TEST REPORT
CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBCKS-WTW-P22051021A
FCC ID:	TVE-3918T05646
Product:	Secured Wireless Access Point
Brand:	FORTINET
Model No.:	FAP-431G, FAP-433G
Variant Model:	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Received Date:	2022/5/31
Test Date:	2022/8/11 ~ 2022/11/19 (For all tests except 802.11ac (VHT80+80) & 802.11ax (HE80+80) mode) 2023/2/21 ~ 2023/6/12 (For 802.11ac (VHT80+80) & 802.11ax (HE80+80) mode)
Issued Date:	2023/6/27
Applicant:	Fortinet, Inc.
Address:	899 Kifer Rd. Sunnyvale CA. 94086 United States
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location (1):	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
Test Location (2):	No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
FCC Registration / Designation Number(1):	788550 / TW0003
FCC Registration / Designation Number(2):	281270 / TW0032

Approved by: Jeremy Lin , **Date:** 2023/6/27

Jeremy Lin / Project Engineer

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Prepared by : Pettie Chen / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P22051021A	Original release.	2023/6/27

1 Certificate

Product:	Secured Wireless Access Point
Brand:	FORTINET
Test Model:	FAP-431G, FAP-433G
Variant Model:	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Sample Status:	Engineering sample
Applicant:	Fortinet, Inc.
Test Date:	2022/8/11 ~ 2022/11/19 (For all tests except 802.11ac (VHT80+80) & 802.11ax (HE80+80) mode) 2023/2/21 ~ 2023/6/12 (For 802.11ac (VHT80+80) & 802.11ax (HE80+80) mode)
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure:	ANSI C63.10-2013 KDB 789033 D02 General UNII Test Procedure New Rules v02r01 KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1/2)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1/2)	Power Spectral Density	Pass	Meet the requirement of limit.
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -5.39 dB at 0.59000 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.7 dB at 36.63, 62.01 MHz
15.407(b) (1/2/3/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 5350.00, 5460.00, 5725.00 MHz
15.203	Antenna Requirement	Pass	For internal antenna: Antenna connector is ipex(MHF) not a standard connector. For external antenna: Antenna connector is R-SMA(ANT0 ~ ANT3) & ipex (ANT4 ~ ANT7) not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Occupied Bandwidth	-	491.896 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.99 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Secured Wireless Access Point
Brand	FORTINET
Test Model	FAP-431G, FAP-433G
Variant Model	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Model Difference	Refer to note
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from Adapter 55Vdc from PoE
Modulation Type	802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): up to 600Mbps 802.11ac (VHT20/40/80/160): up to 1733.3Mbps 802.11ax: up to 4803.9Mbps
Operating Frequency	5.18 GHz ~ 5.32 GHz, 5.5 GHz ~ 5.72 GHz
Number of Channel	Radio 2: 5180 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80), 802.11ac (VHT80+VHT80), 802.11ax (HE80+HE80): 1 5500 ~ 5720MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 802.11ac (VHT80+VHT80), 802.11ax (HE80+HE80): 1 Radio 3: 5500 ~ 5720MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 802.11ac (VHT160), 802.11ax (HE160): 1

Output Power	Model: FAP-431G: **Radio 2:** 5180 ~ 5320MHz: CDD: 249.133 mW (23.96 dBm) Beamforming: 193.244 mW (22.86 dBm) 5500 ~ 5720MHz: CDD: 249.574 mW (23.97 dBm) Beamforming: 246.032 mW (23.91 dBm) **Radio 3:** 5500 ~ 5720MHz: CDD: 248.612 mW (23.96 dBm) Beamforming: 193.947 mW (22.88 dBm) Model: FAP-433G: **Radio 2:** 5180 ~ 5320MHz: CDD: 233.578 mW (23.68 dBm) Beamforming: 184.628 mW (22.66 dBm) 5500 ~ 5720MHz: CDD: 240.944 mW (23.82 dBm) Beamforming: 171.716 mW (22.35 dBm) **Radio 3:** 5500 ~ 5720MHz: CDD: 249.027 mW (23.96 dBm) Beamforming: 141.343 mW (21.50 dBm)
EUT Category	Indoor Access Point

Note:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV CPS report no.: RFBCKS-WTW-P22051021-3. Differences compared with the original report are as below
   - Software enabling 5250-5320 MHz and 5500-5720 MHz band
   - The Radio 3 UNII-2A/2C Scanning Radio only Support RX only by software control
   - For Radio 2: Software enable CH 42+58, CH 106+122 modes [802.11ac (VHT80+VHT80), 802.11ax (HE80+HE80)]

   Therefore, the EUT was tested and presented in the test report.
2. The following models are provided to this EUT. The model FAP-431G, FAP-433G were chosen for final test.

Brand	Test Model	Series Model	Difference
Fortinet	FAP-431G	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	internal antenna
	FAP-433G	FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	external antenna

3. The EUT consumes power from the following adapter and POE.

Adapter (support units only)	
Brand	Asian Power Devices Inc.
Model	WA-48A12R
Input Power	100-240Vac~50-60Hz, 1.5A Max
Output Power	12.0Vdc, 4.0A, 48.0W
Power Line	1.47m cable without core attached on adapter

POE (support units only)	
Brand	Microsemi
Model	PD-9501-10GC/AC
Input Power	100-240Vac~50-60Hz, 1.5A Max
Output Power	55Vdc, 1.1A

4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
5. Radio 1, Radio 2, Radio 3 (5G_H) and Radio 4 can transmit simultaneously.
   But Radio 2 (5G), Radio 3 (5G_H) cannot transmit in the same band simultaneously.
   Radio 4 (BLE) and Radio 4 (Zigbee) cannot transmit simultaneously.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Model	Radio	Chip	Mode	Antennas	Ant. Type	Bands Supported
FAP-433G	Radio 1	QCN-5124	4x4 MIMO	ANT 0/1/2/3	External	2.4GHz WLAN
	Radio 2	QCN-5154	4x4 MIMO	ANT 0/1/2/3	External	U-NII-1, 2A, 2C, 3 WLAN up to 80MHz+80MHz
	Radio 3_6G	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated (Non-detachable external antenna)	6GHz WLAN
	Radio 3_5GH	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated (Non-detachable external antenna)	U-NII-2C, 3, 4 WLAN up to 160MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated (Non-detachable external antenna)	2.4GHz WLAN, U-NII-1, 3, 4 WLAN, 6GHz WLAN (TX/RX), U-NII-2A, 2C (Receiver only)
	Radio 4	EFR32MG21	-	ANT 8	Integrated	BT / Zigbee
FAP-431G	Radio 1	QCN-5124	4x4 MIMO	ANT 0/1/2/3	Integrated	2.4GHz WLAN
	Radio 2	QCN-5154	4x4 MIMO	ANT 0/1/2/3	Integrated	U-NII-1, 2A, 2C, 3, 4 WLAN up to 80MHz+80MHz
	Radio 3_6G	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated	6GHz WLAN
	Radio 3_5GH	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated	U-NII-2C, 3 WLAN up to 160MHz U-NII-4 WLAN up to 160 MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated	2.4GHz WLAN, U-NII-1, 3, 4 WLAN, 6GHz WLAN (TX/RX), U-NII-2A, 2C (Receiver only)
	Radio 4	EFR32MG21	-	ANT 8	Integrated	BT / Zigbee

Model: FAP-431G

Antenna Type		PIFA			
Connector Type		ipex(MHF)			
Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT0(DB4)	Radio1 2G CH0 Radio2 5G CH0 Radio2 5GL CH0	WNC	FortiAP-431G	1.41	2.4~2.4835GHz
				4.62	5.15~5.25GHz
				4.62	5.25~5.35GHz
				4.35	5.47~5.725GHz
				3.91	5.725~5.85GHz
				3.91	5.85~5.895GHz
ANT1(DB3)	Radio1 2G CH1 Radio2 5G CH1 Radio2 5GL CH1	WNC	FortiAP-431G	1.72	2.4~2.4835GHz
				3.38	5.15~5.25GHz
				3.61	5.25~5.35GHz
				3.72	5.47~5.725GHz
				3.72	5.725~5.85GHz
				3.72	5.85~5.895GHz
ANT2(DB1)	Radio1 2G CH2 Radio2 5G CH2 Radio2 5GL CH2	WNC	FortiAP-431G	1.54	2.4~2.4835GHz
				4.85	5.15~5.25GHz
				4.85	5.25~5.35GHz
				4.51	5.47~5.725GHz
				4.30	5.725~5.85GHz
				4.30	5.85~5.895GHz

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT3(DB2)	Radio1 2G CH3 Radio2 5G CH3 Radio2 5GL CH3	WNC	FortiAP-431G	2.38	2.4~2.4835GHz
				3.48	5.15~5.25GHz
				3.52	5.25~5.35GHz
				3.58	5.47~5.725GHz
				3.55	5.725~5.85GHz
				3.55	5.85~5.895GHz
ANT4(TB4)	Radio3 5GH CH0 Radio3 6G CH0 Radio 3 Scanning 2/5/6G CH0 (U-NII-2A, 2C receiver only)	WNC	FortiAP-431G	3.50	2.4~2.4835GHz
				4.98	5.15~5.25GHz
				4.98	5.25~5.35GHz
				4.98	5.47~5.725GHz
				4.50	5.725~5.85GHz
				4.50	5.85~5.895GHz
				4.80	5.925~6.425GHz
				4.80	6.425~6.525GHz
				5.50	6.525~6.875GHz
				5.50	6.875~7.125GHz
ANT5(TB1)	Radio3 5GH CH1 Radio3 6G CH1	WNC	FortiAP-431G	4.76	5.47~5.725GHz
				4.38	5.725~5.85GHz
				4.38	5.85~5.895GHz
				4.32	5.925~6.425GHz
				4.32	6.425~6.525GHz
				4.84	6.525~6.875GHz
				4.84	6.875~7.125GHz
ANT6(TB2)	Radio3 5GH CH2 Radio3 6G CH2 Radio 3 Scanning 2/5/6G CH1 (U-NII-2A, 2C receiver only)	WNC	FortiAP-431G	2.58	2.4~2.4835GHz
				4.47	5.15~5.25GHz
				4.81	5.25~5.35GHz
				5.30	5.47~5.725GHz
				5.30	5.725~5.85GHz
				5.30	5.85~5.895GHz
				4.60	5.925~6.425GHz
				4.60	6.425~6.525GHz
				5.20	6.525~6.875GHz
				5.20	6.875~7.125GHz
ANT7(TB3)	Radio3 5GH CH3 Radio3 6G CH3	WNC	FortiAP-431G	5.09	5.47~5.725GHz
				5.09	5.725~5.85GHz
				5.09	5.85~5.895GHz
				4.20	5.925~6.425GHz
				3.94	6.425~6.525GHz
				4.50	6.525~6.875GHz
				4.50	6.875~7.125GHz

Radio 1

Frequency Range	Directional Gain (dBi)
2400~2483.5MHz	6.37

Radio 2

Frequency Range	Directional Gain (dBi)
5150~5250MHz	6.94
5250~5350MHz	6.98
5470~5725MHz	6.06
5725~5850MHz	6.31
5850~5895MHz	6.03

For 802.11ac (VHT80+VHT80) and 802.11ax (HE80+ HE80)

Chan.	Chan. Freq. (MHz)	Directional Gain (dBi)
42+58(L)	5210	4.36
42+58(H)	5290	4.39
106+122(L)	5530	4.03
106+122(H)	5610	3.92

Radio 3

Frequency Range	Directional Gain (dBi)
5470~5725MHz	7.11
5725~5850MHz	6.91
5850~5895MHz	6.61
5925~6425MHz	6.37
6425~6525MHz	6.98
6525~6875MHz	7.11
6875~7125MHz	7.62

Model: FAP-433G

Antenna Type		Dipole			
Connector Type		R-SMA (ANT0 ~ ANT3); ipex (ANT4 ~ ANT7)			
Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT0	Radio 1 2G CH0 Radio 2 5G CH0 Radio 2 5GL CH0	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT1	Radio 1 2G CH1 Radio 2 5G CH1 Radio 2 5GL CH1	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT2	Radio 1 2G CH2 Radio 2 5G CH2 Radio 2 5GL CH2	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT3	Radio 1 2G CH3 Radio 2 5G CH3 Radio 2 5GL CH3	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT4	Radio 3 5GH CH0 Radio 3 6G CH0 2/5/6G CH0 (U-NII-2A, 2C receiver only)	MAGLAYERS	BTEAWT14136G0C1A02	3.11	2.4~2.4835GHz
				2.27	5.15~5.25GHz
				2.27	5.25~5.35GHz
				2.81	5.47~5.725GHz
				2.81	5.725~5.85GHz
				2.81	5.85~5.895GHz
				2.55	5.925~6.425GHz
				2.55	6.425~6.525GHz
				2.74	6.525~6.875GHz
				2.74	6.875~7.125GHz

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT5	Radio 3 5GH CH1 Radio 3 6G CH1	MAGLAYERS	BTEAWT14136G0C1A02	2.81	5.47~5.725GHz
				2.81	5.725~5.85GHz
				2.81	5.85~5.895GHz
				2.55	5.925~6.425GHz
				2.55	6.425~6.525GHz
				2.74	6.525~6.875GHz
				2.74	6.875~7.125GHz
ANT6	Radio 3 5GH CH2 Radio 3 6G CH2 2/5/6G CH1 (U-NII-2A, 2C receiver only)	MAGLAYERS	BTEAWT14136G0C1A01	2.81	2.4~2.4835GHz
				2.39	5.15~5.25GHz
				2.39	5.25~5.35GHz
				2.39	5.47~5.725GHz
				2.39	5.725~5.85GHz
				2.21	5.85~5.895GHz
				2.71	5.925~6.425GHz
				2.71	6.425~6.525GHz
				2.61	6.525~6.875GHz
				2.61	6.875~7.125GHz
ANT7	Radio 3 5GH CH3 Radio 3 6G CH3	MAGLAYERS	BTEAWT14136G0C1A01	2.39	5.47~5.725GHz
				2.39	5.725~5.85GHz
				2.21	5.85~5.895GHz
				2.71	5.925~6.425GHz
				2.71	6.425~6.525GHz
				2.61	6.525~6.875GHz
				2.61	6.875~7.125GHz

Radio 1

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	6.59

Radio 2

Antenna Gain	Directional Gain (dBi)
5150~5250MHz	7.06
5250~5350MHz	7.16
5470~5725MHz	7.52
5725~5850MHz	7.16

For 802.11ac (VHT80+VHT80) and 802.11ax (HE80+ HE80)

Chan.	Chan. Freq. (MHz)	Directional Gain (dBi)
42+58(L)	5210	5.16
42+58(H)	5290	5.13
106+122(L)	5530	5.44
106+122(H)	5610	5.46

Radio 3

Antenna Gain	Directional Gain (dBi)
5470~5725MHz	8.35
5725~5850MHz	8.26
5850~5895MHz	8.10
5925~6425MHz	7.12
6425~6525MHz	7.29
6525~6875MHz	7.33
6875~7125MHz	7.43

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

5 GHz Band		
Radio 2		
Modulation Mode	TX & RX Configuration	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ac (VHT80+VHT80)	2TX+2TX	2RX+2RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE80+HE80)	2TX+2TX	2RX+2RX
Note: 1. All of modulation mode support beamforming function except 802.11a modulation mode. 2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.		
Radio 3		
Modulation Mode	TX & RX Configuration	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ac (VHT160)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE160)	4TX	4RX
Note: 1. All of modulation mode support beamforming function except 802.11a modulation mode. 2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.		
Radio 3_Scanning Radio		
Modulation Mode	TX & RX Configuration	
802.11a	-	2RX
802.11n (HT20)	-	2RX
802.11n (HT40)	-	2RX
802.11ac (VHT20)	-	2RX
802.11ac (VHT40)	-	2RX
802.11ac (VHT80)	-	2RX
802.11ac (VHT160)	-	2RX
802.11ax (HE20)	-	2RX
802.11ax (HE40)	-	2RX
802.11ax (HE80)	-	2RX
802.11ax (HE160)	-	2RX

3.3 Channel List

FOR 5180 ~ 5320 MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
58	5290 MHz

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
50	5250 MHz

1 channel is provided for 802.11ac (VHT80+VHT80), 802.11ax (HE80+HE80):

Channel	Frequency
42+58	5210 MHz + 5290 MHz

FOR 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570 MHz

1 channel is provided for 802.11ac (VHT80+VHT80), 802.11ax (HE80+HE80):

Channel	Frequency
106+122	5530 MHz + 5610 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	EUT can be used in the following ways: X-axis / Y-axis / Z-axis. Pre-scan in these ways and find the worst case as a representative test condition.
Worst Case:	Worst Condition: Y-axis (For Model: FAP-431G), X-axis (For Model: FAP-433G)

Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	A, E	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
		802.11ax (HE80+HE80)	CDD	42+58, 106+122	BPSK	MCS0
	C, G	802.11a	CDD	100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	106, 122, 138	BPSK	MCS0
		802.11ax (HE160)	CDD	114	BPSK	MCS0
RF Output Power	A, E	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11n (HT20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11n (HT40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ac (VHT20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ac (VHT40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ac (VHT80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
		802.11ac (VHT80+ VHT80)	CDD & Beamforming	42+58, 106+122	BPSK	MCS0
		802.11ax (HE20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
		802.11ax (HE80+HE80)	CDD & Beamforming	42+58, 106+122	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	C, G	802.11a	CDD	100, 116, 140, 144	BPSK	6Mb/s
		802.11n (HT20)	CDD & Beamforming	100, 116, 140, 144	BPSK	MCS0
		802.11n (HT40)	CDD & Beamforming	102, 110, 134, 142	BPSK	MCS0
		802.11ac (VHT20)	CDD & Beamforming	100, 116, 140, 144	BPSK	MCS0
		802.11ac (VHT40)	CDD & Beamforming	102, 110, 134, 142	BPSK	MCS0
		802.11ac (VHT80)	CDD & Beamforming	106, 122, 138	BPSK	MCS0
		802.11ac (VHT160)	CDD & Beamforming	114	BPSK	MCS0
		802.11ax (HE20)	CDD & Beamforming	100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD & Beamforming	102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD & Beamforming	106, 122, 138	BPSK	MCS0
		802.11ax (HE160)	CDD & Beamforming	114	BPSK	MCS0
Power Spectral Density	A, E	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
		802.11ax (HE80+HE80)	CDD	42+58, 106+122	BPSK	MCS0
	C, G	802.11a	CDD	100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	106, 122, 138	BPSK	MCS0
		802.11ax (HE160)	CDD	114	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Occupied Bandwidth	A, E	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
		802.11ax (HE80+HE80)	CDD	42+58, 106+122	BPSK	MCS0
	C, G	802.11a	CDD	100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	106, 122, 138	BPSK	MCS0
		802.11ax (HE160)	CDD	114	BPSK	MCS0
Frequency Stability	A, E	802.11a	CDD	52	un-modulation	-
	C, G	802.11a	CDD	100	un-modulation	-
AC Power Conducted Emissions	A, B	802.11a	CDD	116	BPSK	6Mb/s
	C, D	802.11ax (HE40)	CDD	110	BPSK	MCS0
	E, F, G, H	802.11ax (HE80)	CDD	138	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11a	CDD	116	BPSK	6Mb/s
	C, D	802.11ax (HE40)	CDD	110	BPSK	MCS0
	E, F, G, H	802.11ax (HE80)	CDD	138	BPSK	MCS0
Unwanted Emissions above 1 GHz	A, E	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
		802.11ax (HE80+HE80)	CDD	42+58, 106+122	BPSK	MCS0
	C, G	802.11a	CDD	100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	102, 110, 134, 142	BPSK	MCS0
		802.11ax (HE80)	CDD	106, 122, 138	BPSK	MCS0
		802.11ax (HE160)	CDD	114	BPSK	MCS0

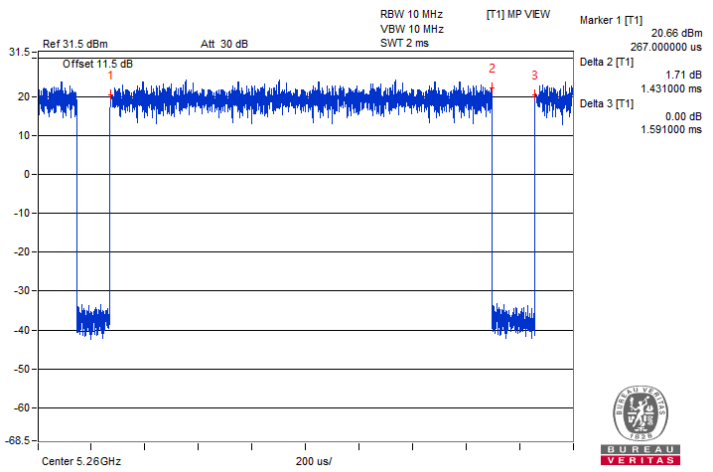
EUT Configure Mode	Mode	EUT Model / Radio	Power
	A	FAP-431G_Radio2	Power from adapter
	B		Power from PoE
	C	FAP-431G_Radio3	Power from adapter
	D		Power from PoE
	E	FAP-433G_Radio2	Power from adapter
	F		Power from PoE
	G	FAP-433G_Radio3	Power from adapter
	H		Power from PoE

Note: The device didn't support Partial RU (Tone RU) with OFDMA Mode.

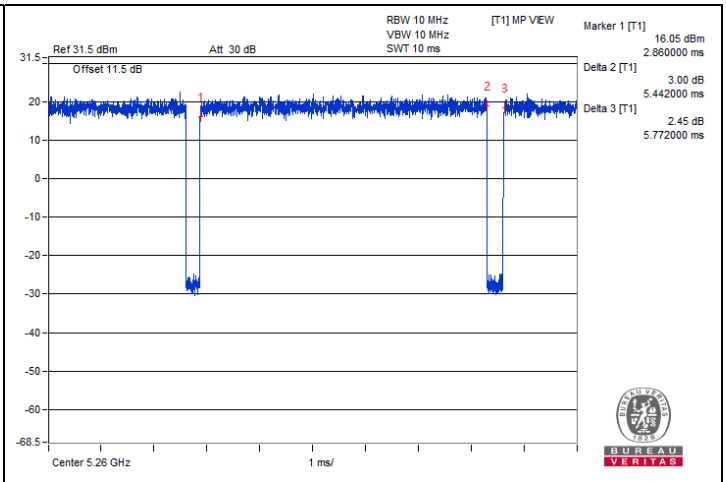
3.5 Duty Cycle of Test Signal

Test Mode A: FAP-431G_Radio 2

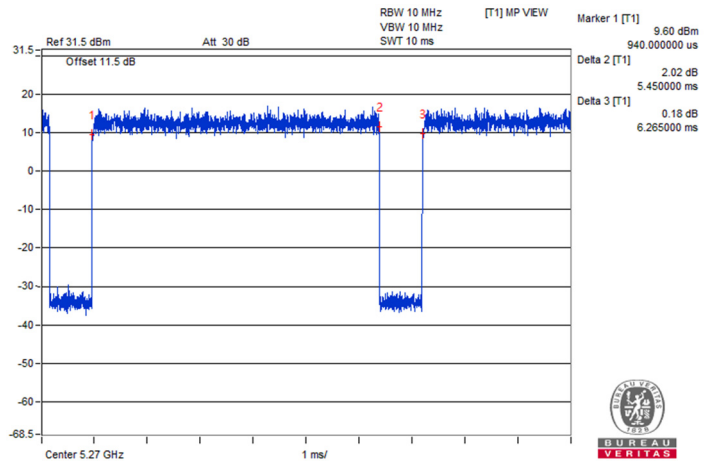
802.11a: Duty cycle = 1.431 ms / 1.591 ms x 100% = 89.9%, duty factor = 10 * log (1/Duty cycle) = 0.46 dB
802.11ax (HE20): Duty cycle = 5.442 ms / 5.772 ms x 100% = 94.3%, duty factor = 10 * log (1/Duty cycle) = 0.26 dB
802.11ax (HE40): Duty cycle = 5.45 ms / 6.265 ms x 100% = 87.0%, duty factor = 10 * log (1/Duty cycle) = 0.61 dB
802.11ax (HE80): Duty cycle = 5.433 ms / 5.763 ms x 100% = 94.3%, duty factor = 10 * log (1/Duty cycle) = 0.26 dB
802.11ax (HE80+HE80): Duty cycle = 5.448 ms / 5.805 ms x 100% = 93.9%, duty factor = 10 * log (1/Duty cycle) = 0.28 dB



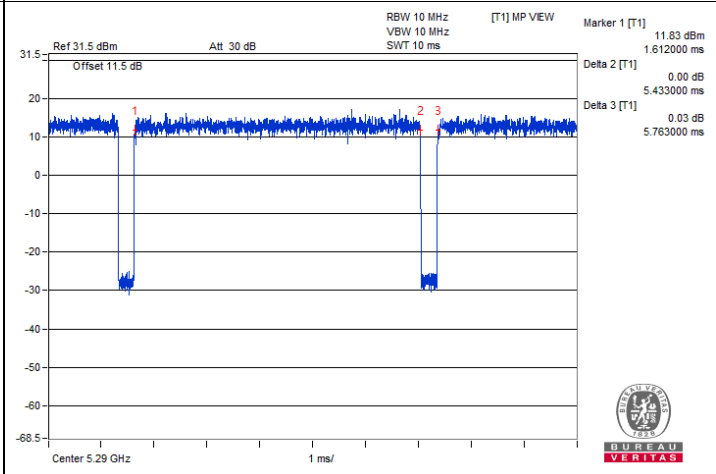
802.11a



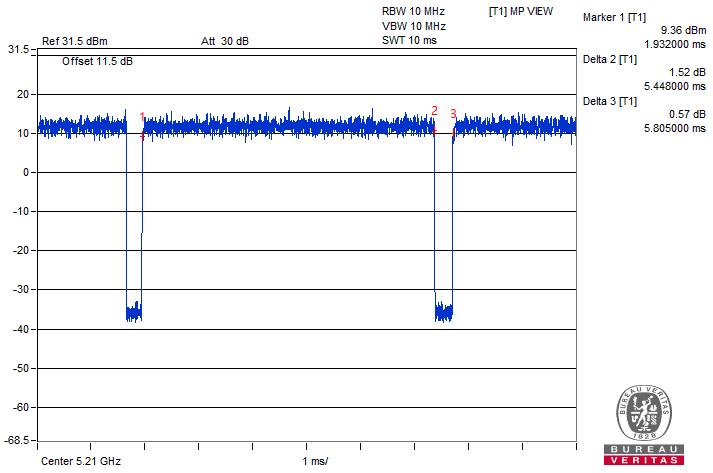
802.11ax (HE20)



802.11ax (HE40)



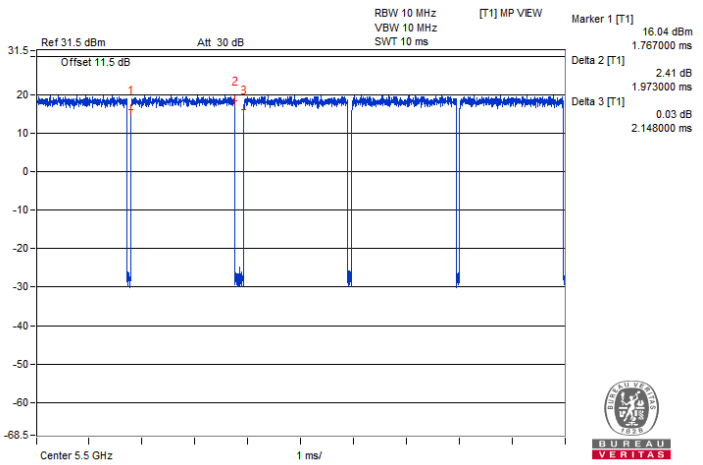
802.11ax (HE80)



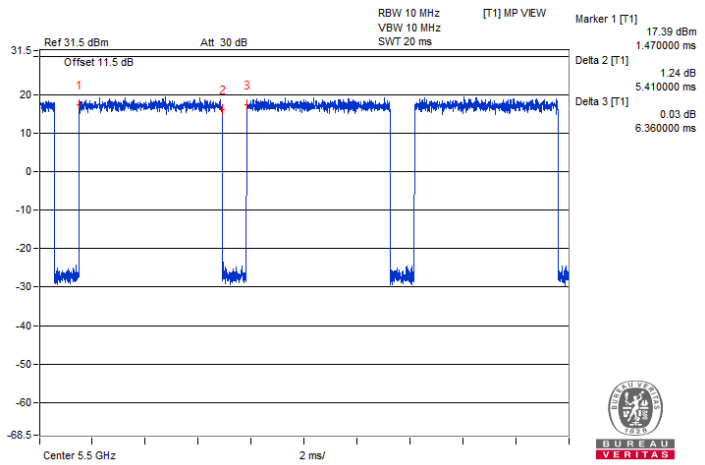
802.11ax (HE80+HE80)

Test Mode C: FAP-431G_Radio 3

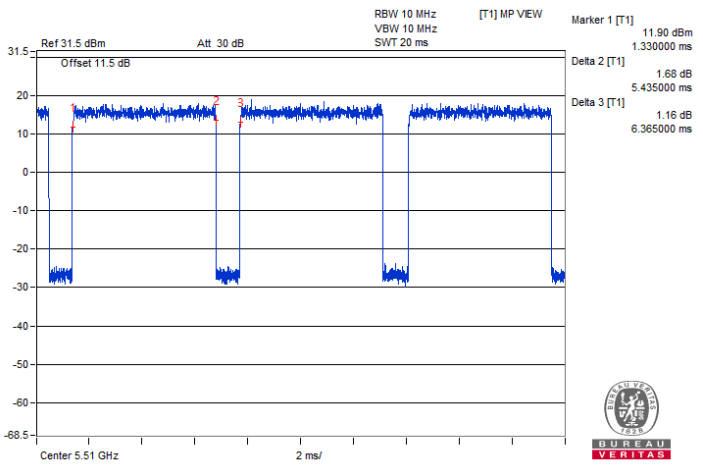
802.11a: Duty cycle = 1.973 ms / 2.148 ms x 100% = 91.9%, duty factor = 10 * log (1/Duty cycle) = 0.37 dB
802.11ax (HE20): Duty cycle = 5.41 ms / 6.36 ms x 100% = 85.1%, duty factor = 10 * log (1/Duty cycle) = 0.70 dB
802.11ax (HE40): Duty cycle = 5.435 ms / 6.365 ms x 100% = 85.4%, duty factor = 10 * log (1/Duty cycle) = 0.69 dB
802.11ax (HE80): Duty cycle = 5.445 ms / 6.435 ms x 100% = 84.6%, duty factor = 10 * log (1/Duty cycle) = 0.73 dB
802.11ax (HE160): Duty cycle = 5.435 ms / 5.92 ms x 100% = 91.8%, duty factor = 10 * log (1/Duty cycle) = 0.37 dB



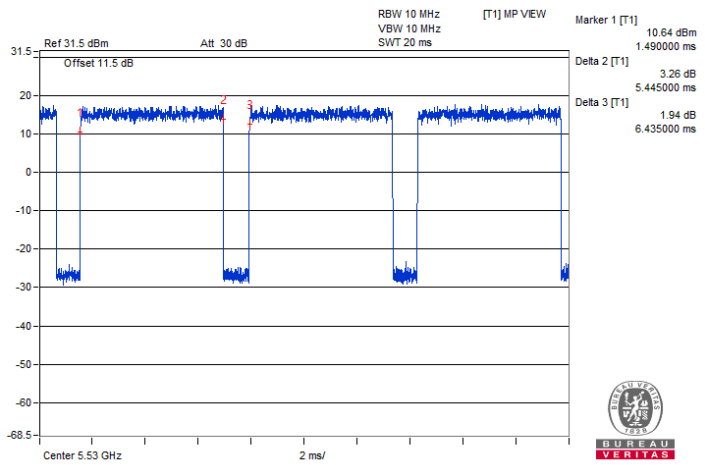
802.11a



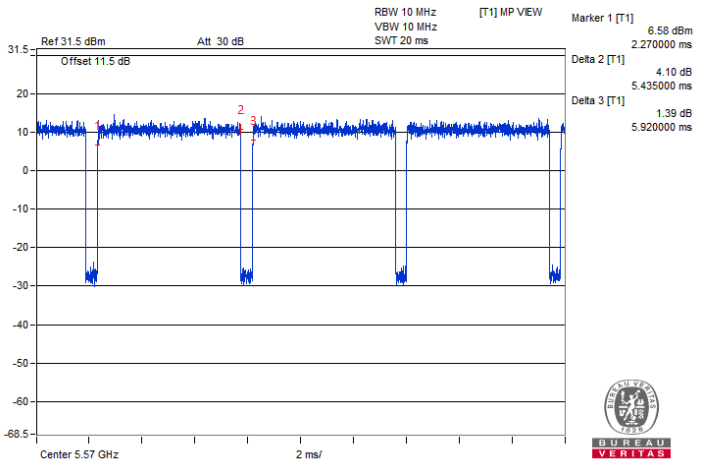
802.11ax (HE20)



802.11ax (HE40)



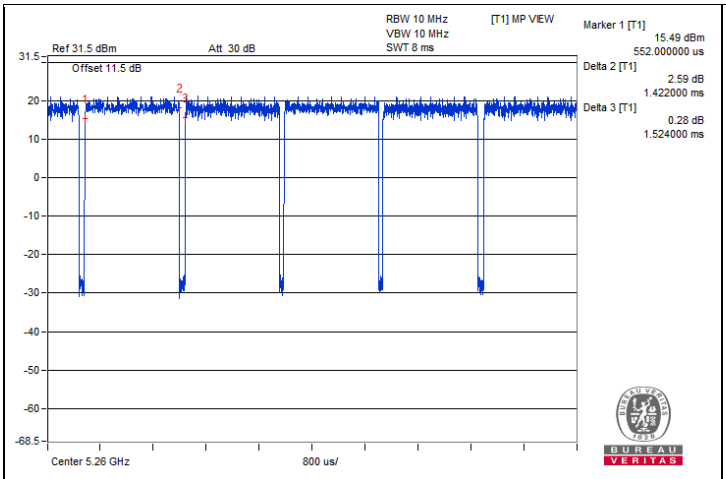
802.11ax (HE80)



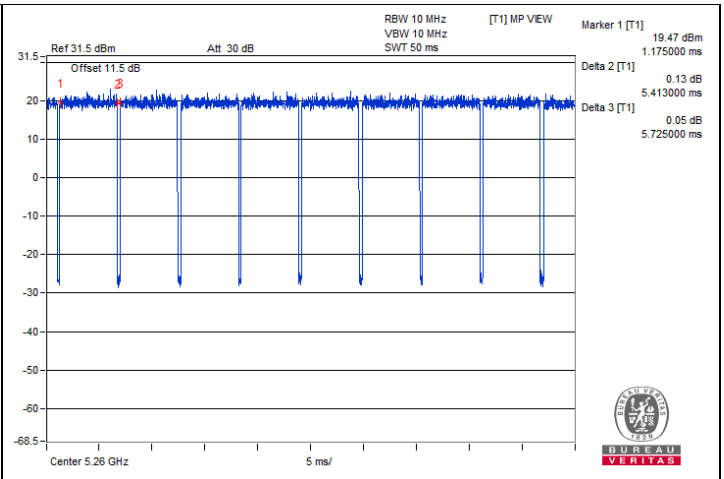
802.11ax (HE160)

Test Mode E: FAP-433G_Radio 2

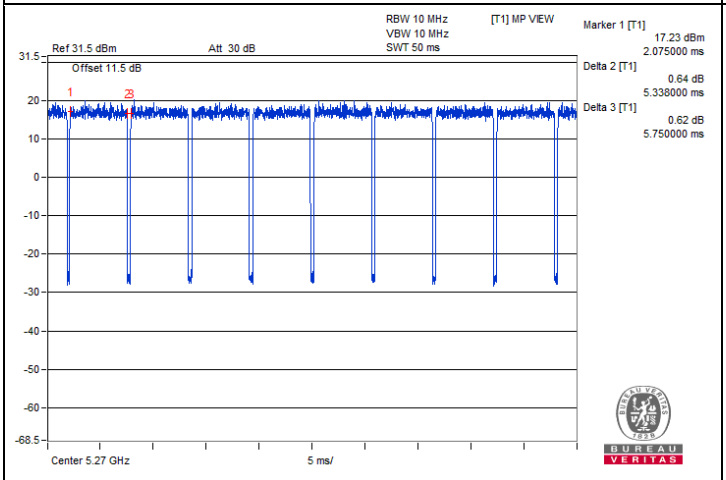
802.11a: Duty cycle = 1.422 ms / 1.524 ms x 100% = 93.3%, duty factor = 10 * log (1/Duty cycle) = 0.30 dB
802.11ax (HE20): Duty cycle = 5.413 ms / 5.725 ms x 100% = 94.6%, duty factor = 10 * log (1/Duty cycle) = 0.24 dB
802.11ax (HE40): Duty cycle = 5.338 ms / 5.75 ms x 100% = 92.8%, duty factor = 10 * log (1/Duty cycle) = 0.32 dB
802.11ax (HE80): Duty cycle = 5.413 ms / 5.751 ms x 100% = 94.1%, duty factor = 10 * log (1/Duty cycle) = 0.26 dB
802.11ax (HE80+HE80): Duty cycle = 5.363 ms / 5.775 ms x 100% = 92.9%, duty factor = 10 * log (1/Duty cycle) = 0.32 dB



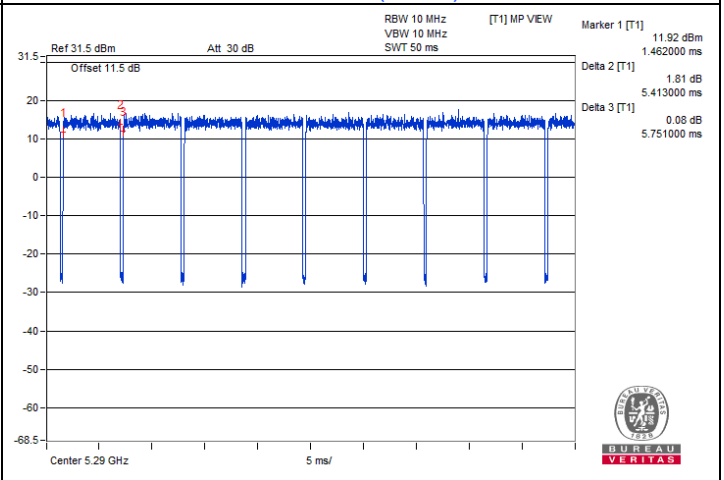
802.11a



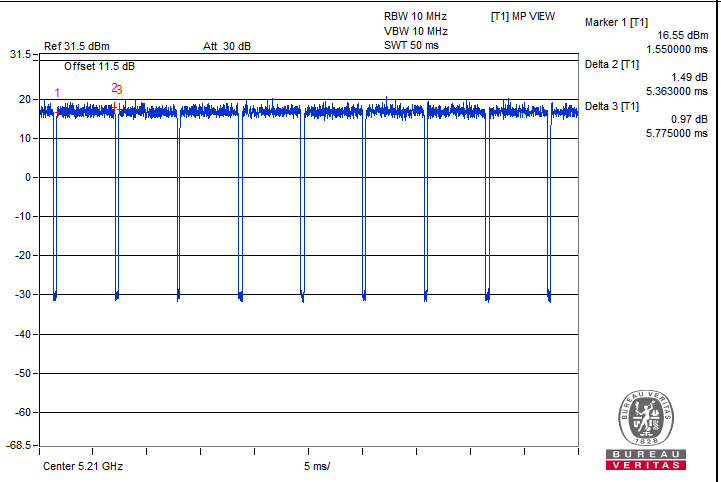
802.11ax (HE20)



802.11ax (HE40)



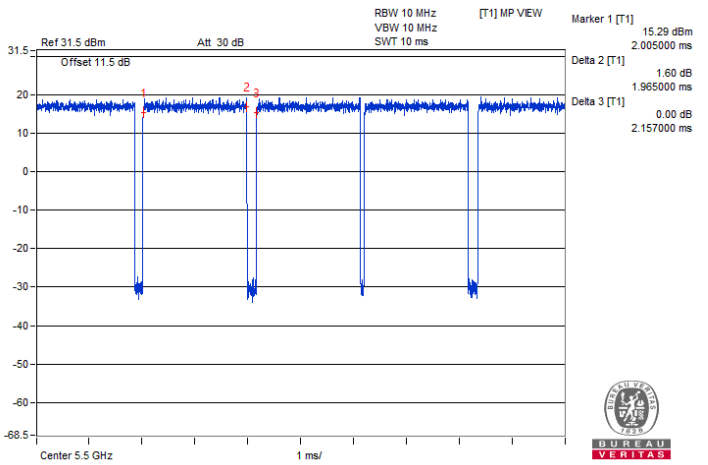
802.11ax (HE80)



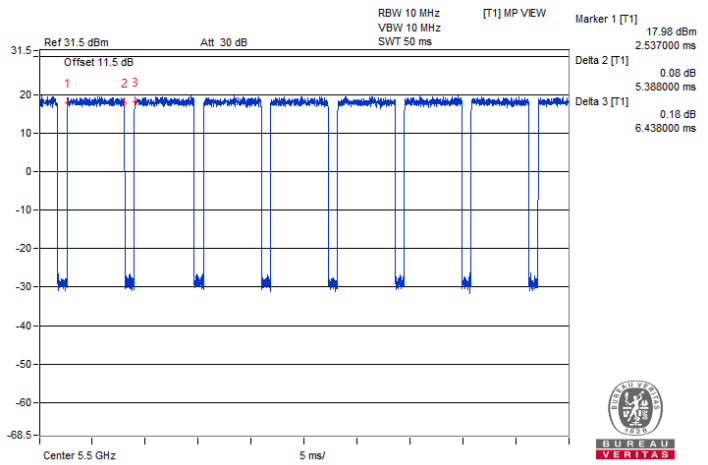
802.11ax (HE80+HE80)

Test Mode G: FAP-433G_Radio 3

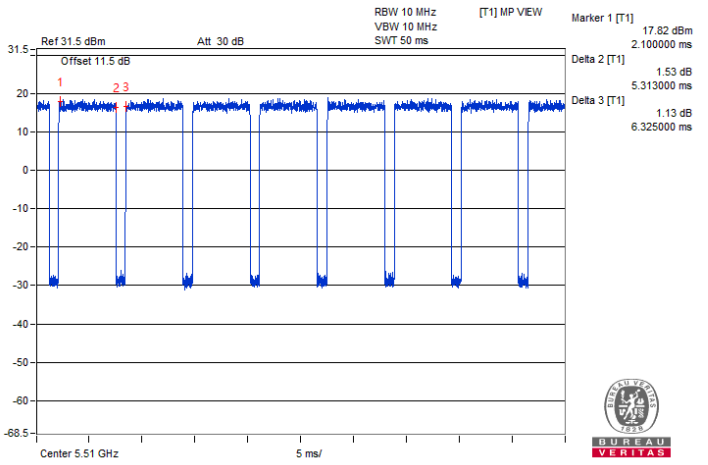
802.11a: Duty cycle = 1.965 ms / 2.157 ms x 100% = 91.1%, duty factor = 10 * log (1/Duty cycle) = 0.40 dB
802.11ax (HE20): Duty cycle = 5.388 ms / 6.438 ms x 100% = 83.7%, duty factor = 10 * log (1/Duty cycle) = 0.77 dB
802.11ax (HE40): Duty cycle = 5.313 ms / 6.325 ms x 100% = 84.0%, duty factor = 10 * log (1/Duty cycle) = 0.76 dB
802.11ax (HE80): Duty cycle = 5.326 ms / 6.351 ms x 100% = 83.9%, duty factor = 10 * log (1/Duty cycle) = 0.76 dB
802.11ax (HE160): Duty cycle = 5.388 ms / 5.875 ms x 100% = 91.7%, duty factor = 10 * log (1/Duty cycle) = 0.38 dB



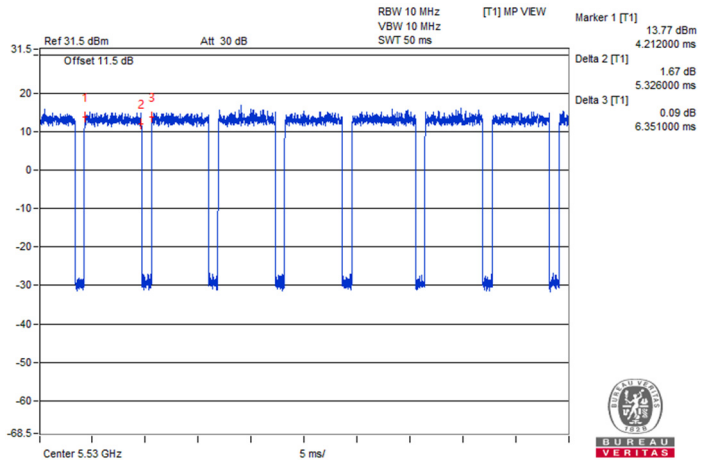
802.11a



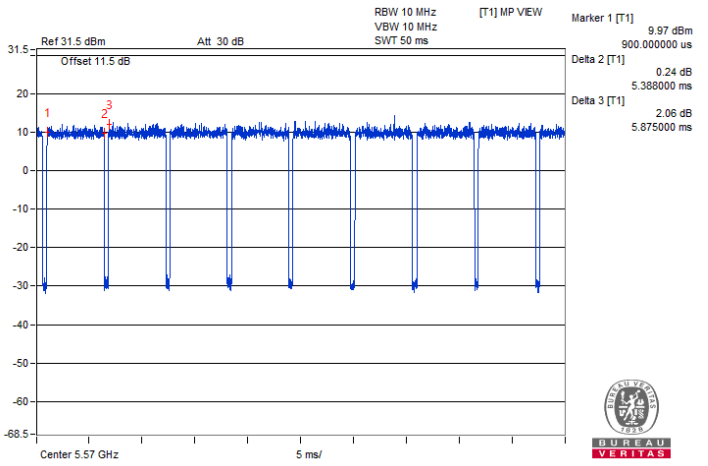
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



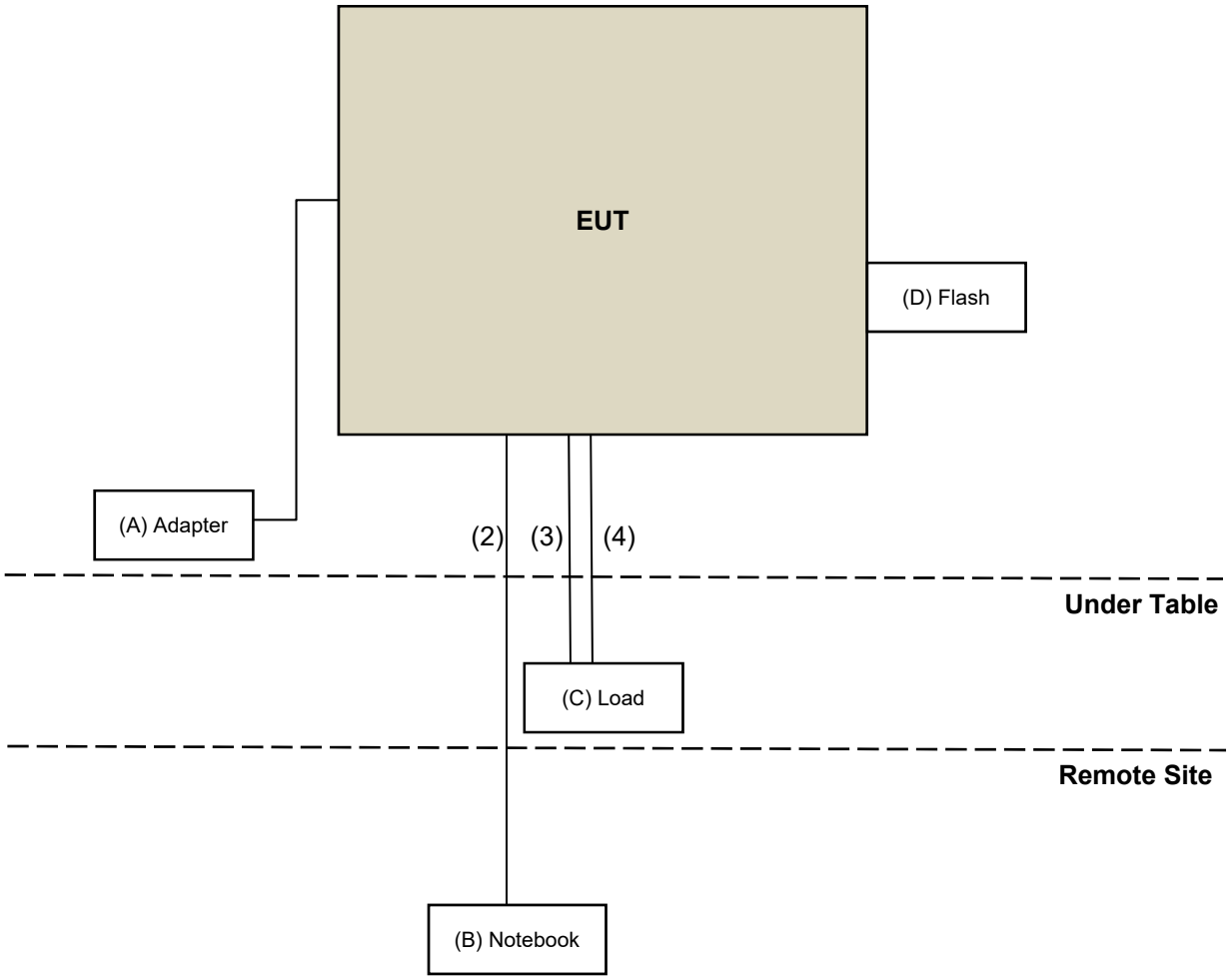
802.11ax (HE160)

3.6 Test Program Used and Operation Descriptions

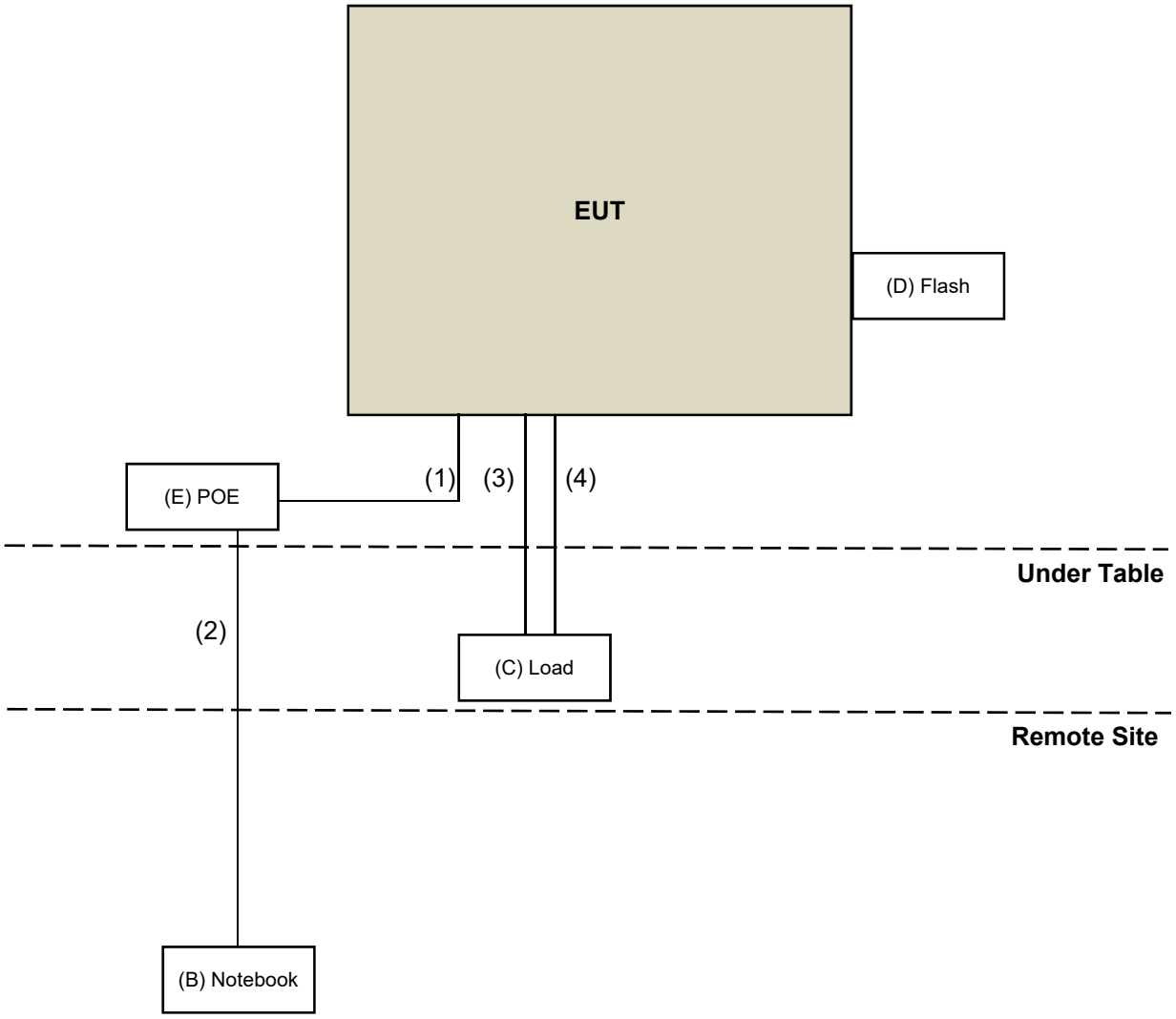
Controlling software (QSPR 5.0-00199) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

ADP Mode



PoE Mode



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	Asian Power Devices Inc.	WA-48A12R	NA	NA	Provided by client
B.	Notebook	Lenovo	20J4 MD A003TW	PF-11H9AK	FCC DoC Approved	-
C.	Load	NA	NA	NA	NA	-
D.	USB Flash	SanDisk	NA	NA	NA	-
E.	PoE	Microsemi	PD-9501-10GC/AC	NA	NA	Provided by client

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	1	1.5	N	0	RJ45, Cat5e
2.	LAN cable	1	10	N	0	RJ45, Cat5e
3.	LAN cable	1	1.5	N	0	RJ45, Cat5e
4.	LAN cable	1	1.5	N	0	RJ45, Cat5e

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/20 ~ 2022/11/19

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/2/21 ~ 2023/6/12

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	2022/1/18	2023/1/17
Power sensor Keysight	U2021XA	MY55380009	2022/3/23	2023/3/22
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	2022/1/17	2023/1/16

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/20 ~ 2022/11/19

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	2023/1/19	2024/1/18
Power sensor Keysight	U2021XA	U2021XA_01	2022/9/13	2023/9/12
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	2023/1/18	2024/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/2/21 ~ 2023/6/12

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 Occupied Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/20 ~ 2022/11/6

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/2/21 ~ 2023/6/12

4.5 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Source ExTech	CFW-105	E000603	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2022/6/23	2023/6/22
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	2022/1/3	2023/1/2

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/20 ~ 2022/11/19

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
LISN R&S	ESH3-Z5	100311	2022/9/12	2023/9/11
LISN ROHDE & SCHWARZ	ENV216	101826	2022/3/14	2023/3/13
RF Coaxial Cable WOKEN	5D-FB	Cable-cond1-01	2022/1/15	2023/1/14
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
Test Receiver Rohde&Schwarz	ESCI	100613	2021/12/3	2022/12/2
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2022/8/31	2023/8/30

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2022/11/7

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Test Receiver R&S	ESR3	102579	2022/7/1	2023/6/30
MXA Signal Analyzer KEYSIGHT	N9020B	MY60110462	2021/12/21	2022/12/20
Pre-amplifier EMCI	EMC330N	980783	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-995	2021/10/28	2022/10/27
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201252	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201250	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2022/11/4 ~ 2022/11/7

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980782	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-1213	2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201235	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201236	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/11/4 ~ 2022/11/7

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A
Test Receiver R&S	ESR3	102579	2022/7/1	2023/6/30
MXA Signal Analyzer KEYSIGHT	N9020B	MY60110462	2021/12/21	2022/12/20
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980783	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-995	2021/10/28	2022/10/27
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201252	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201250	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2022/1/17	2023/1/16
Horn Antenna RFSPIN	DRH18-E	210104A18E	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC118A45SE	980810	2021/12/30	2022/12/29
RF Coaxial Cable EMCI	EMC104-SM-SM-9000	201230	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201242	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210101	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2022/8/11 ~ 2022/9/27

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFT-151SS-0.5T	NA	NA	NA
Turn Table Max-Full	MF-7802BS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208674	NA	NA
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980782	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-1213	2021/10/27	2022/10/26
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201235	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201236	2022/1/17	2023/1/16
Horn Antenna RFSPIN	DRH18-E	210103A18E	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC118A45SE	980808	2021/12/30	2022/12/29
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210102	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201231	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-9000	201243	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/8/11 ~ 2022/9/27

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A
Test Receiver R&S	ESR3	102579	2022/7/1	2023/6/30
MXA Signal Analyzer KEYSIGHT	N9020B	MY60110513	2022/12/26	2023/12/25
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
Pre_Amplifier EMCI	EMC330N	980783	2023/1/16	2024/1/15
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-995	2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201252	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201250	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2023/1/16	2024/1/15
Horn Antenna RFSPIN	DRH18-E	210104A18E	2022/11/13	2023/11/12
Pre_Amplifier EMCI	EMC118A45SE	980810	2022/12/29	2023/12/28
RF Coaxial Cable EMCI	EMC104-SM-SM-9000	201230	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201242	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210101	2023/1/16	2024/1/15

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2023/2/21 ~ 2023/6/12

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFA-515BSN	NA	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208676	NA	NA
MXE EMI Receiver Keysight	N9038B	MY60180018	2023/2/7	2024/2/6
MXA Signal Analyzer Keysight	N9020B	MY60110513	2022/12/26	2023/12/25
Horn Antenna RFSPIN	DRH18-E	210104A18E	2022/11/13	2023/11/12
Preamplifier EMCI	EMC 012645	980115	2022/10/1	2023/9/30
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201232	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210103	2023/1/16	2024/1/15
Horn Antenna Schwarzbeck	BBHA 9170	9170-1048	2022/11/13	2023/11/12
RF Coaxial Cable EMCI	EMC101G-KM-KM-5000	201261	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC101G-KM-KM-3000	201258	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201253	2023/1/16	2024/1/15

Notes:

1. The test was performed in WM - 966 chamber 9.
2. Tested Date: 2023/2/21 ~ 2023/6/12

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

Operation Band	Limit
U-NII-2A	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250mW (24 dBm) or 11 dBm+10 log B*

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

5.3 Power Spectral Density

Operation Band	Limit
U-NII-2A	11 dBm/ MHz
U-NII-2C	11 dBm/ MHz

5.4 Occupied Bandwidth

The results are for reference only.

5.5 Frequency Stability

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

5.6 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.7 Unwanted Emissions below 1 GHz

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

Frequencies (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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.8 Unwanted Emissions above 1 GHz

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

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 1000 MHz, 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 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

<table>
<tr><th colspan="2">Applicable To</th><th colspan="2">Limit</th></tr>
<tr><td colspan="2" rowspan="2">789033 D02 General UNII Test Procedure New Rules v02r01</td><td colspan="2">Field Strength at 3 m</td></tr>
<tr><td>PK: 74 (dBµV/m)</td><td>AV: 54 (dBµV/m)</td></tr>
<tr><td>Frequency Band</td><td>Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3 m</td></tr>
<tr><td>5150~5250 MHz</td><td>15.407(b)(1)</td><td rowspan="3">PK: -27 (dBm/MHz)</td><td rowspan="3">PK: 68.2 (dBµV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td>15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td>15.407(b)(3)</td></tr>
<tr><td>5725~5850 MHz</td><td>15.407(b)(4)(i)</td><td>PK: -27 (dBm/MHz) *1
PK: 10 (dBm/MHz) *2
PK: 15.6 (dBm/MHz) *3
PK: 27 (dBm/MHz) *4</td><td>PK: 68.2 (dBµV/m) *1
PK: 105.2 (dBµV/m) *2
PK: 110.8 (dBµV/m) *3
PK: 122.2 (dBµV/m) *4</td></tr>
<tr><td colspan="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.</td></tr>
</table>

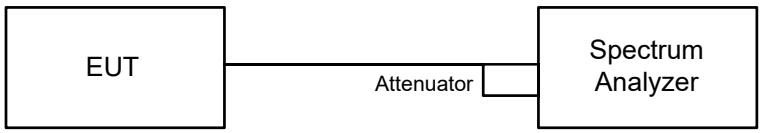
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup



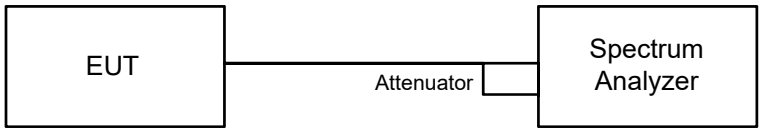
6.1.2 Test Procedure

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

6.2 RF Output Power

6.2.1 Test Setup

For channel straddling:



6.2.2 Test Procedure

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.

For channel straddling:

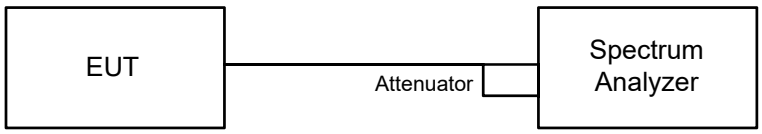
Method SA-2A

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Manually set sweep time ≥ 10 × (number of points in sweep) × (total on/off period of the transmitted signal).
e. Perform a single sweep.
f. Record the max value and add 10 log (1/duty cycle).

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-2

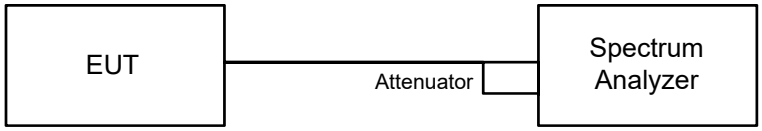
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
g. Record the max value and add 10 log (1/duty cycle).

For specified measurement bandwidth 500 kHz:
Method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
c. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300 kHz)
d. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
e. Sweep time = auto, trigger set to “free run”.
f. Trace average at least 100 traces in power averaging mode.
g. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
h. Record the max value and add 10 log (1/duty cycle).

6.4 Occupied Bandwidth

6.4.1 Test Setup

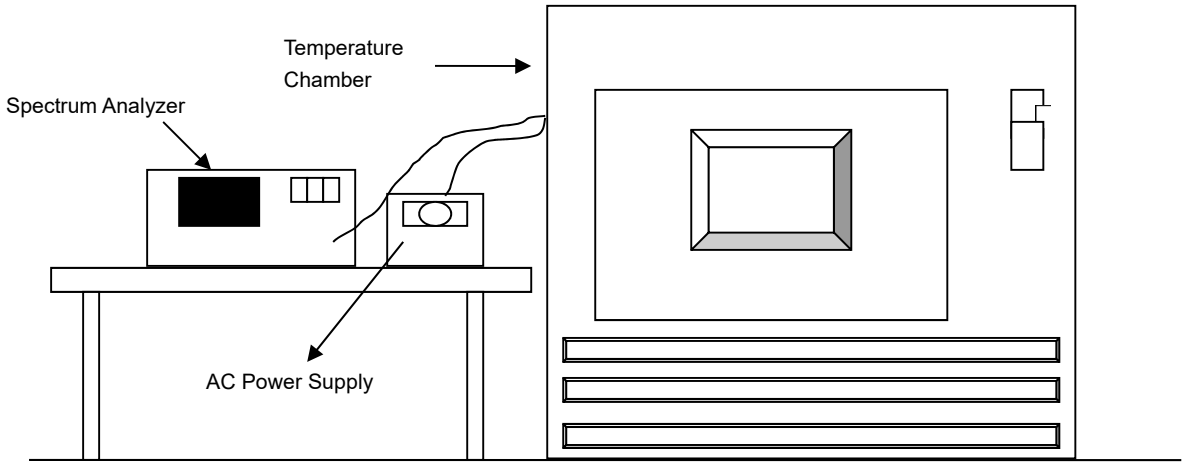


6.4.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to Sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

6.5 Frequency Stability

6.5.1 Test Setup

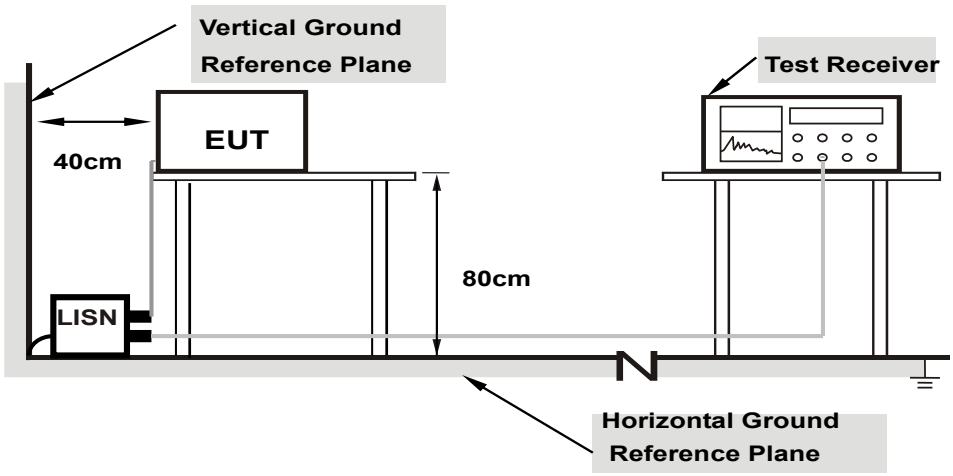


6.5.2 Test Procedure

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

6.6 AC Power Conducted Emissions

6.6.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.6.2 Test Procedure

a. The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

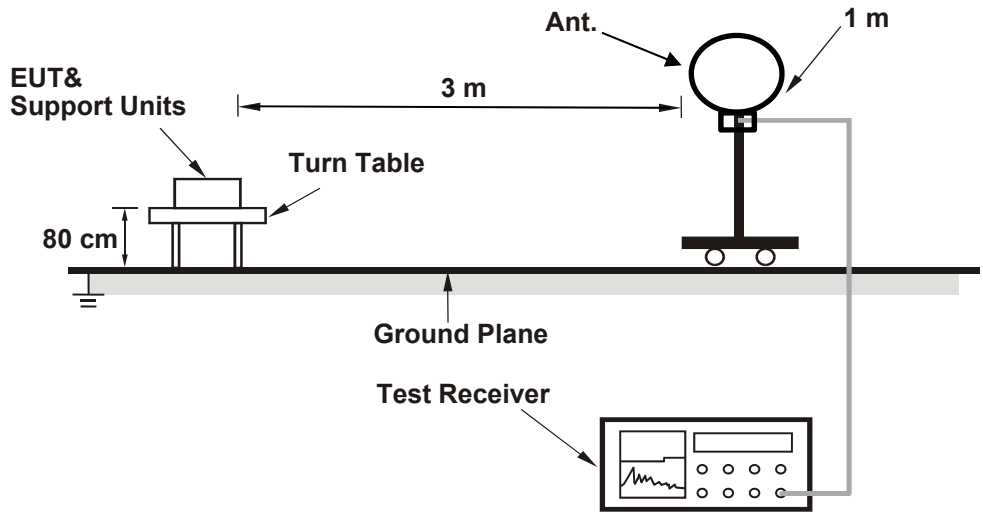
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

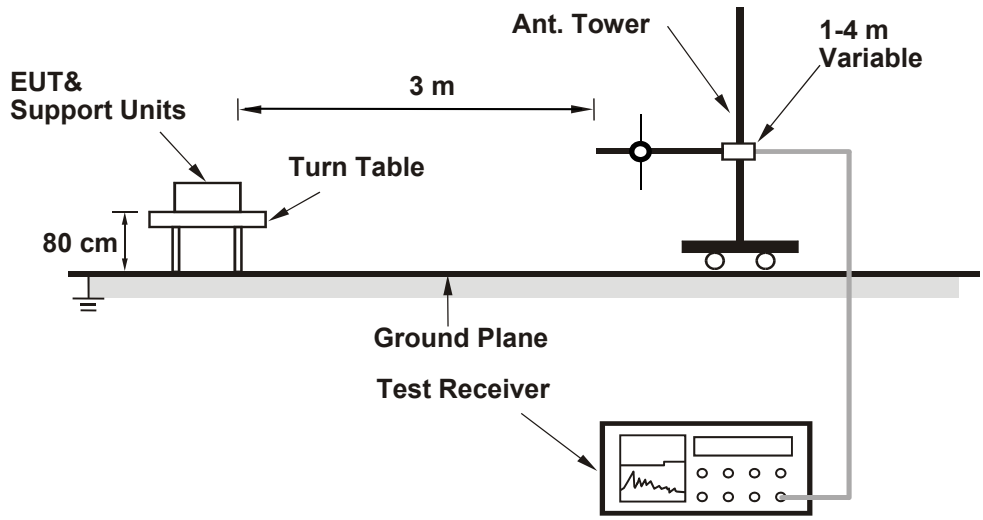
6.7 Unwanted Emissions below 1 GHz

6.7.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

For Radiated emission below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters 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. 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. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters 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.

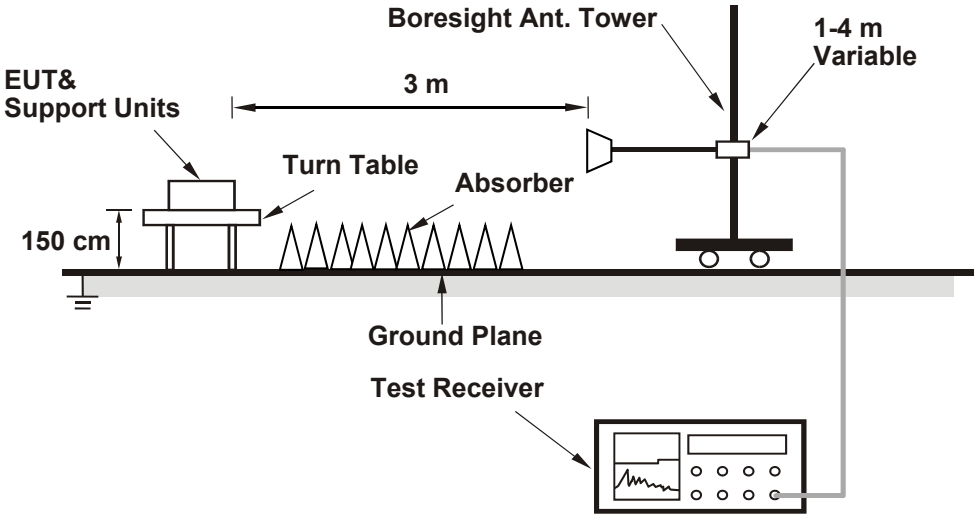
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.8.2 Test Procedure

a. The EUT was placed on the top of a rotating table 1.5 meters 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. 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.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin / Jisyong Wang

Test Mode A: FAP-431G_Radio 2

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	19.47	19.72	19.59	19.78
60	5300	19.87	19.61	19.68	19.69
64	5320	19.46	19.66	19.64	19.59
100	5500	19.83	19.79	19.94	19.71
116	5580	19.88	19.87	19.92	19.89
140	5700	19.71	19.79	19.69	19.69
144 (U-NII-2C)	5720	14.98	14.83	14.94	14.86
144 (U-NII-3)	5720	4.60	4.82	4.64	4.61

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	19.47	23.89	<	24
60	5300	19.61	23.92	<	24
64	5320	19.46	23.89	<	24
100	5500	19.71	23.94	<	24
116	5580	19.87	23.98	<	24
140	5700	19.69	23.94	<	24
144 (U-NII-2C)	5720	14.83	22.71	<	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.67	21.64	21.40	21.39
60	5300	21.89	21.90	21.66	21.45
64	5320	21.63	21.45	21.51	21.48
100	5500	21.18	21.32	21.41	21.53
116	5580	21.57	21.65	21.10	21.54
140	5700	21.40	21.56	21.33	21.52
144 (U-NII-2C)	5720	15.72	15.68	16.04	15.69
144 (U-NII-3)	5720	5.73	5.59	5.66	5.65

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	21.39	24.3	>	24
60	5300	21.45	24.31	>	24
64	5320	21.45	24.31	>	24
100	5500	21.18	24.25	>	24
116	5580	21.10	24.24	>	24
140	5700	21.33	24.28	>	24
144 (U-NII-2C)	5720	15.68	22.95	<	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	42.53	42.38	42.41	42.32
62	5310	41.74	42.52	42.61	42.42
102	5510	42.02	42.34	42.12	42.34
110	5550	42.74	42.24	42.03	42.36
134	5670	42.45	42.19	42.15	42.22
142 (U-NII-2C)	5710	36.19	36.35	35.96	36.24
142 (U-NII-3)	5710	6.28	6.08	6.40	5.42

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	42.32	27.26	>	24
62	5310	41.74	27.2	>	24
102	5510	42.02	27.23	>	24
110	5550	42.03	27.23	>	24
134	5670	42.15	27.24	>	24
142 (U-NII-2C)	5710	35.96	26.55	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.78	83.12	82.67	82.61
106	5530	83.46	82.74	82.79	82.92
122	5610	82.97	83.18	82.86	83.30
138 (U-NII-2C)	5690	76.26	76.31	76.30	76.22
138 (U-NII-3)	5690	6.50	6.40	6.96	7.13

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	82.61	30.17	>	24
106	5530	82.74	30.17	>	24
122	5610	82.86	30.18	>	24
138 (U-NII-2C)	5690	76.22	29.82	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

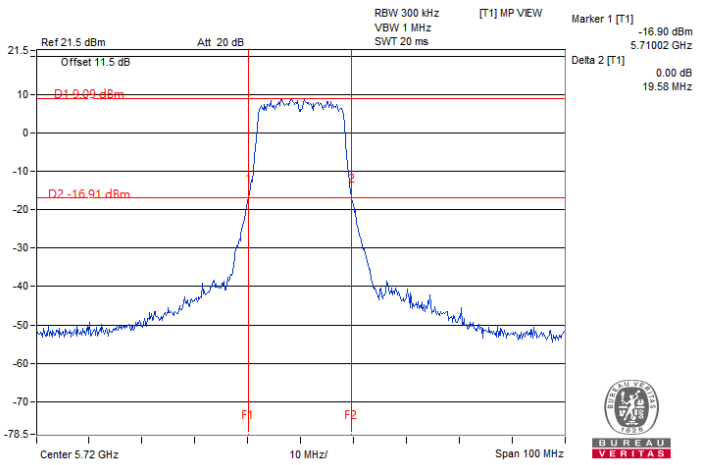
802.11ax (HE80+HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58(H)	5290	-	-	82.95	83.10
106+122(L)	5530	83.42	83.69	-	-
106+122(H)	5610	-	-	83.67	83.18

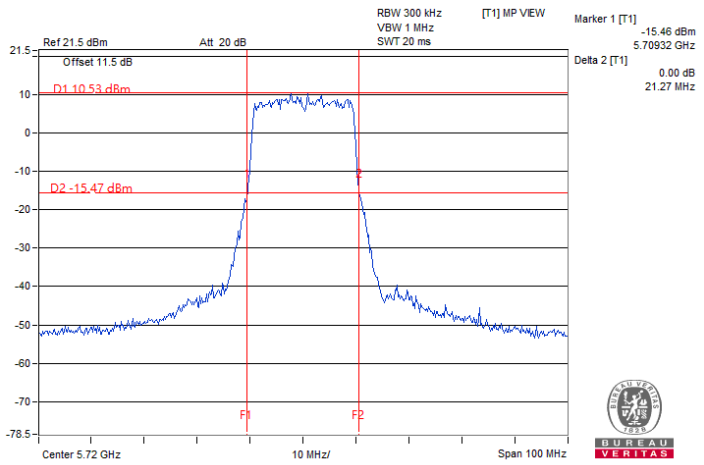
Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
42+58(H)	5290	82.95	30.18	>	24
106+122(L)	5530	83.42	30.21	>	24
106+122(H)	5610	83.18	30.2	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

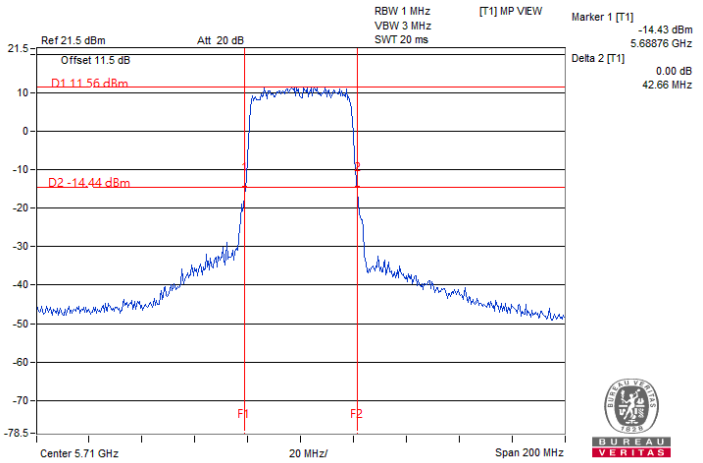
Spectrum Plot of Minimum Value



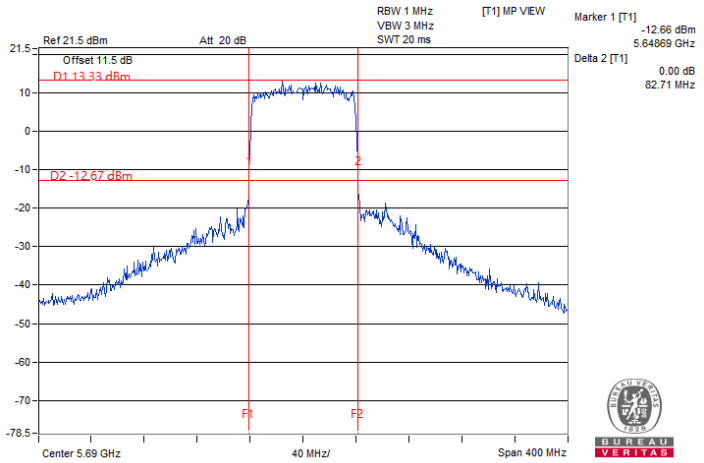
802.11a / Chain 0 : CH 144 (U-NII-3)



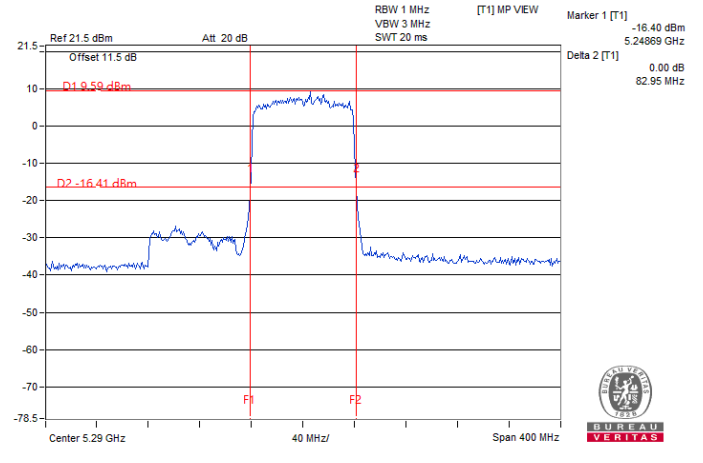
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 3 : CH 144 (U-NII-3)



802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



802.11ax (HE80+HE80) / Chain 2 : 42+58(H)

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin, Wayne Lin

Test Mode C: FAP-431G_Radio 3

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.62	20.99	22.23	20.75
116	5580	22.31	20.95	22.47	20.71
140	5700	21.36	20.78	21.27	20.68
144 (U-NII-2C)	5720	15.59	15.37	15.67	15.29
144 (U-NII-3)	5720	5.83	5.32	5.72	5.23

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
100	5500	20.75	24.17	>	24
116	5580	20.71	24.16	>	24
140	5700	20.68	24.15	>	24
144 (U-NII-2C)	5720	15.29	22.84	<	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	22.25	22.32	22.30	22.22
116	5580	22.62	22.25	22.45	22.05
140	5700	22.01	22.19	22.26	22.45
144 (U-NII-2C)	5720	16.66	16.06	17.76	15.91
144 (U-NII-3)	5720	7.48	6.31	8.48	5.92

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
100	5500	22.22	24.46	>	24
116	5580	22.05	24.43	>	24
140	5700	22.01	24.42	>	24
144 (U-NII-2C)	5720	15.91	23.01	<	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	41.96	41.62	41.81	41.89
110	5550	79.29	55.73	75.05	45.90
134	5670	42.47	41.55	42.14	41.77
142 (U-NII-2C)	5710	53.45	35.87	46.36	35.90
142 (U-NII-3)	5710	20.72	5.82	16.67	5.90

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
102	5510	41.62	27.19	>	24
110	5550	45.90	27.61	>	24
134	5670	41.55	27.18	>	24
142 (U-NII-2C)	5710	35.87	26.54	>	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	140.53	83.67	147.77	83.64
122	5610	134.39	83.43	139.92	83.55
138 (U-NII-2C)	5690	106.42	77.36	112.23	76.43
138 (U-NII-3)	5690	45.70	6.43	36.30	6.63

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
106	5530	83.64	30.22	>	24
122	5610	83.43	30.21	>	24
138 (U-NII-2C)	5690	76.43	29.83	>	24

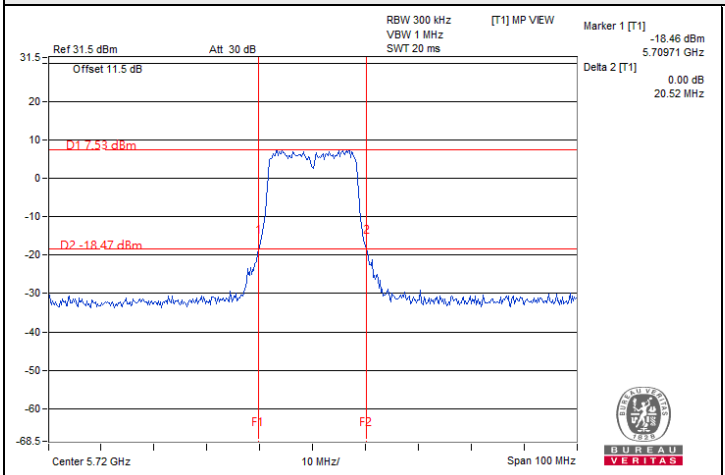
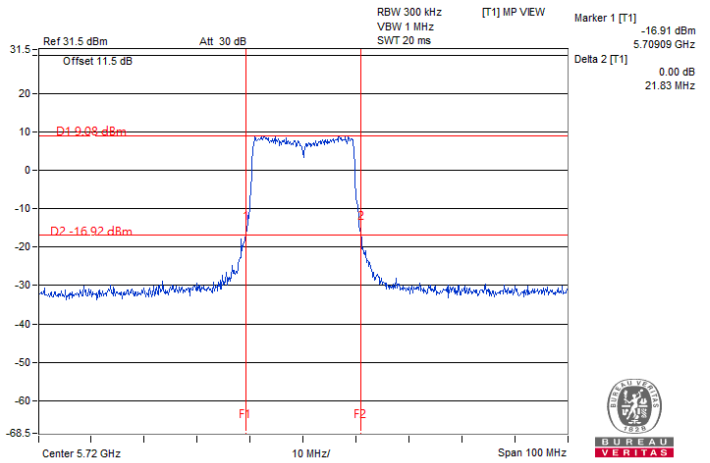
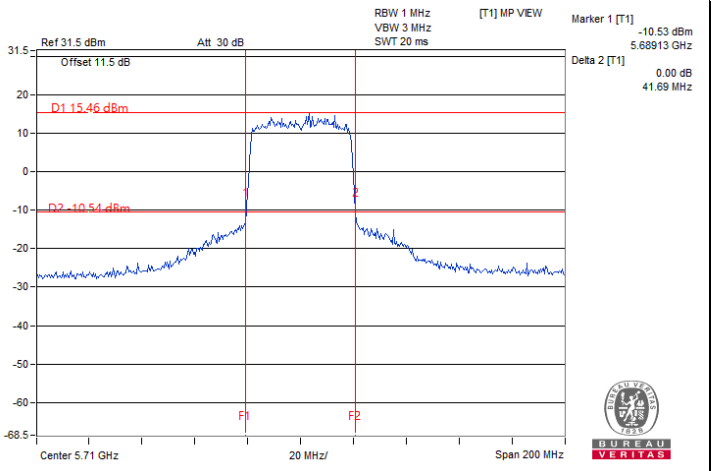
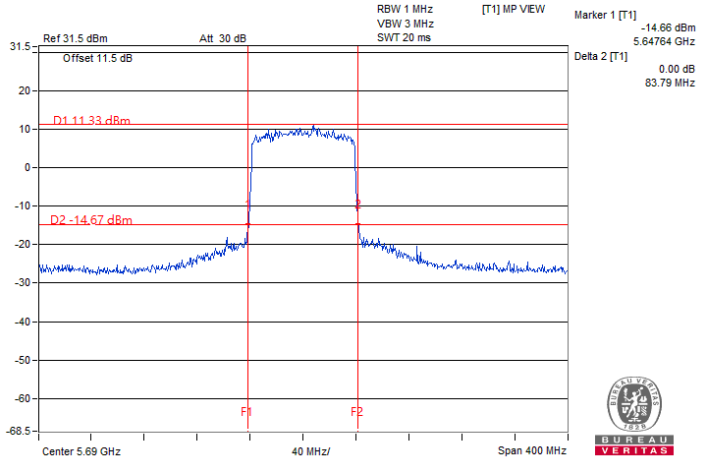
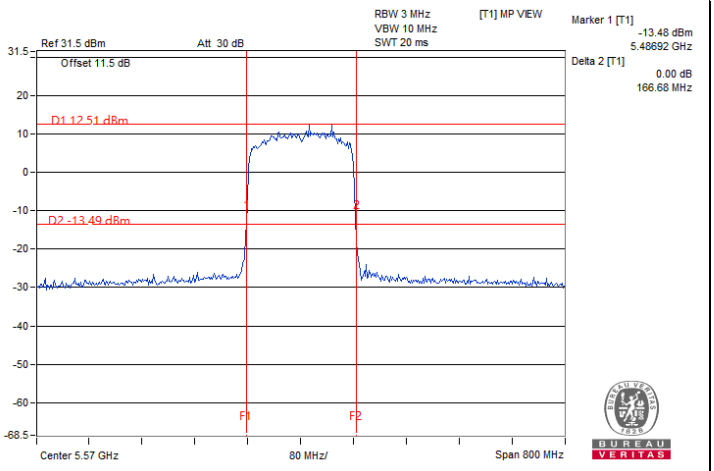
Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE160)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	169.18	167.46	167.59	166.68

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
114	5570	166.68	33.21	>	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Spectrum Plot of Minimum Value	
	
802.11a / Chain 3 : CH 144 (U-NII-3)	802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)
	
802.11ax (HE40) / Chain 1 : CH 144 (U-NII-3)	802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)
	
802.11ax (HE160) / Chain 3 : CH 114	

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Jisyong Wang

Test Mode E: FAP-433G_Radio 2

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	19.83	19.77	19.81	19.65
60	5300	19.85	19.76	19.60	19.63
64	5320	19.77	19.49	19.49	19.70
100	5500	19.73	19.18	19.53	19.72
116	5580	19.85	19.27	19.59	19.68
140	5700	19.66	19.58	19.68	19.56
144 (U-NII-2C)	5720	14.91	14.99	14.88	15.05
144 (U-NII-3)	5720	4.59	4.56	4.69	4.81

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	19.65	23.93	<	24
60	5300	19.60	23.92	<	24
64	5320	19.49	23.89	<	24
100	5500	19.18	23.82	<	24
116	5580	19.27	23.84	<	24
140	5700	19.56	23.91	<	24
144 (U-NII-2C)	5720	14.88	22.72	<	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.69	21.40	21.58	21.34
60	5300	21.42	21.65	22.11	21.46
64	5320	21.62	21.32	21.36	21.57
100	5500	21.83	21.09	21.60	21.25
116	5580	21.50	21.94	21.54	21.52
140	5700	21.74	21.47	21.82	21.55
144 (U-NII-2C)	5720	15.71	15.82	16.08	15.68
144 (U-NII-3)	5720	5.82	5.56	5.83	5.70

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	21.34	24.29	>	24
60	5300	21.42	24.3	>	24
64	5320	21.32	24.28	>	24
100	5500	21.09	24.24	>	24
116	5580	21.50	24.32	>	24
140	5700	21.47	24.31	>	24
144 (U-NII-2C)	5720	15.68	22.95	<	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	42.34	42.42	42.26	42.17
62	5310	42.18	42.40	42.30	42.40
102	5510	42.30	42.08	42.32	42.26
110	5550	42.27	41.87	42.40	42.40
134	5670	42.43	41.52	42.24	42.44
142 (U-NII-2C)	5710	36.13	36.11	36.26	36.02
142 (U-NII-3)	5710	6.28	5.84	6.04	5.95

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	42.17	27.25	>	24
62	5310	42.18	27.25	>	24
102	5510	42.08	27.24	>	24
110	5550	41.87	27.21	>	24
134	5670	41.52	27.18	>	24
142 (U-NII-2C)	5710	36.02	26.56	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.90	83.14	83.32	82.85
106	5530	83.22	83.00	83.31	83.27
122	5610	83.06	82.76	82.89	83.44
138 (U-NII-2C)	5690	76.57	76.66	76.81	76.32
138 (U-NII-3)	5690	6.85	6.31	6.57	6.48

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	82.85	30.18	>	24
106	5530	83.00	30.19	>	24
122	5610	82.76	30.17	>	24
138 (U-NII-2C)	5690	76.32	29.82	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

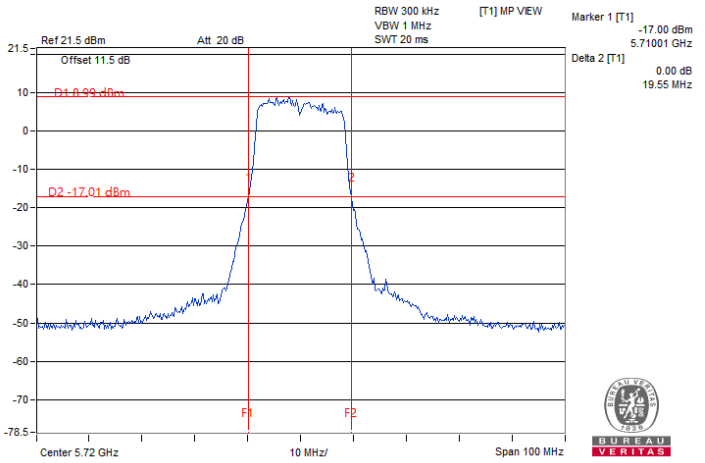
802.11ax (HE80+HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58(H)	5290	-	-	83.77	83.68
106+122(L)	5530	82.94	83.18	-	-
106+122(H)	5610	-	-	83.42	83.53

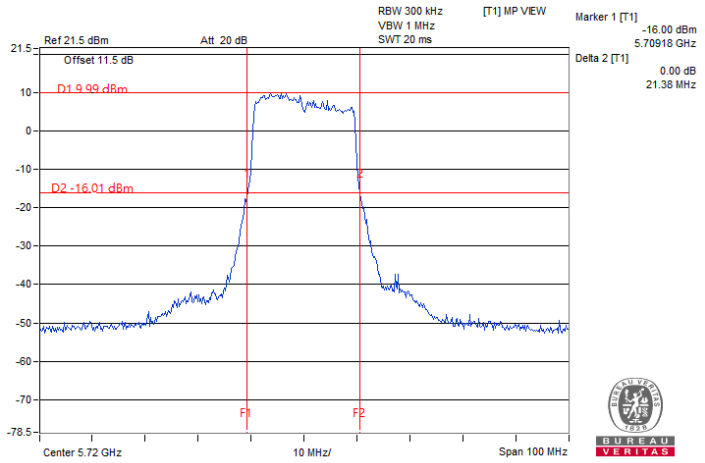
Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
42+58(H)	5290	83.68	30.22	>	24
106+122(L)	5530	82.94	30.18	>	24
106+122(H)	5610	83.42	30.21	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

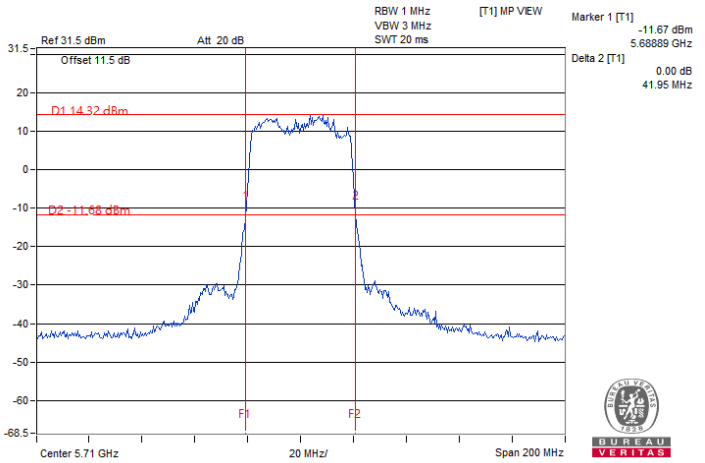
Spectrum Plot of Minimum Value



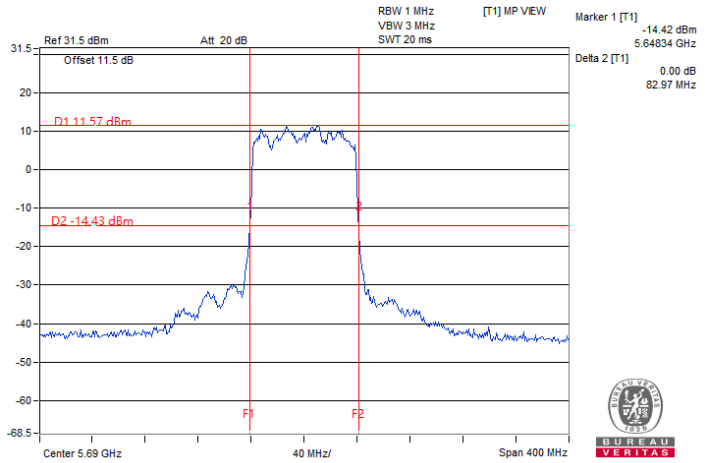
802.11a / Chain 1 : CH 144 (U-NII-3)



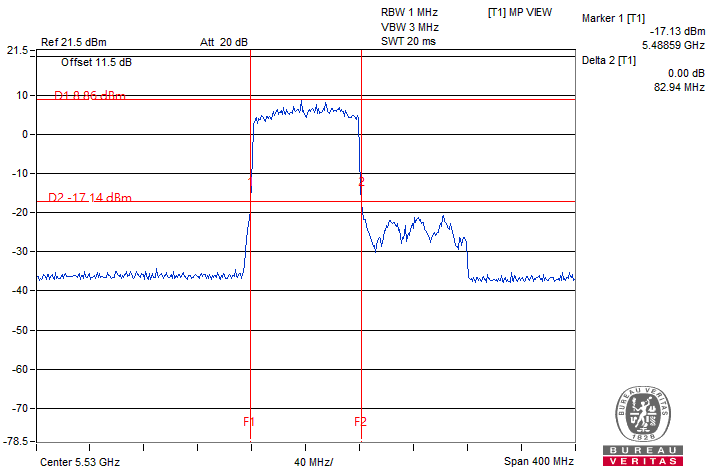
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



802.11ax (HE80) / Chain 0 : CH 106+122(L)

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G: FAP-433G_Radio 3

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.27	20.53	21.08	20.55
116	5580	21.33	20.83	21.70	20.45
140	5700	20.86	20.67	20.85	20.43
144 (U-NII-2C)	5720	15.58	15.37	15.53	15.29
144 (U-NII-3)	5720	5.47	5.34	5.86	4.99

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
100	5500	20.53	24.12	>	24
116	5580	20.45	24.1	>	24
140	5700	20.43	24.1	>	24
144 (U-NII-2C)	5720	15.29	22.84	<	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	23.85	22.26	22.62	22.13
116	5580	22.23	22.43	22.38	21.98
140	5700	22.35	22.22	22.25	22.47
144 (U-NII-2C)	5720	16.24	16.00	16.01	16.02
144 (U-NII-3)	5720	5.91	6.43	6.04	5.93

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
100	5500	22.13	24.44	>	24
116	5580	21.98	24.42	>	24
140	5700	22.22	24.46	>	24
144 (U-NII-2C)	5720	16.00	23.04	<	24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	41.96	41.80	41.90	41.75
110	5550	68.57	41.84	61.04	42.20
134	5670	41.71	41.79	41.76	41.75
142 (U-NII-2C)	5710	36.74	35.94	38.50	35.88
142 (U-NII-3)	5710	6.15	5.95	13.90	5.88

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
102	5510	41.75	27.2 > 24
110	5550	41.84	27.21 > 24
134	5670	41.71	27.2 > 24
142 (U-NII-2C)	5710	35.88	26.54 > 24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	84.17	83.40	83.11	83.42
122	5610	165.86	87.71	163.49	85.43
138 (U-NII-2C)	5690	103.15	76.74	99.38	77.15
138 (U-NII-3)	5690	38.00	6.90	38.64	6.56

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
106	5530	83.11	30.19 > 24
122	5610	85.43	30.31 > 24
138 (U-NII-2C)	5690	76.74	29.85 > 24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

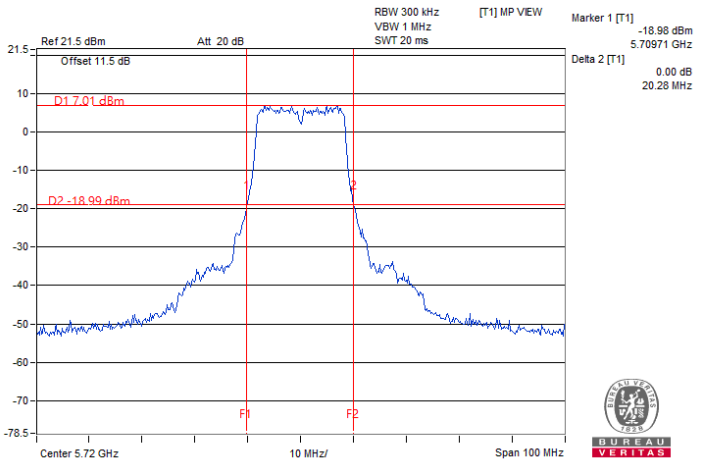
802.11ax (HE160)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	168.40	167.90	169.32	168.09

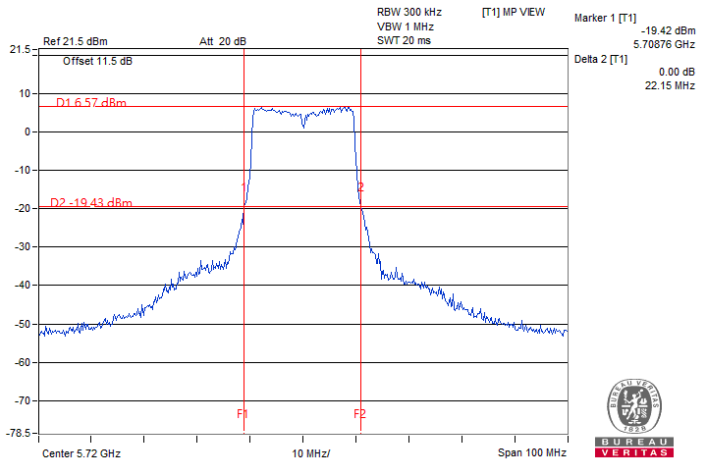
Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
114	5570	167.90	33.25 > 24

Note: For U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

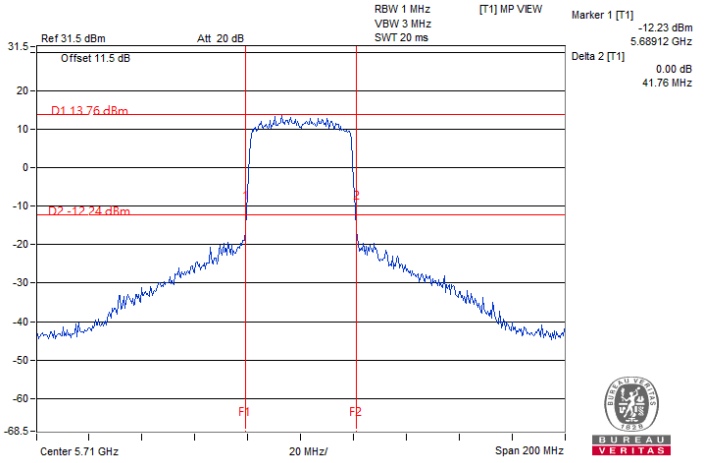
Spectrum Plot of Minimum Value



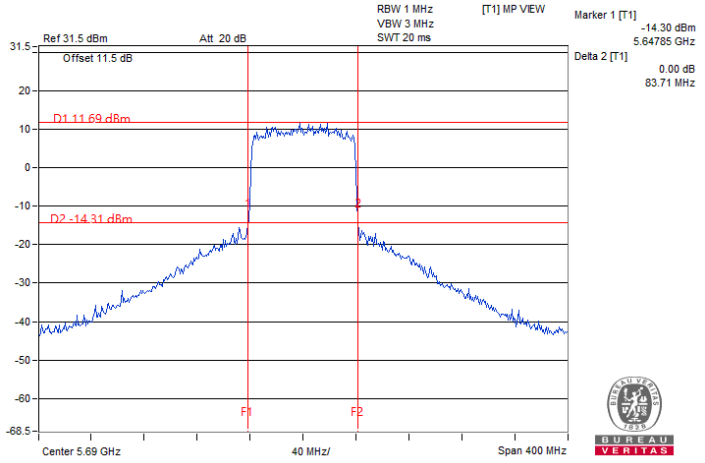
802.11a / Chain 3 : CH 144 (U-NII-3)



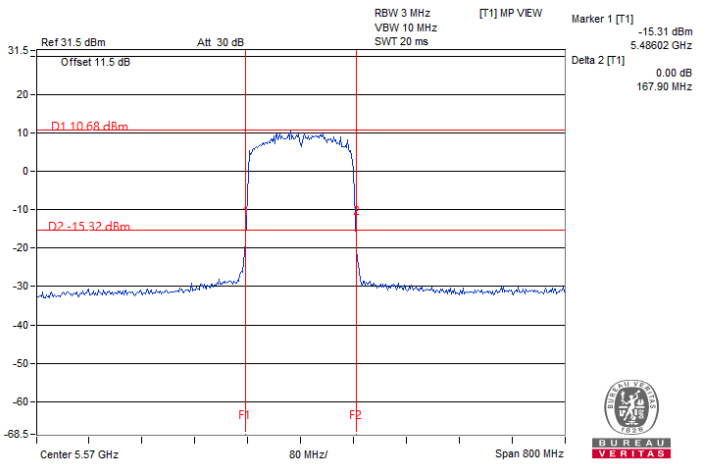
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)



802.11ax (HE160) / Chain 1 : CH 114

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1

7.2 RF Output Power

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin / Jisyong Wang

Test Mode A: FAP-431G_Radio 2

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.85	18.11	17.82	17.42	241.41	23.83	23.89	Pass
60	5300	17.91	18.23	17.90	17.41	245.069	23.89	23.92	Pass
64	5320	17.99	18.08	17.92	17.39	243.991	23.87	23.89	Pass
100	5500	17.92	18.13	18.06	17.44	246.393	23.92	23.94	Pass
116	5580	18.01	18.09	18.20	17.47	**249.574**	**23.97**	23.98	Pass
140	5700	17.93	18.01	18.17	17.50	247.177	23.93	23.94	Pass
*144 (U-NII-2C)	5720	15.83	16.19	16.56	15.91	182.512	22.61	22.71	Pass
*144 (U-NII-3)	5720	9.27	10.11	8.37	9.69	38.792	15.89	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.60	17.73	17.89	17.53	234.978	23.71	24	Pass
60	5300	17.59	17.76	17.95	17.52	235.982	23.73	24	Pass
64	5320	17.56	17.66	17.82	17.50	232.129	23.66	24	Pass
100	5500	17.49	17.86	17.96	17.42	234.924	23.71	24	Pass
116	5580	17.43	17.75	17.88	17.61	233.954	23.69	24	Pass
140	5700	17.51	17.80	17.82	17.55	234.039	23.69	24	Pass
*144 (U-NII-2C)	5720	16.23	16.90	16.72	15.73	185.988	22.69	22.95	Pass
*144 (U-NII-3)	5720	10.46	11.60	9.73	9.99	47.671	16.78	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.42	17.70	17.82	17.65	232.837	23.67	24	Pass
62	5310	16.06	16.23	16.41	16.32	168.948	22.28	24	Pass
102	5510	17.77	17.62	17.78	17.37	232.206	23.66	24	Pass
110	5550	17.77	17.58	17.98	17.23	232.771	23.67	24	Pass
134	5670	17.81	17.46	17.92	17.28	231.514	23.65	24	Pass
*142 (U-NII-2C)	5710	16.72	15.80	17.07	15.77	199.674	23.00	24	Pass
*142 (U-NII-3)	5710	6.30	7.41	6.09	6.15	20.645	13.15	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.71	17.86	18.02	17.64	241.578	23.83	24	Pass
60	5300	17.71	17.88	18.08	17.63	242.608	23.85	24	Pass
64	5320	17.67	17.79	17.94	17.60	238.37	23.77	24	Pass
100	5500	17.60	17.99	18.08	17.52	241.257	23.82	24	Pass
116	5580	17.55	17.88	18.01	17.72	240.659	23.81	24	Pass
140	5700	17.62	17.93	17.94	17.66	240.471	23.81	24	Pass
*144 (U-NII-2C)	5720	16.35	17.02	16.83	15.84	190.987	22.81	22.95	Pass
*144 (U-NII-3)	5720	10.58	11.71	9.84	10.11	48.947	16.90	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.55	17.82	17.93	17.76	239.21	23.79	24	Pass
62	5310	16.16	16.34	16.54	16.44	173.495	22.39	24	Pass
102	5510	17.89	17.75	17.89	17.49	238.706	23.78	24	Pass
110	5550	17.91	17.69	18.10	17.35	239.441	23.79	24	Pass
134	5670	17.94	17.58	18.05	17.39	238.164	23.77	24	Pass
*142 (U-NII-2C)	5710	16.83	15.91	17.19	15.87	204.832	23.11	24	Pass
*142 (U-NII-3)	5710	6.41	7.51	6.20	6.27	21.171	13.26	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.48	13.85	13.65	13.73	93.329	19.70	24	Pass
106	5530	17.57	17.90	17.98	17.36	236.063	23.73	24	Pass
122	5610	17.59	17.89	18.01	17.43	237.506	23.76	24	Pass
*138 (U-NII-2C)	5690	17.44	17.55	17.43	17.43	236.564	23.74	24	Pass
*138 (U-NII-3)	5690	3.10	3.95	2.47	3.86	9.253	9.66	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80+VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	15.27	15.36	-	-	68.007	18.33	30	Pass
42+58(H)	5290	-	-	15.18	15.38	67.475	18.29	24	Pass
106+122(L)	5530	17.78	17.68	-	-	238.703	23.78	24	Pass
106+122(H)	5610	-	-	17.72	17.85				

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.83	17.99	18.13	17.76	248.341	23.95	24	Pass
60	5300	17.81	17.99	18.21	17.75	**249.133**	**23.96**	24	Pass
64	5320	17.79	17.92	18.06	17.71	245.055	23.89	24	Pass
100	5500	17.72	18.12	18.20	17.63	248.032	23.95	24	Pass
116	5580	17.65	18.01	18.12	17.84	247.128	23.93	24	Pass
140	5700	17.74	18.06	18.06	17.77	247.217	23.93	24	Pass
*144 (U-NII-2C)	5720	16.47	17.13	16.95	15.95	196.115	22.93	22.95	Pass
*144 (U-NII-3)	5720	10.70	11.83	9.95	10.22	50.269	17.01	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.65	17.94	18.05	17.89	245.784	23.91	24	Pass
62	5310	16.27	16.47	16.66	16.55	178.255	22.51	24	Pass
102	5510	18.02	17.87	18.01	17.60	245.407	23.90	24	Pass
110	5550	18.03	17.82	18.22	17.45	246.032	23.91	24	Pass
134	5670	18.06	17.69	18.19	17.51	245.004	23.89	24	Pass
*142 (U-NII-2C)	5710	16.95	16.02	17.32	15.98	210.502	23.23	24	Pass
*142 (U-NII-3)	5710	6.53	7.62	6.31	6.39	21.737	13.37	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.59	13.99	13.77	13.86	96.062	19.83	24	Pass
106	5530	17.69	18.02	18.11	17.47	242.697	23.85	24	Pass
122	5610	17.71	18.01	18.15	17.56	244.591	23.88	24	Pass
*138 (U-NII-2C)	5690	17.56	17.67	17.54	17.54	242.914	23.85	24	Pass
*138 (U-NII-3)	5690	3.21	4.07	2.58	3.98	9.503	9.78	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80+HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	15.33	15.41	-	-	68.873	18.38	30	Pass
42+58(H)	5290	-	-	15.23	15.44	68.337	18.35	24	Pass
106+122(L)	5530	17.83	17.76	-	-	242.435	23.85	24	Pass
106+122(H)	5610	-	-	17.80	17.91				

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.51 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.48	16.64	16.77	16.40	181.78	22.60	23.02	Pass
60	5300	16.49	16.62	16.81	16.44	182.514	22.61	23.02	Pass
64	5320	16.50	16.57	16.68	16.39	180.172	22.56	23.02	Pass
100	5500	17.01	17.05	17.18	17.08	204.223	23.10	23.94	Pass
116	5580	17.05	17.29	17.41	17.12	210.882	23.24	23.94	Pass
140	5700	16.98	17.30	17.38	17.06	209.109	23.20	23.94	Pass
*144 (U-NII-2C)	5720	15.73	16.37	16.21	15.22	165.259	22.18	22.89	Pass
*144 (U-NII-3)	5720	9.94	11.07	9.25	9.49	42.386	16.27	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.33	16.57	16.66	16.55	179.878	22.55	23.02	Pass
62	5310	16.06	16.23	16.41	16.32	168.948	22.28	23.02	Pass
102	5510	17.77	17.62	17.78	17.37	232.206	23.66	23.94	Pass
110	5550	17.77	17.58	17.98	17.23	232.771	23.67	23.94	Pass
134	5670	17.81	17.46	17.92	17.28	231.514	23.65	23.94	Pass
*142 (U-NII-2C)	5710	16.72	15.80	17.07	15.77	199.674	23.00	23.94	Pass
*142 (U-NII-3)	5710	6.30	7.41	6.09	6.15	20.645	13.15	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.60	16.77	16.91	16.52	187.208	22.72	23.02	Pass
60	5300	16.60	16.75	16.94	16.56	187.745	22.74	23.02	Pass
64	5320	16.61	16.71	16.81	16.52	185.543	22.68	23.02	Pass
100	5500	17.12	17.18	17.30	17.22	210.189	23.23	23.94	Pass
116	5580	17.17	17.40	17.54	17.24	216.794	23.36	23.94	Pass
140	5700	17.11	17.43	17.50	17.17	215.093	23.33	23.94	Pass
*144 (U-NII-2C)	5720	15.84	16.49	16.33	15.34	169.796	22.30	22.89	Pass
*144 (U-NII-3)	5720	10.05	11.19	9.35	9.60	43.484	16.38	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.45	16.71	16.79	16.68	185.35	22.68	23.02	Pass
62	5310	16.16	16.34	16.54	16.44	173.495	22.39	23.02	Pass
102	5510	17.89	17.75	17.89	17.49	238.706	23.78	23.94	Pass
110	5550	17.91	17.69	18.10	17.35	239.441	23.79	23.94	Pass
134	5670	17.94	17.58	18.05	17.39	238.164	23.77	23.94	Pass
*142 (U-NII-2C)	5710	16.83	15.91	17.19	15.87	204.832	23.11	23.94	Pass
*142 (U-NII-3)	5710	6.41	7.51	6.20	6.27	21.171	13.26	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.48	13.85	13.65	13.73	93.329	19.70	23.02	Pass
106	5530	17.57	17.90	17.98	17.36	236.063	23.73	23.94	Pass
122	5610	17.59	17.89	18.01	17.43	237.506	23.76	23.94	Pass
*138 (U-NII-2C)	5690	17.44	17.55	17.43	17.43	236.564	23.74	23.94	Pass
*138 (U-NII-3)	5690	3.10	3.95	2.47	3.86	9.253	9.66	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ac (VHT80+VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	15.27	15.36	-	-	68.007	18.33	30	Pass
42+58(H)	5290	-	-	15.18	15.38	67.475	18.29	24	Pass
106+122(L)	5530	17.78	17.68	-	-	238.703	23.78	24	Pass
106+122(H)	5610	-	-	17.72	17.85				Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-1, the directional gain is 4.36 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.03 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.73	16.91	17.04	16.64	192.903	22.85	23.02	Pass
60	5300	16.72	16.88	17.08	16.67	**193.244**	**22.86**	23.02	Pass
64	5320	16.72	16.84	16.95	16.64	190.972	22.81	23.02	Pass
100	5500	17.24	17.31	17.42	17.35	216.326	23.35	23.94	Pass
116	5580	17.29	17.52	17.67	17.34	222.752	23.48	23.94	Pass
140	5700	17.22	17.55	17.63	17.28	221.008	23.44	23.94	Pass
*144 (U-NII-2C)	5720	15.96	16.61	16.43	15.45	174.252	22.41	22.89	Pass
*144 (U-NII-3)	5720	10.17	11.31	9.45	9.70	44.614	16.49	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.57	16.84	16.93	16.80	190.88	22.81	23.02	Pass
62	5310	16.27	16.47	16.66	16.55	178.255	22.51	23.02	Pass
102	5510	18.02	17.87	18.01	17.60	245.407	23.90	23.94	Pass
110	5550	18.03	17.82	18.22	17.45	**246.032**	**23.91**	23.94	Pass
134	5670	18.06	17.69	18.19	17.51	245.004	23.89	23.94	Pass
*142 (U-NII-2C)	5710	16.95	16.02	17.32	15.98	210.502	23.23	23.94	Pass
*142 (U-NII-3)	5710	6.53	7.62	6.31	6.39	21.737	13.37	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.59	13.99	13.77	13.86	96.062	19.83	23.02	Pass
106	5530	17.69	18.02	18.11	17.47	242.697	23.85	23.94	Pass
122	5610	17.71	18.01	18.15	17.56	244.591	23.88	23.94	Pass
*138 (U-NII-2C)	5690	17.56	17.67	17.54	17.54	242.914	23.85	23.94	Pass
*138 (U-NII-3)	5690	3.21	4.07	2.58	3.98	9.503	9.78	29.69	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.98-6)].
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(6.06-6)].
5. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.31-6) = 29.69 dBm.

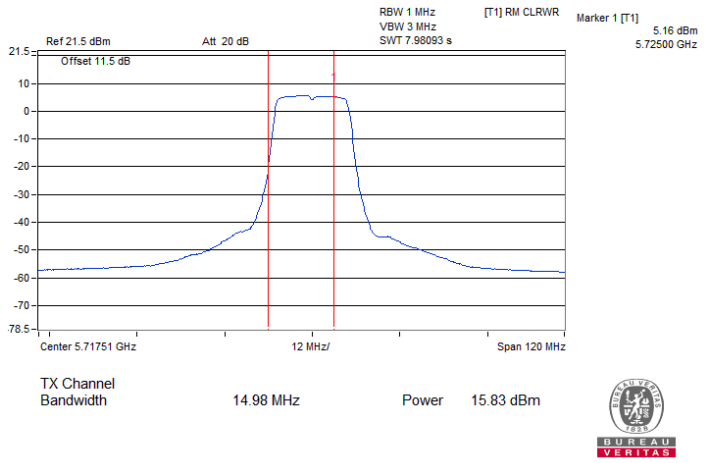
802.11ax (HE80+HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	15.33	15.41	-	-	68.873	18.38	30	Pass
42+58(H)	5290	-	-	15.23	15.44	68.337	18.35	24	Pass
106+122(L)	5530	17.83	17.76	-	-	242.435	23.85	24	Pass
106+122(H)	5610	-	-	17.80	17.91				Pass

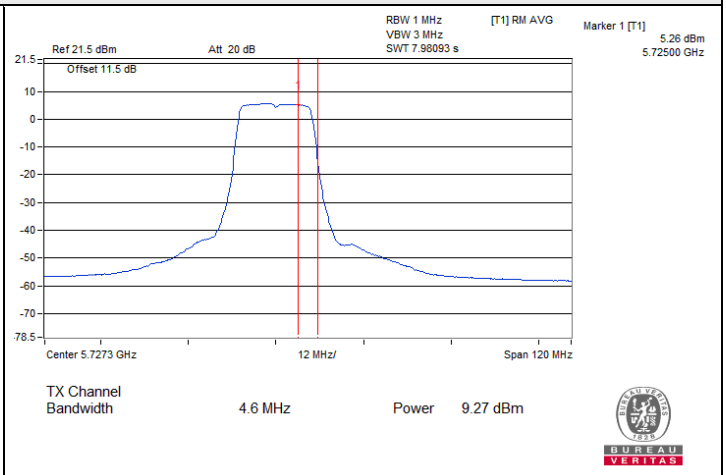
Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-1, the directional gain is 4.36 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.03 dBi < 6 dBi, so the output power limit shall not be reduced.

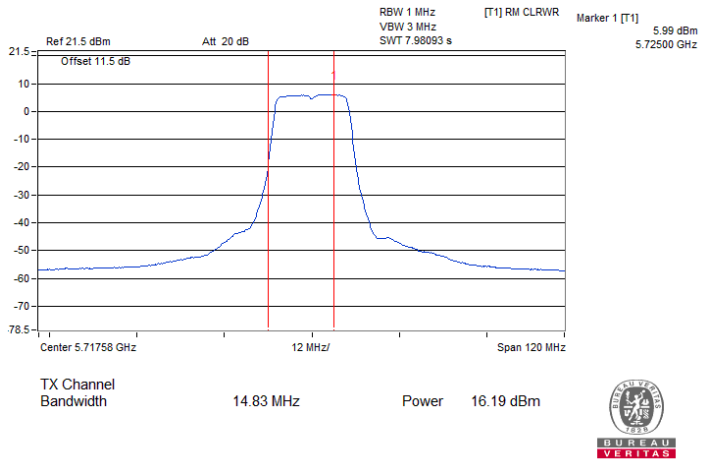
Spectrum Plot for channel straddling



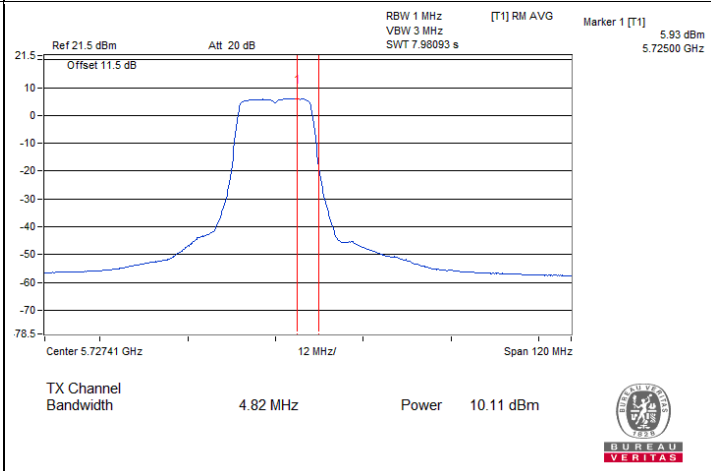
802.11a / Chain 0 : CH 144 (U-NII-2C)



802.11a / Chain 0 : CH 144 (U-NII-3)

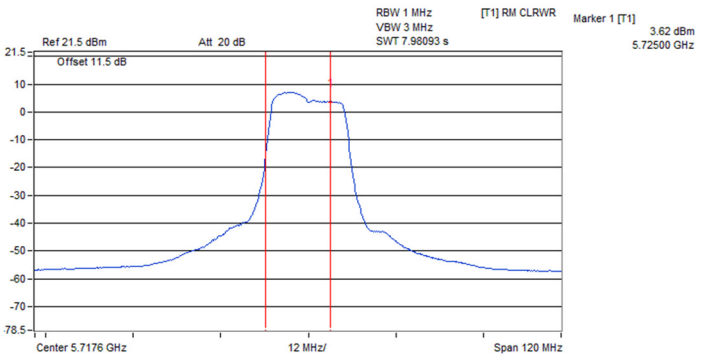


802.11a / Chain 1 : CH 144 (U-NII-2C)



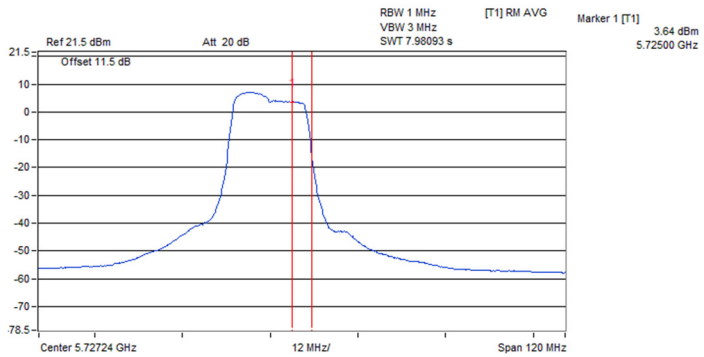
802.11a / Chain 1 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



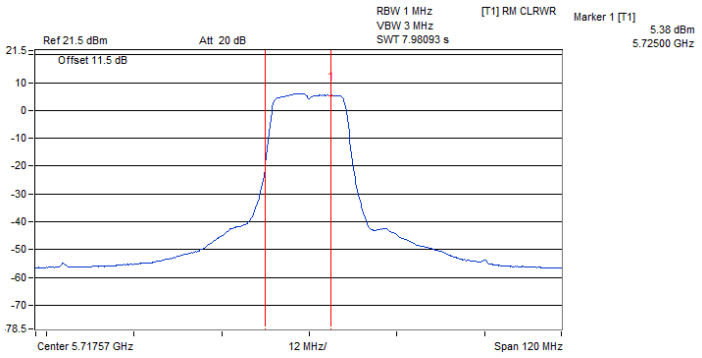
TX Channel Bandwidth 14.79 MHz Power 16.56 dBm

802.11a / Chain 2 : CH 144 (U-NII-2C)



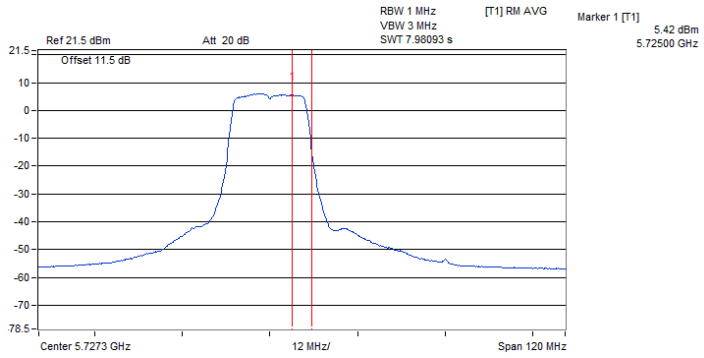
TX Channel Bandwidth 4.49 MHz Power 8.37 dBm

802.11a / Chain 2 : CH 144 (U-NII-3)



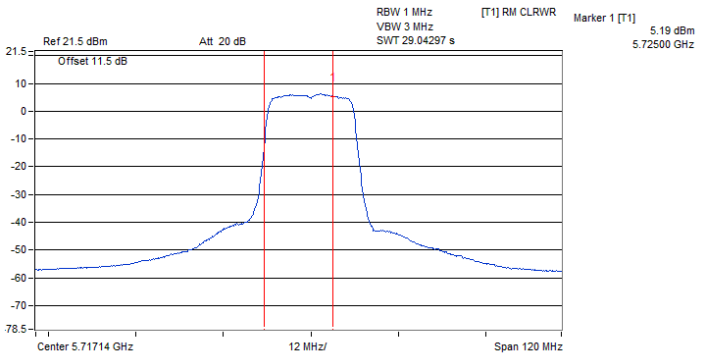
TX Channel Bandwidth 14.86 MHz Power 15.91 dBm

802.11a / Chain 3 : CH 144 (U-NII-2C)



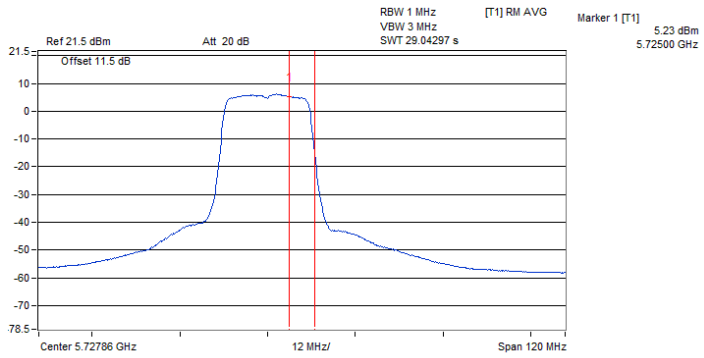
TX Channel Bandwidth 4.61 MHz Power 9.69 dBm

802.11a / Chain 3 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.72 MHz Power 16.47 dBm

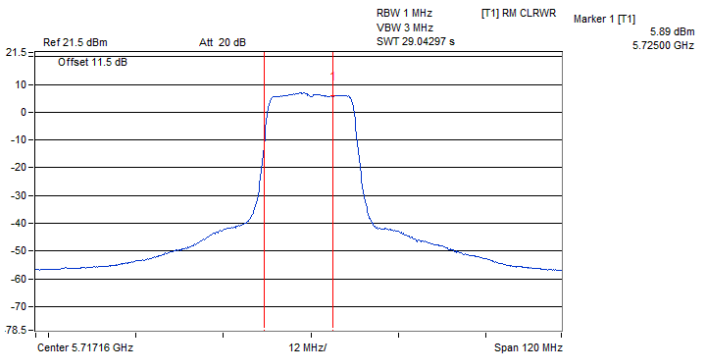
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.73 MHz Power 10.7 dBm

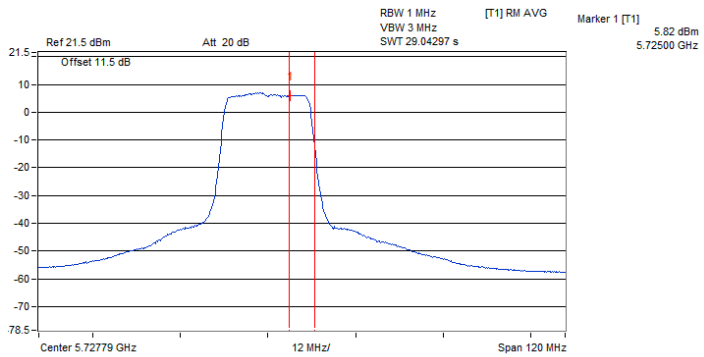
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



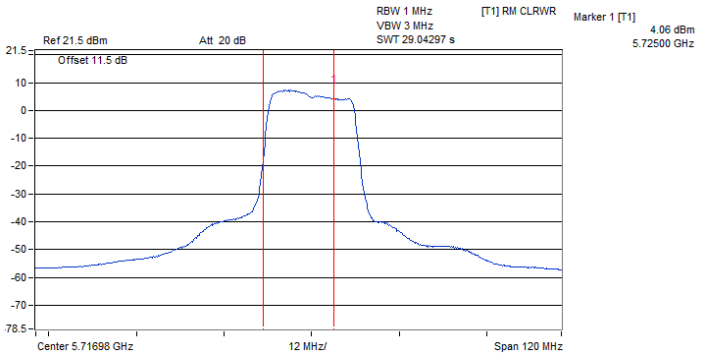
TX Channel Bandwidth 15.68 MHz Power 17.13 dBm

802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



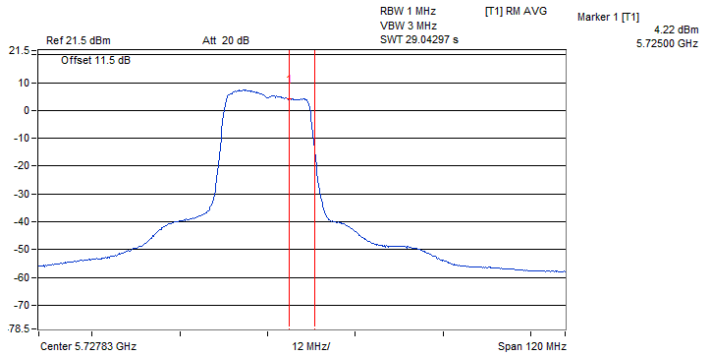
TX Channel Bandwidth 5.59 MHz Power 11.83 dBm

802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)



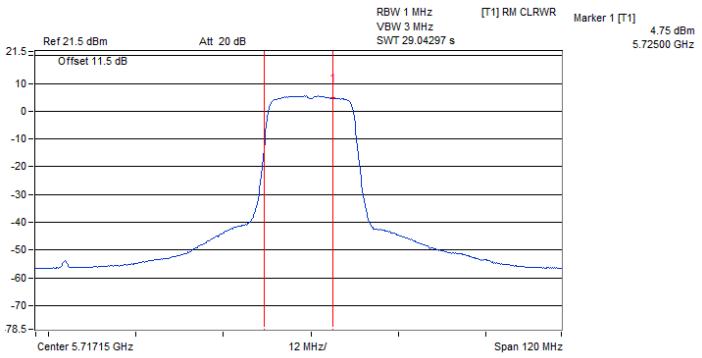
TX Channel Bandwidth 16.04 MHz Power 16.95 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)



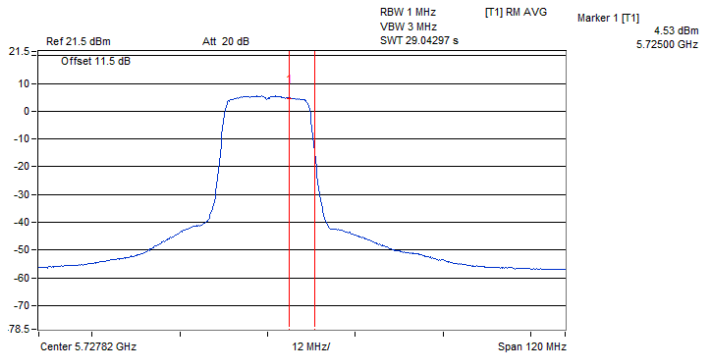
TX Channel Bandwidth 5.66 MHz Power 9.95 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.69 MHz Power 15.95 dBm

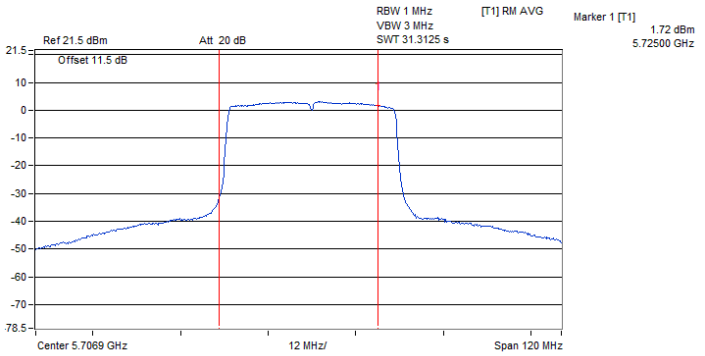
802.11ax (HE20) / Chain 3 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.65 MHz Power 10.22 dBm

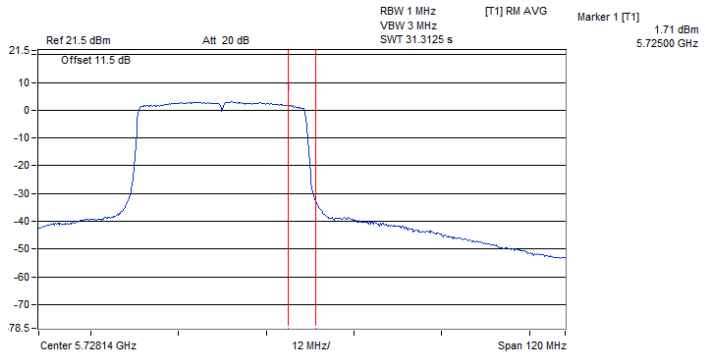
802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



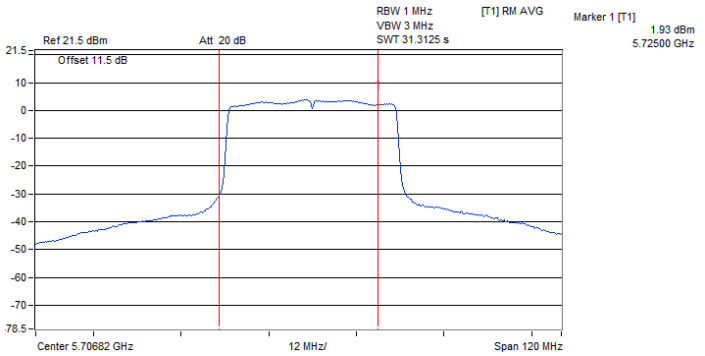
TX Channel Bandwidth 36.19 MHz Power 16.95 dBm

802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)



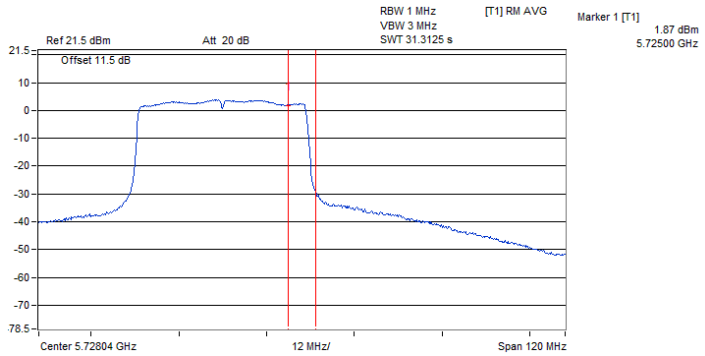
TX Channel Bandwidth 6.28 MHz Power 6.53 dBm

802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)



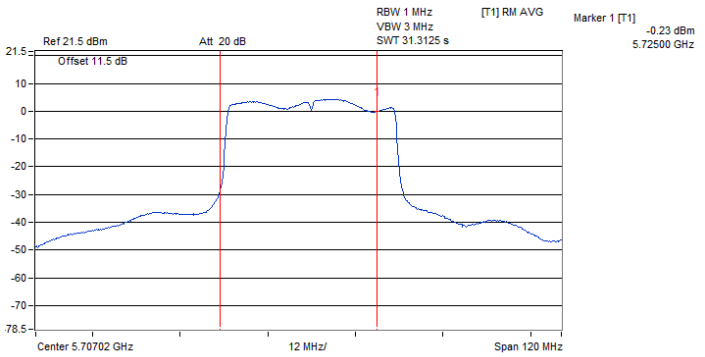
TX Channel Bandwidth 36.35 MHz Power 16.02 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



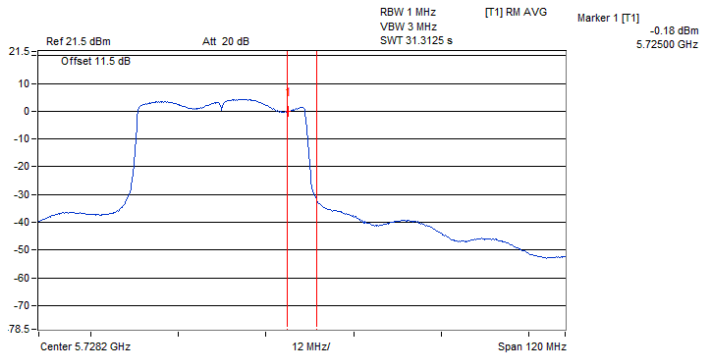
TX Channel Bandwidth 6.08 MHz Power 7.62 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



TX Channel Bandwidth 35.96 MHz Power 17.32 dBm

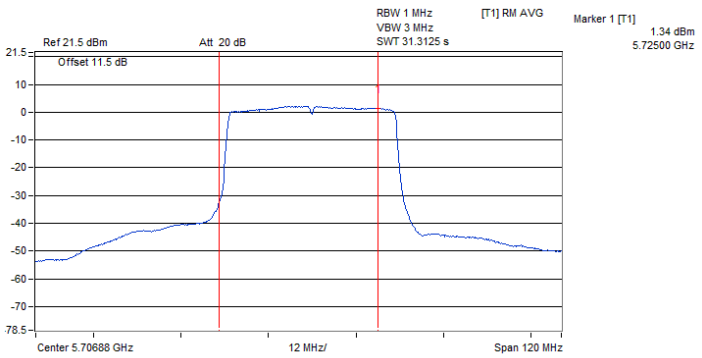
802.11ax (HE40) / Chain 2 : CH 142 (U-NII-2C)



TX Channel Bandwidth 6.4 MHz Power 6.31 dBm

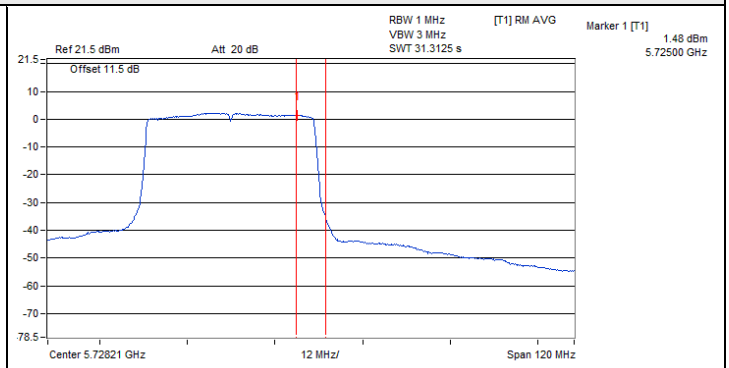
802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



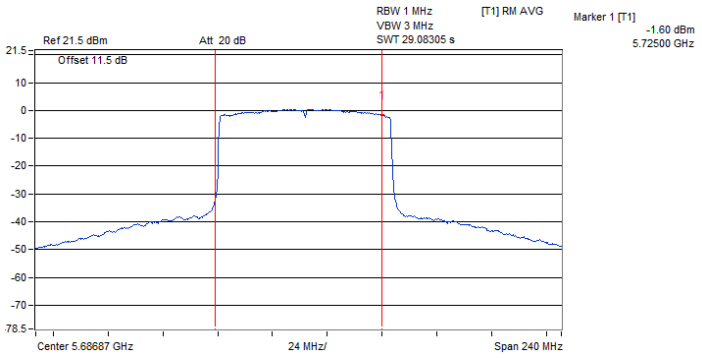
TX Channel Bandwidth 36.24 MHz Power 15.98 dBm

802.11ax (HE40) / Chain 3 : CH 142 (U-NII-2C)



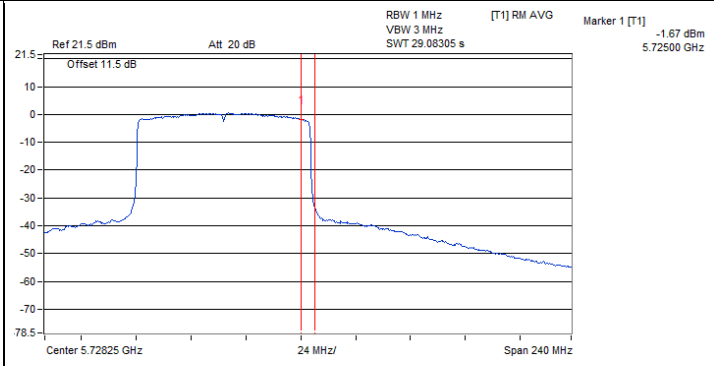
TX Channel Bandwidth 6.42 MHz Power 6.39 dBm

802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)



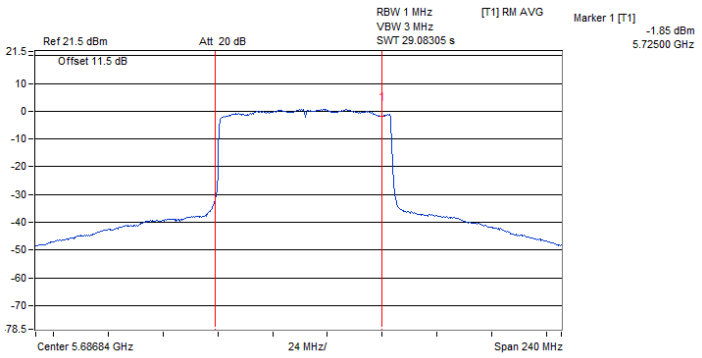
TX Channel Bandwidth 76.26 MHz Power 17.56 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



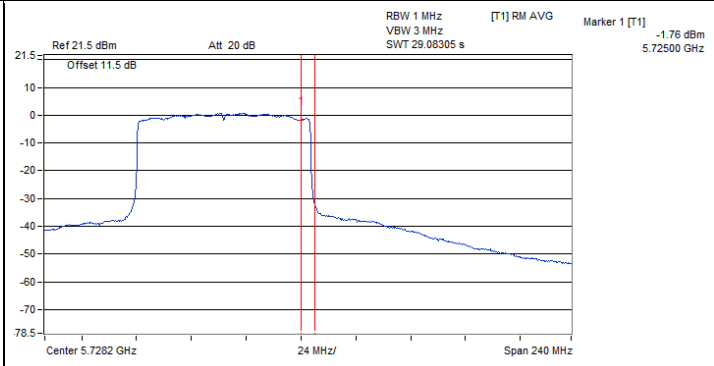
TX Channel Bandwidth 6.5 MHz Power 3.21 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)



TX Channel Bandwidth 76.31 MHz Power 17.67 dBm

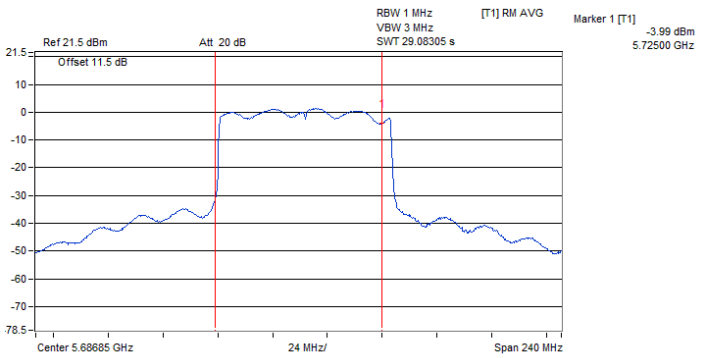
802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



TX Channel Bandwidth 6.4 MHz Power 4.07 dBm

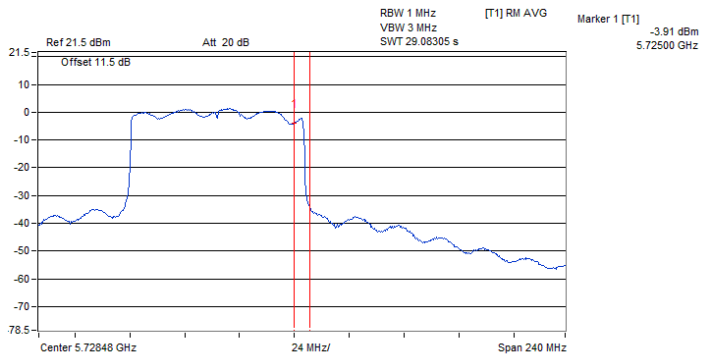
802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



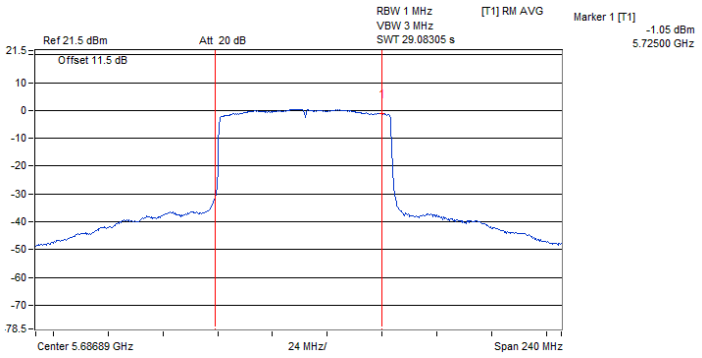
TX Channel Bandwidth 76.3 MHz Power 17.54 dBm

802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)



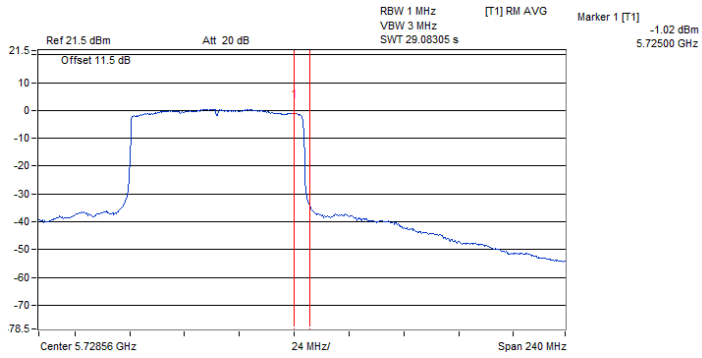
TX Channel Bandwidth 6.96 MHz Power 2.58 dBm

802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)



TX Channel Bandwidth 76.22 MHz Power 17.54 dBm

802.11ax (HE80) / Chain 3 : CH 138 (U-NII-2C)



TX Channel Bandwidth 7.13 MHz Power 3.98 dBm

802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin, Wayne Lin

Test Mode C: FAP-431G_Radio 3

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.70	15.72	15.60	15.87	149.423	21.74	24	Pass
116	5580	16.35	16.27	16.41	16.58	174.767	22.42	24	Pass
140	5700	15.71	15.74	15.65	15.86	150.013	21.76	24	Pass
*144 (U-NII-2C)	5720	14.99	14.94	14.90	15.01	136.455	21.35	22.84	Pass
*144 (U-NII-3)	5720	9.69	9.46	9.51	9.62	39.451	15.96	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.85	14.70	14.52	14.81	118.644	20.74	24	Pass
116	5580	16.16	16.05	16.48	16.52	170.914	22.33	24	Pass
140	5700	14.75	14.46	14.62	14.50	114.937	20.60	24	Pass
*144 (U-NII-2C)	5720	14.61	14.63	14.58	14.71	136.646	21.36	23.01	Pass
*144 (U-NII-3)	5720	10.48	10.49	10.37	10.41	52.011	17.16	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.78	13.35	13.57	13.65	91.43	19.61	24	Pass
110	5550	17.77	17.74	17.32	18.01	236.463	23.74	24	Pass
134	5670	16.20	15.98	16.09	15.89	160.774	22.06	24	Pass
*142 (U-NII-2C)	5710	17.20	16.80	16.79	16.77	229.105	23.60	24	Pass
*142 (U-NII-3)	5710	6.95	6.26	6.56	6.39	21.156	13.25	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.90	14.73	14.57	14.87	119.952	20.79	24	Pass
116	5580	16.22	16.11	16.54	16.58	173.292	22.39	24	Pass
140	5700	14.81	14.52	14.67	14.58	116.6	20.67	24	Pass
*144 (U-NII-2C)	5720	14.65	14.67	14.62	14.75	137.91	21.40	23.01	Pass
*144 (U-NII-3)	5720	10.51	10.53	10.40	10.44	52.402	17.19	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.84	13.40	13.63	13.71	92.652	19.67	24	Pass
110	5550	17.83	17.80	17.37	18.09	239.922	23.80	24	Pass
134	5670	16.24	16.04	16.14	15.95	162.722	22.11	24	Pass
*142 (U-NII-2C)	5710	17.24	16.83	16.84	16.81	231.225	23.64	24	Pass
*142 (U-NII-3)	5710	6.98	6.31	6.60	6.42	21.338	13.29	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	17.42	16.93	17.11	17.40	210.884	23.24	24	Pass
122	5610	17.82	17.55	17.95	17.80	240.049	23.80	24	Pass
*138 (U-NII-2C)	5690	17.23	17.00	17.31	17.12	246.188	23.91	24	Pass
*138 (U-NII-3)	5690	2.71	2.87	3.02	3.09	9.271	9.67	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	15.74	15.34	15.71	15.60	145.242	21.62	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.95	14.79	14.62	14.92	121.41	20.84	24	Pass
116	5580	16.27	16.15	16.59	16.63	175.203	22.44	24	Pass
140	5700	14.86	14.56	14.71	14.62	117.749	20.71	24	Pass
*144 (U-NII-2C)	5720	14.72	14.72	14.66	14.79	139.506	21.45	23.01	Pass
*144 (U-NII-3)	5720	10.55	10.57	10.43	10.51	52.948	17.24	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.91	13.44	13.70	13.76	93.894	19.73	24	Pass
110	5550	17.90	17.85	17.44	18.13	243.089	23.86	24	Pass
134	5670	16.30	16.11	16.20	16.02	165.171	22.18	24	Pass
*142 (U-NII-2C)	5710	17.29	16.86	16.87	16.84	233.116	23.68	24	Pass
*142 (U-NII-3)	5710	7.01	6.35	6.63	6.47	21.522	13.33	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	17.46	16.98	17.15	17.44	212.95	23.28	24	Pass
122	5610	17.87	17.60	18.01	17.85	242.974	23.86	24	Pass
*138 (U-NII-2C)	5690	17.27	17.03	17.35	17.18	**248.612**	**23.96**	24	Pass
*138 (U-NII-3)	5690	2.76	2.91	3.06	3.14	9.367	9.72	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	15.80	15.41	15.75	15.64	147	21.67	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-2C, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.85	14.70	14.52	14.81	118.644	20.74	22.89	Pass
116	5580	16.16	16.05	16.48	16.52	170.914	22.33	22.89	Pass
140	5700	14.75	14.46	14.62	14.50	114.937	20.60	22.89	Pass
*144 (U-NII-2C)	5720	14.61	14.63	14.58	14.71	136.646	21.36	21.9	Pass
*144 (U-NII-3)	5720	10.48	10.49	10.37	10.41	52.011	17.16	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.78	13.35	13.57	13.65	91.43	19.61	22.89	Pass
110	5550	16.79	16.76	16.27	16.92	186.745	22.71	22.89	Pass
134	5670	16.20	15.98	16.09	15.89	160.774	22.06	22.89	Pass
*142 (U-NII-2C)	5710	16.20	15.81	15.79	15.75	181.884	22.60	22.89	Pass
*142 (U-NII-3)	5710	5.93	5.25	5.61	5.37	16.805	12.25	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.90	14.73	14.57	14.87	119.952	20.79	22.89	Pass
116	5580	16.22	16.11	16.54	16.58	173.292	22.39	22.89	Pass
140	5700	14.81	14.52	14.67	14.58	116.6	20.67	22.89	Pass
*144 (U-NII-2C)	5720	14.65	14.67	14.62	14.75	137.91	21.40	21.9	Pass
*144 (U-NII-3)	5720	10.51	10.53	10.40	10.44	52.402	17.19	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.84	13.40	13.63	13.71	92.652	19.67	22.89	Pass
110	5550	16.89	16.84	16.35	17.06	191.139	22.81	22.89	Pass
134	5670	16.24	16.04	16.14	15.95	162.722	22.11	22.89	Pass
*142 (U-NII-2C)	5710	16.24	15.85	15.86	15.80	183.98	22.65	22.89	Pass
*142 (U-NII-3)	5710	5.96	5.31	5.62	5.41	16.939	12.29	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	16.84	16.33	16.64	16.92	186.595	22.71	22.89	Pass
122	5610	16.76	16.50	16.87	16.84	189.039	22.77	22.89	Pass
*138 (U-NII-2C)	5690	16.18	15.92	16.18	16.04	191.755	22.83	22.89	Pass
*138 (U-NII-3)	5690	1.70	1.82	2.00	2.08	7.326	8.65	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ac (VHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	15.74	15.34	15.71	15.60	145.242	21.62	22.89	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	14.95	14.79	14.62	14.92	121.41	20.84	22.89	Pass
116	5580	16.27	16.15	16.59	16.63	175.203	22.44	22.89	Pass
140	5700	14.86	14.56	14.71	14.62	117.749	20.71	22.89	Pass
*144 (U-NII-2C)	5720	14.72	14.72	14.66	14.79	139.506	21.45	21.9	Pass
*144 (U-NII-3)	5720	10.55	10.57	10.43	10.51	52.948	17.24	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	13.91	13.44	13.70	13.76	93.894	19.73	22.89	Pass
110	5550	16.96	16.87	16.47	17.10	**193.947**	**22.88**	22.89	Pass
134	5670	16.30	16.11	16.20	16.02	165.171	22.18	22.89	Pass
*142 (U-NII-2C)	5710	16.28	15.87	15.89	15.82	185.162	22.68	22.89	Pass
*142 (U-NII-3)	5710	6.00	5.34	5.64	5.45	17.066	12.32	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	16.97	16.50	16.59	16.93	189.363	22.77	22.89	Pass
122	5610	16.90	16.65	16.91	16.94	193.738	22.87	22.89	Pass
*138 (U-NII-2C)	5690	16.21	15.95	16.22	16.09	193.418	22.86	22.89	Pass
*138 (U-NII-3)	5690	1.73	1.87	2.03	2.13	7.394	8.69	29.09	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].
4. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.91-6) = 29.09 dBm.

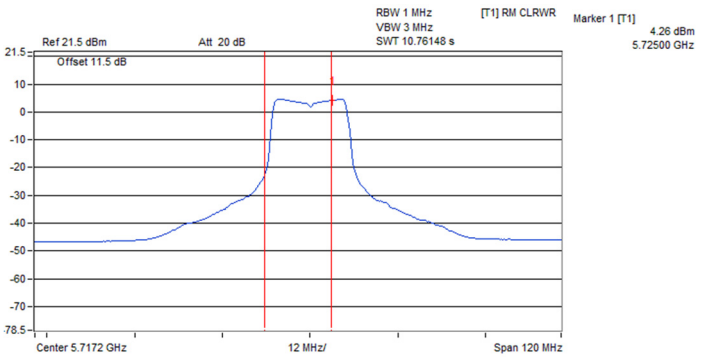
802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	15.80	15.41	15.75	15.64	147	21.67	22.89	Pass

Notes:

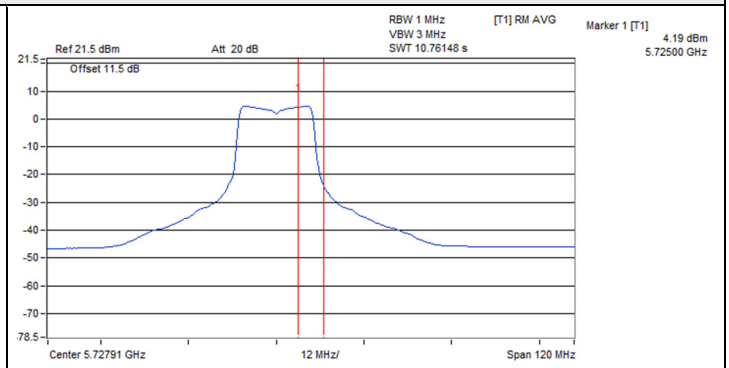
1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.11-6)].

Spectrum Plot for channel straddling



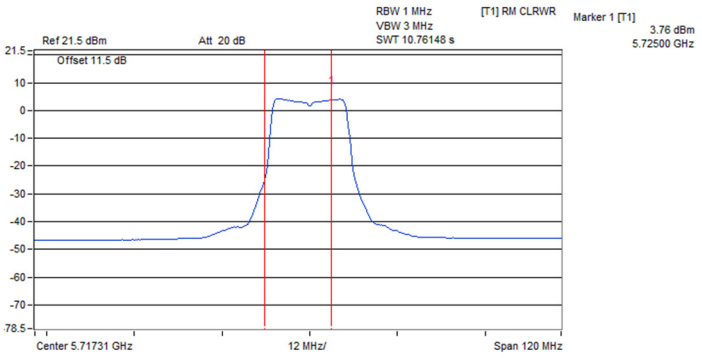
TX Channel Bandwidth 15.59 MHz Power 14.99 dBm

802.11a / Chain 0 : CH 144 (U-NII-2C)



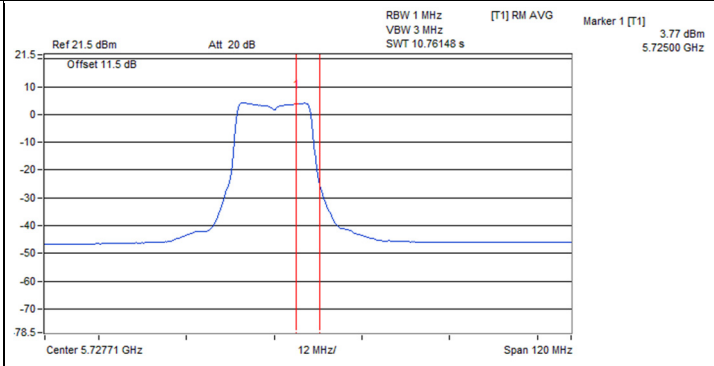
TX Channel Bandwidth 5.83 MHz Power 9.69 dBm

802.11a / Chain 0 : CH 144 (U-NII-3)



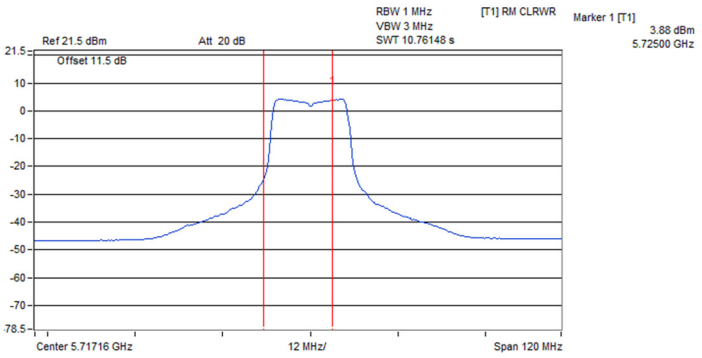
TX Channel Bandwidth 15.37 MHz Power 14.94 dBm

802.11a / Chain 1 : CH 144 (U-NII-2C)



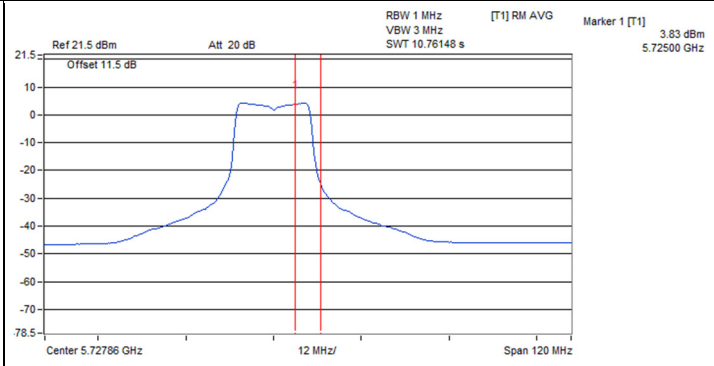
TX Channel Bandwidth 5.42 MHz Power 9.46 dBm

802.11a / Chain 1 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.67 MHz Power 14.9 dBm

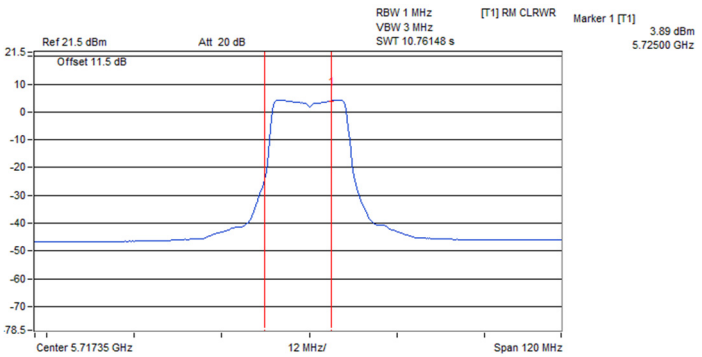
802.11a / Chain 2 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.72 MHz Power 9.51 dBm

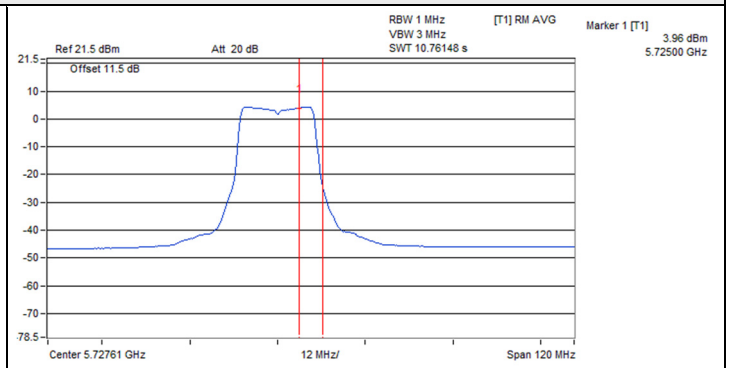
802.11a / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



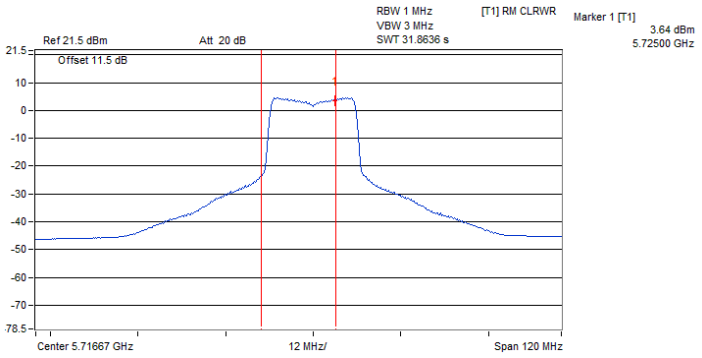
TX Channel Bandwidth 15.29 MHz Power 15.01 dBm

802.11a / Chain 3 : CH 144 (U-NII-2C)



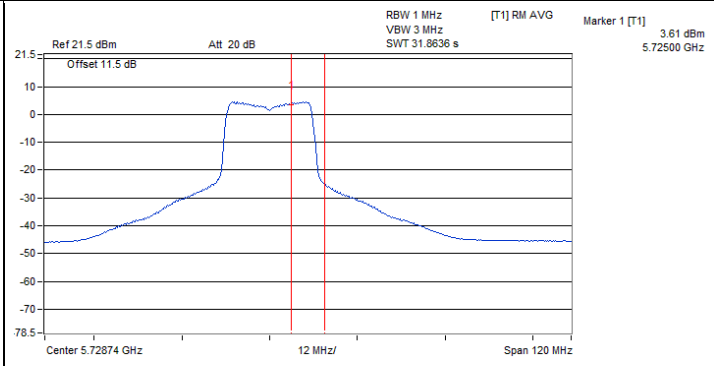
TX Channel Bandwidth 5.23 MHz Power 9.62 dBm

802.11a / Chain 3 : CH 144 (U-NII-3)



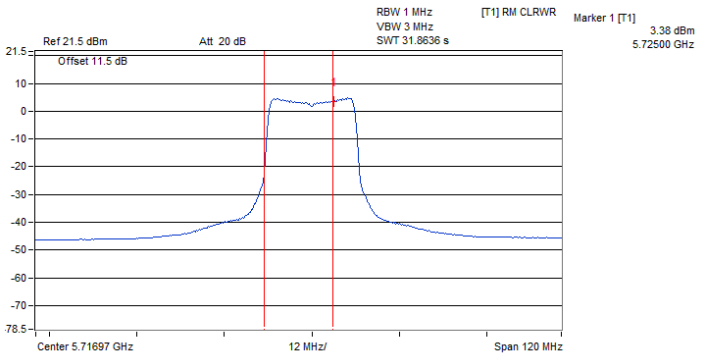
TX Channel Bandwidth 16.66 MHz Power 14.72 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



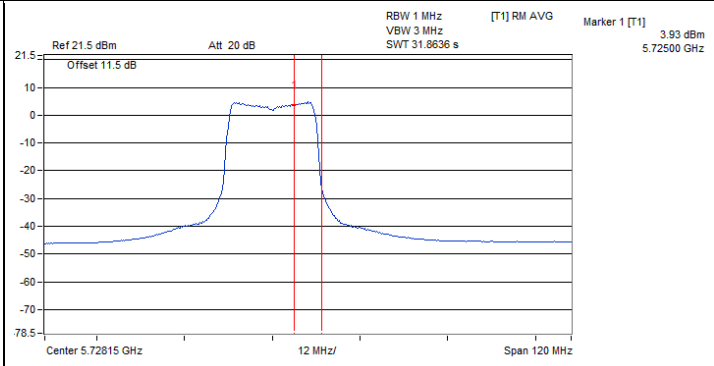
TX Channel Bandwidth 7.48 MHz Power 10.55 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



TX Channel Bandwidth 16.06 MHz Power 14.72 dBm

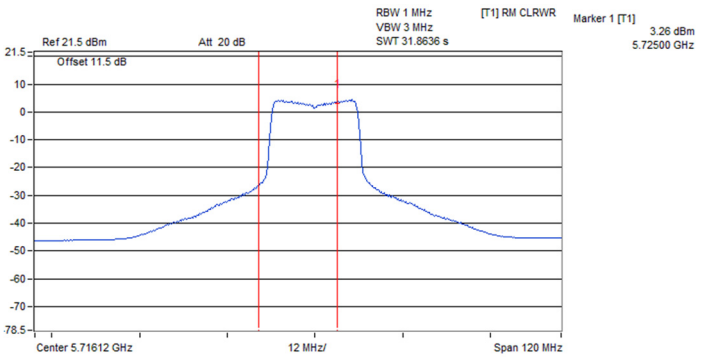
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



TX Channel Bandwidth 6.31 MHz Power 10.57 dBm

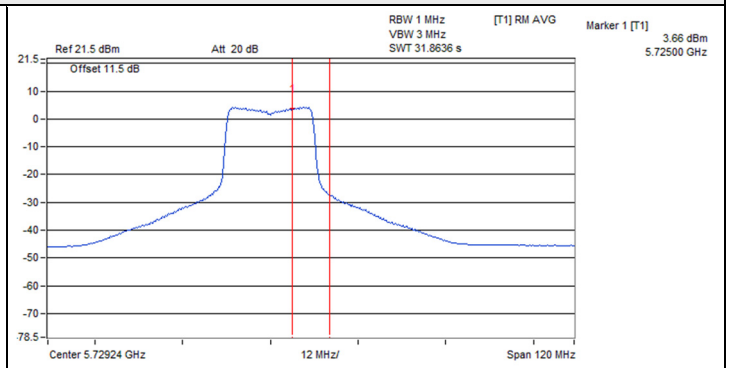
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



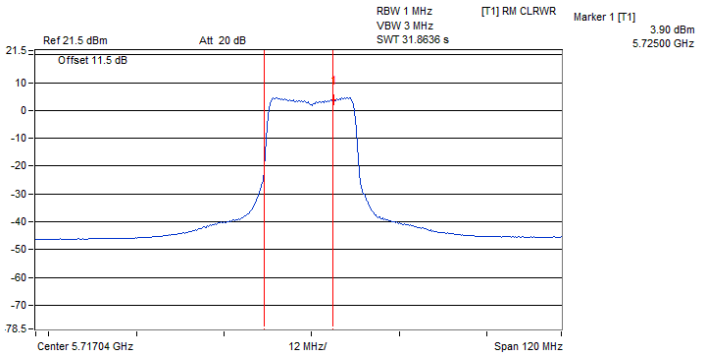
TX Channel Bandwidth 17.76 MHz Power 14.66 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)



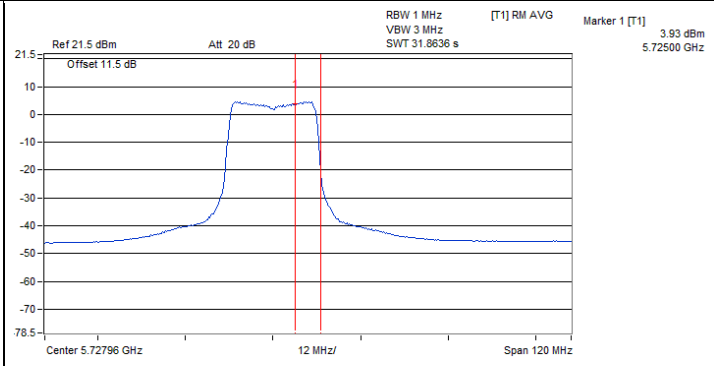
TX Channel Bandwidth 8.48 MHz Power 10.43 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



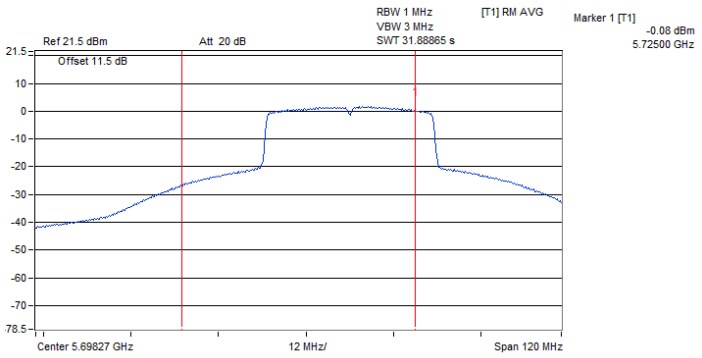
TX Channel Bandwidth 15.91 MHz Power 14.79 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-2C)



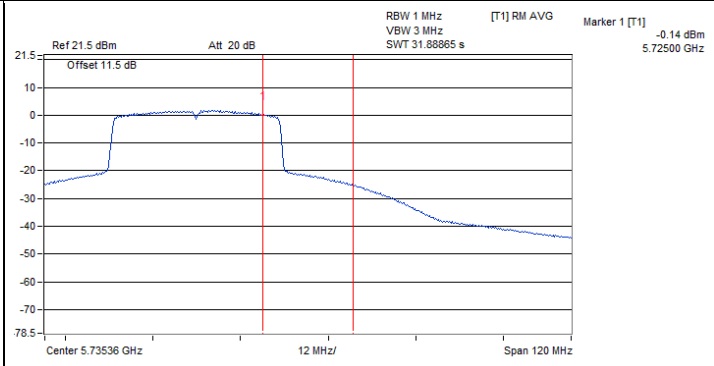
TX Channel Bandwidth 5.92 MHz Power 10.51 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



TX Channel Bandwidth 53.45 MHz Power 17.29 dBm

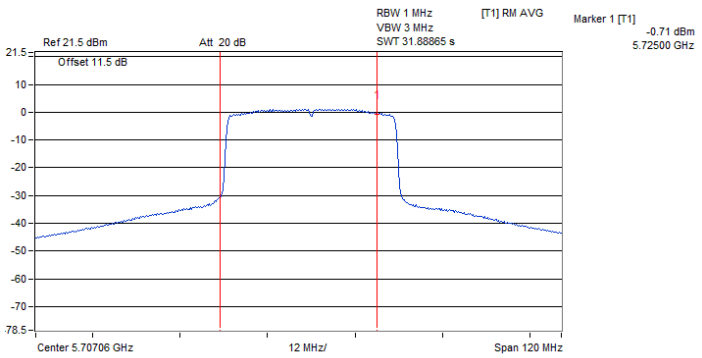
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)



TX Channel Bandwidth 20.72 MHz Power 7.01 dBm

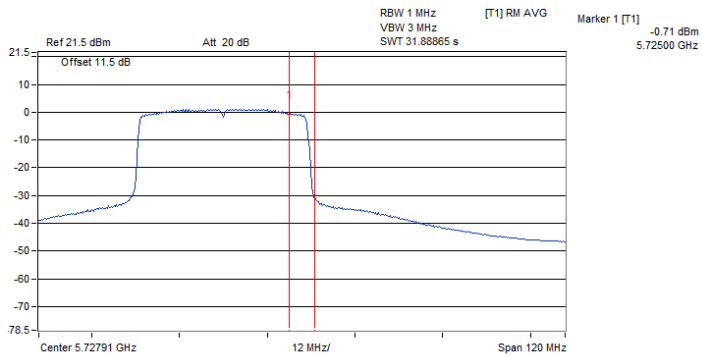
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



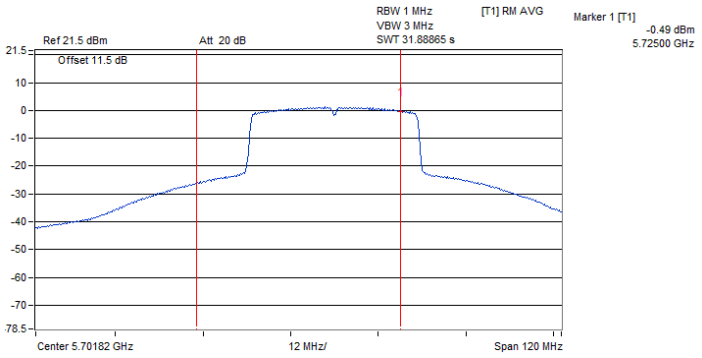
TX Channel Bandwidth 35.87 MHz Power 16.86 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



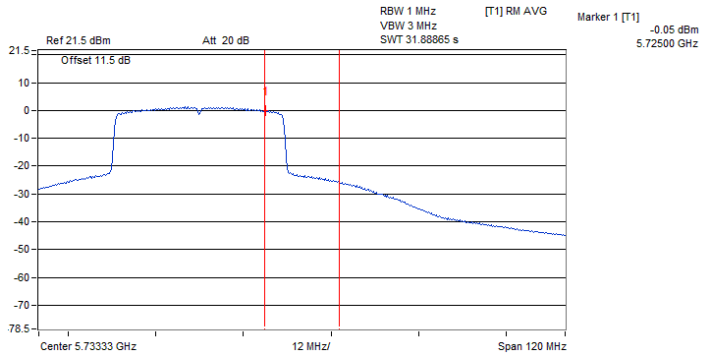
TX Channel Bandwidth 5.82 MHz Power 6.35 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



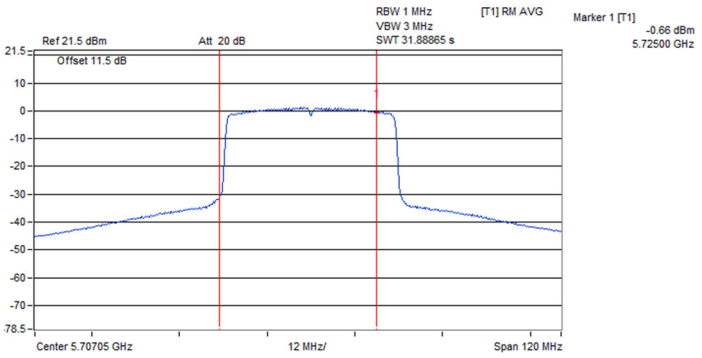
TX Channel Bandwidth 46.36 MHz Power 16.87 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-2C)



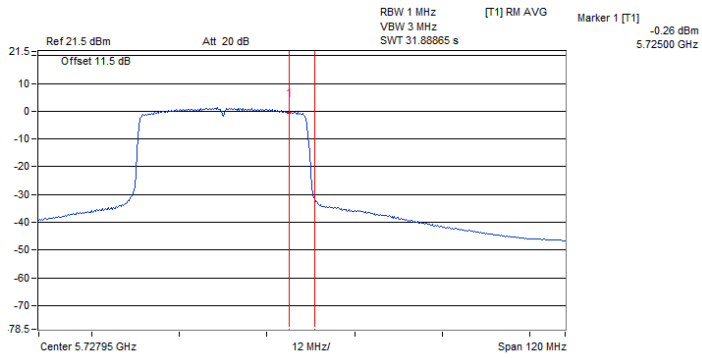
TX Channel Bandwidth 16.67 MHz Power 6.63 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)



TX Channel Bandwidth 35.9 MHz Power 16.84 dBm

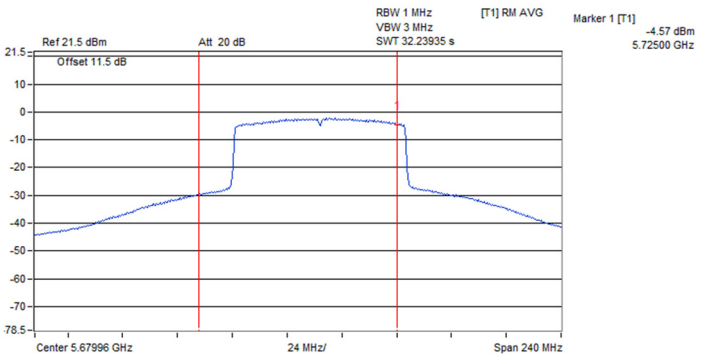
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.9 MHz Power 6.47 dBm

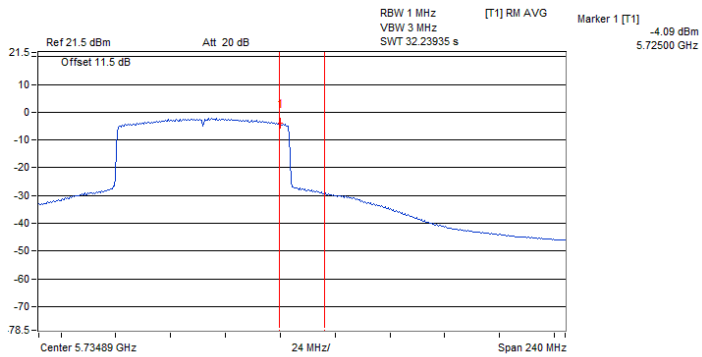
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



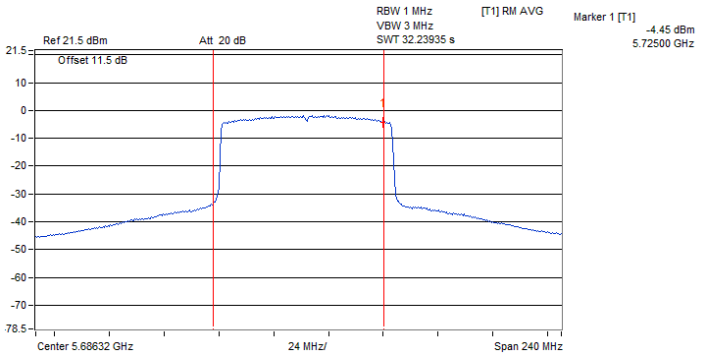
TX Channel Bandwidth 90.07 MHz Power 17.27 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



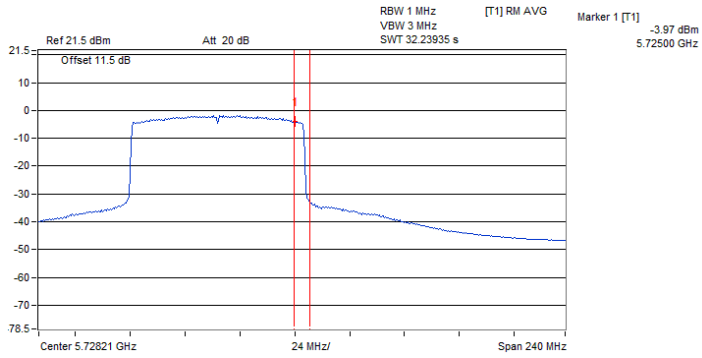
TX Channel Bandwidth 19.78 MHz Power 2.76 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)



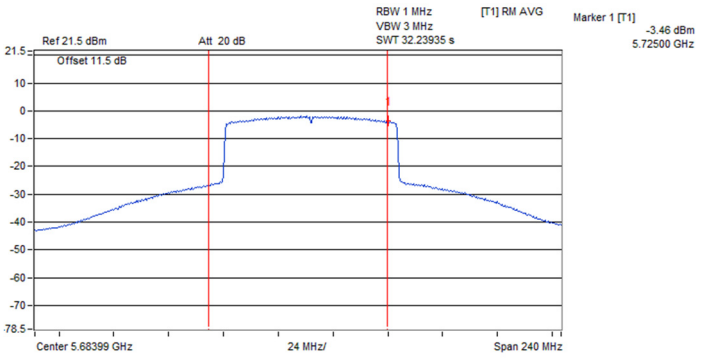
TX Channel Bandwidth 77.36 MHz Power 17.03 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



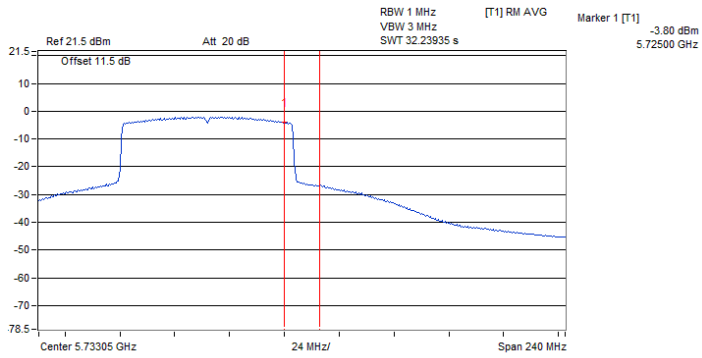
TX Channel Bandwidth 6.43 MHz Power 2.91 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



TX Channel Bandwidth 82.01 MHz Power 17.35 dBm

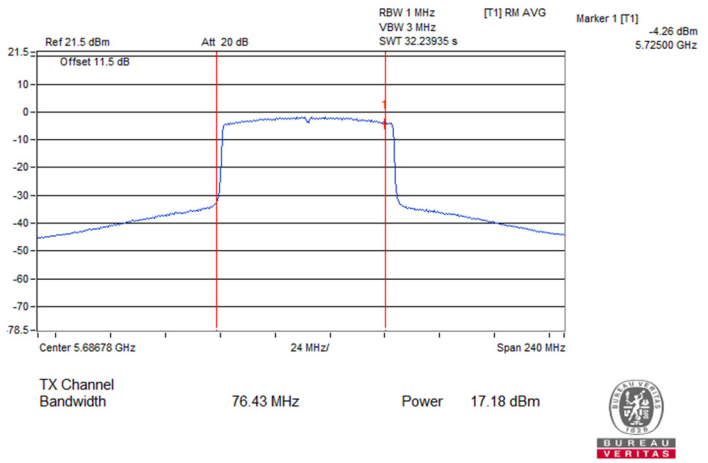
802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)



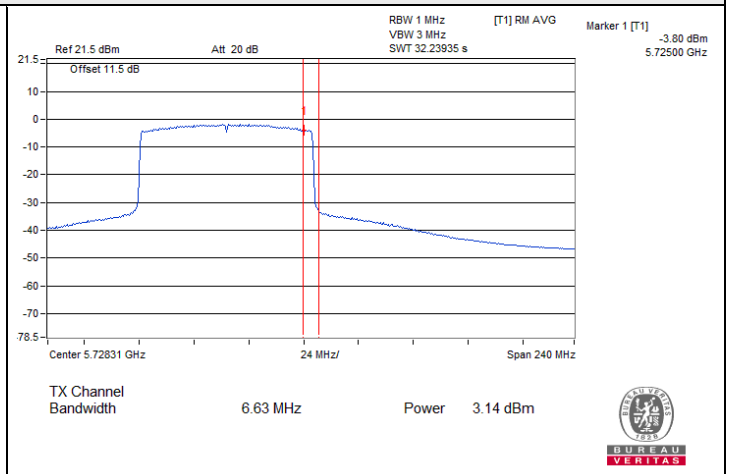
TX Channel Bandwidth 16.11 MHz Power 3.06 dBm

802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-2C)



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Jisyong Wang

Test Mode E: FAP-433G_Radio 2

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	15.76	16.12	16.43	15.73	159.962	22.04	23.93	Pass
60	5300	16.31	16.53	16.23	16.13	170.731	22.32	23.92	Pass
64	5320	16.13	16.43	16.44	16.32	171.885	22.35	23.89	Pass
100	5500	16.13	16.33	16.06	16.34	167.391	22.24	23.82	Pass
116	5580	16.32	16.37	16.23	16.34	171.234	22.34	23.84	Pass
140	5700	16.37	16.56	16.43	16.69	179.261	22.53	23.91	Pass
*144 (U-NII-2C)	5720	15.12	15.49	15.23	14.92	141.786	21.52	22.72	Pass
*144 (U-NII-3)	5720	8.67	7.80	8.13	8.55	28.991	14.62	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.43	16.03	16.38	16.13	168.414	22.26	24	Pass
60	5300	16.30	16.03	16.32	16.26	167.864	22.25	24	Pass
64	5320	16.11	15.85	16.32	16.10	162.975	22.12	24	Pass
100	5500	16.20	15.85	16.01	16.11	160.855	22.06	24	Pass
116	5580	16.27	15.94	16.08	16.10	162.934	22.12	24	Pass
140	5700	16.06	16.06	16.23	16.06	162.979	22.12	24	Pass
*144 (U-NII-2C)	5720	15.69	15.03	15.55	15.36	147.179	21.68	22.95	Pass
*144 (U-NII-3)	5720	9.69	7.64	10.23	9.75	37.127	15.70	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.08	17.42	17.69	17.17	217.065	23.37	24	Pass
62	5310	17.08	17.80	18.07	17.05	226.107	23.54	24	Pass
102	5510	17.06	17.50	18.02	17.21	222.998	23.48	24	Pass
110	5550	17.21	17.57	17.95	16.98	221.988	23.46	24	Pass
134	5670	17.13	17.49	17.56	17.13	216.36	23.35	24	Pass
*142 (U-NII-2C)	5710	15.98	16.23	16.66	16.03	181.004	22.58	24	Pass
*142 (U-NII-3)	5710	6.59	4.91	6.59	6.21	17.662	12.47	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.53	16.17	16.38	16.27	172.224	22.36	24	Pass
60	5300	16.46	16.12	16.33	16.43	172.125	22.36	24	Pass
64	5320	16.13	15.99	16.45	16.13	165.992	22.20	24	Pass
100	5500	16.30	15.91	16.13	16.29	165.212	22.18	24	Pass
116	5580	16.42	16.10	16.27	16.27	169.332	22.29	24	Pass
140	5700	16.18	16.18	16.38	16.16	167.806	22.25	24	Pass
*144 (U-NII-2C)	5720	15.76	15.13	15.69	15.48	150.862	21.79	22.95	Pass
*144 (U-NII-3)	5720	9.76	7.73	10.33	9.84	37.884	15.78	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.16	17.58	17.83	17.27	223.326	23.49	24	Pass
62	5310	17.22	17.83	18.11	17.13	229.722	23.61	24	Pass
102	5510	17.11	17.53	18.03	17.35	225.811	23.54	24	Pass
110	5550	17.24	17.59	17.97	17.15	225.016	23.52	24	Pass
134	5670	17.30	17.64	17.73	17.28	224.463	23.51	24	Pass
*142 (U-NII-2C)	5710	16.06	16.33	16.74	16.07	184.179	22.65	24	Pass
*142 (U-NII-3)	5710	6.65	4.98	6.66	6.26	17.916	12.53	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.19	17.17	17.35	17.11	210.205	23.23	24	Pass
106	5530	15.43	17.21	16.05	15.87	166.372	22.21	24	Pass
122	5610	17.42	17.85	17.88	17.48	233.482	23.68	24	Pass
*138 (U-NII-2C)	5690	16.79	16.98	16.77	15.84	195.007	22.90	24	Pass
*138 (U-NII-3)	5690	3.36	1.69	2.97	2.23	7.752	8.89	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80+VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	13.29	13.32	-	-	42.809	16.32	30	Pass
42+58(H)	5290	-	-	13.31	13.29	42.759	16.31	24	Pass
106+122(L)	5530	14.85	14.76	-	-	123.5	20.92	24	Pass
106+122(H)	5610	-	-	14.96	15.01				

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.61	16.33	16.52	16.37	176.993	22.48	24	Pass
60	5300	16.58	16.26	16.37	16.49	175.682	22.45	24	Pass
64	5320	16.26	16.15	16.53	16.27	170.819	22.33	24	Pass
100	5500	16.39	16.06	16.29	16.41	170.228	22.31	24	Pass
116	5580	16.43	16.17	16.43	16.36	172.56	22.37	24	Pass
140	5700	16.33	16.24	16.44	16.29	171.642	22.35	24	Pass
*144 (U-NII-2C)	5720	15.80	15.17	15.74	15.59	153.959	21.87	22.95	Pass
*144 (U-NII-3)	5720	9.83	7.85	10.41	9.92	38.875	15.90	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.35	17.77	17.83	17.37	229.416	23.61	24	Pass
62	5310	17.33	17.92	18.11	17.23	**233.578**	**23.68**	24	Pass
102	5510	17.21	17.63	18.08	17.42	230.021	23.62	24	Pass
110	5550	17.29	17.67	18.06	17.29	229.612	23.61	24	Pass
134	5670	17.36	17.76	17.85	17.33	229.183	23.60	24	Pass
*142 (U-NII-2C)	5710	16.19	16.47	16.86	16.25	190.285	22.79	24	Pass
*142 (U-NII-3)	5710	6.73	5.01	6.71	6.32	18.154	12.59	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.34	17.32	17.46	17.22	216.593	23.36	24	Pass
106	5530	15.46	17.25	16.22	16.02	170.118	22.31	24	Pass
122	5610	17.58	17.92	18.01	17.67	**240.944**	**23.82**	24	Pass
*138 (U-NII-2C)	5690	16.83	17.00	16.88	15.93	197.87	22.96	24	Pass
*138 (U-NII-3)	5690	3.43	1.78	3.03	2.34	7.897	8.97	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80+HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	13.35	13.45	-	-	43.758	16.41	30	Pass
42+58(H)	5290	-	-	13.44	13.42	44.059	16.44	24	Pass
106+122(L)	5530	14.93	14.82	-	-	125.438	20.98	24	Pass
106+122(H)	5610	-	-	15.00	15.10				

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.37 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.94 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.43	16.03	16.38	16.13	168.414	22.26	22.84	Pass
60	5300	16.30	16.03	16.32	16.26	167.864	22.25	22.84	Pass
64	5320	16.11	15.85	16.32	16.10	162.975	22.12	22.84	Pass
100	5500	15.74	15.26	15.54	15.65	143.586	21.57	22.48	Pass
116	5580	15.76	15.41	15.54	15.53	143.976	21.58	22.48	Pass
140	5700	15.55	15.46	15.77	15.49	144.125	21.59	22.48	Pass
*144 (U-NII-2C)	5720	15.14	14.55	15.03	14.83	130.534	21.16	21.43	Pass
*144 (U-NII-3)	5720	9.16	7.15	9.69	8.12	30.911	14.90	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.19	16.55	16.71	16.24	175.709	22.45	22.84	Pass
62	5310	16.13	16.73	16.99	16.03	178.249	22.51	22.84	Pass
102	5510	15.46	16.07	16.45	15.61	156.132	21.93	22.48	Pass
110	5550	15.66	16.05	16.47	15.49	156.828	21.95	22.48	Pass
134	5670	15.64	15.94	16.16	15.59	153.405	21.86	22.48	Pass
*142 (U-NII-2C)	5710	15.01	15.26	15.64	15.06	144.316	21.59	22.48	Pass
*142 (U-NII-3)	5710	5.61	3.84	5.56	5.20	13.982	11.46	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.53	16.17	16.38	16.27	172.224	22.36	22.84	Pass
60	5300	16.46	16.12	16.33	16.43	172.125	22.36	22.84	Pass
64	5320	16.13	15.99	16.45	16.13	165.992	22.20	22.84	Pass
100	5500	15.82	15.42	15.54	15.74	146.317	21.65	22.48	Pass
116	5580	15.88	15.54	15.68	15.67	148.462	21.72	22.48	Pass
140	5700	15.65	15.62	15.83	15.60	147.846	21.70	22.48	Pass
*144 (U-NII-2C)	5720	15.24	14.65	15.18	15.02	134.662	21.29	21.43	Pass
*144 (U-NII-3)	5720	9.28	7.26	9.79	9.33	33.73	15.28	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.24	16.65	16.74	16.33	178.453	22.52	22.84	Pass
62	5310	16.19	16.85	16.99	16.07	180.585	22.57	22.84	Pass
102	5510	15.51	15.96	16.58	15.83	158.736	22.01	22.48	Pass
110	5550	15.64	16.00	16.55	15.63	158.269	21.99	22.48	Pass
134	5670	15.76	16.14	16.22	15.82	158.812	22.01	22.48	Pass
*142 (U-NII-2C)	5710	15.13	15.42	15.76	15.11	148.136	21.71	22.48	Pass
*142 (U-NII-3)	5710	5.69	3.94	5.69	5.25	14.263	11.54	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	16.23	16.26	16.44	16.17	169.588	22.29	22.84	Pass
106	5530	15.43	17.21	16.05	15.87	166.372	22.21	22.48	Pass
122	5610	15.91	16.28	16.45	16.01	165.574	22.19	22.48	Pass
*138 (U-NII-2C)	5690	15.28	15.45	15.26	14.39	137.965	21.40	22.48	Pass
*138 (U-NII-3)	5690	1.89	0.26	1.52	0.87	5.575	7.46	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ac (VHT80+VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	13.29	13.32	-	-	42.809	16.32	30	Pass
42+58(H)	5290	-	-	13.31	13.29	42.759	16.31	24	Pass
106+122(L)	5530	14.85	14.76	-	-	123.5	20.92	24	Pass
106+122(H)	5610	-	-	14.96	15.01				Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-1, the directional gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 5.13 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.61	16.33	16.52	16.37	176.993	22.48	22.84	Pass
60	5300	16.58	16.26	16.37	16.49	175.682	22.45	22.84	Pass
64	5320	16.26	16.15	16.53	16.27	170.819	22.33	22.84	Pass
100	5500	15.83	15.47	15.82	15.92	150.798	21.78	22.48	Pass
116	5580	15.91	15.63	15.90	15.89	153.273	21.85	22.48	Pass
140	5700	15.82	15.64	15.88	15.73	150.975	21.79	22.48	Pass
*144 (U-NII-2C)	5720	15.28	14.70	15.22	15.06	128.569	21.09	21.43	Pass
*144 (U-NII-3)	5720	9.28	7.37	8.83	9.39	30.258	14.81	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.30	16.82	16.81	16.40	182.367	22.61	22.84	Pass
62	5310	16.32	17.01	17.01	16.16	**184.628**	**22.66**	22.84	Pass
102	5510	15.69	16.08	16.48	15.85	160.541	22.06	22.48	Pass
110	5550	15.81	16.22	16.48	15.77	162.206	22.10	22.48	Pass
134	5670	15.91	16.22	16.37	15.85	162.684	22.11	22.48	Pass
*142 (U-NII-2C)	5710	15.15	15.40	15.81	15.21	149.409	21.74	22.48	Pass
*142 (U-NII-3)	5710	5.70	3.03	5.68	5.26	13.767	11.39	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	16.37	16.36	16.53	16.19	173.172	22.38	22.84	Pass
106	5530	15.46	17.25	16.22	16.02	170.118	22.31	22.48	Pass
122	5610	16.20	16.46	16.59	16.14	**171.716**	**22.35**	22.48	Pass
*138 (U-NII-2C)	5690	15.35	15.48	15.41	14.39	140.059	21.46	22.48	Pass
*138 (U-NII-3)	5690	1.98	0.33	1.54	1.83	5.956	7.75	28.84	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.16-6)].
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.52-6)].
5. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.16-6) = 28.84 dBm.

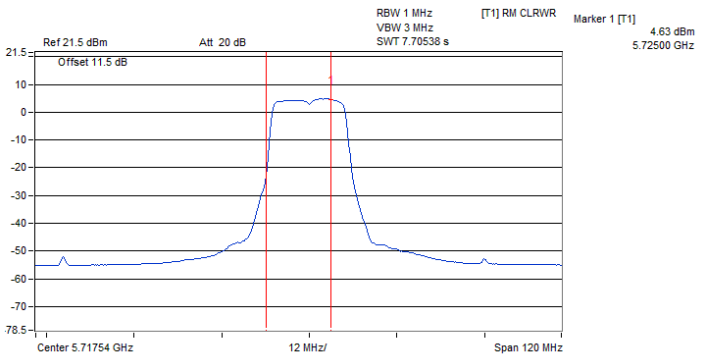
802.11ax (HE80+HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	13.35	13.45	-	-	43.758	16.41	30	Pass
42+58(H)	5290	-	-	13.44	13.42	44.059	16.44	24	Pass
106+122(L)	5530	14.93	14.82	-	-	125.438	20.98	24	Pass
106+122(H)	5610	-	-	15.00	15.10				

Notes:

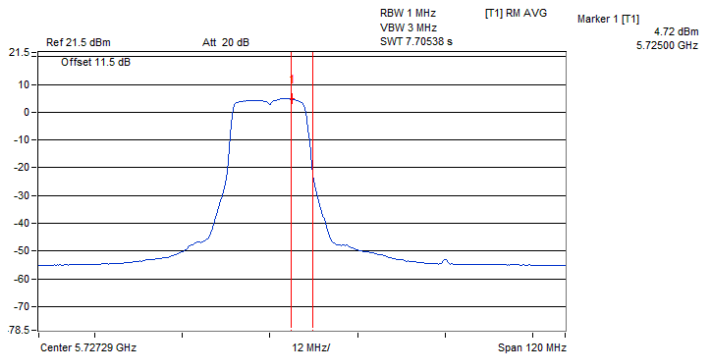
1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-1, the directional gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 5.13 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.46 dBi < 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



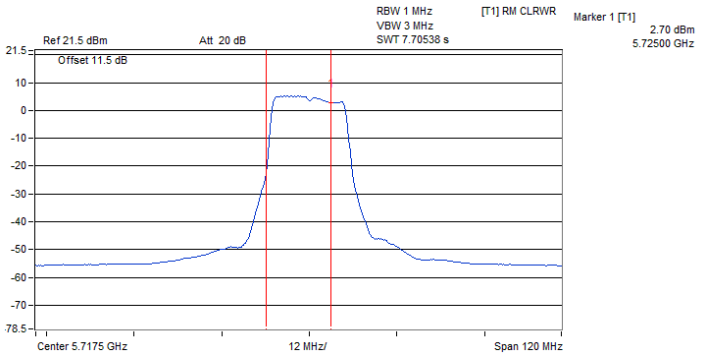
TX Channel Bandwidth 14.91 MHz Power 15.12 dBm

802.11a / Chain 0 : CH 144 (U-NII-2C)



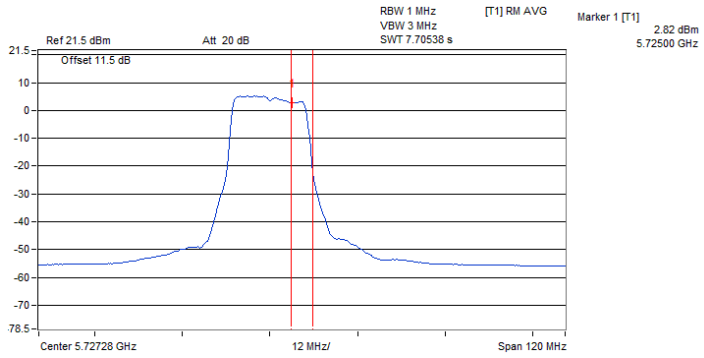
TX Channel Bandwidth 4.59 MHz Power 8.67 dBm

802.11a / Chain 0 : CH 144 (U-NII-3)



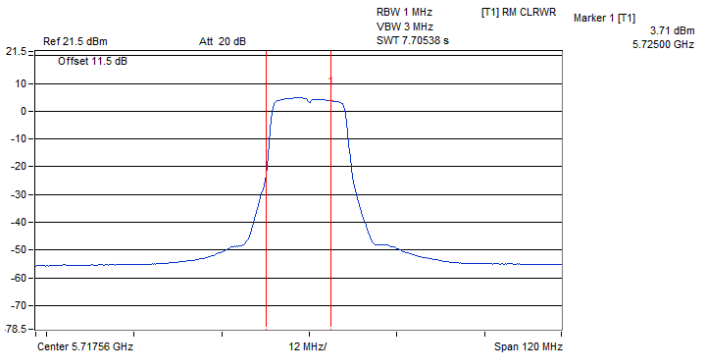
TX Channel Bandwidth 14.99 MHz Power 15.49 dBm

802.11a / Chain 1 : CH 144 (U-NII-2C)



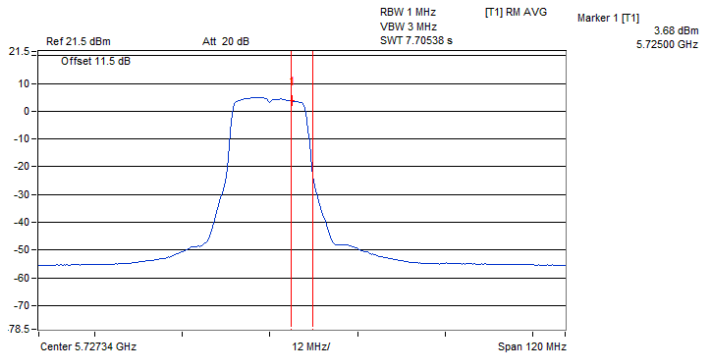
TX Channel Bandwidth 4.56 MHz Power 7.8 dBm

802.11a / Chain 1 : CH 144 (U-NII-3)



TX Channel Bandwidth 14.88 MHz Power 15.23 dBm

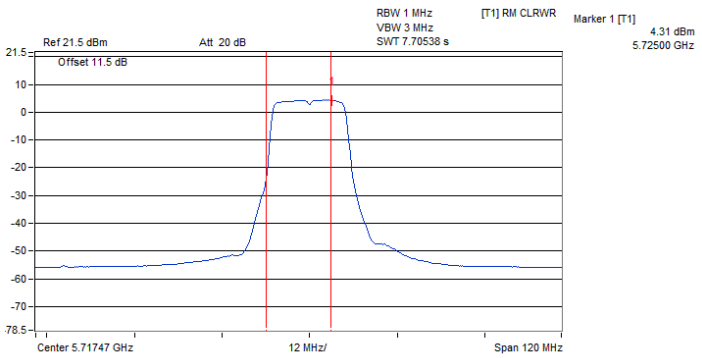
802.11a / Chain 2 : CH 144 (U-NII-2C)



TX Channel Bandwidth 4.69 MHz Power 8.13 dBm

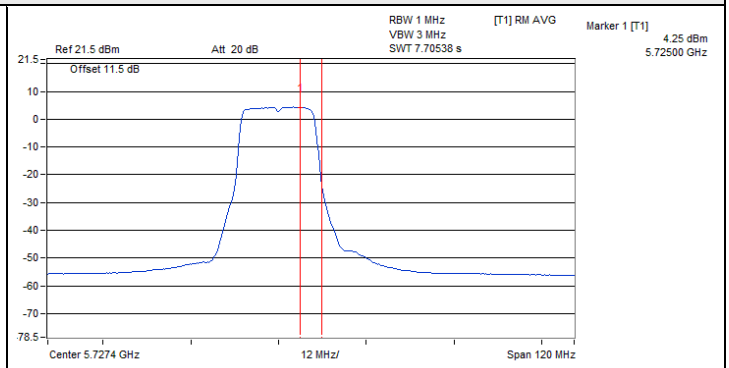
802.11a / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



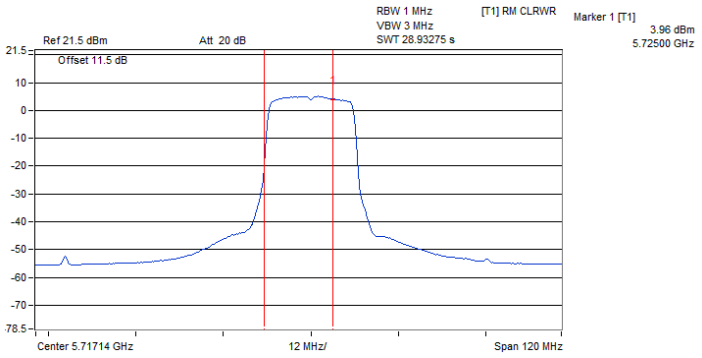
TX Channel Bandwidth 15.05 MHz Power 14.92 dBm

802.11a / Chain 3 : CH 144 (U-NII-2C)



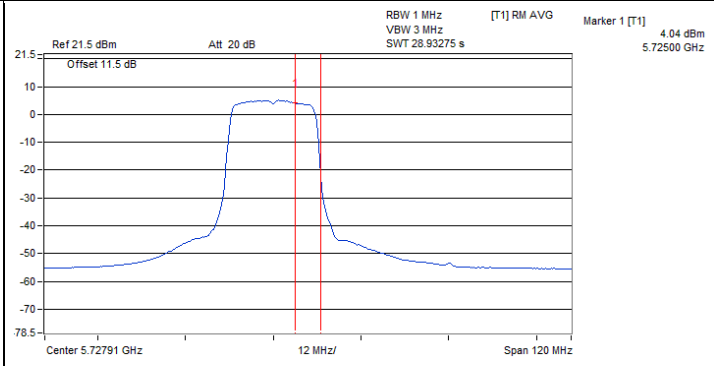
TX Channel Bandwidth 4.81 MHz Power 8.55 dBm

802.11a / Chain 3 : CH 144 (U-NII-3)



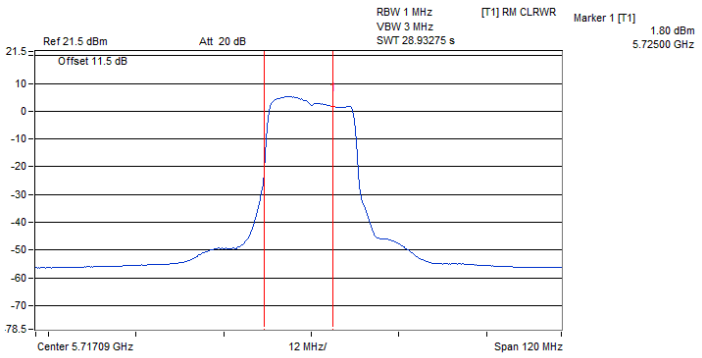
TX Channel Bandwidth 15.71 MHz Power 15.8 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



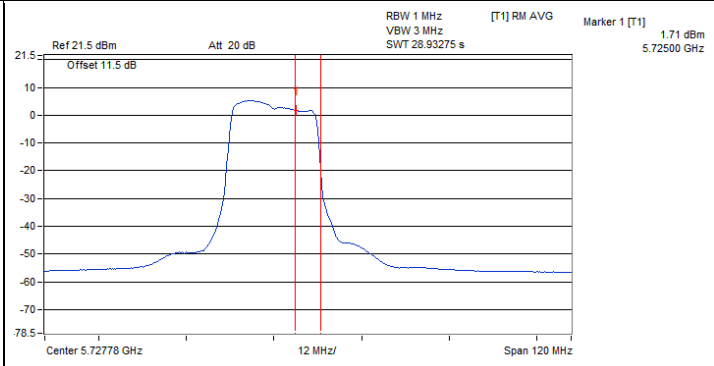
TX Channel Bandwidth 5.82 MHz Power 9.83 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.82 MHz Power 15.17 dBm

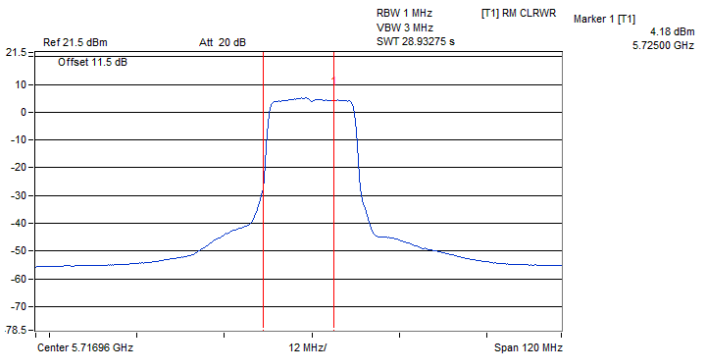
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.56 MHz Power 7.85 dBm

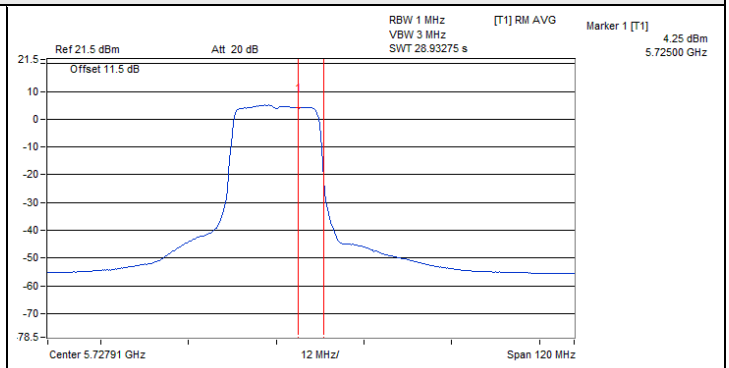
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



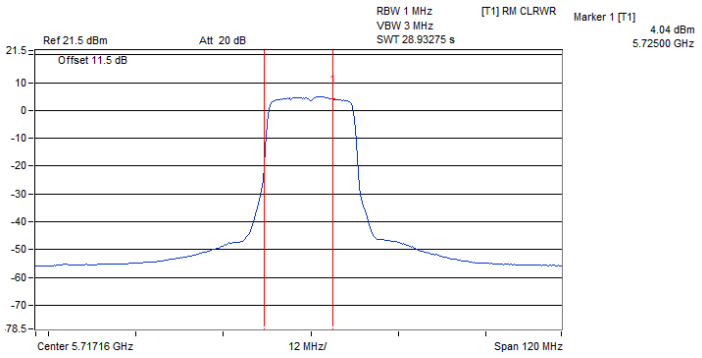
TX Channel Bandwidth 16.08 MHz Power 15.74 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)



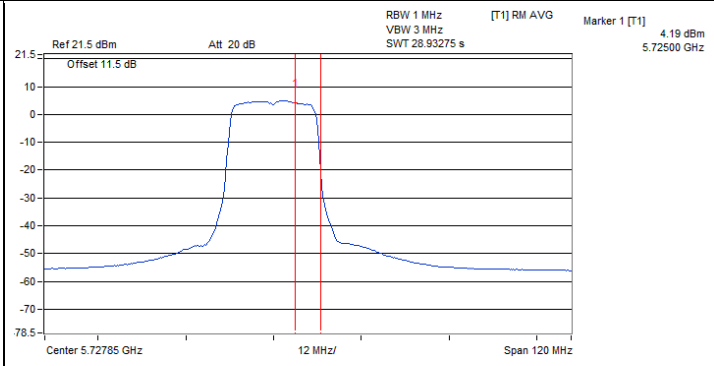
TX Channel Bandwidth 5.83 MHz Power 10.41 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



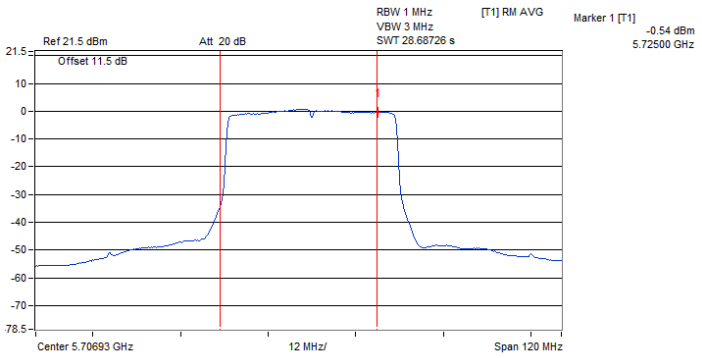
TX Channel Bandwidth 15.68 MHz Power 15.59 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-2C)



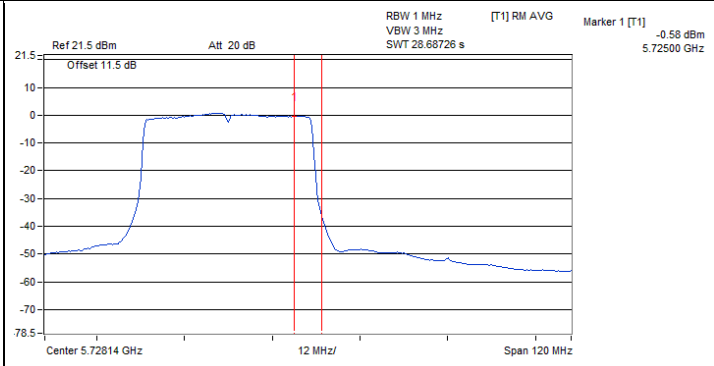
TX Channel Bandwidth 5.7 MHz Power 9.92 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



TX Channel Bandwidth 36.13 MHz Power 16.19 dBm

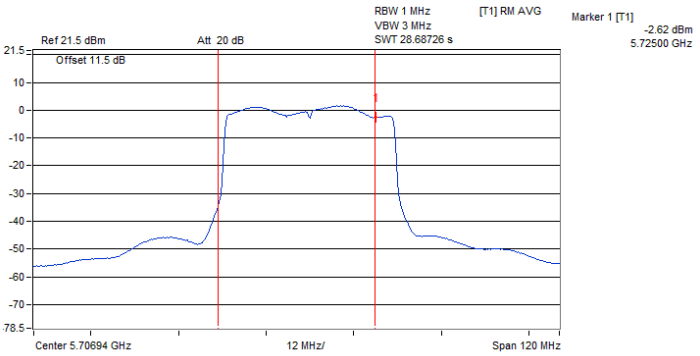
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)



TX Channel Bandwidth 6.28 MHz Power 6.73 dBm

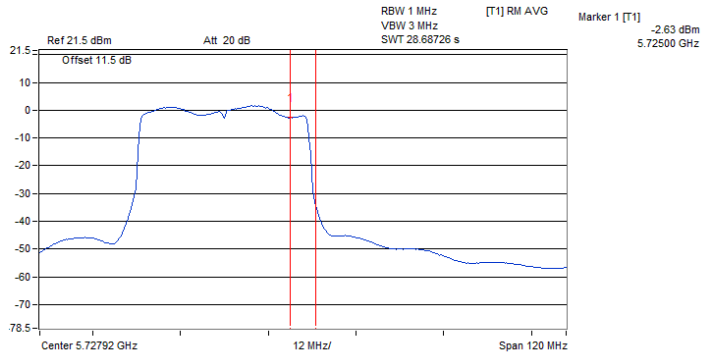
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



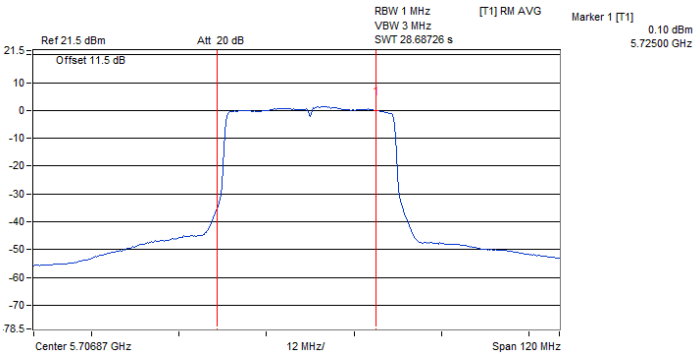
TX Channel Bandwidth 36.11 MHz Power 16.47 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



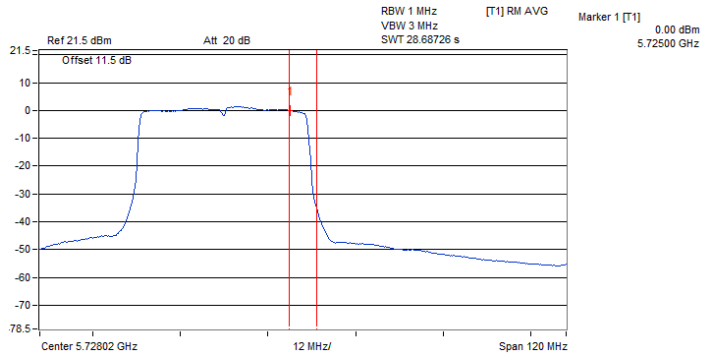
TX Channel Bandwidth 5.84 MHz Power 5.01 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



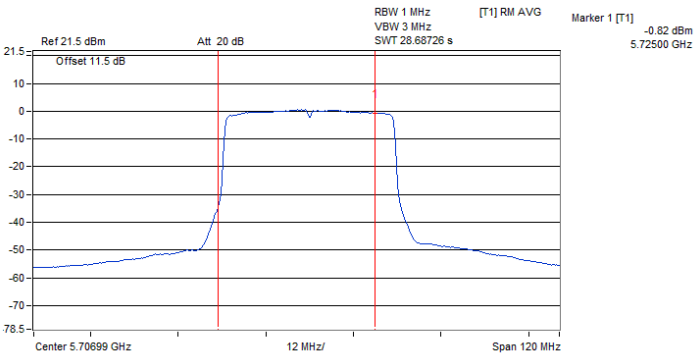
TX Channel Bandwidth 36.26 MHz Power 16.86 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-2C)



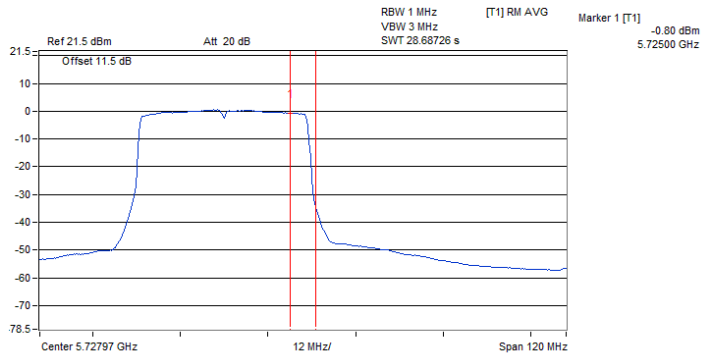
TX Channel Bandwidth 6.04 MHz Power 6.71 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)



TX Channel Bandwidth 36.02 MHz Power 16.25 dBm

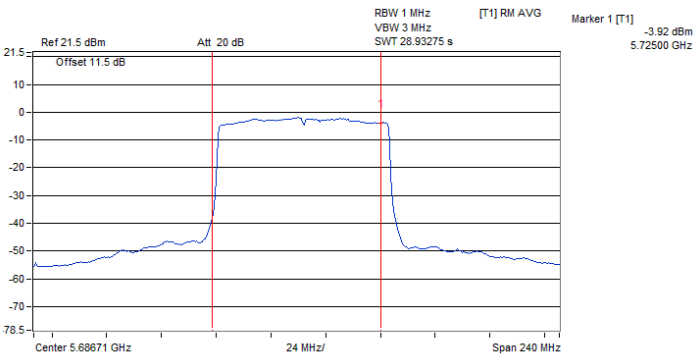
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.95 MHz Power 6.32 dBm

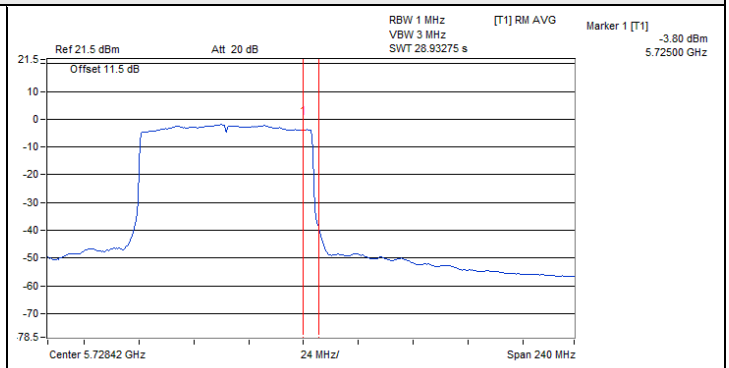
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



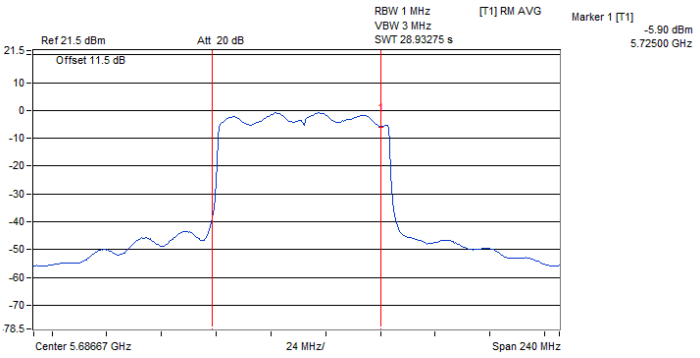
TX Channel Bandwidth 76.57 MHz Power 16.83 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



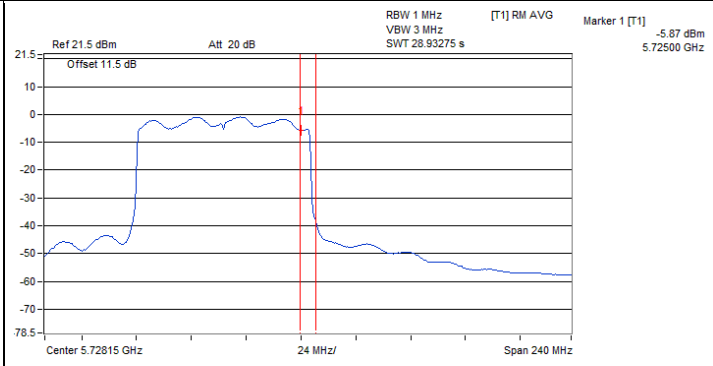
TX Channel Bandwidth 6.85 MHz Power 3.43 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)



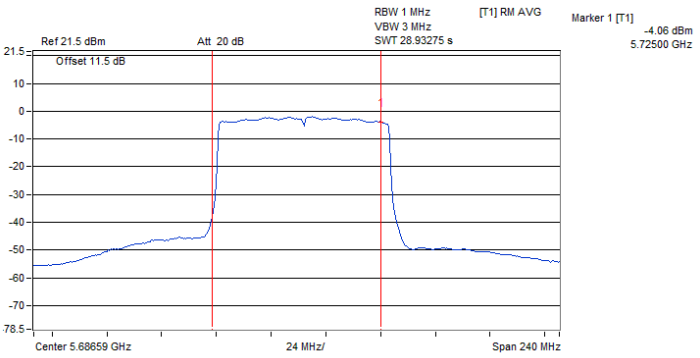
TX Channel Bandwidth 76.66 MHz Power 17 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



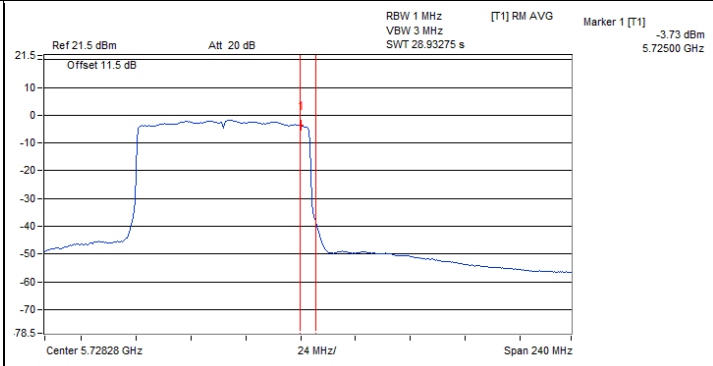
TX Channel Bandwidth 6.31 MHz Power 1.78 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



TX Channel Bandwidth 76.81 MHz Power 16.88 dBm

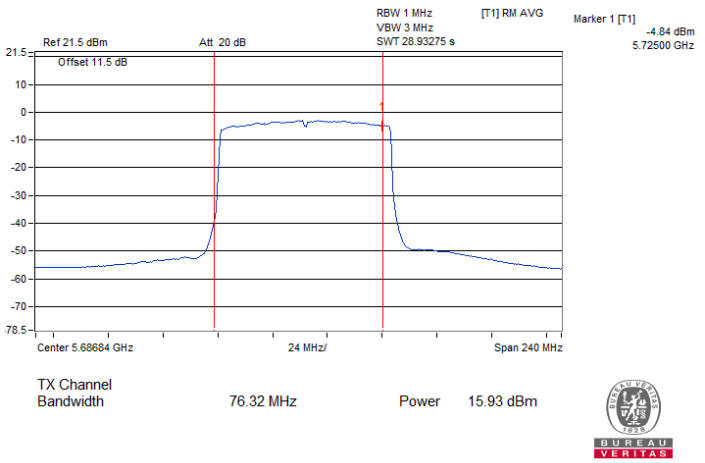
802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)



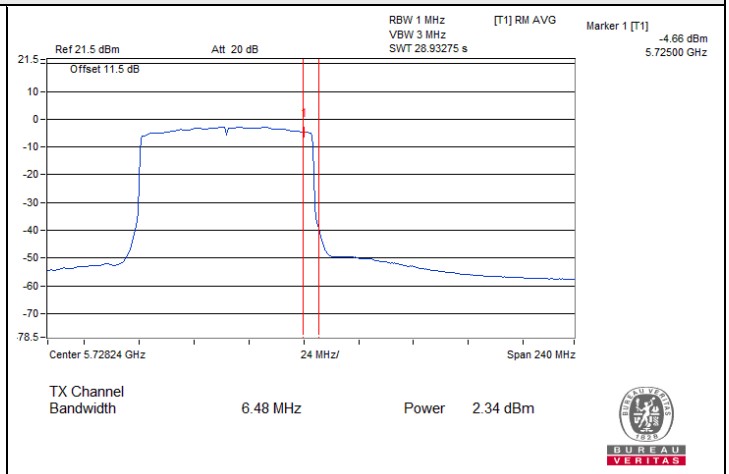
TX Channel Bandwidth 6.57 MHz Power 3.03 dBm

802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-2C)



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G: FAP-433G_Radio 3

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.01	14.97	14.66	15.12	124.851	20.96	24	Pass
116	5580	15.54	15.57	15.52	15.73	144.924	21.61	24	Pass
140	5700	15.04	14.92	14.71	15.08	124.752	20.96	24	Pass
*144 (U-NII-2C)	5720	13.75	13.61	13.49	13.92	102.824	20.12	22.84	Pass
*144 (U-NII-3)	5720	8.43	8.10	8.15	8.34	29.394	14.68	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.24	15.05	14.67	15.53	130.5	21.16	24	Pass
116	5580	15.07	15.09	14.83	15.29	128.732	21.10	24	Pass
140	5700	15.18	14.96	15.03	15.53	131.829	21.20	24	Pass
*144 (U-NII-2C)	5720	12.26	12.15	12.39	12.43	81.334	19.10	23.04	Pass
*144 (U-NII-3)	5720	8.06	8.11	7.98	8.36	31.072	14.92	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.30	14.05	13.94	14.25	103.7	20.16	24	Pass
110	5550	17.08	17.54	17.45	17.11	214.793	23.32	24	Pass
134	5670	15.41	15.33	15.37	15.20	136.389	21.35	24	Pass
*142 (U-NII-2C)	5710	15.58	15.64	15.36	15.78	172.601	22.37	24	Pass
*142 (U-NII-3)	5710	5.31	5.06	5.13	5.45	15.915	12.02	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.40	15.15	14.86	15.66	134.817	21.30	24	Pass
116	5580	15.26	15.20	14.95	15.31	131.911	21.20	24	Pass
140	5700	15.21	15.13	15.03	15.68	134.686	21.29	24	Pass
*144 (U-NII-2C)	5720	12.31	12.24	12.42	12.55	82.707	19.18	23.04	Pass
*144 (U-NII-3)	5720	8.12	8.13	8.06	8.43	31.487	14.98	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.36	14.13	13.98	14.43	105.924	20.25	24	Pass
110	5550	17.19	17.58	17.60	17.16	219.208	23.41	24	Pass
134	5670	15.55	15.47	15.41	15.26	139.515	21.45	24	Pass
*142 (U-NII-2C)	5710	15.69	15.67	15.43	15.84	175.298	22.44	24	Pass
*142 (U-NII-3)	5710	5.37	5.12	5.23	5.55	16.212	12.10	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	14.42	14.45	14.27	14.39	109.757	20.40	24	Pass
122	5610	18.13	17.79	17.80	17.74	244.691	23.89	24	Pass
*138 (U-NII-2C)	5690	16.79	16.84	16.55	16.98	227.917	23.58	24	Pass
*138 (U-NII-3)	5690	3.16	2.69	2.84	3.06	9.389	9.73	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	14.03	13.36	13.57	13.66	92.916	19.68	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.47	15.21	15.04	15.74	137.839	21.39	24	Pass
116	5580	15.33	15.26	15.01	15.44	134.383	21.28	24	Pass
140	5700	15.38	15.23	15.11	15.69	137.359	21.38	24	Pass
*144 (U-NII-2C)	5720	12.38	12.27	12.43	12.62	83.574	19.22	23.04	Pass
*144 (U-NII-3)	5720	8.19	8.26	8.18	8.49	32.178	15.08	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the directional gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.54	14.22	14.04	14.62	109.193	20.38	24	Pass
110	5550	17.35	17.59	17.64	17.34	224.013	23.50	24	Pass
134	5670	15.57	15.51	15.43	15.27	140.186	21.47	24	Pass
*142 (U-NII-2C)	5710	15.75	15.79	15.58	15.96	179.883	22.55	24	Pass
*142 (U-NII-3)	5710	5.45	5.23	5.36	5.67	16.628	12.21	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	14.57	14.53	14.27	14.55	112.261	20.50	24	Pass
122	5610	18.27	17.84	17.85	17.79	**249.027**	**23.96**	24	Pass
*138 (U-NII-2C)	5690	16.86	16.95	16.59	17.08	232.204	23.66	24	Pass
*138 (U-NII-3)	5690	3.23	2.74	2.93	3.13	9.542	9.80	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	14.11	13.52	13.67	13.77	95.358	19.79	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-2C, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.24	15.05	14.67	15.53	130.5	21.16	21.65	Pass
116	5580	15.07	15.09	14.83	15.29	128.732	21.10	21.65	Pass
140	5700	15.18	14.96	15.03	15.53	131.829	21.20	21.65	Pass
*144 (U-NII-2C)	5720	12.24	12.19	12.21	12.49	80.873	19.08	20.69	Pass
*144 (U-NII-3)	5720	8.01	8.06	7.98	8.27	30.728	14.88	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.30	14.05	13.94	14.25	103.7	20.16	21.65	Pass
110	5550	15.01	15.44	15.35	15.08	133.225	21.25	21.65	Pass
134	5670	15.41	15.33	15.37	15.20	136.389	21.35	21.65	Pass
*142 (U-NII-2C)	5710	13.60	13.62	13.41	13.73	108.876	20.37	21.65	Pass
*142 (U-NII-3)	5710	3.39	3.09	3.15	3.41	10.093	10.04	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.40	15.15	14.86	15.66	134.817	21.30	21.65	Pass
116	5580	15.26	15.20	14.95	15.31	131.911	21.20	21.65	Pass
140	5700	15.21	15.13	15.03	15.68	134.686	21.29	21.65	Pass
*144 (U-NII-2C)	5720	12.27	12.24	12.26	12.55	81.766	19.13	20.69	Pass
*144 (U-NII-3)	5720	8.08	8.14	8.06	8.36	31.3	14.96	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.36	14.13	13.98	14.43	105.924	20.25	21.65	Pass
110	5550	15.19	15.49	15.51	15.28	137.718	21.39	21.65	Pass
134	5670	15.55	15.47	15.41	15.26	139.515	21.45	21.65	Pass
*142 (U-NII-2C)	5710	13.71	13.63	13.49	13.92	111.381	20.47	21.65	Pass
*142 (U-NII-3)	5710	3.35	3.17	3.20	3.49	10.191	10.08	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	14.42	14.45	14.27	14.39	109.757	20.40	21.65	Pass
122	5610	15.20	14.67	14.75	14.70	121.739	20.85	21.65	Pass
*138 (U-NII-2C)	5690	13.85	13.87	13.64	13.96	115.255	20.62	21.65	Pass
*138 (U-NII-3)	5690	0.13	-0.33	-0.11	0.07	4.7083	6.73	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ac (VHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	14.03	13.36	13.57	13.66	92.916	19.68	21.65	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	15.47	15.21	15.04	15.74	137.839	21.39	21.65	Pass
116	5580	15.33	15.26	15.01	15.44	134.383	21.28	21.65	Pass
140	5700	15.38	15.23	15.11	15.69	137.359	21.38	21.65	Pass
*144 (U-NII-2C)	5720	12.38	12.27	12.43	12.62	83.574	19.22	20.69	Pass
*144 (U-NII-3)	5720	8.19	8.26	8.18	8.49	32.178	15.08	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.54	14.22	14.04	14.62	109.193	20.38	21.65	Pass
110	5550	15.35	15.59	15.64	15.34	**141.343**	21.50	21.65	Pass
134	5670	15.57	15.51	15.43	15.27	140.186	21.47	21.65	Pass
*142 (U-NII-2C)	5710	13.77	13.84	13.61	14.06	96.463	19.84	21.65	Pass
*142 (U-NII-3)	5710	3.49	3.29	3.39	3.75	8.921	9.50	27.74	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].
4. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.26-6) = 27.74 dBm.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	14.57	14.53	14.27	14.55	112.261	20.50	21.38	Pass
122	5610	15.24	14.88	14.92	14.75	125.08	20.97	21.38	Pass
*138 (U-NII-2C)	5690	13.84	14.01	13.62	14.10	116.986	20.68	21.38	Pass
*138 (U-NII-3)	5690	0.31	-0.22	-0.09	0.09	4.7996	6.81	27.38	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.62 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.62-6)].
4. For U-NII-3, the directional gain is 8.62 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.62-6) = 27.38 dBm.

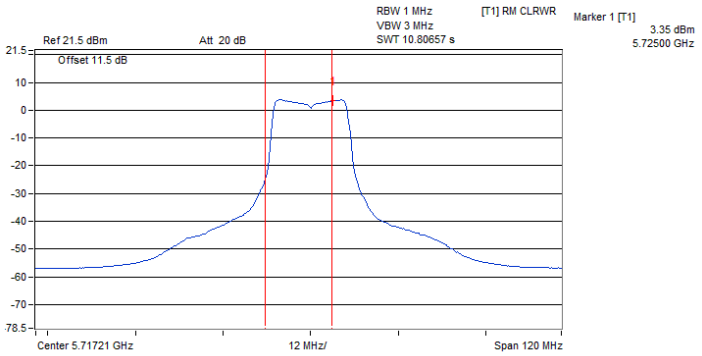
802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	14.11	13.52	13.67	13.77	95.358	19.79	21.65	Pass

Notes:

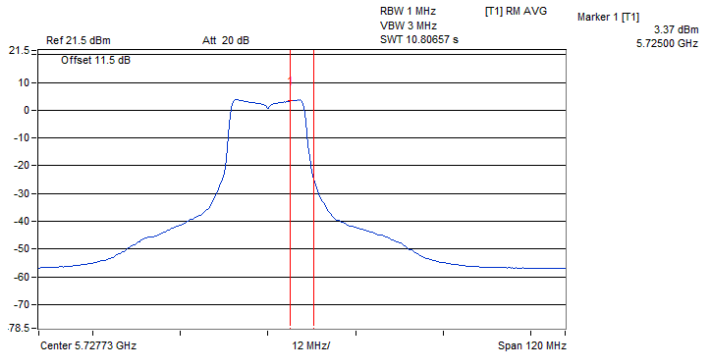
1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.35-6)].

Spectrum Plot for channel straddling



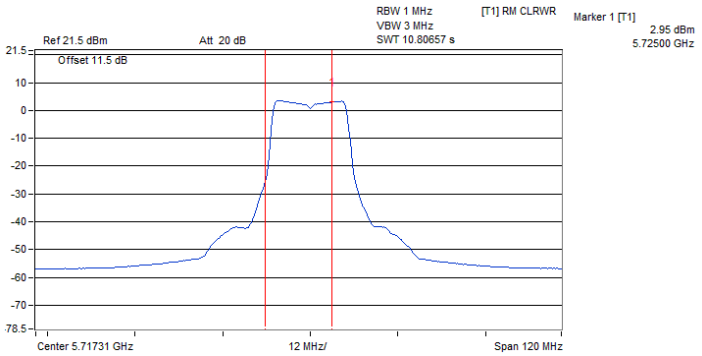
TX Channel Bandwidth 15.58 MHz Power 13.75 dBm

802.11a / Chain 0 : CH 144 (U-NII-2C)



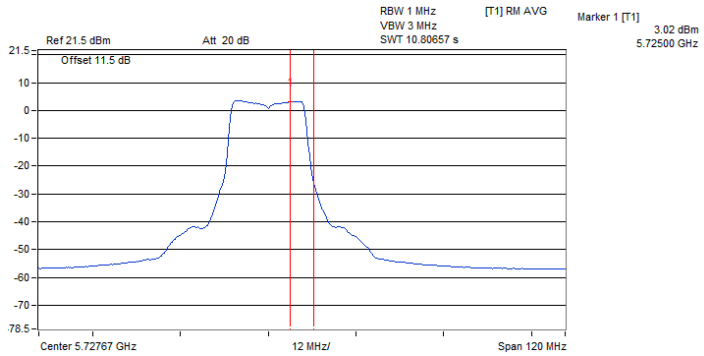
TX Channel Bandwidth 5.47 MHz Power 8.43 dBm

802.11a / Chain 0 : CH 144 (U-NII-3)



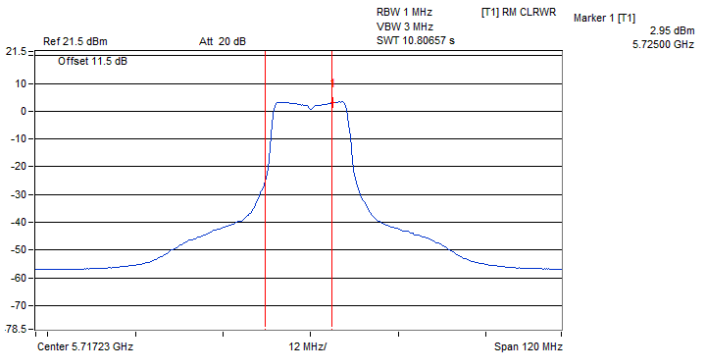
TX Channel Bandwidth 15.37 MHz Power 13.61 dBm

802.11a / Chain 1 : CH 144 (U-NII-2C)



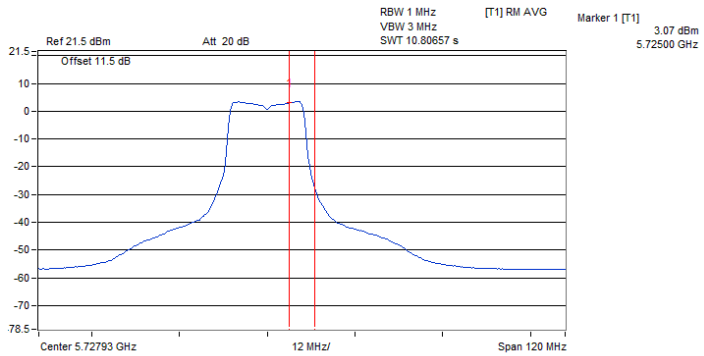
TX Channel Bandwidth 5.34 MHz Power 8.1 dBm

802.11a / Chain 1 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.53 MHz Power 13.49 dBm

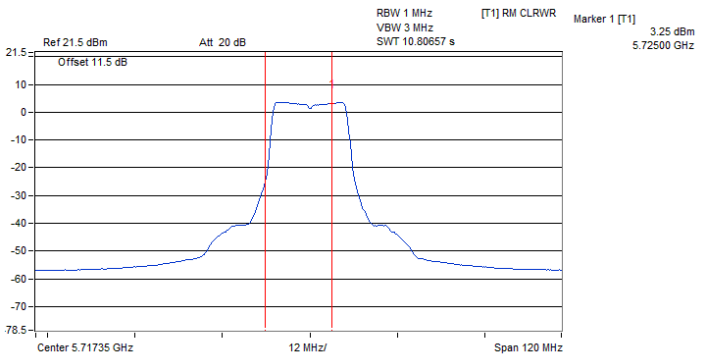
802.11a / Chain 2 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.86 MHz Power 8.15 dBm

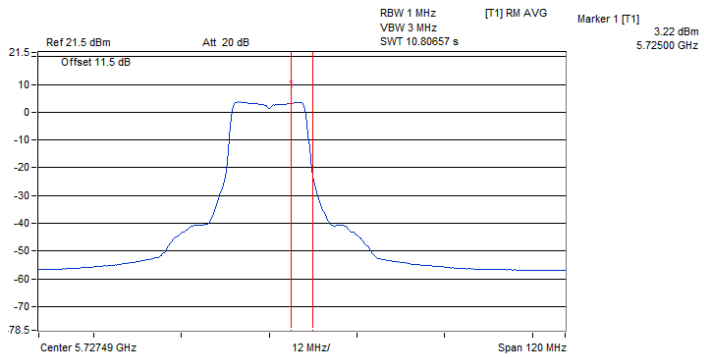
802.11a / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



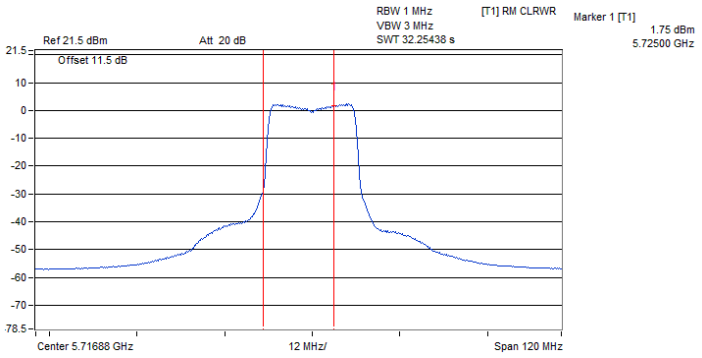
TX Channel Bandwidth 15.29 MHz Power 13.92 dBm

802.11a / Chain 3 : CH 144 (U-NII-2C)



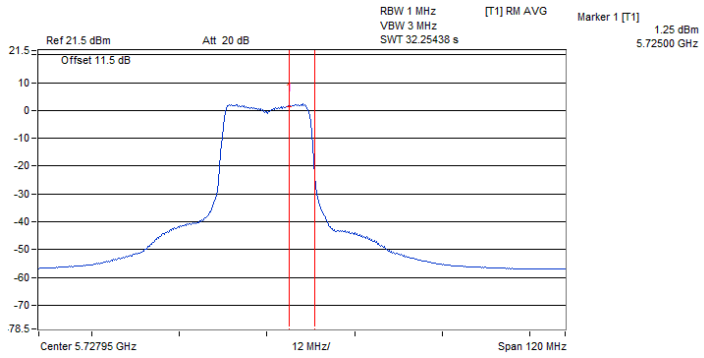
TX Channel Bandwidth 4.99 MHz Power 8.34 dBm

802.11a / Chain 3 : CH 144 (U-NII-3)



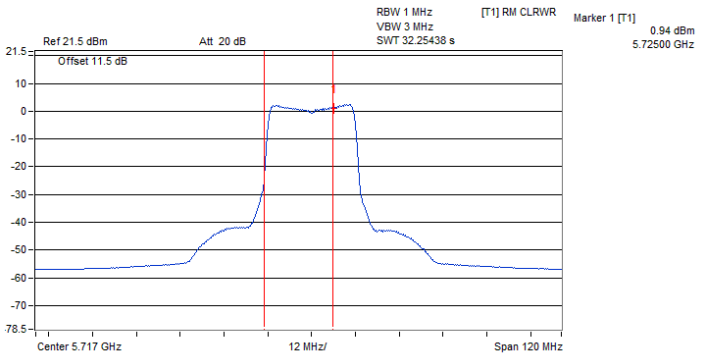
TX Channel Bandwidth 16.24 MHz Power 12.38 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



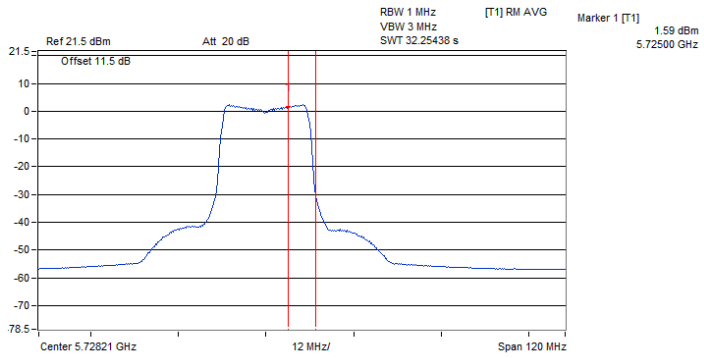
TX Channel Bandwidth 5.91 MHz Power 8.19 dBm

802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



TX Channel Bandwidth 16 MHz Power 12.27 dBm

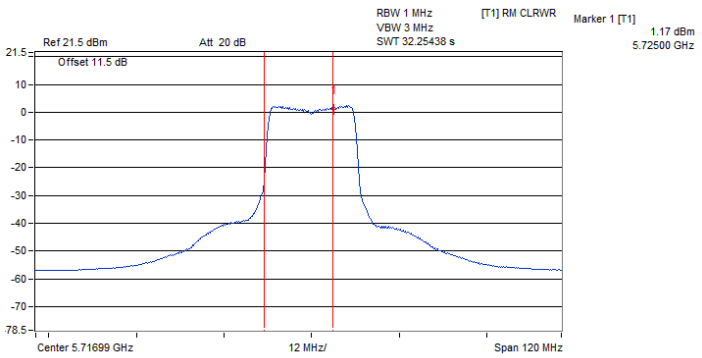
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



TX Channel Bandwidth 6.43 MHz Power 8.26 dBm

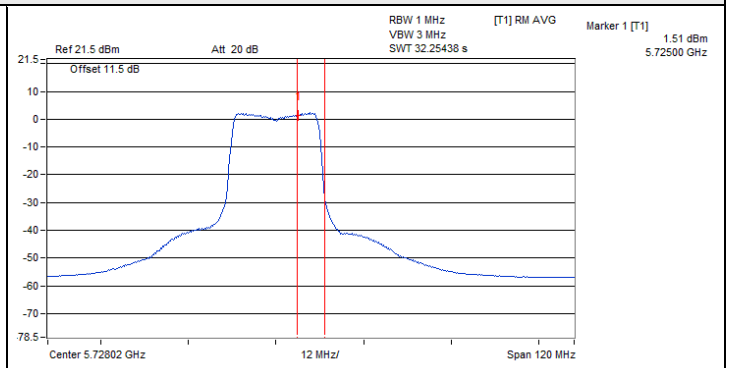
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



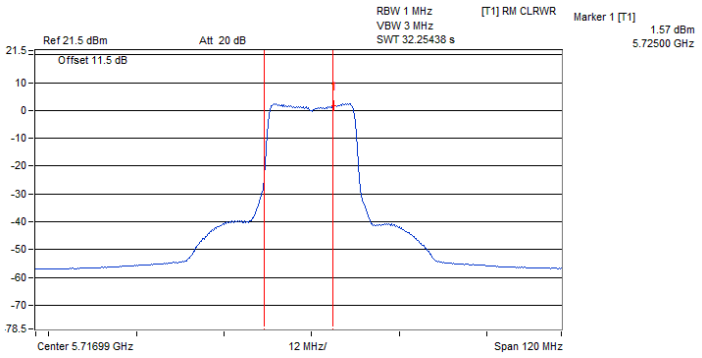
TX Channel Bandwidth 16.01 MHz Power 12.43 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)



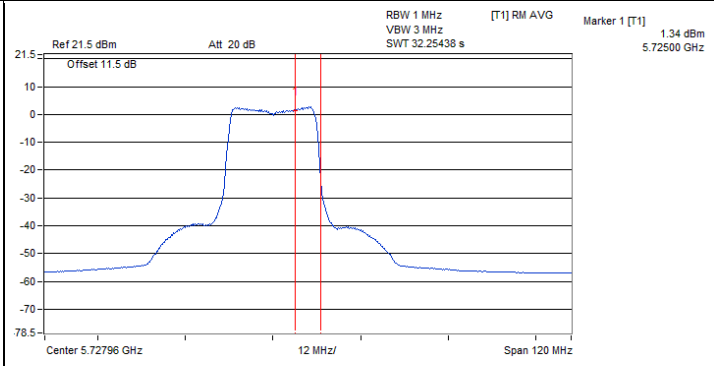
TX Channel Bandwidth 6.04 MHz Power 8.18 dBm

802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



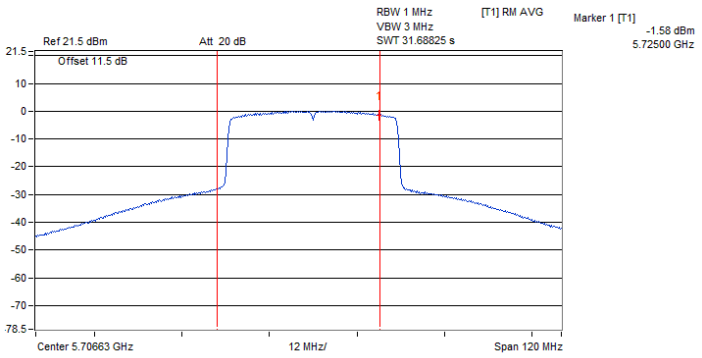
TX Channel Bandwidth 16.02 MHz Power 12.62 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-2C)



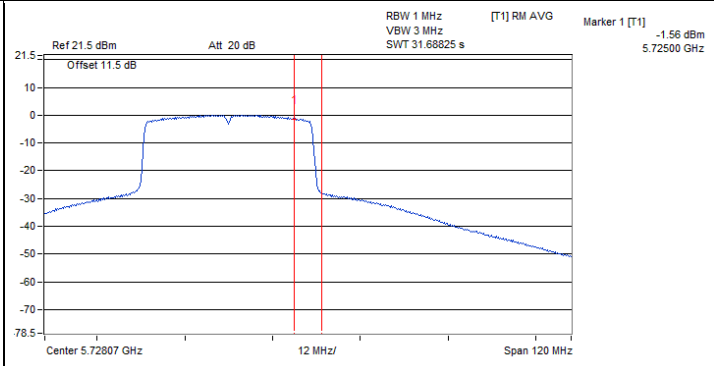
TX Channel Bandwidth 5.93 MHz Power 8.49 dBm

802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



TX Channel Bandwidth 36.74 MHz Power 15.75 dBm

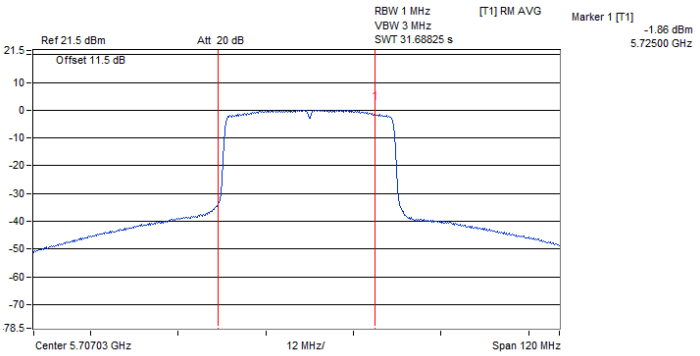
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)



TX Channel Bandwidth 6.15 MHz Power 5.45 dBm

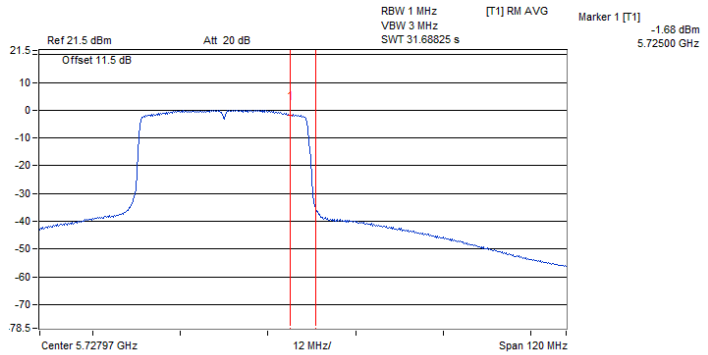
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



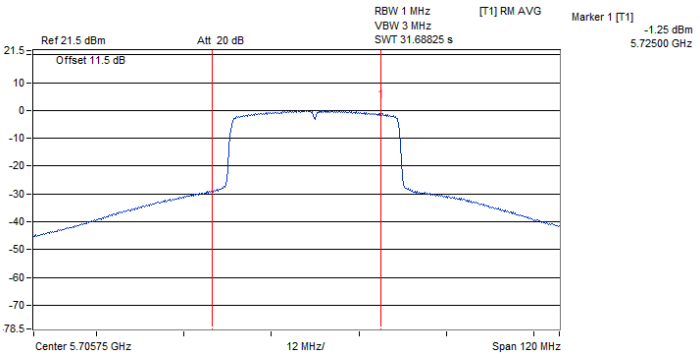
TX Channel Bandwidth 35.94 MHz Power 15.79 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



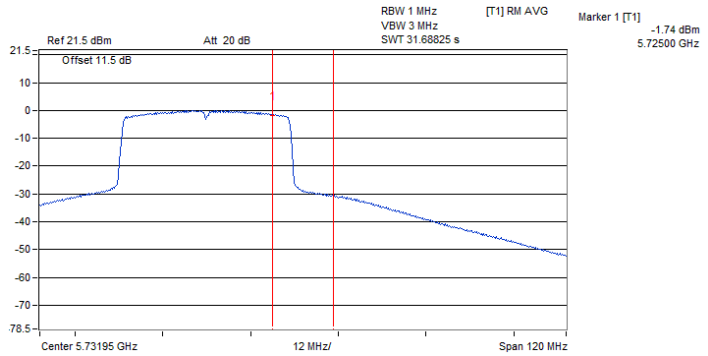
TX Channel Bandwidth 5.95 MHz Power 5.23 dBm

802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



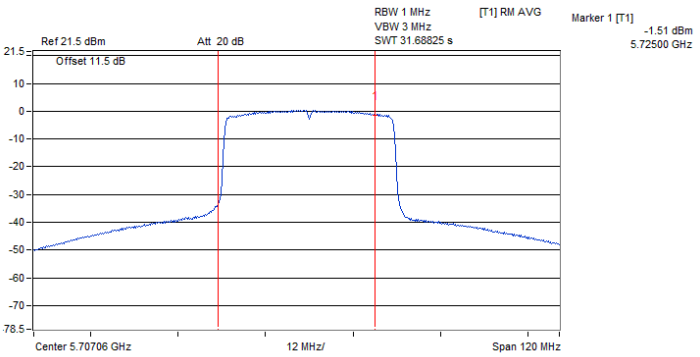
TX Channel Bandwidth 38.5 MHz Power 15.58 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-2C)



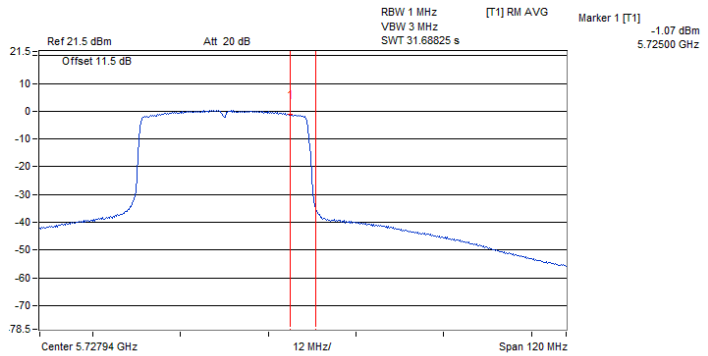
TX Channel Bandwidth 13.9 MHz Power 5.36 dBm

802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)



TX Channel Bandwidth 35.88 MHz Power 15.96 dBm

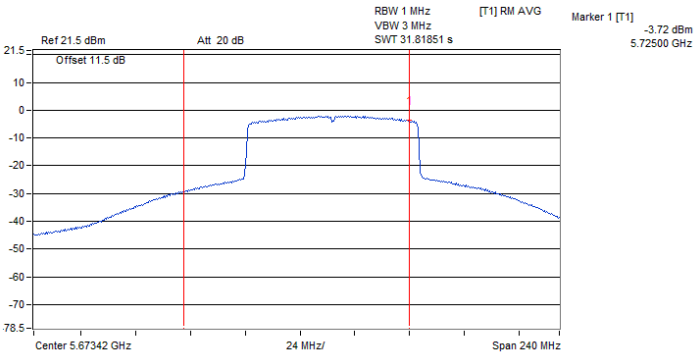
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.88 MHz Power 5.67 dBm

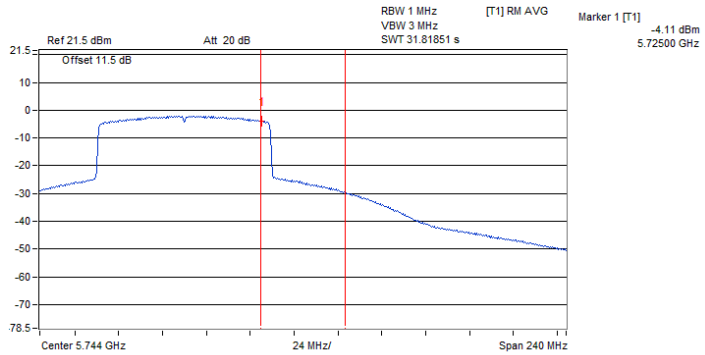
802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



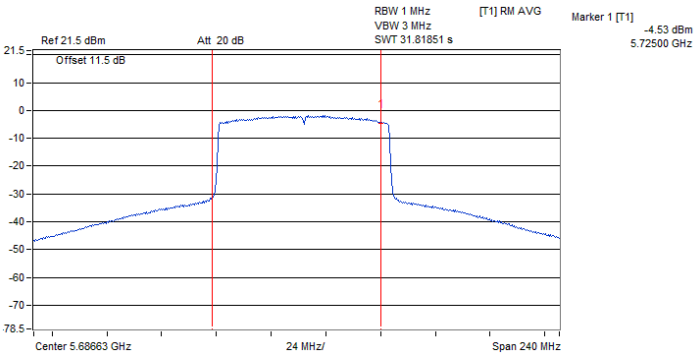
TX Channel Bandwidth 103.15 MHz Power 16.86 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



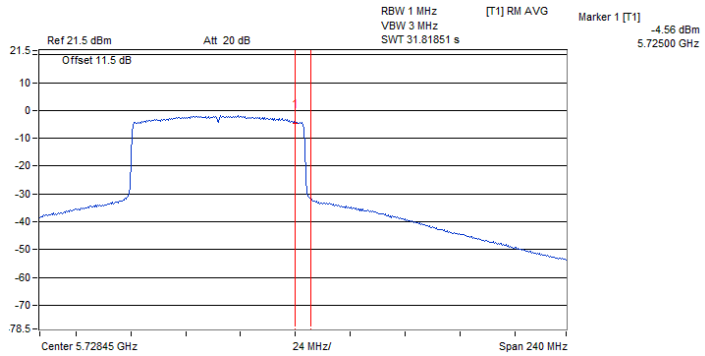
TX Channel Bandwidth 38 MHz Power 3.23 dBm

802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)



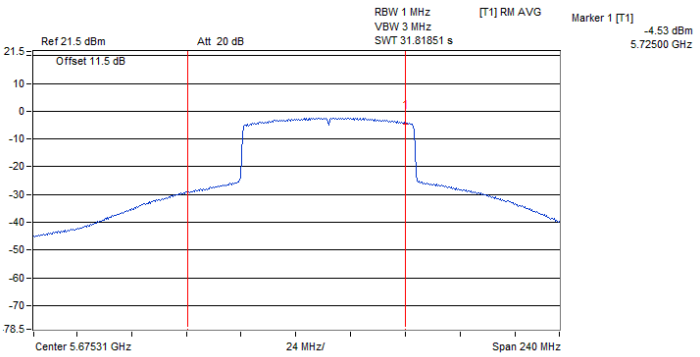
TX Channel Bandwidth 76.74 MHz Power 16.95 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



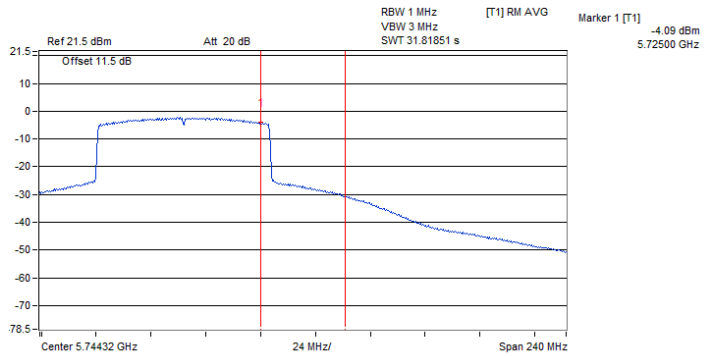
TX Channel Bandwidth 6.9 MHz Power 2.74 dBm

802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



TX Channel Bandwidth 99.38 MHz Power 16.59 dBm

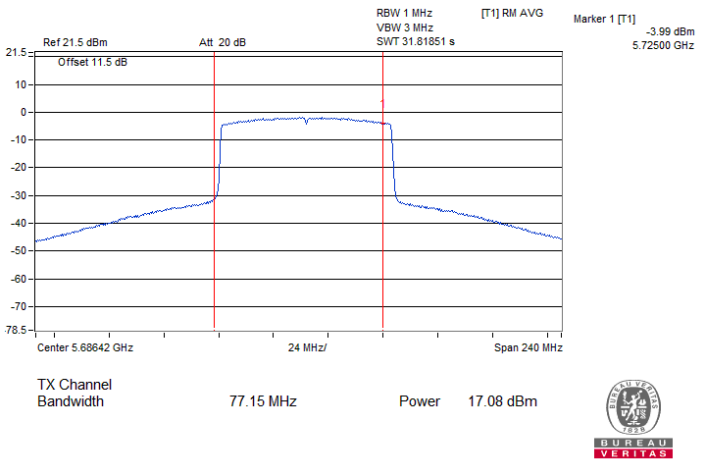
802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)



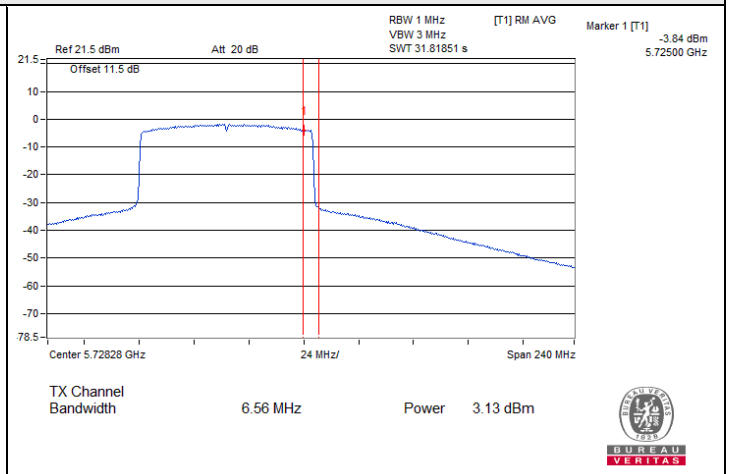
TX Channel Bandwidth 38.64 MHz Power 2.93 dBm

802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-2C)



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)

7.3 Power Spectral Density

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin / Jisyong Wang

Test Mode A: FAP-431G_Radio 2

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	3.34	3.75	3.31	3.02	0.46	9.84	10.02	Pass
60	5300	3.22	3.65	2.60	2.99	0.46	9.61	10.02	Pass
64	5320	3.07	3.49	3.15	2.67	0.46	9.59	10.02	Pass
100	5500	3.89	4.08	3.75	3.77	0.46	10.36	10.94	Pass
116	5580	4.12	3.84	4.27	3.57	0.46	10.44	10.94	Pass
140	5700	4.22	4.18	4.12	3.79	0.46	10.56	10.94	Pass
144 (U-NII-2C)	5720	3.79	3.98	4.20	3.43	0.46	10.34	10.94	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.98-6) = 10.02 dBm/MHz.
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.06-6) = 10.94 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	3.16	3.38	3.34	3.41	0.26	9.60	10.02	Pass
60	5300	3.39	3.40	3.68	2.57	0.26	9.56	10.02	Pass
64	5320	3.83	3.24	3.77	2.91	0.26	9.73	10.02	Pass
100	5500	3.97	4.23	4.45	3.98	0.26	10.44	10.94	Pass
116	5580	4.02	4.22	4.49	4.37	0.26	10.56	10.94	Pass
140	5700	4.08	4.33	4.25	4.23	0.26	10.50	10.94	Pass
144 (U-NII-2C)	5720	4.07	4.27	4.94	3.20	0.26	10.44	10.94	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.98-6) = 10.02 dBm/MHz.
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.06-6) = 10.94 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	1.33	0.56	1.55	1.57	0.61	7.90	10.02	Pass
62	5310	-0.54	-0.42	-0.36	0.31	0.61	6.39	10.02	Pass
102	5510	1.00	1.24	1.61	0.73	0.61	7.79	10.94	Pass
110	5550	1.20	1.64	0.92	1.12	0.61	7.86	10.94	Pass
134	5670	1.53	0.82	1.23	0.72	0.61	7.72	10.94	Pass
142 (U-NII-2C)	5710	1.35	1.28	1.54	0.60	0.61	7.84	10.94	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.98-6) = 10.02 dBm/MHz.
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.06-6) = 10.94 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	-5.74	-5.61	-5.71	-5.93	0.26	0.53	10.02	Pass
106	5530	-2.07	-1.58	-1.89	-2.44	0.26	4.30	10.94	Pass
122	5610	-1.82	-1.78	-1.32	-1.65	0.26	4.64	10.94	Pass
138 (U-NII-2C)	5690	-2.14	-1.42	-0.92	-2.54	0.26	4.57	10.94	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 6.98 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.98-6) = 10.02 dBm/MHz.
4. For U-NII-2C, the directional gain is 6.06 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.06-6) = 10.94 dBm/MHz.

802.11ax (HE80+HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	-3.67	-3.57	-	-	0.28	-0.33	17	Pass
42+58(H)	5290	-	-	-3.74	-3.60	0.28	-0.38	11	Pass
106+122(L)	5530	-1.41	-1.27	-	-	0.28	1.95	11	Pass
106+122(H)	5610	-	-	-1.33	-1.27	0.28	1.99	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 4.36 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.39 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.03 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-6.21	-4.68	-6.41	-5.63	0.34	0.46	3.02	29.69	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.31-6) = 29.69 dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-7.21	-7.24	-8.30	-6.93	-1.37	0.26	1.11	29.69	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.31-6) = 29.69 dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
142 (U-NII-3)	5710	-10.71	-10.42	-11.10	-9.68	-4.43	0.61	-1.60	29.69	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.31-6) = 29.69 dBm/500kHz.

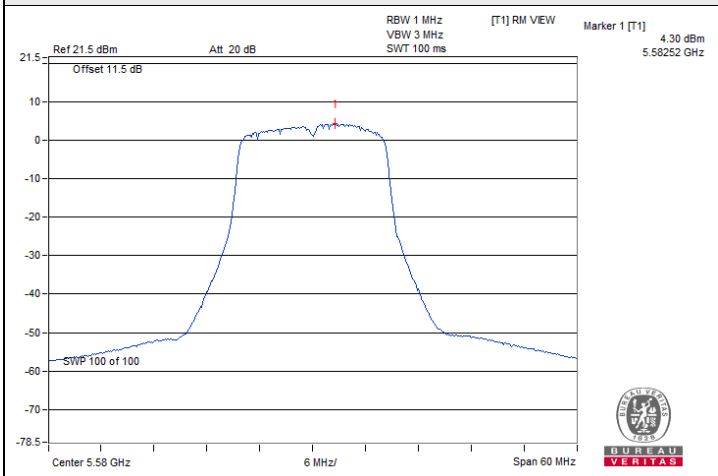
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
138 (U-NII-3)	5690	-14.69	-13.99	-14.89	-13.57	-8.23	0.26	-5.75	29.69	Pass

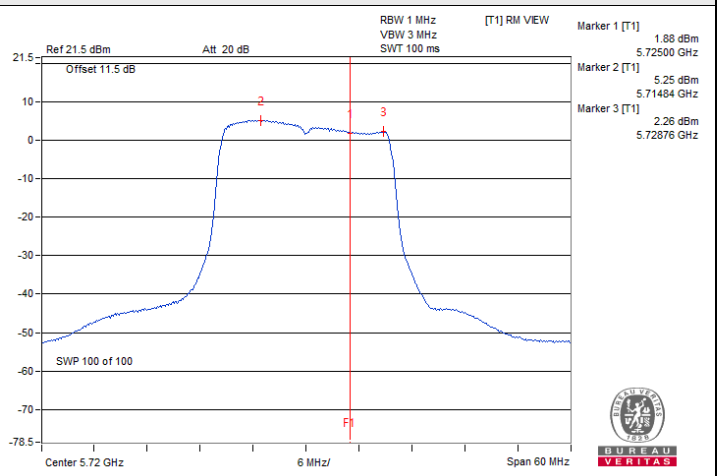
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.31 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.31-6) = 29.69 dBm/500kHz.

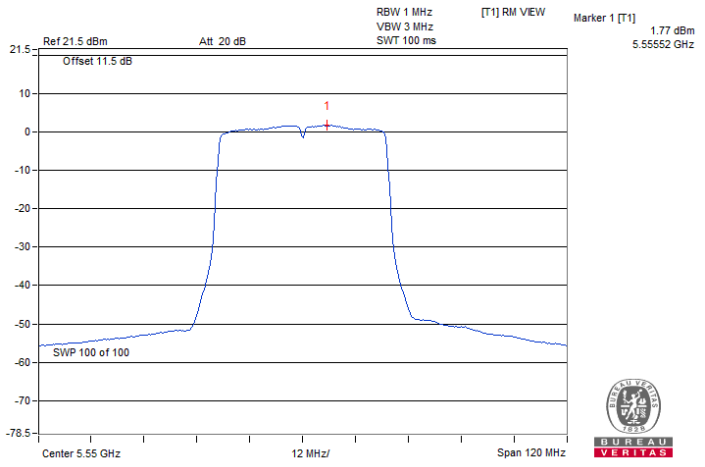
Spectrum Plot of Maximum Value



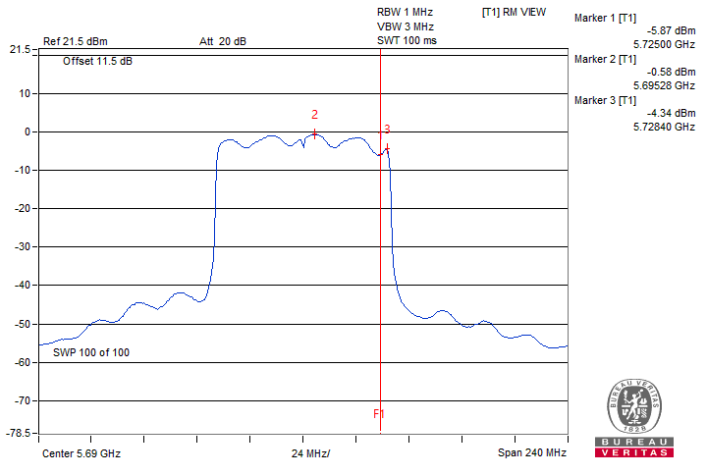
802.11a / Chain 2 : CH 116



802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)

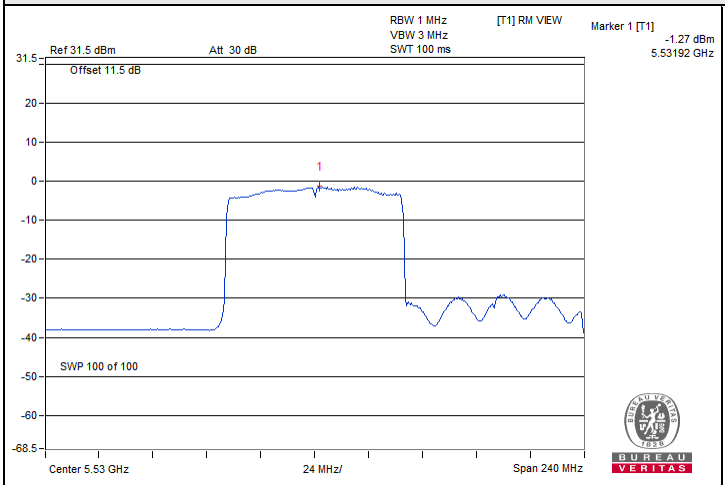


802.11ax (HE40) / Chain 1 : CH 110

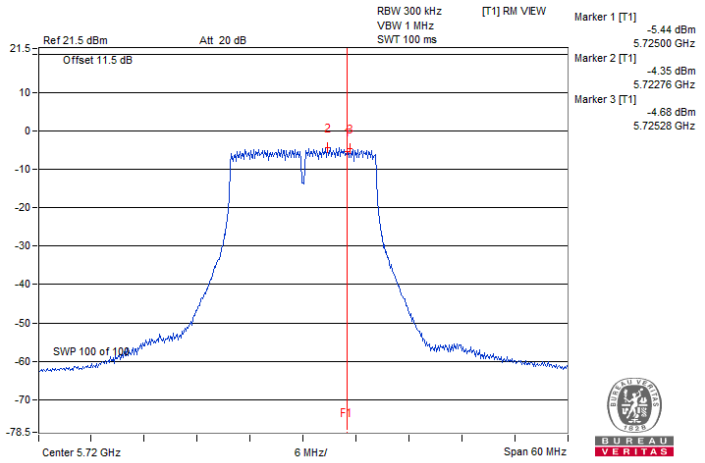


802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)

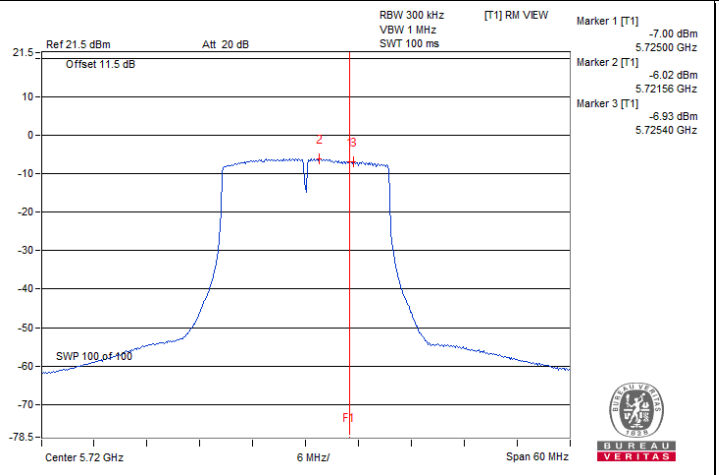
Spectrum Plot of Maximum Value



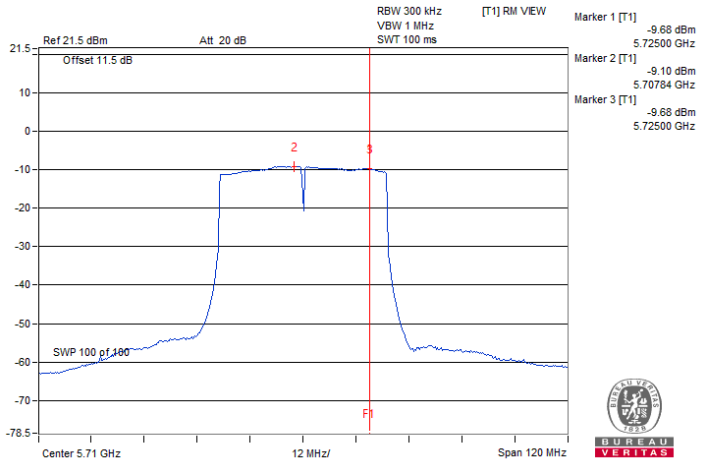
802.11ax (HE80) / Chain 1 : CH 106+122(L)



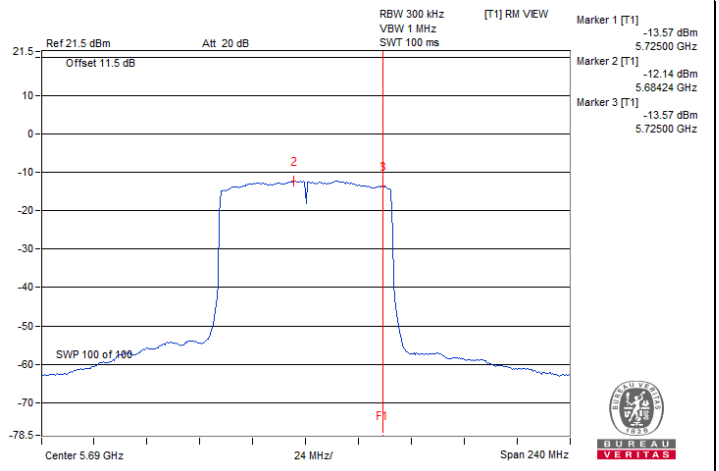
802.11a / Chain 1 : CH 144 (U-NII-3)



802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 3 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin, Wayne Lin

Test Mode C: FAP-431G_Radio 3

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	2.37	2.43	2.31	2.57	0.37	8.81	9.89	Pass
116	5580	3.09	2.98	3.16	3.18	0.37	9.49	9.89	Pass
140	5700	2.47	2.37	2.28	2.59	0.37	8.82	9.89	Pass
144 (U-NII-2C)	5720	2.99	3.04	2.94	3.10	0.37	9.41	9.89	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.11-6) = 9.89 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	1.23	1.11	0.92	1.38	0.70	7.88	9.89	Pass
116	5580	2.70	2.40	2.94	2.97	0.70	9.48	9.89	Pass
140	5700	1.35	0.86	1.04	0.97	0.70	7.78	9.89	Pass
144 (U-NII-2C)	5720	2.63	2.69	2.74	2.88	0.70	9.46	9.89	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.11-6) = 9.89 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	-2.74	-3.27	-2.97	-2.94	0.69	3.73	9.89	Pass
110	5550	1.18	1.11	0.70	1.42	0.69	7.82	9.89	Pass
134	5670	-0.26	-0.63	-0.41	-0.62	0.69	6.23	9.89	Pass
142 (U-NII-2C)	5710	1.10	0.98	1.03	0.90	0.69	7.71	9.89	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.11-6) = 9.89 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	-2.11	-2.54	-2.40	-2.13	0.73	4.46	9.89	Pass
122	5610	-1.72	-1.94	-1.50	-1.67	0.73	5.05	9.89	Pass
138 (U-NII-2C)	5690	-1.72	-2.18	-1.90	-1.96	0.73	4.81	9.89	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.11-6) = 9.89 dBm/MHz.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	-6.84	-7.22	-6.91	-7.06	0.37	-0.61	9.89	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 7.11 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.11-6) = 9.89 dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-5.21	-5.51	-5.46	-5.27	0.66	0.37	3.25	29.09	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.91-6) = 29.09 dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-8.59	-8.64	-8.47	-8.24	-2.46	0.7	0.46	29.09	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.91-6) = 29.09 dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
142 (U-NII-3)	5710	-11.88	-12.33	-11.86	-11.93	-5.98	0.69	-3.07	29.09	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.91-6) = 29.09 dBm/500kHz.

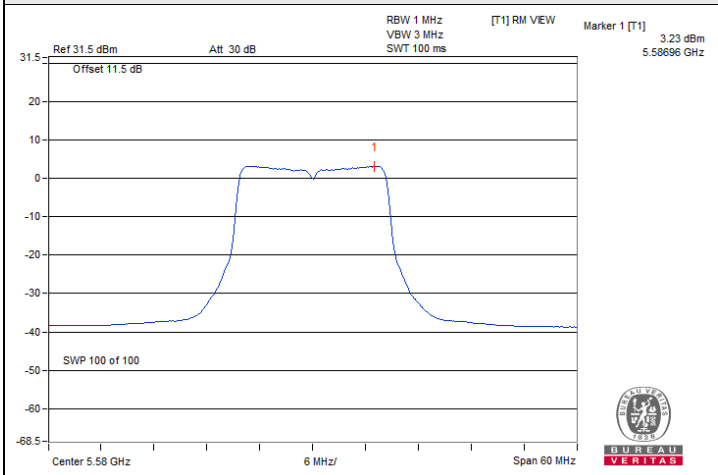
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
138 (U-NII-3)	5690	-17.01	-17.78	-17.83	-17.41	-11.47	0.73	-8.52	29.09	Pass

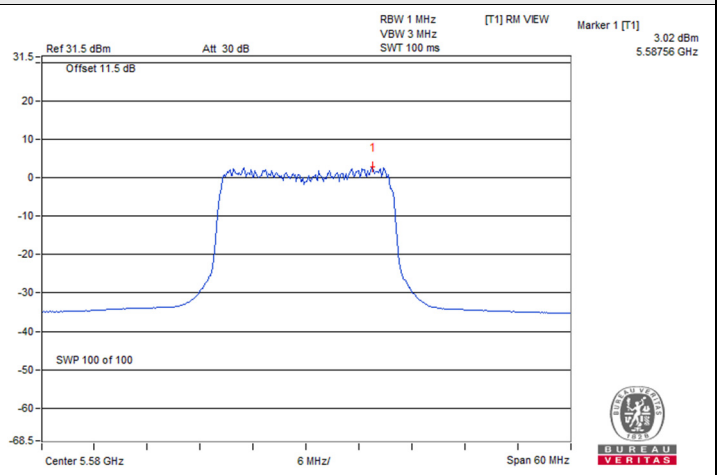
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 6.91 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.91-6) = 29.09 dBm/500kHz.

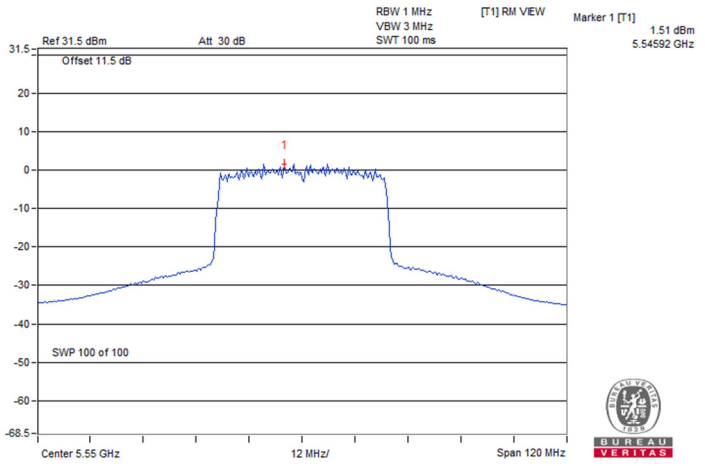
Spectrum Plot of Maximum Value



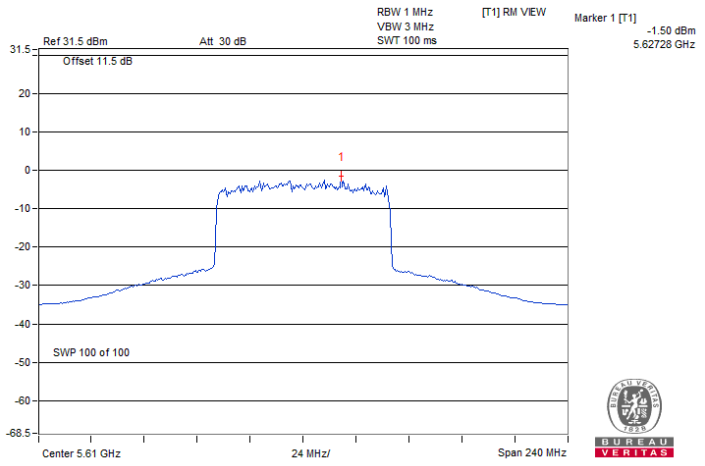
802.11a / Chain 3 : CH 116



802.11ax (HE20) / Chain 3 : CH 116

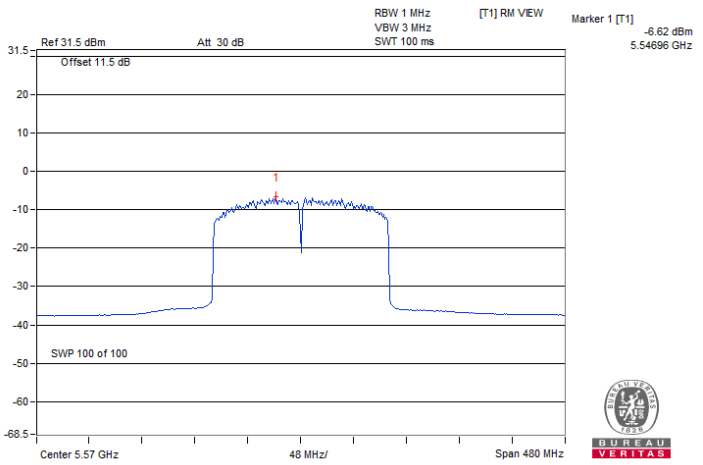


802.11ax (HE40) / Chain 3 : CH 110

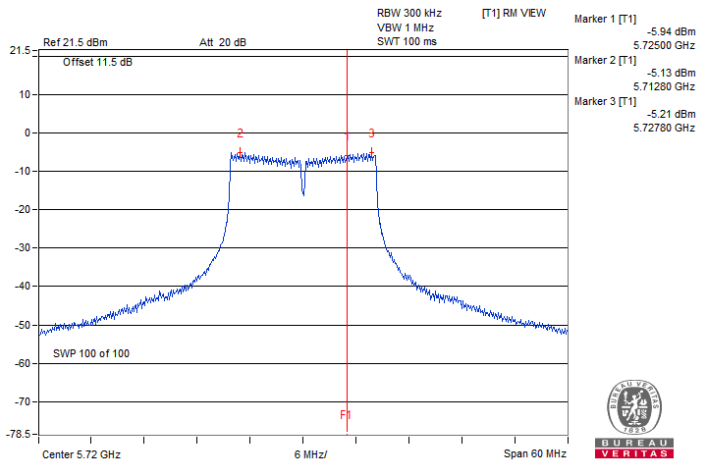


802.11ax (HE80) / Chain 2 : CH 122

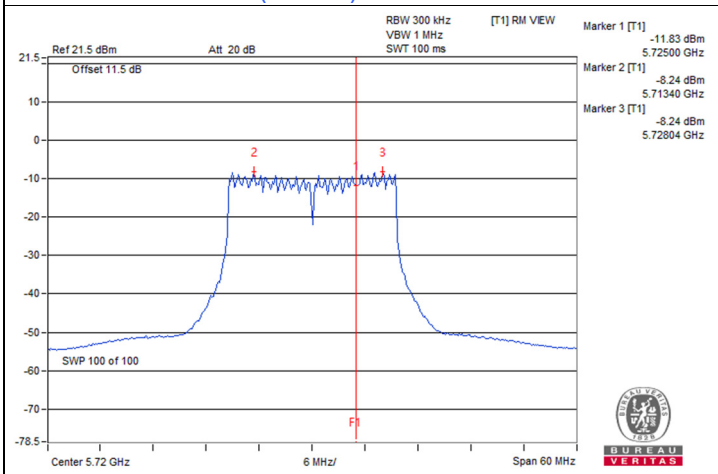
Spectrum Plot of Maximum Value



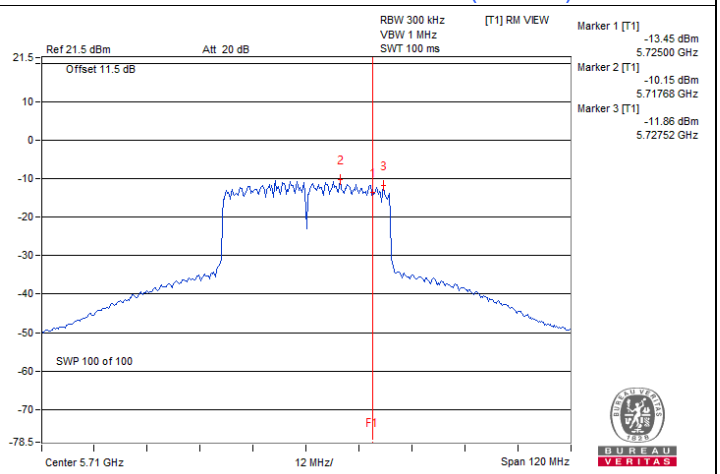
802.11ax (HE160) / Chain 0 : CH 114



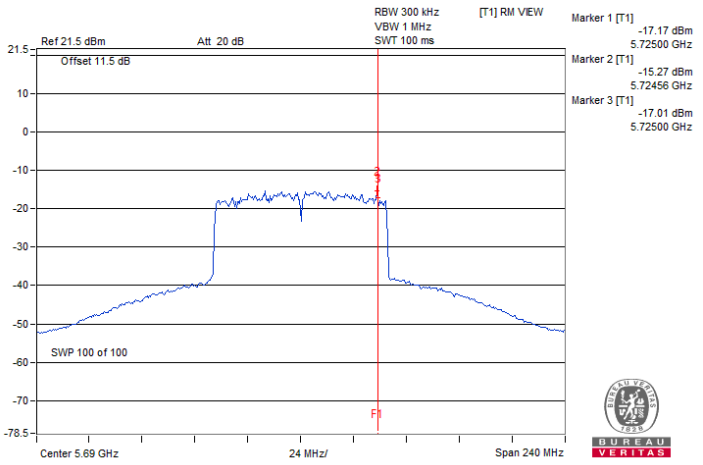
802.11a / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Jisyong Wang

Test Mode E: FAP-433G_Radio 2

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	3.26	3.00	3.76	3.17	0.30	9.63	9.84	Pass
60	5300	3.32	3.67	3.46	3.34	0.30	9.77	9.84	Pass
64	5320	3.35	3.00	3.74	3.49	0.30	9.72	9.84	Pass
100	5500	3.28	3.36	2.93	2.80	0.30	9.42	9.48	Pass
116	5580	3.04	2.55	3.66	2.53	0.30	9.29	9.48	Pass
140	5700	2.82	3.34	2.57	3.13	0.30	9.30	9.48	Pass
144 (U-NII-2C)	5720	2.43	3.63	3.44	2.48	0.30	9.35	9.48	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.16-6) = 9.84 dBm/MHz.
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.52-6) = 9.48 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	2.42	3.04	2.97	3.67	0.24	9.31	9.84	Pass
60	5300	3.20	3.10	2.26	2.99	0.24	9.16	9.84	Pass
64	5320	2.90	3.47	2.77	3.27	0.24	9.37	9.84	Pass
100	5500	3.38	3.09	2.77	3.16	0.24	9.37	9.48	Pass
116	5580	3.65	-0.24	2.92	3.29	0.24	8.91	9.48	Pass
140	5700	2.58	3.42	3.79	2.81	0.24	9.44	9.48	Pass
144 (U-NII-2C)	5720	2.85	3.49	2.90	3.05	0.24	9.34	9.48	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.16-6) = 9.84 dBm/MHz.
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.52-6) = 9.48 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	0.81	0.63	1.82	1.35	0.32	7.52	9.84	Pass
62	5310	0.11	2.35	0.42	1.65	0.32	7.57	9.84	Pass
102	5510	-0.02	1.16	2.61	0.80	0.32	7.59	9.48	Pass
110	5550	-0.40	1.05	0.10	-0.79	0.32	6.39	9.48	Pass
134	5670	-0.66	1.21	-0.48	-0.77	0.32	6.25	9.48	Pass
142 (U-NII-2C)	5710	-1.05	0.85	-0.18	-0.05	0.32	6.29	9.48	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.16-6) = 9.84 dBm/MHz.
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.52-6) = 9.48 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	-2.67	-1.41	-2.20	-4.10	0.26	3.79	9.84	Pass
106	5530	-5.25	-3.22	-5.14	-5.01	0.26	1.71	9.48	Pass
122	5610	-2.43	-0.84	-2.45	-5.41	0.26	3.79	9.48	Pass
138 (U-NII-2C)	5690	-2.93	-1.08	-4.16	-3.16	0.26	3.60	9.48	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2A, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.16-6) = 9.84 dBm/MHz.
4. For U-NII-2C, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to 11-(7.52-6) = 9.48 dBm/MHz.

802.11ax (HE80+HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58(L)	5210	-5.66	-5.82	-	-	0.32	-2.41	17	Pass
42+58(H)	5290	-	-	-5.78	-5.73	0.32	-2.42	11	Pass
106+122(L)	5530	-4.08	-4.31	-	-	0.32	-0.86	11	Pass
106+122(H)	5610	-	-	-3.98	-3.81	0.32	-0.56	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.16 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.13 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.46 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-5.46	-6.41	-6.55	-5.84	-0.02	0.3	2.50	28.84	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 30-(7.16-6) = 28.84 dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-6.64	-9.19	-6.62	-7.11	-1.25	0.24	1.21	28.84	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 30-(7.16-6) = 28.84 dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
142 (U-NII-3)	5710	-9.72	-11.40	-9.63	-10.20	-4.16	0.32	-1.62	28.84	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 30-(7.16-6) = 28.84 dBm/500kHz.

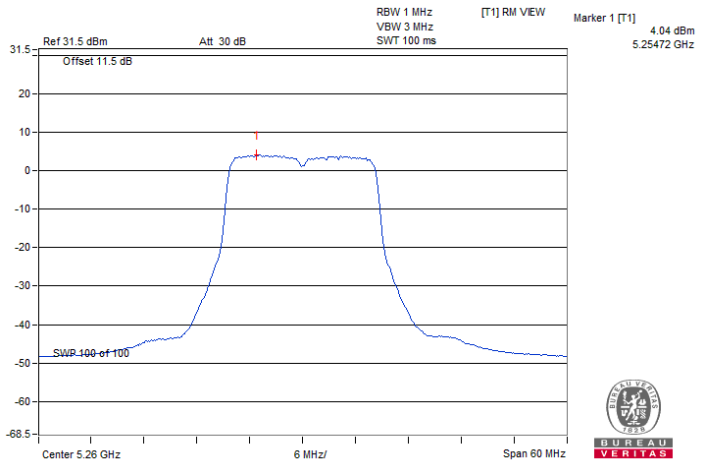
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
138 (U-NII-3)	5690	-12.94	-14.35	-13.50	-13.79	-7.59	0.26	-5.11	28.84	Pass

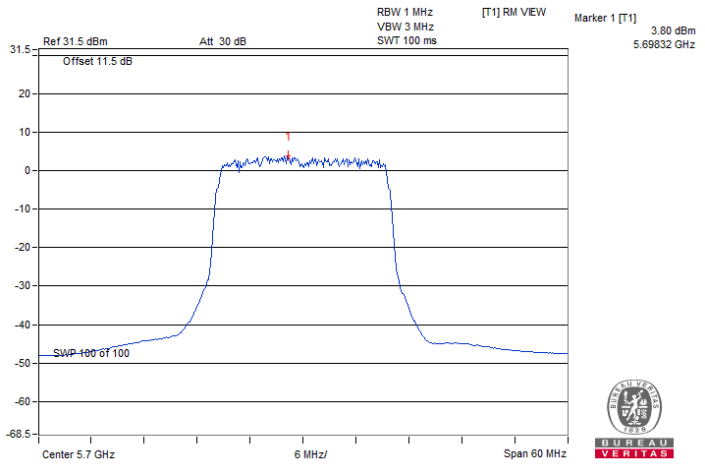
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 7.16 dBi > 6 dBi, so the power density limit shall be reduced to 30-(7.16-6) = 28.84 dBm/500kHz.

Spectrum Plot of Maximum Value

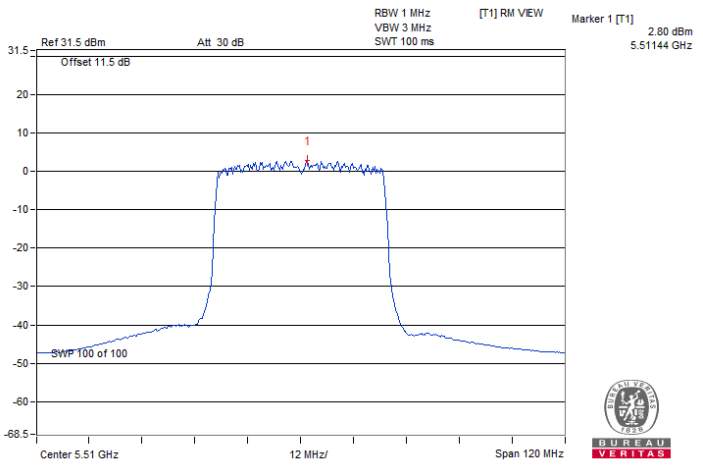


802.11a / Chain 2 : CH 52

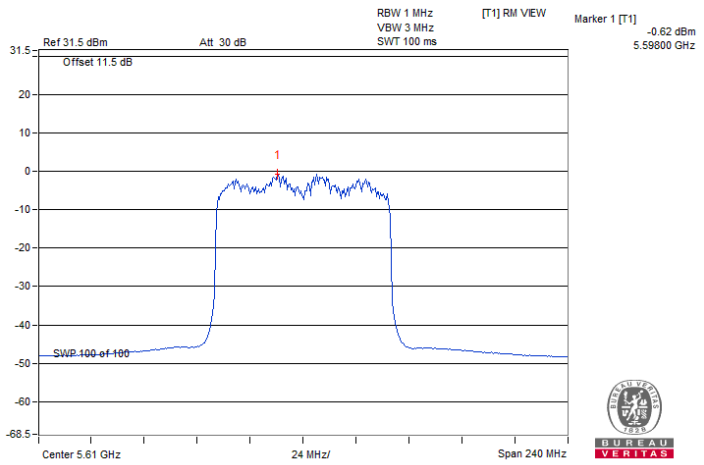


802.11ax (HE20) / Chain 2 : CH 140

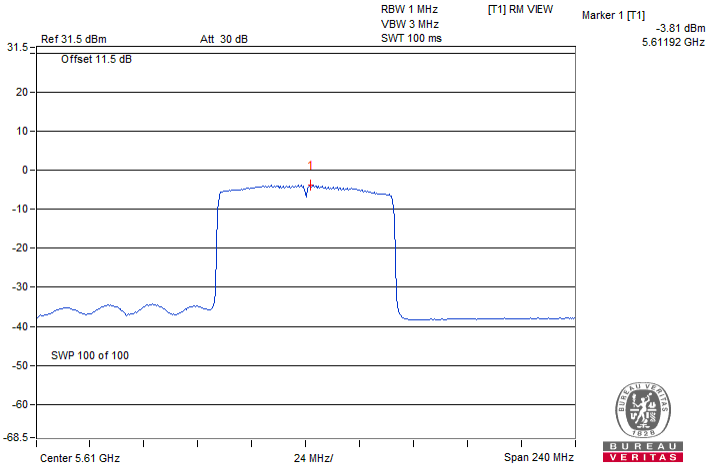
Spectrum Plot of Maximum Value



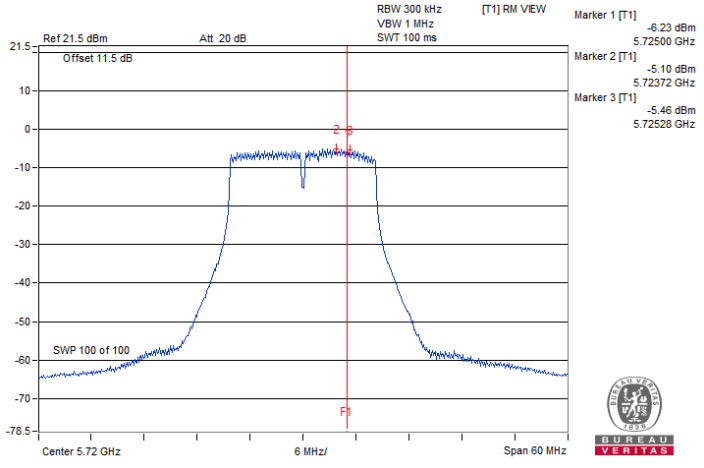
802.11ax (HE40) / Chain 2 : CH 102



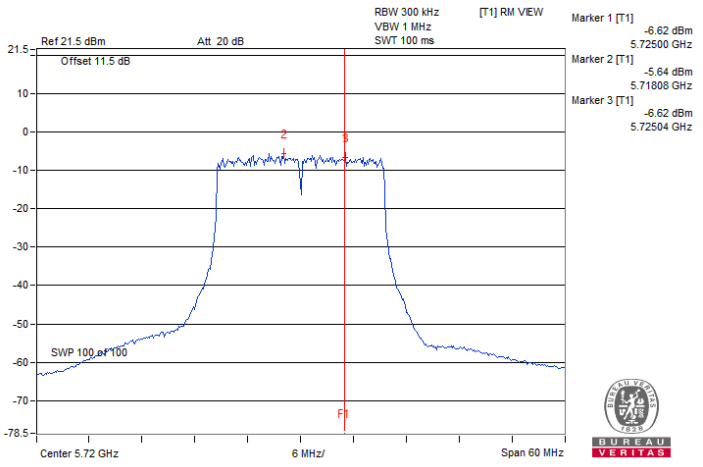
802.11ax (HE80) / Chain 1 : CH 122



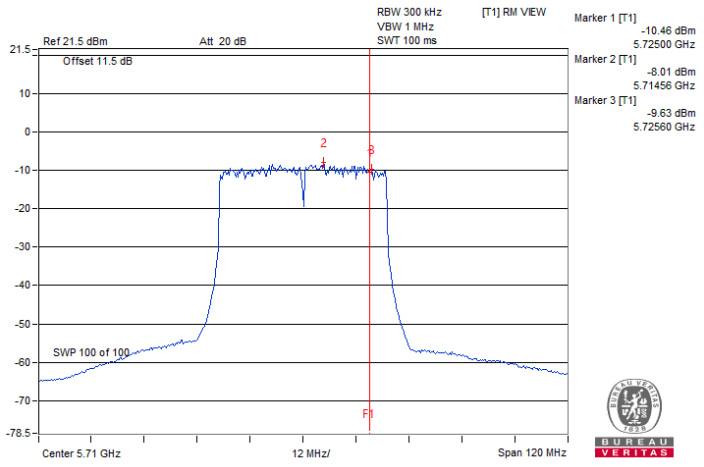
802.11ax (HE80+HE80) / Chain 3 : CH 106+122(H)



802.11a / Chain 0 : CH 144 (U-NII-3)

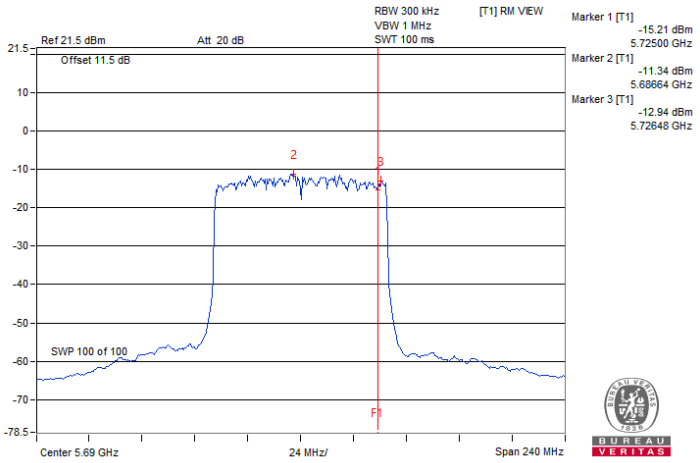


802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)

Spectrum Plot of Maximum Value



802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G: FAP-433G_Radio 3

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	1.73	1.07	1.11	1.31	0.40	7.73	8.65	Pass
116	5580	2.17	1.67	2.01	1.99	0.40	8.38	8.65	Pass
140	5700	1.55	1.19	1.16	1.38	0.40	7.74	8.65	Pass
144 (U-NII-2C)	5720	2.14	2.00	1.88	2.00	0.40	8.43	8.65	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.35-6) = 8.65 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	1.87	1.46	1.63	1.91	0.77	8.51	8.65	Pass
116	5580	1.02	1.16	1.26	1.53	0.77	8.04	8.65	Pass
140	5700	1.17	1.34	1.27	1.52	0.77	8.12	8.65	Pass
144 (U-NII-2C)	5720	1.10	1.25	0.97	1.41	0.77	7.98	8.65	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.35-6) = 8.65 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	-1.62	-2.33	-2.12	-1.77	0.76	4.83	8.65	Pass
110	5550	0.64	0.65	0.27	1.23	0.76	7.49	8.65	Pass
134	5670	-1.31	-1.51	-1.60	-1.40	0.76	5.33	8.65	Pass
142 (U-NII-2C)	5710	0.45	0.55	0.36	0.76	0.76	7.31	8.65	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.35-6) = 8.65 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	-5.11	-5.87	-5.47	-5.46	0.76	1.31	8.65	Pass
122	5610	-2.04	-1.79	-1.88	-1.39	0.76	5.01	8.65	Pass
138 (U-NII-2C)	5690	-1.53	-1.61	-1.93	-1.64	0.76	5.11	8.65	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.35-6) = 8.65 dBm/MHz.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	-8.08	-7.92	-7.88	-7.54	0.38	-1.45	8.65	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-2C, the directional gain is 8.35 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.35-6) = 8.65 dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-6.29	-6.47	-6.43	-6.30	-0.35	0.4	2.27	27.74	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.26-6) = 27.74 dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
144 (U-NII-3)	5720	-7.83	-7.65	-7.91	-7.47	-1.69	0.77	1.30	27.74	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.26-6) = 27.74 dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
142 (U-NII-3)	5710	-9.88	-10.16	-10.03	-9.83	-3.95	0.76	-0.97	27.74	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.26-6) = 27.74 dBm/500kHz.

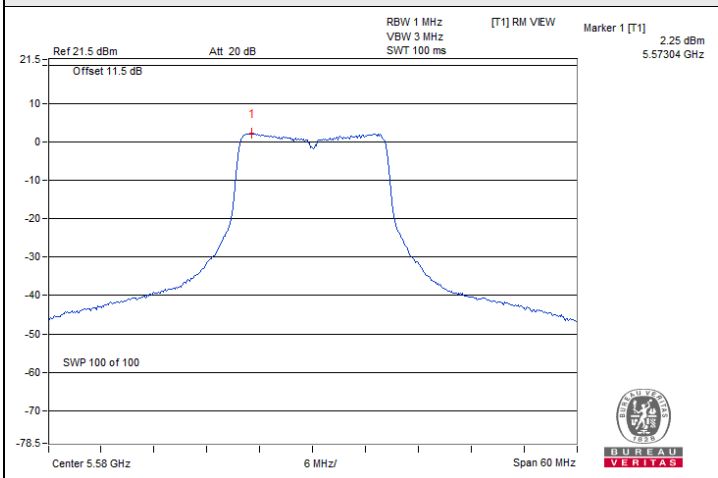
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3					
138 (U-NII-3)	5690	-12.53	-12.86	-12.83	-12.66	-6.7	0.76	-3.72	27.74	Pass

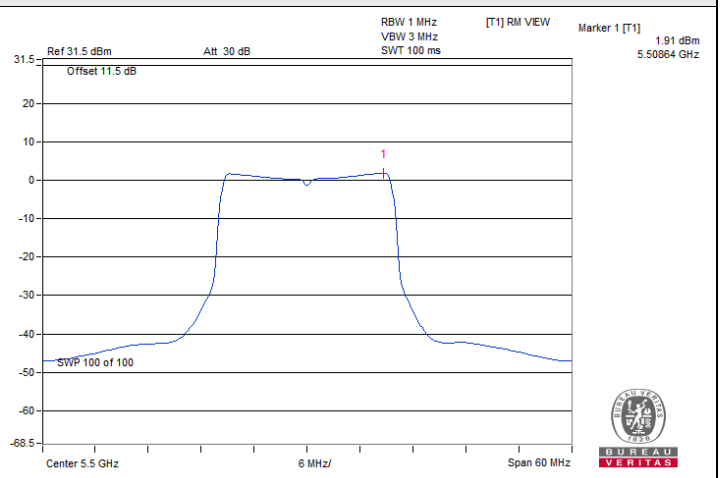
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-3, the directional gain is 8.26 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.26-6) = 27.74 dBm/500kHz.

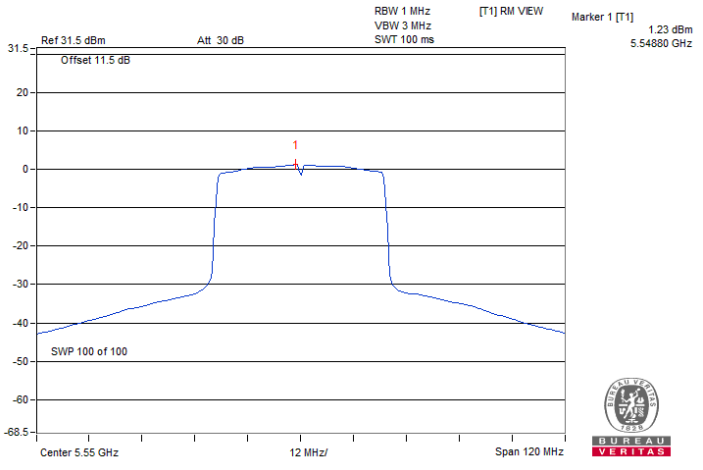
Spectrum Plot of Maximum Value



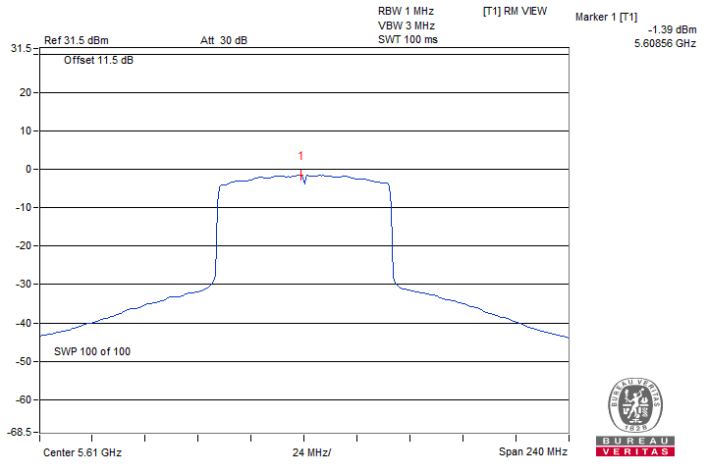
802.11a / Chain 0 : CH 116



802.11ax (HE20) / Chain 3 : CH 100

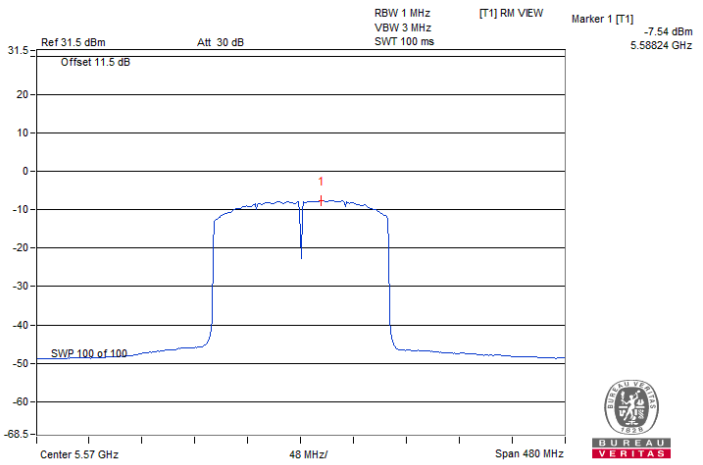


802.11ax (HE40) / Chain 3 : CH 110

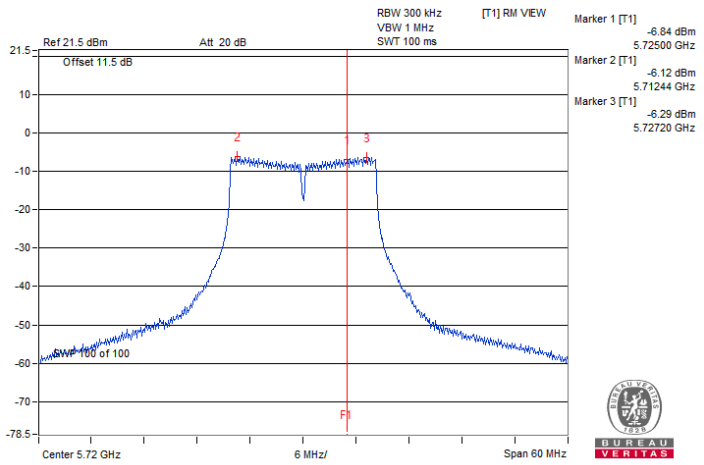


802.11ax (HE80) / Chain 3 : CH 122

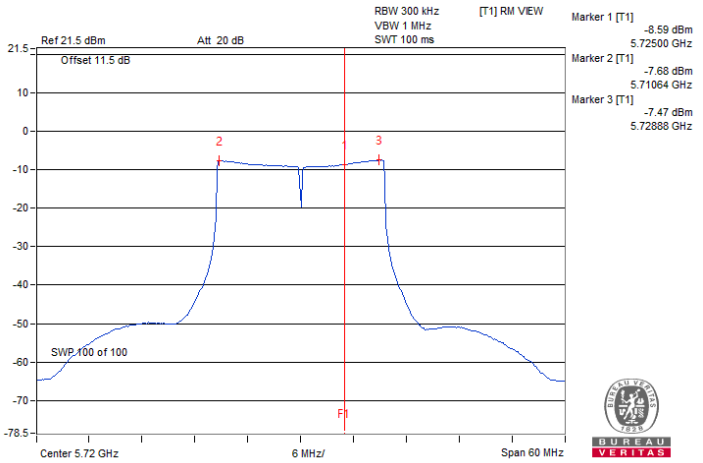
Spectrum Plot of Maximum Value



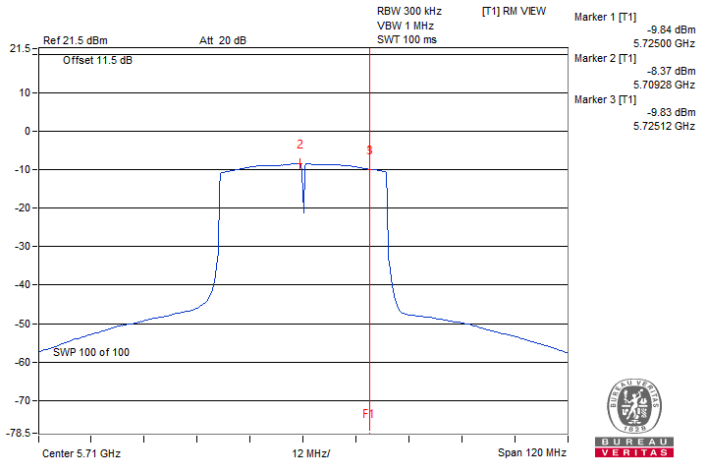
802.11ax (HE160) / Chain 3 : CH 114



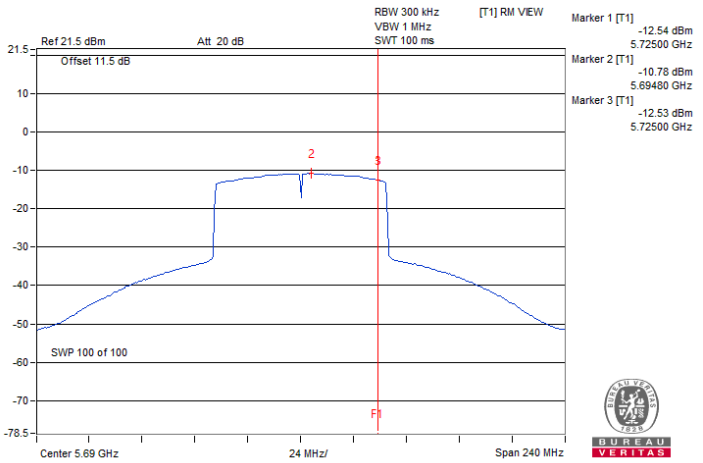
802.11a / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 3 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)

7.4 Occupied Bandwidth

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Jisyong Wang

Test Mode A: FAP-431G_Radio 2

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	16.44	16.44	16.44	16.44
60	5300	16.56	16.44	16.44	16.56
64	5320	16.44	16.44	16.44	16.44
100	5500	16.44	16.44	16.56	16.56
116	5580	16.44	16.44	16.32	16.56
140	5700	16.44	16.56	16.44	16.44
144 (U-NII-2C)	5720	13.40	13.28	13.28	13.28
144 (U-NII-3)	5720	3.16	3.28	3.16	3.16

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.96	18.96	18.96	19.08
60	5300	18.96	18.96	18.96	19.08
64	5320	19.08	18.84	18.96	18.96
100	5500	18.96	19.08	19.08	18.96
116	5580	18.96	18.96	18.96	19.08
140	5700	19.08	18.96	18.96	19.08
144 (U-NII-2C)	5720	14.60	14.60	14.60	14.48
144 (U-NII-3)	5720	4.36	4.36	4.36	4.36

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	38.16	38.04	38.16	38.28
62	5310	38.16	38.04	37.92	37.92
102	5510	38.04	38.04	37.80	38.16
110	5550	38.08	38.08	37.89	38.08
134	5670	38.16	38.16	38.16	37.92
142 (U-NII-2C)	5710	34.20	34.20	34.20	34.20
142 (U-NII-3)	5710	3.96	3.96	3.96	3.96

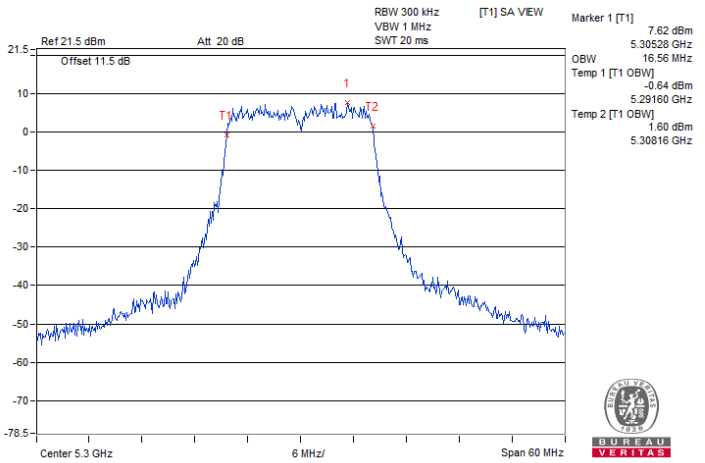
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.28	77.04	77.28
106	5530	77.31	77.31	76.92	77.31
122	5610	77.28	77.52	77.04	77.28
138 (U-NII-2C)	5690	73.88	73.88	73.88	73.88
138 (U-NII-3)	5690	3.40	3.40	3.40	3.40

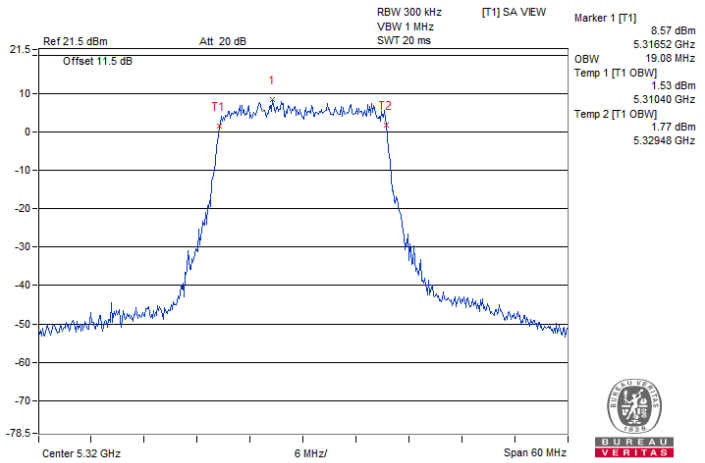
802.11ax (HE80+HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58(L)	5210	77.76	77.76	-	-
42+58(H)	5290	-	-	76.80	77.28
106+122(L)	5530	77.22	77.22	-	-
106+122(H)	5610	-	-	77.28	77.28

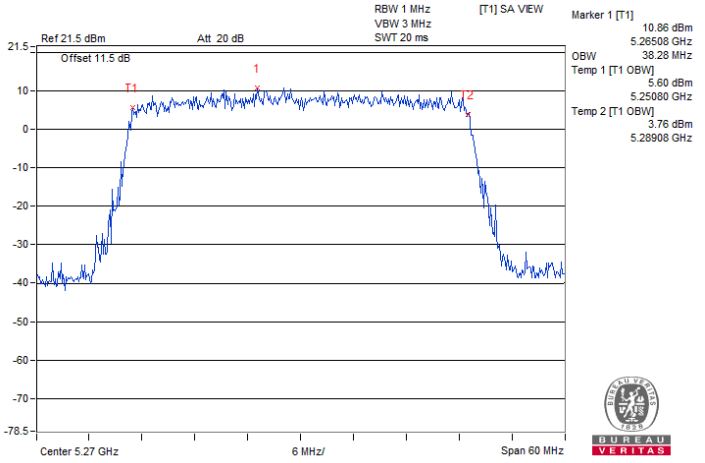
Spectrum Plot of Maximum Value



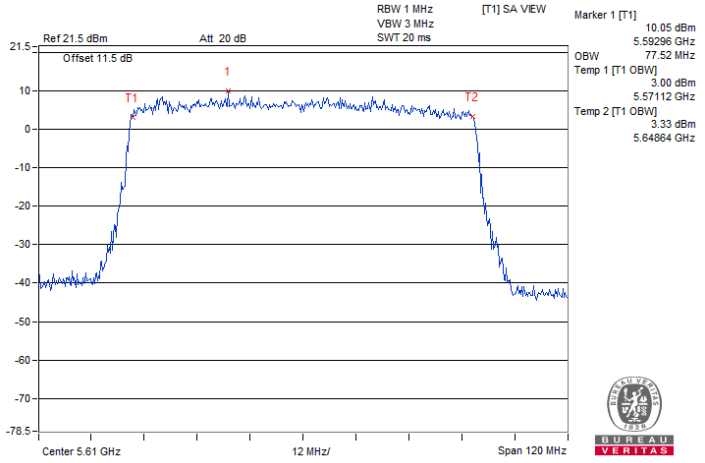
802.11a / Chain 0 : CH 60



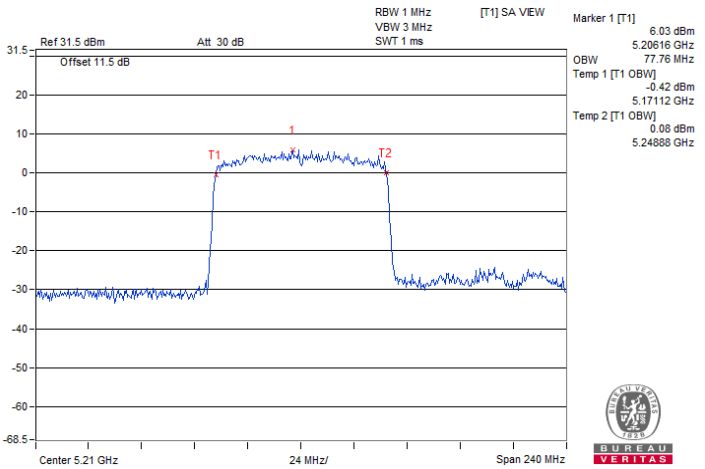
802.11ax (HE20) / Chain 0 : CH 64



802.11ax (HE40) / Chain 3 : CH 54



802.11ax (HE80) / Chain 1 : CH 122



802.11ax (HE80+HE80) / Chain 1 : CH 42+58(L)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin, Wayne Lin

Test Mode C: FAP-431G_Radio 3

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	16.92	16.68	16.80	16.68
116	5580	16.80	16.68	16.80	16.68
140	5700	16.68	16.68	16.68	16.68
144 (U-NII-2C)	5720	13.52	13.40	13.40	13.40
144 (U-NII-3)	5720	3.28	3.28	3.28	3.28

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	19.14	19.20	19.08	19.08
116	5580	19.32	19.20	19.20	19.08
140	5700	19.08	19.08	19.20	19.08
144 (U-NII-2C)	5720	14.60	14.60	14.60	14.60
144 (U-NII-3)	5720	4.60	4.48	4.48	4.60

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	38.64	37.92	37.92	37.92
110	5550	45.36	38.16	38.88	38.40
134	5670	37.92	37.92	38.16	37.92
142 (U-NII-2C)	5710	34.44	33.96	34.20	33.96
142 (U-NII-3)	5710	4.44	3.96	4.20	3.96

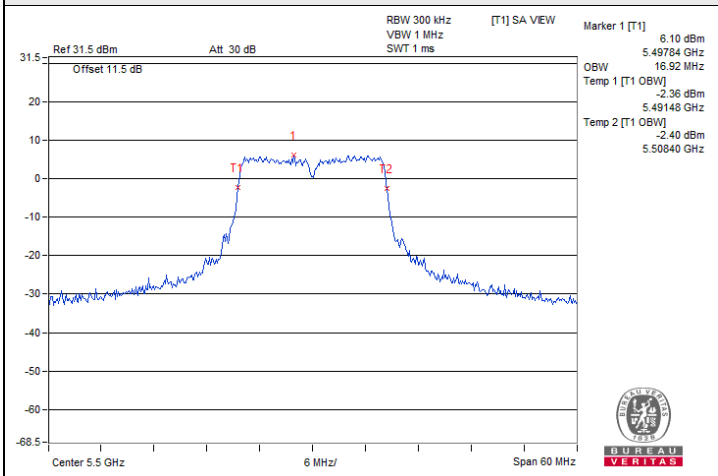
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	79.30	78.26	79.30	78.60
122	5610	77.76	77.76	77.76	77.28
138 (U-NII-2C)	5690	73.88	74.36	74.36	73.40
138 (U-NII-3)	5690	3.88	3.88	3.88	3.40

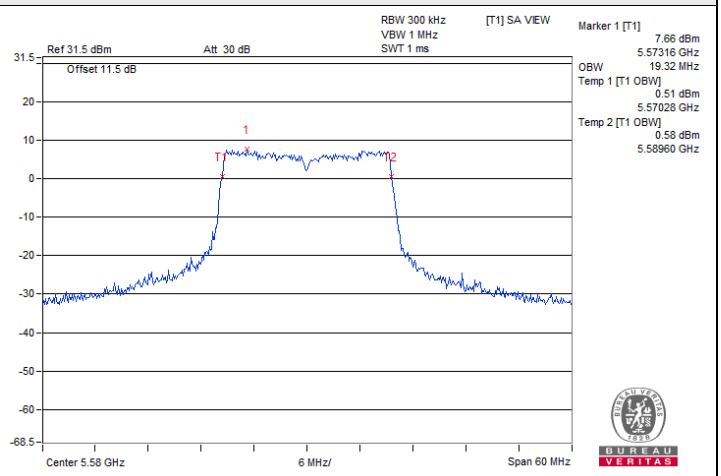
802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	155.13	155.52	155.52	156.48

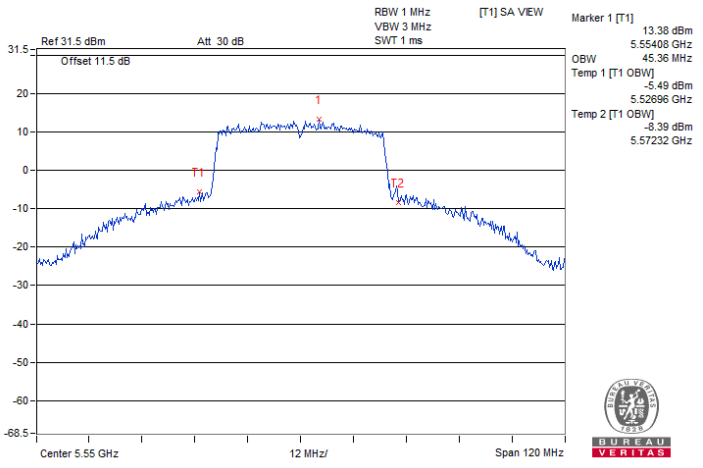
Spectrum Plot of Maximum Value



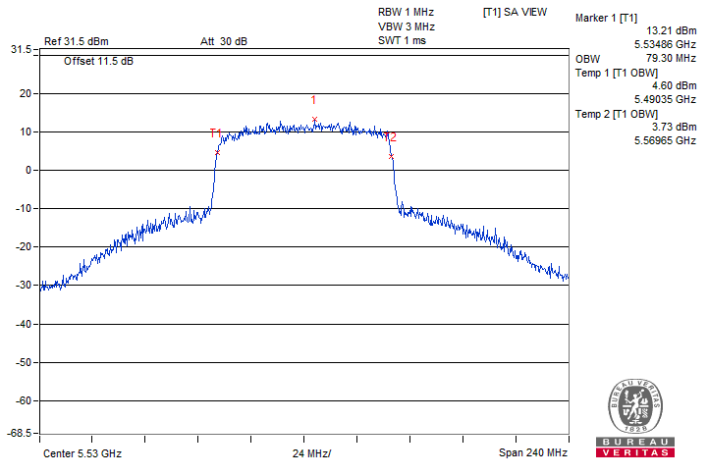
802.11a / Chain 0 : CH 100



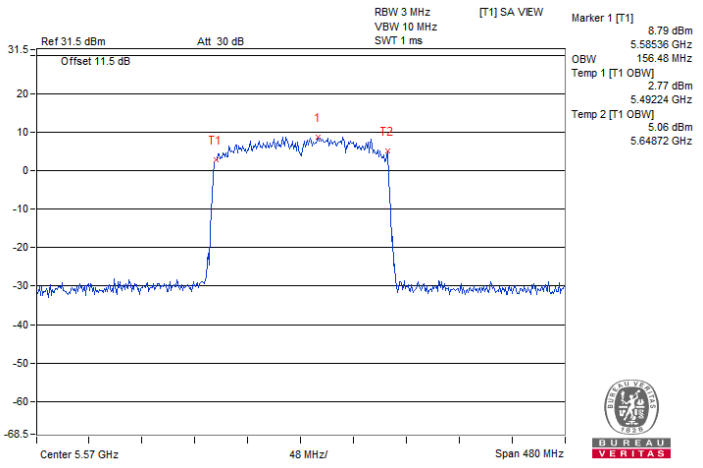
802.11ax (HE20) / Chain 0 : CH 116



802.11ax (HE40) / Chain 0 : CH 110



802.11ax (HE80) / Chain 0 : CH 106



802.11ax (HE160) / Chain 3 : CH 114

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Jisyong Wang

Test Mode E: FAP-433G_Radio 2

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	16.56	16.44	16.56	16.44
60	5300	16.44	16.56	16.44	16.44
64	5320	16.56	16.44	16.44	16.44
100	5500	16.56	16.32	16.44	16.44
116	5580	16.56	16.32	16.44	16.44
140	5700	16.56	16.56	16.44	16.44
144 (U-NII-2C)	5720	13.40	13.40	13.28	13.28
144 (U-NII-3)	5720	3.04	3.04	3.04	3.16

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.96	18.96	18.96	18.84
60	5300	18.84	18.96	18.96	18.96
64	5320	19.08	18.84	18.96	18.96
100	5500	19.08	18.84	18.96	18.84
116	5580	18.96	19.08	18.96	18.96
140	5700	19.08	18.96	19.08	18.96
144 (U-NII-2C)	5720	14.60	14.60	14.60	14.60
144 (U-NII-3)	5720	4.36	4.36	4.36	4.36

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	37.92	38.16	38.16	37.92
62	5310	37.92	38.16	38.16	38.16
102	5510	37.92	37.92	38.16	38.16
110	5550	38.04	37.68	38.16	38.16
134	5670	38.16	37.68	37.92	38.16
142 (U-NII-2C)	5710	34.20	34.20	34.20	34.20
142 (U-NII-3)	5710	3.96	3.96	3.96	3.96

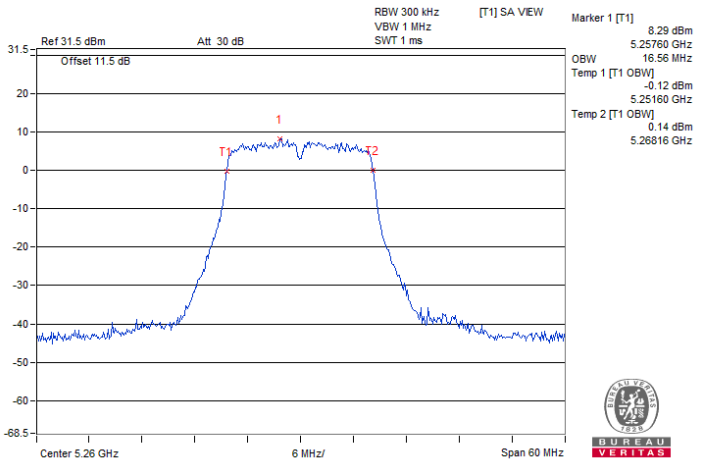
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.28	77.28	77.28
106	5530	77.28	77.28	77.28	77.28
122	5610	77.28	76.80	77.28	77.28
138 (U-NII-2C)	5690	73.88	73.88	73.88	73.40
138 (U-NII-3)	5690	3.40	3.40	3.40	3.40

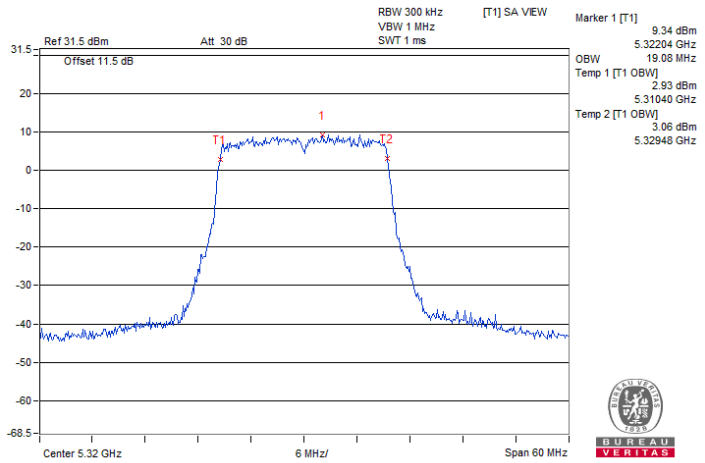
802.11ax (HE80+HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58(L)	5210	77.76	77.76	-	-
42+58(H)	5290	-	-	77.28	77.28
106+122(L)	5530	77.22	77.57	-	-
106+122(H)	5610	-	-	77.28	77.28

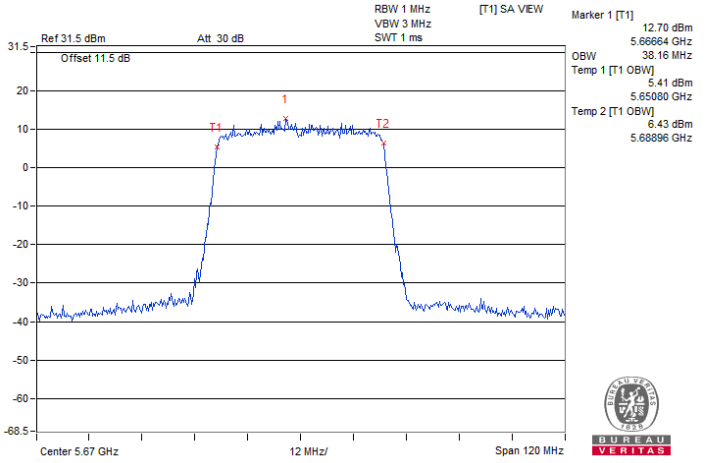
Spectrum Plot of Maximum Value



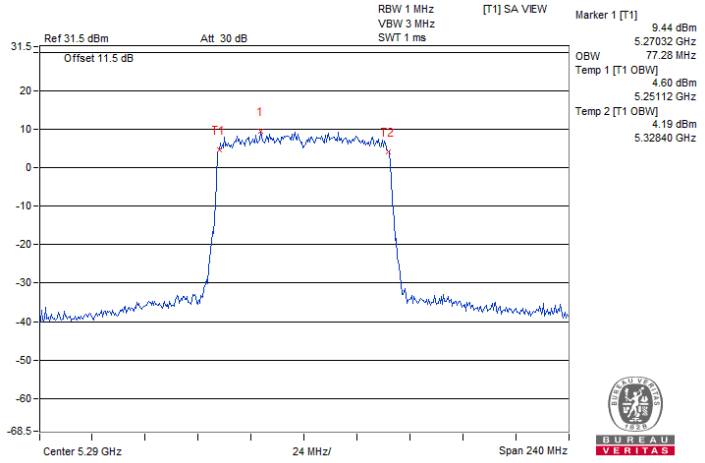
802.11a / Chain 0 : CH 52



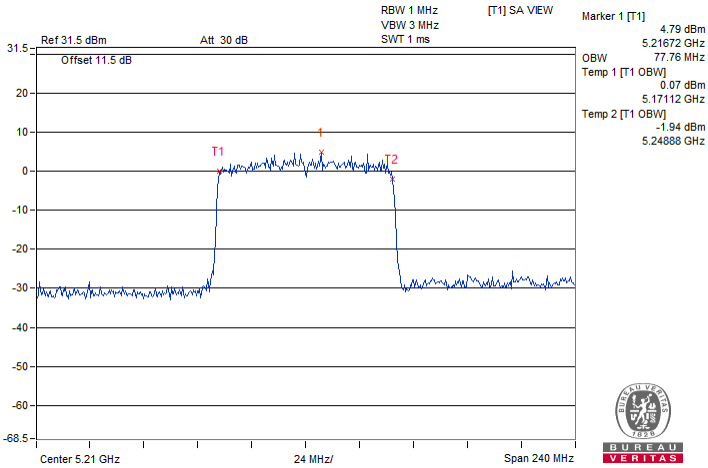
802.11ax (HE20) / Chain 0 : CH 64



802.11ax (HE40) / Chain 0 : CH 134



802.11ax (HE80) / Chain 0 : CH 58



802.11ax (HE80+HE80) / Chain 0 : CH 42+58(L)

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G: FAP-433G_Radio 3

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	16.68	16.68	16.68	16.68
116	5580	16.80	16.68	16.68	16.68
140	5700	16.68	16.68	16.68	16.68
144 (U-NII-2C)	5720	13.40	13.40	13.40	13.40
144 (U-NII-3)	5720	3.28	3.28	3.28	3.28

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	19.08	19.08	19.08	19.08
116	5580	19.08	19.32	19.08	19.08
140	5700	19.08	19.08	19.08	19.08
144 (U-NII-2C)	5720	14.60	14.60	14.60	14.60
144 (U-NII-3)	5720	4.48	4.48	4.48	4.48

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	37.68	37.68	37.68	37.68
110	5550	38.16	37.68	38.16	37.68
134	5670	37.68	37.68	37.68	37.68
142 (U-NII-2C)	5710	34.20	34.20	34.20	33.96
142 (U-NII-3)	5710	3.96	3.96	3.96	3.72

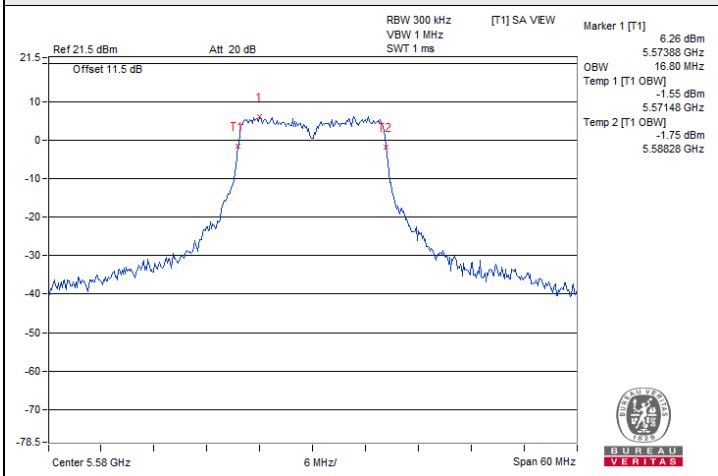
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	77.04	77.28	77.28	77.76
122	5610	78.24	77.28	78.72	77.28
138 (U-NII-2C)	5690	74.36	73.88	73.88	73.88
138 (U-NII-3)	5690	3.88	3.40	3.88	3.40

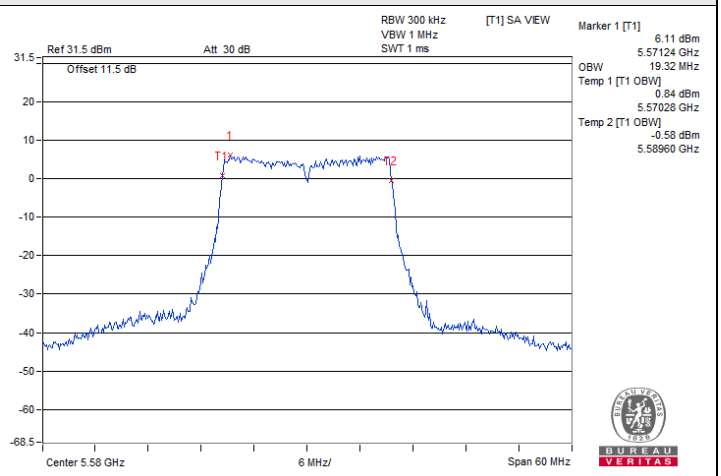
802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	155.52	155.52	155.52	155.52

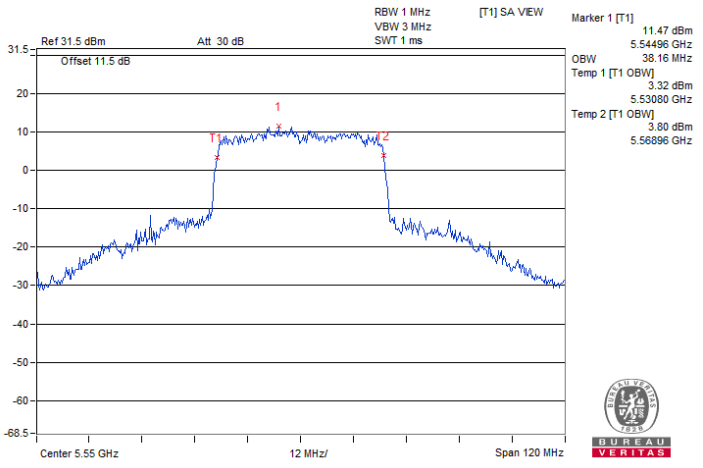
Spectrum Plot of Maximum Value



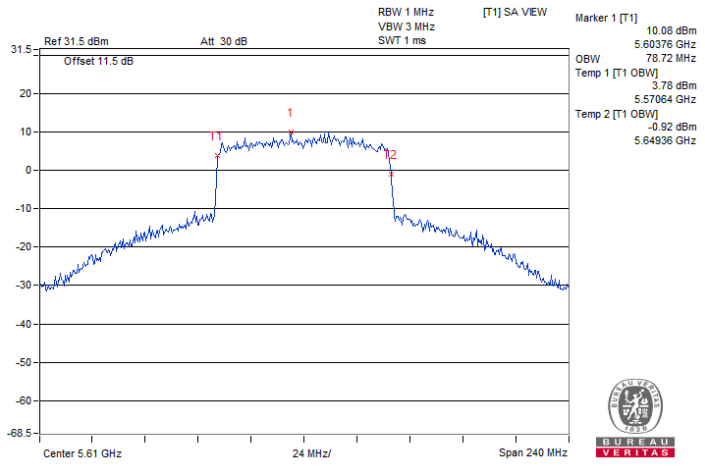
802.11a / Chain 0 : CH 116



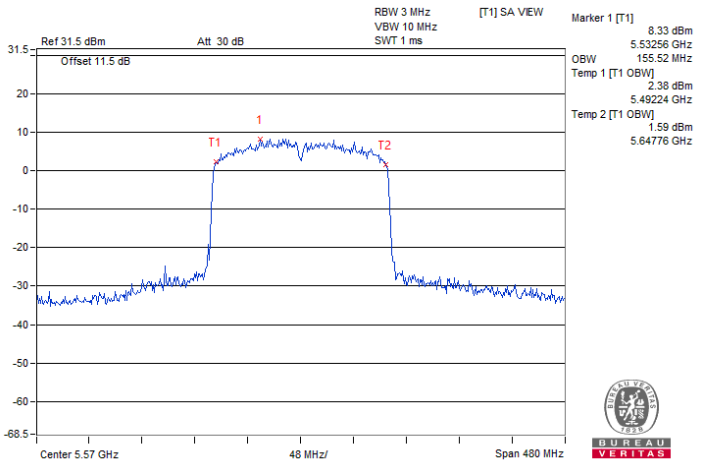
802.11ax (HE20) / Chain 1 : CH 116



802.11ax (HE40) / Chain 0 : CH 110



802.11ax (HE80) / Chain 2 : CH 122



802.11ax (HE160) / Chain 0 : CH 114

7.5 Frequency Stability

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin

Test Mode A: FAP-431G_Radio 2

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	120	5259.9925	Pass	5259.9914	Pass	5259.9948	Pass	5259.9939	Pass
40	120	5259.994	Pass	5259.9951	Pass	5259.9947	Pass	5259.9947	Pass
30	120	5259.9998	Pass	5260.0026	Pass	5260.001	Pass	5260.0022	Pass
20	120	5260.0266	Pass	5260.0245	Pass	5260.0284	Pass	5260.0249	Pass
10	120	5260.0166	Pass	5260.0164	Pass	5260.0171	Pass	5260.0137	Pass
0	120	5260.0244	Pass	5260.0266	Pass	5260.0253	Pass	5260.0259	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5260.0307	Pass	5260.031	Pass	5260.0286	Pass	5260.0308	Pass
	120	5260.0266	Pass	5260.0245	Pass	5260.0284	Pass	5260.0249	Pass
	102	5260.0324	Pass	5260.0334	Pass	5260.0343	Pass	5260.0373	Pass

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin, Wayne Lin

Test Mode C: FAP-431G_Radio 3

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5500 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	120	5499.9788	Pass	5499.983	Pass	5499.9797	Pass	5499.9787	Pass
40	120	5500.0193	Pass	5500.0204	Pass	5500.0186	Pass	5500.0185	Pass
30	120	5500.0147	Pass	5500.0121	Pass	5500.0145	Pass	5500.0158	Pass
20	120	5500.0267	Pass	5500.0286	Pass	5500.0271	Pass	5500.0275	Pass
10	120	5499.9841	Pass	5499.9893	Pass	5499.9887	Pass	5499.9851	Pass
0	120	5499.9817	Pass	5499.9785	Pass	5499.9789	Pass	5499.9795	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5500 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5500.0176	Pass	5500.0179	Pass	5500.0195	Pass	5500.0162	Pass
	120	5500.0267	Pass	5500.0286	Pass	5500.0271	Pass	5500.0275	Pass
	102	5500.0176	Pass	5500.0186	Pass	5500.0181	Pass	5500.0212	Pass

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode E: FAP-433G_Radio 2

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5260 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	120	5259.9942	Pass	5259.993	Pass	5259.9965	Pass	5259.9955	Pass
40	120	5259.9957	Pass	5259.9967	Pass	5259.995	Pass	5259.995	Pass
30	120	5259.9861	Pass	5259.9888	Pass	5259.9911	Pass	5259.9871	Pass
20	120	5259.9976	Pass	5259.9993	Pass	5259.9979	Pass	5259.9983	Pass
10	120	5260.0146	Pass	5260.0144	Pass	5260.0138	Pass	5260.0156	Pass
0	120	5260.0072	Pass	5260.0094	Pass	5260.0066	Pass	5260.0072	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5259.9868	Pass	5259.9871	Pass	5259.9886	Pass	5259.9855	Pass
	120	5259.9976	Pass	5259.9993	Pass	5259.9979	Pass	5259.9983	Pass
	102	5259.9868	Pass	5259.9878	Pass	5259.9873	Pass	5259.9903	Pass

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G: FAP-433G_Radio 3

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5500 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	120	5500.0157	Pass	5500.0145	Pass	5500.0167	Pass	5500.0171	Pass
40	120	5500.0118	Pass	5500.0129	Pass	5500.0166	Pass	5500.0165	Pass
30	120	5500.0073	Pass	5500.0102	Pass	5500.0071	Pass	5500.0084	Pass
20	120	5500.0193	Pass	5500.0211	Pass	5500.0196	Pass	5500.0201	Pass
10	120	5499.9822	Pass	5499.982	Pass	5499.9813	Pass	5499.9778	Pass
0	120	5499.9744	Pass	5499.9767	Pass	5499.9738	Pass	5499.9744	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5500 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5500.0179	Pass	5500.0183	Pass	5500.0198	Pass	5500.0166	Pass
	120	5500.0193	Pass	5500.0211	Pass	5500.0196	Pass	5500.0201	Pass
	102	5500.018	Pass	5500.0191	Pass	5500.0185	Pass	5500.0161	Pass

7.6 AC Power Conducted Emissions

Test Mode A: FAP-431G_Radio 2

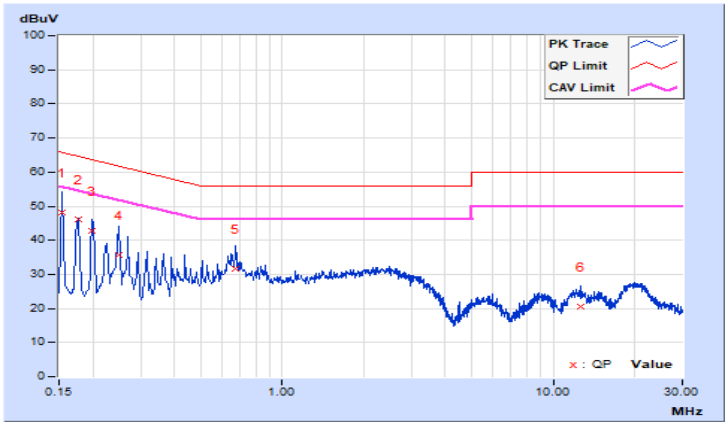
ADP mode

RF Mode	802.11a	**Channel**	CH 116：5580 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15400	9.68	38.55	22.76	48.23	32.44	65.78	55.78	-17.55	-23.34
2	0.17800	9.70	36.32	20.00	46.02	29.70	64.58	54.58	-18.56	-24.88
3	0.19800	9.72	33.14	17.52	42.86	27.24	63.69	53.69	-20.83	-26.45
4	0.25000	9.74	25.88	14.83	35.62	24.57	61.76	51.76	-26.14	-27.19
5	0.67000	9.82	21.97	16.95	31.79	26.77	56.00	46.00	-24.21	-19.23
6	12.68200	10.09	10.42	5.57	20.51	15.66	60.00	50.00	-39.49	-34.34

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

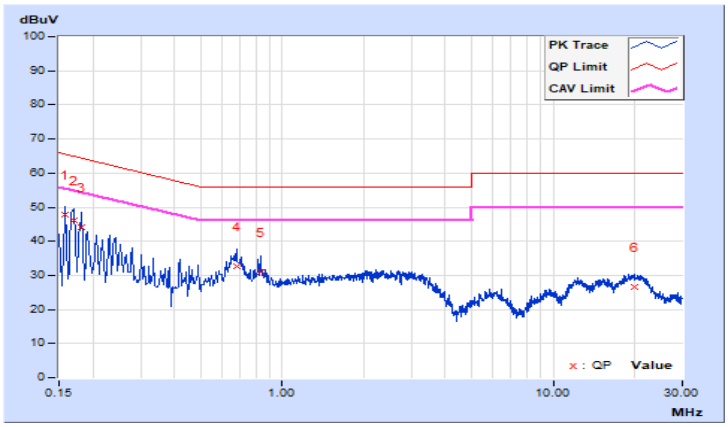


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.69	38.02	21.35	47.71	31.04	65.57	55.57	-17.86	-24.53
2	0.17000	9.70	36.32	20.41	46.02	30.11	64.96	54.96	-18.94	-24.85
3	0.18200	9.71	34.41	19.35	44.12	29.06	64.39	54.39	-20.27	-25.33
4	0.67800	9.83	22.81	17.50	32.64	27.33	56.00	46.00	-23.36	-18.67
5	0.83000	9.85	21.13	14.07	30.98	23.92	56.00	46.00	-25.02	-22.08
6	19.93800	10.20	16.31	12.05	26.51	22.25	60.00	50.00	-33.49	-27.75

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode B: FAP-431G_Radio 2

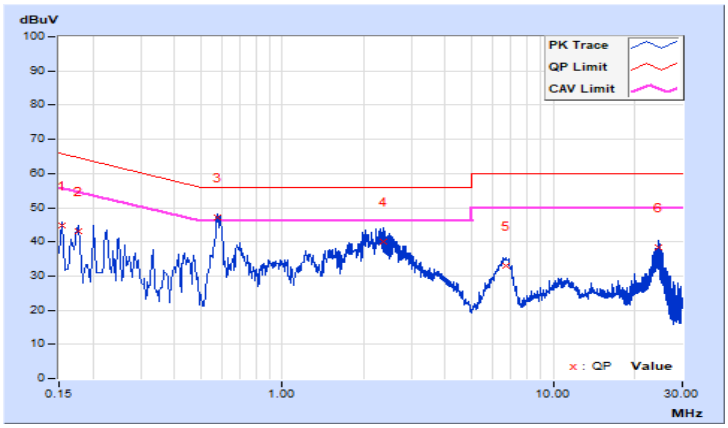
POE mode

RF Mode	802.11a	**Channel**	CH 116：5580 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15400	9.62	35.04	20.06	44.66	29.68	65.78	55.78	-21.12	-26.10
2	0.17755	9.63	33.38	19.05	43.01	28.68	64.60	54.60	-21.59	-25.92
3	0.57400	9.69	37.33	30.71	47.02	40.40	56.00	46.00	-8.98	-5.60
4	2.36600	9.73	30.23	22.34	39.96	32.07	56.00	46.00	-16.04	-13.93
5	6.67000	9.77	23.15	20.01	32.92	29.78	60.00	50.00	-27.08	-20.22
6	24.33000	9.71	28.62	24.44	38.33	34.15	60.00	50.00	-21.67	-15.85

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

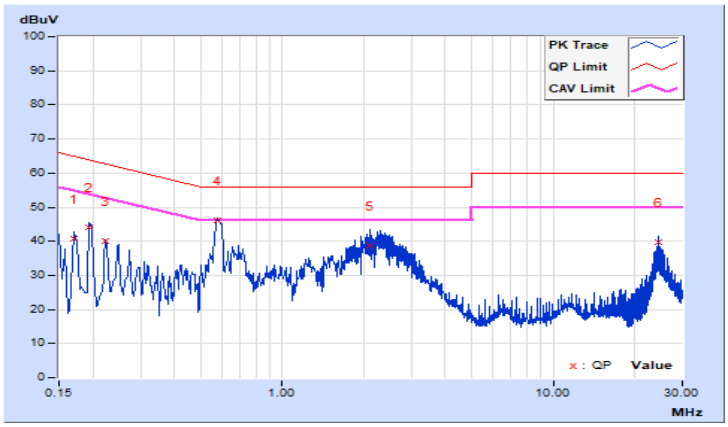


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17000	9.62	31.14	21.28	40.76	30.90	64.96	54.96	-24.20	-24.06
2	0.19400	9.63	34.52	17.81	44.15	27.44	63.86	53.86	-19.71	-26.42
3	0.22200	9.64	30.37	15.04	40.01	24.68	62.74	52.74	-22.73	-28.06
4	0.57400	9.69	36.30	29.66	45.99	39.35	56.00	46.00	-10.01	-6.65
5	2.09800	9.72	28.98	19.77	38.70	29.49	56.00	46.00	-17.30	-16.51
6	24.57000	9.80	29.93	27.63	39.73	37.43	60.00	50.00	-20.27	-12.57

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode C: FAP-431G_Radio 3

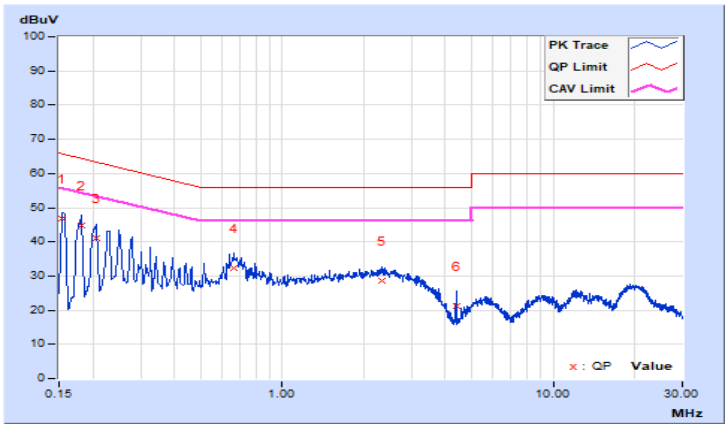
ADP mode

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.68	37.01	22.41	46.69	32.09	65.78	55.78	-19.09	-23.69
2	0.18180	9.71	35.11	18.67	44.82	28.38	64.40	54.40	-19.58	-26.02
3	0.20600	9.72	31.36	16.56	41.08	26.28	63.37	53.37	-22.29	-27.09
4	0.66200	9.82	22.66	17.00	32.48	26.82	56.00	46.00	-23.52	-19.18
5	2.33000	9.91	18.68	14.67	28.59	24.58	56.00	46.00	-27.41	-21.42
6	4.39000	9.96	11.30	0.82	21.26	10.78	56.00	46.00	-34.74	-35.22

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

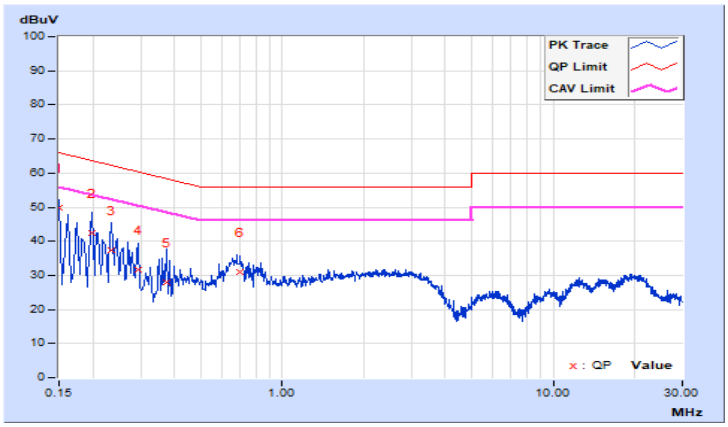


RF Mode	802.11ax (HE40)	**Channel**	CH 110：5550 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.68	40.09	24.31	49.77	33.99	66.00	56.00	-16.23	-22.01
2	0.19800	9.72	32.61	17.88	42.33	27.60	63.69	53.69	-21.36	-26.09
3	0.23400	9.74	27.79	16.05	37.53	25.79	62.31	52.31	-24.78	-26.52
4	0.29400	9.76	21.87	12.62	31.63	22.38	60.41	50.41	-28.78	-28.03
5	0.37400	9.80	18.19	9.76	27.99	19.56	58.41	48.41	-30.42	-28.85
6	0.70200	9.84	21.17	15.78	31.01	25.62	56.00	46.00	-24.99	-20.38

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode D: FAP-431G_Radio 3

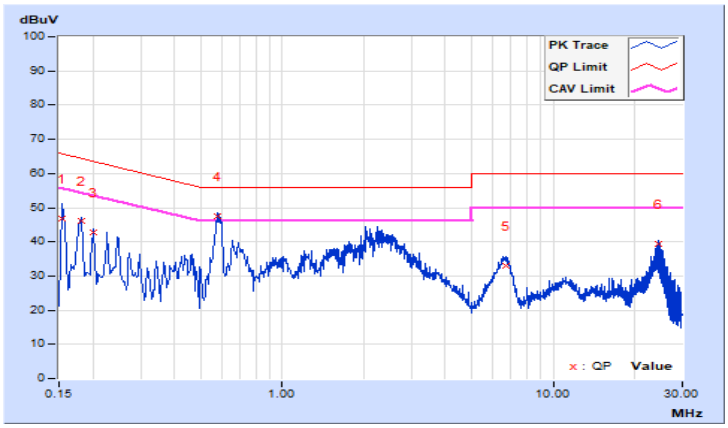
POE mode

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.62	37.23	20.22	46.85	29.84	65.78	55.78	-18.93	-25.94
2	0.18200	9.63	36.43	20.63	46.06	30.26	64.39	54.39	-18.33	-24.13
3	0.20200	9.64	33.28	18.71	42.92	28.35	63.53	53.53	-20.61	-25.18
4	0.57798	9.69	37.93	30.53	47.62	40.22	56.00	46.00	-8.38	-5.78
5	6.70600	9.77	23.23	20.05	33.00	29.82	60.00	50.00	-27.00	-20.18
6	24.57000	9.71	29.84	27.35	39.55	37.06	60.00	50.00	-20.45	-12.94

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

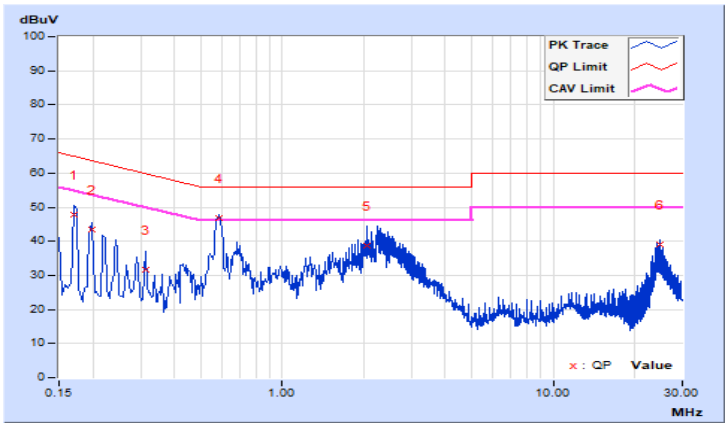


RF Mode	802.11ax (HE40)	**Channel**	CH 110：5550 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.17000	9.62	38.26	21.40	47.88	31.02	64.96	54.96	-17.08	-23.94
2	0.19800	9.63	33.91	16.61	43.54	26.24	63.69	53.69	-20.15	-27.45
3	0.31400	9.66	22.07	10.70	31.73	20.36	59.86	49.86	-28.13	-29.50
4	0.58565	9.69	36.99	29.29	46.68	38.98	56.00	46.00	-9.32	-7.02
5	2.05791	9.72	28.97	20.10	38.69	29.82	56.00	46.00	-17.31	-16.18
6	24.81400	9.80	29.24	25.73	39.04	35.53	60.00	50.00	-20.96	-14.47

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode E: FAP-433G_Radio 2

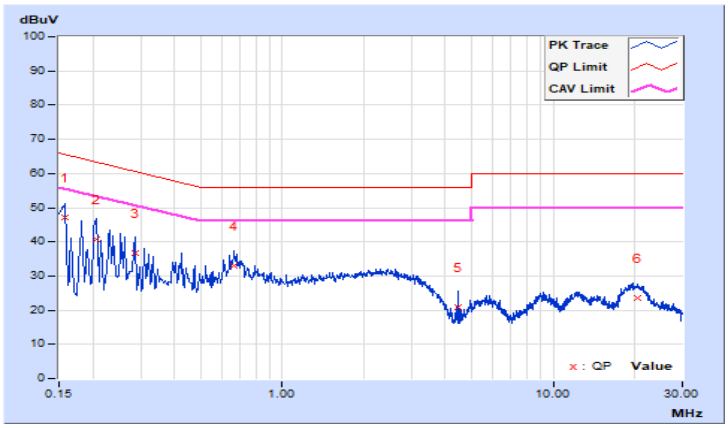
ADP mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.69	37.44	19.87	47.13	29.56	65.57	55.57	-18.44	-26.01
2	0.20577	9.72	31.04	16.93	40.76	26.65	63.37	53.37	-22.61	-26.72
3	0.28600	9.75	26.79	20.55	36.54	30.30	60.64	50.64	-24.10	-20.34
4	0.66200	9.82	23.10	17.11	32.92	26.93	56.00	46.00	-23.08	-19.07
5	4.48600	9.96	10.82	0.20	20.78	10.16	56.00	46.00	-35.22	-35.84
6	20.52600	10.16	13.31	9.18	23.47	19.34	60.00	50.00	-36.53	-30.66

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

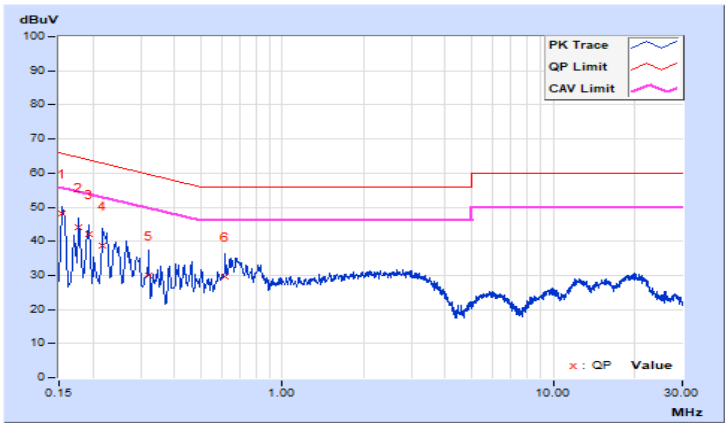


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15400	9.68	38.50	22.72	48.18	32.40	65.78	55.78	-17.60	-23.38
2	0.17800	9.70	34.47	19.65	44.17	29.35	64.58	54.58	-20.41	-25.23
3	0.19400	9.72	32.25	17.54	41.97	27.26	63.86	53.86	-21.89	-26.60
4	0.21800	9.73	28.89	15.63	38.62	25.36	62.89	52.89	-24.27	-27.53
5	0.32200	9.77	20.17	10.59	29.94	20.36	59.66	49.66	-29.72	-29.30
6	0.61800	9.83	19.91	14.36	29.74	24.19	56.00	46.00	-26.26	-21.81

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode F: FAP-433G_Radio 2

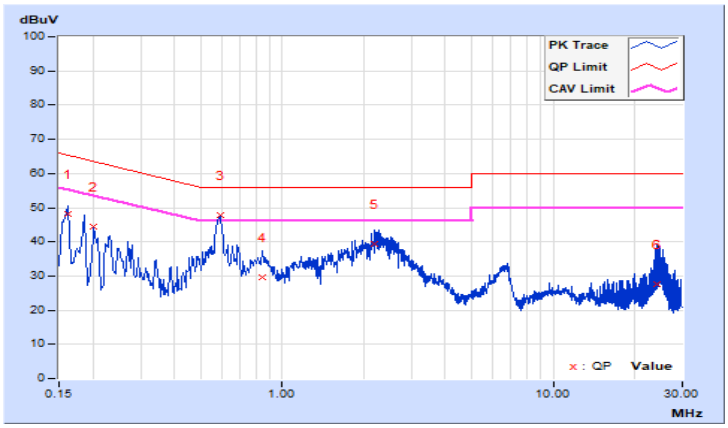
POE mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16190	9.62	38.56	25.96	48.18	35.58	65.37	55.37	-17.19	-19.79
2	0.20200	9.64	34.95	19.90	44.59	29.54	63.53	53.53	-18.94	-23.99
3	**0.59000**	**9.69**	**38.01**	**30.92**	**47.70**	**40.61**	**56.00**	**46.00**	**-8.30**	**-5.39**
4	0.84600	9.70	19.77	13.12	29.47	22.82	56.00	46.00	-26.53	-23.18
5	2.20200	9.72	29.78	20.47	39.50	30.19	56.00	46.00	-16.50	-15.81
6	24.10600	9.71	17.84	13.64	27.55	23.35	60.00	50.00	-32.45	-26.65

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

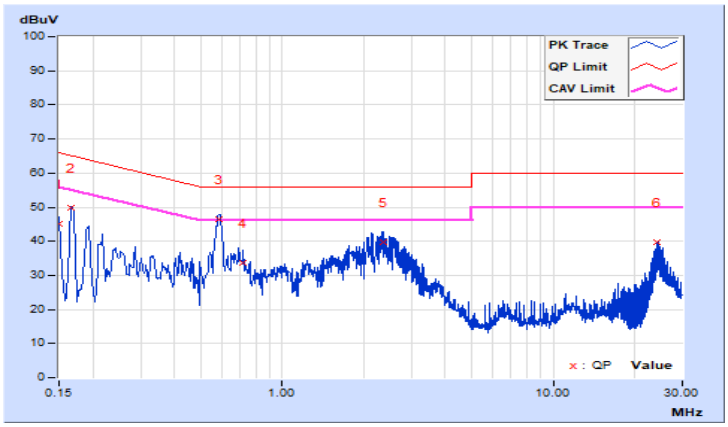


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.62	35.55	23.83	45.17	33.45	66.00	56.00	-20.83	-22.55
2	0.16600	9.62	40.13	24.10	49.75	33.72	65.16	55.16	-15.41	-21.44
3	0.58411	9.69	36.92	29.71	46.61	39.40	56.00	46.00	-9.39	-6.60
4	0.71800	9.69	23.98	17.52	33.67	27.21	56.00	46.00	-22.33	-18.79
5	2.35400	9.72	29.92	20.96	39.64	30.68	56.00	46.00	-16.36	-15.32
6	24.09400	9.81	29.84	27.04	39.65	36.85	60.00	50.00	-20.35	-13.15

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode G: FAP-433G_Radio 3

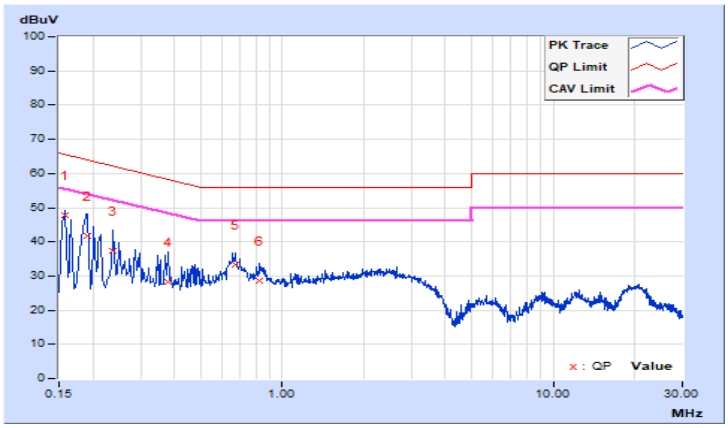
ADP mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.69	38.04	20.23	47.73	29.92	65.57	55.57	-17.84	-25.65
2	0.19000	9.71	31.93	16.11	41.64	25.82	64.04	54.04	-22.40	-28.22
3	0.23800	9.74	27.70	16.26	37.44	26.00	62.17	52.17	-24.73	-26.17
4	0.37800	9.79	18.65	11.30	28.44	21.09	58.32	48.32	-29.88	-27.23
5	0.66987	9.82	23.63	17.59	33.45	27.41	56.00	46.00	-22.55	-18.59
6	0.82600	9.83	18.88	13.76	28.71	23.59	56.00	46.00	-27.29	-22.41

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

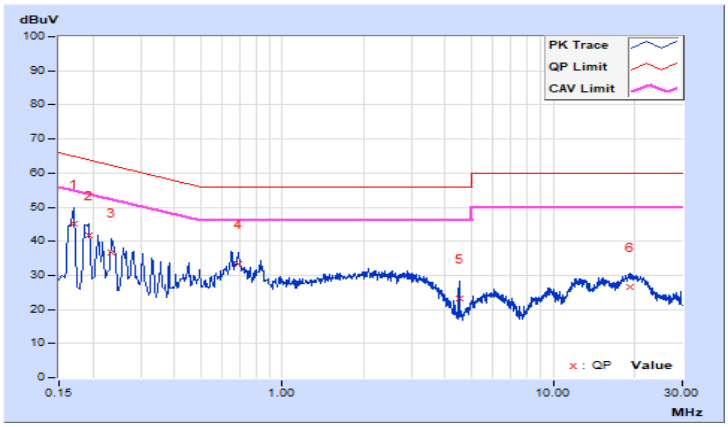


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.17000	9.70	35.52	19.69	45.22	29.39	64.96	54.96	-19.74	-25.57
2	0.19316	9.71	32.05	17.32	41.76	27.03	63.90	53.90	-22.14	-26.87
3	0.23400	9.74	27.02	15.57	36.76	25.31	62.31	52.31	-25.55	-27.00
4	0.69000	9.83	23.59	17.13	33.42	26.96	56.00	46.00	-22.58	-19.04
5	4.49000	9.98	13.27	2.10	23.25	12.08	56.00	46.00	-32.75	-33.92
6	19.30200	10.19	16.38	12.07	26.57	22.26	60.00	50.00	-33.43	-27.74

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



Test Mode H: FAP-433G_Radio 3

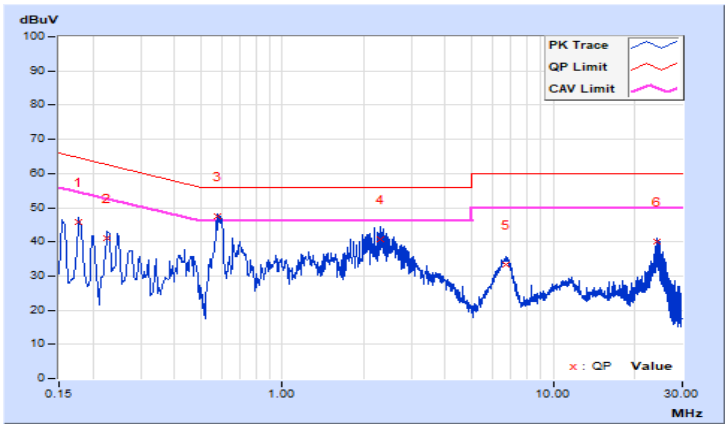
POE mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17800	9.63	36.16	19.86	45.79	29.49	64.58	54.58	-18.79	-25.09
2	0.22600	9.65	31.48	18.90	41.13	28.55	62.60	52.60	-21.47	-24.05
3	0.57798	9.69	37.72	30.36	47.41	40.05	56.00	46.00	-8.59	-5.95
4	2.31400	9.72	31.13	22.93	40.85	32.65	56.00	46.00	-15.15	-13.35
5	6.73800	9.77	23.42	20.00	33.19	29.77	60.00	50.00	-26.81	-20.23
6	24.09000	9.72	30.32	26.81	40.04	36.53	60.00	50.00	-19.96	-13.47

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

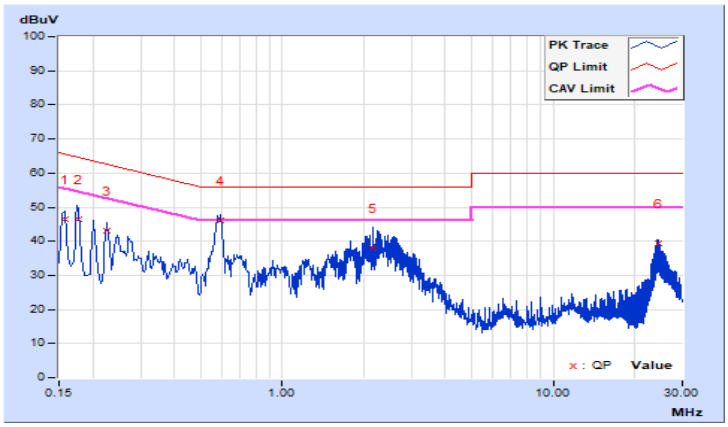


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15770	9.62	36.80	22.36	46.42	31.98	65.58	55.58	-19.16	-23.60
2	0.17800	9.63	36.67	19.24	46.30	28.87	64.58	54.58	-18.28	-25.71
3	0.22600	9.64	33.43	26.71	43.07	36.35	62.60	52.60	-19.53	-16.25
4	0.59000	9.69	36.59	29.68	46.28	39.37	56.00	46.00	-9.72	-6.63
5	2.15800	9.72	28.31	18.27	38.03	27.99	56.00	46.00	-17.97	-18.01
6	24.33400	9.81	29.55	25.41	39.36	35.22	60.00	50.00	-20.64	-14.78

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



7.7 Unwanted Emissions below 1 GHz

Test Mode A: FAP-431G_Radio 2

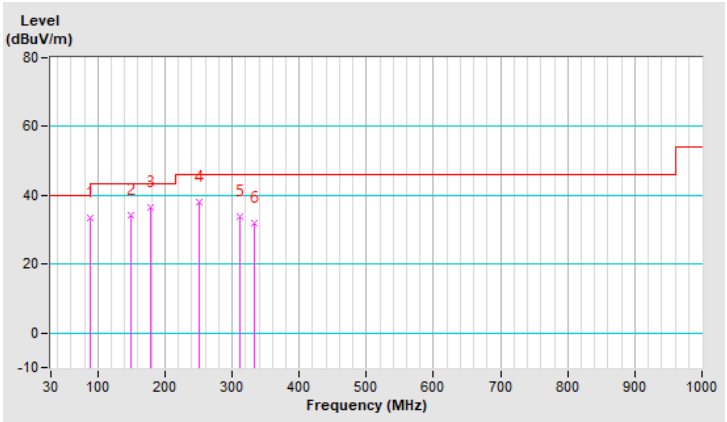
ADP mode

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	89.17	33.4 QP	43.5	-10.1	1.99 H	122	52.6	-19.2
2	148.34	34.3 QP	43.5	-9.2	1.99 H	18	47.6	-13.3
3	178.41	36.6 QP	43.5	-6.9	1.99 H	236	51.3	-14.7
4	250.19	38.1 QP	46.0	-7.9	1.49 H	50	52.8	-14.7
5	312.27	33.8 QP	46.0	-12.2	1.49 H	212	46.5	-12.7
6	333.61	32.1 QP	46.0	-13.9	1.00 H	224	44.0	-11.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

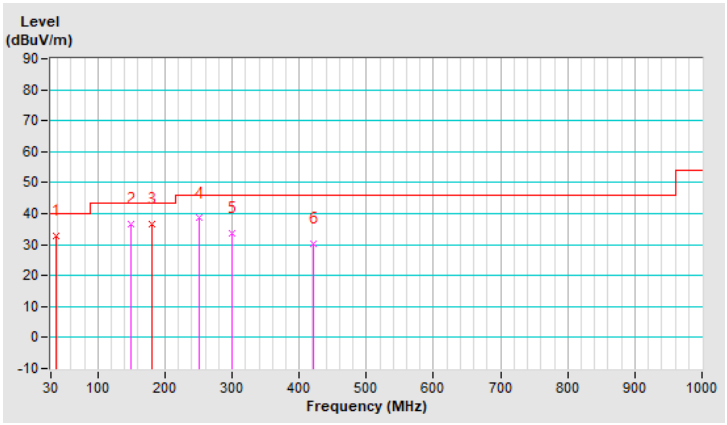


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	37.58	32.8 QP	40.0	-7.2	1.00 V	29	46.7	-13.9
2	148.34	36.6 QP	43.5	-6.9	1.00 V	178	49.9	-13.3
3	181.00	36.6 QP	43.5	-6.9	1.00 V	330	51.5	-14.9
4	250.19	38.5 QP	46.0	-7.5	1.00 V	93	53.2	-14.7
5	299.66	33.5 QP	46.0	-12.5	1.99 V	2	46.5	-13.0
6	420.91	30.3 QP	46.0	-15.7	1.49 V	40	40.2	-9.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode B: FAP-431G_Radio 2

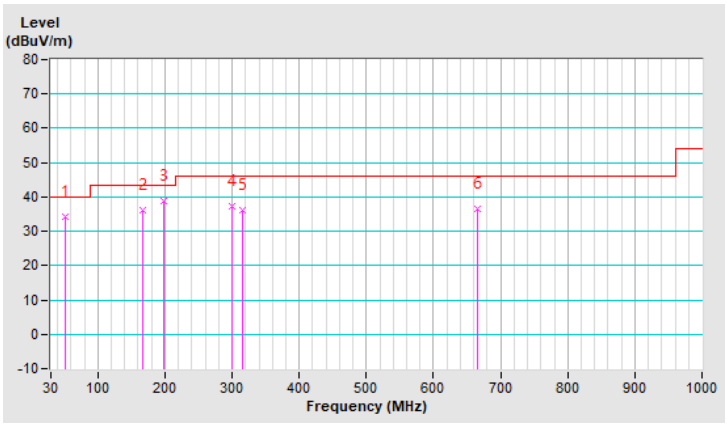
POE mode

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	52.31	34.1 QP	40.0	-5.9	1.51 H	78	47.4	-13.3
2	166.77	36.1 QP	43.5	-7.4	1.99 H	60	49.7	-13.6
3	197.81	38.8 QP	43.5	-4.7	1.99 H	204	55.6	-16.8
4	299.66	37.2 QP	46.0	-8.8	1.01 H	202	50.2	-13.0
5	315.18	36.0 QP	46.0	-10.0	1.01 H	198	48.6	-12.6
6	666.32	36.5 QP	46.0	-9.5	1.01 H	2	41.4	-4.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

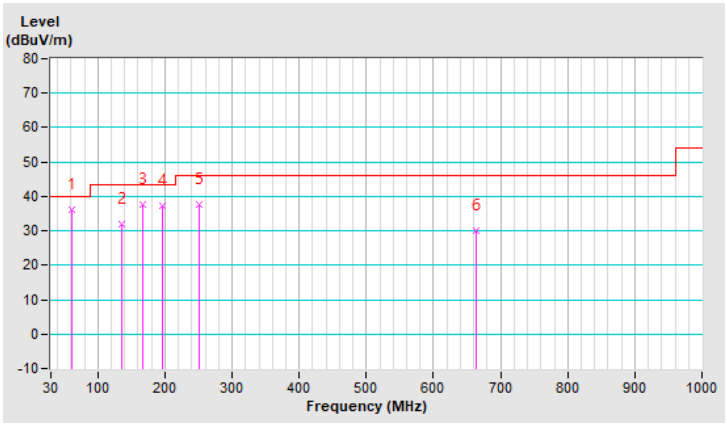


RF Mode	802.11a	**Channel**	CH 116：5580 MHz
Frequency Range	9 kHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	**62.01**	**36.3 QP**	**40.0**	**-3.7**	**1.00 V**	**3**	**50.6**	**-14.3**
2	135.73	32.0 QP	43.5	-11.5	2.00 V	176	46.0	-14.0
3	166.77	37.7 QP	43.5	-5.8	1.00 V	81	51.3	-13.6
4	196.84	37.1 QP	43.5	-6.4	1.49 V	193	53.8	-16.7
5	250.19	37.5 QP	46.0	-8.5	1.00 V	187	52.2	-14.7
6	664.38	30.1 QP	46.0	-15.9	1.49 V	2	35.0	-4.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode C: FAP-431G_Radio 3

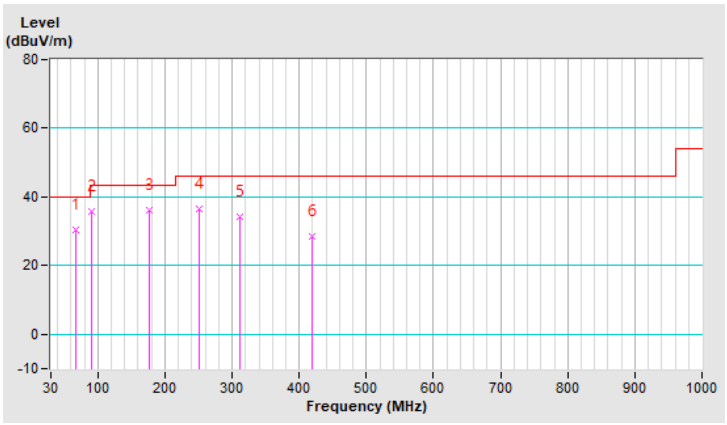
ADP mode

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.86	30.4 QP	40.0	-9.6	1.99 H	280	45.3	-14.9
2	90.14	35.8 QP	43.5	-7.7	1.99 H	103	55.1	-19.3
3	177.44	36.2 QP	43.5	-7.3	1.99 H	11	50.8	-14.6
4	250.19	36.6 QP	46.0	-9.4	1.49 H	50	51.3	-14.7
5	312.27	34.3 QP	46.0	-11.7	1.49 H	217	47.0	-12.7
6	418.97	28.4 QP	46.0	-17.6	1.01 H	226	38.3	-9.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

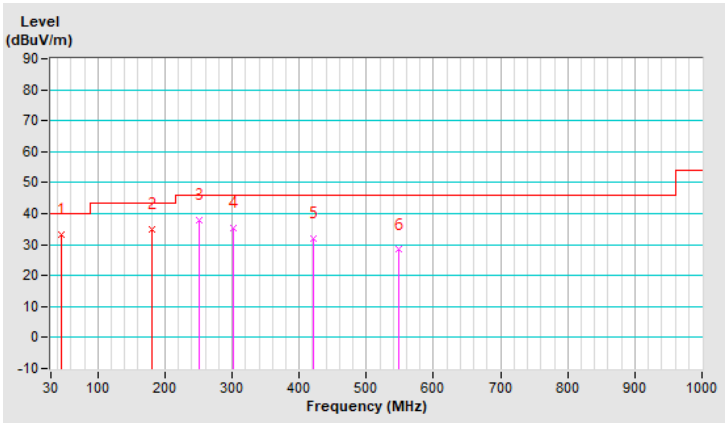


RF Mode	802.11ax (HE40)	**Channel**	CH 110：5550 MHz
Frequency Range	9 kHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	45.91	33.1 QP	40.0	-6.9	1.01 V	192	46.3	-13.2
2	180.69	35.1 QP	43.5	-8.4	1.01 V	339	50.0	-14.9
3	250.19	38.0 QP	46.0	-8.0	1.99 V	333	52.7	-14.7
4	301.60	35.2 QP	46.0	-10.8	1.01 V	2	48.2	-13.0
5	421.88	31.9 QP	46.0	-14.1	1.01 V	223	41.7	-9.8
6	548.95	28.3 QP	46.0	-17.7	1.01 V	174	35.6	-7.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode D: FAP-431G_Radio 3

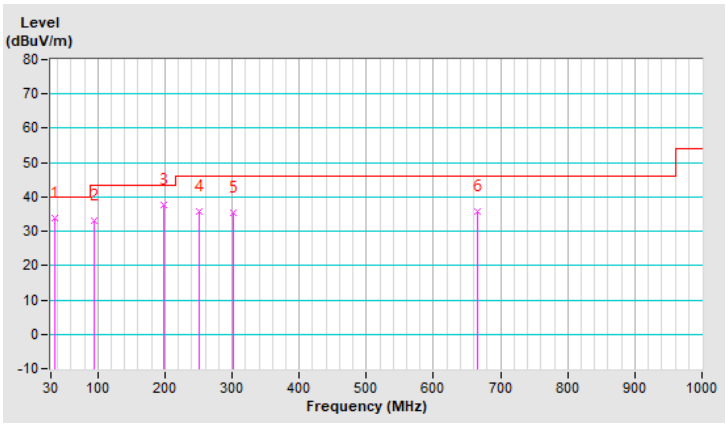
POE mode

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	36.79	33.9 QP	40.0	-6.1	1.49 H	245	47.9	-14.0
2	94.99	33.2 QP	43.5	-10.3	1.99 H	263	51.9	-18.7
3	197.81	37.7 QP	43.5	-5.8	1.99 H	227	54.5	-16.8
4	250.19	35.8 QP	46.0	-10.2	1.01 H	133	50.5	-14.7
5	302.57	35.5 QP	46.0	-10.5	1.01 H	107	48.4	-12.9
6	665.35	35.8 QP	46.0	-10.2	1.01 H	21	40.7	-4.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

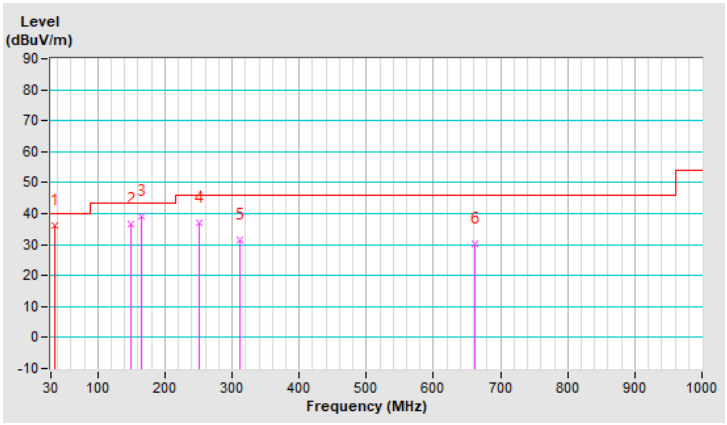


RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	**36.63**	**36.3 QP**	**40.0**	**-3.7**	**1.01 V**	**8**	**50.4**	**-14.1**
2	148.34	36.5 QP	43.5	-7.0	2.00 V	207	49.8	-13.3
3	165.80	39.0 QP	43.5	-4.5	1.01 V	41	52.5	-13.5
4	250.19	36.9 QP	46.0	-9.1	1.49 V	186	51.6	-14.7
5	312.27	31.5 QP	46.0	-14.5	1.01 V	247	44.2	-12.7
6	662.44	30.2 QP	46.0	-15.8	1.49 V	2	35.1	-4.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode E: FAP-433G_Radio 2

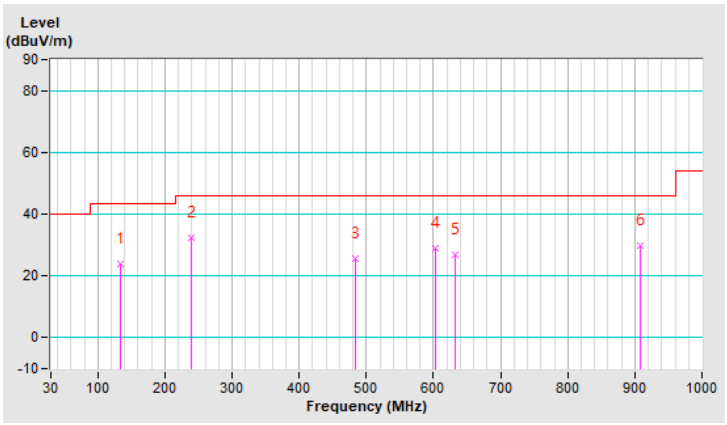
ADP mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	133.80	24.0 QP	43.5	-19.5	2.00 H	247	37.9	-13.9
2	239.50	32.5 QP	46.0	-13.5	1.01 H	104	47.1	-14.6
3	484.00	25.7 QP	46.0	-20.3	2.00 H	170	33.8	-8.1
4	602.30	28.9 QP	46.0	-17.1	1.01 H	153	34.3	-5.4
5	632.40	26.9 QP	46.0	-19.1	2.00 H	138	31.8	-4.9
6	907.90	29.8 QP	46.0	-16.2	1.51 H	132	31.1	-1.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

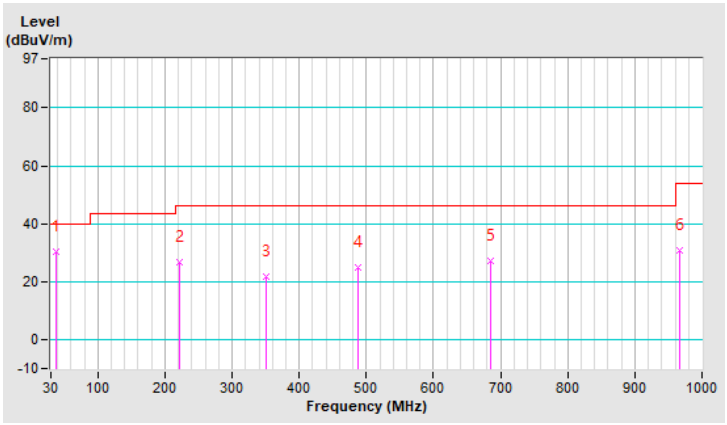


RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	37.80	30.3 QP	40.0	-9.7	1.00 V	4	44.0	-13.7
2	222.10	26.9 QP	46.0	-19.1	1.00 V	169	43.3	-16.4
3	350.10	21.8 QP	46.0	-24.2	1.49 V	176	33.2	-11.4
4	487.80	25.0 QP	46.0	-21.0	1.00 V	323	33.0	-8.0
5	685.70	27.4 QP	46.0	-18.6	1.49 V	18	31.6	-4.2
6	966.00	30.8 QP	54.0	-23.2	1.00 V	42	31.1	-0.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode F: FAP-433G_Radio 2

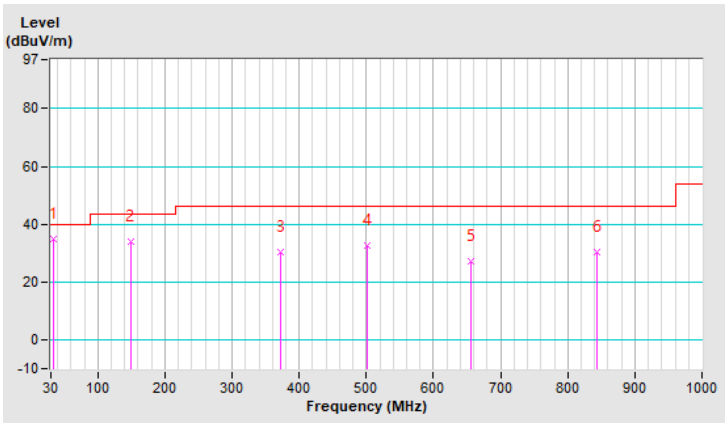
POE mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.90	35.1 QP	40.0	-4.9	1.99 H	235	49.4	-14.3
2	148.30	34.1 QP	43.5	-9.4	1.99 H	77	47.3	-13.2
3	371.40	30.4 QP	46.0	-15.6	1.00 H	220	41.0	-10.6
4	500.40	32.4 QP	46.0	-13.6	1.49 H	131	40.3	-7.9
5	656.60	27.0 QP	46.0	-19.0	1.99 H	150	31.7	-4.7
6	842.90	30.3 QP	46.0	-15.7	1.99 H	249	32.4	-2.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

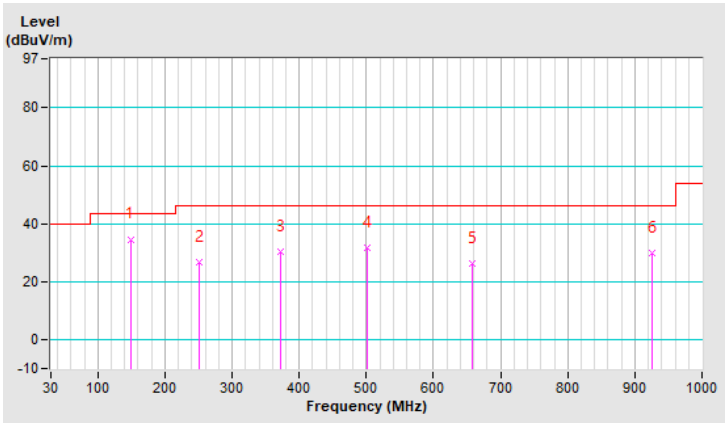


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	148.30	34.7 QP	43.5	-8.8	1.01 V	114	47.9	-13.2
2	250.20	26.8 QP	46.0	-19.2	1.51 V	119	41.0	-14.2
3	371.40	30.2 QP	46.0	-15.8	1.51 V	225	40.8	-10.6
4	500.40	31.8 QP	46.0	-14.2	1.01 V	335	39.7	-7.9
5	658.60	26.3 QP	46.0	-19.7	1.01 V	239	30.9	-4.6
6	925.30	30.1 QP	46.0	-15.9	2.00 V	17	30.9	-0.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode G: FAP-433G_Radio 3

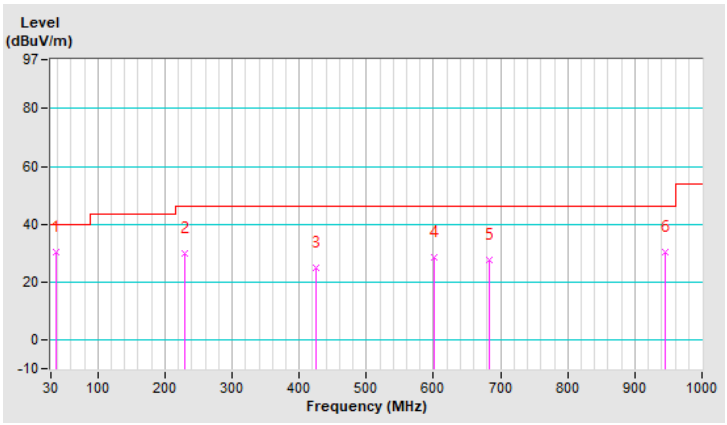
ADP mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	37.80	30.3 QP	40.0	-9.7	1.01 H	18	44.0	-13.7
2	229.80	30.1 QP	46.0	-15.9	1.01 H	222	45.6	-15.5
3	424.80	24.9 QP	46.0	-21.1	1.01 H	149	34.3	-9.4
4	600.40	28.5 QP	46.0	-17.5	1.01 H	77	33.9	-5.4
5	682.80	27.6 QP	46.0	-18.4	2.00 H	149	31.9	-4.3
6	945.70	30.4 QP	46.0	-15.6	1.01 H	18	30.8	-0.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

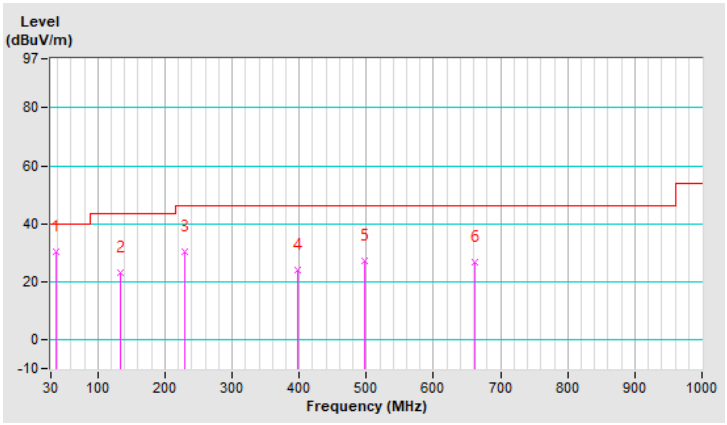


RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	37.80	30.5 QP	40.0	-9.5	1.49 V	18	44.2	-13.7
2	132.80	23.0 QP	43.5	-20.5	1.00 V	197	37.1	-14.1
3	229.80	30.3 QP	46.0	-15.7	1.00 V	237	45.8	-15.5
4	398.60	24.1 QP	46.0	-21.9	1.00 V	163	34.2	-10.1
5	497.50	27.1 QP	46.0	-18.9	1.00 V	311	35.0	-7.9
6	661.50	26.9 QP	46.0	-19.1	1.99 V	0	31.5	-4.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



Test Mode H: FAP-433G_Radio 3

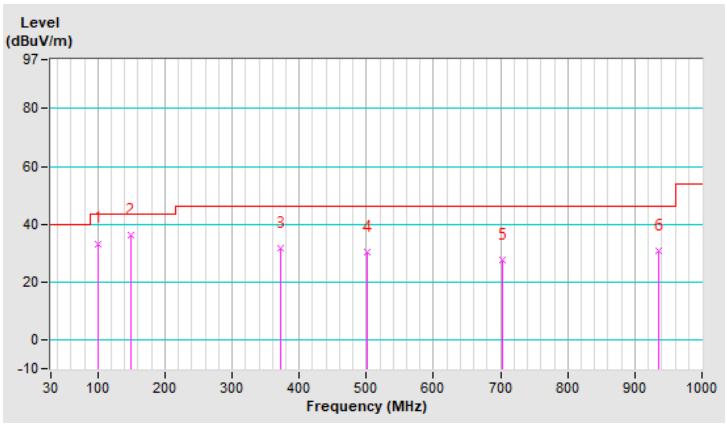
POE mode

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	99.80	33.3 QP	43.5	-10.2	2.00 H	253	50.9	-17.6
2	148.30	36.1 QP	43.5	-7.4	2.00 H	62	49.3	-13.2
3	371.40	31.6 QP	46.0	-14.4	1.01 H	225	42.2	-10.6
4	500.40	30.2 QP	46.0	-15.8	1.51 H	189	38.1	-7.9
5	703.20	27.6 QP	46.0	-18.4	1.51 H	222	31.5	-3.9
6	935.00	30.9 QP	46.0	-15.1	2.00 H	217	31.6	-0.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

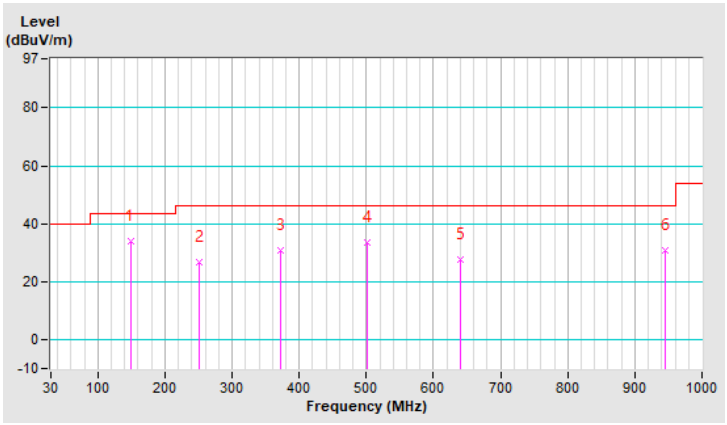


RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	26°C, 70% RH
Tested By	Randy Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	148.30	34.2 QP	43.5	-9.3	1.00 V	141	47.4	-13.2
2	250.20	26.6 QP	46.0	-19.4	1.99 V	125	40.8	-14.2
3	371.40	30.8 QP	46.0	-15.2	1.00 V	206	41.4	-10.6
4	500.40	33.3 QP	46.0	-12.7	1.00 V	341	41.2	-7.9
5	640.10	27.8 QP	46.0	-18.2	1.99 V	104	32.5	-4.7
6	945.70	30.9 QP	46.0	-15.1	1.49 V	19	31.3	-0.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



7.8 Unwanted Emissions above 1 GHz

Test Mode A: FAP-431G_Radio 2

RF Mode	802.11a	**Channel**	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	56.8 PK	74.0	-17.2	1.52 H	41	54.7	2.1
2	5150.00	48.1 AV	54.0	-5.9	1.52 H	41	46.0	2.1
3	*5260.00	118.8 PK			1.52 H	51	78.7	40.1
4	*5260.00	112.4 AV			1.52 H	51	72.3	40.1
5	#10520.00	56.1 PK	68.2	-12.1	1.61 H	312	48.2	7.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	57.6 PK	74.0	-16.4	3.52 V	10	55.5	2.1
2	5150.00	47.4 AV	54.0	-6.6	3.52 V	10	45.3	2.1
3	*5260.00	116.3 PK			3.52 V	10	76.2	40.1
4	*5260.00	109.7 AV			3.52 V	10	69.6	40.1
5	#10520.00	54.2 PK	68.2	-14.0	1.98 V	85	46.3	7.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	119.1 PK			1.51 H	44	79.1	40.0
2	*5300.00	111.9 AV			1.51 H	44	71.9	40.0
3	10600.00	55.6 PK	74.0	-18.4	1.72 H	318	47.6	8.0
4	10600.00	46.0 AV	54.0	-8.0	1.72 H	318	38.0	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.0 PK			3.55 V	11	77.0	40.0
2	*5300.00	109.4 AV			3.55 V	11	69.4	40.0
3	10600.00	55.3 PK	74.0	-18.7	2.01 V	90	47.3	8.0
4	10600.00	45.7 AV	54.0	-8.3	2.01 V	90	37.7	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	119.0 PK			1.44 H	39	79.0	40.0
2	*5320.00	112.3 AV			1.44 H	39	72.3	40.0
3	5350.00	56.7 PK	74.0	-17.3	1.44 H	39	54.9	1.8
4	5350.00	48.8 AV	54.0	-5.2	1.44 H	39	47.0	1.8
5	10640.00	55.7 PK	74.0	-18.3	1.70 H	315	47.7	8.0
6	10640.00	46.2 AV	54.0	-7.8	1.70 H	315	38.2	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	117.0 PK			3.24 V	7	77.0	40.0
2	*5320.00	110.4 AV			3.24 V	7	70.4	40.0
3	5350.00	56.2 PK	74.0	-17.8	3.24 V	7	54.4	1.8
4	5350.00	48.5 AV	54.0	-5.5	3.24 V	7	46.7	1.8
5	10640.00	54.9 PK	74.0	-19.1	2.12 V	108	46.9	8.0
6	10640.00	45.2 AV	54.0	-8.8	2.12 V	108	37.2	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5403.02	56.5 PK	74.0	-17.5	1.00 H	43	54.9	1.6
2	5403.02	48.9 AV	54.0	-5.1	1.00 H	43	47.3	1.6
3	#5470.00	58.6 PK	68.2	-9.6	1.00 H	43	56.7	1.9
4	*5500.00	119.0 PK			1.00 H	43	78.7	40.3
5	*5500.00	112.2 AV			1.00 H	43	71.9	40.3
6	11000.00	55.1 PK	74.0	-18.9	1.71 H	291	46.7	8.4
7	11000.00	46.1 AV	54.0	-7.9	1.71 H	291	37.7	8.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5403.02	56.4 PK	74.0	-17.6	3.16 V	5	54.8	1.6
2	5403.02	48.6 AV	54.0	-5.4	3.16 V	5	47.0	1.6
3	#5470.00	58.4 PK	68.2	-9.8	3.16 V	5	56.5	1.9
4	*5500.00	116.4 PK			3.16 V	5	76.1	40.3
5	*5500.00	109.6 AV			3.16 V	5	69.3	40.3
6	11000.00	55.0 PK	74.0	-19.0	1.89 V	101	46.6	8.4
7	11000.00	46.0 AV	54.0	-8.0	1.89 V	101	37.6	8.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	118.3 PK			1.73 H	44	77.5	40.8
2	*5580.00	111.5 AV			1.73 H	44	70.7	40.8
3	11160.00	55.6 PK	74.0	-18.4	1.69 H	287	46.8	8.8
4	11160.00	46.6 AV	54.0	-7.4	1.69 H	287	37.8	8.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	116.9 PK			3.76 V	358	76.1	40.8
2	*5580.00	110.2 AV			3.76 V	358	69.4	40.8
3	11160.00	55.2 PK	74.0	-18.8	1.85 V	99	46.4	8.8
4	11160.00	46.3 AV	54.0	-7.7	1.85 V	99	37.5	8.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	117.7 PK			1.72 H	46	76.4	41.3
2	*5700.00	110.9 AV			1.72 H	46	69.6	41.3
3	#5725.00	61.4 PK	68.2	-6.8	1.72 H	46	58.2	3.2
4	11400.00	55.6 PK	74.0	-18.4	1.71 H	290	46.7	8.9
5	11400.00	46.6 AV	54.0	-7.4	1.71 H	290	37.7	8.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	117.1 PK			3.54 V	5	75.8	41.3
2	*5700.00	110.4 AV			3.54 V	5	69.1	41.3
3	#5725.00	60.5 PK	68.2	-7.7	3.54 V	5	57.3	3.2
4	11400.00	55.4 PK	74.0	-18.6	1.81 V	103	46.5	8.9
5	11400.00	46.5 AV	54.0	-7.5	1.81 V	103	37.6	8.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	57.8 PK	68.2	-10.4	2.22 H	310	55.9	1.9
2	*5720.00	121.1 PK			2.22 H	310	79.6	41.5
3	*5720.00	114.2 AV			2.22 H	310	72.7	41.5
4	#5850.00	58.6 PK	68.2	-9.6	2.22 H	310	54.7	3.9
5	11440.00	56.0 PK	74.0	-18.0	1.51 H	302	47.0	9.0
6	11440.00	46.1 AV	54.0	-7.9	1.51 H	302	37.1	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.8 PK	68.2	-11.4	3.71 V	333	54.9	1.9
2	*5720.00	119.3 PK			3.71 V	333	77.8	41.5
3	*5720.00	111.6 AV			3.71 V	333	70.1	41.5
4	#5850.00	58.7 PK	68.2	-9.5	3.71 V	333	54.8	3.9
5	11440.00	55.8 PK	74.0	-18.2	1.97 V	64	46.8	9.0
6	11440.00	45.9 AV	54.0	-8.1	1.97 V	64	36.9	9.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.7 PK	74.0	-16.3	1.48 H	42	55.6	2.1
2	5150.00	48.0 AV	54.0	-6.0	1.48 H	42	45.9	2.1
3	*5260.00	121.5 PK			1.48 H	42	81.4	40.1
4	*5260.00	112.8 AV			1.48 H	42	72.7	40.1
5	#10520.00	55.1 PK	68.2	-13.1	1.65 H	302	47.2	7.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.1 PK	74.0	-16.9	3.57 V	5	55.0	2.1
2	5150.00	47.4 AV	54.0	-6.6	3.57 V	5	45.3	2.1
3	*5260.00	115.2 PK			3.57 V	5	75.1	40.1
4	*5260.00	109.1 AV			3.57 V	5	69.0	40.1
5	#10520.00	54.8 PK	68.2	-13.4	2.08 V	99	46.9	7.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	121.9 PK			1.55 H	44	81.9	40.0
2	*5300.00	113.3 AV			1.55 H	44	73.3	40.0
3	10600.00	55.2 PK	74.0	-18.8	1.66 H	299	47.2	8.0
4	10600.00	45.1 AV	54.0	-8.9	1.66 H	299	37.1	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	116.3 PK			3.55 V	9	76.3	40.0
2	*5300.00	109.9 AV			3.55 V	9	69.9	40.0
3	10600.00	54.5 PK	74.0	-19.5	2.07 V	99	46.5	8.0
4	10600.00	44.2 AV	54.0	-9.8	2.07 V	99	36.2	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	121.0 PK			1.47 H	49	81.0	40.0
2	*5320.00	111.2 AV			1.47 H	49	71.2	40.0
3	5350.00	56.6 PK	74.0	-17.4	1.47 H	49	54.8	1.8
4	5350.00	48.8 AV	54.0	-5.2	1.47 H	49	47.0	1.8
5	10640.00	55.0 PK	74.0	-19.0	1.58 H	301	47.0	8.0
6	10640.00	44.9 AV	54.0	-9.1	1.58 H	301	36.9	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	119.2 PK			3.73 V	5	79.2	40.0
2	*5320.00	110.0 AV			3.73 V	5	70.0	40.0
3	5350.00	55.5 PK	74.0	-18.5	3.73 V	5	53.7	1.8
4	5350.00	48.2 AV	54.0	-5.8	3.73 V	5	46.4	1.8
5	10640.00	54.5 PK	74.0	-19.5	2.01 V	95	46.5	8.0
6	10640.00	44.2 AV	54.0	-9.8	2.01 V	95	36.2	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.96	57.1 PK	74.0	-16.9	1.72 H	39	55.4	1.7
2	5375.96	48.9 AV	54.0	-5.1	1.72 H	39	47.2	1.7
3	#5470.00	57.7 PK	68.2	-10.5	1.72 H	39	55.8	1.9
4	*5500.00	120.9 PK			1.72 H	39	80.6	40.3
5	*5500.00	110.8 AV			1.72 H	39	70.5	40.3
6	11000.00	55.2 PK	74.0	-18.8	1.69 H	281	46.8	8.4
7	11000.00	46.1 AV	54.0	-7.9	1.69 H	281	37.7	8.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.96	56.4 PK	74.0	-17.6	3.47 V	6	54.7	1.7
2	5375.96	48.6 AV	54.0	-5.4	3.47 V	6	46.9	1.7
3	#5470.00	57.6 PK	68.2	-10.6	3.47 V	6	55.7	1.9
4	*5500.00	119.2 PK			3.47 V	6	78.9	40.3
5	*5500.00	109.5 AV			3.47 V	6	69.2	40.3
6	11000.00	55.0 PK	74.0	-19.0	1.80 V	111	46.6	8.4
7	11000.00	46.0 AV	54.0	-8.0	1.80 V	111	37.6	8.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	121.8 PK			1.67 H	45	81.0	40.8
2	*5580.00	111.8 AV			1.67 H	45	71.0	40.8
3	11160.00	55.7 PK	74.0	-18.3	1.81 H	293	46.9	8.8
4	11160.00	46.6 AV	54.0	-7.4	1.81 H	293	37.8	8.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	119.0 PK			3.79 V	1	78.2	40.8
2	*5580.00	109.5 AV			3.79 V	1	68.7	40.8
3	11160.00	55.5 PK	74.0	-18.5	1.82 V	115	46.7	8.8
4	11160.00	46.4 AV	54.0	-7.6	1.82 V	115	37.6	8.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	120.1 PK			1.61 H	48	78.8	41.3
2	*5700.00	110.4 AV			1.61 H	48	69.1	41.3
3	#5725.00	61.8 PK	68.2	-6.4	1.61 H	48	58.6	3.2
4	11400.00	55.7 PK	74.0	-18.3	1.77 H	296	46.8	8.9
5	11400.00	46.5 AV	54.0	-7.5	1.77 H	296	37.6	8.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	119.7 PK			3.71 V	0	78.4	41.3
2	*5700.00	110.2 AV			3.71 V	0	68.9	41.3
3	#5725.00	60.8 PK	68.2	-7.4	3.71 V	0	57.6	3.2
4	11400.00	55.6 PK	74.0	-18.4	1.79 V	101	46.7	8.9
5	11400.00	46.4 AV	54.0	-7.6	1.79 V	101	37.5	8.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	57.8 PK	68.2	-10.4	1.24 H	44	55.9	1.9
2	*5720.00	122.7 PK			1.24 H	44	81.2	41.5
3	*5720.00	112.8 AV			1.24 H	44	71.3	41.5
4	#5850.00	58.5 PK	68.2	-9.7	1.24 H	44	54.6	3.9
5	11440.00	55.6 PK	74.0	-18.4	1.48 H	291	46.6	9.0
6	11440.00	45.5 AV	54.0	-8.5	1.48 H	291	36.5	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.6 PK	68.2	-11.6	1.58 V	36	54.7	1.9
2	*5720.00	116.9 PK			1.58 V	36	75.4	41.5
3	*5720.00	107.6 AV			1.58 V	36	66.1	41.5
4	#5850.00	58.3 PK	68.2	-9.9	1.58 V	36	54.4	3.9
5	11440.00	55.5 PK	74.0	-18.5	1.99 V	55	46.5	9.0
6	11440.00	45.4 AV	54.0	-8.6	1.99 V	55	36.4	9.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.3 PK	74.0	-16.7	1.61 H	37	55.2	2.1
2	5150.00	48.1 AV	54.0	-5.9	1.61 H	37	46.0	2.1
3	*5270.00	117.6 PK			1.61 H	37	77.5	40.1
4	*5270.00	109.3 AV			1.61 H	37	69.2	40.1
5	5350.00	58.9 PK	74.0	-15.1	1.61 H	37	57.1	1.8
6	5350.00	48.8 AV	54.0	-5.2	1.61 H	37	47.0	1.8
7	#10540.00	54.7 PK	68.2	-13.5	1.58 H	289	46.8	7.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.1 PK	74.0	-16.9	3.61 V	7	55.0	2.1
2	5150.00	47.5 AV	54.0	-6.5	3.61 V	7	45.4	2.1
3	*5270.00	115.2 PK			3.61 V	7	75.1	40.1
4	*5270.00	107.5 AV			3.61 V	7	67.4	40.1
5	5350.00	58.3 PK	74.0	-15.7	3.61 V	7	56.5	1.8
6	5350.00	48.4 AV	54.0	-5.6	3.61 V	7	46.6	1.8
7	#10540.00	54.5 PK	68.2	-13.7	2.11 V	91	46.6	7.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	115.0 PK			1.53 H	39	75.0	40.0
2	*5310.00	107.5 AV			1.53 H	39	67.5	40.0
3	5350.00	60.8 PK	74.0	-13.2	1.53 H	39	59.0	1.8
4	5350.00	52.8 AV	54.0	-1.2	1.53 H	39	51.0	1.8
5	10620.00	54.9 PK	74.0	-19.1	1.60 H	295	46.9	8.0
6	10620.00	44.9 AV	54.0	-9.1	1.60 H	295	36.9	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	113.0 PK			3.65 V	8	73.0	40.0
2	*5310.00	106.2 AV			3.65 V	8	66.2	40.0
3	5350.00	58.5 PK	74.0	-15.5	3.65 V	8	56.7	1.8
4	5350.00	51.9 AV	54.0	-2.1	3.65 V	8	50.1	1.8
5	10620.00	54.4 PK	74.0	-19.6	2.01 V	77	46.4	8.0
6	10620.00	44.2 AV	54.0	-9.8	2.01 V	77	36.2	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE40)	Channel	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.2 PK	74.0	-15.8	2.70 H	303	56.3	1.9
2	5460.00	49.4 AV	54.0	-4.6	2.70 H	303	47.5	1.9
3	#5470.00	61.6 PK	68.2	-6.6	2.70 H	303	59.7	1.9
4	*5510.00	118.9 PK			2.70 H	303	78.5	40.4
5	*5510.00	109.1 AV			2.70 H	303	68.7	40.4
6	11020.00	55.2 PK	74.0	-18.8	1.81 H	291	46.8	8.4
7	11020.00	46.2 AV	54.0	-7.8	1.81 H	291	37.8	8.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.9 PK	74.0	-16.1	3.26 V	349	56.0	1.9
2	5460.00	49.8 AV	54.0	-4.2	3.26 V	349	47.9	1.9
3	#5470.00	58.8 PK	68.2	-9.4	3.23 V	349	56.9	1.9
4	*5510.00	116.0 PK			3.23 V	349	75.6	40.4
5	*5510.00	106.5 AV			3.23 V	349	66.1	40.4
6	11020.00	55.1 PK	74.0	-18.9	1.81 V	99	46.7	8.4
7	11020.00	46.0 AV	54.0	-8.0	1.81 V	99	37.6	8.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	118.0 PK			2.70 H	302	77.3	40.7
2	*5550.00	109.1 AV			2.70 H	302	68.4	40.7
3	11100.00	55.4 PK	74.0	-18.6	1.84 H	295	46.8	8.6
4	11100.00	46.3 AV	54.0	-7.7	1.84 H	295	37.7	8.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	116.8 PK			3.41 V	350	76.1	40.7
2	*5550.00	107.0 AV			3.41 V	350	66.3	40.7
3	11100.00	55.3 PK	74.0	-18.7	1.84 V	102	46.7	8.6
4	11100.00	46.2 AV	54.0	-7.8	1.84 V	102	37.6	8.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	118.2 PK			2.52 H	46	76.9	41.3
2	*5670.00	109.0 AV			2.52 H	46	67.7	41.3
3	#5725.00	62.5 PK	68.2	-5.7	2.52 H	46	59.3	3.2
4	11340.00	55.9 PK	74.0	-18.1	1.89 H	301	46.9	9.0
5	11340.00	46.8 AV	54.0	-7.2	1.89 H	301	37.8	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	114.6 PK			3.44 V	1	73.3	41.3
2	*5670.00	106.0 AV			3.44 V	1	64.7	41.3
3	#5725.00	59.2 PK	68.2	-9.0	3.44 V	1	56.0	3.2
4	11340.00	55.8 PK	74.0	-18.2	1.77 V	98	46.8	9.0
5	11340.00	46.6 AV	54.0	-7.4	1.77 V	98	37.6	9.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	57.3 PK	68.2	-10.9	2.51 H	41	55.4	1.9
2	*5710.00	119.6 PK			2.51 H	41	78.2	41.4
3	*5710.00	109.1 AV			2.51 H	41	67.7	41.4
4	#5850.00	58.2 PK	68.2	-10.0	2.51 H	41	54.3	3.9
5	11420.00	56.0 PK	74.0	-18.0	1.67 H	300	47.0	9.0
6	11420.00	46.7 AV	54.0	-7.3	1.67 H	300	37.7	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.1 PK	68.2	-10.1	3.80 V	4	56.2	1.9
2	*5710.00	113.8 PK			3.80 V	4	72.4	41.4
3	*5710.00	106.1 AV			3.80 V	4	64.7	41.4
4	#5850.00	58.3 PK	68.2	-9.9	3.80 V	4	54.4	3.9
5	11420.00	55.8 PK	74.0	-18.2	2.05 V	53	46.8	9.0
6	11420.00	46.6 AV	54.0	-7.4	2.05 V	53	37.6	9.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	109.6 PK			1.63 H	37	69.6	40.0
2	*5290.00	101.8 AV			1.63 H	37	61.8	40.0
3	5350.00	59.8 PK	74.0	-14.2	1.63 H	37	58.0	1.8
4	5350.00	52.6 AV	54.0	-1.4	1.63 H	37	50.8	1.8
5	#10580.00	54.5 PK	68.2	-13.7	1.64 H	308	46.5	8.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	105.4 PK			3.51 V	10	65.4	40.0
2	*5290.00	99.5 AV			3.51 V	10	59.5	40.0
3	5350.00	58.8 PK	74.0	-15.2	3.51 V	10	57.0	1.8
4	5350.00	50.9 AV	54.0	-3.1	3.51 V	10	49.1	1.8
5	#10580.00	53.9 PK	68.2	-14.3	2.03 V	89	45.9	8.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5455.60	61.7 PK	74.0	-12.3	1.53 H	43	59.8	1.9
2	5455.60	53.1 AV	54.0	-0.9	1.53 H	43	51.2	1.9
3	#5470.00	59.8 PK	68.2	-8.4	1.53 H	43	57.9	1.9
4	*5530.00	113.9 PK			1.53 H	43	73.3	40.6
5	*5530.00	104.8 AV			1.53 H	43	64.2	40.6
6	#5725.00	59.0 PK	68.2	-9.2	1.53 H	43	55.8	3.2
7	11060.00	55.5 PK	74.0	-18.5	1.73 H	310	46.9	8.6
8	11060.00	46.4 AV	54.0	-7.6	1.73 H	310	37.8	8.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5455.60	59.7 PK	74.0	-14.3	3.89 V	342	57.8	1.9
2	5455.60	51.1 AV	54.0	-2.9	3.89 V	342	49.2	1.9
3	#5470.00	62.3 PK	68.2	-5.9	3.89 V	342	60.4	1.9
4	*5530.00	112.2 PK			3.89 V	342	71.6	40.6
5	*5530.00	103.6 AV			3.89 V	342	63.0	40.6
6	#5725.00	58.1 PK	68.2	-10.1	3.89 V	342	54.9	3.2
7	11060.00	55.3 PK	74.0	-18.7	2.05 V	75	46.7	8.6
8	11060.00	46.3 AV	54.0	-7.7	2.05 V	75	37.7	8.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80)	Channel	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.4 PK	74.0	-17.6	2.31 H	319	54.5	1.9
2	5460.00	48.2 AV	54.0	-5.8	2.31 H	319	46.3	1.9
3	#5470.00	58.4 PK	68.2	-9.8	2.31 H	319	56.5	1.9
4	*5610.00	115.9 PK			2.31 H	319	74.8	41.1
5	*5610.00	107.2 AV			2.31 H	319	66.1	41.1
6	#5725.00	58.9 PK	68.2	-9.3	2.31 H	319	55.7	3.2
7	11220.00	56.0 PK	74.0	-18.0	1.71 H	315	47.0	9.0
8	11220.00	46.9 AV	54.0	-7.1	1.71 H	315	37.9	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	3.90 V	344	54.2	1.9
2	5460.00	47.9 AV	54.0	-6.1	3.90 V	344	46.0	1.9
3	#5470.00	57.5 PK	68.2	-10.7	3.90 V	344	55.6	1.9
4	*5610.00	113.5 PK			3.90 V	344	72.4	41.1
5	*5610.00	104.7 AV			3.90 V	344	63.6	41.1
6	#5725.00	59.7 PK	68.2	-8.5	3.90 V	344	56.5	3.2
7	11220.00	55.8 PK	74.0	-18.2	2.01 V	73	46.8	9.0
8	11220.00	46.6 AV	54.0	-7.4	2.01 V	73	37.6	9.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	57.0 PK	68.2	-11.2	2.23 H	41	55.1	1.9
2	*5690.00	115.0 PK			2.23 H	41	73.7	41.3
3	*5690.00	106.1 AV			2.23 H	41	64.8	41.3
4	#5850.00	58.6 PK	68.2	-9.6	2.23 H	41	54.7	3.9
5	11380.00	57.0 PK	74.0	-17.0	1.71 H	302	48.1	8.9
6	11380.00	46.2 AV	54.0	-7.8	1.71 H	302	37.3	8.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.0 PK	68.2	-10.2	3.82 V	8	56.1	1.9
2	*5690.00	112.6 PK			3.82 V	8	71.3	41.3
3	*5690.00	104.3 AV			3.82 V	8	63.0	41.3
4	#5850.00	58.8 PK	68.2	-9.4	3.82 V	8	54.9	3.9
5	11380.00	56.7 PK	74.0	-17.3	1.99 V	61	47.8	8.9
6	11380.00	46.0 AV	54.0	-8.0	1.99 V	61	37.1	8.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80+HE80)	**Channel**	CH 42：5210 MHz+ CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 68% RH
Tested By	Wade Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	60.7 PK	74.0	-13.3	2.19 H	318	58.5	2.2
2	5150.00	51.8 AV	54.0	-2.2	2.19 H	318	49.6	2.2
3	*5210.00	109.2 PK			2.19 H	318	68.6	40.6
4	*5210.00	101.2 AV			2.19 H	318	60.6	40.6
5	*5290.00	106.5 PK			2.81 H	29	66.2	40.3
6	*5290.00	99.7 AV			2.81 H	29	59.4	40.3
7	5350.00	58.6 PK	74.0	-15.4	2.19 H	318	56.3	2.3
8	**5350.00**	**53.8 AV**	**54.0**	**-0.2**	**2.19 H**	**318**	**51.5**	**2.3**
9	#10420.00	56.3 PK	68.2	-11.9	2.22 H	311	48.4	7.9
10	#10580.00	56.8 PK	68.2	-11.4	2.14 H	325	48.3	8.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	58.5 PK	74.0	-15.5	2.88 V	31	56.3	2.2
2	5150.00	47.5 AV	54.0	-6.5	2.88 V	31	45.3	2.2
3	*5210.00	104.6 PK			2.88 V	31	64.0	40.6
4	*5210.00	97.0 AV			2.88 V	31	56.4	40.6
5	*5290.00	104.1 PK			1.43 V	327	63.8	40.3
6	*5290.00	95.6 AV			1.43 V	327	55.3	40.3
7	5350.00	55.8 PK	74.0	-18.2	2.88 V	31	53.5	2.3
8	5350.00	49.8 AV	54.0	-4.2	2.88 V	31	47.5	2.3
9	#10420.00	56.2 PK	68.2	-12.0	2.45 V	331	48.3	7.9
10	#10580.00	56.8 PK	68.2	-11.4	1.52 V	331	48.3	8.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80+HE80)	**Channel**	CH 106：5530 MHz+ CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 68% RH
Tested By	Wade Huang		

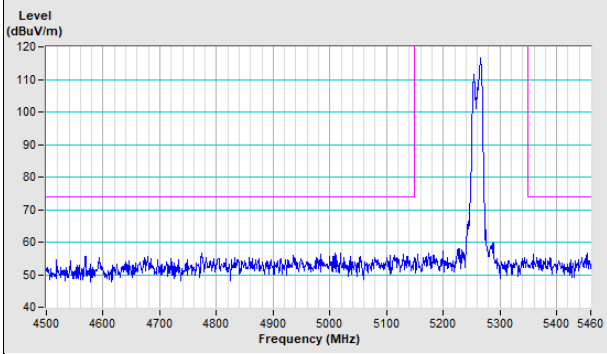
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5460.00	62.7 PK	74.0	-11.3	2.18 H	318	60.1	2.6
2	5460.00	53.7 AV	54.0	-0.3	2.18 H	318	51.1	2.6
3	#5470.00	67.9 PK	68.2	-0.3	2.18 H	318	65.3	2.6
4	*5530.00	111.3 PK			2.18 H	318	70.5	40.8
5	*5530.00	103.5 AV			2.18 H	318	62.7	40.8
6	*5610.00	111.1 PK			2.26 H	67	69.8	41.3
7	*5610.00	103.4 AV			2.26 H	67	62.1	41.3
8	#5725.00	58.4 PK	68.2	-9.8	2.18 H	318	54.6	3.8
9	11060.00	57.2 PK	74.0	-16.8	2.16 H	333	48.3	8.9
10	11060.00	47.1 AV	54.0	-6.9	2.16 H	333	38.2	8.9
11	11220.00	57.3 PK	74.0	-16.7	2.21 H	52	48.3	9.0
12	11220.00	47.5 AV	54.0	-6.5	2.21 H	52	38.5	9.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5460.00	56.9 PK	74.0	-17.1	4.00 V	344	54.3	2.6
2	5460.00	51.2 AV	54.0	-2.8	4.00 V	344	48.6	2.6
3	#5470.00	60.3 PK	68.2	-7.9	4.00 V	344	57.7	2.6
4	*5530.00	107.1 PK			4.00 V	344	66.3	40.8
5	*5530.00	99.4 AV			4.00 V	344	58.6	40.8
6	*5610.00	105.4 PK			1.32 V	20	64.1	41.3
7	*5610.00	98.1 AV			1.32 V	20	56.8	41.3
8	#5725.00	57.1 PK	68.2	-11.1	4.00 V	344	53.3	3.8
9	11060.00	57.3 PK	74.0	-16.7	3.13 V	332	48.4	8.9
10	11060.00	47.4 AV	54.0	-6.6	3.13 V	332	38.5	8.9
11	11220.00	57.3 PK	74.0	-16.7	1.24 V	23	48.3	9.0
12	11220.00	47.2 AV	54.0	-6.8	1.24 V	23	38.2	9.0

Remarks:

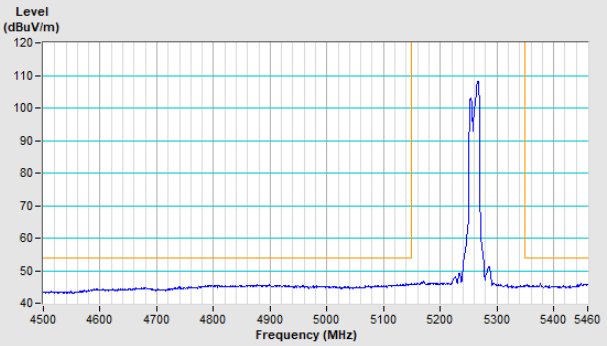
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

802.11a Channel 52

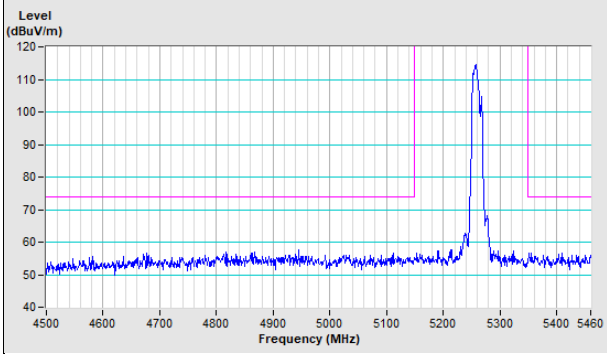
Horizontal (Peak)



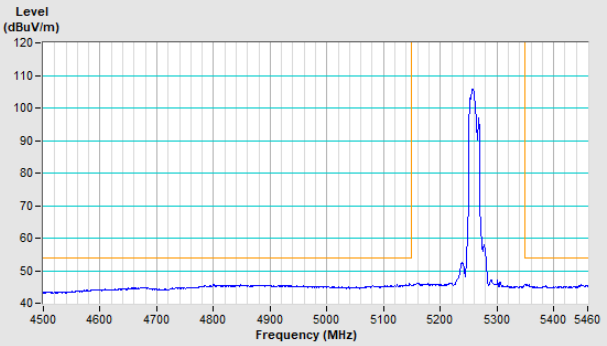
Horizontal (Average)



Vertical (Peak)

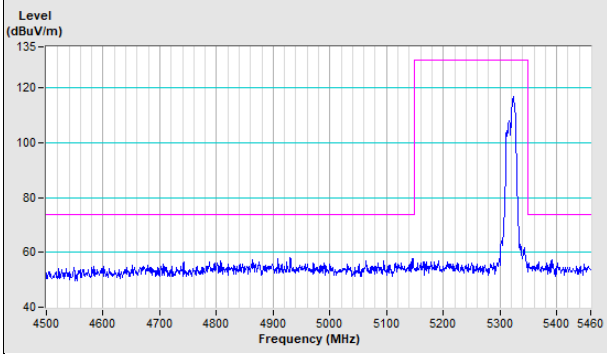


Vertical (Average)

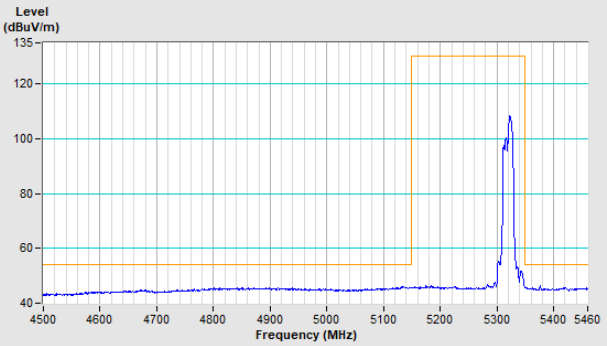


802.11a Channel 64

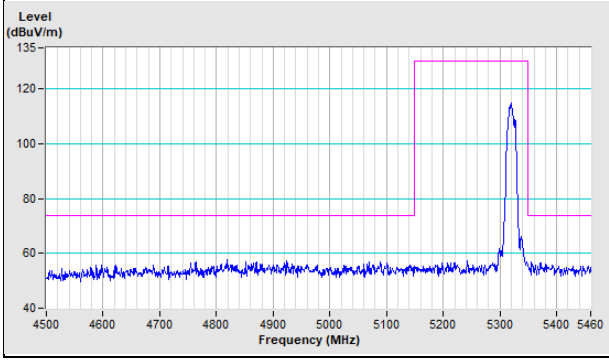
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)