MEASUREMENT REPORT

FCC PART 15.407 WLAN 802.11ax

FCC ID:	Q9DAPIN0635
Applicant:	Hewlett Packard Enterprise Company
Application Type:	Certification
Product:	ACCESS POINT
Model No.:	APIN0635
Trademark:	aruba a Hewlett Packard Enterprise company, Hewlett Packard Enterprise
FCC Classification:	15E 6GHz Low Power Indoor Access Point (6ID)
FCC Rule Part(s):	Part15 Subpart E (Section 15.407)
Test Date:	January 13 ~ May 28, 2021

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 987594 D02v01. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2101RSU034-U2	Rev. 01	Initial report	05-29-2021	Invalid
2101RSU034-U2	Rev. 02	Add some description	07-07-2021	Invalid
2101RSU034-U2	Rev. 03	Add some description	07-28-2021	Valid

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1. General Information

1.1. Applicant

Hewlett Packard Enterprise Company

3333 Scott Blvd, Santa Clara, CA 95054, USA

1.2. Manufacturer

Hewlett Packard Enterprise Company

3333 Scott Blvd, Santa Clara, CA 95054, USA

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**	
	Laboratory Location (Suzhou - Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	Laboratory Location (Suzhou - SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
	VCCI: R-20025, G-20034, C-20020, T-20020	
☐	**Test Site – MRT Shenzhen Laboratory**	
	Laboratory Location (Shenzhen)	
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	CNAS: L10551
	FCC: CN1284	ISED: CN0105
☐	**Test Site – MRT Taiwan Laboratory**	
	Laboratory Location (Taiwan)	
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
	Laboratory Accreditations	
	TAF: L3261-190725	
	FCC: 291082, TW3261	ISED: TW3261

2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	ACCESS POINT
Model No.	APINH635
Test Device Serial No.	DKS0BS0028
Software Version	20210120 spf.11.3.cs
	Aruba OS 8.9.0.0_80031 (CBP)
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Bluetooth Specification	v5.0 single mode, BLE only
Zigbee Specification	802.15.4
Operating Temperature	0 ~ 50 °C
Power Type	AC Adapter or PoE input
Operating Environment	Indoor Use

Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

2.2. Product Specification Subjective to this Report

Frequency Range	For 802.11ax-HE20: 5955~7095MHz
	For 802.11ax-HE40: 5965~7085MHz
	For 802.11ax-HE80: 5985~7025MHz
	For 802.11ax-HE160: 6025~6985MHz
Type of Modulation	802.11ax: OFDMA
Data Rate	802.11ax: up to 2402Mbps

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

2.3. Working Frequencies for this report

802.11ax-HE20

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

802.11ax-HE40

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

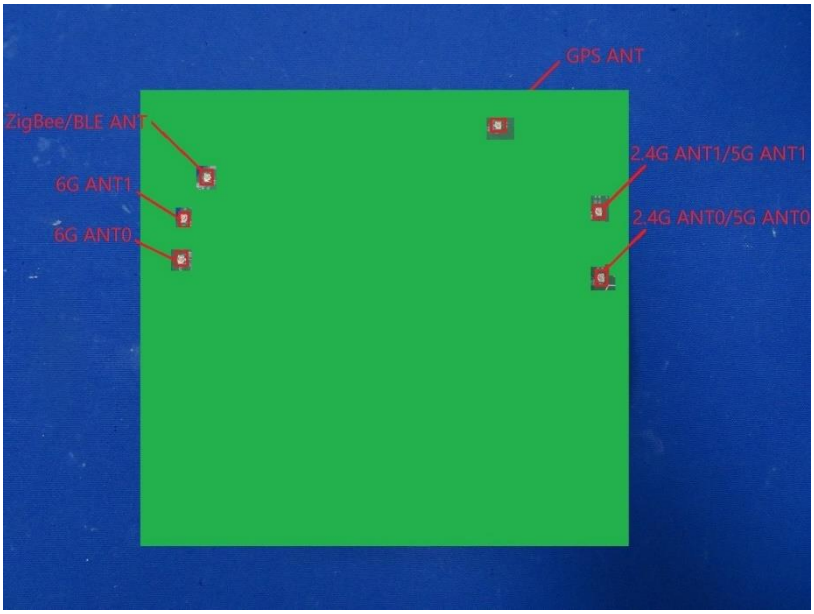
802.11ax-HE80

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

802.11ax-HE160

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

2.4. Description of Antenna RF Port

Antenna RF Port


2.5. Description of Available Antennas

Antenna Type	Frequency Band (GHz)	Max Peak Gain (dBi)	CDD Directional Gain (dBi)		BF Directional Gain (dBi)
			For Power	For PSD	
Wi-Fi Internal Antenna (2*2 MIMO)					
PIFA	2.4 ~ 2.5	2.90	2.90	5.91	5.91
	5.15 ~ 5.9	4.90	4.90	7.91	7.91
	5.9 ~ 7.2	4.30	4.30	4.30	4.30
Bluetooth / ZigBee Internal Antenna					
PIFA	2.4 ~ 2.5	3.0			

Note:

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

For CDD transmissions, directional gain is calculated as follows, N_{ANT} = 2, N_{SS} = 1.

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 = 3.01;

- For power measurements on IEEE 802.11 devices,

  Array Gain = 0 dB for N_{ANT} ≤ 4;

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax, not include 802.11a/b/g. Directional gain = G_{ANT} + BF Gain. BF mode power setting will be less than or equal to CDD power setting.
3. Wi-Fi 6E band antennas are cross polarized. The directional gain value of 4.3dBi was derived using the formula shown in KDB 662911 D01 F)d)ii), Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + … + 10^{GN} /10)/N_{ANT}] dBi. This was applied to each point in the spatial antenna gain array for the two antennas.
   The maximum calculated value was 4.3dBi, the detail refer to antenna specification.
   Provisions of point (3) of Page 3 of KDB 662911 D02 also be used. “(3) If the transmitter output signals are correlated as defined in attachment 662911 D01 of this publication and the conditions of (2) do not apply, then the sum of the two EIRPs or ERPs (total or spectral density) must be below the limit. (See Attachment 662911 D01 of this publication regarding summing spectral densities.)”

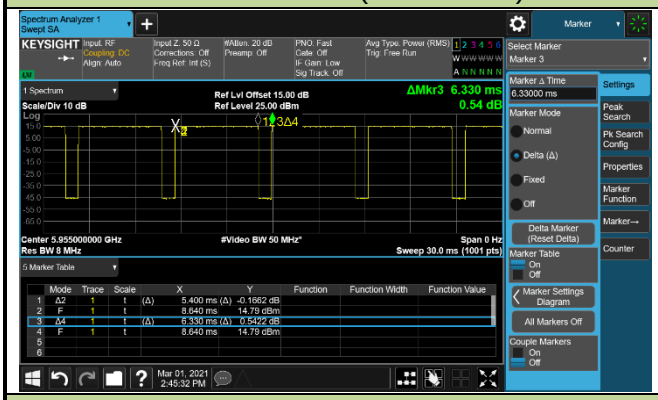
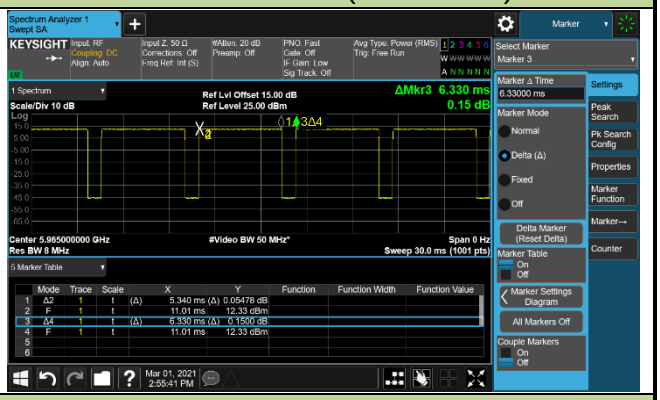
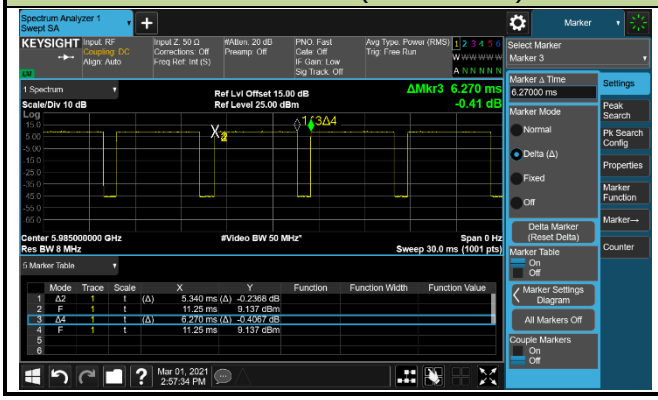
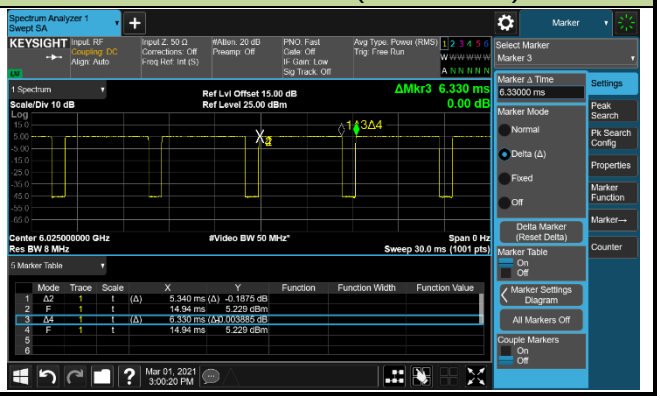
2.6. Test Mode

Test Mode	Mode 1: Transmit by 802.11ax-HE20 (MCS0)
	Mode 2: Transmit by 802.11ax-HE40 (MCS0)
	Mode 3: Transmit by 802.11ax-HE80 (MCS0)
	Mode 4: Transmit by 802.11ax-HE160 (MCS0)

2.7. Duty Cycle

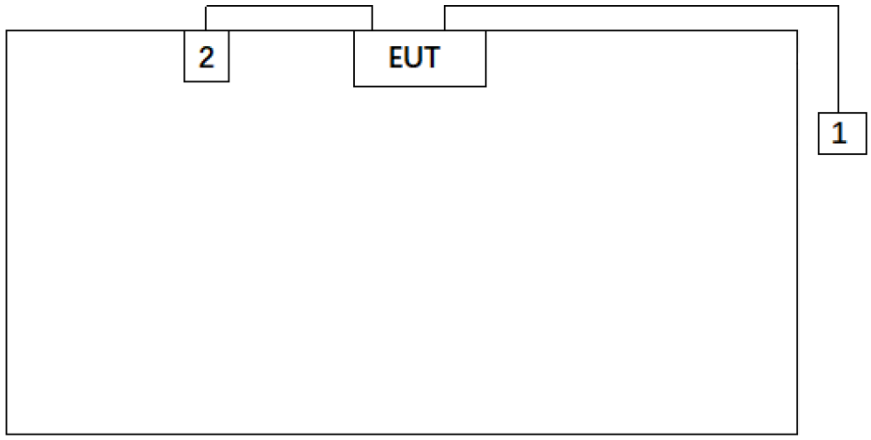
6GHz operation is possible in 20MHz, 40MHz, 80MHz and 160MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where T 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	85.31%
802.11ax-HE40	84.36%
802.11ax-HE80	85.17%
802.11ax-HE160	84.36%

Duty Cycle (T = Transmission Duration)	
802.11ax-HE20 (T=5.400ms)	802.11ax-HE40 (T=5.340ms)
	
802.11ax-HE80 (T=5.340ms)	802.11ax-HE160 (T=5.340ms)
	

2.8. Configuration of Test System

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.



Product		Manufacturer	Model No.
1	Notebook	DELL	Latitude 7490
2	AC Adapter	aruba	DB-48A12

Note 1: The test utility software used during testing was “QSPR”. and the version was “v50-00186”

Note 2: Detail power setting refer to operation description.

2.9. Applicable 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. Test Environment Condition

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

2.11. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

2.12. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

3. ANTENNA REQUIREMENTS

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

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

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

Conclusion:

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

4. TEST EQUIPMENT CALIBRATION DATE

Conducted Emission (WZ-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2022/01/12
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06404	1 year	2021/07/26
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Conducted Emission (SIP-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2021/07/02
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06621	1 year	2021/12/03

Radiated Emission (WZ-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022/01/04
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2021/08/30
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2021/08/08
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2021/09/27
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	testo	608-H1	MRTSUE06403	1 year	2021/07/26
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2022/04/29

Radiated Emission (WZ-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2021/07/02
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2021/05/26
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2021/10/25
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2021/12/08
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2022/04/29

Radiated Emission (SIP-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2021/07/02
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2021/07/23
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06645	1 year	2021/08/30
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06610	1 year	2021/08/30
Preamplifier	EMCI	EMC051845SE	MRTSUE06600	1 year	2021/11/12
Thermal Hygrometer	testo	608-H1	MRTSUE06620	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2021/12/24

Radiated Emission (SIP-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2021/07/02
MXA Signal Analyzer	Keysight	N9020B	MRTSUE06604	1 year	2021/09/26
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06646	1 year	2021/08/30
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06648	1 year	2021/11/26
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06599	1 year	2021/11/26
Preamplifier	EMCI	EMC051845SE	MRTSUE06644	1 year	2021/11/12
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2021/10/13
Thermal Hygrometer	testo	608-H1	MRTSUE06624	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2021/12/24

Radiated Emission (SIP-AC3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2021/07/02
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2021/07/23
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06647	1 year	2021/08/08
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2021/09/13
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06598	1 year	2021/11/26
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2022/01/14
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2022/01/14
Thermal Hygrometer	testo	608-H1	MRTSUE06622	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2021/12/24

Conducted Test Equipment (WZ-TR3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2022/04/13
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2022/01/07
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2022/04/13
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2021/10/22
USB wideband power sensor	Keysight	U2021XA	MRTSUE06446	1 year	2021/08/30
USB wideband power sensor	Keysight	U2021XA	MRTSUE06447	1 year	2021/08/08
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2021/06/11
Audio Analyzer	Agilent	U8903B	MRTSUE06143	1 year	2021/06/11
Modulation Analyzer	HP	HP8901A	MRTSUE06098	1 year	2021/09/26
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2021/10/20
Dual Directional Coupler	narda	4226−10	MRTSUE06563	1 year	2021/10/29
Power divider	Marvelous Microwave Inc.	MVE8576	MRTSUE06851	1 year	2021/06/15
DC Power Supply	GWINSTEK	DPS-3303C	MRTSUE06064	N/A	N/A
Temperature & Humidity Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2021/10/22
Thermal Hygrometer	testo	608-H1	MRTSUE06401	1 year	2021/07/26

Conducted Test Equipment (SIP-SR5)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2022/04/13
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2021/08/30
USB wideband power sensor	Agilent	U2021XA	MRTSUE06595	1 year	2021/09/26
USB wideband power sensor	Agilent	U2021XA	MRTSUE06596	1 year	2021/09/26
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2021/10/20
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2021/06/11
Dual Directional Coupler	narda	4226−10	MRTSUE06563	1 year	2021/10/29
Temperature Chamber	BAOYT	BYG-408CS	MRTSUE06847	1 year	2022/02/23
Thermal Hygrometer	testo	622	MRTSUE06629	1 year	2021/11/25

Software	Version	Function
EMI Software	V3	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.

Conducted Emission Measurement
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): Horizontal: 9KHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~6GHz: 6.40dB Vertical: 9KHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 0.78dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.13dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.15dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 0.28%

6. TEST RESULT

6.1. Summary

FCC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	26dB Bandwidth	N/A	Conducted	N/A	Section 6.2
15.407(a)(5), (a)(6)	Maximum Equivalent Isotopically Radiated Power (E.I.R.P)	30dBm		Pass	Section 6.3
15.407(a)(5), (a)(6)	Peak Power Spectral Density (E.I.R.P)	5 dBm/MHz		Pass	Section 6.4
15.407(b)(6)	In-Band Emission	Refer to Section 6.5		Pass	Section 6.5
15.407(g)	Frequency Stability	± 20 ppm		Pass	Section 6.6
15.407(d)(6)	Contention-Based Protocol	Detect an AWGN signal with 90% level of certainty		Pass	Section 6.7
15.407(b)(5)	Unwanted Emissions	≤ −27 dBm/MHz	Radiated	Pass	Section 6.8 & 6.9
15.407(b)(7), (8), (9)	General Field Strength (Restricted Bands and Radiated Emission)	Emissions in restricted bands must meet the radiated limits detailed in15.209		Pass	
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 6.10

Notes:

1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2) For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
3) EUT supports one configuration only in 802.11ax full RU mode.
4) Test Items “26dB Bandwidth” showed the worst test data in this report.
5) This product has two filter configurations (Type A and Type B) and RF output power is within the tolerance of the device for the same setting. We choose Type A filter to perform all RF testing and choose Type B filter to perform spot check testing (output power and radiated spurious emission).

6.2. 26dB Bandwidth Measurement

6.2.1.Test Limit

N/A

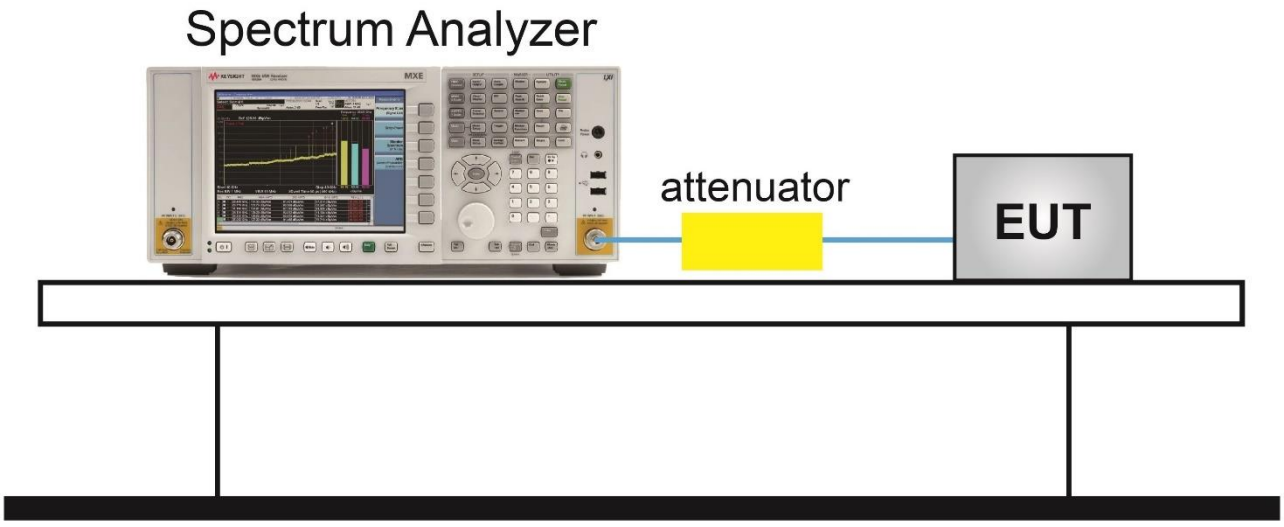
6.2.2.Test Procedure used

KDB 789033 D02v02r01- Section C.1

6.2.3.Test Setting

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 ≥ 3×RBW.
4. Detector = Peak.
5. Trace mode = max hold.

6.2.4.Test Setup

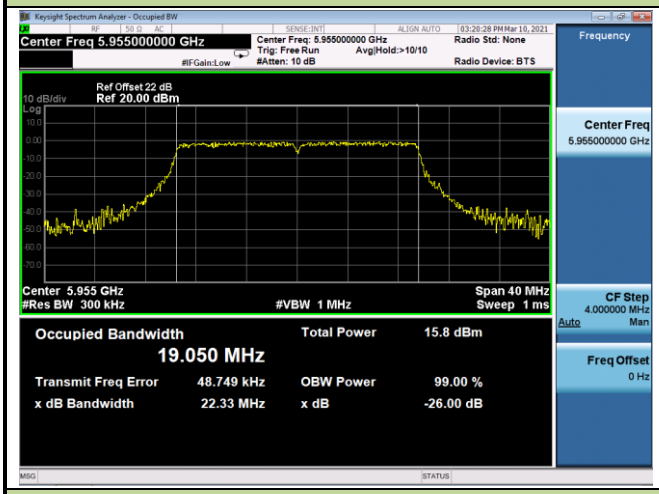
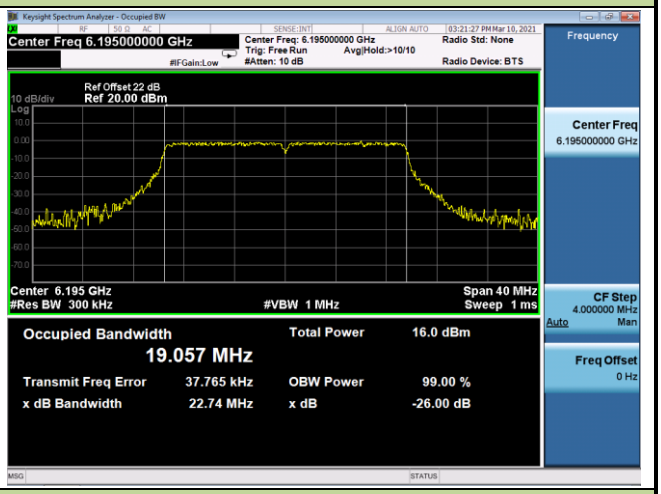
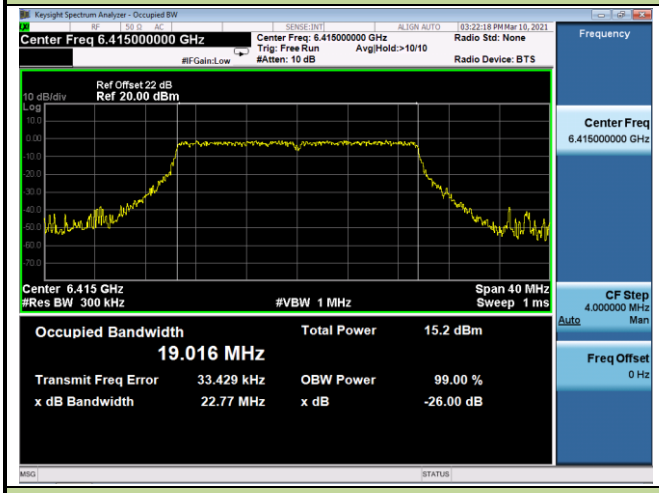
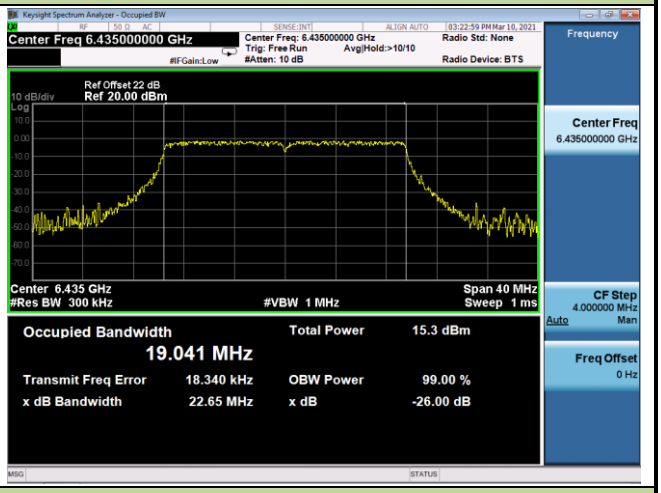
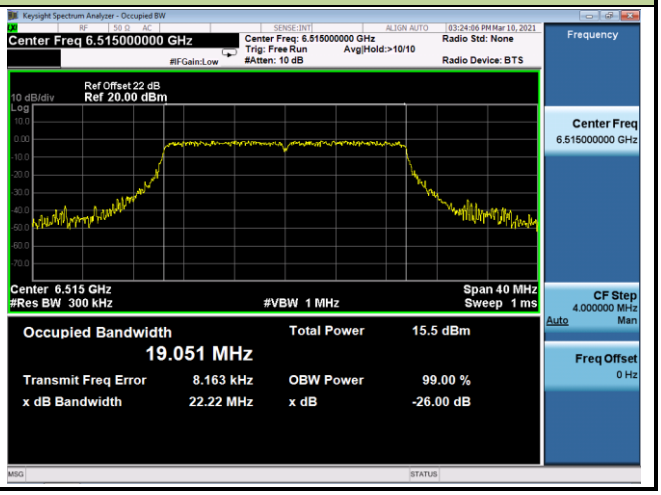


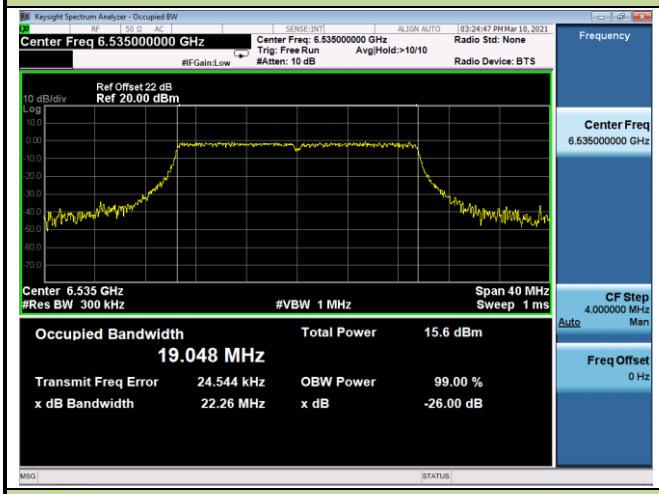
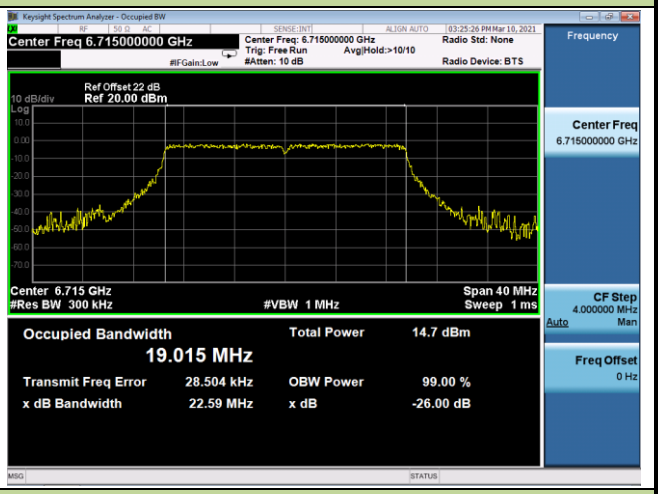
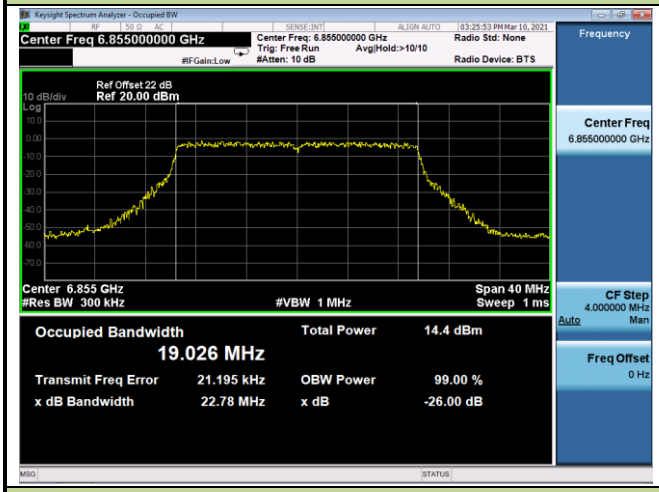
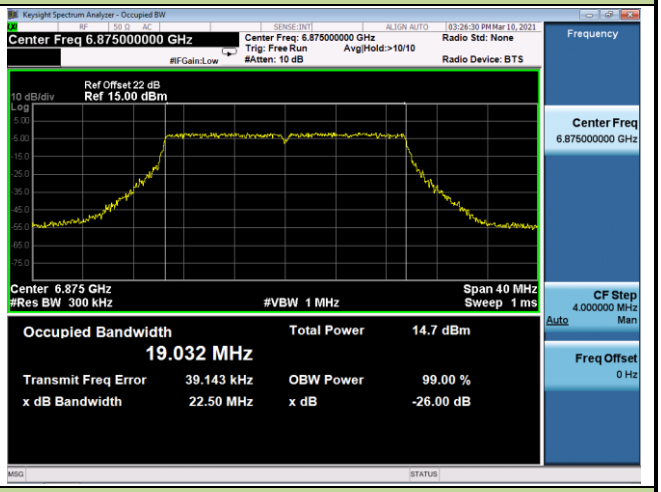
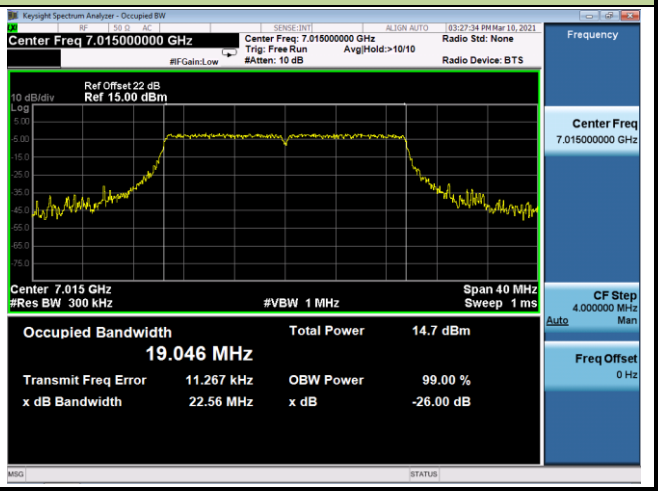
6.2.5.Test Result

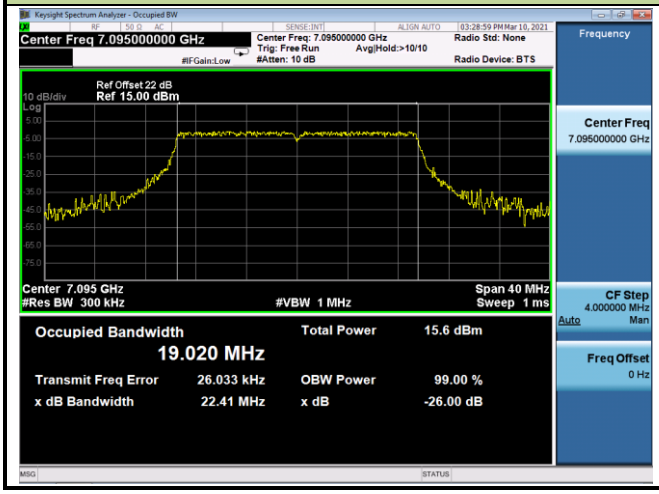
Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2021/03/10 ~ 2021/05/19		

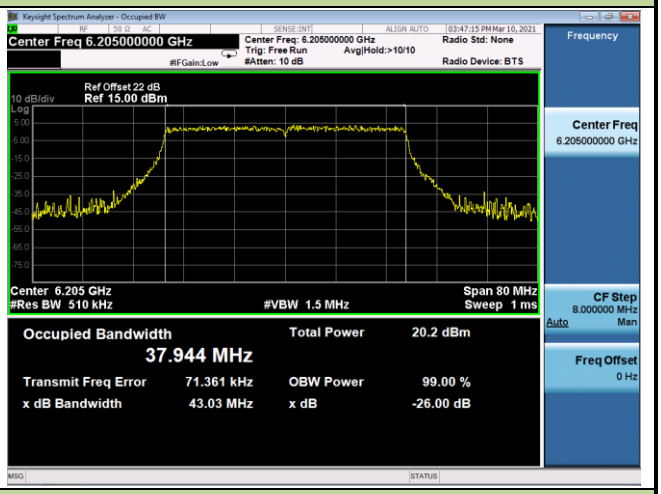
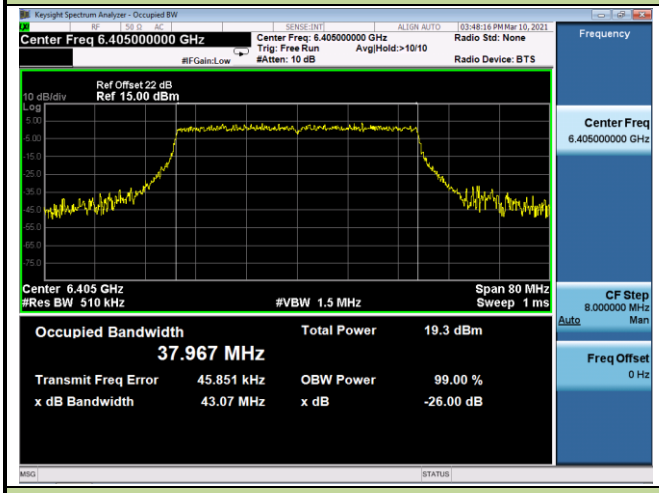
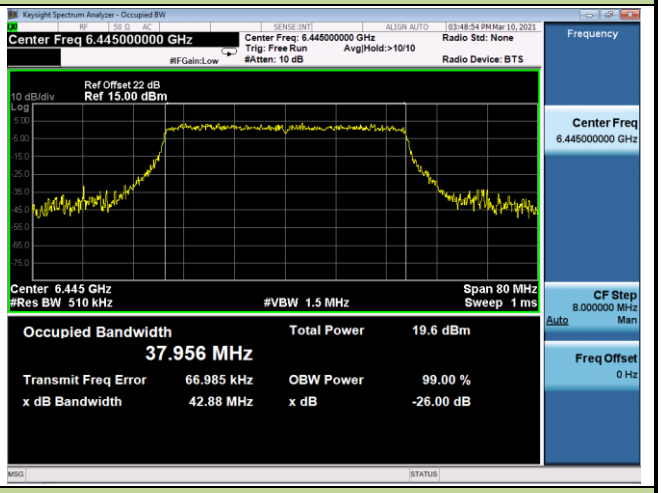
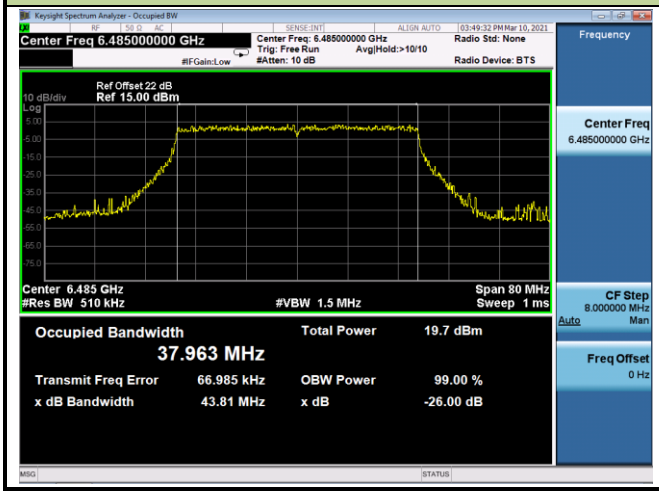
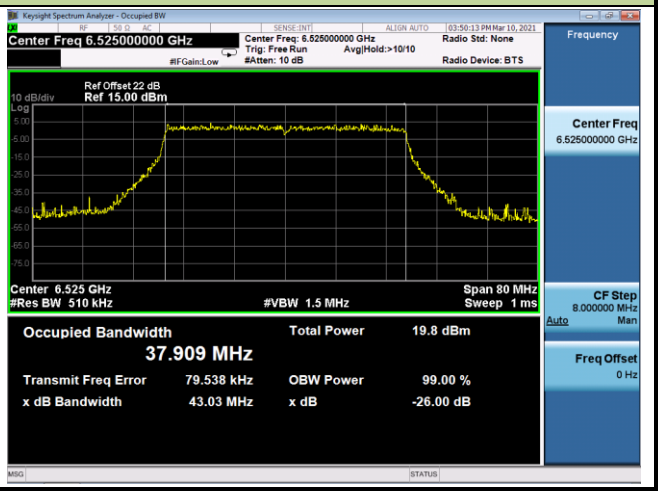
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1 Port					
802.11ax-HE20	MCS0	1	5955	22.33	19.05
802.11ax-HE20	MCS0	49	6195	22.74	19.06
802.11ax-HE20	MCS0	93	6415	22.77	19.02
802.11ax-HE20	MCS0	97	6435	22.65	19.04
802.11ax-HE20	MCS0	105	6475	22.25	19.02
802.11ax-HE20	MCS0	113	6515	22.22	19.05
802.11ax-HE20	MCS0	117	6535	22.26	19.05
802.11ax-HE20	MCS0	153	6715	22.59	19.02
802.11ax-HE20	MCS0	181	6855	22.78	19.03
802.11ax-HE20	MCS0	185	6875	22.50	19.03
802.11ax-HE20	MCS0	189	6895	22.81	19.04
802.11ax-HE20	MCS0	213	7015	22.56	19.05
802.11ax-HE20	MCS0	229	7095	22.41	19.02
802.11ax-HE40	MCS0	3	5965	44.78	37.96
802.11ax-HE40	MCS0	51	6205	43.03	37.94
802.11ax-HE40	MCS0	91	6405	43.07	37.97
802.11ax-HE40	MCS0	99	6445	42.88	37.96
802.11ax-HE40	MCS0	107	6485	43.81	37.96
802.11ax-HE40	MCS0	115	6525	43.03	37.91
802.11ax-HE40	MCS0	123	6565	42.96	37.99
802.11ax-HE40	MCS0	147	6685	42.64	37.94
802.11ax-HE40	MCS0	179	6845	42.20	37.96
802.11ax-HE40	MCS0	187	6885	43.50	37.95
802.11ax-HE40	MCS0	195	6925	43.52	37.99
802.11ax-HE40	MCS0	211	7005	43.77	37.97
802.11ax-HE40	MCS0	227	7085	42.85	37.94

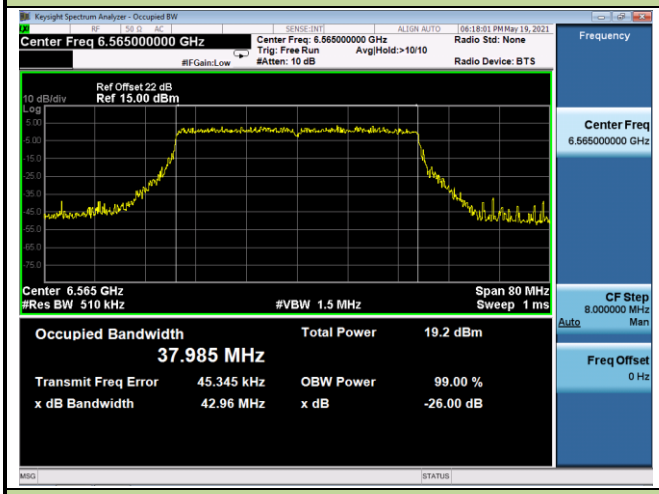
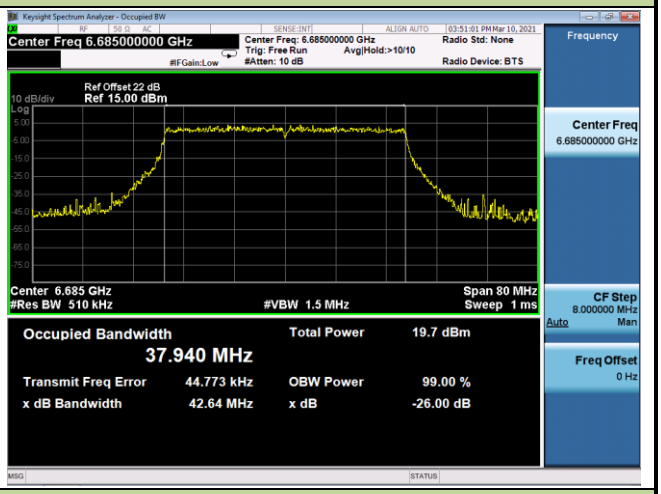
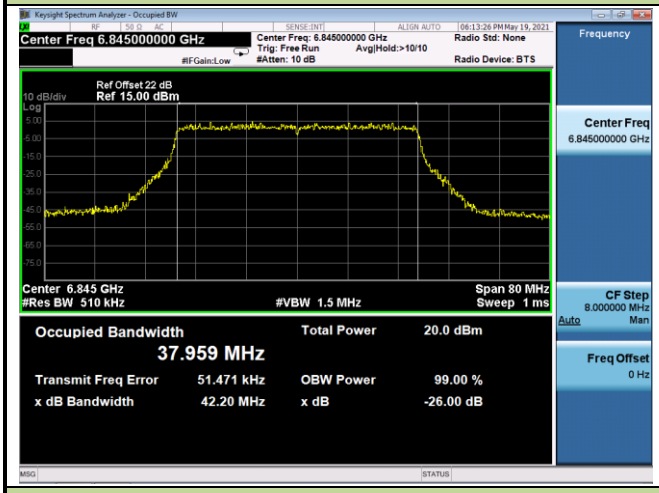
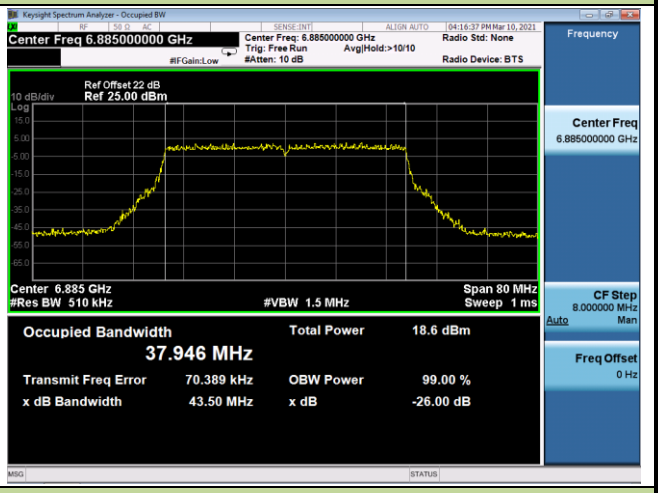
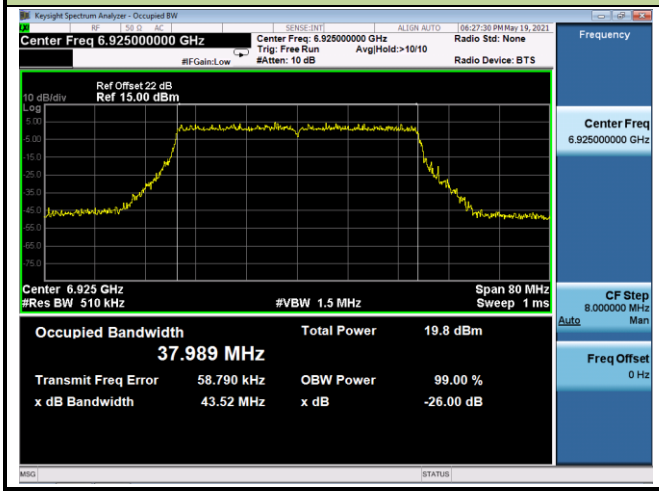
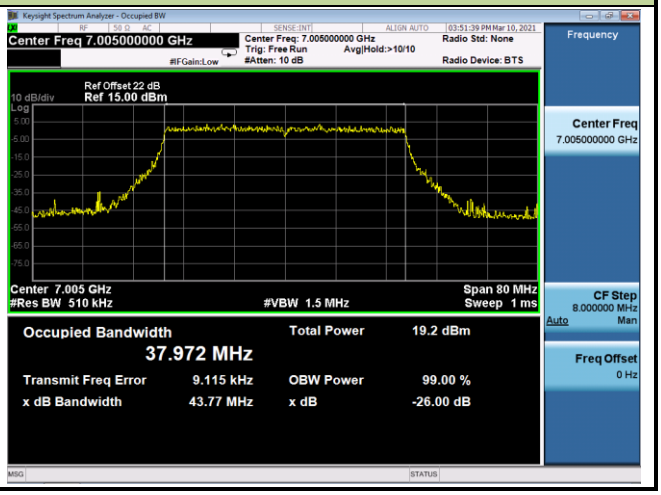
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1 Port					
802.11ax-HE80	MCS0	7	5985	88.61	77.61
802.11ax-HE80	MCS0	55	6225	87.66	77.69
802.11ax-HE80	MCS0	87	6385	89.63	77.74
802.11ax-HE80	MCS0	103	6465	88.18	77.72
802.11ax-HE80	MCS0	119	6545	89.48	77.69
802.11ax-HE80	MCS0	135	6625	88.92	77.82
802.11ax-HE80	MCS0	151	6705	87.42	77.74
802.11ax-HE80	MCS0	183	6865	88.36	77.72
802.11ax-HE80	MCS0	199	6945	88.51	77.73
802.11ax-HE80	MCS0	215	7025	88.40	77.69
802.11ax-HE160	MCS0	15	6025	169.80	157.12
802.11ax-HE160	MCS0	47	6185	171.20	157.02
802.11ax-HE160	MCS0	79	6345	170.90	156.90
802.11ax-HE160	MCS0	111	6505	171.70	156.88
802.11ax-HE160	MCS0	143	6665	172.70	156.73
802.11ax-HE160	MCS0	175	6825	171.00	156.94
802.11ax-HE160	MCS0	207	6985	170.50	156.88

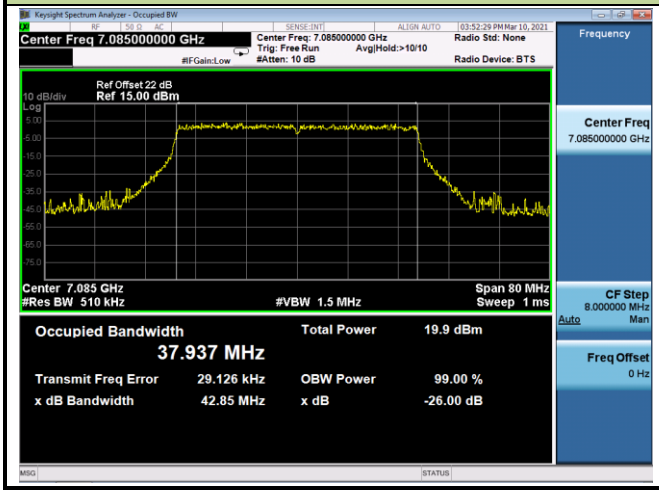
802.11ax-HE20 26dB Bandwidth & 99% Bandwidth	
Channel 1 (5955MHz)	Channel 49 (6195MHz)
	
Channel 93 (6415MHz)	Channel 97 (6435MHz)
	
Channel 105 (6475MHz)	Channel 113 (6515MHz)
	

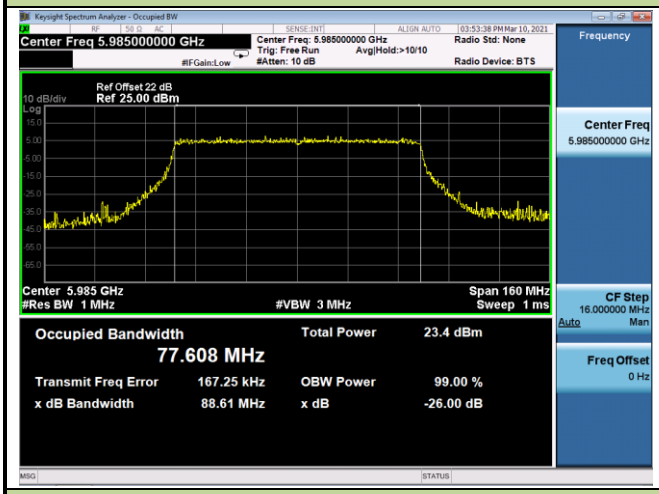
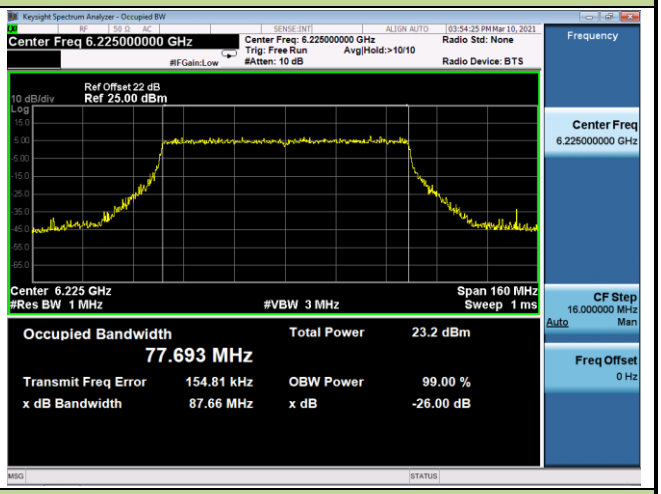
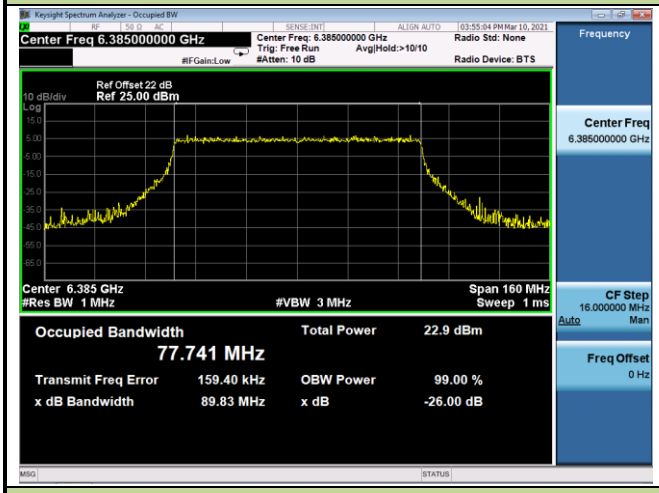
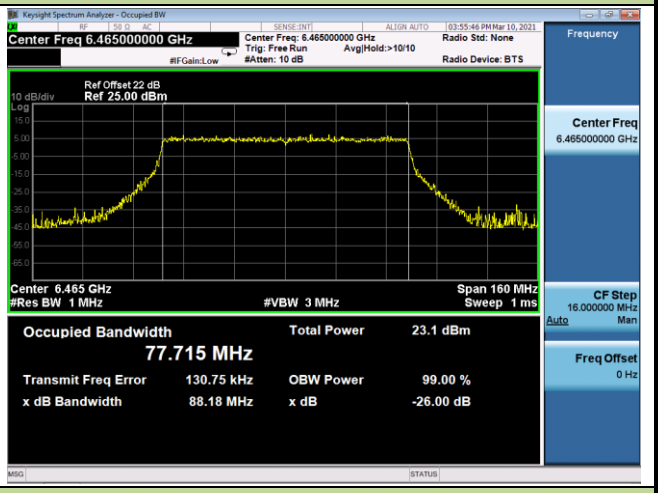
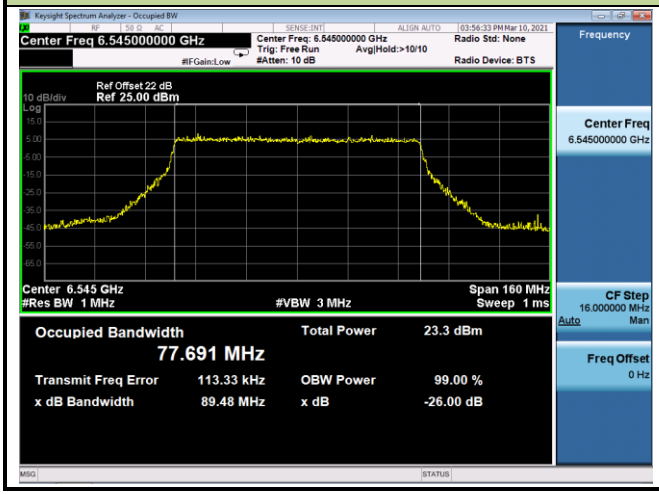
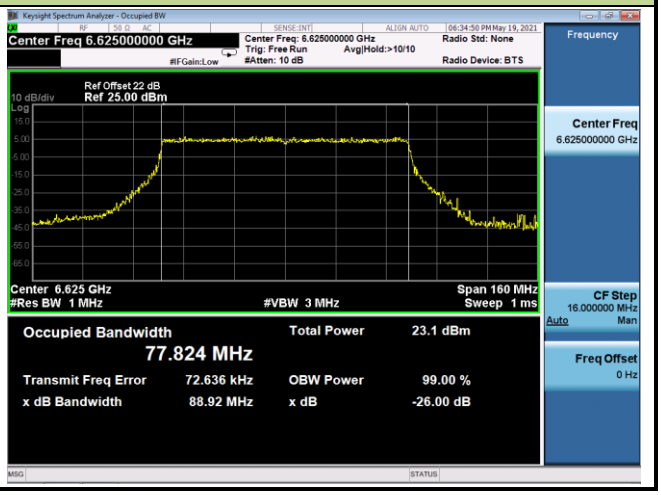
802.11ax-HE20 26dB Bandwidth & 99% Bandwidth	
Channel 117 (6535MHz)	Channel 153 (6715MHz)
	
Channel 181 (6855MHz)	Channel 185 (6875MHz)
	
Channel 189 (6895MHz)	Channel 213 (7015MHz)
	

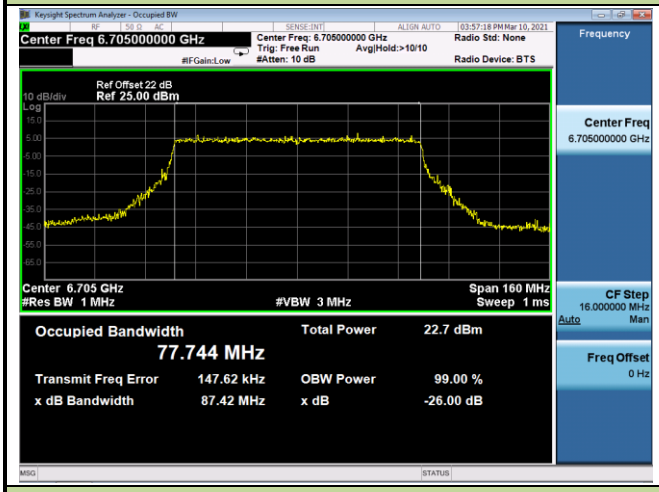
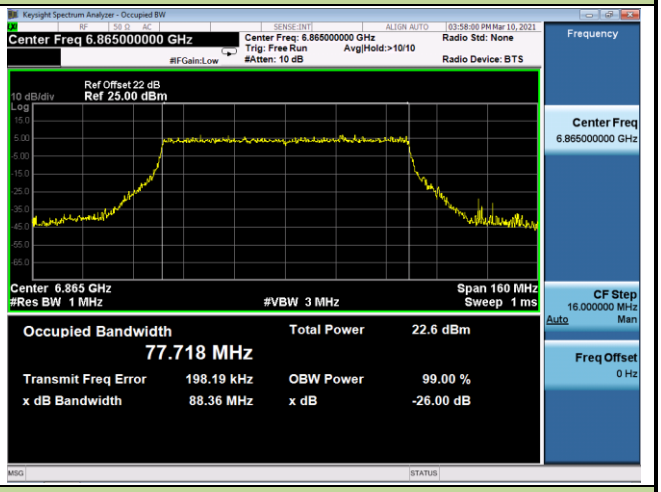
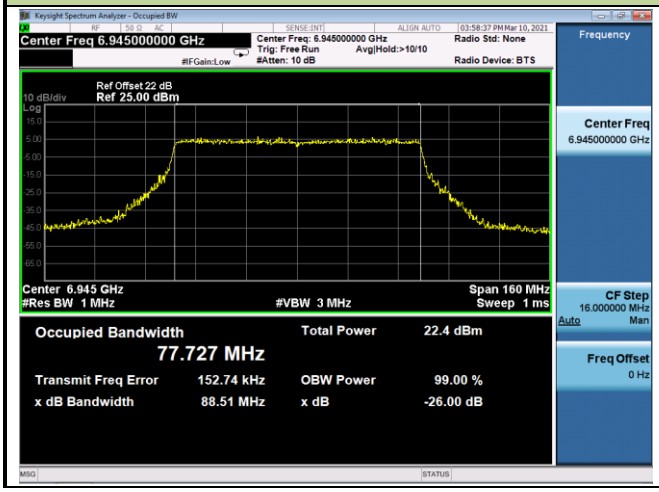
802.11ax-HE20 26dB Bandwidth & 99% Bandwidth	
Channel 229 (7095MHz)	
	

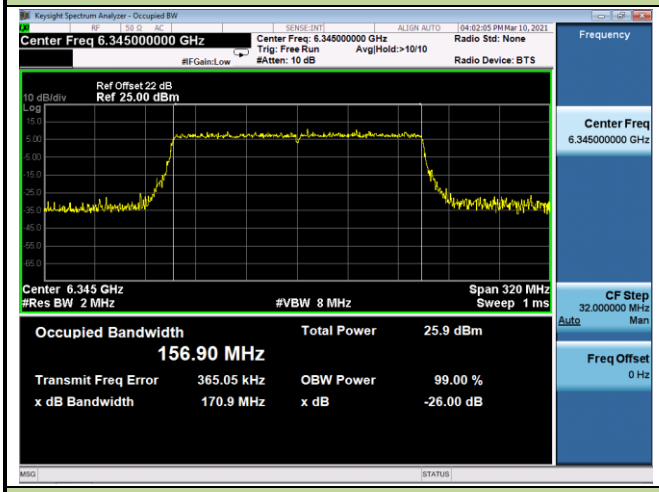
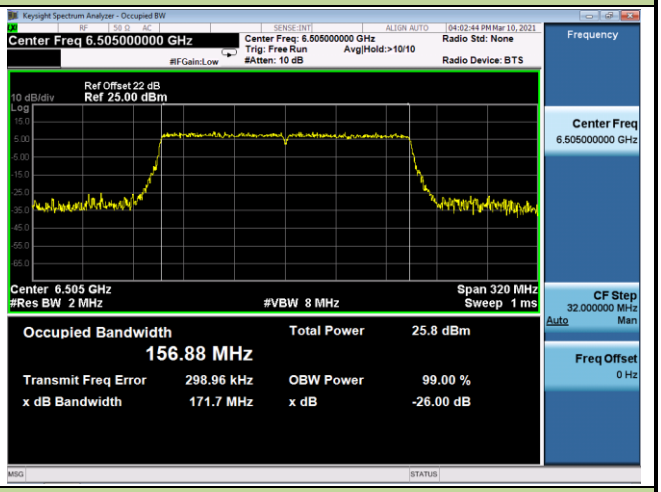
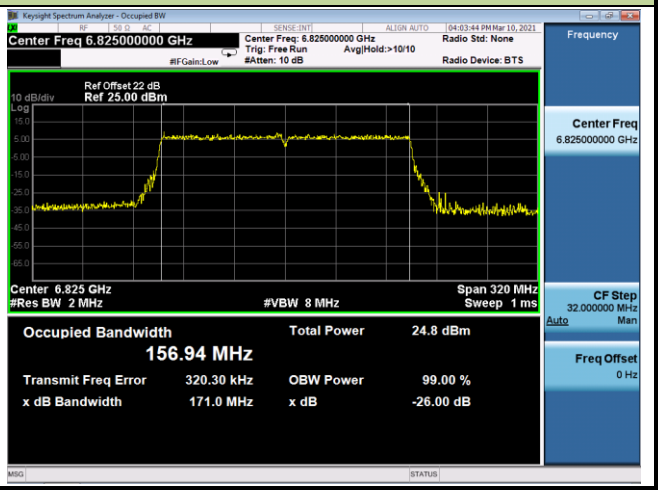
802.11ax-HE40 26dB Bandwidth & 99% Bandwidth	
Channel 3 (5965MHz)	Channel 51 (6205MHz)
	
Channel 91 (6405MHz)	Channel 99 (6445MHz)
	
Channel 107 (6485MHz)	Channel 115 (6525MHz)
	

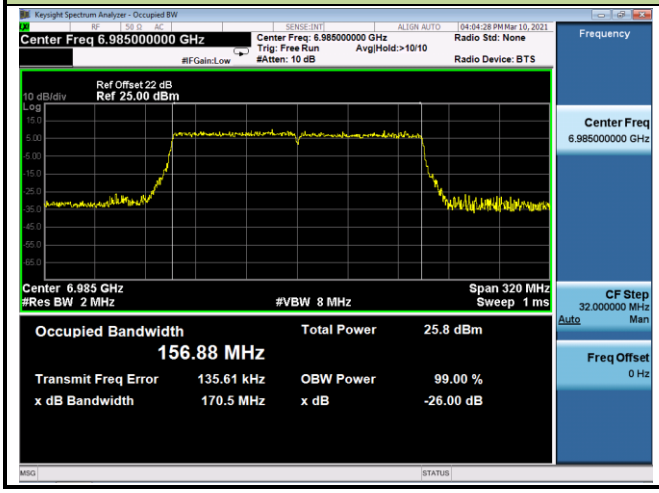
802.11ax-HE40 26dB Bandwidth & 99% Bandwidth	
Channel 123 (6565MHz)	Channel 147 (6685MHz)
	
Channel 179 (6845MHz)	Channel 187 (6885MHz)
	
Channel 195 (6925MHz)	Channel 211 (7005MHz)
	

Channel 227 (7085MHz)	
	

802.11ax-HE80 26dB Bandwidth & 99% Bandwidth	
Channel 7 (5985MHz)	Channel 55 (6225MHz)
	
Channel 87 (6385MHz)	Channel 103 (6465MHz)
	
Channel 119 (6545MHz)	Channel 135 (6625MHz)
	

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

802.11ax-HE160 26dB Bandwidth & 99% Bandwidth	
Channel 15 (6025MHz)	Channel 47 (6185MHz)
	
Channel 79 (6345MHz)	Channel 111 (6505MHz)
	
Channel 143 (6665MHz)	Channel 175 (6825MHz)
	

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

6.3. Output Power Measurement

6.3.1.Test Limit

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

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

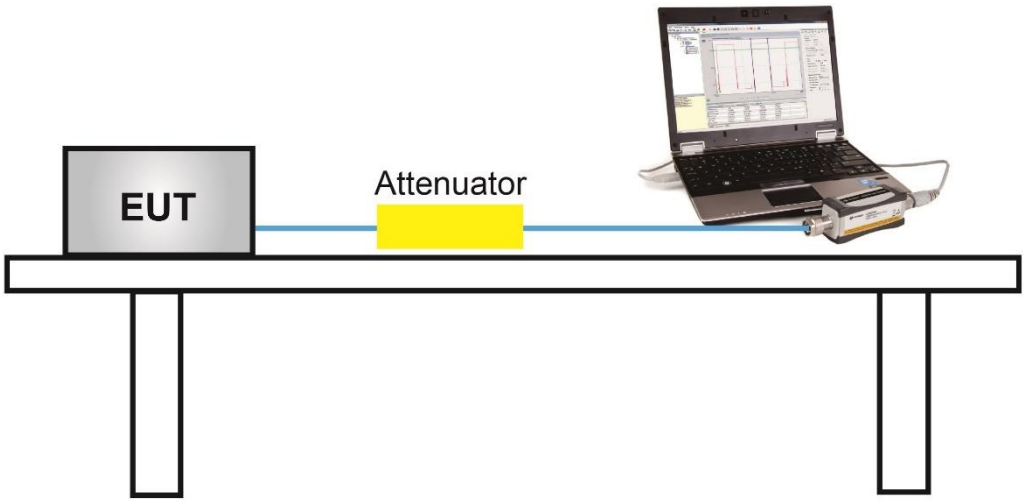
6.3.2.Test Procedure Used

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

6.3.3.Test Setting

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

Power output test was verified over all data rates of each mode shown as below table, and then choose the maximum power output (grey marker) for final test of each channel.

For Ant 0 port

Test Mode	Bandwidth	Channel	Frequency (MHz)	Data Rate/ MCS	Average Power (dBm)
802.11ax	20	1	5955	MCS0	8.81
				MCS5	8.55
				MCS11	8.34
802.11ax	40	3	5965	MCS0	11.78
				MCS5	11.41
				MCS11	11.25
802.11ax	80	7	5985	MCS0	14.48
				MCS5	14.07
				MCS11	13.83
802.11ax	160	15	6025	MCS0	16.82
				MCS5	16.51
				MCS11	16.34

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2021/03/07	Filter Configuration	Type A Filter

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Total E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
11ax-HE20	MCS0	1	5955	8.81	8.64	11.74	16.04	≤ 30.00	Pass
11ax-HE20	MCS0	49	6195	8.85	9.06	11.97	16.27	≤ 30.00	Pass
11ax-HE20	MCS0	93	6415	8.63	8.98	11.82	16.12	≤ 30.00	Pass
11ax-HE20	MCS0	97	6435	8.53	8.75	11.65	15.95	≤ 30.00	Pass
11ax-HE20	MCS0	105	6475	8.63	8.92	11.79	16.09	≤ 30.00	Pass
11ax-HE20	MCS0	113	6515	8.57	8.93	11.76	16.06	≤ 30.00	Pass
11ax-HE20	MCS0	117	6535	8.56	8.78	11.68	15.98	≤ 30.00	Pass
11ax-HE20	MCS0	153	6715	9.15	8.97	12.07	16.37	≤ 30.00	Pass
11ax-HE20	MCS0	181	6855	8.88	8.94	11.92	16.22	≤ 30.00	Pass
11ax-HE20	MCS0	185	6875	8.77	8.96	11.88	16.18	≤ 30.00	Pass
11ax-HE20	MCS0	189	6895	8.75	9.08	11.93	16.23	≤ 30.00	Pass
11ax-HE20	MCS0	213	7015	8.74	8.72	11.74	16.04	≤ 30.00	Pass
11ax-HE20	MCS0	229	7095	9.05	8.92	12.00	16.30	≤ 30.00	Pass
11ax-HE40	MCS0	3	5965	11.78	11.64	14.72	19.02	≤ 30.00	Pass
11ax-HE40	MCS0	51	6205	11.26	11.32	14.30	18.60	≤ 30.00	Pass
11ax-HE40	MCS0	91	6405	11.50	11.86	14.69	18.99	≤ 30.00	Pass
11ax-HE40	MCS0	99	6445	11.37	11.65	14.52	18.82	≤ 30.00	Pass
11ax-HE40	MCS0	107	6485	11.68	11.65	14.68	18.98	≤ 30.00	Pass
11ax-HE40	MCS0	115	6525	11.52	11.70	14.62	18.92	≤ 30.00	Pass
11ax-HE40	MCS0	123	6565	11.83	11.91	14.88	19.18	≤ 30.00	Pass
11ax-HE40	MCS0	147	6685	11.57	11.38	14.49	18.79	≤ 30.00	Pass
11ax-HE40	MCS0	179	6845	12.58	12.03	15.32	19.62	≤ 30.00	Pass
11ax-HE40	MCS0	187	6885	11.27	11.45	14.37	18.67	≤ 30.00	Pass
11ax-HE40	MCS0	195	6925	12.51	12.46	15.50	19.80	≤ 30.00	Pass
11ax-HE40	MCS0	211	7005	11.46	11.47	14.48	18.78	≤ 30.00	Pass
11ax-HE40	MCS0	227	7085	11.87	11.79	14.84	19.14	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Total E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
11ax-HE80	MCS0	7	5985	14.48	14.32	17.41	21.71	≤ 30.00	Pass
11ax-HE80	MCS0	55	6225	14.57	14.84	17.72	22.02	≤ 30.00	Pass
11ax-HE80	MCS0	87	6385	14.48	14.74	17.62	21.92	≤ 30.00	Pass
11ax-HE80	MCS0	103	6465	14.25	14.56	17.42	21.72	≤ 30.00	Pass
11ax-HE80	MCS0	119	6545	14.43	14.74	17.60	21.90	≤ 30.00	Pass
11ax-HE80	MCS0	135	6625	14.62	14.85	17.75	22.05	≤ 30.00	Pass
11ax-HE80	MCS0	151	6705	14.37	14.17	17.28	21.58	≤ 30.00	Pass
11ax-HE80	MCS0	183	6865	14.07	14.15	17.12	21.42	≤ 30.00	Pass
11ax-HE80	MCS0	199	6945	14.63	14.71	17.68	21.98	≤ 30.00	Pass
11ax-HE80	MCS0	215	7025	14.40	14.45	17.44	21.74	≤ 30.00	Pass
11ax-HE160	MCS0	15	6025	16.82	16.76	19.80	24.10	≤ 30.00	Pass
11ax-HE160	MCS0	47	6185	16.92	16.94	19.94	24.24	≤ 30.00	Pass
11ax-HE160	MCS0	79	6345	16.78	16.95	19.88	24.18	≤ 30.00	Pass
11ax-HE160	MCS0	111	6505	17.17	17.16	20.18	24.48	≤ 30.00	Pass
11ax-HE160	MCS0	143	6665	17.07	16.99	20.04	24.34	≤ 30.00	Pass
11ax-HE160	MCS0	175	6825	16.68	16.53	19.62	23.92	≤ 30.00	Pass
11ax-HE160	MCS0	207	6985	17.16	17.12	20.15	24.45	≤ 30.00	Pass

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

Note 2: Total E.I.R.P Power (dBm) = Total Average Power (dBm) + Antenna Gain (dBi), Antenna Gain = 4.3dBi.

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2021/04/05 ~ 2021/05/08	Filter Configuration	Type B Filter

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Total E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
11ax-HE20	MCS0	1	5955	8.44	8.85	11.66	15.96	≤ 30.00	Pass
11ax-HE20	MCS0	49	6195	8.73	9.12	11.94	16.24	≤ 30.00	Pass
11ax-HE20	MCS0	93	6415	8.41	8.74	11.59	15.89	≤ 30.00	Pass
11ax-HE20	MCS0	97	6435	8.45	8.73	11.60	15.90	≤ 30.00	Pass
11ax-HE20	MCS0	105	6475	8.55	8.73	11.65	15.95	≤ 30.00	Pass
11ax-HE20	MCS0	113	6515	8.63	8.84	11.75	16.05	≤ 30.00	Pass
11ax-HE20	MCS0	117	6535	8.55	8.79	11.68	15.98	≤ 30.00	Pass
11ax-HE20	MCS0	153	6715	8.81	9.20	12.02	16.32	≤ 30.00	Pass
11ax-HE20	MCS0	181	6855	8.82	8.85	11.85	16.15	≤ 30.00	Pass
11ax-HE20	MCS0	185	6875	8.25	8.83	11.56	15.86	≤ 30.00	Pass
11ax-HE20	MCS0	189	6895	8.78	8.94	11.87	16.17	≤ 30.00	Pass
11ax-HE20	MCS0	213	7015	8.46	8.59	11.54	15.84	≤ 30.00	Pass
11ax-HE20	MCS0	229	7095	8.66	8.95	11.82	16.12	≤ 30.00	Pass
11ax-HE40	MCS0	3	5965	11.45	11.70	14.59	18.89	≤ 30.00	Pass
11ax-HE40	MCS0	51	6205	11.21	11.25	14.24	18.54	≤ 30.00	Pass
11ax-HE40	MCS0	91	6405	11.48	11.49	14.50	18.80	≤ 30.00	Pass
11ax-HE40	MCS0	99	6445	11.29	11.34	14.33	18.63	≤ 30.00	Pass
11ax-HE40	MCS0	107	6485	11.39	11.32	14.37	18.67	≤ 30.00	Pass
11ax-HE40	MCS0	115	6525	11.35	11.56	14.47	18.77	≤ 30.00	Pass
11ax-HE40	MCS0	123	6565	11.65	11.63	14.65	18.95	≤ 30.00	Pass
11ax-HE40	MCS0	147	6685	11.35	11.50	14.44	18.74	≤ 30.00	Pass
11ax-HE40	MCS0	179	6845	12.07	12.02	15.06	19.36	≤ 30.00	Pass
11ax-HE40	MCS0	187	6885	11.25	11.49	14.38	18.68	≤ 30.00	Pass
11ax-HE40	MCS0	195	6925	12.35	12.22	15.30	19.60	≤ 30.00	Pass
11ax-HE40	MCS0	211	7005	11.69	11.67	14.69	18.99	≤ 30.00	Pass
11ax-HE40	MCS0	227	7085	11.86	11.66	14.77	19.07	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Total E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
11ax-HE80	MCS0	7	5985	14.43	14.36	17.41	21.71	≤ 30.00	Pass
11ax-HE80	MCS0	55	6225	14.50	14.54	17.53	21.83	≤ 30.00	Pass
11ax-HE80	MCS0	87	6385	14.44	14.61	17.54	21.84	≤ 30.00	Pass
11ax-HE80	MCS0	103	6465	14.29	14.52	17.42	21.72	≤ 30.00	Pass
11ax-HE80	MCS0	119	6545	14.31	14.32	17.33	21.63	≤ 30.00	Pass
11ax-HE80	MCS0	135	6625	14.29	14.53	17.42	21.72	≤ 30.00	Pass
11ax-HE80	MCS0	151	6705	14.23	14.28	17.27	21.57	≤ 30.00	Pass
11ax-HE80	MCS0	183	6865	13.98	14.10	17.05	21.35	≤ 30.00	Pass
11ax-HE80	MCS0	199	6945	14.55	14.75	17.66	21.96	≤ 30.00	Pass
11ax-HE80	MCS0	215	7025	14.46	14.48	17.48	21.78	≤ 30.00	Pass
11ax-HE160	MCS0	15	6025	16.23	16.65	19.46	23.76	≤ 30.00	Pass
11ax-HE160	MCS0	47	6185	16.94	16.83	19.90	24.20	≤ 30.00	Pass
11ax-HE160	MCS0	79	6345	16.25	16.47	19.37	23.67	≤ 30.00	Pass
11ax-HE160	MCS0	111	6505	17.22	16.99	20.12	24.42	≤ 30.00	Pass
11ax-HE160	MCS0	143	6665	16.70	16.64	19.68	23.98	≤ 30.00	Pass
11ax-HE160	MCS0	175	6825	16.68	16.65	19.68	23.98	≤ 30.00	Pass
11ax-HE160	MCS0	207	6985	16.98	17.14	20.07	24.37	≤ 30.00	Pass

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

Note 2: Total E.I.R.P (dBm) = Total Average Power (dBm) + Antenna Gain(dBi), Antenna Gain=4.3dBi.

6.4. Power Spectral Density Measurement

6.4.1.Test Limit

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

For a subordinate device operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p in any 1-megahertz band.

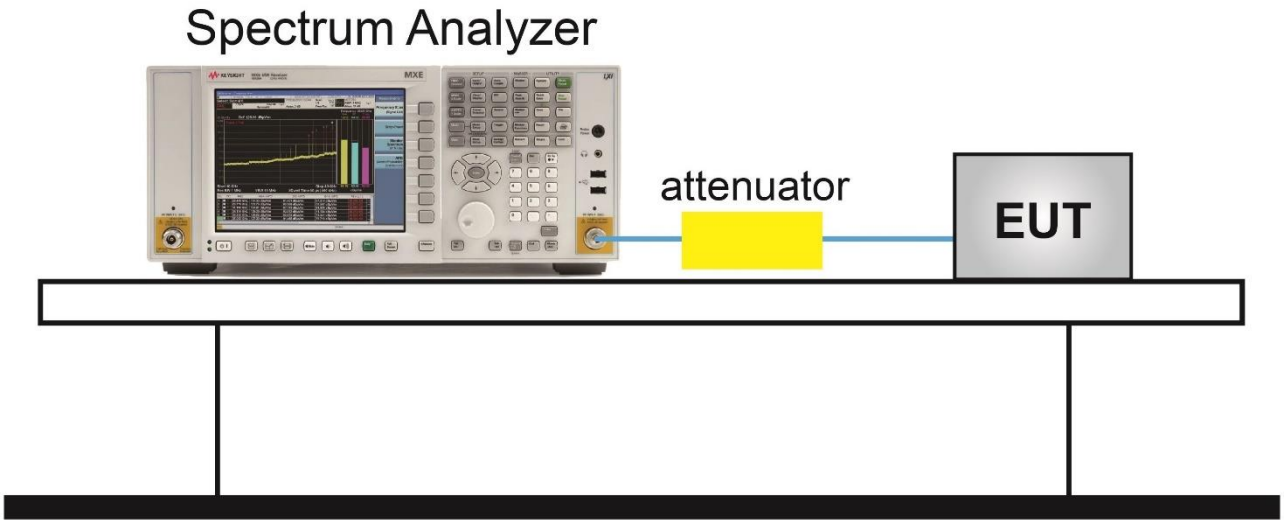
6.4.2.Test Procedure Used

KDB 789033 D02v02r01-Section F

6.4.3.Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW ≥ 3RBW
5. Number of sweep points ≥ 2 × (span / 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*log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10*log (1/0.25) = 6 dB if the duty cycle is 25 percent.

6.4.4.Test Setup



6.4.5.Test Result

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2021/03/01 ~ 2021/04/13		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	E.I.R.P PSD (dBm/MHz)	E.I.R.P PSD Limit (dBm/MHz)	Result
11ax-HE20	MCS0	1	5955	-3.06	-3.45	85.31	4.75	≤ 5.00	Pass
11ax-HE20	MCS0	49	6195	-3.00	-3.31	85.31	4.85	≤ 5.00	Pass
11ax-HE20	MCS0	93	6415	-3.31	-2.96	85.31	4.87	≤ 5.00	Pass
11ax-HE20	MCS0	97	6435	-3.25	-3.40	85.31	4.68	≤ 5.00	Pass
11ax-HE20	MCS0	105	6475	-3.40	-3.29	85.31	4.66	≤ 5.00	Pass
11ax-HE20	MCS0	113	6515	-3.50	-3.17	85.31	4.67	≤ 5.00	Pass
11ax-HE20	MCS0	117	6535	-3.33	-3.05	85.31	4.81	≤ 5.00	Pass
11ax-HE20	MCS0	153	6715	-3.24	-3.57	85.31	4.60	≤ 5.00	Pass
11ax-HE20	MCS0	181	6855	-3.18	-3.04	85.31	4.89	≤ 5.00	Pass
11ax-HE20	MCS0	185	6875	-3.14	-3.16	85.31	4.85	≤ 5.00	Pass
11ax-HE20	MCS0	189	6895	-3.22	-3.02	85.31	4.88	≤ 5.00	Pass
11ax-HE20	MCS0	213	7015	-3.44	-3.34	85.31	4.61	≤ 5.00	Pass
11ax-HE20	MCS0	229	7095	-3.22	-3.14	85.31	4.82	≤ 5.00	Pass
11ax-HE40	MCS0	3	5965	-3.19	-3.12	84.36	4.90	≤ 5.00	Pass
11ax-HE40	MCS0	51	6205	-3.26	-3.04	84.36	4.90	≤ 5.00	Pass
11ax-HE40	MCS0	91	6405	-3.18	-3.40	84.36	4.76	≤ 5.00	Pass
11ax-HE40	MCS0	99	6445	-3.41	-3.06	84.36	4.82	≤ 5.00	Pass
11ax-HE40	MCS0	107	6485	-3.24	-3.03	84.36	4.92	≤ 5.00	Pass
11ax-HE40	MCS0	115	6525	-3.19	-3.06	84.36	4.92	≤ 5.00	Pass
11ax-HE40	MCS0	123	6565	-3.09	-3.40	84.36	4.81	≤ 5.00	Pass
11ax-HE40	MCS0	147	6685	-3.11	-3.17	84.36	4.91	≤ 5.00	Pass
11ax-HE40	MCS0	179	6845	-3.12	-3.47	84.36	4.76	≤ 5.00	Pass
11ax-HE40	MCS0	187	6885	-3.45	-3.37	84.36	4.64	≤ 5.00	Pass
11ax-HE40	MCS0	195	6925	-3.27	-3.24	84.36	4.80	≤ 5.00	Pass
11ax-HE40	MCS0	211	7005	-3.38	-3.17	84.36	4.77	≤ 5.00	Pass
11ax-HE40	MCS0	227	7085	-3.05	-3.22	84.36	4.92	≤ 5.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Duty Cycle (%)	E.I.R.P PSD (dBm/MHz)	E.I.R.P PSD Limit (dBm/MHz)	Result
11ax-HE80	MCS0	7	5985	-3.36	-3.08	85.17	4.79	≤ 5.00	Pass
11ax-HE80	MCS0	55	6225	-3.51	-3.49	85.17	4.51	≤ 5.00	Pass
11ax-HE80	MCS0	87	6385	-3.31	-3.01	85.17	4.85	≤ 5.00	Pass
11ax-HE80	MCS0	103	6465	-3.36	-3.16	85.17	4.75	≤ 5.00	Pass
11ax-HE80	MCS0	119	6545	-3.09	-3.17	85.17	4.88	≤ 5.00	Pass
11ax-HE80	MCS0	135	6545	-3.57	-3.25	85.17	4.60	≤ 5.00	Pass
11ax-HE80	MCS0	151	6705	-3.19	-3.24	85.17	4.79	≤ 5.00	Pass
11ax-HE80	MCS0	183	6865	-3.30	-3.29	85.17	4.71	≤ 5.00	Pass
11ax-HE80	MCS0	199	6945	-3.36	-3.11	85.17	4.77	≤ 5.00	Pass
11ax-HE80	MCS0	215	7025	-3.15	-3.08	85.17	4.89	≤ 5.00	Pass
11ax-HE160	MCS0	15	6025	-3.14	-3.31	84.36	4.83	≤ 5.00	Pass
11ax-HE160	MCS0	47	6185	-3.12	-3.05	84.36	4.96	≤ 5.00	Pass
11ax-HE160	MCS0	79	6345	-3.30	-3.08	84.36	4.86	≤ 5.00	Pass
11ax-HE160	MCS0	111	6505	-3.03	-3.32	84.36	4.88	≤ 5.00	Pass
11ax-HE160	MCS0	143	6665	-2.98	-3.44	84.36	4.84	≤ 5.00	Pass
11ax-HE160	MCS0	175	6825	-3.12	-3.57	84.36	4.71	≤ 5.00	Pass
11ax-HE160	MCS0	207	6985	-3.53	-3.44	84.36	4.56	≤ 5.00	Pass

Note: When EUT duty cycle < 98%, E.I.R.P PSD (dBm/MHz) = 10*log {$10^{(\text{Ant 0 PSD}/10)}$ + $10^{(\text{Ant 1 PSD}/10)}$} (dBm/MHz) + 10*log (1/Duty Cycle) + Antenna Gain (dBi).