

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)  
**Report No.:** RFBENL-WTW-P22010777-1  
**FCC ID:** 2A4C6-GMP02  
**Model No.:** WPEA-251ACNI(BT)  
**Received Date:** 2022/1/24  
**Test Date:** 2022/2/11 ~ 2022/3/8  
**Issued Date:** 2022/4/7

**Applicant:** KONICA MINOLTA, INC.  
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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory  
**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan  
**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:** \_\_\_\_\_, **Date:** 2022/4/7  
May Chen / Manager

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Prepared by : Claire Kuan / Specialist



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## Release Control Record

Issue No.	Description	Date Issued
RFBENL-WTW-P22010777-1	Original release.	2022/4/7

## 1 Certificate

**Product:** 802.11ac/b/g/n Wi-Fi+BT Module

**Brand:** Sparklan

**Test Model:** WPEA-251ACNI(BT)

**Sample Status:** Engineering sample

**Applicant:** KONICA MINOLTA, INC.

**Test Date:** 2022/2/11 ~ 2022/3/8

**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	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1/2/3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -15.67 dB at 0.15000 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.2 dB at 199.11 MHz
15.407(b)(1/2/3/4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 5150.00 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	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 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	802.11ac/b/g/n Wi-Fi+BT Module
Brand	Sparklan
Test Model	WPEA-251ACNI(BT)
Status of EUT	Engineering sample
Power Supply Rating	DC 3.3V from host equipment
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n : up to 300Mbps 802.11ac: up to 866.7Mbps 802.11ax: up to 1201.0Mbps
Operating Frequency	5180 ~ 5240 MHz 5260 ~ 5320 MHz 5500 ~ 5720 MHz 5745 ~ 5825 MHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20) 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	5180 ~ 5240 MHz : 103.561 mW 5260 ~ 5320 MHz : 102.716 mW 5500 ~ 5720 MHz : 102.244 mW 5745 ~ 5825 MHz : 139.998 mW
EUT Category	Client device

Note:

1. There are WLAN (2.4GHz & 5GHz) and Bluetooth technology used for the EUT.
2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5GHz)	Bluetooth

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

3. The above EUT information is declared by manufacturer and for more detailed features description, please refers 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	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
WIFI 0 BT	0	RTI	C0255-ANG0027	2.8	2.4~2.4835	PCB	ipex(MHF)
				6.6	5.15~5.85		
WIFI 1	1	RTI	C0255-ANG0029	2.8	2.4~2.4835	PCB	ipex(MHF)
				6.6	5.15~5.85		

\*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2. The EUT incorporates a MIMO function:

5 GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
<b>802.11a</b>	2TX	2RX
<b>802.11n (HT20)</b>	2TX	2RX
<b>802.11n (HT40)</b>	2TX	2RX
<b>802.11ac (VHT20)</b>	2TX	2RX
<b>802.11ac (VHT40)</b>	2TX	2RX
<b>802.11ac (VHT80)</b>	2TX	2RX

Note:

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



### 3.3 Channel List

#### FOR 5180 ~ 5320 MHz

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

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

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

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

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

#### FOR 5500 ~ 5720 MHz

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

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):

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):

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

**FOR 5745 ~ 5825 MHz:**

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

### 3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. The antenna with EUT can be used in the following ways: XYZ 3-Axis. Pre-scan in these ways and find the worst case as a representative test condition.
Worst Case:	1. X/ Y/ Z Worst Condition:Y Axis 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11a	CDD	149	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
RF Output Power / Power Spectral Density / Occupied Bandwidth	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
26 dB Bandwidth	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ac (VHT40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	CDD	58, 106, 122, 138	BPSK	MCS0



Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
6 dB Bandwidth	802.11a	CDD	144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	CDD	144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	CDD	142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	CDD	138, 155	BPSK	MCS0
Frequency Stability	802.11a	CDD	36	Unmodulation	-

### 3.5 Duty Cycle of Test Signal

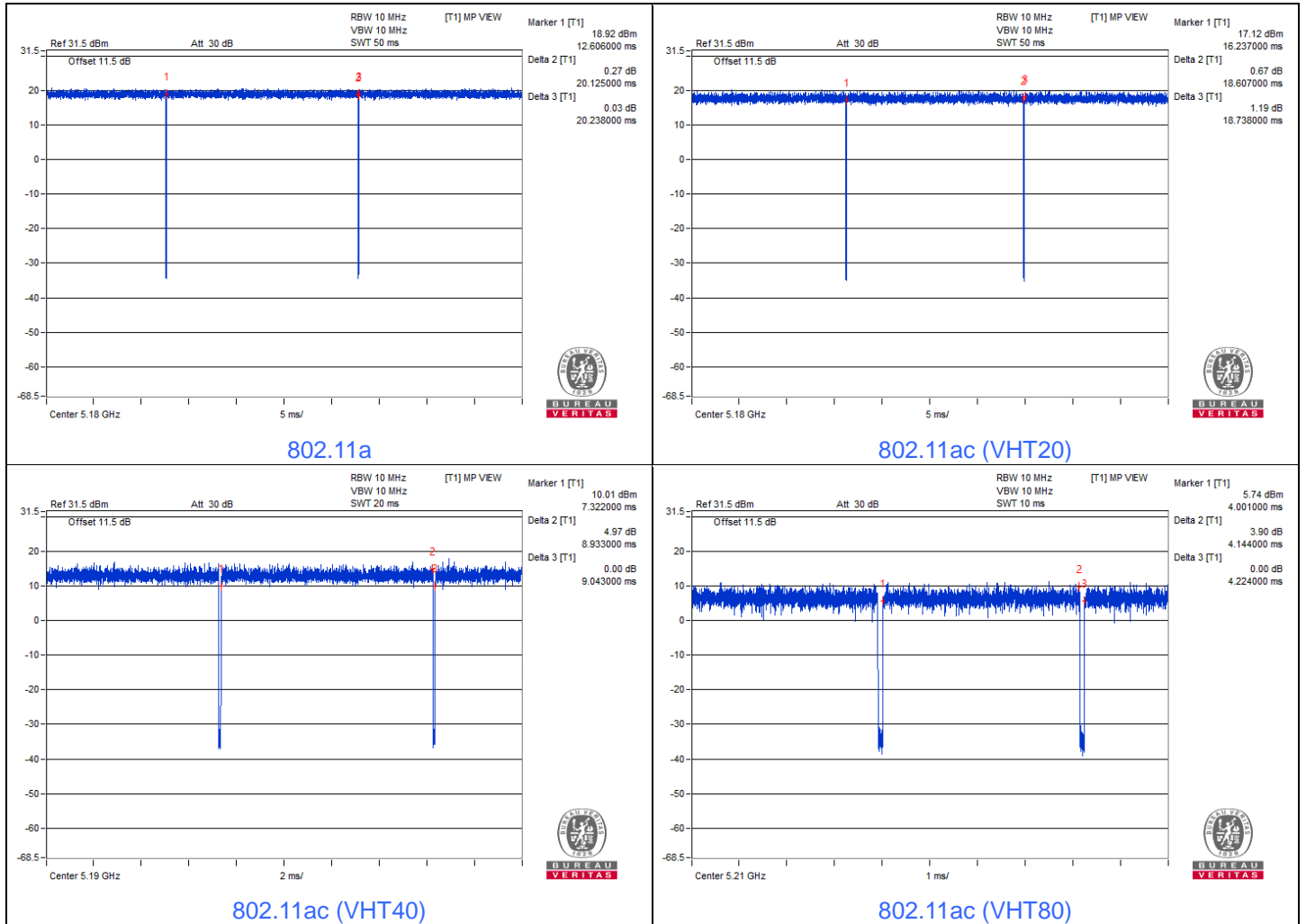
Duty cycle of test signal is  $\geq 98\%$ , duty factor is not required.  
 Duty cycle of test signal is  $< 98\%$ , duty factor shall be considered.

**802.11a:** Duty cycle =  $20.125 \text{ ms} / 20.238 \text{ ms} = 99.4\%$

**802.11ac (VHT20):** Duty cycle =  $18.607 \text{ ms} / 18.738 \text{ ms} = 99.3\%$

**802.11ac (VHT40):** Duty cycle =  $8.933 \text{ ms} / 9.043 \text{ ms} = 98.8\%$

**802.11ac (VHT80):** Duty cycle =  $4.144 \text{ ms} / 4.224 \text{ ms} = 98.1\%$

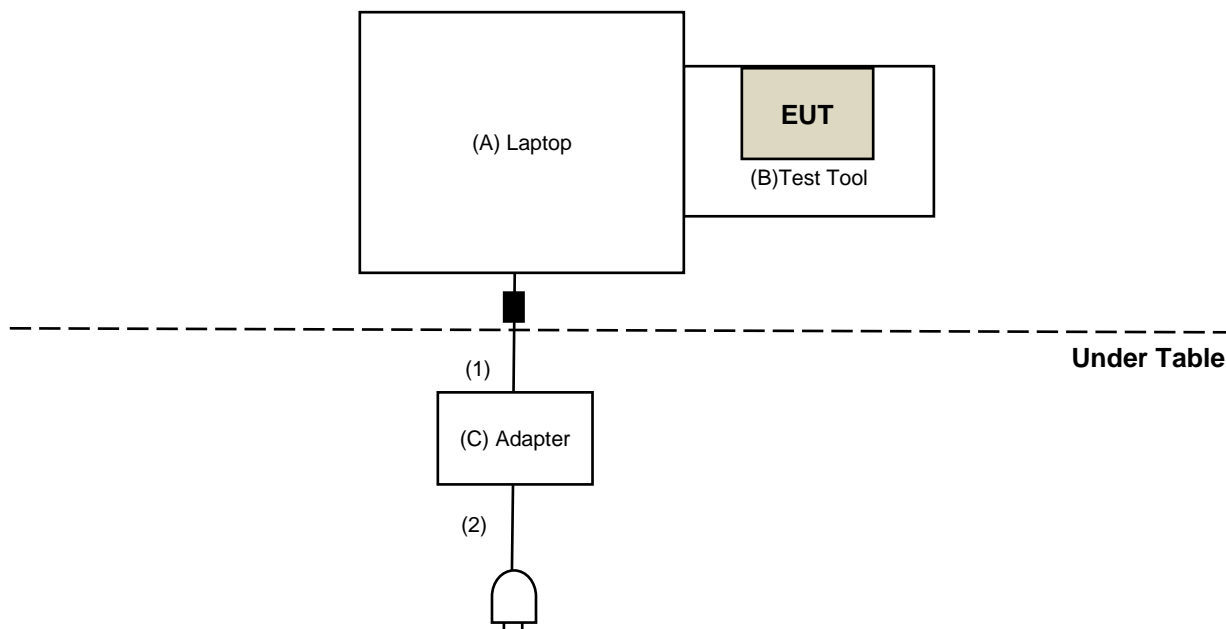


### 3.6 Test Program Used and Operation Descriptions

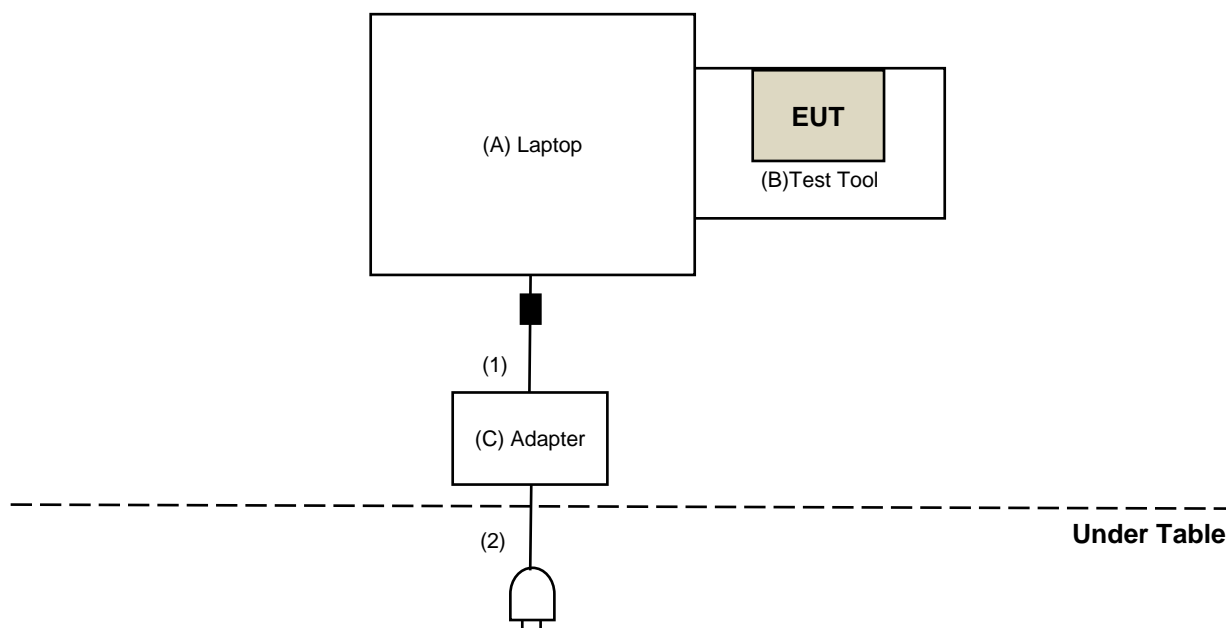
Controlling software (QRCT\_CONN\_v30161) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

### 3.7 Connection Diagram of EUT and Peripheral Devices

#### For Radiated Emission test



#### For AC Power Conducted Emission test



### 3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	3000 N200	N/A	N/A	Provided by Lab
B	Test Tool	Sparklan Communications Inc	N/A	N/A	N/A	Supplied by applicant
C	Adapter	Lenovo	92P1105	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.7	No	1	Provided by Lab
2	AC Cable	1	0.6	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	2021/4/13	2022/4/12
Power Meter Anritsu	ML2495A	1529002	2021/6/21	2022/6/20
Pulse Power Sensor Anritsu	MA2411B	1339443	2021/5/31	2022/5/30
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100964	2021/5/31	2022/5/30

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/3/8

### 4.2 RF Output Power

Refer to section 4.1 to get information of the instruments.

### 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	2021/4/13	2022/4/12
DC POWER SUPPLY Topward	6603D	795558	N/A	N/A
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100964	2021/5/31	2022/5/30
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2022/1/14	2023/1/13
True RMS Clamp Meter Fluke	325	31130711WS	2021/6/2	2022/6/1

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/3/8

#### 4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohms Terminator	50	3	2021/10/27	2022/10/26
Fixed attenuator STI	STI02-2200-10	005	2021/8/27	2022/8/26
LISN R&S	ESH3-Z5	848773/004	2021/10/29	2022/10/28
LISN R & S	ESH3-Z5	835239/001	2021/3/26	2022/3/25
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2021/9/25	2022/9/24
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
TEST RECEIVER R&S	ESCS 30	847124/029	2021/10/13	2022/10/12

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2022/2/28

#### 4.8 Unwanted Emissions below 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
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2022/1/10	2023/1/9
Loop Antenna TESEQ	HLA 6121	45745	2021/7/21	2022/7/20
Pre_Amplifier EMCI	EMC001340	980142	2021/5/24	2022/5/23
	EMC330N	980701	2021/3/10	2022/3/9
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/1/6	2023/1/5
		LOOPCAB-002	2022/1/6	2023/1/5
RF Coaxial Cable COMMATE/PEWC	8D	966-4-1	2021/3/17	2022/3/16
		966-4-2	2021/3/17	2022/3/16
		966-4-3	2021/3/17	2022/3/16
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Test Receiver Agilent	N9038A	MY51210202	2021/11/19	2022/11/18
Trilog Broadband Antenna Schwarzbeck	VULB 9168	9168-406	2021/10/27	2022/10/26

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2022/2/28

#### 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-783	2021/11/14	2022/11/13
	BBHA 9170	BBHA9170519	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC 12630 SE	980638	2021/4/7	2022/4/6
	EMC184045SE	980387	2022/1/10	2023/1/9
RF Cable-Frequency Range : 1- 26.5GHz EMCI	EMC104-SM-SM-1200	160922	2021/12/24	2022/12/23
RF Cable-Frequency range: 1- 40GHz EMCI	EMC102-KM-KM-1200	160924	2022/1/10	2023/1/9
RF Coaxial Cable EMCI	EMC104-SM-SM-2000	180502	2021/4/26	2022/4/25
	EMC104-SM-SM-6000	210704	2021/11/9	2022/11/8
RF Coaxial Cable EMEC	EM102-KMKM-450	21090301	2021/9/11	2022/9/10
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Test Receiver Agilent	N9038A	MY51210202	2021/11/19	2022/11/18

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2022/2/11 ~ 2022/2/28

## 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	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250mW (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)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBµV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK: -27 (dBm/MHz) <sup>*1</sup> PK: 10 (dBm/MHz) <sup>*2</sup> PK: 15.6 (dBm/MHz) <sup>*3</sup> PK: 27 (dBm/MHz) <sup>*4</sup>	PK: 68.2 (dBµV/m) <sup>*1</sup> PK: 105.2 (dBµV/m) <sup>*2</sup> PK: 110.8 (dBµV/m) <sup>*3</sup> PK: 122.2 (dBµV/m) <sup>*4</sup>
*1 beyond 75 MHz or more above of the band edge.		*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.	
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	

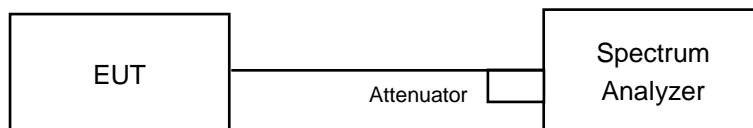
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

## 6 Test Arrangements

### 6.1 26 dB Bandwidth

#### 6.1.1 Test Setup

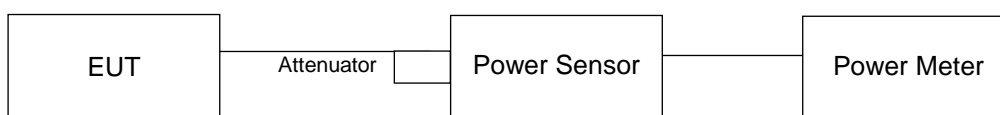


#### 6.1.2 Test Procedure

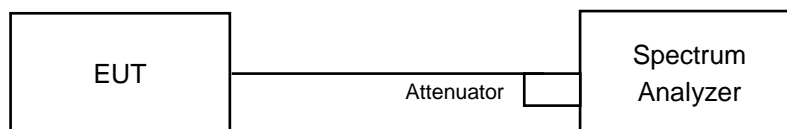
- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

### 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.

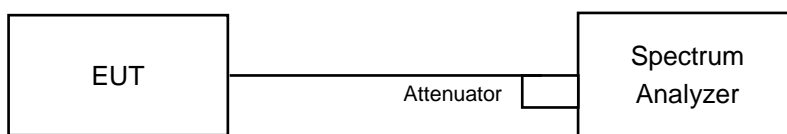
#### For channel straddling:

##### Method SA-1

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

## 6.3 Power Spectral Density

### 6.3.1 Test Setup



### 6.3.2 Test Procedure

#### For specified measurement bandwidth 1 MHz:

Using 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

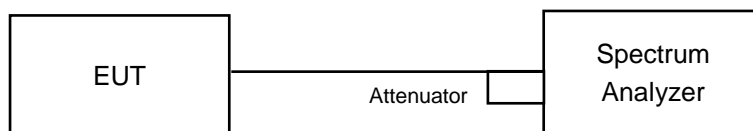
#### For specified measurement bandwidth 500 kHz:

Using 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



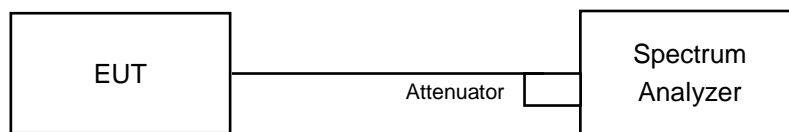
### 6.4.2 Test Procedure

- 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

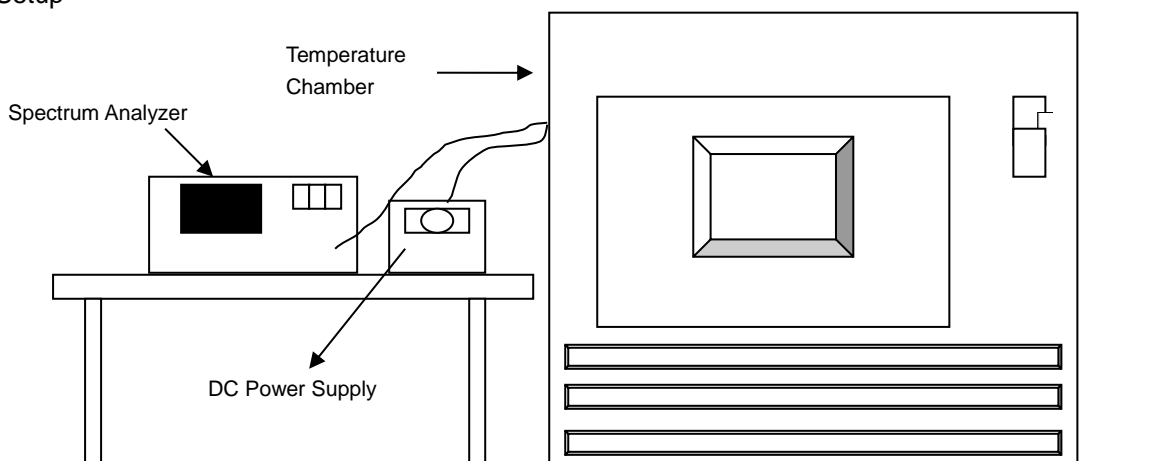


### 6.5.2 Test Procedure

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

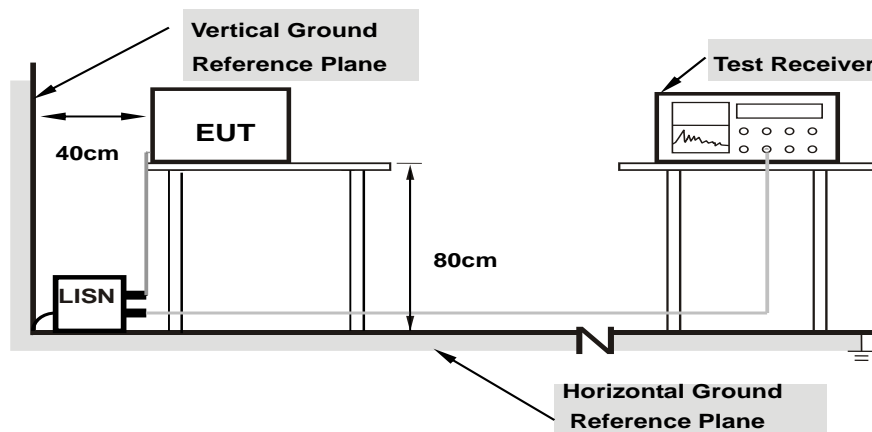


### 6.6.2 Test Procedure

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

## 6.7 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 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.

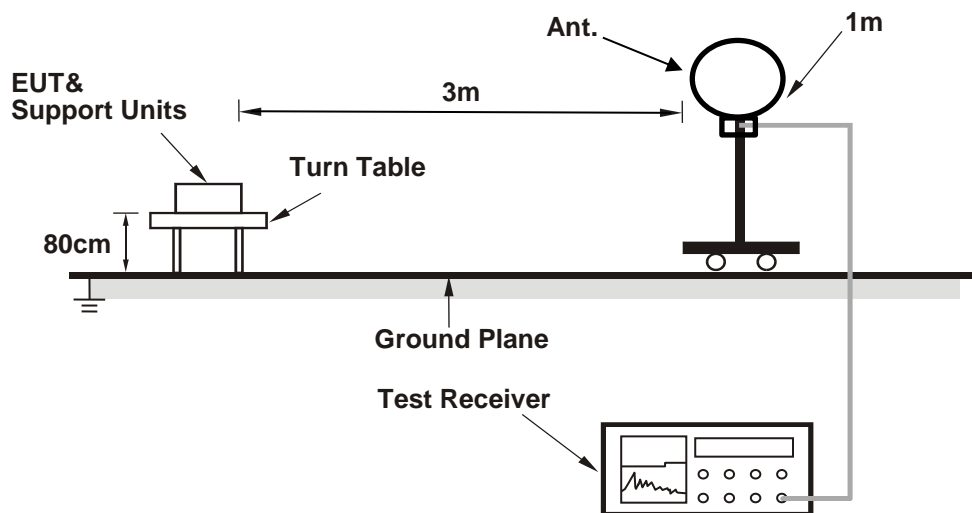
**Note:**

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.

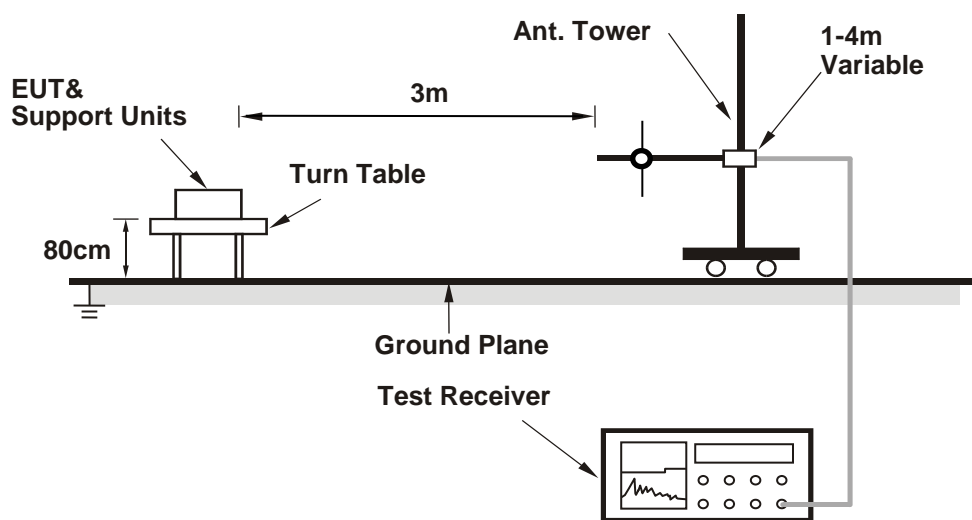
## 6.8 Unwanted Emissions below 1 GHz

### 6.8.1 Test Setup

#### For Radiated emission below 30 MHz



#### For Radiated emission above 30 MHz



## 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.

#### Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. 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.

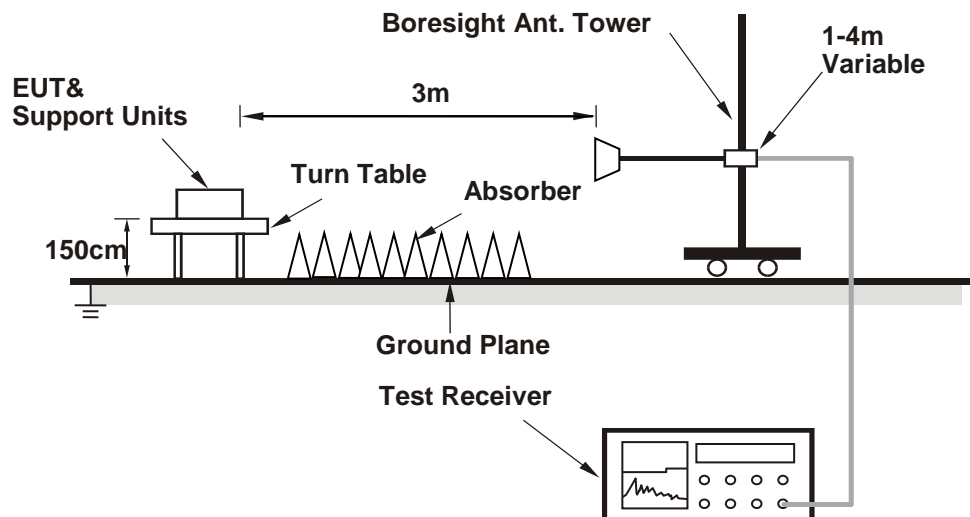
#### Notes:

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 Radiated emission above 1 GHz



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) at frequency above 1 GHz.
- 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:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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#### 802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	42.22	36.34
60	5300	38.16	36.67
64	5320	27.95	32.07
100	5500	25.88	22.94
116	5580	35.4	33.58
140	5700	32.12	24.47
144 (U-NII-2C)	5720	22.35	23.22

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	36.34	26.6 > 24
60	5300	36.67	26.64 > 24
64	5320	27.95	25.46 > 24
100	5500	22.94	24.6 > 24
116	5580	33.58	26.26 > 24
140	5700	24.47	24.88 > 24
144 (U-NII-2C)	5720	22.35	24.49 > 24

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

**802.11ac (VHT20)**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	41.76	39.46
60	5300	41.02	42.52
64	5320	33.03	36.06
100	5500	21.99	21.44
116	5580	29.9	37.35
140	5700	23.97	25.93
144 (U-NII-2C)	5720	24.41	23.62

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	39.46	26.96 > 24
60	5300	41.02	27.12 > 24
64	5320	33.03	26.18 > 24
100	5500	21.44	24.31 > 24
116	5580	29.9	25.75 > 24
140	5700	23.97	24.79 > 24
144 (U-NII-2C)	5720	23.62	24.73 > 24

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

**802.11ac (VHT40)**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	73.98	76.73
62	5310	42.35	42.23
102	5510	42.15	42.06
110	5550	70.37	72.66
134	5670	72.53	72.97
142 (U-NII-2C)	5710	51.58	59.42

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	73.98	29.69 > 24
62	5310	42.23	27.25 > 24
102	5510	42.06	27.23 > 24
110	5550	70.37	29.47 > 24
134	5670	72.53	29.6 > 24
142 (U-NII-2C)	5710	51.58	28.12 > 24

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

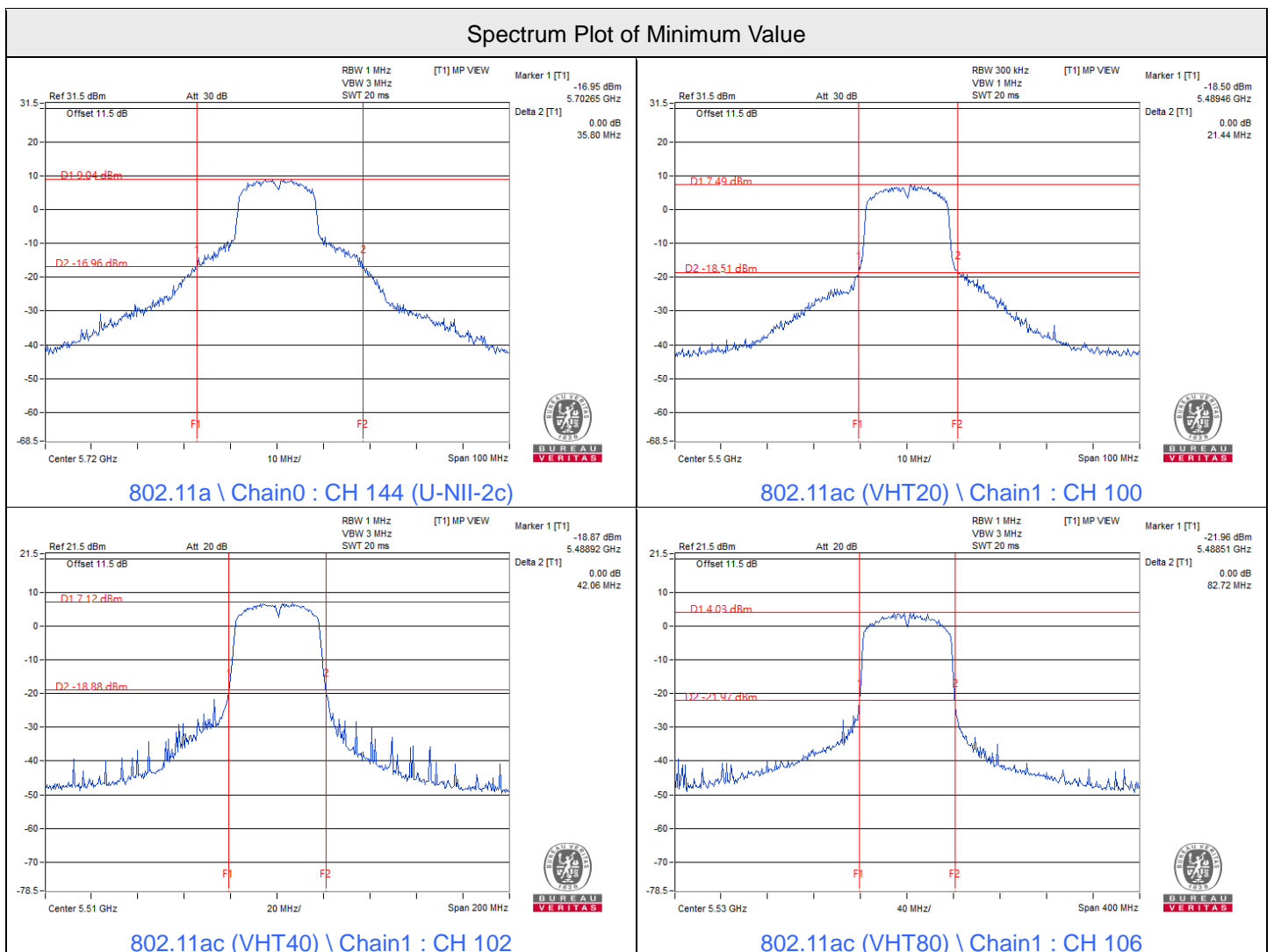


802.11ac (VHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	83.19	86.22
106	5530	84.69	82.72
122	5610	151.32	147.42
138 (U-NII-2C)	5690	92.67	107.38

Determined Output Power Limit				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)	
58	5290	83.19	30.2	> 24
106	5530	82.72	30.17	> 24
122	5610	147.42	32.68	> 24
138 (U-NII-2C)	5690	92.67	30.66	> 24

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



Notes:

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



## 7.2 RF Output Power

Input Power:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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### 802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	16.46	16.41	88.011	19.45	23.4	Pass
40	5200	17.26	17.02	103.561	20.15	23.4	Pass
48	5240	16.98	16.82	97.972	19.91	23.4	Pass
52	5260	17.09	16.76	98.592	19.94	23.4	Pass
60	5300	17.01	16.67	96.686	19.85	23.4	Pass
64	5320	16.25	15.79	80.101	19.04	23.4	Pass
100	5500	15.53	15.73	73.138	18.64	23.4	Pass
116	5580	16.78	17.36	102.093	20.09	23.4	Pass
140	5700	16.55	16.84	93.491	19.71	23.4	Pass
*144 (U-NII-2C)	5720	15.67	15.27	70.549	18.48	23.4	Pass
*144 (U-NII-3)	5720	8.44	7.96	13.234	11.22	29.4	Pass
149	5745	18.54	18.36	139.998	21.46	29.4	Pass
157	5785	18.47	18.27	137.45	21.38	29.4	Pass
165	5825	18.15	18.03	128.846	21.10	29.4	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 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $24 - (6.6 - 6) = 23.4$  dBm.
- For U-NII-2A, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-2C, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-3, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $30 - (6.6 - 6) = 29.4$  dBm.

**802.11ac (VHT20)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	15.65	15.79	74.66	18.73	23.4	Pass
40	5200	16.82	16.70	94.857	19.77	23.4	Pass
48	5240	16.71	16.96	96.541	19.85	23.4	Pass
52	5260	16.94	17.21	102.033	20.09	23.4	Pass
60	5300	16.87	17.33	102.716	20.12	23.4	Pass
64	5320	15.91	15.98	78.622	18.96	23.4	Pass
100	5500	15.31	15.60	70.27	18.47	23.4	Pass
116	5580	16.85	17.31	102.244	20.10	23.4	Pass
140	5700	16.38	16.79	91.204	19.60	23.4	Pass
*144 (U-NII-2C)	5720	15.83	15.25	71.779	18.56	23.4	Pass
*144 (U-NII-3)	5720	8.92	8.45	14.797	11.70	29.4	Pass
149	5745	17.95	17.65	120.584	20.81	29.4	Pass
157	5785	17.86	17.97	123.756	20.93	29.4	Pass
165	5825	17.82	17.67	119.013	20.76	29.4	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 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $24 - (6.6 - 6) = 23.4$  dBm.
- For U-NII-2A, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-2C, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-3, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $30 - (6.6 - 6) = 29.4$  dBm.

**802.11ac (VHT40)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	13.42	13.60	44.887	16.52	23.4	Pass
46	5230	16.35	16.31	85.908	19.34	23.4	Pass
54	5270	16.01	16.18	81.398	19.11	23.4	Pass
62	5310	13.22	13.38	42.766	16.31	23.4	Pass
102	5510	12.05	12.54	33.98	15.31	23.4	Pass
110	5550	16.33	16.57	88.348	19.46	23.4	Pass
134	5670	16.45	16.79	91.91	19.63	23.4	Pass
*142 (U-NII-2C)	5710	15.85	15.42	73.293	18.65	23.4	Pass
*142 (U-NII-3)	5710	3.56	3.41	4.463	6.50	29.4	Pass
151	5755	17.94	18.15	127.543	21.06	29.4	Pass
159	5795	17.87	18.06	125.209	20.98	29.4	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 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $24 - (6.6 - 6) = 23.4$  dBm.
- For U-NII-2A, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-2C, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-3, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $30 - (6.6 - 6) = 29.4$  dBm.

**802.11ac (VHT80)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	11.22	12.17	29.725	14.73	23.4	Pass
58	5290	11.35	11.99	29.458	14.69	23.4	Pass
106	5530	11.45	12.28	30.868	14.90	23.4	Pass
122	5610	16.62	17.25	99.008	19.96	23.4	Pass
*138 (U-NII-2C)	5690	14.82	14.87	61.029	17.86	23.4	Pass
*138 (U-NII-3)	5690	-1.59	-1.79	1.3556	1.32	29.4	Pass
155	5775	18.05	17.96	126.344	21.02	29.4	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 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $24 - (6.6 - 6) = 23.4$  dBm.
- For U-NII-2A, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-2C, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (6.6 - 6)].
- For U-NII-3, the maximum gain is 6.6 dBi > 6 dBi, so the output power limit shall be reduced to  $30 - (6.6 - 6) = 29.4$  dBm.

### 7.3 Power Spectral Density

Input Power:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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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			
36	5180	3.25	-4.22	3.97	7.39	Pass
40	5200	4.33	3.80	7.08	7.39	Pass
48	5240	3.57	3.28	6.44	7.39	Pass
52	5260	3.54	3.01	6.29	7.39	Pass
60	5300	3.54	3.09	6.33	7.39	Pass
64	5320	2.62	2.49	5.57	7.39	Pass
100	5500	1.84	2.14	5.00	7.39	Pass
116	5580	3.30	3.71	6.52	7.39	Pass
140	5700	3.13	3.17	6.16	7.39	Pass
144 (U-NII-2C)	5720	3.93	4.49	7.23	7.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
- For U-NII-1, the directional gain is 9.61 dBi > 6dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.
- For U-NII-2A, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.
- For U-NII-2C, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.

**802.11ac (VHT20)**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	1.62	1.84	4.74	7.39	Pass
40	5200	3.95	3.82	6.90	7.39	Pass
48	5240	3.12	3.19	6.17	7.39	Pass
52	5260	3.31	3.51	6.42	7.39	Pass
60	5300	3.44	3.52	6.49	7.39	Pass
64	5320	2.75	2.37	5.57	7.39	Pass
100	5500	1.60	1.74	4.68	7.39	Pass
116	5580	2.98	3.83	6.44	7.39	Pass
140	5700	2.30	3.04	5.70	7.39	Pass
144 (U-NII-2C)	5720	3.80	3.37	6.60	7.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
- For U-NII-1, the directional gain is 9.61 dBi > 6dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.
- For U-NII-2A, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.
- For U-NII-2C, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $11-(9.61-6) = 7.39$  dBm/MHz.

### 802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
38	5190	-3.01	-3.68	-0.32	7.39	Pass
46	5230	0.08	-0.45	2.83	7.39	Pass
54	5270	-1.12	-1.08	1.91	7.39	Pass
62	5310	-3.73	-3.58	-0.64	7.39	Pass
102	5510	-4.95	-4.49	-1.70	7.39	Pass
110	5550	-0.59	-0.33	2.55	7.39	Pass
134	5670	-0.49	-0.34	2.60	7.39	Pass
142 (U-NII-2C)	5710	0.30	0.56	3.44	7.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
- For U-NII-1, the directional gain is 9.61 dBi > 6dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.
- For U-NII-2A, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.
- For U-NII-2C, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.

### 802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
42	5210	-9.18	-7.71	-5.37	7.39	Pass
58	5290	-8.56	-8.69	-5.61	7.39	Pass
106	5530	-8.23	-7.79	-4.99	7.39	Pass
122	5610	-3.64	-3.05	-0.32	7.39	Pass
138 (U-NII-2C)	5690	-3.10	-3.96	-0.50	7.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
- For U-NII-1, the directional gain is 9.61 dBi > 6dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.
- For U-NII-2A, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.
- For U-NII-2C, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.61-6) = 7.39 dBm/MHz.

**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				
144 (U-NII-3)	5720	-4.95	-4.54	-1.73	0.49	26.39	Pass
149	5745	-3.40	-3.66	-0.52	1.70	26.39	Pass
157	5785	-3.79	-3.55	-0.66	1.56	26.39	Pass
165	5825	-4.00	-3.76	-0.87	1.35	26.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-3, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $30-(9.61-6) = 26.39$  dBm/500kHz.

**802.11ac (VHT20)**

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				
144 (U-NII-3)	5720	-5.27	-5.96	-2.59	-0.37	26.39	Pass
149	5745	-3.92	-3.74	-0.82	1.40	26.39	Pass
157	5785	-3.69	-4.15	-0.9	1.32	26.39	Pass
165	5825	-4.17	-4.15	-1.15	1.07	26.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-3, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $30-(9.61-6) = 26.39$  dBm/500kHz.

**802.11ac (VHT40)**

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				
142 (U-NII-3)	5710	-10.52	-10.58	-7.54	-5.32	26.39	Pass
151	5755	-7.68	-7.57	-4.61	-2.39	26.39	Pass
159	5795	-7.94	-7.86	-4.89	-2.67	26.39	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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-3, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $30-(9.61-6) = 26.39$  dBm/500kHz.

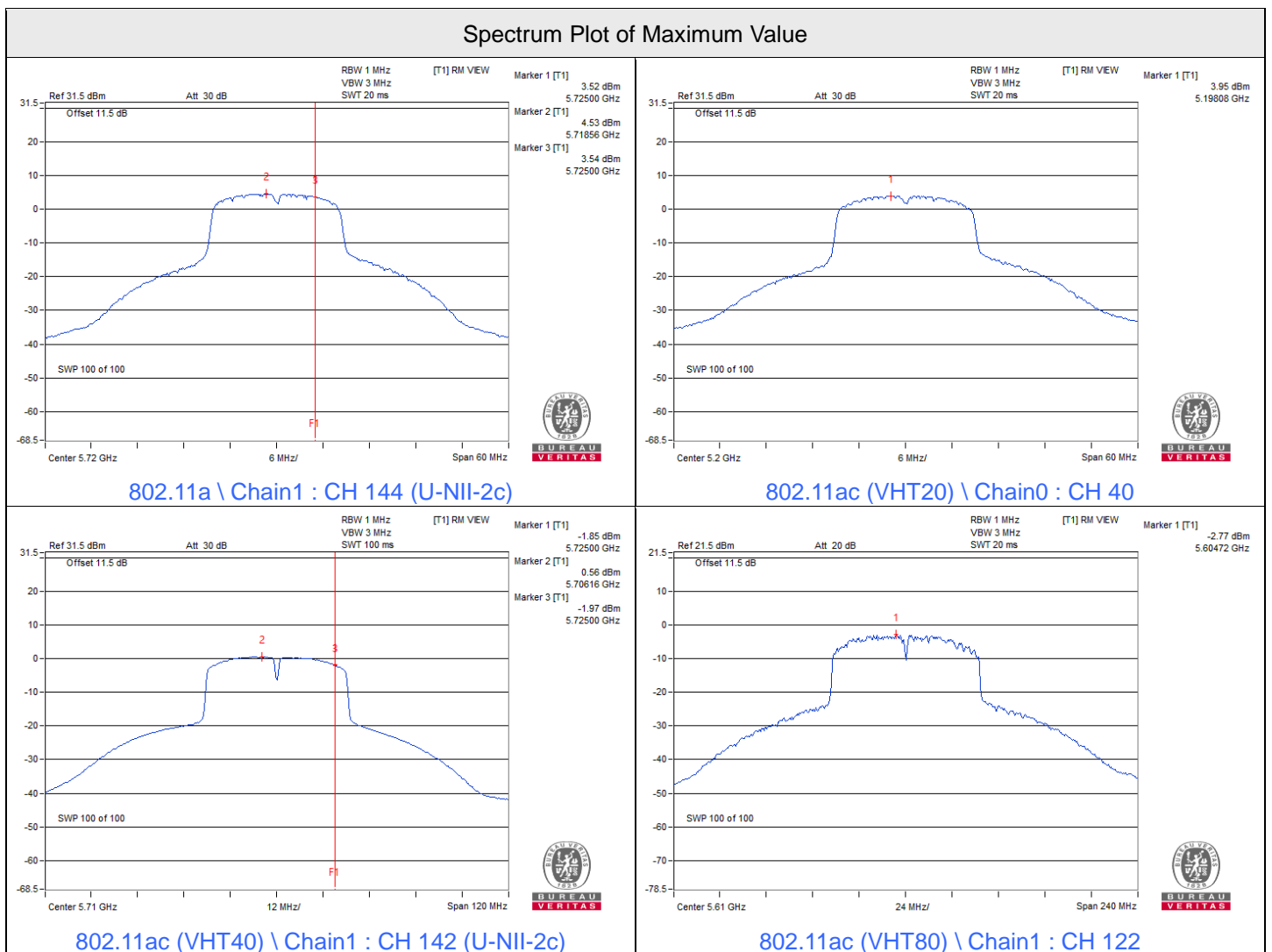


802.11ac (VHT80)

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				
138 (U-NII-3)	5690	-15.72	-16.32	-13	-10.78	26.39	Pass
155	5775	-11.29	-11.69	-8.48	-6.26	26.39	Pass

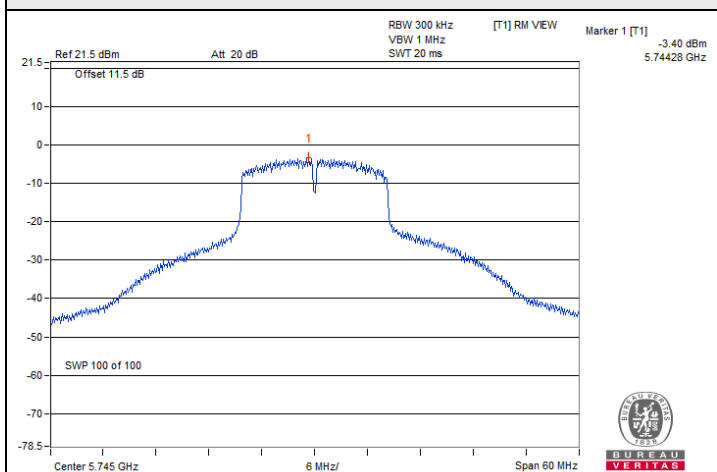
Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
- For U-NII-3, the directional gain is 9.61 dBi > 6 dBi, so the power density limit shall be reduced to  $30 - (9.61 - 6) = 26.39$  dBm/500kHz.

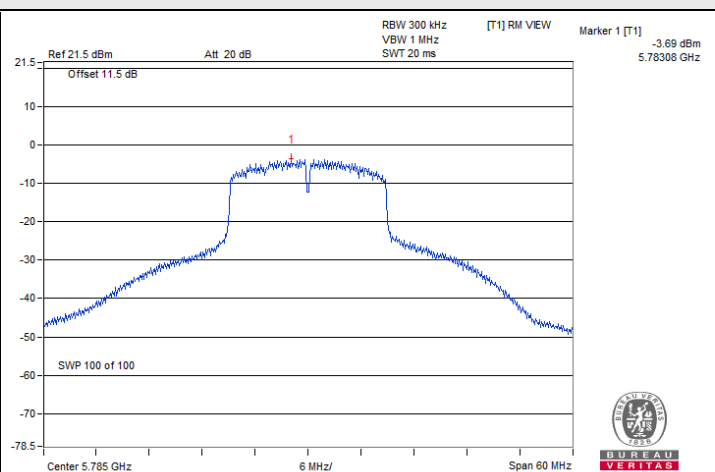




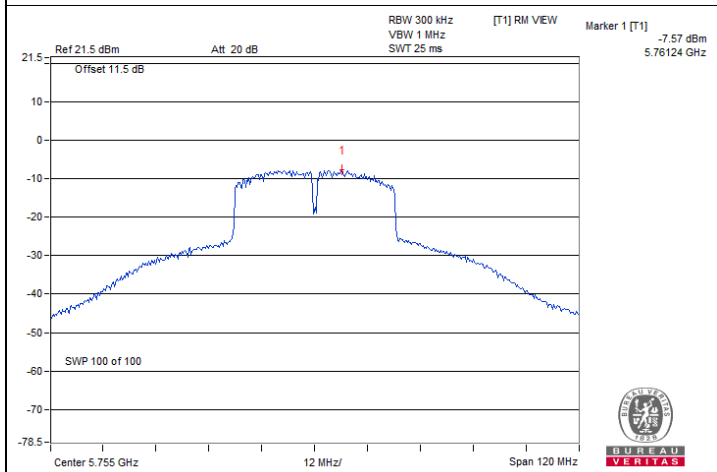
### Spectrum Plot of Maximum Value



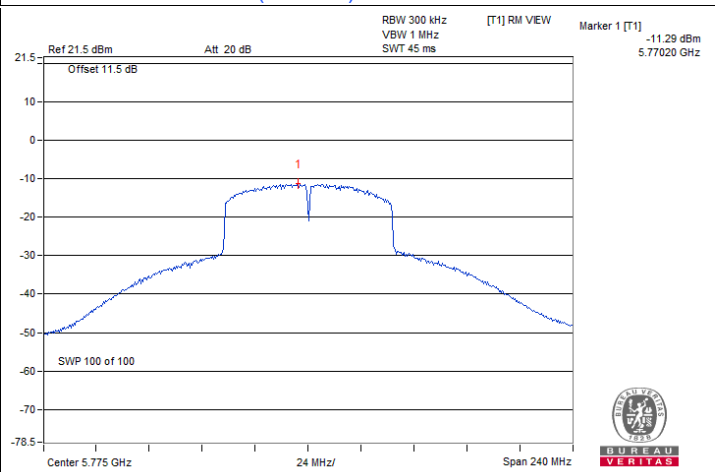
802.11a \ Chain0 : CH 149



802.11ac (VHT20) \ Chain0 : CH 157



802.11ac (VHT40) \ Chain1 : CH 151



802.11ac (VHT80) \ Chain0 : CH 155

#### 7.4 6 dB Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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#### 802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	2.53	3.1	0.5	Pass
149	5745	16.35	16.31	0.5	Pass
157	5785	15.67	15.69	0.5	Pass
165	5825	14.93	16.33	0.5	Pass

#### 802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	2.46	2.46	0.5	Pass
149	5745	16.33	17.58	0.5	Pass
157	5785	15.2	14.34	0.5	Pass
165	5825	16.35	16.21	0.5	Pass

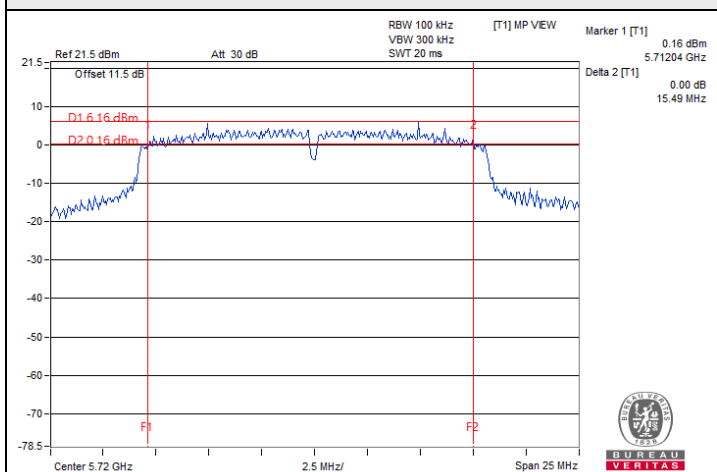
#### 802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	1.26	1.24	0.5	Pass
151	5755	33.28	32.76	0.5	Pass
159	5795	33.92	34.16	0.5	Pass

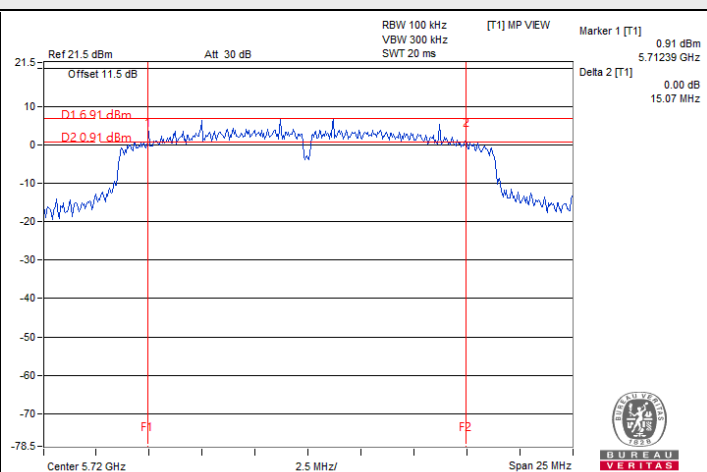
#### 802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	2.07	2.6	0.5	Pass
155	5775	66.46	70.39	0.5	Pass

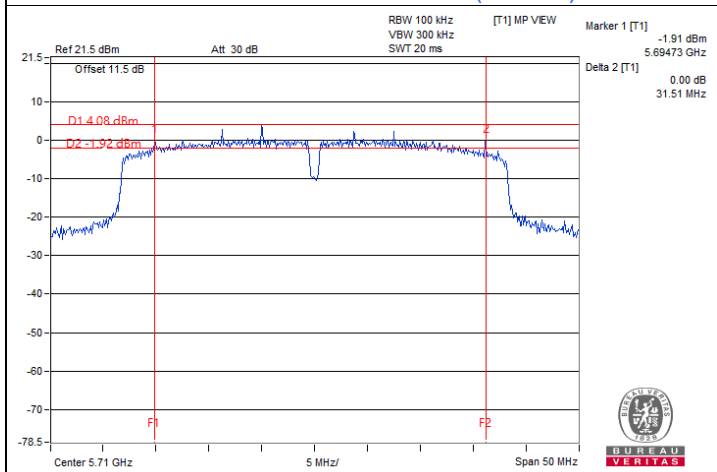
### Spectrum Plot of Minimum Value



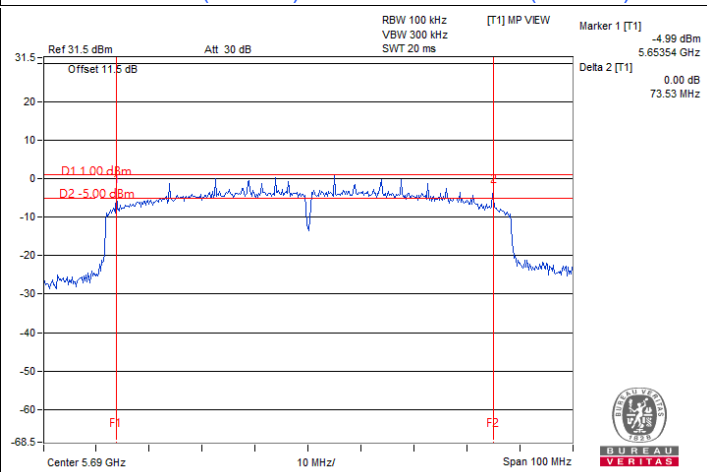
802.11a \ Chain0 : CH 144 (U-NII-3)



802.11ac (VHT20) \ Chain0 : CH 144 (U-NII-3)



802.11ac (VHT40) \ Chain1 : CH 142 (U-NII-3)



802.11ac (VHT80) \ Chain0 : CH 138 (U-NII-3)

**Notes:**

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

## 7.5 Occupied Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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### 802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.24	18.24
40	5200	22.44	26.52
48	5240	18.6	17.04
52	5260	24.6	18.24
60	5300	19.32	18
64	5320	16.68	16.92
100	5500	16.44	16.44
116	5580	17.52	17.16
140	5700	16.92	16.68
144 (U-NII-2C)	5720	14.36	14.72
144 (U-NII-3)	5720	5.2	6.52
149	5745	22.44	25.2
157	5785	19.68	26.76
165	5825	21	24.12

### 802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.52	18
40	5200	24.24	21.72
48	5240	18.12	19.44
52	5260	21.6	21
60	5300	20.16	22.92
64	5320	17.88	18.72
100	5500	17.52	17.64
116	5580	17.88	18.36
140	5700	17.52	17.64
144 (U-NII-2C)	5720	14.72	14.24
144 (U-NII-3)	5720	5.44	4
149	5745	20.28	24.6
157	5785	19.44	23.76
165	5825	22.44	22.92

**802.11ac (VHT40)**

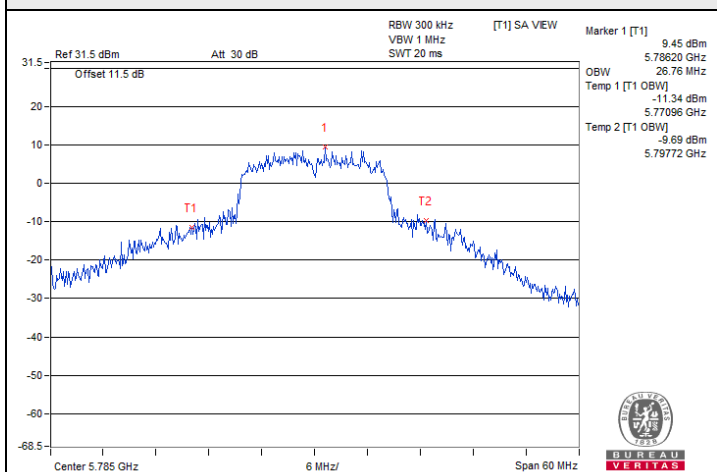
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	36	36.24
46	5230	38.16	37.68
54	5270	37.2	36.96
62	5310	36	36.24
102	5510	36	36.24
110	5550	36.48	36.72
134	5670	36.72	36.96
142 (U-NII-2C)	5710	33.96	38.52
142 (U-NII-3)	5710	7.08	3.96
151	5755	45.36	52.32
159	5795	45.84	50.64

**802.11ac (VHT80)**

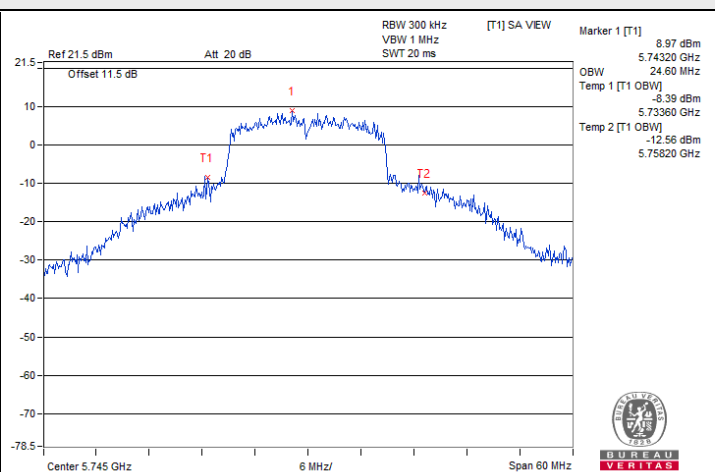
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	74.88	75.36
58	5290	75.36	74.88
106	5530	74.88	74.4
122	5610	77.28	77.28
138 (U-NII-2C)	5690	72.92	72.92
138 (U-NII-3)	5690	2.92	2.92
155	5775	96	82.56



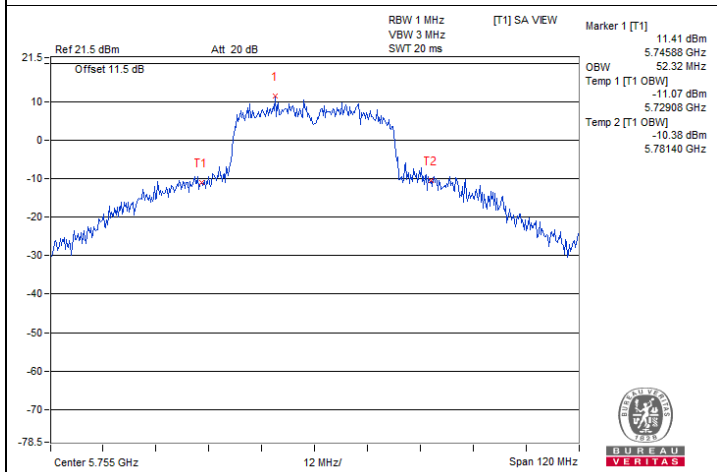
### Spectrum Plot of Maximum Value



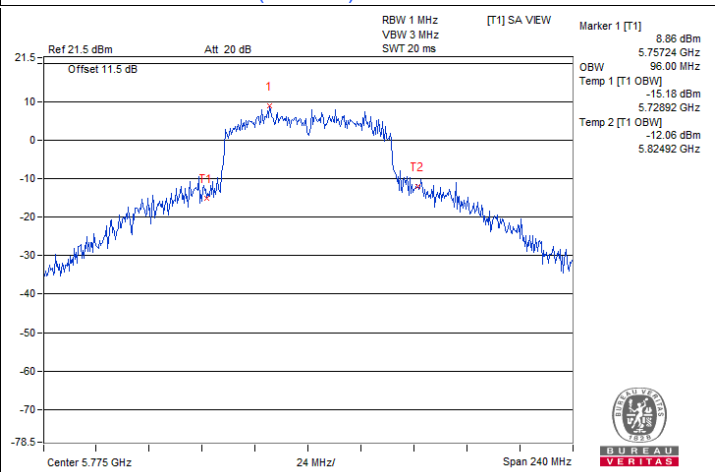
802.11a \ Chain1 : CH 157



802.11ac (VHT20) \ Chain1 : CH 149

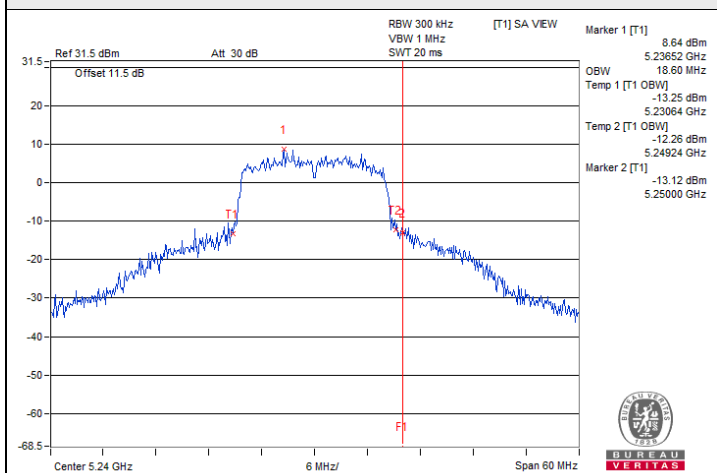


802.11ac (VHT40) \ Chain1 : CH 151

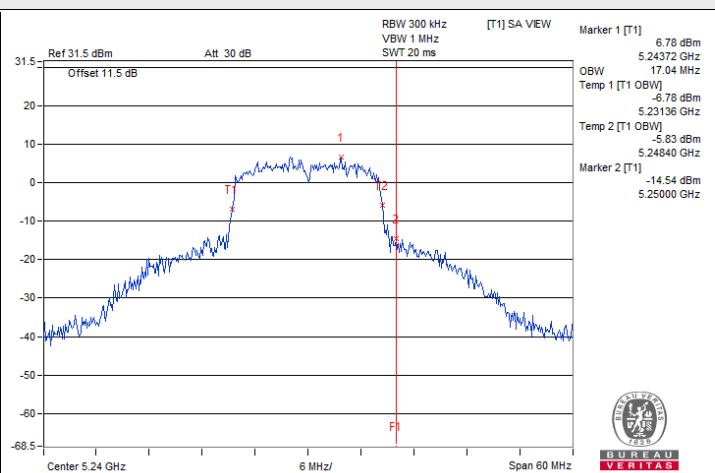


802.11ac (VHT80) \ Chain0 : CH 155

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

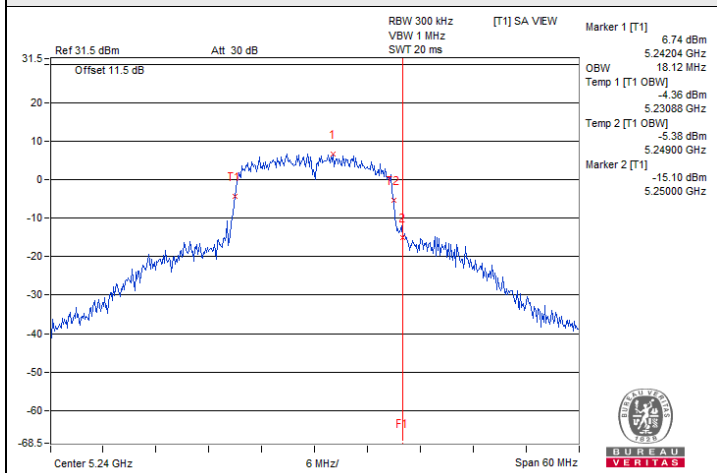


802.11a \ Chain 0 : CH 48

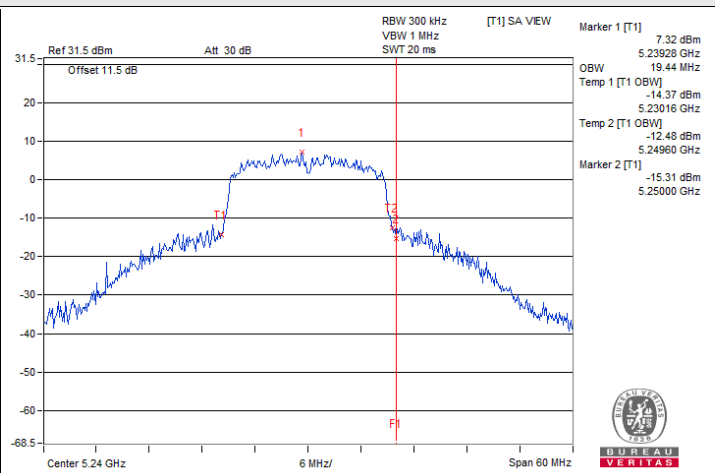


802.11a \ Chain 1 : CH 48

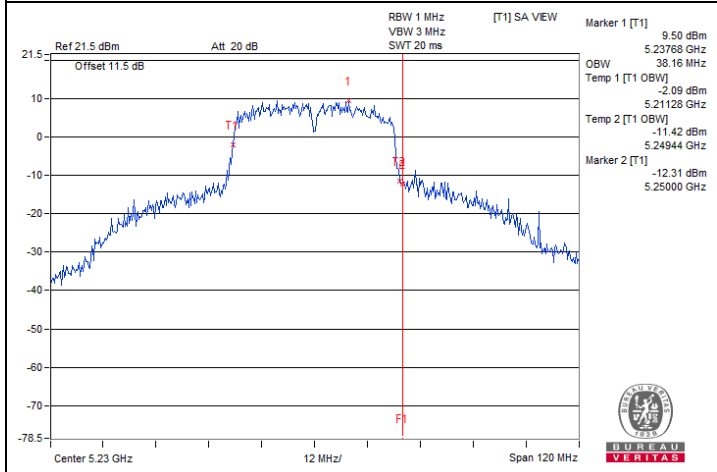
Spectrum Plot for nearby DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2A band)



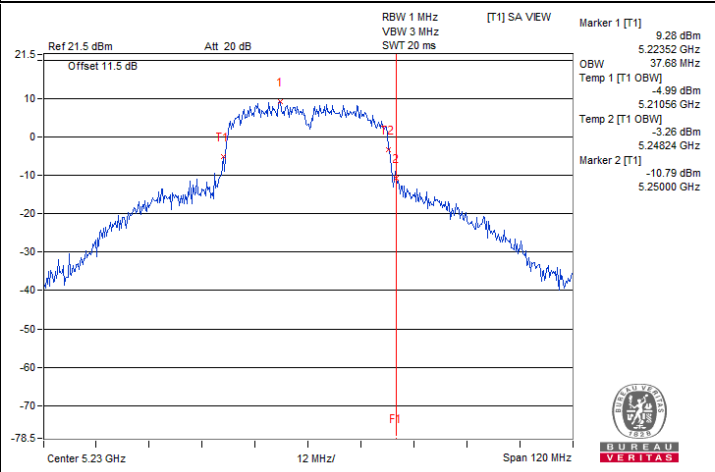
802.11ac (VHT20) \ Chain 0 : CH 48



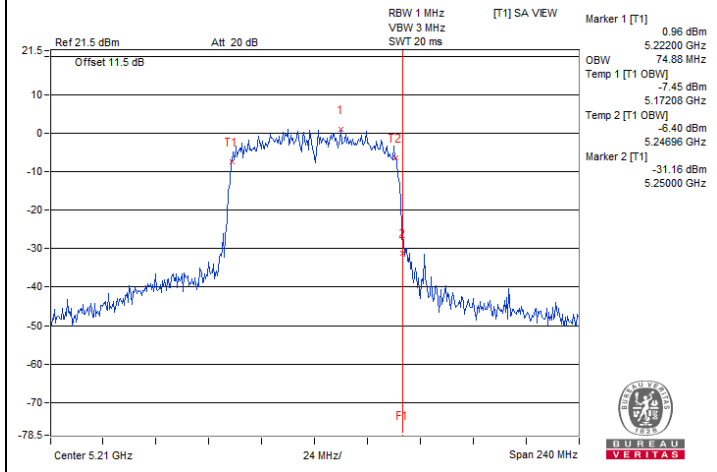
802.11ac (VHT20) \ Chain 1 : CH 48



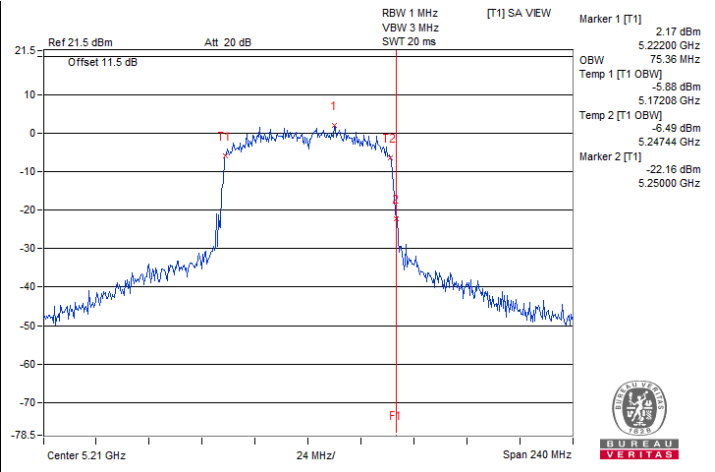
802.11ac (VHT40) \ Chain 0 : CH 46



802.11ac (VHT40) \ Chain 1 : CH 46



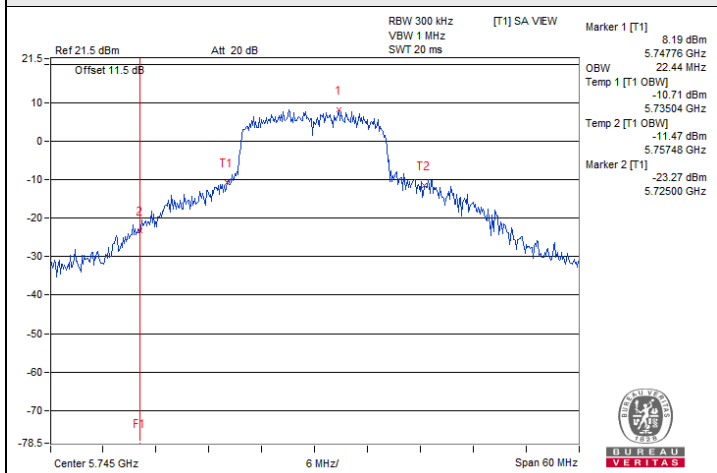
802.11ac (VHT80) \ Chain 0 : CH 42



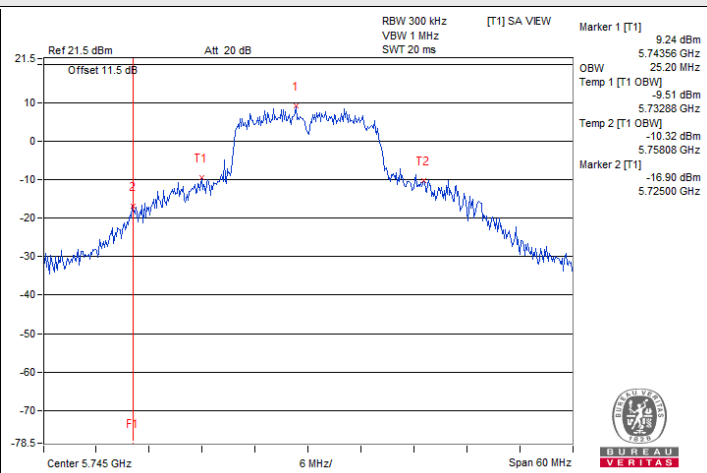
802.11ac (VHT80) \ Chain 1 : CH 42



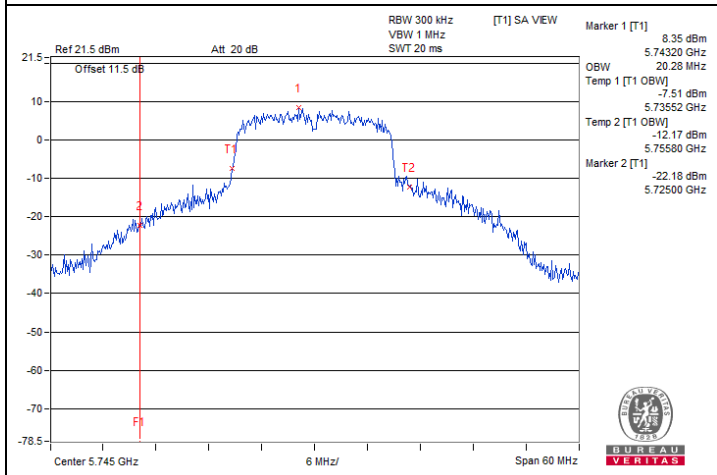
### Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)



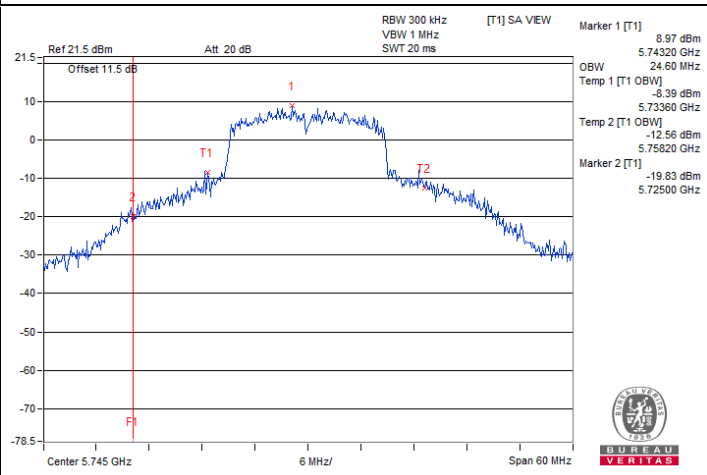
802.11a \ Chain 0 : CH 149



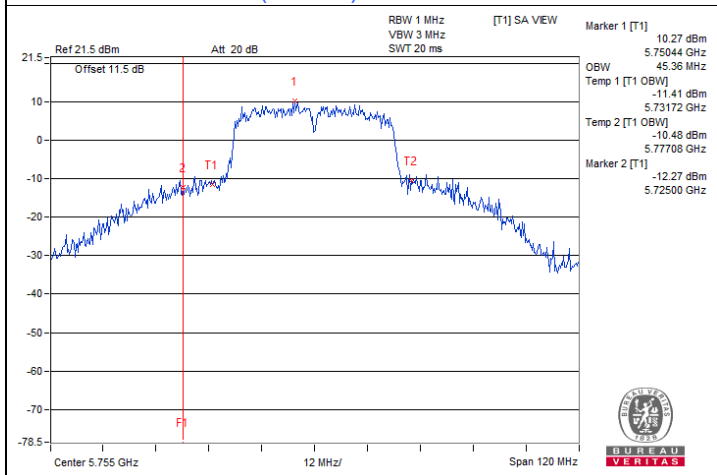
802.11a \ Chain 1 : CH 149



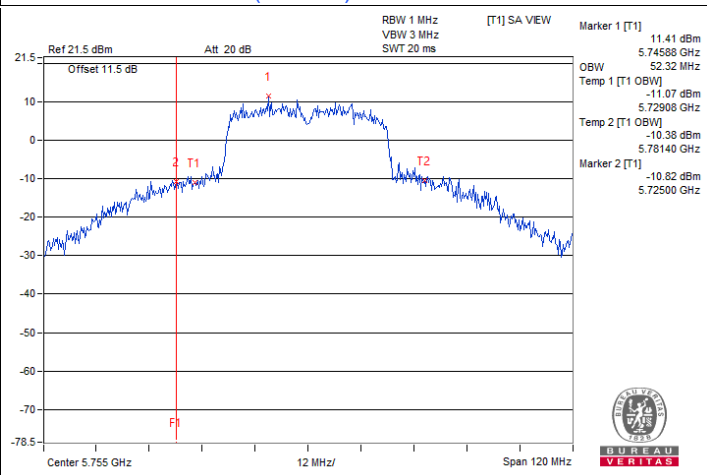
802.11ac (VHT20) \ Chain 0 : CH 149



802.11ac (VHT20) \ Chain 1 : CH 149

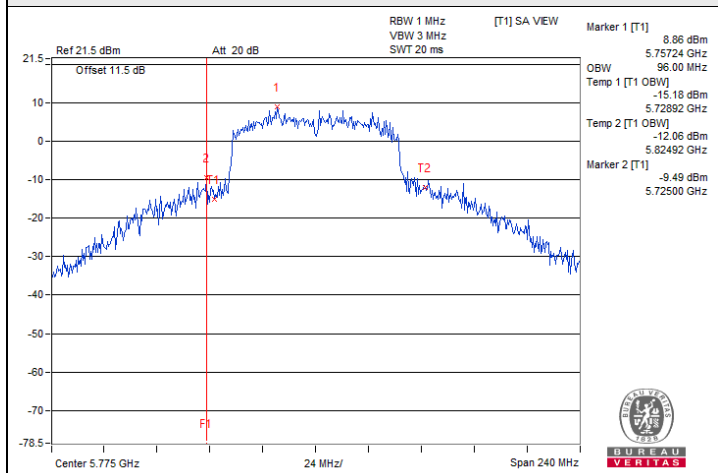


802.11ac (VHT40) \ Chain 0 : CH 151

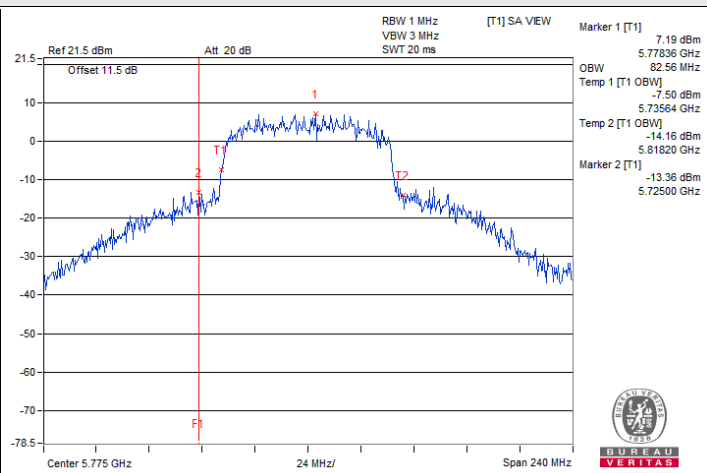


802.11ac (VHT40) \ Chain 1 : CH 151

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



802.11ac (VHT80) \ Chain 0 : CH 155



802.11ac (VHT80) \ Chain 1 : CH 155

## 7.6 Frequency Stability

Input Power:	3.3 Vdc	Environmental Conditions:	25 °C, 60 % RH	Tested By:	Ryann Wu
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### 802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	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
85	3.3	5180.011	Pass	5180.0131	Pass	5180.0094	Pass	5180.0116	Pass
80	3.3	5179.9959	Pass	5179.9962	Pass	5179.9924	Pass	5179.9972	Pass
70	3.3	5179.99	Pass	5179.989	Pass	5179.9913	Pass	5179.9922	Pass
60	3.3	5179.9839	Pass	5179.9811	Pass	5179.9821	Pass	5179.9829	Pass
50	3.3	5179.9968	Pass	5179.9966	Pass	5179.9973	Pass	5179.9984	Pass
40	3.3	5179.9897	Pass	5179.9898	Pass	5179.9885	Pass	5179.9898	Pass
30	3.3	5180.0128	Pass	5180.0159	Pass	5180.0134	Pass	5180.0168	Pass
20	3.3	5180.0085	Pass	5180.0089	Pass	5180.009	Pass	5180.0125	Pass
10	3.3	5179.9932	Pass	5179.9962	Pass	5179.9975	Pass	5179.9972	Pass
0	3.3	5180.0167	Pass	5180.0176	Pass	5180.0186	Pass	5180.0147	Pass
-10	3.3	5179.9798	Pass	5179.9765	Pass	5179.9761	Pass	5179.9779	Pass
-20	3.3	5179.9978	Pass	5179.9989	Pass	5179.9995	Pass	5179.9985	Pass
-30	3.3	5179.9998	Pass	5179.999	Pass	5179.997	Pass	5179.9991	Pass
-40	3.3	5179.9976	Pass	5179.9956	Pass	5179.9954	Pass	5179.9986	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	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	3.795	5180.01	Pass	5180.0113	Pass	5180.0115	Pass	5180.0099	Pass
	3.3	5180.0085	Pass	5180.0089	Pass	5180.009	Pass	5180.0125	Pass
	2.805	5180.0033	Pass	5180.0055	Pass	5180.0038	Pass	5180.0023	Pass

## 7.7 AC Power Conducted Emissions

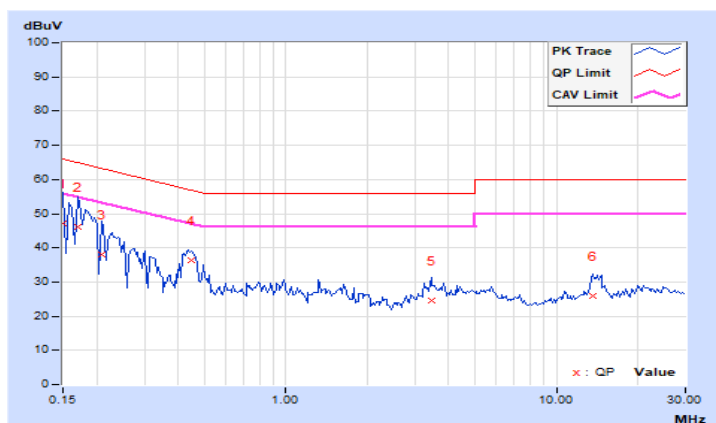
RF Mode	TX 802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Ryan Du		

### 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	10.05	37.03	19.59	47.08	29.64	66.00	56.00	-18.92	-26.36
2	0.16953	10.05	36.01	14.63	46.06	24.68	64.98	54.98	-18.92	-30.30
3	0.20859	10.05	28.06	8.70	38.11	18.75	63.26	53.26	-25.15	-34.51
4	0.44688	10.07	26.30	14.90	36.37	24.97	56.93	46.93	-20.56	-21.96
5	3.44531	10.23	14.35	8.76	24.58	18.99	56.00	46.00	-31.42	-27.01
6	13.71484	10.84	15.13	7.71	25.97	18.55	60.00	50.00	-34.03	-31.45

#### 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

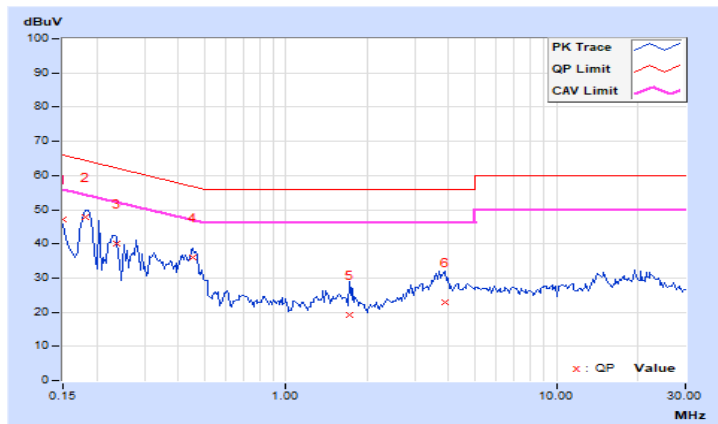


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	150 kHz ~ 30 MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>Input Power (System)</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25 °C, 75 % RH
<b>Tested By</b>	Ryan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

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.02	37.21	30.31	47.23	40.33	66.00	56.00	-18.77	-15.67
2	0.18125	10.03	37.91	25.86	47.94	35.89	64.43	54.43	-16.49	-18.54
3	0.23594	10.03	30.01	19.55	40.04	29.58	62.24	52.24	-22.20	-22.66
4	0.45469	10.04	26.02	20.07	36.06	30.11	56.79	46.79	-20.73	-16.68
5	1.73047	10.12	8.95	1.19	19.07	11.31	56.00	46.00	-36.93	-34.69
6	3.87500	10.20	12.72	6.48	22.92	16.68	56.00	46.00	-33.08	-29.32

**Remarks:**

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



## 7.8 Unwanted Emissions below 1 GHz

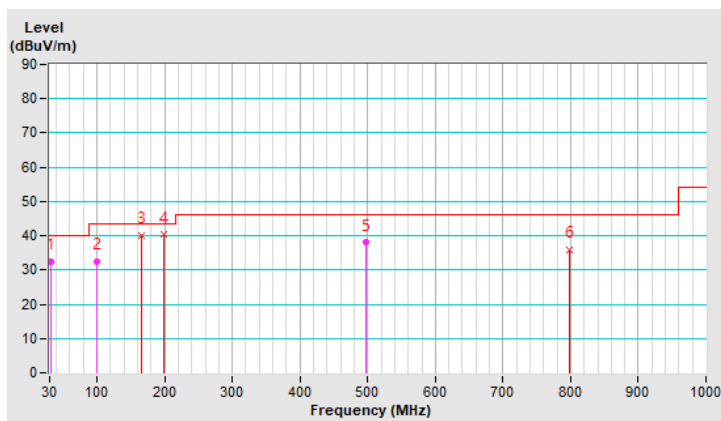
RF Mode	TX 802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120Vac, 60Hz	Environmental Conditions	20 °C, 70 % RH
Tested By	Ryan Du		

### 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	32.10	32.6 QP	40.0	-7.4	1.00 H	241	46.3	-13.7
2	99.74	32.6 QP	43.5	-10.9	3.00 H	235	49.4	-16.8
3	166.02	40.2 QP	43.5	-3.3	1.50 H	187	52.5	-12.3
<b>4</b>	<b>199.11</b>	<b>40.3 QP</b>	<b>43.5</b>	<b>-3.2</b>	<b>1.50 H</b>	<b>261</b>	<b>55.4</b>	<b>-15.1</b>
5	497.87	38.2 QP	46.0	-7.8	1.50 H	231	43.4	-5.2
6	797.61	36.0 QP	46.0	-10.0	1.00 H	255	34.8	1.2

### Remarks:

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

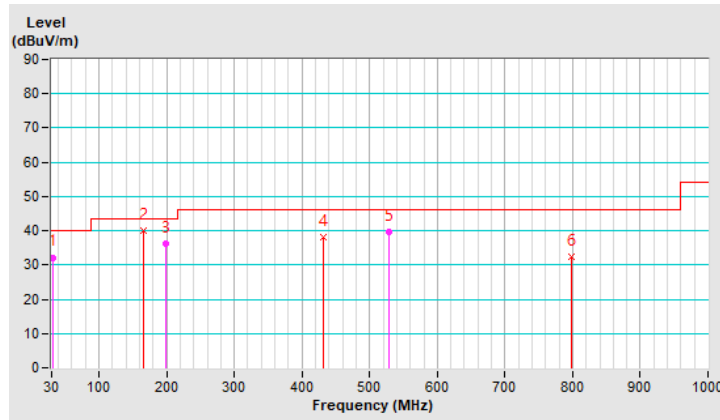


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	9 kHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	(QP) RB = 120kHz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	31.18	32.2 QP	40.0	-7.8	1.00 V	289	46.1	-13.9
2	166.24	40.1 QP	43.5	-3.4	1.00 V	291	52.5	-12.4
3	199.11	36.1 QP	43.5	-7.4	2.00 V	157	51.2	-15.1
4	431.99	38.2 QP	46.0	-7.8	1.50 V	257	44.9	-6.7
5	527.99	39.7 QP	46.0	-6.3	1.50 V	259	44.2	-4.5
6	797.78	32.4 QP	46.0	-13.6	1.50 V	277	31.2	1.2

**Remarks:**

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



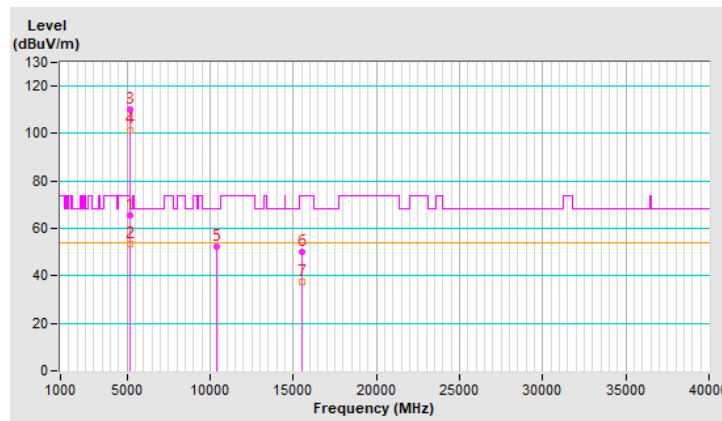
## 7.9 Unwanted Emissions above 1 GHz

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 36 : 5180 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 (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.7 PK	74.0	-8.3	1.80 H	212	64.7	1.0
2	5150.00	53.6 AV	54.0	-0.4	1.80 H	212	52.6	1.0
3	*5180.00	110.4 PK			1.80 H	212	109.7	0.7
4	*5180.00	101.6 AV			1.80 H	212	100.9	0.7
5	#10360.00	52.3 PK	68.2	-15.9	2.06 H	46	41.8	10.5
6	15540.00	49.9 PK	74.0	-24.1	1.92 H	39	38.4	11.5
7	15540.00	37.2 AV	54.0	-16.8	1.92 H	39	25.7	11.5

### Remarks:

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



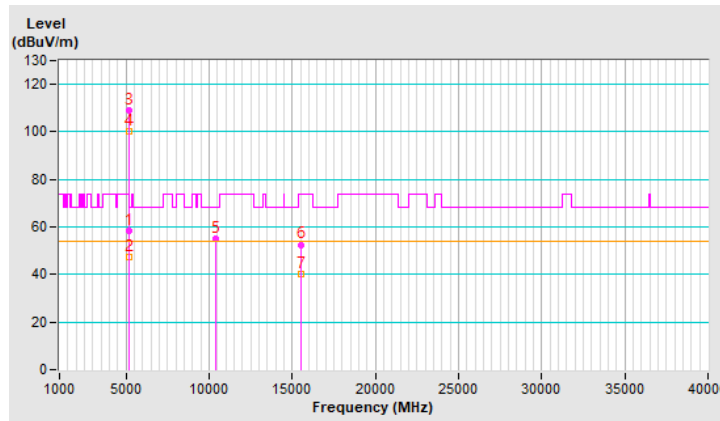


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 36 : 5180 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.3 PK	74.0	-15.7	1.21 V	152	57.3	1.0
2	5150.00	47.6 AV	54.0	-6.4	1.21 V	152	46.6	1.0
3	*5180.00	109.1 PK			1.21 V	152	108.4	0.7
4	*5180.00	100.4 AV			1.21 V	152	99.7	0.7
5	#10360.00	55.0 PK	68.2	-13.2	1.32 V	100	44.5	10.5
6	15540.00	52.6 PK	74.0	-21.4	1.91 V	61	41.1	11.5
7	15540.00	40.3 AV	54.0	-13.7	1.91 V	61	28.8	11.5

**Remarks:**

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

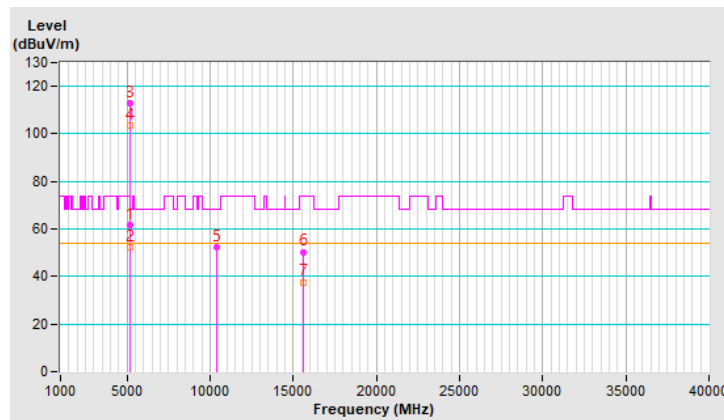


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.5 PK	74.0	-12.5	1.84 H	214	60.5	1.0
2	5150.00	52.3 AV	54.0	-1.7	1.84 H	214	51.3	1.0
3	*5200.00	113.1 PK			1.84 H	214	112.5	0.6
4	*5200.00	103.5 AV			1.84 H	214	102.9	0.6
5	#10400.00	52.4 PK	68.2	-15.8	2.06 H	48	41.7	10.7
6	15600.00	50.4 PK	74.0	-23.6	1.89 H	40	38.7	11.7
7	15600.00	37.7 AV	54.0	-16.3	1.89 H	40	26.0	11.7

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

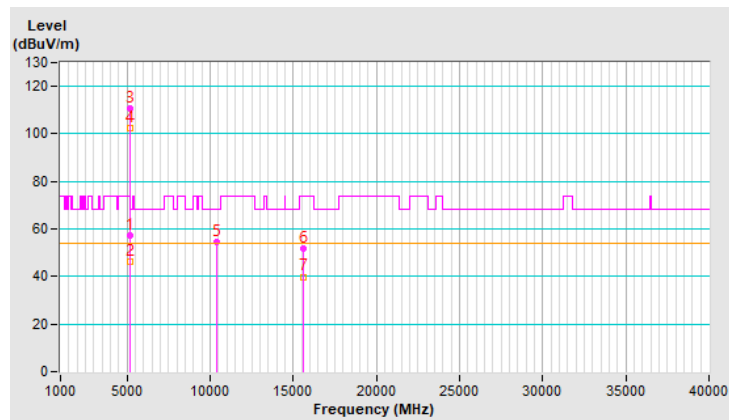


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.1 PK	74.0	-16.9	1.18 V	137	56.1	1.0
2	5150.00	46.5 AV	54.0	-7.5	1.18 V	137	45.5	1.0
3	*5200.00	110.9 PK			1.18 V	137	110.3	0.6
4	*5200.00	102.2 AV			1.18 V	137	101.6	0.6
5	#10400.00	54.7 PK	68.2	-13.5	1.37 V	99	44.0	10.7
6	15600.00	52.0 PK	74.0	-22.0	1.88 V	47	40.3	11.7
7	15600.00	39.9 AV	54.0	-14.1	1.88 V	47	28.2	11.7

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

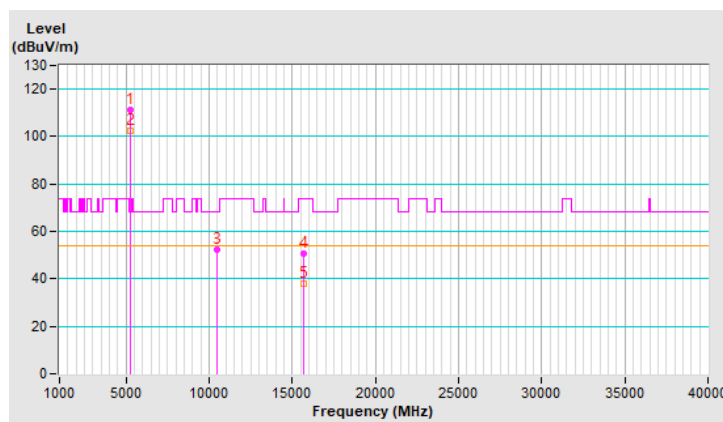


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	111.2 PK			1.86 H	216	110.8	0.4
2	*5240.00	102.5 AV			1.86 H	216	102.1	0.4
3	#10480.00	52.4 PK	68.2	-15.8	2.07 H	61	41.9	10.5
4	15720.00	50.8 PK	74.0	-23.2	1.91 H	53	39.3	11.5
5	15720.00	37.8 AV	54.0	-16.2	1.91 H	53	26.3	11.5

**Remarks:**

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

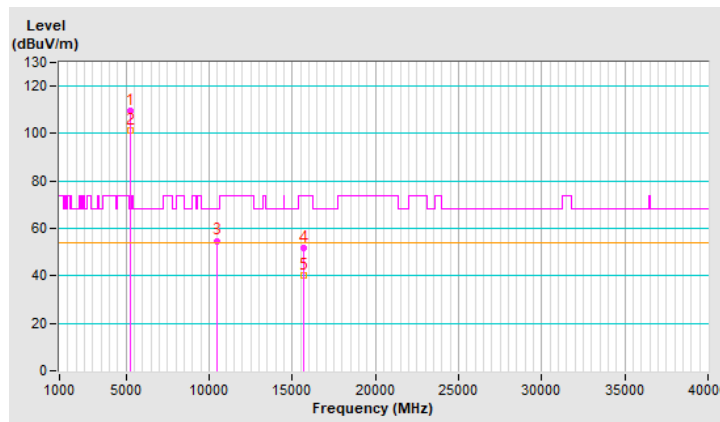


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.8 PK			1.24 V	141	109.4	0.4
2	*5240.00	101.3 AV			1.24 V	141	100.9	0.4
3	#10480.00	54.8 PK	68.2	-13.4	1.36 V	86	44.3	10.5
4	15720.00	52.0 PK	74.0	-22.0	1.83 V	43	40.5	11.5
5	15720.00	40.1 AV	54.0	-13.9	1.83 V	43	28.6	11.5

**Remarks:**

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

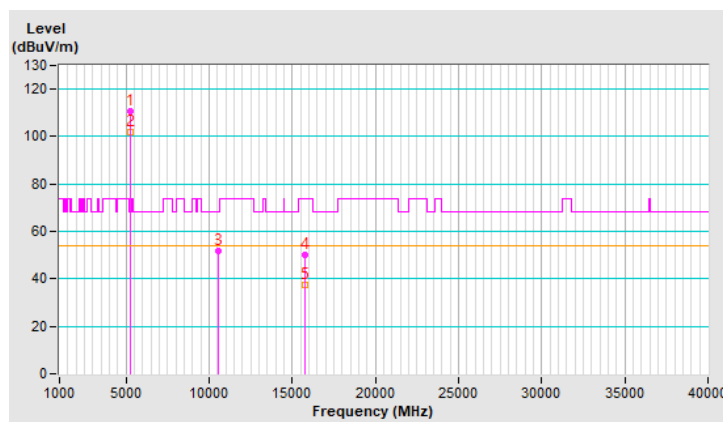


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	*5260.00	110.7 PK			1.89 H	205	110.4	0.3
2	*5260.00	102.0 AV			1.89 H	205	101.7	0.3
3	#10520.00	51.9 PK	68.2	-16.3	2.00 H	47	41.5	10.4
4	15780.00	50.3 PK	74.0	-23.7	1.84 H	40	38.9	11.4
5	15780.00	37.6 AV	54.0	-16.4	1.84 H	40	26.2	11.4

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

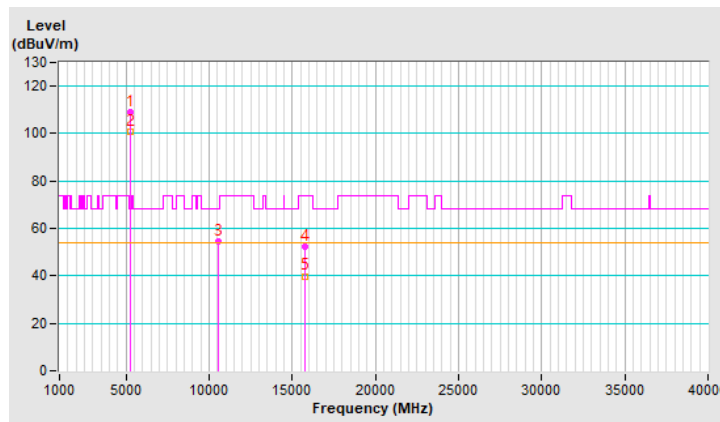


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	*5260.00	109.1 PK			1.22 V	138	108.8	0.3
2	*5260.00	100.9 AV			1.22 V	138	100.6	0.3
3	#10520.00	54.3 PK	68.2	-13.9	1.32 V	89	43.9	10.4
4	15780.00	52.1 PK	74.0	-21.9	1.87 V	32	40.7	11.4
5	15780.00	39.9 AV	54.0	-14.1	1.87 V	32	28.5	11.4

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

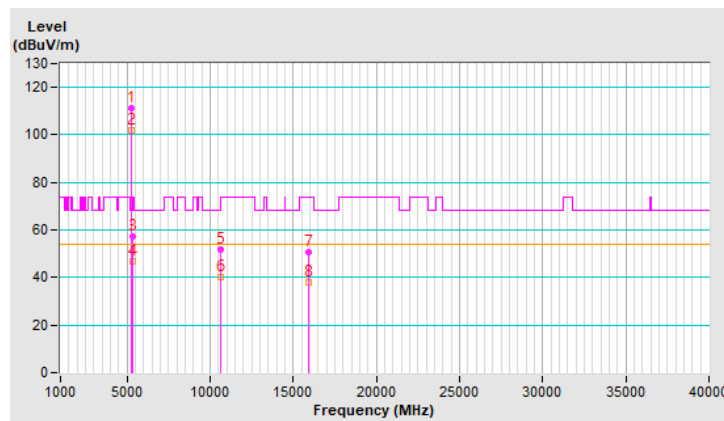


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	111.0 PK			1.86 H	201	110.7	0.3
2	*5300.00	102.1 AV			1.86 H	201	101.8	0.3
3	5350.00	57.1 PK	74.0	-16.9	1.86 H	201	56.5	0.6
4	5350.00	46.7 AV	54.0	-7.3	1.86 H	201	46.1	0.6
5	10600.00	52.0 PK	74.0	-22.0	2.11 H	61	42.1	9.9
6	10600.00	40.4 AV	54.0	-13.6	2.11 H	61	30.5	9.9
7	15900.00	50.8 PK	74.0	-23.2	1.91 H	24	39.2	11.6
8	15900.00	37.9 AV	54.0	-16.1	1.91 H	24	26.3	11.6

**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.



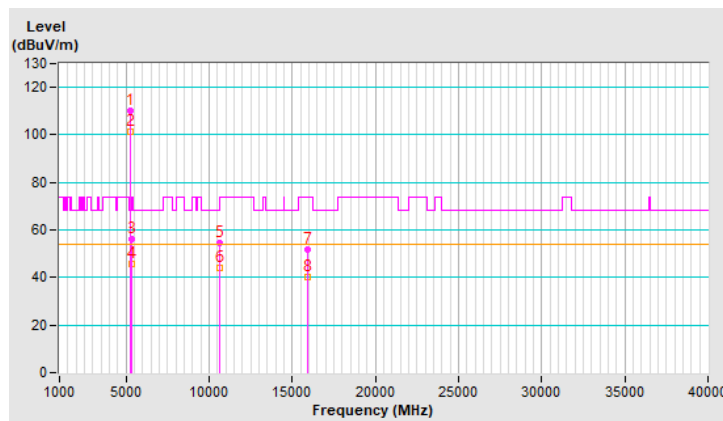


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	109.9 PK			1.26 V	166	109.6	0.3
2	*5300.00	101.3 AV			1.26 V	166	101.0	0.3
3	5350.00	56.2 PK	74.0	-17.8	1.26 V	166	55.6	0.6
4	5350.00	45.8 AV	54.0	-8.2	1.26 V	166	45.2	0.6
5	10600.00	54.7 PK	74.0	-19.3	1.33 V	106	44.8	9.9
6	10600.00	43.9 AV	54.0	-10.1	1.33 V	106	34.0	9.9
7	15900.00	52.0 PK	74.0	-22.0	1.93 V	47	40.4	11.6
8	15900.00	40.2 AV	54.0	-13.8	1.93 V	47	28.6	11.6

**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.

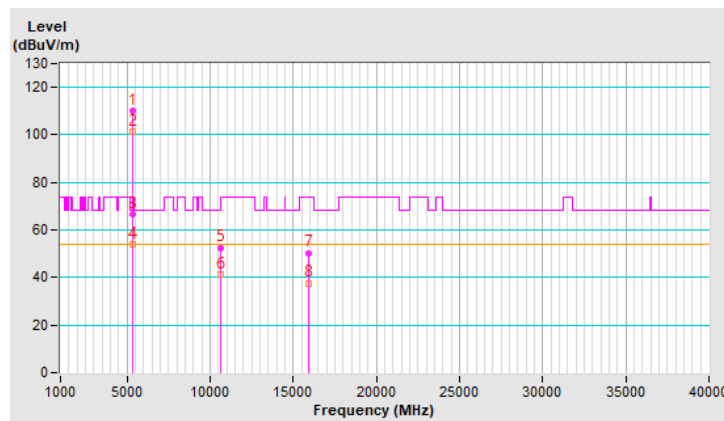


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	110.2 PK			1.53 H	198	109.8	0.4
2	*5320.00	101.4 AV			1.53 H	198	101.0	0.4
3	5350.00	66.5 PK	74.0	-7.5	1.53 H	198	65.9	0.6
4	5350.00	53.8 AV	54.0	-0.2	1.53 H	198	53.2	0.6
5	10640.00	52.6 PK	74.0	-21.4	2.05 H	32	42.5	10.1
6	10640.00	41.1 AV	54.0	-12.9	2.05 H	32	31.0	10.1
7	15960.00	50.4 PK	74.0	-23.6	1.93 H	36	38.6	11.8
8	15960.00	37.7 AV	54.0	-16.3	1.93 H	36	25.9	11.8

**Remarks:**

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

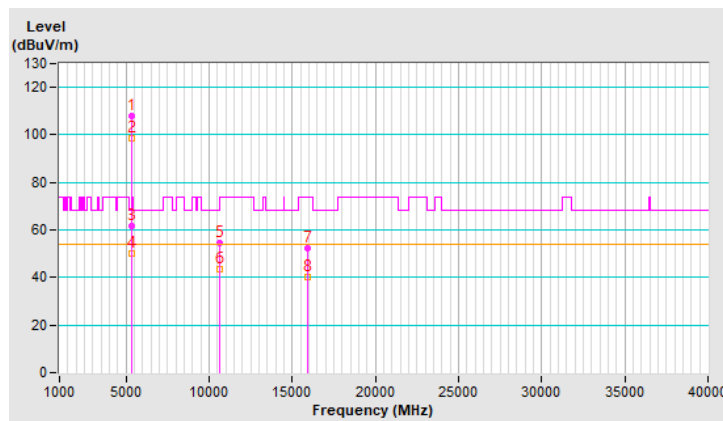


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	107.9 PK			1.57 V	129	107.5	0.4
2	*5320.00	98.8 AV			1.57 V	129	98.4	0.4
3	5350.00	61.7 PK	74.0	-12.3	1.57 V	129	61.1	0.6
4	5350.00	50.1 AV	54.0	-3.9	1.57 V	129	49.5	0.6
5	10640.00	54.5 PK	74.0	-19.5	1.43 V	110	44.4	10.1
6	10640.00	43.4 AV	54.0	-10.6	1.43 V	110	33.3	10.1
7	15960.00	52.5 PK	74.0	-21.5	1.94 V	58	40.7	11.8
8	15960.00	40.3 AV	54.0	-13.7	1.94 V	58	28.5	11.8

**Remarks:**

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

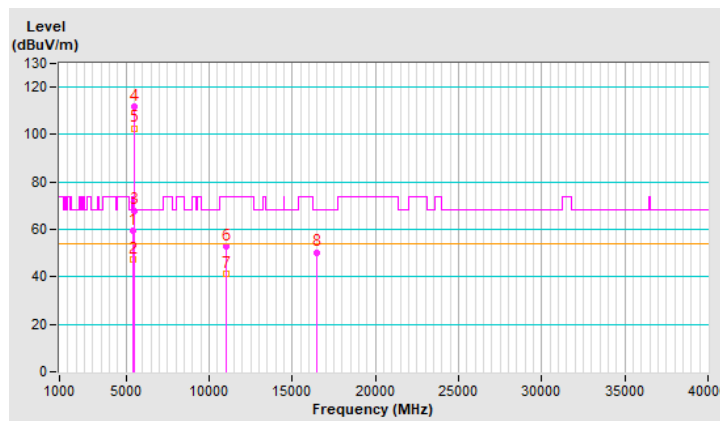


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.3 PK	74.0	-14.7	1.40 H	204	58.5	0.8
2	5460.00	47.5 AV	54.0	-6.5	1.40 H	204	46.7	0.8
3	#5470.00	68.0 PK	68.2	-0.2	1.40 H	204	67.2	0.8
4	*5500.00	111.8 PK			1.40 H	204	111.0	0.8
5	*5500.00	102.7 AV			1.40 H	204	101.9	0.8
6	11000.00	53.0 PK	74.0	-21.0	2.00 H	39	41.9	11.1
7	11000.00	41.2 AV	54.0	-12.8	2.00 H	39	30.1	11.1
8	#16500.00	50.4 PK	68.2	-17.8	1.85 H	27	36.6	13.8

**Remarks:**

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

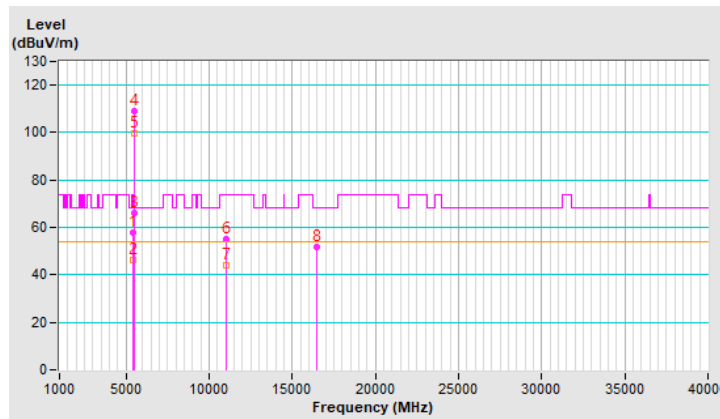


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	57.6 PK	74.0	-16.4	1.40 V	51	56.8	0.8
2	5460.00	46.2 AV	54.0	-7.8	1.40 V	51	45.4	0.8
3	#5470.00	66.1 PK	68.2	-2.1	1.40 V	51	65.3	0.8
4	*5500.00	109.1 PK			1.40 V	51	108.3	0.8
5	*5500.00	99.8 AV			1.40 V	51	99.0	0.8
6	11000.00	55.0 PK	74.0	-19.0	1.35 V	108	43.9	11.1
7	11000.00	44.3 AV	54.0	-9.7	1.35 V	108	33.2	11.1
8	#16500.00	51.6 PK	68.2	-16.6	1.89 V	48	37.8	13.8

**Remarks:**

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

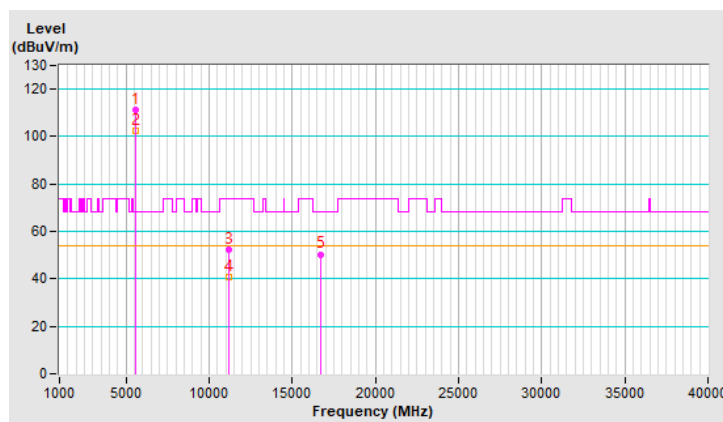


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	111.3 PK			1.84 H	219	110.5	0.8
2	*5580.00	102.3 AV			1.84 H	219	101.5	0.8
3	11160.00	52.4 PK	74.0	-21.6	2.07 H	64	41.5	10.9
4	11160.00	40.9 AV	54.0	-13.1	2.07 H	64	30.0	10.9
5	#16740.00	50.4 PK	68.2	-17.8	1.85 H	27	35.3	15.1

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

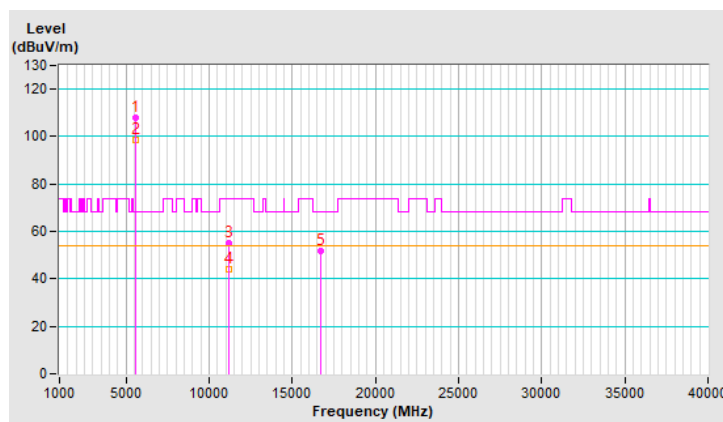


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	107.8 PK			1.17 V	158	107.0	0.8
2	*5580.00	98.8 AV			1.17 V	158	98.0	0.8
3	11160.00	55.0 PK	74.0	-19.0	1.41 V	107	44.1	10.9
4	11160.00	44.1 AV	54.0	-9.9	1.41 V	107	33.2	10.9
5	#16740.00	51.7 PK	68.2	-16.5	1.89 V	51	36.6	15.1

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



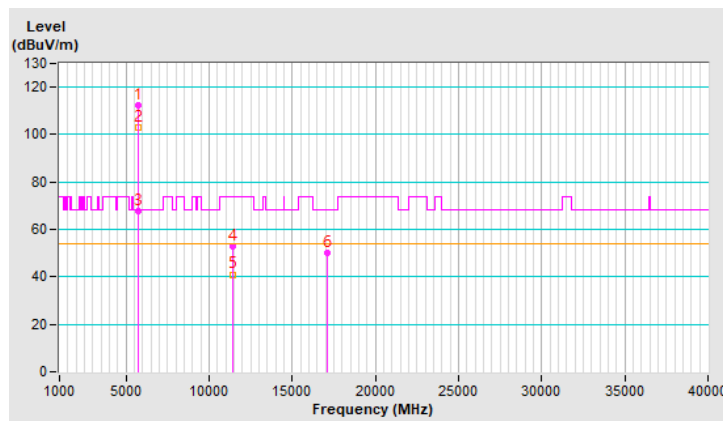
<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

**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	112.3 PK			1.78 H	214	111.1	1.2
2	*5700.00	103.2 AV			1.78 H	214	102.0	1.2
3	#5725.00	67.9 PK	68.2	-0.3	1.78 H	214	66.6	1.3
4	11400.00	52.7 PK	74.0	-21.3	2.04 H	44	41.0	11.7
5	11400.00	41.0 AV	54.0	-13.0	2.04 H	44	29.3	11.7
6	#17100.00	50.2 PK	68.2	-18.0	1.94 H	29	33.9	16.3

**Remarks:**

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



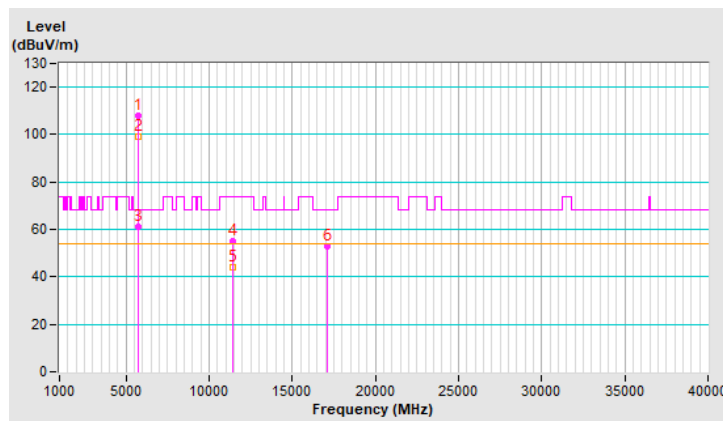


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	107.7 PK			1.22 V	157	106.5	1.2
2	*5700.00	98.9 AV			1.22 V	157	97.7	1.2
3	#5725.00	61.3 PK	68.2	-6.9	1.22 V	157	60.0	1.3
4	11400.00	55.0 PK	74.0	-19.0	1.39 V	84	43.3	11.7
5	11400.00	43.8 AV	54.0	-10.2	1.39 V	84	32.1	11.7
6	#17100.00	52.7 PK	68.2	-15.5	1.90 V	55	36.4	16.3

**Remarks:**

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

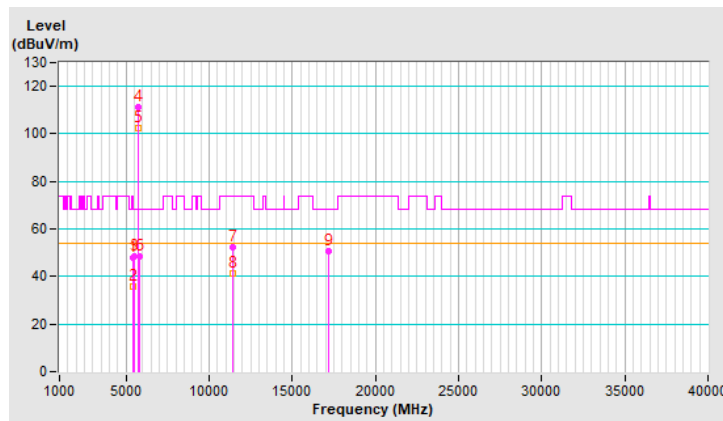


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	47.9 PK	74.0	-26.1	1.88 H	209	47.1	0.8
2	5460.00	35.6 AV	54.0	-18.4	1.88 H	209	34.8	0.8
3	#5470.00	48.2 PK	68.2	-20.0	1.88 H	209	47.4	0.8
4	*5720.00	111.1 PK			1.88 H	209	109.8	1.3
5	*5720.00	102.3 AV			1.88 H	209	101.0	1.3
6	#5850.00	48.4 PK	68.2	-19.8	1.88 H	209	47.1	1.3
7	11440.00	52.5 PK	74.0	-21.5	2.11 H	38	40.8	11.7
8	11440.00	41.1 AV	54.0	-12.9	2.11 H	38	29.4	11.7
9	#17160.00	50.7 PK	68.2	-17.5	1.87 H	36	34.6	16.1

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

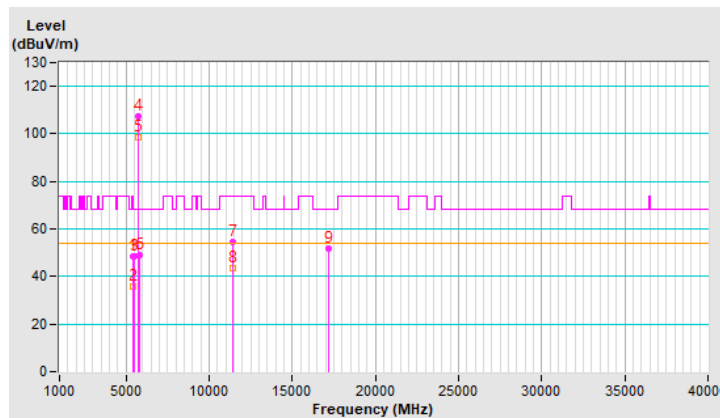


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	48.3 PK	74.0	-25.7	1.18 V	144	47.5	0.8
2	5460.00	36.0 AV	54.0	-18.0	1.18 V	144	35.2	0.8
3	#5470.00	48.3 PK	68.2	-19.9	1.18 V	144	47.5	0.8
4	*5720.00	107.4 PK			1.18 V	144	106.1	1.3
5	*5720.00	98.5 AV			1.18 V	144	97.2	1.3
6	#5850.00	49.0 PK	68.2	-19.2	1.18 V	144	47.7	1.3
7	11440.00	54.5 PK	74.0	-19.5	1.41 V	88	42.8	11.7
8	11440.00	43.6 AV	54.0	-10.4	1.41 V	88	31.9	11.7
9	#17160.00	51.8 PK	68.2	-16.4	1.92 V	46	35.7	16.1

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

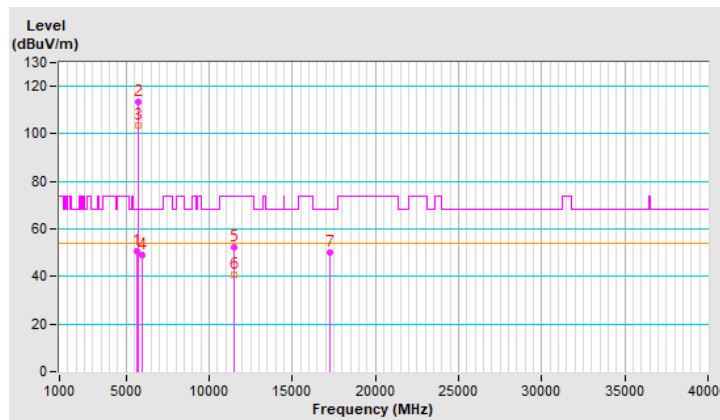


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.69	50.7 PK	68.2	-17.5	1.84 H	218	49.7	1.0
2	*5745.00	113.3 PK			1.84 H	218	111.9	1.4
3	*5745.00	103.7 AV			1.84 H	218	102.3	1.4
4	#5945.73	48.8 PK	68.2	-19.4	1.84 H	218	47.1	1.7
5	11490.00	52.2 PK	74.0	-21.8	2.12 H	35	40.5	11.7
6	11490.00	40.8 AV	54.0	-13.2	2.12 H	35	29.1	11.7
7	#17235.00	50.2 PK	68.2	-18.0	1.86 H	54	34.3	15.9

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

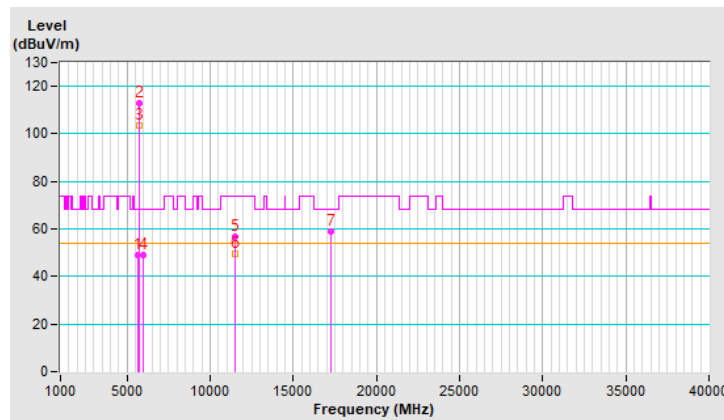


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5621.87	49.0 PK	68.2	-19.2	1.67 V	69	47.9	1.1
2	*5745.00	112.9 PK			1.67 V	69	111.5	1.4
3	*5745.00	103.3 AV			1.67 V	69	101.9	1.4
4	#5956.20	49.1 PK	68.2	-19.1	1.67 V	69	47.4	1.7
5	11490.00	56.9 PK	74.0	-17.1	1.92 V	141	45.2	11.7
6	11490.00	49.5 AV	54.0	-4.5	1.92 V	141	37.8	11.7
7	#17235.00	59.1 PK	68.2	-9.1	2.41 V	166	43.2	15.9

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

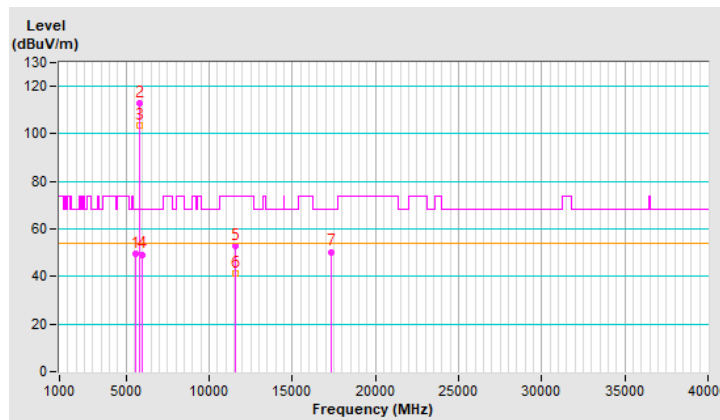


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5599.39	49.8 PK	68.2	-18.4	1.83 H	215	48.9	0.9
2	*5785.00	112.7 PK			1.83 H	215	111.3	1.4
3	*5785.00	103.4 AV			1.83 H	215	102.0	1.4
4	#6003.33	49.3 PK	68.2	-18.9	1.83 H	215	47.5	1.8
5	11570.00	52.8 PK	74.0	-21.2	2.07 H	39	41.4	11.4
6	11570.00	41.3 AV	54.0	-12.7	2.07 H	39	29.9	11.4
7	#17355.00	50.4 PK	68.2	-17.8	1.94 H	26	33.9	16.5

**Remarks:**

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

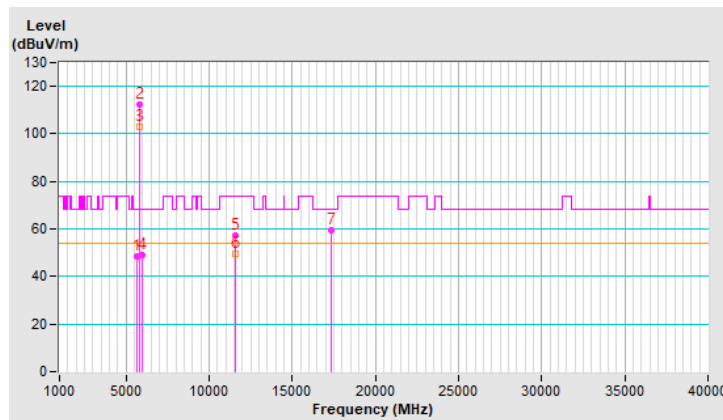


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5644.76	48.2 PK	68.2	-20.0	1.64 V	66	47.2	1.0
2	*5785.00	112.6 PK			1.64 V	66	111.2	1.4
3	*5785.00	103.0 AV			1.64 V	66	101.6	1.4
4	#6006.83	48.8 PK	68.2	-19.4	1.64 V	66	47.0	1.8
5	11570.00	57.3 PK	74.0	-16.7	1.87 V	143	45.9	11.4
6	11570.00	49.8 AV	54.0	-4.2	1.87 V	143	38.4	11.4
7	#17355.00	59.3 PK	68.2	-8.9	2.46 V	159	42.8	16.5

**Remarks:**

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

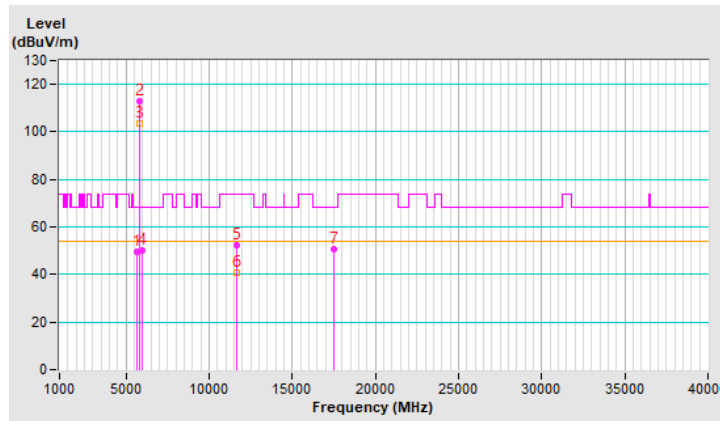


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5642.47	49.7 PK	68.2	-18.5	1.87 H	216	48.7	1.0
2	*5825.00	113.0 PK			1.87 H	216	111.6	1.4
3	*5825.00	103.6 AV			1.87 H	216	102.2	1.4
4	#6007.02	50.1 PK	68.2	-18.1	1.87 H	216	48.3	1.8
5	11650.00	52.4 PK	74.0	-21.6	2.02 H	54	41.1	11.3
6	11650.00	40.6 AV	54.0	-13.4	2.02 H	54	29.3	11.3
7	#17475.00	50.5 PK	68.2	-17.7	1.86 H	41	32.9	17.6

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



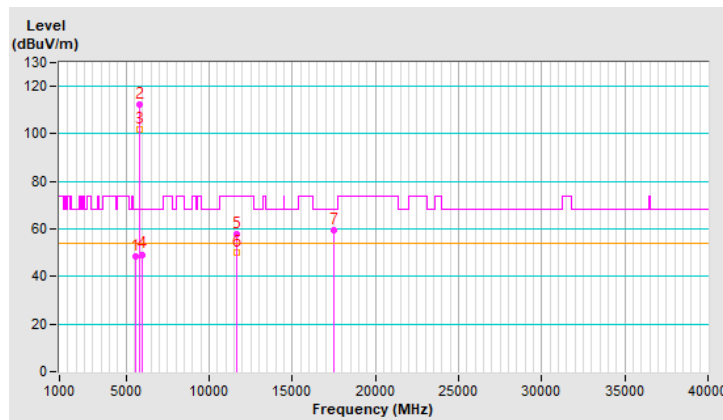


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5560.75	48.2 PK	68.2	-20.0	1.68 V	63	47.4	0.8
2	*5825.00	112.1 PK			1.68 V	63	110.7	1.4
3	*5825.00	102.0 AV			1.68 V	63	100.6	1.4
4	#5962.92	49.3 PK	68.2	-18.9	1.68 V	63	47.6	1.7
5	11650.00	58.0 PK	74.0	-16.0	1.85 V	132	46.7	11.3
6	11650.00	50.2 AV	54.0	-3.8	1.85 V	132	38.9	11.3
7	#17475.00	59.6 PK	68.2	-8.6	2.41 V	161	42.0	17.6

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

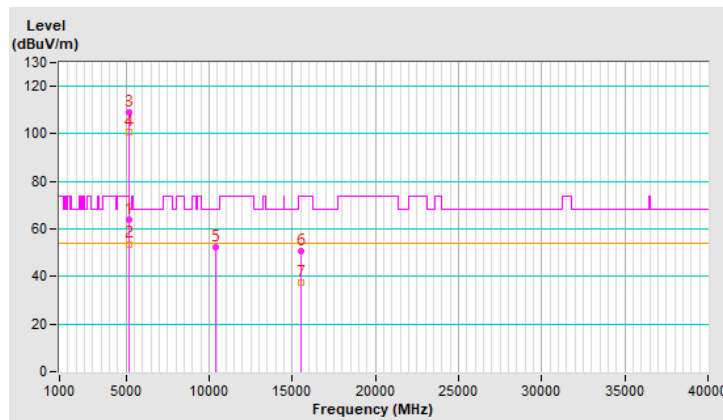


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 36 : 5180 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	63.7 PK	74.0	-10.3	2.66 H	192	62.7	1.0
2	5150.00	53.7 AV	54.0	-0.3	2.66 H	192	52.7	1.0
3	*5180.00	109.3 PK			2.66 H	192	108.6	0.7
4	*5180.00	101.0 AV			2.66 H	192	100.3	0.7
5	#10360.00	52.2 PK	68.2	-16.0	2.12 H	69	41.7	10.5
6	15540.00	50.5 PK	74.0	-23.5	1.91 H	35	39.0	11.5
7	15540.00	37.5 AV	54.0	-16.5	1.91 H	35	26.0	11.5

**Remarks:**

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

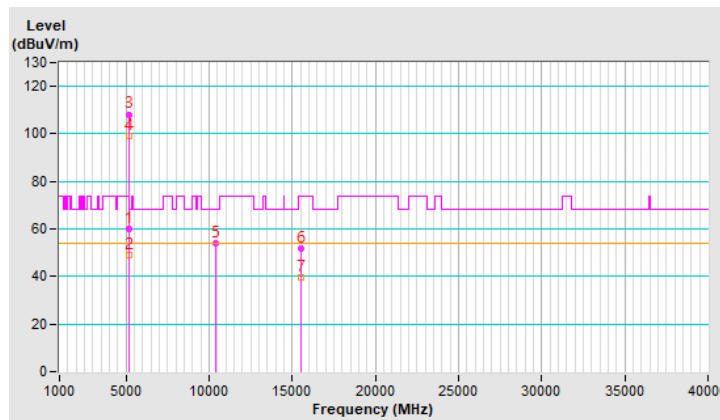


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 36 : 5180 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.9 PK	74.0	-14.1	1.99 V	63	58.9	1.0
2	5150.00	49.1 AV	54.0	-4.9	1.99 V	63	48.1	1.0
3	*5180.00	108.2 PK			1.99 V	63	107.5	0.7
4	*5180.00	99.3 AV			1.99 V	63	98.6	0.7
5	#10360.00	54.2 PK	68.2	-14.0	1.34 V	96	43.7	10.5
6	15540.00	51.6 PK	74.0	-22.4	1.91 V	39	40.1	11.5
7	15540.00	39.4 AV	54.0	-14.6	1.91 V	39	27.9	11.5

**Remarks:**

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

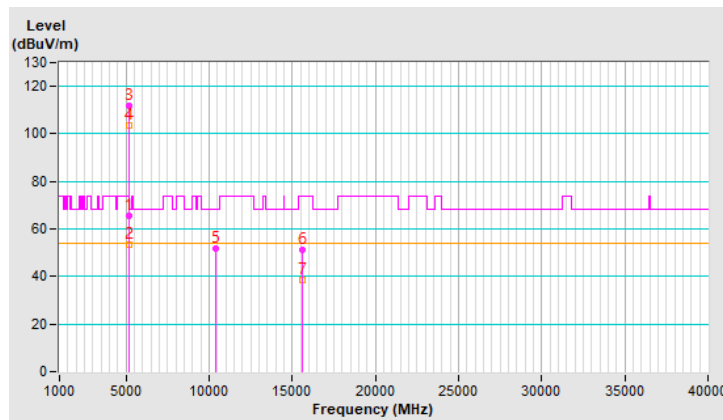


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.6 PK	74.0	-8.4	1.79 H	221	64.6	1.0
2	5150.00	53.6 AV	54.0	-0.4	1.79 H	221	52.6	1.0
3	*5200.00	112.0 PK			1.79 H	221	111.4	0.6
4	*5200.00	103.3 AV			1.79 H	221	102.7	0.6
5	#10400.00	51.8 PK	68.2	-16.4	2.09 H	46	41.1	10.7
6	15600.00	51.3 PK	74.0	-22.7	1.92 H	36	39.6	11.7
7	15600.00	38.3 AV	54.0	-15.7	1.92 H	36	26.6	11.7

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

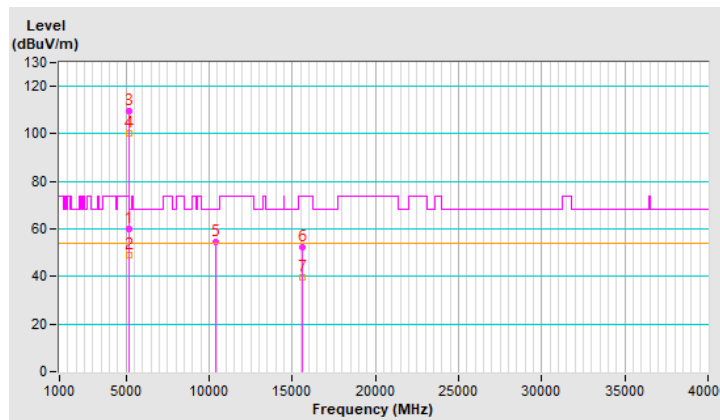


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	60.0 PK	74.0	-14.0	1.19 V	157	59.0	1.0
2	5150.00	49.2 AV	54.0	-4.8	1.19 V	157	48.2	1.0
3	*5200.00	109.7 PK			1.19 V	157	109.1	0.6
4	*5200.00	100.2 AV			1.19 V	157	99.6	0.6
5	#10400.00	54.7 PK	68.2	-13.5	1.31 V	87	44.0	10.7
6	15600.00	52.1 PK	74.0	-21.9	1.84 V	34	40.4	11.7
7	15600.00	39.8 AV	54.0	-14.2	1.84 V	34	28.1	11.7

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

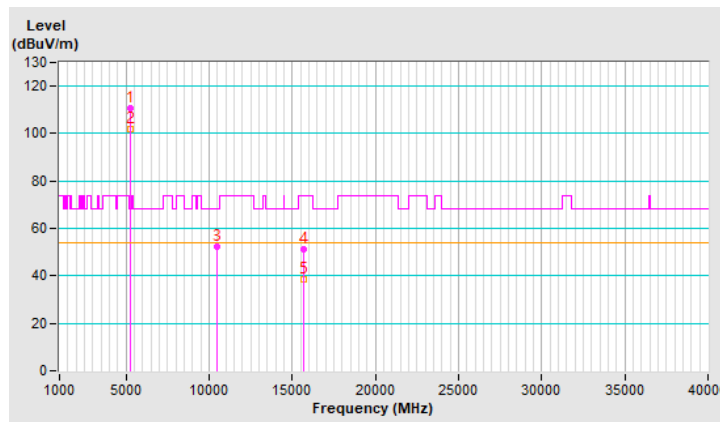


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	110.9 PK			1.92 H	230	110.5	0.4
2	*5240.00	102.1 AV			1.92 H	230	101.7	0.4
3	#10480.00	52.1 PK	68.2	-16.1	2.08 H	47	41.6	10.5
4	15720.00	51.0 PK	74.0	-23.0	1.91 H	24	39.5	11.5
5	15720.00	38.4 AV	54.0	-15.6	1.91 H	24	26.9	11.5

**Remarks:**

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

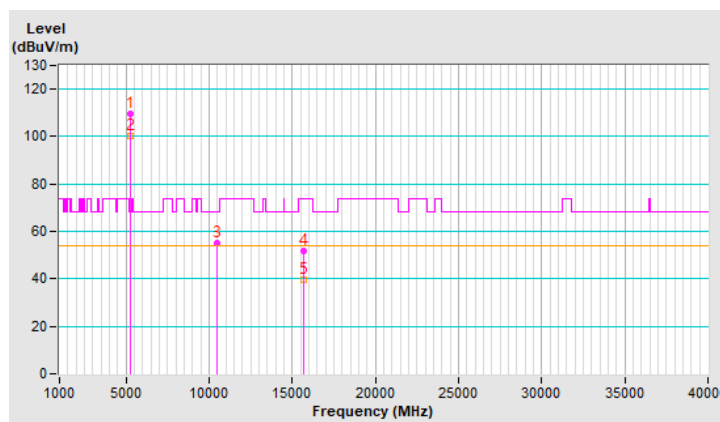


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.4 PK			1.19 V	163	109.0	0.4
2	*5240.00	100.4 AV			1.19 V	163	100.0	0.4
3	#10480.00	55.1 PK	68.2	-13.1	1.43 V	110	44.6	10.5
4	15720.00	51.8 PK	74.0	-22.2	1.92 V	50	40.3	11.5
5	15720.00	39.7 AV	54.0	-14.3	1.92 V	50	28.2	11.5

**Remarks:**

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

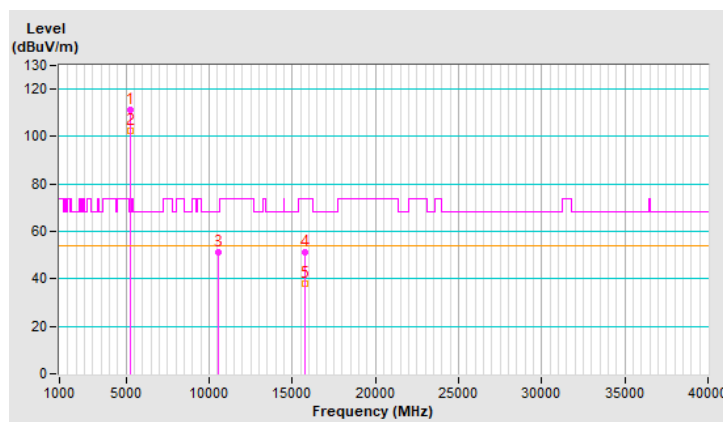


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	*5260.00	111.2 PK			1.84 H	213	110.9	0.3
2	*5260.00	102.6 AV			1.84 H	213	102.3	0.3
3	#10520.00	51.3 PK	68.2	-16.9	2.15 H	48	40.9	10.4
4	15780.00	51.1 PK	74.0	-22.9	1.86 H	31	39.7	11.4
5	15780.00	38.0 AV	54.0	-16.0	1.86 H	31	26.6	11.4

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



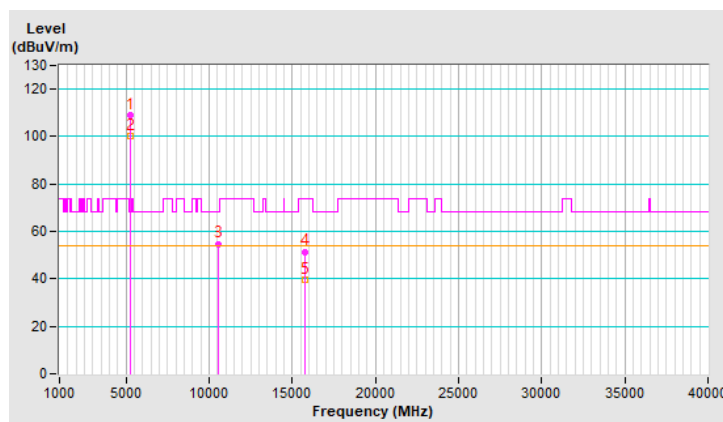


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	*5260.00	109.3 PK			1.26 V	148	109.0	0.3
2	*5260.00	100.2 AV			1.26 V	148	99.9	0.3
3	#10520.00	54.8 PK	68.2	-13.4	1.38 V	106	44.4	10.4
4	15780.00	51.5 PK	74.0	-22.5	1.93 V	50	40.1	11.4
5	15780.00	39.6 AV	54.0	-14.4	1.93 V	50	28.2	11.4

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

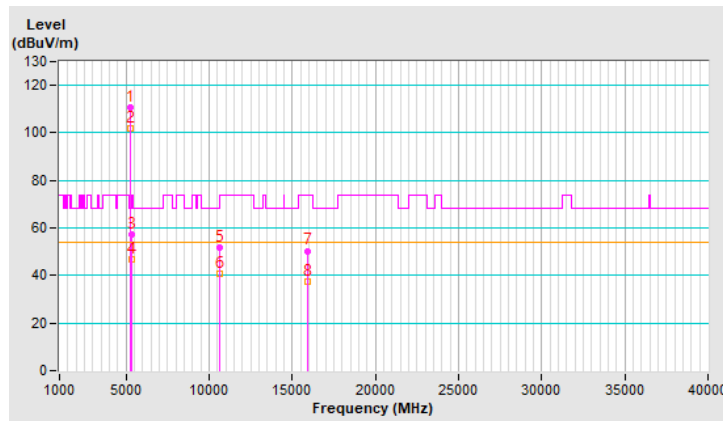


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	110.7 PK			1.90 H	213	110.4	0.3
2	*5300.00	102.0 AV			1.90 H	213	101.7	0.3
3	5350.00	57.2 PK	74.0	-16.8	1.90 H	213	56.6	0.6
4	5350.00	46.8 AV	54.0	-7.2	1.90 H	213	46.2	0.6
5	10600.00	52.0 PK	74.0	-22.0	2.10 H	73	42.1	9.9
6	10600.00	40.5 AV	54.0	-13.5	2.10 H	73	30.6	9.9
7	15900.00	50.4 PK	74.0	-23.6	1.85 H	29	38.8	11.6
8	15900.00	37.4 AV	54.0	-16.6	1.85 H	29	25.8	11.6

**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.

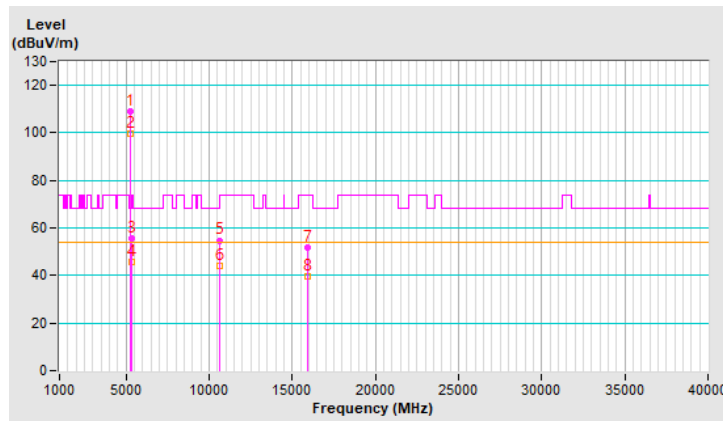


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	109.3 PK			1.20 V	136	109.0	0.3
2	*5300.00	99.9 AV			1.20 V	136	99.6	0.3
3	5350.00	55.7 PK	74.0	-18.3	1.20 V	136	55.1	0.6
4	5350.00	45.5 AV	54.0	-8.5	1.20 V	136	44.9	0.6
5	10600.00	54.8 PK	74.0	-19.2	1.41 V	90	44.9	9.9
6	10600.00	44.1 AV	54.0	-9.9	1.41 V	90	34.2	9.9
7	15900.00	51.9 PK	74.0	-22.1	1.86 V	38	40.3	11.6
8	15900.00	39.6 AV	54.0	-14.4	1.86 V	38	28.0	11.6

**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.

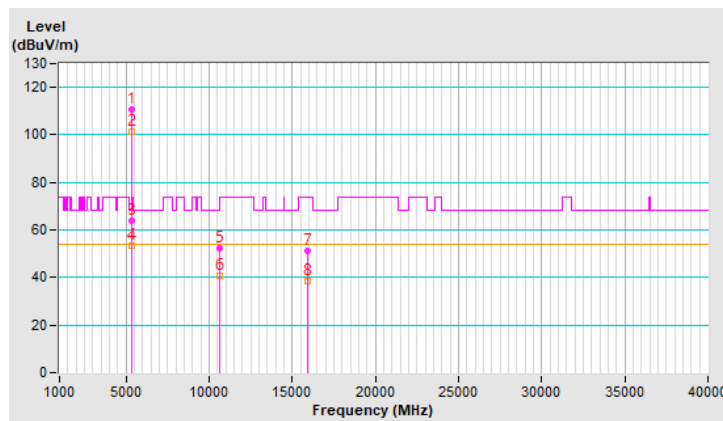


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	110.5 PK			1.64 H	223	110.1	0.4
2	*5320.00	101.2 AV			1.64 H	223	100.8	0.4
3	5350.00	63.9 PK	74.0	-10.1	1.64 H	223	63.3	0.6
4	5350.00	53.5 AV	54.0	-0.5	1.64 H	223	52.9	0.6
5	10640.00	52.5 PK	74.0	-21.5	2.14 H	71	42.4	10.1
6	10640.00	40.8 AV	54.0	-13.2	2.14 H	71	30.7	10.1
7	15960.00	51.1 PK	74.0	-22.9	1.96 H	38	39.3	11.8
8	15960.00	38.3 AV	54.0	-15.7	1.96 H	38	26.5	11.8

**Remarks:**

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

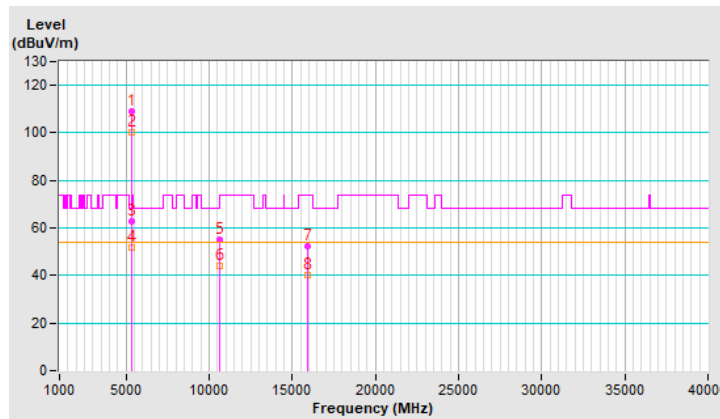


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	109.3 PK			2.02 V	87	108.9	0.4
2	*5320.00	100.0 AV			2.02 V	87	99.6	0.4
3	5350.00	62.9 PK	74.0	-11.1	2.02 V	87	62.3	0.6
4	5350.00	51.7 AV	54.0	-2.3	2.02 V	87	51.1	0.6
5	10640.00	54.9 PK	74.0	-19.1	1.36 V	108	44.8	10.1
6	10640.00	44.1 AV	54.0	-9.9	1.36 V	108	34.0	10.1
7	15960.00	52.4 PK	74.0	-21.6	1.86 V	32	40.6	11.8
8	15960.00	40.0 AV	54.0	-14.0	1.86 V	32	28.2	11.8

**Remarks:**

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

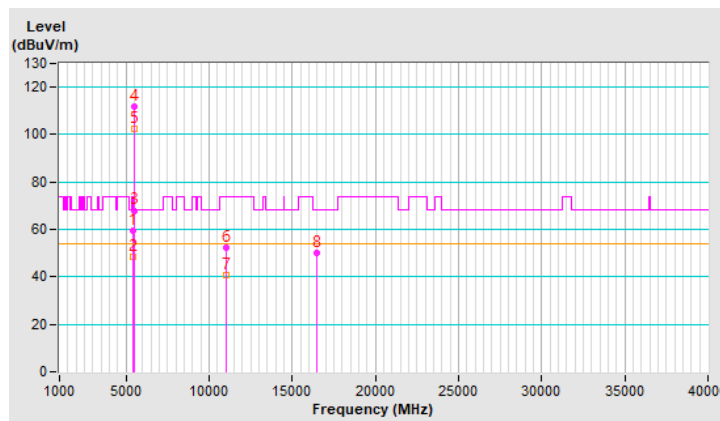


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.5 PK	74.0	-14.5	1.68 H	217	58.7	0.8
2	5460.00	48.3 AV	54.0	-5.7	1.68 H	217	47.5	0.8
3	#5470.00	68.0 PK	68.2	-0.2	1.68 H	217	67.2	0.8
4	*5500.00	111.9 PK			1.68 H	217	111.1	0.8
5	*5500.00	102.5 AV			1.68 H	217	101.7	0.8
6	11000.00	52.2 PK	74.0	-21.8	2.08 H	53	41.1	11.1
7	11000.00	40.5 AV	54.0	-13.5	2.08 H	53	29.4	11.1
8	#16500.00	50.3 PK	68.2	-17.9	1.93 H	30	36.5	13.8

**Remarks:**

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

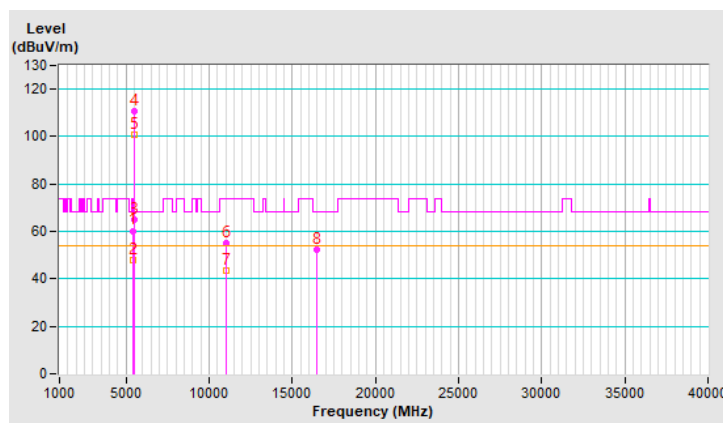


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.3 PK	74.0	-13.7	1.95 V	81	59.5	0.8
2	5460.00	47.8 AV	54.0	-6.2	1.95 V	81	47.0	0.8
3	#5470.00	65.2 PK	68.2	-3.0	1.95 V	81	64.4	0.8
4	*5500.00	110.5 PK			1.95 V	81	109.7	0.8
5	*5500.00	100.9 AV			1.95 V	81	100.1	0.8
6	11000.00	54.9 PK	74.0	-19.1	1.32 V	104	43.8	11.1
7	11000.00	43.7 AV	54.0	-10.3	1.32 V	104	32.6	11.1
8	#16500.00	52.3 PK	68.2	-15.9	1.92 V	59	38.5	13.8

**Remarks:**

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

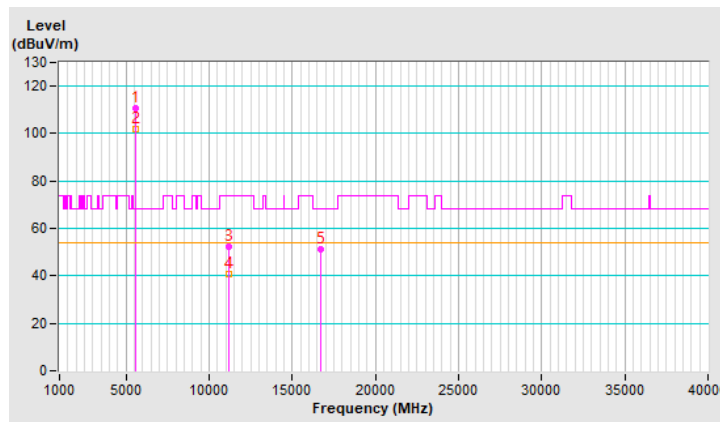


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.7 PK			1.67 H	202	109.9	0.8
2	*5580.00	101.9 AV			1.67 H	202	101.1	0.8
3	11160.00	52.3 PK	74.0	-21.7	2.06 H	55	41.4	10.9
4	11160.00	40.6 AV	54.0	-13.4	2.06 H	55	29.7	10.9
5	#16740.00	51.2 PK	68.2	-17.0	1.87 H	24	36.1	15.1

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



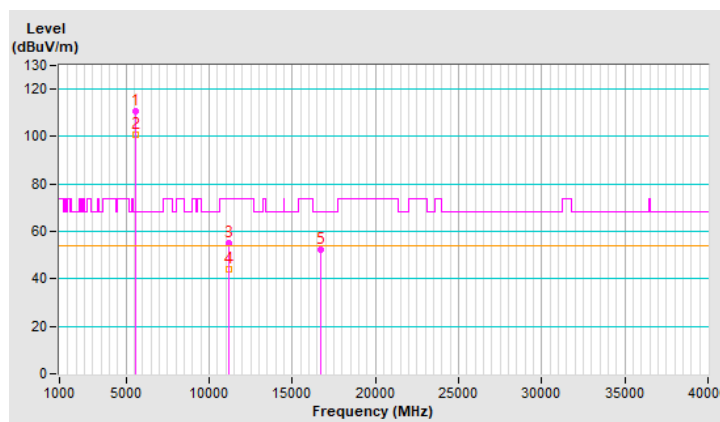


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.7 PK			1.92 V	73	109.9	0.8
2	*5580.00	100.9 AV			1.92 V	73	100.1	0.8
3	11160.00	55.2 PK	74.0	-18.8	1.43 V	103	44.3	10.9
4	11160.00	44.1 AV	54.0	-9.9	1.43 V	103	33.2	10.9
5	#16740.00	52.2 PK	68.2	-16.0	1.85 V	51	37.1	15.1

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

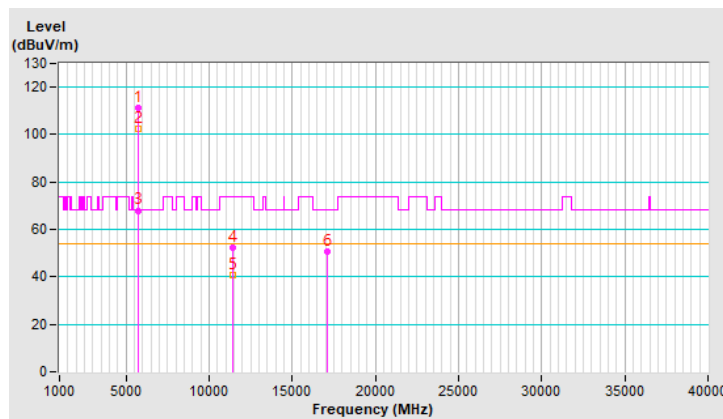


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	111.2 PK			1.68 H	211	110.0	1.2
2	*5700.00	102.4 AV			1.68 H	211	101.2	1.2
3	#5725.00	68.0 PK	68.2	-0.2	1.68 H	211	66.7	1.3
4	11400.00	52.4 PK	74.0	-21.6	2.12 H	45	40.7	11.7
5	11400.00	40.7 AV	54.0	-13.3	2.12 H	45	29.0	11.7
6	#17100.00	50.8 PK	68.2	-17.4	1.95 H	33	34.5	16.3

**Remarks:**

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

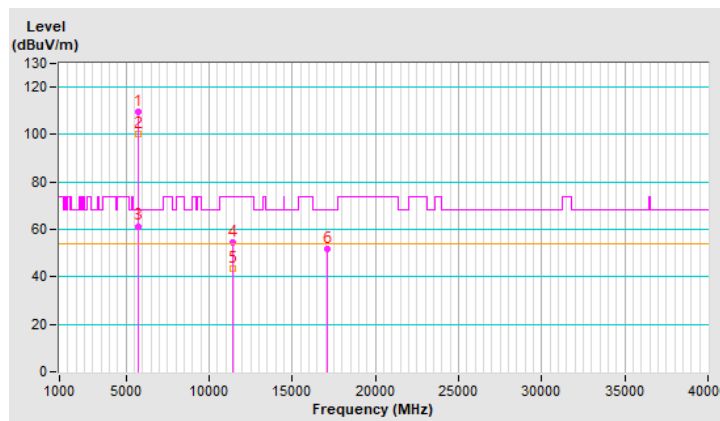


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	109.7 PK			1.90 V	78	108.5	1.2
2	*5700.00	100.4 AV			1.90 V	78	99.2	1.2
3	#5725.00	61.4 PK	68.2	-6.8	1.90 V	78	60.1	1.3
4	11400.00	54.4 PK	74.0	-19.6	1.37 V	98	42.7	11.7
5	11400.00	43.6 AV	54.0	-10.4	1.37 V	98	31.9	11.7
6	#17100.00	51.6 PK	68.2	-16.6	1.86 V	36	35.3	16.3

**Remarks:**

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

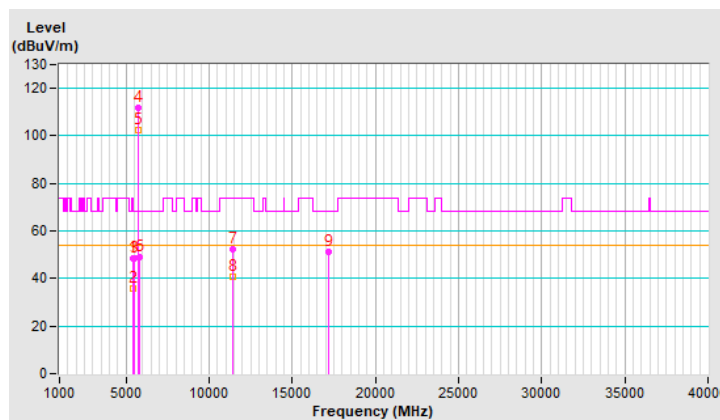


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	48.3 PK	74.0	-25.7	1.64 H	217	47.5	0.8
2	5460.00	35.9 AV	54.0	-18.1	1.64 H	217	35.1	0.8
3	#5470.00	48.7 PK	68.2	-19.5	1.64 H	217	47.9	0.8
4	*5720.00	111.6 PK			1.64 H	217	110.3	1.3
5	*5720.00	102.5 AV			1.64 H	217	101.2	1.3
6	#5850.00	48.8 PK	68.2	-19.4	1.64 H	217	47.5	1.3
7	11440.00	52.4 PK	74.0	-21.6	2.10 H	74	40.7	11.7
8	11440.00	40.5 AV	54.0	-13.5	2.10 H	74	28.8	11.7
9	#17160.00	51.1 PK	68.2	-17.1	1.93 H	20	35.0	16.1

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

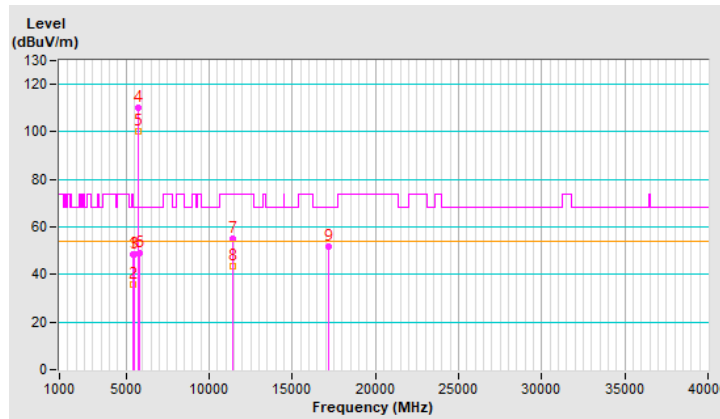


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	48.4 PK	74.0	-25.6	1.99 V	69	47.6	0.8
2	5460.00	36.0 AV	54.0	-18.0	1.99 V	69	35.2	0.8
3	#5470.00	48.6 PK	68.2	-19.6	1.99 V	69	47.8	0.8
4	*5720.00	109.9 PK			1.99 V	69	108.6	1.3
5	*5720.00	100.4 AV			1.99 V	69	99.1	1.3
6	#5850.00	49.0 PK	68.2	-19.2	1.99 V	69	47.7	1.3
7	11440.00	54.9 PK	74.0	-19.1	1.33 V	105	43.2	11.7
8	11440.00	43.7 AV	54.0	-10.3	1.33 V	105	32.0	11.7
9	#17160.00	52.0 PK	68.2	-16.2	1.86 V	47	35.9	16.1

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

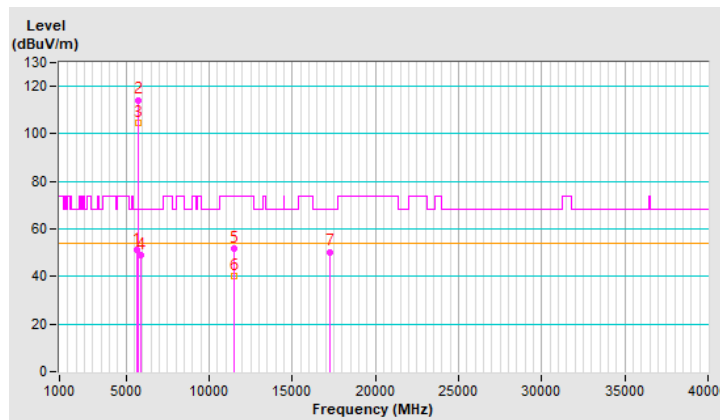


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5645.44	51.3 PK	68.2	-16.9	1.70 H	213	50.3	1.0
2	*5745.00	114.3 PK			1.70 H	213	112.9	1.4
3	*5745.00	104.8 AV			1.70 H	213	103.4	1.4
4	#5931.03	49.2 PK	68.2	-19.0	1.70 H	213	47.7	1.5
5	11490.00	51.8 PK	74.0	-22.2	2.05 H	69	40.1	11.7
6	11490.00	40.0 AV	54.0	-14.0	2.05 H	69	28.3	11.7
7	#17235.00	50.4 PK	68.2	-17.8	1.96 H	35	34.5	15.9

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

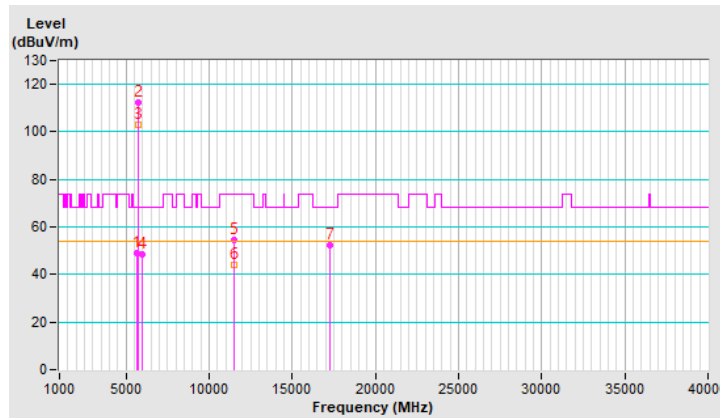


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.96	48.9 PK	68.2	-19.3	1.66 V	63	47.9	1.0
2	*5745.00	112.4 PK			1.66 V	63	111.0	1.4
3	*5745.00	102.8 AV			1.66 V	63	101.4	1.4
4	#6000.42	48.5 PK	68.2	-19.7	1.66 V	63	46.7	1.8
5	11490.00	54.6 PK	74.0	-19.4	1.34 V	92	42.9	11.7
6	11490.00	43.8 AV	54.0	-10.2	1.34 V	92	32.1	11.7
7	#17235.00	52.3 PK	68.2	-15.9	1.91 V	32	36.4	15.9

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

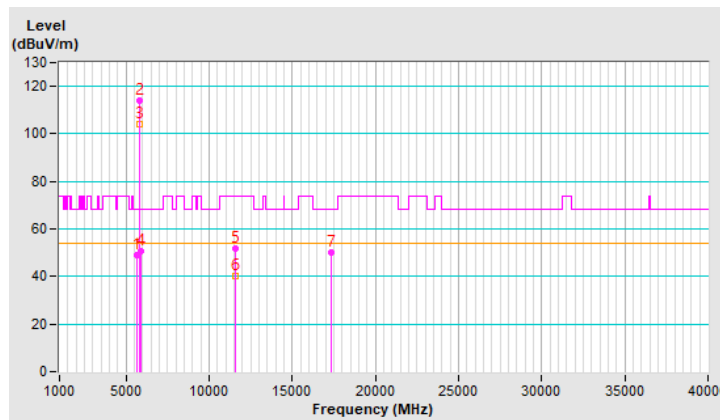


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5627.09	49.0 PK	68.2	-19.2	1.69 H	212	48.0	1.0
2	*5785.00	113.9 PK			1.69 H	212	112.5	1.4
3	*5785.00	104.3 AV			1.69 H	212	102.9	1.4
4	#5927.98	50.8 PK	68.2	-17.4	1.69 H	212	49.3	1.5
5	11570.00	51.6 PK	74.0	-22.4	2.06 H	45	40.2	11.4
6	11570.00	40.0 AV	54.0	-14.0	2.06 H	45	28.6	11.4
7	#17355.00	50.2 PK	68.2	-18.0	1.90 H	9	33.7	16.5

**Remarks:**

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



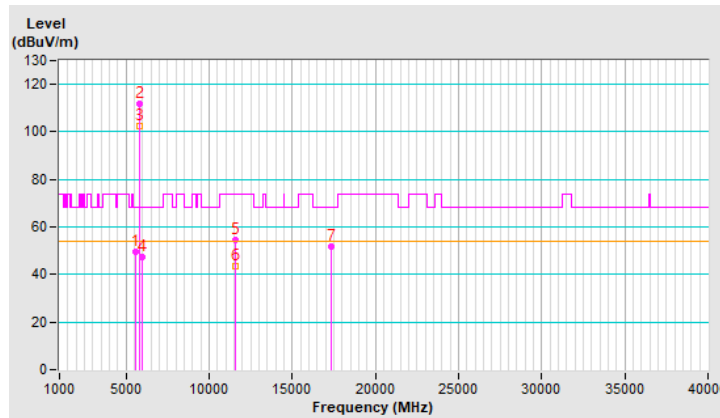


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5601.47	49.4 PK	68.2	-18.8	1.72 V	65	48.4	1.0
2	*5785.00	111.9 PK			1.72 V	65	110.5	1.4
3	*5785.00	102.3 AV			1.72 V	65	100.9	1.4
4	#6003.52	47.2 PK	68.2	-21.0	1.72 V	65	45.4	1.8
5	11570.00	54.5 PK	74.0	-19.5	1.41 V	100	43.1	11.4
6	11570.00	43.6 AV	54.0	-10.4	1.41 V	100	32.2	11.4
7	#17355.00	51.9 PK	68.2	-16.3	1.84 V	60	35.4	16.5

**Remarks:**

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

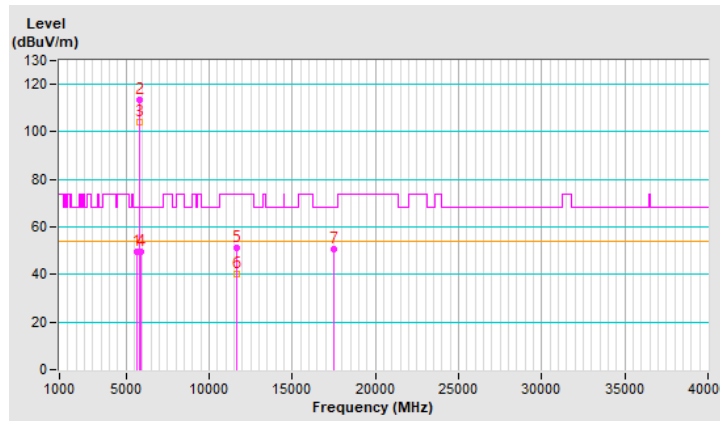


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5648.69	49.8 PK	68.2	-18.4	1.68 H	214	48.8	1.0
2	*5825.00	113.7 PK			1.68 H	214	112.3	1.4
3	*5825.00	104.2 AV			1.68 H	214	102.8	1.4
4	#5926.41	49.7 PK	68.2	-18.5	1.68 H	214	48.2	1.5
5	11650.00	51.4 PK	74.0	-22.6	2.10 H	52	40.1	11.3
6	11650.00	40.1 AV	54.0	-13.9	2.10 H	52	28.8	11.3
7	#17475.00	50.8 PK	68.2	-17.4	1.96 H	32	33.2	17.6

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

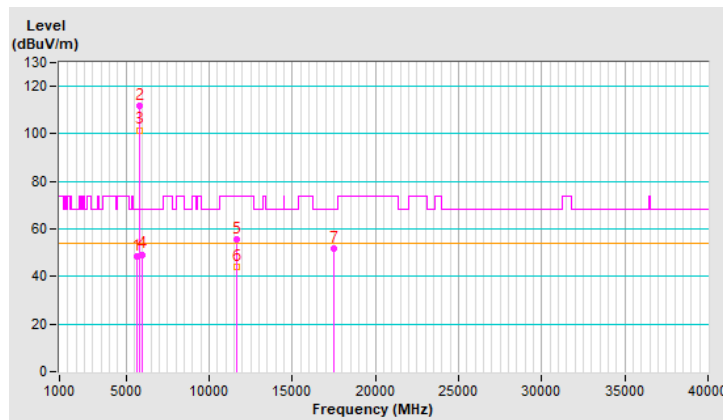


<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5641.35	48.7 PK	68.2	-19.5	1.67 V	65	47.7	1.0
2	*5825.00	111.6 PK			1.67 V	65	110.2	1.4
3	*5825.00	101.6 AV			1.67 V	65	100.2	1.4
4	#6000.05	49.3 PK	68.2	-18.9	1.67 V	65	47.5	1.8
5	11650.00	55.4 PK	74.0	-18.6	1.39 V	88	44.1	11.3
6	11650.00	44.3 AV	54.0	-9.7	1.39 V	88	33.0	11.3
7	#17475.00	51.9 PK	68.2	-16.3	1.86 V	47	34.3	17.6

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

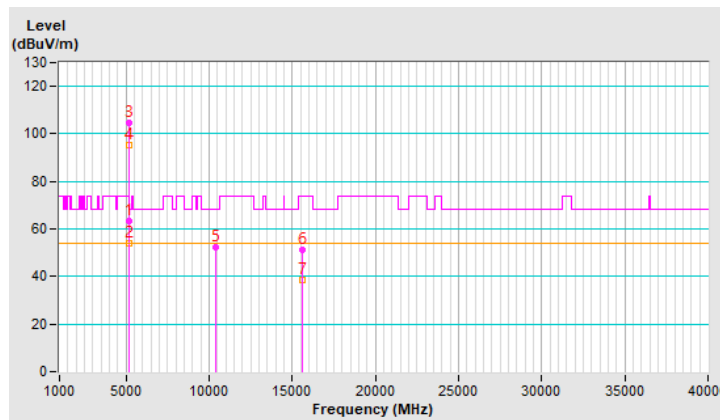


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 38 : 5190 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	63.4 PK	74.0	-10.6	1.22 H	192	62.4	1.0
2	5150.00	53.8 AV	54.0	-0.2	1.22 H	192	52.8	1.0
3	*5190.00	104.5 PK			1.22 H	192	103.9	0.6
4	*5190.00	95.1 AV			1.22 H	192	94.5	0.6
5	#10380.00	52.1 PK	68.2	-16.1	2.16 H	65	41.5	10.6
6	15570.00	51.2 PK	74.0	-22.8	1.85 H	11	39.6	11.6
7	15570.00	38.4 AV	54.0	-15.6	1.85 H	11	26.8	11.6

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

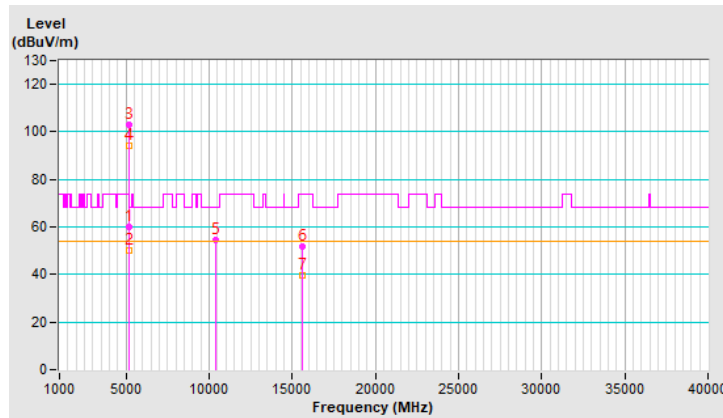


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 38 : 5190 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.8 PK	74.0	-14.2	2.14 V	81	58.8	1.0
2	5150.00	50.3 AV	54.0	-3.7	2.14 V	81	49.3	1.0
3	*5190.00	103.1 PK			2.14 V	81	102.5	0.6
4	*5190.00	94.0 AV			2.14 V	81	93.4	0.6
5	#10380.00	54.7 PK	68.2	-13.5	1.41 V	96	44.1	10.6
6	15570.00	51.9 PK	74.0	-22.1	1.82 V	63	40.3	11.6
7	15570.00	39.6 AV	54.0	-14.4	1.82 V	63	28.0	11.6

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

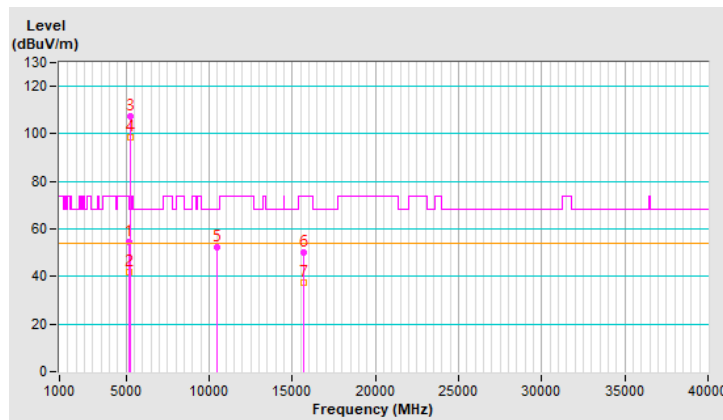


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 46 : 5230 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	54.6 PK	74.0	-19.4	1.24 H	192	53.6	1.0
2	5150.00	41.6 AV	54.0	-12.4	1.24 H	192	40.6	1.0
3	*5230.00	107.3 PK			1.24 H	192	106.9	0.4
4	*5230.00	98.4 AV			1.24 H	192	98.0	0.4
5	#10460.00	52.1 PK	68.2	-16.1	2.10 H	65	41.5	10.6
6	15690.00	50.2 PK	74.0	-23.8	1.87 H	15	38.6	11.6
7	15690.00	37.5 AV	54.0	-16.5	1.87 H	15	25.9	11.6

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

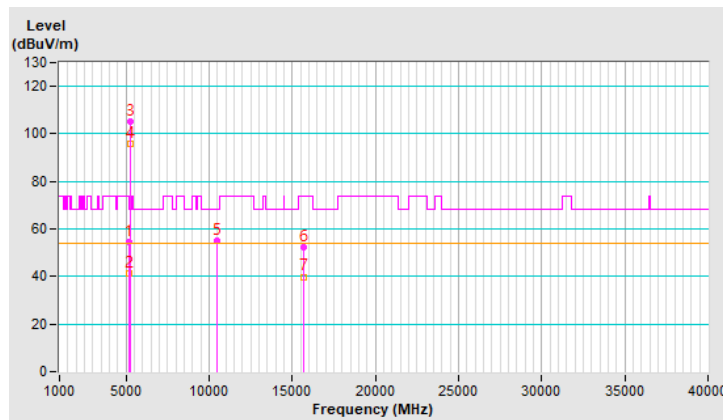


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 46 : 5230 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	54.3 PK	74.0	-19.7	2.18 V	95	53.3	1.0
2	5150.00	41.4 AV	54.0	-12.6	2.18 V	95	40.4	1.0
3	*5230.00	105.0 PK			2.18 V	95	104.6	0.4
4	*5230.00	95.6 AV			2.18 V	95	95.2	0.4
5	#10460.00	55.3 PK	68.2	-12.9	1.34 V	96	44.7	10.6
6	15690.00	52.1 PK	74.0	-21.9	1.84 V	42	40.5	11.6
7	15690.00	39.9 AV	54.0	-14.1	1.84 V	42	28.3	11.6

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

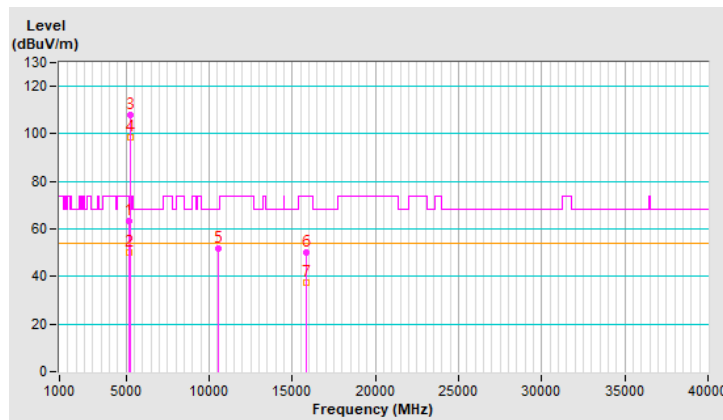


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 54 : 5270 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	63.4 PK	74.0	-10.6	1.32 H	194	62.4	1.0
2	5150.00	50.1 AV	54.0	-3.9	1.32 H	194	49.1	1.0
3	*5270.00	107.7 PK			1.32 H	194	107.4	0.3
4	*5270.00	98.5 AV			1.32 H	194	98.2	0.3
5	#10540.00	52.0 PK	68.2	-16.2	2.12 H	77	41.7	10.3
6	15810.00	50.2 PK	74.0	-23.8	1.86 H	25	38.9	11.3
7	15810.00	37.6 AV	54.0	-16.4	1.86 H	25	26.3	11.3

**Remarks:**

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



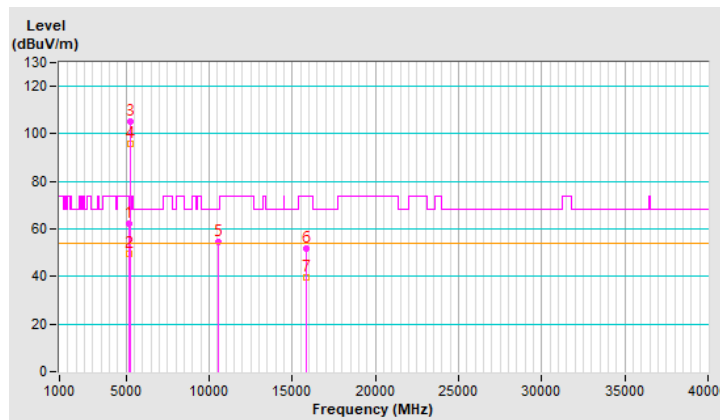


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 54 : 5270 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	62.1 PK	74.0	-11.9	2.19 V	74	61.1	1.0
2	5150.00	49.4 AV	54.0	-4.6	2.19 V	74	48.4	1.0
3	*5270.00	105.4 PK			2.19 V	74	105.1	0.3
4	*5270.00	95.7 AV			2.19 V	74	95.4	0.3
5	#10540.00	54.6 PK	68.2	-13.6	1.34 V	84	44.3	10.3
6	15810.00	52.0 PK	74.0	-22.0	1.92 V	53	40.7	11.3
7	15810.00	39.6 AV	54.0	-14.4	1.92 V	53	28.3	11.3

**Remarks:**

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

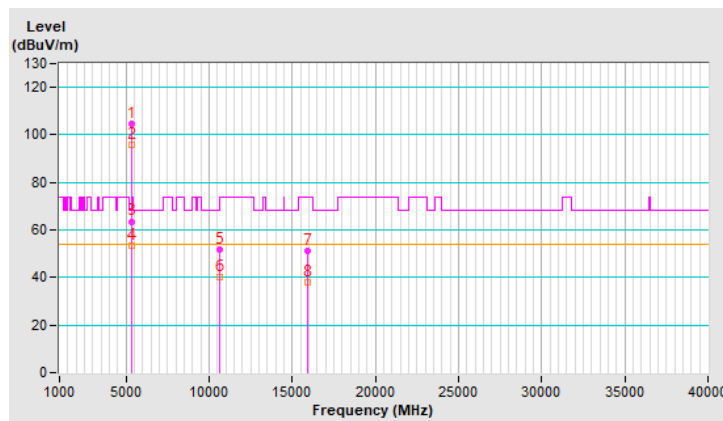


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 62 : 5310 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	104.8 PK			1.42 H	192	104.4	0.4
2	*5310.00	95.8 AV			1.42 H	192	95.4	0.4
3	5350.00	63.6 PK	74.0	-10.4	1.42 H	192	63.0	0.6
4	5350.00	53.6 AV	54.0	-0.4	1.42 H	192	53.0	0.6
5	10620.00	51.8 PK	74.0	-22.2	2.08 H	47	41.8	10.0
6	10620.00	40.3 AV	54.0	-13.7	2.08 H	47	30.3	10.0
7	15930.00	51.0 PK	74.0	-23.0	1.88 H	20	39.3	11.7
8	15930.00	38.2 AV	54.0	-15.8	1.88 H	20	26.5	11.7

**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.

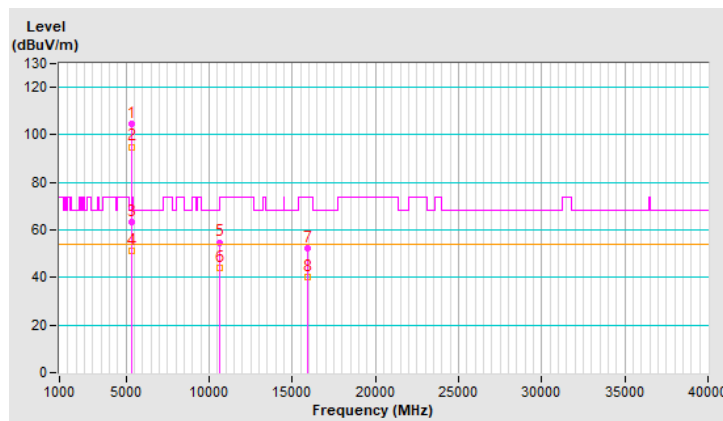


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 62 : 5310 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	104.4 PK			2.07 V	80	104.0	0.4
2	*5310.00	95.0 AV			2.07 V	80	94.6	0.4
3	5350.00	63.1 PK	74.0	-10.9	2.07 V	80	62.5	0.6
4	5350.00	51.4 AV	54.0	-2.6	2.07 V	80	50.8	0.6
5	10620.00	54.8 PK	74.0	-19.2	1.40 V	98	44.8	10.0
6	10620.00	44.2 AV	54.0	-9.8	1.40 V	98	34.2	10.0
7	15930.00	52.5 PK	74.0	-21.5	1.86 V	50	40.8	11.7
8	15930.00	40.3 AV	54.0	-13.7	1.86 V	50	28.6	11.7

**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.

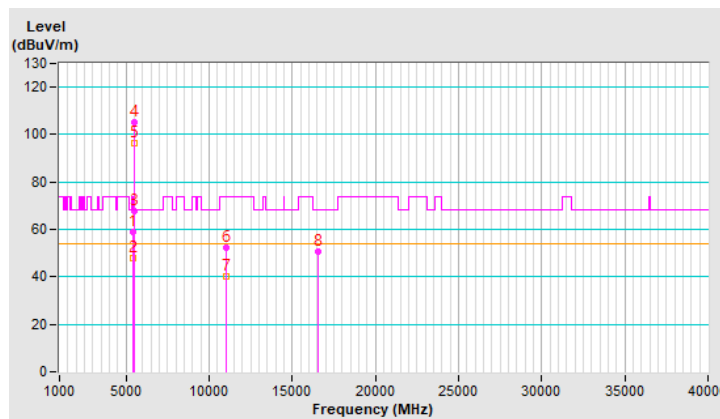


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 102 : 5510 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.1 PK	74.0	-14.9	2.82 H	189	58.3	0.8
2	5460.00	48.1 AV	54.0	-5.9	2.82 H	189	47.3	0.8
3	#5470.00	67.8 PK	68.2	-0.4	2.82 H	189	67.0	0.8
4	*5510.00	105.2 PK			2.82 H	189	104.4	0.8
5	*5510.00	96.2 AV			2.82 H	189	95.4	0.8
6	11020.00	52.1 PK	74.0	-21.9	2.11 H	46	41.0	11.1
7	11020.00	40.2 AV	54.0	-13.8	2.11 H	46	29.1	11.1
8	#16530.00	50.5 PK	68.2	-17.7	1.88 H	20	36.6	13.9

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

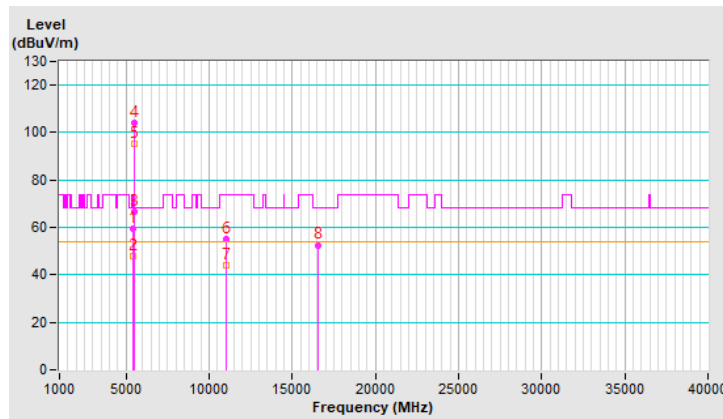


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 102 : 5510 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	59.4 PK	74.0	-14.6	2.05 V	81	58.6	0.8
2	5460.00	47.9 AV	54.0	-6.1	2.05 V	81	47.1	0.8
3	#5470.00	66.6 PK	68.2	-1.6	2.05 V	81	65.8	0.8
4	*5510.00	104.2 PK			2.05 V	81	103.4	0.8
5	*5510.00	95.3 AV			2.05 V	81	94.5	0.8
6	11020.00	55.0 PK	74.0	-19.0	1.34 V	105	43.9	11.1
7	11020.00	44.1 AV	54.0	-9.9	1.34 V	105	33.0	11.1
8	#16530.00	52.6 PK	68.2	-15.6	1.84 V	35	38.7	13.9

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

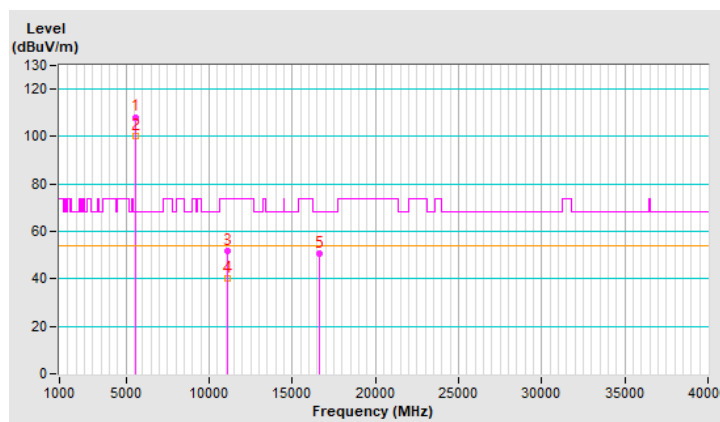


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 110 : 5550 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	108.2 PK			1.12 H	191	107.4	0.8
2	*5550.00	100.0 AV			1.12 H	191	99.2	0.8
3	11100.00	51.8 PK	74.0	-22.2	2.09 H	52	41.0	10.8
4	11100.00	40.4 AV	54.0	-13.6	2.09 H	52	29.6	10.8
5	#16650.00	50.7 PK	68.2	-17.5	1.91 H	32	36.0	14.7

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

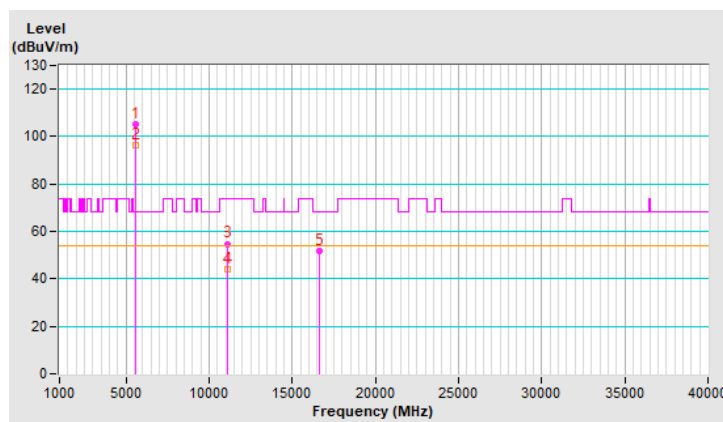


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 110 : 5550 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	105.1 PK			2.16 V	94	104.3	0.8
2	*5550.00	96.2 AV			2.16 V	94	95.4	0.8
3	11100.00	54.8 PK	74.0	-19.2	1.33 V	89	44.0	10.8
4	11100.00	44.0 AV	54.0	-10.0	1.33 V	89	33.2	10.8
5	#16650.00	51.9 PK	68.2	-16.3	1.93 V	49	37.2	14.7

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

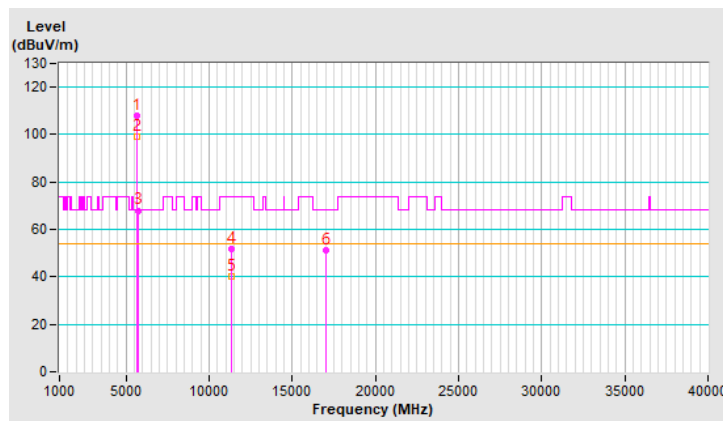


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 134 : 5670 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	107.8 PK			1.17 H	193	106.8	1.0
2	*5670.00	99.3 AV			1.17 H	193	98.3	1.0
3	#5725.00	68.0 PK	68.2	-0.2	1.17 H	193	66.7	1.3
4	11340.00	51.9 PK	74.0	-22.1	2.09 H	69	40.3	11.6
5	11340.00	40.4 AV	54.0	-13.6	2.09 H	69	28.8	11.6
6	#17010.00	51.0 PK	68.2	-17.2	1.89 H	9	35.1	15.9

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



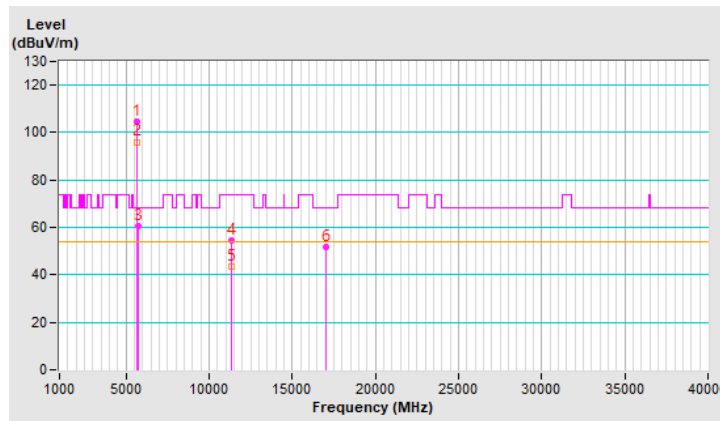


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 134 : 5670 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	104.8 PK			2.10 V	86	103.8	1.0
2	*5670.00	96.1 AV			2.10 V	86	95.1	1.0
3	#5725.00	60.7 PK	68.2	-7.5	2.10 V	86	59.4	1.3
4	11340.00	54.3 PK	74.0	-19.7	1.42 V	89	42.7	11.6
5	11340.00	43.5 AV	54.0	-10.5	1.42 V	89	31.9	11.6
6	#17010.00	51.8 PK	68.2	-16.4	1.87 V	49	35.9	15.9

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

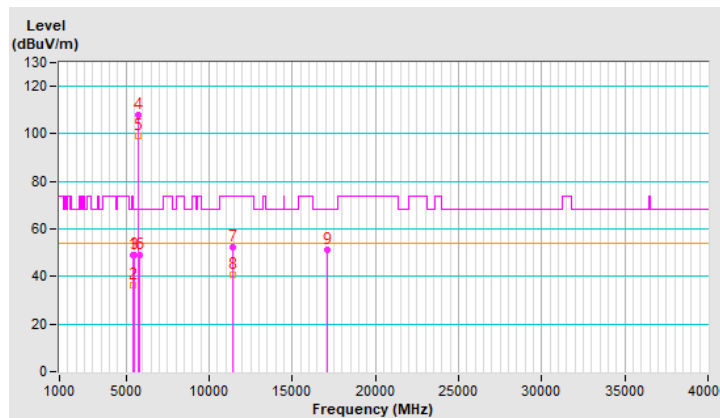


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 142 : 5710 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	49.0 PK	74.0	-25.0	1.22 H	199	48.2	0.8
2	5460.00	36.3 AV	54.0	-17.7	1.22 H	199	35.5	0.8
3	#5470.00	49.2 PK	68.2	-19.0	1.22 H	199	48.4	0.8
4	*5710.00	107.7 PK			1.22 H	199	106.5	1.2
5	*5710.00	99.2 AV			1.22 H	199	98.0	1.2
6	#5850.00	49.2 PK	68.2	-19.0	1.22 H	199	47.9	1.3
7	11420.00	52.2 PK	74.0	-21.8	2.12 H	70	40.5	11.7
8	11420.00	40.6 AV	54.0	-13.4	2.12 H	70	28.9	11.7
9	#17130.00	51.1 PK	68.2	-17.1	1.87 H	11	34.9	16.2

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

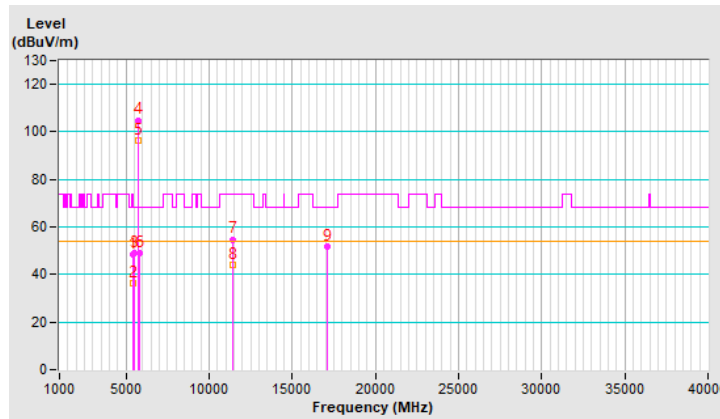


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 142 : 5710 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	48.6 PK	74.0	-25.4	2.15 V	75	47.8	0.8
2	5460.00	36.3 AV	54.0	-17.7	2.15 V	75	35.5	0.8
3	#5470.00	48.9 PK	68.2	-19.3	2.15 V	75	48.1	0.8
4	*5710.00	104.9 PK			2.15 V	75	103.7	1.2
5	*5710.00	96.2 AV			2.15 V	75	95.0	1.2
6	#5850.00	48.8 PK	68.2	-19.4	2.15 V	75	47.5	1.3
7	11420.00	54.8 PK	74.0	-19.2	1.38 V	83	43.1	11.7
8	11420.00	43.8 AV	54.0	-10.2	1.38 V	83	32.1	11.7
9	#17130.00	51.8 PK	68.2	-16.4	1.90 V	52	35.6	16.2

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

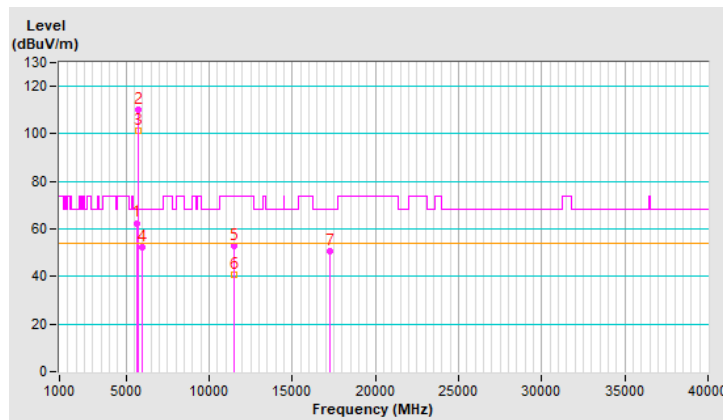


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5645.51	62.5 PK	68.2	-5.7	1.53 H	217	61.5	1.0
2	*5755.00	110.3 PK			1.53 H	217	108.9	1.4
3	*5755.00	101.3 AV			1.53 H	217	99.9	1.4
4	#5985.95	52.1 PK	68.2	-16.1	1.53 H	217	50.4	1.7
5	11510.00	52.8 PK	74.0	-21.2	2.13 H	68	41.1	11.7
6	11510.00	40.9 AV	54.0	-13.1	2.13 H	68	29.2	11.7
7	#17265.00	50.8 PK	68.2	-17.4	1.89 H	18	34.9	15.9

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

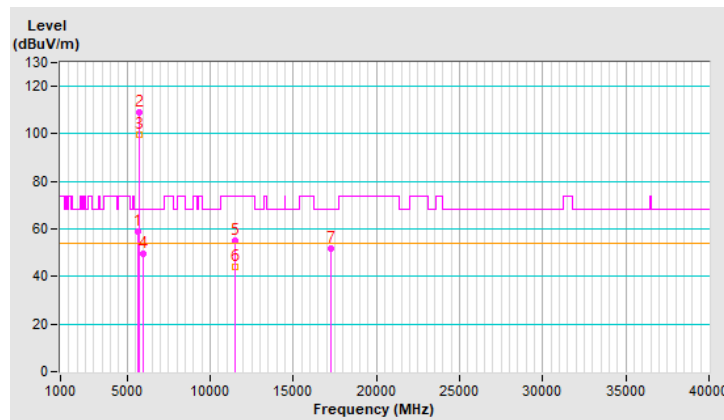


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5649.42	59.1 PK	68.2	-9.1	1.81 V	63	58.1	1.0
2	*5755.00	108.9 PK			1.81 V	63	107.5	1.4
3	*5755.00	99.7 AV			1.81 V	63	98.3	1.4
4	#5985.06	49.5 PK	68.2	-18.7	1.81 V	63	47.8	1.7
5	11510.00	54.9 PK	74.0	-19.1	1.35 V	85	43.2	11.7
6	11510.00	44.3 AV	54.0	-9.7	1.35 V	85	32.6	11.7
7	#17265.00	51.9 PK	68.2	-16.3	1.92 V	33	36.0	15.9

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

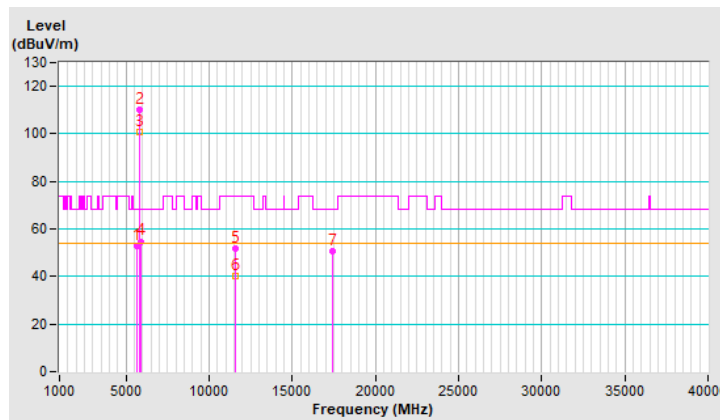


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 159 : 5795 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5633.93	52.7 PK	68.2	-15.5	1.53 H	217	51.7	1.0
2	*5795.00	110.1 PK			1.53 H	217	108.7	1.4
3	*5795.00	101.0 AV			1.53 H	217	99.6	1.4
4	#5928.53	54.8 PK	68.2	-13.4	1.53 H	217	53.3	1.5
5	11590.00	51.8 PK	74.0	-22.2	2.06 H	72	40.5	11.3
6	11590.00	40.0 AV	54.0	-14.0	2.06 H	72	28.7	11.3
7	#17385.00	50.6 PK	68.2	-17.6	1.93 H	34	33.8	16.8

**Remarks:**

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

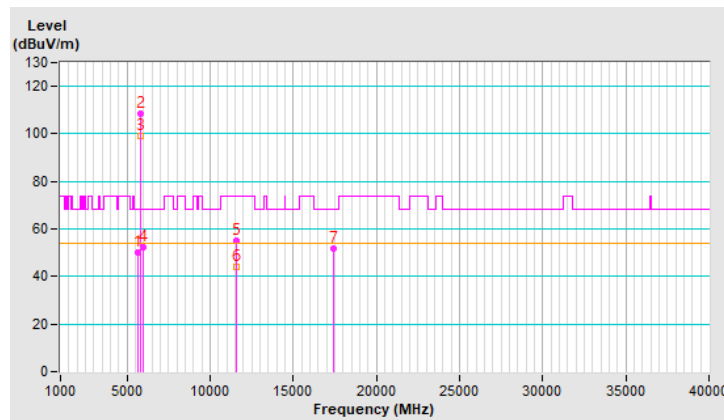


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 159 : 5795 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5648.78	50.3 PK	68.2	-17.9	1.82 V	51	49.3	1.0
2	*5795.00	108.7 PK			1.82 V	51	107.3	1.4
3	*5795.00	99.2 AV			1.82 V	51	97.8	1.4
4	#5992.55	52.2 PK	68.2	-16.0	1.82 V	51	50.5	1.7
5	11590.00	55.0 PK	74.0	-19.0	1.41 V	99	43.7	11.3
6	11590.00	43.9 AV	54.0	-10.1	1.41 V	99	32.6	11.3
7	#17385.00	51.9 PK	68.2	-16.3	1.83 V	50	35.1	16.8

**Remarks:**

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

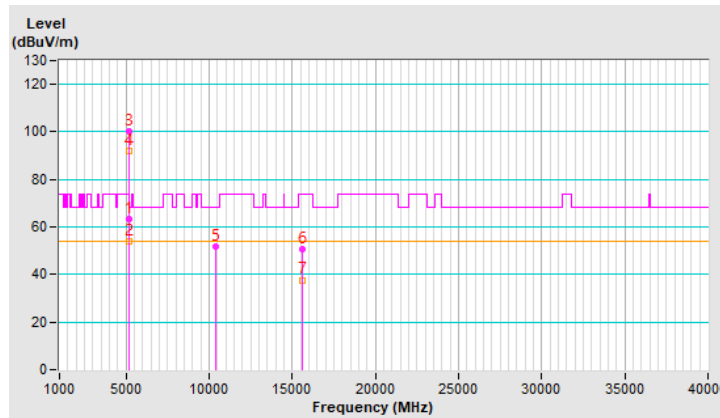


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 42 : 5210 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	63.4 PK	74.0	-10.6	1.22 H	193	62.4	1.0
2	<b>5150.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.22 H</b>	<b>193</b>	<b>52.9</b>	<b>1.0</b>
3	*5210.00	100.1 PK			1.22 H	193	99.6	0.5
4	*5210.00	91.8 AV			1.22 H	193	91.3	0.5
5	#10420.00	51.8 PK	68.2	-16.4	2.16 H	67	41.2	10.6
6	15630.00	50.5 PK	74.0	-23.5	1.85 H	27	38.9	11.6
7	15630.00	37.7 AV	54.0	-16.3	1.85 H	27	26.1	11.6

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



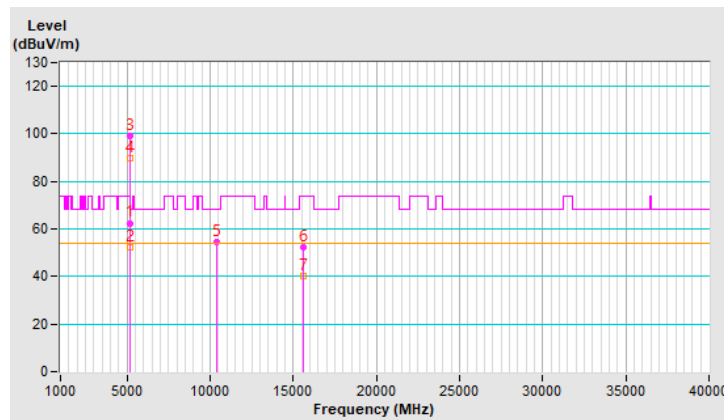


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 42 : 5210 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	62.5 PK	74.0	-11.5	2.12 V	81	61.5	1.0
2	5150.00	52.5 AV	54.0	-1.5	2.12 V	81	51.5	1.0
3	*5210.00	99.1 PK			2.12 V	81	98.6	0.5
4	*5210.00	89.7 AV			2.12 V	81	89.2	0.5
5	#10420.00	54.3 PK	68.2	-13.9	1.41 V	113	43.7	10.6
6	15630.00	52.4 PK	74.0	-21.6	1.94 V	43	40.8	11.6
7	15630.00	40.2 AV	54.0	-13.8	1.94 V	43	28.6	11.6

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

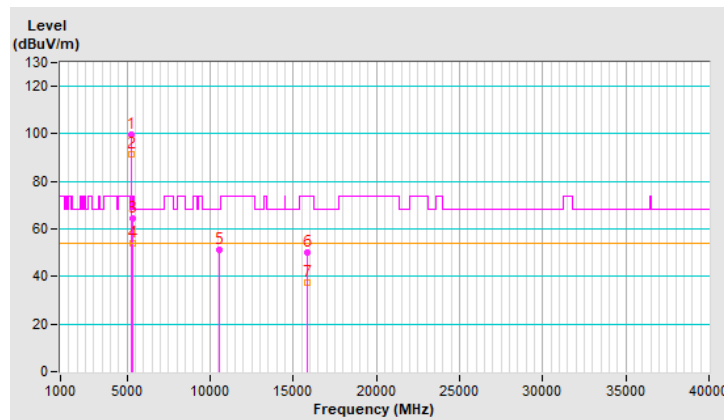


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 58 : 5290 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	99.7 PK			1.21 H	193	99.4	0.3
2	*5290.00	91.5 AV			1.21 H	193	91.2	0.3
3	5350.00	64.6 PK	74.0	-9.4	1.21 H	193	64.0	0.6
4	5350.00	53.8 AV	54.0	-0.2	1.21 H	193	53.2	0.6
5	#10580.00	51.4 PK	68.2	-16.8	2.13 H	56	41.4	10.0
6	15870.00	50.2 PK	74.0	-23.8	1.88 H	19	38.6	11.6
7	15870.00	37.4 AV	54.0	-16.6	1.88 H	19	25.8	11.6

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

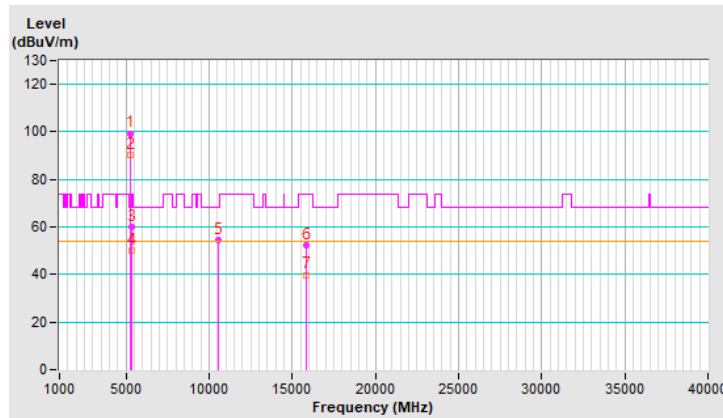


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 58 : 5290 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	99.4 PK			2.00 V	88	99.1	0.3
2	*5290.00	90.1 AV			2.00 V	88	89.8	0.3
3	5350.00	59.9 PK	74.0	-14.1	2.00 V	88	59.3	0.6
4	5350.00	50.2 AV	54.0	-3.8	2.00 V	88	49.6	0.6
5	#10580.00	54.5 PK	68.2	-13.7	1.36 V	90	44.5	10.0
6	15870.00	52.2 PK	74.0	-21.8	1.83 V	34	40.6	11.6
7	15870.00	39.9 AV	54.0	-14.1	1.83 V	34	28.3	11.6

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

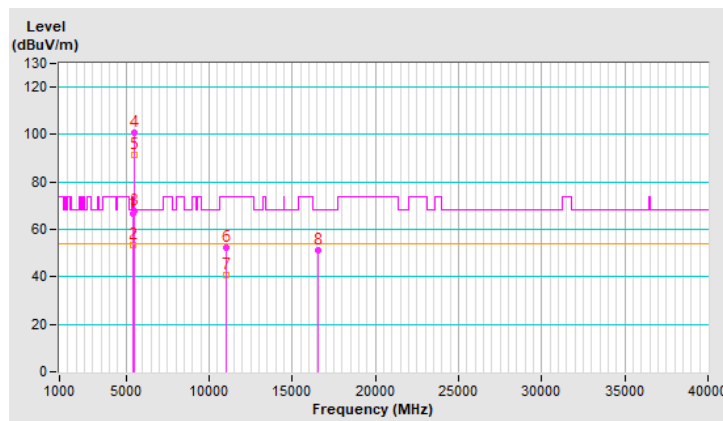


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 106 : 5530 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	66.8 PK	74.0	-7.2	1.34 H	188	66.0	0.8
2	5460.00	53.6 AV	54.0	-0.4	1.34 H	188	52.8	0.8
3	#5470.00	67.9 PK	68.2	-0.3	1.34 H	188	67.1	0.8
4	*5530.00	100.6 PK			1.34 H	188	99.8	0.8
5	*5530.00	91.4 AV			1.34 H	188	90.6	0.8
6	11060.00	52.5 PK	74.0	-21.5	2.07 H	71	41.5	11.0
7	11060.00	40.8 AV	54.0	-13.2	2.07 H	71	29.8	11.0
8	#16590.00	51.2 PK	68.2	-17.0	1.91 H	39	36.9	14.3

**Remarks:**

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

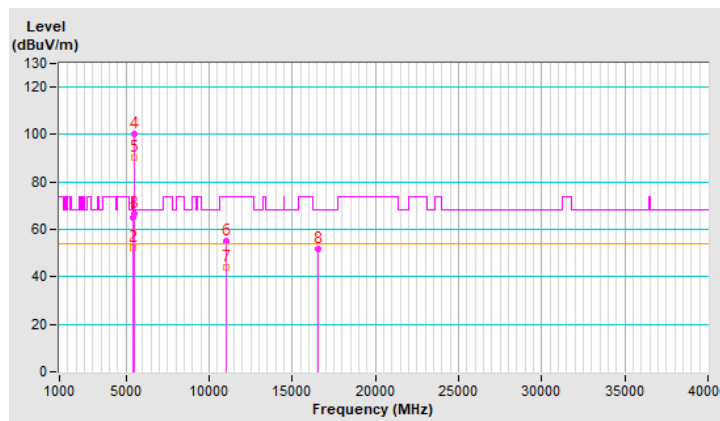


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 106 : 5530 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	64.8 PK	74.0	-9.2	2.05 V	81	64.0	0.8
2	5460.00	52.4 AV	54.0	-1.6	2.05 V	81	51.6	0.8
3	#5470.00	66.8 PK	68.2	-1.4	2.05 V	81	66.0	0.8
4	*5530.00	100.1 PK			2.05 V	81	99.3	0.8
5	*5530.00	90.4 AV			2.05 V	81	89.6	0.8
6	11060.00	55.3 PK	74.0	-18.7	1.34 V	92	44.3	11.0
7	11060.00	44.1 AV	54.0	-9.9	1.34 V	92	33.1	11.0
8	#16590.00	51.6 PK	68.2	-16.6	1.92 V	58	37.3	14.3

**Remarks:**

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

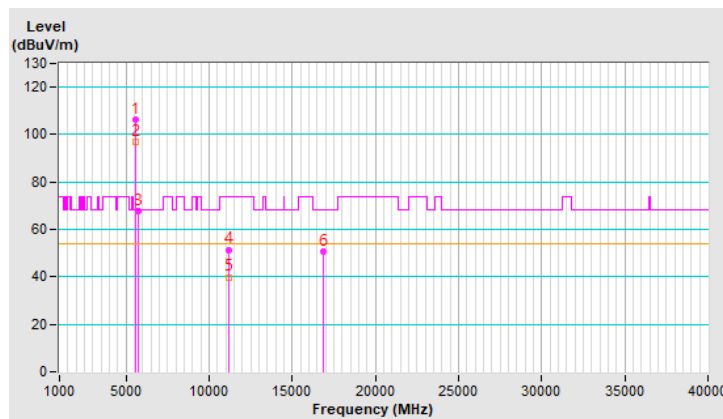


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 122 : 5610 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	106.2 PK			1.71 H	217	105.2	1.0
2	*5610.00	96.8 AV			1.71 H	217	95.8	1.0
3	#5725.00	67.5 PK	68.2	-0.7	1.71 H	217	66.2	1.3
4	11220.00	51.5 PK	74.0	-22.5	2.12 H	67	40.5	11.0
5	11220.00	39.9 AV	54.0	-14.1	2.12 H	67	28.9	11.0
6	#16830.00	50.9 PK	68.2	-17.3	1.89 H	14	35.7	15.2

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

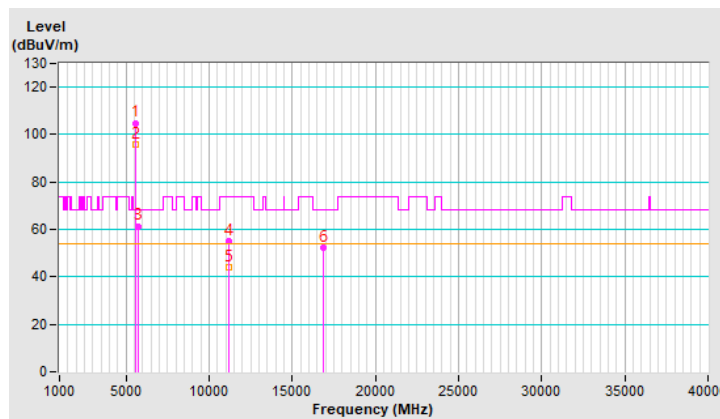


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 122 : 5610 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	104.9 PK			2.16 V	89	103.9	1.0
2	*5610.00	95.7 AV			2.16 V	89	94.7	1.0
3	#5725.00	61.4 PK	68.2	-6.8	2.16 V	89	60.1	1.3
4	11220.00	54.9 PK	74.0	-19.1	1.43 V	98	43.9	11.0
5	11220.00	43.9 AV	54.0	-10.1	1.43 V	98	32.9	11.0
6	#16830.00	52.3 PK	68.2	-15.9	1.84 V	57	37.1	15.2

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

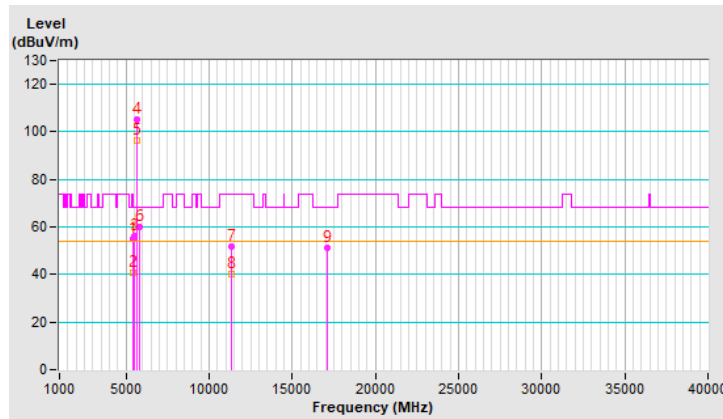


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 138 : 5690 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	1.67 H	214	54.5	0.8
2	5460.00	40.6 AV	54.0	-13.4	1.67 H	214	39.8	0.8
3	#5470.00	56.3 PK	68.2	-11.9	1.67 H	214	55.5	0.8
4	*5690.00	105.3 PK			1.67 H	214	104.3	1.0
5	*5690.00	96.3 AV			1.67 H	214	95.3	1.0
6	#5850.00	59.8 PK	68.2	-8.4	1.67 H	214	58.5	1.3
7	11380.00	51.8 PK	74.0	-22.2	2.08 H	48	40.1	11.7
8	11380.00	40.3 AV	54.0	-13.7	2.08 H	48	28.6	11.7
9	#17070.00	51.0 PK	68.2	-17.2	1.92 H	29	34.8	16.2

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



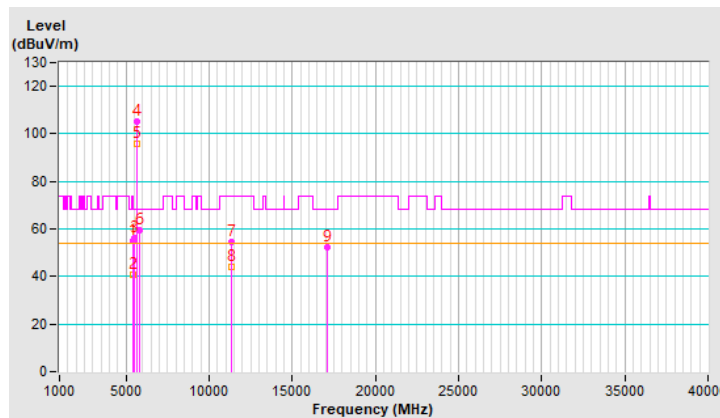


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 138 : 5690 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	55.2 PK	74.0	-18.8	2.14 V	92	54.4	0.8
2	5460.00	40.7 AV	54.0	-13.3	2.14 V	92	39.9	0.8
3	#5470.00	56.2 PK	68.2	-12.0	2.14 V	92	55.4	0.8
4	*5690.00	105.3 PK			2.14 V	92	104.3	1.0
5	*5690.00	95.9 AV			2.14 V	92	94.9	1.0
6	#5850.00	59.4 PK	68.2	-8.8	2.14 V	92	58.1	1.3
7	11380.00	54.7 PK	74.0	-19.3	1.39 V	96	43.0	11.7
8	11380.00	43.8 AV	54.0	-10.2	1.39 V	96	32.1	11.7
9	#17070.00	52.2 PK	68.2	-16.0	1.90 V	46	36.0	16.2

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

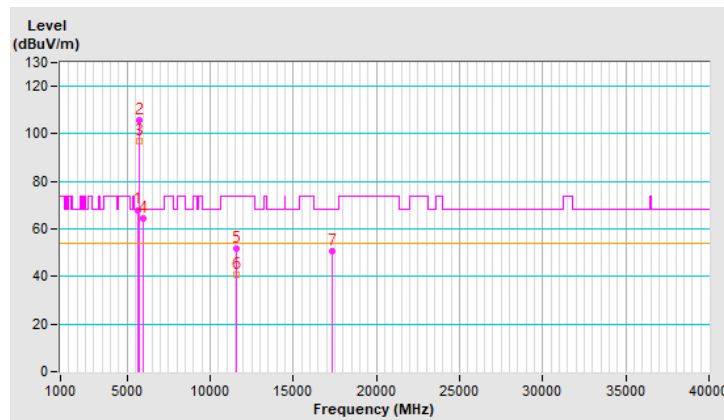


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 155 : 5775 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5647.79	68.0 PK	68.2	-0.2	1.61 H	217	67.0	1.0
2	*5775.00	105.7 PK			1.61 H	217	104.3	1.4
3	*5775.00	96.9 AV			1.61 H	217	95.5	1.4
4	#5938.69	64.6 PK	68.2	-3.6	1.61 H	217	63.0	1.6
5	11550.00	51.9 PK	74.0	-22.1	2.15 H	61	40.5	11.4
6	11550.00	40.5 AV	54.0	-13.5	2.15 H	61	29.1	11.4
7	#17325.00	50.9 PK	68.2	-17.3	1.93 H	36	34.7	16.2

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

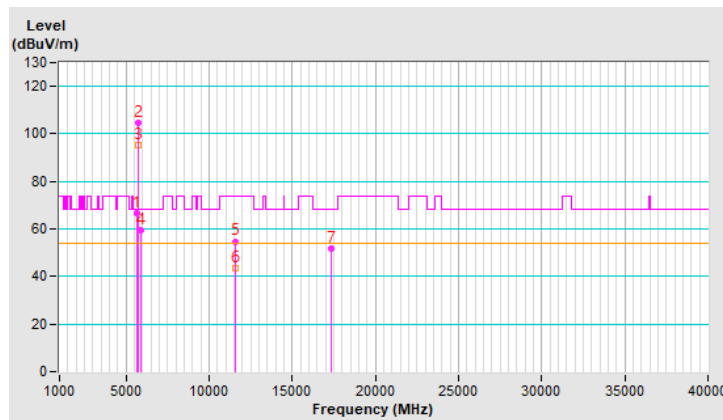


<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 155 : 5775 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
<b>Input Power (System)</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	20 °C, 70 % RH
<b>Tested By</b>	Ryan Du		

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	#5648.42	66.6 PK	68.2	-1.6	1.75 V	55	65.6	1.0
2	*5775.00	104.8 PK			1.75 V	55	103.4	1.4
3	*5775.00	95.5 AV			1.75 V	55	94.1	1.4
4	#5926.77	59.4 PK	68.2	-8.8	1.75 V	55	57.9	1.5
5	11550.00	54.8 PK	74.0	-19.2	1.40 V	92	43.4	11.4
6	11550.00	43.7 AV	54.0	-10.3	1.40 V	92	32.3	11.4
7	#17325.00	51.9 PK	68.2	-16.3	1.89 V	49	35.7	16.2

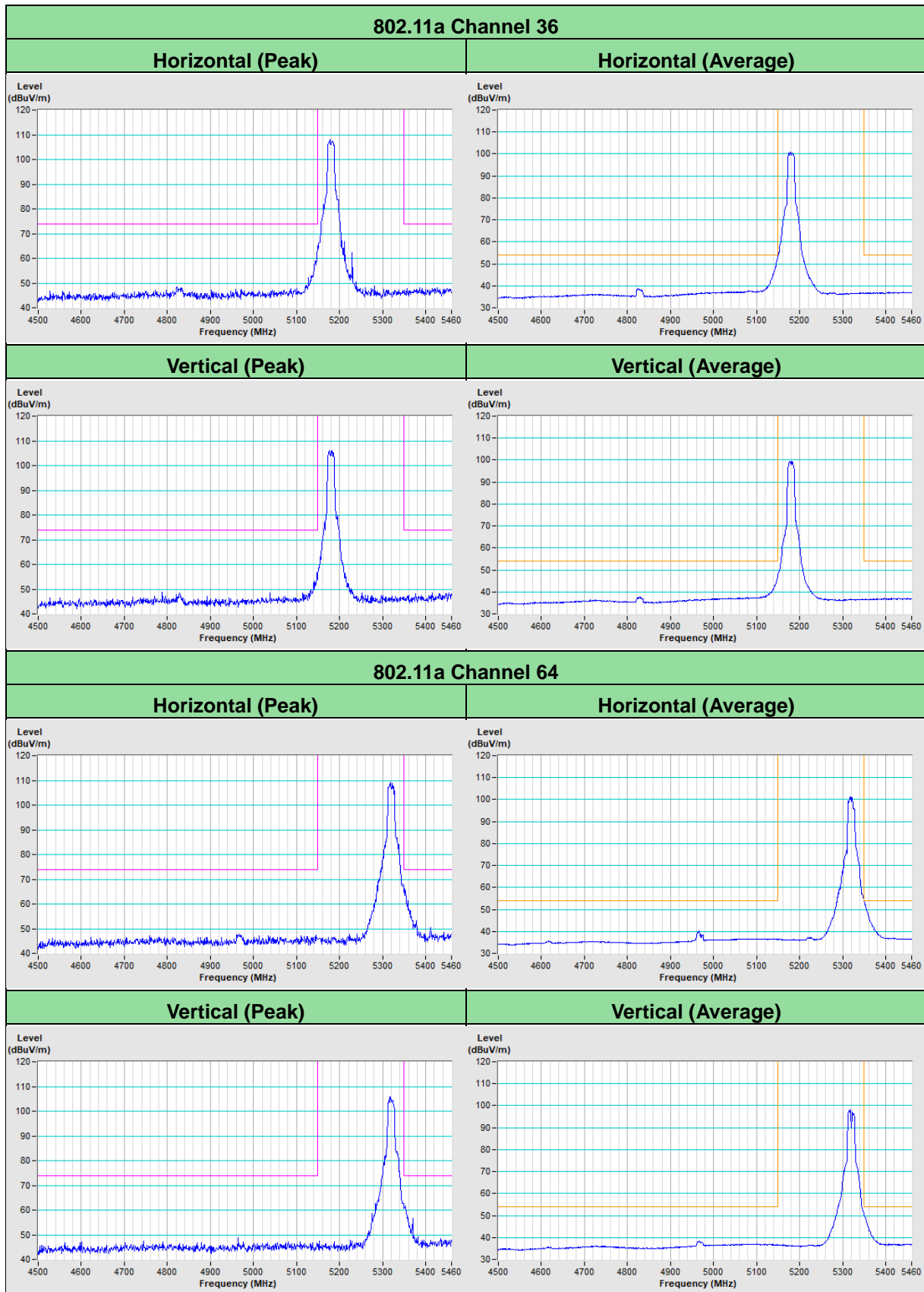
**Remarks:**

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

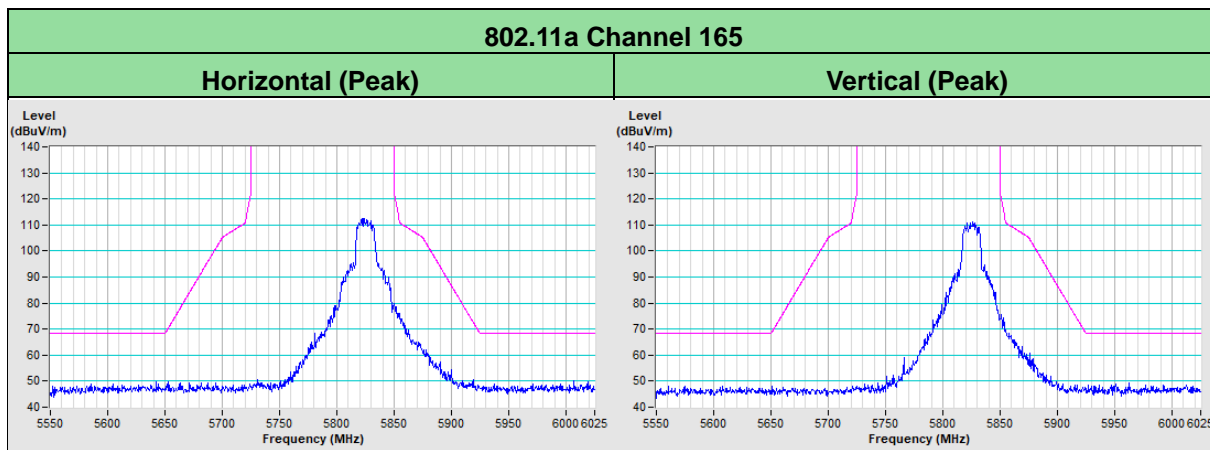




### Plot of Band Edge



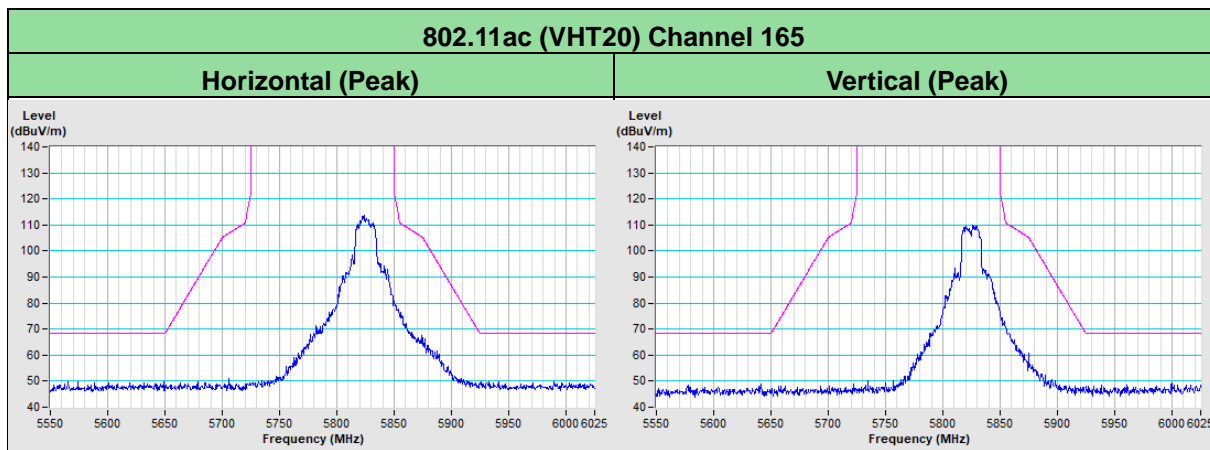








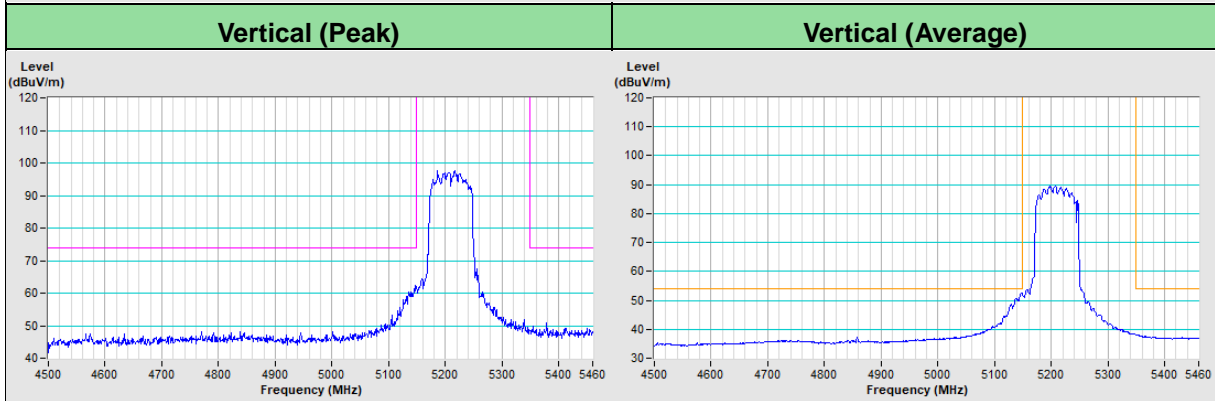
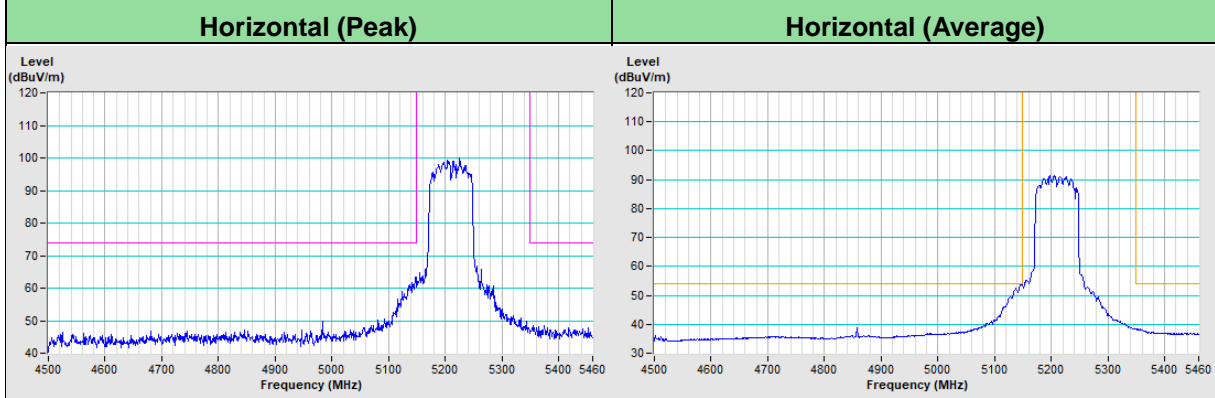




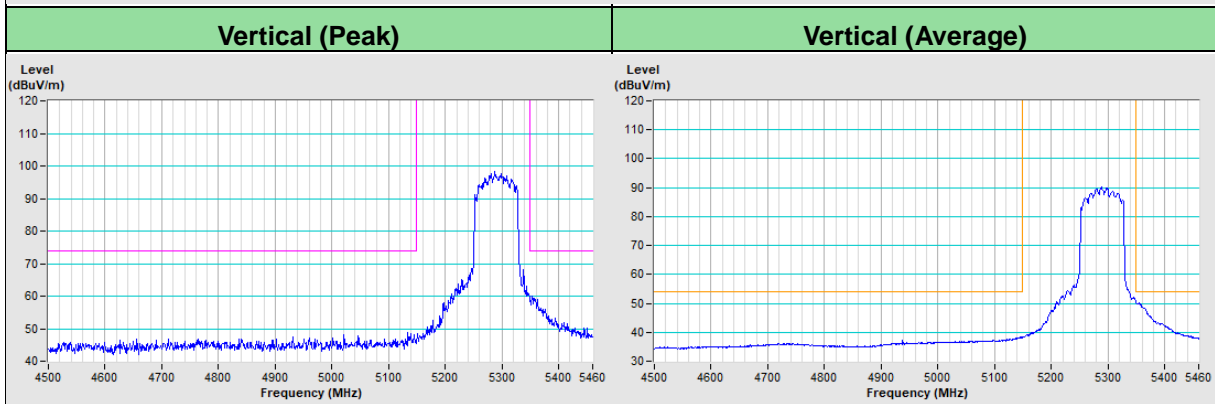
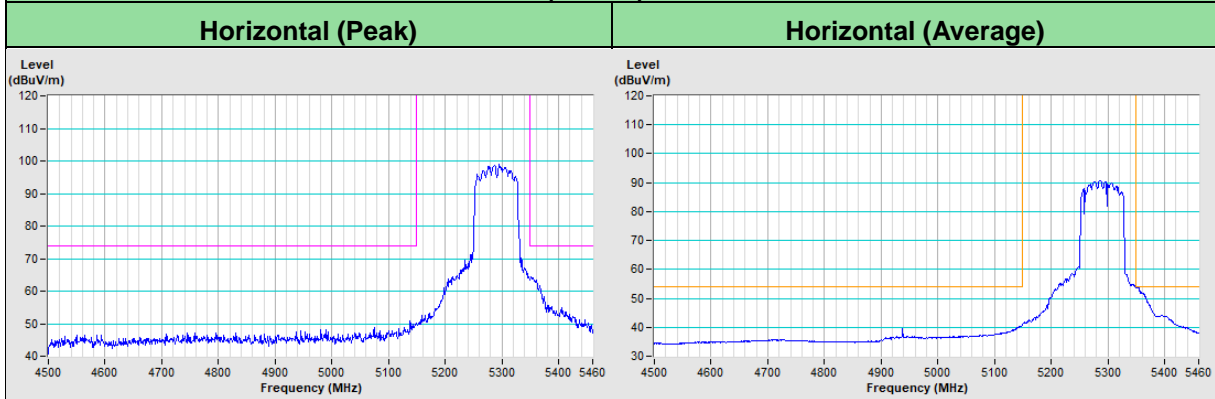




### 802.11ac (VHT80) Channel 42



### 802.11ac (VHT80) Channel 58





## 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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