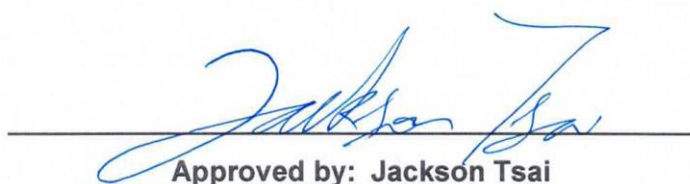


Radio Exposure Evaluation Report

FCC ID : 2AHBN-AP66
Equipment : Wi-Fi 7 Wireless Access Point
Brand Name : Juniper
Model Name : AP66, AP66D
Applicant : Juniper Networks, Inc.
1133 Innovation Way Sunnyvale, California
94089 USA
Manufacturer : Juniper Networks, Inc.
1133 Innovation Way Sunnyvale, California
94089 USA
Standard : 47 CFR FCC Part 2 Subpart J, section 2.1091

The product was received on Aug. 12, 2025, and testing was started from Aug. 12, 2025 and completed on Oct. 03, 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.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Applicable Standards	11
1.3 Testing Location	11
2 MAXIMUM PERMISSIBLE EXPOSURE	12
2.1 Limit of Maximum Permissible Exposure	12
2.2 RF Exposure Exempt Measurement	13
2.3 Multiple RF Sources Exposure.....	14
2.4 MPE Calculation Method	15
2.5 Calculated Result and Limit.....	16

Photographs of EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FA583005	01	Initial issue of report	Nov. 18, 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: Ryan Hsiao
Report Producer: Debby Hung

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 (O-QPSK)

**1.1.2 Antenna Information_AP66**

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	Juniper	AP66	PIFA	I-Pex	2.4G	Radio 2
2	Juniper	AP66	PIFA	I-Pex	2.4G	Radio 2
3	Juniper	AP66	PIFA	I-Pex	2.4G+5G+6G	Radio 3
4	Juniper	AP66	PIFA	I-Pex	5G	Radio 1
5	Juniper	AP66	Dipole	I-Pex	5G	Radio 1
6	Juniper	AP66	Dipole	I-Pex	6G	Radio 0
7	Juniper	AP66	PIFA	I-Pex	6G	Radio 0
8	Juniper	AP66	PIFA	I-Pex	802.15.4	Radio 5
9	Juniper	AP66	PIFA	I-Pex	BT	Radio 4
10	Juniper	AP66	PIFA	I-Pex	GPS	Radio 6

Ant.	Port	Gain (dBi)											
		2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	802.15.4	BT	GPS
1	1	5.61	-	-	-	-	-	-	-	-	-	-	-
2	2	5.77	-	-	-	-	-	-	-	-	-	-	-
3	1	4.8	5.4	5.3	5.1	5	5.1	6.2	5.9	5.7	-	-	-
4	1	-	5.02	4.81	4.78	4.86	-	-	-	-	-	-	-
5	2	-	4.58	4.5	5.92	5.25	-	-	-	-	-	-	-
6	1	-	-	-	-	-	4.43	5.23	4.57	5.86	-	-	-
7	2	-	-	-	-	-	6.38	5.32	5.01	4.66	-	-	-
8	1	-	-	-	-	-	-	-	-	-	5.1	-	-
9	1	-	-	-	-	-	-	-	-	-	-	6.3	-
10	1	-	-	-	-	-	-	-	-	-	-	-	3.9



Ant.		Composite Gain (dBi)								
		2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8
1~2	DG [1SS]	7.78	-	-	-	-	-	-	-	-
	DG [2SS]	5.77	-	-	-	-	-	-	-	-
4~5	DG [1SS]	-	5.02	4.81	5.92	5.25	-	-	-	-
	DG [2SS]	-	5.02	4.81	5.92	5.25	-	-	-	-
6~7	DG [1SS]	-	-	-	-	-	6.38	5.32	5.01	5.86
	DG [2SS]	-	-	-	-	-	6.38	5.32	5.01	5.86

Note 1: DG=Directional Gain.

Note 2: The EUT has ten antennas.

Note 3: The composite gain is derived as KDB 662911 D03 v02 which was used as directional gain. For more detail information, please refer to the Antenna Pattern Report AP583005.

For 2.4GHz function:

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

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

For b20/g20 mode (1TX/1RX) < **Radio 3_Scan** >

Ant. 3 (port 1) could transmit/receive.

For 5GHz function:

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

Ant. 4 (port 1) and Ant. 5 (port 2) could transmit/receive simultaneously.

For a20 mode (1TX/1RX) < **Radio 3_Scan** >

Ant. 3 (port 1) could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) < **Radio 4** >

Ant. 9 (port 1) could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX) < **Radio 5** >

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

**1.1.3 Antenna Information_AP66D**

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	Juniper	AP66D	PIFA	I-Pex	2.4G	Radio 2
2	Juniper	AP66D	PIFA	I-Pex	2.4G	Radio 2
3	Juniper	AP66D	PIFA	I-Pex	2.4G+5G+6G	Radio 3
4	Juniper	AP66D	Dipole	I-Pex	5G	Radio 1
5	Juniper	AP66D	Dipole	I-Pex	5G	Radio 1
6	Juniper	AP66D	Dipole	I-Pex	6G	Radio 0
7	Juniper	AP66D	Dipole	I-Pex	6G	Radio 0
8	Juniper	AP66D	PIFA	I-Pex	802.15.4	Radio 5
9	Juniper	AP66D	PIFA	I-Pex	BT	Radio 4
10	Juniper	AP66D	PIFA	I-Pex	GPS	Radio 6

Ant.	Beam width	Port	Gain (dBi)											BT	GPS
			2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	802.15.4			
1	-	1	6	-	-	-	-	-	-	-	-	-	-	-	
2	-	2	5.6	-	-	-	-	-	-	-	-	-	-	-	
3	-	1	3.4	3.2	4	4.9	5.4	5.2	4.4	5.1	4.5	-	-	-	
4	90x90	1	-	4	2.8	3.3	4.2	-	-	-	-	-	-	-	
5		2	-	3.2	3.6	4.7	3.6	-	-	-	-	-	-	-	
4	90x30	1	-	6.2	6.6	6.7	6.2	-	-	-	-	-	-	-	
5		2	-	6.6	6.5	6.5	6.4	-	-	-	-	-	-	-	
4	30x30	1	-	9.2	9.3	9.5	10	-	-	-	-	-	-	-	
5		2	-	9.8	9.4	10	9.7	-	-	-	-	-	-	-	
6	90x90	1	-	-	-	-	-	5.6	4.4	5.1	4.5	-	-	-	
7		2	-	-	-	-	-	7	7.4	7.5	6	-	-	-	
6	90x30	1	-	-	-	-	-	7.3	7.6	7.3	7.2	-	-	-	



Ant.	Beam width	Port	Gain (dBi)											
			2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	802.15.4	BT	GPS
1	-	1	6	-	-	-	-	-	-	-	-	-	-	-
2	-	2	5.6	-	-	-	-	-	-	-	-	-	-	-
7		2	-	-	-	-	-	6.9	7.4	7.6	6.6	-	-	-
6	30x30	1	-	-	-	-	-	10.2	10.1	10.1	9.1	-	-	-
7		2	-	-	-	-	-	9.6	10	10.3	9.3	-	-	-
8	-	1	-	-	-	-	-	-	-	-	-	3.9	-	-
9	-	1	-	-	-	-	-	-	-	-	-	-	3.7	-
10	-	1	-	-	-	-	-	-	-	-	-	-	-	2.5

Ant.	Beam width		Composite Gain (dBi)									
			2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	
1~2	-	DG [1SS]	8.5	-	-	-	-	-	-	-	-	-
		DG [2SS]	8.5	-	-	-	-	-	-	-	-	-
4~5	90x90	DG [1SS]	-	6.3	5.8	6.8	6.5	-	-	-	-	-
		DG [2SS]	-	6.3	5.8	6.8	6.5	-	-	-	-	-
4~5	90x30	DG [1SS]	-	9.4	9.5	9.6	9.3	-	-	-	-	-
		DG [2SS]	-	9.4	9.5	9.6	9.3	-	-	-	-	-
4~5	30x30	DG [1SS]	-	12.5	12.3	12.7	12.8	-	-	-	-	-
		DG [2SS]	-	12.5	12.3	12.7	12.8	-	-	-	-	-
6~7	90x90	DG [1SS]	-	-	-	-	-	8.4	8.1	8.4	7.6	-
		DG [2SS]	-	-	-	-	-	8.4	8.1	8.4	7.6	-
6~7	90x30	DG [1SS]	-	-	-	-	-	10.1	10.2	10.2	9.7	-
		DG [2SS]	-	-	-	-	-	10.1	10.2	10.2	9.7	-
6~7	30x30	DG [1SS]	-	-	-	-	-	12.9	13	13.1	12.2	-
		DG [2SS]	-	-	-	-	-	12.9	13	13.1	12.2	-

Note 1: DG=Directional Gain.

Note 2: Beamwidth 30x30 was Main test.



Note 3: The EUT has ten antennas.

For 2.4GHz function:

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

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

For b20/g20 mode (1TX/1RX) < **Radio 3_Scan** >

Ant. 3 (port 1) could transmit/receive.

For 5GHz function:

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

Ant. 4 (port 1) and Ant. 5 (port 2) could transmit/receive simultaneously.

For a20 mode (1TX/1RX) < **Radio 3_Scan** >

Ant. 3 (port 1) could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) < **Radio 4** >

Ant. 9 (port 1) could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX) < **Radio 5** >

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

1.1.4 Table for Multiple Listing

Model Name	AP66	AP66D
Wi-Fi Internal Omni Antenna	X	-
Wi-Fi Internal Dynamic Directional Antenna	-	X
Note: 2 SKUs have the same PCB		

Note: The information presented above originates from the manufacturer.

1.1.5 Accessories

Accessories
Bracket*1

Reminder: Regarding to more detail and other information, please refer to user manual.

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.			
☒	Wenhua 3rd. (TAF: 3785)	ADD: No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)	
		TEL: 886-3-327-0868	
Test site Designation No. TW0036 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 (5G)+R2 (2.4G)+R3 (2.4G)+BT
2. R1 (5G)+R2 (2.4G)+R3 (5G)+BT
3. R1 (5G)+R2 (2.4G)+R3 (2.4G)+802.15.4
4. R1 (5G)+R2 (2.4G)+R3 (5G)+802.15.4

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)	$P_{th}(mW) = \begin{cases} ERP_{20cm}(d / 20cm)^x \rightarrow d \leq 20cm \\ ERP_{20cm} \rightarrow 20cm < d \leq 40cm \end{cases}$ $x = -\log_{10}\left(\frac{60}{ERP_{20cm}\sqrt{f}}\right) \text{ and } f \text{ is in GHz}$ $\begin{cases} ERP_{20cm} : 0.3GHz \leq f < 1.5GHz \rightarrow 2040f(mW) \\ ERP_{20cm} : 1.5GHz \leq f \leq 6GHz \rightarrow 3060(mW) \end{cases}$
C	§1.1307(b)(3)(i)(C)	$\begin{cases} 0.3 \sim 1.34MHz \rightarrow ERP(W) = 1920R^2 \\ 1.34 \sim 30MHz \rightarrow ERP(W) = 3450R^2 / f^2 \\ 30 \sim 300MHz \rightarrow ERP(W) = 3.83R^2 \\ 300 \sim 1500MHz \rightarrow ERP(W) = 0.0128R^2 f \\ 1500 \sim 100000MHz \rightarrow ERP(W) = 19.2R^2 \end{cases}$ 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 20/43 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

<AP66>

WLAN 2.4G_Non-Beamforming_Radio 2_AP66

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.77	21.54	25.16	0.50	368.129	20	B	3060.0	0.1203
2.4G;D1D	5.77	20.56	24.18	0.50	293.765	20	B	3060.0	0.0960

WLAN 2.4G_Non-Beamforming_Radio 3_AP66

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.80	21.45	24.10	0.50	288.403	20	B	3060.0	0.0943
2.4G;D1D	4.80	21.11	23.76	0.50	266.686	20	B	3060.0	0.0872

WLAN 5G_Non-Beamforming_Radio 1_AP66_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	5.02	23.86	26.73	0.50	528.445	20	B	3060.0	0.1728
5.3G;D1D	4.81	23.57	26.23	0.50	470.977	20	B	3060.0	0.1540
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
5.8G;D1D	5.25	22.57	25.67	0.50	414.000	20	B	3060.0	0.1353

WLAN 5G_Non-Beamforming_Radio 3_AP66_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	5.40	20.74	23.99	0.50	281.190	20	B	3060.0	0.0919
5.3G;D1D	5.30	19.25	22.40	0.50	194.984	20	B	3060.0	0.0637
5.6G;D1D	5.10	20.60	23.55	0.50	254.097	20	B	3060.0	0.0831
5.8G;D1D	5.00	20.48	23.33	0.50	241.546	20	B	3060.0	0.0790

WLAN 5G_Non-Beamforming_Radio 1_AP66_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	5.02	15.44	18.31	0.50	76.033	20	B	3060.0	0.0249
5.3G;D1D	4.81	23.57	26.23	0.50	470.977	20	B	3060.0	0.1540
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
5.8G;D1D	5.25	22.57	25.67	0.50	414.000	20	B	3060.0	0.1353

WLAN 5G_Non-Beamforming_Radio 3_AP66_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	5.40	15.04	18.29	0.50	75.683	20	B	3060.0	0.0247
5.3G;D1D	5.30	19.25	22.40	0.50	194.984	20	B	3060.0	0.0637
5.6G;D1D	5.10	20.60	23.55	0.50	254.097	20	B	3060.0	0.0831
5.8G;D1D	5.00	20.48	23.33	0.50	241.546	20	B	3060.0	0.0790

**Bluetooth_AP66**

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	6.30	12.91	17.06	0.50	57.016	20	B	3060.0	0.0186

802.15.4_AP66

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	5.10	12.53	15.48	0.50	39.628	20	B	3060.0	0.0130

WLAN 2.4G_Beamforming_Radio 2_AP66

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526

WLAN 5G_Beamforming_Radio 1_AP66_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	5.02	23.86	26.73	0.50	528.445	20	B	3060.0	0.1728
5.3G;D1D	4.81	23.57	26.23	0.50	470.977	20	B	3060.0	0.1540
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
5.8G;D1D	5.25	22.57	25.67	0.50	414.000	20	B	3060.0	0.1353

WLAN 5G_Beamforming_Radio 1_AP66_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	5.02	15.44	18.31	0.50	76.033	20	B	3060.0	0.0249
5.3G;D1D	4.81	23.57	26.23	0.50	470.977	20	B	3060.0	0.1540
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
5.8G;D1D	5.25	22.57	25.67	0.50	414.000	20	B	3060.0	0.1353

**<AP66D>****WLAN 2.4G_Non-Beamforming_Radio 2_AP66D**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	6.00	23.96	27.81	0.50	677.642	43	C	3550.1	0.1909
2.4G;D1D	6.00	21.89	25.74	0.50	420.727	43	C	3550.1	0.1186

WLAN 2.4G_Non-Beamforming_Radio 3_AP66D

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	3.40	21.04	22.29	0.50	190.108	43	C	3550.1	0.0536
2.4G;D1D	3.40	20.81	22.06	0.50	180.302	43	C	3550.1	0.0508

WLAN 5G_Non-Beamforming_Radio 1_AP66D_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	9.80	22.99	30.64	0.50	1300.170	43	C	3550.1	0.3664
5.3G;D1D	9.40	19.97	27.22	0.50	591.562	43	C	3550.1	0.1667
5.6G;D1D	10.00	19.46	27.31	0.50	603.949	43	C	3550.1	0.1702
5.8G;D1D	10.00	23.29	31.14	0.50	1458.814	43	C	3550.1	0.4111

WLAN 5G_Non-Beamforming_Radio 3_AP66D_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	3.20	19.68	20.73	0.50	132.739	43	C	3550.1	0.0374
5.3G;D1D	4.00	18.80	20.65	0.50	130.317	43	C	3550.1	0.0367
5.6G;D1D	4.90	19.30	22.05	0.50	179.887	43	C	3550.1	0.0507
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631

WLAN 5G_Non-Beamforming_Radio 1_AP66D_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	9.80	10.68	18.33	0.50	76.384	43	C	3550.1	0.0215
5.3G;D1D	9.40	19.97	27.22	0.50	591.562	43	C	3550.1	0.1667
5.6G;D1D	10.00	19.46	27.31	0.50	603.949	43	C	3550.1	0.1702
5.8G;D1D	10.00	23.29	31.14	0.50	1458.814	43	C	3550.1	0.4111

WLAN 5G_Non-Beamforming_Radio 3_AP66D_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	3.70	16.65	18.20	0.50	74.131	43	C	3550.1	0.0209
5.3G;D1D	4.00	18.80	20.65	0.50	130.317	43	C	3550.1	0.0367
5.6G;D1D	4.90	19.30	22.05	0.50	179.887	43	C	3550.1	0.0507
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631

**Bluetooth_AP66D**

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	3.70	12.65	14.20	0.50	29.512	43	C	3550.1	0.0083

802.15.4_AP66D

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	12.42	14.17	0.50	29.309	43	C	3550.1	0.0083

WLAN 2.4G_Beamforming_Radio 2_AP66D

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075

WLAN 5G_Beamforming_Radio 1_AP66D_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	12.50	22.99	33.34	0.50	2421.029	43	C	3550.1	0.6822
5.3G;D1D	12.30	17.11	27.26	0.50	597.035	43	C	3550.1	0.1682
5.6G;D1D	12.70	16.75	27.30	0.50	602.560	43	C	3550.1	0.1698
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791

WLAN 5G_Beamforming_Radio 1_AP66D_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	12.50	7.98	18.33	0.50	76.384	43	C	3550.1	0.0215
5.3G;D1D	12.30	17.11	27.26	0.50	597.035	43	C	3550.1	0.1682
5.6G;D1D	12.70	16.75	27.30	0.50	602.560	43	C	3550.1	0.1698
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791

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: <AP66_indoor>****R1 (5G)+R2 (2.4G)+R3 (2.4G)+BT**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
2.4G;G1D	4.80	21.45	24.10	0.50	288.403	20	B	3060.0	0.0943
2.4G;BT-LE	6.30	12.91	17.06	0.50	57.016	20	B	3060.0	0.0186
Sum TL Ratio_B	0.4498								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+BT

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
5.2G;D1D	5.40	20.74	23.99	0.50	281.190	20	B	3060.0	0.0919
2.4G;BT-LE	6.30	12.91	17.06	0.50	57.016	20	B	3060.0	0.0186
Sum TL Ratio_B	0.4474								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (2.4G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
2.4G;G1D	4.80	21.45	24.10	0.50	288.403	20	B	3060.0	0.0943
2.4G;D1D	5.10	12.53	15.48	0.50	39.628	20	B	3060.0	0.0130
Sum TL Ratio_B	0.4442								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
5.2G;D1D	5.40	20.74	23.99	0.50	281.190	20	B	3060.0	0.0919
2.4G;D1D	5.10	12.53	15.48	0.50	39.628	20	B	3060.0	0.0130
Sum TL Ratio_B	0.4418								
Ratio Limit	1								

**Simultaneous Transmission Analysis Mode: <AP66_outdoor>****R1 (5G)+R2 (2.4G)+R3 (2.4G)+BT**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
2.4G;G1D	4.80	21.45	24.10	0.50	288.403	20	B	3060.0	0.0943
2.4G;BT-LE	6.30	12.91	17.06	0.50	57.016	20	B	3060.0	0.0186
Sum TL Ratio_B	0.4498								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+BT

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
5.6G;D1D	5.10	20.60	23.55	0.50	254.097	20	B	3060.0	0.0831
2.4G;BT-LE	6.30	12.91	17.06	0.50	57.016	20	B	3060.0	0.0186
Sum TL Ratio_B	0.4386								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (2.4G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
2.4G;G1D	4.80	21.45	24.10	0.50	288.403	20	B	3060.0	0.0943
2.4G;D1D	5.10	12.53	15.48	0.50	39.628	20	B	3060.0	0.0130
Sum TL Ratio_B	0.4442								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	5.92	23.24	27.01	0.50	563.638	20	B	3060.0	0.1843
2.4G;D1D	7.78	20.56	26.19	0.50	466.659	20	B	3060.0	0.1526
5.6G;D1D	5.10	20.60	23.55	0.50	254.097	20	B	3060.0	0.0831
2. 2.4G;D1D;	5.10	12.53	15.48	0.50	39.628	20	B	3060.0	0.0130
Sum TL Ratio_B	0.433								
Ratio Limit	1								

**Simultaneous Transmission Analysis Mode: <AP66D_indoor>****R1 (5G)+R2 (2.4G)+R3 (2.4G)+BT**

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.2G;D1D	12.50	22.99	33.34	0.50	2421.029	43	C	3550.1	0.6822
2.4G;G1D	3.40	21.04	22.29	0.50	190.108	43	C	3550.1	0.0536
2.4G;BT-LE	3.70	12.65	14.20	0.50	29.512	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9516								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+BT

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.2G;D1D	12.50	22.99	33.34	0.50	2421.029	43	C	3550.1	0.6822
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631
2.4G;BT-LE	3.70	12.65	14.20	0.50	29.512	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9611								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (2.4G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.2G;D1D	12.50	22.99	33.34	0.50	2421.029	43	C	3550.1	0.6822
2.4G;G1D	3.40	21.04	22.29	0.50	190.108	43	C	3550.1	0.0536
2.4G;	3.90	12.42	14.17	0.50	29.309	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9516								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.2G;D1D	12.50	22.99	33.34	0.50	2421.029	43	C	3550.1	0.6822
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631
2.4G;	3.90	12.42	14.17	0.50	29.309	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9611								
Ratio Limit	1								



Simultaneous Transmission Analysis Mode: <AP66_outdoor>

R1 (5G)+R2 (2.4G)+R3 (2.4G)+BT

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791
2.4G;G1D	3.40	21.04	22.29	0.50	190.108	43	C	3550.1	0.0536
2.4G;BT-LE	3.70	12.65	14.20	0.50	29.512	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9485								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+BT

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631
2.4G;BT-LE	3.70	12.65	14.20	0.50	29.512	43	C	3550.1	0.0083
Sum TL Ratio_C	0.958								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (2.4G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791
2.4G;G1D	3.40	21.04	22.29	0.50	190.108	43	C	3550.1	0.0536
2.4G;	3.90	12.42	14.17	0.50	29.309	43	C	3550.1	0.0083
Sum TL Ratio_C	0.9485								
Ratio Limit	1								

R1 (5G)+R2 (2.4G)+R3 (5G)+802.15.4

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.50	21.82	28.17	0.50	736.207	43	C	3550.1	0.2075
5.8G;D1D	12.80	22.67	33.32	0.50	2409.905	43	C	3550.1	0.6791
5.8G;D1D	5.40	19.75	23.00	0.50	223.872	43	C	3550.1	0.0631
2.4G;	3.90	12.42	14.17	0.50	29.309	43	C	3550.1	0.0083
Sum TL Ratio_C	0.958								
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————