



RADIO EXPOSURE TEST REPORT

FCC ID : 2BXL5-ARIA3629

Equipment : WiFi7 Tri-band Router W/SFP+ Cage and VoIP,
WiFi7 Tri-band Router,
WiFi7 Tri-band Router with VoIP,
WiFi7 Tri-band Router W/SFP+ Cage

Brand Name : Hitron

Model Name : ARIA3629, ARIA3625, ARIA3625V, ARIA3625V-XPL,
ARIA3626

Applicant : Hitron Technologies Americas, Inc.
9000 E Nichols Ave, Suite 103 Centennial, CO 80112 USA

Manufacturer : Hitron Technologies Inc.
No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu
30078, Taiwan

Standard : 47 CFR Part 2.1091

The product was received on Jul. 07, 2026, and testing was started from Aug. 04, 2026 and completed on Sep. 09, 2026. 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

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A1_1 Ver1.1

Page Number : 3 of 11
Issued Date : Oct. 08, 2026
Report Version : 01



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:

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.

Reviewed by: Sam Chen

Report Producer: Vicky Huang



1 General Description

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	5180-5250 5250-5320 5500-5720 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
6GHz WLAN	5925-7125	5955-7115	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: GFSK

1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Modes of Operation	Gain (dBi)
1	1	PSA	EmP344c-B-I75(R)	Dipole	I-PEX	WLAN 2.4GHz + WLAN 5GHz	Note 1
2	2	PSA	EmP379a-B-I75(G)	Dipole	I-PEX	WLAN 2.4GHz + WLAN 5GHz	
3	3	PSA	EmP344e-B-I85(Y)	Dipole	I-PEX	WLAN 2.4GHz + WLAN 5GHz	
4	4	PSA	EmP344d-B-I130(W)	Dipole	I-PEX	WLAN 2.4GHz + WLAN 5GHz	
5	1	PSA	EmP630b-B-I130(B)	Dipole	I-PEX	WLAN 6GHz	
6	2	PSA	EmP630a-B-I95(Br)	Dipole	I-PEX	WLAN 6GHz	
7	3	PSA	EmP630c-B-I90(Gr)	Dipole	I-PEX	WLAN 6GHz	
8	4	PSA	EmP630d-B-I60(BI)	Dipole	I-PEX	WLAN 6GHz	
9	1	PSA	EmP171-B-I150(G)	Dipole	I-PEX	Bluetooth	

Note 1:

Ant.	Antenna Gain (dBi)									
	WLAN 2.4GHz	WLAN 5GHz				WLAN 6GHz				BT
		5.2GHz	5.3GHz	5.6GHz	5.785GHz	6.175GHz	6.475GHz	6.695GHz	6.995GHz	
1	4.34	3.18	2.93	5.07	4.25	-	-	-	-	-
2	3.08	4.92	3.91	3.58	3.43	-	-	-	-	-
3	5	4.96	4.25	5.8	5.32	-	-	-	-	-
4	5.01	2.8	2.97	3.87	3.64	-	-	-	-	-
5	-	-	-	-	-	6.17	6.76	5.33	5.89	-
6	-	-	-	-	-	5.3	4.57	4.78	6.56	-
7	-	-	-	-	-	4.29	4.27	4.99	4.76	-
8	-	-	-	-	-	5.26	4.73	5.38	4.91	-
9	-	-	-	-	-	-	-	-	-	4.53



Directional Gain (dBi)				
Item	WLAN 2.4GHz			
	2.45GHz			
4T1S	6.17			
4T2S	5.01			
4T4S	5.01			
Item	WLAN 5GHz UNII 1-3			
	5.2GHz	5.3GHz	5.6GHz	5.785GHz
4T1S	5.26	5.1	5.8	5.32
4T2S	4.96	4.25	5.8	5.32
4T4S	4.96	4.25	5.8	5.32
Item	WLAN 6GHz UNII 5-8			
	6.175GHz	6.475GHz	6.695GHz	6.995GHz
4T1S	8.08	8.36	8.34	7.86
4T2S	6.17	6.76	5.38	6.56
4T4S	6.17	6.76	5.38	6.56

Note 2: The above information (excepting WLAN 2.4GH, 5GHz, 6GHz antenna gain and WLAN 2.4GH, 5GHz, 6GHz directional gain) was declared by manufacturer.

For WLAN 2.4GH, 5GHz, 6GHz Maximum Directional Gain following KDB662911 D03.

Note 3:

For 2.4GHz function:

For IEEE 802.11b/g/n/VHT/ax/be (4TX/4RX):

Port 1~Port 4 can be used as transmitting/receiving antenna.

Port 1~Port 4 could transmit/receive simultaneously

For 5GHz function:

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

Port 1~Port 4 can be used as transmitting/receiving antenna.

Port 1~Port 4 could transmit/receive simultaneously

For 6GHz function:

For IEEE 802.11a/ax/be/ (4TX/4RX):

Port 1~Port 4 can be used as transmitting/receiving antenna.

Port 1~Port 4 could transmit/receive simultaneously

For Bluetooth function (1TX/1RX):

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



1.3 Table for Multiple Listing

The Equipment Names/model names in the following table are all refer to the identical product

Equipment Name	Model Name	Phone Port	SFP+ Cage	Braille	Service Provider
WiFi7 Tri-band Router W/SFP+ Cage and VoIP	ARIA3629	2	1	Not Supported	Other than the service provider, Explore
WiFi7 Tri-band Router	ARIA3625	0	0	Not Supported	Other than the service provider, Explore
WiFi7 Tri-band Router with VoIP	ARIA3625V	2	0	Supported	Other than the service provider, Explore
	ARIA3625V-XPL				For the service provider: Explore
WiFi7 Tri-band Router W/SFP+ Cage	ARIA3626	0	1	Not Supported	Other than the service provider, Explore

Note 1: From the above models, model: ARIA3629 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

1.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	FRECOM	F48L1-120400SPAU	INPUT: 100-240V ~ 50/60Hz, 1.4A OUTPUT: 12.0V, 4.0A, 48.0W
Adapter 2	MOSO	MS-V4000R120-050A0-US	INPUT: 100-240V ~ 50/60Hz, 1.3A max. OUTPUT: 12.0V, 4.0A
Other			
RJ-45 cable*1: Shielded, 1.5m			



1.5 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 25 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

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

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;D1D	6.17	27.81	33.98	0.50	34.48	25	0.35720	1.00000	0.3572
5.2G;D1D	5.26	29.82	35.08	0.50	35.58	25	0.46016	1.00000	0.46016
5.3G;D1D	4.25	22.69	26.94	0.04	26.98	25	0.06352	1.00000	0.06352
5.6G;D1D	5.80	21.16	26.96	0.02	26.98	25	0.06352	1.00000	0.06352
5.8G;D1D	5.32	29.94	35.26	0.50	35.76	25	0.47963	1.00000	0.47963
6.2G;D1D	8.08	21.82	29.90	0.09	29.99	25	0.12703	1.00000	0.12703
6.4G;D1D	8.36	21.44	29.80	0.19	29.99	25	0.12703	1.00000	0.12703
6.7G;D1D	8.34	21.56	29.90	0.09	29.99	25	0.12703	1.00000	0.12703
7.0G;D1D	7.86	19.55	27.41	0.50	27.91	25	0.07869	1.00000	0.07869
2.4G;BT-LE	4.53	8.71	13.24	0.50	13.74	25	0.00301	1.00000	0.00301

Simultaneous Transmission Analysis Mode: Bluetooth + WLAN 2.4GHz + WLAN 5GHz + WLAN 6GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;BT-LE	4.53	8.71	13.24	0.50	13.74	25	0.00301	1.00000	0.00301
2.4G;D1D	6.17	27.81	33.98	0.50	34.48	25	0.35720	1.00000	0.3572
5.8G;D1D	5.32	29.94	35.26	0.50	35.76	25	0.47963	1.00000	0.47963
6.2G;D1D	8.08	21.82	29.90	0.09	29.99	25	0.12703	1.00000	0.12703
Sum Ratio	0.96687								
Ratio Limit	1								

————THE END————