TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBCKS-WTW-P22051021-3
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 ~ 2022/11/3
Issued Date:	2022/11/14
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:** **2022/11/14**

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-P22051021-3	Original release.	2022/11/14

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 ~ 2022/11/3
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)(1/2/3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	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 -5.06 dB at 0.59000 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.1 dB at 127.00 MHz
15.407(b) (1/2/3/4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 5150.00 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): up to 1733.2Mbps 802.11ax: up to 2402Mbps
Operating Frequency	5180 ~ 5240MHz, 5745 ~ 5825MHz
Number of Channel	Radio 2: 5180 ~ 5240MHz: 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): 1 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 Radio 3: 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 Radio 3_Scanning Radio: 5180 ~ 5240MHz: 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): 1 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1

Output Power	Model: FAP-431G: **Radio 2:** 5180 ~ 5240MHz: CDD: 921.508 mW (29.64 dBm) Beamforming: 758.479 mW (28.80 dBm) 5745 ~ 5825MHz: CDD: 993.315 mW (29.97 dBm) Beamforming: 877.19 mW (29.43 dBm) **Radio 3:** 5745 ~ 5825MHz: CDD: 704.842 mW (28.48 dBm) Beamforming: 704.842 mW (28.48 dBm) **Radio 3_Scanning Radio:** 5180 ~ 5240MHz: CDD: 143.083 mW (21.56 dBm) 5745 ~ 5825MHz: CDD: 403.211 mW (26.06 dBm) Model: FAP-433G: **Radio 2:** 5180 ~ 5240MHz: CDD: 666.99 mW (28.24 dBm) Beamforming: 666.99 mW (28.24 dBm) 5745 ~ 5825MHz: CDD: 981.196 mW (29.92 dBm) Beamforming: 762.53 mW (28.82 dBm) **Radio 3:** 5745 ~ 5825MHz: CDD: 797.041 mW (29.01 dBm) Beamforming: 566.733 mW (27.53 dBm) **Radio 3_Scanning Radio:** 5180 ~ 5240MHz: CDD: 147.665 mW (21.69 dBm) 5745 ~ 5825MHz: CDD: 345.182 mW (25.38 dBm)
EUT Category	Indoor Access Point

Note:

1. 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

2. 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

3. 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.
4. Radio 1, Radio 2, Radio 4 and (Radio 3 or Radio 3_Scanning Radio) can transmit simultaneously.
   But Radio 1 (2.4G) and Radio 3_Scanning Radio (2.4G) cannot transmit simultaneously.
   Radio 2 (5G), Radio 3 (5G) and Radio 3_Scanning Radio (5G) cannot transmit in the same band simultaneously.
   Radio 3 (6G) and Radio 3_Scanning Radio (6G) cannot transmit in the same band 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	NII-1, 3 WLAN up to 80 MHz
	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)	NII-3 WLAN up to 80 MHz NII-4 WLAN up to 160 MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated (Non-detachable external antenna)	2.4 GHz WLAN, NII-1, 3, 4 WLAN, 6GHz WLAN
	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	NII-1, 3, 4 WLAN up to 80 MHz
	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	NII-3 WLAN up to 80 MHz NII-4 WLAN up to 160 MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated	2.4 GHz WLAN, NII-1, 3, 4 WLAN, 6GHz WLAN
	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)	Rdaio1 2G CH0 Rdaio2 5G CH0 Rdaio2 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)	Rdaio1 2G CH1 Rdaio2 5G CH1 Rdaio2 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)	Rdaio1 2G CH2 Rdaio2 5G CH2 Rdaio2 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)	Rdaio1 2G CH3 Rdaio2 5G CH3 Rdaio2 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)	Rdaio3 5GH CH0 Rdaio3 6G CH0 Rdaio3 Scanning (2/5/6G) CH0	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)	Rdaio3 5GH CH1 Rdaio3 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)	Rdaio3 5GH CH2 Rdaio3 6G CH2 Rdaio3 Scanning (2/5/6G) CH1	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)	Rdaio3 5GH CH3 Rdaio3 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

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	6.37

Radio 2

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

Radio 3

Antenna Gain	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

Scanning Radio

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	0.84
5150~5250MHz	1.87
5250~5350MHz	1.82
5470~5725MHz	2.10
5725~5850MHz	1.57
5850~5895MHz	1.49
5925~6425MHz	4.51
6425~6525MHz	4.57
6525~6875MHz	5.03
6875~7125MHz	5.12

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 Scanning Radio (2/5/6G) CH0	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 Scanning Radio (2/5/6G) CH1	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

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

Scanning Radio

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	1.41
5150~5250MHz	2.04
5250~5350MHz	2.09
5470~5725MHz	2.51
5725~5850MHz	2.30
5850~5895MHz	2.10
5925~6425MHz	4.48
6425~6525MHz	4.28
6525~6875MHz	4.76
6875~7125MHz	4.17

* 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
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	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		
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
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	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	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
802.11ac (VHT20)	2TX	2RX
802.11ac (VHT40)	2TX	2RX
802.11ac (VHT80)	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX
802.11ax (HE80)	2TX	2RX

3.3 Channel List

FOR 5180 ~ 5240 MHz

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

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

Channel	Frequency
42	5210 MHz

FOR 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

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

Channel	Frequency
155	5775 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
RF Output Power	A, G	802.11a	CDD	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
		802.11n (HT20)	CDD & Beamforming	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11n (HT40)	CDD & Beamforming	38, 46, 151, 159	BPSK	MCS0
		802.11ac (VHT20)	CDD & Beamforming	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ac (VHT40)	CDD & Beamforming	38, 46, 151, 159	BPSK	MCS0
		802.11ac (VHT80)	CDD & Beamforming	42, 155	BPSK	MCS0
		802.11ax (HE20)	CDD & Beamforming	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD & Beamforming	38, 46, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD & Beamforming	42, 155	BPSK	MCS0
	C, I	802.11a	CDD	149, 157, 165	BPSK	6Mb/s
		802.11n (HT20)	CDD & Beamforming	149, 157, 165	BPSK	MCS0
		802.11n (HT40)	CDD & Beamforming	151, 159	BPSK	MCS0
		802.11ac (VHT20)	CDD & Beamforming	149, 157, 165	BPSK	MCS0
		802.11ac (VHT40)	CDD & Beamforming	151, 159	BPSK	MCS0
		802.11ac (VHT80)	CDD & Beamforming	155	BPSK	MCS0
		802.11ax (HE20)	CDD & Beamforming	149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD & Beamforming	151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD & Beamforming	155	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	E, K	802.11a	CDD	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
		802.11n (HT20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11n (HT40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ac (VHT20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ac (VHT40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ac (VHT80)	CDD	42, 155	BPSK	MCS0
		802.11ax (HE20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 155	BPSK	MCS0
Power Spectral Density	A, E, G, K	802.11a	CDD	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 155	BPSK	MCS0
	C, I	802.11a	CDD	149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	149, 157, 165	BPSK	MCS0
6 dB Bandwidth	A, C, E, G, I, K	802.11a	CDD	149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	149, 157, 165	BPSK	MCS0
Occupied Bandwidth	A, E, G, K	802.11a	CDD	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 155	BPSK	MCS0
	C, I	802.11a	CDD	149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	155	BPSK	MCS0

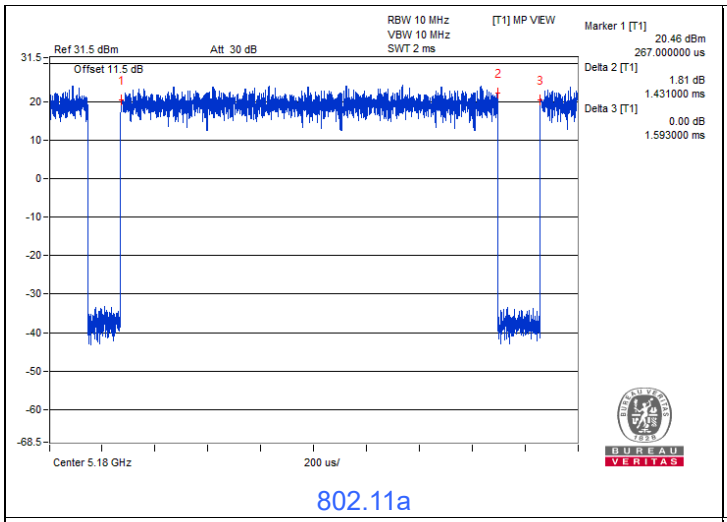
Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Frequency Stability	A, E, G, K	802.11a	CDD	36	un-modulation	-
	C, I	802.11a	CDD	149	un-modulation	-
AC Power Conducted Emissions	A, B, K, L	802.11a	CDD	157	BPSK	6Mb/s
	C, D, I, J	802.11ax (HE20)	CDD	157	BPSK	MCS0
	E, F	802.11a	CDD	165	BPSK	6Mb/s
	G, H	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	A, B, K, L	802.11a	CDD	157	BPSK	6Mb/s
	C, D, I, J	802.11ax (HE20)	CDD	157	BPSK	MCS0
	E, F	802.11a	CDD	165	BPSK	6Mb/s
	G, H	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	A, E, G, K	802.11a	CDD	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 155	BPSK	MCS0
	C, I	802.11a	CDD	149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	155	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-431G_Radio3_Scanning Radio	Power from adapter
	F		Power from PoE
	G	FAP-433G_Radio2	Power from adapter
	H		Power from PoE
	I	FAP-433G_Radio3	Power from adapter
	J		Power from PoE
	K	FAP-433G_Radio3_Scanning Radio	Power from adapter
	L		Power from PoE
Note: Raido 3_Scanning Radio does not support Beamformig mode.			

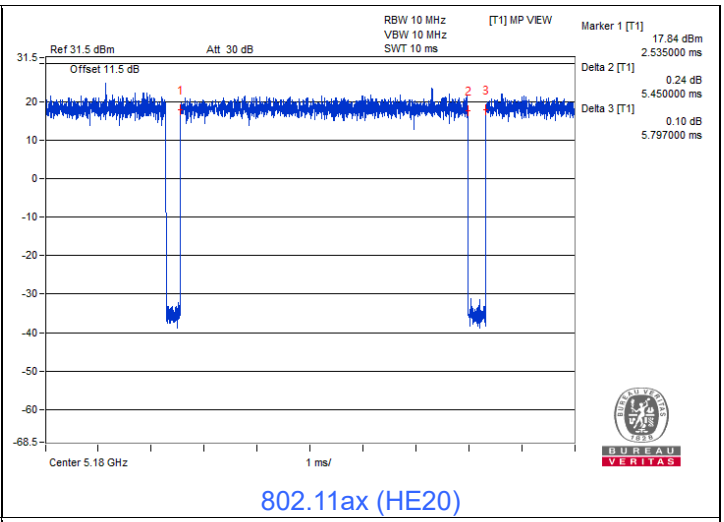
3.5 Duty Cycle of Test Signal

Test Mode A: FAP-431G_Radio 2

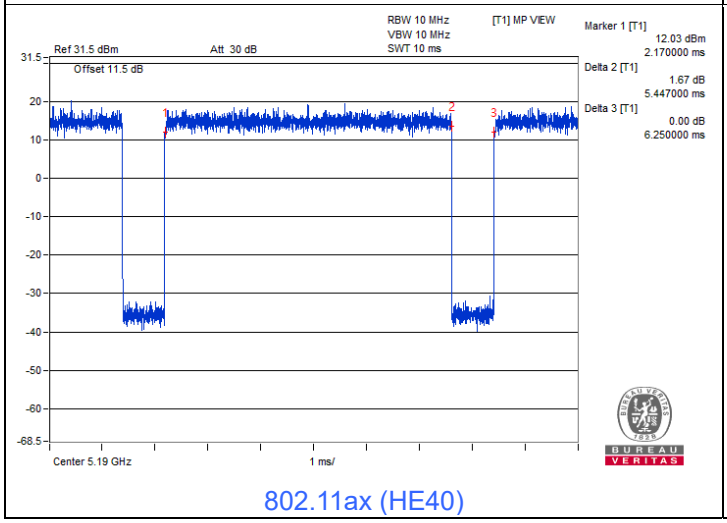
802.11a: Duty cycle = 1.431 ms / 1.593 ms x 100% = 89.8%, duty factor = 10 * log (1/Duty cycle) = 0.47 dB
802.11ax (HE20): Duty cycle = 5.45 ms / 5.797 ms x 100% = 94.0%, duty factor = 10 * log (1/Duty cycle) = 0.27 dB
802.11ax (HE40): Duty cycle = 5.447 ms / 6.25 ms x 100% = 87.2%, duty factor = 10 * log (1/Duty cycle) = 0.60 dB
802.11ax (HE80): Duty cycle = 5.448 ms / 5.805 ms x 100% = 93.9%, duty factor = 10 * log (1/Duty cycle) = 0.28 dB



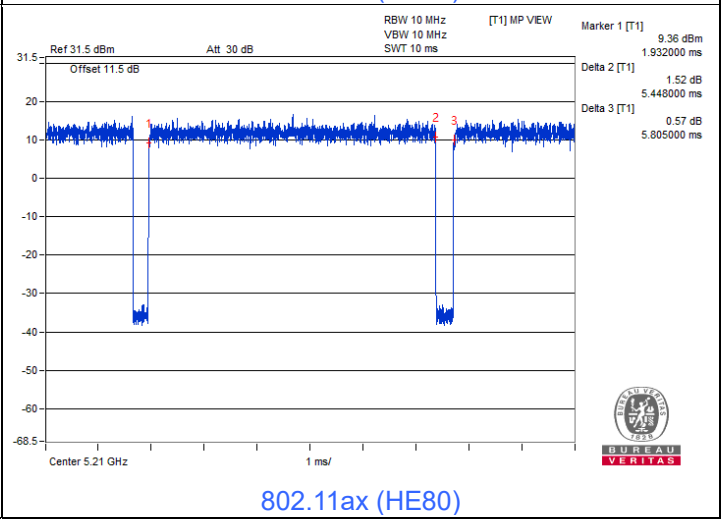
802.11a



802.11ax (HE20)



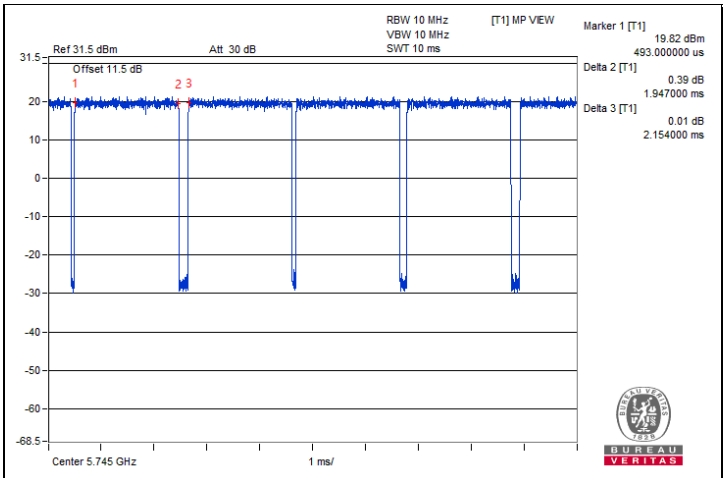
802.11ax (HE40)



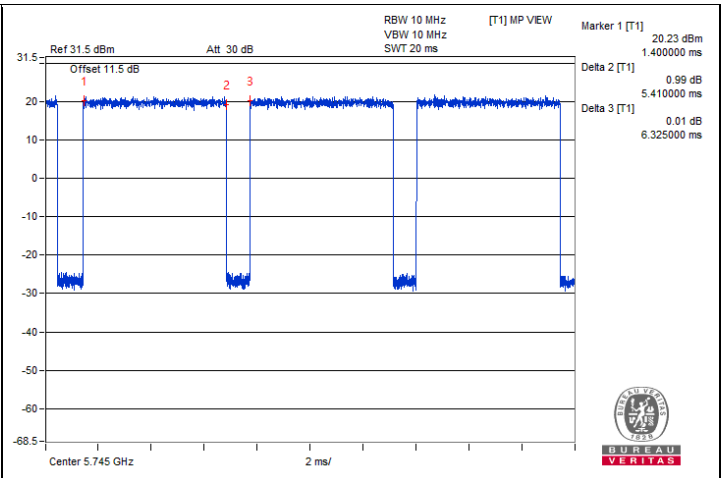
802.11ax (HE80)

Test Mode C: FAP-431G_Radio 3

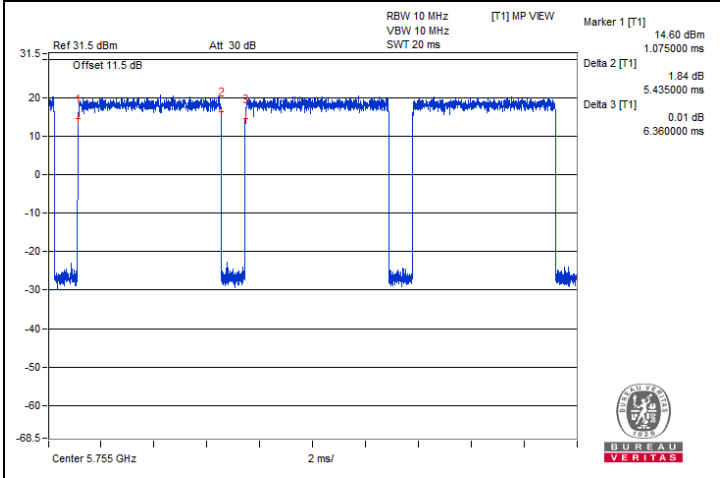
802.11a: Duty cycle = 1.947 ms / 2.154 ms x 100% = 90.4%, duty factor = 10 * log (1/Duty cycle) = 0.44 dB
802.11ax (HE20): Duty cycle = 5.41 ms / 6.325 ms x 100% = 85.5%, duty factor = 10 * log (1/Duty cycle) = 0.68 dB
802.11ax (HE40): Duty cycle = 5.435 ms / 6.36 ms x 100% = 85.5%, duty factor = 10 * log (1/Duty cycle) = 0.68 dB
802.11ax (HE80): Duty cycle = 5.4 ms / 6.425 ms x 100% = 84.0%, duty factor = 10 * log (1/Duty cycle) = 0.75 dB



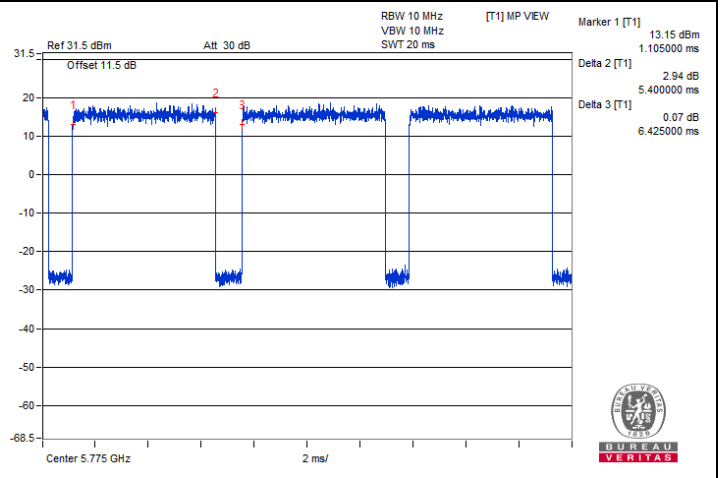
802.11a



802.11ax (HE20)



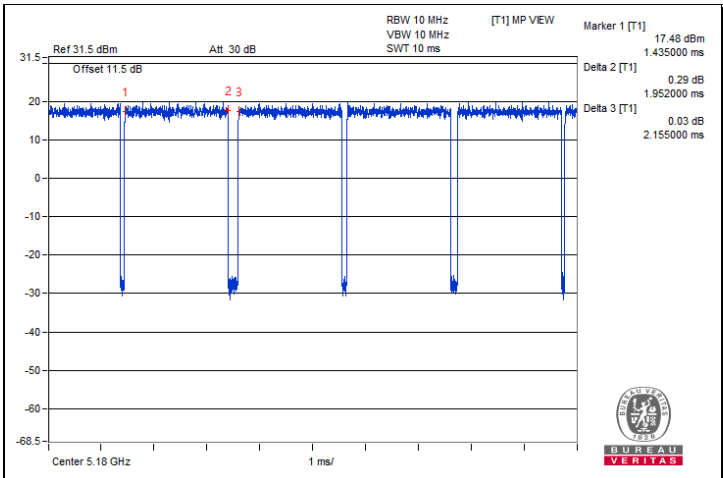
802.11ax (HE40)



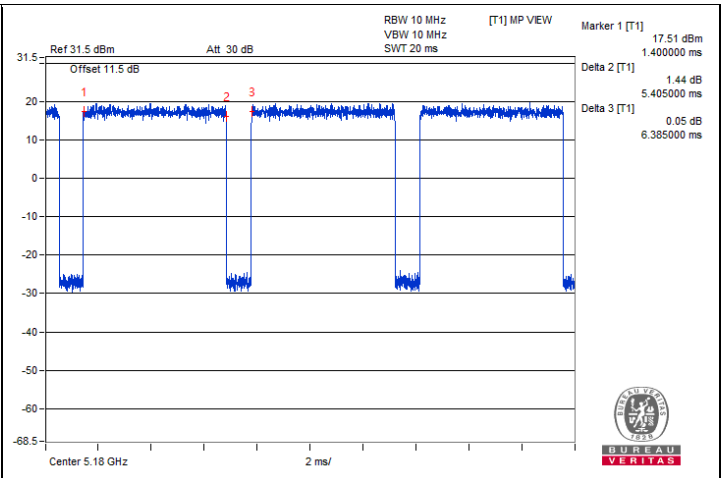
802.11ax (HE80)

Test Mode E: FAP-431G_Scanning Radio

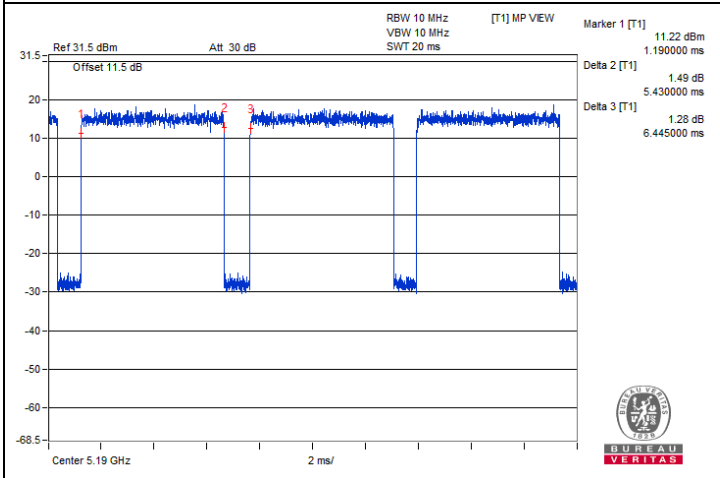
802.11a: Duty cycle = 1.952 ms / 2.155 ms x 100% = 90.6%, duty factor = 10 * log (1/Duty cycle) = 0.43 dB
802.11ax (HE20): Duty cycle = 5.405 ms / 6.385 ms x 100% = 84.7%, duty factor = 10 * log (1/Duty cycle) = 0.72 dB
802.11ax (HE40): Duty cycle = 5.43 ms / 6.445 ms x 100% = 84.3%, duty factor = 10 * log (1/Duty cycle) = 0.74 dB
802.11ax (HE80): Duty cycle = 5.41 ms / 6.375 ms x 100% = 84.9%, duty factor = 10 * log (1/Duty cycle) = 0.71 dB



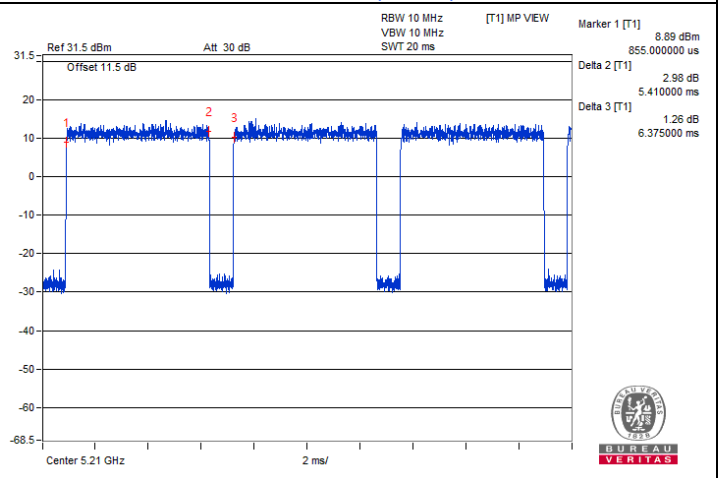
802.11a



802.11ax (HE20)



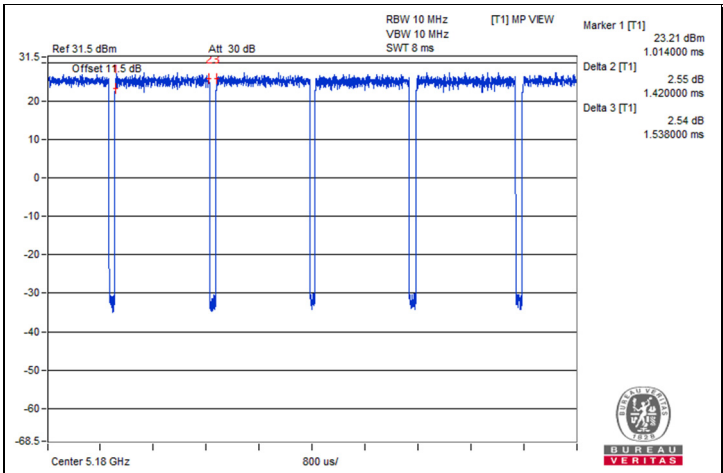
802.11ax (HE40)



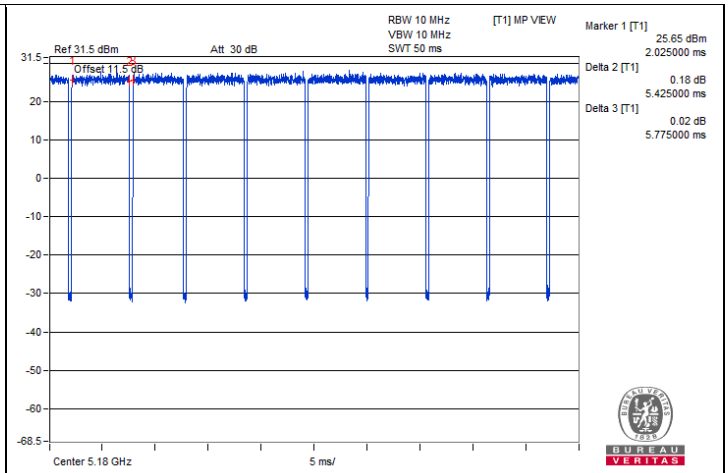
802.11ax (HE80)

Test Mode G: FAP-433G_Radio 2

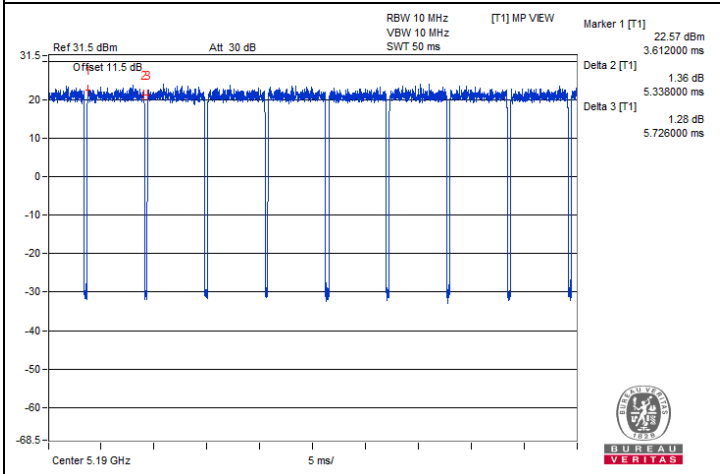
802.11a: Duty cycle = 1.42 ms / 1.538 ms x 100% = 92.3%, duty factor = 10 * log (1/Duty cycle) = 0.35 dB
802.11ax (HE20): Duty cycle = 5.425 ms / 5.775 ms x 100% = 93.9%, duty factor = 10 * log (1/Duty cycle) = 0.27 dB
802.11ax (HE40): Duty cycle = 5.338 ms / 5.726 ms x 100% = 93.2%, duty factor = 10 * log (1/Duty cycle) = 0.30 dB
802.11ax (HE80): Duty cycle = 5.363 ms / 5.775 ms x 100% = 92.9%, duty factor = 10 * log (1/Duty cycle) = 0.32 dB



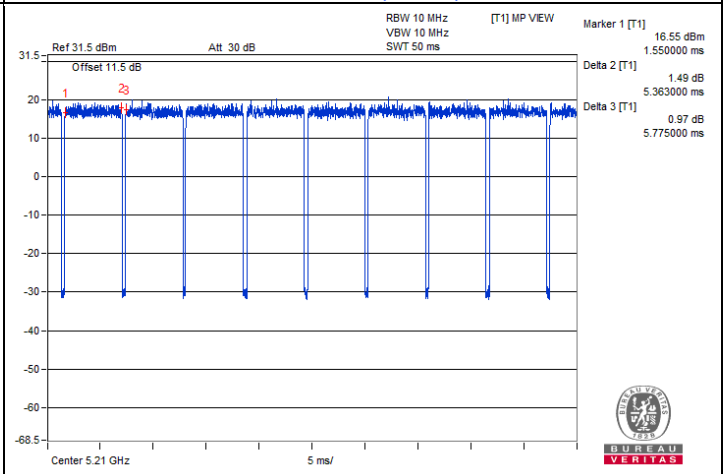
802.11a



802.11ax (HE20)



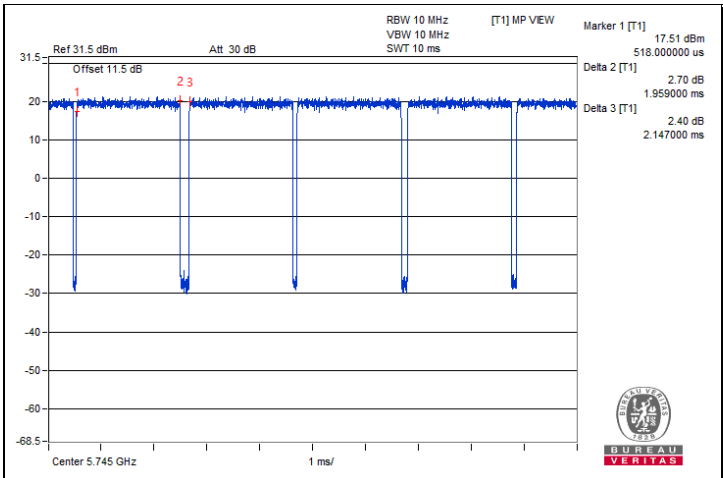
802.11ax (HE40)



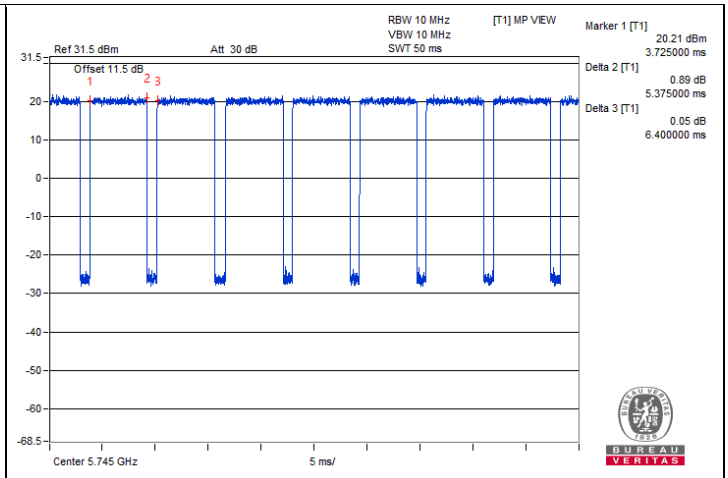
802.11ax (HE80)

Test Mode I: FAP-433G_Radio 3

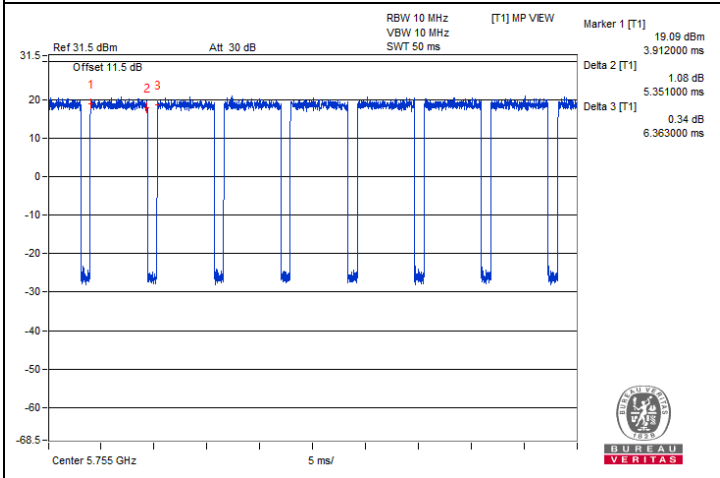
802.11a: Duty cycle = 1.959 ms / 2.147 ms x 100% = 91.2%, duty factor = 10 * log (1/Duty cycle) = 0.40 dB
802.11ax (HE20): Duty cycle = 5.375 ms / 6.4 ms x 100% = 84.0%, duty factor = 10 * log (1/Duty cycle) = 0.76 dB
802.11ax (HE40): Duty cycle = 5.351 ms / 6.363 ms x 100% = 84.1%, duty factor = 10 * log (1/Duty cycle) = 0.75 dB
802.11ax (HE80): Duty cycle = 5.325 ms / 6.387 ms x 100% = 83.4%, duty factor = 10 * log (1/Duty cycle) = 0.79 dB



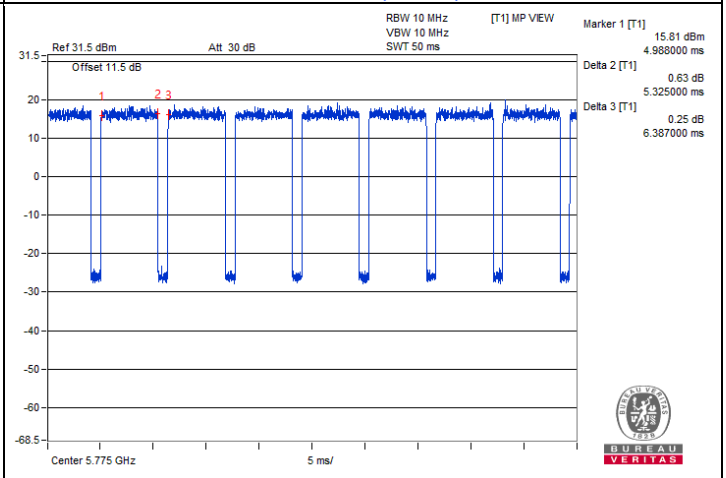
802.11a



802.11ax (HE20)



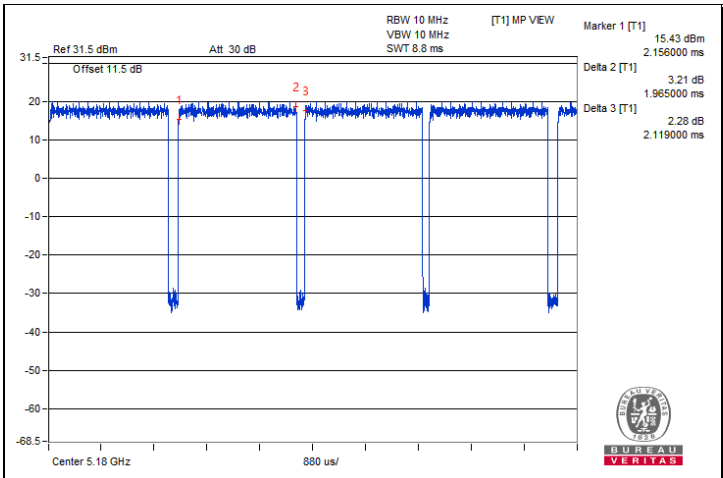
802.11ax (HE40)



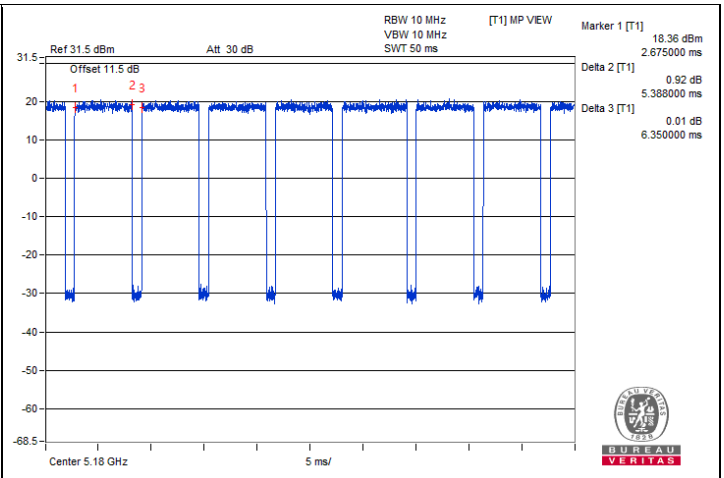
802.11ax (HE80)

Test Mode K: FAP-433G_Scanning Radio

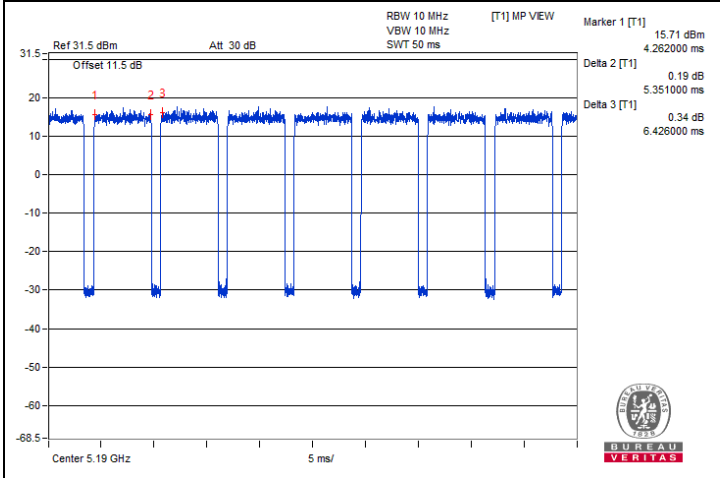
802.11a: Duty cycle = 1.965 ms / 2.119 ms x 100% = 92.7%, duty factor = 10 * log (1/Duty cycle) = 0.33 dB
802.11ax (HE20): Duty cycle = 5.388 ms / 6.35 ms x 100% = 84.9%, duty factor = 10 * log (1/Duty cycle) = 0.71 dB
802.11ax (HE40): Duty cycle = 5.351 ms / 6.426 ms x 100% = 83.3%, duty factor = 10 * log (1/Duty cycle) = 0.80 dB
802.11ax (HE80): Duty cycle = 5.416 ms / 6.411 ms x 100% = 84.5%, duty factor = 10 * log (1/Duty cycle) = 0.73 dB



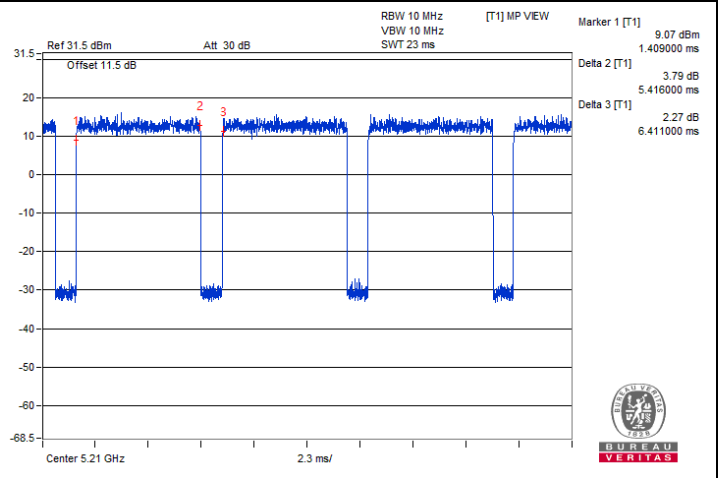
802.11a



802.11ax (HE20)



802.11ax (HE40)



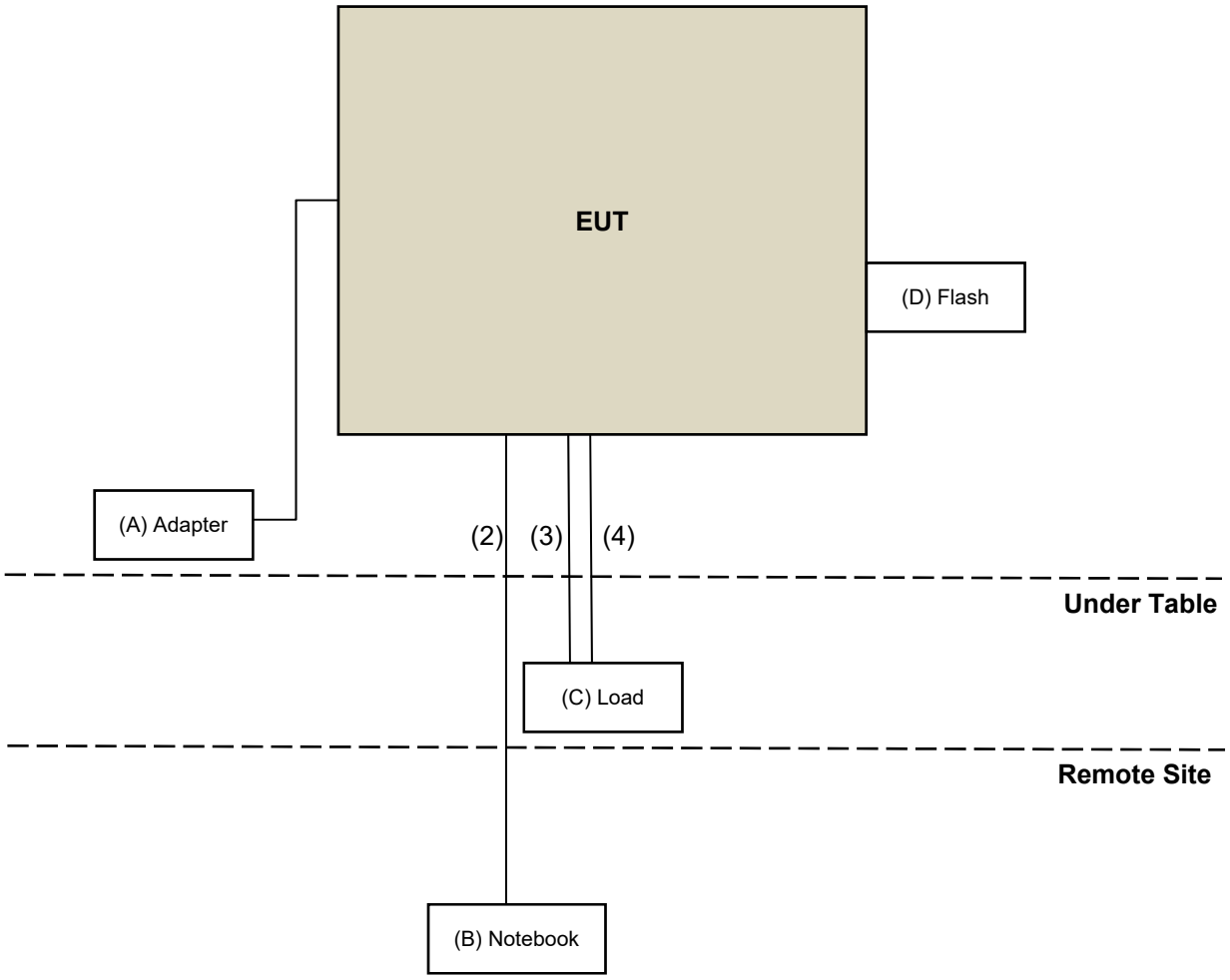
802.11ax (HE80)

3.6 Test Program Used and Operation Descriptions

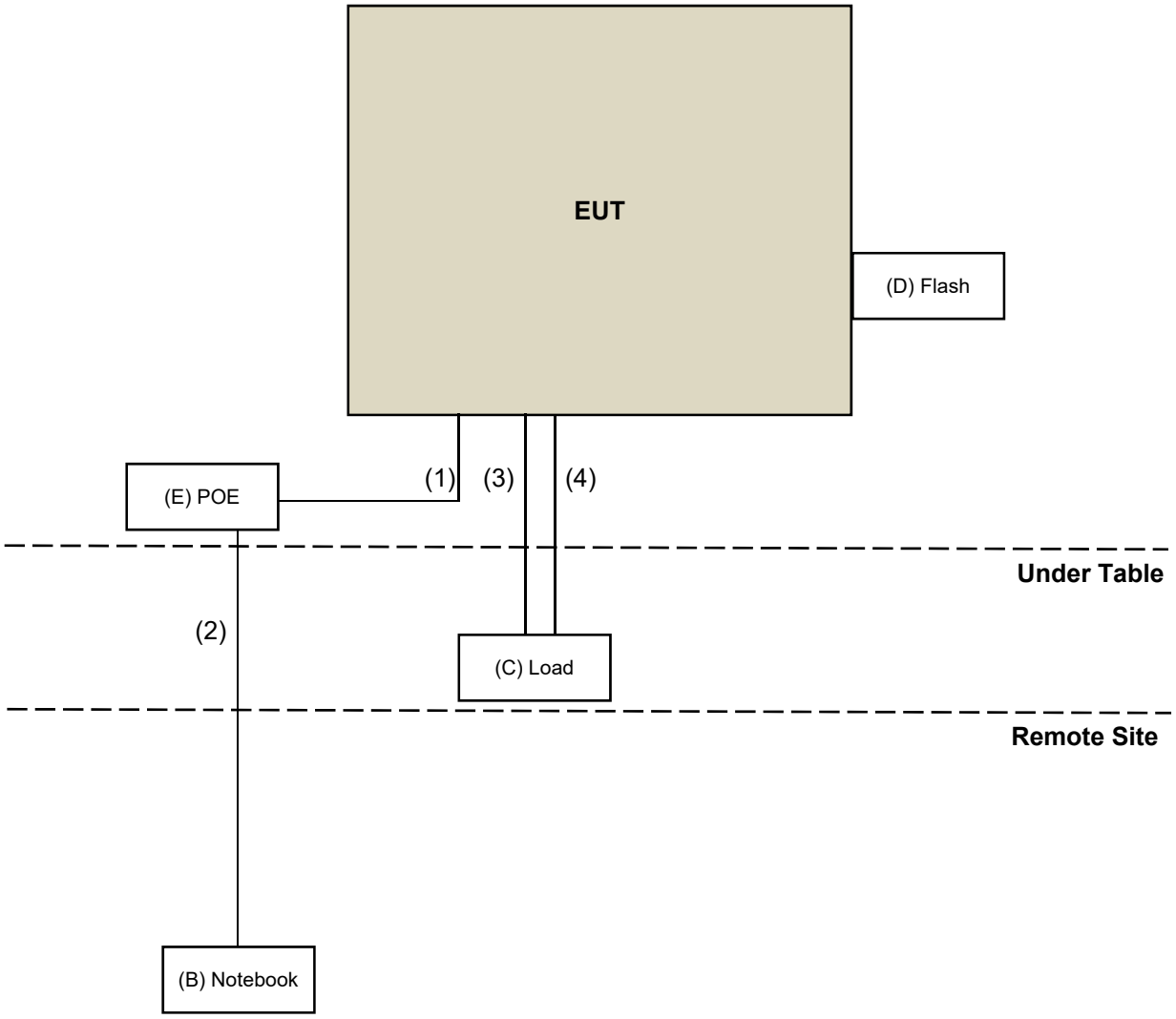
Controlling software (QSPR 5.0-00199) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

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 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
Wideband Power Sensor(N1923A) KEYSIGHT	N1923A	MY58020002	2022/1/17	2023/1/16

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/11/2 ~ 2022/11/3

4.2 Power Spectral Density

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: 2022/11/2 ~ 2022/11/3

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Occupied Bandwidth

Refer to section 4.2 to get information of the instruments.

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: 2022/11/2 ~ 2022/11/3

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
DC-LISN SCHWARZBECK MESS-ELETRONIK	NNBM 8126G	8126G-069	2021/11/10	2022/11/9
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: 2022/9/21 ~ 2022/11/1

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
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: 2022/9/14 ~ 2022/11/2

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
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 2022/10/20	2022/10/26 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: 2022/9/14 ~ 2022/11/2

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 ~ 2022/9/26

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 ~ 2022/9/26

5 Limits of Test Items

5.1 RF Output Power

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250 mW (24 dBm)

Operation Band	Limit
U-NII-3	1 Watt (30 dBm)

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.

5.2 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/ MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	Mobile and Portable client device	11 dBm/ MHz

Operation Band	Limit
U-NII-3	30 dBm/ 500 kHz

5.3 6 dB Bandwidth

Within the 5.725-5.850 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

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><td colspan="2">Applicable To</td><td colspan="2">Limit</td></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>

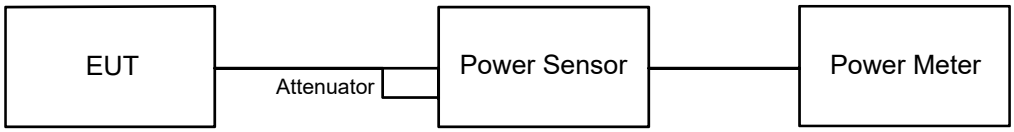
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup

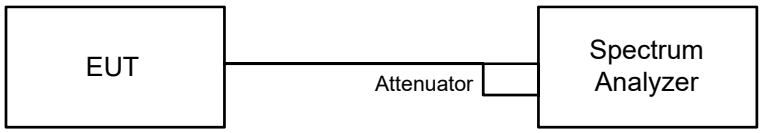


6.1.2 Test Procedure

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.

6.2 Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-2

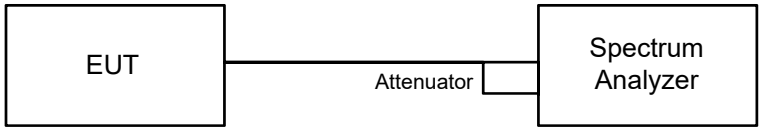
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger 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).

6.3 6 dB Bandwidth

6.3.1 Test Setup

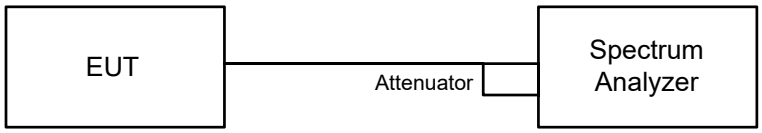


6.3.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4 Occupied Bandwidth

6.4.1 Test Setup

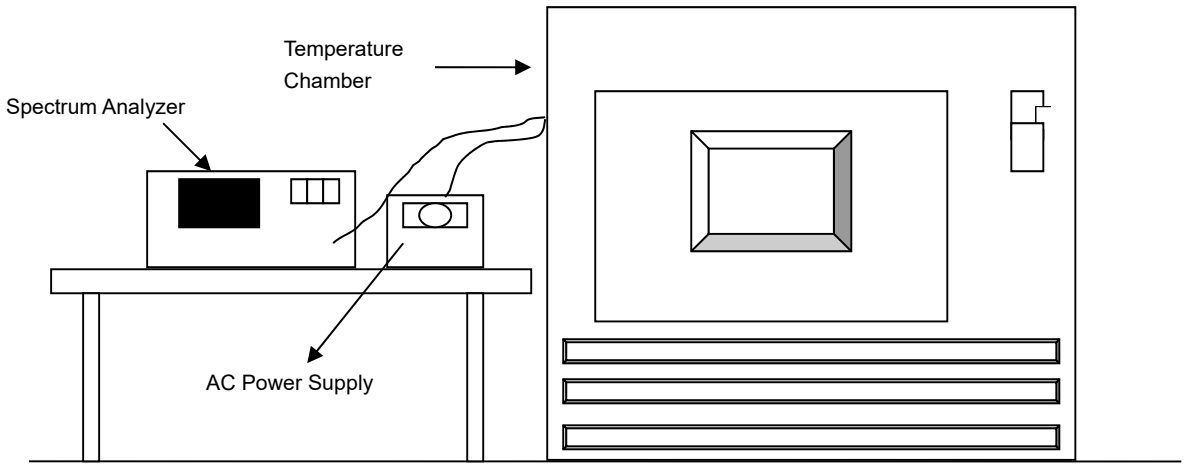


6.4.2 Test Procedure

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

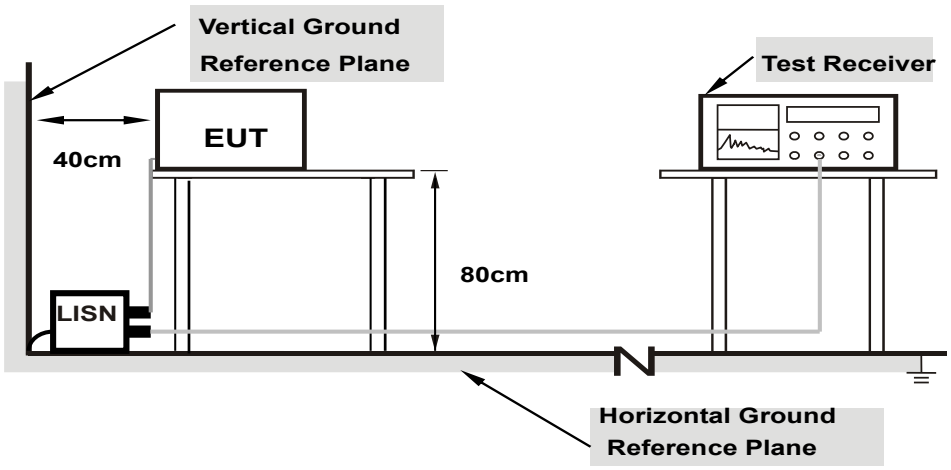


6.5.2 Test Procedure

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.

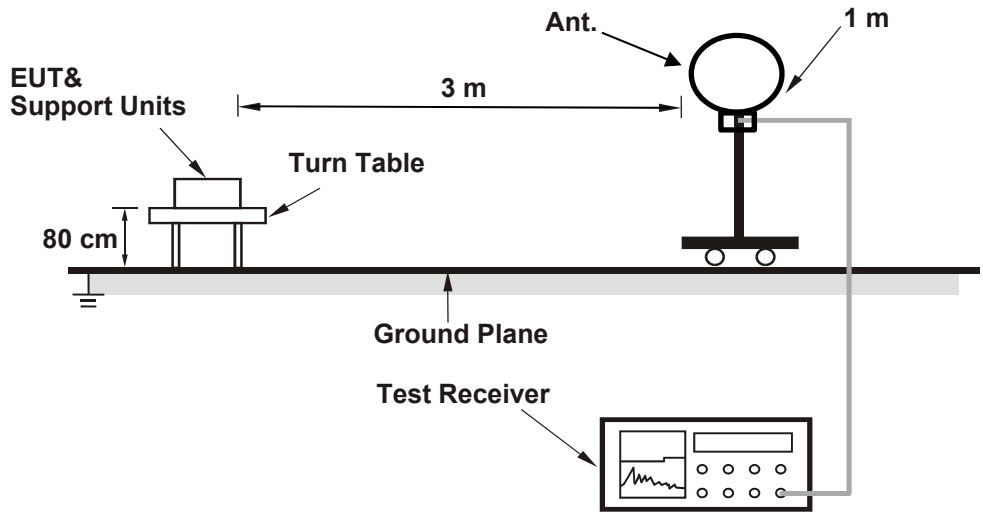
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

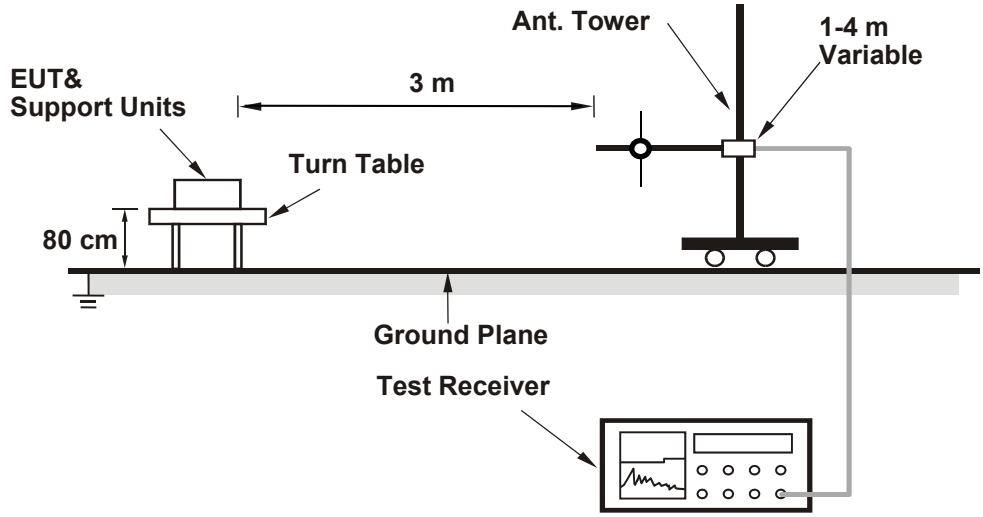
6.7 Unwanted Emissions below 1 GHz

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.

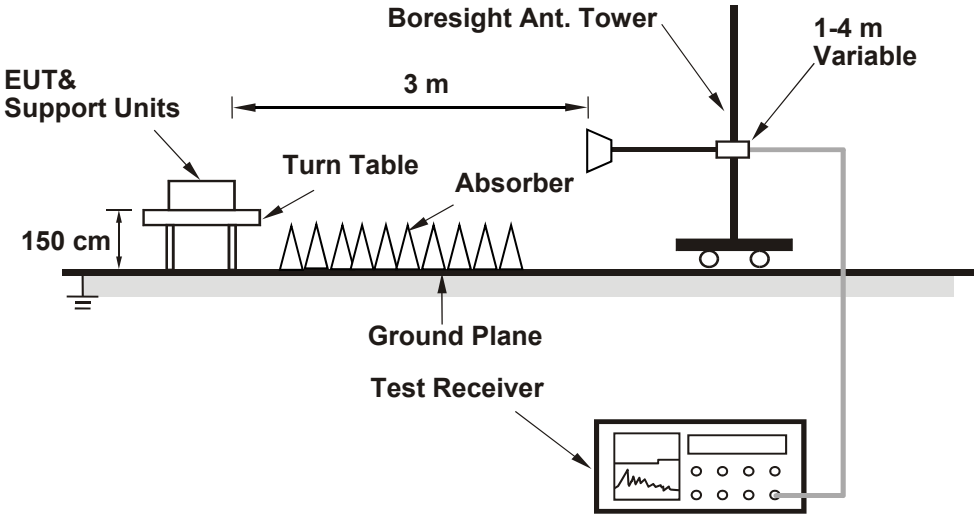
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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 RF Output Power

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 CDD

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				
36	5180	20.33	20.54	20.59	20.43	446.094	26.49	30	Pass
40	5200	23.11	23.16	23.19	23.17	827.599	29.18	30	Pass
48	5240	23.42	23.68	23.77	23.62	**921.508**	29.64	30	Pass
149	5745	23.66	24.09	23.92	23.89	980.232	29.91	30	Pass
157	5785	23.70	24.13	23.99	23.97	**993.315**	29.97	30	Pass
165	5825	23.72	24.12	23.96	23.99	993.228	29.97	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
36	5180	19.70	19.98	20.12	19.68	388.564	25.89	30	Pass
40	5200	22.95	23.19	23.17	22.97	811.335	29.09	30	Pass
48	5240	22.89	23.12	23.16	22.85	799.419	29.03	30	Pass
149	5745	23.54	23.61	23.92	23.01	902.149	29.55	30	Pass
157	5785	23.67	23.74	24.06	23.14	930.147	29.69	30	Pass
165	5825	23.60	23.69	23.92	23.10	913.748	29.61	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	17.14	17.32	17.13	17.21	209.955	23.22	30	Pass
46	5230	21.31	21.72	21.38	21.09	549.734	27.40	30	Pass
151	5755	23.86	23.96	23.79	23.26	943.274	29.75	30	Pass
159	5795	23.97	23.84	23.63	23.22	932.131	29.69	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
36	5180	19.81	20.10	20.25	19.80	399.473	26.01	30	Pass
40	5200	23.07	23.32	23.29	23.08	834.092	29.21	30	Pass
48	5240	23.01	23.24	23.29	22.95	821.396	29.15	30	Pass
149	5745	23.66	23.73	24.05	23.11	927.063	29.67	30	Pass
157	5785	23.80	23.86	24.20	23.25	957.479	29.81	30	Pass
165	5825	23.72	23.80	24.05	23.20	938.415	29.72	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	17.26	17.45	17.25	17.32	215.841	23.34	30	Pass
46	5230	21.42	21.85	21.50	21.22	565.472	27.52	30	Pass
151	5755	23.98	24.09	23.80	23.39	964.639	29.84	30	Pass
159	5795	24.10	23.96	23.74	23.32	957.3	29.81	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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	5210	17.01	17.44	17.22	17.25	211.508	23.25	30	Pass
155	5775	21.82	21.81	22.30	21.30	608.48	27.84	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

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				
36	5180	19.92	20.23	20.37	19.92	410.681	26.14	30	Pass
40	5200	23.18	23.44	23.42	23.19	857.005	29.33	30	Pass
48	5240	23.12	23.37	23.41	23.06	843.969	29.26	30	Pass
149	5745	23.77	23.85	24.18	23.23	953.089	29.79	30	Pass
157	5785	23.92	23.99	24.31	23.36	983.759	29.93	30	Pass
165	5825	23.85	23.92	24.19	23.31	965.976	29.85	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	17.37	17.57	17.38	17.44	221.888	23.46	30	Pass
46	5230	21.55	21.98	21.62	21.33	581.693	27.65	30	Pass
151	5755	24.10	24.22	23.91	23.51	991.705	29.96	30	Pass
159	5795	24.23	24.08	23.87	23.44	985.29	29.94	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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	5210	17.11	17.56	17.34	17.38	217.322	23.37	30	Pass
155	5775	21.94	21.92	22.43	21.42	625.572	27.96	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.85 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.3 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				
36	5180	19.70	19.98	20.12	19.68	388.564	25.89	29.06	Pass
40	5200	22.41	22.59	22.62	22.43	713.527	28.53	29.06	Pass
48	5240	22.33	22.55	22.60	22.30	702.683	28.47	29.06	Pass
149	5745	23.01	23.05	23.37	22.50	796.921	29.01	29.69	Pass
157	5785	23.12	23.22	23.51	22.61	821.788	29.15	29.69	Pass
165	5825	23.09	23.11	23.37	22.53	804.679	29.06	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
38	5190	17.14	17.32	17.13	17.21	209.955	23.22	29.06	Pass
46	5230	21.31	21.72	21.38	21.09	549.734	27.40	29.06	Pass
151	5755	23.33	23.38	23.14	22.75	827.477	29.18	29.69	Pass
159	5795	23.40	23.29	23.12	22.73	824.696	29.16	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
36	5180	19.81	20.10	20.25	19.80	399.473	26.01	29.06	Pass
40	5200	22.53	22.74	22.76	22.54	735.265	28.66	29.06	Pass
48	5240	22.45	22.68	22.72	22.43	723.198	28.59	29.06	Pass
149	5745	23.13	23.19	23.50	22.62	820.72	29.14	29.69	Pass
157	5785	23.25	23.34	23.64	22.73	845.829	29.27	29.69	Pass
165	5825	23.21	23.24	23.50	22.65	828.223	29.18	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
38	5190	17.26	17.45	17.25	17.32	215.841	23.34	29.06	Pass
46	5230	21.42	21.85	21.50	21.22	565.472	27.52	29.06	Pass
151	5755	23.45	23.52	23.26	22.86	851.248	29.30	29.69	Pass
159	5795	23.55	23.42	23.24	22.83	848.98	29.29	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
42	5210	17.01	17.44	17.22	17.25	211.508	23.25	29.06	Pass
155	5775	21.82	21.81	22.30	21.30	608.48	27.84	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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 (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				
36	5180	19.92	20.23	20.37	19.92	410.681	26.14	29.06	Pass
40	5200	22.66	22.88	22.89	22.68	**758.479**	28.80	29.06	Pass
48	5240	22.59	22.83	22.85	22.56	746.473	28.73	29.06	Pass
149	5745	23.25	23.31	23.63	22.73	843.812	29.26	29.69	Pass
157	5785	23.37	23.46	23.75	22.85	868.98	29.39	29.69	Pass
165	5825	23.32	23.38	23.63	22.79	853.337	29.31	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
38	5190	17.37	17.57	17.38	17.44	221.888	23.46	29.06	Pass
46	5230	21.55	21.98	21.62	21.33	581.693	27.65	29.06	Pass
151	5755	23.58	23.66	23.39	22.98	**877.19**	29.43	29.69	Pass
159	5795	23.68	23.54	23.35	22.93	871.897	29.40	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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				
42	5210	17.11	17.56	17.34	17.38	217.322	23.37	29.06	Pass
155	5775	21.94	21.92	22.43	21.42	625.572	27.96	29.69	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 6.94 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.94-6) = 29.06 dBm.
3. 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.

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

Test Mode C: FAP-431G_Radio 3

802.11a CDD

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				
149	5745	21.89	22.34	21.70	22.41	648.013	28.12	30	Pass
157	5785	21.91	22.60	21.82	22.91	684.697	28.35	30	Pass
165	5825	21.90	22.40	21.75	22.39	651.666	28.14	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
149	5745	20.74	20.62	20.75	20.80	472.999	26.75	30	Pass
157	5785	22.00	22.50	21.94	22.87	686.274	28.36	30	Pass
165	5825	21.67	21.52	21.70	21.73	585.645	27.68	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	20.24	19.81	20.04	20.11	404.892	26.07	30	Pass
159	5795	20.24	20.35	20.13	20.68	434.063	26.38	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
149	5745	20.80	20.67	20.81	20.84	478.75	26.80	30	Pass
157	5785	22.04	22.56	22.01	22.93	695.448	28.42	30	Pass
165	5825	21.73	21.59	21.75	21.79	593.779	27.74	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	20.30	19.86	20.12	20.17	410.773	26.14	30	Pass
159	5795	20.30	20.41	20.19	20.73	439.829	26.43	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
155	5775	17.21	16.79	17.04	17.17	203.057	23.08	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

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				
149	5745	20.84	20.73	20.85	20.91	484.572	26.85	30	Pass
157	5785	22.10	22.62	22.05	23.00	**704.842**	28.48	30	Pass
165	5825	21.80	21.66	21.81	21.85	602.725	27.80	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	20.34	19.90	20.16	20.22	414.816	26.18	30	Pass
159	5795	20.36	20.45	20.25	20.78	445.159	26.49	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
155	5775	17.25	16.85	17.11	17.20	205.391	23.13	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-3, 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				
149	5745	20.74	20.62	20.75	20.80	472.999	26.75	29.09	Pass
157	5785	22.00	22.50	21.94	22.87	686.274	28.36	29.09	Pass
165	5825	21.67	21.52	21.70	21.73	585.645	27.68	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	20.24	19.81	20.04	20.11	404.892	26.07	29.09	Pass
159	5795	20.24	20.35	20.13	20.68	434.063	26.38	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
149	5745	20.80	20.67	20.81	20.84	478.75	26.80	29.09	Pass
157	5785	22.04	22.56	22.01	22.93	695.448	28.42	29.09	Pass
165	5825	21.73	21.59	21.75	21.79	593.779	27.74	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	20.30	19.86	20.12	20.17	410.773	26.14	29.09	Pass
159	5795	20.30	20.41	20.19	20.73	439.829	26.43	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
155	5775	17.21	16.79	17.04	17.17	203.057	23.08	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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 (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				
149	5745	20.84	20.73	20.85	20.91	484.572	26.85	29.09	Pass
157	5785	22.10	22.62	22.05	23.00	**704.842**	28.48	29.09	Pass
165	5825	21.80	21.66	21.81	21.85	602.725	27.80	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	20.34	19.90	20.16	20.22	414.816	26.18	29.09	Pass
159	5795	20.36	20.45	20.25	20.78	445.159	26.49	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
155	5775	17.25	16.85	17.11	17.20	205.391	23.13	29.09	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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.

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

Test Mode E: FAP-431G_Scanning Radio

802.11a CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	15.16	14.85	63.359	18.02	30	Pass
40	5200	18.12	17.76	124.567	20.95	30	Pass
48	5240	18.54	18.05	135.276	21.31	30	Pass
149	5745	22.76	22.62	371.609	25.70	30	Pass
157	5785	22.80	22.65	374.623	25.74	30	Pass
165	5825	23.06	23.03	**403.211**	26.06	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.73	14.41	57.322	17.58	30	Pass
40	5200	17.42	16.95	104.753	20.20	30	Pass
48	5240	18.50	18.09	135.212	21.31	30	Pass
149	5745	21.82	21.80	303.411	24.82	30	Pass
157	5785	22.67	22.62	367.737	25.66	30	Pass
165	5825	22.31	22.19	335.793	25.26	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.83	13.40	46.032	16.63	30	Pass
46	5230	16.79	16.30	90.411	19.56	30	Pass
151	5755	20.28	20.17	210.652	23.24	30	Pass
159	5795	21.42	20.97	263.701	24.21	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.85	14.52	58.863	17.70	30	Pass
40	5200	17.54	17.01	106.989	20.29	30	Pass
48	5240	18.62	18.21	139	21.43	30	Pass
149	5745	21.94	21.93	312.27	24.95	30	Pass
157	5785	22.80	22.76	379.345	25.79	30	Pass
165	5825	22.43	22.30	344.809	25.38	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.96	13.51	47.327	16.75	30	Pass
46	5230	16.90	16.40	92.629	19.67	30	Pass
151	5755	20.41	20.29	216.806	23.36	30	Pass
159	5795	21.55	21.08	271.122	24.33	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	13.39	13.10	42.245	16.26	30	Pass
155	5775	17.68	17.35	112.939	20.53	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.98	14.64	60.585	17.82	30	Pass
40	5200	17.67	17.13	110.121	20.42	30	Pass
48	5240	18.76	18.32	**143.083**	21.56	30	Pass
149	5745	22.07	22.05	321.389	25.07	30	Pass
157	5785	22.94	22.88	390.877	25.92	30	Pass
165	5825	22.66	22.43	359.486	25.56	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	14.07	13.63	48.594	16.87	30	Pass
46	5230	17.02	16.51	95.121	19.78	30	Pass
151	5755	20.53	20.41	222.88	23.48	30	Pass
159	5795	21.67	21.20	278.718	24.45	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	13.52	13.20	43.384	16.37	30	Pass
155	5775	17.81	17.46	116.113	20.65	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.98 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.

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

Test Mode G: FAP-433G_Radio 2

802.11a CDD

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				
36	5180	21.07	21.61	21.38	21.41	548.576	27.39	30	Pass
40	5200	21.23	21.54	21.63	21.47	561.127	27.49	30	Pass
48	5240	21.43	21.56	21.82	21.33	570.1	27.56	30	Pass
149	5745	23.85	23.84	25.26	22.06	**981.196**	29.92	30	Pass
157	5785	23.76	23.98	25.13	22.13	976.86	29.90	30	Pass
165	5825	23.01	22.84	25.24	22.29	895.924	29.52	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
36	5180	20.04	20.74	20.58	20.41	443.643	26.47	30	Pass
40	5200	20.87	21.17	21.37	21.25	523.509	27.19	30	Pass
48	5240	21.00	21.31	21.34	21.07	524.794	27.20	30	Pass
149	5745	23.13	23.28	24.71	21.82	866.376	29.38	30	Pass
157	5785	23.22	23.44	24.58	21.90	872.681	29.41	30	Pass
165	5825	23.15	23.19	23.70	22.15	813.108	29.10	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	18.72	18.99	19.17	19.03	316.315	25.00	30	Pass
46	5230	21.45	22.42	22.17	22.17	644.096	28.09	30	Pass
151	5755	23.02	23.18	24.54	21.79	844.105	29.26	30	Pass
159	5795	24.08	23.88	24.14	22.61	942.015	29.74	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
36	5180	20.19	20.83	20.65	20.57	455.46	26.58	30	Pass
40	5200	21.00	21.27	21.37	21.26	530.757	27.25	30	Pass
48	5240	21.11	21.44	21.41	21.22	539.209	27.32	30	Pass
149	5745	23.17	23.35	24.85	21.98	886.811	29.48	30	Pass
157	5785	23.32	23.48	24.76	22.09	898.927	29.54	30	Pass
165	5825	23.28	23.33	23.75	22.18	830.862	29.20	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	18.88	19.09	19.20	19.20	324.7	25.11	30	Pass
46	5230	21.59	22.43	22.27	22.29	657.44	28.18	30	Pass
151	5755	23.18	23.25	24.65	21.83	863.794	29.36	30	Pass
159	5795	24.13	23.98	24.21	22.65	956.275	29.81	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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	5210	17.79	18.10	18.19	18.07	254.912	24.06	30	Pass
155	5775	18.66	21.35	20.20	20.07	416.094	26.19	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.45 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

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				
36	5180	20.37	20.92	20.79	20.59	466.989	26.69	30	Pass
40	5200	21.17	21.43	21.39	21.33	543.466	27.35	30	Pass
48	5240	21.29	21.56	21.43	21.35	553.258	27.43	30	Pass
149	5745	23.24	23.36	24.95	22.13	903.546	29.56	30	Pass
157	5785	23.37	23.64	24.83	22.24	920.059	29.64	30	Pass
165	5825	23.29	23.44	23.76	22.35	843.58	29.26	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the directional gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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				
38	5190	19.02	19.19	19.35	19.26	333.217	25.23	30	Pass
46	5230	21.62	22.45	22.33	22.43	**666.99**	28.24	30	Pass
151	5755	23.26	23.37	24.84	21.96	890.932	29.50	30	Pass
159	5795	24.16	24.03	24.36	22.75	974.808	29.89	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

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	5210	17.92	18.21	18.37	18.12	261.736	24.18	30	Pass
155	5775	18.73	21.47	20.22	20.21	425.077	26.28	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 5.31 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 5.45 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				
36	5180	20.04	20.74	20.58	20.41	443.643	26.47	28.94	Pass
40	5200	20.87	21.17	21.37	21.25	523.509	27.19	28.94	Pass
48	5240	21.00	21.31	21.34	21.07	524.794	27.20	28.94	Pass
149	5745	22.03	22.26	23.76	20.88	688.092	28.38	28.84	Pass
157	5785	22.19	22.46	23.67	20.94	698.77	28.44	28.84	Pass
165	5825	22.67	22.67	23.12	21.55	717.542	28.56	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
38	5190	18.72	18.99	19.17	19.03	316.315	25.00	28.94	Pass
46	5230	21.45	22.42	22.17	22.17	644.096	28.09	28.94	Pass
151	5755	21.94	22.25	23.46	20.76	665.322	28.23	28.84	Pass
159	5795	23.01	22.85	23.13	21.53	740.561	28.70	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
36	5180	20.19	20.83	20.65	20.57	455.46	26.58	28.94	Pass
40	5200	21.00	21.27	21.37	21.26	530.757	27.25	28.94	Pass
48	5240	21.11	21.44	21.41	21.22	539.209	27.32	28.94	Pass
149	5745	22.10	22.31	23.86	20.97	700.482	28.45	28.84	Pass
157	5785	22.26	22.52	23.69	20.99	706.613	28.49	28.84	Pass
165	5825	22.73	22.80	23.20	21.66	733.914	28.66	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
38	5190	18.88	19.09	19.20	19.20	324.7	25.11	28.94	Pass
46	5230	21.59	22.43	22.27	22.29	657.44	28.18	28.94	Pass
151	5755	22.16	22.21	23.60	20.81	680.369	28.33	28.84	Pass
159	5795	23.06	22.91	23.17	21.62	750.438	28.75	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
42	5210	17.79	18.10	18.19	18.07	254.912	24.06	28.94	Pass
155	5775	18.66	21.35	20.20	20.07	416.094	26.19	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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 (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				
36	5180	20.37	20.92	20.79	20.59	466.989	26.69	28.94	Pass
40	5200	21.17	21.43	21.39	21.33	543.466	27.35	28.94	Pass
48	5240	21.29	21.56	21.43	21.35	553.258	27.43	28.94	Pass
149	5745	22.22	22.42	23.89	21.18	717.433	28.56	28.84	Pass
157	5785	22.34	22.57	23.73	21.21	720.291	28.58	28.84	Pass
165	5825	22.77	22.95	23.31	21.77	751.08	28.76	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
38	5190	19.02	19.19	19.35	19.26	333.217	25.23	28.94	Pass
46	5230	21.62	22.45	22.33	22.43	**666.99**	28.24	28.94	Pass
151	5755	22.24	22.33	23.86	20.92	705.311	28.48	28.84	Pass
159	5795	23.10	22.98	23.26	21.70	**762.53**	28.82	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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				
42	5210	17.92	18.21	18.37	18.12	261.736	24.18	28.94	Pass
155	5775	18.73	21.47	20.22	20.21	425.077	26.28	28.84	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 7.06 dBi > 6 dBi, so the output power limit shall be reduced to 30-(7.06-6) = 28.94 dBm.
3. 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.

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

Test Mode I: FAP-433G_Radio 3

802.11a CDD

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				
149	5745	21.43	20.98	21.14	20.64	510.204	27.08	30	Pass
157	5785	21.73	23.39	21.83	21.53	661.847	28.21	30	Pass
165	5825	21.74	21.69	21.37	21.79	584.946	27.67	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
149	5745	21.47	20.31	20.40	20.72	475.454	26.77	30	Pass
157	5785	21.97	23.62	22.01	23.51	770.64	28.87	30	Pass
165	5825	20.40	20.65	20.57	20.76	459.144	26.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	19.74	19.63	19.18	19.23	352.519	25.47	30	Pass
159	5795	20.37	20.25	19.96	20.06	415.101	26.18	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
149	5745	21.48	20.45	20.57	20.82	486.207	26.87	30	Pass
157	5785	22.12	23.66	22.05	23.67	788.25	28.97	30	Pass
165	5825	20.46	20.66	20.75	20.92	469.895	26.72	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	19.77	19.72	19.22	19.30	357.206	25.53	30	Pass
159	5795	20.38	20.33	20.14	20.20	425.014	26.28	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
155	5775	16.75	16.49	16.67	16.70	185.091	22.67	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi,, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

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				
149	5745	21.54	20.57	20.73	20.84	496.229	26.96	30	Pass
157	5785	22.14	23.69	22.06	23.78	**797.041**	29.01	30	Pass
165	5825	20.64	20.83	20.78	20.94	480.777	26.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
151	5755	19.78	19.84	19.32	19.33	362.654	25.59	30	Pass
159	5795	20.39	20.48	20.17	20.21	430.028	26.33	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. 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) CDD

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				
155	5775	16.94	16.62	16.73	16.78	190.092	22.79	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-3, 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				
149	5745	21.47	20.31	20.40	20.72	475.454	26.77	27.74	Pass
157	5785	20.49	22.04	20.42	22.14	545.723	27.37	27.74	Pass
165	5825	20.40	20.65	20.57	20.76	459.144	26.62	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	19.74	19.63	19.18	19.23	352.519	25.47	27.74	Pass
159	5795	20.37	20.25	19.96	20.06	415.101	26.18	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
149	5745	21.48	20.45	20.57	20.82	486.207	26.87	27.74	Pass
157	5785	20.58	22.09	20.50	22.14	552.088	27.42	27.74	Pass
165	5825	20.46	20.66	20.75	20.92	469.895	26.72	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	19.77	19.72	19.22	19.30	357.206	25.53	27.74	Pass
159	5795	20.38	20.33	20.14	20.20	425.014	26.28	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
155	5775	16.75	16.49	16.67	16.70	185.091	22.67	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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 (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				
149	5745	21.54	20.57	20.73	20.84	496.229	26.96	27.74	Pass
157	5785	20.70	22.14	20.62	22.31	**566.733**	27.53	27.74	Pass
165	5825	20.64	20.83	20.78	20.94	480.777	26.82	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
151	5755	19.78	19.84	19.32	19.33	362.654	25.59	27.74	Pass
159	5795	20.39	20.48	20.17	20.21	430.028	26.33	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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				
155	5775	16.94	16.62	16.73	16.78	190.092	22.79	27.74	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. 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.

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

Test Mode K: FAP-433G_Scanning Radio

802.11a CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.67	14.71	58.889	17.70	30	Pass
40	5200	17.66	17.82	118.879	20.75	30	Pass
48	5240	18.45	18.26	136.973	21.37	30	Pass
149	5745	21.45	21.48	280.242	24.48	30	Pass
157	5785	22.33	22.41	**345.182**	25.38	30	Pass
165	5825	21.58	21.63	289.426	24.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.15	14.18	52.174	17.17	30	Pass
40	5200	16.24	16.36	85.316	19.31	30	Pass
48	5240	18.73	18.23	141.265	21.50	30	Pass
149	5745	21.07	21.22	260.484	24.16	30	Pass
157	5785	21.16	21.27	264.624	24.23	30	Pass
165	5825	21.44	21.35	275.929	24.41	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.11	13.23	41.468	16.18	30	Pass
46	5230	16.10	16.23	82.71	19.18	30	Pass
151	5755	18.53	18.52	142.402	21.54	30	Pass
159	5795	20.23	20.20	210.302	23.23	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.22	14.32	53.463	17.28	30	Pass
40	5200	16.29	16.44	86.69	19.38	30	Pass
48	5240	18.84	18.24	143.223	21.56	30	Pass
149	5745	21.17	21.22	263.412	24.21	30	Pass
157	5785	21.17	21.44	270.391	24.32	30	Pass
165	5825	21.44	21.50	280.669	24.48	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.29	13.27	42.579	16.29	30	Pass
46	5230	16.26	16.36	85.509	19.32	30	Pass
151	5755	18.55	18.67	145.266	21.62	30	Pass
159	5795	20.24	20.22	210.78	23.24	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	12.59	12.62	36.434	15.62	30	Pass
155	5775	16.60	16.80	93.609	19.71	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	14.23	14.33	53.587	17.29	30	Pass
40	5200	16.41	16.52	88.627	19.48	30	Pass
48	5240	18.93	18.42	**147.665**	21.69	30	Pass
149	5745	21.28	21.39	271.997	24.35	30	Pass
157	5785	21.36	21.45	276.41	24.42	30	Pass
165	5825	21.58	21.63	289.426	24.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.33	13.39	43.355	16.37	30	Pass
46	5230	16.45	16.48	88.62	19.48	30	Pass
151	5755	18.67	18.69	147.581	21.69	30	Pass
159	5795	20.31	20.39	216.795	23.36	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	12.69	12.71	37.242	15.71	30	Pass
155	5775	16.71	16.82	94.965	19.78	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.39 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 2.81 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

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

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				
36	5180	6.86	6.97	7.17	6.86	0.47	13.46	16.06	Pass
40	5200	9.50	9.55	9.63	9.52	0.47	16.04	16.06	Pass
48	5240	9.52	9.57	9.43	9.31	0.47	15.95	16.06	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 6.94 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.94-6) = 16.06 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				
36	5180	6.36	6.27	6.61	6.38	0.27	12.70	16.06	Pass
40	5200	9.63	9.69	9.45	9.70	0.27	15.91	16.06	Pass
48	5240	9.52	9.60	9.83	9.42	0.27	15.89	16.06	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 6.94 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.94-6) = 16.06 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				
38	5190	1.02	0.43	0.67	0.98	0.60	7.40	16.06	Pass
46	5230	4.97	5.02	5.28	4.79	0.60	11.64	16.06	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 6.94 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.94-6) = 16.06 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				
42	5210	-2.05	-2.33	-1.94	-2.42	0.28	4.12	16.06	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 6.94 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.94-6) = 16.06 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					
149	5745	0.35	0.80	0.57	0.67	6.62	0.47	9.31	29.69	Pass
157	5785	0.36	0.83	0.55	0.46	6.57	0.47	9.26	29.69	Pass
165	5825	0.44	0.80	0.56	0.41	6.58	0.47	9.27	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					
149	5745	-0.88	-0.73	-0.35	-1.40	5.2	0.27	7.69	29.69	Pass
157	5785	-0.65	-0.70	-0.47	-1.02	5.32	0.27	7.81	29.69	Pass
165	5825	-0.66	-0.85	-0.34	-1.24	5.26	0.27	7.75	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.

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					
151	5755	-4.41	-4.38	-4.13	-4.71	1.62	0.6	4.44	29.69	Pass
159	5795	-4.46	-4.52	-4.11	-4.79	1.56	0.6	4.38	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.

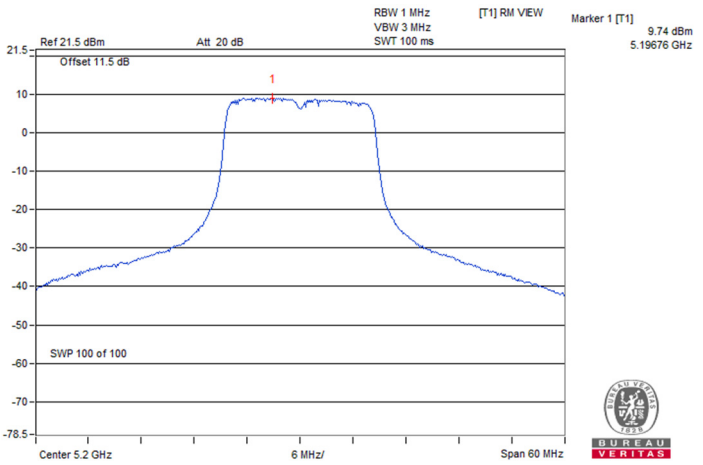
802.11ax (HE80)

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					
155	5775	-8.76	-8.51	-8.24	-8.96	-2.59	0.28	-0.09	29.69	Pass

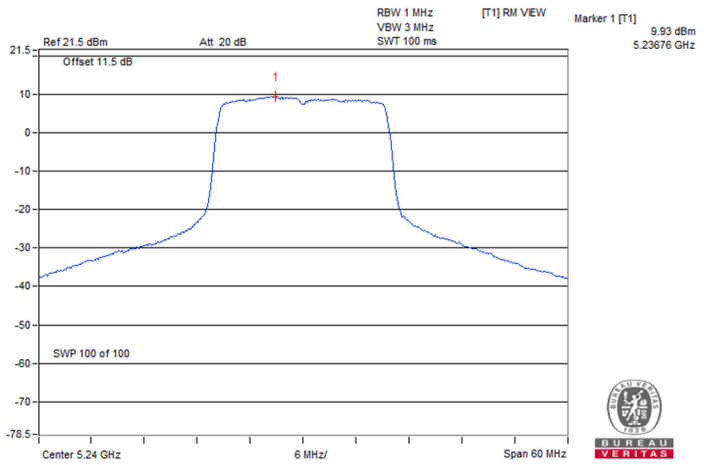
Notes:

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.

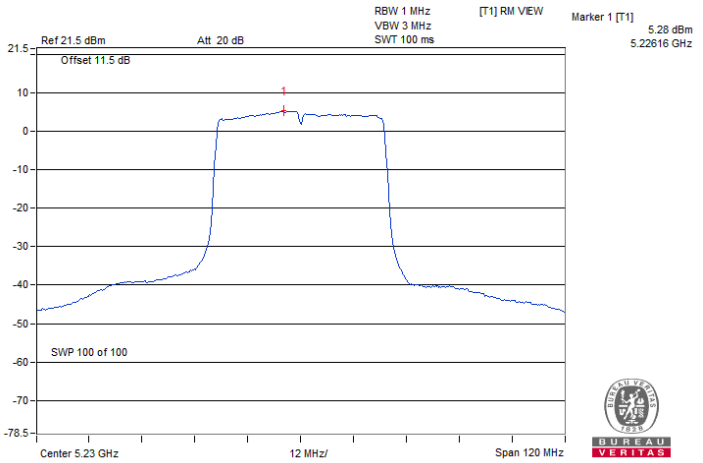
Spectrum Plot of Maximum Value



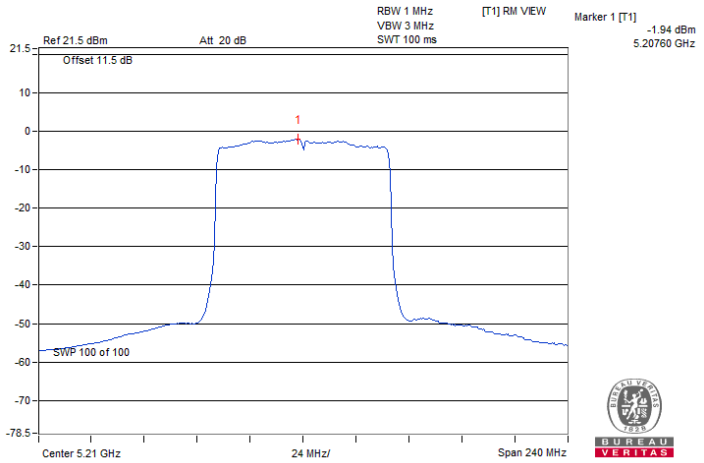
802.11a / Chain 2 : CH 40



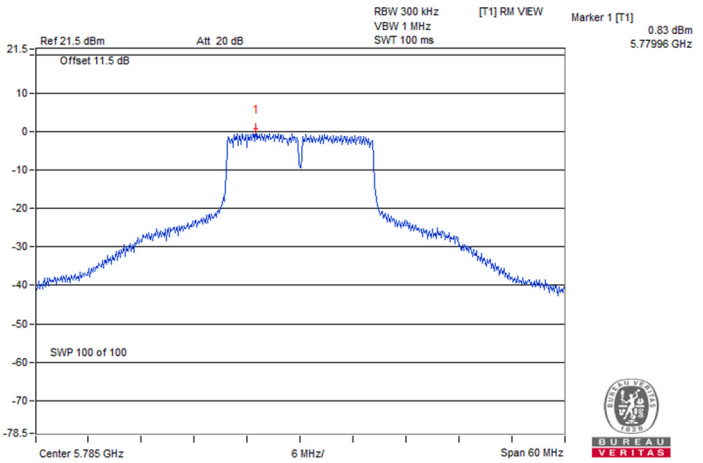
802.11ax (HE20) / Chain 2 : CH 48



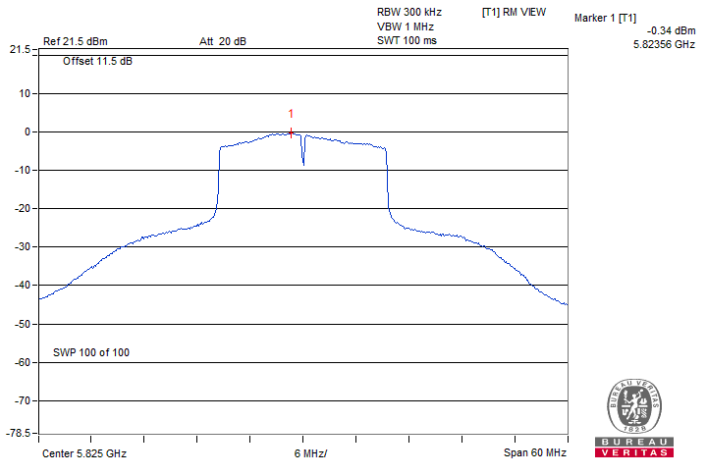
802.11ax (HE40) / Chain 2 : CH 46



802.11ax (HE80) / Chain 2 : CH 42

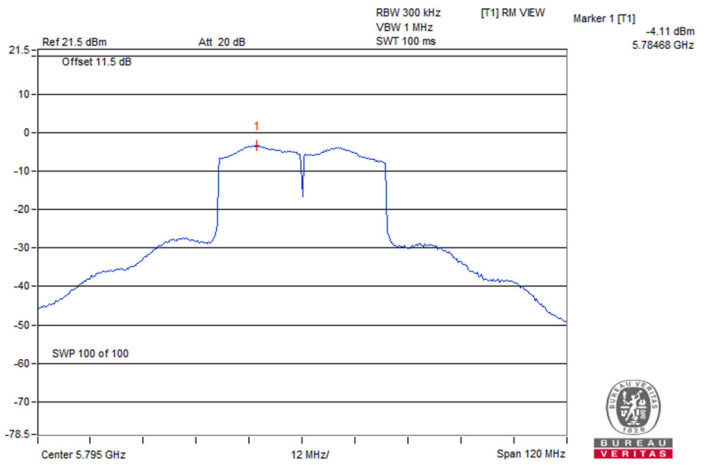


802.11a / Chain 1 : CH 157

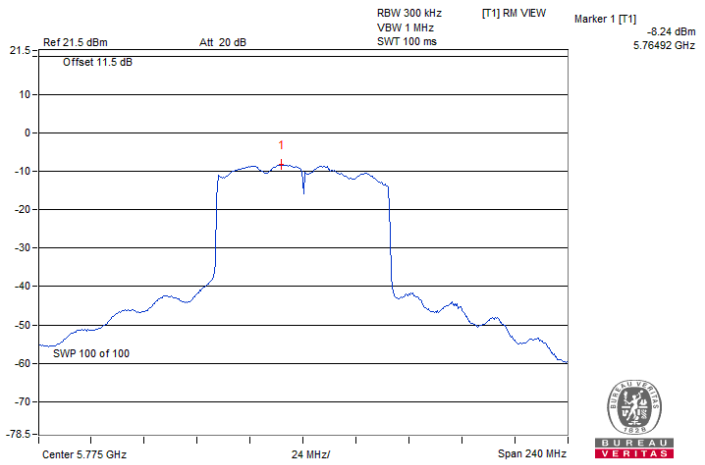


802.11ax (HE20) / Chain 2 : CH 165

Spectrum Plot of Maximum Value



802.11ax (HE40) / Chain 2 : CH 159



802.11ax (HE80) / Chain 2 : CH 155

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

Test Mode C: FAP-431G_Radio 3

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					
149	5745	-0.28	0.21	-0.45	0.29	5.97	0.44	8.63	29.09	Pass
157	5785	-0.20	0.39	-0.31	0.73	6.19	0.44	8.85	29.09	Pass
165	5825	-0.19	0.30	-0.40	0.30	6.03	0.44	8.69	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					
149	5745	-5.85	-5.96	-5.85	-5.74	0.17	0.68	3.07	29.09	Pass
157	5785	-4.53	-3.99	-4.57	-3.54	1.88	0.68	4.78	29.09	Pass
165	5825	-4.87	-5.08	-4.86	-4.78	1.12	0.68	4.02	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					
151	5755	-9.37	-9.81	-9.54	-9.51	-3.53	0.68	-0.63	29.09	Pass
159	5795	-9.35	-9.28	-9.48	-8.96	-3.24	0.68	-0.34	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.

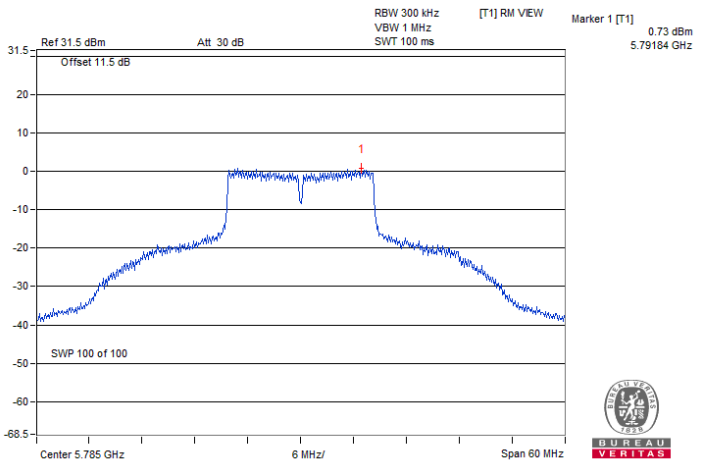
802.11ax (HE80)

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					
155	5775	-14.57	-14.84	-14.70	-14.45	-8.62	0.75	-5.65	29.09	Pass

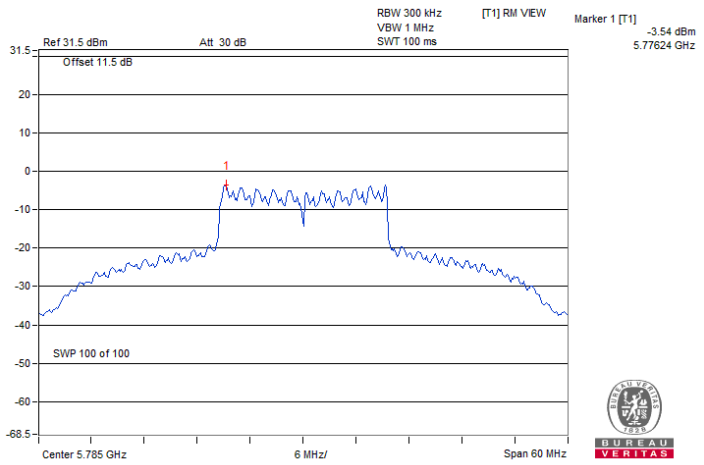
Notes:

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.

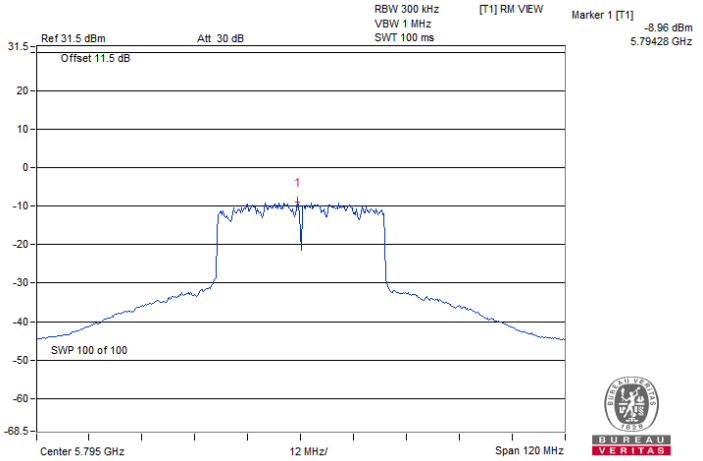
Spectrum Plot of Maximum Value



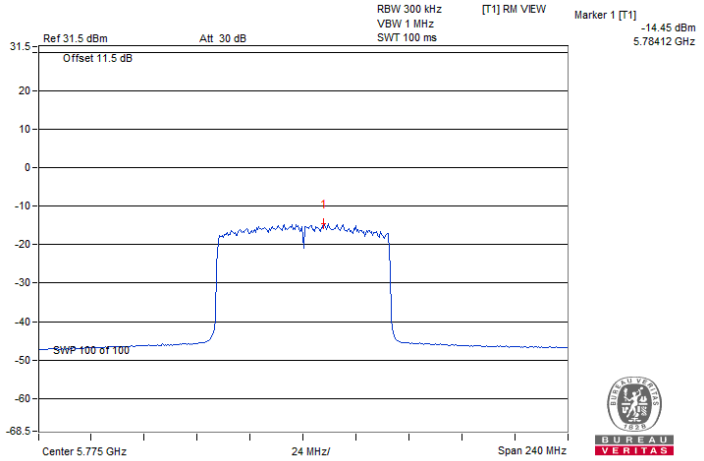
802.11a / Chain 3 : CH 157



802.11ax (HE20) / Chain 3 : CH 157



802.11ax (HE40) / Chain 3 : CH 159



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode E: FAP-431G_Scanning Radio

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				
36	5180	2.16	1.82	0.43	5.43	17.00	Pass
40	5200	5.10	4.78	0.43	8.38	17.00	Pass
48	5240	5.55	4.97	0.43	8.71	17.00	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 1.87 dBi < 6dBi, so the power density limit shall not be reduced.

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				
36	5180	1.57	1.22	0.72	5.13	17.00	Pass
40	5200	4.28	3.83	0.72	7.79	17.00	Pass
48	5240	5.26	4.94	0.72	8.83	17.00	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 1.87 dBi < 6dBi, so the power density limit shall not be reduced.

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				
38	5190	-2.09	-2.65	0.74	1.39	17.00	Pass
46	5230	0.85	0.22	0.74	4.30	17.00	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 1.87 dBi < 6dBi, so the power density limit shall not be reduced.

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				
42	5210	-5.85	-5.93	0.71	-2.17	17.00	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 1.87 dBi < 6dBi, 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					
149	5745	0.89	0.80	3.86	0.43	6.51	30	Pass
157	5785	0.94	0.76	3.86	0.43	6.51	30	Pass
165	5825	1.24	1.14	4.2	0.43	6.85	30	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 1.57 dBi < 6 dBi, so the power density limit shall not be reduced.

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					
149	5745	-4.33	-4.37	-1.34	0.72	1.60	30	Pass
157	5785	-2.79	-2.87	0.18	0.72	3.12	30	Pass
165	5825	-3.03	-3.17	-0.09	0.72	2.85	30	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 1.57 dBi < 6 dBi, so the power density limit shall not be reduced.

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					
151	5755	-7.39	-7.51	-4.44	0.74	-1.48	30	Pass
159	5795	-6.36	-6.84	-3.58	0.74	-0.62	30	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 1.57 dBi < 6 dBi, so the power density limit shall not be reduced.

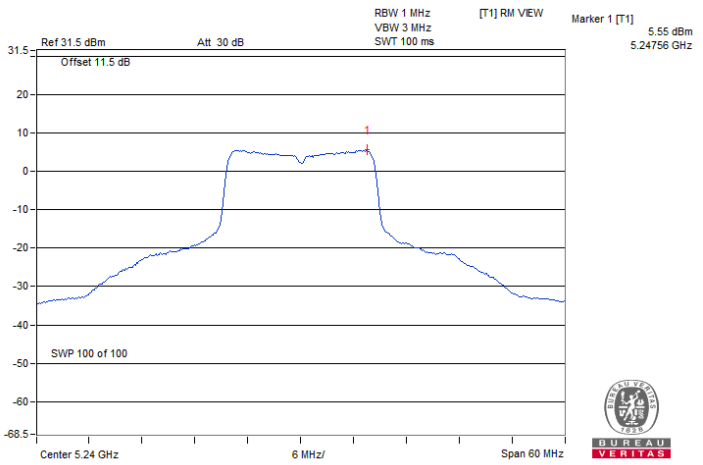
802.11ax (HE80)

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					
155	5775	-12.70	-12.98	-9.83	0.71	-6.90	30	Pass

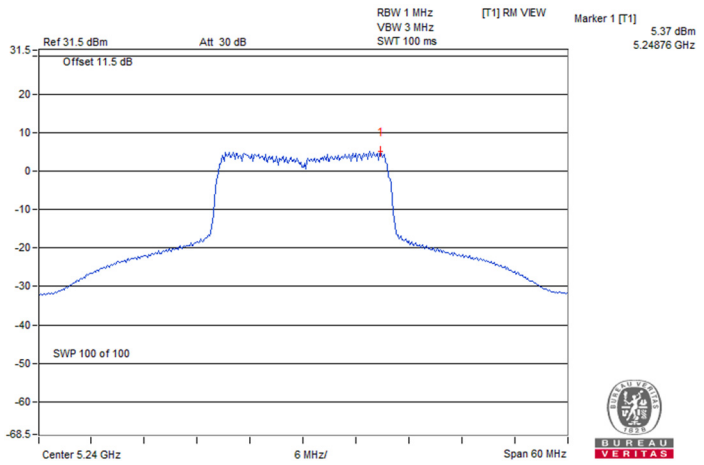
Notes:

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 1.57 dBi < 6 dBi, so the power density limit shall not be reduced.

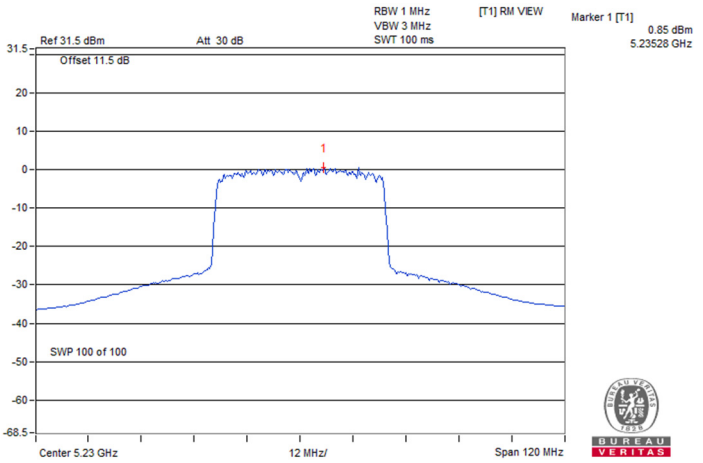
Spectrum Plot of Maximum Value



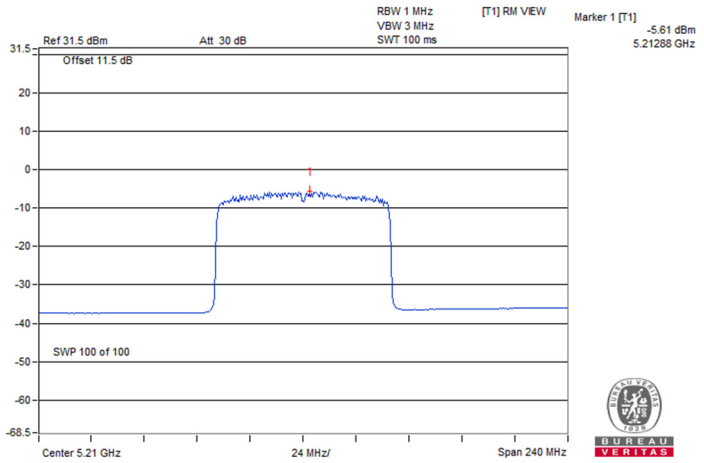
802.11a / Chain 0 : CH 48



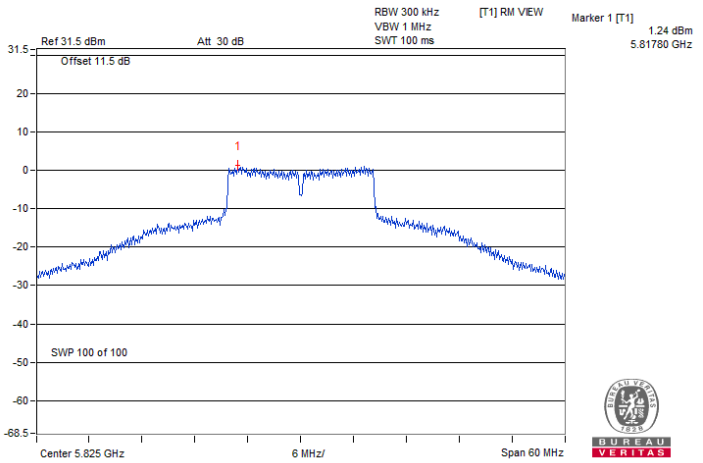
802.11ax (HE20) / Chain 0 : CH 48



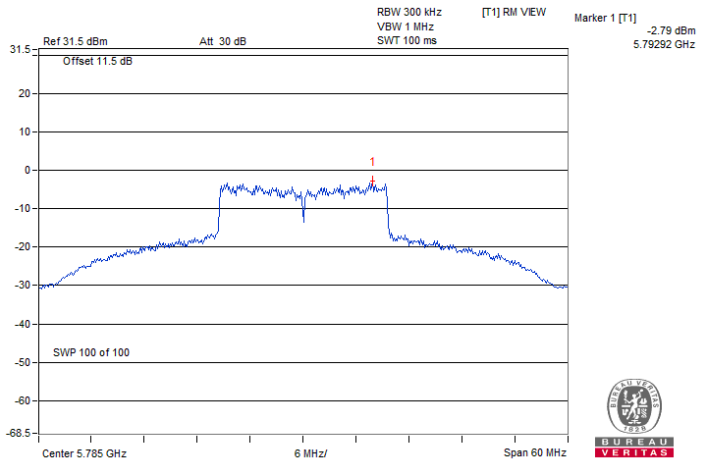
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE80) / Chain 0 : CH 42

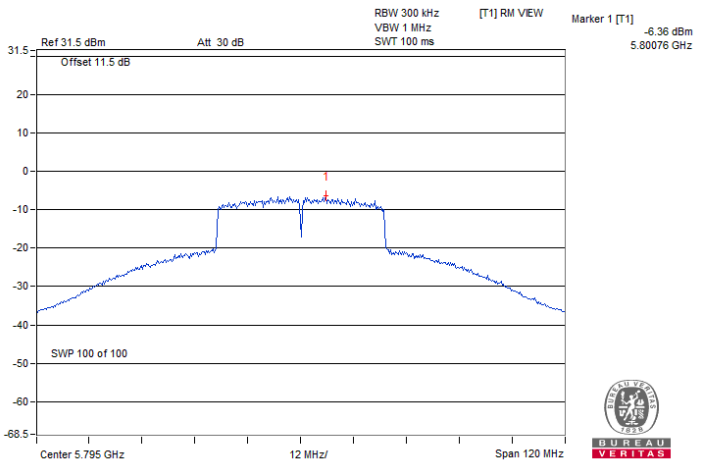


802.11a / Chain 0 : CH 165

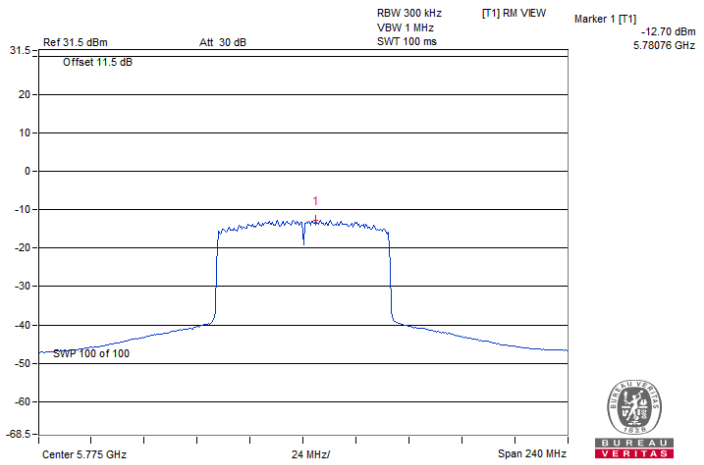


802.11ax (HE20) / Chain 0 : CH 157

Spectrum Plot of Maximum Value



802.11ax (HE40) / Chain 0 : CH 159



802.11ax (HE80) / Chain 0 : CH 155

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

Test Mode G: 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				
36	5180	8.76	8.41	8.29	8.95	0.35	14.98	15.94	Pass
40	5200	9.19	9.59	8.47	8.84	0.35	15.41	15.94	Pass
48	5240	9.07	9.41	9.63	8.76	0.35	15.60	15.94	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-1, the directional gain is 7.06 dBi > 6dBi, so the power density limit shall be reduced to 17-(7.06-6) = 15.94 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				
36	5180	6.32	7.97	7.39	6.69	0.27	13.43	15.94	Pass
40	5200	9.60	9.64	9.55	9.15	0.27	15.78	15.94	Pass
48	5240	9.59	9.39	8.75	8.61	0.27	15.40	15.94	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-1, the directional gain is 7.06 dBi > 6dBi, so the power density limit shall be reduced to 17-(7.06-6) = 15.94 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				
38	5190	2.45	3.21	2.45	3.17	0.30	9.16	15.94	Pass
46	5230	6.13	5.65	6.35	6.69	0.30	12.54	15.94	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-1, the directional gain is 7.06 dBi > 6dBi, so the power density limit shall be reduced to 17-(7.06-6) = 15.94 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				
42	5210	-2.59	-1.56	-2.96	-1.57	0.32	4.21	15.94	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-1, the directional gain is 7.06 dBi > 6dBi, so the power density limit shall be reduced to 17-(7.06-6) = 15.94 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					
149	5745	2.67	2.64	0.88	2.22	8.18	0.35	10.75	28.84	Pass
157	5785	2.23	3.14	2.28	1.43	8.33	0.35	10.90	28.84	Pass
165	5825	1.74	2.14	2.45	1.12	7.91	0.35	10.48	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					
149	5745	0.80	1.46	1.06	-0.53	6.78	0.27	9.27	28.84	Pass
157	5785	0.77	1.10	1.84	-1.24	6.78	0.27	9.27	28.84	Pass
165	5825	0.71	0.83	1.34	-0.62	6.64	0.27	9.13	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					
151	5755	-2.57	-2.22	-1.81	-2.91	3.66	0.3	6.18	28.84	Pass
159	5795	-1.66	-1.85	-1.18	-6.10	3.7	0.3	6.22	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.

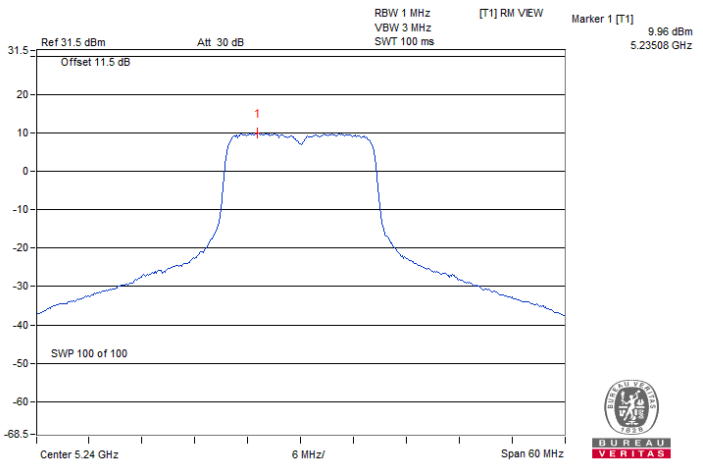
802.11ax (HE80)

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					
155	5775	-7.94	-7.13	-7.85	-8.36	-1.78	0.32	0.76	28.84	Pass

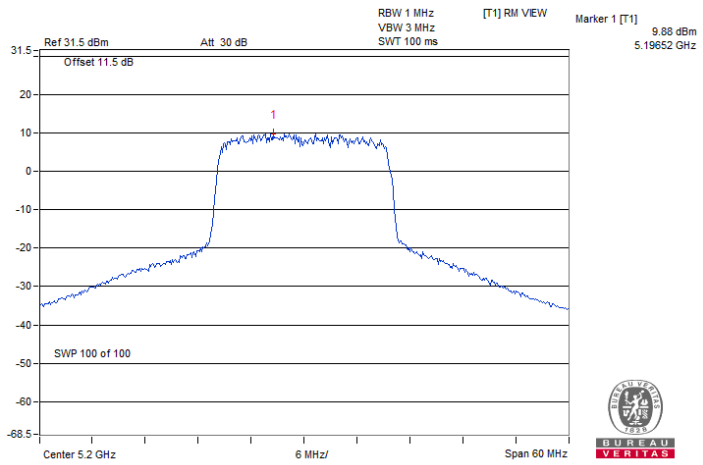
Notes:

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.

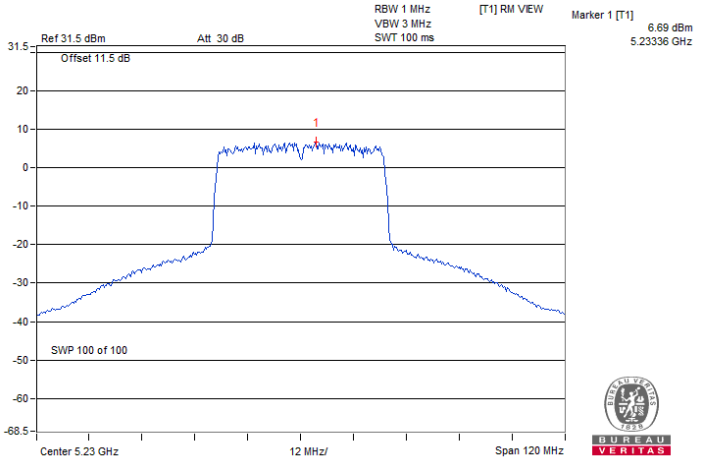
Spectrum Plot of Maximum Value



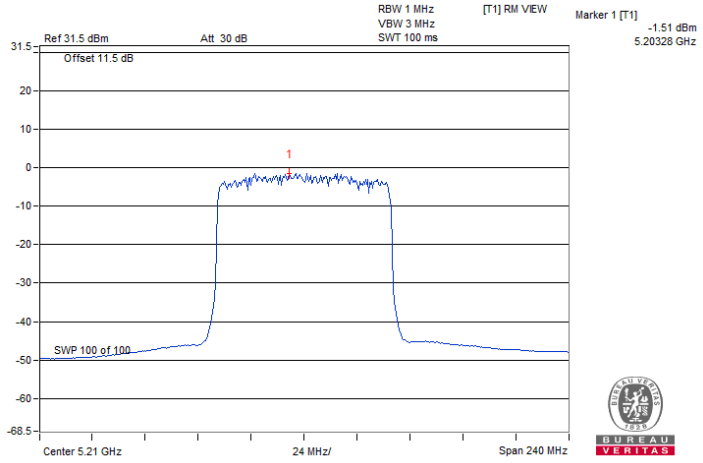
802.11a / Chain 2 : CH 48



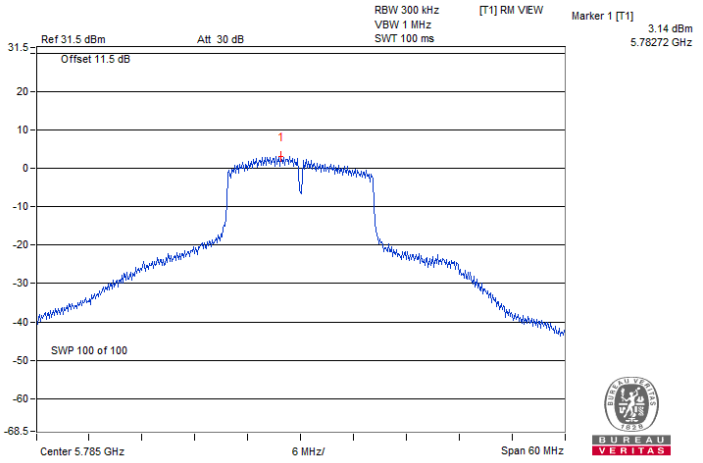
802.11ax (HE20) / Chain 1 : CH 40



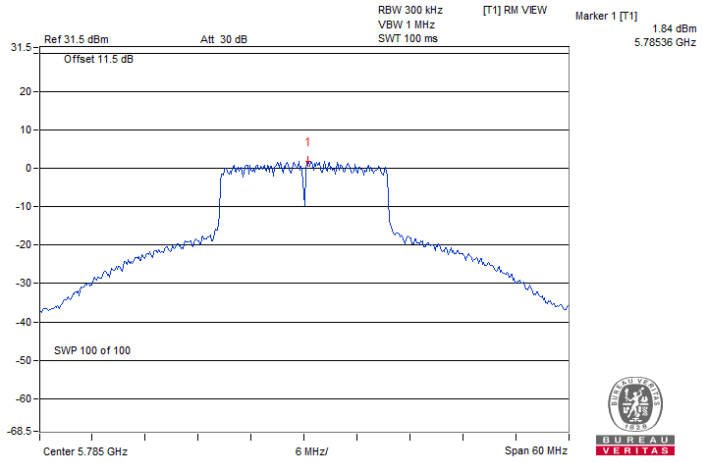
802.11ax (HE40) / Chain 3 : CH 46



802.11ax (HE80) / Chain 1 : CH 42

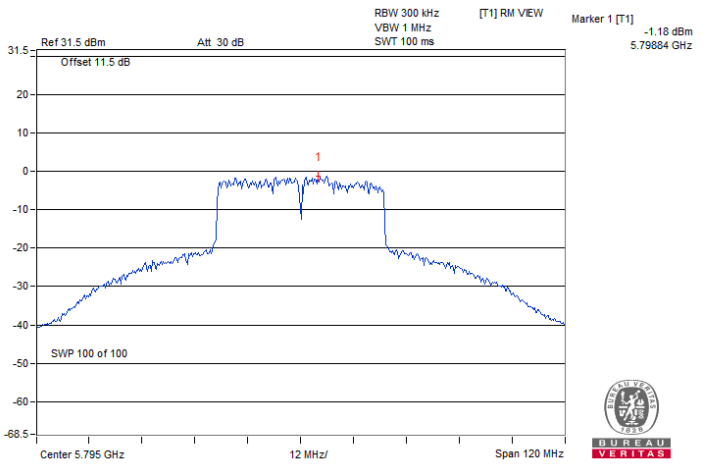


802.11a / Chain 1 : CH 157

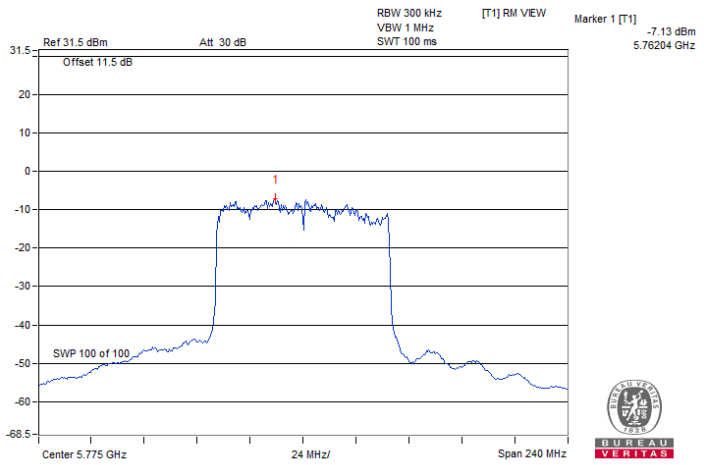


802.11ax (HE20) / Chain 2 : CH 157

Spectrum Plot of Maximum Value



802.11ax (HE40) / Chain 2 : CH 159



802.11ax (HE80) / Chain 1 : CH 155

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

Test Mode I: FAP-433G_Radio 3

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					
149	5745	-0.28	-1.16	-0.84	-1.03	5.21	0.4	7.83	27.74	Pass
157	5785	-0.51	-0.73	-0.38	-0.43	5.51	0.4	8.13	27.74	Pass
165	5825	-0.15	-0.84	-0.37	-0.60	5.54	0.4	8.16	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					
149	5745	-1.99	-1.81	-2.30	-1.88	4.03	0.76	7.01	27.74	Pass
157	5785	-1.44	0.29	-1.52	0.31	5.52	0.76	8.50	27.74	Pass
165	5825	-2.66	-2.10	-2.36	-2.11	3.72	0.76	6.70	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					
151	5755	-5.94	-5.98	-6.29	-5.81	0.02	0.75	2.99	27.74	Pass
159	5795	-6.04	-6.00	-5.95	-5.75	0.09	0.75	3.06	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.

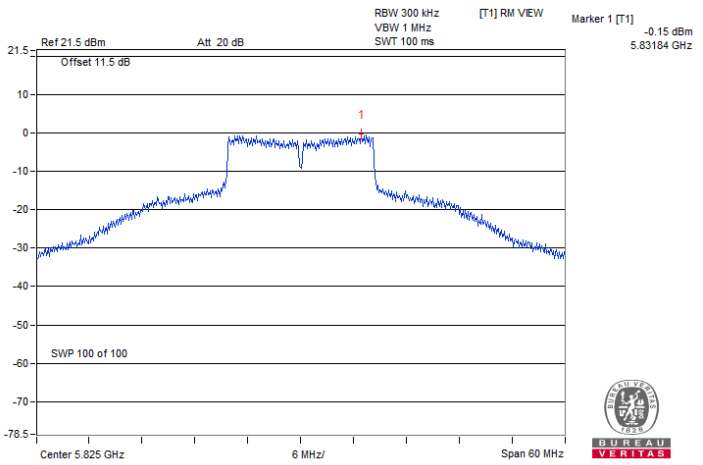
802.11ax (HE80)

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					
155	5775	-12.12	-12.07	-12.16	-12.01	-6.07	0.79	-3.06	27.74	Pass

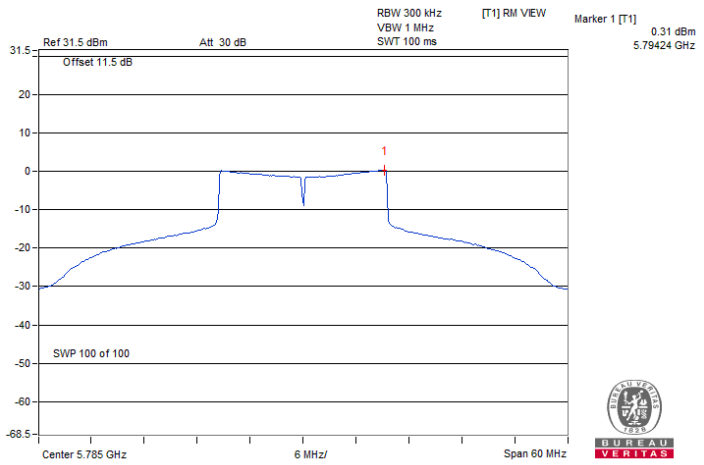
Notes:

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.

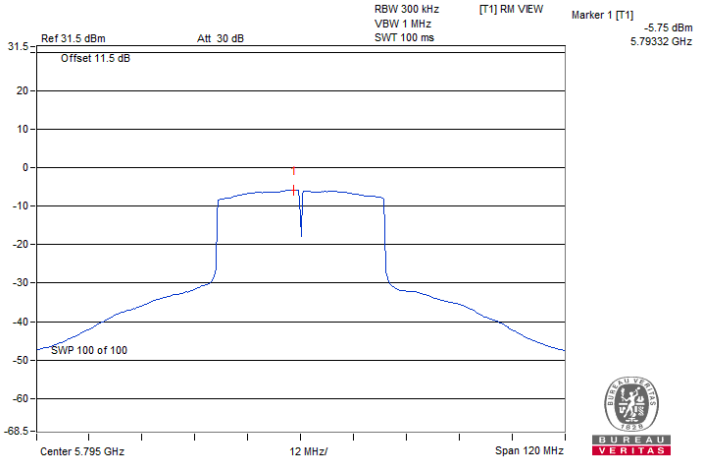
Spectrum Plot of Maximum Value



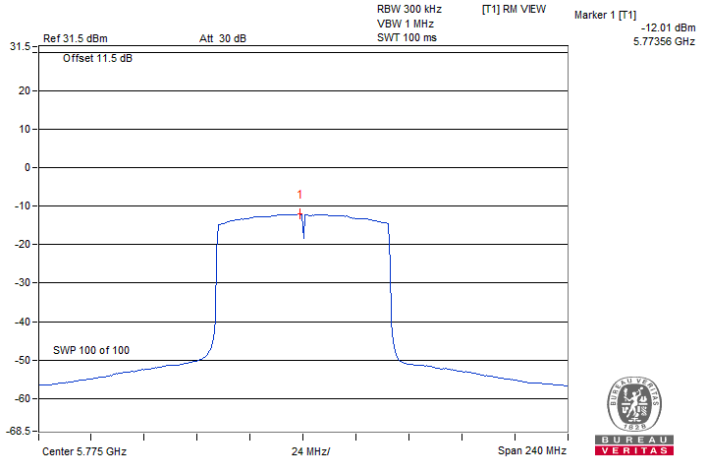
802.11a / Chain 0 : CH 165



802.11ax (HE20) / Chain 3 : CH 157



802.11ax (HE40) / Chain 3 : CH 159



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode K: FAP-433G_Scanning Radio

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				
36	5180	2.08	1.67	0.33	5.22	17.00	Pass
40	5200	5.07	4.59	0.33	8.18	17.00	Pass
48	5240	5.67	5.30	0.33	8.83	17.00	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 2.04 dBi < 6dBi, so the power density limit shall not be reduced.

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				
36	5180	1.96	1.50	0.71	5.46	17.00	Pass
40	5200	3.81	3.41	0.71	7.33	17.00	Pass
48	5240	5.27	4.98	0.71	8.85	17.00	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 2.04 dBi < 6dBi, so the power density limit shall not be reduced.

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				
38	5190	-3.37	-3.72	0.80	0.27	17.00	Pass
46	5230	-0.19	-0.56	0.80	3.44	17.00	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 2.04 dBi < 6dBi, so the power density limit shall not be reduced.

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				
42	5210	-6.97	-6.90	0.73	-3.19	17.00	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 2.04 dBi < 6dBi, 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					
149	5745	0.29	0.39	3.35	0.33	5.90	30	Pass
157	5785	-0.01	0.04	3.03	0.33	5.58	30	Pass
165	5825	0.24	0.36	3.31	0.33	5.86	30	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 2.3 dBi < 6 dBi, so the power density limit shall not be reduced.

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					
149	5745	-2.02	-1.50	1.26	0.71	4.19	30	Pass
157	5785	-1.66	-1.29	1.54	0.71	4.47	30	Pass
165	5825	-1.69	-1.59	1.37	0.71	4.30	30	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 2.3 dBi < 6 dBi, so the power density limit shall not be reduced.

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					
151	5755	-7.21	-7.39	-4.29	0.8	-1.27	30	Pass
159	5795	-5.88	-5.82	-2.84	0.8	0.18	30	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 2.3 dBi < 6 dBi, so the power density limit shall not be reduced.

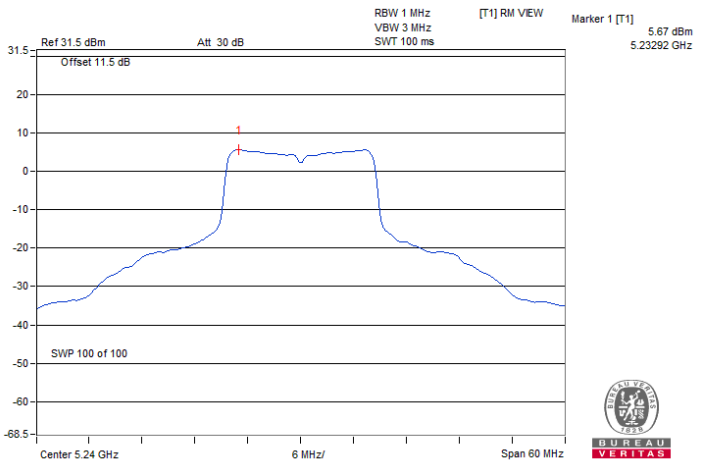
802.11ax (HE80)

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					
155	5775	-11.85	-12.04	-8.93	0.73	-5.98	30	Pass

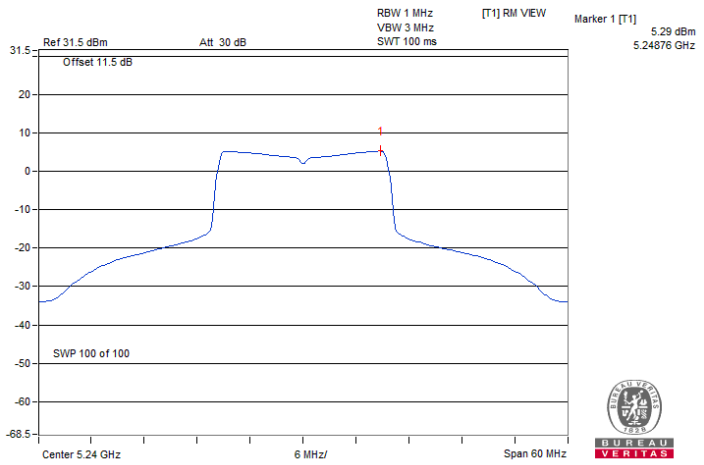
Notes:

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 2.3 dBi < 6 dBi, so the power density limit shall not be reduced.

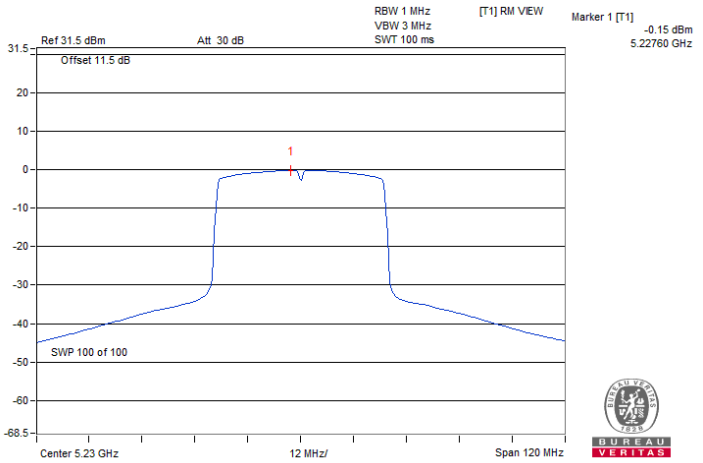
Spectrum Plot of Maximum Value



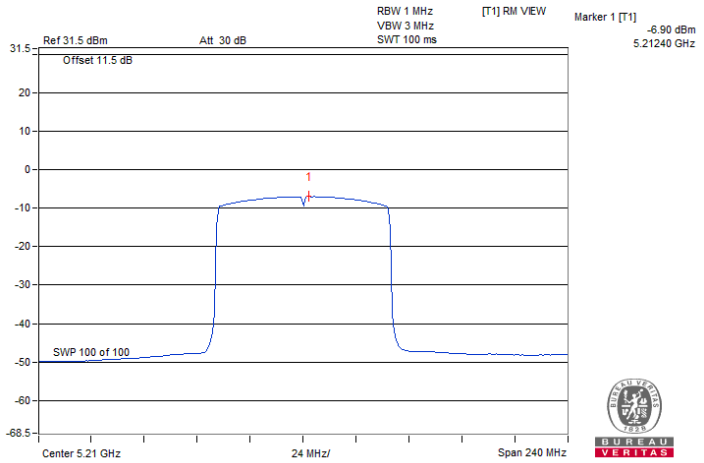
802.11a / Chain 0 : CH 48



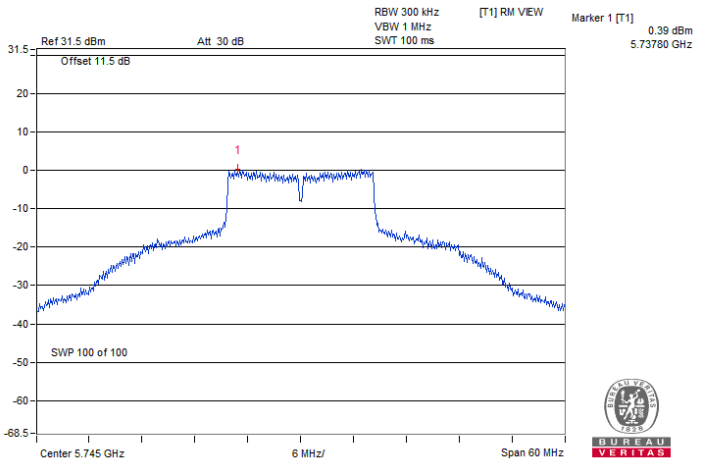
802.11ax (HE20) / Chain 0 : CH 48



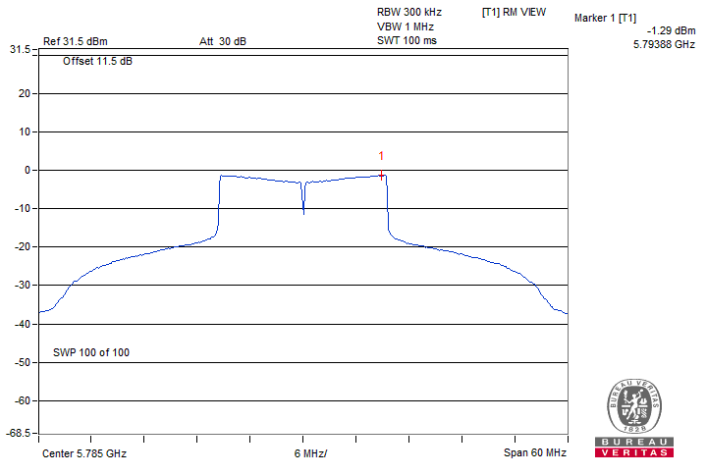
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE80) / Chain 1 : CH 42

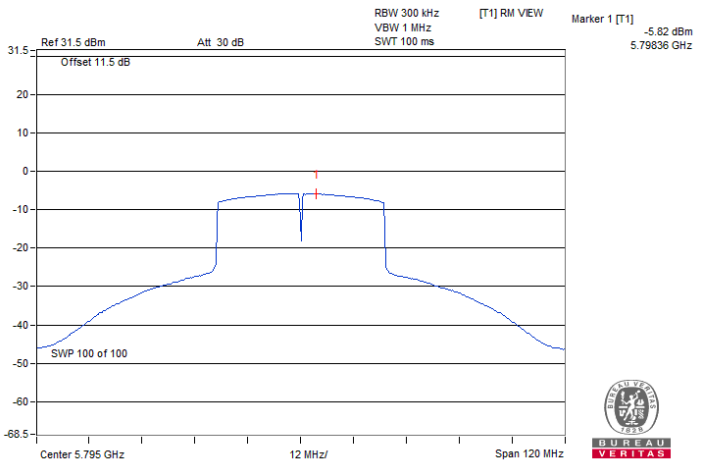


802.11a / Chain 1 : CH 149

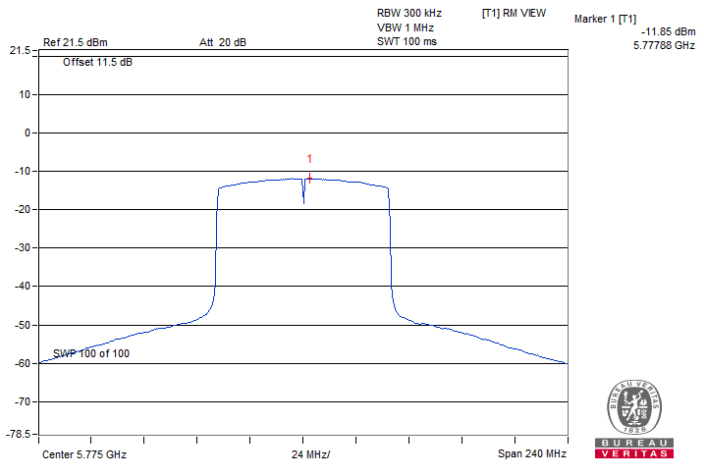


802.11ax (HE20) / Chain 1 : CH 157

Spectrum Plot of Maximum Value



802.11ax (HE40) / Chain 1 : CH 159



802.11ax (HE80) / Chain 0 : CH 155

7.3 6 dB Bandwidth

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

Test Mode A: FAP-431G_Radio 2

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	16.35	15.94	15.75	16.35	0.5	Pass
157	5785	16.35	16.36	15.56	16.31	0.5	Pass
165	5825	16.08	16.06	16.36	16.09	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	19.00	18.97	18.94	19.01	0.5	Pass
157	5785	18.94	18.38	18.95	18.78	0.5	Pass
165	5825	18.84	18.29	16.75	18.65	0.5	Pass

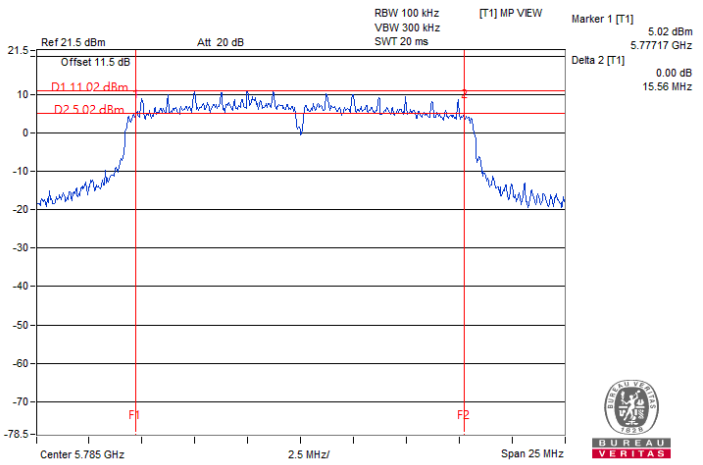
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.92	37.88	38.03	37.97	0.5	Pass
159	5795	37.90	37.20	37.78	37.86	0.5	Pass

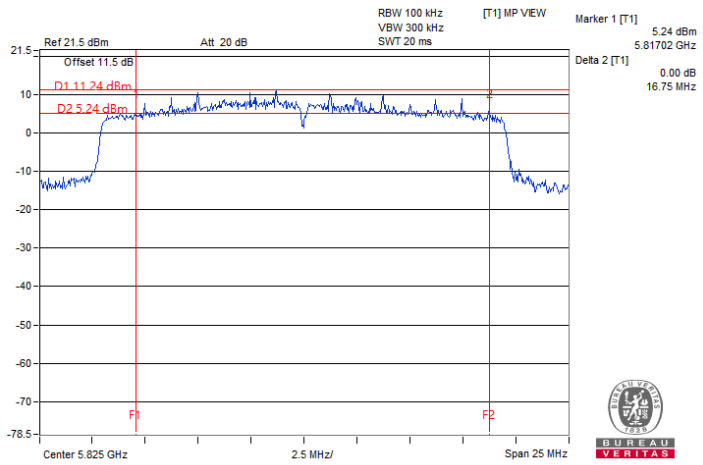
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.57	76.93	76.68	77.71	0.5	Pass

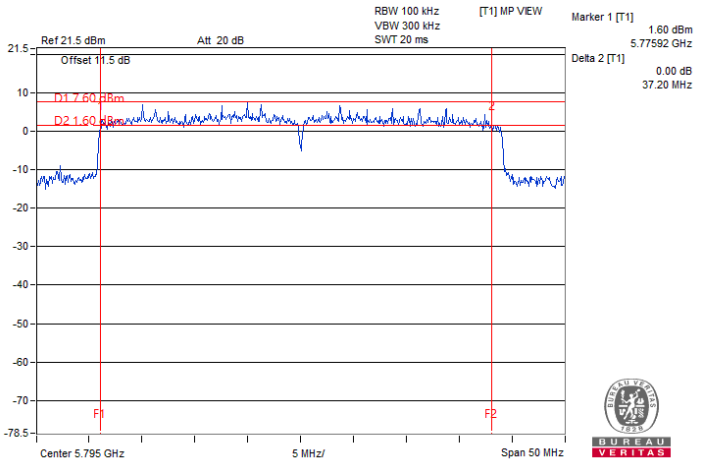
Spectrum Plot of Minimum Value



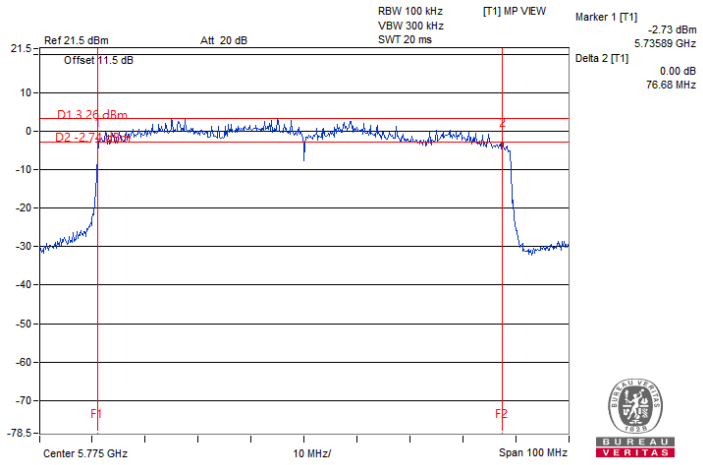
802.11a / Chain 2 : CH 157



802.11ax (HE20) / Chain 2 : CH 165



802.11ax (HE40) / Chain 1 : CH 159



802.11ax (HE80) / Chain 2 : CH 155

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

Test Mode C: FAP-431G_Radio 3

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	16.39	16.37	16.38	16.39	0.5	Pass
157	5785	16.42	16.40	16.40	16.40	0.5	Pass
165	5825	16.41	16.39	16.41	16.40	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	19.09	19.13	19.09	19.13	0.5	Pass
157	5785	19.17	19.13	19.10	19.11	0.5	Pass
165	5825	19.11	19.15	19.13	19.15	0.5	Pass

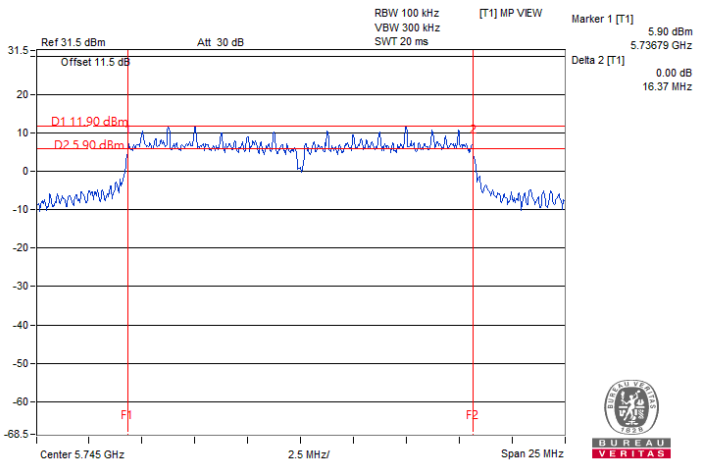
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.51	37.98	37.76	37.37	0.5	Pass
159	5795	36.71	37.55	37.53	37.54	0.5	Pass

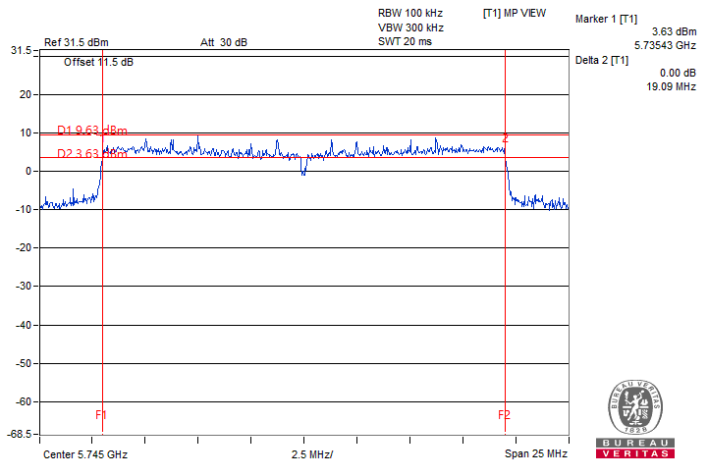
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.80	77.90	77.54	77.75	0.5	Pass

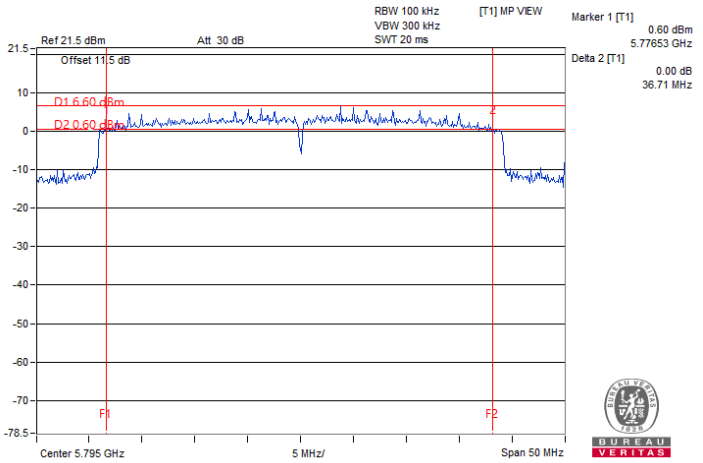
Spectrum Plot of Minimum Value



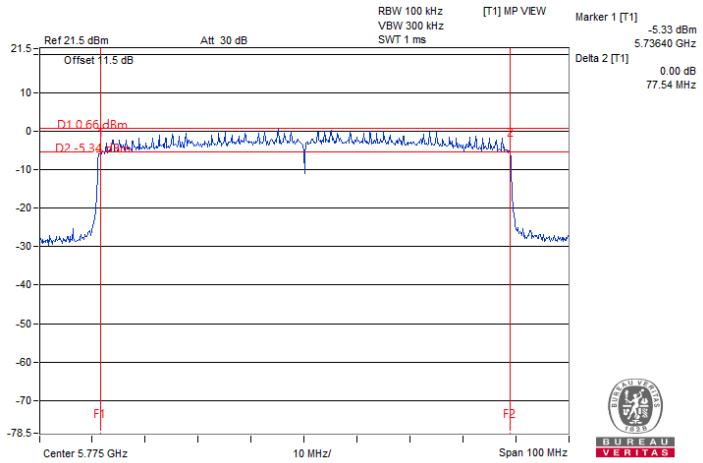
802.11a / Chain 1 : CH 149



802.11ax (HE20) / Chain 0 : CH 149



802.11ax (HE40) / Chain 0 : CH 159



802.11ax (HE80) / Chain 2 : CH 155

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

Test Mode E: FAP-431G_Scanning Radio

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	16.42	16.43	0.5	Pass
157	5785	16.42	16.44	0.5	Pass
165	5825	16.43	16.44	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	19.14	19.13	0.5	Pass
157	5785	19.11	19.13	0.5	Pass
165	5825	19.11	19.10	0.5	Pass

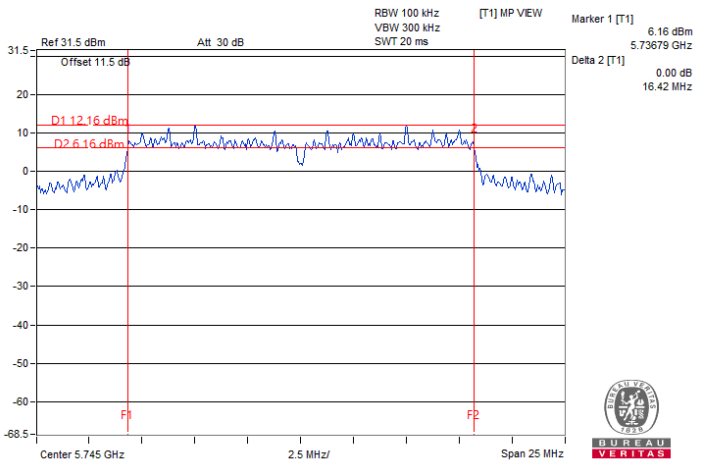
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
151	5755	37.96	37.27	0.5	Pass
159	5795	37.52	37.14	0.5	Pass

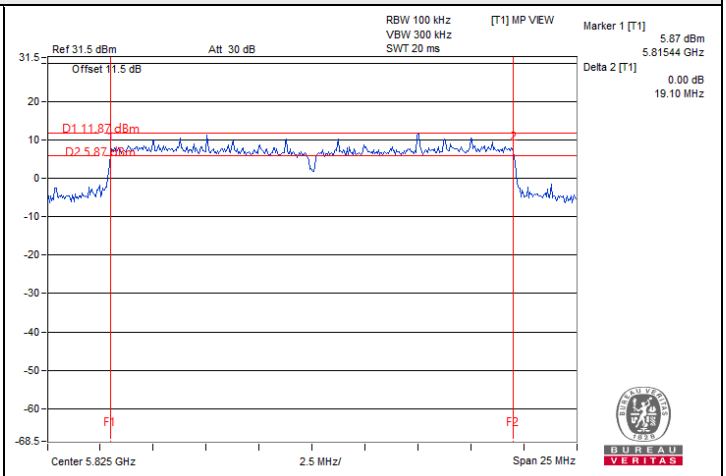
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
155	5775	77.95	77.16	0.5	Pass

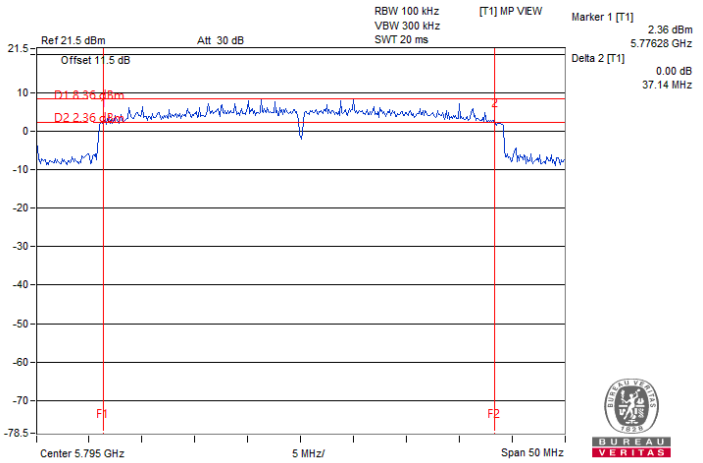
Spectrum Plot of Minimum Value



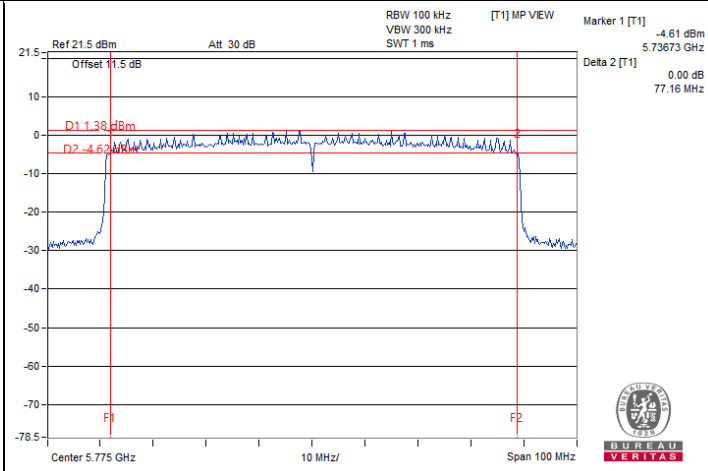
802.11a / Chain 0 : CH 149



802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 1 : CH 159



802.11ax (HE80) / Chain 1 : CH 155

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

Test Mode G: FAP-433G_Radio 2

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	16.35	15.41	16.34	16.36	0.5	Pass
157	5785	16.38	15.37	16.36	16.38	0.5	Pass
165	5825	16.38	16.35	16.39	16.34	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	18.85	18.52	18.96	19.00	0.5	Pass
157	5785	18.77	17.90	18.88	18.93	0.5	Pass
165	5825	19.03	17.37	19.00	18.90	0.5	Pass

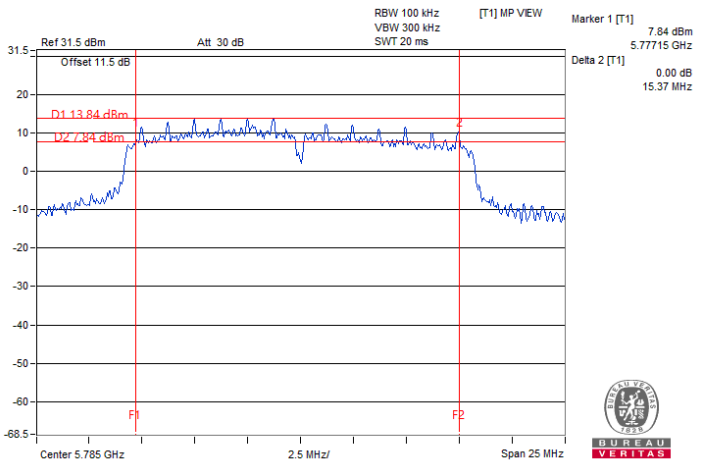
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	38.12	38.22	37.91	38.05	0.5	Pass
159	5795	38.12	38.13	37.84	37.76	0.5	Pass

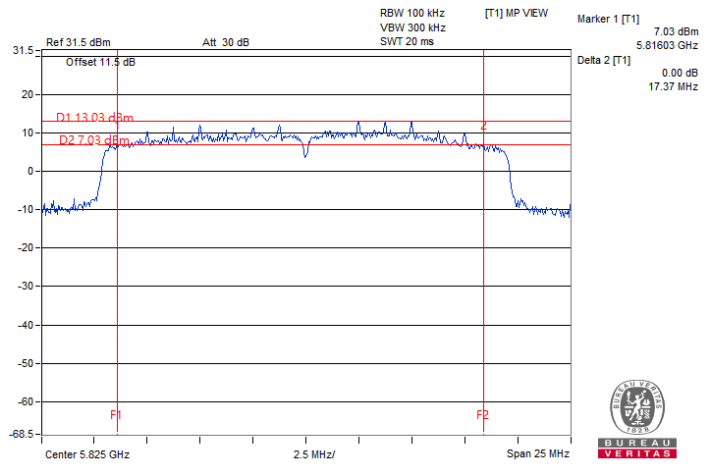
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.63	76.76	77.30	77.42	0.5	Pass

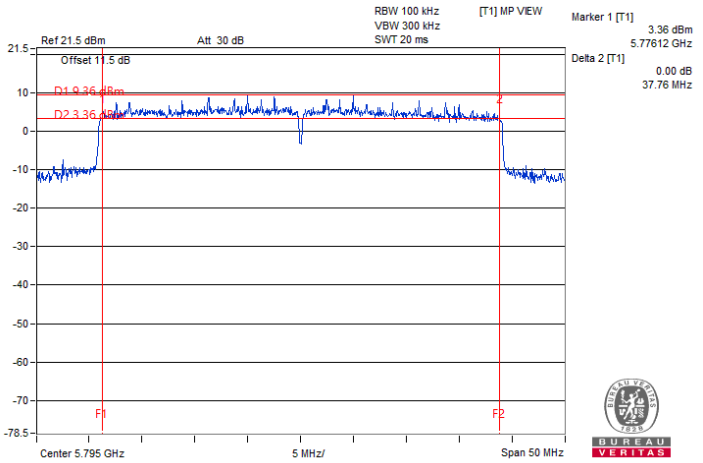
Spectrum Plot of Minimum Value



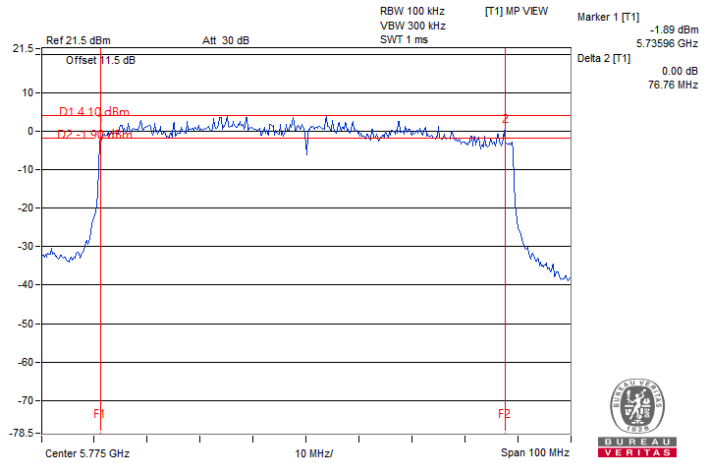
802.11a / Chain 1 : CH 157



802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 3 : CH 159



802.11ax (HE80) / Chain 1 : CH 155

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

Test Mode I: FAP-433G_Radio 3

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	16.42	16.40	16.39	16.40	0.5	Pass
157	5785	16.40	16.39	16.41	16.41	0.5	Pass
165	5825	16.41	16.41	16.40	16.41	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	19.08	19.16	19.07	19.15	0.5	Pass
157	5785	19.14	19.19	19.14	19.09	0.5	Pass
165	5825	19.15	19.14	19.14	19.16	0.5	Pass

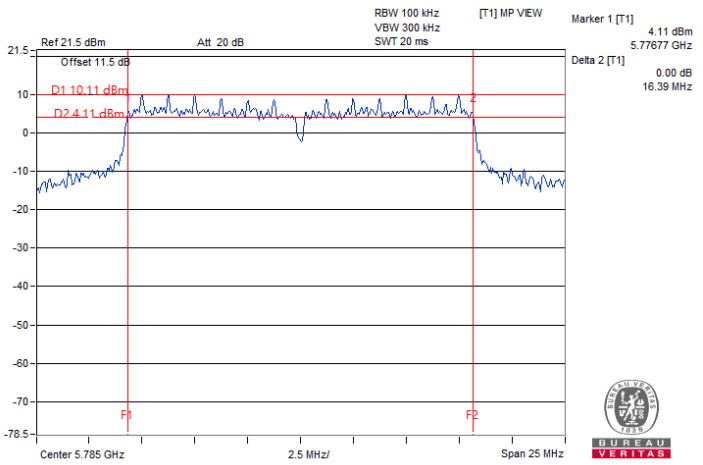
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.60	38.00	38.28	38.04	0.5	Pass
159	5795	38.12	37.91	37.99	37.74	0.5	Pass

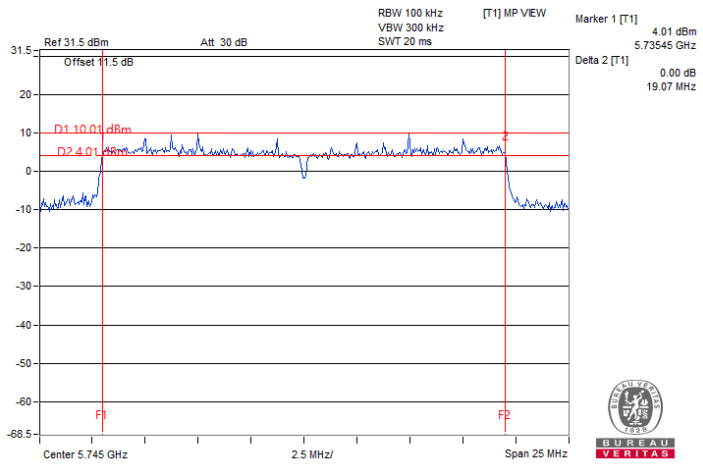
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.94	77.62	77.53	77.55	0.5	Pass

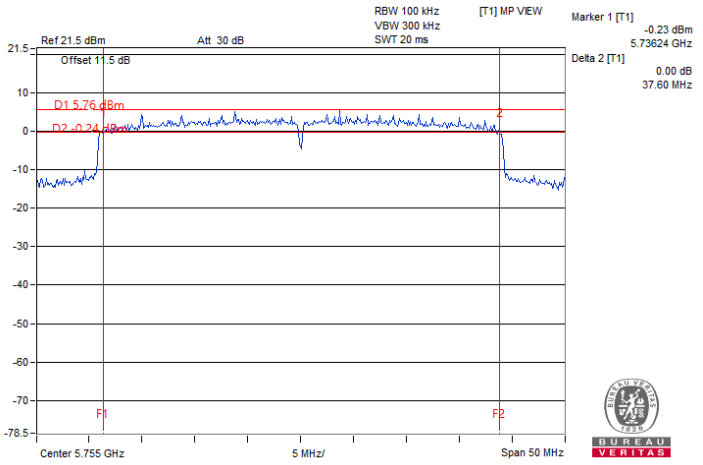
Spectrum Plot of Minimum Value



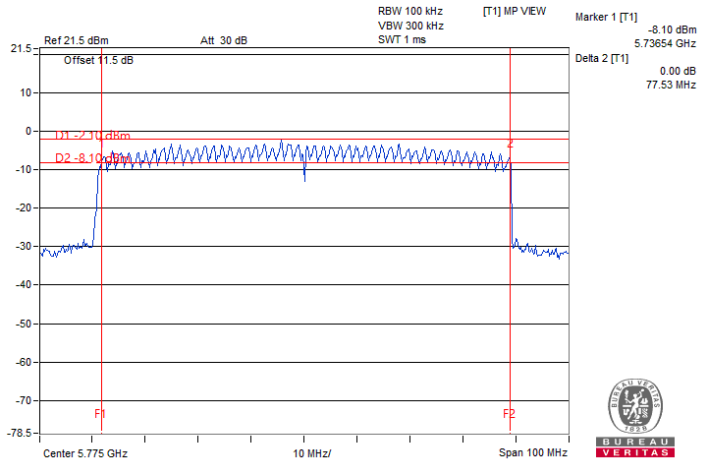
802.11a / Chain 1 : CH 157



802.11ax (HE20) / Chain 2 : CH 149



802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE80) / Chain 2 : CH 155

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

Test Mode K: FAP-433G_Scanning Radio

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	16.40	16.42	0.5	Pass
157	5785	16.40	16.42	0.5	Pass
165	5825	16.40	16.41	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	19.13	19.16	0.5	Pass
157	5785	19.08	19.14	0.5	Pass
165	5825	19.11	19.12	0.5	Pass

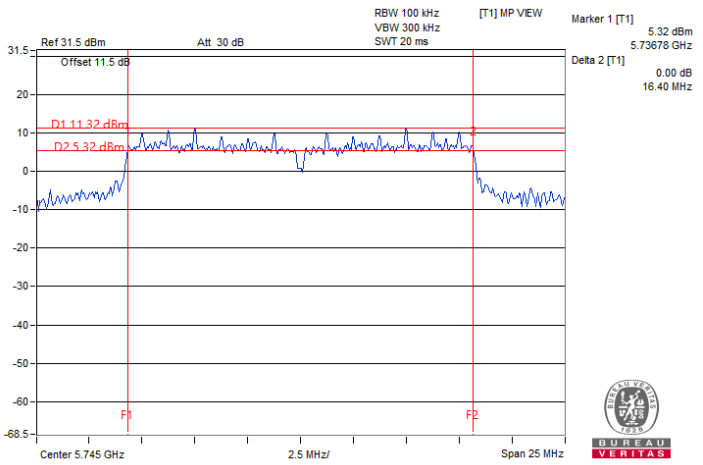
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
151	5755	37.89	37.97	0.5	Pass
159	5795	37.51	37.98	0.5	Pass

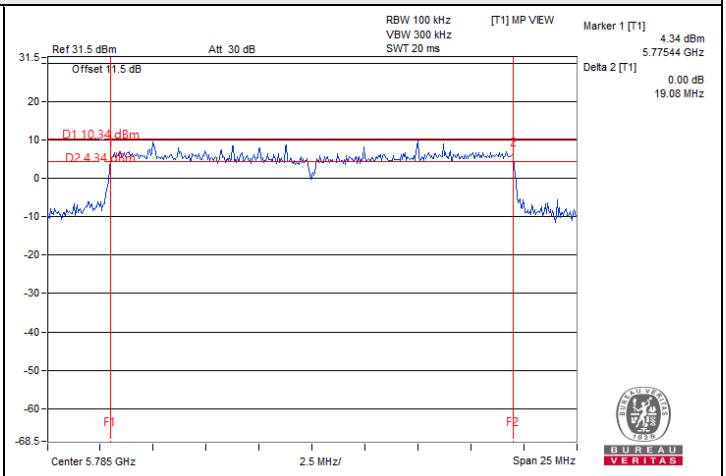
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
155	5775	77.65	77.24	0.5	Pass

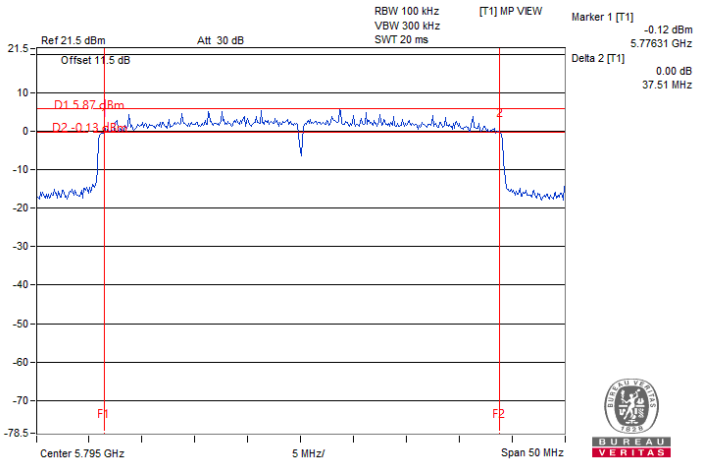
Spectrum Plot of Minimum Value



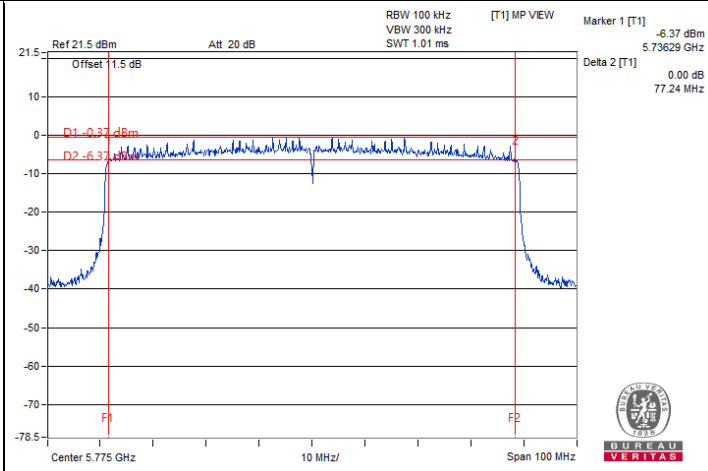
802.11a / Chain 0 : CH 149



802.11ax (HE20) / Chain 0 : CH 157



802.11ax (HE40) / Chain 0 : CH 159



802.11ax (HE80) / Chain 1 : CH 155

7.4 Occupied Bandwidth

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

Test Mode A: FAP-431G_Radio 2

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.44	16.44	16.44	16.56
40	5200	16.56	16.56	16.56	16.68
48	5240	16.56	16.56	16.44	16.56
149	5745	16.64	17.02	17.12	17.69
157	5785	17.11	18.56	16.64	17.50
165	5825	20.10	24.52	21.74	19.90

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.08	19.08	18.96	18.96
40	5200	19.08	19.20	19.08	18.96
48	5240	19.08	19.08	19.08	19.08
149	5745	19.23	19.52	19.33	19.33
157	5785	19.33	19.81	19.33	19.23
165	5825	19.90	23.17	19.23	19.90

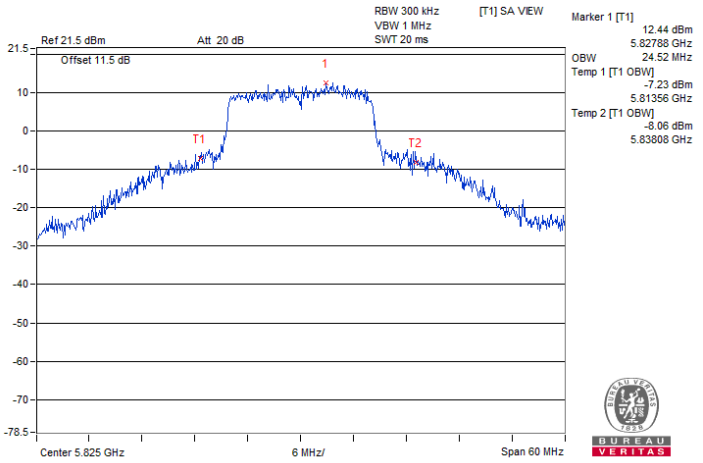
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	38.04	37.92	38.04	38.16
46	5230	38.16	38.16	38.40	37.92
151	5755	38.27	39.04	38.46	38.84
159	5795	38.37	39.33	38.08	38.56

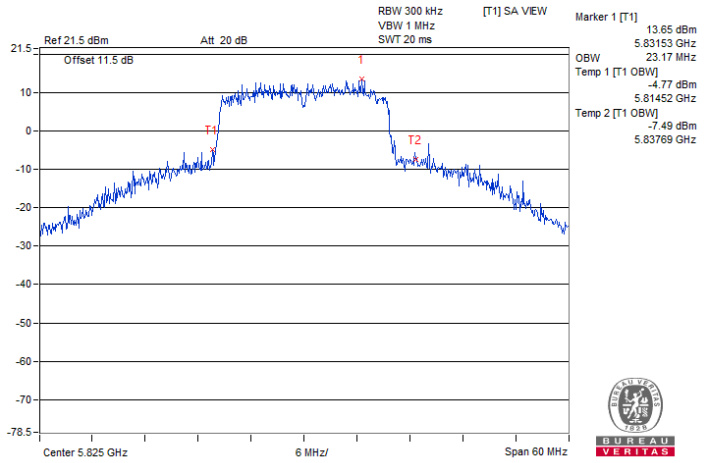
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.28	77.28
155	5775	77.31	77.31	76.93	76.93

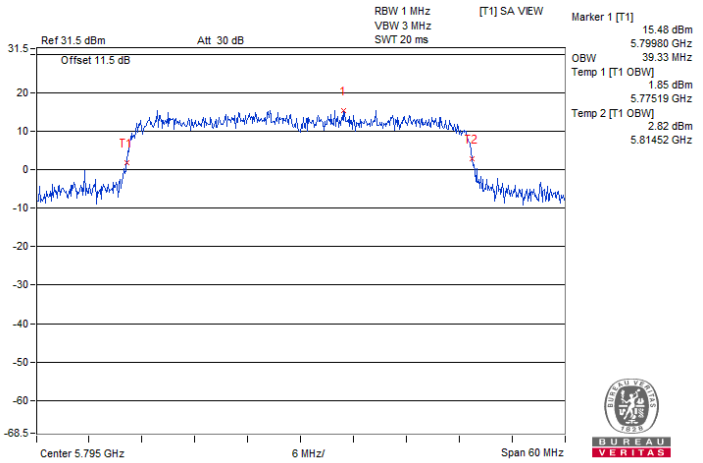
Spectrum Plot of Maximum Value



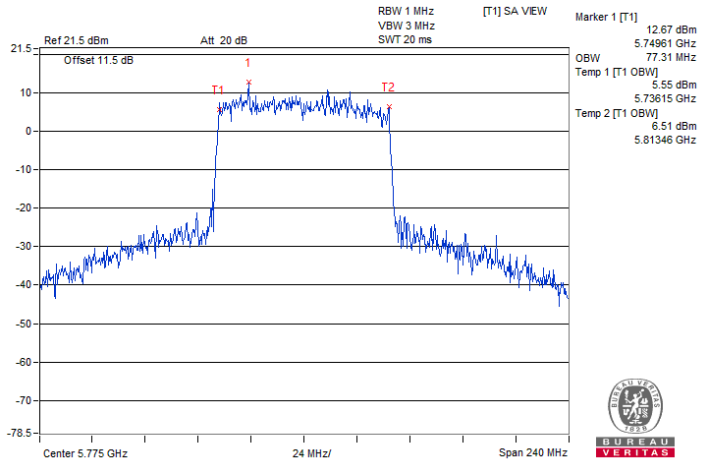
802.11a / Chain 1 : CH 165



802.11ax (HE20) / Chain 1 : CH 165



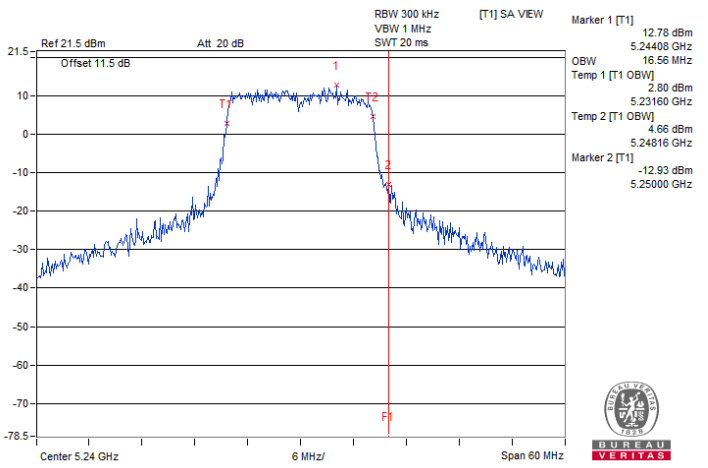
802.11ax (HE40) / Chain 1 : CH 159



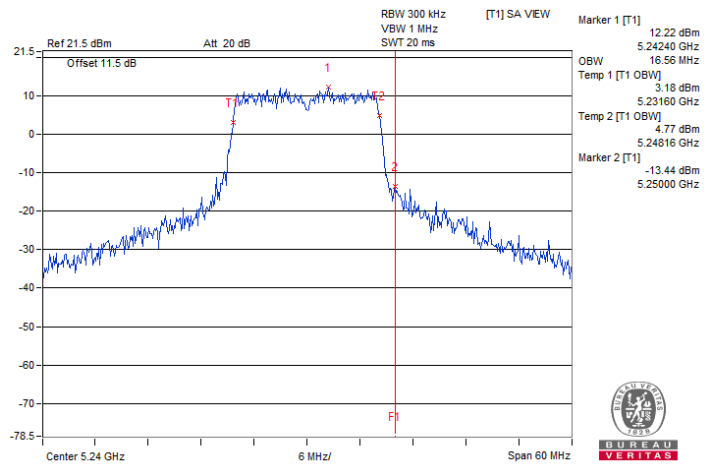
802.11ax (HE80) / Chain 0 : CH 155

Spectrum Plot for nearby DFS band

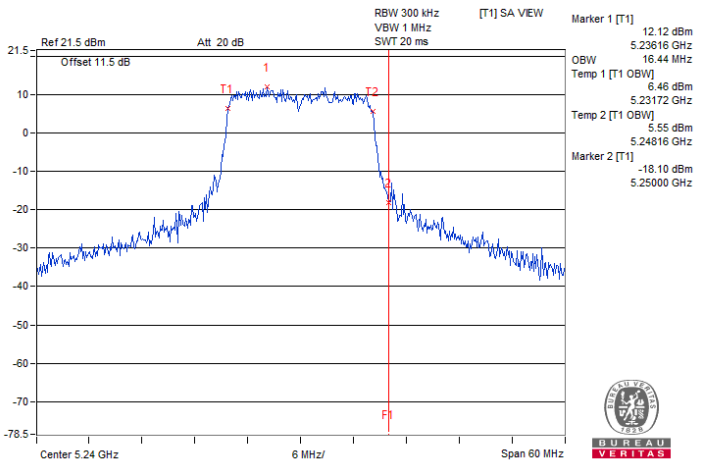
(DFS is required, if 99% OCP straddle into U-NII-2A)



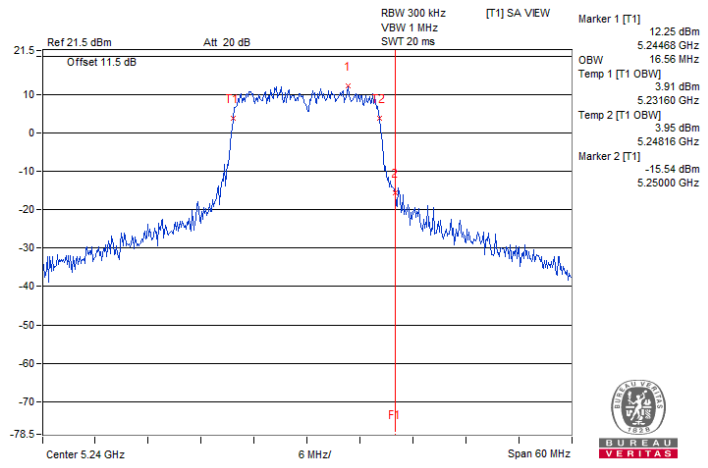
802.11a / Chain 0 : CH 48



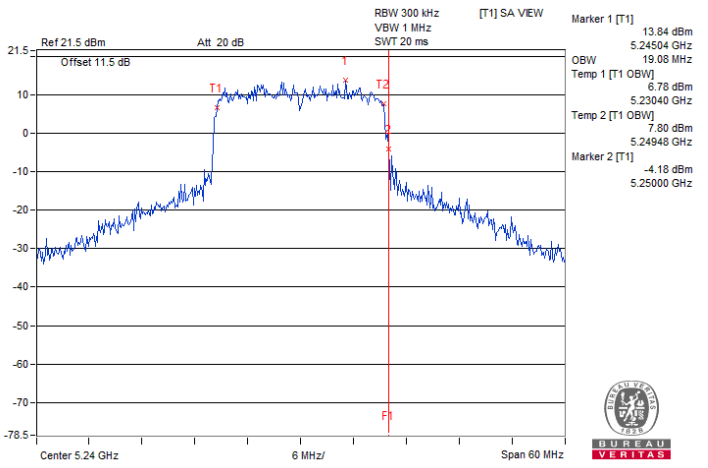
802.11a / Chain 1 : CH 48



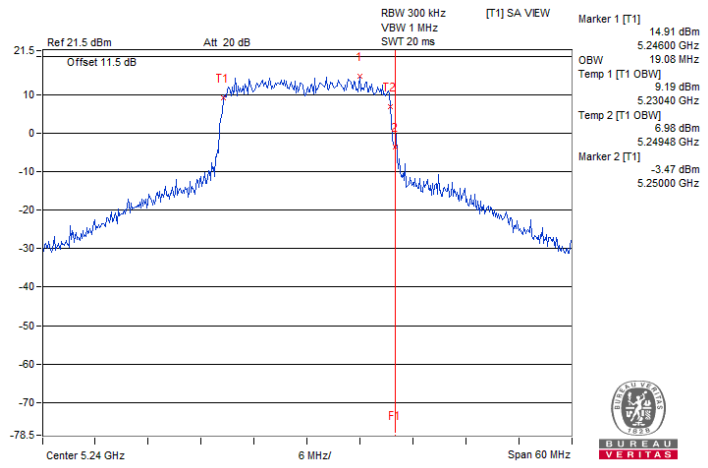
802.11a / Chain 2 : CH 48



802.11a / Chain 3 : CH 48



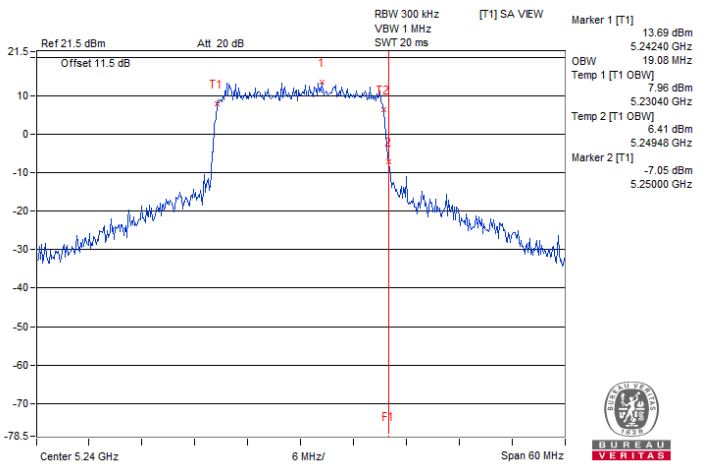
802.11ax (HE20) / Chain 0 : CH 48



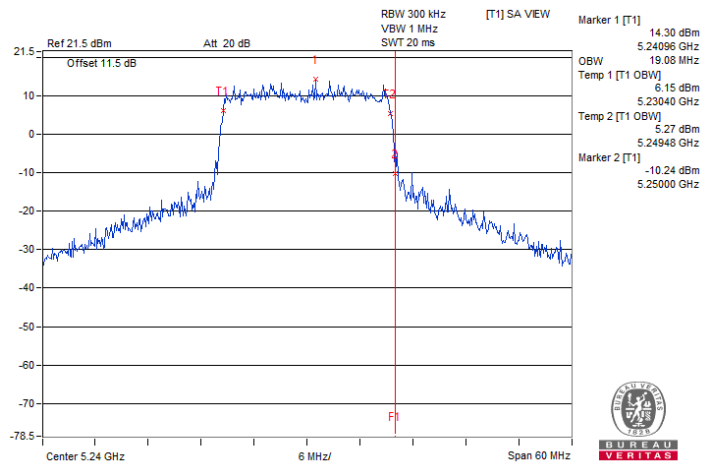
802.11ax (HE20) / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

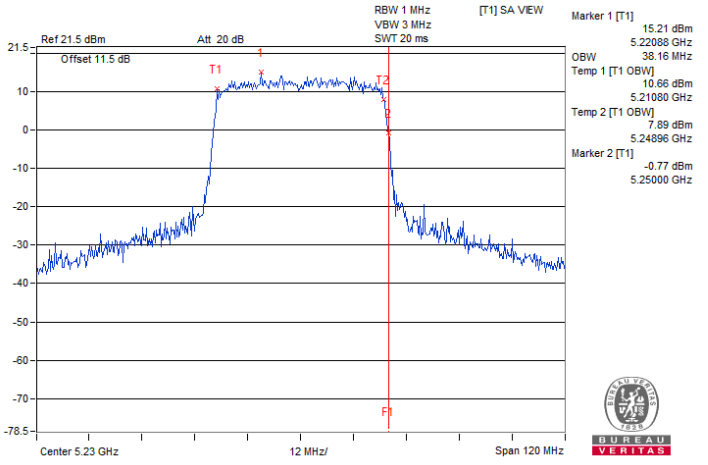
(DFS is required, if 99% OCP straddle into U-NII-2A)



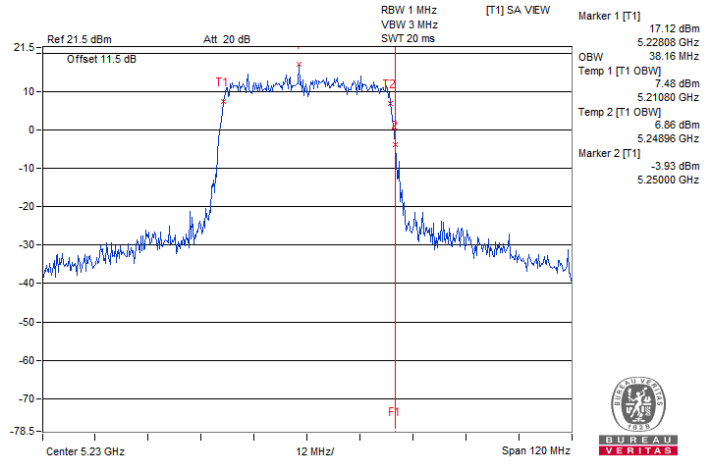
802.11ax (HE20) / Chain 2 : CH 48



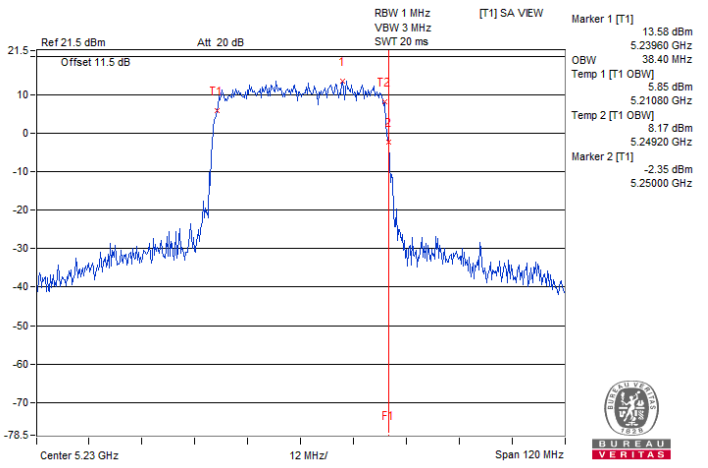
802.11ax (HE20) / Chain 3 : CH 48



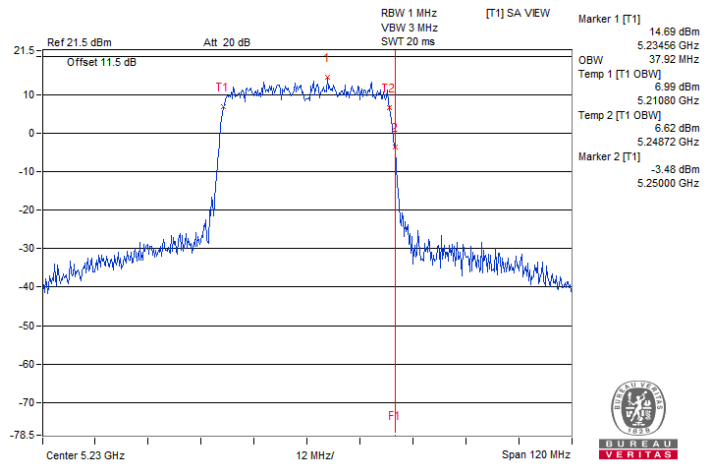
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE40) / Chain 1 : CH 46



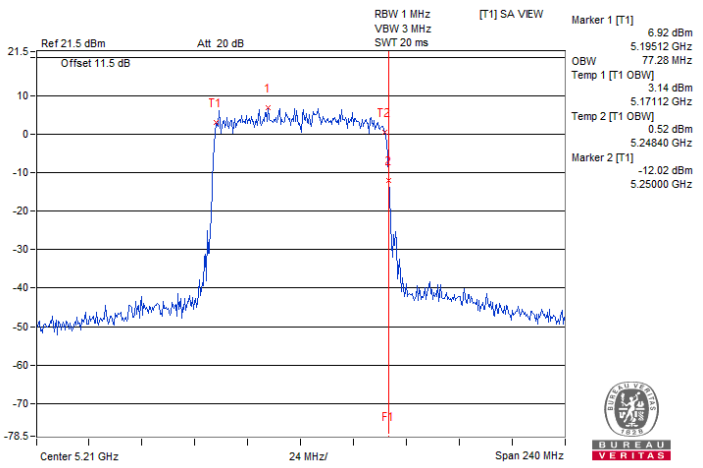
802.11ax (HE40) / Chain 2 : CH 46



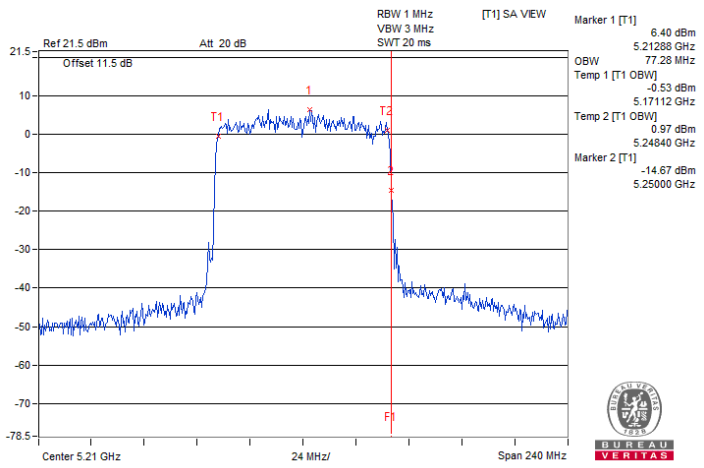
802.11ax (HE40) / Chain 3 : CH 46

Spectrum Plot for nearby DFS band

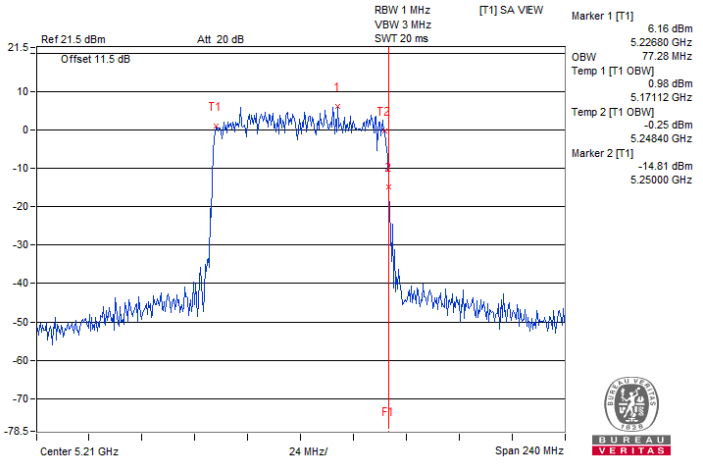
(DFS is required, if 99% OCP straddle into U-NII-2A)



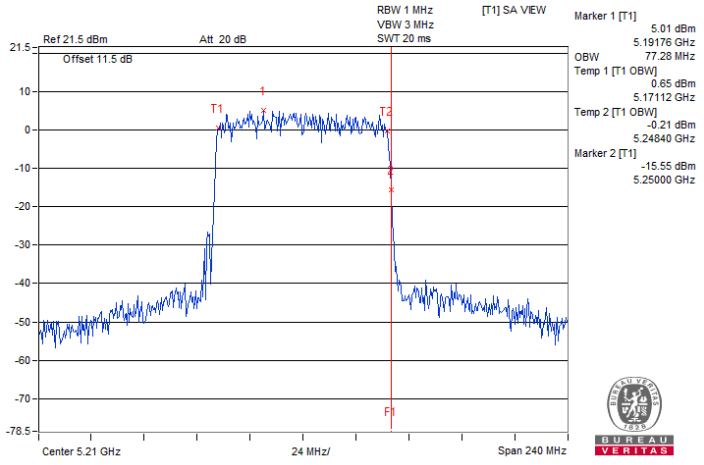
802.11ax (HE80) / Chain 0 : CH 42



802.11ax (HE80) / Chain 1 : CH 42



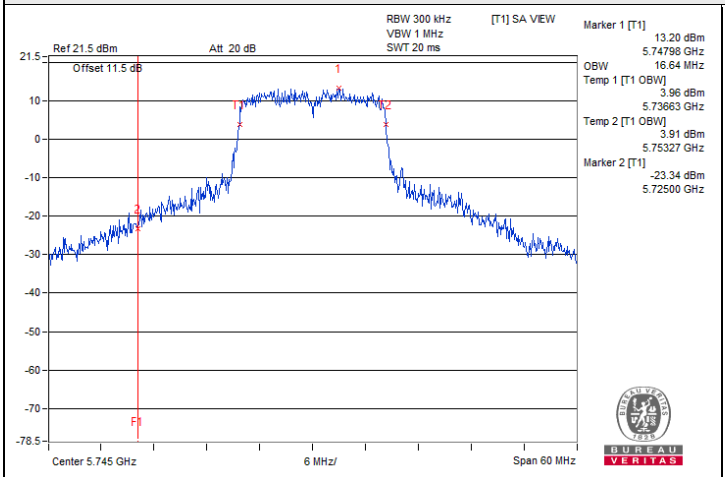
802.11ax (HE80) / Chain 2 : CH 42



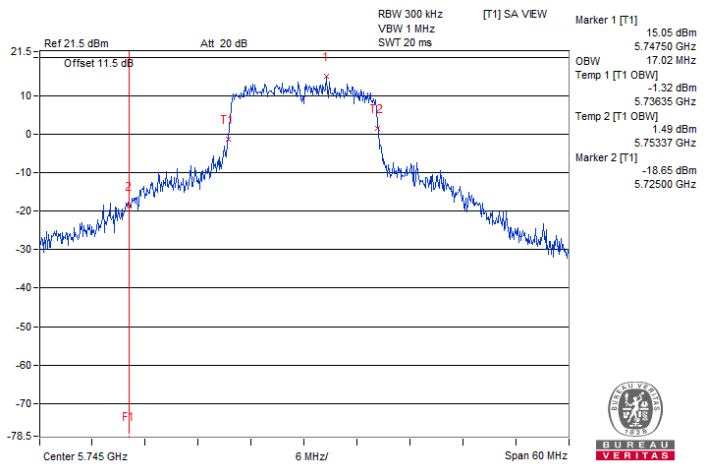
802.11ax (HE80) / Chain 3 : CH 42

Spectrum Plot for nearby DFS band

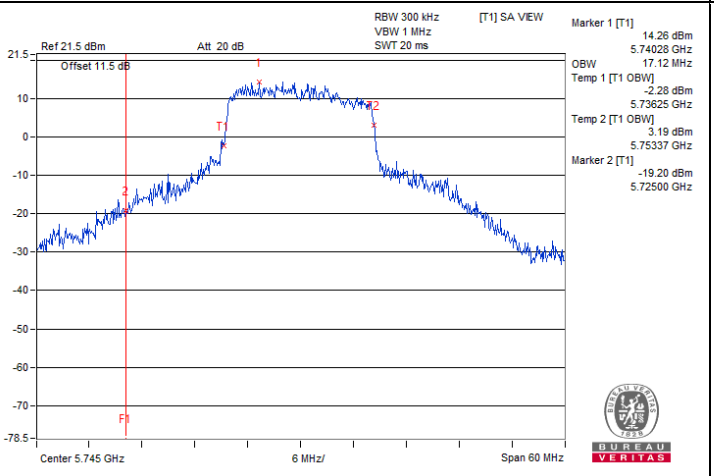
(DFS is required, if 99% OCP straddle into U-NII-2C)



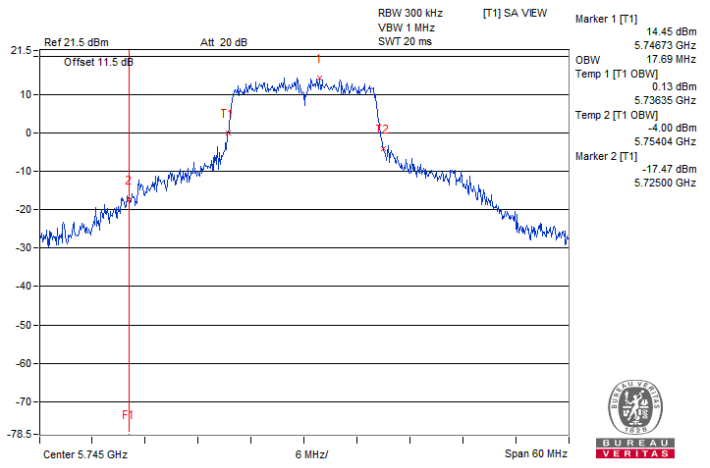
802.11a / Chain 0 : CH 149



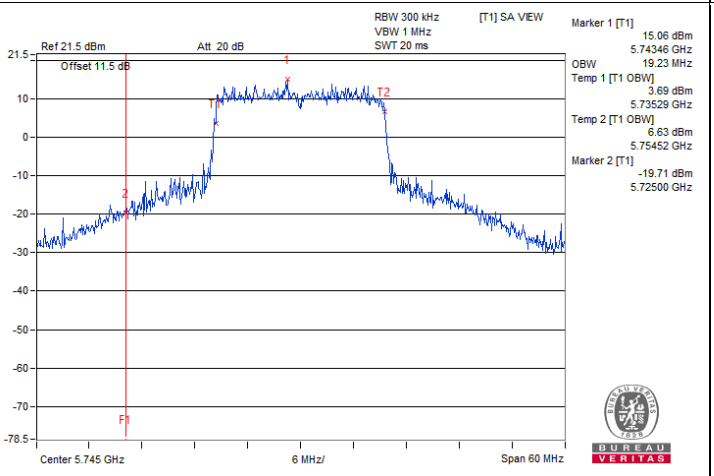
802.11a / Chain 1 : CH 149



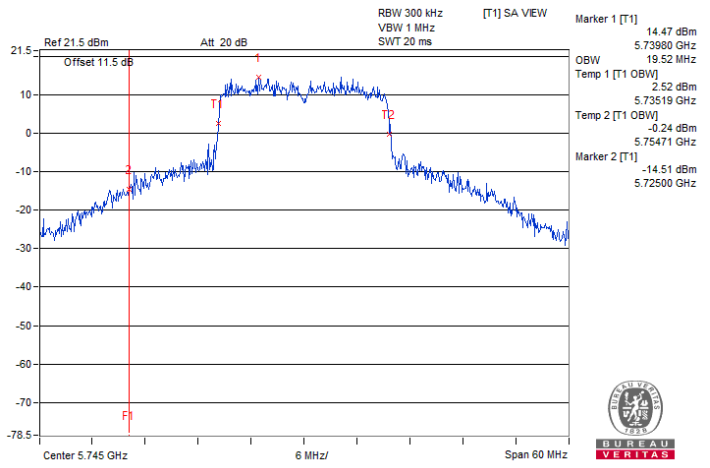
802.11a / Chain 2 : CH 149



802.11a / Chain 3 : CH 149



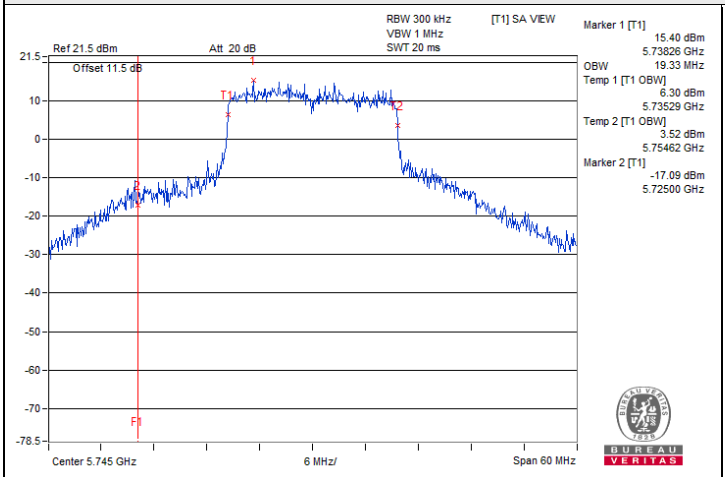
802.11ax (HE20) / Chain 0 : CH 149



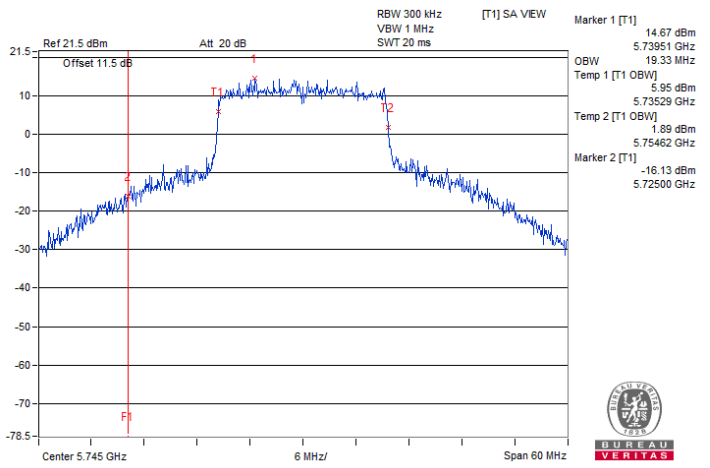
802.11ax (HE20) / Chain 1 : CH 149

Spectrum Plot for nearby DFS band

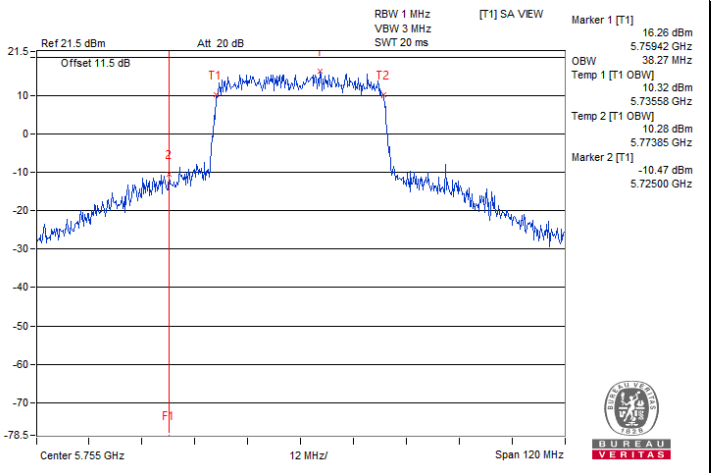
(DFS is required, if 99% OCP straddle into U-NII-2C)



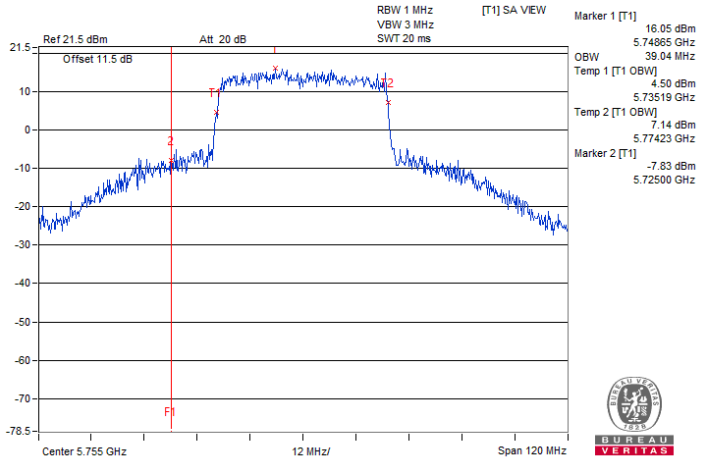
802.11ax (HE20) / Chain 2 : CH 149



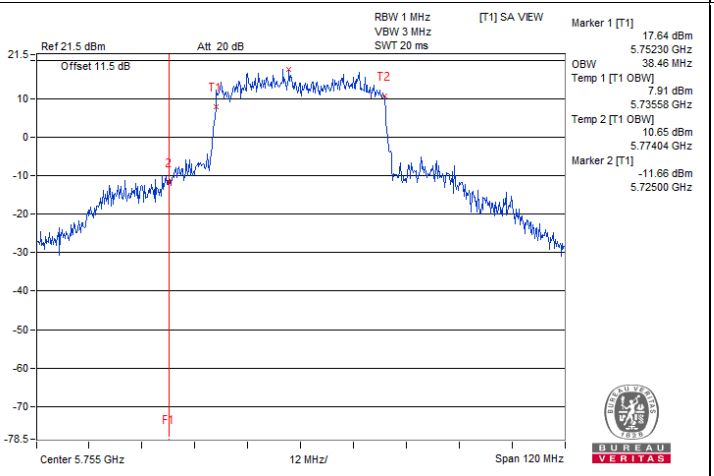
802.11ax (HE20) / Chain 3 : CH 149



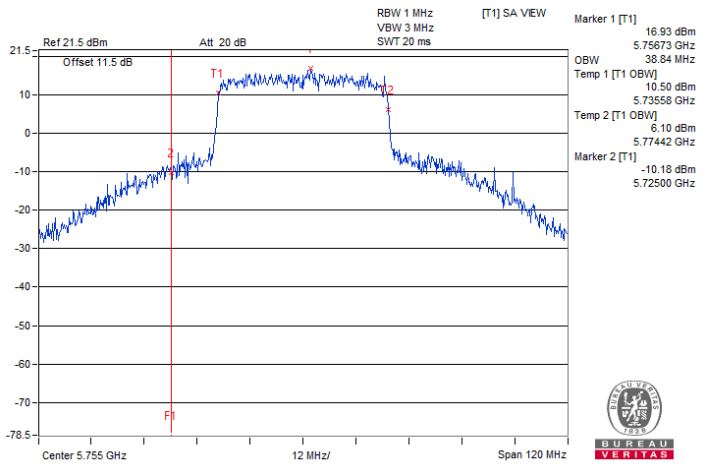
802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE40) / Chain 1 : CH 151



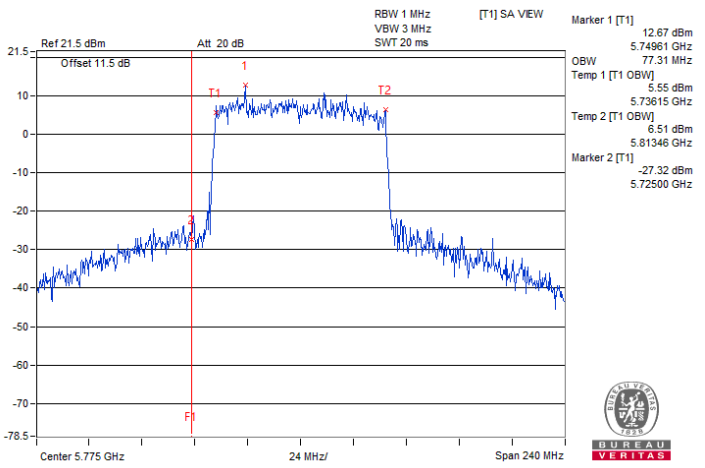
802.11ax (HE40) / Chain 2 : CH 151



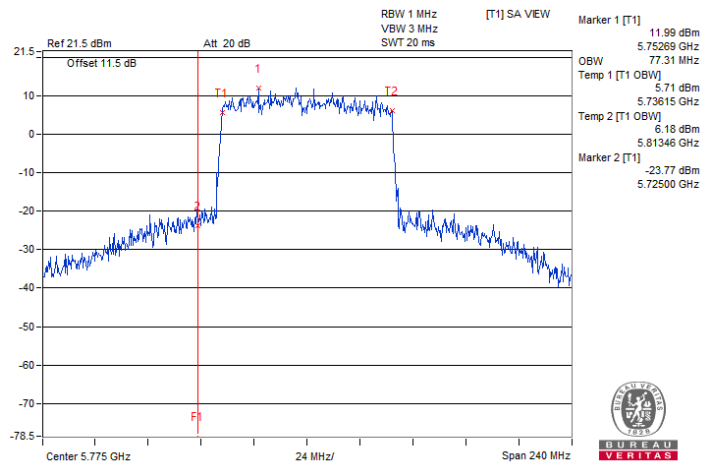
802.11ax (HE40) / Chain 3 : CH 151

Spectrum Plot for nearby DFS band

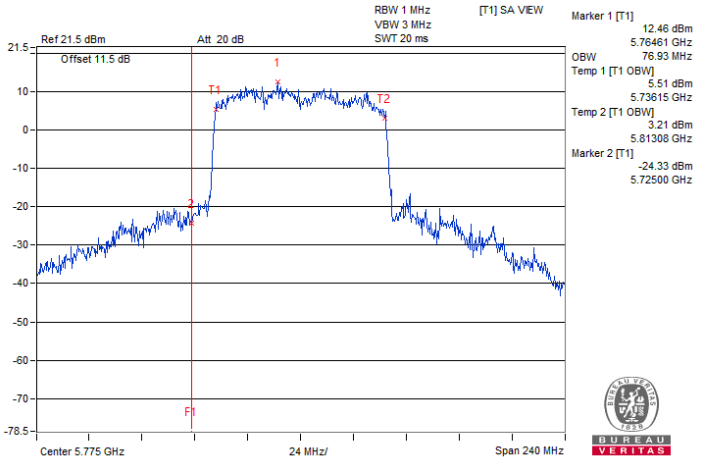
(DFS is required, if 99% OCP straddle into U-NII-2C)



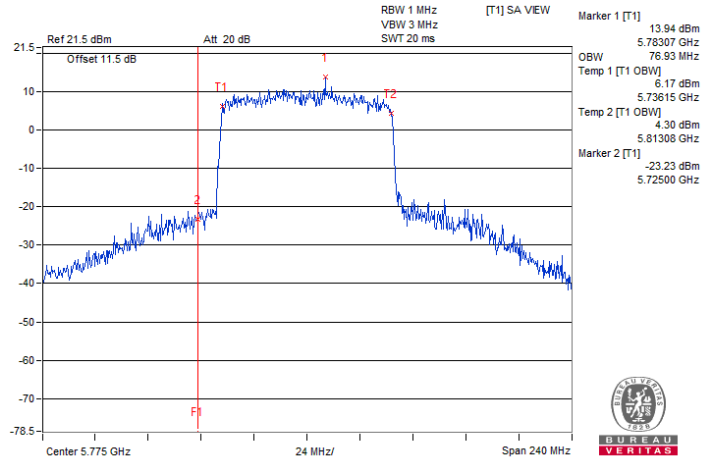
802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155



802.11ax (HE80) / Chain 2 : CH 155



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode C: FAP-431G_Radio 3

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	39.65	33.57	39.22	33.66
157	5785	39.24	32.52	39.12	31.68
165	5825	39.00	30.72	39.24	29.76

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	35.56	19.57	32.26	19.91
157	5785	44.76	35.52	44.76	34.92
165	5825	40.80	19.92	42.48	21.60

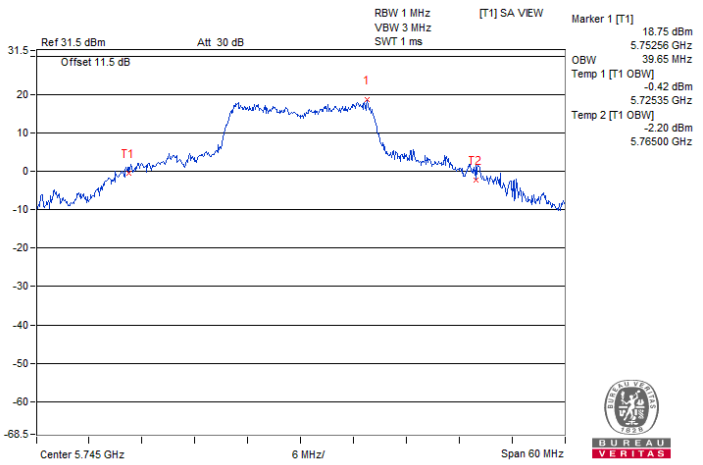
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	54.96	38.26	50.61	38.26
159	5795	56.88	38.40	56.40	38.40

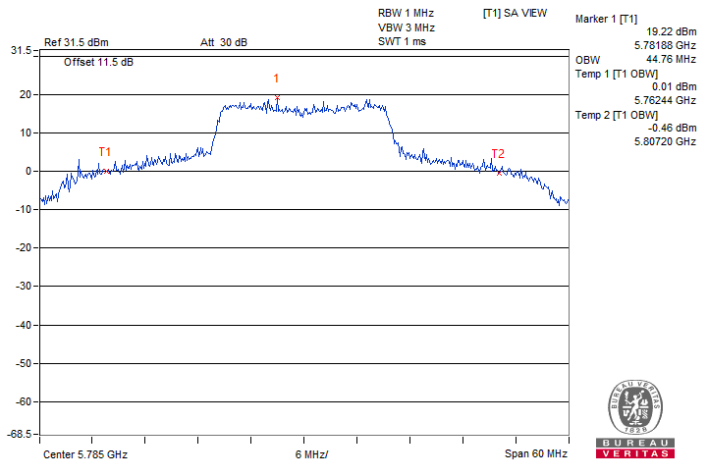
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.22	77.22	77.22	77.22

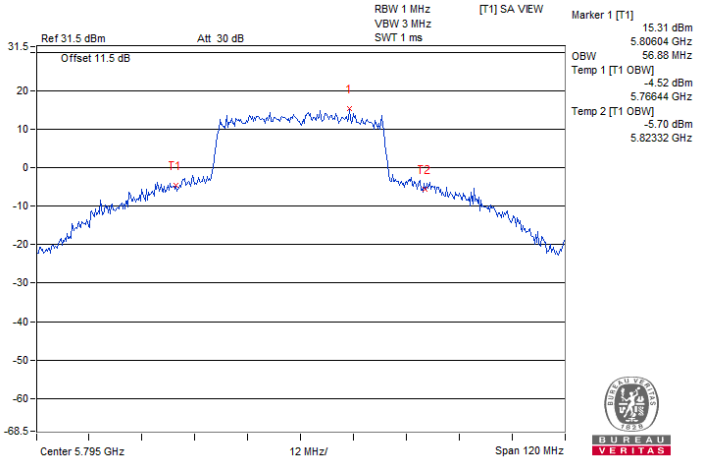
Spectrum Plot of Maximum Value



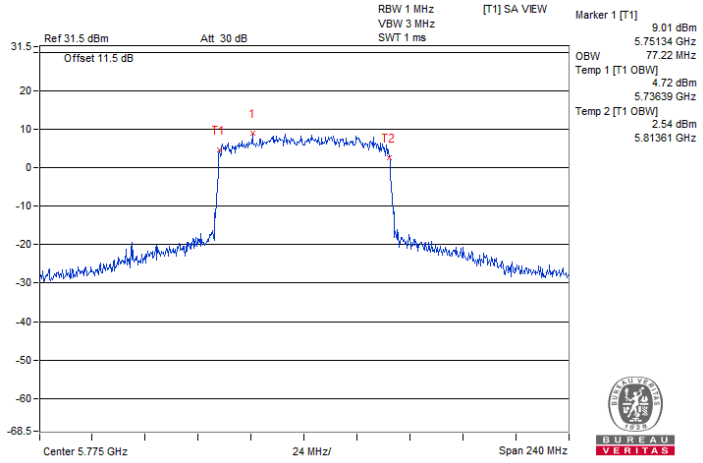
802.11a / Chain 0 : CH 149



802.11ax (HE20) / Chain 0 : CH 157



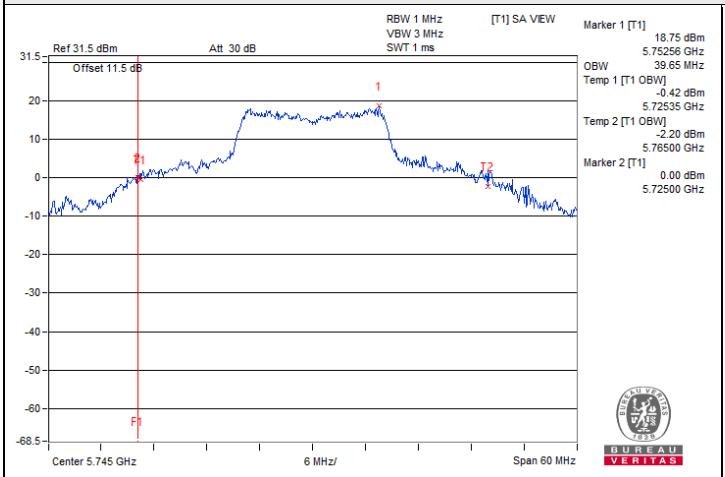
802.11ax (HE40) / Chain 0 : CH 159



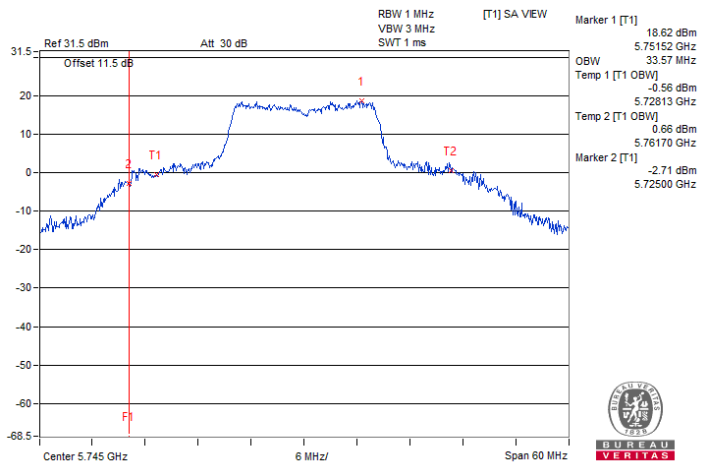
802.11ax (HE80) / Chain 0 : CH 155

Spectrum Plot for nearby DFS band

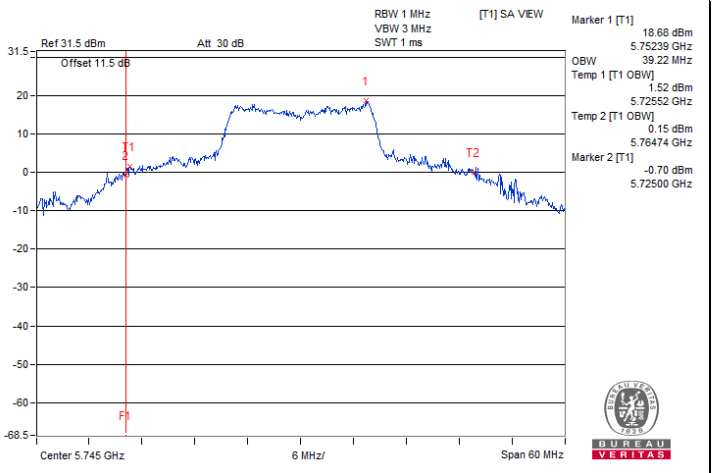
(DFS is required, if 99% OCP straddle into U-NII-2C)



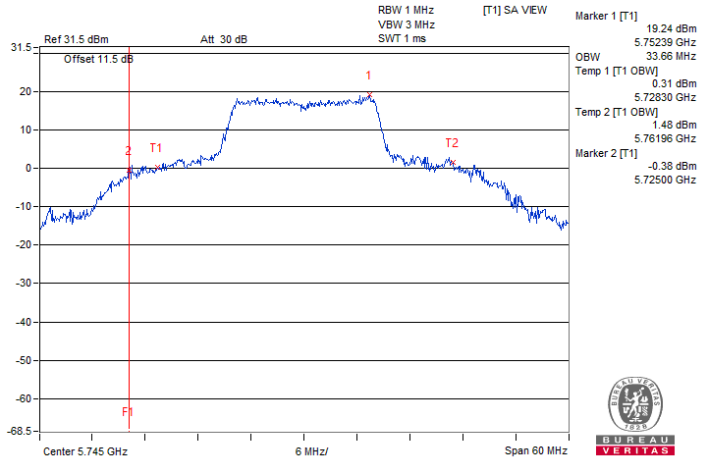
802.11a / Chain 0 : CH 149



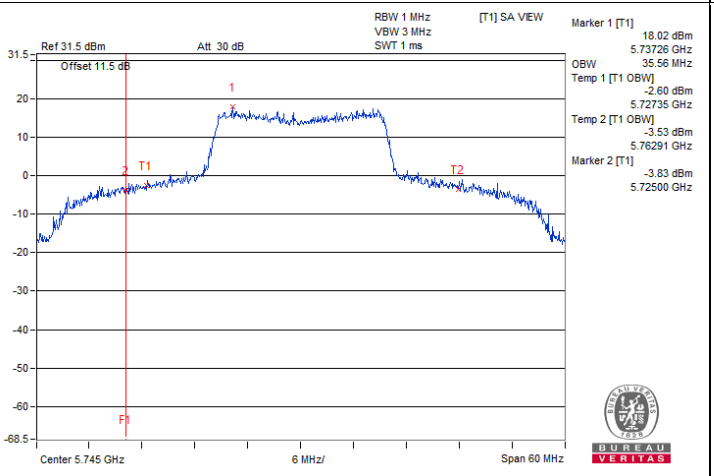
802.11a / Chain 1 : CH 149



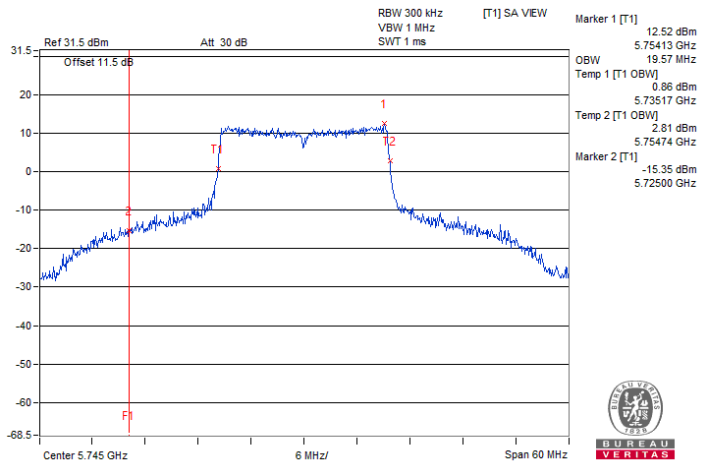
802.11a / Chain 2 : CH 149



802.11a / Chain 3 : CH 149



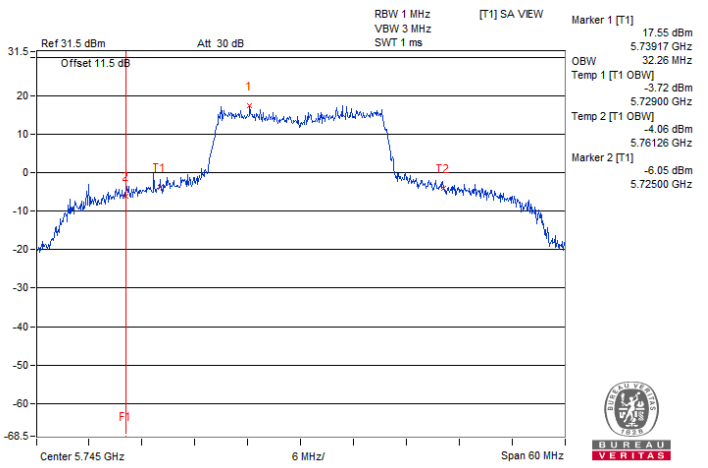
802.11ax (HE20) / Chain 0 : CH 149



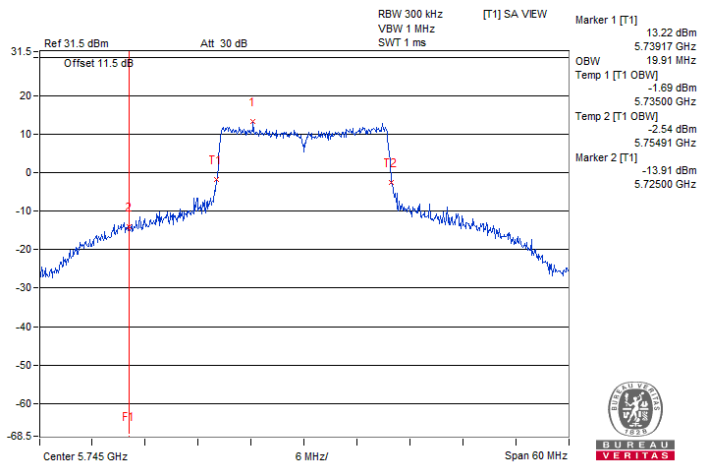
802.11ax (HE20) / Chain 1 : CH 149

Spectrum Plot for nearby DFS band

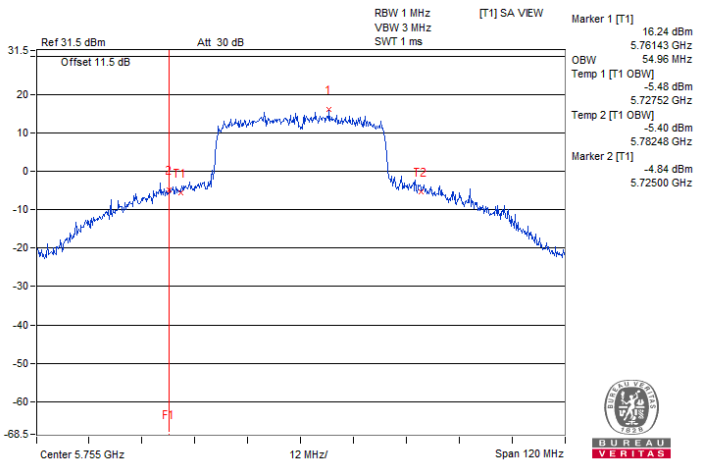
(DFS is required, if 99% OCP straddle into U-NII-2C)



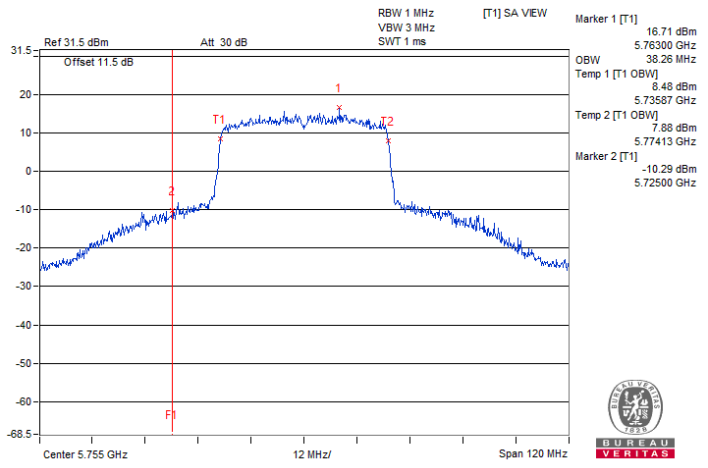
802.11ax (HE20) / Chain 2 : CH 149



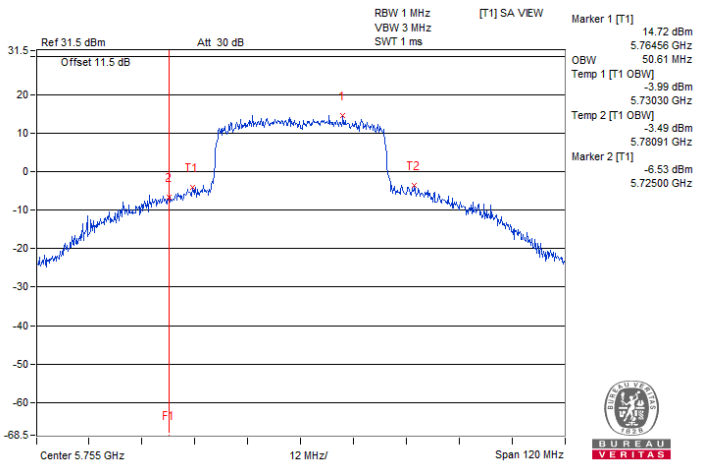
802.11ax (HE20) / Chain 3 : CH 149



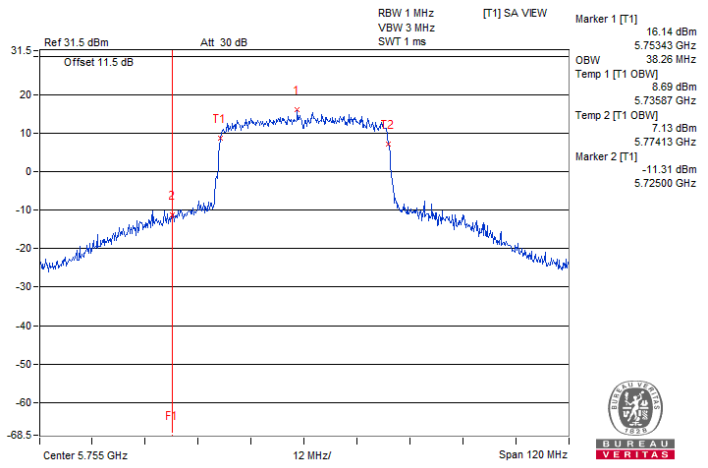
802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE40) / Chain 1 : CH 151



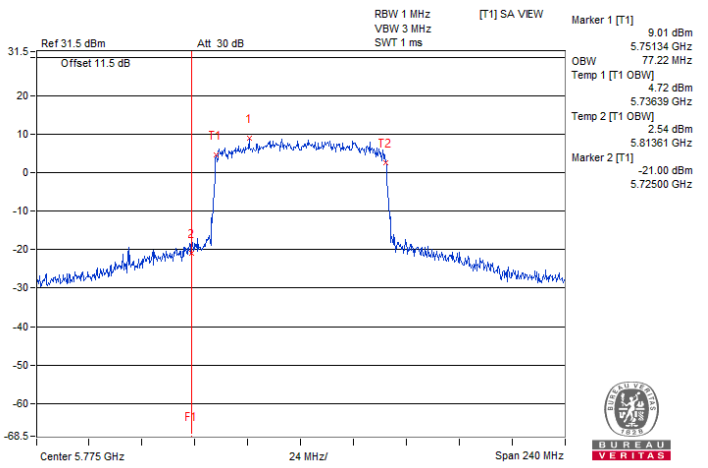
802.11ax (HE40) / Chain 2 : CH 151



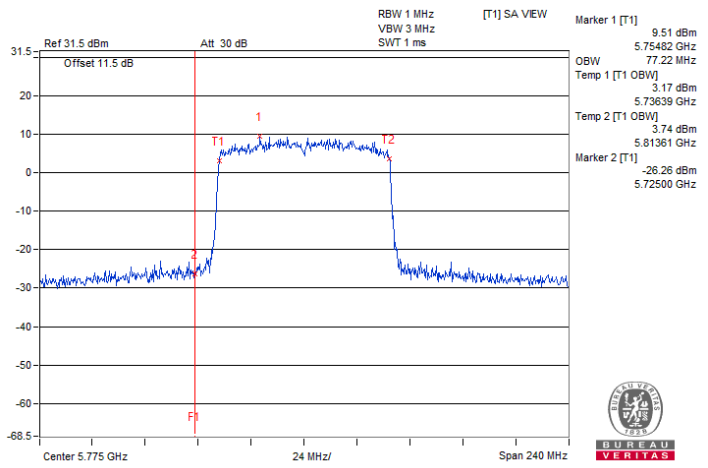
802.11ax (HE40) / Chain 3 : CH 151

Spectrum Plot for nearby DFS band

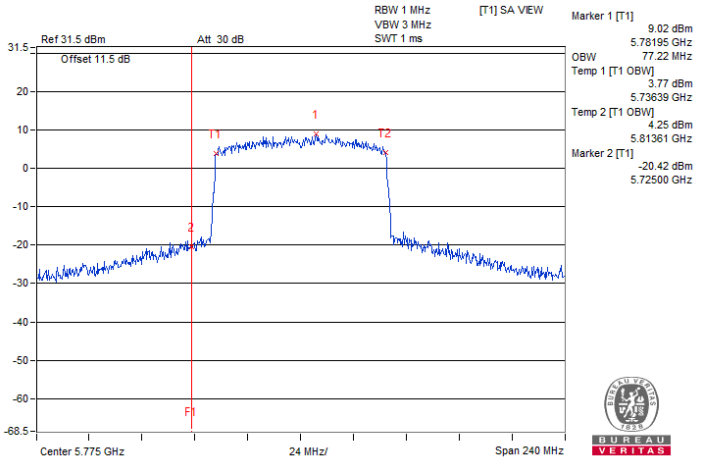
(DFS is required, if 99% OCP straddle into U-NII-2C)



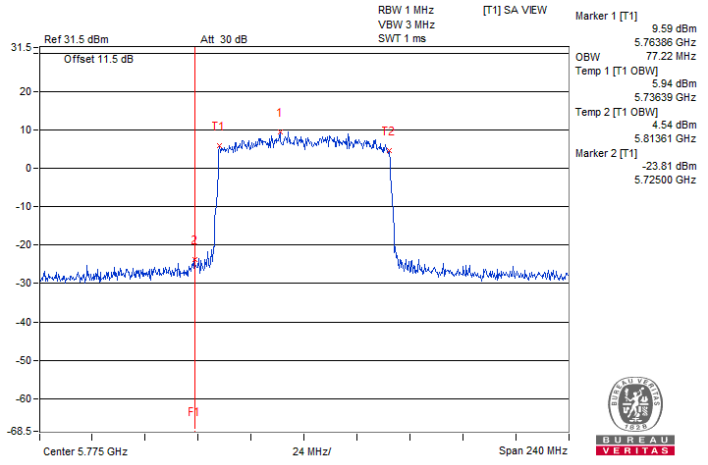
802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155



802.11ax (HE80) / Chain 2 : CH 155



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode E: FAP-431G_Scanning Radio

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.68	16.68
40	5200	17.28	16.92
48	5240	18.24	17.04
149	5745	39.84	38.64
157	5785	38.76	38.16
165	5825	40.92	39.48

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.22	19.20
40	5200	19.20	19.20
48	5240	19.44	19.44
149	5745	35.88	36.00
157	5785	43.20	42.72
165	5825	39.60	39.60

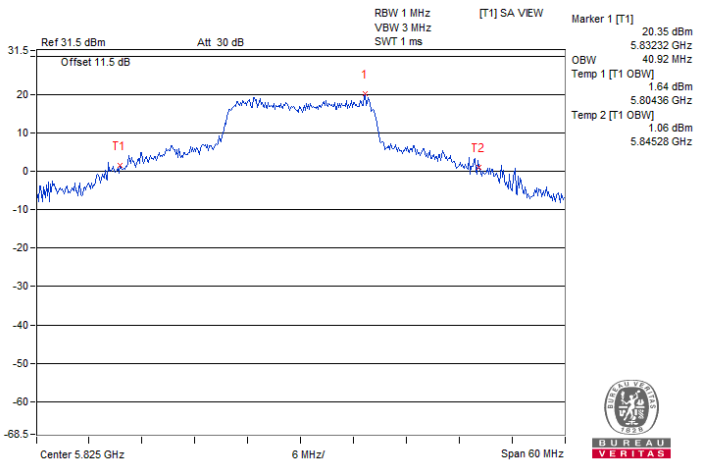
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	38.88	38.64
46	5230	38.16	37.92
151	5755	56.40	47.76
159	5795	69.60	70.32

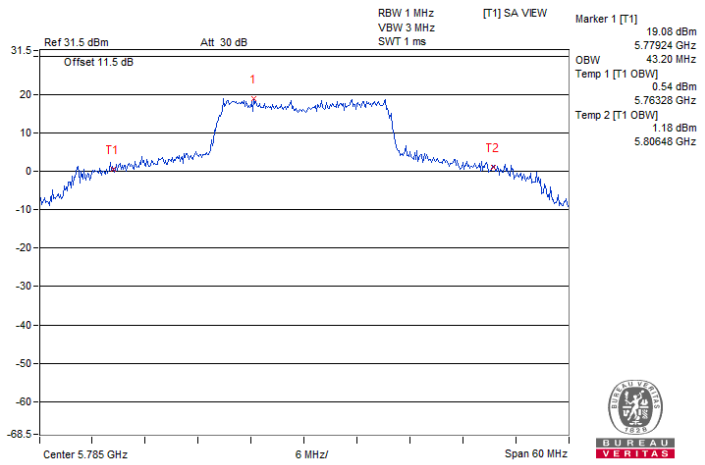
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	78.24	78.24
155	5775	77.28	77.76

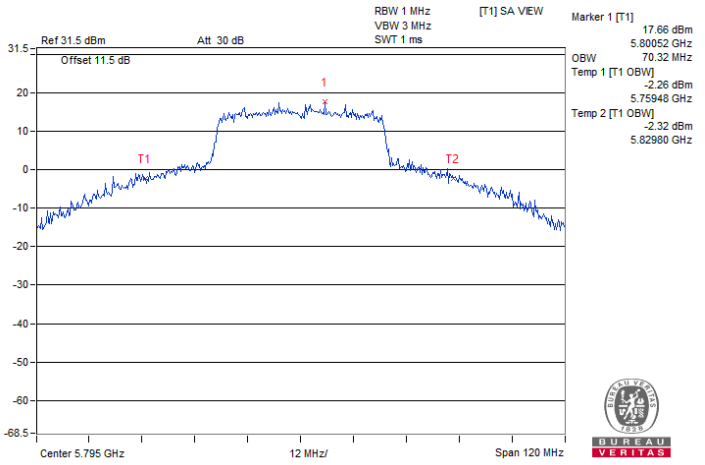
Spectrum Plot of Maximum Value



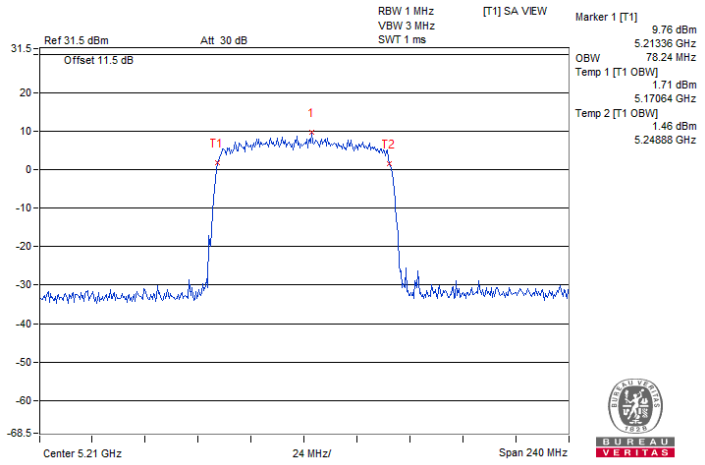
802.11a / Chain 0 : CH 165



802.11ax (HE20) / Chain 0 : CH 157

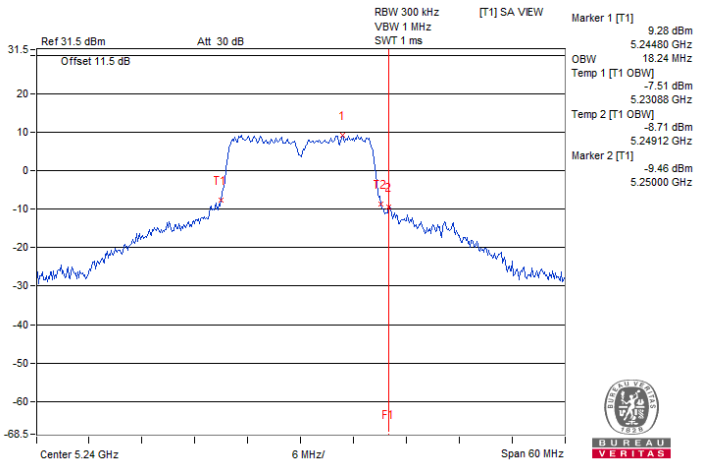


802.11ax (HE40) / Chain 1 : CH 159

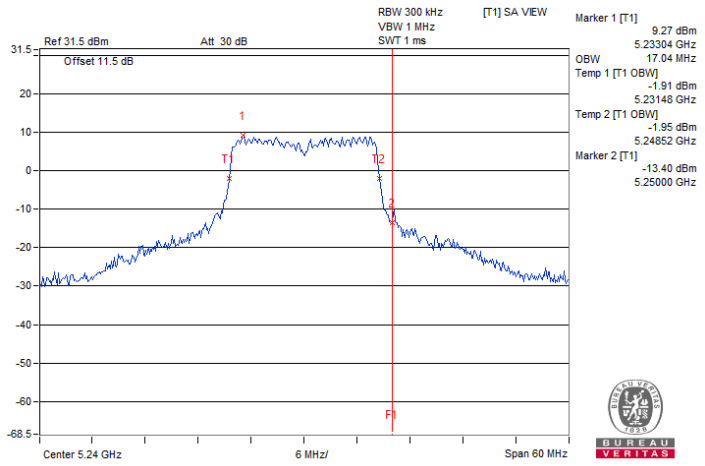


802.11ax (HE80) / Chain 0 : CH 42

Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A)



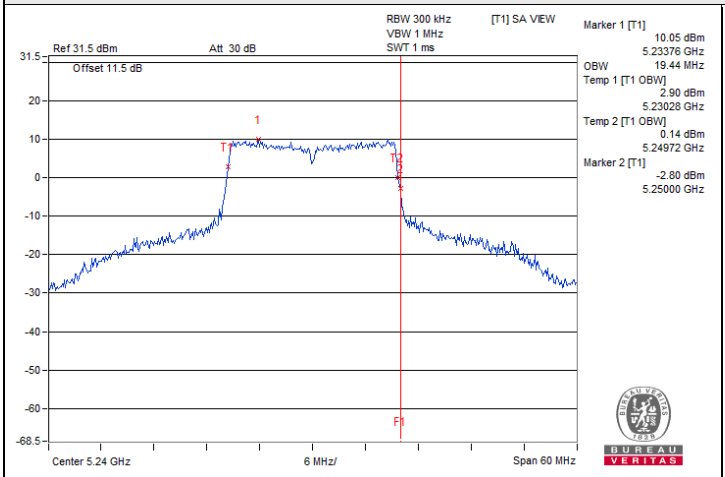
802.11a / Chain 0 : CH 48



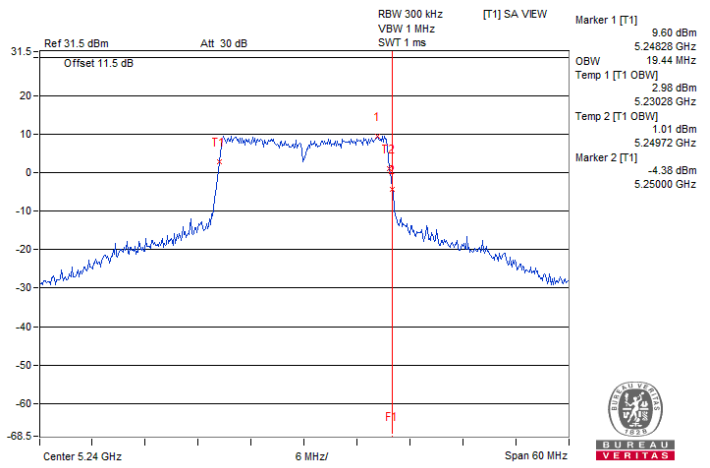
802.11a / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

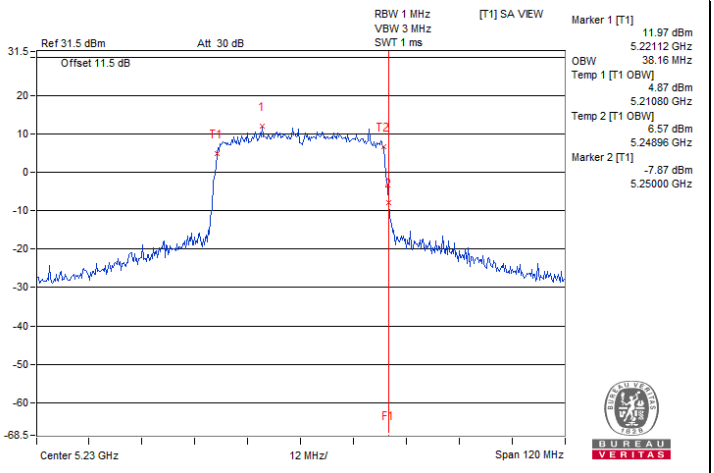
(DFS is required, if 99% OCP straddle into U-NII-2A)



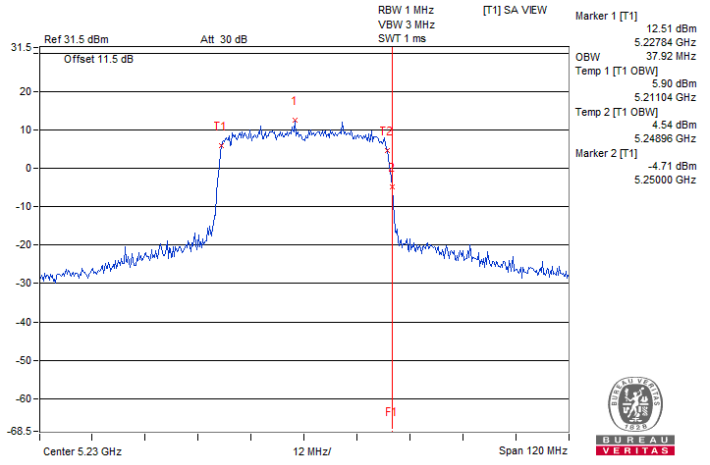
802.11ax (HE20) / Chain 0 : CH 48



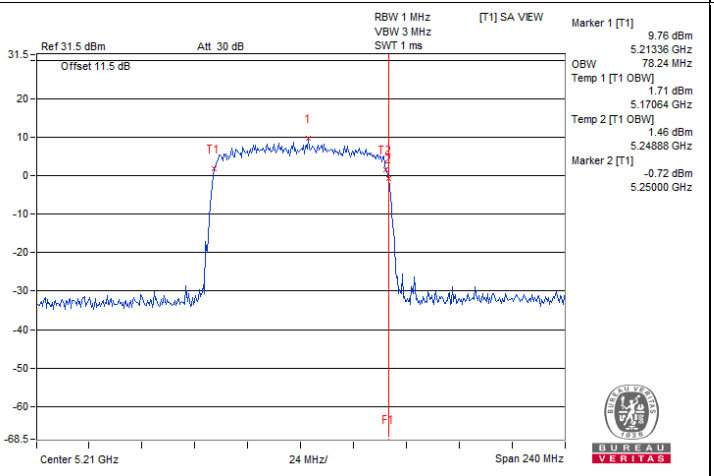
802.11ax (HE20) / Chain 1 : CH 48



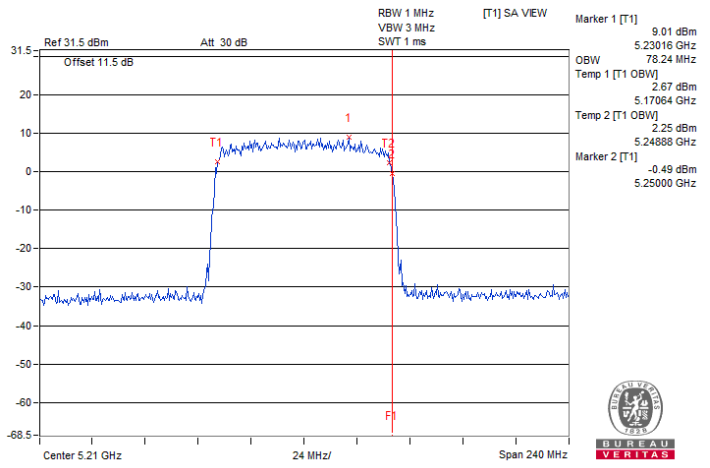
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE40) / Chain 1 : CH 46



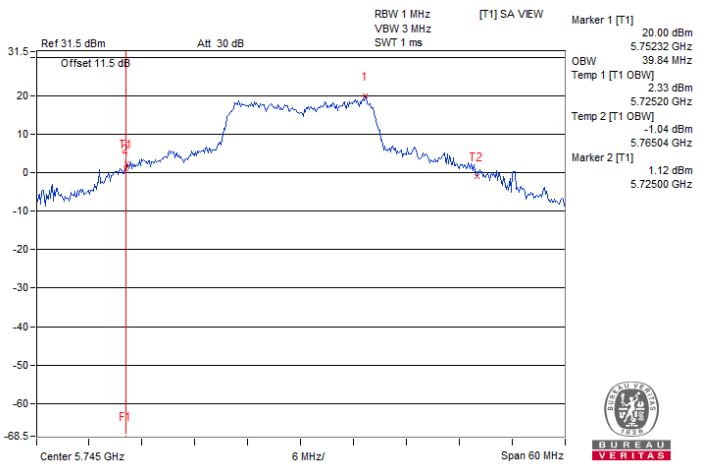
802.11ax (HE80) / Chain 0 : CH 42



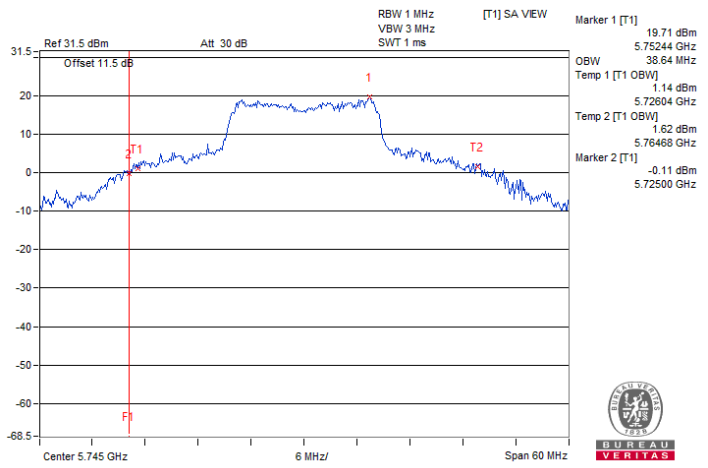
802.11ax (HE80) / Chain 1 : CH 42

Spectrum Plot for nearby DFS band

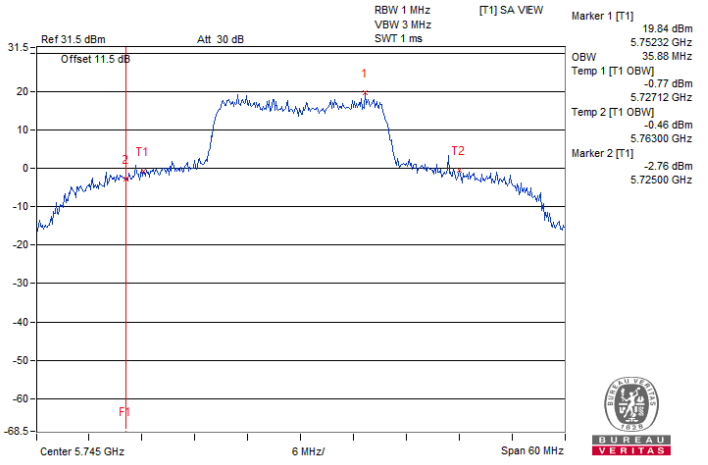
(DFS is required, if 99% OCP straddle into U-NII-2C)



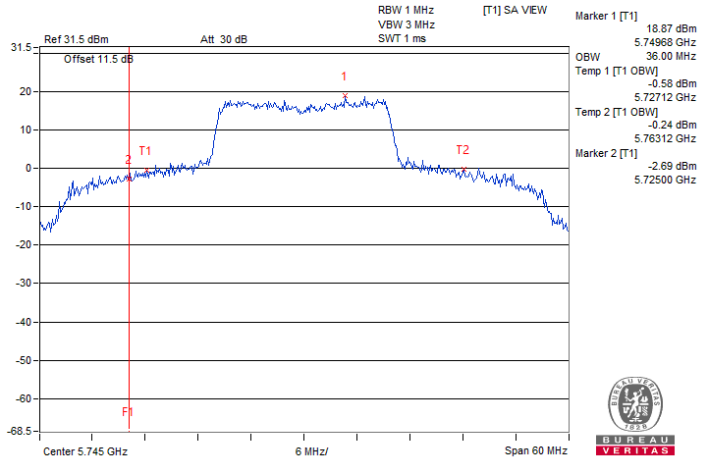
802.11a / Chain 0 : CH 149



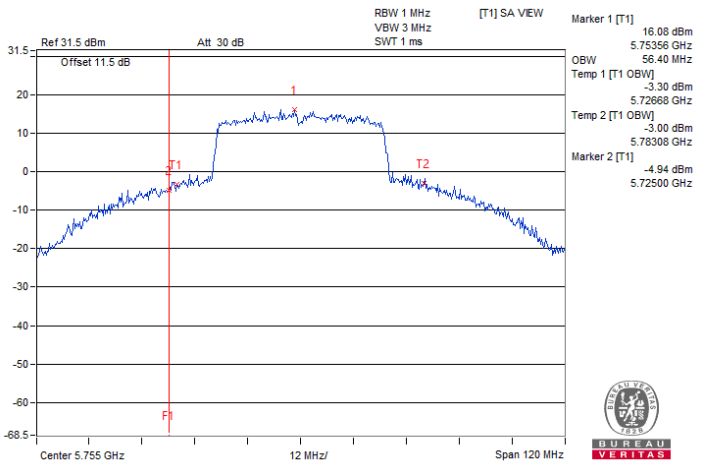
802.11a / Chain 1 : CH 149



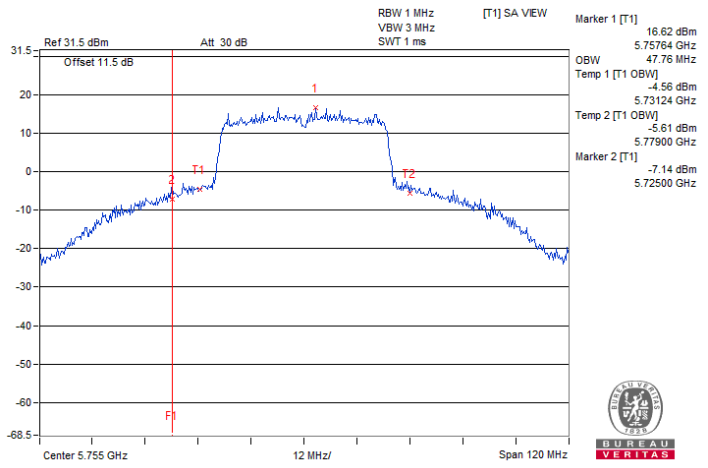
802.11ax (HE20) / Chain 0 : CH 149



802.11ax (HE20) / Chain 1 : CH 149



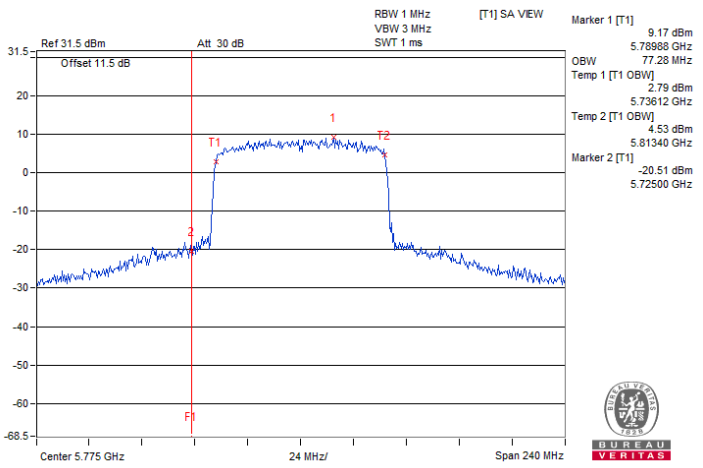
802.11ax (HE40) / Chain 0 : CH 151



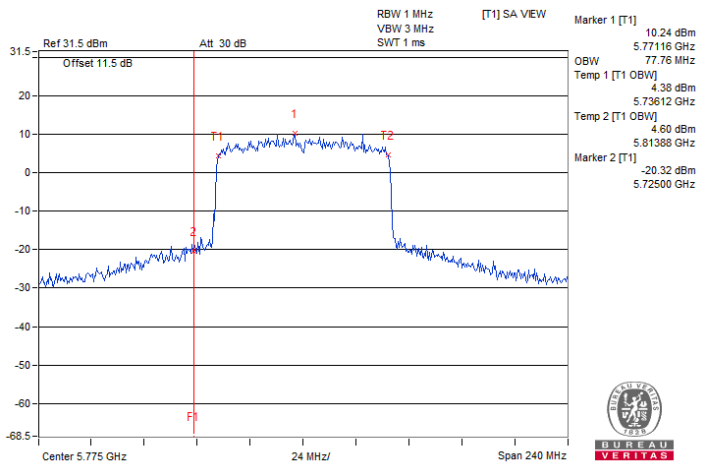
802.11ax (HE40) / Chain 1 : CH 151

Spectrum Plot for nearby DFS band

(DFS is required, if 99% OCP straddle into U-NII-2C)



802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155

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

Test Mode G: FAP-433G_Radio 2

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.56	16.56	16.56	16.44
40	5200	16.56	16.56	16.56	16.56
48	5240	16.56	16.56	16.56	16.56
149	5745	19.68	20.64	21.12	18.96
157	5785	20.04	19.80	21.24	21.96
165	5825	23.28	27.36	31.08	20.04

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.08	19.08	19.08	18.96
40	5200	19.08	19.08	19.08	19.08
48	5240	18.96	19.08	19.08	19.08
149	5745	19.08	19.32	24.48	19.20
157	5785	19.32	19.20	24.72	19.20
165	5825	21.60	20.64	32.40	19.32

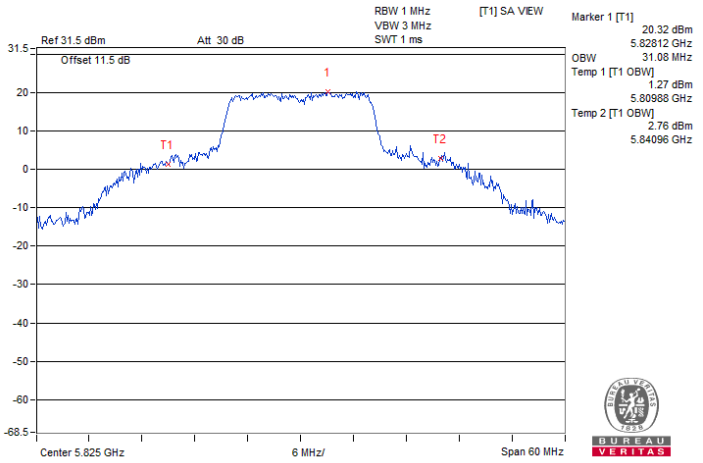
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	38.16	37.92	38.16	37.92
46	5230	38.16	38.16	38.40	38.16
151	5755	38.64	38.64	38.88	38.40
159	5795	39.60	52.32	50.88	48.84

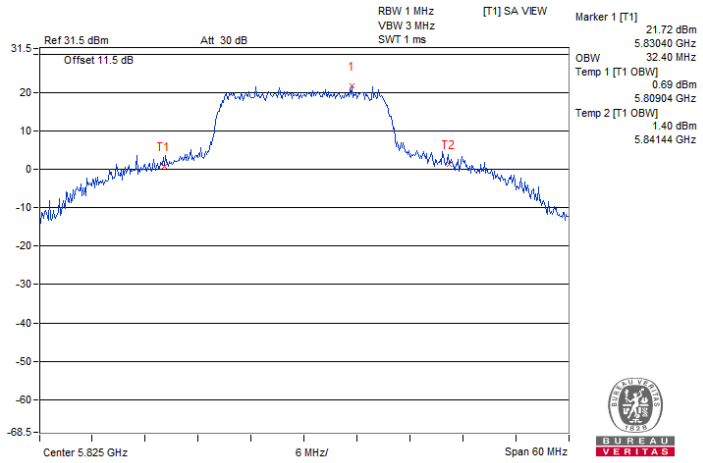
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.28	77.28
155	5775	77.28	77.28	77.28	77.28

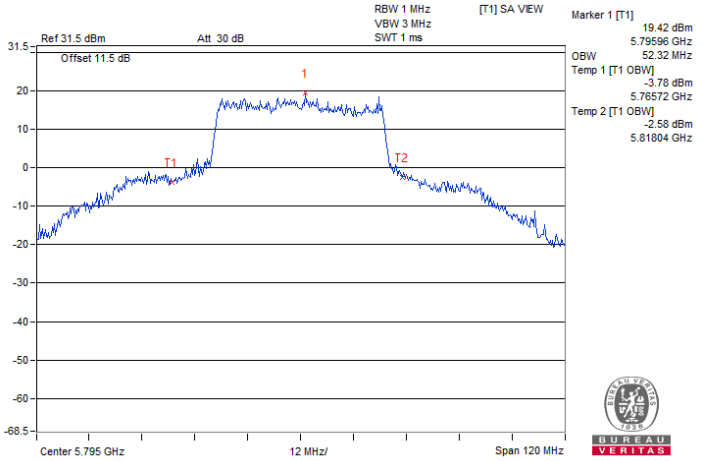
Spectrum Plot of Maximum Value



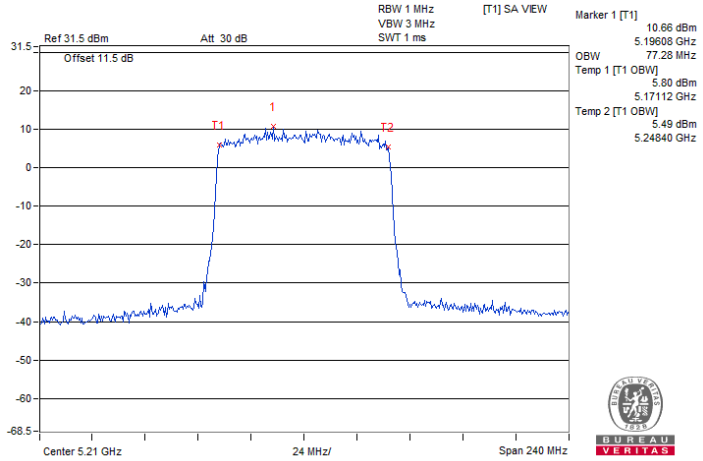
802.11a / Chain 2 : CH 165



802.11ax (HE20) / Chain 2 : CH 165



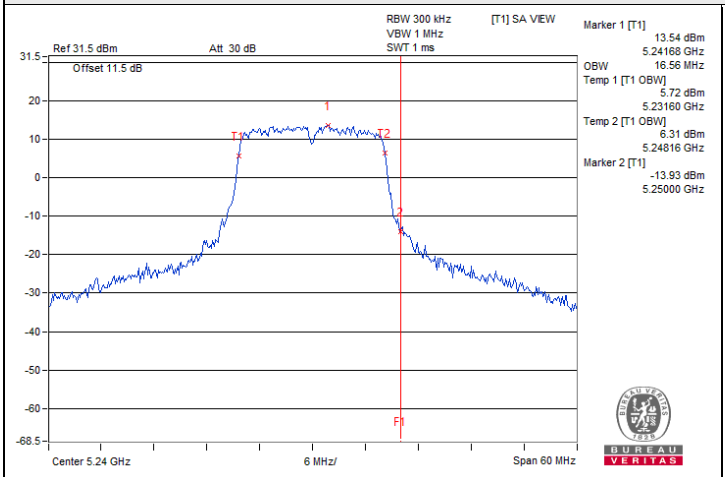
802.11ax (HE40) / Chain 1 : CH 159



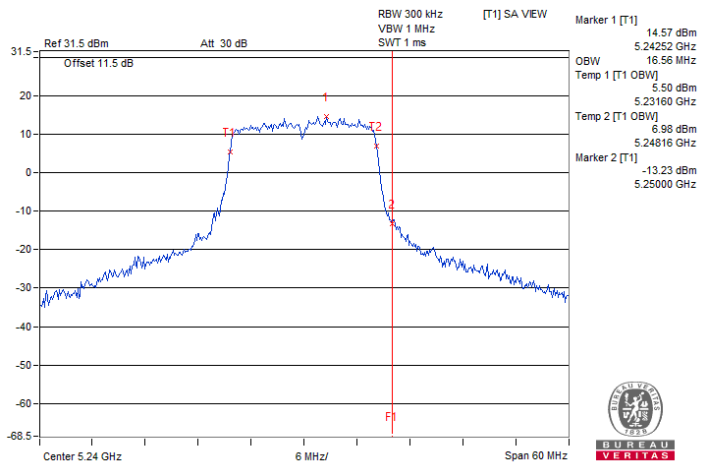
802.11ax (HE80) / Chain 0 : CH 42

Spectrum Plot for nearby DFS band

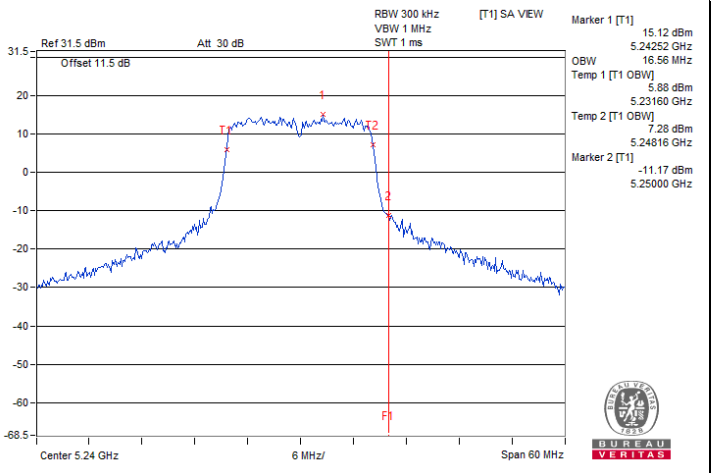
(DFS is required, if 99% OCP straddle into U-NII-2A)



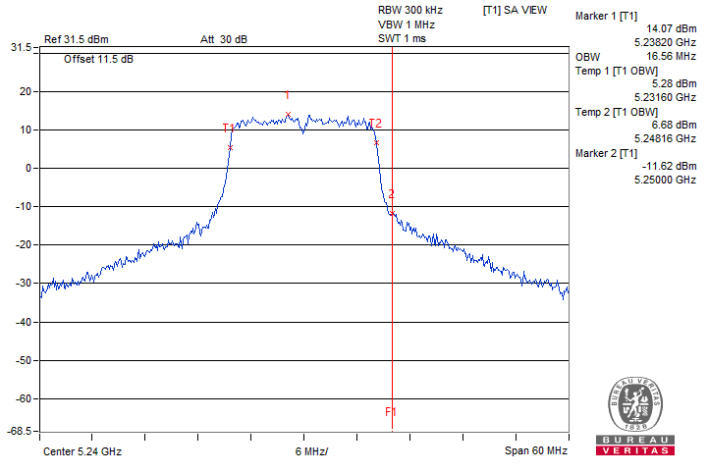
802.11a / Chain 0 : CH 48



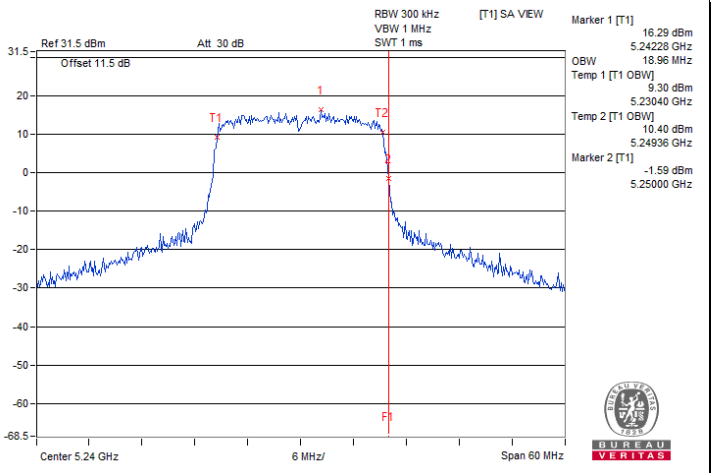
802.11a / Chain 1 : CH 48



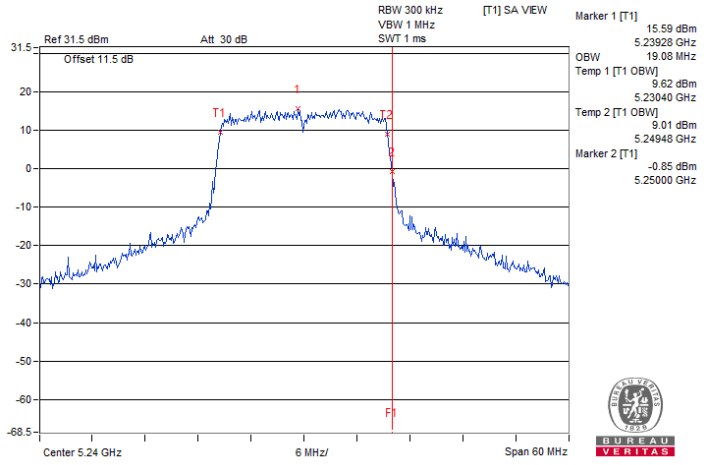
802.11a / Chain 2 : CH 48



802.11a / Chain 3 : CH 48



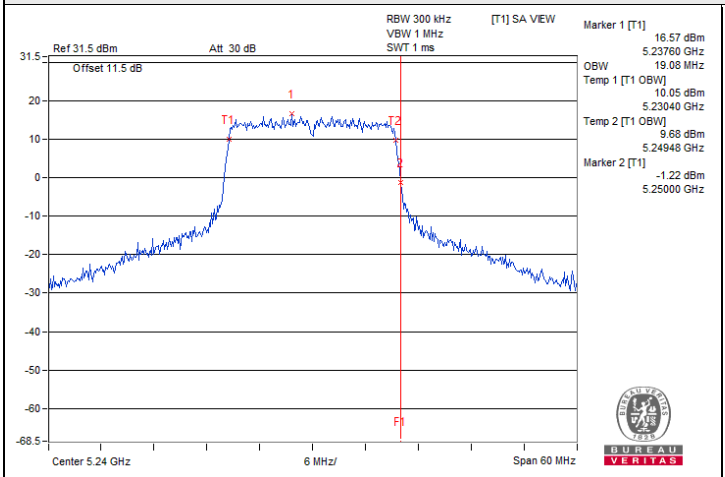
802.11ax (HE20) / Chain 0 : CH 48



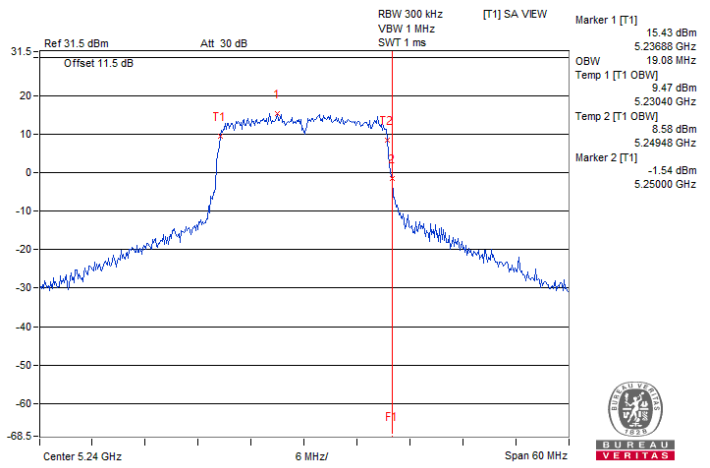
802.11ax (HE20) / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

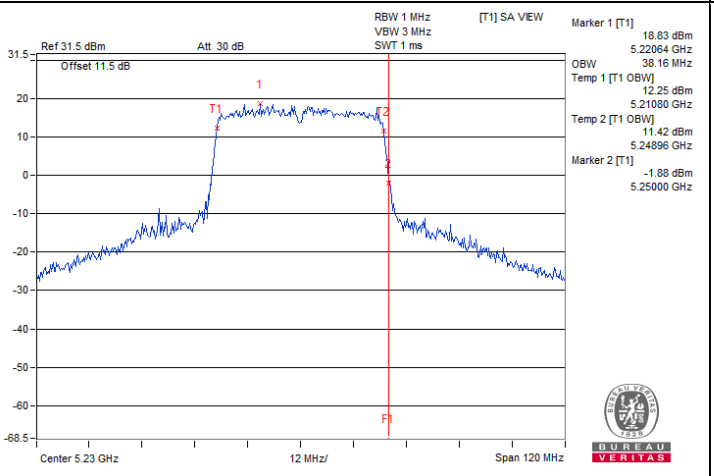
(DFS is required, if 99% OCP straddle into U-NII-2A)



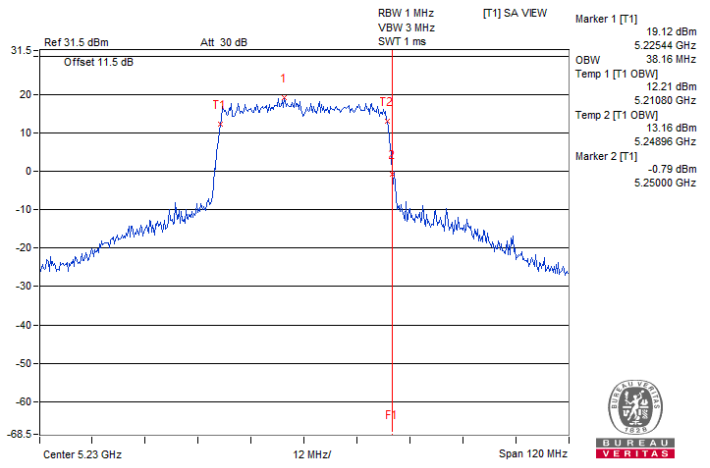
802.11ax (HE20) / Chain 2 : CH 48



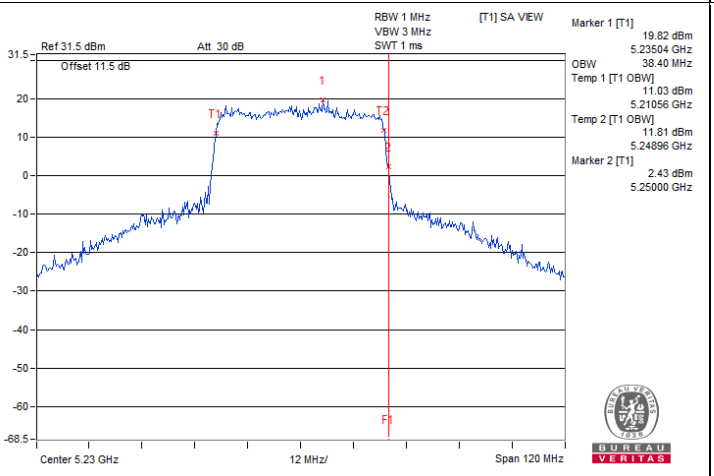
802.11ax (HE20) / Chain 3 : CH 48



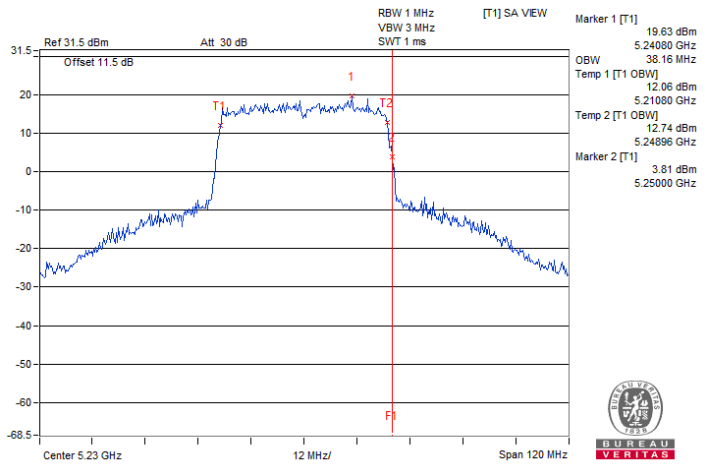
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE40) / Chain 1 : CH 46



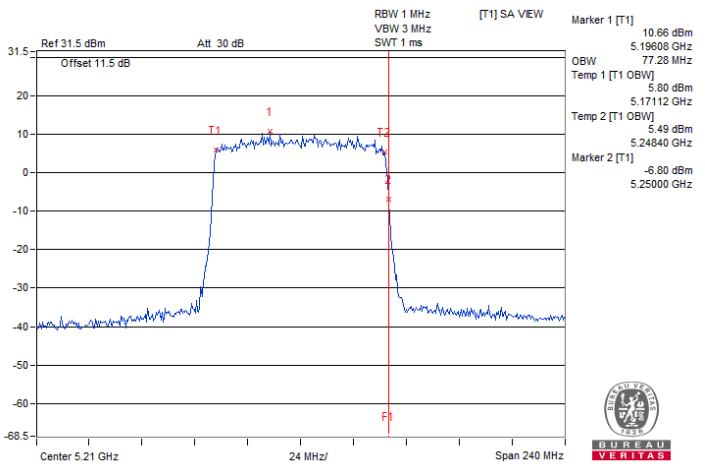
802.11ax (HE40) / Chain 2 : CH 46



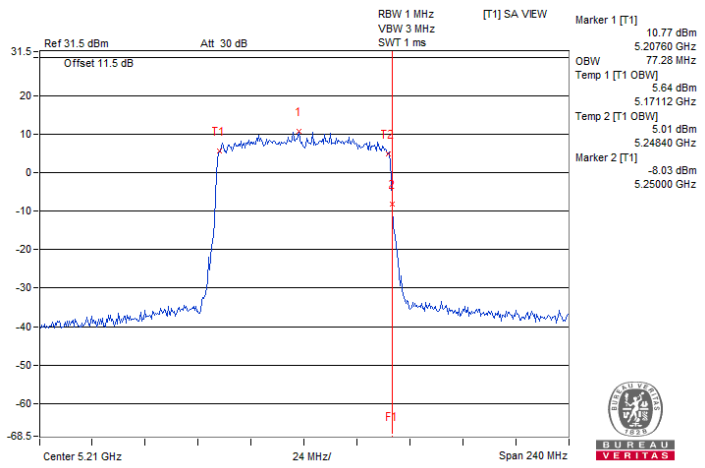
802.11ax (HE40) / Chain 3 : CH 46

Spectrum Plot for nearby DFS band

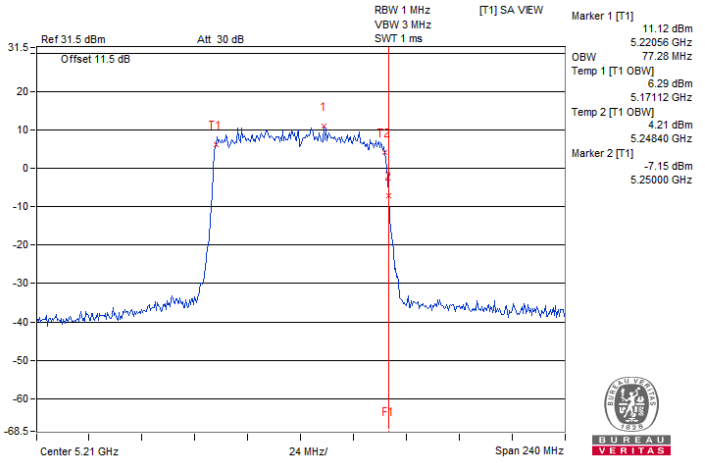
(DFS is required, if 99% OCP straddle into U-NII-2A)



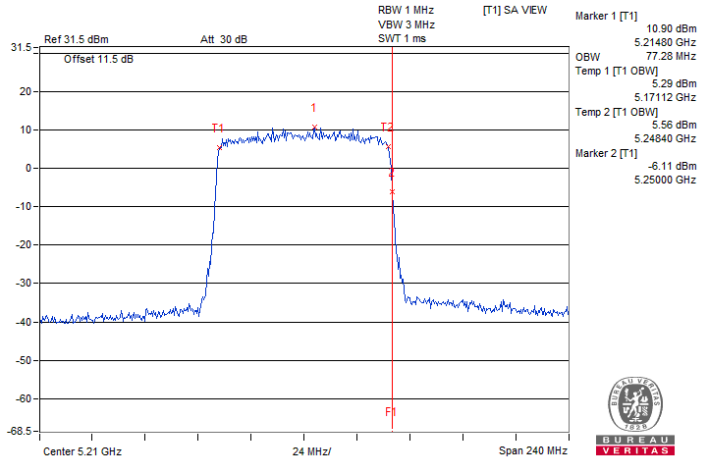
802.11ax (HE80) / Chain 0 : CH 42



802.11ax (HE80) / Chain 1 : CH 42



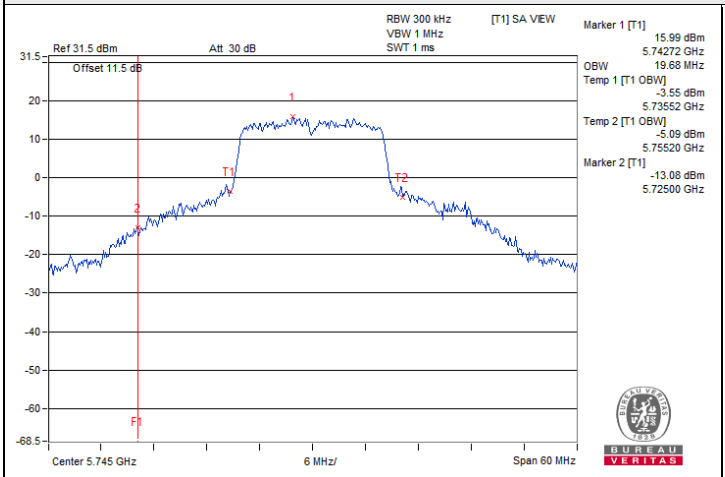
802.11ax (HE80) / Chain 2 : CH 42



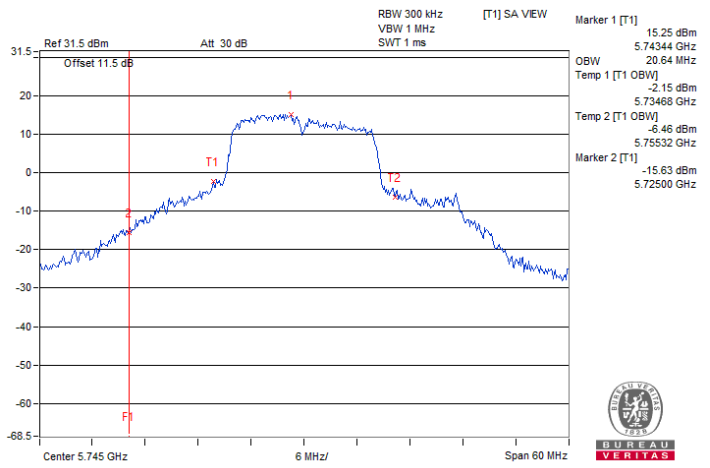
802.11ax (HE80) / Chain 3 : CH 42

Spectrum Plot for nearby DFS band

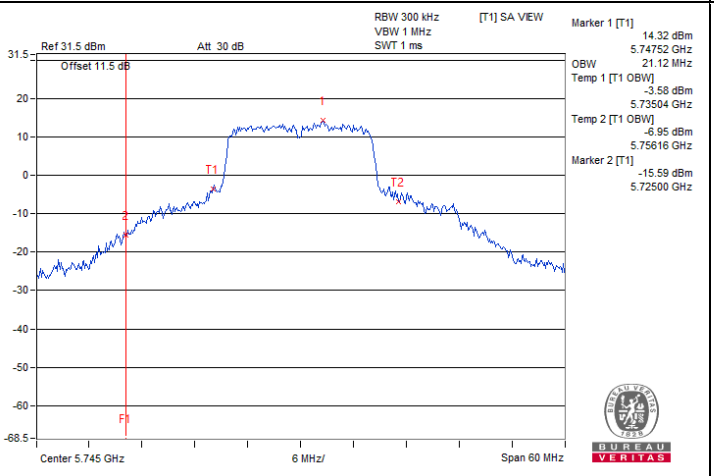
(DFS is required, if 99% OCP straddle into U-NII-2C)



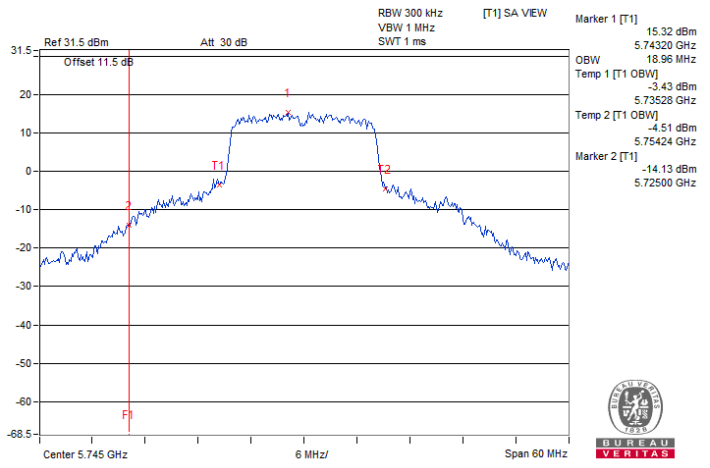
802.11a / Chain 0 : CH 149



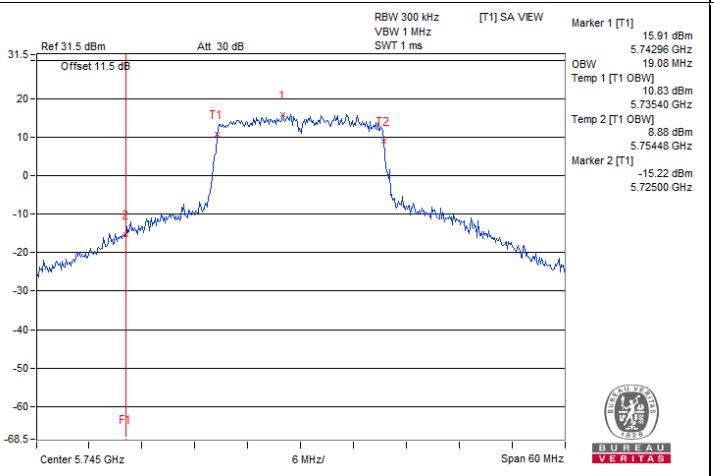
802.11a / Chain 1 : CH 149



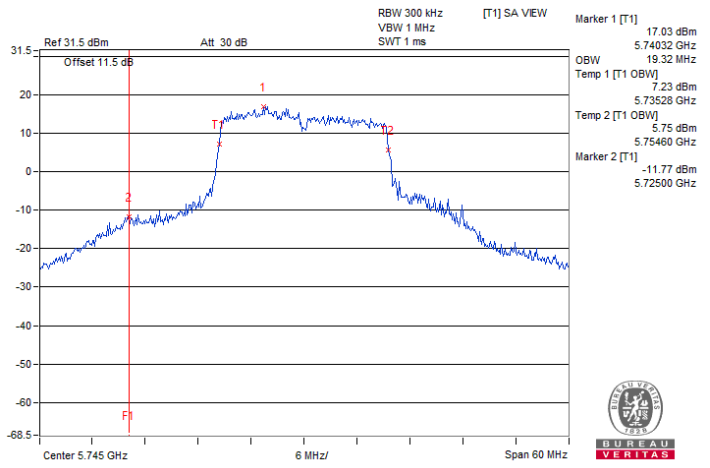
802.11a / Chain 2 : CH 149



802.11a / Chain 3 : CH 149



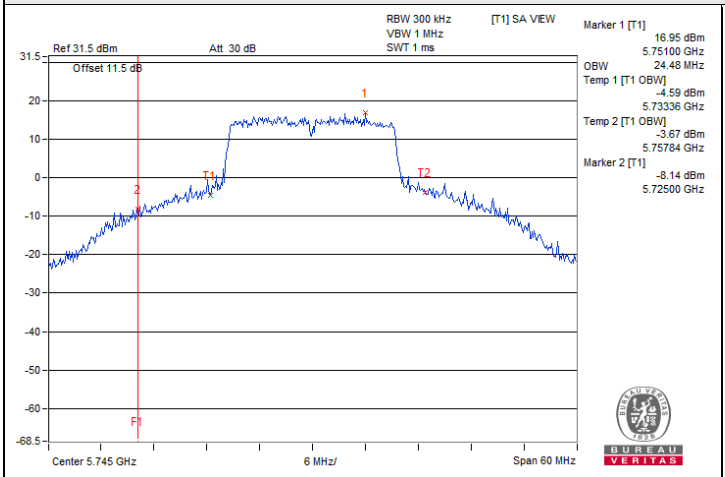
802.11ax (HE20) / Chain 0 : CH 149



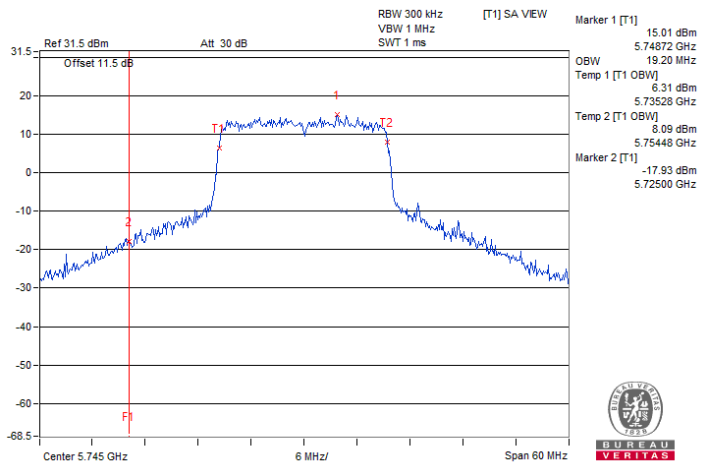
802.11ax (HE20) / Chain 1 : CH 149

Spectrum Plot for nearby DFS band

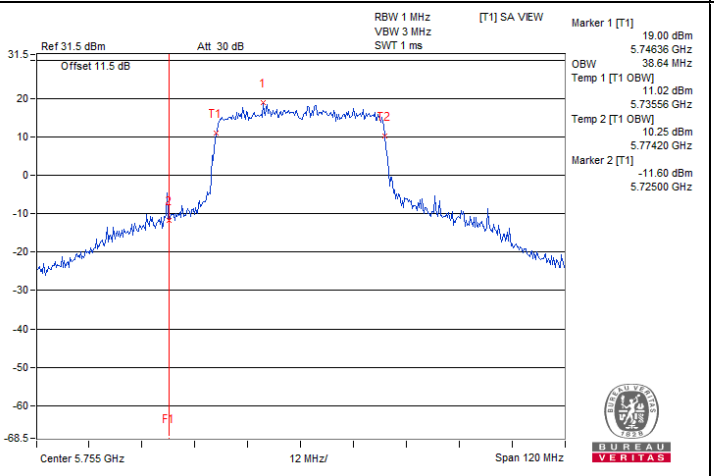
(DFS is required, if 99% OCP straddle into U-NII-2C)



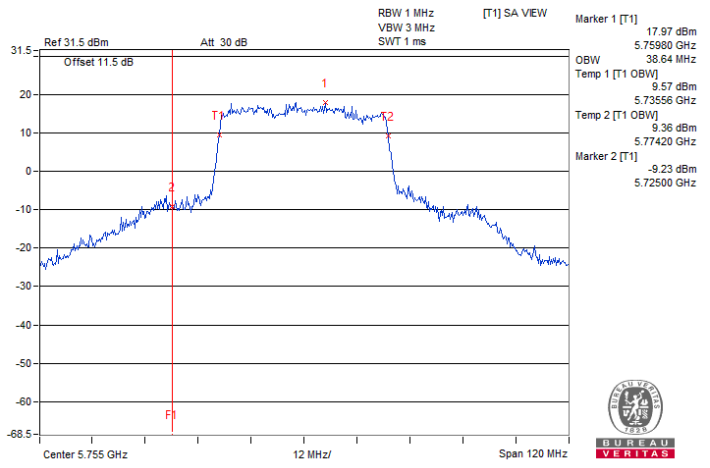
802.11ax (HE20) / Chain 2 : CH 149



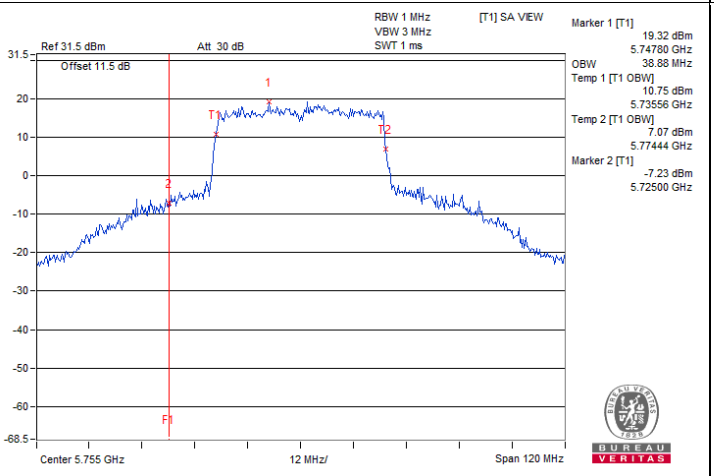
802.11ax (HE20) / Chain 3 : CH 149



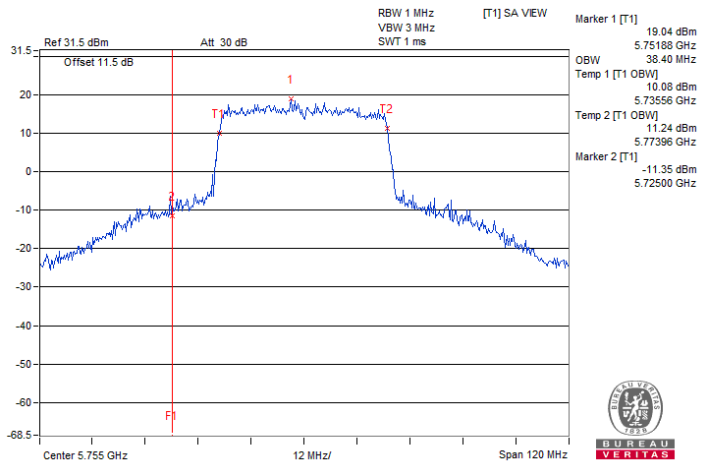
802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE40) / Chain 1 : CH 151



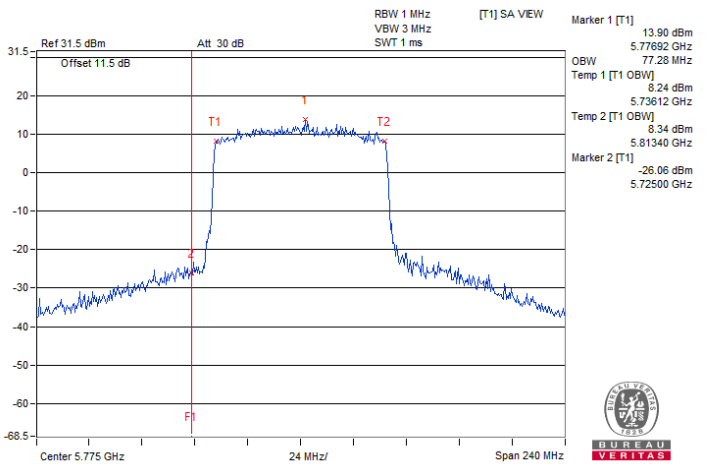
802.11ax (HE40) / Chain 2 : CH 151



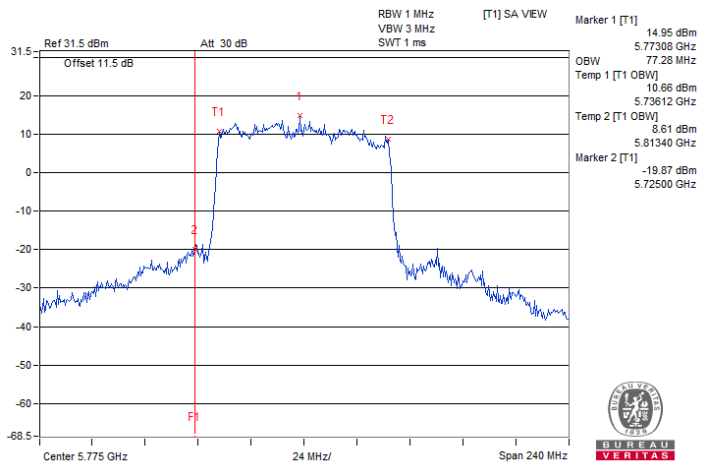
802.11ax (HE40) / Chain 3 : CH 151

Spectrum Plot for nearby DFS band

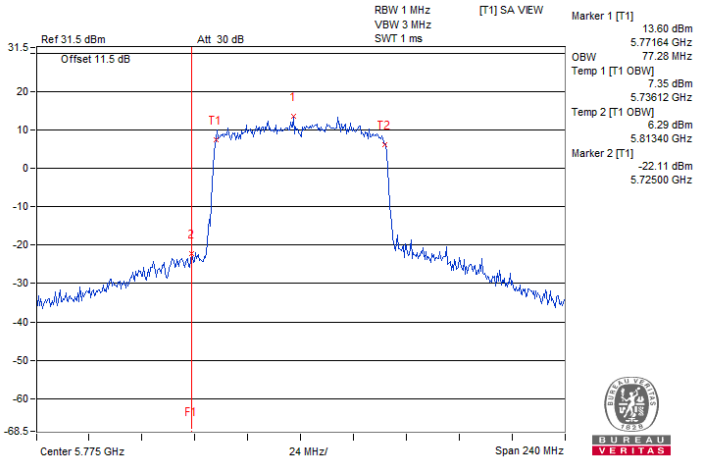
(DFS is required, if 99% OCP straddle into U-NII-2C)



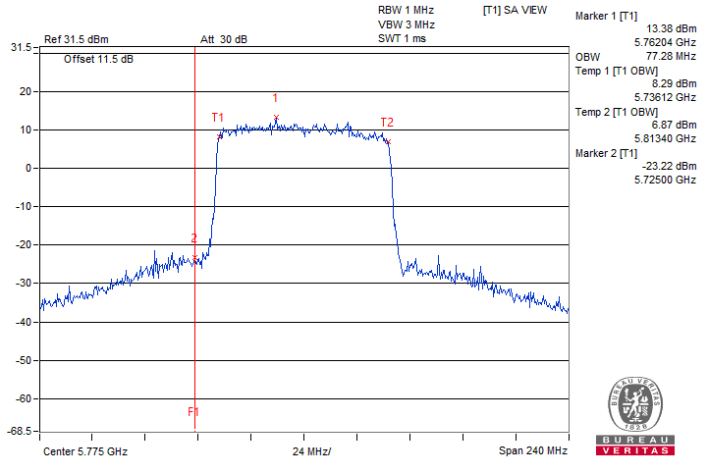
802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155



802.11ax (HE80) / Chain 2 : CH 155



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode I: FAP-433G_Radio 3

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	38.76	20.64	35.52	20.76
157	5785	38.64	23.04	38.76	23.52
165	5825	38.64	23.28	39.12	24.00

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	38.10	19.92	35.88	19.80
157	5785	43.20	40.44	43.80	40.32
165	5825	33.72	19.56	38.04	19.56

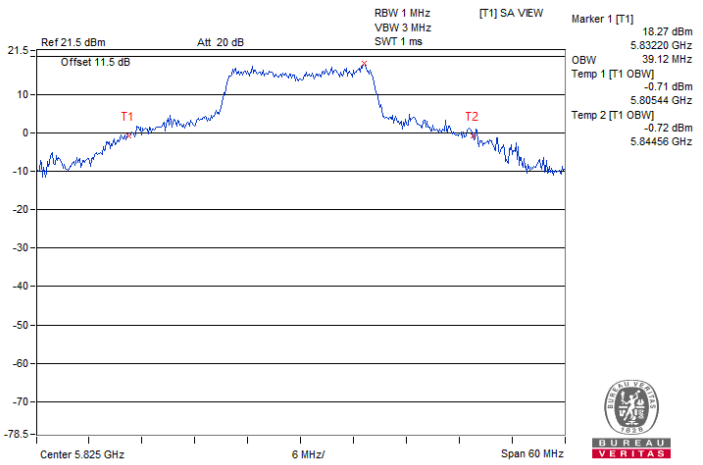
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	53.28	38.40	48.00	38.16
159	5795	51.60	38.40	53.76	38.40

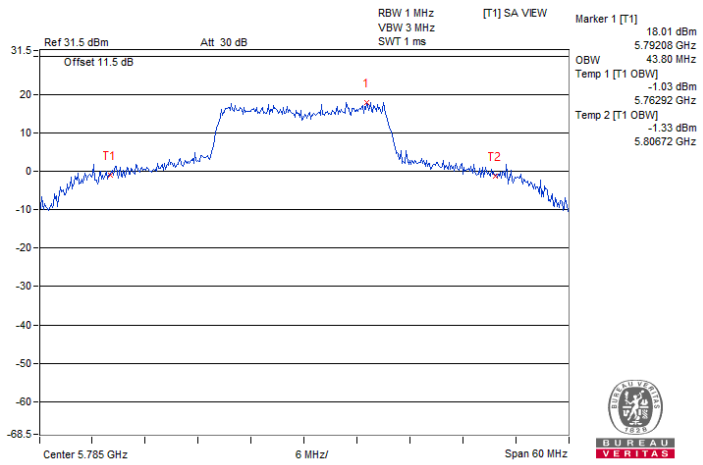
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.28	77.28	77.28	77.28

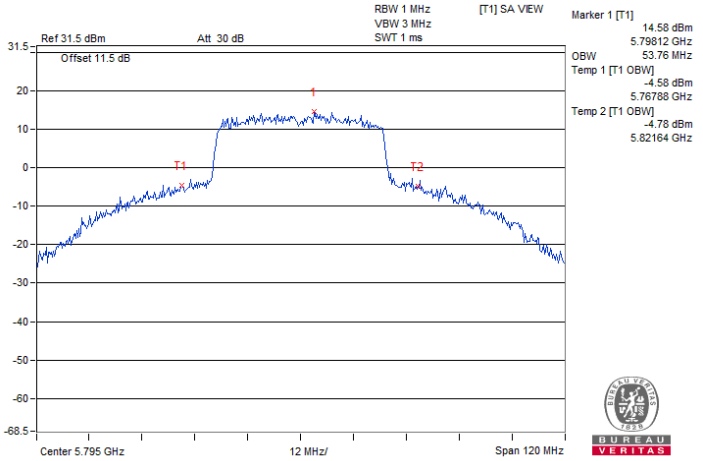
Spectrum Plot of Maximum Value



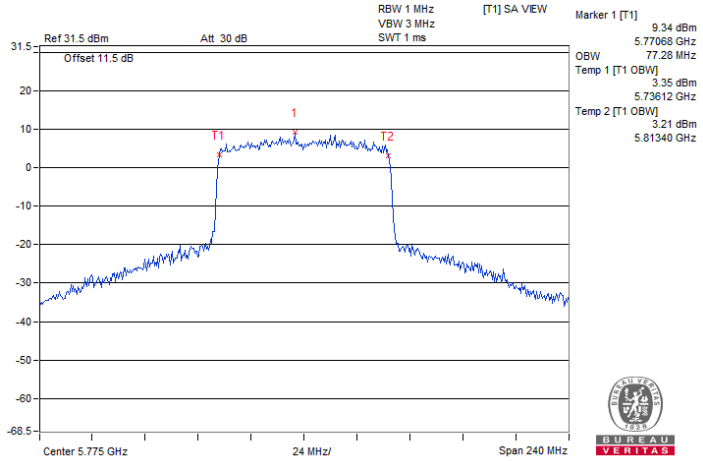
802.11a / Chain 2 : CH 165



802.11ax (HE20) / Chain 2 : CH 157



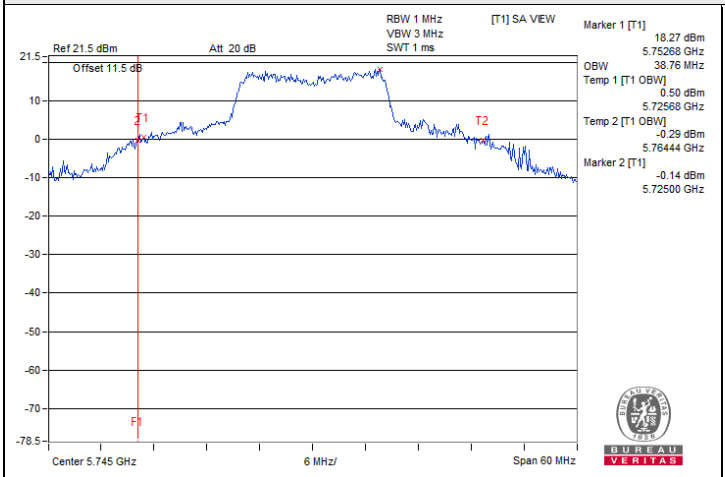
802.11ax (HE40) / Chain 2 : CH 159



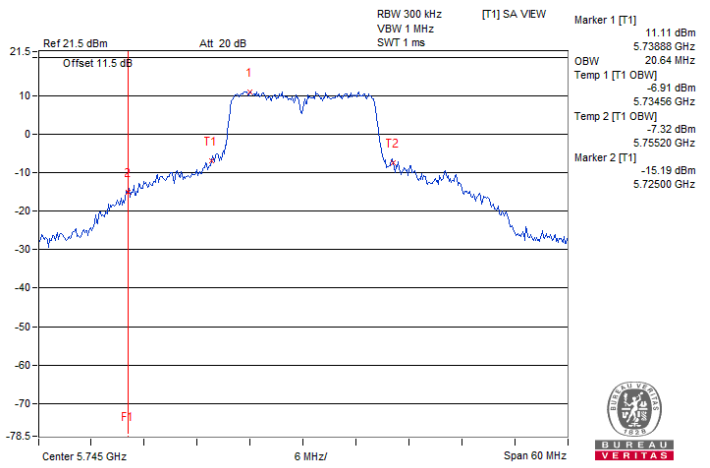
802.11ax (HE80) / Chain 0 : CH 155

Spectrum Plot for nearby DFS band

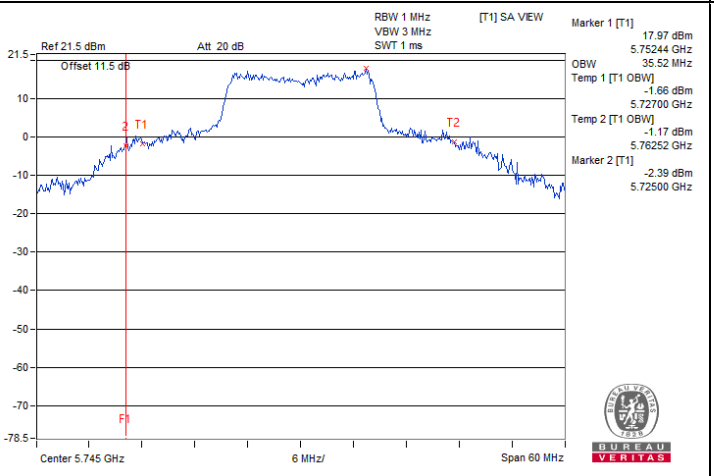
(DFS is required, if 99% OCP straddle into U-NII-2C)



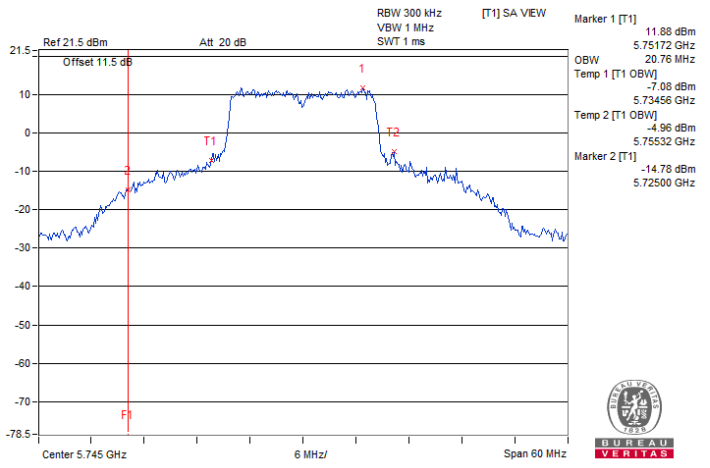
802.11a / Chain 0 : CH 149



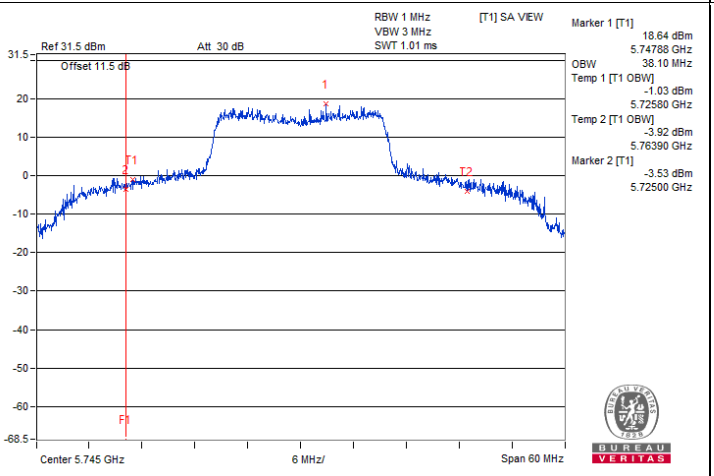
802.11a / Chain 1 : CH 149



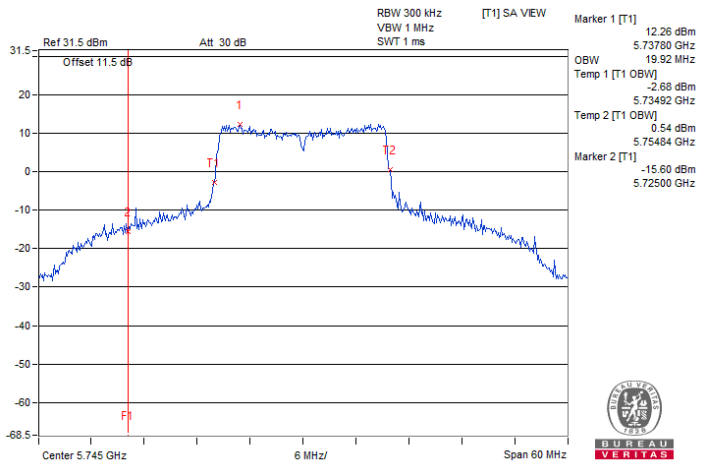
802.11a / Chain 2 : CH 149



802.11a / Chain 3 : CH 149



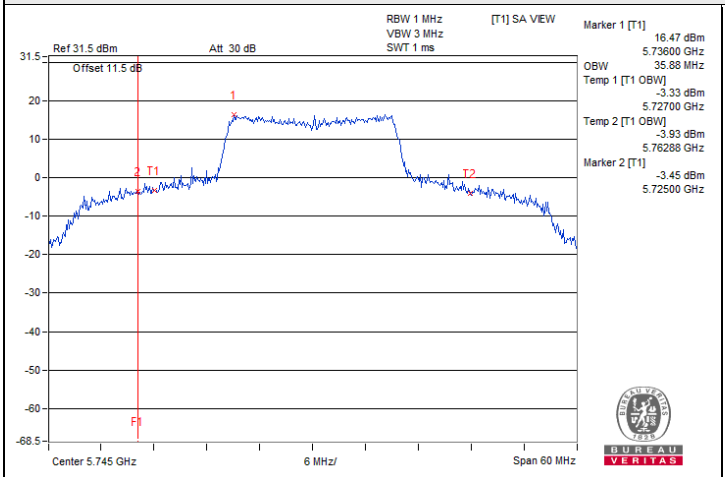
802.11ax (HE20) / Chain 0 : CH 149



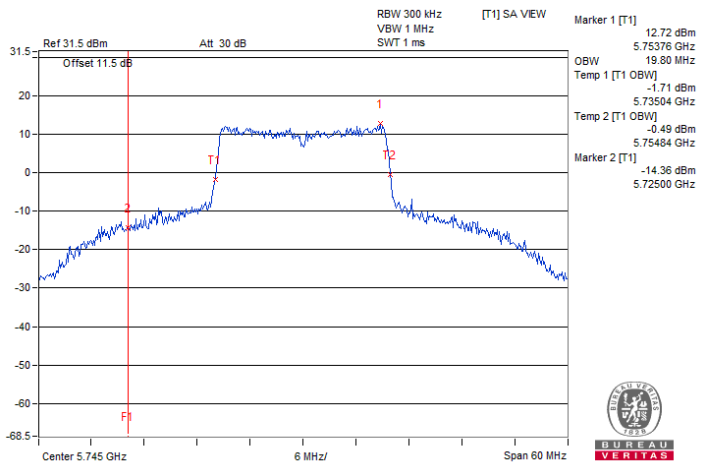
802.11ax (HE20) / Chain 1 : CH 149

Spectrum Plot for nearby DFS band

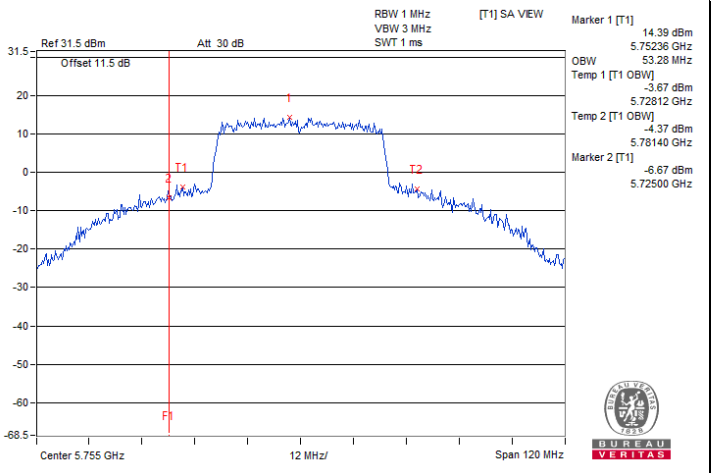
(DFS is required, if 99% OCP straddle into U-NII-2C)



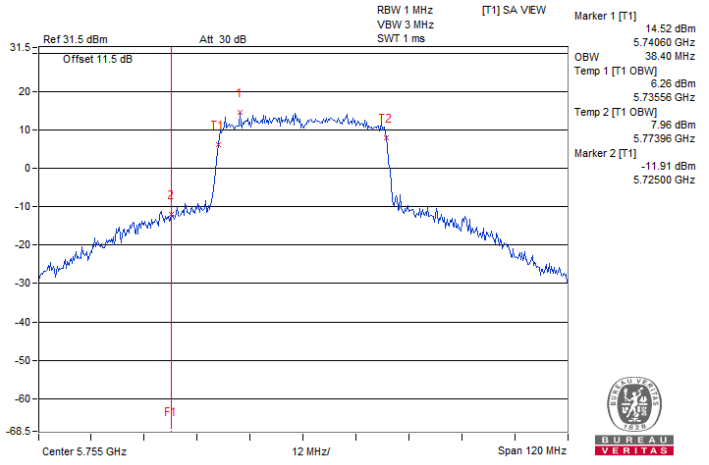
802.11ax (HE20) / Chain 2 : CH 149



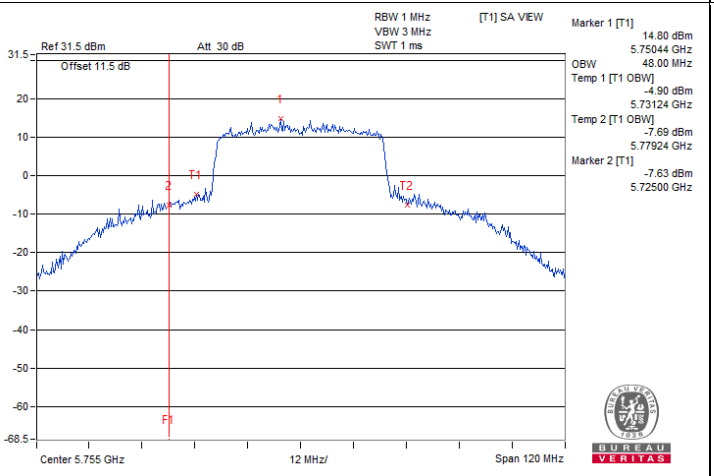
802.11ax (HE20) / Chain 3 : CH 149



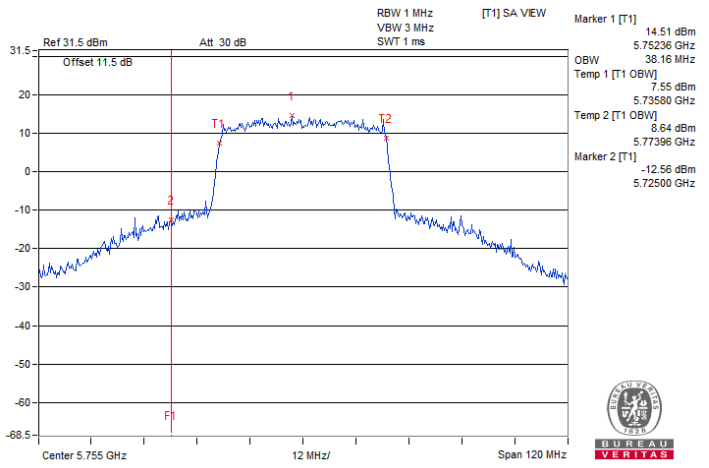
802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE40) / Chain 1 : CH 151



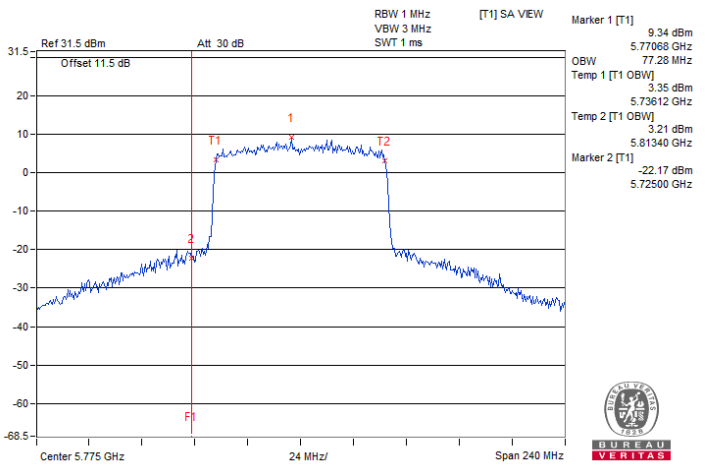
802.11ax (HE40) / Chain 2 : CH 151



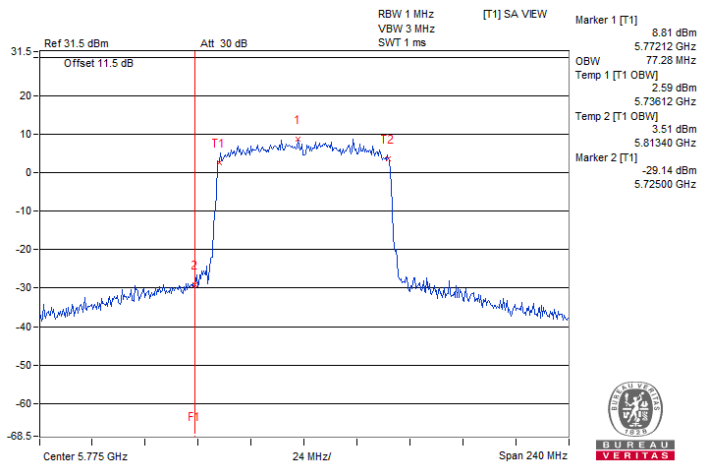
802.11ax (HE40) / Chain 3 : CH 151

Spectrum Plot for nearby DFS band

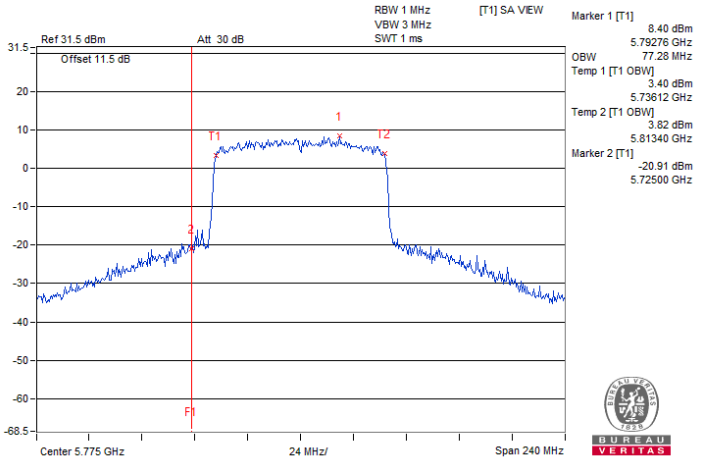
(DFS is required, if 99% OCP straddle into U-NII-2C)



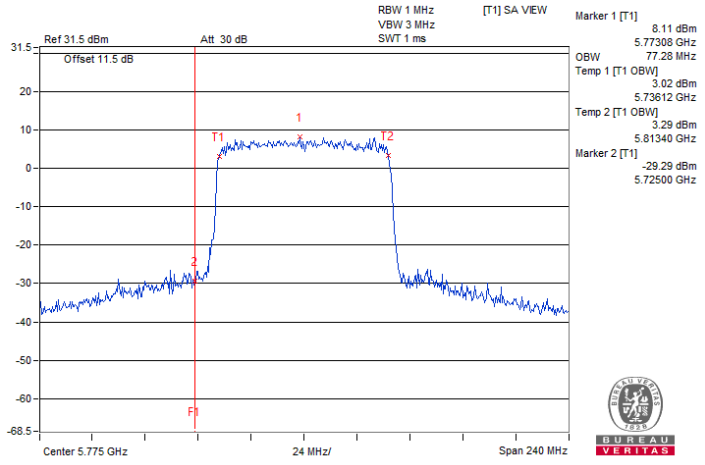
802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155



802.11ax (HE80) / Chain 2 : CH 155



802.11ax (HE80) / Chain 3 : CH 155

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

Test Mode K: FAP-433G_Scanning Radio

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.68	16.56
40	5200	17.28	16.92
48	5240	18.36	17.16
149	5745	33.84	34.92
157	5785	32.04	31.92
165	5825	34.32	33.48

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.08	19.08
40	5200	19.20	19.20
48	5240	19.80	19.44
149	5745	31.56	33.48
157	5785	34.20	34.92
165	5825	33.00	32.52

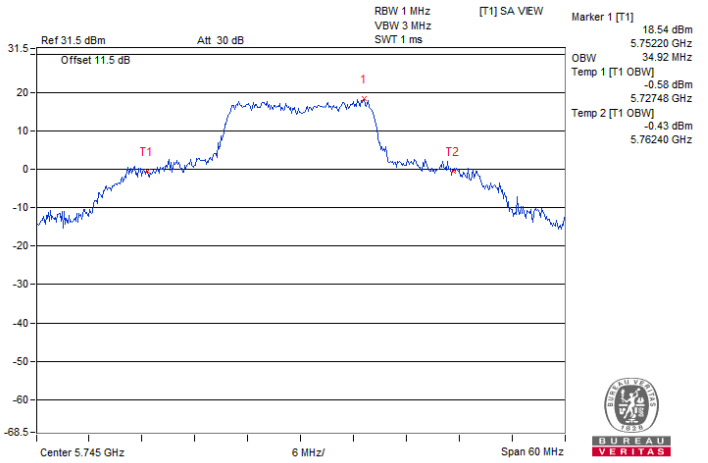
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.92	37.68
46	5230	37.92	37.92
151	5755	38.16	38.16
159	5795	39.84	39.12

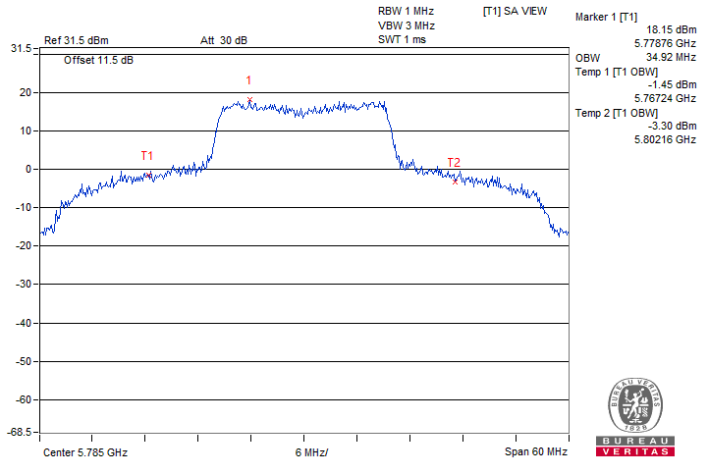
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	77.28
155	5775	77.04	77.04

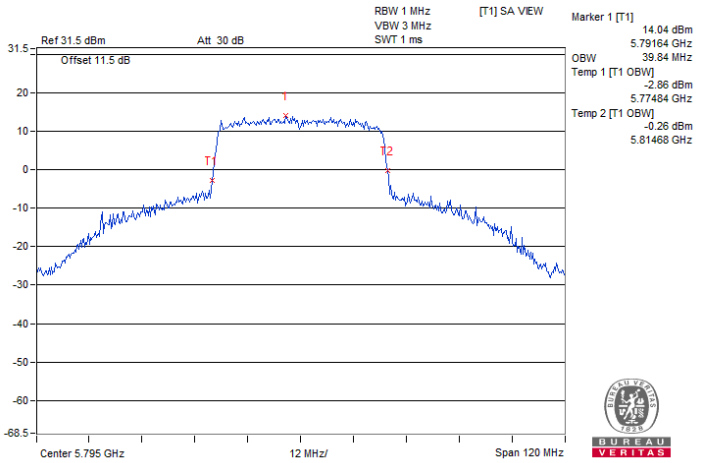
Spectrum Plot of Maximum Value



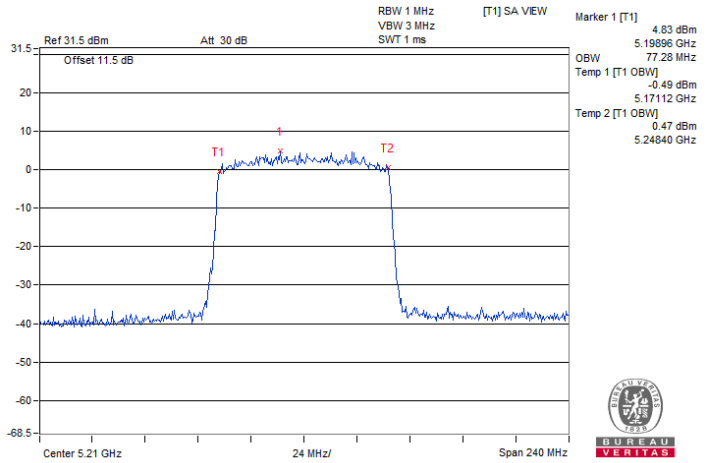
802.11a / Chain 1 : CH 149



802.11ax (HE20) / Chain 1 : CH 157

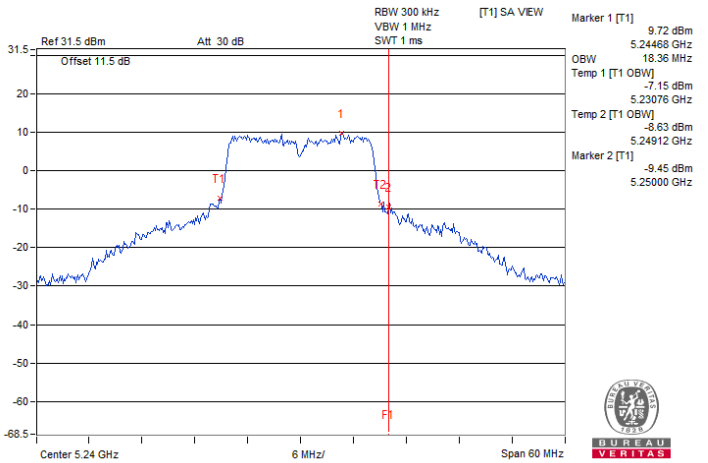


802.11ax (HE40) / Chain 0 : CH 159

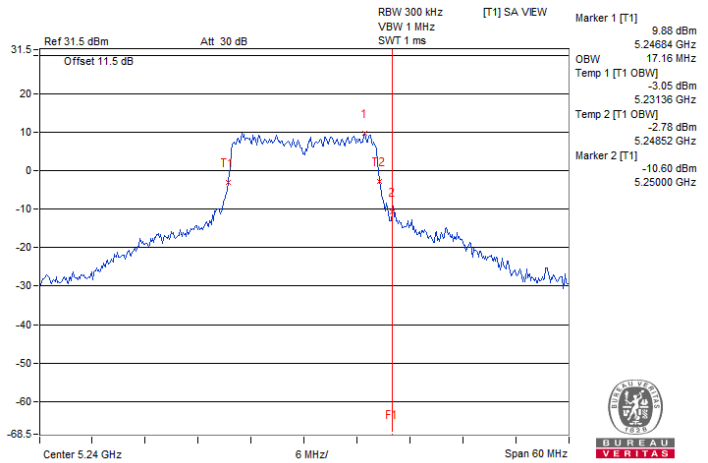


802.11ax (HE80) / Chain 0 : CH 42

Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A)



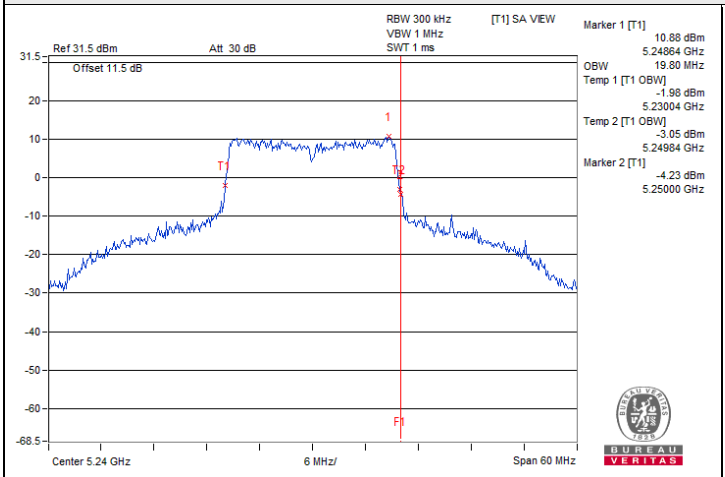
802.11a / Chain 0 : CH 48



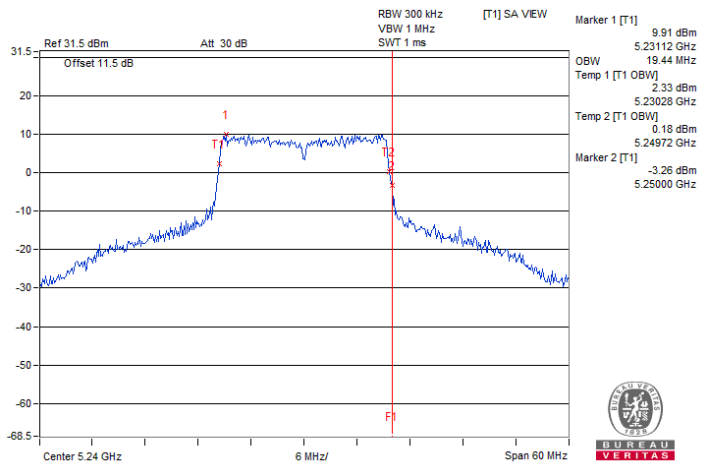
802.11a / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

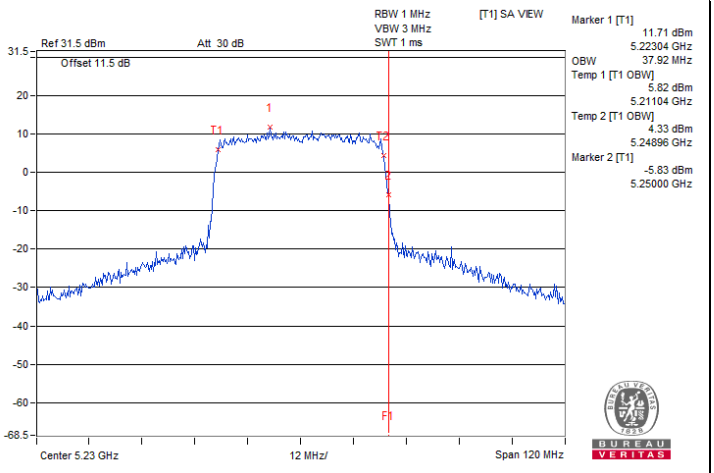
(DFS is required, if 99% OCP straddle into U-NII-2A)



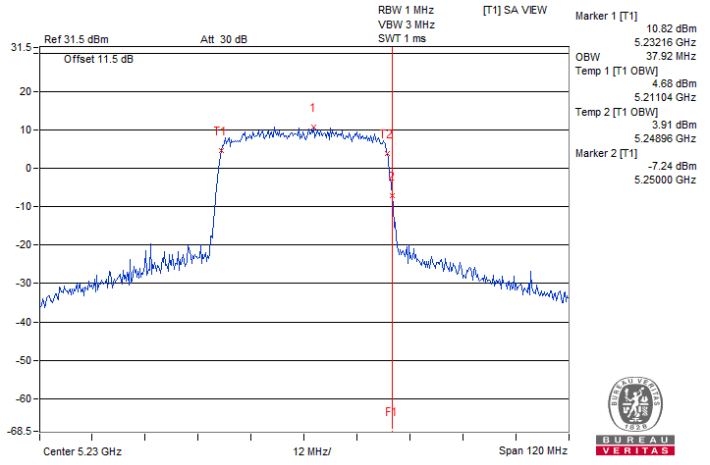
802.11ax (HE20) / Chain 0 : CH 48



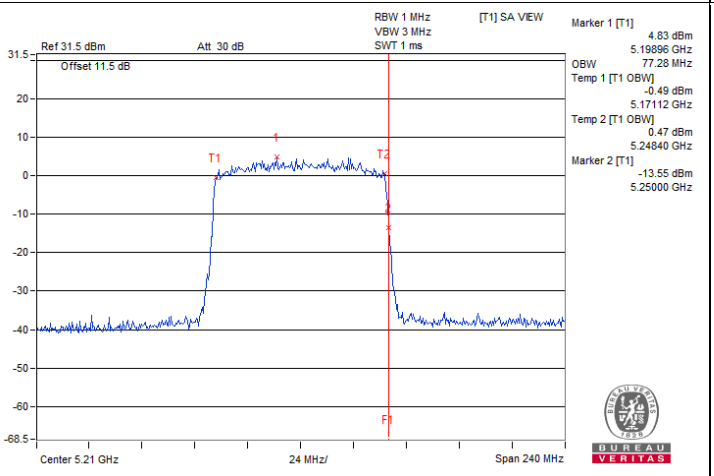
802.11ax (HE20) / Chain 1 : CH 48



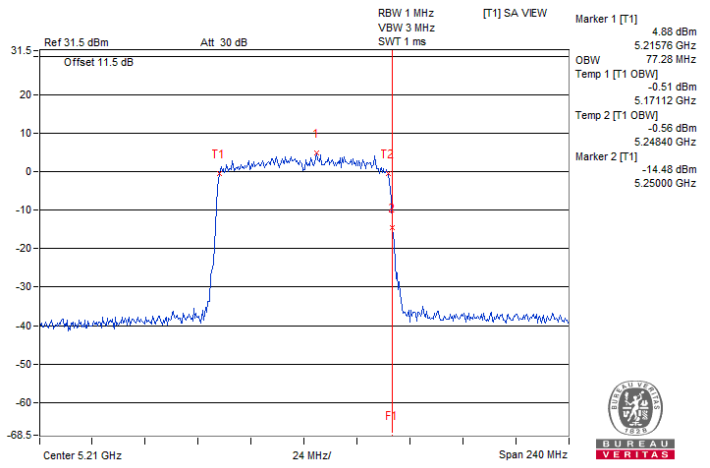
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE40) / Chain 1 : CH 46



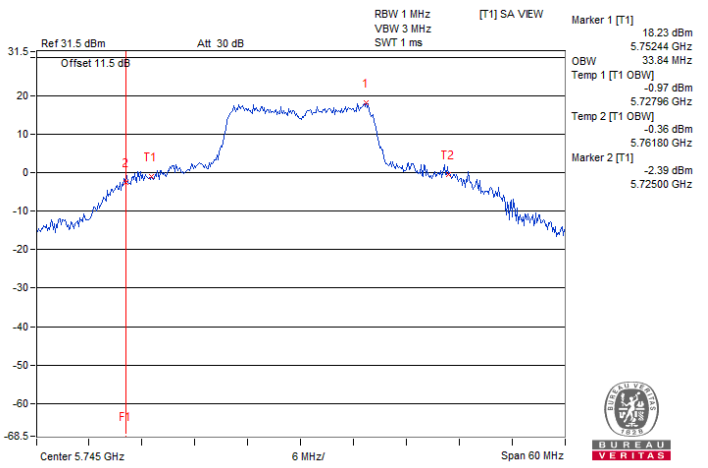
802.11ax (HE80) / Chain 0 : CH 42



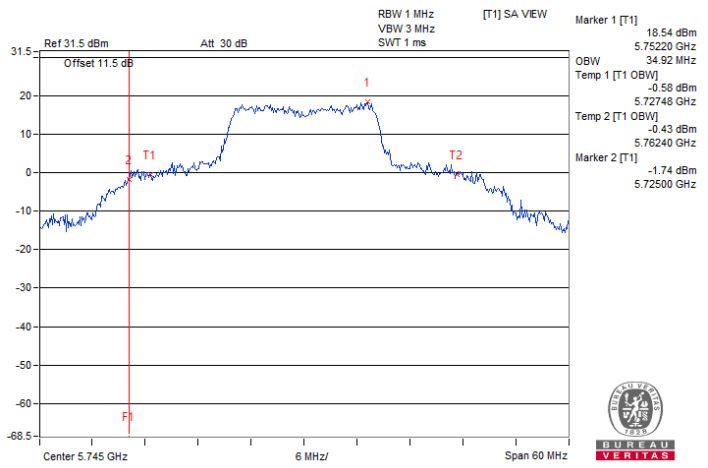
802.11ax (HE80) / Chain 1 : CH 42

Spectrum Plot for nearby DFS band

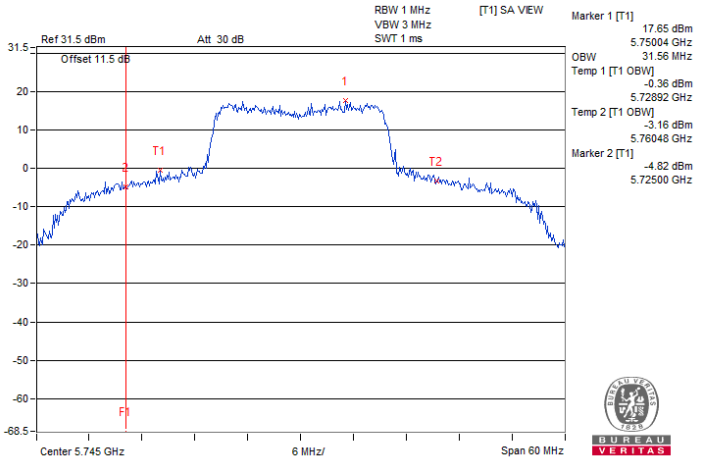
(DFS is required, if 99% OCP straddle into U-NII-2C)



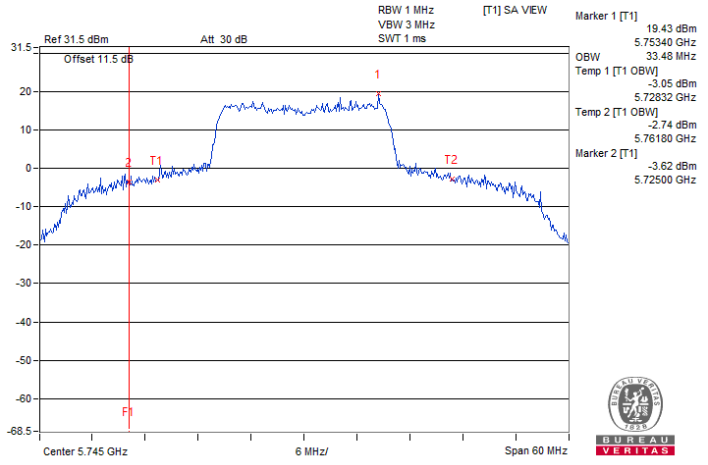
802.11a / Chain 0 : CH 149



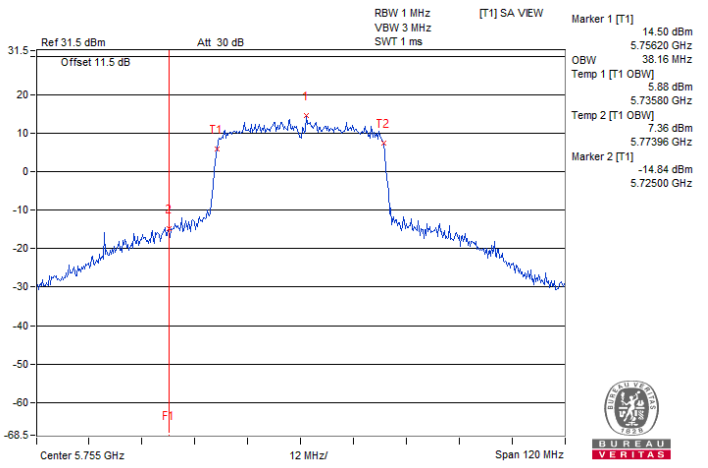
802.11a / Chain 1 : CH 149



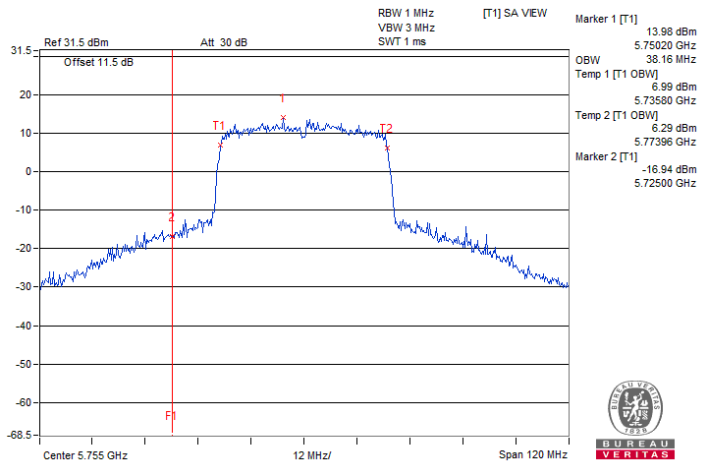
802.11ax (HE20) / Chain 0 : CH 149



802.11ax (HE20) / Chain 1 : CH 149



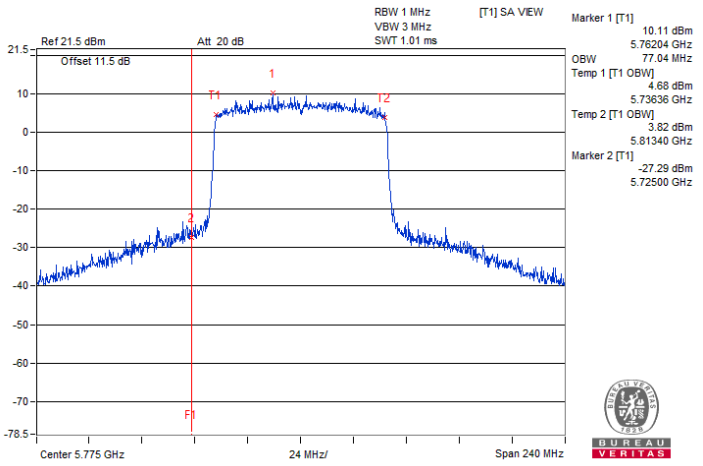
802.11ax (HE40) / Chain 0 : CH 151



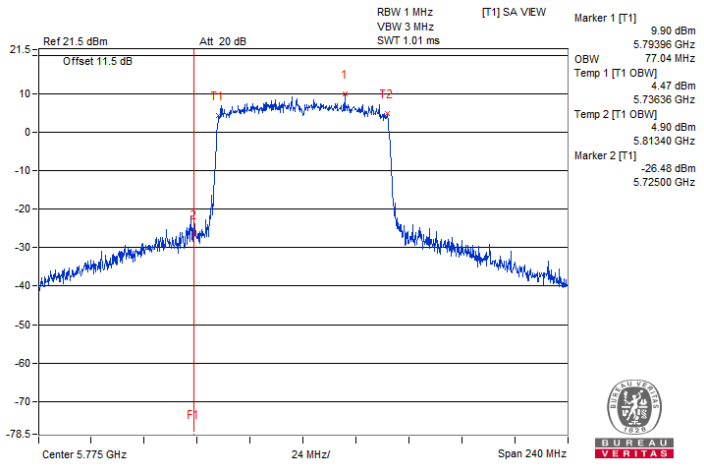
802.11ax (HE40) / Chain 1 : CH 151

Spectrum Plot for nearby DFS band

(DFS is required, if 99% OCP straddle into U-NII-2C)



802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155

7.5 Frequency Stability

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

Test Mode A: FAP-431G_Radio 2

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5180 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	5179.9918	Pass	5179.9955	Pass	5179.9908	Pass	5179.995	Pass
40	120	5180.0146	Pass	5180.0104	Pass	5180.0139	Pass	5180.0139	Pass
30	120	5180.0051	Pass	5180.0078	Pass	5180.0063	Pass	5180.0075	Pass
20	120	5179.9797	Pass	5179.9762	Pass	5179.98	Pass	5179.9804	Pass
10	120	5180.003	Pass	5180.0027	Pass	5180.0021	Pass	5180.004	Pass
0	120	5180.0007	Pass	5179.9977	Pass	5180.0002	Pass	5180.0008	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 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	5179.9846	Pass	5179.9849	Pass	5179.9864	Pass	5179.9847	Pass
	120	5179.9797	Pass	5179.9762	Pass	5179.98	Pass	5179.9804	Pass
	102	5179.9708	Pass	5179.9718	Pass	5179.9712	Pass	5179.9742	Pass

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

Test Mode C: FAP-431G_Radio 3

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5745 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	5745.029	Pass	5745.0277	Pass	5745.0243	Pass	5745.0289	Pass
40	120	5745.0139	Pass	5745.0092	Pass	5745.0131	Pass	5745.0131	Pass
30	120	5745.0033	Pass	5745.0063	Pass	5745.0031	Pass	5745.0045	Pass
20	120	5745.0159	Pass	5745.0178	Pass	5745.0163	Pass	5745.0167	Pass
10	120	5744.9772	Pass	5744.9769	Pass	5744.9762	Pass	5744.9725	Pass
0	120	5745.0264	Pass	5745.0268	Pass	5745.0295	Pass	5745.0244	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5745 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	5745.0256	Pass	5745.0259	Pass	5745.0276	Pass	5745.0299	Pass
	120	5745.0159	Pass	5745.0178	Pass	5745.0163	Pass	5745.0167	Pass
	102	5745.0027	Pass	5745.0038	Pass	5745.0032	Pass	5745.0065	Pass

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

Test Mode E: FAP-431G_Scanning Radio

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5180 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	5179.9791	Pass	5179.9742	Pass	5179.9762	Pass	5179.9753	Pass
40	120	5179.9905	Pass	5179.9915	Pass	5179.9898	Pass	5179.9898	Pass
30	120	5179.9863	Pass	5179.9839	Pass	5179.9861	Pass	5179.9822	Pass
20	120	5179.9914	Pass	5179.988	Pass	5179.9918	Pass	5179.987	Pass
10	120	5180.0031	Pass	5180.0042	Pass	5180.0036	Pass	5180.0054	Pass
0	120	5180.0108	Pass	5180.013	Pass	5180.0103	Pass	5180.0109	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 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	5179.9824	Pass	5179.9828	Pass	5179.9842	Pass	5179.9826	Pass
	120	5179.9914	Pass	5179.988	Pass	5179.9918	Pass	5179.987	Pass
	102	5179.9895	Pass	5179.9904	Pass	5179.9899	Pass	5179.9877	Pass

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

Test Mode G: FAP-433G_Radio 2

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5180 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	5179.9994	Pass	5180.001	Pass	5180.0013	Pass	5179.9981	Pass
40	120	5179.9784	Pass	5179.9799	Pass	5179.9792	Pass	5179.9776	Pass
30	120	5179.9747	Pass	5179.9768	Pass	5179.9744	Pass	5179.9749	Pass
20	120	5179.9952	Pass	5179.9973	Pass	5179.9934	Pass	5179.9922	Pass
10	120	5180.0117	Pass	5180.0139	Pass	5180.0138	Pass	5180.0114	Pass
0	120	5180.0172	Pass	5180.021	Pass	5180.0162	Pass	5180.0188	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 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	5179.9836	Pass	5179.983	Pass	5179.9848	Pass	5179.9845	Pass
	120	5179.9952	Pass	5179.9973	Pass	5179.9934	Pass	5179.9922	Pass
	102	5180.0011	Pass	5180.0035	Pass	5180.0027	Pass	5180.0023	Pass

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

Test Mode I: FAP-433G_Radio 3

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5745 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	5745.0019	Pass	5745.0007	Pass	5745.0029	Pass	5745.0019	Pass
40	120	5744.97	Pass	5744.9711	Pass	5744.9692	Pass	5744.9692	Pass
30	120	5745.0227	Pass	5745.02	Pass	5745.0224	Pass	5745.0238	Pass
20	120	5744.9778	Pass	5744.974	Pass	5744.9782	Pass	5744.9787	Pass
10	120	5744.9908	Pass	5744.9905	Pass	5744.9956	Pass	5744.9918	Pass
0	120	5744.9882	Pass	5744.9849	Pass	5744.9876	Pass	5744.9883	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5745 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	5744.9832	Pass	5744.9836	Pass	5744.9795	Pass	5744.9807	Pass
	120	5744.9778	Pass	5744.974	Pass	5744.9782	Pass	5744.9787	Pass
	102	5744.9775	Pass	5744.9786	Pass	5744.978	Pass	5744.9755	Pass

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

Test Mode K: FAP-433G_Scanning Radio

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5180 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	5180.0141	Pass	5180.0129	Pass	5180.015	Pass	5180.014	Pass
40	120	5180.0004	Pass	5180.0014	Pass	5179.9997	Pass	5179.9997	Pass
30	120	5179.9909	Pass	5179.9937	Pass	5179.9907	Pass	5179.992	Pass
20	120	5180.0023	Pass	5180.0041	Pass	5180.0034	Pass	5180.0038	Pass
10	120	5180.0272	Pass	5180.0269	Pass	5180.0263	Pass	5180.0282	Pass
0	120	5180.0197	Pass	5180.0219	Pass	5180.0192	Pass	5180.0198	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 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	5179.9975	Pass	5179.9978	Pass	5179.9993	Pass	5179.9962	Pass
	120	5180.0023	Pass	5180.0041	Pass	5180.0034	Pass	5180.0038	Pass
	102	5179.9975	Pass	5179.9985	Pass	5179.998	Pass	5179.9957	Pass

7.6 AC Power Conducted Emissions

Test Mode A: FAP-431G_Radio 2

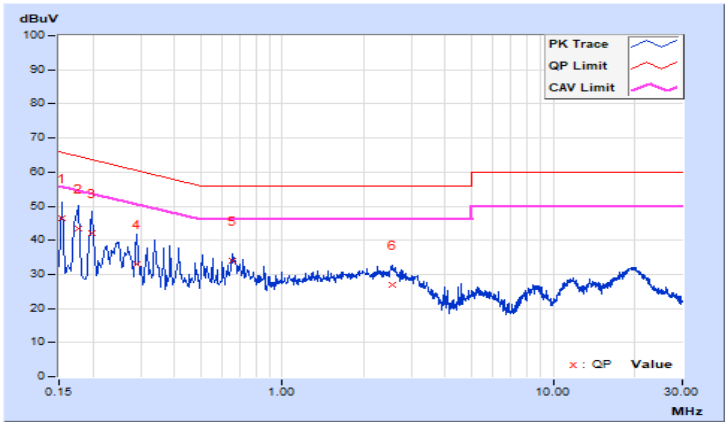
ADP mode

RF Mode	802.11a	**Channel**	CH 157：5785 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	36.75	20.62	46.43	30.30	65.78	55.78	-19.35	-25.48
2	0.17800	9.70	33.68	18.52	43.38	28.22	64.58	54.58	-21.20	-26.36
3	0.19800	9.72	32.39	17.22	42.11	26.94	63.69	53.69	-21.58	-26.75
4	0.29000	9.76	23.14	10.01	32.90	19.77	60.52	50.52	-27.62	-30.75
5	0.65800	9.82	24.13	18.90	33.95	28.72	56.00	46.00	-22.05	-17.28
6	2.55000	9.91	17.12	13.26	27.03	23.17	56.00	46.00	-28.97	-22.83

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

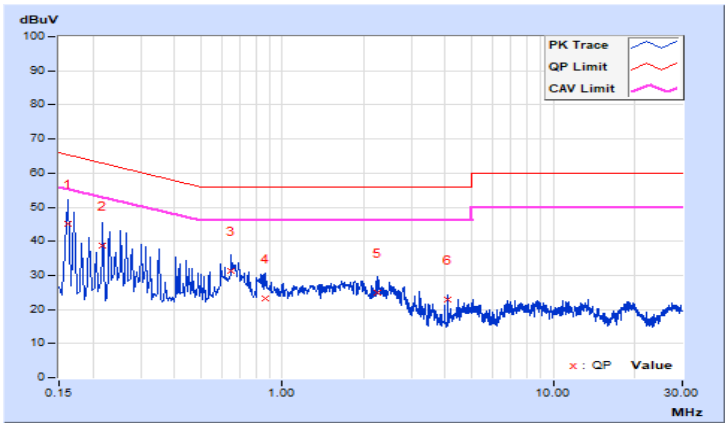


RF Mode	802.11a	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

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	0.16200	9.69	35.39	16.21	45.08	25.90	65.36	55.36	-20.28	-29.46
2	0.21800	9.73	29.08	13.34	38.81	23.07	62.89	52.89	-24.08	-29.82
3	0.65000	9.83	21.48	14.79	31.31	24.62	56.00	46.00	-24.69	-21.38
4	0.86600	9.85	13.48	9.65	23.33	19.50	56.00	46.00	-32.67	-26.50
5	2.25400	9.93	14.97	11.09	24.90	21.02	56.00	46.00	-31.10	-24.98
6	4.06600	9.97	13.04	2.43	23.01	12.40	56.00	46.00	-32.99	-33.60

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

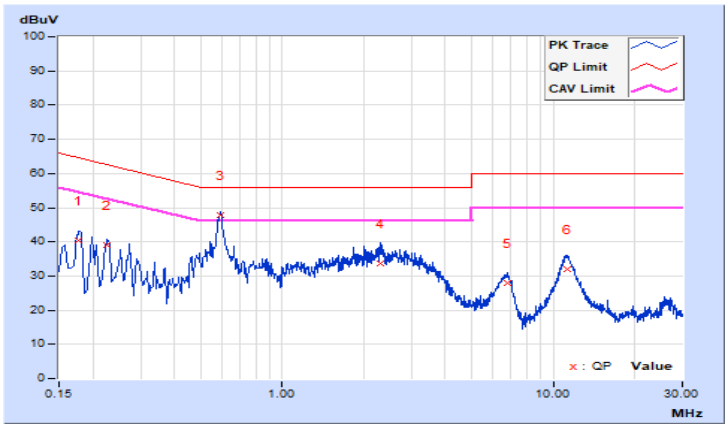
POE mode

RF Mode	802.11a	Channel	CH 157：5785 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	30.74	19.21	40.37	28.84	64.58	54.58	-24.21	-25.74
2	0.22565	9.65	29.32	15.38	38.97	25.03	62.61	52.61	-23.64	-27.58
3	0.59341	9.69	38.10	31.03	47.79	40.72	56.00	46.00	-8.21	-5.28
4	2.29400	9.72	23.99	17.46	33.71	27.18	56.00	46.00	-22.29	-18.82
5	6.75000	9.78	18.01	12.96	27.79	22.74	60.00	50.00	-32.21	-27.26
6	11.21800	9.82	22.02	16.08	31.84	25.90	60.00	50.00	-28.16	-24.10

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

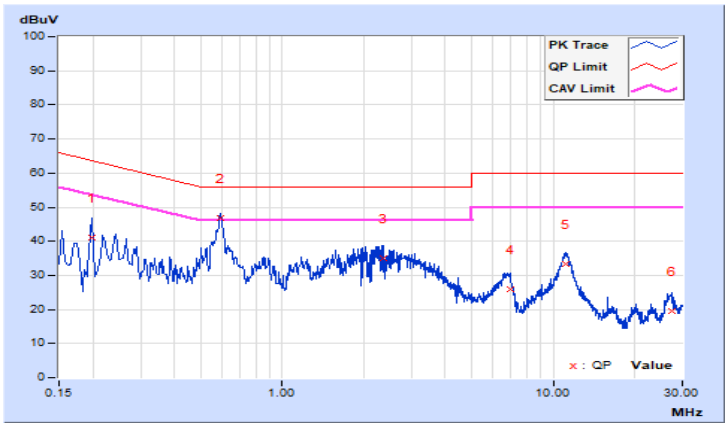


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

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	0.19800	9.64	31.58	15.85	41.22	25.49	63.69	53.69	-22.47	-28.20
2	0.59400	9.69	36.96	30.41	46.65	40.10	56.00	46.00	-9.35	-5.90
3	2.36200	9.73	25.43	17.93	35.16	27.66	56.00	46.00	-20.84	-18.34
4	6.93800	9.78	16.26	12.66	26.04	22.44	60.00	50.00	-33.96	-27.56
5	11.19800	9.82	23.37	16.83	33.19	26.65	60.00	50.00	-26.81	-23.35
6	27.28600	9.87	9.63	4.31	19.50	14.18	60.00	50.00	-40.50	-35.82

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

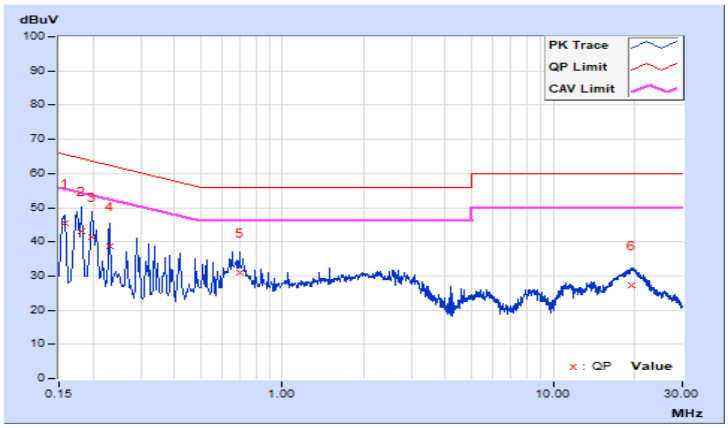
ADP mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	0.15728	9.69	35.78	19.11	45.47	28.80	65.61	55.61	-20.14	-26.81
2	0.18200	9.71	33.44	17.79	43.15	27.50	64.39	54.39	-21.24	-26.89
3	0.19800	9.72	31.63	16.37	41.35	26.09	63.69	53.69	-22.34	-27.60
4	0.23000	9.73	29.15	15.09	38.88	24.82	62.45	52.45	-23.57	-27.63
5	0.69800	9.82	21.01	15.28	30.83	25.10	56.00	46.00	-25.17	-20.90
6	19.43000	10.15	17.29	13.17	27.44	23.32	60.00	50.00	-32.56	-26.68

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

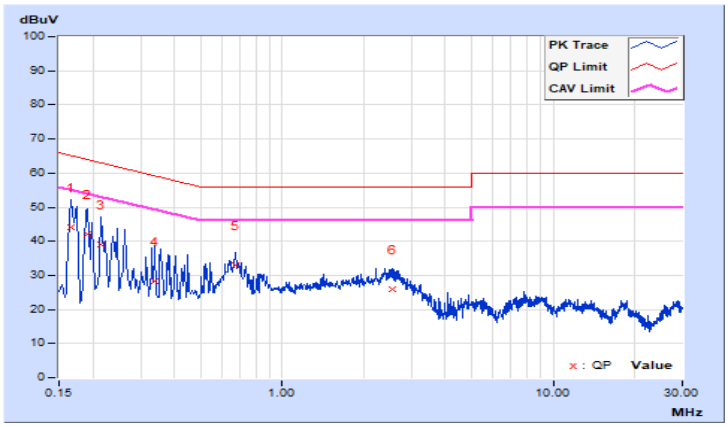


RF Mode	802.11ax (HE20)	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

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	0.16600	9.69	34.41	15.92	44.10	25.61	65.16	55.16	-21.06	-29.55
2	0.19000	9.71	32.48	14.91	42.19	24.62	64.04	54.04	-21.85	-29.42
3	0.21400	9.73	29.42	13.94	39.15	23.67	63.05	53.05	-23.90	-29.38
4	0.33800	9.78	18.56	7.37	28.34	17.15	59.25	49.25	-30.91	-32.10
5	0.67000	9.83	23.00	16.13	32.83	25.96	56.00	46.00	-23.17	-20.04
6	2.54600	9.93	15.88	11.57	25.81	21.50	56.00	46.00	-30.19	-24.50

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

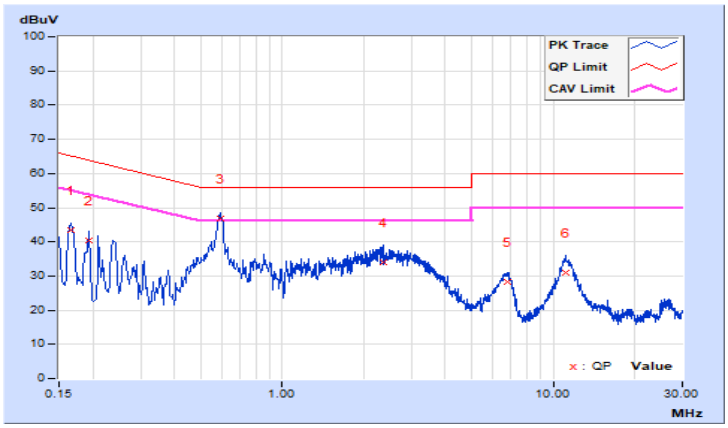
POE mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	0.16579	9.63	33.96	21.29	43.59	30.92	65.17	55.17	-21.58	-24.25
2	0.19400	9.64	30.88	15.15	40.52	24.79	63.86	53.86	-23.34	-29.07
3	0.59000	9.69	37.16	30.98	46.85	40.67	56.00	46.00	-9.15	-5.33
4	2.36200	9.73	24.22	16.65	33.95	26.38	56.00	46.00	-22.05	-19.62
5	6.75400	9.78	18.54	13.46	28.32	23.24	60.00	50.00	-31.68	-26.76
6	11.11800	9.82	21.27	14.48	31.09	24.30	60.00	50.00	-28.91	-25.70

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

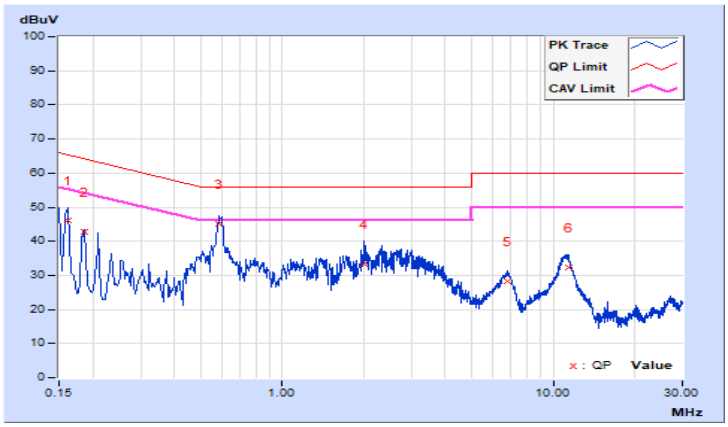


RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

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	0.16190	9.62	36.56	20.86	46.18	30.48	65.37	55.37	-19.19	-24.89
2	0.18600	9.63	32.97	17.68	42.60	27.31	64.21	54.21	-21.61	-26.90
3	0.58200	9.69	35.50	28.57	45.19	38.26	56.00	46.00	-10.81	-7.74
4	2.01400	9.73	23.47	16.70	33.20	26.43	56.00	46.00	-22.80	-19.57
5	6.80200	9.78	18.41	13.83	28.19	23.61	60.00	50.00	-31.81	-26.39
6	11.38600	9.82	22.53	16.07	32.35	25.89	60.00	50.00	-27.65	-24.11

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-431G_Scanning Radio

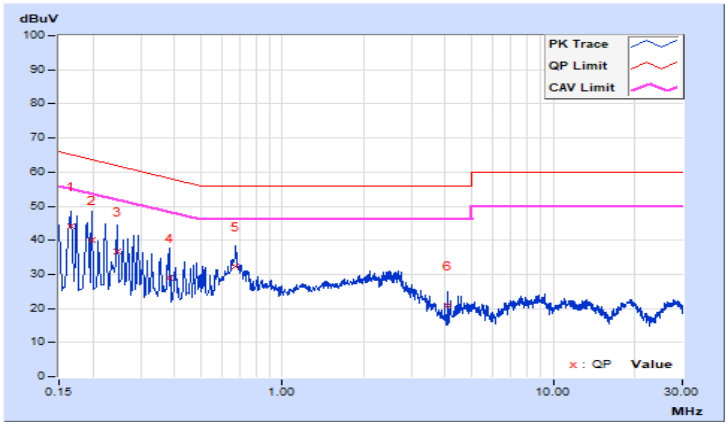
ADP mode

RF Mode	802.11a	Channel	CH 165：5825 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	22.7°C, 67.2% 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	0.16600	9.69	34.31	15.64	44.00	25.33	65.16	55.16	-21.16	-29.83
2	0.19800	9.72	30.31	13.06	40.03	22.78	63.69	53.69	-23.66	-30.91
3	0.24600	9.74	26.87	13.64	36.61	23.38	61.89	51.89	-25.28	-28.51
4	0.38600	9.79	19.09	7.80	28.88	17.59	58.15	48.15	-29.27	-30.56
5	0.67000	9.82	22.50	15.92	32.32	25.74	56.00	46.00	-23.68	-20.26
6	4.07000	9.95	11.02	2.41	20.97	12.36	56.00	46.00	-35.03	-33.64

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

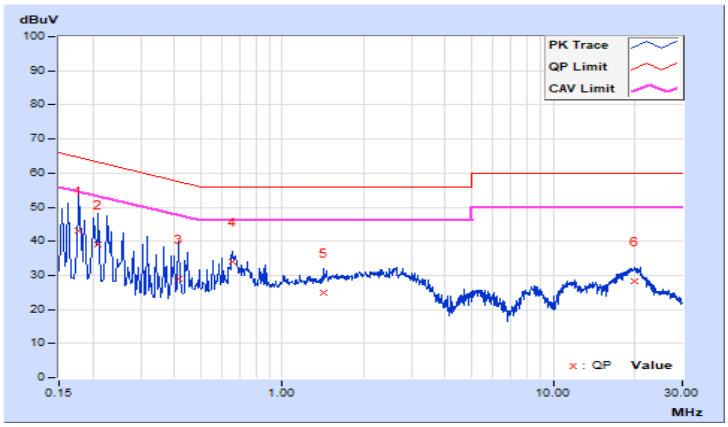


RF Mode	802.11a	**Channel**	CH 165：5825 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

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	0.17800	9.70	33.36	17.17	43.06	26.87	64.58	54.58	-21.52	-27.71
2	0.21000	9.72	29.45	14.22	39.17	23.94	63.21	53.21	-24.04	-29.27
3	0.41400	9.81	19.07	10.02	28.88	19.83	57.57	47.57	-28.69	-27.74
4	0.65800	9.83	24.27	18.94	34.10	28.77	56.00	46.00	-21.90	-17.23
5	1.43000	9.89	15.13	11.76	25.02	21.65	56.00	46.00	-30.98	-24.35
6	20.02600	10.20	17.95	14.48	28.15	24.68	60.00	50.00	-31.85	-25.32

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-431G_Scanning Radio

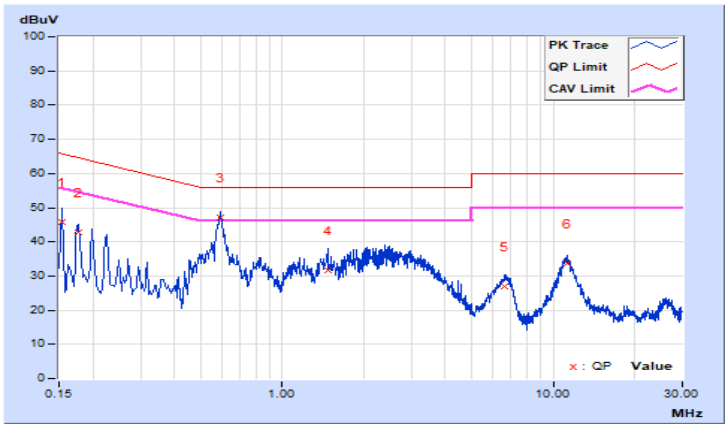
POE mode

RF Mode	802.11a	Channel	CH 165：5825 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	36.02	19.26	45.64	28.88	65.78	55.78	-20.14	-26.90
2	0.17615	9.63	33.05	17.38	42.68	27.01	64.67	54.67	-21.99	-27.66
3	**0.59000**	**9.69**	**37.52**	**31.25**	**47.21**	**40.94**	**56.00**	**46.00**	**-8.79**	**-5.06**
4	1.47000	9.71	21.93	14.19	31.64	23.90	56.00	46.00	-24.36	-22.10
5	6.64600	9.78	17.03	14.27	26.81	24.05	60.00	50.00	-33.19	-25.95
6	11.28600	9.82	23.87	17.51	33.69	27.33	60.00	50.00	-26.31	-22.67

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

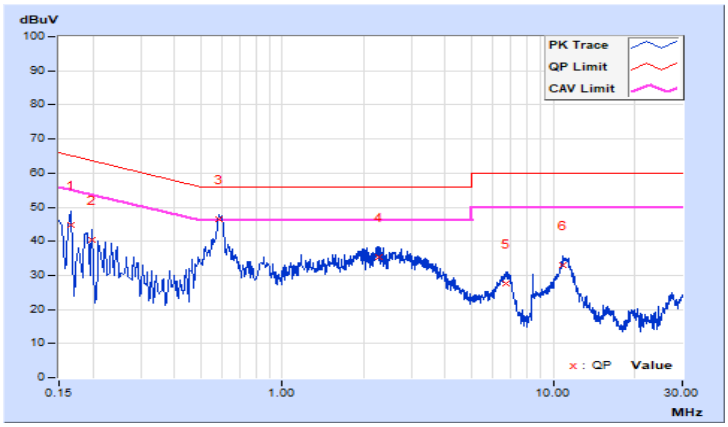


RF Mode	802.11a	**Channel**	CH 165：5825 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Edison Lee		

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	0.16579	9.63	35.19	18.64	44.82	28.27	65.17	55.17	-20.35	-26.90
2	0.19800	9.64	30.66	15.42	40.30	25.06	63.69	53.69	-23.39	-28.63
3	0.58565	9.69	36.88	30.37	46.57	40.06	56.00	46.00	-9.43	-5.94
4	2.28200	9.73	25.75	18.89	35.48	28.62	56.00	46.00	-20.52	-17.38
5	6.73800	9.78	17.67	14.77	27.45	24.55	60.00	50.00	-32.55	-25.45
6	10.87000	9.82	23.07	16.77	32.89	26.59	60.00	50.00	-27.11	-23.41

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



Test Mode G: FAP-433G_Radio 2

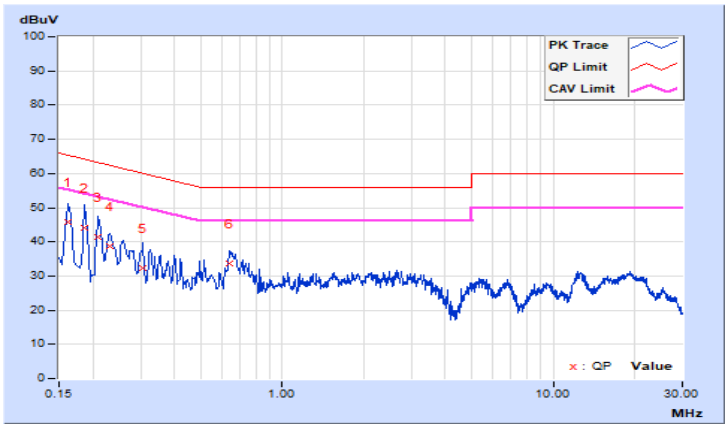
ADP mode

RF Mode	802.11a	Channel	CH 149：5745 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	Rex Wang		

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	0.16200	9.69	36.16	20.39	45.85	30.08	65.36	55.36	-19.51	-25.28
2	0.18600	9.71	34.46	19.01	44.17	28.72	64.21	54.21	-20.04	-25.49
3	0.21000	9.72	31.77	17.00	41.49	26.72	63.21	53.21	-21.72	-26.49
4	0.22985	9.73	29.08	15.13	38.81	24.86	62.46	52.46	-23.65	-27.60
5	0.30600	9.76	22.60	10.57	32.36	20.33	60.08	50.08	-27.72	-29.75
6	0.64200	9.82	23.79	19.11	33.61	28.93	56.00	46.00	-22.39	-17.07

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

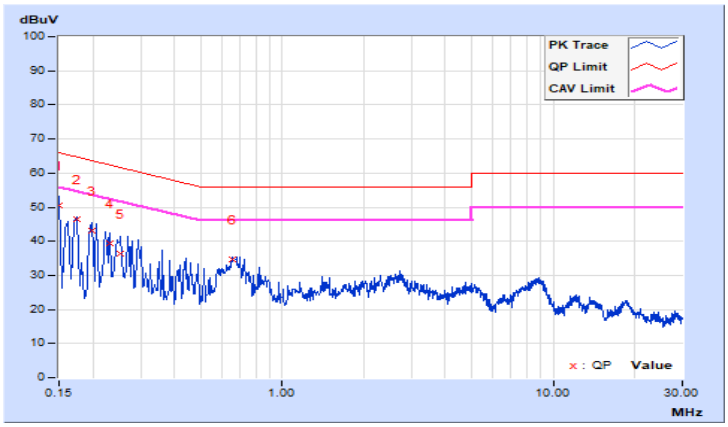


RF Mode	802.11a	**Channel**	CH 149：5745 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Rex Wang		

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	40.81	24.29	50.49	33.97	66.00	56.00	-15.51	-22.03
2	0.17384	9.70	36.92	20.36	46.62	30.06	64.77	54.77	-18.15	-24.71
3	0.19780	9.72	33.52	16.98	43.24	26.70	63.70	53.70	-20.46	-27.00
4	0.23000	9.73	29.78	14.26	39.51	23.99	62.45	52.45	-22.94	-28.46
5	0.25400	9.74	26.57	13.99	36.31	23.73	61.63	51.63	-25.32	-27.90
6	0.65763	9.83	24.86	19.01	34.69	28.84	56.00	46.00	-21.31	-17.16

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 2

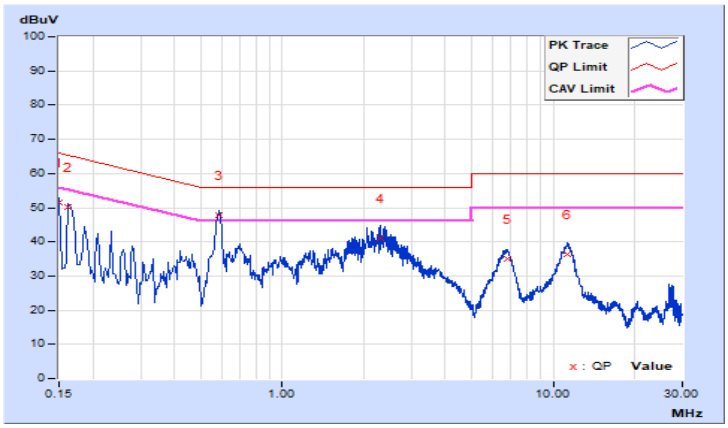
POE mode

RF Mode	802.11a	**Channel**	CH 149：5745 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	Rex Wang		

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	0.15000	9.68	41.82	24.09	51.50	33.77	66.00	56.00	-14.50	-22.23
2	0.16200	9.69	40.38	25.21	50.07	34.90	65.36	55.36	-15.29	-20.46
3	0.58565	9.81	37.94	30.19	47.75	40.00	56.00	46.00	-8.25	-6.00
4	2.31800	9.91	31.13	22.83	41.04	32.74	56.00	46.00	-14.96	-13.26
5	6.82600	10.00	24.97	22.01	34.97	32.01	60.00	50.00	-25.03	-17.99
6	11.26200	10.07	26.34	20.62	36.41	30.69	60.00	50.00	-23.59	-19.31

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

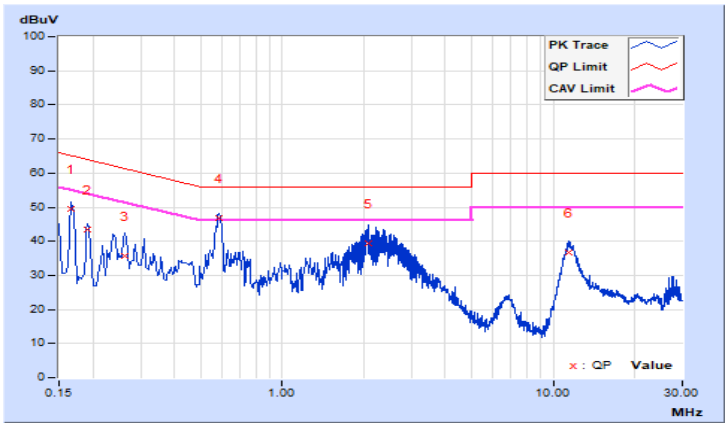


RF Mode	802.11a	**Channel**	CH 149：5745 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Rex Wang		

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	0.16600	9.69	39.69	24.73	49.38	34.42	65.16	55.16	-15.78	-20.74
2	0.19000	9.71	33.69	21.70	43.40	31.41	64.04	54.04	-20.64	-22.63
3	0.26200	9.75	25.81	12.57	35.56	22.32	61.37	51.37	-25.81	-29.05
4	0.58600	9.83	37.11	29.47	46.94	39.30	56.00	46.00	-9.06	-6.70
5	2.09400	9.92	29.58	20.52	39.50	30.44	56.00	46.00	-16.50	-15.56
6	11.42200	10.08	26.49	20.17	36.57	30.25	60.00	50.00	-23.43	-19.75

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 I: FAP-433G_Radio 3

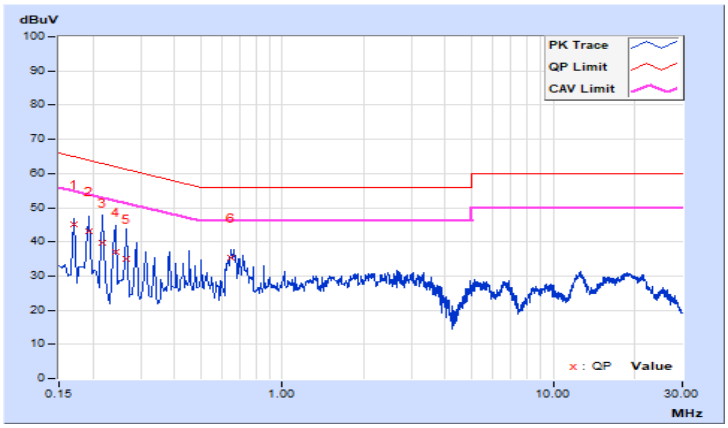
ADP mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	Rex Wang		

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	0.17000	9.70	35.32	21.93	45.02	31.63	64.96	54.96	-19.94	-23.33
2	0.19400	9.72	33.31	20.39	43.03	30.11	63.86	53.86	-20.83	-23.75
3	0.21800	9.73	30.00	16.19	39.73	25.92	62.89	52.89	-23.16	-26.97
4	0.24165	9.74	27.43	15.23	37.17	24.97	62.04	52.04	-24.87	-27.07
5	0.26600	9.75	25.35	14.40	35.10	24.15	61.24	51.24	-26.14	-27.09
6	0.64732	9.82	25.59	20.22	35.41	30.04	56.00	46.00	-20.59	-15.96

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

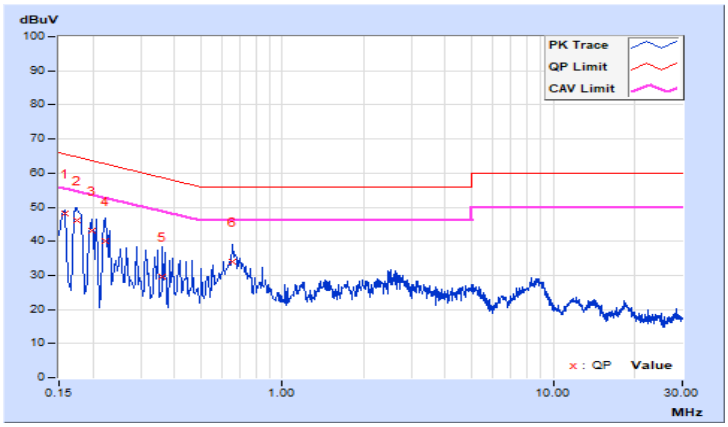


RF Mode	802.11ax (HE20)	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Rex Wang		

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	0.15728	9.69	38.32	21.21	48.01	30.90	65.61	55.61	-17.60	-24.71
2	0.17384	9.70	36.58	20.02	46.28	29.72	64.77	54.77	-18.49	-25.05
3	0.19800	9.72	33.37	16.71	43.09	26.43	63.69	53.69	-20.60	-27.26
4	0.22200	9.73	30.31	14.80	40.04	24.53	62.74	52.74	-22.70	-28.21
5	0.36200	9.79	19.70	8.95	29.49	18.74	58.68	48.68	-29.19	-29.94
6	0.65400	9.83	24.21	18.26	34.04	28.09	56.00	46.00	-21.96	-17.91

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 J: FAP-433G_Radio 3

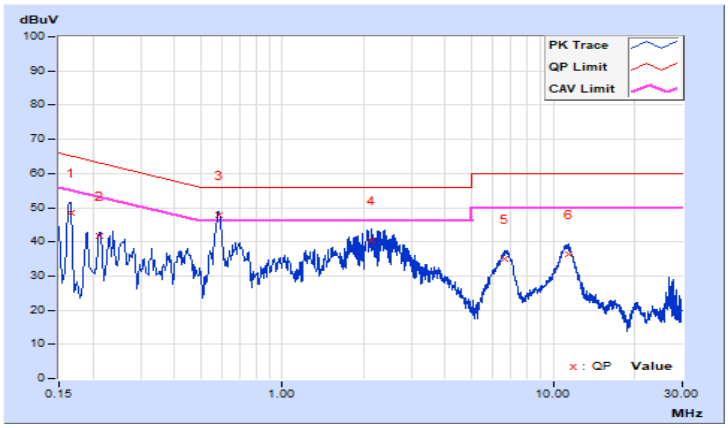
POE mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	Rex Wang		

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	0.16535	9.69	38.89	24.73	48.58	34.42	65.19	55.19	-16.61	-20.77
2	0.21238	9.72	32.15	18.84	41.87	28.56	63.11	53.11	-21.24	-24.55
3	0.58104	9.81	37.98	30.10	47.79	39.91	56.00	46.00	-8.21	-6.09
4	2.12962	9.90	30.42	22.14	40.32	32.04	56.00	46.00	-15.68	-13.96
5	6.63800	10.00	25.12	22.18	35.12	32.18	60.00	50.00	-24.88	-17.82
6	11.41800	10.08	26.34	20.14	36.42	30.22	60.00	50.00	-23.58	-19.78

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

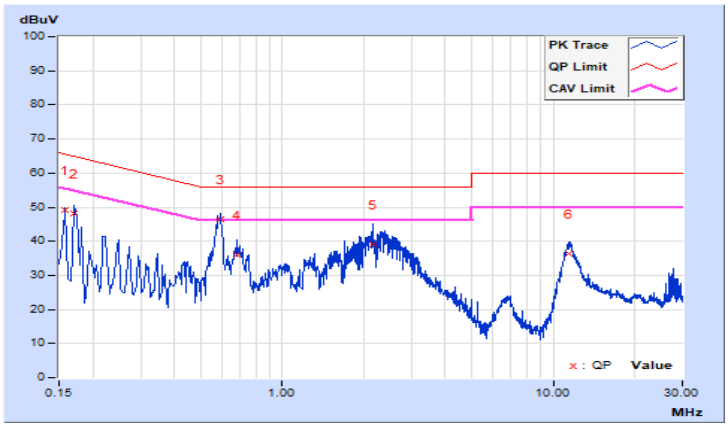


RF Mode	802.11ax (HE20)	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Rex Wang		

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	39.54	21.30	49.23	30.99	65.57	55.57	-16.34	-24.58
2	0.17000	9.70	38.50	21.80	48.20	31.50	64.96	54.96	-16.76	-23.46
3	0.59000	9.83	36.66	29.67	46.49	39.50	56.00	46.00	-9.51	-6.50
4	0.67800	9.83	26.19	20.33	36.02	30.16	56.00	46.00	-19.98	-15.84
5	2.15786	9.92	29.01	19.51	38.93	29.43	56.00	46.00	-17.07	-16.57
6	11.38600	10.08	26.45	20.35	36.53	30.43	60.00	50.00	-23.47	-19.57

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 K: FAP-433G_Scanning Radio

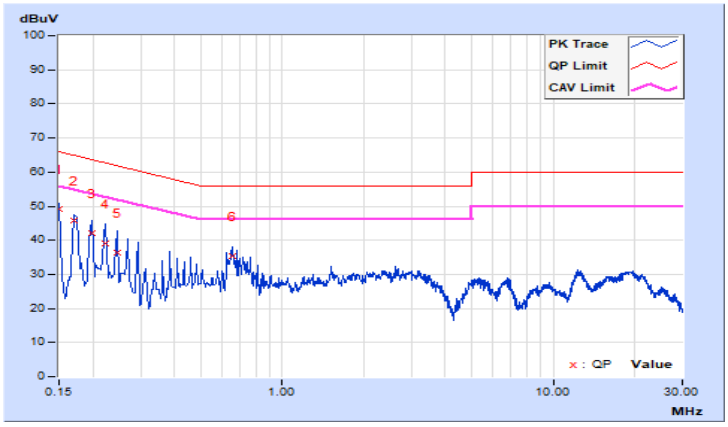
ADP mode

RF Mode	802.11a	Channel	CH 157：5785 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	Rex Wang		

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	0.15000	9.68	39.62	24.84	49.30	34.52	66.00	56.00	-16.70	-21.48
2	0.17000	9.70	36.20	21.18	45.90	30.88	64.96	54.96	-19.06	-24.08
3	0.19800	9.72	32.42	18.31	42.14	28.03	63.69	53.69	-21.55	-25.66
4	0.22200	9.73	29.21	15.57	38.94	25.30	62.74	52.74	-23.80	-27.44
5	0.24600	9.74	26.78	15.37	36.52	25.11	61.89	51.89	-25.37	-26.78
6	0.65400	9.82	25.61	19.64	35.43	29.46	56.00	46.00	-20.57	-16.54

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

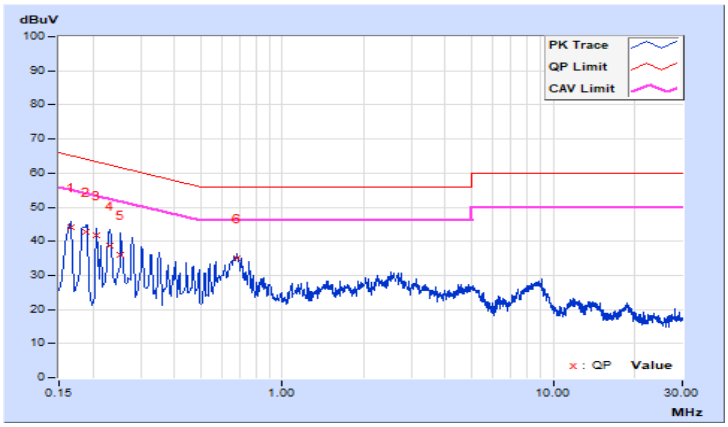


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Rex Wang		

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	0.16600	9.69	34.36	17.65	44.05	27.34	65.16	55.16	-21.11	-27.82
2	0.18963	9.71	33.04	15.90	42.75	25.61	64.05	54.05	-21.30	-28.44
3	0.20600	9.72	31.88	15.46	41.60	25.18	63.37	53.37	-21.77	-28.19
4	0.22985	9.73	29.07	13.91	38.80	23.64	62.46	52.46	-23.66	-28.82
5	0.25400	9.74	26.27	13.89	36.01	23.63	61.63	51.63	-25.62	-28.00
6	0.67800	9.83	25.04	19.52	34.87	29.35	56.00	46.00	-21.13	-16.65

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



Test Mode L: FAP-433G_Scanning Radio

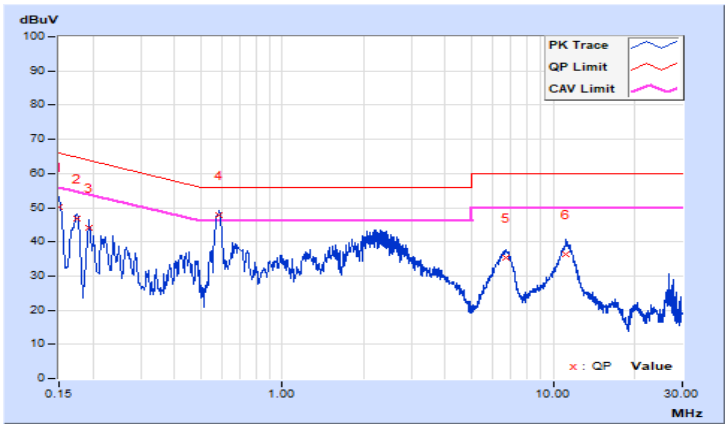
POE mode

RF Mode	802.11a	**Channel**	CH 157：5785 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	Rex Wang		

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	0.15000	9.68	40.58	23.51	50.26	33.19	66.00	56.00	-15.74	-22.81
2	0.17384	9.70	36.99	20.85	46.69	30.55	64.77	54.77	-18.08	-24.22
3	0.19400	9.72	34.33	19.87	44.05	29.59	63.86	53.86	-19.81	-24.27
4	0.58200	9.81	38.04	29.95	47.85	39.76	56.00	46.00	-8.15	-6.24
5	6.69400	10.00	25.19	22.24	35.19	32.24	60.00	50.00	-24.81	-17.76
6	11.14200	10.07	26.41	20.49	36.48	30.56	60.00	50.00	-23.52	-19.44

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

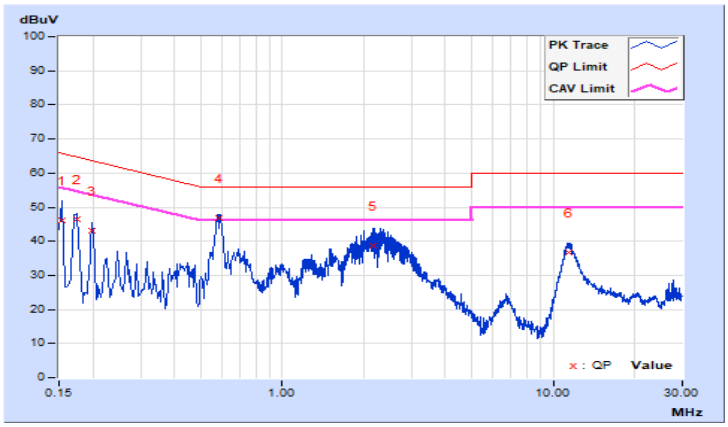


RF Mode	802.11a	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Rex Wang		

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	36.57	18.87	46.25	28.55	65.78	55.78	-19.53	-27.23
2	0.17384	9.70	36.90	19.27	46.60	28.97	64.77	54.77	-18.17	-25.80
3	0.19800	9.72	33.38	16.61	43.10	26.33	63.69	53.69	-20.59	-27.36
4	0.58719	9.83	36.91	29.35	46.74	39.18	56.00	46.00	-9.26	-6.82
5	2.15400	9.92	28.90	19.19	38.82	29.11	56.00	46.00	-17.18	-16.89
6	11.45800	10.08	26.72	20.71	36.80	30.79	60.00	50.00	-23.20	-19.21

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

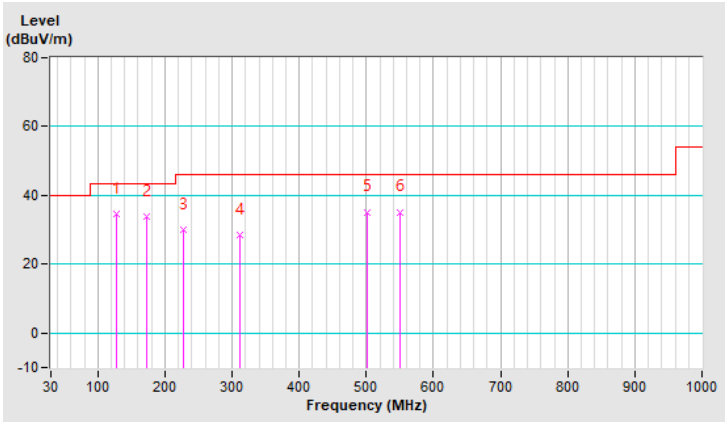
ADP mode

RF Mode	802.11a	**Channel**	CH 157：5785 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	Noah Chang		

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	127.97	34.5 QP	43.5	-9.0	1.51 H	83	49.2	-14.7
2	173.56	33.7 QP	43.5	-9.8	1.51 H	79	47.8	-14.1
3	226.91	30.0 QP	46.0	-16.0	1.51 H	53	46.5	-16.5
4	312.27	28.4 QP	46.0	-17.6	1.00 H	28	41.1	-12.7
5	500.45	35.2 QP	46.0	-10.8	1.51 H	18	43.5	-8.3
6	550.89	35.2 QP	46.0	-10.8	1.99 H	310	42.5	-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.

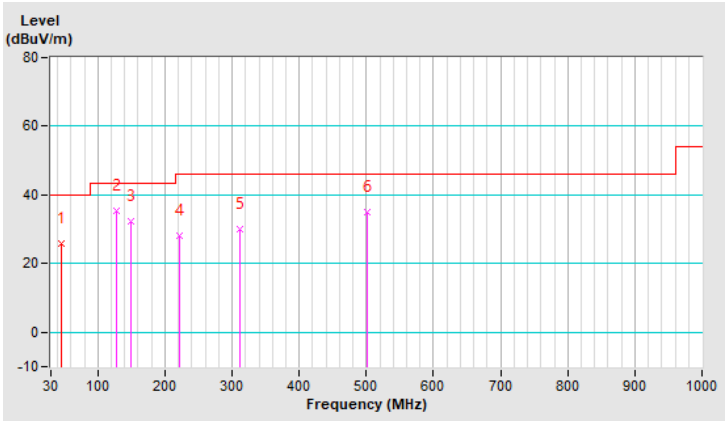


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	46.48	25.8 QP	40.0	-14.2	1.99 V	152	39.1	-13.3
2	127.00	35.2 QP	43.5	-8.3	1.51 V	333	50.0	-14.8
3	148.34	32.4 QP	43.5	-11.1	1.51 V	354	45.7	-13.3
4	222.06	28.0 QP	46.0	-18.0	1.00 V	186	44.9	-16.9
5	312.27	30.0 QP	46.0	-16.0	1.51 V	175	42.7	-12.7
6	500.45	35.0 QP	46.0	-11.0	1.51 V	344	43.3	-8.3

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 B: FAP-431G_Radio 2

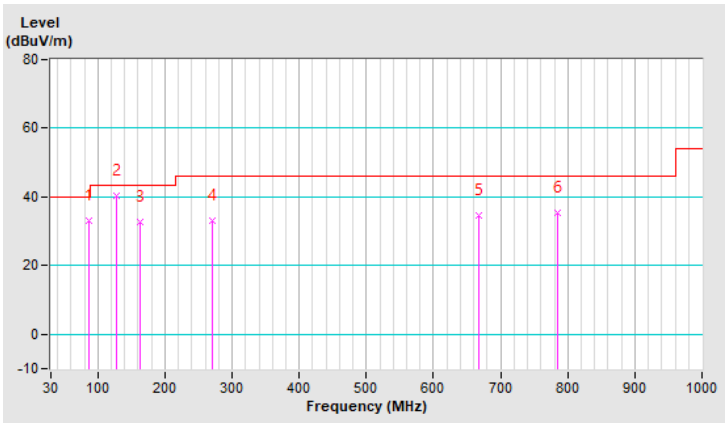
POE mode

RF Mode	802.11a	Channel	CH 157：5785 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	Noah Chang		

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	87.64	33.0 QP	40.0	-7.0	2.00 H	255	51.9	-18.9
2	**127.00**	**40.4 QP**	**43.5**	**-3.1**	**1.51 H**	**2**	**55.2**	**-14.8**
3	163.55	32.7 QP	43.5	-10.8	1.51 H	167	45.9	-13.2
4	270.39	33.1 QP	46.0	-12.9	1.01 H	18	46.6	-13.5
5	668.23	34.8 QP	46.0	-11.2	1.01 H	196	39.4	-4.6
6	784.91	35.4 QP	46.0	-10.6	1.01 H	227	37.9	-2.5

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 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.

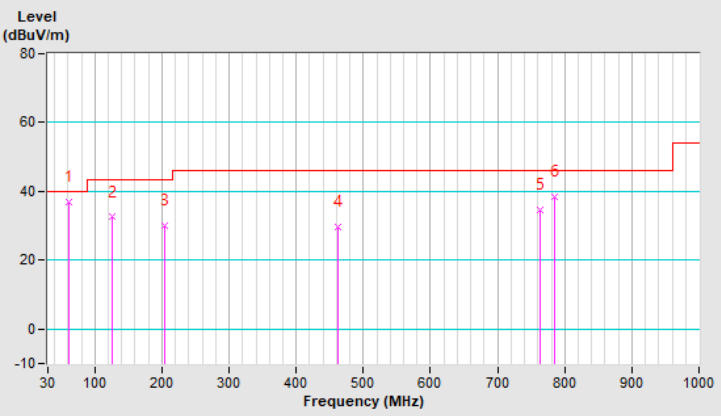


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	60.93	36.8 QP	40.0	-3.2	1.00 V	95	50.8	-14.0
2	125.59	32.5 QP	43.5	-11.0	1.99 V	319	47.4	-14.9
3	204.32	29.9 QP	43.5	-13.6	1.00 V	197	46.7	-16.8
4	461.58	29.6 QP	46.0	-16.4	1.00 V	325	38.0	-8.4
5	762.42	34.6 QP	46.0	-11.4	1.49 V	333	37.5	-2.9
6	784.91	38.5 QP	46.0	-7.5	1.00 V	3	41.0	-2.5

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 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

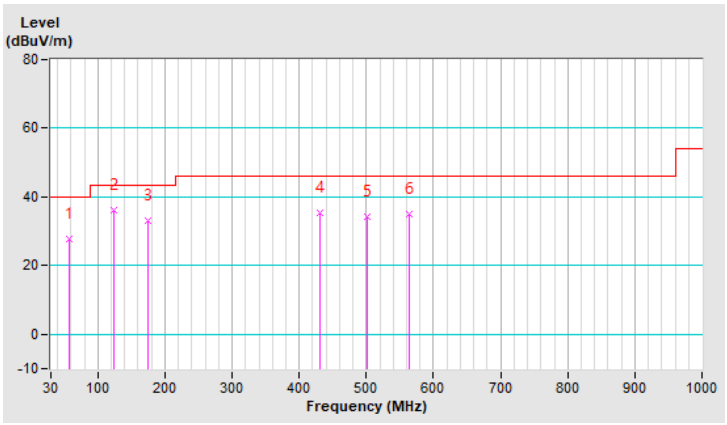
ADP mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	Noah Chang		

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	58.13	27.9 QP	40.0	-12.1	1.99 H	334	41.7	-13.8
2	124.09	36.3 QP	43.5	-7.2	1.51 H	159	51.4	-15.1
3	174.53	33.0 QP	43.5	-10.5	1.51 H	83	47.2	-14.2
4	431.58	35.2 QP	46.0	-10.8	1.51 H	77	44.7	-9.5
5	500.45	34.3 QP	46.0	-11.7	1.00 H	18	42.6	-8.3
6	563.50	35.0 QP	46.0	-11.0	1.51 H	71	41.9	-6.9

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.

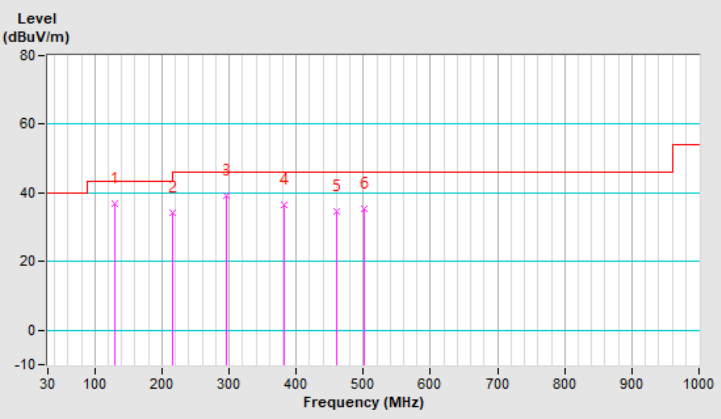


RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	129.91	37.0 QP	43.5	-6.5	1.51 V	326	51.5	-14.5
2	216.24	34.1 QP	46.0	-11.9	1.99 V	77	51.0	-16.9
3	295.78	39.2 QP	46.0	-6.8	1.51 V	308	52.3	-13.1
4	382.11	36.7 QP	46.0	-9.3	1.99 V	77	47.5	-10.8
5	459.71	34.6 QP	46.0	-11.4	1.99 V	77	43.4	-8.8
6	500.45	35.3 QP	46.0	-10.7	1.00 V	312	43.6	-8.3

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

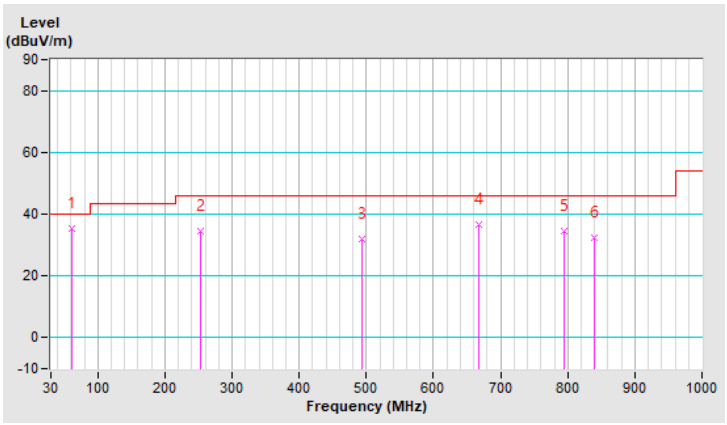
POE mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 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	Noah Chang		

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	60.93	35.2 QP	40.0	-4.8	2.00 H	2	49.2	-14.0
2	252.12	34.6 QP	46.0	-11.4	1.01 H	56	48.9	-14.3
3	493.91	32.0 QP	46.0	-14.0	1.50 H	293	39.9	-7.9
4	668.23	36.4 QP	46.0	-9.6	1.01 H	192	41.0	-4.6
5	794.75	34.4 QP	46.0	-11.6	1.50 H	65	36.9	-2.5
6	839.74	32.3 QP	46.0	-13.7	1.01 H	137	34.1	-1.8

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.

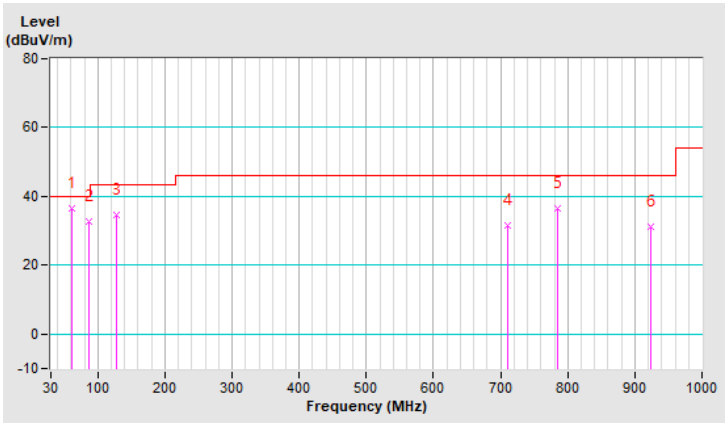


RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	60.93	36.6 QP	40.0	-3.4	1.00 V	112	50.6	-14.0
2	87.64	32.7 QP	40.0	-7.3	1.49 V	300	51.6	-18.9
3	127.00	34.5 QP	43.5	-9.0	1.00 V	197	49.3	-14.8
4	710.41	31.4 QP	46.0	-14.6	1.49 V	297	35.4	-4.0
5	784.91	36.7 QP	46.0	-9.3	1.00 V	347	39.2	-2.5
6	924.09	31.3 QP	46.0	-14.7	2.00 V	75	32.0	-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.



Test Mode E: FAP-431G_Scanning Radio

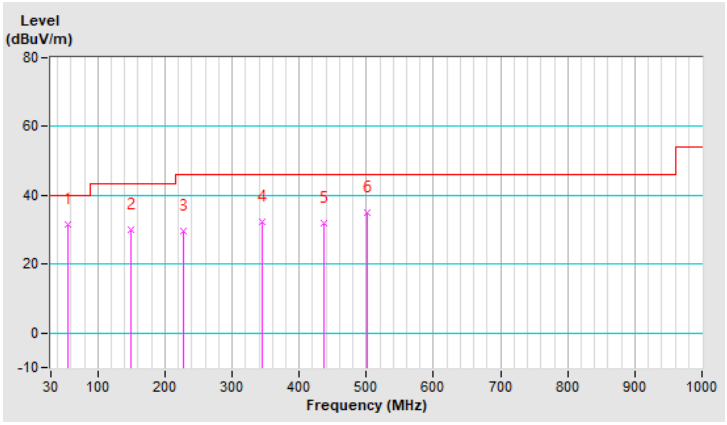
ADP mode

RF Mode	802.11a	Channel	CH 165：5825 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	Noah Chang		

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	55.22	31.4 QP	40.0	-8.6	1.99 H	86	44.9	-13.5
2	148.34	30.2 QP	43.5	-13.3	1.99 H	227	43.5	-13.3
3	227.88	29.7 QP	46.0	-16.3	1.00 H	67	46.1	-16.4
4	344.28	32.2 QP	46.0	-13.8	1.51 H	307	44.1	-11.9
5	437.40	32.1 QP	46.0	-13.9	1.99 H	198	41.4	-9.3
6	500.45	35.1 QP	46.0	-10.9	1.99 H	18	43.4	-8.3

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.

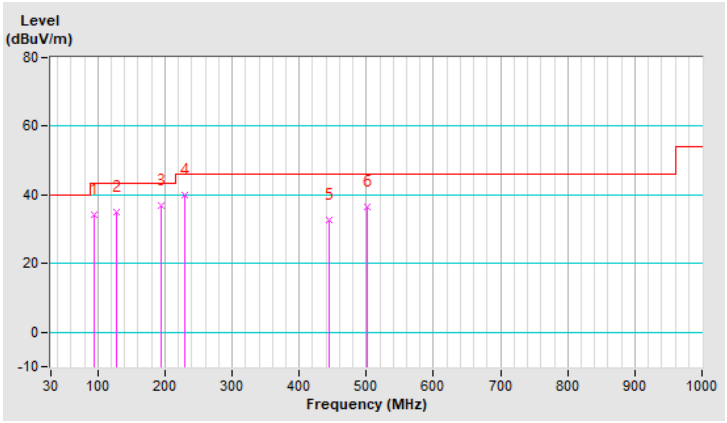


RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	94.02	34.4 QP	43.5	-9.1	2.00 V	194	53.2	-18.8
2	127.97	34.9 QP	43.5	-8.6	1.51 V	191	49.6	-14.7
3	193.93	36.9 QP	43.5	-6.6	1.51 V	99	53.3	-16.4
4	228.85	39.8 QP	46.0	-6.2	1.51 V	95	56.0	-16.2
5	444.19	32.7 QP	46.0	-13.3	1.00 V	92	41.8	-9.1
6	500.45	36.5 QP	46.0	-9.5	2.00 V	320	44.8	-8.3

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-431G_Scanning Radio

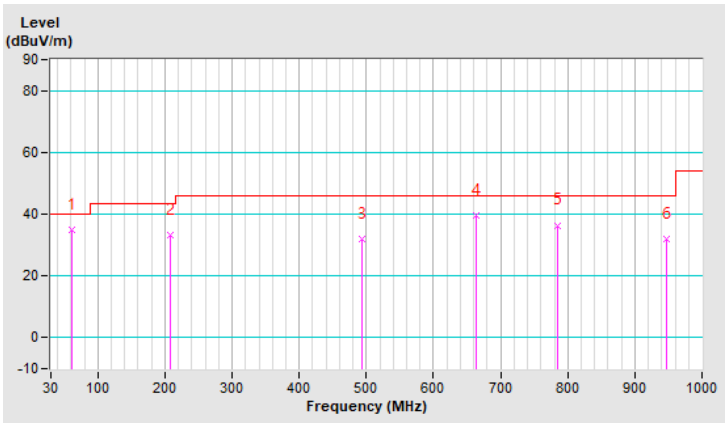
POE mode

RF Mode	802.11a	Channel	CH 165：5825 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	Noah Chang		

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	60.93	34.8 QP	40.0	-5.2	1.01 H	2	48.8	-14.0
2	207.13	33.4 QP	43.5	-10.1	1.01 H	281	50.2	-16.8
3	493.91	32.0 QP	46.0	-14.0	1.50 H	290	39.9	-7.9
4	664.01	39.4 QP	46.0	-6.6	1.01 H	187	44.0	-4.6
5	784.91	36.4 QP	46.0	-9.6	1.01 H	182	38.9	-2.5
6	946.58	31.9 QP	46.0	-14.1	1.01 H	328	32.3	-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.

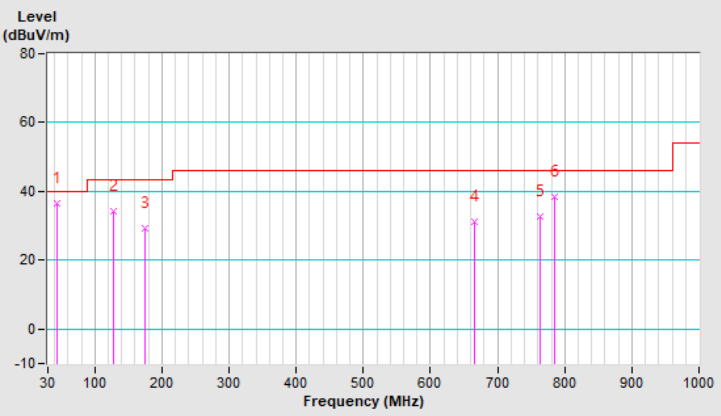


RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 72% RH
Tested By	Noah Chang		

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	44.06	36.4 QP	40.0	-3.6	1.49 V	104	49.7	-13.3
2	127.00	34.1 QP	43.5	-9.4	1.00 V	226	48.9	-14.8
3	174.80	29.3 QP	43.5	-14.2	2.00 V	285	43.3	-14.0
4	665.42	31.0 QP	46.0	-15.0	1.49 V	182	35.6	-4.6
5	762.42	32.7 QP	46.0	-13.3	1.00 V	181	35.6	-2.9
6	784.91	38.4 QP	46.0	-7.6	1.00 V	192	40.9	-2.5

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 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 2

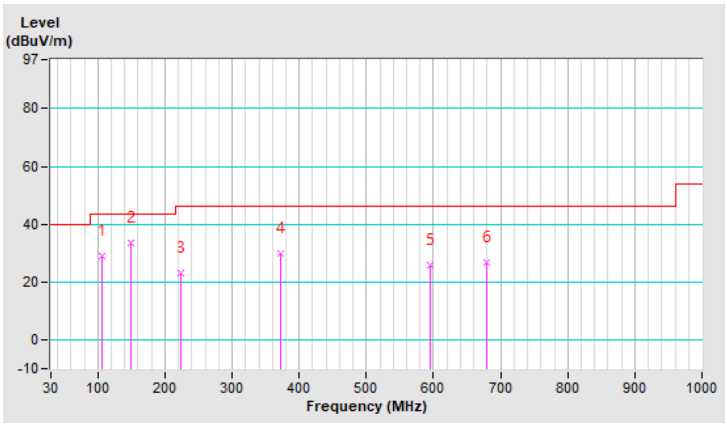
ADP mode

RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 77% 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	106.63	29.1 QP	43.5	-14.4	1.49 H	247	45.7	-16.6
2	148.34	33.3 QP	43.5	-10.2	1.00 H	100	46.5	-13.2
3	223.03	22.9 QP	46.0	-23.1	1.49 H	212	39.3	-16.4
4	371.44	30.0 QP	46.0	-16.0	1.00 H	342	40.6	-10.6
5	595.51	25.8 QP	46.0	-20.2	1.49 H	18	31.2	-5.4
6	678.93	26.8 QP	46.0	-19.2	1.49 H	49	31.1	-4.3

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.

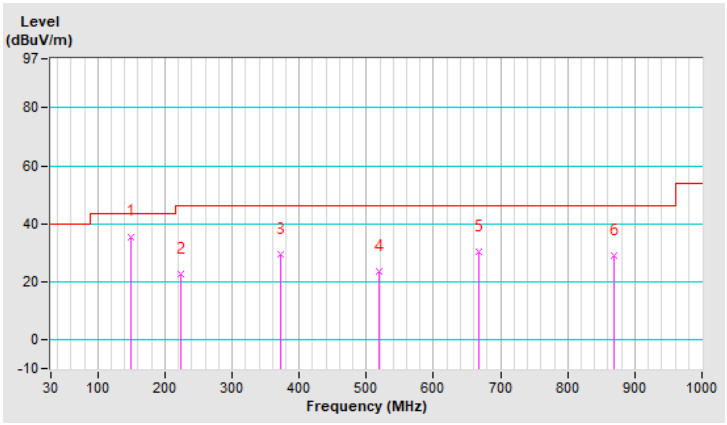


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 77% RH
Tested By	Randy Wu		

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	148.34	35.6 QP	43.5	-7.9	1.01 V	281	48.8	-13.2
2	223.03	22.8 QP	46.0	-23.2	1.01 V	285	39.2	-16.4
3	371.44	29.3 QP	46.0	-16.7	1.01 V	80	39.9	-10.6
4	519.85	23.5 QP	46.0	-22.5	1.01 V	3	30.9	-7.4
5	668.26	30.5 QP	46.0	-15.5	1.01 V	313	35.0	-4.5
6	868.08	28.9 QP	46.0	-17.1	1.50 V	351	30.9	-2.0

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 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 2

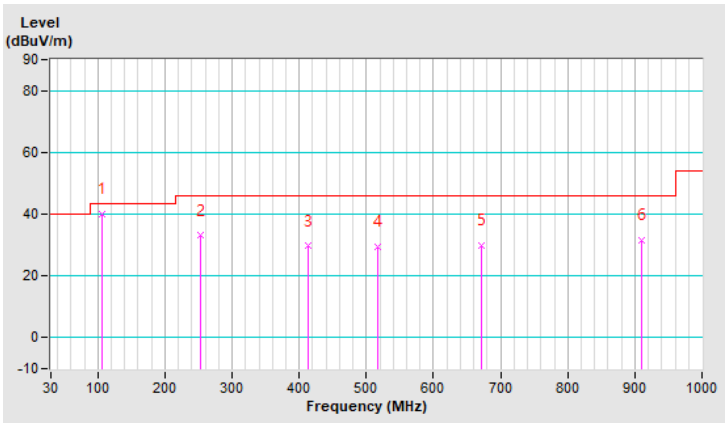
POE mode

RF Mode	802.11a	**Channel**	CH 149：5745 MHz
Frequency Range	9 kHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 65% 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	106.63	39.8 QP	43.5	-3.7	1.99 H	95	56.4	-16.6
2	253.10	33.0 QP	46.0	-13.0	1.00 H	282	47.1	-14.1
3	414.12	29.6 QP	46.0	-16.4	1.00 H	232	39.4	-9.8
4	517.91	29.4 QP	46.0	-16.6	1.99 H	33	36.9	-7.5
5	672.14	29.9 QP	46.0	-16.1	1.99 H	225	34.4	-4.5
6	909.79	31.6 QP	46.0	-14.4	1.50 H	216	32.8	-1.2

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.

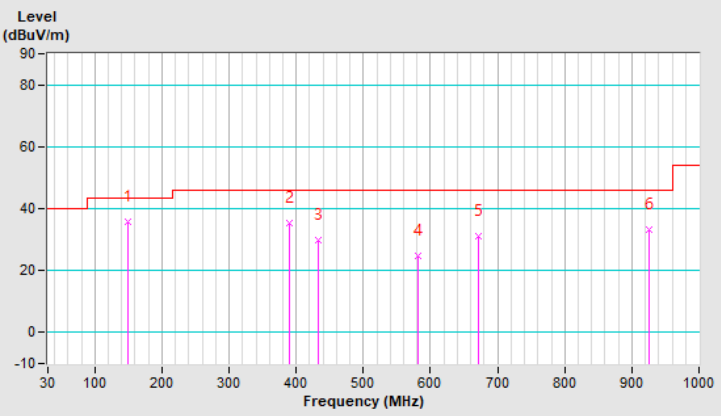


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 65% RH
Tested By	Randy Wu		

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	148.34	35.7 QP	43.5	-7.8	1.00 V	154	48.9	-13.2
2	388.90	35.5 QP	46.0	-10.5	1.00 V	22	45.7	-10.2
3	433.52	29.7 QP	46.0	-16.3	1.00 V	237	38.8	-9.1
4	580.96	24.9 QP	46.0	-21.1	1.49 V	108	30.8	-5.9
5	672.14	31.1 QP	46.0	-14.9	1.49 V	178	35.6	-4.5
6	925.31	33.3 QP	46.0	-12.7	1.49 V	178	34.1	-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 I: FAP-433G_Radio 3

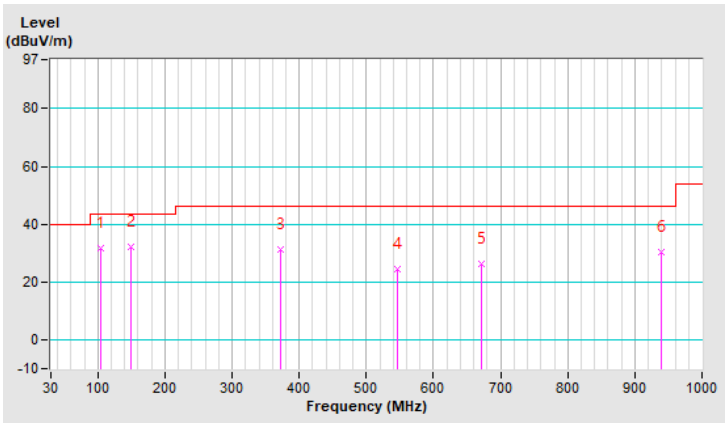
ADP mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 77% 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	103.72	31.7 QP	43.5	-11.8	1.49 H	124	48.7	-17.0
2	148.34	32.3 QP	43.5	-11.2	1.00 H	97	45.5	-13.2
3	371.44	31.2 QP	46.0	-14.8	1.00 H	275	41.8	-10.6
4	546.04	24.6 QP	46.0	-21.4	1.00 H	275	31.7	-7.1
5	672.14	26.4 QP	46.0	-19.6	1.00 H	76	30.9	-4.5
6	939.86	30.4 QP	46.0	-15.6	1.49 H	26	31.0	-0.6

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.

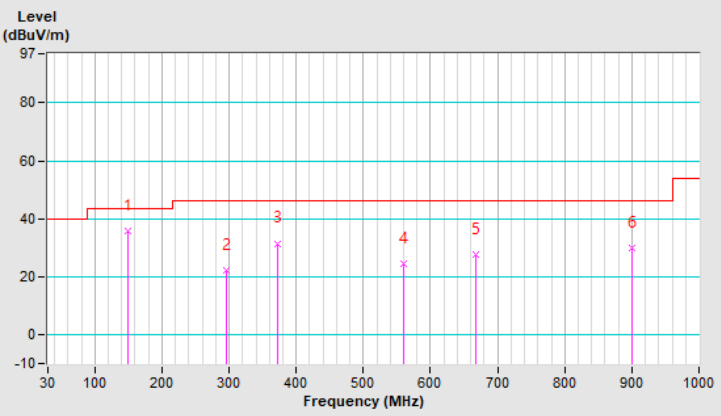


RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 77% RH
Tested By	Randy Wu		

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	148.34	36.0 QP	43.5	-7.5	1.01 V	236	49.2	-13.2
2	296.75	22.1 QP	46.0	-23.9	1.50 V	0	34.6	-12.5
3	371.44	31.5 QP	46.0	-14.5	1.01 V	74	42.1	-10.6
4	559.62	24.3 QP	46.0	-21.7	1.50 V	268	31.1	-6.8
5	668.26	27.8 QP	46.0	-18.2	1.01 V	8	32.3	-4.5
6	901.06	30.0 QP	46.0	-16.0	1.50 V	126	31.5	-1.5

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 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 J: FAP-433G_Radio 3

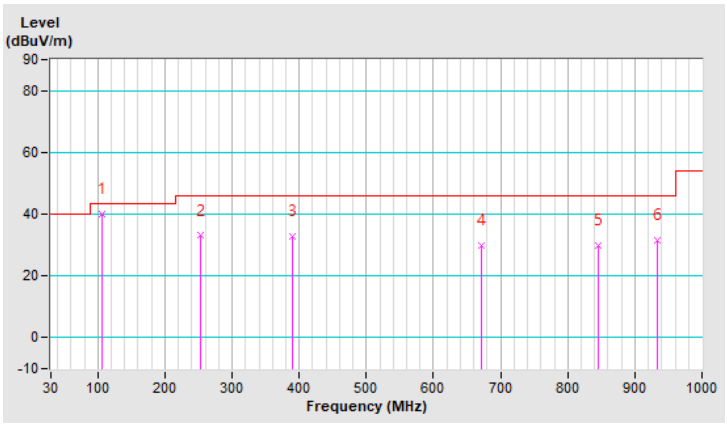
POE mode

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 65% 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	106.63	39.8 QP	43.5	-3.7	1.99 H	95	56.4	-16.6
2	253.10	33.0 QP	46.0	-13.0	1.00 H	282	47.1	-14.1
3	388.90	32.7 QP	46.0	-13.3	1.50 H	171	42.9	-10.2
4	672.14	29.9 QP	46.0	-16.1	1.99 H	225	34.4	-4.5
5	845.77	29.8 QP	46.0	-16.2	1.99 H	210	31.9	-2.1
6	934.04	31.6 QP	46.0	-14.4	1.00 H	150	32.2	-0.6

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.



RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 65% 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	107.60	36.5 QP	43.5	-7.0	1.00 V	164	52.9	-16.4
2	148.34	35.7 QP	43.5	-7.8	1.00 V	154	48.9	-13.2
3	371.44	34.5 QP	46.0	-11.5	1.00 V	18	45.1	-10.6
4	469.41	28.0 QP	46.0	-18.0	1.00 V	184	36.2	-8.2
5	672.14	31.1 QP	46.0	-14.9	1.49 V	178	35.6	-4.5
6	839.95	36.5 QP	46.0	-9.5	1.49 V	2	38.5	-2.0

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 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.