TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBBQZ-WTW-P24030358-1
FCC ID:	PY324200628
Product:	AX3000 Wallplug Extender
Brand:	NETGEAR
Model No.:	EAX17
Received Date:	2024/4/8
Test Date:	2024/9/4 ~ 2024/10/14
Issued Date:	2024/10/29
Applicant and Manufacturer:	NETGEAR, INC.
Address:	350 East Plumeria Drive San Jose CA 95134
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:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** 2024/10/29

Jeremy Lin / Project Engineer

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Prepared by : Celine Chou / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P24030358-1	Original release.	2024/10/29

1 Certificate

Product:	AX3000 Wallplug Extender
Brand:	NETGEAR
Test Model:	EAX17
Sample Status:	Engineering sample
Applicant and Manufacturer:	NETGEAR, INC.
Test Date:	2024/9/4 ~ 2024/10/14
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure:	ANSI C63.10-2013 KDB 789033 D02 General UNII Test Procedure New Rules v02r01 KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(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(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -9.05 dB at 0.54975 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -7.8 dB at 72.17 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 5129.00, 5143.50 and 5150.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

Notes:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The “Dynamic Frequency Selection measurement” was recorded in DFS test report.

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) (±)
26 dB Bandwidth	-	206.5 Hz
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.64 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 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	AX3000 Wallplug Extender
Brand	NETGEAR
Test Model	EAX17
Status of EUT	Engineering sample
Power Supply Rating	100-240 Vac
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11n: up to 450 Mbps 802.11ac: up to 2340 Mbps 802.11ax: up to 3602.9 Mbps
Operating Frequency	5.18 GHz ~ 5.25 GHz 5.26 GHz ~ 5.32 GHz 5.50 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 25 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 12 802.11ac (VHT80), 802.11ax (HE80): 6 802.11ac (VHT160), 802.11ax (HE160): 2
Output Power	5.18 GHz ~ 5.25 GHz : 837.483 mW (29.23 dBm) 5.26 GHz ~ 5.32 GHz : 212.025 mW (23.26 dBm) 5.50 GHz ~ 5.72 GHz : 212.685 mW (23.28 dBm) 5.745 GHz ~ 5.825 GHz : 841.009 mW (29.25 dBm)
EUT Category	Extender

Note: 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.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type	Connector Type	Freq. (MHz)	Antenna Gain (dBi)			Directional Gain (dBi)
			Ant 0	Ant 1	Ant 2	
PIFA	NA	2400~2483.5	3.44	3.54	-	4.67
		5150~5250	4.06	3.17	3.93	5.80
		5250~5350	4.21	3.64	4.38	5.77
		5470~5725	4.70	3.59	4.14	5.79
		5725~5850	5.20	2.70	3.95	5.97

*The detailed antenna information, please refer to the BV CPS Directional Gain Measurement Report no.: RFBBQZ-WTW-P24030358-5.

2. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	Tx & Rx Configuration	
802.11a	3TX	3RX
802.11n (HT20)	3TX	3RX
802.11n (HT40)	3TX	3RX
802.11ac (VHT20)	3TX	3RX
802.11ac (VHT40)	3TX	3RX
802.11ac (VHT80)	3TX	3RX
802.11ac (VHT160)	3TX	3RX
802.11ax (HE20)	3TX	3RX
802.11ax (HE40)	3TX	3RX
802.11ax (HE80)	3TX	3RX
802.11ax (HE160)	3TX	3RX

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.
3. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) and 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) therefore the manufacturer will control the power for 802.11n/ac mode is same as the 802.11ax mode or more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

FOR 5180 ~ 5320 MHz

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	52	5260 MHz
40	5200 MHz	56	5280 MHz
44	5220 MHz	60	5300 MHz
48	5240 MHz	64	5320 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	54	5270 MHz
46	5230 MHz	62	5310 MHz

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

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

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

Channel	Frequency
50	5250 MHz

FOR 5500 ~ 5720 MHz

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

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

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

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

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

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

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

Channel	Frequency
114	5570 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:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	X-axis/ Y-axis/ Z-axis Worst Condition: X-axis

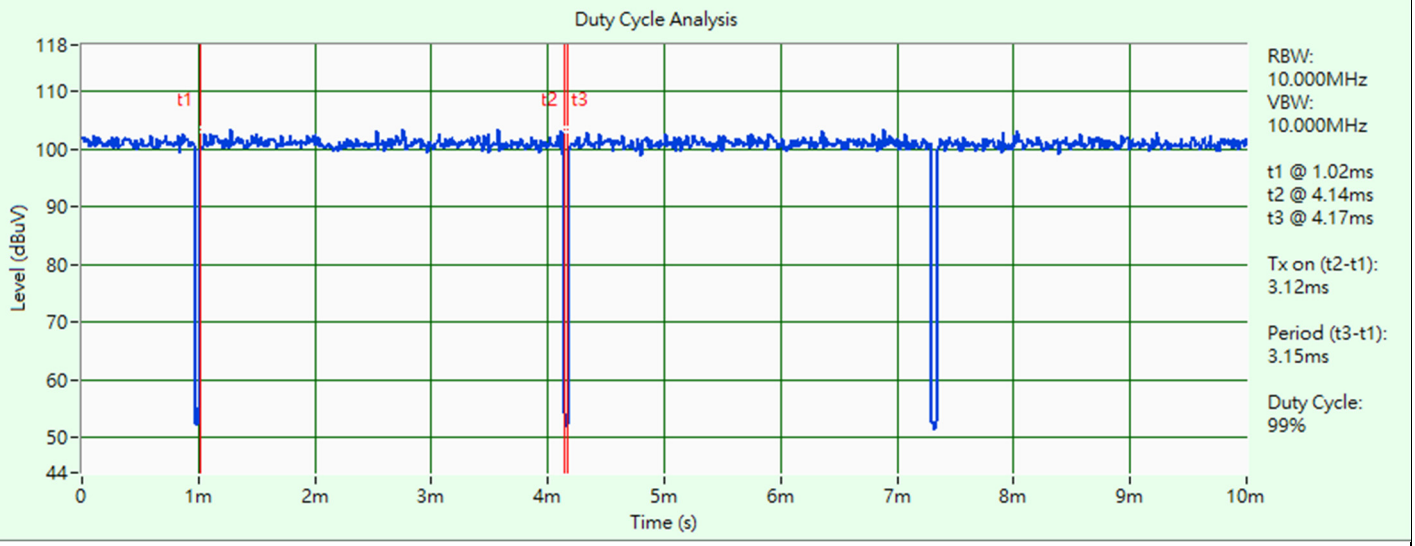
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
RF Output Power	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD & Beamforming	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD & Beamforming	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD & Beamforming	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD & Beamforming	50, 114	BPSK	MCS0
Power Spectral Density	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
6 dB Bandwidth	802.11a	CDD	144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	138, 155	BPSK	MCS0

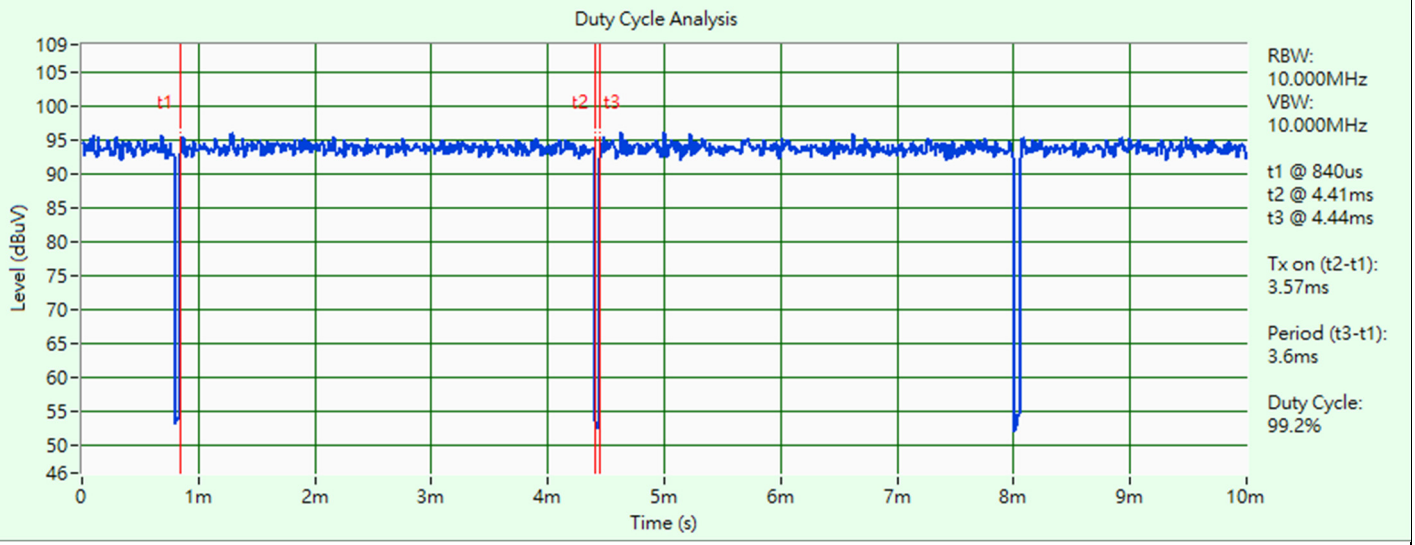
Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Occupied Bandwidth	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
AC Power Conducted Emissions	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0

3.5 Duty Cycle of Test Signal

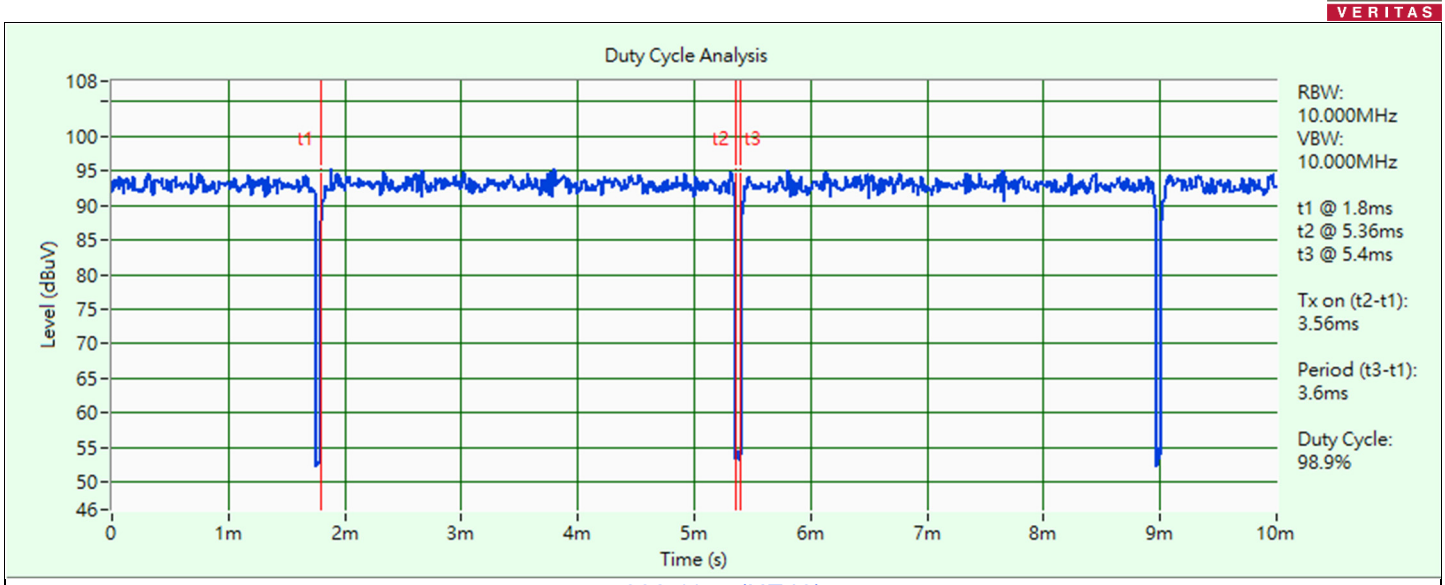
802.11a: Duty cycle = 3.12 ms / 3.15 ms x 100% = 99.0%
802.11ax (HE20): Duty cycle = 3.57 ms / 3.6 ms x 100% = 99.2%
802.11ax (HE40): Duty cycle = 3.56 ms / 3.6 ms x 100% = 98.9%
802.11ax (HE80): Duty cycle = 4.72 ms / 4.74 ms x 100% = 99.6%
802.11ax (HE160): Duty cycle = 5.055 ms / 5.104 ms x 100% = 99.0%



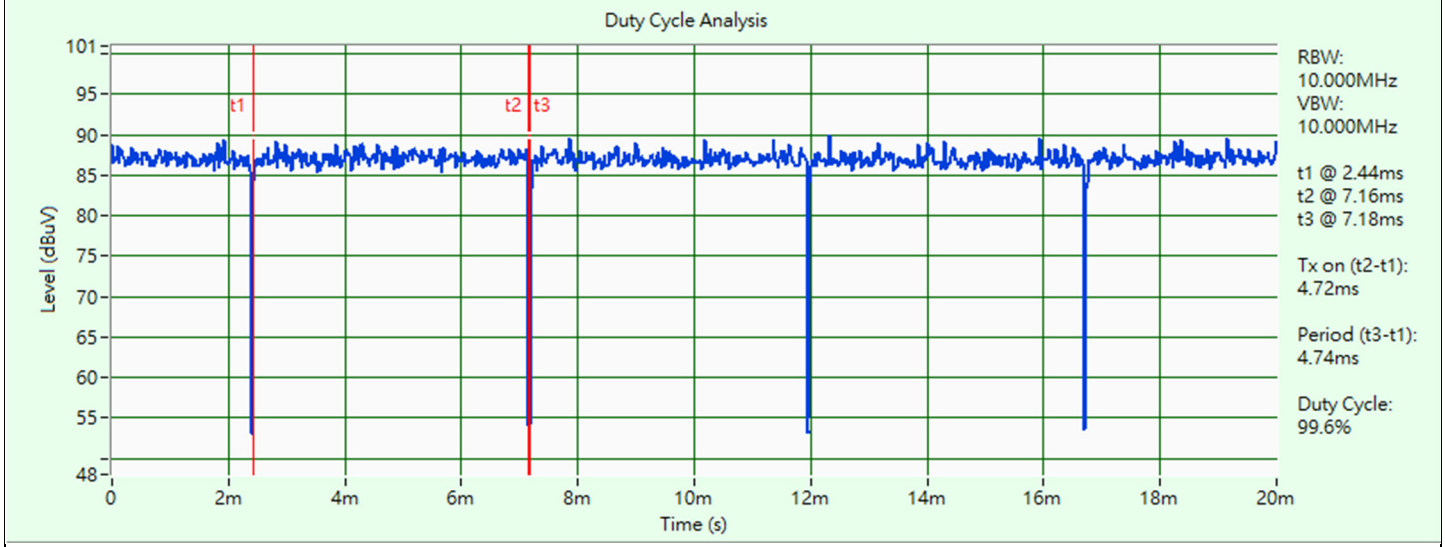
802.11a



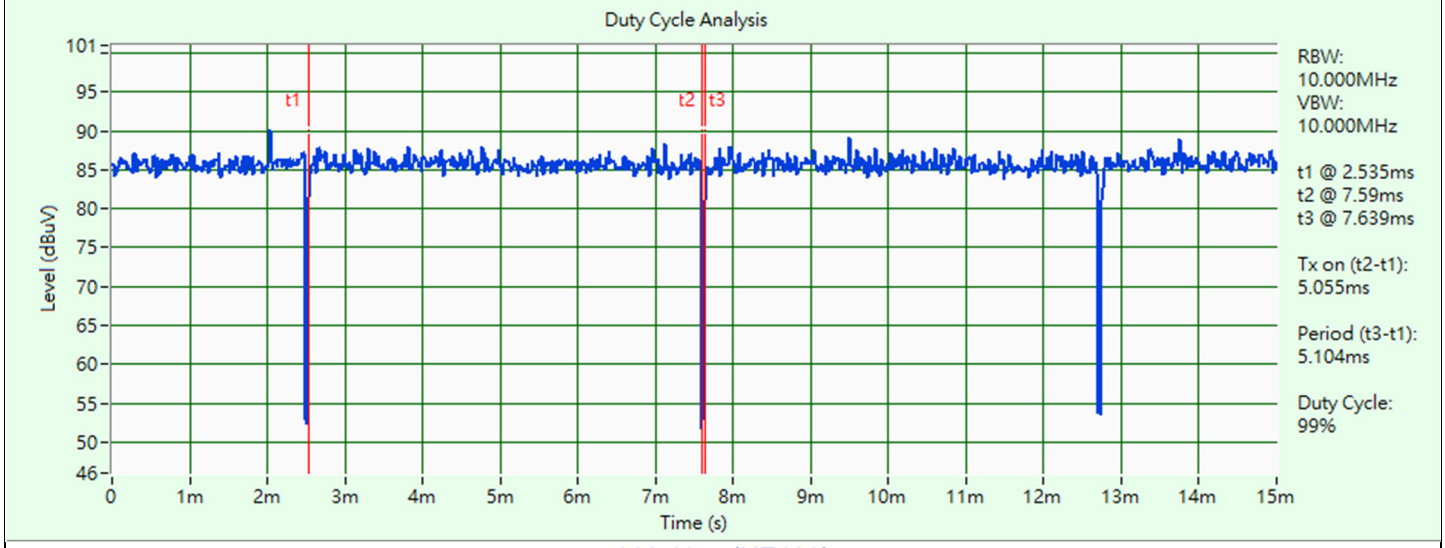
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)

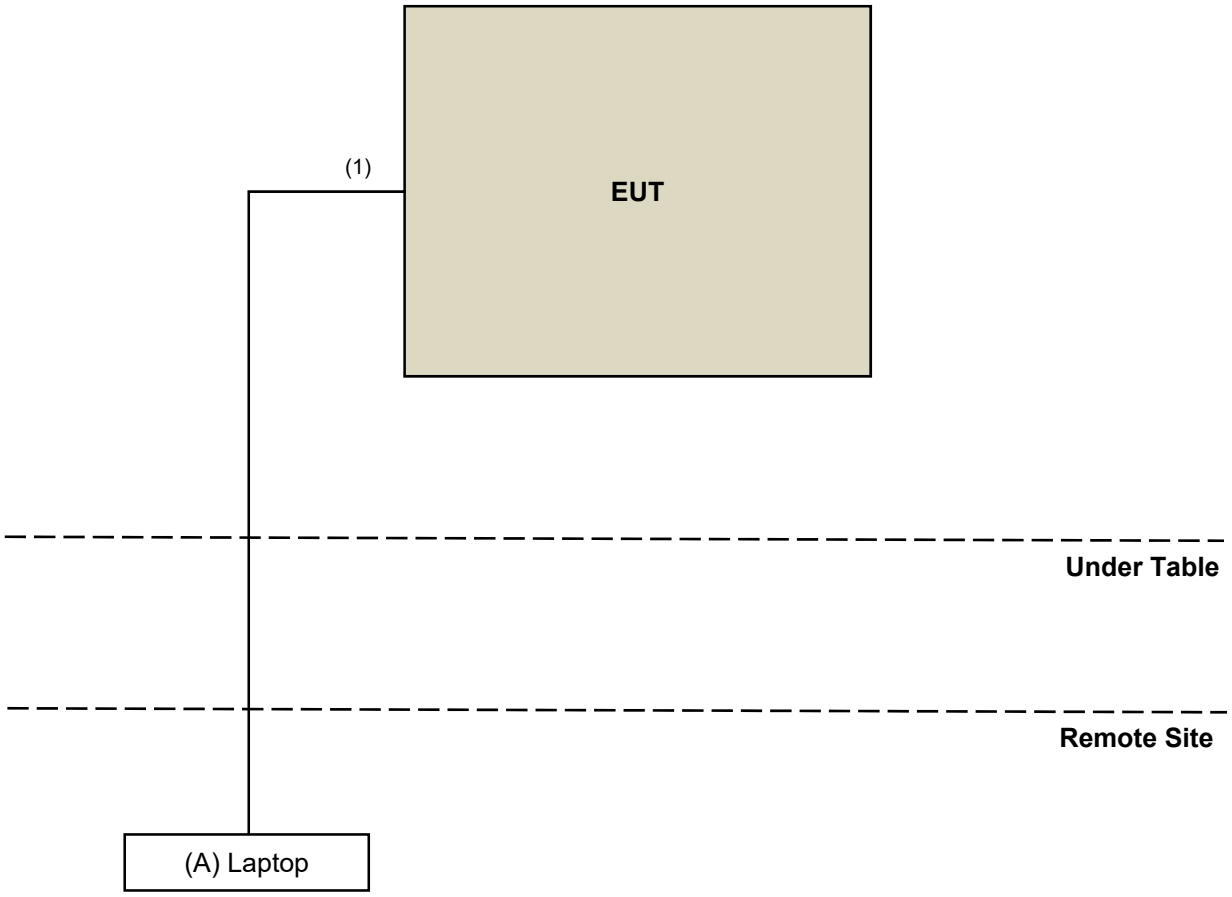


802.11ax (HE160)

3.6 Test Program Used and Operation Descriptions

Controlling software QATool_V2.78 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	10	N	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/10/14

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17
		MY58140009	2024/1/18	2025/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/10/14

4.3 Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2023/11/22	2024/11/21
50 ohm terminal resistance	E1-011279	04	2023/11/22	2024/11/21
	E1-011280	05	2023/11/22	2024/11/21
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESCI	100613	2023/12/4	2024/12/3
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2024/1/6	2025/1/5
LISN R&S	ENV216	101826	2024/3/25	2025/3/24
	ESH3-Z5	100116	2024/2/21	2025/2/20
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2024/1/6	2025/1/5
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2024/9/4

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2023/10/13	2024/10/12
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
Preamplifier Agilent	8447D	2944A10631	2024/5/1	2025/4/30
Preamplifier EMCI	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2024/7/6	2025/7/5
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2024/9/4

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170241	2023/10/16	2024/10/15
		BBHA9170243	2023/11/12	2024/11/11
Preamplifier EMCI	EMC 184045	980116	2023/9/27 2024/9/24	2024/9/26 2025/9/23
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
		MY 13380+295012/04	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2024/9/23 ~ 2024/10/14

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 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	250mW (24 dBm)

Operation Band	Limit
U-NII-2A	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

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

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

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

5.3 Power Spectral Density

Operation Band	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-2A	11 dBm/MHz
U-NII-2C	11 dBm/MHz
U-NII-3	30 dBm/500 kHz

5.4 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.

5.5 Occupied Bandwidth

The results are for reference only.

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

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

For transmitters operating in the 5.15-5.25 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.25-5.35 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.47-5.725 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(3)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK: 122.2 (dBμV/m) *4
*1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

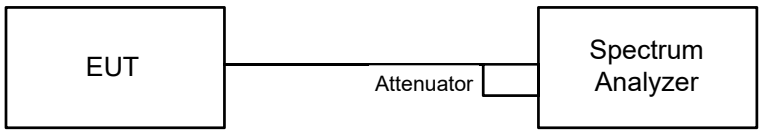
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup



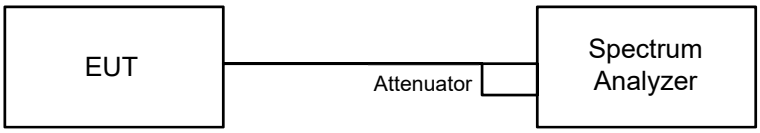
6.1.2 Test Procedure

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

6.2 RF Output Power

6.2.1 Test Setup

For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

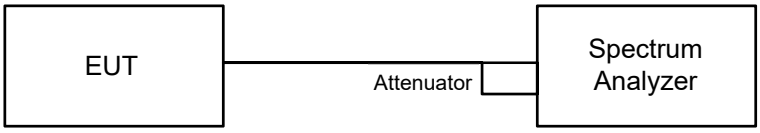
Method SA-1

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. Record the max value

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-1

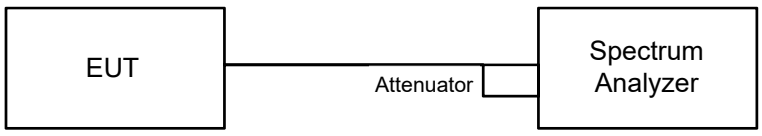
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger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

For specified measurement bandwidth 500 kHz:
Method SA-1

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. Record the max value

6.4 6 dB Bandwidth

6.4.1 Test Setup

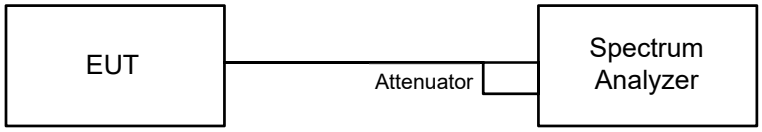


6.4.2 Test Procedure

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.

6.5 Occupied Bandwidth

6.5.1 Test Setup

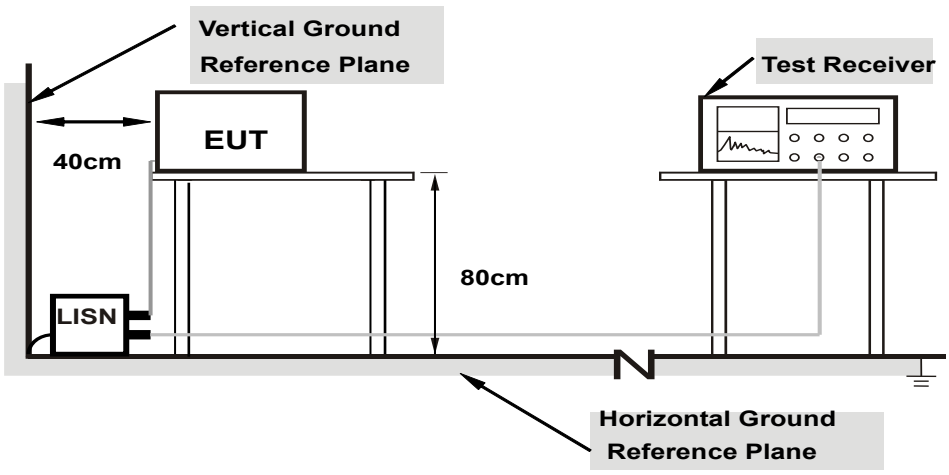


6.5.2 Test Procedure

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.

6.6 AC Power Conducted Emissions

6.6.1 Test Setup



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

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

6.6.2 Test Procedure

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

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

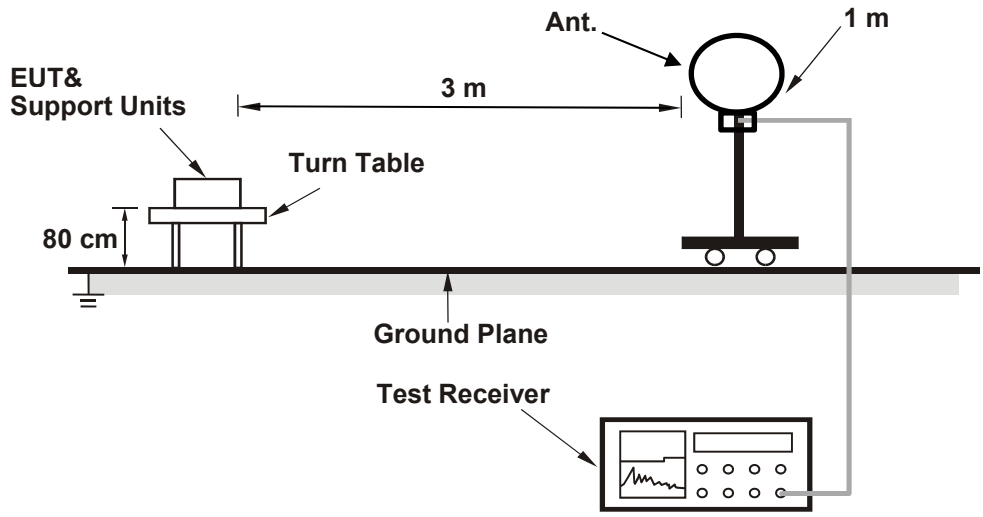
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

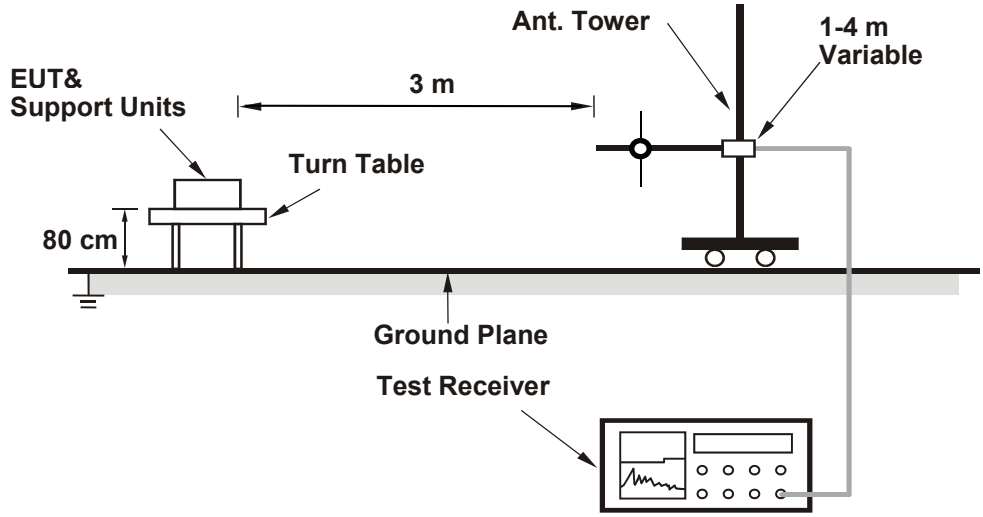
6.7 Unwanted Emissions below 1 GHz

6.7.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.7.2 Test Procedure

For Radiated emission below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

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

For Radiated emission above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

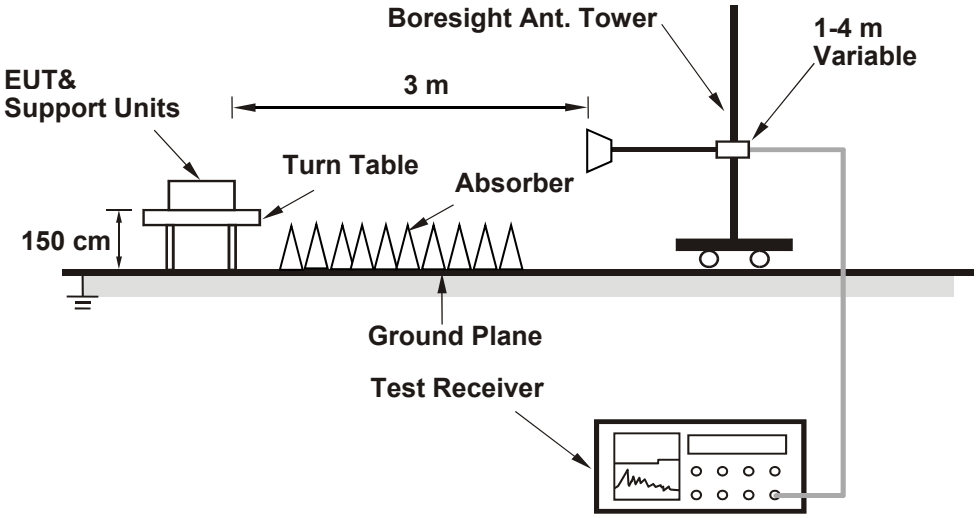
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

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

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



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

6.8.2 Test Procedure

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

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

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	21.01	21.17	20.59
60	5300	29.67	30.60	28.59
64	5320	29.46	29.36	27.40
100	5500	28.85	29.54	28.69
116	5580	20.96	22.75	20.55
140	5700	27.62	29.77	25.94
144 (U-NII-2C)	5720	15.43	16.74	15.79
144 (U-NII-3)	5720	5.29	5.83	5.41

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.59	24.13	>	24
60	5300	28.59	25.56	>	24
64	5320	27.40	25.37	>	24
100	5500	28.69	25.57	>	24
116	5580	20.55	24.12	>	24
140	5700	25.94	25.13	>	24
144 (U-NII-2C)	5720	15.43	22.88	<	24

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

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	22.36	22.29	22.10
60	5300	29.68	29.81	30.23
64	5320	31.21	29.98	30.04
100	5500	27.87	28.11	29.51
116	5580	22.09	21.90	22.09
140	5700	26.20	27.43	23.76
144 (U-NII-2C)	5720	16.11	15.91	15.75
144 (U-NII-3)	5720	6.07	6.01	5.84

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	22.10	24.44	>	24
60	5300	29.68	25.72	>	24
64	5320	29.98	25.76	>	24
100	5500	27.87	25.45	>	24
116	5580	21.90	24.4	>	24
140	5700	23.76	24.75	>	24
144 (U-NII-2C)	5720	15.75	22.97	<	24

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

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	39.97	39.71	39.75
62	5310	52.48	52.28	43.88
102	5510	47.05	45.67	47.17
110	5550	39.85	39.81	39.88
134	5670	48.85	55.30	49.21
142 (U-NII-2C)	5710	34.93	34.93	34.78
142 (U-NII-3)	5710	4.89	4.92	4.97

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	39.71	26.98	>	24
62	5310	43.88	27.42	>	24
102	5510	45.67	27.59	>	24
110	5550	39.81	26.99	>	24
134	5670	48.85	27.88	>	24
142 (U-NII-2C)	5710	34.78	26.41	>	24

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

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
58	5290	91.50	100.79	93.57
106	5530	96.20	101.89	89.89
122	5610	81.47	81.34	81.38
138 (U-NII-2C)	5690	75.61	75.48	75.62
138 (U-NII-3)	5690	5.74	5.69	5.77

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	91.50	30.61	>	24
106	5530	89.89	30.53	>	24
122	5610	81.34	30.1	>	24
138 (U-NII-2C)	5690	75.48	29.77	>	24

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

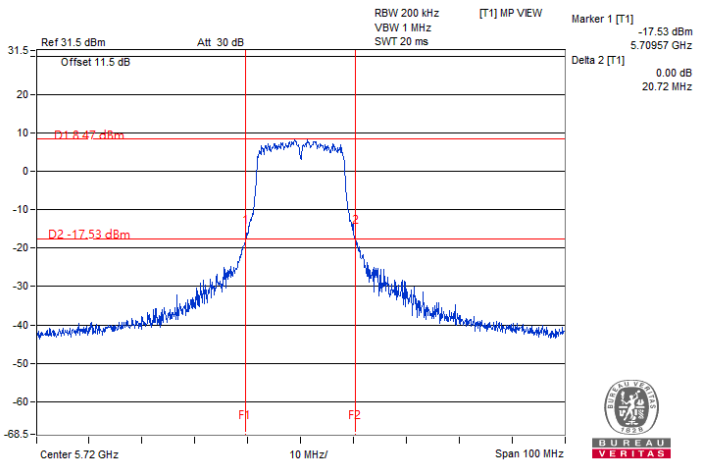
802.11ax (HE160)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
50 (U-NII-1)	5250	82.21	86.25	81.99
50 (U-NII-2A)	5250	82.30	82.70	82.00
114	5570	164.18	164.68	164.89

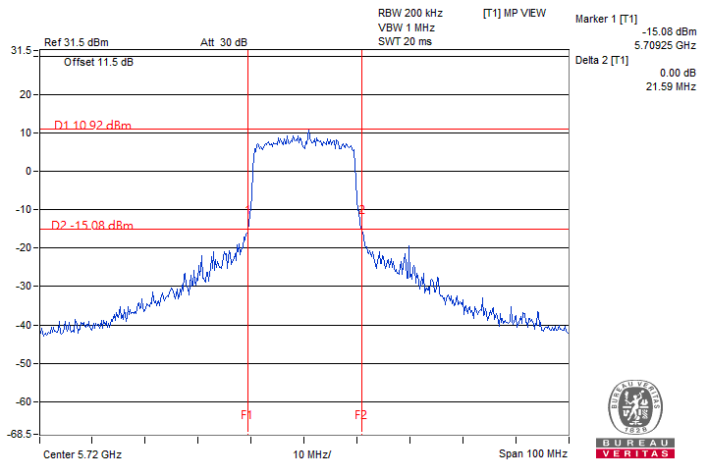
Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
50 (U-NII-2A)	5250	82.00	30.13	>	24
114	5570	164.18	33.15	>	24

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

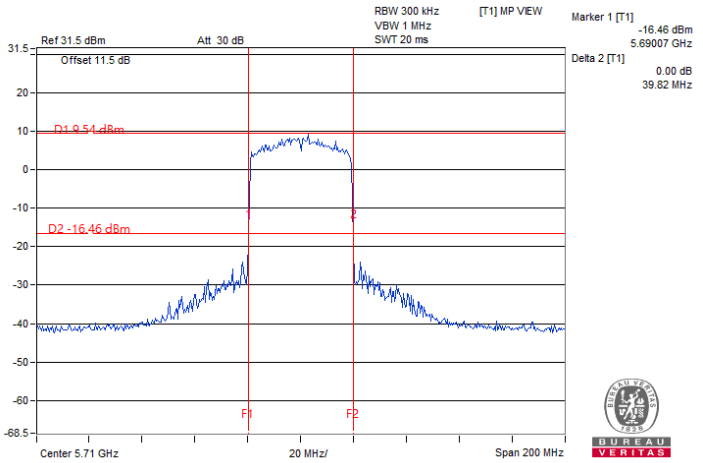
Spectrum Plot of Minimum Value



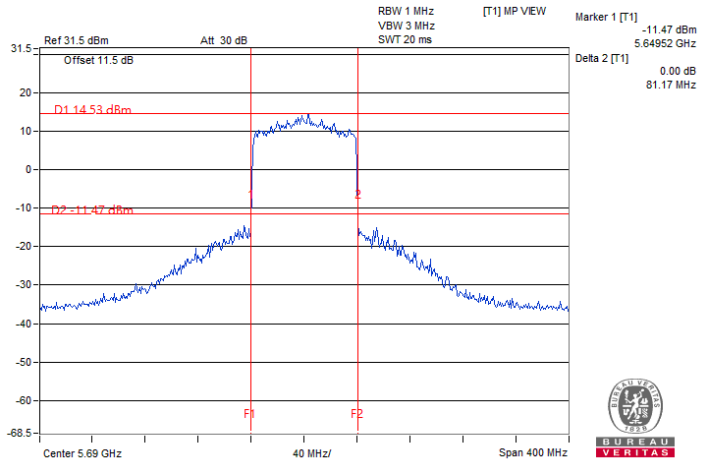
802.11a / Chain 0 : CH 144 (U-NII-3)



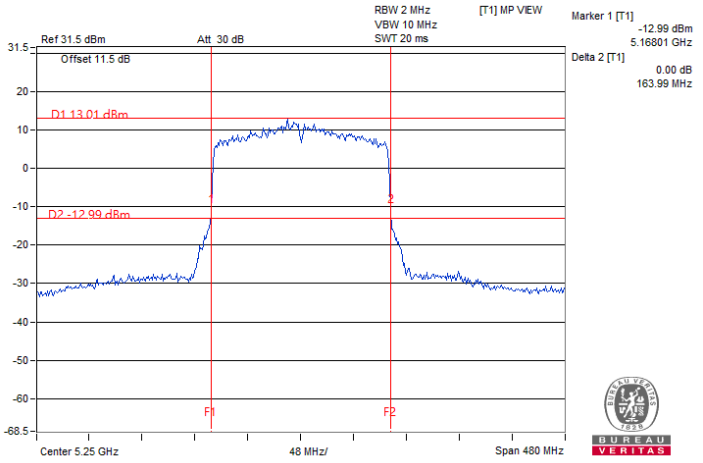
802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)



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



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



802.11ax (HE160) / Chain 2 : CH 50 (U-NII-1)

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz
3. For U-NII-1 straddle channel = 5250 MHz - Marker 1
4. For U-NII-2A straddle channel = Marker 1 + Delta 2 - 5250 MHz

7.2 RF Output Power

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

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
36	5180	22.33	23.01	22.19	536.565	27.30	30	Pass
40	5200	24.30	24.83	24.22	837.483	29.23	30	Pass
48	5240	23.30	23.68	23.23	657.520	28.18	30	Pass
52	5260	18.19	18.83	18.21	208.523	23.19	24	Pass
60	5300	18.27	18.80	18.39	212.025	23.26	24	Pass
64	5320	18.22	18.83	18.33	210.835	23.24	24	Pass
100	5500	17.77	19.45	18.09	212.363	23.27	24	Pass
116	5580	17.75	19.34	18.01	208.709	23.20	24	Pass
140	5700	17.97	19.20	18.13	210.851	23.24	24	Pass
*144 (U-NII-2C)	5720	16.87	18.01	17.02	162.232	22.10	22.88	Pass
*144 (U-NII-3)	5720	10.30	11.33	10.26	34.915	15.43	30	Pass
149	5745	23.90	25.37	24.00	841.009	29.25	30	Pass
157	5785	23.87	25.40	23.97	839.977	29.24	30	Pass
165	5825	23.85	25.41	23.92	836.801	29.23	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.06 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.38 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
36	5180	20.91	21.69	20.63	386.492	25.87	30	Pass
40	5200	23.27	23.97	23.13	667.373	28.24	30	Pass
48	5240	23.25	23.69	23.15	651.771	28.14	30	Pass
52	5260	18.11	18.82	18.18	206.688	23.15	24	Pass
60	5300	18.15	18.87	18.31	210.168	23.23	24	Pass
64	5320	18.27	18.83	18.35	211.918	23.26	24	Pass
100	5500	17.68	19.41	18.10	210.476	23.23	24	Pass
116	5580	17.71	19.37	17.98	208.323	23.19	24	Pass
140	5700	17.92	19.24	18.09	210.307	23.23	24	Pass
*144 (U-NII-2C)	5720	16.70	17.94	16.79	156.756	21.95	22.97	Pass
*144 (U-NII-3)	5720	10.87	12.12	10.90	40.814	16.11	30	Pass
149	5745	23.91	25.07	23.98	817.437	29.12	30	Pass
157	5785	23.93	25.06	23.97	817.259	29.12	30	Pass
165	5825	23.95	25.41	23.72	831.354	29.20	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.06 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.38 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
38	5190	19.66	20.38	19.39	288.510	24.60	30	Pass
46	5230	21.82	22.36	21.47	464.523	26.67	30	Pass
54	5270	18.12	18.83	18.23	207.774	23.18	24	Pass
62	5310	18.24	18.81	18.17	208.328	23.19	24	Pass
102	5510	17.81	19.37	17.97	209.553	23.21	24	Pass
110	5550	17.80	19.32	18.02	209.150	23.20	24	Pass
134	5670	17.62	19.31	18.17	208.734	23.20	24	Pass
*142 (U-NII-2C)	5710	17.30	18.50	17.54	181.252	22.58	24	Pass
*142 (U-NII-3)	5710	6.34	7.46	6.68	14.533	11.62	30	Pass
151	5755	23.68	25.35	23.78	814.895	29.11	30	Pass
159	5795	23.68	25.32	23.77	811.986	29.10	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.06 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.38 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
42	5210	16.79	17.59	16.57	150.559	21.78	30	Pass
58	5290	16.91	17.57	16.96	155.898	21.93	24	Pass
106	5530	17.71	19.28	17.88	205.119	23.12	24	Pass
122	5610	17.83	19.41	18.11	212.685	23.28	24	Pass
*138 (U-NII-2C)	5690	17.30	18.80	17.70	188.445	22.75	24	Pass
*138 (U-NII-3)	5690	2.82	4.36	3.38	6.821	8.34	30	Pass
155	5775	21.74	23.29	22.14	526.266	27.21	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.06 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.38 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
*50 (U-NII-1)	5250	13.46	14.44	13.45	72.110	18.58	30	Pass
*50 (U-NII-2A)	5250	13.51	14.16	13.49	70.836	18.50	24	Pass
114	5570	17.01	18.77	17.35	179.895	22.55	24	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4.06 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4.38 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
36	5180	20.91	21.69	20.63	386.492	25.87	30	Pass
40	5200	23.27	23.97	23.13	667.373	28.24	30	Pass
48	5240	23.25	23.69	23.15	651.771	28.14	30	Pass
52	5260	18.11	18.82	18.18	206.688	23.15	24	Pass
60	5300	18.15	18.87	18.31	210.168	23.23	24	Pass
64	5320	18.27	18.83	18.35	211.918	23.26	24	Pass
100	5500	17.68	19.41	18.10	210.476	23.23	24	Pass
116	5580	17.71	19.37	17.98	208.323	23.19	24	Pass
140	5700	17.92	19.24	18.09	210.307	23.23	24	Pass
*144 (U-NII-2C)	5720	16.70	17.94	16.79	156.756	21.95	22.97	Pass
*144 (U-NII-3)	5720	10.87	12.12	10.90	40.814	16.11	30	Pass
149	5745	23.91	25.07	23.98	817.437	29.12	30	Pass
157	5785	23.93	25.06	23.97	817.259	29.12	30	Pass
165	5825	23.95	25.41	23.72	831.354	29.20	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the directional gain is 5.97 dBi < 6 dBi, so the output power limit shall not be reduced.

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				
38	5190	19.66	20.38	19.39	288.510	24.60	30	Pass
46	5230	21.82	22.36	21.47	464.523	26.67	30	Pass
54	5270	18.12	18.83	18.23	207.774	23.18	24	Pass
62	5310	18.24	18.81	18.17	208.328	23.19	24	Pass
102	5510	17.81	19.37	17.97	209.553	23.21	24	Pass
110	5550	17.80	19.32	18.02	209.150	23.20	24	Pass
134	5670	17.62	19.31	18.17	208.734	23.20	24	Pass
*142 (U-NII-2C)	5710	17.30	18.50	17.54	181.252	22.58	24	Pass
*142 (U-NII-3)	5710	6.34	7.46	6.68	14.533	11.62	30	Pass
151	5755	23.68	25.35	23.78	814.895	29.11	30	Pass
159	5795	23.68	25.32	23.77	811.986	29.10	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the directional gain is 5.97 dBi < 6 dBi, so the output power limit shall not be reduced.

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				
42	5210	16.79	17.59	16.57	150.559	21.78	30	Pass
58	5290	16.91	17.57	16.96	155.898	21.93	24	Pass
106	5530	17.71	19.28	17.88	205.119	23.12	24	Pass
122	5610	17.83	19.41	18.11	212.685	23.28	24	Pass
*138 (U-NII-2C)	5690	17.30	18.80	17.70	188.445	22.75	24	Pass
*138 (U-NII-3)	5690	2.82	4.36	3.38	6.821	8.34	30	Pass
155	5775	21.74	23.29	22.14	526.266	27.21	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the directional gain is 5.97 dBi < 6 dBi, so the output power limit shall not be reduced.

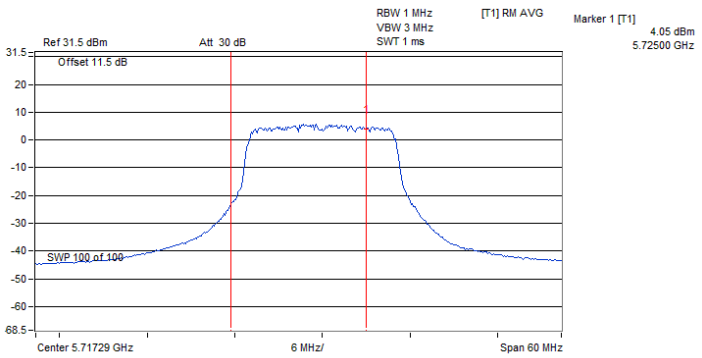
802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2				
*50 (U-NII-1)	5250	13.46	14.44	13.45	72.110	18.58	30	Pass
*50 (U-NII-2A)	5250	13.51	14.16	13.49	70.836	18.50	24	Pass
114	5570	17.01	18.77	17.35	179.895	22.55	24	Pass

Notes:

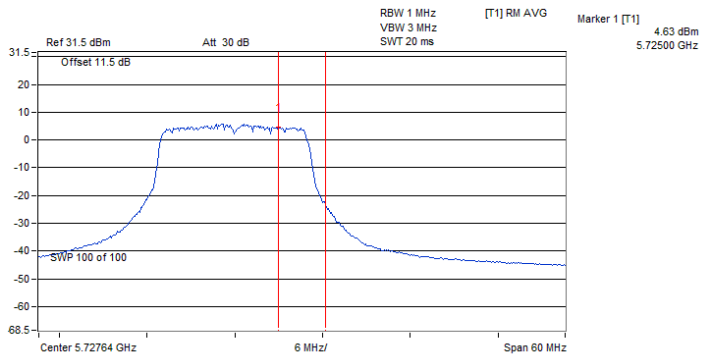
1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



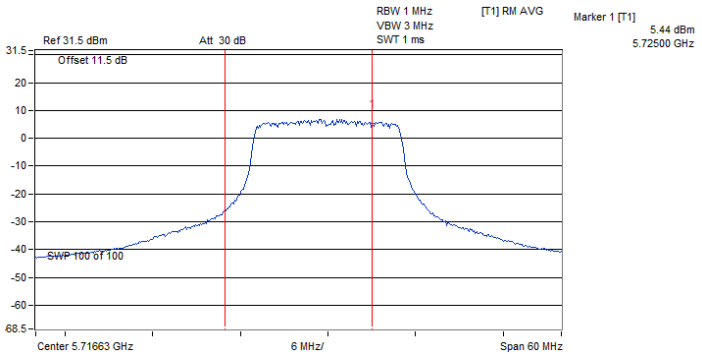
TX Channel Bandwidth 15.43 MHz Power 16.87 dBm

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



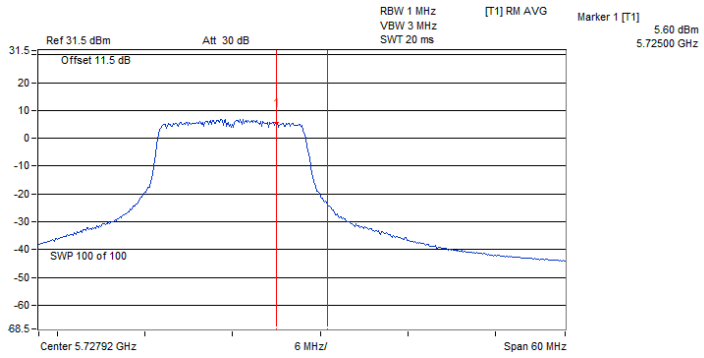
TX Channel Bandwidth 5.29 MHz Power 10.3 dBm

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



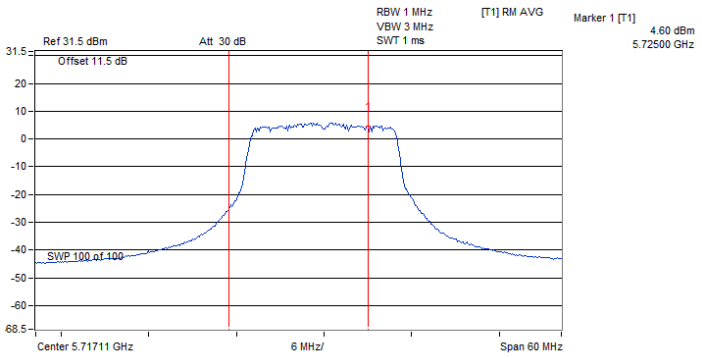
TX Channel Bandwidth 16.74 MHz Power 18.01 dBm

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



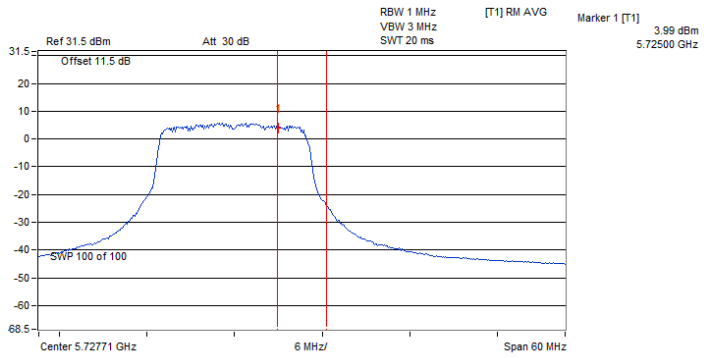
TX Channel Bandwidth 5.83 MHz Power 11.33 dBm

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



TX Channel Bandwidth 15.79 MHz Power 17.02 dBm

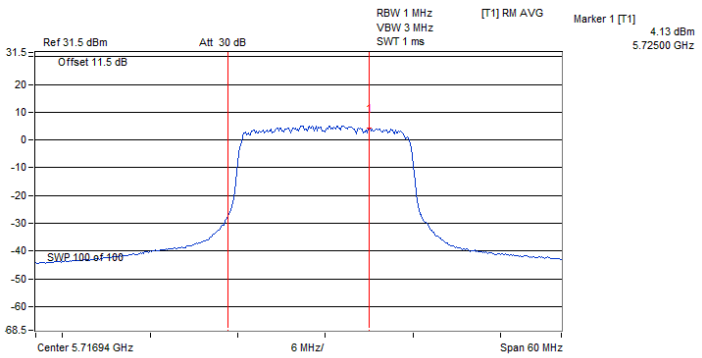
802.11a / Chain 2 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.41 MHz Power 10.26 dBm

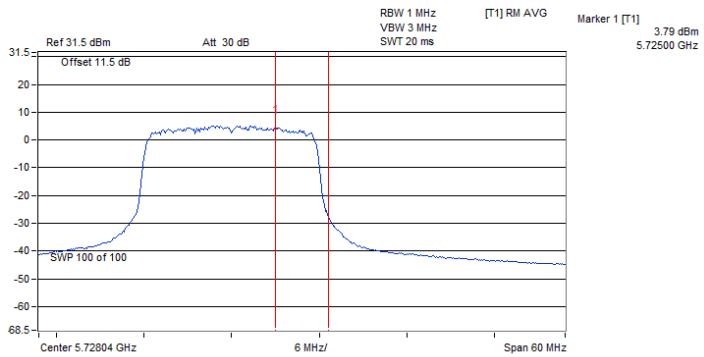
802.11a / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



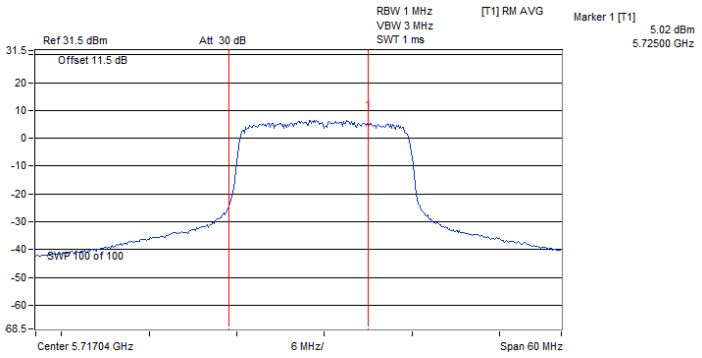
TX Channel Bandwidth 16.11 MHz Power 16.7 dBm

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



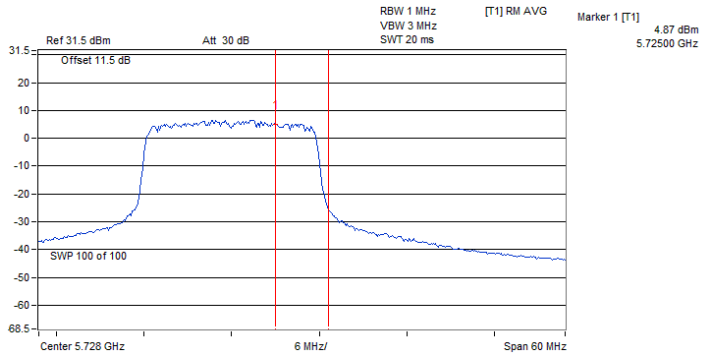
TX Channel Bandwidth 6.07 MHz Power 10.87 dBm

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



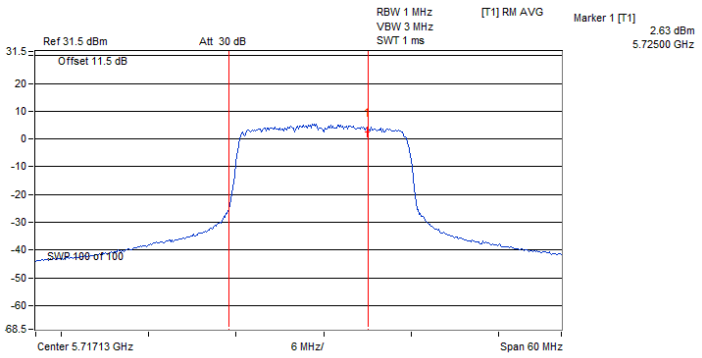
TX Channel Bandwidth 15.91 MHz Power 17.94 dBm

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



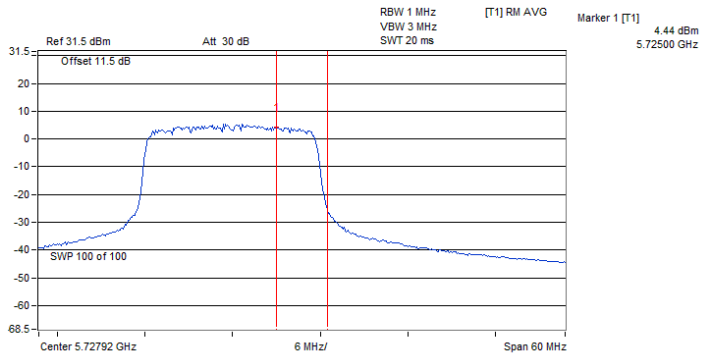
TX Channel Bandwidth 6.01 MHz Power 12.12 dBm

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



TX Channel Bandwidth 15.75 MHz Power 16.79 dBm

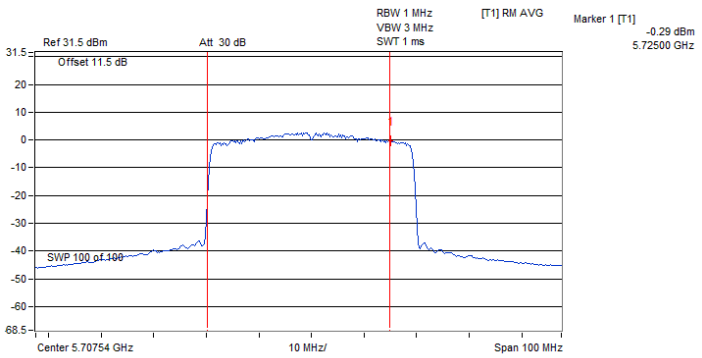
802.11ax (HE20) / Chain 2 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.84 MHz Power 10.9 dBm

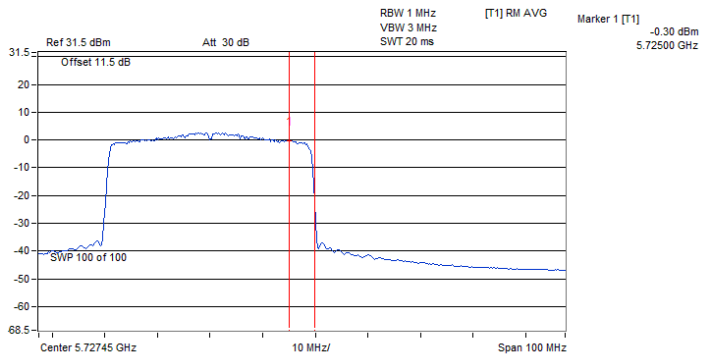
802.11ax (HE20) / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



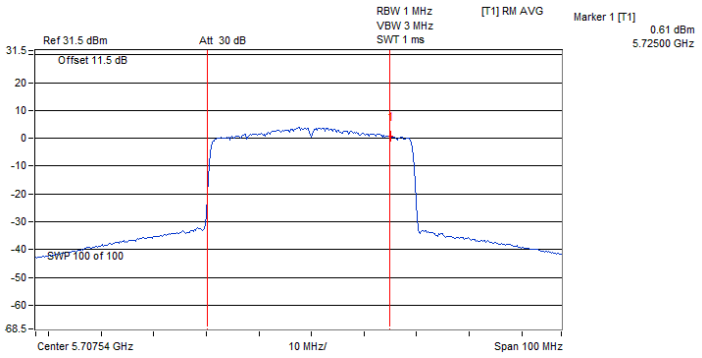
TX Channel Bandwidth 34.93 MHz Power 17.3 dBm

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



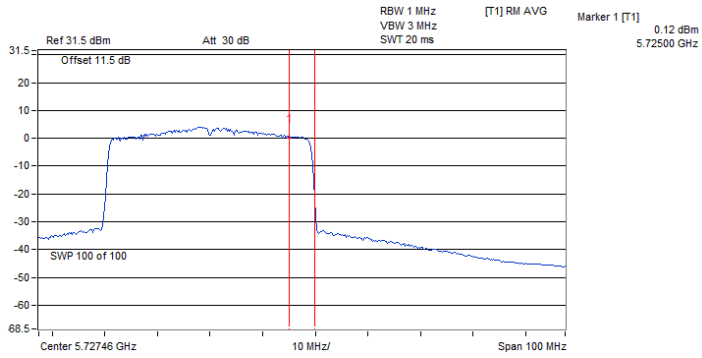
TX Channel Bandwidth 4.89 MHz Power 6.34 dBm

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



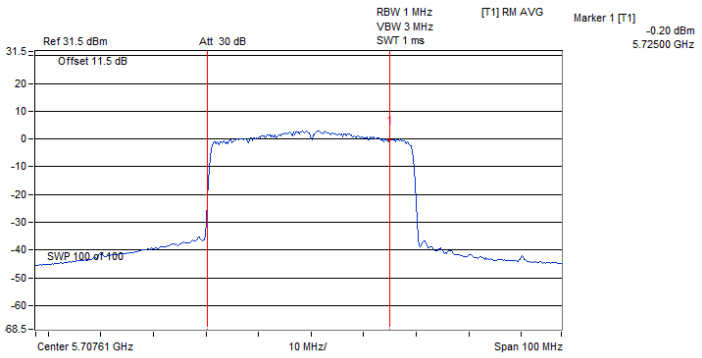
TX Channel Bandwidth 34.93 MHz Power 18.5 dBm

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



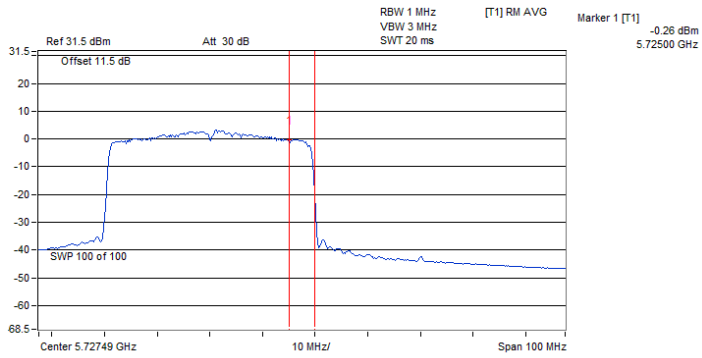
TX Channel Bandwidth 4.92 MHz Power 7.46 dBm

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



TX Channel Bandwidth 34.78 MHz Power 17.54 dBm

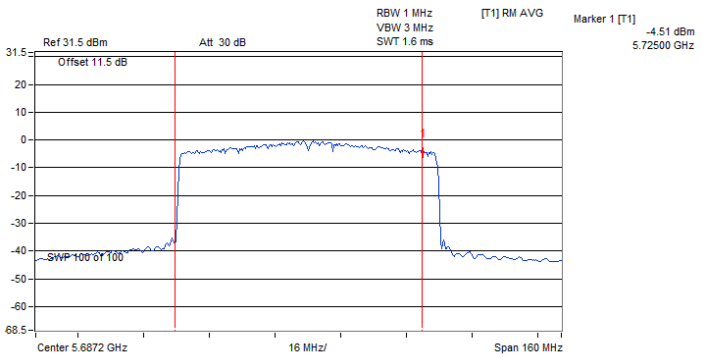
802.11ax (HE40) / Chain 2 : CH 142 (U-NII-2C)



TX Channel Bandwidth 4.97 MHz Power 6.68 dBm

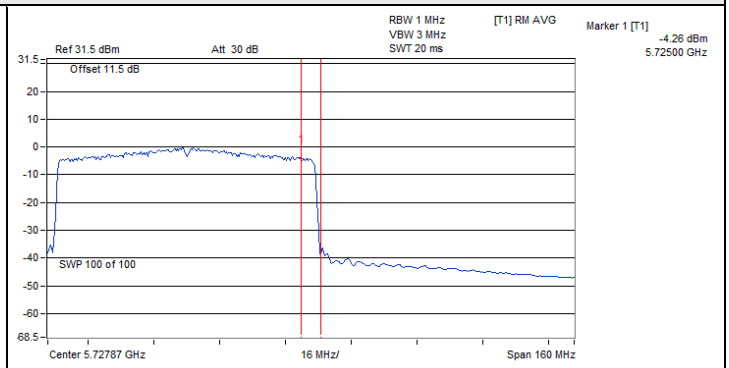
802.11ax (HE40) / Chain 2 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



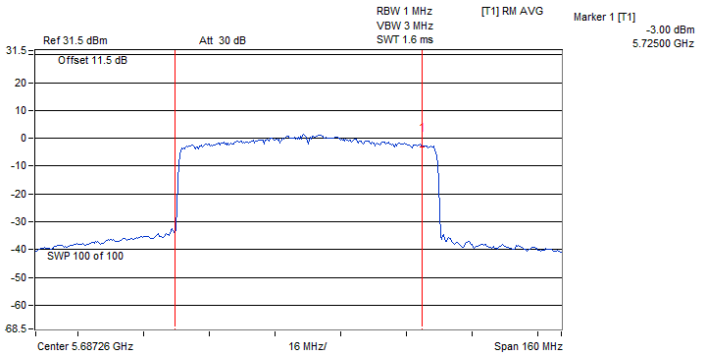
TX Channel Bandwidth 75.61 MHz Power 17.3 dBm

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



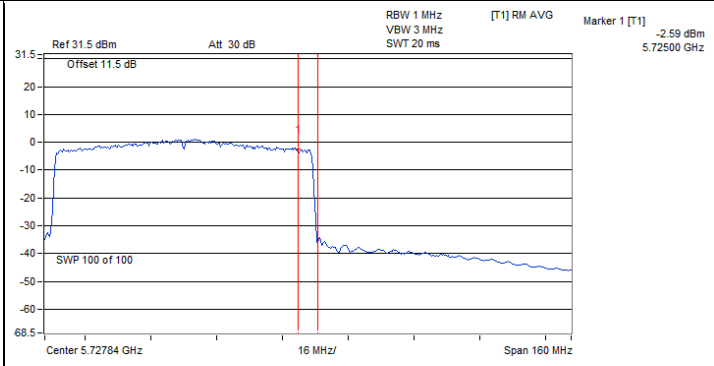
TX Channel Bandwidth 5.74 MHz Power 2.82 dBm

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



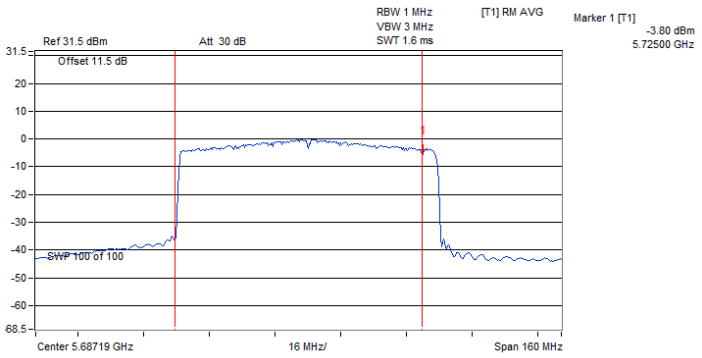
TX Channel Bandwidth 75.48 MHz Power 18.8 dBm

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



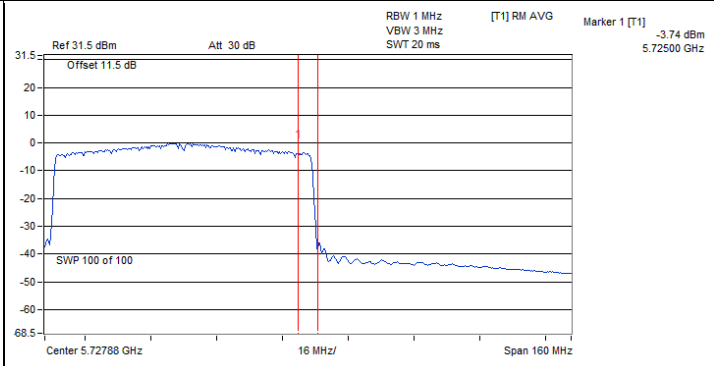
TX Channel Bandwidth 5.69 MHz Power 4.36 dBm

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



TX Channel Bandwidth 75.62 MHz Power 17.7 dBm

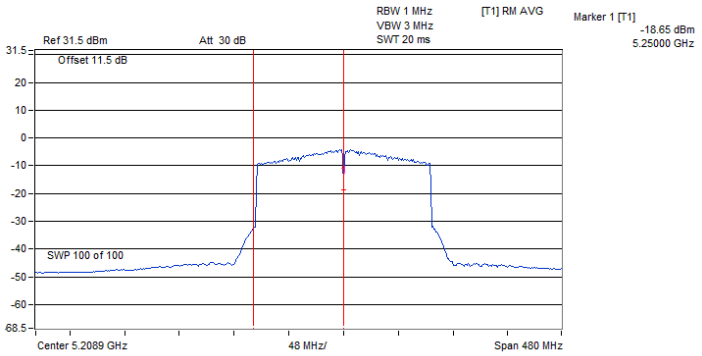
802.11ax (HE80) / Chain 2 : CH 138 (U-NII-2C)



TX Channel Bandwidth 5.77 MHz Power 3.38 dBm

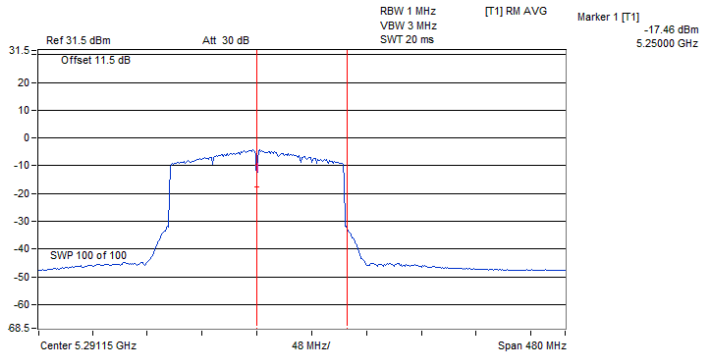
802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



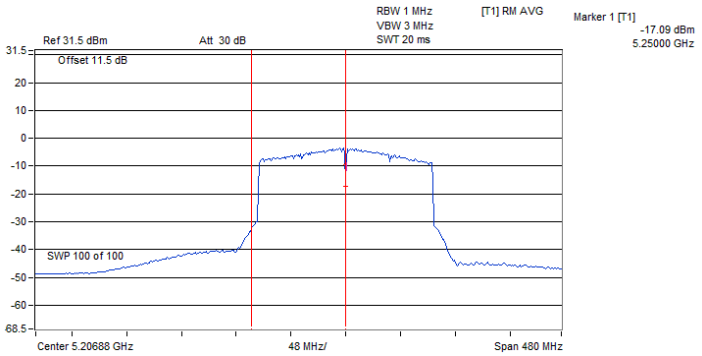
TX Channel Bandwidth 82.21 MHz Power 13.46 dBm

802.11ax (HE160) / Chain 0 : CH 50 (U-NII-1)



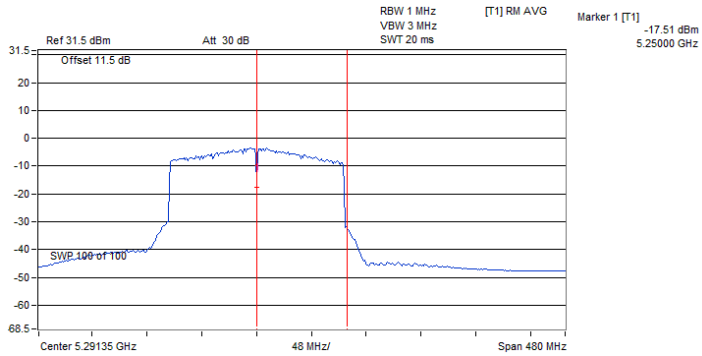
TX Channel Bandwidth 82.3 MHz Power 13.51 dBm

802.11ax (HE160) / Chain 0 : CH 50 (U-NII-2A)



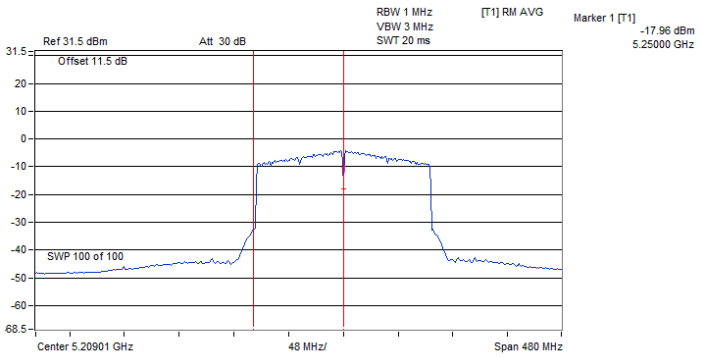
TX Channel Bandwidth 86.25 MHz Power 14.44 dBm

802.11ax (HE160) / Chain 1 : CH 50 (U-NII-1)



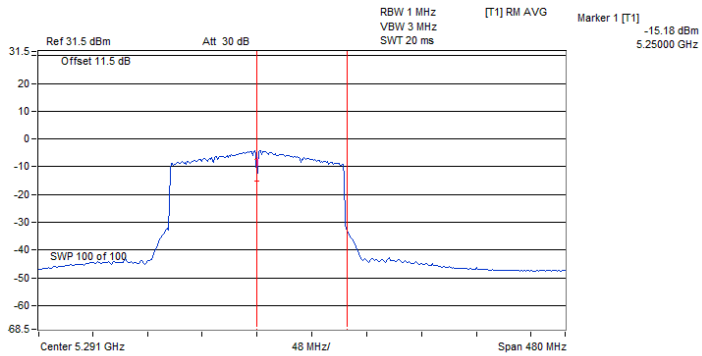
TX Channel Bandwidth 82.7 MHz Power 14.16 dBm

802.11ax (HE160) / Chain 1 : CH 50 (U-NII-2A)



TX Channel Bandwidth 81.99 MHz Power 13.45 dBm

802.11ax (HE160) / Chain 2 : CH 50 (U-NII-1)



TX Channel Bandwidth 82 MHz Power 13.49 dBm

802.11ax (HE160) / Chain 2 : CH 50 (U-NII-2A)

7.3 Power Spectral Density

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

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)			Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2			
36	5180	9.82	10.50	9.55	14.75	17	Pass
40	5200	11.70	12.31	11.67	16.67	17	Pass
48	5240	10.68	10.87	10.65	15.51	17	Pass
52	5260	5.61	6.32	5.51	10.60	11	Pass
60	5300	5.78	6.29	5.87	10.76	11	Pass
64	5320	5.73	6.24	5.79	10.70	11	Pass
100	5500	5.18	6.88	5.56	10.71	11	Pass
116	5580	5.17	6.76	5.49	10.63	11	Pass
140	5700	5.45	6.66	5.63	10.72	11	Pass
144 (U-NII-2C)	5720	5.37	6.57	5.59	10.65	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)			Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2			
36	5180	7.89	8.62	7.45	12.78	17	Pass
40	5200	10.11	10.94	9.88	15.11	17	Pass
48	5240	10.02	10.65	10.07	15.03	17	Pass
52	5260	5.01	5.81	5.05	10.08	11	Pass
60	5300	5.06	5.77	5.26	10.14	11	Pass
64	5320	5.16	5.77	5.23	10.17	11	Pass
100	5500	4.55	6.33	4.97	10.12	11	Pass
116	5580	4.41	6.34	4.76	10.03	11	Pass
140	5700	4.66	6.16	4.80	10.03	11	Pass
144 (U-NII-2C)	5720	4.62	6.26	5.07	10.14	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)			Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2			
38	5190	4.08	4.82	3.80	9.03	17	Pass
46	5230	6.24	6.80	5.90	11.10	17	Pass
54	5270	2.61	3.27	2.66	7.63	11	Pass
62	5310	2.67	3.31	2.55	7.63	11	Pass
102	5510	2.23	3.80	2.43	7.65	11	Pass
110	5550	2.18	3.71	2.19	7.53	11	Pass
134	5670	2.06	3.53	2.64	7.56	11	Pass
142 (U-NII-2C)	5710	2.35	3.39	2.54	7.56	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)			Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2			
42	5210	-1.88	-0.96	-2.06	3.17	17	Pass
58	5290	-1.93	-1.12	-1.71	3.20	11	Pass
106	5530	-0.97	0.69	-0.88	4.45	11	Pass
122	5610	-0.86	0.79	-0.66	4.59	11	Pass
138 (U-NII-2C)	5690	-1.02	0.71	-0.81	4.47	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the power density limit shall not be reduced.

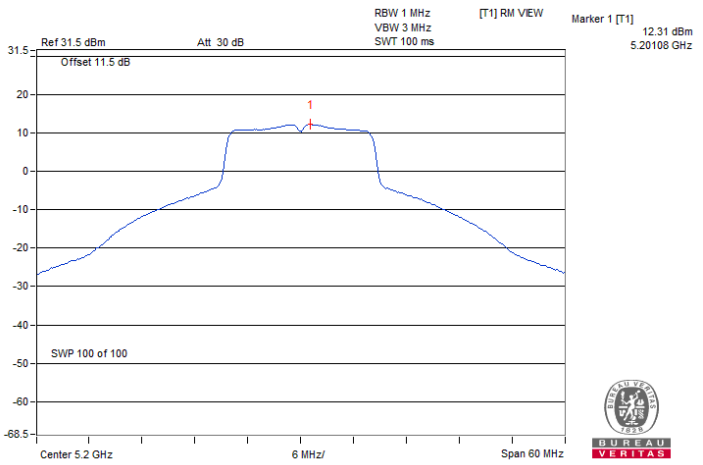
802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)			Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2			
50 (U-NII-1)	5250	-3.80	-3.31	-4.08	1.05	17	Pass
50 (U-NII-2A)	5250	-4.01	-3.16	-4.25	0.99	11	Pass
114	5570	-3.71	-1.88	-3.57	1.80	11	Pass

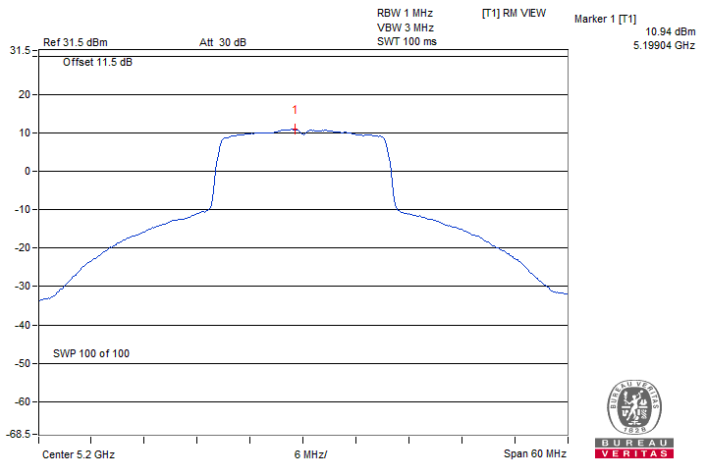
Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. For U-NII-1, the directional gain is 5.8 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.77 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.79 dBi < 6 dBi, so the power density limit shall not be reduced.

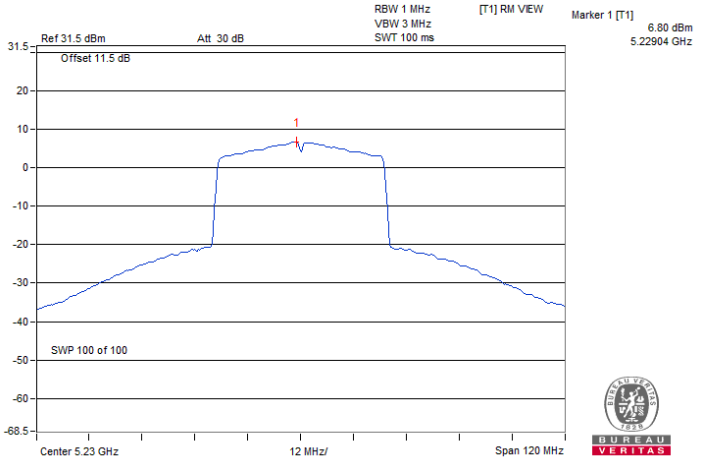
Spectrum Plot of Maximum Value



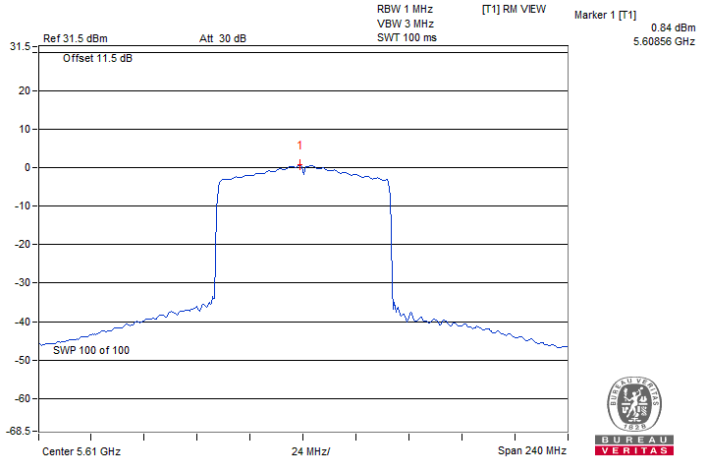
802.11a / Chain 1 : CH 40



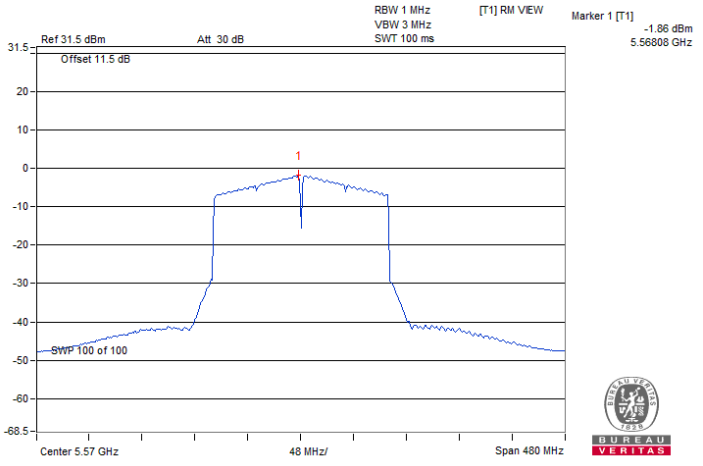
802.11ax (HE20) / Chain 1 : CH 40



802.11ax (HE40) / Chain 1 : CH 46



802.11ax (HE80) / Chain 1 : CH 122



802.11ax (HE160) / Chain 1 : CH 114

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)			Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2				
144 (U-NII-3)	5720	-4.28	-2.82	-3.80	1.18	3.40	30	Pass
149	5745	3.19	4.67	3.20	8.52	10.74	30	Pass
157	5785	3.16	4.62	3.24	8.50	10.72	30	Pass
165	5825	3.03	4.59	3.21	8.44	10.66	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 5.97 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)			Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2				
144 (U-NII-3)	5720	-4.98	-3.85	-5.03	0.19	2.41	30	Pass
149	5745	1.65	2.74	1.61	6.80	9.02	30	Pass
157	5785	1.81	2.71	1.75	6.88	9.10	30	Pass
165	5825	1.73	3.08	1.41	6.91	9.13	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 5.97 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)			Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2				
142 (U-NII-3)	5710	-9.71	-8.66	-9.91	-4.62	-2.40	30	Pass
151	5755	-0.69	0.97	-0.65	4.72	6.94	30	Pass
159	5795	-0.72	0.95	-0.67	4.70	6.92	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 5.97 dBi < 6 dBi, so the power density limit shall not be reduced.

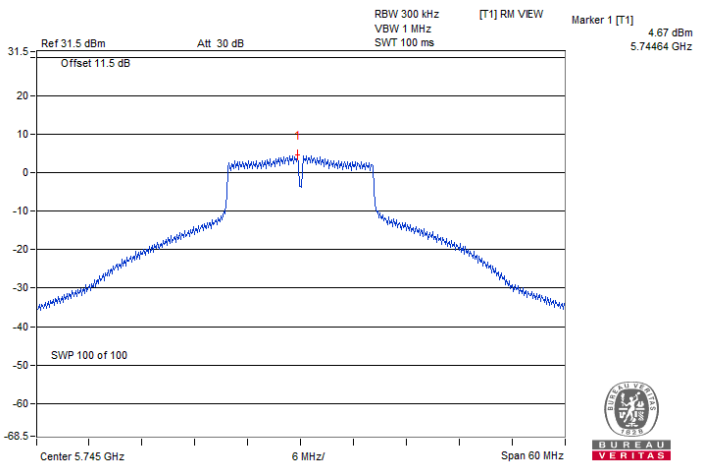
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)			Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1	Chain 2				
138 (U-NII-3)	5690	-13.12	-11.88	-12.90	-7.83	-5.61	30	Pass
155	5775	-5.51	-4.07	-5.14	-0.09	2.13	30	Pass

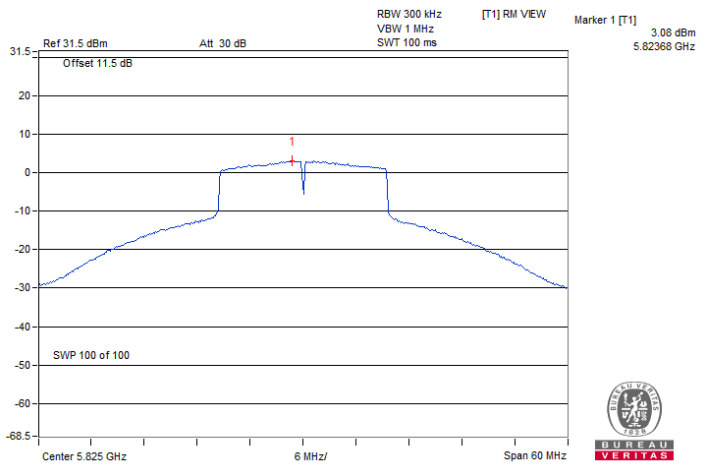
Notes:

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

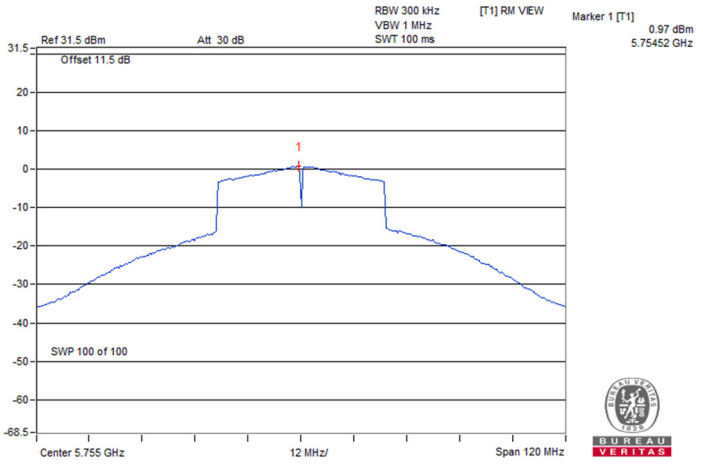
Spectrum Plot of Maximum Value



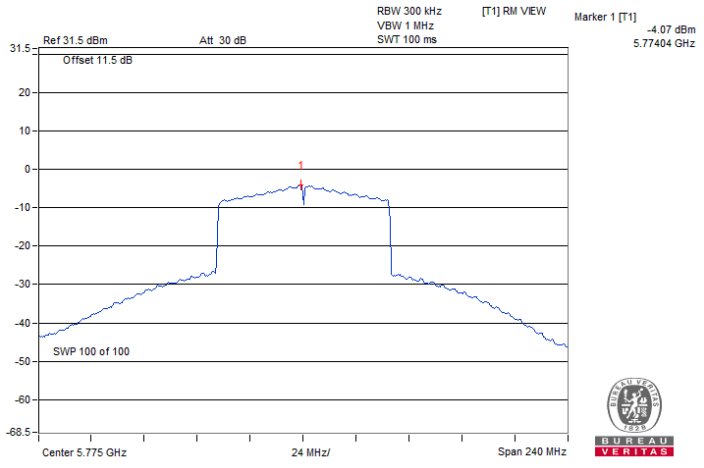
802.11a / Chain 1 : CH 149



802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 1 : CH 151



802.11ax (HE80) / Chain 1 : CH 155

7.4 6 dB Bandwidth

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

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
144 (U-NII-3)	5720	3.13	3.16	3.16	0.5	Pass
149	5745	16.37	16.39	16.40	0.5	Pass
157	5785	16.37	16.41	16.40	0.5	Pass
165	5825	16.35	16.41	16.42	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
144 (U-NII-3)	5720	4.47	4.46	4.45	0.5	Pass
149	5745	18.84	18.86	18.50	0.5	Pass
157	5785	18.69	18.57	18.80	0.5	Pass
165	5825	18.77	18.39	18.79	0.5	Pass

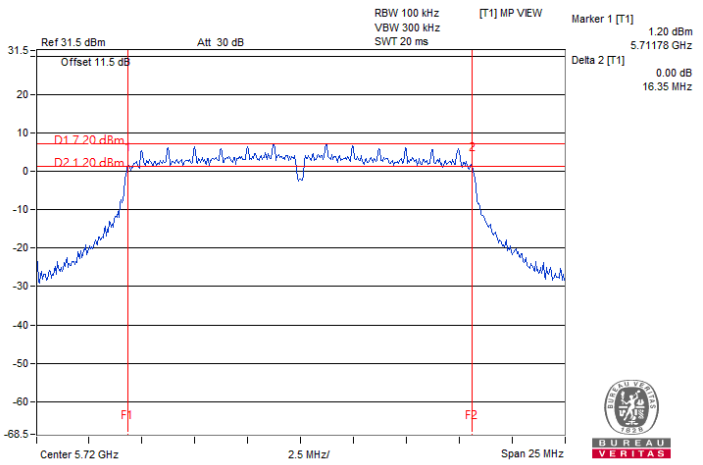
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
142 (U-NII-3)	5710	3.65	3.31	3.92	0.5	Pass
151	5755	36.95	36.71	35.20	0.5	Pass
159	5795	37.02	35.47	36.93	0.5	Pass

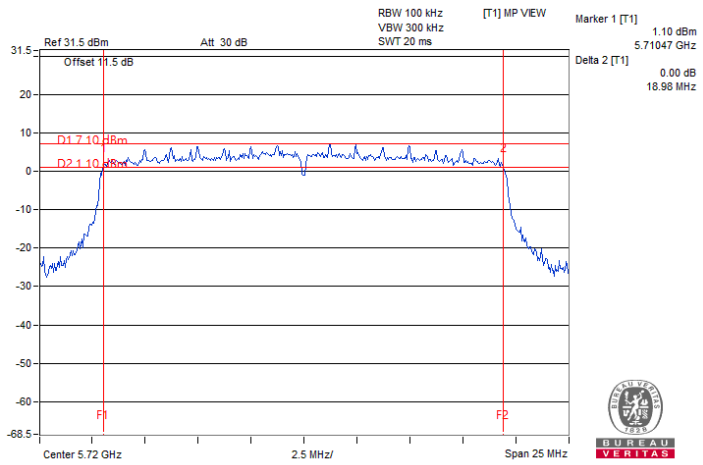
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
138 (U-NII-3)	5690	0.54	3.45	2.70	0.5	Pass
155	5775	76.14	75.38	75.40	0.5	Pass

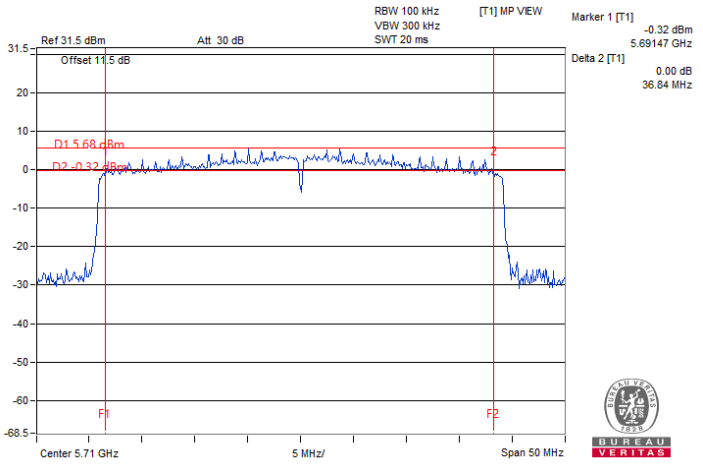
Spectrum Plot of Minimum Value



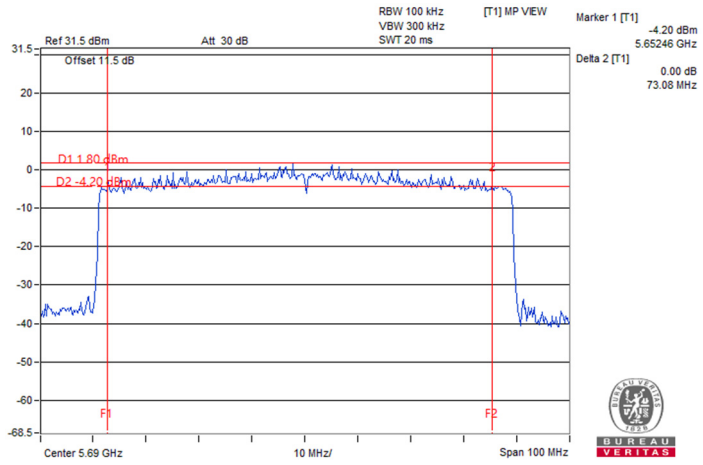
802.11a / Chain 0 : CH 144 (U-NII-3)



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



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



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

Note: For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

7.5 Occupied Bandwidth

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

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
36	5180	17.70	18.96	17.04
40	5200	31.60	29.52	24.24
48	5240	18.60	19.80	18.96
52	5260	16.68	16.68	16.68
60	5300	17.04	16.92	16.92
64	5320	17.04	17.04	16.92
100	5500	17.04	17.04	16.92
116	5580	16.68	16.68	16.68
140	5700	16.92	16.92	16.92
144 (U-NII-2C)	5720	13.40	13.40	13.40
144 (U-NII-3)	5720	3.28	3.28	3.28
149	5745	26.04	29.52	28.80
157	5785	27.24	32.60	30.00
165	5825	27.00	32.80	27.96

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
36	5180	19.20	19.32	19.20
40	5200	19.92	20.64	19.56
48	5240	19.44	19.68	19.32
52	5260	19.08	19.08	18.96
60	5300	19.20	19.08	19.20
64	5320	19.32	19.20	19.20
100	5500	19.20	19.20	19.20
116	5580	19.08	19.08	19.08
140	5700	19.08	19.20	19.20
144 (U-NII-2C)	5720	14.60	14.60	14.60
144 (U-NII-3)	5720	4.48	4.48	4.48
149	5745	22.08	29.28	27.84
157	5785	22.08	30.60	29.40
165	5825	21.84	35.20	27.36

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
38	5190	38.16	38.04	37.92
46	5230	37.92	38.16	37.92
54	5270	37.68	37.68	37.92
62	5310	37.92	37.92	37.92
102	5510	37.92	38.04	37.92
110	5550	37.68	37.92	37.92
134	5670	38.16	37.92	38.16
142 (U-NII-2C)	5710	33.96	33.96	33.96
142 (U-NII-3)	5710	3.72	3.96	3.96
151	5755	42.96	58.56	45.84
159	5795	42.36	59.88	51.60

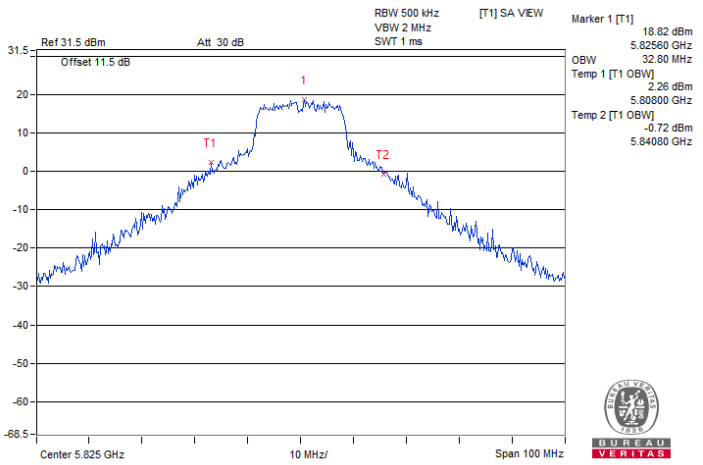
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
42	5210	77.28	77.28	77.04
58	5290	77.28	77.76	77.76
106	5530	77.28	76.80	77.76
122	5610	76.80	77.28	76.80
138 (U-NII-2C)	5690	73.40	73.40	73.40
138 (U-NII-3)	5690	3.40	3.40	3.40
155	5775	77.76	78.72	78.24

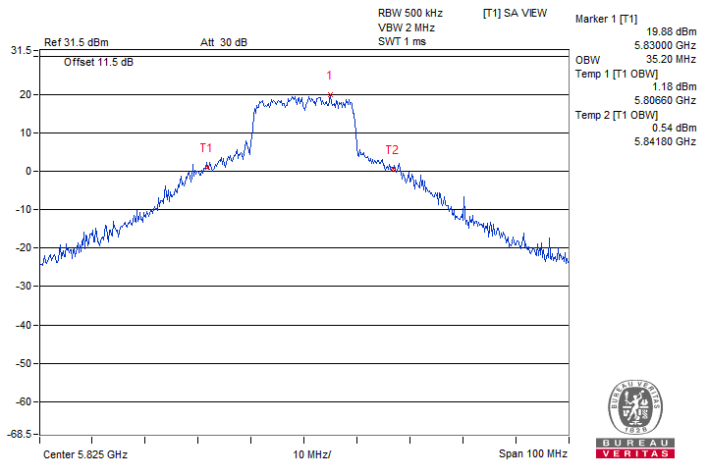
802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
50 (U-NII-1)	5250	77.76	78.72	78.72
50 (U-NII-2A)	5250	77.76	77.76	77.76
114	5570	156.48	155.52	155.52

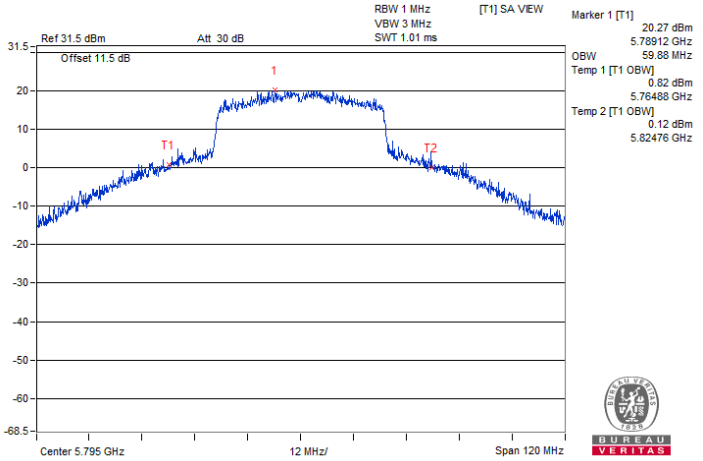
Spectrum Plot of Maximum Value



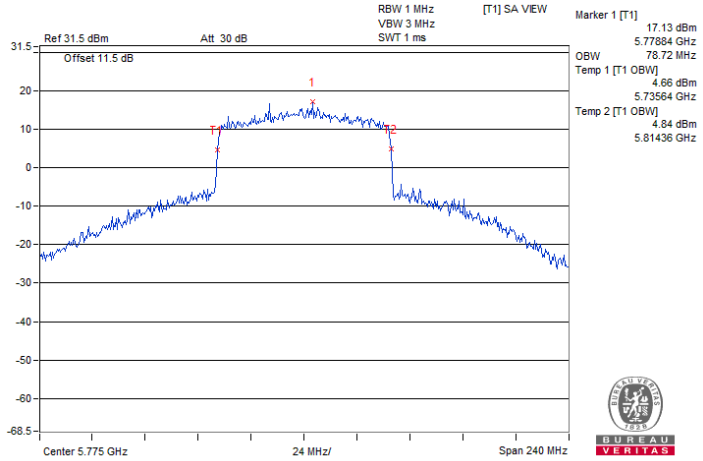
802.11a / Chain 1 : CH 165



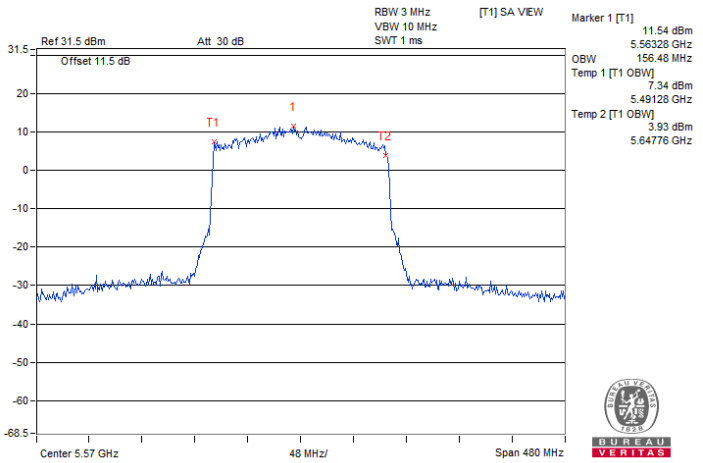
802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 1 : CH 159



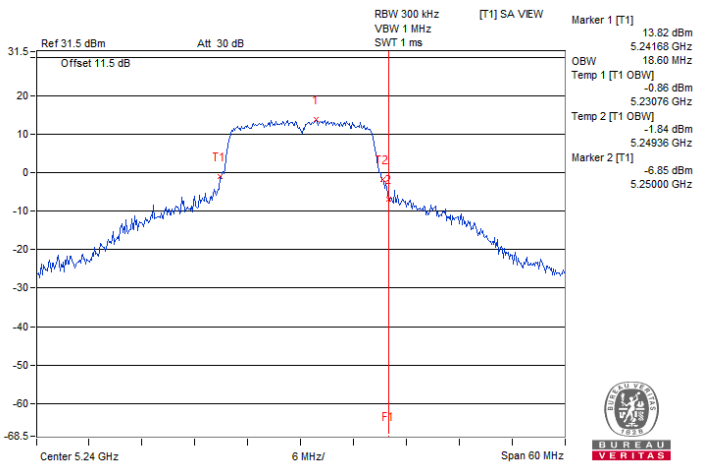
802.11ax (HE80) / Chain 1 : CH 155



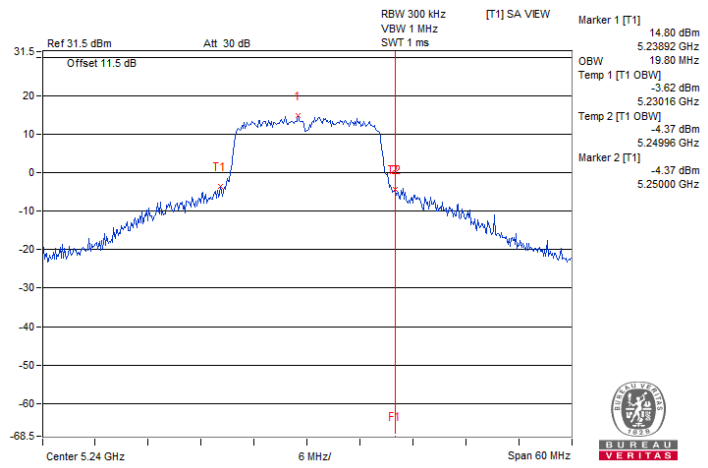
802.11ax (HE160) / Chain 0 : CH 114

Spectrum Plot for nearby DFS band

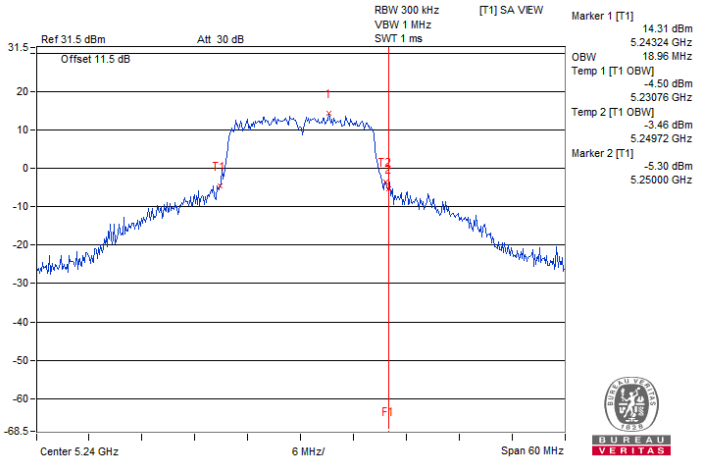
(DFS is required, if 99% OCP straddle into U-NII-2A)



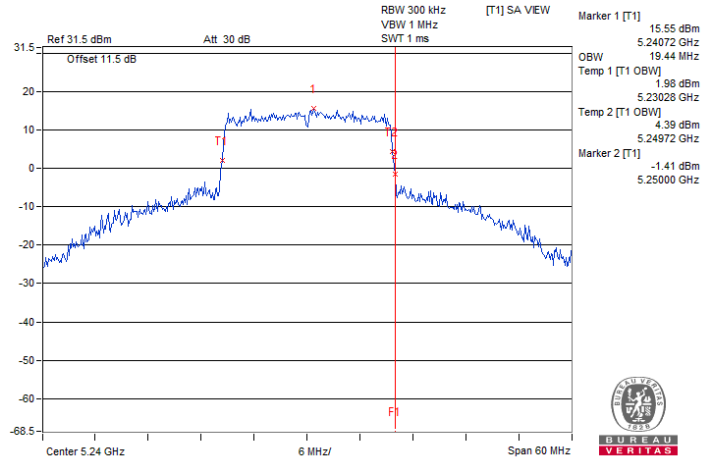
802.11a / Chain 0 : CH 48



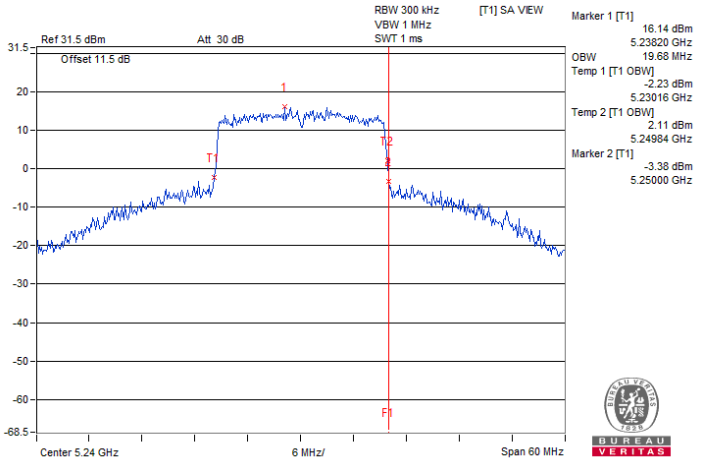
802.11a / Chain 1 : CH 48



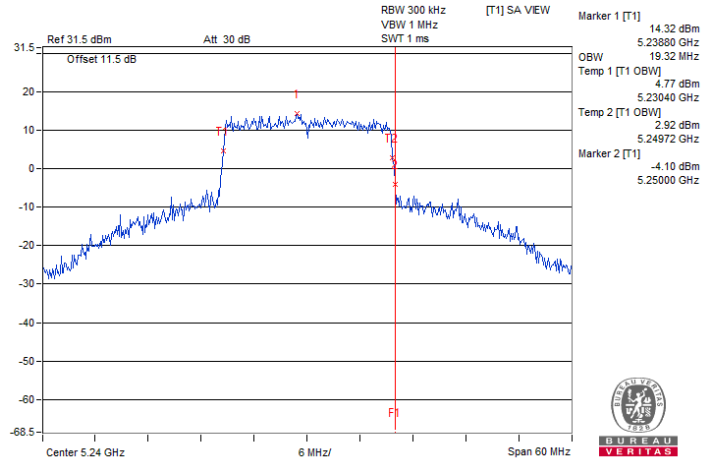
802.11a / Chain 2 : CH 48



802.11ax (HE20) / Chain 0 : CH 48



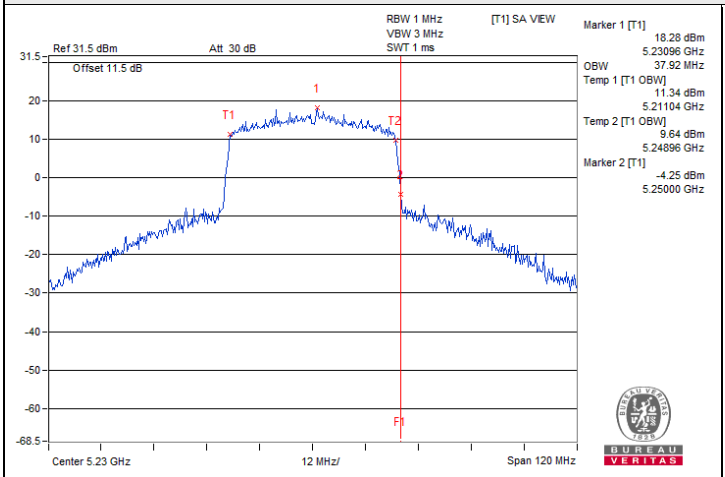
802.11ax (HE20) / Chain 1 : CH 48



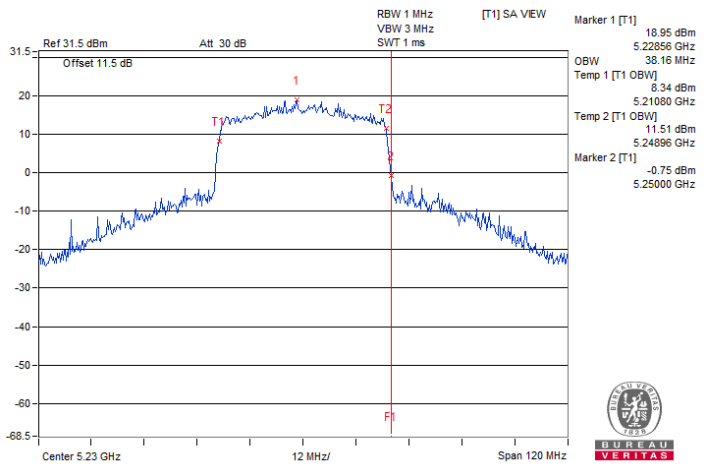
802.11ax (HE20) / Chain 2 : CH 48

Spectrum Plot for nearby DFS band

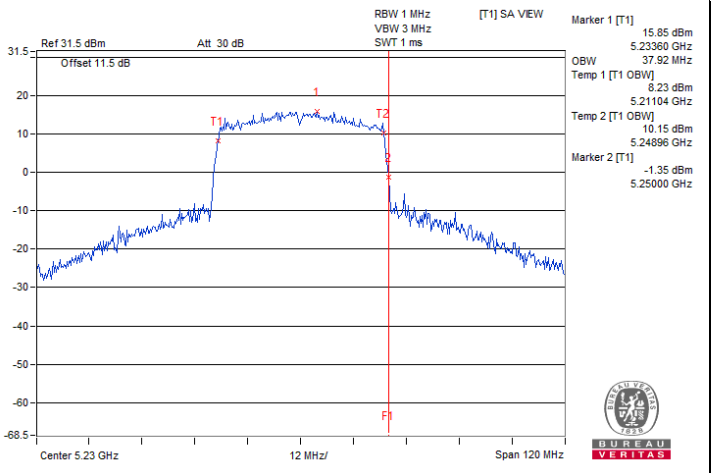
(DFS is required, if 99% OCP straddle into U-NII-2A)



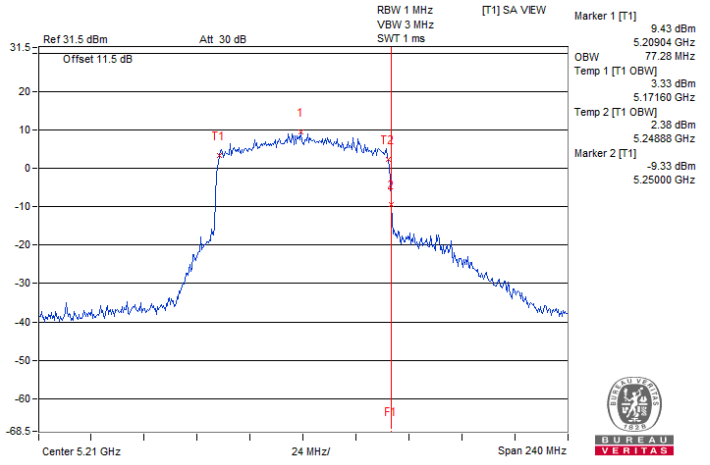
802.11ax (HE40) / Chain 0 : CH 46



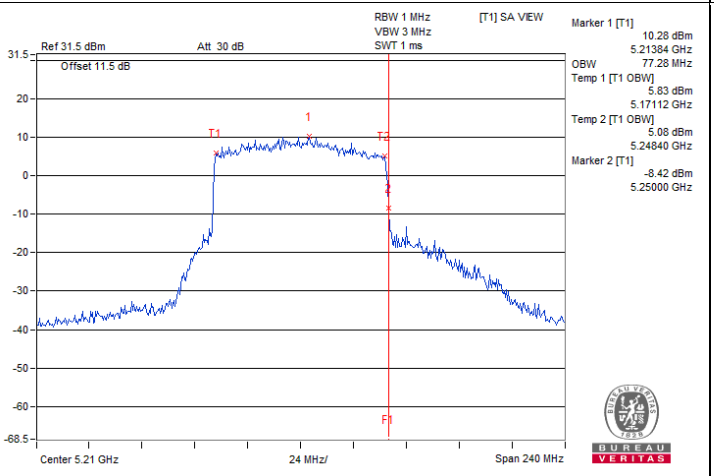
802.11ax (HE40) / Chain 1 : CH 46



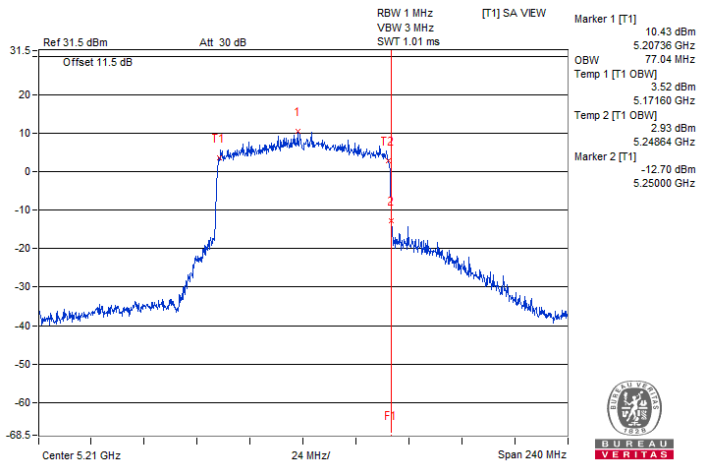
802.11ax (HE40) / Chain 2 : CH 46



802.11ax (HE80) / Chain 0 : CH 42



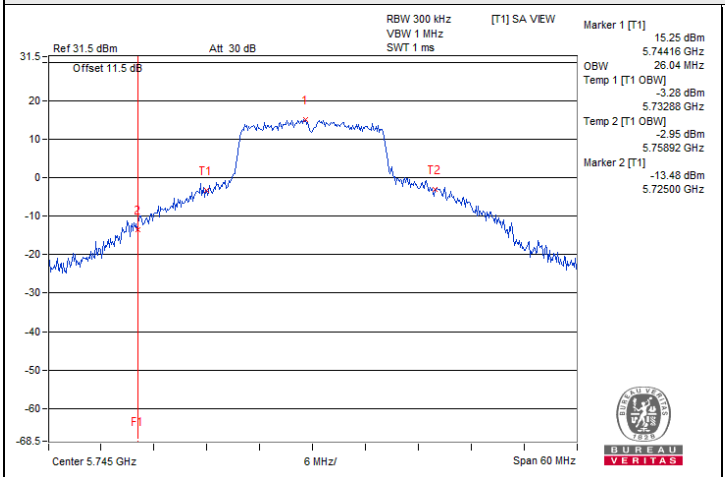
802.11ax (HE80) / Chain 1 : CH 42



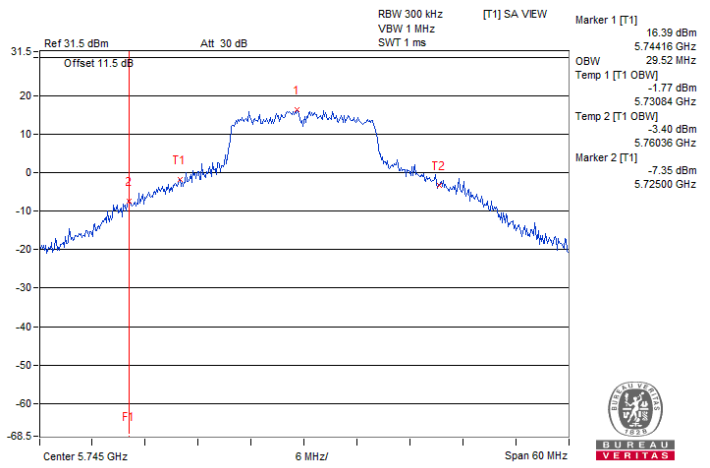
802.11ax (HE80) / Chain 2 : CH 42

Spectrum Plot for nearby DFS band

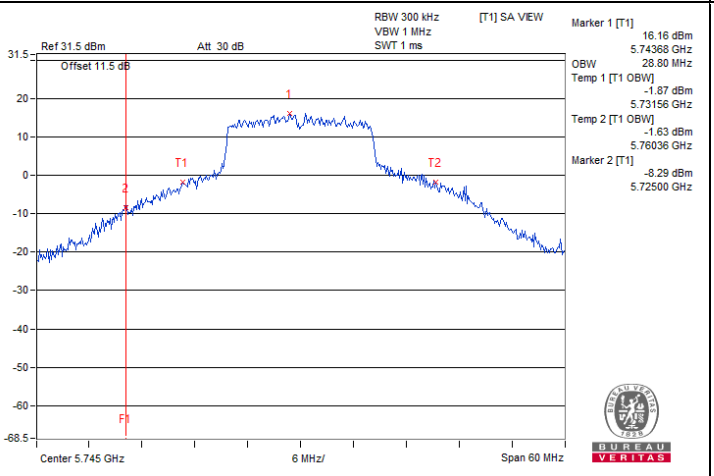
(DFS is required, if 99% OCP straddle into U-NII-2C)



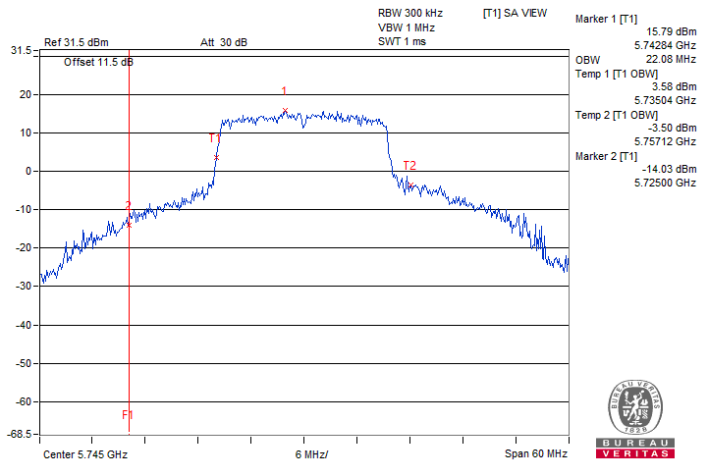
802.11a / Chain 0 : CH 149



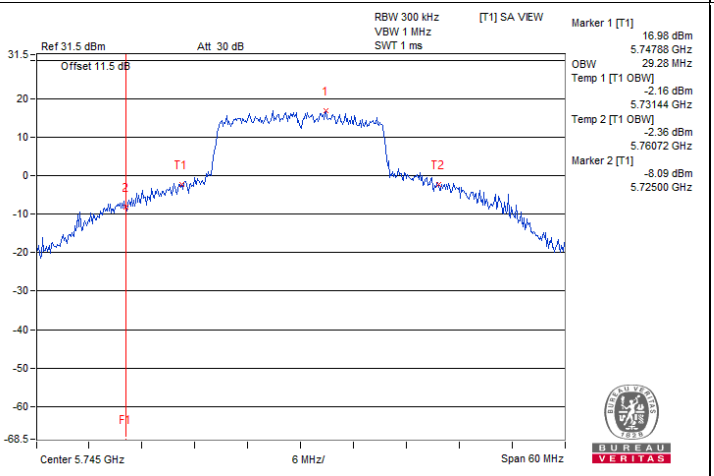
802.11a / Chain 1 : CH 149



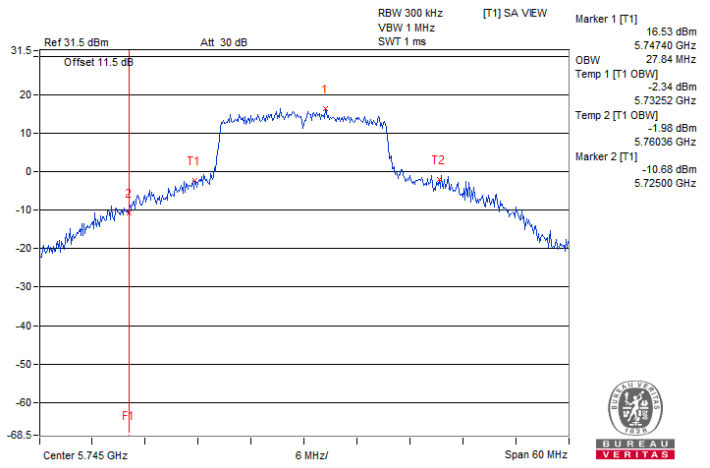
802.11a / Chain 2 : CH 149



802.11ax (HE20) / Chain 0 : CH 149



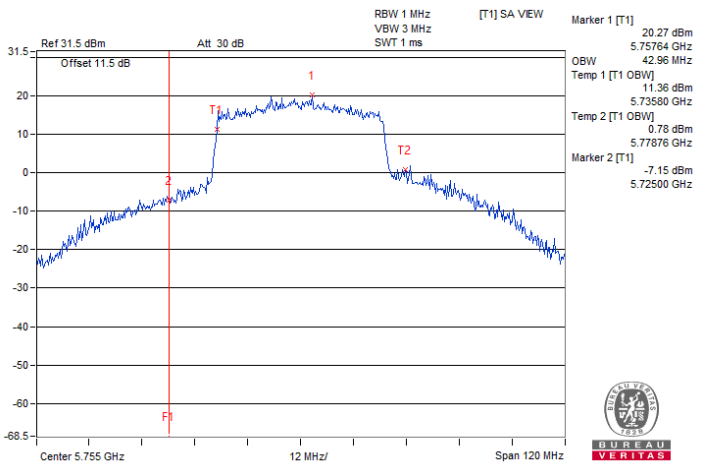
802.11ax (HE20) / Chain 1 : CH 149



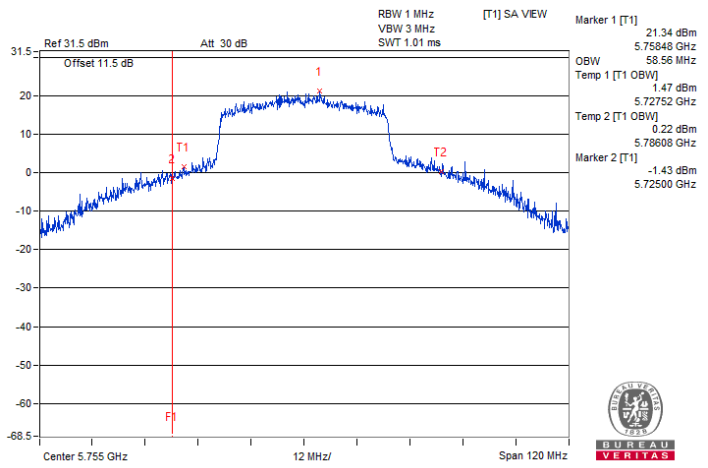
802.11ax (HE20) / Chain 2 : CH 149

Spectrum Plot for nearby DFS band

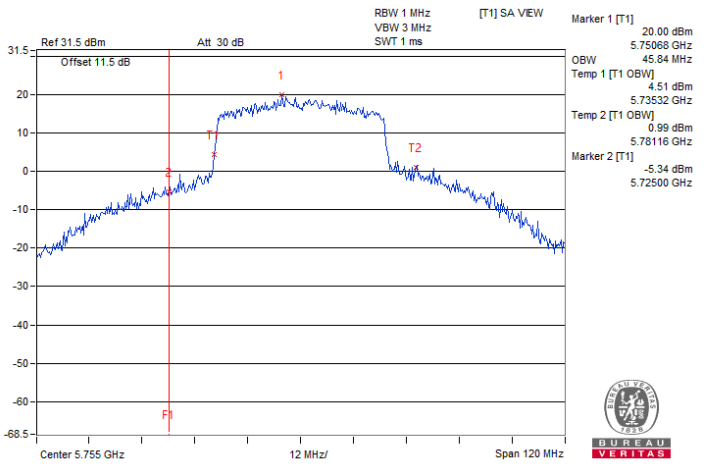
(DFS is required, if 99% OCP straddle into U-NII-2C)



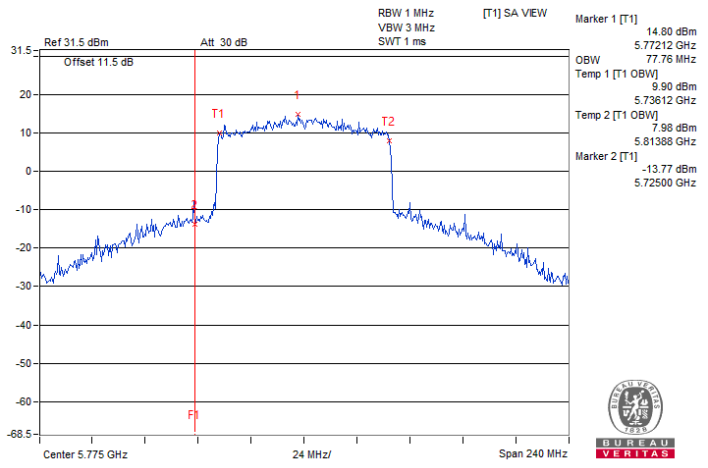
802.11ax (HE40) / Chain 0 : CH 151



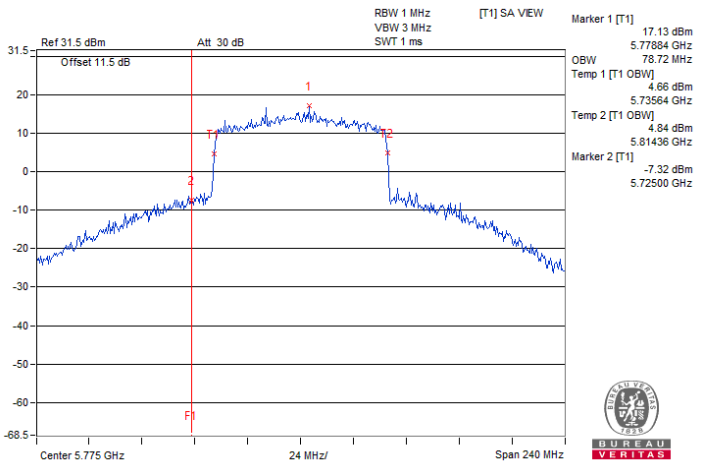
802.11ax (HE40) / Chain 1 : CH 151



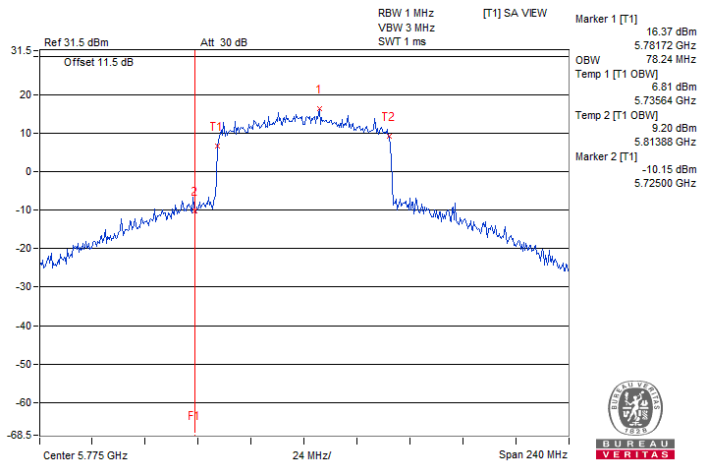
802.11ax (HE40) / Chain 2 : CH 151



802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155



802.11ax (HE80) / Chain 2 : CH 155

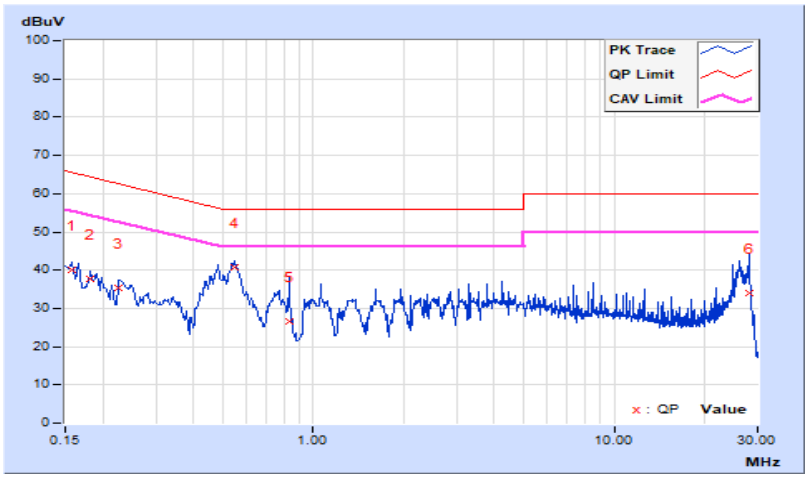
7.6 AC Power Conducted Emissions

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**	23 °C, 66 % RH
Tested By	Titan Hsu		

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	0.15770	9.68	30.29	21.21	39.97	30.89	65.58	55.58	-25.61	-24.69
2	0.18180	9.69	28.04	19.37	37.73	29.06	64.40	54.40	-26.67	-25.34
3	0.22600	9.72	25.47	19.40	35.19	29.12	62.60	52.60	-27.41	-23.48
4	**0.54975**	**9.83**	**30.93**	**27.12**	**40.76**	**36.95**	**56.00**	**46.00**	**-15.24**	**-9.05**
5	0.83000	9.84	16.61	11.39	26.45	21.23	56.00	46.00	-29.55	-24.77
6	28.28600	10.24	23.66	15.29	33.90	25.53	60.00	50.00	-26.10	-24.47

Remarks:

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

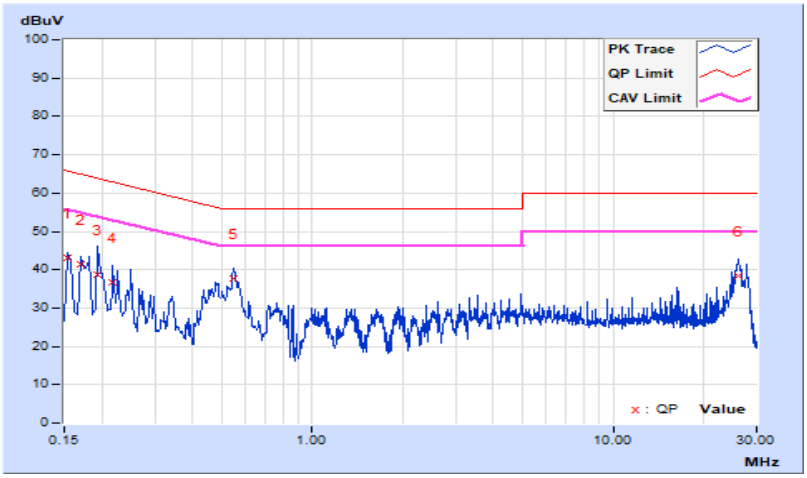


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

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	33.44	17.80	43.12	27.48	65.78	55.78	-22.66	-28.30
2	0.17000	9.69	31.73	17.74	41.42	27.43	64.96	54.96	-23.54	-27.53
3	0.19400	9.70	28.92	16.40	38.62	26.10	63.86	53.86	-25.24	-27.76
4	0.21800	9.71	27.12	15.55	36.83	25.26	62.89	52.89	-26.06	-27.63
5	0.54600	9.85	27.76	22.86	37.61	32.71	56.00	46.00	-18.39	-13.29
6	26.18200	10.37	27.99	18.04	38.36	28.41	60.00	50.00	-21.64	-21.59

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



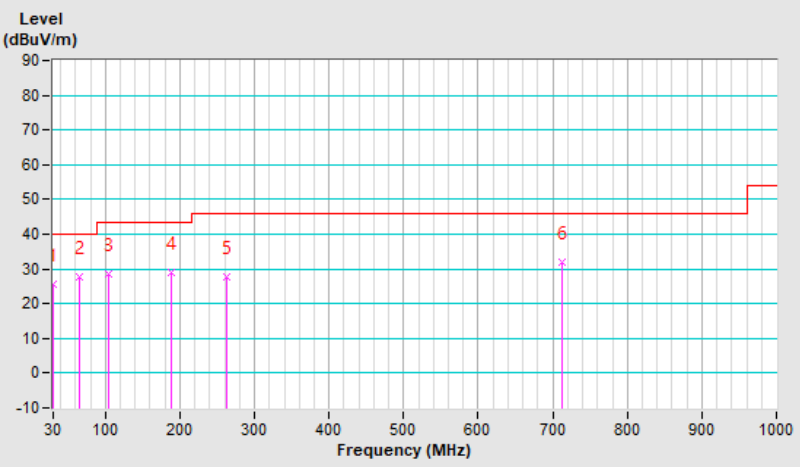
7.7 Unwanted Emissions below 1 GHz

RF Mode	802.11a	**Channel**	CH 149：5745 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23 °C, 66 % RH
Tested By	Titan Hsu		

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	30.00	25.7 QP	40.0	-14.3	1.50 H	5	36.2	-10.5
2	65.14	27.9 QP	40.0	-12.1	1.50 H	136	38.1	-10.2
3	104.51	28.5 QP	43.5	-15.0	1.00 H	16	41.1	-12.6
4	188.86	28.8 QP	43.5	-14.7	1.50 H	252	39.9	-11.1
5	263.36	27.7 QP	46.0	-18.3	1.00 H	249	36.2	-8.5
6	711.81	32.1 QP	46.0	-13.9	1.00 H	16	31.1	1.0

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 frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

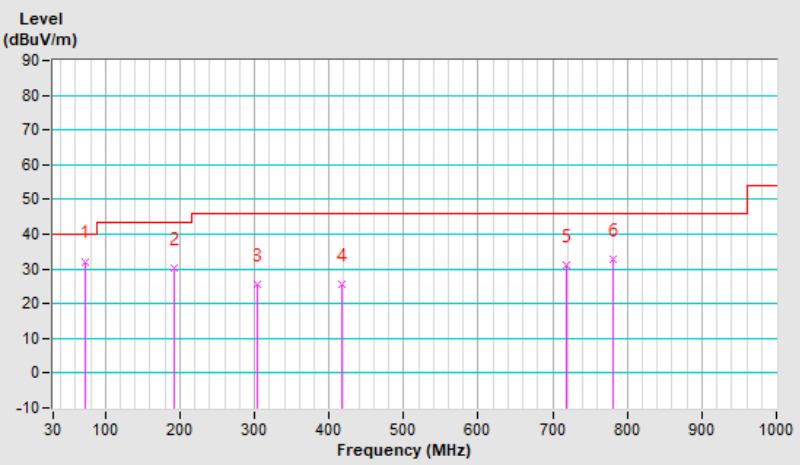


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

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	**72.17**	**32.2 QP**	**40.0**	**-7.8**	**1.00 V**	**90**	**43.5**	**-11.3**
2	191.67	30.3 QP	43.5	-13.2	1.00 V	278	41.6	-11.3
3	304.13	25.4 QP	46.0	-20.6	1.49 V	48	32.6	-7.2
4	418.00	25.6 QP	46.0	-20.4	1.00 V	258	30.8	-5.2
5	717.43	31.2 QP	46.0	-14.8	1.00 V	184	30.1	1.1
6	780.70	32.7 QP	46.0	-13.3	1.00 V	310	29.9	2.8

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 frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.8 Unwanted Emissions above 1 GHz

RF Mode	802.11a	**Channel**	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23 °C, 66 % RH
Tested By	Luis Lee		

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	5143.50	72.2 PK	74.0	-1.8	2.00 H	176	59.1	13.1
2	**5143.50**	**53.8 AV**	**54.0**	**-0.2**	**2.00 H**	**176**	**40.7**	**13.1**
3	*5180.00	121.3 PK			2.00 H	176	77.9	43.4
4	*5180.00	110.6 AV			2.00 H	176	67.2	43.4
5	#10360.00	62.2 PK	68.2	-6.0	1.99 H	118	40.5	21.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	70.3 PK	74.0	-3.7	2.27 V	213	57.2	13.1
2	5150.00	53.0 AV	54.0	-1.0	2.27 V	213	39.9	13.1
3	*5180.00	117.3 PK			2.27 V	213	73.9	43.4
4	*5180.00	107.6 AV			2.27 V	213	64.2	43.4
5	#10360.00	61.5 PK	68.2	-6.7	1.45 V	206	39.8	21.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	5143.50	70.9 PK	74.0	-3.1	2.00 H	174	57.8	13.1
2	**5143.50**	**53.8 AV**	**54.0**	**-0.2**	**2.00 H**	**174**	**40.7**	**13.1**
3	*5200.00	122.2 PK			2.00 H	174	78.9	43.3
4	*5200.00	112.4 AV			2.00 H	174	69.1	43.3
5	#10400.00	62.2 PK	68.2	-6.0	1.97 H	113	40.4	21.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.6 PK	74.0	-7.4	2.48 V	213	53.5	13.1
2	5150.00	51.3 AV	54.0	-2.7	2.48 V	213	38.2	13.1
3	*5200.00	120.1 PK			2.48 V	213	76.8	43.3
4	*5200.00	110.2 AV			2.48 V	213	66.9	43.3
5	#10400.00	61.5 PK	68.2	-6.7	1.56 V	239	39.7	21.8

Remarks:

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

RF Mode	802.11a	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

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	*5240.00	122.3 PK			1.98 H	1	79.1	43.2
2	*5240.00	112.4 AV			1.98 H	1	69.2	43.2
3	5350.00	61.3 PK	74.0	-12.7	1.98 H	1	48.2	13.1
4	5350.00	48.0 AV	54.0	-6.0	1.98 H	1	34.9	13.1
5	#10480.00	62.2 PK	68.2	-6.0	1.95 H	112	40.2	22.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	121.2 PK			2.48 V	208	78.0	43.2
2	*5240.00	111.4 AV			2.48 V	208	68.2	43.2
3	5350.00	60.0 PK	74.0	-14.0	2.48 V	208	46.9	13.1
4	5350.00	47.5 AV	54.0	-6.5	2.48 V	208	34.4	13.1
5	#10480.00	61.7 PK	68.2	-6.5	1.60 V	233	39.7	22.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.0 PK	74.0	-6.0	2.06 H	11	54.9	13.1
2	5150.00	53.1 AV	54.0	-0.9	2.06 H	11	40.0	13.1
3	*5180.00	121.5 PK			2.06 H	11	78.1	43.4
4	*5180.00	109.1 AV			2.06 H	11	65.7	43.4
5	#10360.00	61.9 PK	68.2	-6.3	1.92 H	122	40.2	21.7
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	5148.30	62.1 PK	74.0	-11.9	2.39 V	197	49.0	13.1
2	5148.30	49.5 AV	54.0	-4.5	2.39 V	197	36.4	13.1
3	*5180.00	118.5 PK			2.39 V	197	75.1	43.4
4	*5180.00	107.0 AV			2.39 V	197	63.6	43.4
5	#10360.00	61.3 PK	68.2	-6.9	1.55 V	230	39.6	21.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.6 PK	74.0	-3.4	2.03 H	14	57.5	13.1
2	5150.00	53.7 AV	54.0	-0.3	2.03 H	14	40.6	13.1
3	*5200.00	121.6 PK			2.03 H	14	78.3	43.3
4	*5200.00	110.5 AV			2.03 H	14	67.2	43.3
5	#10400.00	62.1 PK	68.2	-6.1	1.95 H	129	40.3	21.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5148.40	66.3 PK	74.0	-7.7	2.41 V	196	53.2	13.1
2	5148.40	50.0 AV	54.0	-4.0	2.41 V	196	36.9	13.1
3	*5200.00	119.7 PK			2.41 V	196	76.4	43.3
4	*5200.00	108.5 AV			2.41 V	196	65.2	43.3
5	#10400.00	61.7 PK	68.2	-6.5	1.55 V	231	39.9	21.8

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

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	*5240.00	124.1 PK			2.04 H	12	80.9	43.2
2	*5240.00	111.4 AV			2.04 H	12	68.2	43.2
3	5350.00	61.5 PK	74.0	-12.5	2.04 H	12	48.4	13.1
4	5350.00	47.9 AV	54.0	-6.1	2.04 H	12	34.8	13.1
5	#10480.00	62.2 PK	68.2	-6.0	1.92 H	135	40.2	22.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	120.4 PK			2.66 V	197	77.2	43.2
2	*5240.00	109.4 AV			2.66 V	197	66.2	43.2
3	5350.00	59.8 PK	74.0	-14.2	2.66 V	197	46.7	13.1
4	5350.00	46.9 AV	54.0	-7.1	2.66 V	197	33.8	13.1
5	#10480.00	61.6 PK	68.2	-6.6	1.49 V	201	39.6	22.0

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 38：5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.5 PK	74.0	-6.5	2.16 H	6	54.4	13.1
2	5150.00	53.5 AV	54.0	-0.5	2.16 H	6	40.4	13.1
3	*5190.00	117.6 PK			2.16 H	6	74.3	43.3
4	*5190.00	105.2 AV			2.16 H	6	61.9	43.3
5	#10380.00	61.3 PK	68.2	-6.9	1.95 H	142	39.6	21.7
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	5148.00	64.5 PK	74.0	-9.5	2.62 V	197	51.4	13.1
2	5148.00	51.3 AV	54.0	-2.7	2.62 V	197	38.2	13.1
3	*5190.00	114.9 PK			2.62 V	197	71.6	43.3
4	*5190.00	102.7 AV			2.62 V	197	59.4	43.3
5	#10380.00	61.0 PK	68.2	-7.2	1.41 V	201	39.3	21.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 46：5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.1 PK	74.0	-3.9	2.12 H	9	57.0	13.1
2	**5150.00**	**53.8 AV**	**54.0**	**-0.2**	**2.12 H**	**9**	**40.7**	**13.1**
3	*5230.00	120.1 PK			2.12 H	9	76.9	43.2
4	*5230.00	107.7 AV			2.12 H	9	64.5	43.2
5	5350.00	61.1 PK	74.0	-12.9	2.12 H	9	48.0	13.1
6	5350.00	48.3 AV	54.0	-5.7	2.12 H	9	35.2	13.1
7	#10460.00	61.7 PK	68.2	-6.5	1.92 H	145	39.8	21.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5147.70	67.1 PK	74.0	-6.9	2.71 V	195	54.0	13.1
2	5147.70	52.3 AV	54.0	-1.7	2.71 V	195	39.2	13.1
3	*5230.00	117.3 PK			2.71 V	195	74.1	43.2
4	*5230.00	105.6 AV			2.71 V	195	62.4	43.2
5	5350.00	59.9 PK	74.0	-14.1	2.71 V	195	46.8	13.1
6	5350.00	47.5 AV	54.0	-6.5	2.71 V	195	34.4	13.1
7	#10460.00	61.4 PK	68.2	-6.8	1.39 V	217	39.5	21.9

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 42：5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.3 PK	74.0	-8.7	2.08 H	10	52.2	13.1
2	5150.00	53.6 AV	54.0	-0.4	2.08 H	10	40.5	13.1
3	*5210.00	111.1 PK			2.08 H	10	67.8	43.3
4	*5210.00	99.2 AV			2.08 H	10	55.9	43.3
5	#10420.00	61.4 PK	68.2	-6.8	1.95 H	138	39.5	21.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5147.50	62.6 PK	74.0	-11.4	2.69 V	204	49.5	13.1
2	5147.50	50.2 AV	54.0	-3.8	2.69 V	204	37.1	13.1
3	*5210.00	109.4 PK			2.69 V	204	66.1	43.3
4	*5210.00	97.7 AV			2.69 V	204	54.4	43.3
5	#10420.00	61.1 PK	68.2	-7.1	1.57 V	214	39.2	21.9

Remarks:

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

RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.3 PK	74.0	-12.7	1.84 H	21	48.2	13.1
2	5150.00	49.1 AV	54.0	-4.9	1.84 H	21	36.0	13.1
3	*5260.00	119.3 PK			1.84 H	21	76.0	43.3
4	*5260.00	109.2 AV			1.84 H	21	65.9	43.3
5	#10520.00	62.2 PK	68.2	-6.0	1.89 H	125	40.2	22.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.9 PK	74.0	-13.1	2.42 V	207	47.8	13.1
2	5150.00	48.7 AV	54.0	-5.3	2.42 V	207	35.6	13.1
3	*5260.00	117.4 PK			2.42 V	207	74.1	43.3
4	*5260.00	107.6 AV			2.42 V	207	64.3	43.3
5	#10520.00	61.6 PK	68.2	-6.6	1.55 V	240	39.6	22.0

Remarks:

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

RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	118.5 PK			2.05 H	27	75.2	43.3
2	*5300.00	108.9 AV			2.05 H	27	65.6	43.3
3	10600.00	62.3 PK	74.0	-11.7	1.95 H	122	40.2	22.1
4	10600.00	47.3 AV	54.0	-6.7	1.95 H	122	25.2	22.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.9 PK			2.49 V	212	72.6	43.3
2	*5300.00	106.5 AV			2.49 V	212	63.2	43.3
3	10600.00	61.9 PK	74.0	-12.1	1.60 V	214	39.8	22.1
4	10600.00	47.0 AV	54.0	-7.0	1.60 V	214	24.9	22.1

Remarks:

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

RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	118.3 PK			1.82 H	24	74.8	43.5
2	*5320.00	108.3 AV			1.82 H	24	64.8	43.5
3	5350.00	61.1 PK	74.0	-12.9	1.82 H	24	48.0	13.1
4	5350.00	48.2 AV	54.0	-5.8	1.82 H	24	35.1	13.1
5	10640.00	62.5 PK	74.0	-11.5	1.92 H	128	40.0	22.5
6	10640.00	47.6 AV	54.0	-6.4	1.92 H	128	25.1	22.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.4 PK			2.39 V	209	72.9	43.5
2	*5320.00	107.0 AV			2.39 V	209	63.5	43.5
3	5350.00	60.0 PK	74.0	-14.0	2.39 V	209	46.9	13.1
4	5350.00	47.6 AV	54.0	-6.4	2.39 V	209	34.5	13.1
5	10640.00	62.0 PK	74.0	-12.0	1.61 V	221	39.5	22.5
6	10640.00	47.1 AV	54.0	-6.9	1.61 V	221	24.6	22.5

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.8 PK	74.0	-13.2	1.87 H	8	47.7	13.1
2	5150.00	48.1 AV	54.0	-5.9	1.87 H	8	35.0	13.1
3	*5260.00	120.6 PK			1.87 H	8	77.3	43.3
4	*5260.00	108.1 AV			1.87 H	8	64.8	43.3
5	#10520.00	62.0 PK	68.2	-6.2	1.92 H	125	40.0	22.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.3 PK	74.0	-13.7	2.87 V	197	47.2	13.1
2	5150.00	47.1 AV	54.0	-6.9	2.87 V	197	34.0	13.1
3	*5260.00	118.2 PK			2.87 V	197	74.9	43.3
4	*5260.00	106.7 AV			2.87 V	197	63.4	43.3
5	#10520.00	61.6 PK	68.2	-6.6	1.49 V	233	39.6	22.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	120.3 PK			1.96 H	8	77.0	43.3
2	*5300.00	108.4 AV			1.96 H	8	65.1	43.3
3	10600.00	62.1 PK	74.0	-11.9	1.93 H	21	40.0	22.1
4	10600.00	47.3 AV	54.0	-6.7	1.93 H	21	25.2	22.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.6 PK			2.83 V	195	74.3	43.3
2	*5300.00	106.4 AV			2.83 V	195	63.1	43.3
3	10600.00	61.5 PK	74.0	-12.5	1.52 V	236	39.4	22.1
4	10600.00	46.9 AV	54.0	-7.1	1.52 V	236	24.8	22.1

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	119.8 PK			1.80 H	11	76.3	43.5
2	*5320.00	107.9 AV			1.80 H	11	64.4	43.5
3	5350.00	61.9 PK	74.0	-12.1	1.80 H	11	48.8	13.1
4	5350.00	49.6 AV	54.0	-4.4	1.80 H	11	36.5	13.1
5	10640.00	62.5 PK	74.0	-11.5	1.95 H	28	40.0	22.5
6	10640.00	47.6 AV	54.0	-6.4	1.95 H	28	25.1	22.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.7 PK			2.83 V	194	73.2	43.5
2	*5320.00	105.3 AV			2.83 V	194	61.8	43.5
3	5350.00	61.0 PK	74.0	-13.0	2.83 V	194	47.9	13.1
4	5350.00	47.5 AV	54.0	-6.5	2.83 V	194	34.4	13.1
5	10640.00	62.2 PK	74.0	-11.8	1.45 V	220	39.7	22.5
6	10640.00	47.0 AV	54.0	-7.0	1.45 V	220	24.5	22.5

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.1 PK	74.0	-12.9	1.86 H	11	48.0	13.1
2	5150.00	48.1 AV	54.0	-5.9	1.86 H	11	35.0	13.1
3	*5270.00	118.3 PK			1.86 H	11	75.0	43.3
4	*5270.00	106.4 AV			1.86 H	11	63.1	43.3
5	5350.00	66.1 PK	74.0	-7.9	1.86 H	11	53.0	13.1
6	5350.00	50.3 AV	54.0	-3.7	1.86 H	11	37.2	13.1
7	#10540.00	61.7 PK	68.2	-6.5	1.95 H	121	39.6	22.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	2.86 V	196	46.4	13.1
2	5150.00	47.2 AV	54.0	-6.8	2.86 V	196	34.1	13.1
3	*5270.00	115.9 PK			2.86 V	196	72.6	43.3
4	*5270.00	104.7 AV			2.86 V	196	61.4	43.3
5	5352.00	64.9 PK	74.0	-9.1	2.86 V	196	51.8	13.1
6	5352.00	49.1 AV	54.0	-4.9	2.86 V	196	36.0	13.1
7	#10540.00	61.3 PK	68.2	-6.9	1.42 V	248	39.2	22.1

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	117.0 PK			1.80 H	11	73.7	43.3
2	*5310.00	104.8 AV			1.80 H	11	61.5	43.3
3	5350.00	64.6 PK	74.0	-9.4	1.80 H	11	51.5	13.1
4	5350.00	52.7 AV	54.0	-1.3	1.80 H	11	39.6	13.1
5	10620.00	61.7 PK	74.0	-12.3	1.92 H	122	39.5	22.2
6	10620.00	47.0 AV	54.0	-7.0	1.92 H	122	24.8	22.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	114.4 PK			2.80 V	199	71.1	43.3
2	*5310.00	102.8 AV			2.80 V	199	59.5	43.3
3	5350.00	61.7 PK	74.0	-12.3	2.80 V	199	48.6	13.1
4	5350.00	49.5 AV	54.0	-4.5	2.80 V	199	36.4	13.1
5	10620.00	61.4 PK	74.0	-12.6	1.44 V	210	39.2	22.2
6	10620.00	46.7 AV	54.0	-7.3	1.44 V	210	24.5	22.2

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	111.9 PK			1.83 H	9	68.6	43.3
2	*5290.00	99.6 AV			1.83 H	9	56.3	43.3
3	5350.00	64.1 PK	74.0	-9.9	1.83 H	9	51.0	13.1
4	5350.00	53.4 AV	54.0	-0.6	1.83 H	9	40.3	13.1
5	#10580.00	61.6 PK	68.2	-6.6	1.97 H	20	39.5	22.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	110.1 PK			2.86 V	195	66.8	43.3
2	*5290.00	97.9 AV			2.86 V	195	54.6	43.3
3	5352.00	62.3 PK	74.0	-11.7	2.86 V	195	49.2	13.1
4	5352.00	49.6 AV	54.0	-4.4	2.86 V	195	36.5	13.1
5	#10580.00	61.3 PK	68.2	-6.9	1.44 V	210	39.2	22.1

Remarks:

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

RF Mode	802.11ax (HE160)	Channel	CH 50：5250 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	5129.00	66.2 PK	74.0	-7.8	1.88 H	197	53.0	13.2
2	**5129.00**	**53.8 AV**	**54.0**	**-0.2**	**1.88 H**	**197**	**40.6**	**13.2**
3	*5250.00	108.5 PK			1.88 H	197	65.3	43.2
4	*5250.00	96.8 AV			1.88 H	197	53.6	43.2
5	5353.60	66.8 PK	74.0	-7.2	1.88 H	197	53.7	13.1
6	5353.60	53.3 AV	54.0	-0.7	1.88 H	197	40.2	13.1
7	#10500.00	62.4 PK	68.2	-5.8	1.95 H	120	40.4	22.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5143.90	63.4 PK	74.0	-10.6	2.15 V	210	50.3	13.1
2	5143.90	51.3 AV	54.0	-2.7	2.15 V	210	38.2	13.1
3	*5250.00	106.9 PK			2.15 V	210	63.7	43.2
4	*5250.00	95.0 AV			2.15 V	210	51.8	43.2
5	5354.00	63.6 PK	74.0	-10.4	2.15 V	210	50.5	13.1
6	5354.00	50.6 AV	54.0	-3.4	2.15 V	210	37.5	13.1
7	#10500.00	60.7 PK	68.2	-7.5	1.55 V	213	38.7	22.0

Remarks:

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

RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.9 PK	74.0	-13.1	1.83 H	36	47.7	13.2
2	5460.00	48.7 AV	54.0	-5.3	1.83 H	36	35.5	13.2
3	#5470.00	61.8 PK	68.2	-6.4	1.83 H	36	48.5	13.3
4	*5500.00	117.7 PK			1.83 H	36	73.8	43.9
5	*5500.00	108.1 AV			1.83 H	36	64.2	43.9
6	11000.00	62.7 PK	74.0	-11.3	1.92 H	21	40.0	22.7
7	11000.00	48.0 AV	54.0	-6.0	1.92 H	21	25.3	22.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.0 PK	74.0	-14.0	2.29 V	205	46.8	13.2
2	5460.00	48.1 AV	54.0	-5.9	2.29 V	205	34.9	13.2
3	#5470.00	61.5 PK	68.2	-6.7	2.29 V	205	48.2	13.3
4	*5500.00	116.5 PK			2.29 V	205	72.6	43.9
5	*5500.00	106.3 AV			2.29 V	205	62.4	43.9
6	11000.00	62.2 PK	74.0	-11.8	1.48 V	229	39.5	22.7
7	11000.00	47.2 AV	54.0	-6.8	1.48 V	229	24.5	22.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	117.6 PK			1.85 H	35	73.8	43.8
2	*5580.00	108.2 AV			1.85 H	35	64.4	43.8
3	11160.00	62.8 PK	74.0	-11.2	1.95 H	25	40.0	22.8
4	11160.00	48.0 AV	54.0	-6.0	1.95 H	25	25.2	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	115.6 PK			2.25 V	207	71.8	43.8
2	*5580.00	105.8 AV			2.25 V	207	62.0	43.8
3	11160.00	62.3 PK	74.0	-11.7	1.29 V	221	39.5	22.8
4	11160.00	47.3 AV	54.0	-6.7	1.29 V	221	24.5	22.8

Remarks:

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

RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	118.0 PK			2.02 H	37	73.7	44.3
2	*5700.00	108.5 AV			2.02 H	37	64.2	44.3
3	#5725.00	65.9 PK	68.2	-2.3	2.02 H	37	52.2	13.7
4	11400.00	63.6 PK	74.0	-10.4	1.99 H	22	40.0	23.6
5	11400.00	48.9 AV	54.0	-5.1	1.99 H	22	25.3	23.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	117.1 PK			2.25 V	207	72.8	44.3
2	*5700.00	107.8 AV			2.25 V	207	63.5	44.3
3	#5725.00	64.4 PK	68.2	-3.8	2.25 V	207	50.7	13.7
4	11400.00	63.0 PK	74.0	-11.0	1.45 V	244	39.4	23.6
5	11400.00	48.4 AV	54.0	-5.6	1.45 V	244	24.8	23.6

Remarks:

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

RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.8 PK	68.2	-7.4	1.96 H	38	47.5	13.3
2	*5720.00	119.1 PK			1.96 H	38	74.7	44.4
3	*5720.00	109.5 AV			1.96 H	38	65.1	44.4
4	#5850.00	61.8 PK	68.2	-6.4	1.96 H	38	48.0	13.8
5	11440.00	63.4 PK	74.0	-10.6	1.98 H	27	39.9	23.5
6	11440.00	48.7 AV	54.0	-5.3	1.98 H	27	25.2	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.2 PK	68.2	-8.0	2.35 V	206	46.9	13.3
2	*5720.00	116.2 PK			2.35 V	206	71.8	44.4
3	*5720.00	106.1 AV			2.35 V	206	61.7	44.4
4	#5850.00	61.0 PK	68.2	-7.2	2.35 V	206	47.2	13.8
5	11440.00	62.9 PK	74.0	-11.1	1.56 V	230	39.4	23.5
6	11440.00	48.3 AV	54.0	-5.7	1.56 V	230	24.8	23.5

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.7 PK	74.0	-12.3	1.92 H	8	48.5	13.2
2	5460.00	48.0 AV	54.0	-6.0	1.92 H	8	34.8	13.2
3	#5470.00	63.5 PK	68.2	-4.7	1.92 H	8	50.2	13.3
4	*5500.00	120.4 PK			1.92 H	8	76.5	43.9
5	*5500.00	108.0 AV			1.92 H	8	64.1	43.9
6	11000.00	62.5 PK	74.0	-11.5	1.95 H	28	39.8	22.7
7	11000.00	47.8 AV	54.0	-6.2	1.95 H	28	25.1	22.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.4 PK	74.0	-12.6	2.36 V	195	48.2	13.2
2	5460.00	47.4 AV	54.0	-6.6	2.36 V	195	34.2	13.2
3	#5470.00	61.6 PK	68.2	-6.6	2.36 V	195	48.3	13.3
4	*5500.00	116.1 PK			2.36 V	195	72.2	43.9
5	*5500.00	104.4 AV			2.36 V	195	60.5	43.9
6	11000.00	62.1 PK	74.0	-11.9	1.51 V	240	39.4	22.7
7	11000.00	47.5 AV	54.0	-6.5	1.51 V	240	24.8	22.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	119.5 PK			1.96 H	8	75.7	43.8
2	*5580.00	107.6 AV			1.96 H	8	63.8	43.8
3	11160.00	62.5 PK	74.0	-11.5	1.92 H	30	39.7	22.8
4	11160.00	47.9 AV	54.0	-6.1	1.92 H	30	25.1	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	115.8 PK			2.36 V	192	72.0	43.8
2	*5580.00	104.3 AV			2.36 V	192	60.5	43.8
3	11160.00	62.0 PK	74.0	-12.0	1.51 V	244	39.2	22.8
4	11160.00	47.5 AV	54.0	-6.5	1.51 V	244	24.7	22.8

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	119.9 PK			1.87 H	8	75.6	44.3
2	*5700.00	107.3 AV			1.87 H	8	63.0	44.3
3	#5725.00	67.7 PK	68.2	-0.5	1.87 H	8	54.0	13.7
4	11400.00	63.4 PK	74.0	-10.6	1.95 H	32	39.8	23.6
5	11400.00	48.8 AV	54.0	-5.2	1.95 H	32	25.2	23.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	115.4 PK			2.36 V	212	71.1	44.3
2	*5700.00	104.2 AV			2.36 V	212	59.9	44.3
3	#5725.00	62.4 PK	68.2	-5.8	2.36 V	212	48.7	13.7
4	11400.00	62.8 PK	74.0	-11.2	1.41 V	245	39.2	23.6
5	11400.00	48.3 AV	54.0	-5.7	1.41 V	245	24.7	23.6

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.9 PK	68.2	-7.3	2.02 H	9	47.6	13.3
2	*5720.00	120.1 PK			2.02 H	9	75.7	44.4
3	*5720.00	108.3 AV			2.02 H	9	63.9	44.4
4	#5850.00	62.1 PK	68.2	-6.1	2.02 H	9	48.3	13.8
5	11440.00	63.2 PK	74.0	-10.8	1.92 H	22	39.7	23.5
6	11440.00	48.6 AV	54.0	-5.4	1.92 H	22	25.1	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.5 PK	68.2	-7.7	2.26 V	209	47.2	13.3
2	*5720.00	116.0 PK			2.26 V	209	71.6	44.4
3	*5720.00	104.5 AV			2.26 V	209	60.1	44.4
4	#5850.00	61.5 PK	68.2	-6.7	2.26 V	209	47.7	13.8
5	11440.00	62.4 PK	74.0	-11.6	1.50 V	219	38.9	23.5
6	11440.00	48.4 AV	54.0	-5.6	1.50 V	219	24.9	23.5

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.9 PK	74.0	-12.1	2.09 H	9	48.7	13.2
2	5460.00	49.7 AV	54.0	-4.3	2.09 H	9	36.5	13.2
3	#5470.00	66.5 PK	68.2	-1.7	2.09 H	9	53.2	13.3
4	*5510.00	117.5 PK			2.09 H	9	73.6	43.9
5	*5510.00	105.0 AV			2.09 H	9	61.1	43.9
6	11020.00	62.4 PK	74.0	-11.6	1.95 H	25	39.5	22.9
7	11020.00	48.0 AV	54.0	-6.0	1.95 H	25	25.1	22.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.7 PK	74.0	-13.3	1.99 V	215	47.5	13.2
2	5460.00	49.1 AV	54.0	-4.9	1.99 V	215	35.9	13.2
3	#5470.00	64.9 PK	68.2	-3.3	1.99 V	215	51.6	13.3
4	*5510.00	113.3 PK			1.99 V	215	69.4	43.9
5	*5510.00	101.4 AV			1.99 V	215	57.5	43.9
6	11020.00	61.7 PK	74.0	-12.3	1.49 V	226	38.8	22.9
7	11020.00	47.6 AV	54.0	-6.4	1.49 V	226	24.7	22.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	118.3 PK			2.12 H	9	74.4	43.9
2	*5550.00	105.9 AV			2.12 H	9	62.0	43.9
3	11100.00	62.4 PK	74.0	-11.6	1.92 H	27	39.6	22.8
4	11100.00	48.0 AV	54.0	-6.0	1.92 H	27	25.2	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	113.1 PK			1.96 V	214	69.2	43.9
2	*5550.00	101.6 AV			1.96 V	214	57.7	43.9
3	11100.00	61.5 PK	74.0	-12.5	1.49 V	223	38.7	22.8
4	11100.00	47.4 AV	54.0	-6.6	1.49 V	223	24.6	22.8

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	118.2 PK			2.08 H	11	74.0	44.2
2	*5670.00	105.6 AV			2.08 H	11	61.4	44.2
3	#5725.00	65.7 PK	68.2	-2.5	2.08 H	11	52.0	13.7
4	11340.00	62.9 PK	74.0	-11.1	1.90 H	22	39.6	23.3
5	11340.00	48.5 AV	54.0	-5.5	1.90 H	22	25.2	23.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	114.2 PK			1.91 V	214	70.0	44.2
2	*5670.00	102.4 AV			1.91 V	214	58.2	44.2
3	#5725.00	61.3 PK	68.2	-6.9	1.91 V	214	47.6	13.7
4	11340.00	62.0 PK	74.0	-12.0	1.47 V	220	38.7	23.3
5	11340.00	47.9 AV	54.0	-6.1	1.47 V	220	24.6	23.3

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.5 PK	68.2	-7.7	1.99 H	9	47.2	13.3
2	*5710.00	117.0 PK			1.99 H	9	72.7	44.3
3	*5710.00	105.5 AV			1.99 H	9	61.2	44.3
4	#5850.00	61.3 PK	68.2	-6.9	1.99 H	9	47.5	13.8
5	11420.00	63.1 PK	74.0	-10.9	1.95 H	21	39.5	23.6
6	11420.00	48.7 AV	54.0	-5.3	1.95 H	21	25.1	23.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.3 PK	68.2	-7.9	2.24 V	213	47.0	13.3
2	*5710.00	114.3 PK			2.24 V	213	70.0	44.3
3	*5710.00	102.0 AV			2.24 V	213	57.7	44.3
4	#5850.00	61.0 PK	68.2	-7.2	2.24 V	213	47.2	13.8
5	11420.00	62.3 PK	74.0	-11.7	1.42 V	225	38.7	23.6
6	11420.00	48.1 AV	54.0	-5.9	1.42 V	225	24.5	23.6

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	66.0 PK	74.0	-8.0	1.98 H	11	52.8	13.2
2	5460.00	53.5 AV	54.0	-0.5	1.98 H	11	40.3	13.2
3	#5470.00	67.8 PK	68.2	-0.4	1.98 H	11	54.5	13.3
4	*5530.00	113.5 PK			1.98 H	11	69.6	43.9
5	*5530.00	101.0 AV			1.98 H	11	57.1	43.9
6	11060.00	62.4 PK	74.0	-11.6	1.92 H	25	39.6	22.8
7	11060.00	47.8 AV	54.0	-6.2	1.92 H	25	25.0	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5449.00	65.2 PK	74.0	-8.8	2.24 V	207	52.0	13.2
2	5449.00	51.9 AV	54.0	-2.1	2.24 V	207	38.7	13.2
3	#5470.00	66.0 PK	68.2	-2.2	2.24 V	207	52.7	13.3
4	*5530.00	111.4 PK			2.24 V	207	67.5	43.9
5	*5530.00	99.2 AV			2.24 V	207	55.3	43.9
6	11060.00	61.6 PK	74.0	-12.4	1.55 V	216	38.8	22.8
7	11060.00	47.5 AV	54.0	-6.5	1.55 V	216	24.7	22.8

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

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	*5610.00	113.6 PK			2.02 H	11	69.8	43.8
2	*5610.00	101.3 AV			2.02 H	11	57.5	43.8
3	#5725.00	66.9 PK	68.2	-1.3	2.02 H	11	53.2	13.7
4	11220.00	62.4 PK	74.0	-11.6	1.95 H	20	39.6	22.8
5	11220.00	47.9 AV	54.0	-6.1	1.95 H	20	25.1	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	111.0 PK			2.24 V	207	67.2	43.8
2	*5610.00	99.7 AV			2.24 V	207	55.9	43.8
3	#5725.00	64.4 PK	68.2	-3.8	2.24 V	207	50.7	13.7
4	11220.00	61.6 PK	74.0	-12.4	1.51 V	210	38.8	22.8
5	11220.00	47.6 AV	54.0	-6.4	1.51 V	210	24.8	22.8

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.5 PK	68.2	-7.7	2.08 H	8	47.2	13.3
2	*5690.00	114.9 PK			2.08 H	8	70.7	44.2
3	*5690.00	102.6 AV			2.08 H	8	58.4	44.2
4	#5850.00	62.0 PK	68.2	-6.2	2.08 H	8	48.2	13.8
5	11380.00	62.9 PK	74.0	-11.1	1.87 H	18	39.5	23.4
6	11380.00	48.4 AV	54.0	-5.6	1.87 H	18	25.0	23.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.1 PK	68.2	-8.1	2.15 V	210	46.8	13.3
2	*5690.00	112.3 PK			2.15 V	210	68.1	44.2
3	*5690.00	100.1 AV			2.15 V	210	55.9	44.2
4	#5850.00	61.4 PK	68.2	-6.8	2.15 V	210	47.6	13.8
5	11380.00	62.4 PK	74.0	-11.6	1.44 V	213	39.0	23.4
6	11380.00	47.9 AV	54.0	-6.1	1.44 V	213	24.5	23.4

Remarks:

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

RF Mode	802.11ax (HE160)	Channel	CH 114：5570 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	5458.50	65.2 PK	74.0	-8.8	2.03 H	199	52.0	13.2
2	5458.50	53.7 AV	54.0	-0.3	2.03 H	199	40.5	13.2
3	#5470.00	67.3 PK	68.2	-0.9	2.03 H	199	54.0	13.3
4	*5570.00	108.5 PK			2.03 H	199	64.6	43.9
5	*5570.00	97.2 AV			2.03 H	199	53.3	43.9
6	#5725.00	64.8 PK	68.2	-3.4	2.03 H	199	51.1	13.7
7	11140.00	63.4 PK	74.0	-10.6	1.98 H	124	40.5	22.9
8	11140.00	50.4 AV	54.0	-3.6	1.98 H	124	27.5	22.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5449.00	63.8 PK	74.0	-10.2	2.10 V	209	50.6	13.2
2	5449.00	52.4 AV	54.0	-1.6	2.10 V	209	39.2	13.2
3	#5470.00	65.0 PK	68.2	-3.2	2.10 V	209	51.7	13.3
4	*5570.00	108.0 PK			2.10 V	209	64.1	43.9
5	*5570.00	94.3 AV			2.10 V	209	50.4	43.9
6	#5725.00	61.6 PK	68.2	-6.6	2.10 V	209	47.9	13.7
7	11140.00	61.5 PK	74.0	-12.5	1.56 V	238	38.6	22.9
8	11140.00	47.6 AV	54.0	-6.4	1.56 V	238	24.7	22.9

Remarks:

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

RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5649.60	67.7 PK	68.2	-0.5	2.22 H	36	54.3	13.4
2	*5745.00	125.1 PK			2.22 H	36	80.5	44.6
3	*5745.00	113.6 AV			2.22 H	36	69.0	44.6
4	#5994.00	63.8 PK	68.2	-4.4	2.22 H	36	49.7	14.1
5	11490.00	63.7 PK	74.0	-10.3	2.05 H	136	40.3	23.4
6	11490.00	49.9 AV	54.0	-4.1	2.05 H	136	26.5	23.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5647.60	63.5 PK	68.2	-4.7	2.10 V	212	50.1	13.4
2	*5745.00	121.1 PK			2.10 V	212	76.5	44.6
3	*5745.00	110.4 AV			2.10 V	212	65.8	44.6
4	#5955.20	62.6 PK	68.2	-5.6	2.10 V	212	48.6	14.0
5	11490.00	62.9 PK	74.0	-11.1	1.46 V	227	39.5	23.4
6	11490.00	50.5 AV	54.0	-3.5	1.46 V	227	27.1	23.4

Remarks:

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

RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5633.60	61.9 PK	68.2	-6.3	2.19 H	40	48.7	13.2
2	*5785.00	123.7 PK			2.19 H	40	79.0	44.7
3	*5785.00	114.0 AV			2.19 H	40	69.3	44.7
4	#5965.20	62.1 PK	68.2	-6.1	2.19 H	40	48.1	14.0
5	11570.00	63.5 PK	74.0	-10.5	2.12 H	144	40.4	23.1
6	11570.00	49.8 AV	54.0	-4.2	2.12 H	144	26.7	23.1
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	#5602.00	63.5 PK	68.2	-4.7	2.15 V	213	50.4	13.1
2	*5785.00	121.2 PK			2.15 V	213	76.5	44.7
3	*5785.00	111.0 AV			2.15 V	213	66.3	44.7
4	#5990.40	63.2 PK	68.2	-5.0	2.15 V	213	49.1	14.1
5	11570.00	62.1 PK	74.0	-11.9	1.42 V	224	39.0	23.1
6	11570.00	48.0 AV	54.0	-6.0	1.42 V	224	24.9	23.1

Remarks:

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

RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5606.40	61.3 PK	68.2	-6.9	2.10 H	43	48.2	13.1
2	*5825.00	123.8 PK			2.10 H	43	79.1	44.7
3	*5825.00	113.6 AV			2.10 H	43	68.9	44.7
4	#5954.40	63.7 PK	68.2	-4.5	2.10 H	43	49.7	14.0
5	11650.00	62.9 PK	74.0	-11.1	1.98 H	125	40.2	22.7
6	11650.00	49.1 AV	54.0	-4.9	1.98 H	125	26.4	22.7
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	#5638.00	61.8 PK	68.2	-6.4	2.14 V	213	48.5	13.3
2	*5825.00	120.6 PK			2.14 V	213	75.9	44.7
3	*5825.00	110.4 AV			2.14 V	213	65.7	44.7
4	#5985.20	63.0 PK	68.2	-5.2	2.14 V	213	49.0	14.0
5	11650.00	61.6 PK	74.0	-12.4	1.47 V	236	38.9	22.7
6	11650.00	47.8 AV	54.0	-6.2	1.47 V	236	25.1	22.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5641.20	65.7 PK	68.2	-2.5	2.14 H	42	52.3	13.4
2	*5745.00	125.1 PK			2.14 H	42	80.5	44.6
3	*5745.00	112.9 AV			2.14 H	42	68.3	44.6
4	#5989.60	63.2 PK	68.2	-5.0	2.14 H	42	49.1	14.1
5	11490.00	63.8 PK	74.0	-10.2	2.11 H	134	40.4	23.4
6	11490.00	50.1 AV	54.0	-3.9	2.11 H	134	26.7	23.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.40	61.6 PK	68.2	-6.6	2.07 V	207	48.2	13.4
2	*5745.00	122.2 PK			2.07 V	207	77.6	44.6
3	*5745.00	109.9 AV			2.07 V	207	65.3	44.6
4	#5996.40	62.2 PK	68.2	-6.0	2.07 V	207	48.1	14.1
5	11490.00	62.9 PK	74.0	-11.1	1.44 V	201	39.5	23.4
6	11490.00	49.3 AV	54.0	-4.7	1.44 V	201	25.9	23.4

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5612.00	62.3 PK	68.2	-5.9	2.13 H	44	49.1	13.2
2	*5785.00	124.8 PK			2.13 H	44	80.1	44.7
3	*5785.00	112.8 AV			2.13 H	44	68.1	44.7
4	#5942.40	63.0 PK	68.2	-5.2	2.13 H	44	49.0	14.0
5	11570.00	63.5 PK	74.0	-10.5	2.13 H	140	40.4	23.1
6	11570.00	49.5 AV	54.0	-4.5	2.13 H	140	26.4	23.1
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	#5615.20	62.0 PK	68.2	-6.2	2.16 V	202	48.8	13.2
2	*5785.00	121.5 PK			2.16 V	202	76.8	44.7
3	*5785.00	109.3 AV			2.16 V	202	64.6	44.7
4	#5975.60	62.9 PK	68.2	-5.3	2.16 V	202	48.9	14.0
5	11570.00	62.3 PK	74.0	-11.7	1.55 V	204	39.2	23.1
6	11570.00	47.8 AV	54.0	-6.2	1.55 V	204	24.7	23.1

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5639.20	62.9 PK	68.2	-5.3	2.24 H	17	49.6	13.3
2	*5825.00	125.2 PK			2.24 H	17	80.5	44.7
3	*5825.00	112.4 AV			2.24 H	17	67.7	44.7
4	#5925.20	64.4 PK	68.2	-3.8	2.24 H	17	50.5	13.9
5	11650.00	63.0 PK	74.0	-11.0	2.11 H	132	40.3	22.7
6	11650.00	49.1 AV	54.0	-4.9	2.11 H	132	26.4	22.7
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	#5642.80	61.7 PK	68.2	-6.5	2.53 V	204	48.3	13.4
2	*5825.00	122.3 PK			2.53 V	204	77.6	44.7
3	*5825.00	109.4 AV			2.53 V	204	64.7	44.7
4	#5996.40	63.0 PK	68.2	-5.2	2.53 V	204	48.9	14.1
5	11650.00	62.1 PK	74.0	-11.9	1.49 V	224	39.4	22.7
6	11650.00	48.0 AV	54.0	-6.0	1.49 V	224	25.3	22.7

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 151：5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5638.80	67.8 PK	68.2	-0.4	2.21 H	17	54.5	13.3
2	*5755.00	121.1 PK			2.21 H	17	76.5	44.6
3	*5755.00	109.1 AV			2.21 H	17	64.5	44.6
4	#5925.60	62.8 PK	68.2	-5.4	2.21 H	17	48.9	13.9
5	11510.00	63.5 PK	74.0	-10.5	2.10 H	132	40.2	23.3
6	11510.00	49.6 AV	54.0	-4.4	2.10 H	132	26.3	23.3
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	#5645.60	65.6 PK	68.2	-2.6	2.53 V	204	52.2	13.4
2	*5755.00	118.3 PK			2.53 V	204	73.7	44.6
3	*5755.00	107.6 AV			2.53 V	204	63.0	44.6
4	#5948.00	62.7 PK	68.2	-5.5	2.53 V	204	48.7	14.0
5	11510.00	62.1 PK	74.0	-11.9	1.47 V	204	38.8	23.3
6	11510.00	48.1 AV	54.0	-5.9	1.47 V	204	24.8	23.3

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5646.40	63.5 PK	68.2	-4.7	1.97 H	38	50.1	13.4
2	*5795.00	121.1 PK			1.97 H	38	76.4	44.7
3	*5795.00	109.3 AV			1.97 H	38	64.6	44.7
4	#5928.00	67.9 PK	68.2	-0.3	1.97 H	38	53.9	14.0
5	11590.00	63.1 PK	74.0	-10.9	2.11 H	139	40.2	22.9
6	11590.00	49.2 AV	54.0	-4.8	2.11 H	139	26.3	22.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.80	62.0 PK	68.2	-6.2	2.31 V	206	48.7	13.3
2	*5795.00	118.4 PK			2.31 V	206	73.7	44.7
3	*5795.00	107.0 AV			2.31 V	206	62.3	44.7
4	#5928.40	63.5 PK	68.2	-4.7	2.31 V	206	49.5	14.0
5	11590.00	61.8 PK	74.0	-12.2	1.44 V	218	38.9	22.9
6	11590.00	47.9 AV	54.0	-6.1	1.44 V	218	25.0	22.9

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 155：5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	#5649.20	67.8 PK	68.2	-0.4	2.06 H	40	54.4	13.4
2	*5775.00	115.6 PK			2.06 H	40	71.0	44.6
3	*5775.00	103.8 AV			2.06 H	40	59.2	44.6
4	#5930.00	64.4 PK	68.2	-3.8	2.06 H	40	50.4	14.0
5	11550.00	63.3 PK	74.0	-10.7	2.01 H	124	40.2	23.1
6	11550.00	49.5 AV	54.0	-4.5	2.01 H	124	26.4	23.1
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	#5634.00	65.3 PK	68.2	-2.9	2.31 V	206	52.1	13.2
2	*5775.00	113.4 PK			2.31 V	206	68.8	44.6
3	*5775.00	102.4 AV			2.31 V	206	57.8	44.6
4	#5986.40	62.9 PK	68.2	-5.3	2.31 V	206	48.9	14.0
5	11550.00	61.9 PK	74.0	-12.1	1.45 V	224	38.8	23.1
6	11550.00	48.0 AV	54.0	-6.0	1.45 V	224	24.9	23.1

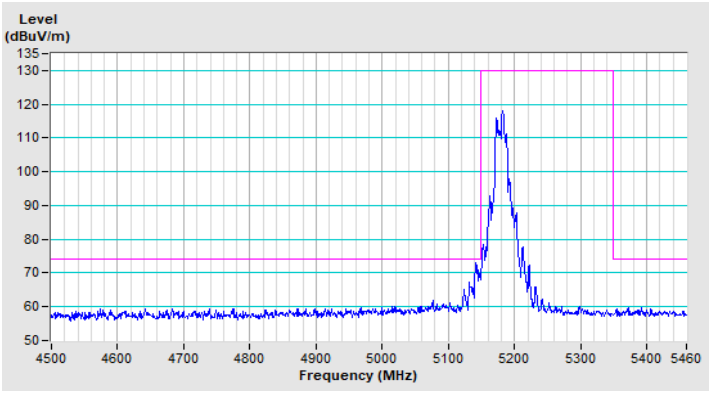
Remarks:

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

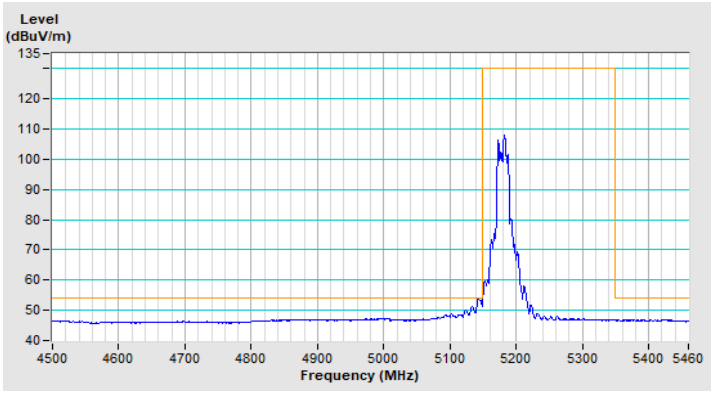
Plot of Band Edge

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

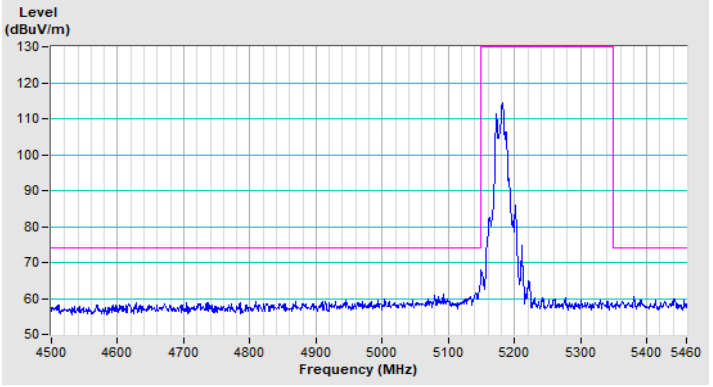
802.11a Channel 36



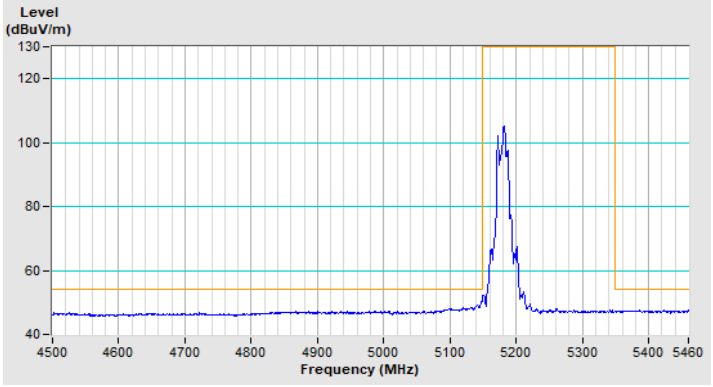
Horizontal (Peak)



Horizontal (Average)

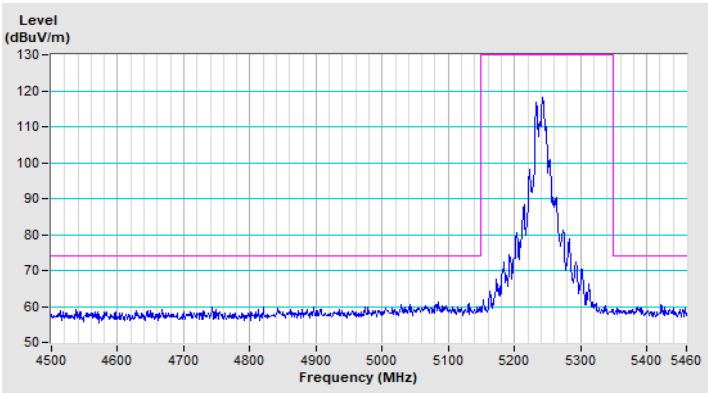


Vertical (Peak)

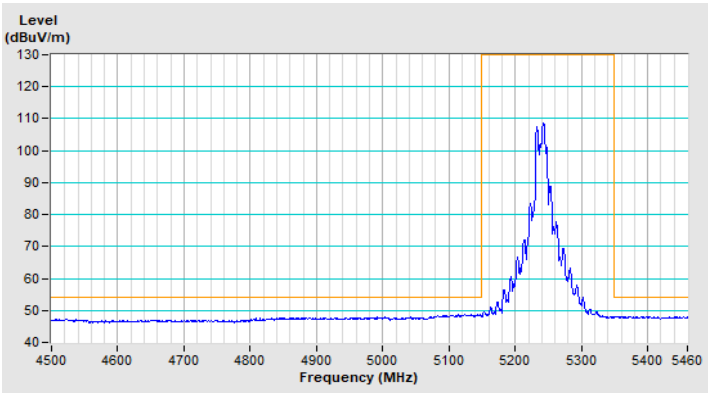


Vertical (Average)

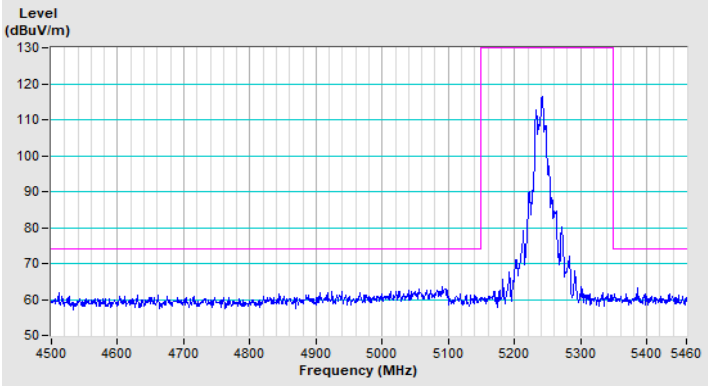
802.11a Channel 48



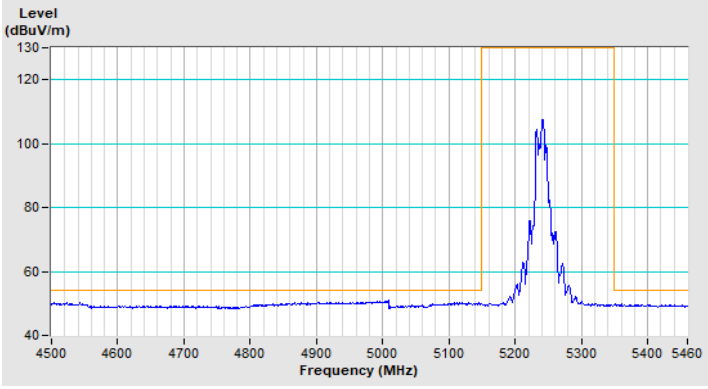
Horizontal (Peak)



Horizontal (Average)



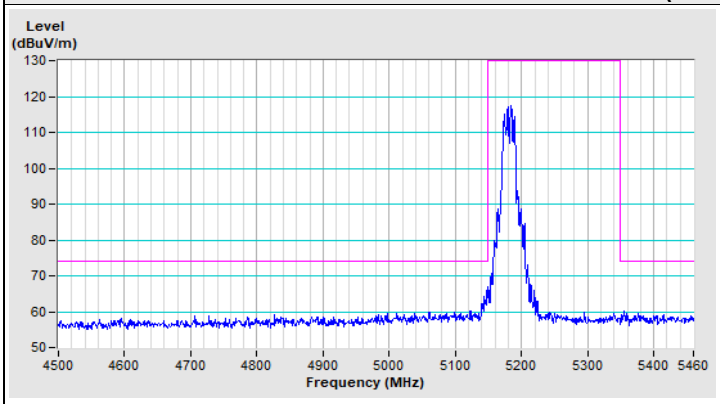
Vertical (Peak)



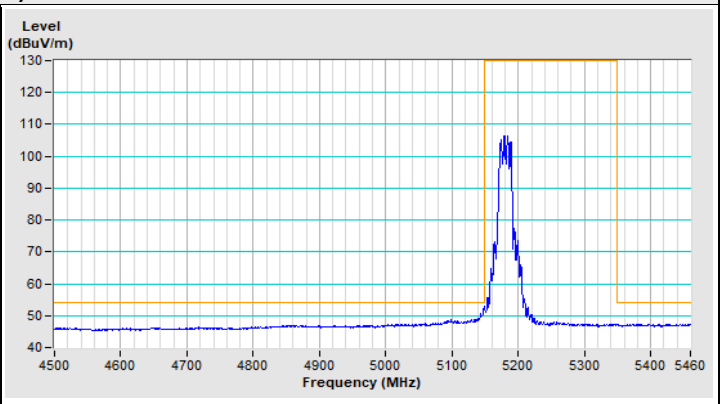
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

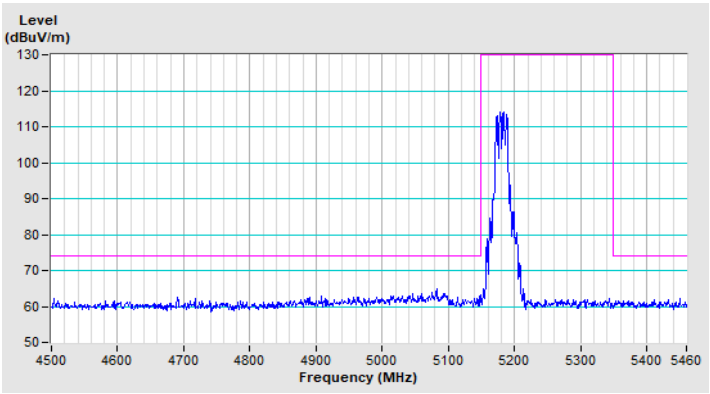
802.11ax (HE20) Channel 36



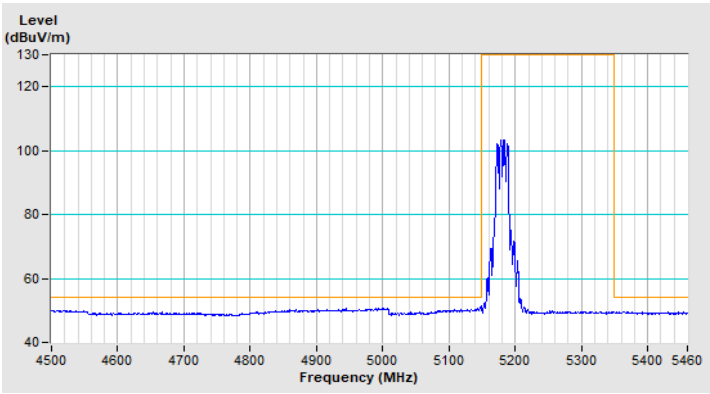
Horizontal (Peak)



Horizontal (Average)

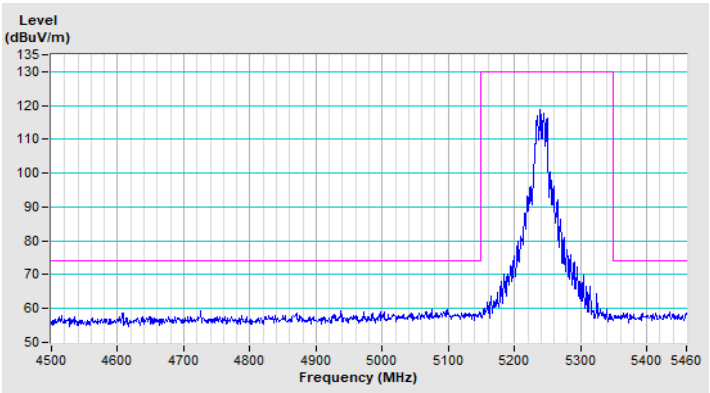


Vertical (Peak)

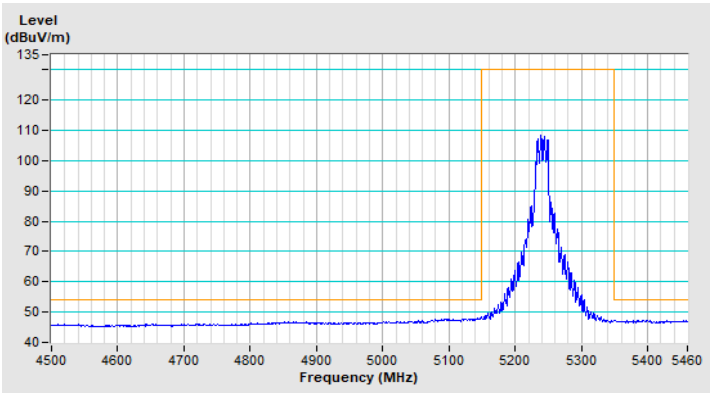


Vertical (Average)

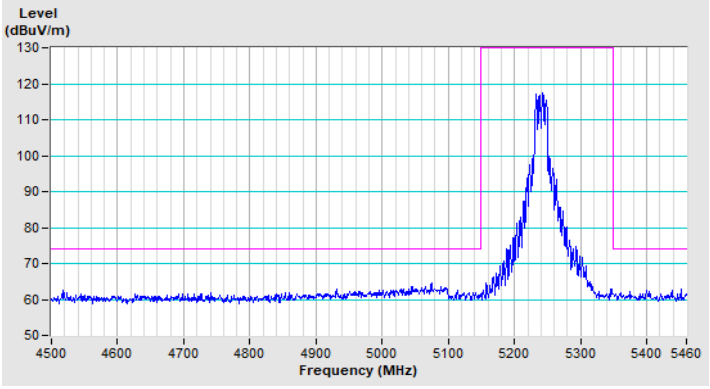
802.11ax (HE20) Channel 48



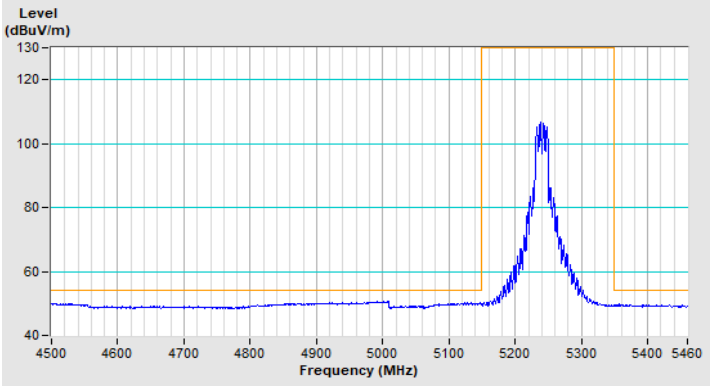
Horizontal (Peak)



Horizontal (Average)



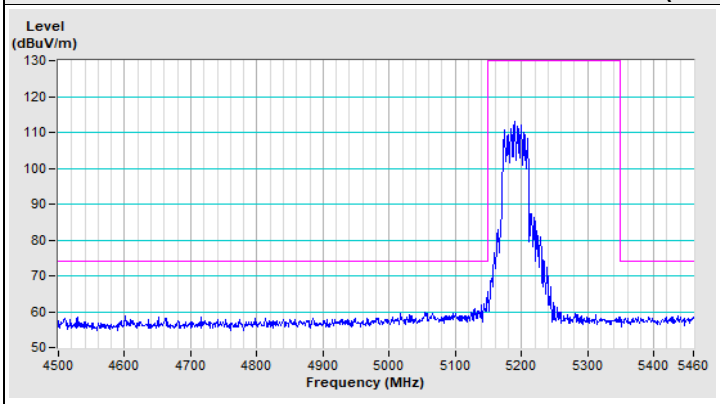
Vertical (Peak)



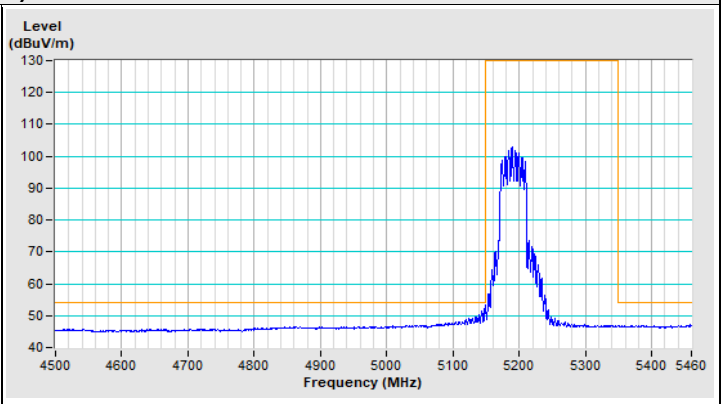
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

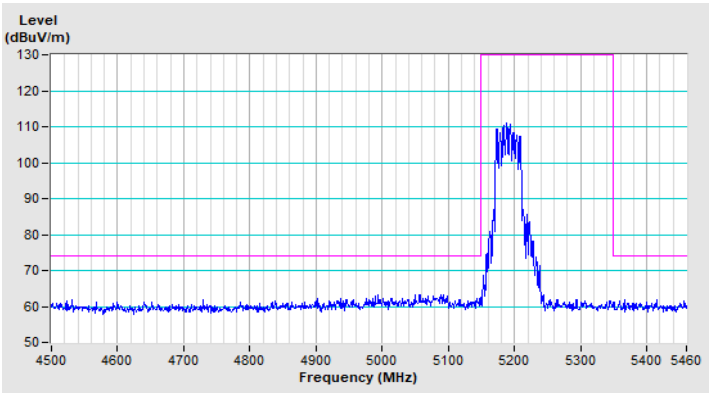
802.11ax (HE40) Channel 38



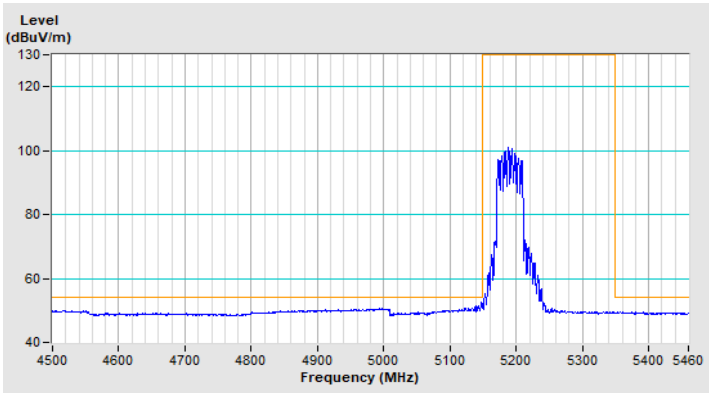
Horizontal (Peak)



Horizontal (Average)

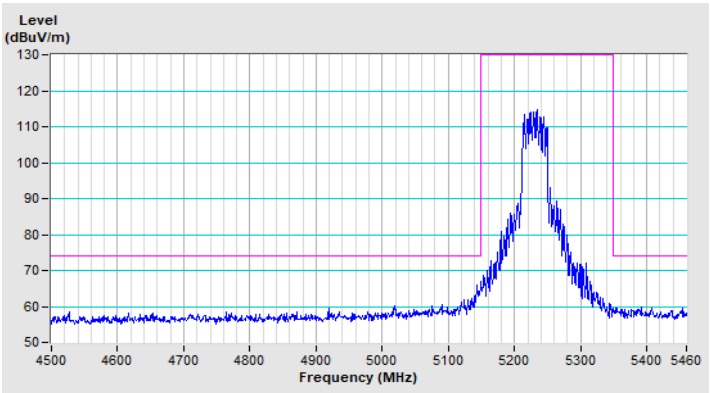


Vertical (Peak)

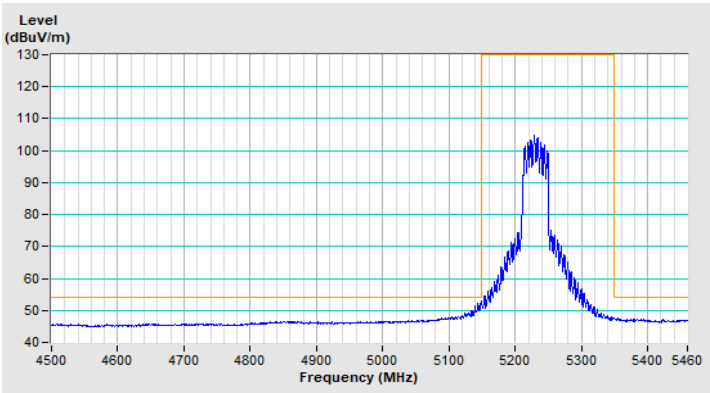


Vertical (Average)

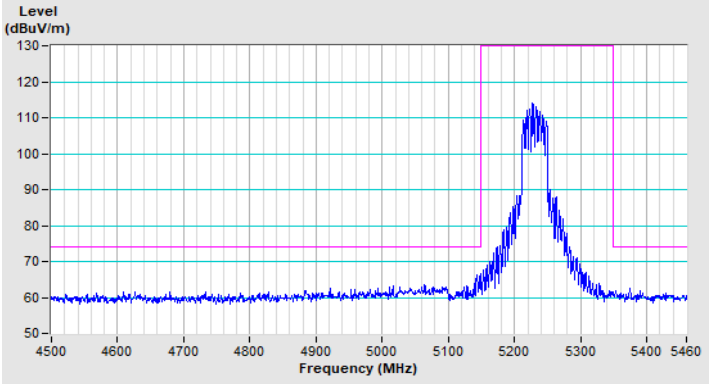
802.11ax (HE40) Channel 46



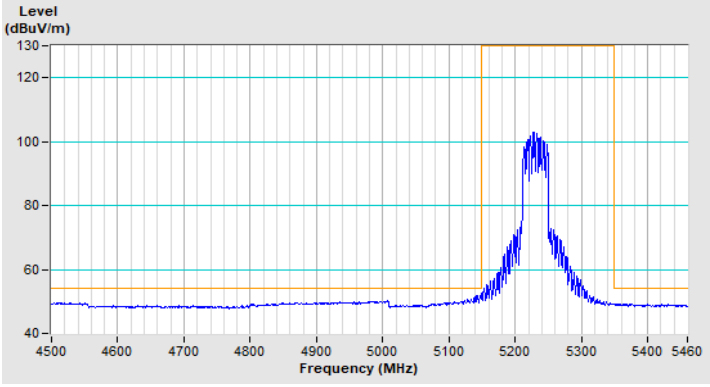
Horizontal (Peak)



Horizontal (Average)



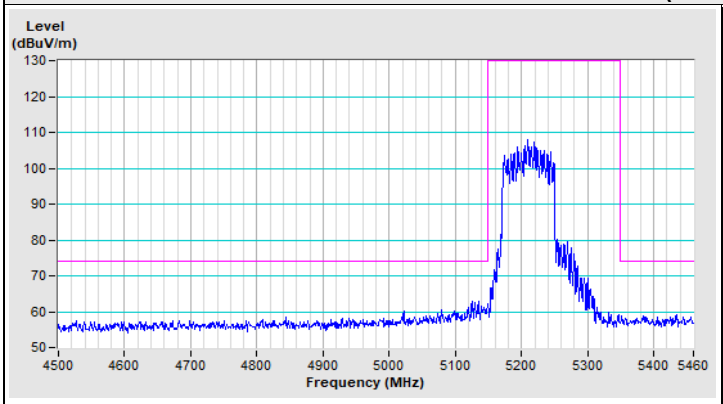
Vertical (Peak)



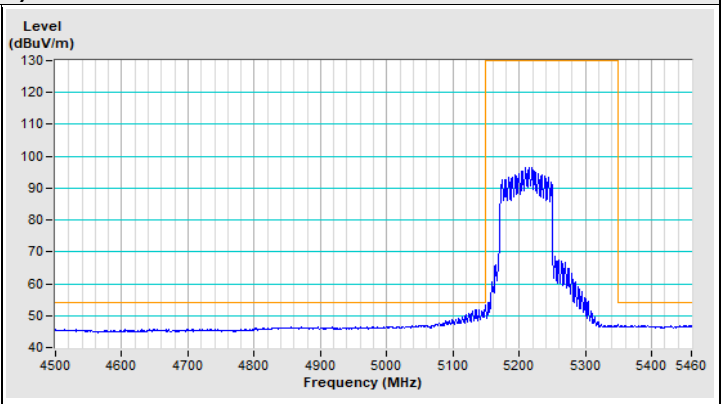
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

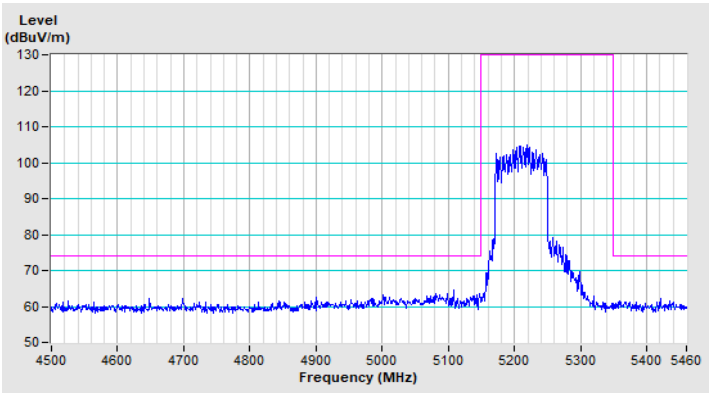
802.11ax (HE80) Channel 42



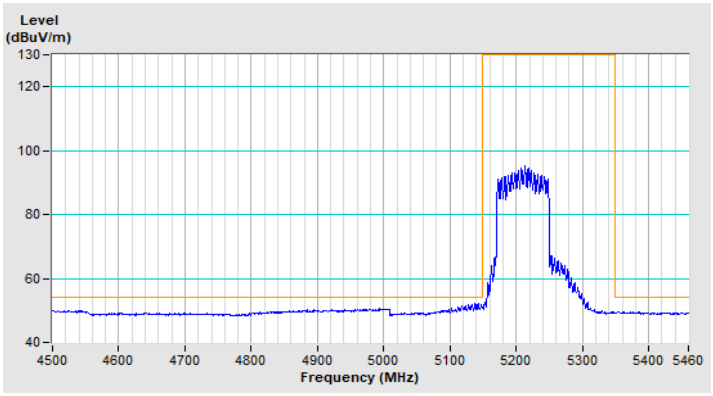
Horizontal (Peak)



Horizontal (Average)



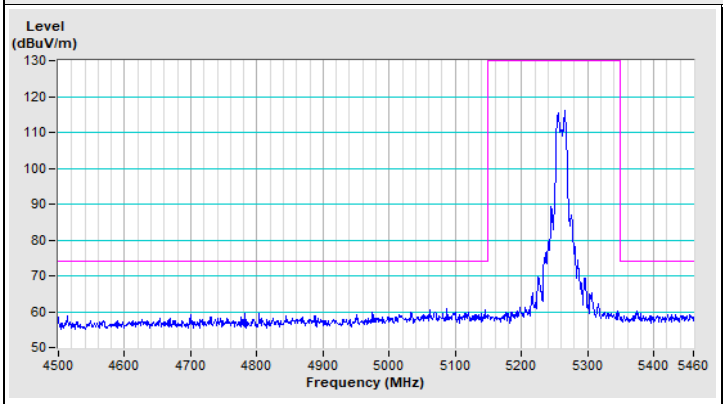
Vertical (Peak)



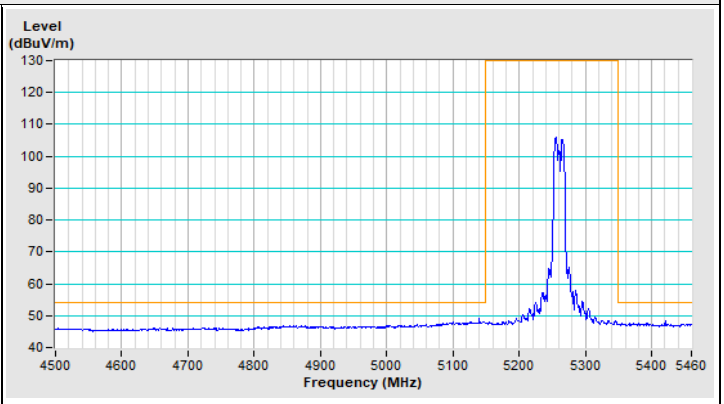
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

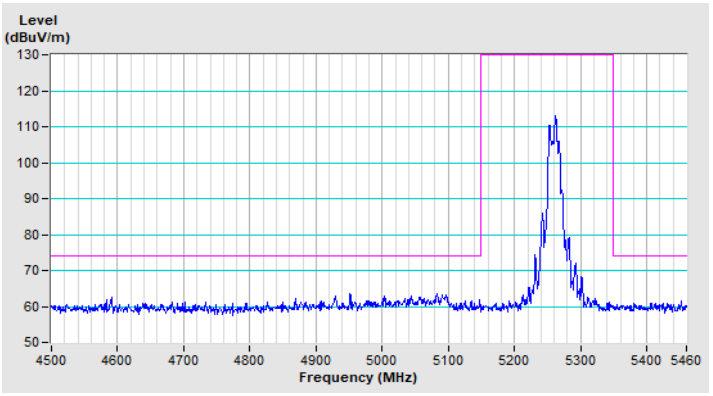
802.11a Channel 52



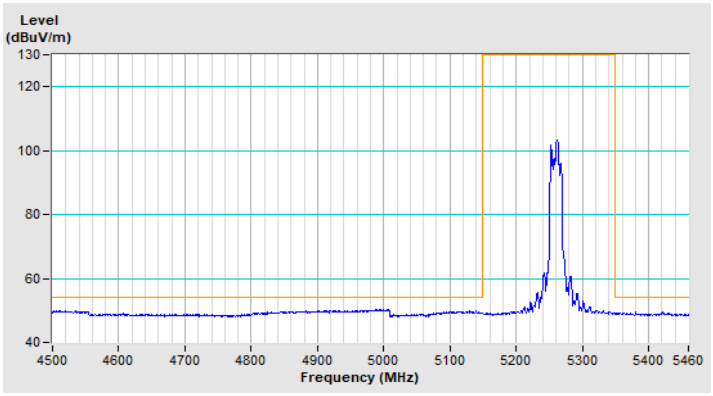
Horizontal (Peak)



Horizontal (Average)

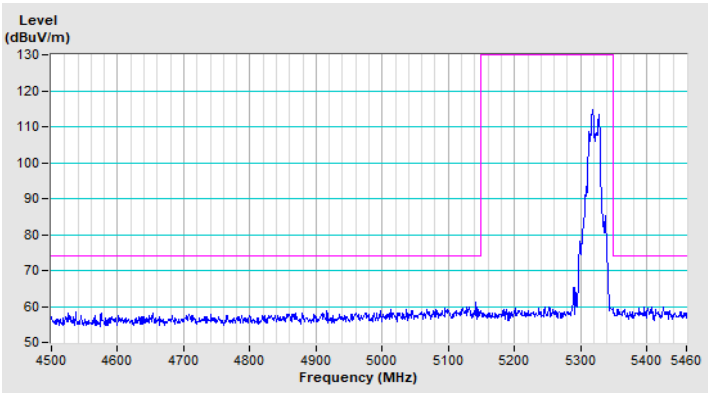


Vertical (Peak)

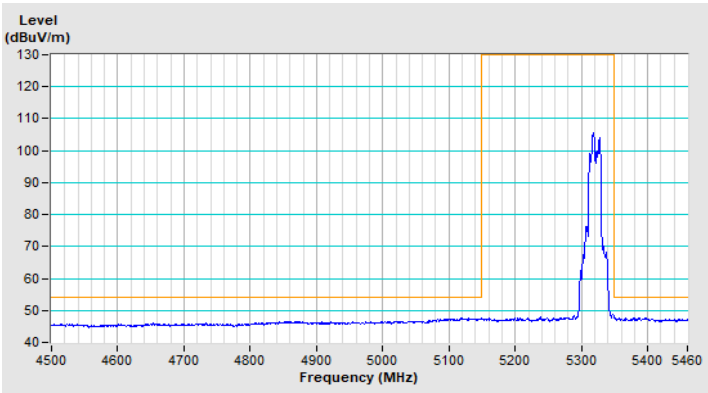


Vertical (Average)

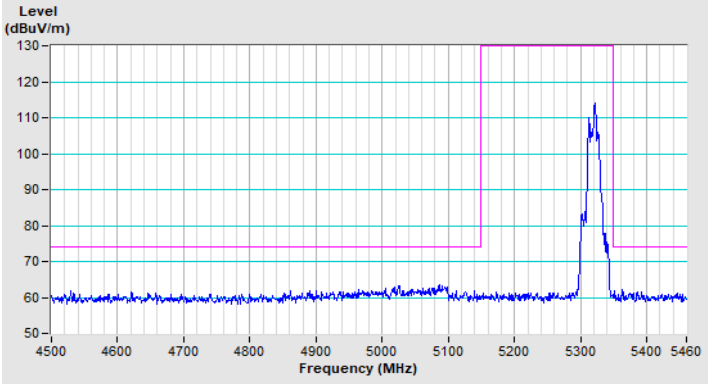
802.11a Channel 64



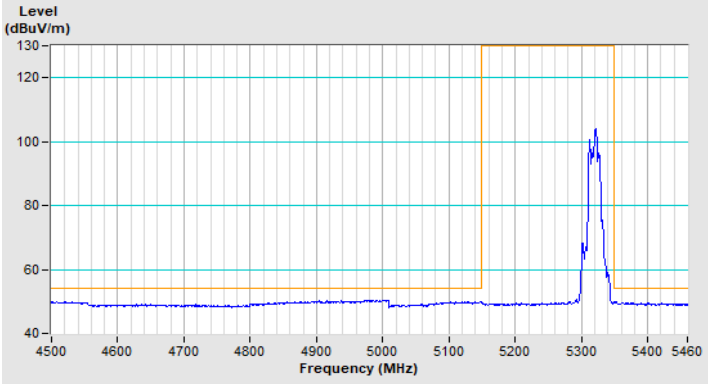
Horizontal (Peak)



Horizontal (Average)



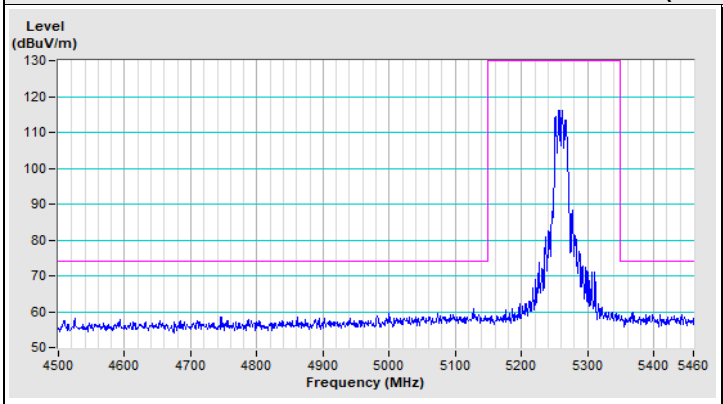
Vertical (Peak)



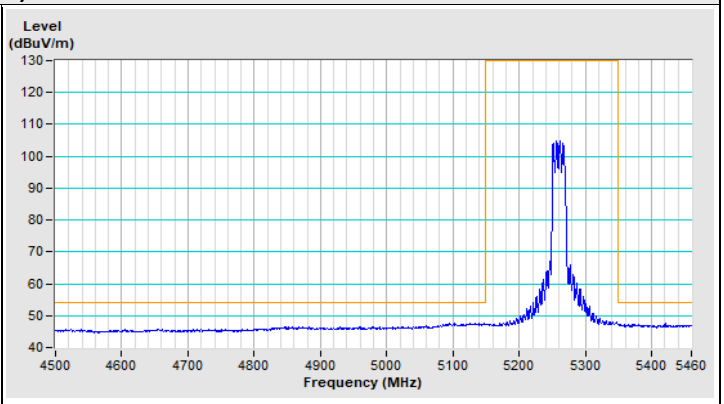
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

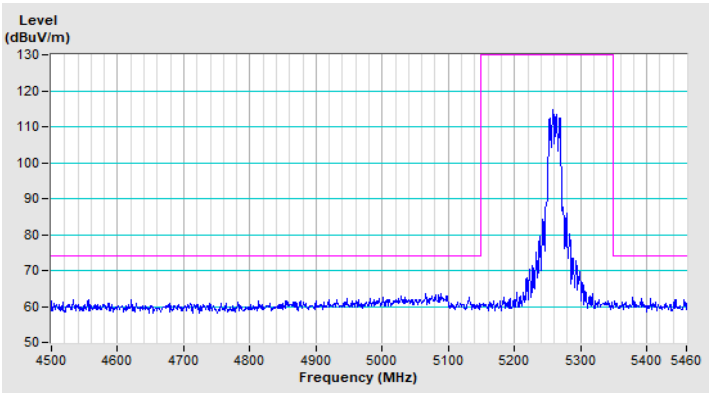
802.11ax (HE20) Channel 52



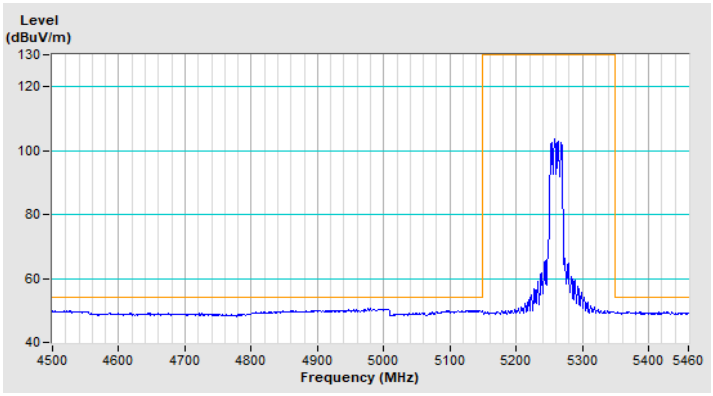
Horizontal (Peak)



Horizontal (Average)

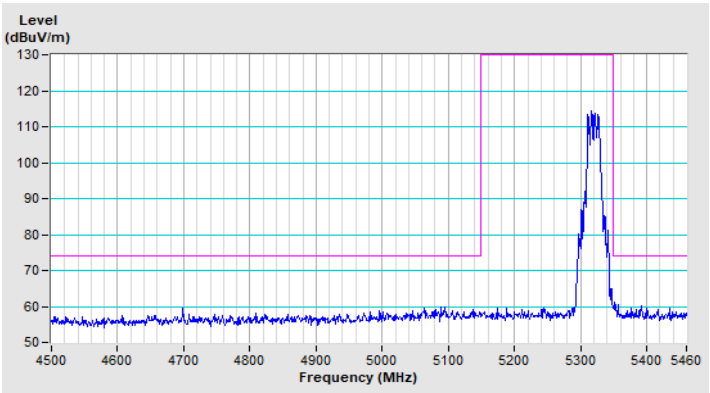


Vertical (Peak)

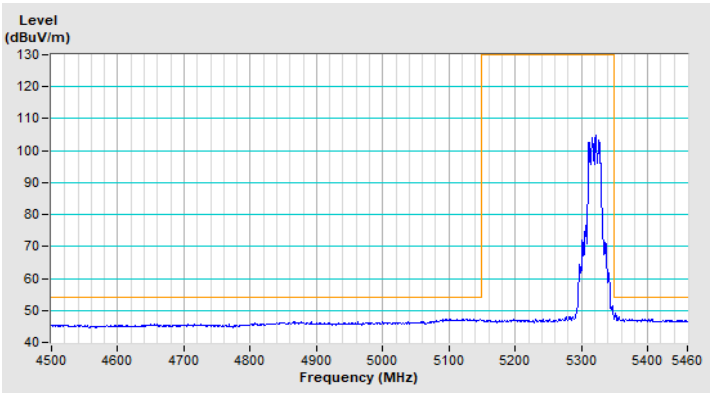


Vertical (Average)

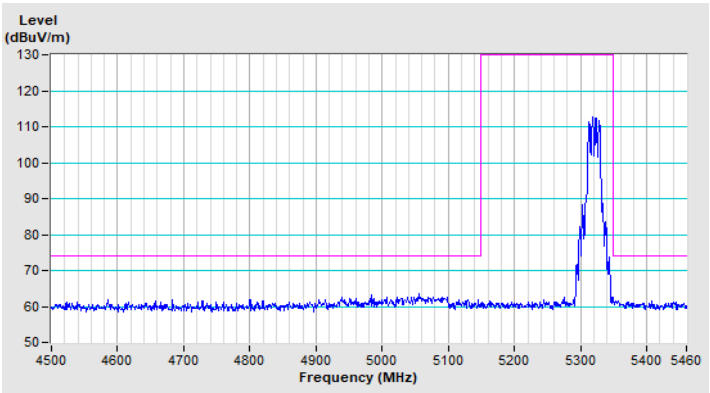
802.11ax (HE20) Channel 64



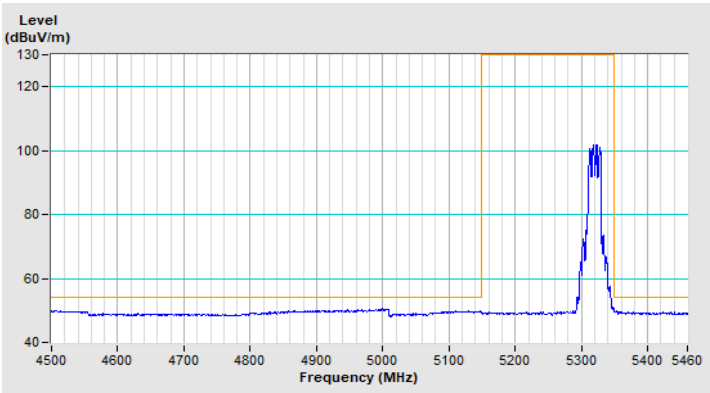
Horizontal (Peak)



Horizontal (Average)



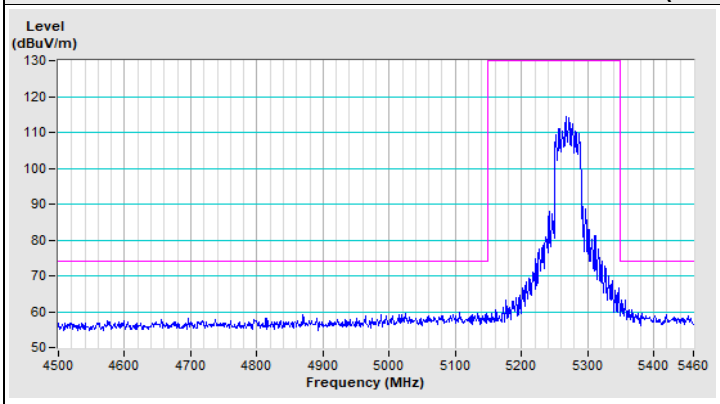
Vertical (Peak)



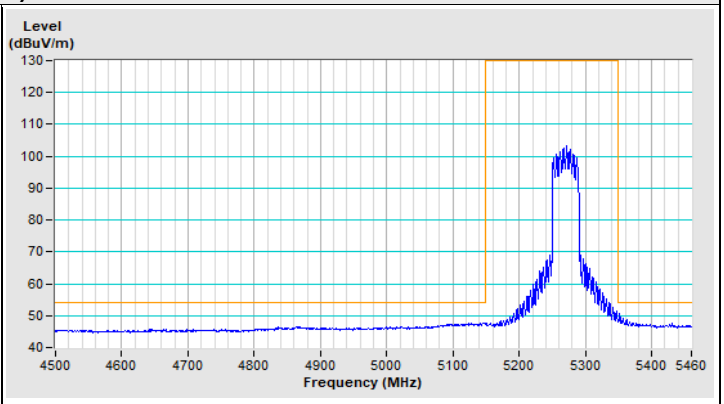
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

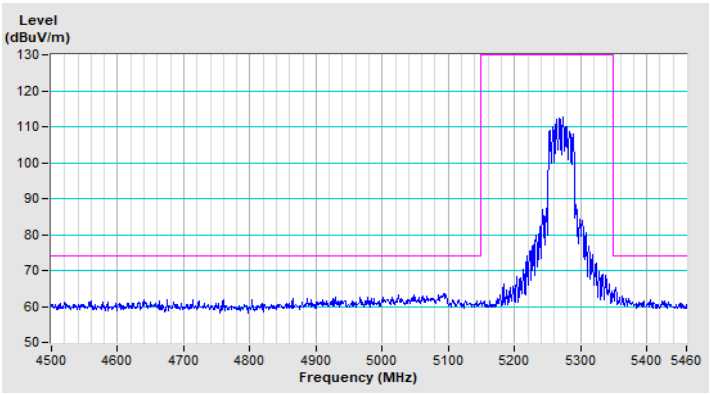
802.11ax (HE40) Channel 54



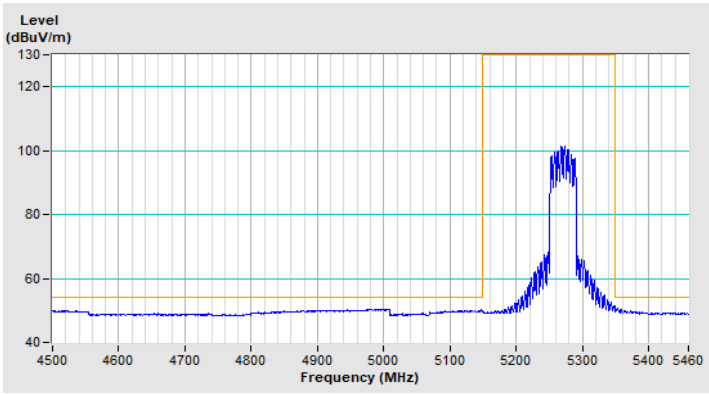
Horizontal (Peak)



Horizontal (Average)

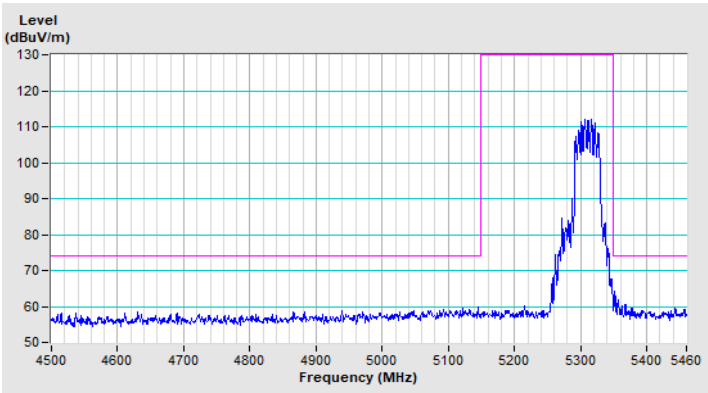


Vertical (Peak)

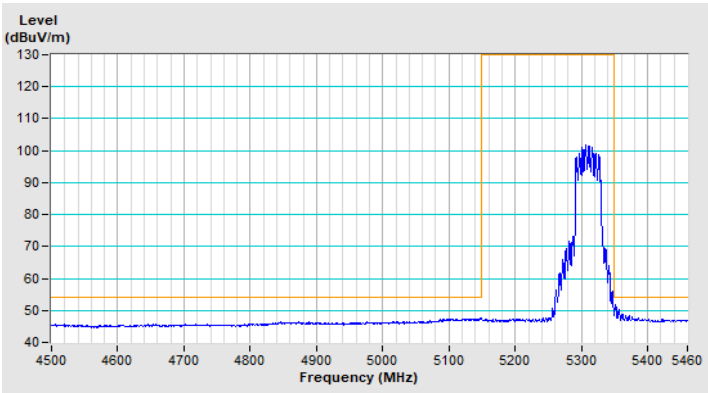


Vertical (Average)

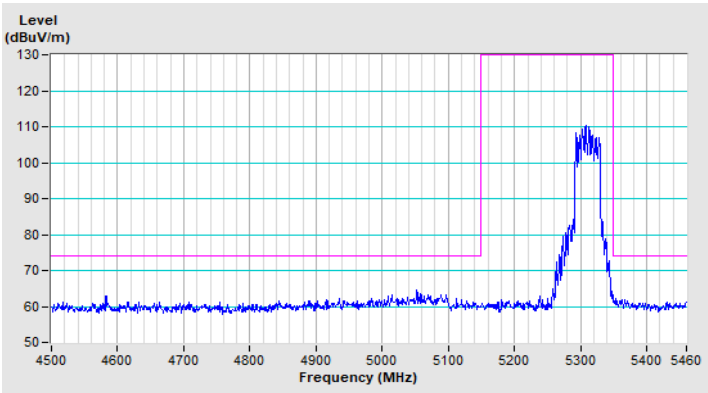
802.11ax (HE40) Channel 62



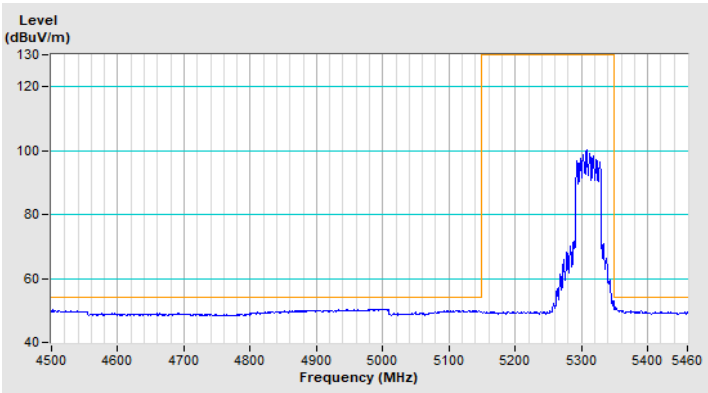
Horizontal (Peak)



Horizontal (Average)



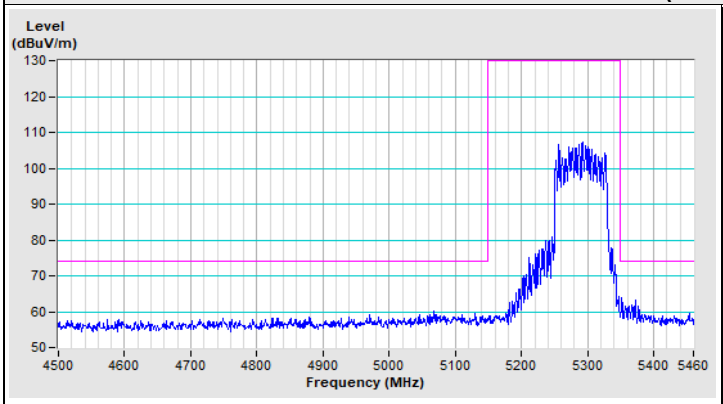
Vertical (Peak)



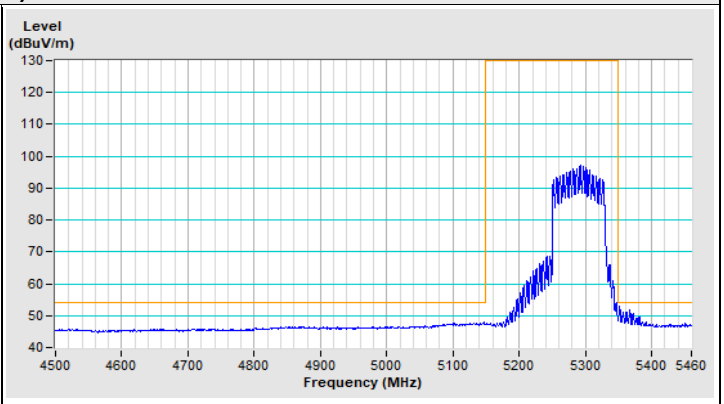
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

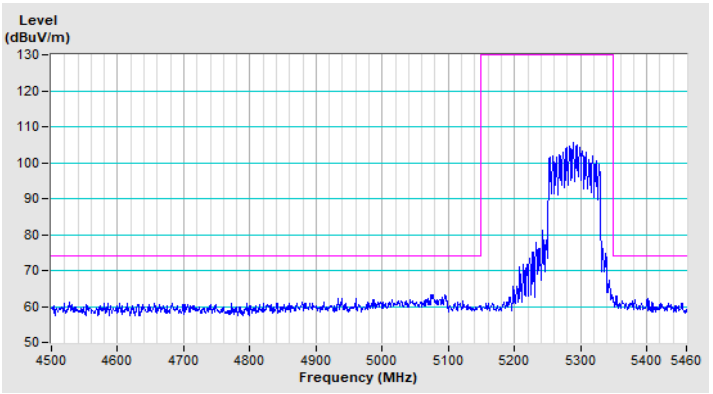
802.11ax (HE80) Channel 58



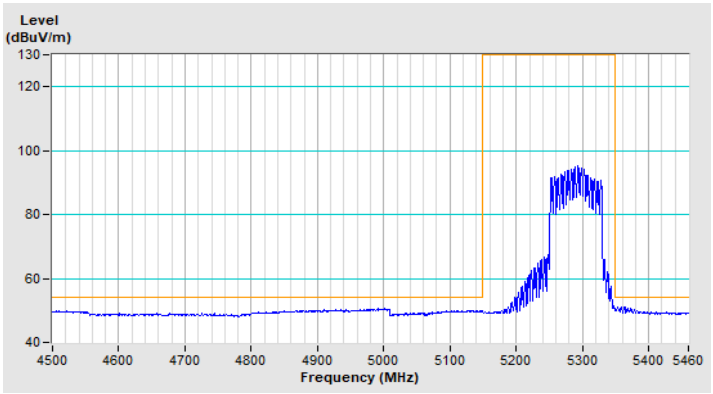
Horizontal (Peak)



Horizontal (Average)



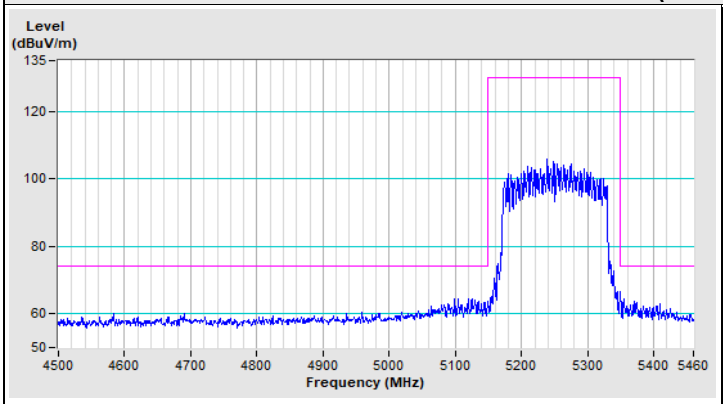
Vertical (Peak)



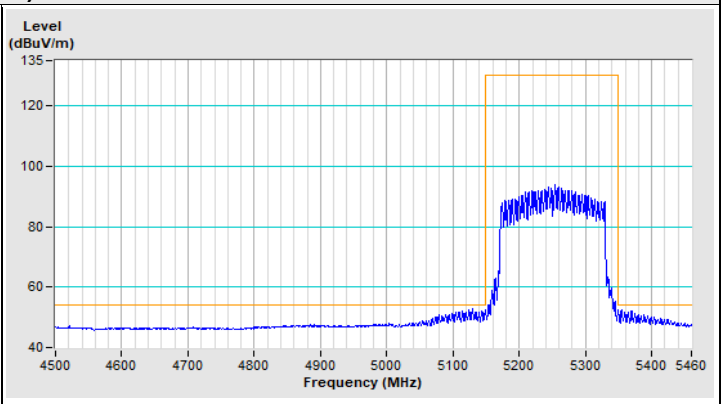
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

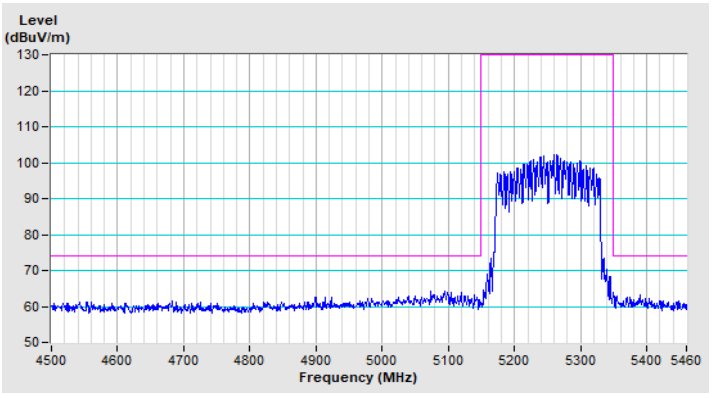
802.11ax (HE160) Channel 50



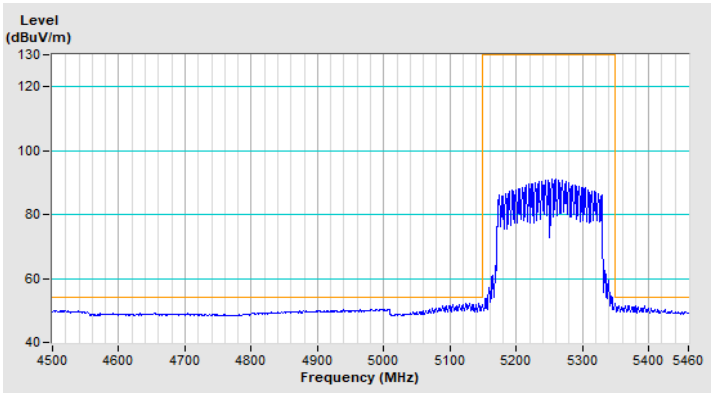
Horizontal (Peak)



Horizontal (Average)



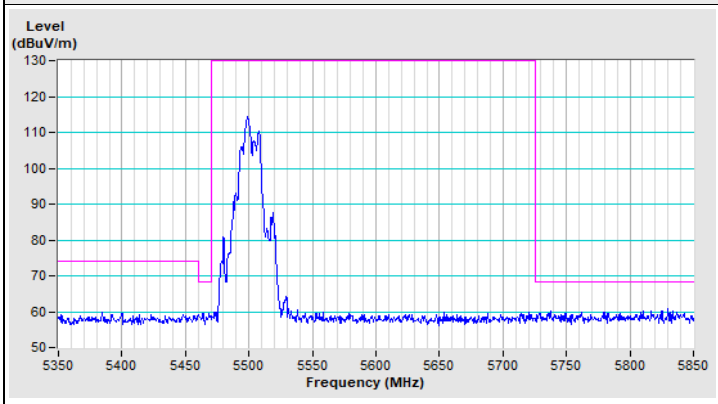
Vertical (Peak)



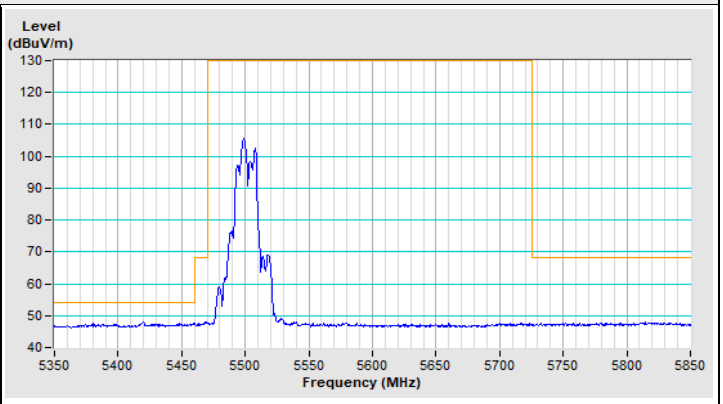
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

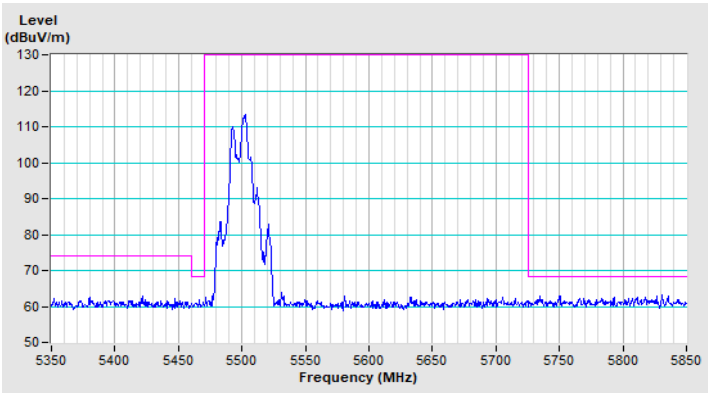
802.11a Channel 100



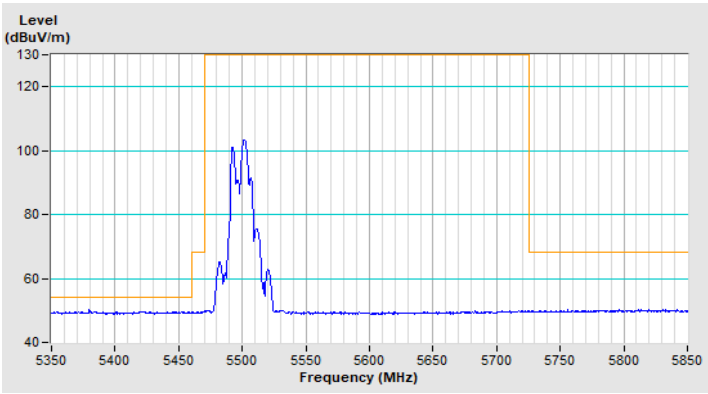
Horizontal (Peak)



Horizontal (Average)

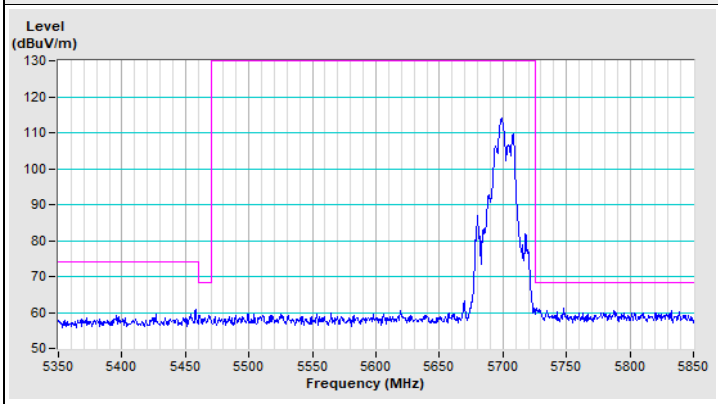


Vertical (Peak)

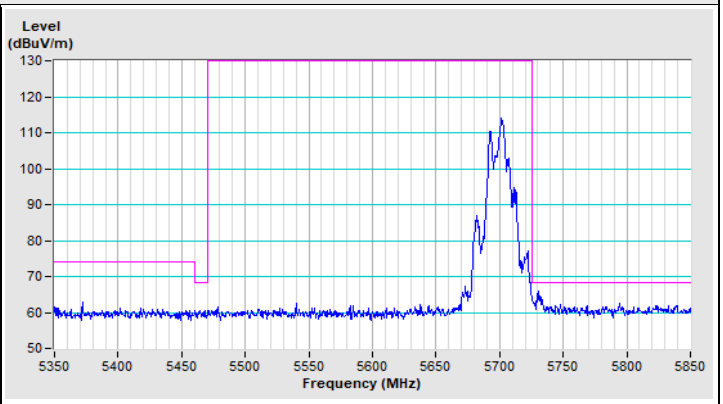


Vertical (Average)

802.11a Channel 140



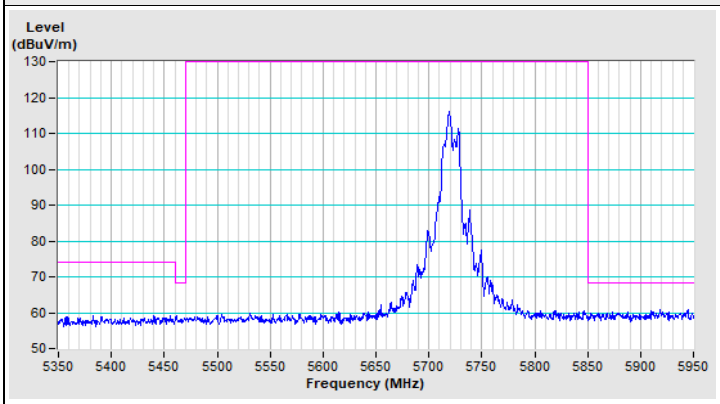
Horizontal (Peak)



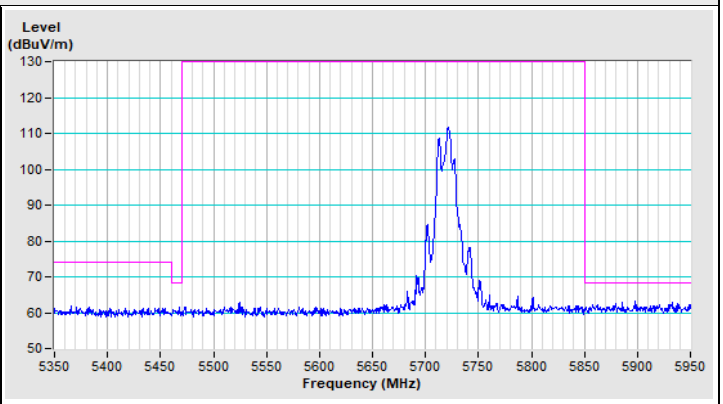
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11a Channel 144



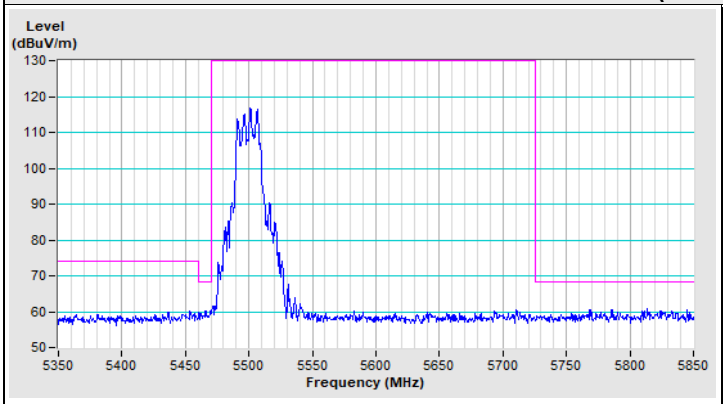
Horizontal (Peak)



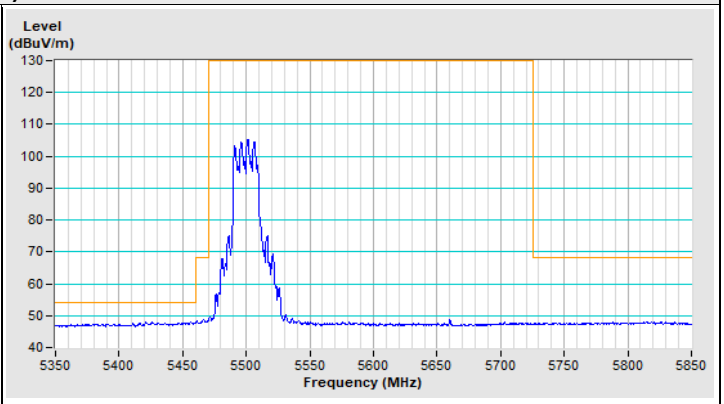
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

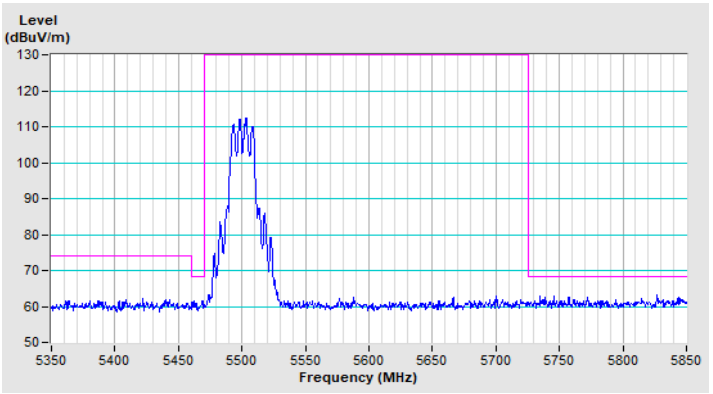
802.11ax (HE20) Channel 100



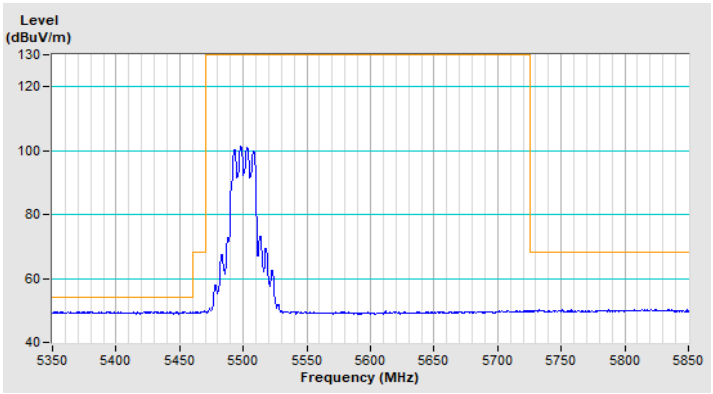
Horizontal (Peak)



Horizontal (Average)

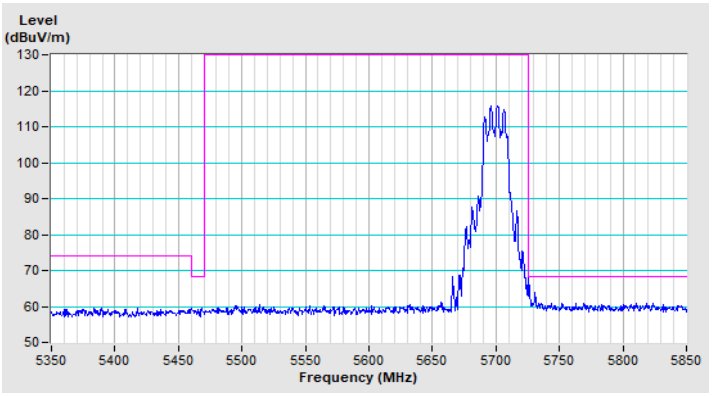


Vertical (Peak)

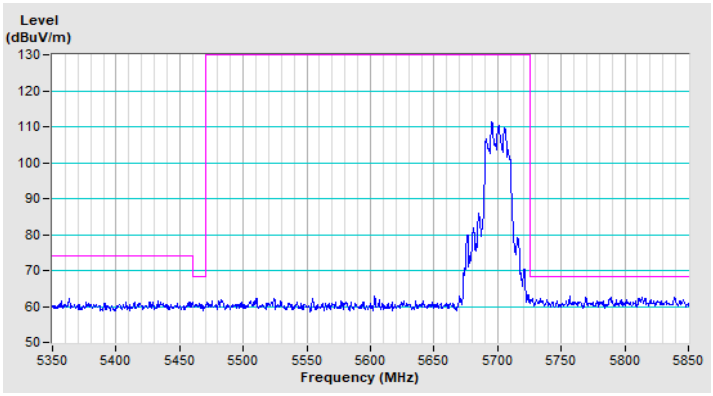


Vertical (Average)

802.11ax (HE20) Channel 140



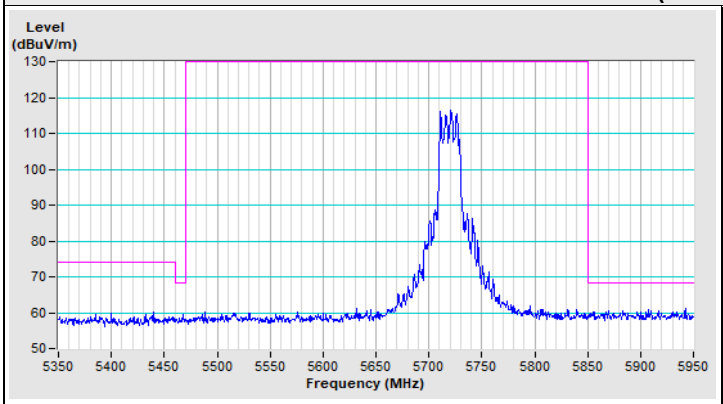
Horizontal (Peak)



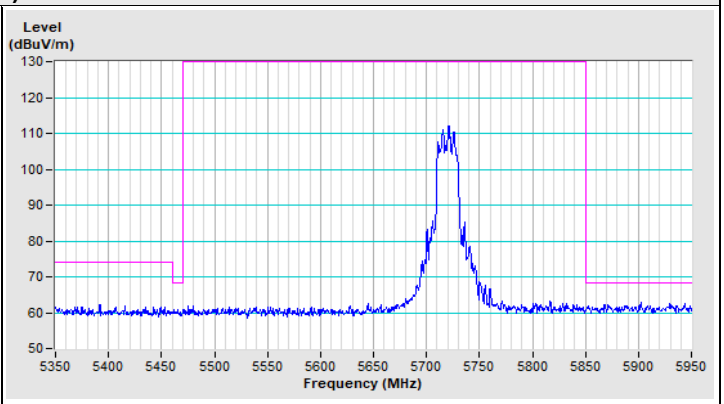
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ax (HE20) Channel 144



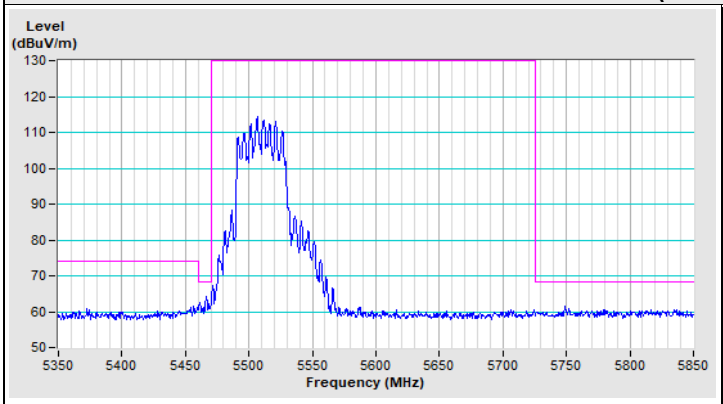
Horizontal (Peak)



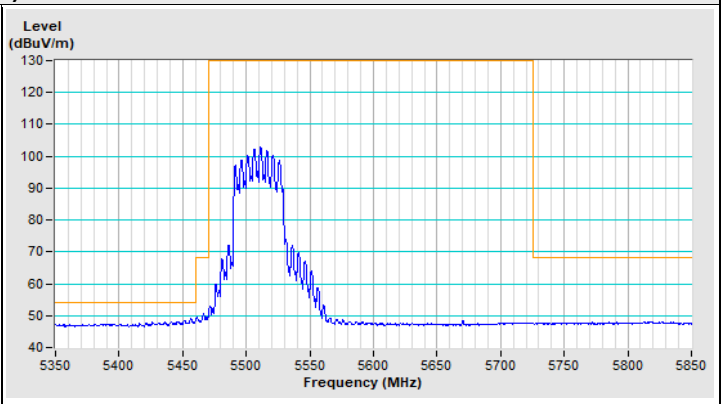
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

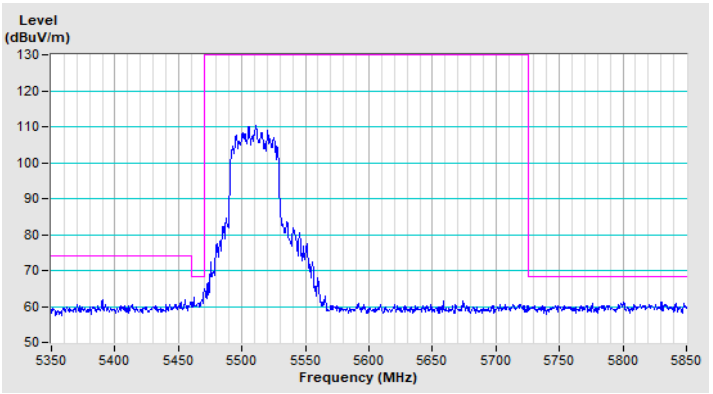
802.11ax (HE40) Channel 102



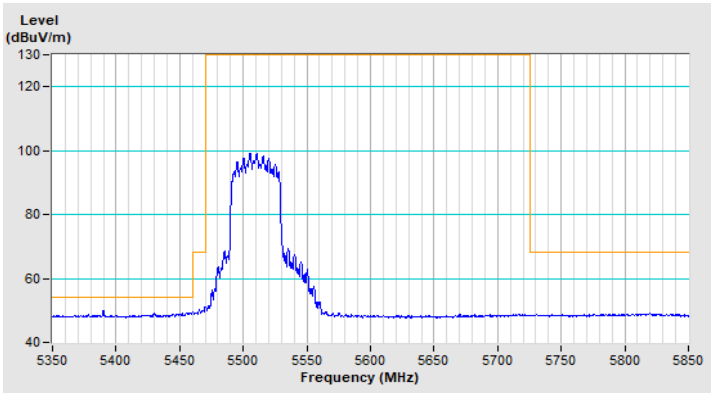
Horizontal (Peak)



Horizontal (Average)

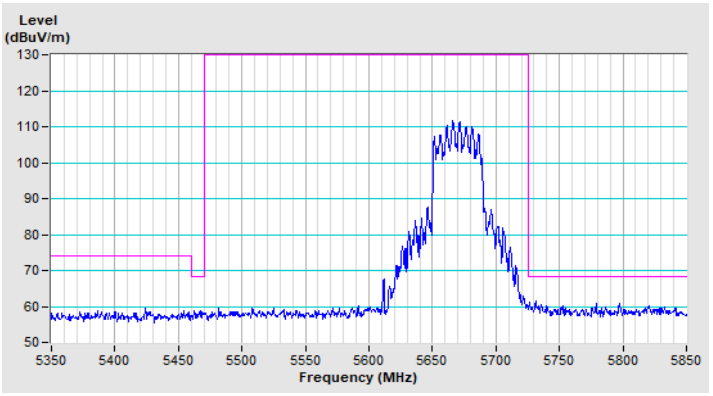


Vertical (Peak)

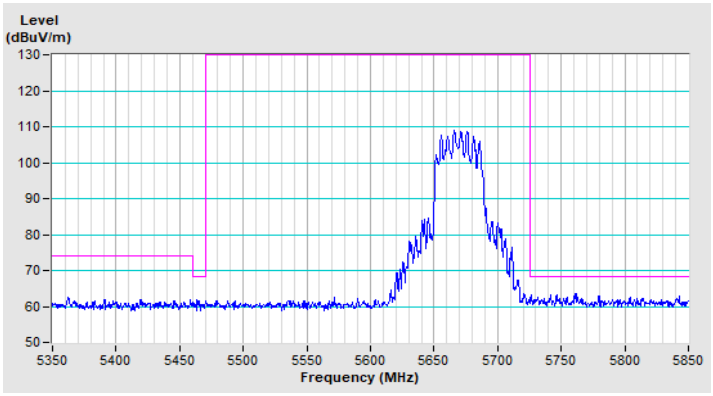


Vertical (Average)

802.11ax (HE40) Channel 134

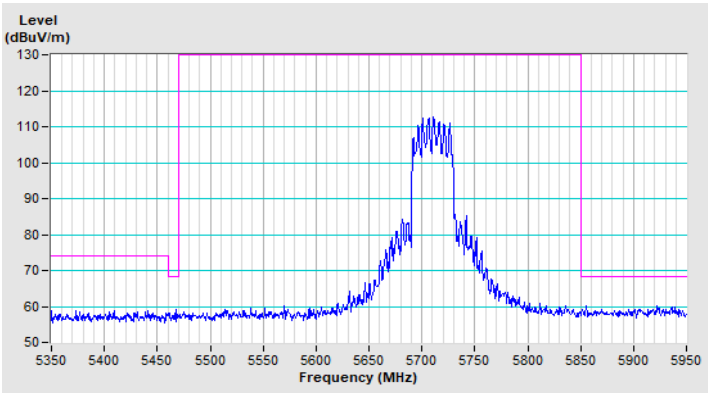


Horizontal (Peak)

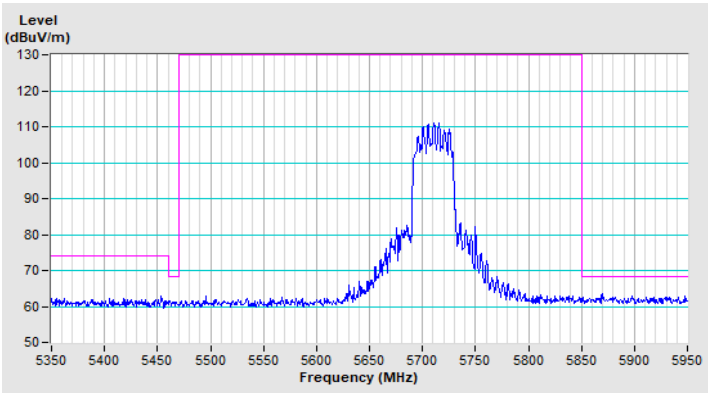


Vertical (Peak)

802.11ax (HE40) Channel 142



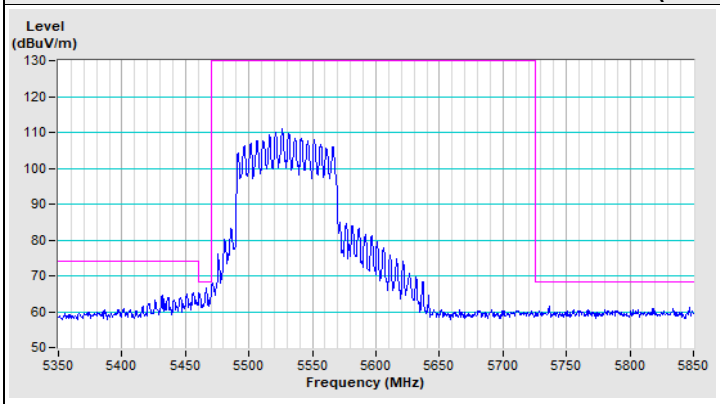
Horizontal (Peak)



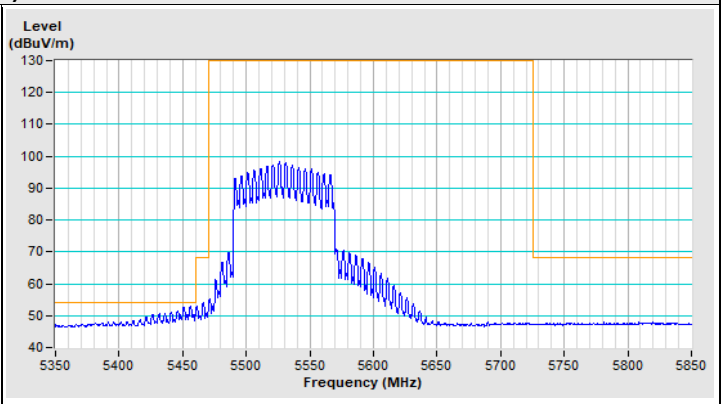
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

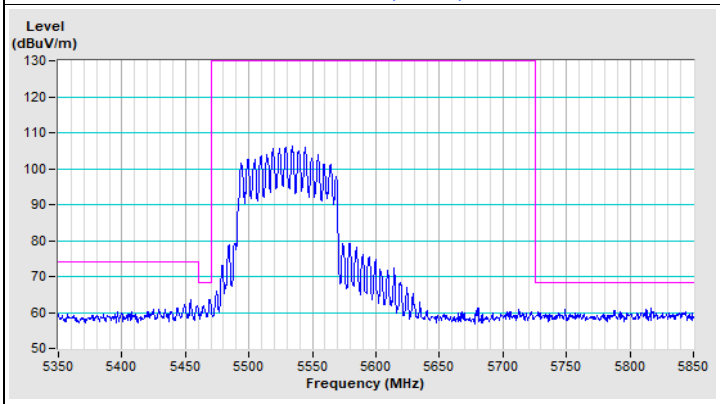
802.11ax (HE80) Channel 106



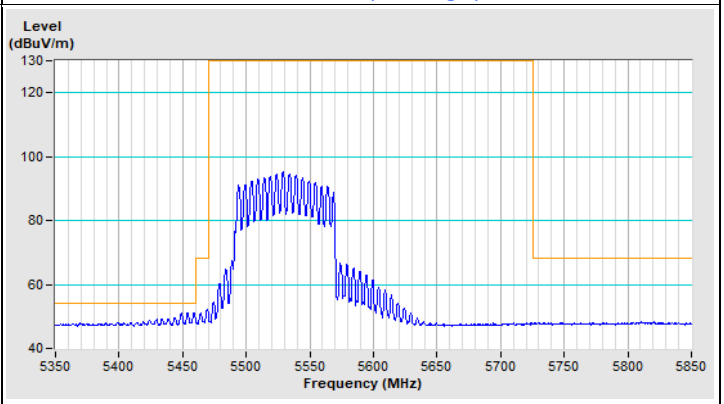
Horizontal (Peak)



Horizontal (Average)

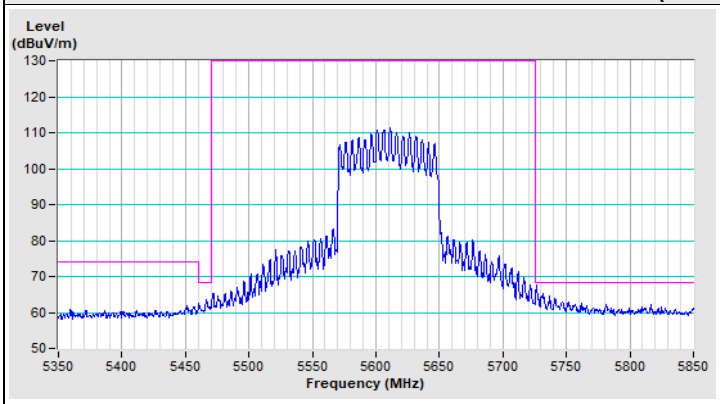


Vertical (Peak)

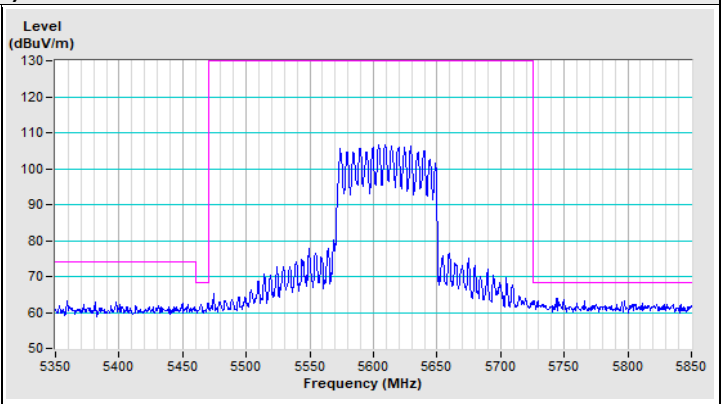


Vertical (Average)

802.11ax (HE80) Channel 122



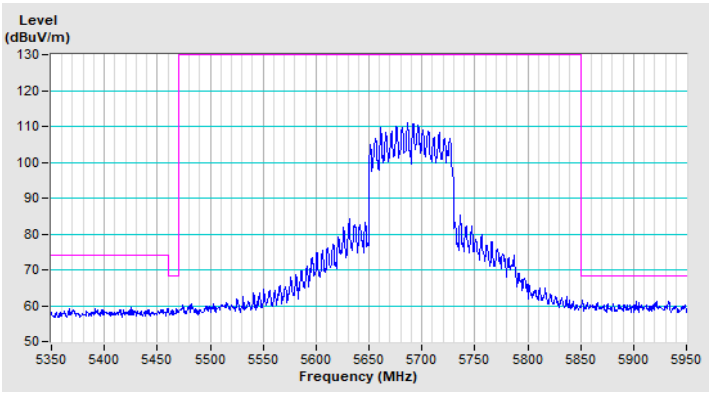
Horizontal (Peak)



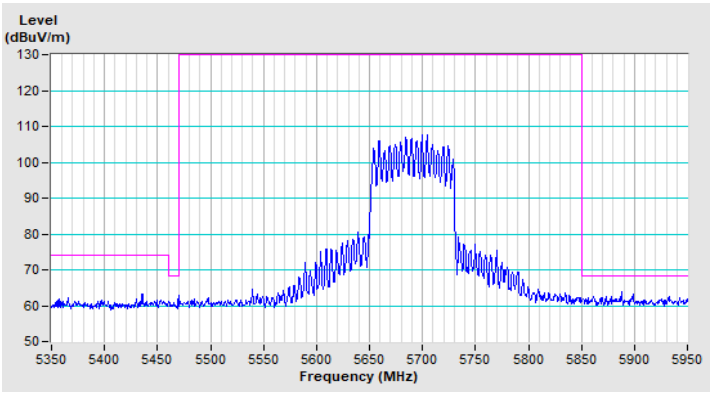
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ax (HE80) Channel 138



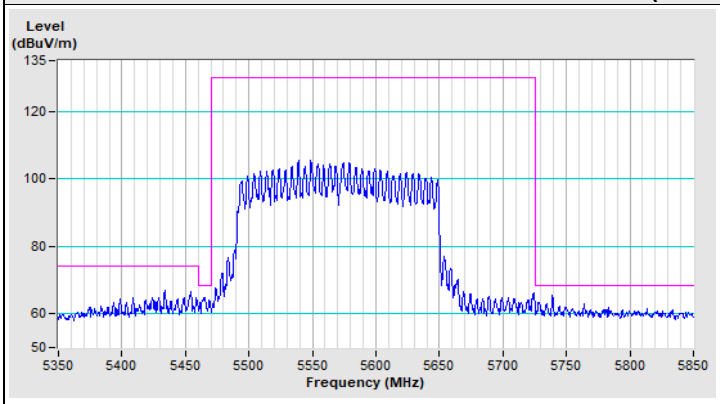
Horizontal (Peak)



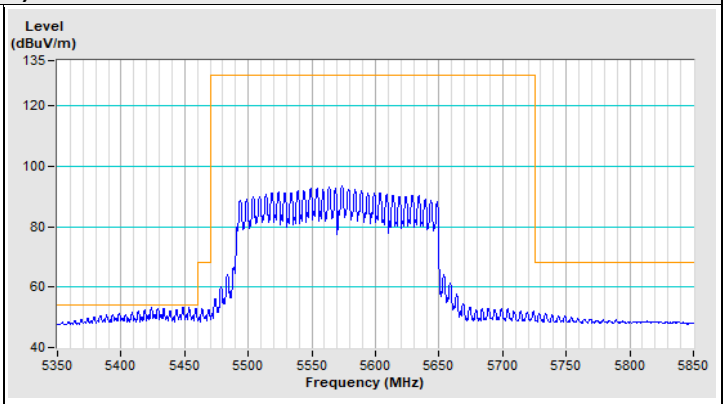
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak

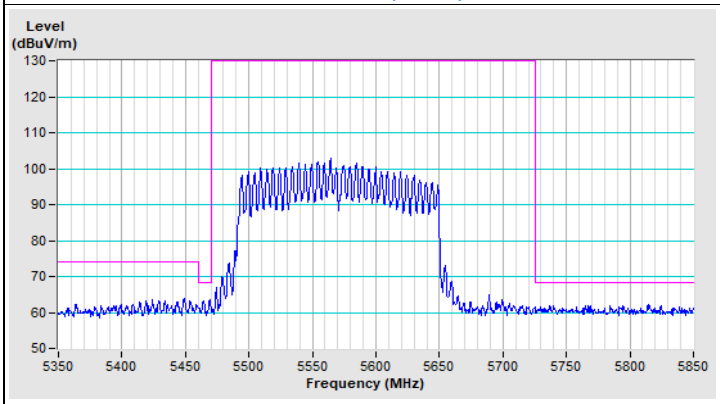
802.11ax (HE160) Channel 114



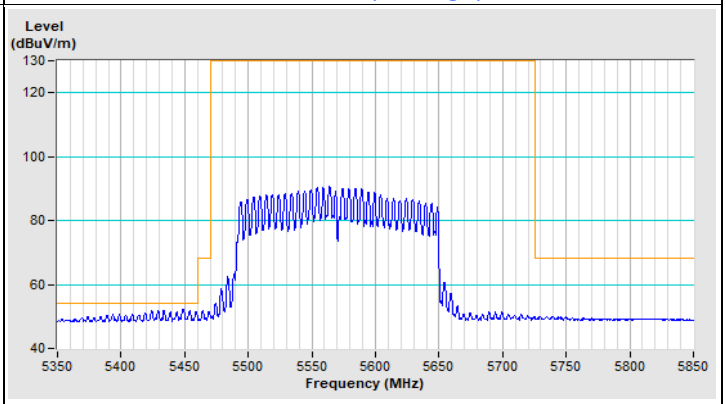
Horizontal (Peak)



Horizontal (Average)



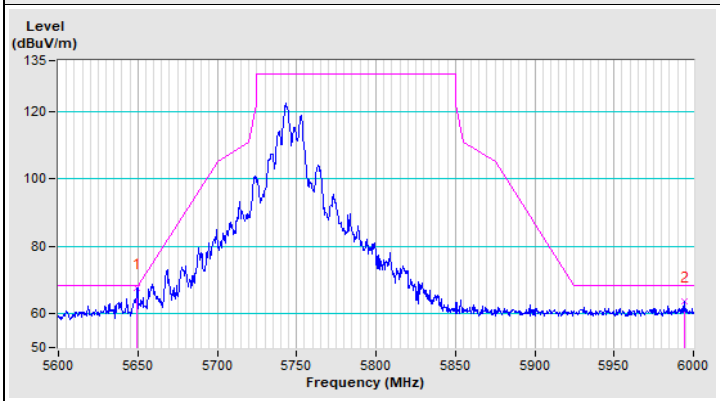
Vertical (Peak)



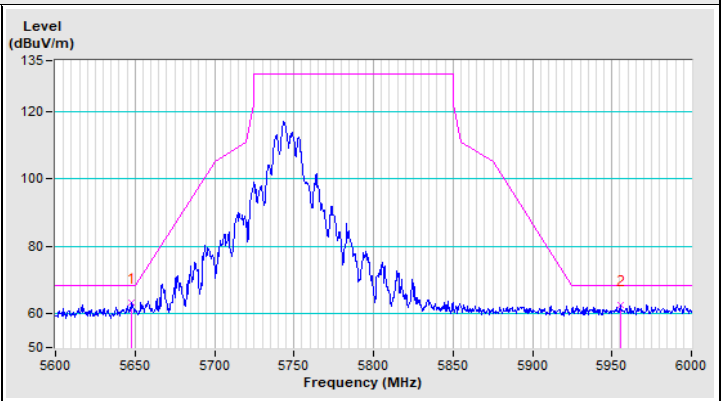
Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11a Channel 149

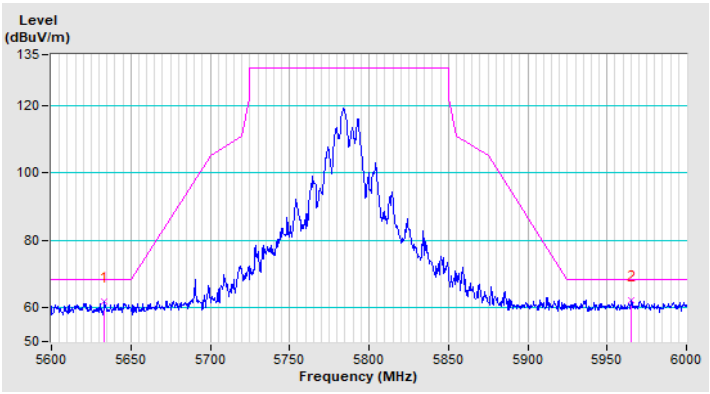


Horizontal (Peak)

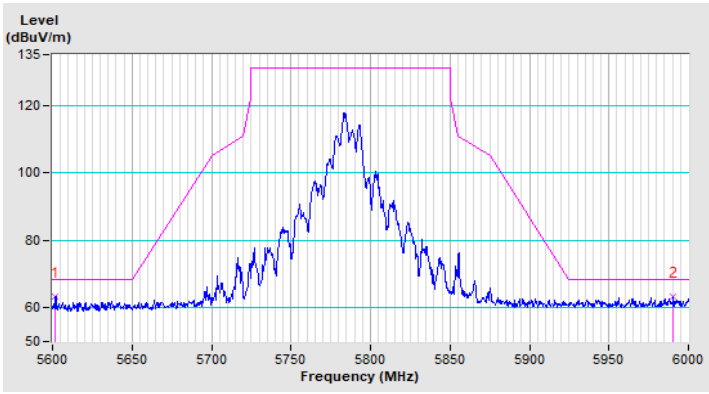


Vertical (Peak)

802.11a Channel 157

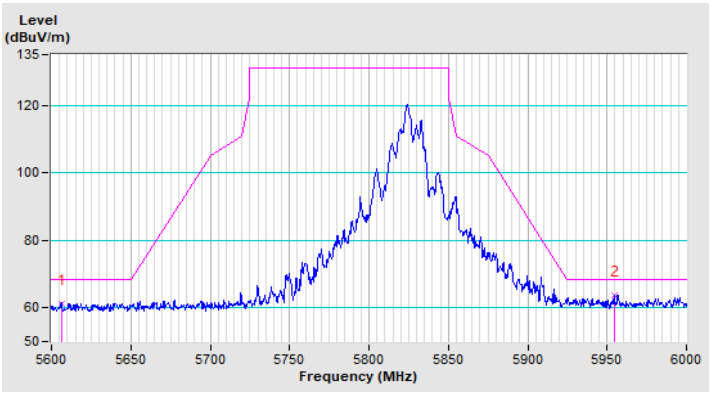


Horizontal (Peak)

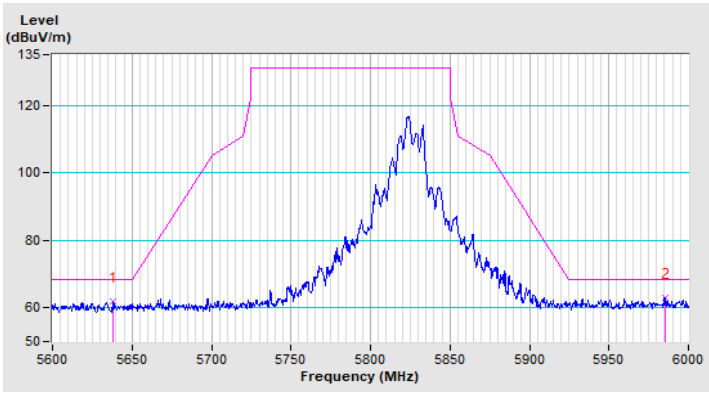


Vertical (Peak)

802.11a Channel 165



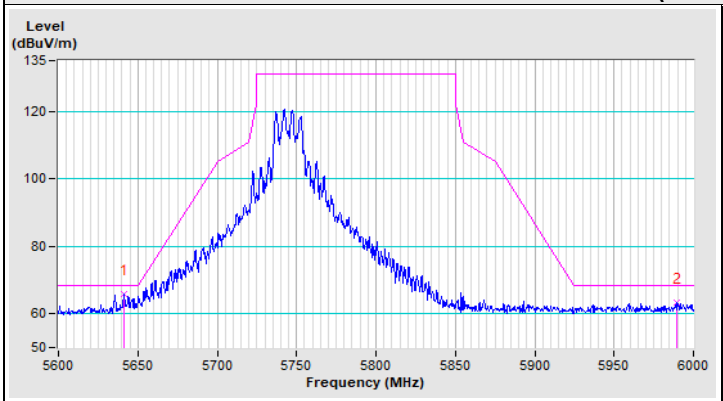
Horizontal (Peak)



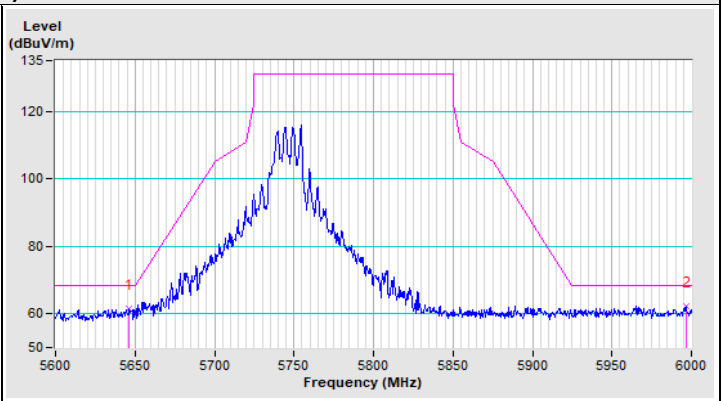
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ax (HE20) Channel 149

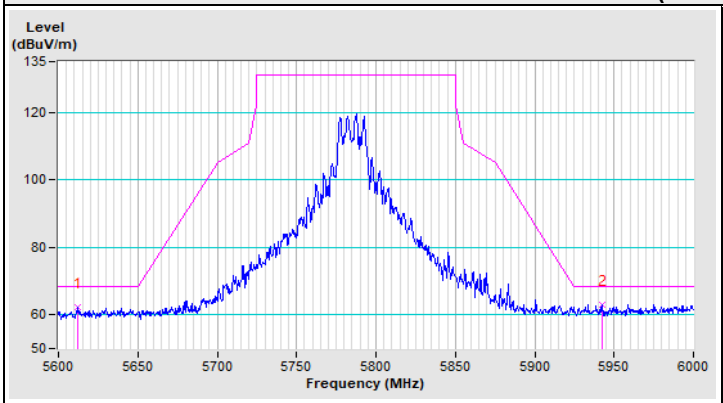


Horizontal (Peak)

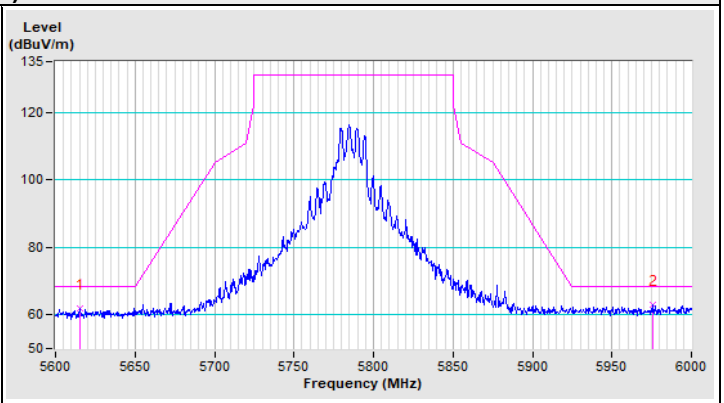


Vertical (Peak)

802.11ax (HE20) Channel 157

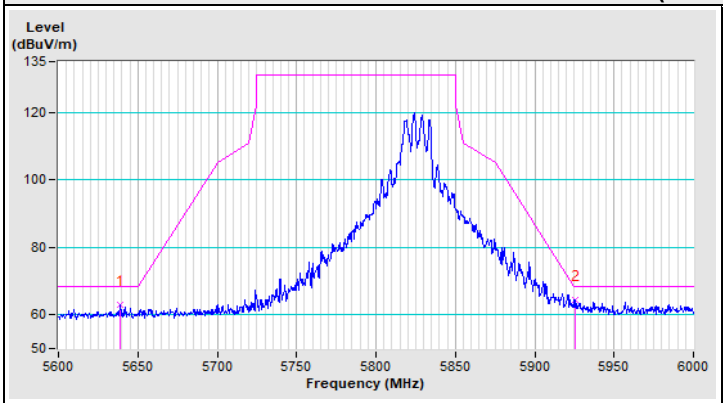


Horizontal (Peak)

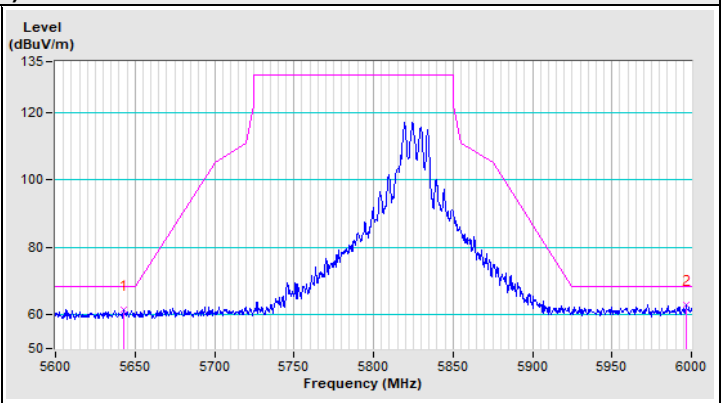


Vertical (Peak)

802.11ax (HE20) Channel 165



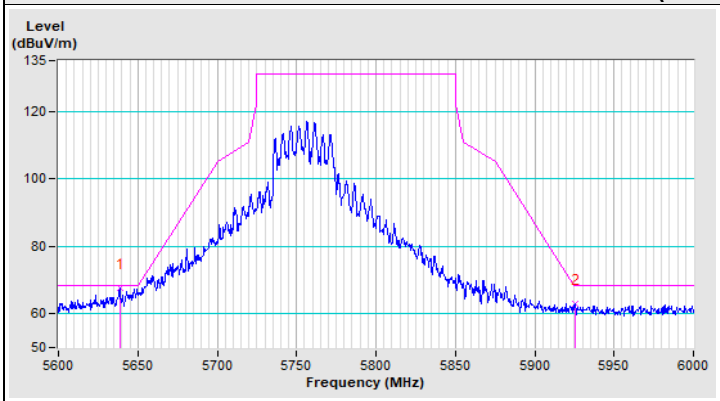
Horizontal (Peak)



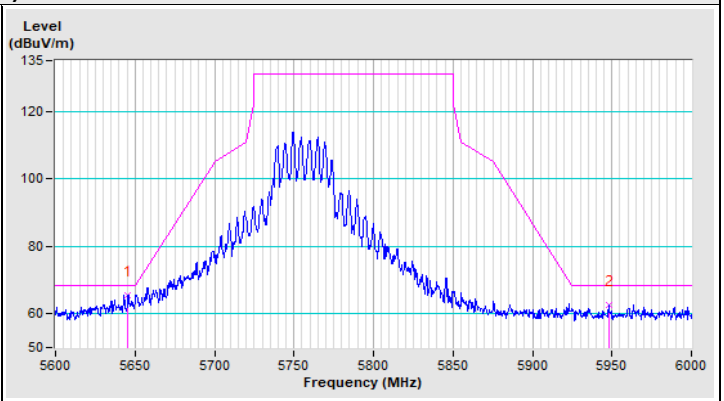
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ax (HE40) Channel 151

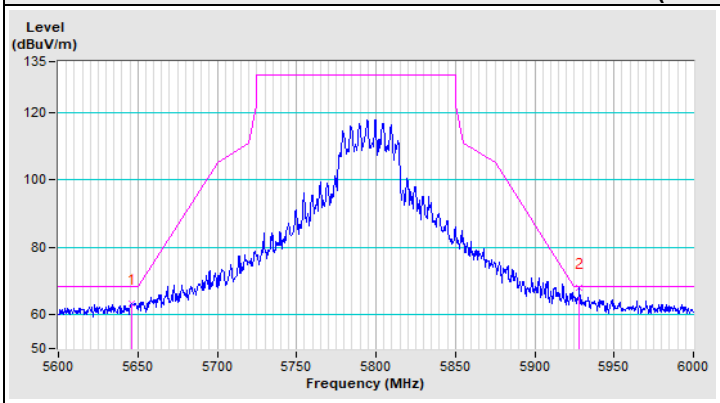


Horizontal (Peak)

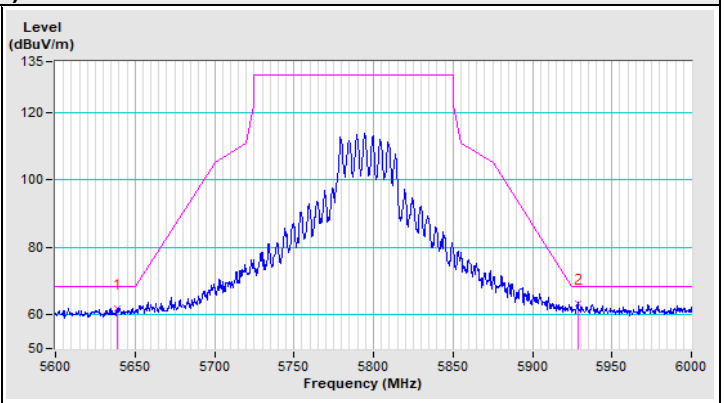


Vertical (Peak)

802.11ax (HE40) Channel 159



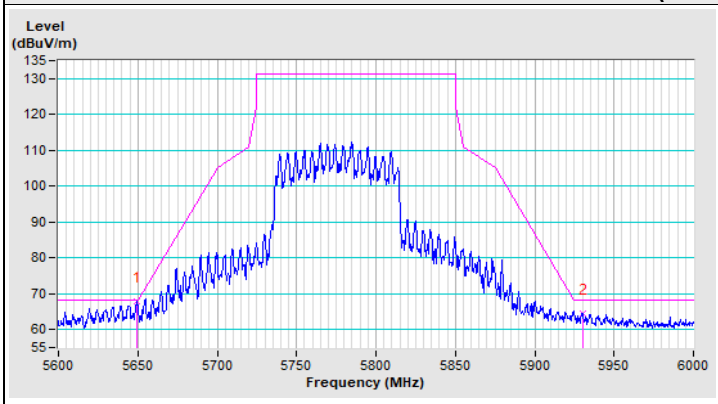
Horizontal (Peak)



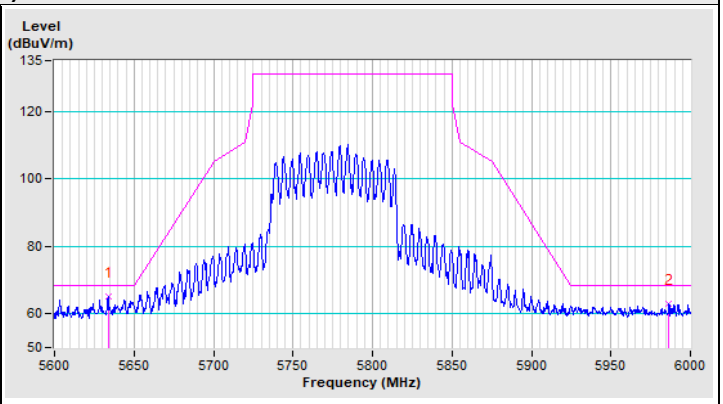
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ax (HE80) Channel 155



Horizontal (Peak)



Vertical (Peak)

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The address and road map of all our labs can be found in our web site also.

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