RADIO TEST REPORT

Product	:	Wi-Fi 7 AIW-173 module
Model Name	:	AIW-173BQ-GI1
Series Model	:	AIW-173LQ-GI1, AIW-173LQ-GI2, AIW-173BQ-GI2, AIW-173HQ-GI1, AIW-173HQ-GI2
FCC ID	:	M82-AIW-173
Test Regulation	:	FCC 47 CFR Part 15 Subpart E (Section 15.407)
Received Date	:	2024/9/18
Test Date	:	2024/9/19 ~ 2025/2/10
Issued Date	:	2025/4/16
Applicant	:	Advantech Co Ltd No. 1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei, Taiwan 114
Issued By	:	Underwriters Laboratories Taiwan Co., Ltd. Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Testing Laboratory
3398

REVISION HISTORY

Original Test Report No.: 4791471150-US-R2-V0

Revision	Test report No.	Date	Page revised	Contents
Original	4791471150-US-R2-V0	2025/4/16	-	Initial issue

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1. Attestation of Test Results

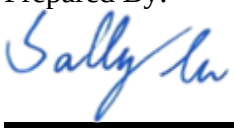
APPLICANT:	Advantech Co Ltd No. 1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei, Taiwan 114
MANUFACTURER:	Advantech Co Ltd No. 1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei, Taiwan 114
EUT DESCRIPTION:	Wi-Fi 7 AIW-173 module
BRAND:	ADVANTECH
MODEL:	AIW-173BQ-GI1
SERIES MODEL:	AIW-173LQ-GI1, AIW-173LQ-GI2, AIW-173BQ-GI2, AIW-173HQ-GI1, AIW-173HQ-GI2
SAMPLE STAGE:	Design Verification Test Sample
DATE of TESTED:	2024/9/19 ~ 2025/2/10

APPLICABLE STANDARDS	
STANDARD	**Test Results**
FCC 47 CFR PART 15 Subpart E (Section 15.407)	PASS

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:



Sally Lu Date : 2025/4/16
Project Handler

Approved and Authorized By:

Eric Lee Date : 2025/4/16
Senior Laboratory Engineer

2. Summary of Test Results

Summary of Test Results		
FCC Clause	**Test Items**	**Result**
15.407(b)(9)	AC Power Conducted Emissions	PASS
15.407(b)(6)(9)	Radiated Emissions	PASS
15.407(b)(7)	In-Band Emission (Mask)	PASS
15.407(a)(4/5/6/7/8/9)	Max Average Transmit Power	PASS
15.407(a)(11)	Emission Bandwidth Measurement	PASS
15.407(a)(4/5/6/7/8/9)	Peak Power Spectral Density	PASS
15.407 (d)(6)	Contention-based Protocol.	PASS
15.407(g)	Frequency Stability	PASS
15.407(a)(7)(8)	Dual Client- Proper Power Adjustment	PASS
15.407(d)(4/5)	Operational restrictions for 6 GHz U-NII devices	PASS
15.203	Antenna Requirement	PASS

3. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2, KDB 789033 D02 General UNII Test Procedure New Rules v02r01, KDB414788 D01 Radiated Test Site v01r01, ANSI C63.10-2013, KDB 987594 D02 U-NII 6 GHz EMC Measurement v03 and KDB 662911 D01 Multiple Transmitter Output v02r01.

4. Facilities and Accreditation

Test Location	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398.

5. Measurement Uncertainty

For statement of conformity, Simple acceptance (Section 3.1.4 of IEC Guide 115) was applied as decision rule for measurement in this test report.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor k=2.

Determining compliance based on the results of the compliance measurement, not considering measurement instrumentation uncertainty.

Measurement	Frequency	Uncertainty
Conducted disturbance at mains terminals ports	150kHz ~ 30MHz	3.1 dB
RF Conducted	9 kHz - 40GHz	2.3 dB
Radiated disturbance below 30MHz	9 kHz - 30 MHz	3.2 dB
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	6.1 dB
Radiated disturbance above 1 GHz	1GHz ~ 40GHz	5.1 dB

6. Equipment under Test

6.1. Description of EUT

Product	Wi-Fi 7 AIW-173 module
Brand Name	ADVANTECH
Model Name	AIW-173BQ-GI1
Series Model	AIW-173LQ-GI1, AIW-173LQ-GI2, AIW-173BQ-GI2, AIW-173HQ-GI1, AIW-173HQ-GI2
Normal Voltage	3.3Vdc

Operating Frequency	5935 ~ 6425MHz, 6435 ~ 6515MHz, 6535 ~ 6855MHz, 6875 ~ 7115MHz
Modulation	4096QAM, 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM / OFDMA
CBP for Channel Puncturing Function	Not Support
CBP for Bandwidth Reduction Function	Support (See page 175-176 test plots)
Transfer Rate	802.11a: up to 54 Mbps
	802.11ax: up to MCS11
	802.11be: up to MCS13
Maximum Output Power	5935 ~ 6415 MHz: 14.73 dBm
	6435 ~ 6515 MHz: 12.11 dBm
	6535 ~ 6855 MHz: 14.77 dBm
	6875 ~ 7115 MHz: 14.48 dBm
Sample ID	Conducted Test:7620396
	Radiated Test:7620396

Note:
1. The models difference table as below:

Model	**Different**	
	Type	**Bluetooth Interface**
AIW-173LQ-GI1	LGA Module	Bluetooth USB control
AIW-173LQ-GI2		Bluetooth UART control
AIW-173BQ-GI1	M.2 type PCB board + LGA Module	Bluetooth USB control
AIW-173BQ-GI2		Bluetooth UART control
AIW-173HQ-GI1	PCIE type PCB board + LGA Module	Bluetooth USB control
AIW-173HQ-GI2		Bluetooth UART control

Remark:
1. There are no circuit or layout differences in the LGA Module part across the three types.
2. AIW-173LQ-GI1 and AIW-173LQ-GI2 have identical electrical characteristics.
3. AIW-173BQ-GI1 and AIW-173BQ-GI2 have identical electrical characteristics.
4. AIW-173HQ-GI1 and AIW-173HQ-GI2 have identical electrical characteristics.

2. EUT provides a complete 2Tx port and 2Rx port. Please refer to the following working transmission conditions:

Modulation Mode	Tx/Rx Function	
802.11a	2Tx	2Rx
802.11ax(HE20)	2Tx	2Rx
802.11ax(HE40)	2Tx	2Rx
802.11ax(HE80)	2Tx	2Rx
802.11ax(HE160)	2Tx	2Rx
802.11be(EHT20)	2Tx	2Rx
802.11be(EHT40)	2Tx	2Rx
802.11be(EHT80)	2Tx	2Rx
802.11be(EHT160)	2Tx	2Rx
802.11be(EHT320)	2Tx	2Rx

*The modulation and bandwidth are similar for 802.11ax mode for HE20 / HE40 / HE80 / HE160 and 802.11be mode for EHT20 / EHT40 / EHT80 / EHT160, therefore investigated one worst case to representative mode in test report.

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual, the laboratory shall not be held responsible.

6.2. Channel List

FOR 5925 ~ 6425MHz (U-NII-5 band)
25 channels are provided for 6G WLAN 20MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
2	5935 MHz	25	6075 MHz	49	6195 MHz	73	6315 MHz
1	5955 MHz	29	6095 MHz	53	6215 MHz	77	6335 MHz
5	5975 MHz	33	6115 MHz	57	6235 MHz	81	6355 MHz
9	5995 MHz	37	6135 MHz	61	6255 MHz	85	6375 MHz
13	6015 MHz	41	6155 MHz	65	6275 MHz	89	6395 MHz
17	6035 MHz	45	6175 MHz	69	6295 MHz	93	6415 MHz
21	6055 MHz	-	-	-	-	-	-

12 channels are provided for 6G WLAN 40MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	27	6085 MHz	51	6205 MHz	75	6325 MHz
11	6005 MHz	35	6125 MHz	59	6245 MHz	83	6365 MHz
19	6045 MHz	43	6165 MHz	67	6285 MHz	91	6405 MHz

6 channels are provided for 6G WLAN 80MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	39	6145 MHz	71	6305 MHz
23	6065 MHz	55	6225 MHz	87	6385 MHz

3 channels are provided for 6G WLAN 160MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz

3 channels are provided for 6G WLAN 320MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
31	6105 MHz	63	6265 MHz	*95	6425 MHz

FOR 6425 ~ 6525MHz (U-NII-6 band)
5 channels are provided for 6G WLAN 20MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	105	6475 MHz	113	6515 MHz
101	6455 MHz	109	6495 MHz	-	-

3 channels are provided for 6G WLAN 40MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445 MHz	107	6485 MHz	*115	6525 MHz

2 channels are provided for 6G WLAN 80MHz bandwidth system:

Channel	Frequency	Channel	Frequency
103	6465 MHz	*119	6545 MHz

1 channel are provided for 6G WLAN 160MHz bandwidth system:

Channel	Frequency
*111	6505 MHz

FOR 6525 ~ 6875MHz (U-NII-7 band)
17 channels are provided for 6G WLAN 20MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	137	6635 MHz	153	6715 MHz	169	6795 MHz
121	6555 MHz	141	6655 MHz	157	6735 MHz	173	6815 MHz
125	6575 MHz	145	6675 MHz	161	6755 MHz	177	6835 MHz
129	6595 MHz	149	6695 MHz	165	6775 MHz	181	6855 MHz
133	6615 MHz	-	-	-	-	-	-

8 channels are provided for 6G WLAN 40MHz bandwidth system:

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

3 channels are provided for 6G WLAN 80MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
135	6625 MHz	151	6705 MHz	167	6785 MHz

1 channel are provided for 6G WLAN 160MHz bandwidth system:

Channel	Frequency
143	6665 MHz

2 channel are provided for 6G WLAN 320MHz bandwidth system:

Channel	Frequency	Channel	Frequency
*127	6585 MHz	*159	6745 MHz

FOR 6875 ~ 7125MHz (U-NII-8 band)
13 channels are provided for 6G WLAN 20MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
185	6875 MHz	201	6955 MHz	213	7015 MHz	225	7075 MHz
189	6895 MHz	205	6975 MHz	217	7035 MHz	229	7095 MHz
193	6915 MHz	209	6995 MHz	221	7055 MHz	233	7115 MHz
197	6935 MHz	-	-	-	-	-	-

6 channels are provided for 6G WLAN 40MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
*187	6885 MHz	203	6965 MHz	219	7045 MHz
195	6925 MHz	211	7005 MHz	227	7085 MHz

3 channels are provided for 6G WLAN 80MHz bandwidth system:

Channel	Frequency	Channel	Frequency	Channel	Frequency
*183	6865 MHz	199	6945 MHz	215	7025 MHz

2 channels are provided for 6G WLAN 160MHz bandwidth system:

Channel	Frequency	Channel	Frequency
*175	6825 MHz	207	6985 MHz

1 channels are provided for 6G WLAN 320MHz bandwidth system:

Channel	Frequency
*191	6905 MHz

Note:* mean this’s straddle channel.

6.3. Test Condition

Test Item	Test Site No.	Environmental	Input Power	Test Date	Tested by
Antenna Port Conducted Measurement	SR4	20~25°C/ 56~69%RH	3.3Vdc	2024/09/23~ 2025/01/20	WaterNil Guan
Radiated Spurious Emission	966-2	22~26°C/ 62~68%RH	3.3Vdc	2024/09/19~ 2025/02/10	WaterNil Guan
AC power Line Conducted Emission	SR1	22°C/ 53%RH	120Vac/ 60Hz	2025/02/05	WaterNil Guan

Sample Calculation:

Antenna Port Conducted Measurement:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBm) = Reading Value (dBm) +Attenuator Factor (dB) + Cable Loss (dB).
  Example: Result Value (10dBm) = Reading Value (-2dBm) +Attenuator Factor (10dB) + Cable Loss(2dB).
  *Test plot only shown the "Result Value".

Radiated Spurious Emission:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
  Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Factor (dB).
  Example: Result Value (34.5dBuV/m) = Reading Value (40.1dBuV) + Antenna Factor (18.7dB/m) + Cable Loss (4.2dB) - Preamp Factor (28.5dB).

AC power Line Conducted Emission:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBuV) = Reading Value (dBuV) + Correction Factor (dB).
  Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).
  Example: Result Value (53.7dBuV) = Reading Value (35.1dBuV) + Insertion loss(18.1dB) + Cable loss(0.5dB).

6.4. Description of Available Antennas

Ant. No.	Transmitter Circuit	Brand Name	Model Name	Maximum Gain (dBi)	Ant. Type	Connector Type
1	Chain0+1	Advantech	AIW-512-C (1751000460-01)	2.87 dBi : 2400 ~ 2500 MHz 3.11 dBi : 5150 ~ 5850 MHz 3.22 dBi : 5925 ~ 7125 MHz	Dipole	RP-SMA Male
2	Chain0+1	Advantech	AIW-512-I (1751000651-01)	2.87 dBi : 2400 ~ 2500 MHz 3.11 dBi : 5150 ~ 5850 MHz 3.22 dBi : 5925 ~ 7125 MHz	Dipole	RP-SMA Male
3	Chain0+1	Advantech	1751000642-01	1.61 dBi : 2400 ~ 2500 MHz 3.68 dBi : 5150 ~ 5850 MHz 4.06 dBi : 5925 ~ 7125 MHz	Dipole	RP-SMA Male
4	Chain0+1	Advantech	AIW-511 (1751000342-01)	2.28 dBi : 2400 ~ 2500 MHz 2.64 dBi : 5150 ~ 5850 MHz 3.28 dBi : 5925 ~ 7125 MHz	Dipole	RP-SMA Male
5	Chain0+1	Advantech	AIW-513 (1751000717-01)	1.48 dBi : 2400 ~ 2500 MHz 3.58 dBi : 5150 ~ 5850 MHz 4.04 dBi : 5925 ~ 7125 MHz	Dipole	RP-SMA Male
6	Chain0+1	Advantech	AIW-514	ANT0: 2.59 dBi @ 2400 – 2500 MHz 3.58 dBi @ 5150 – 5850 MHz 3.94 dBi @ 5925 – 7125 MHz ANT1: 2.60 dBi @ 2400 – 2500 MHz 3.51 dBi @ 5150 – 5850 MHz 3.91 dBi @ 5925 – 7125 MHz	Dipole	RP-SMA-Male

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual, the laboratory shall not be held responsible.

6.5. Test Mode Applicability and Tested Channel Detail

Test Item	Mode	Frequency Range(MHz)	Modulation Type	Available Channel	Test Channel	Data Rate
Radiated Bandedge	802.11a	5935-6425	OFDM	2 to 93	2, 1, 45, 93	6 Mbps
	802.11be20			2 to 93	2, 1, 45, 93	MCS0 Nss1
	802.11be40			3 to 91	3, 43, 91	MCS0 Nss1
	802.11be80			7 to 87	7, 39, 87	MCS0 Nss1
	802.11be160			15 to 79	15,47,79	MCS0 Nss1
	802.11be320			31 to 95	31, 63, 95	MCS0 Nss1
	802.11a	6435-6515	OFDM	97 to 113	97, 105, 113	6 Mbps
	802.11be20			97 to 113	97, 105, 113	MCS0 Nss1
	802.11be40			99 to 115	99, 107, 115	MCS0 Nss1
	802.11be80			103 to 119	103, 119	MCS0 Nss1
	802.11be160			111	111	MCS0 Nss1
	802.11a	6535-6875	OFDM	117 to 181	117, 149, 181	6 Mbps
	802.11be20			117 to 181	117, 149, 181	MCS0 Nss1
	802.11be40			123 to 179	123, 155, 179	MCS0 Nss1
	802.11be80			135 to 167	135, 151, 167	MCS0 Nss1
	802.11be160			143	143	MCS0 Nss1
	802.11be320			127 to 159	127, 159	MCS0 Nss1
	802.11a	6875-7115	OFDM	185 to 233	185, 209, 229, 233	6 Mbps
	802.11be20			185 to 233	185, 209, 229, 233	MCS0 Nss1
	802.11be40			187 to 227	187, 211, 227	MCS0 Nss1
	802.11be80			183 to 215	183, 199, 215	MCS0 Nss1
	802.11be160			175 to 207	175, 207	MCS0 Nss1
	802.11be320			191	191	MCS0 Nss1
Radiated Emissions (Above 1GHz)	802.11a	5935-6425	OFDM	2 to 93	2, 1, 45, 93	6 Mbps
	802.11a	6435-6515	OFDM	97 to 113	97, 105, 113	6 Mbps
	802.11a	6535-6875	OFDM	117 to 181	117, 149, 181	6 Mbps
	802.11a	6875-7115	OFDM	185 to 233	185, 209, 229, 233	6 Mbps
Radiated Emissions (Below 1GHz)	802.11a	6535-6875	OFDM	1 to 93	149	6 Mbps
AC Power Line Conducted Emission	802.11be320	6535-6875	OFDM	1 to 93	127	MCS0 Nss1
Antenna Port Conducted Measurement	802.11a	5935-6425	OFDM	2 to 93	2, 1, 45, 93	6 Mbps
	802.11be20			2 to 93	2, 1, 45, 93	MCS0 Nss1
	802.11be40			3 to 91	3, 43, 91	MCS0 Nss1
	802.11be80			7 to 87	7, 39, 87	MCS0 Nss1
	802.11be160			15 to 79	15,47,79	MCS0 Nss1
	802.11be320			31 to 95	31, 63, 95	MCS0 Nss1

Test Item	Mode	Frequency Range(MHz)	Modulation Type	Available Channel	Test Channel	Data Rate
Antenna Port Conducted Measurement	802.11a	6435-6515	OFDM	97 to 113	97, 105, 113	6 Mbps
	802.11be20			97 to 113	97, 105, 113	MCS0 Nss1
	802.11be40			99 to 115	99, 107, 115	MCS0 Nss1
	802.11be80			103 to 119	103, 119	MCS0 Nss1
	802.11be160			111	111	MCS0 Nss1
	802.11a	6535-6875	OFDM	117 to 181	117, 149, 181	6 Mbps
	802.11be20			117 to 181	117, 149, 181	MCS0 Nss1
	802.11be40			123 to 179	123, 155, 179	MCS0 Nss1
	802.11be80			135 to 167	135, 151, 167	MCS0 Nss1
	802.11be160			143	143	MCS0 Nss1
	802.11be320			127 to 159	127, 159	MCS0 Nss1
	802.11a	6875-7115	OFDM	185 to 233	185, 209, 229, 233	6 Mbps
	802.11be20			185 to 233	185, 209, 229, 233	MCS0 Nss1
	802.11be40			187 to 227	187, 211, 227	MCS0 Nss1
	802.11be80			183 to 215	183, 199, 215	MCS0 Nss1
	802.11be160			175 to 207	175, 207	MCS0 Nss1
	802.11be320			191	191	MCS0 Nss1
Contention Based Protocol Measurement	802.11be20	5935-6425	OFDM	2 to 93	1	MCS0 Nss1
	802.11be320			31 to 95	31	MCS0 Nss1
	802.11be20	6435-6515	OFDM	97 to 113	97	MCS0 Nss1
	802.11be160			111	111	MCS0 Nss1
	802.11be20	6535-6875	OFDM	117 to 181	129	MCS0 Nss1
	802.11be320			127 to 159	159	MCS0 Nss1
	802.11be20	6875-7115	OFDM	185 to 233	193	MCS0 Nss1
	802.11be320			191	191	MCS0 Nss1

- The EUT consists of six different models, all of which share the same LGA Module. Consequently, the fundamental level of the EUT was investigated across these six models. It was determined that the AIW-173BQ-GI1 represented the worst-case scenario and was selected as the representative test model documented in this report.

- The antennas No.2 has the highest and worst gain at 2.4GHz band and the antennas No.3 has the highest gain at 5GHz/6GHz band, therefore, the Radiated Emissions of the EUT was tested in two antennas, and it was found antenna No.2 have worst-case, and thus, the Antenna No.2 was selected representative test data documented in this report.

- The fundamental of the dipole antenna was investigated in two orthogonal (lay and stand), it was determined that stand mode was worst-case. Therefore, all final radiated testing was performed with the dipole antenna in stand mode.

- For radiated emissions below 1 GHz, the worst-case mode was determined from all series. It was found that the AIW-173BQ-GI1 represented the worst-case. Therefore, this model was selected for the final test.

- The radiated spurious emission test was performed in all test modes. The worst case was 802.11a, and therefore, only the worst case data is shown in this report to represent all test modes.

- In the transmit mode, 802.11be320 channel 127 has the highest RF output power. Therefore, the AC conduction were performed using this worst-case mode.

- In the transmit mode, 802.11a channel 149 has the worst case of Tx spurious emission (above 1GHz). Therefore, all final tests for the spurious emission (below 1GHz) were performed using this worst-case mode.

- For Antenna Port Conducted Measurement, this item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

- For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Simultaneously transmission condition:

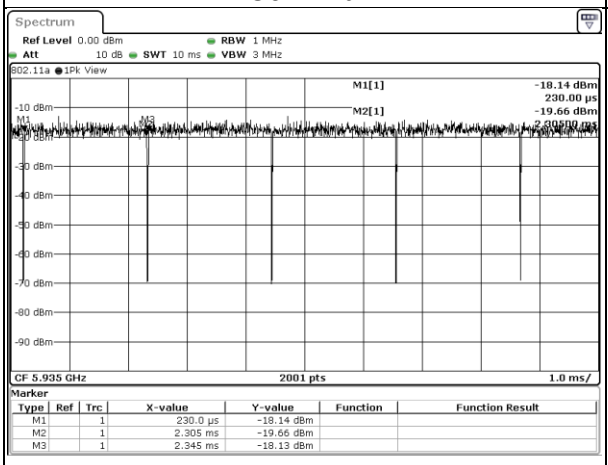
Condition	Technology		
1	BT	WLAN (6GHz)	-
2	WLAN (2.4GHz)	WLAN (6GHz)	-
3	BT	WLAN (2.4GHz)	WLAN (6GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

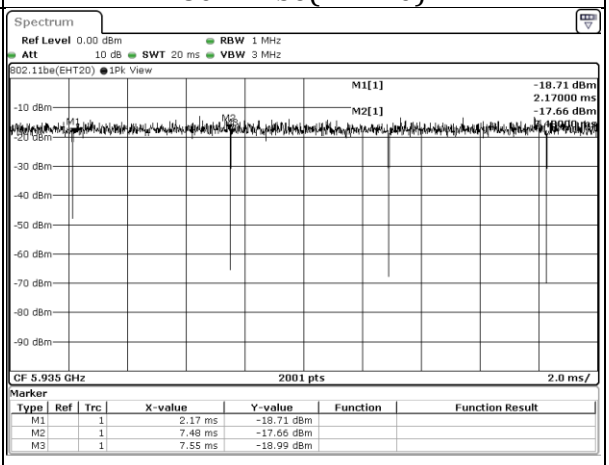
6.6. Duty cycle

Mode	On Time(ms)	On+Off Time(ms)	Duty Cycle	Duty Factor(dB)	VBW(for AV at Freq above 1GHz)
802.11a	2.075	2.115	0.9811	N/A	510Hz
802.11be(EHT20)	5.310	5.380	0.9870	N/A	200Hz
802.11be(EHT40)	5.330	5.390	0.9889	N/A	200Hz
802.11be(EHT80)	5.340	5.420	0.9852	N/A	200Hz
802.11be(EHT160)	4.575	4.605	0.9935	N/A	300Hz
802.11be(EHT320)	0.944	0.970	0.9732	0.12	2kHz

802.11a



802.11be(EHT20)



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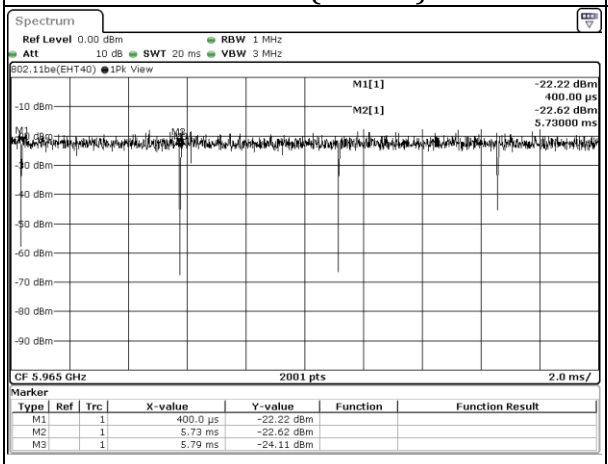

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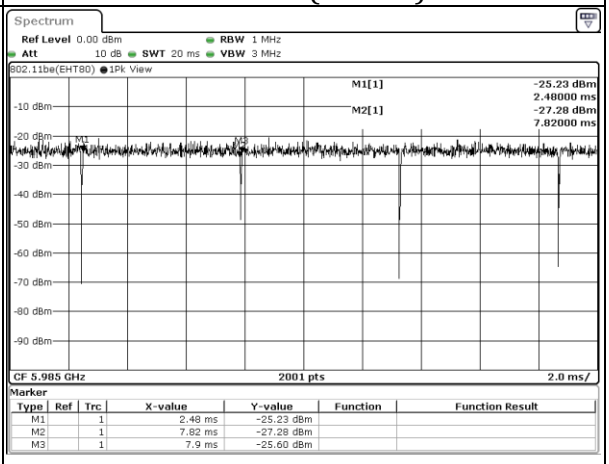
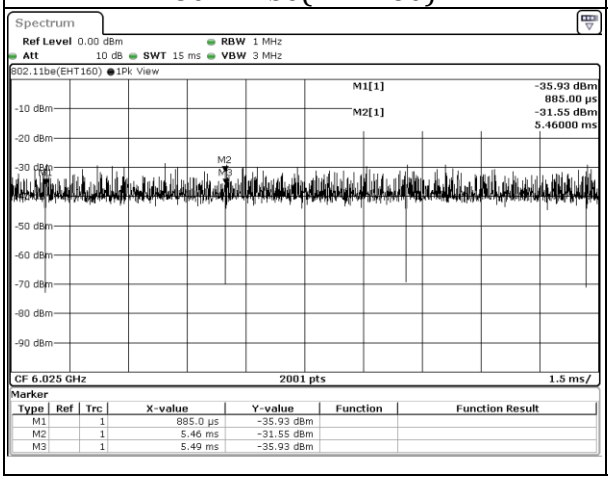
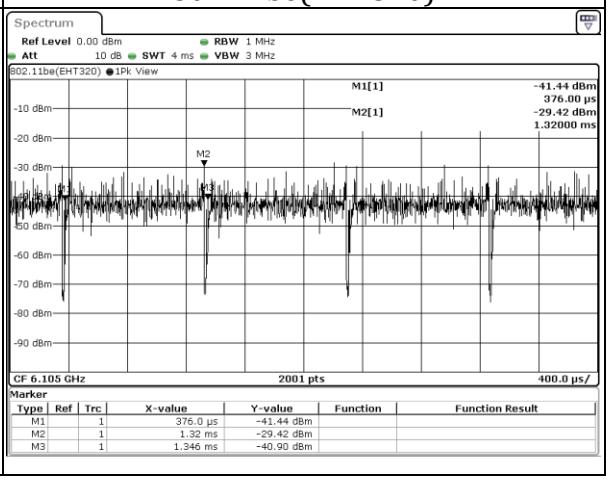


802.11be(EHT160)



802.11be(EHT320)



7. Test Equipment

Test Equipment List					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Expired date**
Radiated Spurious Emission					
Spectrum Analyzer	Keysight	N9010A	MY56070827	2024/3/29	2025/3/28
EMI Test Receiver	Rohde & Schwarz	ESR7	101754	2023/11/22	2024/11/21
				2024/12/24	2025/12/23
Loop Antenna	ETS lindgren	6502	00213440	2023/12/13	2024/12/12
				2024/12/11	2025/12/10
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	2024/1/5	2025/1/4
				2024/12/30	2025/12/29
Horn Antenna (1-18 GHz)	Schwarzbeck	BBHA 9120 D	01690	2023/12/8	2024/12/7
				2024/11/27	2025/11/26
Horn Antenna (18-40 GHz)	Schwarzbeck	BBHA 9170	781	2023/12/27	2024/12/26
				2024/12/18	2025/12/17
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	2024/5/28	2025/5/27
Preamplifier (1-18 GHz)	EMCI	EMC051835BE	980406	2024/1/23	2025/1/22
				2025/1/13	2026/1/12
Preamplifier (18-40GHz)	EMCI	EMC184040SEE	980426	2024/4/16	2025/4/15
Cables (9k-18 GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-4 & 170425-2	2023/11/29	2024/11/28
				2024/11/22	2025/11/21
Cables (18-40GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-1 & 170214-2	2023/11/29	2024/11/28
				2024/11/22	2025/11/21

Test Equipment List					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Expired date**
Antenna Port Conducted Measurement					
Signal Analyzer	Rohde & Schwarz	FSVA3044	101281	2024/3/18	2025/3/17
Signal Analyzer	Rohde & Schwarz	FSV40	101490	2024/7/1	2025/6/30
Attenuator	EMCI	EMC-40ATK2W10	17002	2023/11/15	2024/11/14
				2024/11/13	2025/11/12
USB Power Sensor	Anritsu	MA24408A	12031	2024/7/13	2025/7/12
Temperature &Humidity Test Chamber	GIANT FORCE	GTH-150- 40-CP-AR	MAA1701-010	2024/3/6	2025/3/5
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	2024/10/1	2025/9/30
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	2024/5/14	2025/5/13
Impuls-Begrenzer Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102219-Qt	2024/8/29	2025/8/28
Cables	TITAN	CFD200	T0732ACFD 20020A300-2	2024/5/14	2025/5/13

UL Software		
Description	**Name**	**Version**
Radiated measurement	e3	6.191211 (V6)
Conducted measurement	RF-Conducted-WiFi6e	ver 1.1
AC power Line Conducted Emission	EZ_EMC	UL-3A1.2

8. Description of Test Setup

Tx Mode

Support Equipment

ID	Equipment	Brand Name	Model Name	S/N	Remark
A	Host	Advantech	AIMB-219	N/A	Supplied by Client
B	Test Tool (console board)	Advantech	Advantech	N/A	Supplied by Client

I/O Cables

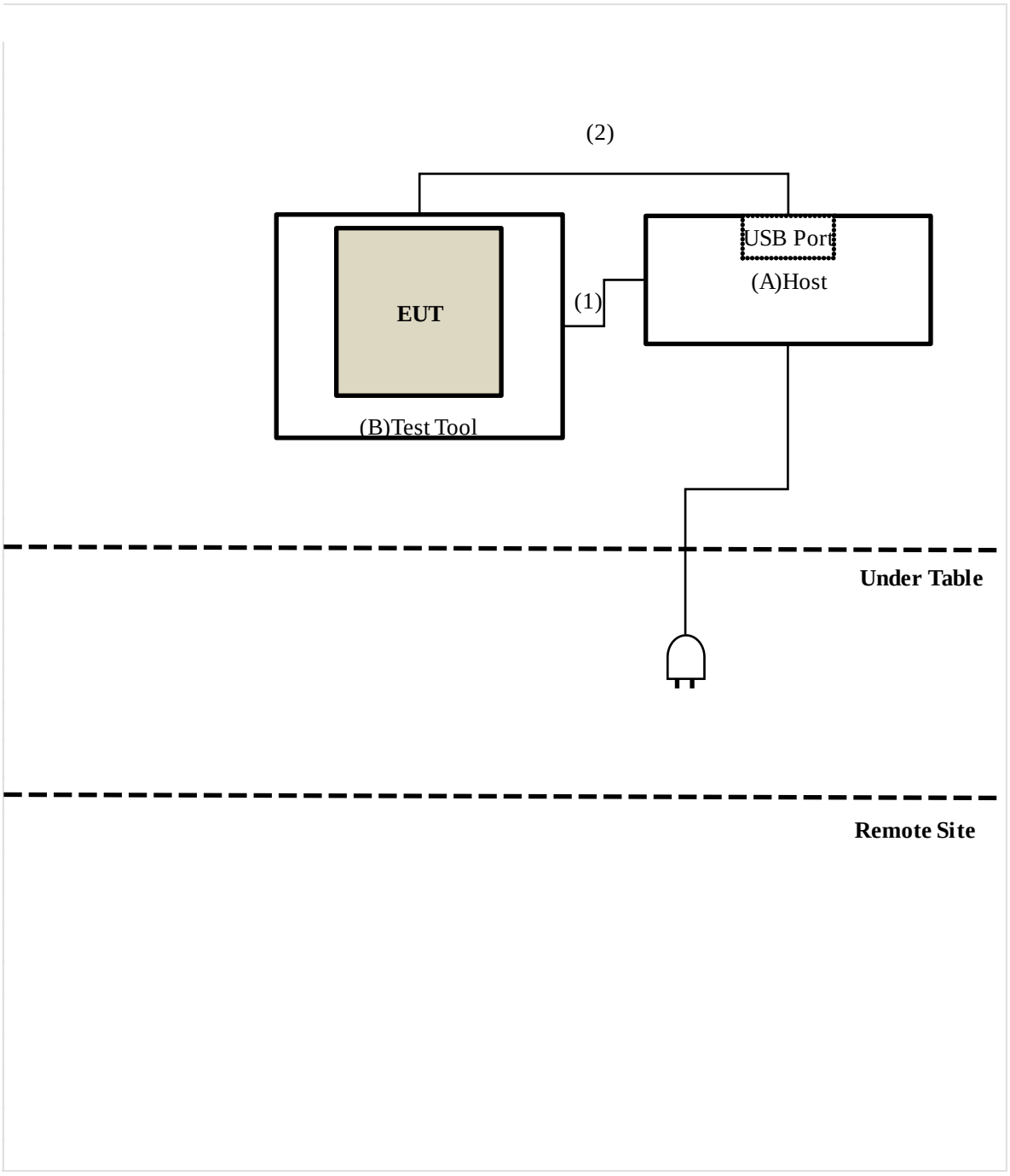
ID	Equipment	Brand Name	Model Name	Length (m)	Remark
1	Cable	ADTLink	R11SF-F	0.5	Supplied by Client
2	Test Tool (console cable)	Advantech	Advantech	0.5	Supplied by Client

Test Setup

Controlled using a bespoke application (QRCT version 4.0.2.11.0) on a test Notebook. The application was used to enable a continuous transmission mode and to select the test channels, data rates, modulation schemes and power setting as required.

Setup Diagram for Test

Tx Mode



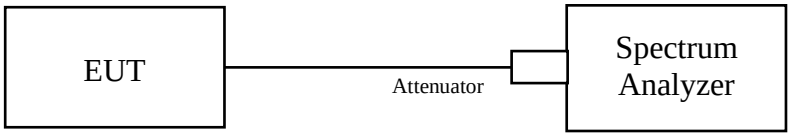
9. Test Results

9.1. 26dB Bandwidth

Test procedure

a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Test Setup

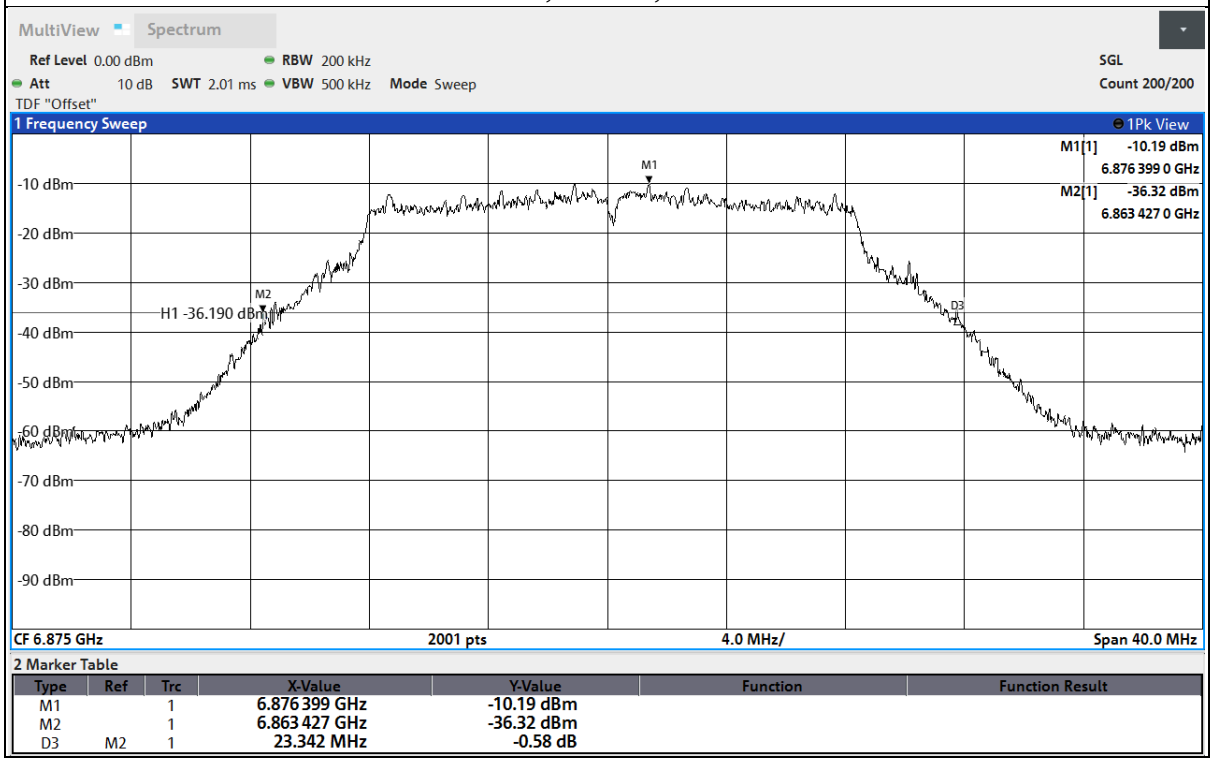


The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

Test Data

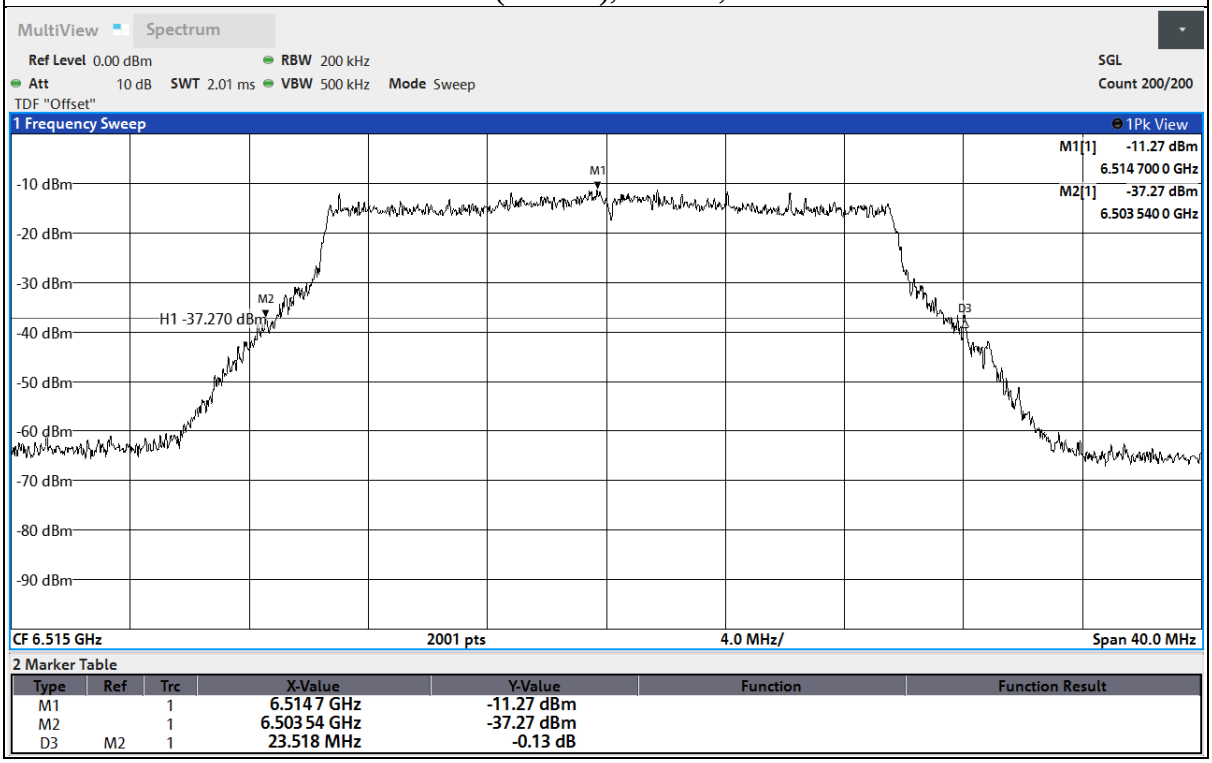
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11a	2	5935	22.976	23.228	320	PASS
	1	5955	22.633	22.202	320	PASS
	45	6175	22.435	23.291	320	PASS
	93	6415	22.23	22.903	320	PASS
	97	6435	22.538	22.784	320	PASS
	105	6475	22.181	22.7	320	PASS
	113	6515	22.371	23.019	320	PASS
	117	6535	22.382	22.886	320	PASS
	149	6695	22.542	22.869	320	PASS
	181	6855	22.385	23.338	320	PASS
	185	6875	22.503	23.342	320	PASS
	209	6995	22.806	22.981	320	PASS
	229	7095	22.441	22.536	320	PASS
	233	7115	22.585	23.093	320	PASS

802.11a, CH185, Chain 1



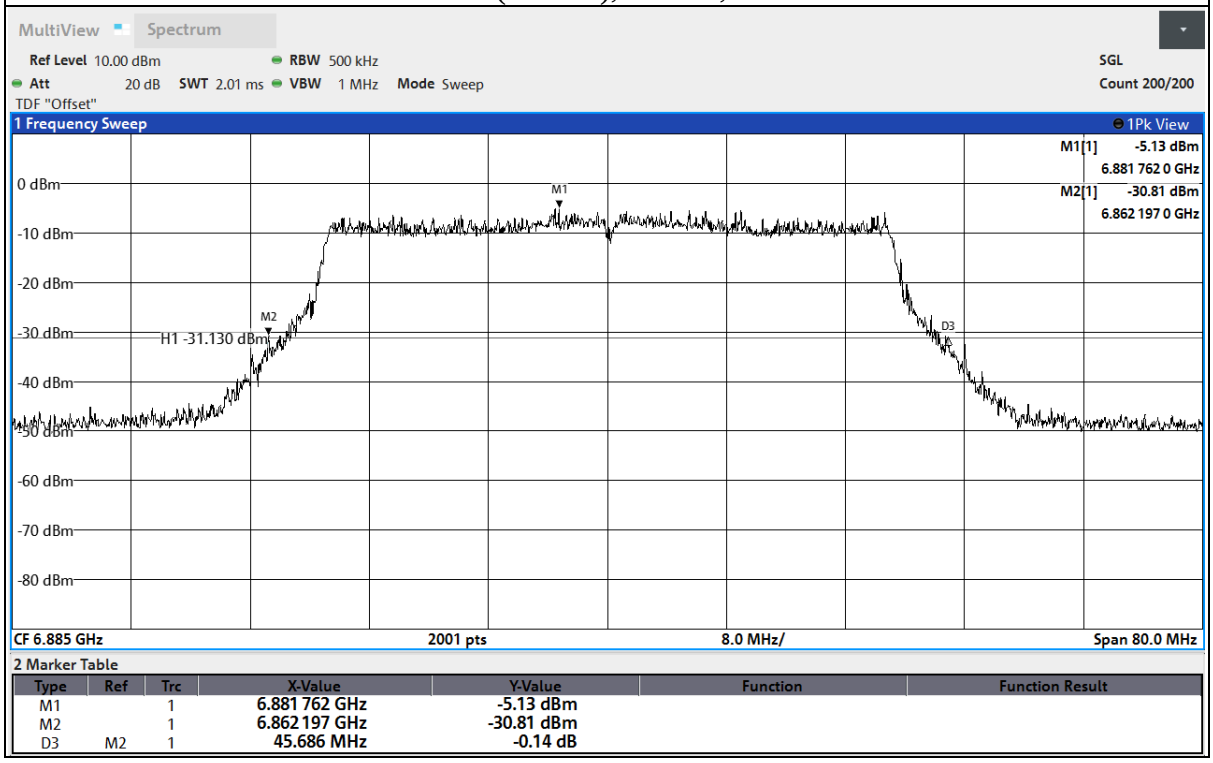
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT20)	2	5935	23.055	22.972	320	PASS
	1	5955	22.008	21.868	320	PASS
	45	6175	22.36	22.924	320	PASS
	93	6415	21.831	23.101	320	PASS
	97	6435	22.361	22.597	320	PASS
	105	6475	22.454	23.493	320	PASS
	113	6515	22.935	23.519	320	PASS
	117	6535	22.248	22.87	320	PASS
	149	6695	22.107	23.411	320	PASS
	181	6855	22.903	23.087	320	PASS
	185	6875	22.346	23.184	320	PASS
	209	6995	22.059	22.664	320	PASS
	229	7095	22.866	23.304	320	PASS
	233	7115	22.782	22.936	320	PASS

802.11be(EHT20), CH113, Chain 1



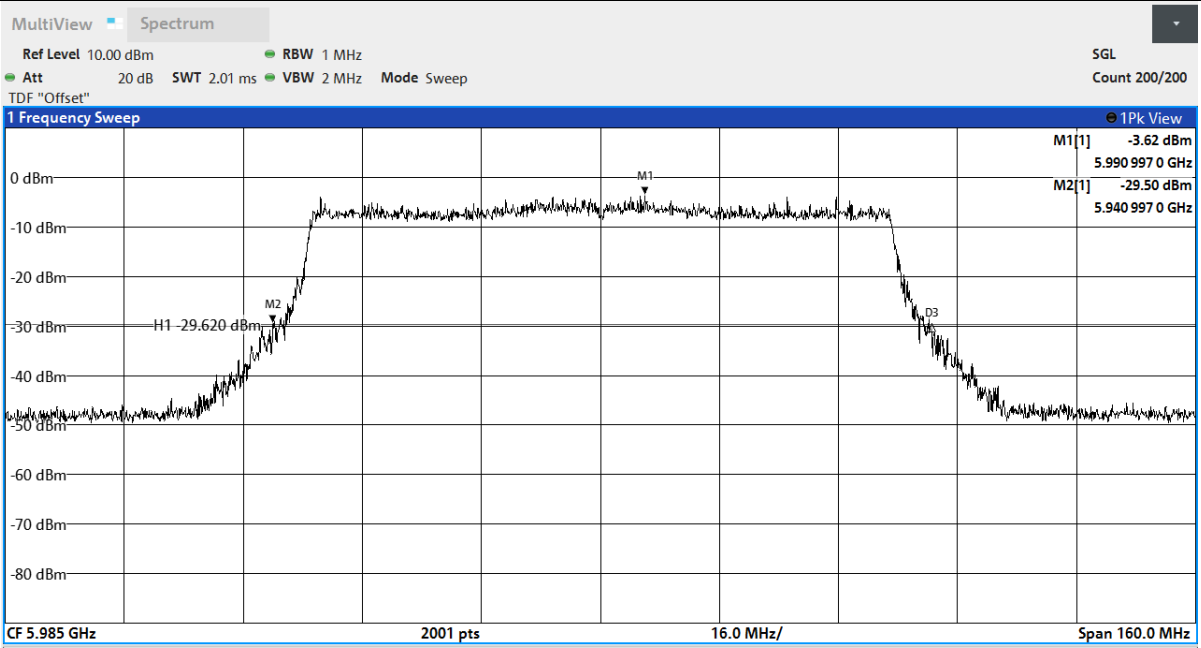
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT40)	3	5965	43.19	44.386	320	PASS
	43	6165	43.537	44.133	320	PASS
	91	6405	43.919	44.408	320	PASS
	99	6445	43.074	44.68	320	PASS
	107	6485	42.59	44.598	320	PASS
	115	6525	42.921	45.254	320	PASS
	123	6565	43.013	44.63	320	PASS
	155	6725	43.321	44.575	320	PASS
	179	6845	42.675	45.254	320	PASS
	187	6885	43.219	45.686	320	PASS
	211	7005	43.083	45.342	320	PASS
	227	7085	43.177	43.879	320	PASS

802.11be(EHT40), CH187, Chain 1



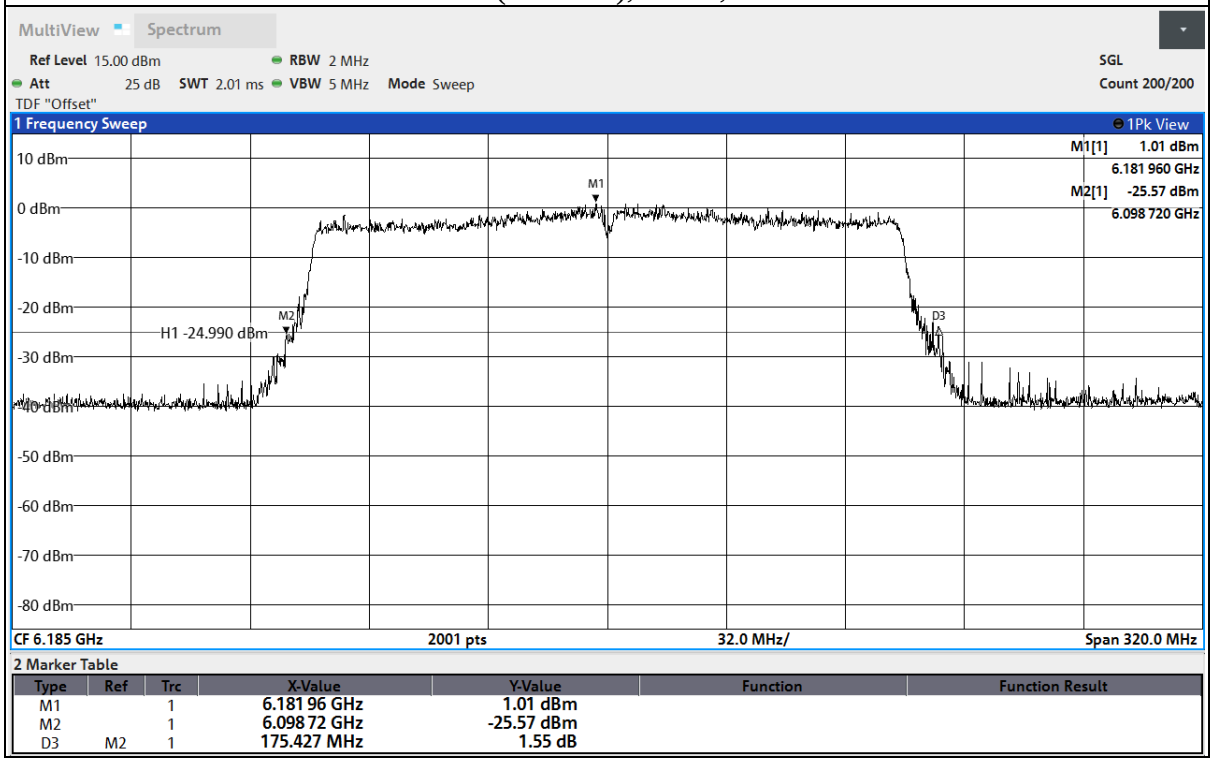
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT80)	7	5985	83.12	88.565	320	PASS
	39	6145	84.653	87.566	320	PASS
	87	6385	84.246	86.06	320	PASS
	103	6465	82.934	88.465	320	PASS
	119	6545	83.811	87.303	320	PASS
	135	6625	84.424	84.084	320	PASS
	151	6705	87.97	88.069	320	PASS
	167	6785	84.168	84.056	320	PASS
	183	6865	84.778	87.181	320	PASS
	199	6945	83.617	87.097	320	PASS
	215	7025	84.781	87.361	320	PASS

802.11be(EHT80), CH7, Chain 1



Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT160)	15	6025	172.536	172.842	320	PASS
	47	6185	175.427	173.593	320	PASS
	79	6345	173.069	172.566	320	PASS
	111	6505	170.35	171.594	320	PASS
	143	6665	171.369	172.223	320	PASS
	175	6825	171.905	172.906	320	PASS
	207	6985	173.161	170.169	320	PASS

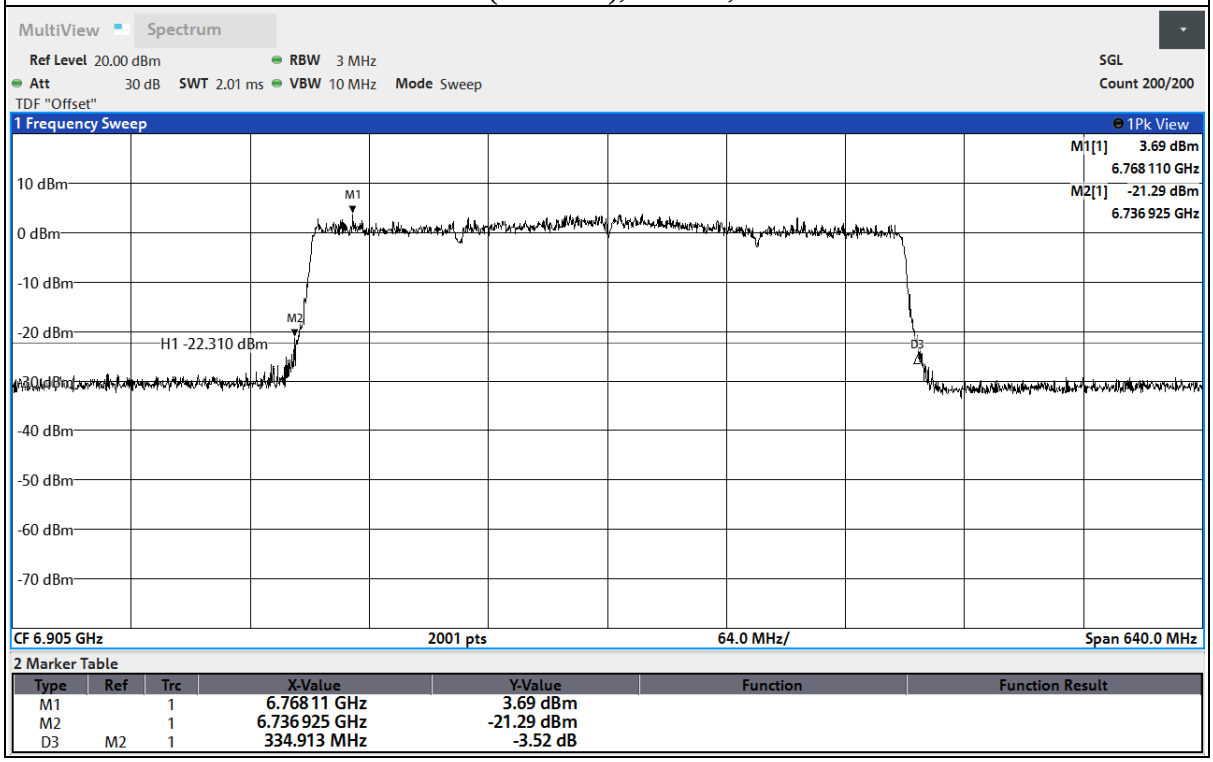
802.11be(EHT160), CH47, Chain 0



Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT320)	31	6105	329.708	331.114	-	PASS
	63	6265	334.193	333.239	-	PASS
	95	6425	331.834	331.354	-	PASS
	127	6585	334.82	332.458	-	PASS
	159	6745	333.293	333.778	-	PASS
	191	6905	333.724	334.913	-	PASS

*Refer to 987594 D03 U-NII 6 GHz QA, 99% bandwidth can be used to show compliance with the 320 MHz maximum bandwidth requirement.

802.11be(EHT320), CH191, Chain 1

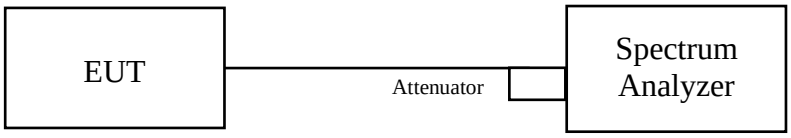


9.2. Occupied Bandwidth

Test procedure

a. Set center frequency to the nominal EUT channel center frequency.
b. Set span = 1.5 times to 5.0 times the OBW.
c. Set RBW = 1% to 5% of the OBW
d. Set VBW ≥ 3 x RBW
e. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
f. Use the 99% power bandwidth function of the instrument (if available).
g. If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Test Setup

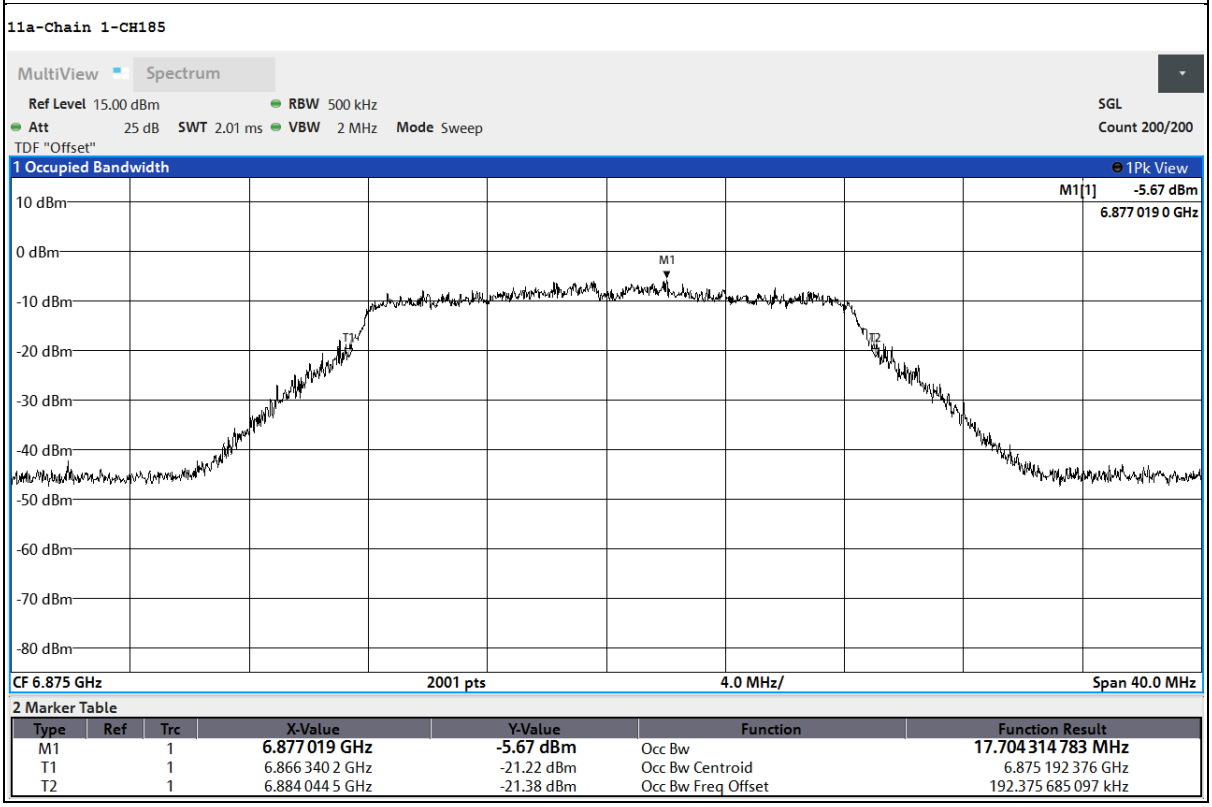


The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

Test Data

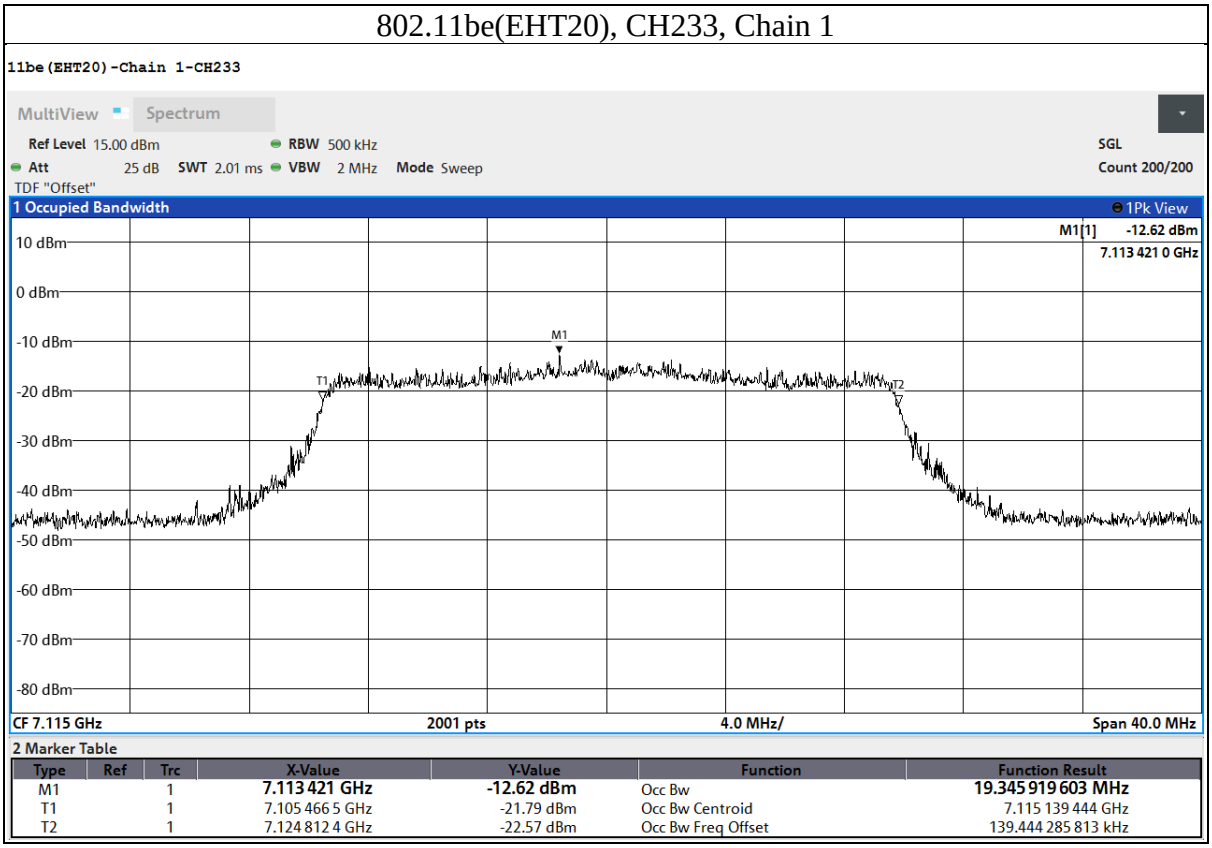
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11a	2	5935	17.442	17.655	320	PASS
	1	5955	17.402	17.313	320	PASS
	45	6175	17.366	17.694	320	PASS
	93	6415	17.381	17.627	320	PASS
	97	6435	17.428	17.486	320	PASS
	105	6475	17.407	17.606	320	PASS
	113	6515	17.416	17.555	320	PASS
	117	6535	17.379	17.507	320	PASS
	149	6695	17.357	17.541	320	PASS
	181	6855	17.386	17.552	320	PASS
	185	6875	17.33	17.704	320	PASS
	209	6995	17.364	17.486	320	PASS
	229	7095	17.31	17.222	320	PASS
	233	7115	17.366	17.668	320	PASS

802.11a, CH185, Chain 1



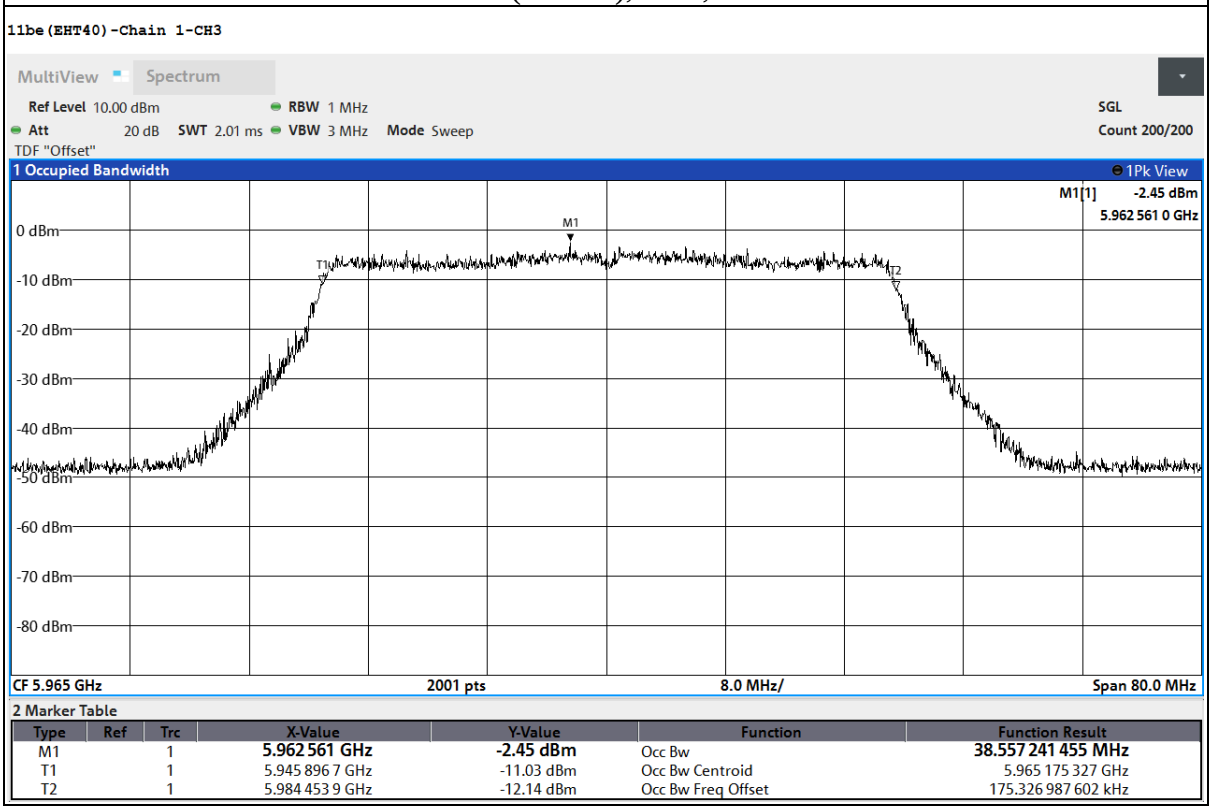
Mode	CH	Freq (MHz)	OBW (MHz) Chain 0	OBW (MHz) Chain 1	Limit (MHz)	Result
802.11be(EHT20)	2	5935	19.249	19.255	320	PASS
	1	5955	19.101	19.111	320	PASS
	45	6175	19.115	19.264	320	PASS
	93	6415	19.153	19.302	320	PASS
	97	6435	19.128	19.23	320	PASS
	105	6475	19.136	19.303	320	PASS
	113	6515	19.164	19.329	320	PASS
	117	6535	19.112	19.287	320	PASS
	149	6695	19.13	19.314	320	PASS
	181	6855	19.162	19.278	320	PASS
	185	6875	19.149	19.249	320	PASS
	209	6995	19.126	19.276	320	PASS
	229	7095	19.137	19.163	320	PASS
	233	7115	19.245	19.346	320	PASS

802.11be(EHT20), CH233, Chain 1



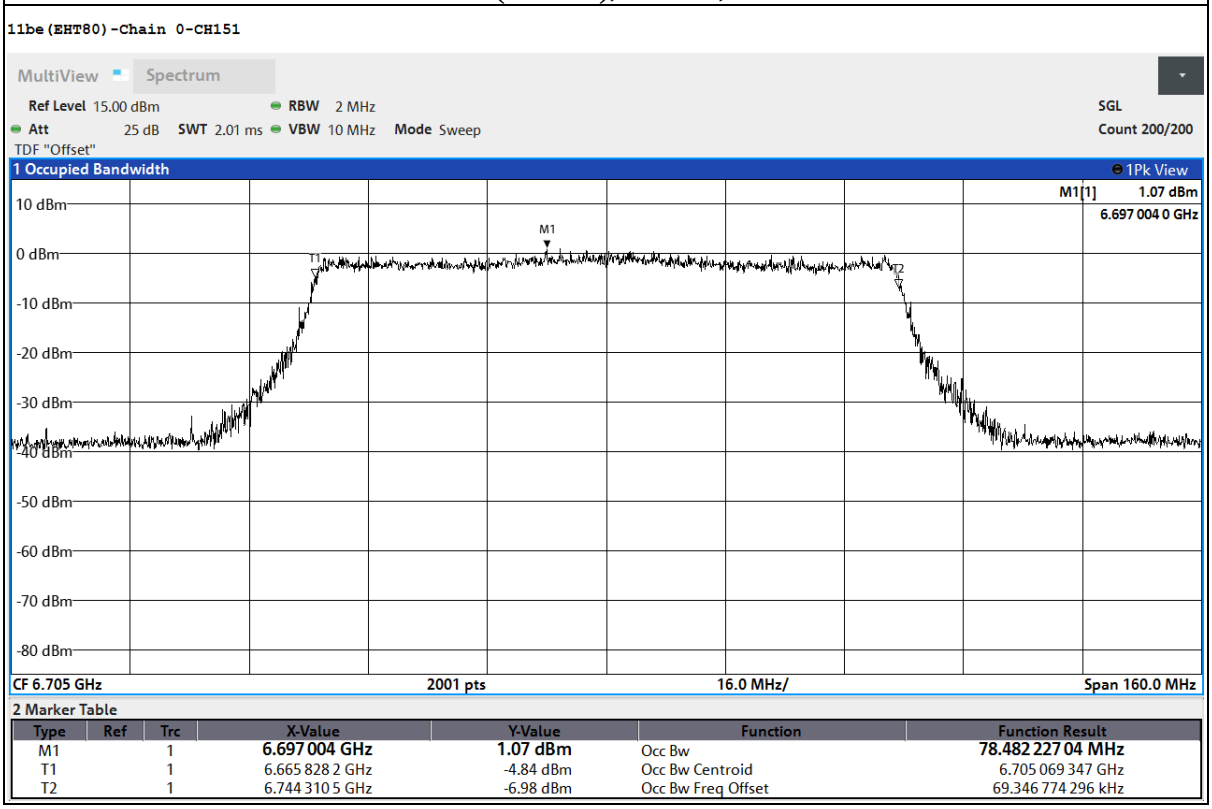
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT40)	3	5965	38.075	38.557	320	PASS
	43	6165	38.057	38.394	320	PASS
	91	6405	38.033	38.465	320	PASS
	99	6445	38.113	38.446	320	PASS
	107	6485	38.137	38.486	320	PASS
	115	6525	38.072	38.533	320	PASS
	123	6565	38.129	38.474	320	PASS
	155	6725	38.129	38.483	320	PASS
	179	6845	38.071	38.507	320	PASS
	187	6885	38.183	38.506	320	PASS
	211	7005	38.157	38.534	320	PASS
	227	7085	38.117	38.54	320	PASS

802.11be(EHT40), CH3, Chain 1



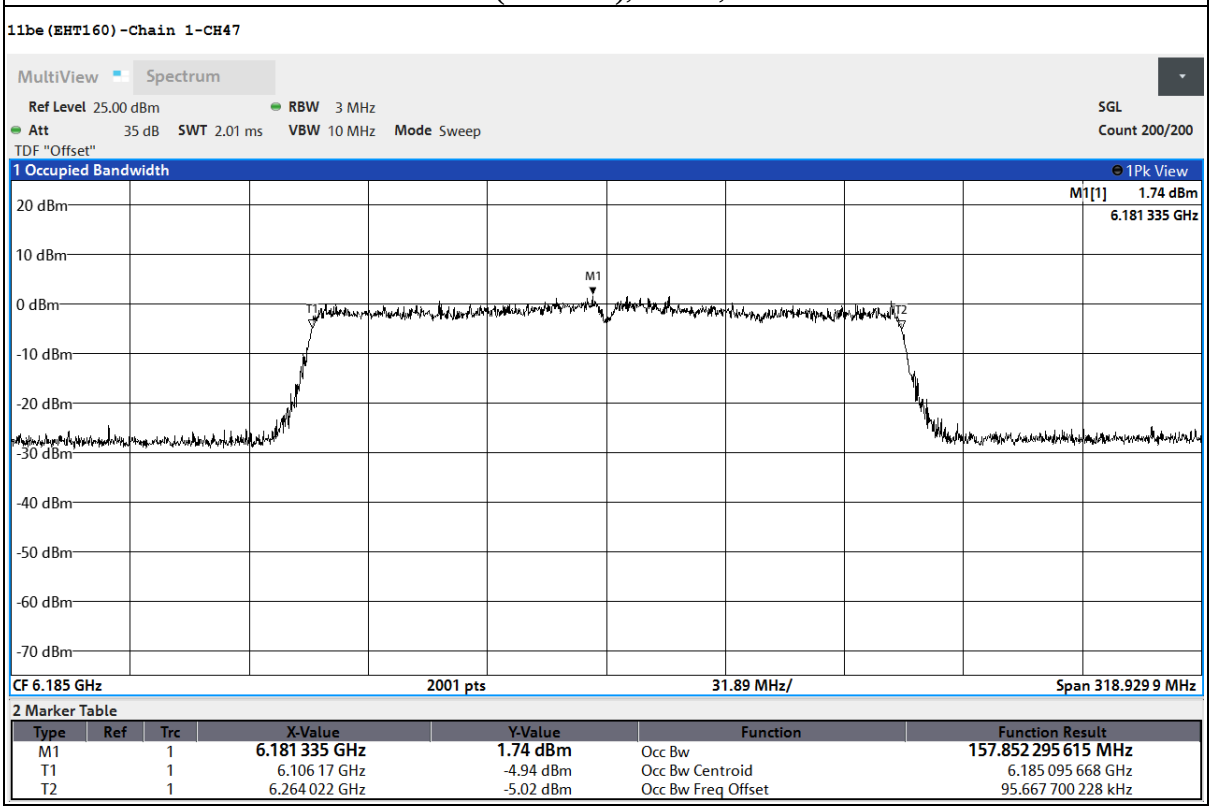
Mode	CH	Freq (MHz)	OBW (MHz) Chain 0	OBW (MHz) Chain 1	Limit (MHz)	Result
802.11be(EHT80)	7	5985	77.077	78.239	320	PASS
	39	6145	77.319	78.135	320	PASS
	87	6385	77.14	78.205	320	PASS
	103	6465	77.128	78.173	320	PASS
	119	6545	77.085	78.469	320	PASS
	135	6625	77.361	77.112	320	PASS
	151	6705	78.482	78.323	320	PASS
	167	6785	77.324	77.215	320	PASS
	183	6865	77.301	78.437	320	PASS
	199	6945	77.041	78.439	320	PASS
	215	7025	77.193	78.427	320	PASS

802.11be(EHT80), CH151, Chain 0



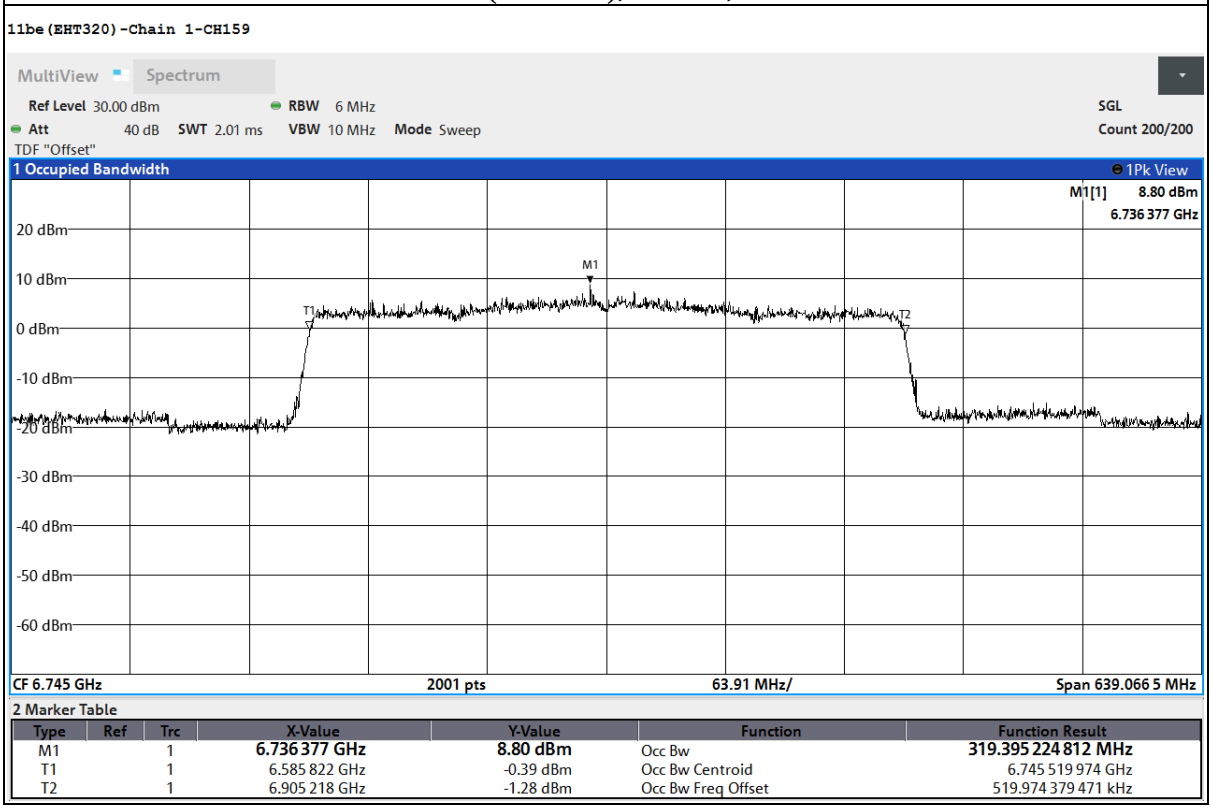
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT160)	15	6025	156.937	157.457	320	PASS
	47	6185	157.035	157.852	320	PASS
	79	6345	157.057	157.541	320	PASS
	111	6505	157.308	157.4	320	PASS
	143	6665	157.045	157.467	320	PASS
	175	6825	157.006	157.614	320	PASS
	207	6985	156.977	157.579	320	PASS

802.11be(EHT160), CH47, Chain 1



Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11be(EHT320)	31	6105	312.487	316.637	320	PASS
	63	6265	311.097	315.53	320	PASS
	95	6425	316.261	316.231	320	PASS
	127	6585	316.263	315.417	320	PASS
	159	6745	316.633	319.395	320	PASS
	191	6905	316.795	315.897	320	PASS

802.11be(EHT320), CH159, Chain 1



9.3. Transmit Power Measurement

Requirements

EUT Category		Operation Band	Limit
			Max Average Power
	Standard Power AP (6SD)	U-NII-5 U-NII-7	EIRP ≤ 36 dBm
			Outdoor device and any elevation angle above 30 degrees: EIRP ≤ 21 dBm
	Fixed Client (6FC)	U-NII-5 U-NII-7	EIRP ≤ 36 dBm
			Any elevation angle above 30 degrees: EIRP ≤ 21 dBm
	Standard Client (6FX)	U-NII-5 U-NII-7	EIRP ≤ 30 dBm
	Indoor AP (6ID)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 30 dBm
	Subordinate (6PP)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 30 dBm
√	Indoor Client (6XD)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 24 dBm
	Dual Client (6CD)	Control of a low power indoor AP: U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 24 dBm
		Control of a standard power AP: U-NII-5 U-NII-7	EIRP ≤ 30 dBm
	Very Low Power (6VL)	U-NII-5 U-NII-7	EIRP ≤ 14 dBm

Note:

1. P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi, B is the 26 dB emission bandwidth in megahertz
2. If EUT with Multiple Transmitter Output:
   a. Directional Gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ +...+$10^{Gn/20}$)^2 / Nant] dBi.
   Nant: Number of Transmit Antennas
   G1, G2,..., Gn: Gain of Individual Antennas
   Example: two antenna and gain 5 dBi / 3dBi, so if it was used for TxBF power measurement
   Directional Gain = 10 log[(105/20 + 103/20)2 / 2] dBi = 7.07 dBi
   b. Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices, CDD
   Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
   Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;
   Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.
   Example: Maximum antenna gain = 5 dBi and NANT ≤ 4, so if it was used for CDD power measurement
   Directional Gain = 5 dBi + Array Gain = 5 dBi + 0 dB = 5 dBi
   c. For power measurement of KDB 662911 is used with multiple transmitter output. Total conducted power is the sum of the conducted power levels measured at the various output ports.

Test Procedure

For Average Power Measurement

Test method PM

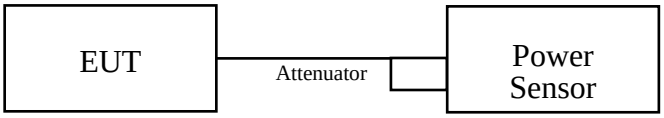
Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

* If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."

EIRP = Maximum Conducted Power + Directional Gain

Test Setup

For Average Power Measurement



The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

Test Data

802.11a

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
2	5935	-1.24	-1.10	1.84	4.06	5.90	24	PASS
1	5955	-1.02	-1.11	1.95	4.06	6.01	24	PASS
45	6175	-2.83	-2.55	0.32	4.06	4.38	24	PASS
93	6415	-2.18	-2.39	0.73	4.06	4.79	24	PASS
97	6435	-1.69	-1.71	1.31	4.06	5.37	24	PASS
105	6475	-1.49	-1.53	1.50	4.06	5.56	24	PASS
113	6515	-0.93	-1.08	2.01	4.06	6.07	24	PASS
117	6535	-1.52	-1.40	1.55	4.06	5.61	24	PASS
149	6695	-1.51	-0.93	1.80	4.06	5.86	24	PASS
181	6855	-1.56	-0.47	2.03	4.06	6.09	24	PASS
185	6875	-1.37	-0.28	2.22	4.06	6.28	24	PASS
209	6995	-1.77	-0.82	1.74	4.06	5.80	24	PASS
229	7095	-1.66	-1.01	1.69	4.06	5.75	24	PASS
233	7115	-1.72	-1.09	1.62	4.06	5.68	24	PASS

802.11be (EHT20)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
2	5935	-11.44	-11.37	-8.39	4.06	-4.33	24	PASS
1	5955	-2.03	-2.09	0.95	4.06	5.01	24	PASS
45	6175	-2.56	-2.29	0.59	4.06	4.65	24	PASS
93	6415	-1.44	-1.52	1.53	4.06	5.59	24	PASS
97	6435	0.13	0.02	3.09	4.06	7.15	24	PASS
105	6475	-0.26	-0.40	2.68	4.06	6.74	24	PASS
113	6515	-0.69	-0.81	2.26	4.06	6.32	24	PASS
117	6535	-1.19	-1.09	1.87	4.06	5.93	24	PASS
149	6695	-1.25	-1.11	1.83	4.06	5.89	24	PASS
181	6855	-1.09	0.05	2.53	4.06	6.59	24	PASS
185	6875	-1.08	0.06	2.54	4.06	6.60	24	PASS
209	6995	-1.32	-0.49	2.13	4.06	6.19	24	PASS
229	7095	-1.25	-0.60	2.10	4.06	6.16	24	PASS
233	7115	-11.83	-11.54	-8.67	4.06	-4.61	24	PASS

802.11be (EHT40)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
3	5965	3.04	2.47	5.77	4.06	9.83	24	PASS
43	6165	2.83	2.00	5.45	4.06	9.51	24	PASS
91	6405	2.54	1.49	5.06	4.06	9.12	24	PASS
99	6445	2.84	1.85	5.38	4.06	9.44	24	PASS
107	6485	3.09	2.04	5.61	4.06	9.67	24	PASS
115	6525	2.88	1.75	5.36	4.06	9.42	24	PASS
123	6565	2.85	1.70	5.32	4.06	9.38	24	PASS
155	6725	2.14	1.88	5.02	4.06	9.08	24	PASS
179	6845	2.37	2.02	5.21	4.06	9.27	24	PASS
187	6885	2.29	1.97	5.14	4.06	9.20	24	PASS
211	7005	2.26	1.93	5.11	4.06	9.17	24	PASS
227	7085	2.52	2.13	5.34	4.06	9.40	24	PASS

802.11be (EHT80)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
7	5985	4.97	4.58	7.79	4.06	11.85	24	PASS
39	6145	5.05	4.19	7.65	4.06	11.71	24	PASS
87	6385	4.64	3.54	7.14	4.06	11.20	24	PASS
103	6465	5.78	4.41	8.16	4.06	12.22	24	PASS
119	6545	5.84	4.63	8.29	4.06	12.35	24	PASS
135	6625	5.89	4.72	8.35	4.06	12.41	24	PASS
151	6705	4.97	4.14	7.59	4.06	11.65	24	PASS
167	6785	4.81	4.40	7.62	4.06	11.68	24	PASS
183	6865	4.53	3.94	7.26	4.06	11.32	24	PASS
199	6945	5.77	5.46	8.63	4.06	12.69	24	PASS
215	7025	4.62	4.25	7.45	4.06	11.51	24	PASS

802.11be (EHT160)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
15	6025	9.43	8.84	12.16	4.06	16.22	24	PASS
47	6185	9.07	8.12	11.63	4.06	15.69	24	PASS
79	6345	8.71	7.72	11.25	4.06	15.31	24	PASS
111	6505	9.58	8.57	12.11	4.06	16.17	24	PASS
143	6665	9.17	8.19	11.72	4.06	15.78	24	PASS
175	6825	8.26	8.01	11.15	4.06	15.21	24	PASS
207	6985	8.65	8.63	11.65	4.06	15.71	24	PASS

802.11be (EHT320)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (dBm)	Directional Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
		Chain 0	Chain 1					
31	6105	11.93	11.32	14.65	4.06	18.71	24	PASS
63	6265	11.96	11.22	14.62	4.06	18.68	24	PASS
95	6425	12.06	11.35	14.73	4.06	18.79	24	PASS
127	6585	12.15	11.34	14.77	4.06	18.83	24	PASS
159	6745	12.13	11.34	14.76	4.06	18.82	24	PASS
191	6905	11.62	11.31	14.48	4.06	18.54	24	PASS

9.4. Power Spectral Density

Requirements

EUT Category		Operation Band	Limit
			Max Average Power Density
	Standard Power AP (6SD)	U-NII-5 U-NII-7	EIRP ≤ 23 dBm/MHz
	Fixed Client (6FC)	U-NII-5 U-NII-7	EIRP ≤ 23 dBm/MHz
	Standard Client (6FX)	U-NII-5 U-NII-7	EIRP ≤ 17 dBm/MHz
	Indoor AP (6ID)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 5 dBm/MHz
	Subordinate (6PP)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ 5 dBm/MHz
√	Indoor Client (6XD)	U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ -1 dBm/MHz
	Dual Client (6CD)	Control of a low power indoor AP: U-NII-5, U-NII-6 U-NII-7, U-NII-8	EIRP ≤ -1 dBm/MHz
		Control of a standard power AP: U-NII-5 U-NII-7	EIRP ≤ 17 dBm/MHz
	Very Low Power (6VL)	U-NII-5 U-NII-7	EIRP ≤ -5 dBm/MHz

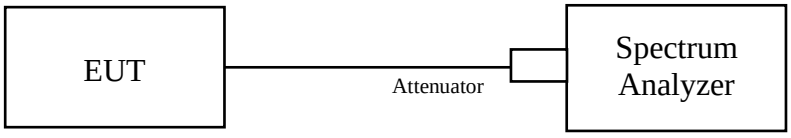
Note:
1. PSD = power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz
2. G_{TX} = the maximum transmitting antenna directional gain in dBi.
3. If EUT with Multiple Transmitter Output:
   a. Directional Gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{Gn/20})^2$ / Nant] dBi.
   Nant: Number of Transmit Antennas
   G1, G2,..., Gn: Gain of Individual Antennas
   Example: two antenna and gain 5 dBi / 3dBi, so if it was used for power density measurement
   Directional Gain = 10 log[$(10^{5/20} + 10^{3/20})^2$ / 2] dBi = 7.07 dBi
   b. "PSD per chain" of the report shown is maximum value for each chain, at the "Total PSD" is summing entire spectra across corresponding frequency bins on the various outputs by computer, refer KDB 662911 Method a) for calculating total power density.
   c. Method a) of power density measurement of KDB 662911 is used for calculating total power density with multiple transmitter output. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
4. EIRP Power Density = Sum of the conducted power density levels + Directional Gain
5. Refer to section 6.6 for duty cycle spectrum plot. (If duty cycle<98%)

Test procedure

Using method:

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 RBW, Detector = RMS
c. Sweep time = auto, trigger set to “free run”.
d. Trace average at least 100 traces in power averaging mode.
e. Record the max value and add 10 log (1/duty cycle) *If duty cycle<98%

Test Setup



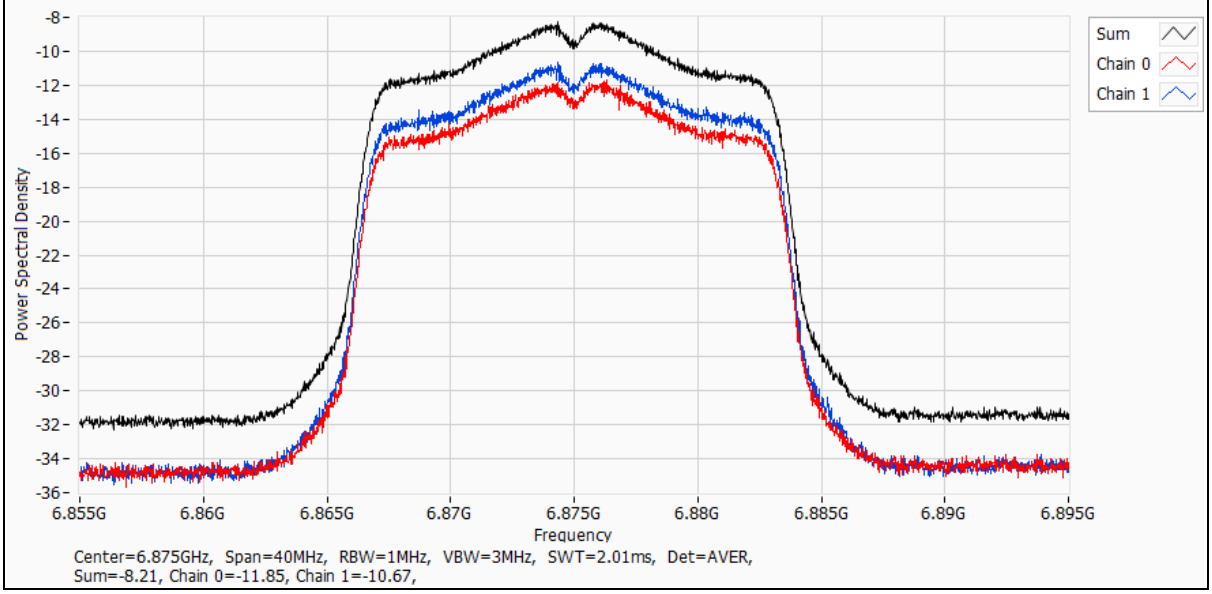
The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

Test Data

Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11a	2	5935	7.07	-2.807	-1	PASS
	1	5955	7.07	-2.343	-1	PASS
	45	6175	7.07	-3.897	-1	PASS
	93	6415	7.07	-3.385	-1	PASS
	97	6435	7.07	-2.679	-1	PASS
	105	6475	7.07	-2.68	-1	PASS
	113	6515	7.07	-2.177	-1	PASS
	117	6535	7.07	-2.645	-1	PASS
	149	6695	7.07	-2.151	-1	PASS
	181	6855	7.07	-1.789	-1	PASS
	185	6875	7.07	-1.139	-1	PASS
	209	6995	7.07	-2.118	-1	PASS
	229	7095	7.07	-2.24	-1	PASS
	233	7115	7.07	-2.153	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11a	2	5935	-12.91	-12.53
	1	5955	-12.18	-12.34
	45	6175	-14.02	-13.52
	93	6415	-13.33	-13.27
	97	6435	-12.44	-12.81
	105	6475	-12.67	-12.76
	113	6515	-11.96	-12.32
	117	6535	-12.63	-12.52
	149	6695	-12.73	-11.59
	181	6855	-12.46	-11.2
	185	6875	-11.69	-10.67
	209	6995	-12.63	-11.63
	229	7095	-12.55	-11.86
	233	7115	-12.67	-11.67

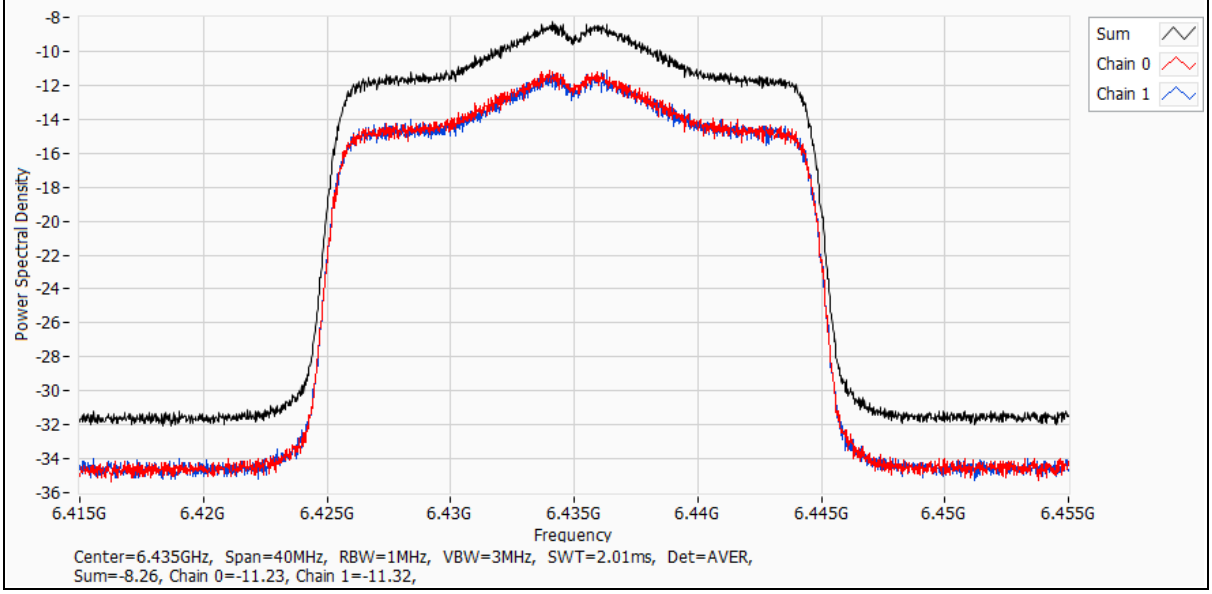
802.11a, CH185



Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11be(EHT20)	2	5935	7.07	-16.814	-1	PASS
	1	5955	7.07	-3.755	-1	PASS
	45	6175	7.07	-3.943	-1	PASS
	93	6415	7.07	-2.879	-1	PASS
	97	6435	7.07	-1.194	-1	PASS
	105	6475	7.07	-1.645	-1	PASS
	113	6515	7.07	-2.095	-1	PASS
	117	6535	7.07	-2.645	-1	PASS
	149	6695	7.07	-2.453	-1	PASS
	181	6855	7.07	-1.622	-1	PASS
	185	6875	7.07	-1.634	-1	PASS
	209	6995	7.07	-1.924	-1	PASS
	229	7095	7.07	-2.11	-1	PASS
	233	7115	7.07	-17.772	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11be(EHT20)	2	5935	-26.81	-26.69
	1	5955	-13.77	-13.6
	45	6175	-13.96	-13.82
	93	6415	-12.81	-12.93
	97	6435	-11.15	-11.09
	105	6475	-11.65	-11.63
	113	6515	-12.02	-12.28
	117	6535	-12.44	-12.36
	149	6695	-12.95	-11.86
	181	6855	-12.27	-10.94
	185	6875	-12.33	-10.86
	209	6995	-12.59	-11.4
	229	7095	-12.49	-11.67
	233	7115	-28.4	-27.12

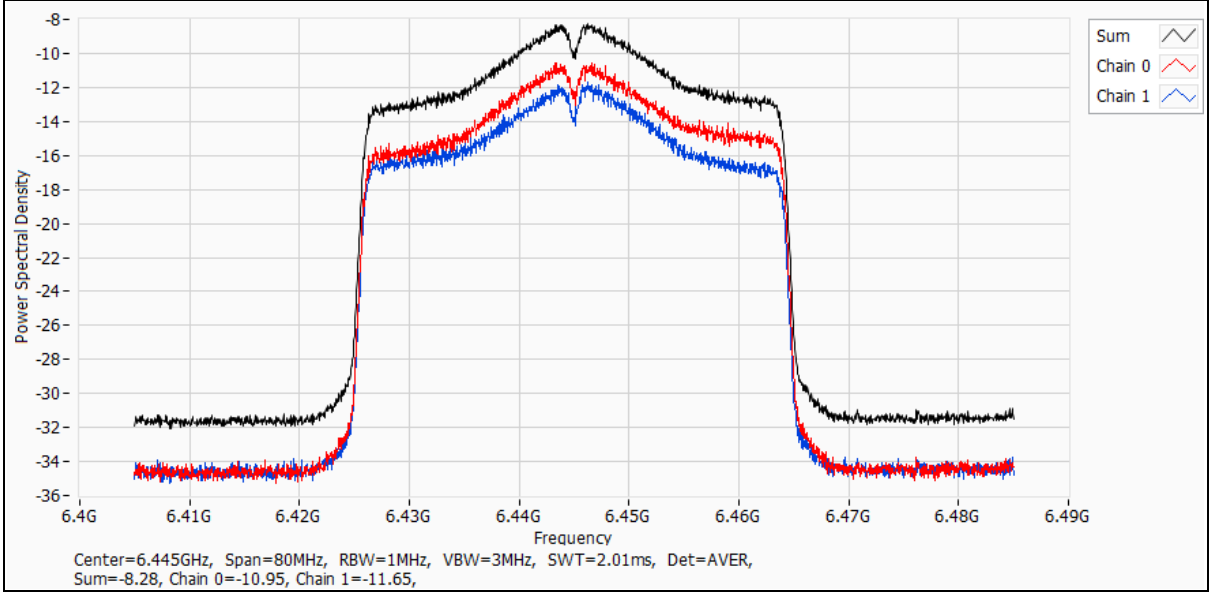
802.11be(EHT20), CH97



Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11be(EHT40)	3	5965	7.07	-1.297	-1	PASS
	43	6165	7.07	-1.329	-1	PASS
	91	6405	7.07	-1.589	-1	PASS
	99	6445	7.07	-1.207	-1	PASS
	107	6485	7.07	-1.231	-1	PASS
	115	6525	7.07	-1.577	-1	PASS
	123	6565	7.07	-1.631	-1	PASS
	155	6725	7.07	-1.403	-1	PASS
	179	6845	7.07	-1.333	-1	PASS
	187	6885	7.07	-1.475	-1	PASS
	211	7005	7.07	-1.246	-1	PASS
	227	7085	7.07	-1.438	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11be(EHT40)	3	5965	-10.88	-11.53
	43	6165	-10.56	-11.88
	91	6405	-10.98	-12.23
	99	6445	-10.56	-11.65
	107	6485	-10.51	-11.55
	115	6525	-10.97	-12.11
	123	6565	-11.07	-11.99
	155	6725	-11.29	-11.46
	179	6845	-11.17	-11.43
	187	6885	-11.11	-11.7
	211	7005	-10.95	-11.35
	227	7085	-11.14	-11.53

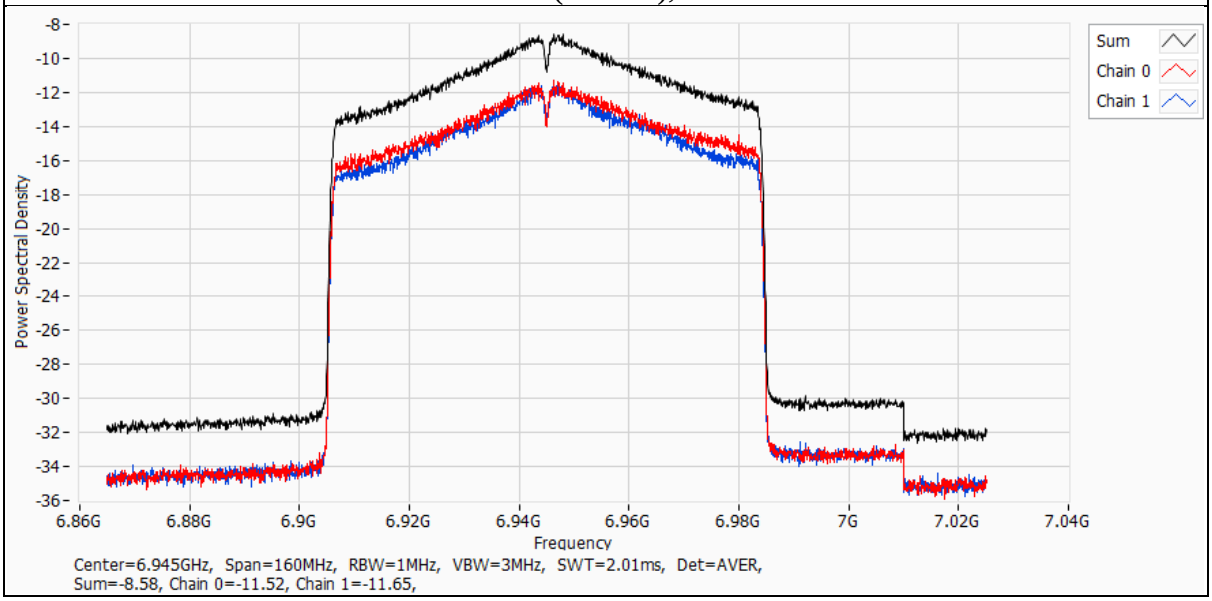
802.11be(EHT40), CH99



Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11be(EHT80)	7	5985	7.07	-2.336	-1	PASS
	39	6145	7.07	-2.642	-1	PASS
	87	6385	7.07	-2.907	-1	PASS
	103	6465	7.07	-1.73	-1	PASS
	119	6545	7.07	-1.598	-1	PASS
	135	6625	7.07	-1.803	-1	PASS
	151	6705	7.07	-1.914	-1	PASS
	167	6785	7.07	-2.244	-1	PASS
	183	6865	7.07	-2.311	-1	PASS
	199	6945	7.07	-1.506	-1	PASS
	215	7025	7.07	-2.209	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11be(EHT80)	7	5985	-11.85	-12.67
	39	6145	-11.91	-13.32
	87	6385	-12.32	-13.16
	103	6465	-11.13	-12.12
	119	6545	-11.08	-12.05
	135	6625	-11.25	-12.41
	151	6705	-11.7	-12.15
	167	6785	-11.82	-12.21
	183	6865	-12.12	-12.68
	199	6945	-11.31	-11.58
	215	7025	-12.05	-12.13

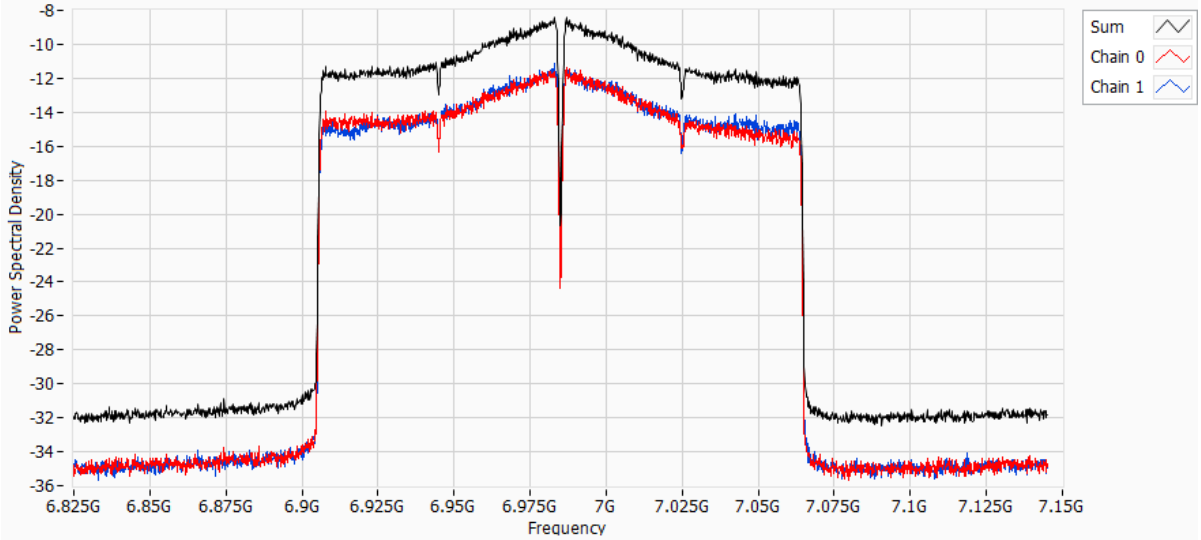
802.11be(EHT80), CH199



Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11be(EHT160)	15	6025	7.07	-1.479	-1	PASS
	47	6185	7.07	-1.585	-1	PASS
	79	6345	7.07	-2.15	-1	PASS
	111	6505	7.07	-1.408	-1	PASS
	143	6665	7.07	-1.695	-1	PASS
	175	6825	7.07	-2.213	-1	PASS
	207	6985	7.07	-1.293	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11be(EHT160)	15	6025	-11.07	-11.78
	47	6185	-11.11	-11.85
	79	6345	-11.34	-12.64
	111	6505	-10.84	-11.62
	143	6665	-11.29	-12.07
	175	6825	-12.17	-12.08
	207	6985	-11.39	-11.15

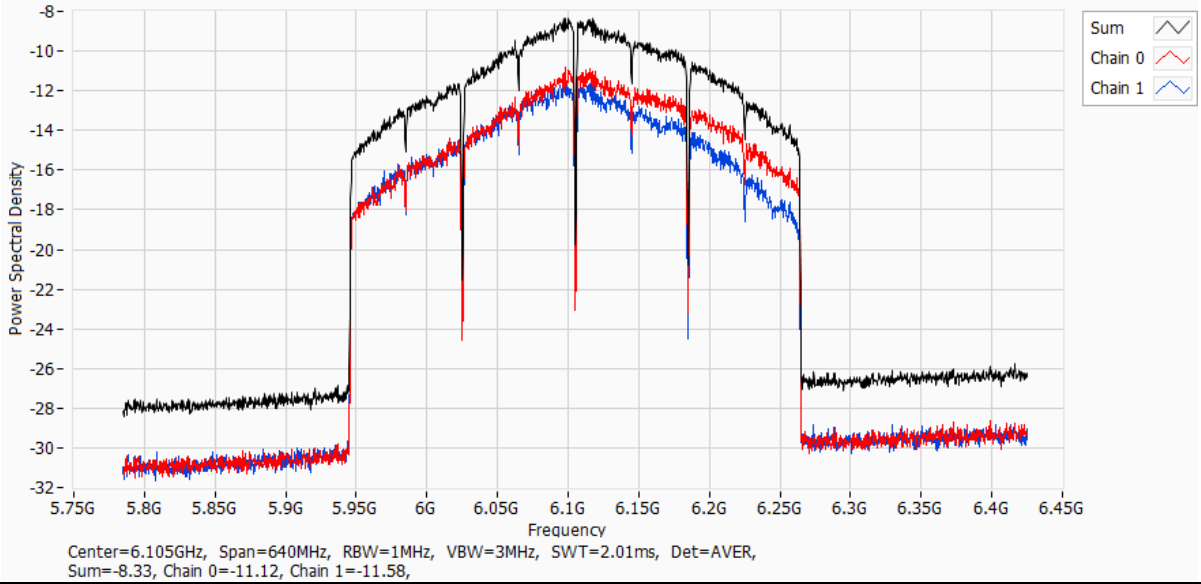
802.11be(EHT160), CH207



Mode	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11be(EHT320)	31	6105	7.07	-1.261	-1	PASS
	63	6265	7.07	-1.608	-1	PASS
	95	6425	7.07	-1.309	-1	PASS
	127	6585	7.07	-1.545	-1	PASS
	159	6745	7.07	-1.361	-1	PASS
	191	6905	7.07	-1.441	-1	PASS

Mode	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11be(EHT320)	31	6105	-10.8	-11.58
	63	6265	-11.22	-12.06
	95	6425	-10.85	-11.66
	127	6585	-11.23	-11.72
	159	6745	-11.36	-11.31
	191	6905	-11.38	-11.44

802.11be(EHT320), CH31



9.5. Frequency Stability

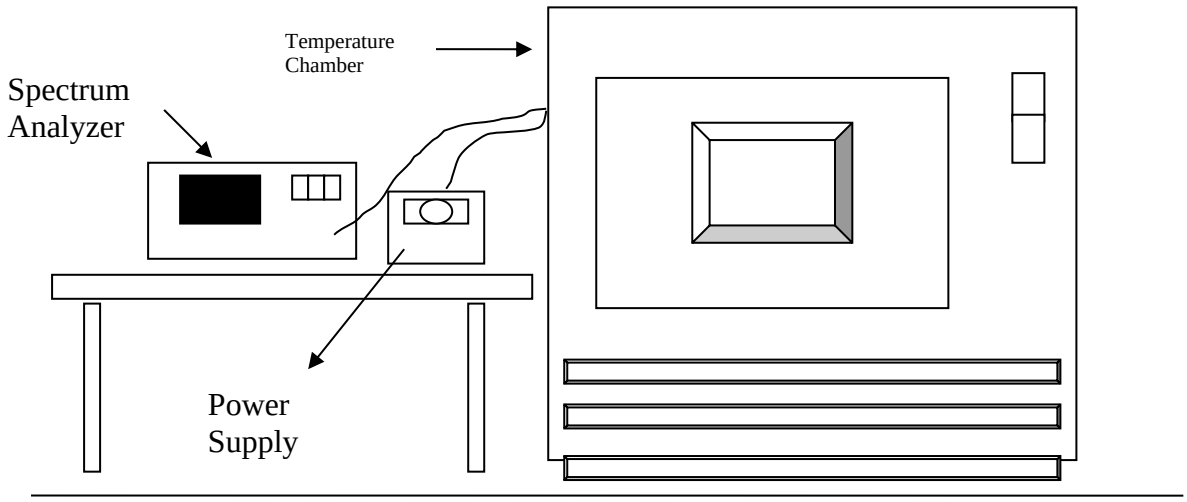
Requirements

The frequency of the carrier signal shall be maintained within band of operation.

Test procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

Test Setup



Test Data

Frequency Stability Versus Temp.									
Operating Frequency: 5955 MHz									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
50	120	5954.9836	-2.75	5954.984	-2.69	5954.9846	-2.59	5954.9817	-3.07
40	120	5954.991	-1.51	5954.9894	-1.78	5954.9939	-1.02	5954.9924	-1.28
30	120	5955.006	1.01	5955.0072	1.21	5955.0049	0.82	5955.0031	0.52
20	120	5955.0156	2.62	5955.0208	3.49	5955.0149	2.50	5955.0178	2.99
10	120	5954.9796	-3.43	5954.9774	-3.80	5954.9769	-3.88	5954.9796	-3.43
0	120	5954.9727	-4.58	5954.9711	-4.85	5954.9722	-4.67	5954.9677	-5.42
-10	120	5954.9814	-3.12	5954.9811	-3.17	5954.9799	-3.38	5954.9793	-3.48
-20	120	5954.9941	-0.99	5954.9988	-0.20	5954.9983	-0.29	5954.997	-0.50
-30	120	5954.9902	-1.65	5954.9901	-1.66	5954.9893	-1.80	5954.9875	-2.10
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
20	138	5955.0146	2.45	5955.0216	3.63	5955.0152	2.55	5955.0172	2.89
20	120	5955.0156	2.62	5955.0208	3.49	5955.0149	2.50	5955.0178	2.99
20	102	5955.0163	2.74	5955.022	3.69	5955.0148	2.49	5955.0184	3.09

9.6. Radiated Spurious Emission

Requirements

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3m
5925MHz > F > 7125MHz	Peak:-7 (dBm/MHz)	88.2(dBμV/m)
	Average: -27 (dBm/MHz)	68.2(dBμV/m)

Note:
The following formula is used to convert the effective isotropic radiated power (eirp) to field strength:

$E = \frac{1000000\sqrt{30P}}{3}$ μV/m, where P is the eirp (Watts).

Test Procedures

[For 9 kHz ~ 30 MHz]

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.

Peak

Frequency	RBW	VBW
9 kHz~150 kHz	200 Hz	600 Hz
150 kHz~30 MHz	10 kHz	30 kHz
30 MHz~1 GHz	120 kHz	360 kHz
Above 1GHz	1 MHz	3 MHz

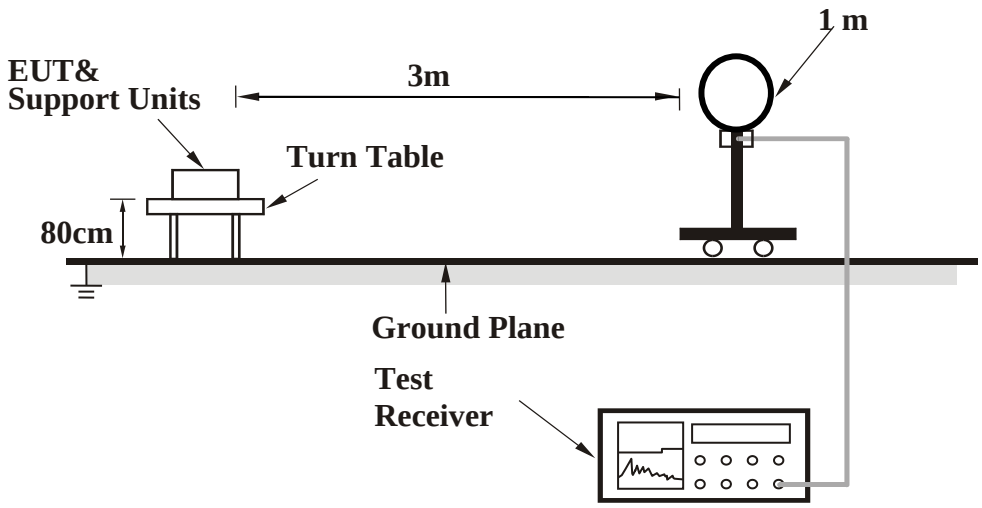
Average for above 1GHz

RBW	VBW
1MHz	Refer to section 6.6 for duty cycle.

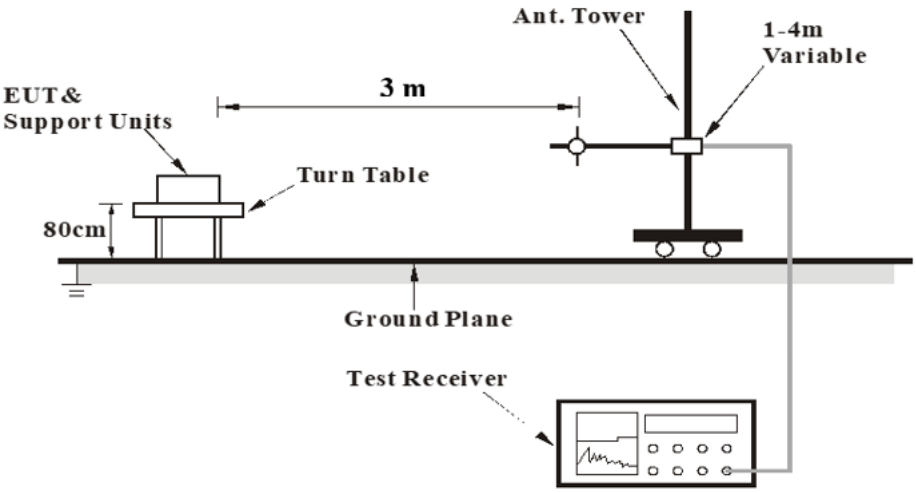
d. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
e. Test data of Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
f. Test data of Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
g. Test data of Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
h. Test data of Notation "@" = Fundamental Frequency
i. Test data of Notation " * " = The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.

Test Setup

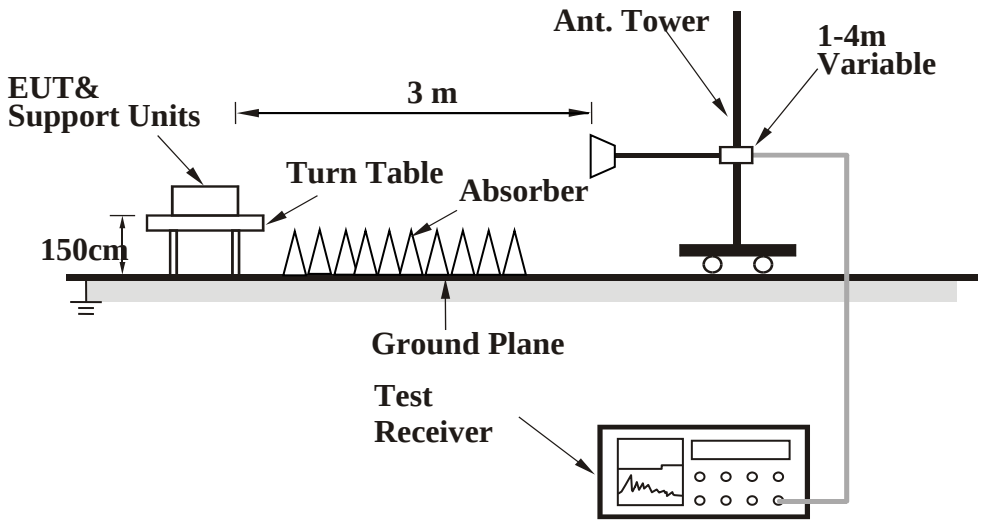
<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz >



<Frequency Range above 1 GHz> 1 GHz ~ 40 GHz



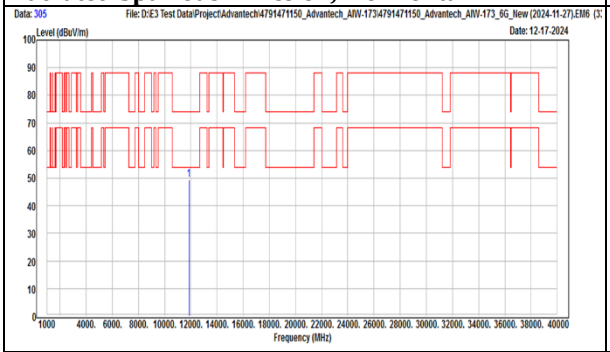
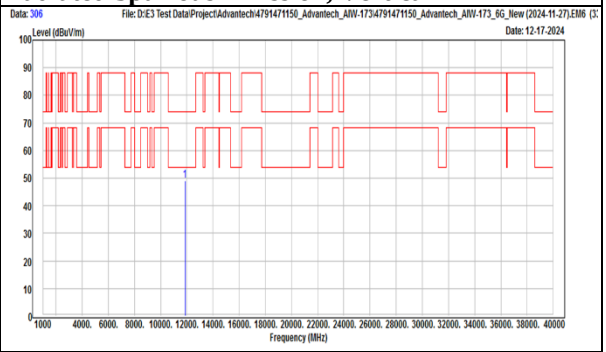
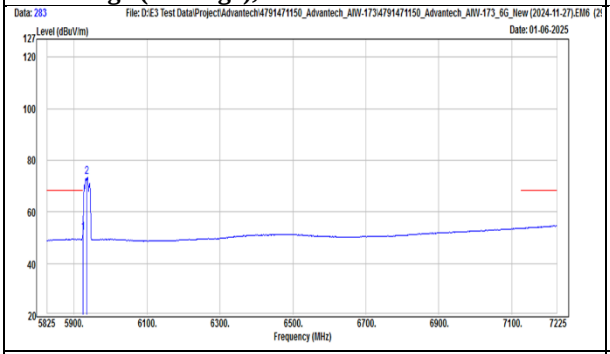
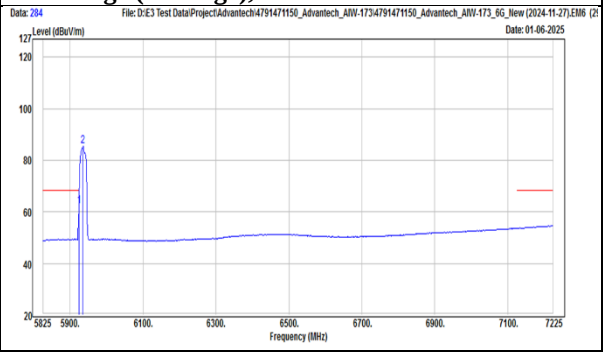
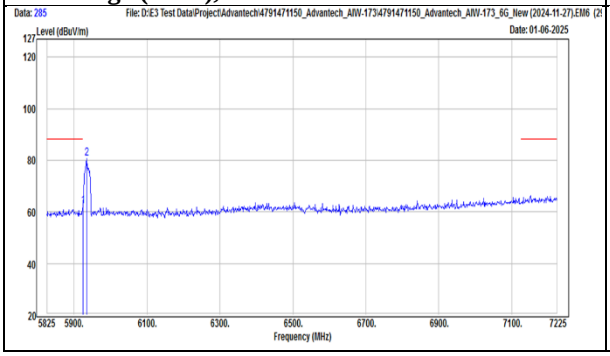
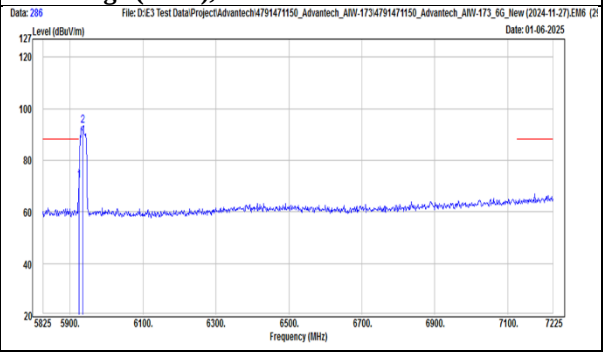
For the actual test configuration, please refer to the Setup Configurations.

Test Data

Above 1 GHz

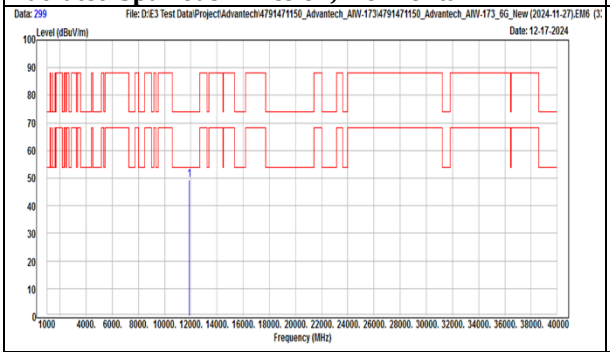
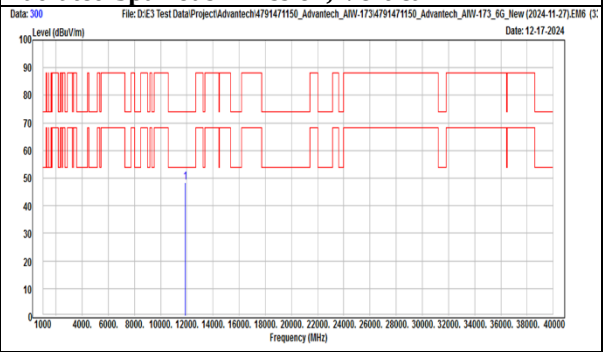
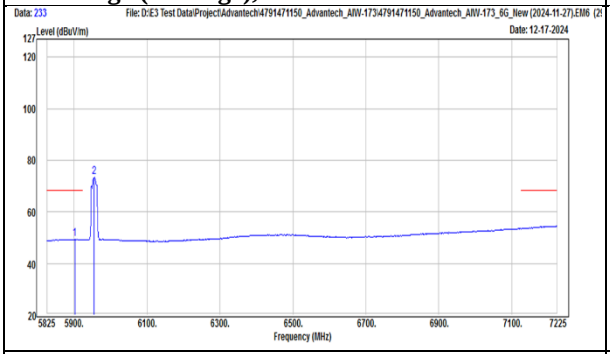
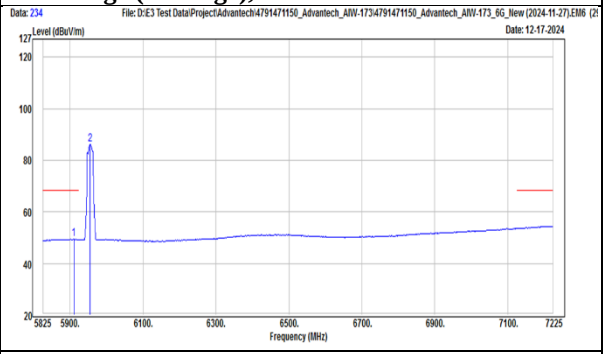
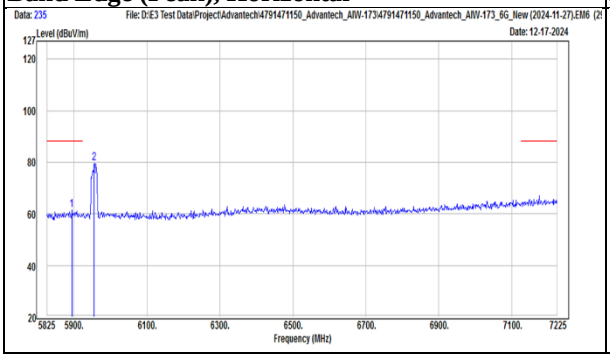
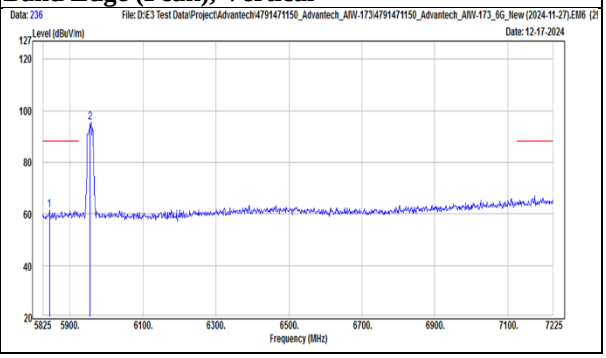
Mode	802.11a	Channel	2

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5924.4	40.77	21.26	62.03	88.2	-26.17	PK
		5924.4	30.62	21.26	51.88	68.2	-16.32	AVG
	@	5935	59.45	21.26	80.71	N/A	N/A	PK
	@	5935	52.21	21.26	73.47	N/A	N/A	AVG
	*	11870	30.56	18.94	49.5	74	-24.5	PK
Vertical		5924.4	50.79	21.26	72.05	88.2	-16.15	PK
		5924.4	40.88	21.26	62.14	68.2	-6.06	AVG
	@	5935	72.23	21.26	93.49	N/A	N/A	PK
	@	5935	64.37	21.26	85.63	N/A	N/A	AVG
	*	11870	30.25	18.94	49.19	74	-24.81	PK

TX, 802.11a (Ch 2) **Radiated Spurious Emission, Horizontal**	**TX, 802.11a (Ch 2)** **Radiated Spurious Emission, Vertical**
	
TX, 802.11a (Ch 2) **Band Edge (Average), Horizontal**	**TX, 802.11a (Ch 2)** **Band Edge (Average), Vertical**
	
TX, 802.11a (Ch 2) **Band Edge (Peak), Horizontal**	**TX, 802.11a (Ch 2)** **Band Edge (Peak), Vertical**
	

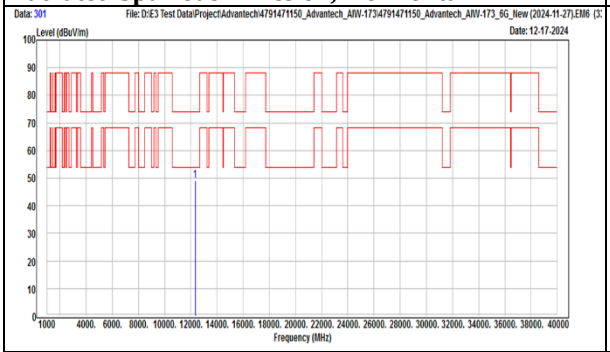
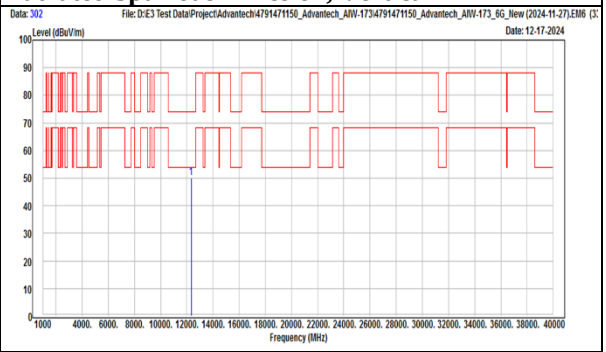
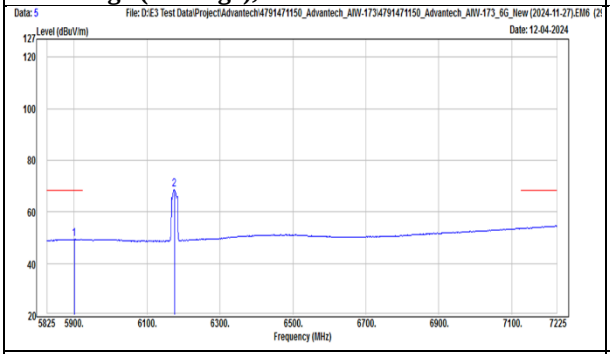
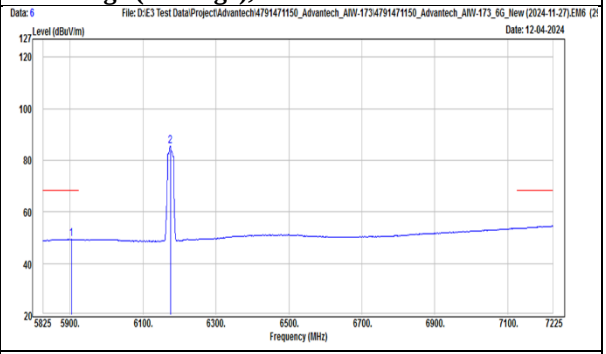
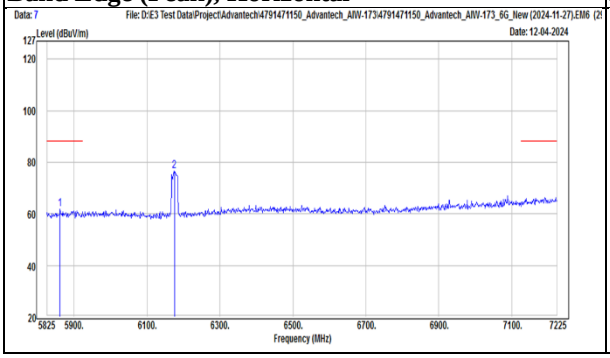
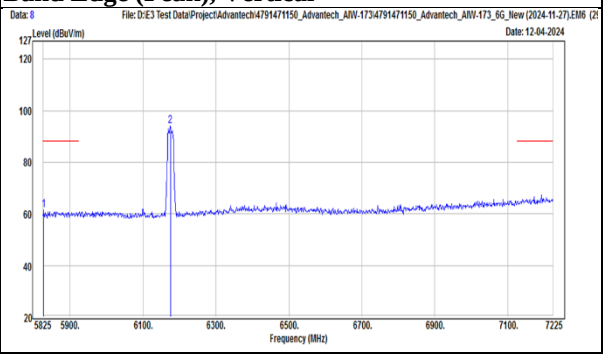
Mode	802.11a	Channel	1

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5893.6	40.21	21.29	61.5	88.2	-26.7	PK
		5902	28.11	21.3	49.41	68.2	-18.79	AVG
	@	5955	58.55	21.25	79.8	N/A	N/A	PK
	@	5955	52.25	21.25	73.5	N/A	N/A	AVG
	*	11910	30.34	19.05	49.39	74	-24.61	PK
Vertical		5843.2	40.38	21.22	61.6	88.2	-26.6	PK
		5910.4	28.14	21.28	49.42	68.2	-18.78	AVG
	@	5955	74.26	21.25	95.51	N/A	N/A	PK
	@	5955	65.07	21.25	86.32	N/A	N/A	AVG
	*	11910	29.5	19.05	48.55	74	-25.45	PK

TX, 802.11a (Ch 1) **Radiated Spurious Emission, Horizontal**	**TX, 802.11a (Ch 1)** **Radiated Spurious Emission, Vertical**
	
TX, 802.11a (Ch 1) **Band Edge (Average), Horizontal**	**TX, 802.11a (Ch 1)** **Band Edge (Average), Vertical**
	
TX, 802.11a (Ch 1) **Band Edge (Peak), Horizontal**	**TX, 802.11a (Ch 1)** **Band Edge (Peak), Vertical**
	

Mode	802.11a	Channel	45

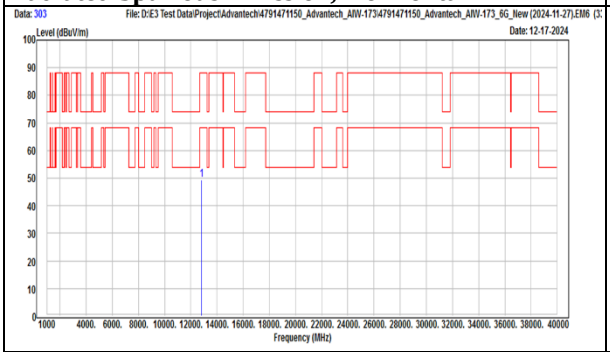
Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5861.4	40.51	21.27	61.78	88.2	-26.42	PK
		5900.6	28.07	21.3	49.37	68.2	-18.83	AVG
	@	6175	54.61	21.92	76.53	N/A	N/A	PK
	@	6175	46.65	21.92	68.57	N/A	N/A	AVG
	*	12350	29.27	19.8	49.07	74	-24.93	PK
Vertical		5827.8	40.28	21.14	61.42	88.2	-26.78	PK
		5903.4	28.06	21.3	49.36	68.2	-18.84	AVG
	@	6175	72.13	21.92	94.05	N/A	N/A	PK
	@	6175	63.73	21.92	85.65	N/A	N/A	AVG
	*	12350	30.15	19.8	49.95	74	-24.05	PK

TX, 802.11a (Ch 45) **Radiated Spurious Emission, Horizontal**	**TX, 802.11a (Ch 45)** **Radiated Spurious Emission, Vertical**
	
TX, 802.11a (Ch 45) **Band Edge (Average), Horizontal**	**TX, 802.11a (Ch 45)** **Band Edge (Average), Vertical**
	
TX, 802.11a (Ch 45) **Band Edge (Peak), Horizontal**	**TX, 802.11a (Ch 45)** **Band Edge (Peak), Vertical**
	

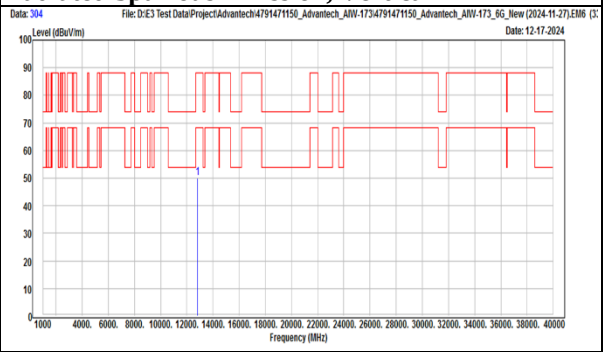
Mode	802.11a	Channel	93

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5836.2	40.22	21.18	61.4	88.2	-26.8	PK
		5893.6	28.06	21.29	49.35	68.2	-18.85	AVG
	@	6415	53.71	23.1	76.81	N/A	N/A	PK
	@	6415	46.74	23.1	69.84	N/A	N/A	AVG
		7190	40.26	26.46	66.72	88.2	-21.48	PK
		7223.6	27.89	26.62	54.51	68.2	-13.69	AVG
	*	12830	28.29	21.15	49.44	88.2	-38.76	PK
Vertical		5890.8	40.29	21.29	61.58	88.2	-26.62	PK
		5892.2	28.14	21.29	49.43	68.2	-18.77	AVG
	@	6415	70.29	23.1	93.39	N/A	N/A	PK
	@	6415	62.12	23.1	85.22	N/A	N/A	AVG
		7155	40.39	26.22	66.61	88.2	-21.59	PK
		7219.4	27.96	26.6	54.56	68.2	-13.64	AVG
	*	12830	28.81	21.15	49.96	88.2	-38.24	PK

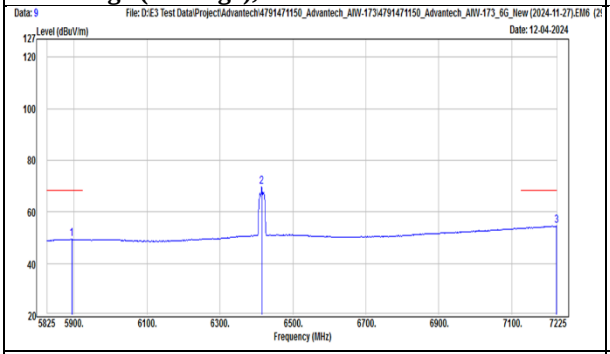
TX, 802.11a (Ch 93)
Radiated Spurious Emission, Horizontal



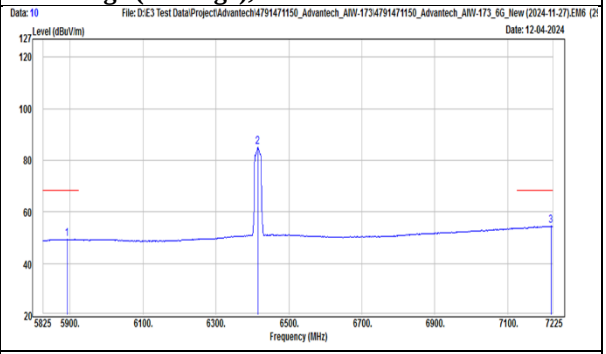
TX, 802.11a (Ch 93)
Radiated Spurious Emission, Vertical



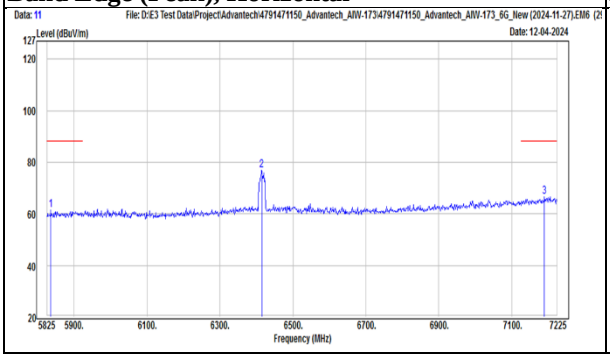
TX, 802.11a (Ch 93)
Band Edge (Average), Horizontal



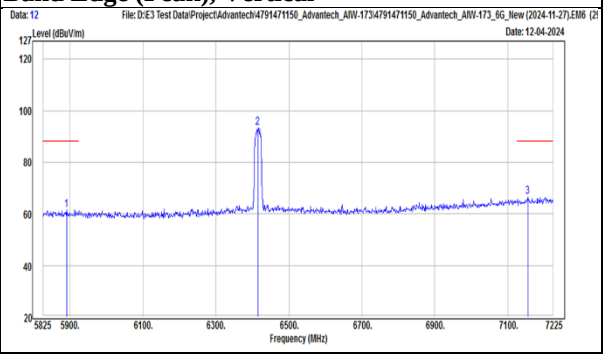
TX, 802.11a (Ch 93)
Band Edge (Average), Vertical



TX, 802.11a (Ch 93)
Band Edge (Peak), Horizontal



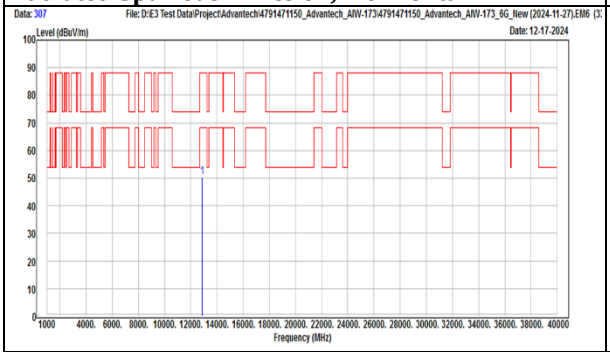
TX, 802.11a (Ch 93)
Band Edge (Peak), Vertical



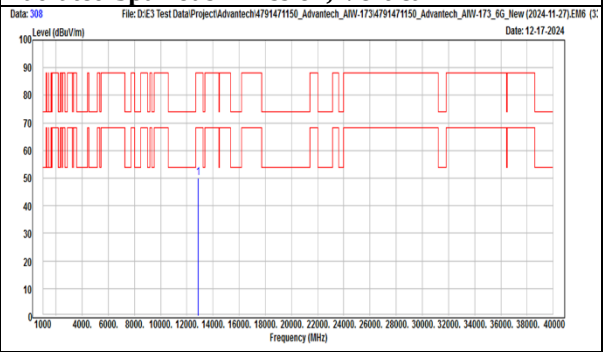
Mode	802.11a	Channel	97

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5872.6	39.96	21.27	61.23	88.2	-26.97	PK
		5875.4	28.02	21.28	49.3	68.2	-18.9	AVG
	@	6435	54.78	23.2	77.98	N/A	N/A	PK
	@	6435	46.79	23.2	69.99	N/A	N/A	AVG
		7205.4	40.49	26.55	67.04	88.2	-21.16	PK
		7225	27.97	26.62	54.59	68.2	-13.61	AVG
	*	12870	29.06	21.35	50.41	88.2	-37.79	PK
Vertical		5881	40.33	21.28	61.61	88.2	-26.59	PK
		5902	28.01	21.3	49.31	68.2	-18.89	AVG
	@	6435	71.67	23.2	94.87	N/A	N/A	PK
	@	6435	63	23.2	86.2	N/A	N/A	AVG
		7171.8	40.77	26.33	67.1	88.2	-21.1	PK
		7223.6	27.8	26.62	54.42	68.2	-13.78	AVG
	*	12870	28.64	21.35	49.99	88.2	-38.21	PK

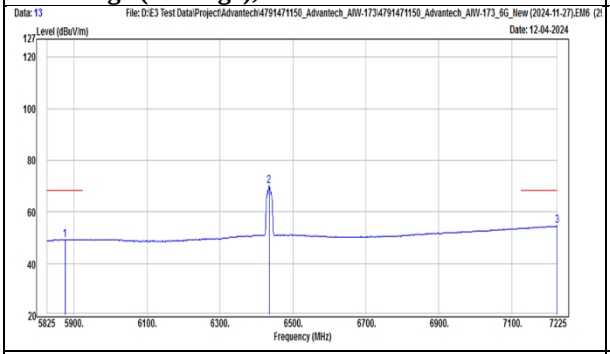
TX, 802.11a (Ch 97)
Radiated Spurious Emission, Horizontal



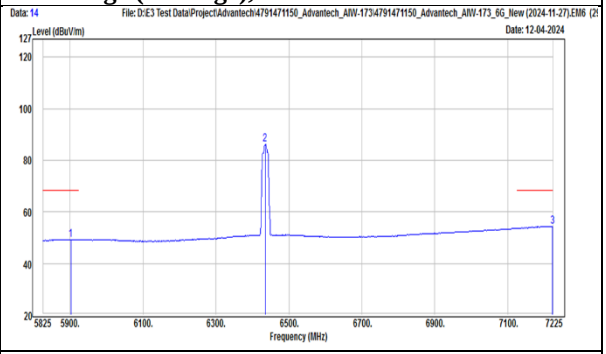
TX, 802.11a (Ch 97)
Radiated Spurious Emission, Vertical



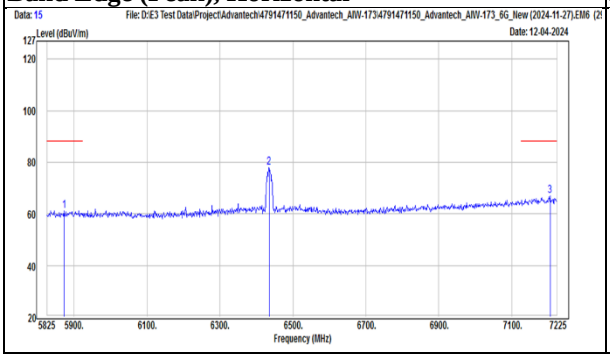
TX, 802.11a (Ch 97)
Band Edge (Average), Horizontal



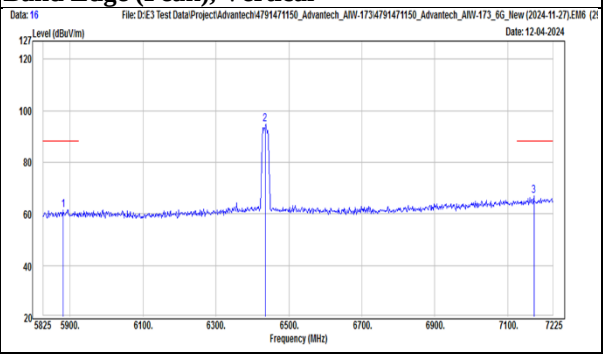
TX, 802.11a (Ch 97)
Band Edge (Average), Vertical



TX, 802.11a (Ch 97)
Band Edge (Peak), Horizontal



TX, 802.11a (Ch 97)
Band Edge (Peak), Vertical



Mode	802.11a	Channel	105

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5899.2	28.05	21.3	49.35	68.2	-18.85	AVG
		5918.8	40.03	21.27	61.3	88.2	-26.9	PK
	@	6475	54.01	23.44	77.45	N/A	N/A	PK
	@	6475	47.4	23.44	70.84	N/A	N/A	AVG
		7204	39.76	26.55	66.31	88.2	-21.89	PK
		7222.2	27.93	26.61	54.54	68.2	-13.66	AVG
	*	12950	29.31	21.37	50.68	88.2	-37.52	PK
Vertical		5865.6	40.94	21.27	62.21	88.2	-25.99	PK
		5899.2	28	21.3	49.3	68.2	-18.9	AVG
	@	6475	71.2	23.44	94.64	N/A	N/A	PK
	@	6475	61.86	23.44	85.3	N/A	N/A	AVG
		7208.2	39.8	26.56	66.36	88.2	-21.84	PK
		7219.4	27.95	26.6	54.55	68.2	-13.65	AVG
	*	12950	28.86	21.37	50.23	88.2	-37.97	PK