

RF MEASUREMENT REPORT

FCC ID : 2AXJ4TXE70UH
Applicant : TP-Link Corporation Limited
Application Type : Certification
Product : AXE5400 Wi-Fi 6E High Gain Wireless USB Adapter
Model No. : Archer TXE70UH
Brand Name : tp-link
FCC Classification : 15E 6 GHz Low Power Indoor Client (6XD)
FCC Rule Part(s) : Part 15 Subpart E (Section 15.407)
Received Date : January 12, 2023
Test Date : January 16, 2023~ May 31, 2023

Tested By : Owen Tsai
(Owen Tsai)
Reviewed By : Paddy Chen
(Paddy Chen)
Approved By : Chenz Ker
(Chenz Ker)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB789033. Test results reported herein relate only to the item(s) tested.

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

Revision History

Report No.	Version	Description	Issue Date	Note
2301TW0105-U4	1.0	Original Report	2023-07-25	Invalid
2301TW0105-U4	2.0	Correct the frequency range of antennas	2023-08-19	Invalid
2301TW0105-U4	3.0	Add the verdict in section 6.2.5	2023-08-28	Valid

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General Information

Applicant	TP-Link Corporation Limited
Applicant Address	Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hongkong
Manufacturer	TP-Link Corporation Limited
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082
FCC Rule Part(s)	Part 15.407

Test Facility / Accreditations

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

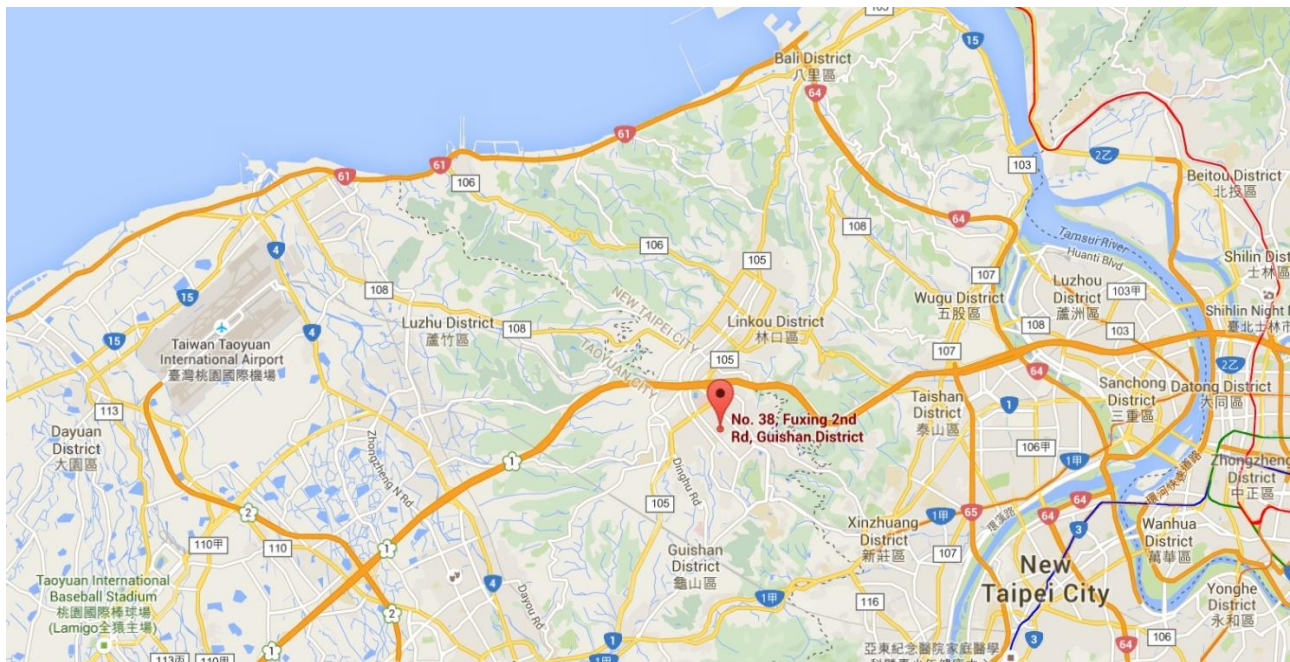
1. INTRODUCTION

1.1. Scope

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

1.2. MRT Test Location

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



2. Product Information

2.1. Equipment Description

Product Name	AXE5400 Wi-Fi 6E High Gain Wireless USB Adapter
Model No.	Archer TXE70UH
Brand Name	tp-link
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Power Supply	By USB

2.2. Radio Specification

Frequency Range	For 802.11ax-HE20: 5955 ~ 7115MHz For 802.11ax-HE40: 5965 ~ 7085MHz For 802.11ax-HE80: 5985 ~ 7025MHz For 802.11ax-HE160: 6025 ~ 6985MHz
Type of Modulation	802.11ax: OFDMA
Data Rate	802.11ax: up to 2402Mbps

Note: For other features of this EUT, test report will be issued separately.

2.3. Working Frequencies

802.11ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
97	6435 MHz	101	6455 MHz	105	6475 MHz
109	5495 MHz	113	6515 MHz	117	6535 MHz
121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz
145	6675 MHz	149	6695 MHz	153	6715 MHz
157	6735 MHz	161	6755 MHz	165	6775 MHz
169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	189	6895 MHz
193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz
229	7095 MHz	233	7115 MHz	--	--

802.11ax-HE40

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

195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz	--	--

802.11ax-HE80

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

802.11ax-HE160

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

2.4. Antenna Details

Antenna Type	Frequency Band (MHz)	T _x Paths	Number of spatial streams	Antenna Gain (dBi)		CDD Directional Gain (dBi)	
				Ant 1	Ant 2	For Power	For PSD
Antenna appearance #1							
Dipole	2412 ~ 2462	2	1	2.00	2.00	2.00	5.01
	5150 ~ 5850	2	1	2.00	2.00	2.00	5.01
	5925 ~ 7125	2	1	2.00	2.00	2.00	5.01
		2	2	2.00	2.00	2.00	2.00
Antenna appearance #2							
Dipole	2412 ~ 2462	2	1	1.80	2.00	2.00	5.01
	5150 ~ 5850	2	1	1.77	2.00	2.00	5.01
	5925 ~ 7125	2	1	1.88	2.00	2.00	5.01
		2	2	1.88	2.00	2.00	2.00

Remark:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log (N_{ANT}/ N_{SS}) dB;

- For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB for N_{ANT} ≤ 4;

2. The information as above is from the antenna specifications.

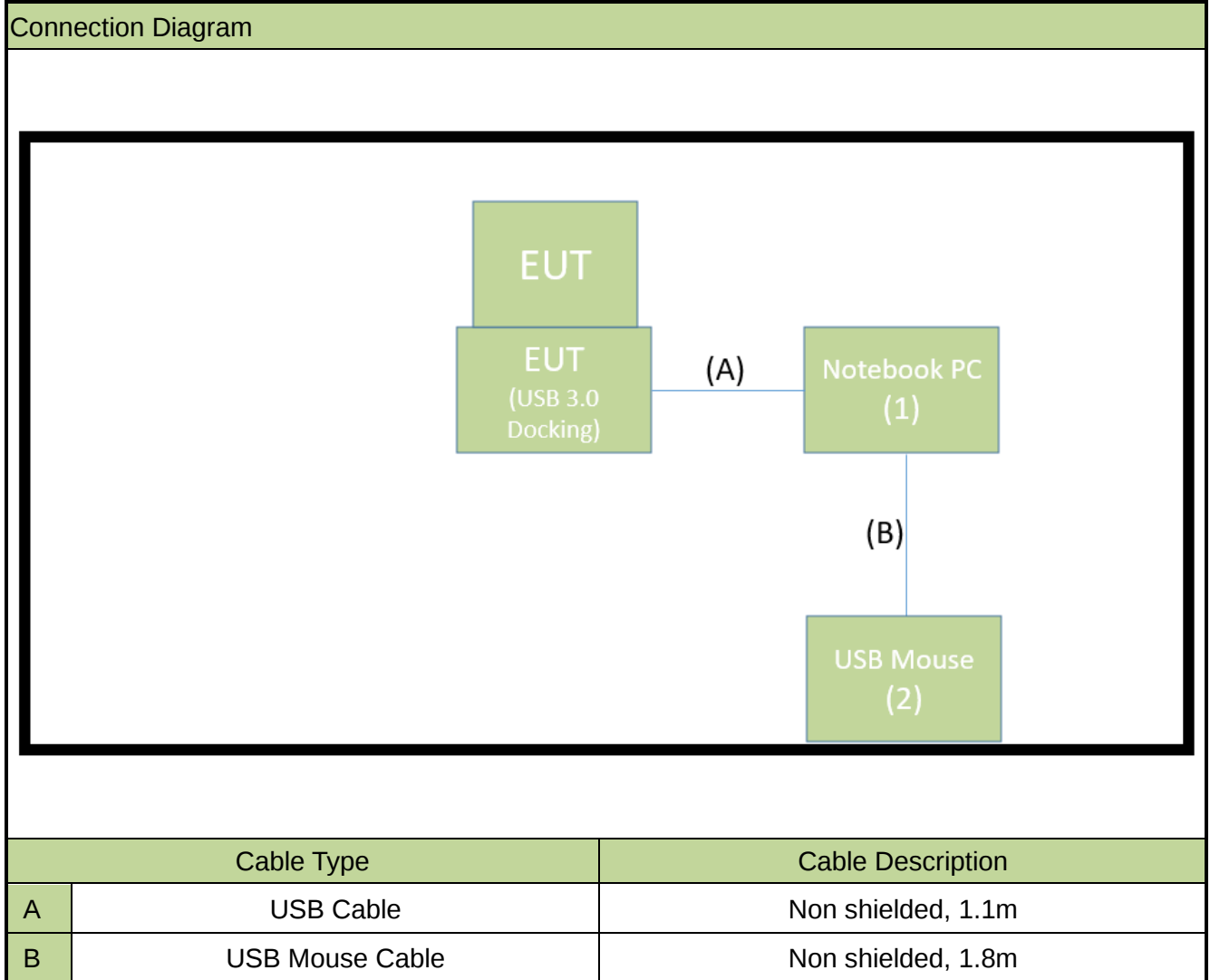
3. Device has two antenna appearances, the antennas have the different antenna gain, details refer to the antenna specification and internal photograph.

2.5. Test Mode

CDD Mode
Mode 1: Transmit by 802.11ax-HE20_Nss=1 (MCS0) (CDD mode)
Mode 2: Transmit by 802.11ax-HE40_Nss=1 (MCS0) (CDD mode)
Mode 3: Transmit by 802.11ax-HE80_Nss=1 (MCS0) (CDD mode)
Mode 4: Transmit by 802.11ax-HE160_Nss=1 (MCS0) (CDD mode)
Mode 5: Transmit by 802.11ax-HE20_Nss=2 (MCS0) (CDD mode)
Mode 6: Transmit by 802.11ax-HE40_Nss=2 (MCS0) (CDD mode)
Mode 7: Transmit by 802.11ax-HE80_Nss=2 (MCS0) (CDD mode)
Mode 8: Transmit by 802.11ax-HE160_Nss=2 (MCS0) (CDD mode)
Remark: 1. For Radiated emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power. 2. As Designated by manufacturer, the lowest data rate was the worst condition, so all the tests were done with lowest data rate. 3. EUT supports one configuration only in 802.11ax full RU mode. 4. Antenna appearance #1 was selected for testing except CBP item, and another one only was verified the worst case mode.

2.6. Test System Connection Diagram

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



2.7. Test System Details

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	Lenovo	20Y7-006KTW	N/A	Non-Shielded, 0.8m
2	USB Mouse	Logitech	M90	N/A	N/A

2.8. Test Software

The test utility software used during testing was “RTL8852C_USB_MP_Package_ALPHA”, the version is ver2.0.20.

Note: Different antenna has the same power setting, final power setting please refer to operational description.

2.9. Applied Standards

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

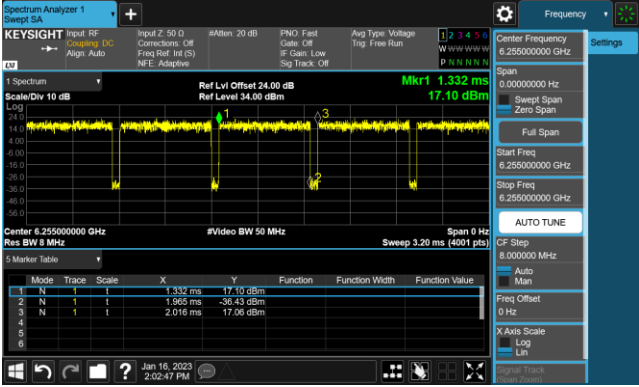
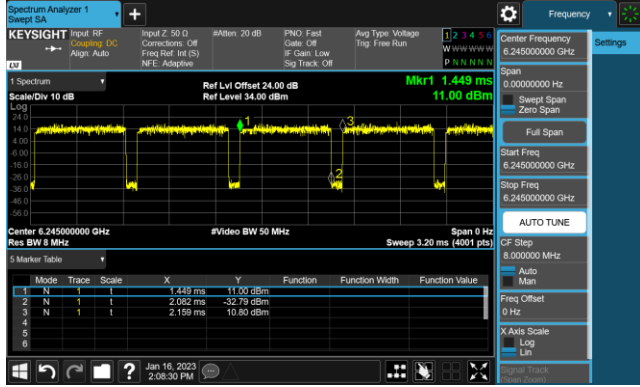
- ANSI C63.10-2013
- FCC KDB 789033 D02v02r01
- FCC KDB 987594 D02v01
- FCC KDB 662911 D01v02r01
- FCC KDB 414788 D01v01r01
- FCC KDB 412172 D01v01r01

2.10. Duty Cycle

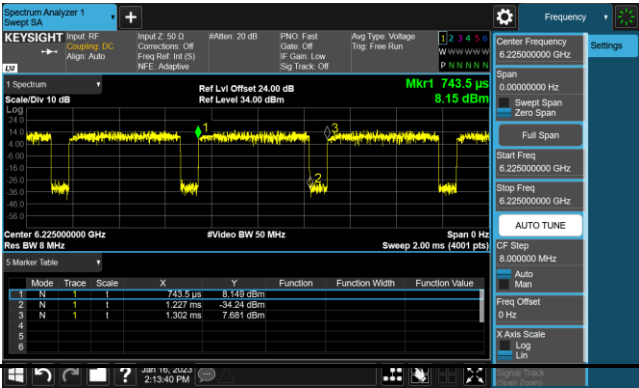
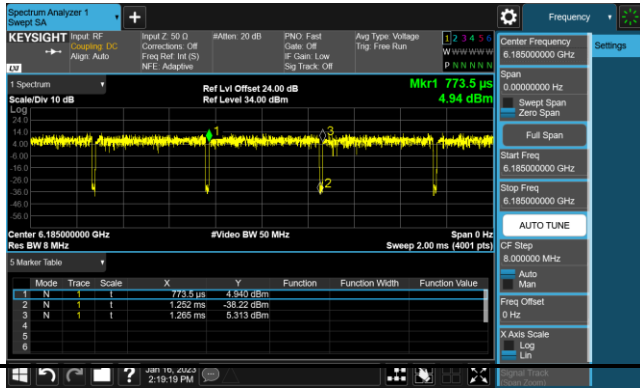
The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
802.11ax-HE20	92.65%
802.11ax-HE40	89.15%
802.11ax-HE80	86.57%
802.11ax-HE160	97.36%

Duty Cycle	
802.11ax-HE20	802.11ax-HE40

802.11ax-HE80	802.11ax-HE160
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2.11. Test Environment Condition

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

Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Two-Line V-Network	R&S	ENV216	MRTTWA00019	1 year	2024/3/7
Two-Line V-Network	R&S	ENV216	MRTTWA00020	1 year	2024/4/17
EMI Test Receiver	R&S	ESR3	MRTTWA00045	1 year	2024/5/10
DIVA PLUS Funk-Wetterstation	TFA	35.1083	MRTTWA00050	1 year	2024/6/15

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2024/5/22
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2023/12/21
Broadband Hornantenna	RFSPIN	DRH18-E	MRTTWA00087	1 year	2024/5/17
Broadband Preamplifier	EMC Instruments corporation	EMC118A45SE	MRTTWA00088	1 year	2024/5/17
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2024/3/20
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2024/3/27
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2024/3/8
Signal Analyzer	R&S	FSVA3044	MRTTWA00092	1 year	2023/7/23
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00034	1 year	2024/6/26
Cable	HUBERSUHNER	EMC105-NM-N M-3000	MRTTWE00035	1 year	2024/6/26
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00032	1 year	2024/6/4

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	1 year	2024/4/19
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2023/10/5
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2023/7/19
Attenuator	WTI	218FS-20	MRTTWE00026	1 year	2023/11/2
Attenuator	WTI	218FS-10	MRTTWE00027	1 year	2024/6/15
Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2024/6/11
DIVA PLUS Funk-Wetterstation	TFA	35.1083	MRTTWA00050	1 year	2024/6/15

Software	Version	Function
e3	9.160520a	EMI Test Software

5. 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
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 150kHz~30MHz: $\pm 2.53\text{dB}$
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz ~ 1GHz: $\pm 4.25\text{dB}$ 1GHz ~ 40GHz: $\pm 4.45\text{dB}$
Conducted Power (Carrier Power / Power Density)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.84\text{dB}$
Conducted Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 2.65\text{ dB}$
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 3.3\%$
Temp. / Humidity
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.82^\circ\text{C} / \pm 3\%$
Frequency Error
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 78.4\text{Hz}$

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(10)	Channel Bandwidth	Conducted	Pass
15.407(a)(8)	Maximum Equivalent Isotropically Radiated Power (E.I.R.P)		Pass
15.407(a)(8)	Peak Power Spectral Density (E.I.R.P)		Pass
15.407(b)(6)	In-Band Emission		Pass
15.407(d)(6)	Contention-Based Protocol		Pass
15.407(b)(5)	Unwanted Emissions		Pass
15.407(b)(8), (9), (10)	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	Pass

Remark:

- Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.
- 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.
- For radiated emission test, the test results shown in the following sections represent the worst-case emissions.

6.2. Channel Bandwidth

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 used

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

KDB 789033 D02v02r01- Section D (99% Bandwidth)

6.2.3. Test Setting

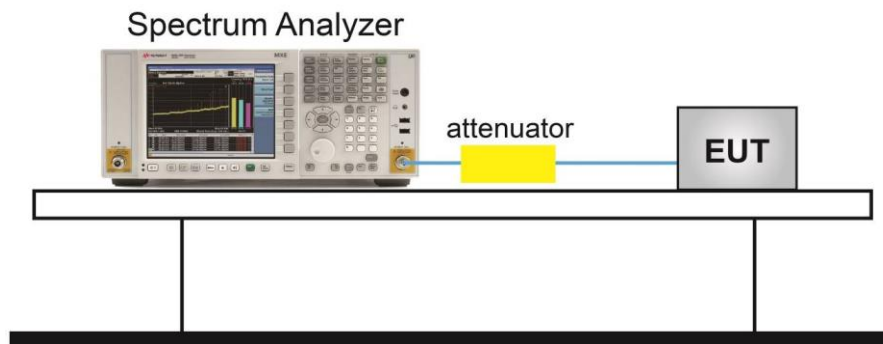
26dB Bandwidth

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 26$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediated power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold.

99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1% to 5% of the OBW
4. Set VBW $\geq 3 \times$ RBW
5. Detector = Peak.
6. Use the 99% power bandwidth function of the instrument.

6.2.4. Test Setup



6.2.5. Test Result

Test Site	SR5	Test Engineer	Marvin
Test Date	2023/03/14~2023/03/29		

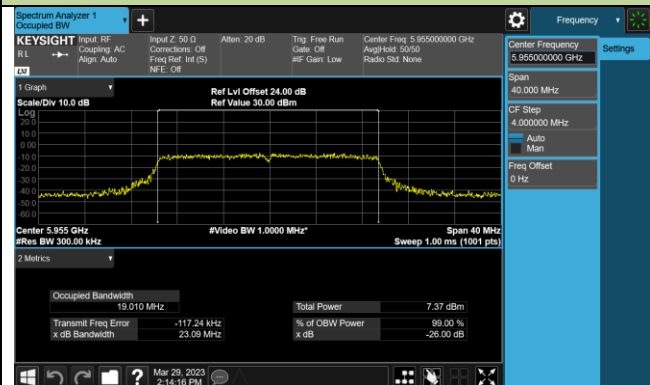
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Result
802.11ax-HE20	MCS0	1	5955	23.090	19.010	Pass
802.11ax-HE20	MCS0	33	6115	22.540	19.028	Pass
802.11ax-HE20	MCS0	93	6415	23.460	19.044	Pass
802.11ax-HE20	MCS0	97	6435	23.490	19.002	Pass
802.11ax-HE20	MCS0	105	6475	23.070	19.028	Pass
802.11ax-HE20	MCS0	113	6515	24.070	19.016	Pass
802.11ax-HE20	MCS0	117	6535	23.660	19.021	Pass
802.11ax-HE20	MCS0	149	6695	22.940	18.986	Pass
802.11ax-HE20	MCS0	181	6855	23.820	19.042	Pass
802.11ax-HE20	MCS0	185	6875	23.020	19.023	Pass
802.11ax-HE20	MCS0	189	6895	24.060	18.992	Pass
802.11ax-HE20	MCS0	213	7015	24.370	19.007	Pass
802.11ax-HE20	MCS0	233	7115	22.780	18.998	Pass
802.11ax-HE40	MCS0	3	5965	44.120	38.038	Pass
802.11ax-HE40	MCS0	43	6165	43.410	37.958	Pass
802.11ax-HE40	MCS0	91	6405	42.970	38.002	Pass
802.11ax-HE40	MCS0	99	6445	43.160	37.999	Pass
802.11ax-HE40	MCS0	107	6485	43.020	37.995	Pass
802.11ax-HE40	MCS0	115	6525	43.070	37.947	Pass
802.11ax-HE40	MCS0	123	6565	42.340	38.036	Pass
802.11ax-HE40	MCS0	147	6685	43.120	37.987	Pass
802.11ax-HE40	MCS0	179	6845	44.070	38.026	Pass
802.11ax-HE40	MCS0	187	6885	43.620	38.007	Pass
802.11ax-HE40	MCS0	195	6925	43.480	38.004	Pass
802.11ax-HE40	MCS0	211	7005	43.010	38.074	Pass
802.11ax-HE40	MCS0	227	7085	43.300	38.017	Pass

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Result
802.11ax-HE80	MCS0	7	5985	80.970	77.240	Pass
802.11ax-HE80	MCS0	39	6145	80.530	77.328	Pass
802.11ax-HE80	MCS0	87	6385	80.360	77.291	Pass
802.11ax-HE80	MCS0	103	6465	80.910	77.315	Pass
802.11ax-HE80	MCS0	119	6545	80.470	77.233	Pass
802.11ax-HE80	MCS0	135	6625	80.530	77.230	Pass
802.11ax-HE80	MCS0	151	6705	80.410	77.392	Pass
802.11ax-HE80	MCS0	183	6865	81.670	77.223	Pass
802.11ax-HE80	MCS0	199	6945	80.660	77.480	Pass
802.11ax-HE80	MCS0	215	7025	80.620	77.193	Pass
802.11ax-HE160	MCS0	15	6025	162.300	156.700	Pass
802.11ax-HE160	MCS0	79	6345	162.400	156.890	Pass
802.11ax-HE160	MCS0	111	6505	287.800	157.220	Pass
802.11ax-HE160	MCS0	143	6665	162.800	156.920	Pass
802.11ax-HE160	MCS0	175	6825	162.800	156.920	Pass
802.11ax-HE160	MCS0	207	6985	297.500	158.030	Pass

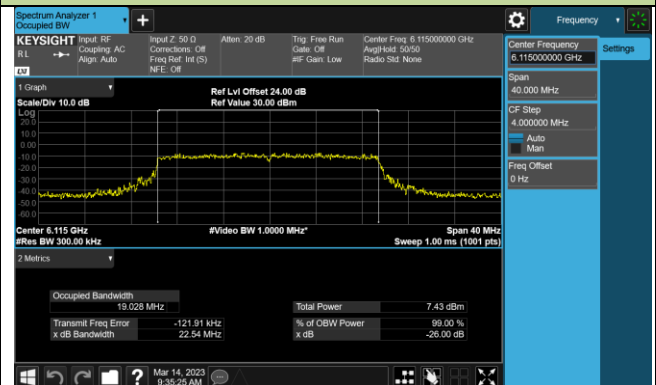
Note: The 99% BW measurement can be used for the 320 MHz mode.

802.11ax-HE20 26dB Bandwidth & 99% Bandwidth

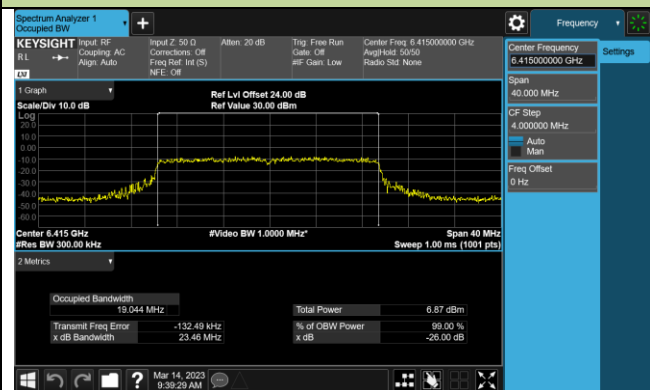
Channel 1 (5955MHz)



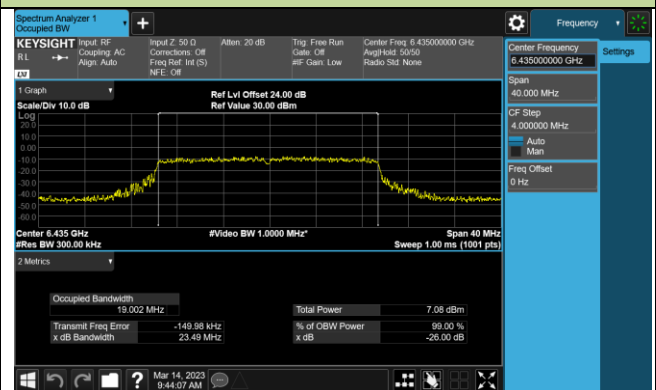
Channel 33 (6115MHz)



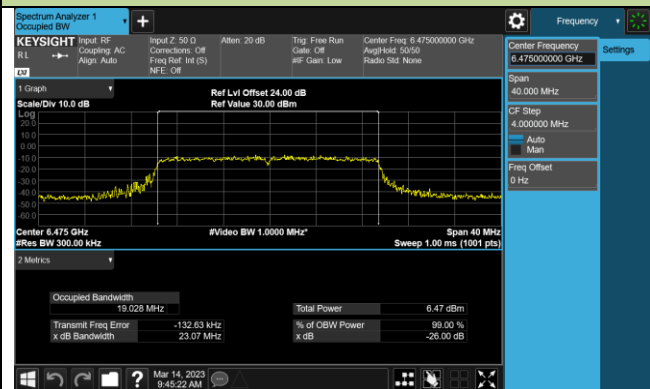
Channel 93 (6415MHz)



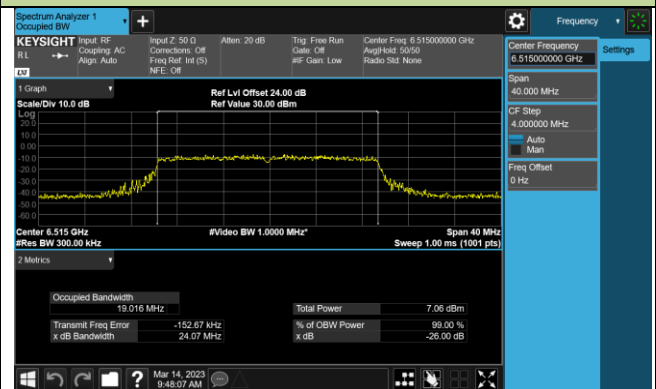
Channel 97 (6435MHz)



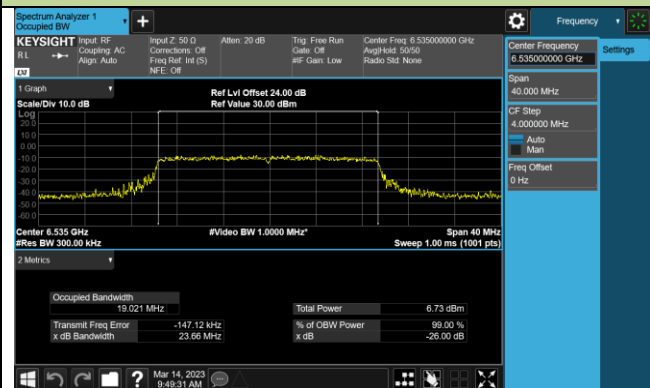
Channel 105 (6475MHz)



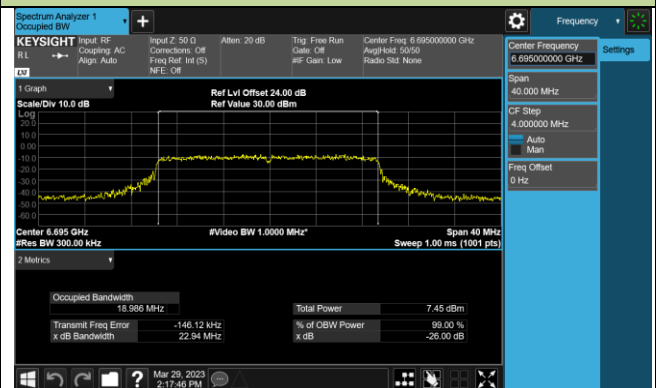
Channel 113 (6515MHz)



Channel 117 (6535MHz)

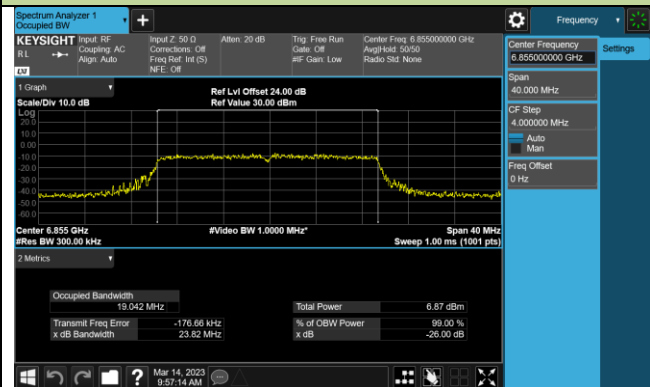


Channel 149 (6695MHz)

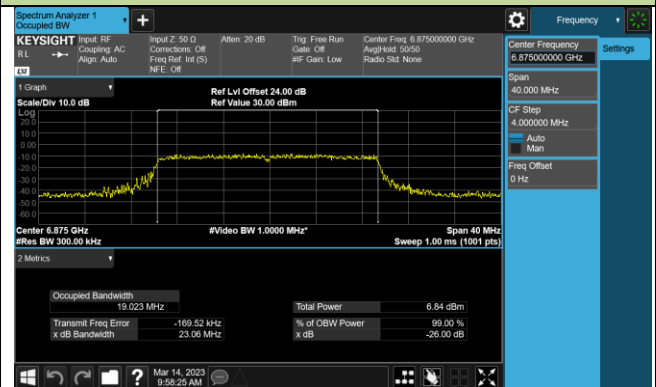


802.11ax-HE20 26dB Bandwidth & 99% Bandwidth

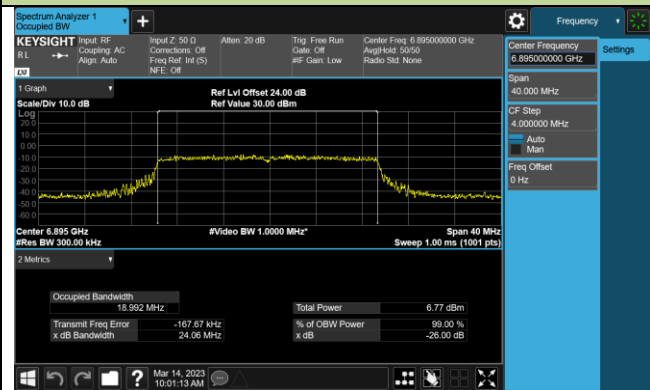
Channel 181 (6855MHz)



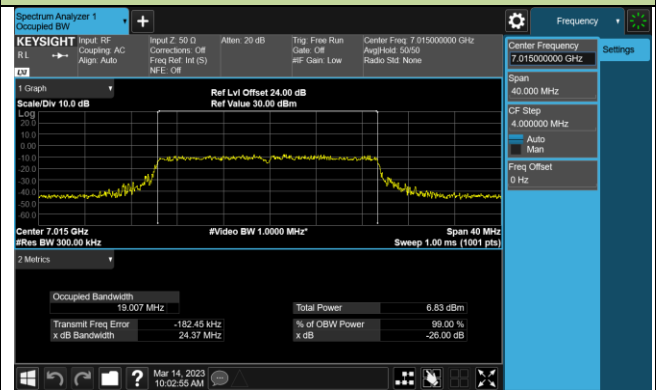
Channel 185 (6875MHz)



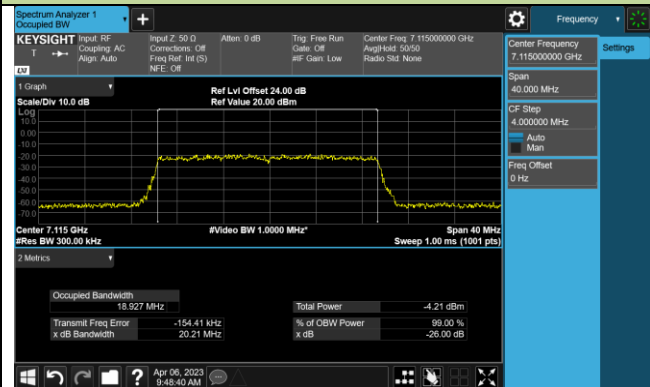
Channel 189 (6895MHz)



Channel 213 (7015MHz)

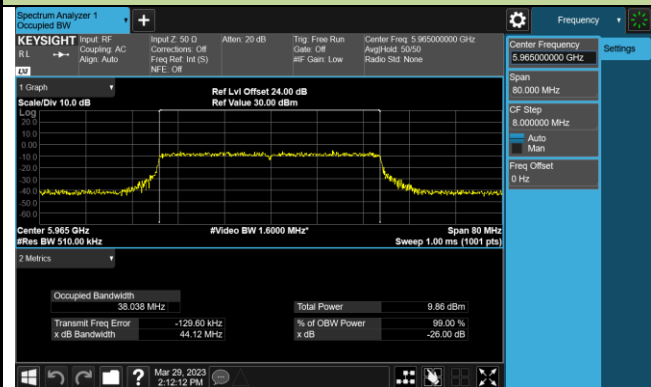


Channel 233 (7115MHz)

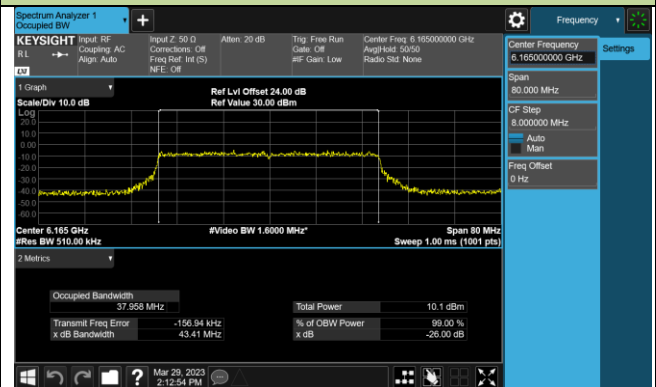


802.11ax-HE40 26dB Bandwidth & 99% Bandwidth

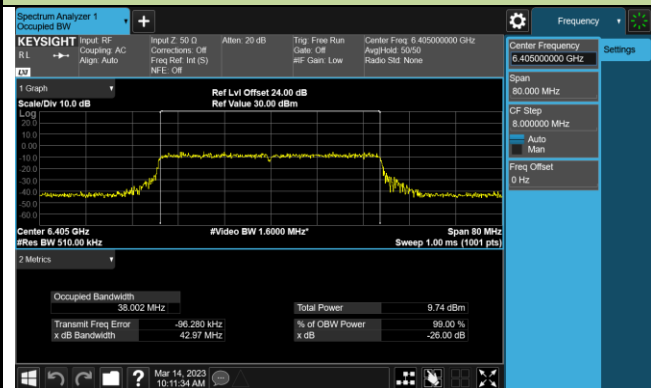
Channel 3 (5965MHz)



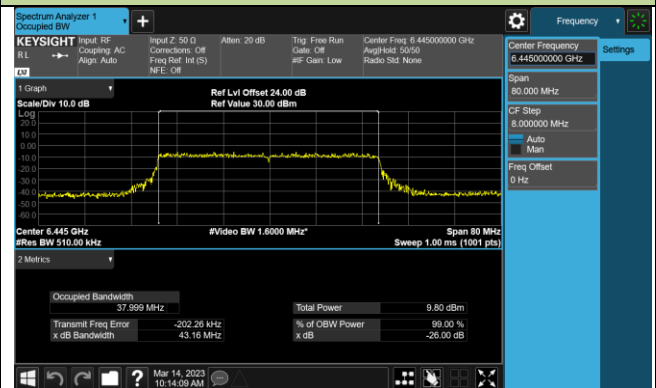
Channel 43 (6165MHz)



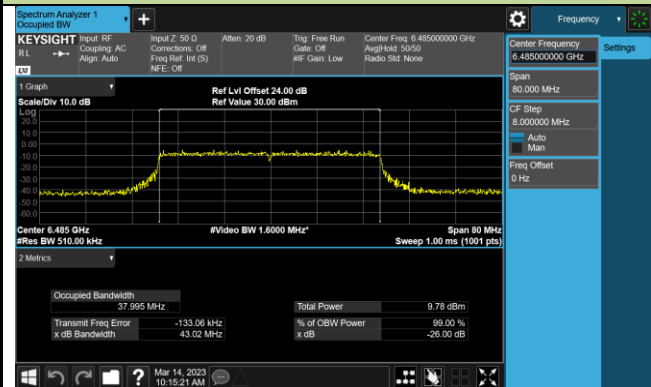
Channel 91 (6405MHz)



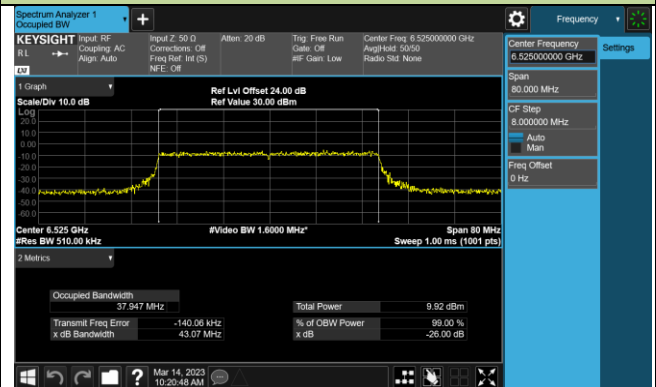
Channel 99 (6445MHz)



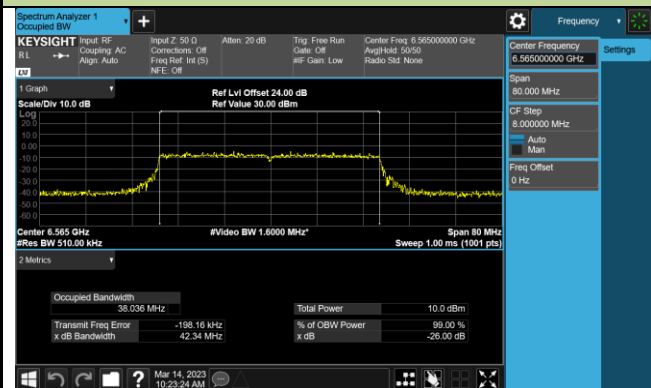
Channel 107 (6485MHz)



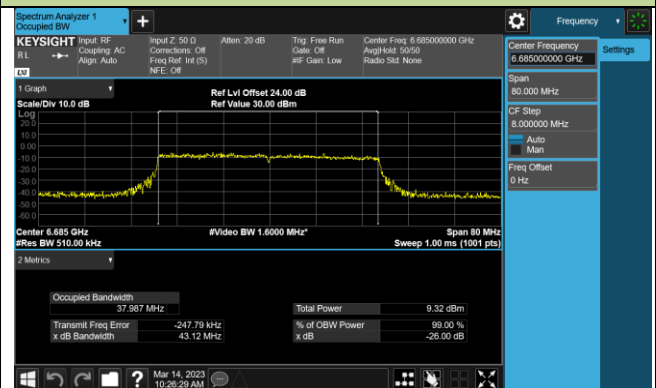
Channel 115 (6525MHz)



Channel 123 (6565MHz)

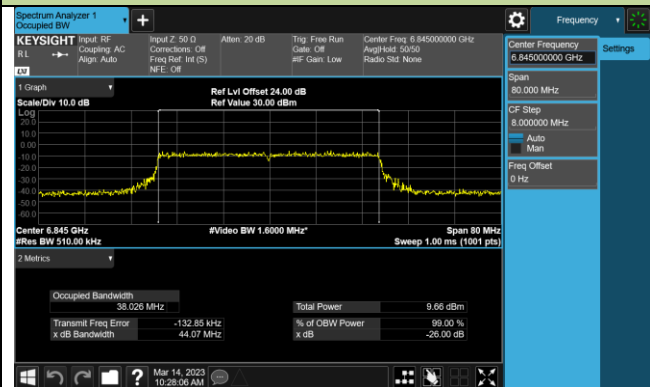


Channel 147 (6685MHz)

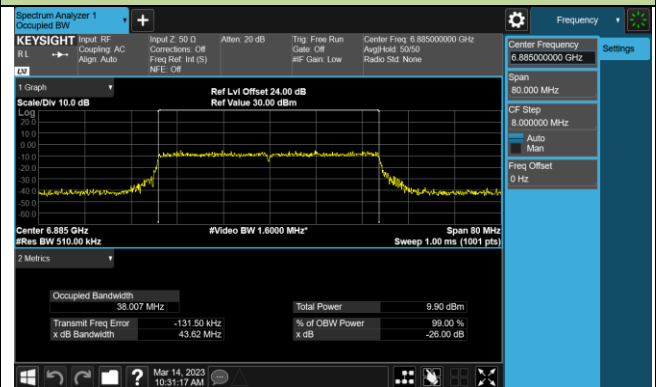


802.11ax-HE40 26dB Bandwidth & 99% Bandwidth

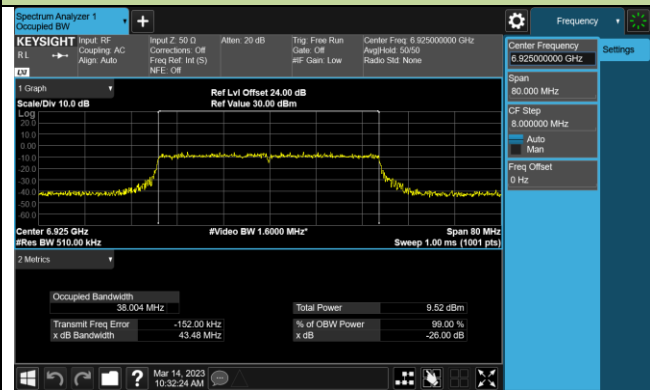
Channel 179 (6845MHz)



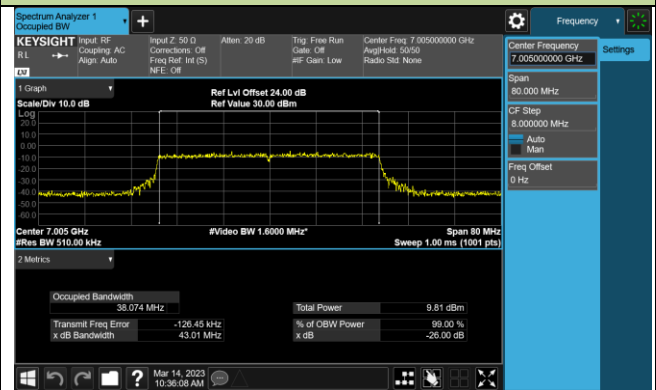
Channel 187 (6885MHz)



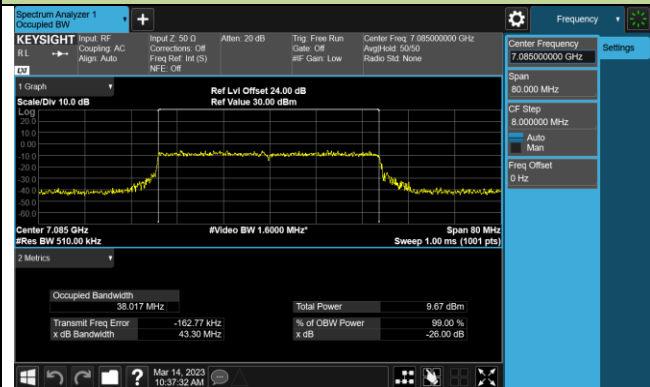
Channel 195 (6925MHz)



Channel 211 (7005MHz)

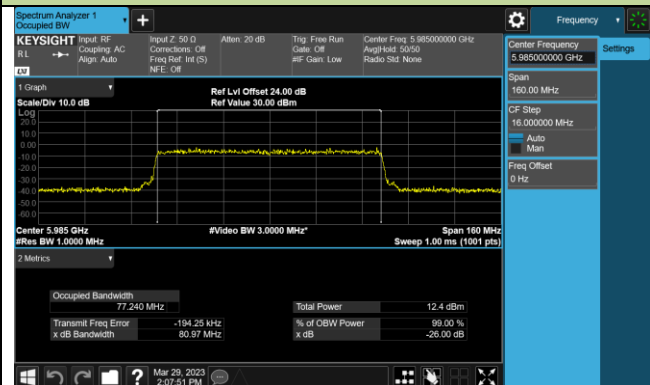


Channel 227 (7085MHz)

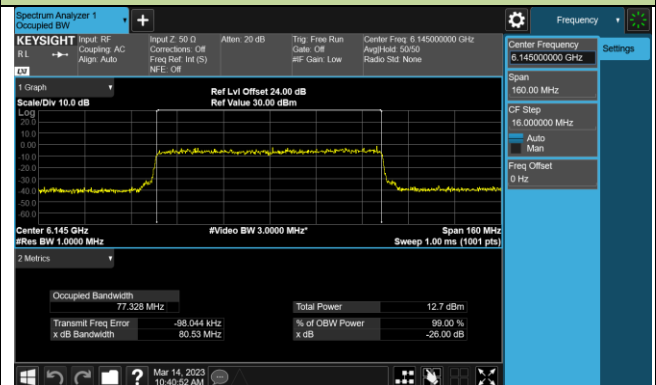


802.11ax-HE80 26dB Bandwidth & 99% Bandwidth

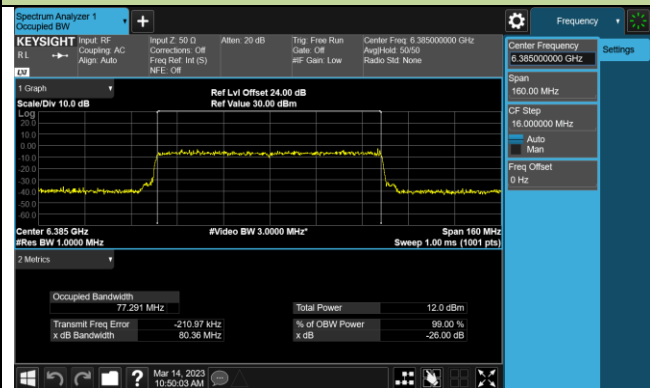
Channel 7 (5985MHz)



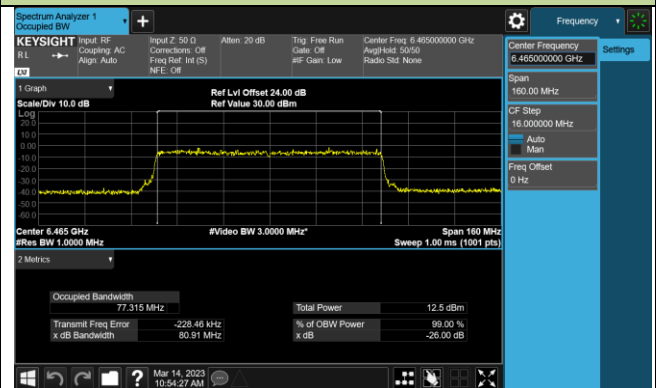
Channel 39 (6145MHz)



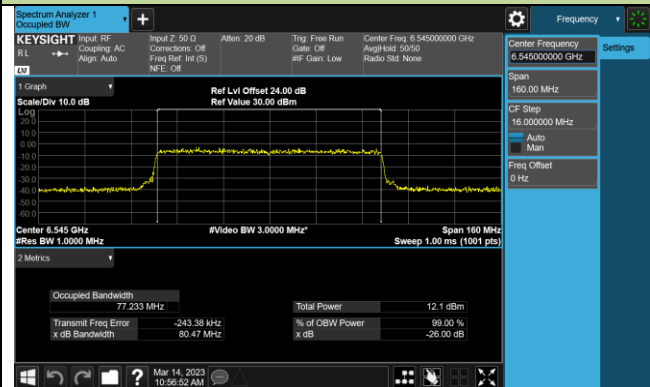
Channel 87 (6385MHz)



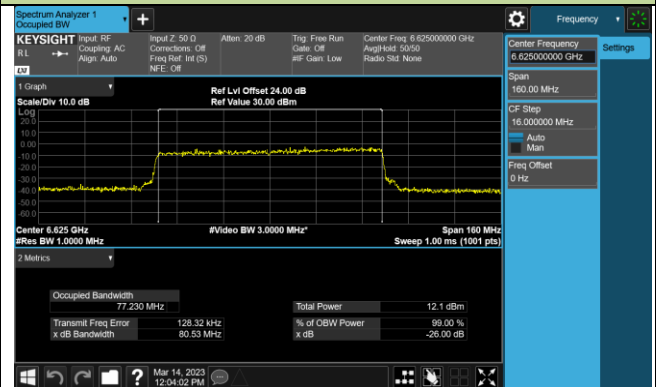
Channel 103 (6465MHz)



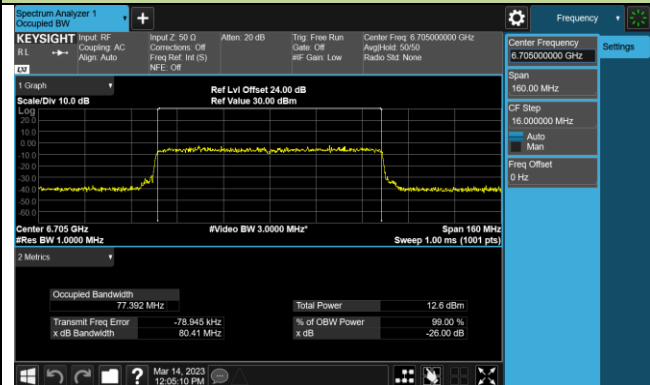
Channel 119 (6545MHz)



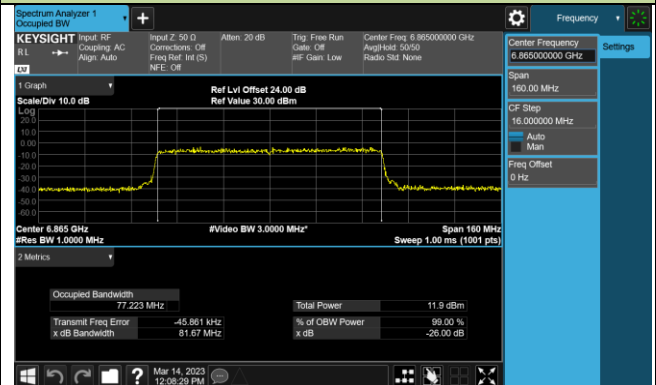
Channel 135 (6625MHz)

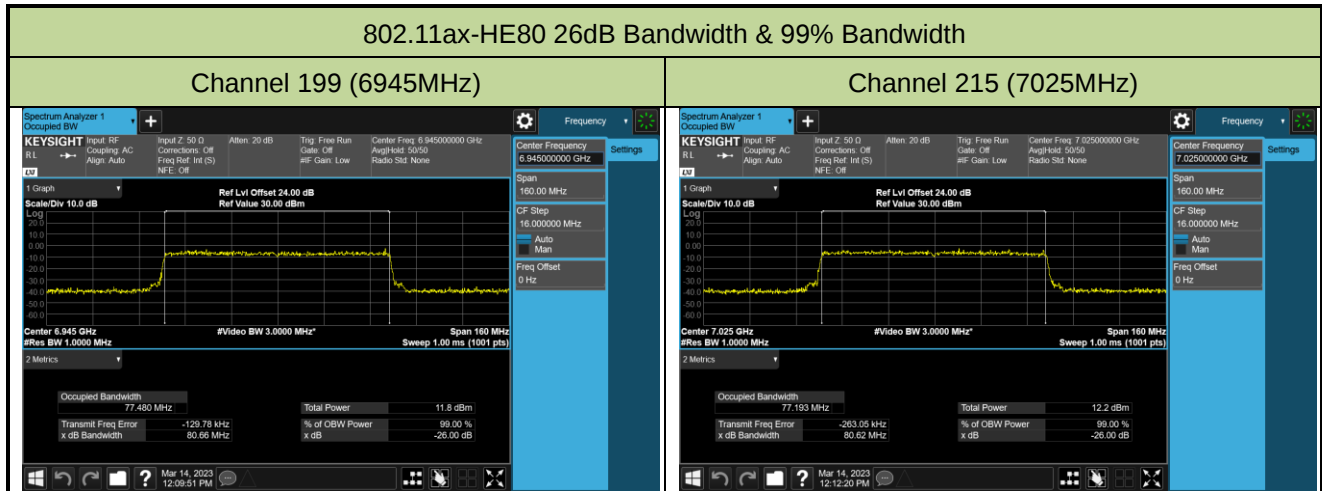


Channel 151 (6705MHz)



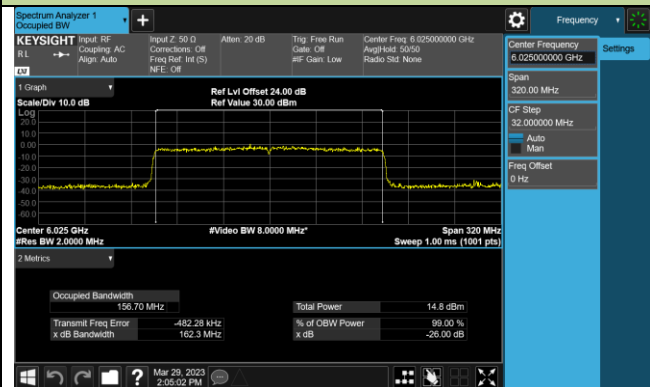
Channel 183 (6865MHz)



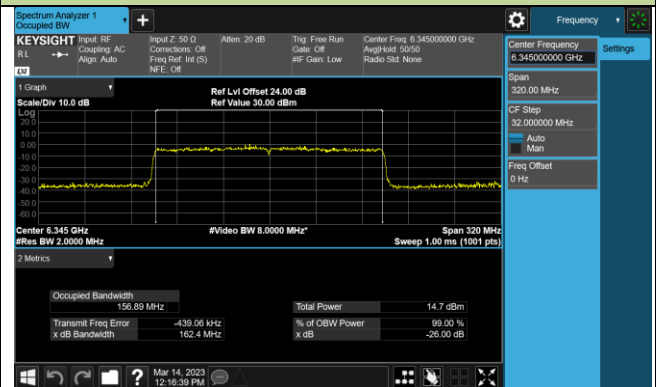


802.11ax-HE160 26dB Bandwidth & 99% Bandwidth

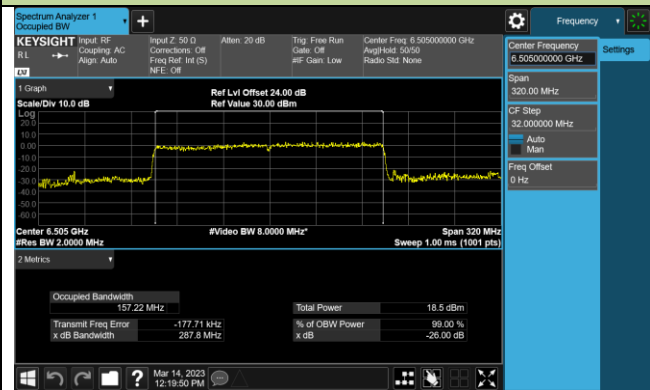
Channel 15 (6025MHz)



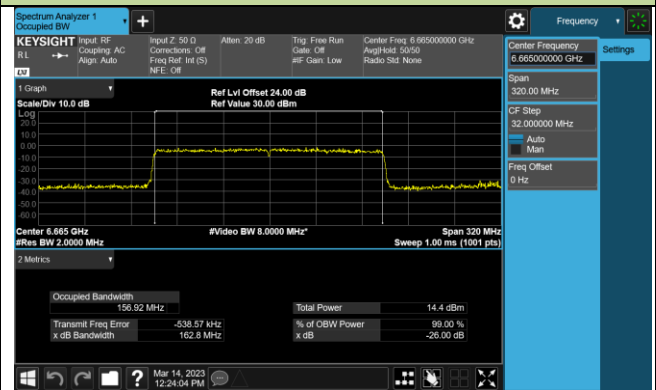
Channel 79 (6345MHz)



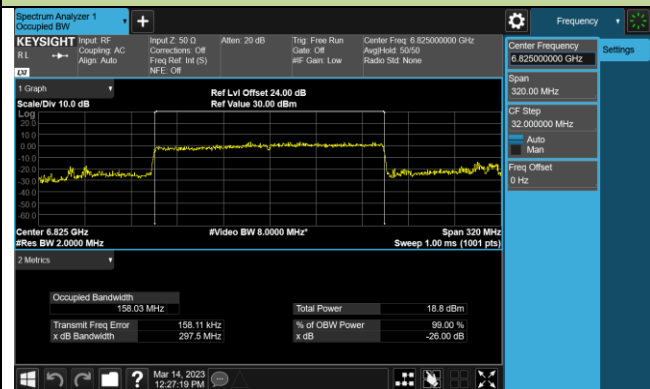
Channel 111 (6505MHz)



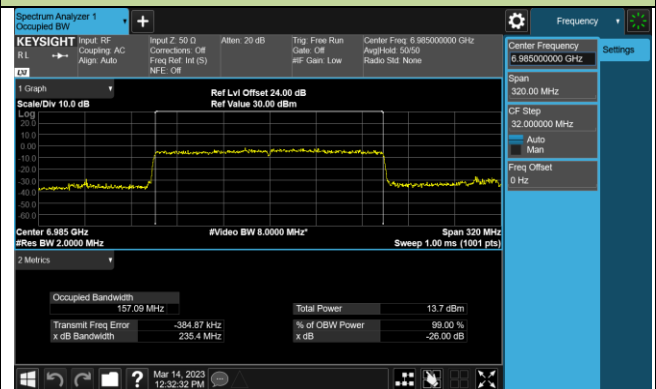
Channel 143 (6665MHz)



Channel 175 (6825MHz)



Channel 207 (6985MHz)



6.3. Output Power

6.3.1. Test Limit

For client devices operating under the control of an indoor access point in the 5.925–7.125 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

6.3.2. Test Procedure Used

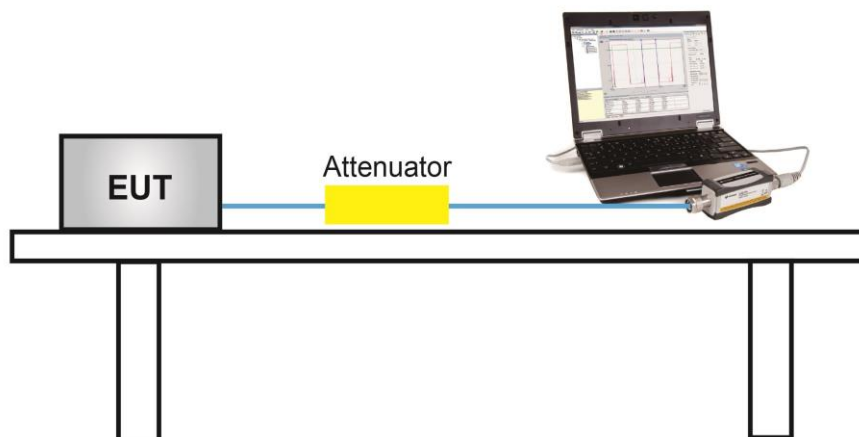
KDB 789033D02v02r01- Section E)3)b) Method PM-G

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

Test Site	SR5	Test Engineer	Marvin
Test Date	2023/03/16		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)
				Ant 1	Ant 2				
CDD Mode (Nss = 1)									
11ax-HE20	MCS0	1	5955	3.03	3.31	6.18	2.00	8.18	≤ 24.00
11ax-HE20	MCS0	33	6115	3.32	3.10	6.22	2.00	8.22	≤ 24.00
11ax-HE20	MCS0	93	6415	2.12	2.82	5.49	2.00	7.49	≤ 24.00
11ax-HE20	MCS0	97	6435	2.57	2.49	5.54	2.00	7.54	≤ 24.00
11ax-HE20	MCS0	105	6475	3.17	3.24	6.22	2.00	8.22	≤ 24.00
11ax-HE20	MCS0	113	6515	3.41	3.21	6.32	2.00	8.32	≤ 24.00
11ax-HE20	MCS0	117	6535	3.40	3.32	6.37	2.00	8.37	≤ 24.00
11ax-HE20	MCS0	149	6695	2.93	3.08	6.02	2.00	8.02	≤ 24.00
11ax-HE20	MCS0	181	6855	3.03	3.40	6.23	2.00	8.23	≤ 24.00
11ax-HE20	MCS0	185	6875	3.30	3.35	6.34	2.00	8.34	≤ 24.00
11ax-HE20	MCS0	189	6895	3.29	3.15	6.23	2.00	8.23	≤ 24.00
11ax-HE20	MCS0	213	7015	3.43	3.72	6.59	2.00	8.59	≤ 24.00
11ax-HE20	MCS0	233	7115	-9.01	-8.63	-5.81	2.00	-3.81	≤ 24.00
11ax-HE40	MCS0	3	5965	5.34	6.15	8.77	2.00	10.77	≤ 24.00
11ax-HE40	MCS0	43	6165	6.04	5.82	8.94	2.00	10.94	≤ 24.00
11ax-HE40	MCS0	91	6405	5.95	5.93	8.95	2.00	10.95	≤ 24.00
11ax-HE40	MCS0	99	6445	5.64	5.51	8.59	2.00	10.59	≤ 24.00
11ax-HE40	MCS0	107	6485	5.67	5.74	8.72	2.00	10.72	≤ 24.00
11ax-HE40	MCS0	115	6525	5.82	5.98	8.91	2.00	10.91	≤ 24.00
11ax-HE40	MCS0	123	6565	6.61	6.41	9.52	2.00	11.52	≤ 24.00
11ax-HE40	MCS0	147	6685	6.25	6.77	9.53	2.00	11.53	≤ 24.00
11ax-HE40	MCS0	179	6845	6.19	6.36	9.29	2.00	11.29	≤ 24.00
11ax-HE40	MCS0	187	6885	6.32	6.39	9.37	2.00	11.37	≤ 24.00
11ax-HE40	MCS0	195	6925	6.19	6.42	9.32	2.00	11.32	≤ 24.00
11ax-HE40	MCS0	211	7005	6.18	6.51	9.36	2.00	11.36	≤ 24.00
11ax-HE40	MCS0	227	7085	6.18	5.84	9.02	2.00	11.02	≤ 24.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)
				Ant 1	Ant 2				
CDD Mode (Nss = 1)									
11ax-HE80	MCS0	7	5985	8.39	8.59	11.50	2.00	13.50	≤ 24.00
11ax-HE80	MCS0	39	6145	9.11	8.51	11.83	2.00	13.83	≤ 24.00
11ax-HE80	MCS0	87	6385	8.58	8.33	11.47	2.00	13.47	≤ 24.00
11ax-HE80	MCS0	103	6465	8.86	8.52	11.70	2.00	13.70	≤ 24.00
11ax-HE80	MCS0	119	6545	8.69	8.47	11.59	2.00	13.59	≤ 24.00
11ax-HE80	MCS0	135	6625	8.85	8.89	11.88	2.00	13.88	≤ 24.00
11ax-HE80	MCS0	151	6705	9.25	9.29	12.28	2.00	14.28	≤ 24.00
11ax-HE80	MCS0	183	6865	8.61	8.32	11.48	2.00	13.48	≤ 24.00
11ax-HE80	MCS0	199	6945	8.84	8.68	11.77	2.00	13.77	≤ 24.00
11ax-HE80	MCS0	215	7025	9.31	9.13	12.23	2.00	14.23	≤ 24.00
11ax-HE160	MCS0	15	6025	11.74	11.66	14.71	2.00	16.71	≤ 24.00
11ax-HE160	MCS0	79	6345	11.77	11.66	14.73	2.00	16.73	≤ 24.00
11ax-HE160	MCS0	111	6505	11.52	11.59	14.57	2.00	16.57	≤ 24.00
11ax-HE160	MCS0	143	6665	12.03	12.41	15.23	2.00	17.23	≤ 24.00
11ax-HE160	MCS0	175	6825	11.59	11.48	14.55	2.00	16.55	≤ 24.00
11ax-HE160	MCS0	207	6985	11.04	11.29	14.18	2.00	16.18	≤ 24.00

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

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

Test Site	SR5	Test Engineer	Marvin
Test Date	2023/03/16		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)
				Ant 1	Ant 2				
CDD Mode (Nss = 2)									
11ax-HE20	MCS0	1	5955	6.05	6.16	9.12	2.00	11.12	≤ 24.00
11ax-HE20	MCS0	33	6115	5.95	5.86	8.92	2.00	10.92	≤ 24.00
11ax-HE20	MCS0	93	6415	5.74	5.80	8.78	2.00	10.78	≤ 24.00
11ax-HE20	MCS0	97	6435	5.91	5.86	8.90	2.00	10.90	≤ 24.00
11ax-HE20	MCS0	105	6475	5.89	5.98	8.95	2.00	10.95	≤ 24.00
11ax-HE20	MCS0	113	6515	5.88	5.93	8.92	2.00	10.92	≤ 24.00
11ax-HE20	MCS0	117	6535	6.10	6.20	9.16	2.00	11.16	≤ 24.00
11ax-HE20	MCS0	149	6695	6.82	6.47	9.66	2.00	11.66	≤ 24.00
11ax-HE20	MCS0	181	6855	6.01	6.71	9.38	2.00	11.38	≤ 24.00
11ax-HE20	MCS0	185	6875	5.82	6.32	9.09	2.00	11.09	≤ 24.00
11ax-HE20	MCS0	189	6895	5.77	6.30	9.05	2.00	11.05	≤ 24.00
11ax-HE20	MCS0	213	7015	6.31	6.64	9.49	2.00	11.49	≤ 24.00
11ax-HE20	MCS0	233	7115	-9.01	-8.63	-5.81	2.00	-3.81	≤ 24.00
11ax-HE40	MCS0	3	5965	8.15	8.56	11.37	2.00	13.37	≤ 24.00
11ax-HE40	MCS0	43	6165	9.22	9.22	12.23	2.00	14.23	≤ 24.00
11ax-HE40	MCS0	91	6405	8.65	8.62	11.65	2.00	13.65	≤ 24.00
11ax-HE40	MCS0	99	6445	8.37	8.14	11.27	2.00	13.27	≤ 24.00
11ax-HE40	MCS0	107	6485	8.42	8.41	11.43	2.00	13.43	≤ 24.00
11ax-HE40	MCS0	115	6525	8.64	8.79	11.73	2.00	13.73	≤ 24.00
11ax-HE40	MCS0	123	6565	9.07	9.20	12.15	2.00	14.15	≤ 24.00
11ax-HE40	MCS0	147	6685	9.33	9.38	12.37	2.00	14.37	≤ 24.00
11ax-HE40	MCS0	179	6845	8.61	9.18	11.91	2.00	13.91	≤ 24.00
11ax-HE40	MCS0	187	6885	8.75	9.35	12.07	2.00	14.07	≤ 24.00
11ax-HE40	MCS0	195	6925	8.75	9.48	12.14	2.00	14.14	≤ 24.00
11ax-HE40	MCS0	211	7005	8.90	9.12	12.02	2.00	14.02	≤ 24.00
11ax-HE40	MCS0	227	7085	9.15	8.89	12.03	2.00	14.03	≤ 24.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)
				Ant 1	Ant 2				
CDD Mode (Nss = 2)									
11ax-HE80	MCS0	7	5985	11.47	11.63	14.56	2.00	16.56	≤ 24.00
11ax-HE80	MCS0	39	6145	11.69	11.57	14.64	2.00	16.64	≤ 24.00
11ax-HE80	MCS0	87	6385	10.71	11.04	13.89	2.00	15.89	≤ 24.00
11ax-HE80	MCS0	103	6465	11.29	11.04	14.18	2.00	16.18	≤ 24.00
11ax-HE80	MCS0	119	6545	11.81	11.74	14.79	2.00	16.79	≤ 24.00
11ax-HE80	MCS0	135	6625	11.91	12.38	15.16	2.00	17.16	≤ 24.00
11ax-HE80	MCS0	151	6705	12.13	12.30	15.23	2.00	17.23	≤ 24.00
11ax-HE80	MCS0	183	6865	11.49	11.86	14.69	2.00	16.69	≤ 24.00
11ax-HE80	MCS0	199	6945	11.31	12.05	14.71	2.00	16.71	≤ 24.00
11ax-HE80	MCS0	215	7025	11.80	11.90	14.86	2.00	16.86	≤ 24.00
11ax-HE160	MCS0	15	6025	12.40	12.27	15.35	2.00	17.35	≤ 24.00
11ax-HE160	MCS0	79	6345	12.42	12.66	15.55	2.00	17.55	≤ 24.00
11ax-HE160	MCS0	111	6505	11.88	12.10	15.00	2.00	17.00	≤ 24.00
11ax-HE160	MCS0	143	6665	12.22	12.73	15.49	2.00	17.49	≤ 24.00
11ax-HE160	MCS0	175	6825	11.90	12.51	15.23	2.00	17.23	≤ 24.00
11ax-HE160	MCS0	207	6985	12.10	12.75	15.45	2.00	17.45	≤ 24.00

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

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

6.4. Power Spectral Density

6.4.1. Test Limit

For client devices operating under the control of an indoor access point in the 5.925–7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band.

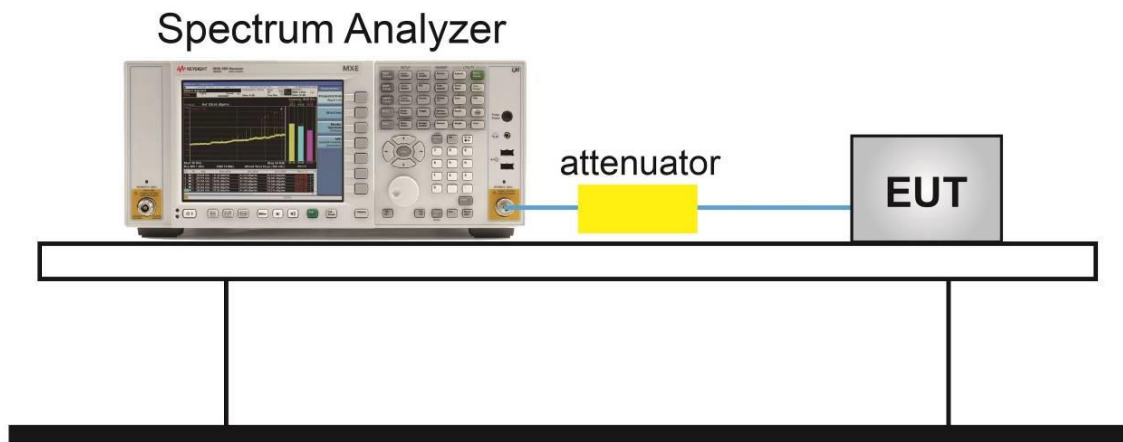
6.4.2. Test Procedure Used

KDB 789033 D02v02r01-SectionF

6.4.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. 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

Test Site	SR5	Test Engineer	Marvin
Test Date	2023/01/30~2023/04/06		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Duty Cycle (%)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)
				Ant 1	Ant 2					
CDD Mode (Nss = 1)										
11ax-HE20	MCS0	1	5955	-9.746	-9.228	-6.469	92.65%	5.01	-1.127	≤ -1.000
11ax-HE20	MCS0	33	6115	-9.644	-9.315	-6.466	92.65%	5.01	-1.124	≤ -1.000
11ax-HE20	MCS0	93	6415	-9.485	-9.779	-6.619	92.65%	5.01	-1.277	≤ -1.000
11ax-HE20	MCS0	97	6435	-9.407	-9.772	-6.575	92.65%	5.01	-1.234	≤ -1.000
11ax-HE20	MCS0	105	6475	-9.493	-9.457	-6.465	92.65%	5.01	-1.123	≤ -1.000
11ax-HE20	MCS0	113	6515	-9.629	-9.545	-6.576	92.65%	5.01	-1.235	≤ -1.000
11ax-HE20	MCS0	117	6535	-9.685	-9.584	-6.624	92.65%	5.01	-1.282	≤ -1.000
11ax-HE20	MCS0	149	6695	-9.564	-9.538	-6.541	92.65%	5.01	-1.199	≤ -1.000
11ax-HE20	MCS0	181	6855	-9.418	-9.490	-6.444	92.65%	5.01	-1.102	≤ -1.000
11ax-HE20	MCS0	185	6875	-9.577	-9.702	-6.629	92.65%	5.01	-1.287	≤ -1.000
11ax-HE20	MCS0	189	6895	-9.568	-9.458	-6.502	92.65%	5.01	-1.161	≤ -1.000
11ax-HE20	MCS0	213	7015	-9.724	-9.353	-6.524	92.65%	5.01	-1.182	≤ -1.000
11ax-HE20	MCS0	233	7115	-20.718	-21.072	-17.881	92.65%	5.01	-12.539	≤ -1.000
11ax-HE40	MCS0	3	5965	-10.002	-9.298	-6.625	89.15%	5.01	-1.116	≤ -1.000
11ax-HE40	MCS0	43	6165	-9.769	-9.651	-6.699	89.15%	5.01	-1.190	≤ -1.000
11ax-HE40	MCS0	91	6405	-9.882	-9.372	-6.609	89.15%	5.01	-1.100	≤ -1.000
11ax-HE40	MCS0	99	6445	-9.279	-9.994	-6.612	89.15%	5.01	-1.102	≤ -1.000
11ax-HE40	MCS0	107	6485	-9.429	-9.901	-6.648	89.15%	5.01	-1.139	≤ -1.000
11ax-HE40	MCS0	115	6525	-9.649	-9.697	-6.663	89.15%	5.01	-1.154	≤ -1.000
11ax-HE40	MCS0	123	6565	-9.724	-9.637	-6.670	89.15%	5.01	-1.161	≤ -1.000
11ax-HE40	MCS0	147	6685	-9.821	-9.476	-6.635	89.15%	5.01	-1.126	≤ -1.000
11ax-HE40	MCS0	179	6845	-9.653	-9.752	-6.692	89.15%	5.01	-1.183	≤ -1.000
11ax-HE40	MCS0	187	6885	-9.604	-9.618	-6.601	89.15%	5.01	-1.092	≤ -1.000
11ax-HE40	MCS0	195	6925	-9.853	-9.467	-6.645	89.15%	5.01	-1.136	≤ -1.000
11ax-HE40	MCS0	211	7005	-9.866	-9.743	-6.794	89.15%	5.01	-1.285	≤ -1.000
11ax-HE40	MCS0	227	7085	-9.871	-9.417	-6.628	89.15%	5.01	-1.119	≤ -1.000

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Duty Cycle (%)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)
				Ant 1	Ant 2					
CDD Mode (Nss = 1)										
11ax-HE80	MCS0	7	5985	-9.584	-10.061	-6.806	86.57%	5.01	-1.169	≤ -1.000
11ax-HE80	MCS0	39	6145	-9.868	-9.752	-6.799	86.57%	5.01	-1.163	≤ -1.000
11ax-HE80	MCS0	87	6385	-9.698	-10.104	-6.886	86.57%	5.01	-1.249	≤ -1.000
11ax-HE80	MCS0	103	6465	-10.090	-9.755	-6.909	86.57%	5.01	-1.272	≤ -1.000
11ax-HE80	MCS0	119	6545	-9.725	-9.901	-6.802	86.57%	5.01	-1.165	≤ -1.000
11ax-HE80	MCS0	135	6625	-9.590	-10.100	-6.827	86.57%	5.01	-1.191	≤ -1.000
11ax-HE80	MCS0	151	6705	-9.700	-10.006	-6.840	86.57%	5.01	-1.203	≤ -1.000
11ax-HE80	MCS0	183	6865	-10.091	-9.702	-6.882	86.57%	5.01	-1.245	≤ -1.000
11ax-HE80	MCS0	199	6945	-9.679	-9.880	-6.768	86.57%	5.01	-1.131	≤ -1.000
11ax-HE80	MCS0	215	7025	-9.803	-9.836	-6.809	86.57%	5.01	-1.173	≤ -1.000
11ax-HE160	MCS0	15	6025	-9.106	-9.484	-6.281	97.36%	5.01	-1.154	≤ -1.000
11ax-HE160	MCS0	79	6345	-9.310	-9.292	-6.291	97.36%	5.01	-1.164	≤ -1.000
11ax-HE160	MCS0	111	6505	-9.221	-9.439	-6.318	97.36%	5.01	-1.192	≤ -1.000
11ax-HE160	MCS0	143	6665	-9.354	-9.341	-6.337	97.36%	5.01	-1.211	≤ -1.000
11ax-HE160	MCS0	175	6825	-9.213	-9.463	-6.326	97.36%	5.01	-1.199	≤ -1.000
11ax-HE160	MCS0	207	6985	-9.833	-9.003	-6.388	97.36%	5.01	-1.261	≤ -1.000

Note 1: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\}$

Note 2: When EUT duty cycle < 98%, EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$ + Directional Gain (dBi).

Test Site	SR5	Test Engineer	Marvin
Test Date	2023/03/13~2023/05/31		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD		Total PSD (dBm/MHz)	Duty Cycle (%)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)
				(dBm/MHz)						
				Ant 1	Ant 2					
CDD Mode (Nss = 2)										
11ax-HE20	MCS0	1	5955	-6.691	-6.234	-3.446	92.65%	2.00	-1.115	≤ -1.000
11ax-HE20	MCS0	33	6115	-6.660	-6.833	-3.735	92.65%	2.00	-1.404	≤ -1.000
11ax-HE20	MCS0	93	6415	-6.571	-6.633	-3.592	92.65%	2.00	-1.260	≤ -1.000
11ax-HE20	MCS0	97	6435	-6.564	-6.669	-3.606	92.65%	2.00	-1.274	≤ -1.000
11ax-HE20	MCS0	105	6475	-6.390	-6.541	-3.455	92.65%	2.00	-1.123	≤ -1.000
11ax-HE20	MCS0	113	6515	-6.714	-6.430	-3.559	92.65%	2.00	-1.228	≤ -1.000
11ax-HE20	MCS0	117	6535	-6.584	-6.382	-3.472	92.65%	2.00	-1.140	≤ -1.000
11ax-HE20	MCS0	149	6695	-6.721	-6.234	-3.460	92.65%	2.00	-1.129	≤ -1.000
11ax-HE20	MCS0	181	6855	-6.941	-6.075	-3.476	92.65%	2.00	-1.145	≤ -1.000
11ax-HE20	MCS0	185	6875	-6.966	-6.332	-3.627	92.65%	2.00	-1.296	≤ -1.000
11ax-HE20	MCS0	189	6895	-6.996	-6.418	-3.687	92.65%	2.00	-1.356	≤ -1.000
11ax-HE20	MCS0	213	7015	-6.788	-6.617	-3.691	92.65%	2.00	-1.360	≤ -1.000
11ax-HE20	MCS0	233	7115	-20.718	-21.072	-17.881	92.65%	2.00	-15.550	≤ -1.000
11ax-HE40	MCS0	3	5965	-7.173	-6.303	-3.706	89.15%	2.00	-1.207	≤ -1.000
11ax-HE40	MCS0	43	6165	-6.542	-6.709	-3.614	89.15%	2.00	-1.116	≤ -1.000
11ax-HE40	MCS0	91	6405	-6.810	-6.508	-3.646	89.15%	2.00	-1.147	≤ -1.000
11ax-HE40	MCS0	99	6445	-6.973	-6.963	-3.958	89.15%	2.00	-1.459	≤ -1.000
11ax-HE40	MCS0	107	6485	-7.195	-6.974	-4.073	89.15%	2.00	-1.574	≤ -1.000
11ax-HE40	MCS0	115	6525	-6.841	-6.711	-3.765	89.15%	2.00	-1.266	≤ -1.000
11ax-HE40	MCS0	123	6565	-6.709	-6.648	-3.668	89.15%	2.00	-1.169	≤ -1.000
11ax-HE40	MCS0	147	6685	-7.086	-6.452	-3.747	89.15%	2.00	-1.248	≤ -1.000
11ax-HE40	MCS0	179	6845	-7.227	-6.567	-3.874	89.15%	2.00	-1.375	≤ -1.000
11ax-HE40	MCS0	187	6885	-7.007	-6.286	-3.621	89.15%	2.00	-1.122	≤ -1.000
11ax-HE40	MCS0	195	6925	-7.036	-6.272	-3.627	89.15%	2.00	-1.128	≤ -1.000
11ax-HE40	MCS0	211	7005	-6.682	-6.690	-3.676	89.15%	2.00	-1.177	≤ -1.000
11ax-HE40	MCS0	227	7085	-6.063	-7.248	-3.605	89.15%	2.00	-1.106	≤ -1.000

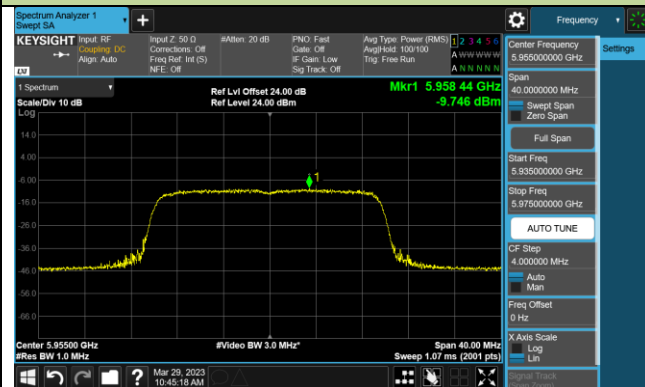
Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Duty Cycle (%)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)
				Ant 1	Ant 2					
CDD Mode (Nss = 2)										
11ax-HE80	MCS0	7	5985	-6.407	-7.155	-3.755	86.57%	2.00	-1.128	≤ -1.000
11ax-HE80	MCS0	39	6145	-6.657	-7.503	-4.049	86.57%	2.00	-1.423	≤ -1.000
11ax-HE80	MCS0	87	6385	-8.065	-6.287	-4.075	86.57%	2.00	-1.449	≤ -1.000
11ax-HE80	MCS0	103	6465	-7.391	-6.958	-4.159	86.57%	2.00	-1.532	≤ -1.000
11ax-HE80	MCS0	119	6545	-6.896	-7.023	-3.949	86.57%	2.00	-1.322	≤ -1.000
11ax-HE80	MCS0	135	6625	-6.484	-7.181	-3.808	86.57%	2.00	-1.182	≤ -1.000
11ax-HE80	MCS0	151	6705	-7.184	-6.376	-3.751	86.57%	2.00	-1.125	≤ -1.000
11ax-HE80	MCS0	183	6865	-6.758	-6.943	-3.839	86.57%	2.00	-1.213	≤ -1.000
11ax-HE80	MCS0	199	6945	-7.612	-6.607	-4.070	86.57%	2.00	-1.444	≤ -1.000
11ax-HE80	MCS0	215	7025	-6.884	-6.809	-3.836	86.57%	2.00	-1.210	≤ -1.000
11ax-HE160	MCS0	15	6025	-8.586	-7.240	-4.851	97.36%	2.00	-2.735	≤ -1.000
11ax-HE160	MCS0	79	6345	-9.091	-7.320	-5.106	97.36%	2.00	-2.989	≤ -1.000
11ax-HE160	MCS0	111	6505	-9.456	-9.188	-6.310	97.36%	2.00	-4.193	≤ -1.000
11ax-HE160	MCS0	143	6665	-9.577	-8.205	-5.827	97.36%	2.00	-3.711	≤ -1.000
11ax-HE160	MCS0	175	6825	-9.238	-8.686	-5.943	97.36%	2.00	-3.827	≤ -1.000
11ax-HE160	MCS0	207	6985	-9.252	-8.137	-5.649	97.36%	2.00	-3.532	≤ -1.000

Note 1: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\}$

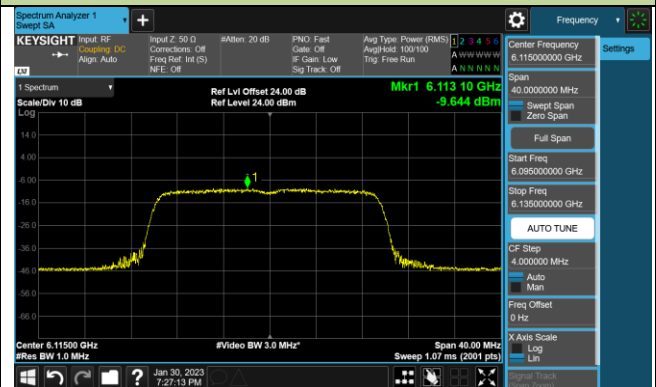
Note 2: When EUT duty cycle < 98%, EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$ + Directional Gain (dBi).

802.11ax-HE20 Power Spectral Density – Ant 1 (Nss=1)

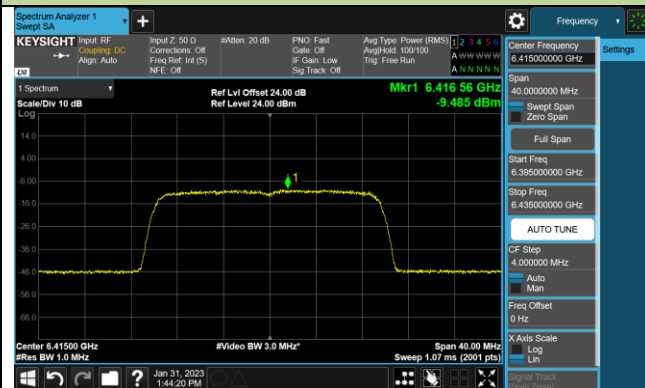
Channel 1 (5955MHz)



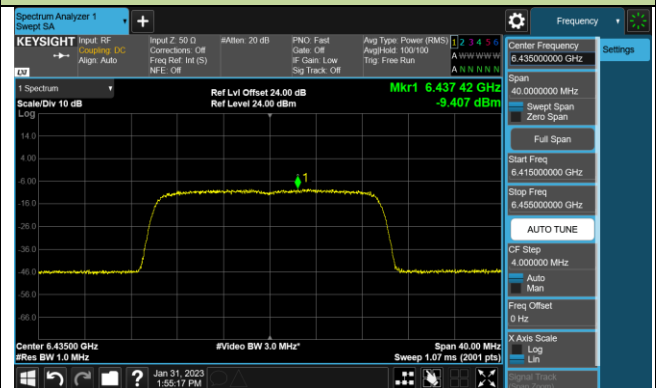
Channel 33 (6115MHz)



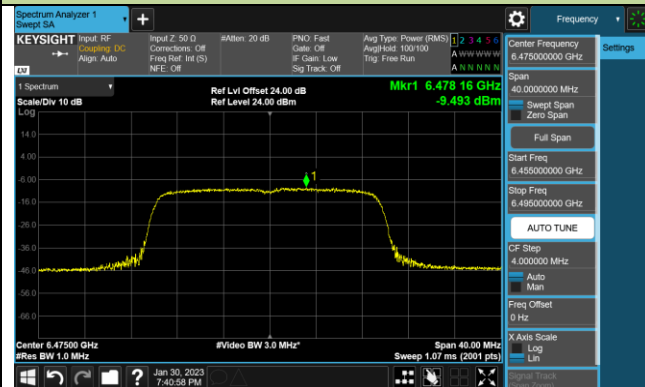
Channel 93 (6415MHz)



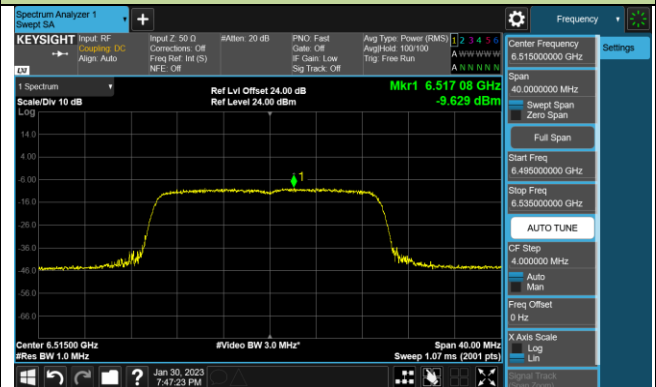
Channel 97 (6435MHz)



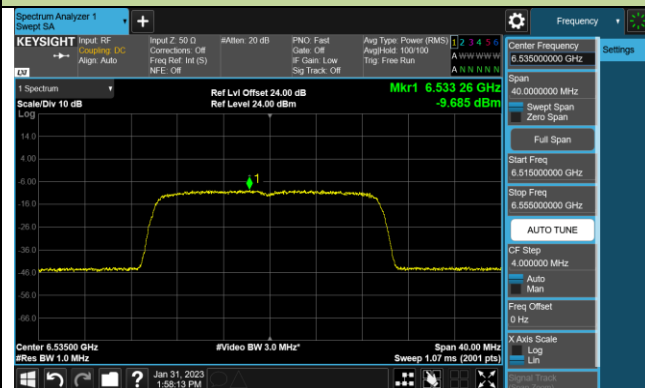
Channel 105 (6475MHz)



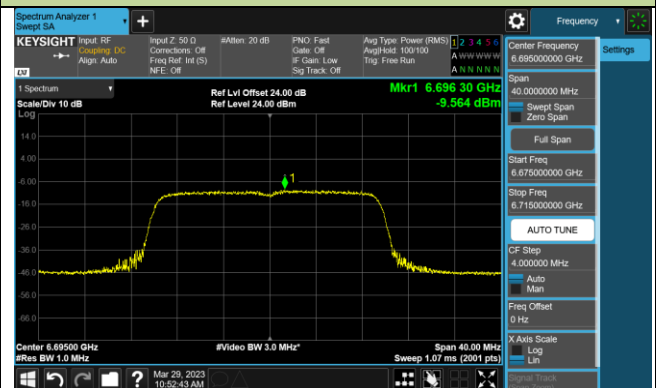
Channel 113 (6515MHz)



Channel 117 (6535MHz)

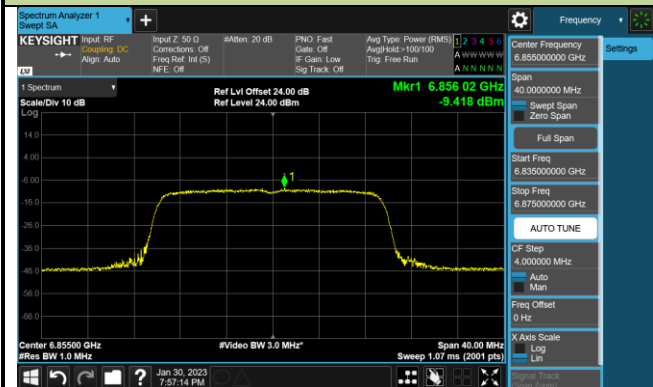


Channel 149 (6695MHz)

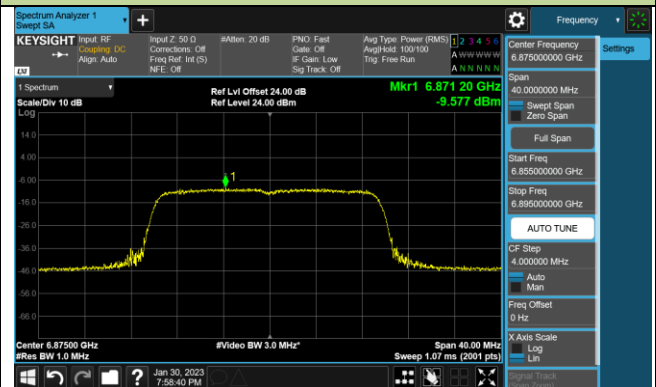


802.11ax-HE20 Power Spectral Density – Ant 1 (Nss=1)

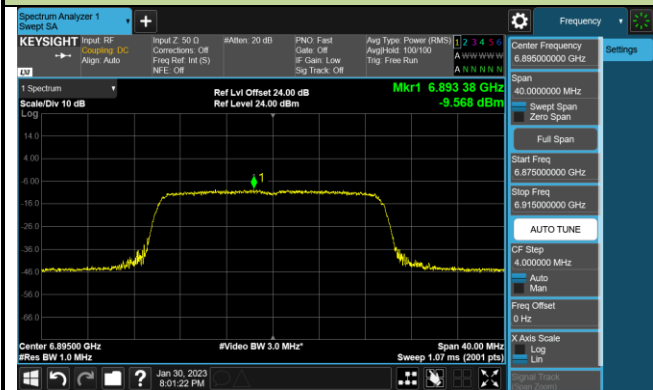
Channel 181 (6855MHz)



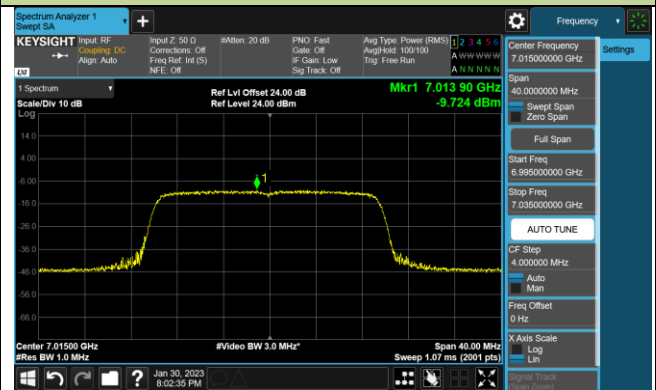
Channel 185 (6875MHz)



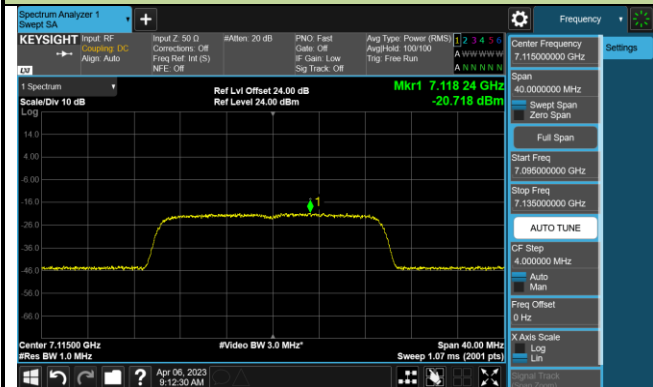
Channel 189 (6895MHz)



Channel 213 (7015MHz)

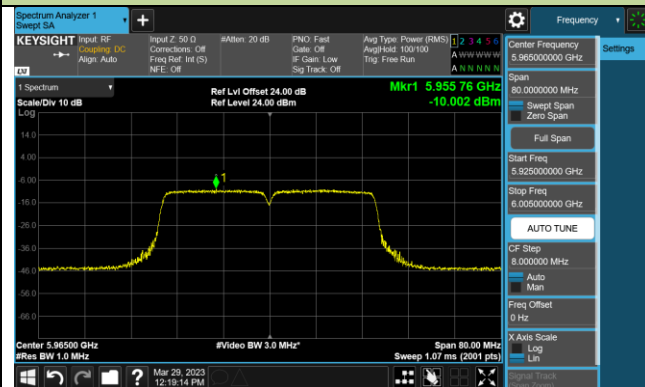


Channel 233 (7115MHz)

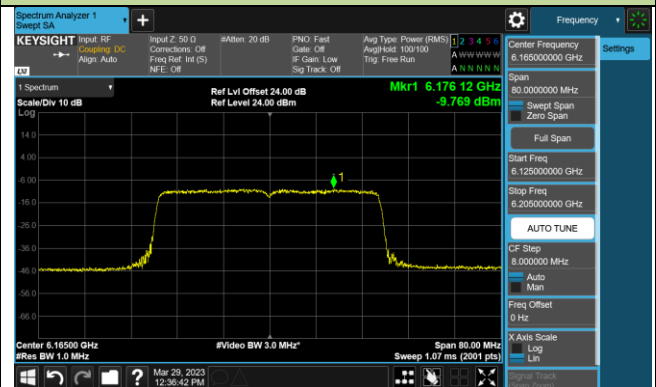


802.11ax-HE40 Power Spectral Density – Ant 1 (Nss=1)

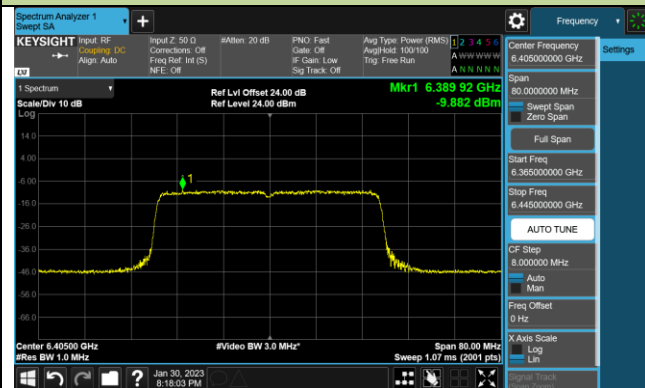
Channel 3 (5965MHz)



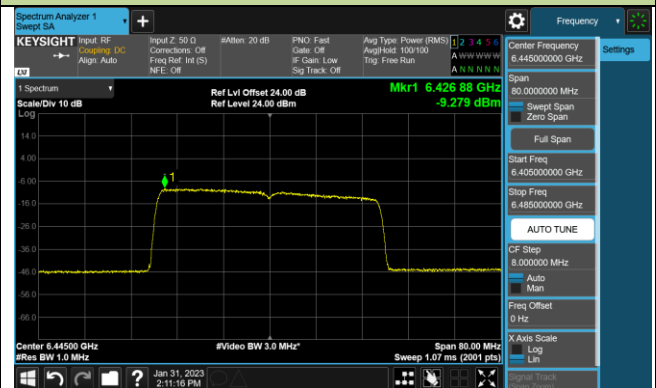
Channel 43 (6165MHz)



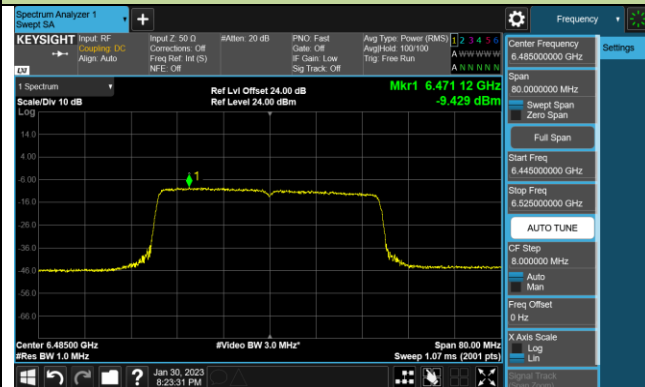
Channel 91 (6405MHz)



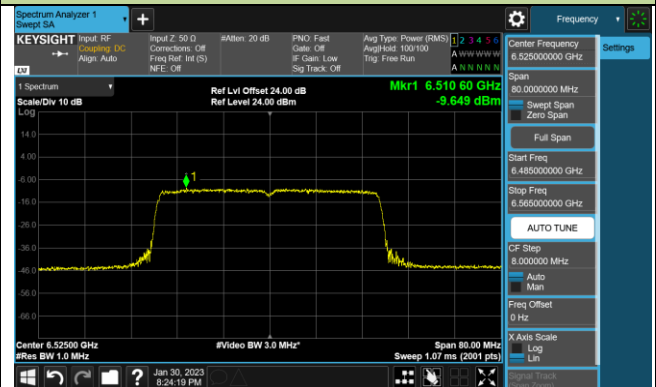
Channel 99 (6445MHz)



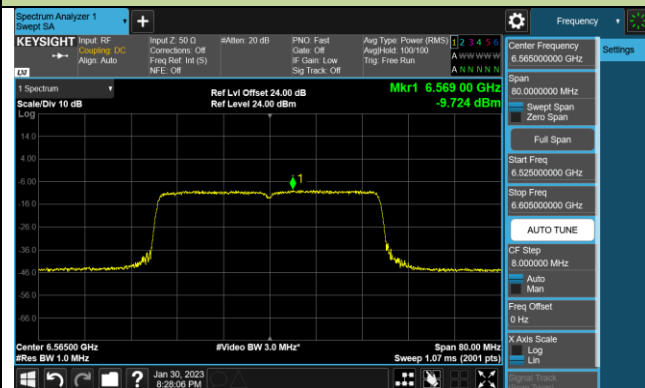
Channel 107 (6485MHz)



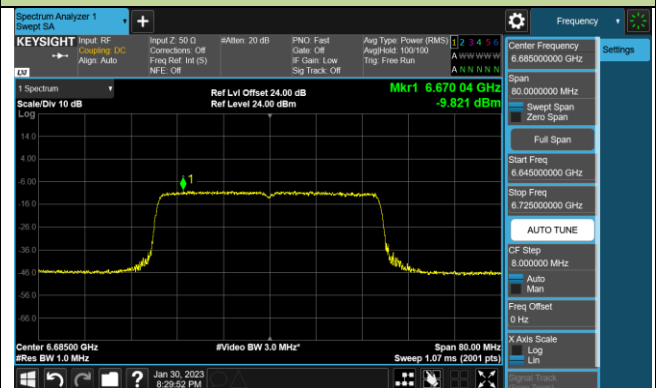
Channel 115 (6525MHz)



Channel 123 (6565MHz)

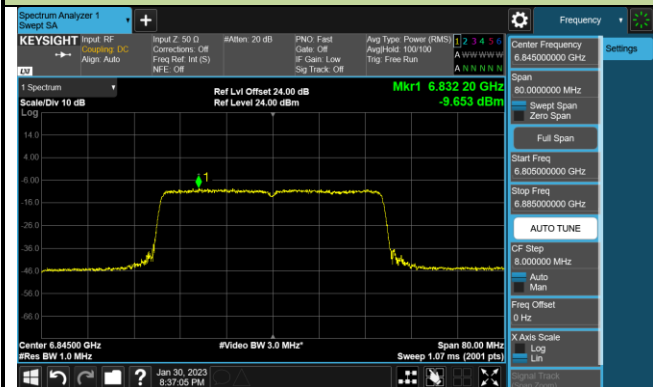


Channel 147 (6685MHz)

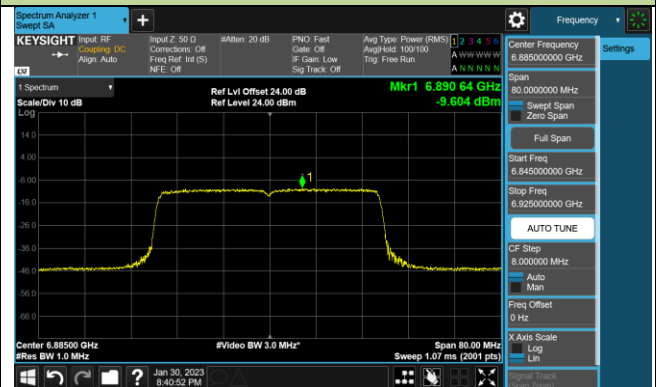


802.11ax-HE40 Power Spectral Density – Ant 1 (Nss=1)

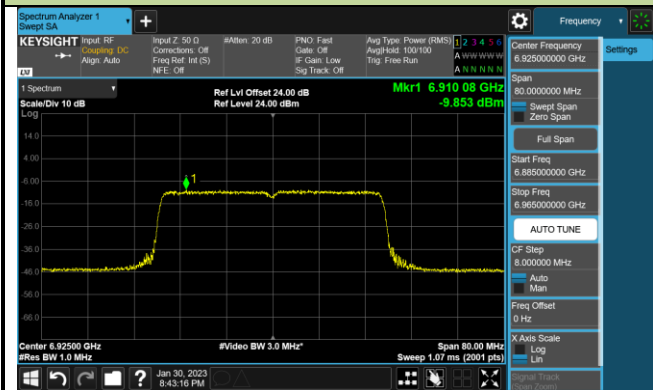
Channel 179 (6845MHz)



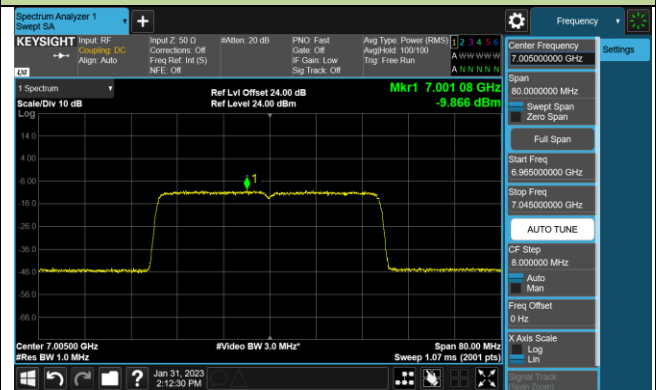
Channel 187 (6885MHz)



Channel 195 (6925MHz)



Channel 211 (7005MHz)



Channel 227 (7085MHz)

