RF MEASUREMENT REPORT

FCC ID:	Q9DAPIN0615
Applicant:	Hewlett Packard Enterprise Company
Product:	ACCESS POINT
Model No.:	APIN0615
Marketing Name:	AP32
Trademark:	aruba a Hewlett Packard Enterprise company / Hewlett Packard Enterprise
FCC Classification:	15E 6GHz Low Power Indoor Access Point (6ID)
FCC Rule Part(s):	Part 15 Subpart E (Section 15.407)
Result:	Complies
Received Date:	2023-08-25
Test Date:	2023-10-20 ~ 2024-01-11

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 specified in KDB789033. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2308RSU066-U6	V01	Initial Report	2023-12-03	Invalid
2308RSU066-U6	V02	Add spot check test data	2024-01-11	Valid

Note 1: The product is a variation on the existing APIN0615 that had FCC approval (FCC ID: Q9DAPIN0615).

The differences are shown in the table below.

Parts of Product	Modification
Top cover	Change ION style look.
Bottom Cover	Yes, Changed Painted white
Light pipe	Yes, Changed. Move to the edge for consistent ION ID
USB Port	Removed USB
Antenna	Remove BLE/ZigBee/GPS Antenna
PCB	Remove BLE/ZigBee/GPS chipset

The applicant remeasured a set of antenna gain that slightly different than before.

Frequency Range (MHz)	Original Wi-Fi Antenna Gain (dBi)	Current Wi-Fi Antenna Gain (dBi)
2400 ~ 2480(Radio 0)	2.0	1.5
2400 ~ 2480(Radio 1)	0.6	1.6
5150 ~ 5895	3.8	3.8
5925 ~ 7125	3.5	3.9

Note 2: Most test data refer to original test report no. 2108RSU088-U2. Spot-check tests were done on these items based on worst-case results reported in the original FCC ID filing.

Test Description	Verdict
Channel Bandwidth	Data referencing with spot check
Maximum Equivalent Isotopically Radiated Power (EIRP)	Data referencing with spot check
Maximum Power Spectral Density (EIRP)	Data referencing with spot check
In-Band Emission	Data referencing with spot check
Contention-Based Protocol	Data referencing with spot check
Radiated Spurious Emission and Band Edge	Data referencing with spot check
AC Conducted Emissions 150kHz - 30MHz	Full test

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 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.	APIN0615
Marketing Name:	AP32
Serial No.	CNQSM1H00H
Software Version	v0.1.12
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Power Type	AC Adapter or PoE input
Operating Temp.	0 ~ 50 °C
Operating Environment	Indoor Use
Accessories	
AC/DC Adapter	Model: WB-18Q12R Input: 100-240V ~ 50/60Hz, 0.5A Max Output: 12.0V, 1.5A, 18W
PoE Injector	Model: ADH-30CR BB Input: 100-240V ~ 1.0A 50-60Hz Output: 55V, 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. AC Power Adapter and PoE Injector are not sold with Product.	

1.5. Radio Specification under Test

Frequency Range	For 802.11ax-HE20: 5955 ~ 7095MHz For 802.11ax-HE40: 5965 ~ 7085MHz For 802.11ax-HE80: 5985 ~ 7025MHz For 802.11ax-HE160: 6025 ~ 6985MHz	
Type of Modulation	802.11ax: OFDMA	
Data Rate	802.11ax: up to 2402Mbps	
Channel Puncturing Function	☐ Supported	☒ Unsupported
Support RU	☒ Full RU	☐ Partial RU

1.6. Working Frequencies

802.11ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
97	6435 MHz	101	6455 MHz	105	6475 MHz
109	5495 MHz	113	6515 MHz	117	6535 MHz
121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz
145	6675 MHz	149	6695 MHz	153	6715 MHz
157	6735 MHz	161	6755 MHz	165	6775 MHz
169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	189	6895 MHz
193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz
229	7095 MHz	--	--	--	--

802.11ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz
27	6085 MHz	35	6125 MHz	43	6165 MHz
51	6205 MHz	59	6245 MHz	67	6285 MHz
75	6325 MHz	83	6365 MHz	91	6405 MHz
99	6445 MHz	107	6485 MHz	115	6525 MHz
123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz
171	6805 MHz	179	6845 MHz	187	6885 MHz
195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz	--	--

802.11ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz
55	6225 MHz	71	6305 MHz	87	6385 MHz
103	6465 MHz	119	6545 MHz	135	6625 MHz
151	6705 MHz	167	6785 MHz	183	6865 MHz
199	6945 MHz	215	7025 MHz	--	--

802.11ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz
111	6505 MHz	143	6665 MHz	175	6825 MHz
207	6985 MHz	--	--	--	--

1.7. Antenna Details

Antenna Type	Frequency Band (MHz)	Tx Paths	Uncorrelated Gain (dBi)	Correlated Gain (dBi)
PIFA	2412 ~ 2462(Radio 0)	2	1.5	4.4
PIFA	2412 ~ 2462(Radio 1)	2	1.6	4.5
PIFA	5150 ~ 5895	2	3.8	6.8
PIFA	5925 ~ 7125	2	3.9	6.9

Note 1: In accordance with KDB 662911 D01v02r01, uncorrelated directional gain was applied for calculating max conducted output power limit and correlated directional gain was applied for calculating PSD limit.

Note 2: The directional gain calculation refers to antenna report provided by the applicant.

2. Test Configuration

2.1. Test Mode

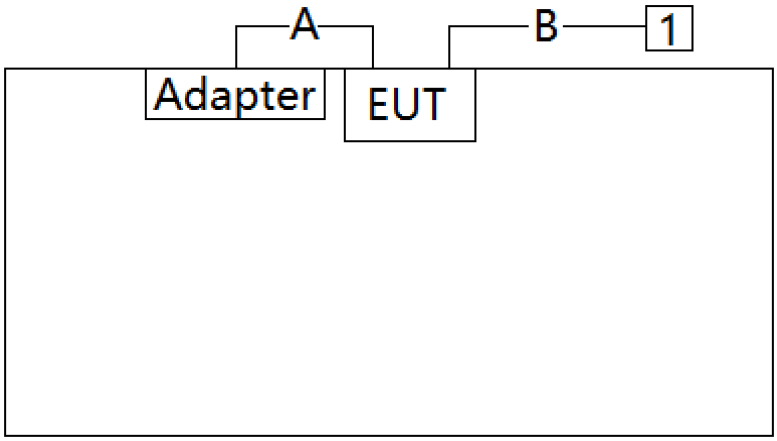
Mode 1: Transmit by 802.11ax-HE20_N_{SS}=1 (MCS0)
Mode 2: Transmit by 802.11ax-HE40_N_{SS}=1 (MCS0)
Mode 3: Transmit by 802.11ax-HE80_N_{SS}=1 (MCS0)
Mode 4: Transmit by 802.11 ax-HE160_N_{SS}=1 (MCS0)

Note: These test modes (worst case) are from the original report.

2.2. Test System Connection Diagram

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

Connection Diagram



Cable Type		Cable Description
A	Power Cable	Non shielded, 2.0m
B	LAN Cable	Non shielded, 3.0m

Product		Manufacturer	Model No.
1	Notebook	ThinkPad	E495

2.3. Test Software

The test utility software used during testing was “accessMTool” and the version was “3.2.1.5”.

2.4. Applied Standards

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

- ANSI C63.10-2013
- FCC KDB 789033 D02v02r01
- FCC KDB 987594 D02v01
- FCC KDB 987594 D04v01
- FCC KDB 662911 D01v02r01
- FCC KDB 414788 D01v01r01
- FCC KDB 412172 D01v01r01

2.5. Test Environment Condition

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

3. Antenna Requirements

Excerpt from §15.407(a)(9) of the FCC Rules/Regulations:

Access points operating under the provisions of paragraphs (a)(5) and (a)(6) of this section must employ a permanently attached integrated antenna.

- The antenna of the device is built in and locked inside the enclosure.

Conclusion:

The device complies with the requirement of §15.407(a)(9).

4. Measuring Instrument

Instrument Name	Manufacturer	Model No.	Asset No.	Cali. Interval	Cal. Due Date	Test Site
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2023-12-28	SIP-AC2
				1 year	2024-12-17	SIP-AC2
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2024-10-09	SIP-AC3
Loop Antenna	Schwarzbeck	FMZB 1519 B	MRTSUE06937	1 year	2024-02-26	SIP-AC2
Signal Analyzer	Keysight	N9010B	MRTSUE07028	1 year	2024-10-23	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06622	1 year	2024-11-03	SIP-AC2
Thermohygrometer	testo	608-H1	MRTSUE06624	1 year	2024-11-03	SIP-AC2
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06647	1 year	2024-06-17	SIP-AC2
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2023-12-22	SIP-AC2
				1 year	2024-12-21	SIP-AC2
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2024-07-14	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2024-10-28	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2024-01-12	SIP-AC3
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06646	1 year	2024-08-04	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2023-12-22	SIP-AC3
				1 year	2024-12-21	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE11255	1 year	2024-08-13	SIP-AC3
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06599	1 year	2024-09-24	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE11022	1 year	2023-11-01	SIP-TR1
				1 year	2024-10-28	SIP-TR1
USB Power Sensor	Keysight	U2021XA	MRTSUE06596	1 year	2024-07-31	SIP-TR1
Temperature Chamber	BAOYT	BYG-408CS	MRTSUE06847	1 year	2024-02-12	SIP-TR1
Signal Analyzer	Keysight	N9010B	MRTSUE07036	1 year	2024-02-29	SIP-TR1
Pxle Microwave Vector Signal Source test set	Keysight	M9384B	MRTSUE06994	1 year	2024-09-05	SIP-TR2
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2024-05-23	SIP-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2024-05-23	SIP-SR2
Four-Line V-Network	R&S	ENV432	MRTSUE06614	1 year	2024-10-23	SIP-SR2
Thermohygrometer	testo	608-H1	MRTSUE06621	1 year	2024-11-03	SIP-SR2
Shielding Room	MIX-BEP	SIP-SR2	MRTSUE06949	5 years	2024-10-23	SIP-SR2

Software	Version	Function
EMI V3	V 3.0.0	EMI Test Software
Controller_MF 7802BS	1.02	RE Antenna & Turntable
BenchVue Power Meter	2019	Power

5. Decision Rules and Measurement Uncertainty

5.1. 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.)

5.2. 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.

AC Conducted Emission Measurement
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.58dB 150kHz~30MHz: 3.20dB
Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9kHz~30MHz: 2.61dB Coplanar: 9kHz~30MHz: 2.62dB Horizontal: 30MHz~200MHz: 3.79dB 200MHz~1GHz: 3.91dB 1GHz~40GHz: 4.99dB Vertical: 30MHz~200MHz: 4.06dB 200MHz~1GHz: 5.21dB 1GHz~40GHz: 4.90dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.2dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.4dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.2dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.7%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(10)	Channel Bandwidth	Conducted	Pass
15.407(a)(5)	Maximum Equivalent Isotopically Radiated Power (EIRP)		Pass
15.407(a)(5)	Maximum Power Spectral Density (EIRP)		Pass
15.407(b)(7)	In-Band Emission		Pass
15.407(d)(6)	Contention-Based Protocol		Pass
15.407(b)(6)	Unwanted Emissions	Radiated	Pass
15.407(b)(9), (10)	General Field Strength (Restricted Bands and Radiated Emission)		Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	Pass

Note: For Radiated Spurious Emission and Radiated Restricted Band Edge, the EUT setup for testing is determined by the original report.

6.2. Channel Bandwidth Measurement

6.2.1. Test Limit

The maximum transmitter channel bandwidth (99% bandwidth) for U–NII devices in the 5.925–7.125 GHz band is 320 megahertz.

6.2.2. Test Procedure

KDB 789033 D02v02r01- Section II)C)1) (26dB Bandwidth)

KDB 789033 D02v02r01- Section II)D) (99% Bandwidth)

6.2.3. Test Setting

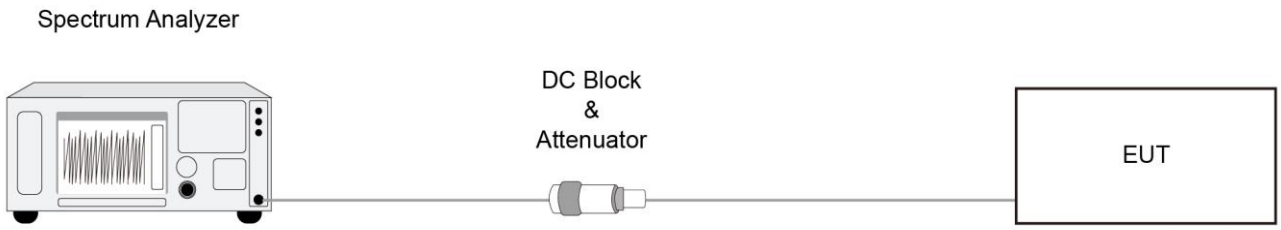
26dB Bandwidth

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 1% to 5% of the OBW
3. VBW ≥ 3 × RBW
4. Span = 1.5 times to 5 times the OBW
5. Detector = peak
6. Trace mode = max hold
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument.

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Output Power Measurement

6.3.1. Test Limit

For an indoor access point operating in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

6.3.2. Test Procedure

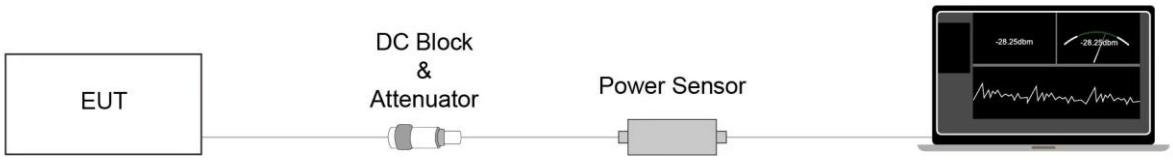
KDB 789033D02v02r01- Section II)E)3)b) Method PM-G

6.3.3. Test Setting

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.

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Power Spectral Density Measurement

6.4.1. Test Limit

For an indoor access point operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm EIRP in any 1-megahertz band.

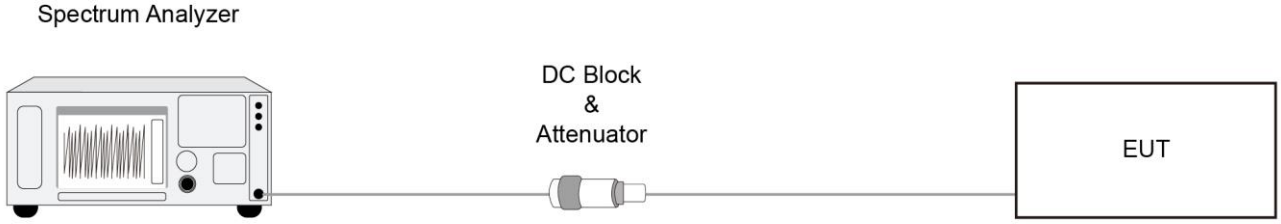
6.4.2. Test Procedure

KDB 789033 D02v02r01-Section Ⅱ)F)

6.4.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points ≥ 2 × (span / RBW)
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
11. Add 10*log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10*log(1/0.25) = 6 dB if the duty cycle is 25 percent.

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. In-Band Emission Measurement

6.5.1. Test Limit

Suppressed by 20 dB at 1 MHz outside of the channel edge.

(The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)

Suppressed by 28 dB at one channel bandwidth from the channel center.

Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.

6.5.2. Test Procedure

KDB 987594 D02v02r01- Section J

6.5.3. Test Setting

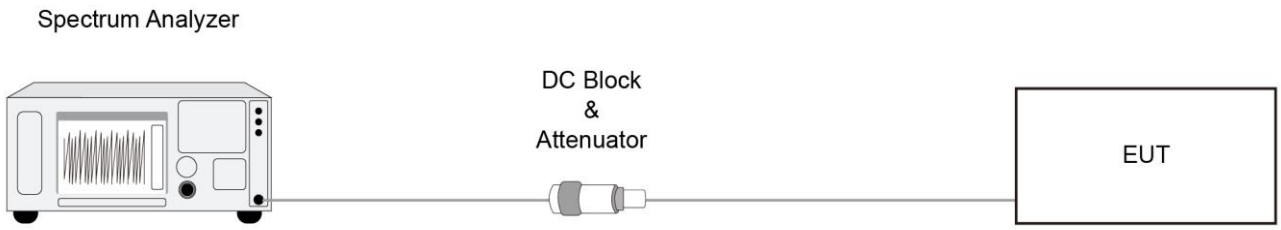
Emissions Mask Reference Level Measurement

1. Set the span to encompass the entire 26 dB EBW of the signal.
2. Set RBW = same RBW used for 26 dB EBW measurement.
3. Set VBW ≥ 3 X RBW.
4. Number of points in sweep ≥ [2 x span / RBW].
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Use the peak search function on the instrument to find the peak of the spectrum.

In-Band Emission

1. Using the measuring equipment limit line function, develop the emissions mask based on rule.
2. Adjust the span to encompass the entire mask as necessary.
3. Clear trace.
4. Trace average at least 100 traces in power averaging (rms) mode.
5. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

6.5.4. Test Setup



6.5.5. Test Result

Refer to Appendix A.5.

6.6. Frequency Stability Measurement

6.6.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

6.6.2. Test Procedure

Frequency Stability Under Temperature Variations:

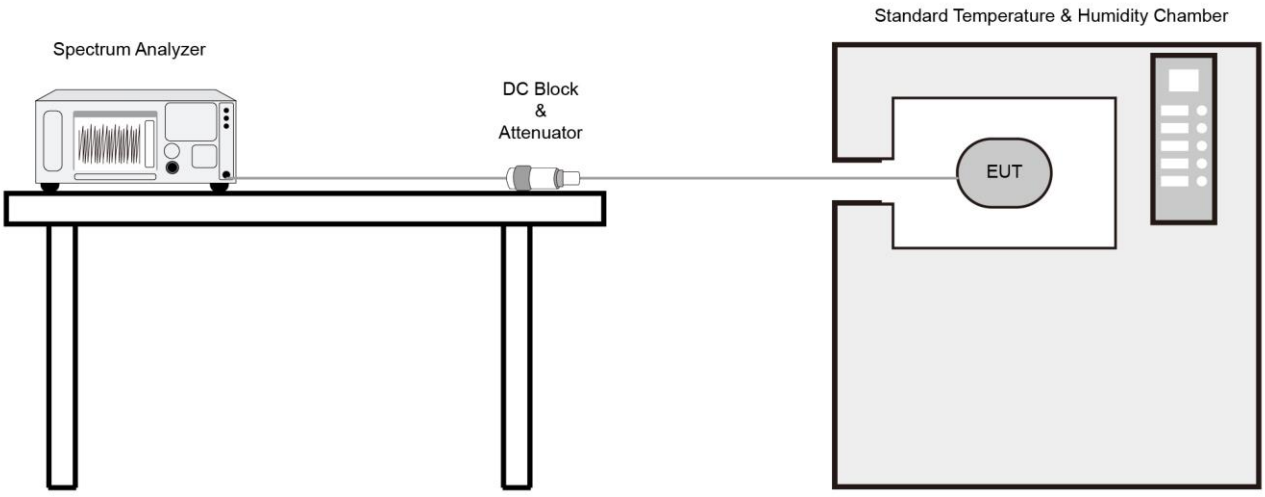
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, recordthe maximum frequency change.

6.6.3. Test Setup



6.6.4. Test Result

Refer to Appendix A.6.

6.7. Contention Based Protocol Measurement

6.7.1. Test Limit

Unlicensed indoor low power device must detect co-channel radio frequency power that is at least -62dBm (The threshold is referenced to a 0dBi antenna gain.) or low.

Indoor low power device must detect an AWGN signal with 90% (or better) level of certainty.

6.7.2. Test Procedure

KDB 987594 D02v01- Section I

6.7.3. Test Setting

1. Configure the EUT to transmit with a constant duty cycle.

2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.

3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.

Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.

4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.

5. Using an AWGN signal source, generate a 10 MHz-wide AWGN signal. Use Table 1 of KDB 987594 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.

6. Set the AWGN signal power to an extremely low level. Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in below figure.

7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.

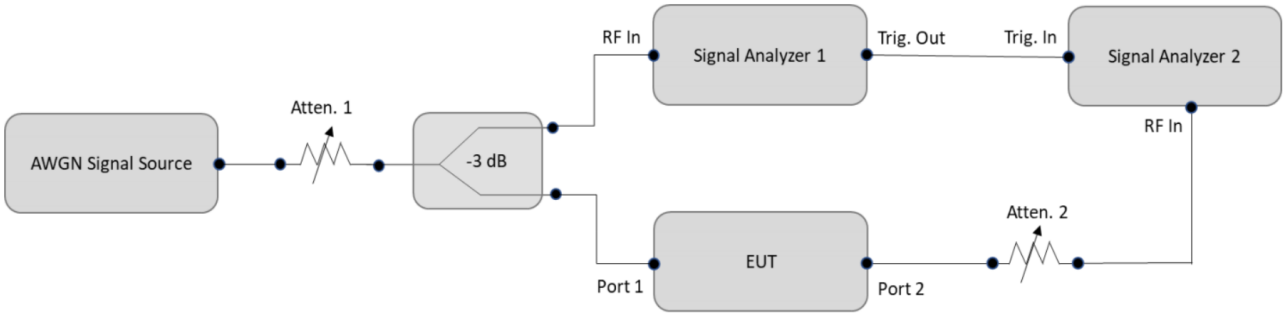
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.

9. Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.

10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If

testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

6.7.4. Test Setup



6.7.5. Test Result

Refer to Appendix A.7.

6.8. Radiated Spurious Emission Measurement

6.8.1. Test Limit

For 15.407(b)(5) requirement

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 e.i.r.p. of −27 dBm/MHz.

Refer to 987594 D02 U-NII 6GHz EMC Measurement v01 clause G

Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.

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 [uV/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

6.8.2. Test Procedure

KDB 789033 D02v02r01-Section II)G)

6.8.3. 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 = 10 Hz.

If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

802.11ax-HE20	VBW = 620Hz	802.11ax-HE40	VBW = 1.3kHz
802.11ax-HE80	VBW = 2.4kHz	802.11ax-HE160	VBW = 4.3kHz

4. Detector = Peak

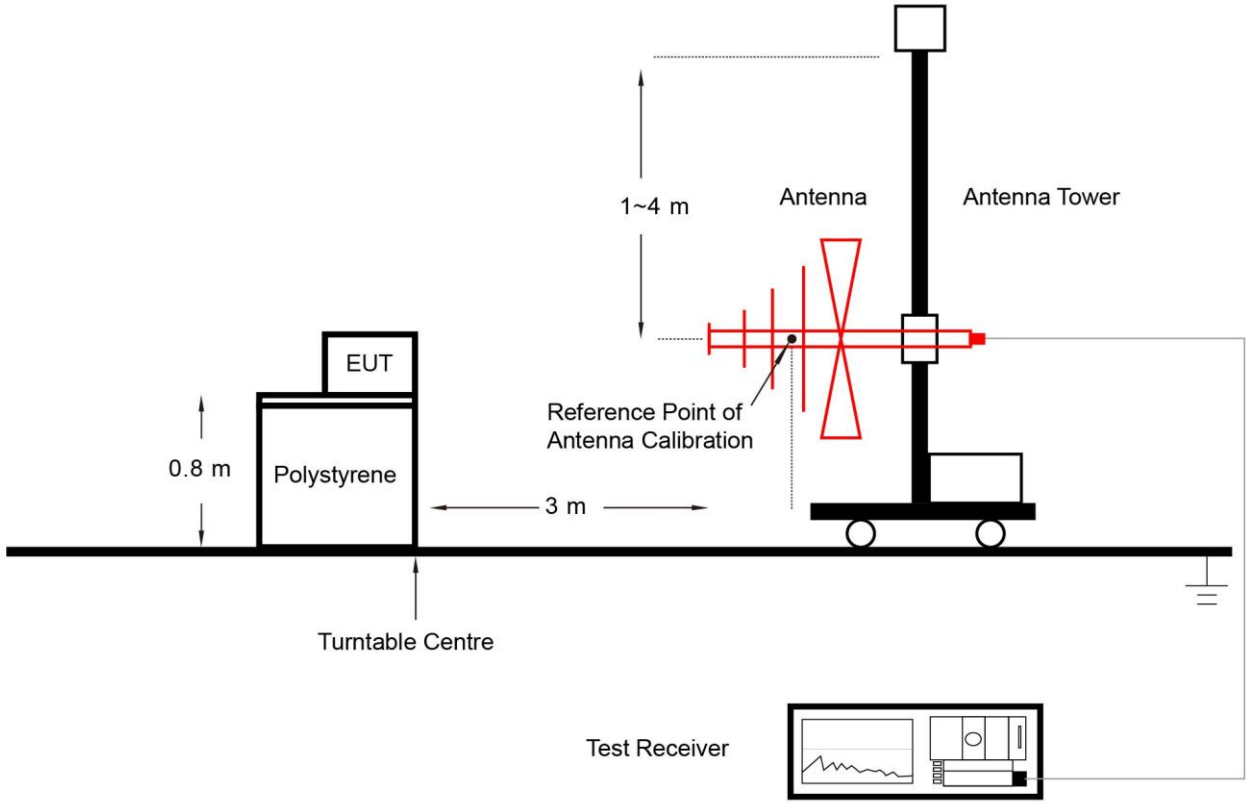
5. Sweep time = auto

6. Trace mode = max hold

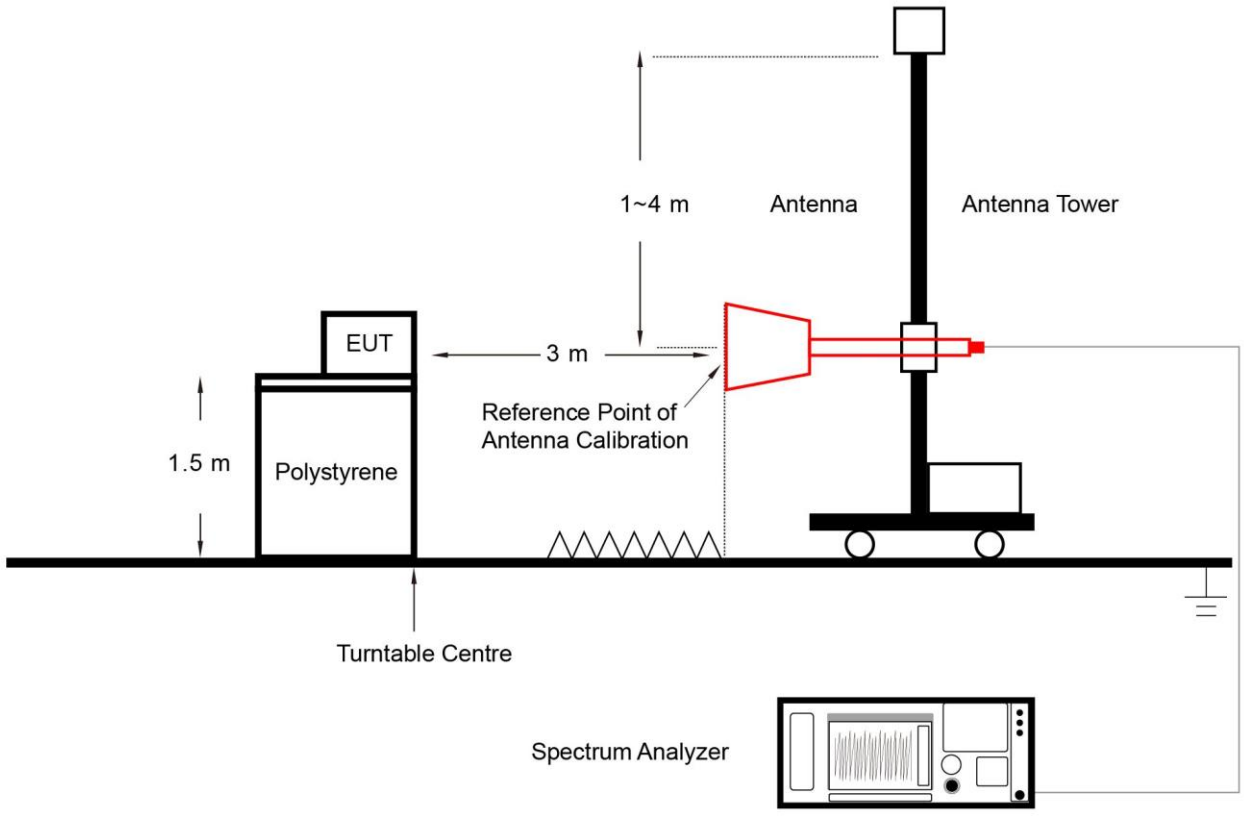
7. Trace was allowed to stabilize

6.8.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.8.5. Test Result

Refer to Appendix A.8.

6.9. Radiated Restricted Band Edge Measurement

6.9.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41	--	--	--

For 15.407(b)(5) requirement:

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 e.i.r.p. of −27 dBm/MHz.

Refer to 987594 D02 U-NII 6GHz EMC Measurement v01 clause G - Unwanted Emission Measurement

Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.

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 [uV/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

6.9.2. Test Procedure

KDB 789033 D02v02r01-Section II)G)

6.9.3. Test Setting

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)

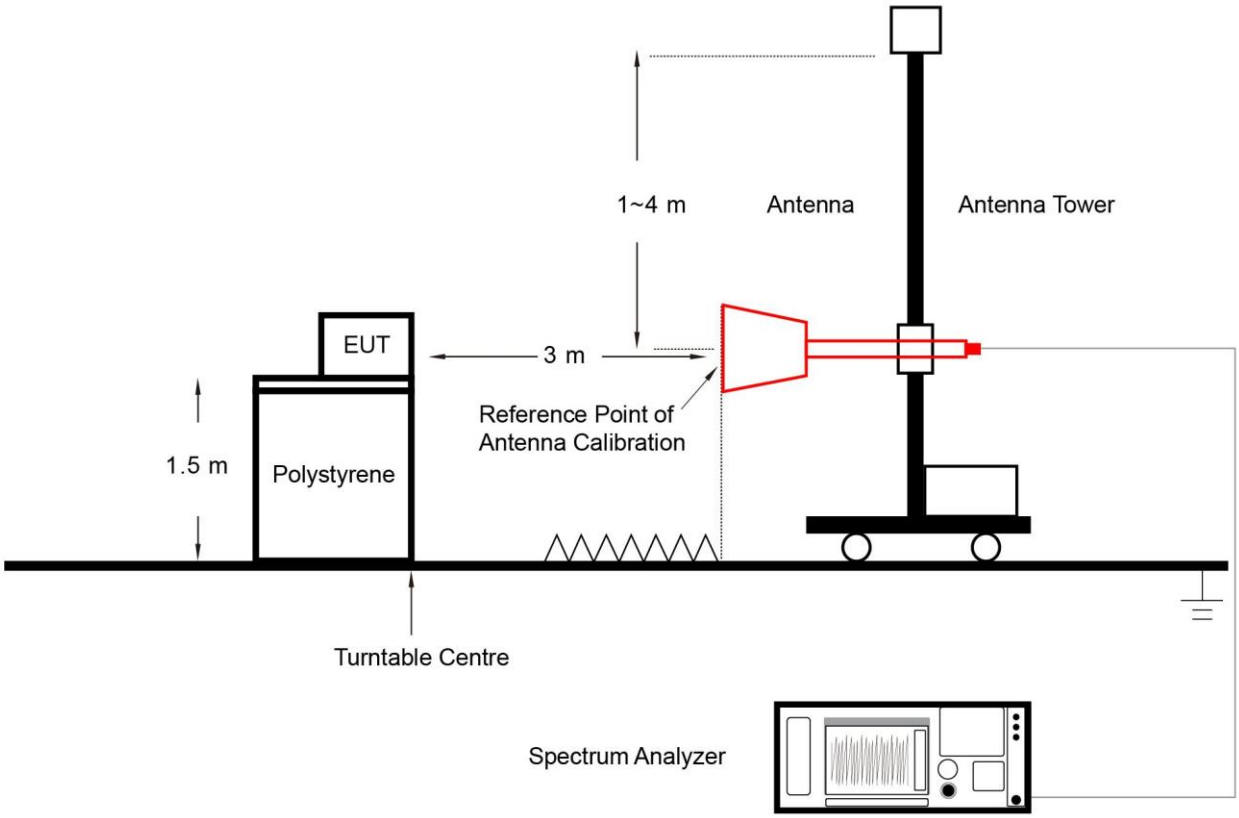
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz

   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

802.11ax-HE20	VBW = 620Hz	802.11ax-HE40	VBW = 1.3kHz
802.11ax-HE80	VBW = 2.4kHz	802.11ax-HE160	VBW = 4.3kHz

4. Detector = Peak
5. Sweep time = Auto
6. Trace mode = Max hold
7. Trace was allowed to stabilize

6.9.4. Test Setup



6.9.5. Test Result

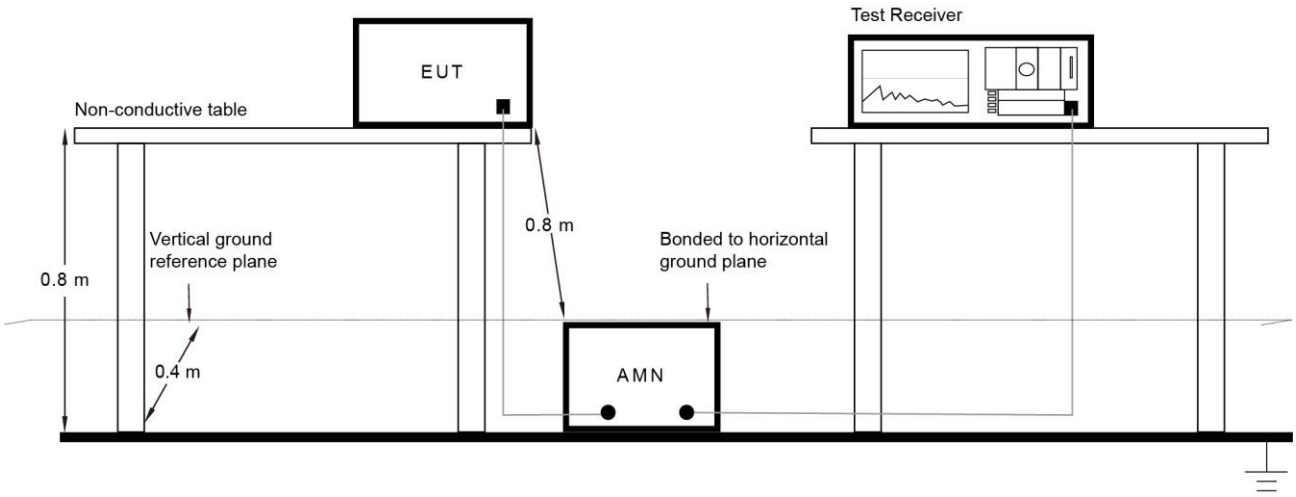
Refer to Appendix A.9.

6.10. AC Conducted Emissions Measurement

6.10.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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.		

6.10.2. Test Setup



6.10.3. Test Result

Refer to Appendix A.10.

Appendix A – Test Result

A.1 Duty Cycle Test Result

Refer to MRT report no. 2108RSU088-U2 Appendix A.1.

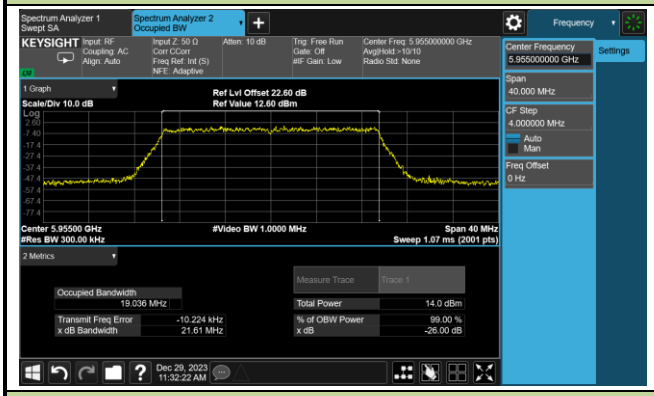
A.2 Channel Bandwidth Test Result

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2023-12-29		
Filter Type	Akoustic Filter (N_{SS}=1)		
Remark	Spot Check		

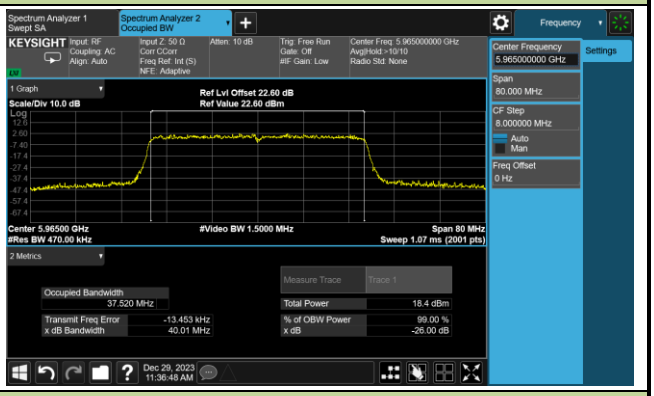
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Test Result
802.11ax-HE20	MCS0	1	5955	21.61	19.036	Pass
802.11ax-HE40	MCS0	3	5965	40.01	37.520	Pass
802.11ax-HE80	MCS0	7	5985	80.80	76.939	Pass
802.11ax-HE160	MCS0	15	6025	164.30	155.41	Pass

26dB Bandwidth

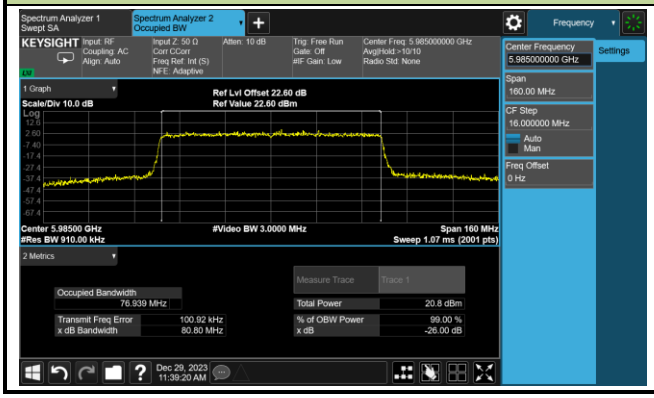
802.11ax-HE20 Channel 1 (5955MHz)



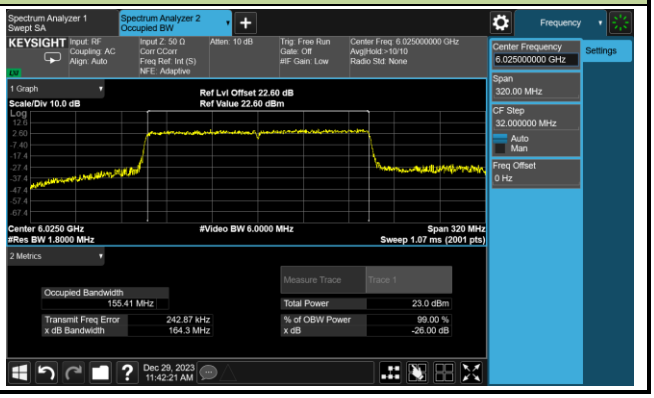
802.11ax-HE40 Channel 3 (5965MHz)



802.11ax-HE80 Channel 7 (5985MHz)



802.11ax-HE160 Channel 15 (6025MHz)



A.3 Output Power Test Result

Test Site	SIP-AC2	Test Engineer	Fusco Pan
Test Date	2023-12-03		
Filter Type	Akoustic Filter (N_{SS}=1)		
Remark	Spot Check		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	EIRP (dBuV/m)	EIRP (dBm)	Total EIRP (dBm)	Limit (dBm)
802.11ax-HE20	MCS0	1	5955	111.7	16.50	16.60	≤ 30.00
802.11ax-HE40	MCS0	3	5965	114.8	19.60	19.77	≤ 30.00
802.11ax-HE80	MCS0	7	5985	116.9	21.70	22.03	≤ 30.00
802.11ax-HE160	MCS0	15	6025	117.9	22.70	23.25	≤ 30.00

Note 1: EIRP (dBm) = EIRP (dBuV/m) – 95.2.

Note 2: Total EIRP (dBm) = EIRP (dBm) + 10*log(1/duty cycle).

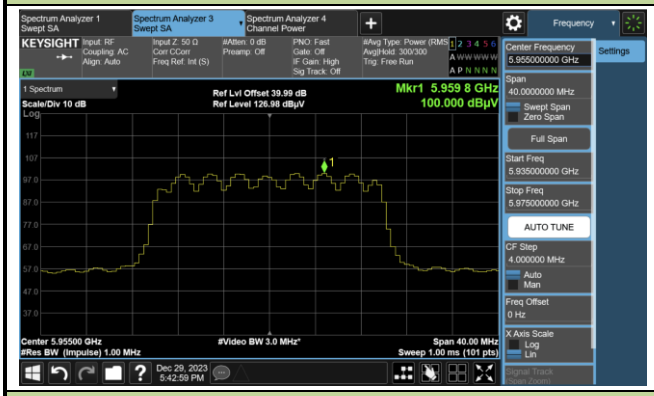
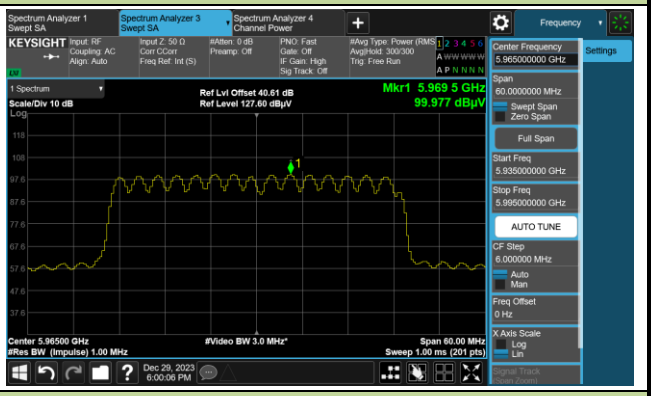
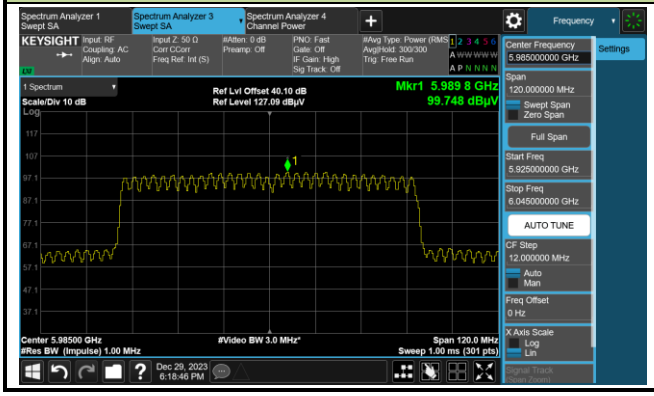
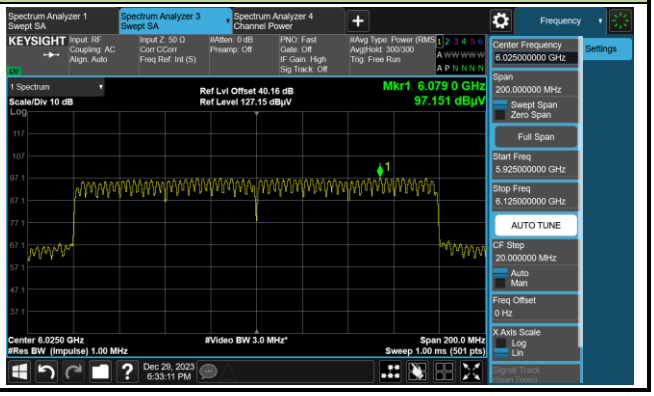
A.4 Power Spectral Density Test Result

Test Site	SIP-AC2	Test Engineer	Alisa Deng
Test Date	2023-12-29		
Filter Type	Akoustic Filter (NSS=1)		
Remark	Spot Check		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	EIRP PSD (dBuV/m)	EIRP PSD (dBm/MHz)	Duty Cycle (%)	Total EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
802.11ax-HE20	MCS0	1	5955	100.000	4.80	97.69	4.90	≤ 5.00
802.11ax-HE40	MCS0	3	5965	99.977	4.77	95.66	4.96	≤ 5.00
802.11ax-HE80	MCS0	7	5985	99.748	4.55	92.29	4.90	≤ 5.00
802.11ax-HE160	MCS0	15	6025	97.151	1.95	88.04	2.50	≤ 5.00

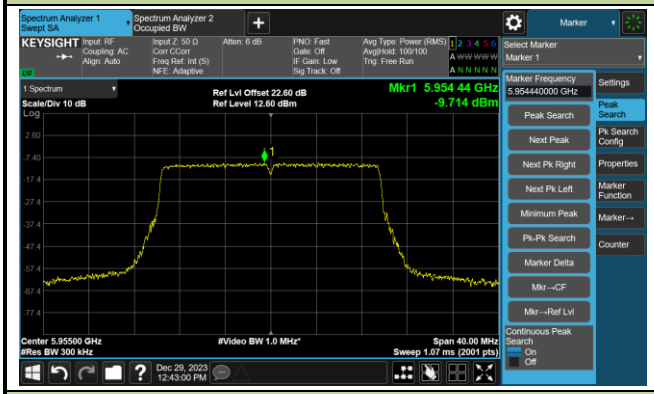
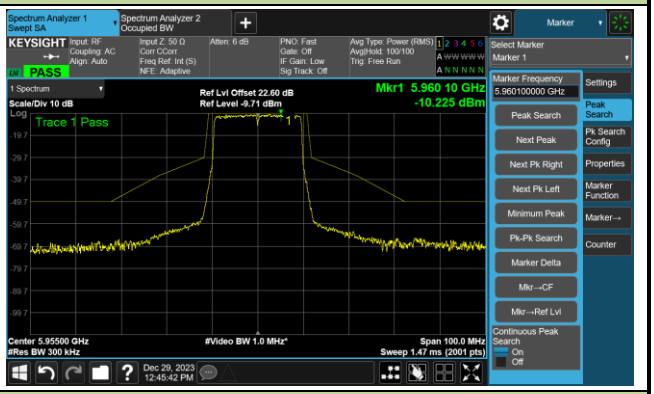
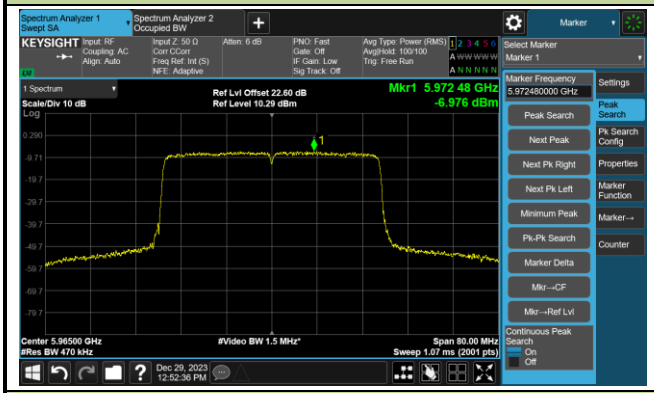
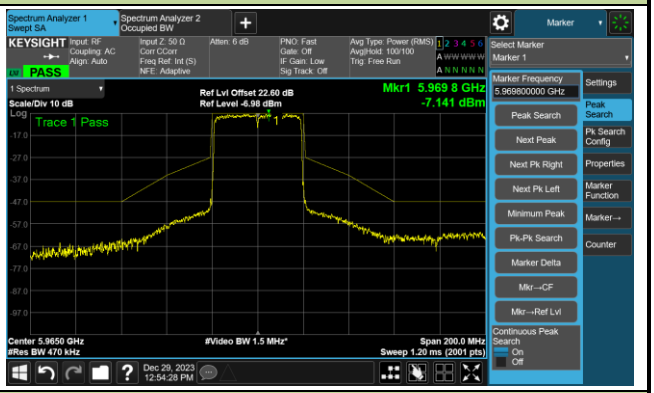
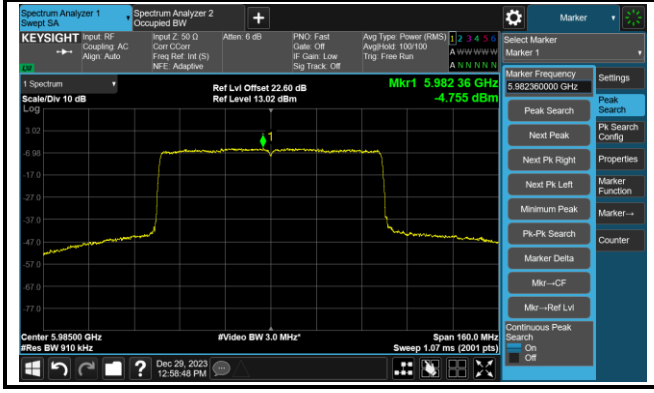
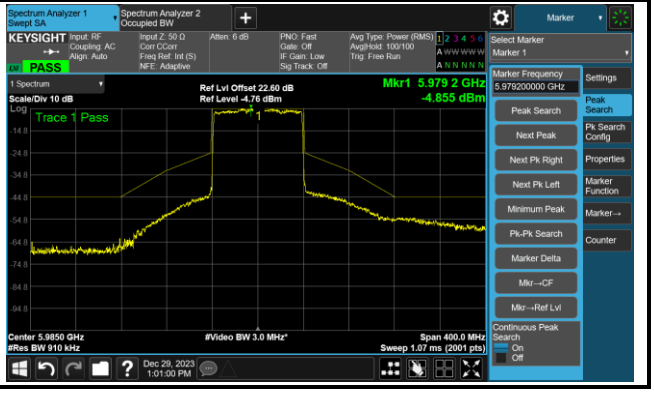
Note 1: EIRP PSD(dBm) = EIRP PSD(dBuV/m) – 95.2.

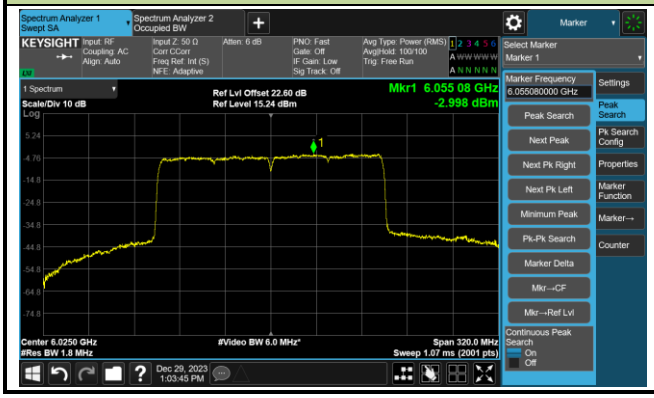
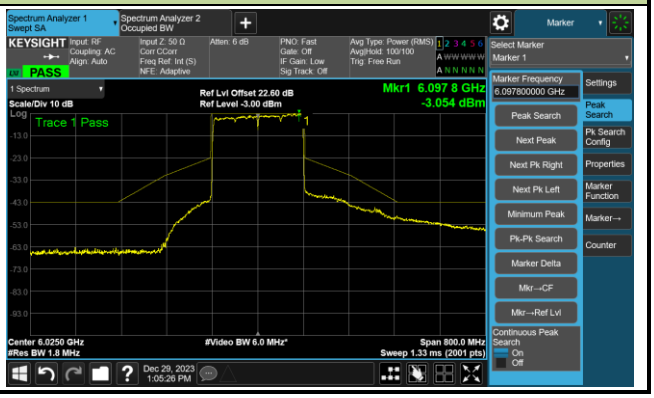
Note 2: Total EIRP PSD(dBm) = EIRP PSD(dBm) + 10*log(1/duty cycle).

Power Spectral Density	
802.11ax-HE20 Channel 1 (5955MHz)	802.11ax-HE40 Channel 3 (5965MHz)
	
802.11ax-HE80 Channel 7 (5985MHz)	802.11ax-HE160 Channel 15 (6025MHz)
	

A.5 In-Band Emission Measurement

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2023-12-29		
Filter Type	Akoustic Filter (N_{SS}=1)		
Remark	Spot Check		

In-Band Emission	
802.11ax-HE20 Channel 1 (5955MHz)	
The Reference Level	The Mask Data
	
802.11ax-HE40 Channel 3 (5965MHz)	
The Reference Level	The Mask Data
	
802.11ax-HE80 Channel 7 (5985MHz)	
The Reference Level	The Mask Data
	

802.11ax-HE160 Channel 15 (6025MHz)	
The Reference Level	The Mask Data
	

A.6 Frequency Stability Test Result

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2023-12-29		
Test Mode	5955MHz (Carrier Mode)		
Remark	Spot Check		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100	120	- 20	11.23	11.24	11.23	11.22

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} *10^6.

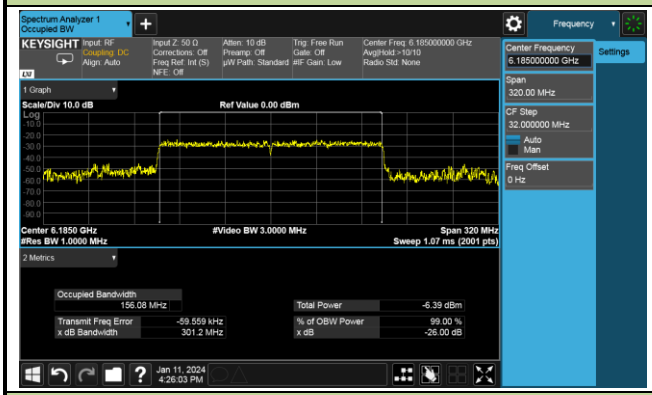
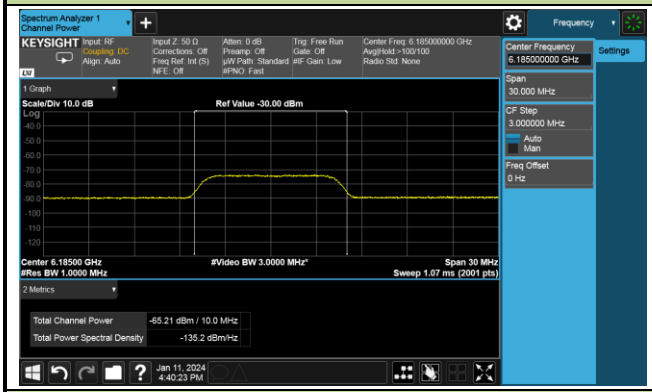
A.7 Contention Based Protocol Test Result

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2024-01-11		
Remark	Spot Check		

Test Channel	Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	AWGN Power (dBm)	Ant. Gain (dBi)	Detection Power (dBm)	Detection Limit (dBm)	Detected Number	Detection Probability (%)	Limit (%)	Test Result
Operation Band: U-NII 5											
47	160	6185	6185	-65.0	3.9	-68.9	≤ -62.0	10	100	90	Pass

Note 1: Detection Power (dBm) = Injected AWGN Power (dBm) - Antenna Gain (dBi).

Note 2: Conducted measurements are used.

EUT Tx Waveform	
802.11ax-HE160 / CH47	
	
Incumbent Signal Calibration Plots (NII-5 Band)	
802.11ax-HE160 / CH47 (Middle)	
	
Test Result of EUT ceased transmission (NII-5 Band)	
802.11ax-HE160 / CH47 (Middle)	
	

A.8 Radiated Spurious Emission Test Result

Product	ACCESS POINT	Test Engineer	Fusco Pan
Test Site	SIP-AC3	Test Date	2023-10-20
Test Mode	802.11ax-HE20 (Nss=1)	Test Channel	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.		

Mark	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
*	9780.5	48.8	-1.9	46.9	88.2	-41.3	Peak	Horizontal
	11319.0	48.1	-1.1	47.0	74.0	-27.0	Peak	Horizontal
*	12917.0	48.5	-0.2	48.3	88.2	-39.9	Peak	Horizontal
	15645.5	46.0	4.5	50.5	74.0	-23.5	Peak	Horizontal
*	9780.5	48.8	-1.9	46.9	88.2	-41.3	Peak	Vertical
	11319.0	48.1	-1.1	47.0	74.0	-27.0	Peak	Vertical
*	12917.0	48.5	-0.2	48.3	88.2	-39.9	Peak	Vertical
	15645.5	46.0	4.5	50.5	74.0	-23.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBuV/m can be determined by adding a “conversion” factor of 95.2dB to the Limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Test Engineer	Fusco Pan
Test Site	SIP-AC3	Test Date	2023-10-20
Test Mode	802.11ax-HE40 (Nss=1)	Test Channel	3
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.		

Mark	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
	9304.5	48.6	-1.8	46.8	74.0	-27.2	Peak	Horizontal
*	10129.0	47.5	-1.3	46.2	88.2	-42.0	Peak	Horizontal
	11642.0	49.2	-1.4	47.8	74.0	-26.2	Peak	Horizontal
*	14158.0	47.0	2.5	49.5	88.2	-38.7	Peak	Horizontal
*	9270.5	47.4	-1.6	45.8	88.2	-42.4	Peak	Vertical
	11404.0	50.0	-1.1	48.9	74.0	-25.1	Peak	Vertical
	12466.5	48.7	-1.1	47.6	74.0	-26.4	Peak	Vertical
*	14149.5	47.4	2.4	49.8	88.2	-38.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBuV/m can be determined by adding a “conversion” factor of 95.2dB to the Limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Test Engineer	Fusco Pan
Test Site	SIP-AC3	Test Date	2023-10-20
Test Mode	802.11ax-HE80 (Nss=1)	Test Channel	7
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.		

Mark	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
	9355.5	47.6	-2.0	45.6	74.0	-28.4	Peak	Horizontal
*	9984.5	48.0	-1.5	46.5	88.2	-41.7	Peak	Horizontal
	11897.0	48.6	-1.3	47.3	74.0	-26.7	Peak	Horizontal
*	14183.5	47.3	2.6	49.9	88.2	-38.3	Peak	Horizontal
	9313.0	48.2	-1.8	46.4	74.0	-27.6	Peak	Vertical
*	9959.0	48.2	-1.5	46.7	88.2	-41.5	Peak	Vertical
	12109.5	49.2	-1.4	47.8	74.0	-26.2	Peak	Vertical
*	14056.0	47.5	2.4	49.9	88.2	-38.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBuV/m can be determined by adding a “conversion” factor of 95.2dB to the Limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Test Engineer	Fusco Pan
Test Site	SIP-AC3	Test Date	2023-10-20
Test Mode	802.11ax-HE160 (Nss=1)	Test Channel	15
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.		

Mark	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
*	10069.5	48.4	-1.4	47.0	88.2	-41.2	Peak	Horizontal
	11132.0	48.2	-1.1	47.1	74.0	-26.9	Peak	Horizontal
	12024.5	49.1	-1.4	47.7	74.0	-26.3	Peak	Horizontal
*	13903.0	47.5	2.1	49.6	88.2	-38.6	Peak	Horizontal
	9423.5	48.3	-2.4	45.9	74.0	-28.1	Peak	Vertical
*	10469.0	48.1	-1.1	47.0	88.2	-41.2	Peak	Vertical
	11421.0	48.1	-1.0	47.1	74.0	-26.9	Peak	Vertical
*	14056.0	47.5	2.4	49.9	88.2	-38.3	Peak	Vertical

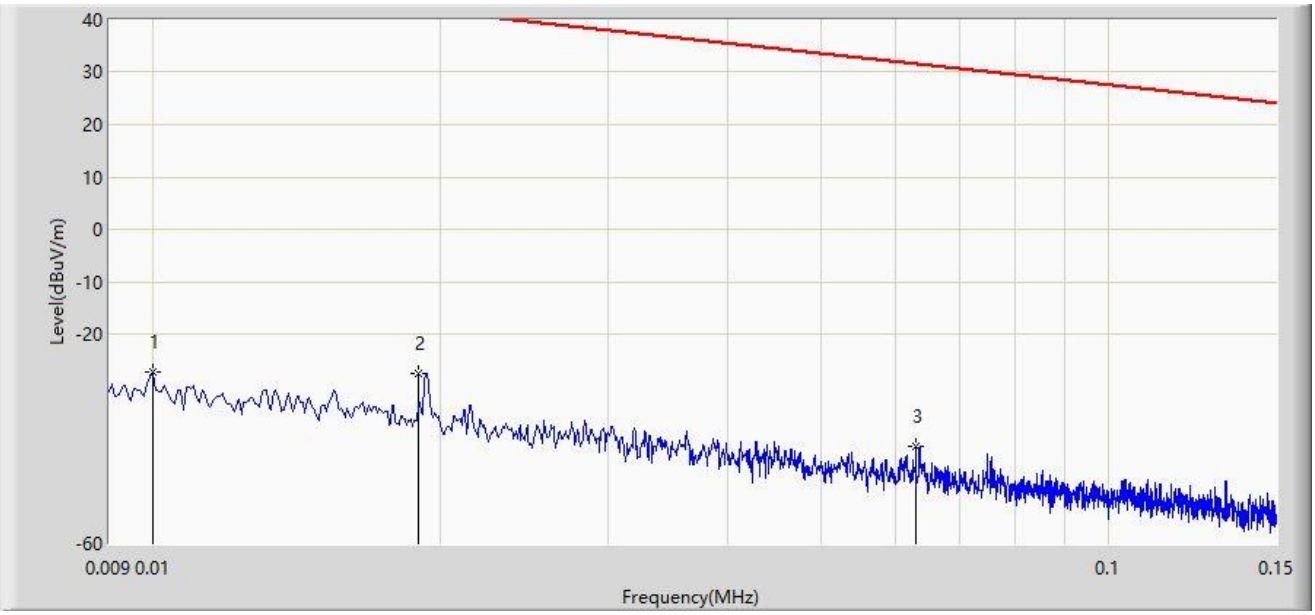
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBuV/m can be determined by adding a “conversion” factor of 95.2dB to the Limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 30MHz:

Site: SIP-AC2	Test Date: 2023/11/17
Limit: FCC_Part 15.209_RSE(3m)_PK(9k-30M)	Engineer: Fusco Pan
Probe: FMZB1519B_9kHz-30MHz	Polarity: Coaxial
EUT: EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		0.010	-27.377	32.696	-74.962	47.585	-60.073	PK
2	*	0.019	-27.435	32.998	-69.448	42.013	-60.433	PK
3		0.063	-41.463	19.860	-73.070	31.607	-61.323	PK

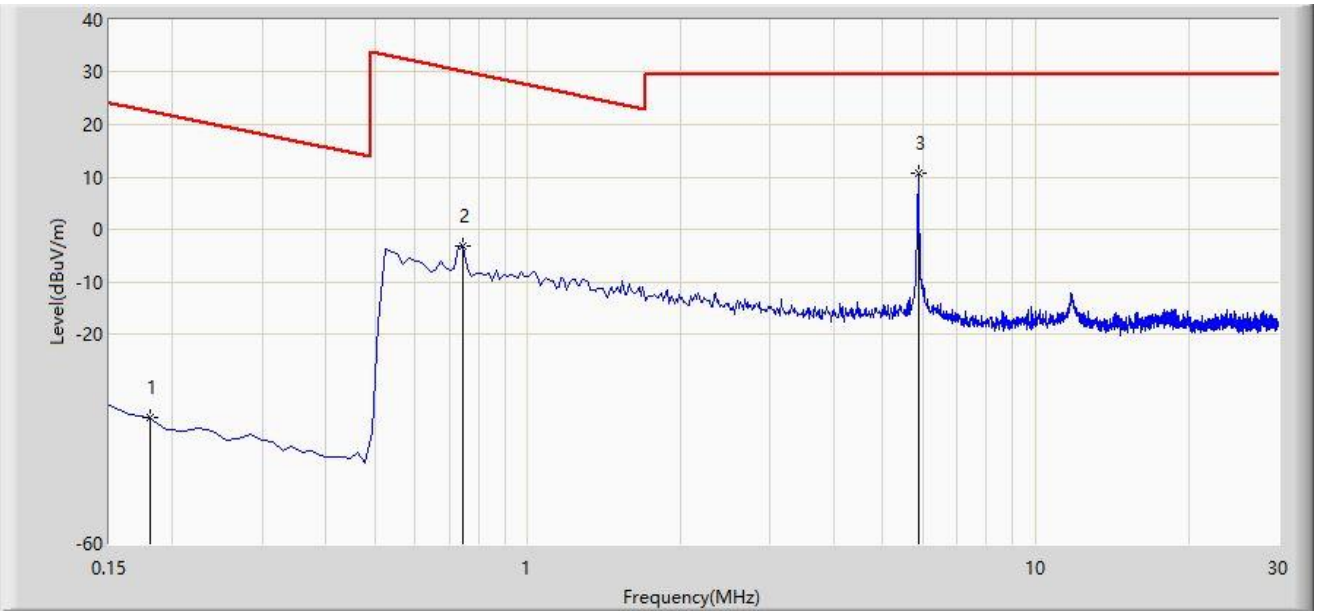
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC2	Test Date: 2023/11/17
Limit: FCC_Part 15.209_RSE(3m)_PK(9k-30M)	Engineer: Fusco Pan
Probe: FMZB1519B_9kHz-30MHz	Polarity: Coaxial
EUT: EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		0.180	-35.928	25.469	-58.422	22.494	-61.397	PK
2		0.747	-3.250	17.826	-33.398	30.148	-21.076	PK
3	*	5.866	10.786	31.988	-18.714	29.500	-21.203	PK

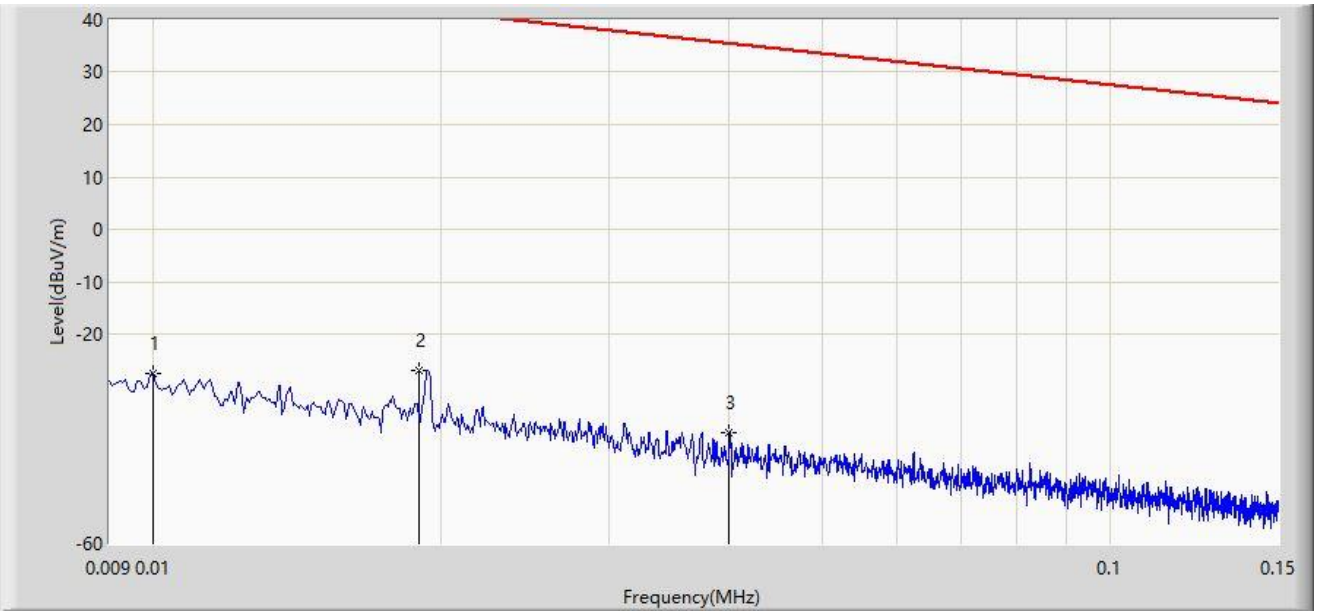
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC2	Test Date: 2023/11/17
Limit: FCC_Part 15.209_RSE(3m)_PK(9k-30M)	Engineer: Fusco Pan
Probe: FMZB1519B_9kHz-30MHz	Polarity: Coplanar
EUT: EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		0.010	-27.665	32.408	-75.250	47.585	-60.073	PK
2	*	0.019	-26.870	33.563	-68.883	42.013	-60.433	PK
3		0.040	-38.980	22.257	-74.531	35.551	-61.237	PK

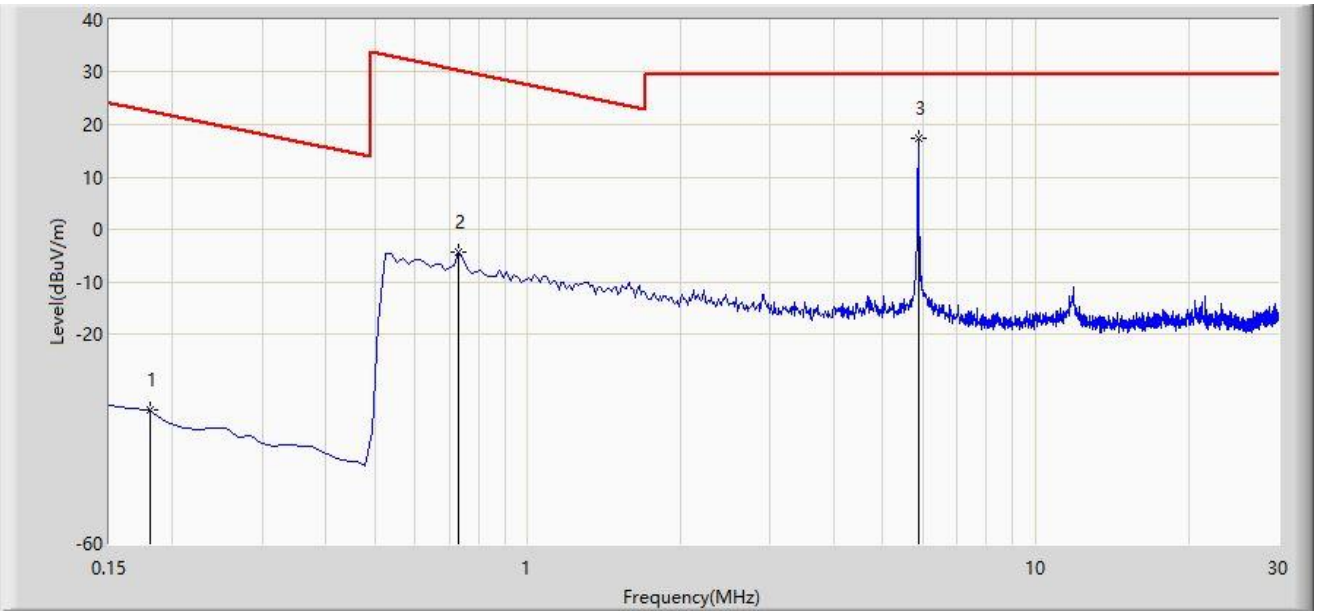
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC2	Test Date: 2023/11/17
Limit: FCC_Part 15.209_RSE(3m)_PK(9k-30M)	Engineer: Fusco Pan
Probe: FMZB1519B_9kHz-30MHz	Polarity: Coplanar
EUT: EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		0.180	-34.483	26.914	-56.977	22.494	-61.397	PK
2		0.732	-4.439	16.635	-34.763	30.324	-21.075	PK
3	*	5.866	17.352	38.554	-12.148	29.500	-21.203	PK

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

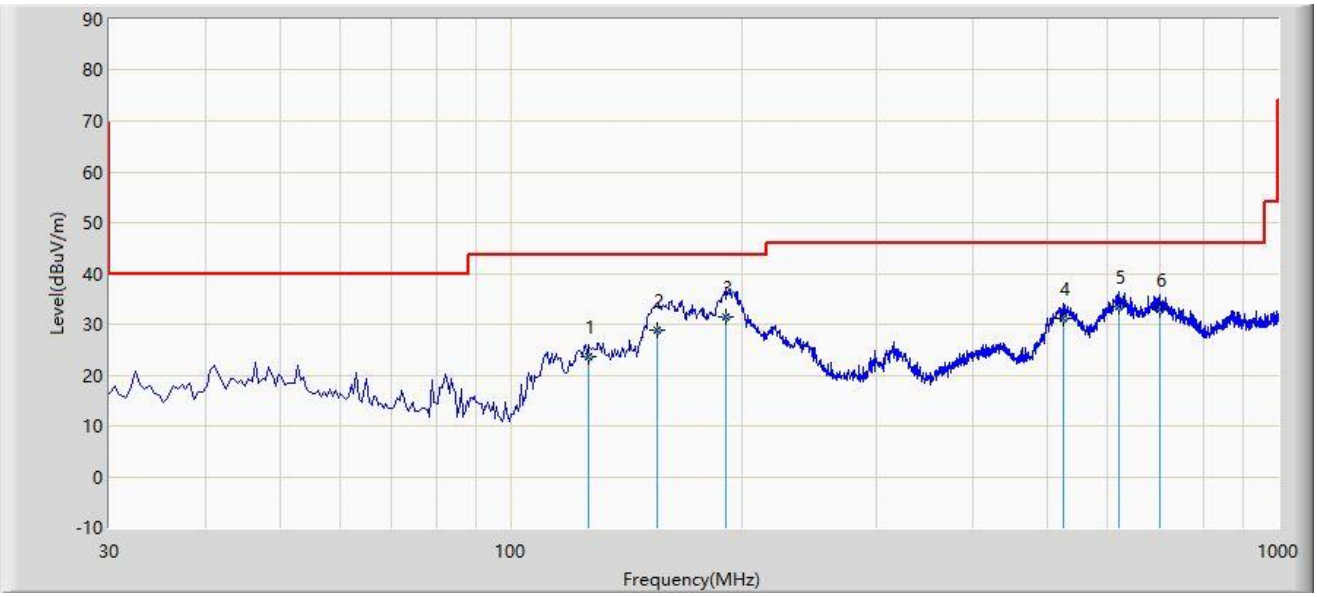
Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

The Result of Radiated Emission below 1GHz:

Site: SIP-AC2	Test Date: 2023-10-26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Fusco Pan
Probe: VULB 9168_00998_25-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHZ	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		126.600	23.605	7.100	-19.895	43.500	16.505	QP
2		155.156	28.891	10.600	-14.609	43.500	18.292	QP
3	*	191.035	31.472	16.000	-12.028	43.500	15.471	QP
4		525.650	31.242	7.300	-14.758	46.000	23.942	QP
5		619.645	33.334	6.340	-12.666	46.000	26.995	QP
6		701.360	32.968	5.690	-13.032	46.000	27.279	QP

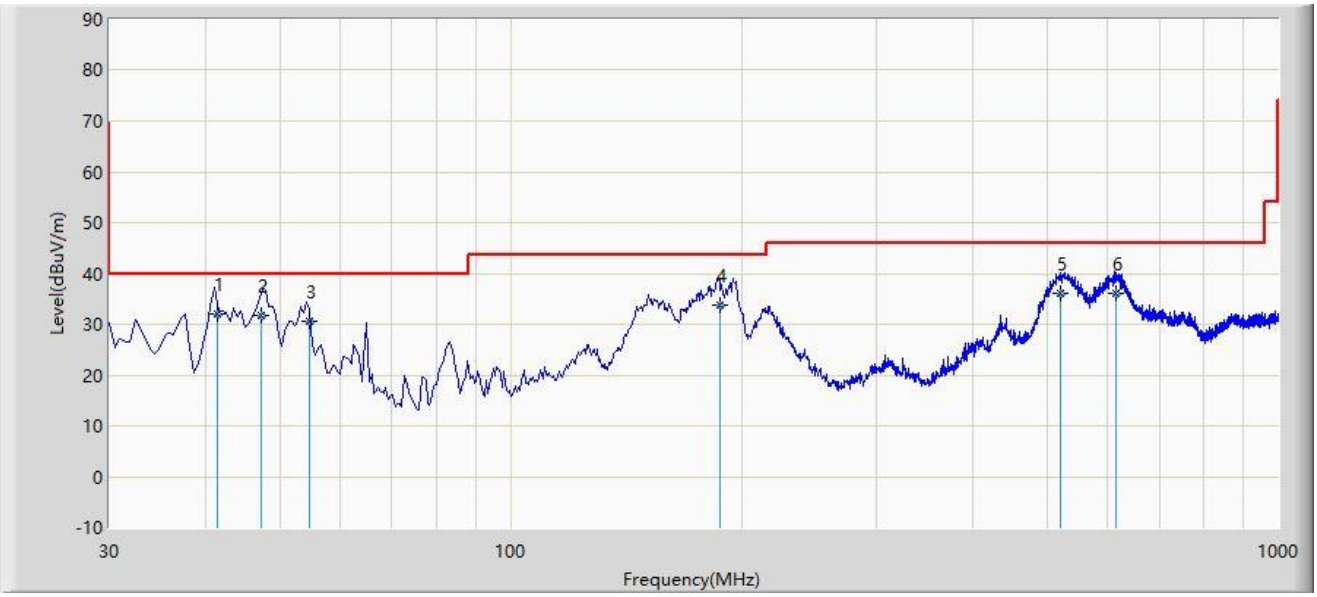
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC2	Test Date: 2023-10-26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Fusco Pan
Probe: VULB 9168_00998_25-2000MHz	Polarity: Vertical
EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHZ	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	41.530	32.008	14.000	-7.992	40.000	18.008	QP
2		47.356	31.845	13.400	-8.155	40.000	18.445	QP
3		54.650	30.613	12.360	-9.387	40.000	18.253	QP
4		187.110	33.860	18.000	-9.640	43.500	15.859	QP
5		519.650	36.150	12.410	-9.850	46.000	23.740	QP
6		615.360	36.076	9.100	-9.924	46.000	26.976	QP

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

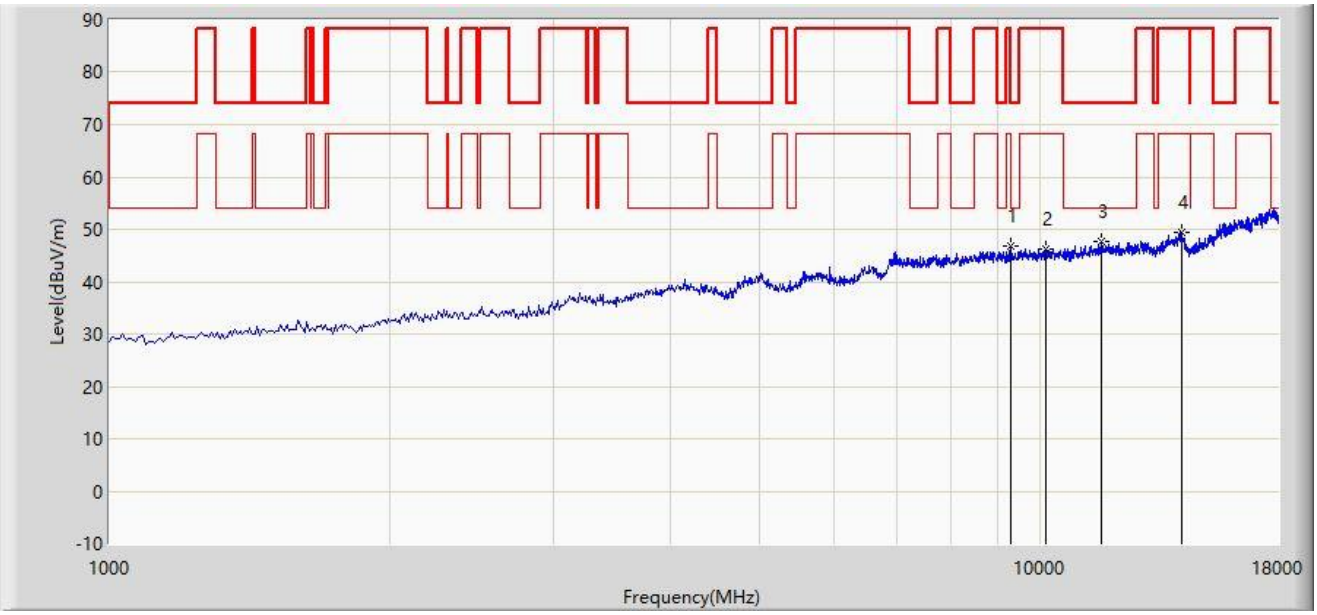
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

The Result of Radiated Emission between 1GHz ~ 18GHz:

Site: SIP-AC3	Test Date: 2023/10/20
Limit: FCC_Part15.209_RSE(3m)_6G	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESS POINT	Power: By PoE
Note: Transmit by 802.11ax-HE40 at 5965MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		9304.500	46.782	48.580	-27.218	74.000	-1.797	PK
2		10129.000	46.200	47.489	-42.000	88.200	-1.289	PK
3	*	11642.000	47.795	49.209	-26.205	74.000	-1.414	PK
4		14158.000	49.545	47.028	-38.655	88.200	2.517	PK

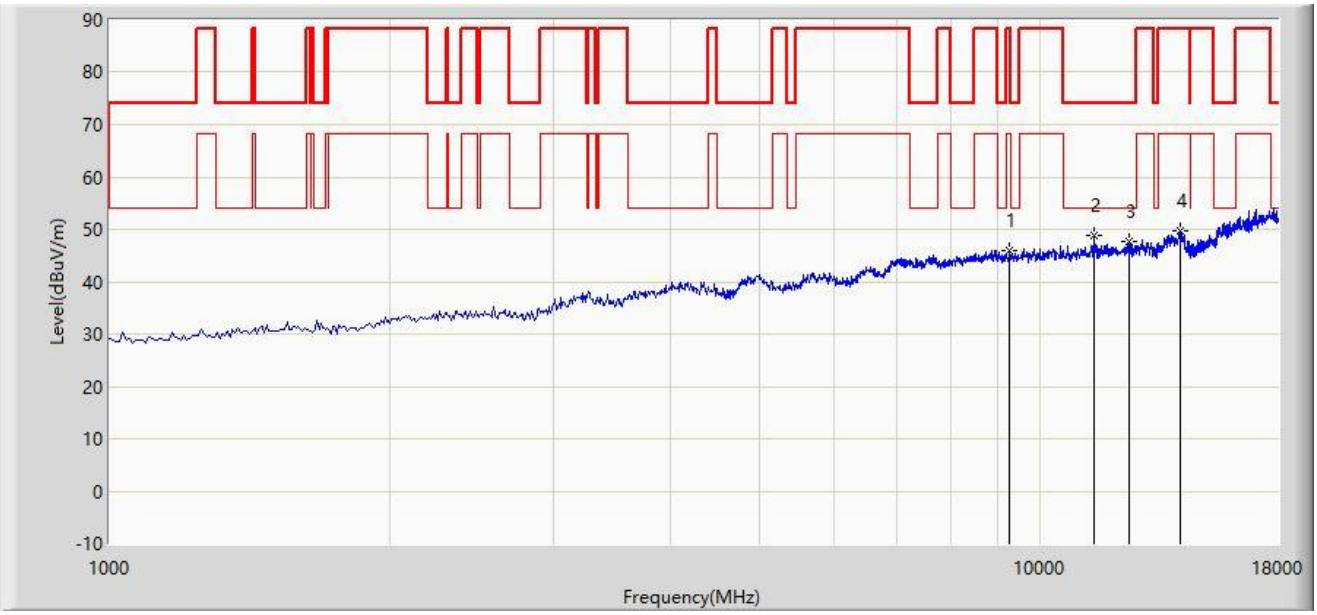
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Site: SIP-AC3	Test Date: 2023/10/20
Limit: FCC_Part15.209_RSE(3m)_6G	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE40 at 5965MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		9270.500	45.849	47.401	-42.351	88.200	-1.552	PK
2	*	11404.000	48.876	49.993	-25.124	74.000	-1.117	PK
3		12466.500	47.617	48.705	-26.383	74.000	-1.087	PK
4		14149.500	49.814	47.404	-38.386	88.200	2.410	PK

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

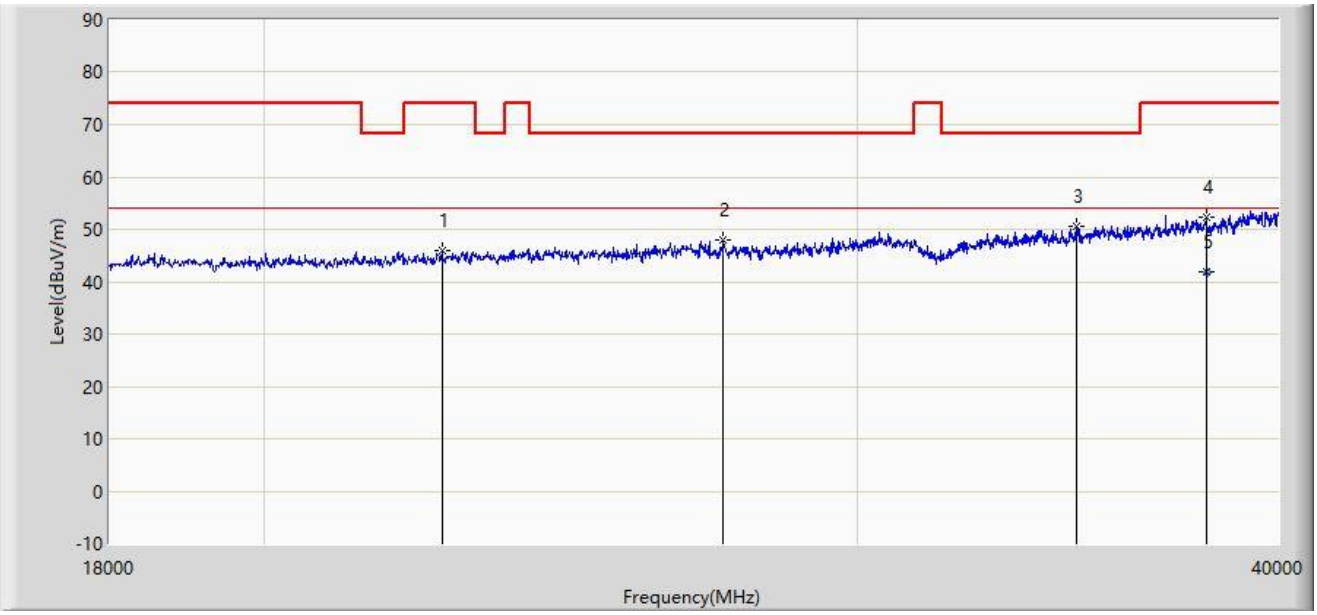
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

The Result of Radiated Emission between 18GHz ~ 40GHz:

Site: SIP-AC2	Test Date: 2023/10/25
Limit: FCC_Part15.209_RSE(3m)	Engineer: Fusco Pan
Probe: BBHA 9170_00934_18-40GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz P=80 Full Band	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		22598.000	45.966	55.911	-28.034	74.000	-9.945	PK
2		27372.000	47.935	56.920	-20.265	68.200	-8.985	PK
3		34852.000	50.486	58.156	-17.714	68.200	-7.670	PK
4		38097.000	52.421	55.627	-21.579	74.000	-3.207	PK
5	*	38097.000	42.013	45.220	-11.987	54.000	-3.207	AV

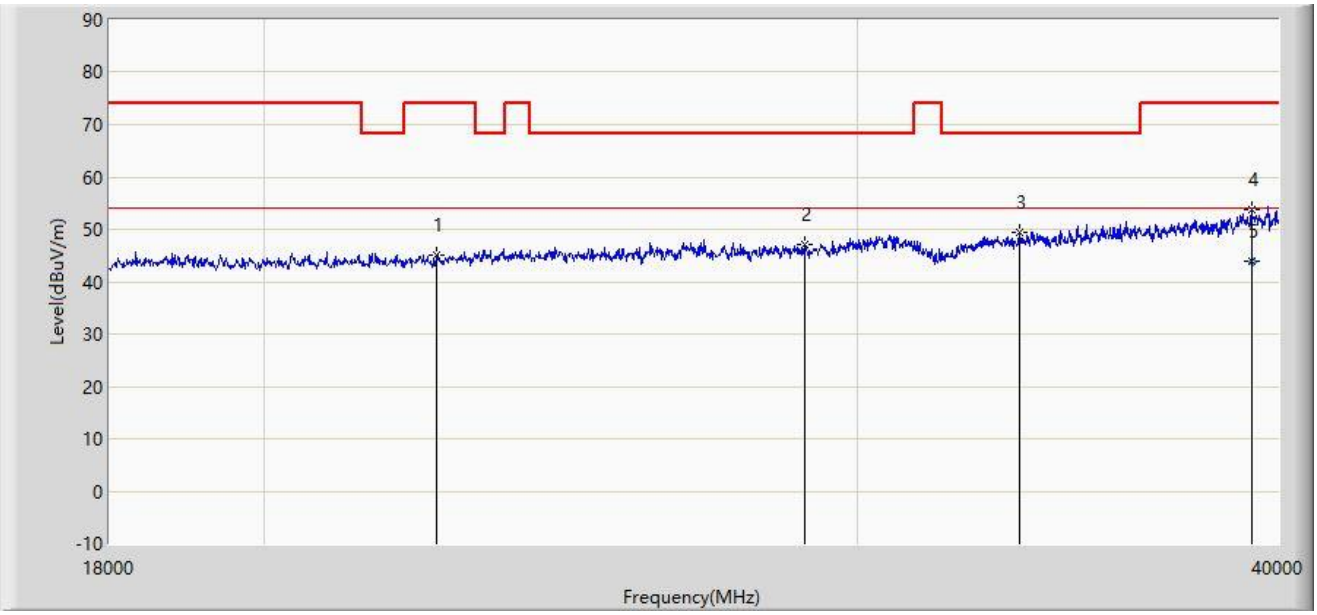
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Site: SIP-AC2	Test Date: 2023/10/25
Limit: FCC_Part15.209_RSE(3m)	Engineer: Fusco Pan
Probe: BBHA 9170_00934_18-40GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz P=80 Full Band	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		22521.000	45.215	54.878	-28.785	74.000	-9.663	PK
2		28934.000	47.002	56.480	-21.198	68.200	-9.478	PK
3		33532.000	49.488	58.991	-18.712	68.200	-9.503	PK
4		39296.000	53.631	53.429	-20.369	74.000	0.202	PK
5	*	39296.000	43.862	43.660	-10.138	54.000	0.202	AV

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

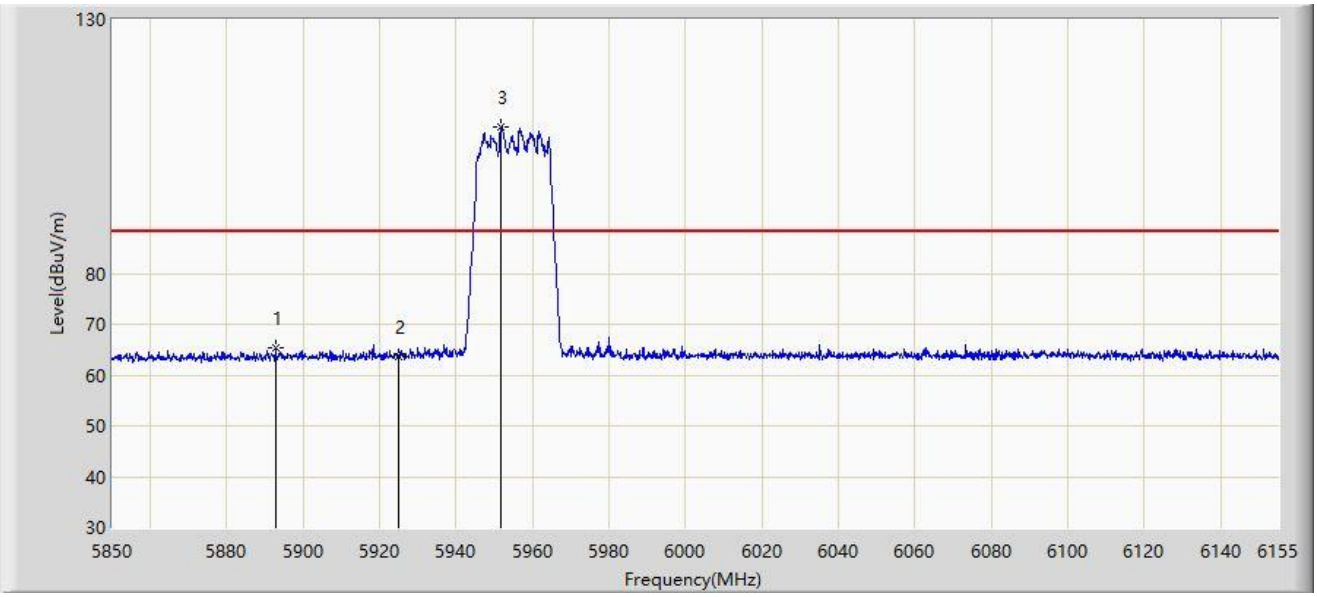
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

A.9 Radiated Restricted Band Edge Test Result

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



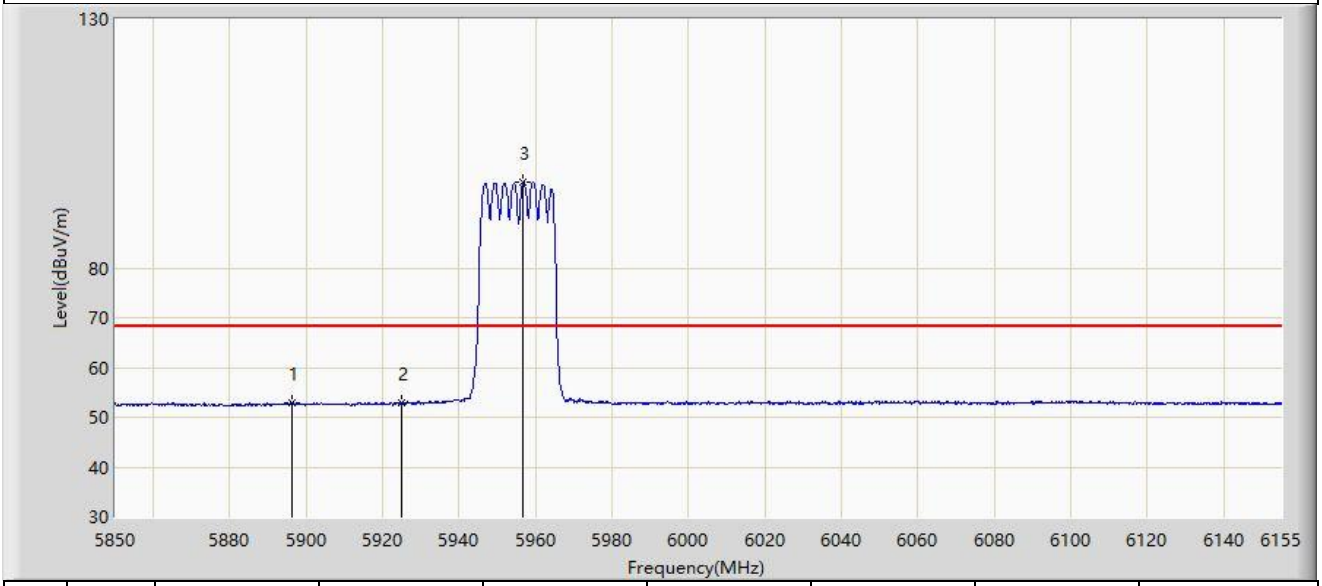
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5892.700	65.333	72.258	-22.867	88.200	-6.925	PK
2		5925.000	63.760	70.651	-24.440	88.200	-6.891	PK
3		5951.565	108.938	115.679	N/A	N/A	-6.740	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



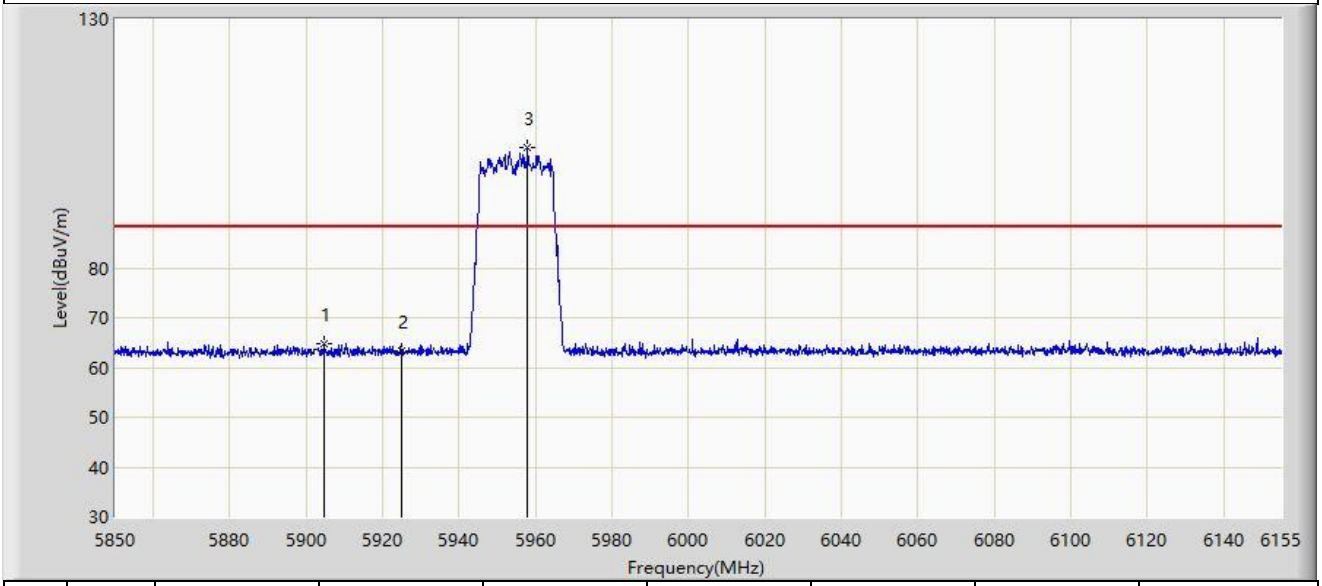
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5896.208	52.952	59.824	-15.248	68.200	-6.871	AV
2		5925.000	52.809	59.700	-15.391	68.200	-6.891	AV
3		5956.750	97.331	104.072	N/A	N/A	-6.741	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



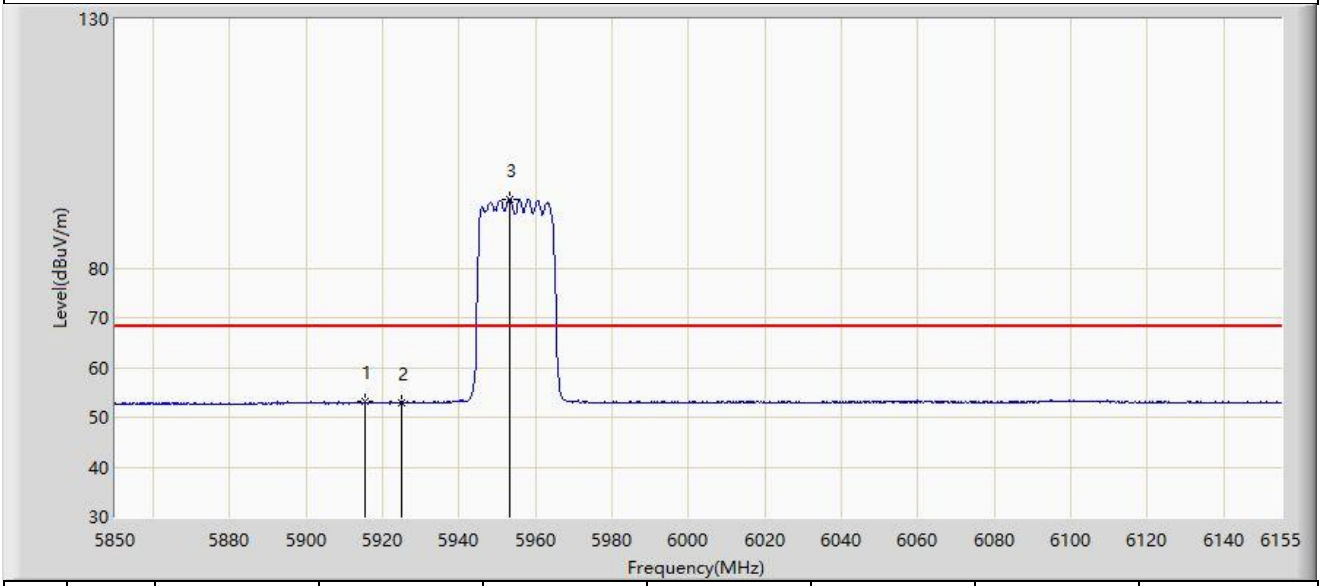
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5904.595	64.755	71.666	-23.445	88.200	-6.911	PK
2		5925.000	63.234	70.125	-24.966	88.200	-6.891	PK
3		5957.970	104.320	111.061	N/A	N/A	-6.741	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE20 at 5955MHz	



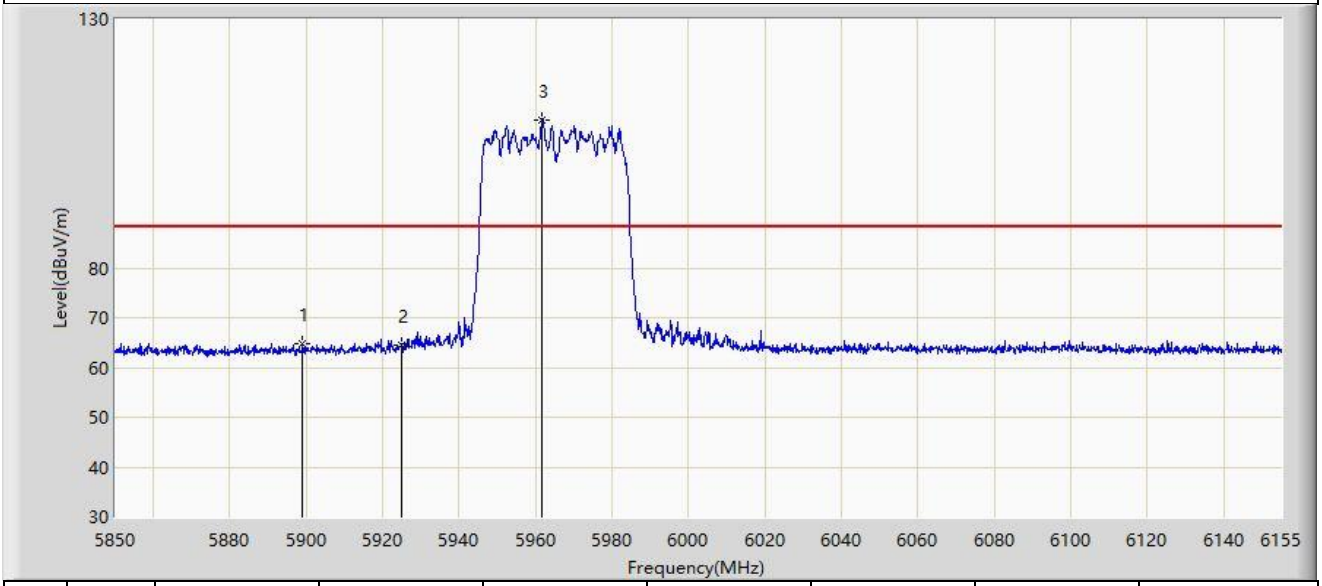
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5915.422	53.125	60.063	-15.075	68.200	-6.938	AV
2		5925.000	53.034	59.925	-15.166	68.200	-6.891	AV
3		5953.090	93.882	100.623	N/A	N/A	-6.741	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE40 at 5965MHz	



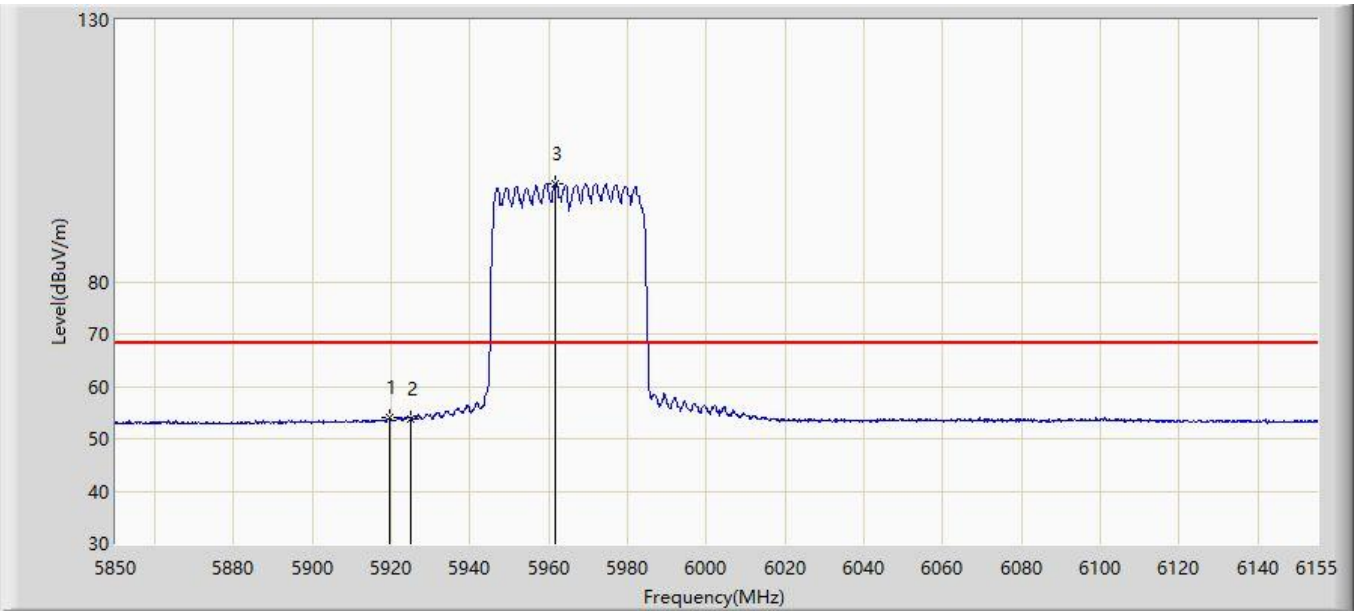
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5899.105	64.659	71.544	-23.541	88.200	-6.886	PK
2		5925.000	64.529	71.420	-23.671	88.200	-6.891	PK
3		5961.630	109.817	116.559	N/A	N/A	-6.742	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE40 at 5965MHz	



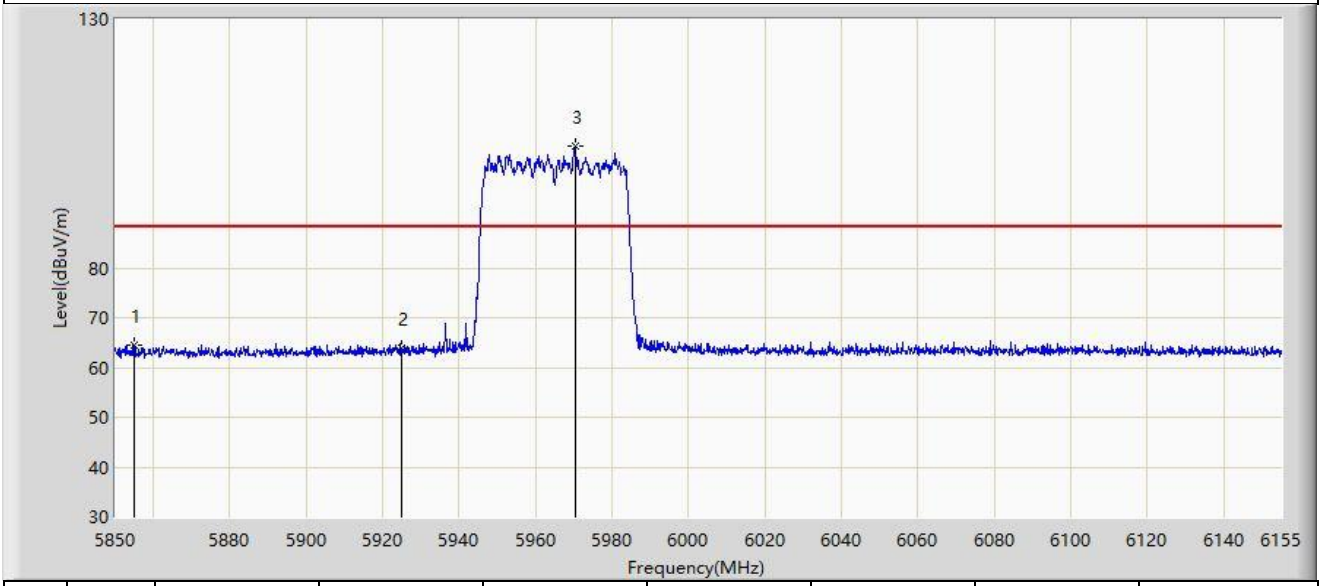
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5919.388	54.125	61.044	-14.075	68.200	-6.919	AV
2		5925.000	53.833	60.724	-14.367	68.200	-6.891	AV
3		5961.783	98.818	105.560	N/A	N/A	-6.742	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE40 at 5965MHz	



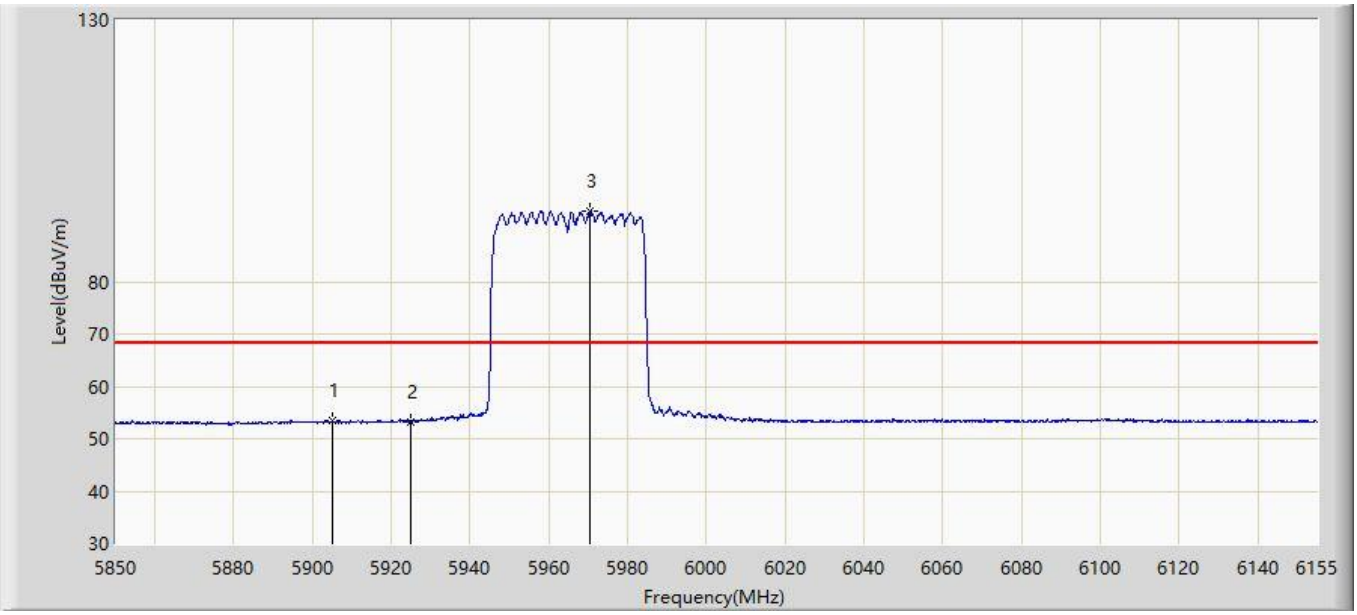
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5855.033	64.578	71.531	-23.622	88.200	-6.952	PK
2		5925.000	63.920	70.811	-24.280	88.200	-6.891	PK
3		5970.322	104.490	111.243	N/A	N/A	-6.752	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE40 at 5965MHz	



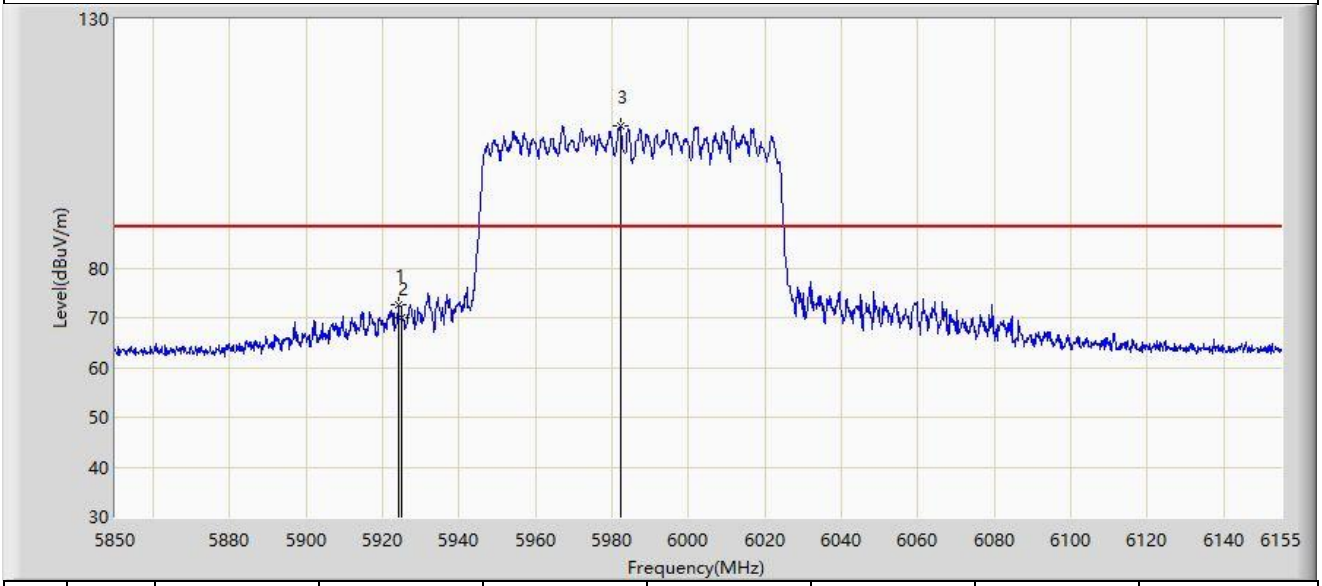
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5905.053	53.451	60.364	-14.749	68.200	-6.914	AV
2		5925.000	53.318	60.209	-14.882	68.200	-6.891	AV
3		5970.475	93.565	100.318	N/A	N/A	-6.753	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE80 at 5985MHz	



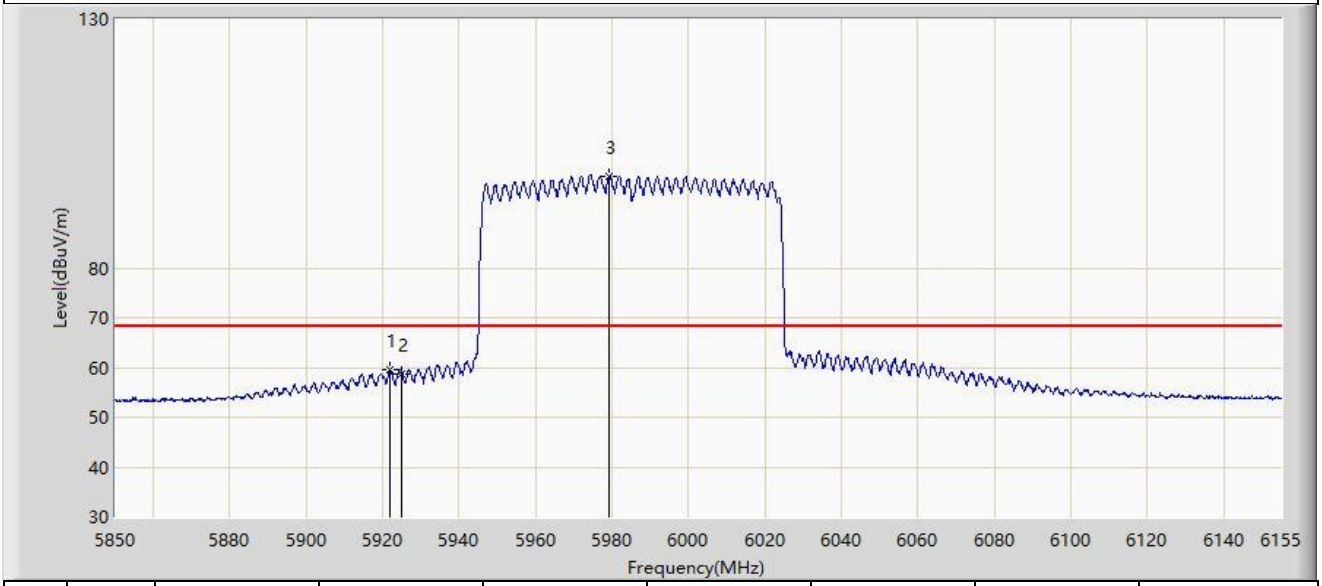
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5924.268	72.548	79.443	-15.652	88.200	-6.895	PK
2		5925.000	70.034	76.925	-18.166	88.200	-6.891	PK
3		5982.065	108.503	115.272	N/A	N/A	-6.769	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE80 at 5985MHz	



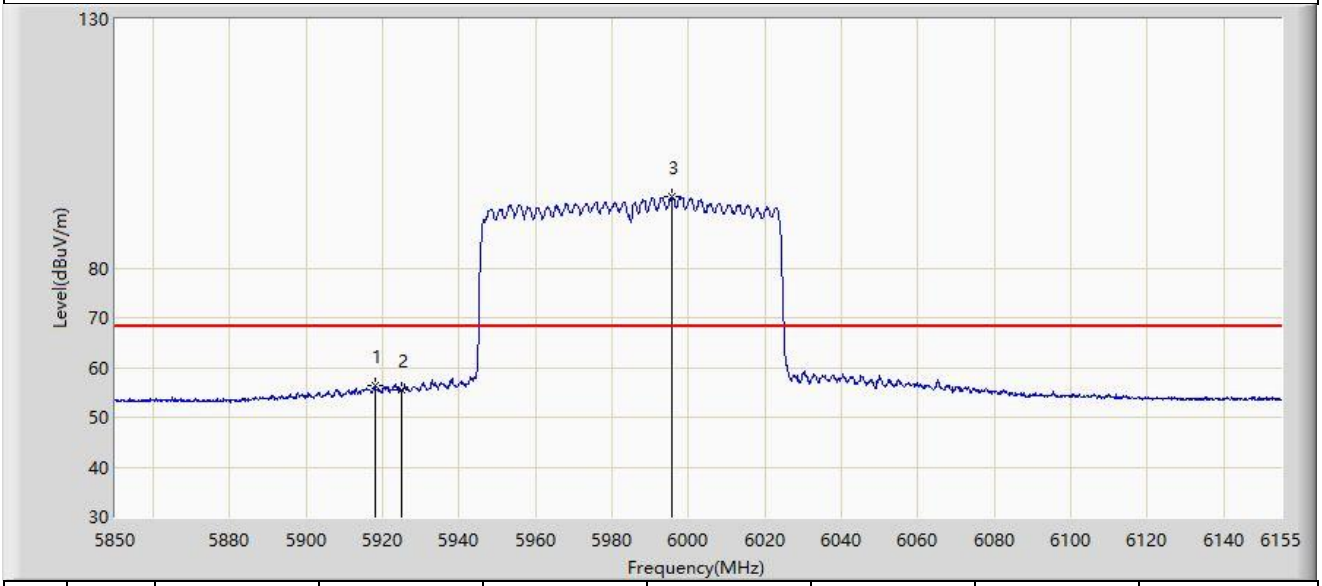
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5921.828	59.479	66.386	-8.721	68.200	-6.907	AV
2		5925.000	58.589	65.480	-9.611	68.200	-6.891	AV
3		5979.320	98.496	105.264	N/A	N/A	-6.768	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE80 at 5985MHz	



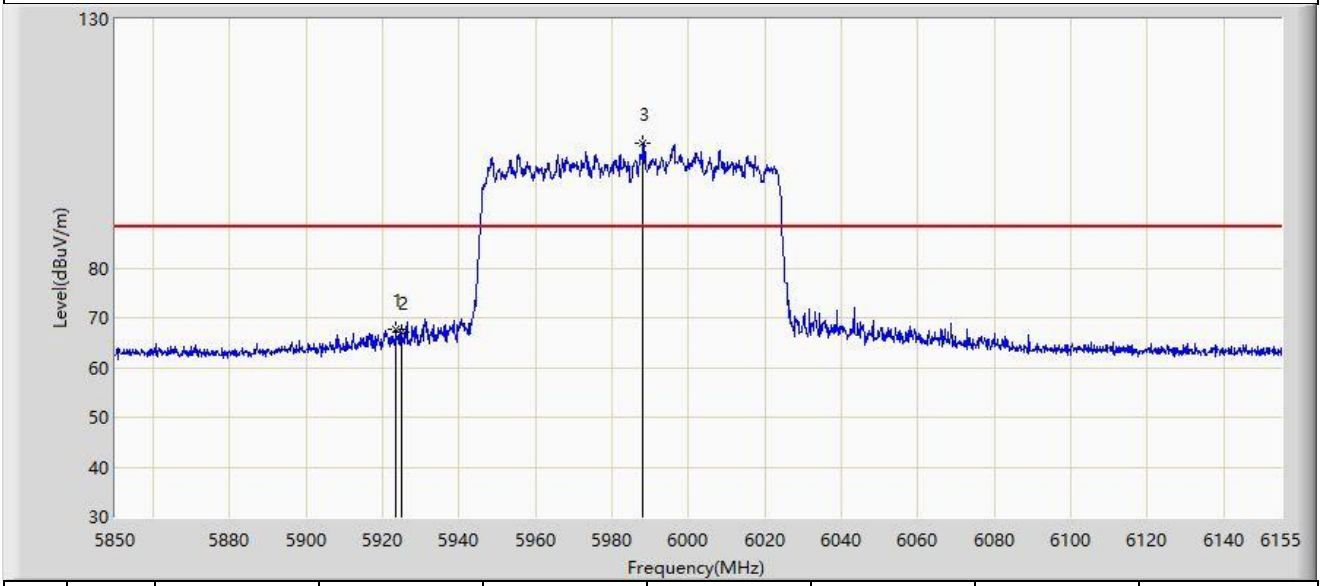
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5917.862	56.355	63.281	-11.845	68.200	-6.926	AV
2		5925.000	55.541	62.432	-12.659	68.200	-6.891	AV
3		5995.790	94.236	100.982	N/A	N/A	-6.745	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE80 at 5985MHz	



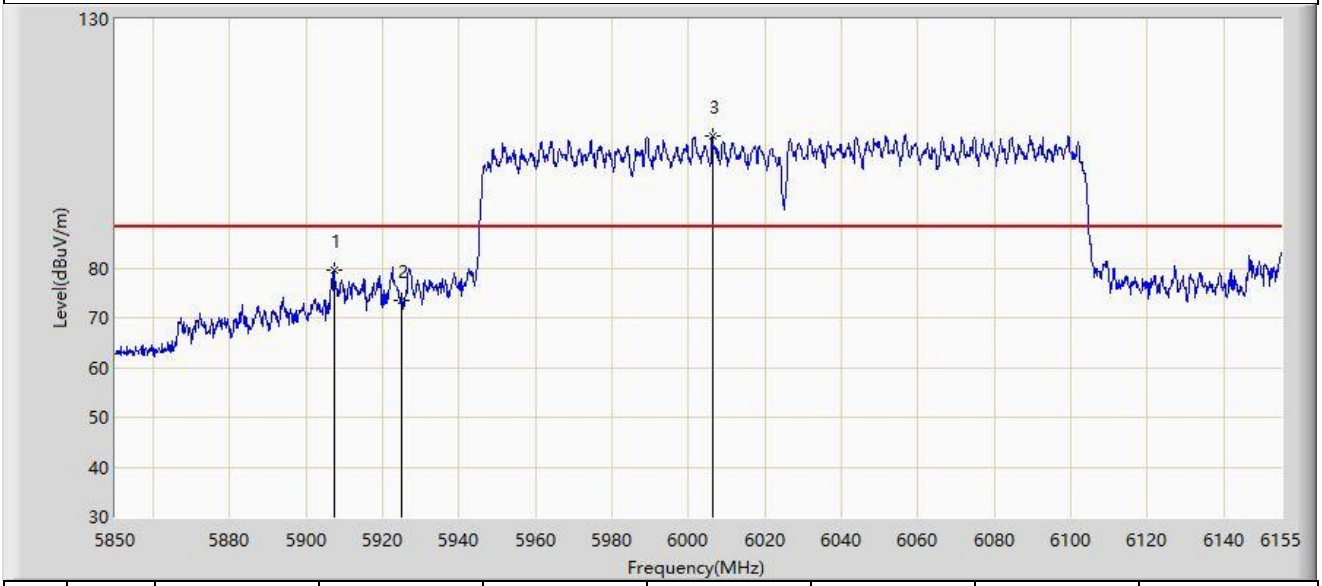
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5923.353	67.563	74.462	-20.637	88.200	-6.900	PK
2		5925.000	67.023	73.914	-21.177	88.200	-6.891	PK
3		5988.165	104.964	111.723	N/A	N/A	-6.759	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE160 at 6025MHz	



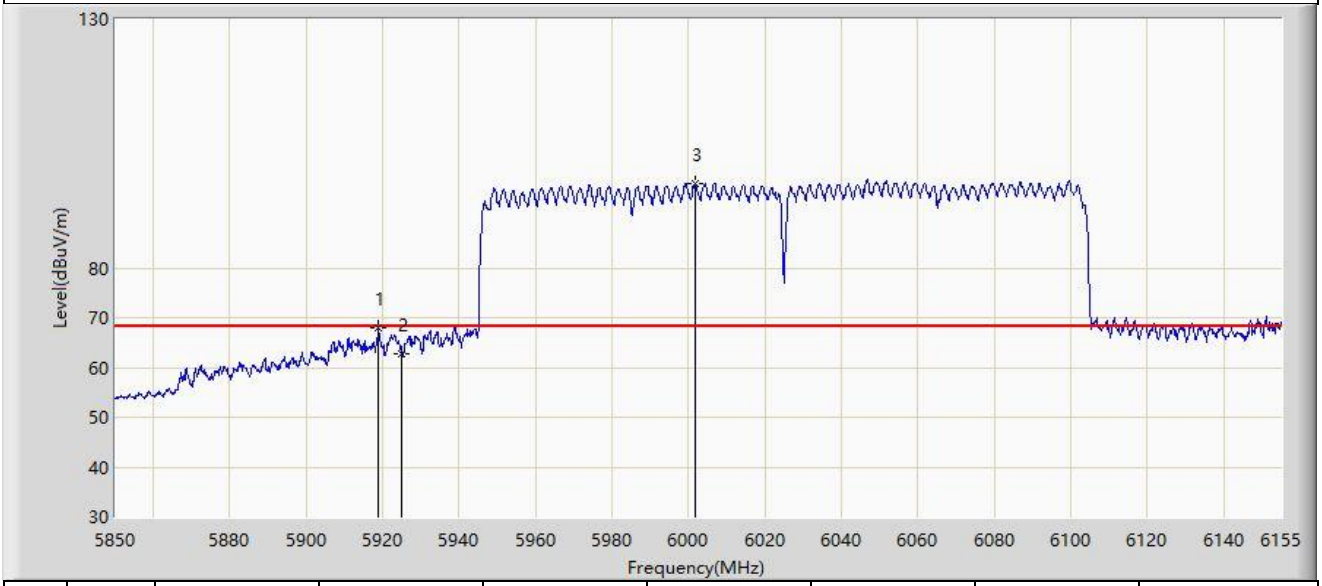
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5907.187	79.636	86.559	-8.564	88.200	-6.923	PK
2		5925.000	73.545	80.436	-14.655	88.200	-6.891	PK
3		6006.160	106.616	113.310	N/A	N/A	-6.695	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Horizontal
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE160 at 6025MHz	



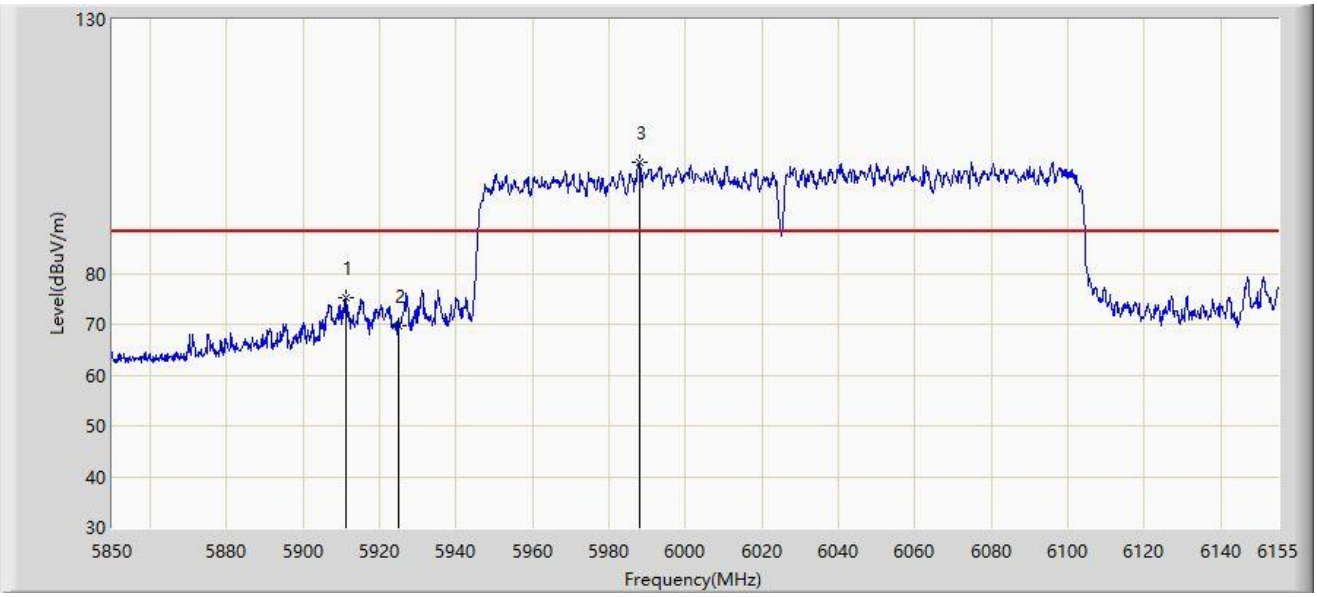
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5918.930	68.100	75.021	-0.100	68.200	-6.921	AV
2		5925.000	62.761	69.652	-5.439	68.200	-6.891	AV
3		6001.737	96.955	103.675	N/A	N/A	-6.720	AV

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE160 at 6025MHz	



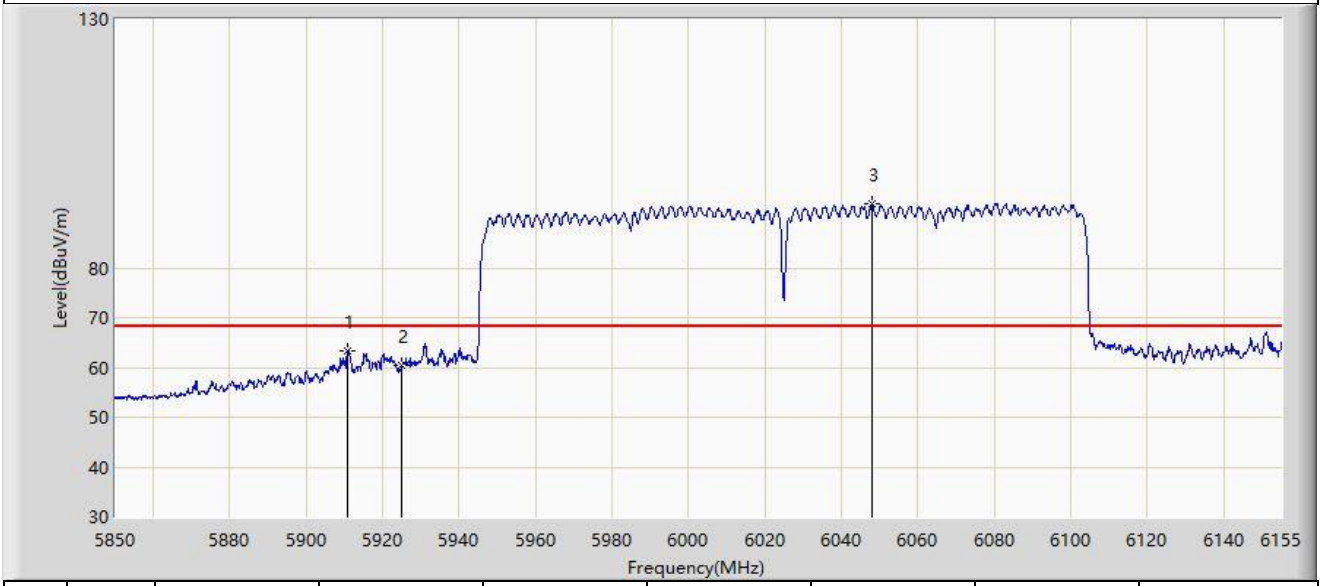
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5911.000	75.249	82.190	-12.951	88.200	-6.940	PK
2		5925.000	69.842	76.733	-18.358	88.200	-6.891	PK
3		5988.013	101.755	108.514	N/A	N/A	-6.759	PK

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

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Test Date: 2023-10-20
Limit: FCC_6G_RE(3m)	Engineer: Fusco Pan
Probe: HF907_102862_1-18GHz-AC1	Polarity: Vertical
EUT: ACCESSS POINT	Power: By PoE
Test Mode: Transmit by 802.11ax-HE160 at 6025MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5910.848	63.456	70.396	-4.744	68.200	-6.940	AV
2		5925.000	60.293	67.184	-7.907	68.200	-6.891	AV
3		6047.792	92.789	99.279	N/A	N/A	-6.490	AV

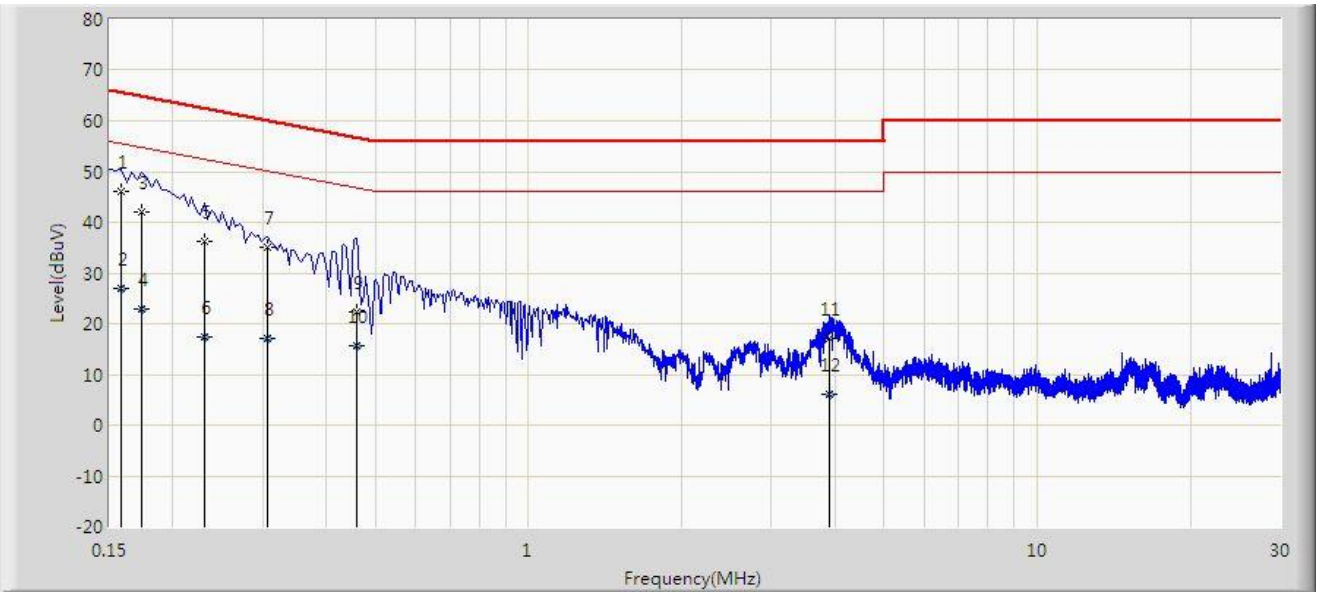
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

A.10 AC Conducted Emissions Test Result

Site: SIP-SR2	Test Date: 2023-12-29
Temperature: 17.6°C	Humidity: 49.1%
Limit: FCC_Part15.207_CE_AC Power	Engineer: Mark Long
Probe: SIP-SR2-ENV216_101684_E	Polarity: Line
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE160 at channel 6025MHz	



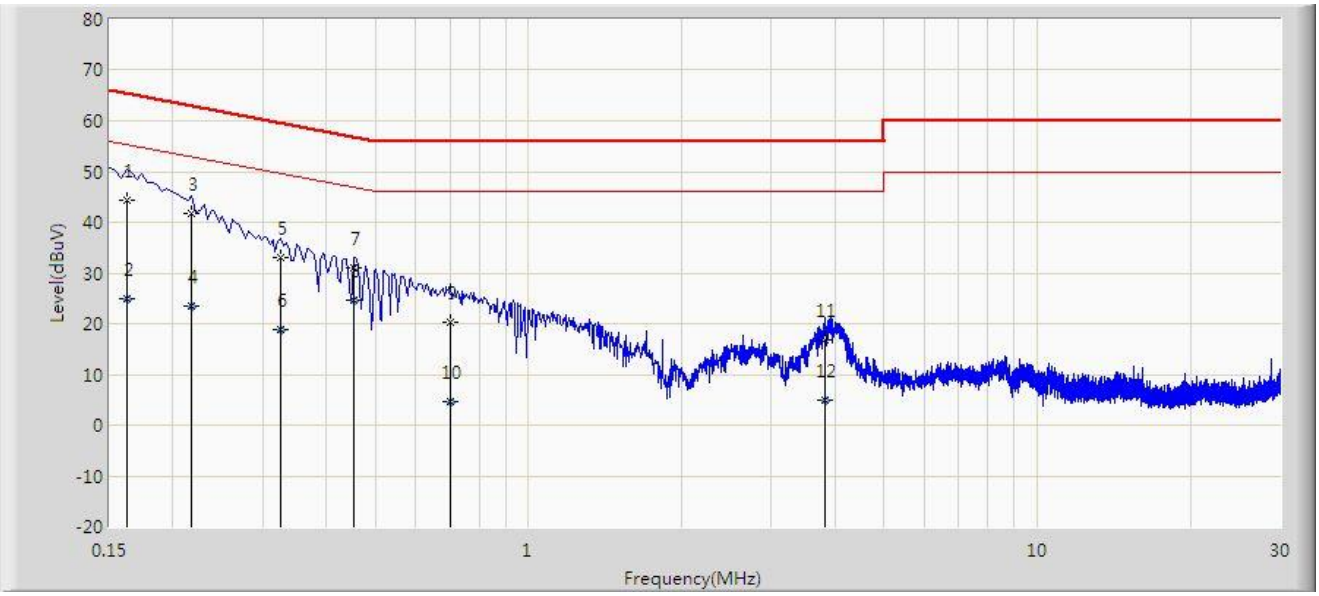
No	Mark	Frequency (MHz)	Measure Level (dBµV)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV)	Factor (dB)	Type
1	*	0.158	46.149	36.498	-19.420	65.568	9.650	QP
2		0.158	26.996	17.345	-28.573	55.568	9.650	AV
3		0.174	42.126	32.473	-22.641	64.767	9.653	QP
4		0.174	22.828	13.175	-31.940	54.767	9.653	AV
5		0.230	36.256	26.542	-26.194	62.450	9.714	QP
6		0.230	17.276	7.562	-35.174	52.450	9.714	AV
7		0.306	35.062	25.337	-25.017	60.078	9.724	QP
8		0.306	17.124	7.399	-32.955	50.078	9.724	AV
9		0.458	22.461	12.725	-34.268	56.729	9.736	QP
10		0.458	15.663	5.927	-31.065	46.729	9.736	AV
11		3.902	17.037	7.139	-38.963	56.000	9.898	QP
12		3.902	6.134	-3.764	-39.866	46.000	9.898	AV

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

Note 2: Measure Level (dBµV) = Reading Level (dBµV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SIP-SR2	Test Date: 2023-12-29
Temperature: 17.6°C	Humidity: 49.1%
Limit: FCC_Part15.207_CE_AC Power	Engineer: Mark Long
Probe: SIP-SR2-ENV216_101684_E	Polarity: Neutral
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE160 at channel 6025MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV)	Factor (dB)	Type
1	*	0.162	44.461	34.811	-20.900	65.361	9.650	QP
2		0.162	24.877	15.227	-30.484	55.361	9.650	AV
3		0.218	41.862	32.167	-21.032	62.895	9.696	QP
4		0.218	23.360	13.664	-29.535	52.895	9.696	AV
5		0.326	33.143	23.414	-26.409	59.552	9.729	QP
6		0.326	18.966	9.237	-30.587	49.552	9.729	AV
7		0.454	30.910	21.180	-25.891	56.802	9.730	QP
8		0.454	24.606	14.876	-22.195	46.802	9.730	AV
9		0.702	20.331	10.591	-35.669	56.000	9.740	QP
10		0.702	4.694	-5.046	-41.306	46.000	9.740	AV
11		3.826	16.843	6.957	-39.157	56.000	9.886	QP
12		3.826	5.056	-4.830	-40.944	46.000	9.886	AV

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

Note 2: Measure Level (dBµV) = Reading Level (dBµV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Appendix B – Test Setup Photograph

Refer to “2308RSU066-UT” file.

Appendix C – EUT Photograph

Refer to “2308RSU066-UE” file.

The End