

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBECO-WTW-P22120330-1
FCC ID: TLZ-AM497617
Product: 802.11ac with BT5.2 Combo Module,802.11ac with BT 5.3 Combo Module
Brand: AzureWave
Model No.: AW-AM497
Series Model: AW-AM617
Received Date: 2022/12/12
Test Date: 2022/12/26 ~ 2022/12/29
Issued Date: 2023/8/14

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FCC Registration / 198487 / TW2021
Designation Number:

Approved by: Jeremy Lin , **Date:** 2023/8/14
Jeremy Lin / Project Engineer

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Prepared by : Vito Lung / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBECO-WTW-P22120330-1	Original release.	2023/8/14

1 Certificate

Product: 802.11ac with BT5.2 Combo Module,802.11ac with BT 5.3 Combo Module

Brand: AzureWave

Test Model: AW-AM497

Series Model: AW-AM617

Sample Status: Engineering sample

Applicant: AzureWave Technologies, Inc.

Test Date: 2022/12/26 ~ 2022/12/29

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

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 -14.73 dB at 0.75200 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -10.1 dB at 251.79 MHz
15.407(b)(1/2/3/4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.70 dB at 5350.00 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:

Parameter	Specification	Uncertainty (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	3.00 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.38 dB
	30 MHz ~ 1 GHz	5.7 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 6 GHz	4.83 dB
	6 GHz ~ 18 GHz	5.37 dB
	18 GHz ~ 40 GHz	5.24 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 with BT5.2 Combo Module,802.11ac with BT 5.3 Combo Module
Brand	AzureWave
Test Model	AW-AM497
Series Model	AW-AM617
Status of EUT	Engineering sample
Power Supply Rating	3.6 Vdc 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 54 Mbps 802.11n: up to 72.2 Mbps 802.11ac: up to 86.7 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20): 25
Output Power	5.18 GHz ~ 5.24 GHz : 185.78 mW (22.69 dBm) 5.26 GHz ~ 5.32 GHz : 231.206 mW (23.64 dBm) 5.5 GHz ~ 5.72 GHz : 221.309 mW (23.45 dBm) 5.745 GHz ~ 5.825 GHz : 191.867 mW (22.83 dBm)
EUT Category	Client device

Note:

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

Condition	Technology	
1	WLAN (2.4 GHz)	Bluetooth

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

3. Please refer to as below for the detail of model differences.

Model Name	PMN	IC Chip no.
AW-AM497	802.11ac with BT5.2 Combo Module	CYW43012
AW-AM617	802.11ac with BT5.3 Combo Module	CYW43022

Note:

1. From the above models, model: **AW-AM497** was selected as representative model for the test and its data was recorded in this report after pretest with AW-AM617.

2. CYW43022 is a pin-compatible IC chip similar to the CYW43012, designed to support the same wireless specifications.

- New deep sleep mode
- Improved security for firmware and memory
- SDIO support for both Wi-Fi and Bluetooth

No changes were made to the radio circuits for WLAN and Bluetooth and wireless emissions, RF performance, RF power are unaffected by the ROM change

3. FVIN version independent of RF characteristics

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length
1	Chain 0	MAG.LAYERS	MSA-4008-25GC1-A2	2.98	2.4~2.4835GHz	PIFA	ipex(MHF)	150 mm
				5.16	5.15~5.85GHz			

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

2. The EUT incorporates a SISO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11ac (VHT20)	1TX	1RX

Note:

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

3.3 Channel List

FOR 5180 ~ 5320 MHz

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

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

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

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		

3.4 Test Mode Applicability and Tested Channel Detail

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

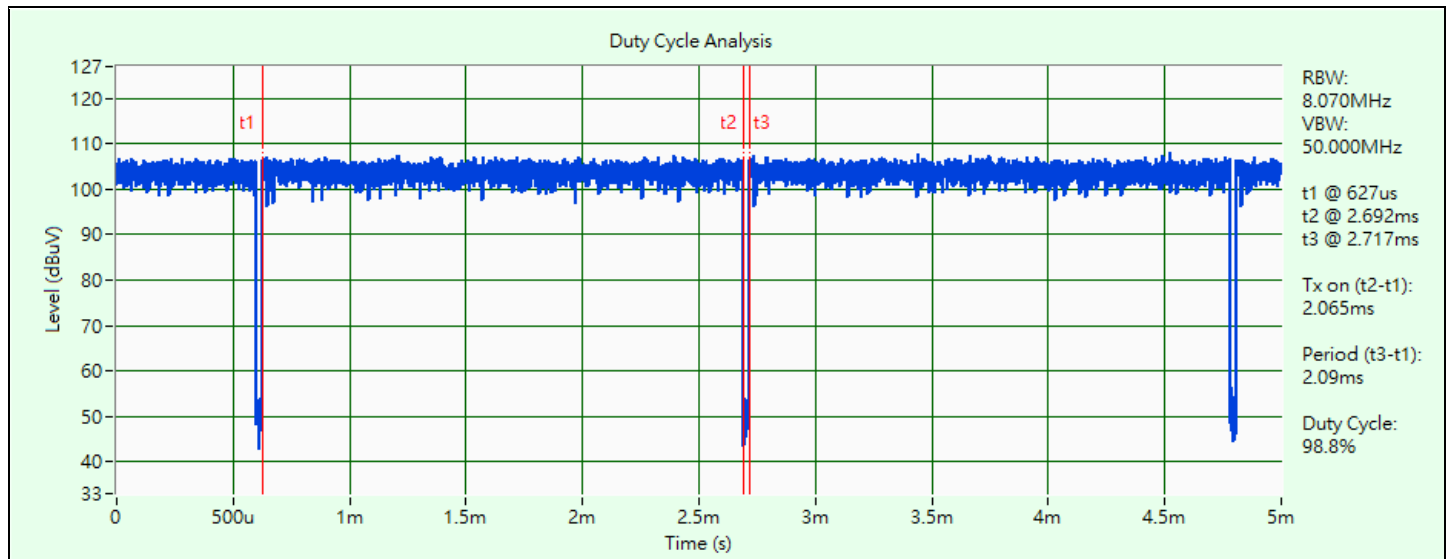
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
RF Output Power / Power Spectral Density	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
6 dB Bandwidth	802.11a	144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	144, 149, 157, 165	BPSK	MCS0
Occupied Bandwidth	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
Frequency Stability	802.11a	36	un-modulation	-
AC Power Conducted Emissions	802.11a	52	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11a	52	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0

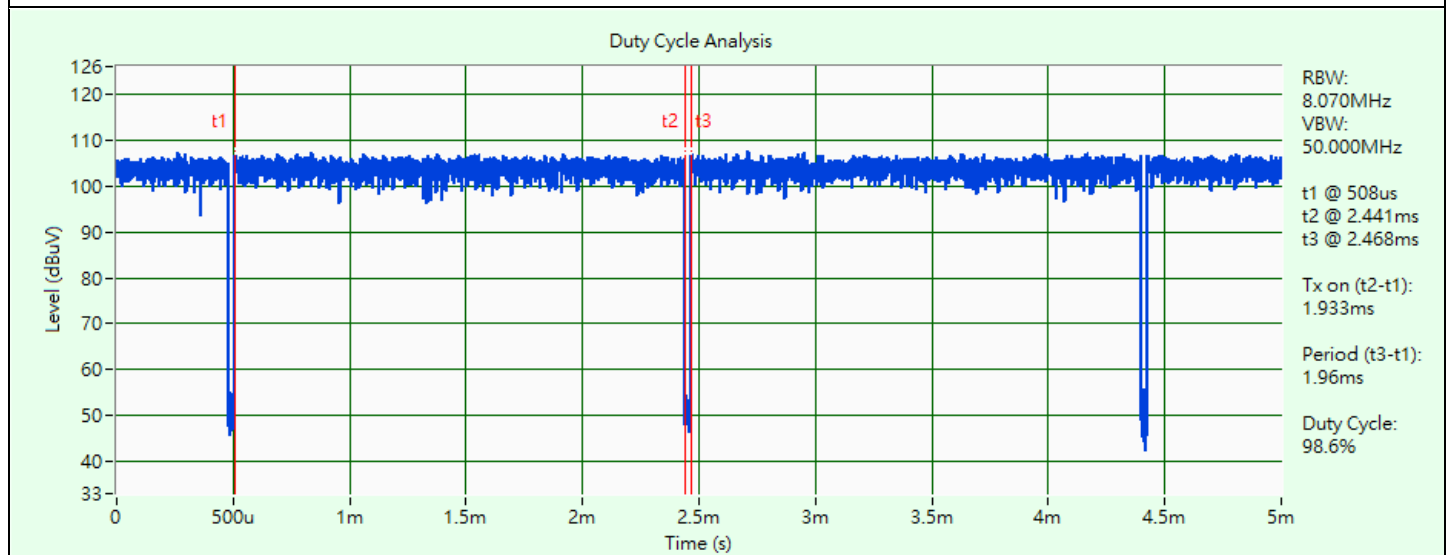
3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 2.065 ms / 2.09 ms x 100% = 98.8%

802.11ac (VHT20): Duty cycle = 1.933 ms / 1.96 ms x 100% = 98.6%



802.11a

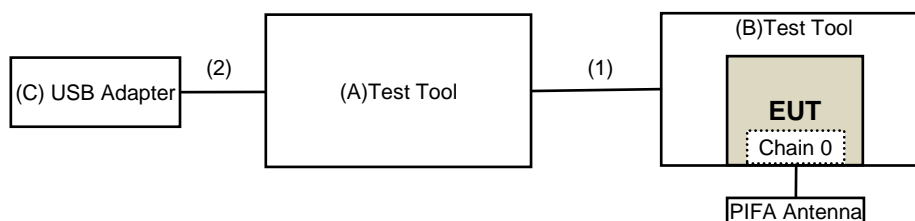


802.11ac (VHT20)

3.6 Test Program Used and Operation Descriptions

Controlling software (TeraTerm v4.8) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Test Tool	AzureWave	N/A	N/A	N/A	Supplied by applicant
B	Test Tool	AzureWave	N/A	N/A	N/A	Supplied by applicant
C	USB Adapter	APPLE	N/A	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Type-C to Type-C cable	1	1	Yes	0	Provided by Lab
2	Type-C to USB cable	1	1	Yes	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
Spectrum Analyzer KEYSIGHT	N9030A	MY54490260	2022/7/14	2023/7/13
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/12/28

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power meter Anritsu	ML2495A	0842014	2022/4/27	2023/4/26
Pulse Power Sensor Anritsu	MA2411B	0738404	2022/4/27	2023/4/26
Spectrum Analyzer KEYSIGHT	N9030A	MY54490260	2022/7/14	2023/7/13
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/12/28

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
Spectrum Analyzer KEYSIGHT	N9030A	MY54490260	2022/7/14	2023/7/13
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8
Temperature & Humidity Chamber TERCHY	MHU-225AU	920409	2022/6/27	2023/6/26

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/12/28

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal LYNICS	0900510	E1-011285	2022/9/19	2023/9/18
		E1-011286	2022/9/19	2023/9/18
50 Ohms Terminator LYNICS	0900510	E1-01-305	2022/2/9	2023/2/8
Attenuator STI	STI02-2200-10	NO.4	2022/9/2	2023/9/1
DC LISN R&S	ESH3-Z6	100219	2022/8/2	2023/8/1
		844950/018	2022/8/2	2023/8/1
DC LISN Schwarzbeck	NNLK 8121	8121-808	2022/4/29	2023/4/28
High Voltage Probe Schwarzbeck	TK9420	00982	2022/12/14	2023/12/13
Isolation Transformer Erika Fiedler	D-65396	017	2022/9/8	2023/9/7
LISN R&S	ENV216	101196	2022/5/24	2023/5/23
LISN Schwarzbeck	NNLK 8121	8121-00759	2022/8/18	2023/8/17
		8121-731	2022/5/26	2023/5/25
	NNLK8129	8129229	2022/6/8	2023/6/7
	NSLK 8128	8128-244	2022/11/8	2023/11/7
RF Coaxial Cable Commate	5D-FB	Cable-CO5-01	2022/1/28	2023/1/27
Software BVADT	Cond_V7.3.7.4	N/A	N/A	N/A
Test Receiver R&S	ESR3	102412	2022/12/21	2023/12/20

Notes:

1. The test was performed in Linkou Conduction 5.
2. Tested Date: 2022/12/29

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
* LOOP ANTENNA EMCI	LPA600	270	2021/9/2	2023/9/1
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2022/10/21	2023/10/20
Coupling/Dcoupling Network Schwarzbeck	CDNE-M2	00097	2022/6/1	2023/5/31
	CDNE-M3	00091	2022/6/1	2023/5/31
Pre_Amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
Pre_Amplifier HP	8447D	2432A03504	2022/2/17	2023/2/16
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2022/6/30	2023/6/29
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101544	2022/5/9	2023/5/8
Test Receiver Agilent	N9038A	MY51210129	2022/4/8	2023/4/7
		MY51210137	2022/6/9	2023/6/8
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

- * The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA
- The test was performed in Linkou 966 Chamber 6 (CH 6).
- Tested Date: 2022/12/29

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Band Pass Filter MICRO-TRONICS	BRM17690	005	2022/5/26	2023/5/25
Boresight antenna tower fixture BV	BAF-02	6	N/A	N/A
High Pass Filter Wainwright Instruments	WHK 3.1/18G-10SS	SN 8	2022/5/26	2023/5/25
Horn Antenna EMCO	3115	00028257	2022/11/13	2023/11/12
Horn Antenna ETS-Lindgren	3117-PA	00215857	2022/11/13	2023/11/12
Horn Antenna Schwarzbeck	BBHA 9170	212	2022/10/20	2023/10/19
Notch Filter MICRO-TRONICS	BRC50703-01	010	2022/5/26	2023/5/25
Pre-amplifier HP	8449B	3008A01201	2022/2/17	2023/2/16
Pre-amplifier (18GHz-40GHz) EMCI	EMC184045B	980175	2022/9/3	2023/9/2
Pre_Amplifier EMCI	EMC0126545	980076	2022/2/17	2023/2/16
	EMC184045B	980235	2022/2/17	2023/2/16
RF Coaxial Cable EM	EM102-KMKM-3.5+1M	EM102-KMKM-3.5+1M-01	2022/7/7	2023/7/6
RF Coaxial Cable EMCI	EMC104	190801	2022/7/7	2023/7/6
		190804	2022/7/7	2023/7/6
RF Coaxial Cable HUBER SUHNER	SF-104	Cable-CH6-01	2022/9/20	2023/9/19
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8
Test Receiver Agilent	N9038A	MY51210129	2022/4/8	2023/4/7
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2022/12/26 ~ 2022/12/28

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

*B is the 26 dB emission bandwidth in megahertz

5.3 Power Spectral Density

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

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Frequency Stability

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

5.7 AC Power Conducted Emissions

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

Notes:

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

5.8 Unwanted Emissions below 1 GHz

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

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

5.9 Unwanted Emissions above 1 GHz

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

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.15-5.25 GHz band:

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

For transmitters operating in the 5.25-5.35 GHz band:

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

For transmitters operating in the 5.47-5.725 GHz band:

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

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1}	PK: 68.2 (dBμV/m) ^{*1}
	PK: 10 (dBm/MHz) ^{*2}	PK: 105.2 (dBμV/m) ^{*2}
	PK: 15.6 (dBm/MHz) ^{*3}	PK: 110.8 (dBμV/m) ^{*3}
	PK: 27 (dBm/MHz) ^{*4}	PK: 122.2 (dBμV/m) ^{*4}

^{*1} beyond 75 MHz or more above of the band edge.

^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

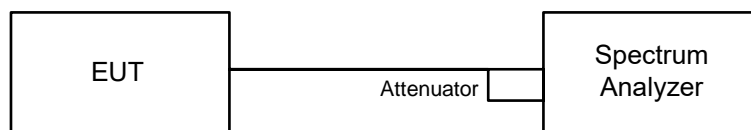
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

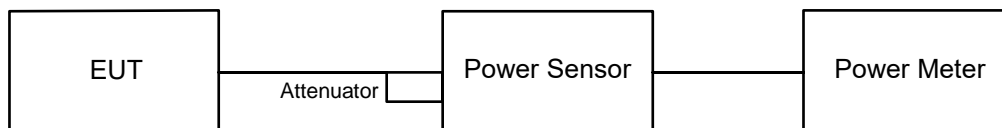


6.1.2 Test Procedure

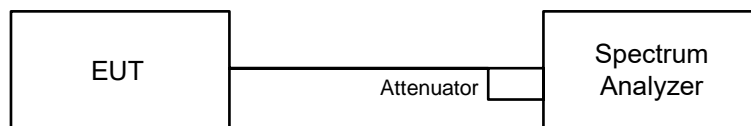
- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

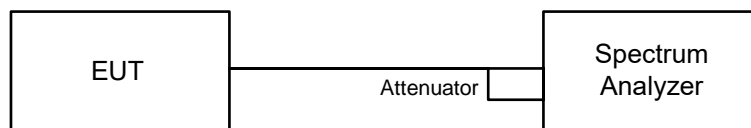
Method SA-1

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

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-1

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

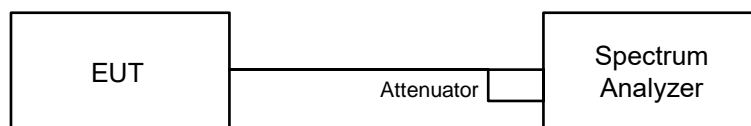
For specified measurement bandwidth 500 kHz:

Method SA-1

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

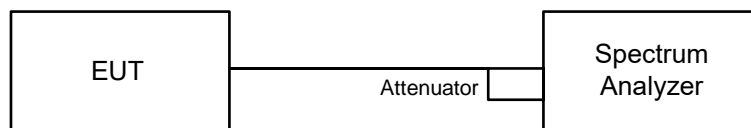


6.4.2 Test Procedure

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

6.5 Occupied Bandwidth

6.5.1 Test Setup

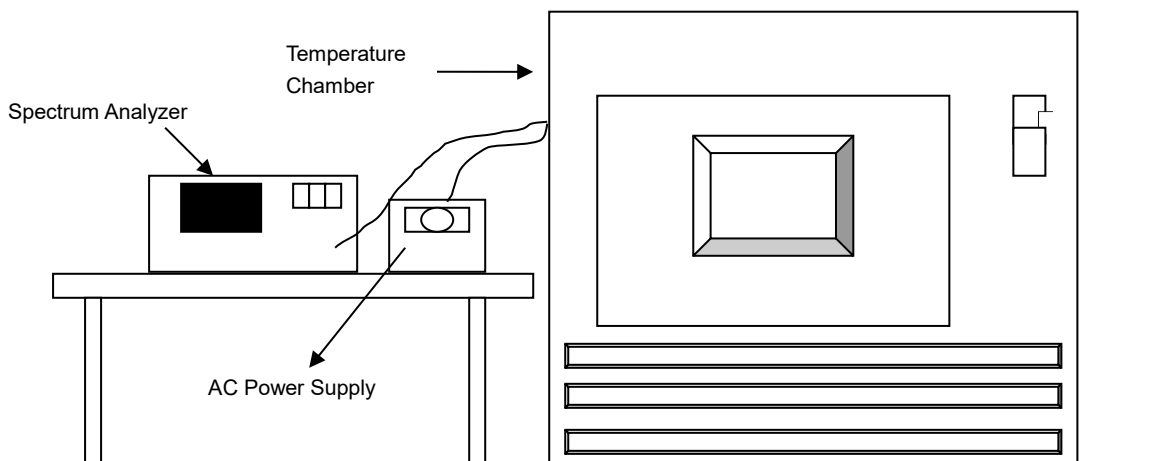


6.5.2 Test Procedure

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

6.6 Frequency Stability

6.6.1 Test Setup

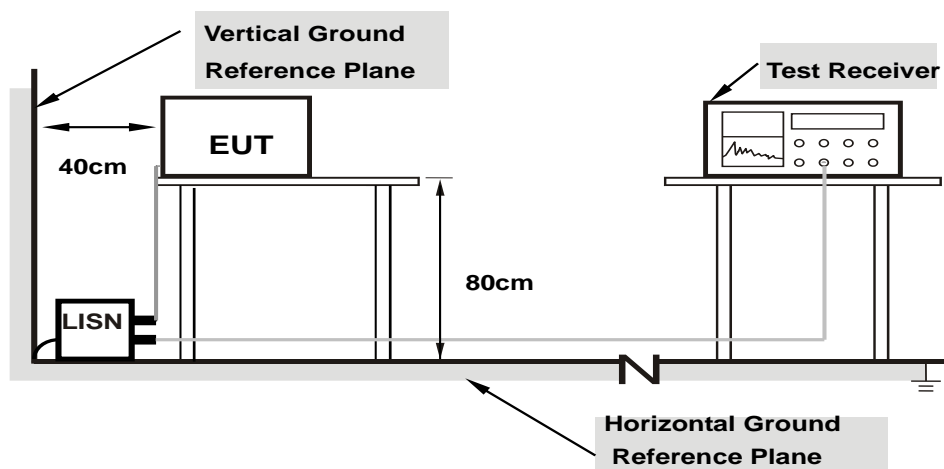


6.6.2 Test Procedure

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

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



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

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

6.7.2 Test Procedure

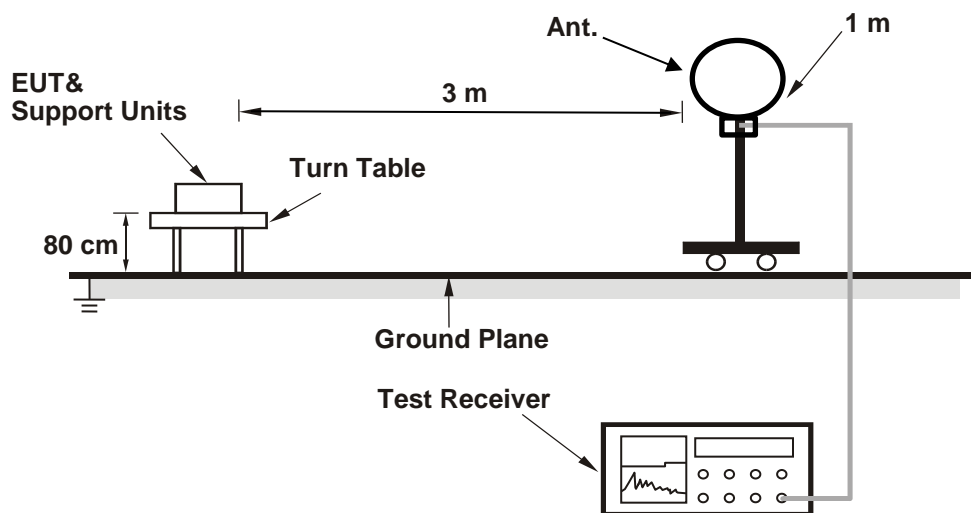
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

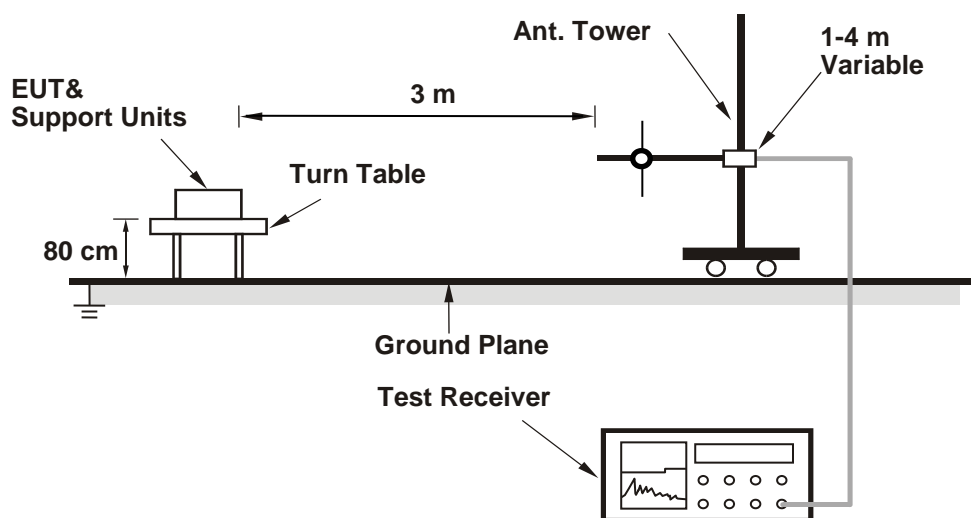
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.8.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

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

For Radiated emission above 30 MHz

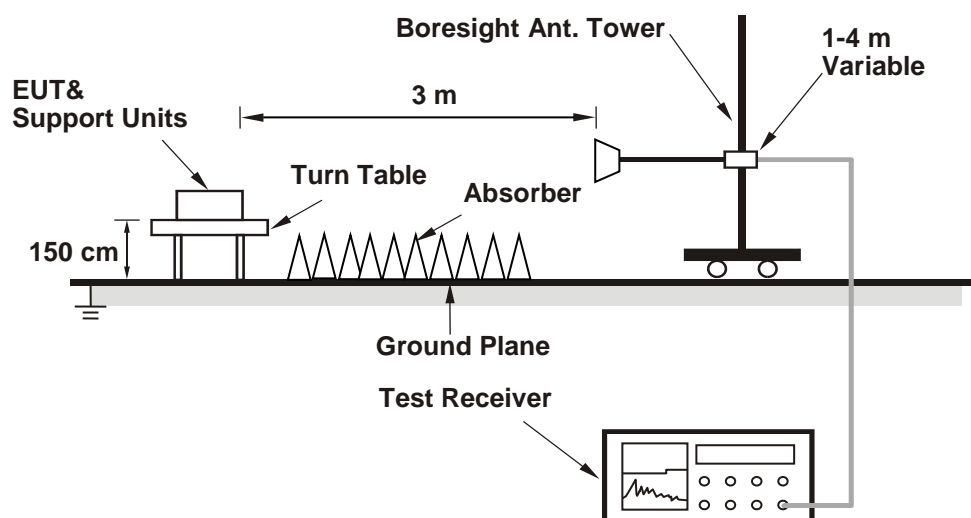
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

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

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



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

6.9.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	55.39
60	5300	54.66
64	5320	39.09
100	5500	21.79
116	5580	58.64
140	5700	27.6
144 (U-NII-2C)	5720	28.22
144 (U-NII-3)	5720	24.05

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	55.39	28.43 > 24
60	5300	54.66	28.37 > 24
64	5320	39.09	26.92 > 24
100	5500	21.79	24.38 > 24
116	5580	58.64	28.68 > 24
140	5700	27.60	25.4 > 24
144 (U-NII-2C)	5720	28.22	25.5 > 24

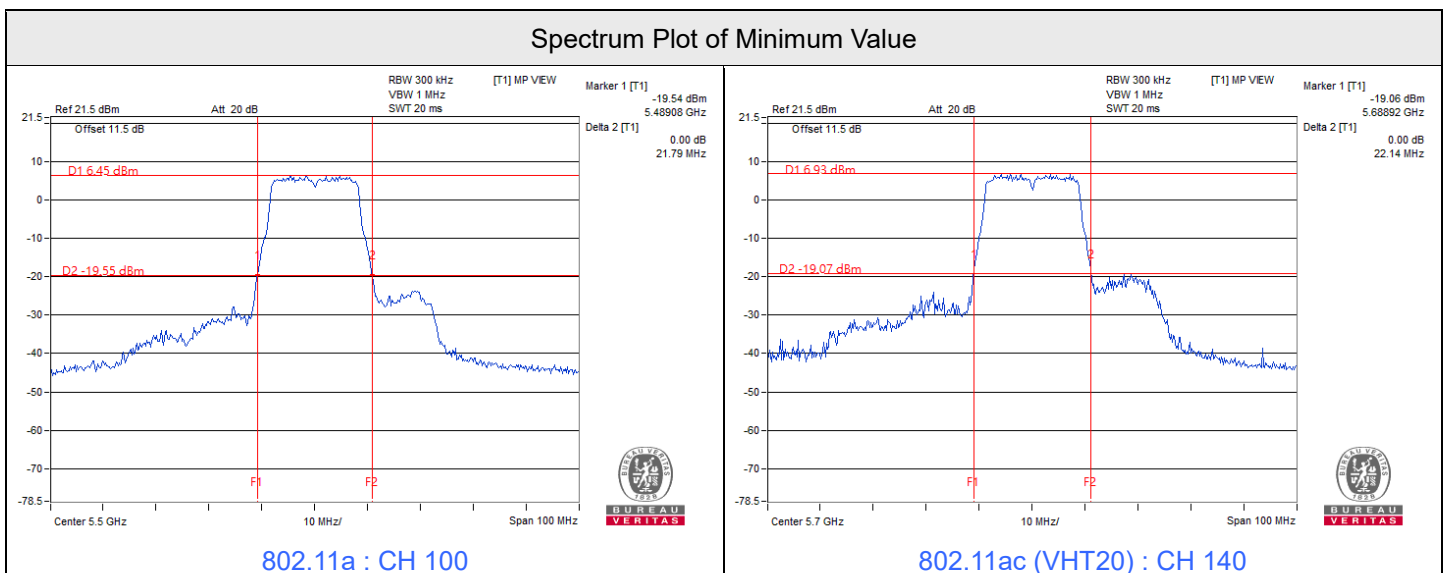
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ac (VHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	69.59
60	5300	49.15
64	5320	45.94
100	5500	22.31
116	5580	74.65
140	5700	22.14
144 (U-NII-2C)	5720	30.05
144 (U-NII-3)	5720	25.7

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	69.59	29.42 > 24
60	5300	49.15	27.91 > 24
64	5320	45.94	27.62 > 24
100	5500	22.31	24.48 > 24
116	5580	74.65	29.73 > 24
140	5700	22.14	24.45 > 24
144 (U-NII-2C)	5720	30.05	25.77 > 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 = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

7.2 RF Output Power

Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	65.766	18.18	24	Pass
40	5200	185.78	22.69	24	Pass
48	5240	81.658	19.12	24	Pass
52	5260	231.206	23.64	24	Pass
60	5300	180.717	22.57	24	Pass
64	5320	85.31	19.31	24	Pass
100	5500	49.091	16.91	24	Pass
116	5580	221.309	23.45	24	Pass
140	5700	65.766	18.18	24	Pass
*144 (U-NII-2C)	5720	92.257	19.65	24	Pass
*144 (U-NII-3)	5720	23.335	13.68	30	Pass
149	5745	187.499	22.73	30	Pass
157	5785	189.671	22.78	30	Pass
165	5825	183.654	22.64	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

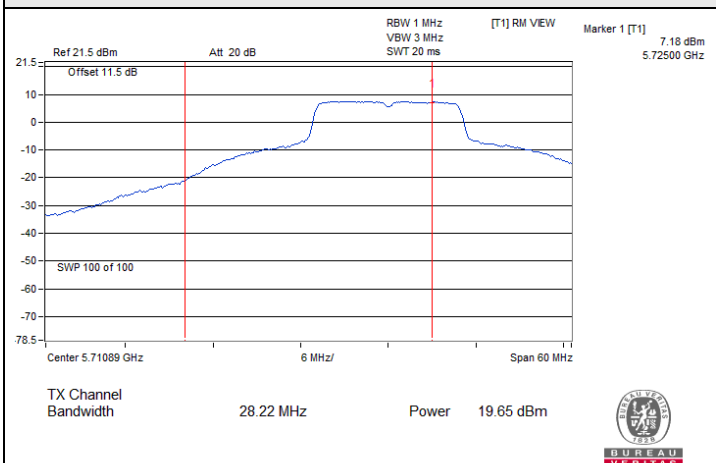
Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	70.958	18.51	24	Pass
40	5200	143.549	21.57	24	Pass
48	5240	87.096	19.40	24	Pass
52	5260	230.144	23.62	24	Pass
60	5300	134.586	21.29	24	Pass
64	5320	83.946	19.24	24	Pass
100	5500	42.756	16.31	24	Pass
116	5580	212.814	23.28	24	Pass
140	5700	48.529	16.86	24	Pass
*144 (U-NII-2C)	5720	90.157	19.55	24	Pass
*144 (U-NII-3)	5720	25.293	14.03	30	Pass
149	5745	187.068	22.72	30	Pass
157	5785	191.867	22.83	30	Pass
165	5825	186.209	22.70	30	Pass

Notes:

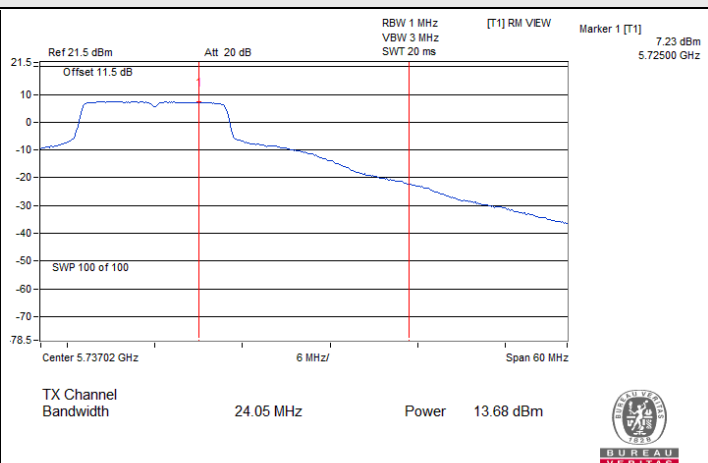
- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.



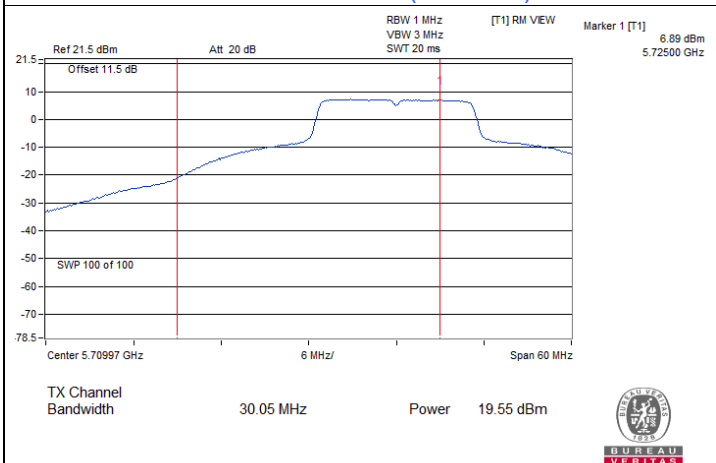
Spectrum Plot for channel straddling



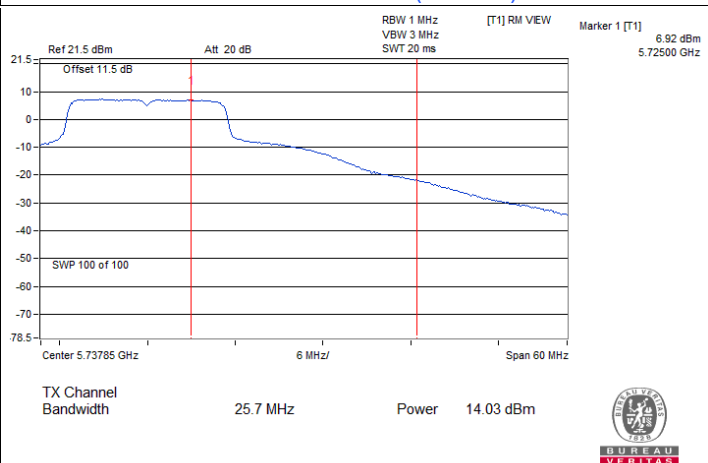
802.11a : CH 144 (U-NII-2C)



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



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



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

7.3 Power Spectral Density

Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	3.18	11	Pass
40	5200	7.50	11	Pass
48	5240	4.44	11	Pass
52	5260	8.19	11	Pass
60	5300	7.41	11	Pass
64	5320	4.10	11	Pass
100	5500	1.94	11	Pass
116	5580	7.72	11	Pass
140	5700	3.27	11	Pass
144 (U-NII-2C)	5720	7.61	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 5.16 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	3.14	11	Pass
40	5200	6.32	11	Pass
48	5240	4.02	11	Pass
52	5260	7.96	11	Pass
60	5300	5.92	11	Pass
64	5320	3.86	11	Pass
100	5500	0.92	11	Pass
116	5580	7.42	11	Pass
140	5700	1.82	11	Pass
144 (U-NII-2C)	5720	7.36	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 5.16 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.09	1.13	30	Pass
149	5745	-1.03	1.19	30	Pass
157	5785	-1.27	0.95	30	Pass
165	5825	-1.47	0.75	30	Pass

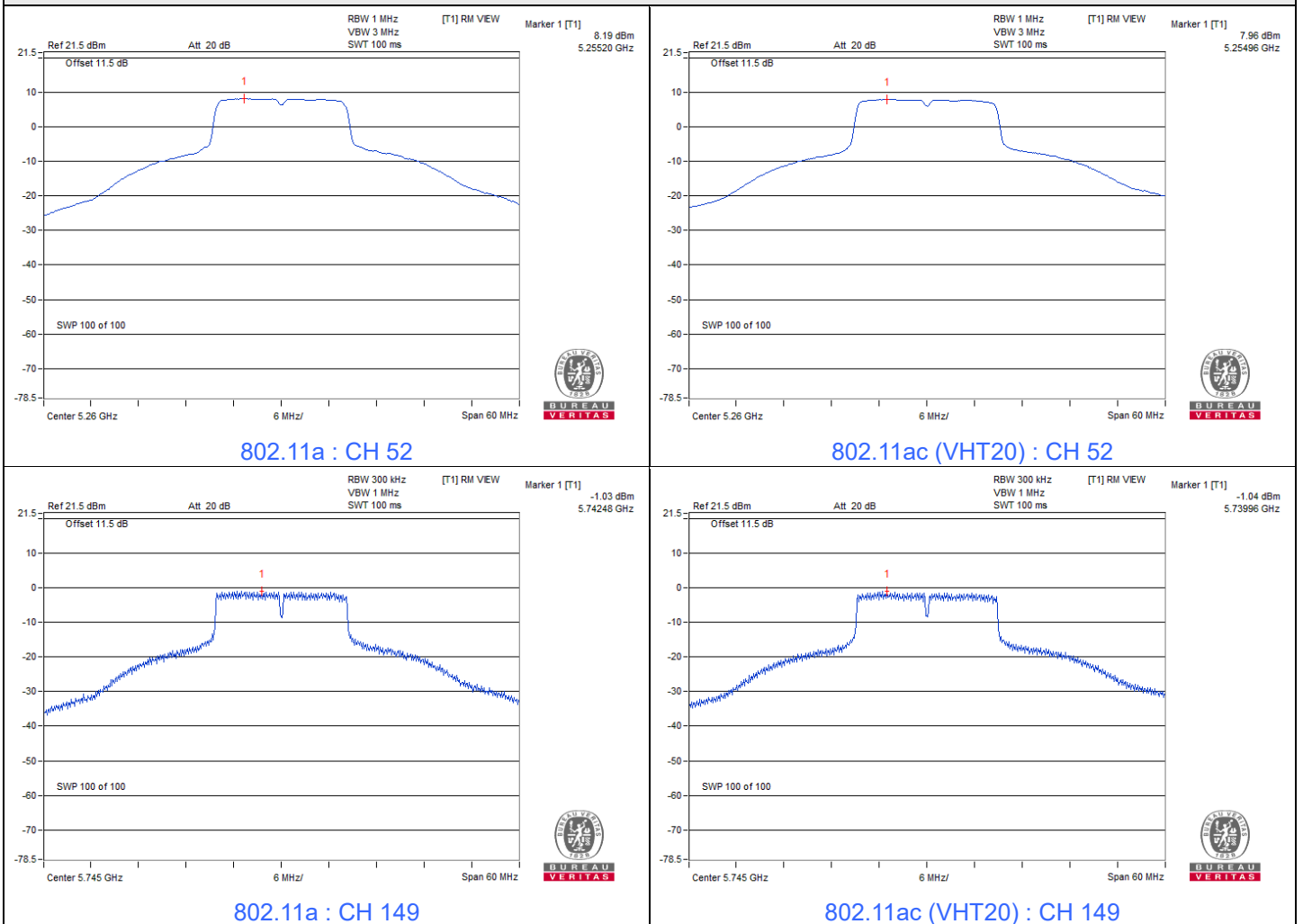
Note: For U-NII-3, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.33	0.89	30	Pass
149	5745	-1.04	1.18	30	Pass
157	5785	-1.28	0.94	30	Pass
165	5825	-1.63	0.59	30	Pass

Note: For U-NII-3, the antenna gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.

Spectrum Plot of Maximum Value



7.4 6 dB Bandwidth

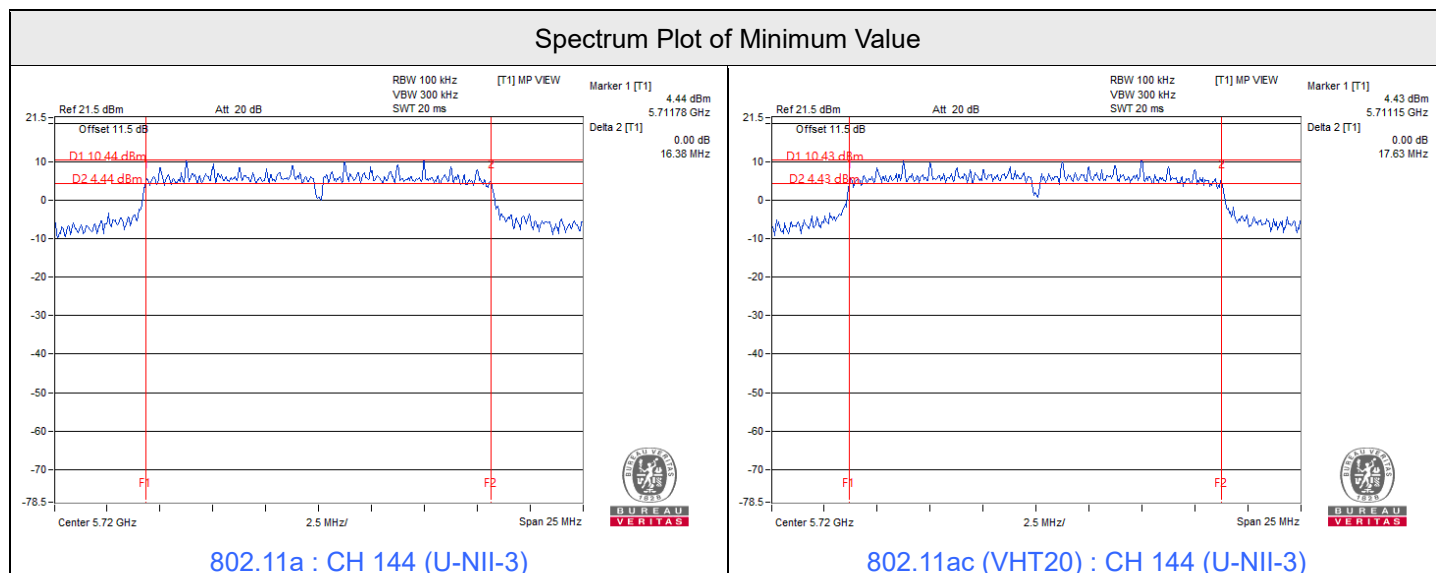
Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.16	0.5	Pass
149	5745	16.38	0.5	Pass
157	5785	16.39	0.5	Pass
165	5825	16.39	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.78	0.5	Pass
149	5745	17.61	0.5	Pass
157	5785	17.64	0.5	Pass
165	5825	17.58	0.5	Pass



Notes:

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

7.5 Occupied Bandwidth

Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

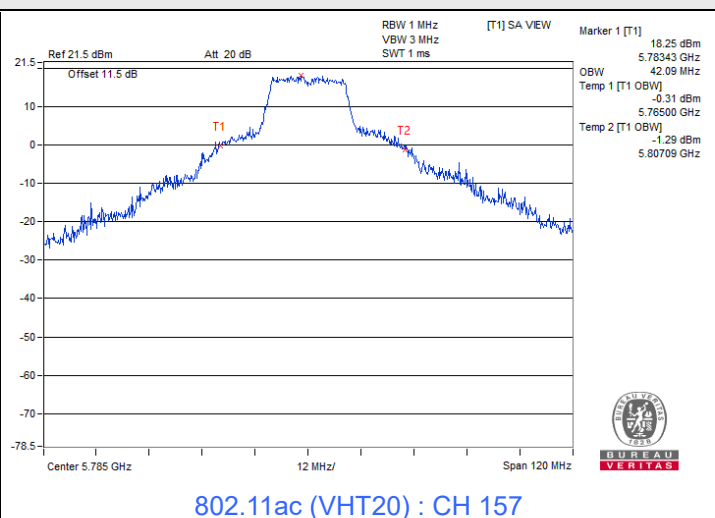
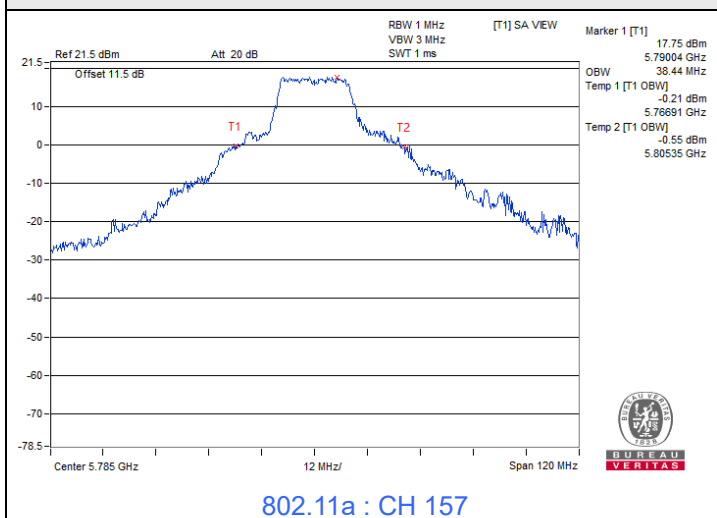
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
40	5200	34.08
48	5240	18.72
52	5260	36.34
60	5300	35.65
64	5320	17.76
100	5500	17.04
116	5580	36.87
140	5700	17.28
144 (U-NII-2C)	5720	21.56
144 (U-NII-3)	5720	13.36
149	5745	37.22
157	5785	38.44
165	5825	36

802.11ac (VHT20)

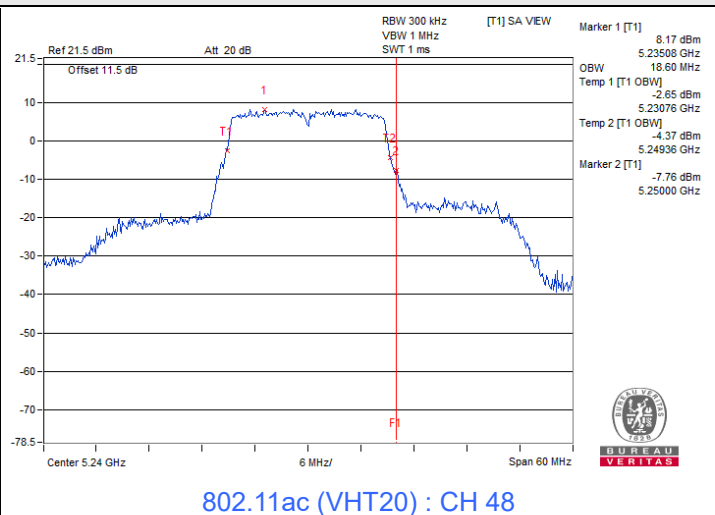
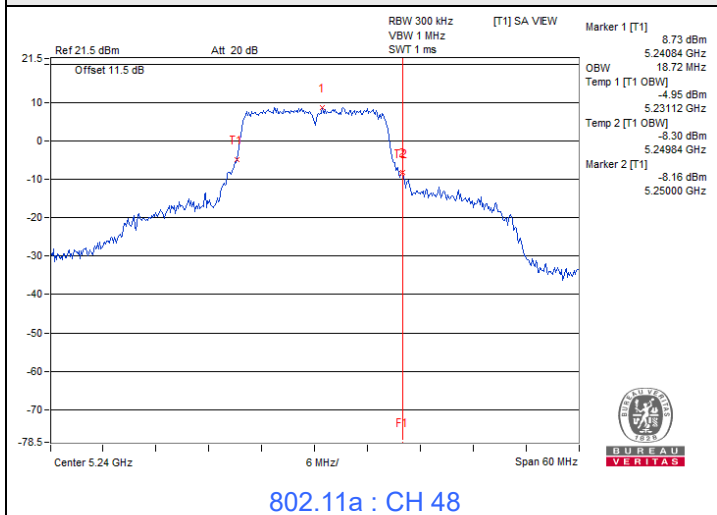
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.24
40	5200	28.92
48	5240	18.6
52	5260	39.65
60	5300	28.44
64	5320	18.72
100	5500	18.12
116	5580	35.82
140	5700	18.24
144 (U-NII-2C)	5720	22.76
144 (U-NII-3)	5720	14.56
149	5745	41.56
157	5785	42.09
165	5825	40.52



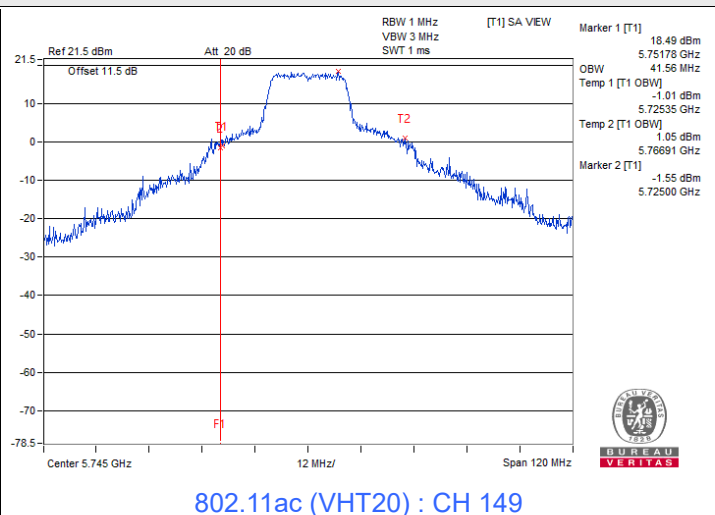
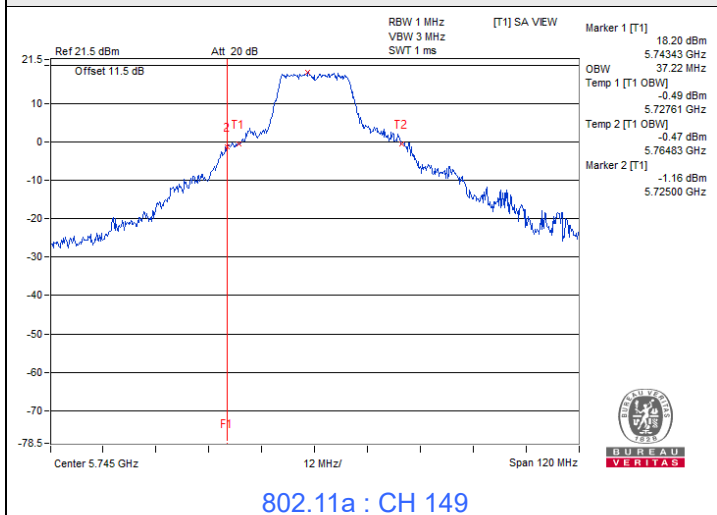
Spectrum Plot of Maximum Value



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



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



7.6 Frequency Stability

Input Power (System):	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
70	120	5179.9871	Pass	5179.9874	Pass	5179.9894	Pass	5179.9885	Pass
60	120	5179.9886	Pass	5179.9897	Pass	5179.9879	Pass	5179.9879	Pass
50	120	5179.9843	Pass	5179.9819	Pass	5179.9841	Pass	5179.9812	Pass
40	120	5180.0021	Pass	5180.0038	Pass	5180.0024	Pass	5180.0028	Pass
30	120	5180.0189	Pass	5180.0187	Pass	5180.0181	Pass	5180.0199	Pass
20	120	5180.0115	Pass	5180.0109	Pass	5180.0134	Pass	5180.014	Pass
10	120	5180.0063	Pass	5180.0067	Pass	5180.0029	Pass	5180.0051	Pass
0	120	5180.0068	Pass	5180.0039	Pass	5180.0034	Pass	5180.0064	Pass
-10	120	5179.9737	Pass	5179.9757	Pass	5179.9725	Pass	5179.9719	Pass
-20	120	5180.0157	Pass	5180.0166	Pass	5180.0166	Pass	5180.0165	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5180.0196	Pass	5180.0189	Pass	5180.0197	Pass	5180.0175	Pass
	120	5180.0115	Pass	5180.0109	Pass	5180.0134	Pass	5180.014	Pass
	102	5180.0094	Pass	5180.011	Pass	5180.0114	Pass	5180.0117	Pass

7.7 AC Power Conducted Emissions

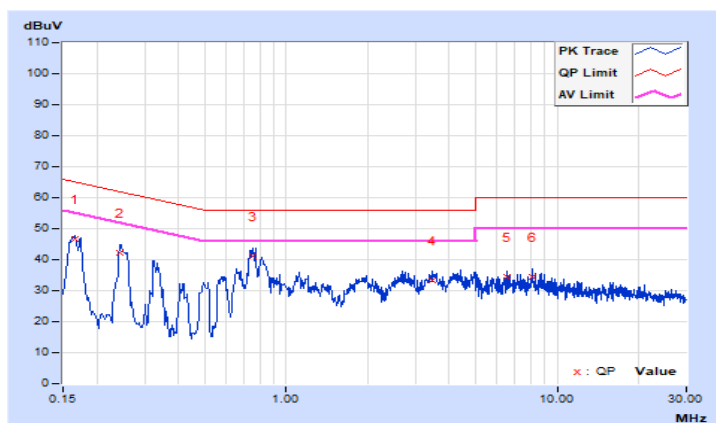
RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Jed Wu		

Phase Of Power : Line (L)

No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16535	9.93	36.73	18.29	46.66	28.22	65.19	55.19	-18.53	-26.97
2	0.24200	9.94	32.28	13.04	42.22	22.98	62.03	52.03	-19.81	-29.05
3	0.75200	9.96	31.31	21.16	41.27	31.12	56.00	46.00	-14.73	-14.88
4	3.44000	10.09	23.36	15.32	33.45	25.41	56.00	46.00	-22.55	-20.59
5	6.50800	10.23	24.08	17.08	34.31	27.31	60.00	50.00	-25.69	-22.69
6	8.08400	10.30	24.14	17.28	34.44	27.58	60.00	50.00	-25.56	-22.42

Remarks:

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

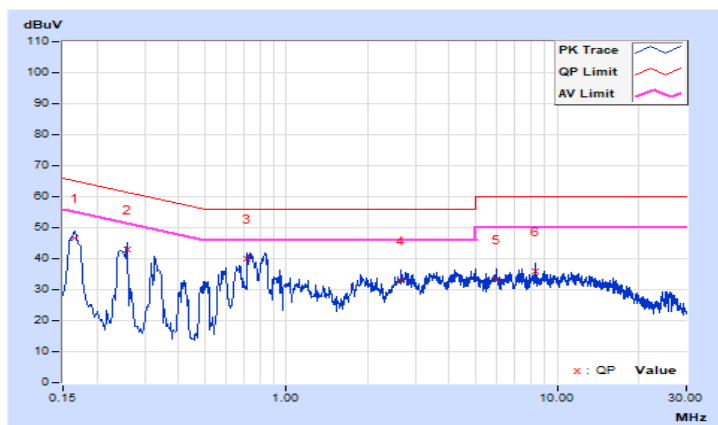


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Jed Wu		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16579	9.94	36.85	17.38	46.79	27.32	65.17	55.17	-18.38	-27.85
2	0.25800	9.95	32.94	10.92	42.89	20.87	61.50	51.50	-18.61	-30.63
3	0.72000	9.98	30.16	20.22	40.14	30.20	56.00	46.00	-15.86	-15.80
4	2.66400	10.07	22.86	15.89	32.93	25.96	56.00	46.00	-23.07	-20.04
5	5.95200	10.21	23.25	16.70	33.46	26.91	60.00	50.00	-26.54	-23.09
6	8.33600	10.30	25.80	19.68	36.10	29.98	60.00	50.00	-23.90	-20.02

Remarks:

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



7.8 Unwanted Emissions below 1 GHz

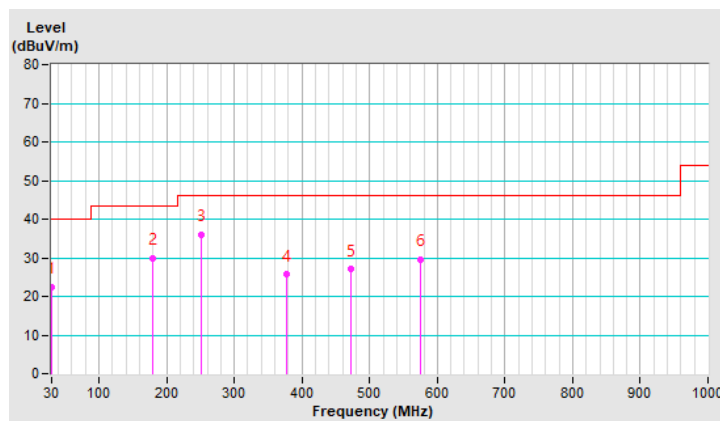
RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	16°C, 59% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.58	22.5 QP	40.0	-17.5	1.06 H	294	33.0	-10.5
2	179.96	29.8 QP	43.5	-13.7	1.24 H	112	39.1	-9.3
3	251.79	35.9 QP	46.0	-10.1	1.13 H	121	43.8	-7.9
4	377.84	25.6 QP	46.0	-20.4	1.38 H	232	29.4	-3.8
5	472.22	27.0 QP	46.0	-19.0	1.69 H	322	28.7	-1.7
6	574.61	29.5 QP	46.0	-16.5	1.57 H	40	29.2	0.3

Remarks:

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

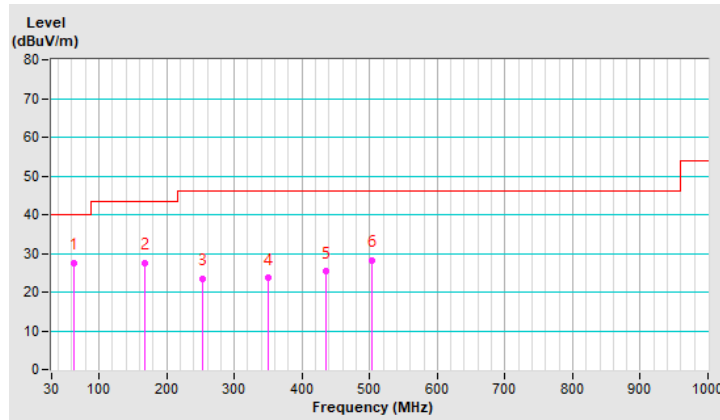


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	16°C, 59% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	62.88	27.5 QP	40.0	-12.5	1.74 V	273	36.8	-9.3
2	168.03	27.6 QP	43.5	-15.9	1.56 V	168	35.7	-8.1
3	252.32	23.5 QP	46.0	-22.5	1.32 V	111	31.4	-7.9
4	349.23	23.6 QP	46.0	-22.4	1.14 V	360	28.5	-4.9
5	436.19	25.3 QP	46.0	-20.7	1.58 V	144	27.7	-2.4
6	503.55	28.2 QP	46.0	-17.8	1.92 V	302	29.5	-1.3

Remarks:

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



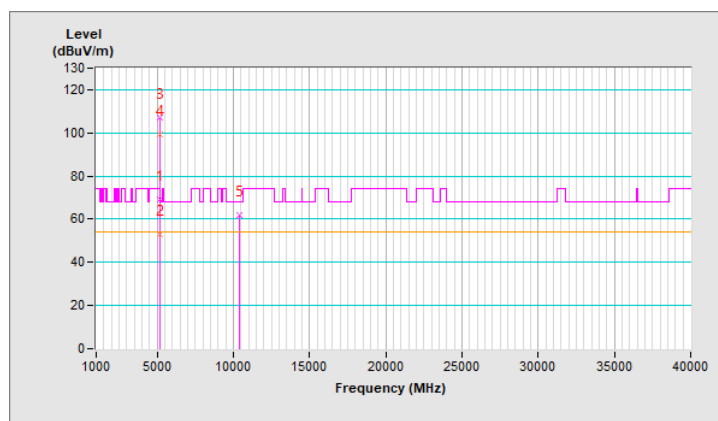
7.9 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	69.32 PK	74.00	-4.68	1.21 H	309	56.92	12.40
2	5150.00	52.98 AV	54.00	-1.02	1.21 H	309	40.58	12.40
3	*5180.00	106.85 PK			1.21 H	309	94.40	12.45
4	*5180.00	99.05 AV			1.21 H	309	86.60	12.45
5	#10360.00	62.09 PK	68.20	-6.11	2.12 H	236	38.41	23.68

Remarks:

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

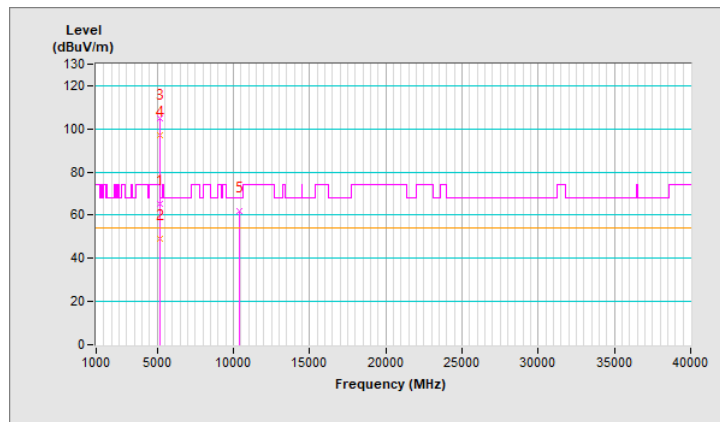


RF Mode	802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.36 PK	74.00	-8.64	3.15 V	332	52.96	12.40
2	5150.00	49.37 AV	54.00	-4.63	3.15 V	332	36.97	12.40
3	*5180.00	104.62 PK			3.15 V	332	92.17	12.45
4	*5180.00	97.00 AV			3.15 V	332	84.55	12.45
5	#10360.00	61.70 PK	68.20	-6.50	2.91 V	276	38.02	23.68

Remarks:

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

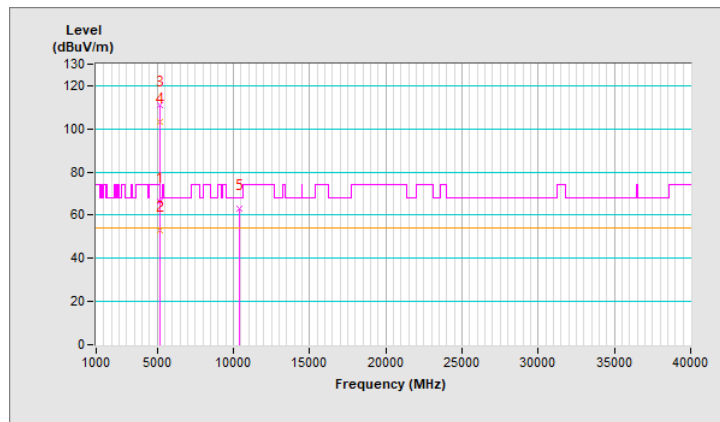


RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.14 PK	74.00	-7.86	2.86 H	308	53.74	12.40
2	5150.00	53.20 AV	54.00	-0.80	2.86 H	308	40.80	12.40
3	*5200.00	111.16 PK			2.86 H	308	98.69	12.47
4	*5200.00	103.40 AV			2.86 H	308	90.93	12.47
5	#10400.00	63.10 PK	68.20	-5.10	3.77 H	237	39.53	23.57

Remarks:

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

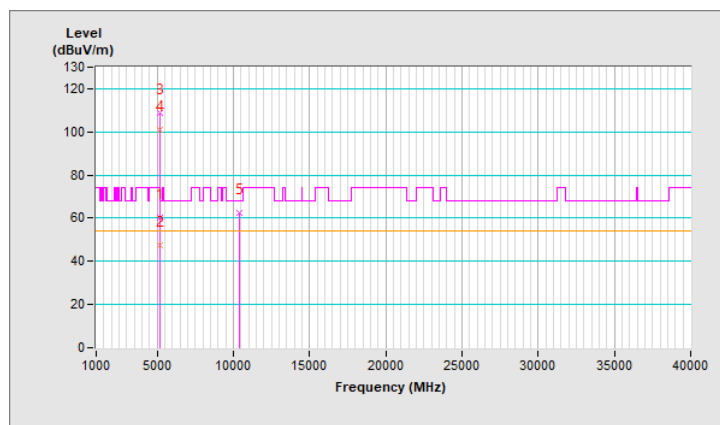


RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.08 PK	74.00	-13.92	1.50 V	333	47.68	12.40
2	5150.00	47.15 AV	54.00	-6.85	1.50 V	333	34.75	12.40
3	*5200.00	108.95 PK			1.50 V	333	96.48	12.47
4	*5200.00	100.90 AV			1.50 V	333	88.43	12.47
5	#10400.00	62.70 PK	68.20	-5.50	1.26 V	275	39.13	23.57

Remarks:

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



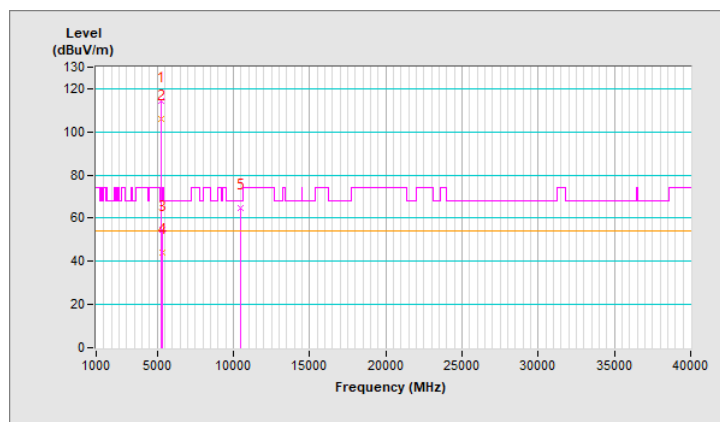
RF Mode	802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	114.56 PK			2.87 H	222	101.69	12.87
2	*5240.00	106.28 AV			2.87 H	222	93.41	12.87
3	5350.00	54.91 PK	74.00	-19.09	2.87 H	222	41.29	13.62
4	5350.00	44.04 AV	54.00	-9.96	2.87 H	222	30.42	13.62
5	#10480.00	65.00 PK	68.20	-3.20	3.78 H	151	40.65	24.35

Remarks:

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

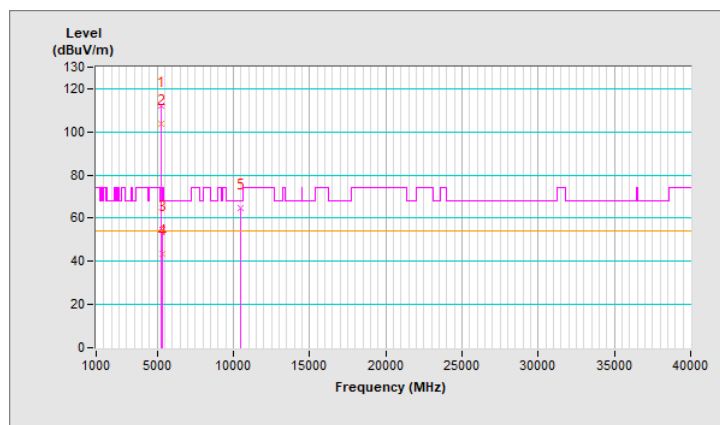


RF Mode	802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	112.00 PK			1.49 V	245	99.13	12.87
2	*5240.00	103.85 AV			1.49 V	245	90.98	12.87
3	5350.00	54.40 PK	74.00	-19.60	1.49 V	245	40.78	13.62
4	5350.00	43.60 AV	54.00	-10.40	1.49 V	245	29.98	13.62
5	#10480.00	64.60 PK	68.20	-3.60	1.25 V	189	40.25	24.35

Remarks:

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

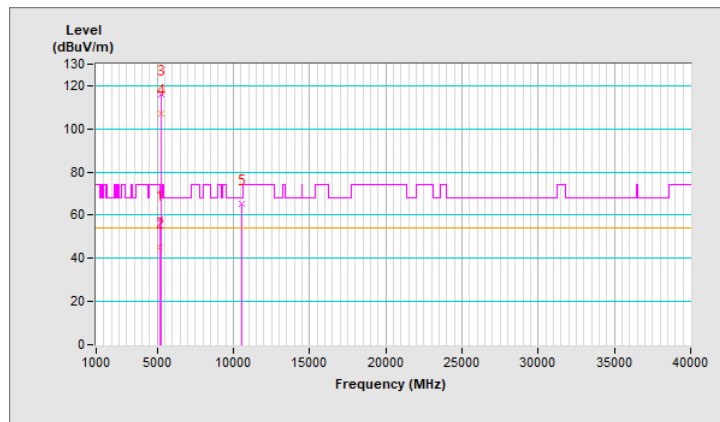


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.28 PK	74.00	-15.72	2.84 H	222	45.88	12.40
2	5150.00	45.13 AV	54.00	-8.87	2.84 H	222	32.73	12.40
3	*5260.00	115.78 PK			2.84 H	222	102.69	13.09
4	*5260.00	107.28 AV			2.84 H	222	94.19	13.09
5	#10520.00	65.40 PK	68.20	-2.80	3.75 H	149	40.89	24.51

Remarks:

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

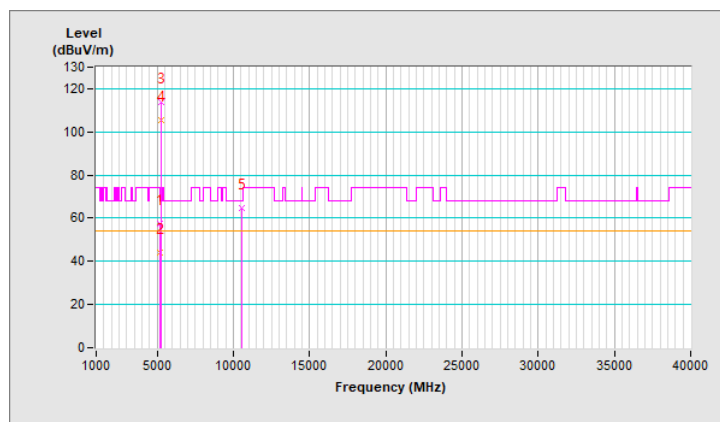


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.19 PK	74.00	-16.81	1.52 V	245	44.79	12.40
2	5150.00	43.96 AV	54.00	-10.04	1.52 V	245	31.56	12.40
3	*5260.00	113.66 PK			1.52 V	245	100.57	13.09
4	*5260.00	105.18 AV			1.52 V	245	92.09	13.09
5	#10520.00	65.00 PK	68.20	-3.20	1.28 V	189	40.49	24.51

Remarks:

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

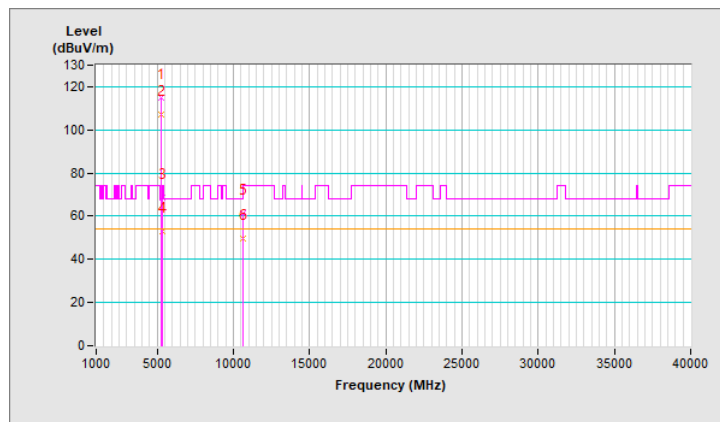


RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.04 PK			2.82 H	221	101.56	13.48
2	*5300.00	107.34 AV			2.82 H	221	93.86	13.48
3	5350.00	68.90 PK	74.00	-5.10	2.82 H	221	55.28	13.62
4	5350.00	53.20 AV	54.00	-0.80	2.82 H	221	39.58	13.62
5	10600.00	61.44 PK	74.00	-12.56	3.73 H	148	37.06	24.38
6	10600.00	49.46 AV	54.00	-4.54	3.73 H	148	25.08	24.38

Remarks:

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

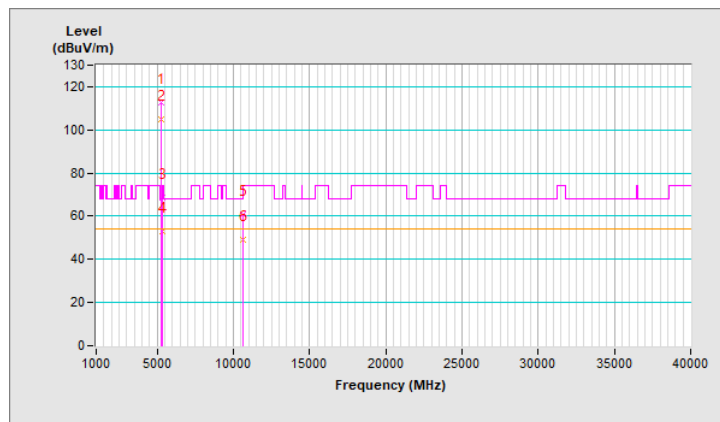


RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	112.85 PK			1.54 V	244	99.37	13.48
2	*5300.00	104.70 AV			1.54 V	244	91.22	13.48
3	5350.00	68.40 PK	74.00	-5.60	1.54 V	244	54.78	13.62
4	5350.00	52.90 AV	54.00	-1.10	1.54 V	244	39.28	13.62
5	10600.00	61.00 PK	74.00	-13.00	1.30 V	188	36.62	24.38
6	10600.00	49.10 AV	54.00	-4.90	1.30 V	188	24.72	24.38

Remarks:

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

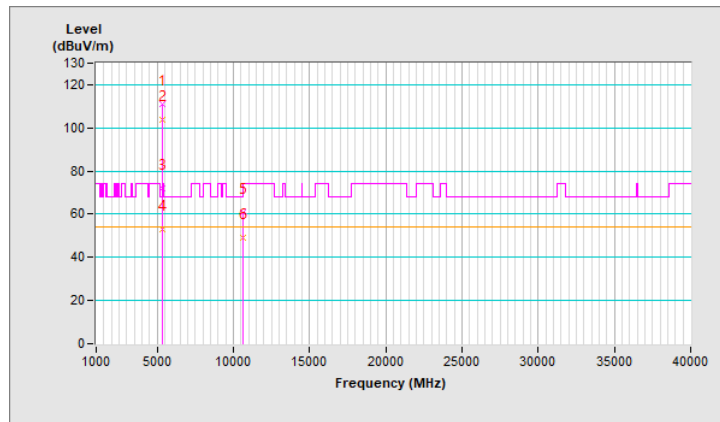


RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	111.30 PK			2.80 H	223	97.75	13.55
2	*5320.00	103.80 AV			2.80 H	223	90.25	13.55
3	5350.00	71.90 PK	74.00	-2.10	2.80 H	223	58.28	13.62
4	5350.00	53.00 AV	54.00	-1.00	2.80 H	223	39.38	13.62
5	10640.00	61.00 PK	74.00	-13.00	3.71 H	146	36.19	24.81
6	10640.00	49.10 AV	54.00	-4.90	3.71 H	146	24.29	24.81

Remarks:

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

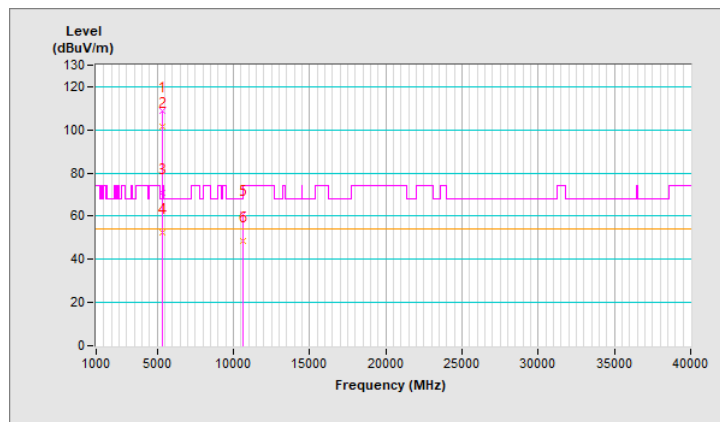


RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	109.05 PK			1.56 V	246	95.50	13.55
2	*5320.00	101.63 AV			1.56 V	246	88.08	13.55
3	5350.00	70.92 PK	74.00	-3.08	1.56 V	246	57.30	13.62
4	5350.00	52.49 AV	54.00	-1.51	1.56 V	246	38.87	13.62
5	10640.00	60.60 PK	74.00	-13.40	1.32 V	190	35.79	24.81
6	10640.00	48.80 AV	54.00	-5.20	1.32 V	190	23.99	24.81

Remarks:

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

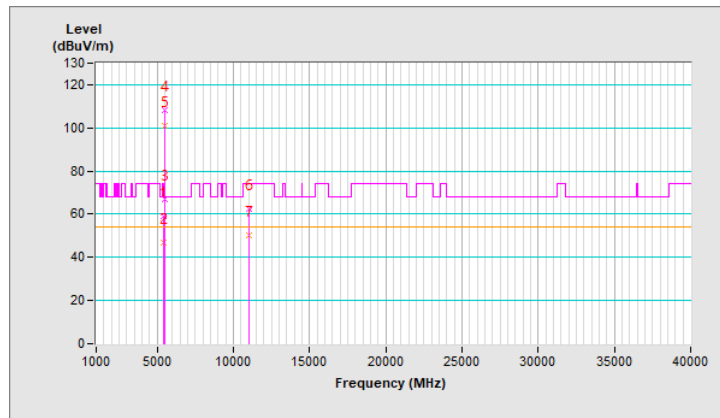


RF Mode	802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.25 PK	74.00	-14.75	2.45 H	312	45.30	13.95
2	5460.00	47.06 AV	54.00	-6.94	2.45 H	312	33.11	13.95
3	#5470.00	67.10 PK	68.20	-1.10	2.45 H	312	53.12	13.98
4	*5500.00	108.30 PK			2.45 H	312	94.28	14.02
5	*5500.00	100.78 AV			2.45 H	312	86.76	14.02
6	11000.00	62.50 PK	74.00	-11.50	3.37 H	239	36.92	25.58
7	11000.00	50.30 AV	54.00	-3.70	3.37 H	239	24.72	25.58

Remarks:

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

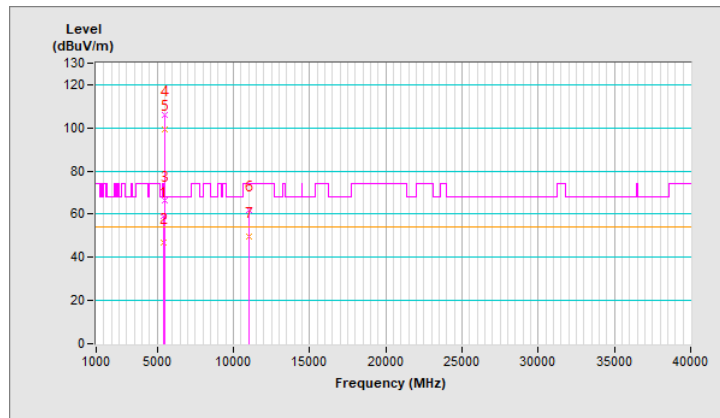


RF Mode	802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.90 PK	74.00	-15.10	1.91 V	325	44.95	13.95
2	5460.00	46.80 AV	54.00	-7.20	1.91 V	325	32.85	13.95
3	#5470.00	66.30 PK	68.20	-1.90	1.91 V	325	52.32	13.98
4	*5500.00	106.25 PK			1.91 V	325	92.23	14.02
5	*5500.00	99.10 AV			1.91 V	325	85.08	14.02
6	11000.00	62.10 PK	74.00	-11.90	1.67 V	268	36.52	25.58
7	11000.00	49.90 AV	54.00	-4.10	1.67 V	268	24.32	25.58

Remarks:

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

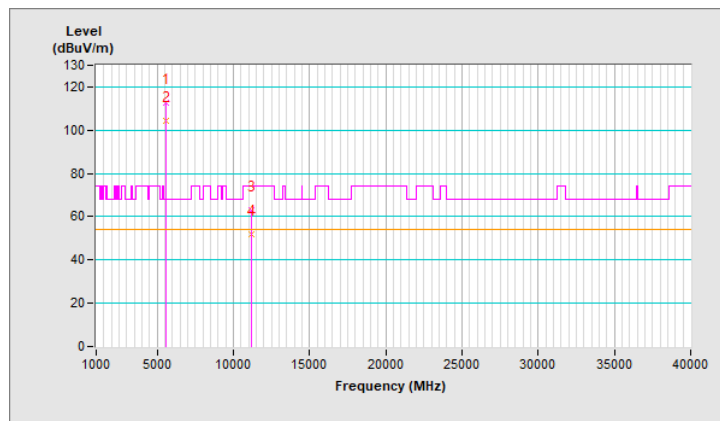


RF Mode	802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	112.57 PK			2.29 H	297	98.74	13.83
2	*5580.00	104.46 AV			2.29 H	297	90.63	13.83
3	11160.00	63.10 PK	74.00	-10.90	3.21 H	224	36.92	26.18
4	11160.00	51.90 AV	54.00	-2.10	3.21 H	224	25.72	26.18

Remarks:

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

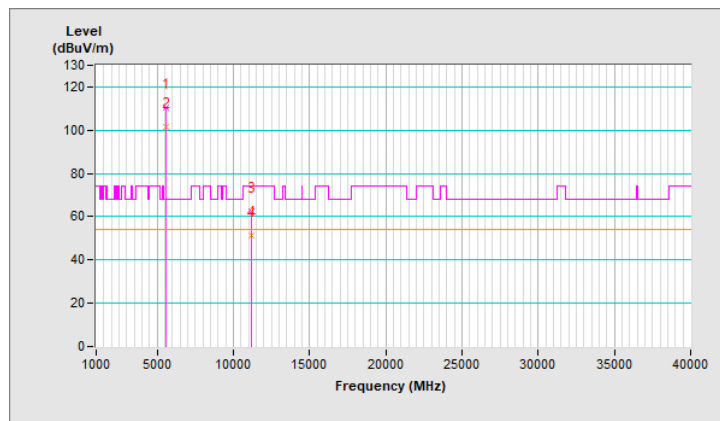


RF Mode	802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.28 PK			1.75 V	340	96.45	13.83
2	*5580.00	101.77 AV			1.75 V	340	87.94	13.83
3	11160.00	62.70 PK	74.00	-11.30	1.83 V	283	36.52	26.18
4	11160.00	51.50 AV	54.00	-2.50	1.83 V	283	25.32	26.18

Remarks:

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

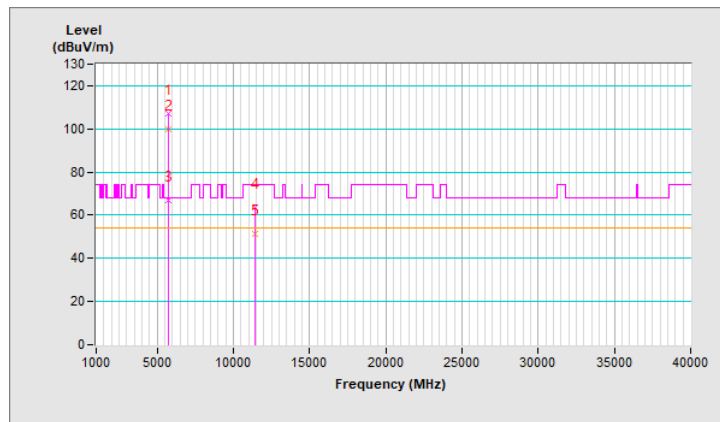


RF Mode	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	107.30 PK			2.42 H	291	93.98	13.32
2	*5700.00	99.78 AV			2.42 H	291	86.46	13.32
3	#5725.00	67.10 PK	68.20	-1.10	2.42 H	291	53.72	13.38
4	11400.00	63.50 PK	74.00	-10.50	3.34 H	218	36.61	26.89
5	11400.00	51.30 AV	54.00	-2.70	3.34 H	218	24.41	26.89

Remarks:

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

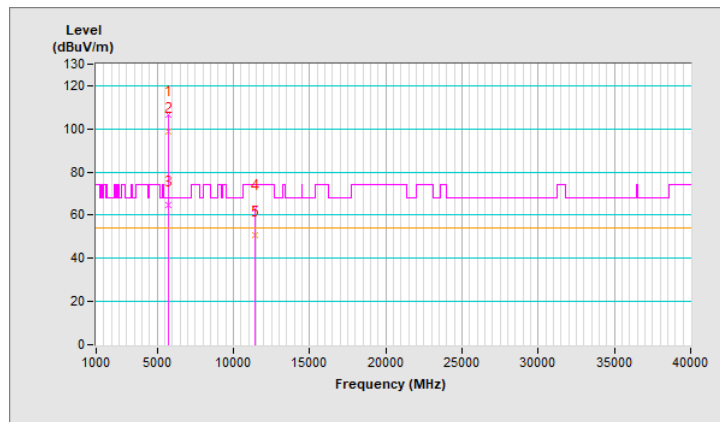


RF Mode	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	106.43 PK			1.88 V	346	91.74	14.69
2	*5700.00	98.80 AV			1.88 V	346	84.11	14.69
3	#5725.00	64.76 PK	68.20	-3.44	1.88 V	346	51.38	13.38
4	11400.00	63.10 PK	74.00	-10.90	1.64 V	289	36.21	26.89
5	11400.00	50.90 AV	54.00	-3.10	1.64 V	289	24.01	26.89

Remarks:

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

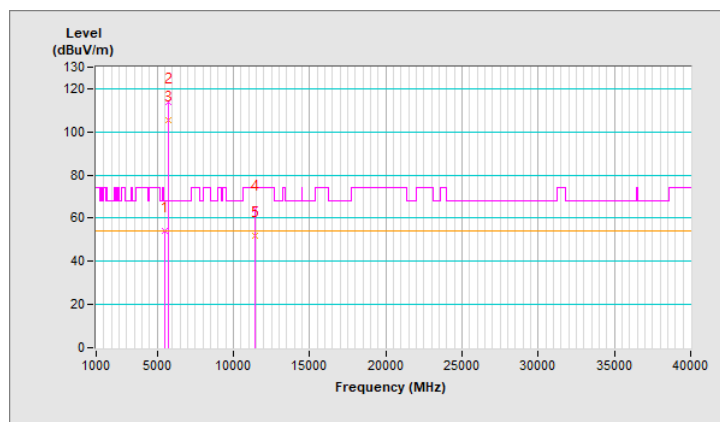


RF Mode	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	54.07 PK	68.20	-14.13	2.71 H	331	40.09	13.98
2	*5720.00	113.85 PK			2.71 H	331	100.47	13.38
3	*5720.00	105.22 AV			2.71 H	331	91.84	13.38
4	11440.00	64.00 PK	74.00	-10.00	3.63 H	258	37.11	26.89
5	11440.00	51.80 AV	54.00	-2.20	3.63 H	258	24.91	26.89

Remarks:

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

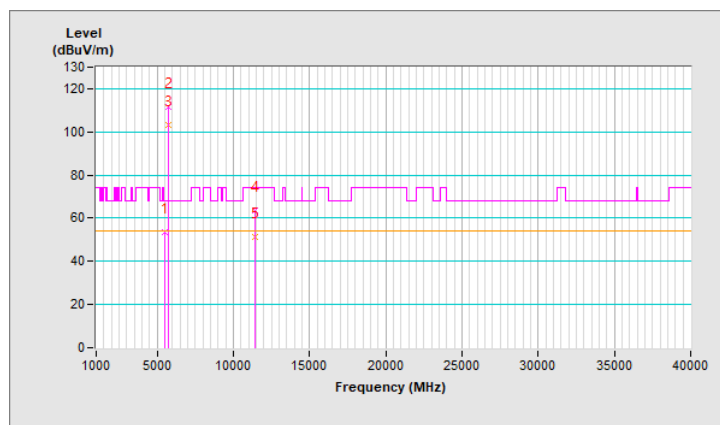


RF Mode	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	53.70 PK	68.20	-14.50	2.17 V	344	39.72	13.98
2	*5720.00	111.48 PK			2.17 V	344	98.10	13.38
3	*5720.00	103.42 AV			2.17 V	344	90.04	13.38
4	11440.00	63.60 PK	74.00	-10.40	1.93 V	287	36.71	26.89
5	11440.00	51.40 AV	54.00	-2.60	1.93 V	287	24.51	26.89

Remarks:

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

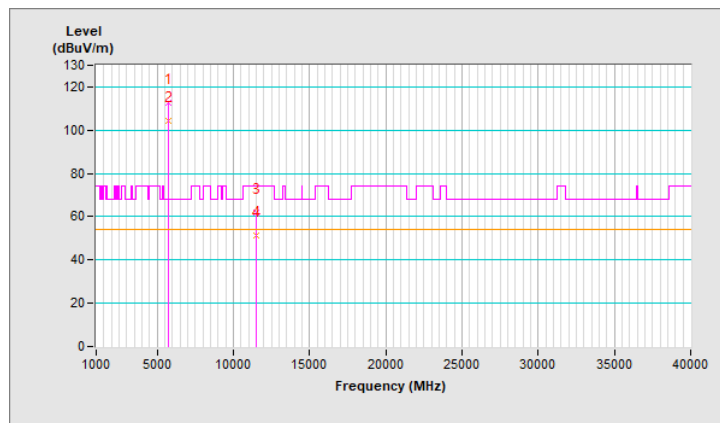


RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	112.43 PK			2.71 H	293	99.00	13.43
2	*5745.00	104.24 AV			2.71 H	293	90.81	13.43
3	11490.00	61.80 PK	74.00	-12.20	3.63 H	220	35.02	26.78
4	11490.00	51.30 AV	54.00	-2.70	3.63 H	220	24.52	26.78

Remarks:

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

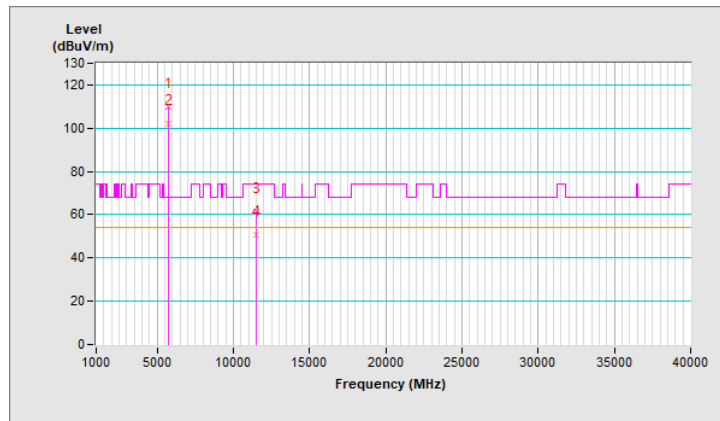


RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	110.10 PK			2.17 V	306	96.67	13.43
2	*5745.00	101.96 AV			2.17 V	306	88.53	13.43
3	11490.00	61.40 PK	74.00	-12.60	1.93 V	249	34.62	26.78
4	11490.00	50.90 AV	54.00	-3.10	1.93 V	249	24.12	26.78

Remarks:

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

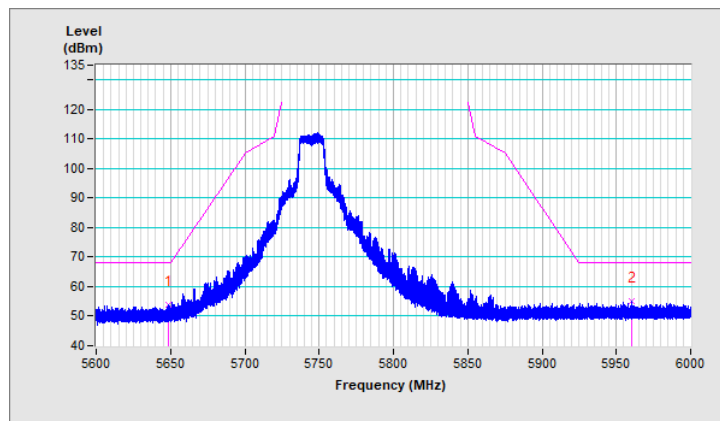


RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.63	53.80 PK	68.20	-14.40	2.71 H	293	40.39	13.41
2	#5960.09	54.90 PK	68.20	-13.30	2.71 H	293	41.00	13.90

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

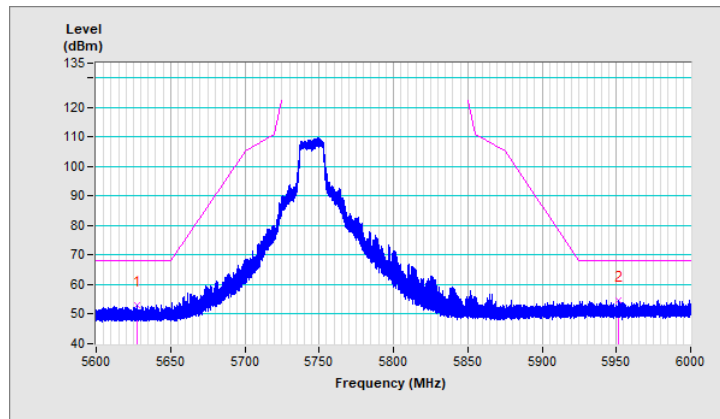


RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5627.20	52.90 PK	68.20	-15.30	2.17 V	306	39.38	13.52
2	#5951.73	54.70 PK	68.20	-13.50	2.17 V	306	40.81	13.89

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

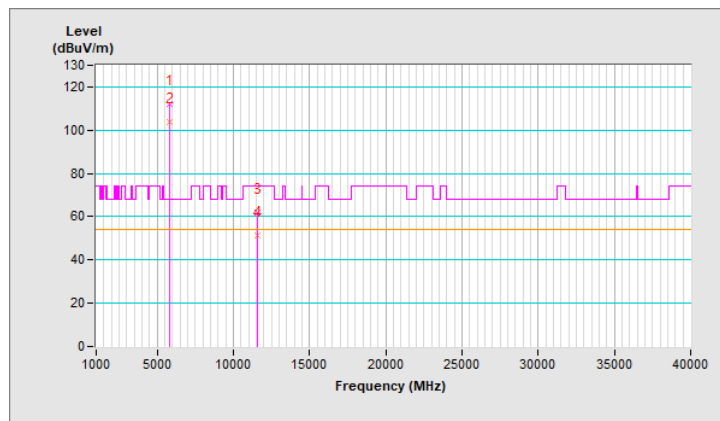


RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	112.30 PK			2.48 H	290	98.90	13.40
2	*5785.00	104.00 AV			2.48 H	290	90.60	13.40
3	11570.00	61.80 PK	74.00	-12.20	3.40 H	217	34.82	26.98
4	11570.00	51.30 AV	54.00	-2.70	3.40 H	217	24.32	26.98

Remarks:

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

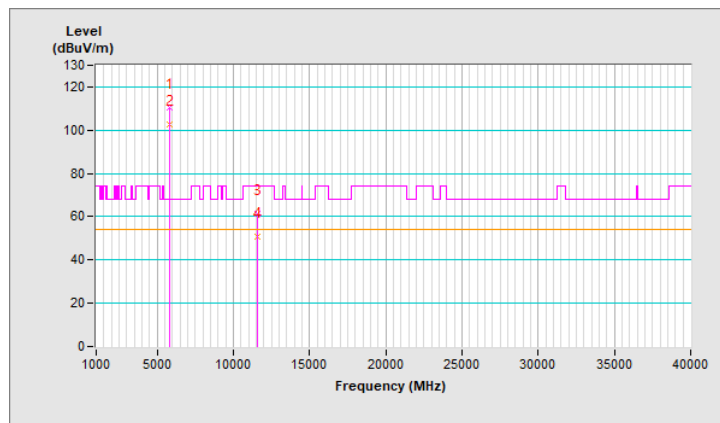


RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	110.60 PK			1.94 V	303	97.20	13.40
2	*5785.00	102.46 AV			1.94 V	303	89.06	13.40
3	11570.00	61.40 PK	74.00	-12.60	1.70 V	246	34.42	26.98
4	11570.00	50.90 AV	54.00	-3.10	1.70 V	246	23.92	26.98

Remarks:

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

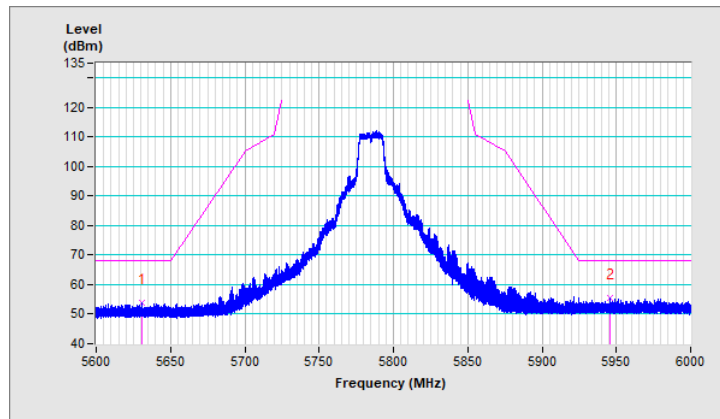


RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	#5631.04	53.90 PK	68.20	-14.30	2.48 H	290	40.40	13.50
2	#5945.71	55.40 PK	68.20	-12.80	2.48 H	290	41.50	13.90

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

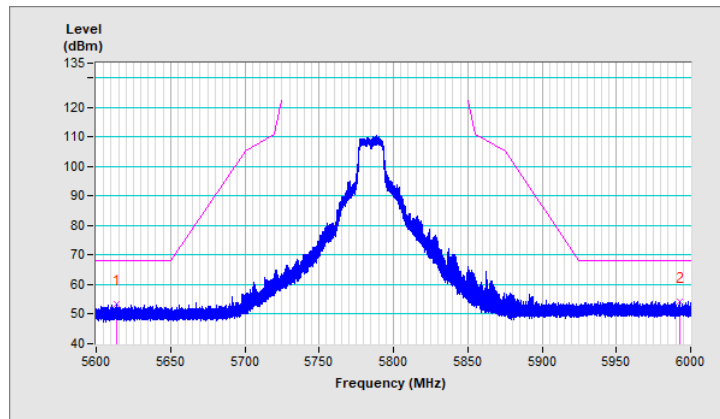


RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5613.88	53.30 PK	68.20	-14.90	1.94 V	303	39.71	13.59
2	#5992.96	54.30 PK	68.20	-13.90	1.94 V	303	40.39	13.91

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

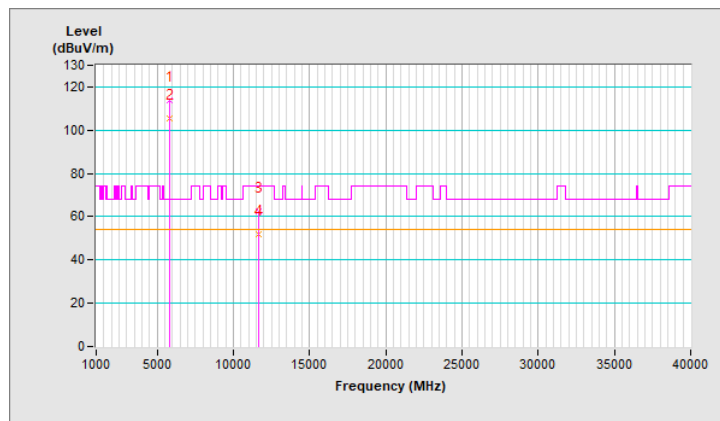


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	113.79 PK			2.55 H	290	100.30	13.49
2	*5825.00	105.55 AV			2.55 H	290	92.06	13.49
3	11650.00	62.50 PK	74.00	-11.50	3.47 H	218	34.71	27.79
4	11650.00	52.00 AV	54.00	-2.00	3.47 H	218	24.21	27.79

Remarks:

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

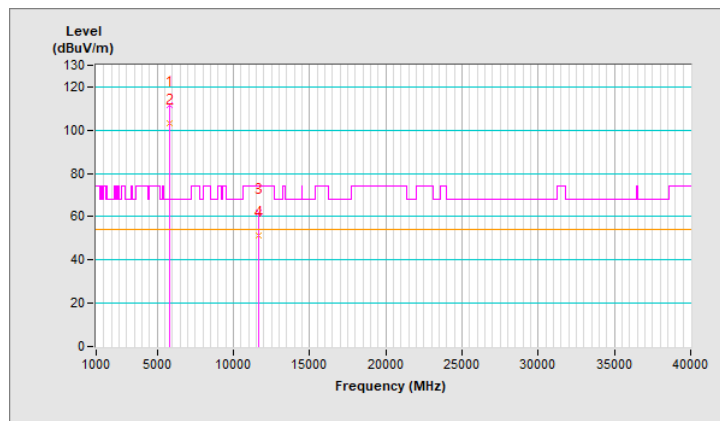


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	111.56 PK			2.01 V	302	98.07	13.49
2	*5825.00	103.49 AV			2.01 V	302	90.00	13.49
3	11650.00	62.10 PK	74.00	-11.90	1.57 V	246	34.31	27.79
4	11650.00	51.60 AV	54.00	-2.40	1.57 V	246	23.81	27.79

Remarks:

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

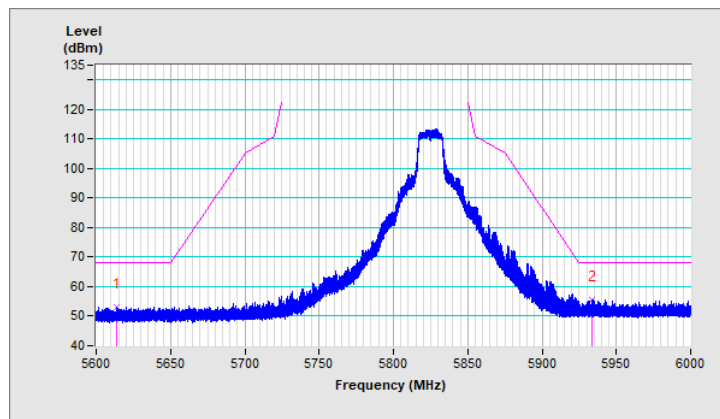


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5614.13	53.10 PK	68.20	-15.10	2.55 H	290	39.51	13.59
2	#5933.78	55.40 PK	68.20	-12.80	2.55 H	290	41.52	13.88

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

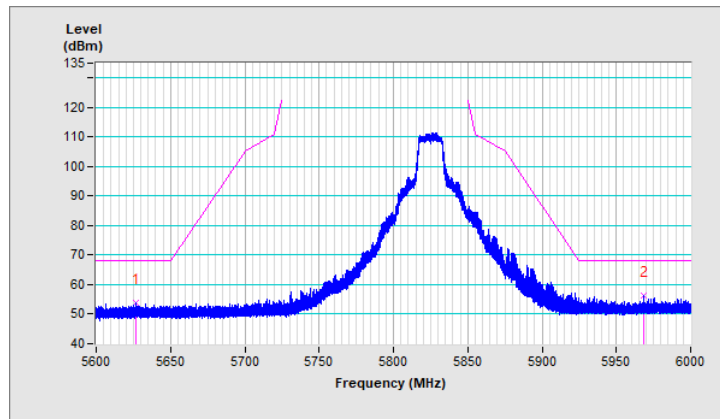


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.72	54.00 PK	68.20	-14.20	2.01 V	302	40.48	13.52
2	#5968.46	56.20 PK	68.20	-12.00	2.01 V	302	42.30	13.90

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

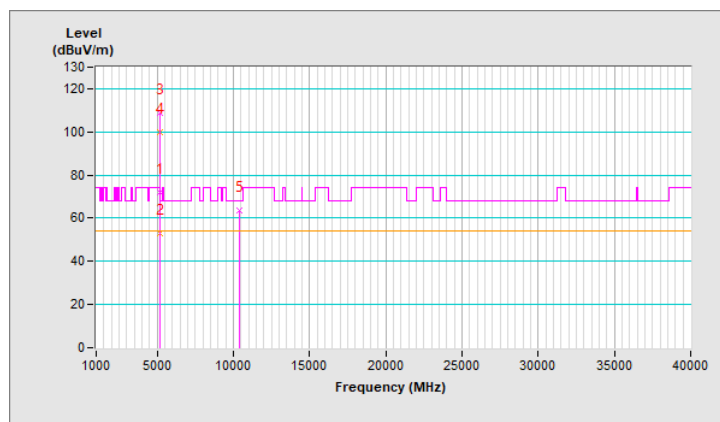


RF Mode	802.11ac (VHT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.81 PK	74.00	-2.19	2.75 H	308	59.41	12.40
2	5150.00	53.20 AV	54.00	-0.80	2.75 H	308	40.80	12.40
3	*5180.00	108.61 PK			2.75 H	308	96.16	12.45
4	*5180.00	99.62 AV			2.75 H	308	87.17	12.45
5	#10360.00	63.80 PK	68.20	-4.40	3.66 H	235	40.12	23.68

Remarks:

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

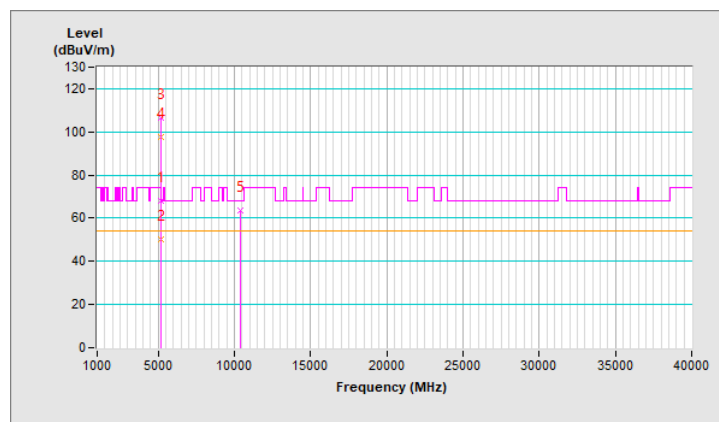


RF Mode	802.11ac (VHT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.25 PK	74.00	-5.75	1.61 V	331	55.85	12.40
2	5150.00	50.26 AV	54.00	-3.74	1.61 V	331	37.86	12.40
3	*5180.00	106.70 PK			1.61 V	331	94.25	12.45
4	*5180.00	97.73 AV			1.61 V	331	85.28	12.45
5	#10360.00	63.40 PK	68.20	-4.80	1.37 V	277	39.72	23.68

Remarks:

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

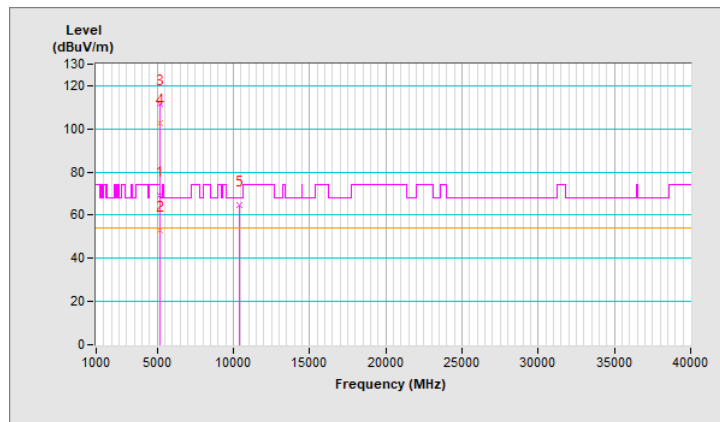


RF Mode	802.11ac (VHT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.96 PK	74.00	-5.04	2.75 H	249	56.56	12.40
2	5150.00	53.20 AV	54.00	-0.80	2.75 H	249	40.80	12.40
3	*5200.00	111.57 PK			2.75 H	249	99.10	12.47
4	*5200.00	102.85 AV			2.75 H	249	90.38	12.47
5	#10400.00	64.50 PK	68.20	-3.70	3.67 H	176	40.93	23.57

Remarks:

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

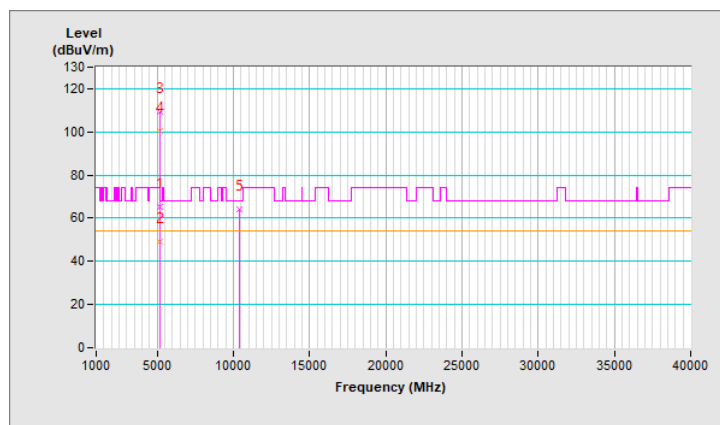


RF Mode	802.11ac (VHT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	5150.00	65.36 PK	74.00	-8.64	1.62 V	272	52.96	12.40
2	5150.00	49.19 AV	54.00	-4.81	1.62 V	272	36.79	12.40
3	*5200.00	109.27 PK			1.62 V	272	96.80	12.47
4	*5200.00	100.40 AV			1.62 V	272	87.93	12.47
5	#10400.00	64.10 PK	68.20	-4.10	1.37 V	272	40.53	23.57

Remarks:

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

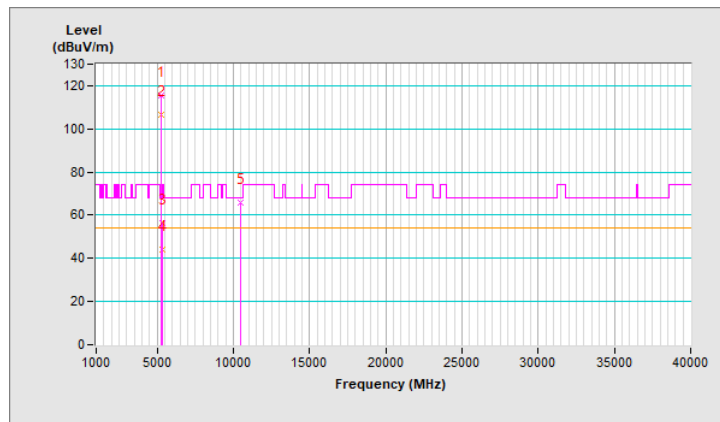


RF Mode	802.11ac (VHT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	115.26 PK			2.86 H	223	102.39	12.87
2	*5240.00	106.57 AV			2.86 H	223	93.70	12.87
3	5350.00	56.55 PK	74.00	-17.45	2.86 H	223	42.93	13.62
4	5350.00	44.16 AV	54.00	-9.84	2.86 H	223	30.54	13.62
5	#10480.00	65.70 PK	68.20	-2.50	3.56 H	150	41.35	24.35

Remarks:

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

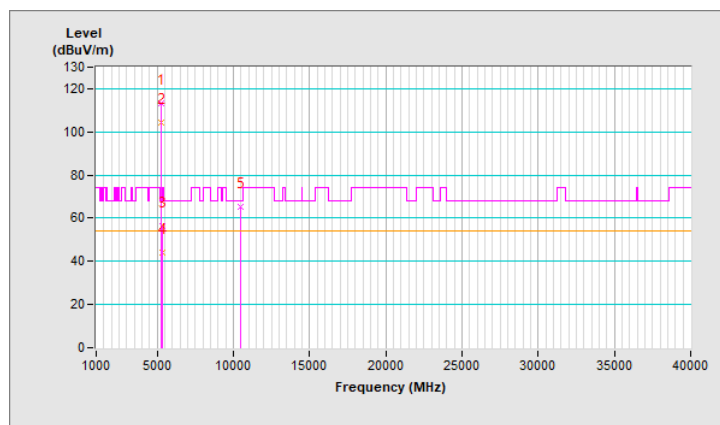


RF Mode	802.11ac (VHT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	113.00 PK			1.51 V	246	100.13	12.87
2	*5240.00	104.42 AV			1.51 V	246	91.55	12.87
3	5350.00	56.10 PK	74.00	-17.90	1.51 V	246	42.48	13.62
4	5350.00	43.90 AV	54.00	-10.10	1.51 V	246	30.28	13.62
5	#10480.00	65.30 PK	68.20	-2.90	1.27 V	190	40.95	24.35

Remarks:

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

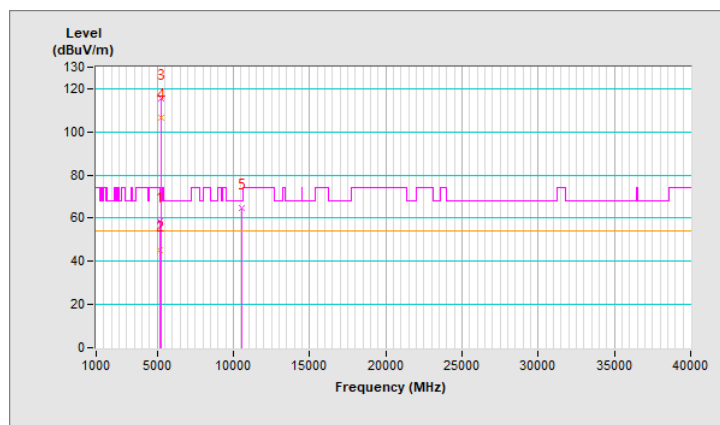


RF Mode	802.11ac (VHT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.83 PK	74.00	-15.17	2.46 H	308	46.43	12.40
2	5150.00	44.93 AV	54.00	-9.07	2.46 H	308	32.53	12.40
3	*5260.00	115.30 PK			2.46 H	308	102.21	13.09
4	*5260.00	106.62 AV			2.46 H	308	93.53	13.09
5	#10520.00	64.90 PK	68.20	-3.30	3.37 H	235	40.39	24.51

Remarks:

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

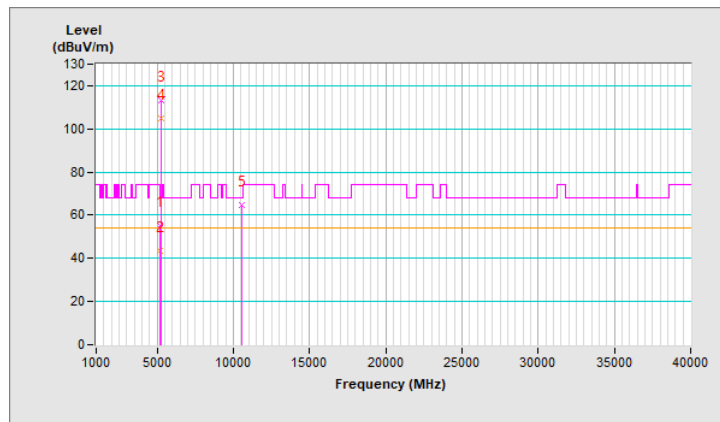


RF Mode	802.11ac (VHT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.47 PK	74.00	-18.53	1.90 V	333	43.07	12.40
2	5150.00	43.44 AV	54.00	-10.56	1.90 V	333	31.04	12.40
3	*5260.00	113.20 PK			1.90 V	333	100.11	13.09
4	*5260.00	104.78 AV			1.90 V	333	91.69	13.09
5	#10520.00	64.50 PK	68.20	-3.70	1.66 V	275	39.99	24.51

Remarks:

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

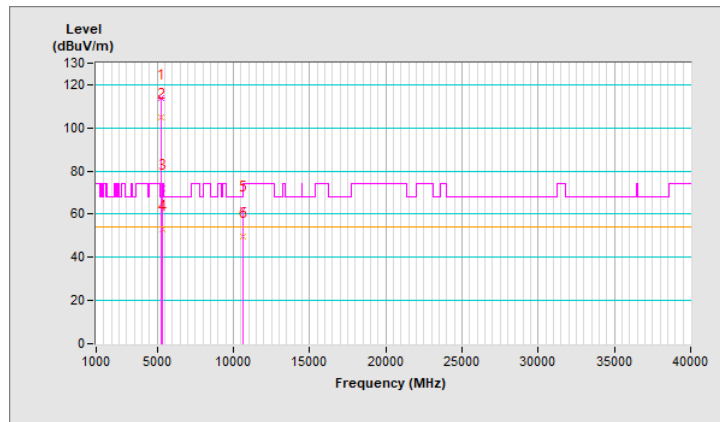


RF Mode	802.11ac (VHT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.57 PK			2.46 H	315	100.09	13.48
2	*5300.00	104.70 AV			2.46 H	315	91.22	13.48
3	5350.00	71.84 PK	74.00	-2.16	2.46 H	315	58.22	13.62
4	5350.00	53.20 AV	54.00	-0.80	2.46 H	315	39.58	13.62
5	10600.00	62.00 PK	74.00	-12.00	3.38 H	242	37.62	24.38
6	10600.00	49.80 AV	54.00	-4.20	3.38 H	242	25.42	24.38

Remarks:

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

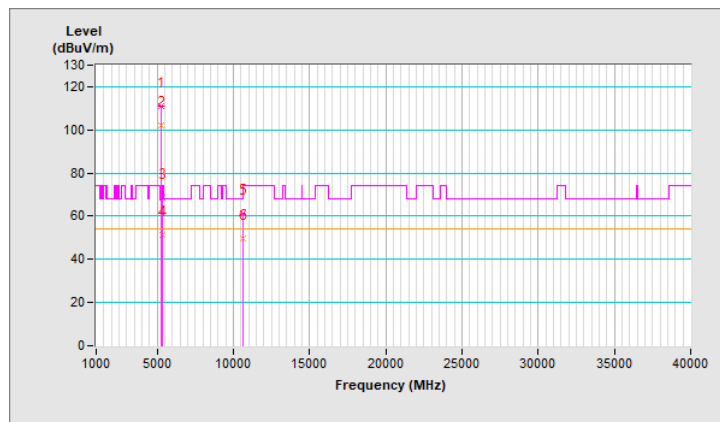


RF Mode	802.11ac (VHT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	111.20 PK			1.91 V	338	97.72	13.48
2	*5300.00	102.28 AV			1.91 V	338	88.80	13.48
3	5350.00	68.70 PK	74.00	-5.30	1.91 V	338	55.08	13.62
4	5350.00	51.60 AV	54.00	-2.40	1.91 V	338	37.98	13.62
5	10600.00	61.60 PK	74.00	-12.40	1.67 V	282	37.22	24.38
6	10600.00	49.40 AV	54.00	-4.60	1.67 V	282	25.02	24.38

Remarks:

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

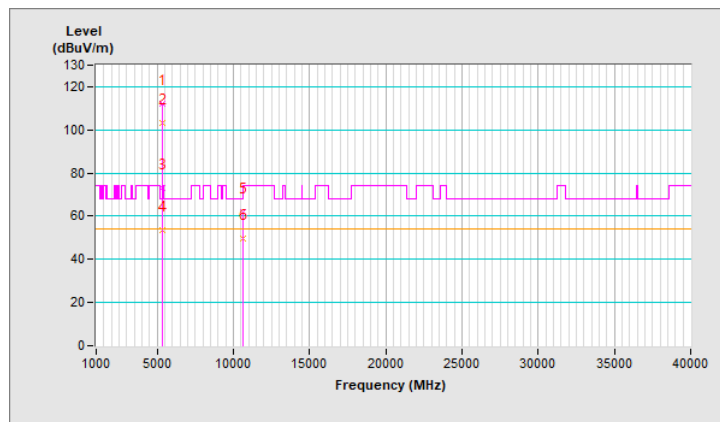


RF Mode	802.11ac (VHT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	112.10 PK			2.24 H	314	98.55	13.55
2	*5320.00	102.96 AV			2.24 H	314	89.41	13.55
3	5350.00	72.90 PK	74.00	-1.10	2.24 H	314	59.28	13.62
4	5350.00	53.30 AV	54.00	-0.70	2.24 H	314	39.68	13.62
5	10640.00	62.00 PK	74.00	-12.00	3.16 H	241	37.19	24.81
6	10640.00	49.80 AV	54.00	-4.20	3.16 H	241	24.99	24.81

Remarks:

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

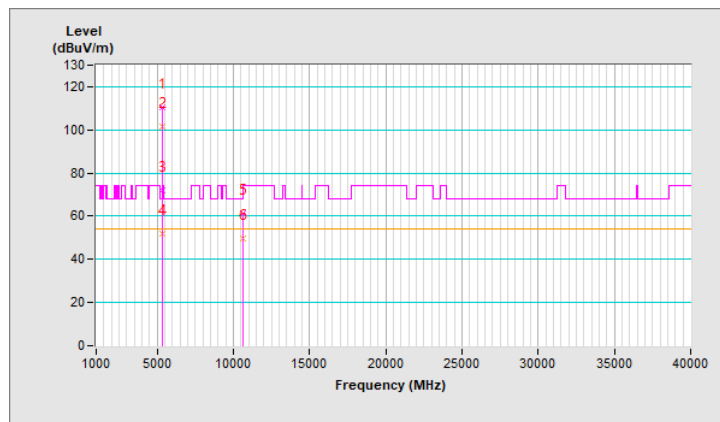


RF Mode	802.11ac (VHT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.20 PK			2.12 V	327	96.65	13.55
2	*5320.00	101.33 AV			2.12 V	327	87.78	13.55
3	5350.00	71.90 PK	74.00	-2.10	2.12 V	327	58.28	13.62
4	5350.00	52.10 AV	54.00	-1.90	2.12 V	327	38.48	13.62
5	10640.00	61.60 PK	74.00	-12.40	1.88 V	271	36.79	24.81
6	10640.00	49.40 AV	54.00	-4.60	1.88 V	271	24.59	24.81

Remarks:

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

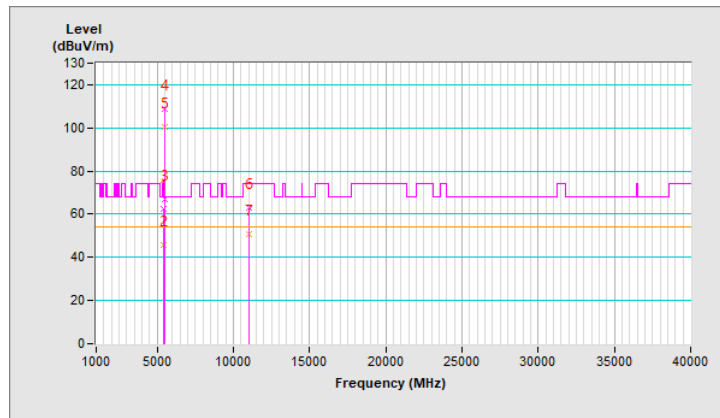


RF Mode	802.11ac (VHT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.45 PK	74.00	-11.55	2.88 H	304	48.50	13.95
2	5460.00	45.96 AV	54.00	-8.04	2.88 H	304	32.01	13.95
3	#5470.00	67.10 PK	68.20	-1.10	2.88 H	304	53.12	13.98
4	*5500.00	109.00 PK			2.88 H	304	94.98	14.02
5	*5500.00	100.30 AV			2.88 H	304	86.28	14.02
6	11000.00	63.20 PK	74.00	-10.80	3.80 H	231	37.62	25.58
7	11000.00	51.00 AV	54.00	-3.00	3.80 H	231	25.42	25.58

Remarks:

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

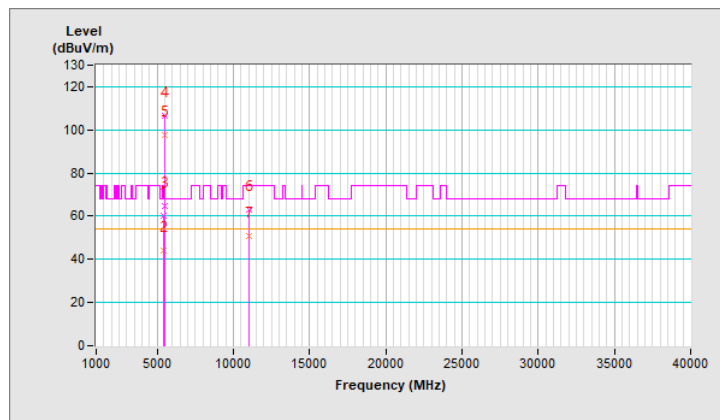


RF Mode	802.11ac (VHT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.00 PK	74.00	-14.00	2.34 V	333	46.05	13.95
2	5460.00	44.10 AV	54.00	-9.90	2.34 V	333	30.15	13.95
3	#5470.00	64.83 PK	68.20	-3.37	2.34 V	333	50.85	13.98
4	*5500.00	106.78 PK			2.34 V	333	92.76	14.02
5	*5500.00	97.78 AV			2.34 V	333	83.76	14.02
6	11000.00	62.80 PK	74.00	-11.20	2.10 V	276	37.22	25.58
7	11000.00	50.60 AV	54.00	-3.40	2.10 V	276	25.02	25.58

Remarks:

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

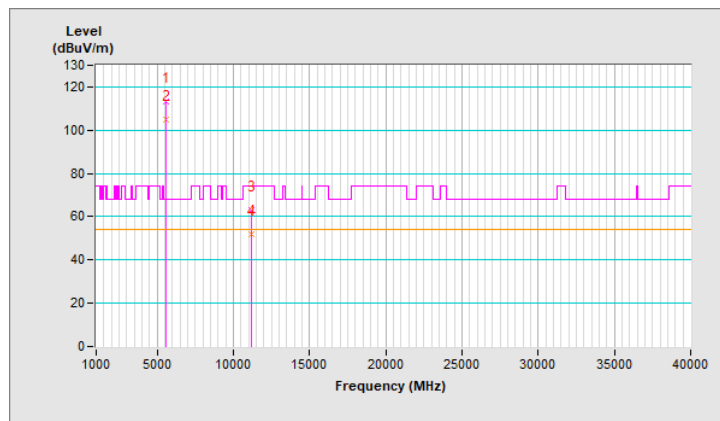


RF Mode	802.11ac (VHT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	113.38 PK			2.72 H	306	99.55	13.83
2	*5580.00	104.72 AV			2.72 H	306	90.89	13.83
3	11160.00	63.08 PK	74.00	-10.92	3.10 H	233	36.90	26.18
4	11160.00	51.72 AV	54.00	-2.28	3.10 H	233	25.54	26.18

Remarks:

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

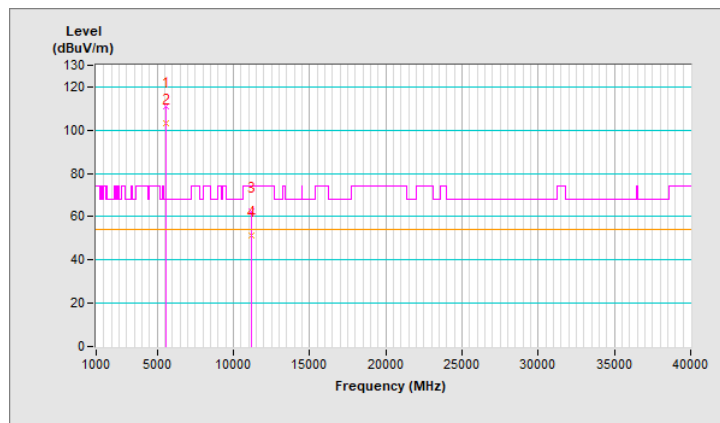


RF Mode	802.11ac (VHT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	111.30 PK			1.64 V	331	97.47	13.83
2	*5580.00	103.00 AV			1.64 V	331	89.17	13.83
3	11160.00	62.70 PK	74.00	-11.30	1.40 V	274	36.52	26.18
4	11160.00	51.30 AV	54.00	-2.70	1.40 V	274	25.12	26.18

Remarks:

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

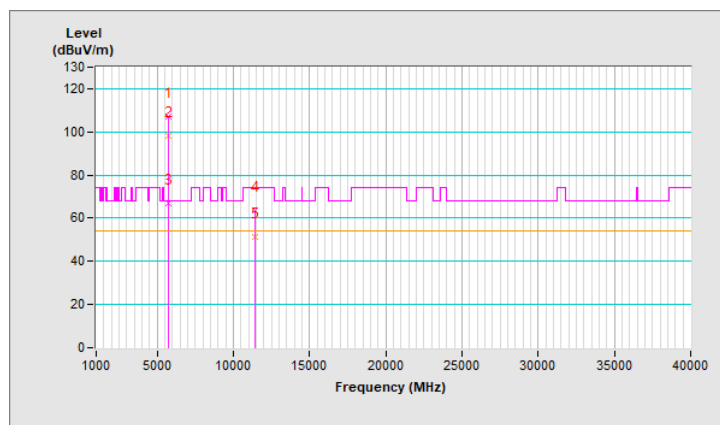


RF Mode	802.11ac (VHT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	107.10 PK			2.42 H	291	93.78	13.32
2	*5700.00	98.33 AV			2.42 H	291	85.01	13.32
3	#5725.00	67.10 PK	68.20	-1.10	2.42 H	291	53.72	13.38
4	11400.00	63.40 PK	74.00	-10.60	3.34 H	218	36.44	26.96
5	11400.00	51.20 AV	54.00	-2.80	3.34 H	218	24.24	26.96

Remarks:

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

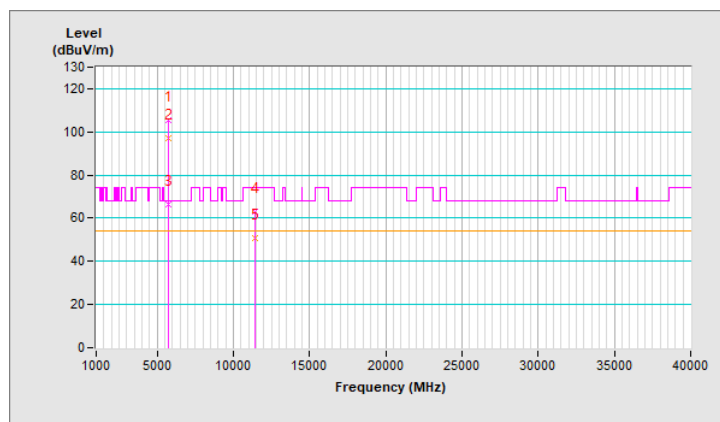


RF Mode	802.11ac (VHT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	105.30 PK			1.88 V	346	91.98	13.32
2	*5700.00	97.00 AV			1.88 V	346	83.68	13.32
3	#5725.00	66.20 PK	68.20	-2.00	1.88 V	346	52.82	13.38
4	11400.00	63.00 PK	74.00	-11.00	1.70 V	289	36.04	26.96
5	11400.00	50.80 AV	54.00	-3.20	1.70 V	289	23.84	26.96

Remarks:

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

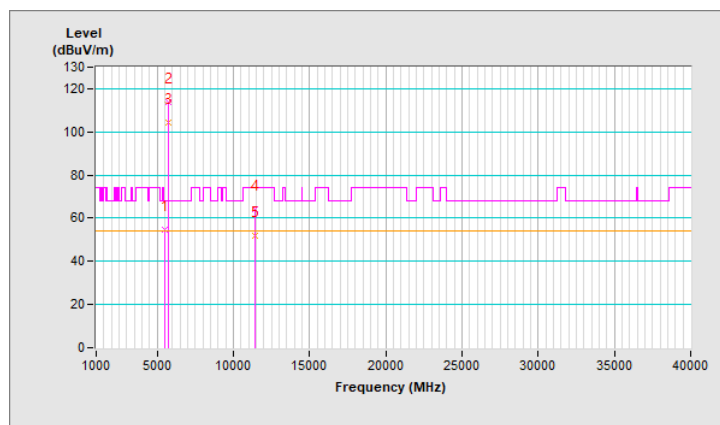


RF Mode	802.11ac (VHT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	54.46 PK	68.20	-13.74	2.41 H	291	40.48	13.98
2	*5720.00	113.70 PK			2.41 H	291	100.32	13.38
3	*5720.00	104.57 AV			2.41 H	291	91.19	13.38
4	11440.00	64.10 PK	74.00	-9.90	3.33 H	218	37.21	26.89
5	11440.00	51.90 AV	54.00	-2.10	3.33 H	218	25.01	26.89

Remarks:

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

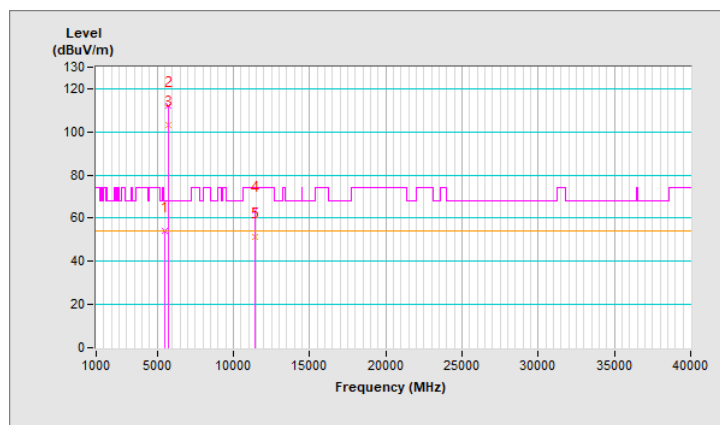


RF Mode	802.11ac (VHT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	54.10 PK	68.20	-14.10	1.95 V	347	40.12	13.98
2	*5720.00	112.00 PK			1.95 V	347	98.62	13.38
3	*5720.00	102.95 AV			1.95 V	347	89.57	13.38
4	11440.00	63.70 PK	74.00	-10.30	1.71 V	290	36.81	26.89
5	11440.00	51.30 AV	54.00	-2.70	1.71 V	290	24.41	26.89

Remarks:

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

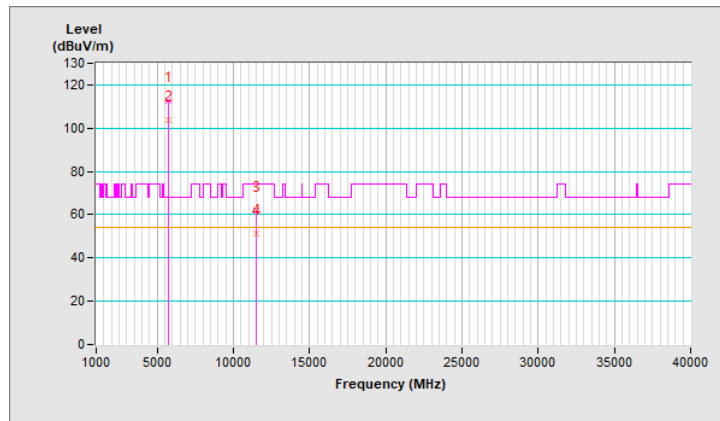


RF Mode	802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	112.89 PK			2.49 H	290	99.46	13.43
2	*5745.00	103.76 AV			2.49 H	290	90.33	13.43
3	11490.00	62.10 PK	74.00	-11.90	3.41 H	219	35.32	26.78
4	11490.00	51.60 AV	54.00	-2.40	3.41 H	219	24.82	26.78

Remarks:

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

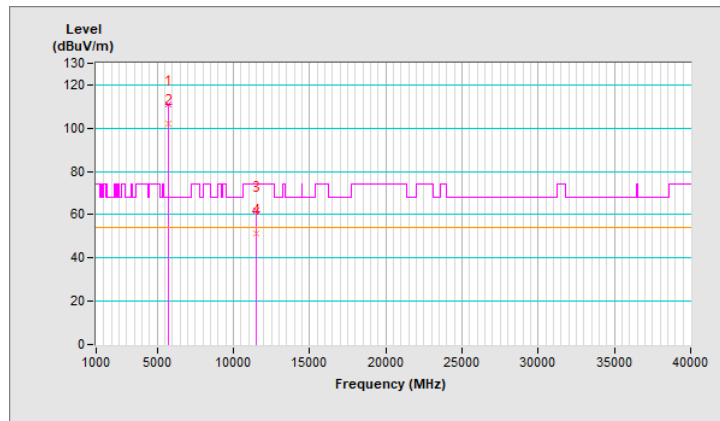


RF Mode	802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	111.04 PK			1.95 V	304	97.61	13.43
2	*5745.00	102.19 AV			1.95 V	304	88.76	13.43
3	11490.00	61.70 PK	74.00	-12.30	1.71 V	290	34.92	26.78
4	11490.00	51.20 AV	54.00	-2.80	1.71 V	290	24.42	26.78

Remarks:

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

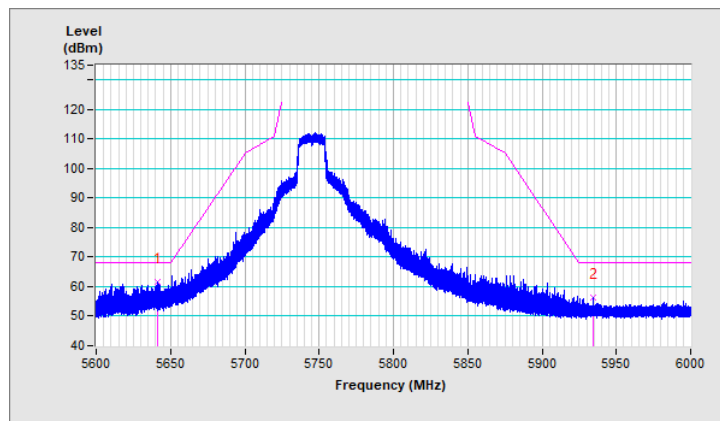


RF Mode	802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.35	61.60 PK	68.20	-6.60	2.49 H	290	48.16	13.44
2	#5934.25	56.30 PK	68.20	-11.90	2.49 H	290	42.42	13.88

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

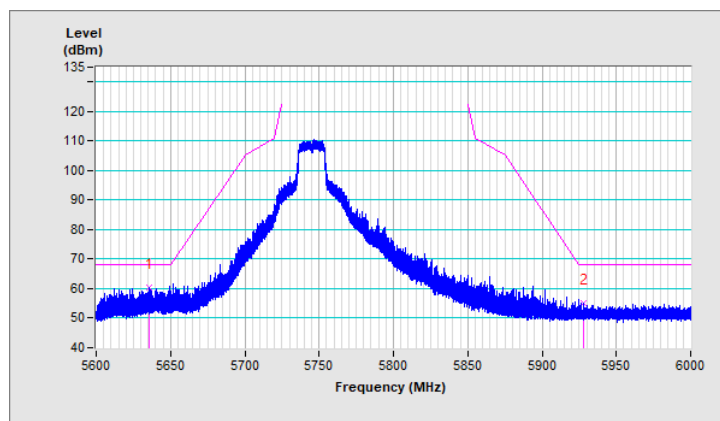


RF Mode	802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5635.50	60.50 PK	68.20	-7.70	1.95 V	304	47.03	13.47
2	#5927.82	55.10 PK	68.20	-13.10	1.95 V	304	41.24	13.86

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

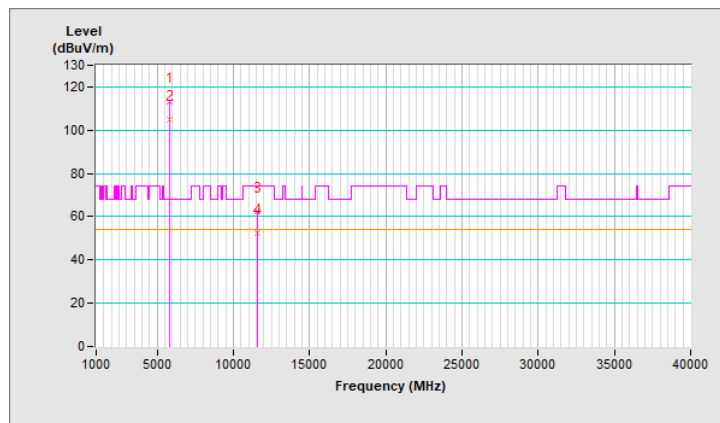


RF Mode	802.11ac (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	113.17 PK			2.48 H	290	99.77	13.40
2	*5785.00	104.62 AV			2.48 H	290	91.22	13.40
3	11570.00	62.70 PK	74.00	-11.30	3.40 H	218	35.72	26.98
4	11570.00	52.20 AV	54.00	-1.80	3.40 H	218	25.22	26.98

Remarks:

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

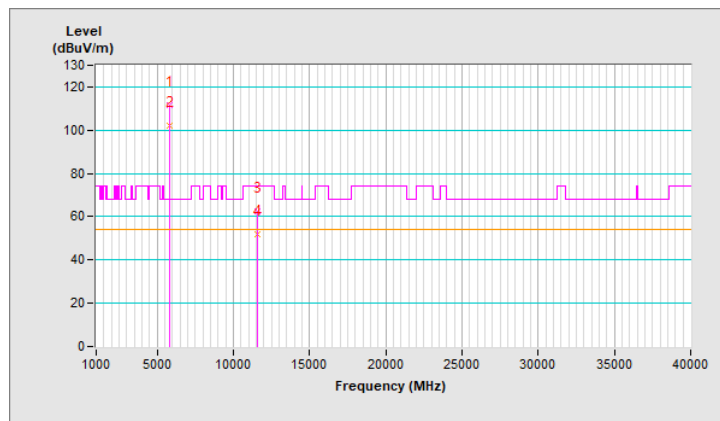


RF Mode	802.11ac (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	111.44 PK			1.94 V	302	98.04	13.40
2	*5785.00	102.28 AV			1.94 V	302	88.88	13.40
3	11570.00	62.30 PK	74.00	-11.70	1.64 V	246	35.32	26.98
4	11570.00	51.80 AV	54.00	-2.20	1.64 V	246	24.82	26.98

Remarks:

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

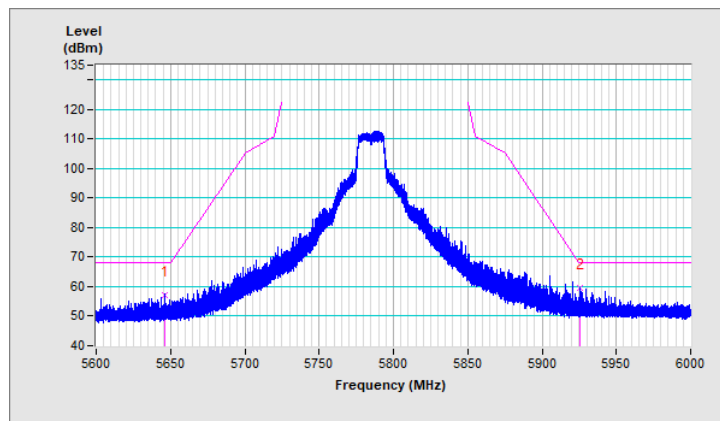


RF Mode	802.11ac (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.18	57.30 PK	68.20	-10.90	2.48 H	290	43.88	13.42
2	#5925.74	59.50 PK	68.20	-8.70	2.48 H	290	45.64	13.86

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

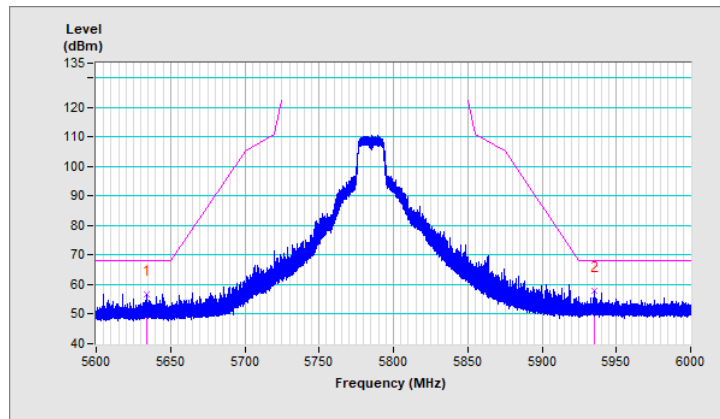


RF Mode	802.11ac (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.20	56.90 PK	68.20	-11.30	1.94 V	302	43.42	13.48
2	#5935.48	58.10 PK	68.20	-10.10	1.94 V	302	44.22	13.88

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

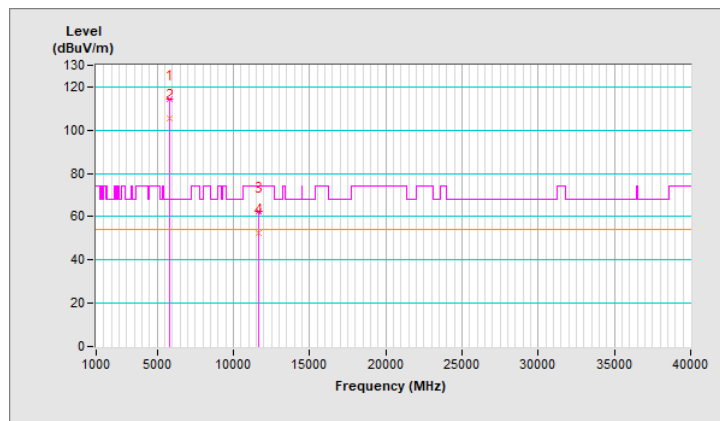


RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	114.36 PK			2.55 H	290	100.87	13.49
2	*5825.00	105.53 AV			2.55 H	290	92.04	13.49
3	11650.00	62.70 PK	74.00	-11.30	3.47 H	216	34.91	27.79
4	11650.00	52.20 AV	54.00	-1.80	3.47 H	216	24.41	27.79

Remarks:

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

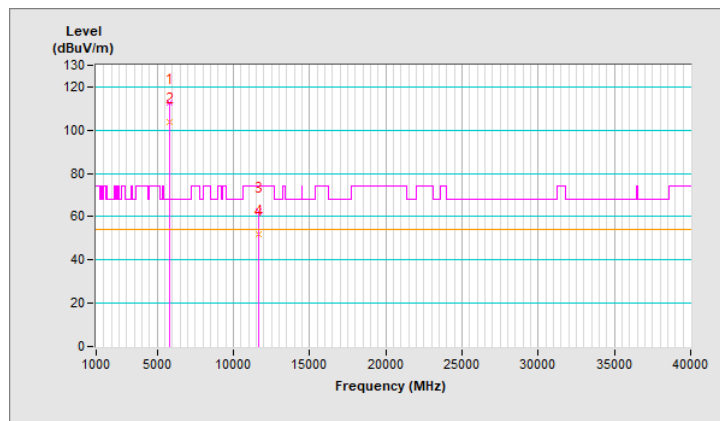


RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	112.60 PK			1.81 V	346	99.11	13.49
2	*5825.00	103.77 AV			1.81 V	346	90.28	13.49
3	11650.00	62.30 PK	74.00	-11.70	1.57 V	226	34.51	27.79
4	11650.00	51.80 AV	54.00	-2.20	1.57 V	226	24.01	27.79

Remarks:

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

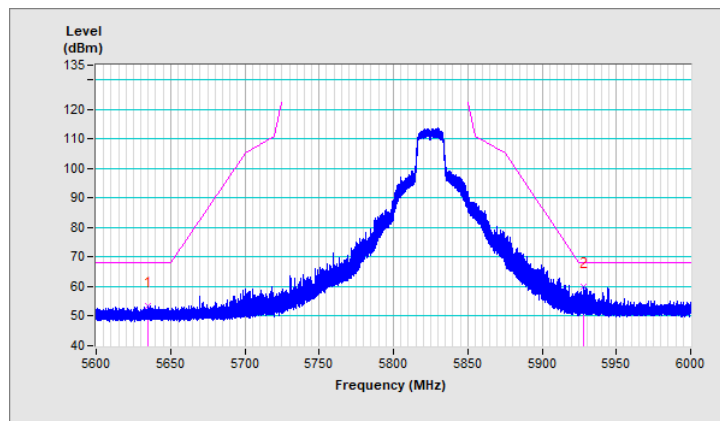


RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.65	53.40 PK	68.20	-14.80	2.55 H	290	39.92	13.48
2	#5927.80	59.90 PK	68.20	-8.30	2.55 H	290	46.04	13.86

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

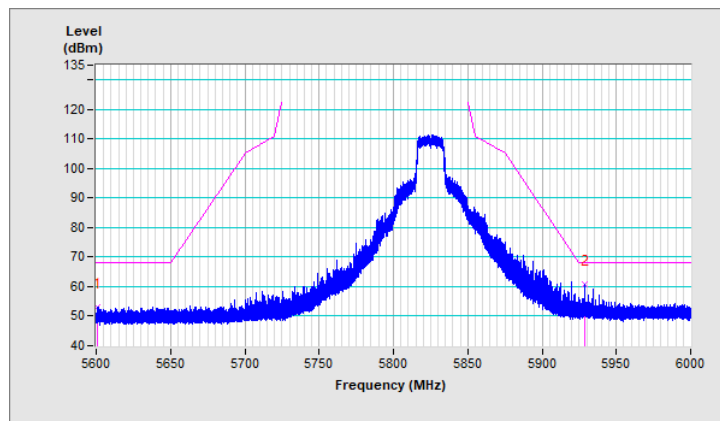


RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	19.8°C, 63.2% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5600.93	53.10 PK	68.20	-15.10	1.81 V	346	39.46	13.64
2	#5928.45	60.90 PK	68.20	-7.30	1.81 V	346	47.04	13.86

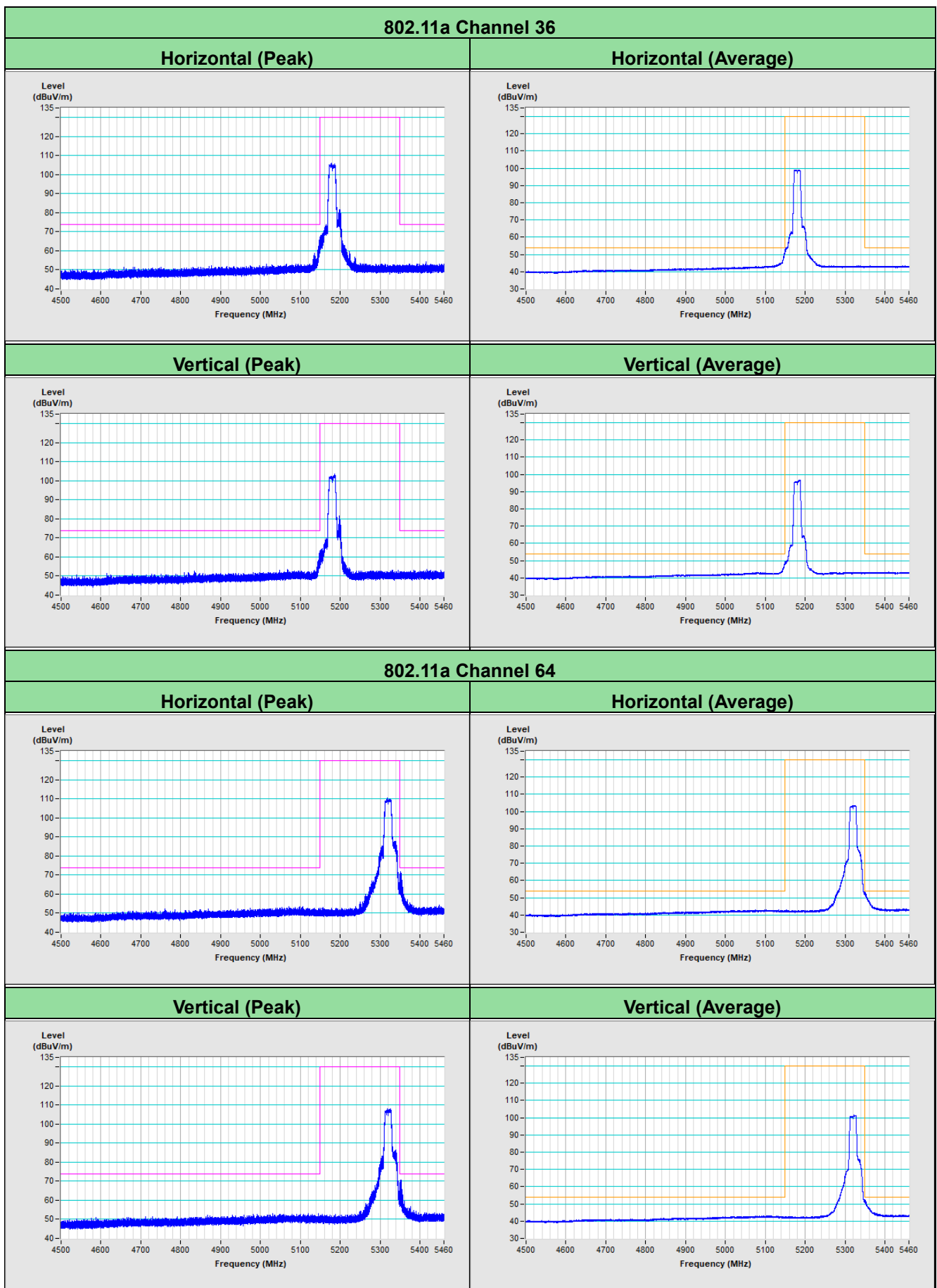
Remarks:

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



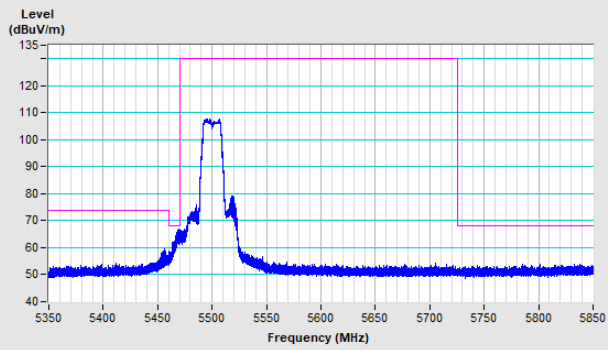


Plot of Band Edge

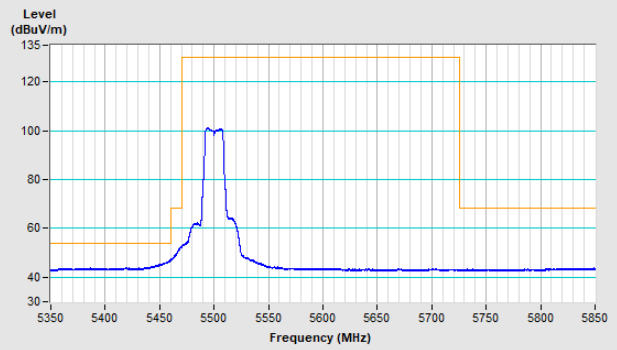


802.11a Channel 100

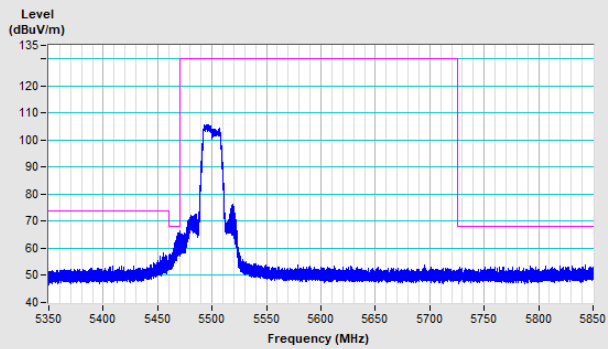
Horizontal (Peak)



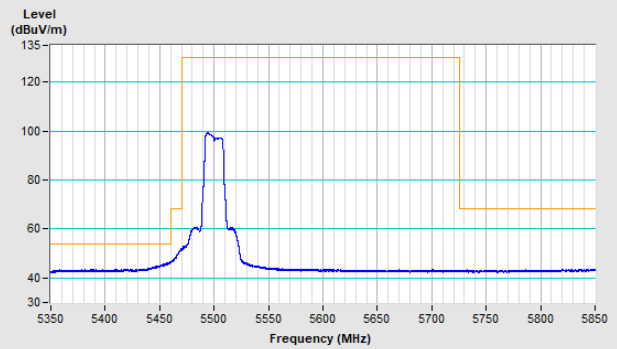
Horizontal (Average)



Vertical (Peak)

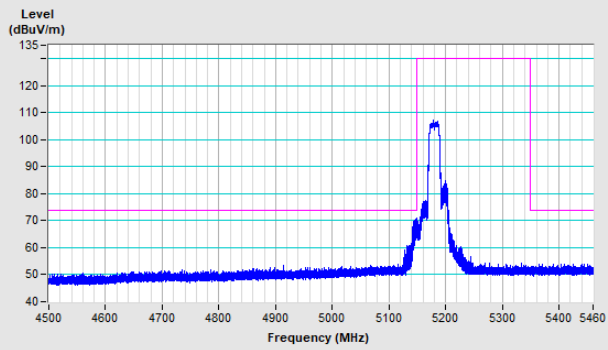


Vertical (Average)

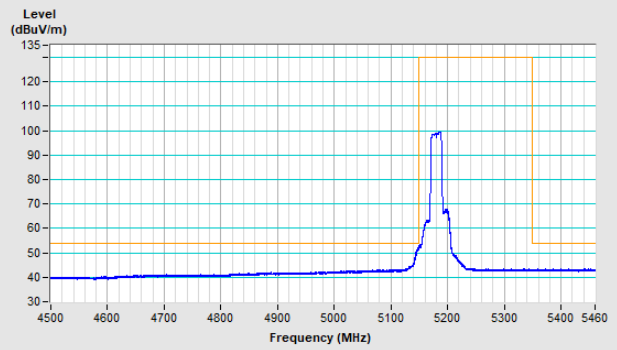


802.11ac (VHT20) Channel 36

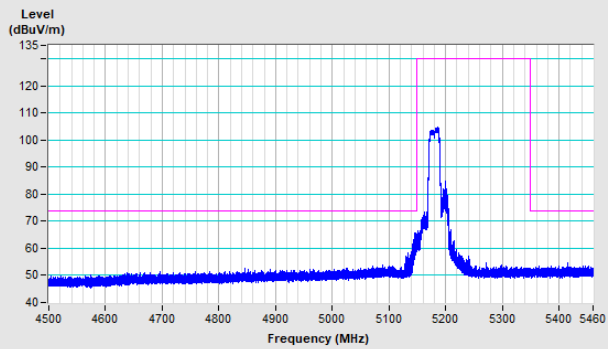
Horizontal (Peak)



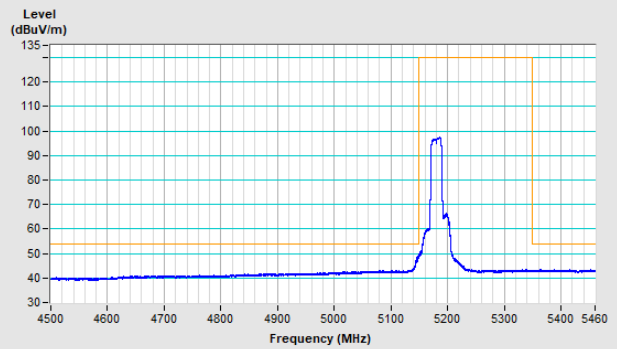
Horizontal (Average)



Vertical (Peak)

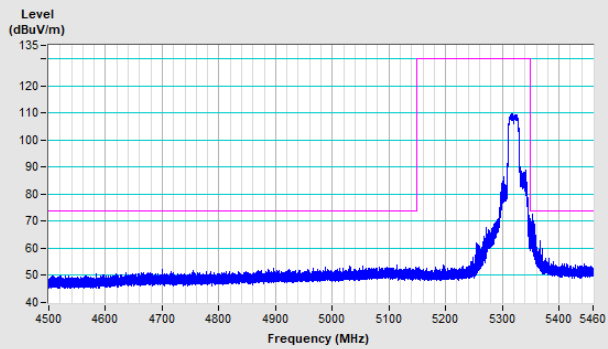


Vertical (Average)

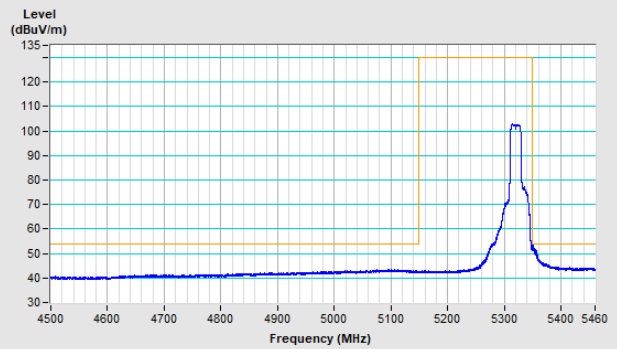


802.11ac (VHT20) Channel 64

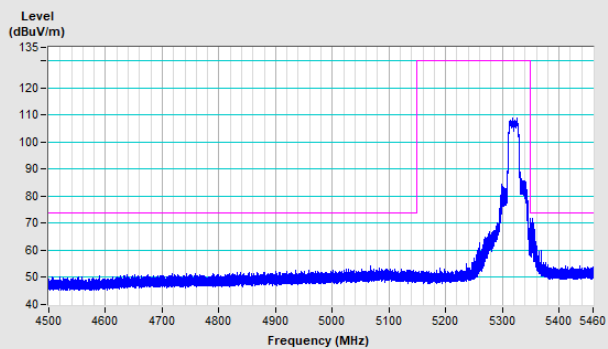
Horizontal (Peak)



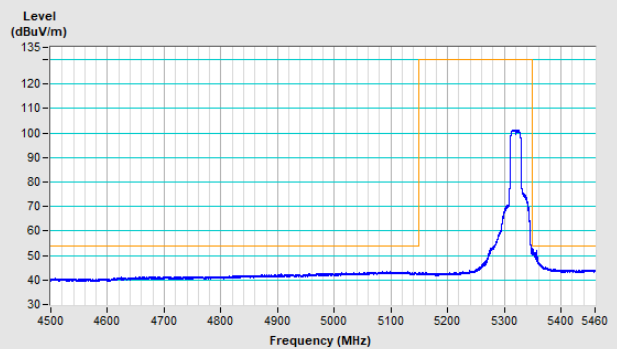
Horizontal (Average)



Vertical (Peak)

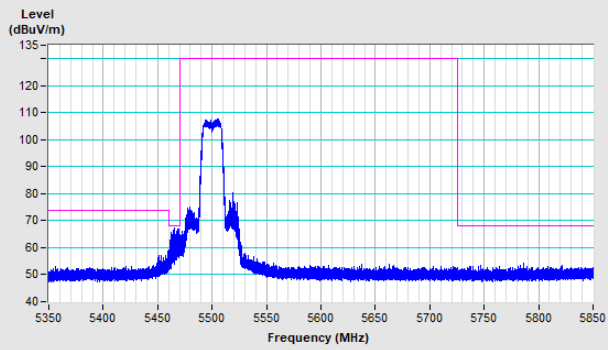


Vertical (Average)

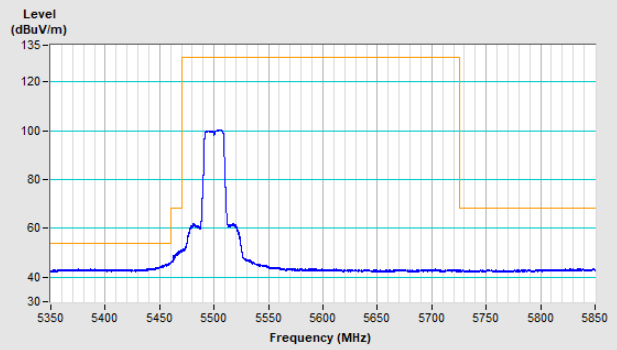


802.11ac (VHT20) Channel 100

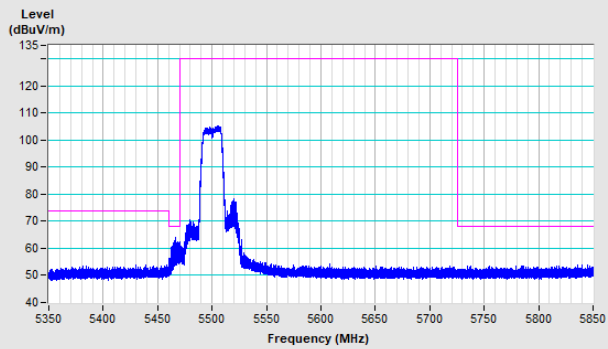
Horizontal (Peak)



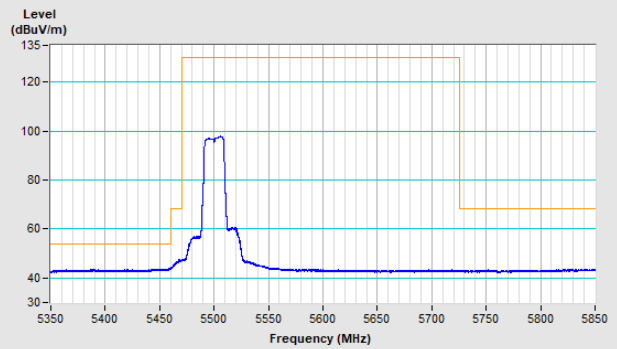
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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

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