



Radio Exposure Evaluation Report

FCC ID : QXO-AP4060
Equipment : Access Point
Brand Name : Extreme Networks
Model Name : AP4060X
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 Apr. 17, 2025, and testing was started from May 05, 2025 and completed on Jul. 23, 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 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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Photographs of EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FA512205-03B	01	Initial issue of report	Aug. 20, 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: Amber Chiu



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)
Bluetooth	2400-2483.5	2402-2480	LE: DSSS (GFSK)
802.15.4	2400-2483.5	2405-2480	DSSS (QPSK)

1.1.2 Antenna Information

< AP4060X >

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	Signal Plus	61723014SG	Dipole	N-type	2.4G+5G	Radio 1_2.4G Radio 2_5G
2	Signal Plus	61723014SG	Dipole	N-type	2.4G+5G	Radio 1_2.4G Radio 2_5G
3	Signal Plus	61723014SG	Dipole	N-type	5G+6G	Radio 3_5GL/6G
4	Signal Plus	61723014SG	Dipole	N-type	5G+6G	Radio 3_5GL/6G
5	Sercomm	6172008HWA5	PIFA	I-Pex	2.4G+5G+6G	Radio 1_Scan
6	Sercomm	6172008HWA6	PIFA	I-Pex	BT+802.15.4	BLE_chain 1_H
7	Sercomm	6172008HWA7	PIFA	I-Pex	BT+802.15.4	BLE_chain 1_V
8	Sercomm	6172008HWA8	PIFA	I-Pex	BT+802.15.4	BLE_chain 0_I
9	Sercomm	6172008HWA9	PIFA	I-Pex	GPS	GPS
10	Signal Plus	61723015SG	Omni	N-type	BT+802.15.4	BLE_chain 0_E
11	Signal Plus	6172300VSG	Patch	N-type	2.4G+5G+6G	Radio 1_2.4G Radio 2_5G Radio 3_5GL/6G
12	Signal Plus	61723016SG	Patch	N-type	2.4G+5G+6G	Radio 1_2.4G Radio 2_5G Radio 3_5GL/6G

Ant.	Port	Gain (dBi)													
		2.4G	UNII-1	UNII-2 A	UNII-2 C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	BT1H	BT1V	BT0-I	GPS	BT0-E
1	1	4.45	4.76	4.21	4.32	4.64	-	-	-	-	-	-	-	-	-
2	2	4.45	4.76	4.21	4.32	4.64	-	-	-	-	-	-	-	-	-
3	1	-	4.76	4.21	-	-	6.69	6.72	7.40	6.85	-	-	-	-	-
4	2	-	4.76	4.21	-	-	6.69	6.72	7.40	6.85	-	-	-	-	-
5	1	3.70	2.89	3.35	4.93	3.56	4.96	3.88	3.55	4.32	-	-	-	-	-
6	2	-	-	-	-	-	-	-	-	-	3.13	-	-	-	-
7	1	-	-	-	-	-	-	-	-	-	-	4.00	-	-	-
8	1	-	-	-	-	-	-	-	-	-	-	-	3.75	-	-
9	1	-	-	-	-	-	-	-	-	-	-	-	-	2.31	-
10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5.65
11-1	1	7.3	6.27	6.43	6.72	6.47	-	-	-	-	-	-	-	-	-
11-2	2	7.3	6.27	6.43	6.72	6.47	-	-	-	-	-	-	-	-	-
11-3	1	-	6.27	6.43	-	-	6.72	6.53	6.5	6.49	-	-	-	-	-
11-4	2	-	6.27	6.43	-	-	6.72	6.53	6.5	6.49	-	-	-	-	-
12-1	1	12.34	12.08	12.3	12.2	12.24	-	-	-	-	-	-	-	-	-
12-2	2	12.34	12.08	12.3	12.2	12.24	-	-	-	-	-	-	-	-	-
12-3	1	-	12.08	12.3	-	-	12.39	11.63	12.32	12.25	-	-	-	-	-
12-4	2	-	12.08	12.3	-	-	12.39	11.63	12.32	12.25	-	-	-	-	-



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Ant.	Port	Cable loss													
		2.4G	UNII-1	UNII-2 A	UNII-2 C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	BT1H	BT1V	BT0-I	GPS	BT0-E
1	1	0.69	1.15	1.04	1.13	1.22	-	-	-	-	-	-	-	-	-
2	2	0.55	0.90	0.95	0.88	0.98	-	-	-	-	-	-	-	-	-
3	1	-	0.90	0.85	-	-	0.84	0.92	0.88	0.87	-	-	-	-	-
4	2	-	1.17	1.10	-	-	1.23	1.15	1.37	1.16	-	-	-	-	-
5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88
11-1	1	0.69	1.15	1.04	1.13	1.22	-	-	-	-	-	-	-	-	-
11-2	2	0.55	0.90	0.95	0.88	0.98	-	-	-	-	-	-	-	-	-
11-3	1	-	0.90	0.85	-	-	0.84	0.92	0.88	0.87	-	-	-	-	-
11-4	2	-	1.17	1.10	-	-	1.23	1.15	1.37	1.16	-	-	-	-	-
12-1	1	1.20	1.89	1.78	1.87	1.96	-	-	-	-	-	-	-	-	-
12-2	2	1.06	1.64	1.69	1.62	1.72	-	-	-	-	-	-	-	-	-
12-3	1	-	1.64	1.59	-	-	1.65	1.73	1.69	1.68	-	-	-	-	-
12-4	2	-	1.91	1.84	-	-	2.04	1.96	2.18	1.97	-	-	-	-	-

Ant.	Port	Net Antenna Gain (dBi)													
		2.4G	UNII-1	UNII-2 A	UNII-2 C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	BT1H	BT1V	BT0-I	GPS	BT0-E
1	1	3.76	3.61	3.17	3.19	3.42	-	-	-	-	-	-	-	-	-
2	2	3.90	3.86	3.26	3.44	3.66	-	-	-	-	-	-	-	-	-
3	1	-	3.86	3.36	-	-	5.85	5.80	6.52	5.98	-	-	-	-	-
4	2	-	3.59	3.11	-	-	5.46	5.57	6.03	5.69	-	-	-	-	-
5	1	3.70	2.89	3.35	4.93	3.56	4.96	3.88	3.55	4.32	-	-	-	-	-
6	2	-	-	-	-	-	-	-	-	-	3.13	-	-	-	-
7	1	-	-	-	-	-	-	-	-	-	-	4.00	-	-	-
8	1	-	-	-	-	-	-	-	-	-	-	-	3.75	-	-
9	1	-	-	-	-	-	-	-	-	-	-	-	-	3.80	-
10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4.77
11-1	1	6.61	5.12	5.39	5.59	5.25	-	-	-	-	-	-	-	-	-
11-2	2	6.75	5.37	5.48	5.84	5.49	-	-	-	-	-	-	-	-	-
11-3	1	-	5.37	5.58	-	-	5.88	5.61	5.62	5.62	-	-	-	-	-
11-4	2	-	5.10	5.33	-	-	5.49	5.38	5.13	5.33	-	-	-	-	-
12-1	1	11.14	10.19	10.52	10.33	10.28	-	-	-	-	-	-	-	-	-
12-2	2	11.28	10.44	10.61	10.58	10.52	-	-	-	-	-	-	-	-	-
12-3	1	-	10.44	10.71	-	-	10.74	9.90	10.63	10.57	-	-	-	-	-
12-4	2	-	10.17	10.46	-	-	10.35	9.67	10.14	10.28	-	-	-	-	-



Ant.	Port	30 Degree Gain (dBi)			
		UNII-1	UNII-5	UNII-6	UNII-7
1~2	1~2	3.33	-	-	-
3~4	1~2	3.33	4.37	2.36	3.29
11	1~2	3.6	-	-	-
	1~2	3.6	3.58	4.14	4.17
12	1~2	3.55	-	-	-
	1~2	3.55	4.05	4.07	4.43

Note 1: The EUT has twelve 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.

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

Ant. 11-1 (port 1) could transmit.

Ant. 11-1 (port 1) and Ant. 11-2 (port 2) could receive simultaneously.

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

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

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. 11-1 (port 1) and Ant. 11-2 (port 2) could transmit/receive simultaneously.

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

For b20/g20 mode (1TX/1RX) < **Radio 1_Scan** >

Ant. 5 (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.

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

Ant. 11-1 (port 1) could transmit.

Ant. 11-1 (port 1) and Ant. 11-2 (port 2) could receive simultaneously.

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

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

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. 11-1 (port 1) and Ant. 11-2 (port 2) could transmit/receive simultaneously.

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

For IEEE 802.11 a/n/ac/ax/be mode (1TX/2RX) < **Radio 3** > **Low band**

Ant. 3 (port 1) could transmit.

Ant. 3 (port 1) and Ant. 4 (port 2) receive simultaneously.

Ant. 11-3 (port 1) could transmit.

Ant. 11-3 (port 1) and Ant. 11-4 (port 2) could receive simultaneously.

Ant. 12-3 (port 1) could transmit.

Ant. 12-3 (port 1) and Ant. 12-4 (port 2) could receive simultaneously.

For IEEE 802.11 a/n/ac/ax/be mode (2TX/2RX) < **Radio 3** > **Low band**

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

Ant. 11-3 (port 1) and Ant. 11-4 (port 2) could transmit/receive simultaneously.

Ant. 12-3 (port 1) and Ant. 12-4 (port 2) could transmit/receive simultaneously.

For a20/a40/a80/a160 mode (1TX/1RX) < **Radio 1_Scan** >

Ant. 5 (port 1) could transmit/receive.

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) < chain 0 >

Ant. 8 (port 1) could transmit/receive.

Ant. 10 (port 1) could transmit/receive.

For IEEE 802.15.1 Bluetooth mode (1TX/2RX) < chain 1>

Ant. 6 (port 2) and Ant. 7 (port 1) could transmit/receive.

Support diversity function and pre-tested on each single chain, the worst case was Ant. 7 (port 1) and it was recorded in this test report.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX) < chain 0 >

Ant. 8 (port 1) could transmit/receive.

Ant. 10 (port 1) could transmit/receive.

For IEEE 802.15.1 Bluetooth mode (1TX/2RX) < chain 1>

Ant. 6 (port 2) and Ant. 7 (port 1) could transmit/receive.

Support diversity function and pre-tested on each single chain, the worst case was Ant. 7 (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 $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{IS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{IS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{IS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

1.1.3 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
AP4060	Internal antennas
AP4060X	External antennas

1.1.4 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FA512205-01B

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Add model name. (AP4060X)	Exposure evaluation was evaluated

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/ cm ²)	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/ cm ²)	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	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-I)
2	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-E)
3	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-I)
4	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-E)
5	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain1)
6	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain1)
7	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G+IEEE 802.15.4 (chain0-I)
8	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain0-E)
9	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+IEEE 802.15.4 (chain0-I)
10	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain0-E)
11	R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain1)
12	R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4(chain1)

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)	$P_{th}(mW) = \begin{cases} ERP_{20cm} (d / 20cm)^x \rightarrow d \leq 20cm \\ ERP_{20cm} \rightarrow 20cm < d \leq 40cm \end{cases}$ $x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right) \text{ and } f \text{ is in GHz}$ $\begin{cases} ERP_{20cm} : 0.3GHz \leq f < 1.5GHz \rightarrow 2040 f(mW) \\ ERP_{20cm} : 1.5GHz \leq f \leq 6GHz \rightarrow 3060(mW) \end{cases}$
C	§1.1307(b)(3)(i)(C)	$\begin{cases} 0.3 \sim 1.34MHz \rightarrow ERP(W) = 1920 R^2 \\ 1.34 \sim 30MHz \rightarrow ERP(W) = 3450 R^2 / f^2 \\ 30 \sim 300MHz \rightarrow ERP(W) = 3.83R^2 \\ 300 \sim 1500MHz \rightarrow ERP(W) = 0.0128 R^2 f \\ 1500 \sim 100000MHz \rightarrow ERP(W) = 19.2R^2 \end{cases}$ f is in MHz; R is in m; $R > \lambda / 2\pi$

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)	$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{ExposureLimit_k} \leq 1$ 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 60 cm to show compliance with the power density limit.
The following formula was used to calculate the Power Density:

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

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 2.4GHz_Non-Beamforming_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	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
2.4G;D1D	3.70	18.09	19.64	0.50	103.276	60	C	6912.0	0.0149

WLAN 2.4GHz_Non-Beamforming_Radio 1_1T1S_Dipole

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	3.76	20.58	22.19	0.50	185.780	60	C	6912.0	0.0269
2.4G;D1D	3.76	19.92	21.53	0.50	159.588	60	C	6912.0	0.0231

WLAN 2.4GHz_Non-Beamforming_Radio 1_2T1S_Dipole

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	3.90	23.12	24.87	0.50	344.437	60	C	6912.0	0.0498
2.4G;D1D	3.90	22.25	24.00	0.50	281.838	60	C	6912.0	0.0408

WLAN 2.4GHz_Non-Beamforming_Radio 1_2T2S_Dipole

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	3.90	21.79	23.54	0.50	253.513	60	C	6912.0	0.0367

WLAN 2.4GHz_Non-Beamforming_Radio 1_1T1S_Patch

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	11.14	18.85	27.84	0.50	682.339	60	C	6912.0	0.0987
2.4G;D1D	11.14	17.37	26.36	0.50	485.289	60	C	6912.0	0.0702

WLAN 2.4GHz_Non-Beamforming_Radio 1_2T1S_Patch

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	11.28	21.17	30.30	0.50	1202.264	60	C	6912.0	0.1740
2.4G;D1D	11.28	20.11	29.24	0.50	941.890	60	C	6912.0	0.1363

WLAN 2.4GHz_Non-Beamforming_Radio 1_2T2S_Patch

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.28	19.53	28.66	0.50	824.138	60	C	6912.0	0.1193

**WLAN 5GHz_Non-Beamforming_Radio 1_Scan_Indoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	2.89	17.60	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	3.35	17.91	19.11	0.50	91.411	60	C	6912.0	0.0132
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
5.8G;D1D	3.56	18.05	19.46	0.50	99.083	60	C	6912.0	0.0143

WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.61	18.83	20.29	0.50	119.950	60	C	6912.0	0.0174
5.3G;D1D	3.17	18.26	19.28	0.50	95.060	60	C	6912.0	0.0138
5.6G;D1D	3.19	18.21	19.25	0.50	94.406	60	C	6912.0	0.0137
5.8G;D1D	3.42	18.61	19.88	0.50	109.144	60	C	6912.0	0.0158

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	21.99	23.70	0.50	263.027	60	C	6912.0	0.0381
5.3G;D1D	3.26	21.51	22.62	0.50	205.116	60	C	6912.0	0.0297
5.6G;D1D	3.44	21.38	22.67	0.50	207.491	60	C	6912.0	0.0300
5.8G;D1D	3.66	22.01	23.52	0.50	252.348	60	C	6912.0	0.0365

WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	22.12	23.83	0.50	271.019	60	C	6912.0	0.0392
5.3G;D1D	3.26	21.62	22.73	0.50	210.378	60	C	6912.0	0.0304
5.6G;D1D	3.44	21.53	22.82	0.50	214.783	60	C	6912.0	0.0311
5.8G;D1D	3.66	22.05	23.56	0.50	254.683	60	C	6912.0	0.0369

WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.19	18.83	26.87	0.50	545.758	60	C	6912.0	0.0790
5.3G;D1D	10.52	18.26	26.63	0.50	516.416	60	C	6912.0	0.0747
5.6G;D1D	10.33	18.15	26.33	0.50	481.948	60	C	6912.0	0.0697
5.8G;D1D	10.28	18.61	26.74	0.50	529.663	60	C	6912.0	0.0766

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	21.99	30.28	0.50	1196.741	60	C	6912.0	0.1732
5.3G;D1D	10.61	18.85	27.31	0.50	603.949	60	C	6912.0	0.0874
5.6G;D1D	10.58	18.88	27.31	0.50	603.949	60	C	6912.0	0.0874
5.8G;D1D	10.52	22.01	30.38	0.50	1224.616	60	C	6912.0	0.1772

**WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Patch_Indoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	22.12	30.41	0.50	1233.105	60	C	6912.0	0.1784
5.3G;D1D	10.61	18.82	27.28	0.50	599.791	60	C	6912.0	0.0868
5.6G;D1D	10.58	18.89	27.32	0.50	605.341	60	C	6912.0	0.0876
5.8G;D1D	10.52	22.05	30.42	0.50	1235.947	60	C	6912.0	0.1789

WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	19.33	21.04	0.50	142.561	60	C	6912.0	0.0206
5.3G;D1D	3.36	18.88	20.09	0.50	114.551	60	C	6912.0	0.0166

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	22.42	24.13	0.50	290.402	60	C	6912.0	0.0420
5.3G;D1D	3.36	21.92	23.13	0.50	230.675	60	C	6912.0	0.0334

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	22.27	23.98	0.50	280.543	60	C	6912.0	0.0406
5.3G;D1D	3.36	21.80	23.01	0.50	224.388	60	C	6912.0	0.0325

WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	19.33	27.62	0.50	648.634	60	C	6912.0	0.0939
5.3G;D1D	10.71	18.68	27.24	0.50	594.292	60	C	6912.0	0.0860

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	22.42	30.71	0.50	1321.296	60	C	6912.0	0.1912
5.3G;D1D	10.71	18.69	27.25	0.50	595.662	60	C	6912.0	0.0862

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	22.27	30.56	0.50	1276.439	60	C	6912.0	0.1847
5.3G;D1D	10.71	18.75	27.31	0.50	603.949	60	C	6912.0	0.0874

**WLAN 5GHz_Non-Beamforming_Radio 1_Scan_Outdoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	2.89	17.60	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	3.35	17.91	19.11	0.50	91.411	60	C	6912.0	0.0132
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
5.8G;D1D	3.56	18.05	19.46	0.50	99.083	60	C	6912.0	0.0143

WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.61	16.86	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	3.17	18.26	19.28	0.50	95.060	60	C	6912.0	0.0138
5.6G;D1D	3.19	18.21	19.25	0.50	94.406	60	C	6912.0	0.0137
5.8G;D1D	3.42	18.61	19.88	0.50	109.144	60	C	6912.0	0.0158

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	16.61	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	3.26	21.51	22.62	0.50	205.116	60	C	6912.0	0.0297
5.6G;D1D	3.44	21.38	22.67	0.50	207.491	60	C	6912.0	0.0300
5.8G;D1D	3.66	22.01	23.52	0.50	252.348	60	C	6912.0	0.0365

WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	16.62	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	3.26	21.62	22.73	0.50	210.378	60	C	6912.0	0.0304
5.6G;D1D	3.44	21.53	22.82	0.50	214.783	60	C	6912.0	0.0311
5.8G;D1D	3.66	22.05	23.56	0.50	254.683	60	C	6912.0	0.0369

WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Patch_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.19	10.28	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	10.52	18.26	26.63	0.50	516.416	60	C	6912.0	0.0747
5.6G;D1D	10.33	18.15	26.33	0.50	481.948	60	C	6912.0	0.0697
5.8G;D1D	10.28	18.61	26.74	0.50	529.663	60	C	6912.0	0.0766

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Patch_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	10.00	18.29	0.50	75.683	60	C	6912.0	0.0110
5.3G;D1D	10.61	18.85	27.31	0.50	603.949	60	C	6912.0	0.0874
5.6G;D1D	10.58	18.88	27.31	0.50	603.949	60	C	6912.0	0.0874
5.8G;D1D	10.52	22.01	30.38	0.50	1224.616	60	C	6912.0	0.1772

**WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Patch_Peak Gain_Outdoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	10.04	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	10.61	18.82	27.28	0.50	599.791	60	C	6912.0	0.0868
5.6G;D1D	10.58	18.89	27.32	0.50	605.341	60	C	6912.0	0.0876
5.8G;D1D	10.52	22.05	30.42	0.50	1235.947	60	C	6912.0	0.1789

WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	16.63	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	3.36	18.88	20.09	0.50	114.551	60	C	6912.0	0.0166

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	16.58	18.29	0.50	75.683	60	C	6912.0	0.0110
5.3G;D1D	3.36	21.92	23.13	0.50	230.675	60	C	6912.0	0.0334

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Dipole_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	16.63	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	3.36	21.80	23.01	0.50	224.388	60	C	6912.0	0.0325

WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Patch_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	10.05	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	10.71	18.68	27.24	0.50	594.292	60	C	6912.0	0.0860

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Patch_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	10.03	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	10.71	18.69	27.25	0.50	595.662	60	C	6912.0	0.0862

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Patch_Peak Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.44	10.05	18.34	0.50	76.560	60	C	6912.0	0.0111
5.3G;D1D	10.71	18.75	27.31	0.50	603.949	60	C	6912.0	0.0874

**WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Dipole_30 Degree Gain_Outdoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.33	17.15	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	3.17	18.26	19.28	0.50	95.060	60	C	6912.0	0.0138
5.6G;D1D	3.19	18.21	19.25	0.50	94.406	60	C	6912.0	0.0137
5.8G;D1D	3.42	18.61	19.88	0.50	109.144	60	C	6912.0	0.0158

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Dipole_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.33	17.11	18.29	0.50	75.683	60	C	6912.0	0.0110
5.3G;D1D	3.26	21.51	22.62	0.50	205.116	60	C	6912.0	0.0297
5.6G;D1D	3.44	21.38	22.67	0.50	207.491	60	C	6912.0	0.0300
5.8G;D1D	3.66	22.01	23.52	0.50	252.348	60	C	6912.0	0.0365

WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Dipole_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.86	22.12	23.83	0.50	271.019	60	C	6912.0	0.0392
5.3G;D1D	3.26	21.62	22.73	0.50	210.378	60	C	6912.0	0.0304
5.6G;D1D	3.44	21.53	22.82	0.50	214.783	60	C	6912.0	0.0311
5.8G;D1D	3.66	22.05	23.56	0.50	254.683	60	C	6912.0	0.0369

WLAN 5GHz_Non-Beamforming_Radio 2_1T1S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.88	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	10.52	18.26	26.63	0.50	516.416	60	C	6912.0	0.0747
5.6G;D1D	10.33	18.15	26.33	0.50	481.948	60	C	6912.0	0.0697
5.8G;D1D	10.28	18.61	26.74	0.50	529.663	60	C	6912.0	0.0766

WLAN 5GHz_Non-Beamforming_Radio 2_2T1S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.84	18.29	0.50	75.683	60	C	6912.0	0.0110
5.3G;D1D	10.61	18.85	27.31	0.50	603.949	60	C	6912.0	0.0874
5.6G;D1D	10.58	18.88	27.31	0.50	603.949	60	C	6912.0	0.0874
5.8G;D1D	10.52	22.01	30.38	0.50	1224.616	60	C	6912.0	0.1772

WLAN 5GHz_Non-Beamforming_Radio 2_2T2S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.81	18.26	0.50	75.162	60	C	6912.0	0.0109
5.3G;D1D	10.61	18.82	27.28	0.50	599.791	60	C	6912.0	0.0868
5.6G;D1D	10.58	18.98	27.41	0.50	618.016	60	C	6912.0	0.0894
5.8G;D1D	10.52	22.05	30.42	0.50	1235.947	60	C	6912.0	0.1789

**WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Dipole_30 Degree Gain_Outdoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.33	17.15	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	3.36	18.88	20.09	0.50	114.551	60	C	6912.0	0.0166

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Dipole_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.33	17.15	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	3.36	21.92	23.13	0.50	230.675	60	C	6912.0	0.0334

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Dipole_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.33	17.13	18.31	0.50	76.033	60	C	6912.0	0.0110
5.3G;D1D	3.36	21.80	23.01	0.50	224.388	60	C	6912.0	0.0325

WLAN 5GHz_Non-Beamforming_Radio 3_1T1S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.88	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	10.71	18.68	27.24	0.50	594.292	60	C	6912.0	0.0860

WLAN 5GHz_Non-Beamforming_Radio 3_2T1S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.88	18.33	0.50	76.384	60	C	6912.0	0.0111
5.3G;D1D	10.71	18.69	27.25	0.50	595.662	60	C	6912.0	0.0862

WLAN 5GHz_Non-Beamforming_Radio 3_2T2S_Patch_30 Degree Gain_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	3.60	16.87	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	10.71	18.75	27.31	0.50	603.949	60	C	6912.0	0.0874

**BT_Chain 0_Internal**

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	3.75	11.57	13.17	0.50	23.281	60	C	6912.0	0.0034

BT_Chain 0_External

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	4.77	11.62	14.24	0.50	29.785	60	C	6912.0	0.0043

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;BT-LE	4.00	11.33	13.18	0.50	23.335	60	C	6912.0	0.0034

802.15.4_Chain 0_Internal

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;	3.75	11.62	13.22	0.50	23.550	60	C	6912.0	0.0034

802.15.4_Chain 0_External

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;	4.77	11.67	14.29	0.50	30.130	60	C	6912.0	0.0044

802.15.4_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;	4.00	11.42	13.27	0.50	23.823	60	C	6912.0	0.0034

**WLAN 2.4GHz_Beamforming_Radio 1_Dipole**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	6.84	22.07	26.76	0.50	532.108	60	C	6912.0	0.0770

WLAN 2.4GHz_Beamforming_Radio 1_Patch

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458

WLAN 5GHz_Beamforming_Radio 2_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	6.75	21.99	26.59	0.50	511.682	60	C	6912.0	0.0740
5.3G;D1D	6.23	21.51	25.59	0.50	406.443	60	C	6912.0	0.0588
5.6G;D1D	6.33	21.38	25.56	0.50	403.645	60	C	6912.0	0.0584
5.8G;D1D	6.55	22.01	26.41	0.50	490.908	60	C	6912.0	0.0710

WLAN 5GHz_Beamforming_Radio 2_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	13.33	21.99	33.17	0.50	2328.091	60	C	6912.0	0.3369
5.3G;D1D	13.58	15.88	27.31	0.50	603.949	60	C	6912.0	0.0874
5.6G;D1D	13.47	16.02	27.34	0.50	608.135	60	C	6912.0	0.0880
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448

WLAN 5GHz_Beamforming_Radio 3_Dipole_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	6.74	22.42	27.01	0.50	563.638	60	C	6912.0	0.0816
5.3G;D1D	6.25	21.92	26.02	0.50	448.745	60	C	6912.0	0.0649

WLAN 5GHz_Beamforming_Radio 3_Patch_Indoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
5.3G;D1D	13.60	15.84	27.29	0.50	601.174	60	C	6912.0	0.0870

WLAN 5GHz_Beamforming_Radio 2_Dipole_Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	6.75	13.68	18.28	0.50	75.509	60	C	6912.0	0.0109
5.3G;D1D	6.23	21.51	25.59	0.50	406.443	60	C	6912.0	0.0588
5.6G;D1D	6.33	21.38	25.56	0.50	403.645	60	C	6912.0	0.0584
5.8G;D1D	6.55	22.01	26.41	0.50	490.908	60	C	6912.0	0.0710

**WLAN 5GHz Beamforming Radio 2 Patch Outdoor**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	13.33	7.13	18.31	0.50	76.033	60	C	6912.0	0.0110
5.3G;D1D	13.58	15.86	27.29	0.50	601.174	60	C	6912.0	0.0870
5.6G;D1D	13.47	16.02	27.34	0.50	608.135	60	C	6912.0	0.0880
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448

WLAN 5GHz Beamforming Radio 3 Dipole Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	6.74	13.73	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	6.25	21.92	26.02	0.50	448.745	60	C	6912.0	0.0649

WLAN 5GHz Beamforming Radio 3 Patch Outdoor

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	13.32	7.15	18.32	0.50	76.208	60	C	6912.0	0.0110
5.3G;D1D	13.60	15.84	27.29	0.50	601.174	60	C	6912.0	0.0870

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:****1. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-I)**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	3.75	11.57	13.17	0.50	23.281	60	C	6912.0	0.0034
Sum TL Ratio_C	0.6402								
Ratio Limit	1								

2. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-E)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	4.77	11.62	14.24	0.50	29.785	60	C	6912.0	0.0043
Sum TL Ratio_C	0.6412								
Ratio Limit	1								

3. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-I)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	3.75	11.57	13.17	0.50	23.281	60	C	6912.0	0.0034
Sum TL Ratio_C	0.9826								
Ratio Limit	1								

**4. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain0-E)**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	4.77	11.62	14.24	0.50	29.785	60	C	6912.0	0.0043
Sum TL Ratio_C	0.9836								
Ratio Limit	1								

5. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +BT(chain1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	4.00	11.33	13.18	0.50	23.335	60	C	6912.0	0.0034
Sum TL Ratio_C	0.6403								
Ratio Limit	1								

6. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +BT(chain1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;BT-LE	4.00	11.33	13.18	0.50	23.335	60	C	6912.0	0.0034
Sum TL Ratio_C	0.9826								
Ratio Limit	1								

**7. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G+IEEE 802.15.4 (chain0-I)**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	3.75	11.62	13.22	0.50	23.550	60	C	6912.0	0.0034
Sum TL Ratio_C	0.6403								
Ratio Limit	1								

8. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain0-E)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	4.77	11.67	14.29	0.50	30.130	60	C	6912.0	0.0044
Sum TL Ratio_C	0.6412								
Ratio Limit	1								

9. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+IEEE 802.15.4 (chain0-I)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	3.75	11.62	13.22	0.50	23.550	60	C	6912.0	0.0034
Sum TL Ratio_C	0.9827								
Ratio Limit	1								

**10. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain0-E)**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	4.77	11.67	14.29	0.50	30.130	60	C	6912.0	0.0044
Sum TL Ratio_C	0.9836								
Ratio Limit	1								

11. R1:2.4G+R2:5G Full+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4 (chain1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	4.00	11.42	13.27	0.50	23.823	60	C	6912.0	0.0034
Sum TL Ratio_C	0.6403								
Ratio Limit	1								

12. R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G +IEEE 802.15.4(chain1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	14.22	19.73	31.80	0.50	1698.244	60	C	6912.0	0.2458
5.8G;D1D	13.41	22.01	33.27	0.50	2382.319	60	C	6912.0	0.3448
5.2G;D1D	13.32	22.07	33.24	0.50	2365.920	60	C	6912.0	0.3424
2.4G;G1D	3.70	20.74	22.29	0.50	190.108	60	C	6912.0	0.0275
5.6G;D1D	4.93	17.87	20.65	0.50	130.317	60	C	6912.0	0.0189
2.4G;	4.00	11.42	13.27	0.50	23.823	60	C	6912.0	0.0034
Sum TL Ratio_C	0.9827								
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—————