TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBDKG-WTW-P24030380-1

FCC ID: JNZVR0038

Product: Camera and Speakerphone

Brand: Logitech, logi

Model No.: VR0038

Received Date: 2024/2/2

Test Date: 2024/3/3 ~ 2024/4/17

Issued Date: 2024/5/16

Applicant: Logitech Far East Ltd.

Address: #2 Creation Rd. 4, Science-Based Ind. Park Hsinchu Taiwan, R.O.C.

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

FCC Registration / Designation Number: 723255 / TW2022

Approved by: _____ , **Date:** **2024/5/16**

May Chen / Manager

This test report consists of 161 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by : Vito Lung / Specialist

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Table of Contents

Release Control Record **4**

1 Certificate **5**

2 Summary of Test Results **6**

2.1 Measurement Uncertainty 7
2.2 Supplementary Information 7

3 General Information **8**

3.1 General Description of EUT 8
3.2 Antenna Description of EUT 9
3.3 Channel List 10
3.4 Test Mode Applicability and Tested Channel Detail 12
3.5 Duty Cycle of Test Signal 14
3.6 Test Program Used and Operation Descriptions 16
3.7 Connection Diagram of EUT and Peripheral Devices 16
3.8 Configuration of Peripheral Devices and Cable Connections 17

4 Test Instruments **18**

4.1 26 dB Bandwidth 18
4.2 RF Output Power 18
4.3 Power Spectral Density 18
4.4 6 dB Bandwidth 18
4.5 Occupied Bandwidth 18
4.6 Frequency Stability 19
4.7 AC Power Conducted Emissions 19
4.8 Unwanted Emissions below 1 GHz 20
4.9 Unwanted Emissions above 1 GHz 20

5 Limits of Test Items **21**

5.1 26 dB Bandwidth 21
5.2 RF Output Power 21
5.3 Power Spectral Density 21
5.4 6 dB Bandwidth 21
5.5 Occupied Bandwidth 21
5.6 Frequency Stability 22
5.7 AC Power Conducted Emissions 22
5.8 Unwanted Emissions below 1 GHz 22
5.9 Unwanted Emissions above 1 GHz 23

6 Test Arrangements **25**

6.1 26 dB Bandwidth 25
6.1.1 Test Setup 25
6.1.2 Test Procedure 25
6.2 RF Output Power 25
6.2.1 Test Setup 25
6.2.2 Test Procedure 25
6.3 Power Spectral Density 26
6.3.1 Test Setup 26
6.3.2 Test Procedure 26
6.4 6 dB Bandwidth 26
6.4.1 Test Setup 26
6.4.2 Test Procedure 26
6.5 Occupied Bandwidth 27
6.5.1 Test Setup 27
6.5.2 Test Procedure 27
6.6 Frequency Stability 27
6.6.1 Test Setup 27
6.6.2 Test Procedure 27
6.7 AC Power Conducted Emissions 28

6.7.1 Test Setup 28
6.7.2 Test Procedure 28
6.8 Unwanted Emissions below 1 GHz 29
6.8.1 Test Setup 29
6.8.2 Test Procedure 30
6.9 Unwanted Emissions above 1 GHz 31
6.9.1 Test Setup 31
6.9.2 Test Procedure 31

7 Test Results of Test Item 32

7.1 26 dB Bandwidth 32
7.2 RF Output Power 36
7.3 Power Spectral Density 42
7.4 6 dB Bandwidth 48
7.5 Occupied Bandwidth 50
7.6 Frequency Stability 56
7.7 AC Power Conducted Emissions 57
7.8 Unwanted Emissions below 1 GHz 59
7.9 Unwanted Emissions above 1 GHz 61

8 Pictures of Test Arrangements 160

9 Information of the Testing Laboratories 161

Release Control Record

Issue No.	Description	Date Issued
RFBDKG-WTW-P24030380-1	Original release.	2024/5/16

1 Certificate

Product:	Camera and Speakerphone
Brand:	Logitech, logi
Test Model:	VR0038
Sample Status:	Engineering sample
Applicant:	Logitech Far East Ltd.
Test Date:	2024/3/3 ~ 2024/4/17
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure:	ANSI C63.10-2013 KDB 789033 D02 General UNII Test Procedure New Rules v02r01 KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -13.63 dB at 0.50156 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -4.2 dB at 34.99 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -4.0 dB at 5470.00 and 5641.84 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Notes:

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
26 dB Bandwidth	-	1050.00 Hz
RF Output Power	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Occupied Bandwidth	-	1050.00 Hz
Frequency Stability	-	0.16 ppm
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.1 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.0 dB
	18 GHz ~ 40 GHz	5.3 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Camera and Speakerphone
Brand	Logitech, logi
Test Model	VR0038
Status of EUT	Engineering sample
Power Supply Rating	100-240 Vac
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	OFDM
Transfer Rate	802.11a: Up to 54 Mbps 802.11n: Up to 300 Mbps 802.11ac: Up to 866.7 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): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	5.18 GHz ~ 5.24 GHz: 195.917 mW (22.92 dBm) 5.26 GHz ~ 5.32 GHz: 185.406 mW (22.68 dBm) 5.5 GHz ~ 5.72 GHz: 187.517 mW (22.73 dBm) 5.745 GHz ~ 5.825 GHz: 395.395 mW (25.97 dBm)
EUT Category	Client device

Note:

1. The EUT uses following accessories.

AC Adapter		
Brand	Model	Specification
LOGI	AM40R-190A	AC Input: 100-240V,1.4A Max, 50/60Hz DC Output: 19V, 2.11A, 40.09W DC Output Cable: 3m with one core Manufacturer: PHIHONG TECHNOLOGY CO. LTD.
Plug		
Brand	Model	
logi	534-000969	
USB-C to USB-C Cable		
Brand	Model	Specification
logi	502-001533	Specification: shielded, 3m
USB-C to USB-C Cable (optional)		
Brand	Model	Specification
logi	Z00038	Specification: shielded, 5m
C8 Connector		
Brand	Model	
logi	534-00978	

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

Condition	Technology	
1	WLAN (2.4 GHz)	WLAN (5 GHz)
2	WLAN (2.4 GHz)	Bluetooth
3	WLAN (5 GHz)	Bluetooth
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	RF Chain No.	Brand	Model	Antenna Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type
WIFI 0	WF0	FIH Co., Ltd.	VR0038-0	3.6	2.4~2.4835	PIFA	None
				3.24	5.15~5.85		
WIFI 1	WF1	FIH Co., Ltd.	VR0038-1	3.27	2.4~2.4835	PIFA	None
				3.09	5.15~5.85		
Bluetooth	-	FIH Co., Ltd.	F146D8713910001	3.51	2.4~2.4835	PIFA	ipex(MHF)

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

2. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	**TX & RX Configuration**	
802.11a	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
802.11ac (VHT20)	2TX	2RX
802.11ac (VHT40)	2TX	2RX
802.11ac (VHT80)	2TX	2RX

Note:
1. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz), 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

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

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

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

FOR 5500 ~ 5720 MHz

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

FOR 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

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

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

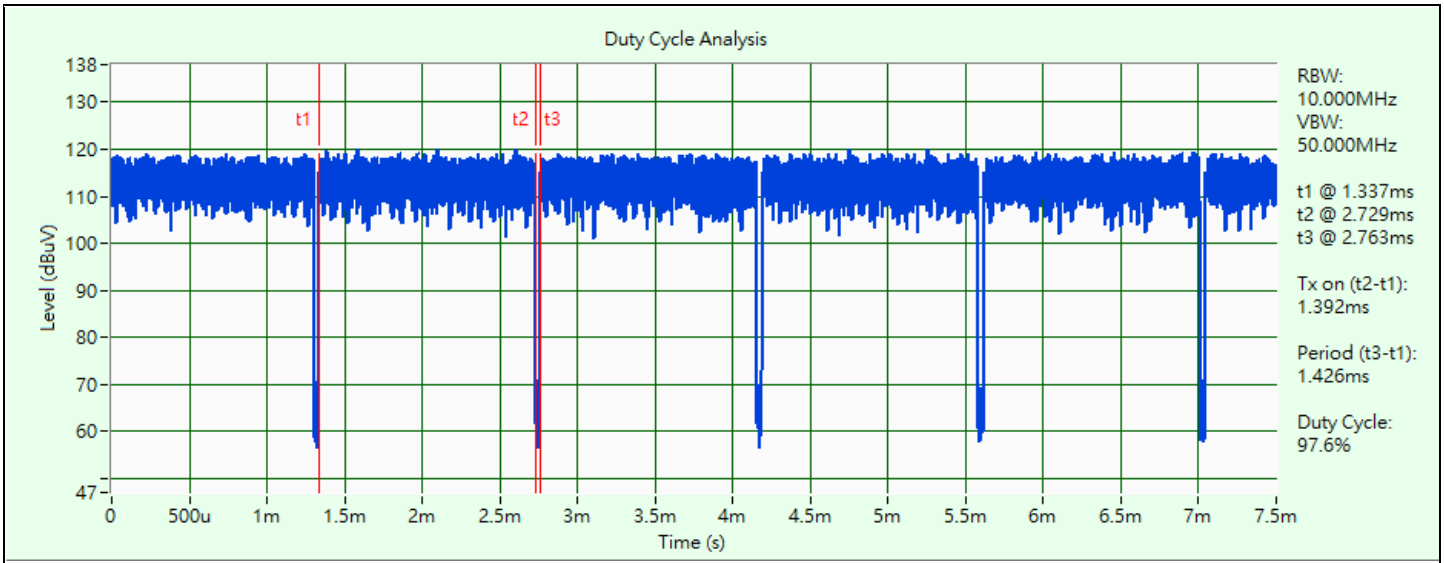
Following channel(s) was (were) selected for the final test as listed below:

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
	802.11ac (VHT40)	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	58, 106, 122, 138	BPSK	MCS0
RF Output Power	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
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
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
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
6 dB Bandwidth	802.11a	144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	138, 155	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
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
Frequency Stability	802.11a	36	unmodulated	-

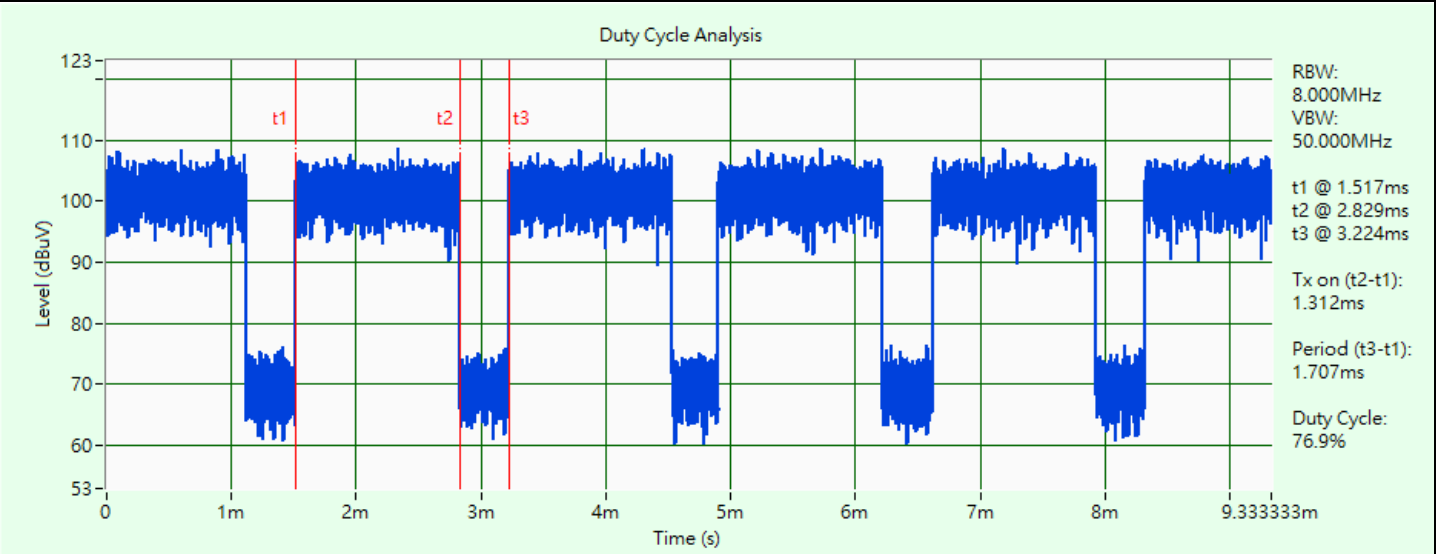
Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	802.11ac (VHT20)	157	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11ac (VHT20)	157	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac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

3.5 Duty Cycle of Test Signal

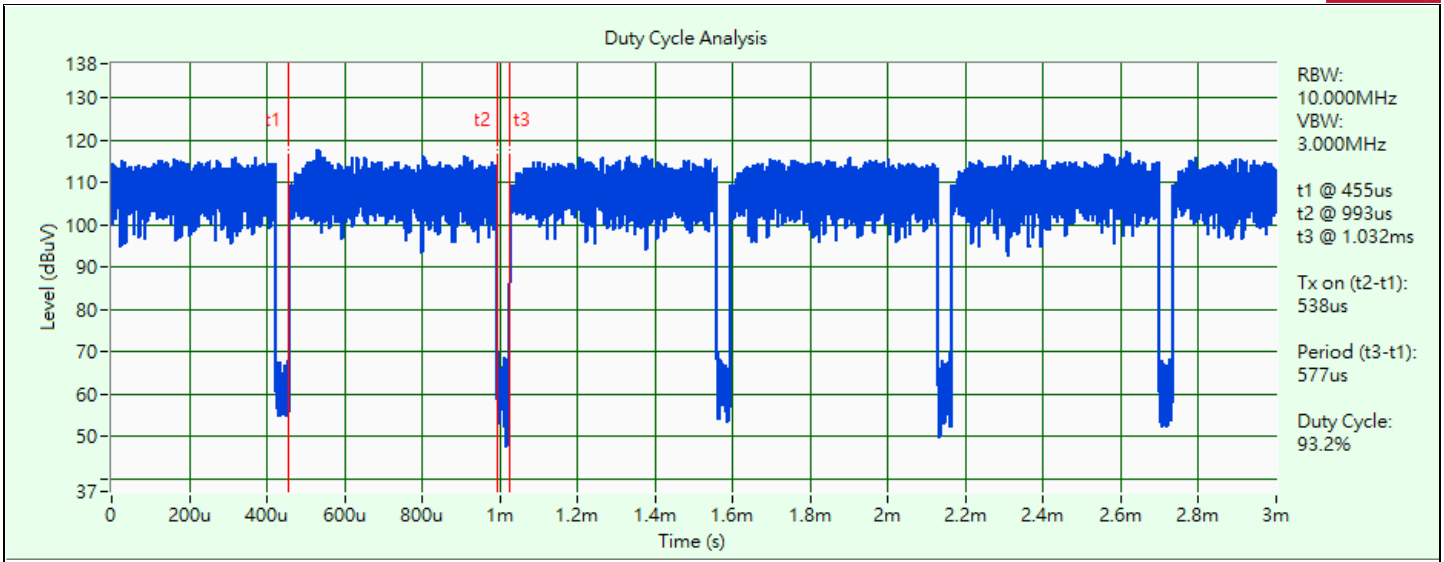
802.11a: Duty cycle = 1.392 ms / 1.426 ms x 100% = 97.6%, duty factor = 10 * log (1/Duty cycle) = 0.10 dB
802.11ac (VHT20): Duty cycle = 1.312 ms / 1.707 ms x 100% = 76.9%, duty factor = 10 * log (1/Duty cycle) = 1.14 dB
802.11ac (VHT40): Duty cycle = 0.538 ms / 0.577 ms x 100% = 93.2%, duty factor = 10 * log (1/Duty cycle) = 0.30 dB
802.11ac (VHT80): Duty cycle = 0.324 ms / 0.359 ms x 100% = 90.3%, duty factor = 10 * log (1/Duty cycle) = 0.45 dB



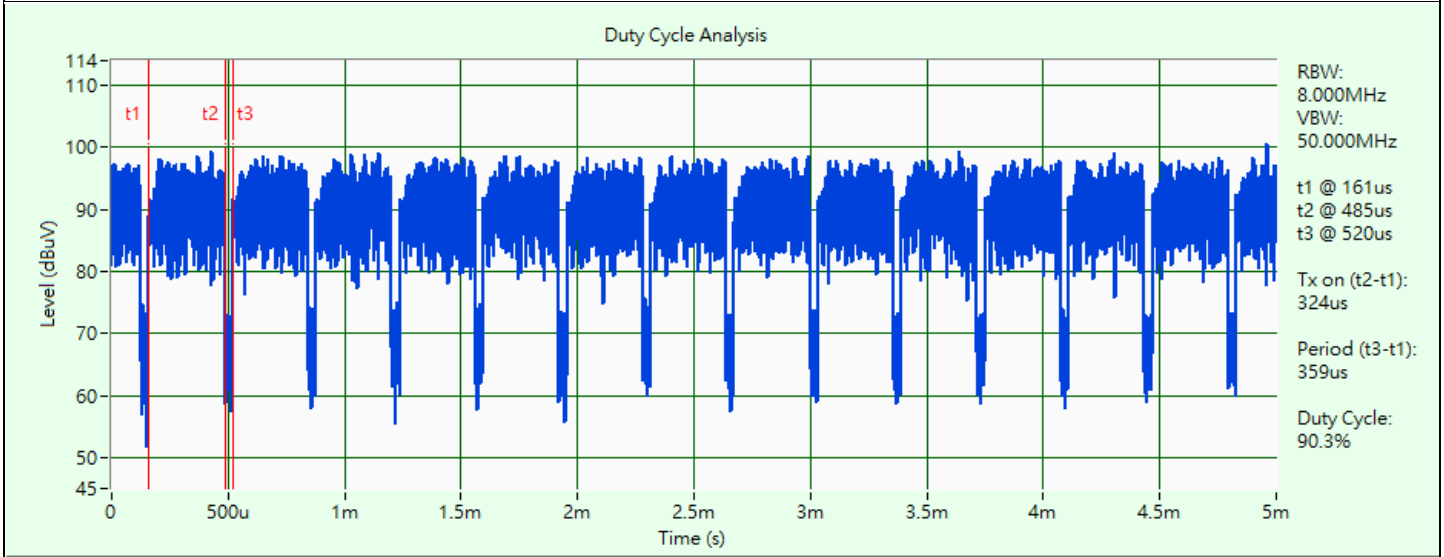
802.11a



802.11ac (VHT20)



802.11ac (VHT40)

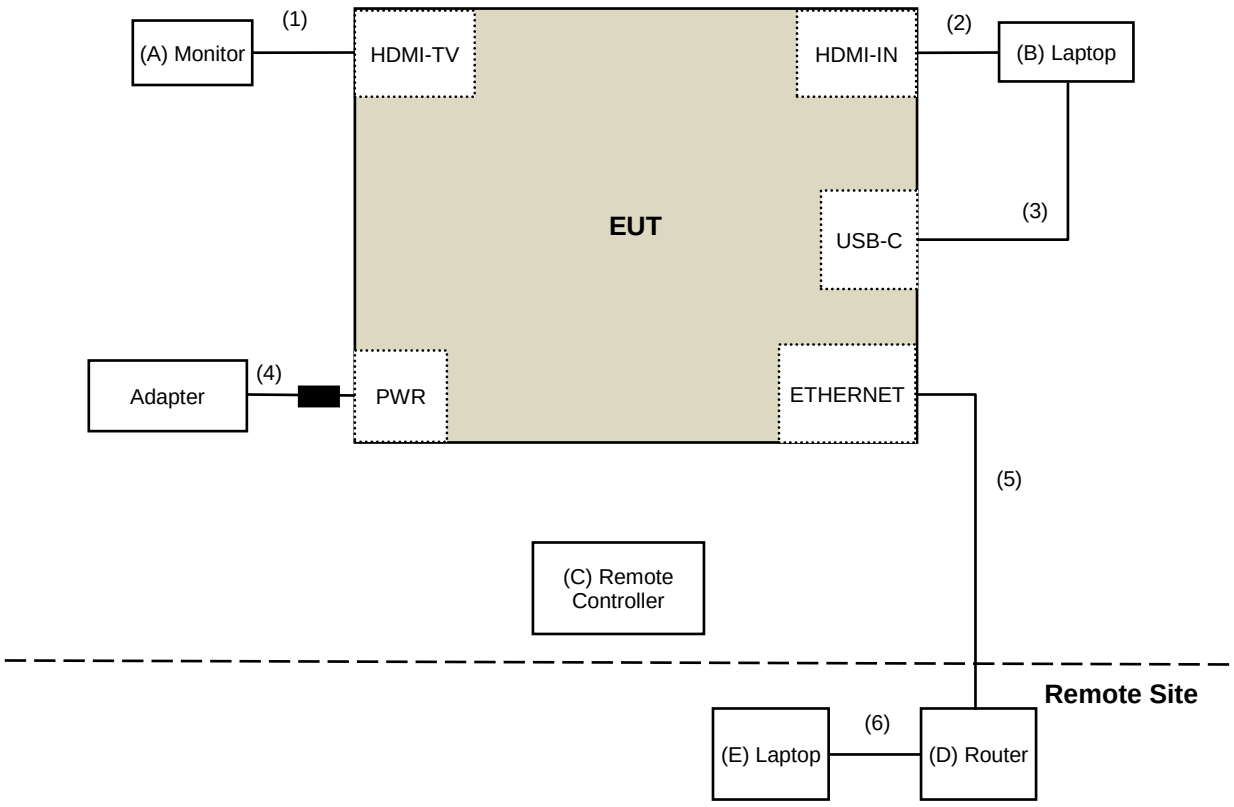


802.11ac (VHT80)

3.6 Test Program Used and Operation Descriptions

Controlling software (adb paste WIFI Command) 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	Monitor	DELL	P2415Q	CN-0J1P7F-QDC00-85L-13GB-A09	DoC	Provided by Lab
B	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab
C	Remote controller	Logitech	RR0016	N/A	N/A	Supplied by applicant
D	Router	NETGEAR	RAX40	N/A	N/A	Provided by Lab
E	Laptop	Lenovo	20U5S01X00 L14	PF-28LKK7	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	HDMI Cable	1	2	Yes	0	Supplied by applicant
2	HDMI Cable	1	2	Yes	0	Provided by Lab
3	USB-C Cable	1	3	Yes	0	Supplied by applicant
4	DC Cable	1	3	No	1	Supplied by applicant
5	RJ-45 Cable	1	10	No	0	Provided by Lab
6	RJ-45 Cable	1	3	No	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2024/2/20	2025/2/19
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2024/4/17

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2024/2/20	2025/2/19
Pulse Power Sensor Anritsu	MA2411B	1726434	2023/6/19	2024/6/18
RF Power Meter Anritsu	ML2495A	1529002	2023/6/17	2024/6/16
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2024/4/17

4.3 Power Spectral Density

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

4.4 6 dB Bandwidth

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

4.5 Occupied Bandwidth

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

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Source GOOD WILL	6905S	1991551	N/A	N/A
MXA Signal Analyzer Keysight	N9020B	MY60112409	2024/2/20	2025/2/19
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2023/12/20	2024/12/19
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2024/4/17

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2023/10/20	2024/10/19
EMI Test Receiver R&S	ESCS 30	847124/029	2023/10/18	2024/10/17
Fixed Attenuator STI	STI02-2200-10	005	2024/2/19	2025/2/18
LISN R&S	ESH3-Z5	835239/001	2024/4/3	2025/4/2
		848773/004	2023/10/13	2024/10/12
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2024/2/19	2025/2/18
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2024/4/16

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-0942	2023/10/12	2024/10/11
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-01	2023/12/12	2024/12/11
Loop Antenna Electro-Metrics	EM-6879	264	2024/2/23	2025/2/22
MXA Signal Analyzer Keysight	N9020B	MY60112410	2024/3/13	2025/3/12
MXE EMI Receiver Keysight	N9038A	MY59050100	2023/6/13	2024/6/12
Preamplifier EMCI	EMC330N	980852	2024/2/17	2025/2/16
	EMC001340	980142	2024/2/19	2025/2/18
RF Coaxial Cable JYEBAO	5D-FB	LOOPCAB-001	2024/2/19	2025/2/18
		LOOPCAB-002	2024/2/19	2025/2/18
RF Coaxial Cable PEWC	8D	966-6-1	2024/2/19	2025/2/18
		966-6-2	2024/2/19	2025/2/18
		966-6-3	2024/2/19	2025/2/18
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:
1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2024/4/15

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-2035	2023/11/12	2024/11/11
	BBHA 9170	BBHA9170519	2023/11/12	2024/11/11
MXA Signal Analyzer Keysight	N9020B	MY60112410	2023/3/6 2024/3/13	2024/3/5 2025/3/12
MXE EMI Receiver Keysight	N9038A	MY59050100	2023/6/13	2024/6/12
Preamplifier EMCI	EMC12630SE	980385	2023/8/10	2024/8/9
	EMC184045SE	980387	2023/8/9	2024/8/8
RF Coaxial Cable EMCI	EMC101G-KM-KM-10000	210708	2023/11/2	2024/11/1
	EMC102-KM-KM-1200	160924	2024/1/29	2025/1/28
	EMC102-KM-KM-4000	200214	2024/1/29	2025/1/28
	EMC104-SM-SM-1300	210205	2023/5/8	2024/5/7
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:
1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2024/3/3 ~ 2024/4/12

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

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

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

*B is the 26 dB emission bandwidth in megahertz

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

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

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

5.3 Power Spectral Density

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

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 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: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK: 122.2 (dBμV/m) *4
*1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

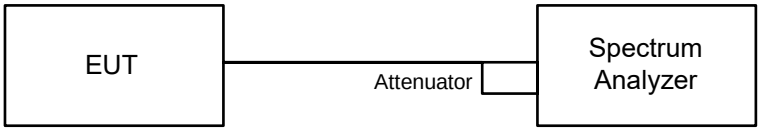
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup



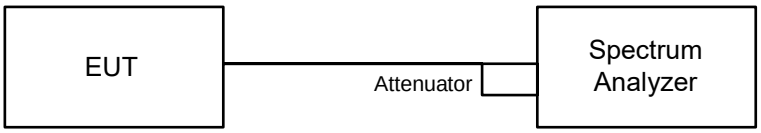
6.1.2 Test Procedure

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

6.2 RF Output Power

6.2.1 Test Setup

For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

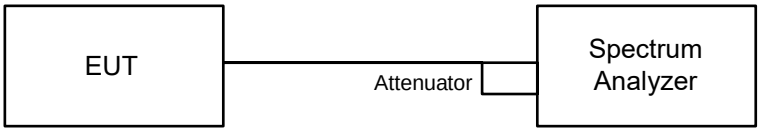
Method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)Sweep time = auto, trigger set to “free run”.
d. Trace average at least 100 traces in power averaging mode.
e. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
f. Record the max value and add 10 log (1/duty cycle).

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-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
g. Record the max value and add 10 log (1/duty cycle).

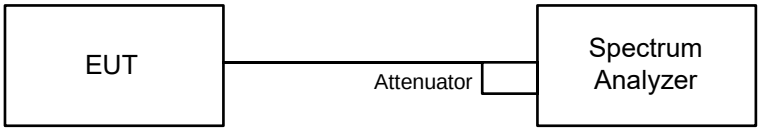
For specified measurement bandwidth 500 kHz:

Method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
c. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300 kHz)
d. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
e. Sweep time = auto, trigger set to “free run”.
f. Trace average at least 100 traces in power averaging mode.
g. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
h. Record the max value and add 10 log (1/duty cycle).

6.4 6 dB Bandwidth

6.4.1 Test Setup

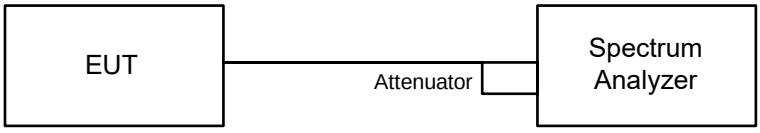


6.4.2 Test Procedure

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

6.5 Occupied Bandwidth

6.5.1 Test Setup

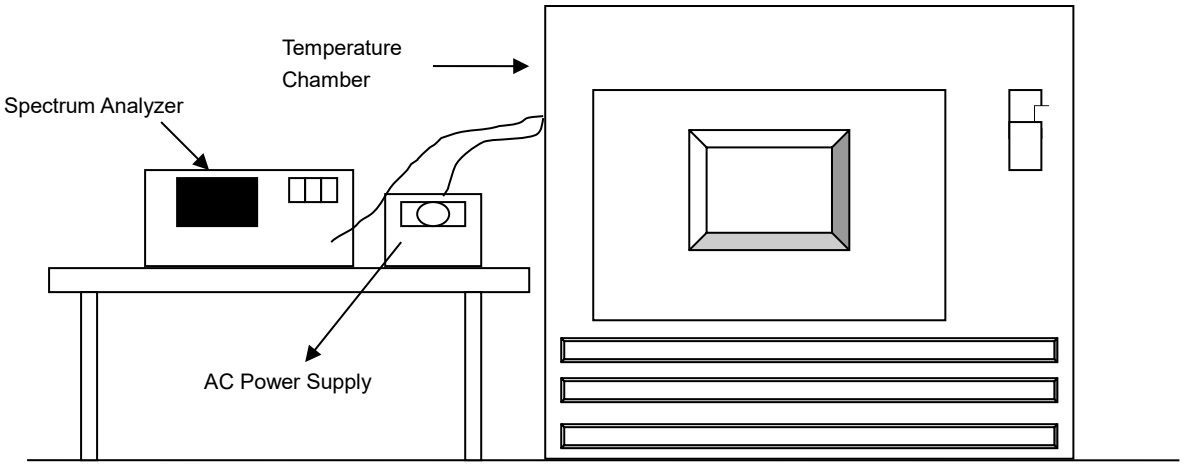


6.5.2 Test Procedure

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

6.6 Frequency Stability

6.6.1 Test Setup

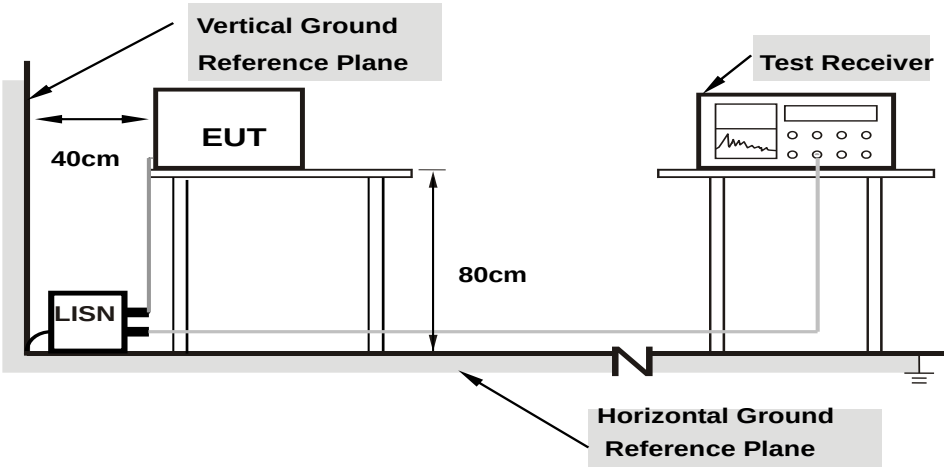


6.6.2 Test Procedure

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

6.7 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

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

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

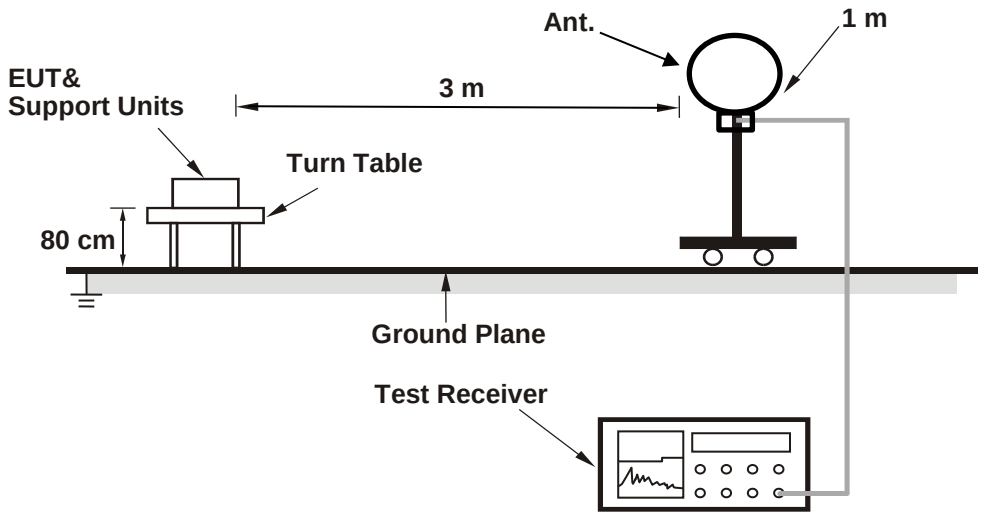
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

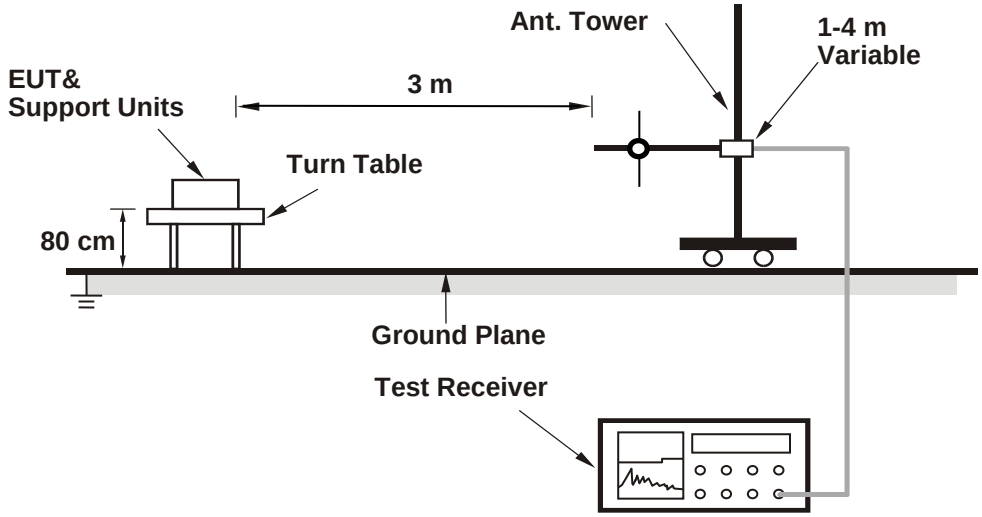
6.8 Unwanted Emissions below 1 GHz

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.

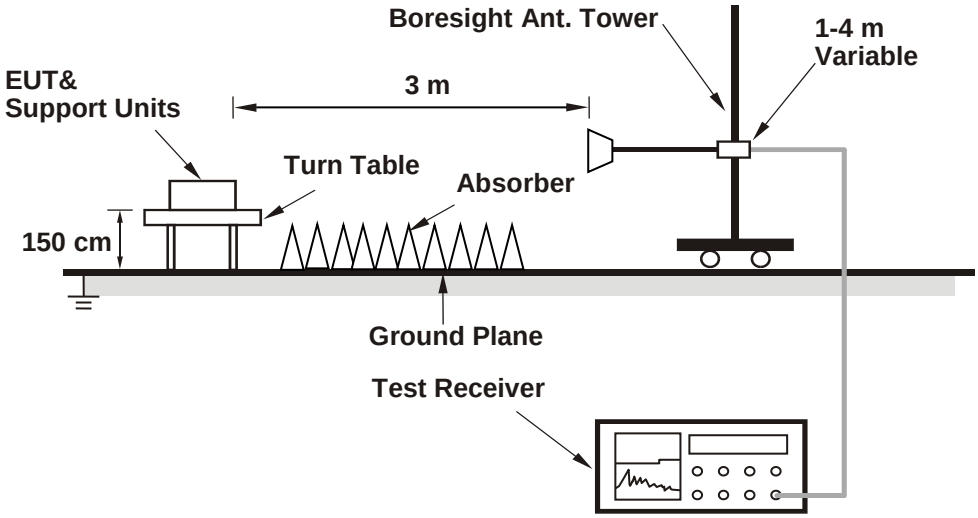
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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

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

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

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

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

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

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	26.28	25.46
60	5300	26.33	25.77
64	5320	26.20	26.85
100	5500	26.57	24.99
116	5580	25.48	25.85
140	5700	26.45	25.69
144 (U-NII-2C)	5720	18.71	17.31
144 (U-NII-3)	5720	7.90	7.34

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	25.46	25.05	>	24
60	5300	25.77	25.11	>	24
64	5320	26.20	25.18	>	24
100	5500	24.99	24.97	>	24
116	5580	25.48	25.06	>	24
140	5700	25.69	25.09	>	24
144 (U-NII-2C)	5720	17.31	23.38	<	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)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	27.07	25.84
60	5300	26.83	23.79
64	5320	34.37	23.95
100	5500	29.00	24.29
116	5580	26.39	23.55
140	5700	34.12	23.63
144 (U-NII-2C)	5720	18.15	17.02
144 (U-NII-3)	5720	8.69	6.93

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	25.84	25.12 > 24
60	5300	23.79	24.76 > 24
64	5320	23.95	24.79 > 24
100	5500	24.29	24.85 > 24
116	5580	23.55	24.71 > 24
140	5700	23.63	24.73 > 24
144 (U-NII-2C)	5720	17.02	23.3 < 24

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

802.11ac (VHT40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	40.17	39.78
62	5310	40.10	39.76
102	5510	39.99	39.27
110	5550	40.03	39.62
134	5670	40.39	39.42
142 (U-NII-2C)	5710	35.16	34.89
142 (U-NII-3)	5710	5.27	4.83

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	39.78	26.99 > 24
62	5310	39.76	26.99 > 24
102	5510	39.27	26.94 > 24
110	5550	39.62	26.97 > 24
134	5670	39.42	26.95 > 24
142 (U-NII-2C)	5710	34.89	26.42 > 24

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

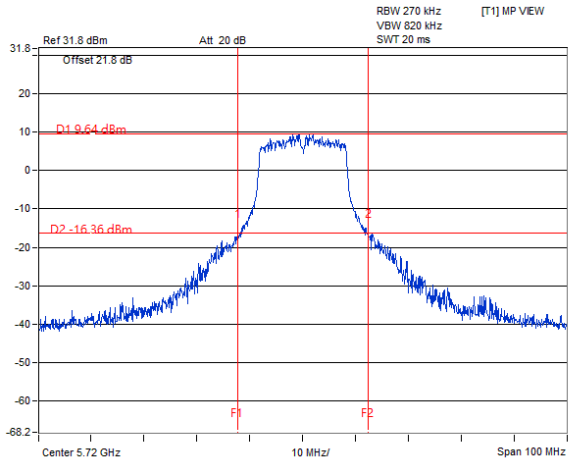
802.11ac (VHT80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	79.83	79.21
106	5530	80.00	79.02
122	5610	79.90	79.05
138 (U-NII-2C)	5690	86.98	77.09
138 (U-NII-3)	5690	17.25	4.57

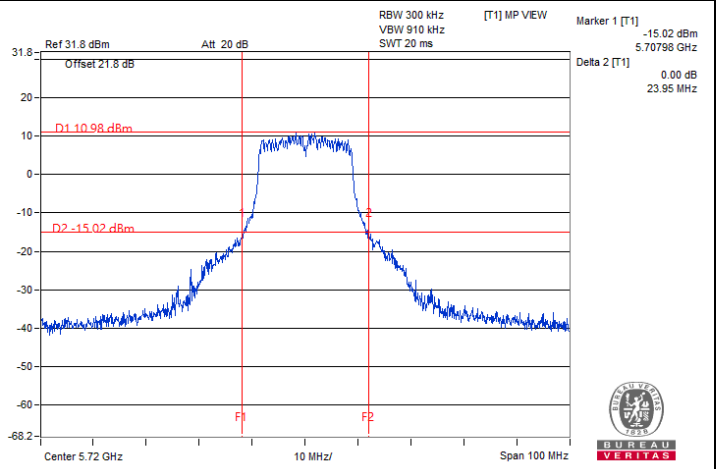
Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	79.21	29.98 > 24
106	5530	79.02	29.97 > 24
122	5610	79.05	29.97 > 24
138 (U-NII-2C)	5690	77.09	29.86 > 24

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

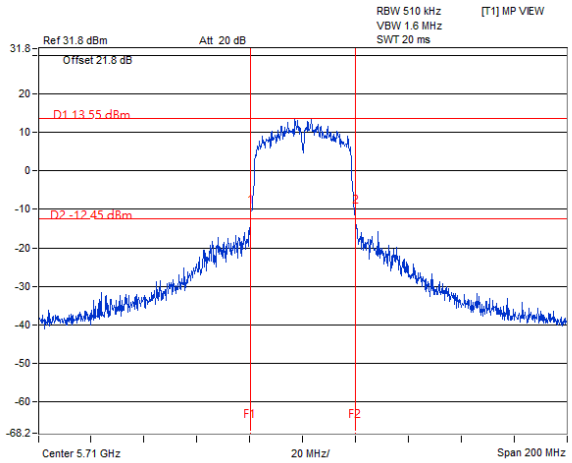
Spectrum Plot of Minimum Value



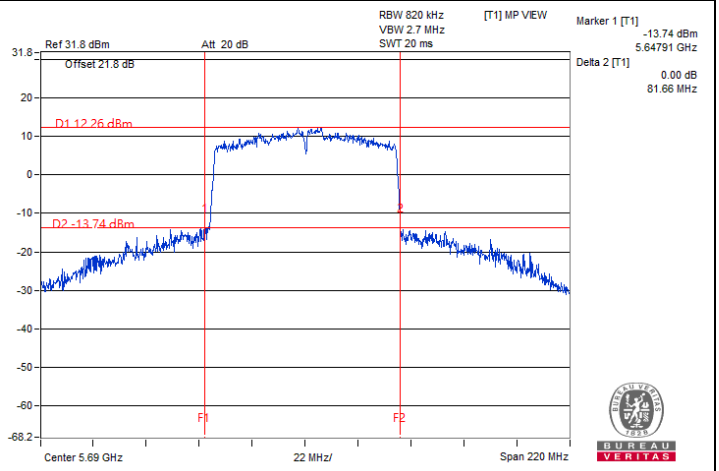
802.11a / Chain 1 : CH 144 (U-NII-3)



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



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



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

Notes:

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

7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	18.19	18.28	133.215	21.25	24	Pass
40	5200	19.85	19.97	195.917	22.92	24	Pass
48	5240	19.56	19.66	182.835	22.62	24	Pass
52	5260	19.62	19.71	185.163	22.68	24	Pass
60	5300	19.58	19.69	183.893	22.65	24	Pass
64	5320	18.55	18.65	144.897	21.61	24	Pass
100	5500	16.77	16.83	95.728	19.81	24	Pass
116	5580	19.16	19.24	166.36	22.21	24	Pass
140	5700	17.44	17.57	112.61	20.52	24	Pass
*144 (U-NII-2C)	5720	16.61	17.21	100.82	20.04	23.38	Pass
*144 (U-NII-3)	5720	8.95	10.84	20.474	13.11	30	Pass
149	5745	22.55	22.68	365.24	25.63	30	Pass
157	5785	22.41	22.46	350.378	25.45	30	Pass
165	5825	22.79	22.91	385.542	25.86	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	17.80	17.76	119.959	20.79	24	Pass
40	5200	19.61	19.68	184.308	22.66	24	Pass
48	5240	19.82	19.95	194.795	22.90	24	Pass
52	5260	19.55	19.71	183.698	22.64	24	Pass
60	5300	19.58	19.76	185.406	22.68	24	Pass
64	5320	18.73	18.72	149.118	21.74	24	Pass
100	5500	16.66	16.68	92.903	19.68	24	Pass
116	5580	19.69	19.75	187.517	22.73	24	Pass
140	5700	17.60	17.64	115.62	20.63	24	Pass
*144 (U-NII-2C)	5720	16.35	17.69	132.58	21.22	23.3	Pass
*144 (U-NII-3)	5720	10.31	10.88	29.906	14.76	30	Pass
149	5745	22.84	22.88	386.398	25.87	30	Pass
157	5785	22.95	22.97	395.395	25.97	30	Pass
165	5825	22.85	22.89	387.288	25.88	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	14.95	15.01	62.956	17.99	24	Pass
46	5230	19.68	19.92	191.071	22.81	24	Pass
54	5270	19.35	19.38	172.796	22.38	24	Pass
62	5310	15.90	16.01	78.807	18.97	24	Pass
102	5510	15.06	15.05	64.052	18.07	24	Pass
110	5550	19.60	19.64	183.246	22.63	24	Pass
134	5670	16.30	16.30	85.316	19.31	24	Pass
*142 (U-NII-2C)	5710	17.66	17.60	124.289	20.94	24	Pass
*142 (U-NII-3)	5710	5.34	5.57	7.535	8.77	30	Pass
151	5755	20.79	21.01	246.133	23.91	30	Pass
159	5795	21.18	21.40	269.258	24.30	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.

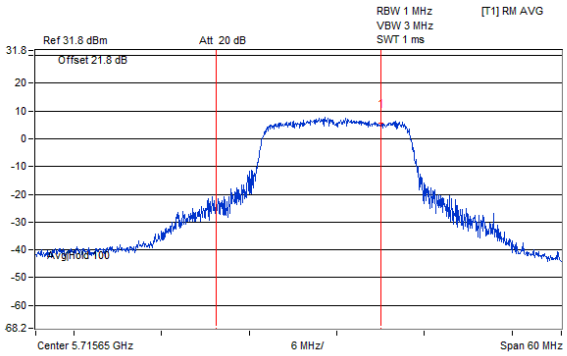
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	12.62	12.66	36.731	15.65	24	Pass
58	5290	11.72	11.81	30.03	14.78	24	Pass
106	5530	12.44	12.52	35.404	15.49	24	Pass
122	5610	14.42	14.51	55.918	17.48	24	Pass
*138 (U-NII-2C)	5690	16.86	17.90	122.091	20.87	24	Pass
*138 (U-NII-3)	5690	1.43	2.16	3.362	5.27	30	Pass
155	5775	18.95	18.99	157.774	21.98	30	Pass

Notes:

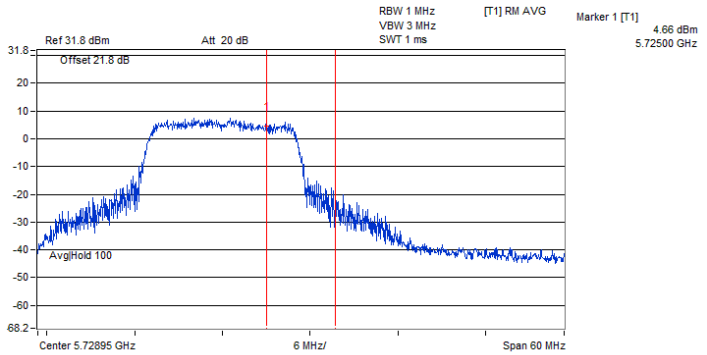
1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.24 dBi < 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



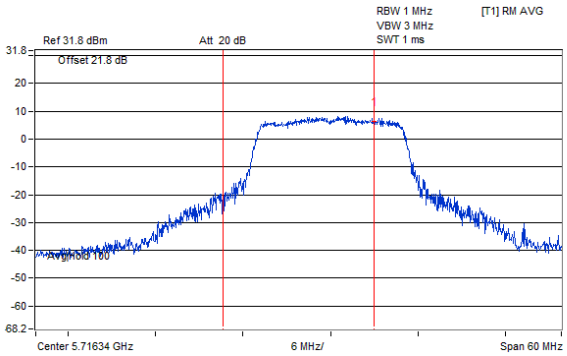
TX Channel Bandwidth 18.71 MHz Power 16.61 dBm

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



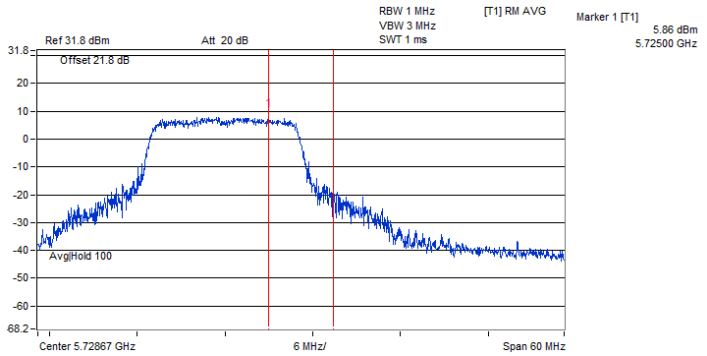
TX Channel Bandwidth 7.9 MHz Power 8.95 dBm

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



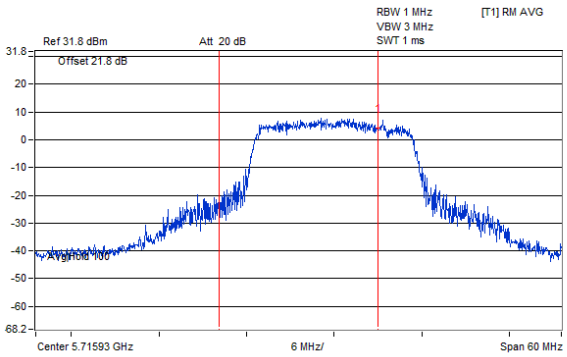
TX Channel Bandwidth 17.31 MHz Power 17.21 dBm

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



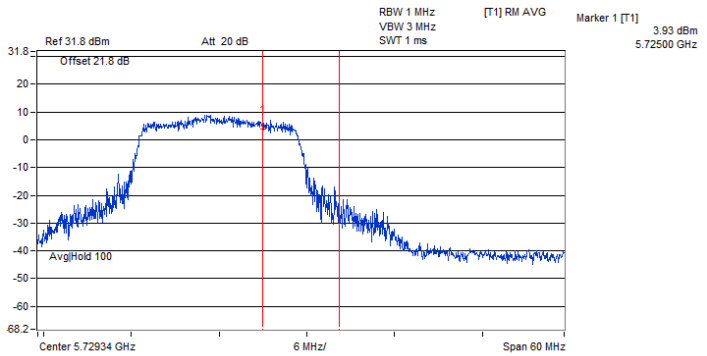
TX Channel Bandwidth 7.34 MHz Power 10.84 dBm

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



TX Channel Bandwidth 18.15 MHz Power 16.35 dBm

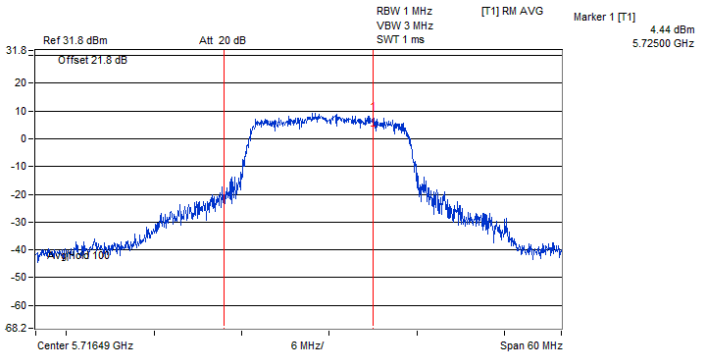
802.11ac (VHT20) / Chain 0 : CH 144 (U-NII-2C)



TX Channel Bandwidth 8.69 MHz Power 10.31 dBm

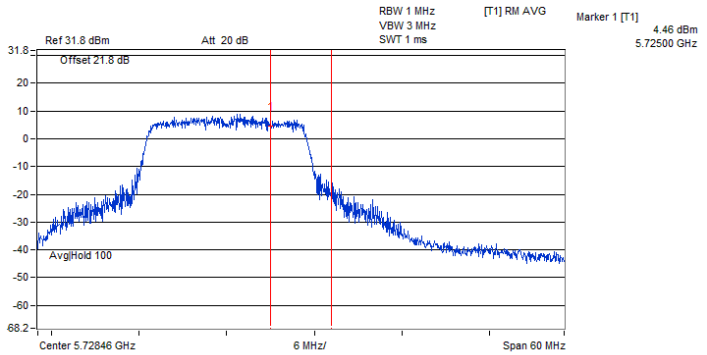
802.11ac (VHT20) / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



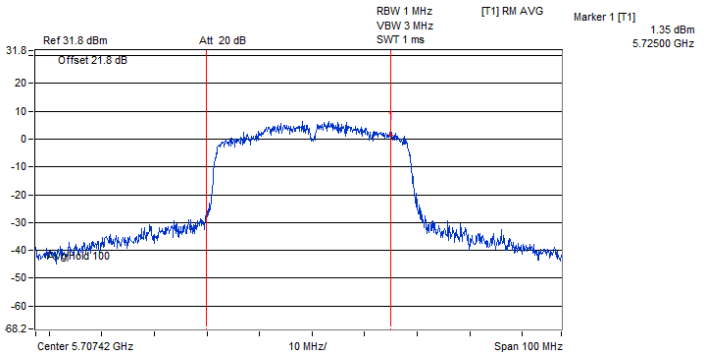
TX Channel Bandwidth 17.02 MHz Power 17.69 dBm

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



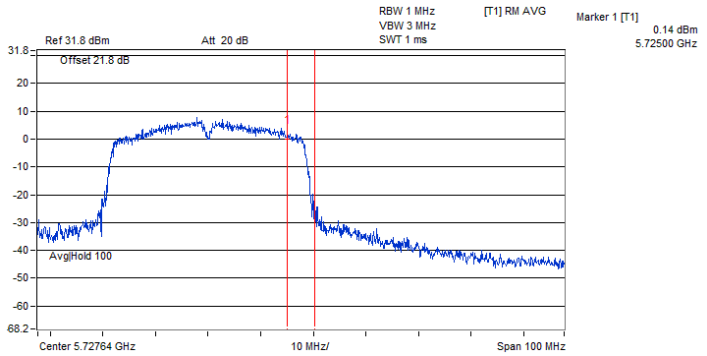
TX Channel Bandwidth 6.93 MHz Power 10.88 dBm

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



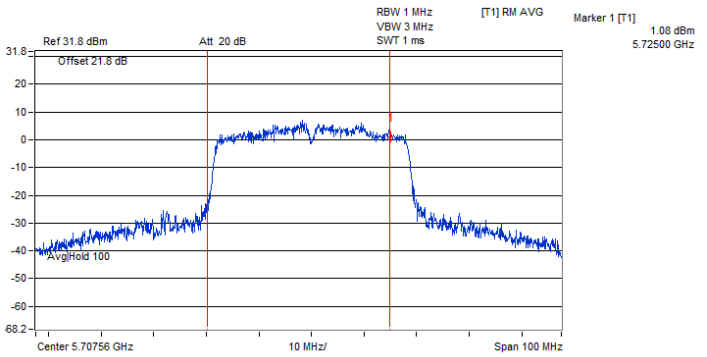
TX Channel Bandwidth 35.16 MHz Power 17.66 dBm

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



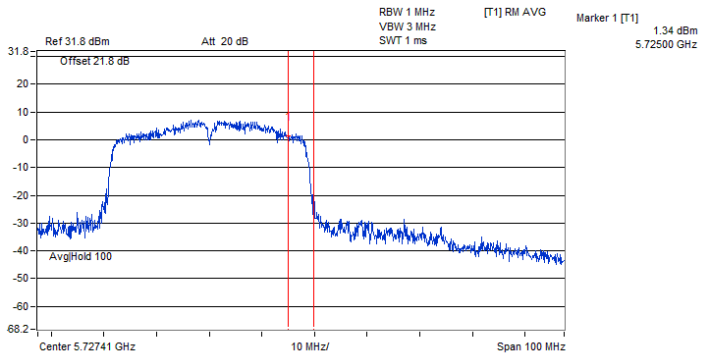
TX Channel Bandwidth 5.27 MHz Power 5.34 dBm

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



TX Channel Bandwidth 34.89 MHz Power 17.6 dBm

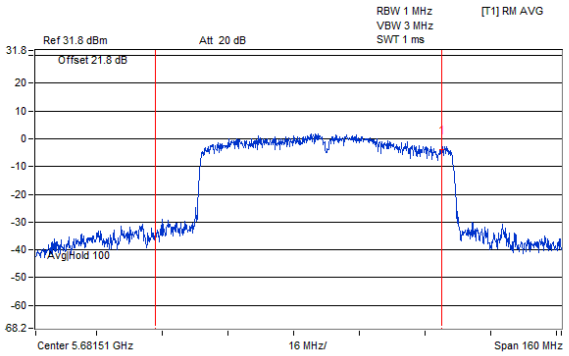
802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-2C)



TX Channel Bandwidth 4.83 MHz Power 5.57 dBm

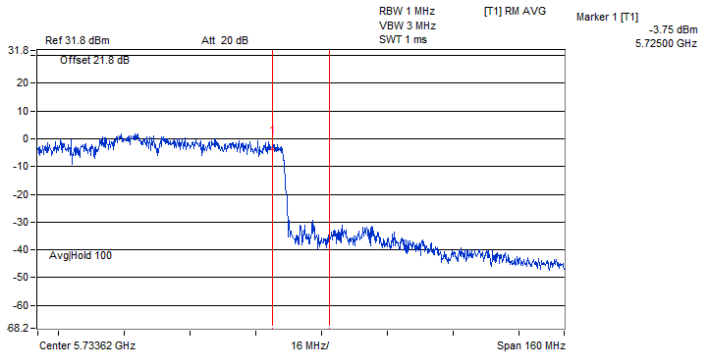
802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



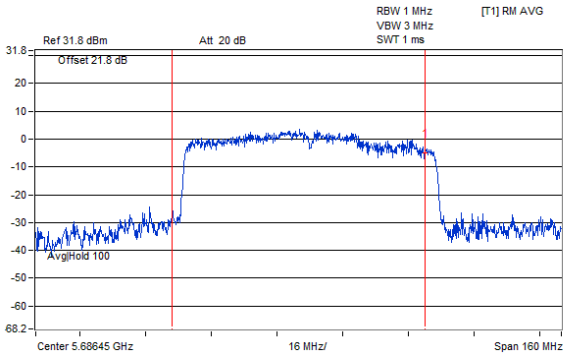
TX Channel Bandwidth 86.98 MHz Power 16.86 dBm

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



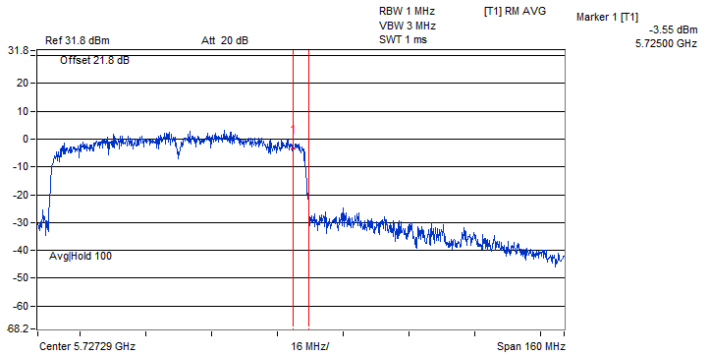
TX Channel Bandwidth 17.25 MHz Power 1.43 dBm

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



TX Channel Bandwidth 77.09 MHz Power 17.9 dBm

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



TX Channel Bandwidth 4.57 MHz Power 2.16 dBm

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

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	4.68	5.28	0.10	8.10	10.82	Pass
40	5200	5.42	6.29	0.10	8.99	10.82	Pass
48	5240	5.60	6.70	0.10	9.30	10.82	Pass
52	5260	5.61	7.32	0.10	9.66	10.82	Pass
60	5300	5.09	6.60	0.10	9.02	10.82	Pass
64	5320	3.62	6.09	0.10	8.14	10.82	Pass
100	5500	2.94	3.84	0.10	6.52	10.82	Pass
116	5580	4.65	7.01	0.10	9.10	10.82	Pass
140	5700	4.50	4.81	0.10	7.77	10.82	Pass
144 (U-NII-2C)	5720	5.94	6.54	0.10	9.36	10.82	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-1, the directional gain is 6.18 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	3.97	4.97	1.14	8.65	10.82	Pass
40	5200	4.62	6.42	1.14	9.76	10.82	Pass
48	5240	5.79	6.42	1.14	9.80	10.82	Pass
52	5260	5.31	7.41	1.14	9.60	10.82	Pass
60	5300	4.02	7.36	1.14	8.88	10.82	Pass
64	5320	2.62	5.74	1.14	8.60	10.82	Pass
100	5500	2.17	3.54	1.14	7.06	10.82	Pass
116	5580	4.50	6.02	1.14	9.48	10.82	Pass
140	5700	3.55	5.00	1.14	8.49	10.82	Pass
144 (U-NII-2C)	5720	4.93	5.73	1.14	9.50	10.82	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-1, the directional gain is 6.18 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
38	5190	-1.98	-0.80	0.30	1.96	10.82	Pass
46	5230	3.75	4.62	0.30	7.52	10.82	Pass
54	5270	0.61	4.20	0.30	6.08	10.82	Pass
62	5310	-1.63	0.45	0.30	2.84	10.82	Pass
102	5510	-1.50	-1.52	0.30	1.80	10.82	Pass
110	5550	2.66	3.94	0.30	6.66	10.82	Pass
134	5670	0.47	0.36	0.30	3.73	10.82	Pass
142 (U-NII-2C)	5710	2.72	4.27	0.30	6.87	10.82	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-1, the directional gain is 6.18 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
42	5210	-8.89	-7.13	0.45	-4.46	10.82	Pass
58	5290	-10.61	-7.39	0.45	-5.25	10.82	Pass
106	5530	-9.86	-7.15	0.45	-4.84	10.82	Pass
122	5610	-8.37	-5.61	0.45	-3.31	10.82	Pass
138 (U-NII-2C)	5690	0.09	0.01	0.45	3.51	10.82	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-1, the directional gain is 6.18 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.18-6) = 10.82 dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-0.73	-0.02	2.65	0.1	4.97	29.82	Pass
149	5745	4.51	4.18	7.36	0.1	9.68	29.82	Pass
157	5785	4.95	4.72	7.85	0.1	10.17	29.82	Pass
165	5825	5.04	4.89	7.98	0.1	10.30	29.82	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-3, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.18-6) = 29.82 dBm/500kHz.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-1.42	-0.67	1.98	1.14	5.34	29.82	Pass
149	5745	4.20	4.53	7.38	1.14	10.74	29.82	Pass
157	5785	4.34	4.89	7.63	1.14	10.99	29.82	Pass
165	5825	4.21	4.86	7.56	1.14	10.92	29.82	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-3, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.18-6) = 29.82 dBm/500kHz.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
142 (U-NII-3)	5710	-6.54	-5.11	-2.76	0.3	-0.24	29.82	Pass
151	5755	0.15	1.32	3.78	0.3	6.30	29.82	Pass
159	5795	0.09	0.71	3.42	0.3	5.94	29.82	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-3, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.18-6) = 29.82 dBm/500kHz.

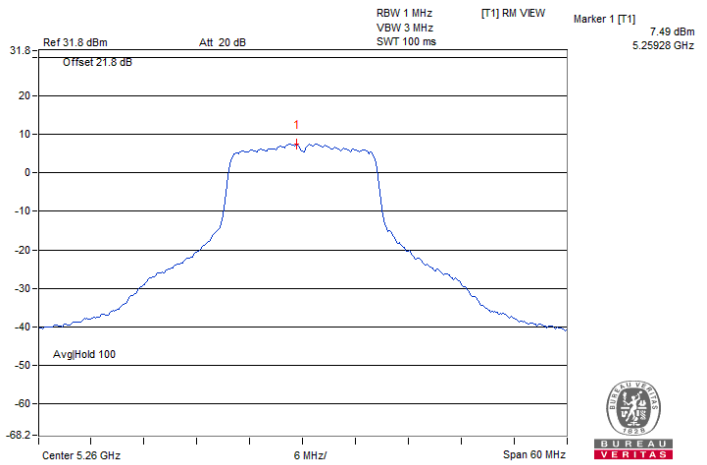
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
138 (U-NII-3)	5690	-8.93	-8.82	-5.86	0.45	-3.19	29.82	Pass
155	5775	-6.72	-6.41	-3.55	0.45	-0.88	29.82	Pass

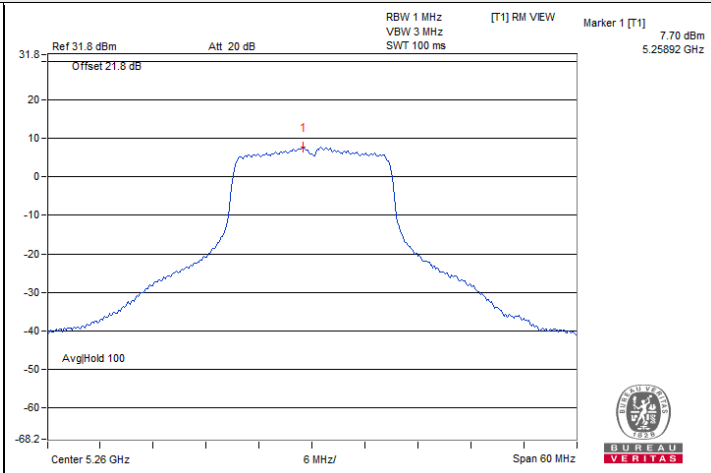
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-3, the directional gain is 6.18 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.18-6) = 29.82 dBm/500kHz.

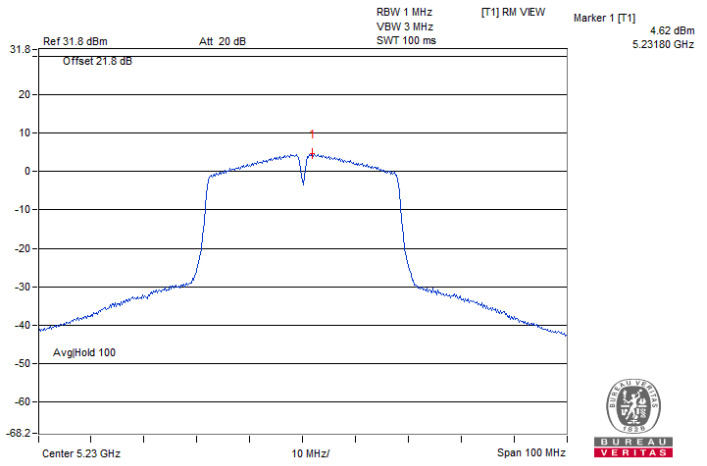
Spectrum Plot of Maximum Value



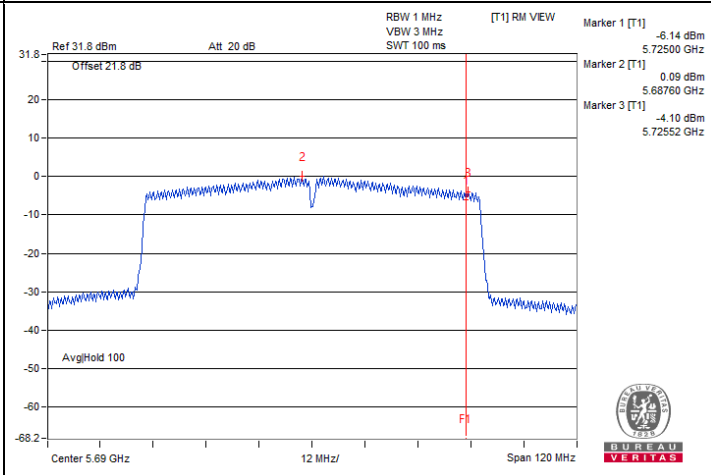
802.11a / Chain 1 : CH 52



802.11ac (VHT20) / Chain 1 : CH 52

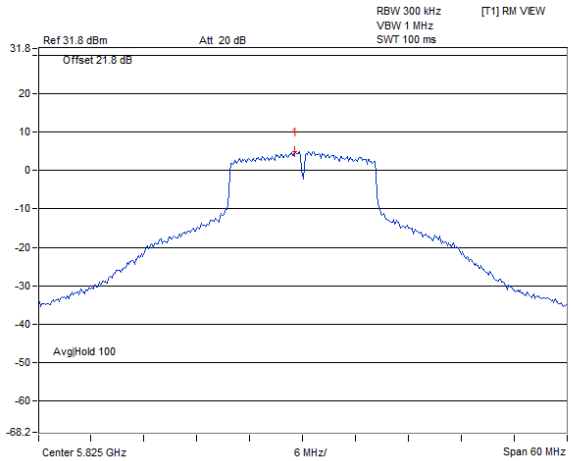


802.11ac (VHT40) / Chain 1 : CH 46

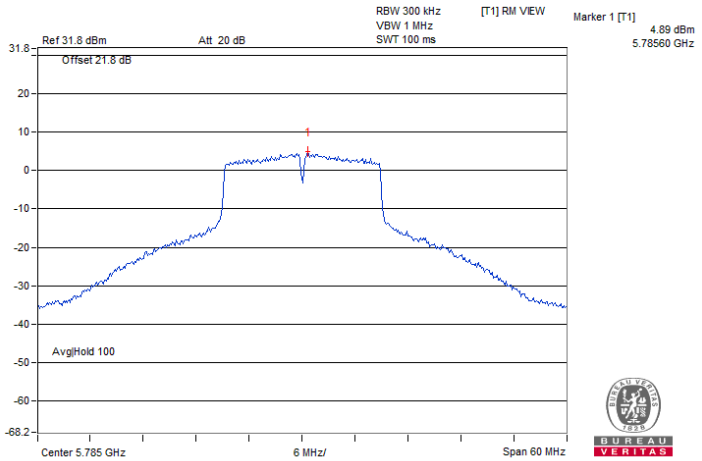


802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-2C)

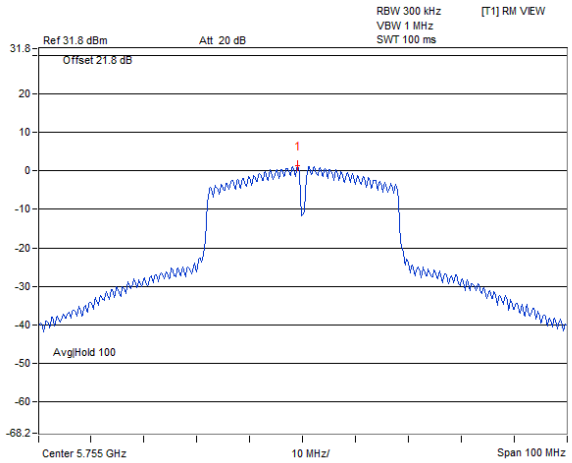
Spectrum Plot of Maximum Value



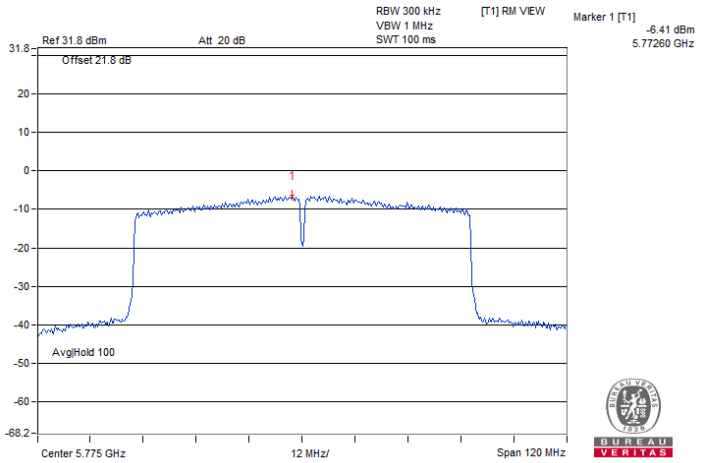
802.11a / Chain 0 : CH 165



802.11ac (VHT20) / Chain 1 : CH 157



802.11ac (VHT40) / Chain 1 : CH 151



802.11ac (VHT80) / Chain 1 : CH 155

7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.14	3.18	0.5	Pass
149	5745	15.92	16.33	0.5	Pass
157	5785	15.93	16.31	0.5	Pass
165	5825	15.89	16.32	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.42	3.77	0.5	Pass
149	5745	16.88	16.95	0.5	Pass
157	5785	16.91	16.94	0.5	Pass
165	5825	15.44	17.31	0.5	Pass

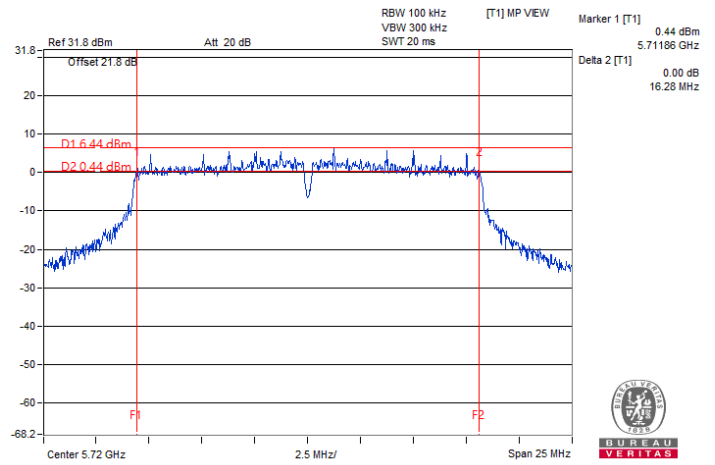
802.11ac (VHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	2.51	2.56	0.5	Pass
151	5755	35.02	33.77	0.5	Pass
159	5795	31.33	34.93	0.5	Pass

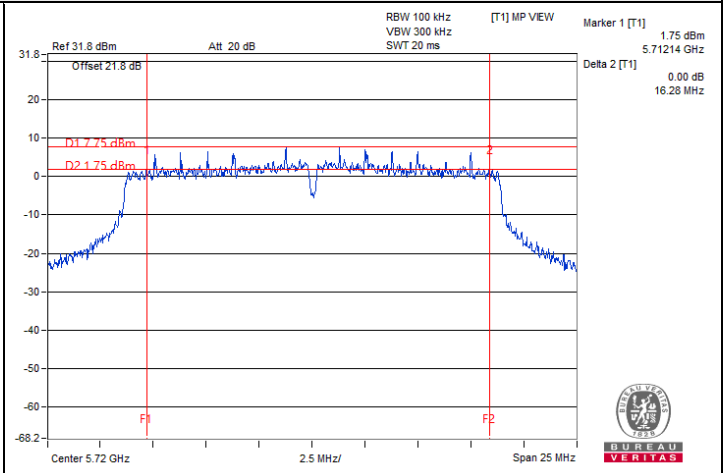
802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	2.62	2.50	0.5	Pass
155	5775	73.87	73.92	0.5	Pass

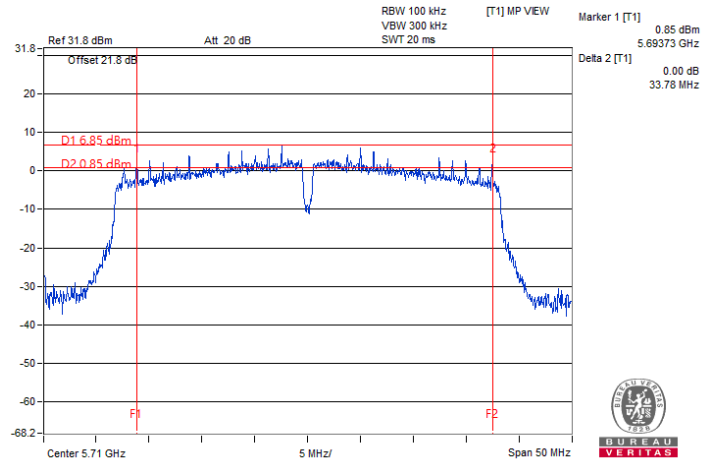
Spectrum Plot of Minimum Value



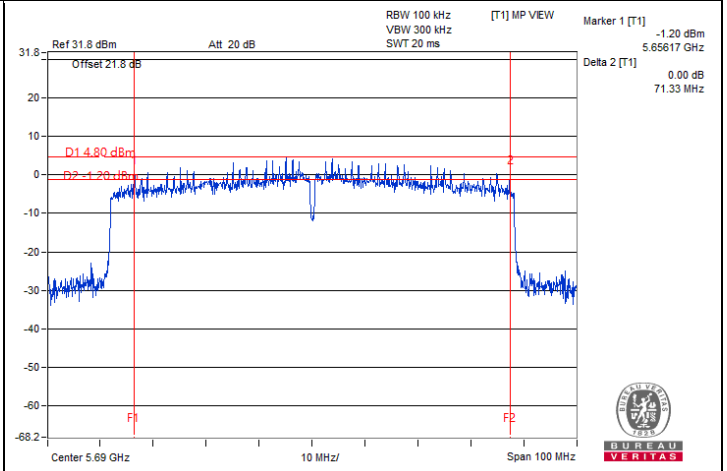
802.11a / Chain 0 : CH 144 (U-NII-3)



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



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



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

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

7.5 Occupied Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.22	16.92
40	5200	16.92	16.92
48	5240	16.50	16.44
52	5260	16.92	16.80
60	5300	16.92	16.80
64	5320	16.86	16.86
100	5500	16.98	16.74
116	5580	16.74	16.74
140	5700	16.86	16.80
144 (U-NII-2C)	5720	13.40	13.34
144 (U-NII-3)	5720	3.46	3.46
149	5745	22.74	21.84
157	5785	24.06	23.04
165	5825	22.74	25.14

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.00	17.88
40	5200	18.06	17.88
48	5240	17.52	17.52
52	5260	18.06	17.82
60	5300	18.00	17.94
64	5320	18.06	17.82
100	5500	18.00	17.82
116	5580	17.94	17.88
140	5700	17.88	17.82
144 (U-NII-2C)	5720	14.00	13.88
144 (U-NII-3)	5720	4.06	3.94
149	5745	19.32	21.78
157	5785	20.34	22.08
165	5825	19.32	24.06

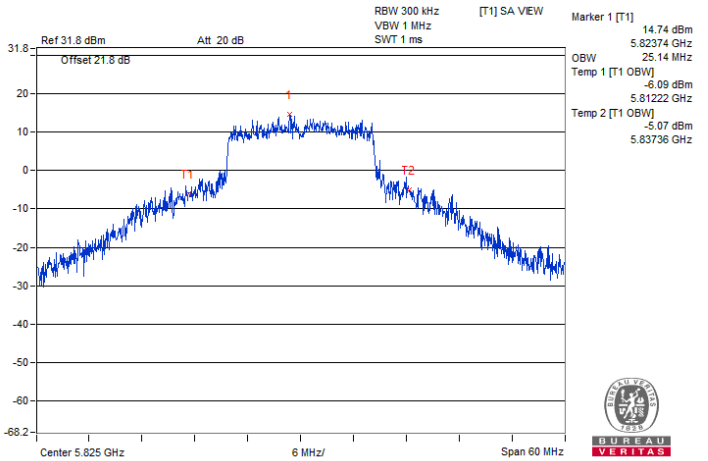
802.11ac (VHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	35.76	35.52
46	5230	35.88	35.88
54	5270	36.00	35.76
62	5310	35.88	35.88
102	5510	36.00	36.12
110	5550	36.00	35.88
134	5670	35.76	35.76
142 (U-NII-2C)	5710	33.00	33.12
142 (U-NII-3)	5710	3.00	3.24
151	5755	36.12	36.24
159	5795	36.00	36.36

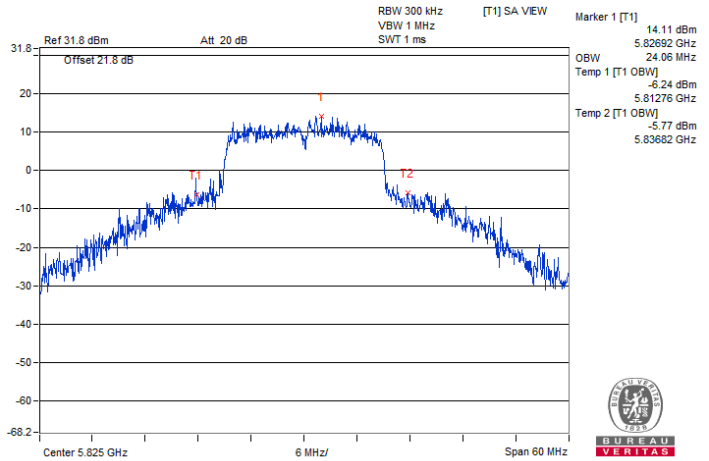
802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	75.60	74.88
58	5290	75.12	75.36
106	5530	74.88	75.36
122	5610	75.12	74.88
138 (U-NII-2C)	5690	72.68	72.68
138 (U-NII-3)	5690	2.68	2.68
155	5775	75.36	75.12

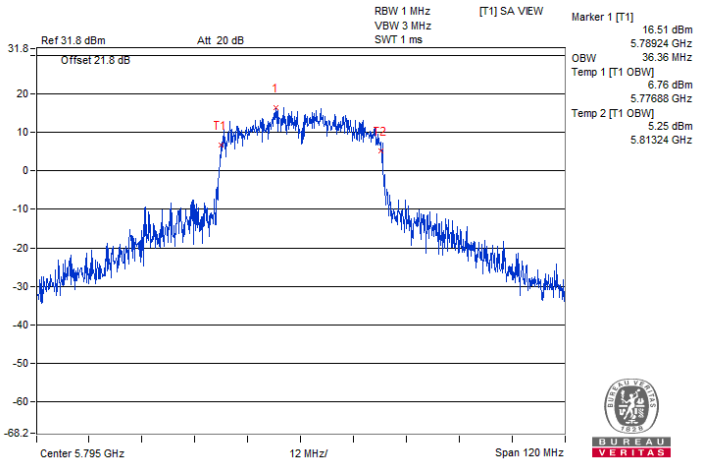
Spectrum Plot of Maximum Value



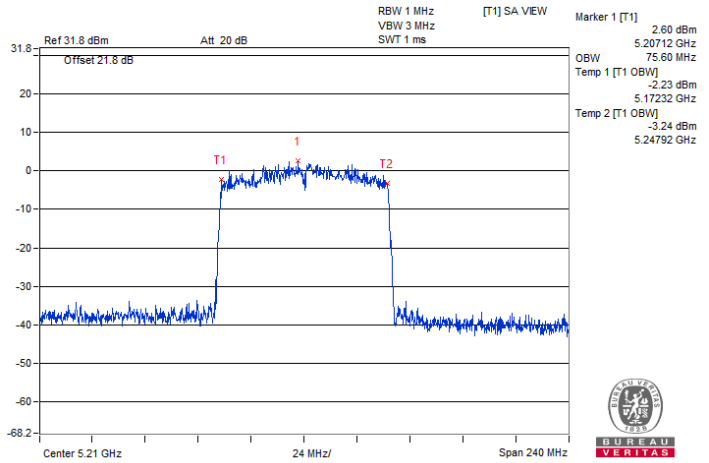
802.11a / Chain 1 : CH 165



802.11ac (VHT20) / Chain 1 : CH 165

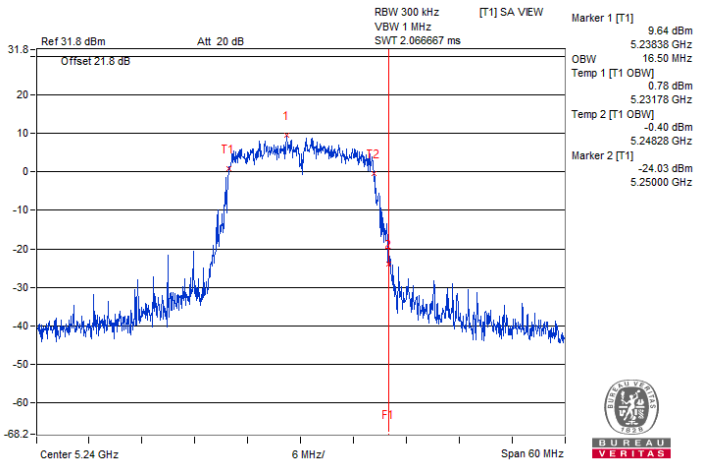


802.11ac (VHT40) / Chain 1 : CH 159

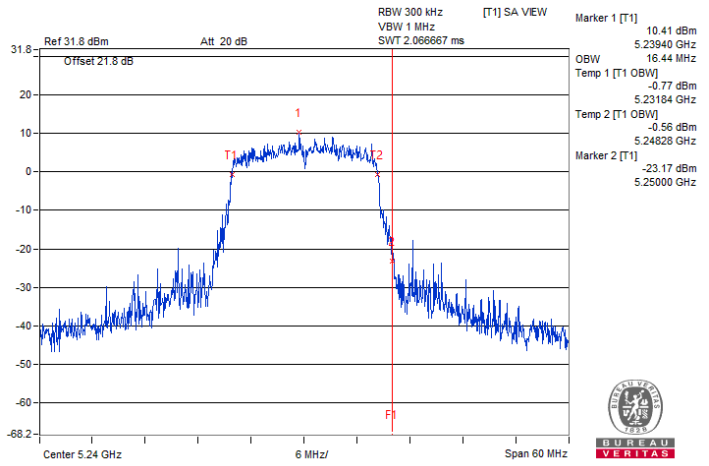


802.11ac (VHT80) / Chain 0 : CH 42

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



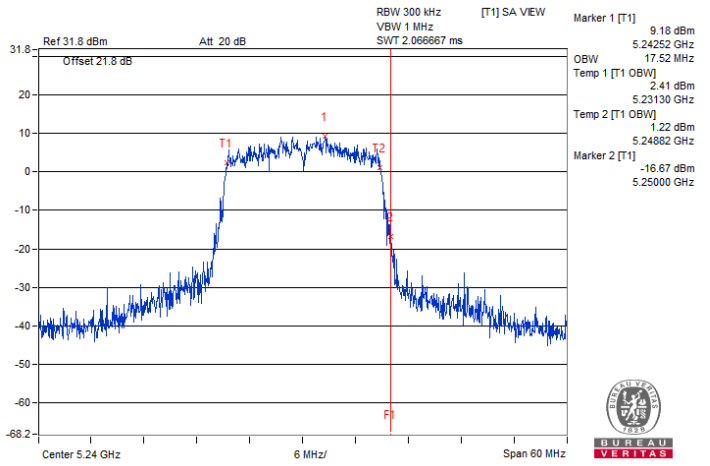
802.11a / Chain 0 : CH 48



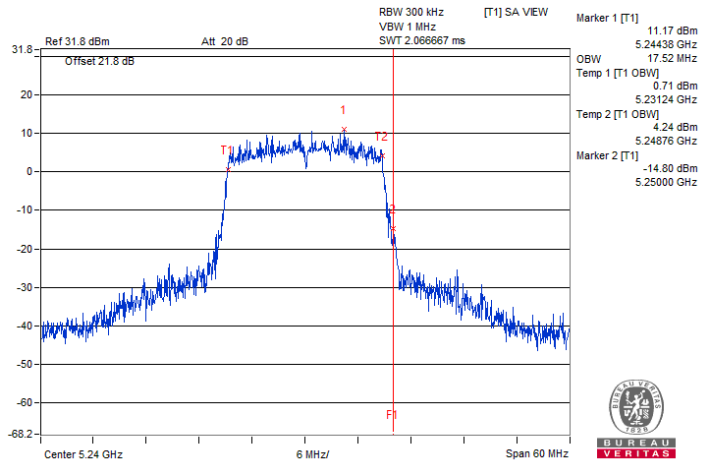
802.11a / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

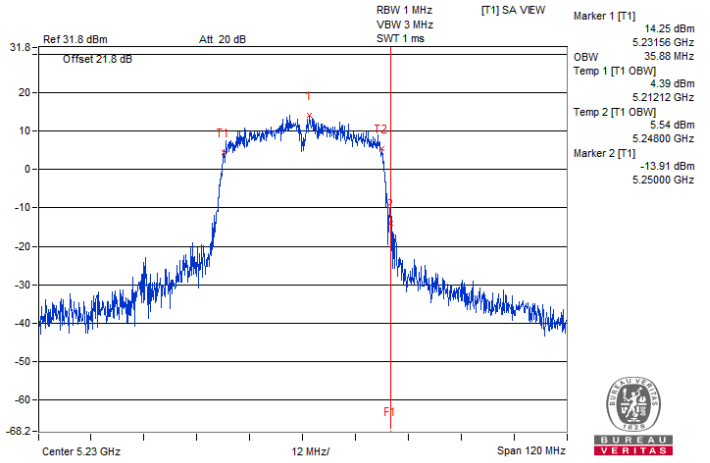
(DFS is required, if 99% OCP straddle into U-NII-2A)



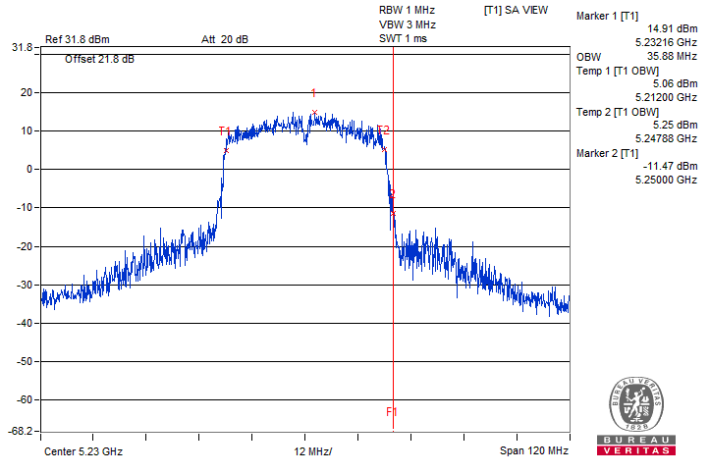
802.11ac (VHT20) / Chain 0 : CH 48



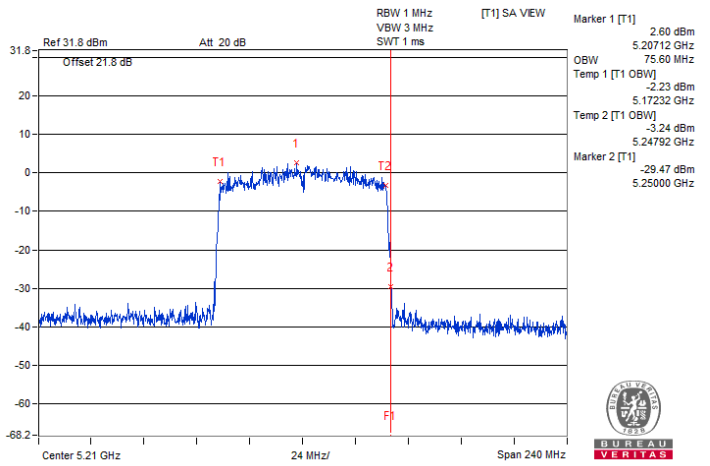
802.11ac (VHT20) / Chain 1 : CH 48



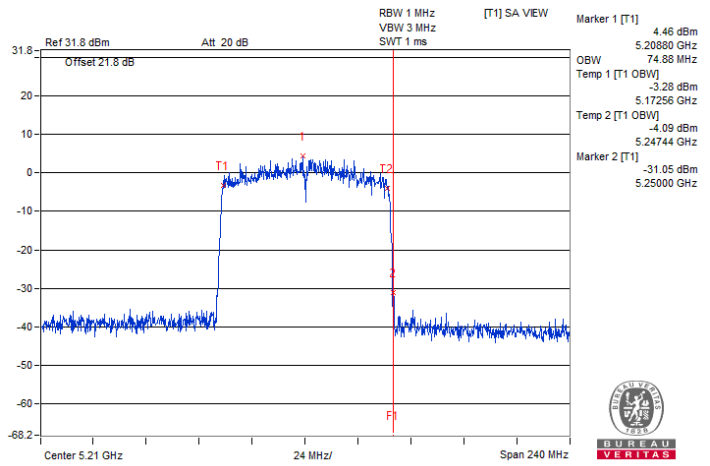
802.11ac (VHT40) / Chain 0 : CH 46



802.11ac (VHT40) / Chain 1 : CH 46



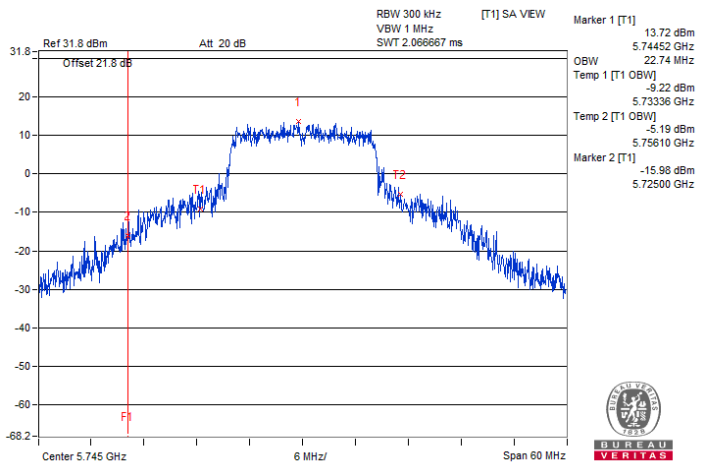
802.11ac (VHT80) / Chain 0 : CH 42



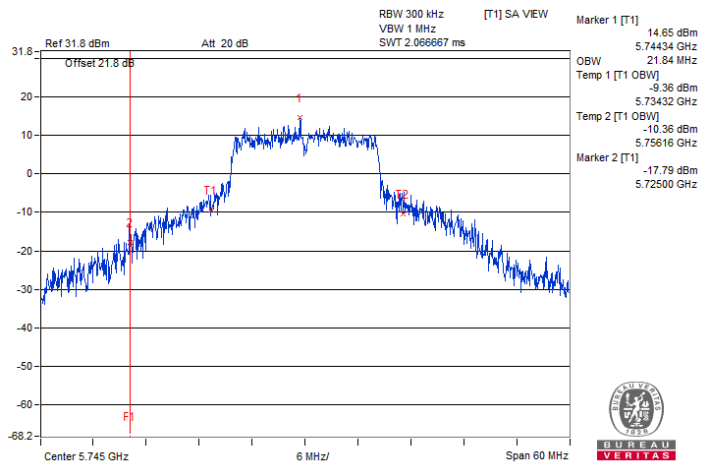
802.11ac (VHT80) / Chain 1 : CH 42

Spectrum Plot for nearby DFS band

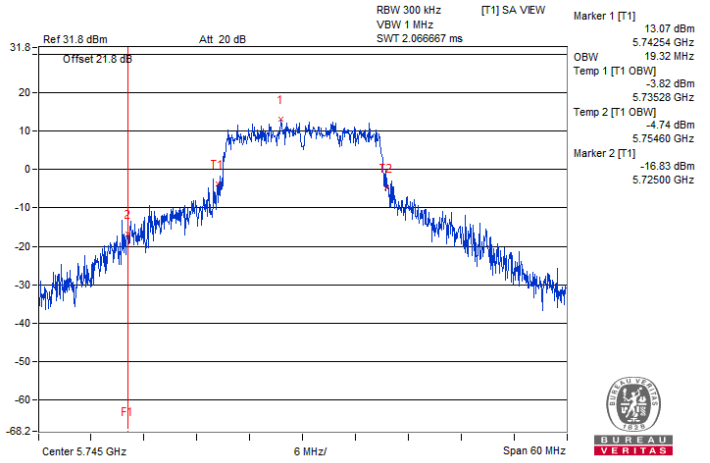
(DFS is required, if 99% OCP straddle into U-NII-2C)



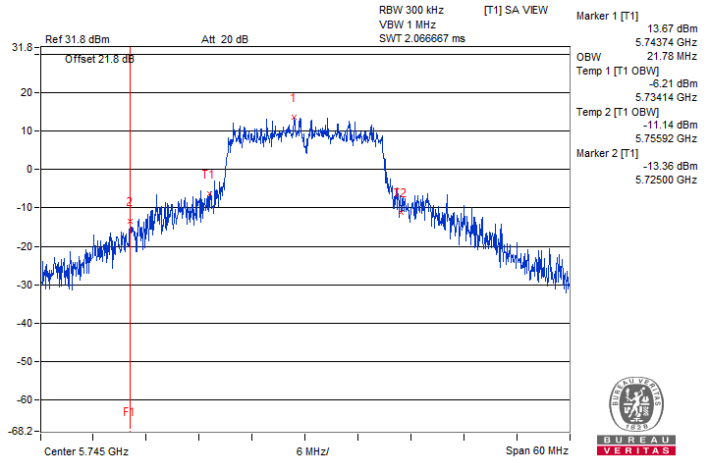
802.11a / Chain 0 : CH 149



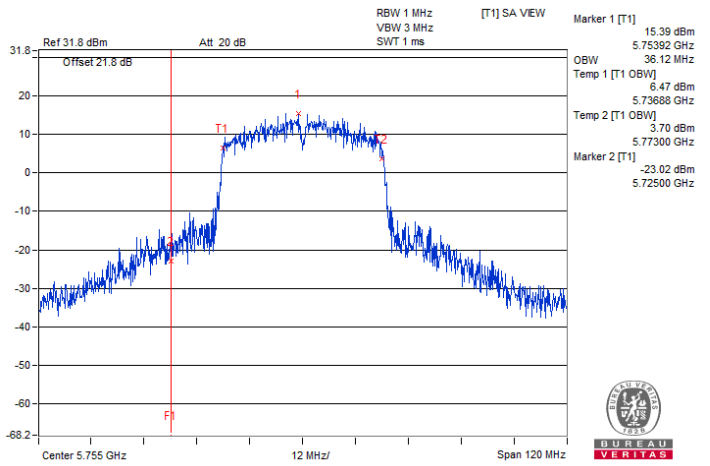
802.11a / Chain 1 : CH 149



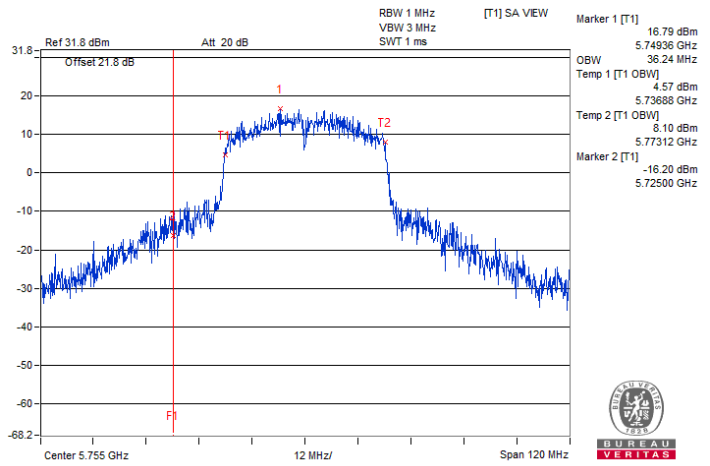
802.11ac (VHT20) / Chain 0 : CH 149



802.11ac (VHT20) / Chain 1 : CH 149



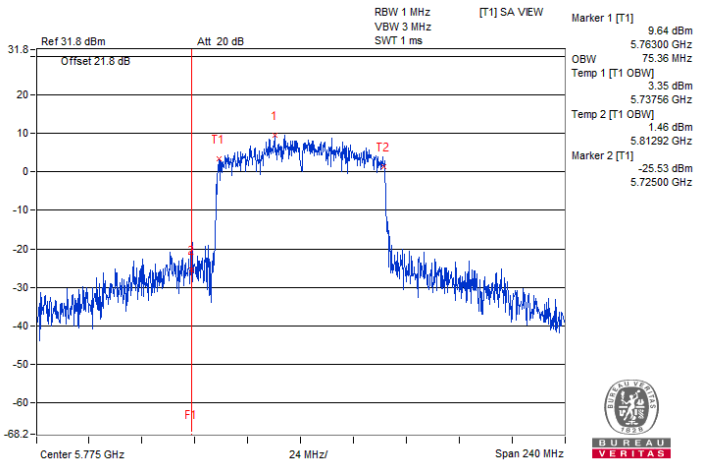
802.11ac (VHT40) / Chain 0 : CH 151



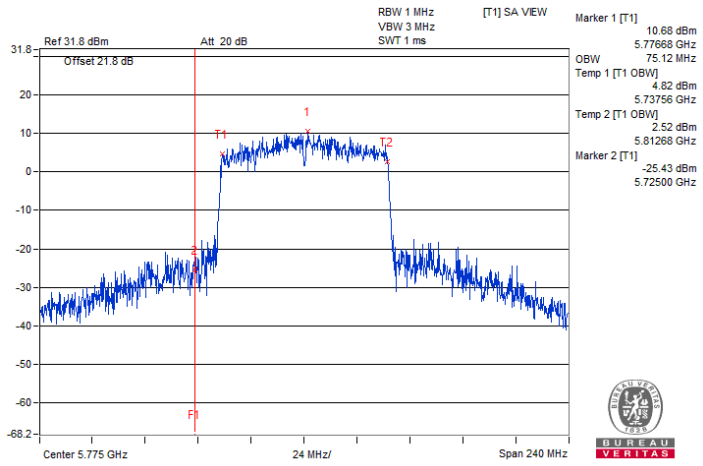
802.11ac (VHT40) / Chain 1 : CH 151

Spectrum Plot for nearby DFS band

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



802.11ac (VHT80) / Chain 0 : CH 155



802.11ac (VHT80) / Chain 1 : CH 155

7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 65% RH	Tested By:	John Peng

Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5180.0276	Pass	5180.0265	Pass	5180.0234	Pass	5180.0276	Pass
30	120	5180.014	Pass	5180.0099	Pass	5180.0133	Pass	5180.0133	Pass
20	120	5180.0046	Pass	5180.0073	Pass	5180.0043	Pass	5180.0056	Pass
10	120	5180.0159	Pass	5180.0176	Pass	5180.0162	Pass	5180.0166	Pass
0	120	5179.981	Pass	5179.9807	Pass	5179.9801	Pass	5179.9768	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5180.0146	Pass	5180.0167	Pass	5180.014	Pass	5180.0146	Pass
	120	5180.0046	Pass	5180.0073	Pass	5180.0043	Pass	5180.0056	Pass
	102	5180.0023	Pass	5180.0026	Pass	5180.0041	Pass	5180.0021	Pass

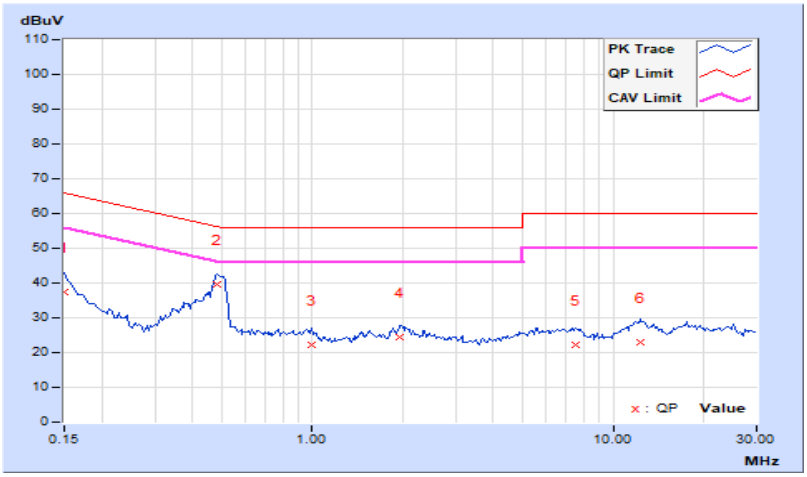
7.7 AC Power Conducted Emissions

RF Mode	802.11ac (VHT20)	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	21°C, 66% RH
Tested By	Willy Lin		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.93	27.51	18.69	37.44	28.62	66.00	56.00	-28.56	-27.38
2	0.48203	9.96	29.62	21.96	39.58	31.92	56.30	46.30	-16.72	-14.38
3	0.99375	9.99	12.21	1.96	22.20	11.95	56.00	46.00	-33.80	-34.05
4	1.96094	10.05	14.53	7.24	24.58	17.29	56.00	46.00	-31.42	-28.71
5	7.55078	10.46	11.71	4.12	22.17	14.58	60.00	50.00	-37.83	-35.42
6	12.27344	10.81	12.30	7.35	23.11	18.16	60.00	50.00	-36.89	-31.84

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

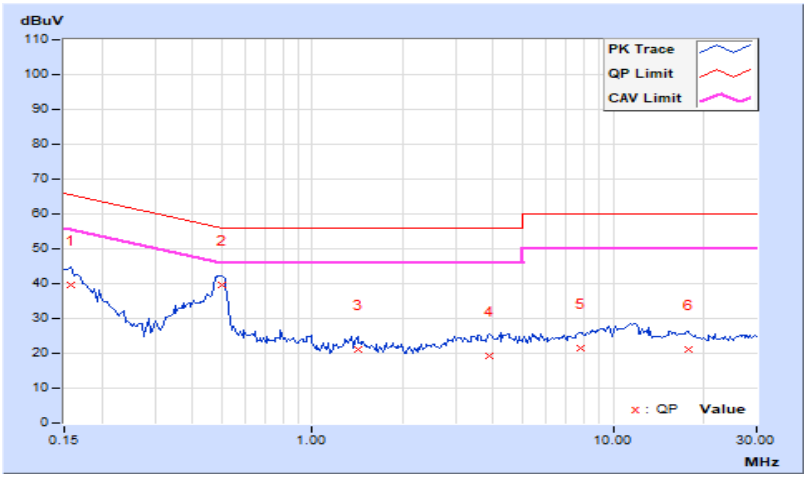


RF Mode	802.11ac (VHT20)	**Channel**	CH 157：5785 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	21°C, 66% RH
Tested By	Willy Lin		

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	0.15781	10.01	29.57	18.77	39.58	28.78	65.58	55.58	-26.00	-26.80
2	**0.50156**	**10.02**	**29.57**	**22.35**	**39.59**	**32.37**	**56.00**	**46.00**	**-16.41**	**-13.63**
3	1.41797	10.06	11.06	1.29	21.12	11.35	56.00	46.00	-34.88	-34.65
4	3.86328	10.21	8.91	3.10	19.12	13.31	56.00	46.00	-36.88	-32.69
5	7.75781	10.45	10.95	2.56	21.40	13.01	60.00	50.00	-38.60	-36.99
6	17.76953	10.99	10.16	3.24	21.15	14.23	60.00	50.00	-38.85	-35.77

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



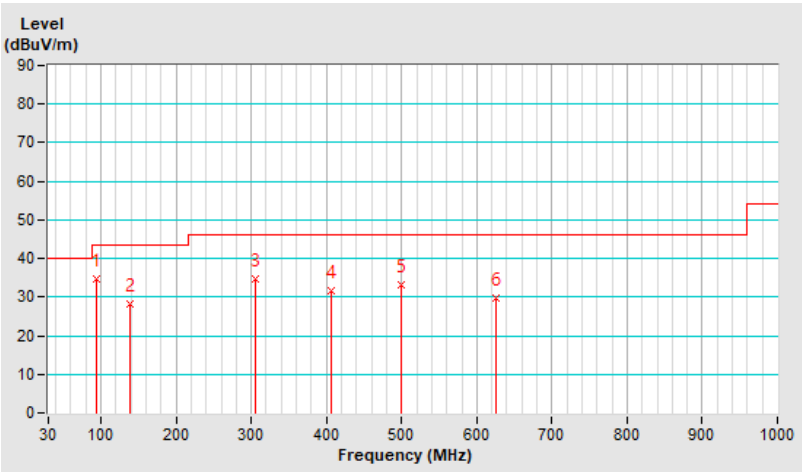
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11ac (VHT20)	**Channel**	CH 157：5785 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Weiwei Lo		

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	94.51	34.6 QP	43.5	-8.9	1.50 H	136	52.9	-18.3
2	138.31	28.2 QP	43.5	-15.3	1.50 H	249	41.6	-13.4
3	305.16	34.8 QP	46.0	-11.2	1.00 H	166	46.9	-12.1
4	405.75	31.6 QP	46.0	-14.4	2.00 H	122	41.3	-9.7
5	500.33	33.0 QP	46.0	-13.0	2.00 H	319	40.6	-7.6
6	625.41	29.8 QP	46.0	-16.2	3.00 H	31	34.5	-4.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

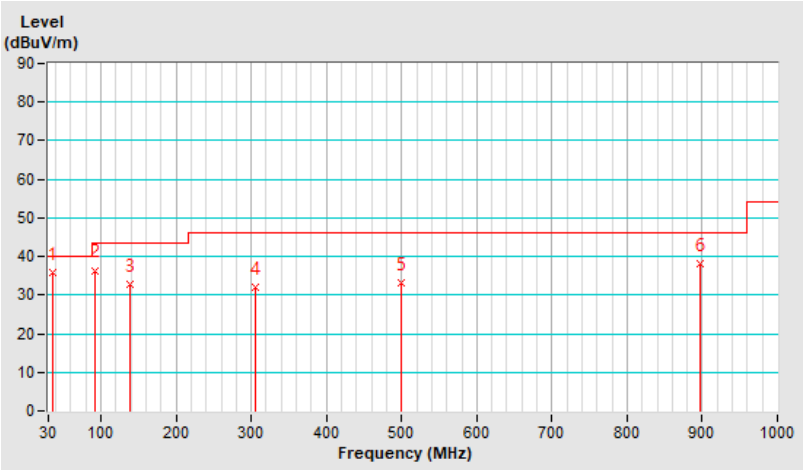


RF Mode	802.11ac (VHT20)	**Channel**	CH 157：5785 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Weiwei Lo		

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	**34.99**	**35.8 QP**	**40.0**	**-4.2**	**1.50 V**	**217**	**49.5**	**-13.7**
2	91.51	36.4 QP	43.5	-7.1	2.00 V	350	55.0	-18.6
3	139.42	32.9 QP	43.5	-10.6	1.00 V	212	46.2	-13.3
4	304.98	32.0 QP	46.0	-14.0	1.50 V	100	44.1	-12.1
5	500.18	33.1 QP	46.0	-12.9	1.50 V	177	40.7	-7.6
6	896.33	38.2 QP	46.0	-7.8	1.00 V	301	38.9	-0.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



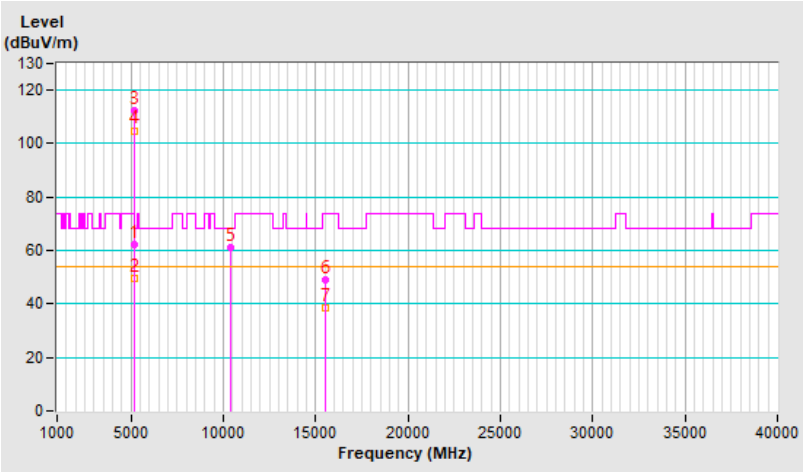
7.9 Unwanted Emissions above 1 GHz

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, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	22°C, 67% RH
Tested By	Weiwei Lo		

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	62.3 PK	74.0	-11.7	1.18 H	190	58.3	4.0
2	5150.00	49.8 AV	54.0	-4.2	1.18 H	190	45.8	4.0
3	*5180.00	112.6 PK			1.18 H	190	108.8	3.8
4	*5180.00	104.9 AV			1.18 H	190	101.1	3.8
5	#10360.00	61.2 PK	68.2	-7.0	1.25 H	168	47.5	13.7
6	15540.00	49.1 PK	74.0	-24.9	1.51 H	68	34.2	14.9
7	15540.00	38.5 AV	54.0	-15.5	1.51 H	68	23.6	14.9

Remarks:

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

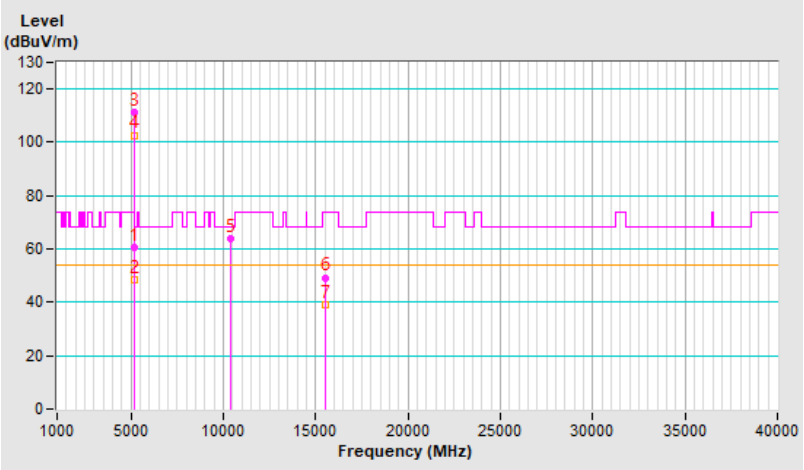


RF Mode	802.11a	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	60.6 PK	74.0	-13.4	2.18 V	203	56.6	4.0
2	5150.00	48.2 AV	54.0	-5.8	2.18 V	203	44.2	4.0
3	*5180.00	111.5 PK			2.18 V	203	107.7	3.8
4	*5180.00	102.7 AV			2.18 V	203	98.9	3.8
5	#10360.00	63.8 PK	68.2	-4.4	1.43 V	269	50.1	13.7
6	15540.00	49.3 PK	74.0	-24.7	1.50 V	302	34.4	14.9
7	15540.00	38.9 AV	54.0	-15.1	1.50 V	302	24.0	14.9

Remarks:

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

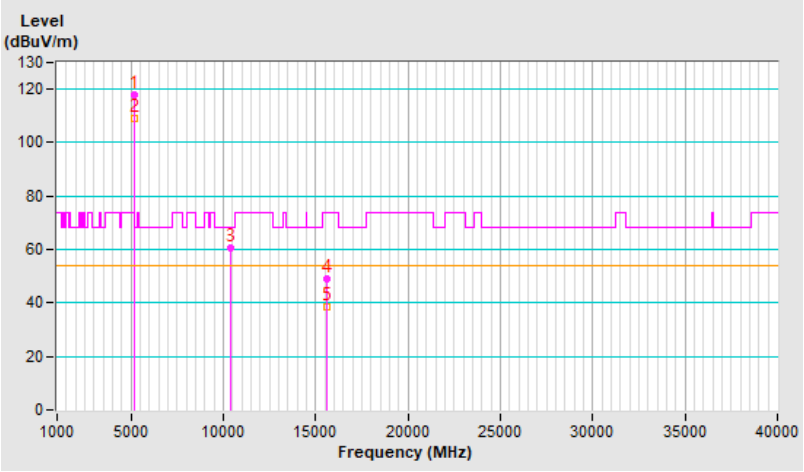


RF Mode	802.11a	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5200.00	118.0 PK			1.30 H	180	114.4	3.6
2	*5200.00	109.3 AV			1.30 H	180	105.7	3.6
3	#10400.00	60.6 PK	68.2	-7.6	1.28 H	156	46.7	13.9
4	15600.00	48.9 PK	74.0	-25.1	1.49 H	72	34.3	14.6
5	15600.00	38.6 AV	54.0	-15.4	1.49 H	72	24.0	14.6

Remarks:

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

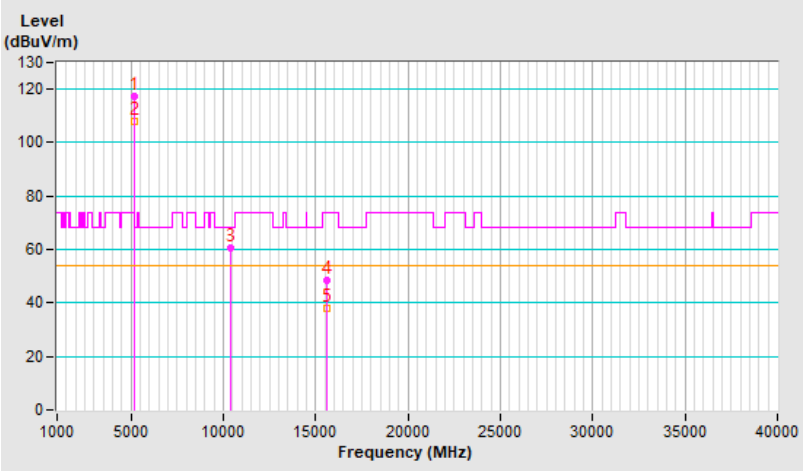


RF Mode	802.11a	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5200.00	117.5 PK			1.28 V	260	113.9	3.6
2	*5200.00	108.1 AV			1.28 V	260	104.5	3.6
3	#10400.00	60.5 PK	68.2	-7.7	1.45 V	268	46.6	13.9
4	15600.00	48.4 PK	74.0	-25.6	1.55 V	301	33.8	14.6
5	15600.00	38.1 AV	54.0	-15.9	1.55 V	301	23.5	14.6

Remarks:

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

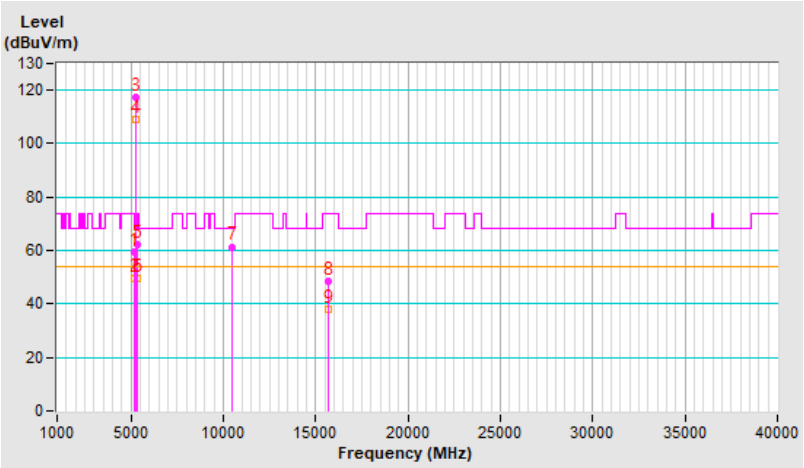


RF Mode	802.11a	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	59.4 PK	74.0	-14.6	1.34 H	188	55.4	4.0
2	5150.00	49.7 AV	54.0	-4.3	1.34 H	188	45.7	4.0
3	*5240.00	117.3 PK			1.34 H	188	114.1	3.2
4	*5240.00	108.9 AV			1.34 H	188	105.7	3.2
5	5350.00	62.2 PK	74.0	-11.8	1.34 H	188	58.6	3.6
6	5350.00	49.5 AV	54.0	-4.5	1.34 H	188	45.9	3.6
7	#10480.00	61.4 PK	68.2	-6.8	1.27 H	158	47.1	14.3
8	15720.00	48.6 PK	74.0	-25.4	1.54 H	61	34.4	14.2
9	15720.00	38.1 AV	54.0	-15.9	1.54 H	61	23.9	14.2

Remarks:

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

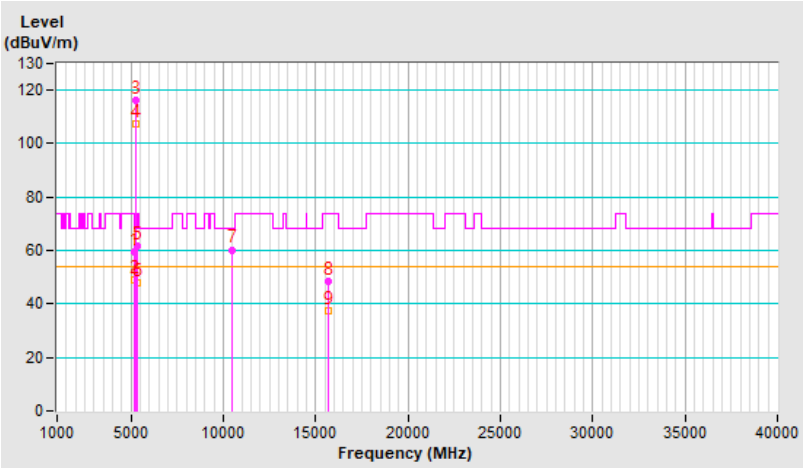


RF Mode	802.11a	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.6 PK	74.0	-14.4	1.26 V	256	55.6	4.0
2	5150.00	48.9 AV	54.0	-5.1	1.26 V	256	44.9	4.0
3	*5240.00	116.1 PK			1.26 V	256	112.9	3.2
4	*5240.00	107.6 AV			1.26 V	256	104.4	3.2
5	5350.00	61.8 PK	74.0	-12.2	1.26 V	256	58.2	3.6
6	5350.00	48.1 AV	54.0	-5.9	1.26 V	256	44.5	3.6
7	#10480.00	60.3 PK	68.2	-7.9	1.39 V	276	46.0	14.3
8	15720.00	48.7 PK	74.0	-25.3	1.56 V	294	34.5	14.2
9	15720.00	37.5 AV	54.0	-16.5	1.56 V	294	23.3	14.2

Remarks:

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

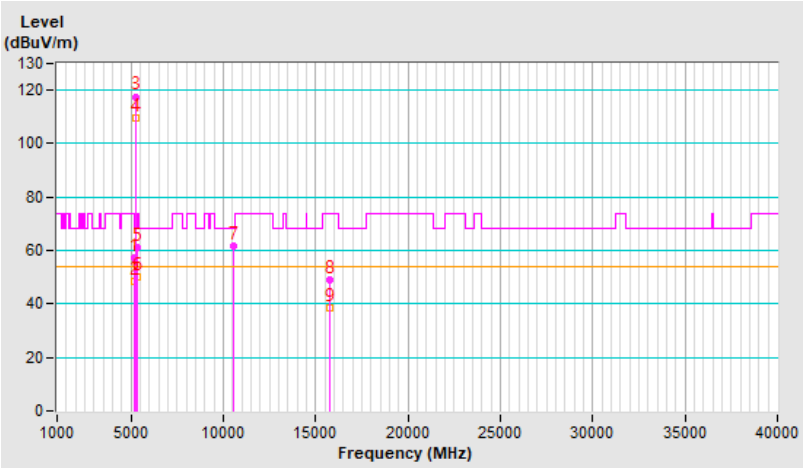


RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.5 PK	74.0	-16.5	1.33 H	191	53.5	4.0
2	5150.00	48.3 AV	54.0	-5.7	1.33 H	191	44.3	4.0
3	*5260.00	117.6 PK			1.33 H	191	114.5	3.1
4	*5260.00	109.4 AV			1.33 H	191	106.3	3.1
5	5350.00	60.9 PK	74.0	-13.1	1.33 H	191	57.3	3.6
6	5350.00	49.9 AV	54.0	-4.1	1.33 H	191	46.3	3.6
7	#10520.00	61.7 PK	68.2	-6.5	1.24 H	182	47.2	14.5
8	15780.00	48.8 PK	74.0	-25.2	1.57 H	84	34.8	14.0
9	15780.00	38.4 AV	54.0	-15.6	1.57 H	84	24.4	14.0

Remarks:

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

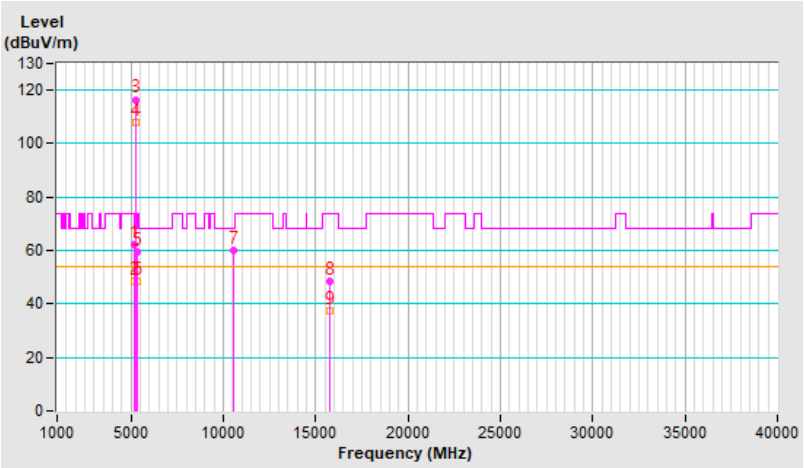


RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.3 PK	74.0	-11.7	1.30 V	216	58.3	4.0
2	5150.00	48.5 AV	54.0	-5.5	1.30 V	216	44.5	4.0
3	*5260.00	116.5 PK			1.30 V	216	113.4	3.1
4	*5260.00	108.1 AV			1.30 V	216	105.0	3.1
5	5350.00	59.3 PK	74.0	-14.7	1.30 V	216	55.7	3.6
6	5350.00	48.6 AV	54.0	-5.4	1.30 V	216	45.0	3.6
7	#10520.00	59.9 PK	68.2	-8.3	1.42 V	284	45.4	14.5
8	15780.00	48.7 PK	74.0	-25.3	1.50 V	306	34.7	14.0
9	15780.00	37.5 AV	54.0	-16.5	1.50 V	306	23.5	14.0

Remarks:

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

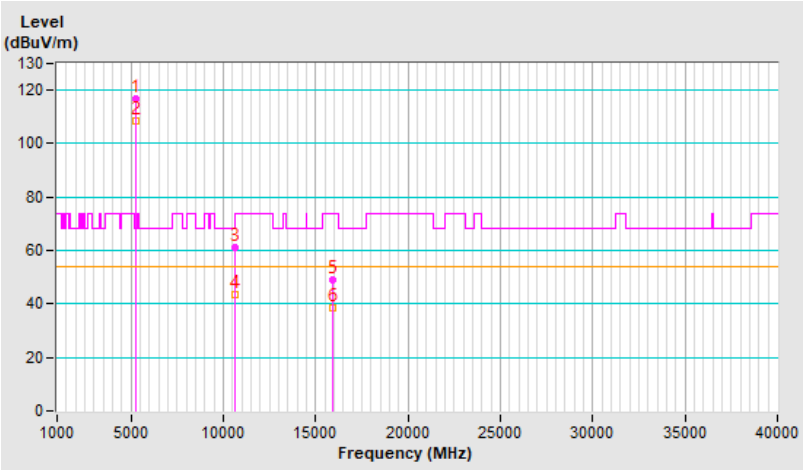


RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	116.8 PK			1.40 H	203	113.8	3.0
2	*5300.00	108.6 AV			1.40 H	203	105.6	3.0
3	10600.00	60.9 PK	74.0	-13.1	1.29 H	182	46.0	14.9
4	10600.00	43.5 AV	54.0	-10.5	1.29 H	182	28.6	14.9
5	15900.00	49.1 PK	74.0	-24.9	1.57 H	63	35.0	14.1
6	15900.00	38.6 AV	54.0	-15.4	1.57 H	63	24.5	14.1

Remarks:

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

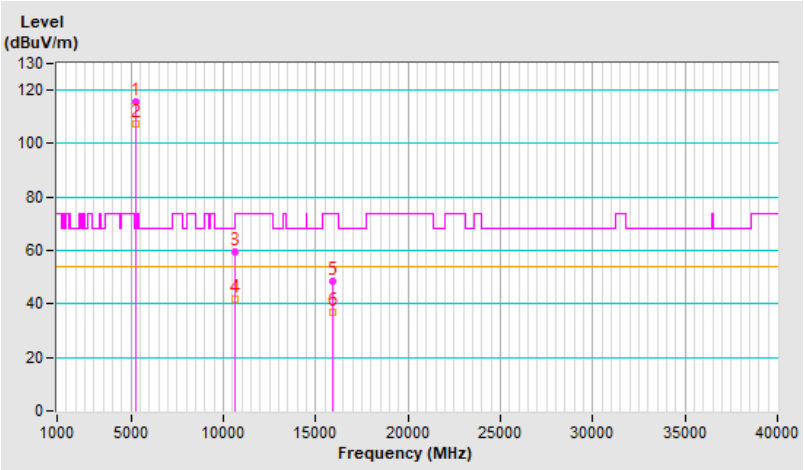


RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.7 PK			1.27 V	227	112.7	3.0
2	*5300.00	107.6 AV			1.27 V	227	104.6	3.0
3	10600.00	59.5 PK	74.0	-14.5	1.43 V	259	44.6	14.9
4	10600.00	41.9 AV	54.0	-12.1	1.43 V	259	27.0	14.9
5	15900.00	48.3 PK	74.0	-25.7	1.48 V	288	34.2	14.1
6	15900.00	37.0 AV	54.0	-17.0	1.48 V	288	22.9	14.1

Remarks:

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

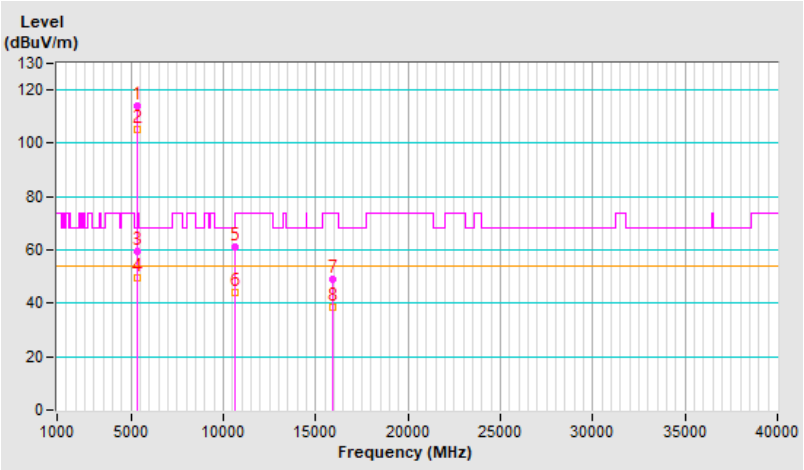


RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	113.8 PK			1.00 H	202	110.5	3.3
2	*5320.00	105.3 AV			1.00 H	202	102.0	3.3
3	5350.00	59.3 PK	74.0	-14.7	1.00 H	202	55.7	3.6
4	5350.00	49.6 AV	54.0	-4.4	1.00 H	202	46.0	3.6
5	10640.00	61.1 PK	74.0	-12.9	1.27 H	178	46.3	14.8
6	10640.00	43.8 AV	54.0	-10.2	1.27 H	178	29.0	14.8
7	15960.00	48.8 PK	74.0	-25.2	1.58 H	75	35.0	13.8
8	15960.00	38.6 AV	54.0	-15.4	1.58 H	75	24.8	13.8

Remarks:

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

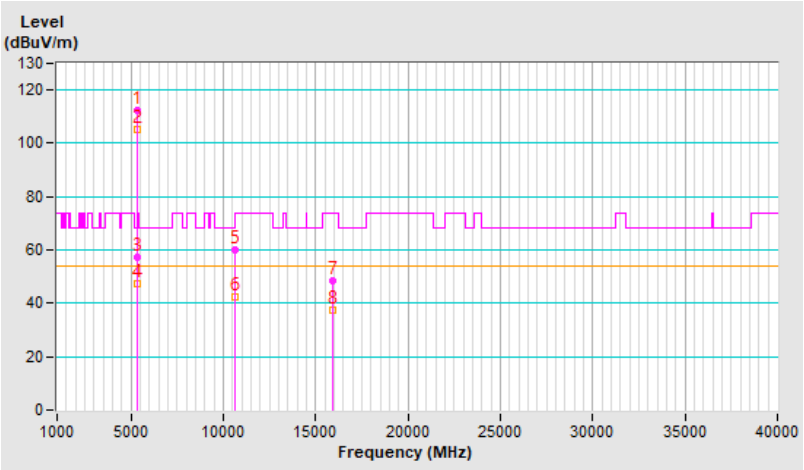


RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	112.1 PK			1.30 V	268	108.8	3.3
2	*5320.00	105.1 AV			1.30 V	268	101.8	3.3
3	5350.00	57.3 PK	74.0	-16.7	1.30 V	268	53.7	3.6
4	5350.00	47.5 AV	54.0	-6.5	1.30 V	268	43.9	3.6
5	10640.00	59.9 PK	74.0	-14.1	1.33 V	254	45.1	14.8
6	10640.00	42.2 AV	54.0	-11.8	1.33 V	254	27.4	14.8
7	15960.00	48.7 PK	74.0	-25.3	1.52 V	305	34.9	13.8
8	15960.00	37.5 AV	54.0	-16.5	1.52 V	305	23.7	13.8

Remarks:

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

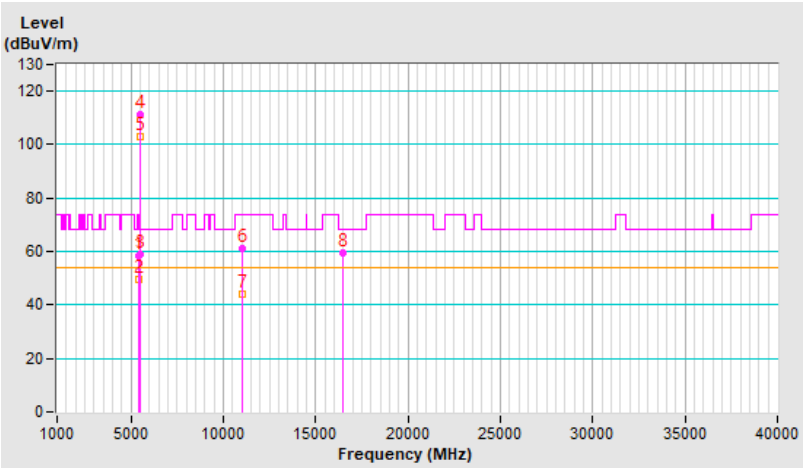


RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.3 PK	74.0	-15.7	1.00 H	198	54.6	3.7
2	5460.00	49.5 AV	54.0	-4.5	1.00 H	198	45.8	3.7
3	#5470.00	58.8 PK	68.2	-9.4	1.00 H	198	55.1	3.7
4	*5500.00	111.3 PK			1.00 H	198	107.6	3.7
5	*5500.00	103.1 AV			1.00 H	198	99.4	3.7
6	11000.00	61.2 PK	74.0	-12.8	1.21 H	188	46.6	14.6
7	11000.00	43.9 AV	54.0	-10.1	1.21 H	188	29.3	14.6
8	#16500.00	59.4 PK	68.2	-8.8	1.36 H	179	43.4	16.0

Remarks:

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

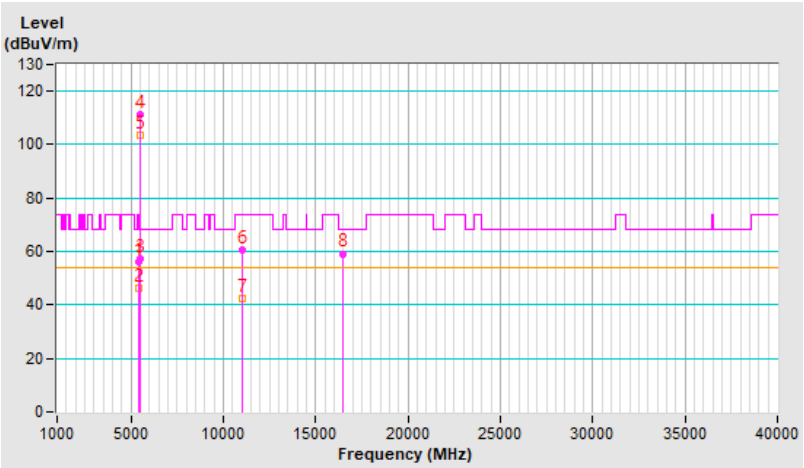


RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.2 PK	74.0	-17.8	1.29 V	218	52.5	3.7
2	5460.00	46.5 AV	54.0	-7.5	1.29 V	218	42.8	3.7
3	#5470.00	57.5 PK	68.2	-10.7	1.29 V	218	53.8	3.7
4	*5500.00	111.5 PK			1.29 V	218	107.8	3.7
5	*5500.00	103.5 AV			1.29 V	218	99.8	3.7
6	11000.00	60.8 PK	74.0	-13.2	1.34 V	260	46.2	14.6
7	11000.00	42.5 AV	54.0	-11.5	1.34 V	260	27.9	14.6
8	#16500.00	59.2 PK	68.2	-9.0	1.50 V	316	43.2	16.0

Remarks:

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

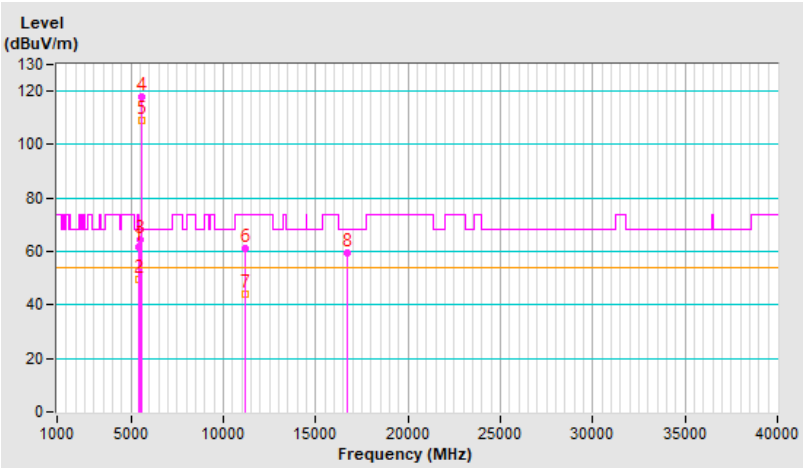


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.07 H	212	57.8	3.7
2	5460.00	49.8 AV	54.0	-4.2	1.07 H	212	46.1	3.7
3	**#5470.00**	**64.2 PK**	**68.2**	**-4.0**	**1.07 H**	**212**	**60.5**	**3.7**
4	*5580.00	117.8 PK			1.07 H	212	114.0	3.8
5	*5580.00	109.3 AV			1.07 H	212	105.5	3.8
6	11160.00	61.0 PK	74.0	-13.0	1.27 H	187	46.5	14.5
7	11160.00	43.8 AV	54.0	-10.2	1.27 H	187	29.3	14.5
8	#16740.00	59.6 PK	68.2	-8.6	1.35 H	169	43.0	16.6

Remarks:

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

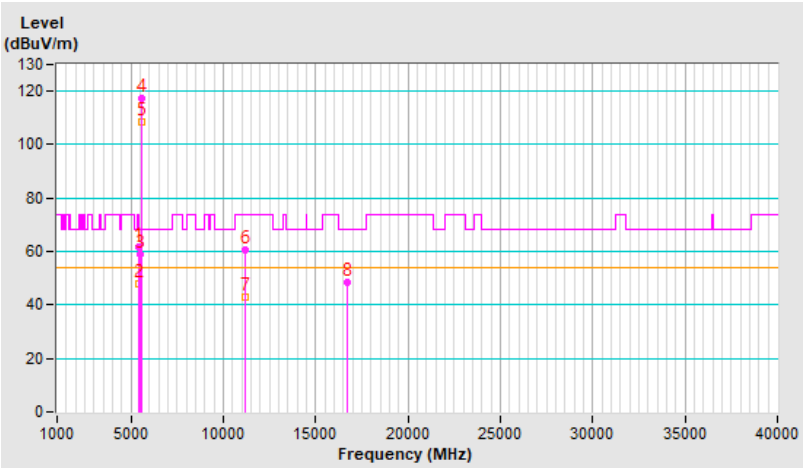


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.9 PK	74.0	-12.1	1.27 V	204	58.2	3.7
2	5460.00	48.0 AV	54.0	-6.0	1.27 V	204	44.3	3.7
3	#5470.00	59.0 PK	68.2	-9.2	1.27 V	204	55.3	3.7
4	*5580.00	117.1 PK			1.27 V	204	113.3	3.8
5	*5580.00	108.5 AV			1.27 V	204	104.7	3.8
6	11160.00	60.7 PK	74.0	-13.3	1.39 V	259	46.2	14.5
7	11160.00	42.7 AV	54.0	-11.3	1.39 V	259	28.2	14.5
8	#16740.00	48.5 PK	68.2	-19.7	1.52 V	310	31.9	16.6

Remarks:

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

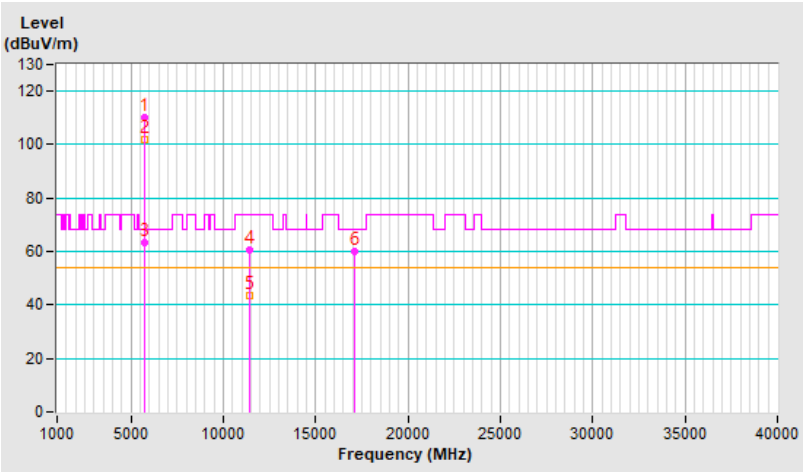


RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	109.9 PK			1.10 H	225	106.4	3.5
2	*5700.00	101.8 AV			1.10 H	225	98.3	3.5
3	#5725.00	63.5 PK	68.2	-4.7	1.10 H	225	59.8	3.7
4	11400.00	60.7 PK	74.0	-13.3	1.21 H	199	45.9	14.8
5	11400.00	43.6 AV	54.0	-10.4	1.21 H	199	28.8	14.8
6	#17100.00	59.9 PK	68.2	-8.3	1.37 H	165	41.9	18.0

Remarks:

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

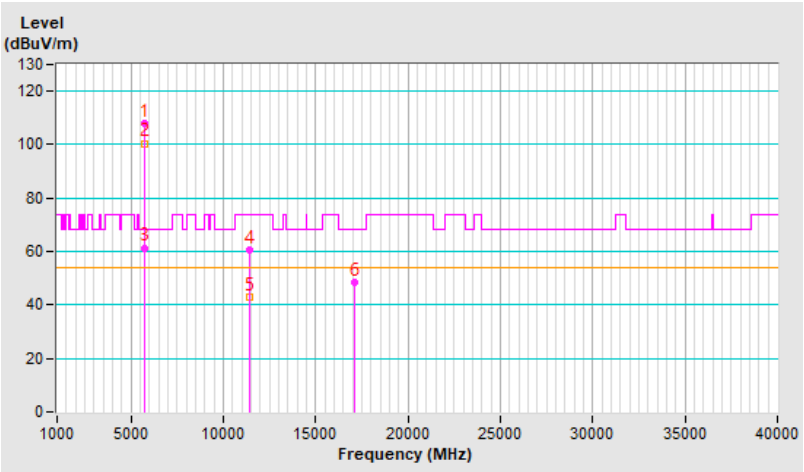


RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	108.1 PK			1.32 V	212	104.6	3.5
2	*5700.00	100.5 AV			1.32 V	212	97.0	3.5
3	#5725.00	61.4 PK	68.2	-6.8	1.32 V	212	57.7	3.7
4	11400.00	60.6 PK	74.0	-13.4	1.38 V	272	45.8	14.8
5	11400.00	42.7 AV	54.0	-11.3	1.38 V	272	27.9	14.8
6	#17100.00	48.3 PK	68.2	-19.9	1.50 V	287	30.3	18.0

Remarks:

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

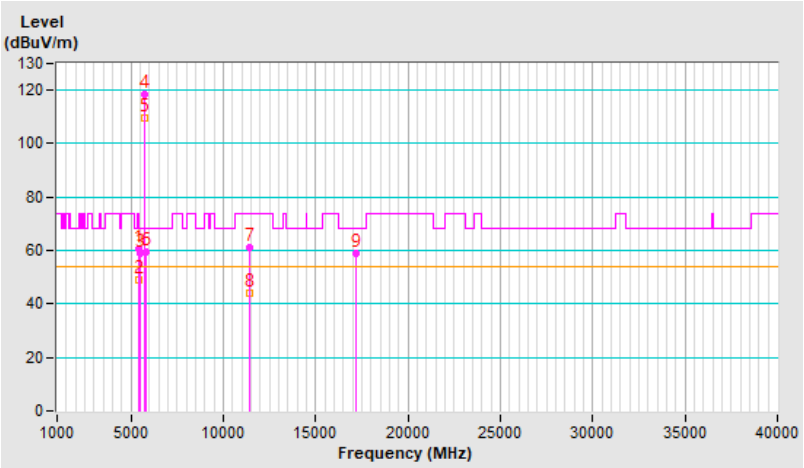


RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.5 PK	74.0	-13.5	1.08 H	211	56.8	3.7
2	5460.00	48.8 AV	54.0	-5.2	1.08 H	211	45.1	3.7
3	#5470.00	58.9 PK	68.2	-9.3	1.08 H	211	55.2	3.7
4	*5720.00	118.3 PK			1.08 H	211	114.6	3.7
5	*5720.00	109.5 AV			1.08 H	211	105.8	3.7
6	#5850.00	59.5 PK	68.2	-8.7	1.08 H	211	55.3	4.2
7	11440.00	61.0 PK	74.0	-13.0	1.29 H	193	46.1	14.9
8	11440.00	44.1 AV	54.0	-9.9	1.29 H	193	29.2	14.9
9	#17160.00	59.0 PK	68.2	-9.2	1.30 H	170	40.9	18.1

Remarks:

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

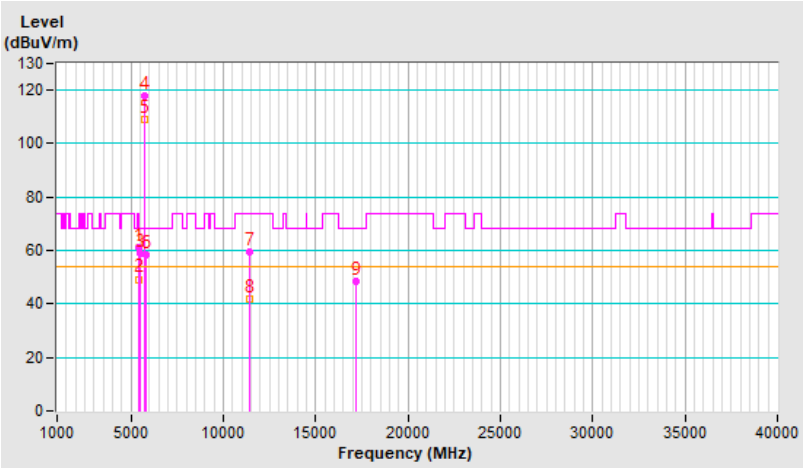


RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.1 PK	74.0	-12.9	1.35 V	215	57.4	3.7
2	5460.00	49.3 AV	54.0	-4.7	1.35 V	215	45.6	3.7
3	#5470.00	59.1 PK	68.2	-9.1	1.35 V	215	55.4	3.7
4	*5720.00	118.1 PK			1.35 V	215	114.4	3.7
5	*5720.00	109.1 AV			1.35 V	215	105.4	3.7
6	#5850.00	58.5 PK	68.2	-9.7	1.35 V	215	54.3	4.2
7	11440.00	59.3 PK	74.0	-14.7	2.21 V	144	44.4	14.9
8	11440.00	41.9 AV	54.0	-12.1	2.21 V	144	27.0	14.9
9	#17160.00	48.4 PK	68.2	-19.8	1.72 V	165	30.3	18.1

Remarks:

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

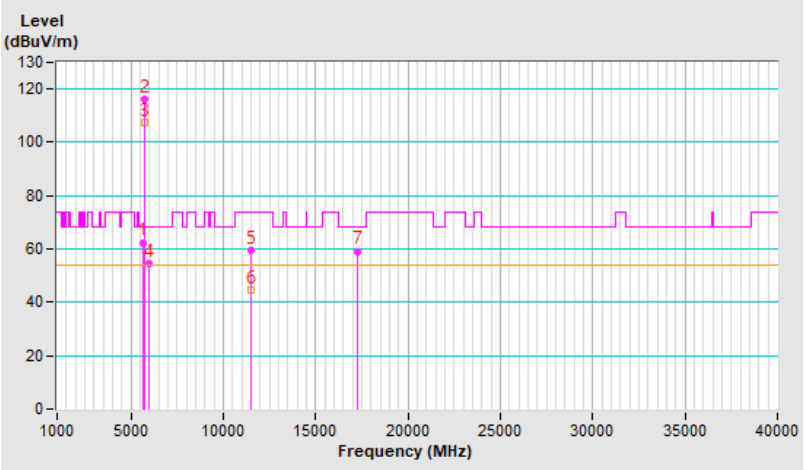


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5644.79	62.5 PK	68.2	-5.7	1.97 H	184	58.8	3.7
2	*5745.00	116.3 PK			1.97 H	184	112.4	3.9
3	*5745.00	107.2 AV			1.97 H	184	103.3	3.9
4	#5942.85	54.7 PK	68.2	-13.5	1.97 H	184	50.6	4.1
5	11490.00	59.5 PK	74.0	-14.5	1.89 H	176	44.3	15.2
6	11490.00	44.5 AV	54.0	-9.5	1.89 H	176	29.3	15.2
7	#17235.00	59.2 PK	68.2	-9.0	1.40 H	220	41.1	18.1

Remarks:

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

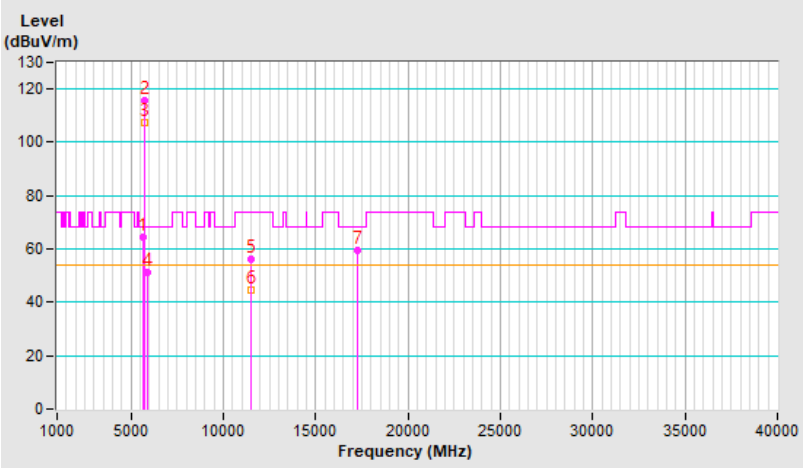


RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	**#5641.84**	**64.2 PK**	**68.2**	**-4.0**	**2.08 V**	**200**	**60.5**	**3.7**
2	*5745.00	115.8 PK			2.08 V	200	111.9	3.9
3	*5745.00	107.3 AV			2.08 V	200	103.4	3.9
4	#5928.48	51.4 PK	68.2	-16.8	2.08 V	200	47.3	4.1
5	11490.00	56.3 PK	74.0	-17.7	2.26 V	151	41.1	15.2
6	11490.00	44.5 AV	54.0	-9.5	2.26 V	151	29.3	15.2
7	#17235.00	59.6 PK	68.2	-8.6	1.70 V	160	41.5	18.1

Remarks:

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

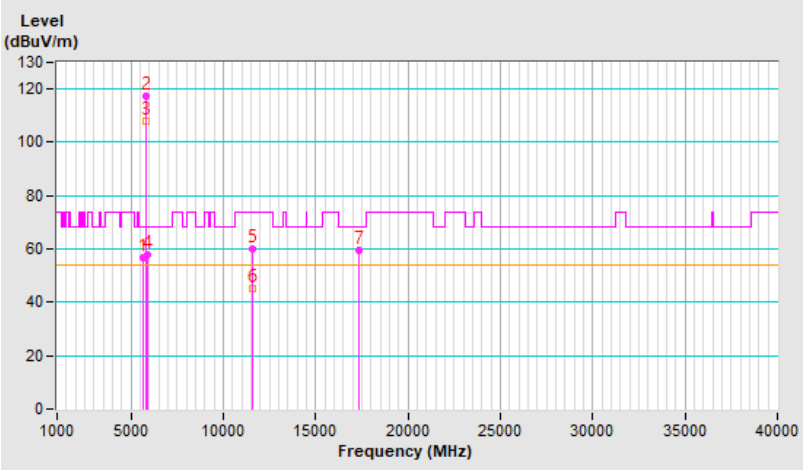


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.47	56.9 PK	68.2	-11.3	1.69 H	188	53.2	3.7
2	*5785.00	117.2 PK			1.69 H	188	113.0	4.2
3	*5785.00	107.9 AV			1.69 H	188	103.7	4.2
4	#5929.52	57.7 PK	68.2	-10.5	1.69 H	188	53.6	4.1
5	11570.00	60.0 PK	74.0	-14.0	1.85 H	189	44.8	15.2
6	11570.00	44.9 AV	54.0	-9.1	1.85 H	189	29.7	15.2
7	#17355.00	59.4 PK	68.2	-8.8	1.45 H	215	40.9	18.5

Remarks:

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

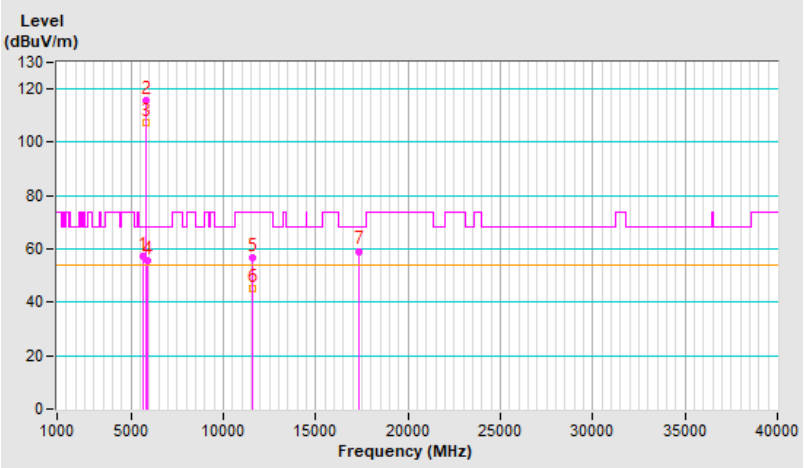


RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5623.36	57.3 PK	68.2	-10.9	1.01 V	212	53.6	3.7
2	*5785.00	115.7 PK			1.01 V	212	111.5	4.2
3	*5785.00	107.6 AV			1.01 V	212	103.4	4.2
4	#5927.17	55.5 PK	68.2	-12.7	1.01 V	212	51.5	4.0
5	11570.00	56.9 PK	74.0	-17.1	2.28 V	144	41.7	15.2
6	11570.00	44.9 AV	54.0	-9.1	2.28 V	144	29.7	15.2
7	#17355.00	59.2 PK	68.2	-9.0	1.68 V	167	40.7	18.5

Remarks:

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

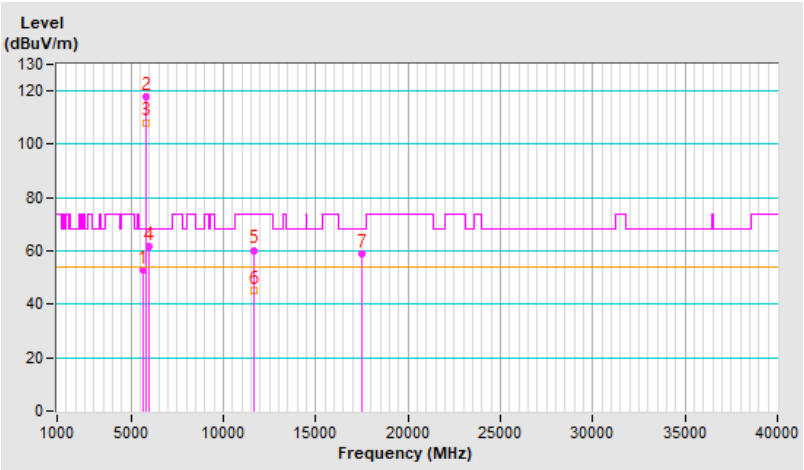


RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5646.28	53.0 PK	68.2	-15.2	1.96 H	186	49.3	3.7
2	*5825.00	117.7 PK			1.96 H	186	113.5	4.2
3	*5825.00	108.2 AV			1.96 H	186	104.0	4.2
4	#5934.89	61.6 PK	68.2	-6.6	1.96 H	186	57.5	4.1
5	11650.00	60.3 PK	74.0	-13.7	1.81 H	178	45.6	14.7
6	11650.00	45.1 AV	54.0	-8.9	1.81 H	178	30.4	14.7
7	#17475.00	59.1 PK	68.2	-9.1	1.41 H	218	39.6	19.5

Remarks:

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

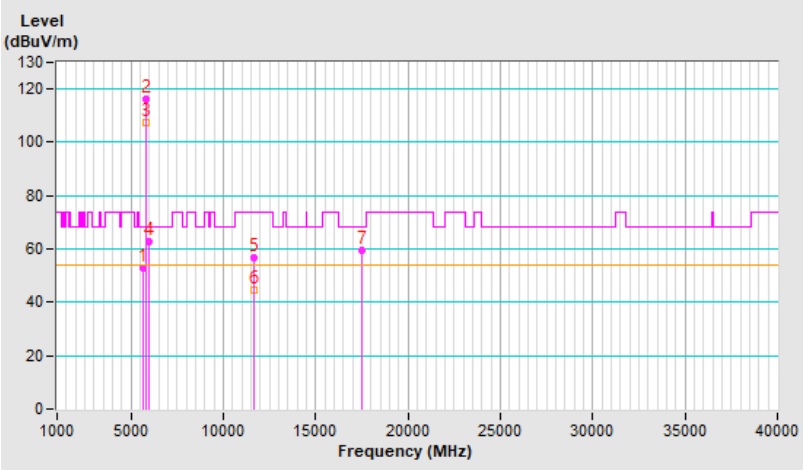


RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5640.51	52.9 PK	68.2	-15.3	2.04 V	215	49.2	3.7
2	*5825.00	116.3 PK			2.04 V	215	112.1	4.2
3	*5825.00	107.2 AV			2.04 V	215	103.0	4.2
4	#5937.46	62.6 PK	68.2	-5.6	2.04 V	215	58.5	4.1
5	11650.00	56.7 PK	74.0	-17.3	2.26 V	150	42.0	14.7
6	11650.00	44.5 AV	54.0	-9.5	2.26 V	150	29.8	14.7
7	#17475.00	59.7 PK	68.2	-8.5	1.66 V	169	40.2	19.5

Remarks:

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

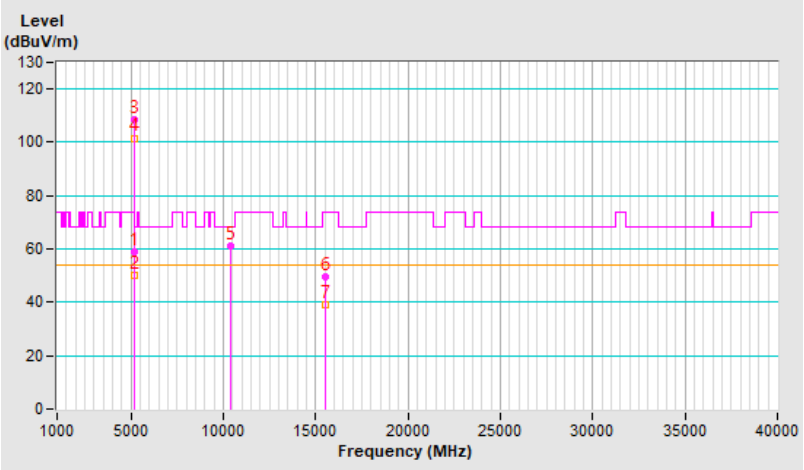


RF Mode	802.11ac (VHT20)	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	58.8 PK	74.0	-15.2	1.31 H	184	54.8	4.0
2	5150.00	49.9 AV	54.0	-4.1	1.31 H	184	45.9	4.0
3	*5180.00	108.5 PK			1.31 H	184	104.7	3.8
4	*5180.00	101.6 AV			1.31 H	184	97.8	3.8
5	#10360.00	60.9 PK	68.2	-7.3	1.87 H	198	47.2	13.7
6	15540.00	49.5 PK	74.0	-24.5	1.48 H	211	34.6	14.9
7	15540.00	39.0 AV	54.0	-15.0	1.48 H	211	24.1	14.9

Remarks:

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

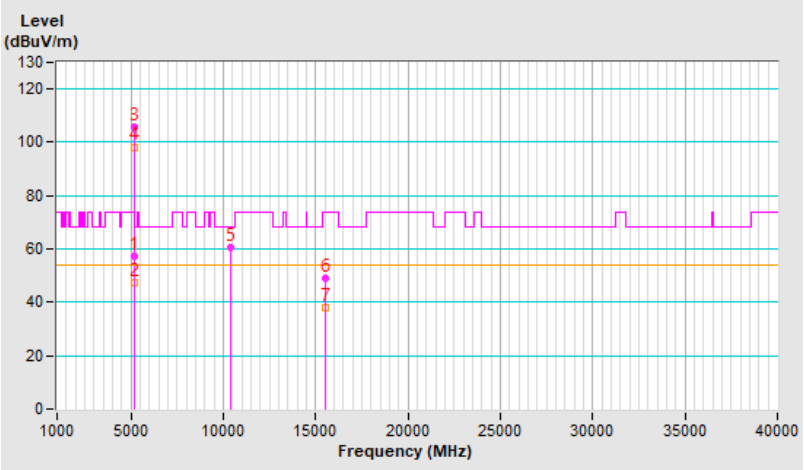


RF Mode	802.11ac (VHT20)	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	57.5 PK	74.0	-16.5	1.50 V	181	53.5	4.0
2	5150.00	47.3 AV	54.0	-6.7	1.50 V	181	43.3	4.0
3	*5180.00	105.9 PK			1.50 V	181	102.1	3.8
4	*5180.00	98.3 AV			1.50 V	181	94.5	3.8
5	#10360.00	60.5 PK	68.2	-7.7	2.28 V	141	46.8	13.7
6	15540.00	48.8 PK	74.0	-25.2	1.71 V	159	33.9	14.9
7	15540.00	37.8 AV	54.0	-16.2	1.71 V	159	22.9	14.9

Remarks:

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

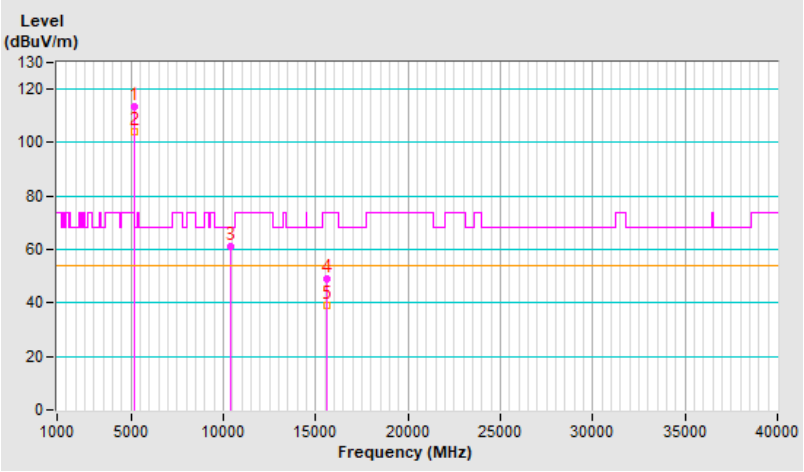


RF Mode	802.11ac (VHT20)	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5200.00	113.5 PK			1.35 H	178	109.9	3.6
2	*5200.00	104.2 AV			1.35 H	178	100.6	3.6
3	#10400.00	61.1 PK	68.2	-7.1	1.82 H	189	47.2	13.9
4	15600.00	49.2 PK	74.0	-24.8	1.49 H	224	34.6	14.6
5	15600.00	38.9 AV	54.0	-15.1	1.49 H	224	24.3	14.6

Remarks:

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

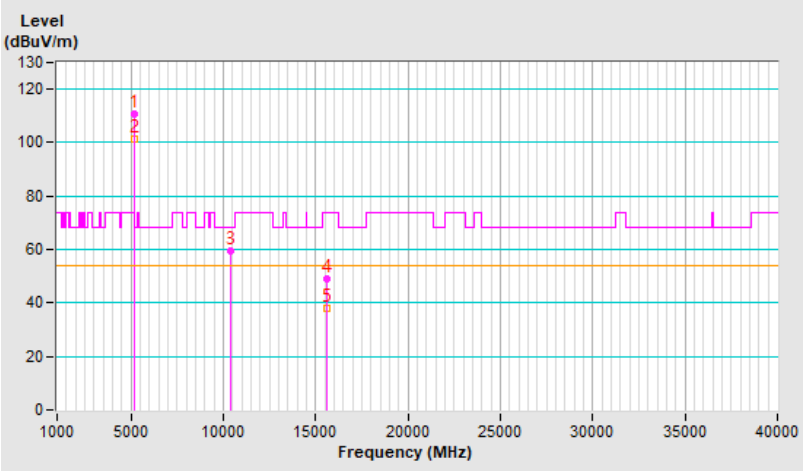


RF Mode	802.11ac (VHT20)	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5200.00	110.5 PK			1.48 V	192	106.9	3.6
2	*5200.00	101.3 AV			1.48 V	192	97.7	3.6
3	#10400.00	59.5 PK	68.2	-8.7	2.30 V	128	45.6	13.9
4	15600.00	49.1 PK	74.0	-24.9	1.71 V	145	34.5	14.6
5	15600.00	38.0 AV	54.0	-16.0	1.71 V	145	23.4	14.6

Remarks:

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

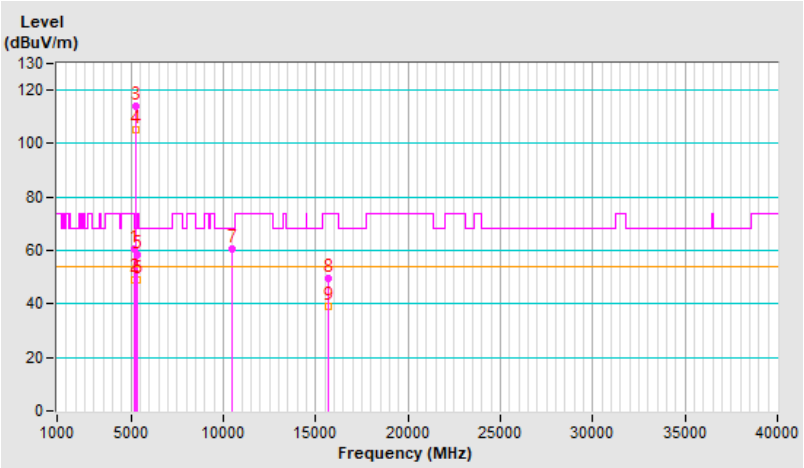


RF Mode	802.11ac (VHT20)	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.5 PK	74.0	-13.5	1.30 H	175	56.5	4.0
2	5150.00	49.3 AV	54.0	-4.7	1.30 H	175	45.3	4.0
3	*5240.00	114.2 PK			1.30 H	175	111.0	3.2
4	*5240.00	105.3 AV			1.30 H	175	102.1	3.2
5	5350.00	58.4 PK	74.0	-15.6	1.30 H	175	54.8	3.6
6	5350.00	49.1 AV	54.0	-4.9	1.30 H	175	45.5	3.6
7	#10480.00	60.4 PK	68.2	-7.8	1.80 H	174	46.1	14.3
8	15720.00	49.7 PK	74.0	-24.3	1.39 H	230	35.5	14.2
9	15720.00	39.2 AV	54.0	-14.8	1.39 H	230	25.0	14.2

Remarks:

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

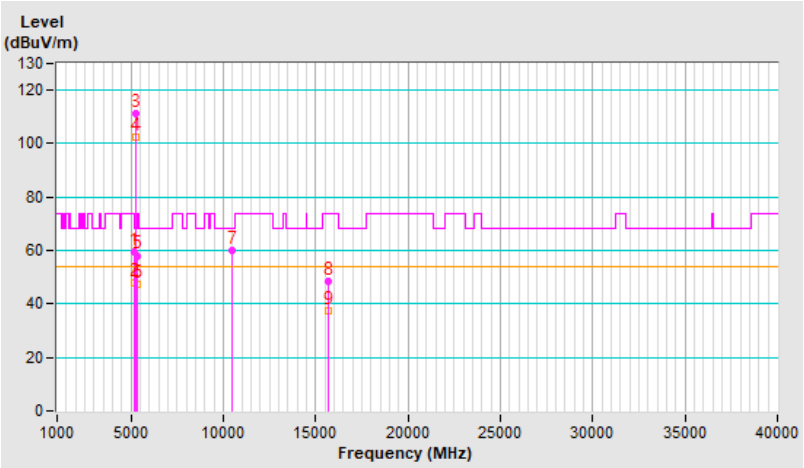


RF Mode	802.11ac (VHT20)	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	1.45 V	171	55.5	4.0
2	5150.00	48.1 AV	54.0	-5.9	1.45 V	171	44.1	4.0
3	*5240.00	111.3 PK			1.45 V	171	108.1	3.2
4	*5240.00	102.4 AV			1.45 V	171	99.2	3.2
5	5350.00	58.1 PK	74.0	-15.9	1.45 V	171	54.5	3.6
6	5350.00	47.3 AV	54.0	-6.7	1.45 V	171	43.7	3.6
7	#10480.00	60.2 PK	68.2	-8.0	2.27 V	131	45.9	14.3
8	15720.00	48.7 PK	74.0	-25.3	1.71 V	155	34.5	14.2
9	15720.00	37.2 AV	54.0	-16.8	1.71 V	155	23.0	14.2

Remarks:

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

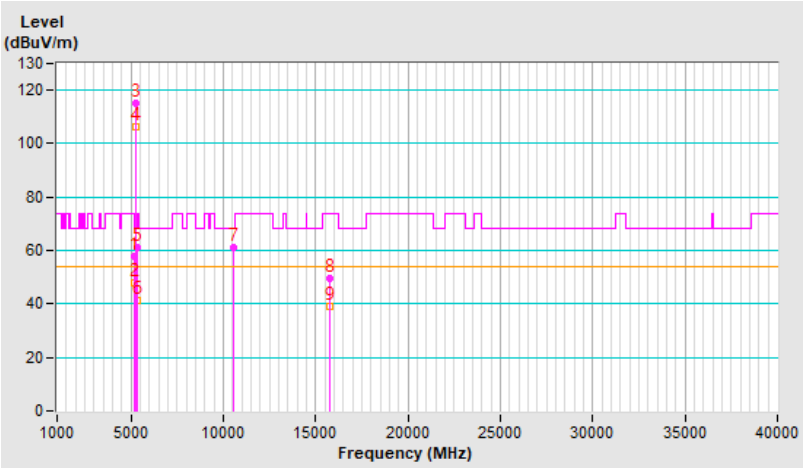


RF Mode	802.11ac (VHT20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.6 PK	74.0	-16.4	1.33 H	177	53.6	4.0
2	5150.00	48.1 AV	54.0	-5.9	1.33 H	177	44.1	4.0
3	*5260.00	115.0 PK			1.33 H	177	111.9	3.1
4	*5260.00	106.3 AV			1.33 H	177	103.2	3.1
5	5350.00	61.1 PK	74.0	-12.9	1.33 H	177	57.5	3.6
6	5350.00	41.3 AV	54.0	-12.7	1.33 H	177	37.7	3.6
7	#10520.00	61.0 PK	68.2	-7.2	1.89 H	182	46.5	14.5
8	15780.00	49.6 PK	74.0	-24.4	1.39 H	216	35.6	14.0
9	15780.00	39.3 AV	54.0	-14.7	1.39 H	216	25.3	14.0

Remarks:

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

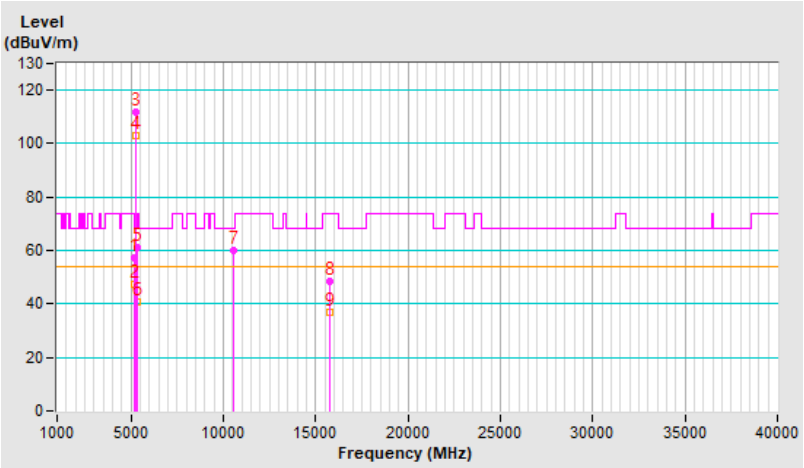


RF Mode	802.11ac (VHT20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.1 PK	74.0	-16.9	1.48 V	183	53.1	4.0
2	5150.00	47.5 AV	54.0	-6.5	1.48 V	183	43.5	4.0
3	*5260.00	112.0 PK			1.48 V	183	108.9	3.1
4	*5260.00	103.2 AV			1.48 V	183	100.1	3.1
5	5350.00	60.9 PK	74.0	-13.1	1.48 V	183	57.3	3.6
6	5350.00	40.5 AV	54.0	-13.5	1.48 V	183	36.9	3.6
7	#10520.00	60.2 PK	68.2	-8.0	2.31 V	135	45.7	14.5
8	15780.00	48.5 PK	74.0	-25.5	1.73 V	170	34.5	14.0
9	15780.00	37.1 AV	54.0	-16.9	1.73 V	170	23.1	14.0

Remarks:

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

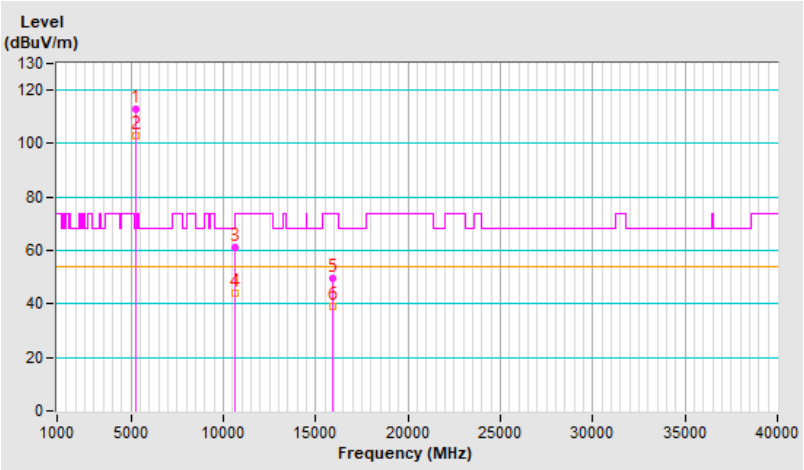


RF Mode	802.11ac (VHT20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	113.1 PK			1.28 H	180	110.1	3.0
2	*5300.00	103.2 AV			1.28 H	180	100.2	3.0
3	10600.00	61.2 PK	74.0	-12.8	1.84 H	194	46.3	14.9
4	10600.00	44.1 AV	54.0	-9.9	1.84 H	194	29.2	14.9
5	15900.00	49.5 PK	74.0	-24.5	1.40 H	201	35.4	14.1
6	15900.00	39.1 AV	54.0	-14.9	1.40 H	201	25.0	14.1

Remarks:

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

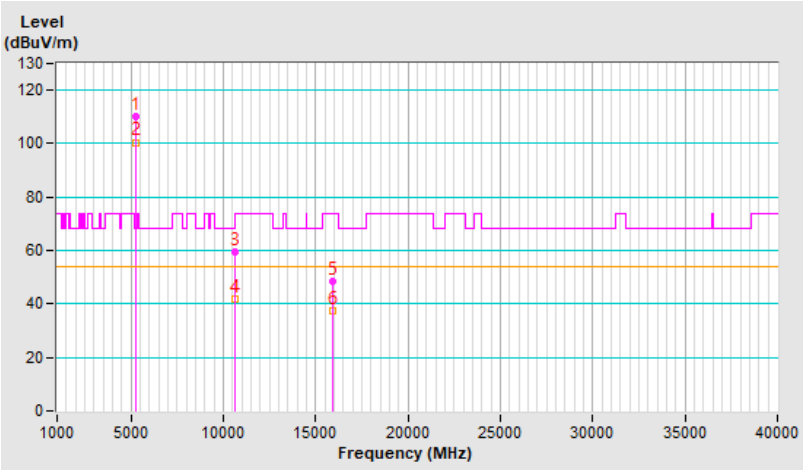


RF Mode	802.11ac (VHT20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	110.1 PK			1.48 V	182	107.1	3.0
2	*5300.00	100.5 AV			1.48 V	182	97.5	3.0
3	10600.00	59.5 PK	74.0	-14.5	1.00 V	0	44.6	14.9
4	10600.00	41.9 AV	54.0	-12.1	1.00 V	0	27.0	14.9
5	15900.00	48.6 PK	74.0	-25.4	1.00 V	0	34.5	14.1
6	15900.00	37.2 AV	54.0	-16.8	1.00 V	0	23.1	14.1

Remarks:

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

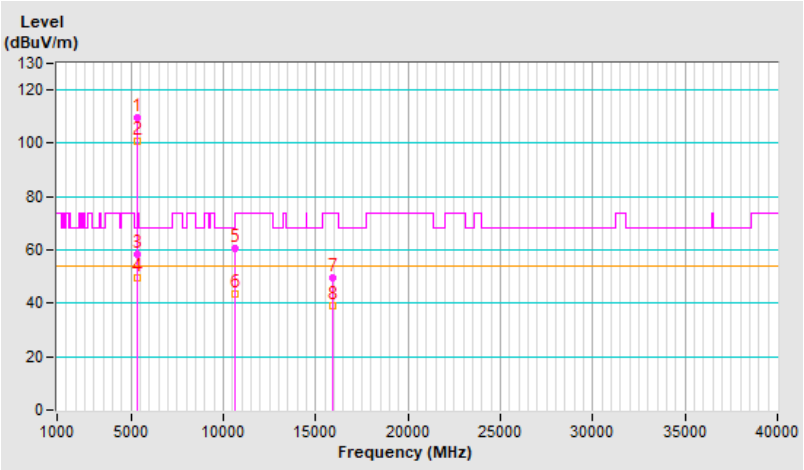


RF Mode	802.11ac (VHT20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	109.5 PK			1.41 H	187	106.2	3.3
2	*5320.00	101.0 AV			1.41 H	187	97.7	3.3
3	5350.00	58.3 PK	74.0	-15.7	1.41 H	187	54.7	3.6
4	5350.00	49.6 AV	54.0	-4.4	1.41 H	187	46.0	3.6
5	10640.00	60.6 PK	74.0	-13.4	1.81 H	201	45.8	14.8
6	10640.00	43.4 AV	54.0	-10.6	1.81 H	201	28.6	14.8
7	15960.00	49.8 PK	74.0	-24.2	1.46 H	226	36.0	13.8
8	15960.00	39.2 AV	54.0	-14.8	1.46 H	226	25.4	13.8

Remarks:

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

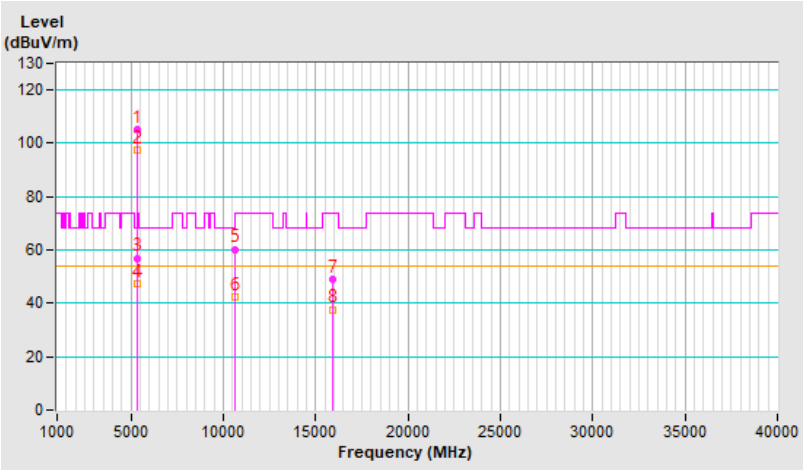


RF Mode	802.11ac (VHT20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	105.4 PK			1.40 V	184	102.1	3.3
2	*5320.00	97.6 AV			1.40 V	184	94.3	3.3
3	5350.00	57.0 PK	74.0	-17.0	1.40 V	184	53.4	3.6
4	5350.00	47.3 AV	54.0	-6.7	1.40 V	184	43.7	3.6
5	10640.00	60.3 PK	74.0	-13.7	2.32 V	144	45.5	14.8
6	10640.00	42.5 AV	54.0	-11.5	2.32 V	144	27.7	14.8
7	15960.00	49.1 PK	74.0	-24.9	1.65 V	148	35.3	13.8
8	15960.00	37.7 AV	54.0	-16.3	1.65 V	148	23.9	13.8

Remarks:

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

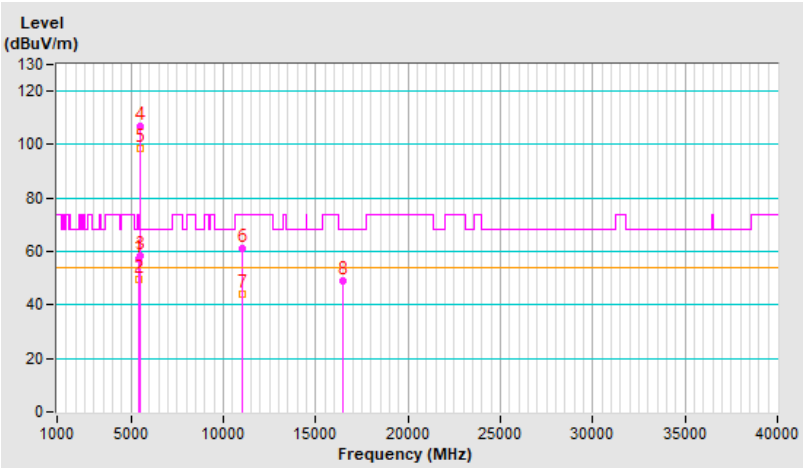


RF Mode	802.11ac (VHT20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.5 PK	74.0	-16.5	1.43 H	213	53.8	3.7
2	5460.00	49.6 AV	54.0	-4.4	1.43 H	213	45.9	3.7
3	#5470.00	58.2 PK	68.2	-10.0	1.43 H	213	54.5	3.7
4	*5500.00	107.0 PK			1.43 H	213	103.3	3.7
5	*5500.00	98.5 AV			1.43 H	213	94.8	3.7
6	11000.00	61.2 PK	74.0	-12.8	1.82 H	178	46.6	14.6
7	11000.00	43.9 AV	54.0	-10.1	1.82 H	178	29.3	14.6
8	#16500.00	49.2 PK	68.2	-19.0	1.43 H	230	33.2	16.0

Remarks:

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

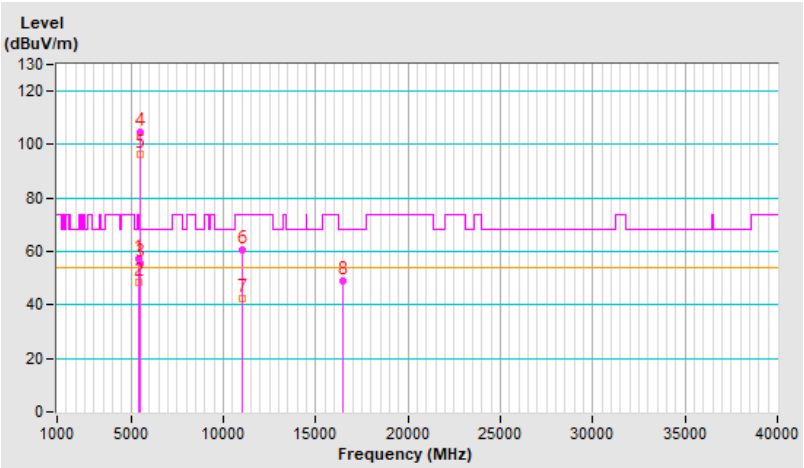


RF Mode	802.11ac (VHT20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	1.40 V	213	53.7	3.7
2	5460.00	48.6 AV	54.0	-5.4	1.40 V	213	44.9	3.7
3	#5470.00	55.8 PK	68.2	-12.4	1.40 V	213	52.1	3.7
4	*5500.00	104.5 PK			1.40 V	213	100.8	3.7
5	*5500.00	96.2 AV			1.40 V	213	92.5	3.7
6	11000.00	60.5 PK	74.0	-13.5	2.24 V	148	45.9	14.6
7	11000.00	42.5 AV	54.0	-11.5	2.24 V	148	27.9	14.6
8	#16500.00	48.9 PK	68.2	-19.3	1.74 V	158	32.9	16.0

Remarks:

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

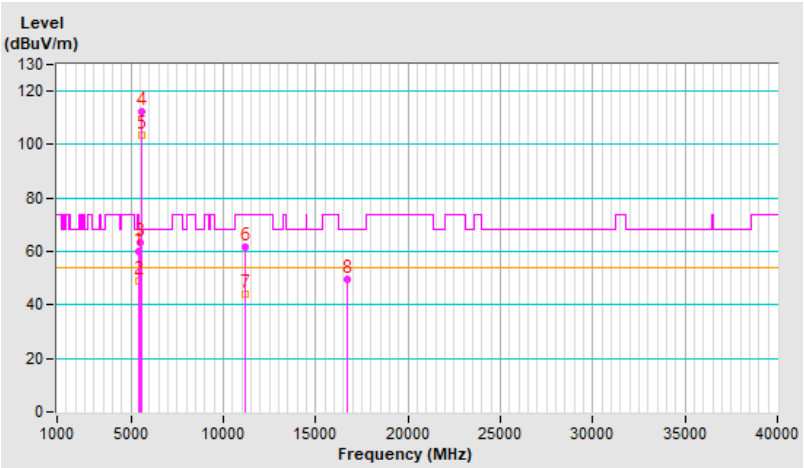


RF Mode	802.11ac (VHT20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.2 PK	74.0	-13.8	1.33 H	193	56.5	3.7
2	5460.00	49.1 AV	54.0	-4.9	1.33 H	193	45.4	3.7
3	#5470.00	63.5 PK	68.2	-4.7	1.33 H	193	59.8	3.7
4	*5580.00	112.3 PK			1.33 H	193	108.5	3.8
5	*5580.00	103.5 AV			1.33 H	193	99.7	3.8
6	11160.00	61.7 PK	74.0	-12.3	1.82 H	185	47.2	14.5
7	11160.00	44.2 AV	54.0	-9.8	1.82 H	185	29.7	14.5
8	#16740.00	49.8 PK	68.2	-18.4	1.43 H	202	33.2	16.6

Remarks:

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

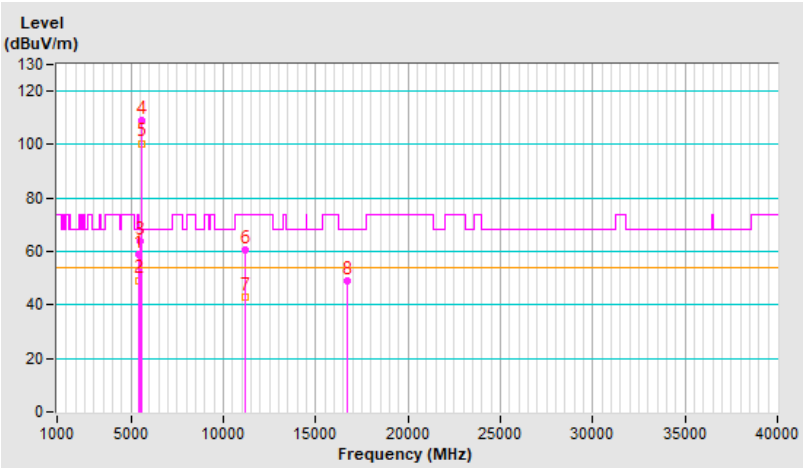


RF Mode	802.11ac (VHT20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.1 PK	74.0	-14.9	1.50 V	176	55.4	3.7
2	5460.00	49.3 AV	54.0	-4.7	1.50 V	176	45.6	3.7
3	#5470.00	64.1 PK	68.2	-4.1	1.50 V	176	60.4	3.7
4	*5580.00	109.1 PK			1.50 V	176	105.3	3.8
5	*5580.00	100.5 AV			1.50 V	176	96.7	3.8
6	11160.00	60.5 PK	74.0	-13.5	2.23 V	138	46.0	14.5
7	11160.00	42.7 AV	54.0	-11.3	2.23 V	138	28.2	14.5
8	#16740.00	49.1 PK	68.2	-19.1	1.67 V	174	32.5	16.6

Remarks:

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

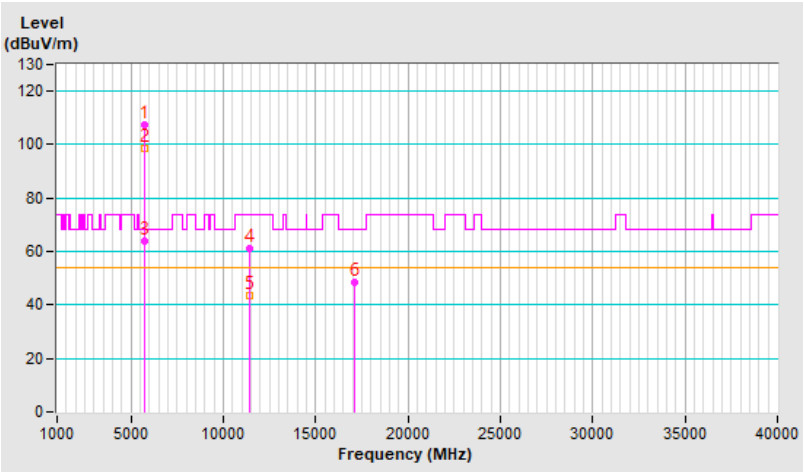


RF Mode	802.11ac (VHT20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	107.5 PK			1.26 H	197	104.0	3.5
2	*5700.00	98.6 AV			1.26 H	197	95.1	3.5
3	#5725.00	63.9 PK	68.2	-4.3	1.26 H	197	60.2	3.7
4	11400.00	61.2 PK	74.0	-12.8	1.79 H	185	46.4	14.8
5	11400.00	43.7 AV	54.0	-10.3	1.79 H	185	28.9	14.8
6	#17100.00	48.7 PK	68.2	-19.5	1.42 H	221	30.7	18.0

Remarks:

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

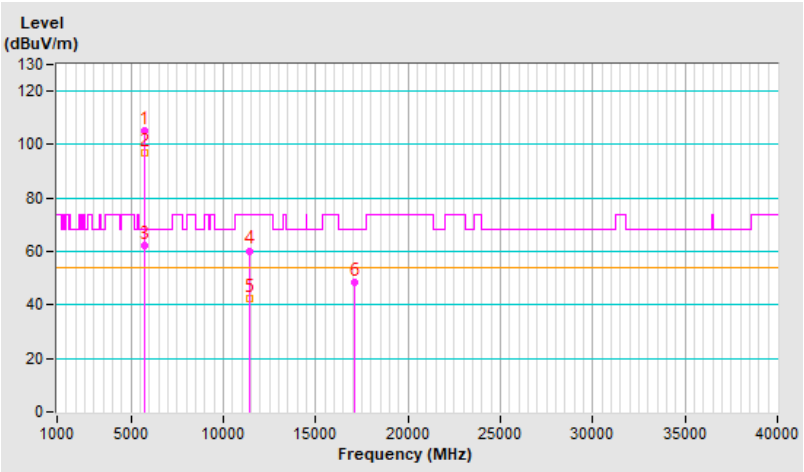


RF Mode	802.11ac (VHT20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	105.1 PK			1.49 V	178	101.6	3.5
2	*5700.00	96.7 AV			1.49 V	178	93.2	3.5
3	#5725.00	62.1 PK	68.2	-6.1	1.49 V	178	58.4	3.7
4	11400.00	60.3 PK	74.0	-13.7	2.23 V	128	45.5	14.8
5	11400.00	42.4 AV	54.0	-11.6	2.23 V	128	27.6	14.8
6	#17100.00	48.7 PK	68.2	-19.5	1.73 V	162	30.7	18.0

Remarks:

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

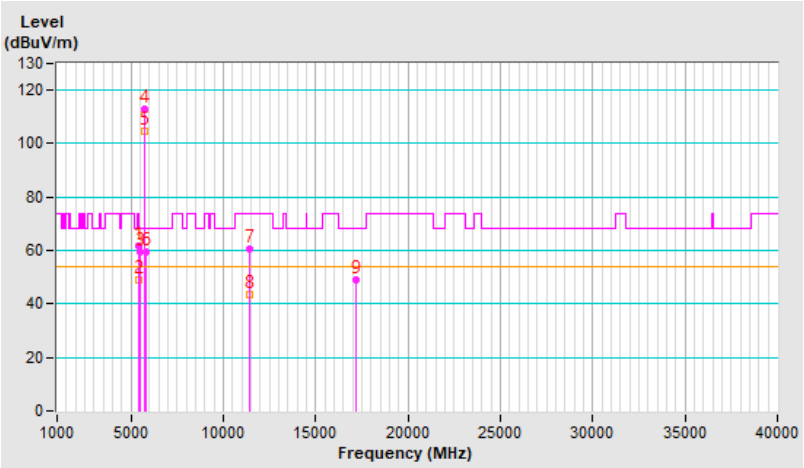


RF Mode	802.11ac (VHT20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.28 H	190	57.8	3.7
2	5460.00	49.1 AV	54.0	-4.9	1.28 H	190	45.4	3.7
3	#5470.00	59.4 PK	68.2	-8.8	1.28 H	190	55.7	3.7
4	*5720.00	113.0 PK			1.28 H	190	109.3	3.7
5	*5720.00	104.8 AV			1.28 H	190	101.1	3.7
6	#5850.00	59.3 PK	68.2	-8.9	1.28 H	190	55.1	4.2
7	11440.00	60.7 PK	74.0	-13.3	1.84 H	194	45.8	14.9
8	11440.00	43.4 AV	54.0	-10.6	1.84 H	194	28.5	14.9
9	#17160.00	49.2 PK	68.2	-19.0	1.49 H	213	31.1	18.1

Remarks:

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

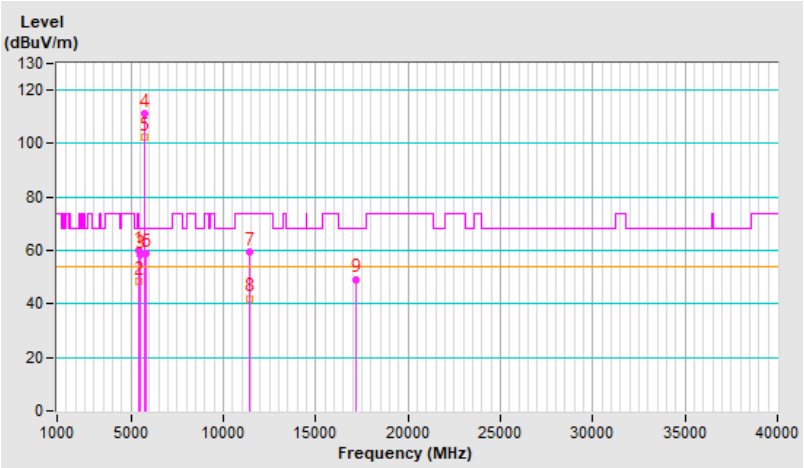


RF Mode	802.11ac (VHT20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	60.1 PK	74.0	-13.9	1.43 V	200	56.4	3.7
2	5460.00	48.5 AV	54.0	-5.5	1.43 V	200	44.8	3.7
3	#5470.00	58.3 PK	68.2	-9.9	1.43 V	200	54.6	3.7
4	*5720.00	111.3 PK			1.43 V	200	107.6	3.7
5	*5720.00	102.5 AV			1.43 V	200	98.8	3.7
6	#5850.00	59.1 PK	68.2	-9.1	1.43 V	200	54.9	4.2
7	11440.00	59.7 PK	74.0	-14.3	2.32 V	152	44.8	14.9
8	11440.00	42.1 AV	54.0	-11.9	2.32 V	152	27.2	14.9
9	#17160.00	49.3 PK	68.2	-18.9	1.75 V	171	31.2	18.1

Remarks:

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

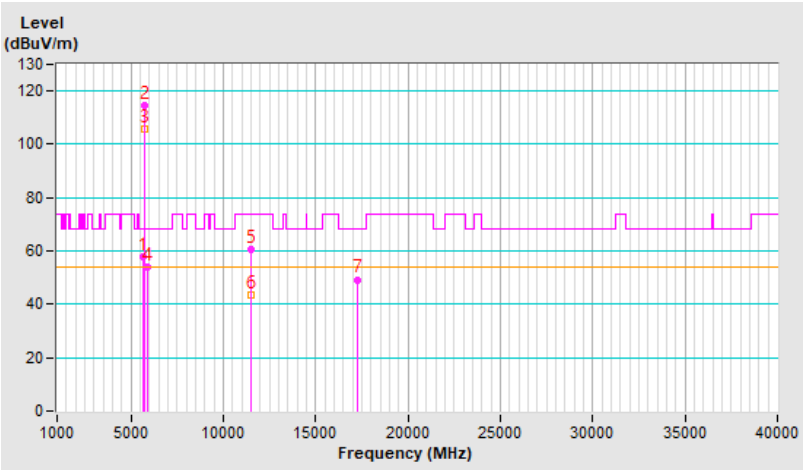


RF Mode	802.11ac (VHT20)	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5650.00	58.0 PK	68.2	-10.2	1.40 H	178	54.3	3.7
2	*5745.00	114.5 PK			1.40 H	178	110.6	3.9
3	*5745.00	105.9 AV			1.40 H	178	102.0	3.9
4	#5934.00	53.8 PK	68.2	-14.4	1.40 H	178	49.7	4.1
5	11490.00	60.4 PK	74.0	-13.6	1.90 H	198	45.2	15.2
6	11490.00	43.3 AV	54.0	-10.7	1.90 H	198	28.1	15.2
7	#17235.00	49.3 PK	68.2	-18.9	1.46 H	201	31.2	18.1

Remarks:

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

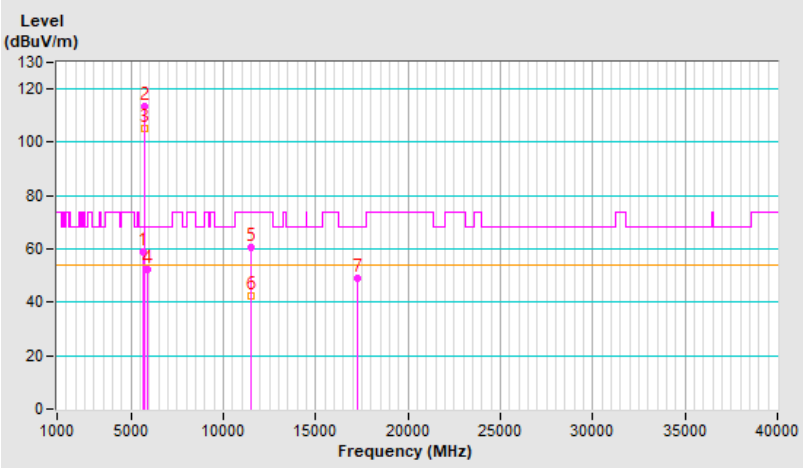


RF Mode	802.11ac (VHT20)	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5647.00	58.7 PK	68.2	-9.5	1.87 V	206	55.0	3.7
2	*5745.00	113.6 PK			1.87 V	206	109.7	3.9
3	*5745.00	105.0 AV			1.87 V	206	101.1	3.9
4	#5929.00	52.3 PK	68.2	-15.9	1.87 V	206	48.2	4.1
5	11490.00	60.4 PK	74.0	-13.6	2.31 V	132	45.2	15.2
6	11490.00	42.4 AV	54.0	-11.6	2.31 V	132	27.2	15.2
7	#17235.00	49.0 PK	68.2	-19.2	1.74 V	143	30.9	18.1

Remarks:

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

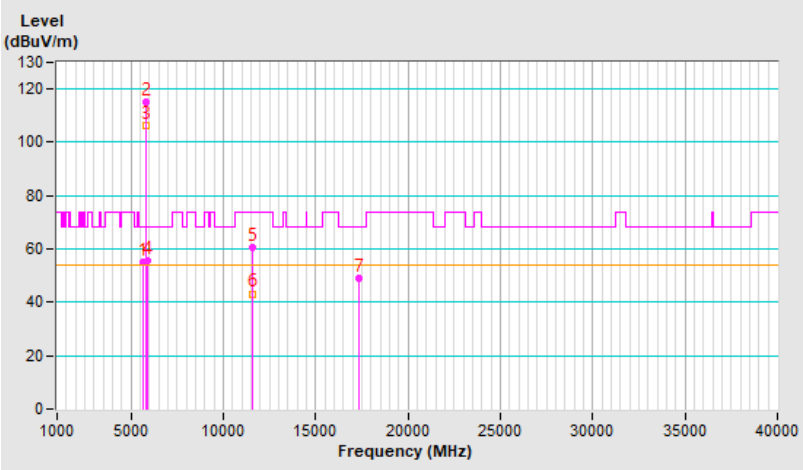


RF Mode	802.11ac (VHT20)	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5650.70	55.1 PK	68.2	-13.1	1.39 H	178	51.4	3.7
2	*5785.00	115.0 PK			1.39 H	178	110.8	4.2
3	*5785.00	106.2 AV			1.39 H	178	102.0	4.2
4	#5933.70	55.5 PK	68.2	-12.7	1.39 H	178	51.4	4.1
5	11570.00	60.4 PK	74.0	-13.6	1.80 H	179	45.2	15.2
6	11570.00	43.2 AV	54.0	-10.8	1.80 H	179	28.0	15.2
7	#17355.00	49.0 PK	68.2	-19.2	1.43 H	222	30.5	18.5

Remarks:

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

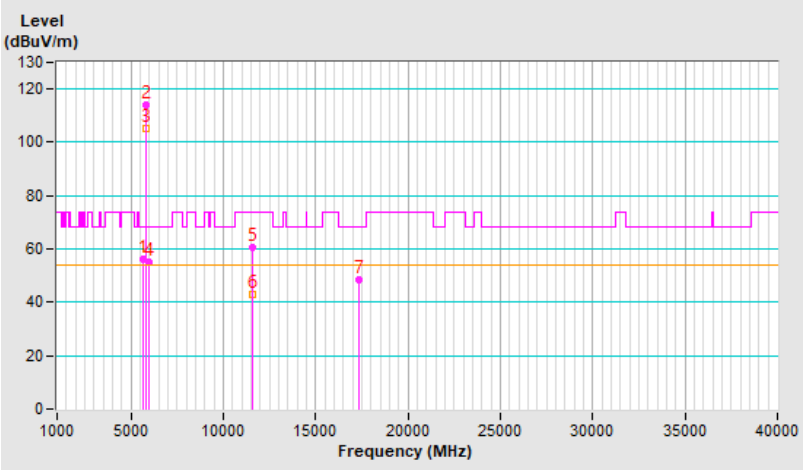


RF Mode	802.11ac (VHT20)	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.00	56.2 PK	68.2	-12.0	1.86 V	205	52.5	3.7
2	*5785.00	113.8 PK			1.86 V	205	109.6	4.2
3	*5785.00	105.1 AV			1.86 V	205	100.9	4.2
4	#5938.00	55.0 PK	68.2	-13.2	1.86 V	205	50.9	4.1
5	11570.00	60.7 PK	74.0	-13.3	2.29 V	135	45.5	15.2
6	11570.00	42.9 AV	54.0	-11.1	2.29 V	135	27.7	15.2
7	#17355.00	48.7 PK	68.2	-19.5	1.74 V	150	30.2	18.5

Remarks:

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

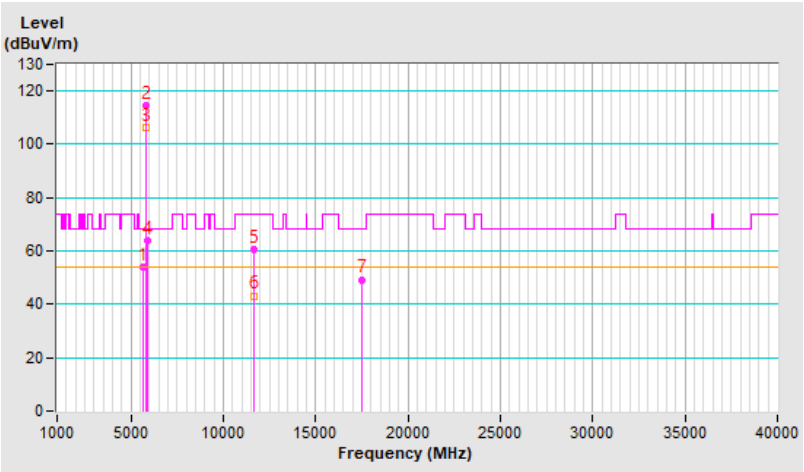


RF Mode	802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5646.70	54.1 PK	68.2	-14.1	1.36 H	178	50.4	3.7
2	*5825.00	114.5 PK			1.36 H	178	110.3	4.2
3	*5825.00	106.3 AV			1.36 H	178	102.1	4.2
4	#5924.90	64.1 PK	68.2	-4.1	1.36 H	178	60.1	4.0
5	11650.00	60.4 PK	74.0	-13.6	1.85 H	201	45.7	14.7
6	11650.00	43.2 AV	54.0	-10.8	1.85 H	201	28.5	14.7
7	#17475.00	49.3 PK	68.2	-18.9	1.41 H	214	29.8	19.5

Remarks:

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

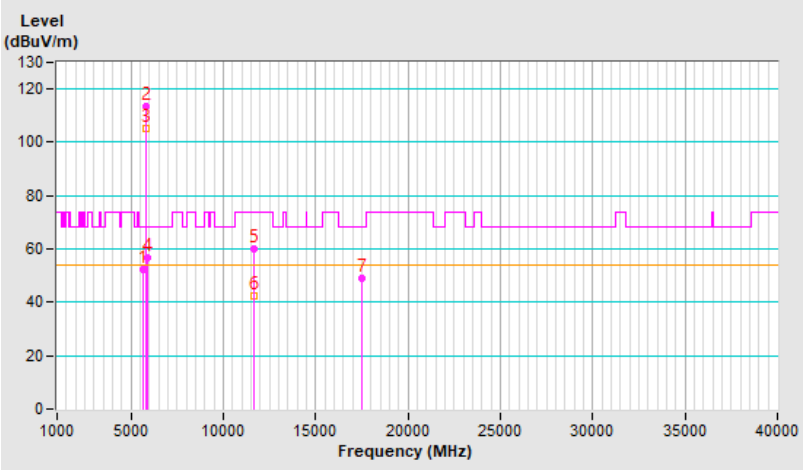


RF Mode	802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5644.30	52.3 PK	68.2	-15.9	1.85 V	204	48.6	3.7
2	*5825.00	113.2 PK			1.85 V	204	109.0	4.2
3	*5825.00	105.2 AV			1.85 V	204	101.0	4.2
4	#5926.50	56.7 PK	68.2	-11.5	1.85 V	204	52.7	4.0
5	11650.00	60.1 PK	74.0	-13.9	2.22 V	128	45.4	14.7
6	11650.00	42.3 AV	54.0	-11.7	2.22 V	128	27.6	14.7
7	#17475.00	48.8 PK	68.2	-19.4	1.68 V	150	29.3	19.5

Remarks:

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

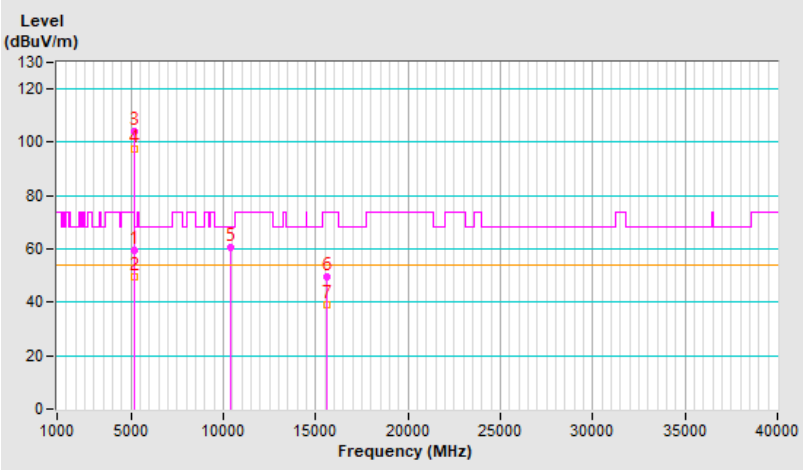


RF Mode	802.11ac (VHT40)	Channel	CH 38：5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	59.6 PK	74.0	-14.4	1.31 H	186	55.6	4.0
2	5150.00	49.5 AV	54.0	-4.5	1.31 H	186	45.5	4.0
3	*5190.00	104.1 PK			1.31 H	186	100.4	3.7
4	*5190.00	97.5 AV			1.31 H	186	93.8	3.7
5	#10380.00	60.8 PK	68.2	-7.4	1.85 H	212	47.0	13.8
6	15570.00	49.7 PK	74.0	-24.3	1.45 H	204	34.9	14.8
7	15570.00	39.0 AV	54.0	-15.0	1.45 H	204	24.2	14.8

Remarks:

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

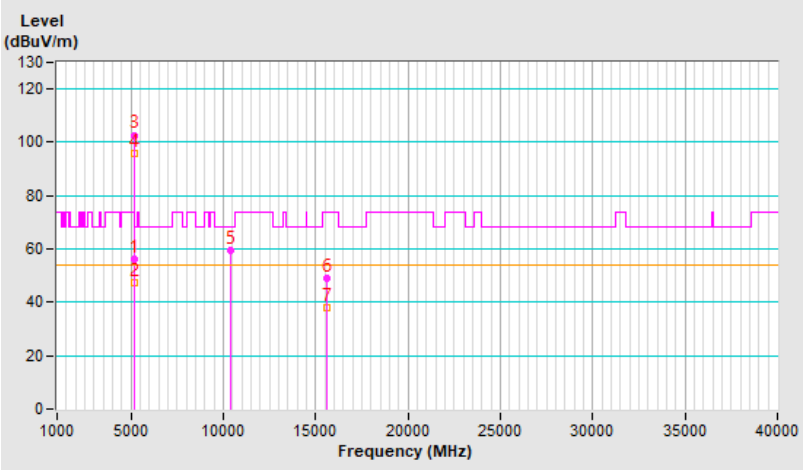


RF Mode	802.11ac (VHT40)	Channel	CH 38：5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	56.3 PK	74.0	-17.7	1.51 V	180	52.3	4.0
2	5150.00	47.3 AV	54.0	-6.7	1.51 V	180	43.3	4.0
3	*5190.00	102.7 PK			1.51 V	180	99.0	3.7
4	*5190.00	95.6 AV			1.51 V	180	91.9	3.7
5	#10380.00	59.5 PK	68.2	-8.7	1.37 V	266	45.7	13.8
6	15570.00	48.8 PK	74.0	-25.2	1.48 V	299	34.0	14.8
7	15570.00	37.8 AV	54.0	-16.2	1.48 V	299	23.0	14.8

Remarks:

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

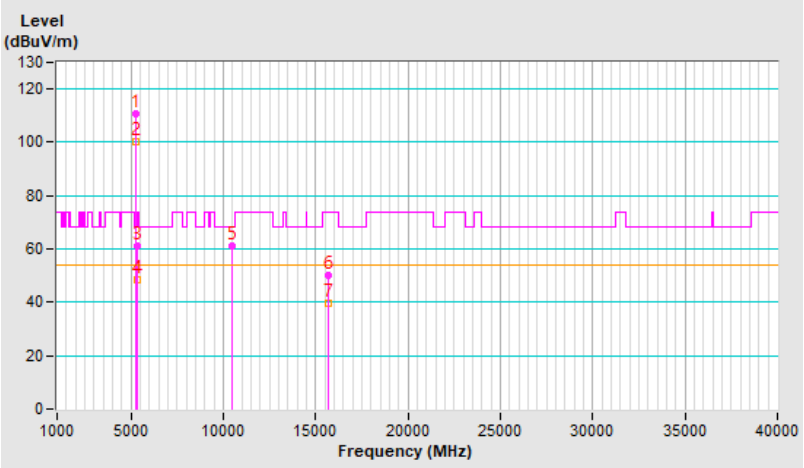


RF Mode	802.11ac (VHT40)	Channel	CH 46：5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5230.00	110.5 PK			1.32 H	171	107.2	3.3
2	*5230.00	100.3 AV			1.32 H	171	97.0	3.3
3	5350.00	61.2 PK	74.0	-12.8	1.32 H	171	57.6	3.6
4	5350.00	48.5 AV	54.0	-5.5	1.32 H	171	44.9	3.6
5	#10460.00	60.9 PK	68.2	-7.3	1.90 H	222	46.7	14.2
6	15690.00	50.2 PK	74.0	-23.8	1.42 H	196	35.9	14.3
7	15690.00	39.4 AV	54.0	-14.6	1.42 H	196	25.1	14.3

Remarks:

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

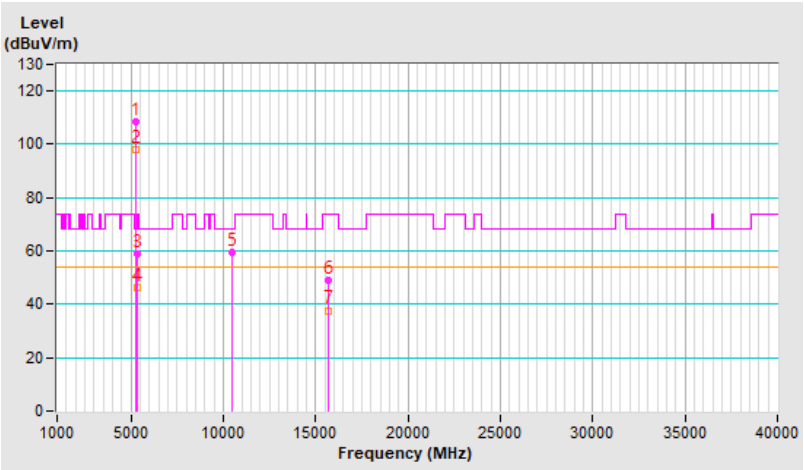


RF Mode	802.11ac (VHT40)	Channel	CH 46：5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	*5230.00	108.3 PK			1.53 V	195	105.0	3.3
2	*5230.00	98.2 AV			1.53 V	195	94.9	3.3
3	5350.00	59.1 PK	74.0	-14.9	1.53 V	195	55.5	3.6
4	5350.00	46.3 AV	54.0	-7.7	1.53 V	195	42.7	3.6
5	#10460.00	59.7 PK	68.2	-8.5	1.35 V	269	45.5	14.2
6	15690.00	48.9 PK	74.0	-25.1	1.51 V	290	34.6	14.3
7	15690.00	37.7 AV	54.0	-16.3	1.51 V	290	23.4	14.3

Remarks:

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

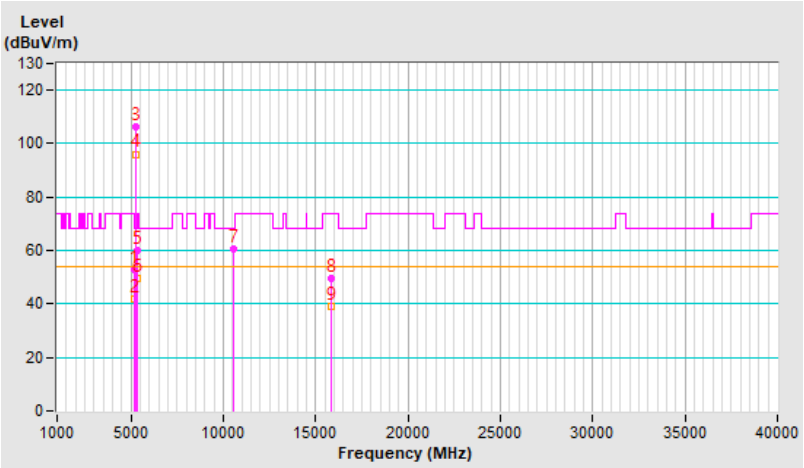


RF Mode	802.11ac (VHT40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	53.1 PK	74.0	-20.9	1.29 H	175	49.1	4.0
2	5150.00	41.6 AV	54.0	-12.4	1.29 H	175	37.6	4.0
3	*5270.00	106.3 PK			1.29 H	175	103.3	3.0
4	*5270.00	96.1 AV			1.29 H	175	93.1	3.0
5	5350.00	60.1 PK	74.0	-13.9	1.29 H	175	56.5	3.6
6	5350.00	49.8 AV	54.0	-4.2	1.29 H	175	46.2	3.6
7	#10540.00	60.7 PK	68.2	-7.5	1.84 H	204	46.1	14.6
8	15810.00	49.8 PK	74.0	-24.2	1.46 H	220	35.7	14.1
9	15810.00	39.1 AV	54.0	-14.9	1.46 H	220	25.0	14.1

Remarks:

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

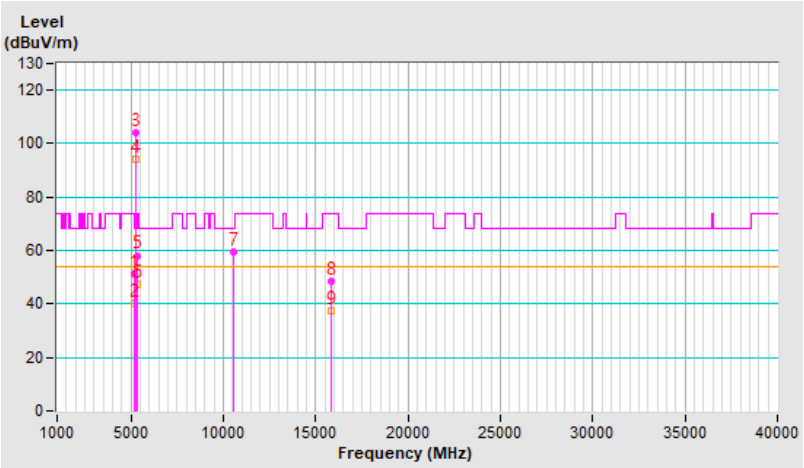


RF Mode	802.11ac (VHT40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	51.3 PK	74.0	-22.7	1.50 V	184	47.3	4.0
2	5150.00	40.1 AV	54.0	-13.9	1.50 V	184	36.1	4.0
3	*5270.00	104.1 PK			1.50 V	184	101.1	3.0
4	*5270.00	94.2 AV			1.50 V	184	91.2	3.0
5	5350.00	58.1 PK	74.0	-15.9	1.50 V	184	54.5	3.6
6	5350.00	47.2 AV	54.0	-6.8	1.50 V	184	43.6	3.6
7	#10540.00	59.7 PK	68.2	-8.5	1.37 V	266	45.1	14.6
8	15810.00	48.4 PK	74.0	-25.6	1.43 V	309	34.3	14.1
9	15810.00	37.5 AV	54.0	-16.5	1.43 V	309	23.4	14.1

Remarks:

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

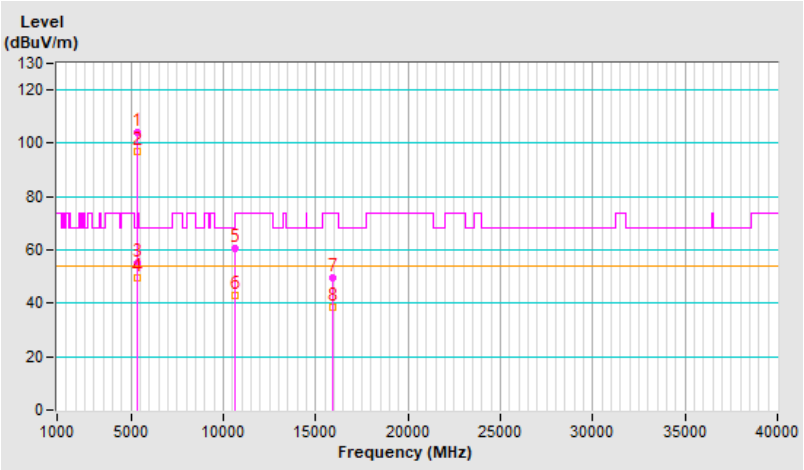


RF Mode	802.11ac (VHT40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	103.9 PK			1.26 H	186	100.8	3.1
2	*5310.00	96.7 AV			1.26 H	186	93.6	3.1
3	5350.00	55.2 PK	74.0	-18.8	1.26 H	186	51.6	3.6
4	5350.00	49.7 AV	54.0	-4.3	1.26 H	186	46.1	3.6
5	10620.00	60.4 PK	74.0	-13.6	1.82 H	209	45.6	14.8
6	10620.00	43.0 AV	54.0	-11.0	1.82 H	209	28.2	14.8
7	15930.00	49.4 PK	74.0	-24.6	1.42 H	192	35.4	14.0
8	15930.00	38.7 AV	54.0	-15.3	1.42 H	192	24.7	14.0

Remarks:

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

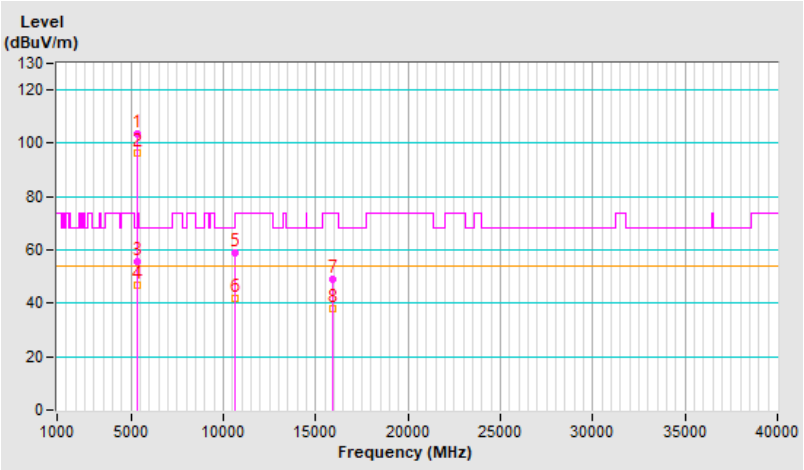


RF Mode	802.11ac (VHT40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	103.5 PK			1.20 V	182	100.4	3.1
2	*5310.00	96.6 AV			1.20 V	182	93.5	3.1
3	5350.00	55.8 PK	74.0	-18.2	1.20 V	182	52.2	3.6
4	5350.00	47.0 AV	54.0	-7.0	1.20 V	182	43.4	3.6
5	10620.00	59.1 PK	74.0	-14.9	1.35 V	278	44.3	14.8
6	10620.00	41.9 AV	54.0	-12.1	1.35 V	278	27.1	14.8
7	15930.00	49.0 PK	74.0	-25.0	1.52 V	312	35.0	14.0
8	15930.00	38.2 AV	54.0	-15.8	1.52 V	312	24.2	14.0

Remarks:

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

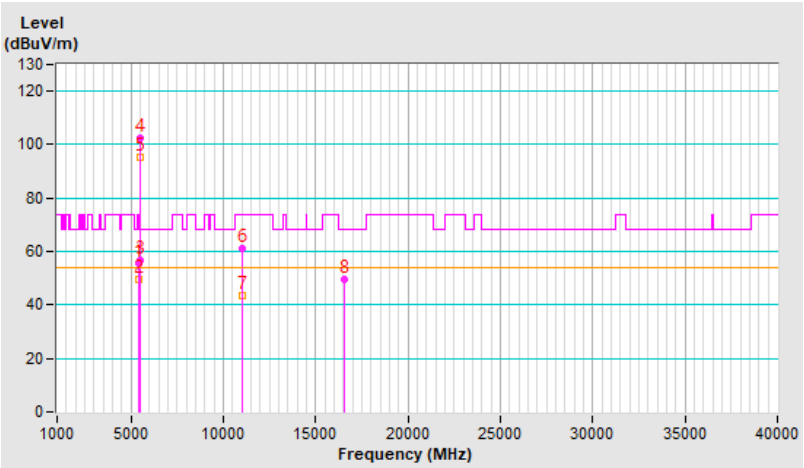


RF Mode	802.11ac (VHT40)	Channel	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.6 PK	74.0	-18.4	1.26 H	198	51.9	3.7
2	5460.00	49.6 AV	54.0	-4.4	1.26 H	198	45.9	3.7
3	#5470.00	56.9 PK	68.2	-11.3	1.26 H	198	53.2	3.7
4	*5510.00	102.4 PK			1.26 H	198	98.7	3.7
5	*5510.00	95.3 AV			1.26 H	198	91.6	3.7
6	11020.00	61.0 PK	74.0	-13.0	1.87 H	223	46.4	14.6
7	11020.00	43.5 AV	54.0	-10.5	1.87 H	223	28.9	14.6
8	#16530.00	49.7 PK	68.2	-18.5	1.41 H	213	33.8	15.9

Remarks:

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

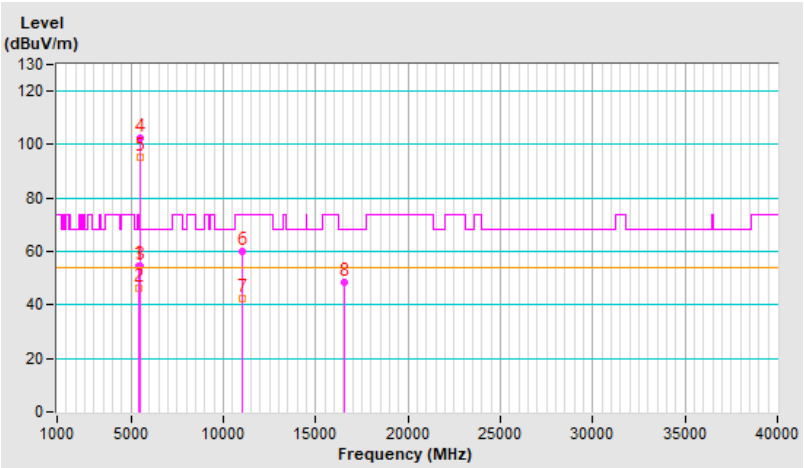


RF Mode	802.11ac (VHT40)	Channel	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	54.8 PK	74.0	-19.2	1.20 V	180	51.1	3.7
2	5460.00	46.5 AV	54.0	-7.5	1.20 V	180	42.8	3.7
3	#5470.00	54.4 PK	68.2	-13.8	1.20 V	180	50.7	3.7
4	*5510.00	102.3 PK			1.20 V	180	98.6	3.7
5	*5510.00	95.4 AV			1.20 V	180	91.7	3.7
6	11020.00	59.8 PK	74.0	-14.2	1.36 V	253	45.2	14.6
7	11020.00	42.3 AV	54.0	-11.7	1.36 V	253	27.7	14.6
8	#16530.00	48.6 PK	68.2	-19.6	1.45 V	298	32.7	15.9

Remarks:

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

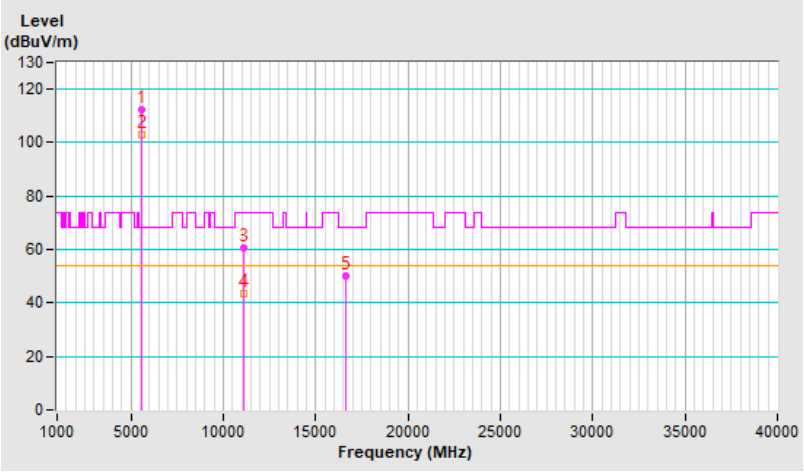


RF Mode	802.11ac (VHT40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	112.3 PK			1.30 H	185	108.6	3.7
2	*5550.00	103.2 AV			1.30 H	185	99.5	3.7
3	11100.00	60.8 PK	74.0	-13.2	1.86 H	211	46.0	14.8
4	11100.00	43.3 AV	54.0	-10.7	1.86 H	211	28.5	14.8
5	#16650.00	50.1 PK	68.2	-18.1	1.41 H	206	33.9	16.2

Remarks:

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

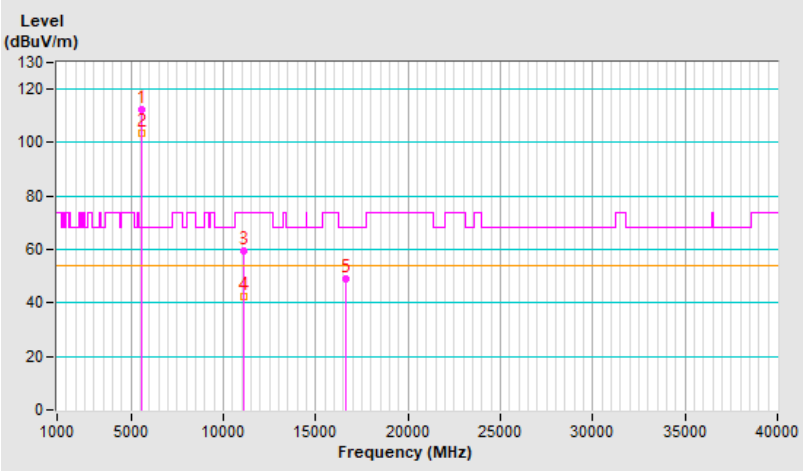


RF Mode	802.11ac (VHT40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	112.5 PK			1.20 V	165	108.8	3.7
2	*5550.00	103.6 AV			1.20 V	165	99.9	3.7
3	11100.00	59.6 PK	74.0	-14.4	1.35 V	271	44.8	14.8
4	11100.00	42.4 AV	54.0	-11.6	1.35 V	271	27.6	14.8
5	#16650.00	49.2 PK	68.2	-19.0	1.45 V	305	33.0	16.2

Remarks:

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

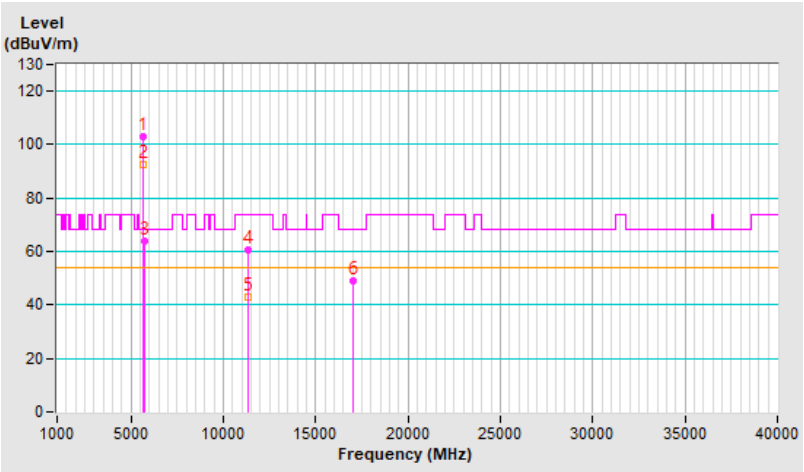


RF Mode	802.11ac (VHT40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	102.8 PK			1.26 H	213	99.1	3.7
2	*5670.00	92.6 AV			1.26 H	213	88.9	3.7
3	#5725.00	64.0 PK	68.2	-4.2	1.26 H	213	60.3	3.7
4	11340.00	60.6 PK	74.0	-13.4	1.88 H	200	45.8	14.8
5	11340.00	43.1 AV	54.0	-10.9	1.88 H	200	28.3	14.8
6	#17010.00	49.0 PK	68.2	-19.2	1.45 H	218	31.2	17.8

Remarks:

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

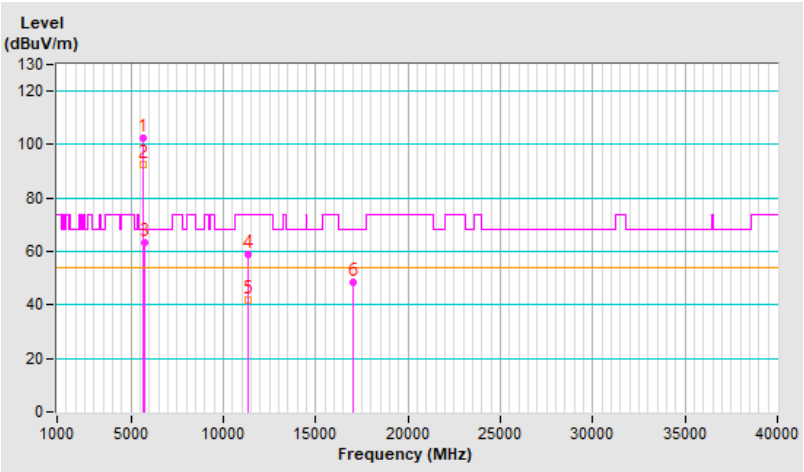


RF Mode	802.11ac (VHT40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	102.6 PK			1.16 V	181	98.9	3.7
2	*5670.00	92.5 AV			1.16 V	181	88.8	3.7
3	#5725.00	63.4 PK	68.2	-4.8	1.16 V	181	59.7	3.7
4	11340.00	59.0 PK	74.0	-15.0	1.40 V	251	44.2	14.8
5	11340.00	41.8 AV	54.0	-12.2	1.40 V	251	27.0	14.8
6	#17010.00	48.7 PK	68.2	-19.5	1.49 V	293	30.9	17.8

Remarks:

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

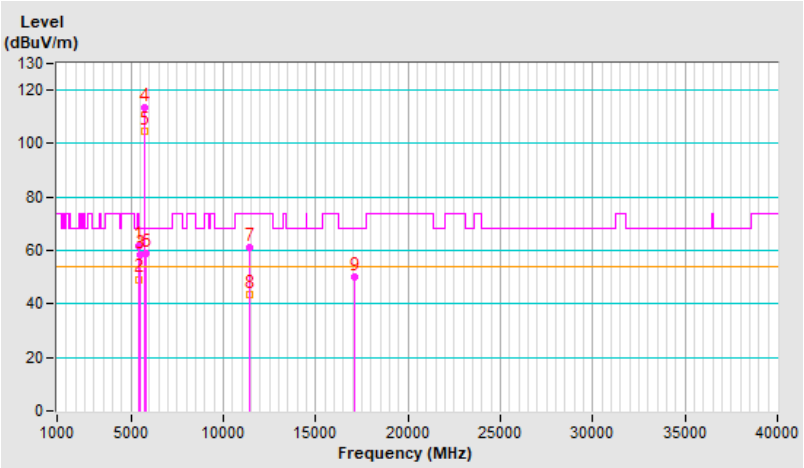


RF Mode	802.11ac (VHT40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.28 H	203	57.8	3.7
2	5460.00	49.3 AV	54.0	-4.7	1.28 H	203	45.6	3.7
3	#5470.00	58.6 PK	68.2	-9.6	1.28 H	203	54.9	3.7
4	*5710.00	113.5 PK			1.28 H	203	109.9	3.6
5	*5710.00	104.5 AV			1.28 H	203	100.9	3.6
6	#5850.00	58.9 PK	68.2	-9.3	1.28 H	203	54.7	4.2
7	11420.00	61.1 PK	74.0	-12.9	1.87 H	206	46.2	14.9
8	11420.00	43.4 AV	54.0	-10.6	1.87 H	206	28.5	14.9
9	#17130.00	49.9 PK	68.2	-18.3	1.40 H	218	31.9	18.0

Remarks:

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

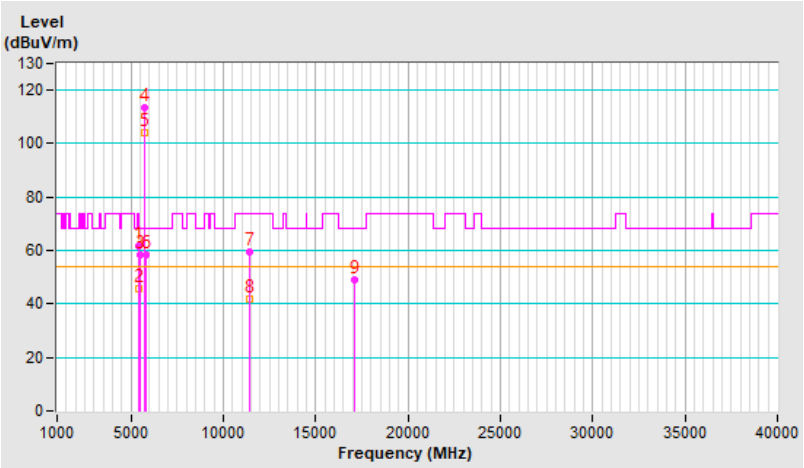


RF Mode	802.11ac (VHT40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.7 PK	74.0	-12.3	1.25 V	172	58.0	3.7
2	5460.00	45.6 AV	54.0	-8.4	1.25 V	172	41.9	3.7
3	#5470.00	58.3 PK	68.2	-9.9	1.25 V	172	54.6	3.7
4	*5710.00	113.7 PK			1.25 V	172	110.1	3.6
5	*5710.00	104.1 AV			1.25 V	172	100.5	3.6
6	#5850.00	58.4 PK	68.2	-9.8	1.25 V	172	54.2	4.2
7	11420.00	59.3 PK	74.0	-14.7	1.34 V	274	44.4	14.9
8	11420.00	42.0 AV	54.0	-12.0	1.34 V	274	27.1	14.9
9	#17130.00	49.1 PK	68.2	-19.1	1.45 V	294	31.1	18.0

Remarks:

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

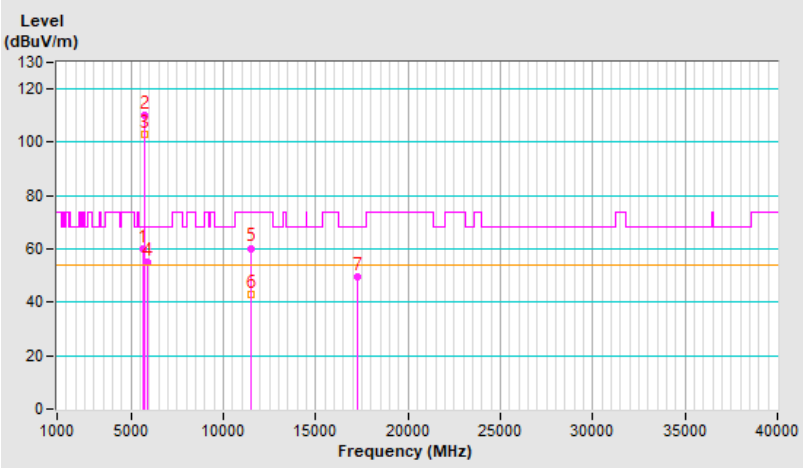


RF Mode	802.11ac (VHT40)	Channel	CH 151：5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5634.00	59.8 PK	68.2	-8.4	1.69 H	179	56.1	3.7
2	*5755.00	110.3 PK			1.69 H	179	106.3	4.0
3	*5755.00	102.9 AV			1.69 H	179	98.9	4.0
4	#5931.00	54.9 PK	68.2	-13.3	1.69 H	179	50.8	4.1
5	11510.00	60.3 PK	74.0	-13.7	1.90 H	213	45.0	15.3
6	11510.00	43.1 AV	54.0	-10.9	1.90 H	213	27.8	15.3
7	#17265.00	49.8 PK	68.2	-18.4	1.48 H	202	31.8	18.0

Remarks:

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

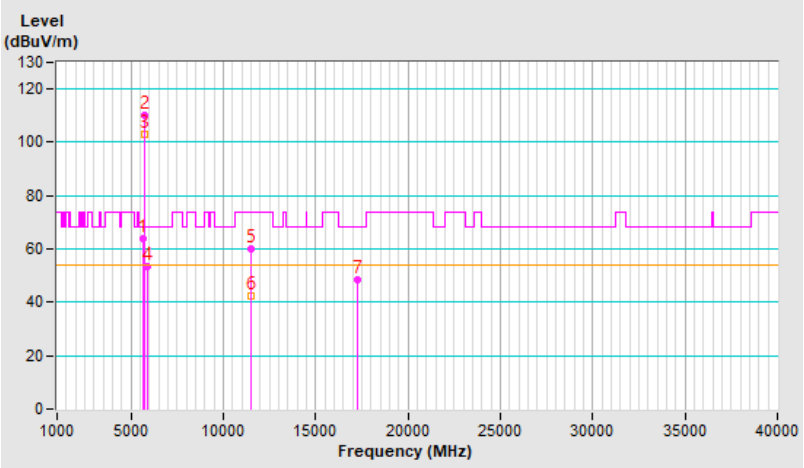


RF Mode	802.11ac (VHT40)	Channel	CH 151：5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.00	64.1 PK	68.2	-4.1	1.91 V	209	60.4	3.7
2	*5755.00	110.1 PK			1.91 V	209	106.1	4.0
3	*5755.00	102.9 AV			1.91 V	209	98.9	4.0
4	#5930.00	53.4 PK	68.2	-14.8	1.91 V	209	49.3	4.1
5	11510.00	59.8 PK	74.0	-14.2	1.43 V	261	44.5	15.3
6	11510.00	42.2 AV	54.0	-11.8	1.43 V	261	26.9	15.3
7	#17265.00	48.2 PK	68.2	-20.0	1.51 V	287	30.2	18.0

Remarks:

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

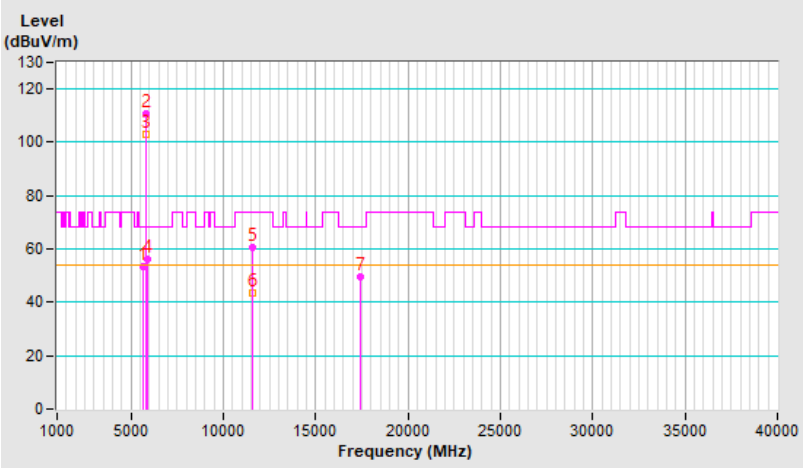


RF Mode	802.11ac (VHT40)	Channel	CH 159：5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5640.60	53.4 PK	68.2	-14.8	1.50 H	178	49.7	3.7
2	*5795.00	110.7 PK			1.50 H	178	106.5	4.2
3	*5795.00	102.9 AV			1.50 H	178	98.7	4.2
4	#5925.70	56.4 PK	68.2	-11.8	1.50 H	178	52.4	4.0
5	11590.00	60.8 PK	74.0	-13.2	1.80 H	223	45.6	15.2
6	11590.00	43.7 AV	54.0	-10.3	1.80 H	223	28.5	15.2
7	#17385.00	49.6 PK	68.2	-18.6	1.51 H	195	30.8	18.8

Remarks:

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

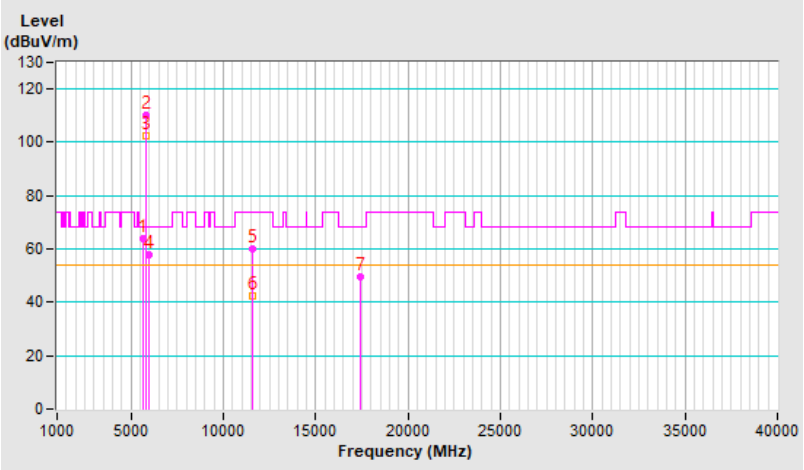


RF Mode	802.11ac (VHT40)	Channel	CH 159：5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	#5630.00	64.0 PK	68.2	-4.2	2.01 V	208	60.3	3.7
2	*5795.00	110.3 PK			2.01 V	208	106.1	4.2
3	*5795.00	102.2 AV			2.01 V	208	98.0	4.2
4	#5938.00	57.8 PK	68.2	-10.4	2.01 V	208	53.7	4.1
5	11590.00	59.8 PK	74.0	-14.2	1.36 V	257	44.6	15.2
6	11590.00	42.3 AV	54.0	-11.7	1.36 V	257	27.1	15.2
7	#17385.00	49.6 PK	68.2	-18.6	1.48 V	310	30.8	18.8

Remarks:

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

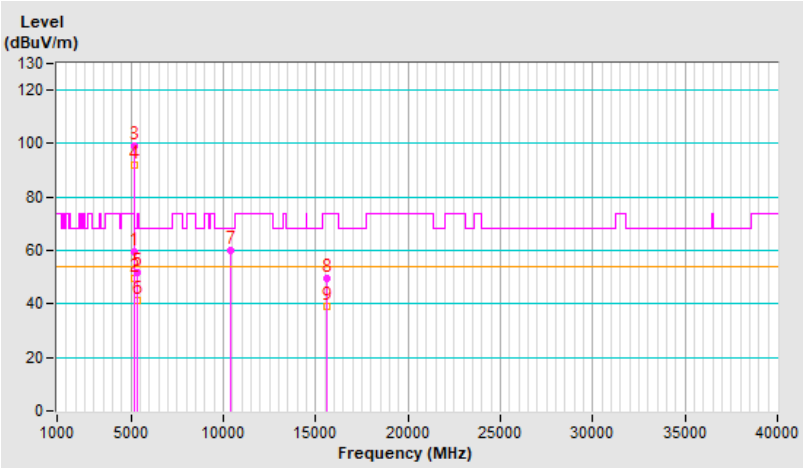


RF Mode	802.11ac (VHT80)	Channel	CH 42：5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	59.3 PK	74.0	-14.7	1.23 H	189	55.3	4.0
2	5150.00	49.8 AV	54.0	-4.2	1.23 H	189	45.8	4.0
3	*5210.00	99.0 PK			1.23 H	189	95.5	3.5
4	*5210.00	91.9 AV			1.23 H	189	88.4	3.5
5	5350.00	51.6 PK	74.0	-22.4	1.23 H	189	48.0	3.6
6	5350.00	41.4 AV	54.0	-12.6	1.23 H	189	37.8	3.6
7	#10420.00	60.2 PK	68.2	-8.0	1.86 H	215	46.2	14.0
8	15630.00	49.7 PK	74.0	-24.3	1.45 H	211	35.2	14.5
9	15630.00	38.9 AV	54.0	-15.1	1.45 H	211	24.4	14.5

Remarks:

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

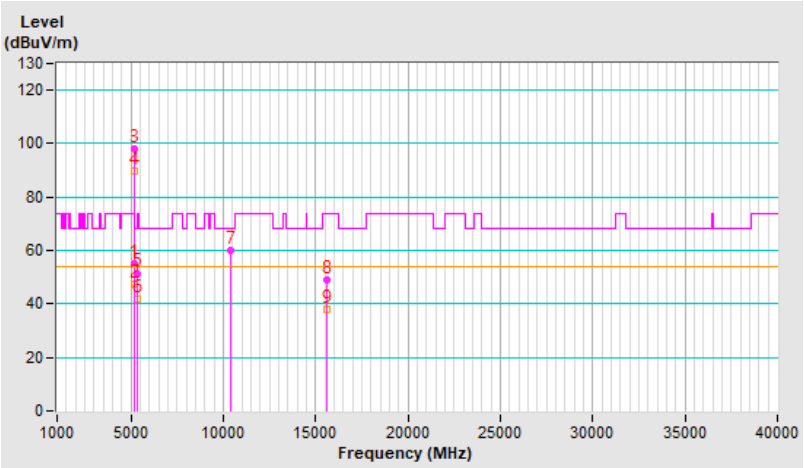


RF Mode	802.11ac (VHT80)	Channel	CH 42：5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	55.0 PK	74.0	-19.0	1.91 V	201	51.0	4.0
2	5150.00	47.6 AV	54.0	-6.4	1.91 V	201	43.6	4.0
3	*5210.00	97.8 PK			1.91 V	201	94.3	3.5
4	*5210.00	89.8 AV			1.91 V	201	86.3	3.5
5	5350.00	51.5 PK	74.0	-22.5	1.91 V	201	47.9	3.6
6	5350.00	42.0 AV	54.0	-12.0	1.91 V	201	38.4	3.6
7	#10420.00	59.9 PK	68.2	-8.3	1.33 V	269	45.9	14.0
8	15630.00	48.8 PK	74.0	-25.2	1.42 V	306	34.3	14.5
9	15630.00	37.8 AV	54.0	-16.2	1.42 V	306	23.3	14.5

Remarks:

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

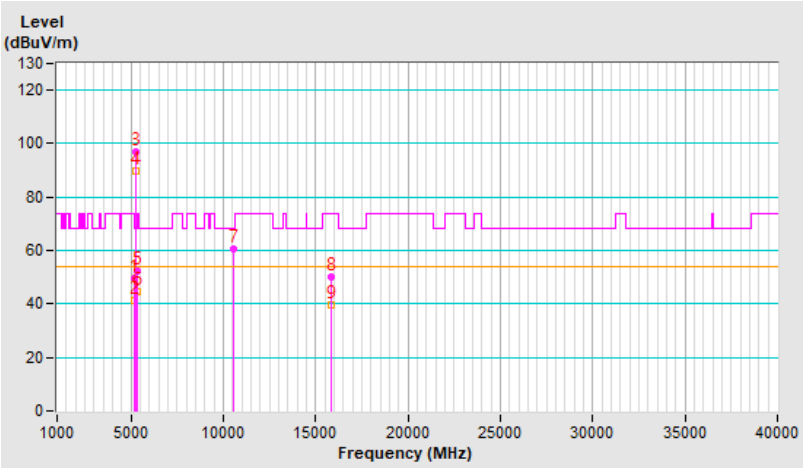


RF Mode	802.11ac (VHT80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	49.7 PK	74.0	-24.3	1.23 H	188	45.7	4.0
2	5150.00	41.2 AV	54.0	-12.8	1.23 H	188	37.2	4.0
3	*5290.00	96.9 PK			1.23 H	188	93.9	3.0
4	*5290.00	89.6 AV			1.23 H	188	86.6	3.0
5	5350.00	52.5 PK	74.0	-21.5	1.23 H	188	48.9	3.6
6	5350.00	44.7 AV	54.0	-9.3	1.23 H	188	41.1	3.6
7	#10580.00	60.6 PK	68.2	-7.6	1.91 H	219	45.8	14.8
8	15870.00	50.3 PK	74.0	-23.7	1.41 H	210	36.3	14.0
9	15870.00	39.5 AV	54.0	-14.5	1.41 H	210	25.5	14.0

Remarks:

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

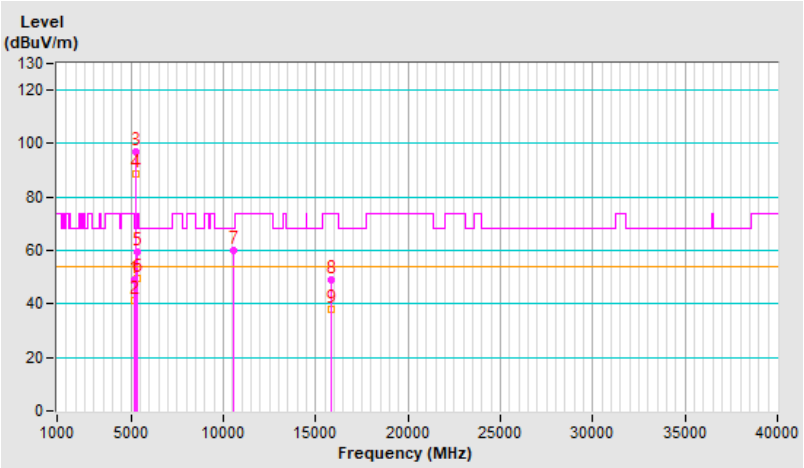


RF Mode	802.11ac (VHT80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	49.1 PK	74.0	-24.9	1.91 V	199	45.1	4.0
2	5150.00	41.4 AV	54.0	-12.6	1.91 V	199	37.4	4.0
3	*5290.00	96.7 PK			1.91 V	199	93.7	3.0
4	*5290.00	88.9 AV			1.91 V	199	85.9	3.0
5	5350.00	59.6 PK	74.0	-14.4	1.91 V	199	56.0	3.6
6	5350.00	49.5 AV	54.0	-4.5	1.91 V	199	45.9	3.6
7	#10580.00	59.9 PK	68.2	-8.3	1.40 V	262	45.1	14.8
8	15870.00	48.9 PK	74.0	-25.1	1.52 V	288	34.9	14.0
9	15870.00	37.8 AV	54.0	-16.2	1.52 V	288	23.8	14.0

Remarks:

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

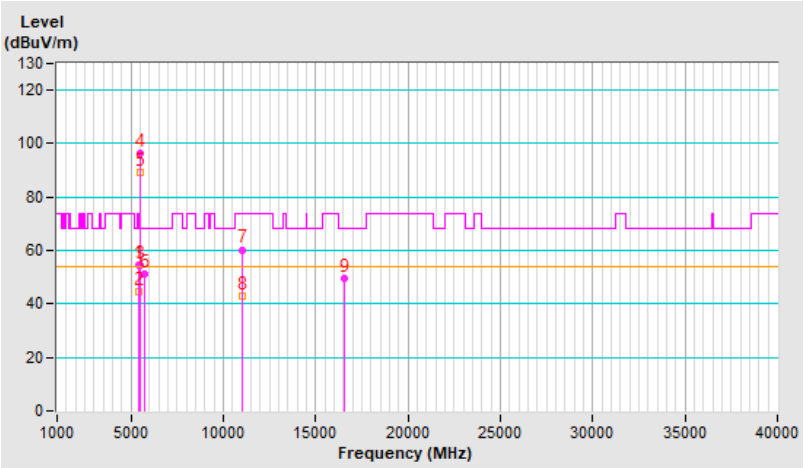


RF Mode	802.11ac (VHT80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	54.6 PK	74.0	-19.4	1.32 H	191	50.9	3.7
2	5460.00	44.8 AV	54.0	-9.2	1.32 H	191	41.1	3.7
3	#5470.00	54.7 PK	68.2	-13.5	1.32 H	191	51.0	3.7
4	*5530.00	96.6 PK			1.32 H	191	92.9	3.7
5	*5530.00	89.0 AV			1.32 H	191	85.3	3.7
6	#5725.00	51.1 PK	68.2	-17.1	1.32 H	191	47.4	3.7
7	11060.00	60.3 PK	74.0	-13.7	1.86 H	205	45.6	14.7
8	11060.00	43.1 AV	54.0	-10.9	1.86 H	205	28.4	14.7
9	#16590.00	49.7 PK	68.2	-18.5	1.51 H	188	33.7	16.0

Remarks:

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

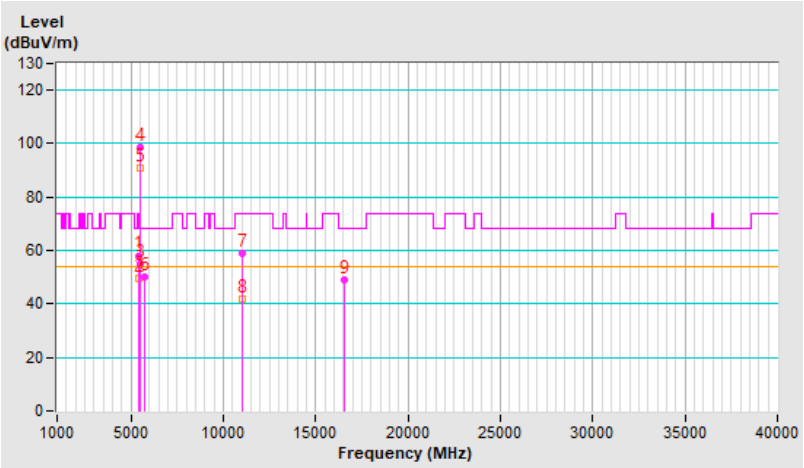


RF Mode	802.11ac (VHT80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

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	58.1 PK	74.0	-15.9	1.46 V	211	54.4	3.7
2	5460.00	49.6 AV	54.0	-4.4	1.46 V	211	45.9	3.7
3	#5470.00	55.2 PK	68.2	-13.0	1.46 V	211	51.5	3.7
4	*5530.00	98.6 PK			1.46 V	211	94.9	3.7
5	*5530.00	90.8 AV			1.46 V	211	87.1	3.7
6	#5725.00	50.1 PK	68.2	-18.1	1.46 V	211	46.4	3.7
7	11060.00	59.1 PK	74.0	-14.9	1.36 V	271	44.4	14.7
8	11060.00	41.9 AV	54.0	-12.1	1.36 V	271	27.2	14.7
9	#16590.00	49.1 PK	68.2	-19.1	1.50 V	285	33.1	16.0

Remarks:

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

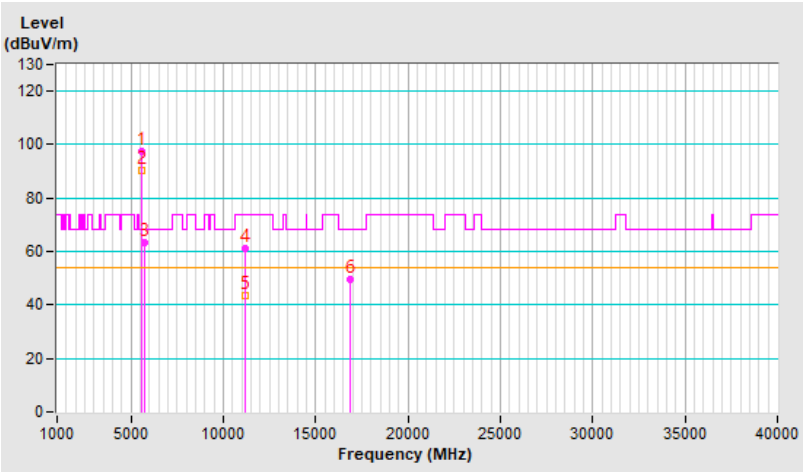


RF Mode	802.11ac (VHT80)	Channel	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	97.3 PK			1.30 H	192	93.5	3.8
2	*5610.00	90.1 AV			1.30 H	192	86.3	3.8
3	#5725.00	63.5 PK	68.2	-4.7	1.30 H	192	59.8	3.7
4	11220.00	60.9 PK	74.0	-13.1	1.79 H	209	46.6	14.3
5	11220.00	43.3 AV	54.0	-10.7	1.79 H	209	29.0	14.3
6	#16830.00	49.5 PK	68.2	-18.7	1.41 H	213	32.4	17.1

Remarks:

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

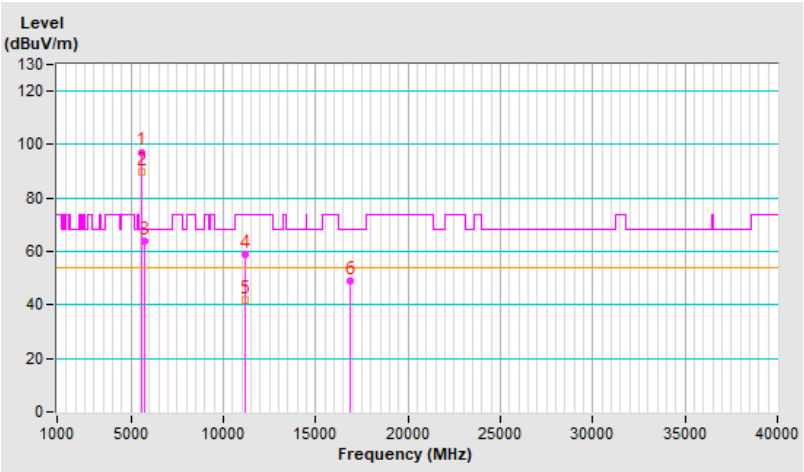


RF Mode	802.11ac (VHT80)	Channel	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	97.2 PK			1.49 V	201	93.4	3.8
2	*5610.00	90.0 AV			1.49 V	201	86.2	3.8
3	#5725.00	64.1 PK	68.2	-4.1	1.49 V	201	60.4	3.7
4	11220.00	59.0 PK	74.0	-15.0	1.42 V	253	44.7	14.3
5	11220.00	41.7 AV	54.0	-12.3	1.42 V	253	27.4	14.3
6	#16830.00	49.0 PK	68.2	-19.2	1.49 V	284	31.9	17.1

Remarks:

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

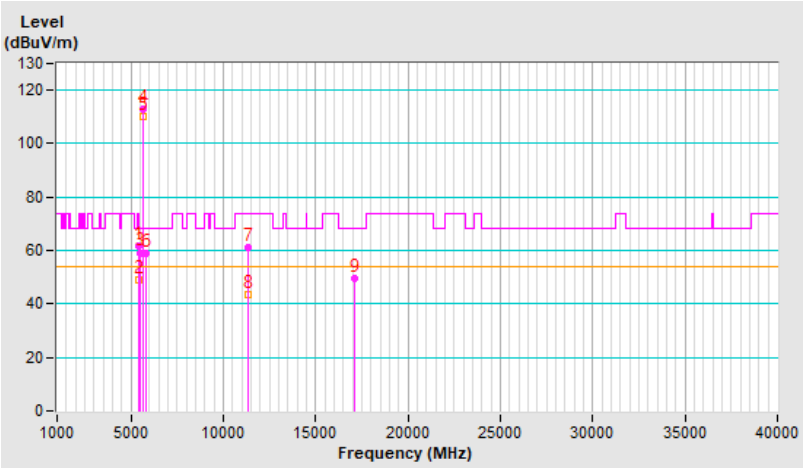


RF Mode	802.11ac (VHT80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.27 H	179	57.8	3.7
2	5460.00	49.1 AV	54.0	-4.9	1.27 H	179	45.4	3.7
3	#5470.00	59.2 PK	68.2	-9.0	1.27 H	179	55.5	3.7
4	*5690.00	113.1 PK			1.27 H	179	109.4	3.7
5	*5690.00	110.1 AV			1.27 H	179	106.4	3.7
6	#5850.00	59.1 PK	68.2	-9.1	1.27 H	179	54.9	4.2
7	11380.00	61.0 PK	74.0	-13.0	1.79 H	213	46.2	14.8
8	11380.00	43.6 AV	54.0	-10.4	1.79 H	213	28.8	14.8
9	#17070.00	49.4 PK	68.2	-18.8	1.41 H	214	31.5	17.9

Remarks:

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

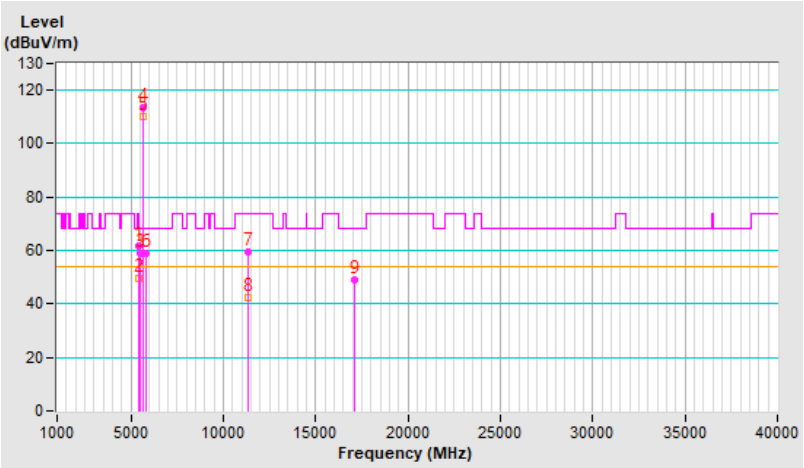


RF Mode	802.11ac (VHT80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.8 PK	74.0	-12.2	1.43 V	213	58.1	3.7
2	5460.00	49.4 AV	54.0	-4.6	1.43 V	213	45.7	3.7
3	#5470.00	58.9 PK	68.2	-9.3	1.43 V	213	55.2	3.7
4	*5690.00	113.3 PK			1.43 V	213	109.6	3.7
5	*5690.00	110.2 AV			1.43 V	213	106.5	3.7
6	#5850.00	58.8 PK	68.2	-9.4	1.43 V	213	54.6	4.2
7	11380.00	59.5 PK	74.0	-14.5	1.38 V	257	44.7	14.8
8	11380.00	42.3 AV	54.0	-11.7	1.38 V	257	27.5	14.8
9	#17070.00	49.0 PK	68.2	-19.2	1.45 V	315	31.1	17.9

Remarks:

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

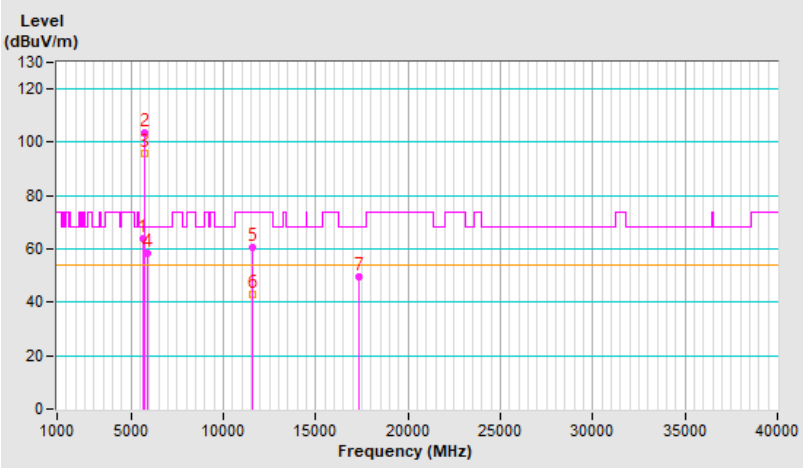


RF Mode	802.11ac (VHT80)	Channel	CH 155：5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5647.00	64.1 PK	68.2	-4.1	1.31 H	187	60.4	3.7
2	*5775.00	103.6 PK			1.31 H	187	99.5	4.1
3	*5775.00	95.9 AV			1.31 H	187	91.8	4.1
4	#5932.00	58.4 PK	68.2	-9.8	1.31 H	187	54.3	4.1
5	11550.00	60.8 PK	74.0	-13.2	1.90 H	222	45.5	15.3
6	11550.00	43.1 AV	54.0	-10.9	1.90 H	222	27.8	15.3
7	#17325.00	49.6 PK	68.2	-18.6	1.43 H	199	31.3	18.3

Remarks:

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

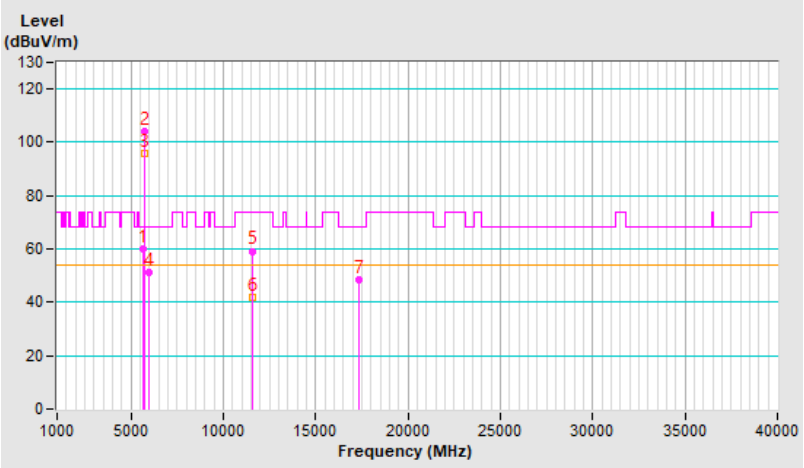


RF Mode	802.11ac (VHT80)	Channel	CH 155：5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Weiwei Lo		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5647.00	60.1 PK	68.2	-8.1	1.74 V	205	56.4	3.7
2	*5775.00	103.9 PK			1.74 V	205	99.8	4.1
3	*5775.00	95.8 AV			1.74 V	205	91.7	4.1
4	#5941.60	51.4 PK	68.2	-16.8	1.74 V	205	47.3	4.1
5	11550.00	59.2 PK	74.0	-14.8	1.34 V	272	43.9	15.3
6	11550.00	41.9 AV	54.0	-12.1	1.34 V	272	26.6	15.3
7	#17325.00	48.4 PK	68.2	-19.8	1.50 V	304	30.1	18.3

Remarks:

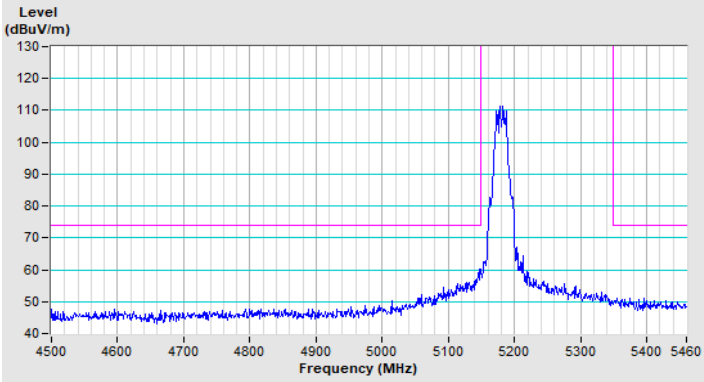
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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



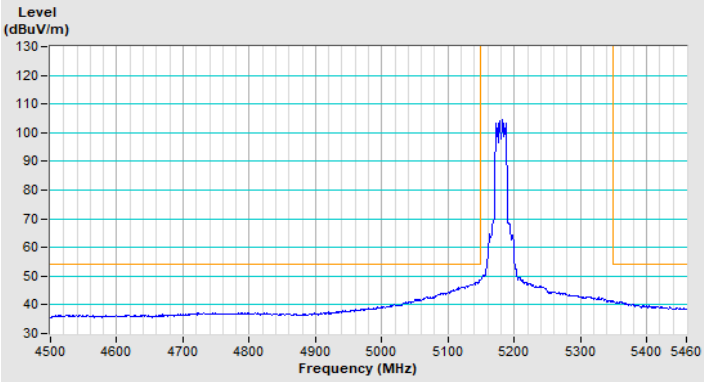
Plot of Band Edge

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

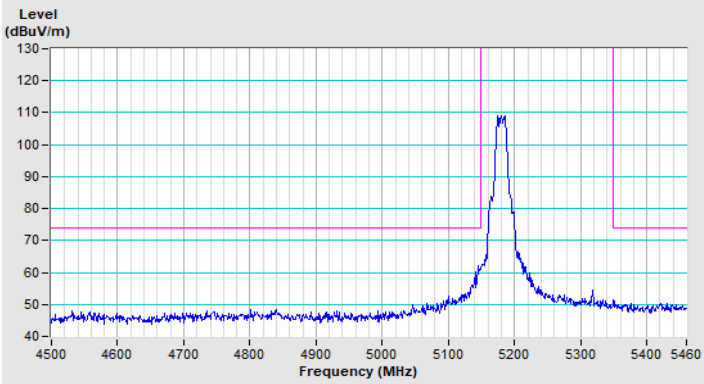
802.11a Channel 36



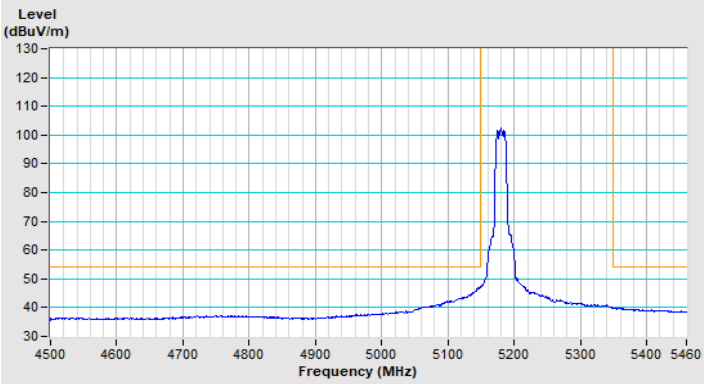
Horizontal (Peak)



Horizontal (Average)

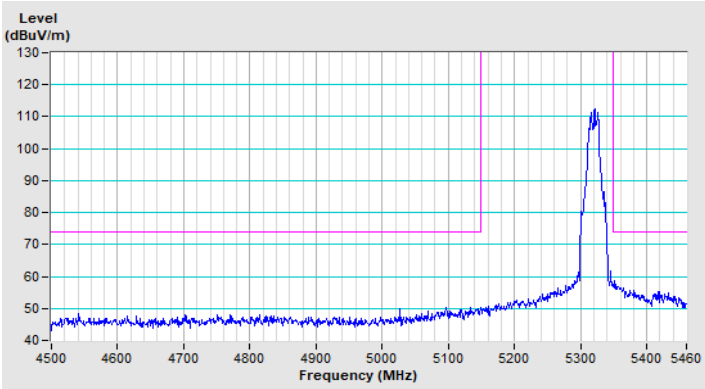


Vertical (Peak)

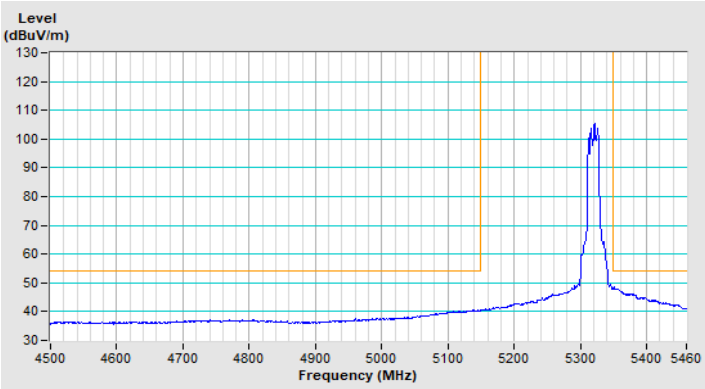


Vertical (Average)

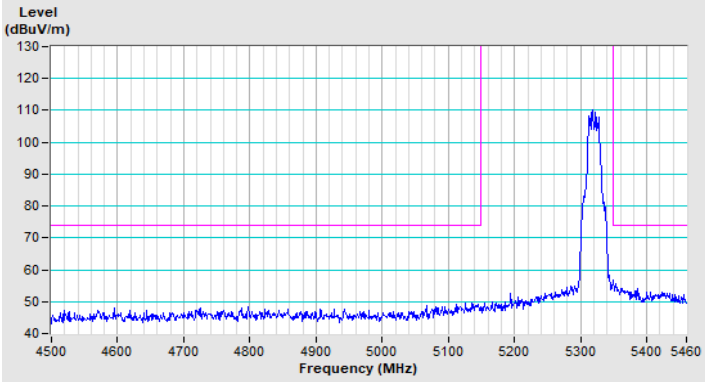
802.11a Channel 64



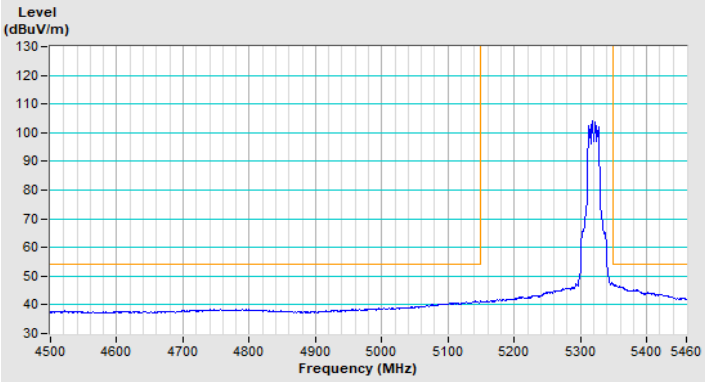
Horizontal (Peak)



Horizontal (Average)



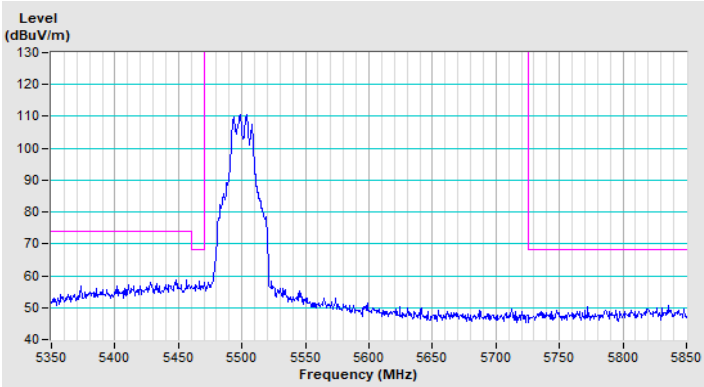
Vertical (Peak)



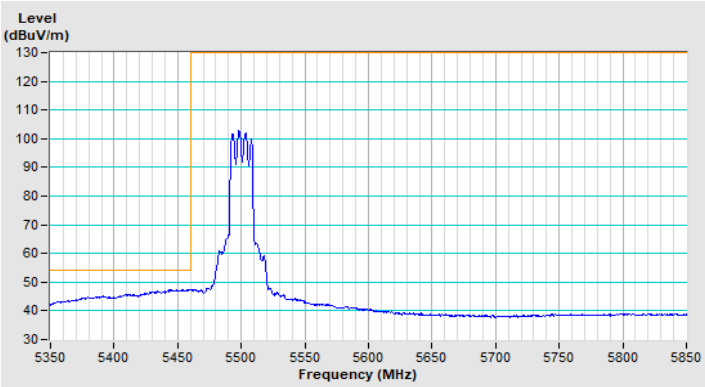
Vertical (Average)

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

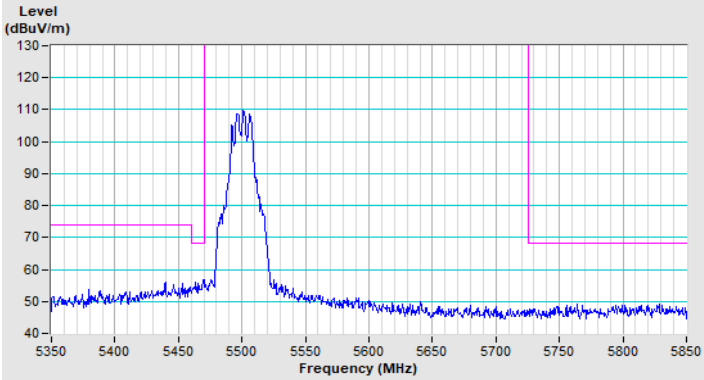
802.11a Channel 100



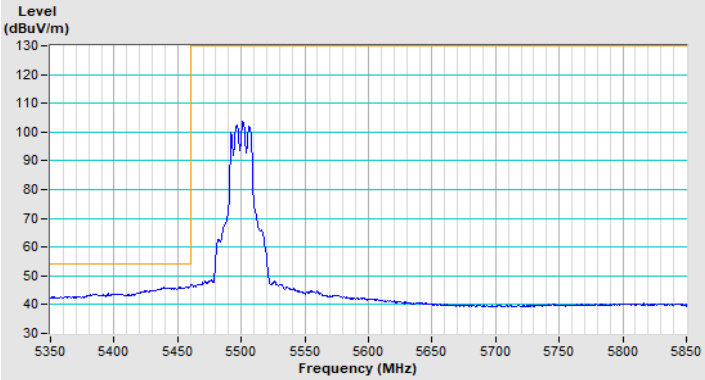
Horizontal (Peak)



Horizontal (Average)



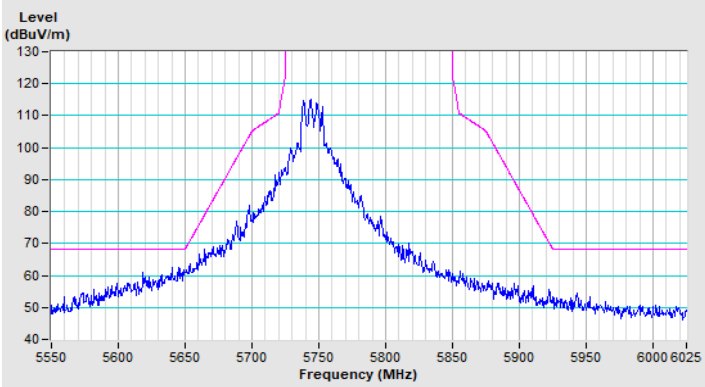
Vertical (Peak)



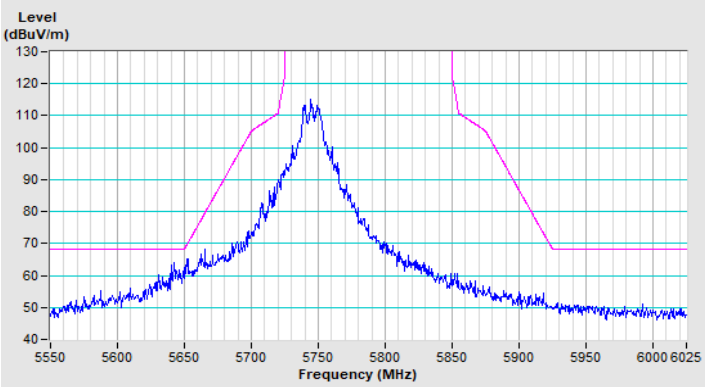
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11a Channel 149

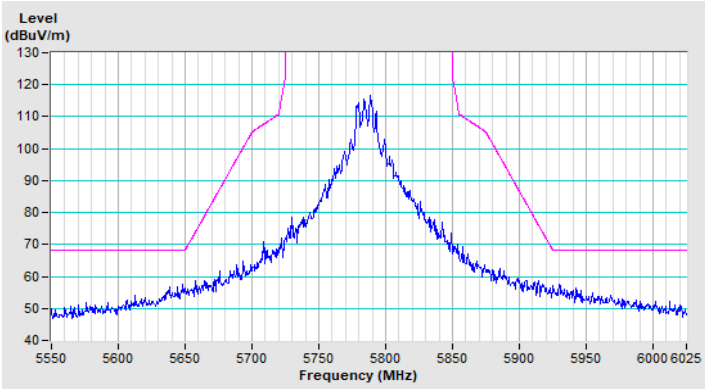


Horizontal (Peak)

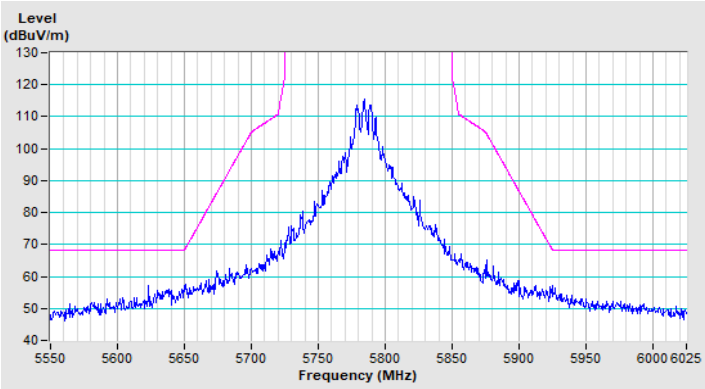


Vertical (Peak)

802.11a Channel 157

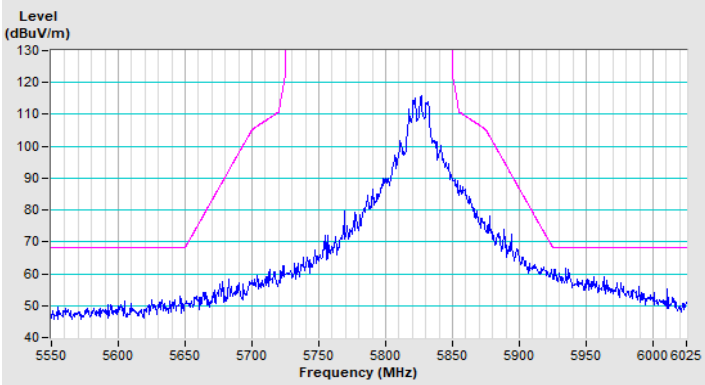


Horizontal (Peak)

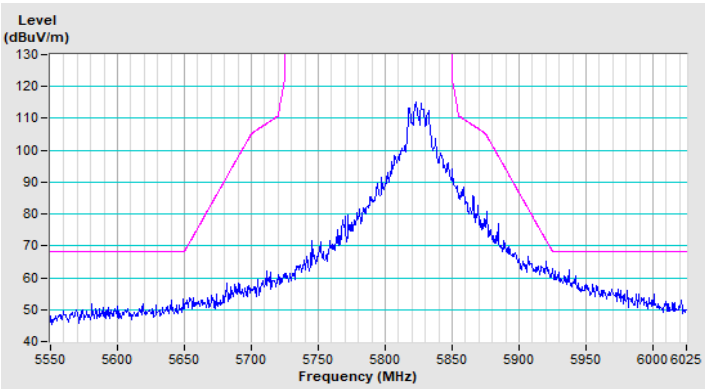


Vertical (Peak)

802.11a Channel 165



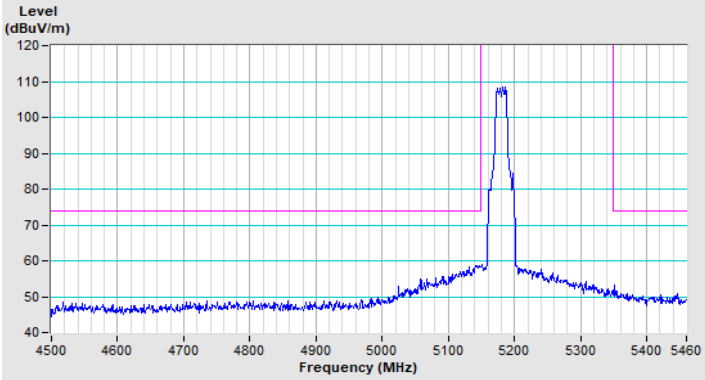
Horizontal (Peak)



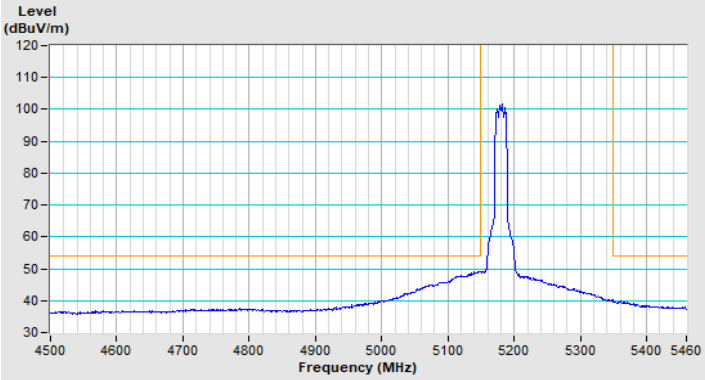
Vertical (Peak)

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

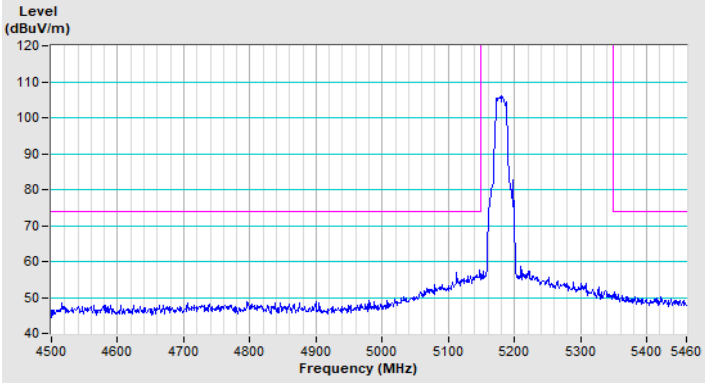
802.11ac (VHT20) Channel 36



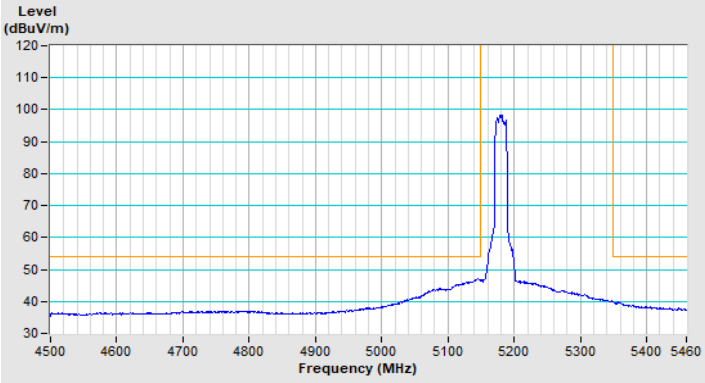
Horizontal (Peak)



Horizontal (Average)

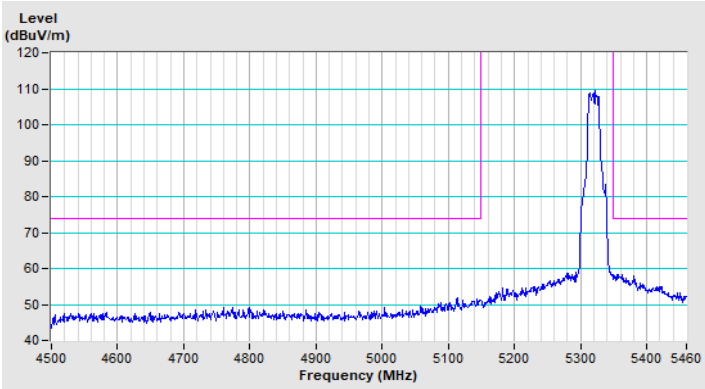


Vertical (Peak)

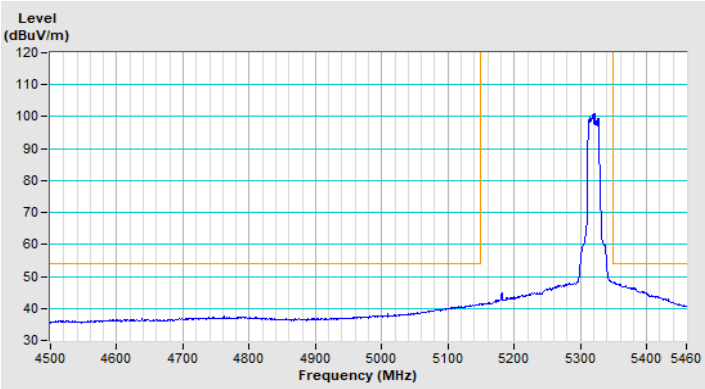


Vertical (Average)

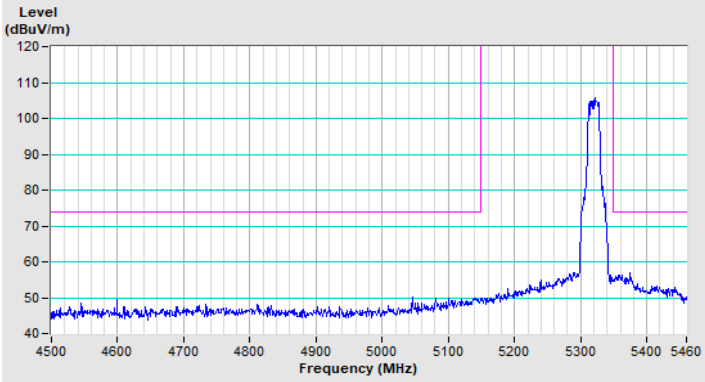
802.11ac (VHT20) Channel 64



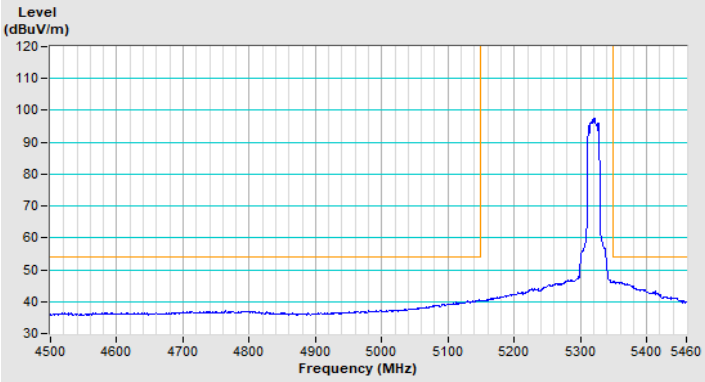
Horizontal (Peak)



Horizontal (Average)



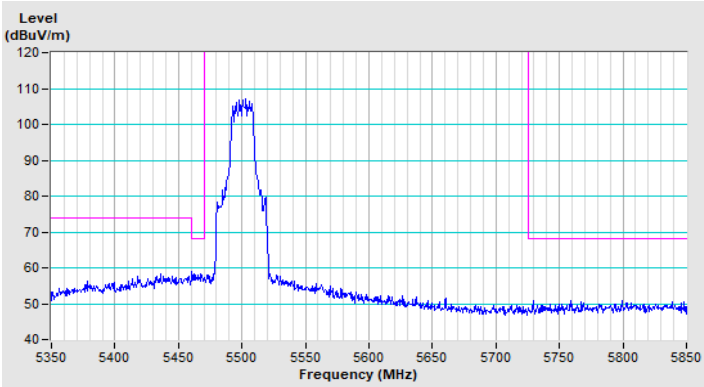
Vertical (Peak)



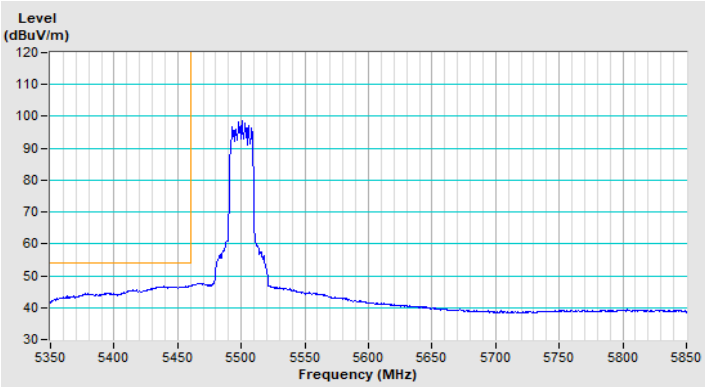
Vertical (Average)

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

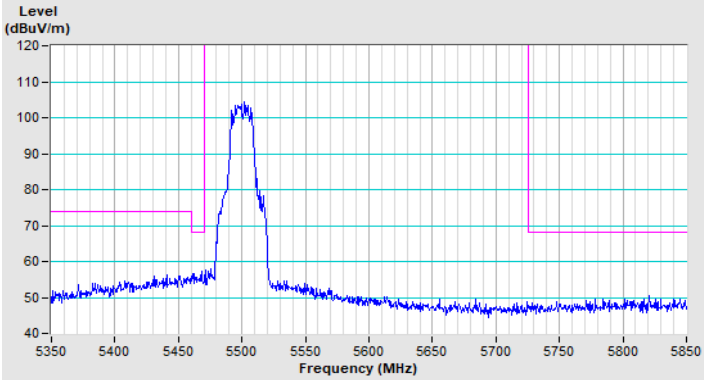
802.11ac (VHT20) Channel 100



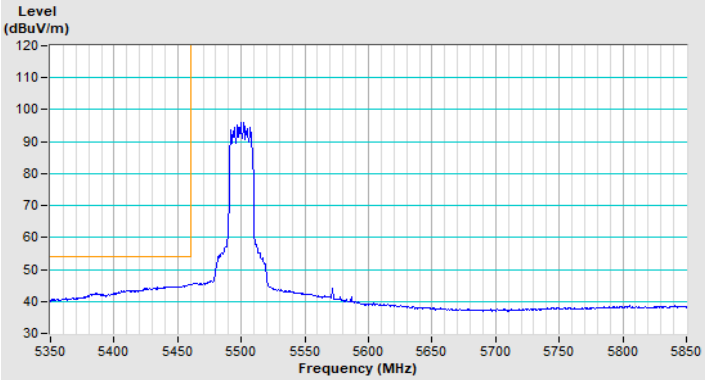
Horizontal (Peak)



Horizontal (Average)



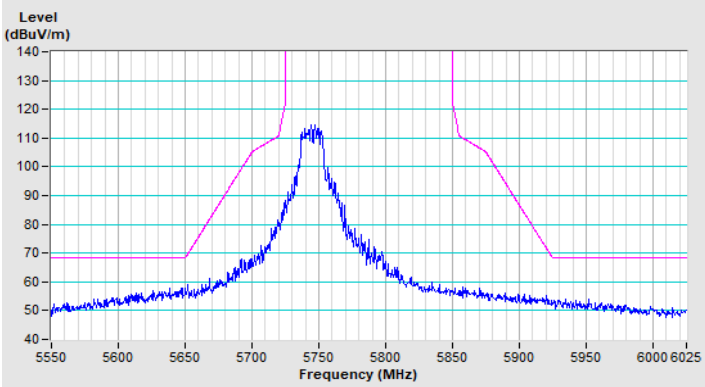
Vertical (Peak)



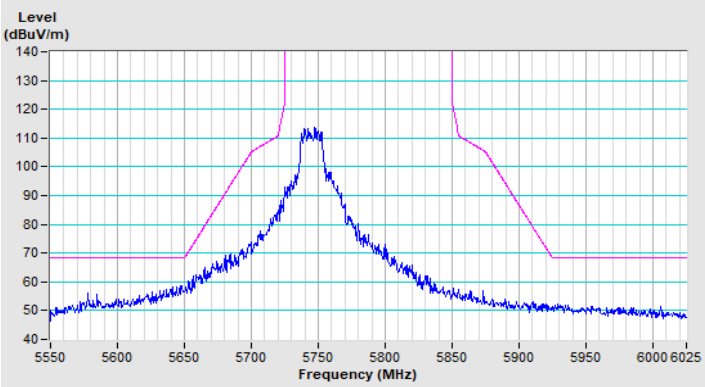
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ac (VHT20) Channel 149

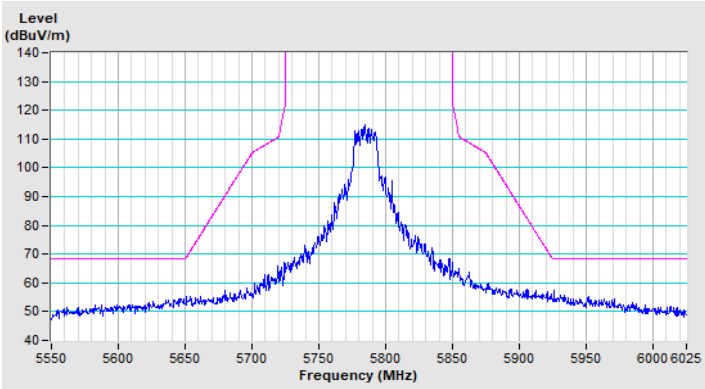


Horizontal (Peak)

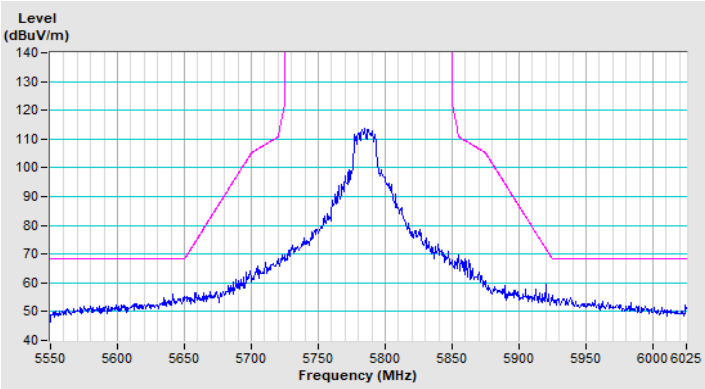


Vertical (Peak)

802.11ac (VHT20) Channel 157

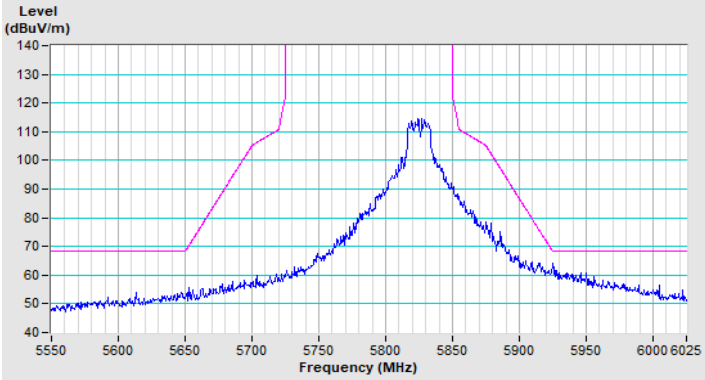


Horizontal (Peak)

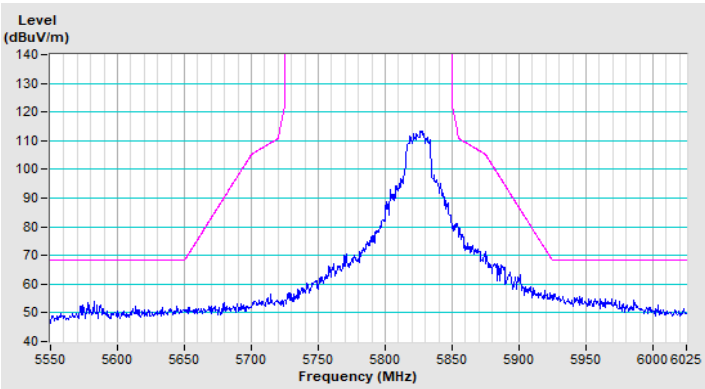


Vertical (Peak)

802.11ac (VHT20) Channel 165



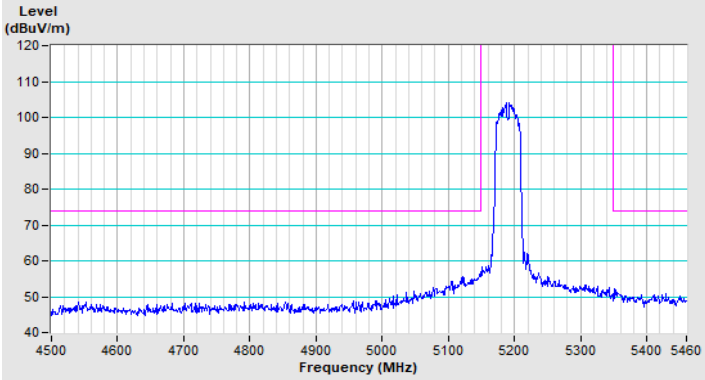
Horizontal (Peak)



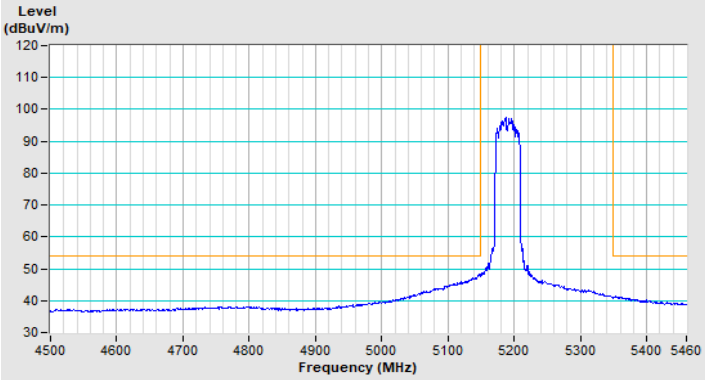
Vertical (Peak)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak

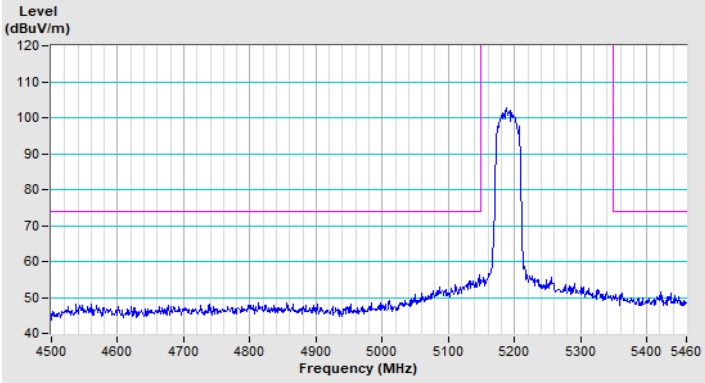
802.11ac (VHT40) Channel 38



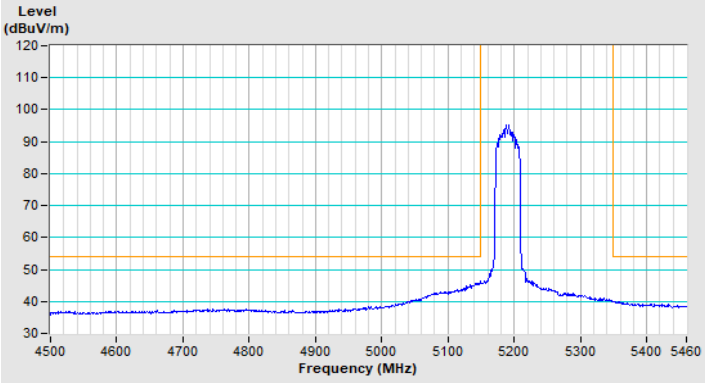
Horizontal (Peak)



Horizontal (Average)

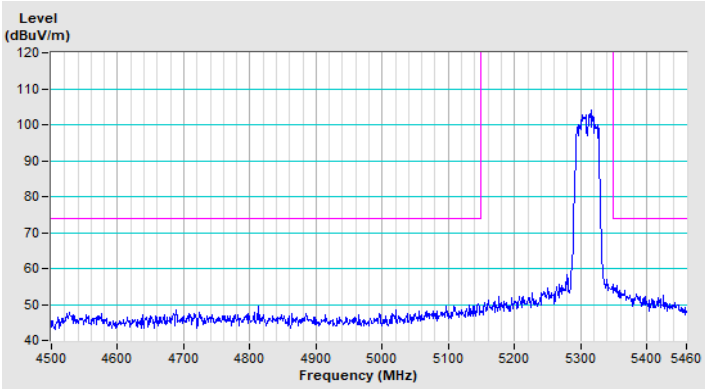


Vertical (Peak)

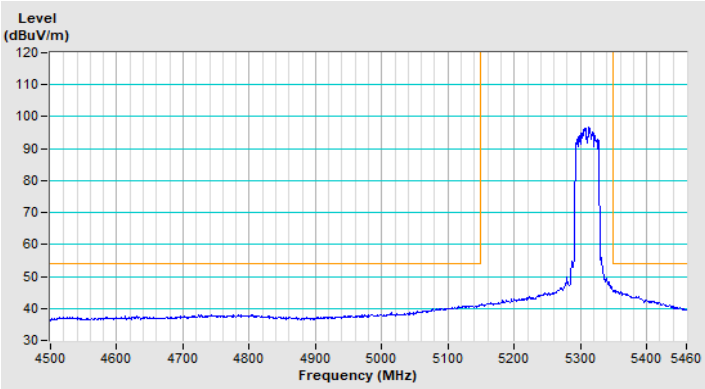


Vertical (Average)

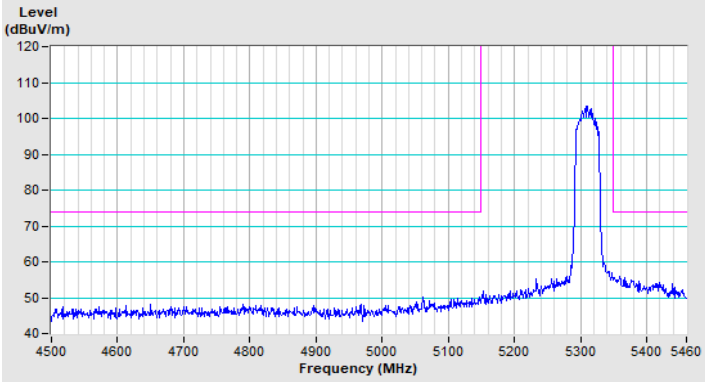
802.11ac (VHT40) Channel 62



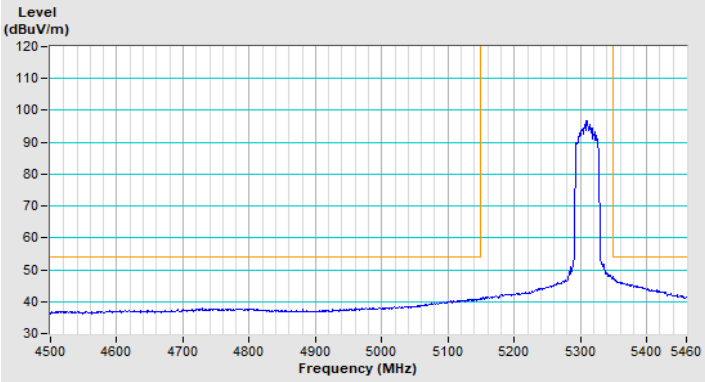
Horizontal (Peak)



Horizontal (Average)



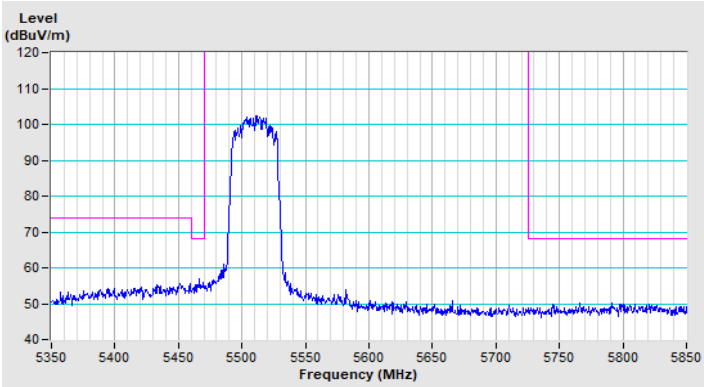
Vertical (Peak)



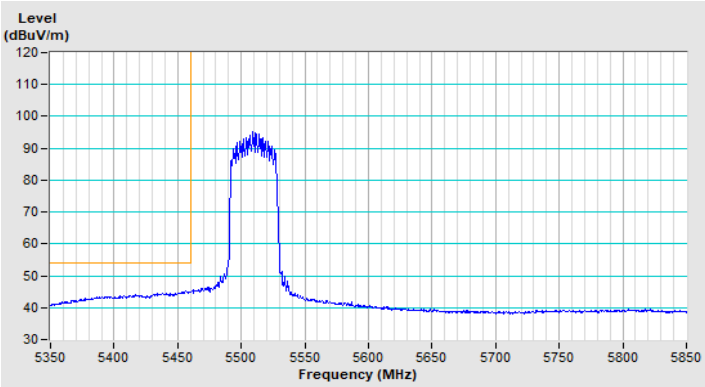
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak

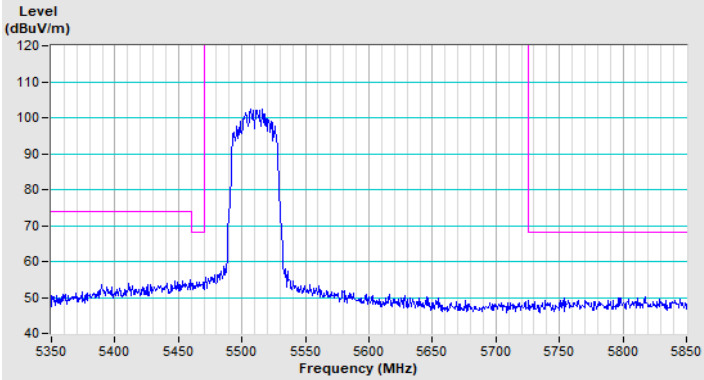
802.11ac (VHT40) Channel 102



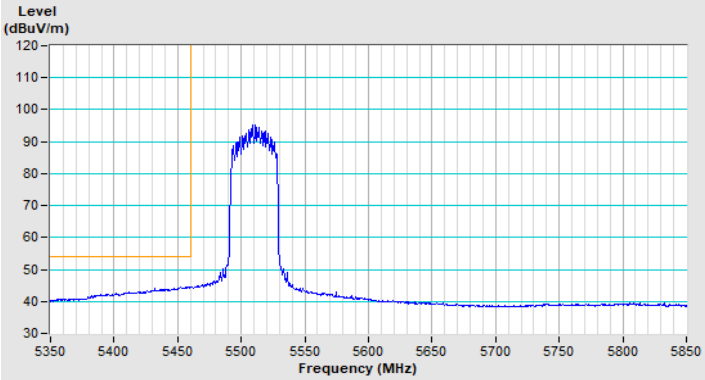
Horizontal (Peak)



Horizontal (Average)



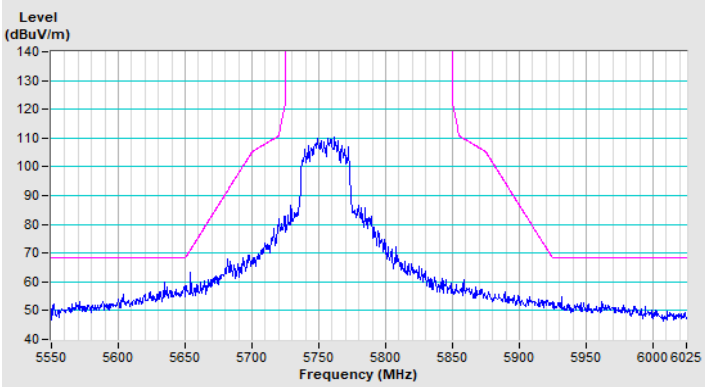
Vertical (Peak)



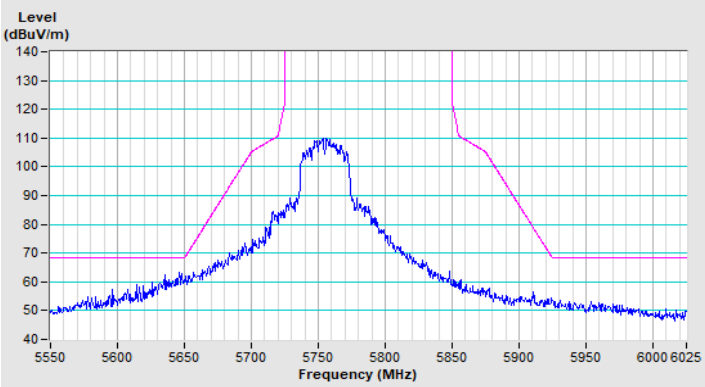
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ac (VHT40) Channel 151

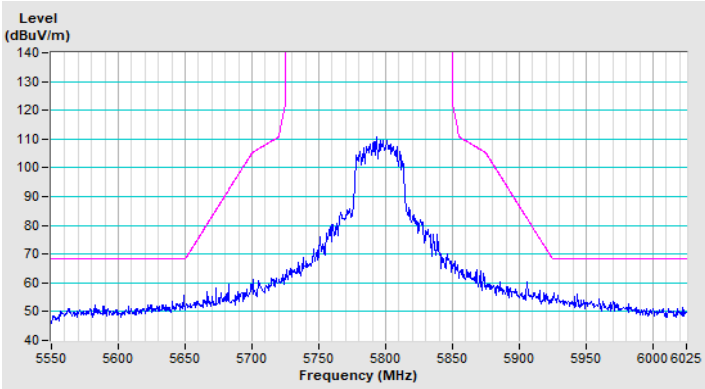


Horizontal (Peak)

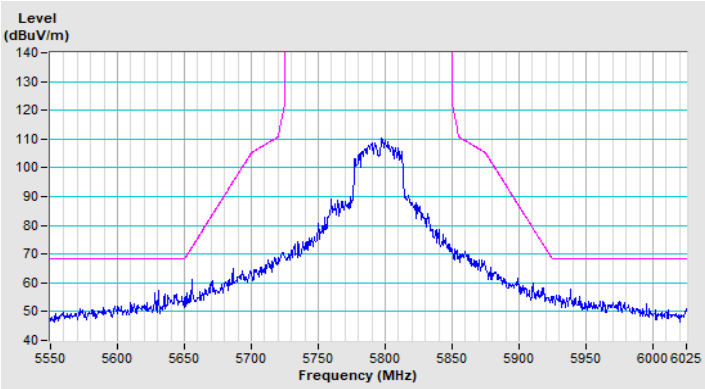


Vertical (Peak)

802.11ac (VHT40) Channel 159



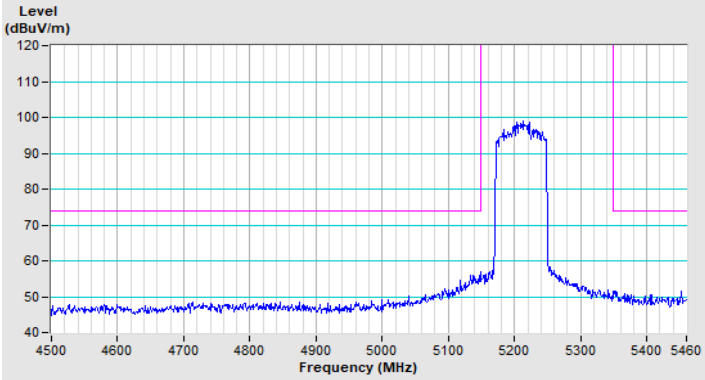
Horizontal (Peak)



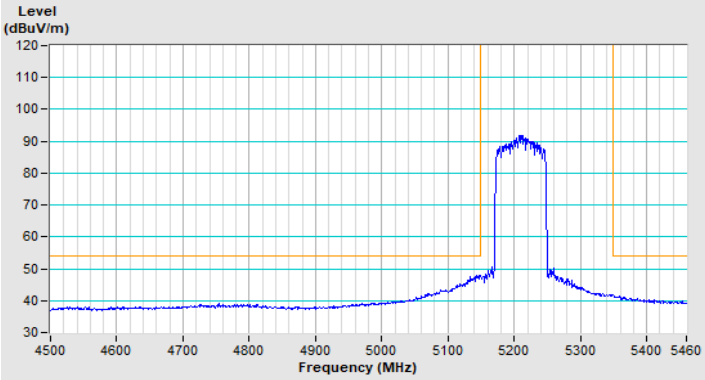
Vertical (Peak)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak

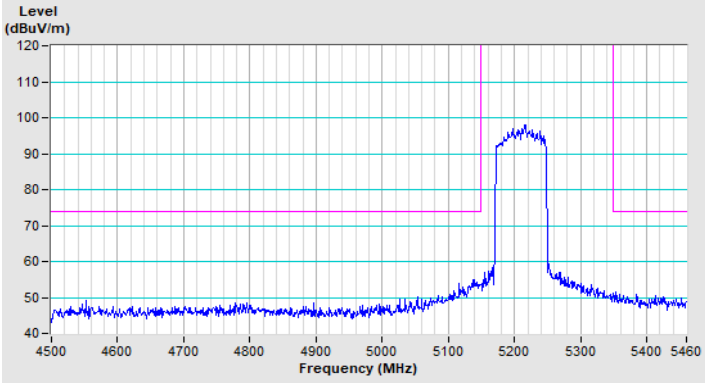
802.11ac (VHT80) Channel 42



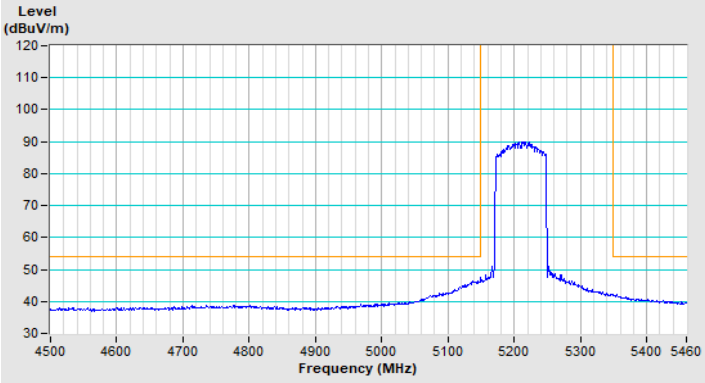
Horizontal (Peak)



Horizontal (Average)

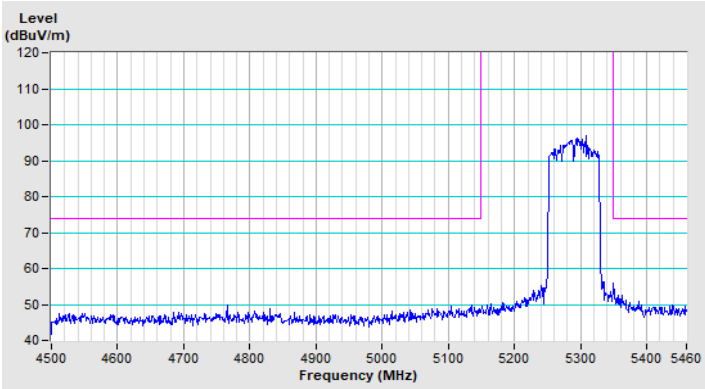


Vertical (Peak)

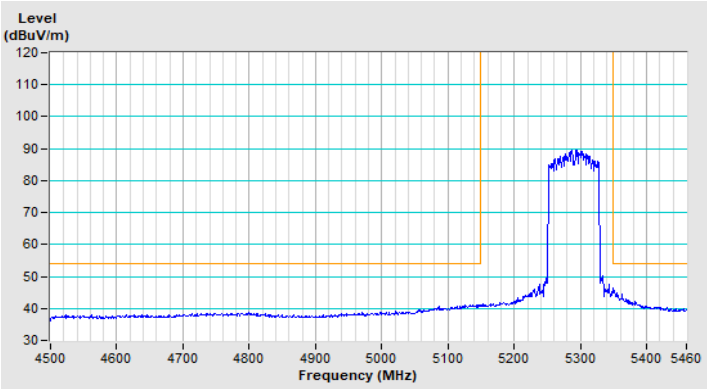


Vertical (Average)

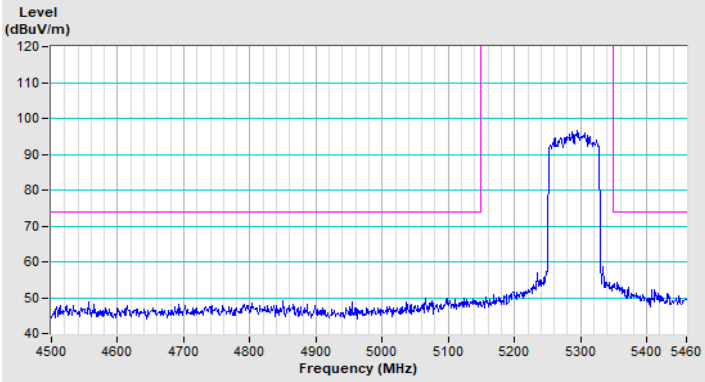
802.11ac (VHT80) Channel 58



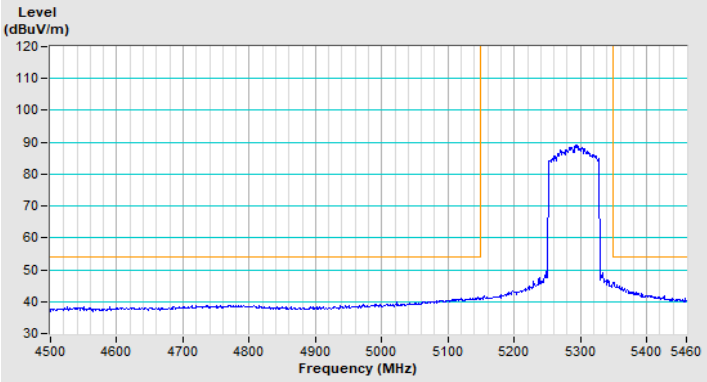
Horizontal (Peak)



Horizontal (Average)



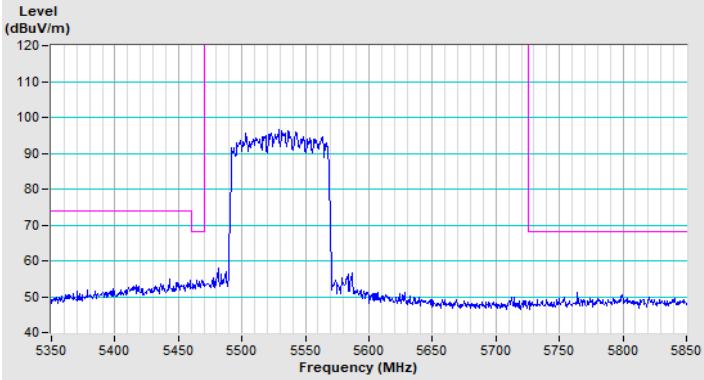
Vertical (Peak)



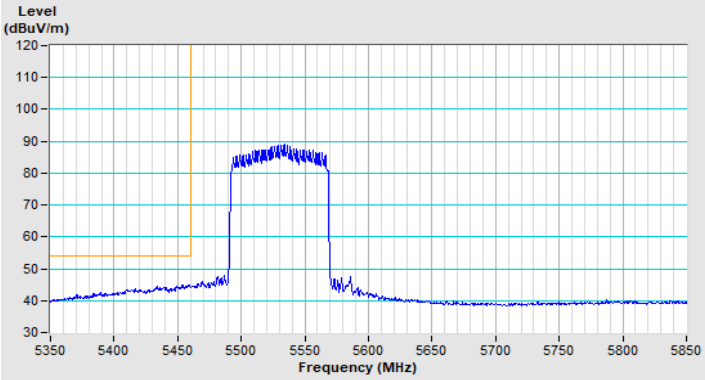
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak

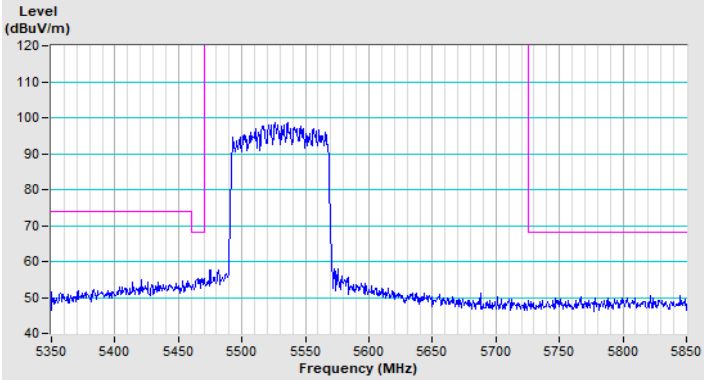
802.11ac (VHT80) Channel 106



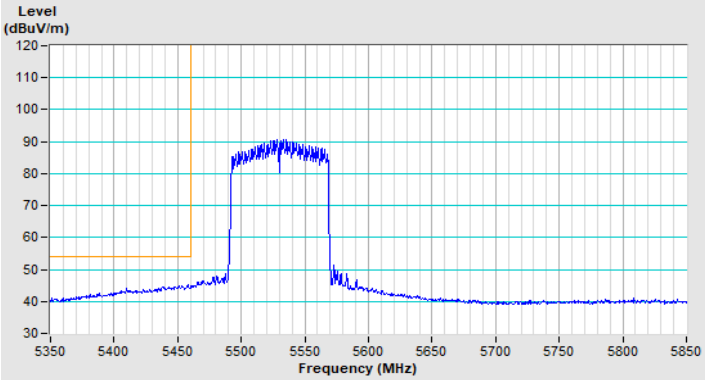
Horizontal (Peak)



Horizontal (Average)



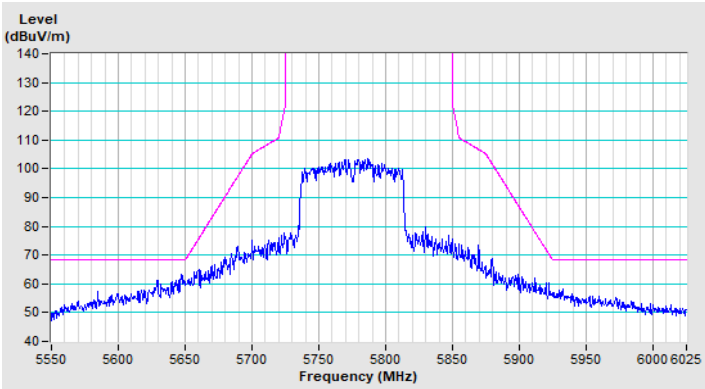
Vertical (Peak)



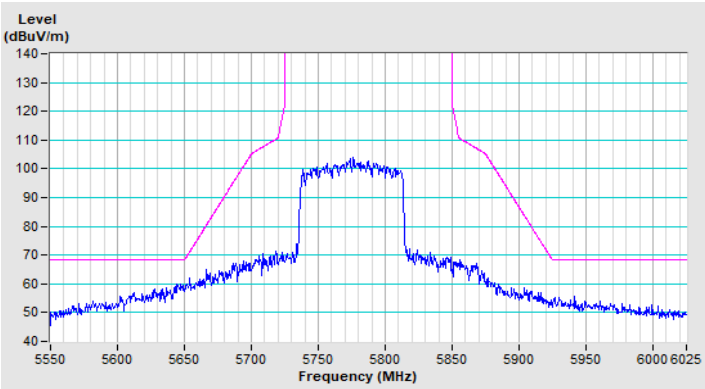
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak

802.11ac (VHT80) Channel 155



Horizontal (Peak)



Vertical (Peak)

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@bureauveritas.com
Web Site: http://ee.bureauveritas.com.tw

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

--- END ---