

# TEST REPORT

## CERTIFICATE OF CONFORMITY

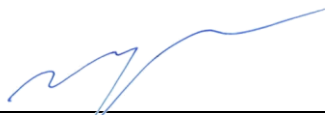
**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)  
**Report No.:** RFBFBE-WTW-P22090890A-1  
**FCC ID:** I88EX7710-B0  
**Product:** AX11000 WiFi 6E 10G Ethernet Gateway  
**Brand:** ZYXEL  
**Model No.:** EX7710-B0  
**Received Date:** 2022/12/1  
**Test Date:** 2022/12/9 ~ 2023/1/20  
**Issued Date:** 2023/3/20

**Applicant:** Zyxel Communications Corporation  
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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory  
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**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

**FCC Registration /** 723255 / TW2022

**Designation Number:**

**Approved by:** \_\_\_\_\_



May Chen / Manager

**Date:** \_\_\_\_\_

2023/3/20

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Prepared by : Vivian Huang / Specialist



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## Release Control Record

Issue No.	Description	Date Issued
RFBFBE-WTW-P22090890A-1	Original release.	2023/3/20

## 1 Certificate

**Product:** AX11000 WiFi 6E 10G Ethernet Gateway

**Brand:** ZYXEL

**Test Model:** EX7710-B0

**Sample Status:** Engineering sample

**Applicant:** Zyxel Communications Corporation

**Test Date:** 2022/12/9 ~ 2023/1/20

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)

**Measurement** ANSI C63.10-2013

**procedure:** KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 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(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -16.69 dB at 23.58344 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.6 dB at 199.18 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 -0.5 dB at 5351.54, 5351.57, 5354.64, 5466.49, 5725.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

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

### 2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.1 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.0 dB
	18 GHz ~ 40 GHz	5.3 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	AX11000 WiFi 6E 10G Ethernet Gateway
Brand	ZYXEL
Test Model	EX7710-B0
CPU Model No.	BCM4912
RF Chip Model No.	2.4G Chip Model: BCM6715 5G Chip Model: BCM6715 6G Chip Model: BCM6715
FW Version	V5.18(ACAK.0)b5_20221215
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from power adapter
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 54Mbps 802.11n: up to 600Mbps 802.11ac: up to 3466.7Mbps 802.11ax: up to 4803.9Mbps
Operating Frequency	5.25 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 16 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 8 802.11ac (VHT80), 802.11ax (HE80): 4 802.11ac (VHT160), 802.11ax (HE160): 2
Output Power	<b>CDD Mode:</b> 5.25 GHz ~ 5.32 GHz : 245.93 mW (23.91 dBm) 5.5 GHz ~ 5.72 GHz : 242.878 mW (23.85 dBm) <b>Beamforming Mode:</b> 5.25 GHz ~ 5.32 GHz : 245.93 mW (23.91 dBm) 5.5 GHz ~ 5.72 GHz : 242.878 mW (23.85 dBm)
EUT Category	Indoor Access Point
Accessory Device	- AC Adapter x1, Brand: APD, Model: WA-42F12FU - Ethernet Cable x1 (1m, Unshielded)

Note:

1. The EUT power needs to be supplied from a power adapter, the information is as below table:

<b>AC Adapter 1</b>			
Brand	Model	Specification	The housing color
APD	WA-42F12FU	AC Input: 100-240Vac, 50/60Hz, 1.2A Max. DC Output: 12Vdc, 3.5A DC Output Cable: Unshielded, 1.5m, without core bonded Manufacturer: ASIAN POWER DEVICES INC.	Black / White

2. The EUT has three radios as following table:

Radio 1	Radio 2	Radio 3
WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz

3. Simultaneously transmission condition.

Condition	Technology		
1	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz

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

4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.



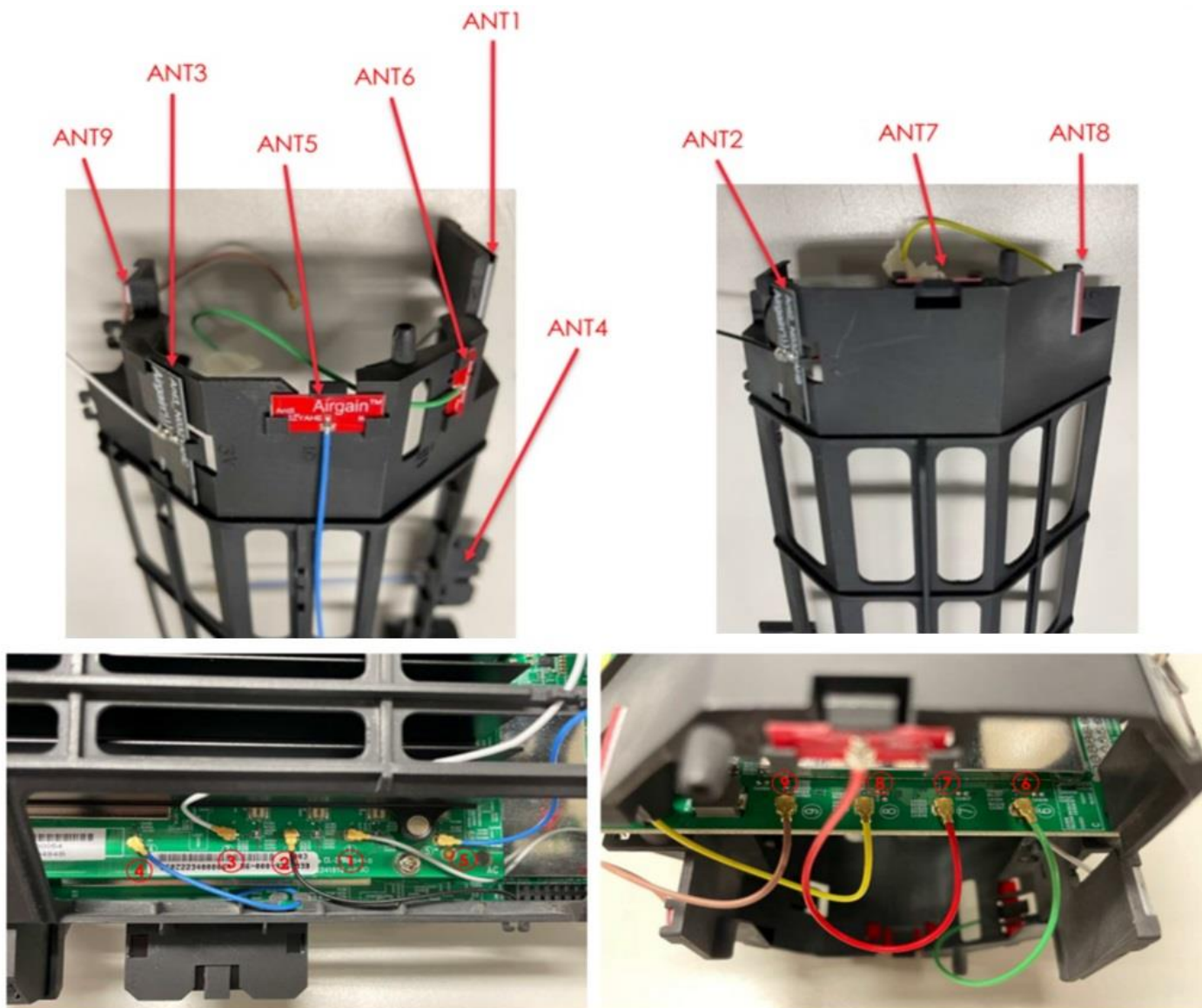
### 3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Part Number	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length
Ant1_Dual-band	2.4G Chain 2 5G Chain 2	Airgain	N03ZYAHA- PK1-G110U	3.8	2.4~2.4835GHz	Dipole	ipex(MHF)	110mm
				3.6	5.15~5.25GHz			
				4.1	5.25~5.35GHz			
				3.7	5.47~5.725GHz			
				4.2	5.725~5.85GHz			
Ant2_Dual-band	2.4G Chain 1 5G Chain 1	Airgain	N03ZYAHB- PK1-B135U	4.6	2.4~2.4835GHz	Dipole	ipex(MHF)	135mm
				5.3	5.15~5.25GHz			
				5.0	5.25~5.35GHz			
				4.9	5.47~5.725GHz			
Ant3_Dual-band	2.4G Chain 0 5G Chain 0	Airgain	N03ZYAHC- PK1-W195U	5.2	5.725~5.85GHz	Dipole	ipex(MHF)	195mm
				3.4	2.4~2.4835GHz			
				5.2	5.15~5.25GHz			
				5.3	5.25~5.35GHz			
Ant4	2.4G Chain 3	Airgain	N03ZYAHD- PK1-A90U	4.2	5.47~5.725GHz	Dipole	ipex(MHF)	90mm
				5.0	2.4~2.4835GHz			
				4.5	5.15~5.25GHz			
				4.1	5.25~5.35GHz			
Ant5_5GHz	5G Chain 3	Airgain	N02ZYAHE- PK1-A105U	4.3	5.47~5.725GHz	Dipole	ipex(MHF)	105mm
				4.6	5.725~5.85GHz			
				5.9	5.925~6.425GHz			
				5.9	6.425~6.525GHz			
Ant6_6GHz	6G Chain 3	Airgain	N06ZYAHF- PK1-E100U	5.9	6.525~6.875GHz	Dipole	ipex(MHF)	100m
				4.8	6.875~7.125GHz			
				5.9	6.425~6.525GHz			
				5.6	5.925~6.425GHz			
Ant7_6GHz	6G Chain 2	Airgain	N06ZYAHG- PK1-R95U	5.5	6.425~6.525GHz	Dipole	ipex(MHF)	95mm
				5.4	6.525~6.875GHz			
				5.7	6.875~7.125GHz			
				5.7	5.925~6.425GHz			
Ant8_6GHz	6G Chain 1	Airgain	N06ZYAHH- PK1-Y75U	5.9	6.425~6.525GHz	Dipole	ipex(MHF)	75mm
				6.0	6.525~6.875GHz			
				5.9	6.875~7.125GHz			
Ant9_6GHz	6G Chain 0	Airgain	N06ZYAHJ- PK1-P75U	4.7	5.925~6.425GHz	Dipole	ipex(MHF)	75mm
				3.7	6.425~6.525GHz			
				4.0	6.525~6.875GHz			
				4.0	6.875~7.125GHz			

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

\* Antenna port location



2.

The directional antenna gain, please refer to the following table:

Frequency Range (GHz)	Directional Antenna Gain (dBi)	Antenna Type	Antenna Connector
5.15~5.25	5.52	Dipole	ipex(MHF)
5.25~5.35	5.57		
5.47~5.725	5.43		
5.725~5.85	5.53		

Note: Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement. More detailed information, please refer to antenna specification.

3. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ac (VHT160)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE160)	4TX	4RX

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
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 the same as the 802.11ax or more lower than it and investigated worst case to representative mode in test report.

### 3.3 Channel List

#### FOR 5250 ~ 5320MHz

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

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

Channel	Frequency
58	5290 MHz

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

Channel	Frequency
50	5250 MHz

#### FOR 5500 ~ 5720MHz

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

### 3.4 Power Setting

Power Setting								
Channel	802.11a CDD	802.11ac (VHT20) CDD	Channel	802.11ac (VHT40) CDD	Channel	802.11ac (VHT80) CDD	Channel	802.11ac (VHT160) CDD
52	73	73	54	71	58	74	50	67
60	73	72	62	73	106	73	114	65
64	76	76	102	73	122	70		
100	71	73	110	71	138	72		
116	69	70	134	71				
140	72	72	142	73				
144	72	73						

Power Setting							
Channel	802.11ax (HE20) CDD	Channel	802.11ax (HE40) CDD	Channel	802.11ax (HE80) CDD	Channel	802.11ax (HE160) CDD
52	73	54	71	58	74	50	67
60	72	62	73	106	73	114	65
64	76	102	73	122	70		
100	73	110	71	138	72		
116	70	134	71				
140	72	142	73				
144	73						

Power Setting							
Channel	802.11ac (VHT20) Beamforming	Channel	802.11ac (VHT40) Beamforming	Channel	802.11ac (VHT80) Beamforming	Channel	802.11ac (VHT160) Beamforming
52	73	54	71	58	74	50	67
60	72	62	73	106	73	114	65
64	76	102	73	122	70		
100	73	110	71	138	72		
116	70	134	71				
140	72	142	73				
144	73						

Power Setting							
Channel	802.11ax (HE20) Beamforming	Channel	802.11ax (HE40) Beamforming	Channel	802.11ax (HE80) Beamforming	Channel	802.11ax (HE160) Beamforming
52	73	54	71	58	74	50	67
60	72	62	73	106	73	114	65
64	76	102	73	122	70		
100	73	110	71	138	72		
116	70	134	71				
140	72	142	73				
144	73						

### 3.5 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
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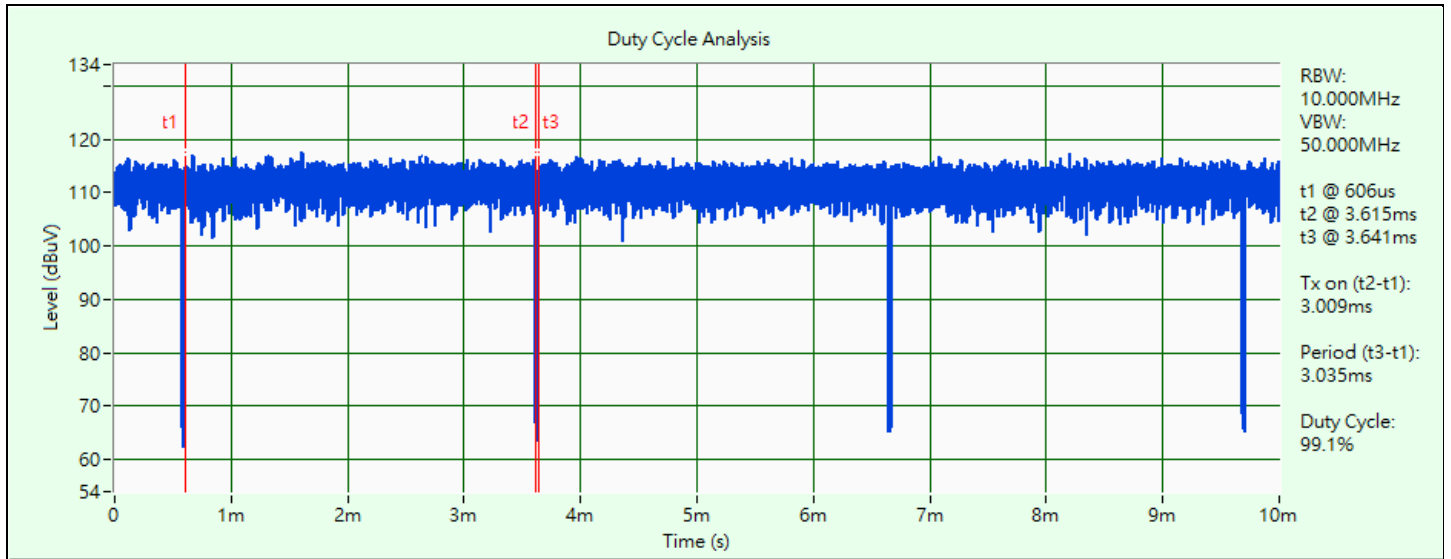
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth / Occupied Bandwidth / Power Spectral Density	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	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ac (VHT40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
	802.11ac (VHT160)	CDD & Beamforming	50, 114	BPSK	MCS0
	802.11ax (HE20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD & Beamforming	50, 114	BPSK	MCS0
6 dB Bandwidth	802.11a	CDD	144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	144	BPSK	MCS0
	802.11ax (HE40)	CDD	142	BPSK	MCS0
	802.11ax (HE80)	CDD	138	BPSK	MCS0
Frequency Stability	802.11a	-	52	un-modulation	-
AC Power Conducted Emissions	802.11ax (HE20)	CDD	52	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11ax (HE20)	CDD	52	BPSK	MCS0

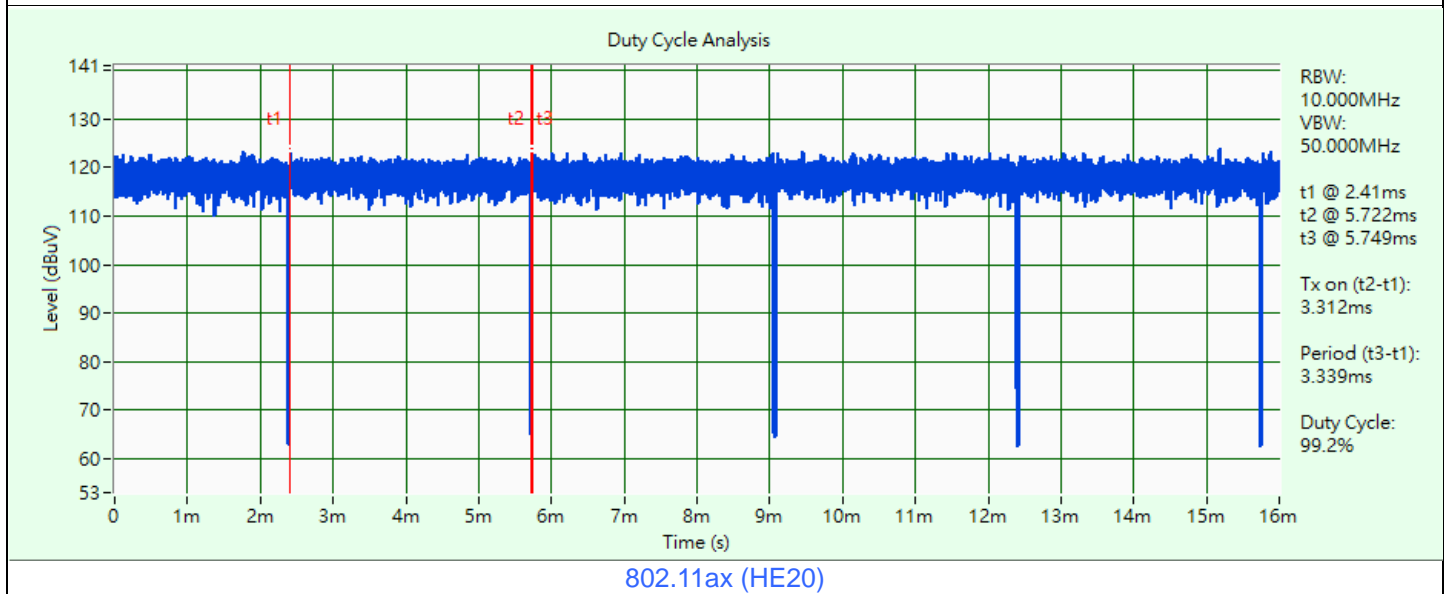
Unwanted Emissions above 1 GHz	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
Note: Partial RU (resource unit) and channel puncturing/bandwidth reduction configurations are not supported.					

### 3.6 Duty Cycle of Test Signal

- 802.11a:** Duty cycle = 3.009 ms / 3.035 ms x 100% = 99.1%
- 802.11ax (HE20):** Duty cycle = 3.312 ms / 3.339 ms x 100% = 99.2%
- 802.11ax (HE40):** Duty cycle = 3.312 ms / 3.338 ms x 100% = 99.2%
- 802.11ax (HE80):** Duty cycle = 3.167 ms / 3.193 ms x 100% = 99.2%
- 802.11ax (HE160):** Duty cycle = 2.998 ms / 3.025 ms x 100% = 99.1%

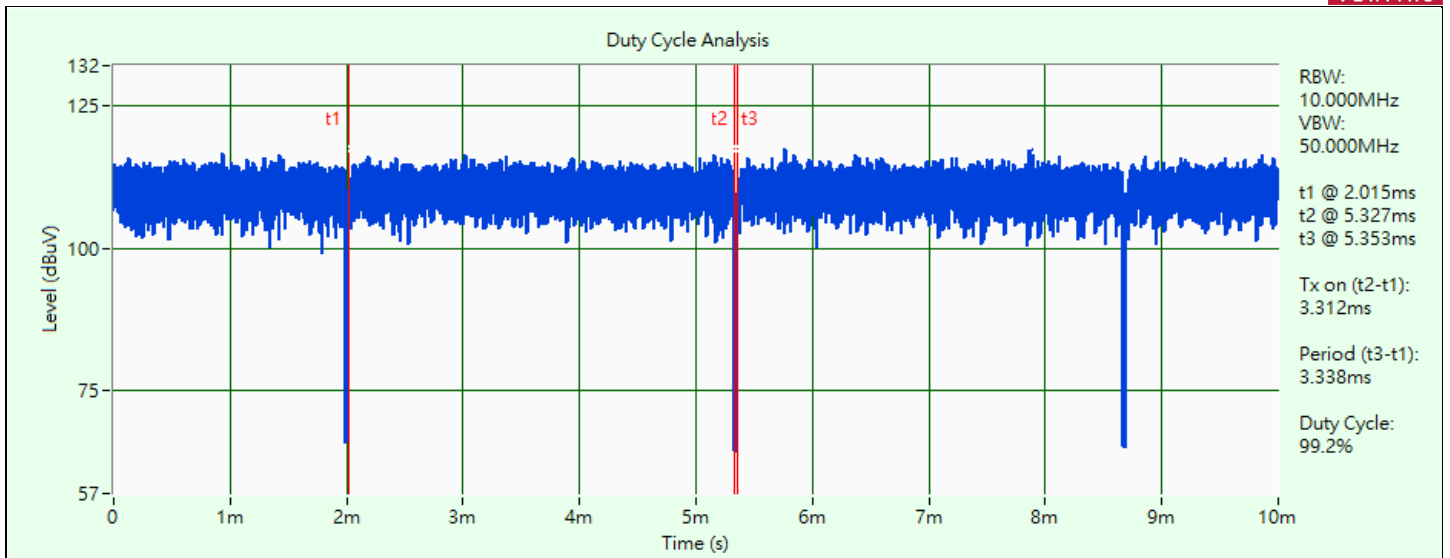


802.11a

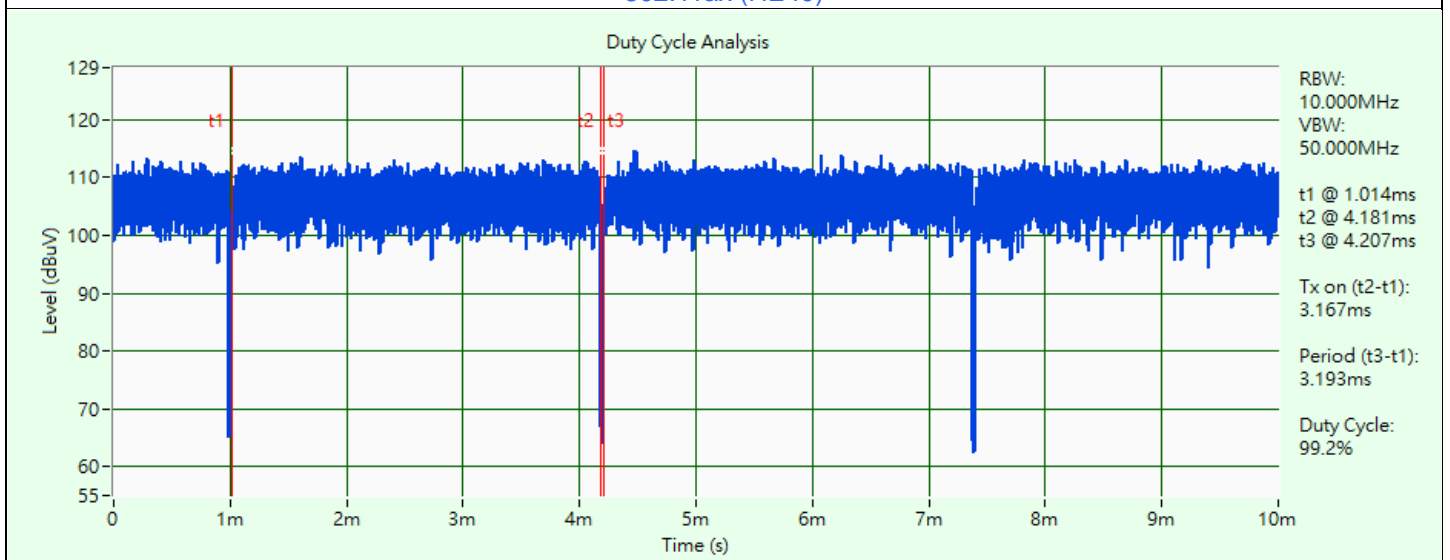


802.11ax (HE20)

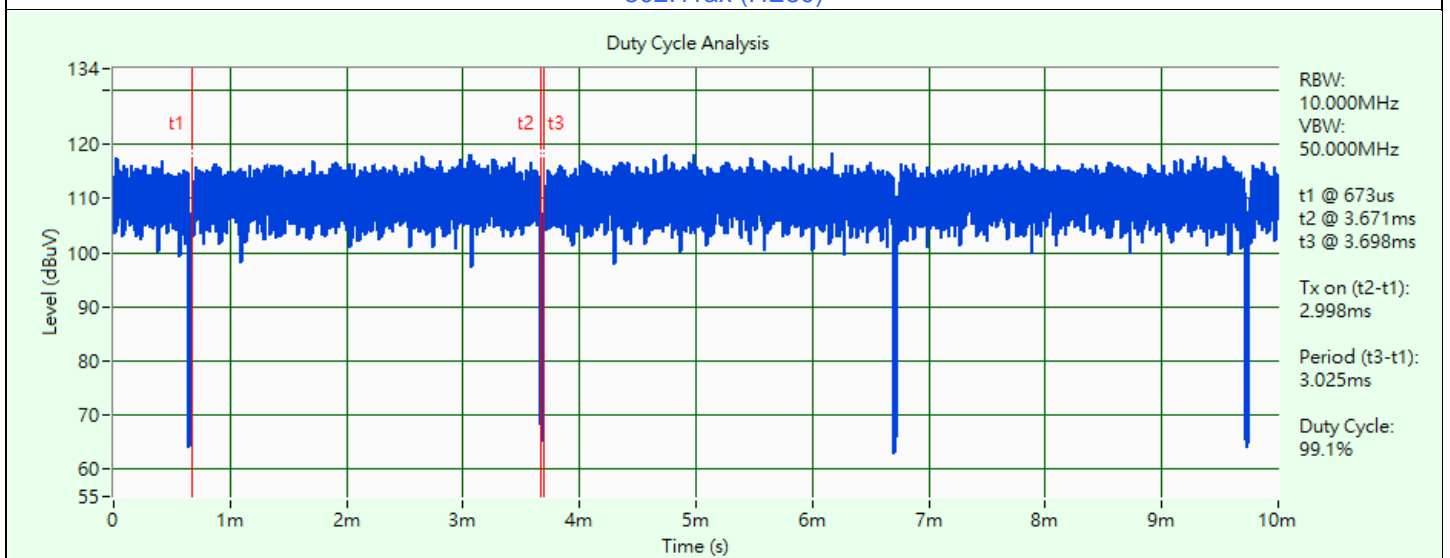




802.11ax (HE40)



802.11ax (HE80)

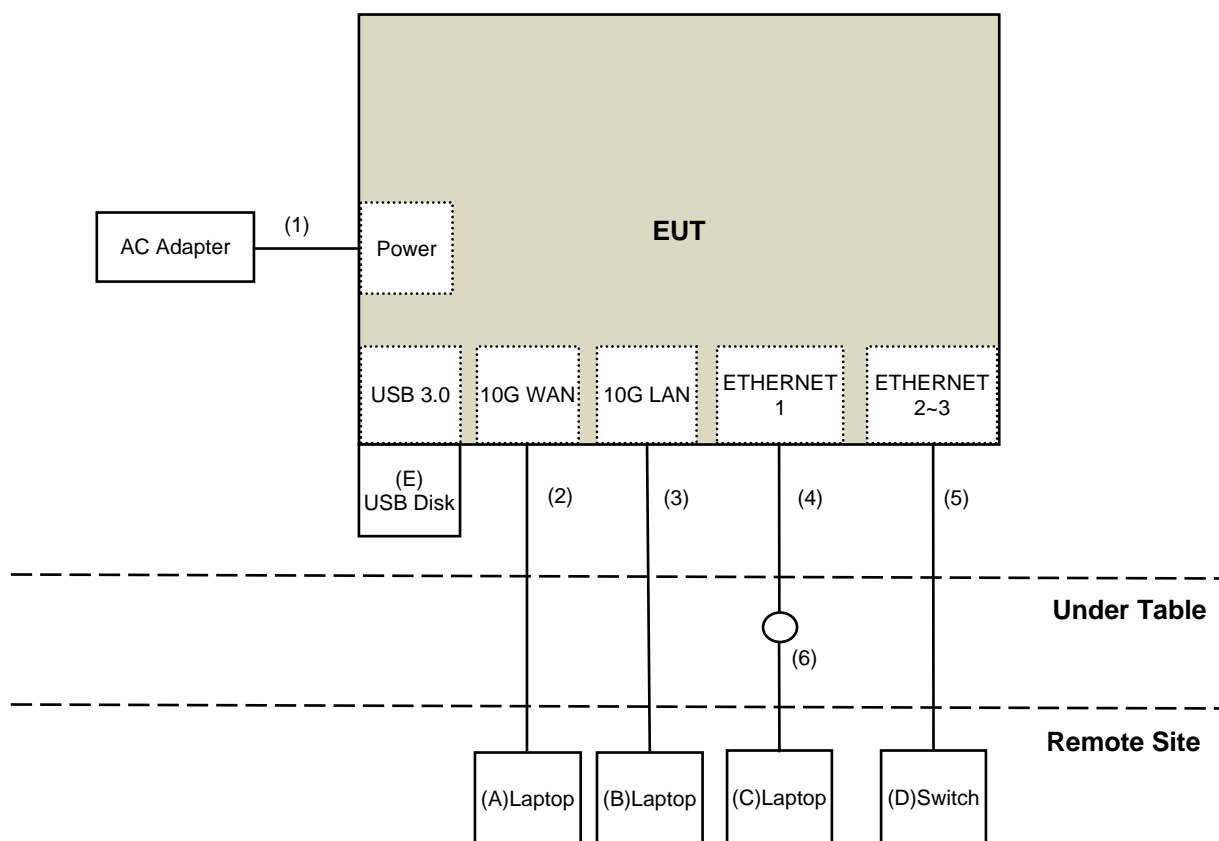


802.11ax (HE160)

### 3.7 Test Program Used and Operation Descriptions

Controlling software (accessMTool\_REL\_3\_2\_1\_3) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

### 3.8 Connection Diagram of EUT and Peripheral Devices



### 3.9 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	20U5S01X00 L14	PF-28LKK7	N/A	Provided by Lab
B	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab
C	Laptop	HP	TPN-Q186	5CD8212YYK	DoC	Provided by Lab
D	Switch	D-Link	DGS-1005D	DR8WC92000523	N/A	Provided by Lab
E	USB Disk	SanDisk	BM181225896Z	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.5	No	0	Supplied by applicant
2	RJ-45 Cable	1	10	No	0	Provided by Lab
3	RJ-45 Cable	1	10	No	0	Provided by Lab
4	Ethernet Cable	1	1	No	0	Supplied by applicant
5	RJ-45 Cable	3	10	No	0	Provided by Lab
6	RJ-45 Cable	1	10	No	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
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/1/20

### 4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Power Meter Anritsu	ML2495A	1529002	2022/6/22	2023/6/21
Pulse Power Sensor Anritsu	MA2411B	1726434	2022/6/22	2023/6/21
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/1/20

### 4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

### 4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

### 4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

#### 4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Source GOOD WILL	6905S	1991551	N/A	N/A
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2022/12/26	2023/12/25
True RMS Clamp Meter Fluke	325	31130711WS	2022/6/9	2023/6/8

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/1/20

#### 4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	N/A	EMC-01	2022/9/27	2023/9/26
Fixed attenuator STI	STI02-2200-10	005	2022/8/24	2023/8/23
LISN R&S	ESH3-Z5	848773/004	2022/10/18	2023/10/17
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2022/8/24	2023/8/23
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
TEST RECEIVER R&S	ESCS 30	847124/029	2022/10/14	2023/10/13

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2023/1/3

#### 4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bilog Antenna Schwarzbeck	VULB 9168	9168-0942	2022/10/20	2023/10/19
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-01	2022/12/28	2023/12/27
LOOP ANTENNA Electro-Metrics	EM-6879	264	2022/3/18	2023/3/17
Pre_Amplifier EMCI	EMC001340	980142	2022/6/2	2023/6/1
Pre_Amplifier(20M-3G) EMCI	EMC330N	980852	2022/3/28	2023/3/27
RF Coaxial Cable COMMATE/PEWC	8D	966-6-1	2022/4/25	2023/4/24
		966-6-2	2022/4/25	2023/4/24
		966-6-3	2022/4/25	2023/4/24
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/1/6	2023/1/5
		LOOPCAB-002	2022/12/19	2023/12/18
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver KEYSIGHT	N9038A	MY59050100	2022/6/20	2023/6/19

Notes:

1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2022/12/30

#### 4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-2035	2022/11/13	2023/11/12
	BBHA 9170	BBHA9170519	2022/11/13	2023/11/12
Pre_Amplifier EMCI	EMC12630SE	980385	2022/8/15	2023/8/14
	EMC184045SE	980387	2022/1/10	2023/1/9
			2022/12/28	2023/12/27
RF Cable EMCI	EMC104-SM-SM-1300	210205	2022/5/10	2023/5/9
RF Cable-Frequency range: 1- 40GHz EMCI	EMC102-KM-KM-1200	160924	2022/1/10	2023/1/9
			2022/12/28	2023/12/27
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2022/3/8	2023/3/7
	EMC101G-KM-KM-10000	210708	2022/11/4	2023/11/3
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver KEYSIGHT	N9038A	MY59050100	2022/6/20	2023/6/19

Notes:

1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2022/12/9 ~ 2023/1/18

## 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 $\leq$ 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  $\geq 40$  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 Frequency Stability

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

## 5.7 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.

## 5.8 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).

## 5.9 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) <sup>*1</sup>	PK: 68.2 (dBμV/m) <sup>*1</sup>
	PK: 10 (dBm/MHz) <sup>*2</sup>	PK: 105.2 (dBμV/m) <sup>*2</sup>
	PK: 15.6 (dBm/MHz) <sup>*3</sup>	PK: 110.8 (dBμV/m) <sup>*3</sup>
	PK: 27 (dBm/MHz) <sup>*4</sup>	PK: 122.2 (dBμV/m) <sup>*4</sup>

<sup>\*1</sup> beyond 75 MHz or more above of the band edge.

<sup>\*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<sup>\*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

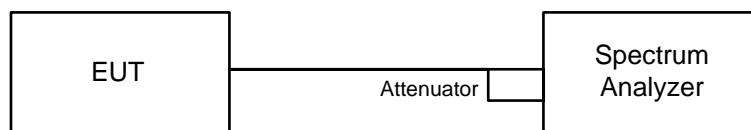
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

## 6 Test Arrangements

### 6.1 26 dB Bandwidth

#### 6.1.1 Test Setup

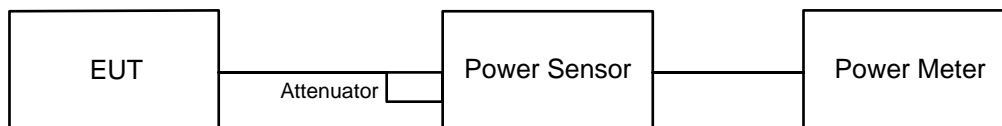


#### 6.1.2 Test Procedure

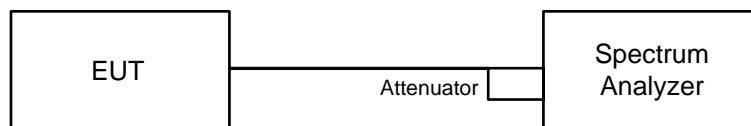
- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat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

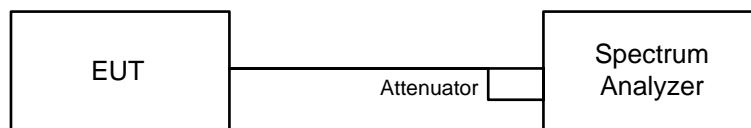
##### Method SA-1

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- c. Sweep points  $\geq$   $[2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq$  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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- Sweep points  $\geq$   $[2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq$  RBW / 2, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value

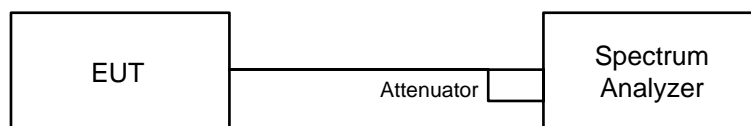
#### For specified measurement bandwidth 500 kHz:

##### Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW  $\geq$  1 MHz, Detector = RMS
- 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  $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$
- Sweep points  $\geq$   $[2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq$  RBW / 2, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value

## 6.4 6 dB Bandwidth

### 6.4.1 Test Setup

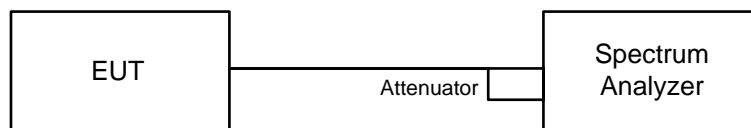


### 6.4.2 Test Procedure

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

## 6.5 Occupied Bandwidth

### 6.5.1 Test Setup

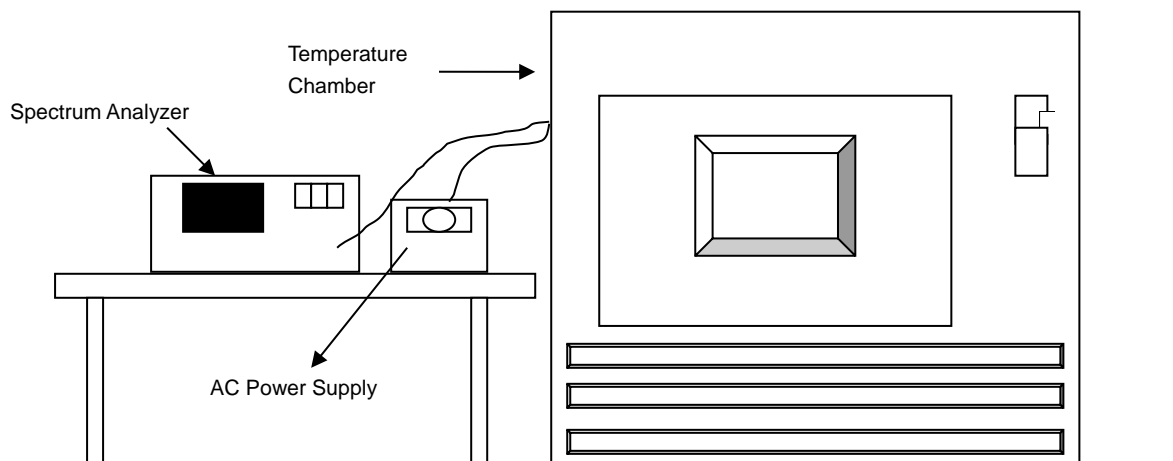


### 6.5.2 Test Procedure

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 Frequency Stability

### 6.6.1 Test Setup

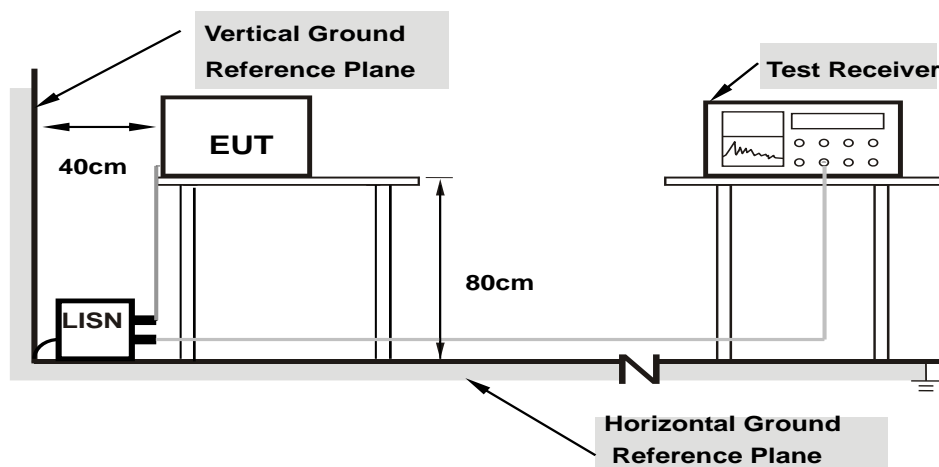


### 6.6.2 Test Procedure

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

## 6.7 AC Power Conducted Emissions

### 6.7.1 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).

### 6.7.2 Test Procedure

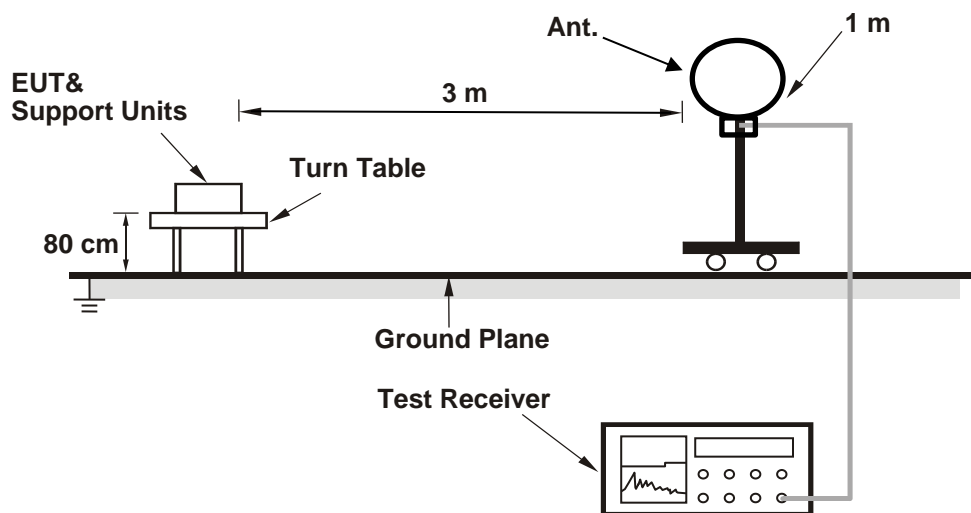
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

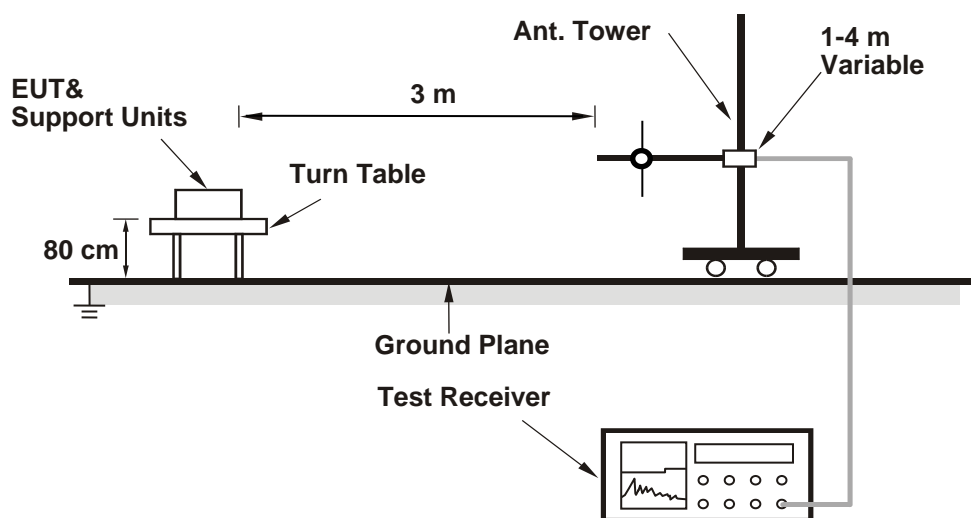
## 6.8 Unwanted Emissions below 1 GHz

### 6.8.1 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).



## 6.8.2 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

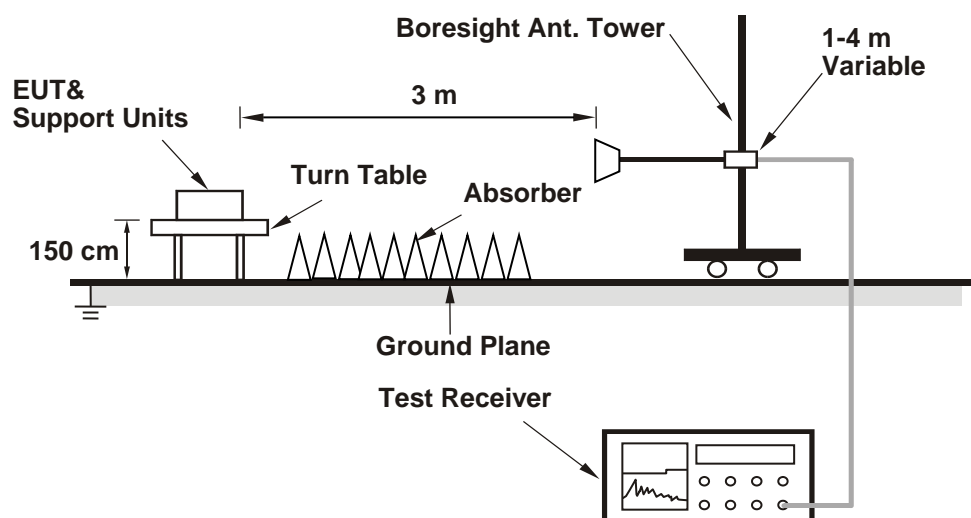
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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.

## 6.9 Unwanted Emissions above 1 GHz

### 6.9.1 Test Setup



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

### 6.9.2 Test Procedure

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

- 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.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10 Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1 GHz.
- 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:	Katina Lu
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#### 802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.80	21.77	21.68	21.95
60	5300	21.90	21.88	21.80	22.02
64	5320	22.46	23.96	23.20	22.47
100	5500	23.48	23.52	22.55	23.88
116	5580	21.85	21.92	21.85	21.62
140	5700	21.86	21.74	21.95	21.93
144 (U-NII-2C)	5720	16.06	15.95	16.00	15.82
144 (U-NII-3)	5720	5.96	5.85	6.10	5.84

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	21.68	24.36 > 24
60	5300	21.80	24.38 > 24
64	5320	22.46	24.51 > 24
100	5500	22.55	24.53 > 24
116	5580	21.62	24.34 > 24
140	5700	21.74	24.37 > 24
144 (U-NII-2C)	5720	15.82	22.99 < 24

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

**802.11ax (HE20)**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	22.01	21.68	22.11	21.96
60	5300	22.06	22.03	22.12	22.04
64	5320	25.94	26.33	25.13	22.45
100	5500	29.07	22.30	23.30	22.66
116	5580	22.03	21.98	21.97	21.96
140	5700	21.90	21.79	22.13	21.97
144 (U-NII-2C)	5720	16.03	15.85	15.96	15.81
144 (U-NII-3)	5720	6.01	5.88	5.98	5.88

Determined Output Power Limit				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)	
52	5260	21.68	24.36	> 24
60	5300	22.03	24.43	> 24
64	5320	22.45	24.51	> 24
100	5500	22.30	24.48	> 24
116	5580	21.96	24.41	> 24
140	5700	21.79	24.38	> 24
144 (U-NII-2C)	5720	15.81	22.98	< 24

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

**802.11ax (HE40)**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.84	41.80	41.80	41.93
62	5310	45.51	42.63	45.08	45.76
102	5510	46.22	43.67	44.38	43.87
110	5550	41.87	41.91	42.17	41.66
134	5670	41.73	41.79	41.90	41.90
142 (U-NII-2C)	5710	35.87	36.01	35.83	35.87
142 (U-NII-3)	5710	5.77	5.91	5.74	5.79

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	41.80	27.21 > 24
62	5310	42.63	27.29 > 24
102	5510	43.67	27.4 > 24
110	5550	41.66	27.19 > 24
134	5670	41.73	27.2 > 24
142 (U-NII-2C)	5710	35.83	26.54 > 24

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

**802.11ax (HE80)**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	86.50	84.30	86.44	84.26
106	5530	84.62	83.22	84.48	83.88
122	5610	83.11	82.68	82.88	83.33
138 (U-NII-2C)	5690	76.35	76.51	76.30	76.32
138 (U-NII-3)	5690	6.40	6.23	6.28	6.58

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	84.26	30.25 > 24
106	5530	83.22	30.2 > 24
122	5610	82.68	30.17 > 24
138 (U-NII-2C)	5690	76.30	29.82 > 24

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

**802.11ax (HE160)**

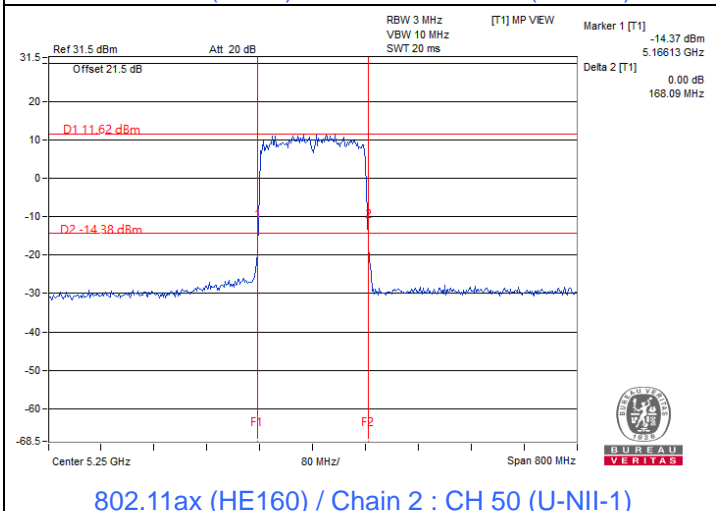
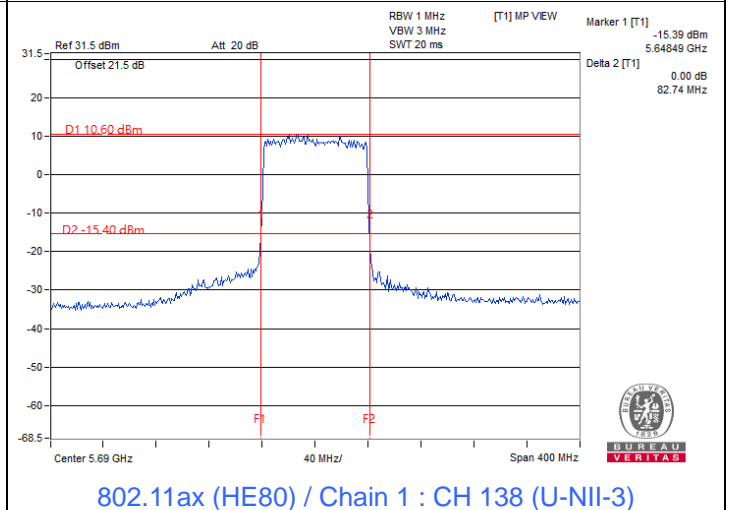
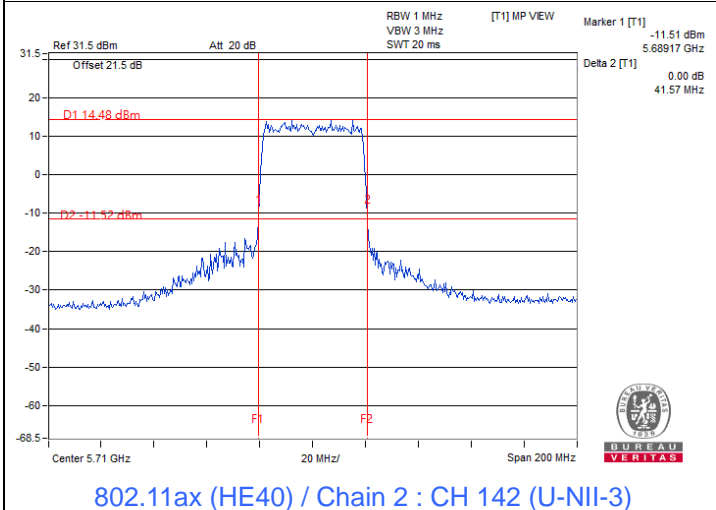
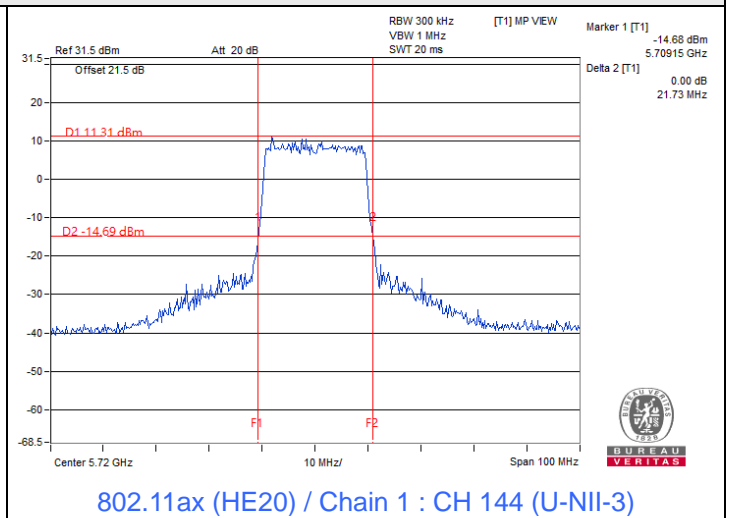
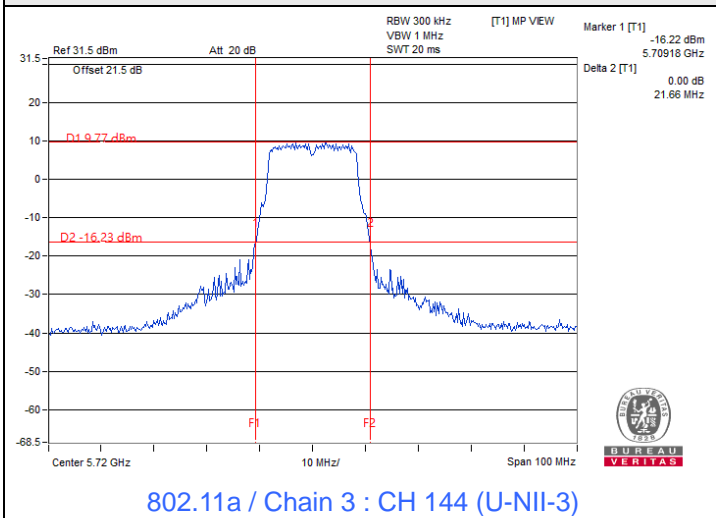
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1)	5250	84.73	83.99	83.87	84.29
50 (U-NII-2A)	5250	84.11	84.11	84.22	84.27
114	5570	168.70	168.30	168.40	168.69

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
50 (U-NII-2A)	5250	84.11	30.24 > 24
114	5570	168.30	33.26 > 24

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



### Spectrum Plot of Minimum Value



#### 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

## 7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Katina Lu
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### 802.11a CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.46	17.71	17.59	18.50	242.945	23.86	24	Pass
60	5300	17.42	17.51	17.24	18.64	237.652	23.76	24	Pass
64	5320	17.44	17.42	17.22	18.54	234.843	23.71	24	Pass
100	5500	16.72	17.31	16.63	17.80	207.098	23.16	24	Pass
116	5580	16.65	17.14	17.04	17.70	207.466	23.17	24	Pass
140	5700	17.01	16.87	16.95	17.71	207.44	23.17	24	Pass
*144 (U-NII-2C)	5720	15.58	15.77	15.50	16.88	158.132	21.99	22.99	Pass
*144 (U-NII-3)	5720	9.35	9.61	9.47	10.73	38.433	15.85	30	Pass

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.80	17.58	17.37	18.59	231.995	23.65	24	Pass
60	5300	16.94	17.44	17.25	18.19	223.899	23.50	24	Pass
64	5320	17.02	17.58	17.19	18.26	226.978	23.56	24	Pass
100	5500	17.00	17.39	17.54	17.85	222.655	23.48	24	Pass
116	5580	16.54	17.40	17.55	18.08	221.19	23.45	24	Pass
140	5700	17.42	16.94	17.37	18.04	222.894	23.48	24	Pass
*144 (U-NII-2C)	5720	16.03	15.67	15.84	17.05	166.054	22.20	22.98	Pass
*144 (U-NII-3)	5720	10.69	10.36	10.54	11.77	48.942	16.90	30	Pass

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.



### 802.11ac (VHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.48	17.26	16.83	18.48	227.851	23.58	24	Pass
62	5310	17.17	17.20	17.17	18.37	225.427	23.53	24	Pass
102	5510	17.27	17.13	16.85	18.51	224.35	23.51	24	Pass
110	5550	17.39	17.47	16.71	18.26	224.545	23.51	24	Pass
134	5670	17.29	17.44	17.11	18.39	229.471	23.61	24	Pass
*142 (U-NII-2C)	5710	16.75	16.96	16.93	17.84	207.105	23.16	24	Pass
*142 (U-NII-3)	5710	6.86	7.11	7.10	8.08	21.549	13.33	30	Pass

**Notes:**

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT80) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.37	17.35	16.70	18.17	221.289	23.45	24	Pass
106	5530	16.72	17.32	16.98	18.18	216.595	23.36	24	Pass
122	5610	17.12	17.60	16.71	18.35	224.339	23.51	24	Pass
*138 (U-NII-2C)	5690	16.58	16.96	16.65	17.81	201.791	23.05	24	Pass
*138 (U-NII-3)	5690	2.95	3.28	3.05	4.31	8.817	9.45	30	Pass

**Notes:**

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT160) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.51	13.41	12.92	14.35	91.182	19.60	30	Pass
*50 (U-NII-2A)	5250	13.57	13.55	13.05	14.64	94.688	19.76	24	Pass
114	5570	16.04	15.65	15.95	16.54	161.344	22.08	24	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.01	17.81	17.65	18.87	245.93	23.91	24	Pass
60	5300	17.24	17.72	17.46	18.46	237.987	23.77	24	Pass
64	5320	17.31	17.81	17.40	18.56	240.955	23.82	24	Pass
100	5500	17.26	17.68	17.78	18.12	236.667	23.74	24	Pass
116	5580	16.80	17.62	17.75	18.35	233.63	23.69	24	Pass
140	5700	17.63	17.21	17.59	18.33	236.033	23.73	24	Pass
*144 (U-NII-2C)	5720	16.03	15.67	15.84	17.05	166.054	22.20	22.98	Pass
*144 (U-NII-3)	5720	10.69	10.36	10.54	11.77	48.942	16.90	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the directional gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.2 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.69	17.53	17.12	18.74	241.713	23.83	24	Pass
62	5310	17.46	17.43	17.44	18.66	239.968	23.80	24	Pass
102	5510	17.52	17.40	17.10	18.73	237.379	23.75	24	Pass
110	5550	17.63	17.72	16.93	18.51	237.374	23.75	24	Pass
134	5670	17.51	17.72	17.33	18.65	242.878	23.85	24	Pass
*142 (U-NII-2C)	5710	16.75	16.96	16.93	17.84	207.105	23.16	24	Pass
*142 (U-NII-3)	5710	6.86	7.11	7.10	8.08	21.549	13.33	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.63	17.57	17.00	18.43	234.872	23.71	24	Pass
106	5530	16.96	17.57	17.22	18.40	228.713	23.59	24	Pass
122	5610	17.33	17.80	16.99	18.59	236.612	23.74	24	Pass
*138 (U-NII-2C)	5690	16.58	16.96	16.65	17.81	201.791	23.05	24	Pass
*138 (U-NII-3)	5690	2.95	3.28	3.05	4.31	8.817	9.45	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.
- 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) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.51	13.41	12.92	14.35	91.182	19.60	30	Pass
*50 (U-NII-2A)	5250	13.57	13.55	13.05	14.64	94.688	19.76	24	Pass
114	5570	16.26	15.88	16.16	16.76	169.722	22.30	24	Pass

**Notes:**

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 5.3 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.9 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	16.80	17.58	17.37	18.59	231.995	23.65	24	Pass
60	5300	16.94	17.44	17.25	18.19	223.899	23.50	24	Pass
64	5320	17.02	17.58	17.19	18.26	226.978	23.56	24	Pass
100	5500	17.00	17.39	17.54	17.85	222.655	23.48	24	Pass
116	5580	16.54	17.40	17.55	18.08	221.19	23.45	24	Pass
140	5700	17.42	16.94	17.37	18.04	222.894	23.48	24	Pass
*144 (U-NII-2C)	5720	16.03	15.67	15.84	17.05	166.054	22.20	22.98	Pass
*144 (U-NII-3)	5720	10.69	10.36	10.54	11.77	48.942	16.90	30	Pass

**Notes:**

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.48	17.26	16.83	18.48	227.851	23.58	24	Pass
62	5310	17.17	17.20	17.17	18.37	225.427	23.53	24	Pass
102	5510	17.27	17.13	16.85	18.51	224.35	23.51	24	Pass
110	5550	17.39	17.47	16.71	18.26	224.545	23.51	24	Pass
134	5670	17.29	17.44	17.11	18.39	229.471	23.61	24	Pass
*142 (U-NII-2C)	5710	16.75	16.96	16.93	17.84	207.105	23.16	24	Pass
*142 (U-NII-3)	5710	6.86	7.11	7.10	8.08	21.549	13.33	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.37	17.35	16.70	18.17	221.289	23.45	24	Pass
106	5530	16.72	17.32	16.98	18.18	216.595	23.36	24	Pass
122	5610	17.12	17.60	16.71	18.35	224.339	23.51	24	Pass
*138 (U-NII-2C)	5690	16.58	16.96	16.65	17.81	201.791	23.05	24	Pass
*138 (U-NII-3)	5690	2.95	3.28	3.05	4.31	8.817	9.45	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.51	13.41	12.92	14.35	91.182	19.60	30	Pass
*50 (U-NII-2A)	5250	13.57	13.55	13.05	14.64	94.688	19.76	24	Pass
114	5570	16.04	15.65	15.95	16.54	161.344	22.08	24	Pass

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-1, the directional gain is 5.52 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	17.01	17.81	17.65	18.87	245.93	23.91	24	Pass
60	5300	17.24	17.72	17.46	18.46	237.987	23.77	24	Pass
64	5320	17.31	17.81	17.40	18.56	240.955	23.82	24	Pass
100	5500	17.26	17.68	17.78	18.12	236.667	23.74	24	Pass
116	5580	16.80	17.62	17.75	18.35	233.63	23.69	24	Pass
140	5700	17.63	17.21	17.59	18.33	236.033	23.73	24	Pass
*144 (U-NII-2C)	5720	16.03	15.67	15.84	17.05	166.054	22.20	22.98	Pass
*144 (U-NII-3)	5720	10.69	10.36	10.54	11.77	48.942	16.90	30	Pass

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 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	Chain 3				
54	5270	17.69	17.53	17.12	18.74	241.713	23.83	24	Pass
62	5310	17.46	17.43	17.44	18.66	239.968	23.80	24	Pass
102	5510	17.52	17.40	17.10	18.73	237.379	23.75	24	Pass
110	5550	17.63	17.72	16.93	18.51	237.374	23.75	24	Pass
134	5670	17.51	17.72	17.33	18.65	242.878	23.85	24	Pass
*142 (U-NII-2C)	5710	16.75	16.96	16.93	17.84	207.105	23.16	24	Pass
*142 (U-NII-3)	5710	6.86	7.11	7.10	8.08	21.549	13.33	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 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	Chain 3				
58	5290	17.63	17.57	17.00	18.43	234.872	23.71	24	Pass
106	5530	16.96	17.57	17.22	18.40	228.713	23.59	24	Pass
122	5610	17.33	17.80	16.99	18.59	236.612	23.74	24	Pass
*138 (U-NII-2C)	5690	16.58	16.96	16.65	17.81	201.791	23.05	24	Pass
*138 (U-NII-3)	5690	2.95	3.28	3.05	4.31	8.817	9.45	30	Pass

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.53 dBi < 6 dBi, so the output power limit shall not be reduced.

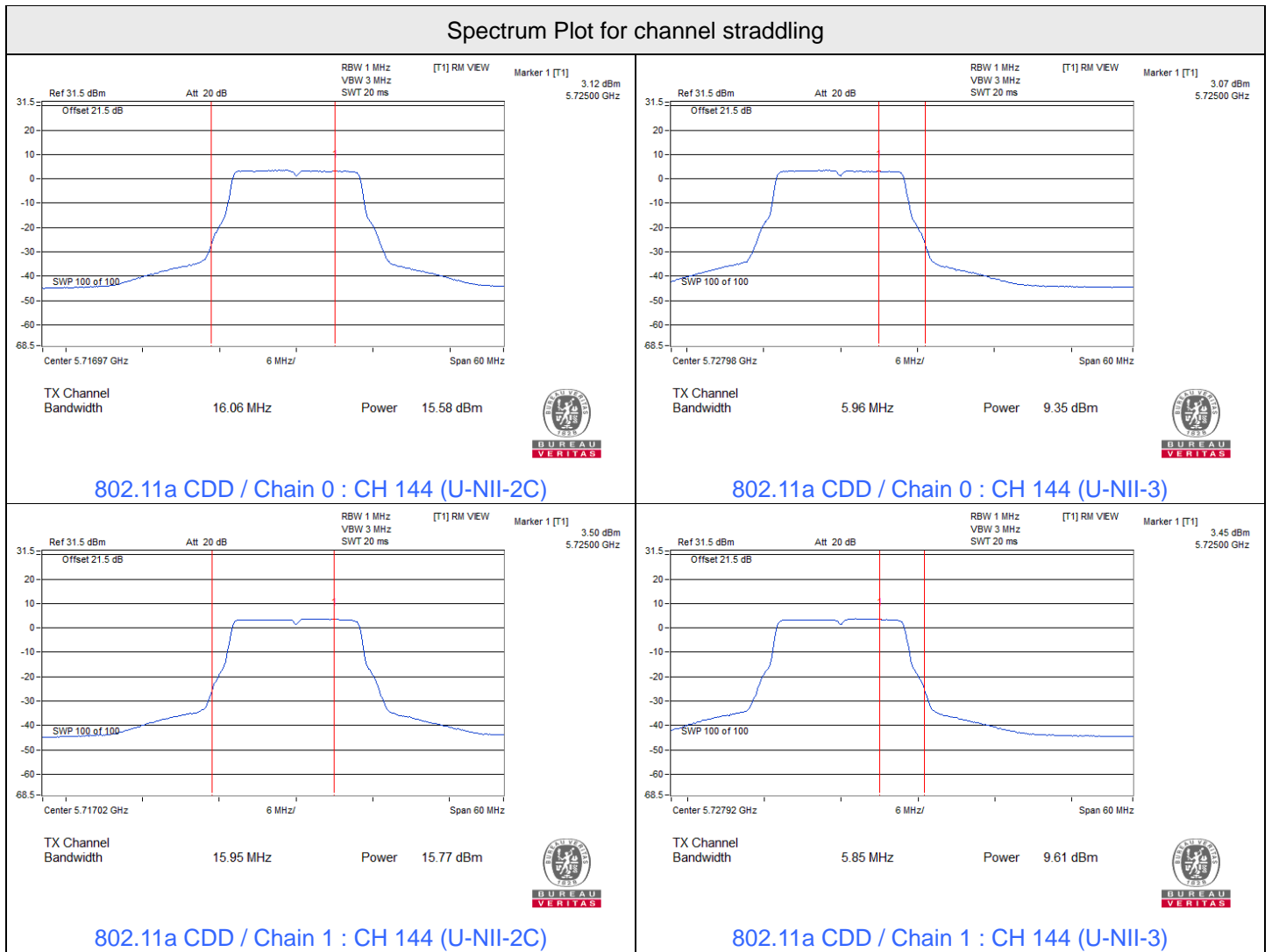


### 802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.51	13.41	12.92	14.35	91.182	19.60	30	Pass
*50 (U-NII-2A)	5250	13.57	13.55	13.05	14.64	94.688	19.76	24	Pass
114	5570	16.26	15.88	16.16	16.76	169.722	22.30	24	Pass

Notes:

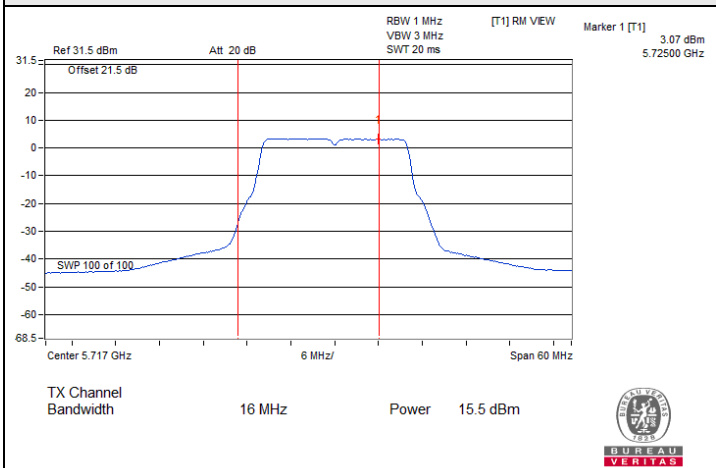
- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-1, the directional gain is 5.52 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the output power limit shall not be reduced.



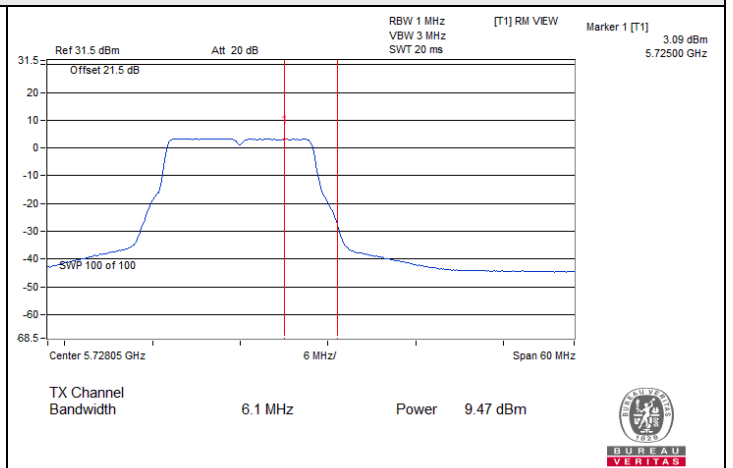




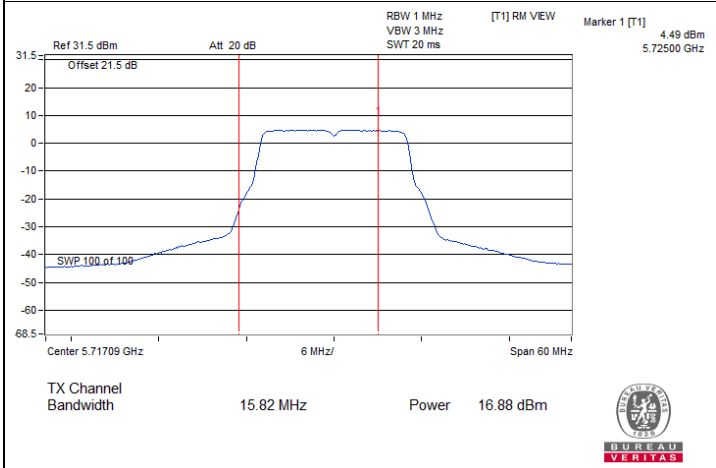
### Spectrum Plot for channel straddling



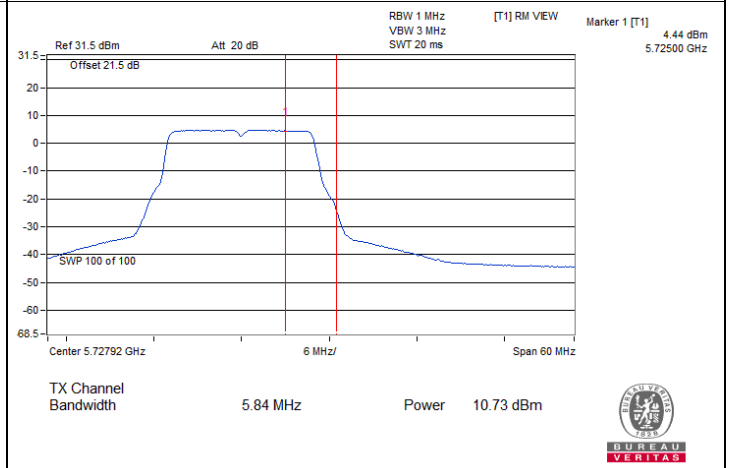
802.11a CDD / Chain 2 : CH 144 (U-NII-2C)



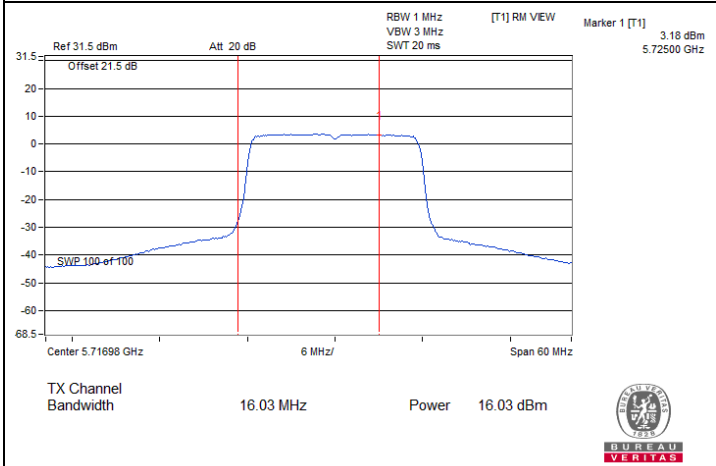
802.11a CDD / Chain 2 : CH 144 (U-NII-3)



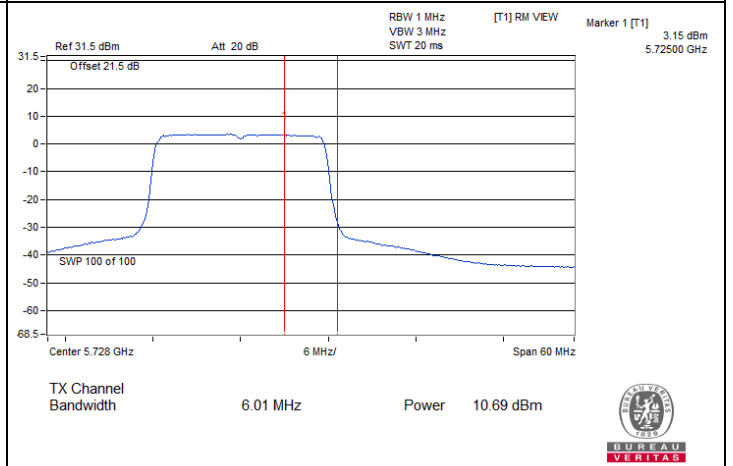
802.11a CDD / Chain 3 : CH 144 (U-NII-2C)



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



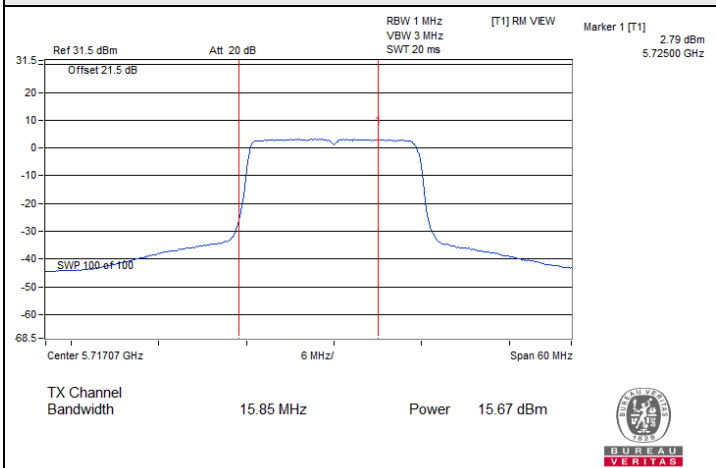
802.11ac (VHT20) CDD / Chain 0 : CH 144 (U-NII-2C)



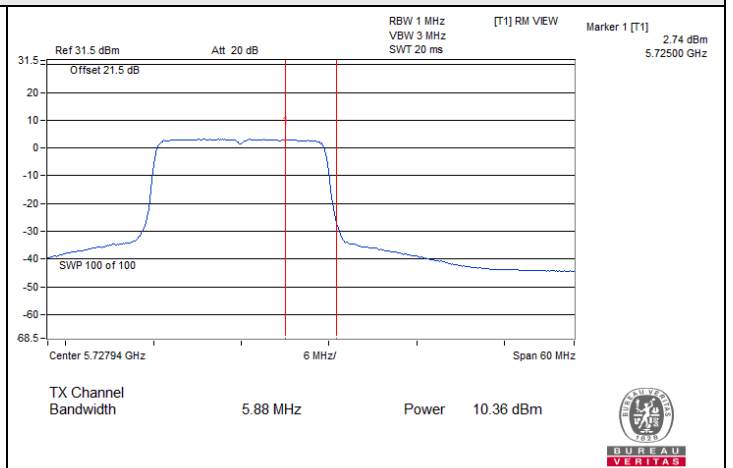
802.11ac (VHT20) CDD / Chain 0 : CH 144 (U-NII-3)



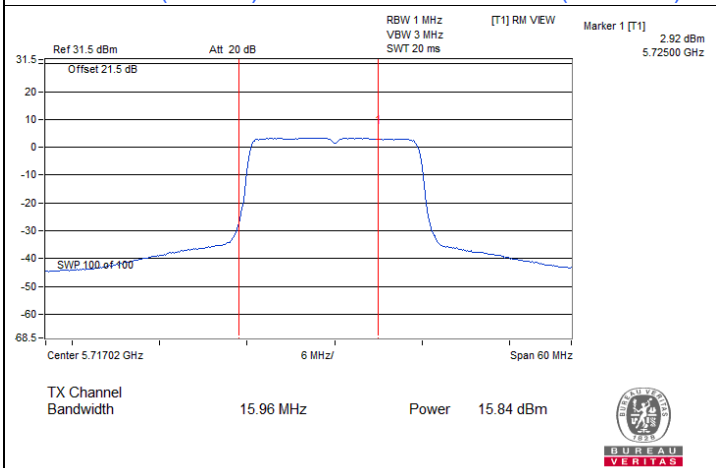
### Spectrum Plot for channel straddling



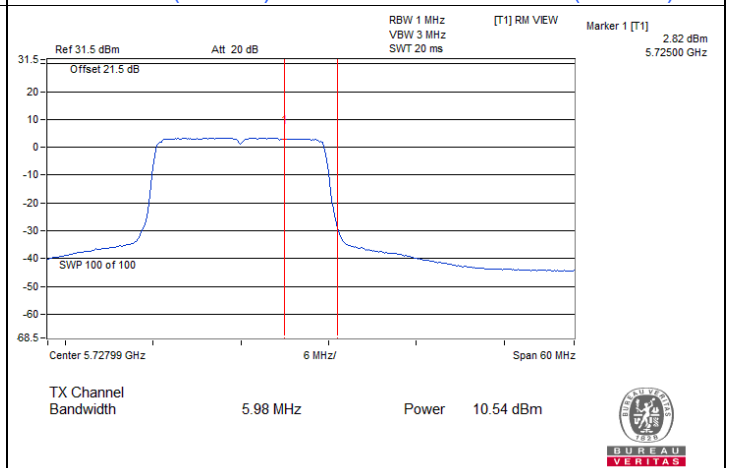
802.11ac (VHT20) CDD / Chain 1 : CH 144 (U-NII-2C)



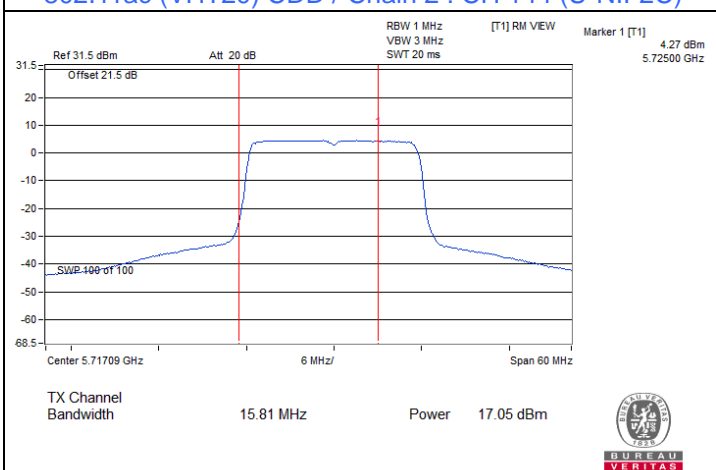
802.11ac (VHT20) CDD / Chain 1 : CH 144 (U-NII-3)



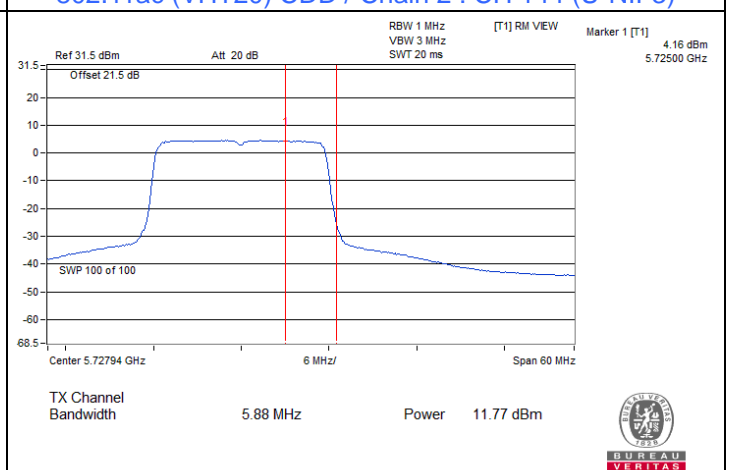
802.11ac (VHT20) CDD / Chain 2 : CH 144 (U-NII-2C)



802.11ac (VHT20) CDD / Chain 2 : CH 144 (U-NII-3)



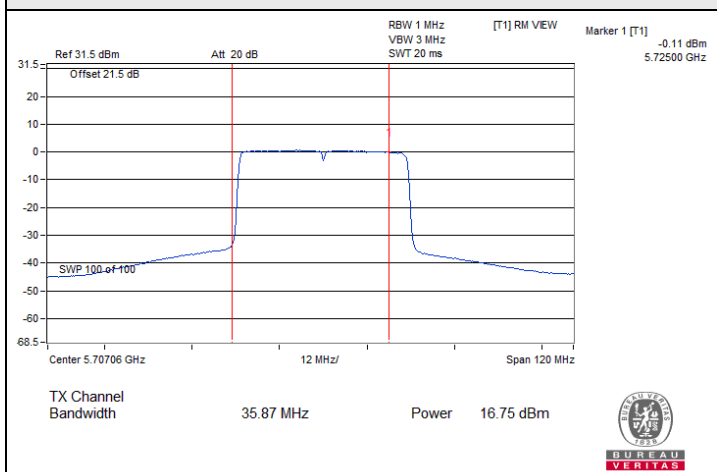
802.11ac (VHT20) CDD / Chain 3 : CH 144 (U-NII-2C)



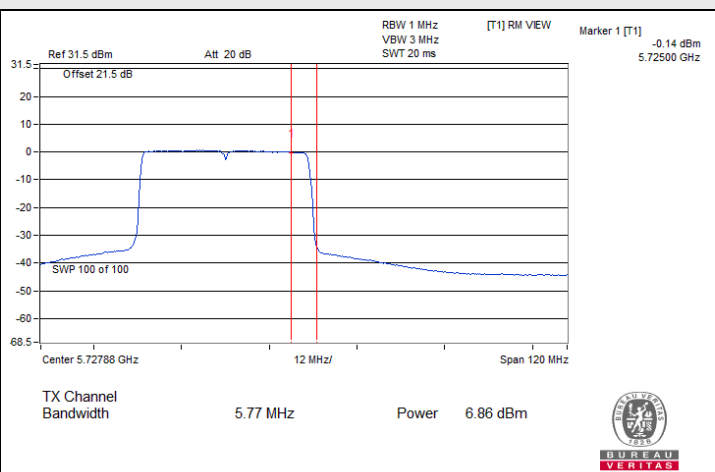
802.11ac (VHT20) CDD / Chain 3 : CH 144 (U-NII-3)



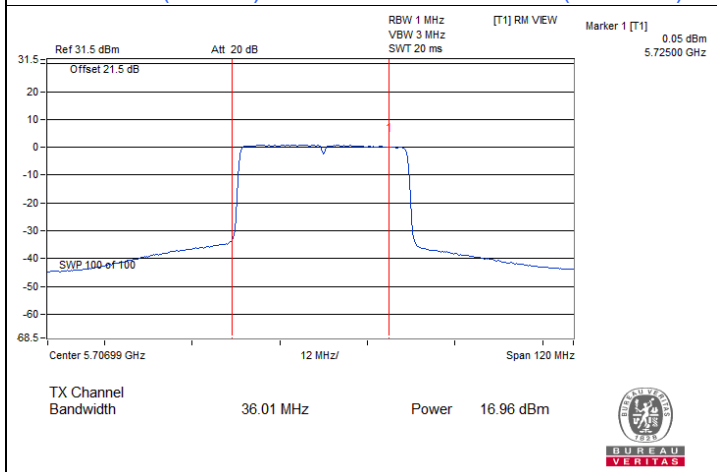
### Spectrum Plot for channel straddling



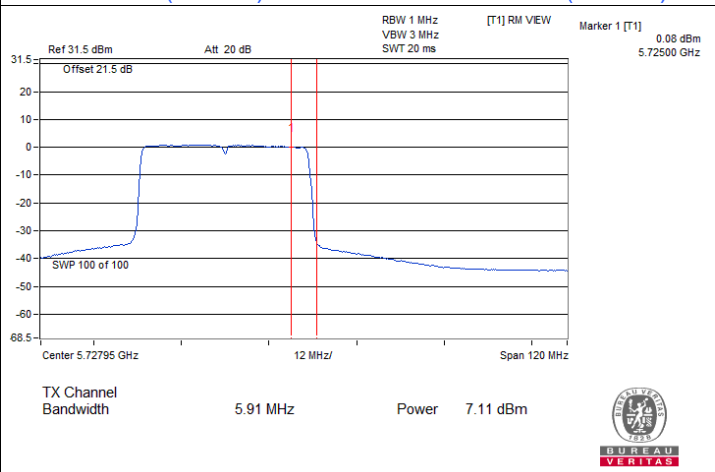
802.11ac (VHT40) CDD / Chain 0 : CH 142 (U-NII-2C)



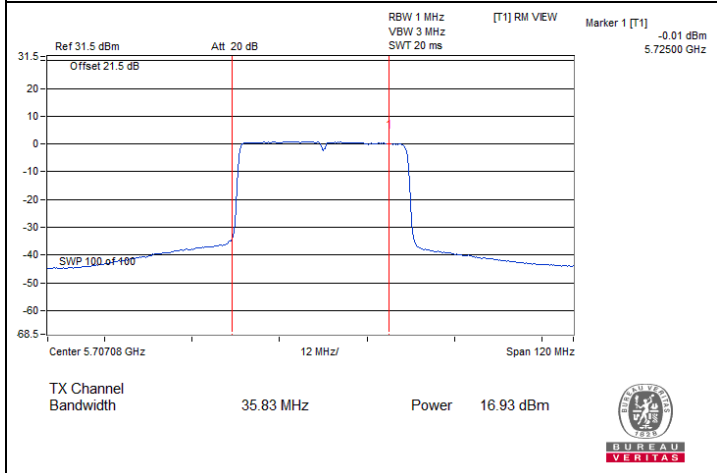
802.11ac (VHT40) CDD / Chain 0 : CH 142 (U-NII-3)



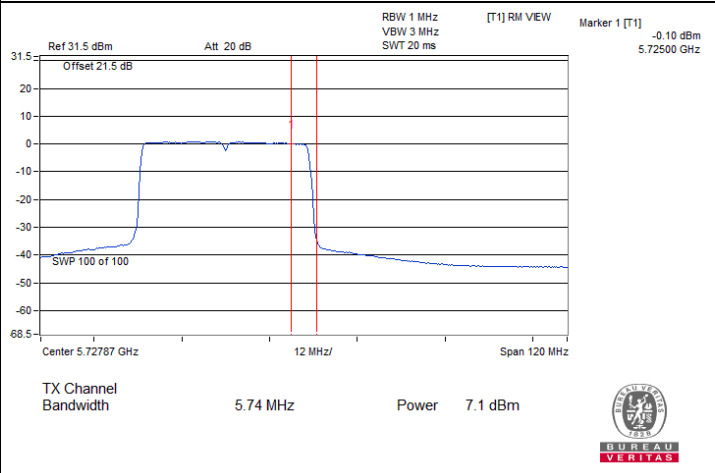
802.11ac (VHT40) CDD / Chain 1 : CH 142 (U-NII-2C)



802.11ac (VHT40) CDD / Chain 1 : CH 142 (U-NII-3)

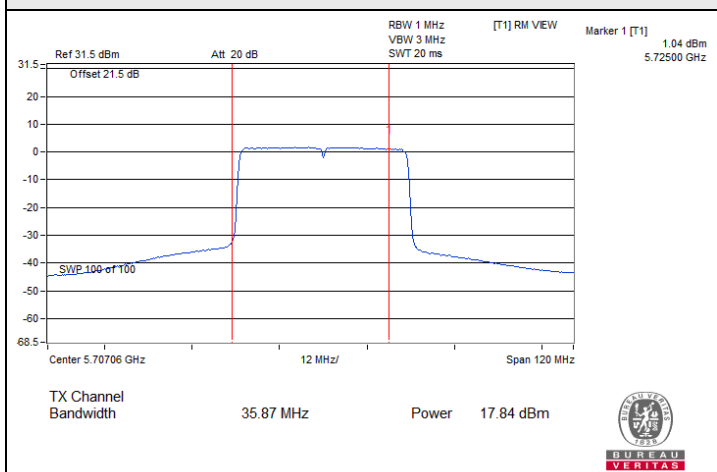


802.11ac (VHT40) CDD / Chain 2 : CH 142 (U-NII-2C)

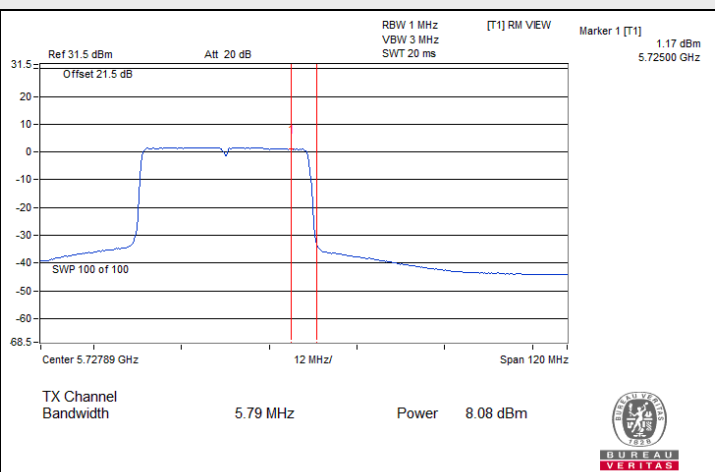


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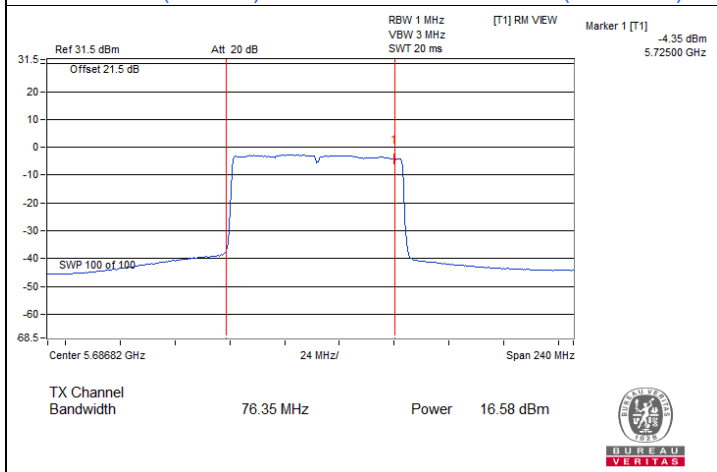
### Spectrum Plot for channel straddling



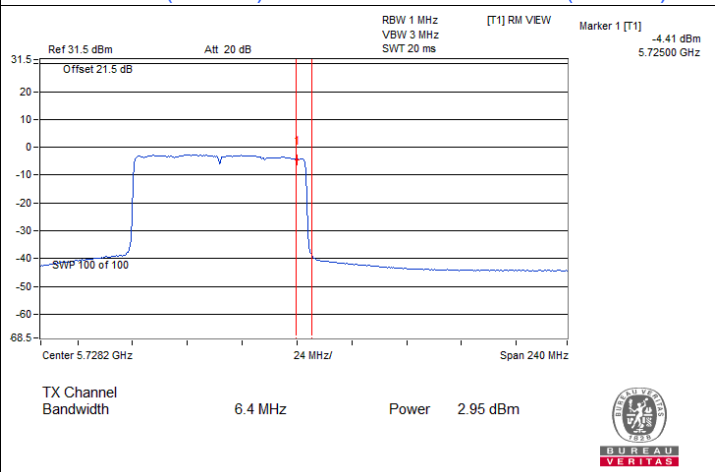
802.11ac (VHT40) CDD / Chain 3 : CH 142 (U-NII-2C)



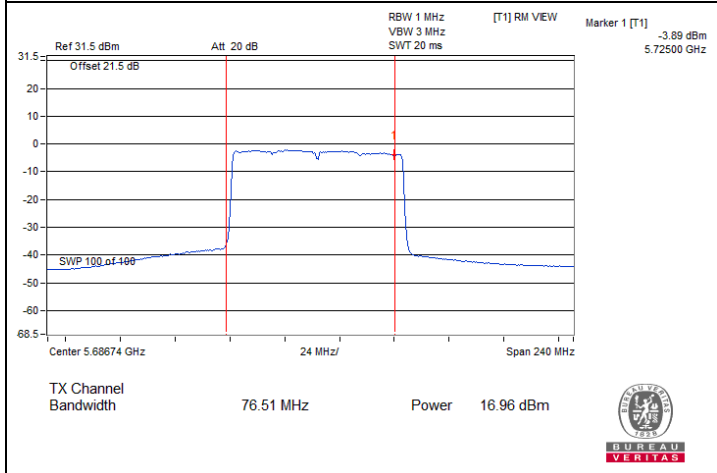
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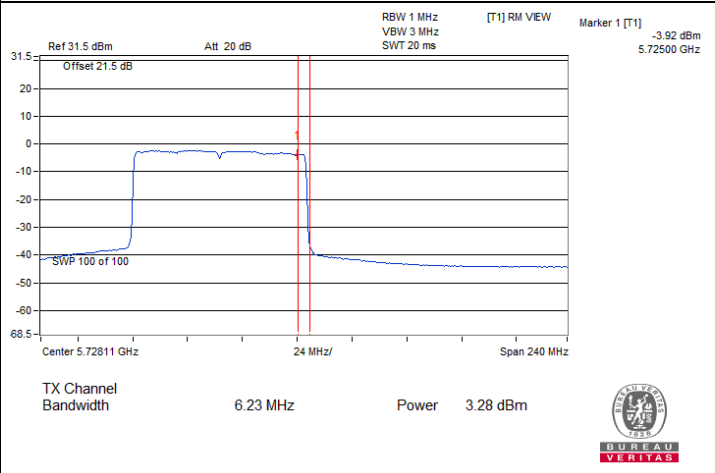
802.11ac (VHT80) CDD / Chain 0 : CH 138 (U-NII-2C)



802.11ac (VHT80) CDD / Chain 0 : CH 138 (U-NII-3)



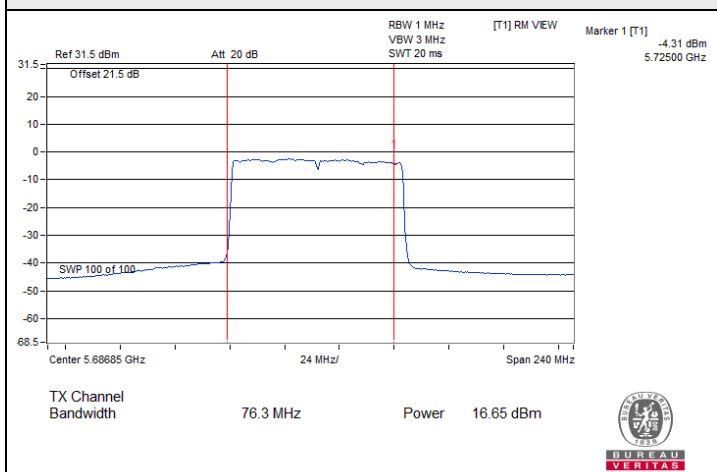
802.11ac (VHT80) CDD / Chain 1 : CH 138 (U-NII-2C)



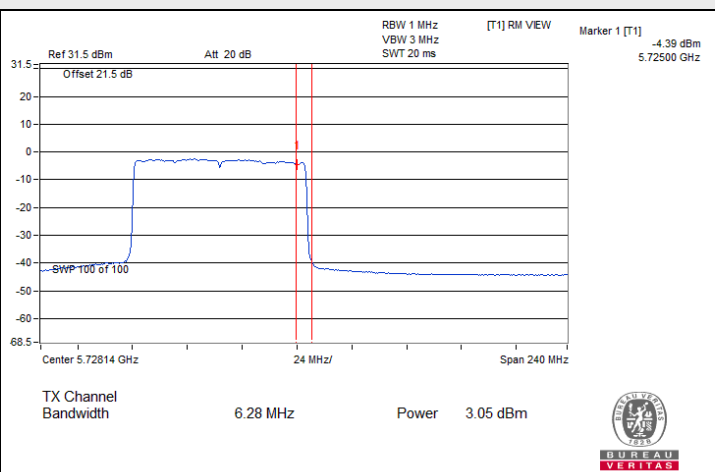
802.11ac (VHT80) CDD / Chain 1 : CH 138 (U-NII-3)



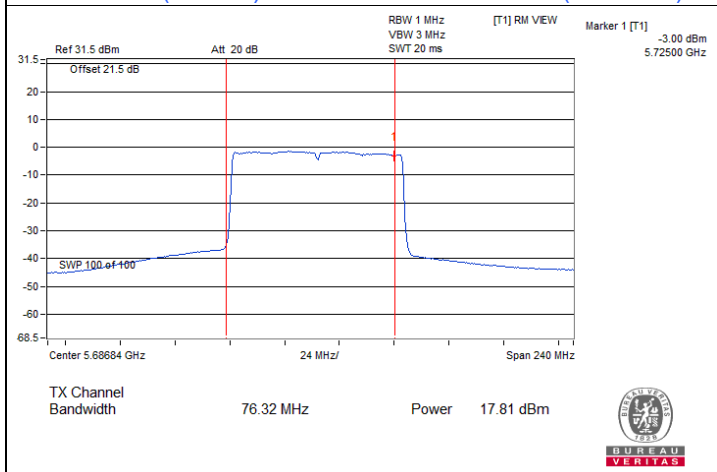
### Spectrum Plot for channel straddling



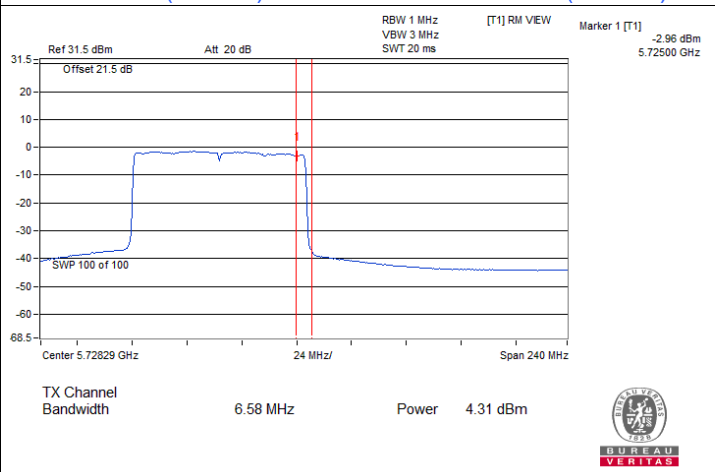
802.11ac (VHT80) CDD / Chain 2 : CH 138 (U-NII-2C)



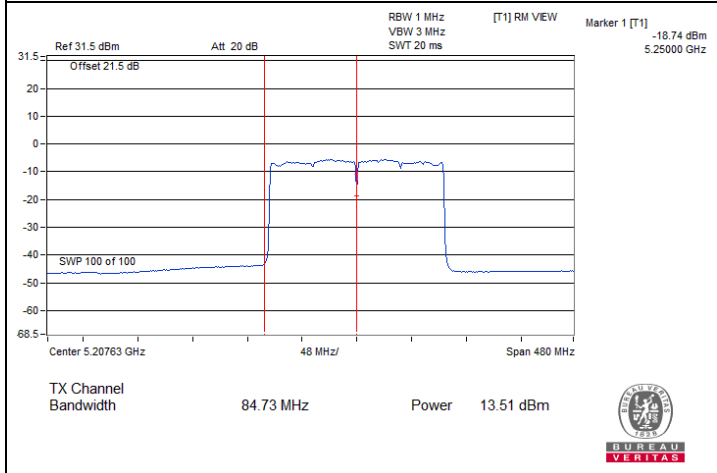
802.11ac (VHT80) CDD / Chain 2 : CH 138 (U-NII-3)



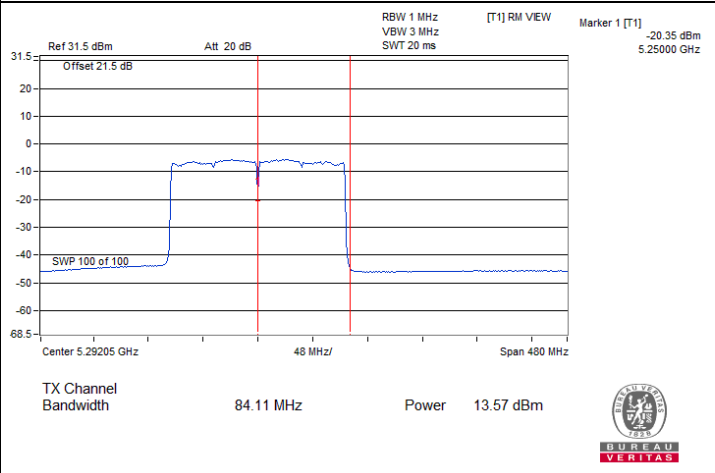
802.11ac (VHT80) CDD / Chain 3 : CH 138 (U-NII-2C)



802.11ac (VHT80) CDD / Chain 3 : CH 138 (U-NII-3)

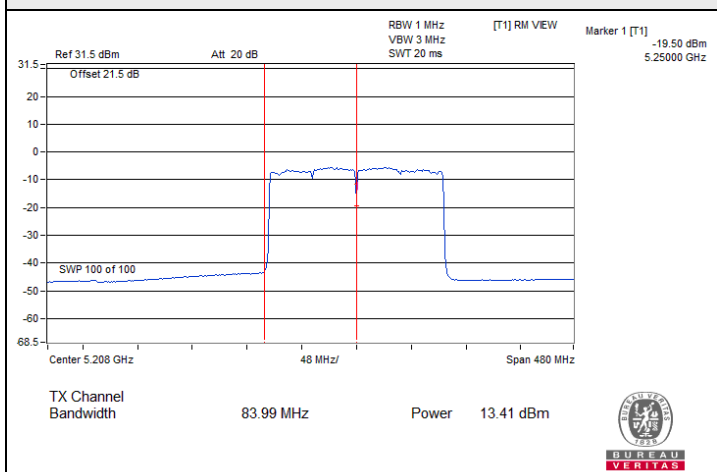


802.11ac (VHT160) CDD / Chain 0 : CH 50 (U-NII-1)

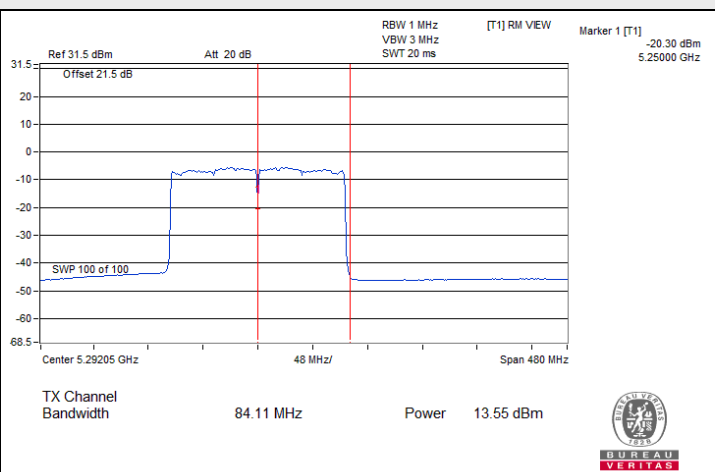


802.11ac (VHT160) CDD / Chain 0 : CH 50 (U-NII-2A)

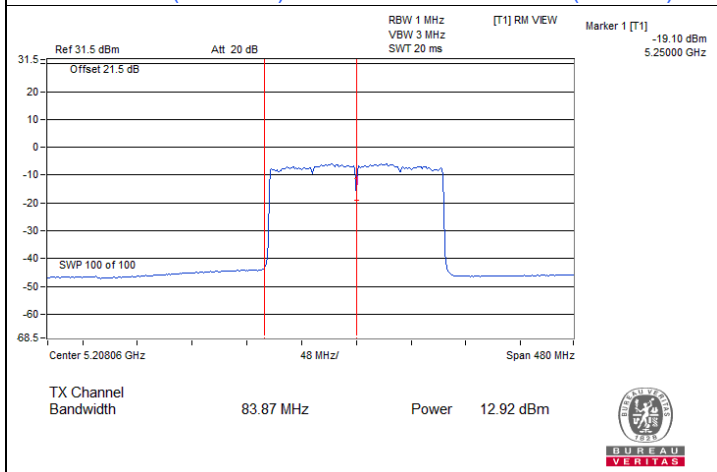
### Spectrum Plot for channel straddling



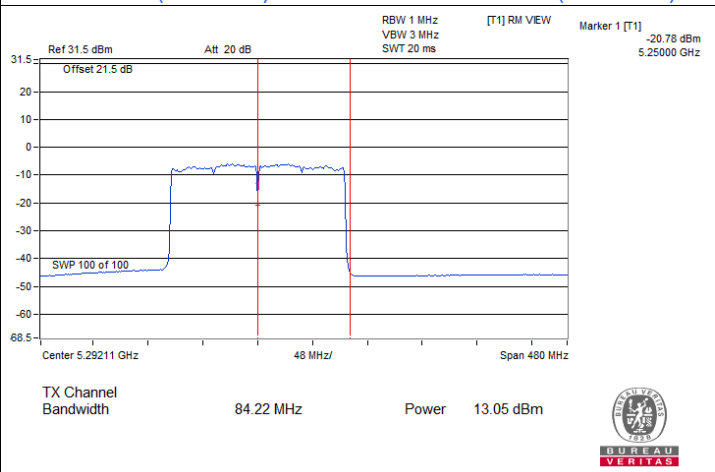
802.11ac (VHT160) CDD / Chain 1 : CH 50 (U-NII-1)



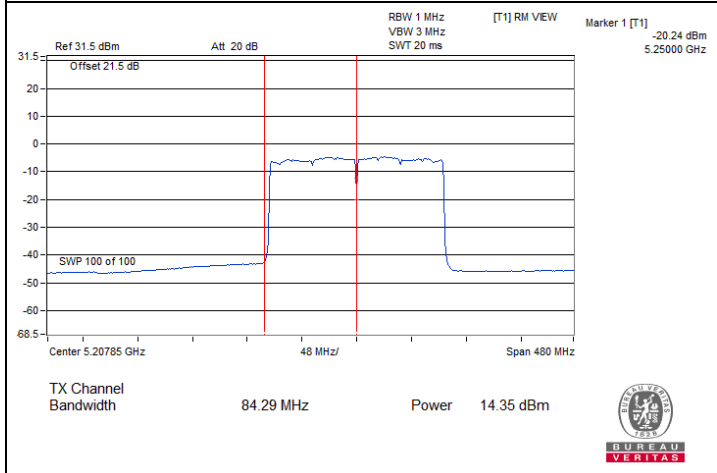
802.11ac (VHT160) CDD / Chain 1 : CH 50 (U-NII-2A)



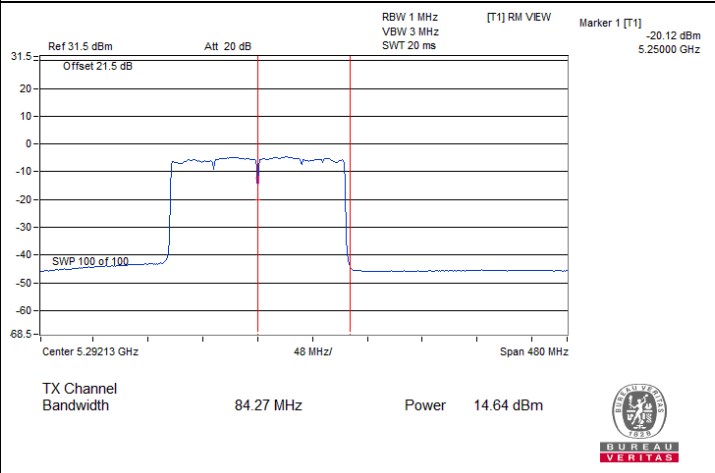
802.11ac (VHT160) CDD / Chain 2 : CH 50 (U-NII-1)



802.11ac (VHT160) CDD / Chain 2 : CH 50 (U-NII-2A)



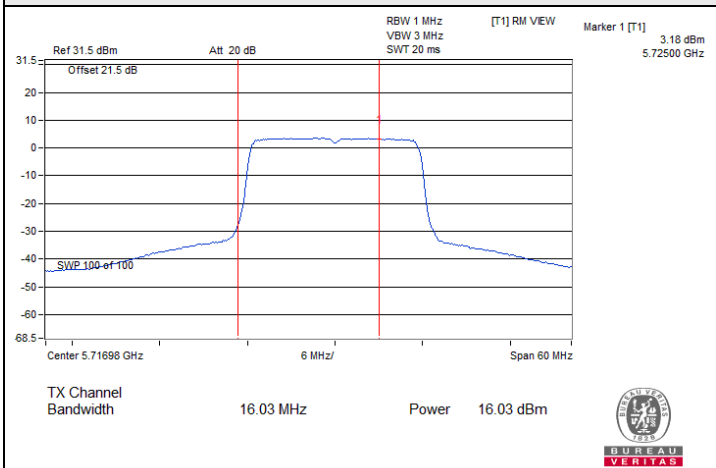
802.11ac (VHT160) CDD / Chain 3 : CH 50 (U-NII-1)



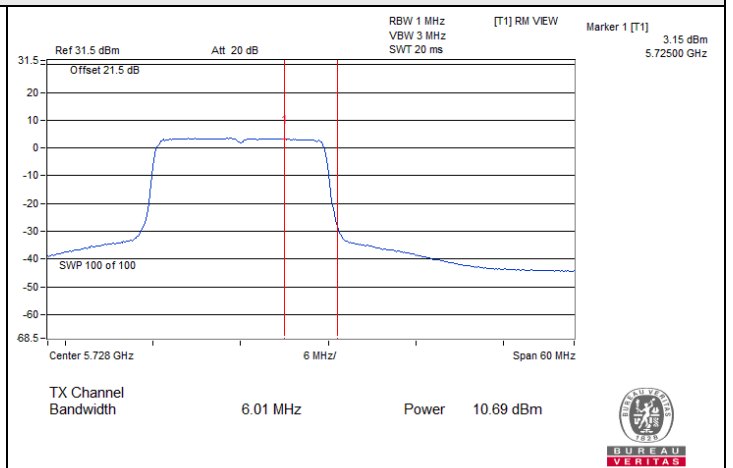
802.11ac (VHT160) CDD / Chain 3 : CH 50 (U-NII-2A)



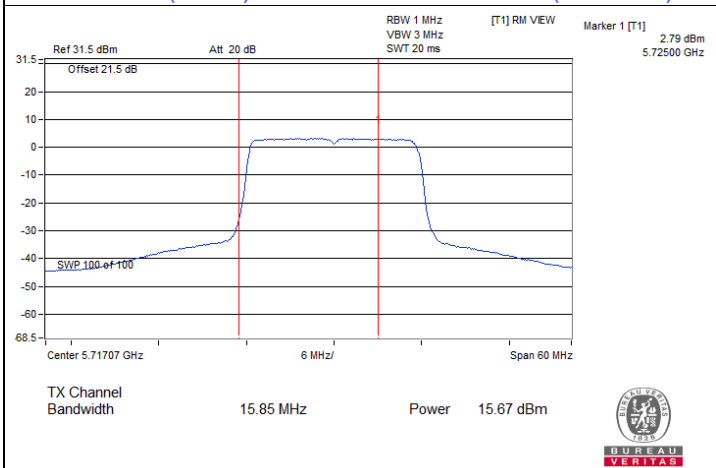
### Spectrum Plot for channel straddling



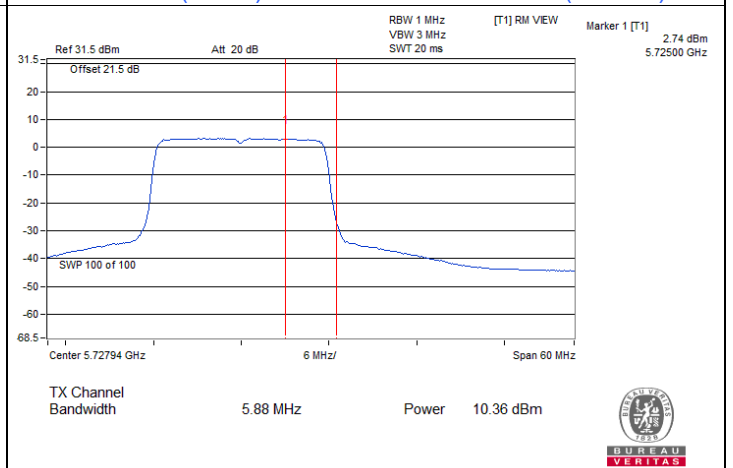
802.11ax (HE20) CDD / Chain 0 : CH 144 (U-NII-2C)



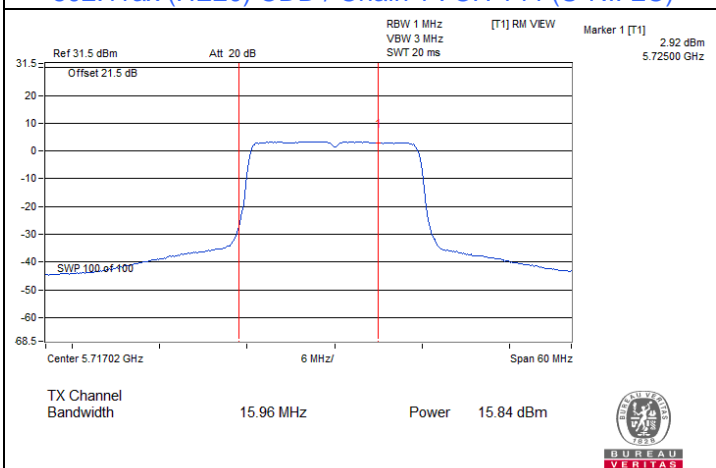
802.11ax (HE20) CDD / Chain 0 : CH 144 (U-NII-3)



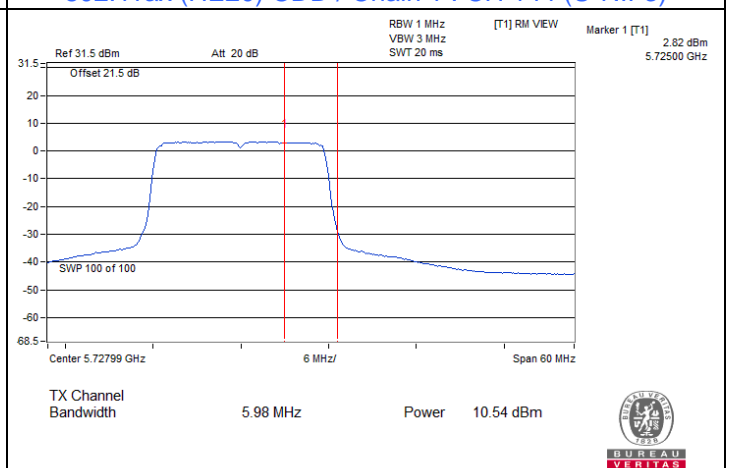
802.11ax (HE20) CDD / Chain 1 : CH 144 (U-NII-2C)



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



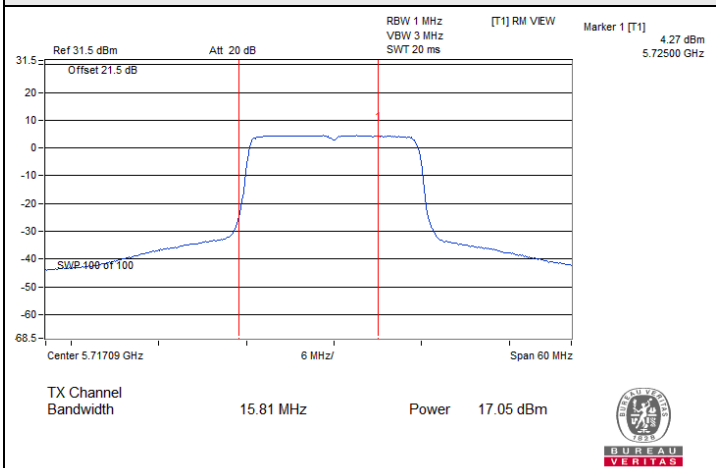
802.11ax (HE20) CDD / Chain 2 : CH 144 (U-NII-2C)



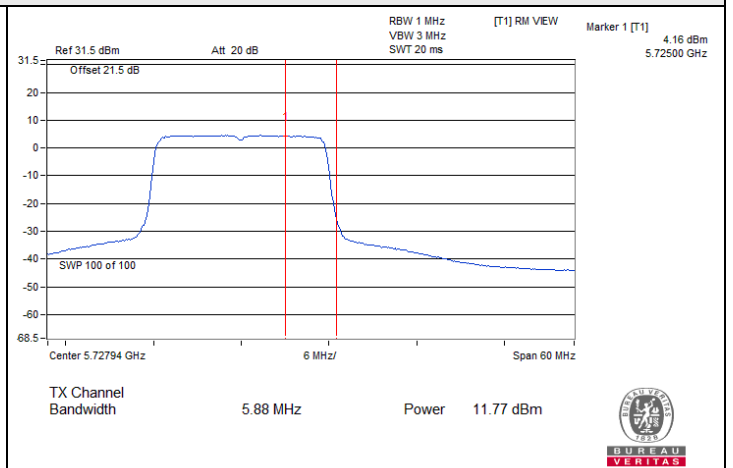
802.11ax (HE20) CDD / Chain 2 : CH 144 (U-NII-3)



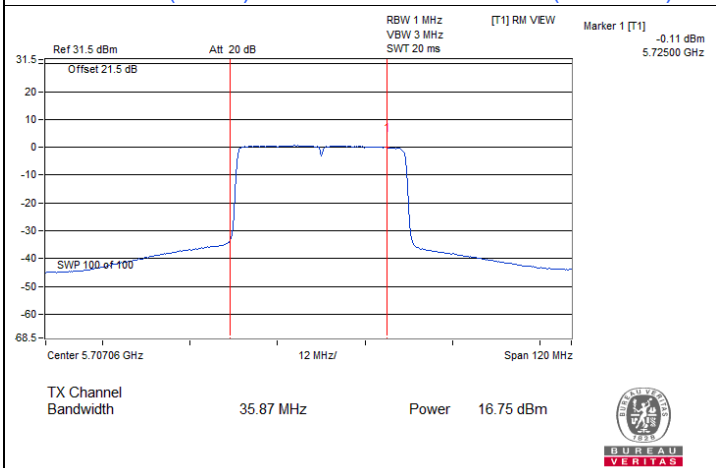
### Spectrum Plot for channel straddling



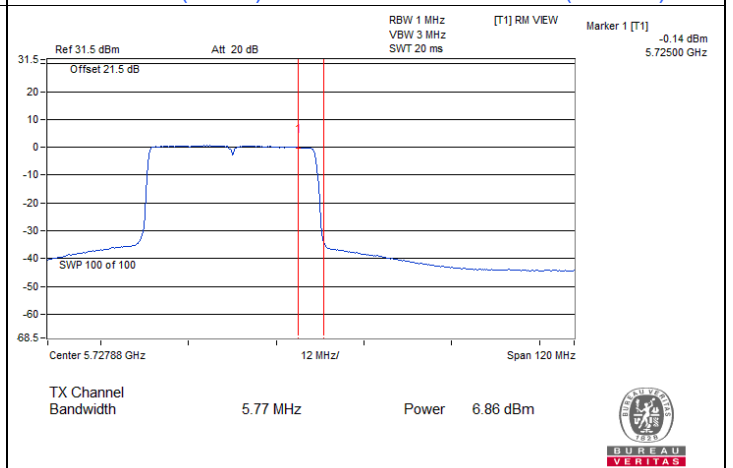
802.11ax (HE20) CDD / Chain 3 : CH 144 (U-NII-2C)



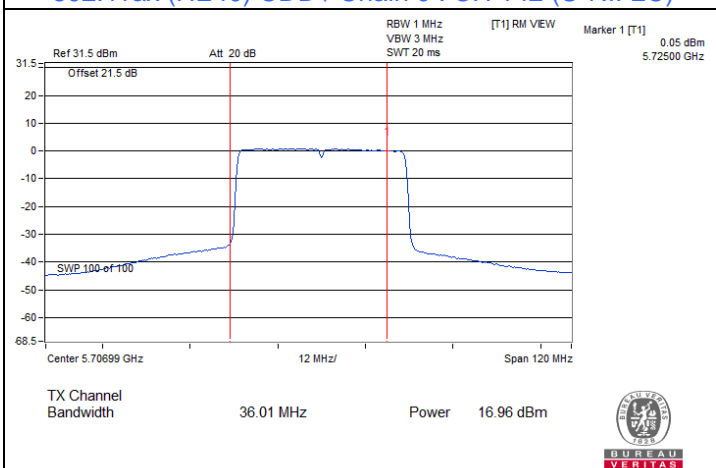
802.11ax (HE20) CDD / Chain 3 : CH 144 (U-NII-3)



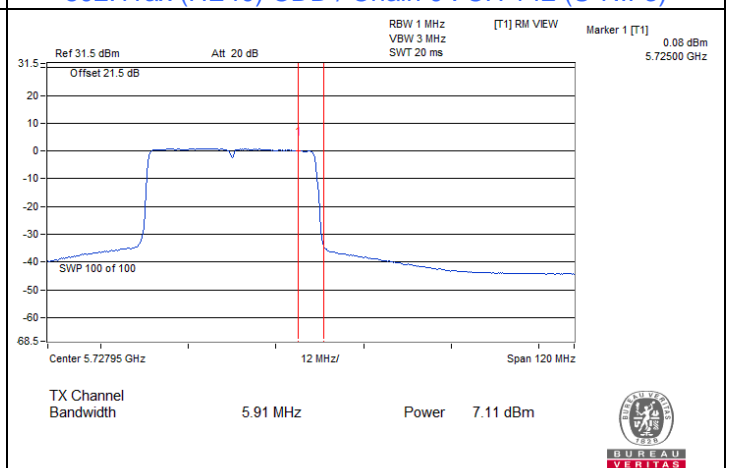
802.11ax (HE40) CDD / Chain 0 : CH 142 (U-NII-2C)



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



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

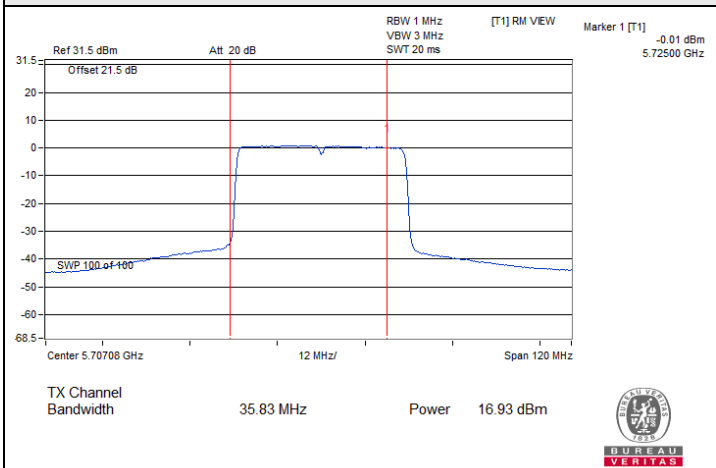


802.11ax (HE40) CDD / Chain 1 : CH 142 (U-NII-3)

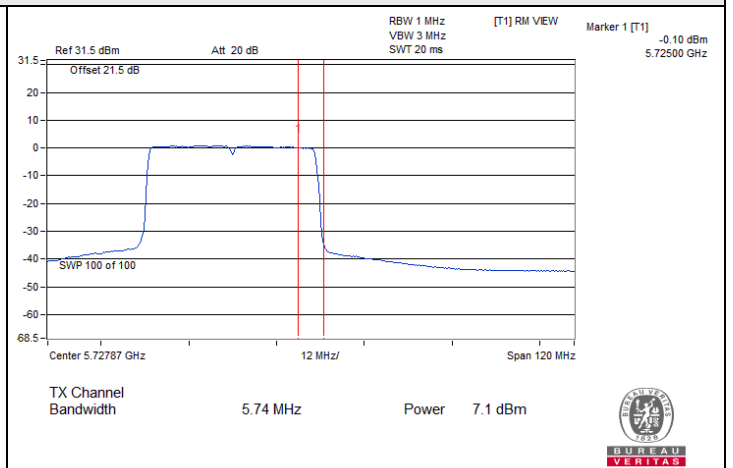




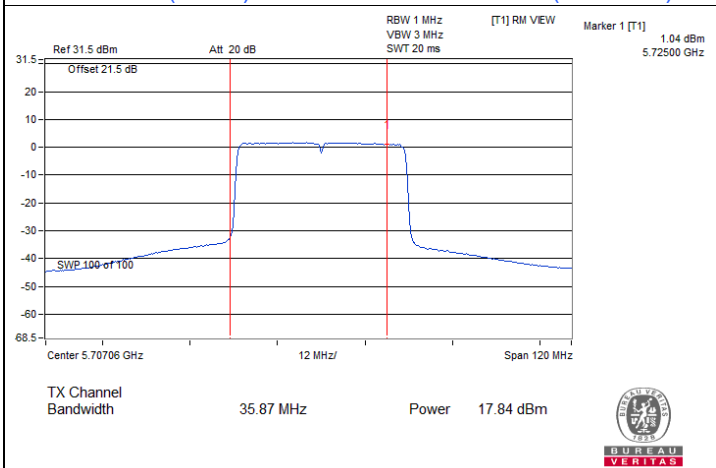
### Spectrum Plot for channel straddling



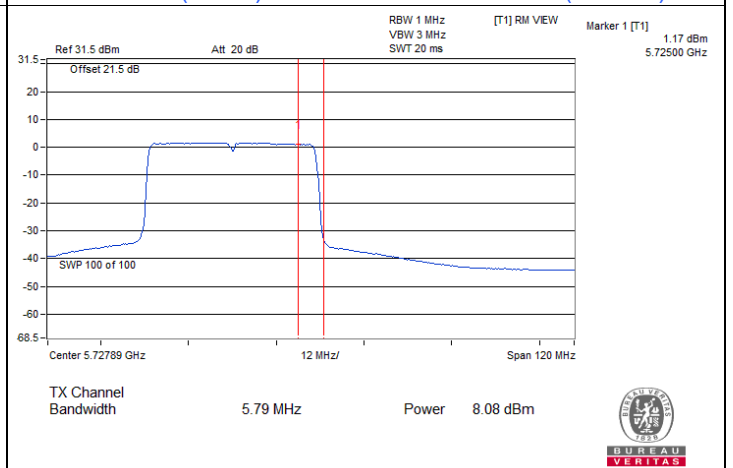
802.11ax (HE40) CDD / Chain 2 : CH 142 (U-NII-2C)



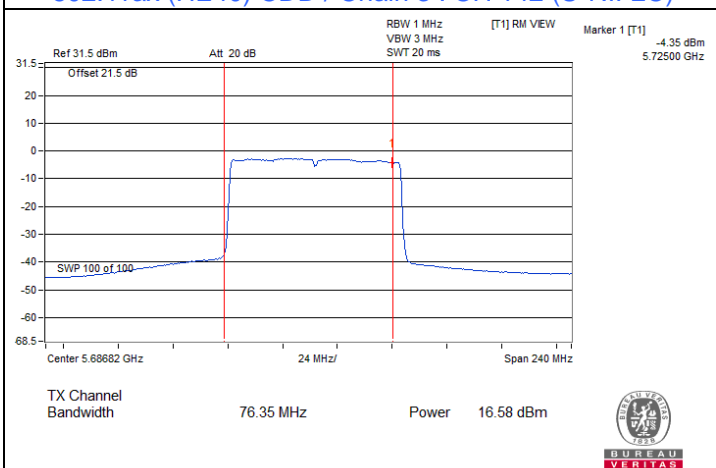
802.11ax (HE40) CDD / Chain 2 : CH 142 (U-NII-3)



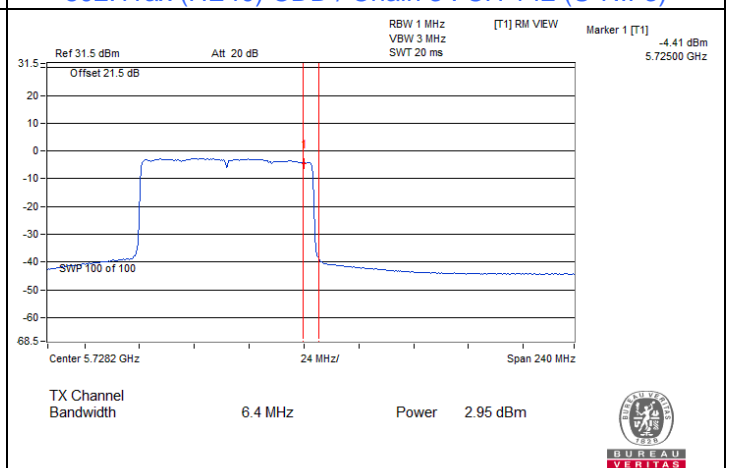
802.11ax (HE40) CDD / Chain 3 : CH 142 (U-NII-2C)



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



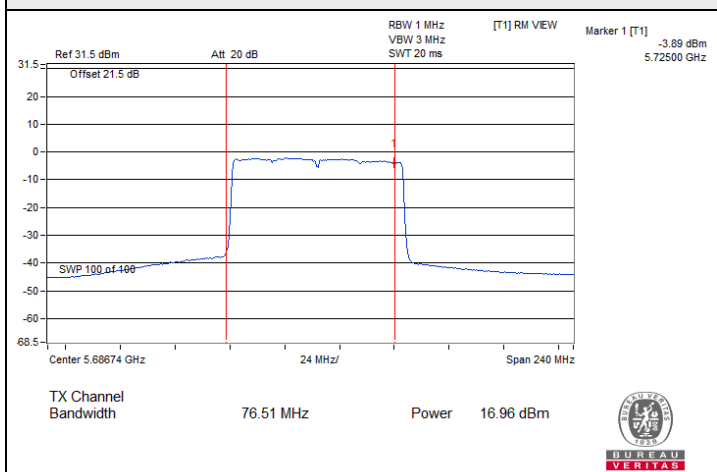
802.11ax (HE80) CDD / Chain 0 : CH 138 (U-NII-2C)



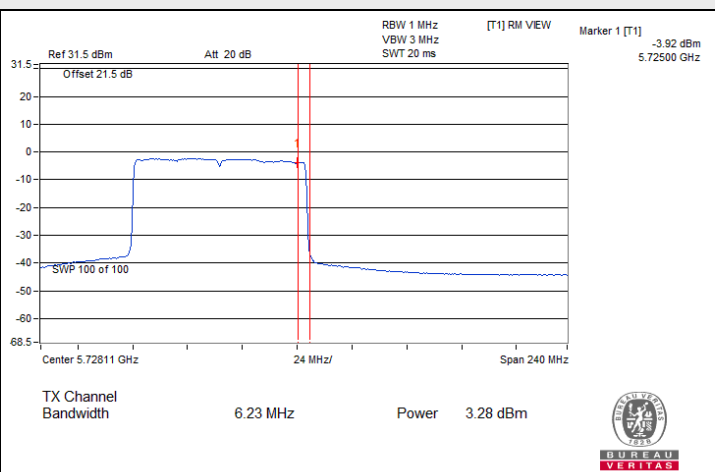
802.11ax (HE80) CDD / Chain 0 : CH 138 (U-NII-3)



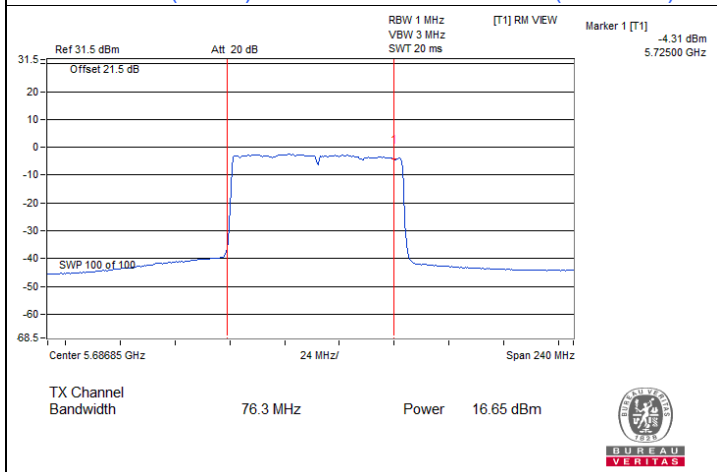
### Spectrum Plot for channel straddling



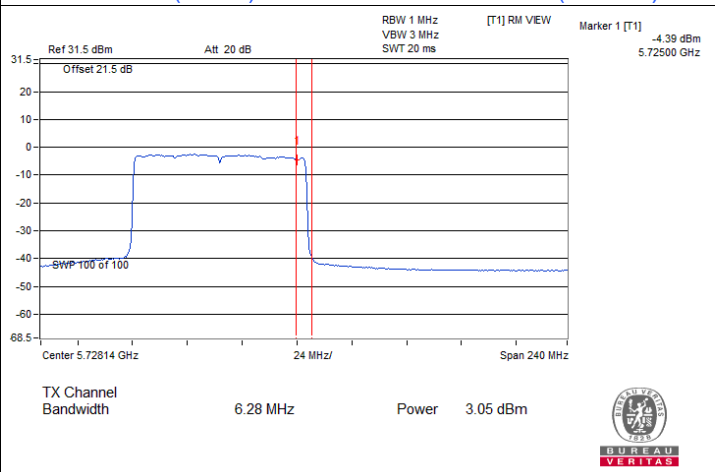
802.11ax (HE80) CDD / Chain 1 : CH 138 (U-NII-2C)



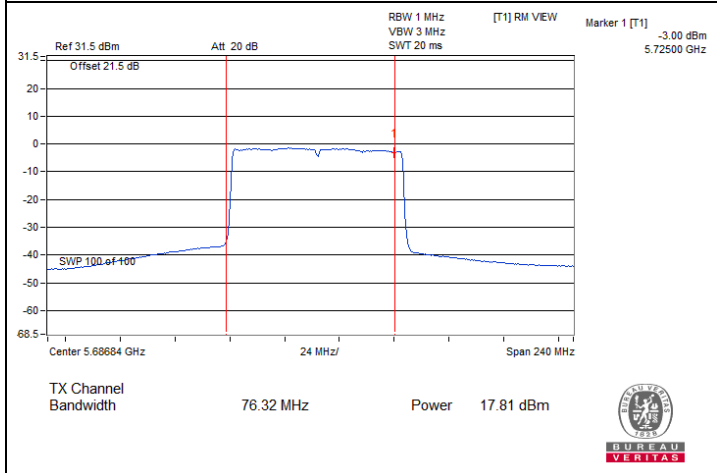
802.11ax (HE80) CDD / Chain 1 : CH 138 (U-NII-3)



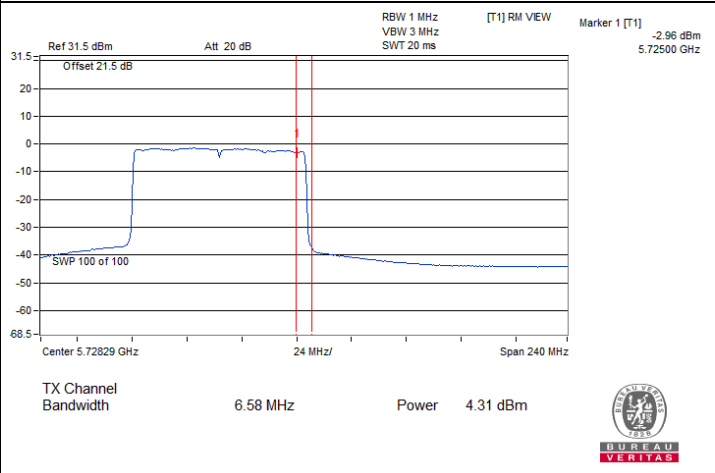
802.11ax (HE80) CDD / Chain 2 : CH 138 (U-NII-2C)



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



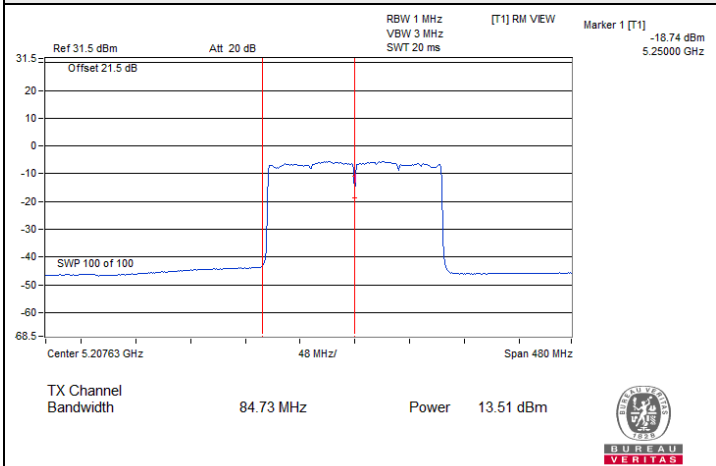
802.11ax (HE80) CDD / Chain 3 : CH 138 (U-NII-2C)



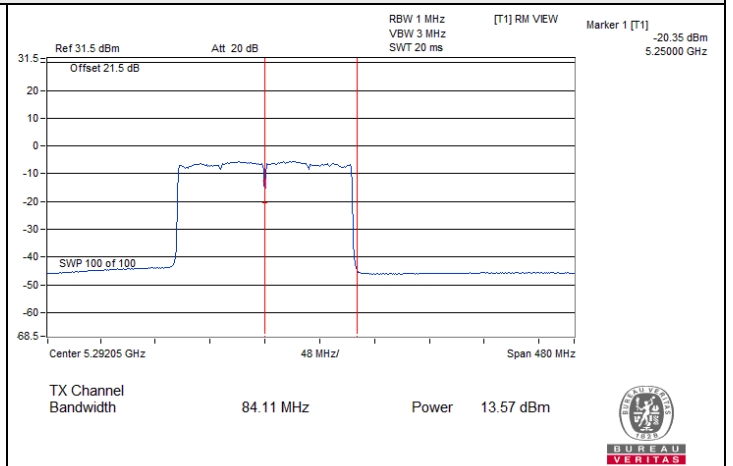
802.11ax (HE80) CDD / Chain 3 : CH 138 (U-NII-3)



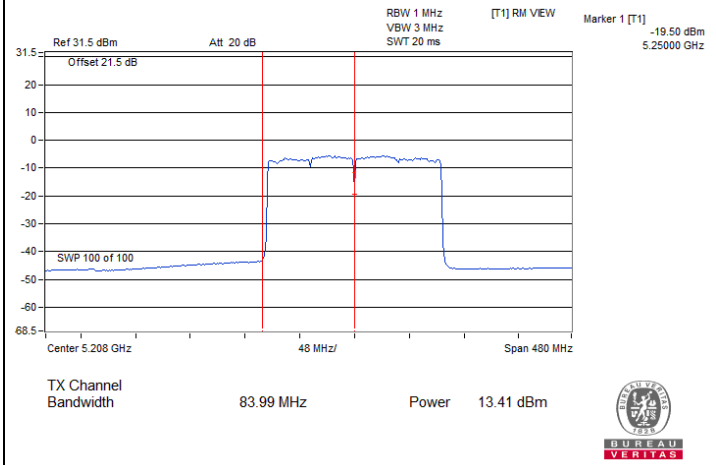
### Spectrum Plot for channel straddling



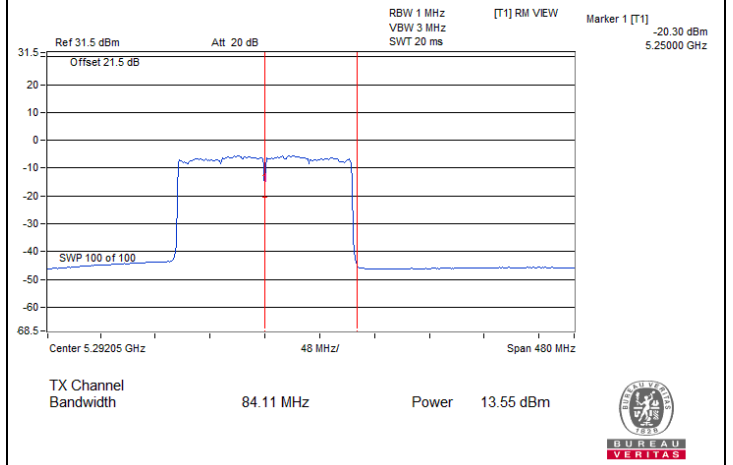
802.11ax (HE160) CDD / Chain 0 : CH 50 (U-NII-1)



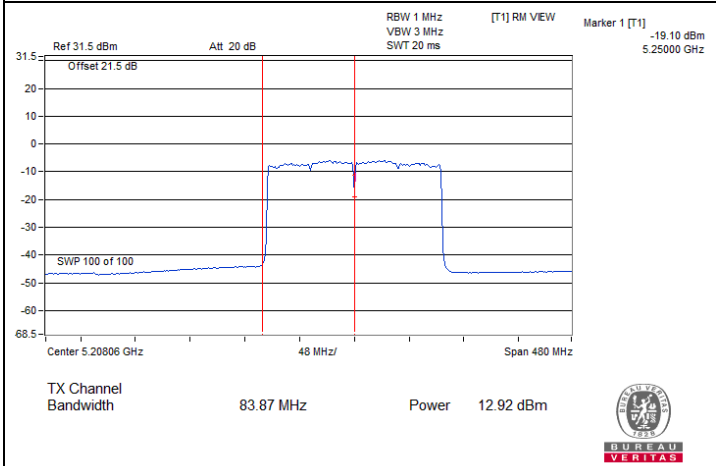
802.11ax (HE160) CDD / Chain 0 : CH 50 (U-NII-2A)



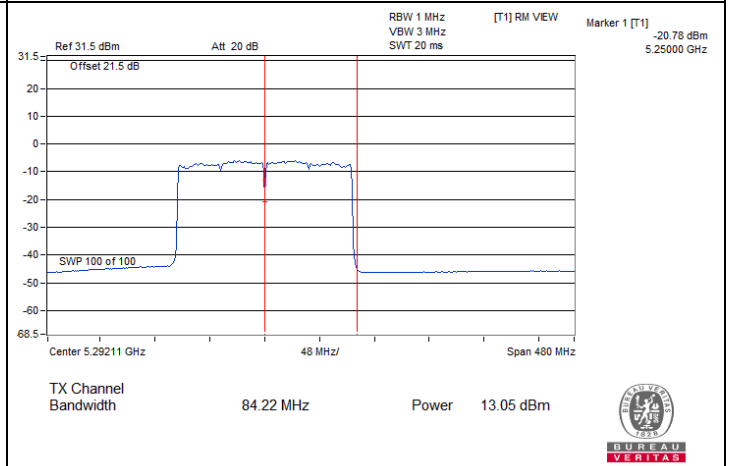
802.11ax (HE160) CDD / Chain 1 : CH 50 (U-NII-1)



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



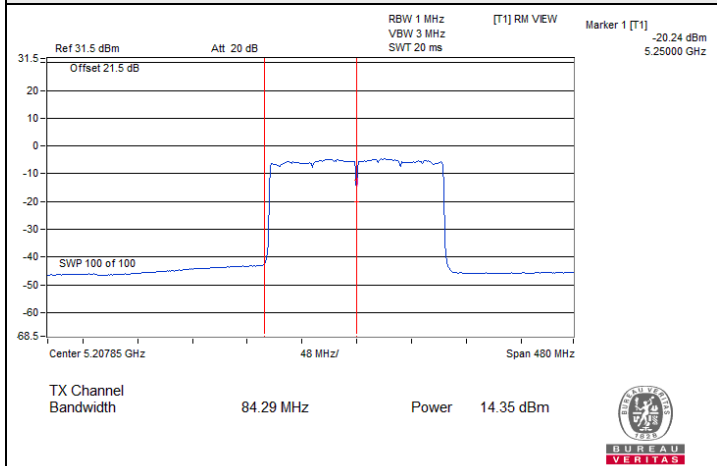
802.11ax (HE160) CDD / Chain 2 : CH 50 (U-NII-1)



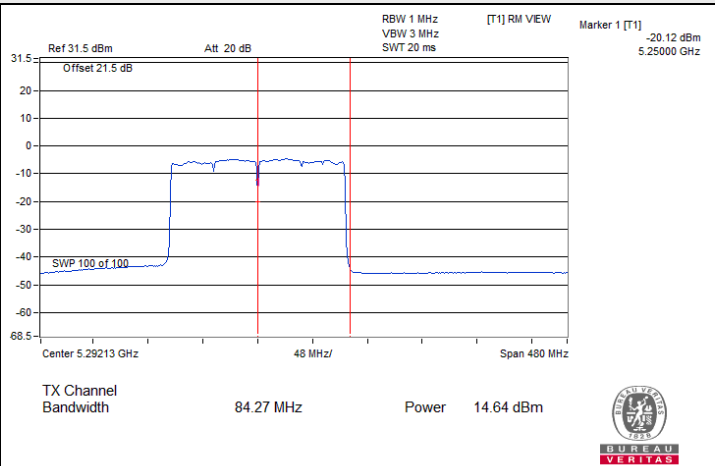
802.11ax (HE160) CDD / Chain 2 : CH 50 (U-NII-2A)



### Spectrum Plot for channel straddling



802.11ax (HE160) CDD / Chain 3 : CH 50 (U-NII-1)



802.11ax (HE160) CDD / Chain 3 : CH 50 (U-NII-2A)

### 7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Katina Lu
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#### 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	Chain 3			
52	5260	4.23	4.83	4.49	5.64	10.85	11	Pass
60	5300	4.26	4.72	4.27	5.50	10.74	11	Pass
64	5320	4.28	4.79	4.11	5.53	10.73	11	Pass
100	5500	4.20	4.86	4.41	5.53	10.80	11	Pass
116	5580	4.29	4.67	4.67	5.35	10.78	11	Pass
140	5700	4.17	4.76	4.58	5.65	10.85	11	Pass
144 (U-NII-2C)	5720	4.00	4.63	4.30	5.58	10.69	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-2A, the directional gain is 5.57 dBi < 6 dBi, so the power density limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.43 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	Chain 3			
52	5260	4.54	4.85	4.56	5.66	10.95	11	Pass
60	5300	4.34	4.79	4.51	5.43	10.81	11	Pass
64	5320	4.26	4.44	4.49	5.56	10.74	11	Pass
100	5500	4.54	4.74	4.52	5.31	10.81	11	Pass
116	5580	3.97	4.75	4.83	5.36	10.78	11	Pass
140	5700	4.28	4.23	4.53	5.50	10.69	11	Pass
144 (U-NII-2C)	5720	4.32	4.31	4.50	5.71	10.77	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-2A, the directional gain is 5.57 dBi < 6 dBi, so the power density limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.43 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	Chain 3			
54	5270	2.14	1.79	1.87	3.29	8.34	11	Pass
62	5310	1.72	1.77	1.87	2.90	8.11	11	Pass
102	5510	1.94	2.36	1.35	3.33	8.33	11	Pass
110	5550	2.28	2.33	1.54	3.31	8.43	11	Pass
134	5670	2.15	2.06	2.03	2.69	8.26	11	Pass
142 (U-NII-2C)	5710	2.27	2.34	2.20	3.11	8.52	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-2A, the directional gain is 5.57 dBi < 6 dBi, so the power density limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.43 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	Chain 3			
58	5290	-0.89	-0.79	-1.25	0.11	5.35	11	Pass
106	5530	-1.49	-0.92	-1.31	0.05	5.15	11	Pass
122	5610	-1.11	-0.75	-1.30	0.61	5.45	11	Pass
138 (U-NII-2C)	5690	-1.05	-0.71	-1.16	0.08	5.34	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-2A, the directional gain is 5.57 dBi < 6 dBi, so the power density limit shall not be reduced.
4. For U-NII-2C, the directional gain is 5.43 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	Chain 3			
50 (U-NII-1)	5250	-4.13	-4.11	-4.50	-3.28	2.04	17	Pass
50 (U-NII-2A)	5250	-4.10	-4.15	-4.51	-3.08	2.09	11	Pass
114	5570	-4.43	-4.95	-5.02	-3.89	1.47	11	Pass

Notes:

- 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.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-1, the directional gain is 5.52 dBi < 6dBi, so the power density limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.57 dBi < 6 dBi, so the power density limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.43 dBi < 6 dBi, so the power density limit shall not be reduced.

### 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	Chain 3				
144 (U-NII-3)	5720	-0.79	-0.07	-0.49	0.84	5.94	8.16	30	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-3, the directional gain is 5.53 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	Chain 3				
144 (U-NII-3)	5720	-0.70	-0.69	-0.63	0.71	5.74	7.96	30	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
- For U-NII-3, the directional gain is 5.53 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	Chain 3				
142 (U-NII-3)	5710	-3.63	-3.54	-3.77	-2.56	2.67	4.89	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 5.53 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	Chain 3				
138 (U-NII-3)	5690	-7.74	-7.30	-7.71	-6.33	-1.21	1.01	30	Pass

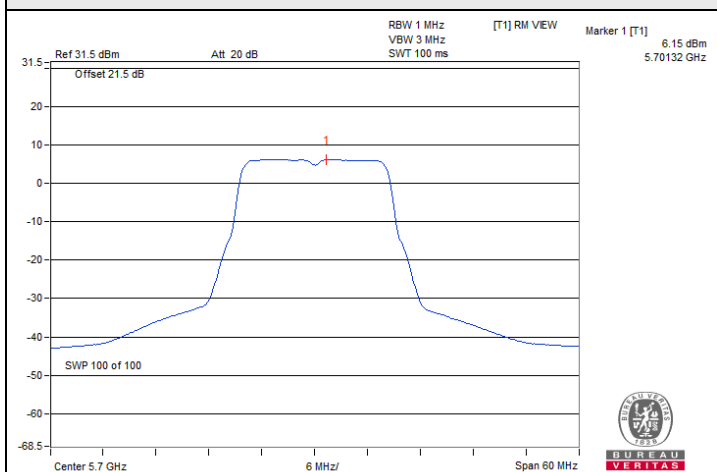
Notes:

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

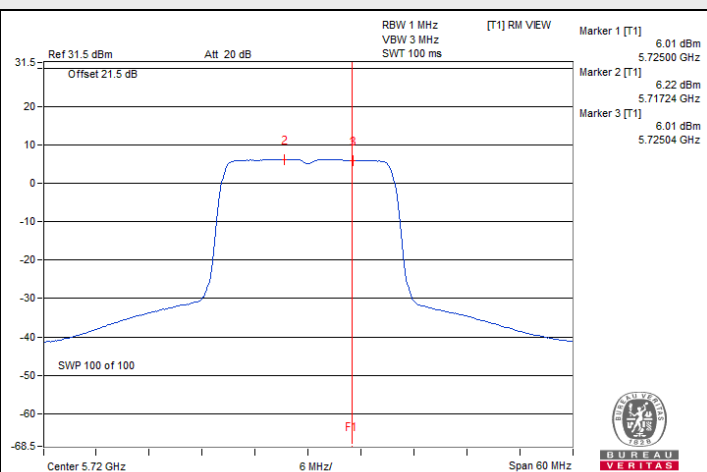




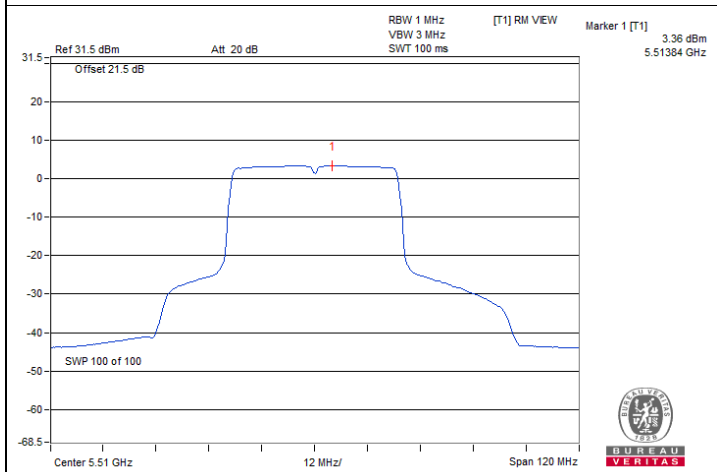
### Spectrum Plot of Maximum Value



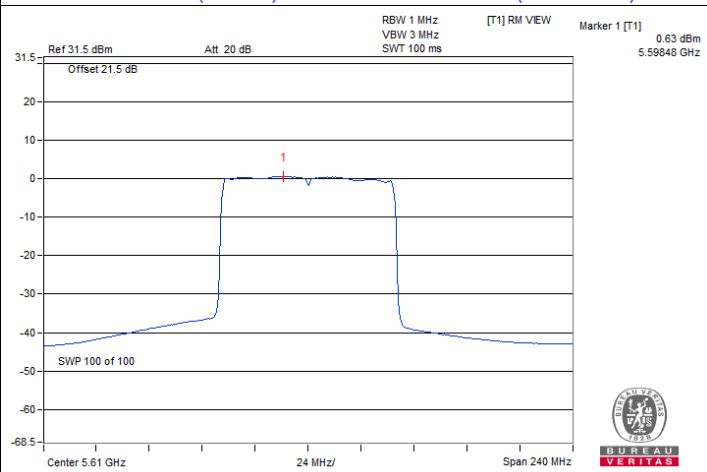
802.11a / Chain 3 : CH 140



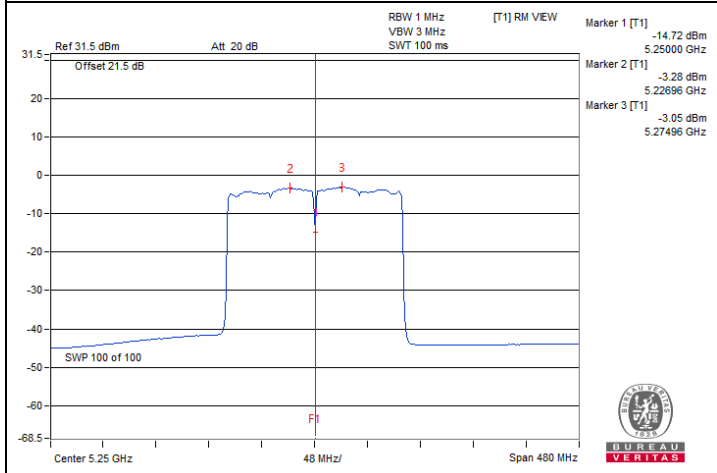
802.11ax (HE20) / Chain 3 : CH 144 (U-NII-2C)



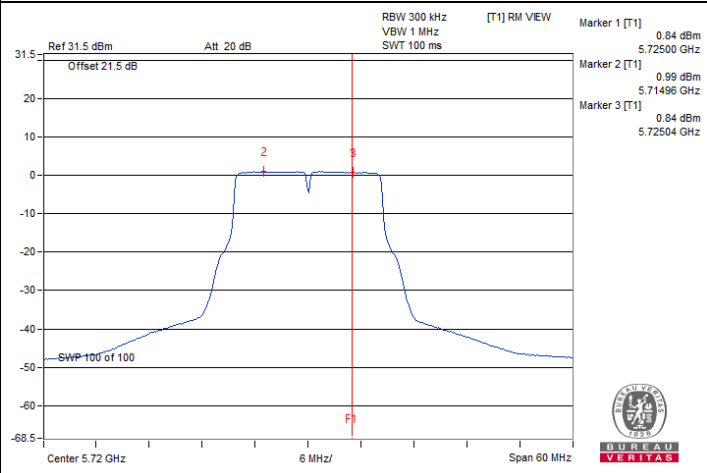
802.11ax (HE40) / Chain 3 : CH 102



802.11ax (HE80) / Chain 3 : CH 122

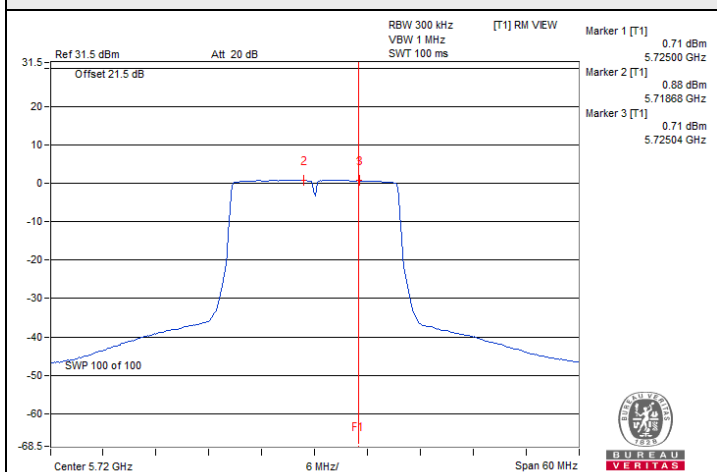


802.11ax (HE160) / Chain 3 : CH 50 (U-NII-2A)

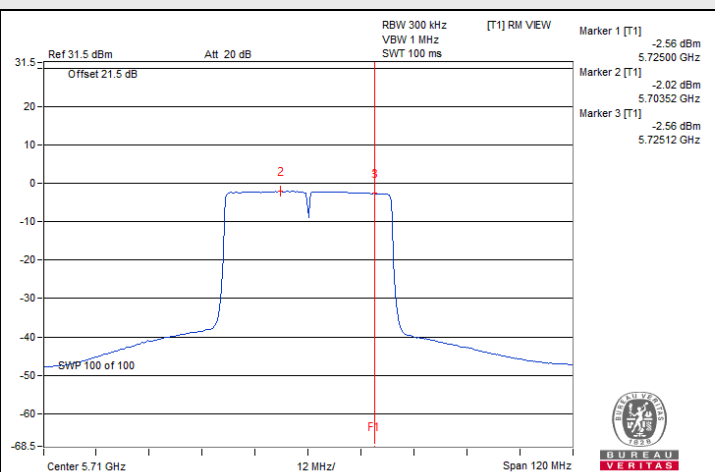


802.11a / Chain 3 : CH 144 (U-NII-3)

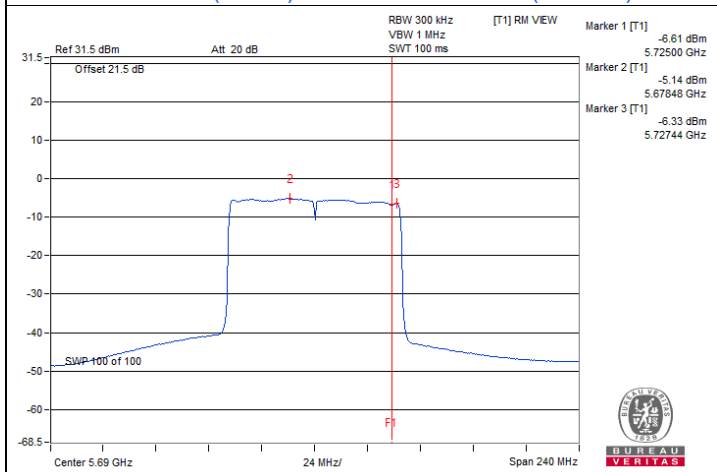
### Spectrum Plot of Maximum Value



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



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



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

#### 7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Katina Lu
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##### 802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3)	5720	3.20	3.19	3.21	3.20	0.5	Pass

##### 802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3)	5720	4.56	4.50	4.53	4.49	0.5	Pass

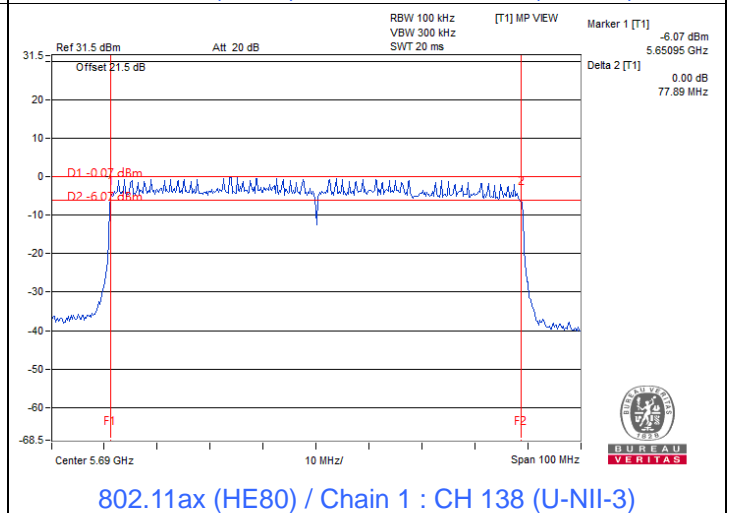
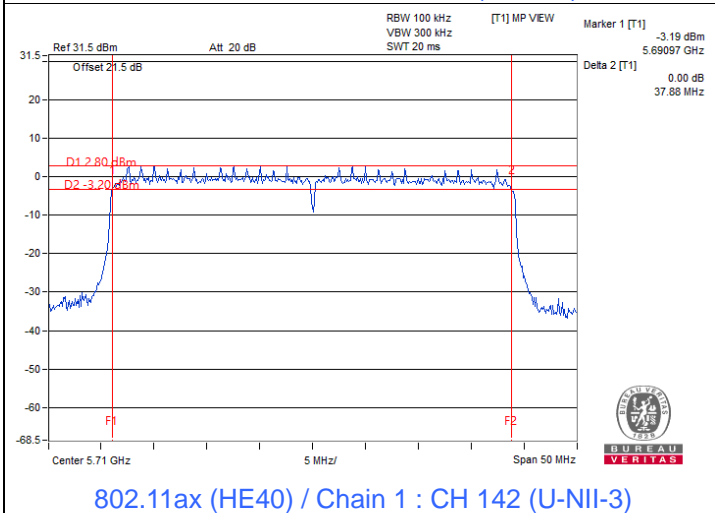
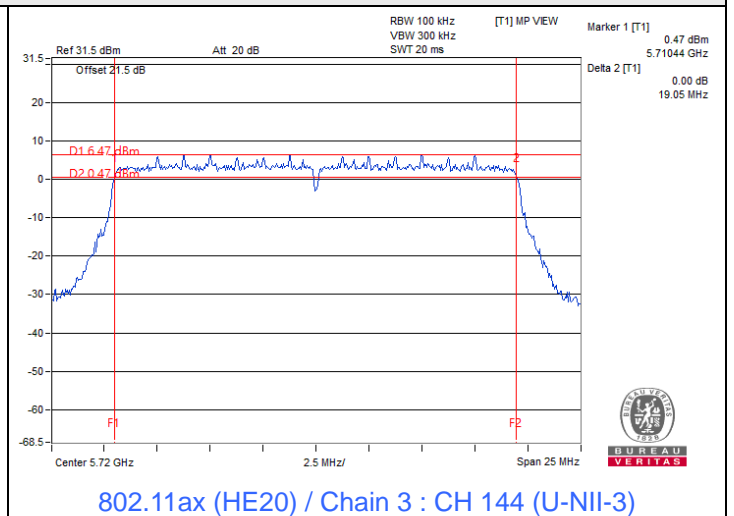
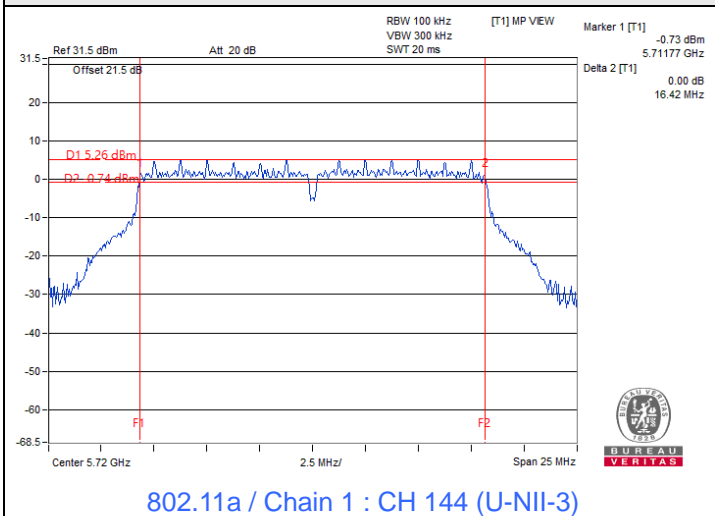
##### 802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
142 (U-NII-3)	5710	4.03	3.85	3.95	3.86	0.5	Pass

##### 802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
138 (U-NII-3)	5690	3.98	3.84	3.90	4.00	0.5	Pass

### Spectrum Plot of Minimum Value



**Notes:**

1. 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:	Katina Lu
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### 802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	17.16	17.16	17.04	16.92
60	5300	17.16	17.16	17.04	16.92
64	5320	17.16	17.28	17.28	17.40
100	5500	17.40	17.16	17.28	17.16
116	5580	17.16	17.16	17.04	16.92
140	5700	17.16	17.16	17.04	16.92
144 (U-NII-2C)	5720	13.64	13.64	13.52	13.52
144 (U-NII-3)	5720	3.52	3.52	3.52	3.40

### 802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	19.08	19.20	19.20	19.20
60	5300	19.08	19.08	19.20	19.20
64	5320	19.32	19.32	19.20	19.32
100	5500	19.20	19.32	19.20	19.32
116	5580	19.20	19.20	19.20	19.08
140	5700	19.20	19.20	19.20	19.08
144 (U-NII-2C)	5720	14.60	14.60	14.72	14.60
144 (U-NII-3)	5720	4.48	4.48	4.48	4.48

### 802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	38.16	38.16	37.92	38.16
62	5310	38.40	38.16	38.16	38.40
102	5510	38.16	38.16	38.16	38.40
110	5550	37.92	38.16	37.92	38.16
134	5670	38.16	38.16	38.16	38.16
142 (U-NII-2C)	5710	34.20	34.20	34.20	34.20
142 (U-NII-3)	5710	3.96	3.96	3.96	3.96

**802.11ax (HE80)**

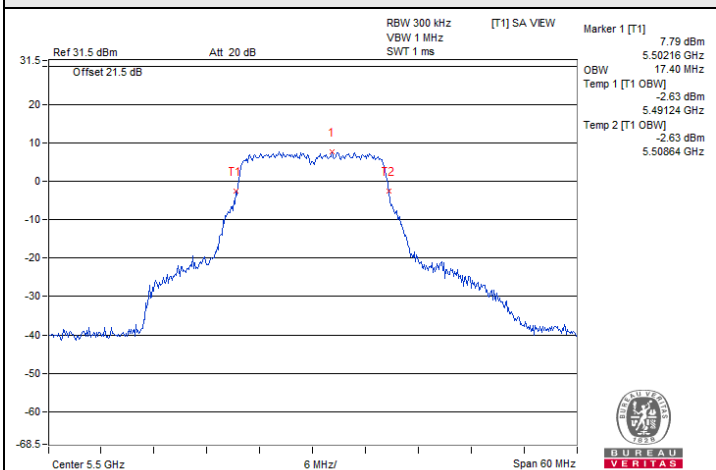
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.28	77.28	77.76
106	5530	77.76	77.76	77.76	77.76
122	5610	77.28	77.28	77.76	77.28
138 (U-NII-2C)	5690	73.88	73.88	73.88	73.88
138 (U-NII-3)	5690	3.40	3.40	3.40	3.88

**802.11ax (HE160)**

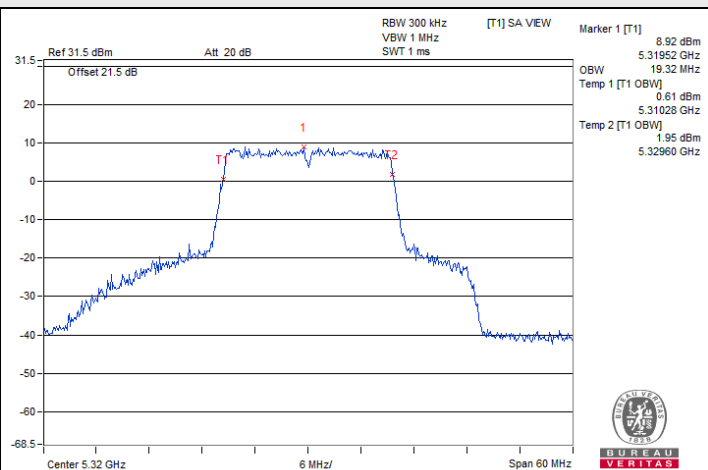
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1)	5250	78.72	78.72	78.72	78.72
50 (U-NII-2A)	5250	78.72	77.76	78.72	77.76
114	5570	156.48	156.48	157.44	156.48



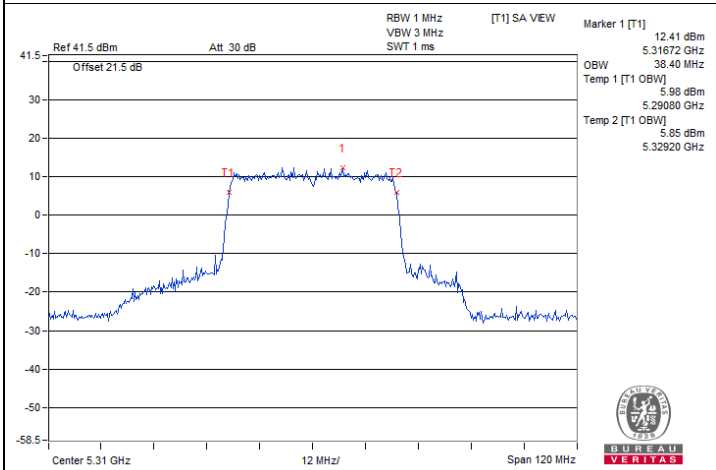
### Spectrum Plot of Maximum Value



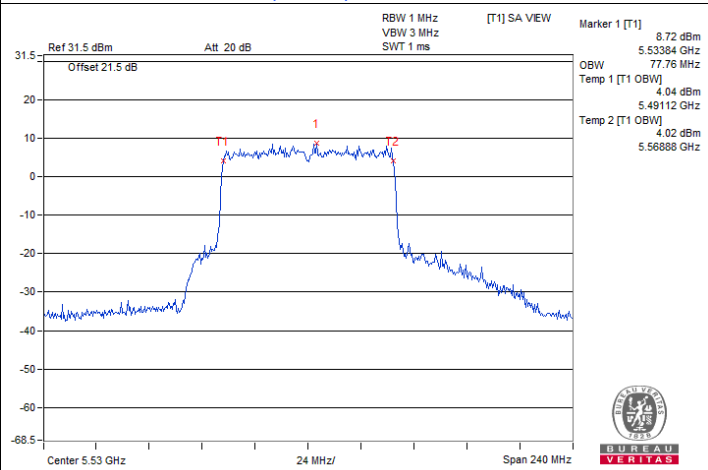
802.11a / Chain 0 : CH 100



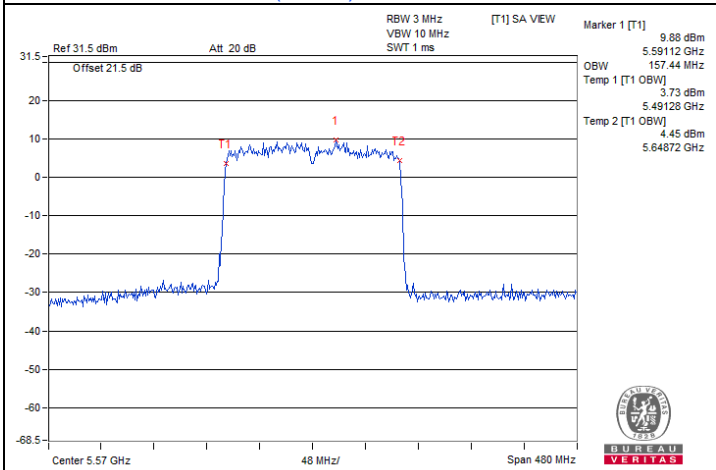
802.11ax (HE20) / Chain 0 : CH 64



802.11ax (HE40) / Chain 0 : CH 62



802.11ax (HE80) / Chain 0 : CH 106



802.11ax (HE160) / Chain 2 : CH 114

## 7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Katina Lu
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### 802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5260 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5259.9901	Pass	5259.9918	Pass	5259.9921	Pass	5259.9924	Pass
30	120	5260.0024	Pass	5260.004	Pass	5260.0032	Pass	5260.0055	Pass
20	120	5259.9887	Pass	5259.9908	Pass	5259.9884	Pass	5259.9889	Pass
10	120	5260.0094	Pass	5260.0063	Pass	5260.0062	Pass	5260.0102	Pass
0	120	5260.0109	Pass	5260.0132	Pass	5260.013	Pass	5260.0106	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5259.9943	Pass	5259.9981	Pass	5259.9986	Pass	5259.9945	Pass
	120	5259.9887	Pass	5259.9908	Pass	5259.9884	Pass	5259.9889	Pass
	102	5259.9958	Pass	5259.9952	Pass	5259.9918	Pass	5259.9915	Pass



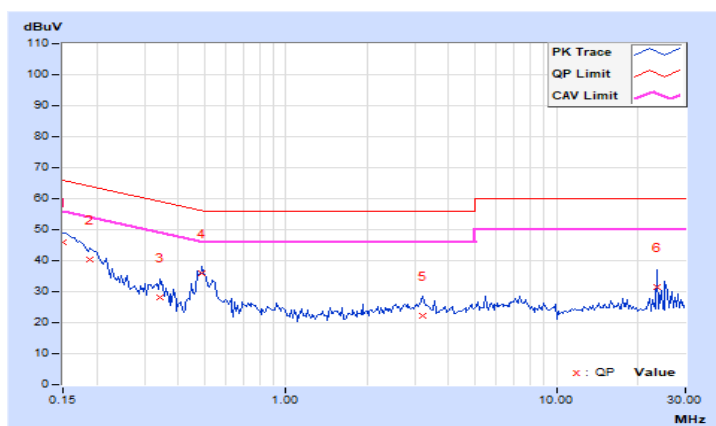
## 7.7 AC Power Conducted Emissions

RF Mode	802.11ax (HE20)	Channel	CH 52 : 5260 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	24°C, 68% RH
Tested By	Sampson Chen		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	36.04	19.26	45.99	29.21	66.00	56.00	-20.01	-26.79
2	0.18906	9.96	30.51	14.87	40.47	24.83	64.08	54.08	-23.61	-29.25
3	0.34141	9.96	18.26	5.56	28.22	15.52	59.17	49.17	-30.95	-33.65
4	0.48984	9.97	25.86	19.23	35.83	29.20	56.17	46.17	-20.34	-16.97
5	3.19922	10.15	12.09	5.25	22.24	15.40	56.00	46.00	-33.76	-30.60
6	23.57031	11.26	20.20	11.11	31.46	22.37	60.00	50.00	-28.54	-27.63

### 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

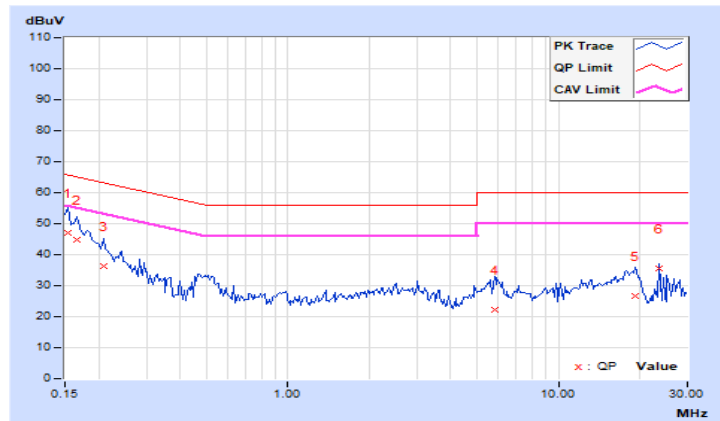


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	150 kHz ~ 30 MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	24°C, 68% RH
<b>Tested By</b>	Sampson Chen		

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	0.15391	9.95	37.07	19.17	47.02	29.12	65.79	55.79	-18.77	-26.67
2	0.16562	9.95	34.73	18.93	44.68	28.88	65.18	55.18	-20.50	-26.30
3	0.20859	9.96	26.40	10.35	36.36	20.31	63.26	53.26	-26.90	-32.95
4	5.78906	10.28	12.07	5.59	22.35	15.87	60.00	50.00	-37.65	-34.13
5	19.30469	10.95	15.83	11.31	26.78	22.26	60.00	50.00	-33.22	-27.74
<b>6</b>	<b>23.58344</b>	<b>11.00</b>	<b>24.49</b>	<b>22.31</b>	<b>35.49</b>	<b>33.31</b>	<b>60.00</b>	<b>50.00</b>	<b>-24.51</b>	<b>-16.69</b>

**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



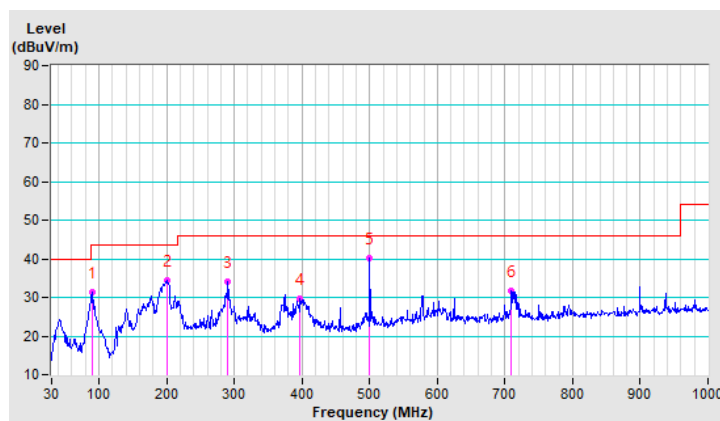
## 7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11ax (HE20)	Channel	CH 52 : 5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 68% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	89.75	31.3 QP	43.5	-12.2	3.00 H	298	49.7	-18.4
2	200.05	34.5 QP	43.5	-9.0	1.50 H	84	50.6	-16.1
3	290.75	34.1 QP	46.0	-11.9	1.00 H	248	46.5	-12.4
4	396.14	29.6 QP	46.0	-16.4	1.00 H	176	39.4	-9.8
5	499.99	40.2 QP	46.0	-5.8	1.50 H	177	47.6	-7.4
6	709.57	31.7 QP	46.0	-14.3	3.00 H	256	35.1	-3.4

### Remarks:

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

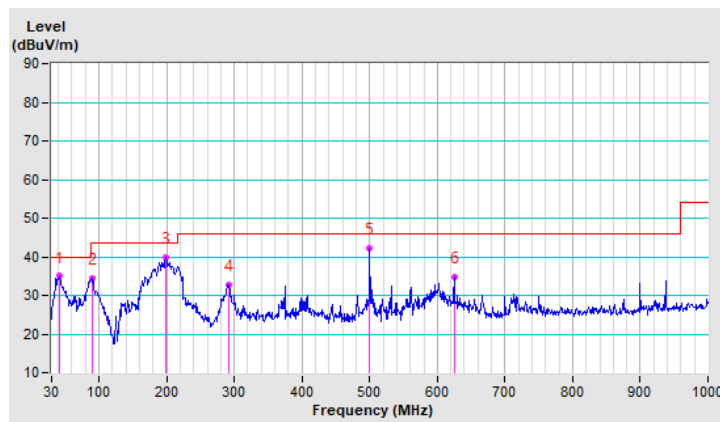


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	(QP) RB = 120kHz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	24°C, 68% RH
<b>Tested By</b>	Sampson Chen		

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	40.67	35.0 QP	40.0	-5.0	1.00 V	316	47.8	-12.8
2	89.56	34.5 QP	43.5	-9.0	1.00 V	290	52.9	-18.4
<b>3</b>	<b>199.18</b>	<b>39.9 QP</b>	<b>43.5</b>	<b>-3.6</b>	<b>1.50 V</b>	<b>1</b>	<b>56.0</b>	<b>-16.1</b>
4	291.04	32.8 QP	46.0	-13.2	1.50 V	192	45.2	-12.4
5	499.99	42.3 QP	46.0	-3.7	1.00 V	235	49.7	-7.4
6	624.98	34.8 QP	46.0	-11.2	1.00 V	228	39.5	-4.7

**Remarks:**

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



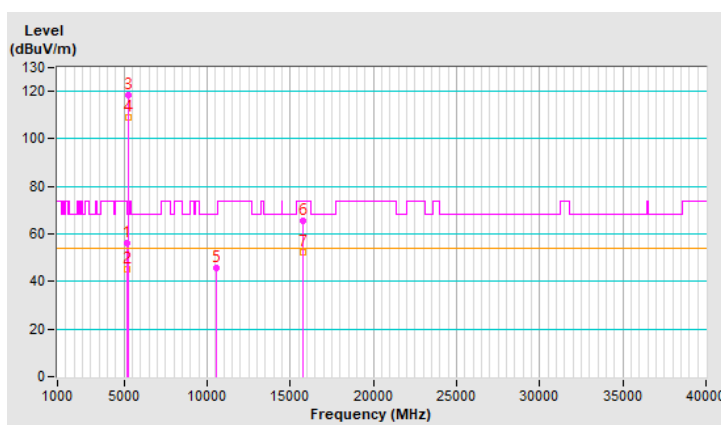
## 7.9 Unwanted Emissions above 1 GHz

<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	1.50 H	316	51.0	5.2
2	5150.00	45.1 AV	54.0	-8.9	1.50 H	316	39.9	5.2
3	*5260.00	118.2 PK			1.50 H	316	113.5	4.7
4	*5260.00	109.1 AV			1.50 H	316	104.4	4.7
5	#10520.00	45.7 PK	68.2	-22.5	1.58 H	6	29.4	16.3
6	15780.00	65.4 PK	74.0	-8.6	1.53 H	354	48.7	16.7
7	15780.00	52.4 AV	54.0	-1.6	1.53 H	354	35.7	16.7

### 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.

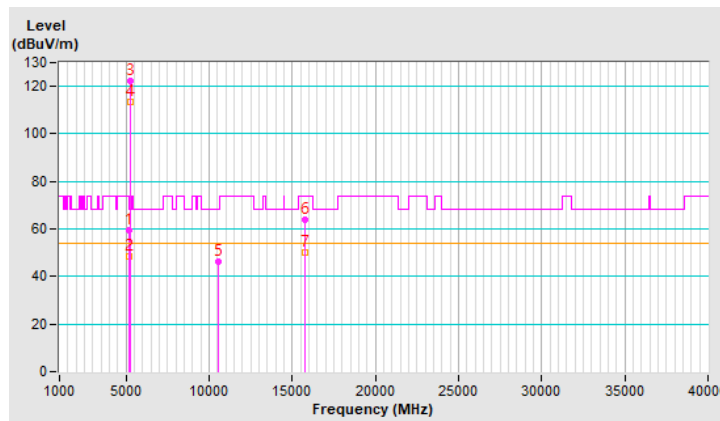


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	59.6 PK	74.0	-14.4	2.08 V	341	54.4	5.2
2	5150.00	48.5 AV	54.0	-5.5	2.08 V	341	43.3	5.2
3	*5260.00	122.2 PK			2.08 V	341	117.5	4.7
4	*5260.00	113.3 AV			2.08 V	341	108.6	4.7
5	#10520.00	46.4 PK	68.2	-21.8	1.45 V	257	30.1	16.3
6	15780.00	63.7 PK	74.0	-10.3	1.52 V	308	47.0	16.7
7	15780.00	50.3 AV	54.0	-3.7	1.52 V	308	33.6	16.7

**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.



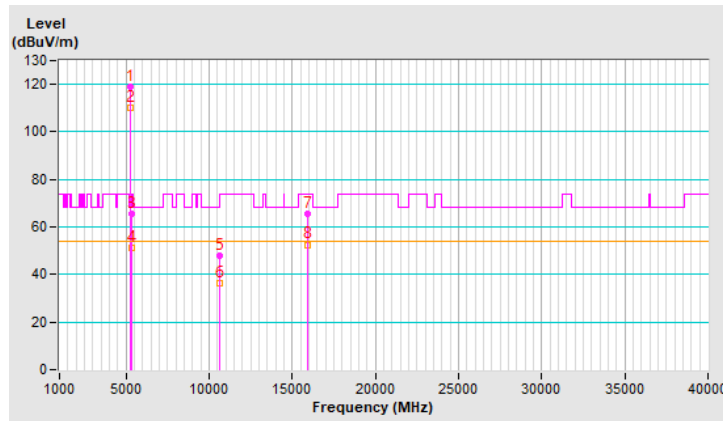
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	119.2 PK			1.60 H	320	114.4	4.8
2	*5300.00	110.3 AV			1.60 H	320	105.5	4.8
3	5354.64	65.4 PK	74.0	-8.6	1.60 H	320	60.4	5.0
4	5354.64	51.4 AV	54.0	-2.6	1.60 H	320	46.4	5.0
5	10600.00	48.1 PK	74.0	-25.9	2.14 H	223	32.2	15.9
6	10600.00	36.2 AV	54.0	-17.8	2.14 H	223	20.3	15.9
7	15900.00	65.5 PK	74.0	-8.5	1.47 H	360	48.9	16.6
8	15900.00	52.6 AV	54.0	-1.4	1.47 H	360	36.0	16.6

**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.

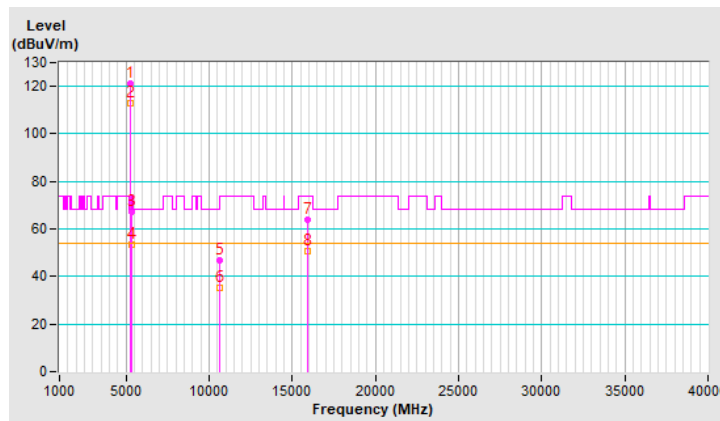


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	121.4 PK			1.33 V	360	116.6	4.8
2	*5300.00	112.8 AV			1.33 V	360	108.0	4.8
3	5354.64	67.0 PK	74.0	-7.0	1.33 V	360	62.0	5.0
4	<b>5354.64</b>	<b>53.5 AV</b>	<b>54.0</b>	<b>-0.5</b>	<b>1.33 V</b>	<b>360</b>	<b>48.5</b>	<b>5.0</b>
5	10600.00	46.9 PK	74.0	-27.1	1.45 V	273	31.0	15.9
6	10600.00	35.1 AV	54.0	-18.9	1.45 V	273	19.2	15.9
7	15900.00	64.1 PK	74.0	-9.9	1.55 V	305	47.5	16.6
8	15900.00	50.9 AV	54.0	-3.1	1.55 V	305	34.3	16.6

**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.





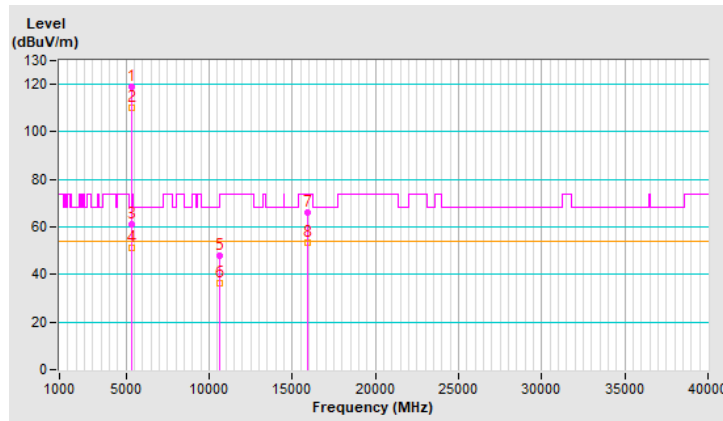
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	118.9 PK			3.08 H	276	114.0	4.9
2	*5320.00	109.9 AV			3.08 H	276	105.0	4.9
3	5350.00	61.2 PK	74.0	-12.8	3.08 H	276	56.2	5.0
4	5350.00	51.0 AV	54.0	-3.0	3.08 H	276	46.0	5.0
5	10640.00	47.8 PK	74.0	-26.2	2.19 H	226	32.0	15.8
6	10640.00	36.1 AV	54.0	-17.9	2.19 H	226	20.3	15.8
7	15960.00	65.9 PK	74.0	-8.1	1.48 H	348	49.2	16.7
8	15960.00	53.2 AV	54.0	-0.8	1.48 H	348	36.5	16.7

**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.

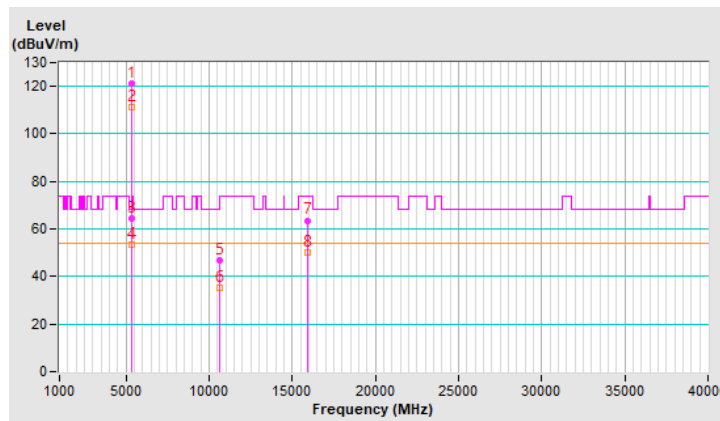


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	121.3 PK			3.05 V	334	116.4	4.9
2	*5320.00	111.5 AV			3.05 V	334	106.6	4.9
3	5350.00	64.4 PK	74.0	-9.6	3.05 V	334	59.4	5.0
4	5350.00	53.2 AV	54.0	-0.8	3.05 V	334	48.2	5.0
5	10640.00	46.9 PK	74.0	-27.1	1.53 V	263	31.1	15.8
6	10640.00	35.0 AV	54.0	-19.0	1.53 V	263	19.2	15.8
7	15960.00	63.6 PK	74.0	-10.4	1.52 V	307	46.9	16.7
8	15960.00	50.0 AV	54.0	-4.0	1.52 V	307	33.3	16.7

**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.



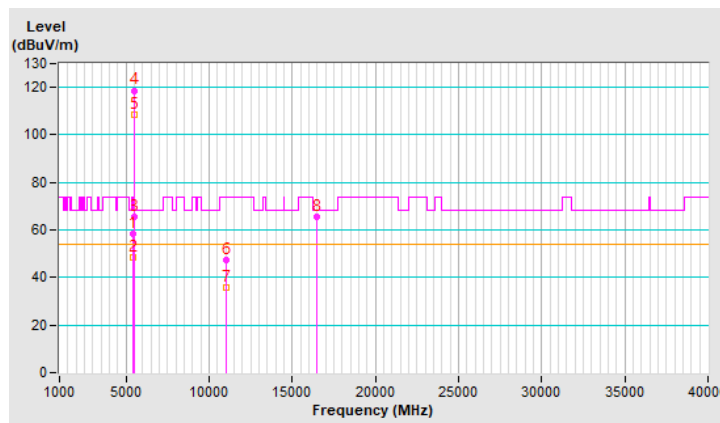
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	5459.31	58.4 PK	74.0	-15.6	2.85 H	277	53.2	5.2
2	5459.31	48.2 AV	54.0	-5.8	2.85 H	277	43.0	5.2
3	#5467.50	65.5 PK	68.2	-2.7	2.85 H	277	60.3	5.2
4	*5500.00	118.7 PK			2.85 H	277	113.5	5.2
5	*5500.00	108.5 AV			2.85 H	277	103.3	5.2
6	11000.00	47.6 PK	74.0	-26.4	2.21 H	220	31.1	16.5
7	11000.00	35.7 AV	54.0	-18.3	2.21 H	220	19.2	16.5
8	#16500.00	65.3 PK	68.2	-2.9	1.50 H	360	46.7	18.6

**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.

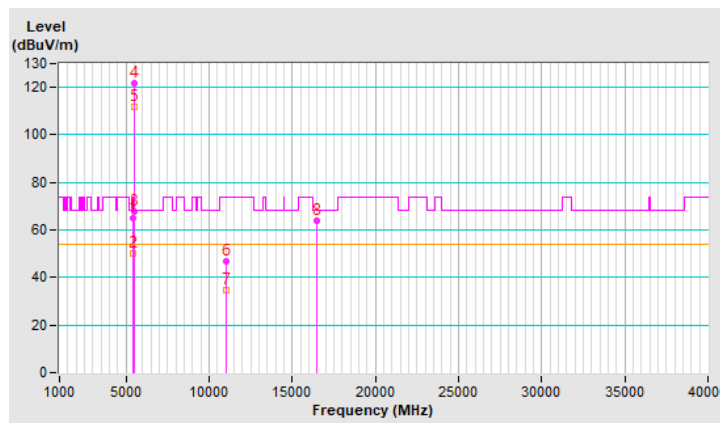


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	5458.66	64.9 PK	74.0	-9.1	3.06 V	360	59.7	5.2
2	5458.66	50.1 AV	54.0	-3.9	3.06 V	360	44.9	5.2
3	#5466.89	67.5 PK	68.2	-0.7	3.06 V	360	62.3	5.2
4	*5500.00	121.8 PK			3.06 V	360	116.6	5.2
5	*5500.00	111.7 AV			3.06 V	360	106.5	5.2
6	11000.00	46.7 PK	74.0	-27.3	1.44 V	272	30.2	16.5
7	11000.00	34.5 AV	54.0	-19.5	1.44 V	272	18.0	16.5
8	#16500.00	64.1 PK	68.2	-4.1	1.53 V	327	45.5	18.6

**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.



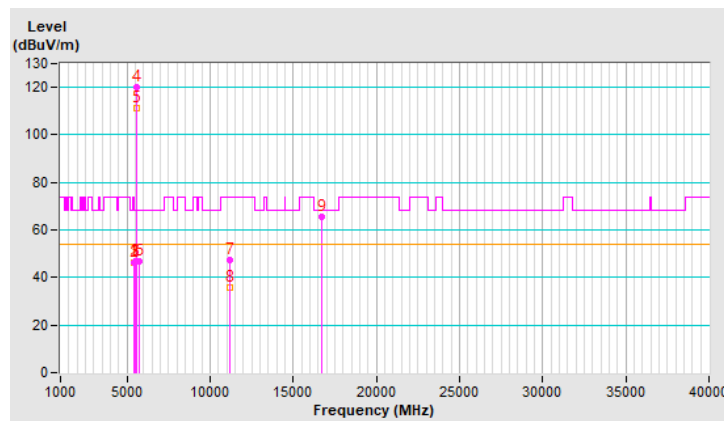
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	46.4 PK	74.0	-27.6	2.90 H	287	41.2	5.2
2	5460.00	46.0 AV	54.0	-8.0	2.90 H	287	40.8	5.2
3	#5469.68	46.8 PK	68.2	-21.4	2.90 H	287	41.6	5.2
4	*5580.00	120.3 PK			2.90 H	287	114.7	5.6
5	*5580.00	111.3 AV			2.90 H	287	105.7	5.6
6	#5738.99	46.9 PK	68.2	-21.3	2.90 H	287	41.1	5.8
7	11160.00	47.3 PK	74.0	-26.7	2.18 H	235	30.7	16.6
8	11160.00	35.6 AV	54.0	-18.4	2.18 H	235	19.0	16.6
9	#16740.00	65.7 PK	68.2	-2.5	1.54 H	360	45.7	20.0

**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.

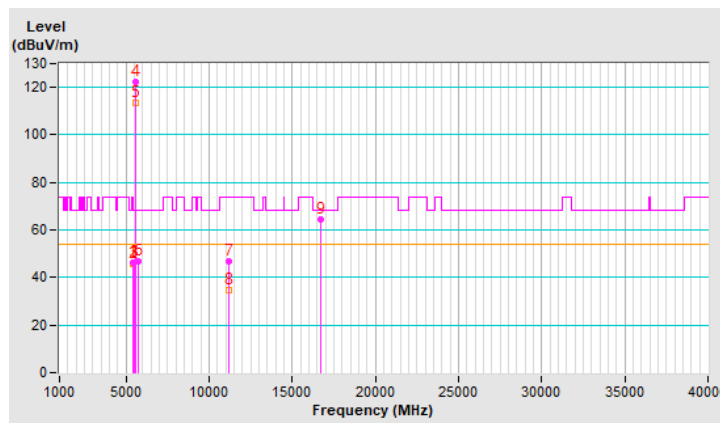


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	46.1 PK	74.0	-27.9	3.17 V	360	40.9	5.2
2	5460.00	45.8 AV	54.0	-8.2	3.17 V	360	40.6	5.2
3	#5469.68	46.1 PK	68.2	-22.1	3.17 V	360	40.9	5.2
4	*5580.00	122.5 PK			3.17 V	360	116.9	5.6
5	*5580.00	113.5 AV			3.17 V	360	107.9	5.6
6	#5738.99	46.6 PK	68.2	-21.6	3.17 V	360	40.8	5.8
7	11160.00	47.0 PK	74.0	-27.0	1.47 V	252	30.4	16.6
8	11160.00	34.6 AV	54.0	-19.4	1.47 V	252	18.0	16.6
9	#16740.00	64.3 PK	68.2	-3.9	1.56 V	327	44.3	20.0

**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.



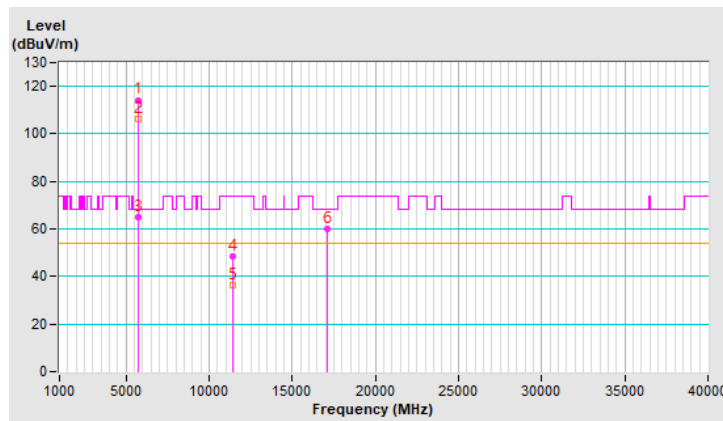
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	114.3 PK			1.55 H	297	108.6	5.7
2	*5700.00	106.2 AV			1.55 H	297	100.5	5.7
3	#5725.00	64.8 PK	68.2	-3.4	1.55 H	297	59.1	5.7
4	11400.00	48.2 PK	74.0	-25.8	2.19 H	233	31.1	17.1
5	11400.00	36.3 AV	54.0	-17.7	2.19 H	233	19.2	17.1
6	#17100.00	60.0 PK	68.2	-8.2	1.52 H	360	39.9	20.1

**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.

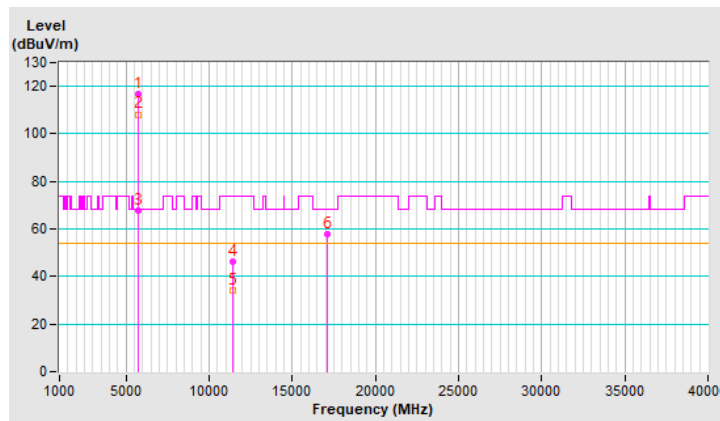


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	116.7 PK			2.43 V	203	111.0	5.7
2	*5700.00	108.2 AV			2.43 V	203	102.5	5.7
<b>3</b>	<b>#5725.00</b>	<b>67.7 PK</b>	<b>68.2</b>	<b>-0.5</b>	<b>2.43 V</b>	<b>203</b>	<b>62.0</b>	<b>5.7</b>
4	11400.00	46.5 PK	74.0	-27.5	1.52 V	265	29.4	17.1
5	11400.00	34.2 AV	54.0	-19.8	1.52 V	265	17.1	17.1
6	#17100.00	58.0 PK	68.2	-10.2	1.49 V	322	37.9	20.1

**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.





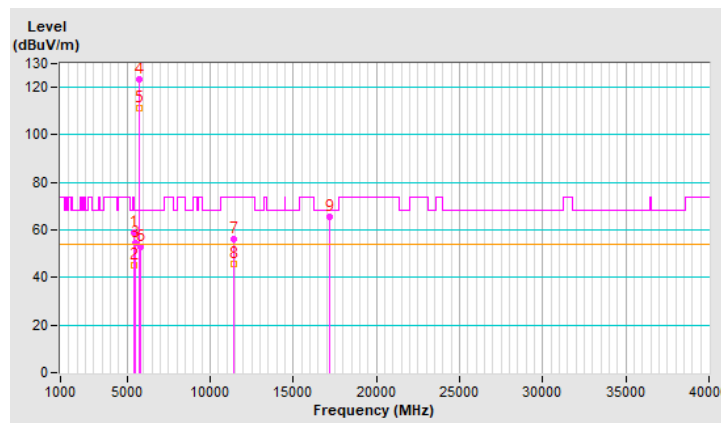
<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.7 PK	74.0	-15.3	1.73 H	280	53.5	5.2
2	5460.00	45.3 AV	54.0	-8.7	1.73 H	280	40.1	5.2
3	#5470.00	54.3 PK	68.2	-13.9	1.73 H	280	49.1	5.2
4	*5720.00	123.3 PK			1.73 H	280	117.6	5.7
5	*5720.00	111.3 AV			1.73 H	280	105.6	5.7
6	#5850.00	52.8 PK	68.2	-15.4	1.73 H	280	46.8	6.0
7	11440.00	56.3 PK	74.0	-17.7	2.15 H	211	39.1	17.2
8	11440.00	45.6 AV	54.0	-8.4	2.15 H	211	28.4	17.2
9	#17160.00	65.6 PK	68.2	-2.6	1.47 H	356	45.4	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.

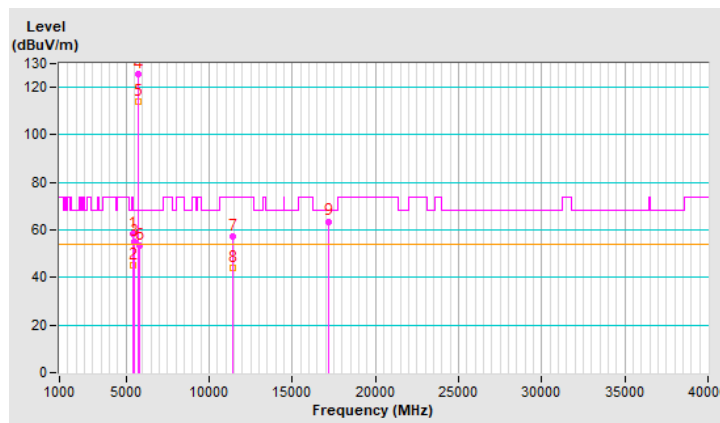


<b>RF Mode</b>	802.11a	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	58.5 PK	74.0	-15.5	2.54 V	205	53.3	5.2
2	5460.00	45.3 AV	54.0	-8.7	2.54 V	205	40.1	5.2
3	#5470.00	55.0 PK	68.2	-13.2	2.54 V	205	49.8	5.2
4	*5720.00	125.5 PK			2.54 V	205	119.8	5.7
5	*5720.00	113.8 AV			2.54 V	205	108.1	5.7
6	#5850.00	53.2 PK	68.2	-15.0	2.54 V	205	47.2	6.0
7	11440.00	57.2 PK	74.0	-16.8	1.47 V	275	40.0	17.2
8	11440.00	44.3 AV	54.0	-9.7	1.47 V	275	27.1	17.2
9	#17160.00	63.6 PK	68.2	-4.6	1.57 V	323	43.4	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.



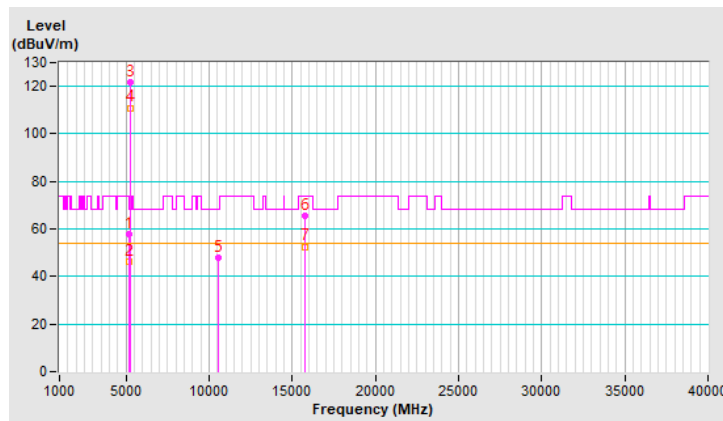
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.6 PK	74.0	-16.4	3.23 H	283	52.4	5.2
2	5150.00	46.4 AV	54.0	-7.6	3.23 H	283	41.2	5.2
3	*5260.00	121.8 PK			3.23 H	283	117.1	4.7
4	*5260.00	111.0 AV			3.23 H	283	106.3	4.7
5	#10520.00	48.0 PK	68.2	-20.2	2.19 H	214	31.7	16.3
6	15780.00	65.3 PK	74.0	-8.7	1.52 H	360	48.6	16.7
7	15780.00	52.6 AV	54.0	-1.4	1.52 H	360	35.9	16.7

**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.

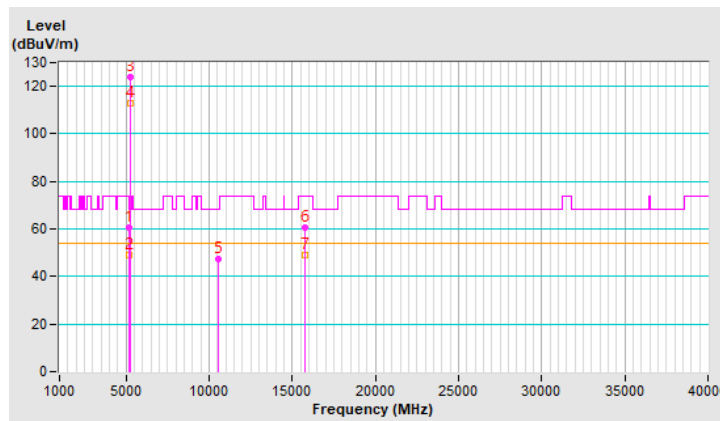


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	60.5 PK	74.0	-13.5	2.05 V	338	55.3	5.2
2	5150.00	49.1 AV	54.0	-4.9	2.05 V	338	43.9	5.2
3	*5260.00	123.8 PK			2.05 V	338	119.1	4.7
4	*5260.00	112.8 AV			2.05 V	338	108.1	4.7
5	#10520.00	47.3 PK	68.2	-20.9	2.01 V	311	31.0	16.3
6	15780.00	60.4 PK	74.0	-13.6	2.59 V	339	43.7	16.7
7	15780.00	48.8 AV	54.0	-5.2	2.59 V	339	32.1	16.7

**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.



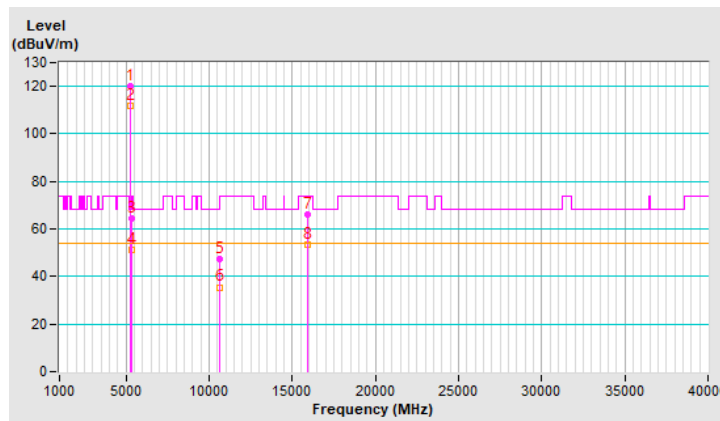
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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			3.00 H	276	115.5	4.8
2	*5300.00	112.0 AV			3.00 H	276	107.2	4.8
3	5350.00	64.4 PK	74.0	-9.6	3.00 H	276	59.4	5.0
4	5350.00	51.4 AV	54.0	-2.6	3.00 H	276	46.4	5.0
5	10600.00	47.1 PK	74.0	-26.9	2.20 H	220	31.2	15.9
6	10600.00	35.5 AV	54.0	-18.5	2.20 H	220	19.6	15.9
7	15900.00	66.1 PK	74.0	-7.9	1.53 H	344	49.5	16.6
8	15900.00	53.2 AV	54.0	-0.8	1.53 H	344	36.6	16.6

**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.

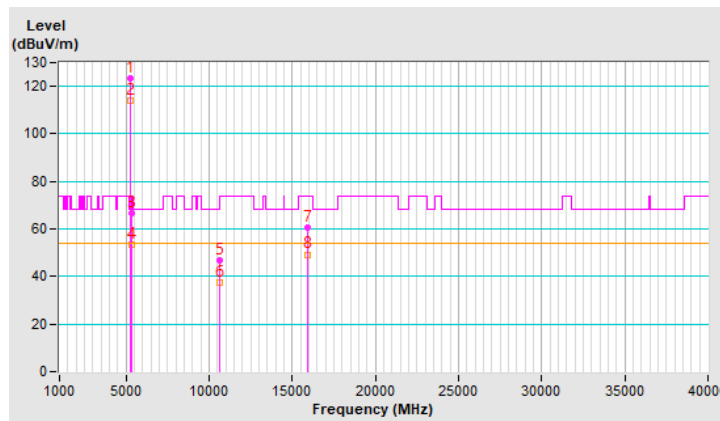


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	123.6 PK			2.02 V	331	118.8	4.8
2	*5300.00	114.0 AV			2.02 V	331	109.2	4.8
3	5350.00	66.6 PK	74.0	-7.4	2.02 V	331	61.6	5.0
4	5350.00	53.2 AV	54.0	-0.8	2.02 V	331	48.2	5.0
5	10600.00	47.0 PK	74.0	-27.0	2.03 V	321	31.1	15.9
6	10600.00	37.2 AV	54.0	-16.8	2.03 V	321	21.3	15.9
7	15900.00	60.6 PK	74.0	-13.4	2.54 V	317	44.0	16.6
8	15900.00	49.3 AV	54.0	-4.7	2.54 V	317	32.7	16.6

**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.



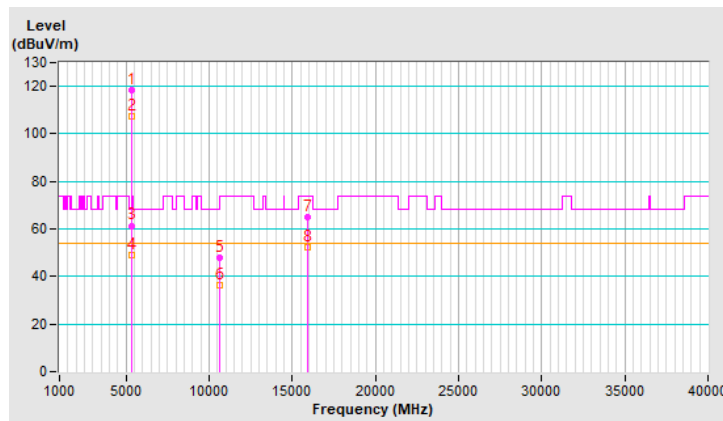
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	118.4 PK			3.08 H	276	113.5	4.9
2	*5320.00	107.2 AV			3.08 H	276	102.3	4.9
3	5350.00	61.4 PK	74.0	-12.6	3.08 H	276	56.4	5.0
4	5350.00	49.0 AV	54.0	-5.0	3.08 H	276	44.0	5.0
5	10640.00	47.7 PK	74.0	-26.3	2.24 H	220	31.9	15.8
6	10640.00	36.1 AV	54.0	-17.9	2.24 H	220	20.3	15.8
7	15960.00	65.2 PK	74.0	-8.8	1.54 H	360	48.5	16.7
8	15960.00	52.5 AV	54.0	-1.5	1.54 H	360	35.8	16.7

**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.

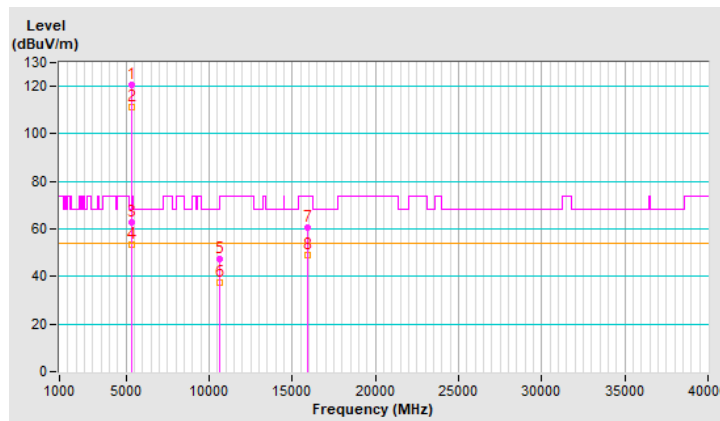


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	120.6 PK			2.00 V	340	115.7	4.9
2	*5320.00	111.0 AV			2.00 V	340	106.1	4.9
3	5350.00	63.0 PK	74.0	-11.0	2.00 V	340	58.0	5.0
4	5350.00	53.3 AV	54.0	-0.7	2.00 V	340	48.3	5.0
5	10640.00	47.6 PK	74.0	-26.4	2.11 V	312	31.8	15.8
6	10640.00	37.5 AV	54.0	-16.5	2.11 V	312	21.7	15.8
7	15960.00	60.4 PK	74.0	-13.6	2.59 V	315	43.7	16.7
8	15960.00	48.9 AV	54.0	-5.1	2.59 V	315	32.2	16.7

**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.



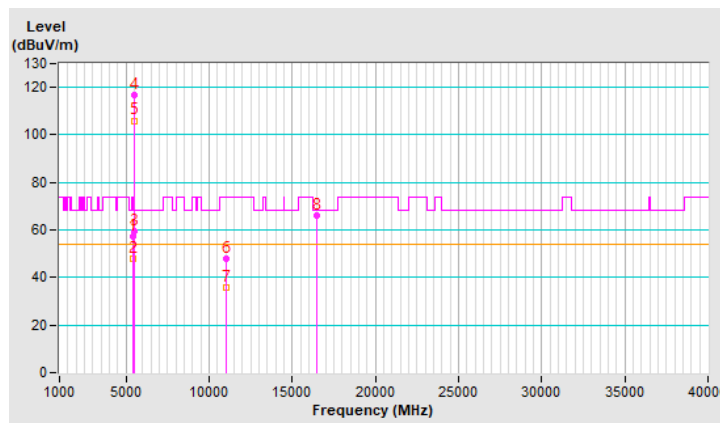


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	57.4 PK	74.0	-16.6	2.85 H	275	52.2	5.2
2	5460.00	48.1 AV	54.0	-5.9	2.85 H	275	42.9	5.2
3	#5470.00	59.3 PK	68.2	-8.9	2.85 H	275	54.1	5.2
4	*5500.00	116.7 PK			2.85 H	275	111.5	5.2
5	*5500.00	106.0 AV			2.85 H	275	100.8	5.2
6	11000.00	47.9 PK	74.0	-26.1	2.18 H	210	31.4	16.5
7	11000.00	36.0 AV	54.0	-18.0	2.18 H	210	19.5	16.5
8	#16500.00	66.3 PK	68.2	-1.9	1.48 H	345	47.7	18.6

**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.

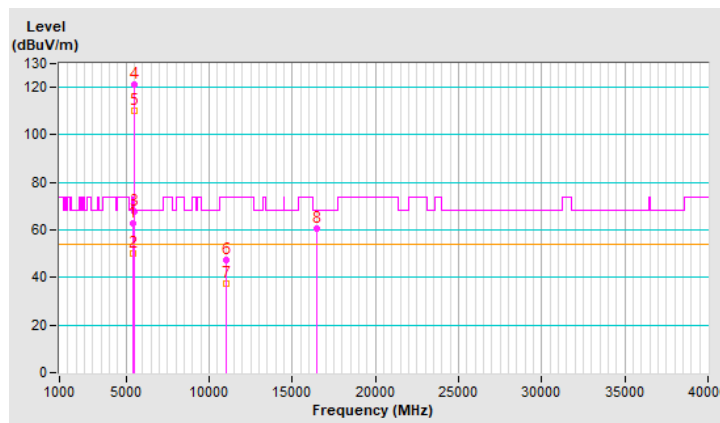


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	62.7 PK	74.0	-11.3	2.51 V	198	57.5	5.2
2	5460.00	50.0 AV	54.0	-4.0	2.51 V	198	44.8	5.2
3	#5470.00	67.6 PK	68.2	-0.6	2.51 V	198	62.4	5.2
4	*5500.00	121.3 PK			2.51 V	198	116.1	5.2
5	*5500.00	110.0 AV			2.51 V	198	104.8	5.2
6	11000.00	47.5 PK	74.0	-26.5	2.33 V	312	31.0	16.5
7	11000.00	37.2 AV	54.0	-16.8	2.33 V	312	20.7	16.5
8	#16500.00	60.5 PK	68.2	-7.7	2.58 V	333	41.9	18.6

**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.



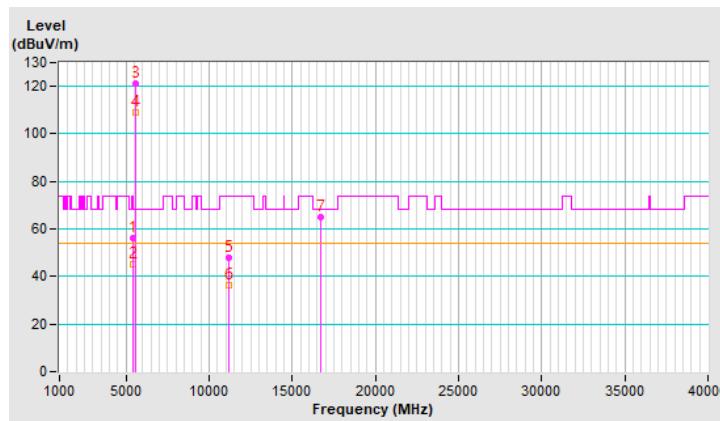
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	2.97 H	285	50.9	5.2
2	5460.00	45.3 AV	54.0	-8.7	2.97 H	285	40.1	5.2
3	*5580.00	121.0 PK			2.97 H	285	115.4	5.6
4	*5580.00	109.3 AV			2.97 H	285	103.7	5.6
5	11160.00	47.9 PK	74.0	-26.1	2.23 H	231	31.3	16.6
6	11160.00	36.3 AV	54.0	-17.7	2.23 H	231	19.7	16.6
7	#16740.00	65.2 PK	68.2	-3.0	1.53 H	360	45.2	20.0

**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.

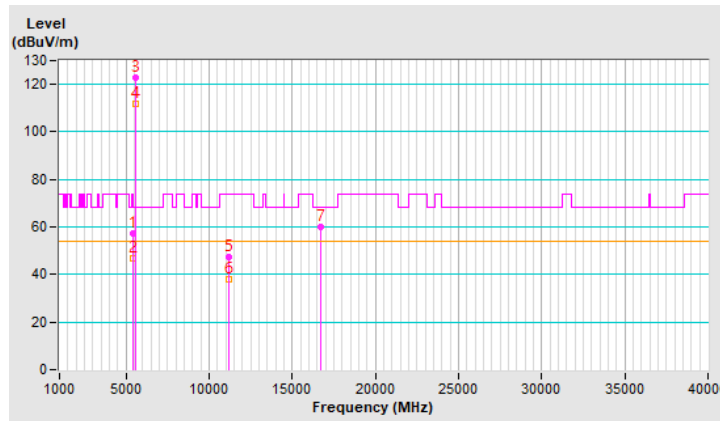


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.2 PK	74.0	-16.8	2.53 V	207	52.0	5.2
2	5460.00	46.8 AV	54.0	-7.2	2.53 V	207	41.6	5.2
3	*5580.00	123.0 PK			2.53 V	207	117.4	5.6
4	*5580.00	111.7 AV			2.53 V	207	106.1	5.6
5	11160.00	47.6 PK	74.0	-26.4	2.12 V	214	31.0	16.6
6	11160.00	37.8 AV	54.0	-16.2	2.12 V	214	21.2	16.6
7	#16740.00	60.0 PK	68.2	-8.2	2.59 V	319	40.0	20.0

**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.



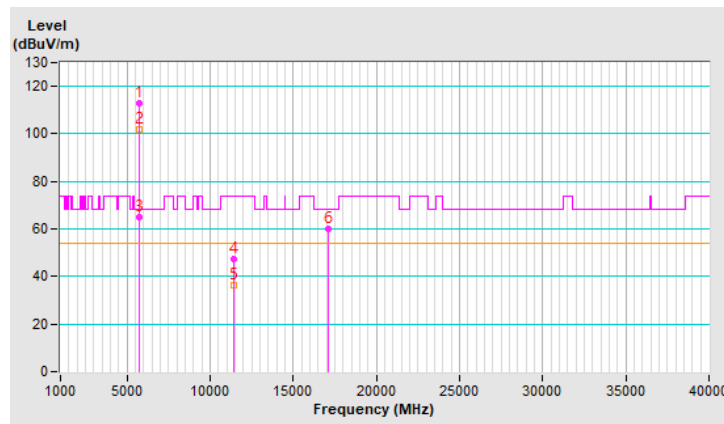
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	113.0 PK			2.11 H	246	107.3	5.7
2	*5700.00	102.0 AV			2.11 H	246	96.3	5.7
3	#5725.00	65.0 PK	68.2	-3.2	2.11 H	246	59.3	5.7
4	11400.00	47.6 PK	74.0	-26.4	2.21 H	223	30.5	17.1
5	11400.00	36.1 AV	54.0	-17.9	2.21 H	223	19.0	17.1
6	#17100.00	60.2 PK	68.2	-8.0	1.53 H	347	40.1	20.1

**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.



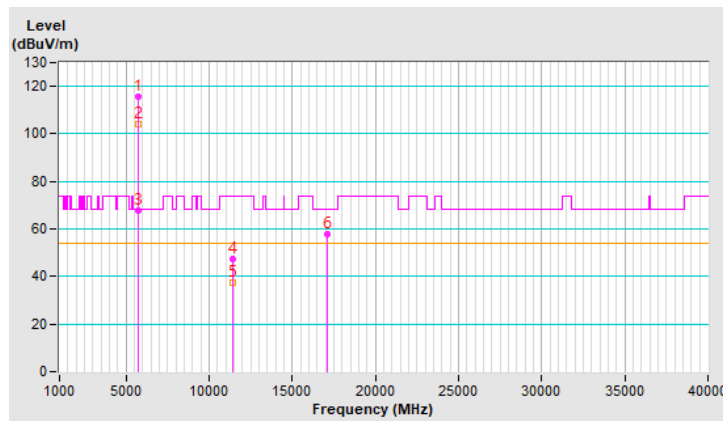
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	115.7 PK			2.57 V	190	110.0	5.7
2	*5700.00	104.2 AV			2.57 V	190	98.5	5.7
3	#5725.00	67.6 PK	68.2	-0.6	2.57 V	190	61.9	5.7
4	11400.00	47.3 PK	74.0	-26.7	2.10 V	322	30.2	17.1
5	11400.00	37.2 AV	54.0	-16.8	2.10 V	322	20.1	17.1
6	#17100.00	57.6 PK	68.2	-10.6	2.58 V	322	37.5	20.1

**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.



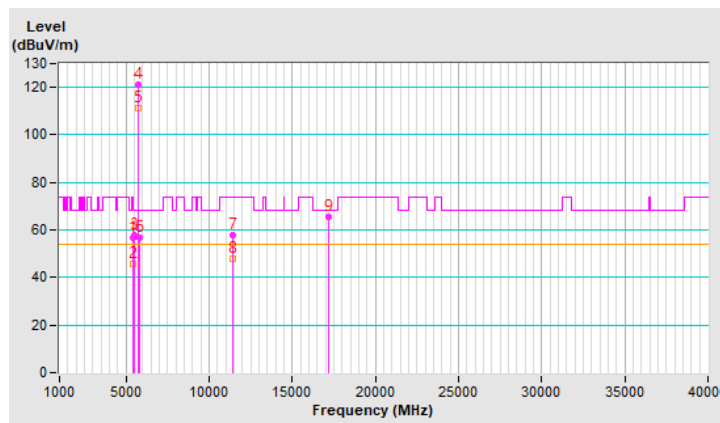
<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.5 PK	74.0	-17.5	2.33 H	298	51.3	5.2
2	5460.00	45.9 AV	54.0	-8.1	2.33 H	298	40.7	5.2
3	#5470.00	57.9 PK	68.2	-10.3	2.33 H	298	52.7	5.2
4	*5720.00	121.3 PK			2.33 H	298	115.6	5.7
5	*5720.00	111.3 AV			2.33 H	298	105.6	5.7
6	#5850.00	56.6 PK	68.2	-11.6	2.33 H	298	50.6	6.0
7	11440.00	57.6 PK	74.0	-16.4	2.91 H	358	40.4	17.2
8	11440.00	48.0 AV	54.0	-6.0	2.91 H	358	30.8	17.2
9	#17160.00	65.6 PK	68.2	-2.6	1.49 H	360	45.4	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.

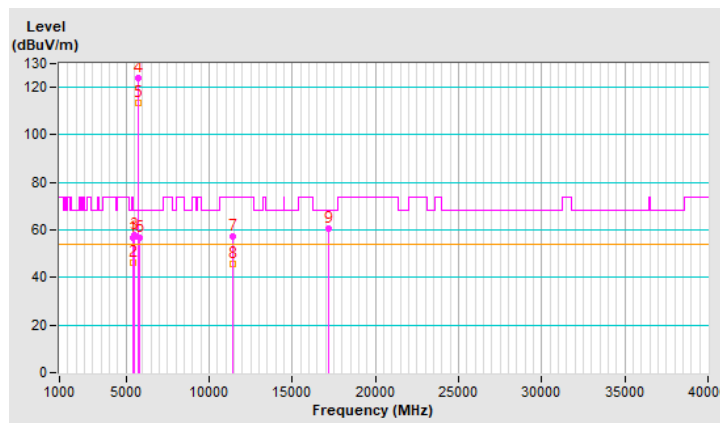


<b>RF Mode</b>	802.11ax (HE20)	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.8 PK	74.0	-17.2	2.54 V	204	51.6	5.2
2	5460.00	46.3 AV	54.0	-7.7	2.54 V	204	41.1	5.2
3	#5470.00	57.8 PK	68.2	-10.4	2.54 V	204	52.6	5.2
4	*5720.00	123.8 PK			2.54 V	204	118.1	5.7
5	*5720.00	113.3 AV			2.54 V	204	107.6	5.7
6	#5850.00	56.5 PK	68.2	-11.7	2.54 V	204	50.5	6.0
7	11440.00	57.3 PK	74.0	-16.7	2.31 V	321	40.1	17.2
8	11440.00	45.6 AV	54.0	-8.4	2.31 V	321	28.4	17.2
9	#17160.00	60.5 PK	68.2	-7.7	2.61 V	321	40.3	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.





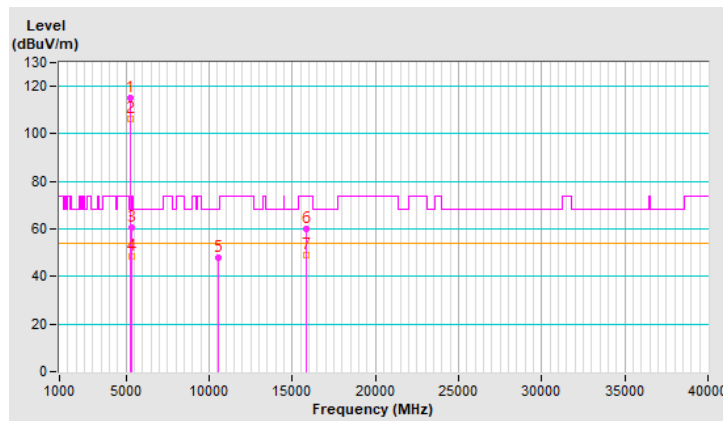
<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 54 : 5270 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	*5270.00	115.1 PK			3.56 H	279	110.4	4.7
2	*5270.00	106.2 AV			3.56 H	279	101.5	4.7
3	5352.24	60.4 PK	74.0	-13.6	3.56 H	279	55.4	5.0
4	5352.24	48.7 AV	54.0	-5.3	3.56 H	279	43.7	5.0
5	#10540.00	48.0 PK	68.2	-20.2	2.25 H	207	31.8	16.2
6	15810.00	60.1 PK	74.0	-13.9	1.53 H	360	43.5	16.6
7	15810.00	49.1 AV	54.0	-4.9	1.53 H	360	32.5	16.6

**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.

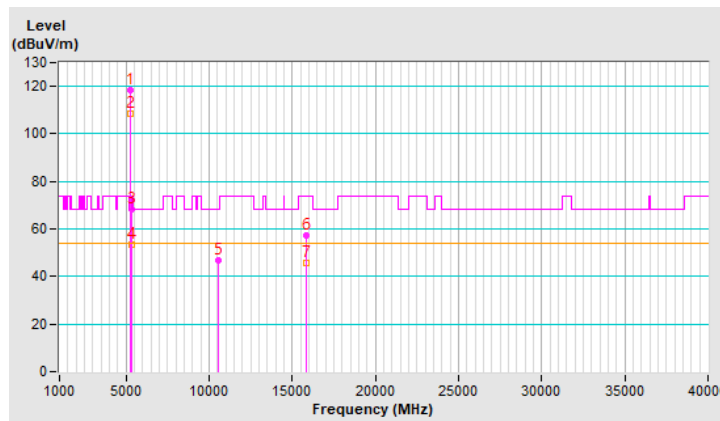


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 54 : 5270 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	*5270.00	118.6 PK			1.96 V	342	113.9	4.7
2	*5270.00	108.5 AV			1.96 V	342	103.8	4.7
3	5351.54	68.4 PK	74.0	-5.6	1.96 V	342	63.4	5.0
4	<b>5351.54</b>	<b>53.5 AV</b>	<b>54.0</b>	<b>-0.5</b>	<b>1.96 V</b>	<b>342</b>	<b>48.5</b>	<b>5.0</b>
5	#10540.00	46.8 PK	68.2	-21.4	1.41 V	291	30.6	16.2
6	15810.00	57.5 PK	74.0	-16.5	2.49 V	317	40.9	16.6
7	15810.00	45.6 AV	54.0	-8.4	2.49 V	317	29.0	16.6

**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.

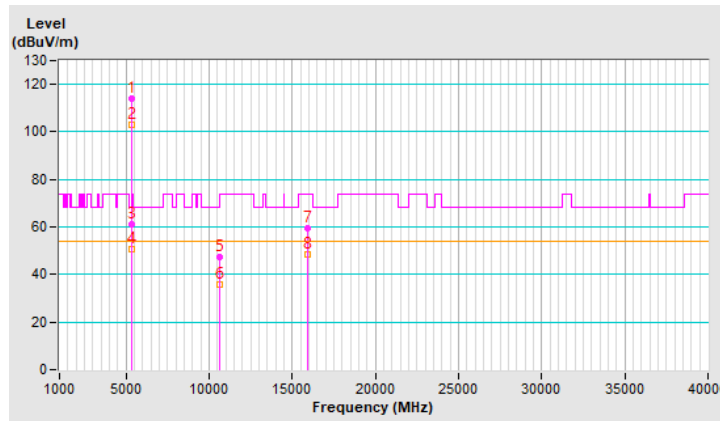


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 62 : 5310 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	114.0 PK			2.94 H	274	109.2	4.8
2	*5310.00	102.9 AV			2.94 H	274	98.1	4.8
3	5350.00	60.9 PK	74.0	-13.1	2.94 H	274	55.9	5.0
4	5350.00	50.6 AV	54.0	-3.4	2.94 H	274	45.6	5.0
5	10620.00	47.2 PK	74.0	-26.8	2.17 H	236	31.3	15.9
6	10620.00	36.0 AV	54.0	-18.0	2.17 H	236	20.1	15.9
7	15930.00	59.5 PK	74.0	-14.5	1.58 H	347	42.9	16.6
8	15930.00	48.6 AV	54.0	-5.4	1.58 H	347	32.0	16.6

**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.

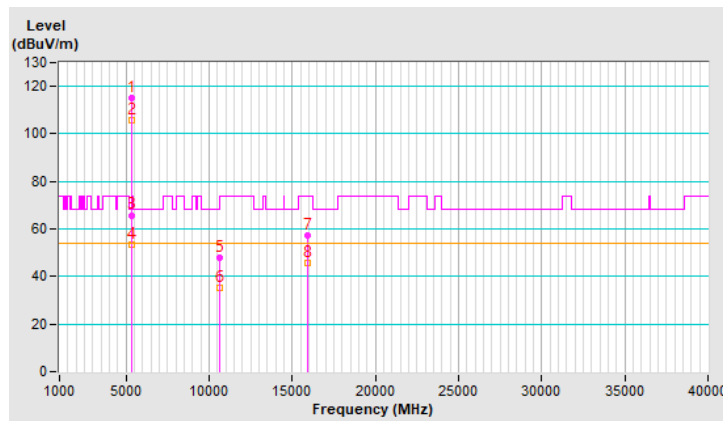


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 62 : 5310 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	115.2 PK			2.12 V	339	110.4	4.8
2	*5310.00	105.7 AV			2.12 V	339	100.9	4.8
3	5351.57	65.8 PK	74.0	-8.2	2.12 V	339	60.8	5.0
4	<b>5351.57</b>	<b>53.5 AV</b>	<b>54.0</b>	<b>-0.5</b>	<b>2.12 V</b>	<b>339</b>	<b>48.5</b>	<b>5.0</b>
5	10620.00	47.7 PK	74.0	-26.3	1.46 V	277	31.8	15.9
6	10620.00	35.3 AV	54.0	-18.7	1.46 V	277	19.4	15.9
7	15930.00	57.2 PK	74.0	-16.8	2.56 V	326	40.6	16.6
8	15930.00	45.6 AV	54.0	-8.4	2.56 V	326	29.0	16.6

**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.

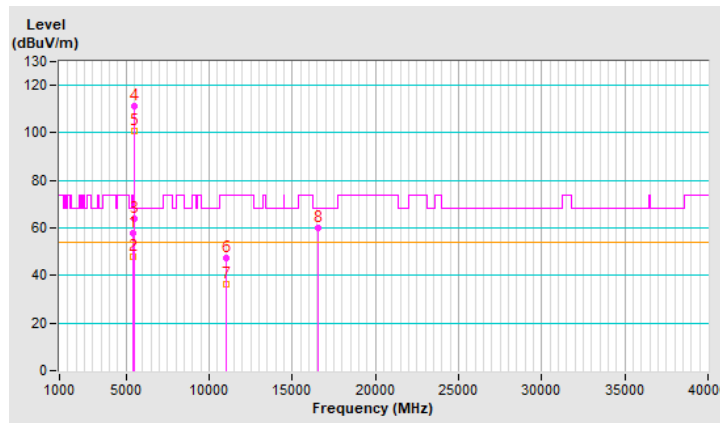


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 102 : 5510 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	57.6 PK	74.0	-16.4	2.71 H	267	52.4	5.2
2	5460.00	47.8 AV	54.0	-6.2	2.71 H	267	42.6	5.2
3	#5465.29	63.9 PK	68.2	-4.3	2.71 H	267	58.7	5.2
4	*5510.00	111.1 PK			2.71 H	267	105.8	5.3
5	*5510.00	100.8 AV			2.71 H	267	95.5	5.3
6	11020.00	47.3 PK	74.0	-26.7	2.18 H	222	30.7	16.6
7	11020.00	36.1 AV	54.0	-17.9	2.18 H	222	19.5	16.6
8	#16530.00	60.1 PK	68.2	-8.1	1.58 H	357	41.5	18.6

**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.

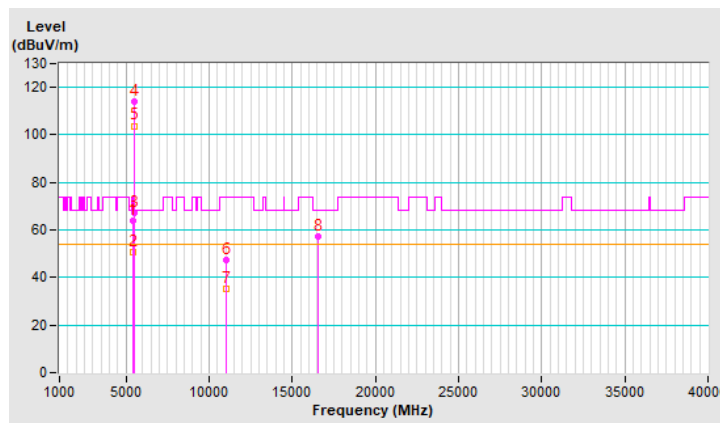


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 102 : 5510 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	64.1 PK	74.0	-9.9	1.98 V	206	58.9	5.2
2	5460.00	50.5 AV	54.0	-3.5	1.98 V	206	45.3	5.2
3	#5465.87	67.4 PK	68.2	-0.8	1.98 V	206	62.2	5.2
4	*5510.00	114.1 PK			1.98 V	206	108.8	5.3
5	*5510.00	103.8 AV			1.98 V	206	98.5	5.3
6	11020.00	47.4 PK	74.0	-26.6	1.52 V	269	30.8	16.6
7	11020.00	35.2 AV	54.0	-18.8	1.52 V	269	18.6	16.6
8	#16530.00	57.5 PK	68.2	-10.7	2.55 V	312	38.9	18.6

**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.



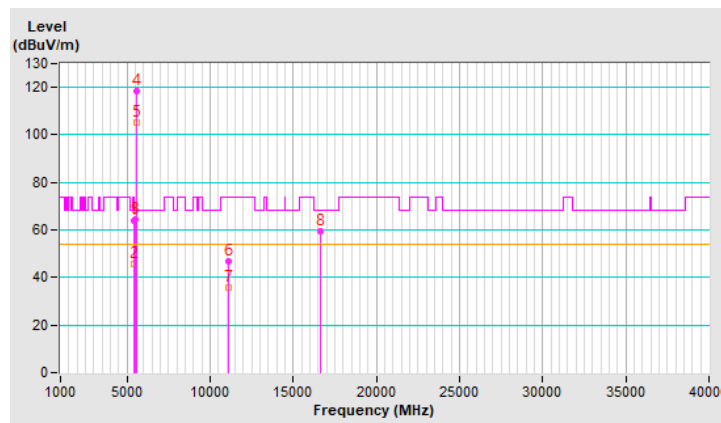
<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 110 : 5550 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	63.8 PK	74.0	-10.2	2.60 H	270	58.6	5.2
2	5460.00	45.6 AV	54.0	-8.4	2.60 H	270	40.4	5.2
3	#5466.49	64.3 PK	68.2	-3.9	2.60 H	270	59.1	5.2
4	*5550.00	118.3 PK			2.60 H	270	113.0	5.3
5	*5550.00	105.3 AV			2.60 H	270	100.0	5.3
6	11100.00	47.0 PK	74.0	-27.0	2.17 H	223	30.3	16.7
7	11100.00	35.7 AV	54.0	-18.3	2.17 H	223	19.0	16.7
8	#16650.00	59.6 PK	68.2	-8.6	1.51 H	348	40.2	19.4

**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.

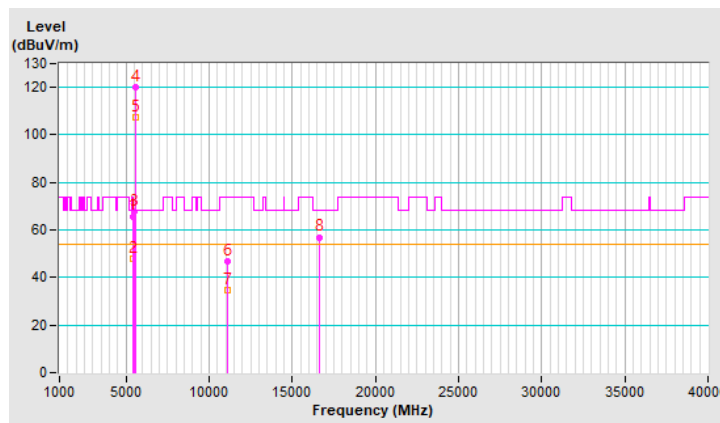


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 110 : 5550 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	65.8 PK	74.0	-8.2	2.05 V	344	60.6	5.2
2	5460.00	47.8 AV	54.0	-6.2	2.05 V	344	42.6	5.2
<b>3</b>	<b>#5466.49</b>	<b>67.7 PK</b>	<b>68.2</b>	<b>-0.5</b>	<b>2.05 V</b>	<b>344</b>	<b>62.5</b>	<b>5.2</b>
4	*5550.00	120.0 PK			2.05 V	344	114.7	5.3
5	*5550.00	107.5 AV			2.05 V	344	102.2	5.3
6	11100.00	46.9 PK	74.0	-27.1	1.45 V	260	30.2	16.7
7	11100.00	34.6 AV	54.0	-19.4	1.45 V	260	17.9	16.7
8	#16650.00	57.0 PK	68.2	-11.2	2.51 V	325	37.6	19.4

**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.





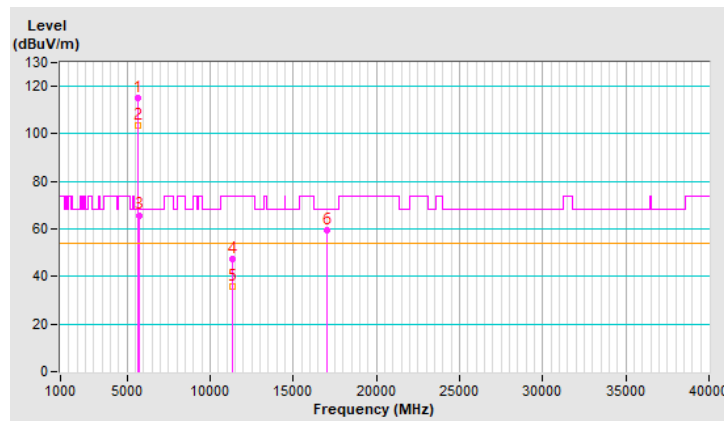
<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 134 : 5670 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	115.3 PK			2.73 H	252	109.6	5.7
2	*5670.00	103.3 AV			2.73 H	252	97.6	5.7
3	#5725.00	65.8 PK	68.2	-2.4	2.73 H	252	60.1	5.7
4	11340.00	47.6 PK	74.0	-26.4	2.15 H	209	30.7	16.9
5	11340.00	35.9 AV	54.0	-18.1	2.15 H	209	19.0	16.9
6	#17010.00	59.5 PK	68.2	-8.7	1.51 H	360	39.3	20.2

**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.
6. " # " : The radiated frequency is out of the restricted band.

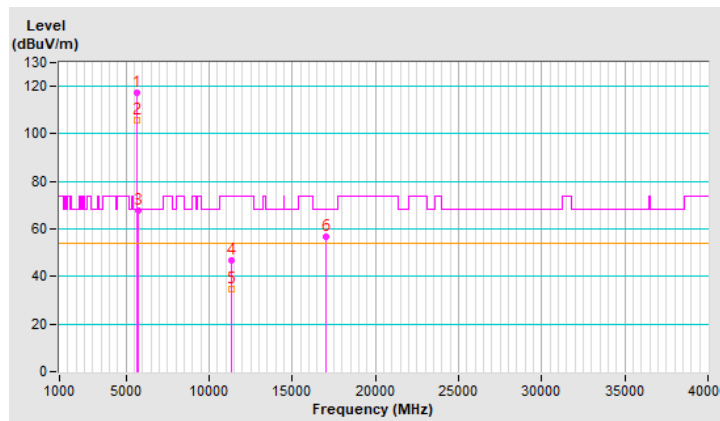


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 134 : 5670 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	117.2 PK			2.53 V	205	111.5	5.7
2	*5670.00	105.7 AV			2.53 V	205	100.0	5.7
3	#5725.00	67.5 PK	68.2	-0.7	2.53 V	205	61.8	5.7
4	11340.00	47.0 PK	74.0	-27.0	1.50 V	275	30.1	16.9
5	11340.00	34.8 AV	54.0	-19.2	1.50 V	275	17.9	16.9
6	#17010.00	56.9 PK	68.2	-11.3	2.59 V	342	36.7	20.2

**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.
6. " # " : The radiated frequency is out of the restricted band.



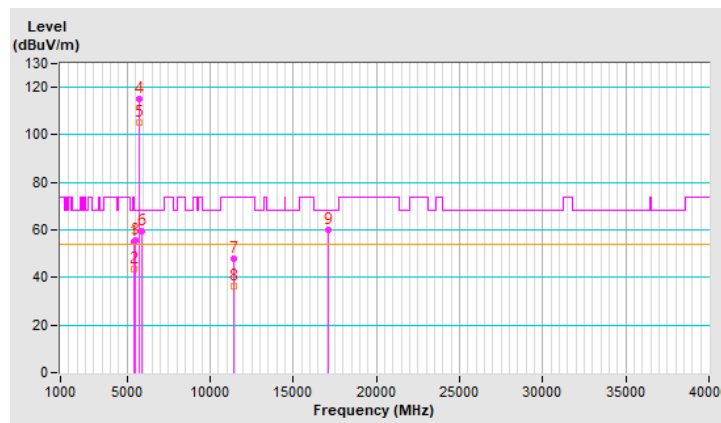
<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 142 : 5710 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	55.3 PK	74.0	-18.7	2.76 H	253	50.1	5.2
2	5460.00	43.3 AV	54.0	-10.7	2.76 H	253	38.1	5.2
3	#5470.00	55.6 PK	68.2	-12.6	2.76 H	253	50.4	5.2
4	*5710.00	115.3 PK			2.76 H	253	109.5	5.8
5	*5710.00	105.4 AV			2.76 H	253	99.6	5.8
6	#5856.06	59.4 PK	68.2	-8.8	2.76 H	253	53.2	6.2
7	11420.00	47.9 PK	74.0	-26.1	2.25 H	238	30.8	17.1
8	11420.00	36.2 AV	54.0	-17.8	2.25 H	238	19.1	17.1
9	#17130.00	60.0 PK	68.2	-8.2	1.51 H	355	39.8	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.

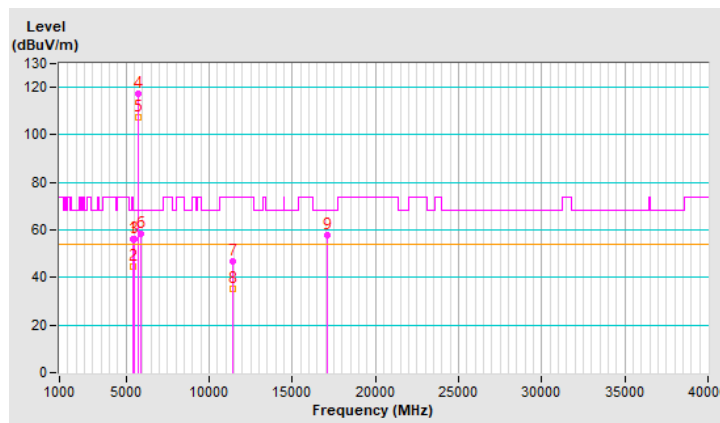


<b>RF Mode</b>	802.11ax (HE40)	<b>Channel</b>	CH 142 : 5710 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	1.61 V	344	50.9	5.2
2	5460.00	44.6 AV	54.0	-9.4	1.61 V	344	39.4	5.2
3	#5470.00	56.3 PK	68.2	-11.9	1.61 V	344	51.1	5.2
4	*5710.00	117.2 PK			1.61 V	344	111.4	5.8
5	*5710.00	107.4 AV			1.61 V	344	101.6	5.8
6	#5856.06	58.6 PK	68.2	-9.6	1.61 V	344	52.4	6.2
7	11420.00	47.0 PK	74.0	-27.0	1.47 V	280	29.9	17.1
8	11420.00	35.2 AV	54.0	-18.8	1.47 V	280	18.1	17.1
9	#17130.00	58.0 PK	68.2	-10.2	2.56 V	334	37.8	20.2

**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.
6. " # ": The radiated frequency is out of the restricted band.



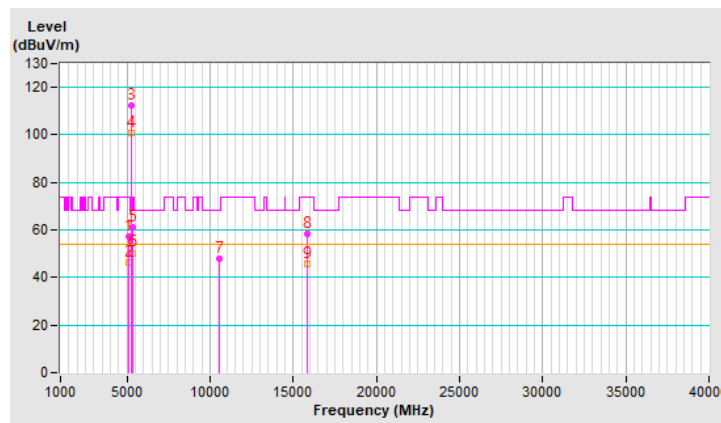
<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 58 : 5290 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	5135.81	57.4 PK	74.0	-16.6	2.80 H	276	52.2	5.2
2	5135.81	46.5 AV	54.0	-7.5	2.80 H	276	41.3	5.2
3	*5290.00	112.5 PK			2.80 H	276	107.8	4.7
4	*5290.00	100.6 AV			2.80 H	276	95.9	4.7
5	5356.34	61.1 PK	74.0	-12.9	2.80 H	276	56.1	5.0
6	5356.34	50.4 AV	54.0	-3.6	2.80 H	276	45.4	5.0
7	#10580.00	47.8 PK	68.2	-20.4	2.17 H	218	31.7	16.1
8	15870.00	58.5 PK	74.0	-15.5	1.51 H	355	41.9	16.6
9	15870.00	45.8 AV	54.0	-8.2	1.51 H	355	29.2	16.6

**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.

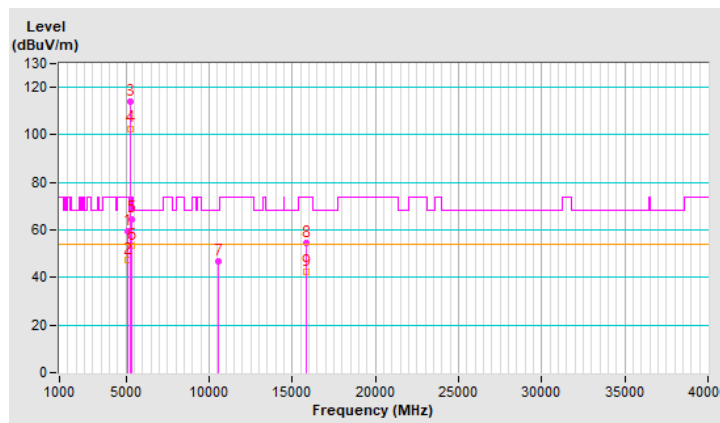


<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 58 : 5290 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	5136.53	59.6 PK	74.0	-14.4	2.07 V	338	54.4	5.2
2	5136.53	47.3 AV	54.0	-6.7	2.07 V	338	42.1	5.2
3	*5290.00	113.8 PK			2.07 V	338	109.1	4.7
4	*5290.00	102.7 AV			2.07 V	338	98.0	4.7
5	5352.00	64.7 PK	74.0	-9.3	2.07 V	338	59.7	5.0
6	5352.00	53.3 AV	54.0	-0.7	2.07 V	338	48.3	5.0
7	#10580.00	47.0 PK	68.2	-21.2	1.43 V	262	30.9	16.1
8	15870.00	54.4 PK	74.0	-19.6	2.57 V	313	37.8	16.6
9	15870.00	42.3 AV	54.0	-11.7	2.57 V	313	25.7	16.6

**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.



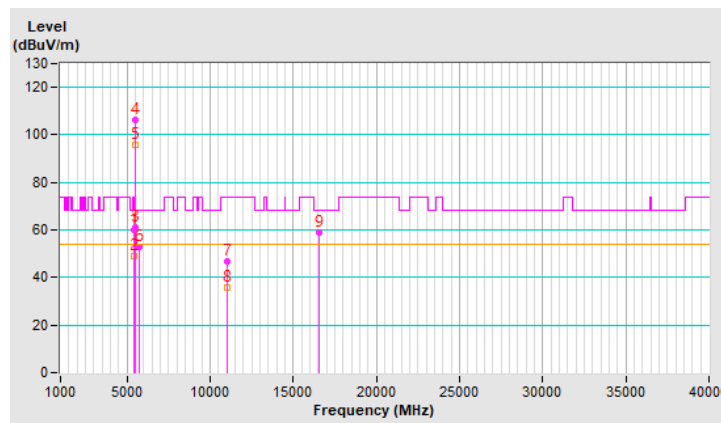
<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 106 : 5530 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	59.9 PK	74.0	-14.1	2.83 H	273	54.7	5.2
2	5460.00	49.0 AV	54.0	-5.0	2.83 H	273	43.8	5.2
3	#5465.30	61.3 PK	68.2	-6.9	2.83 H	273	56.1	5.2
4	*5530.00	106.4 PK			2.83 H	273	101.1	5.3
5	*5530.00	95.8 AV			2.83 H	273	90.5	5.3
6	#5728.68	52.9 PK	68.2	-15.3	2.83 H	273	47.2	5.7
7	11060.00	46.9 PK	74.0	-27.1	2.23 H	231	30.2	16.7
8	11060.00	35.6 AV	54.0	-18.4	2.23 H	231	18.9	16.7
9	#16590.00	58.8 PK	68.2	-9.4	1.43 H	360	40.1	18.7

**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.

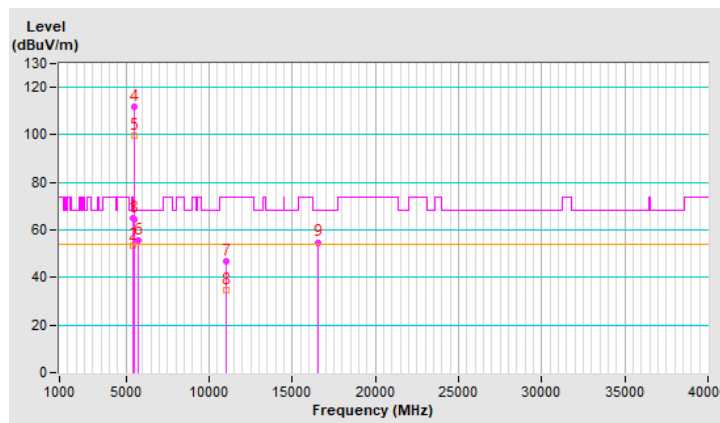


<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 106 : 5530 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	5456.49	64.8 PK	74.0	-9.2	1.94 V	345	59.6	5.2
2	5456.49	53.4 AV	54.0	-0.6	1.94 V	345	48.2	5.2
3	#5466.43	64.7 PK	68.2	-3.5	1.94 V	345	59.5	5.2
4	*5530.00	111.9 PK			1.94 V	345	106.6	5.3
5	*5530.00	99.4 AV			1.94 V	345	94.1	5.3
6	#5725.00	55.4 PK	68.2	-12.8	1.94 V	345	49.7	5.7
7	11060.00	46.9 PK	74.0	-27.1	1.45 V	279	30.2	16.7
8	11060.00	34.9 AV	54.0	-19.1	1.45 V	279	18.2	16.7
9	#16590.00	54.8 PK	68.2	-13.4	2.53 V	331	36.1	18.7

**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.





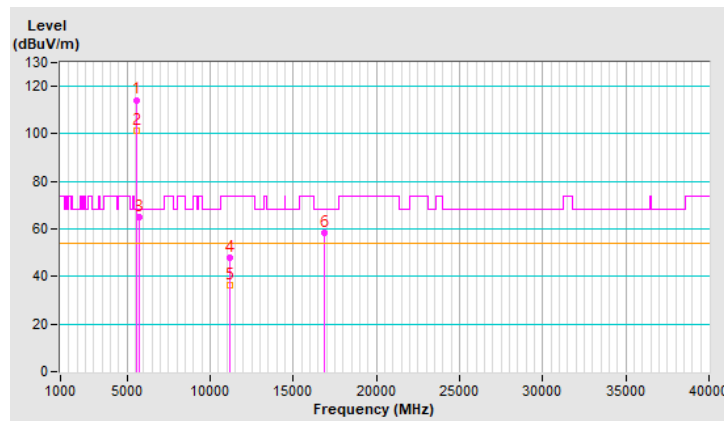
<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 122 : 5610 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	114.3 PK			2.97 H	279	108.6	5.7
2	*5610.00	101.3 AV			2.97 H	279	95.6	5.7
3	#5725.00	64.8 PK	68.2	-3.4	2.97 H	279	59.1	5.7
4	11220.00	47.7 PK	74.0	-26.3	2.17 H	211	31.1	16.6
5	11220.00	36.2 AV	54.0	-17.8	2.17 H	211	19.6	16.6
6	#16830.00	58.3 PK	68.2	-9.9	1.51 H	350	38.4	19.9

**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.

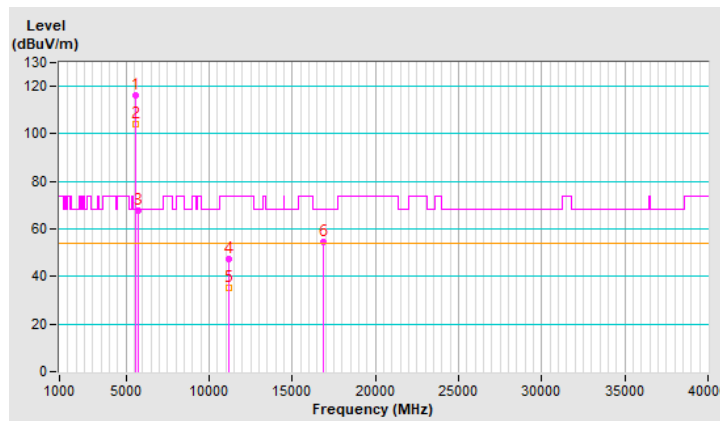


<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 122 : 5610 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	116.3 PK			2.57 V	204	110.6	5.7
2	*5610.00	103.9 AV			2.57 V	204	98.2	5.7
<b>3</b>	<b>#5725.00</b>	<b>67.7 PK</b>	<b>68.2</b>	<b>-0.5</b>	<b>2.57 V</b>	<b>204</b>	<b>62.0</b>	<b>5.7</b>
4	11220.00	47.4 PK	74.0	-26.6	1.47 V	262	30.8	16.6
5	11220.00	35.2 AV	54.0	-18.8	1.47 V	262	18.6	16.6
6	#16830.00	54.3 PK	68.2	-13.9	2.64 V	322	34.4	19.9

**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.



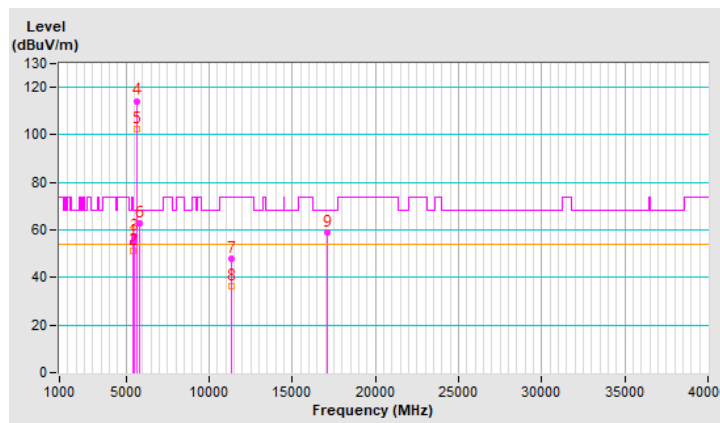
<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 138 : 5690 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	55.3 PK	74.0	-18.7	3.05 H	264	50.1	5.2
2	5460.00	51.3 AV	54.0	-2.7	3.05 H	264	46.1	5.2
3	#5470.00	57.3 PK	68.2	-10.9	3.05 H	264	52.1	5.2
4	*5690.00	114.3 PK			3.05 H	264	108.6	5.7
5	*5690.00	102.3 AV			3.05 H	264	96.6	5.7
6	#5850.00	62.7 PK	68.2	-5.5	3.05 H	264	56.7	6.0
7	11380.00	47.9 PK	74.0	-26.1	2.21 H	234	30.9	17.0
8	11380.00	36.2 AV	54.0	-17.8	2.21 H	234	19.2	17.0
9	#17070.00	59.0 PK	68.2	-9.2	1.44 H	357	38.9	20.1

**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.

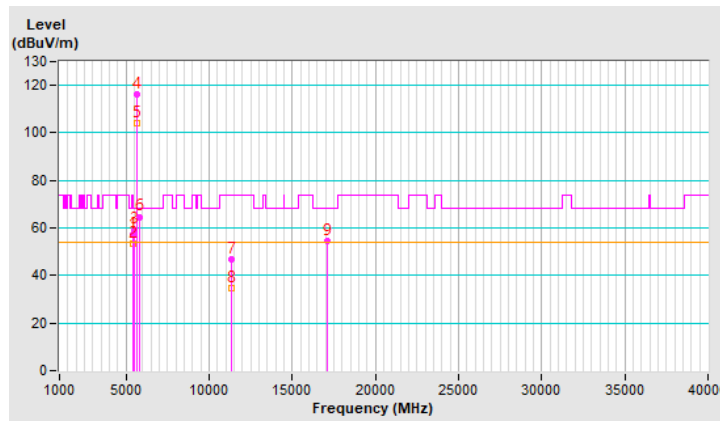


<b>RF Mode</b>	802.11ax (HE80)	<b>Channel</b>	CH 138 : 5690 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.5 PK	74.0	-16.5	1.79 V	346	52.3	5.2
2	5460.00	53.2 AV	54.0	-0.8	1.79 V	346	48.0	5.2
3	#5470.00	59.2 PK	68.2	-9.0	1.79 V	346	54.0	5.2
4	*5690.00	116.2 PK			1.79 V	346	110.5	5.7
5	*5690.00	104.3 AV			1.79 V	346	98.6	5.7
6	#5850.00	64.7 PK	68.2	-3.5	1.79 V	346	58.7	6.0
7	11380.00	46.6 PK	74.0	-27.4	1.43 V	269	29.6	17.0
8	11380.00	34.8 AV	54.0	-19.2	1.43 V	269	17.8	17.0
9	#17070.00	54.5 PK	68.2	-13.7	2.53 V	333	34.4	20.1

**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.



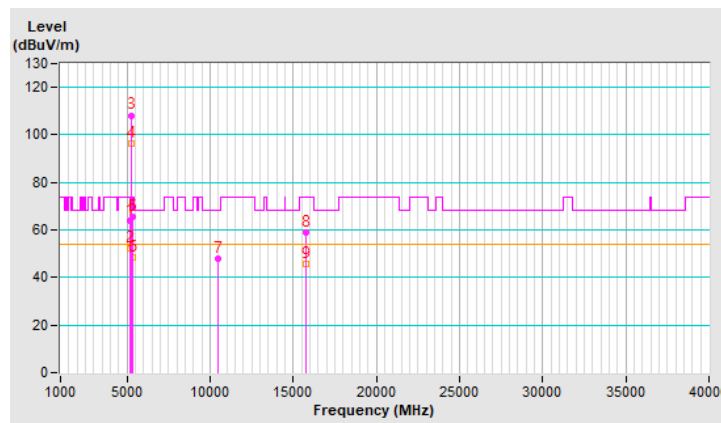
<b>RF Mode</b>	802.11ax (HE160)	<b>Channel</b>	CH 50 : 5250 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	64.0 PK	74.0	-10.0	2.80 H	284	58.8	5.2
2	5150.00	52.5 AV	54.0	-1.5	2.80 H	284	47.3	5.2
3	*5250.00	108.2 PK			2.80 H	284	103.5	4.7
4	*5250.00	96.5 AV			2.80 H	284	91.8	4.7
5	5365.13	65.4 PK	74.0	-8.6	2.80 H	284	60.4	5.0
6	5365.13	48.4 AV	54.0	-5.6	2.80 H	284	43.4	5.0
7	#10500.00	48.0 PK	68.2	-20.2	2.17 H	227	31.6	16.4
8	15750.00	58.7 PK	74.0	-15.3	1.53 H	360	42.1	16.6
9	15750.00	45.8 AV	54.0	-8.2	1.53 H	360	29.2	16.6

**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.

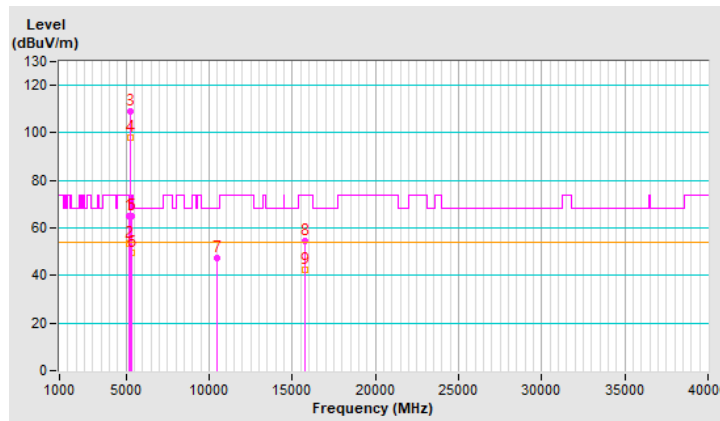


<b>RF Mode</b>	802.11ax (HE160)	<b>Channel</b>	CH 50 : 5250 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	5146.49	64.9 PK	74.0	-9.1	3.25 V	338	59.7	5.2
2	5146.49	53.4 AV	54.0	-0.6	3.25 V	338	48.2	5.2
3	*5250.00	109.3 PK			3.25 V	338	104.6	4.7
4	*5250.00	98.0 AV			3.25 V	338	93.3	4.7
5	5356.73	65.0 PK	74.0	-9.0	3.25 V	338	60.0	5.0
6	5356.73	49.6 AV	54.0	-4.4	3.25 V	338	44.6	5.0
7	#10500.00	47.5 PK	68.2	-20.7	1.45 V	289	31.1	16.4
8	15750.00	54.5 PK	74.0	-19.5	2.56 V	318	37.9	16.6
9	15750.00	42.3 AV	54.0	-11.7	2.56 V	318	25.7	16.6

**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.



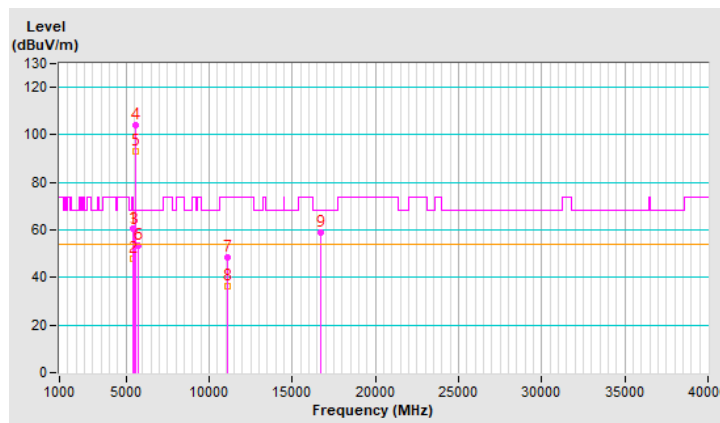
<b>RF Mode</b>	802.11ax (HE160)	<b>Channel</b>	CH 114 : 5570 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

**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	5453.41	60.5 PK	74.0	-13.5	3.65 H	286	55.3	5.2
2	5453.41	48.0 AV	54.0	-6.0	3.65 H	286	42.8	5.2
3	#5464.00	60.2 PK	68.2	-8.0	3.65 H	286	55.0	5.2
4	*5570.00	104.0 PK			3.65 H	286	98.6	5.4
5	*5570.00	93.2 AV			3.65 H	286	87.8	5.4
6	#5725.00	53.4 PK	68.2	-14.8	3.65 H	286	47.7	5.7
7	11140.00	48.2 PK	74.0	-25.8	2.20 H	219	31.6	16.6
8	11140.00	36.5 AV	54.0	-17.5	2.20 H	219	19.9	16.6
9	#16710.00	58.8 PK	68.2	-9.4	1.52 H	348	38.7	20.1

**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.

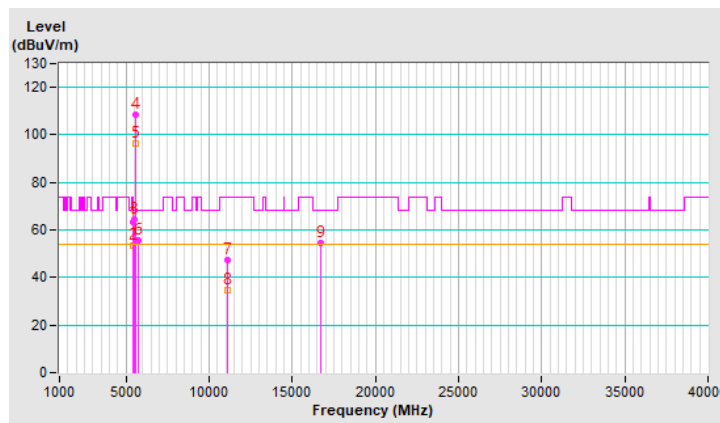


<b>RF Mode</b>	802.11ax (HE160)	<b>Channel</b>	CH 114 : 5570 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	22°C, 71% RH
<b>Tested By</b>	Sampson Chen		

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	5456.28	63.4 PK	74.0	-10.6	1.93 V	347	58.2	5.2
2	5456.28	53.2 AV	54.0	-0.8	1.93 V	347	48.0	5.2
3	#5470.00	64.4 PK	68.2	-3.8	1.93 V	347	59.2	5.2
4	*5570.00	108.4 PK			1.93 V	347	103.0	5.4
5	*5570.00	96.2 AV			1.93 V	347	90.8	5.4
6	#5725.00	55.8 PK	68.2	-12.4	1.93 V	347	50.1	5.7
7	11140.00	47.1 PK	74.0	-26.9	1.49 V	261	30.5	16.6
8	11140.00	34.9 AV	54.0	-19.1	1.49 V	261	18.3	16.6
9	#16710.00	54.3 PK	68.2	-13.9	2.64 V	321	34.2	20.1

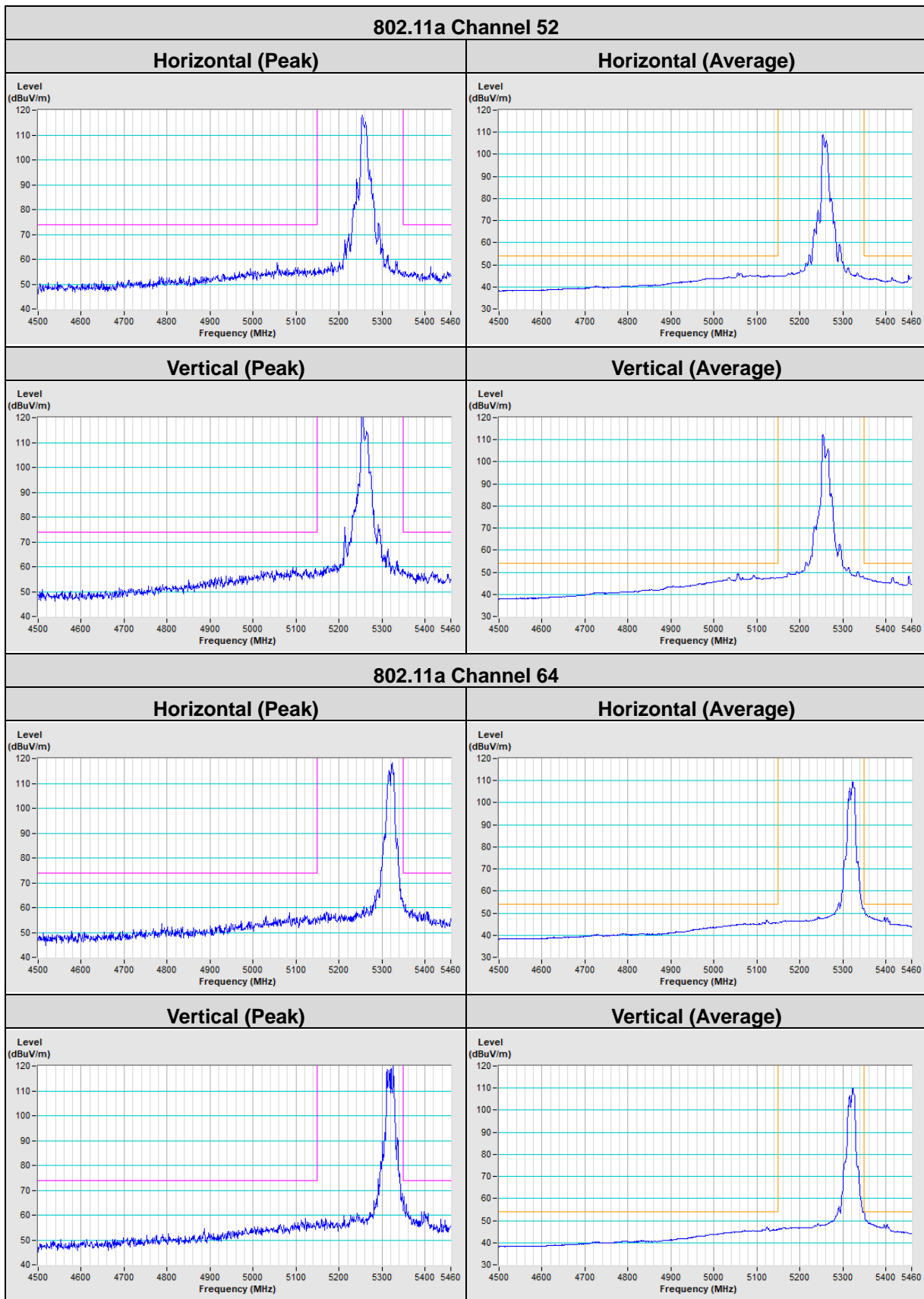
**Remarks:**

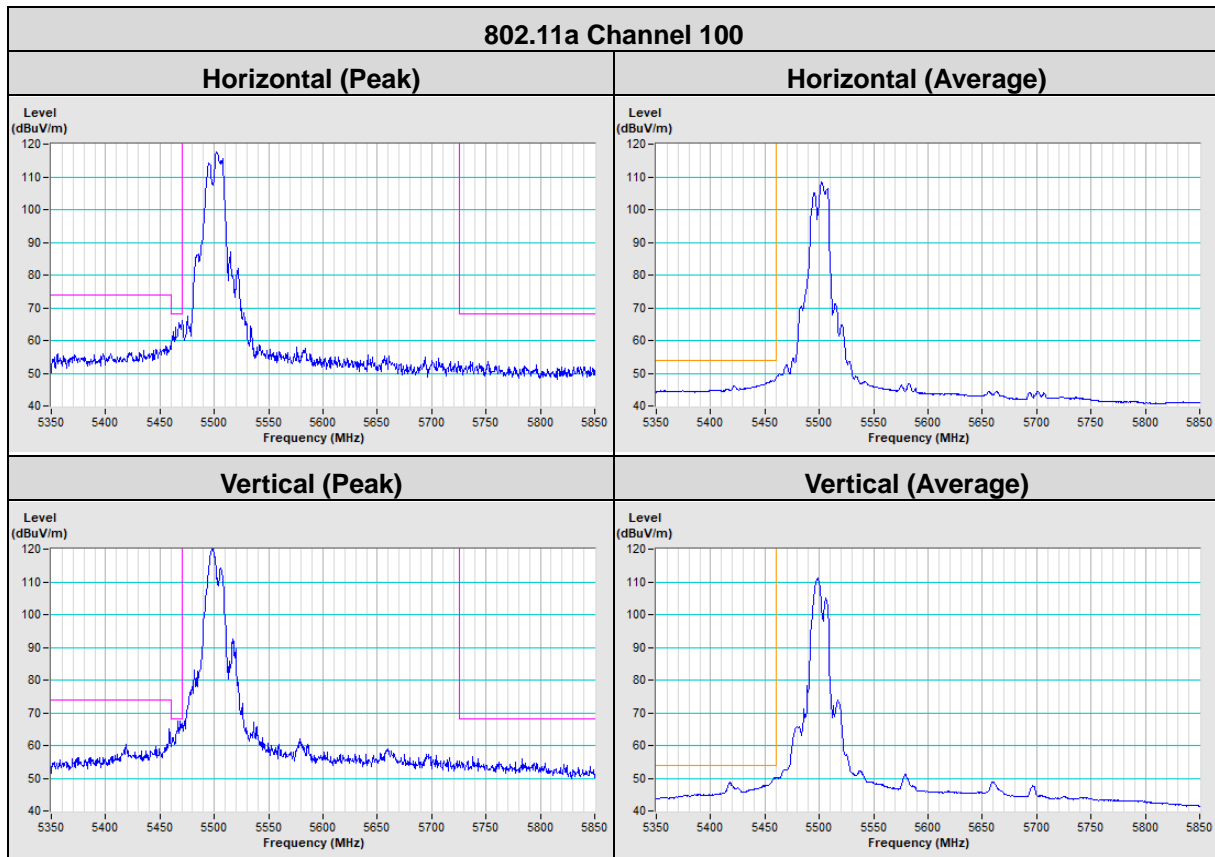
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency,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

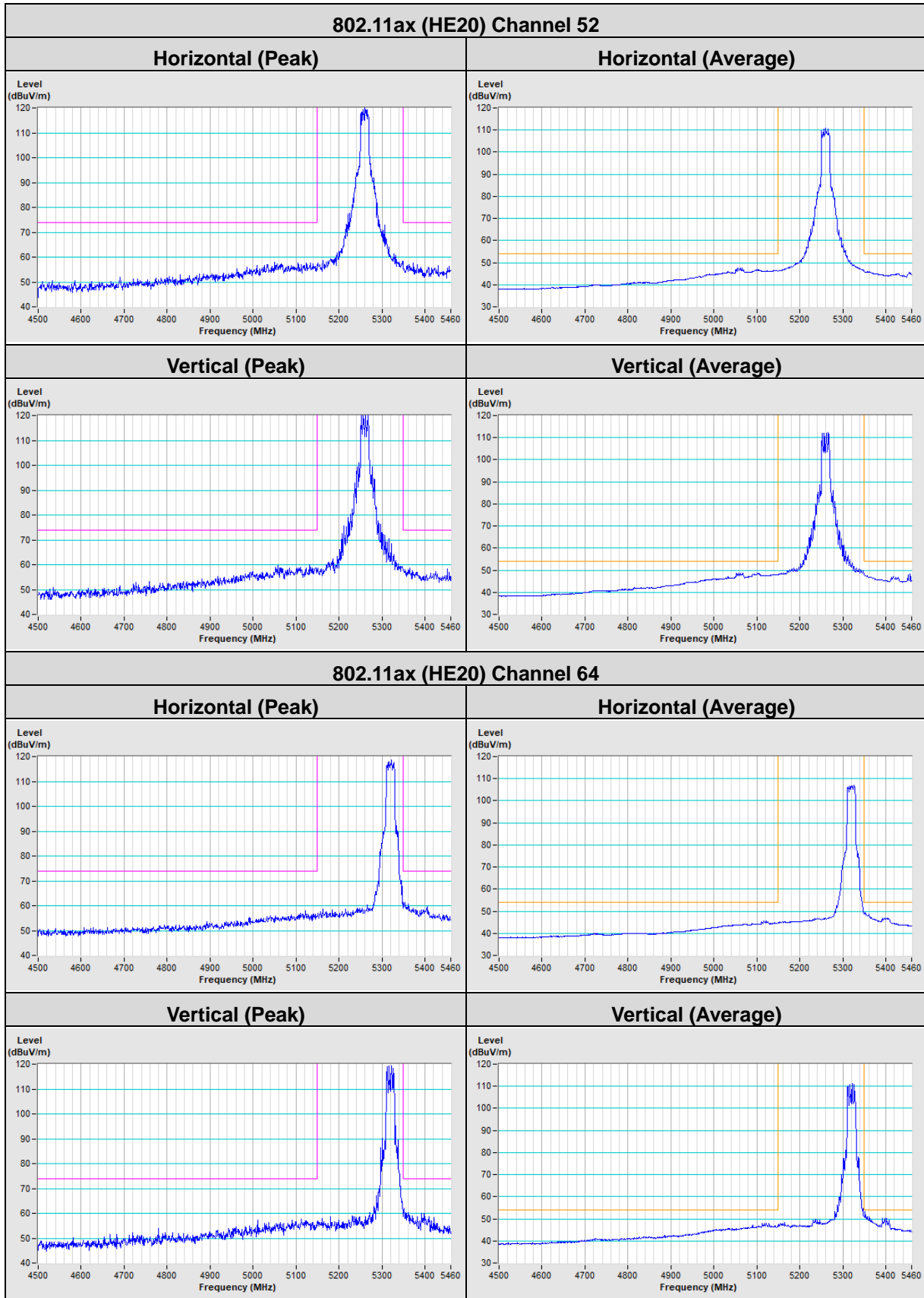


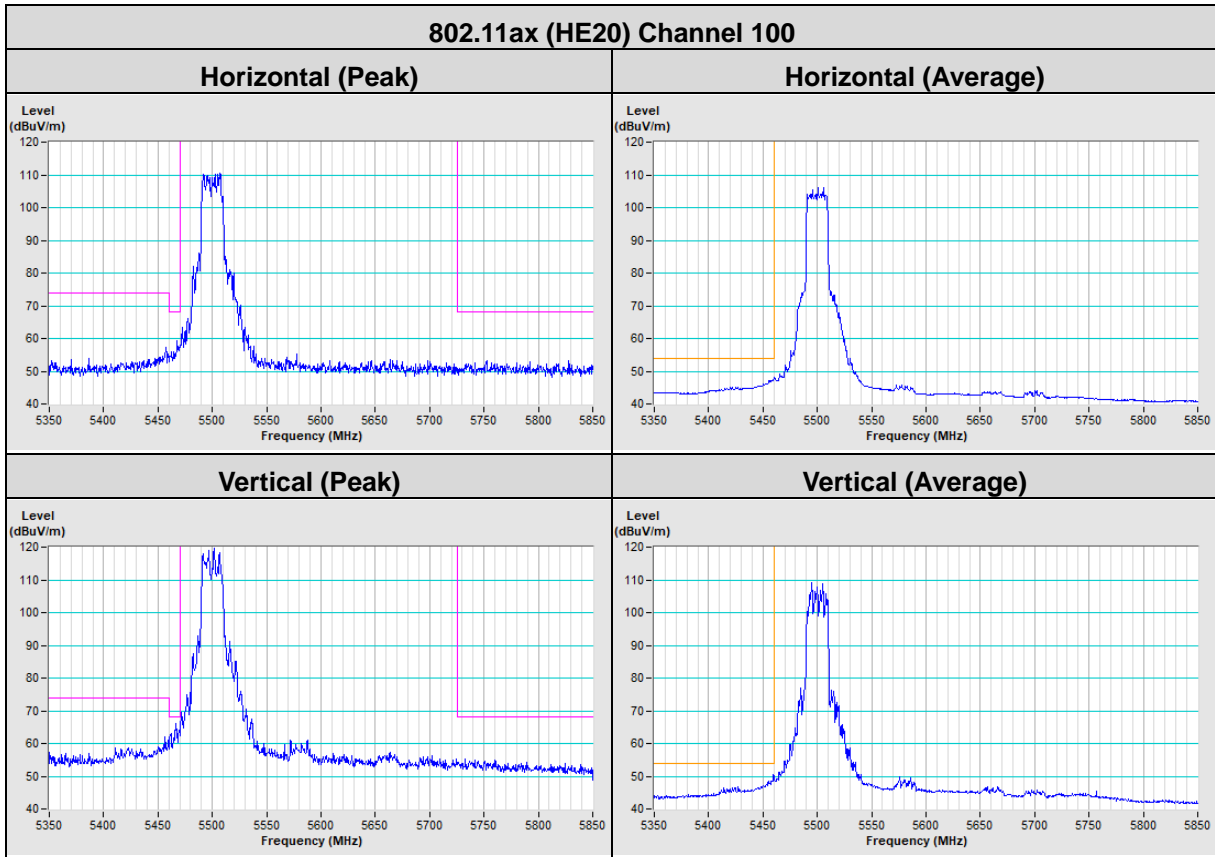


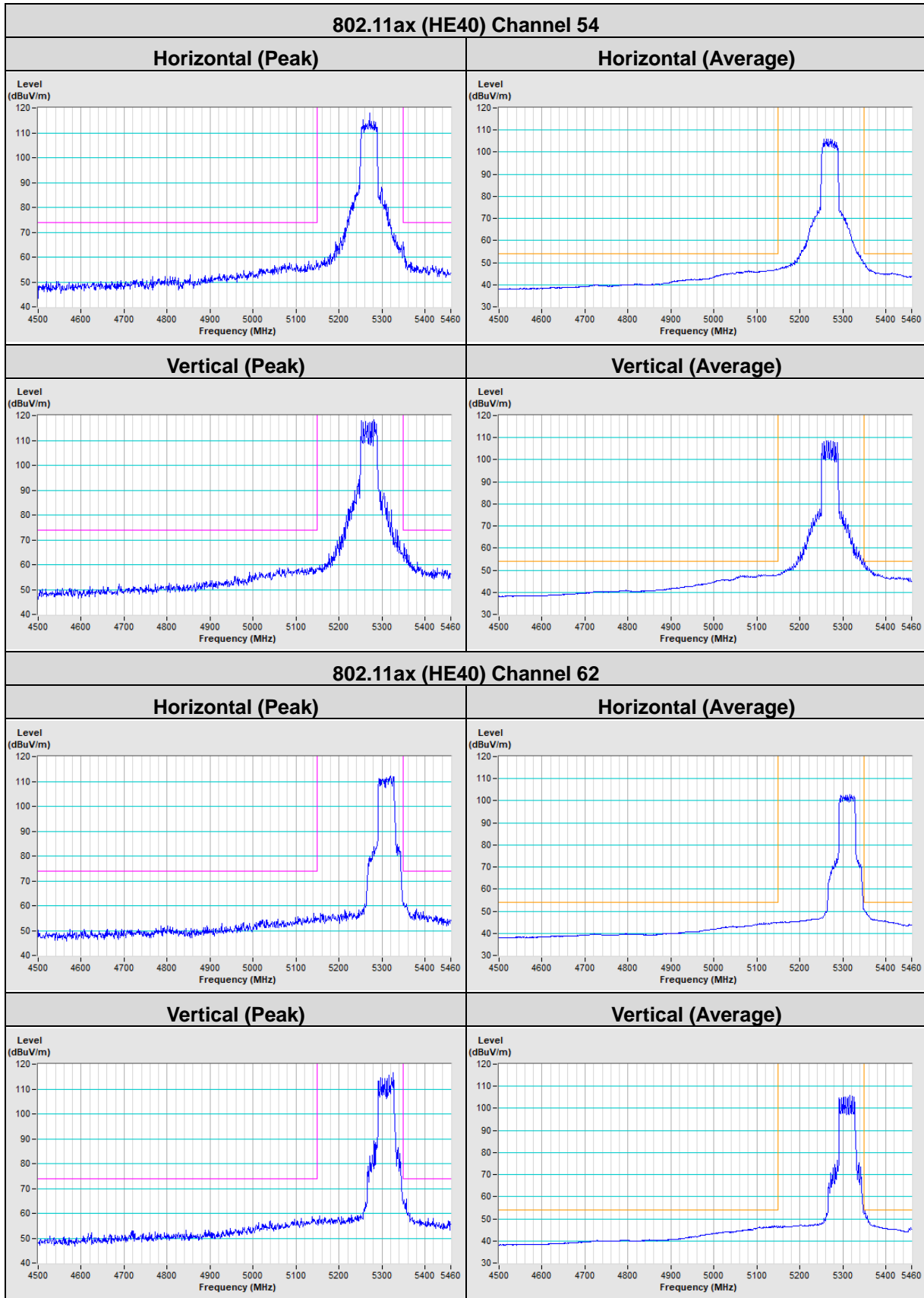
Plot of Band Edge

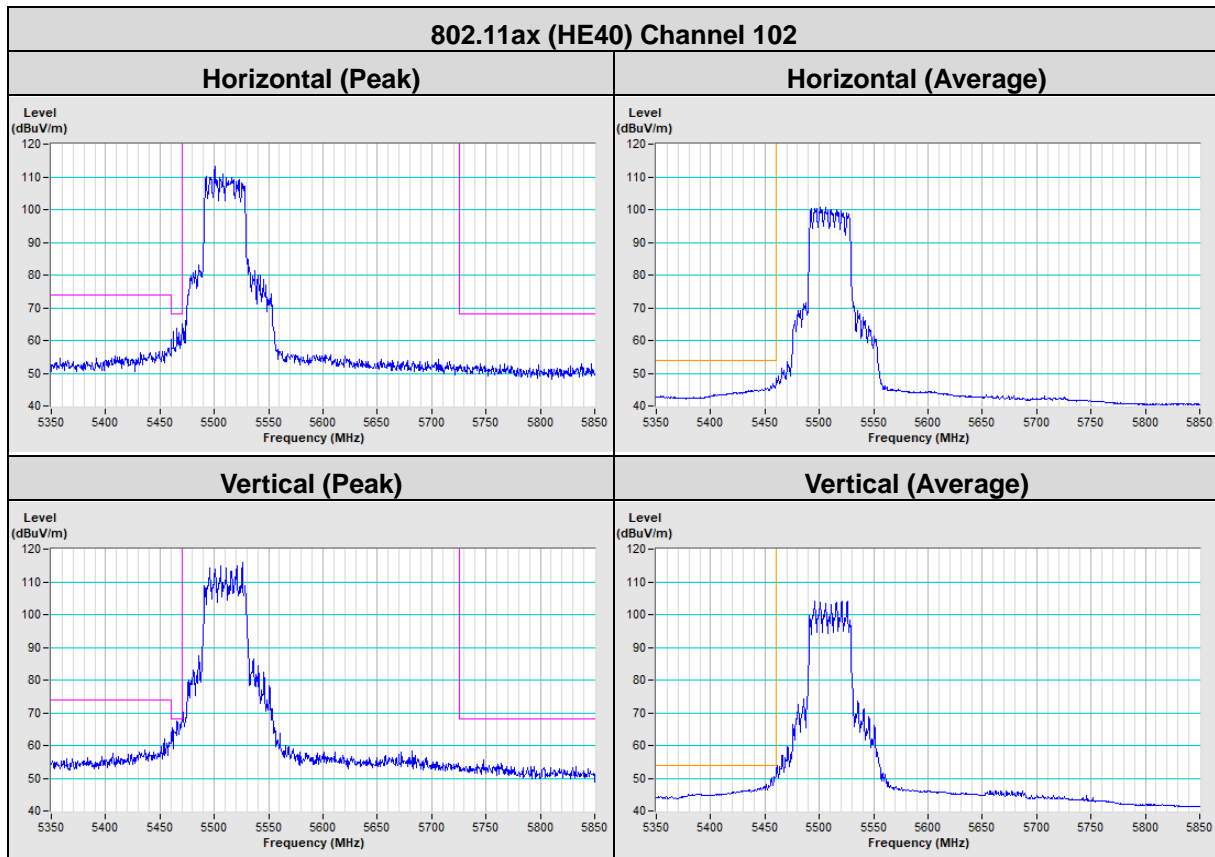


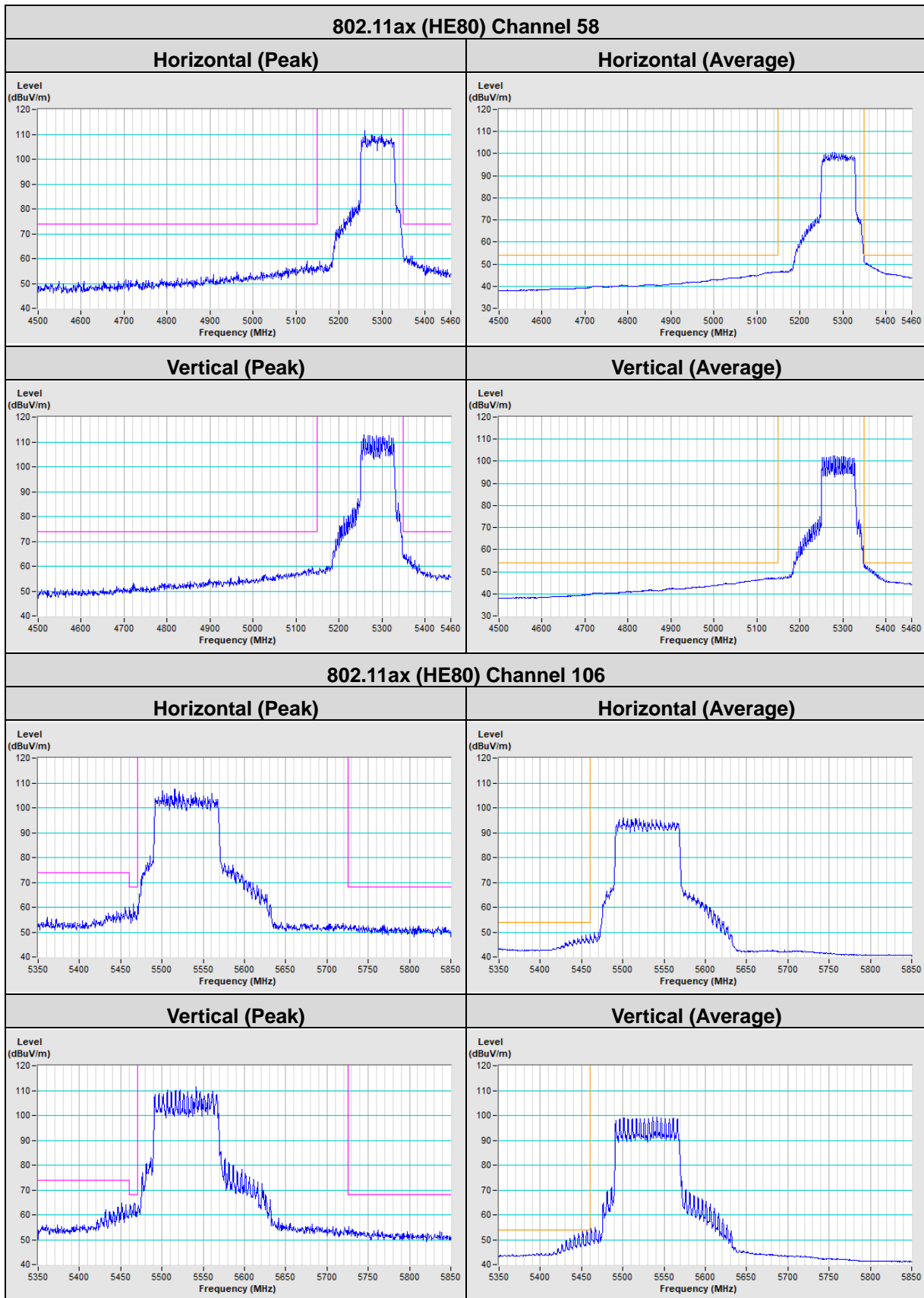


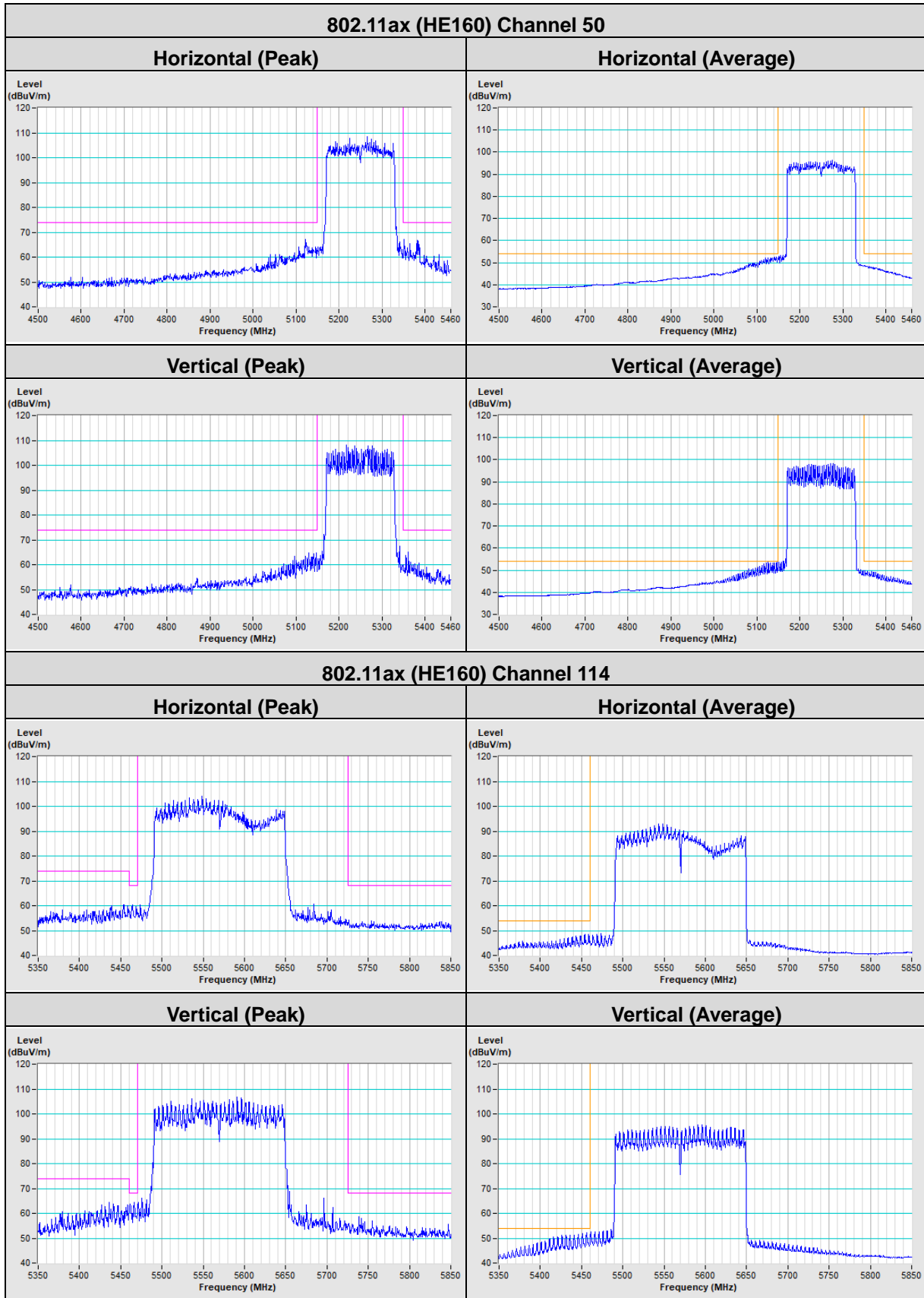














## 8 Pictures of Test Arrangements

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.

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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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