

RADIO TEST REPORT

Product : Inspiren Link

Model Name : IN6L001

FCC ID : 2BNIV-LNK-1

Test Regulation : FCC 47 CFR Part 15 Subpart E (Section 15.407)

Received Date : 2025/12/22

Test Date : 2025/12/22 ~ 2026/01/07

Issued Date : 2026/1/20

Applicant : All Inspire Health
19 Morris Avenue, Building 128, Brooklyn, NY 11205

Issued By : Underwriters Laboratories Taiwan Co., Ltd.
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd.,
Zhudong Township, Hsinchu County, Taiwan

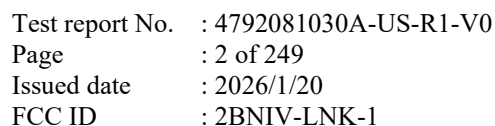


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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1



Original Test Report No.: 4792081030A-US-R1-V0

Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

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1. Attestation of Test Results

APPLICANT: All Inspire Health
19 Morris Avenue, Building 128, Brooklyn, NY 11205

MANUFACTURER: InnoComm Mobile Technology Corporation
3F, No. 6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu 300092,
Taiwan

EUT DESCRIPTION: Inspiren Link

BRAND: All Inspire Health

MODEL: IN6L001

SAMPLE STAGE: Engineering Verification Test Sample

DATE of TESTED: 2025/12/22 ~ 2026/01/07

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
Project Handler

Date : 2026/1/20

Approved and Authorized By:



Eric Lee
Senior Laboratory Engineer

Date : 2026/1/20

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2. Summary of Test Results

Summary of Test Results		
FCC Clause	Test Items	Result
15.407(e)	6dB Bandwidth	PASS
15.403(i)	26dB Bandwidth	PASS
2.1049	Occupied Bandwidth	See Note1
15.407(a)(1/2/3)	Conducted Output Power	PASS
15.407(a)(1/2/3)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
15.407(b) (1/2/3/4/5/9)	Radiated Emissions and Band Edge Measurement	PASS
15.407(b)(9)	AC Power Conducted Emission	PASS
15.203	Antenna Requirement	PASS
15.407(h)	Dynamic Frequency Selection & Transmit power control	See Note2

Note:

1. The Occupied Bandwidth was reference only.
2. The “Dynamic Frequency Selection & Transmit power control measurement” was recorded in Report No.: 4792081030A-US-R2-V0.

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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 C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024 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.

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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	3.0 dB
RF Conducted	9 kHz - 40GHz	2.4 dB
Radiated disturbance below 30MHz	9 kHz - 30 MHz	1.9 dB
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	5.6 dB
Radiated disturbance above 1 GHz	1GHz ~ 40GHz	4.6 dB

6. Equipment under Test

6.1. Description of EUT

Product	Inspiren Link
Brand Name	All Inspire Health
Model Name	IN6L001
Normal Voltage	120Vac/60Hz 3.2Vdc from Battery
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
Modulation	1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Transfer Rate	802.11a: up to 54 Mbps
	802.11n: up to MCS15
	802.11ac: up to MCS9
	802.11ax: up to MCS11
Device Type	Client
Maximum Output Power	5180 ~ 5240 MHz: 16.86 dBm
	5260 ~ 5320 MHz: 16.97 dBm
	5500 ~ 5720 MHz: 17.36 dBm
	5745 ~ 5825 MHz: 17.19 dBm
Sample ID	Conducted Test:9266372
	Radiated Test:9266370

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Note:

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

Modulation Mode	Tx Function	Rx Function
802.11a	2Tx	2Rx
802.11n (HT20)	2Tx	2Rx
802.11n (HT40)	2Tx	2Rx
802.11ac (VHT20)	2Tx	2Rx
802.11ac (VHT40)	2Tx	2Rx
802.11ac (VHT80)	2Tx	2Rx
802.11ax (HE20)	2Tx	2Rx
802.11ax (HE40)	2Tx	2Rx
802.11ax (HE80)	2Tx	2Rx

*The modulation and bandwidth are similar for 802.11n mode, 802.11ac mode, for 20MHz, 40MHz, 80MHz, bandwidth system, therefore investigated one worst case to representative mode in test report.

2. EUT is equipped with a built-in rechargeable battery with the following table:

Brand	Model	Description
UTL	14500	3.2Vdc, 1.92Wh, 20250707/600mAh

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.
4. The EUT contains three modules, namely module 1 (BT+WLAN 2.4GHz+WLAN 5GHz), module 2 (BLE), and module 3 (LoRa). This test report is the WLAN 5GHz test result of module 1 (BT+WLAN 2.4GHz+WLAN 5GHz).

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6.2. Channel List

FOR 5180 ~ 5240MHz

4 channels are provided for 5G WLAN 20MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 5G WLAN 40MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

1 channel is provided for 5G WLAN 80MHz bandwidth system:

Channel	Frequency (MHz)
42	5210

FOR 5260 ~ 5320MHz

4 channels are provided for 5G WLAN 20MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

2 channels are provided for 5G WLAN 40MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

1 channel is provided for 5G WLAN 80MHz bandwidth system:

Channel	Frequency (MHz)
58	5290

FOR 5500 ~ 5700MHz

11 channels are provided for 5G WLAN 20MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	132	5660
104	5520	136	5680
108	5540	140	5700
112	5560	-	-
116	5580	-	-
120	5600	-	-
124	5620	-	-
128	5640	-	-

5 channels are provided for 5G WLAN 40MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590	-	-

3 channel are provided for 5G WLAN 80MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	122	5610
-	-	-	-

FOR 5745 ~ 5825MHz:

5 channels are provided for 5G WLAN 20MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785	-	-

2 channels are provided for 5G WLAN 40MHz bandwidth system:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

1 channel is provided for 5G WLAN 80MHz bandwidth system:

Channel	Frequency (MHz)
155	5775

6.3. Test Condition

Test Item	Test Site No.	Environmental	Input Power	Test Date	Tested by
Antenna Port Conducted Measurement	SR4	19~22°C/ 58~69%RH	120Vac/ 60Hz	2025/12/22~ 2026/01/07	WaterNil Guan
Radiated Spurious Emission	966-2	22~26°C/ 62~68%RH	120Vac/ 60Hz	2025/12/24~ 2026/01/03	Rex Chen
AC power Line Conducted Emission	SR1	24°C/ 62%RH	120Vac/ 60Hz	2026/01/06	Rex Chen

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).

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6.4. Description of Available Antennas

Ant. No.	Transmitter Circuit	Frequency Range	Brand Name	Model Name	Maximum Gain (dBi)	Ant. Type	Connector Type
BT/WIFI 1	Chain0	5150~5850MHz	Innocomm	Ext_WIFI1	3.15	Monopole	i-Pex
WIFI 2	Chain1	5150~5850MHz	Innocomm	Ext_WIFI2	3.33	Monopole	i-Pex

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	5180-5240	OFDM	36 to 48	36, 44, 48	6 Mbps
	802.11ac (VHT20)			36 to 48	36, 44, 48	MCS0 Nss1
	802.11ac (VHT40)			38 to 46	38, 46	MCS0 Nss1
	802.11ac (VHT80)			42	42	MCS0 Nss1
	802.11ax (HE20)			36 to 48	36, 44, 48	MCS0 Nss1
	802.11ax (HE40)			38 to 46	38, 46	MCS0 Nss1
	802.11ax (HE80)			42	42	MCS0 Nss1
	802.11a	5260-5320	OFDM	52 to 64	52, 60, 64	6 Mbps
	802.11ac (VHT20)			52 to 64	52, 60, 64	MCS0 Nss1
	802.11ac (VHT40)			54 to 62	54, 62	MCS0 Nss1
	802.11ac (VHT80)			58	58	MCS0 Nss1
	802.11ax (HE20)			52 to 64	52, 60, 64	MCS0 Nss1
	802.11ax (HE40)			54 to 62	54, 62	MCS0 Nss1
	802.11ax (HE80)			58	58	MCS0 Nss1
	802.11a	5500-5700	OFDM	100 to 140	100, 116, 140	6 Mbps
	802.11ac (VHT20)			100 to 140	100, 116, 140	MCS0 Nss1
	802.11ac (VHT40)			102 to 134	102, 110, 134	MCS0 Nss1
	802.11ac (VHT80)			106 to 122	106, 122	MCS0 Nss1
	802.11ax (HE20)			100 to 140	100, 116, 140	MCS0 Nss1
	802.11ax (HE40)			102 to 134	102, 110, 134	MCS0 Nss1
	802.11ax (HE80)			106 to 122	106, 122	MCS0 Nss1
	802.11a	5745-5825	OFDM	149 to 165	149, 157, 165	6 Mbps
	802.11ac (VHT20)			149 to 165	149, 157, 165	MCS0 Nss1
	802.11ac (VHT40)			151 to 159	151, 159	MCS0 Nss1
	802.11ac (VHT80)			155	155	MCS0 Nss1
	802.11ax (HE20)			149 to 165	149, 157, 165	MCS0 Nss1
	802.11ax (HE40)			151 to 159	151, 159	MCS0 Nss1
	802.11ax (HE80)			155	155	MCS0 Nss1
Radiated Emissions (Above 1GHz)	802.11a	5180-5240	OFDM	36 to 48	36, 44, 48	6 Mbps
	802.11a	5260-5320		52 to 64	52, 60, 64	6 Mbps
	802.11a	5500-5700		100 to 140	100, 116, 140	6 Mbps
	802.11a	5745-5825		149 to 165	149, 157, 165	6 Mbps

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Test Item	Mode	Frequency Range(MHz)	Modulation Type	Available Channel	Test Channel	Data Rate
Radiated Emissions (Below 1GHz)	802.11a	5500-5700	OFDM	100 to 144	116	6 Mbps
AC Power Line Conducted Emission	802.11a	5500-5700	OFDM	100 to 144	116	6 Mbps
Antenna Port Conducted Measurement	802.11a	5180-5240	OFDM	36 to 48	36, 44, 48	6 Mbps
	802.11ac (VHT20)			36 to 48	36, 44, 48	MCS0 Nss1
	802.11ac (VHT40)			38 to 46	38, 46	MCS0 Nss1
	802.11ac (VHT80)			42	42	MCS0 Nss1
	802.11ax (HE20)			36 to 48	36, 44, 48	MCS0 Nss1
	802.11ax (HE40)			38 to 46	38, 46	MCS0 Nss1
	802.11ax (HE80)			42	42	MCS0 Nss1
	802.11a	5260-5320	OFDM	52 to 64	52, 60, 64	6 Mbps
	802.11ac (VHT20)			52 to 64	52, 60, 64	MCS0 Nss1
	802.11ac (VHT40)			54 to 62	54, 62	MCS0 Nss1
	802.11ac (VHT80)			58	58	MCS0 Nss1
	802.11ax (HE20)			52 to 64	52, 60, 64	MCS0 Nss1
	802.11ax (HE40)			54 to 62	54, 62	MCS0 Nss1
	802.11ax (HE80)			58	58	MCS0 Nss1
	802.11a	5500-5700	OFDM	100 to 140	100, 116, 140	6 Mbps
	802.11ac (VHT20)			100 to 140	100, 116, 140	MCS0 Nss1
	802.11ac (VHT40)			102 to 134	102, 110, 134	MCS0 Nss1
	802.11ac (VHT80)			106 to 122	106, 122	MCS0 Nss1
	802.11ax (HE20)			100 to 140	100, 116, 140	MCS0 Nss1
	802.11ax (HE40)			102 to 134	102, 110, 134	MCS0 Nss1
	802.11ax (HE80)			106 to 122	106, 122	MCS0 Nss1
	802.11a	5745-5825	OFDM	149 to 165	149, 157, 165	6 Mbps
	802.11ac (VHT20)			149 to 165	149, 157, 165	MCS0 Nss1
	802.11ac (VHT40)			151 to 159	151, 159	MCS0 Nss1
	802.11ac (VHT80)			155	155	MCS0 Nss1
	802.11ax (HE20)			149 to 165	149, 157, 165	MCS0 Nss1
	802.11ax (HE40)			151 to 159	151, 159	MCS0 Nss1
	802.11ax (HE80)			155	155	MCS0 Nss1

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- The EUT was examined in three orthogonal axes (X-Y, Y-Z, X-Z), and the X-Y plane was confirmed as the worst-case orientation. All final radiated emission tests were conducted with the EUT positioned accordingly.
- The EUT operates on a rechargeable battery. A pre-scan was conducted at 0%, 50%, and 100% battery capacity. The worst-case emissions occurred at 100% capacity, so only the corresponding test data is documented in this report.
- 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, 802.11a channel 116 has the highest RF output power. Therefore, the AC conduction was performed using this worst-case mode.
- In the transmit mode, 802.11a channel 116 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).

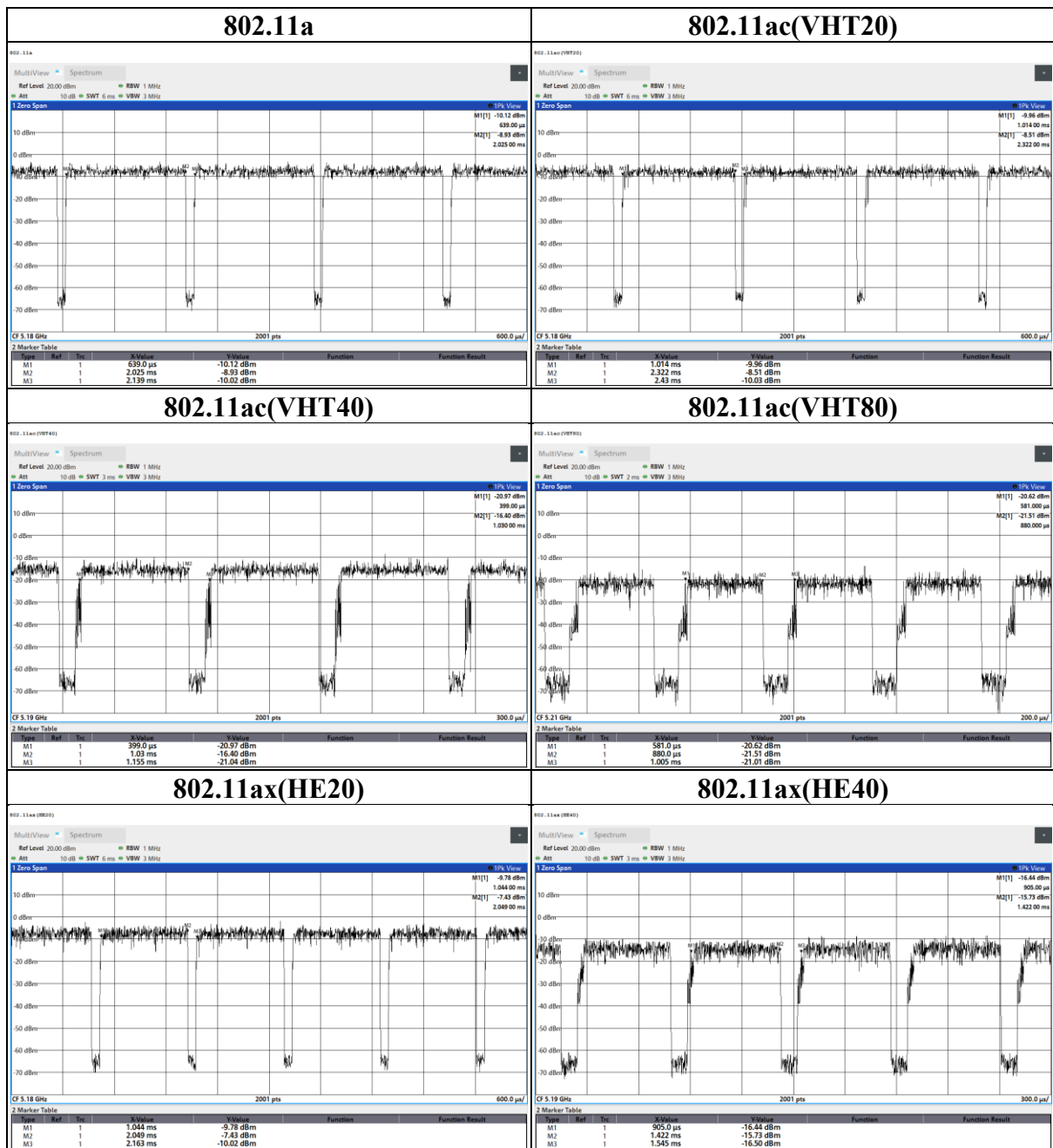
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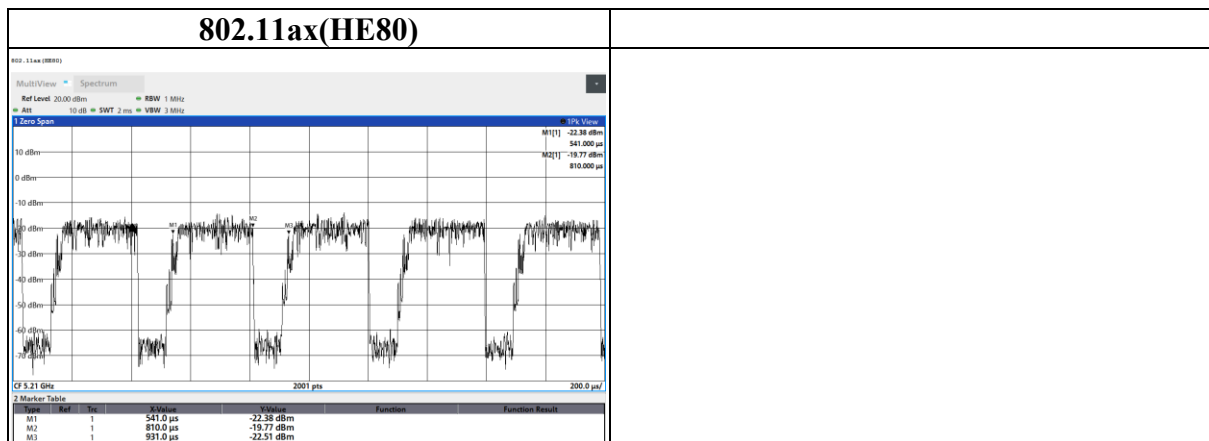
Condition	Technology				
	Module1			Module2	Module3
1	BT	WLAN (2.4GHz)	WLAN (5GHz)	BT LE	LoRa

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 Set (above 1GHz)
802.11a	1.386	1.500	0.9240	0.34	1kHz
802.11ac(VHT20)	1.308	1.416	0.9237	0.34	1kHz
802.11ac(VHT40)	0.631	0.756	0.8347	0.78	2kHz
802.11ac(VHT80)	0.299	0.424	0.7052	1.52	5.1kHz
802.11ax(HE20)	1.005	1.119	0.8981	0.47	1kHz
802.11ax(HE40)	0.517	0.640	0.8078	0.93	2kHz
802.11ax(HE80)	0.269	0.390	0.6897	1.61	5.1kHz





7. Test Equipment

Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired date
Radiated Spurious Emission					
Spectrum Analyzer	Keysight	N9010A	MY56070818	2025/3/12	2026/3/11
EMI Test Receiver	Rohde & Schwarz	ESR7	101754	2024/12/24	2025/12/23
				2025/12/9	2026/12/8
Loop Antenna	ETS lindgren	6502	00213440	2025/11/14	2026/11/13
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	2024/12/30	2025/12/29
				2025/12/23	2026/12/22
Horn Antenna (1-18 GHz)	Schwarzbeck	BBHA 9120 D	01690	2025/11/18	2026/11/17
Horn Antenna (18-40 GHz)	Schwarzbeck	BBHA 9170	781	2025/12/2	2026/12/1
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	2025/5/12	2026/5/11
Preamplifier (1-18 GHz)	EMCI	EMC051835BE	980406	2025/1/13	2026/1/12
Preamplifier (18-40GHz)	EMCI	EMC184040SEE	980426	2025/4/7	2026/4/6
Cables (9k-18 GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-4 & 170425-2	2025/11/21	2026/11/20
Cables (18-40GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-1 & 170214-2	2025/11/21	2026/11/20

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Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired date
Antenna Port Conducted Measurement					
Signal Analyzer	Rohde & Schwarz	FSVA3044	101281	2025/3/5	2026/3/4
Signal Analyzer	Rohde & Schwarz	FSV40	101490	2025/6/17	2026/6/16
Attenuator	EMCI	EMC-40ATK2W10	17002	2025/10/28	2026/10/27
USB Power Sensor	Anritsu	MA24408A	12031	2025/6/24	2026/6/23
Temperature & Humidity Test Chamber	GIANT FORCE	GTH-150-40-CP-AR	MAA1701-010	2025/2/25	2026/2/24
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	2025/9/18	2026/9/17
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	2025/5/27	2026/5/26
Impuls-Begrenzer Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102219-Qt	2025/8/27	2026/8/26
Cables	TITAN	CFD200	T0732ACFD 20020A300-2	2025/4/21	2026/4/20

UL Software		
Description	Name	Version
Radiated measurement	e3	6.191211 (V6)
Conducted measurement	RF-Conducted-FCC 15407	ver 1.1
AC power Line Conducted Emission	EZ_EMG	UL-3A1.2

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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

8. Description of Test Setup

Tx Mode

Support Equipment

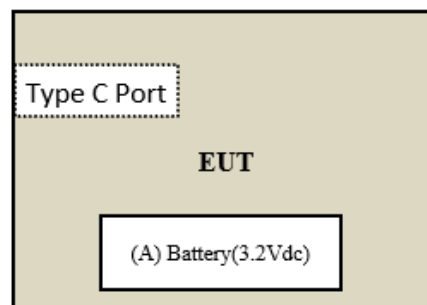
ID	Equipment	Brand Name	Model Name	S/N	Remark
A	Battery	UTL	14500	N/A	Provide by Client 3.2Vdc

Test Setup

Controlled using a bespoke application (ADB interface version 1.0.32) 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



Under Table

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9. Test Results

9.1. 6dB Bandwidth

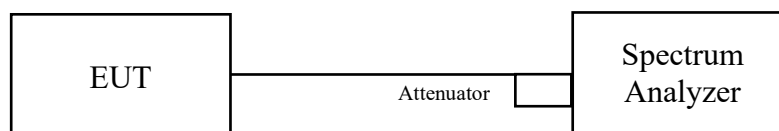
Requirements

The minimum 6 dB bandwidth shall be at least 500 kHz.

Test procedure

- Set resolution bandwidth (RBW) = 1 Range of 1% to 5% of the OBW but not less than 100 kHz.
* Since using 100kHz yields the smallest bandwidth, 100kHz was selected for this evaluation.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
- The plot of the test result only shows the worst case of channels as a representative.

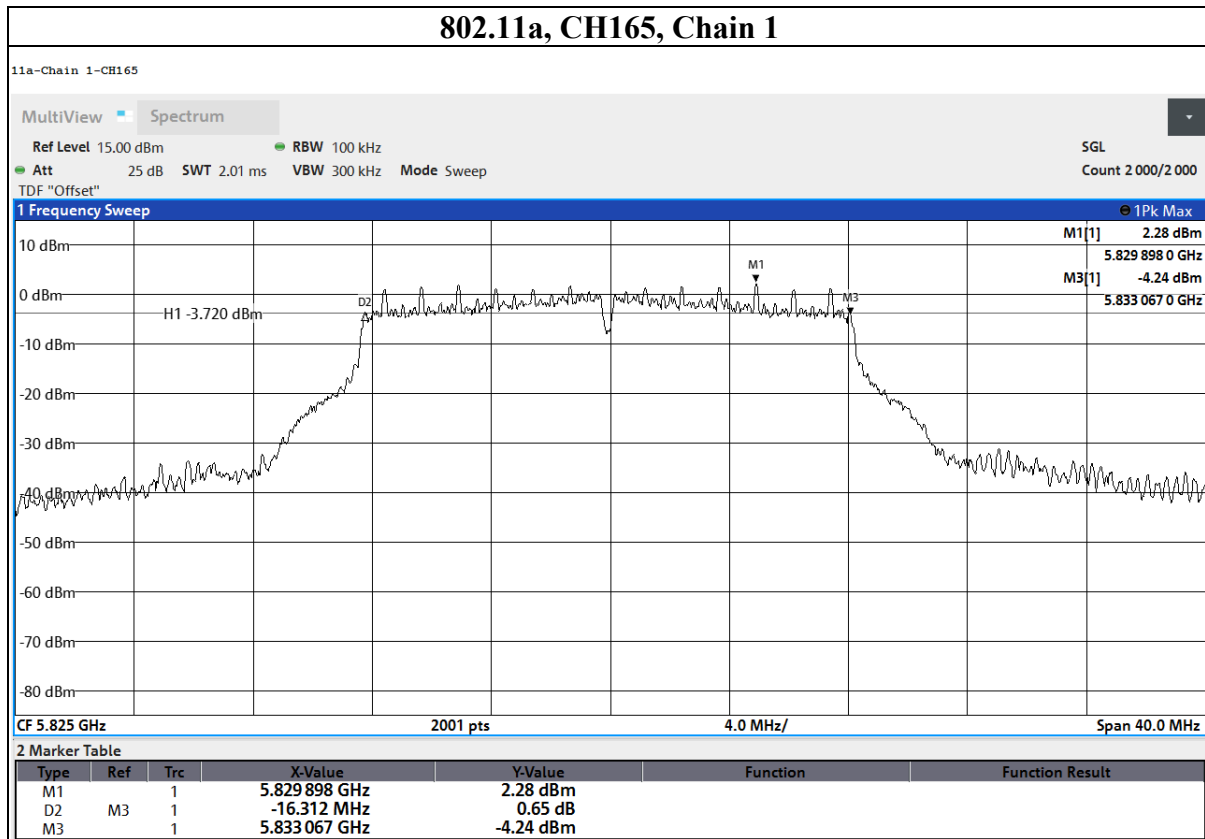
Test Setup



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)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11a	149	5745	16.329	16.32	0.5	PASS
	157	5785	16.313	16.317	0.5	PASS
	165	5825	16.327	16.312	0.5	PASS



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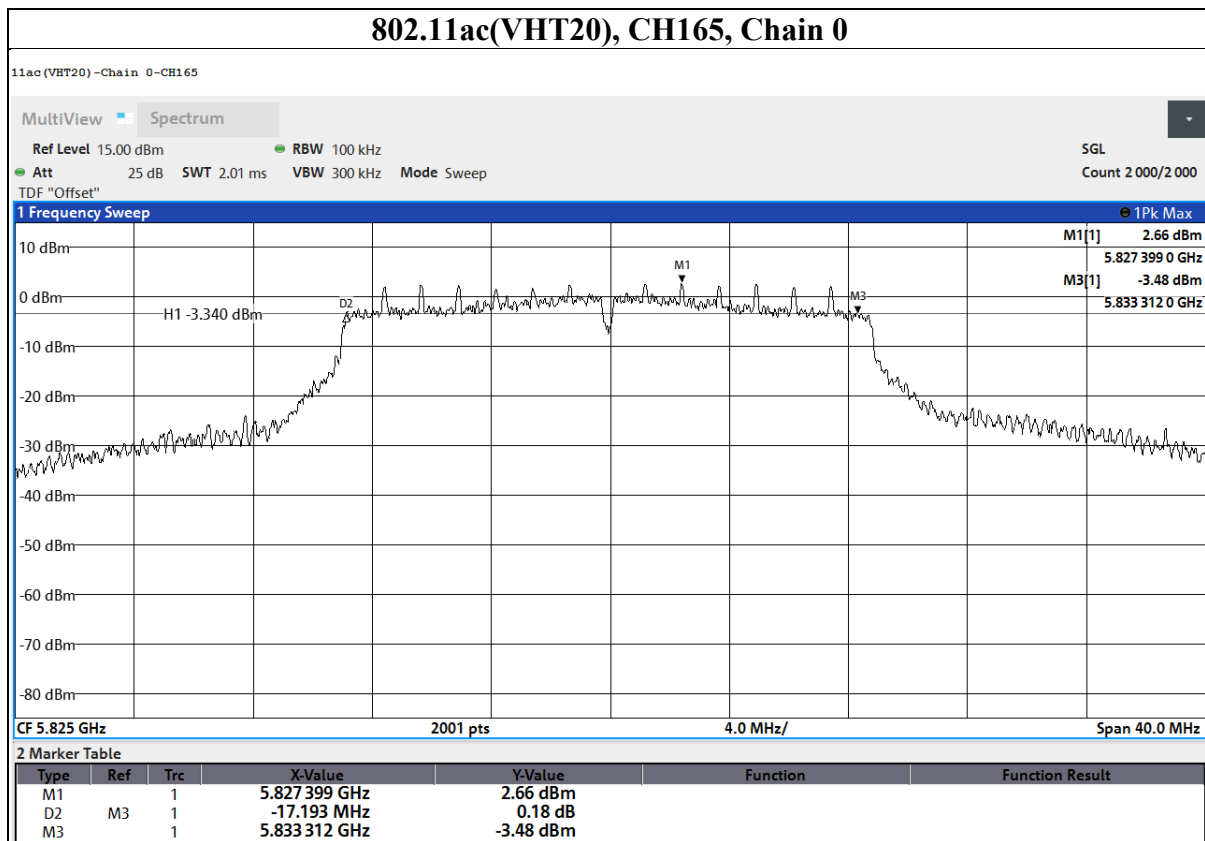
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone : +886-2-7737-3000

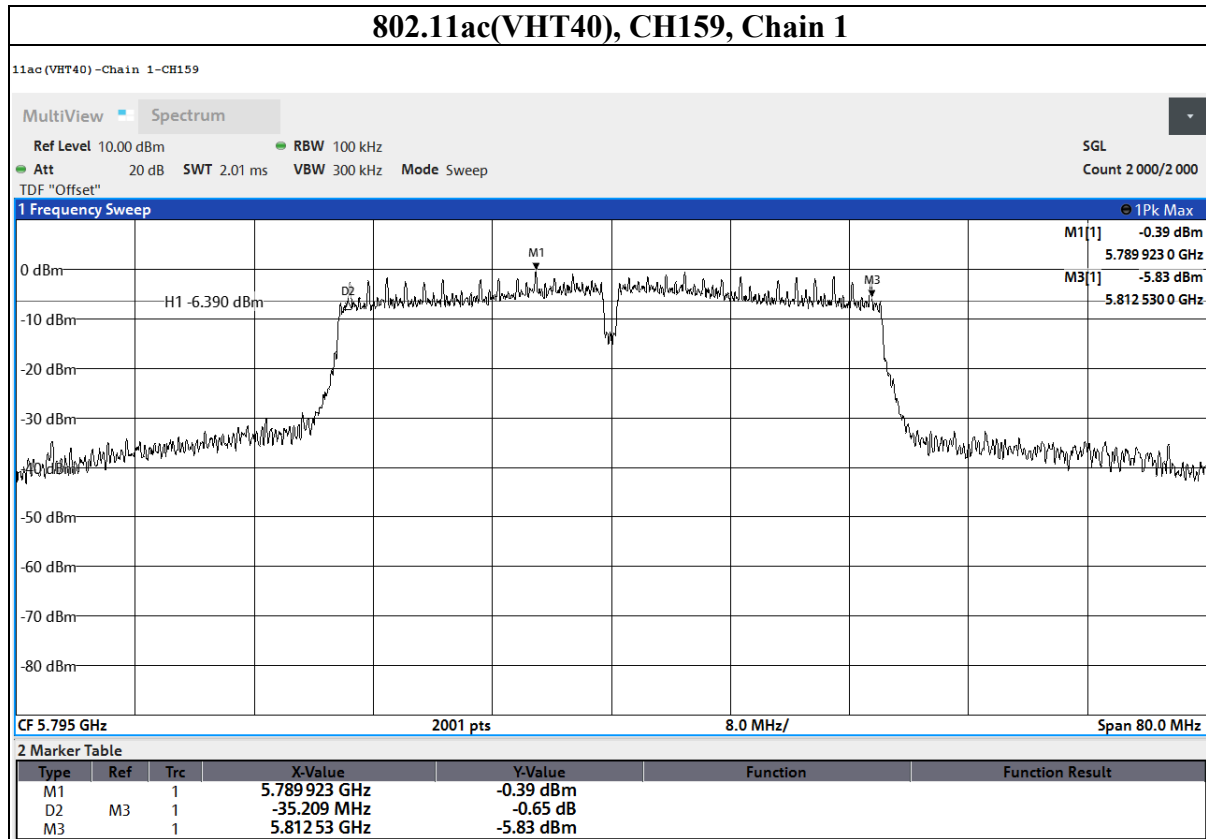
Facsimile (FAX) : +886-3-583-7948

Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

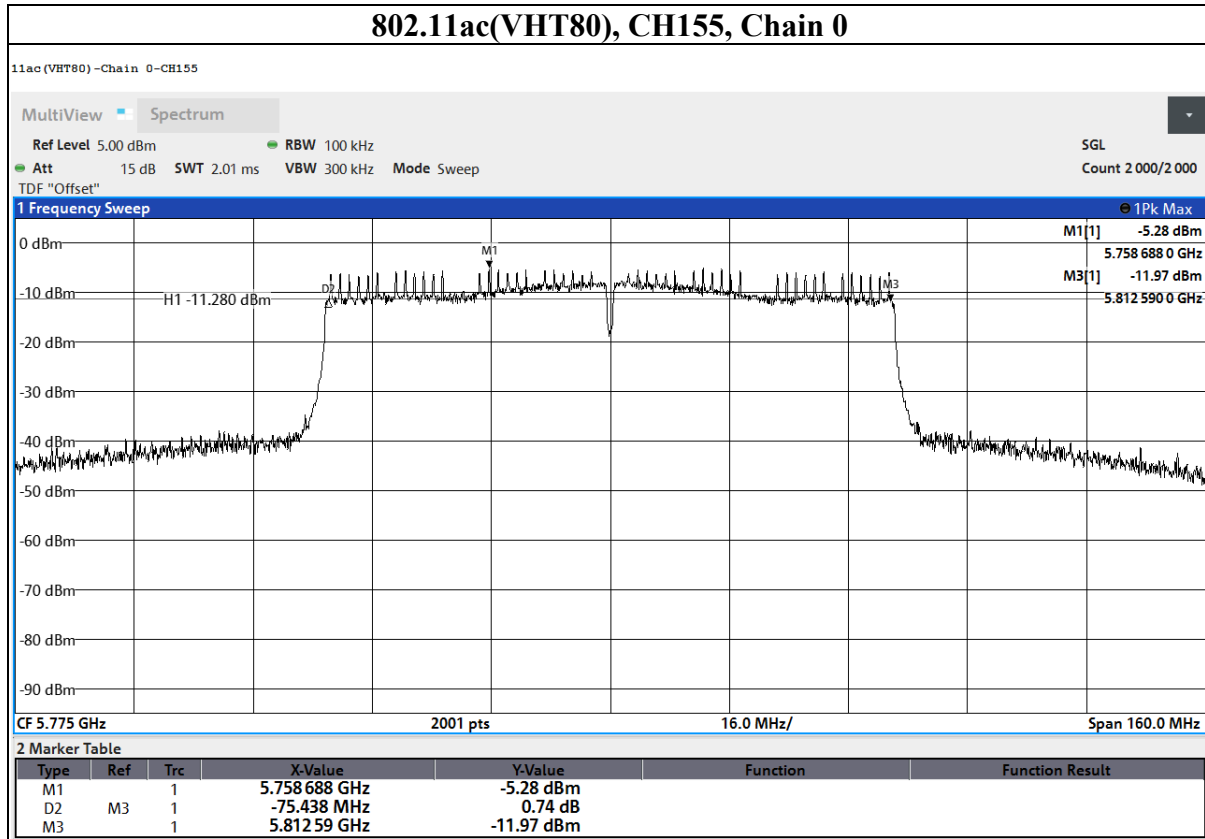
Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT20)	149	5745	17.551	17.587	0.5	PASS
	157	5785	17.312	17.586	0.5	PASS
	165	5825	17.193	17.577	0.5	PASS



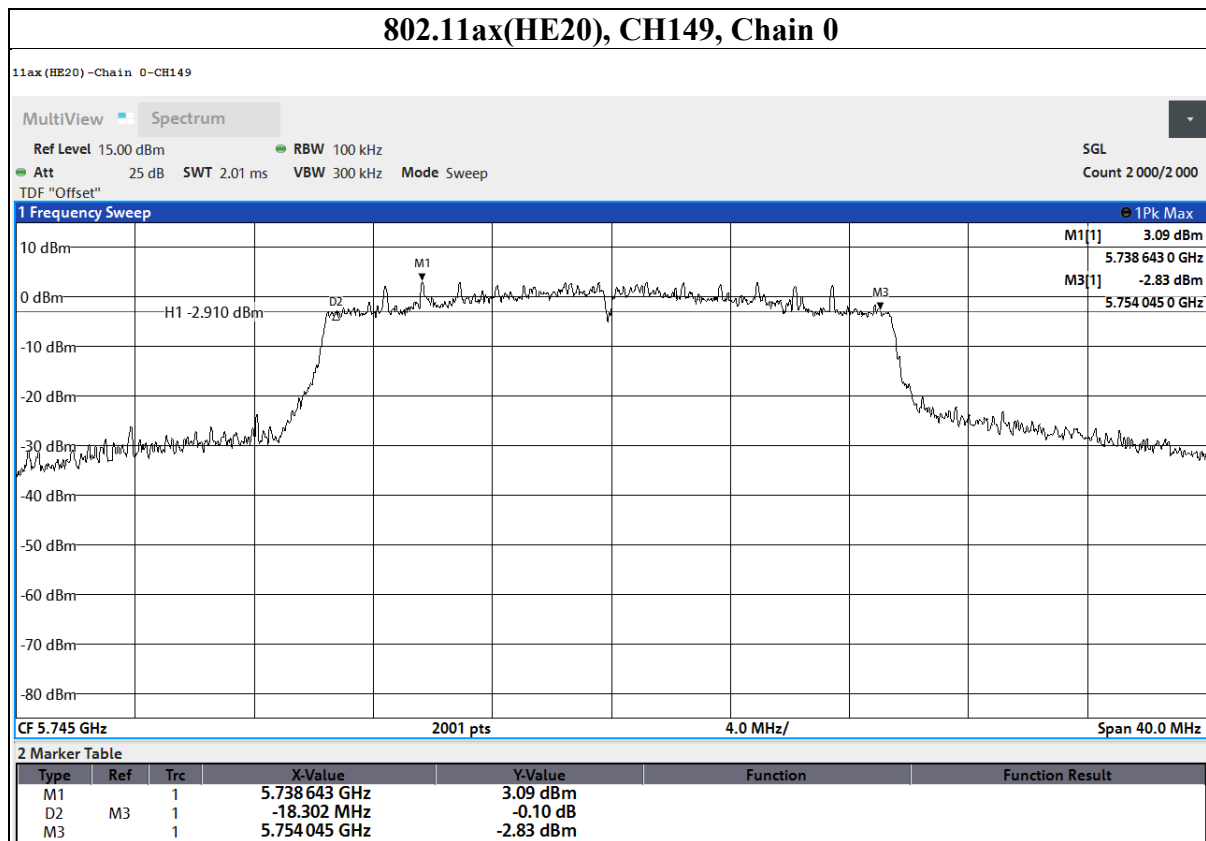
Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT40)	151	5755	35.669	36.354	0.5	PASS
	159	5795	35.519	35.209	0.5	PASS



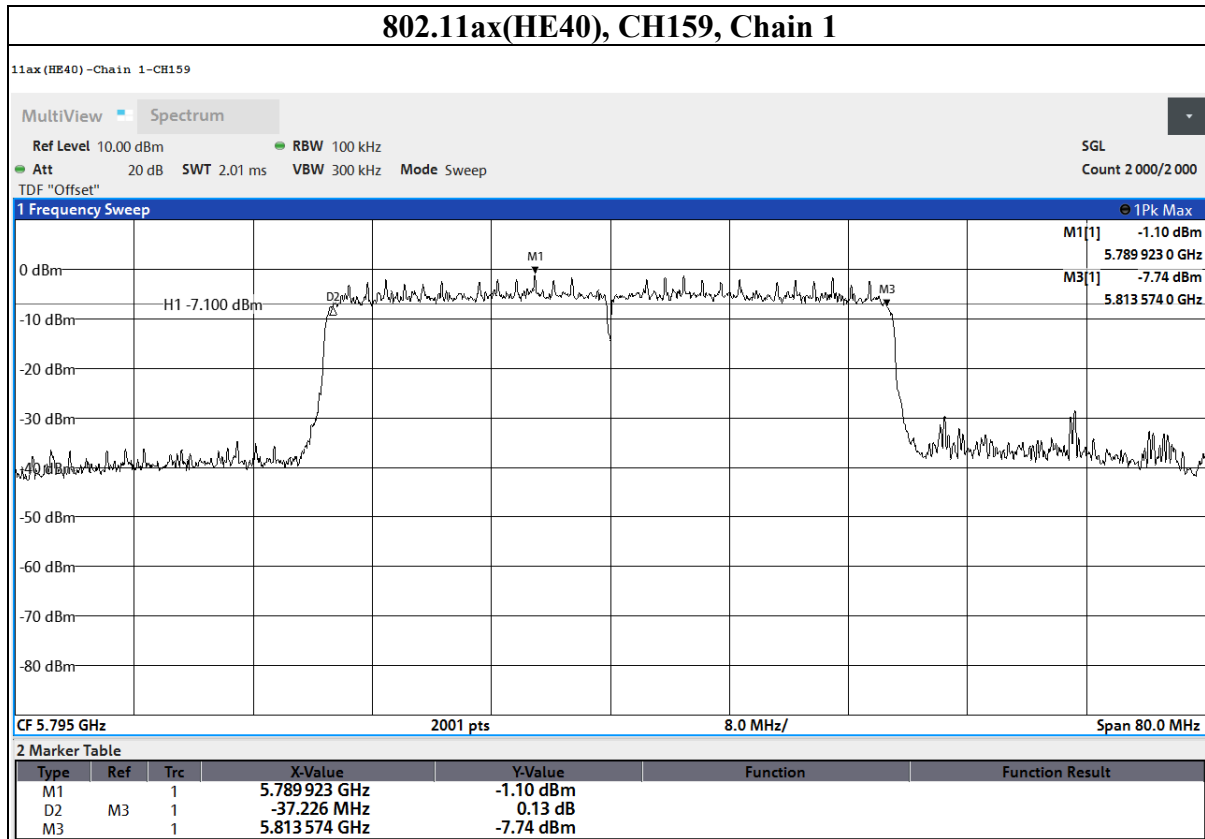
Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT80)	155	5775	75.438	75.514	0.5	PASS



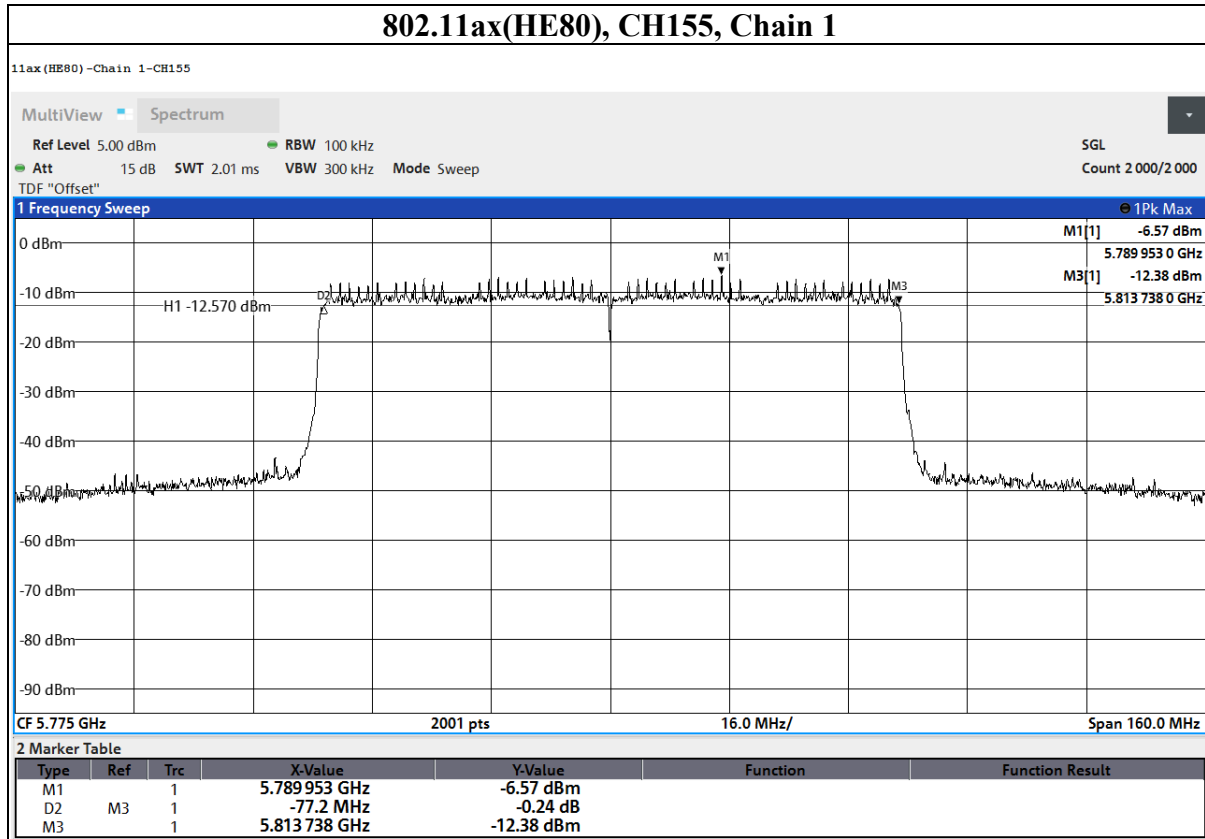
Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE20)	149	5745	18.302	18.741	0.5	PASS
	157	5785	18.365	18.306	0.5	PASS
	165	5825	18.545	18.597	0.5	PASS



Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE40)	151	5755	37.652	37.484	0.5	PASS
	159	5795	37.624	37.226	0.5	PASS



Mode	CH	Freq (MHz)	6dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE80)	155	5775	77.684	77.2	0.5	PASS

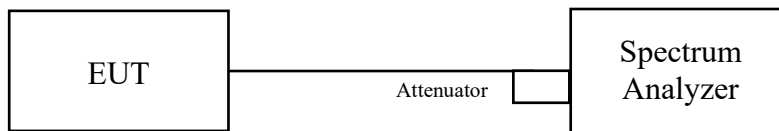


9.2. 26dB Bandwidth

Test procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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%.
- The plot of the test result only shows the worst case of channels as a representative.

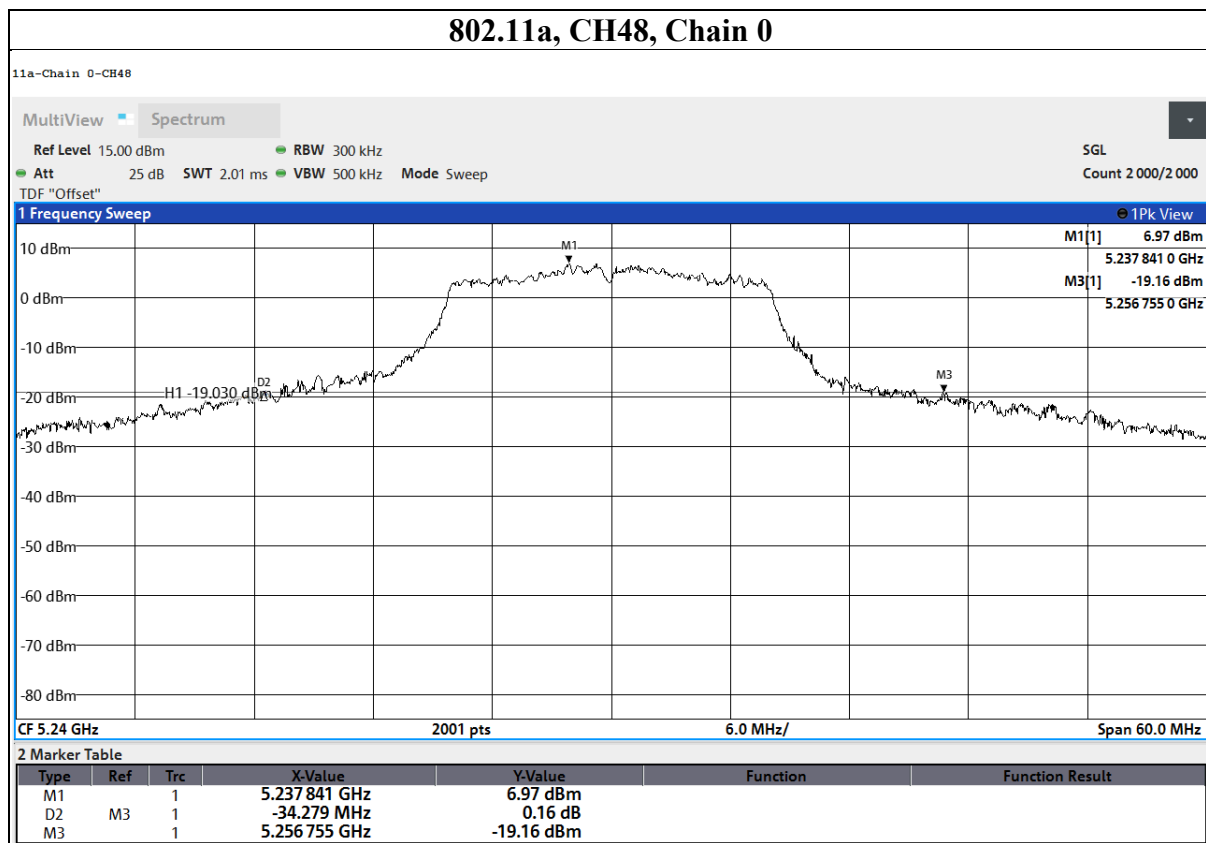
Test Setup



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	36	5180	22.316	21.29	N/A	PASS
	44	5220	22.46	21.853	N/A	PASS
	48	5240	34.279	21.712	N/A	PASS
	52	5260	25.883	26.38	N/A	PASS
	60	5300	21.107	22.373	N/A	PASS
	64	5320	21.196	22.412	N/A	PASS
	100	5500	24.081	22.033	N/A	PASS
	116	5580	25.045	21.115	N/A	PASS
	140	5700	24.88	21.113	N/A	PASS



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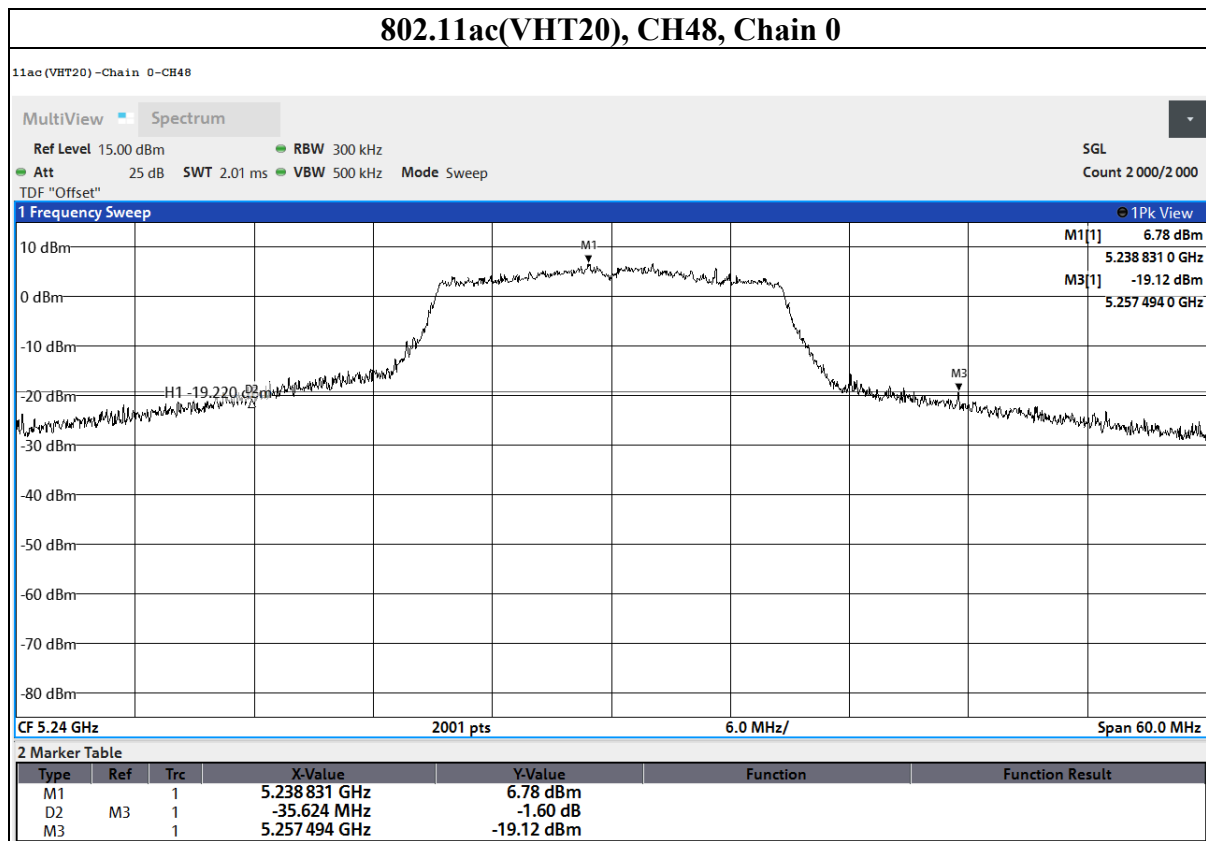
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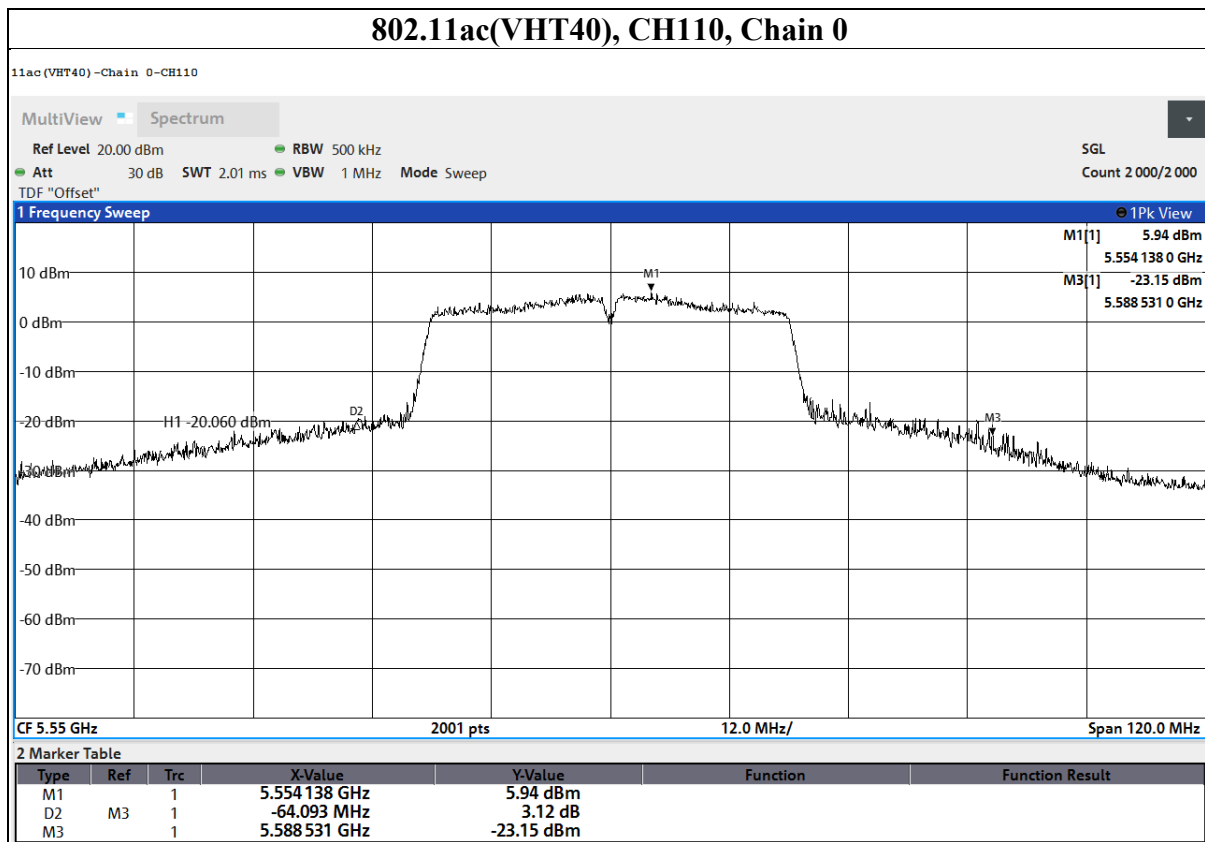
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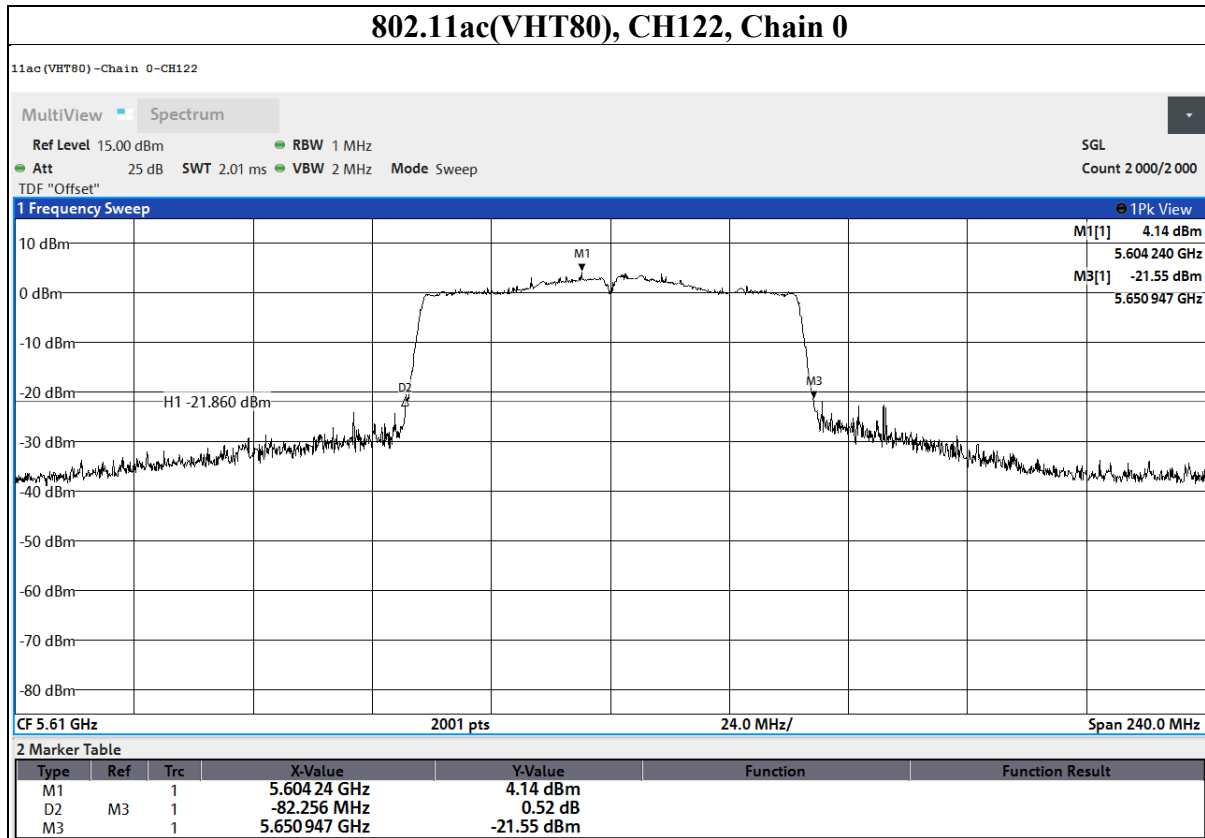
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT20)	36	5180	21.626	24.82	N/A	PASS
	44	5220	21.519	24.919	N/A	PASS
	48	5240	35.624	27.798	N/A	PASS
	52	5260	27.657	23.936	N/A	PASS
	60	5300	21.378	29.146	N/A	PASS
	64	5320	21.501	26.591	N/A	PASS
	100	5500	26.931	22.242	N/A	PASS
	116	5580	32.154	21.296	N/A	PASS
	140	5700	29.832	21.444	N/A	PASS



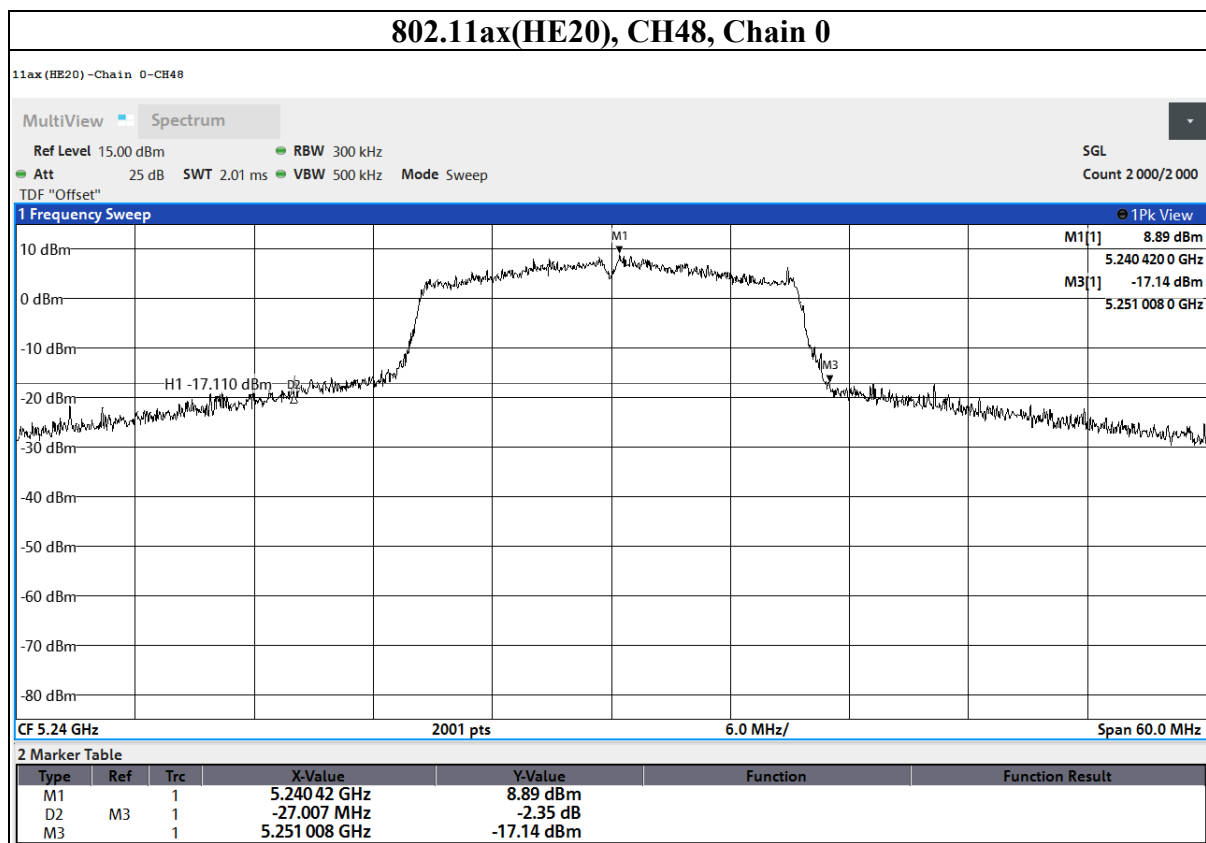
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT40)	38	5190	40.177	39.444	N/A	PASS
	46	5230	60.818	39.977	N/A	PASS
	54	5270	41.886	39.686	N/A	PASS
	62	5310	40.222	39.601	N/A	PASS
	102	5510	52.446	39.629	N/A	PASS
	110	5550	64.093	39.634	N/A	PASS
	134	5670	52.365	39.511	N/A	PASS



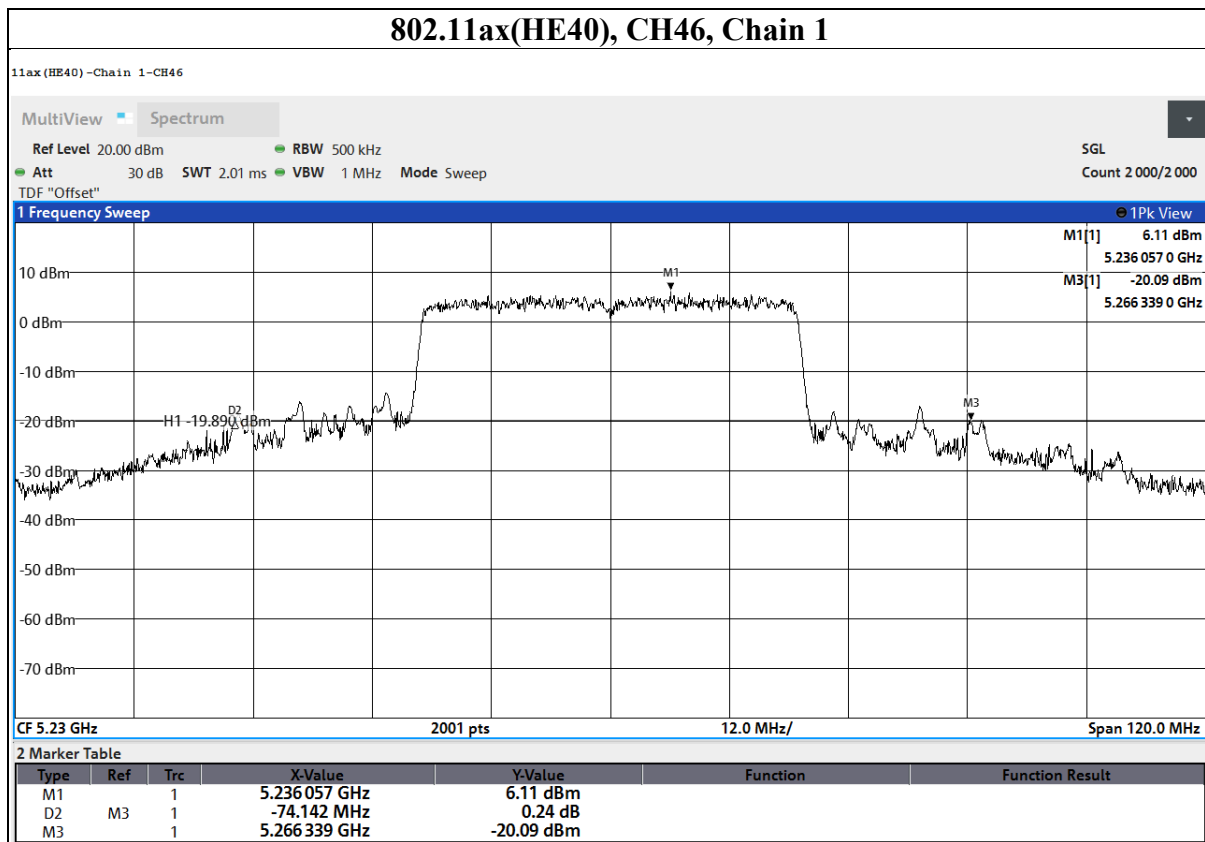
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT80)	42	5210	81.96	81.142	N/A	PASS
	58	5290	82.013	81.516	N/A	PASS
	106	5530	81.903	81.057	N/A	PASS
	122	5610	82.256	81.597	N/A	PASS



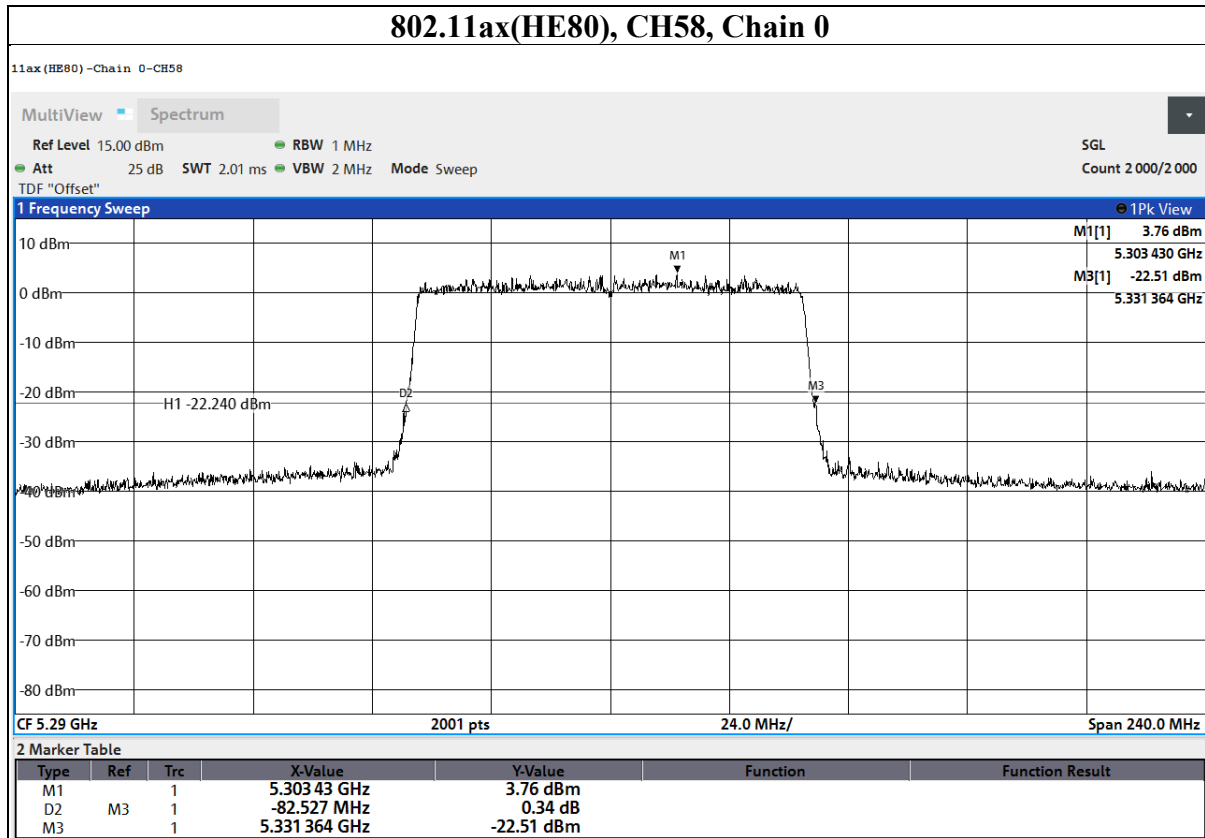
Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE20)	36	5180	21.163	21.317	N/A	PASS
	44	5220	21.407	21.251	N/A	PASS
	48	5240	27.007	25.766	N/A	PASS
	52	5260	21.895	21.25	N/A	PASS
	60	5300	21.229	21.377	N/A	PASS
	64	5320	21.161	21.191	N/A	PASS
	100	5500	21.845	21.05	N/A	PASS
	116	5580	25.064	21.174	N/A	PASS
	140	5700	23.583	21.191	N/A	PASS



Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE40)	38	5190	40.58	40.173	N/A	PASS
	46	5230	40.452	74.142	N/A	PASS
	54	5270	40.412	42.737	N/A	PASS
	62	5310	40.475	40.077	N/A	PASS
	102	5510	51.736	42.757	N/A	PASS
	110	5550	63.206	40.317	N/A	PASS
	134	5670	59.838	39.962	N/A	PASS



Mode	CH	Freq (MHz)	26dB BW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE80)	42	5210	82.355	81.844	N/A	PASS
	58	5290	82.527	82.028	N/A	PASS
	106	5530	82.376	82.073	N/A	PASS
	122	5610	82.089	81.88	N/A	PASS

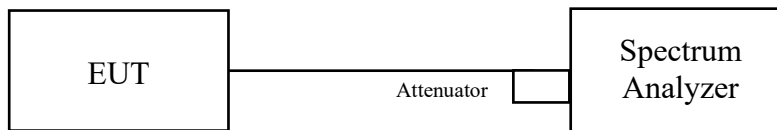


9.3. Occupied Bandwidth

Test procedure

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1% to 5% of the OBW
- Set VBW $\geq 3 \times$ RBW
- 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.
- Use the 99% power bandwidth function of the instrument (if available).
- 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.
- The plot of the test result only shows the worst case of channels as a representative.

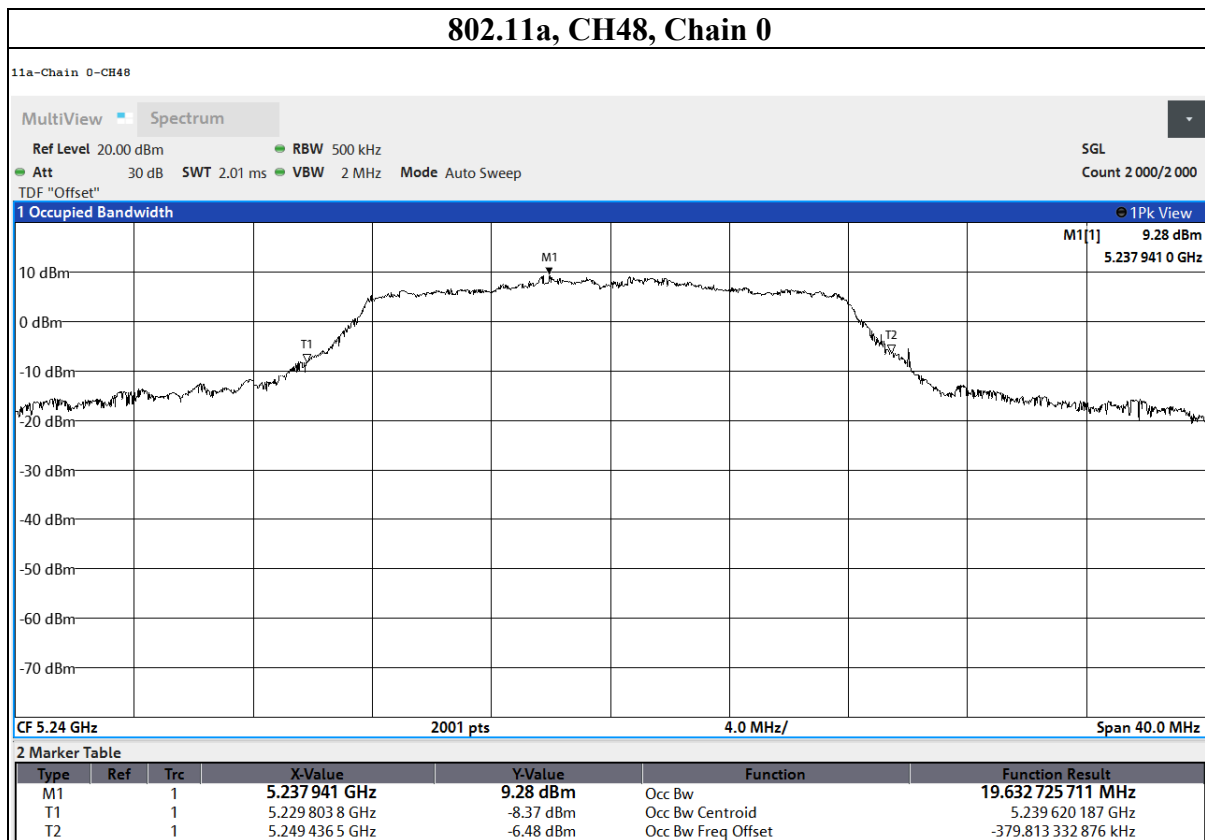
Test Setup



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	36	5180	17.935	17.207	N/A	PASS
	44	5220	18.127	17.325	N/A	PASS
	48	5240	19.633	17.363	N/A	PASS
	52	5260	18.467	17.722	N/A	PASS
	60	5300	17.766	17.42	N/A	PASS
	64	5320	17.75	17.346	N/A	PASS
	100	5500	18.203	17.366	N/A	PASS
	116	5580	18.441	17.175	N/A	PASS
	140	5700	18.425	17.184	N/A	PASS
	149	5745	18.187	17.159	N/A	PASS
	157	5785	18.235	17.224	N/A	PASS
	165	5825	18.166	17.15	N/A	PASS



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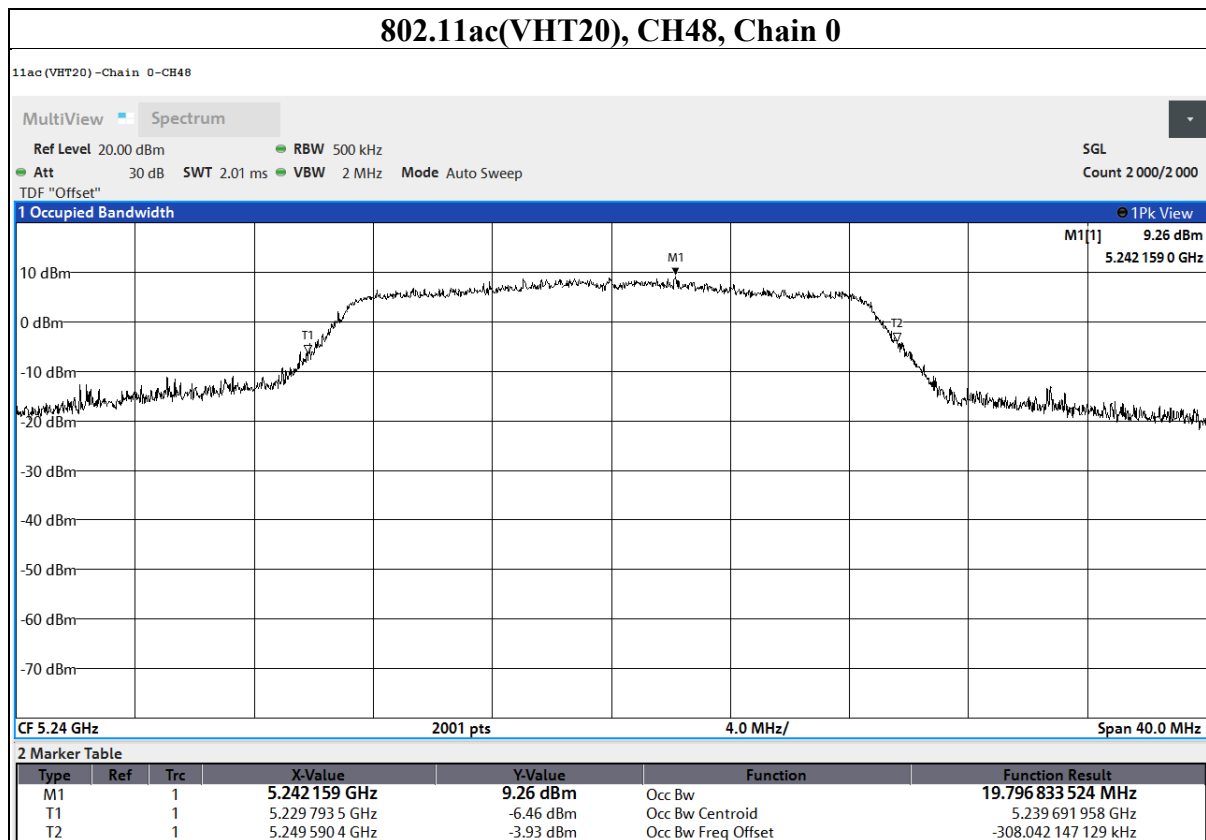
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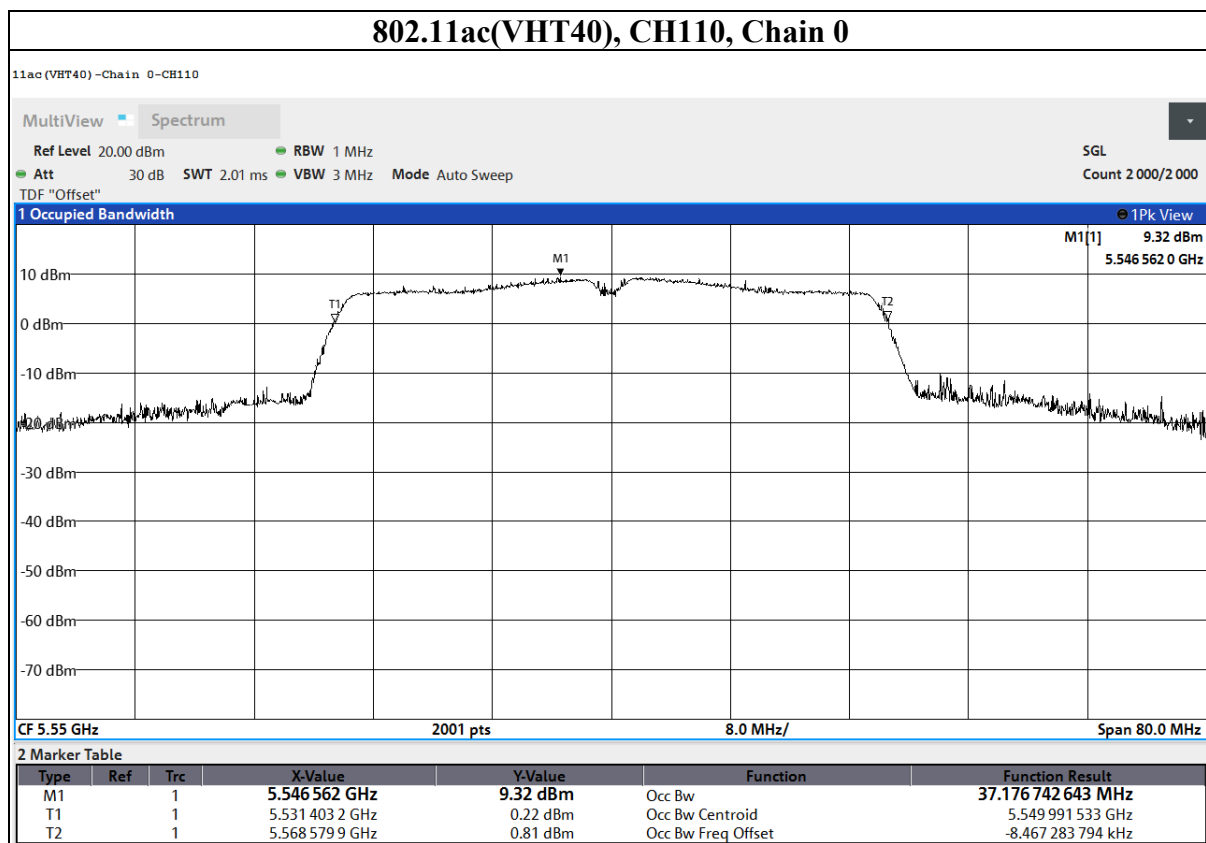
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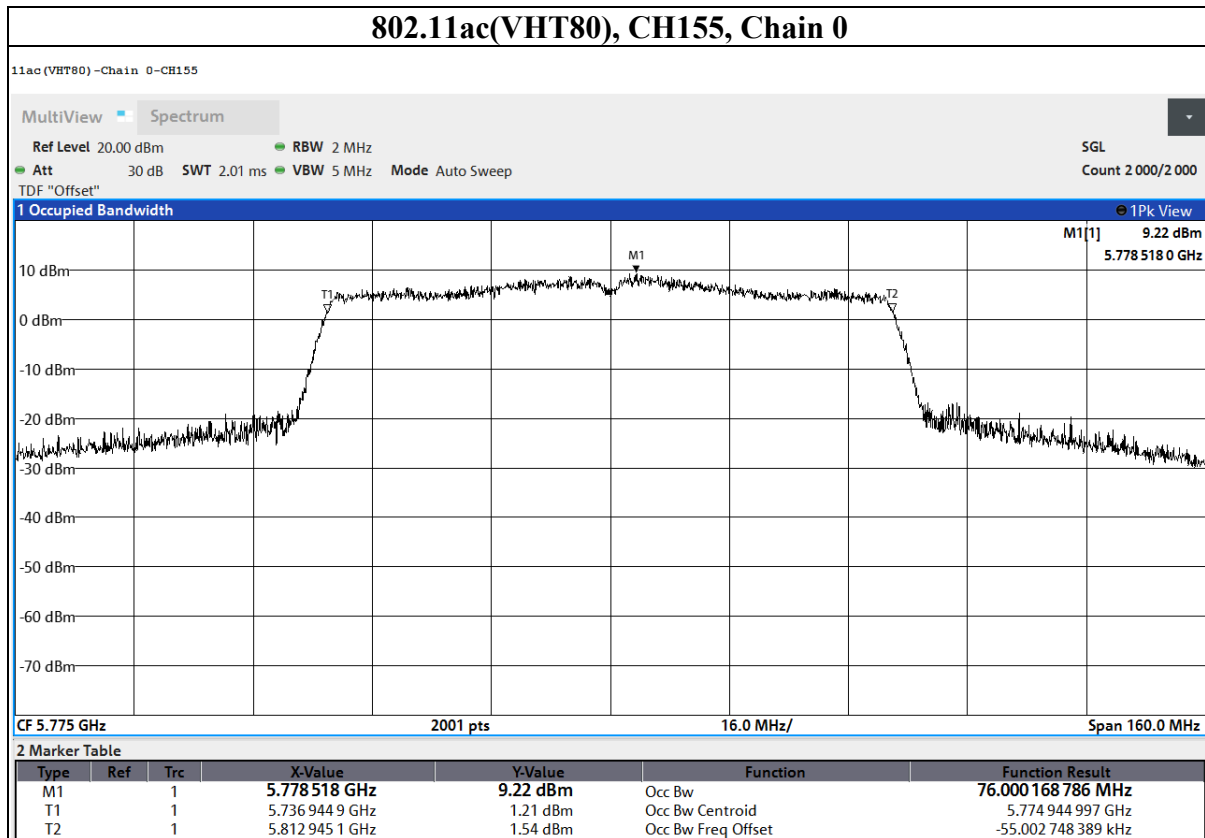
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT20)	36	5180	18.678	18.279	N/A	PASS
	44	5220	18.624	18.453	N/A	PASS
	48	5240	19.797	18.621	N/A	PASS
	52	5260	19.027	18.353	N/A	PASS
	60	5300	18.705	18.411	N/A	PASS
	64	5320	18.665	18.374	N/A	PASS
	100	5500	18.924	18.265	N/A	PASS
	116	5580	19.215	18.168	N/A	PASS
	140	5700	19.183	18.154	N/A	PASS
	149	5745	19.026	18.137	N/A	PASS
	157	5785	19.101	18.117	N/A	PASS
	165	5825	19.184	18.143	N/A	PASS



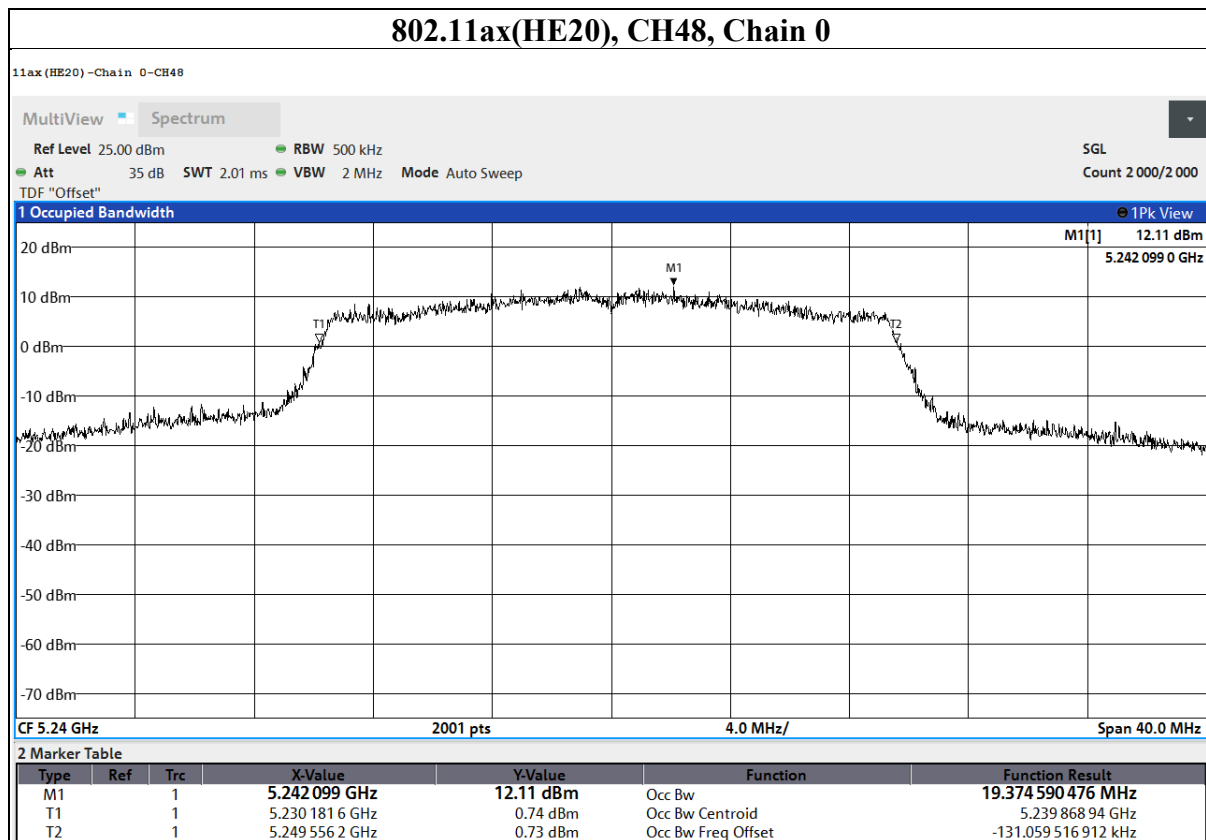
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT40)	38	5190	36.678	36.567	N/A	PASS
	46	5230	37.031	36.67	N/A	PASS
	54	5270	36.7	36.757	N/A	PASS
	62	5310	36.641	36.572	N/A	PASS
	102	5510	36.981	36.668	N/A	PASS
	110	5550	37.177	36.667	N/A	PASS
	134	5670	37.083	36.592	N/A	PASS
	151	5755	36.974	36.599	N/A	PASS
	159	5795	37.08	36.53	N/A	PASS



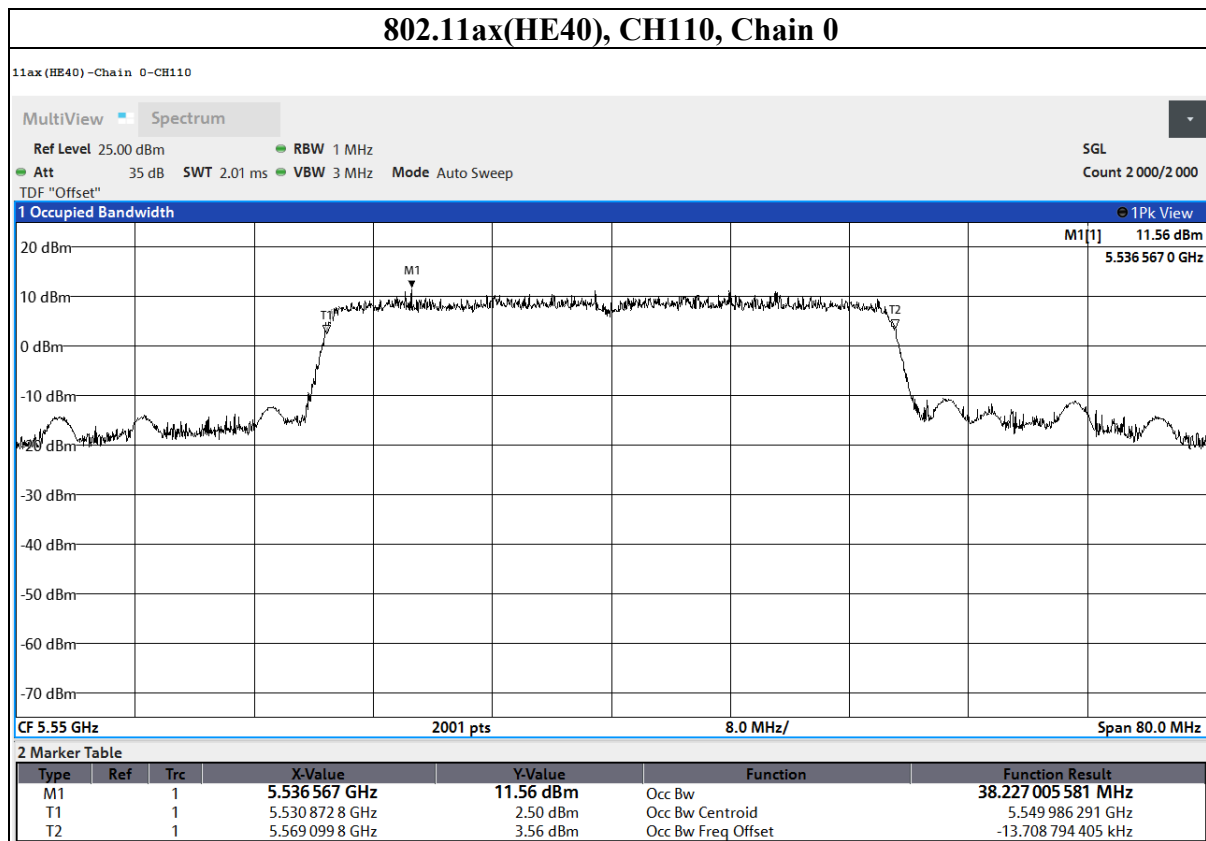
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ac(VHT80)	42	5210	75.95	75.727	N/A	PASS
	58	5290	75.848	75.771	N/A	PASS
	106	5530	75.945	75.658	N/A	PASS
	122	5610	75.952	75.599	N/A	PASS
	155	5775	76	75.706	N/A	PASS



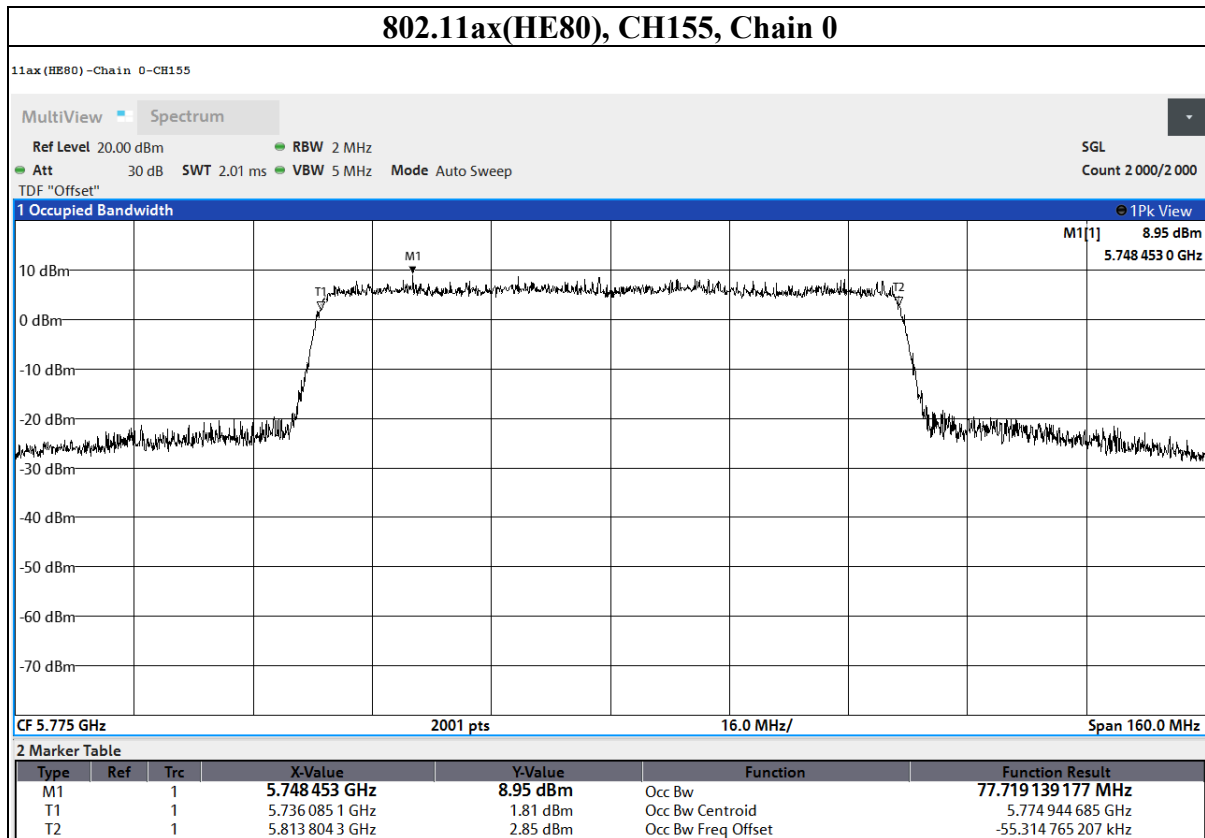
Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE20)	36	5180	19.112	19.074	N/A	PASS
	44	5220	19.141	19.164	N/A	PASS
	48	5240	19.375	19.203	N/A	PASS
	52	5260	19.226	19.125	N/A	PASS
	60	5300	19.087	19.164	N/A	PASS
	64	5320	19.097	19.081	N/A	PASS
	100	5500	19.209	19.125	N/A	PASS
	116	5580	19.276	19.089	N/A	PASS
	140	5700	19.267	19.065	N/A	PASS
	149	5745	19.223	19.08	N/A	PASS
	157	5785	19.239	19.076	N/A	PASS
	165	5825	19.254	19.049	N/A	PASS



Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE40)	38	5190	37.819	37.784	N/A	PASS
	46	5230	37.799	38.146	N/A	PASS
	54	5270	37.905	37.963	N/A	PASS
	62	5310	37.838	37.824	N/A	PASS
	102	5510	38.056	37.834	N/A	PASS
	110	5550	38.227	37.825	N/A	PASS
	134	5670	38.18	37.869	N/A	PASS
	151	5755	38.204	37.825	N/A	PASS
	159	5795	38.152	37.71	N/A	PASS



Mode	CH	Freq (MHz)	OBW (MHz)		Limit (MHz)	Result
			Chain 0	Chain 1		
802.11ax(HE80)	42	5210	77.685	77.595	N/A	PASS
	58	5290	77.592	77.653	N/A	PASS
	106	5530	77.707	77.559	N/A	PASS
	122	5610	77.646	77.493	N/A	PASS
	155	5775	77.719	77.543	N/A	PASS



9.4. Conducted output power

Requirements

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) Max. e.i.r.p $\leq 125\text{mW}$ (21 dBm) at any elevation angle above 30 degrees as measured from the horizon If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 30 - (G_{\text{TX}} - 6)$
		Fixed point-to-point Access Point	1 Watt (30 dBm) If $G_{\text{TX}} > 23 \text{ dBi}$, then $P_{\text{Out}} = 30 - (G_{\text{TX}} - 23)$
		Indoor Access Point	1 Watt (30 dBm) If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 30 - (G_{\text{TX}} - 6)$
	√	Client device	250mW (24 dBm) If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 23.98 - (G_{\text{TX}} - 6)$
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B* If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 23.98 - (G_{\text{TX}} - 6)$
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B* If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 23.98 - (G_{\text{TX}} - 6)$
U-NII-3	√		For Point-to-multipoint systems (P2M): 1 Watt (30 dBm). If $G_{\text{TX}} > 6 \text{ dBi}$, then $P_{\text{Out}} = 30 - (G_{\text{TX}} - 6)$ For Point-to-point systems (P2P): 1 Watt (30 dBm)
U-NII-4		Indoor Access Point	Maximum e.i.r.p. 4 W
		Subordinate Device	Maximum e.i.r.p. 4 W
		Client Device	Maximum e.i.r.p. 1 W

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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ant}}]$ 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 $N_{\text{ANT}} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;
Array Gain = $5 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{\text{ANT}} \geq 5$.
Example: Maximum antenna gain = 5 dBi and $N_{\text{ANT}} \leq 4$, 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

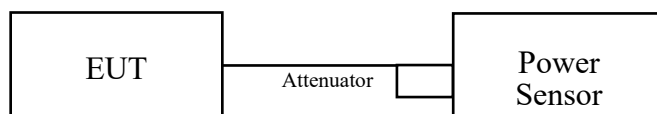
For Average Power Measurement

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.

Test Setup

For Average Power Measurement



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

Test Data

Mode	CH	Freq. (MHz)	AVG Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
			Chain0	Chain1						
802.11a	36	5180	13.75	13.68	47.098	16.73	23.98	20.06	30	Pass
	44	5220	13.76	13.53	46.345	16.66	23.98	19.99	30	Pass
	48	5240	13.88	13.52	46.881	16.71	23.98	20.04	30	Pass
	52	5260	14.17	13.51	48.529	16.86	23.98	20.19	26.99	Pass
	60	5300	13.98	13.57	47.753	16.79	23.98	20.12	26.99	Pass
	64	5320	13.92	13.67	47.973	16.81	23.98	20.14	26.99	Pass
	100	5500	14.81	13.62	53.333	17.27	23.98	20.60	26.99	Pass
	116	5580	14.97	13.62	54.45	17.36	23.98	20.69	26.99	Pass
	140	5700	14.67	13.64	52.481	17.2	23.98	20.53	26.99	Pass
	149	5745	14.55	13.69	51.88	17.15	30	20.48	36.02	Pass
	157	5785	14.42	13.63	50.699	17.05	30	20.38	36.02	Pass
802.11ac(VHT20)	165	5825	14.15	13.6	48.865	16.89	30	20.22	36.02	Pass
	36	5180	13.69	13.71	46.881	16.71	23.98	20.04	30	Pass
	44	5220	14.01	13.69	48.529	16.86	23.98	20.19	30	Pass
	48	5240	13.91	13.58	47.424	16.76	23.98	20.09	30	Pass
	52	5260	14.15	13.56	48.753	16.88	23.98	20.21	26.99	Pass
	60	5300	14.09	13.54	48.195	16.83	23.98	20.16	26.99	Pass
	64	5320	14.02	13.52	47.753	16.79	23.98	20.12	26.99	Pass
	100	5500	14.48	13.44	50.119	17	23.98	20.33	26.99	Pass
	116	5580	14.58	13.74	52.36	17.19	23.98	20.52	26.99	Pass
	140	5700	14.51	13.32	49.774	16.97	23.98	20.30	26.99	Pass
	149	5745	14.56	13.57	51.286	17.1	30	20.43	36.02	Pass
802.11ac(VHT40)	157	5785	14.28	13.53	49.317	16.93	30	20.26	36.02	Pass
	165	5825	13.92	13.72	48.195	16.83	30	20.16	36.02	Pass
	38	5190	12.03	11.82	31.189	14.94	23.98	18.27	30	Pass
	46	5230	13.56	13.05	42.855	16.32	23.98	19.65	30	Pass
	54	5270	13.54	13.13	43.152	16.35	23.98	19.68	26.99	Pass
	62	5310	12.37	11.82	32.434	15.11	23.98	18.44	26.99	Pass
	102	5510	14.24	13.16	47.206	16.74	23.98	20.07	26.99	Pass
	110	5550	14.22	13.15	47.098	16.73	23.98	20.06	26.99	Pass
	134	5670	13.79	13.25	45.082	16.54	23.98	19.87	26.99	Pass
	151	5755	14.16	13.21	46.989	16.72	30	20.05	36.02	Pass
	159	5795	13.77	13.19	44.668	16.5	30	19.83	36.02	Pass
802.11ac(VHT80)	42	5210	11.17	11.16	26.182	14.18	23.98	17.51	30	Pass
	58	5290	11.15	11.03	25.704	14.1	23.98	17.43	26.99	Pass
	106	5530	11.78	10.62	26.607	14.25	23.98	17.58	26.99	Pass
	122	5610	11.7	10.51	26.062	14.16	23.98	17.49	26.99	Pass
	155	5775	11.85	10.71	27.102	14.33	30	17.66	36.02	Pass
802.11ax(HE20)	36	5180	13.49	13.26	43.551	16.39	23.98	19.72	30	Pass
	44	5220	13.8	13.51	46.452	16.67	23.98	20.00	30	Pass
	48	5240	14.03	13.5	47.643	16.78	23.98	20.11	30	Pass
	52	5260	14.23	13.68	49.774	16.97	23.98	20.30	26.99	Pass
	60	5300	13.92	13.58	47.424	16.76	23.98	20.09	26.99	Pass
	64	5320	13.84	13.07	44.463	16.48	23.98	19.81	26.99	Pass
	100	5500	14.74	13.51	52.24	17.18	23.98	20.51	26.99	Pass
	116	5580	14.23	13.5	48.865	16.89	23.98	20.22	26.99	Pass
	140	5700	14.45	13.52	50.35	17.02	23.98	20.35	26.99	Pass
	149	5745	14.62	13.69	52.36	17.19	30	20.52	36.02	Pass
	157	5785	14.32	13.55	49.659	16.96	30	20.29	36.02	Pass
	165	5825	14.29	13.56	49.545	16.95	30	20.28	36.02	Pass

Mode	CH	Freq. (MHz)	AVG Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
			Chain0	Chain1						
802.11ax(HE40)	38	5190	11.32	11.04	26.242	14.19	23.98	17.52	30	Pass
	46	5230	13.75	13.11	44.157	16.45	23.98	19.78	30	Pass
	54	5270	13.91	13.1	44.978	16.53	23.98	19.86	26.99	Pass
	62	5310	11.14	10.73	24.831	13.95	23.98	17.28	26.99	Pass
	102	5510	14.17	13.12	46.666	16.69	23.98	20.02	26.99	Pass
	110	5550	14.52	13.08	48.641	16.87	23.98	20.20	26.99	Pass
	134	5670	13.67	13.29	44.566	16.49	23.98	19.82	26.99	Pass
	151	5755	13.78	13.19	44.771	16.51	30	19.84	36.02	Pass
	159	5795	14.04	13.21	46.345	16.66	30	19.99	36.02	Pass
802.11ax(HE80)	42	5210	11.23	11.17	26.363	14.21	23.98	17.54	30	Pass
	58	5290	10.96	10.93	24.889	13.96	23.98	17.29	26.99	Pass
	106	5530	11.81	10.77	27.102	14.33	23.98	17.66	26.99	Pass
	122	5610	11.62	10.56	25.882	14.13	23.98	17.46	26.99	Pass
	155	5775	11.81	10.66	26.792	14.28	30	17.61	36.02	Pass

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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

9.5. Power Spectral Density

Requirements

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz If $G_{TX} > 6$ dBi, then $PSD = 17 - (G_{TX} - 6)$
		Fixed point-to-point Access Point	17dBm/ MHz If $G_{TX} > 23$ dBi, then $PSD = 17 - (G_{TX} - 23)$
		Indoor Access Point	17dBm/ MHz If $G_{TX} > 6$ dBi, then $PSD = 17 - (G_{TX} - 6)$
	√	Client device	11dBm/ MHz If $G_{TX} > 6$ dBi, then $PSD = 11 - (G_{TX} - 6)$
U-NII-2A	√		11dBm/ MHz If $G_{TX} > 6$ dBi, then $PSD = 11 - (G_{TX} - 6)$
U-NII-2C	√		11dBm/ MHz If $G_{TX} > 6$ dBi, then $PSD = 11 - (G_{TX} - 6)$
U-NII-3	√		For Point-to-multipoint systems (P2M): 30dBm/ 500kHz. If $G_{TX} > 6$ dBi, then $PSD = 30 - (G_{TX} - 6)$ For Point-to-point systems (P2P): 30dBm/ 500kHz
U-NII-4		Indoor Access Point	Maximum e.i.r.p. PSD 20 dBm/MHz
		Subordinate Device	Maximum e.i.r.p. PSD 20 dBm/MHz
		Client Device	Maximum e.i.r.p. PSD 14 dBm/MHz

Note:

1. PSD = power spectral density that the 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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / Nant]$ 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. Refer to section 6.6 for duty cycle spectrum plot. (If duty cycle<98%)

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Test procedure

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method as below:

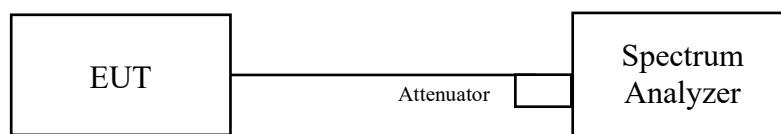
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 RBW, Detector = RMS
- Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Record the max value. (if Duty cycle <98 %, add 10 log (1/duty cycle))
- The plot of the test result only shows the worst case of channels as a representative.

For U-NII-3 band:

Using method as below:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10 \log (500 \text{ kHz}/300\text{kHz})$
- Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Record the max value. (if Duty cycle <98 %, add 10 log (1/duty cycle))
- The plot of the test result only shows the worst case of channels as a representative.

Test Setup



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

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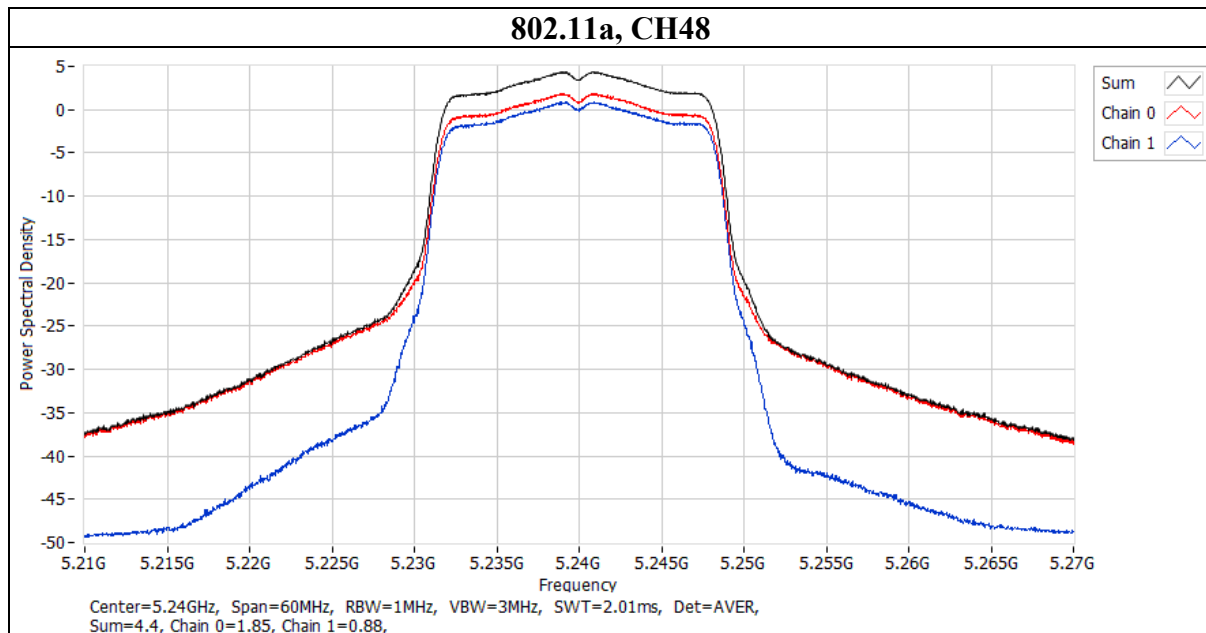
Facsimile (FAX) : +886-3-583-7948

Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

Test Data

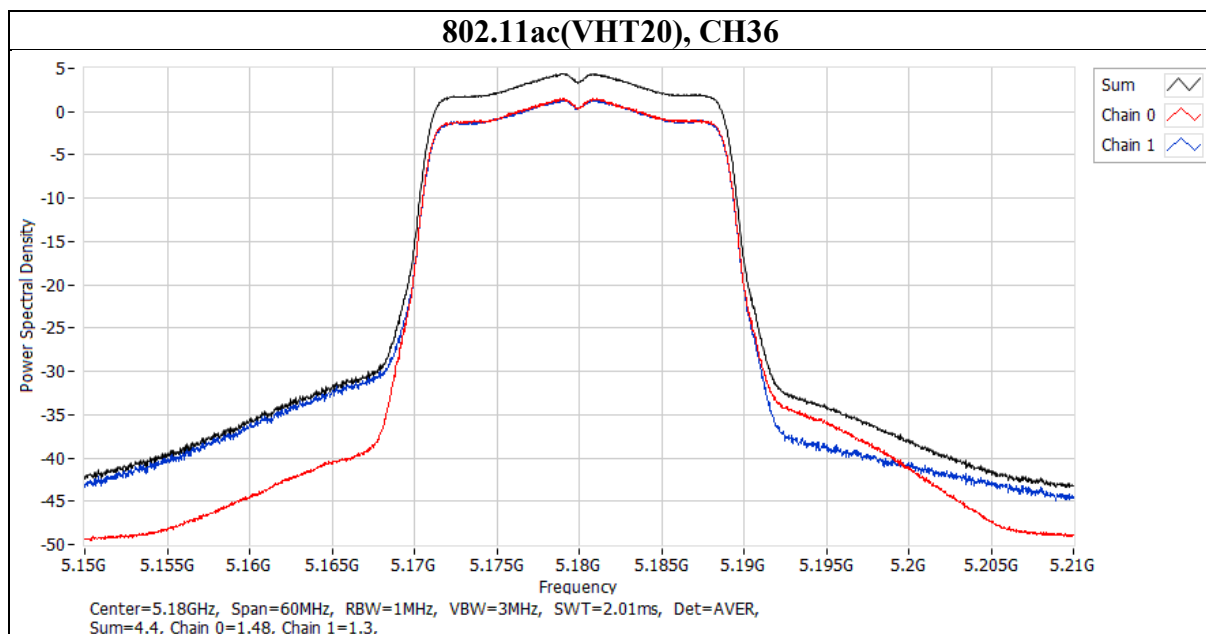
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11a	36	5180	6.25	4.26	10.75	PASS
	44	5220	6.25	4.37	10.75	PASS
	48	5240	6.25	4.4	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11a	36	5180	1.36	1.19
	44	5220	1.62	1.19
	48	5240	1.91	0.88



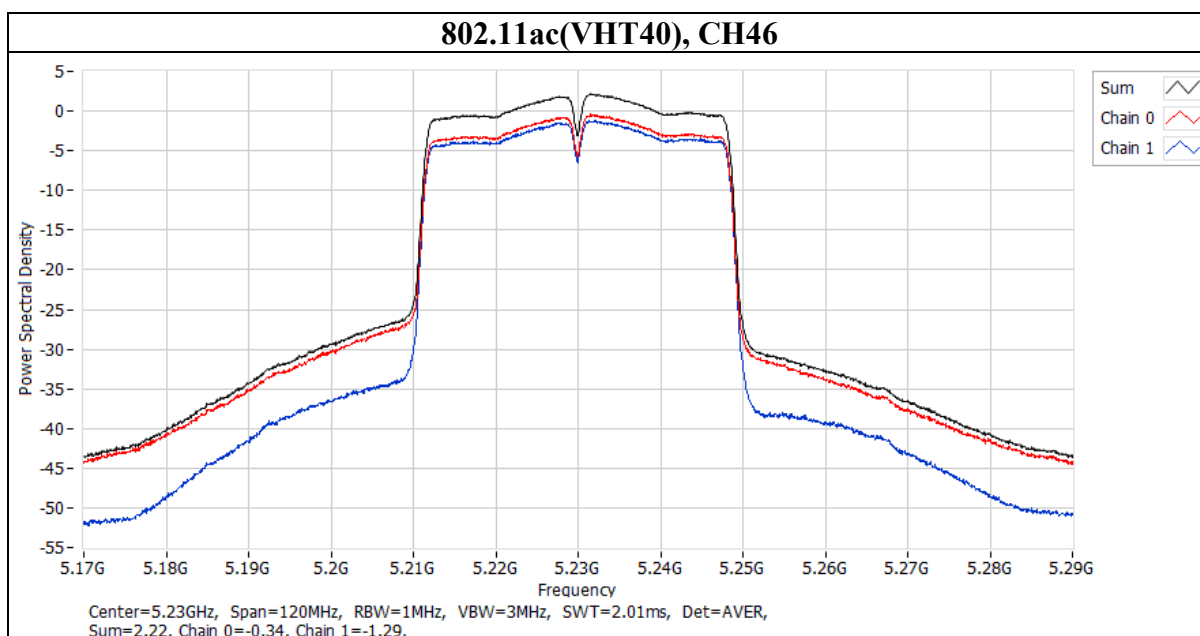
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT20)	36	5180	6.25	4.4	10.75	PASS
	44	5220	6.25	4.38	10.75	PASS
	48	5240	6.25	4.3	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT20)	36	5180	1.55	1.32
	44	5220	1.68	1.15
	48	5240	1.74	0.87



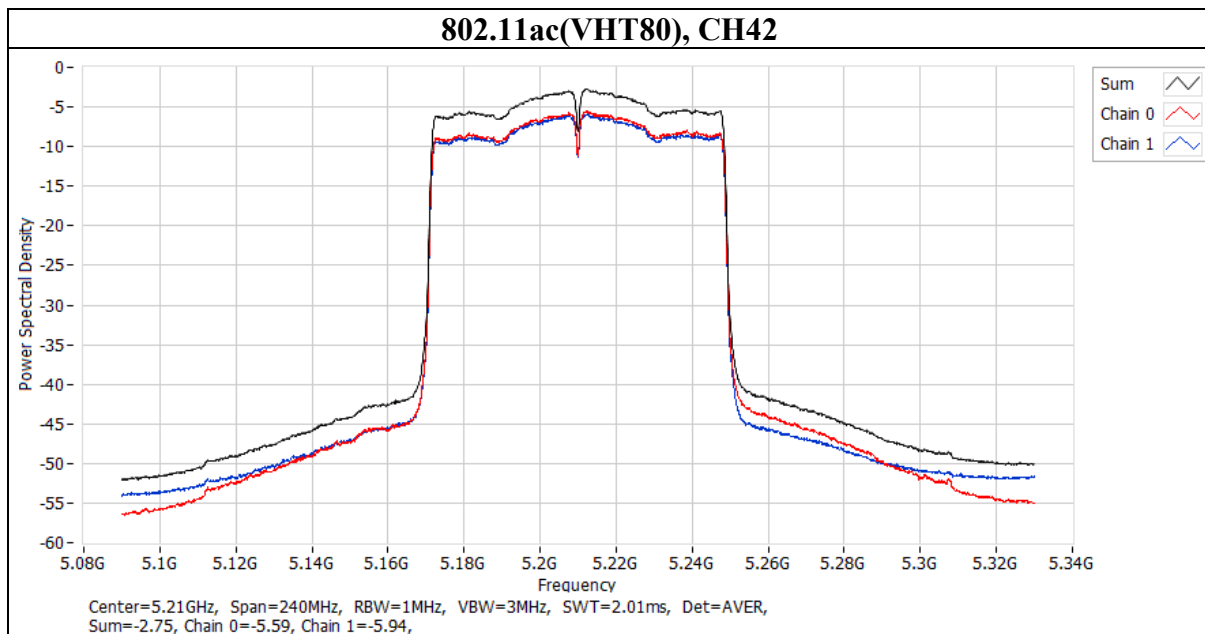
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT40)	38	5190	6.25	0.61	10.75	PASS
	46	5230	6.25	2.22	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT40)	38	5190	-2.23	-2.47
	46	5230	-0.34	-1.21



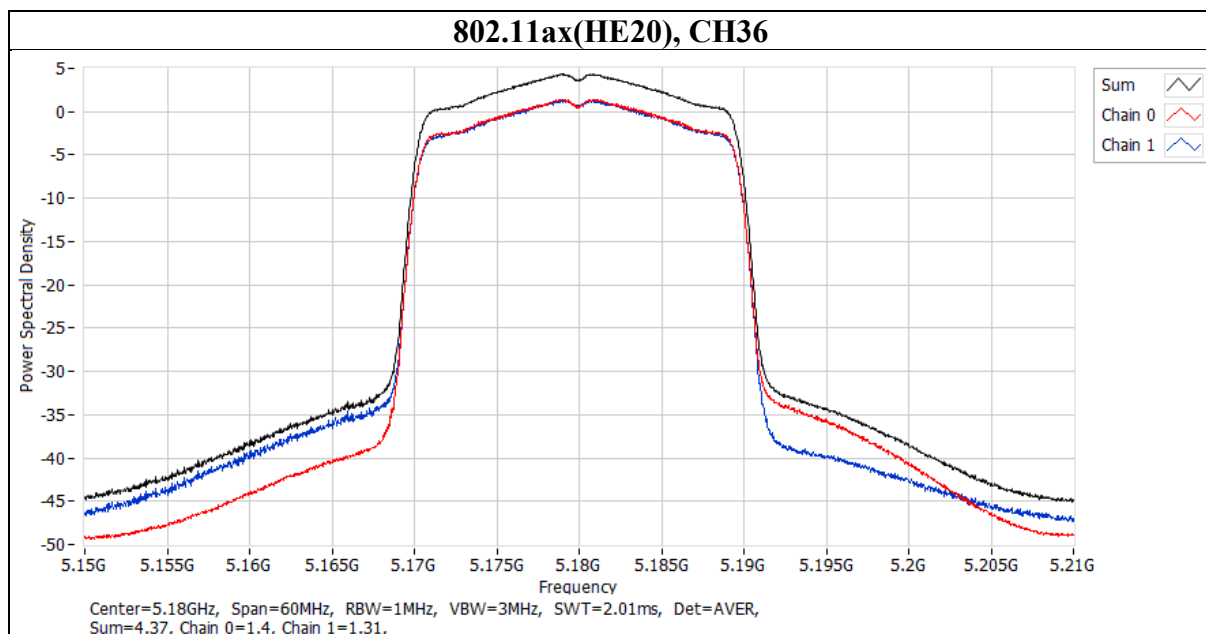
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT80)	42	5210	6.25	-2.75	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT80)	42	5210	-5.55	-5.92



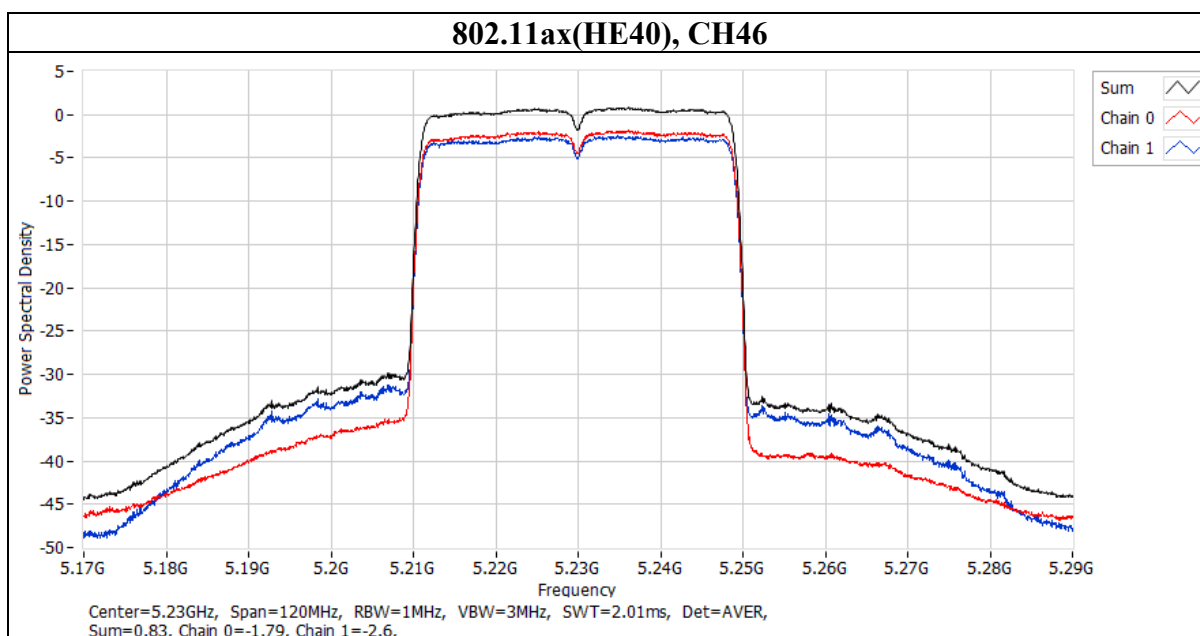
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE20)	36	5180	6.25	4.37	10.75	PASS
	44	5220	6.25	4.29	10.75	PASS
	48	5240	6.25	4.27	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE20)	36	5180	1.44	1.37
	44	5220	1.59	1.07
	48	5240	1.77	0.86



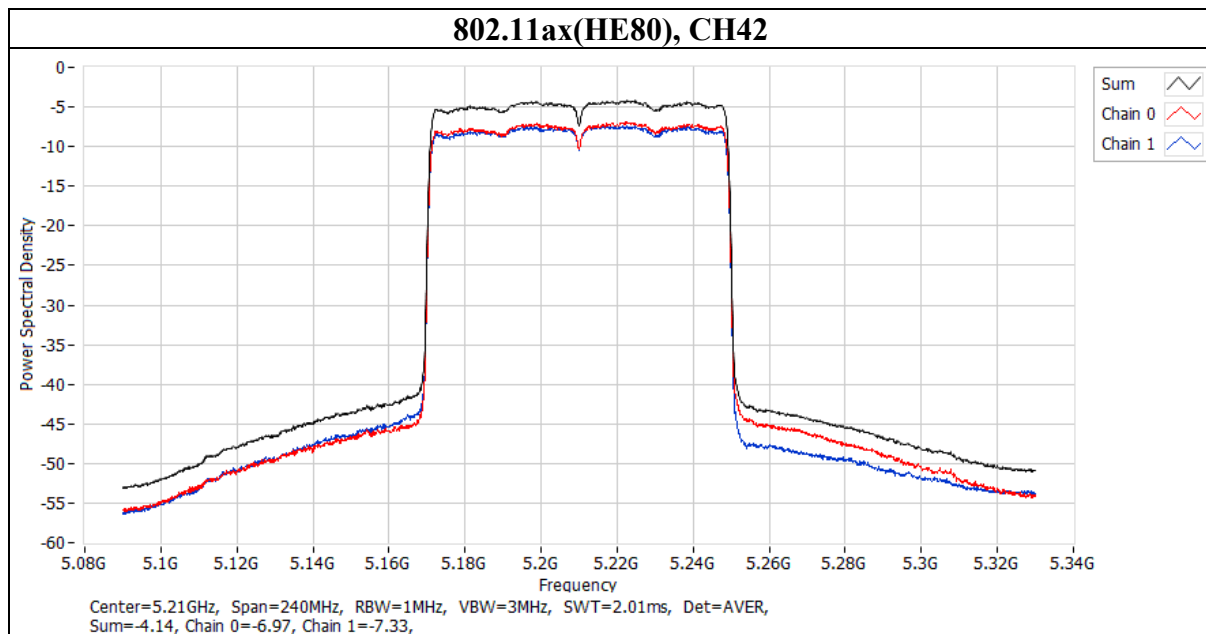
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE40)	38	5190	6.25	-1.62	10.75	PASS
	46	5230	6.25	0.83	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE40)	38	5190	-4.52	-4.65
	46	5230	-1.79	-2.42



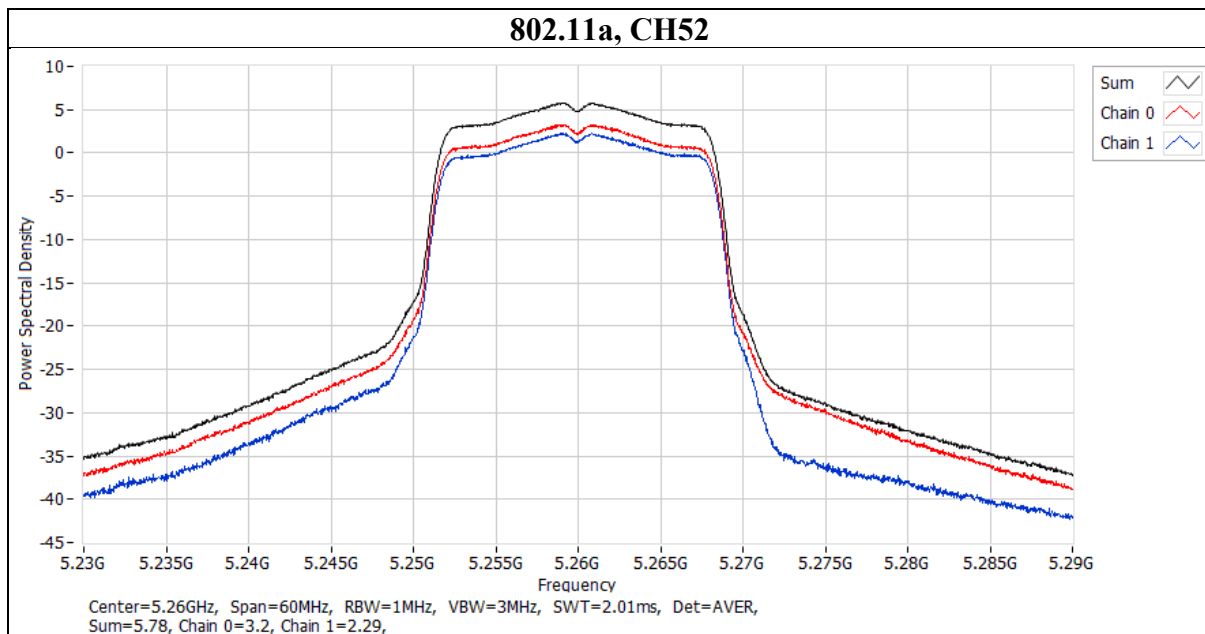
Mode (U-NII-1)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE80)	42	5210	6.25	-4.14	10.75	PASS

Mode (U-NII-1)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE80)	42	5210	-6.92	-7.33



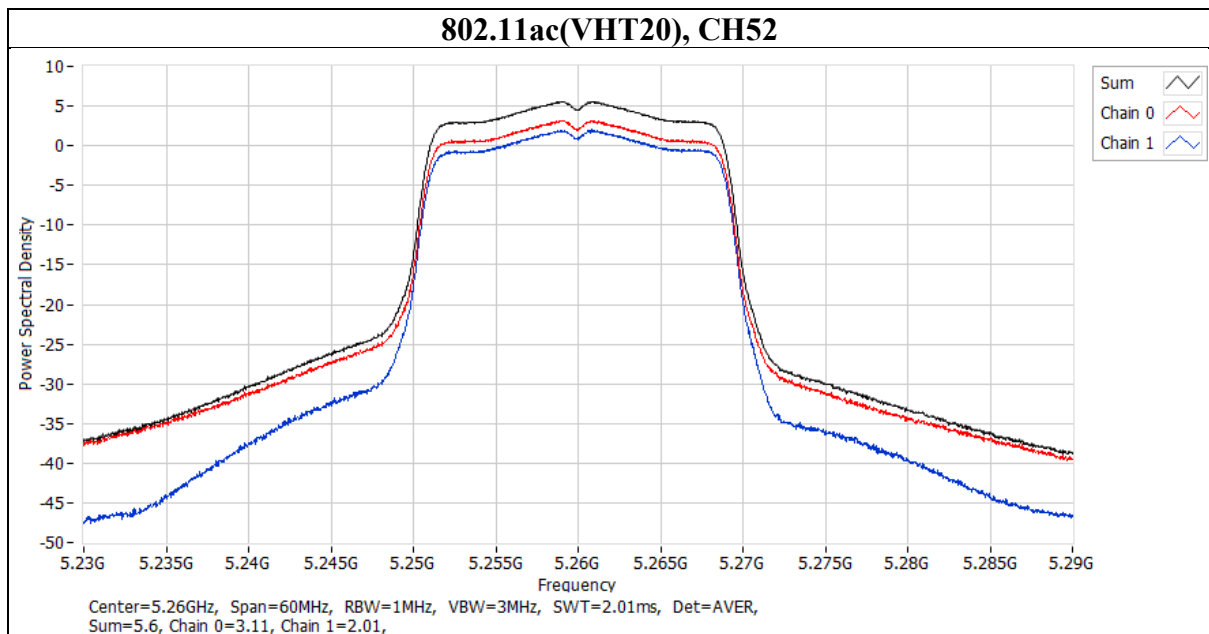
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11a	52	5260	6.25	5.78	10.75	PASS
	60	5300	6.25	5.36	10.75	PASS
	64	5320	6.25	5.42	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11a	52	5260	3.28	2.3
	60	5300	2.74	2.09
	64	5320	2.81	2.19



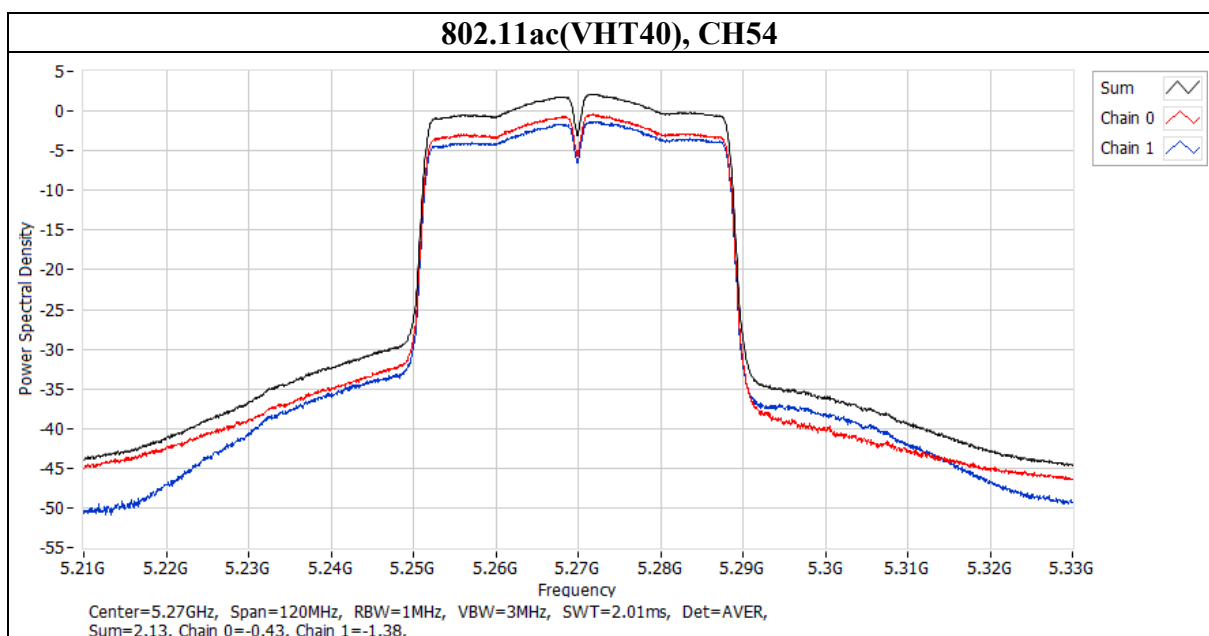
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT20)	52	5260	6.25	5.6	10.75	PASS
	60	5300	6.25	5.36	10.75	PASS
	64	5320	6.25	5.32	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT20)	52	5260	3.15	2.01
	60	5300	2.74	1.99
	64	5320	2.57	2.13



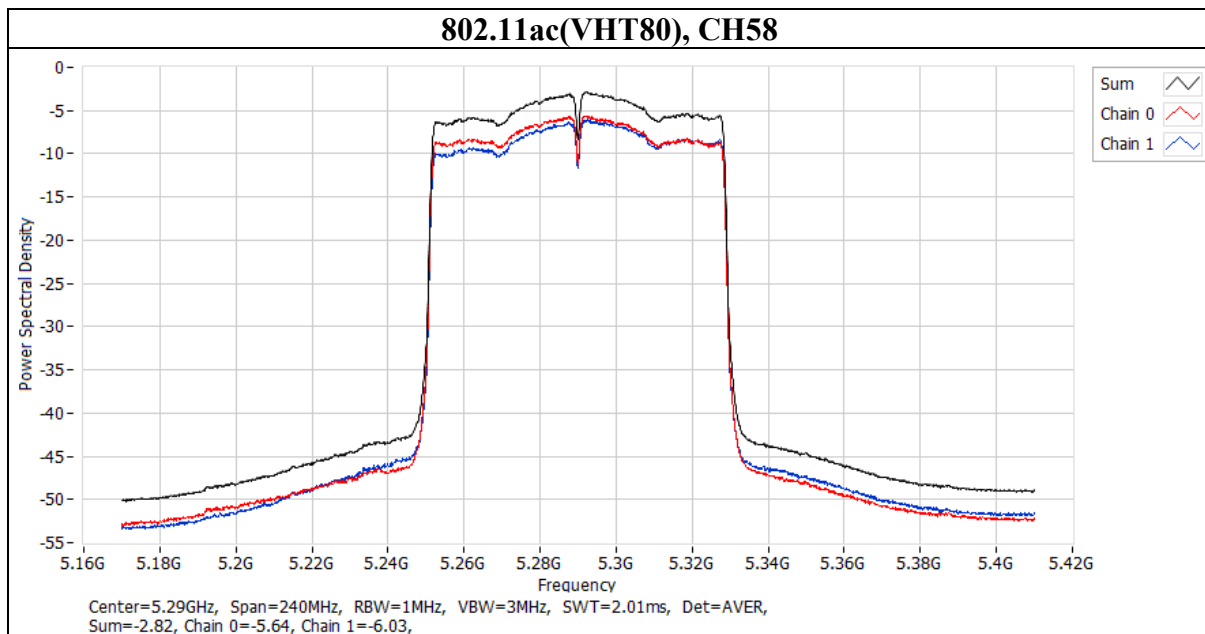
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT40)	54	5270	6.25	2.13	10.75	PASS
	62	5310	6.25	0.74	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT40)	54	5270	-0.4	-1.29
	62	5310	-1.87	-2.58



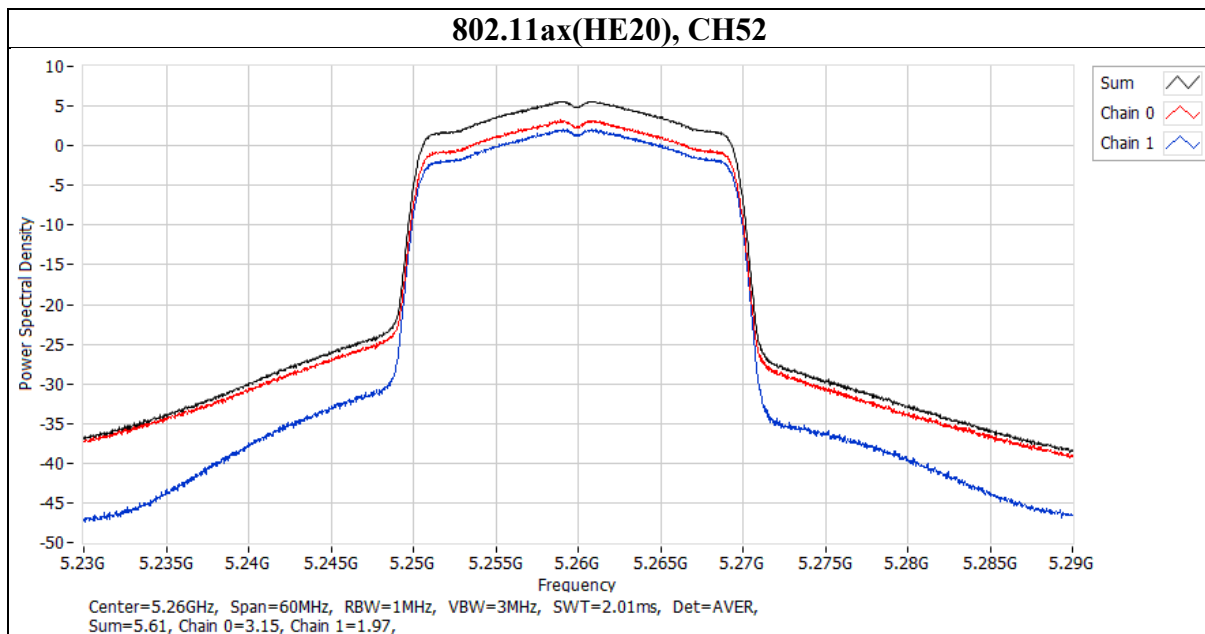
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT80)	58	5290	6.25	-2.82	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT80)	58	5290	-5.61	-6.03



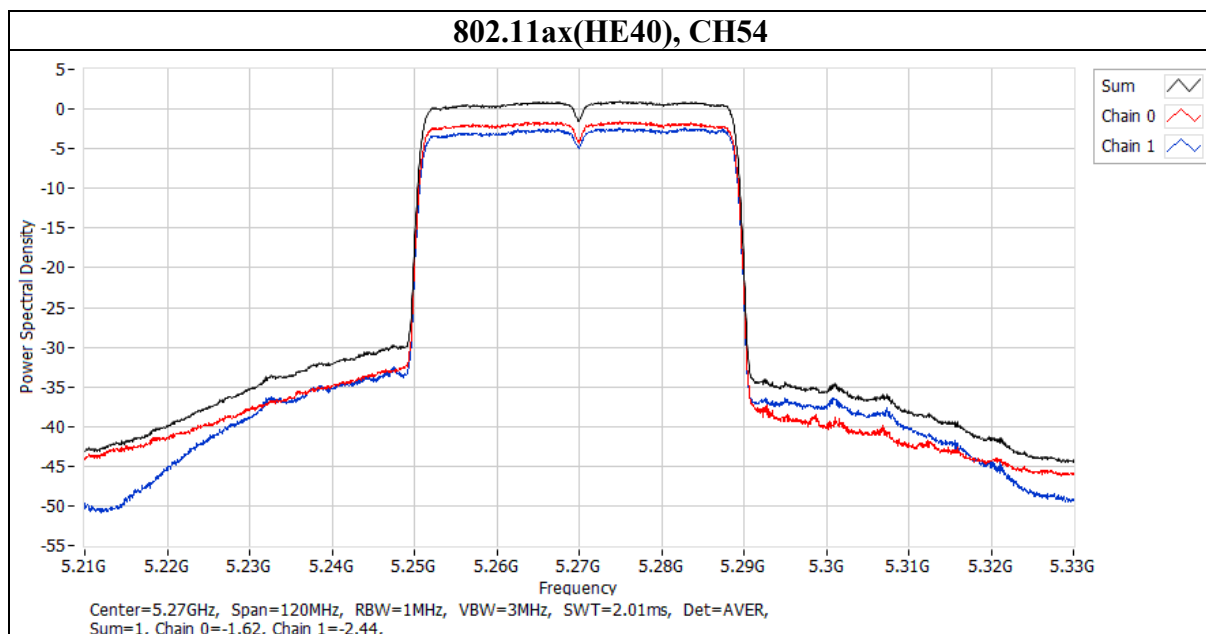
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE20)	52	5260	6.25	5.61	10.75	PASS
	60	5300	6.25	5.36	10.75	PASS
	64	5320	6.25	5.1	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE20)	52	5260	3.21	2.07
	60	5300	2.64	2.11
	64	5320	2.41	1.85



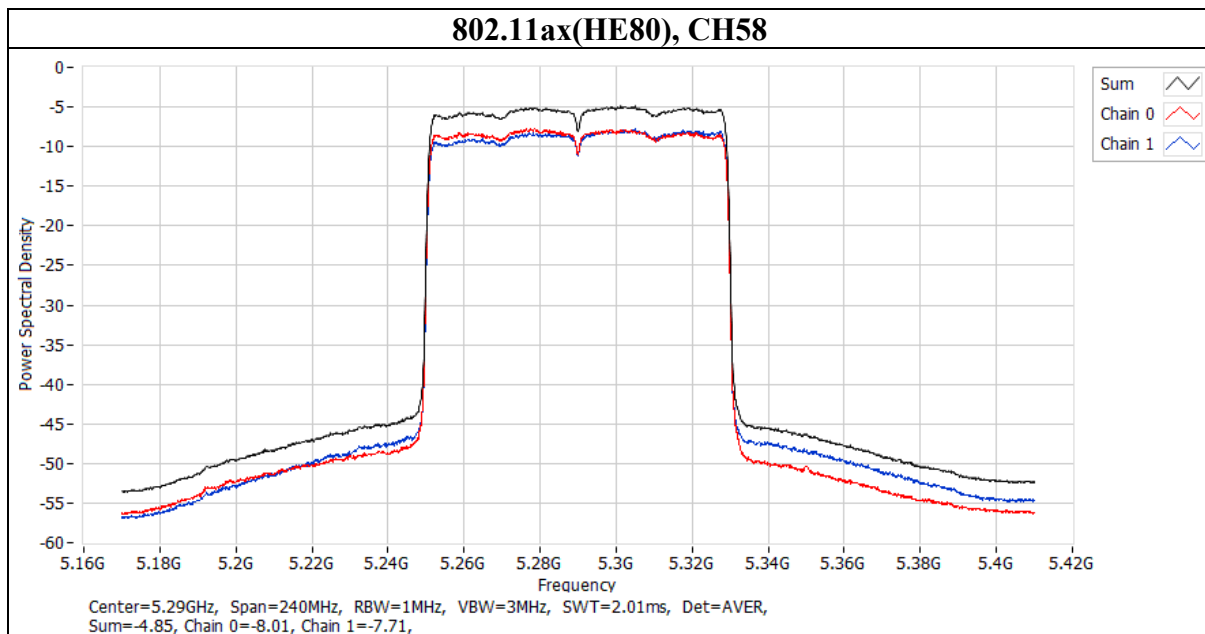
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE40)	54	5270	6.25	1	10.75	PASS
	62	5310	6.25	-1.76	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE40)	54	5270	-1.6	-2.35
	62	5310	-4.63	-4.8



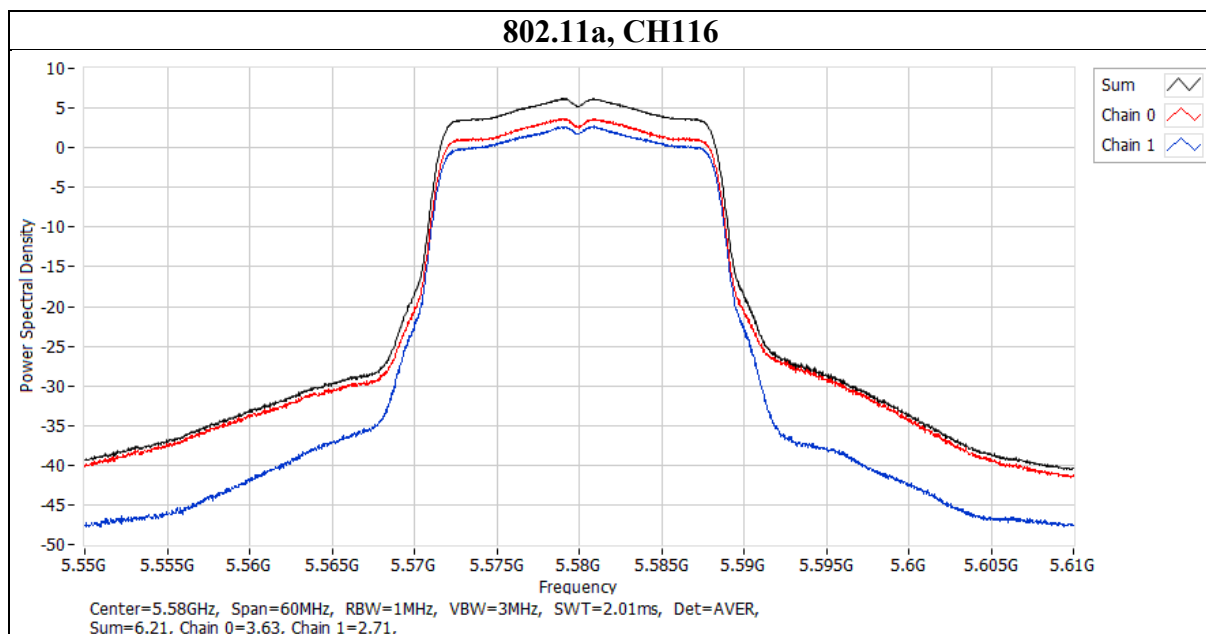
Mode (U-NII-2A)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE80)	58	5290	6.25	-4.85	10.75	PASS

Mode (U-NII-2A)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE80)	58	5290	-7.69	-7.71



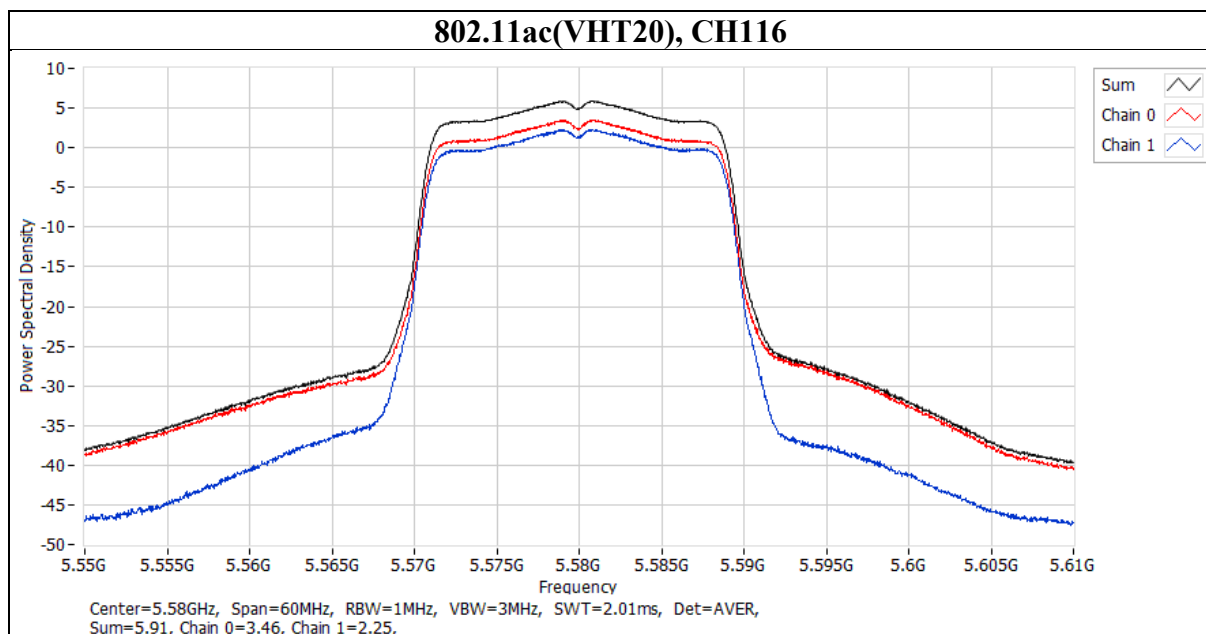
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11a	100	5500	6.25	6.19	10.75	PASS
	116	5580	6.25	6.21	10.75	PASS
	140	5700	6.25	5.76	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11a	100	5500	3.61	2.71
	116	5580	3.7	2.71
	140	5700	3.21	2.37



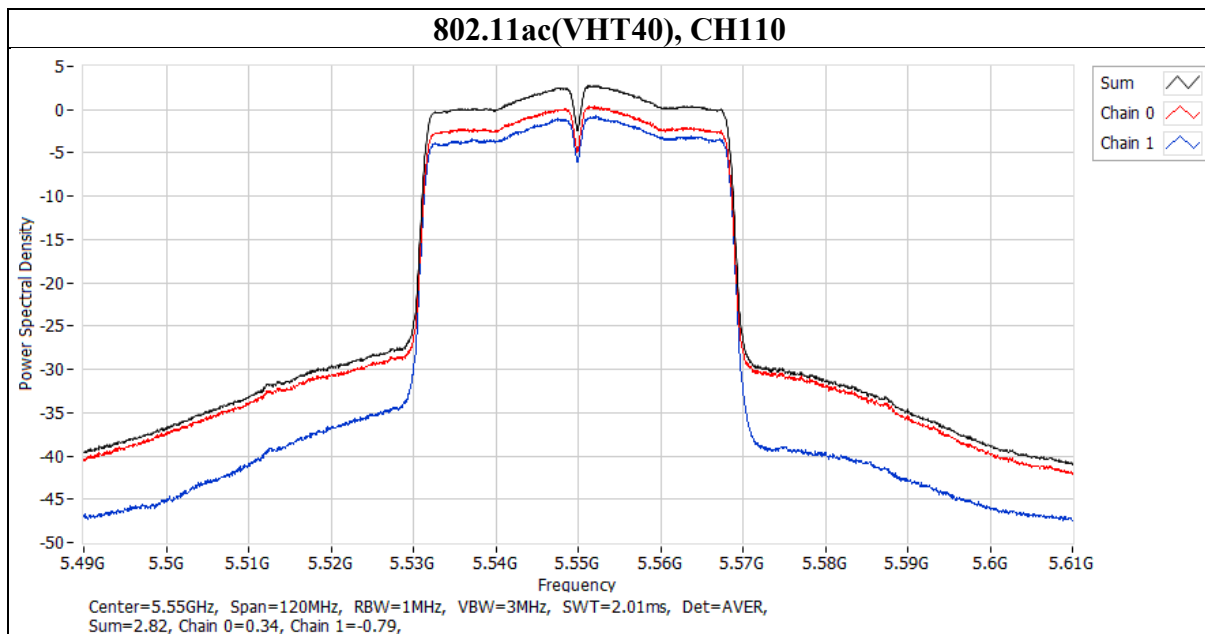
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT20)	100	5500	6.25	5.61	10.75	PASS
	116	5580	6.25	5.91	10.75	PASS
	140	5700	6.25	5.41	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT20)	100	5500	3.16	1.98
	116	5580	3.52	2.25
	140	5700	2.98	1.82



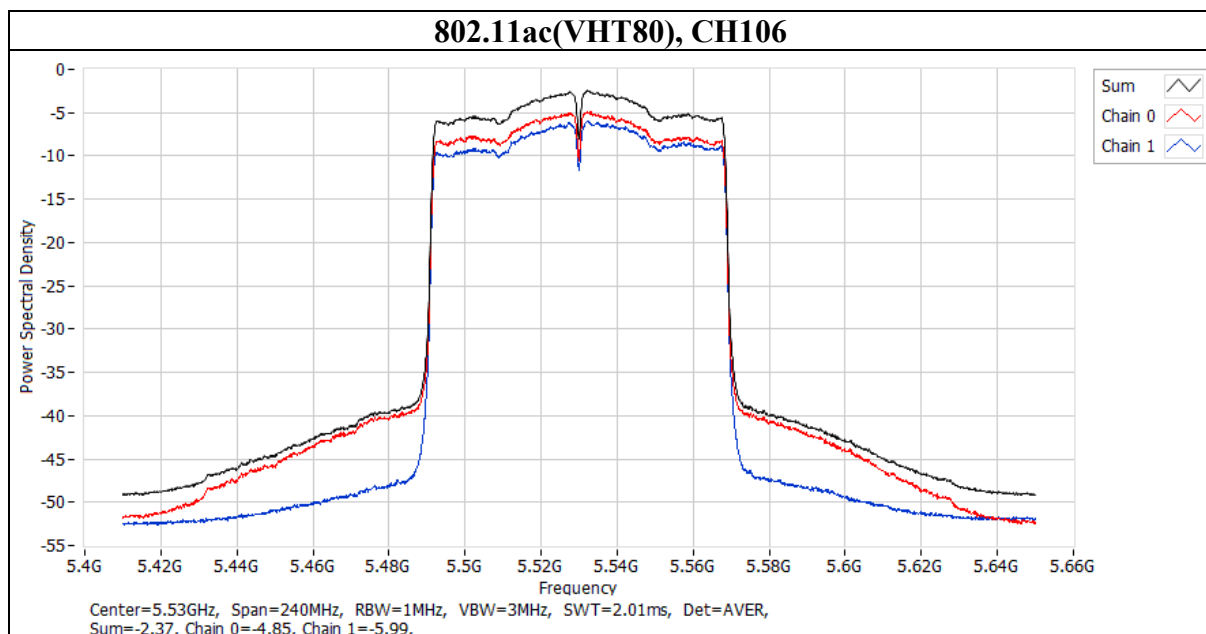
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT40)	102	5510	6.25	2.76	10.75	PASS
	110	5550	6.25	2.82	10.75	PASS
	134	5670	6.25	2.29	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT40)	102	5510	0.23	-0.61
	110	5550	0.38	-0.73
	134	5670	-0.36	-0.98



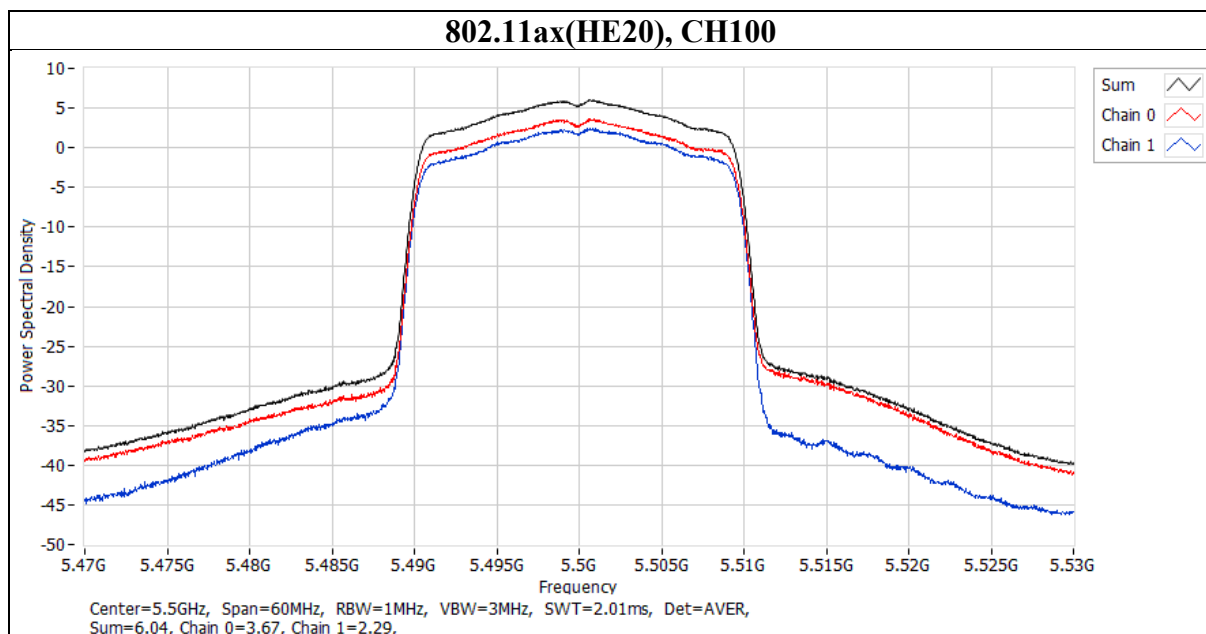
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ac(VHT80)	106	5530	6.25	-2.37	10.75	PASS
	122	5610	6.25	-2.7	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ac(VHT80)	106	5530	-4.85	-5.97
	122	5610	-5.21	-6.18



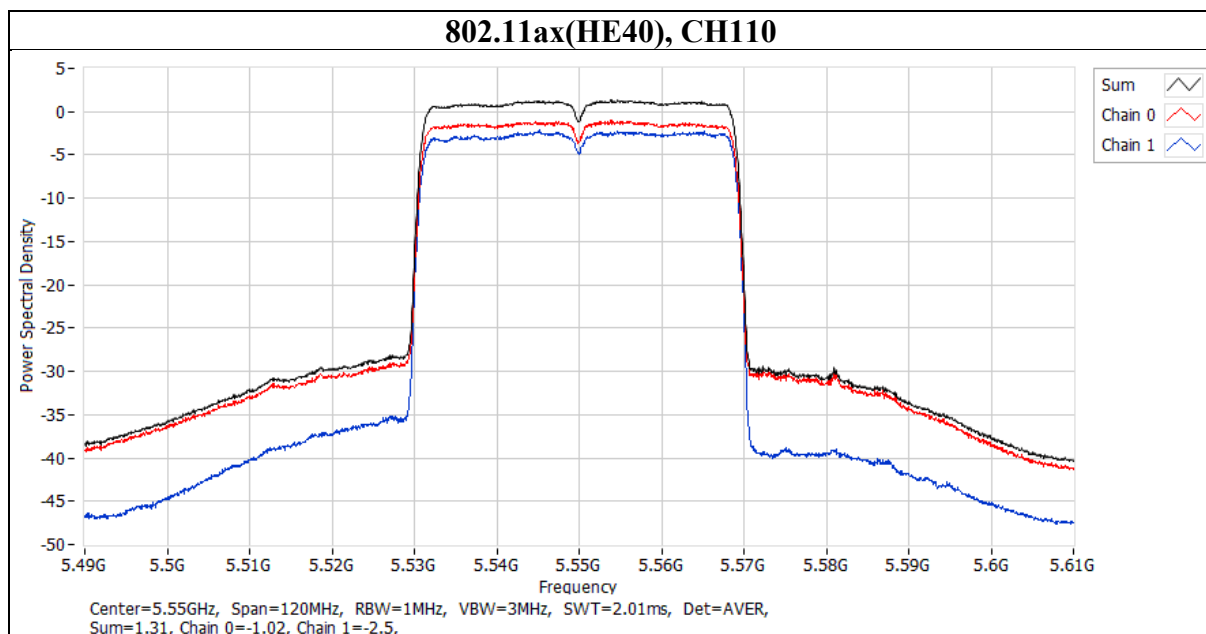
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE20)	100	5500	6.25	6.04	10.75	PASS
	116	5580	6.25	5.89	10.75	PASS
	140	5700	6.25	5.81	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE20)	100	5500	3.67	2.49
	116	5580	3.43	2.27
	140	5700	3.4	2.31



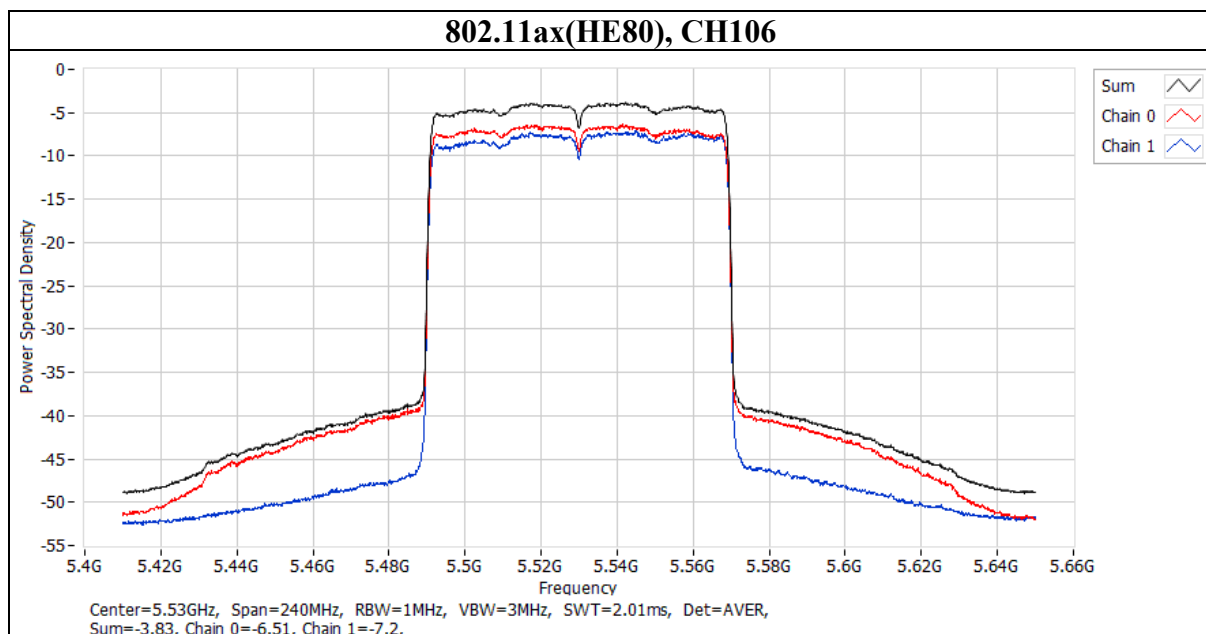
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE40)	102	5510	6.25	1.13	10.75	PASS
	110	5550	6.25	1.31	10.75	PASS
	134	5670	6.25	1.03	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE40)	102	5510	-1.35	-2.2
	110	5550	-1.02	-2.14
	134	5670	-1.67	-2.12



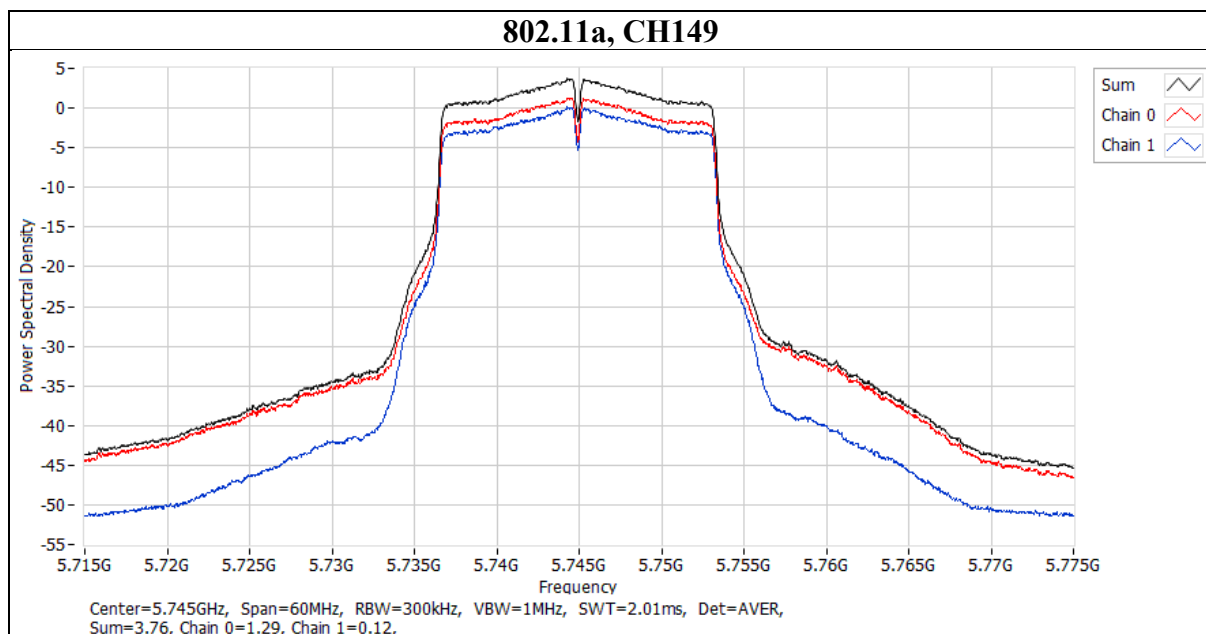
Mode (U-NII-2C)	CH	Freq (MHz)	Directional Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11ax(HE80)	106	5530	6.25	-3.83	10.75	PASS
	122	5610	6.25	-4.06	10.75	PASS

Mode (U-NII-2C)	CH	Freq (MHz)	PSD per Chain (dBm/MHz)	
			Chain 0	Chain 1
802.11ax(HE80)	106	5530	-6.37	-7.11
	122	5610	-6.66	-7.4



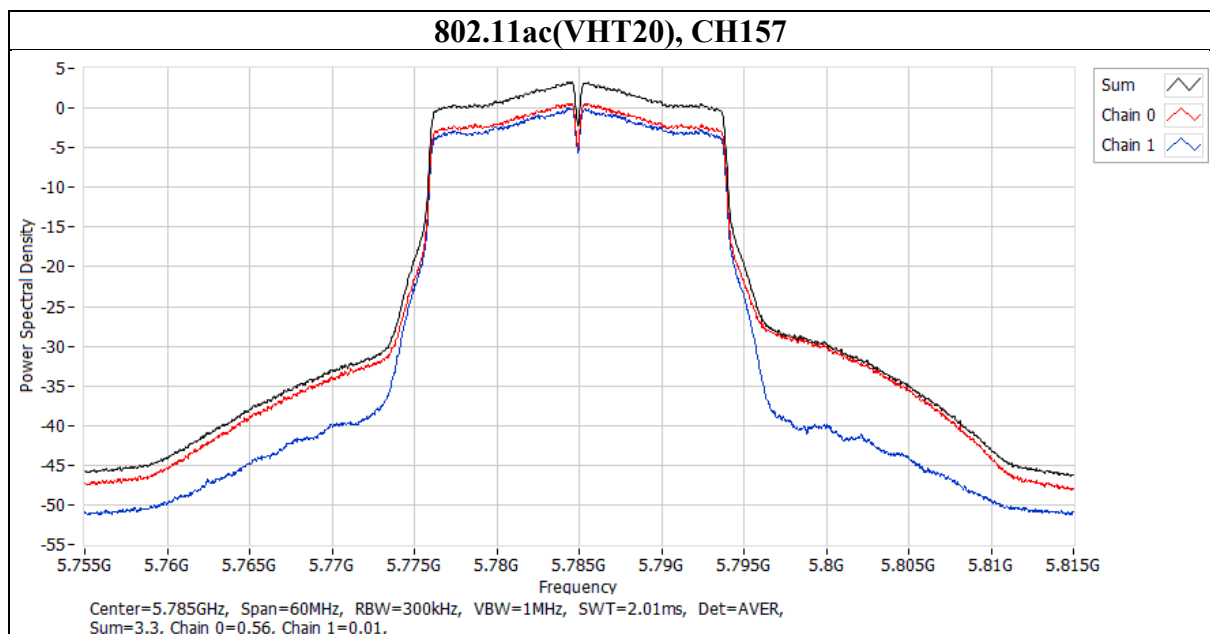
Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11a	149	5745	2.22	6.25	5.97	29.75	PASS
	157	5785	2.22	6.25	5.81	29.75	PASS
	165	5825	2.22	6.25	5.83	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11a	149	5745	1.29	0.12
	157	5785	1.14	0.03
	165	5825	0.7	0.66



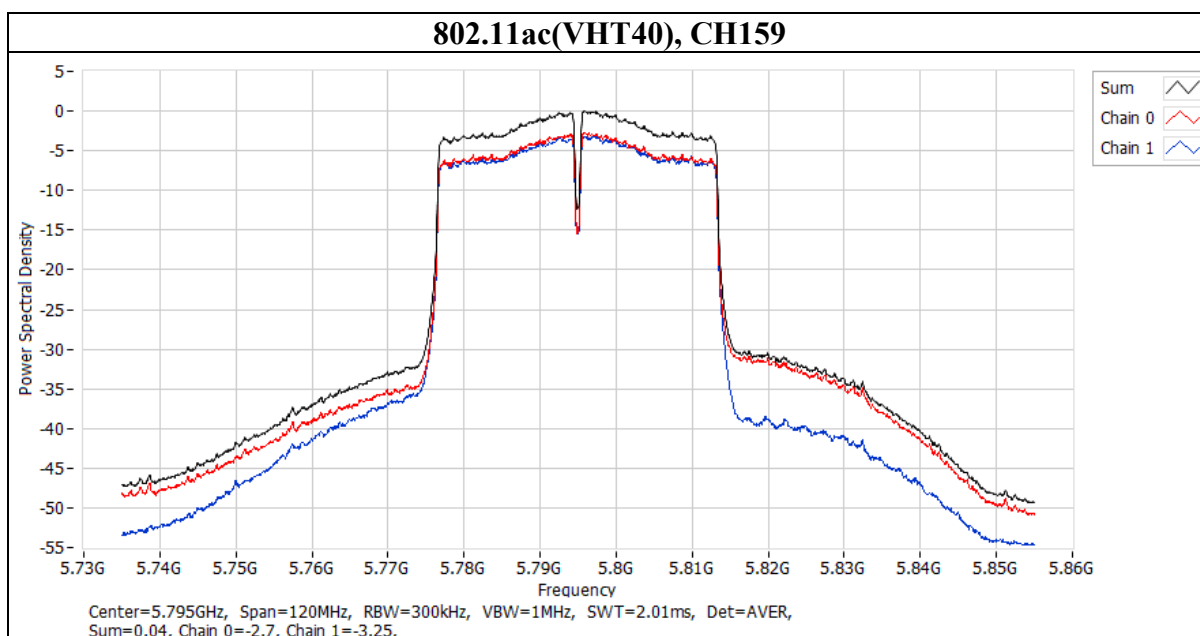
Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ac(VHT20)	149	5745	2.22	6.25	5.46	29.75	PASS
	157	5785	2.22	6.25	5.52	29.75	PASS
	165	5825	2.22	6.25	5.41	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ac(VHT20)	149	5745	0.77	-0.35
	157	5785	0.6	0.01
	165	5825	0.44	-0.03



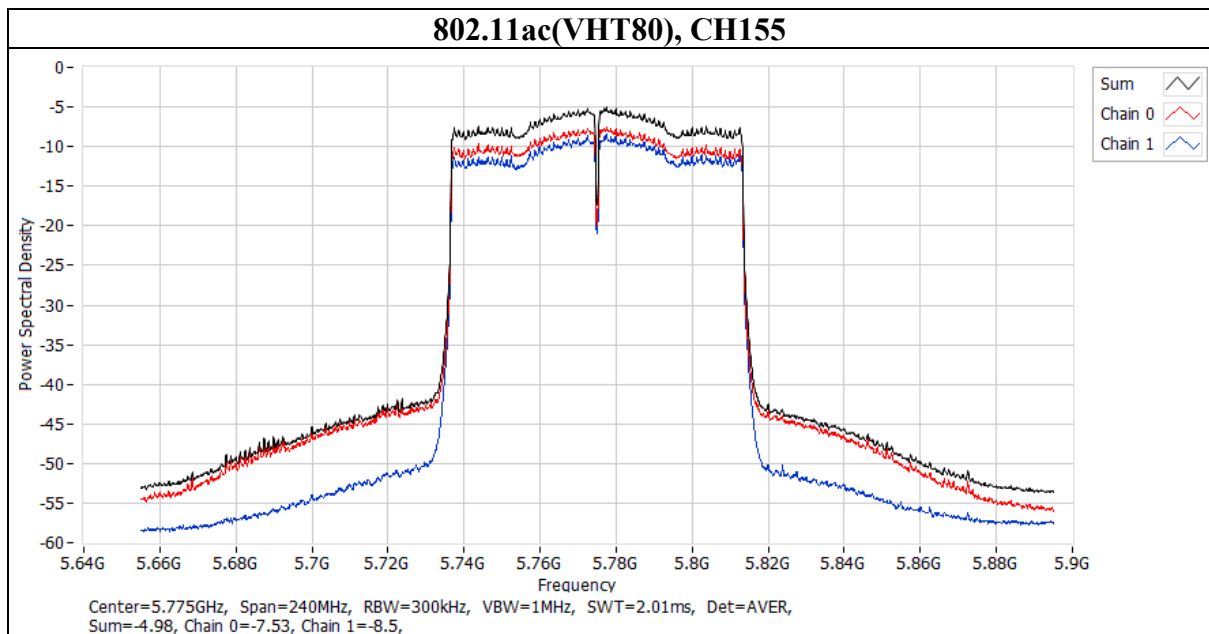
Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ac(VHT40)	151	5755	2.22	6.25	2.05	29.75	PASS
	159	5795	2.22	6.25	2.26	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ac(VHT40)	151	5755	-2.73	-3.59
	159	5795	-2.7	-3.11



Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ac(VHT80)	155	5775	2.22	6.25	-2.76	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ac(VHT80)	155	5775	-7.49	-8.5



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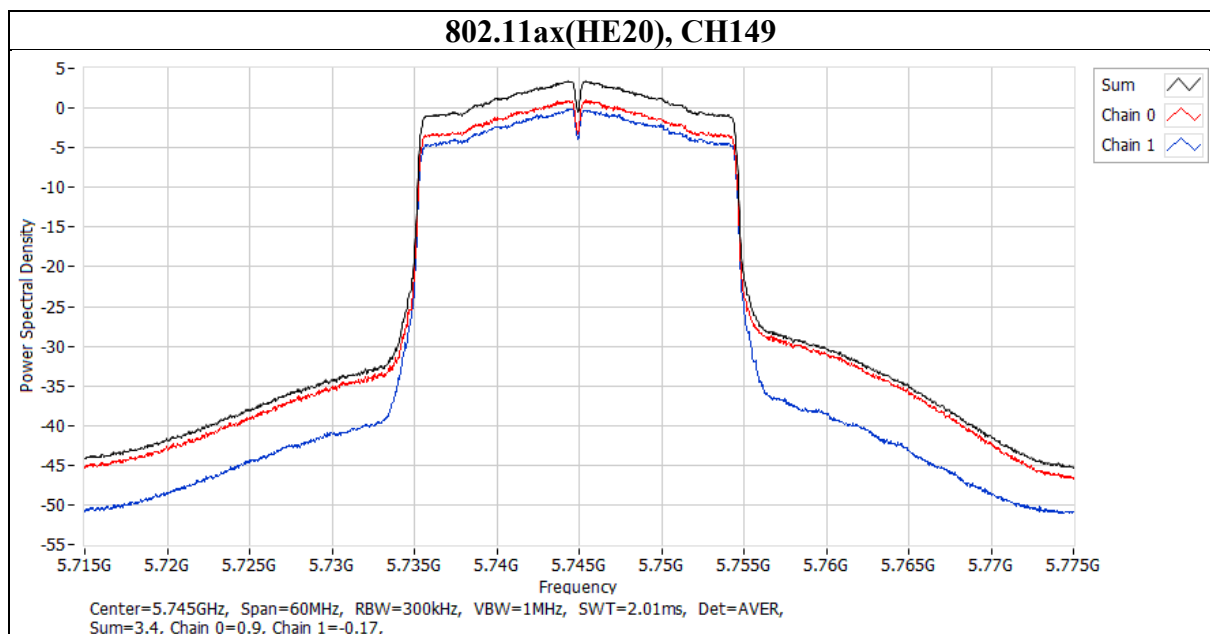
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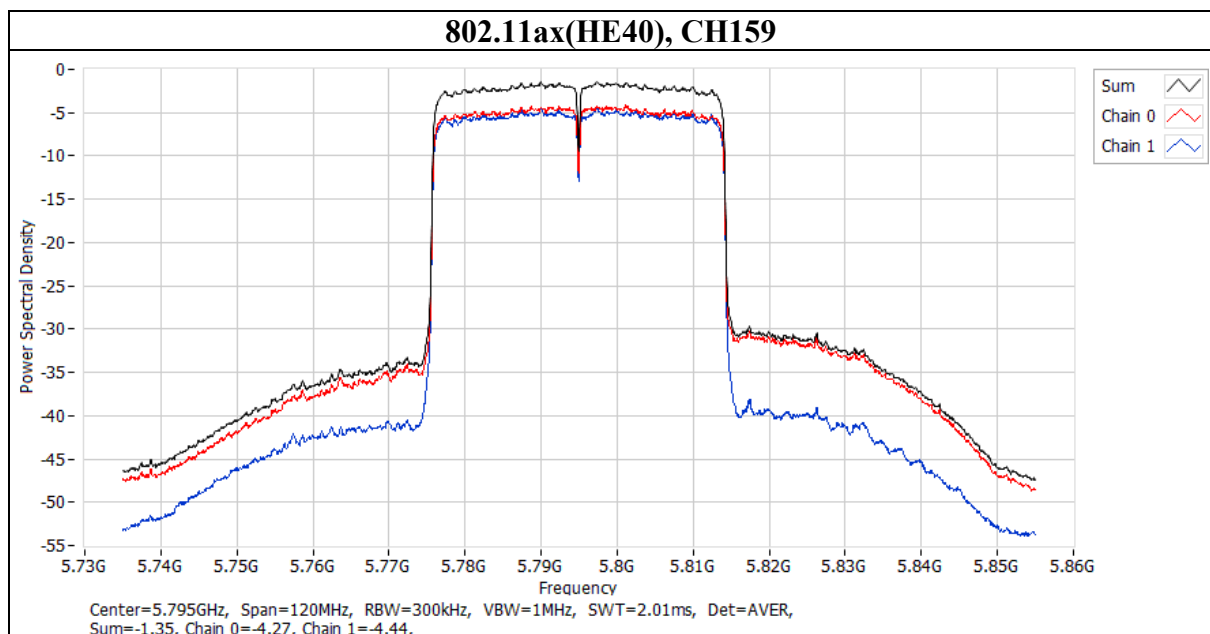
Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ax(HE20)	149	5745	2.22	6.25	5.62	29.75	PASS
	157	5785	2.22	6.25	5.54	29.75	PASS
	165	5825	2.22	6.25	5.39	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ax(HE20)	149	5745	0.97	-0.14
	157	5785	0.61	0.03
	165	5825	0.39	0.06



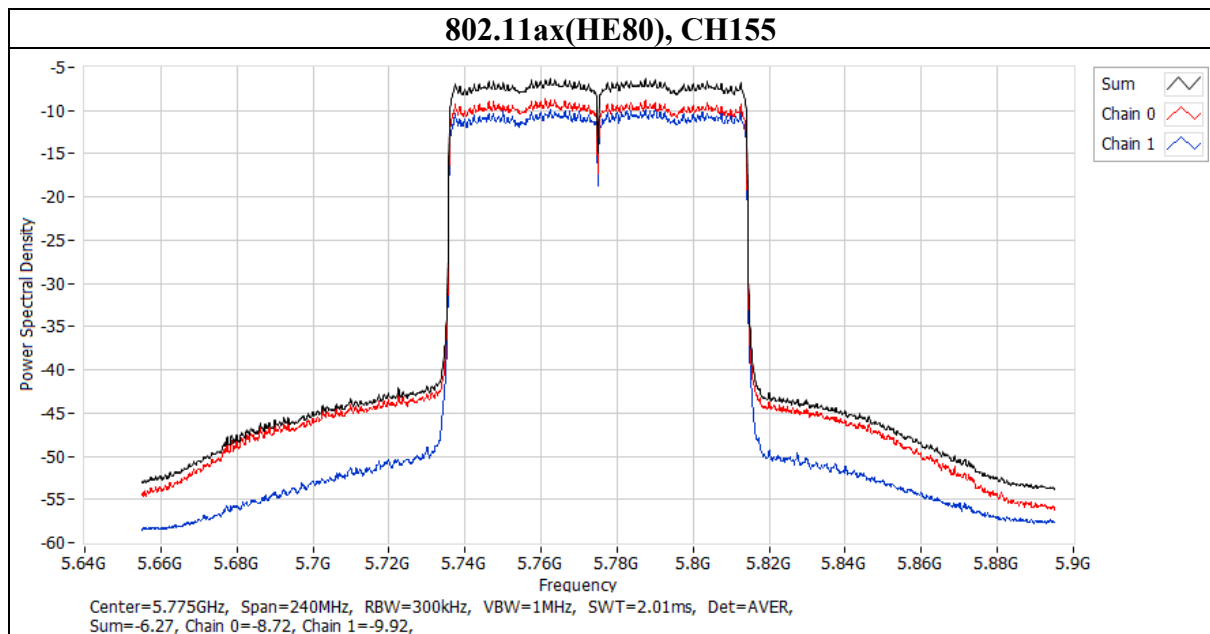
Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ax(HE40)	151	5755	2.22	6.25	0.73	29.75	PASS
	159	5795	2.22	6.25	0.87	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ax(HE40)	151	5755	-4.05	-4.76
	159	5795	-4.17	-4.44



Mode (U-NII-3)	CH	Freq (MHz)	BWCF	Directional Gain (dBi)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11ax(HE80)	155	5775	2.22	6.25	-4.05	29.75	PASS

Mode (U-NII-3)	CH	Freq (MHz)	PSD per Chain (dBm/500kHz)	
			Chain 0	Chain 1
802.11ax(HE80)	155	5775	-8.67	-9.74



9.6. Frequency Stability

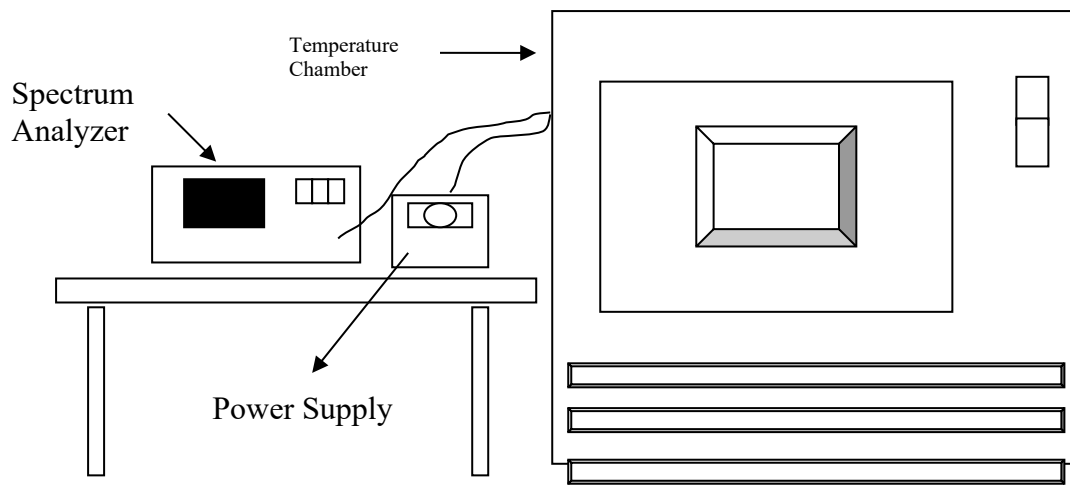
Requirements

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

Test procedure

- The EUT was placed inside the environmental test chamber and powered by nominal voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 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: 5180 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	5179.9905	-1.83	5179.9894	-2.05	5179.9934	-1.27	5179.9938	-1.20
40	120	5180	0.00	5179.9971	-0.56	5179.9983	-0.33	5179.9961	-0.75
30	120	5180.0105	2.03	5180.0096	1.85	5180.01	1.93	5180.0119	2.30
20	120	5179.9981	-0.37	5179.9962	-0.73	5179.9953	-0.91	5179.9946	-1.04
10	120	5179.9882	-2.28	5179.9878	-2.36	5179.9923	-1.49	5179.9879	-2.34
0	120	5179.9901	-1.91	5179.9877	-2.37	5179.9893	-2.07	5179.9903	-1.87
-10	120	5180.0212	4.09	5180.0209	4.03	5180.0215	4.15	5180.0218	4.21
-20	120	5179.9812	-3.63	5179.983	-3.28	5179.9797	-3.92	5179.981	-3.67
-30	120	5179.9849	-2.92	5179.9864	-2.63	5179.9851	-2.88	5179.9881	-2.30
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	5179.9984	-0.31	5179.9956	-0.85	5179.9947	-1.02	5179.9938	-1.20
20	120	5179.9981	-0.37	5179.9962	-0.73	5179.9953	-0.91	5179.9946	-1.04
20	102	5179.9978	-0.42	5179.9961	-0.75	5179.9959	-0.79	5179.9948	-1.00

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9.7. 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.

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Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK:74 (dBμV/m)	AV:54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2(dBμV/m) ^{*1} PK:105.2 (dBμV/m) ^{*2} PK: 110.8(dBμV/m) ^{*3} PK:122.2 (dBμV/m) ^{*4}
	^{*1} beyond 75 MHz or more above of the band edge. ^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. ^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		
5850~5895 MHz	RSS-247 clause 6.2.5.3	5725 MHz and below: PK:27 (dBm/MHz) ^{*1} PK:15.6 (dBm/MHz) ^{*2} PK:10 (dBm/MHz) ^{*3} PK:-27 (dBm/MHz) ^{*4} 5895 MHz and above: AV:-27 (dBm/MHz) ^{*a} AV:15&-7 (dBm/MHz) ^{*b} AV:-5&-27 (dBm/MHz) ^{*c}	5725 MHz and below: PK:122.2 (dBμV/m) ^{*1} PK:110.8 (dBμV/m) ^{*2} PK:105.2 (dBμV/m) ^{*3} PK:68.2 (dBμV/m) ^{*4} 5895 MHz and above: AV: 68.2 (dBμV/m) ^{*a} AV:110.2&88.2 (dBμV/m) ^{*b} AV:90.2&68.2 (dBμV/m) ^{*c}
	^{*1} 5 MHz below the 5725 MHz band edge. ^{*2} 5 MHz below the 5725 MHz band edge decreasing linearly to 10 dBm/MHz at 25 MHz below ^{*3} 25 MHz below the 5725 MHz band edge decreasing linearly to -27 dBm/MHz at 75 MHz below ^{*4} More than 75 MHz below the 5725 MHz band edge. ^{*a} Fixed outdoor access points and fixed outdoor client devices shall not exceed -27 dBm/MHz e.i.r.p. spectral density at or above the 5895 MHz band edge. ^{*b} Indoor access points or indoor subordinate devices shall not exceed 15 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -7 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz. ^{*c} Client devices shall not exceed -5 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -27 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.		

Note:

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

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

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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.

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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 $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) 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 "*" = Only required peak limit or the peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.

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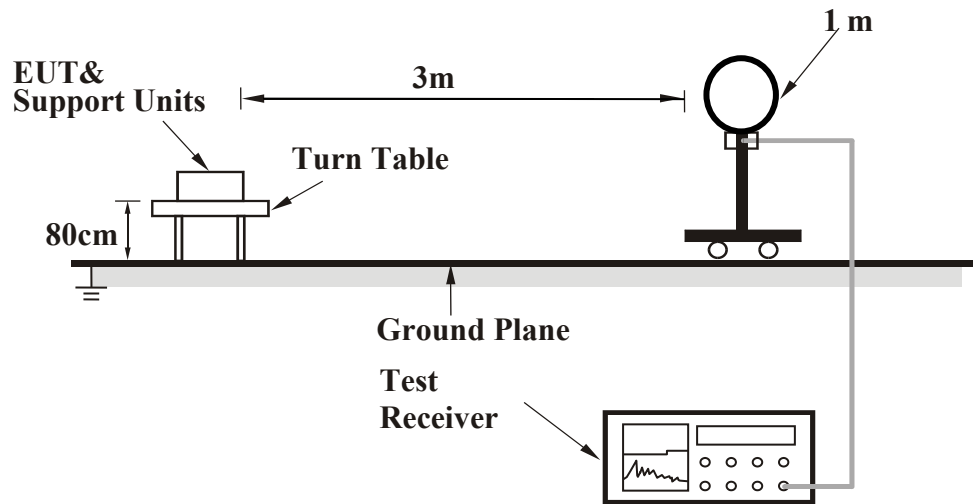
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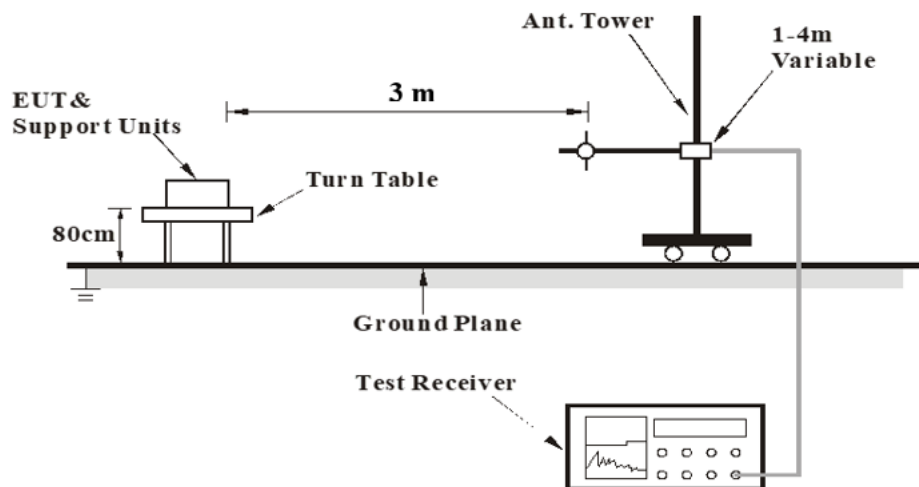
Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

Test Setup

<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz>



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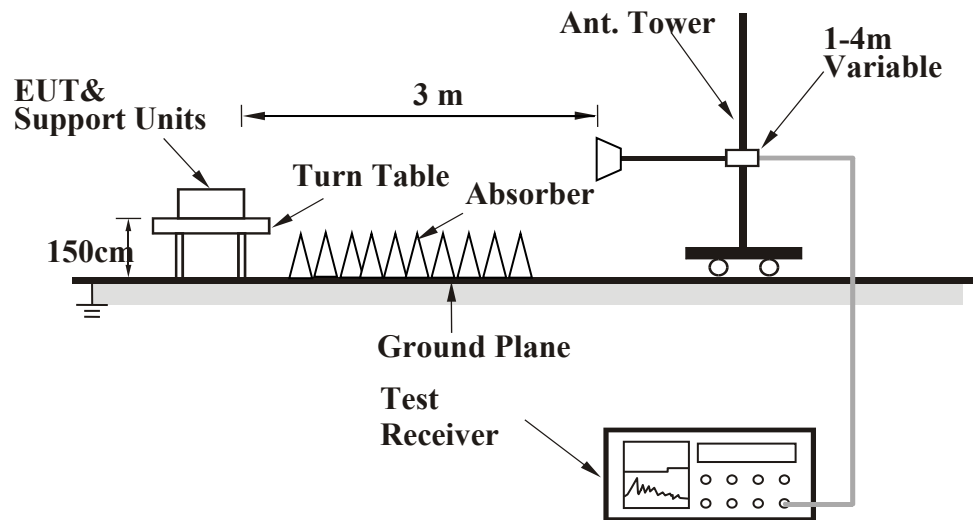
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<Frequency Range above 1 GHz>



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

Test Data

Above 1 GHz

Mode	802.11a	Channel	36
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5141.75	43.9	20.18	64.08	74	-9.92	PK
		5149.8	31.59	20.17	51.76	54	-2.24	AVG
	@	5180	87.11	20.01	107.12	N/A	N/A	PK
	@	5180	81.33	20.01	101.34	N/A	N/A	AVG
Vertical		5111.3	30.57	20.21	50.78	54	-3.22	AVG
		5138.95	43.96	20.18	64.14	74	-9.86	PK
	@	5180	82.79	20.01	102.8	N/A	N/A	PK
	@	5180	76.09	20.01	96.1	N/A	N/A	AVG

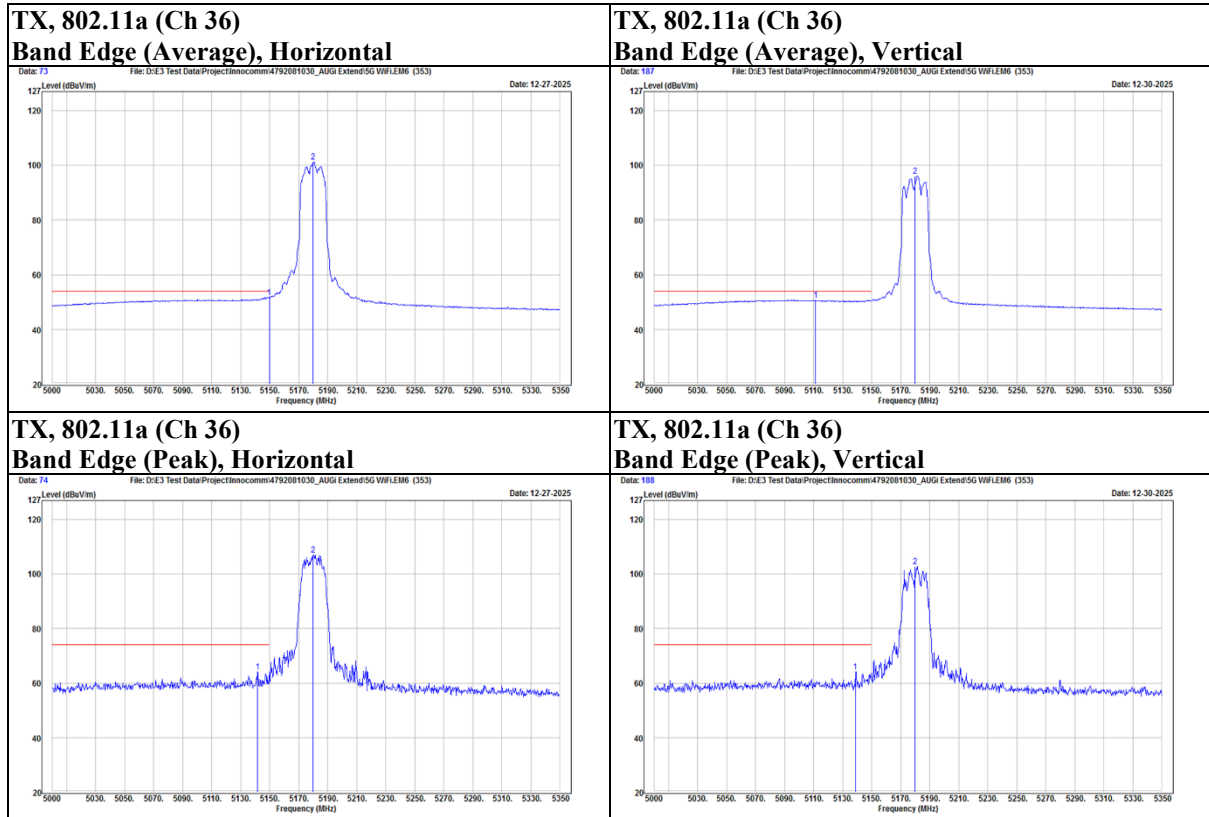
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Mode	802.11a	Channel	44
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5094.85	30.5	20.18	50.68	54	-3.32	AVG
		5110.6	41.64	20.22	61.86	74	-12.14	PK
	@	5220	88.91	19.92	108.83	N/A	N/A	PK
	@	5220	81.49	19.92	101.41	N/A	N/A	AVG
Vertical		5095.9	30.37	20.19	50.56	54	-3.44	AVG
		5104.3	41.55	20.22	61.77	74	-12.23	PK
	@	5220	86.2	19.92	106.12	N/A	N/A	PK
	@	5220	78.8	19.92	98.72	N/A	N/A	AVG

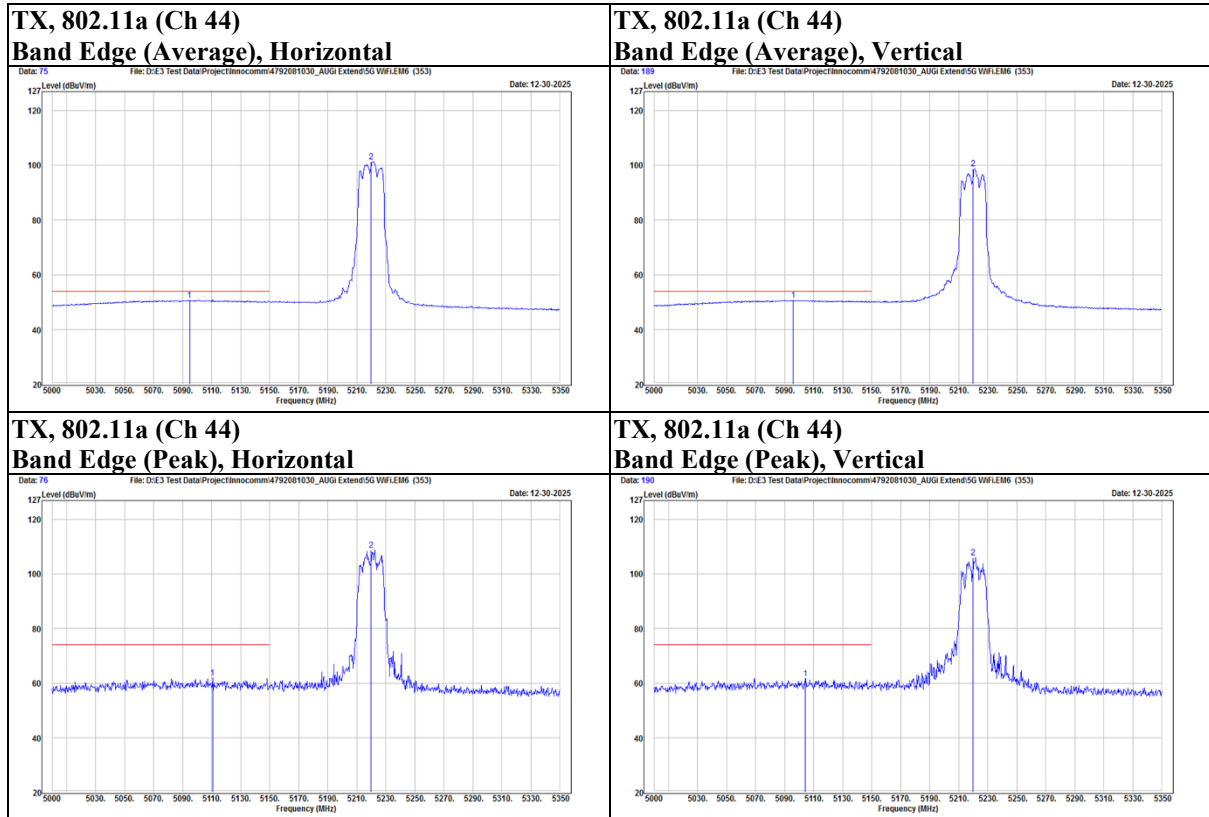
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Mode	802.11a	Channel	48
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5094.15	30.41	20.17	50.58	54	-3.42	AVG
		5123.55	41.31	20.21	61.52	74	-12.48	PK
	@	5240	89.15	19.94	109.09	N/A	N/A	PK
	@	5240	82.55	19.94	102.49	N/A	N/A	AVG
Vertical		5058.8	42.57	19.8	62.37	74	-11.63	PK
		5100.1	30.54	20.24	50.78	54	-3.22	AVG
	@	5240	86.24	19.94	106.18	N/A	N/A	PK
	@	5240	79.56	19.94	99.5	N/A	N/A	AVG

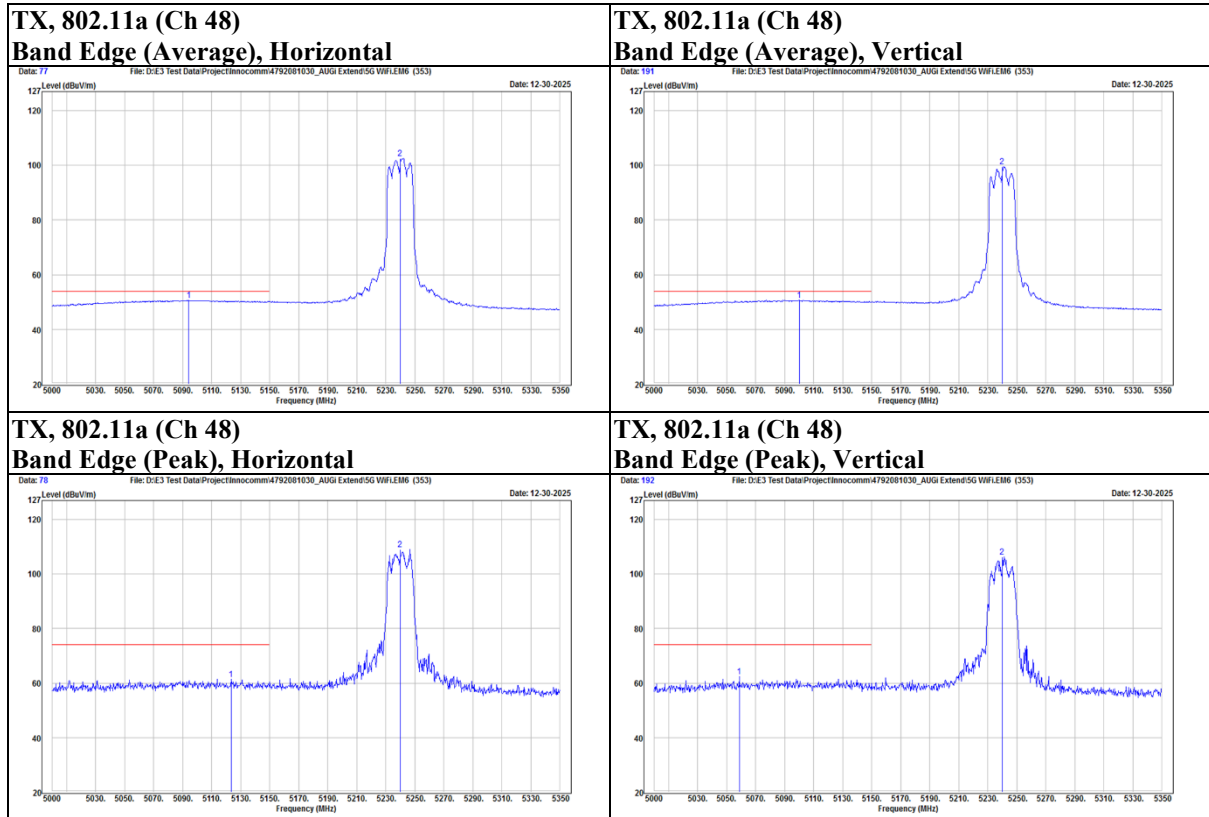
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Mode	802.11a	Channel	52
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5260	90.42	19.93	110.35	N/A	N/A	PK
	@	5260	83.09	19.93	103.02	N/A	N/A	AVG
		5453.7	27.98	20.81	48.79	54	-5.21	AVG
		5457	39.1	20.83	59.93	74	-14.07	PK
Vertical	@	5260	86.14	19.93	106.07	N/A	N/A	PK
	@	5260	78.78	19.93	98.71	N/A	N/A	AVG
		5448.9	38.72	20.76	59.48	74	-14.52	PK
		5458.8	27.92	20.85	48.77	54	-5.23	AVG

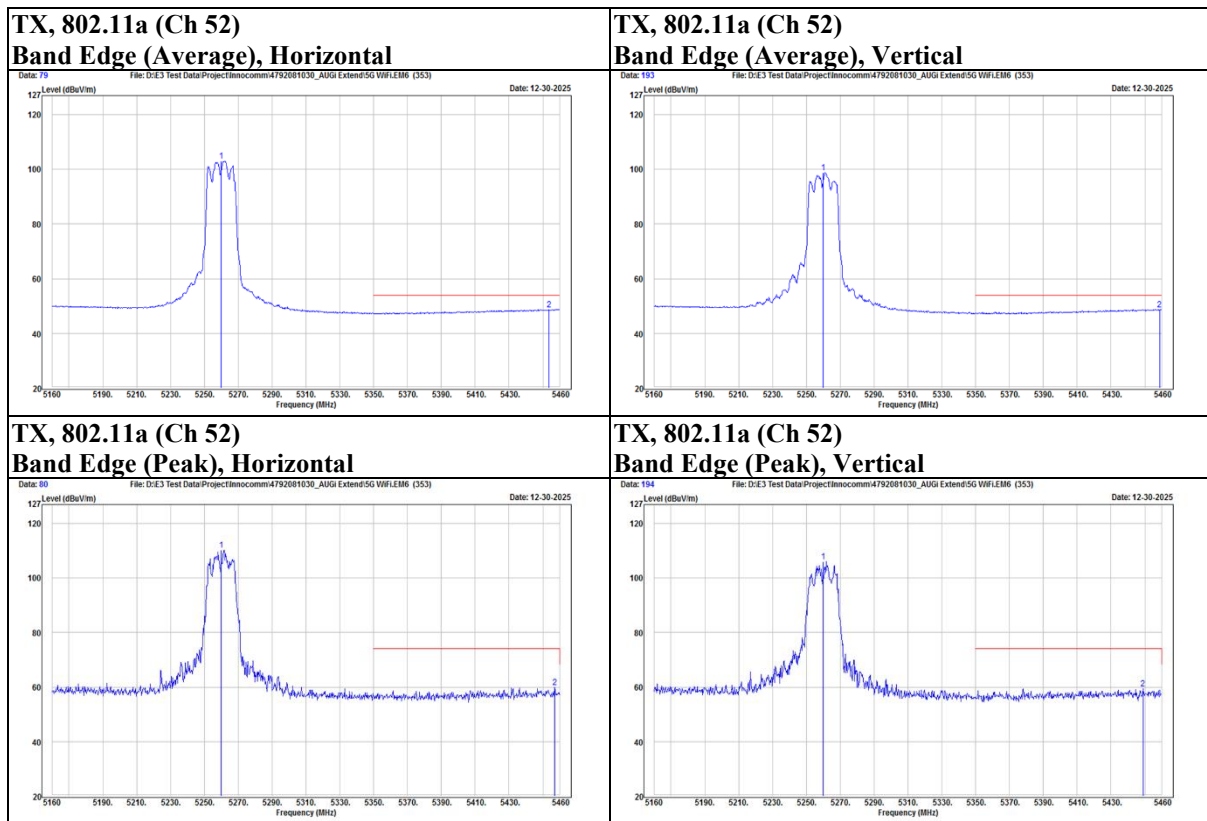
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Mode	802.11a	Channel	60
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5300	89.85	19.87	109.72	N/A	N/A	PK
	@	5300	82.83	19.87	102.7	N/A	N/A	AVG
		5413.8	39.71	20.39	60.1	74	-13.9	PK
		5457.6	27.96	20.85	48.81	54	-5.19	AVG
Vertical	@	5300	83.88	19.87	103.75	N/A	N/A	PK
	@	5300	77.9	19.87	97.77	N/A	N/A	AVG
		5435.4	39.4	20.62	60.02	74	-13.98	PK
		5457.3	27.86	20.84	48.7	54	-5.3	AVG

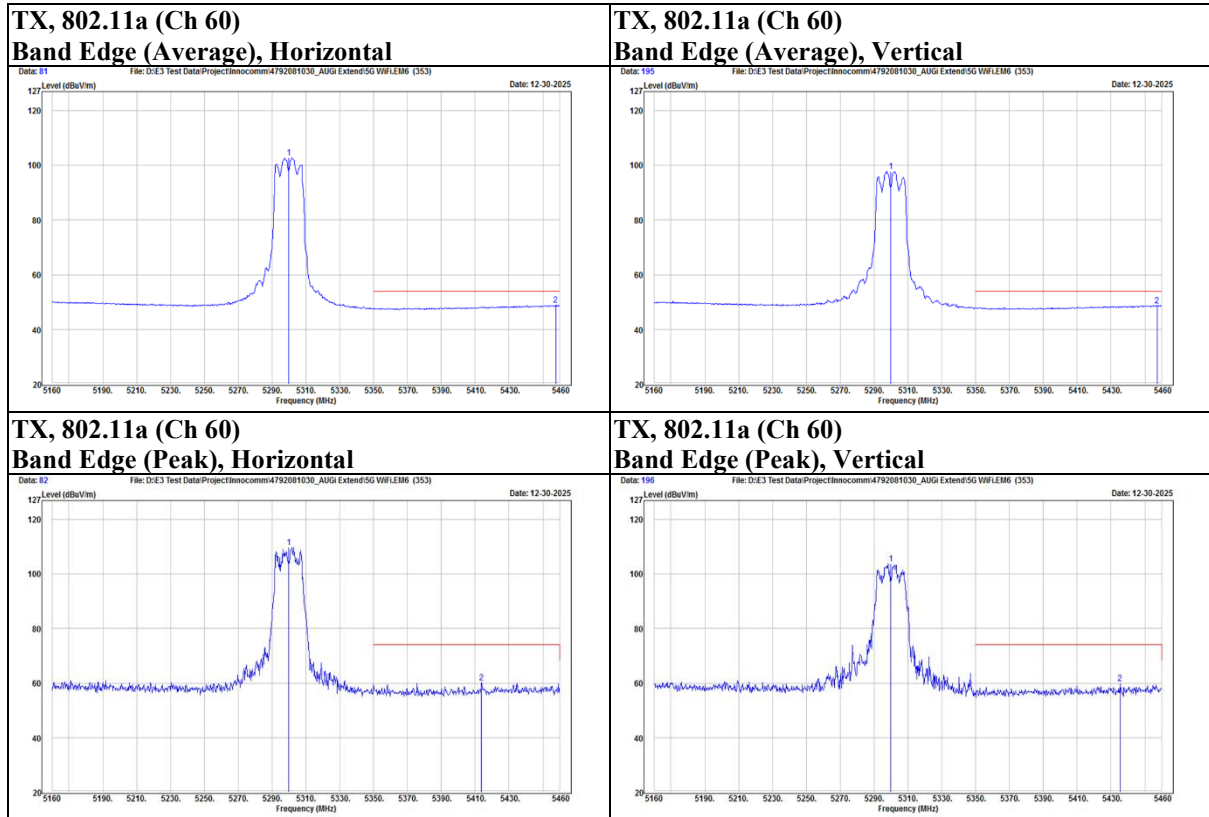
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Mode	802.11a	Channel	64
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5320	88.26	19.85	108.11	N/A	N/A	PK
	@	5320	81.4	19.85	101.25	N/A	N/A	AVG
		5350.2	47.1	19.81	66.91	74	-7.09	PK
		5350.2	30	19.81	49.81	54	-4.19	AVG
Vertical	@	5320	86.08	19.85	105.93	N/A	N/A	PK
	@	5320	77.35	19.85	97.2	N/A	N/A	AVG
		5352.3	30.71	19.83	50.54	54	-3.46	AVG
		5353.2	42.7	19.84	62.54	74	-11.46	PK

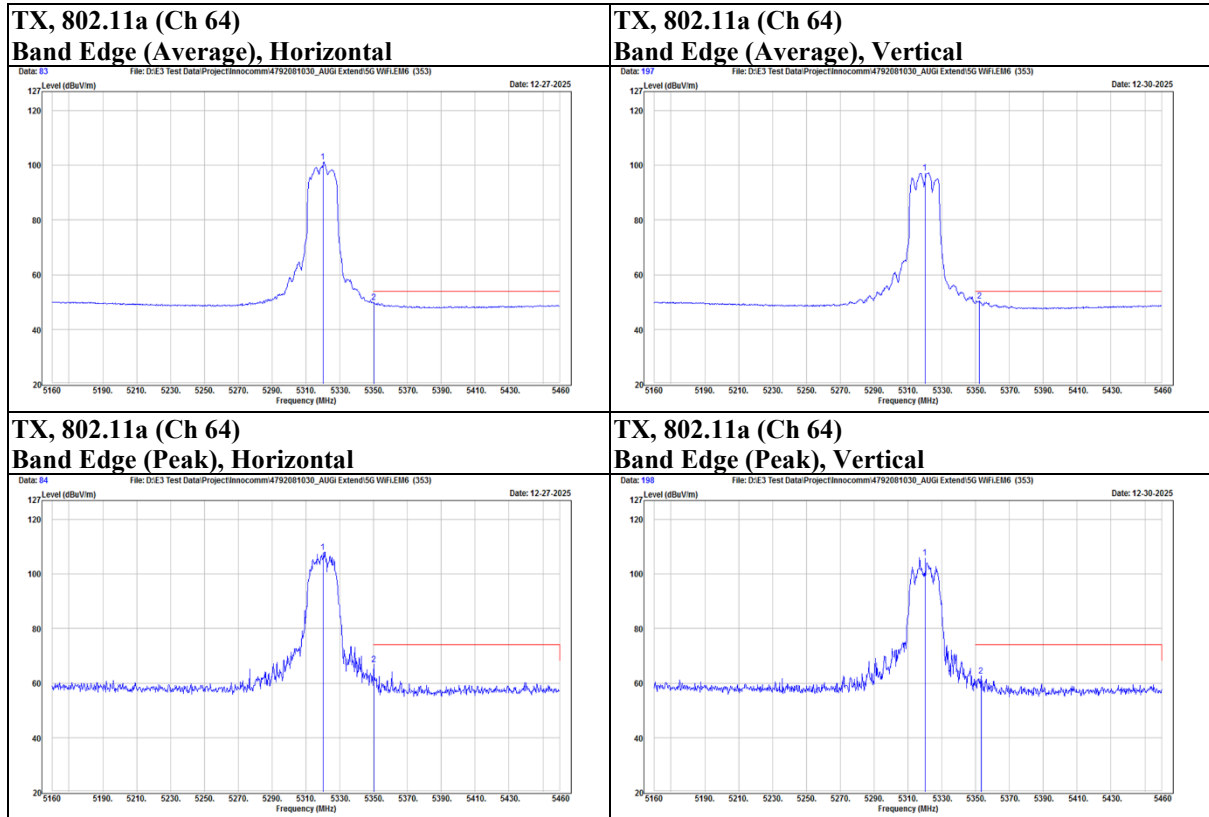
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Mode	802.11a	Channel	100
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5445.85	41.95	20.74	62.69	74	-11.31	PK
		5459.85	30.97	20.87	51.84	54	-2.16	AVG
		5463.35	44.36	20.89	65.25	68.2	-2.95	PK
	@	5500	86.33	21.21	107.54	N/A	N/A	PK
	@	5500	79.41	21.21	100.62	N/A	N/A	AVG
Vertical		5455.3	41.01	20.82	61.83	74	-12.17	PK
		5459.15	29.74	20.85	50.59	54	-3.41	AVG
		5468.6	42.85	20.94	63.79	68.2	-4.41	PK
	@	5500	80.73	21.21	101.94	N/A	N/A	PK
	@	5500	74.91	21.21	96.12	N/A	N/A	AVG

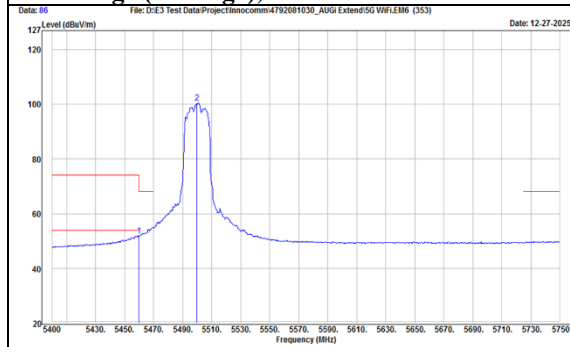
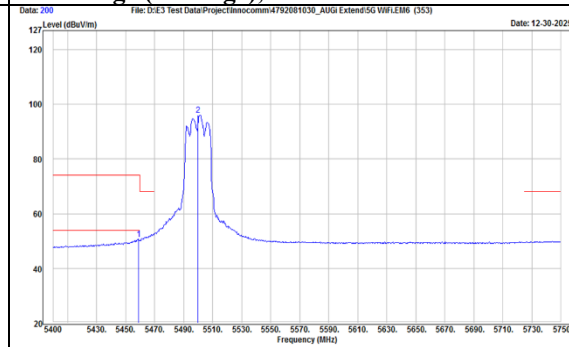
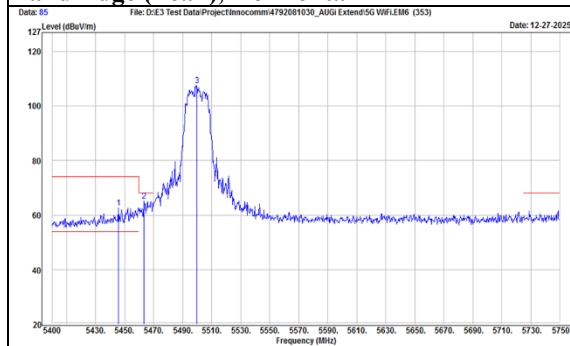
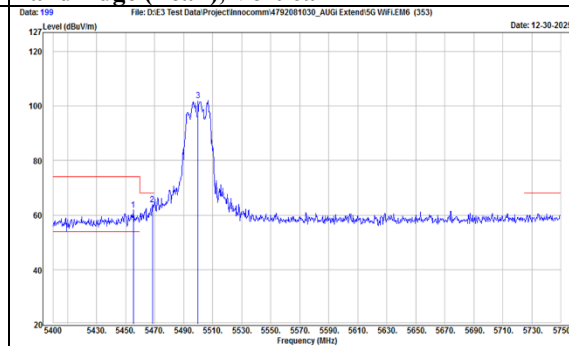
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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

TX, 802.11a (Ch 100)
Band Edge (Average), Horizontal

TX, 802.11a (Ch 100)
Band Edge (Average), Vertical

TX, 802.11a (Ch 100)
Band Edge (Peak), Horizontal

TX, 802.11a (Ch 100)
Band Edge (Peak), Vertical


Mode	802.11a	Channel	116
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5453.55	27.87	20.81	48.68	54	-5.32	AVG
		5459.5	39.24	20.86	60.1	74	-13.9	PK
		5469.3	38.41	20.95	59.36	68.2	-8.84	PK
	@	5580	85.85	21.1	106.95	N/A	N/A	PK
	@	5580	79.23	21.1	100.33	N/A	N/A	AVG
		5737.4	39.54	21.55	61.09	68.2	-7.11	PK
Vertical		5448.65	38.31	20.76	59.07	74	-14.93	PK
		5454.25	27.86	20.82	48.68	54	-5.32	AVG
		5468.95	38.25	20.94	59.19	68.2	-9.01	PK
	@	5580	81.95	21.1	103.05	N/A	N/A	PK
	@	5580	73.17	21.1	94.27	N/A	N/A	AVG
		5741.95	39.41	21.59	61	68.2	-7.2	PK

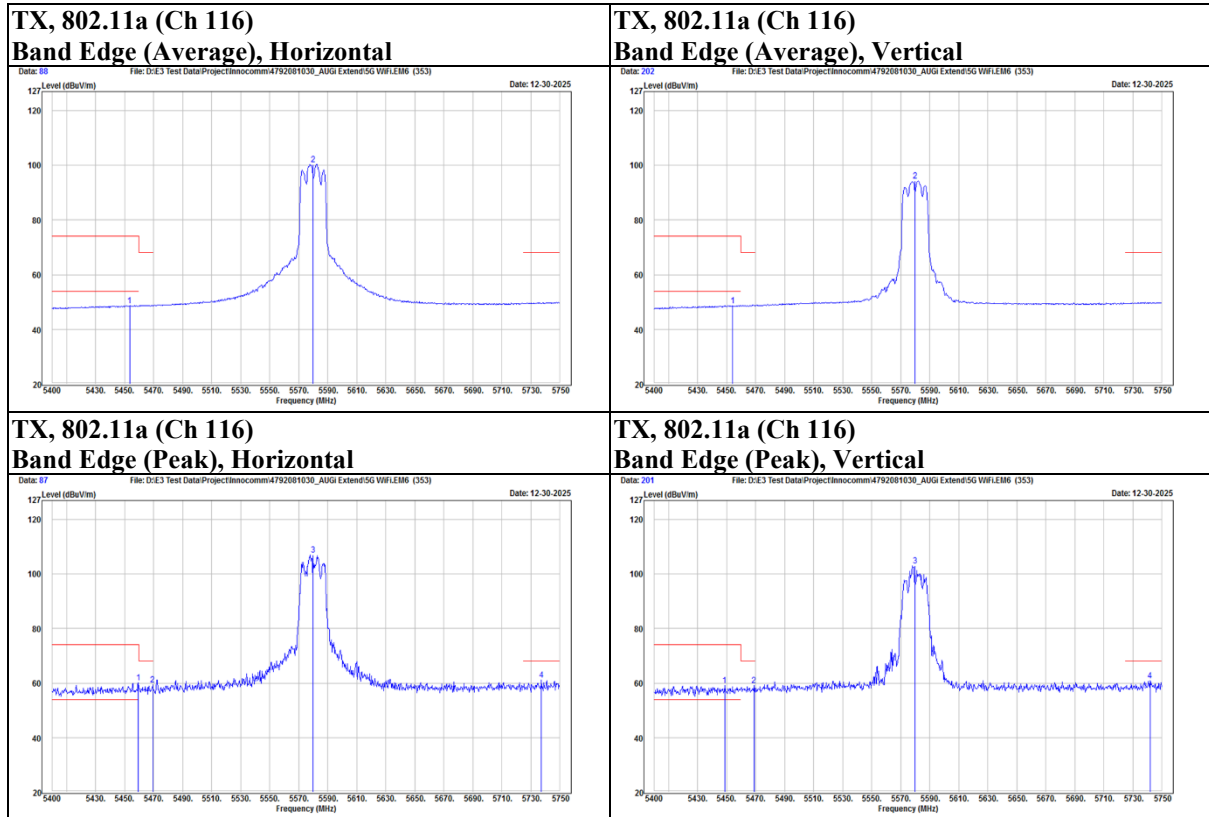
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Mode	802.11a	Channel	140
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5453.2	39.23	20.81	60.04	74	-13.96	PK
		5456	27.94	20.83	48.77	54	-5.23	AVG
		5468.95	38.43	20.94	59.37	68.2	-8.83	PK
	@	5700	86.73	21.23	107.96	N/A	N/A	PK
	@	5700	79.09	21.23	100.32	N/A	N/A	AVG
		5725.15	45.78	21.45	67.23	68.2	-0.97	PK
Vertical		5445.15	39.1	20.73	59.83	74	-14.17	PK
		5455.3	27.9	20.82	48.72	54	-5.28	AVG
		5467.2	38.65	20.93	59.58	68.2	-8.62	PK
	@	5700	80.91	21.23	102.14	N/A	N/A	PK
	@	5700	73.5	21.23	94.73	N/A	N/A	AVG
		5732.85	39.94	21.52	61.46	68.2	-6.74	PK

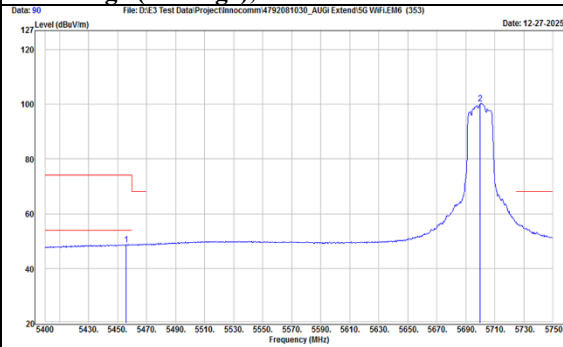
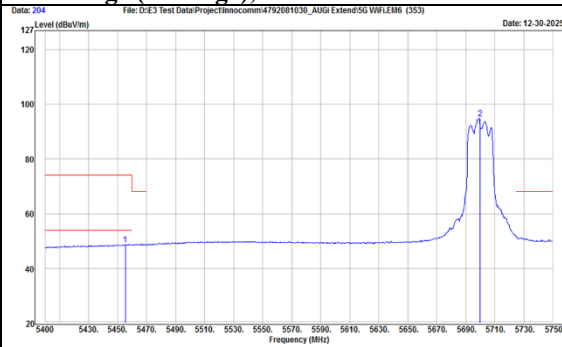
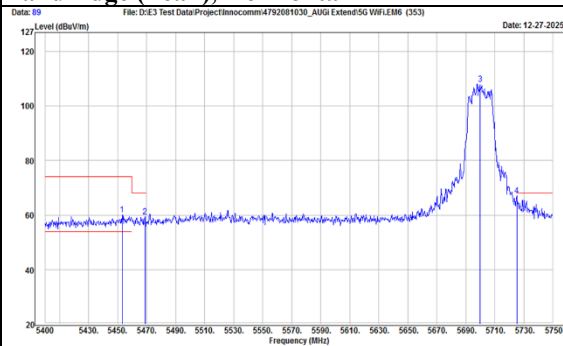
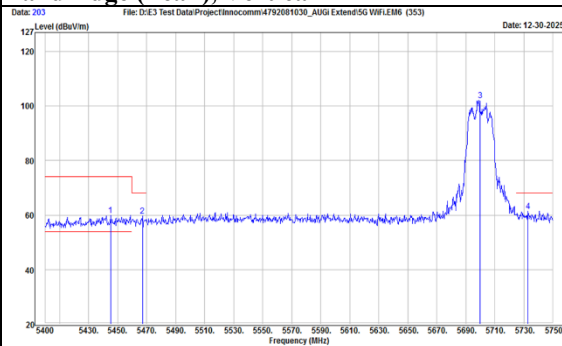
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TX, 802.11a (Ch 140)
Band Edge (Average), Horizontal

TX, 802.11a (Ch 140)
Band Edge (Average), Vertical

TX, 802.11a (Ch 140)
Band Edge (Peak), Horizontal

TX, 802.11a (Ch 140)
Band Edge (Peak), Vertical


Mode	802.11a	Channel	149
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5579.5	40.23	21.1	61.33	68.2	-6.87	PK
		5687	40.87	21.2	62.07	95.61	-33.54	PK
	@	5745	85.51	21.62	107.13	N/A	N/A	PK
Vertical		5555	40.47	21.14	61.61	68.2	-6.59	PK
		5697.5	40.9	21.23	62.13	103.36	-41.23	PK
	@	5745	80.73	21.62	102.35	N/A	N/A	PK

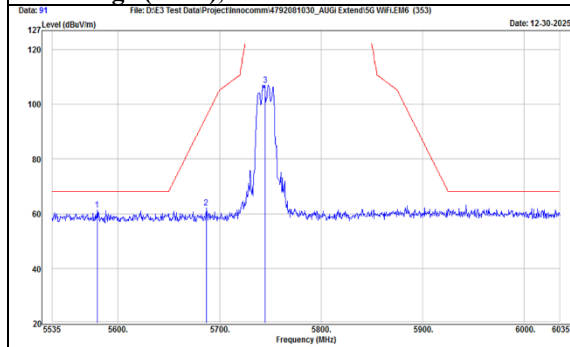
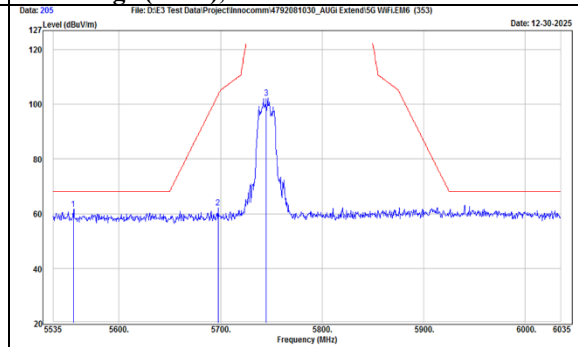
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TX, 802.11a (Ch 149)**Band Edge (Peak), Horizontal****TX, 802.11a (Ch 149)****Band Edge (Peak), Vertical****Underwriters Laboratories Taiwan Co., Ltd.**

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Mode	802.11a	Channel	157
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5551	39.7	21.14	60.84	68.2	-7.36	PK
		5681.5	40.07	21.18	61.25	91.55	-30.3	PK
	@	5785	86.16	21.89	108.05	N/A	N/A	PK
		5882.5	39.86	22.64	62.5	99.63	-37.13	PK
		5978	39.25	22.81	62.06	68.2	-6.14	PK
Vertical		5641.5	40.06	21.1	61.16	68.2	-7.04	PK
		5699.5	39.13	21.23	60.36	104.83	-44.47	PK
	@	5785	81.94	21.89	103.83	N/A	N/A	PK
		5891.5	40.42	22.7	63.12	92.96	-29.84	PK
		5931.5	39.96	22.69	62.65	68.2	-5.55	PK

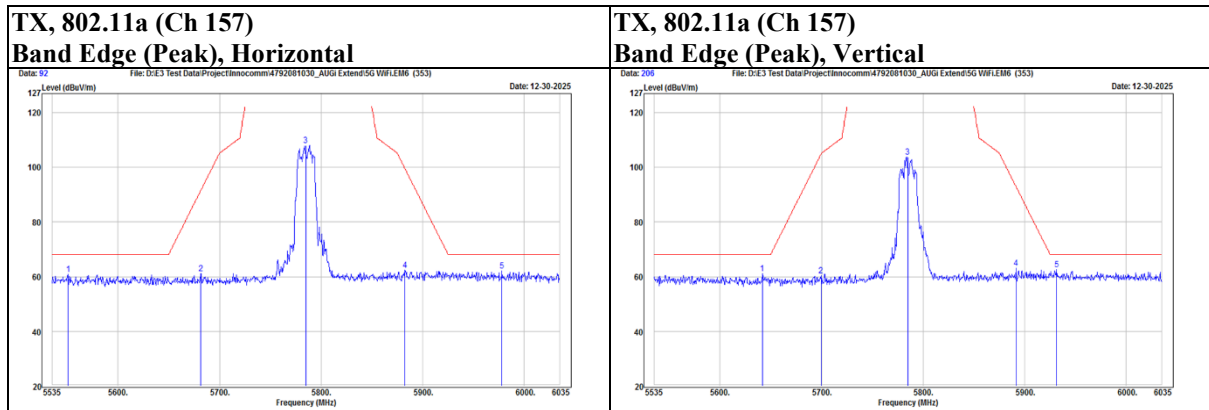
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Mode	802.11a	Channel	165
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5825	85.82	22.21	108.03	N/A	N/A	PK
		5899	39.71	22.74	62.45	87.4	-24.95	PK
		5961	39.93	22.73	62.66	68.2	-5.54	PK
Vertical	@	5825	83.82	22.21	106.03	N/A	N/A	PK
		5914	40.26	22.72	62.98	76.31	-13.33	PK
		5936	40.42	22.7	63.12	68.2	-5.08	PK

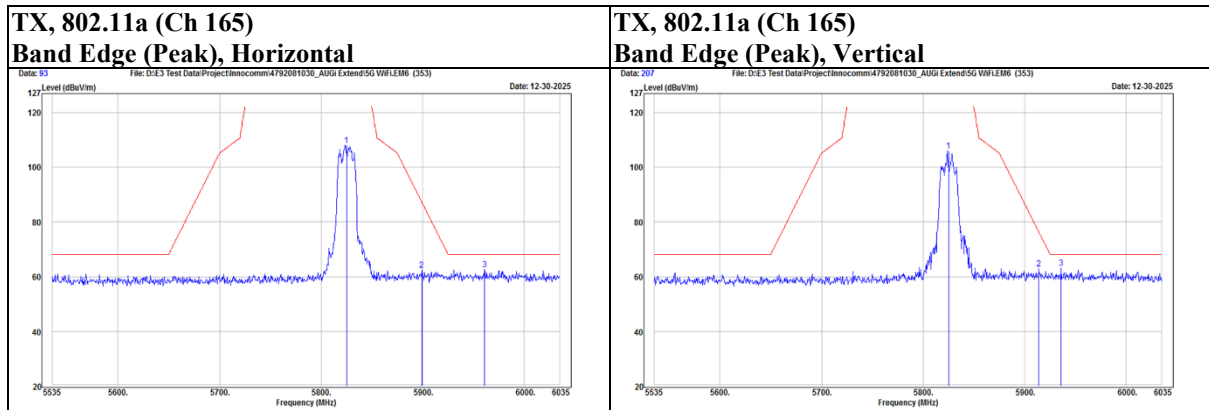
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Mode	802.11a - Emission	Channel	36
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10360	31.27	21.35	52.62	68.2	-15.58	PK
		14500	28.29	28.9	57.19	68.2	-11.01	PK
		14500	20.02	28.9	48.92	54	-5.08	AVG
		15340	28.78	26.5	55.28	68.2	-12.92	PK
		15340	19.95	26.5	46.45	54	-7.55	AVG
	*	20720	32.53	4.98	37.51	74	-36.49	PK
	*	25900	34.54	10.72	45.26	68.2	-22.94	PK
	*	31080	33.37	13.27	46.64	68.2	-21.56	PK
	*	36260	36.88	13.44	50.32	68.2	-17.88	PK
		38848	39.4	16.23	55.63	74	-18.37	PK
		38848	29.56	16.23	45.79	54	-8.21	AVG
Vertical	*	10360	30.71	21.35	52.06	68.2	-16.14	PK
		14500	28.23	28.9	57.13	68.2	-11.07	PK
		14500	19.96	28.9	48.86	54	-5.14	AVG
		15445	29.63	25.86	55.49	74	-18.51	PK
		15445	20.8	25.86	46.66	54	-7.34	AVG
	*	20720	32.6	4.98	37.58	74	-36.42	PK
	*	25900	34.36	10.72	45.08	68.2	-23.12	PK
	*	31080	34.05	13.27	47.32	68.2	-20.88	PK
	*	36260	37.34	13.44	50.78	68.2	-17.42	PK
		39640	37.95	17.49	55.44	74	-18.56	PK
		39640	28.11	17.49	45.6	54	-8.4	AVG

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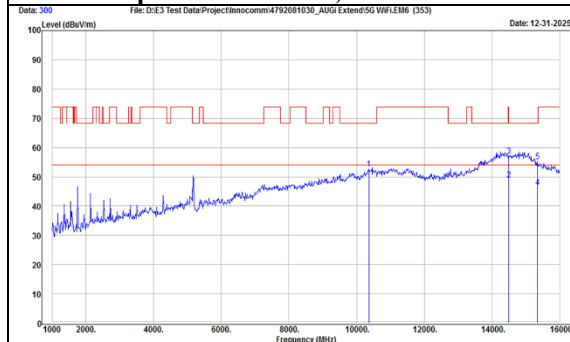
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

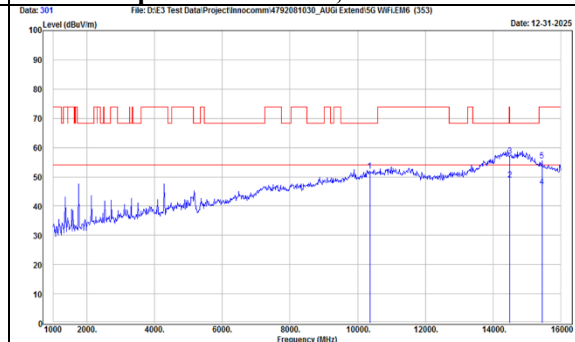
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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

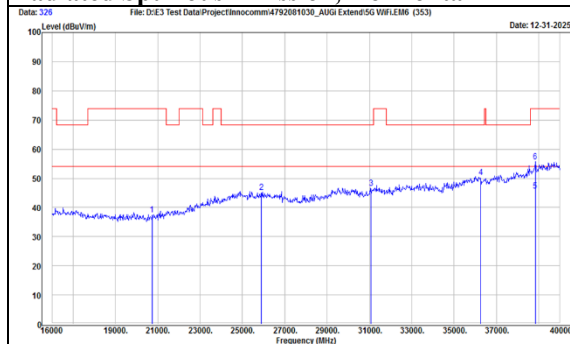
TX, 802.11a - Emission (Ch 36)
Radiated Spurious Emission, Horizontal



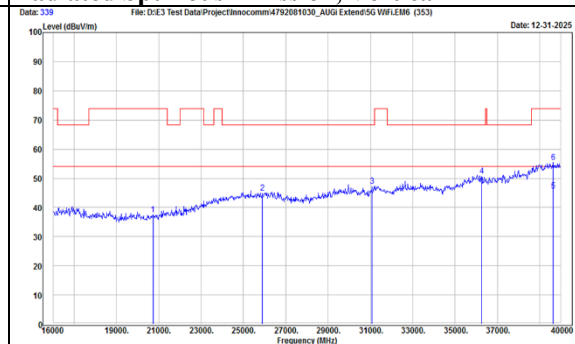
TX, 802.11a - Emission (Ch 36)
Radiated Spurious Emission, Vertical



TX, 802.11a - Emission (Ch 36)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 36)
Radiated Spurious Emission, Vertical



Mode	802.11a - Emission	Channel	44
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10440	30.55	21.74	52.29	68.2	-15.91	PK
		14470	28.44	28.86	57.3	68.2	-10.9	PK
		14470	20.17	28.86	49.03	54	-4.97	AVG
		15340	29.35	26.5	55.85	68.2	-12.35	PK
		15340	20.52	26.5	47.02	54	-6.98	AVG
	*	20880	33.09	5.19	38.28	74	-35.72	PK
	*	26100	34.05	10.69	44.74	68.2	-23.46	PK
	*	31320	33.02	14.24	47.26	74	-26.74	PK
	*	36540	36.89	12.59	49.48	68.2	-18.72	PK
		39808	37.9	17.77	55.67	74	-18.33	PK
		39808	28.06	17.77	45.83	54	-8.17	AVG
Vertical	*	10440	30.29	21.74	52.03	68.2	-16.17	PK
		14485	27.85	28.88	56.73	74	-17.27	PK
		14485	19.58	28.88	48.46	54	-5.54	AVG
		15340	27.39	26.5	53.89	68.2	-14.31	PK
		15340	18.56	26.5	45.06	54	-8.94	AVG
		20960	32.28	5.28	37.56	74	-36.44	PK
		26200	35.27	10.75	46.02	68.2	-22.18	PK
		31440	33.27	13.67	46.94	74	-27.06	PK
		36680	37.3	12.83	50.13	68.2	-18.07	PK
		39040	38.41	16.78	55.19	74	-18.81	PK
		39040	28.57	16.78	45.35	54	-8.65	AVG

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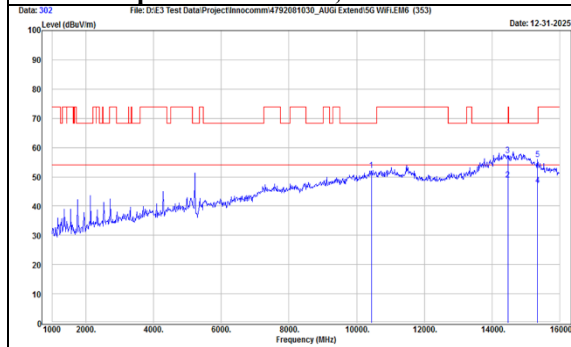
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone : +886-2-7737-3000

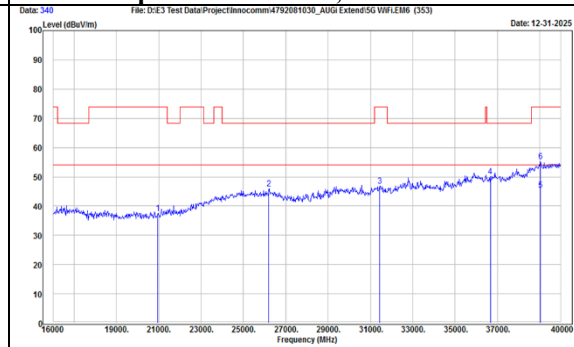
Facsimile (FAX) : +886-3-583-7948

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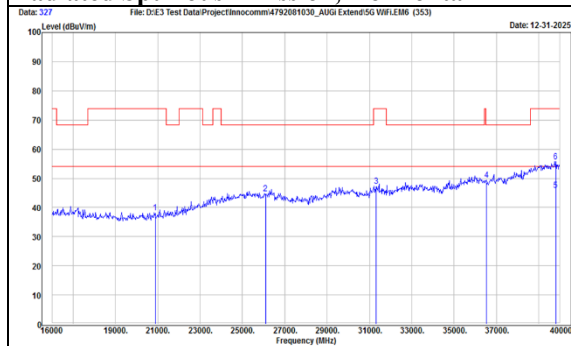
TX, 802.11a - Emission (Ch 44)
Radiated Spurious Emission, Horizontal



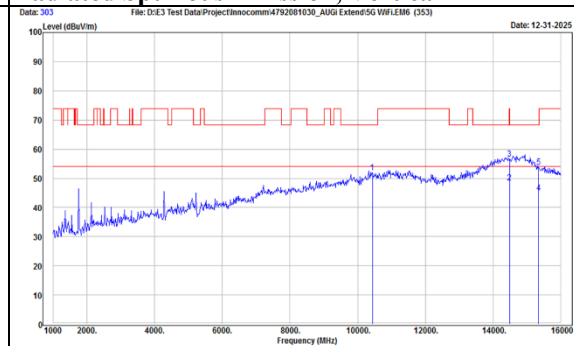
TX, 802.11a - Emission (Ch 44)
Radiated Spurious Emission, Vertical



TX, 802.11a - Emission (Ch 44)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 44)
Radiated Spurious Emission, Vertical



Mode	802.11a - Emission	Channel	48
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10480	29.51	21.89	51.4	68.2	-16.8	PK
		14500	27.77	28.9	56.67	68.2	-11.53	PK
		14500	19.5	28.9	48.4	54	-5.6	AVG
		15310	27.33	26.72	54.05	68.2	-14.15	PK
		15310	18.5	26.72	45.22	54	-8.78	AVG
	*	20960	32.12	5.28	37.4	74	-36.6	PK
	*	26200	34.28	10.75	45.03	68.2	-23.17	PK
	*	31440	33.5	13.67	47.17	74	-26.83	PK
	*	36680	37.13	12.83	49.96	68.2	-18.24	PK
		39832	38.64	17.82	56.46	74	-17.54	PK
		39832	28.8	17.82	46.62	54	-7.38	AVG
Vertical	*	10480	29.03	21.89	50.92	68.2	-17.28	PK
		14470	27.82	28.86	56.68	68.2	-11.52	PK
		14470	19.55	28.86	48.41	54	-5.59	AVG
		15340	29.28	26.5	55.78	68.2	-12.42	PK
		15340	20.45	26.5	46.95	54	-7.05	AVG
	*	20960	32.49	5.28	37.77	74	-36.23	PK
	*	26200	36.07	10.75	46.82	68.2	-21.38	PK
	*	31440	33.98	13.67	47.65	74	-26.35	PK
	*	36680	37.26	12.83	50.09	68.2	-18.11	PK
		39016	38.63	16.72	55.35	74	-18.65	PK
		39016	28.79	16.72	45.51	54	-8.49	AVG

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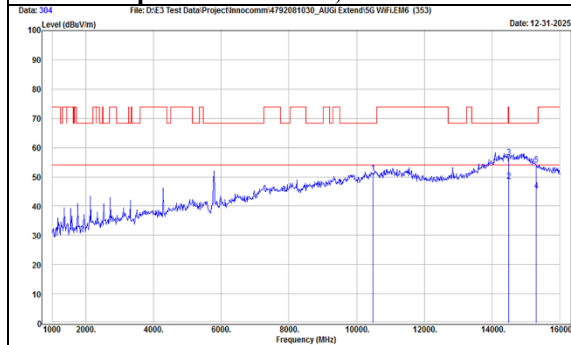
Telephone :+886-2-7737-3000

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Doc No: Form-ULID-004739 (DCS:17-EM-F0878) / 6.1

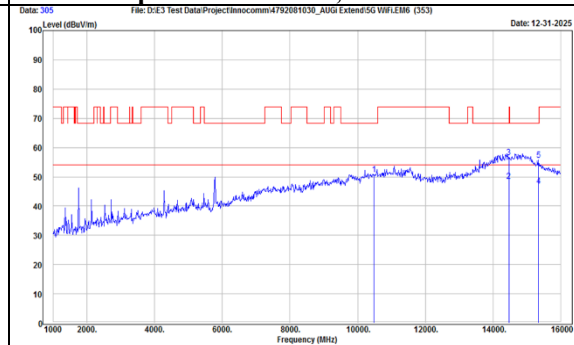
TX, 802.11a - Emission (Ch 48)

Radiated Spurious Emission, Horizontal



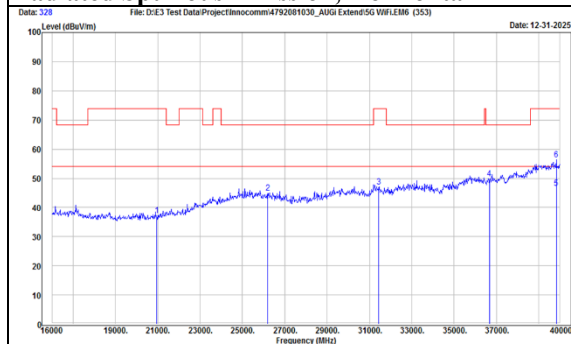
TX, 802.11a - Emission (Ch 48)

Radiated Spurious Emission, Vertical



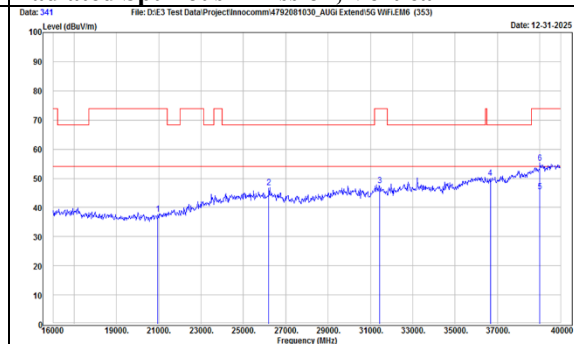
TX, 802.11a - Emission (Ch 48)

Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 48)

Radiated Spurious Emission, Vertical



Mode	802.11a - Emission	Channel	52
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10520	31.04	21.97	53.01	68.2	-15.19	PK
		14470	27.65	28.86	56.51	68.2	-11.69	PK
		14470	19.38	28.86	48.24	54	-5.76	AVG
		15340	28.02	26.5	54.52	68.2	-13.68	PK
		15340	19.19	26.5	45.69	54	-8.31	AVG
	*	21040	32.99	5.42	38.41	74	-35.59	PK
	*	26300	34.26	10.86	45.12	68.2	-23.08	PK
	*	31560	33.59	13.28	46.87	74	-27.13	PK
	*	36820	36.63	13.12	49.75	68.2	-18.45	PK
		39688	38.18	17.56	55.74	74	-18.26	PK
		39688	28.34	17.56	45.9	54	-8.1	AVG
Vertical	*	10520	29.66	21.97	51.63	68.2	-16.57	PK
		14470	27.6	28.86	56.46	68.2	-11.74	PK
		14470	19.33	28.86	48.19	54	-5.81	AVG
		15355	28.34	26.38	54.72	74	-19.28	PK
		15355	19.51	26.38	45.89	54	-8.11	AVG
	*	21040	33.16	5.42	38.58	74	-35.42	PK
	*	26300	33.82	10.86	44.68	68.2	-23.52	PK
	*	31560	33.27	13.28	46.55	74	-27.45	PK
	*	36820	37.76	13.12	50.88	68.2	-17.32	PK
		39760	38.62	17.67	56.29	74	-17.71	PK
		39760	28.78	17.67	46.45	54	-7.55	AVG

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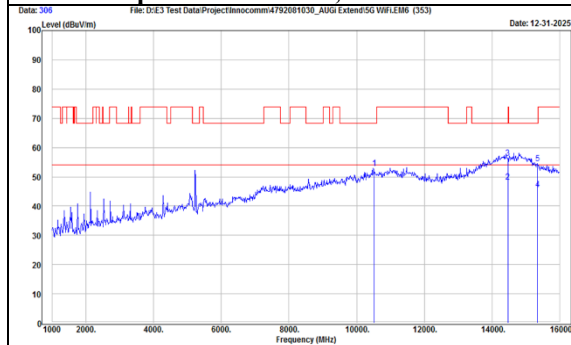
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

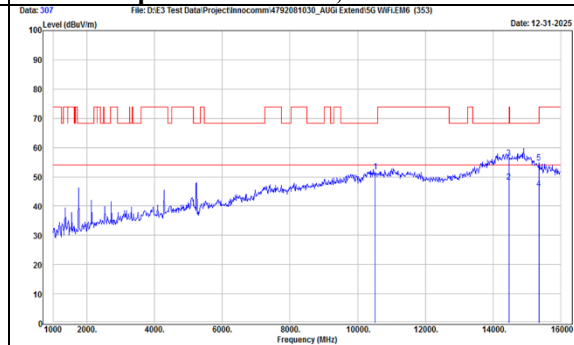
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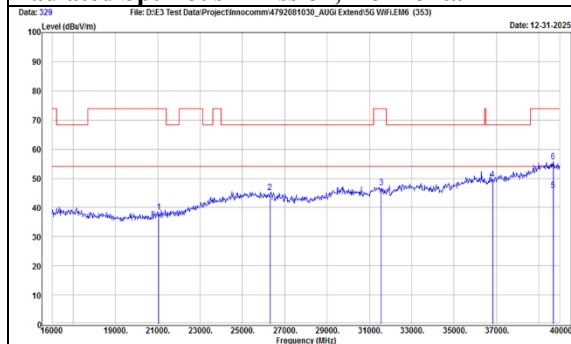
TX, 802.11a - Emission (Ch 52)
Radiated Spurious Emission, Horizontal



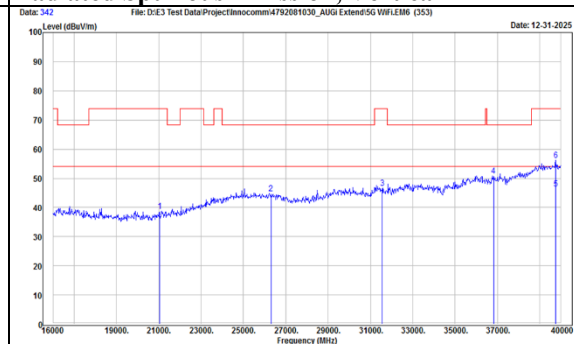
TX, 802.11a - Emission (Ch 52)
Radiated Spurious Emission, Vertical



TX, 802.11a - Emission (Ch 52)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 52)
Radiated Spurious Emission, Vertical



Mode	802.11a - Emission	Channel	60
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10600	29.41	21.97	51.38	74	-22.62	PK
		14485	28.4	28.88	57.28	74	-16.72	PK
		14485	20.13	28.88	49.01	54	-4.99	AVG
		15370	28.94	26.28	55.22	74	-18.78	PK
		15370	20.11	26.28	46.39	54	-7.61	AVG
	*	21200	32	5.69	37.69	74	-36.31	PK
	*	26500	33.28	11.14	44.42	68.2	-23.78	PK
	*	31800	34.02	12.89	46.91	68.2	-21.29	PK
	*	37100	37.74	13.59	51.33	68.2	-16.87	PK
		39016	38.73	16.72	55.45	74	-18.55	PK
		39016	28.89	16.72	45.61	54	-8.39	AVG
Vertical	*	10600	29.74	21.97	51.71	74	-22.29	PK
		14470	28.92	28.86	57.78	68.2	-10.42	PK
		14470	20.65	28.86	49.51	54	-4.49	AVG
		15355	29.34	26.38	55.72	74	-18.28	PK
		15355	20.51	26.38	46.89	54	-7.11	AVG
	*	21200	33.43	5.69	39.12	74	-34.88	PK
	*	26500	33.86	11.14	45	68.2	-23.2	PK
	*	31800	33.27	12.89	46.16	68.2	-22.04	PK
	*	37100	36.65	13.59	50.24	68.2	-17.96	PK
		39448	37.98	17.28	55.26	74	-18.74	PK
		39448	28.14	17.28	45.42	54	-8.58	AVG

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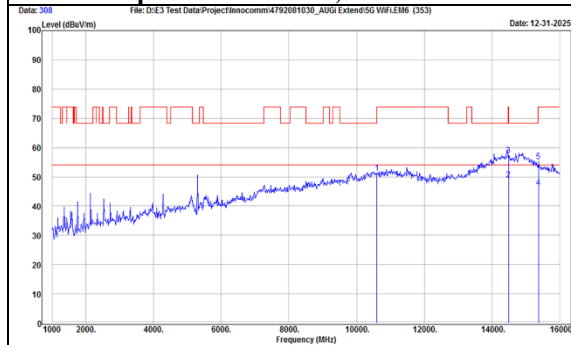
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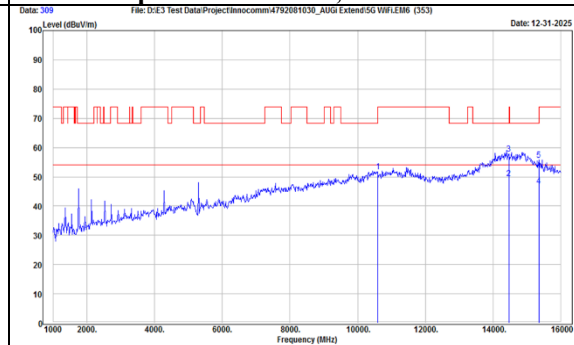
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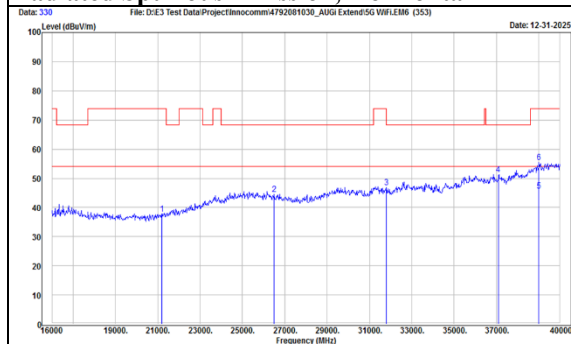
TX, 802.11a - Emission (Ch 60)
Radiated Spurious Emission, Horizontal



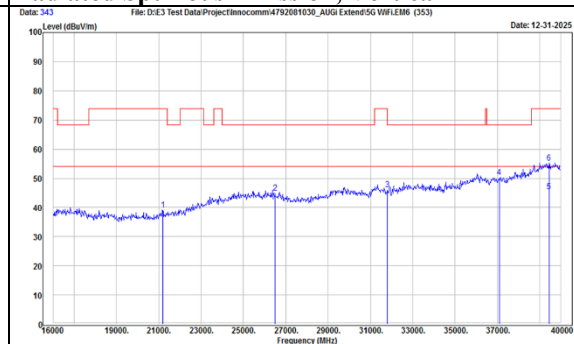
TX, 802.11a - Emission (Ch 60)
Radiated Spurious Emission, Vertical



TX, 802.11a - Emission (Ch 60)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 60)
Radiated Spurious Emission, Vertical



Mode	802.11a - Emission	Channel	64
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	10640	29.28	21.92	51.2	74	-22.8	PK
		14500	28.59	28.9	57.49	68.2	-10.71	PK
		14500	20.32	28.9	49.22	54	-4.78	AVG
		15340	29	26.5	55.5	68.2	-12.7	PK
		15340	20.17	26.5	46.67	54	-7.33	AVG
	*	21280	32.46	5.83	38.29	74	-35.71	PK
	*	26600	33.66	11.15	44.81	68.2	-23.39	PK
	*	31920	33.65	12.66	46.31	68.2	-21.89	PK
	*	37240	36.77	13.62	50.39	68.2	-17.81	PK
		39640	38.22	17.49	55.71	74	-18.29	PK
		39640	28.38	17.49	45.87	54	-8.13	AVG
Vertical	*	10640	29.95	21.92	51.87	74	-22.13	PK
		14485	28.27	28.88	57.15	74	-16.85	PK
		14485	20	28.88	48.88	54	-5.12	AVG
		15310	27.8	26.72	54.52	68.2	-13.68	PK
		15310	18.97	26.72	45.69	54	-8.31	AVG
	*	21280	32.47	5.83	38.3	74	-35.7	PK
	*	26600	32.39	11.15	43.54	68.2	-24.66	PK
	*	31920	33.89	12.66	46.55	68.2	-21.65	PK
	*	37240	37.04	13.62	50.66	68.2	-17.54	PK
		39784	37.53	17.72	55.25	74	-18.75	PK
		39784	27.69	17.72	45.41	54	-8.59	AVG

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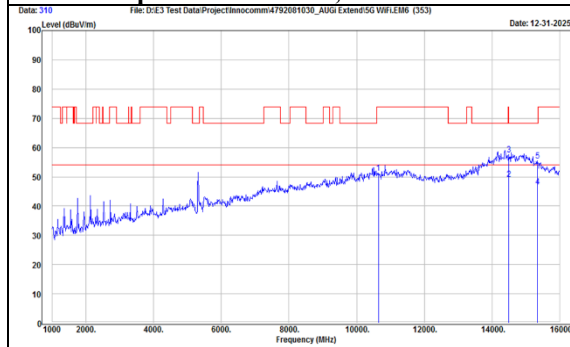
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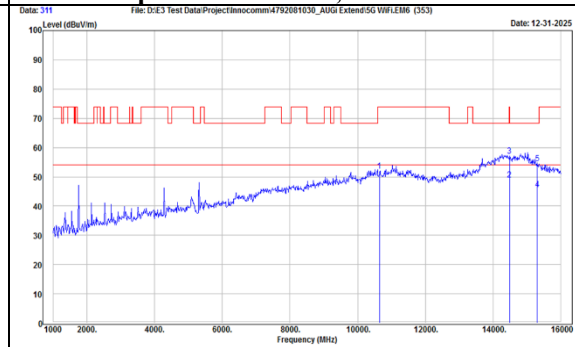
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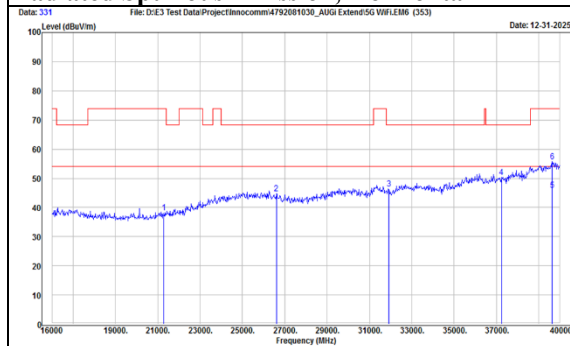
TX, 802.11a - Emission (Ch 64)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 64)
Radiated Spurious Emission, Vertical



TX, 802.11a - Emission (Ch 64)
Radiated Spurious Emission, Horizontal



TX, 802.11a - Emission (Ch 64)
Radiated Spurious Emission, Vertical

