

RF MEASUREMENT REPORT

FCC ID : 2AXJ4TXE50UH
Applicant : TP-Link Corporation Limited
Application Type : Certification
Product : AXE3000 Wi-Fi 6E High Gain Wireless USB Adapter
Model No. : Archer TXE50UH
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 : July 17, 2023
Test Date : July 27 ~ November 16, 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
2307TW0113-U4	1.0	Original Report	2023-12-14	Invalid
2307TW0113-U4	2.0	Updated a typo in section 2.5	2023-12-19	Invalid
2307TW0113-U4	3.0	Add some description in section 6.2 and 6.7	2024-01-20	Valid

CONTENTS

Description	Page
General Information.....	6
1. INTRODUCTION	7
1.1. Scope	7
1.2. MRT Test Location.....	7
2. Product Information	8
2.1. Equipment Description.....	8
2.2. Radio Specification	8
2.3. Working Frequencies	9
2.4. Antenna Details.....	11
2.5. Test Mode	12
2.6. Test System Connection Diagram	12
2.7. Test System Details	13
2.8. Test Software	13
2.9. Applied Standards.....	13
2.10. Duty Cycle.....	14
2.11. Test Environment Condition	15
3. Antenna Requirements	16
4. Measuring Instrument	17
5. Measurement Uncertainty.....	18
6. Test Result.....	19
6.1. Summary.....	19
6.2. 26dB Bandwidth.....	20
6.2.1. Test Limit	20
6.2.2. Test Procedure used	20
6.2.3. Test Setting	20
6.2.4. Test Setup	21
6.2.5. Test Result	22
6.3. Output Power	30
6.3.1. Test Limit	30
6.3.2. Test Procedure Used	30
6.3.3. Test Setting	30
6.3.4. Test Setup	30
6.3.5. Test Result	31
6.4. Power Spectral Density.....	35
6.4.1. Test Limit	35

6.4.2.	Test Procedure Used	35
6.4.3.	Test Setting	35
6.4.4.	Test Setup	36
6.4.5.	Test Result	37
6.5.	In-Band Emission Measurement.....	65
6.5.1.	Test Limit	65
6.5.2.	Test Procedure used	65
6.5.3.	Test Setting	65
6.5.4.	Test Setup	66
6.5.5.	Test Result	67
6.6.	Frequency Stability Measurement	91
6.6.1.	Test Limit	91
6.6.2.	Test Procedure.....	91
6.6.3.	Test Setup	92
6.6.4.	Test Result	93
6.7.	Contention Based Protocol	94
6.7.1.	Test Limit	94
6.7.2.	Test Procedure Used	94
6.7.3.	Test Setting	94
6.7.4.	Test Setup	95
6.7.5.	Test Result	96
6.8.	Radiated Spurious Emission.....	107
6.8.1.	Test Limit	107
6.8.2.	Test Procedure Used	107
6.8.3.	Test Setting	107
6.8.4.	Test Setup	109
6.8.5.	Test Result	110
6.9.	Radiated Restricted Band Edge	262
6.9.1.	Test Limit	262
6.9.2.	Test Procedure Used	263
6.9.3.	Test Setting	263
6.9.4.	Test Setup	264
6.9.5.	Test Result	265
6.10.	AC Conducted Emissions	313
6.10.1.	Test Limit.....	313
6.10.2.	Test Setup.....	313
6.10.3.	Test Result.....	314
7.	Conclusion	318

Appendix A : Test Setup Photograph319
Appendix B : External Photograph319
Appendix C : Internal Photograph319

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
Manufacturer Address	Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hongkong
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.

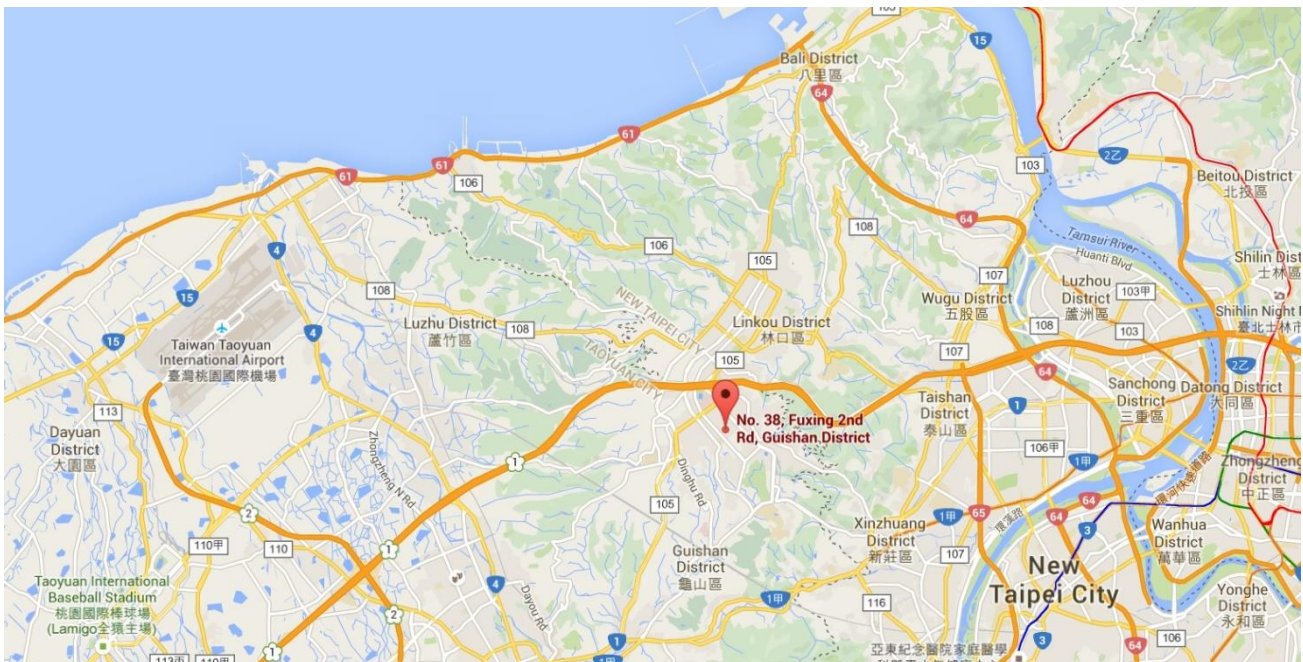
1. INTRODUCTION

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	AXE3000 Wi-Fi 6E High Gain Wireless USB Adapter
Model No.	Archer TXE50UH
Brand Name	tp-link
Wi-Fi Specification	802.11a/b/g/n/ac/ax
EUT Identification No.	#1-1 (Conducted) #1-2 (Radiated)

2.2. Radio Specification

Frequency Range	For 802.11ax-HE20: 5955 ~ 7115MHz For 802.11ax-HE40: 5965 ~ 7085MHz For 802.11ax-HE80: 5985 ~ 7025MHz
Type of Modulation	802.11ax: OFDMA
Data Rate	802.11ax: up to 1201Mbps

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	6495 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	--	--

2.4. Antenna Details

Antenna Type	Frequency Band (MHz)	Tx Paths	Number of spatial streams	Antenna Gain (dBi)		CDD Directional Gain (dBi)	
				Ant 1	Ant 2	For Power	For PSD
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 ~ 6425	2	1	1.88	2.00	2.00	5.01
		2	2	1.88	2.00	2.00	2.00
	6425 ~ 6525	2	1	1.38	1.67	1.67	4.68
		2	2	1.38	1.67	1.67	1.67
	6525 ~ 6875	2	1	1.73	1.74	1.74	4.75
		2	2	1.73	1.74	1.74	1.74
	6875 ~ 7125	2	1	1.25	1.04	1.25	4.26
		2	2	1.25	1.04	1.25	1.25

Remark:

- 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 $N_{ANT} \leq 4$;

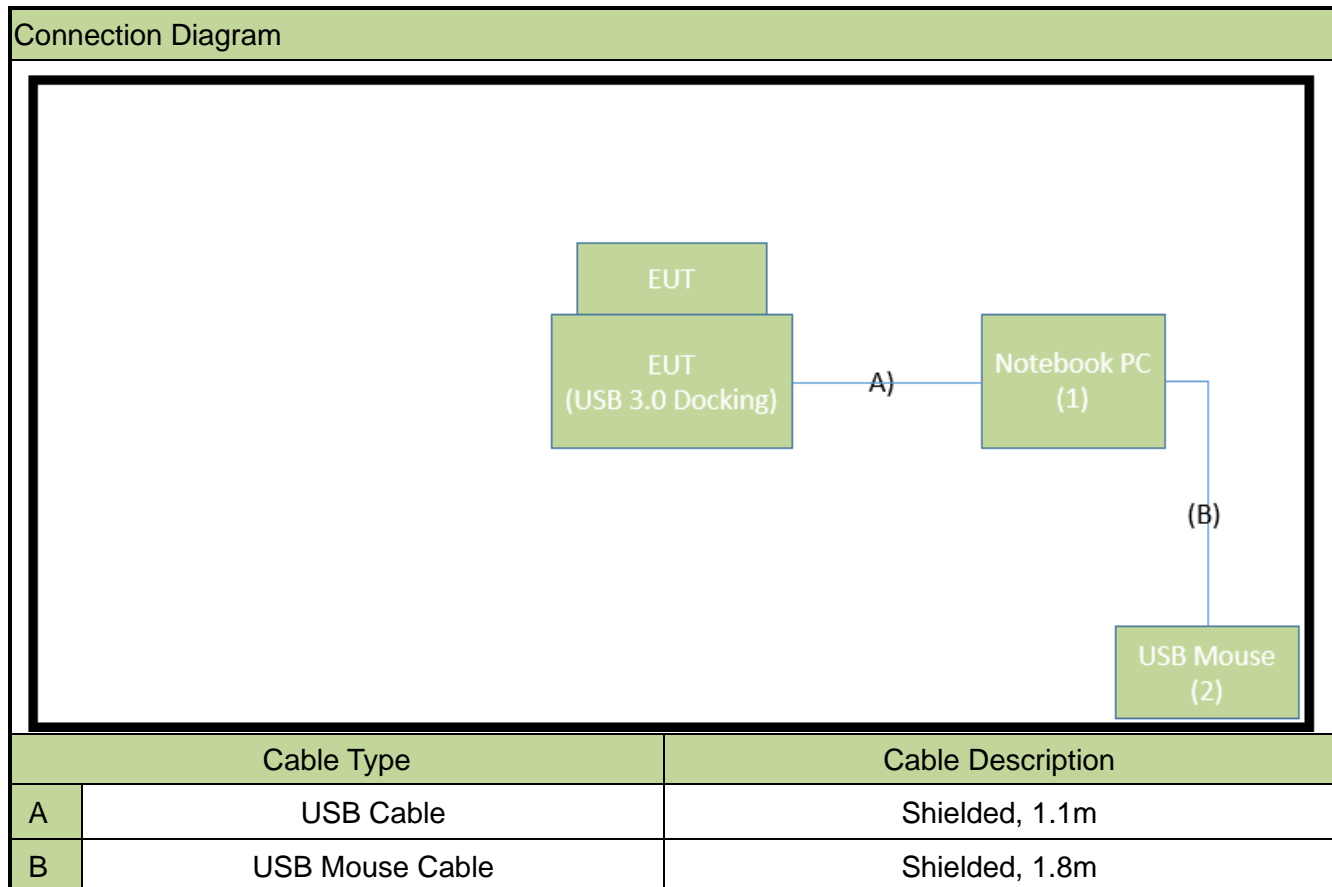
- The information as above is from the antenna specifications.

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-HE20_Nss=2 (MCS0) (CDD mode)
Mode 5: Transmit by 802.11ax-HE40_Nss=2 (MCS0) (CDD mode)
Mode 6: Transmit by 802.11ax-HE80_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. EUT supports one configuration only in 802.11ax full RU 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	T450	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 “accessMTool”, and the version was 3.2.1.2.

Note: 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 D02v02r01
- 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:

Nss=1:

Test Mode	Duty Cycle
802.11ax-HE20	92.01%
802.11ax-HE40	88.51%
802.11ax-HE80	78.78%

Duty Cycle	
802.11ax-HE20	802.11ax-HE40

Nss=2:

Test Mode		Duty Cycle	
802.11ax-HE20		84.86%	
802.11ax-HE40		78.82%	
802.11ax-HE80		67.01%	
Duty Cycle			
802.11ax-HE20		802.11ax-HE40	
802.11ax-HE80			

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	2024/10/31
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	2024/6/29
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	2024/10/17
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2024/7/19
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% ($U=2Uc(y)$): 150kHz~30MHz: $\pm 2.53\text{dB}$
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 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% ($U=2Uc(y)$): $\pm 0.84\text{dB}$
Conducted Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 2.65\text{ dB}$
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 3.3\%$
Temp. / Humidity
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 0.82^\circ\text{C} / \pm 3\%$
Frequency Error
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 78.4\text{Hz}$

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)	26dB 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. 26dB 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

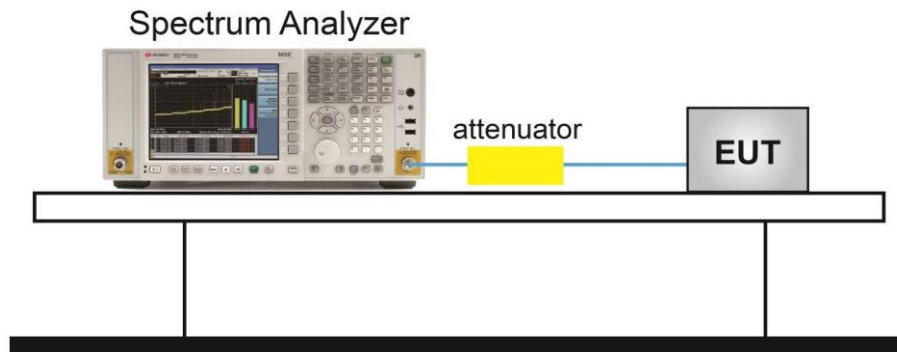
26dB Bandwidth

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	SR6	Test Engineer	Xuan
Test Date	2023/11/6		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11ax-HE20	MCS0	1	5955	22.270	19.046	≤ 320
802.11ax-HE20	MCS0	33	6115	21.530	19.007	≤ 320
802.11ax-HE20	MCS0	93	6415	21.530	18.971	≤ 320
802.11ax-HE20	MCS0	97	6435	21.920	18.956	≤ 320
802.11ax-HE20	MCS0	105	6475	21.040	19.004	≤ 320
802.11ax-HE20	MCS0	113	6515	22.000	18.997	≤ 320
802.11ax-HE20	MCS0	117	6535	28.690	19.010	≤ 320
802.11ax-HE20	MCS0	149	6695	21.730	19.009	≤ 320
802.11ax-HE20	MCS0	181	6855	21.940	18.960	≤ 320
802.11ax-HE20	MCS0	185	6875	21.370	19.004	≤ 320
802.11ax-HE20	MCS0	189	6895	21.790	18.988	≤ 320
802.11ax-HE20	MCS0	213	7015	25.260	18.987	≤ 320
802.11ax-HE20	MCS0	233	7115	21.900	18.952	≤ 320
802.11ax-HE40	MCS0	3	5965	39.250	37.596	≤ 320
802.11ax-HE40	MCS0	43	6165	39.400	37.580	≤ 320
802.11ax-HE40	MCS0	91	6405	39.400	37.609	≤ 320
802.11ax-HE40	MCS0	99	6445	39.300	37.498	≤ 320
802.11ax-HE40	MCS0	107	6485	39.360	37.690	≤ 320
802.11ax-HE40	MCS0	115	6525	39.330	37.480	≤ 320
802.11ax-HE40	MCS0	123	6565	39.320	37.631	≤ 320
802.11ax-HE40	MCS0	147	6685	39.430	37.613	≤ 320
802.11ax-HE40	MCS0	179	6845	39.420	37.449	≤ 320
802.11ax-HE40	MCS0	187	6885	39.320	37.461	≤ 320
802.11ax-HE40	MCS0	195	6925	39.400	37.549	≤ 320
802.11ax-HE40	MCS0	211	7005	39.510	37.573	≤ 320
802.11ax-HE40	MCS0	227	7085	39.520	37.608	≤ 320

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11ax-HE80	MCS0	7	5985	80.160	76.978	≤ 320
802.11ax-HE80	MCS0	39	6145	80.310	77.062	≤ 320
802.11ax-HE80	MCS0	71	6305	80.330	77.069	≤ 320
802.11ax-HE80	MCS0	87	6385	80.240	76.748	≤ 320
802.11ax-HE80	MCS0	103	6465	80.150	76.975	≤ 320
802.11ax-HE80	MCS0	119	6545	80.190	76.885	≤ 320
802.11ax-HE80	MCS0	135	6625	80.190	76.932	≤ 320
802.11ax-HE80	MCS0	151	6705	80.130	76.953	≤ 320
802.11ax-HE80	MCS0	167	6785	80.120	76.934	≤ 320
802.11ax-HE80	MCS0	183	6865	80.100	76.977	≤ 320
802.11ax-HE80	MCS0	199	6945	80.220	76.902	≤ 320
802.11ax-HE80	MCS0	215	7025	80.020	76.970	≤ 320

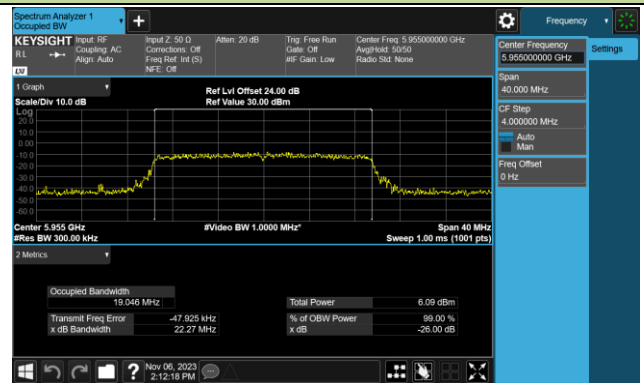
Note:

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

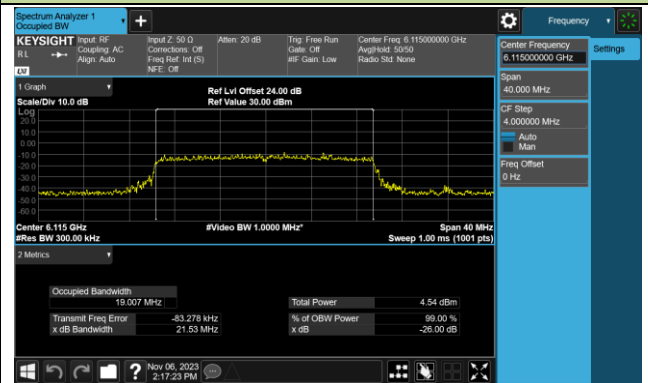
For channels with a nominal bandwidth of 320 MHz compliance is demonstrated by way of the 99% BW.

802.11ax-HE20 26dB Bandwidth & 99% Bandwidth

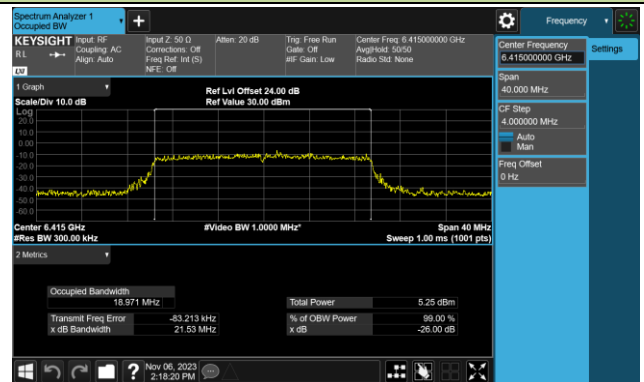
Channel 1 (5955MHz)



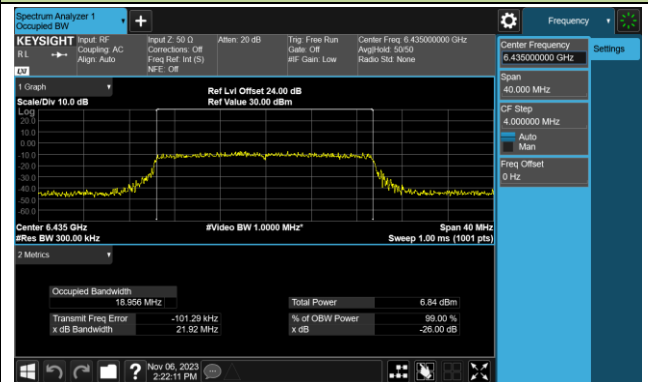
Channel 33 (6115MHz)



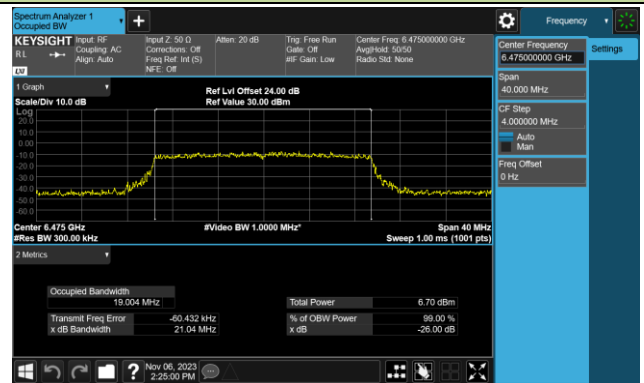
Channel 93 (6415MHz)



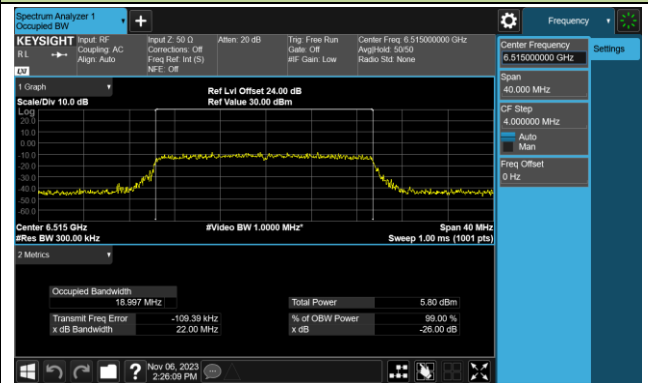
Channel 97 (6435MHz)



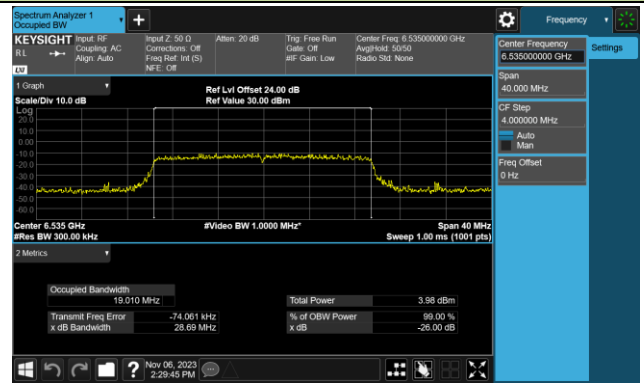
Channel 105 (6475MHz)



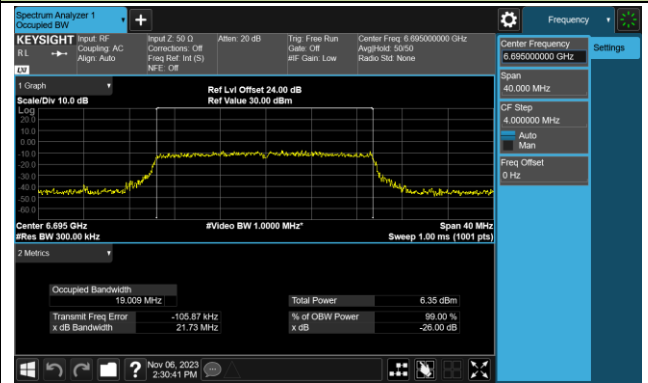
Channel 113 (6515MHz)



Channel 117 (6535MHz)

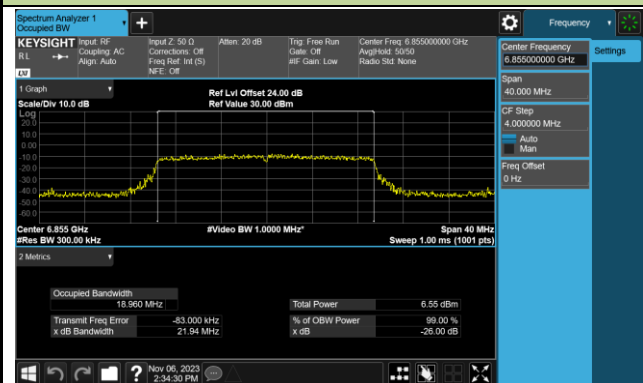


Channel 149 (6695MHz)

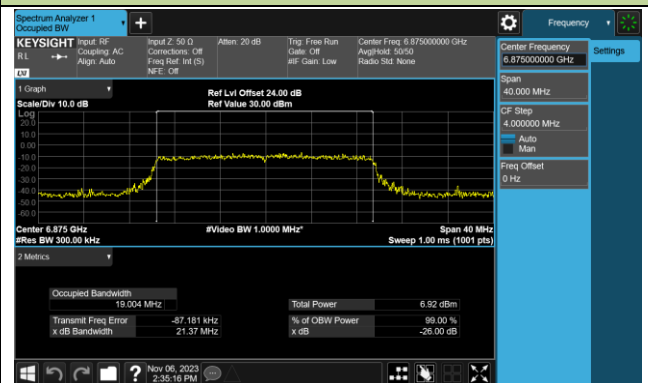


802.11ax-HE20 26dB Bandwidth & 99% Bandwidth

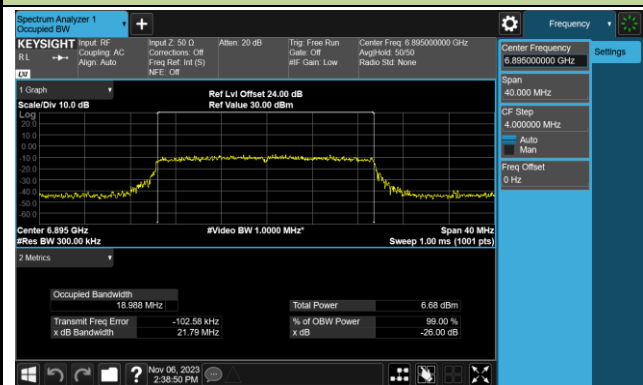
Channel 181 (6855MHz)



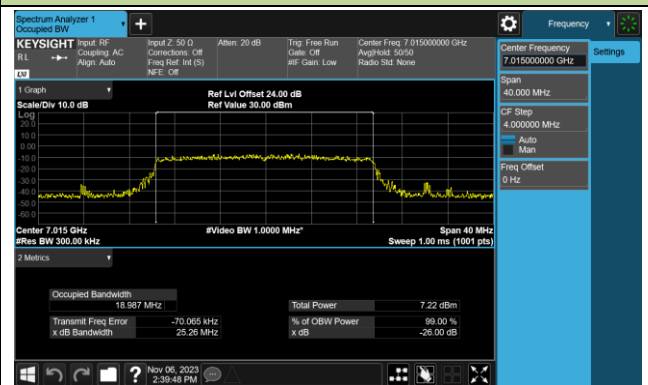
Channel 185 (6875MHz)



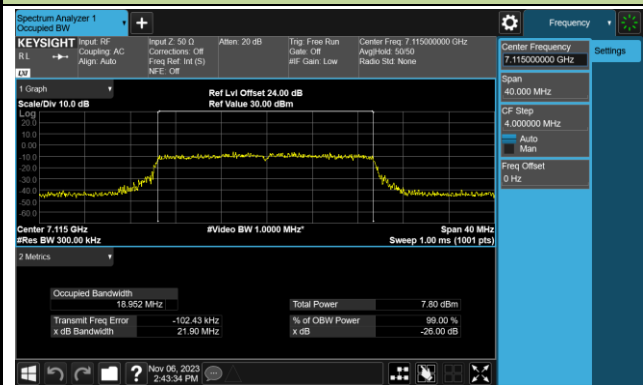
Channel 189 (6895MHz)



Channel 213 (7015MHz)

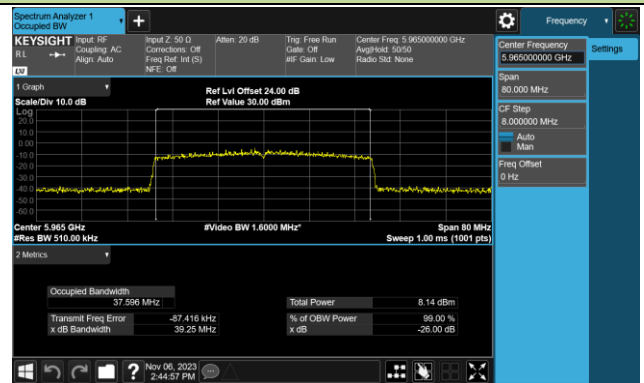


Channel 233 (7115MHz)

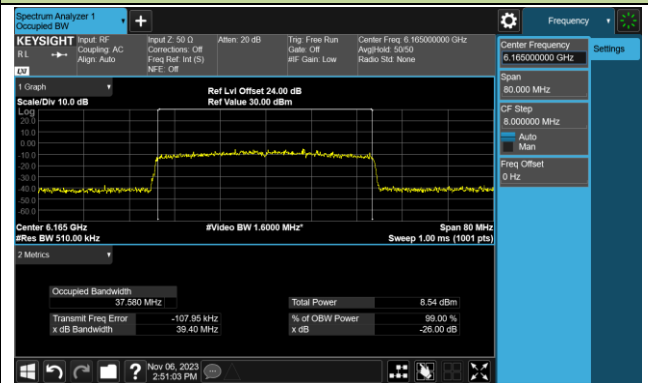


802.11ax-HE40 26dB Bandwidth & 99% Bandwidth

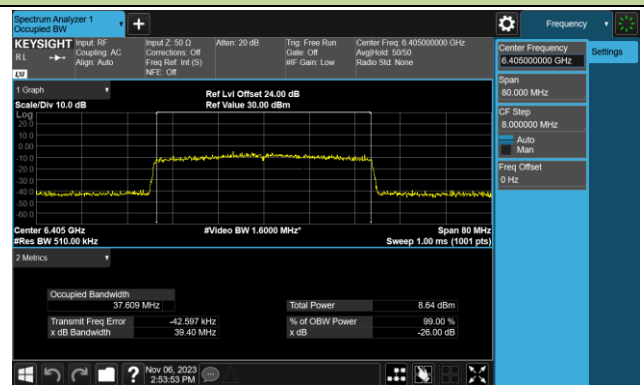
Channel 3 (5965MHz)



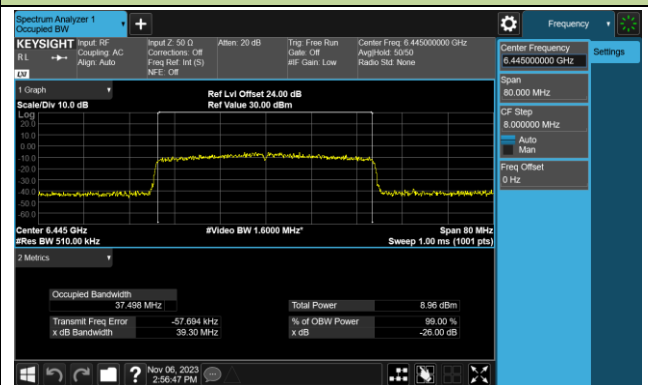
Channel 43 (6165MHz)



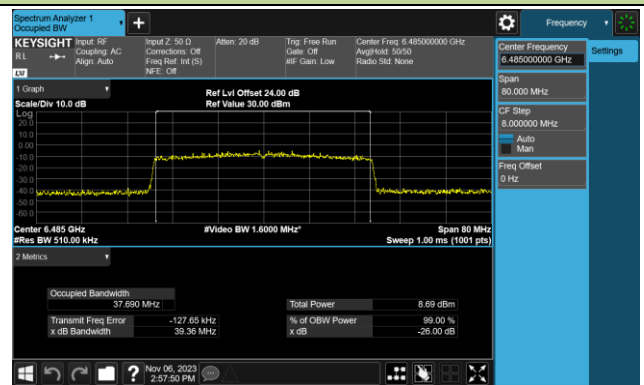
Channel 91 (6405MHz)



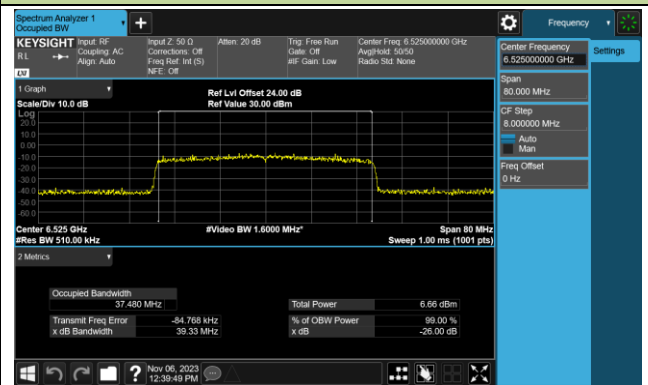
Channel 99 (6445MHz)



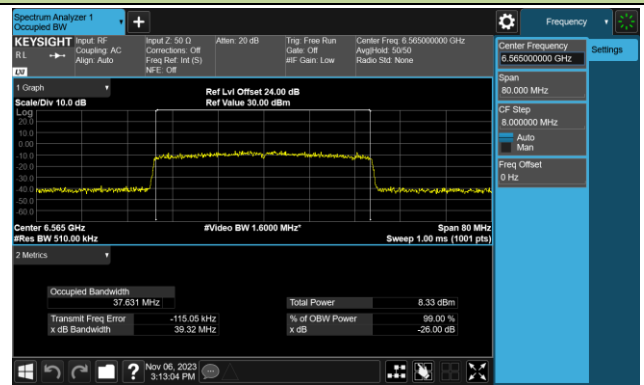
Channel 107 (6485MHz)



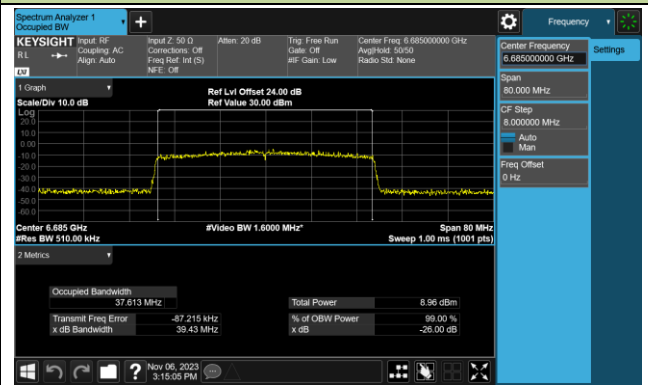
Channel 115 (6525MHz)



Channel 123 (6565MHz)

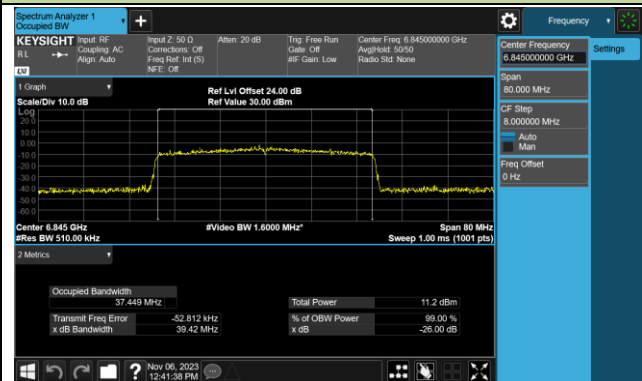


Channel 147 (6685MHz)

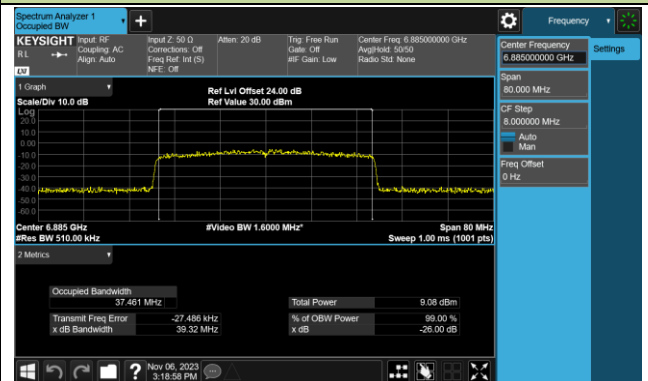


802.11ax-HE40 26dB Bandwidth & 99% Bandwidth

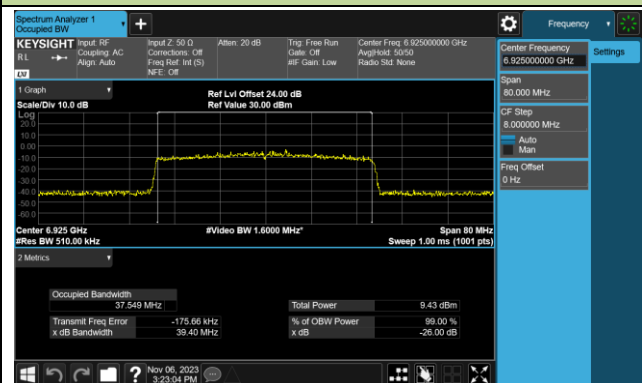
Channel 179 (6845MHz)



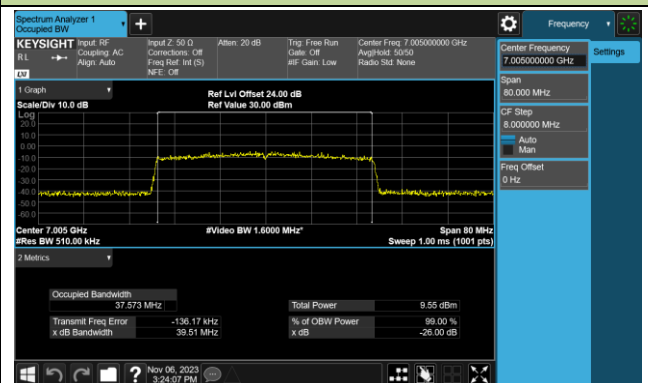
Channel 187 (6885MHz)



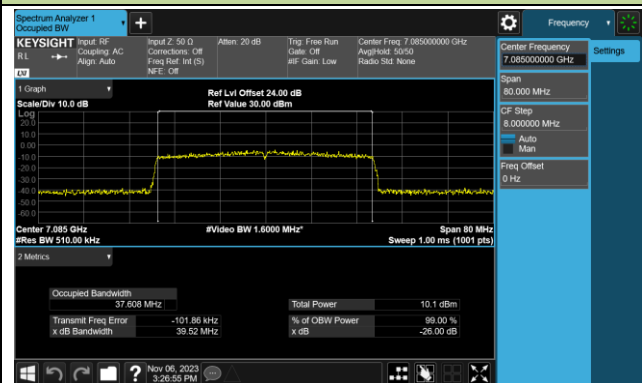
Channel 195 (6925MHz)



Channel 211 (7005MHz)

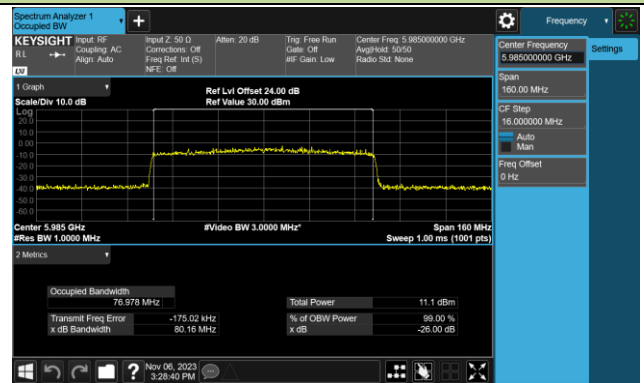


Channel 227 (7085MHz)

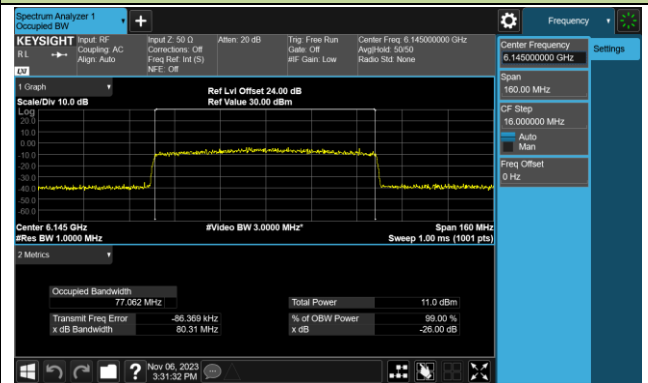


802.11ax-HE80 26dB Bandwidth & 99% Bandwidth

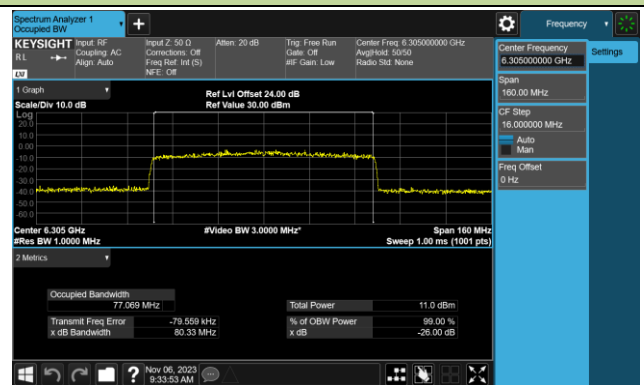
Channel 7 (5985MHz)



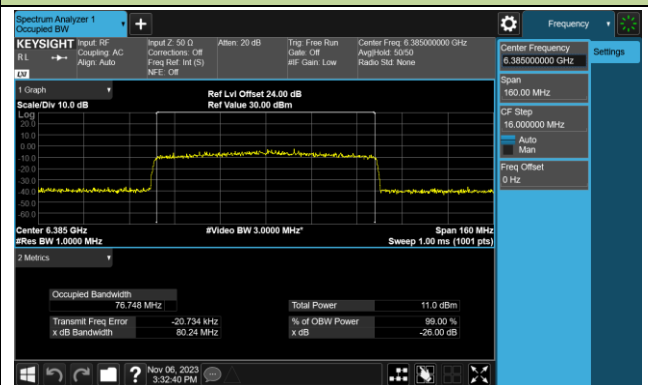
Channel 39 (6145MHz)



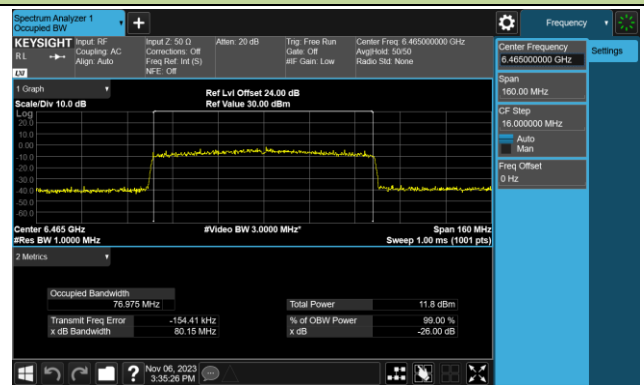
Channel 71 (6305MHz)



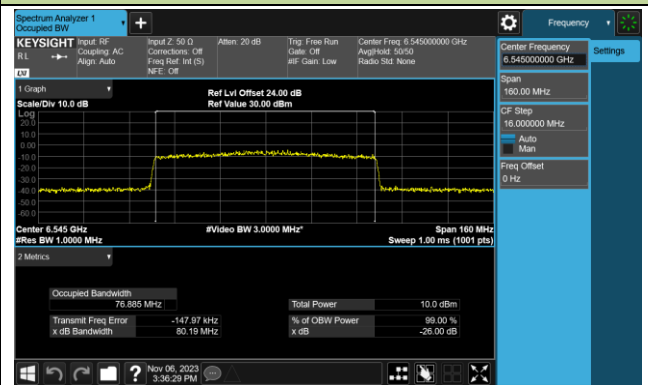
Channel 87 (6385MHz)



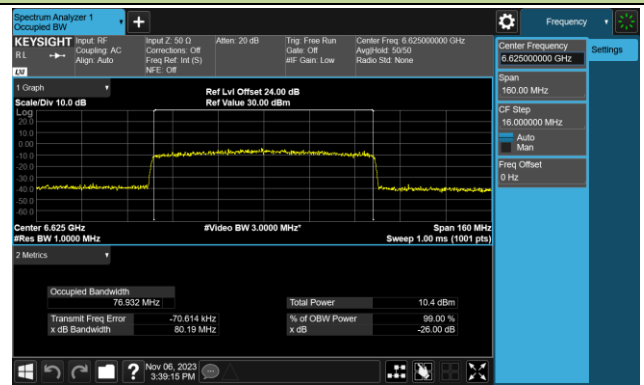
Channel 103 (6465MHz)



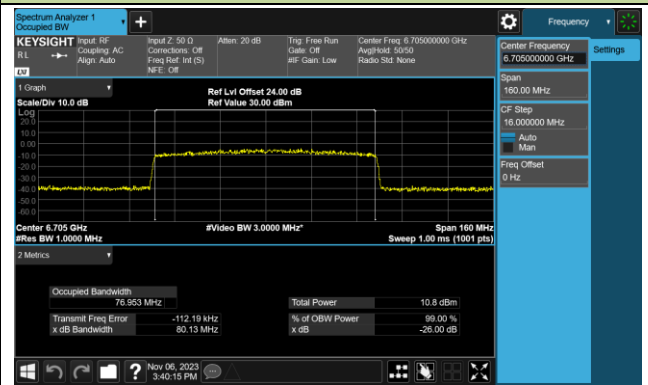
Channel 119 (6545MHz)



Channel 135 (6625MHz)

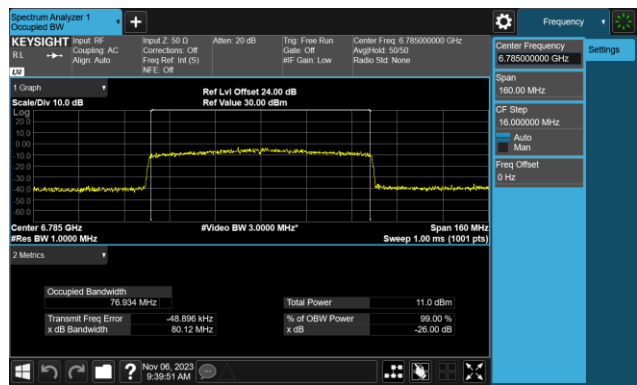


Channel 151 (6705MHz)

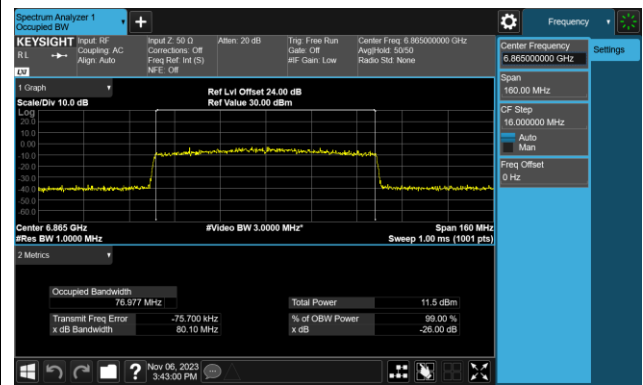


802.11ax-HE80 26dB Bandwidth & 99% Bandwidth

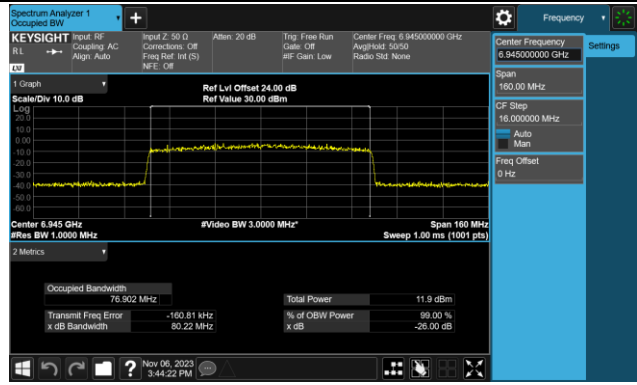
Channel 167 (6785MHz)



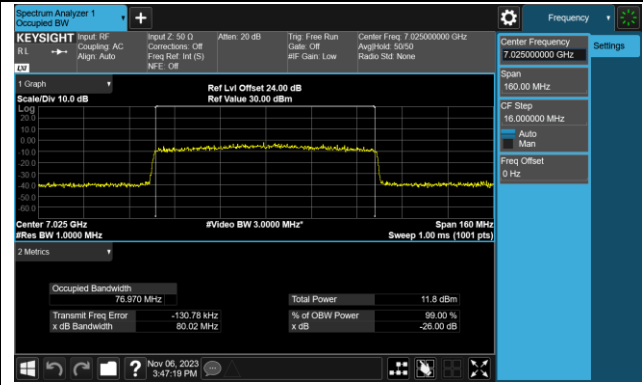
Channel 183 (6865MHz)



Channel 199 (6945MHz)



Channel 215 (7025MHz)



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

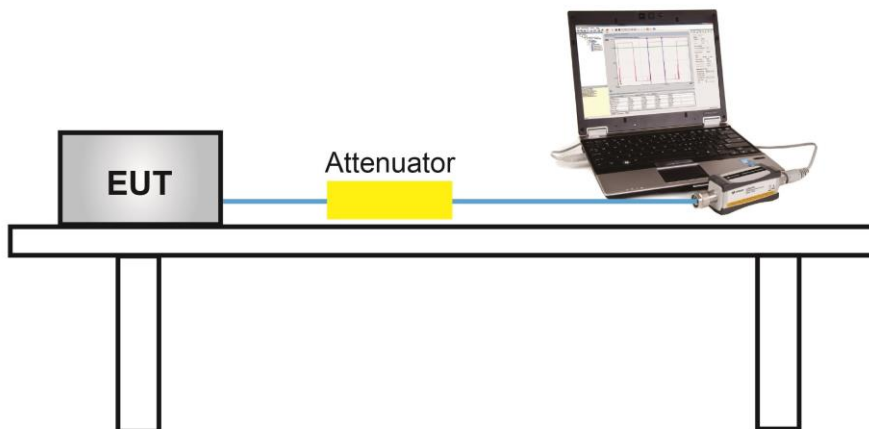
KDB 789033D02v02r01- Section E)3)b) Method PM-G

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	SR6	Test Engineer	Xuan
Test Date	2023/7/27		

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	2.15	2.55	5.36	2.00	7.36	≤ 24.00
11ax-HE20	MCS0	33	6115	1.67	1.82	4.76	2.00	6.76	≤ 24.00
11ax-HE20	MCS0	93	6415	2.58	1.78	5.21	2.00	7.21	≤ 24.00
11ax-HE20	MCS0	97	6435	2.85	3.06	5.97	1.67	7.64	≤ 24.00
11ax-HE20	MCS0	105	6475	2.81	2.71	5.77	1.67	7.44	≤ 24.00
11ax-HE20	MCS0	113	6515	1.67	4.76	6.49	1.67	8.16	≤ 24.00
11ax-HE20	MCS0	117	6535	1.08	3.61	5.54	1.74	7.28	≤ 24.00
11ax-HE20	MCS0	149	6695	3.72	3.12	6.44	1.74	8.18	≤ 24.00
11ax-HE20	MCS0	181	6855	3.05	2.92	6.00	1.74	7.74	≤ 24.00
11ax-HE20	MCS0	185	6875	3.41	2.56	6.02	1.74	7.76	≤ 24.00
11ax-HE20	MCS0	189	6895	3.04	2.65	5.86	1.25	7.11	≤ 24.00
11ax-HE20	MCS0	213	7015	4.21	3.46	6.86	1.25	8.11	≤ 24.00
11ax-HE20	MCS0	233	7115	4.23	4.08	7.17	1.25	8.42	≤ 24.00
11ax-HE40	MCS0	3	5965	4.54	4.62	7.59	2.00	9.59	≤ 24.00
11ax-HE40	MCS0	43	6165	5.14	4.59	7.88	2.00	9.88	≤ 24.00
11ax-HE40	MCS0	91	6405	4.87	4.65	7.77	2.00	9.77	≤ 24.00
11ax-HE40	MCS0	99	6445	4.55	4.18	7.38	1.67	9.05	≤ 24.00
11ax-HE40	MCS0	107	6485	5.06	4.36	7.73	1.67	9.40	≤ 24.00
11ax-HE40	MCS0	115	6525	2.79	5.90	7.63	1.67	9.30	≤ 24.00
11ax-HE40	MCS0	123	6565	5.00	5.01	8.02	1.74	9.76	≤ 24.00
11ax-HE40	MCS0	147	6685	6.09	5.50	8.82	1.74	10.56	≤ 24.00
11ax-HE40	MCS0	179	6845	4.92	5.12	8.03	1.74	9.77	≤ 24.00
11ax-HE40	MCS0	187	6885	5.35	4.90	8.14	1.25	9.39	≤ 24.00
11ax-HE40	MCS0	195	6925	6.02	5.00	8.55	1.25	9.80	≤ 24.00
11ax-HE40	MCS0	211	7005	6.05	5.30	8.70	1.25	9.95	≤ 24.00
11ax-HE40	MCS0	227	7085	6.69	5.86	9.31	1.25	10.56	≤ 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	7.60	7.80	10.71	2.00	12.71	≤ 24.00
11ax-HE80	MCS0	39	6145	7.97	7.87	10.93	2.00	12.93	≤ 24.00
11ax-HE80	MCS0	87	6385	8.51	8.33	11.43	2.00	13.43	≤ 24.00
11ax-HE80	MCS0	103	6465	7.66	6.98	10.34	2.00	12.34	≤ 24.00
11ax-HE80	MCS0	119	6545	8.02	7.99	11.02	1.67	12.69	≤ 24.00
11ax-HE80	MCS0	135	6625	6.53	9.52	11.29	1.74	13.03	≤ 24.00
11ax-HE80	MCS0	151	6705	8.38	8.26	11.33	1.74	13.07	≤ 24.00
11ax-HE80	MCS0	183	6865	8.86	8.21	11.56	1.74	13.30	≤ 24.00
11ax-HE80	MCS0	199	6945	8.15	7.86	11.02	1.74	12.76	≤ 24.00
11ax-HE80	MCS0	215	7025	7.79	7.77	10.79	1.74	12.53	≤ 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	SR6	Test Engineer	Xuan
Test Date	2023/7/27		

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	5.46	5.27	8.38	2.00	10.38	≤ 24.00
11ax-HE20	MCS0	33	6115	6.00	5.46	8.75	2.00	10.75	≤ 24.00
11ax-HE20	MCS0	93	6415	5.05	5.31	8.19	2.00	10.19	≤ 24.00
11ax-HE20	MCS0	97	6435	6.05	5.73	8.90	1.67	10.57	≤ 24.00
11ax-HE20	MCS0	105	6475	5.22	5.79	8.52	1.67	10.19	≤ 24.00
11ax-HE20	MCS0	113	6515	7.12	3.51	8.69	1.67	10.36	≤ 24.00
11ax-HE20	MCS0	117	6535	3.78	7.20	8.83	1.74	10.57	≤ 24.00
11ax-HE20	MCS0	149	6695	6.02	5.95	9.00	1.74	10.74	≤ 24.00
11ax-HE20	MCS0	181	6855	6.09	5.39	8.76	1.74	10.50	≤ 24.00
11ax-HE20	MCS0	185	6875	5.52	5.65	8.60	1.74	10.34	≤ 24.00
11ax-HE20	MCS0	189	6895	5.57	6.35	8.99	1.25	10.24	≤ 24.00
11ax-HE20	MCS0	213	7015	7.14	7.00	10.08	1.25	11.33	≤ 24.00
11ax-HE20	MCS0	233	7115	6.19	6.54	9.38	1.25	10.63	≤ 24.00
11ax-HE40	MCS0	3	5965	7.83	7.50	10.68	2.00	12.68	≤ 24.00
11ax-HE40	MCS0	43	6165	8.12	7.60	10.88	2.00	12.88	≤ 24.00
11ax-HE40	MCS0	91	6405	8.12	8.06	11.10	2.00	13.10	≤ 24.00
11ax-HE40	MCS0	99	6445	7.33	7.81	10.59	1.67	12.26	≤ 24.00
11ax-HE40	MCS0	107	6485	7.52	7.69	10.62	1.67	12.29	≤ 24.00
11ax-HE40	MCS0	115	6525	9.55	5.29	10.93	1.67	12.60	≤ 24.00
11ax-HE40	MCS0	123	6565	8.56	8.43	11.51	1.74	13.25	≤ 24.00
11ax-HE40	MCS0	147	6685	8.29	8.59	11.45	1.74	13.19	≤ 24.00
11ax-HE40	MCS0	179	6845	5.01	9.69	10.96	1.74	12.70	≤ 24.00
11ax-HE40	MCS0	187	6885	8.37	8.62	11.51	1.25	12.76	≤ 24.00
11ax-HE40	MCS0	195	6925	8.41	8.40	11.42	1.25	12.67	≤ 24.00
11ax-HE40	MCS0	211	7005	8.58	8.65	11.63	1.25	12.88	≤ 24.00
11ax-HE40	MCS0	227	7085	8.73	8.37	11.56	1.25	12.81	≤ 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	10.88	10.82	13.86	2.00	15.86	≤ 24.00
11ax-HE80	MCS0	39	6145	11.01	11.59	14.32	2.00	16.32	≤ 24.00
11ax-HE80	MCS0	71	6305	10.87	11.13	14.01	2.00	16.01	≤ 24.00
11ax-HE80	MCS0	87	6385	11.00	11.45	14.24	2.00	16.24	≤ 24.00
11ax-HE80	MCS0	103	6465	11.03	11.34	14.20	1.67	15.87	≤ 24.00
11ax-HE80	MCS0	119	6545	9.62	12.56	14.34	1.74	16.08	≤ 24.00
11ax-HE80	MCS0	135	6625	11.20	11.41	14.32	1.74	16.06	≤ 24.00
11ax-HE80	MCS0	151	6705	11.12	11.39	14.27	1.74	16.01	≤ 24.00
11ax-HE80	MCS0	167	6785	11.24	11.09	14.18	1.74	15.92	≤ 24.00
11ax-HE80	MCS0	183	6865	11.19	11.25	14.23	1.74	15.97	≤ 24.00
11ax-HE80	MCS0	199	6945	11.16	11.24	14.21	1.25	15.46	≤ 24.00
11ax-HE80	MCS0	215	7025	11.52	11.76	14.65	1.25	15.90	≤ 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 Power (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.

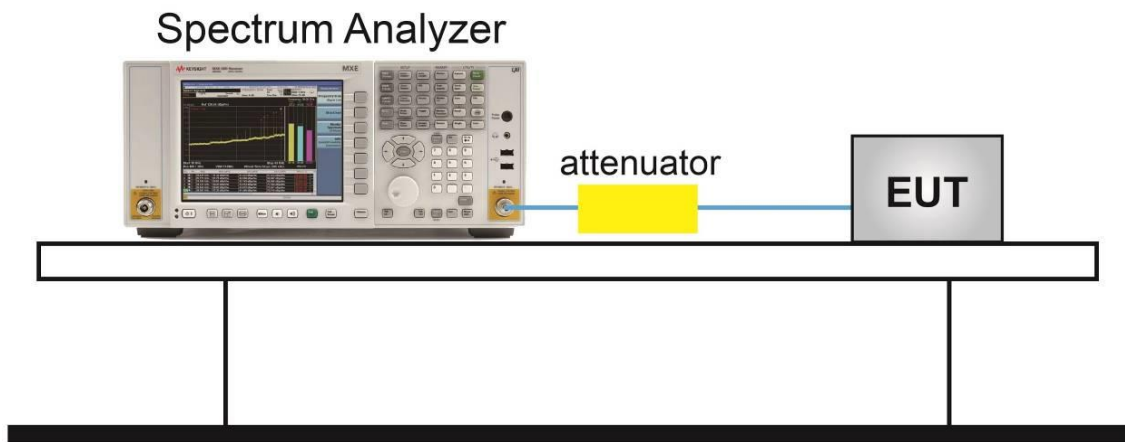
6.4.2. Test Procedure Used

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	SR6	Test Engineer	Xuan
Test Date	2023/11/6~2023/11/13		

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	-9.443	-9.617	-6.519	92.01%	5.01	-1.15	≤ -1.00
11ax-HE20	MCS0	33	6115	-9.892	-9.885	-6.466	92.01%	5.01	-1.51	≤ -1.00
11ax-HE20	MCS0	93	6415	-9.831	-9.948	-6.879	92.01%	5.01	-1.51	≤ -1.00
11ax-HE20	MCS0	97	6435	-9.513	-9.129	-6.306	92.01%	4.68	-1.26	≤ -1.00
11ax-HE20	MCS0	105	6475	-9.237	-9.074	-6.144	92.01%	4.68	-1.10	≤ -1.00
11ax-HE20	MCS0	113	6515	-10.610	-8.469	-6.399	92.01%	4.68	-1.36	≤ -1.00
11ax-HE20	MCS0	117	6535	-11.481	-8.357	-6.634	92.01%	4.75	-1.52	≤ -1.00
11ax-HE20	MCS0	149	6695	-9.348	-9.411	-6.369	92.01%	4.75	-1.26	≤ -1.00
11ax-HE20	MCS0	181	6855	-9.482	-10.029	-6.737	92.01%	4.75	-1.62	≤ -1.00
11ax-HE20	MCS0	185	6875	-9.183	-9.857	-6.497	92.01%	4.75	-1.38	≤ -1.00
11ax-HE20	MCS0	189	6895	-9.297	-9.139	-6.207	92.01%	4.26	-1.59	≤ -1.00
11ax-HE20	MCS0	213	7015	-8.893	-9.333	-6.097	92.01%	4.26	-1.48	≤ -1.00
11ax-HE20	MCS0	233	7115	-8.511	-9.274	-5.865	92.01%	4.26	-1.24	≤ -1.00
11ax-HE40	MCS0	3	5965	-9.765	-9.844	-6.794	88.51%	5.01	-1.25	≤ -1.00
11ax-HE40	MCS0	43	6165	-10.264	-9.636	-6.928	88.51%	5.01	-1.39	≤ -1.00
11ax-HE40	MCS0	91	6405	-9.467	-9.944	-6.689	88.51%	5.01	-1.15	≤ -1.00
11ax-HE40	MCS0	99	6445	-9.374	-9.464	-6.408	88.51%	4.68	-1.20	≤ -1.00
11ax-HE40	MCS0	107	6485	-9.415	-9.660	-6.525	88.51%	4.68	-1.32	≤ -1.00
11ax-HE40	MCS0	115	6525	-12.365	-8.437	-6.961	88.51%	4.68	-1.75	≤ -1.00
11ax-HE40	MCS0	123	6565	-9.331	-9.824	-6.560	88.51%	4.75	-1.28	≤ -1.00
11ax-HE40	MCS0	147	6685	-9.296	-10.301	-6.759	88.51%	4.75	-1.48	≤ -1.00
11ax-HE40	MCS0	179	6845	-7.483	-13.170	-6.445	88.51%	4.75	-1.17	≤ -1.00
11ax-HE40	MCS0	187	6885	-9.121	-9.413	-6.254	88.51%	4.26	-1.46	≤ -1.00
11ax-HE40	MCS0	195	6925	-9.019	-9.130	-6.064	88.51%	4.26	-1.27	≤ -1.00
11ax-HE40	MCS0	211	7005	-8.657	-9.344	-5.977	88.51%	4.26	-1.19	≤ -1.00
11ax-HE40	MCS0	227	7085	-8.688	-9.461	-6.047	88.51%	4.26	-1.26	≤ -1.00

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	-10.071	-10.302	-7.175	78.78%	5.01	-1.13	≤ -1.00
11ax-HE80	MCS0	39	6145	-10.096	-10.398	-7.234	78.78%	5.01	-1.19	≤ -1.00
11ax-HE80	MCS0	71	6305	-10.209	-10.620	-7.399	78.78%	5.01	-1.42	≤ -1.00
11ax-HE80	MCS0	87	6385	-10.328	-10.562	-7.433	78.78%	5.01	-1.39	≤ -1.00
11ax-HE80	MCS0	103	6465	-10.510	-9.968	-7.220	78.78%	4.68	-1.50	≤ -1.00
11ax-HE80	MCS0	119	6545	-11.323	-9.176	-7.108	78.78%	4.75	-1.32	≤ -1.00
11ax-HE80	MCS0	135	6625	-9.839	-11.034	-7.385	78.78%	4.75	-1.60	≤ -1.00
11ax-HE80	MCS0	151	6705	-10.009	-10.364	-7.173	78.78%	4.75	-1.39	≤ -1.00
11ax-HE80	MCS0	167	6785	-10.048	-10.501	-7.258	78.78%	4.75	-1.51	≤ -1.00
11ax-HE80	MCS0	183	6865	-9.975	-10.187	-7.069	78.78%	4.75	-1.28	≤ -1.00
11ax-HE80	MCS0	199	6945	-9.372	-9.833	-6.586	78.78%	4.26	-1.29	≤ -1.00
11ax-HE80	MCS0	215	7025	-9.208	-10.011	-6.581	78.78%	4.26	-1.28	≤ -1.00

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	SR6	Test Engineer	Xuan
Test Date	2023/10/31~2023/11/6		

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-HE20	MCS0	1	5955	-6.840	-7.006	-3.912	84.86%	2.00	-1.199	≤ -1.00
11ax-HE20	MCS0	33	6115	-6.662	-7.029	-3.831	84.86%	2.00	-1.118	≤ -1.00
11ax-HE20	MCS0	93	6415	-6.846	-6.752	-3.788	84.86%	2.00	-1.075	≤ -1.00
11ax-HE20	MCS0	97	6435	-6.311	-6.502	-3.395	84.86%	1.67	-1.012	≤ -1.00
11ax-HE20	MCS0	105	6475	-6.232	-6.681	-3.440	84.86%	1.67	-1.057	≤ -1.00
11ax-HE20	MCS0	113	6515	-5.560	-9.097	-3.968	84.86%	1.67	-1.585	≤ -1.00
11ax-HE20	MCS0	117	6535	-8.659	-5.395	-3.717	84.86%	1.74	-1.264	≤ -1.00
11ax-HE20	MCS0	149	6695	-7.401	-6.985	-4.178	84.86%	1.74	-1.725	≤ -1.00
11ax-HE20	MCS0	181	6855	-6.725	-6.477	-3.589	84.86%	1.74	-1.136	≤ -1.00
11ax-HE20	MCS0	185	6875	-7.305	-6.996	-4.137	84.86%	1.74	-1.684	≤ -1.00
11ax-HE20	MCS0	189	6895	-6.799	-6.115	-3.433	84.86%	1.25	-1.470	≤ -1.00
11ax-HE20	MCS0	213	7015	-5.839	-6.344	-3.074	84.86%	1.25	-1.111	≤ -1.00
11ax-HE20	MCS0	233	7115	-6.409	-6.589	-3.488	84.86%	1.25	-1.525	≤ -1.00
11ax-HE40	MCS0	3	5965	-7.018	-7.662	-4.318	78.82%	2.00	-1.284	≤ -1.00
11ax-HE40	MCS0	43	6165	-6.988	-7.548	-4.249	78.82%	2.00	-1.215	≤ -1.00
11ax-HE40	MCS0	91	6405	-7.325	-7.144	-4.223	78.82%	2.00	-1.190	≤ -1.00
11ax-HE40	MCS0	99	6445	-6.938	-6.877	-3.897	78.82%	1.67	-1.193	≤ -1.00
11ax-HE40	MCS0	107	6485	-7.387	-6.792	-4.069	78.82%	1.67	-1.365	≤ -1.00
11ax-HE40	MCS0	115	6525	-5.643	-9.070	-4.017	78.82%	1.67	-1.313	≤ -1.00
11ax-HE40	MCS0	123	6565	-7.171	-7.403	-4.275	78.82%	1.74	-1.502	≤ -1.00
11ax-HE40	MCS0	147	6685	-7.033	-7.332	-4.170	78.82%	1.74	-1.396	≤ -1.00
11ax-HE40	MCS0	179	6845	-10.260	-5.407	-4.178	78.82%	1.74	-1.404	≤ -1.00
11ax-HE40	MCS0	187	6885	-7.184	-6.972	-4.066	78.82%	1.25	-1.783	≤ -1.00
11ax-HE40	MCS0	195	6925	-6.656	-7.121	-3.872	78.82%	1.25	-1.588	≤ -1.00
11ax-HE40	MCS0	211	7005	-7.103	-6.591	-3.829	78.82%	1.25	-1.546	≤ -1.00
11ax-HE40	MCS0	227	7085	-6.653	-6.892	-3.761	78.82%	1.25	-1.477	≤ -1.00

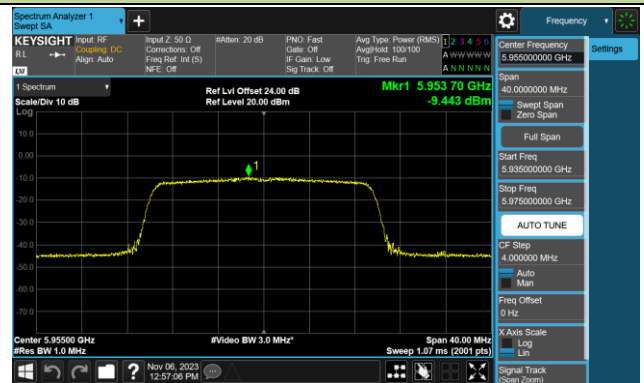
Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Duty Cycle (%)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)
				Ant 1	Ant 2					
CDD Mode (Nss = 2)										
11ax-HE80	MCS0	7	5985	-7.717	-8.025	-4.858	67.01%	2.00	-1.119	≤ -1.00
11ax-HE80	MCS0	39	6145	-8.535	-8.215	-5.362	67.01%	2.00	-1.623	≤ -1.00
11ax-HE80	MCS0	71	6305	-8.794	-10.170	-6.417	67.01%	2.00	-2.679	≤ -1.00
11ax-HE80	MCS0	87	6385	-8.567	-8.971	-5.754	67.01%	2.00	-2.015	≤ -1.00
11ax-HE80	MCS0	103	6465	-7.714	-8.197	-4.938	67.01%	1.67	-1.530	≤ -1.00
11ax-HE80	MCS0	119	6545	-7.280	-9.931	-5.396	67.01%	1.74	-1.917	≤ -1.00
11ax-HE80	MCS0	135	6625	-8.805	-9.225	-6.000	67.01%	1.74	-2.521	≤ -1.00
11ax-HE80	MCS0	151	6705	-9.179	-8.969	-6.062	67.01%	1.74	-2.584	≤ -1.00
11ax-HE80	MCS0	167	6785	-8.527	-8.965	-5.730	67.01%	1.74	-2.252	≤ -1.00
11ax-HE80	MCS0	183	6865	-8.631	-8.057	-5.324	67.01%	1.74	-1.846	≤ -1.00
11ax-HE80	MCS0	199	6945	-8.143	-8.709	-5.406	67.01%	1.25	-2.418	≤ -1.00
11ax-HE80	MCS0	215	7025	-9.129	-8.170	-5.613	67.01%	1.25	-2.624	≤ -1.00

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

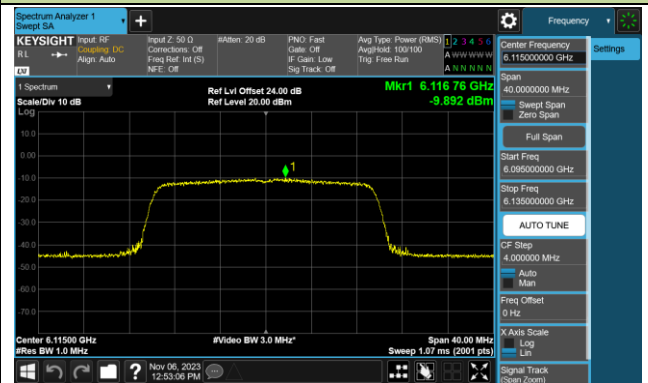
Note 2: When EUT duty cycle < 98%, EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$ + Directional Gain (dBi).

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

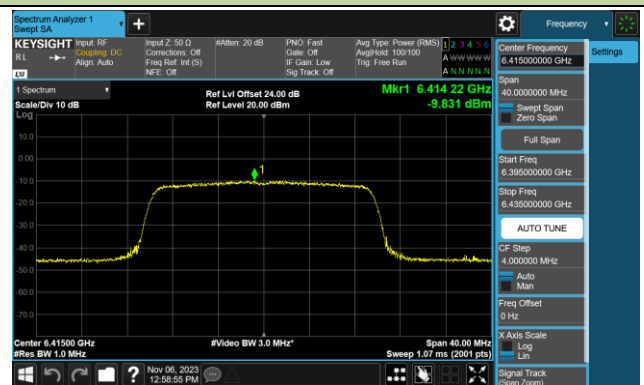
Channel 1 (5955MHz)



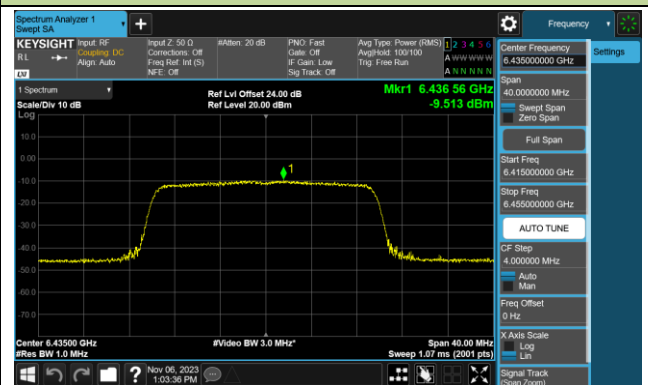
Channel 33 (6115MHz)



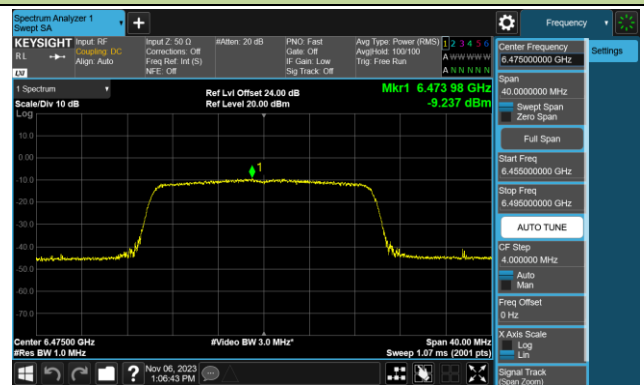
Channel 93 (6415MHz)



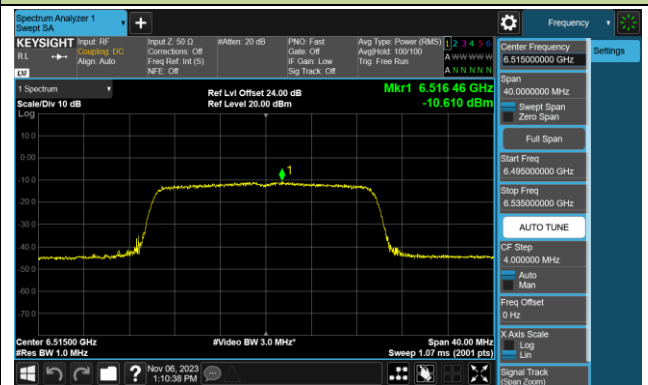
Channel 97 (6435MHz)



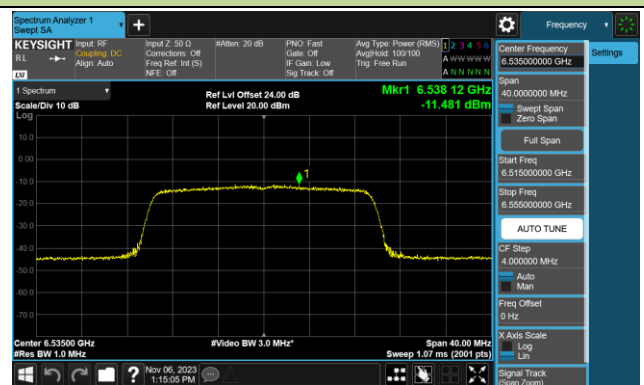
Channel 105 (6475MHz)



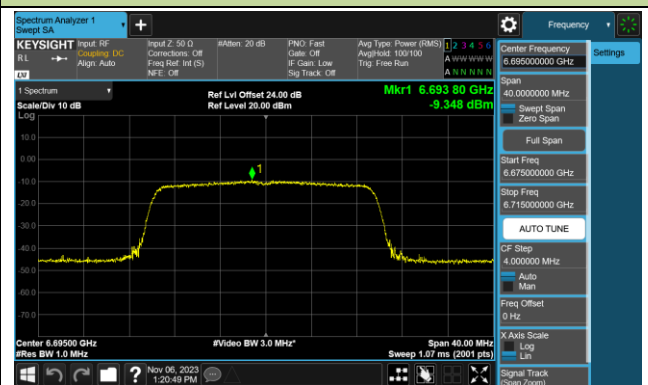
Channel 113 (6515MHz)



Channel 117 (6535MHz)

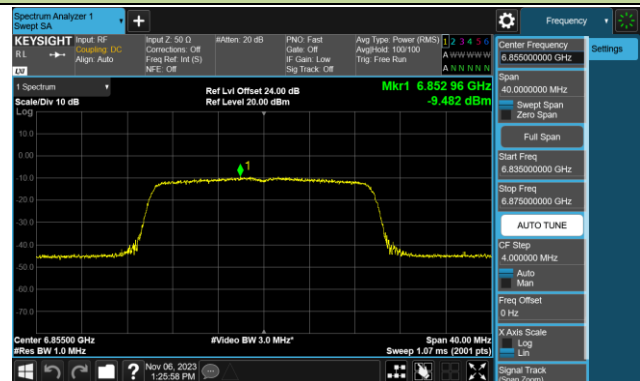


Channel 149 (6695MHz)

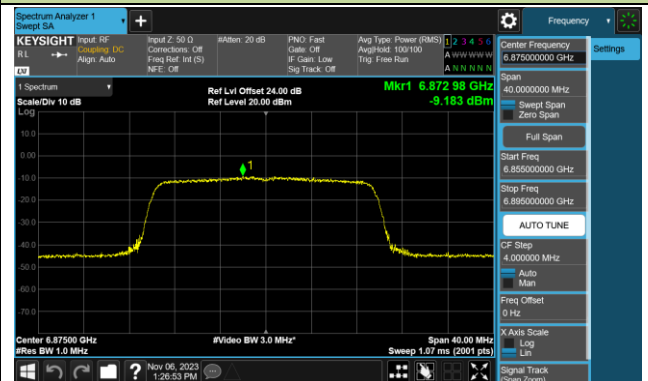


802.11ax-HE20 Power Spectral Density – Ant 1 (Nss=1)

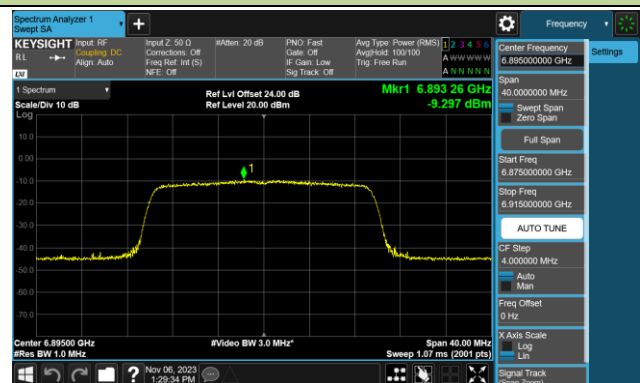
Channel 181 (6855MHz)



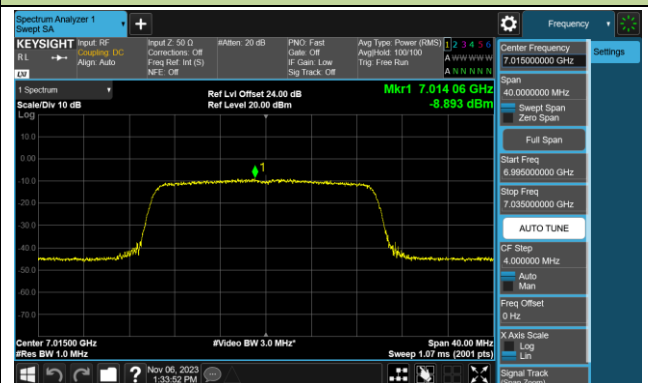
Channel 185 (6875MHz)



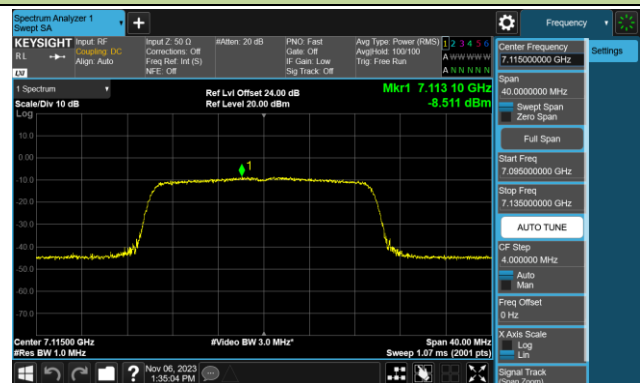
Channel 189 (6895MHz)



Channel 213 (7015MHz)

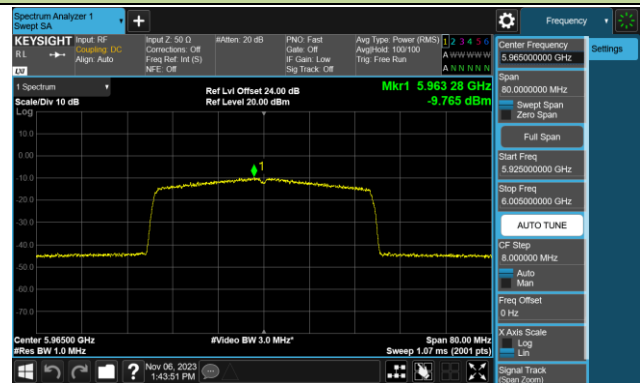


Channel 233 (7115MHz)

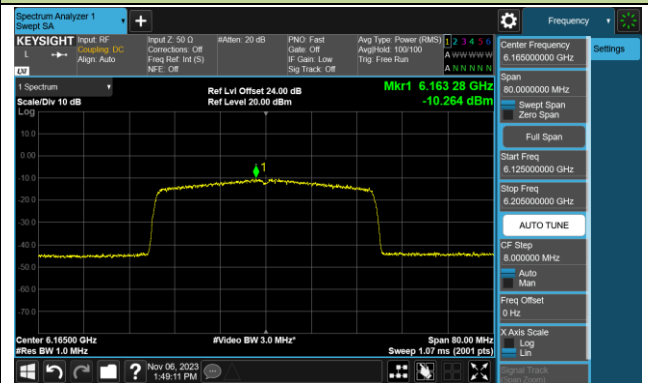


802.11ax-HE40 Power Spectral Density – Ant 1 (Nss=1)

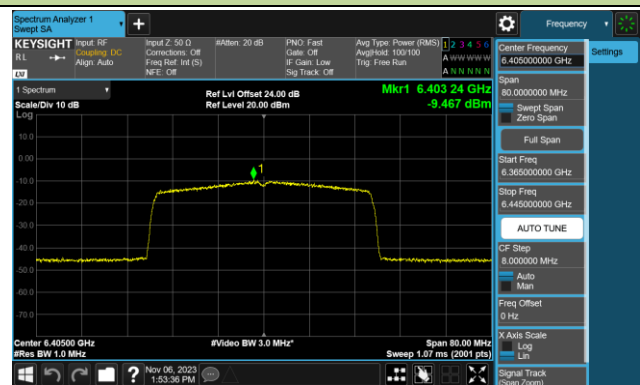
Channel 3 (5965MHz)



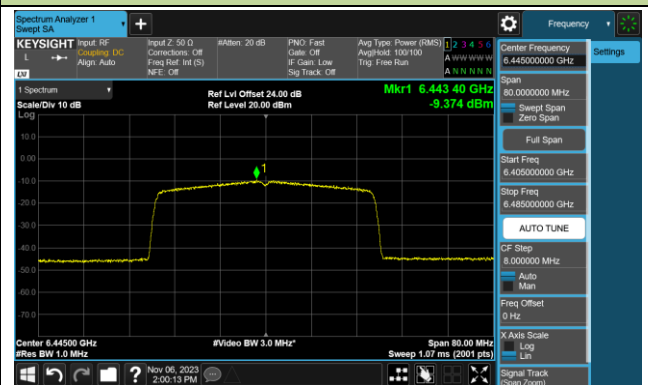
Channel 43 (6165MHz)



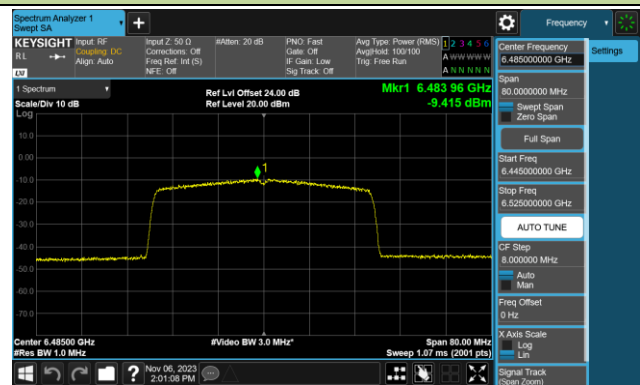
Channel 91 (6405MHz)



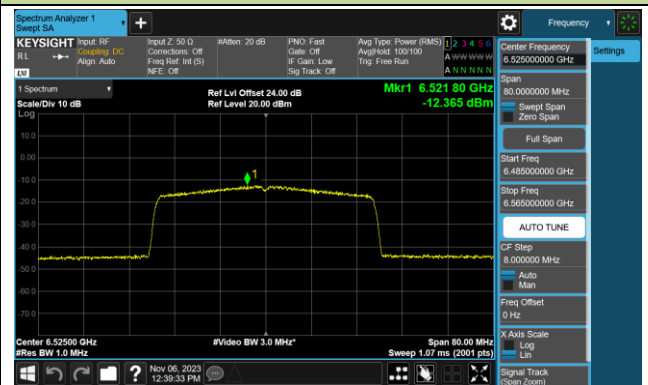
Channel 99 (6445MHz)



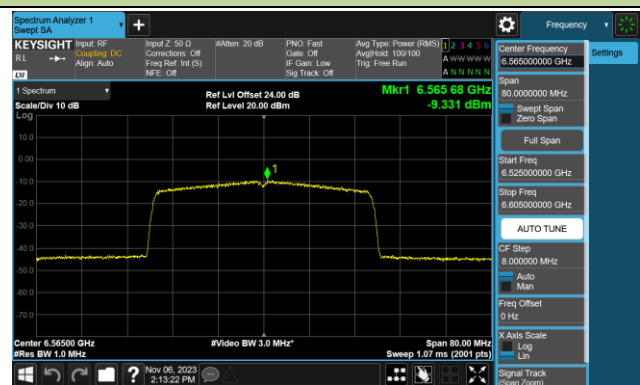
Channel 107 (6485MHz)



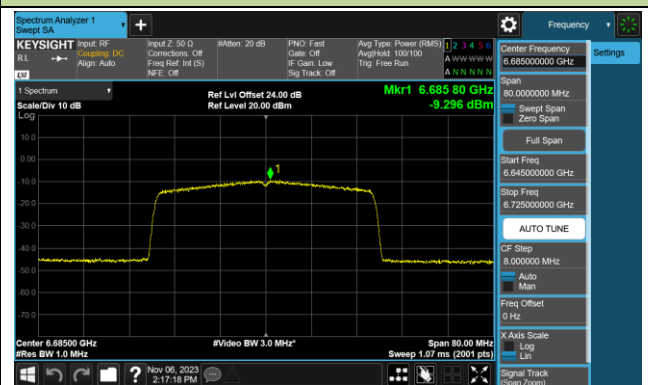
Channel 115 (6525MHz)



Channel 123 (6565MHz)

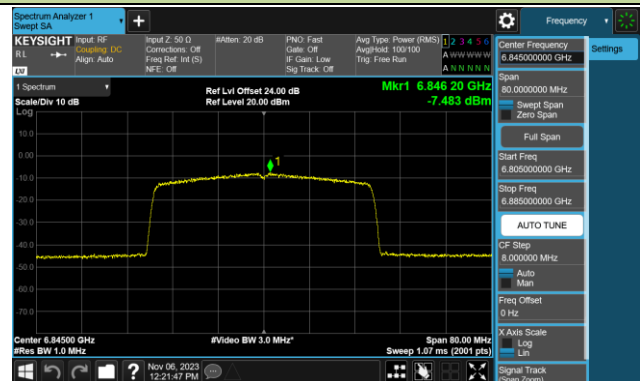


Channel 147 (6685MHz)

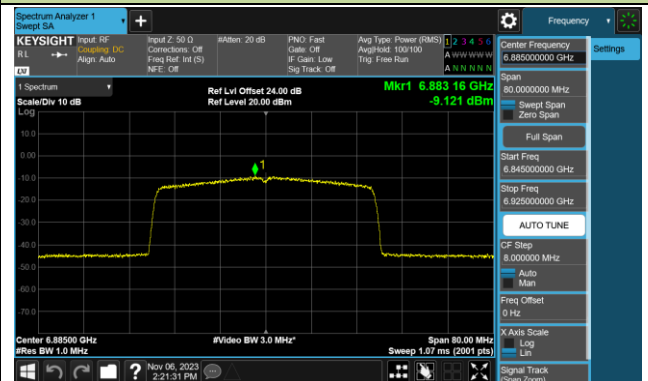


802.11ax-HE40 Power Spectral Density – Ant 1 (Nss=1)

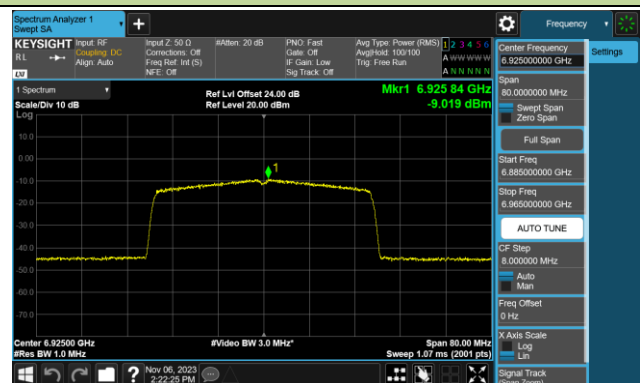
Channel 179 (6845MHz)



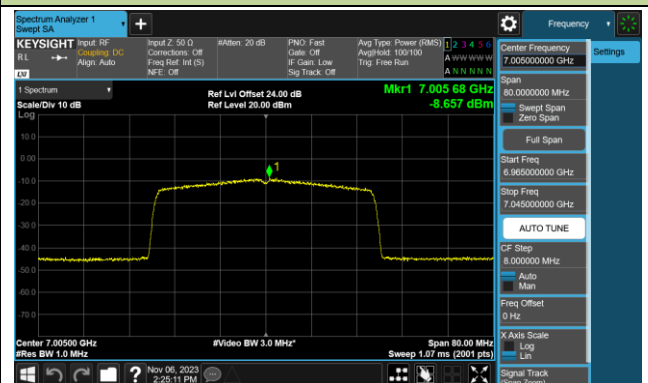
Channel 187 (6885MHz)



Channel 195 (6925MHz)



Channel 211 (7005MHz)



Channel 227 (7085MHz)

