



RF MEASUREMENT REPORT

FCC ID: 2ALJ3AP56X
Applicant: HAN Networks Co., Ltd.
Product: HAN Access Point
Model No.: AP561
Brand Name: HAN NETWORKS, HANNETWORKS
FCC Classification: 15E 6 GHz Standard Power Access Point (6SD)
FCC Rule Part(s): Part 15 Subpart E (Section 15.407)
Result: Complies
Received Date: 2025-09-28
Test Date: 2025-10-14 ~ 2025-10-31

Reviewed By:

Vincent Yu

Vincent Yu

Approved By:

Robin Wu

Robin Wu



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
R25S1115122-U204	V01	Initial Report	2026-09-23	Valid

Note: This report is a copy report based on MRT original report (Report No.: R25S1065098-U204). Only applicant & manufacturer information and product information (name, model and brand name) has changed in this report, others are identical. The test data are all copied from the original report.

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1. General Information

1.1. Applicant

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

1.2. Manufacturer

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

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

1.4. Product Information

Product Name	HAN Access Point
Model No.	AP561
Brand Name	HAN NETWORKS, HANNETWORKS
EUT Identification No.	20250928Sample#05 (Conducted) 20250928Sample#04 (Radiated)
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
GNSS Specification	BDS, Galileo, GLONASS, GPS, SBAS
Antenna Specification	Refer to clause 1.7
Operating Temperature	-40 ~ 70 °C
Power Supply	PoE Input
Accessory(ies)	
PoE #1	Model: POE60U-1BT-X (ALE P/N: POE60U-1BT-X-R) Input: 100-240 V ~ 1.5 A, 50-60 Hz Output: 56 V=0.535 A, 30 W PIN 3, 6+ PIN 1, 2 Return Output: 56 V=0.535 A, 30 W PIN 4, 5+ PIN 7, 8 Return
PoE #2	Model: POE075U-1BT Input: 100-240 V ~ 2.0 A, 50-60 Hz POE Output 1: 56 V=0.8 A, 45 W PIN 3, 6 - +56 V PIN 1, 2 - RETURN POE Output 2: 56 V=0.8 A, 45 W PIN 4, 5 - +56 V PIN 7, 8 - RETURN
Notes: 1. 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. 2. PoE Injector are not marketed in conjunction with the device.	

1.5. Radio Specification under Test

Frequency Range	UNII-5: 5925 ~ 6425 MHz UNII-7: 6525 ~ 6875 MHz	
Modulation Technology	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
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
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	--	--

802.11ax-HE40/be-EHT40

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
123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz
171	6805 MHz	179	6845 MHz	--	--

802.11ax-HE80/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz
55	6225 MHz	71	6305 MHz	87	6385 MHz
135	6625 MHz	151	6705 MHz	167	6785 MHz

802.11ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz
143	6665 MHz	--	--	--	--

802.11be-EHT320

Channel	Frequency	Channel	Frequency	Channel	Frequency
31	6105 MHz	63	6265 MHz	--	--

1.7. Antenna Details

Antenna Type	Frequency (MHz)	TX Paths	Max. Directional Gain (dBi)		Antenna Gain above 30 degrees from the horizon (dBi)	
			Correlated	Uncorrelated	Correlated	Uncorrelated
Wi-Fi Antenna						
Dipole	2412 ~ 2462	2	6.77	6.77	--	--
	5150 ~ 5250	2	7.11	7.11	0.76	0.76
	5250 ~ 5350	2	7.26	7.26	--	--
	5470 ~ 5725	2	7.44/7.77	7.44/7.77	--	--
	5725 ~ 5850	2	7.17/7.71	7.17/7.71	--	--
Dipole	5925 ~ 6425	2	7.75	7.75	-2.51	-2.51
	6525 ~ 6875	2	6.70	6.70	-1.45	-1.45

Notes:

- The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.
- The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax/be, not include 802.11a/b/g.
- For beamforming operation, the software automatically backs power down based on CDD power.
- The detail calculation method of directional gain refers to antenna report provided by the applicant.
- Uncorrelated Directional Gain is for EIRP calculation, and Correlated Directional Gain is for PSD calculation.
- For WLAN Config 2, Correlated Gain and Uncorrelated Gain of Frequency 5470 ~ 5725 MHz is 7.77 dBi, Correlated Gain and Uncorrelated Gain of Frequency 5725 ~ 5850 MHz is 7.71 dBi.

1.8. WLAN Configuration

Model No.	WLAN Antenna Port	WLAN Config 1 - Supporting Band	WLAN Config 2 - Supporting Band
AP561	5GHz 2TX Port	5G Full Band: U-NII-1 (5150-5250 MHz) U-NII-2A (5250-5350 MHz) U-NII-2C (5470-5725 MHz) U-NII-3 (5725-5850 MHz)	5GL Band: U-NII-1 (5150-5250 MHz) U-NII-2A (5250-5350 MHz)
	2GHz 2TX Port	2412 to 2462 MHz	2412 to 2462 MHz
	6GHz 2TX Port	U-NII-5 (5925-6425 MHz) U-NII-7 (6525-6875 MHz)	5GH Band: U-NII-2C (5470-5725 MHz) U-NII-3 (5725-5850 MHz)
Note: WLAN Config 1 and WLAN Config 2 only differ in the software settings and there are no changes in the hardware.			

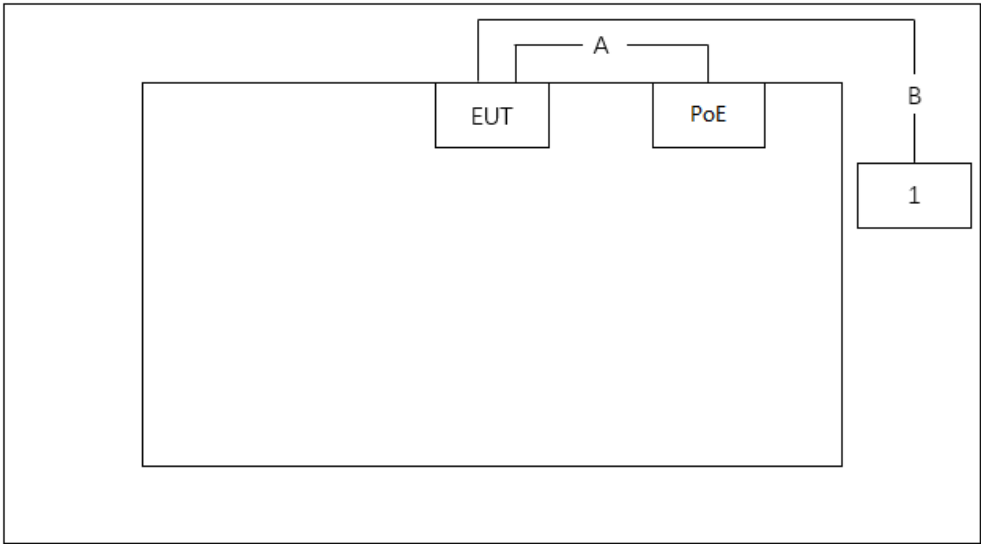
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by 802.11ax-HE20 (MCS0)
Mode 2: Transmit by 802.11ax-HE40 (MCS0)
Mode 3: Transmit by 802.11ax-HE80 (MCS0)
Mode 4: Transmit by 802.11ax-HE160 (MCS0)
Mode 5: Transmit by 802.11be-EHT20 (MCS0)
Mode 6: Transmit by 802.11be-EHT40 (MCS0)
Mode 7: Transmit by 802.11be-EHT80 (MCS0)
Mode 8: Transmit by 802.11be-EHT160 (MCS0)
Mode 9: Transmit by 802.11be-EHT320 (MCS0)
Note 1: 802.11ax and 802.11be have same modulation type and same power parameter, so we only show 802.11be test data in report.
Note 2: All modes of operation and data rates were investigated, so all RF test requirements shall be executed at the worst data rate.

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 – Radiated Emissions Testing & AC Conducted Emissions Testing			
 <pre> graph TD EUT[EUT] --- A[A] --- PoE[PoE] PoE --- B[B] --- 1[1] </pre>			
Cable Type		Cable Description	Length
A	LAN Cable	Non-Shielded	1.5 m
B	LAN Cable	Non-Shielded	> 10 m
Product		Manufacturer	Model No.
1	Notebook	ThinkPad	E14 Gen5

2.3. Test Software

The test utility software used during testing was “QSPR” and the version was “5.0-00202”.

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
- FCC KDB 414788 D01 v01r01
- FCC KDB 412172 D01 v01r01

2.5. Test Environment Condition

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

3. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

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

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

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Signal Analyzer	Keysight	N9010B	MRTSUE07036	1 year	2026-01-21	SIP-TR2
Temperature Chamber	BAOYT	BYG-408CS	MRTSUE06847	1 year	2026-01-21	SIP-TR2
USB Power Sensor	Keysight	U2021XA	MRTSUE06581	1 year	2026-06-12	SIP-TR2
Thermohygrometer	testo	608-H1	MRTSUE11109	1 year	2026-02-25	SIP-TR2
Attenuator	MVE	MVE2213	MRTSUE11059	1 year	2026-06-04	SIP-TR2
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2025-12-05	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2025-10-17 2026-10-16	SIP-AC3
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07075	1 year	2025-11-19	SIP-AC3
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06646	1 year	2026-07-03	SIP-AC3
Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2026-04-26	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2026-01-05	SIP-AC3
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2026-06-20	SIP-AC3
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2026-09-29	SIP-AC3
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06598	1 year	2025-11-03 2026-11-02	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2025-12-19	SIP-AC3
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2026-04-29	SIP-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2026-04-29	SIP-SR2
Four-Line V-Network	R&S	ENV432	MRTSUE06614	1 year	2026-09-28	SIP-SR2
Thermohygrometer	testo	608-H1	MRTSUE06621	1 year	2026-10-08	SIP-SR2
Shielding Room	MIX-BEP	SIP-SR2	MRTSUE06949	5 years	2029-10-13	SIP-SR2

Software	Version	Function
e3	230711	RE & CE
Controller_MF 7802BS	1.02	RE Antenna & Turntable
Agilent Power Analyzer/Agilent Power Panel	V R03.09.00	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
<p>The maximum measurement uncertainty is evaluated as:</p> <p>9 kHz ~ 150 kHz: 3.58 dB</p> <p>150 kHz ~ 30 MHz: 3.20 dB</p>
Radiated Emission Measurement
<p>The maximum measurement uncertainty is evaluated as:</p> <p>Coaxial: 9 kHz ~ 30 MHz: 2.35 dB</p> <p>Coplanar: 9 kHz ~ 30 MHz: 2.37 dB</p> <p>Horizontal: 30 MHz ~ 200 MHz: 3.47 dB</p> <p>200 MHz ~ 1 GHz: 4.17 dB</p> <p>1 GHz ~ 40 GHz: 4.97 dB</p> <p>Vertical: 30 MHz ~ 200 MHz: 4.07 dB</p> <p>200 MHz ~ 1 GHz: 5.28 dB</p> <p>1 GHz ~ 40 GHz: 4.84 dB</p>
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.5 dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 1.5 dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.5 dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 3.2%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(11)	Channel Bandwidth	Conducted	Pass
15.407(a)(4)	Maximum Equivalent Isotropically Radiated Power (EIRP)		Pass
15.407(a)(4)	Maximum Power Spectral Density (EIRP)		Pass
15.407(b)(7)	In-Band Emission		Pass
15.407(g)	Frequency Stability		Pass
15.407(k)	Automated Frequency Coordination		Pass ^{Note 3}
15.407(b)(6)	Unwanted Emissions		Pass
15.407(b)(8), (9), (10)	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150 kHz - 30 MHz	Line Conducted	Pass

Notes:

1. The analyzer plots shown in this section were captured using a correction table to account for cable and attenuator losses in the system connecting the EUT to the analyzer across relevant frequencies.
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.
3. Automated Frequency Coordination refers to report "R25S1065098-U205".

6.2. Channel 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

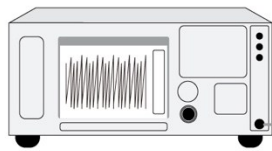
1. The analyzers' automatic bandwidth measurement capability was used to perform the 26 dB bandwidth
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the 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. $VBW \geq 3 \times RBW$
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

Spectrum Analyzer



DC Block
&
Attenuator



EUT



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Equivalent Isotopically Radiated Power Measurement

6.3.1. Test Limit

For a standard access point operating in the 5.925 - 6.425 GHz and 6.525 - 6.875 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm.

For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

6.3.2. Test Procedure

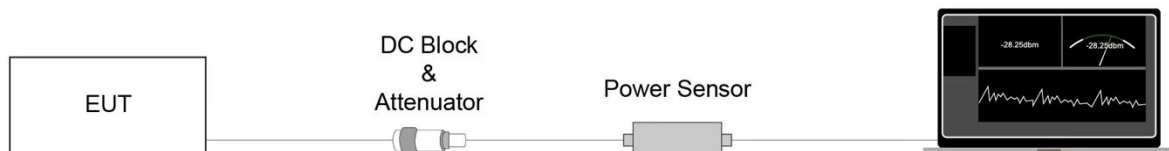
KDB 789033 D02 v02r01- Section II(E)3)b) Method PM-G

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 a standard access point operating in the 5.925-6.425 GHz and 6.525-6.875 GHz band, the maximum power spectral density must not exceed 23 dBm e.i.r.p. in any 1-megahertz band.

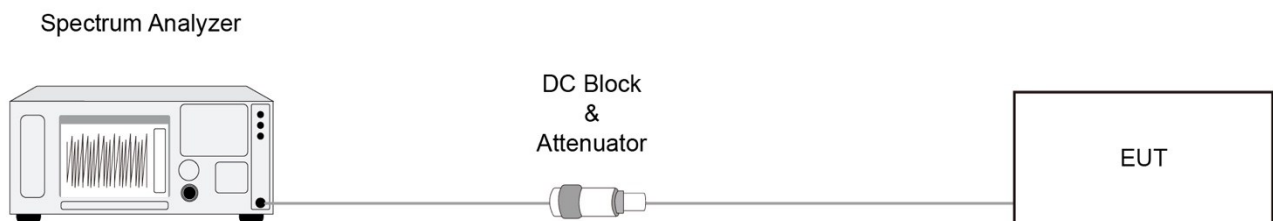
6.4.2. Test Procedure

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 $\geq 2 \times (\text{span} / \text{RBW})$
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 $10 \cdot \log(1/x)$, 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 $10 \cdot \log(1/0.25) = 6$ 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 II)J)

6.5.3. Test Setting

Emissions Mask Reference Level Measurement

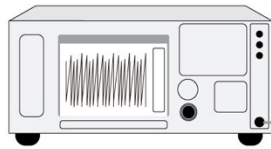
1. Set the span to encompass the entire 26 dB EBW of the signal.
2. Set RBW = same RBW used for 26 dB EBW measurement.
3. Set VBW $\geq 3 \times$ RBW.
4. Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces 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

Spectrum Analyzer



DC Block
&
Attenuator



EUT



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:

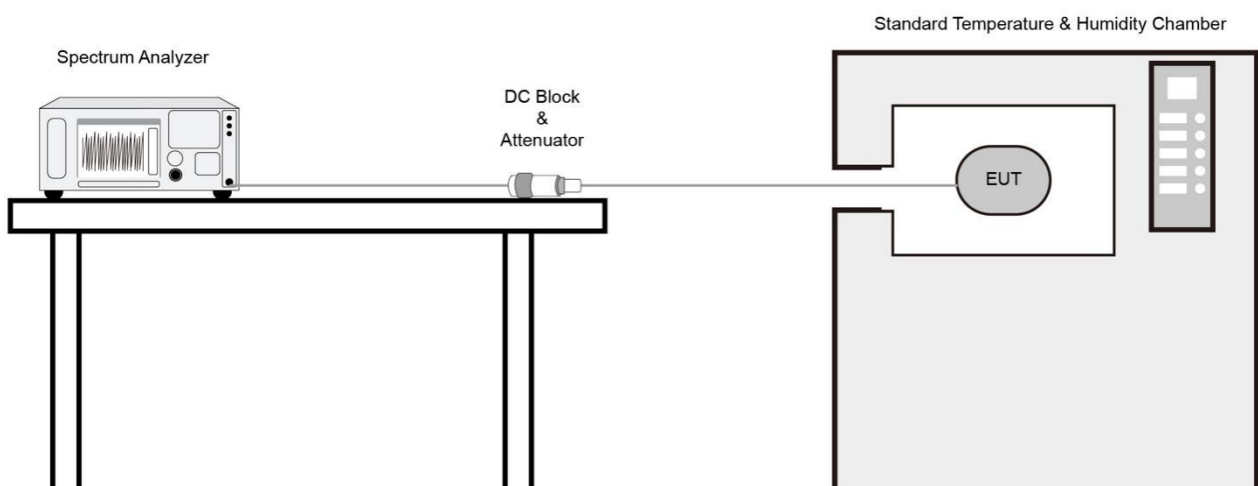
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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 ($\pm 15\%$) and endpoint, record the maximum frequency change.

6.6.3. Test Setup



6.6.4. Test Result

Refer to Appendix A.6.

6.7. Radiated Spurious Emission Measurement

6.7.1. 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 6 GHz 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 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 [μ V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure

KDB 789033 D02 v02r01-Section II)G)

6.7.3. 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 1 MHz
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

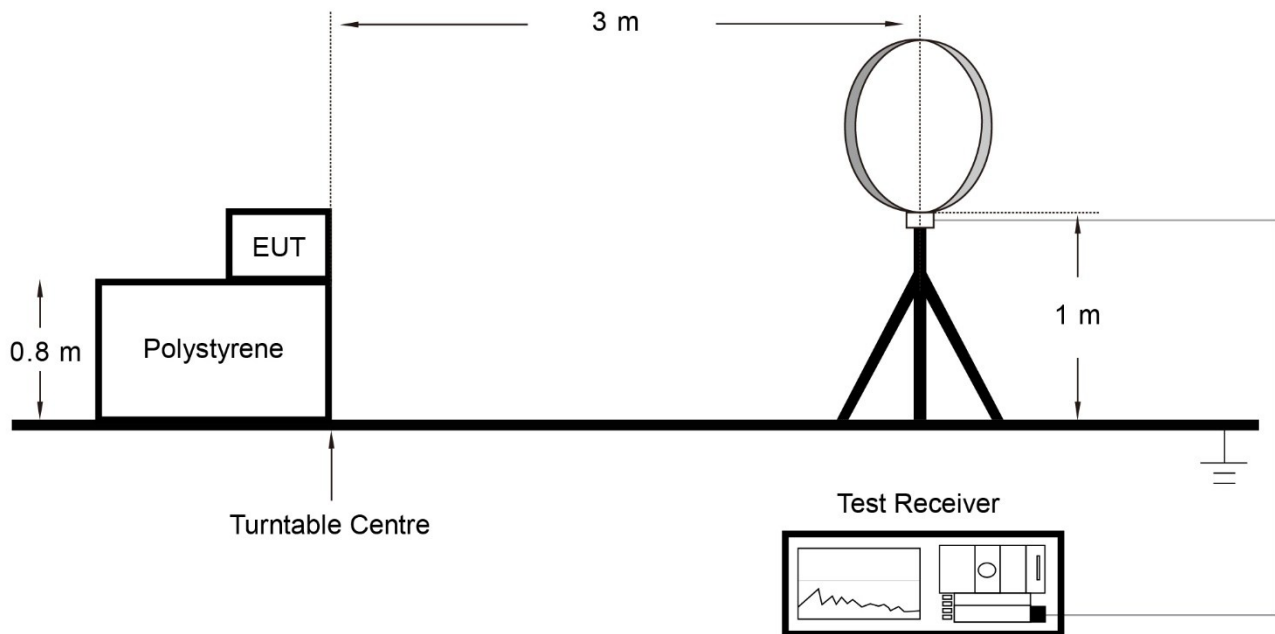
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW = 3 MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1 GHz (Method VB)

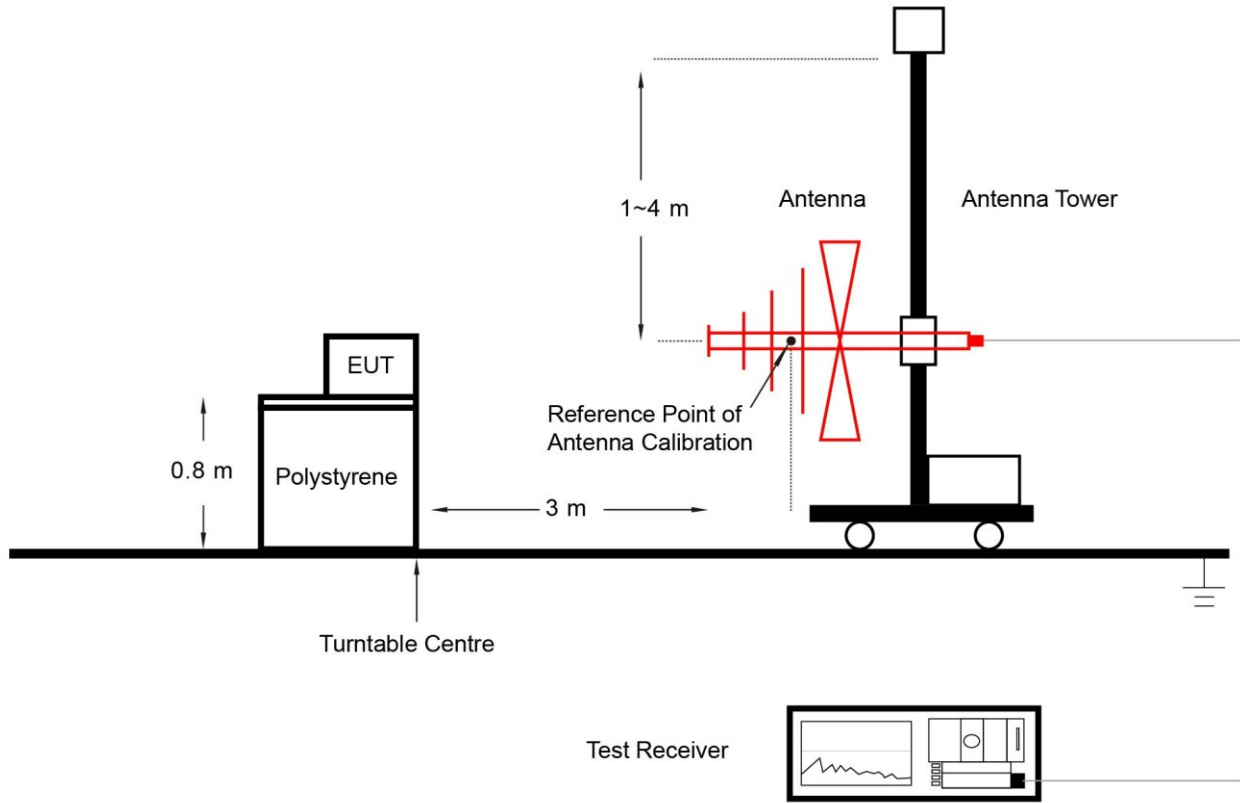
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.7.4. Test Setup

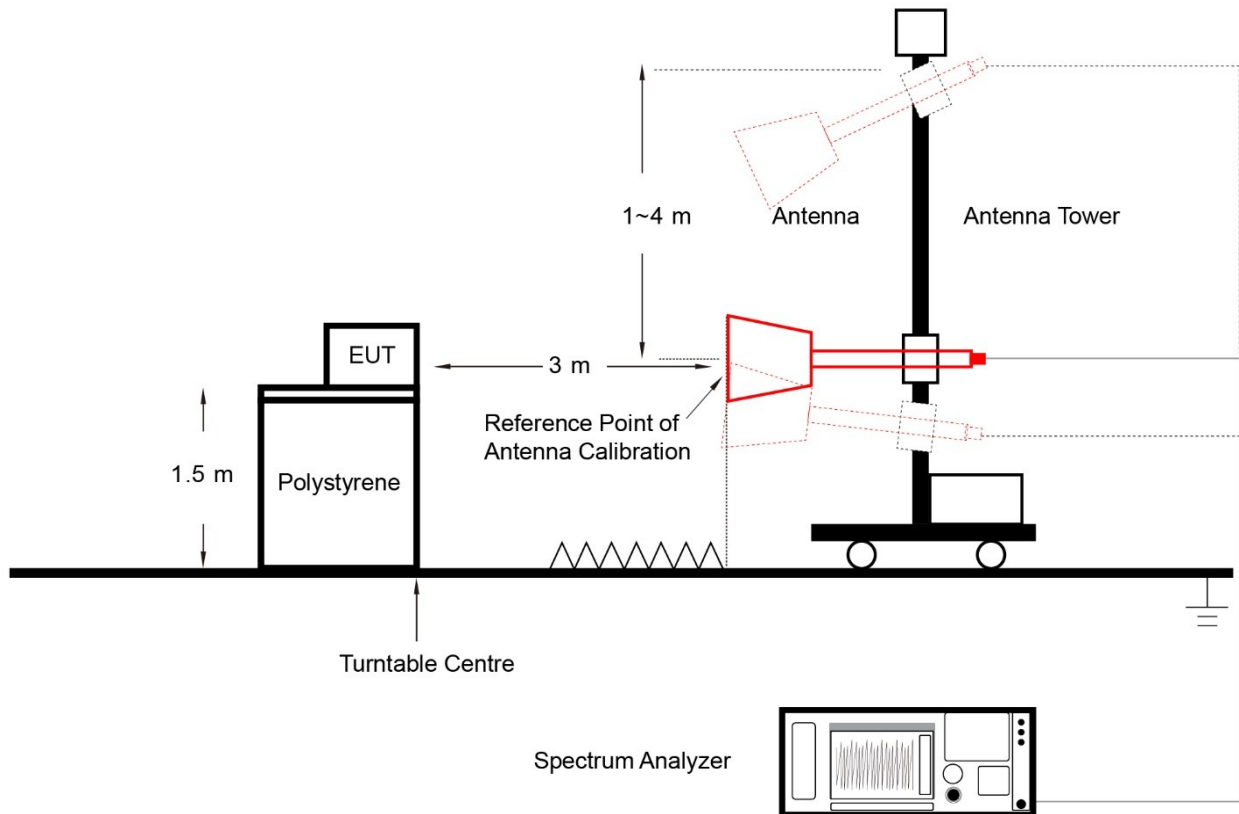
Below 30 MHz Test Setup:



Below 1 GHz Test Setup:



Above 1 GHz Test Setup:



6.7.5. Test Result

Refer to Appendix A.7.

6.8. Radiated Restricted Band Edge Measurement

6.8.1. Test Limit

For 15.407(b)(6) 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 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.

6.8.2. Test Procedure

KDB 789033 D02 v02r01-Section II)G)

6.8.3. Test Setting

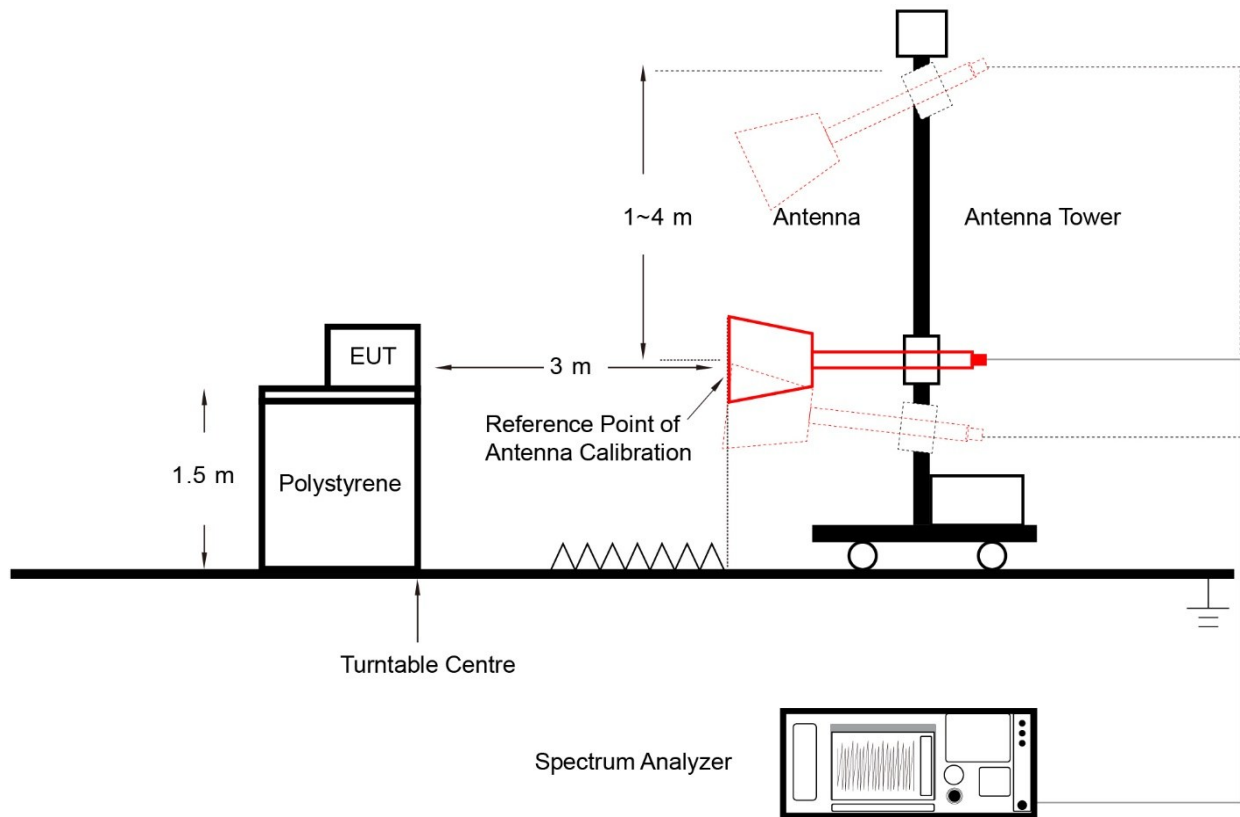
Peak Measurements above 1 GHz

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 $\geq 98\%$, set VBW = 10 Hz
If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = Auto
6. Trace mode = Max hold
7. Trace was allowed to stabilize

6.8.4. Test Setup



6.8.5. Test Result

Refer to Appendix A.8.

6.9. AC Conducted Emissions Measurement

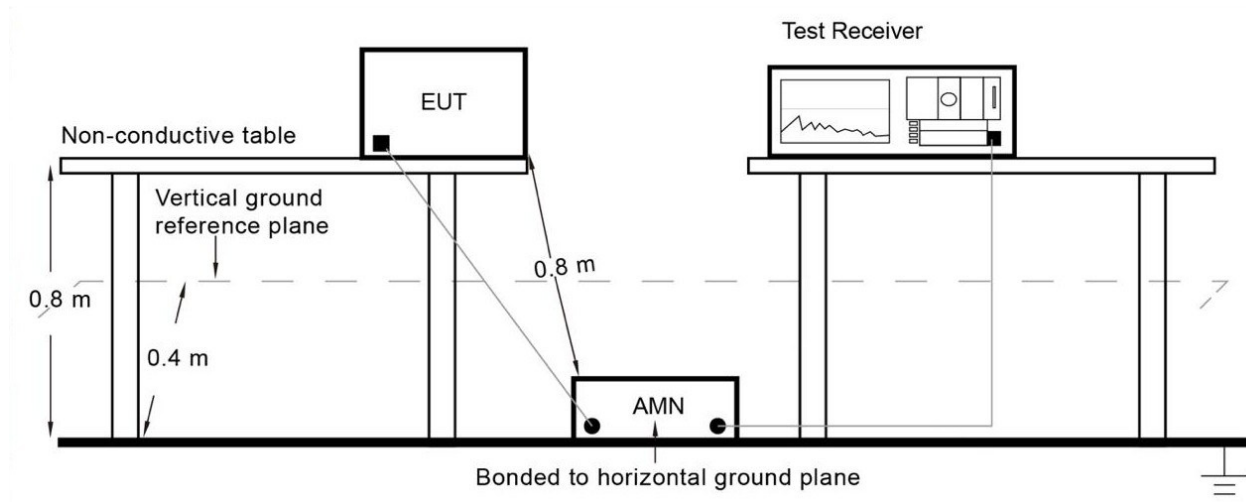
6.9.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
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.

6.9.2. Test Setup



6.9.3. Test Result

Refer to Appendix A.9.

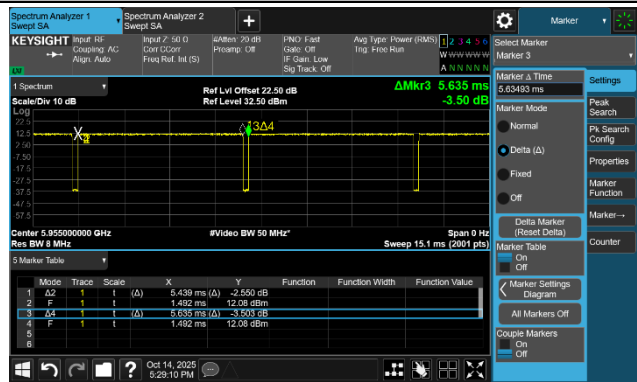
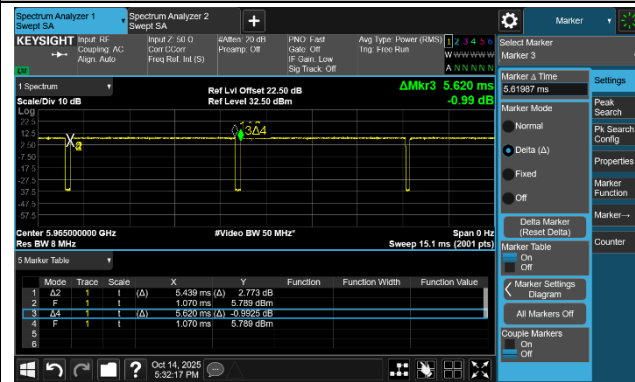
Appendix A - Test Result

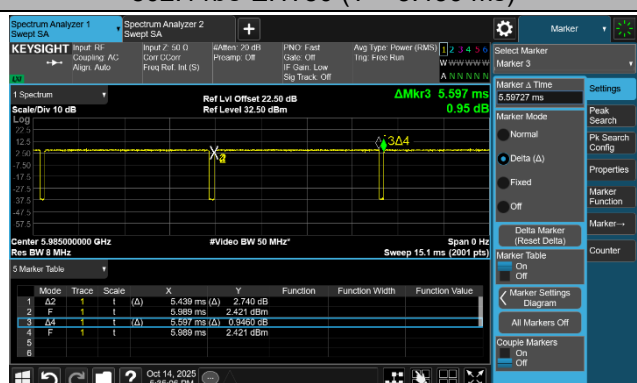
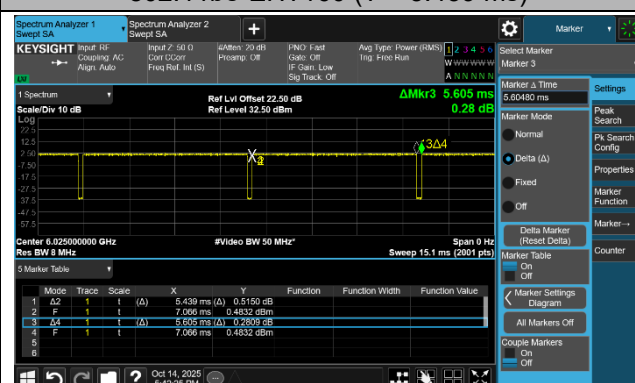
A.1 Duty Cycle Test Result

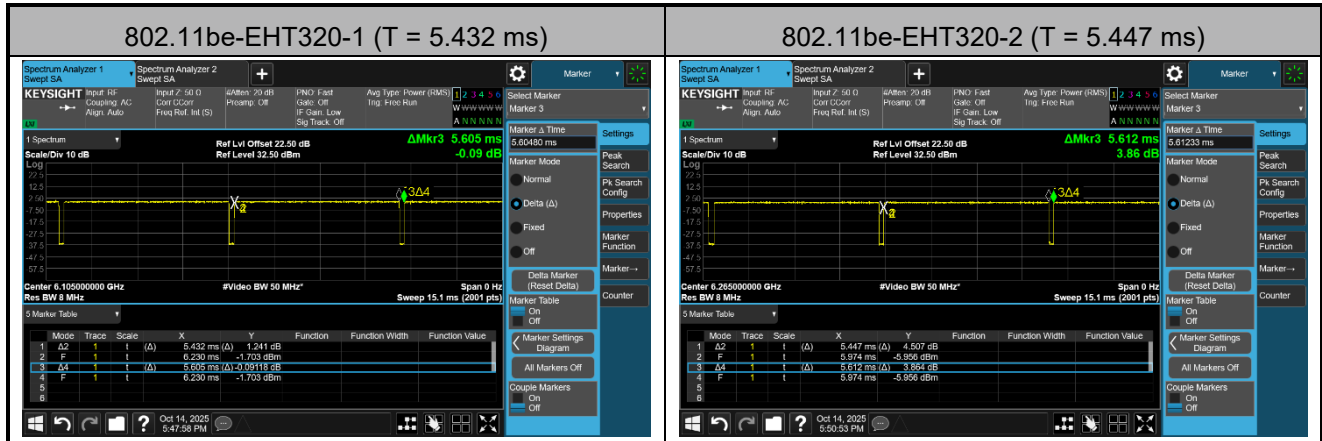
Test Site	SIP-TR2	Test Engineer	Nolan Chen
Test Date	2025-10-14		

Test Mode	Duty Cycle
802.11be-EHT20	96.52%
802.11be-EHT40	96.78%
802.11be-EHT80	97.18%
802.11be-EHT160	97.04%
802.11be-EHT320-1	96.91%
802.11be-EHT320-2	97.06%

Duty Cycle (T = Transmission Duration)	
802.11be-EHT20 (T = 5.439 ms)	802.11be-EHT40 (T = 5.439 ms)

	
802.11be-EHT80 (T = 5.439 ms)	802.11be-EHT160 (T = 5.439 ms)

	
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A.2 Channel Bandwidth Test Result

Test Site	SIP-TR2	Test Engineer	Nolan Chen
Test Date	2025-10-20		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)	Test Result
802.11be-EHT20	MCS0	1	5955	22.77	19.091	Pass
802.11be-EHT20	MCS0	49	6195	23.25	19.120	Pass
802.11be-EHT20	MCS0	93	6415	22.95	19.125	Pass
802.11be-EHT20	MCS0	117	6535	23.42	19.158	Pass
802.11be-EHT20	MCS0	149	6695	22.07	19.085	Pass
802.11be-EHT20	MCS0	181	6855	22.97	19.066	Pass
802.11be-EHT40	MCS0	3	5965	44.08	38.119	Pass
802.11be-EHT40	MCS0	51	6205	43.73	37.983	Pass
802.11be-EHT40	MCS0	91	6405	43.69	38.084	Pass
802.11be-EHT40	MCS0	123	6565	44.19	38.161	Pass
802.11be-EHT40	MCS0	147	6685	44.05	38.066	Pass
802.11be-EHT40	MCS0	179	6845	44.82	38.072	Pass
802.11be-EHT80	MCS0	7	5985	90.25	77.838	Pass
802.11be-EHT80	MCS0	55	6225	90.37	78.150	Pass
802.11be-EHT80	MCS0	87	6385	89.27	77.735	Pass
802.11be-EHT80	MCS0	135	6625	89.81	77.748	Pass
802.11be-EHT80	MCS0	151	6705	89.16	77.832	Pass
802.11be-EHT80	MCS0	167	6785	90.54	77.855	Pass
802.11be-EHT160	MCS0	15	6025	171.3	156.81	Pass
802.11be-EHT160	MCS0	47	6185	174.3	157.29	Pass
802.11be-EHT160	MCS0	79	6345	173.8	157.14	Pass
802.11be-EHT160	MCS0	143	6665	169.2	156.97	Pass
802.11be-EHT320-1	MCS0	31	6105	340.0	315.83	Pass
802.11be-EHT320-2	MCS0	63	6265	335.9	315.85	Pass

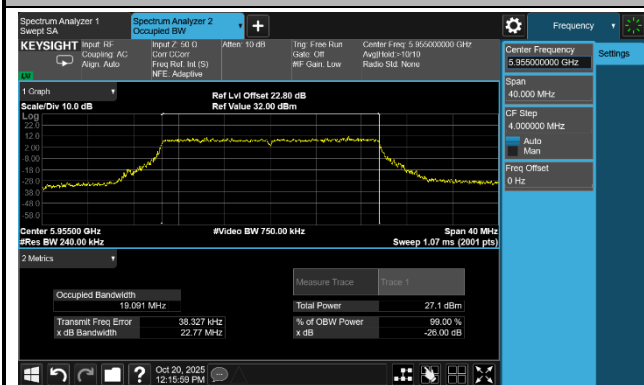
Note:

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

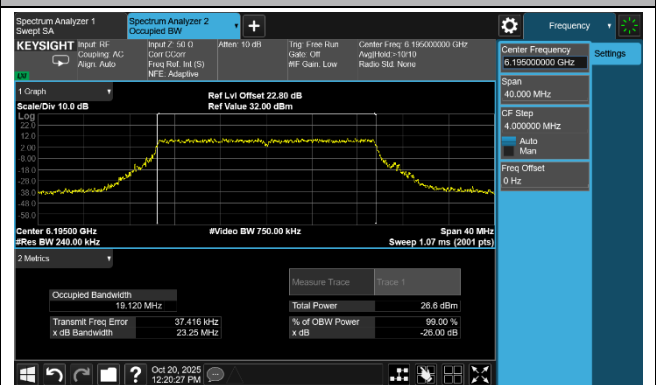
For channels with a nominal bandwidth of 320 MHz compliance is demonstrated by way of the 99% BW.

802.11be-EHT20 26 dB Bandwidth

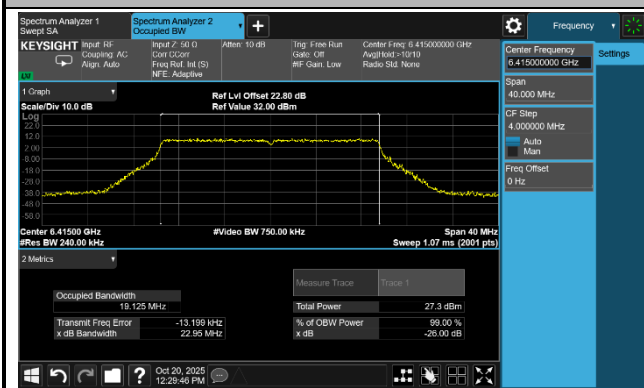
Channel 1 (5955 MHz)



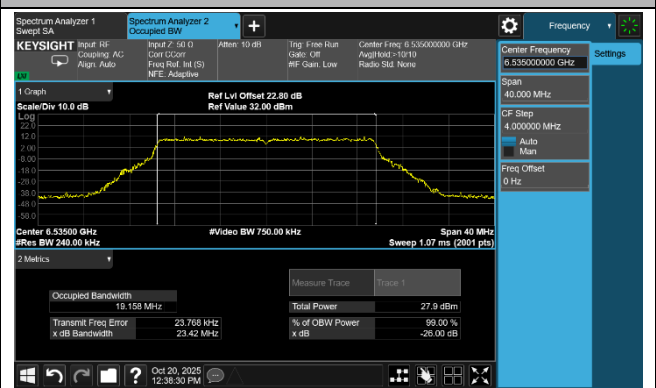
Channel 49 (6195 MHz)



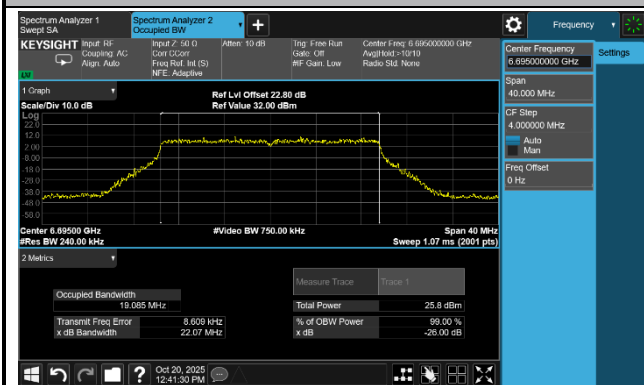
Channel 93 (6415 MHz)



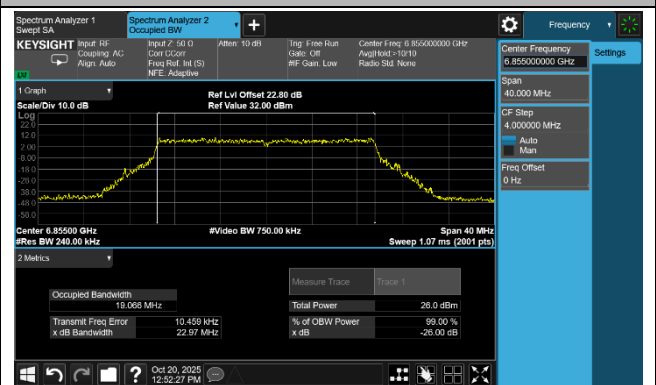
Channel 117 (6535 MHz)



Channel 149 (6695 MHz)

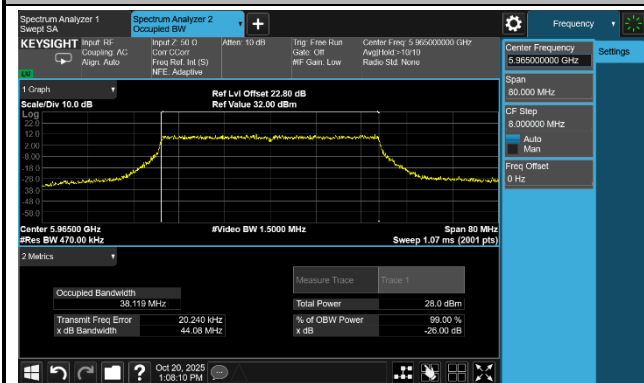


Channel 181 (6855 MHz)

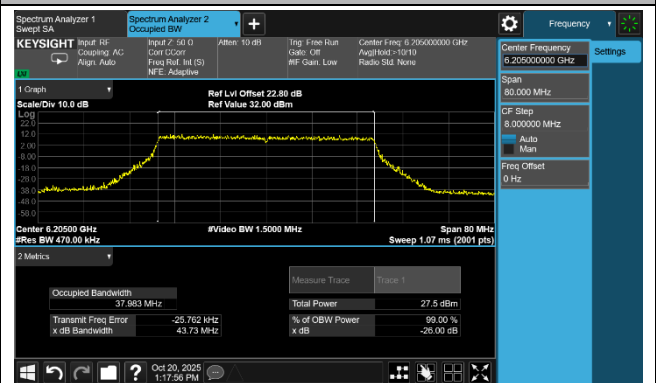


802.11be-EHT40 26 dB Bandwidth

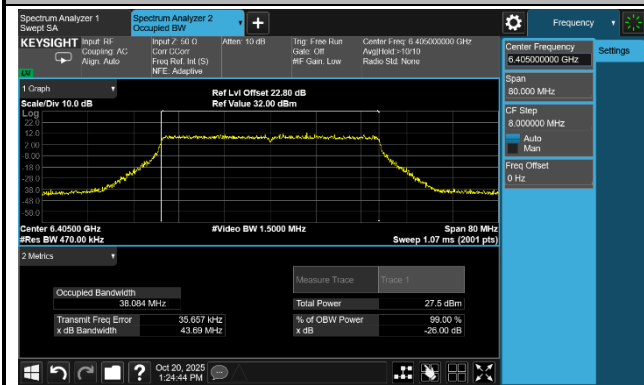
Channel 3 (5965 MHz)



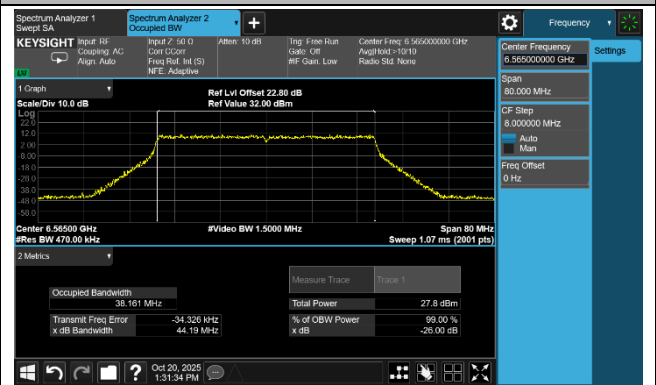
Channel 51 (6205 MHz)



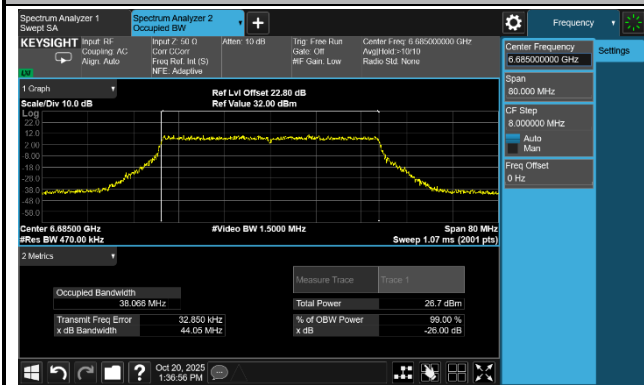
Channel 91 (6405 MHz)



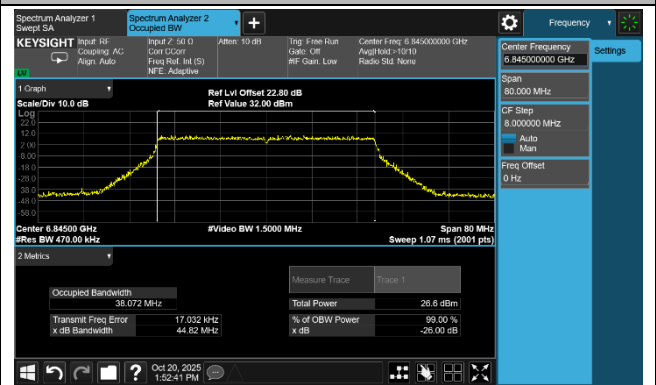
Channel 123 (6565 MHz)



Channel 147 (6685 MHz)

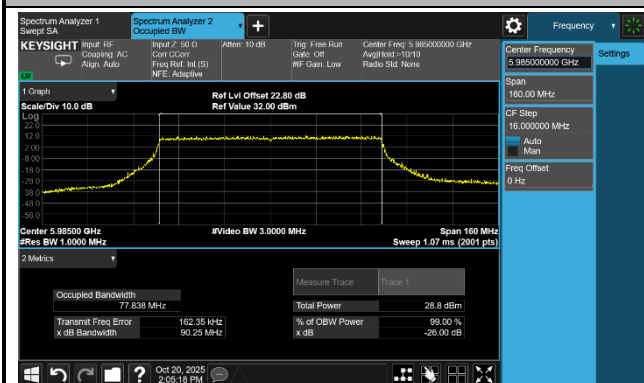


Channel 179 (6845 MHz)

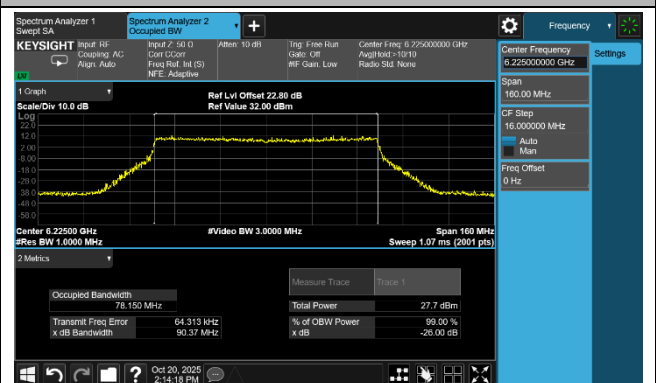


802.11be-EHT80 26 dB Bandwidth

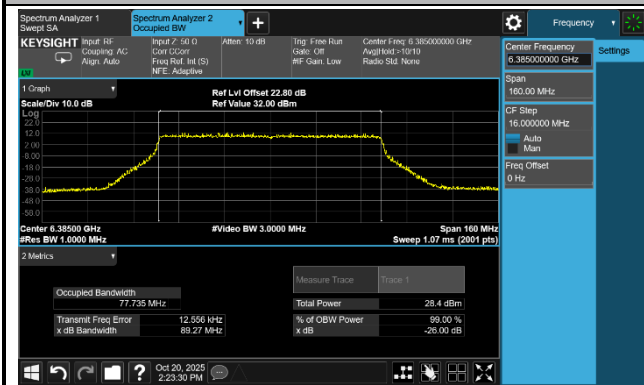
Channel 7 (5985 MHz)



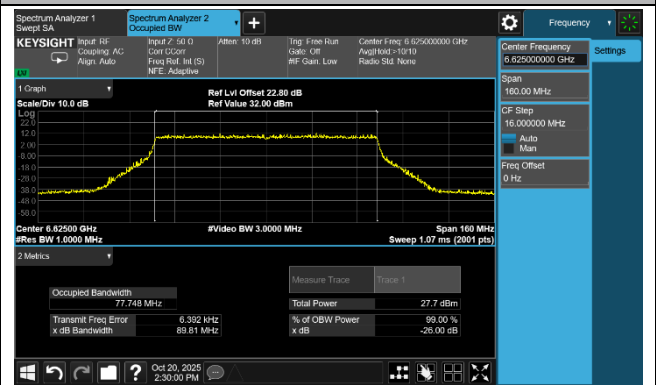
Channel 55 (6225 MHz)



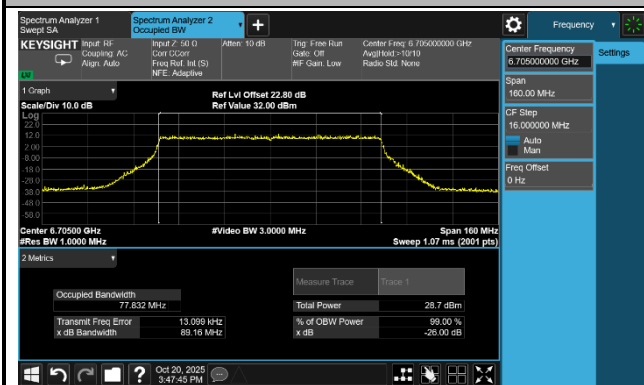
Channel 87 (6385 MHz)



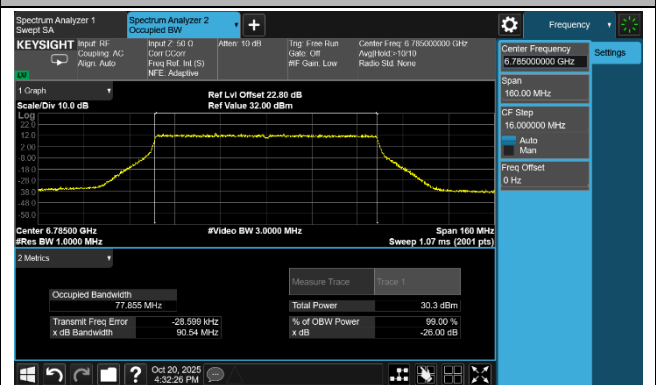
Channel 135 (6625 MHz)



Channel 151 (6705 MHz)

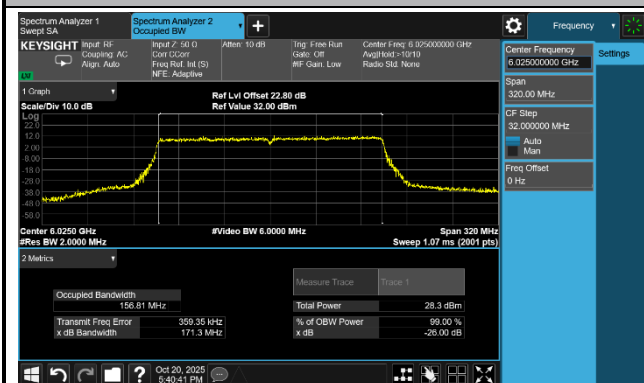


Channel 167 (6785 MHz)

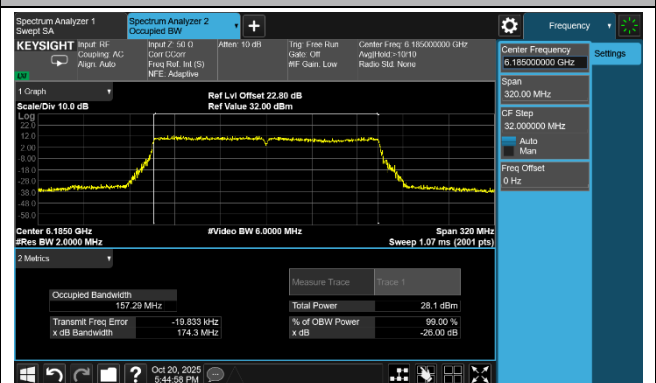


802.11be-EHT160 26 dB Bandwidth

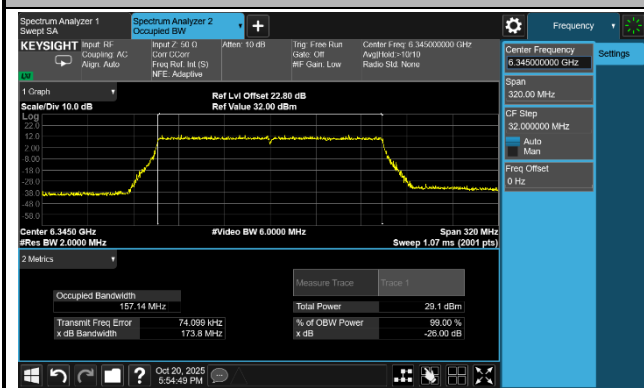
Channel 15 (6025 MHz)



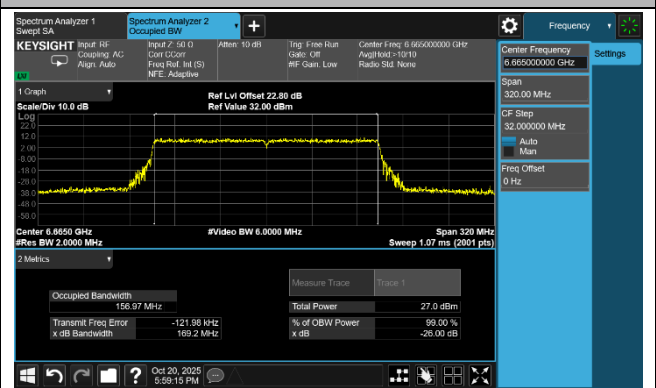
Channel 47 (6185 MHz)

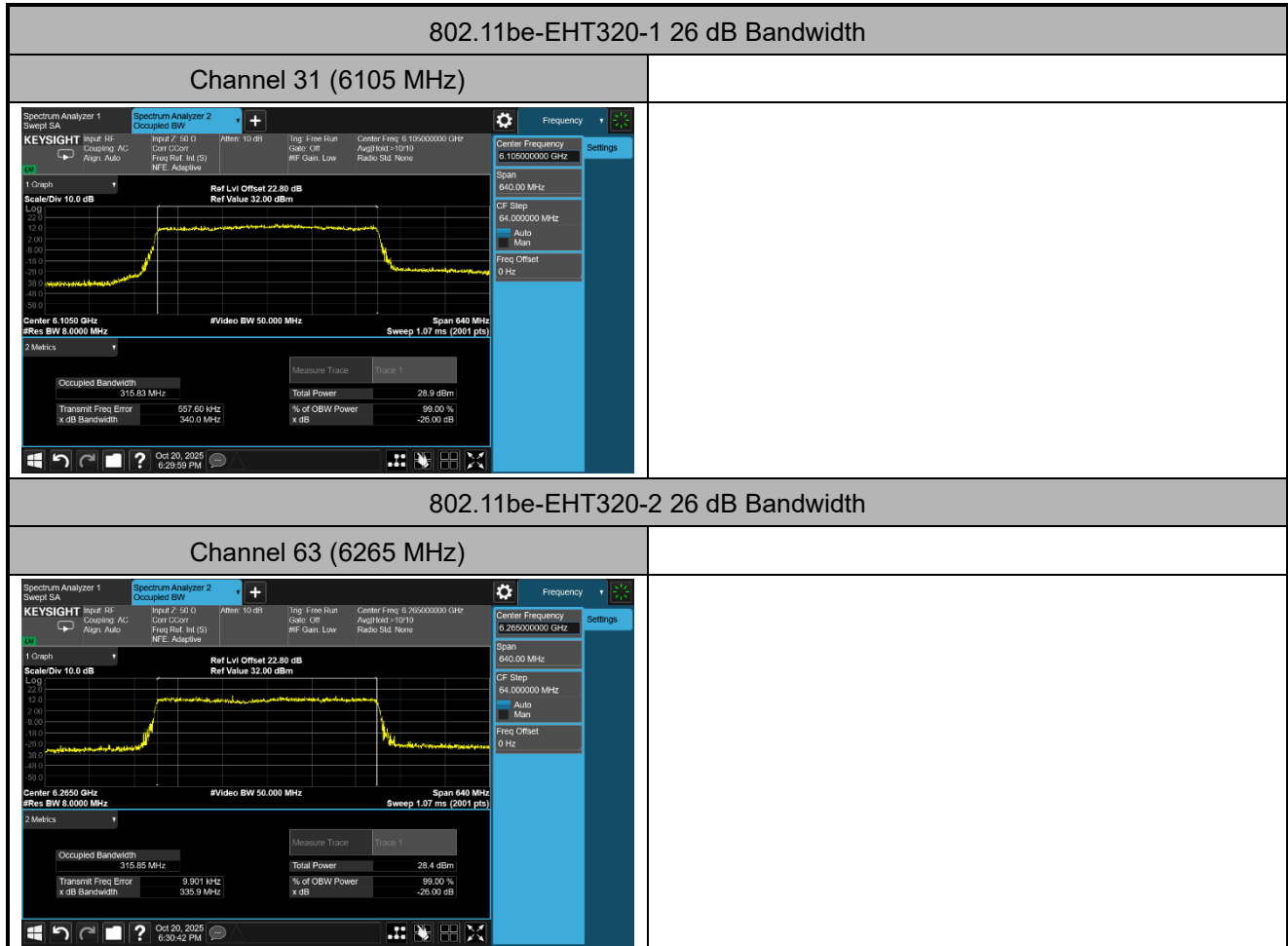


Channel 79 (6345 MHz)



Channel 143 (6665 MHz)





A.3 Equivalent Isotopically Radiated Power Test Result

Test Site	SIP-TR2	Test Engineer	Nolan Chen
Test Date	2025-10-20		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total AV Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)	30° EIRP (dBm)	30° EIRP Limit (dBm)
				Ant 0	Ant 1					
802.11ax-HE20	MCS0	1	5955	19.05	19.49	22.29	30.04	≤ 36.00	19.78	≤ 21.00
802.11ax-HE20	MCS0	49	6195	19.53	19.51	22.53	30.28	≤ 36.00	20.02	≤ 21.00
802.11ax-HE20	MCS0	93	6415	19.48	19.74	22.62	30.37	≤ 36.00	20.11	≤ 21.00
802.11ax-HE20	MCS0	117	6535	18.98	19.21	22.11	29.86	≤ 36.00	20.66	≤ 21.00
802.11ax-HE20	MCS0	149	6695	18.83	19.00	21.93	29.68	≤ 36.00	20.48	≤ 21.00
802.11ax-HE20	MCS0	181	6855	19.33	19.17	22.26	30.01	≤ 36.00	20.81	≤ 21.00
802.11ax-HE40	MCS0	3	5965	19.65	19.72	22.70	30.45	≤ 36.00	20.19	≤ 21.00
802.11ax-HE40	MCS0	51	6205	19.63	19.22	22.44	30.19	≤ 36.00	19.93	≤ 21.00
802.11ax-HE40	MCS0	91	6405	19.08	19.20	22.15	29.90	≤ 36.00	19.64	≤ 21.00
802.11ax-HE40	MCS0	123	6565	18.81	19.12	21.98	29.73	≤ 36.00	20.53	≤ 21.00
802.11ax-HE40	MCS0	147	6685	18.99	19.06	22.04	29.79	≤ 36.00	20.59	≤ 21.00
802.11ax-HE40	MCS0	179	6845	18.87	18.92	21.91	29.66	≤ 36.00	20.46	≤ 21.00
802.11ax-HE80	MCS0	7	5985	19.26	19.21	22.25	30.00	≤ 36.00	19.74	≤ 21.00
802.11ax-HE80	MCS0	55	6225	19.11	19.33	22.23	29.98	≤ 36.00	19.72	≤ 21.00
802.11ax-HE80	MCS0	87	6385	19.39	19.16	22.29	30.04	≤ 36.00	19.78	≤ 21.00
802.11ax-HE80	MCS0	135	6625	19.06	19.05	22.07	29.82	≤ 36.00	20.62	≤ 21.00
802.11ax-HE80	MCS0	151	6705	18.99	19.17	22.09	29.84	≤ 36.00	20.64	≤ 21.00
802.11ax-HE80	MCS0	167	6785	18.98	19.13	22.07	29.82	≤ 36.00	20.62	≤ 21.00
802.11ax-HE160	MCS0	15	6025	19.72	19.48	22.61	30.36	≤ 36.00	20.10	≤ 21.00
802.11ax-HE160	MCS0	47	6185	19.48	19.64	22.57	30.32	≤ 36.00	20.06	≤ 21.00
802.11ax-HE160	MCS0	79	6345	19.32	19.44	22.39	30.14	≤ 36.00	19.88	≤ 21.00
802.11ax-HE160	MCS0	143	6665	19.11	19.48	22.31	30.06	≤ 36.00	20.86	≤ 21.00
802.11be-EHT20	MCS0	1	5955	19.51	19.41	22.47	30.22	≤ 36.00	19.96	≤ 21.00
802.11be-EHT20	MCS0	49	6195	19.61	19.47	22.55	30.30	≤ 36.00	20.04	≤ 21.00
802.11be-EHT20	MCS0	93	6415	19.56	19.79	22.69	30.44	≤ 36.00	20.18	≤ 21.00
802.11be-EHT20	MCS0	117	6535	19.06	19.29	22.19	29.94	≤ 36.00	20.74	≤ 21.00
802.11be-EHT20	MCS0	149	6695	19.12	19.06	22.10	29.85	≤ 36.00	20.65	≤ 21.00
802.11be-EHT20	MCS0	181	6855	19.48	19.21	22.36	30.11	≤ 36.00	20.91	≤ 21.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total AV Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)	30° EIRP (dBm)	30° EIRP Limit (dBm)
				Ant 0	Ant 1					
802.11be-EHT40	MCS0	3	5965	19.77	19.86	22.83	30.58	≤ 36.00	20.32	≤ 21.00
802.11be-EHT40	MCS0	51	6205	19.90	19.42	22.68	30.43	≤ 36.00	20.17	≤ 21.00
802.11be-EHT40	MCS0	91	6405	19.41	19.56	22.50	30.25	≤ 36.00	19.99	≤ 21.00
802.11be-EHT40	MCS0	123	6565	19.12	19.25	22.20	29.95	≤ 36.00	20.75	≤ 21.00
802.11be-EHT40	MCS0	147	6685	19.25	19.19	22.23	29.98	≤ 36.00	20.78	≤ 21.00
802.11be-EHT40	MCS0	179	6845	19.09	19.06	22.09	29.84	≤ 36.00	20.64	≤ 21.00
802.11be-EHT80	MCS0	7	5985	19.81	19.61	22.72	30.47	≤ 36.00	20.21	≤ 21.00
802.11be-EHT80	MCS0	55	6225	19.60	19.36	22.49	30.24	≤ 36.00	19.98	≤ 21.00
802.11be-EHT80	MCS0	87	6385	19.41	19.55	22.49	30.24	≤ 36.00	19.98	≤ 21.00
802.11be-EHT80	MCS0	135	6625	19.35	19.23	22.30	30.05	≤ 36.00	20.85	≤ 21.00
802.11be-EHT80	MCS0	151	6705	19.02	19.21	22.13	29.88	≤ 36.00	20.68	≤ 21.00
802.11be-EHT80	MCS0	167	6785	19.21	19.42	22.33	30.08	≤ 36.00	20.88	≤ 21.00
802.11be-EHT160	MCS0	15	6025	19.76	19.57	22.68	30.43	≤ 36.00	20.17	≤ 21.00
802.11be-EHT160	MCS0	47	6185	19.53	19.87	22.71	30.46	≤ 36.00	20.20	≤ 21.00
802.11be-EHT160	MCS0	79	6345	19.34	19.61	22.49	30.24	≤ 36.00	19.98	≤ 21.00
802.11be-EHT160	MCS0	143	6665	19.21	19.63	22.44	30.19	≤ 36.00	20.99	≤ 21.00
802.11be-EHT320-1	MCS0	31	6105	19.41	19.44	22.44	30.19	≤ 36.00	19.93	≤ 21.00
802.11be-EHT320-2	MCS0	63	6265	19.61	19.54	22.59	30.34	≤ 36.00	20.08	≤ 21.00

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

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

Note 3: 30° EIRP (dBm) = Total Average Power (dBm) + Antenna Gain above 30 degrees from the horizon (dBi).

A.4 Power Spectral Density Test Result

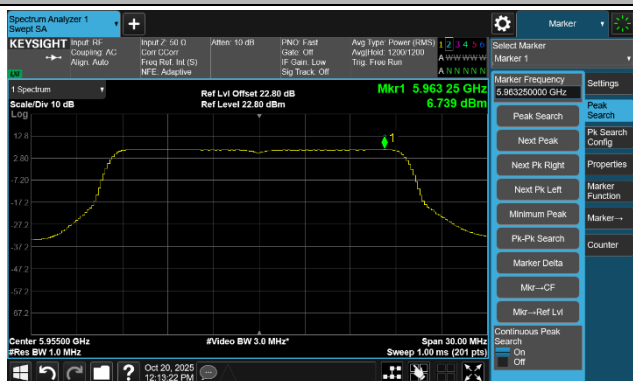
Test Site	SIP-TR2	Test Engineer	Nolan Chen
Test Date	2025-10-20		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Duty Cycle (%)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
				Ant 0	Ant 1			
802.11be-EHT20	MCS0	1	5955	6.739	7.262	96.52	17.922	≤ 23.00
802.11be-EHT20	MCS0	49	6195	7.174	6.895	96.52	17.951	≤ 23.00
802.11be-EHT20	MCS0	93	6415	6.979	7.402	96.52	18.110	≤ 23.00
802.11be-EHT20	MCS0	117	6535	6.617	6.952	96.52	17.702	≤ 23.00
802.11be-EHT20	MCS0	149	6695	6.211	6.189	96.52	17.114	≤ 23.00
802.11be-EHT20	MCS0	181	6855	6.887	6.806	96.52	17.761	≤ 23.00
802.11be-EHT40	MCS0	3	5965	4.313	4.693	96.78	15.410	≤ 23.00
802.11be-EHT40	MCS0	51	6205	4.598	3.629	96.78	15.043	≤ 23.00
802.11be-EHT40	MCS0	91	6405	3.920	4.009	96.78	14.867	≤ 23.00
802.11be-EHT40	MCS0	123	6565	3.359	3.536	96.78	14.351	≤ 23.00
802.11be-EHT40	MCS0	147	6685	3.307	3.332	96.78	14.222	≤ 23.00
802.11be-EHT40	MCS0	179	6845	3.458	3.237	96.78	14.251	≤ 23.00
802.11be-EHT80	MCS0	7	5985	0.749	1.175	97.18	11.852	≤ 23.00
802.11be-EHT80	MCS0	55	6225	1.564	0.727	97.18	12.050	≤ 23.00
802.11be-EHT80	MCS0	87	6385	0.808	0.864	97.18	11.721	≤ 23.00
802.11be-EHT80	MCS0	135	6625	0.309	0.422	97.18	11.250	≤ 23.00
802.11be-EHT80	MCS0	151	6705	0.575	0.606	97.18	11.475	≤ 23.00
802.11be-EHT80	MCS0	167	6785	0.873	1.043	97.18	11.843	≤ 23.00
802.11be-EHT160	MCS0	15	6025	0.171	-0.468	97.04	10.754	≤ 23.00
802.11be-EHT160	MCS0	47	6185	-0.985	-0.415	97.04	10.200	≤ 23.00
802.11be-EHT160	MCS0	79	6345	-1.389	-1.045	97.04	9.677	≤ 23.00
802.11be-EHT160	MCS0	143	6665	-2.172	-2.506	97.04	8.555	≤ 23.00
802.11be-EHT320-1	MCS0	31	6105	-3.459	-3.442	96.91	7.446	≤ 23.00
802.11be-EHT320-2	MCS0	63	6265	-4.017	-3.978	97.06	6.892	≤ 23.00

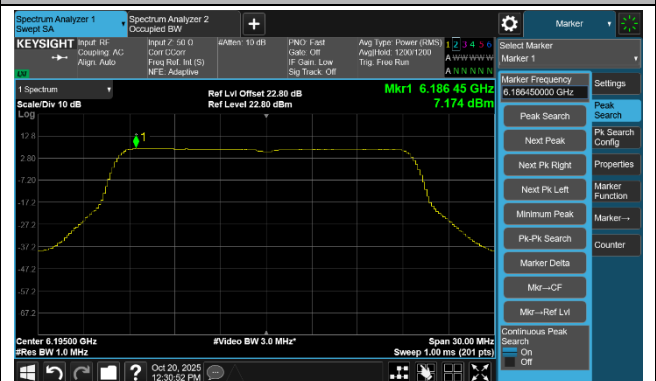
Note: When EUT duty cycle < 98%, EIRP PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$
(dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$ + Directional Gain for PSD (dBi).

802.11be-EHT20 Power Spectral Density- Ant 0

Channel 1 (5955 MHz)



Channel 49 (6195 MHz)



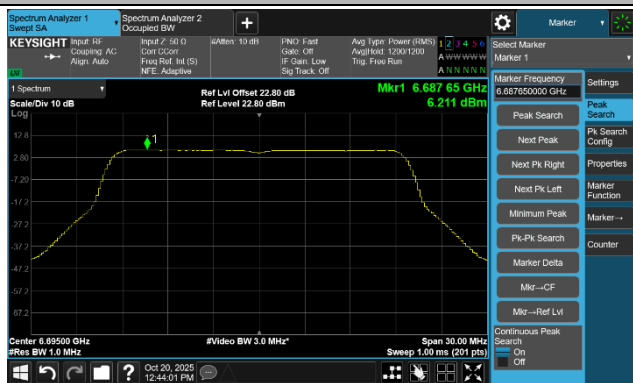
Channel 93 (6415 MHz)



Channel 117 (6535 MHz)



Channel 149 (6695 MHz)

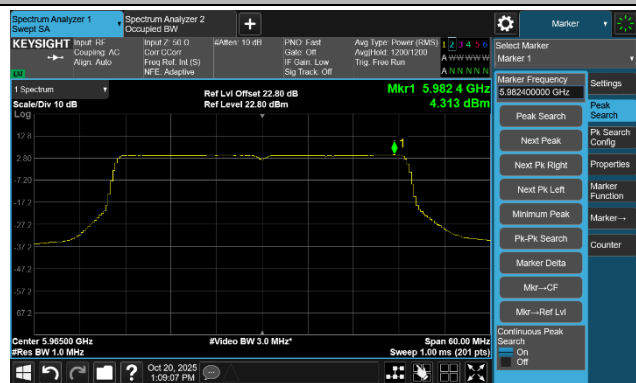


Channel 181 (6855 MHz)

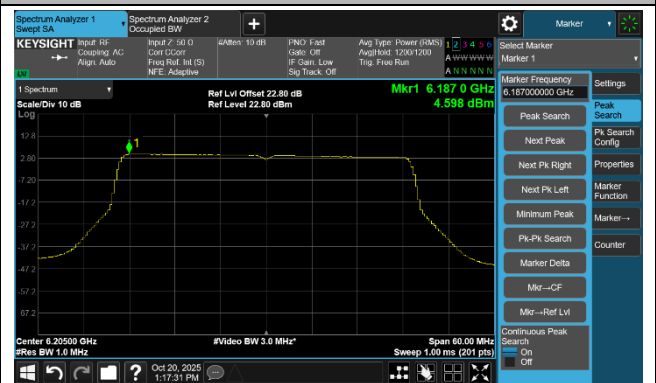


802.11be-EHT40 Power Spectral Density- Ant 0

Channel 3 (5965 MHz)



Channel 51 (6205 MHz)



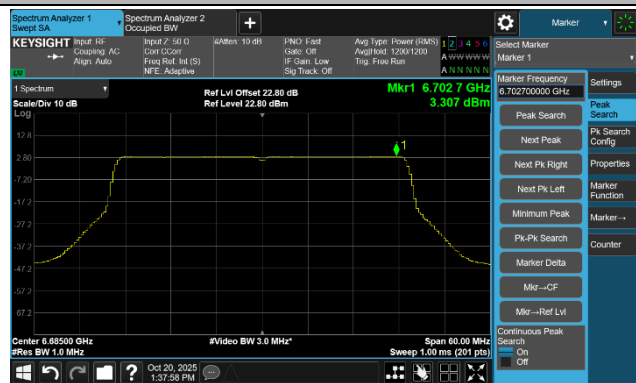
Channel 91 (6405 MHz)



Channel 123 (6565 MHz)



Channel 147 (6685 MHz)

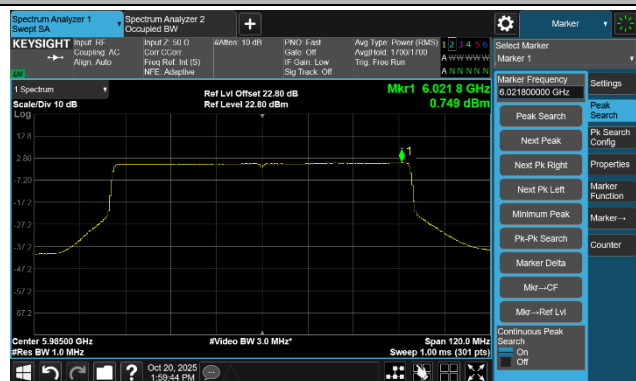


Channel 179 (6845 MHz)

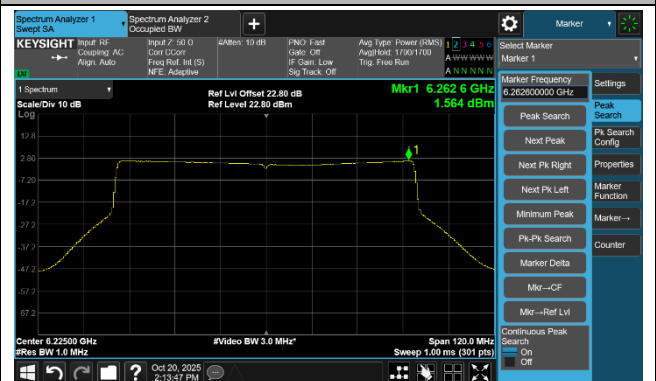


802.11be-EHT80 Power Spectral Density- Ant 0

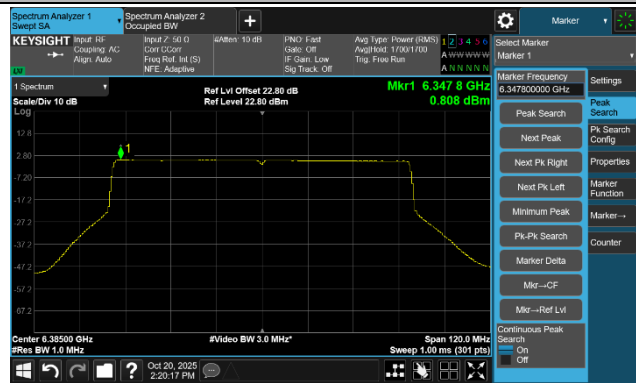
Channel 7 (5985 MHz)



Channel 55 (6225 MHz)



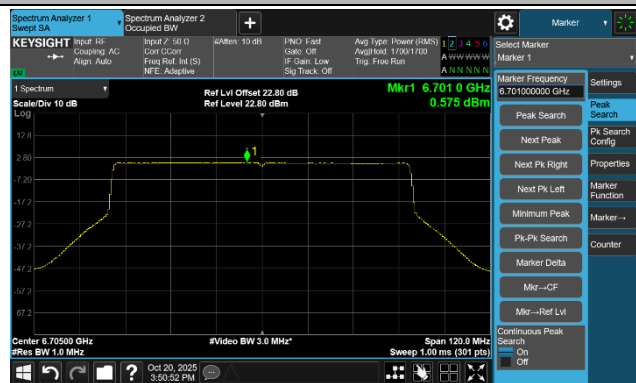
Channel 87 (6385 MHz)



Channel 135 (6625 MHz)



Channel 151 (6705 MHz)



Channel 167 (6785 MHz)

