Co-location Report

FCC ID:	Q9DAPIN0725
Application:	Hewlett Packard Enterprise Company
Product:	ACCESS POINT
Model No.:	APIN0725
Trademark:	Hewlett Packard Enterprise
FCC Rule Part(s):	Part 15 Subpart C (Section 15.247) Part 15 Subpart E (Section 15.407)
Result:	Complies
Received Date:	2024-12-20
Test Date:	2025-02-28

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.
This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures.
Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2412RSU035-U9	V01	Initial Report	2025-04-24	Valid

CONTENTS

1. General Information

1.1. Applicant

Hewlett Packard Enterprise Company

6280 America Center Drive, San Jose CA 95002, United States

1.2. Manufacturer

Hewlett Packard Enterprise Company

6280 America Center Drive, San Jose CA 95002, United States

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**				
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China **Laboratory Location (Suzhou - SIP)** 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China **Laboratory Location (Suzhou - Wujiang)** Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China				
	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐R-20025	☐G-20034	☐C-20020	☐T-20020
		☐R-20141	☐G-20134	☐C-20103	☐T-20104
☐	**Test Site – MRT Shenzhen Laboratory**				
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	**Test Site – MRT Taiwan Laboratory**				
	Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: 3261				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	ACCESS POINT
Model No.	APIN0725
Serial No.	CNT4MPP00W
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	BLE only
Power Type	PoE Input
Operating Temperature	0 ~ 50 °C
Operating Environment	Indoor Use
Accessory	
PoE Injector	Model: ADH-30CR BB Input: 100-240V ~ 1.0A, 50-60Hz Output: 55.0V, 0.55A 30.25W
Remark: 1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. 2. PoE Injector is not sold with Product.	

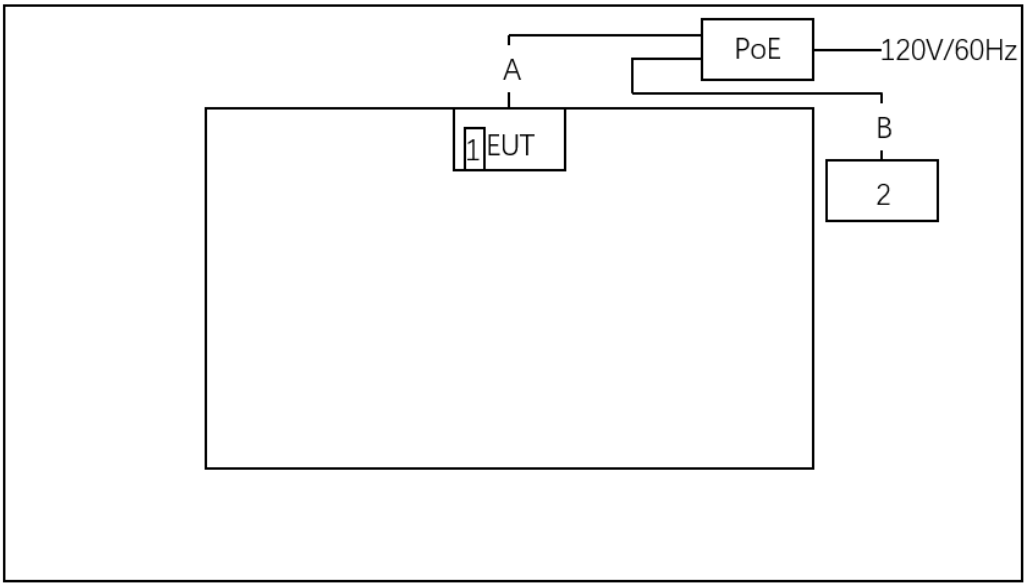
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by BLE 1Mbps at 2402MHz (Core 0) + Transmit by BLE 1Mbps at 2480MHz (Core 1) + Transmit by 802.11b at 2412MHz + Transmit by 802.11a at 5180MHz + Transmit by 802.11ax at 5955MHz
Mode 2: Transmit by ZigBee at 2480MHz (Core 0) + Transmit by BLE 1Mbps at 2402MHz (Core 1) + Transmit by 802.11b at 2462MHz + Transmit by 802.11a at 5180MHz + Transmit by 802.11ax at 5955MHz

2.2. Test System Connection Diagram

Connection Diagram



No.	Cable Type	Cable Spec.	Length
A	Ethernet Cable	Non-Shielded, Cat 6	>10.0m
B	Ethernet Cable	Non-Shielded, Cat 6	1.2m
No.	Product	Manufacturer	Model No.
1	USB Flash	SanDisk	16G
2	Notebook	DELL	Latitude 5491

2.3. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC Part 15 Subpart E §15.407
- KDB 558074 D01v05r02
- KDB 789033 D02v02r01
- ANSI C63.10-2013

2.4. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2025-04-17	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2025-05-08	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2025-09-23	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2025-05-06	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2025-04-18	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11263	1 year	2025-10-16	WZ-AC2
Loop Antenna	Schwarzbeck	FMZB 1519 B	MRTSUE06937	1 year	2026-01-04	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2025-11-03	WZ-AC2
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2026-01-09	WZ-AC2

Software	Version	Function
e3	230711	RE & CE
Controller_MF 7802	1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Radiated Spurious Emissions	
The maximum measurement uncertainty is evaluated as:	
Coaxial:	9kHz~30MHz: 2.35dB
Coplanar:	9kHz~30MHz: 2.37dB
Horizontal:	30MHz~200MHz: 3.47dB
	200MHz~1GHz: 4.17dB
	1GHz~40GHz: 4.97dB
Vertical:	30MHz~200MHz: 4.07dB
	200MHz~1GHz: 5.28dB
	1GHz~40GHz: 4.84dB

5. Radiated Spurious Emissions Measurement (Co-location)

5.1. Test Limit

For 15.247(d) requirement

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an EIRP. of −27 dBm/MHz.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [μV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

5.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.11 & 11.12

ANSI C63.10 - 2013 - Section 6.3 (General Requirements)

ANSI C63.10 - 2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 - 2013 - Section 6.5 (Standard test method in the frequency range of 30MHz to 1GHz)

ANSI C63.10 - 2013 - Section 6.6 (Standard test method above 1GHz)

5.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

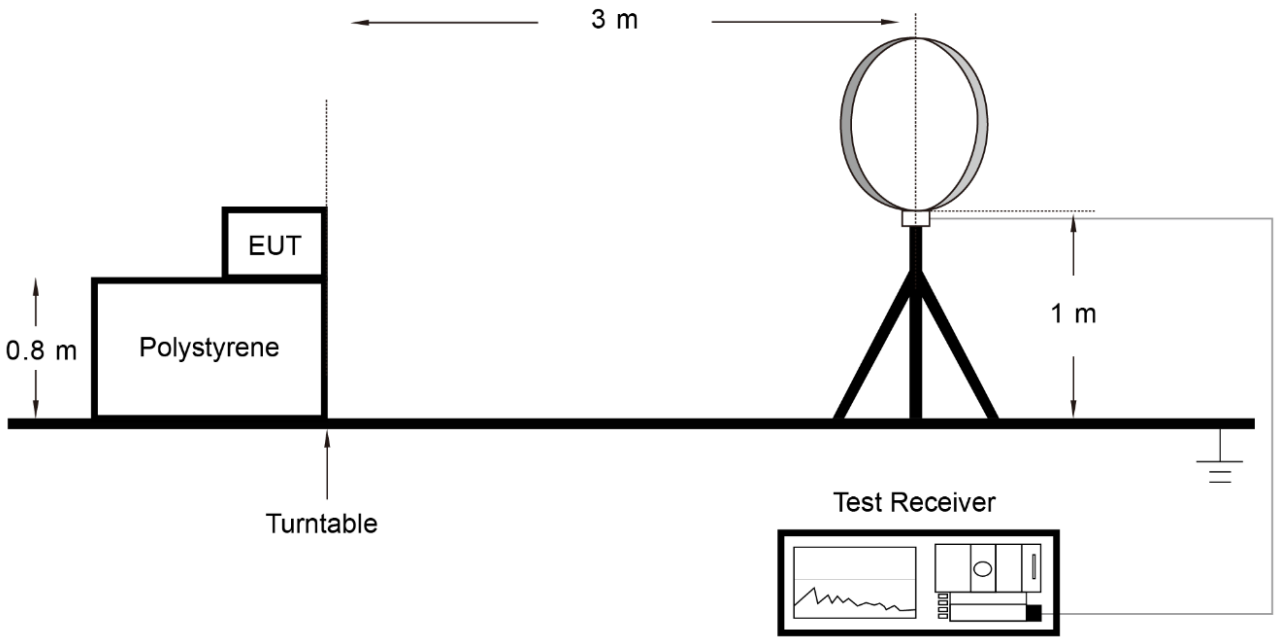
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

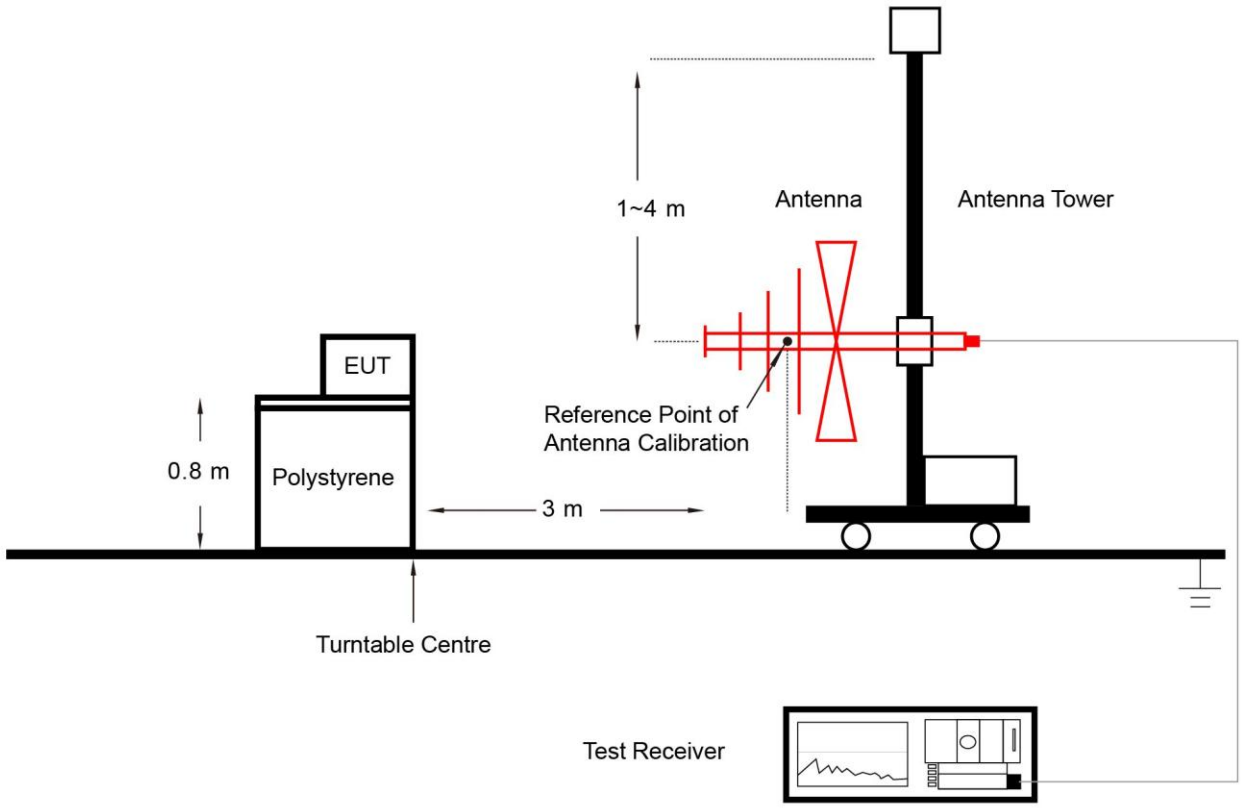
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

5.4. Test Setup

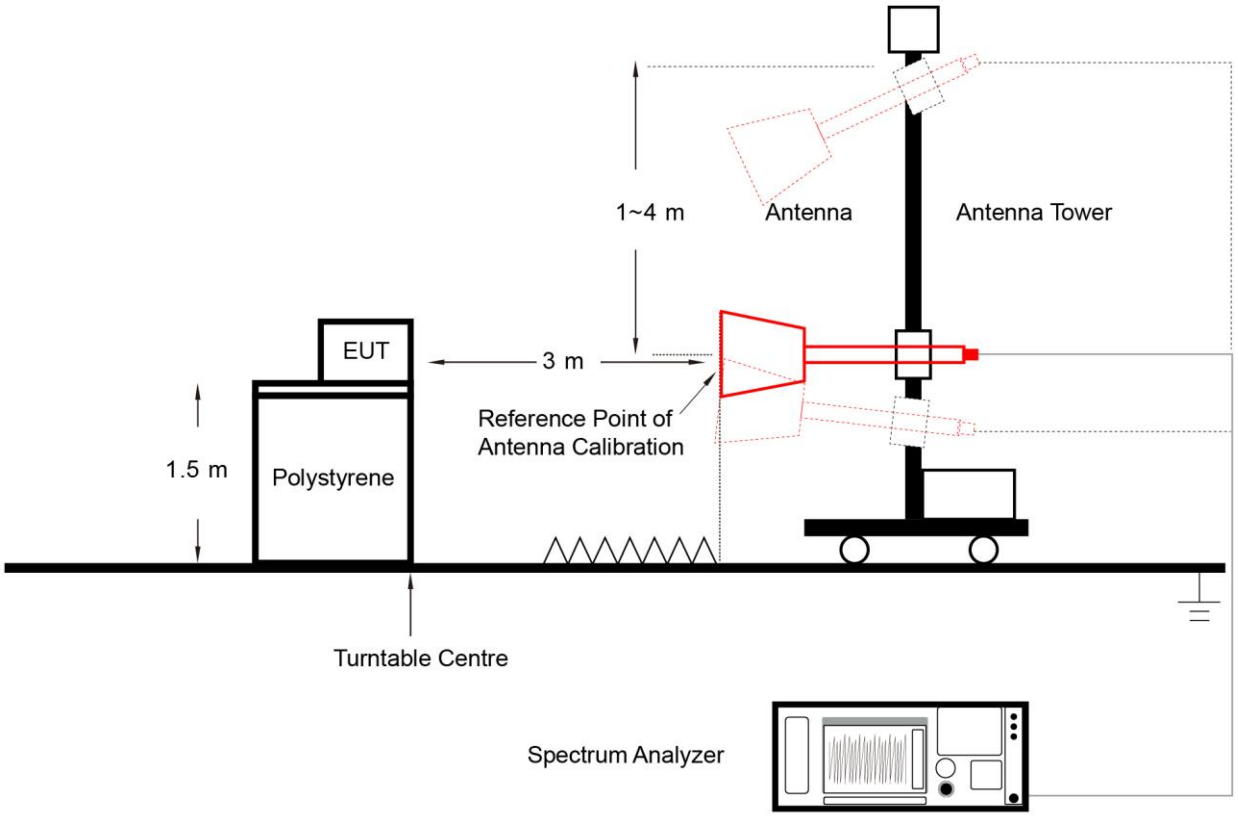
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.5. Test Result

Test Site	WZ-AC2	Test Engineer	Dick Shen
Test Date	2025-02-28	Test Mode	1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

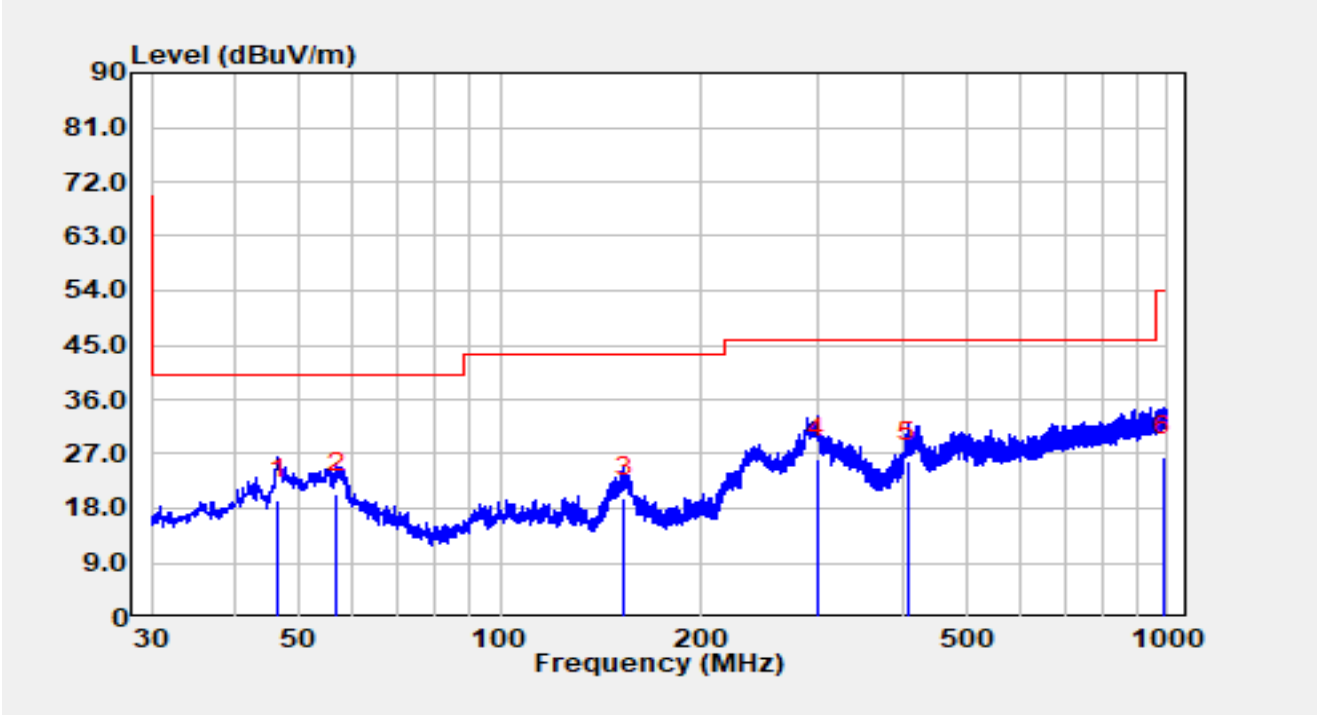
Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1185.4	39.3	-5.9	33.4	74.0	-40.6	Peak	Horizontal
3998.8	35.8	-0.3	35.5	74.0	-38.5	Peak	Horizontal
11092.9	31.0	15.9	46.9	74.0	-27.1	Peak	Horizontal
2387.2	44.4	-2.5	41.9	74.0	-32.1	Peak	Vertical
7444.7	30.9	10.5	41.4	74.0	-32.6	Peak	Vertical
11385.3	29.5	16.5	46.0	74.0	-28.0	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)							

Test Site	WZ-AC2	Test Engineer	Dick Shen
Test Date	2025-02-28	Test Mode	2
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1186.6	38.5	-5.9	32.6	74.0	-41.4	Peak	Horizontal
3900.4	36.6	-0.8	35.8	74.0	-38.2	Peak	Horizontal
11670.9	30.6	16.4	47.0	74.0	-27.0	Peak	Horizontal
3895.6	36.0	-0.7	35.3	74.0	-38.7	Peak	Vertical
7426.0	33.3	10.4	43.7	74.0	-30.3	Peak	Vertical
11725.3	30.9	16.8	47.7	74.0	-26.3	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)							

The Result of Radiated Emission below 1GHz:

Site	WZ-AC2	Test Date	2025-02-28
Temperature	19.9 °C	Humidity	33.1 %
Limit	FCC_Part 15.209_RSE(3m)_QP	Test Engineer	Dick Shen
Factor	VULB 9162_00047	Polarity	Horizontal
EUT	ACCESS POINT	Test Voltage	By PoE
Test Mode	Mode 1		



No	Mark	Frequency (MHz)	Reading (dBµV)	C.F (dB/m)	Measurement (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Detector
1		46.49	-0.96	20.38	19.42	-20.58	40.00	QP
2	*	56.97	0.50	19.91	20.41	-19.59	40.00	QP
3		153.29	4.40	15.37	19.77	-23.73	43.50	QP
4		298.01	5.39	20.92	26.30	-19.70	46.00	QP
5		408.11	2.31	23.50	25.81	-20.19	46.00	QP
6		983.12	-5.66	32.30	26.65	-27.35	54.00	QP

Notes:

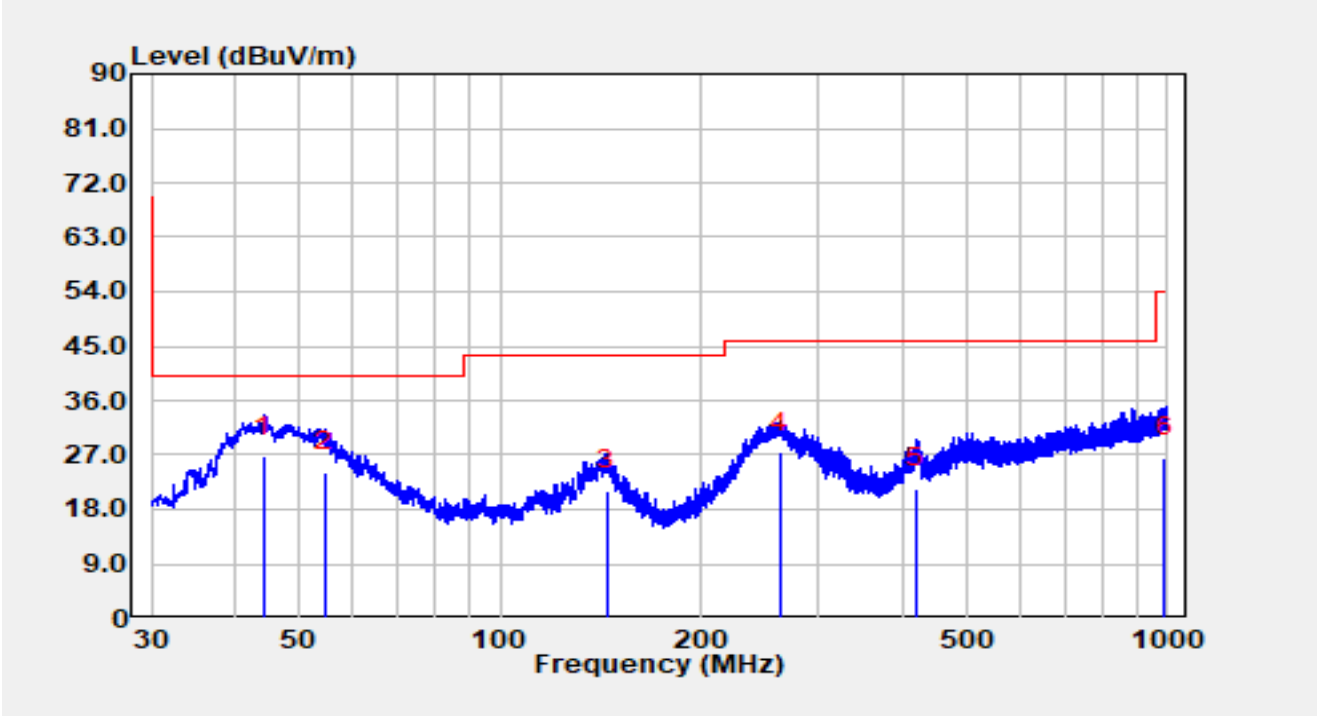
1. " * ", means this data is the worst emission level.

2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBµV/m) = Reading (dBµV) + C.F (dB/m).

4. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	WZ-AC2	Test Date	2025-02-28
Temperature	19.9 °C	Humidity	33.1 %
Limit	FCC_Part 15.209_RSE(3m)_QP	Test Engineer	Dick Shen
Factor	VULB 9162_00047	Polarity	Vertical
EUT	ACCESS POINT	Test Voltage	By PoE
Test Mode	Mode 1		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	44.16	6.53	20.16	26.69	-13.31	40.00	QP
2		54.44	3.96	20.21	24.17	-15.83	40.00	QP
3		144.27	6.00	15.16	21.15	-22.35	43.50	QP
4		262.22	7.19	20.25	27.44	-18.56	46.00	QP
5		420.13	-2.14	23.67	21.52	-24.48	46.00	QP
6		988.85	-5.71	32.36	26.65	-27.35	54.00	QP

Notes:

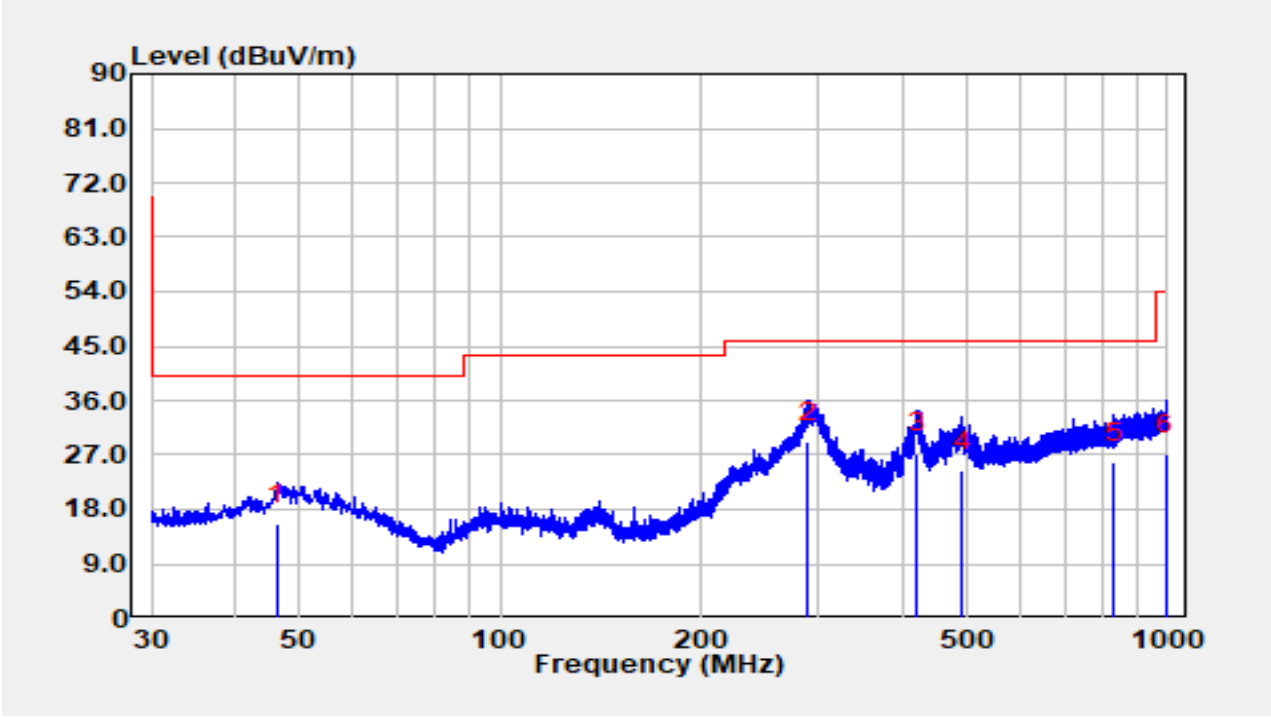
1. " * ", means this data is the worst emission level.

2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

4. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	WZ-AC2	Test Date	2025-02-28
Temperature	19.9 °C	Humidity	33.1 %
Limit	FCC_Part 15.209_RSE(3m)_QP	Test Engineer	Dick Shen
Factor	VULB 9162_00047	Polarity	Horizontal
EUT	ACCESS POINT	Test Voltage	By PoE
Test Mode	Mode 2		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		46.30	-4.79	20.37	15.58	-24.42	40.00	QP
2	*	289.28	8.22	20.82	29.04	-16.96	46.00	QP
3		420.62	3.65	23.67	27.32	-18.68	46.00	QP
4		492.59	-0.91	25.35	24.44	-21.56	46.00	QP
5		831.90	-4.82	30.49	25.66	-20.34	46.00	QP
6		995.54	-5.33	32.39	27.06	-26.94	54.00	QP

Notes:

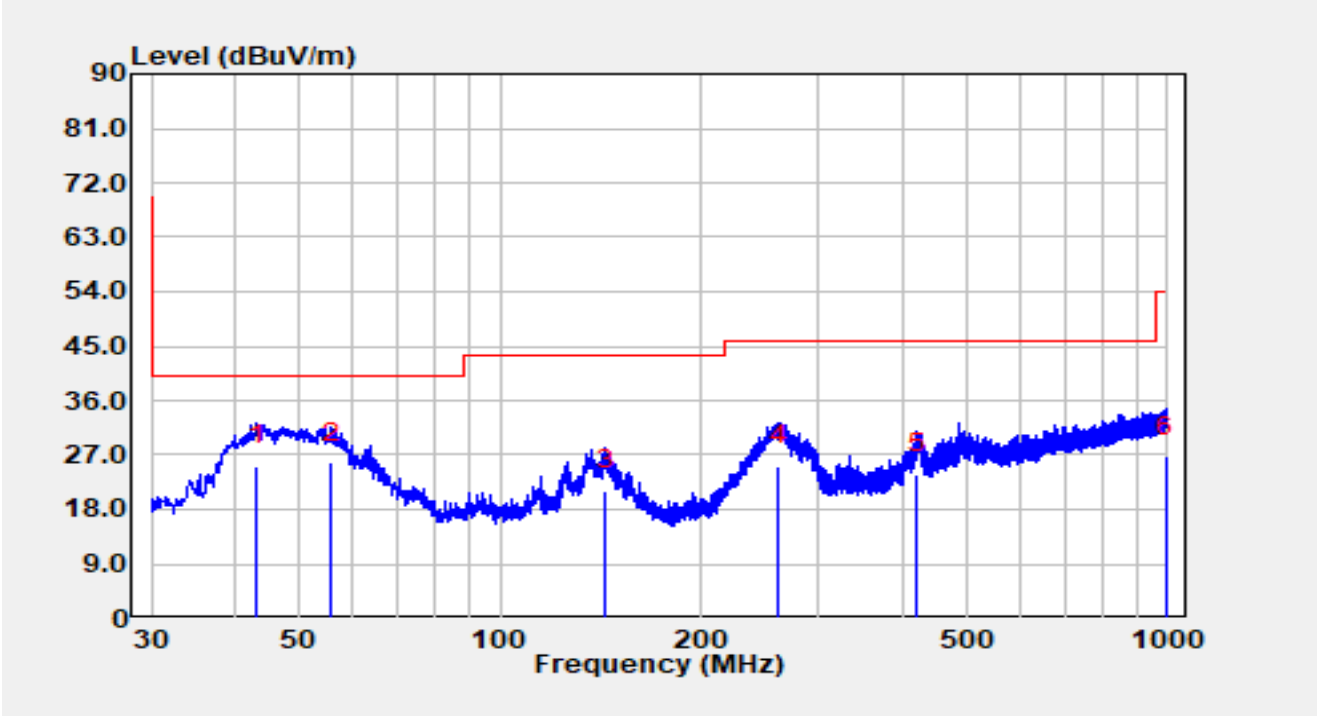
1. " * ", means this data is the worst emission level.

2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

4. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	WZ-AC2	Test Date	2025-02-28
Temperature	19.9 °C	Humidity	33.1 %
Limit	FCC_Part 15.209_RSE(3m)_QP	Test Engineer	Dick Shen
Factor	VULB 9162_00047	Polarity	Vertical
EUT	ACCESS POINT	Test Voltage	By PoE
Test Mode	Mode 2		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		43.10	5.30	19.98	25.28	-14.72	40.00	QP
2	*	55.71	5.67	20.07	25.75	-14.25	40.00	QP
3		144.07	6.01	15.16	21.17	-22.33	43.50	QP
4		261.64	4.98	20.26	25.24	-20.76	46.00	QP
5		421.98	0.15	23.68	23.82	-22.18	46.00	QP
6		992.73	-5.69	32.37	26.68	-27.32	54.00	QP

Notes:

1. " * ", means this data is the worst emission level.

2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

4. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Appendix A - Test Setup Photograph

Refer to “2412RSU035-UT” file.

Appendix B - EUT Photograph

Refer to “2412RSU035-UE” file.

The End