RF MEASUREMENT REPORT

FCC ID:	Q9DAPIN0735
Applicant:	Hewlett Packard Enterprise Company
Product:	ACCESS POINT
Model No.:	APIN0735
Trademark:	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:	2023-11-09
Test Date:	2023-11-30 ~ 2024-03-06, 2025-12-12 ~ 2025-12-27

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. Testing was performed in accordance with the applicable measurement procedures. The test results reported herein apply only to the specific item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
R25S1013119-U203	V01	Initial Report	2026-01-19	Invalid
R25S1013119-U203	V02	Correct the original radio definition	2026-03-18	Valid

Note 1: This sample is based on the original Report No. 2311RSU031-U6, using the default mode (Group 1), with the following wireless Group 2 and 3 newly added. The corresponding tests have been supplemented for Radio 1 6 GHz HB.

Note 2: For Radio 2, the Group 3 6G LB mode is covered by the Group 1 6G LB mode.

Wireless Group	Radio 1	Radio 0	Radio 2
Group 1	2.4 GHz	5 GHz FB	6 GHz WB/LB
Group 2	5 GHz LB	5 GHz HB	6 GHz WB/LB
Group 3	6 GHz HB	5 GHz FB	6 GHz LB

Note 1: The original report No. 2311RSU031-U6 had incorrect radio definitions. This has been corrected in this current report.

Note 2: 5 GHz FB = 5 GHz LB + 5 GHz HB, based on channel selection.

Radio	Filter	Specification
1	5 GHz LB	5150 - 5350 MHz
1	6 GHz HB	6525 - 7125 MHz
0	5 GHz LB	5150 - 5350 MHz
0	5 GHz HB	5470 - 5895 MHz
2	6 GHz WB	6105 - 7125 MHz
2	6 GHz LB	5925 - 6425 MHz

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1. General Information

1.1. Applicant

Hewlett Packard Enterprise Company

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

1.2. Manufacturer

Hewlett Packard Enterprise Company

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

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**	
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China **Laboratory Location (Suzhou - SIP)** 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China **Laboratory Location (Suzhou - Wujiang)** Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China	
	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
☐	**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	
	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.	APIN0735
Serial No.	CNRJM52002 CNRQM5201K (CBP test)
Software Version	V1.6 (Factory Code)
	ArubaOS_Aquila_10.8.0.0_94279 (AOS Code)
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	BLE only
ZigBee Specification	802.15.4
GNSS Specification	GPS, Galileo
Antenna Information	Refer to Section 1.8
Power Type	AC Adapter Input or PoE Input
Operating Environment	Indoor Use
Note: The information of the EUT (Equipment Under Test) was provided by the manufacturer. The accuracy, completeness, and validity of the information are solely the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Frequency Range	UNII-7: 6525 ~ 6875 MHz UNII-8: 6875 ~ 7125 MHz	
Type of Modulation	802.11ax/be: OFDMA	
Data Rate	802.11ax: up to 2402 Mbps 802.11be: up to 5764 Mbps	
Channel Puncturing Function	☐ Supported	☒ Unsupported
Support RU	☒ Full RU	☐ Partial RU

1.6. Working Frequencies

802.11ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
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/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
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/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
135	6625 MHz	151	6705 MHz	167	6785 MHz
183	6865 MHz	199	6945 MHz	215	7025 MHz

802.11ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
143	6665 MHz	175	6825 MHz	207	6985 MHz

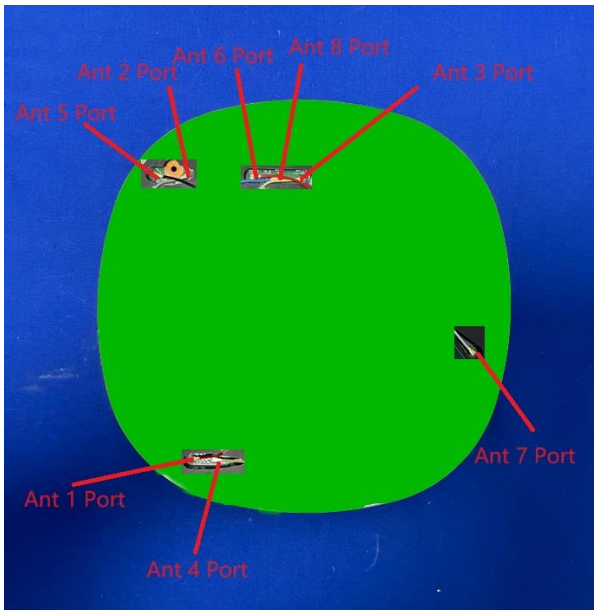
802.11be-EHT320-1

Channel	Frequency	Channel	Frequency	Channel	Frequency
159	6745 MHz	--	--	--	--

802.11be-EHT320-2

Channel	Frequency	Channel	Frequency	Channel	Frequency
191	6905 MHz	--	--	--	--

1.7. Description of Antenna RF Port



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

1.8. Antenna Details

Antenna Type	Frequency Band (GHz)	T_X Paths	Directional Gain (dBi)	
			Uncorrelated	Correlated
Wi-Fi Antennas (Ant 6 & Ant 3)				
PIFA	5.925 ~ 7.125	2	3.62	3.62

Notes:

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 802.11ax/be.

3, For beamforming operation, Aruba OS automatically backs power down based on CDD power.

4, The antennas are cross-polarized, so the correlated gain equals to the uncorrelated gain.

5, The detail calculation method of directional gain refers to antenna specification provided by the applicant.

2. Test Configuration

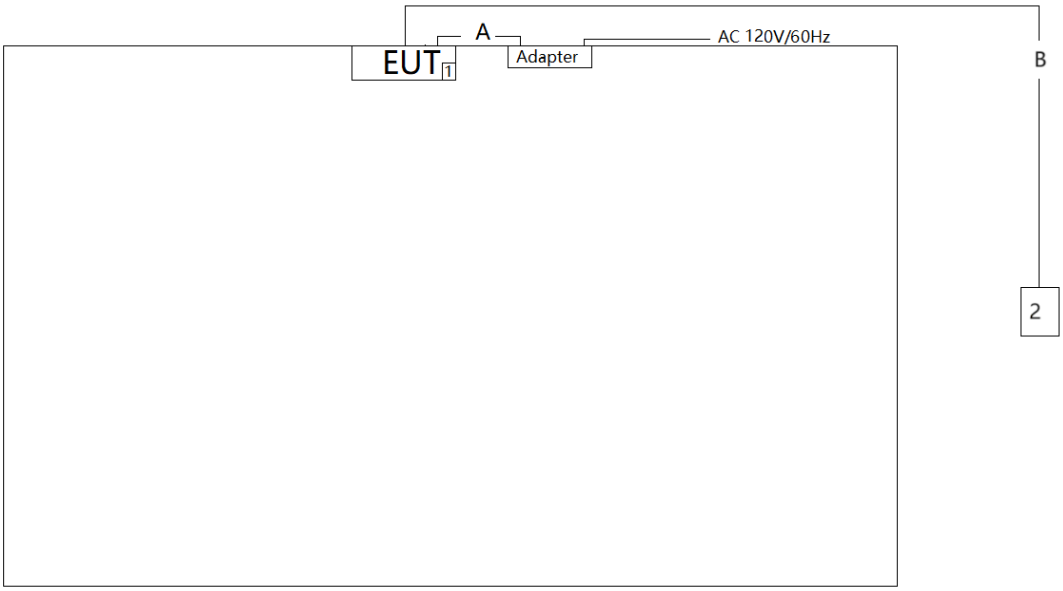
2.1. Test Mode

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 802.11ax-HE160_N_{SS}=1 (MCS0)
Mode 5: Transmit by 802.11be-EHT20_N_{SS}=1 (MCS0)
Mode 6: Transmit by 802.11be-EHT40_N_{SS}=1 (MCS0)
Mode 7: Transmit by 802.11be-EHT80_N_{SS}=1 (MCS0)
Mode 8: Transmit by 802.11be-EHT160_N_{SS}=1 (MCS0)
Mode 9: Transmit by 802.11be-EHT320_N_{SS}=1 (MCS0)
Notes: 1. All modes of operation and data rates were investigated, so all RF test requirements shall be executed at the worst data rate. 2. For CDD mode, this device supports 2 N_{SS} and power level is the same of spatial multiplexing. The worst case is N_{SS}=1. 3. For beamforming operation, manufacturer automatically backs power down based on CDD power. Therefore, only the CDD mode was evaluated in this report.

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10: 2020 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.

Connection Diagram



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

2.3. Test Software

The test utility software used during testing was “accessMTool”, and the version was 3.3.0.6.

Note: Final power setting please refer to operational description.

2.4. Applied Standards

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

- ANSI C63.10-2020
- ANSI C63.10-2020/Cor1-2023
- ANSI C63.10a-2024
- FCC KDB 789033 D02 v02r01

- FCC KDB 987594 D02 v03
- FCC KDB 987594 D04 v03
- FCC KDB 662911 D01 v02r01

2.5. Test Environment Condition

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

3. Antenna Requirements

Excerpt from §15.407(a)(10) 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)(10).

4. Measuring Instrument

Test Date from 2023-11-30 ~ 2024-03-06

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2024-05-15	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2024-05-23	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2024-10-11	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2024-05-07	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2024-04-20	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11263	1 year	2024-11-07	WZ-AC2
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07076	1 year	2024-12-04	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2024-11-04	WZ-AC2
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2024-01-12	WZ-AC2
				1 year	2025-01-11	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2024-05-31	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2024-05-23	WZ-SR5
USB Power Sensor	Keysight	U2021XA	MRTSUE06446	1 year	2024-05-23	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11092	1 year	2024-06-08	WZ-SR5
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2024-09-27	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06401	1 year	2024-05-31	WZ-TR3
Attenuator	MVE	MVE2213	MRTSUE11092	1 year	2024-06-08	WZ-TR3
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2024-05-23	WZ-TR3
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2024-06-07	SIP-AC3
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
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2023-12-22	SIP-AC3
				1 year	2024-12-21	SIP-AC3

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802	1.02	RE Antenna & Turntable
BenchVue Power Meter	2018.1	Power

Test Date from 2025-12-12 ~ 2025-12-27

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2026-12-03	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2026-05-11	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2026-04-17	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE11039	1 year	2026-10-08	WZ-AC1
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2026-04-26	WZ-SR2
Shielding Room	MIX-BEP	WZ-SR2	MRTSUE06215	5 years	2026-12-20	WZ-SR2
Thermohygrometer	testo	608-H1	MRTSUE06404	1 year	2026-04-24	WZ-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06909	1 year	2026-08-31	WZ-SR2
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2026-04-24	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2026-03-31	WZ-SR4
Frequency extender for EXG or MXG	Keysight	N5182BX07	MRTSUE06984	1 year	2026-01-21	WZ-SR4
Signal Generator	Keysight	N5182B	MRTSUE06451	1 year	2026-09-28	WZ-SR4

Software	Version	Function
e3	230711	RE & CE

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.

Uncertainty of the date from 2023-11-30 ~ 2024-03-06

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

Uncertainty of the date from 2025-12-12 ~ 2025-12-27

AC Conducted Emission Measurement
The maximum measurement uncertainty is evaluated as: 9 kHz ~ 150 kHz: 3.59 dB 150 kHz ~ 30 MHz: 3.20 dB
Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9 kHz ~ 30 MHz: 2.56 dB Coplanar: 9 kHz ~ 30 MHz: 2.55 dB Horizontal: 30 MHz ~ 200 MHz: 3.48 dB 200 MHz ~ 1 GHz: 4.17 dB 1 GHz ~ 40 GHz: 5.01 dB Vertical: 30 MHz ~ 200 MHz: 4.09 dB 200 MHz ~ 1 GHz: 5.30 dB 1 GHz ~ 40 GHz: 4.85 dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% (U=2 Uc(y)): 2.9 dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2 Uc(y)): 1.4 dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% (U=2 Uc(y)): 2.9 dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2 Uc(y)): 2.6%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(11)	26 dB 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(g)	Frequency Stability		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 150 kHz - 30 MHz	Line Conducted	Pass

Notes:

1. 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.
2. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

6.2. 26 dB Bandwidth Measurement

6.2.1. Test Limit

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

6.2.2. Test Procedure

KDB 789033 D02 v02r01- Section II)C)1) (26 dB Bandwidth)

KDB 789033 D02 v02r01- Section II)D) (99% Bandwidth)

6.2.3. Test Setting

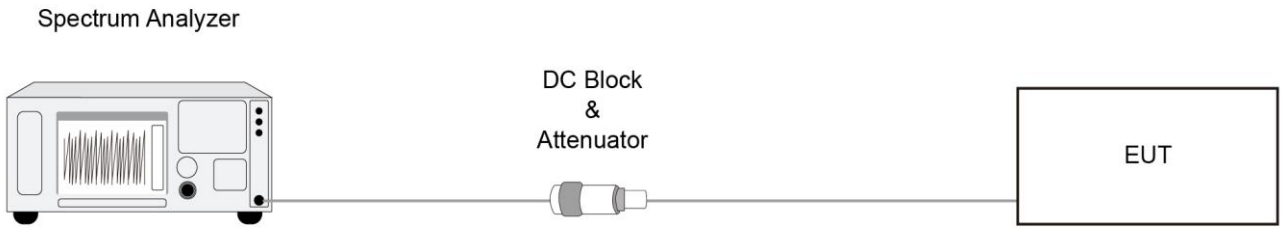
26 dB Bandwidth

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26 dB 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 EIRP over the frequency band of operation must not exceed 30 dBm.

6.3.2. Test Procedure

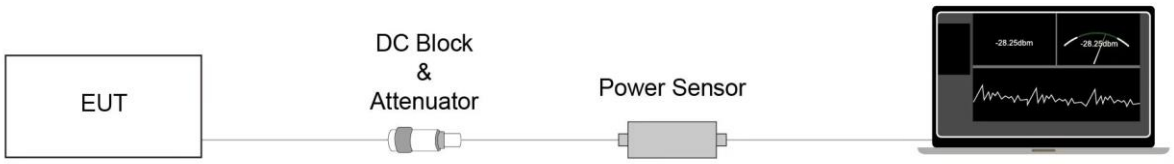
KDB 789033 D02 v02r01- Section II)E)3)b) Method PM-G

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.

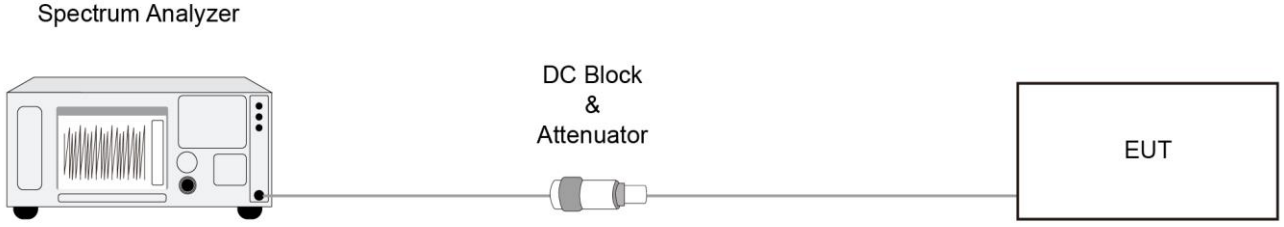
6.4.2. Test Procedure

KDB 789033 D02 v02r01-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 26 dB EBW of the signal.
3. RBW = 1 MHz
4. VBW = 3 MHz
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 D02 v03 - Section J

6.5.3. Test Setting

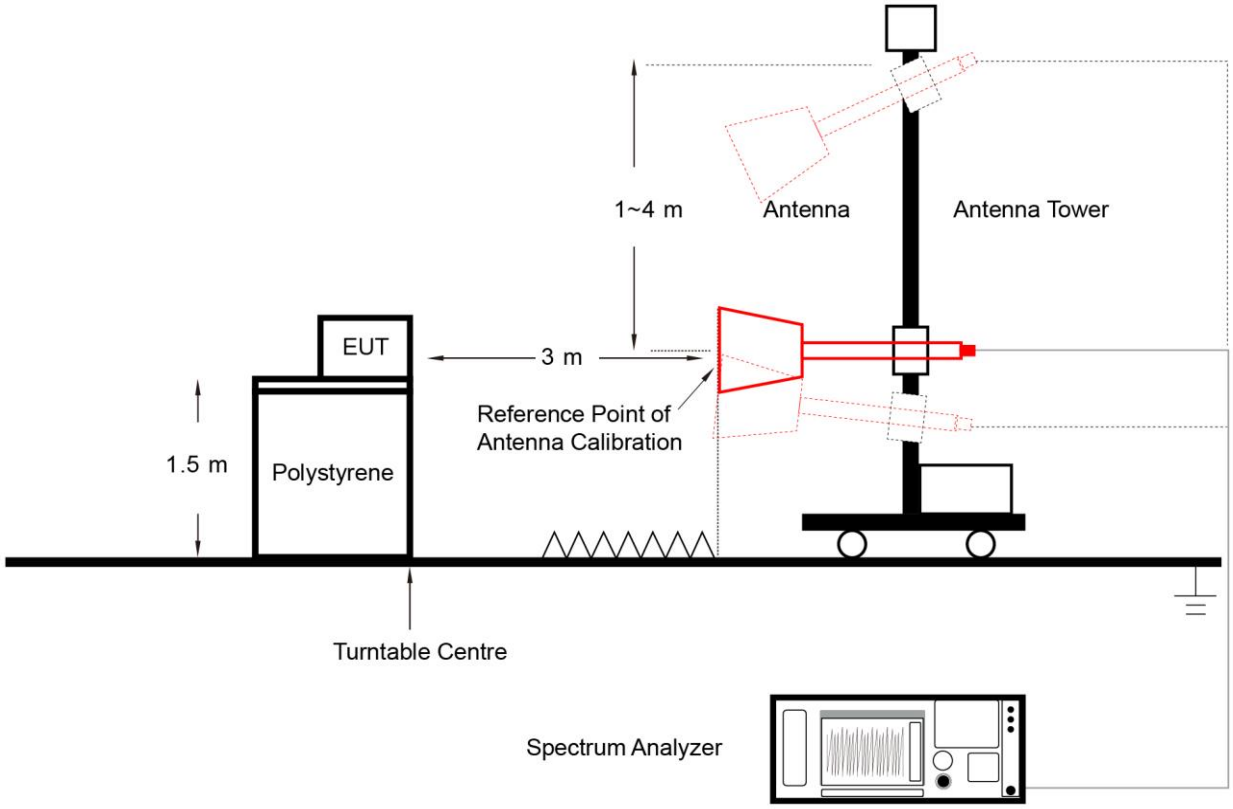
Emissions Mask Reference Level Measurement

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 × RBW
4. Number of points in sweep ≥ [2 × 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:

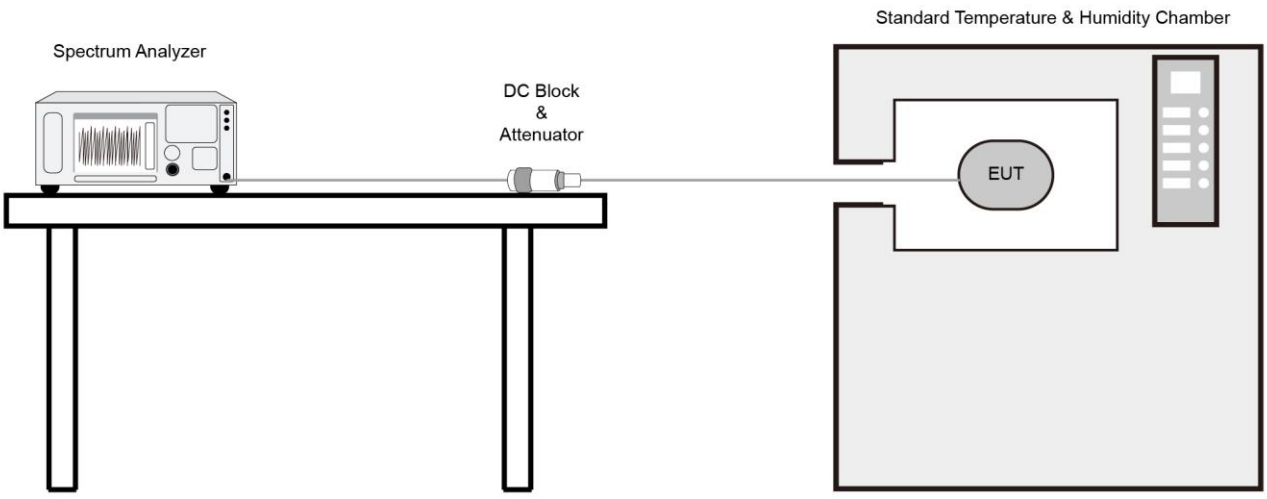
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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, record the 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 -62 dBm (The threshold is referenced to a 0 dBi 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 D02 v03- 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.

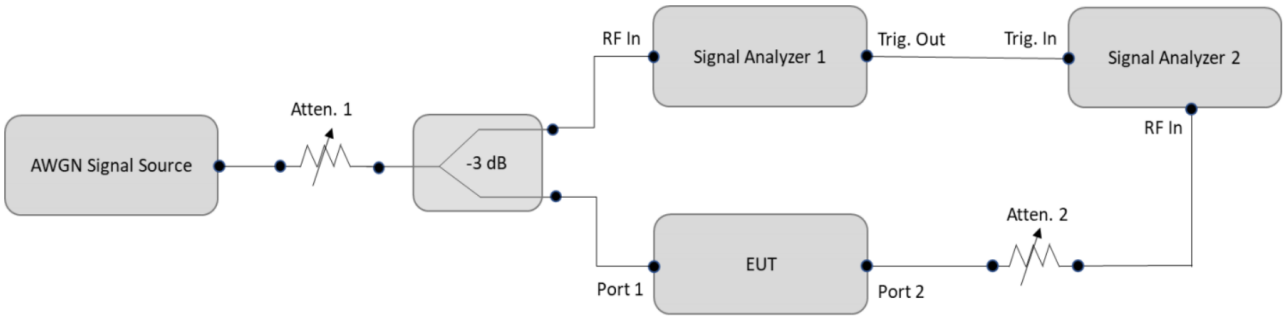
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.

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 EIRP of -27 dBm/MHz.

Refer to 987594 D02 U-NII 6GHz EMC Measurement v03 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 [μV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.8.2. Test Procedure

KDB 789033 D02 v02r01-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
> 1000 MHz	1 MHz

Quasi-Peak Measurements below 1 GHz

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 1 GHz

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

Average Measurements above 1 GHz (Method VB)

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

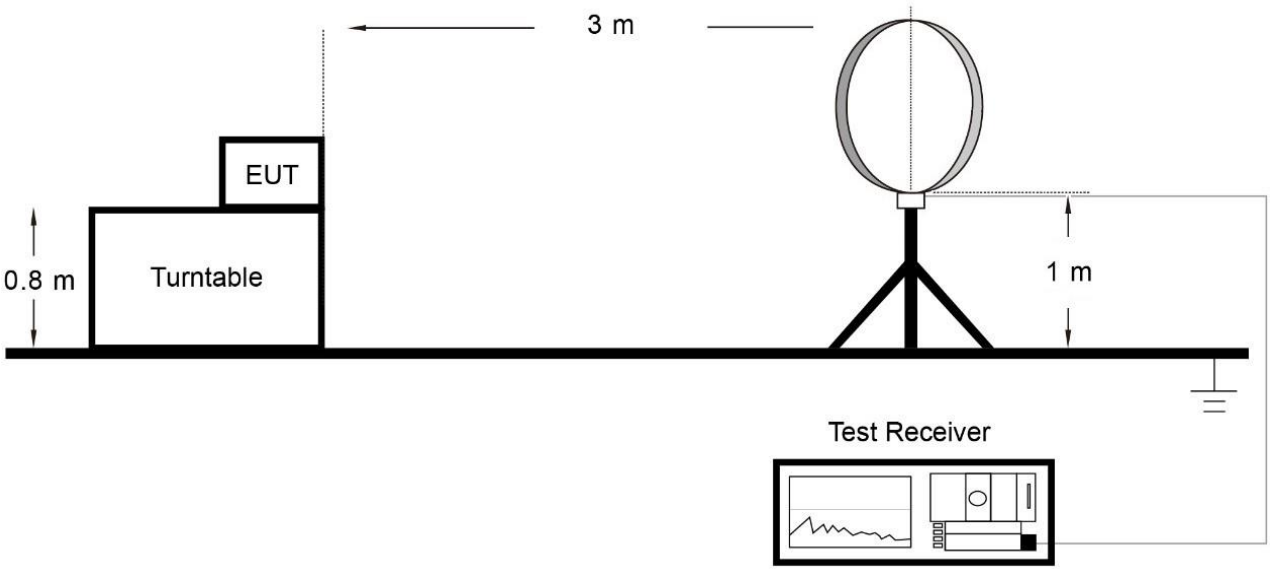
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

802.11ax-HE20	VBW = 680 Hz	802.11be-EHT40	VBW = 1300 Hz
802.11ax-HE40	VBW = 1300 Hz	802.11be-EHT80	VBW = 2700 Hz
802.11ax-HE80	VBW = 2700 Hz	802.11be-EHT160	VBW = 4300 Hz
802.11ax-HE160	VBW = 4300 Hz	802.11be-EHT320	VBW = 6800 Hz
802.11be-EHT20	VBW = 680 Hz	--	--

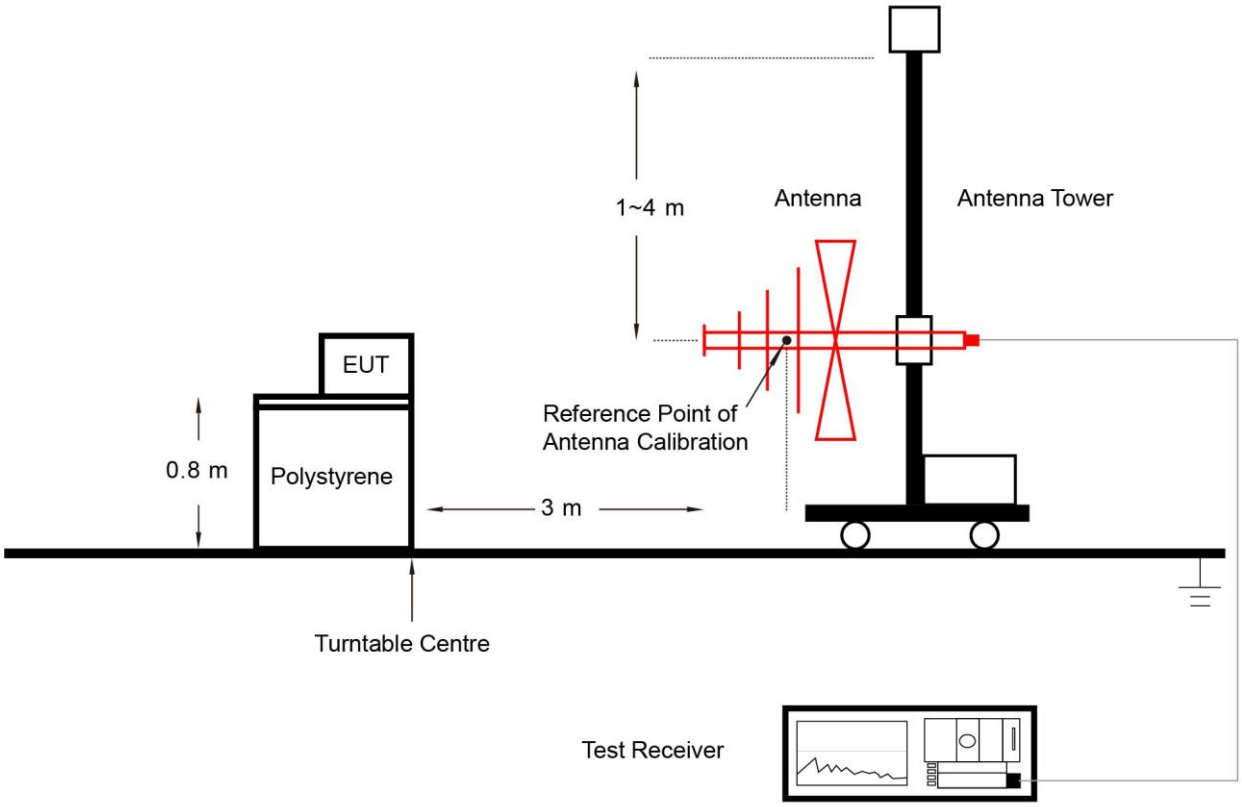
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.8.4. Test Setup

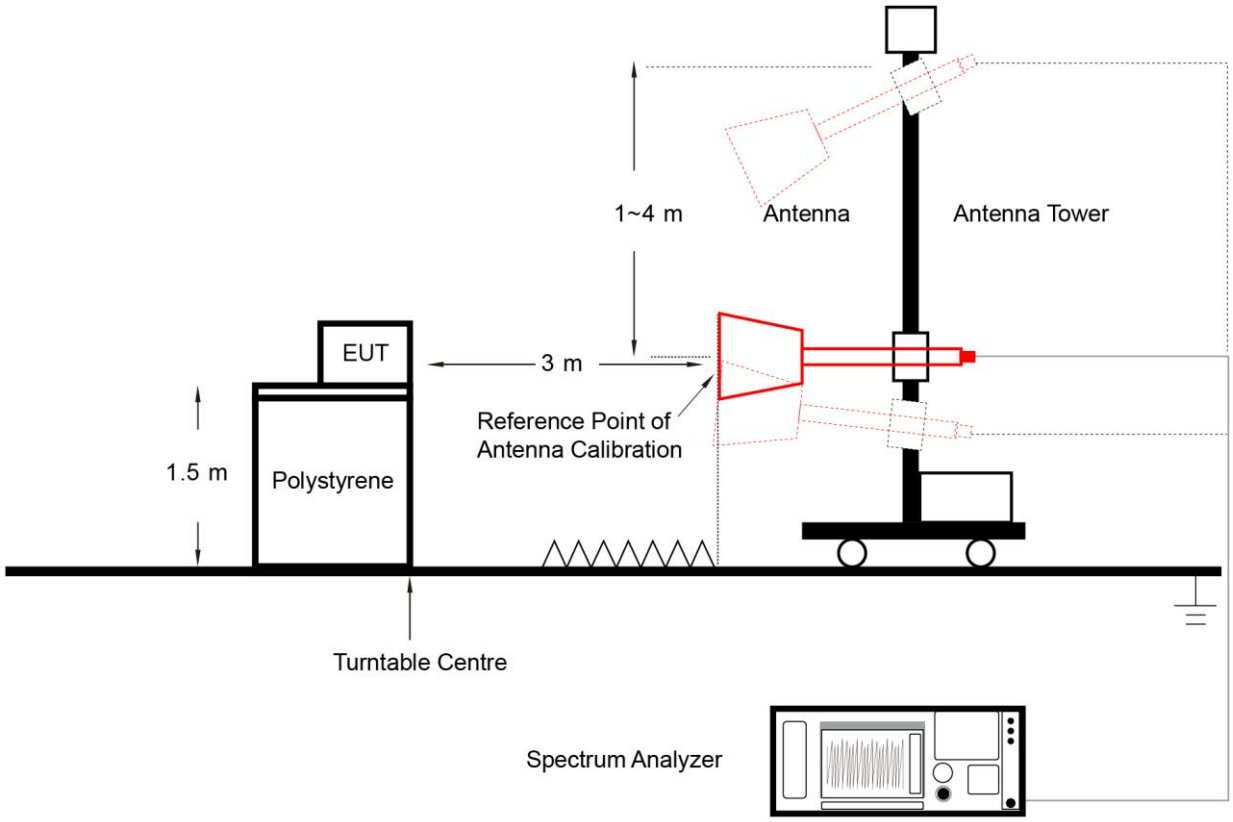
Below 30 MHz Test Setup:



Below 1 GHz Test Setup:



Above 1 GHz Test Setup:



6.8.5. Test Result

Refer to Appendix A.8.

6.9. Radiated 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 EIRP. of -27 dBm/MHz.

Refer to 987594 D02 U-NII 6 GHz EMC Measurement v03 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 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 [μV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.9.2. Test Procedure

KDB 789033 D02 v02r01-Section II)G)

6.9.3. Test Setting

Peak Measurements above 1 GHz

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

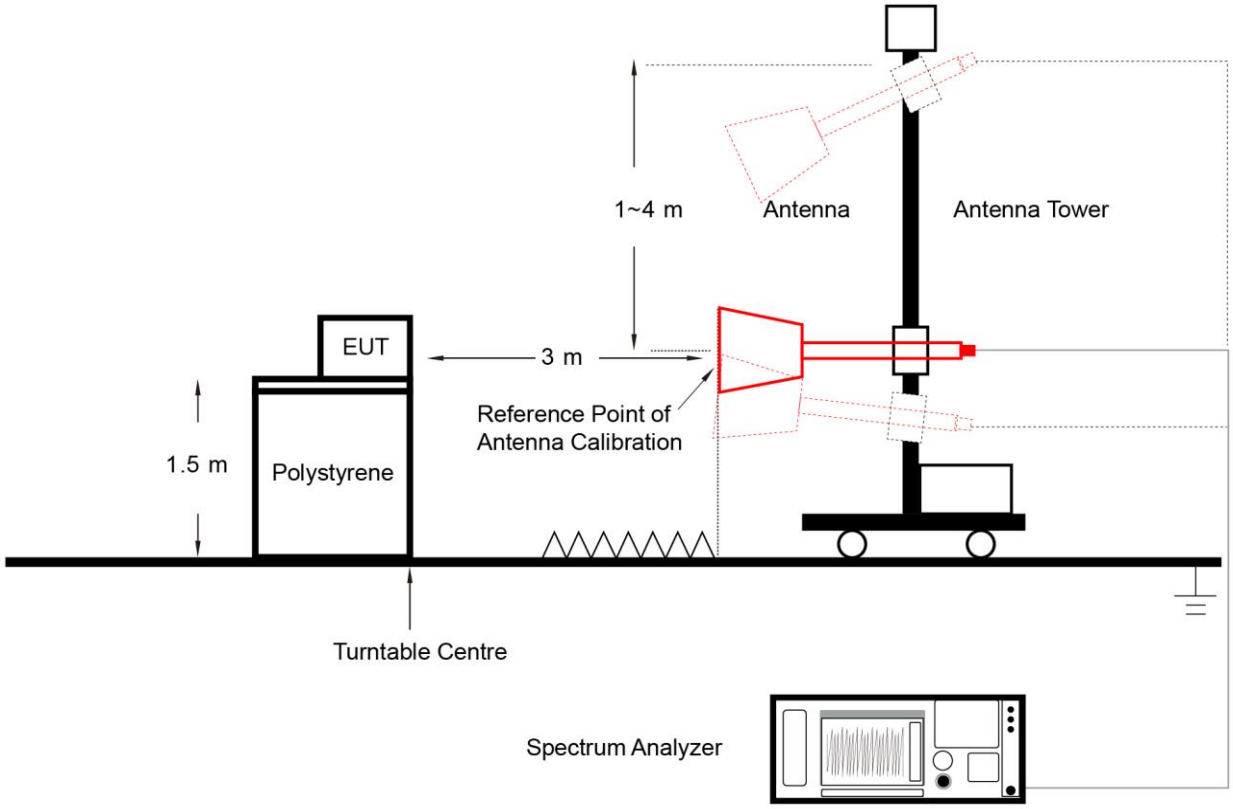
Average Measurements above 1 GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
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 = 680 Hz	802.11be-EHT40	VBW = 1300 Hz
802.11ax-HE40	VBW = 1300 Hz	802.11be-EHT80	VBW = 2700 Hz
802.11ax-HE80	VBW = 2700 Hz	802.11be-EHT160	VBW = 4300 Hz
802.11ax-HE160	VBW = 4300 Hz	802.11be-EHT320	VBW = 6800 Hz
802.11be-EHT20	VBW = 680 Hz	--	--

4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.9.4. Test Setup



6.9.5. Test Result

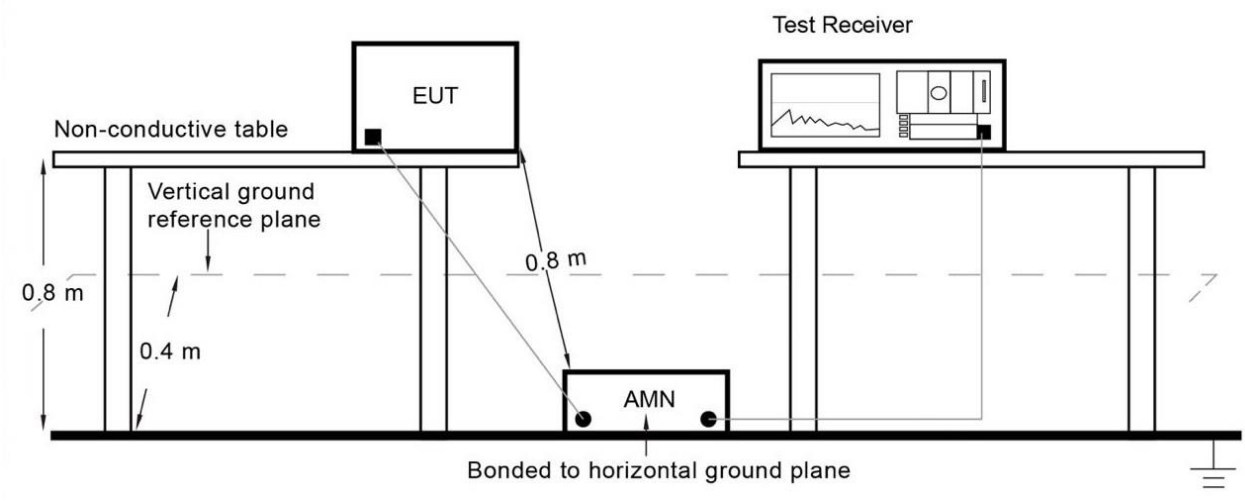
Refer to Appendix A.9.

6.10. AC Conducted Emissions Measurement

6.10.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dBμV)	AV (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 0.15 MHz to 0.5 MHz.		

6.10.2. Test Setup



6.10.3. Test Result

Refer to Appendix A.10.

Appendix A – Test Result

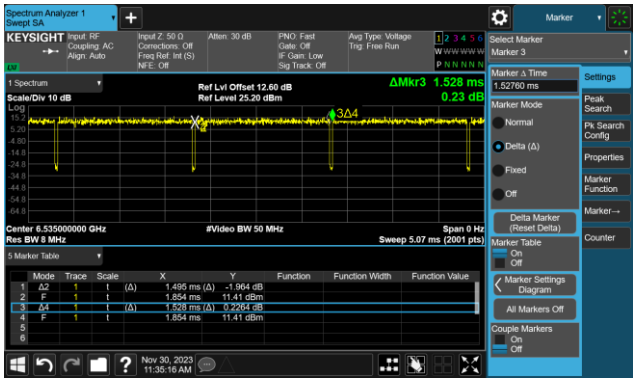
A.1 Duty Cycle Test Result

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-11-30		

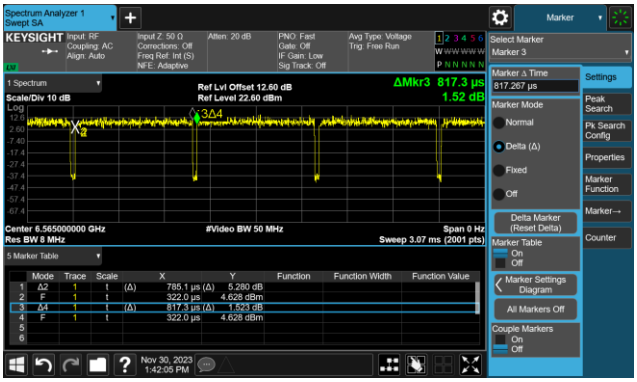
Test Mode	Duty Cycle	Test Mode	Duty Cycle
802.11ax-HE20	97.84%	802.11be-EHT40	95.63%
802.11ax-HE40	96.06%	802.11be-EHT80	92.31%
802.11ax-HE80	92.68%	802.11be-EHT160	87.68%
802.11ax-HE160	88.16%	802.11be-EHT320-1	82.77%
802.11be-EHT20	97.71%	802.11be-EHT320-2	82.98%

Duty Cycle (T = Transmission Duration)

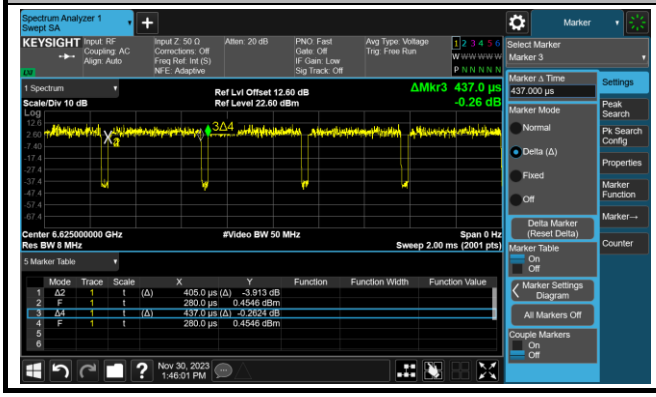
802.11ax-HE20 (T = 1.495 ms)



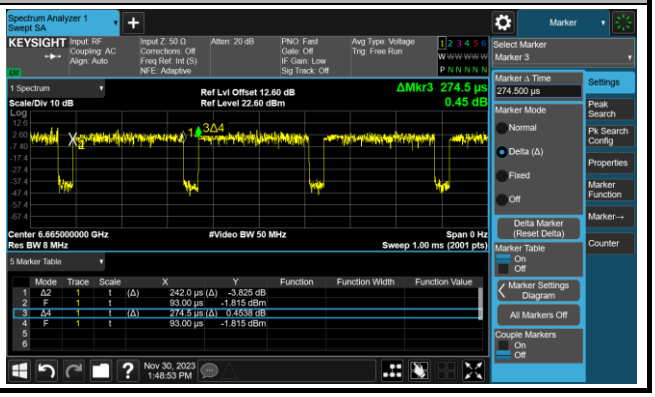
802.11ax-HE40 (T = 785.1 µs)

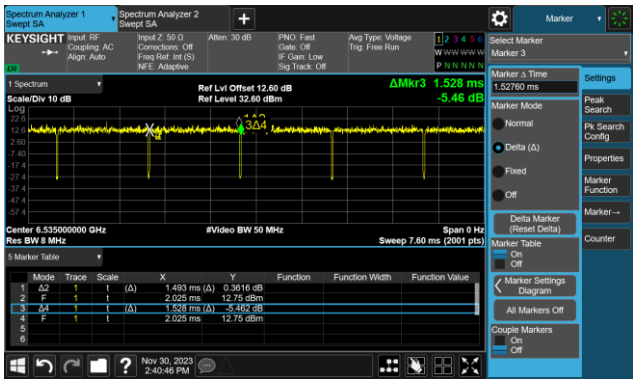
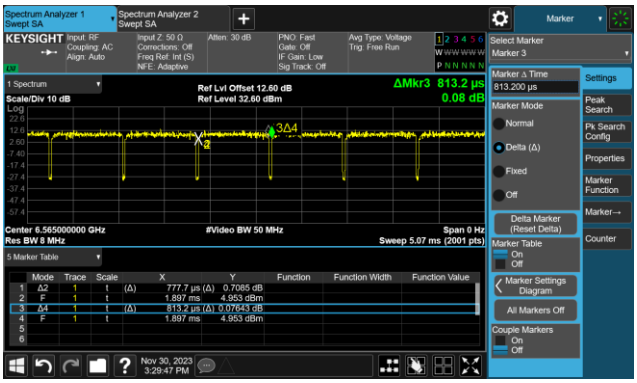
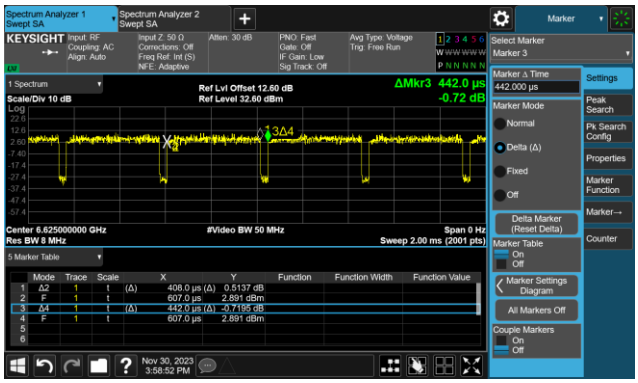
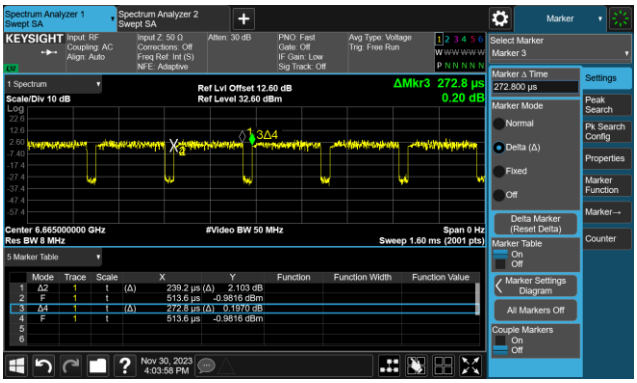
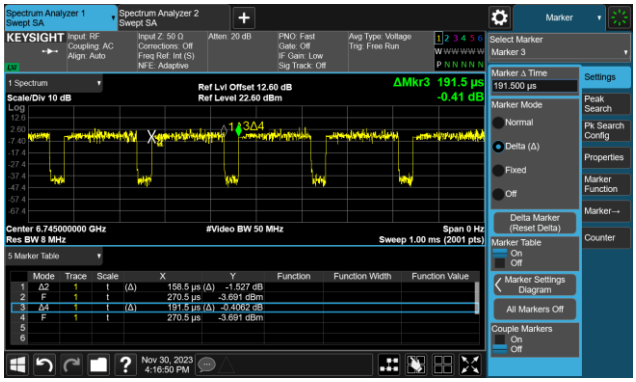
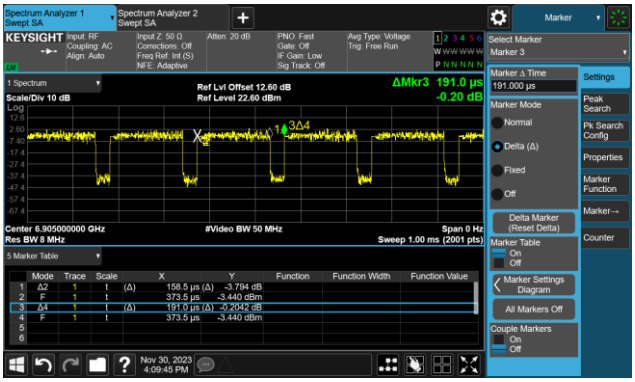


802.11ax-HE80 (T = 405.0 µs)



802.11ax-HE160 (T = 242.0 µs)



Duty Cycle (T = Transmission Duration)	
802.11be-EHT20 (T = 1.493 ms)	802.11be-EHT40 (T = 777.7 µs)
	
802.11be-EHT80 (T = 408.0 µs)	802.11be-EHT160 (T = 239.2 µs)
	
802.11be-EHT320-1 (T = 158.5 µs)	802.11be-EHT320-2 (T = 158.5 µs)
	

A.2 26 dB Bandwidth Test Result

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2024-02-29 ~ 2024-03-02		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)	Test Limit (MHz)
802.11ax-HE20	MCS0	117	6535	21.26	19.103	≤ 320
802.11ax-HE20	MCS0	149	6695	21.61	19.085	≤ 320
802.11ax-HE20	MCS0	181	6855	21.39	19.144	≤ 320
802.11ax-HE20	MCS0	185	6875	21.37	19.054	≤ 320
802.11ax-HE20	MCS0	189	6895	21.48	19.101	≤ 320
802.11ax-HE20	MCS0	209	6995	21.42	19.051	≤ 320
802.11ax-HE20	MCS0	229	7095	21.46	19.079	≤ 320
802.11ax-HE40	MCS0	123	6565	40.18	37.699	≤ 320
802.11ax-HE40	MCS0	147	6685	40.42	37.704	≤ 320
802.11ax-HE40	MCS0	179	6845	40.24	37.751	≤ 320
802.11ax-HE40	MCS0	187	6885	40.38	37.772	≤ 320
802.11ax-HE40	MCS0	195	6925	40.13	37.708	≤ 320
802.11ax-HE40	MCS0	211	7005	40.24	37.732	≤ 320
802.11ax-HE40	MCS0	227	7085	40.63	37.737	≤ 320
802.11ax-HE80	MCS0	135	6625	81.41	77.105	≤ 320
802.11ax-HE80	MCS0	151	6705	81.69	77.209	≤ 320
802.11ax-HE80	MCS0	167	6785	81.78	77.125	≤ 320
802.11ax-HE80	MCS0	183	6865	81.46	77.194	≤ 320
802.11ax-HE80	MCS0	199	6945	81.63	77.128	≤ 320
802.11ax-HE80	MCS0	215	7025	81.50	77.145	≤ 320
802.11ax-HE160	MCS0	143	6665	164.5	156.20	≤ 320
802.11ax-HE160	MCS0	175	6825	164.4	156.59	≤ 320
802.11ax-HE160	MCS0	207	6985	163.8	156.13	≤ 320
802.11be-EHT20	MCS0	117	6535	21.63	19.130	≤ 320
802.11be-EHT20	MCS0	149	6695	21.68	19.156	≤ 320
802.11be-EHT20	MCS0	181	6855	21.97	19.105	≤ 320
802.11be-EHT20	MCS0	185	6875	21.67	19.162	≤ 320
802.11be-EHT20	MCS0	189	6895	21.77	19.175	≤ 320
802.11be-EHT20	MCS0	209	6995	21.59	19.068	≤ 320
802.11be-EHT20	MCS0	229	7095	21.65	19.050	≤ 320

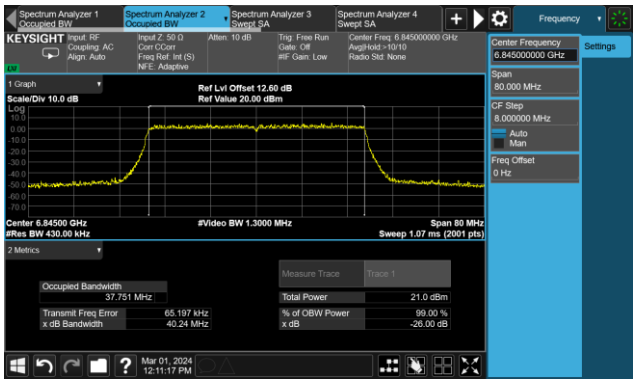
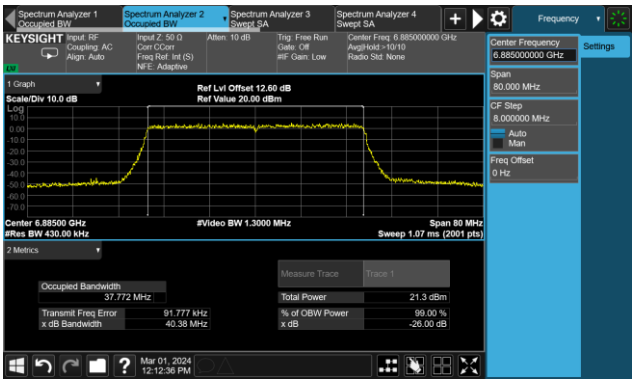
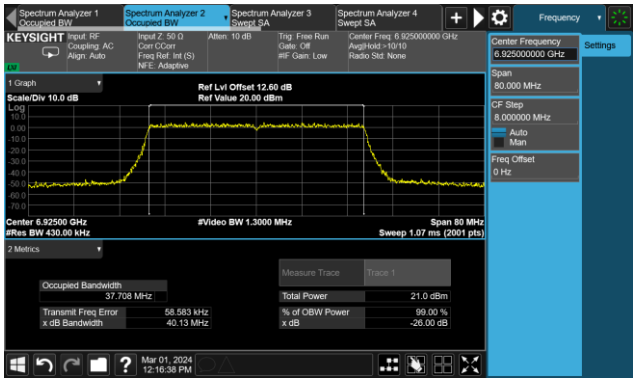
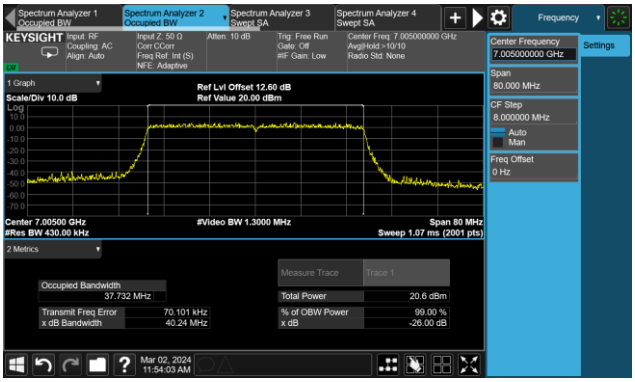
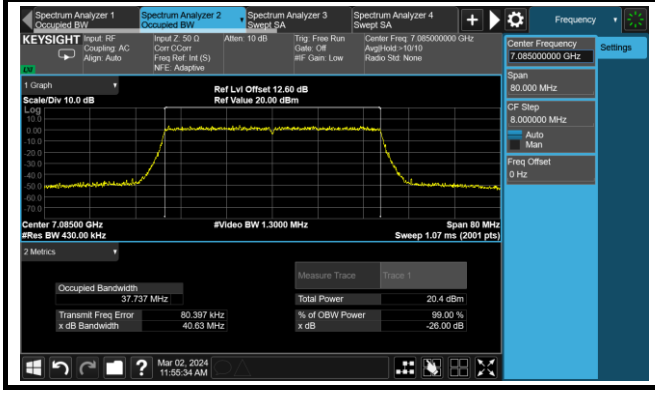
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)	Test Limit (MHz)
802.11be-EHT40	MCS0	123	6565	40.72	37.669	≤ 320
802.11be-EHT40	MCS0	147	6685	40.29	37.639	≤ 320
802.11be-EHT40	MCS0	179	6845	40.75	37.732	≤ 320
802.11be-EHT40	MCS0	187	6885	40.78	37.752	≤ 320
802.11be-EHT40	MCS0	195	6925	40.68	37.715	≤ 320
802.11be-EHT40	MCS0	211	7005	40.74	37.676	≤ 320
802.11be-EHT40	MCS0	227	7085	40.86	37.744	≤ 320
802.11be-EHT80	MCS0	135	6625	81.56	77.196	≤ 320
802.11be-EHT80	MCS0	151	6705	81.62	77.248	≤ 320
802.11be-EHT80	MCS0	167	6785	81.84	77.350	≤ 320
802.11be-EHT80	MCS0	183	6865	81.72	77.042	≤ 320
802.11be-EHT80	MCS0	199	6945	81.17	77.148	≤ 320
802.11be-EHT80	MCS0	215	7025	81.72	77.254	≤ 320
802.11be-EHT160	MCS0	143	6665	163.2	156.31	≤ 320
802.11be-EHT160	MCS0	175	6825	163.7	156.74	≤ 320
802.11be-EHT160	MCS0	207	6985	163.6	156.08	≤ 320
802.11be-EHT320-1	MCS0	159	6745	328.5	316.22	≤ 320
802.11be-EHT320-2	MCS0	191	6905	344.3	314.64	≤ 320

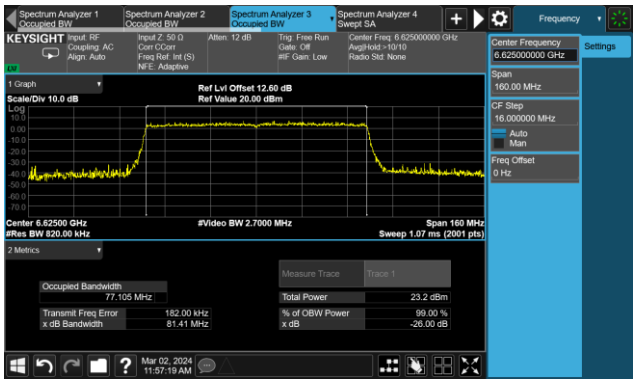
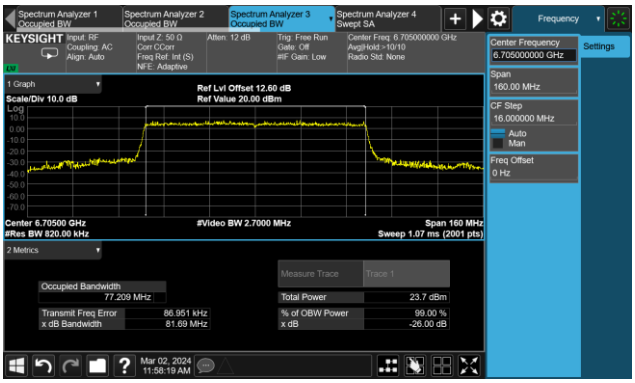
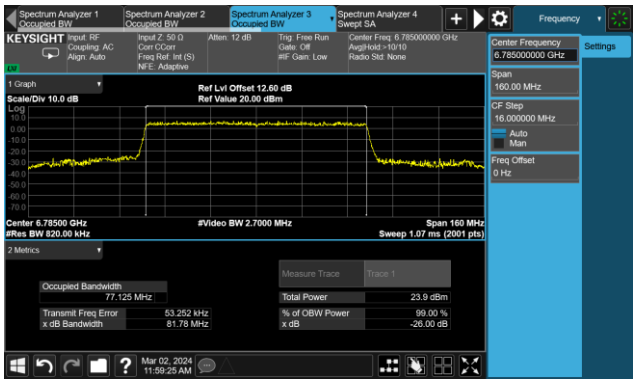
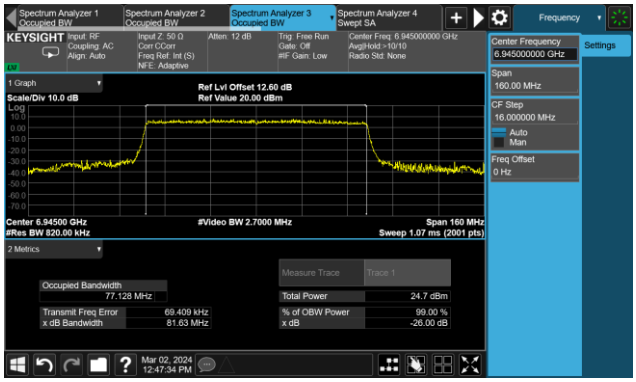
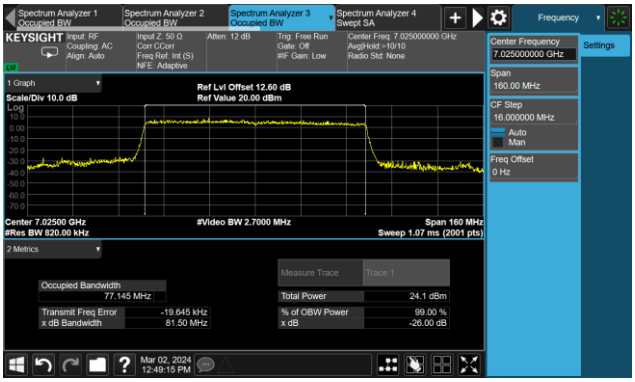
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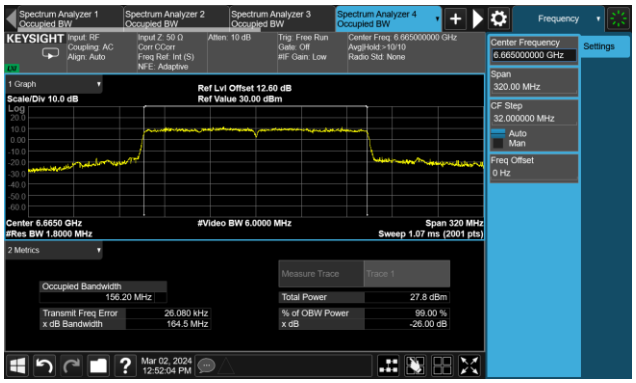
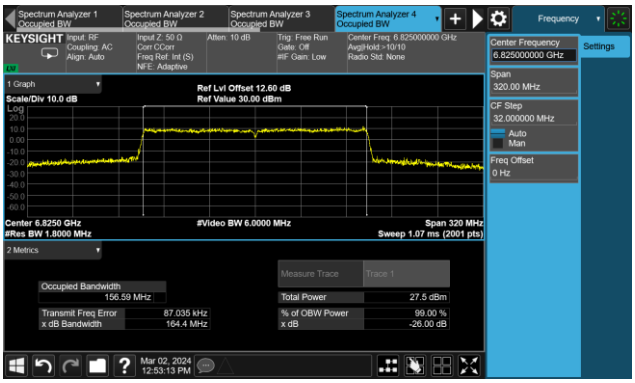
For channels with a nominal bandwidth less than 320 MHz compliance is demonstrated by way of the 26 dB EBW.

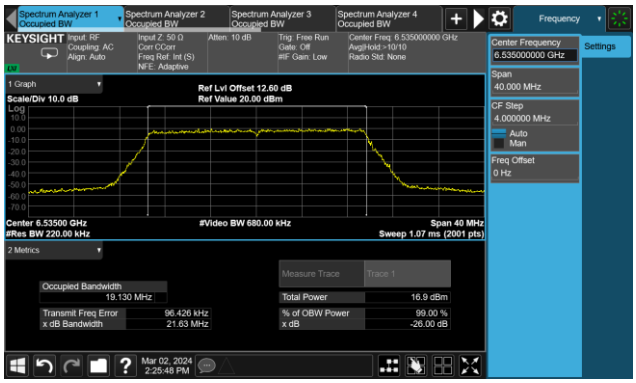
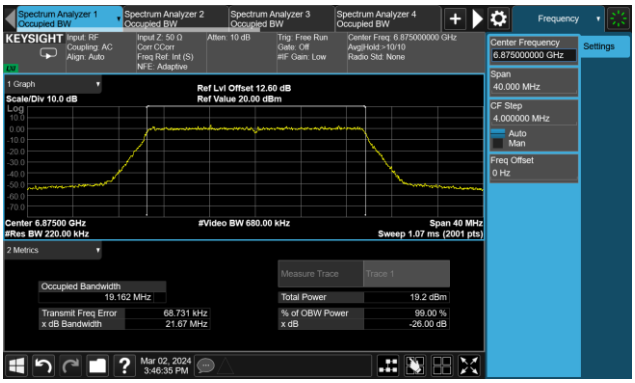
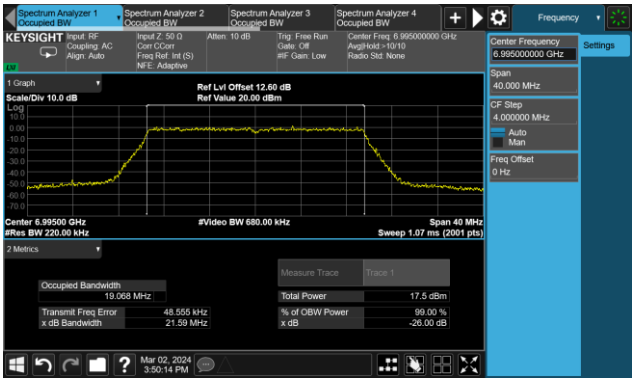
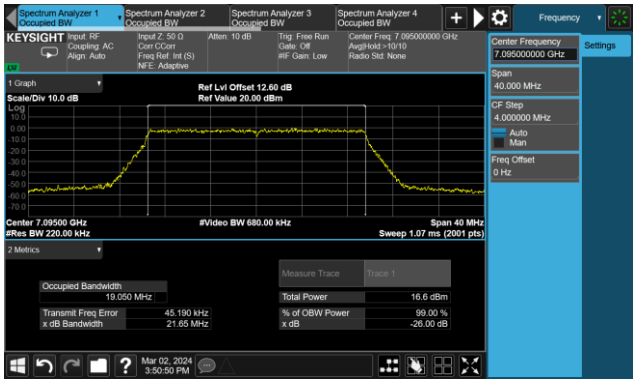
For channels with a nominal bandwidth of 320 MHz compliance is demonstrated by way of the 99% BW.

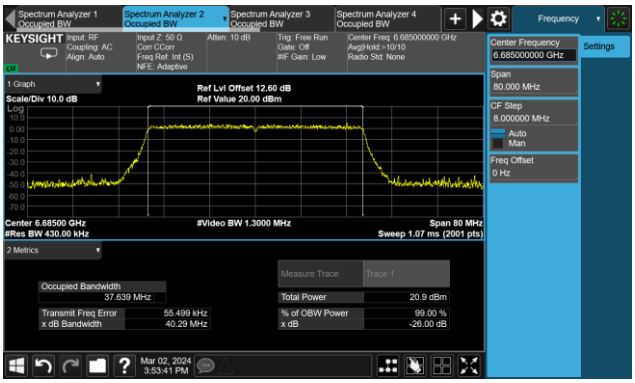
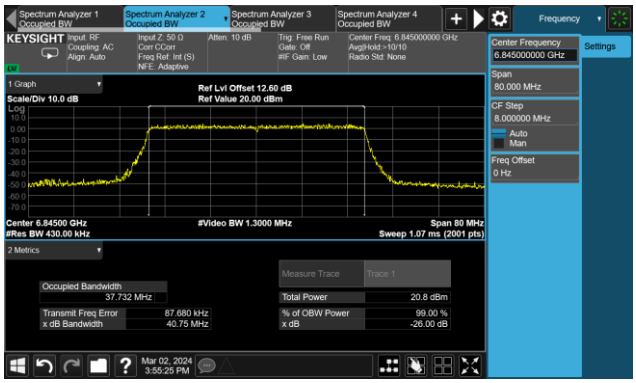
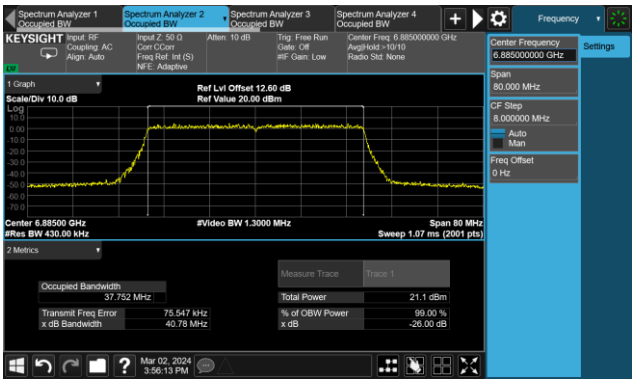
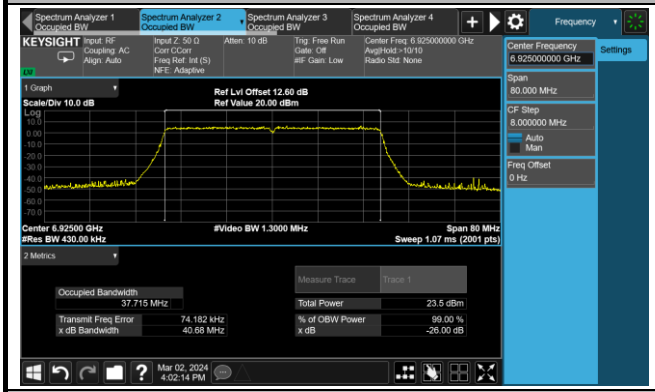
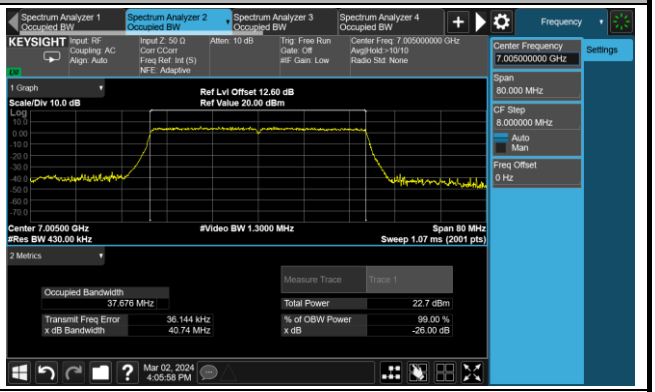
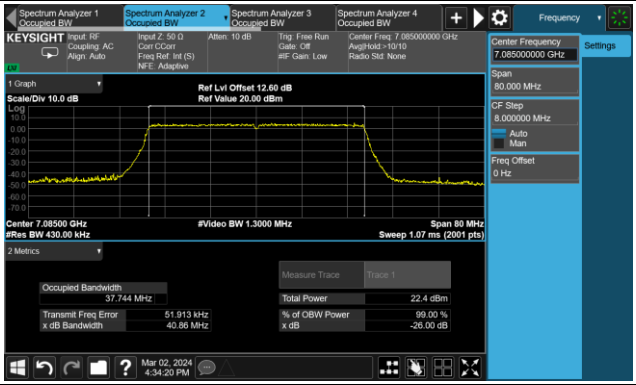
802.11ax-HE20 26 dB & 99% Bandwidth	
Channel 117 (6535 MHz)	Channel 149 (6695 MHz)
	
Channel 181 (6855 MHz)	Channel 185 (6875 MHz)
	
Channel 189 (6895 MHz)	Channel 209 (6995 MHz)
	
Channel 229 (7095 MHz)	
	

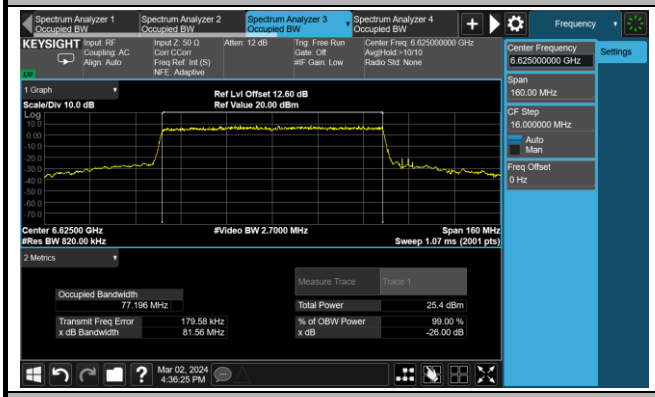
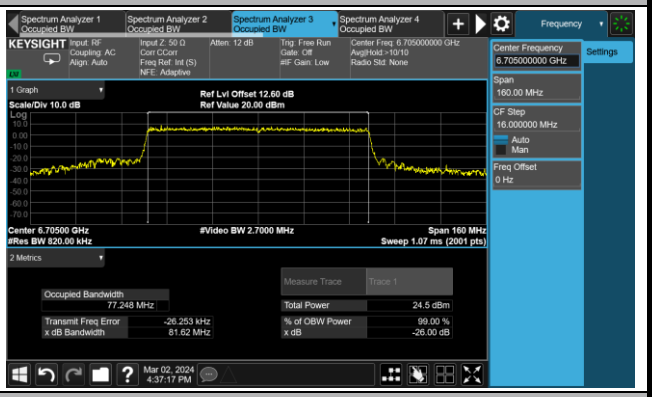
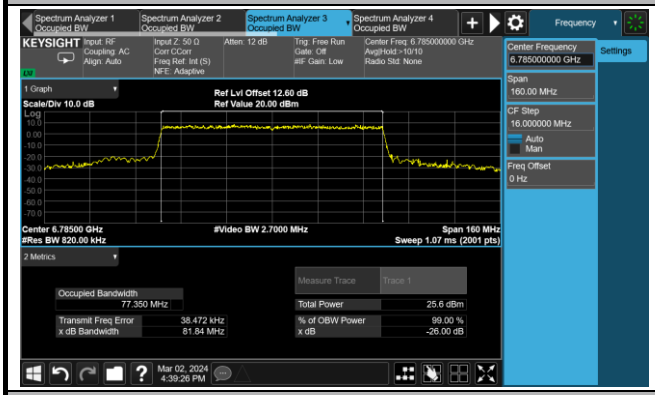
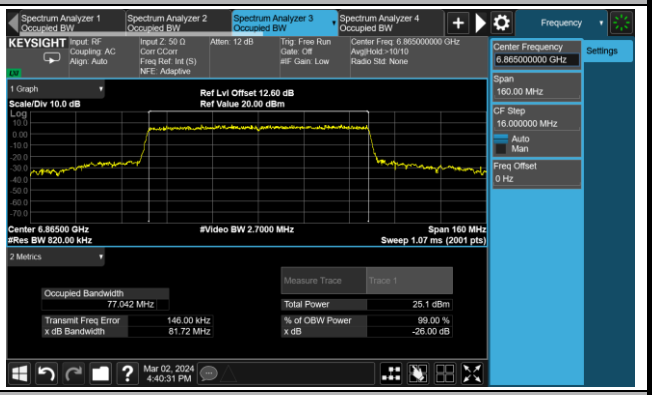
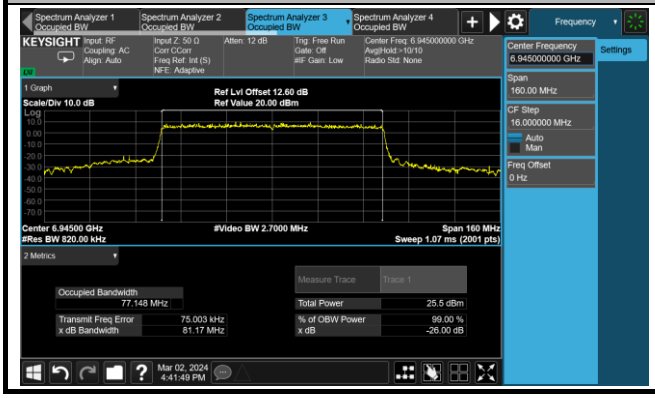
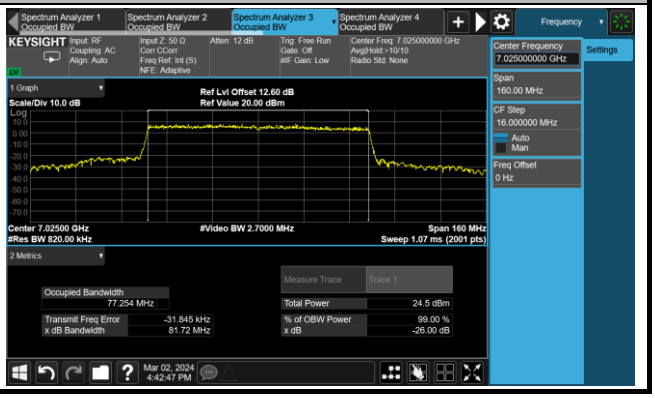
802.11ax-HE40 26 dB & 99% Bandwidth	
Channel 123 (6565 MHz)	Channel 147 (6685 MHz)
	
Channel 179 (6845 MHz)	Channel 187 (6885 MHz)
	
Channel 195 (6925 MHz)	Channel 211 (7005 MHz)
	
Channel 227 (7085 MHz)	
	

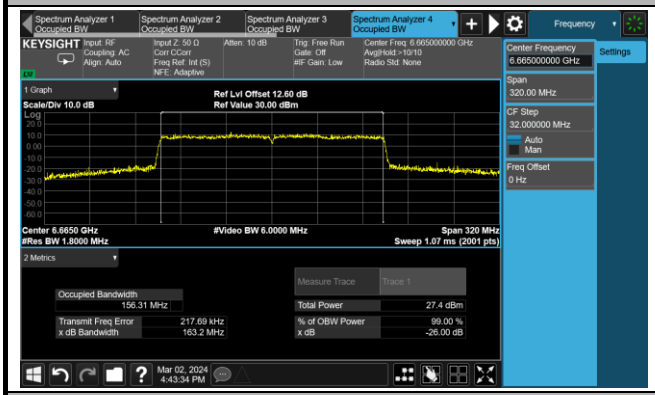
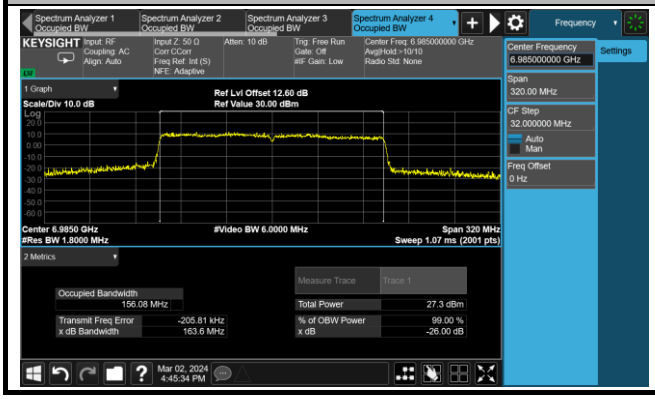
802.11ax-HE80 26 dB & 99% Bandwidth	
Channel 135 (6625 MHz)	Channel 151 (6705 MHz)
	
Channel 167 (6785 MHz)	Channel 183 (6865 MHz)
	
Channel 199 (6945 MHz)	Channel 215 (7025 MHz)
	

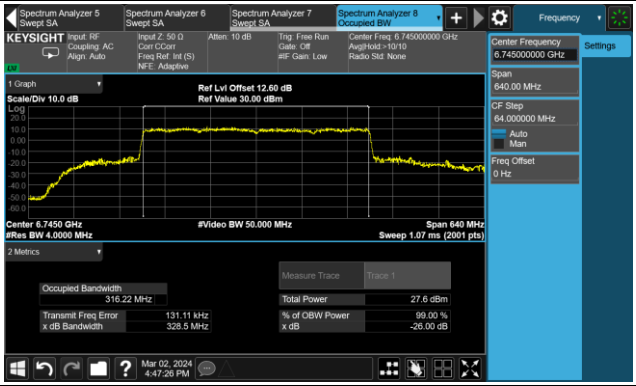
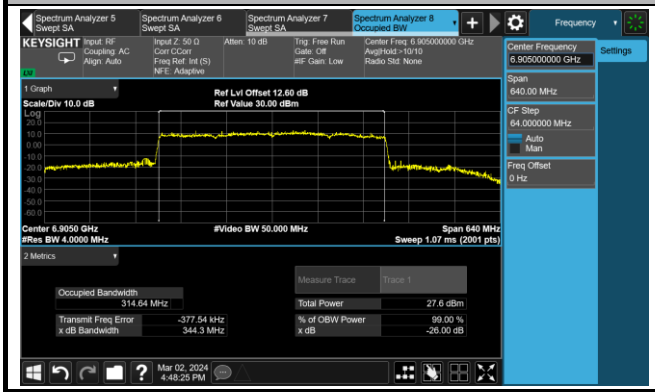
802.11ax-HE160 26 dB & 99% Bandwidth	
Channel 143 (6665 MHz)	Channel 175 (6825 MHz)
	
Channel 207 (6985 MHz)	
	

802.11be-EHT20 26 dB & 99% Bandwidth	
Channel 117 (6535 MHz)	Channel 149 (6695 MHz)
	
Channel 181 (6855 MHz)	Channel 185 (6875 MHz)
	
Channel 189 (6895 MHz)	Channel 209 (6995 MHz)
	
Channel 229 (7095 MHz)	
	

802.11be-EHT40 26 dB & 99% Bandwidth	
Channel 123 (6565 MHz)	Channel 147 (6685 MHz)
	
Channel 179 (6845 MHz)	Channel 187 (6885 MHz)
	
Channel 195 (6925 MHz)	Channel 211 (7005 MHz)
	
Channel 227 (7085 MHz)	
	

802.11be-EHT80 26 dB & 99% Bandwidth	
Channel 135 (6625 MHz)	Channel 151 (6705 MHz)
	
Channel 167 (6785 MHz)	Channel 183 (6865 MHz)
	
Channel 199 (6945 MHz)	Channel 215 (7025 MHz)
	

802.11be-EHT160 26 dB & 99% Bandwidth	
Channel 143 (6665 MHz)	Channel 175 (6825 MHz)
	
Channel 207 (6985 MHz)	
	

802.11be-EHT320-1 26 dB & 99% Bandwidth	
Channel 159 (6745 MHz)	
	
802.11be-EHT320-2 26 dB & 99% Bandwidth	
Channel 191 (6905 MHz)	
	

A.3 Output Power Test Result

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-12-23 ~ 2024-02-12		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	EIRP (dBm)	Limit (dBm)
802.11ax-HE20	MCS0	117	6535	10.49	10.26	13.39	17.01	≤ 30.00
802.11ax-HE20	MCS0	149	6695	10.60	10.70	13.66	17.28	≤ 30.00
802.11ax-HE20	MCS0	181	6855	10.03	10.27	13.16	16.78	≤ 30.00
802.11ax-HE20	MCS0	185	6875	10.20	10.07	13.15	16.77	≤ 30.00
802.11ax-HE20	MCS0	189	6895	10.12	10.08	13.11	16.73	≤ 30.00
802.11ax-HE20	MCS0	209	6995	10.29	10.22	13.27	16.89	≤ 30.00
802.11ax-HE20	MCS0	229	7095	9.39	9.35	12.38	16.00	≤ 30.00
802.11ax-HE40	MCS0	123	6565	12.56	12.75	15.67	19.29	≤ 30.00
802.11ax-HE40	MCS0	147	6685	12.39	12.72	15.57	19.19	≤ 30.00
802.11ax-HE40	MCS0	179	6845	12.66	12.98	15.83	19.45	≤ 30.00
802.11ax-HE40	MCS0	187	6885	12.55	13.15	15.87	19.49	≤ 30.00
802.11ax-HE40	MCS0	195	6925	13.16	13.33	16.26	19.88	≤ 30.00
802.11ax-HE40	MCS0	211	7005	13.12	13.12	16.13	19.75	≤ 30.00
802.11ax-HE40	MCS0	227	7085	12.51	12.08	15.31	18.93	≤ 30.00
802.11ax-HE80	MCS0	135	6625	15.58	15.73	18.67	22.29	≤ 30.00
802.11ax-HE80	MCS0	151	6705	15.60	15.90	18.76	22.38	≤ 30.00
802.11ax-HE80	MCS0	167	6785	15.56	15.76	18.67	22.29	≤ 30.00
802.11ax-HE80	MCS0	183	6865	15.76	16.02	18.90	22.52	≤ 30.00
802.11ax-HE80	MCS0	199	6945	15.60	15.99	18.81	22.43	≤ 30.00
802.11ax-HE80	MCS0	215	7025	15.26	15.32	18.30	21.92	≤ 30.00
802.11ax-HE160	MCS0	143	6665	18.27	18.62	21.46	25.08	≤ 30.00
802.11ax-HE160	MCS0	175	6825	18.58	18.39	21.50	25.12	≤ 30.00
802.11ax-HE160	MCS0	207	6985	18.39	18.25	21.33	24.95	≤ 30.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	EIRP (dBm)	Limit (dBm)
802.11be-EHT20	MCS0	117	6535	9.15	9.62	12.40	16.02	≤ 30.00
802.11be-EHT20	MCS0	149	6695	10.39	10.52	13.47	17.09	≤ 30.00
802.11be-EHT20	MCS0	181	6855	10.18	9.88	13.04	16.66	≤ 30.00
802.11be-EHT20	MCS0	185	6875	10.18	10.10	13.15	16.77	≤ 30.00
802.11be-EHT20	MCS0	189	6895	10.25	10.02	13.15	16.77	≤ 30.00
802.11be-EHT20	MCS0	209	6995	9.24	9.80	12.54	16.16	≤ 30.00
802.11be-EHT20	MCS0	229	7095	9.37	9.30	12.35	15.97	≤ 30.00
802.11be-EHT40	MCS0	123	6565	12.79	12.91	15.86	19.48	≤ 30.00
802.11be-EHT40	MCS0	147	6685	12.57	12.60	15.60	19.22	≤ 30.00
802.11be-EHT40	MCS0	179	6845	12.73	12.70	15.73	19.35	≤ 30.00
802.11be-EHT40	MCS0	187	6885	12.87	12.56	15.73	19.35	≤ 30.00
802.11be-EHT40	MCS0	195	6925	13.76	13.65	16.72	20.34	≤ 30.00
802.11be-EHT40	MCS0	211	7005	13.26	13.06	16.17	19.79	≤ 30.00
802.11be-EHT40	MCS0	227	7085	12.40	12.30	15.36	18.98	≤ 30.00
802.11be-EHT80	MCS0	135	6625	15.69	16.02	18.87	22.49	≤ 30.00
802.11be-EHT80	MCS0	151	6705	15.43	15.97	18.72	22.34	≤ 30.00
802.11be-EHT80	MCS0	167	6785	15.46	16.19	18.85	22.47	≤ 30.00
802.11be-EHT80	MCS0	183	6865	15.90	16.13	19.03	22.65	≤ 30.00
802.11be-EHT80	MCS0	199	6945	15.95	15.91	18.94	22.56	≤ 30.00
802.11be-EHT80	MCS0	215	7025	15.30	15.63	18.48	22.10	≤ 30.00
802.11be-EHT160	MCS0	143	6665	18.56	18.93	21.76	25.38	≤ 30.00
802.11be-EHT160	MCS0	175	6825	18.16	18.31	21.25	24.87	≤ 30.00
802.11be-EHT160	MCS0	207	6985	18.56	18.58	21.58	25.20	≤ 30.00
802.11be-EHT320-1	MCS0	159	6745	18.26	18.36	21.32	24.94	≤ 30.00
802.11be-EHT320-2	MCS0	191	6905	18.01	18.40	21.22	24.84	≤ 30.00

Note 1: Total Average Power (dBm) = $10\times\log\{10^{(\text{Ant 6 Average Power }/10)} + 10^{(\text{Ant 3 Average Power }/10)}\}$.

Note 2: EIRP (dBm) = Total Average Power (dBm) + Uncorrelated Gain (dBi).

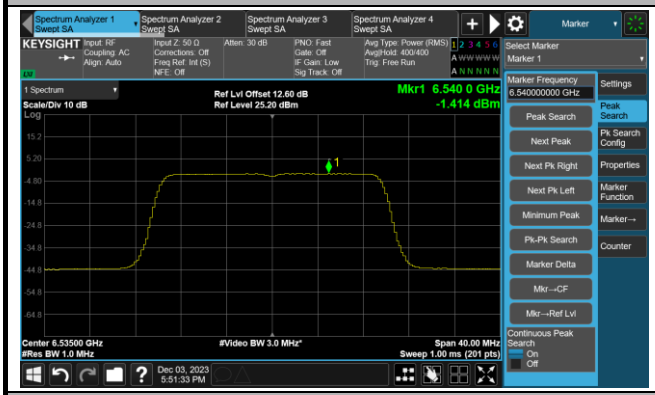
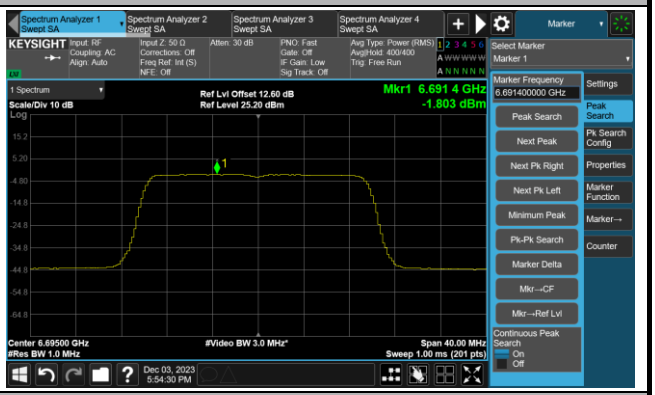
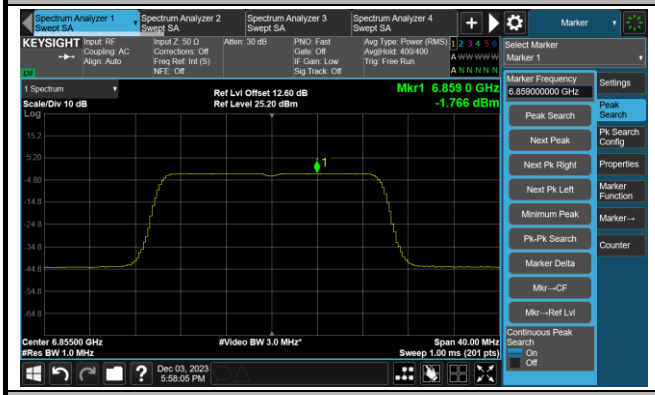
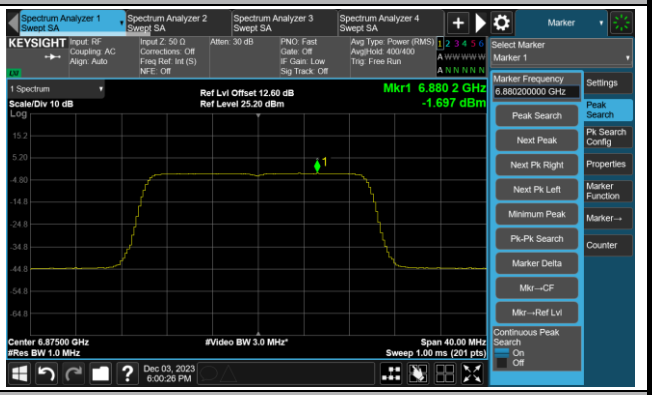
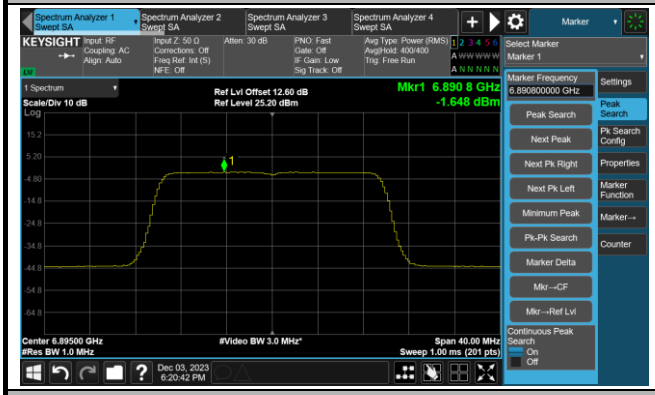
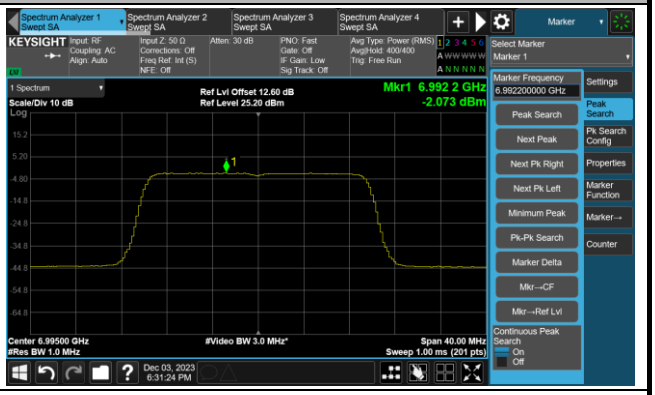
A.4 Power Spectral Density Test Result

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-12-03 ~ 2024-02-23		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
802.11ax-HE20	MCS0	117	6535	-1.414	-2.495	97.84	4.80	≤ 5.00
802.11ax-HE20	MCS0	149	6695	-1.803	-2.313	97.84	4.67	≤ 5.00
802.11ax-HE20	MCS0	181	6855	-1.766	-2.204	97.84	4.75	≤ 5.00
802.11ax-HE20	MCS0	185	6875	-1.697	-2.168	97.84	4.80	≤ 5.00
802.11ax-HE20	MCS0	189	6895	-1.648	-2.150	97.84	4.83	≤ 5.00
802.11ax-HE20	MCS0	209	6995	-2.073	-2.472	97.84	4.46	≤ 5.00
802.11ax-HE20	MCS0	229	7095	-1.787	-2.580	97.84	4.56	≤ 5.00
802.11ax-HE40	MCS0	123	6565	-1.768	-2.158	96.06	4.85	≤ 5.00
802.11ax-HE40	MCS0	147	6685	-2.183	-2.204	96.06	4.61	≤ 5.00
802.11ax-HE40	MCS0	179	6845	-1.760	-2.278	96.06	4.79	≤ 5.00
802.11ax-HE40	MCS0	187	6885	-1.793	-2.383	96.06	4.73	≤ 5.00
802.11ax-HE40	MCS0	195	6925	-1.386	-2.526	96.06	4.89	≤ 5.00
802.11ax-HE40	MCS0	211	7005	-1.818	-2.395	96.06	4.71	≤ 5.00
802.11ax-HE40	MCS0	227	7085	-1.983	-2.251	96.06	4.69	≤ 5.00
802.11ax-HE80	MCS0	135	6625	-1.982	-2.464	92.68	4.74	≤ 5.00
802.11ax-HE80	MCS0	151	6705	-2.006	-2.373	92.68	4.77	≤ 5.00
802.11ax-HE80	MCS0	167	6785	-2.128	-2.415	92.68	4.69	≤ 5.00
802.11ax-HE80	MCS0	183	6865	-2.205	-2.450	92.68	4.63	≤ 5.00
802.11ax-HE80	MCS0	199	6945	-2.096	-2.719	92.68	4.56	≤ 5.00
802.11ax-HE80	MCS0	215	7025	-2.446	-2.480	92.68	4.50	≤ 5.00
802.11ax-HE160	MCS0	143	6665	-2.227	-2.661	88.16	4.74	≤ 5.00
802.11ax-HE160	MCS0	175	6825	-2.047	-3.017	88.16	4.67	≤ 5.00
802.11ax-HE160	MCS0	207	6985	-2.513	-2.421	88.16	4.71	≤ 5.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
802.11be-EHT20	MCS0	117	6535	-1.528	-2.557	97.71	4.72	≤ 5.00
802.11be-EHT20	MCS0	149	6695	-1.589	-2.113	97.71	4.89	≤ 5.00
802.11be-EHT20	MCS0	181	6855	-1.656	-2.034	97.71	4.89	≤ 5.00
802.11be-EHT20	MCS0	185	6875	-1.578	-2.094	97.71	4.90	≤ 5.00
802.11be-EHT20	MCS0	189	6895	-1.639	-2.201	97.71	4.82	≤ 5.00
802.11be-EHT20	MCS0	209	6995	-1.886	-3.245	97.71	4.22	≤ 5.00
802.11be-EHT20	MCS0	229	7095	-2.326	-2.263	97.71	4.44	≤ 5.00
802.11be-EHT40	MCS0	123	6565	-2.259	-2.185	95.63	4.60	≤ 5.00
802.11be-EHT40	MCS0	147	6685	-2.590	-2.221	95.63	4.42	≤ 5.00
802.11be-EHT40	MCS0	179	6845	-2.170	-2.416	95.63	4.53	≤ 5.00
802.11be-EHT40	MCS0	187	6885	-2.186	-2.517	95.63	4.48	≤ 5.00
802.11be-EHT40	MCS0	195	6925	-1.711	-2.335	95.63	4.81	≤ 5.00
802.11be-EHT40	MCS0	211	7005	-1.889	-2.493	95.63	4.64	≤ 5.00
802.11be-EHT40	MCS0	227	7085	-2.187	-2.453	95.63	4.51	≤ 5.00
802.11be-EHT80	MCS0	135	6625	-2.335	-2.202	92.31	4.71	≤ 5.00
802.11be-EHT80	MCS0	151	6705	-2.313	-2.435	92.31	4.60	≤ 5.00
802.11be-EHT80	MCS0	167	6785	-2.377	-2.318	92.31	4.63	≤ 5.00
802.11be-EHT80	MCS0	183	6865	-2.394	-2.487	92.31	4.54	≤ 5.00
802.11be-EHT80	MCS0	199	6945	-2.161	-2.476	92.31	4.66	≤ 5.00
802.11be-EHT80	MCS0	215	7025	-2.225	-2.206	92.31	4.76	≤ 5.00
802.11be-EHT160	MCS0	143	6665	-2.361	-2.482	87.68	4.78	≤ 5.00
802.11be-EHT160	MCS0	175	6825	-2.948	-2.214	87.68	4.64	≤ 5.00
802.11be-EHT160	MCS0	207	6985	-2.284	-2.400	87.68	4.86	≤ 5.00
802.11be-EHT320-1	MCS0	159	6745	-4.906	-5.129	82.77	2.44	≤ 5.00
802.11be-EHT320-2	MCS0	191	6905	-5.362	-4.607	82.98	2.47	≤ 5.00

Note: When EUT duty cycle < 98%, EIRP PSD (dBm/MHz) = 10×log {$10^{(\text{Ant 6 PSD}/10)}$ + $10^{(\text{Ant 3 PSD}/10)}$} (dBm/MHz) + 10×log (1/Duty Cycle) + Correlated Gain (dBi).

802.11ax-HE20 Power Spectral Density – Ant 6	
Channel 117 (6535 MHz)	Channel 149 (6695 MHz)
	
Channel 181 (6855 MHz)	Channel 185 (6875 MHz)
	
Channel 189 (6895 MHz)	Channel 209 (6995 MHz)
	
Channel 229 (7095 MHz)	
