



RADIO EXPOSURE TEST REPORT

FCC ID : HZB-MEGA6
Equipment : EdgeAX 6GHz Radio Module
Brand Name : Proxim Wireless
Model Name : EdgeAX6
Applicant : Proxim Wireless Corporation
2114 Ringwood Ave, San Jose, CA 95131, United States of America
Manufacturer : Proxim Wireless Corporation
2114 Ringwood Ave, San Jose, CA 95131, United States of America
Standard : 47 CFR Part 2.1091

The product was received on Jun. 13, 2025, and testing was started from Aug. 28, 2025 and completed on Nov. 28, 2025. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 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. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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Photographs of EUT v01



History of this test report

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Summary of Test Result

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

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

1. The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The presented declaration output power of Bluetooth for EUT in the report are provided by the manufacturer, and We, Sporton International Inc. Hsinchu Laboratory does not guarantee its accuracy.

Reviewed by: Sam Chen**Report Producer: Sandy Chuang**



1 General Description

1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
6GHz WLAN	5925-6425 6525-6875	6115-6415 6535-6855	802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)



1.2 Antenna Information

Ant.	Measure Port (Port of EUT)		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	V	H					
1	1 (J4)	2 (J6)	Signal Plus Technology	6385F00003	PCB	I-Pex	Note 2
2	1 (J4)	2 (J6)	Signal Plus Technology	6385F00001	Panel	I-Pex	
3	1 (J2)	2 (J5)	Lanbowan	ANT5171D19K-DDP	Sector	Reverse SMA	
4	1 (J2)	2 (J5)	Lanbowan	ANT4971D30P6-MIMO	Dish	Reverse SMA	
5	1 (J4)	2 (J6)	Signal Plus Technology	6385F00008	Sector	I-Pex	

Note 1: V indicates that the antenna is vertically polarized.

H indicates that the antenna is horizontally polarized.

Note 2:

Ant.	Antenna Gain (dBi)		Cable Loss (dB)		
	UNII5	UNII7	I-pax cable	N-TYPE cable	SMA cable
1	16.65	16.64	-	-	-
2	21.83	22.1	-	-	-
3	19	19	1.4	1.84	-
4	31	31	1.4	-	1.75
5	15.5	15.7	-	-	-

Ant.	Net Gain (dBi)		Remark
	UNII5	UNII7	
1	16.65	16.64	Internal Ant.
2	21.83	22.1	Internal Ant.
3	15.76	15.76	External Ant.
4	27.85	27.85	External Ant.
5	15.5	15.7	Internal Ant.

Note 3: The above information was declared by manufacturer.

Note 4: Ant.3 and Ant.5 are the same type of antenna, Only the highest gain antenna Ant. 3 is selected for testing, excluding the Contention-Based Protocol test.



Note 5: Directional gain information

Type	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	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^N \left(\sum_{k=1}^N E_{j,k} ^2 \right)}{N_{ANT}} \right]$
BF	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^N \left(\sum_{k=1}^N E_{j,k} ^2 \right)}{N_{ANT}} \right]$	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^N \left(\sum_{k=1}^N E_{j,k} ^2 \right)}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^N \left(\sum_{k=1}^N |E_{j,k}|^2 \right)}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where :

Cross-Polarized Antenna

ANT1

6G UNII-5 G1= 16.65 dBi ; G2= 16.65 dBi ; DG= 16.65dBi

6G UNII-7 G1= 16.64 dBi ; G2= 16.64 dBi ; DG= 16.64dBi

ANT2

6G UNII-5 G1= 21.83 dBi ; G2= 21.83 dBi ; DG= 21.83dBi

6G UNII-7 G1= 22.1 dBi ; G2= 22.1 dBi ; DG= 22.1dBi

ANT3

6G UNII-5 G1= 15.76 dBi ; G2= 15.76 dBi ; DG= 15.76dBi

6G UNII-7 G1= 15.76 dBi ; G2= 15.76 dBi ; DG= 15.76dBi

ANT4

6G UNII-5 G1= 27.85 dBi ; G2= 27.85 dBi ; DG= 27.85dBi

6G UNII-7 G1= 27.85 dBi ; G2= 27.85 dBi ; DG= 27.85dBi

<For WLAN 6GHz>

For IEEE 802.11ax mode (2TX/2RX)

For Ant. 1, Ant. 2 and Ant. 5

Port 1 and Port 3 can be used as transmitting/receiving antenna.

Port 1 and Port 3 could transmit/receive simultaneously.

For Ant. 3 and Ant. 4

Port 2 and Port 4 can be used as transmitting/receiving antenna.

Port 2 and Port 4 could transmit/receive simultaneously.



1.3 Table for EUT supports function

Function	Support Type
AP	Master
Slave	Slave without radar detection

Note: The above information was declared by manufacturer.

1.4 Table for Host Information

The EUT will be used in the following host:

Host No.	3	4	2	1
Equipment Name	Stratum™ X3			Stratum™ X1
Model Name	SX3-2029B-US	SX3-2020A-US	SX3-2021A-US	SX1-2023C-US
Ethernet Port	Gigabit port*3	Gigabit port*3	Gigabit port*3	Gigabit port*1
Antenna	Ant5. Integrated sector antenna	Ant3. External sector antenna Ant4. External dish antenna	Ant2. Integrated Panel antenna Ant3. External sector antenna Ant4. External dish antenna	Ant1. Integrated PCB antenna Ant4. External dish antenna
RP-SMA connectors	X	V	V	V
Ethernet Controller	External QCA8337N ethernet controller and an ethernet port extension daughter board			IPQ5018 internal ethernet controller
Note	All the models are electrically identical and share the same PCB with additional components populated on PCBA.			

Note 1: The EUT was integrated into the host to perform the testing.

Note 2: From above models, model SX1-2023C-US (Host 1) and model SX3-2021A-US (Host 2) were selected to test.

Note 3: The above information was declared by manufacturer.

1.5 Accessories

N/A

1.6 Testing Location

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.



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

2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

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

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



2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Standard Client_EUT with Host No. 1 + Ant. 1

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	16.65	13.33	29.98	0.01	29.99	0.99770	20	0.19848	1.00000	0.19848
6.7G;D1D	16.64	13.21	29.85	0.14	29.99	0.99770	20	0.19848	1.00000	0.19848

Standard Power Access Point and Fixed client_EUT with Host No. 1 + Ant. 1

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	16.65	17.61	34.26	0.50	34.76	2.99226	20	0.59528	1.00000	0.59528
6.7G;D1D	16.64	14.13	30.77	0.50	31.27	1.33968	20	0.26651	1.00000	0.26651

Standard Client_EUT with Host No. 2 + Ant. 2

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	21.83	8.14	29.97	0.02	29.99	0.99770	20	0.19848	1.00000	0.19848
6.7G;D1D	22.10	7.83	29.93	0.06	29.99	0.99770	20	0.19848	1.00000	0.19848

Standard Power Access Point and Fixed client_EUT with Host No. 2 + Ant. 2

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	21.83	14.07	35.90	0.09	35.99	3.97192	20	0.79017	1.00000	0.79017
6.7G;D1D	22.10	13.86	35.96	0.03	35.99	3.97192	20	0.79017	1.00000	0.79017

**Standard Client_EUT with Host No. 2 + Ant. 3**

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	15.76	14.22	29.98	0.01	29.99	0.99770	20	0.19848	1.00000	0.19848
6.7G;D1D	15.76	14.22	29.98	0.01	29.99	0.99770	20	0.19848	1.00000	0.19848

Standard Power Access Point and Fixed client_EUT with Host No. 2 + Ant. 3

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	15.76	20.11	35.87	0.12	35.99	3.97192	20	0.79017	1.00000	0.79017
6.7G;D1D	15.76	18.98	34.74	0.50	35.24	3.34195	20	0.66484	1.00000	0.66484

Standard Client_EUT with Host No. 1 + Ant. 4

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	27.85	2.13	29.98	0.01	29.99	0.99770	20	0.19848	1.00000	0.19848
6.7G;D1D	27.85	2.13	29.98	0.01	29.99	0.99770	20	0.19848	1.00000	0.19848

Standard Power Access Point and Fixed client_EUT with Host No. 1 + Ant. 4

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	27.85	8.11	35.96	0.03	35.99	3.97192	20	0.79017	1.00000	0.79017
6.7G;D1D	27.85	8.11	35.96	0.03	35.99	3.97192	20	0.79017	1.00000	0.79017

Bluetooth (Host FCC ID: HZB-MEGA2)

Mode	DG (dBi)	Maximum measured RF output power with tune-up procedure (dBm)	Max power Including tune-up tolerance (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)
BT-LE	1.50	4.30	2.6915	20	0.0008	1.00000

**Simultaneous Transmission Analysis Mode:****For Mode 1: EUT with Host No. 1 + Ant. 1 + Bluetooth (Host FCC ID: HZB-MEGA2)**

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	16.65	17.61	-	34.26	0.50	34.76	2.99226	20	0.59528	1.00000
BT-LE	1.50	-	4.30	-	-	5.80	0.00380	20	0.0008	1.00000
									Sum Ratio	0.59604
									Ratio Limit	1

For Mode 2: EUT with Host No. 2 + Ant. 2 + Bluetooth (Host FCC ID: HZB-MEGA2)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.7G;D1D	22.10	13.86	-	35.96	0.03	35.99	3.97192	20	0.79017	1.00000
BT-LE	1.50	-	4.30	-	-	5.80	0.00380	20	0.0008	1.00000
									Sum Ratio	0.79093
									Ratio Limit	1

For Mode 3: EUT with Host No. 2 + Ant. 3 + Bluetooth (Host FCC ID: HZB-MEGA2)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.2G;D1D	15.76	20.11	-	35.87	0.12	35.99	3.97192	20	0.79017	1.00000
BT-LE	1.50	-	4.30	-	-	5.80	0.00380	20	0.0008	1.00000
									Sum Ratio	0.79093
									Ratio Limit	1

For Mode 4: EUT with Host No. 1 + Ant. 4 + Bluetooth (Host FCC ID: HZB-MEGA2)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
6.7G;D1D	27.85	8.11	8.11	35.96	0.03	35.99	3.97192	20	0.79017	1.00000
BT-LE	1.50	-	4.30	-	-	5.80	0.00380	20	0.0008	1.00000
									Sum Ratio	0.79093
									Ratio Limit	1

—————THE END—————