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Report No.: 2412TW0107-U3
Report Version: 1.0
Issue Date: 2025-02-03

MEASUREMENT REPORT

FCC ID	:	**Q9DAPIN0755A**
APPLICANT	:	**Hewlett Packard Enterprise Company**
Application Type	:	**Certification**
Product	:	**ACCESS POINT**
Model No.	:	**APIN0755A**
Brand Name	:	Hewlett Packard Enterprise
FCC Classification	:	**Digital Transmission System (DTS)**
FCC Rule Part(s)	:	**Part 15 Subpart C (Section 15.247)**
Test Procedure(s)	:	**ANSI C63.10-2013**
Received Date	:	**December 9, 2024**
Test Date	:	**December 19, 2024~February 26, 2025**

Tested By : Kaunaz Lee
(Kaunaz Lee)

Reviewed By : Paddy Chen
(Paddy Chen)

Approved By : Chenz Ker
(Chenz Ker)

Testing Laboratory 3261

The test results only relate to the tested sample.
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 specified in ANSI C63.10. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2412TW0107-U3	1.0	Original Report	2025-02-03	

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Description Page

General Information

Applicant	Hewlett Packard Enterprise Company
Applicant Address	6280 America Center Drive, San Jose CA 95002, United States
Manufacturer	Hewlett Packard Enterprise Company
Manufacturer Address	6280 America Center Drive, San Jose CA 95002, United States
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082

Test Facility / Accreditations

1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Canada, EU and TELEC Rules.

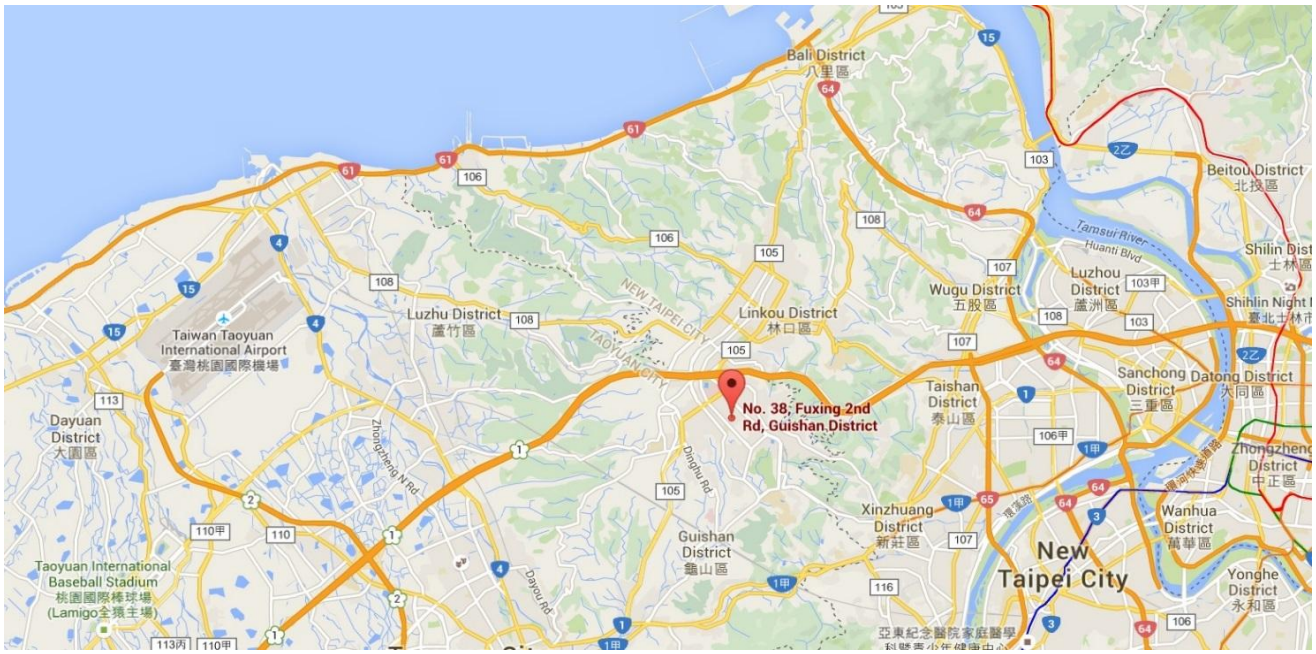
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



2. PRODUCT INFORMATION

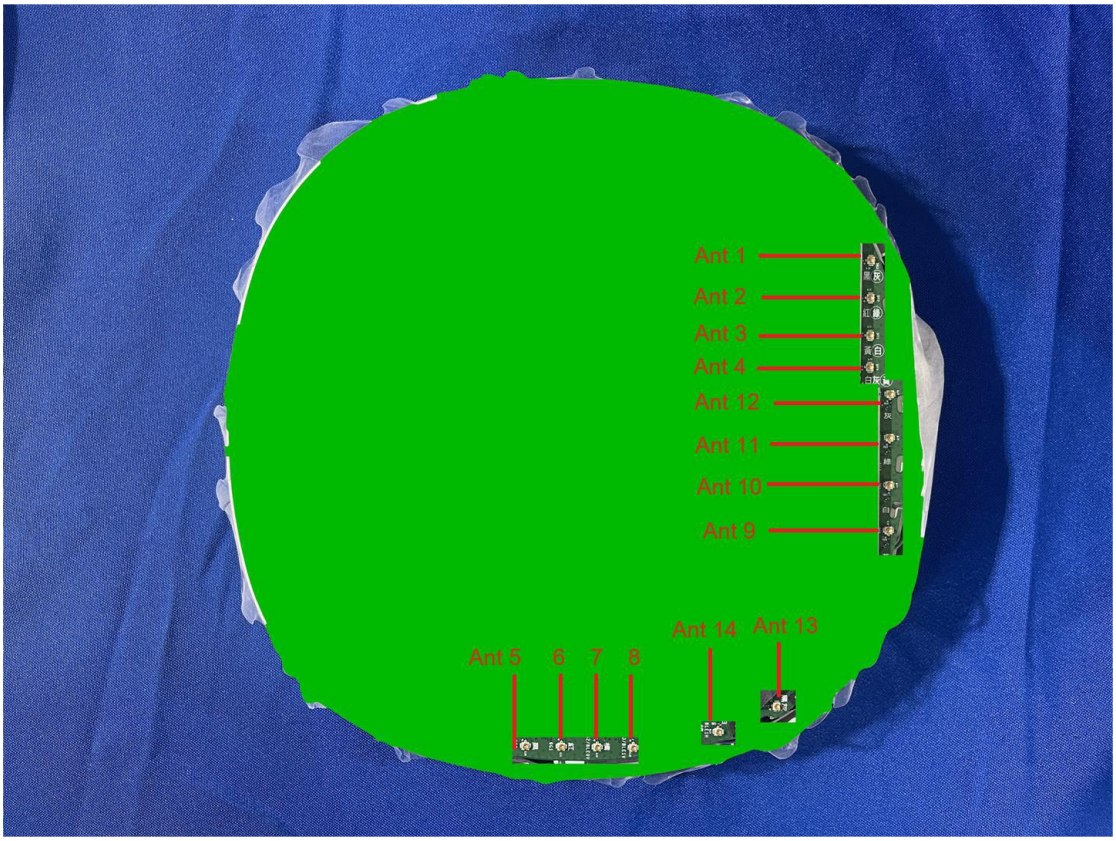
2.1. Equipment Description

Product Name	ACCESS POINT
Model No.	APIN0755A
Serial No.	Radiated Sample: VNSYML300R
	Conducted Sample: VNSYML3008
Software Version	v0.4.6
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	BLE only
ZigBee Specification	802.15.4
GNSS Specification	GPS, Galileo
Power Supply	AC/DC Adapter and PoE Injector Input
Operating Environment	Indoor Use
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

2.2. Product Specification Subjective to this Standard

Frequency Range:	802.11b/g/n-HT20/ax-HE20/be-EHT20: 2412 ~ 2462MHz 802.11n-HT40/ax-HE40/be-EHT40: 2422 ~ 2452MHz	
Channel Number:	802.11b/g/n-HT20/ax-HE20/be-EHT20: 11 802.11n-HT40/ax-HE40/be-EHT40: 7	
Type of Modulation:	802.11b: DSSS 802.11g/n: OFDM 802.11ax/be: OFDMA	
Data Rate:	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 600Mbps 802.11ax: up to 1147.2Mbps 802.11be: up to 1376Mbps	
Channel Puncturing Function	☐ Supported	☒ UnSupported
Support RU	☒ Full RU	☐ Partial RU

2.3. Description of Antenna RF Port



Antenna Port	RF Spec.			
	Wi-Fi 2.4G	Wi-Fi 5G	Wi-Fi 6G	BLE/ZigBee
Ant 1	--	● (Radio 1)	--	--
Ant 2	--	● (Radio 1)	--	--
Ant 3	--	● (Radio 1)	--	--
Ant 4	--	● (Radio 1)	--	--
Ant 5	--	--	● (Radio 0)	--
Ant 6	--	--	● (Radio 0)	--
Ant 7	--	--	● (Radio 0)	● (Core 0)
Ant 8	--	--	● (Radio 0)	● (Core 1)
Ant 9	● (Radio 2)	--	--	--
Ant 10	● (Radio 2)	--	--	--
Ant 11	● (Radio 2)	--	--	--
Ant 12	● (Radio 2)	--	--	--
Ant 13	GNSS			
Ant 14	--	--	--	● (Core 1)

2.4. Antenna Details

Antenna Type	Wi-Fi Antenna	Frequency Band (GHz)	TX Paths	Directional Gain (dBi)	
				Uncorrelated	Correlated
Dipole	Ant 9	2.4 ~ 2.5	4	3.10	9.00
Dipole	Ant 10				
PIFA	Ant 11				
PIFA	Ant 12				

Note:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.
2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax/be, not include 802.11a/b/g.
3. For beamforming operation, Aruba OS automatically backs power down based on CDD power.
4. The detail calculation method of directional gain refers to antenna specification provided by the applicant.

2.5. Test Mode

Mode 1: Transmit by 802.11b (1Mbps)
Mode 2: Transmit by 802.11g (6Mbps)
Mode 3: Transmit by 802.11n-HT20_ N_{SS}=1 (MCS0)
Mode 4: Transmit by 802.11n-HT40_ N_{SS}=1 (MCS0)
Mode 5: Transmit by 802.11ax-HE20_ N_{SS}=1 (MCS0)
Mode 6: Transmit by 802.11ax-HE40_ N_{SS}=1 (MCS0)
Mode 7: Transmit by 802.11be-EHT20_Nss=1 (MCS0)
Mode 8: Transmit by 802.11be-EHT40_Nss=1 (MCS0)
Note 1: All modes of operation and data rates were investigated, so all RF test requirements shall be executed at the worst data rate. Note 2: For beamforming operation, manufacturer automatically backs power down based on CDD power. Therefore, only the CDD mode was evaluated in this report.

2.6. Operation Frequency / Channel List

802.11b/g/n-HT20/ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	--	--

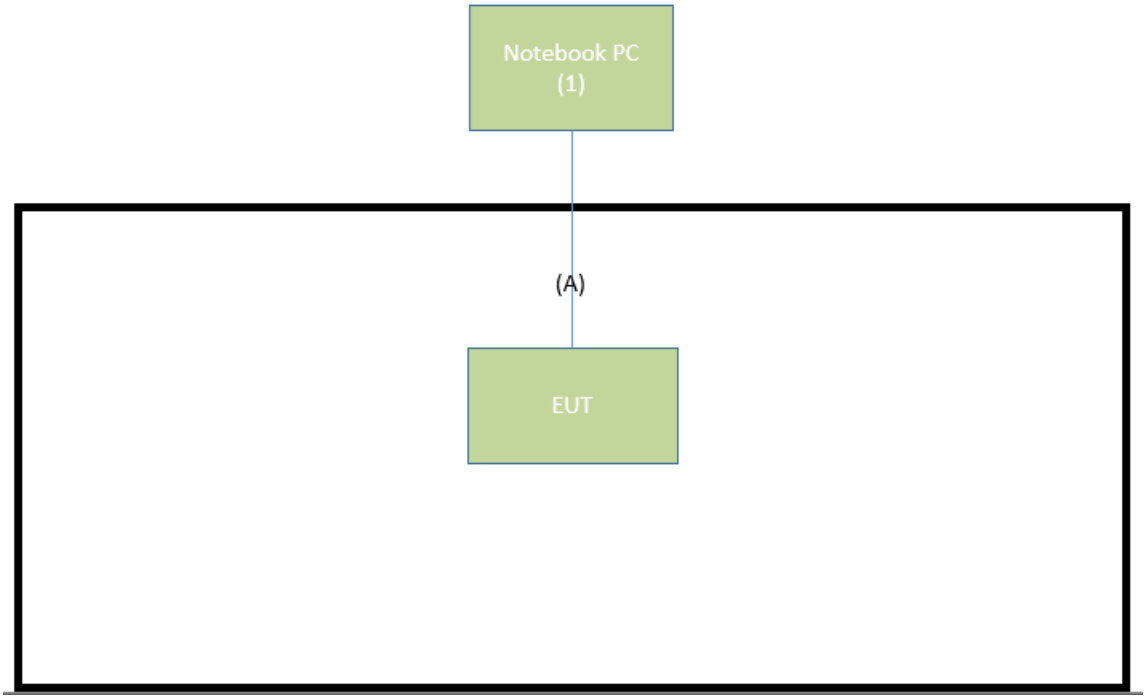
802.11n-HT40/ax-HE40/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	--	--	--	--

2.7. Test Configuration

This device was tested per the guidance of ANSI C63.10-2013. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

Connection Diagram



Signal Cable Type		Signal Cable Description
A	Lan Cable	Non-Shielded, 3.0m

2.8. Test System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	Lenovo	V14 G3 ABA	N/A	Non-shielded, 0.8m

2.9. Test Software

The test utility software used during testing was “accessMTool”, and the version was 3.3.0.6.
Final power setting please refer to operational description.

2.10. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.11. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

3. DESCRIPTION of TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013) was used in the measurement of the **ACCESS POINT.**

Deviation from measurement procedure…….....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 9'x4'x3' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment which determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

Line conducted emissions test results are shown in Section 7.8.

3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable. For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, which produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

Radiated emissions test results are shown in Section 7.6 & 7.7 .

4. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antenna of the **ACCESS POINT,** is permanently attached.
- There are no provisions for connection to an external antenna.

Conclusion:

The EUT unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Acitve Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2025/5/7
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2025/11/5
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2025/2/28
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	1 year	2025/2/28
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2025/3/26
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2025/3/21
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2025/3/5
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2025/3/14

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2025/9/24
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2025/8/12
USB Wideband Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	1 year	2025/4/16

Software	Manufacturer	Version No.
e3	Audix	9.160520a

6. 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.

Conducted Emission- Power Line
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 0.15MHz~30MHz: ± 2.53dB
Radiated Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 9kHz~30MHz: ± 3.92dB 30MHz~1GHz: ± 4.25dB 1GHz~18GHz: ± 4.40dB 18GHz~40GHz: ± 4.45dB
Frequency Error
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ±78.4Hz
Conducted Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ± 0.84dB
Conducted Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):± 2.65 dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ± 3.3%
Temp. / Humidity
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ±0.82°C/ ±3%
DC Voltage
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ±0.3%

7. TEST RESULT

7.1. Summary

Product Name: **ACCESS POINT**
Reference Device: **Q9DAPIN0755**
Variant Device: **Q9DAPIN0755A**
Key differences: **Part substitution for 5G and 6G passive filter**

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Data Referencing	Test Result	Reference
15.247(a)(2)	6dB Bandwidth	≥ 500kHz	Conducted	Y	Pass	Pointer to spot-check exhibit / Section 7.2
15.247(b)(3)	Output Power	≤ 30.00dBm		Y	Pass	Pointer to spot-check exhibit / Section 7.3
15.247(e)	Power Spectral Density	≤ 8.00dBm/3kHz		Y	Pass	Pointer to spot-check exhibit / Section 7.4
15.247(d)	Out-of-Band Emissions	Conducted ≥ 20dBc		Y	Pass	Pointer to spot-check exhibit / Section 7.5
15.205 15.209	Spurious Emission	< FCC 15.209 limits	Radiated	Y	Pass	Pointer to spot-check exhibit / Section 7.6
15.205 15.209	Band Edge Measurement	≦ 74dBuV/m(Peak) ≦54dBuV/m(Average)		Y	Pass	Pointer to spot-check exhibit / Section 7.7
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Y	Pass	Section 7.8

Notes:

1) Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.
2) For radiated emission test, every axis (X, Y, Z) was also verified when applicable. The test results shown in the following sections represent the worst case emissions.
3) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
4) The power was fully tested, and its measured data is lower than the original report. Then spot

checks were performed on the worst-case test mode based on the original report 2403RSU068-U3.

7.2. 6dB Bandwidth Measurement

7.2.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

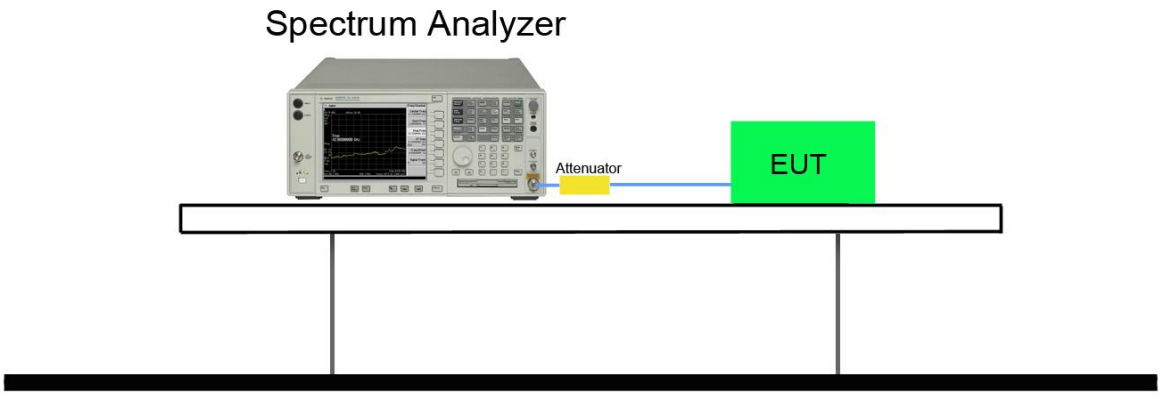
7.2.2. Test Procedure used

ANSI C63.10 - 2013 Section 11.8

7.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 6. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. Set RBW = 100 kHz
3. VBW ≥ 3 × RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace was allowed to stabilize

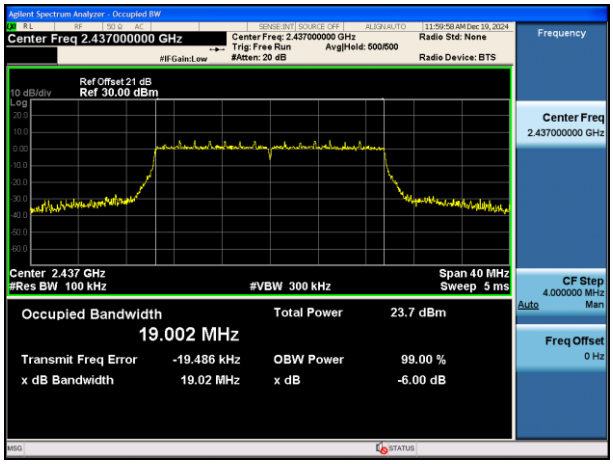
7.2.4. Test Setup



7.2.5. Test Result

Product	ACCESS POINT	Temperature	21°C
Test Engineer	Fran	Relative Humidity	54%
Test Site	SR6	Test Date	2024/12/19

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
11be-EHT20	MCS0	06	2437	19.02	≥ 0.5	Pass

802.1be-EHT20 6dB Bandwidth
Channel 06 (2437MHz)


7.3. Output Power Measurement

7.3.1. Test Limit

The maximum out power shall be less 1 Watt (30dBm).

7.3.2. Test Procedure Used

ANSI C63.10 - 2013 Section 11.9.2.3.2

7.3.3. Test Setting

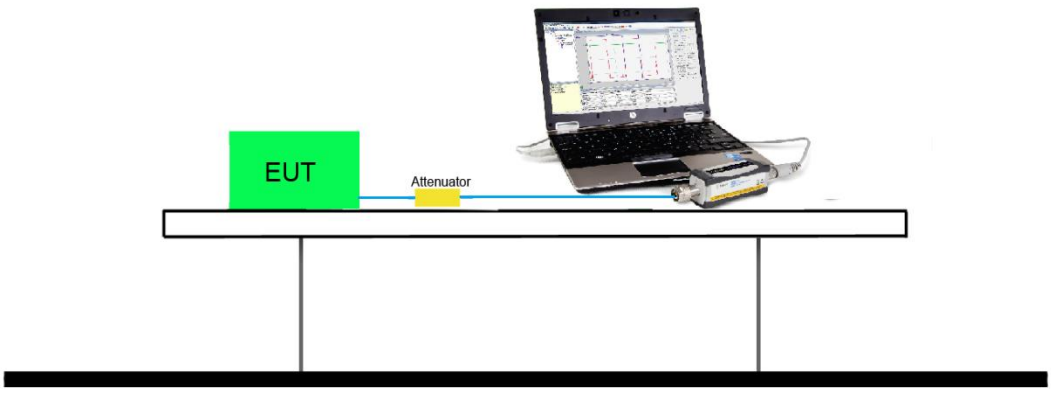
Peak Power Measurement

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.3.4. Test Setup



7.3.5. Test Result of Output Power

Product	ACCESS POINT	Temperature	21°C
Test Engineer	Fran	Relative Humidity	54%
Test Site	SR6	Test Date	2024/12/19

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)				Total Average Power (dBm)	Limit (dBm)	Result
				Ant 9	Ant 10	Ant 11	Ant 12			
b	1M	06	2437	17.62	17.43	17.81	17.98	23.74	≤ 30.00	Pass
g	6M	06	2437	17.86	17.92	17.89	17.81	23.89	≤ 30.00	Pass
n-HT20	MCS0	06	2437	17.64	17.71	18.11	17.94	23.87	≤ 30.00	Pass
n-HT40	MCS0	06	2437	17.62	17.53	17.62	17.94	23.70	≤ 30.00	Pass
ax-HE20	MCS0	06	2437	17.49	17.80	18.01	18.11	23.88	≤ 30.00	Pass
ax-HE40	MCS0	06	2437	17.32	17.44	17.73	18.07	23.67	≤ 30.00	Pass
be-EHT20	MCS0	06	2437	17.89	17.80	18.01	17.94	23.93	≤ 30.00	Pass
be-EHT40	MCS0	06	2437	17.72	17.80	17.83	17.94	23.84	≤ 30.00	Pass

Note: Total Average Power (dBm) = $10*\log\{10^{(\text{Ant 0 Average Power }/10)} + 10^{(\text{Ant 1 Average Power }/10)} + 10^{(\text{Ant 2 Average Power }/10)} + 10^{(\text{Ant 3 Average Power }/10)}\}$.

7.4. Power Spectral Density Measurement

7.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

7.4.2. Test Procedure Used

ANSI C63.10 - 2013 Section 11.10.5

7.4.3. Test Setting

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance, and is optional if the maximum conducted (average) output power was used to demonstrate compliance.

a) Set analyzer center frequency to DTS channel center frequency.

b) Set the span to 1.5 times the DTS bandwidth.

c) Set the RBW to: 3 kHz.

d) Set the VBW ≥ 3* RBW.

e) Detector = peak.

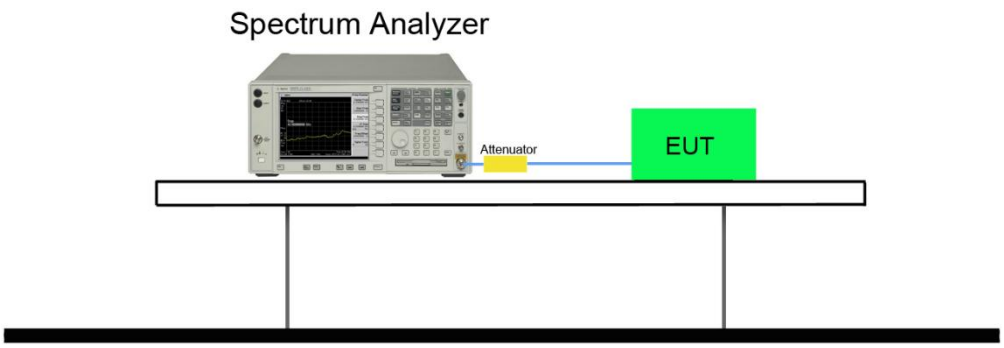
f) Sweep time = auto couple.

g) Trace mode = max hold.

h) Allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum amplitude level within the RBW.

7.4.4. Test Setup



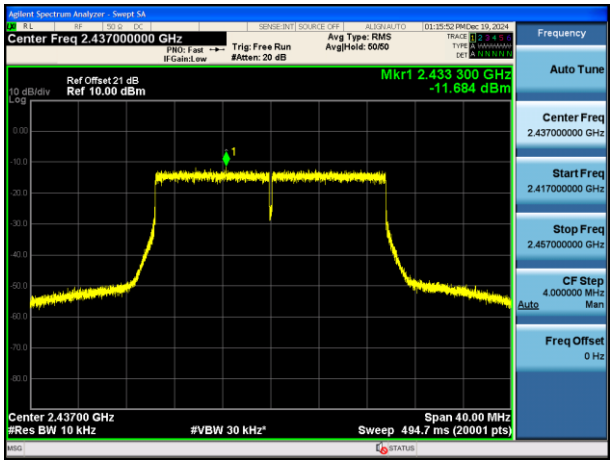
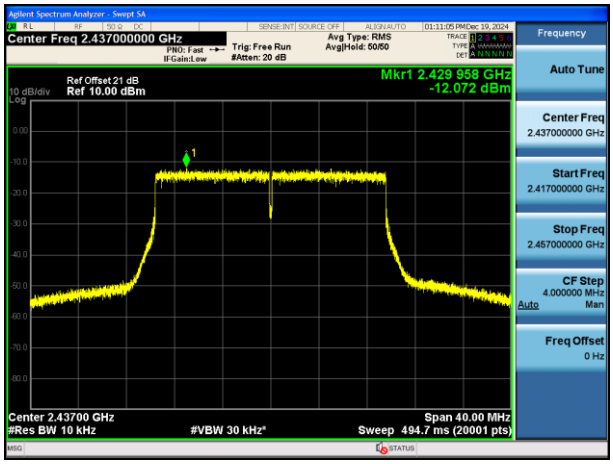
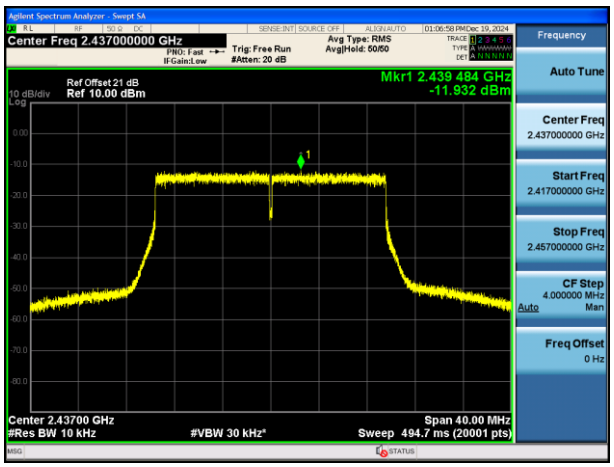
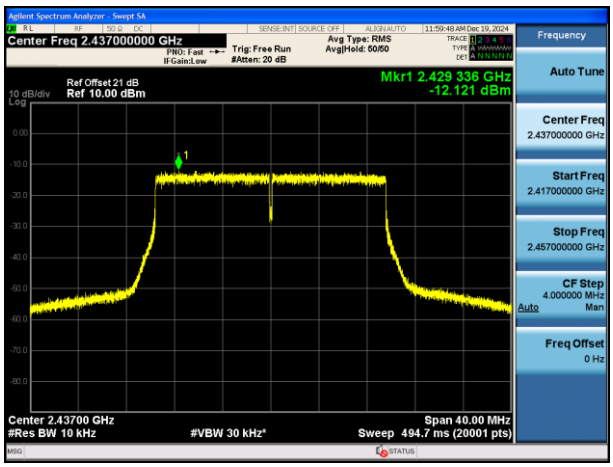
7.4.5. Test Result

Product	ACCESS POINT	Temperature	21°C
Test Engineer	Fran	Relative Humidity	54%
Test Site	SR6	Test Date	2024/12/19

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm / 10kHz)				Duty Cycle (%)	Total PSD (dBm/ 10kHz)	Limit (dBm/ 3kHz)	Result
				Ant 9	Ant 10	Ant 11	Ant 12				
11be-EHT20	MCS0	06	2437	-11.684	-12.072	-11.932	-12.121	97.84%	-5.833	≤ 5.00	Pass

Note 1: Total AVGPSD = 10*log {$10^{(\text{Ant 0 AVGPSD}/10)}$ + $10^{(\text{Ant 1 AVGPSD}/10)}$ + $10^{(\text{Ant 2 AVGPSD}/10)}$ + $10^{(\text{Ant 3 AVGPSD}/10)}$} (dBm/10kHz) + 10*log (1/Duty Cycle).

Note 2: Limit (dBm/3kHz) = 8dBm/3kHz–(Correlated Gain for PSD(dBi) –6 dBi).

802.11be-EHT20 - AVGPSD	
Channel 06 (2437MHz) – Ant 9	Channel 06 (2437MHz) – Ant 10
	
Channel 06 (2437MHz) – Ant 11	Channel 06 (2437MHz) – Ant 12
	

7.5. Out-of-Band Spurious Emissions Emissions Measurement

7.5.1. Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

7.5.2. Test Procedure Used

ANSI C63.10 - 2013 Section 11.11

7.5.3. Test Settitng

(a) Set instrument center frequency to DTS channel center frequency

(b) Set the span to ≥ 1.5 times the DTS bandwidth

(c) Set the RBW = 100 kHz

(d) Set the VBW ≥ 3 x RBW

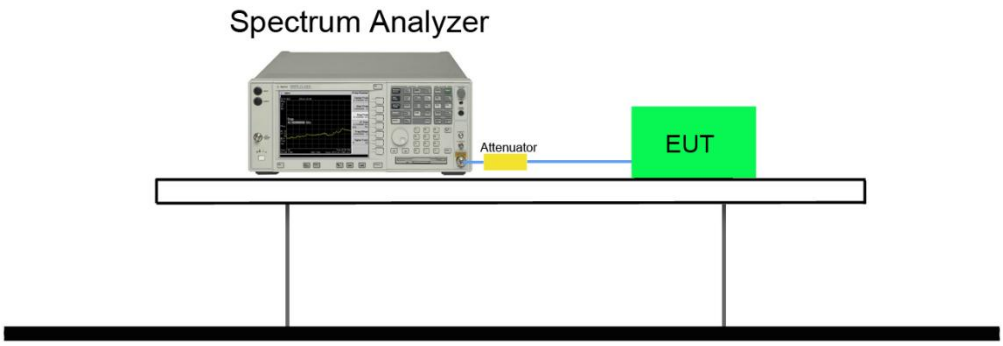
(e) Detector = peak

(f) Sweep time = auto couple

(g) Trace mode = max hold

(h) Allow trace to fully stabilize

7.5.4. Test Setup



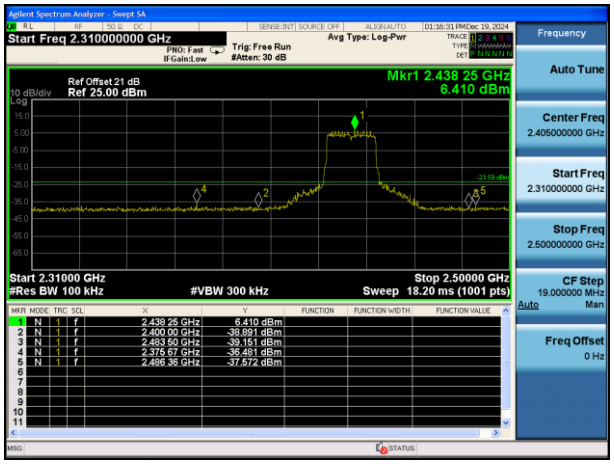
7.5.5. Test Result

Product	ACCESS POINT	Temperature	21°C
Test Engineer	Fran	Relative Humidity	54%
Test Site	SR6	Test Date	2024/12/19

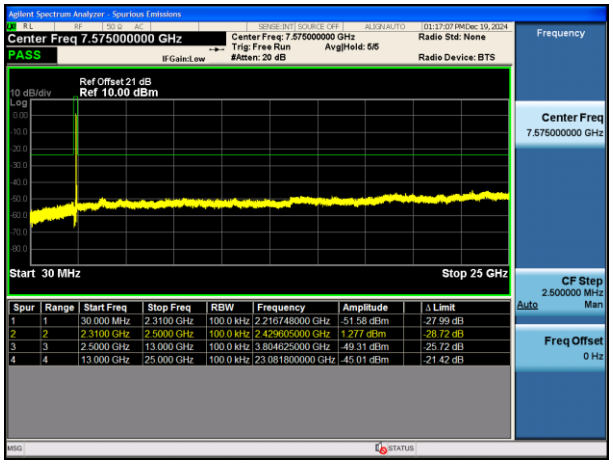
Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Result
11be-EHT20	MCS0	06	2437	30	Pass

802.11be-EHT20 - Out-of-Band Emissions – Ant 9

Channel 06 (2437MHz)



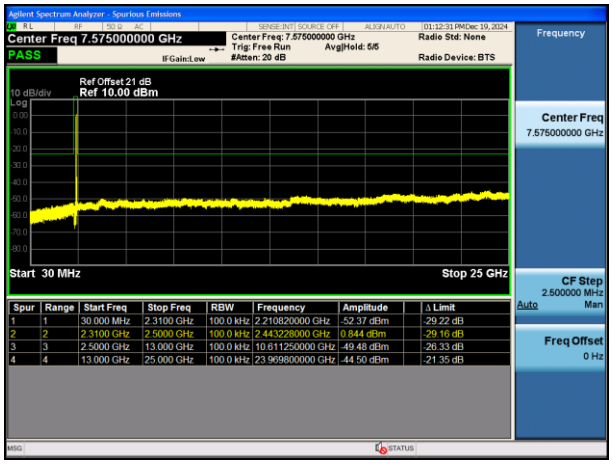
Channel 06 (2437MHz)

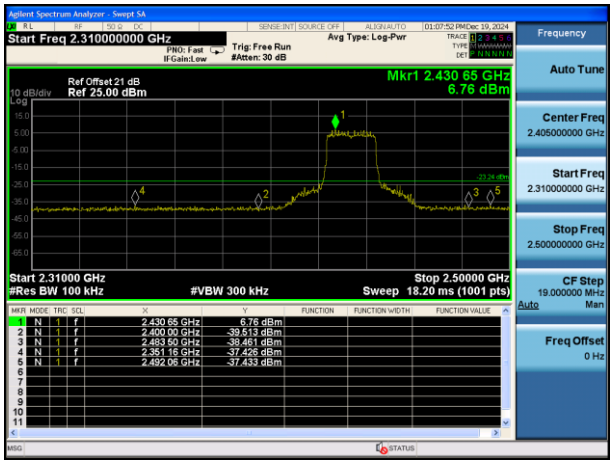
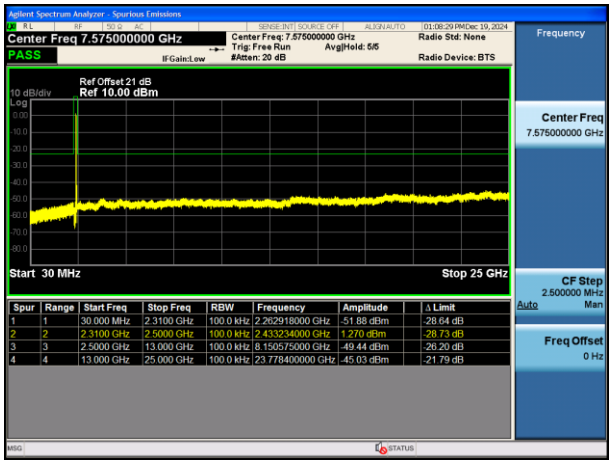
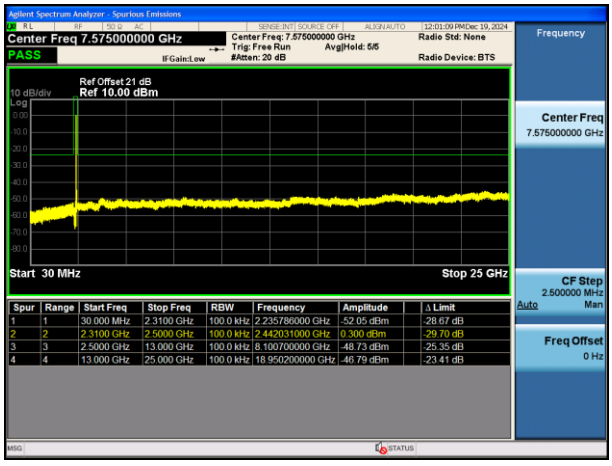


802.11be-EHT20 - Out-of-Band Emissions – Ant 10

Channel 06 (2437MHz)

Channel 06 (2437MHz)



802.11be-EHT20 - Out-of-Band Emissions – Ant 11	
Channel 06 (2437MHz)	Channel 06 (2437MHz)
	
802.11be-EHT20 - Out-of-Band Emissions – Ant 12	
Channel 06 (2437MHz)	Channel 06 (2437MHz)
	

7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

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.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/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

7.6.2. Test Procedure Used

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 above 30MHz to 1GHz)

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

7.6.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak

5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

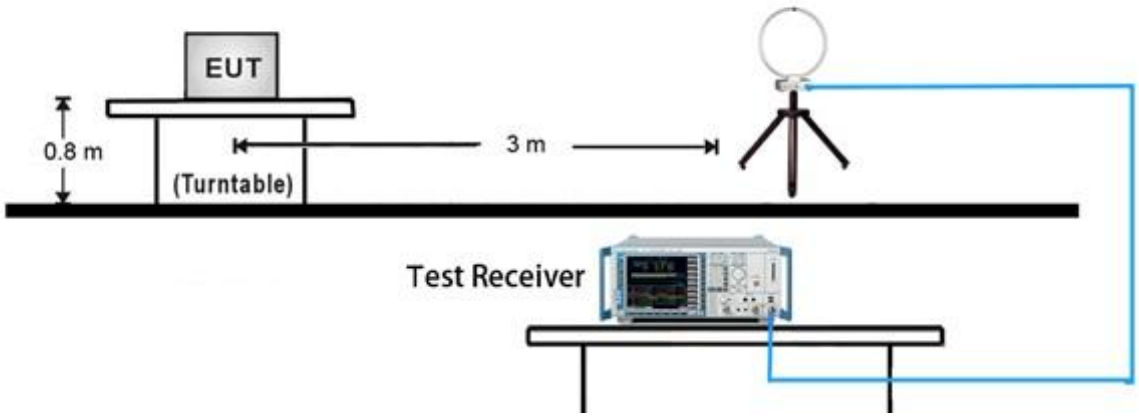
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

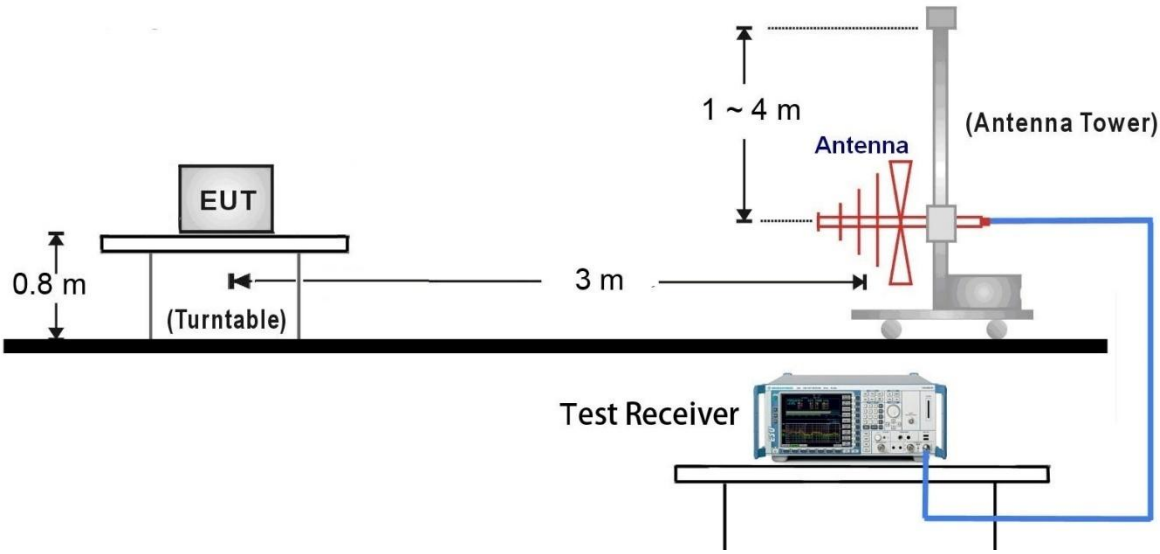
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4. Test Setup

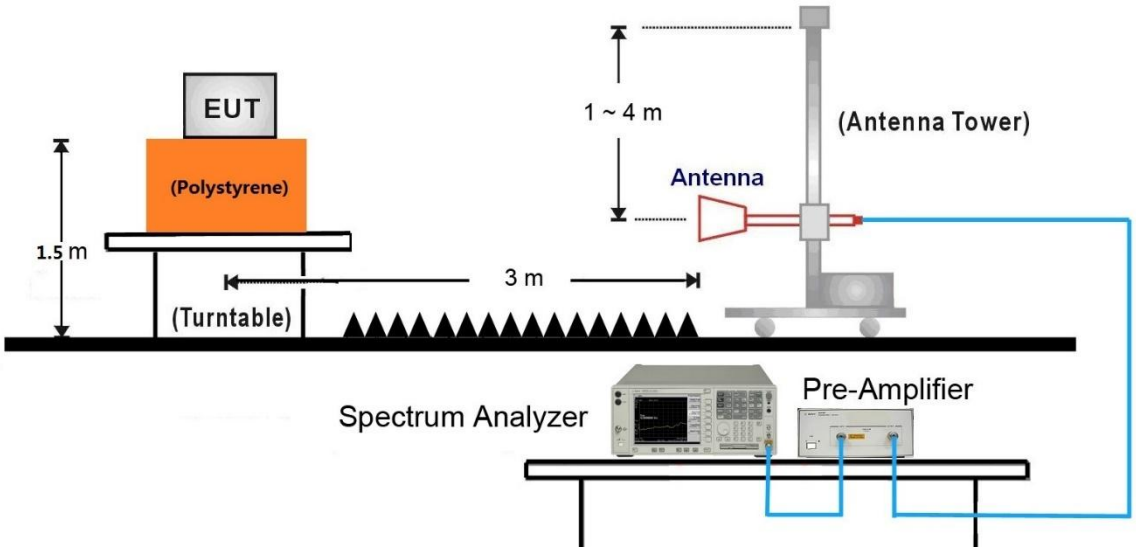
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:

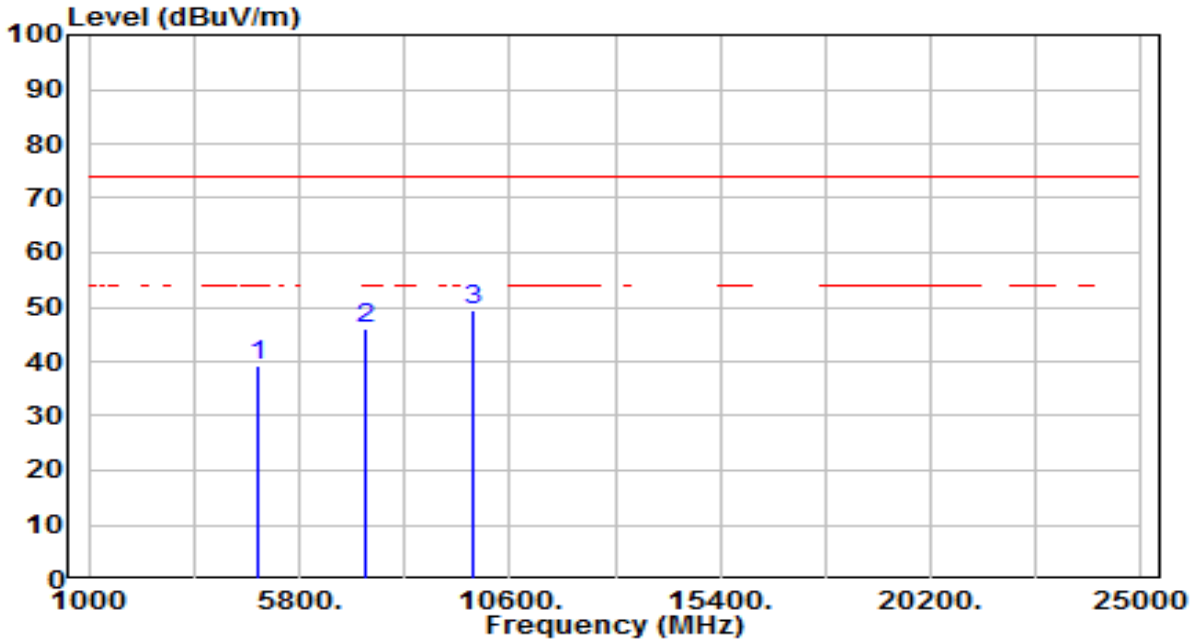


1GHz ~ 25GHz Test Setup:



7.6.5. Test Result

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	20°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

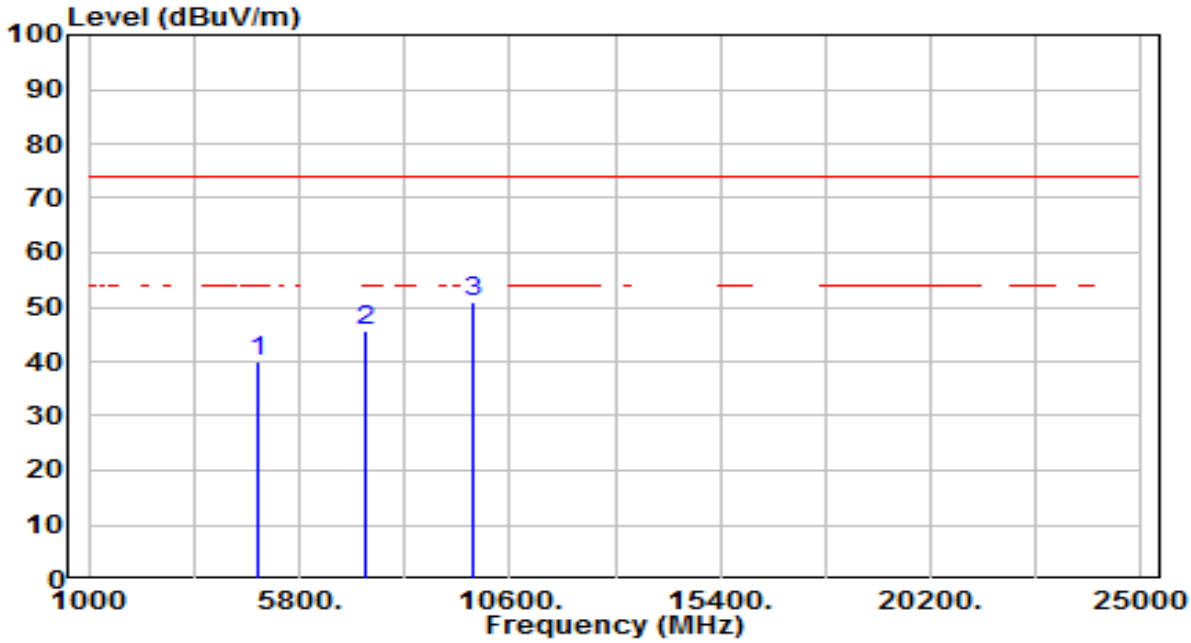


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		4874.000	35.35	3.84	39.19	-34.81	74.00	100	89	Peak
2		7311.000	34.24	11.94	46.18	-27.82	74.00	100	46	Peak
3	*	9748.000	33.37	15.95	49.33	-24.67	74.00	100	180	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	20°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		4874.000	36.20	3.84	40.04	-33.96	74.00	100	162	Peak
2		7311.000	33.83	11.94	45.77	-28.23	74.00	100	144	Peak
3	*	9748.000	35.01	15.95	50.97	-23.03	74.00	100	350	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Limit

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.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/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

7.7.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.13

7.7.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3 * RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold

7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

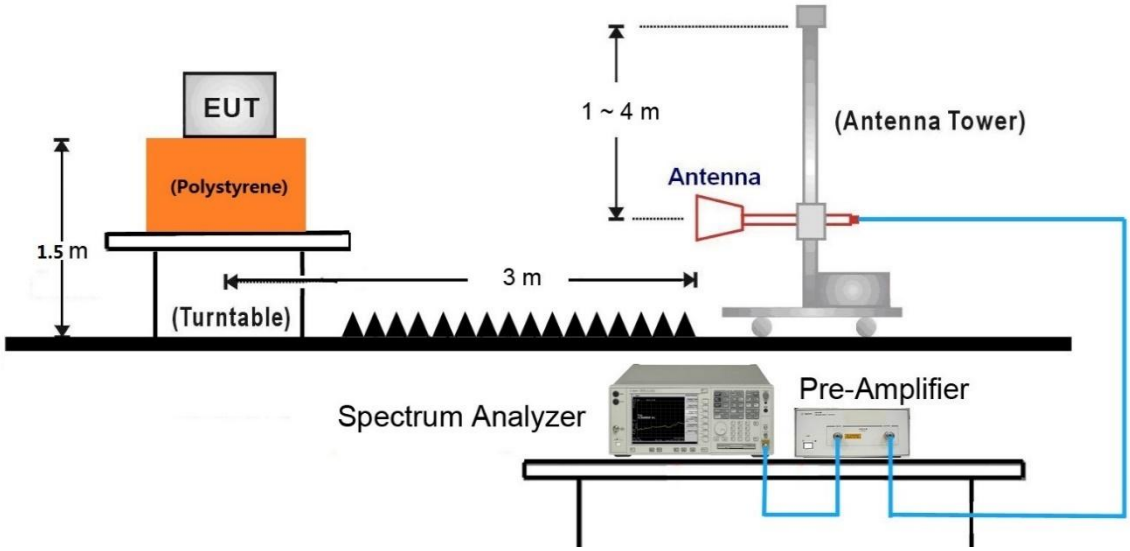
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De 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. Allow max hold to run for at least 50 times (1/duty cycle) traces

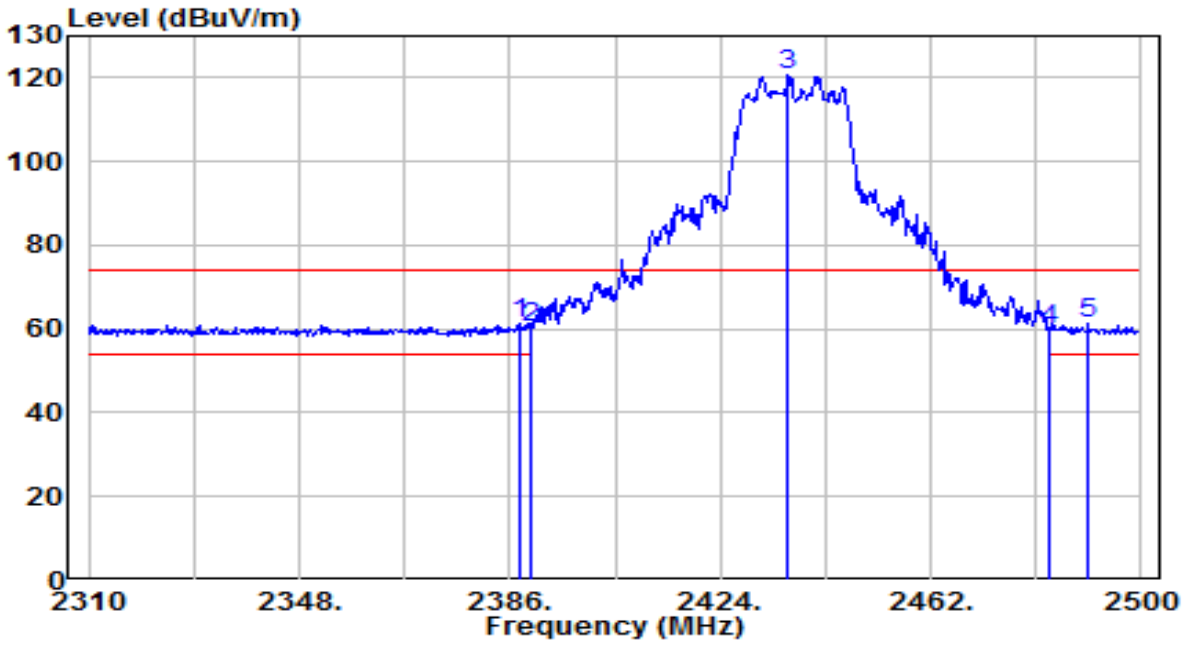
7.7.4. Test Setup

1GHz ~ 25GHz Test Setup:



7.7.5. Test Result

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	20°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

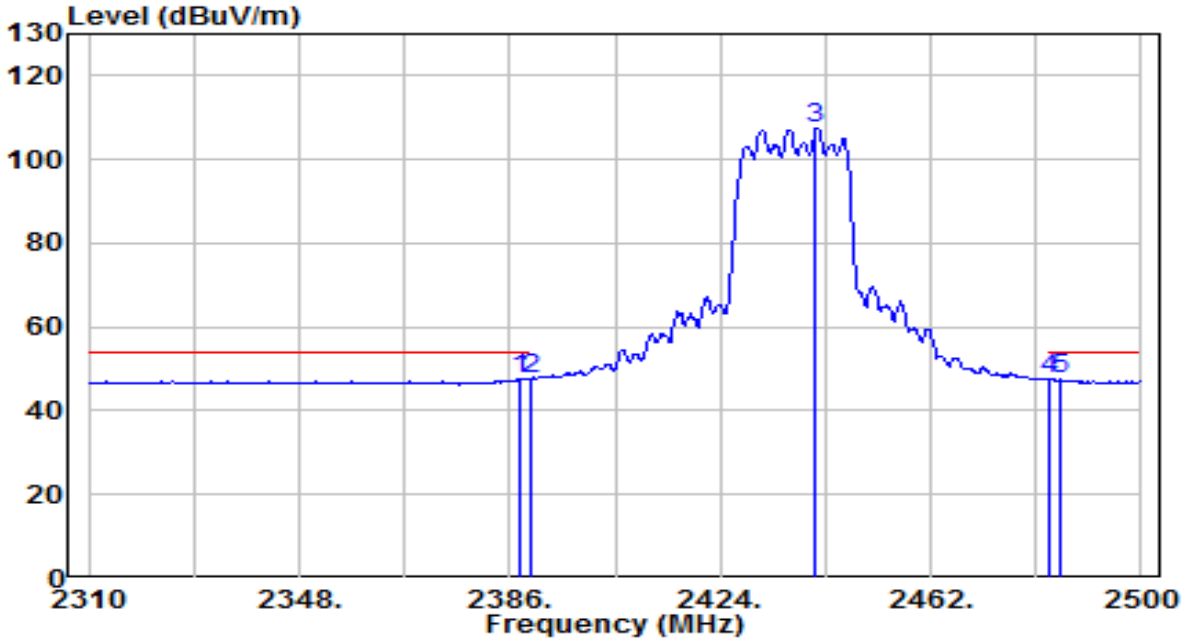


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2387.710	29.32	31.94	61.26	-12.74	74.00	170	180	Peak
2		2390.000	28.35	31.95	60.30	-13.70	74.00	170	180	Peak
3		2436.350	88.57	32.12	120.70	N/A	N/A	170	180	Peak
4		2483.500	27.40	32.30	59.70	-14.30	74.00	170	180	Peak
5		2490.310	28.76	32.32	61.08	-12.92	74.00	170	180	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	20°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

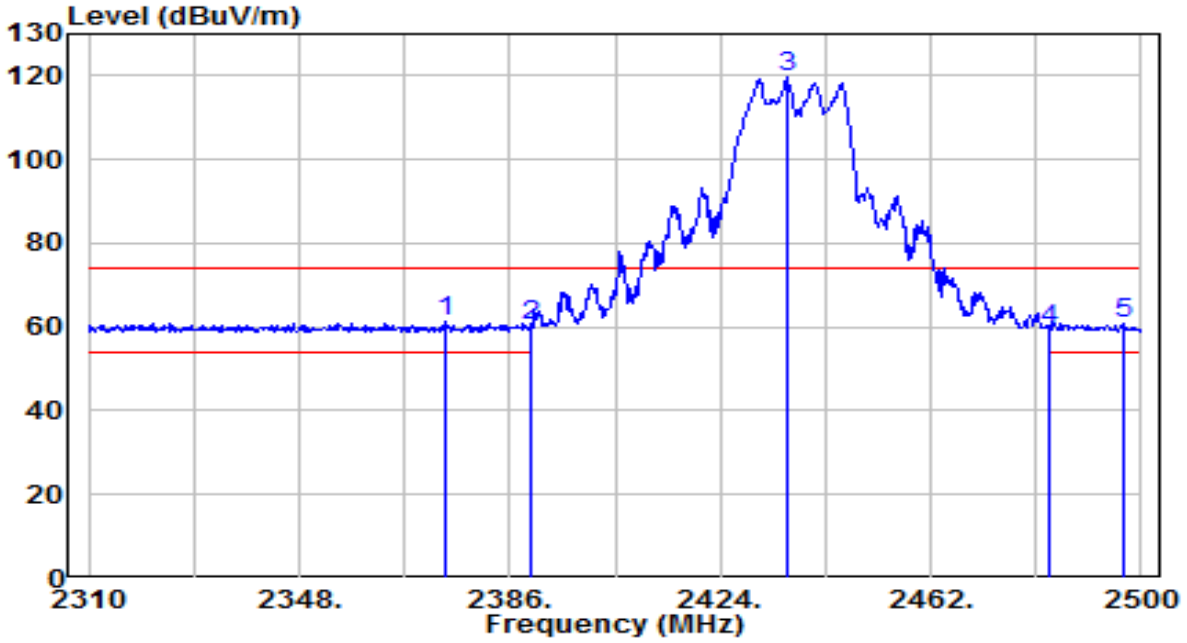


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2387.900	15.64	31.94	47.58	-6.42	54.00	170	180	Average
2	*	2390.000	15.82	31.95	47.77	-6.23	54.00	170	180	Average
3		2441.290	75.27	32.14	107.41	N/A	N/A	170	180	Average
4		2483.500	15.18	32.30	47.48	-6.52	54.00	170	180	Average
5		2485.560	15.12	32.31	47.43	-6.57	54.00	170	180	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	20°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

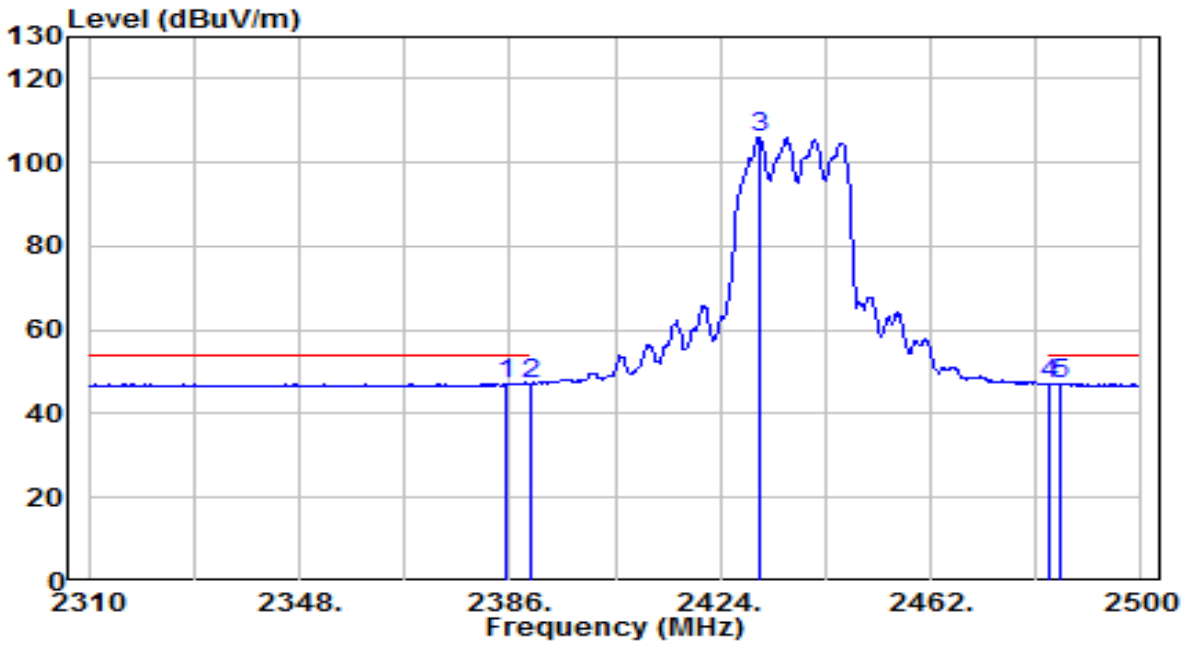


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2374.410	29.24	31.89	61.13	-12.87	74.00	125	200	Peak
2		2390.000	28.30	31.95	60.25	-13.75	74.00	125	200	Peak
3		2436.160	87.41	32.12	119.53	N/A	N/A	125	200	Peak
4		2483.500	27.27	32.30	59.57	-14.43	74.00	125	200	Peak
5		2496.960	28.35	32.35	60.70	-13.30	74.00	125	200	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	ACCESS POINT	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	20°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11be-20MHz_TX_CH 6_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2385.430	15.30	31.93	47.23	-6.77	54.00	125	200	Average
2	*	2390.000	15.32	31.95	47.27	-6.73	54.00	125	200	Average
3		2431.030	73.80	32.10	105.90	N/A	N/A	125	200	Average
4		2483.500	14.81	32.30	47.11	-6.89	54.00	125	200	Average
5		2485.180	14.96	32.30	47.26	-6.74	54.00	125	200	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.8. AC Conducted Emissions Measurement

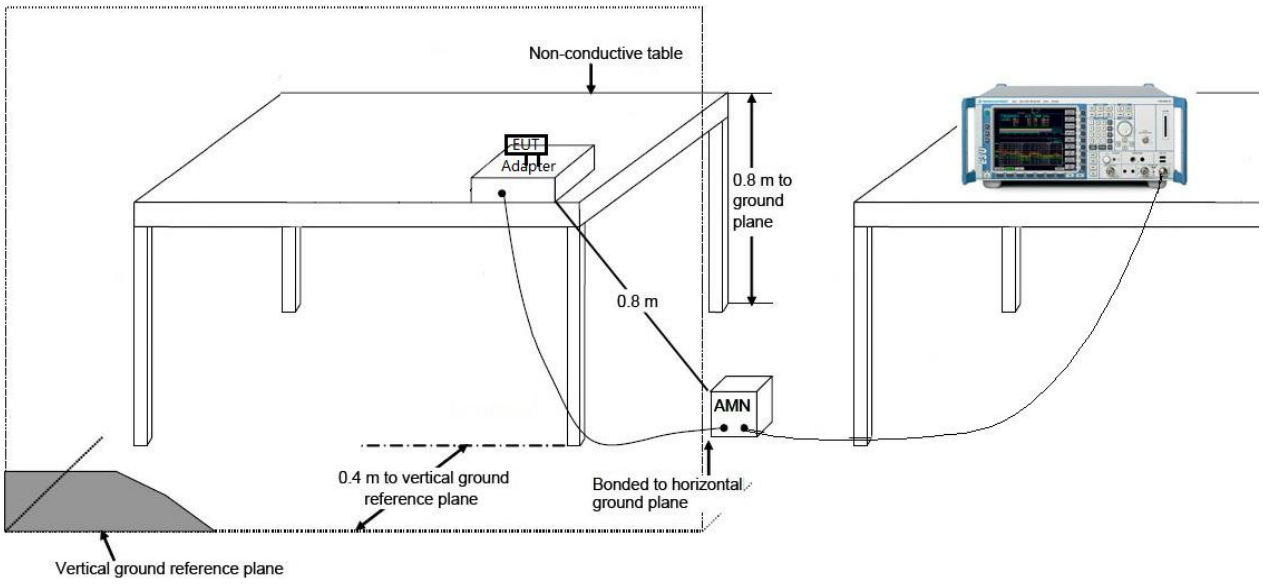
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 / RSS-Gen Limits		
Frequency (MHz)	QP (dBμV)	Average (dBμV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

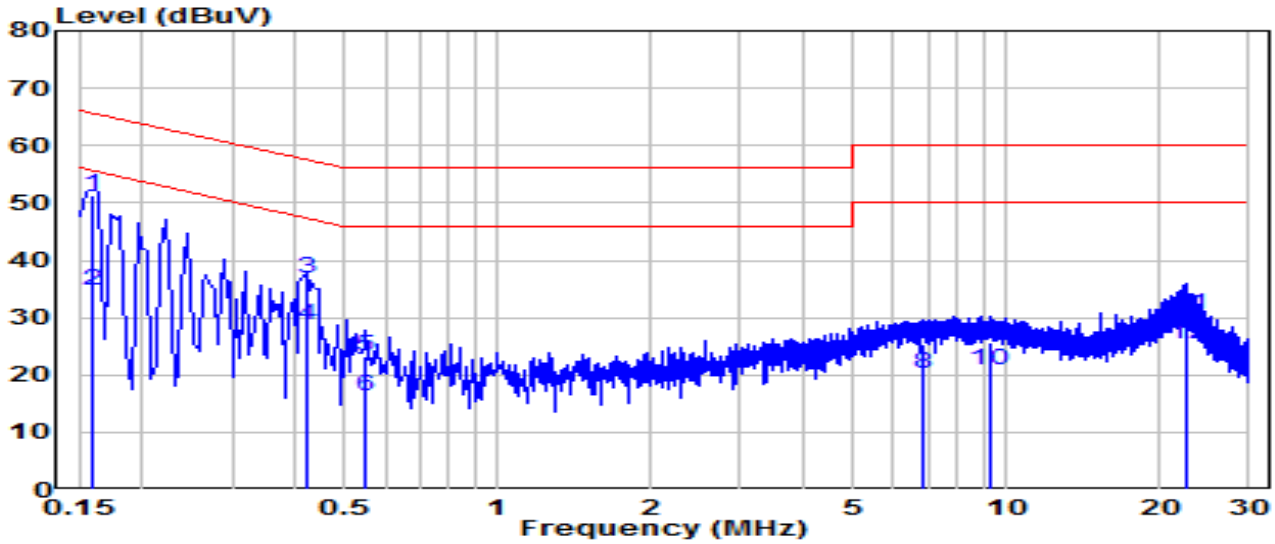
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

EUT	ACCESS POINT	Date of Test	2025-02-26
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Line1	Site / Test Engineer	SR2 / Ryan
Test Mode	802.11n-20MHz_TX_CH6_Ant 0+1+2	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1	*	0.159	41.72	9.63	51.35	-14.16	65.52	QP
2	*	0.159	25.05	9.63	34.68	-20.84	55.52	Average
3		0.420	27.05	9.65	36.69	-20.76	57.45	QP
4		0.420	18.96	9.65	28.60	-18.85	47.45	Average
5		0.550	13.60	9.65	23.25	-32.75	56.00	QP
6		0.550	6.57	9.65	16.23	-29.77	46.00	Average
7		6.845	15.70	9.79	25.49	-34.51	60.00	QP
8		6.845	10.58	9.79	20.38	-29.62	50.00	Average
9		9.248	15.68	9.85	25.53	-34.47	60.00	QP
10		9.248	11.07	9.85	20.92	-29.08	50.00	Average
11		22.715	20.65	9.93	30.58	-29.42	60.00	QP
12		22.715	15.32	9.93	25.25	-24.75	50.00	Average

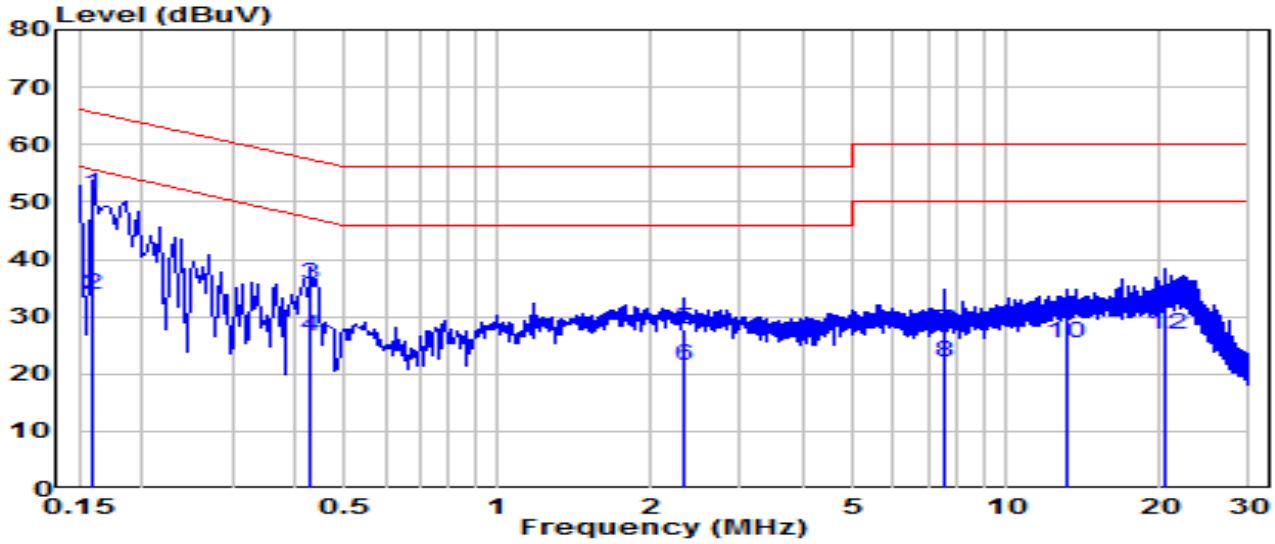
Note:

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

2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).

3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	ACCESS POINT	Date of Test	2025-02-26
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Neutral	Site / Test Engineer	SR2 / Ryan
Test Mode	802.11n-20MHz_TX_CH6_Ant 0+1+2+3	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1	*	0.159	41.65	9.63	51.28	-14.24	65.52	QP
2	*	0.159	24.10	9.63	33.73	-21.79	55.52	Average
3		0.429	25.96	9.65	35.60	-21.67	57.27	QP
4		0.429	17.05	9.65	26.69	-20.58	47.27	Average
5		2.328	18.17	9.71	27.89	-28.11	56.00	QP
6		2.328	11.77	9.71	21.48	-24.52	46.00	Average
7		7.543	17.62	9.83	27.44	-32.56	60.00	QP
8		7.543	12.28	9.83	22.10	-27.90	50.00	Average
9		13.082	19.78	9.92	29.70	-30.30	60.00	QP
10		13.082	15.51	9.92	25.43	-24.57	50.00	Average
11		20.627	21.65	10.00	31.65	-28.35	60.00	QP
12		20.627	16.98	10.00	26.98	-23.02	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **ACCESS POINT** is in compliance with Part 15C of the FCC Rules.

Appendix A : Test Photograph

Refer to “2412TW0107-UTfile.

Appendix B : External Photograph

Refer to “2412TW0107-UE file.

Appendix C : Internal Photograph

Refer to “2412TW0107-UI file.

The End