TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBCUG-WTW-P23030371-3
FCC ID:	B32V660P
Product:	Point of Sale Terminal
Brand:	Verifone
Model No.:	V660p-2
Received Date:	2023/3/13
Test Date:	2023/3/24 ~ 2023/4/17
Issued Date:	2023/5/11
Applicant:	Verifone, Inc.
Address:	1400 West Stanford Ranch Road Suite 150 Rocklin CA 95765 USA
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location(1):	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
Test Location (2):	B2F., No.215, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan
FCC Registration / Designation Number:	(1) 788550 / TW0003 (2) 427177 / TW0011

Approved by: Jeremy Lin , **Date:** 2023/5/11

Jeremy Lin / Project Engineer

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Prepared by : Vera Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCUG-WTW-P23030371-3	Original Release	2023/5/11

1 Certificate

Product:	Point of Sale Terminal
Brand:	Verifone
Test Model:	V660p-2
Sample Status:	Engineering sample
Applicant:	Verifone, Inc.
Test Date:	2023/3/24 ~ 2023/4/17
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

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1)	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 -5.09 dB at 0.54600 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -8.2 dB at 211.17 MHz
15.407(b) (1/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -2.1 dB at 5725.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Occupied Bandwidth	-	491.896 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.99 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.02 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.01 dB
	18 GHz ~ 40 GHz	1.15 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	Point of Sale Terminal
Brand	Verifone
Test Model	V660p-2
Status of EUT	Engineering sample
Power Supply Rating	5 Vdc from adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.3 Mbps
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5720 MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5260 ~ 5320 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5500 ~ 5720 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 12 802.11n (HT40), 802.11ac (VHT40): 6 802.11ac (VHT80): 3 5745 ~ 5825 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1
Output Power	5.18 GHz ~ 5.24 GHz : 60.674 mW (17.83 dBm) 5.26 GHz ~ 5.32 GHz : 61.518 mW (17.89 dBm) 5.5 GHz ~ 5.72 GHz : 55.847 mW (17.47 dBm) 5.745 GHz ~ 5.825 GHz : 42.462 mW (16.28 dBm)
EUT Category	Client device

Note:

1. The accessory devices of EUT, please refer to external photo.
2. There is no simultaneous transmission configuration in this device.
3. 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 Gain (dBi)				Antenna Type	Connector Type
5.15~5.25GHz	5.25~5.35GHz	5.47~5.725GHz	5.725~5.85GHz		
2.2	2.7	2.6	1.9	PIFA	N/A

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

2. The EUT provides 1 completed transmitter and 1 receiver.

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11n (HT40)	1TX	1RX
802.11ac (VHT20)	1TX	1RX
802.11ac (VHT40)	1TX	1RX
802.11ac (VHT80)	1TX	1RX
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 investigated worst case to representative mode in test report.		

3.3 Channel List

For 5180 ~ 5240 MHz

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channels are provided for 802.11ac (VHT80):

Channel	Frequency
42	5210 MHz

For 5260 ~ 5320 MHz

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channels are provided for 802.11ac (VHT80):

Channel	Frequency
58	5290 MHz

For 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20) and 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) and 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) and 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) and 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channels are provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

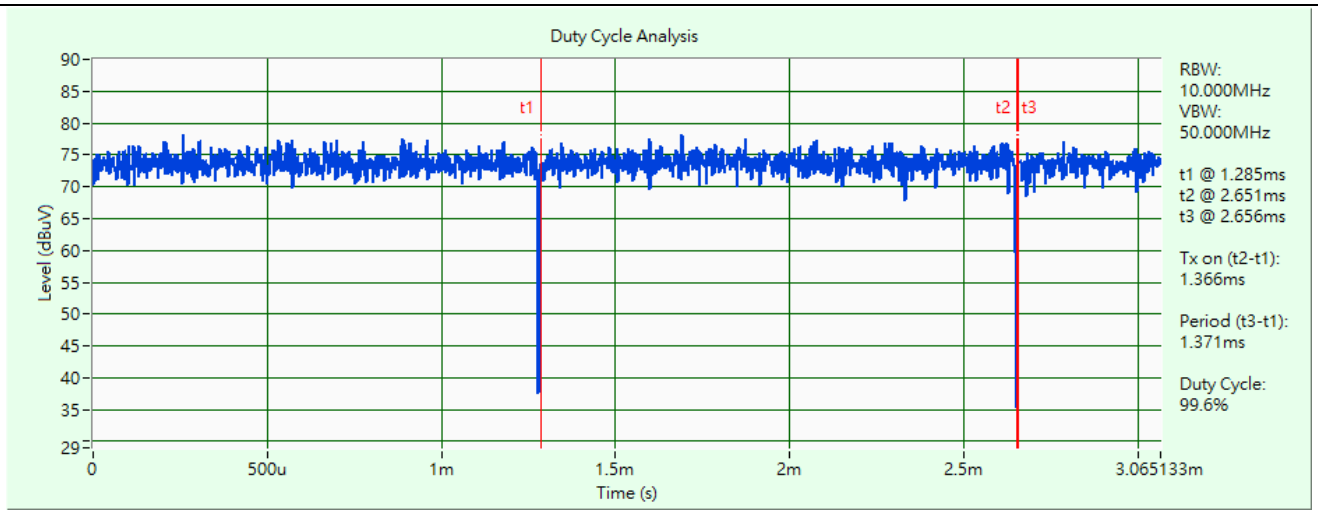
Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: X-axis

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

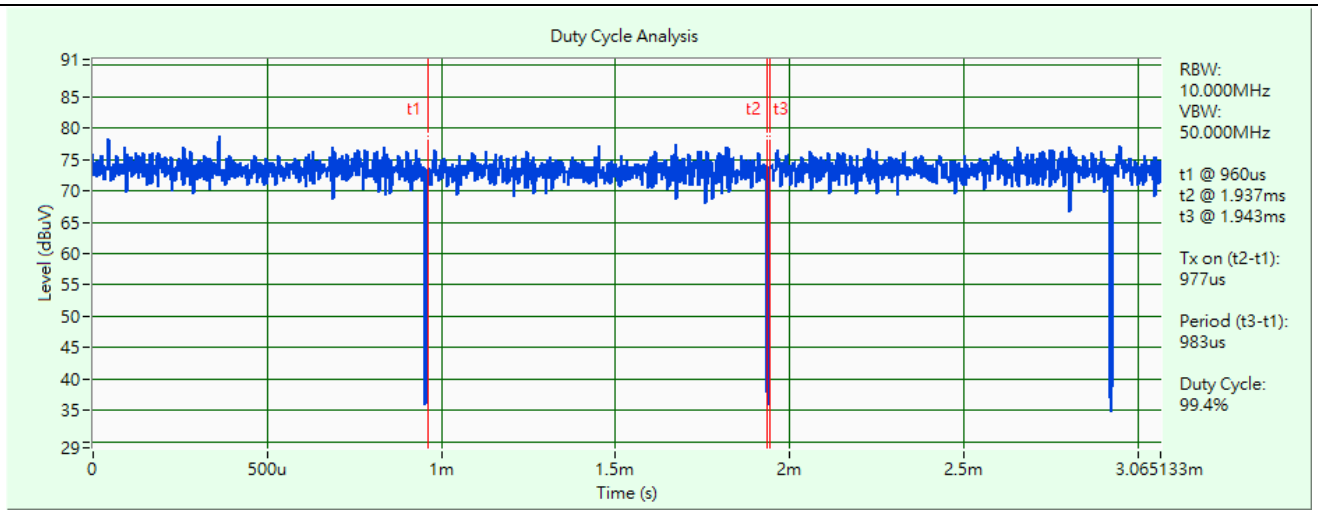
Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ac (VHT40)	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	58, 106, 122, 138	BPSK	MCS0
RF Output Power	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	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 / 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
Frequency Stability	802.11a	36	un-modulation	-
AC Power Conducted Emissions	802.11a	52	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11a	52	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	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

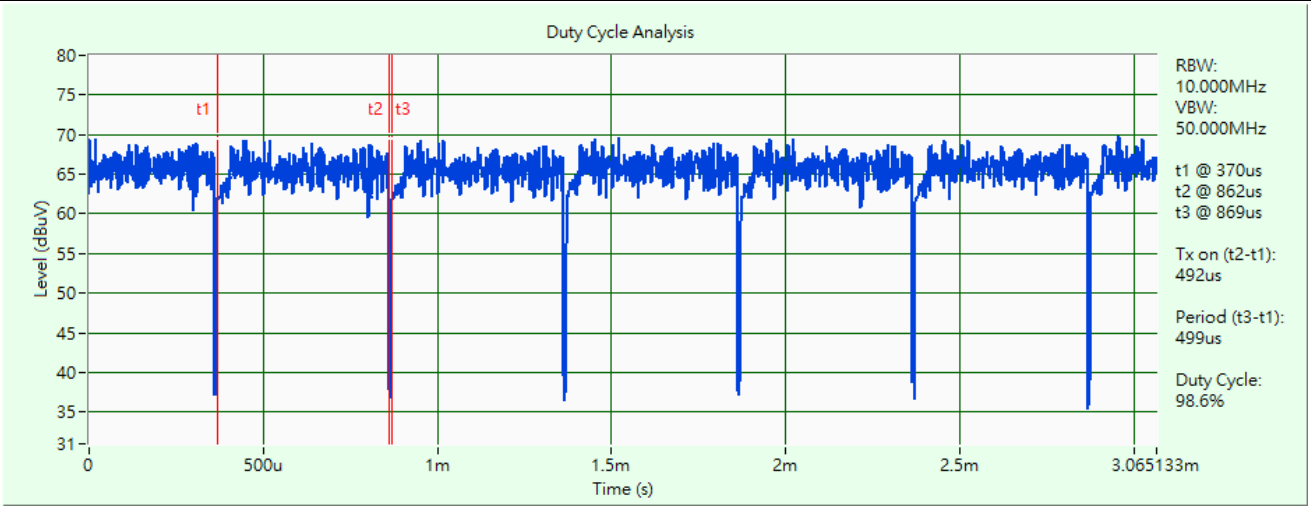
802.11a: Duty cycle = 1.366 ms / 1.371 ms x 100% = 99.6%
802.11ac (VHT20): Duty cycle = 0.977 ms / 0.983 ms x 100% = 99.4%
802.11ac (VHT40): Duty cycle = 0.492 ms / 0.499 ms x 100% = 98.6%
802.11ac (VHT80): Duty cycle = 0.252 ms / 0.255 ms x 100% = 98.8%



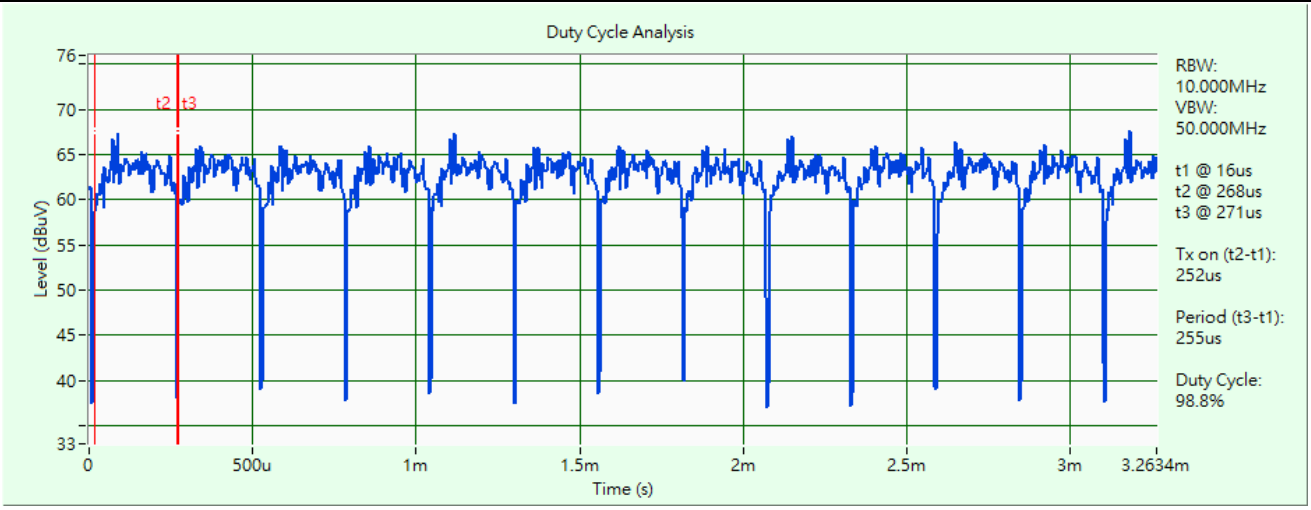
802.11a



802.11ac (VHT20)



802.11ac (VHT40)

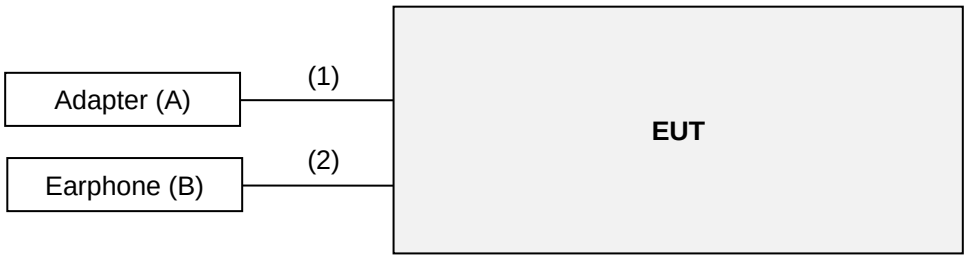


802.11ac (VHT80)

3.6 Test Program Used and Operation Descriptions

Controlling software QRCT Version 3.0.276.0 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	Adapter	Verifone	S011HU0520220	N/A	N/A	Supplied by applicant
B	Earphone	Samsung	EHS-64	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	USB to Type C Cable	1	1.5	Yes	0	Supplied by applicant
2	Audio Cable	1	1	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
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100980	2022/4/20	2023/4/19

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/4/17

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100980	2022/4/20	2023/4/19
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190004/ MY55190007/MY55210005	2022/7/13	2023/7/12

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/4/17

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC power supply JIN YIH Technology	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2022/6/23	2023/6/22
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100980	2022/4/20	2023/4/19
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	2022/12/27	2023/12/26

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/4/17

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
LISN R&S	ESH3-Z5	100116	2023/2/15	2024/2/14
		100311	2022/9/12	2023/9/11
RF Coaxial Cable WOKEN	5D-FB	Cable-cond1-01	2023/1/7	2024/1/6
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
Test Receiver Rohde&Schwarz	ESCI	100613	2022/12/5	2023/12/4
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2022/8/31	2023/8/30

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2023/3/30

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB9168	9168-616	2022/10/26	2023/10/25
Loop Antenna EMCI	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Pre-amplifier EMCI	EMC001340	980201	2022/9/23	2023/9/22
Preamplifier Agilent	310N	187226	2022/6/14	2023/6/13
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4	2022/6/14	2023/6/13
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2022/6/14	2023/6/13
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver Agilent	N9038A	MY52260177	2022/9/19	2023/9/18
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2023/3/28

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	8	N/A	N/A
Horn Antenna ETS-Lindgren	3117	00143293	2022/11/13	2023/11/12
Horn Antenna Schwarzbeck	BBHA 9170	BBHA9170241	2022/10/20	2023/10/19
Pre-Ammlifier EMCI	EMC 184045	980116	2022/10/1	2023/9/30
Preamplifier Agilent	83017A	MY39501373	2022/6/14	2023/6/13
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4	2022/6/14	2023/6/13
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2022/6/14	2023/6/13
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2023/1/7	2024/1/6
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2023/1/7	2024/1/6
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver Agilent	N9038A	MY52260177	2022/9/19	2023/9/18
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2023/3/24 ~ 2023/4/6

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)

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

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)

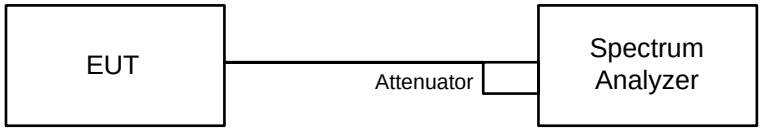
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

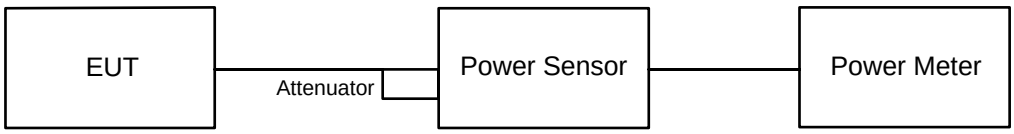


6.1.2 Test Procedure

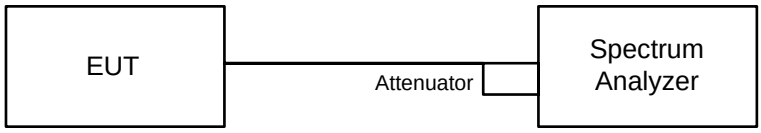
a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

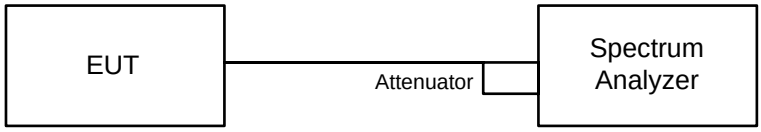
Method SA-1

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

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-1

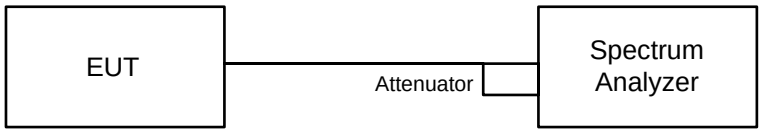
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger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

For specified measurement bandwidth 500 kHz:
Method SA-1

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

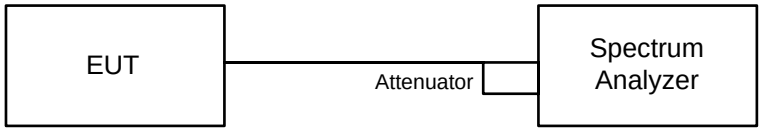


6.4.2 Test Procedure

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

6.5 Occupied Bandwidth

6.5.1 Test Setup

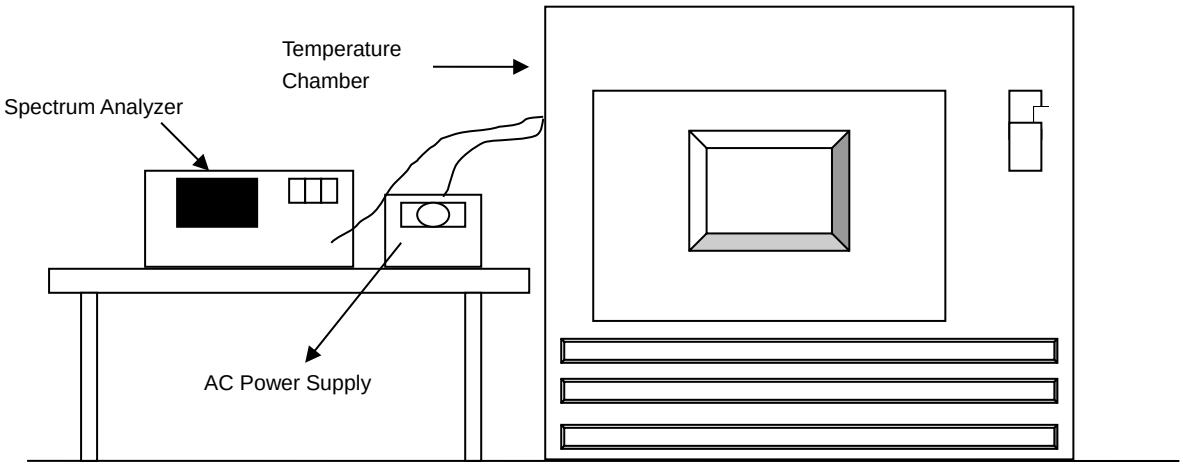


6.5.2 Test Procedure

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

6.6 Frequency Stability

6.6.1 Test Setup

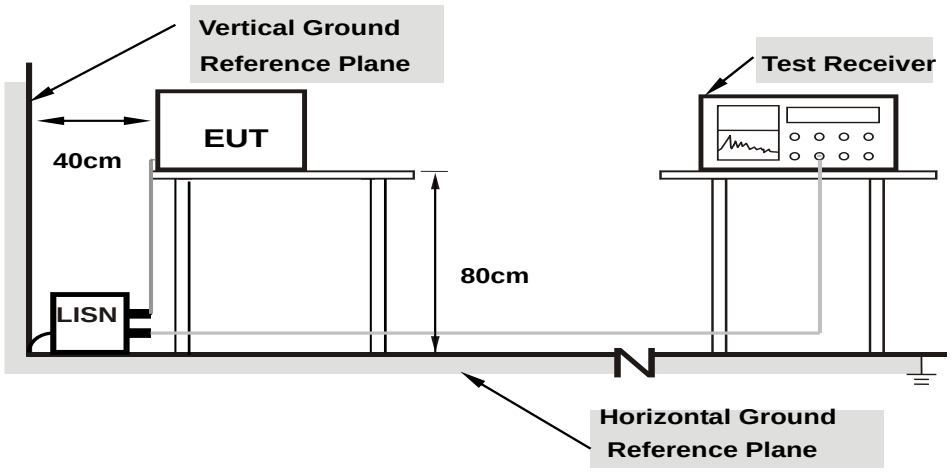


6.6.2 Test Procedure

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.

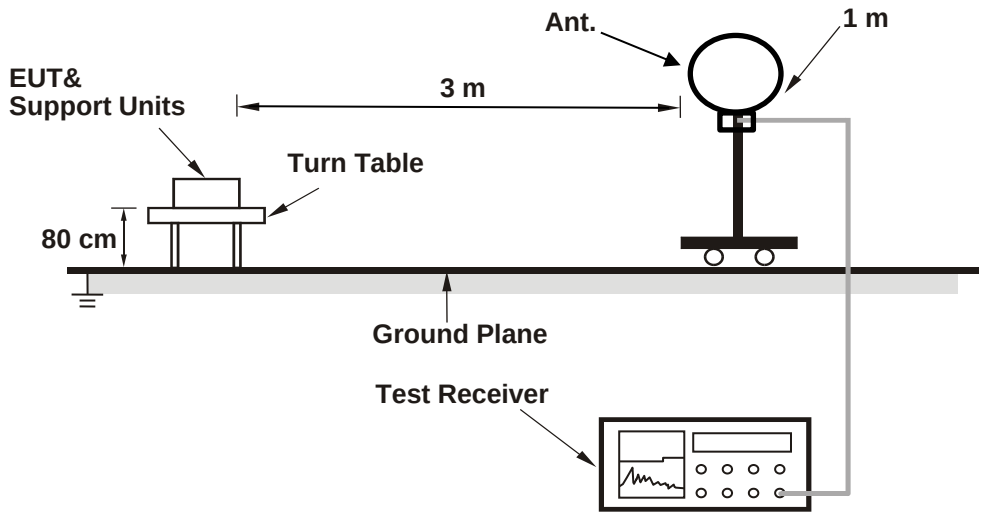
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

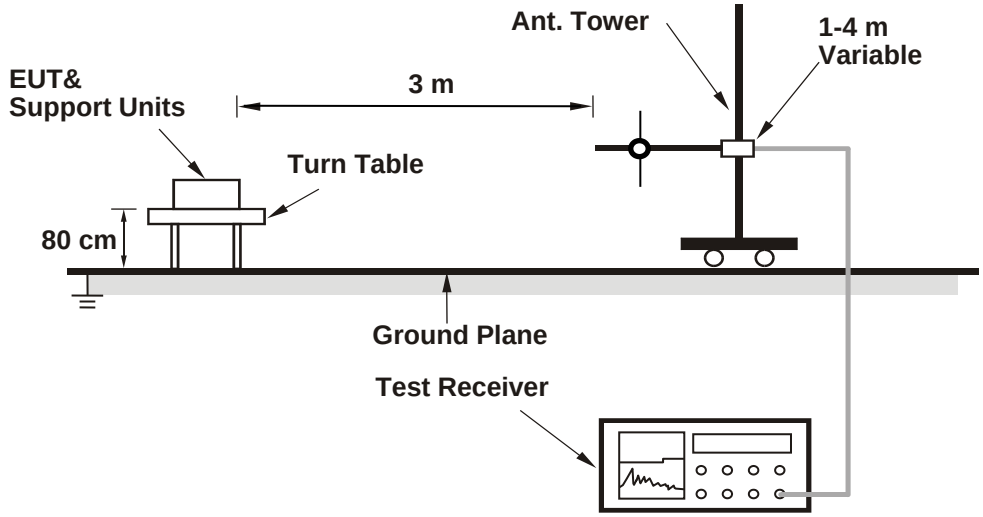
6.8 Unwanted Emissions below 1 GHz

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.

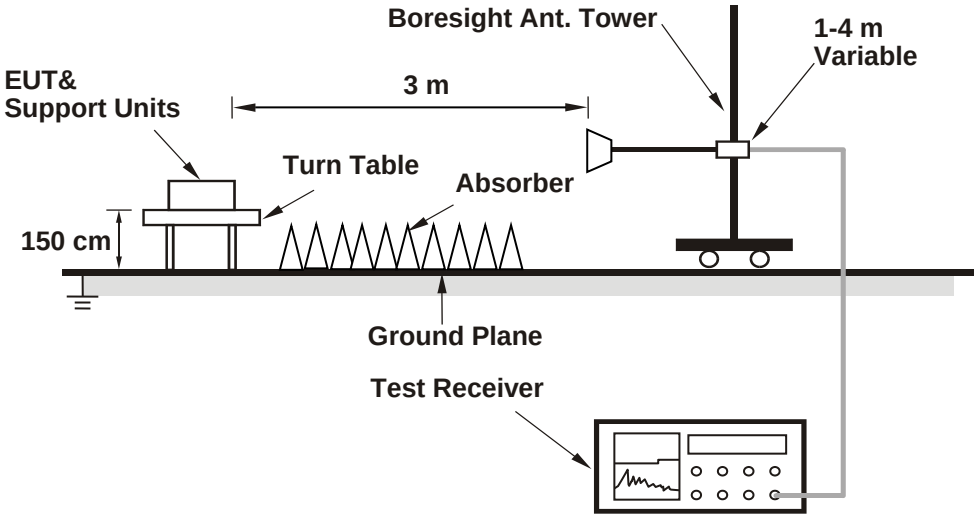
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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, 61% RH	Tested By:	Gary Lin

802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	25.9
60	5300	24.67
64	5320	24.59
100	5500	23.82
116	5580	27.96
140	5700	25.54
144 (U-NII-2C)	5720	19.61
144 (U-NII-3)	5720	7.38

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	25.90	25.13	>	24
60	5300	24.67	24.92	>	24
64	5320	24.59	24.9	>	24
100	5500	23.82	24.76	>	24
116	5580	27.96	25.46	>	24
140	5700	25.54	25.07	>	24
144 (U-NII-2C)	5720	19.61	23.92	<	24

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

802.11ac (VHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	22.47
60	5300	22.47
64	5320	22.59
100	5500	22.6
116	5580	22.47
140	5700	22.84
144 (U-NII-2C)	5720	16.62
144 (U-NII-3)	5720	6.23

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	22.47	24.51	>	24
60	5300	22.47	24.51	>	24
64	5320	22.59	24.53	>	24
100	5500	22.60	24.54	>	24
116	5580	22.47	24.51	>	24
140	5700	22.84	24.58	>	24
144 (U-NII-2C)	5720	16.62	23.2	<	24

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

802.11ac (VHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
54	5270	45.33
62	5310	45.47
102	5510	45.42
110	5550	45.5
134	5670	45.35
142 (U-NII-2C)	5710	38.07
142 (U-NII-3)	5710	7.32

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	45.33	27.56 > 24
62	5310	45.47	27.57 > 24
102	5510	45.42	27.57 > 24
110	5550	45.50	27.58 > 24
134	5670	45.35	27.56 > 24
142 (U-NII-2C)	5710	38.07	26.8 > 24

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

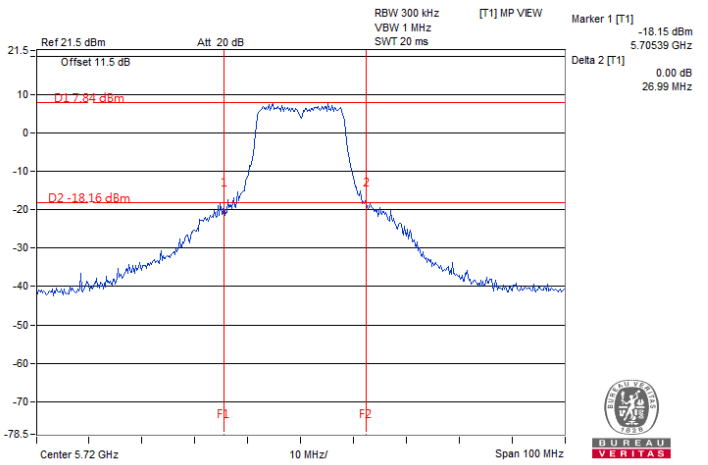
802.11ac (VHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
58	5290	85.96
106	5530	85.77
122	5610	85.46
138 (U-NII-2C)	5690	77.14
138 (U-NII-3)	5690	7.34

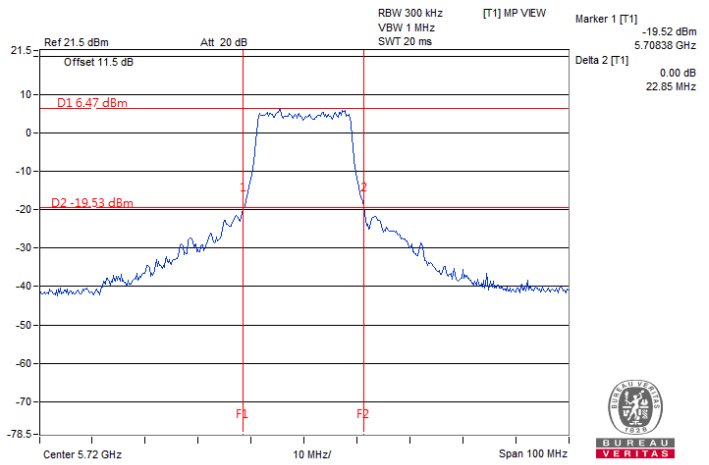
Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	85.96	30.34 > 24
106	5530	85.77	30.33 > 24
122	5610	85.46	30.31 > 24
138 (U-NII-2C)	5690	77.14	29.87 > 24

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

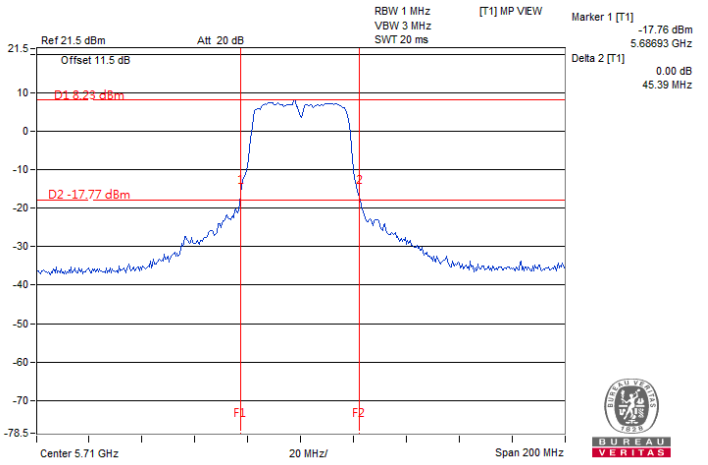
Spectrum Plot of Minimum Value



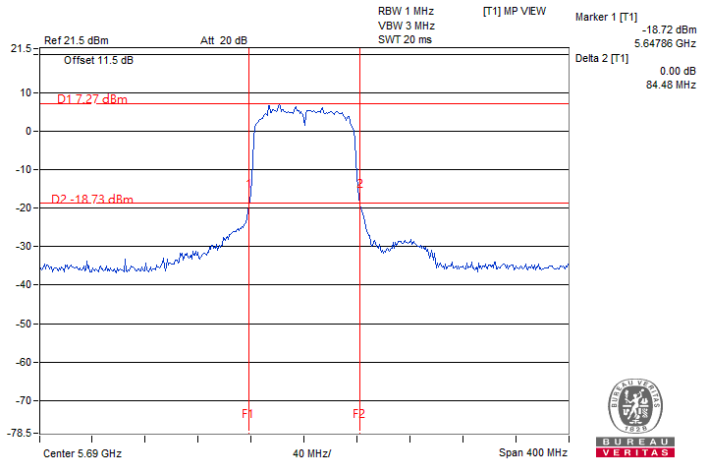
802.11a : CH 144 (U-NII-3)



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



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



802.11ac (VHT80) : 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, 61% RH	Tested By:	Gary Lin

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	**60.674**	**17.83**	24	Pass
40	5200	59.979	17.78	24	Pass
48	5240	57.016	17.56	24	Pass
52	5260	**61.518**	**17.89**	24	Pass
60	5300	57.148	17.57	24	Pass
64	5320	56.105	17.49	24	Pass
100	5500	**55.847**	**17.47**	24	Pass
116	5580	55.081	17.41	24	Pass
140	5700	46.559	16.68	24	Pass
*144 (U-NII-2C)	5720	33.884	15.30	23.92	Pass
*144 (U-NII-3)	5720	8.954	9.52	30	Pass
149	5745	**42.462**	**16.28**	30	Pass
157	5785	38.459	15.85	30	Pass
165	5825	34.119	15.33	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	51.761	17.14	24	Pass
40	5200	51.88	17.15	24	Pass
48	5240	49.774	16.97	24	Pass
52	5260	51.404	17.11	24	Pass
60	5300	47.315	16.75	24	Pass
64	5320	50.582	17.04	24	Pass
100	5500	48.753	16.88	24	Pass
116	5580	43.152	16.35	24	Pass
140	5700	37.584	15.75	24	Pass
*144 (U-NII-2C)	5720	28.054	14.48	23.2	Pass
*144 (U-NII-3)	5720	8.054	9.06	30	Pass
149	5745	33.651	15.27	30	Pass
157	5785	32.734	15.15	30	Pass
165	5825	30.62	14.86	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	47.315	16.75	24	Pass
46	5230	43.053	16.34	24	Pass
54	5270	39.902	16.01	24	Pass
62	5310	38.548	15.86	24	Pass
102	5510	37.584	15.75	24	Pass
110	5550	38.107	15.81	24	Pass
134	5670	33.266	15.22	24	Pass
*142 (U-NII-2C)	5710	27.353	14.37	24	Pass
*142 (U-NII-3)	5710	2.198	3.42	30	Pass
151	5755	29.992	14.77	30	Pass
159	5795	24.266	13.85	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	52.602	17.21	24	Pass
40	5200	52	17.16	24	Pass
48	5240	50.234	17.01	24	Pass
52	5260	51.523	17.12	24	Pass
60	5300	50.466	17.03	24	Pass
64	5320	50.699	17.05	24	Pass
100	5500	49.774	16.97	24	Pass
116	5580	46.345	16.66	24	Pass
140	5700	42.658	16.30	24	Pass
*144 (U-NII-2C)	5720	30.269	14.81	23.2	Pass
*144 (U-NII-3)	5720	8.65	9.37	30	Pass
149	5745	33.806	15.29	30	Pass
157	5785	32.81	15.16	30	Pass
165	5825	31.477	14.98	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	49.659	16.96	24	Pass
46	5230	47.315	16.75	24	Pass
54	5270	45.394	16.57	24	Pass
62	5310	38.726	15.88	24	Pass
102	5510	38.548	15.86	24	Pass
110	5550	38.194	15.82	24	Pass
134	5670	33.42	15.24	24	Pass
*142 (U-NII-2C)	5710	27.925	14.46	24	Pass
*142 (U-NII-3)	5710	2.218	3.46	30	Pass
151	5755	30.061	14.78	30	Pass
159	5795	25.235	14.02	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

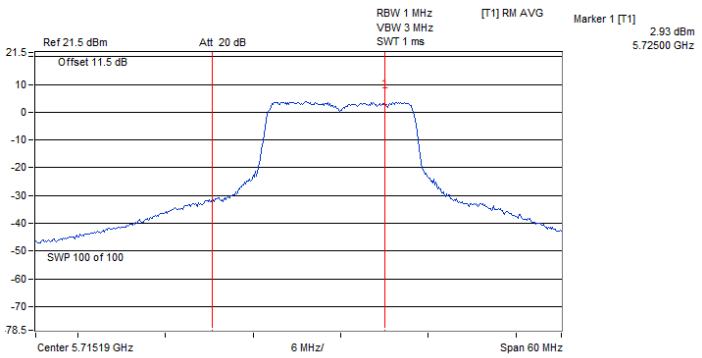
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	41.976	16.23	24	Pass
58	5290	36.728	15.65	24	Pass
106	5530	35.892	15.55	24	Pass
122	5610	34.356	15.36	24	Pass
*138 (U-NII-2C)	5690	30.62	14.86	24	Pass
*138 (U-NII-3)	5690	0.6457	-1.90	30	Pass
155	5775	26.607	14.25	30	Pass

Notes:

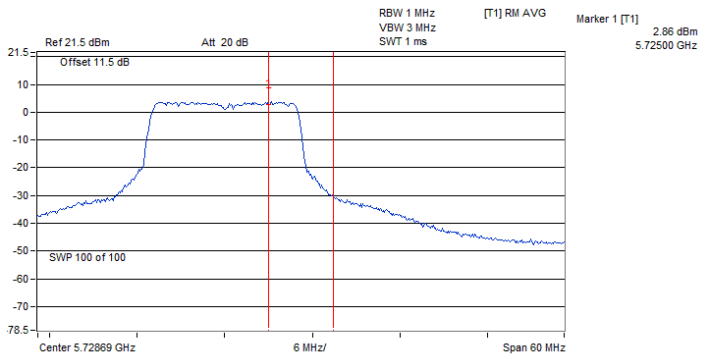
1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. For U-NII-1, the antenna gain is 2.2 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



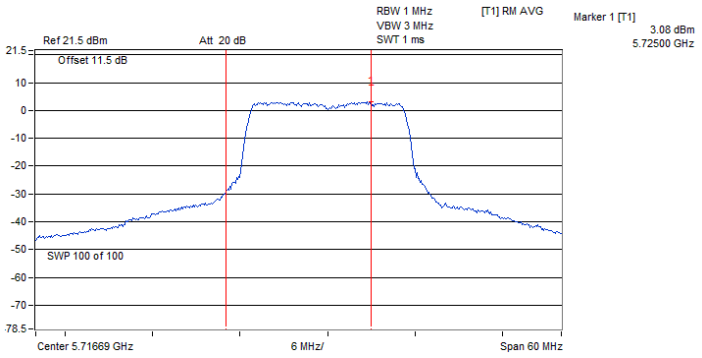
TX Channel Bandwidth 19.61 MHz Power 15.3 dBm

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



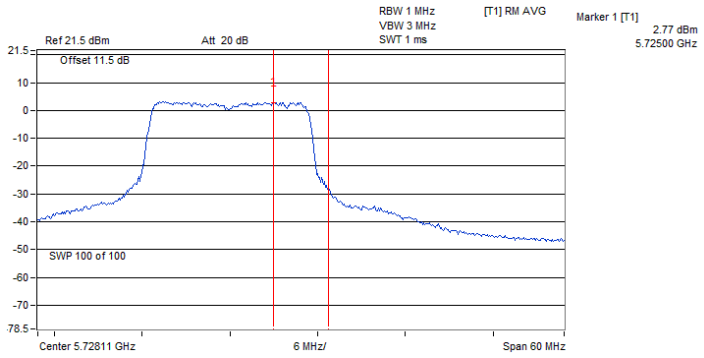
TX Channel Bandwidth 7.38 MHz Power 9.52 dBm

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



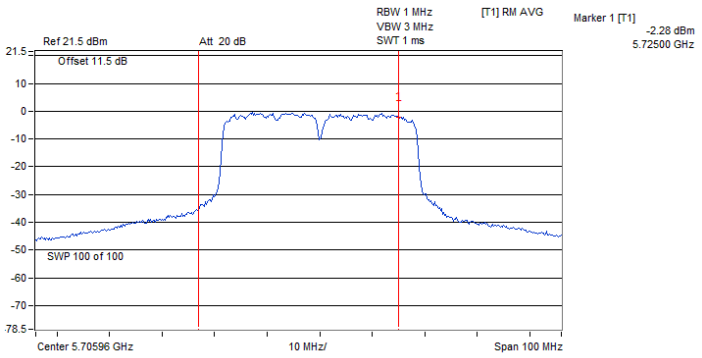
TX Channel Bandwidth 16.62 MHz Power 14.81 dBm

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



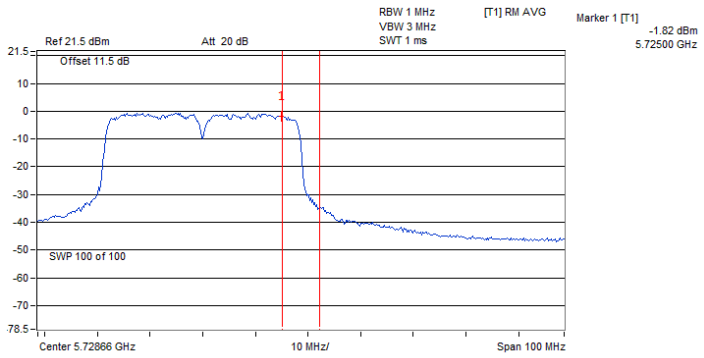
TX Channel Bandwidth 6.23 MHz Power 9.37 dBm

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



TX Channel Bandwidth 38.07 MHz Power 14.46 dBm

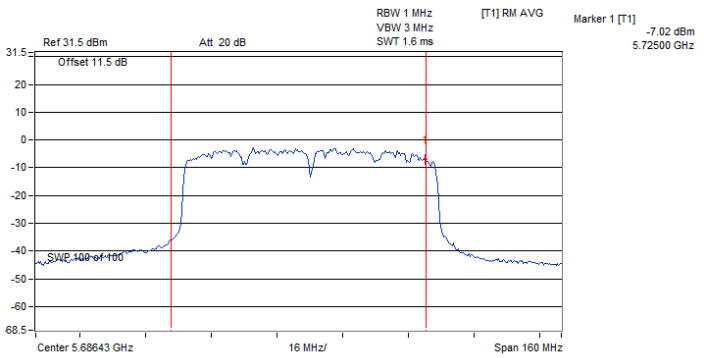
802.11ac (VHT40) : CH 142 (U-NII-2C)



TX Channel Bandwidth 7.32 MHz Power 3.46 dBm

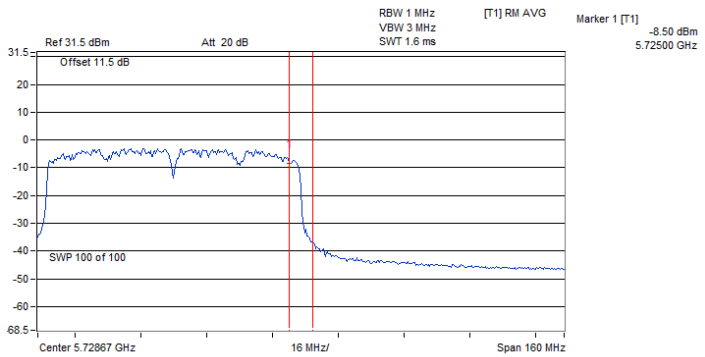
802.11ac (VHT40) : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



TX Channel Bandwidth 77.14 MHz Power 14.86 dBm

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



TX Channel Bandwidth 7.34 MHz Power -1.9 dBm

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

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 61% RH	Tested By:	Gary Lin

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	4.64	11	Pass
40	5200	4.67	11	Pass
48	5240	4.43	11	Pass
52	5260	4.69	11	Pass
60	5300	4.42	11	Pass
64	5320	4.34	11	Pass
100	5500	4.33	11	Pass
116	5580	4.29	11	Pass
140	5700	3.55	11	Pass
144 (U-NII-2C)	5720	3.55	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	4.00	11	Pass
40	5200	3.91	11	Pass
48	5240	3.84	11	Pass
52	5260	3.83	11	Pass
60	5300	3.87	11	Pass
64	5320	3.81	11	Pass
100	5500	3.78	11	Pass
116	5580	3.46	11	Pass
140	5700	3.11	11	Pass
144 (U-NII-2C)	5720	3.08	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	0.55	11	Pass
46	5230	0.41	11	Pass
54	5270	0.23	11	Pass
62	5310	-0.42	11	Pass
102	5510	-0.49	11	Pass
110	5550	-0.46	11	Pass
134	5670	-1.09	11	Pass
142 (U-NII-2C)	5710	-1.10	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	-2.93	11	Pass
58	5290	-3.37	11	Pass
106	5530	-3.54	11	Pass
122	5610	-3.76	11	Pass
138 (U-NII-2C)	5690	-3.77	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.7 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-5.83	-3.61	30	Pass
149	5745	-5.84	-3.62	30	Pass
157	5785	-6.23	-4.01	30	Pass
165	5825	-6.74	-4.52	30	Pass

Note: For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-6.51	-4.29	30	Pass
149	5745	-6.84	-4.62	30	Pass
157	5785	-6.95	-4.73	30	Pass
165	5825	-7.15	-4.93	30	Pass

Note: For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
142 (U-NII-3)	5710	-12.56	-10.34	30	Pass
151	5755	-11.11	-8.89	30	Pass
159	5795	-11.76	-9.54	30	Pass

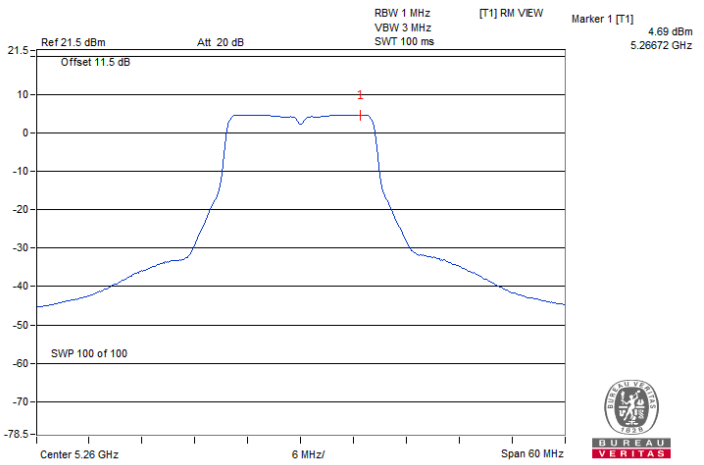
Note: For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT80)

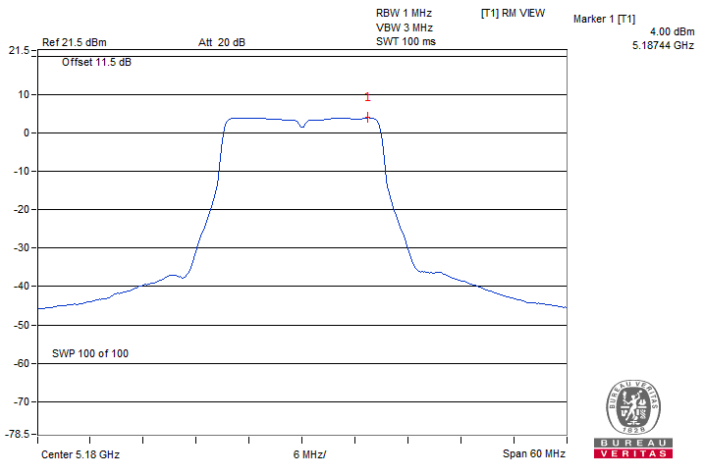
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
138 (U-NII-3)	5690	-16.92	-14.70	30	Pass
155	5775	-13.69	-11.47	30	Pass

Note: For U-NII-3, the antenna gain is 1.9 dBi < 6 dBi, so the power density limit shall not be reduced.

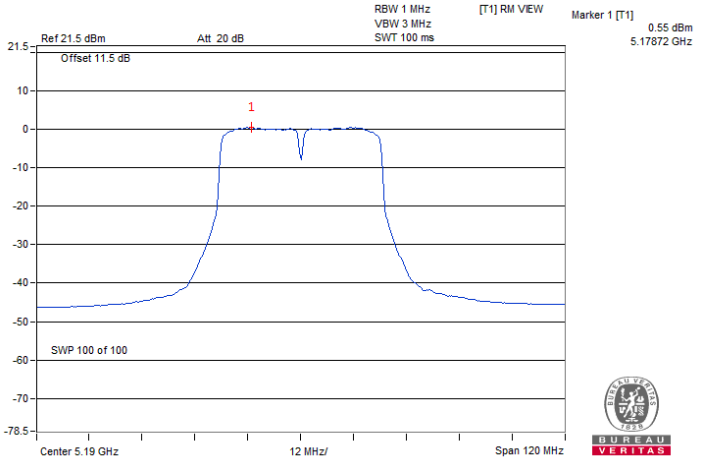
Spectrum Plot of Maximum Value



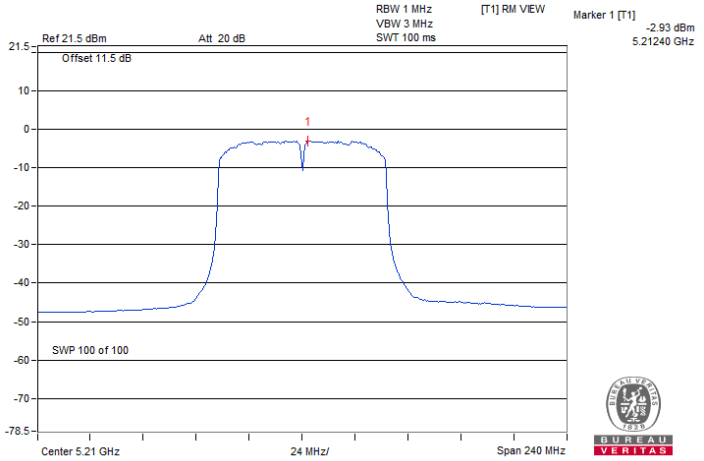
802.11a : CH 52



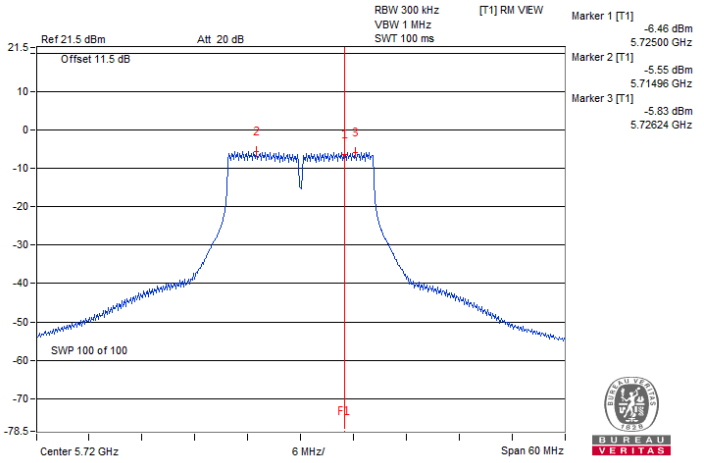
802.11ac (VHT20) : CH 36



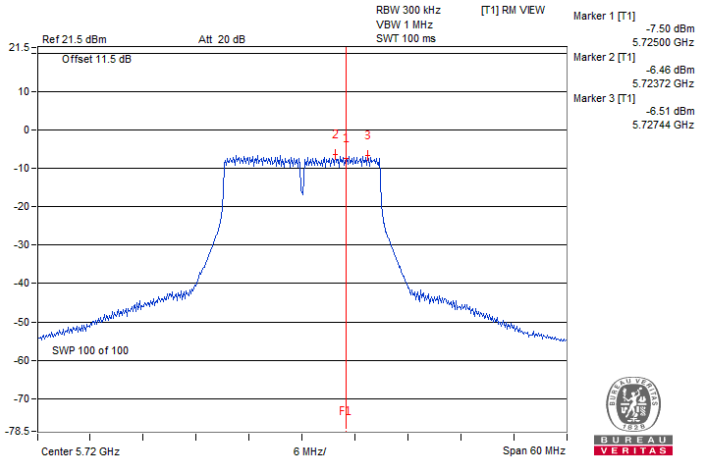
802.11ac (VHT40) : CH 38



802.11ac (VHT80) : CH 42

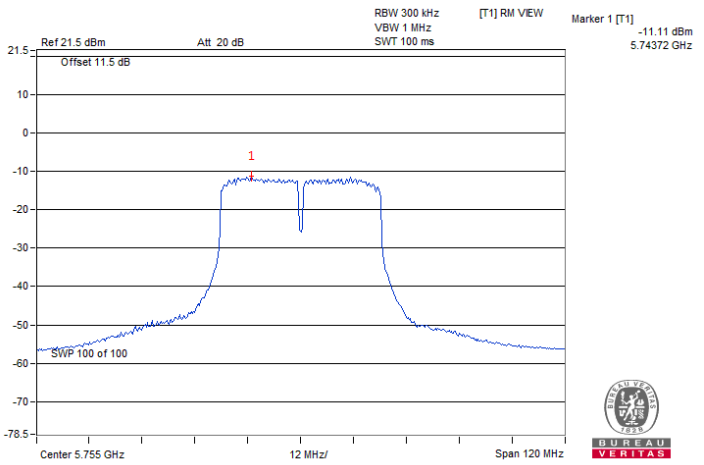


802.11a : CH 144 (U-NII-3)

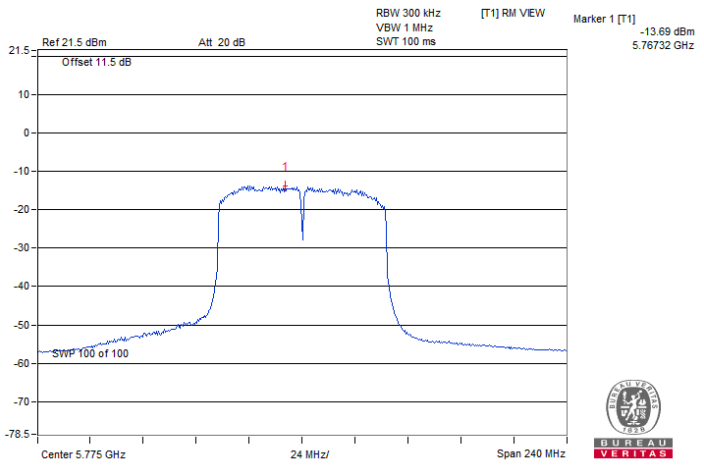


802.11ac (VHT20) : CH 144 (U-NII-3)

Spectrum Plot of Maximum Value



802.11ac (VHT40) : CH 151



802.11ac (VHT80) : CH 155

7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 61% RH	Tested By:	Gary Lin

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.18	0.5	Pass
149	5745	16.42	0.5	Pass
157	5785	16.44	0.5	Pass
165	5825	16.43	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.79	0.5	Pass
149	5745	17.65	0.5	Pass
157	5785	17.66	0.5	Pass
165	5825	17.66	0.5	Pass

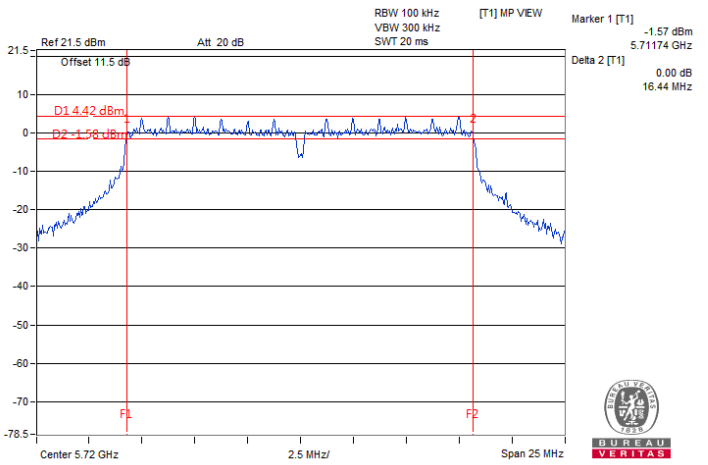
802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
142 (U-NII-3)	5710	2.66	0.5	Pass
151	5755	35.47	0.5	Pass
159	5795	35.34	0.5	Pass

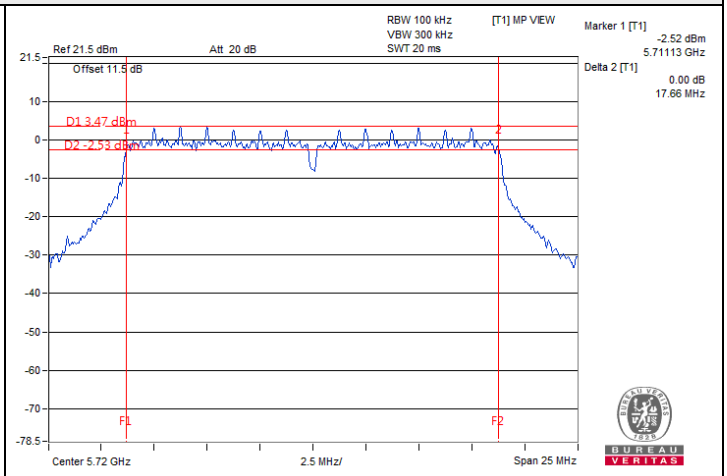
802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
138 (U-NII-3)	5690	2.63	0.5	Pass
155	5775	75.27	0.5	Pass

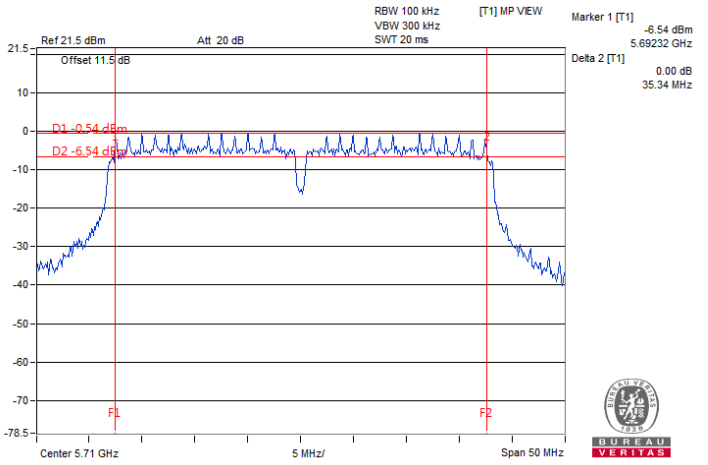
Spectrum Plot of Minimum Value



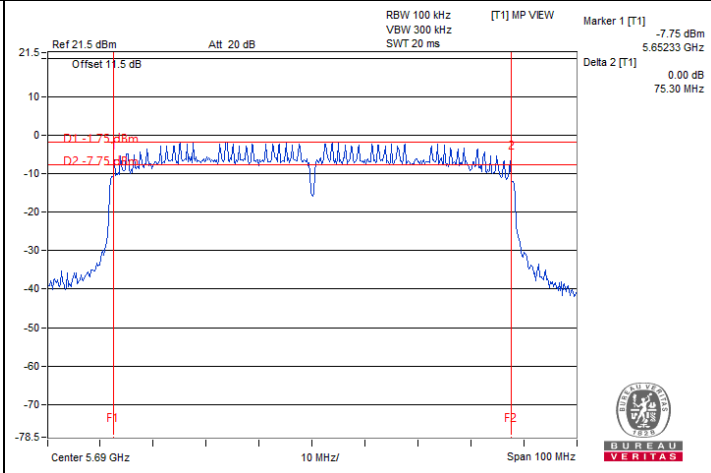
802.11a : CH 144 (U-NII-3)



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



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



802.11ac (VHT80) : 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, 61% RH	Tested By:	Gary Lin

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
40	5200	17.16
48	5240	17.28
52	5260	17.28
60	5300	17.28
64	5320	17.28
100	5500	17.16
116	5580	17.4
140	5700	17.28
144 (U-NII-2C)	5720	13.76
144 (U-NII-3)	5720	3.52
149	5745	17.28
157	5785	17.28
165	5825	17.28

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
40	5200	18.12
48	5240	18.12
52	5260	18.12
60	5300	18.12
64	5320	18.12
100	5500	18.12
116	5580	18.12
140	5700	18.12
144 (U-NII-2C)	5720	14.12
144 (U-NII-3)	5720	4
149	5745	18.12
157	5785	18.12
165	5825	18.12

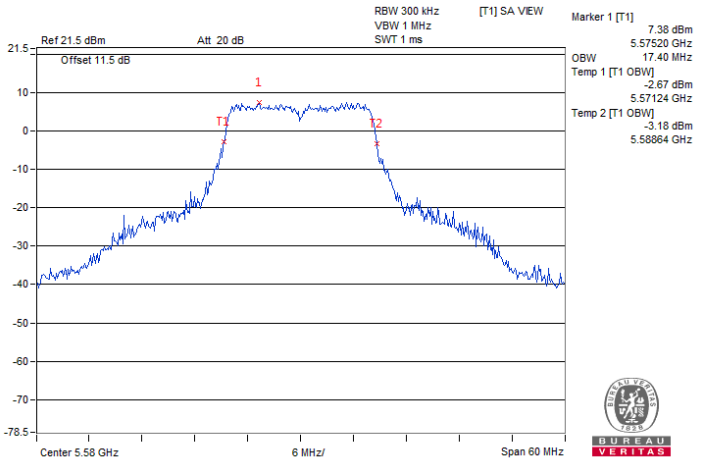
802.11ac (VHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.72
46	5230	36.72
54	5270	36.72
62	5310	36.72
102	5510	36.96
110	5550	36.96
134	5670	36.96
142 (U-NII-2C)	5710	33.72
142 (U-NII-3)	5710	3.24
151	5755	36.96
159	5795	36.96

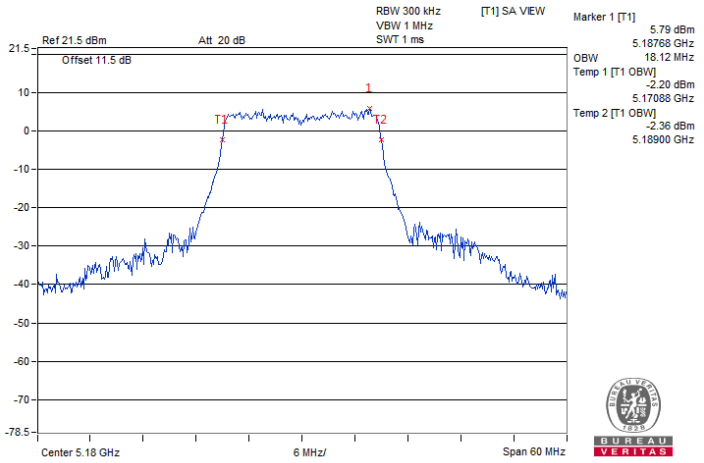
802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	74.88
58	5290	74.88
106	5530	74.88
122	5610	74.88
138 (U-NII-2C)	5690	72.44
138 (U-NII-3)	5690	2.44
155	5775	74.88

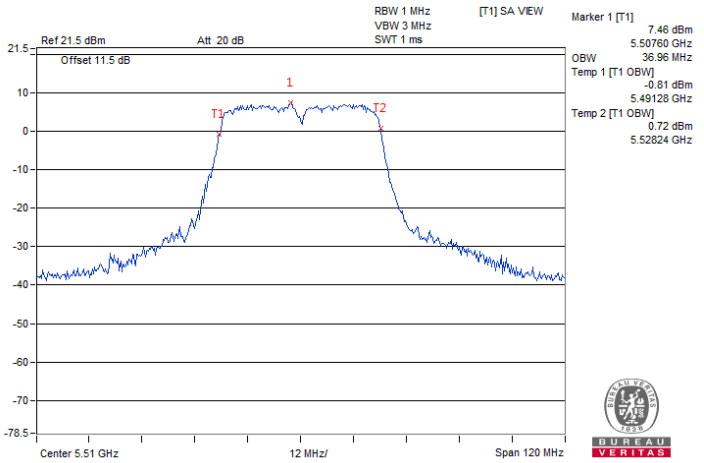
Spectrum Plot of Maximum Value



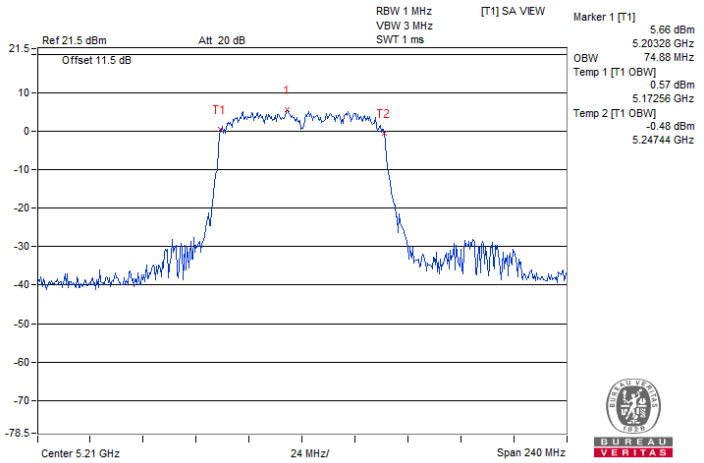
802.11a : CH 116



802.11ac (VHT20) : CH 36



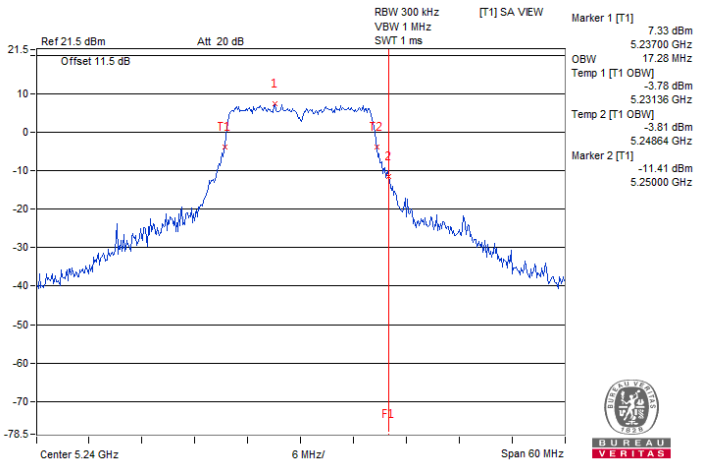
802.11ac (VHT40) : CH 102



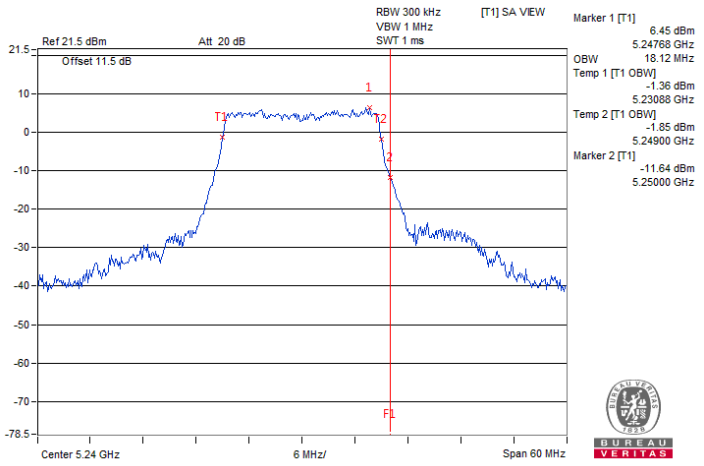
802.11ac (VHT80) : CH 42

Spectrum Plot for nearby DFS band

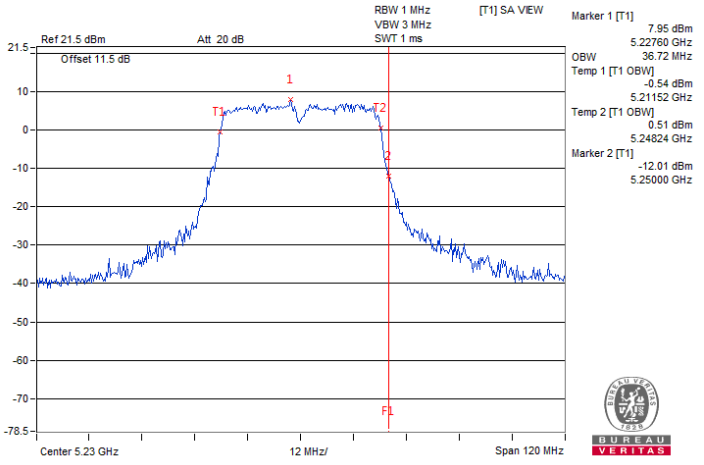
(DFS is required, if 99% OCP straddle into U-NII-2A)



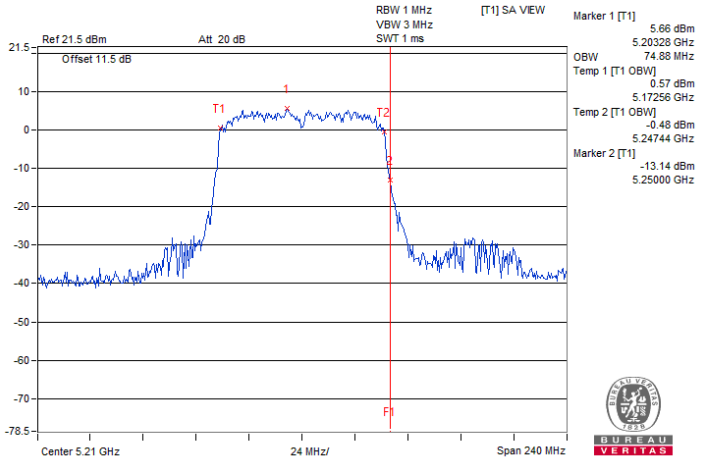
802.11a : CH 48



802.11ac (VHT20) : CH 48



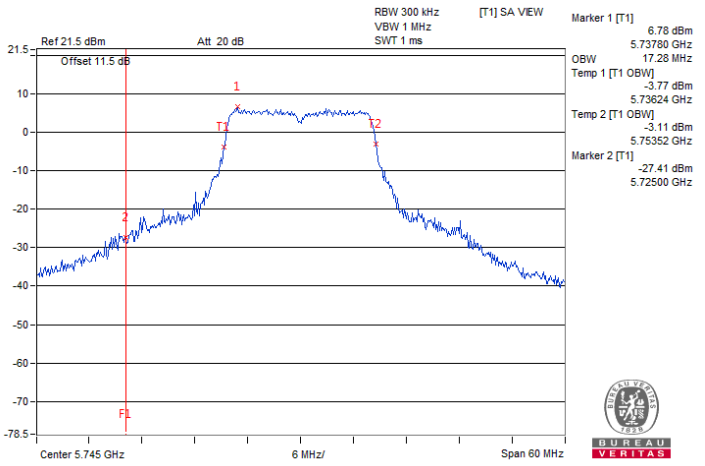
802.11ac (VHT40) : CH 46



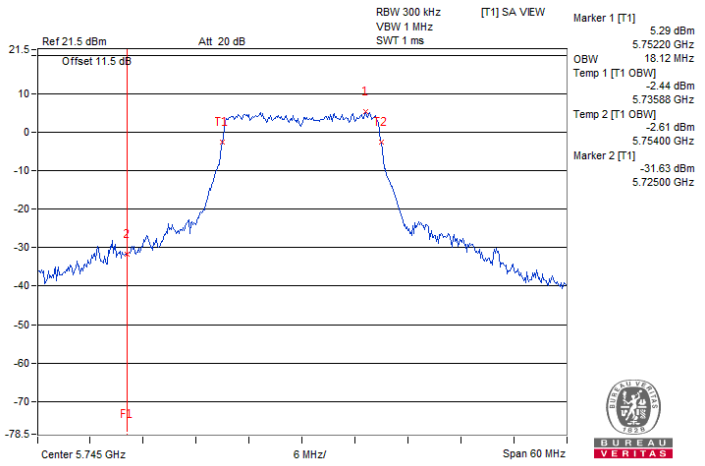
802.11ac (VHT80) : CH 42

Spectrum Plot for nearby DFS band

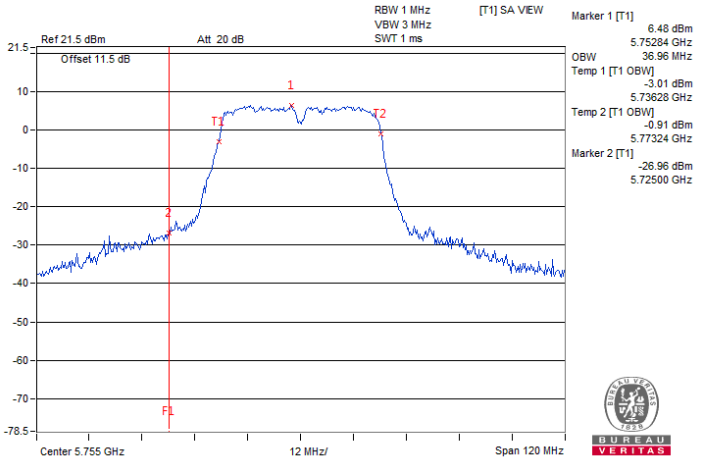
(DFS is required, if 99% OCP straddle into U-NII-2C)



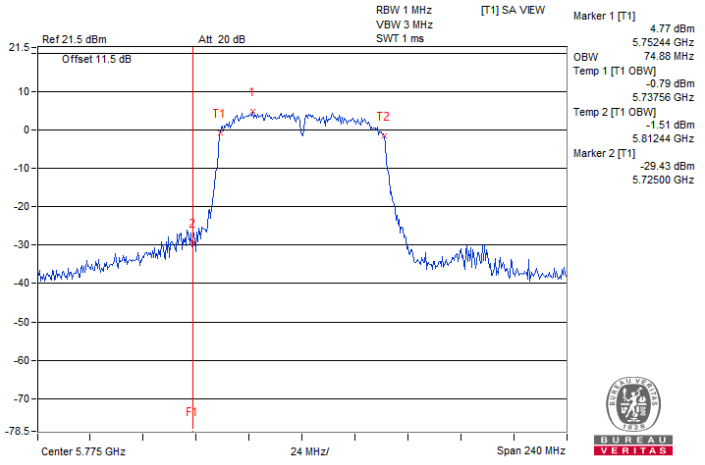
802.11a : CH 149



802.11ac (VHT20) : CH 149



802.11ac (VHT40) : CH 151



802.11ac (VHT80) : CH 155

7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	23°C, 61% RH	Tested By:	Gary Lin

802.11a

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
50	120	5179.9796	Pass	5179.9784	Pass	5179.9753	Pass	5179.9795	Pass
40	120	5180.0126	Pass	5180.0136	Pass	5180.0171	Pass	5180.0171	Pass
30	120	5180.0083	Pass	5180.011	Pass	5180.0081	Pass	5180.0093	Pass
20	120	5180.0196	Pass	5180.0213	Pass	5180.0199	Pass	5180.0203	Pass
10	120	5179.9846	Pass	5179.9844	Pass	5179.9838	Pass	5179.9804	Pass
0	120	5179.9773	Pass	5179.9795	Pass	5179.9767	Pass	5179.9773	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	5180.019	Pass	5180.0193	Pass	5180.0156	Pass	5180.0178	Pass
	120	5180.0196	Pass	5180.0213	Pass	5180.0199	Pass	5180.0203	Pass
	102	5180.019	Pass	5180.02	Pass	5180.0195	Pass	5180.0173	Pass

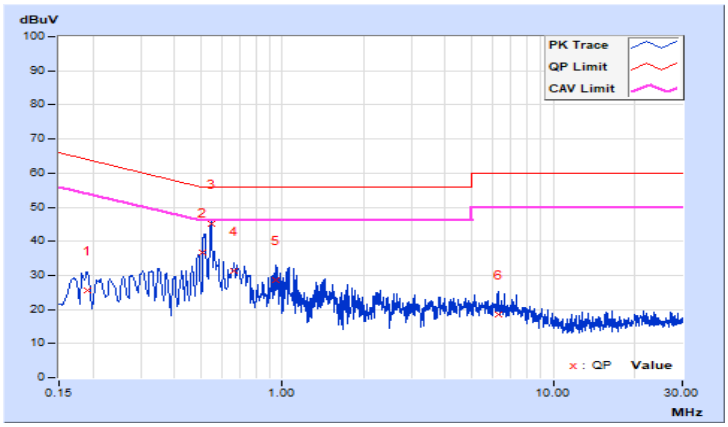
7.7 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Adair Peng		

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	0.19000	10.21	15.47	7.16	25.68	17.37	64.04	54.04	-38.36	-36.67
2	0.51067	10.31	26.49	15.94	36.80	26.25	56.00	46.00	-19.20	-19.75
3	**0.54600**	**10.32**	**34.92**	**30.59**	**45.24**	**40.91**	**56.00**	**46.00**	**-10.76**	**-5.09**
4	0.66200	10.33	20.93	15.93	31.26	26.26	56.00	46.00	-24.74	-19.74
5	0.94200	10.37	18.23	9.03	28.60	19.40	56.00	46.00	-27.40	-26.60
6	6.31000	10.65	7.83	1.33	18.48	11.98	60.00	50.00	-41.52	-38.02

Remarks:

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

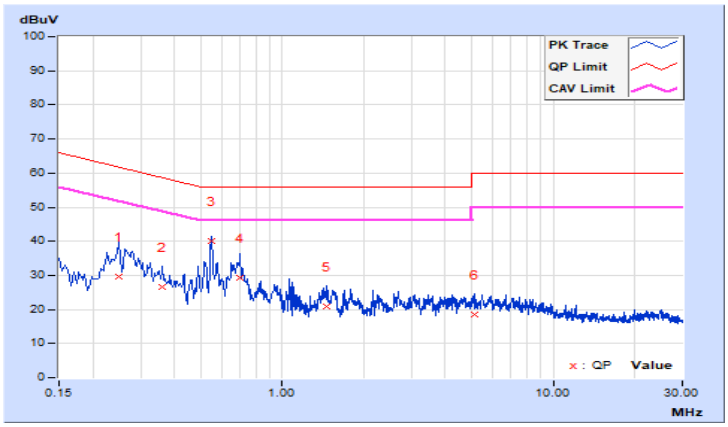


RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Adair Peng		

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	0.25000	10.27	19.22	6.66	29.49	16.93	61.76	51.76	-32.27	-34.83
2	0.36200	10.31	16.33	2.87	26.64	13.18	58.68	48.68	-32.04	-35.50
3	0.54600	10.34	29.58	23.47	39.92	33.81	56.00	46.00	-16.08	-12.19
4	0.69800	10.36	18.79	13.50	29.15	23.86	56.00	46.00	-26.85	-22.14
5	1.45400	10.44	10.41	4.81	20.85	15.25	56.00	46.00	-35.15	-30.75
6	5.10200	10.62	7.82	2.20	18.44	12.82	60.00	50.00	-41.56	-37.18

Remarks:

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



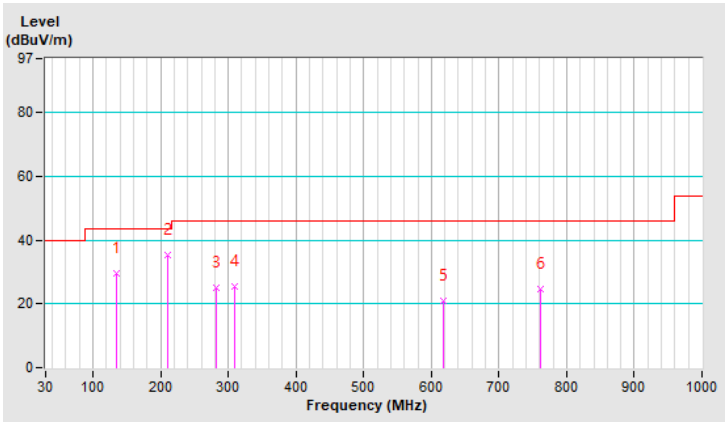
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	134.22	29.5 QP	43.5	-14.0	1.05 H	185	48.0	-18.5
2	**211.17**	**35.3 QP**	**43.5**	**-8.2**	**1.45 H**	**209**	**56.1**	**-20.8**
3	281.67	25.1 QP	46.0	-20.9	1.15 H	141	42.8	-17.7
4	309.10	25.5 QP	46.0	-20.5	1.85 H	205	42.4	-16.9
5	618.54	20.8 QP	46.0	-25.2	1.15 H	101	30.9	-10.1
6	761.30	24.6 QP	46.0	-21.4	1.45 H	159	32.5	-7.9

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 of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

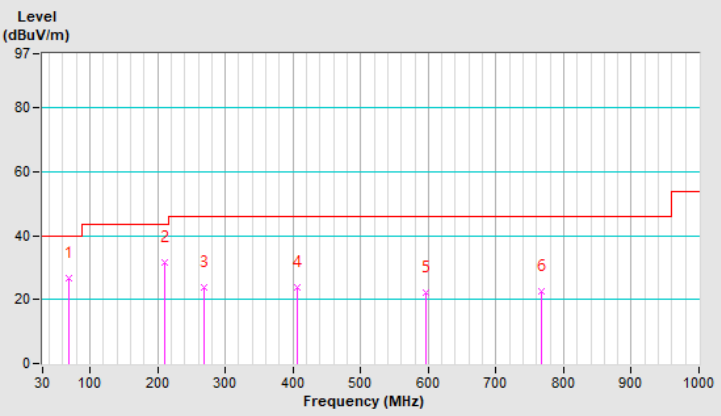


RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	69.40	26.9 QP	40.0	-13.1	1.15 V	241	46.8	-19.9
2	210.28	31.7 QP	43.5	-11.8	1.45 V	209	52.5	-20.8
3	268.99	23.8 QP	46.0	-22.2	1.12 V	214	41.9	-18.1
4	405.71	24.0 QP	46.0	-22.0	1.45 V	331	38.6	-14.6
5	596.81	22.1 QP	46.0	-23.9	1.05 V	100	32.5	-10.4
6	767.60	22.6 QP	46.0	-23.4	1.45 V	197	30.4	-7.8

Remarks:

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



7.9 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.2 PK	74.0	-10.8	1.00 H	115	51.1	12.1
2	5150.00	50.5 AV	54.0	-3.5	1.00 H	115	38.4	12.1
3	*5180.00	108.5 PK			1.00 H	115	65.7	42.8
4	*5180.00	100.4 AV			1.00 H	115	57.6	42.8
5	#10360.00	56.5 PK	68.2	-11.7	1.14 H	177	38.8	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.8 PK	74.0	-10.2	1.03 V	52	51.7	12.1
2	5150.00	48.9 AV	54.0	-5.1	1.03 V	52	36.8	12.1
3	*5180.00	104.3 PK			1.03 V	52	61.5	42.8
4	*5180.00	96.7 AV			1.03 V	52	53.9	42.8
5	#10360.00	56.4 PK	68.2	-11.8	1.37 V	224	38.7	17.7

Remarks:

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

RF Mode	802.11a	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	108.1 PK			1.00 H	115	65.3	42.8
2	*5200.00	100.0 AV			1.00 H	115	57.2	42.8
3	#10400.00	56.6 PK	68.2	-11.6	1.39 H	1	39.1	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	104.2 PK			1.03 V	52	61.4	42.8
2	*5200.00	96.4 AV			1.03 V	52	53.6	42.8
3	#10400.00	56.5 PK	68.2	-11.7	1.37 V	145	39.0	17.5

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 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	108.1 PK			1.00 H	115	65.1	43.0
2	*5240.00	100.2 AV			1.00 H	115	57.2	43.0
3	5350.00	54.3 PK	74.0	-19.7	1.00 H	115	42.0	12.3
4	5350.00	45.2 AV	54.0	-8.8	1.00 H	115	32.9	12.3
5	#10480.00	56.4 PK	68.2	-11.8	1.75 H	145	38.7	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	104.8 PK			1.03 V	52	61.8	43.0
2	*5240.00	96.4 AV			1.03 V	52	53.4	43.0
3	5350.00	54.0 PK	74.0	-20.0	1.03 V	52	41.7	12.3
4	5350.00	45.4 AV	54.0	-8.6	1.03 V	52	33.1	12.3
5	#10480.00	56.3 PK	68.2	-11.9	1.66 V	277	38.6	17.7

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.8 PK	74.0	-8.2	1.00 H	115	53.7	12.1
2	5150.00	50.2 AV	54.0	-3.8	1.00 H	115	38.1	12.1
3	*5180.00	107.6 PK			1.00 H	115	64.8	42.8
4	*5180.00	99.8 AV			1.00 H	115	57.0	42.8
5	#10360.00	56.6 PK	68.2	-11.6	1.37 H	117	38.9	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	1.03 V	52	47.2	12.1
2	5150.00	46.4 AV	54.0	-7.6	1.03 V	52	34.3	12.1
3	*5180.00	103.4 PK			1.03 V	52	60.6	42.8
4	*5180.00	95.7 AV			1.03 V	52	52.9	42.8
5	#10360.00	56.3 PK	68.2	-11.9	1.17 V	241	38.6	17.7

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	105.9 PK			1.00 H	115	63.0	42.9
2	*5200.00	98.1 AV			1.00 H	115	55.2	42.9
3	#10400.00	56.6 PK	68.2	-11.6	1.99 H	185	39.1	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	102.3 PK			1.03 V	52	59.5	42.8
2	*5200.00	95.4 AV			1.03 V	52	52.6	42.8
3	#10400.00	56.3 PK	68.2	-11.9	1.39 V	229	38.8	17.5

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 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	105.9 PK			1.00 H	115	62.9	43.0
2	*5240.00	98.0 AV			1.00 H	115	55.0	43.0
3	5350.00	54.3 PK	74.0	-19.7	1.00 H	115	42.0	12.3
4	5350.00	45.3 AV	54.0	-8.7	1.00 H	115	33.0	12.3
5	#10480.00	56.6 PK	68.2	-11.6	1.36 H	6	38.9	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	102.1 PK			1.03 V	52	59.1	43.0
2	*5240.00	94.0 AV			1.03 V	52	51.0	43.0
3	5350.00	53.9 PK	74.0	-20.1	1.03 V	52	41.6	12.3
4	5350.00	45.0 AV	54.0	-9.0	1.03 V	52	32.7	12.3
5	#10480.00	56.4 PK	68.2	-11.8	1.75 V	197	38.7	17.7

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 38：5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	1.00 H	115	50.2	12.1
2	5150.00	46.0 AV	54.0	-8.0	1.00 H	115	33.9	12.1
3	*5190.00	102.8 PK			1.00 H	115	60.0	42.8
4	*5190.00	94.4 AV			1.00 H	115	51.6	42.8
5	5350.00	54.3 PK	74.0	-19.7	1.00 H	115	42.0	12.3
6	5350.00	45.2 AV	54.0	-8.8	1.00 H	115	32.9	12.3
7	#10380.00	56.6 PK	68.2	-11.6	1.78 H	44	39.0	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.2 PK	74.0	-15.8	1.03 V	52	46.1	12.1
2	5150.00	45.1 AV	54.0	-8.9	1.03 V	52	33.0	12.1
3	*5190.00	99.8 PK			1.03 V	52	57.0	42.8
4	*5190.00	91.7 AV			1.03 V	52	48.9	42.8
5	5350.00	54.2 PK	74.0	-19.8	1.03 V	52	41.9	12.3
6	5350.00	45.4 AV	54.0	-8.6	1.03 V	52	33.1	12.3
7	#10380.00	56.5 PK	68.2	-11.7	1.67 V	185	38.9	17.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.4 PK	74.0	-19.6	1.00 H	115	42.3	12.1
2	5150.00	45.2 AV	54.0	-8.8	1.00 H	115	33.1	12.1
3	*5230.00	102.5 PK			1.00 H	115	59.6	42.9
4	*5230.00	94.7 AV			1.00 H	115	51.8	42.9
5	5350.00	54.6 PK	74.0	-19.4	1.00 H	115	42.3	12.3
6	5350.00	45.6 AV	54.0	-8.4	1.00 H	115	33.3	12.3
7	#10460.00	56.7 PK	68.2	-11.5	1.35 H	119	39.0	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.4 PK	74.0	-19.6	1.03 V	52	42.3	12.1
2	5150.00	45.1 AV	54.0	-8.9	1.03 V	52	33.0	12.1
3	*5230.00	99.2 PK			1.03 V	52	56.3	42.9
4	*5230.00	91.1 AV			1.03 V	52	48.2	42.9
5	5350.00	55.0 PK	74.0	-19.0	1.03 V	52	42.7	12.3
6	5350.00	45.3 AV	54.0	-8.7	1.03 V	52	33.0	12.3
7	#10460.00	55.9 PK	68.2	-12.3	1.78 V	44	38.2	17.7

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 42：5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.9 PK	74.0	-7.1	1.00 H	115	54.8	12.1
2	5150.00	51.0 AV	54.0	-3.0	1.00 H	115	38.9	12.1
3	*5210.00	100.5 PK			1.00 H	115	57.6	42.9
4	*5210.00	92.8 AV			1.00 H	115	49.9	42.9
5	5350.00	56.1 PK	74.0	-17.9	1.00 H	115	43.8	12.3
6	5350.00	45.8 AV	54.0	-8.2	1.00 H	115	33.5	12.3
7	#10420.00	56.6 PK	68.2	-11.6	1.15 H	241	39.0	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.0 PK	74.0	-9.0	1.03 V	52	52.9	12.1
2	5150.00	48.5 AV	54.0	-5.5	1.03 V	52	36.4	12.1
3	*5210.00	96.4 PK			1.03 V	52	53.5	42.9
4	*5210.00	88.8 AV			1.03 V	52	45.9	42.9
5	5350.00	55.5 PK	74.0	-18.5	1.03 V	52	43.2	12.3
6	5350.00	45.3 AV	54.0	-8.7	1.03 V	52	33.0	12.3
7	#10420.00	55.9 PK	68.2	-12.3	1.35 V	55	38.3	17.6

Remarks:

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

RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.0 PK	74.0	-18.0	1.00 H	118	43.9	12.1
2	5150.00	45.5 AV	54.0	-8.5	1.00 H	118	33.4	12.1
3	*5260.00	111.0 PK			1.00 H	118	68.1	42.9
4	*5260.00	102.2 AV			1.00 H	118	59.3	42.9
5	#10520.00	56.7 PK	68.2	-11.5	1.42 H	192	38.9	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.1 PK	74.0	-18.9	1.05 V	72	43.0	12.1
2	5150.00	44.7 AV	54.0	-9.3	1.05 V	72	32.6	12.1
3	*5260.00	107.3 PK			1.05 V	72	64.4	42.9
4	*5260.00	98.8 AV			1.05 V	72	55.9	42.9
5	#10520.00	56.0 PK	68.2	-12.2	1.26 V	242	38.2	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	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	110.9 PK			1.00 H	123	67.9	43.0
2	*5300.00	102.1 AV			1.00 H	123	59.1	43.0
3	10600.00	56.2 PK	74.0	-17.8	2.16 H	115	38.5	17.7
4	10600.00	46.8 AV	54.0	-7.2	2.16 H	115	29.1	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	107.1 PK			1.05 V	83	64.1	43.0
2	*5300.00	98.6 AV			1.05 V	83	55.6	43.0
3	10600.00	56.0 PK	74.0	-18.0	1.51 V	274	38.3	17.7
4	10600.00	46.4 AV	54.0	-7.6	1.51 V	274	28.7	17.7

Remarks:

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

RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.6 PK			1.07 H	124	67.6	43.0
2	*5320.00	101.6 AV			1.07 H	124	58.6	43.0
3	5350.00	69.1 PK	74.0	-4.9	1.07 H	124	56.8	12.3
4	5350.00	49.7 AV	54.0	-4.3	1.07 H	124	37.4	12.3
5	10640.00	56.3 PK	74.0	-17.7	1.65 H	210	38.5	17.8
6	10640.00	46.7 AV	54.0	-7.3	1.65 H	210	28.9	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	106.9 PK			1.07 V	64	63.9	43.0
2	*5320.00	98.2 AV			1.07 V	64	55.2	43.0
3	5350.00	63.4 PK	74.0	-10.6	N/A V	N/A	51.1	12.3
4	5350.00	46.6 AV	54.0	-7.4	N/A V	N/A	34.3	12.3
5	10640.00	56.5 PK	74.0	-17.5	1.38 V	131	38.7	17.8
6	10640.00	46.9 AV	54.0	-7.1	1.38 V	131	29.1	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.

RF Mode	802.11ac (VHT20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.7 PK	74.0	-19.3	1.00 H	118	42.6	12.1
2	5150.00	45.0 AV	54.0	-9.0	1.00 H	118	32.9	12.1
3	*5260.00	110.1 PK			1.00 H	118	67.2	42.9
4	*5260.00	101.1 AV			1.00 H	118	58.2	42.9
5	#10520.00	56.2 PK	68.2	-12.0	1.06 H	240	38.4	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.2 PK	74.0	-18.8	1.05 V	72	43.1	12.1
2	5150.00	44.4 AV	54.0	-9.6	1.05 V	72	32.3	12.1
3	*5260.00	106.3 PK			1.05 V	72	63.4	42.9
4	*5260.00	97.6 AV			1.05 V	72	54.7	42.9
5	#10520.00	56.0 PK	68.2	-12.2	1.26 V	49	38.2	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 (VHT20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	111.5 PK			1.00 H	123	68.5	43.0
2	*5300.00	102.5 AV			1.00 H	123	59.5	43.0
3	10600.00	55.8 PK	74.0	-18.2	1.72 H	206	38.1	17.7
4	10600.00	46.3 AV	54.0	-7.7	1.72 H	206	28.6	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	104.2 PK			1.05 V	83	61.2	43.0
2	*5300.00	97.5 AV			1.05 V	83	54.5	43.0
3	10600.00	56.3 PK	74.0	-17.7	1.66 V	274	38.6	17.7
4	10600.00	46.2 AV	54.0	-7.8	1.66 V	274	28.5	17.7

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	109.0 PK			1.07 H	124	66.0	43.0
2	*5320.00	100.4 AV			1.07 H	124	57.4	43.0
3	5350.00	67.2 PK	74.0	-6.8	1.07 H	124	54.9	12.3
4	5350.00	50.9 AV	54.0	-3.1	1.07 H	124	38.6	12.3
5	10640.00	56.0 PK	74.0	-18.0	2.53 H	104	38.2	17.8
6	10640.00	46.4 AV	54.0	-7.6	2.53 H	104	28.6	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	105.9 PK			1.07 V	64	62.9	43.0
2	*5320.00	97.0 AV			1.07 V	64	54.0	43.0
3	5350.00	63.7 PK	74.0	-10.3	1.07 V	64	51.4	12.3
4	5350.00	48.0 AV	54.0	-6.0	1.07 V	64	35.7	12.3
5	10640.00	55.7 PK	74.0	-18.3	1.42 V	227	37.9	17.8
6	10640.00	46.1 AV	54.0	-7.9	1.42 V	227	28.3	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.

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.8 PK	74.0	-19.2	1.00 H	118	42.7	12.1
2	5150.00	44.4 AV	54.0	-9.6	1.00 H	118	32.3	12.1
3	*5270.00	106.0 PK			1.00 H	118	63.1	42.9
4	*5270.00	97.0 AV			1.00 H	118	54.1	42.9
5	5350.00	55.7 PK	74.0	-18.3	1.00 H	118	43.4	12.3
6	5350.00	45.9 AV	54.0	-8.1	1.00 H	118	33.6	12.3
7	#10540.00	56.4 PK	68.2	-11.8	1.18 H	54	38.6	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.6 PK	74.0	-19.4	1.05 V	74	42.5	12.1
2	5150.00	44.2 AV	54.0	-9.8	1.05 V	74	32.1	12.1
3	*5270.00	102.8 PK			1.05 V	74	59.9	42.9
4	*5270.00	93.6 AV			1.05 V	74	50.7	42.9
5	5350.00	54.9 PK	74.0	-19.1	1.05 V	74	42.6	12.3
6	5350.00	45.7 AV	54.0	-8.3	1.05 V	74	33.4	12.3
7	#10540.00	55.8 PK	68.2	-12.4	1.55 V	196	38.0	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 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	55.4 PK	74.0	-18.6	1.07 H	124	43.3	12.1
2	5150.00	44.0 AV	54.0	-10.0	1.07 H	124	31.9	12.1
3	*5310.00	102.2 PK			1.07 H	124	59.2	43.0
4	*5310.00	94.7 AV			1.07 H	124	51.7	43.0
5	5350.00	62.3 PK	74.0	-11.7	1.07 H	124	50.0	12.3
6	5350.00	47.3 AV	54.0	-6.7	1.07 H	124	35.0	12.3
7	10620.00	56.0 PK	74.0	-18.0	1.14 H	81	38.3	17.7
8	10620.00	46.6 AV	54.0	-7.4	1.14 H	81	28.9	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.2 PK	74.0	-19.8	1.07 V	59	42.1	12.1
2	5150.00	43.9 AV	54.0	-10.1	1.07 V	59	31.8	12.1
3	*5310.00	100.0 PK			1.07 V	59	57.0	43.0
4	*5310.00	92.4 AV			1.07 V	59	49.4	43.0
5	5350.00	59.9 PK	74.0	-14.1	1.07 V	59	47.6	12.3
6	5350.00	46.1 AV	54.0	-7.9	1.07 V	59	33.8	12.3
7	10620.00	55.9 PK	74.0	-18.1	2.26 V	149	38.2	17.7
8	10620.00	46.3 AV	54.0	-7.7	2.26 V	149	28.6	17.7

Remarks:

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

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.6 PK	74.0	-19.4	1.00 H	118	42.5	12.1
2	5150.00	43.0 AV	54.0	-11.0	1.00 H	118	30.9	12.1
3	*5290.00	100.8 PK			1.00 H	118	57.8	43.0
4	*5290.00	92.3 AV			1.00 H	118	49.3	43.0
5	5350.00	62.5 PK	74.0	-11.5	1.00 H	118	50.2	12.3
6	5350.00	47.4 AV	54.0	-6.6	1.00 H	118	35.1	12.3
7	#10580.00	56.1 PK	68.2	-12.1	1.29 H	247	38.4	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.5 PK	74.0	-19.5	1.00 V	134	42.4	12.1
2	5150.00	43.1 AV	54.0	-10.9	1.00 V	134	31.0	12.1
3	*5290.00	97.4 PK			1.14 V	71	54.4	43.0
4	*5290.00	89.7 AV			1.14 V	71	46.7	43.0
5	5350.00	58.7 PK	74.0	-15.3	1.14 V	71	46.4	12.3
6	5350.00	46.3 AV	54.0	-7.7	1.14 V	71	34.0	12.3
7	#10580.00	56.3 PK	68.2	-11.9	1.63 V	138	38.6	17.7

Remarks:

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

RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	58.5 PK	74.0	-15.5	1.00 H	124	45.8	12.7
2	5460.00	48.2 AV	54.0	-5.8	1.00 H	124	35.5	12.7
3	#5470.00	62.8 PK	68.2	-5.4	1.00 H	124	50.1	12.7
4	*5500.00	105.9 PK			1.00 H	124	62.7	43.2
5	*5500.00	97.8 AV			1.00 H	124	54.6	43.2
6	11000.00	57.9 PK	74.0	-16.1	1.54 H	181	39.8	18.1
7	11000.00	48.1 AV	54.0	-5.9	1.54 H	181	30.0	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.5 PK	74.0	-18.5	1.00 V	61	42.8	12.7
2	5460.00	46.2 AV	54.0	-7.8	1.00 V	61	33.5	12.7
3	#5470.00	57.8 PK	68.2	-10.4	1.00 V	61	45.1	12.7
4	*5500.00	102.1 PK			1.00 V	61	58.9	43.2
5	*5500.00	94.2 AV			1.00 V	61	51.0	43.2
6	11000.00	57.5 PK	74.0	-16.5	1.67 V	250	39.4	18.1
7	11000.00	48.0 AV	54.0	-6.0	1.67 V	250	29.9	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 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	107.5 PK			1.00 H	124	64.1	43.4
2	*5580.00	99.6 AV			1.00 H	124	56.2	43.4
3	11160.00	58.1 PK	74.0	-15.9	1.92 H	333	40.0	18.1
4	11160.00	48.2 AV	54.0	-5.8	1.92 H	333	30.1	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	104.9 PK			1.00 V	61	61.5	43.4
2	*5580.00	96.8 AV			1.00 V	61	53.4	43.4
3	11160.00	57.7 PK	74.0	-16.3	1.67 V	119	39.6	18.1
4	11160.00	47.9 AV	54.0	-6.1	1.67 V	119	29.8	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.

RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	106.9 PK			1.00 H	124	63.5	43.4
2	*5700.00	98.8 AV			1.00 H	124	55.4	43.4
3	**#5725.00**	**66.1 PK**	**68.2**	**-2.1**	**1.00 H**	**124**	**53.3**	**12.8**
4	11400.00	57.9 PK	74.0	-16.1	1.05 H	100	39.3	18.6
5	11400.00	48.2 AV	54.0	-5.8	1.05 H	100	29.6	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	102.5 PK			1.00 V	61	59.1	43.4
2	*5700.00	94.8 AV			1.00 V	61	51.4	43.4
3	#5725.00	61.7 PK	68.2	-6.5	1.00 V	61	48.9	12.8
4	11400.00	57.7 PK	74.0	-16.3	1.68 V	211	39.1	18.6
5	11400.00	47.6 AV	54.0	-6.4	1.68 V	211	29.0	18.6

Remarks:

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

RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	54.7 PK	74.0	-19.3	1.01 H	122	42.0	12.7
2	5460.00	43.9 AV	54.0	-10.1	1.01 H	122	31.2	12.7
3	#5470.00	54.5 PK	68.2	-13.7	1.01 H	122	41.8	12.7
4	*5720.00	108.4 PK			1.01 H	122	64.8	43.6
5	*5720.00	101.1 AV			1.01 H	122	57.5	43.6
6	11440.00	56.8 PK	74.0	-17.2	1.64 H	35	38.2	18.6
7	11440.00	47.3 AV	54.0	-6.7	1.64 H	35	28.7	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	54.9 PK	74.0	-19.1	1.04 V	59	42.2	12.7
2	5460.00	43.9 AV	54.0	-10.1	1.04 V	59	31.2	12.7
3	#5470.00	55.6 PK	68.2	-12.6	1.04 V	59	42.9	12.7
4	*5720.00	104.0 PK			1.04 V	59	60.4	43.6
5	*5720.00	96.9 AV			1.04 V	59	53.3	43.6
6	11440.00	57.2 PK	74.0	-16.8	1.92 V	114	38.6	18.6
7	11440.00	47.4 AV	54.0	-6.6	1.92 V	114	28.8	18.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.3 PK	74.0	-17.7	1.00 H	124	43.6	12.7
2	5460.00	47.8 AV	54.0	-6.2	1.00 H	124	35.1	12.7
3	#5470.00	60.2 PK	68.2	-8.0	1.00 H	124	47.5	12.7
4	*5500.00	104.7 PK			1.00 H	124	61.5	43.2
5	*5500.00	96.8 AV			1.00 H	124	53.6	43.2
6	11000.00	58.0 PK	74.0	-16.0	1.95 H	359	39.9	18.1
7	11000.00	48.0 AV	54.0	-6.0	1.95 H	359	29.9	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.4 PK	74.0	-18.6	1.00 V	61	42.7	12.7
2	5460.00	46.2 AV	54.0	-7.8	1.00 V	61	33.5	12.7
3	#5470.00	57.8 PK	68.2	-10.4	1.00 V	61	45.1	12.7
4	*5500.00	101.3 PK			1.00 V	61	58.1	43.2
5	*5500.00	93.8 AV			1.00 V	61	50.6	43.2
6	11000.00	57.6 PK	74.0	-16.4	1.69 V	9	39.5	18.1
7	11000.00	47.7 AV	54.0	-6.3	1.69 V	9	29.6	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 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	106.8 PK			1.00 H	124	63.4	43.4
2	*5580.00	98.9 AV			1.00 H	124	55.5	43.4
3	11160.00	58.3 PK	74.0	-15.7	1.92 H	270	40.2	18.1
4	11160.00	48.3 AV	54.0	-5.7	1.92 H	270	30.2	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	104.3 PK			1.00 V	61	60.9	43.4
2	*5580.00	96.2 AV			1.00 V	61	52.8	43.4
3	11160.00	58.1 PK	74.0	-15.9	1.63 V	328	40.0	18.1
4	11160.00	48.2 AV	54.0	-5.8	1.63 V	328	30.1	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.

RF Mode	802.11ac (VHT20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	104.4 PK			1.00 H	124	61.0	43.4
2	*5700.00	96.7 AV			1.00 H	124	53.3	43.4
3	#5725.00	66.1 PK	68.2	-2.1	1.00 H	61	53.3	12.8
4	11400.00	57.6 PK	74.0	-16.4	1.64 H	186	39.0	18.6
5	11400.00	47.5 AV	54.0	-6.5	1.64 H	186	28.9	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	100.4 PK			1.00 V	61	57.0	43.4
2	*5700.00	92.4 AV			1.00 V	61	49.0	43.4
3	#5725.00	60.2 PK	68.2	-8.0	1.00 V	61	47.4	12.8
4	11400.00	57.4 PK	74.0	-16.6	1.05 V	200	38.8	18.6
5	11400.00	47.5 AV	54.0	-6.5	1.05 V	200	28.9	18.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	54.2 PK	74.0	-19.8	1.01 H	122	41.5	12.7
2	5460.00	43.9 AV	54.0	-10.1	1.01 H	122	31.2	12.7
3	#5470.00	54.8 PK	68.2	-13.4	1.01 H	122	42.1	12.7
4	*5720.00	107.5 PK			1.01 H	122	63.9	43.6
5	*5720.00	99.9 AV			1.01 H	122	56.3	43.6
6	11440.00	57.1 PK	74.0	-16.9	2.09 H	143	38.5	18.6
7	11440.00	47.4 AV	54.0	-6.6	2.09 H	143	28.8	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	54.7 PK	74.0	-19.3	1.04 V	59	42.0	12.7
2	5460.00	43.8 AV	54.0	-10.2	1.04 V	59	31.1	12.7
3	#5470.00	54.9 PK	68.2	-13.3	1.04 V	59	42.2	12.7
4	*5720.00	103.2 PK			1.04 V	59	59.6	43.6
5	*5720.00	96.0 AV			1.04 V	59	52.4	43.6
6	11440.00	57.6 PK	74.0	-16.4	2.51 V	162	39.0	18.6
7	11440.00	47.8 AV	54.0	-6.2	2.51 V	162	29.2	18.6

Remarks:

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

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.7 PK	74.0	-17.3	1.00 H	124	44.0	12.7
2	5460.00	46.0 AV	54.0	-8.0	1.00 H	124	33.3	12.7
3	#5470.00	61.6 PK	68.2	-6.6	1.00 H	124	48.9	12.7
4	*5510.00	101.4 PK			1.00 H	124	58.0	43.4
5	*5510.00	93.2 AV			1.00 H	124	49.8	43.4
6	#5725.00	56.4 PK	68.2	-11.8	1.00 H	124	43.6	12.8
7	11020.00	57.8 PK	74.0	-16.2	1.95 H	199	39.7	18.1
8	11020.00	47.9 AV	54.0	-6.1	1.95 H	199	29.8	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.2 PK	74.0	-17.8	1.00 V	61	43.5	12.7
2	5460.00	46.0 AV	54.0	-8.0	1.00 V	61	33.3	12.7
3	#5470.00	58.1 PK	68.2	-10.1	1.00 V	61	45.4	12.7
4	*5510.00	97.4 PK			1.00 V	61	54.0	43.4
5	*5510.00	89.1 AV			1.00 V	61	45.7	43.4
6	#5725.00	55.7 PK	68.2	-12.5	1.00 V	61	42.9	12.8
7	11020.00	57.6 PK	74.0	-16.4	1.75 V	4	39.5	18.1
8	11020.00	47.5 AV	54.0	-6.5	1.75 V	4	29.4	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 (VHT40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	102.5 PK			1.00 H	124	59.1	43.4
2	*5550.00	94.8 AV			1.00 H	124	51.4	43.4
3	11100.00	58.2 PK	74.0	-15.8	1.63 H	333	39.6	18.6
4	11100.00	48.3 AV	54.0	-5.7	1.63 H	333	29.7	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	99.7 PK			1.00 V	61	56.3	43.4
2	*5550.00	92.0 AV			1.00 V	61	48.6	43.4
3	11100.00	58.1 PK	74.0	-15.9	1.05 V	203	39.5	18.6
4	11100.00	48.2 AV	54.0	-5.8	1.05 V	203	29.6	18.6

Remarks:

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

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	55.8 PK	74.0	-18.2	1.00 H	124	43.1	12.7
2	5460.00	45.9 AV	54.0	-8.1	1.00 H	124	33.2	12.7
3	#5470.00	56.9 PK	68.2	-11.3	1.00 H	124	44.2	12.7
4	*5670.00	103.0 PK			1.00 H	124	59.5	43.5
5	*5670.00	95.3 AV			1.00 H	124	51.8	43.5
6	#5725.00	63.4 PK	68.2	-4.8	1.00 H	124	50.6	12.8
7	11340.00	58.3 PK	74.0	-15.7	1.75 H	227	39.9	18.4
8	11340.00	48.2 AV	54.0	-5.8	1.75 H	227	29.8	18.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.5 PK	74.0	-18.5	1.00 V	61	42.8	12.7
2	5460.00	45.4 AV	54.0	-8.6	1.00 V	61	32.7	12.7
3	#5470.00	55.7 PK	68.2	-12.5	1.00 V	61	43.0	12.7
4	*5670.00	99.5 PK			1.00 V	61	56.0	43.5
5	*5670.00	91.9 AV			1.00 V	61	48.4	43.5
6	#5725.00	60.4 PK	68.2	-7.8	1.00 V	61	47.6	12.8
7	11340.00	57.8 PK	74.0	-16.2	1.96 V	221	39.4	18.4
8	11340.00	47.9 AV	54.0	-6.1	1.96 V	221	29.5	18.4

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	54.5 PK	74.0	-19.5	1.00 H	122	41.8	12.7
2	5460.00	43.8 AV	54.0	-10.2	1.00 H	122	31.1	12.7
3	#5470.00	55.2 PK	68.2	-13.0	1.00 H	122	42.5	12.7
4	*5710.00	104.4 PK			1.00 H	122	61.0	43.4
5	*5710.00	96.5 AV			1.00 H	122	53.1	43.4
6	11420.00	57.3 PK	74.0	-16.7	1.28 H	81	38.7	18.6
7	11420.00	47.5 AV	54.0	-6.5	1.28 H	81	28.9	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	54.1 PK	74.0	-19.9	1.04 V	54	41.4	12.7
2	5460.00	43.8 AV	54.0	-10.2	1.04 V	54	31.1	12.7
3	#5470.00	55.4 PK	68.2	-12.8	1.04 V	54	42.7	12.7
4	*5710.00	99.9 PK			1.04 V	54	56.5	43.4
5	*5710.00	92.4 AV			1.04 V	54	49.0	43.4
6	11420.00	57.2 PK	74.0	-16.8	1.02 V	282	38.6	18.6
7	11420.00	47.5 AV	54.0	-6.5	1.02 V	282	28.9	18.6

Remarks:

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

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	58.4 PK	74.0	-15.6	1.00 H	124	45.7	12.7
2	5460.00	47.2 AV	54.0	-6.8	1.00 H	124	34.5	12.7
3	#5470.00	59.6 PK	68.2	-8.6	1.00 H	124	46.9	12.7
4	*5530.00	99.0 PK			1.00 H	124	55.6	43.4
5	*5530.00	91.4 AV			1.00 H	124	48.0	43.4
6	#5725.00	55.4 PK	68.2	-12.8	1.00 H	124	42.6	12.8
7	11060.00	58.2 PK	74.0	-15.8	1.17 H	183	39.9	18.3
8	11060.00	48.4 AV	54.0	-5.6	1.17 H	183	30.1	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	1.00 V	61	43.4	12.7
2	5460.00	46.1 AV	54.0	-7.9	1.00 V	61	33.4	12.7
3	#5470.00	56.6 PK	68.2	-11.6	1.00 V	61	43.9	12.7
4	*5530.00	95.2 PK			1.00 V	61	51.8	43.4
5	*5530.00	87.5 AV			1.00 V	61	44.1	43.4
6	#5725.00	55.4 PK	68.2	-12.8	1.00 V	61	42.6	12.8
7	11060.00	58.1 PK	74.0	-15.9	1.77 V	314	39.8	18.3
8	11060.00	48.0 AV	54.0	-6.0	1.77 V	314	29.7	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 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	55.8 PK	74.0	-18.2	1.00 H	124	43.1	12.7
2	5460.00	45.9 AV	54.0	-8.1	1.00 H	124	33.2	12.7
3	#5470.00	56.1 PK	68.2	-12.1	1.00 H	124	43.4	12.7
4	*5610.00	100.8 PK			1.00 H	124	57.4	43.4
5	*5610.00	92.7 AV			1.00 H	124	49.3	43.4
6	#5725.00	57.0 PK	68.2	-11.2	1.00 H	124	44.2	12.8
7	11220.00	58.5 PK	74.0	-15.5	1.92 H	209	40.6	17.9
8	11220.00	48.5 AV	54.0	-5.5	1.92 H	209	30.6	17.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.6 PK	74.0	-18.4	1.00 V	61	42.9	12.7
2	5460.00	45.7 AV	54.0	-8.3	1.00 V	61	33.0	12.7
3	#5470.00	56.0 PK	68.2	-12.2	1.00 V	61	43.3	12.7
4	*5610.00	97.2 PK			1.00 V	61	53.8	43.4
5	*5610.00	89.1 AV			1.00 V	61	45.7	43.4
6	#5725.00	56.1 PK	68.2	-12.1	1.00 V	61	43.3	12.8
7	11220.00	58.3 PK	74.0	-15.7	1.05 V	179	40.4	17.9
8	11220.00	48.2 AV	54.0	-5.8	1.05 V	179	30.3	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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	54.3 PK	74.0	-19.7	1.00 H	127	41.6	12.7
2	5460.00	43.8 AV	54.0	-10.2	1.00 H	127	31.1	12.7
3	#5470.00	55.2 PK	68.2	-13.0	1.00 H	127	42.5	12.7
4	*5690.00	102.3 PK			1.00 H	127	58.9	43.4
5	*5690.00	93.7 AV			1.00 H	127	50.3	43.4
6	11380.00	56.8 PK	74.0	-17.2	1.62 H	92	38.3	18.5
7	11380.00	47.1 AV	54.0	-6.9	1.62 H	92	28.6	18.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	54.4 PK	74.0	-19.6	1.02 V	62	41.7	12.7
2	5460.00	43.8 AV	54.0	-10.2	1.02 V	62	31.1	12.7
3	#5470.00	54.9 PK	68.2	-13.3	1.02 V	62	42.2	12.7
4	*5690.00	98.2 PK			1.02 V	62	54.8	43.4
5	*5690.00	89.8 AV			1.02 V	62	46.4	43.4
6	11380.00	57.0 PK	74.0	-17.0	2.39 V	184	38.5	18.5
7	11380.00	47.2 AV	54.0	-6.8	2.39 V	184	28.7	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 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	107.7 PK			1.01 H	124	64.0	43.7
2	*5745.00	99.9 AV			1.01 H	124	56.2	43.7
3	11490.00	58.1 PK	74.0	-15.9	1.93 H	331	39.3	18.8
4	11490.00	48.3 AV	54.0	-5.7	1.93 H	331	29.5	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	103.7 PK			1.00 V	61	60.0	43.7
2	*5745.00	96.0 AV			1.00 V	61	52.3	43.7
3	11490.00	57.5 PK	74.0	-16.5	1.72 V	229	38.7	18.8
4	11490.00	48.1 AV	54.0	-5.9	1.72 V	229	29.3	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.

RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	103.7 PK			1.00 V	61	60.0	43.7
2	*5745.00	96.0 AV			1.00 V	61	52.3	43.7
3	11490.00	57.5 PK	74.0	-16.5	1.72 V	229	38.7	18.8
4	11490.00	48.1 AV	54.0	-5.9	1.72 V	229	29.3	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	105.1 PK			1.00 V	61	61.3	43.8
2	*5785.00	97.6 AV			1.00 V	61	53.8	43.8
3	11570.00	57.8 PK	74.0	-16.2	1.19 V	186	39.2	18.6
4	11570.00	48.0 AV	54.0	-6.0	1.19 V	186	29.4	18.6

Remarks:

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

RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	107.7 PK			1.00 H	124	63.8	43.9
2	*5825.00	100.0 AV			1.00 H	124	56.1	43.9
3	11650.00	58.3 PK	74.0	-15.7	1.74 H	255	39.4	18.9
4	11650.00	48.2 AV	54.0	-5.8	1.74 H	255	29.3	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	103.6 PK			1.00 V	61	59.7	43.9
2	*5825.00	95.9 AV			1.00 V	61	52.0	43.9
3	11650.00	57.8 PK	74.0	-16.2	1.64 V	116	38.9	18.9
4	11650.00	47.9 AV	54.0	-6.1	1.64 V	116	29.0	18.9

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 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	105.9 PK			1.00 H	124	62.2	43.7
2	*5745.00	97.8 AV			1.00 H	124	54.1	43.7
3	11490.00	57.8 PK	74.0	-16.2	1.42 H	318	39.0	18.8
4	11490.00	47.7 AV	54.0	-6.3	1.42 H	318	28.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	102.1 PK			1.00 V	61	58.4	43.7
2	*5745.00	94.3 AV			1.00 V	61	50.6	43.7
3	11490.00	57.7 PK	74.0	-16.3	1.63 V	332	38.9	18.8
4	11490.00	47.9 AV	54.0	-6.1	1.63 V	332	29.1	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 (VHT20)	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	106.2 PK			1.00 H	124	62.4	43.8
2	*5785.00	97.9 AV			1.00 H	124	54.1	43.8
3	11570.00	57.9 PK	74.0	-16.1	1.52 H	163	39.3	18.6
4	11570.00	47.5 AV	54.0	-6.5	1.52 H	163	28.9	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	102.1 PK			1.00 V	61	58.3	43.8
2	*5785.00	93.8 AV			1.00 V	61	50.0	43.8
3	11570.00	57.7 PK	74.0	-16.3	1.82 V	15	39.1	18.6
4	11570.00	47.8 AV	54.0	-6.2	1.82 V	15	29.2	18.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	105.6 PK			1.00 H	124	61.7	43.9
2	*5825.00	97.7 AV			1.00 H	124	53.8	43.9
3	11650.00	57.6 PK	74.0	-16.4	1.12 H	214	38.7	18.9
4	11650.00	47.4 AV	54.0	-6.6	1.12 H	214	28.5	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	102.3 PK			1.00 V	61	58.4	43.9
2	*5825.00	94.2 AV			1.00 V	61	50.3	43.9
3	11650.00	57.4 PK	74.0	-16.6	1.26 V	19	38.5	18.9
4	11650.00	47.4 AV	54.0	-6.6	1.26 V	19	28.5	18.9

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 151：5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5755.00	102.8 PK			1.00 H	124	59.1	43.7
2	*5755.00	95.2 AV			1.00 H	124	51.5	43.7
3	11510.00	57.6 PK	74.0	-16.4	1.45 H	283	38.9	18.7
4	11510.00	47.6 AV	54.0	-6.4	1.45 H	283	28.9	18.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5755.00	98.7 PK			1.00 V	61	55.0	43.7
2	*5755.00	90.7 AV			1.00 V	61	47.0	43.7
3	11510.00	57.4 PK	74.0	-16.6	1.64 V	219	38.7	18.7
4	11510.00	47.6 AV	54.0	-6.4	1.64 V	219	28.9	18.7

Remarks:

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

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5795.00	101.7 PK			1.00 H	124	57.9	43.8
2	*5795.00	93.9 AV			1.00 H	124	50.1	43.8
3	11590.00	57.7 PK	74.0	-16.3	1.63 H	224	39.1	18.6
4	11590.00	47.6 AV	54.0	-6.4	1.63 H	224	29.0	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	97.7 PK			1.00 V	61	53.9	43.8
2	*5795.00	89.9 AV			1.00 V	61	46.1	43.8
3	11590.00	57.4 PK	74.0	-16.6	1.25 V	200	38.8	18.6
4	11590.00	47.5 AV	54.0	-6.5	1.25 V	200	28.9	18.6

Remarks:

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

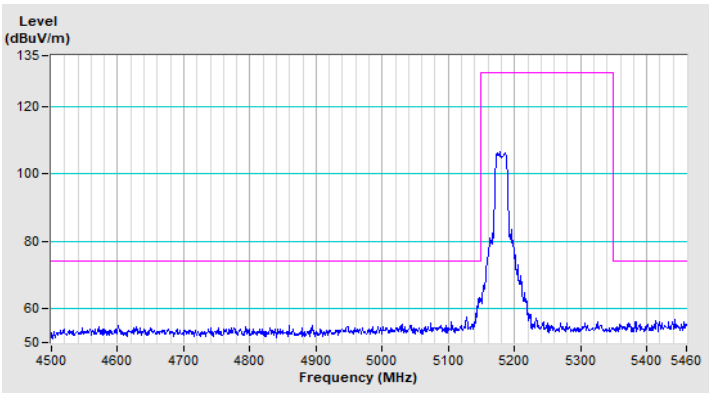
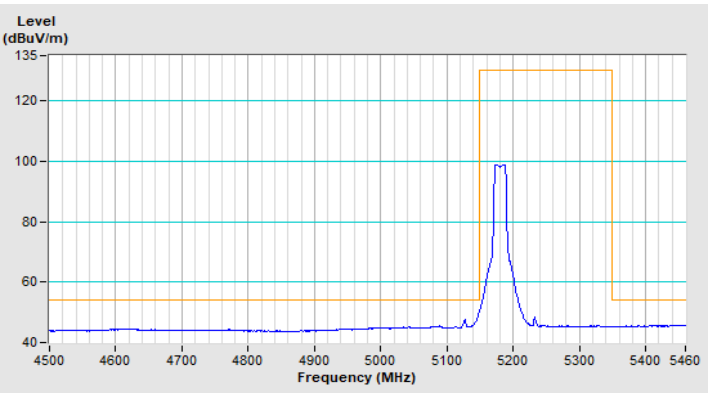
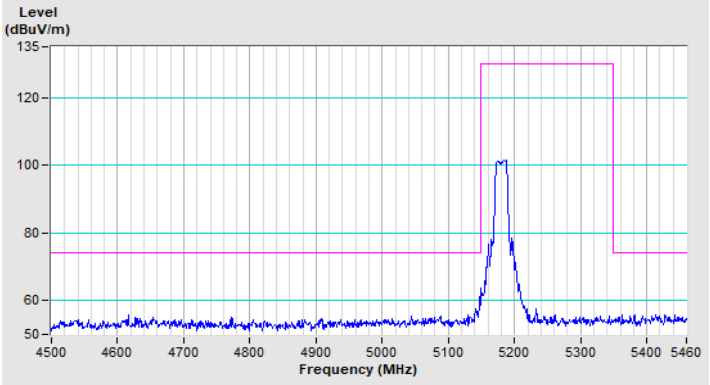
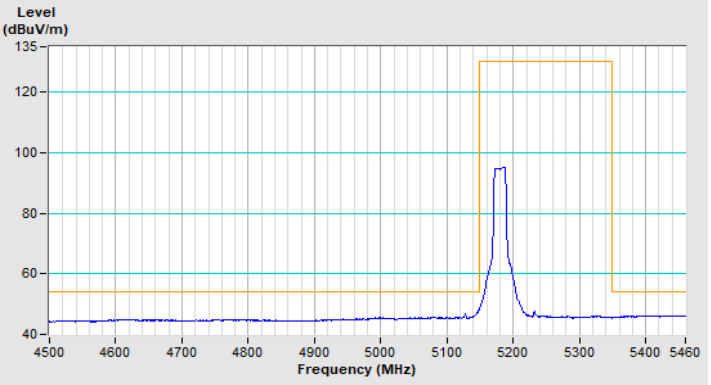
RF Mode	802.11ac (VHT80)	Channel	CH 155：5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

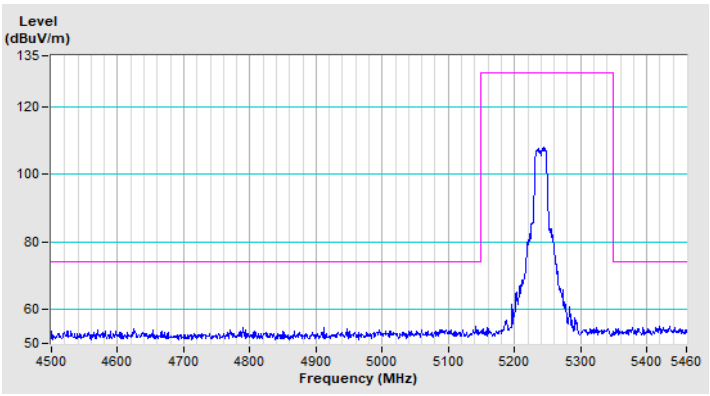
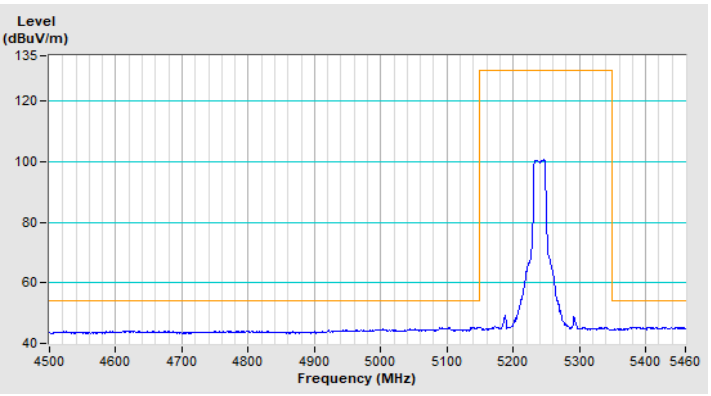
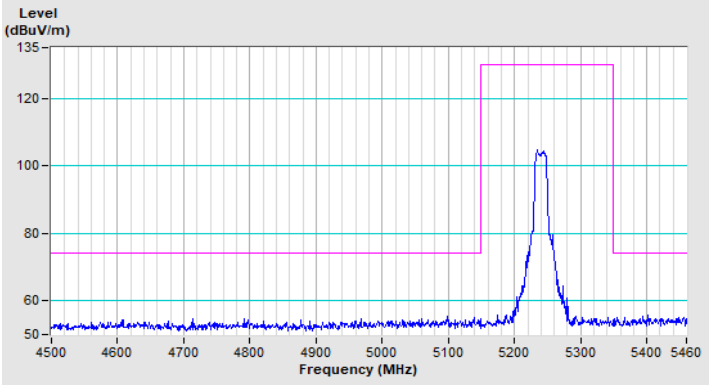
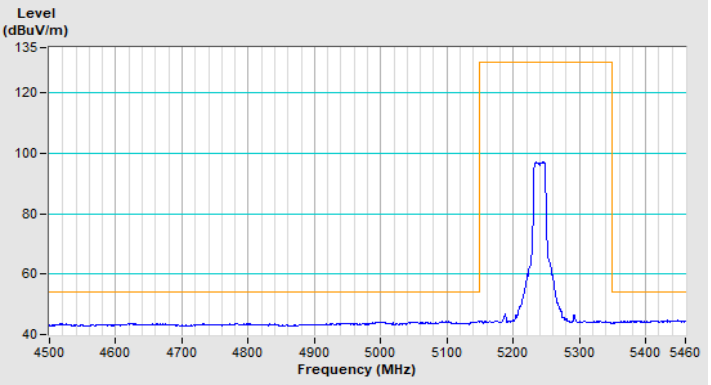
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5775.00	99.6 PK			1.00 H	124	55.8	43.8
2	*5775.00	91.7 AV			1.00 H	124	47.9	43.8
3	11550.00	57.8 PK	74.0	-16.2	1.82 H	313	39.2	18.6
4	11550.00	47.7 AV	54.0	-6.3	1.82 H	313	29.1	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5775.00	96.2 PK			1.00 V	61	52.4	43.8
2	*5775.00	88.5 AV			1.00 V	61	44.7	43.8
3	11550.00	57.7 PK	74.0	-16.3	1.45 V	113	39.1	18.6
4	11550.00	47.6 AV	54.0	-6.4	1.45 V	113	29.0	18.6

Remarks:

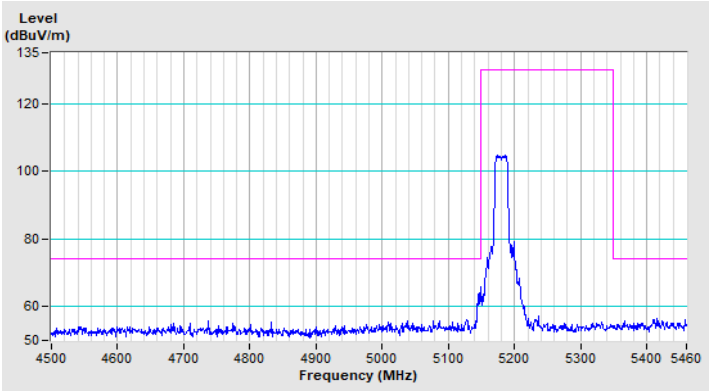
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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

Plot of Band Edge

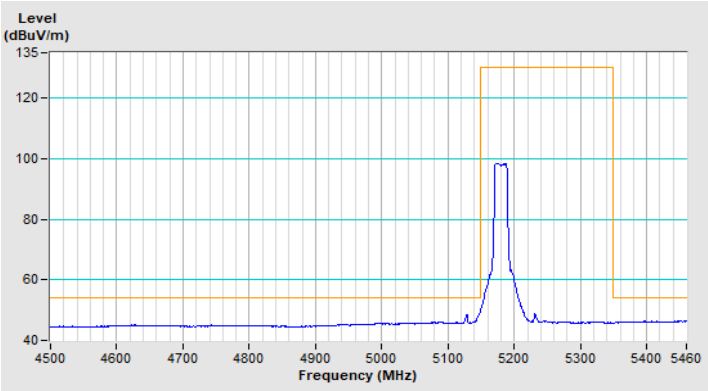
802.11a Channel 36	
	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)

802.11a Channel 48	
	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)

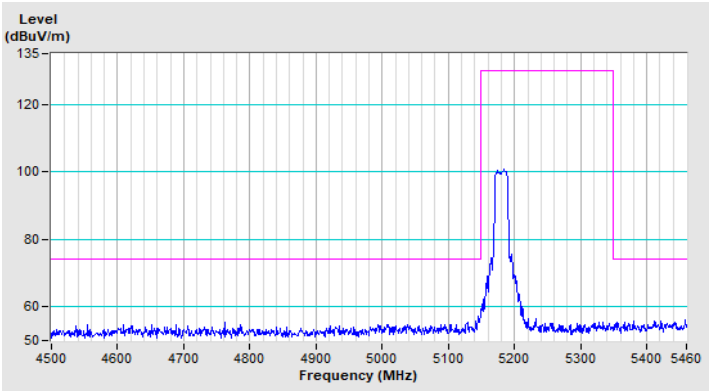
802.11ac (VHT20) Channel 36



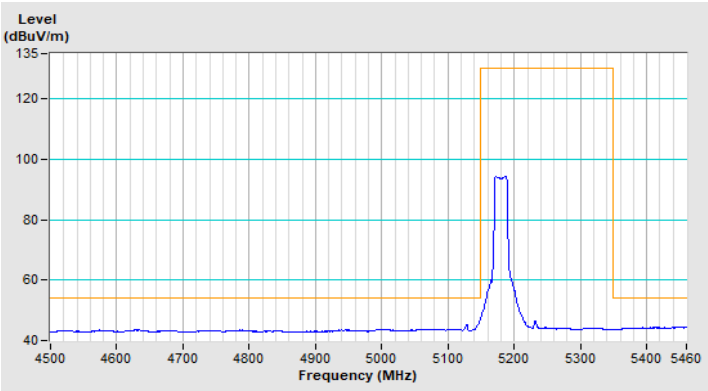
Horizontal (Peak)



Horizontal (Average)

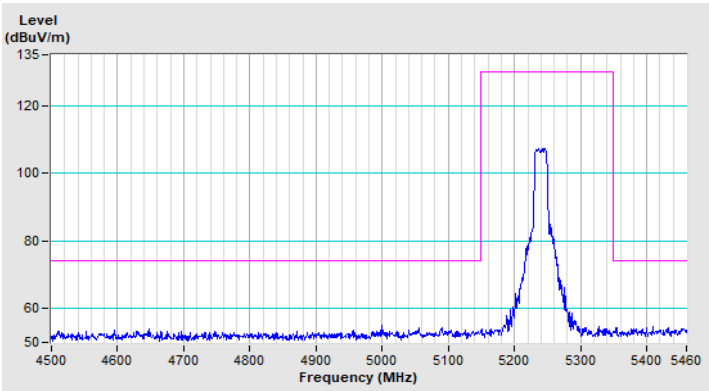


Vertical (Peak)

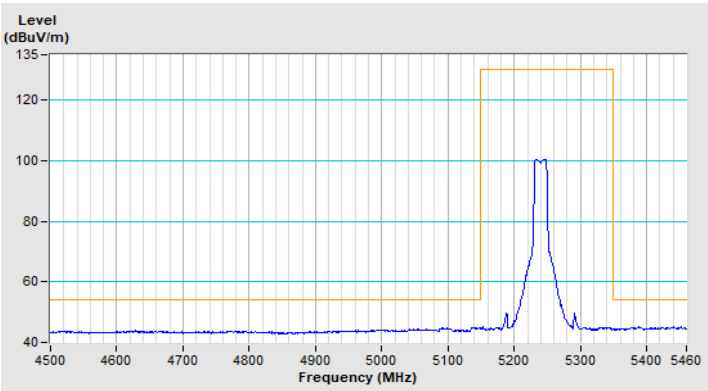


Vertical (Average)

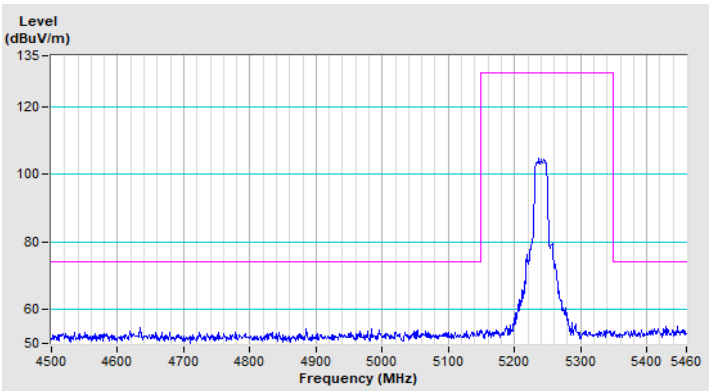
802.11ac (VHT20) Channel 48



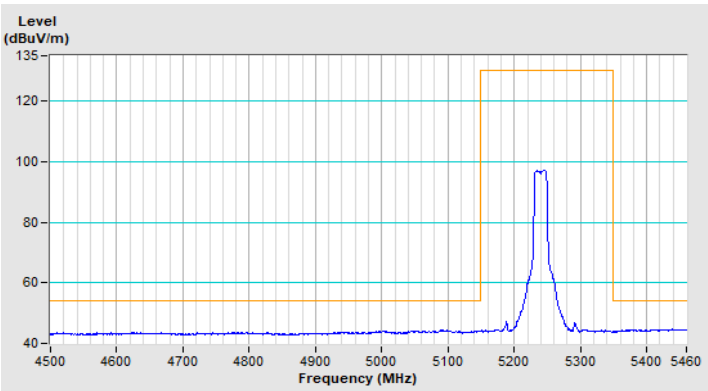
Horizontal (Peak)



Horizontal (Average)

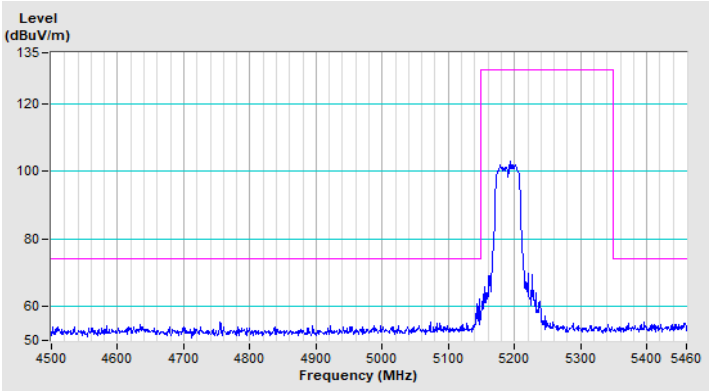


Vertical (Peak)

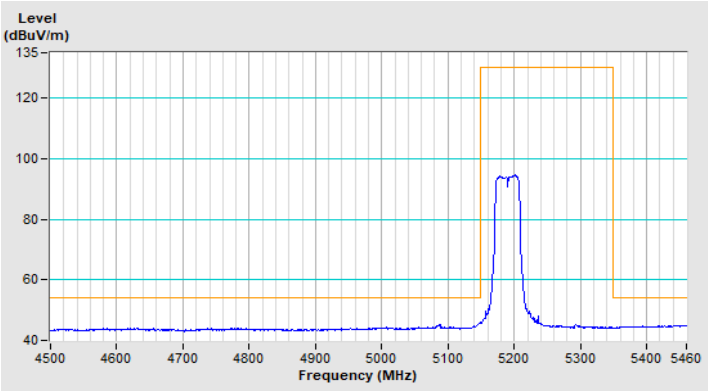


Vertical (Average)

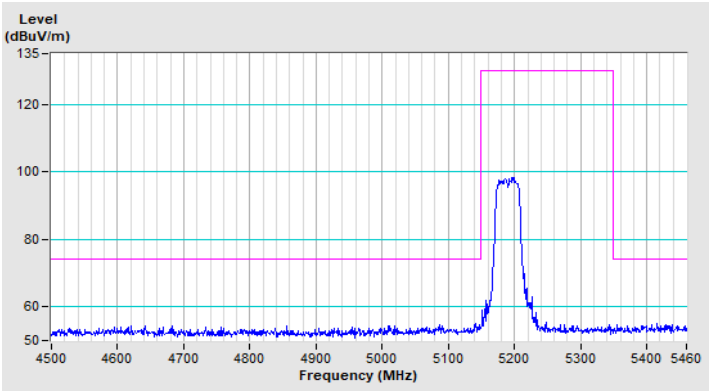
802.11ac (VHT40) Channel 38



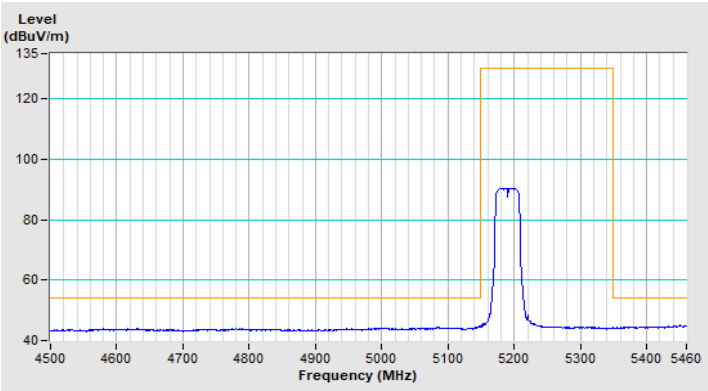
Horizontal (Peak)



Horizontal (Average)

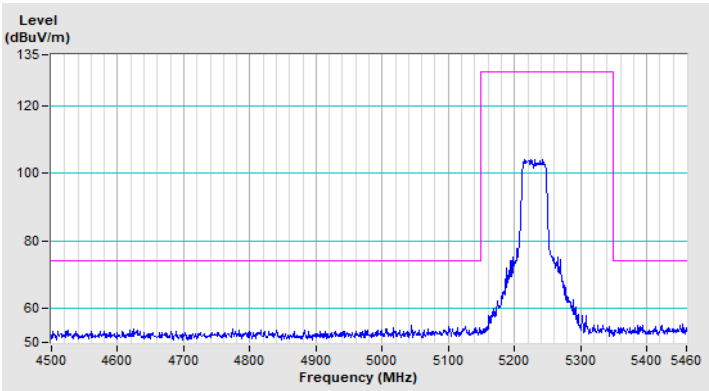


Vertical (Peak)

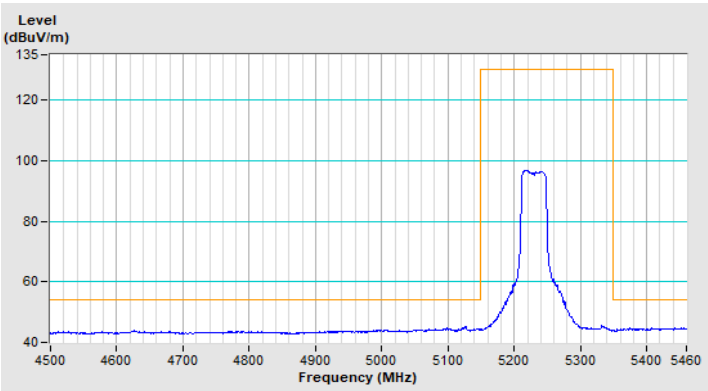


Vertical (Average)

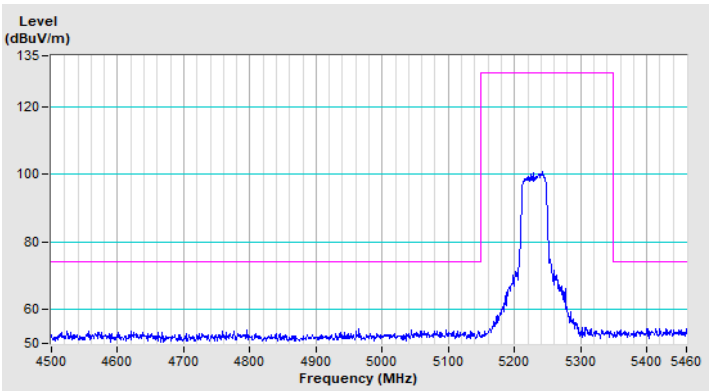
802.11ac (VHT40) Channel 46



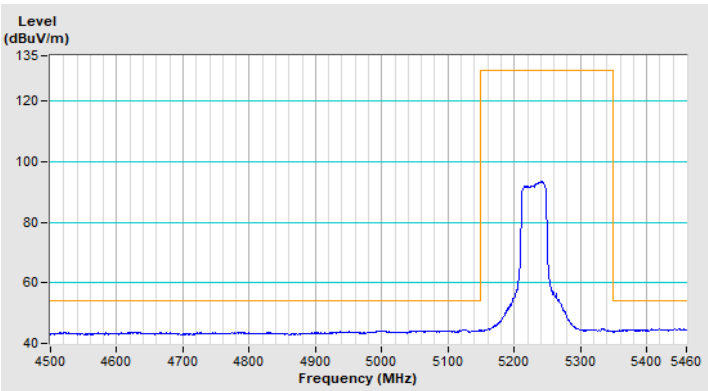
Horizontal (Peak)



Horizontal (Average)

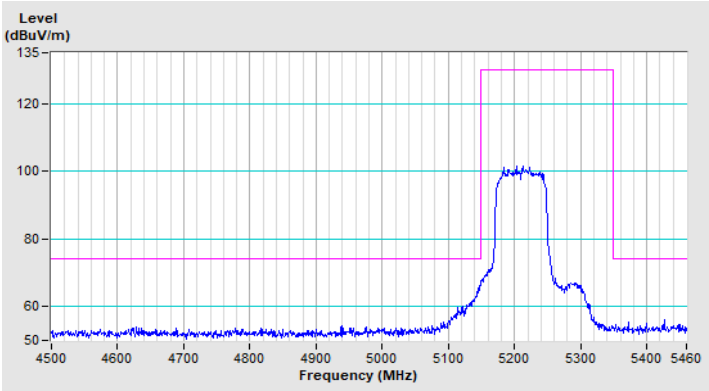


Vertical (Peak)

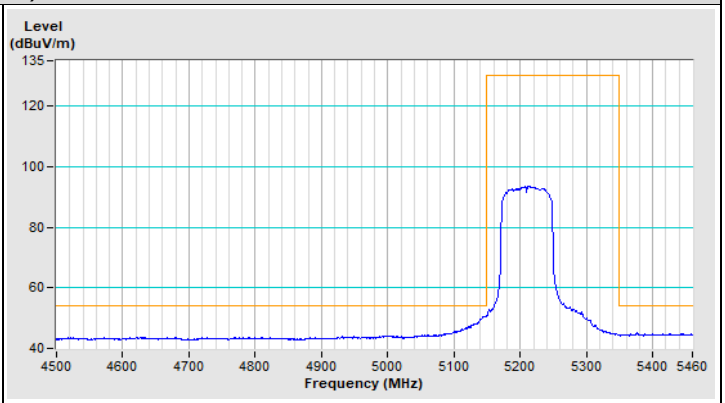


Vertical (Average)

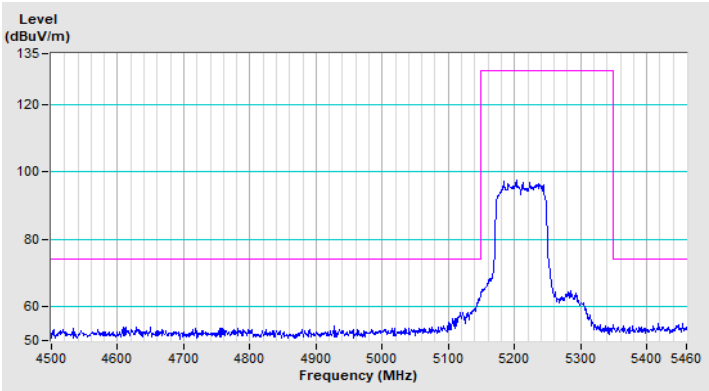
802.11ac (VHT80) Channel 42



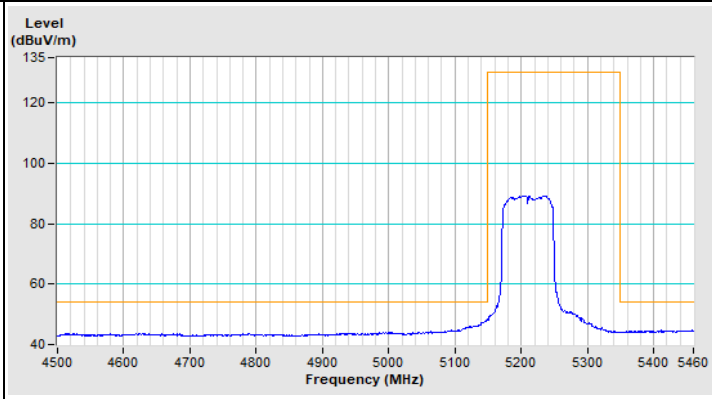
Horizontal (Peak)



Horizontal (Average)

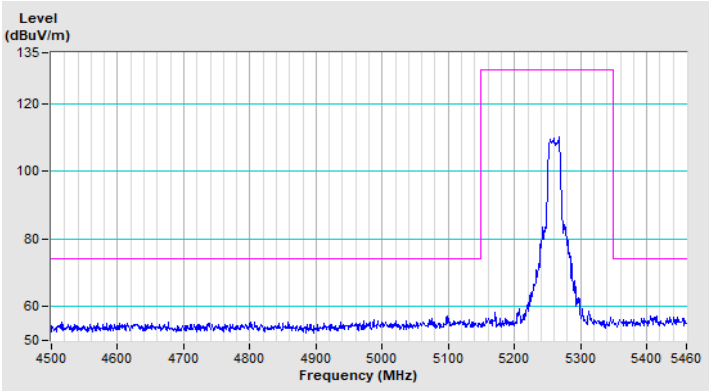


Vertical (Peak)

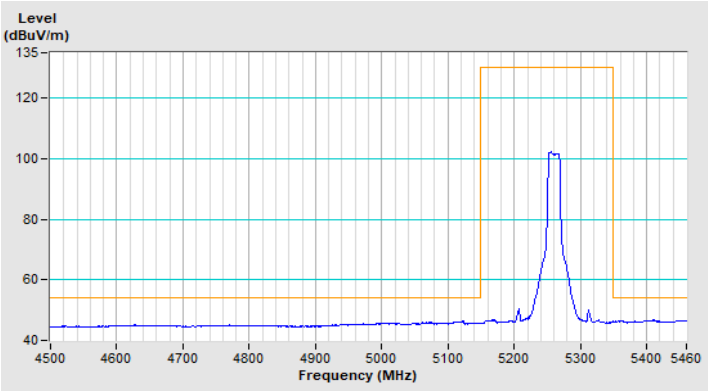


Vertical (Average)

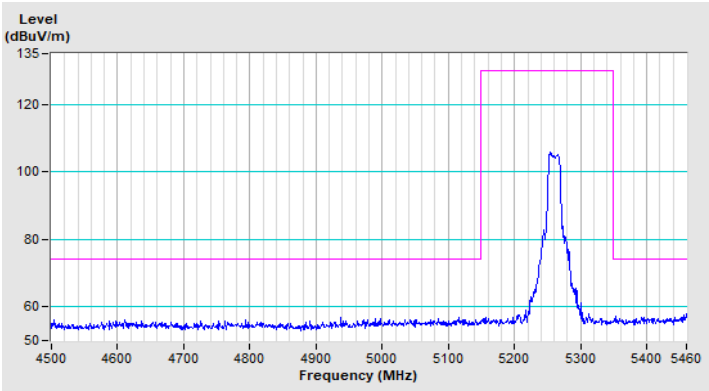
802.11a Channel 52



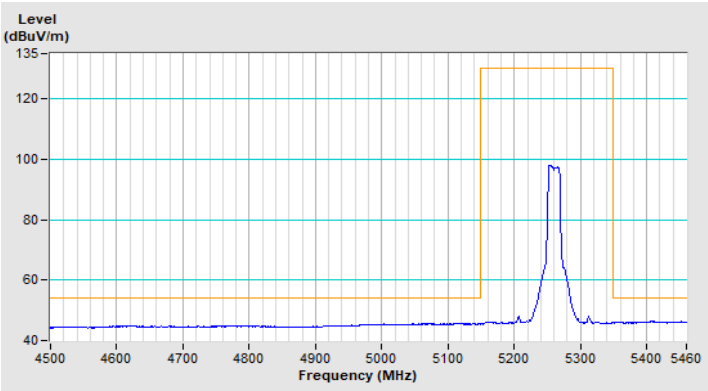
Horizontal (Peak)



Horizontal (Average)

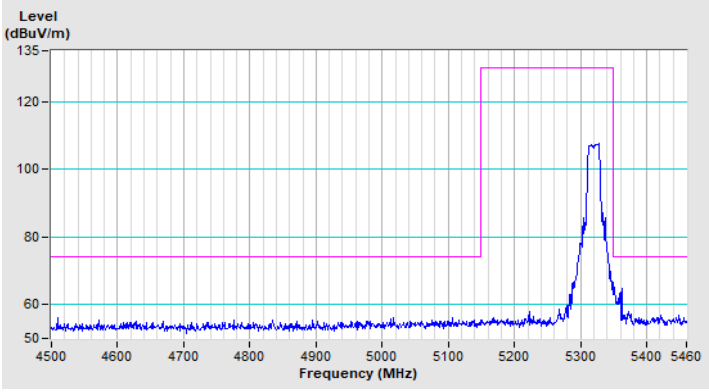


Vertical (Peak)

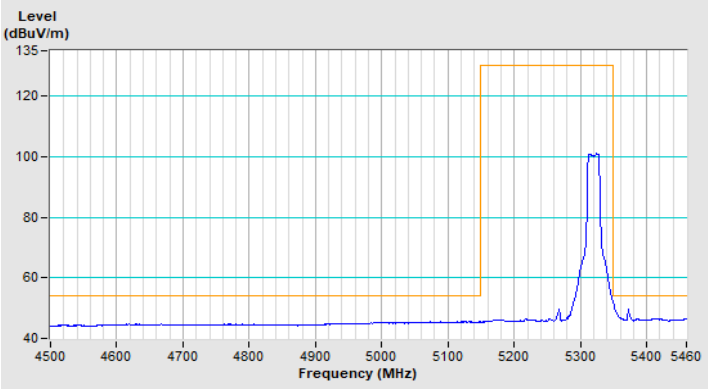


Vertical (Average)

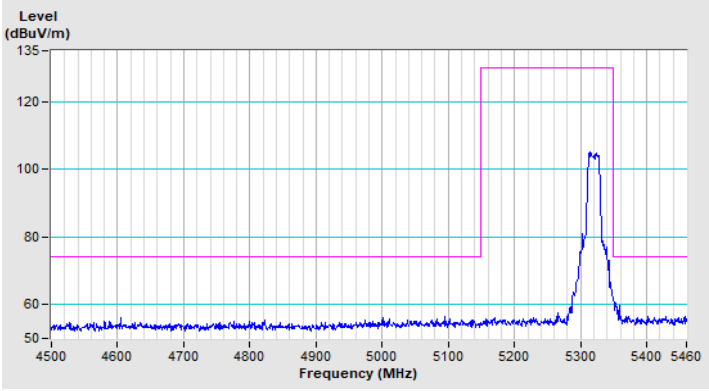
802.11a Channel 64



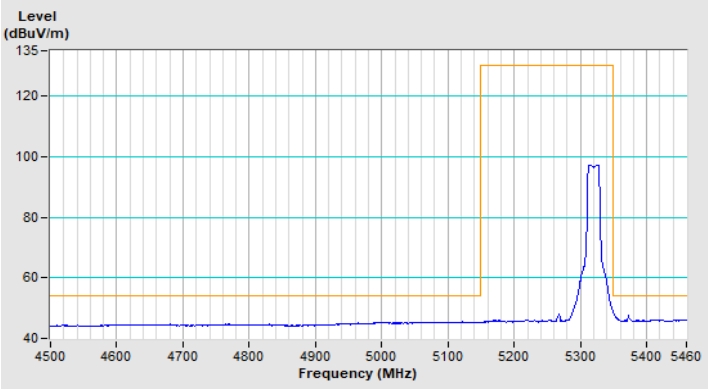
Horizontal (Peak)



Horizontal (Average)

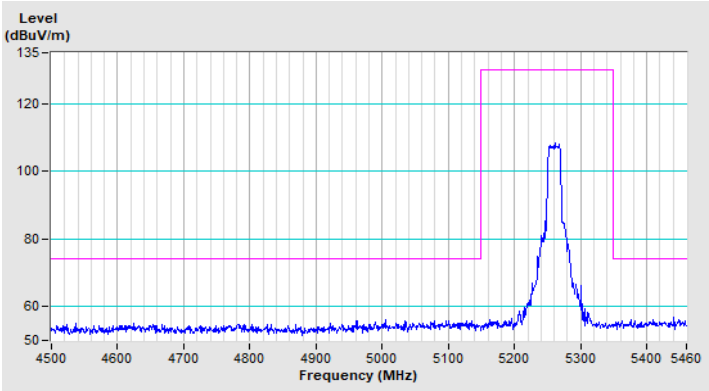


Vertical (Peak)

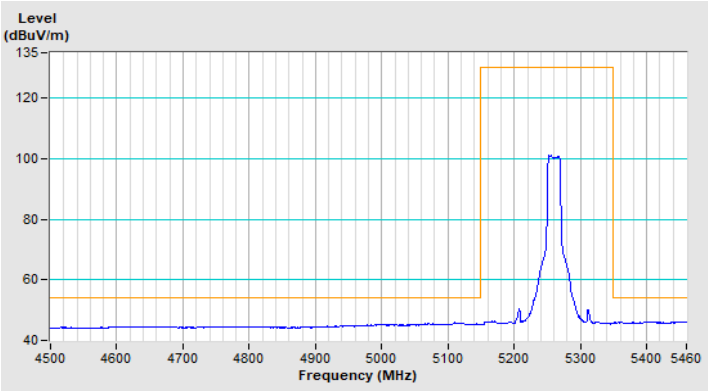


Vertical (Average)

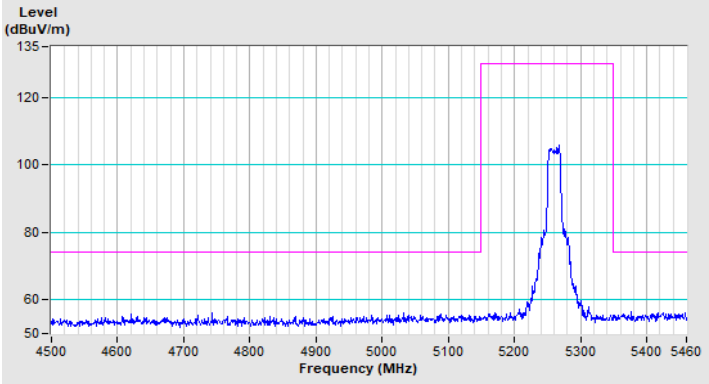
802.11ac (VHT20) Channel 52



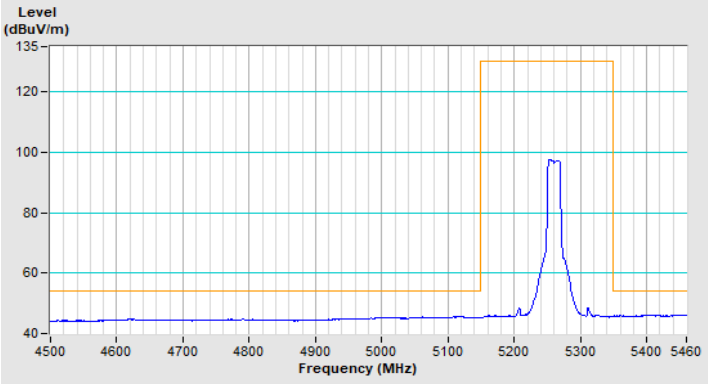
Horizontal (Peak)



Horizontal (Average)

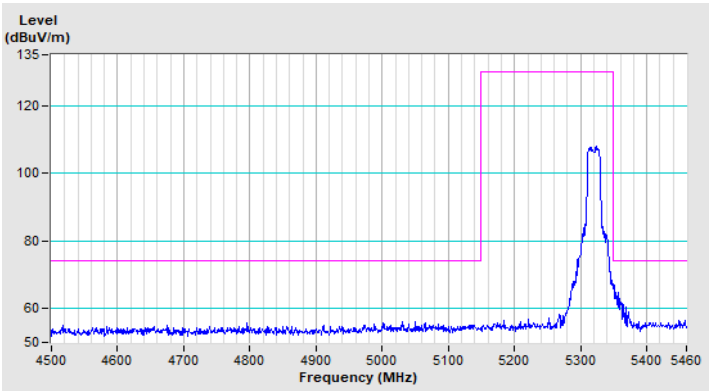


Vertical (Peak)

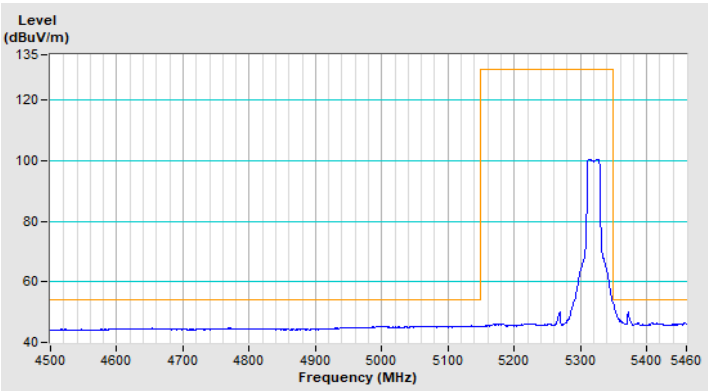


Vertical (Average)

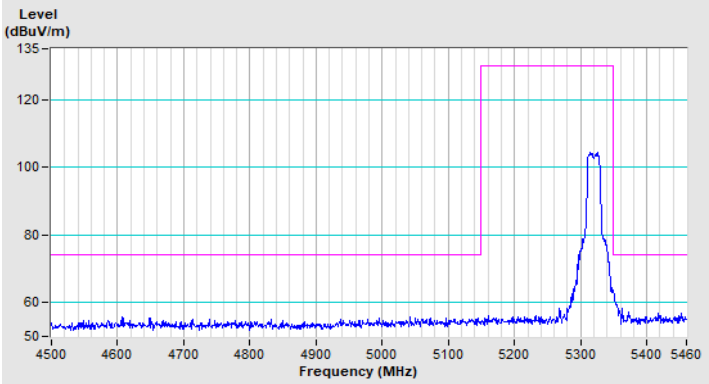
802.11ac (VHT20) Channel 64



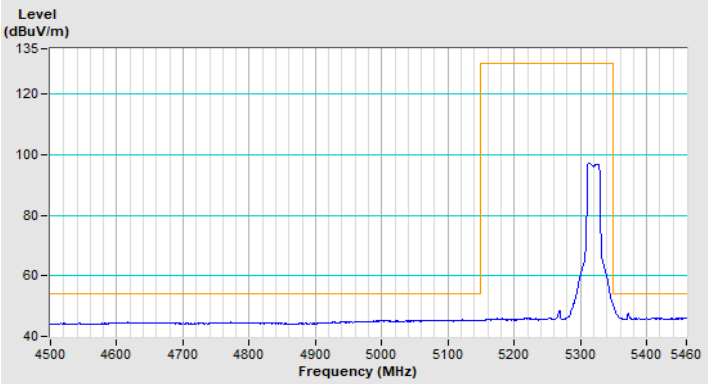
Horizontal (Peak)



Horizontal (Average)

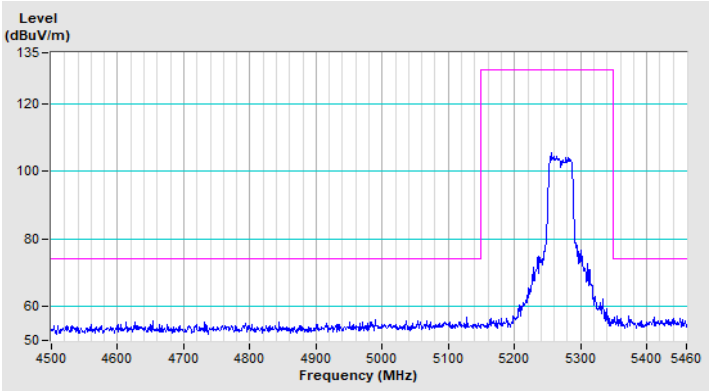


Vertical (Peak)

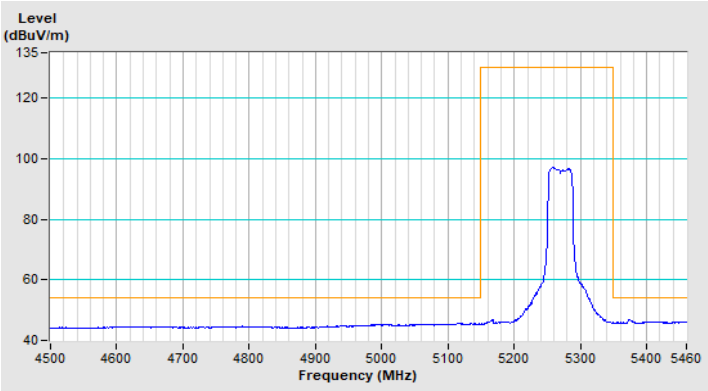


Vertical (Average)

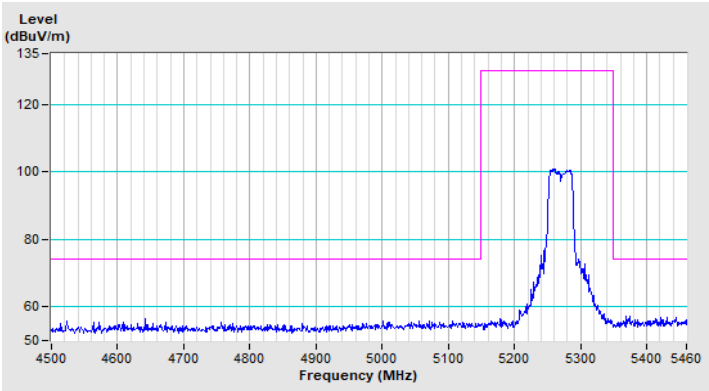
802.11ac (VHT40) Channel 54



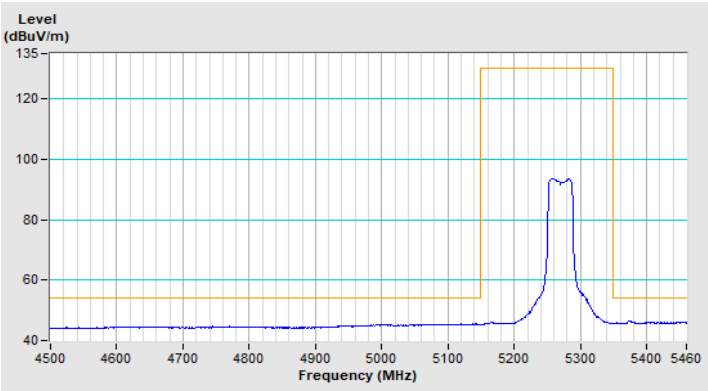
Horizontal (Peak)



Horizontal (Average)

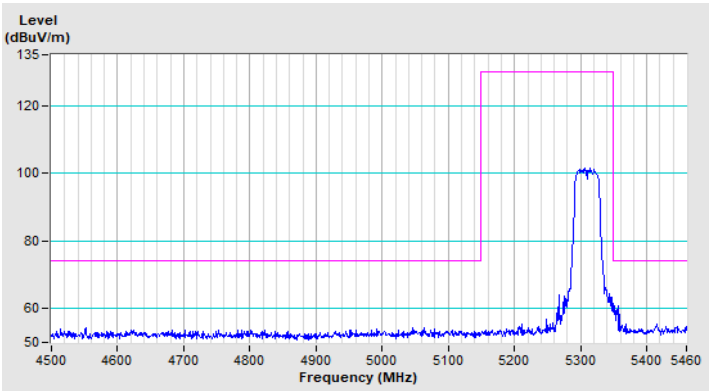


Vertical (Peak)

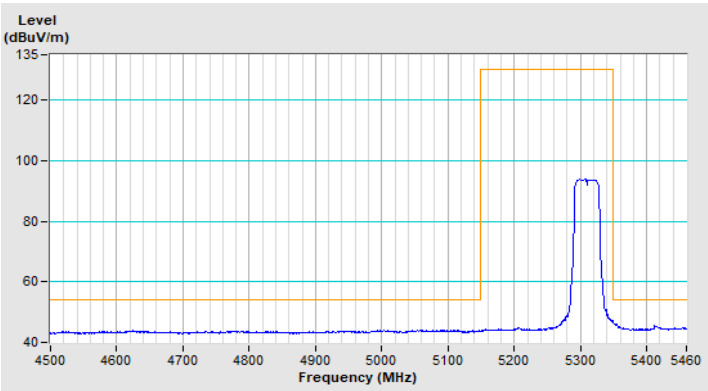


Vertical (Average)

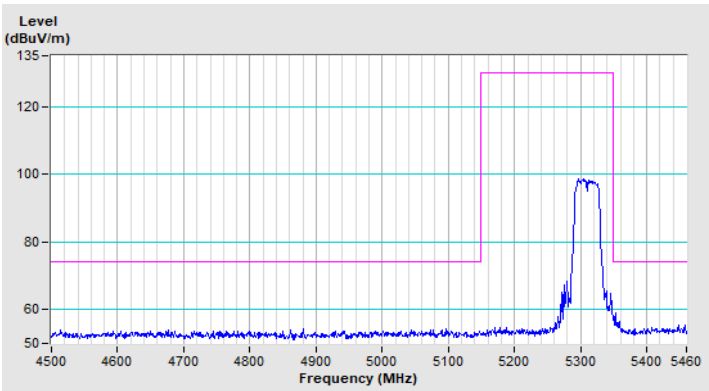
802.11ac (VHT40) Channel 62



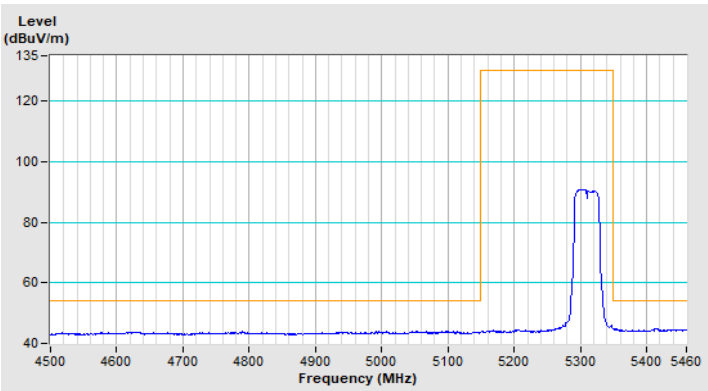
Horizontal (Peak)



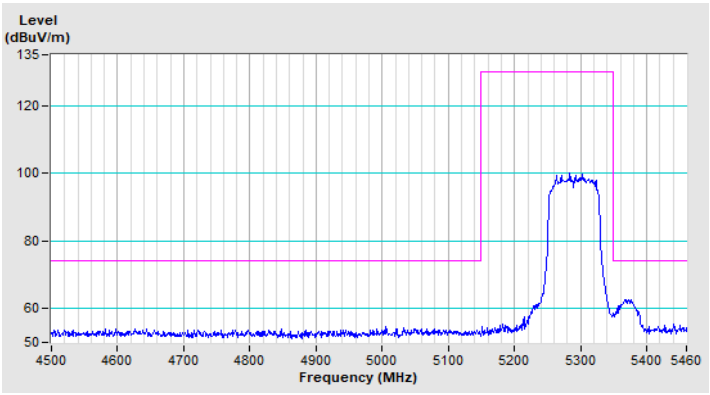
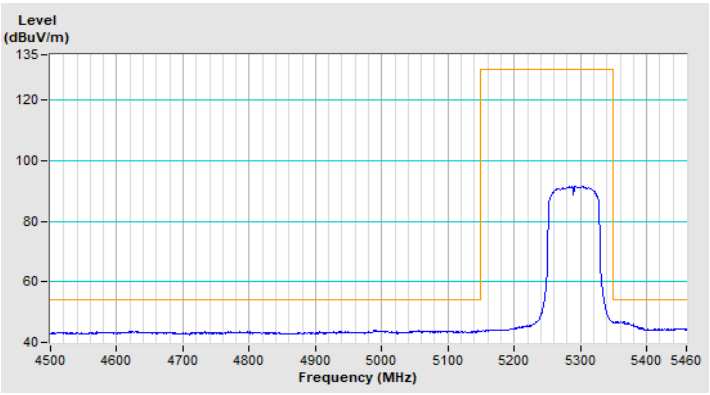
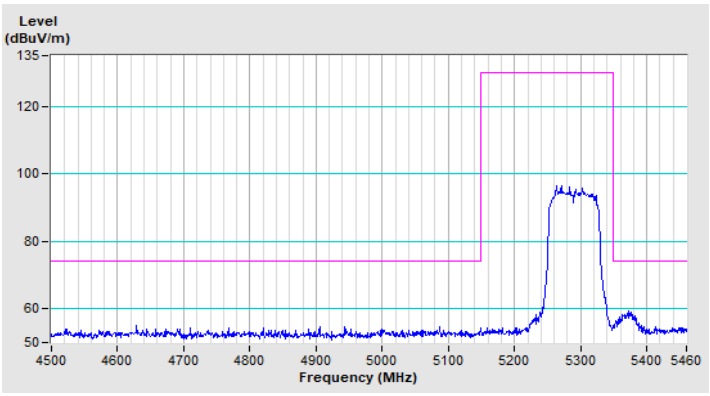
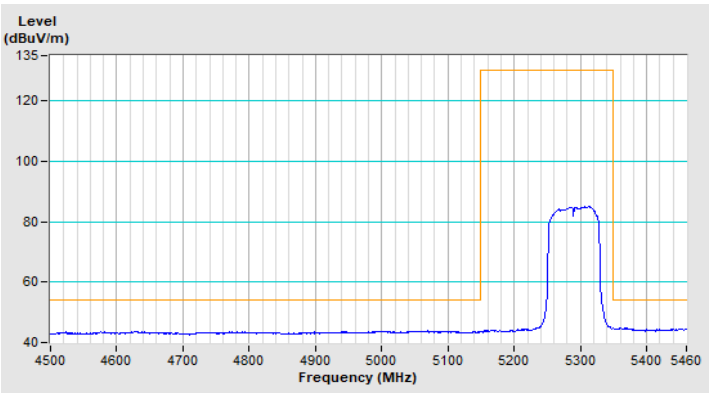
Horizontal (Average)



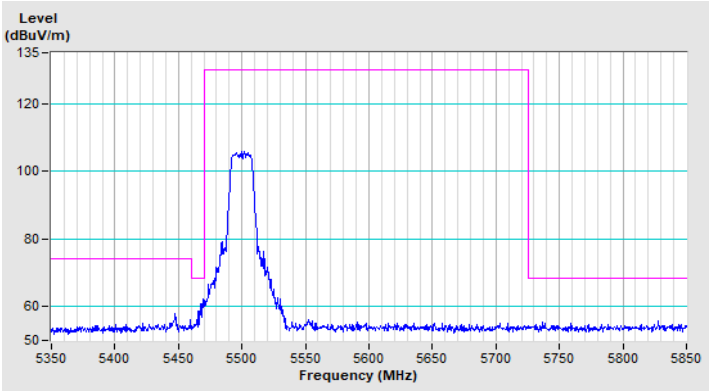
Vertical (Peak)



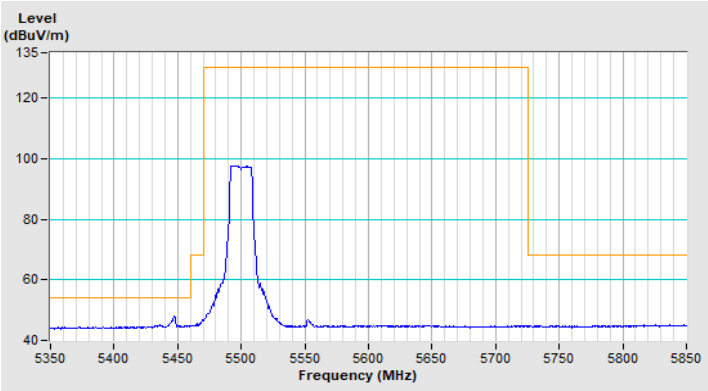
Vertical (Average)

802.11ac (VHT80) Channel 58	
 Horizontal (Peak)	 Horizontal (Average)
 Vertical (Peak)	 Vertical (Average)

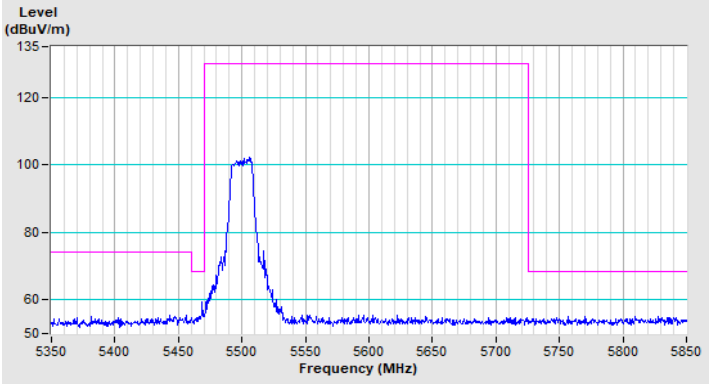
802.11a Channel 100



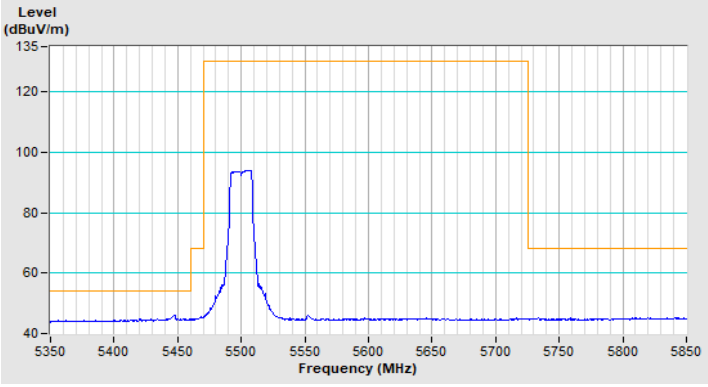
Horizontal (Peak)



Horizontal (Average)

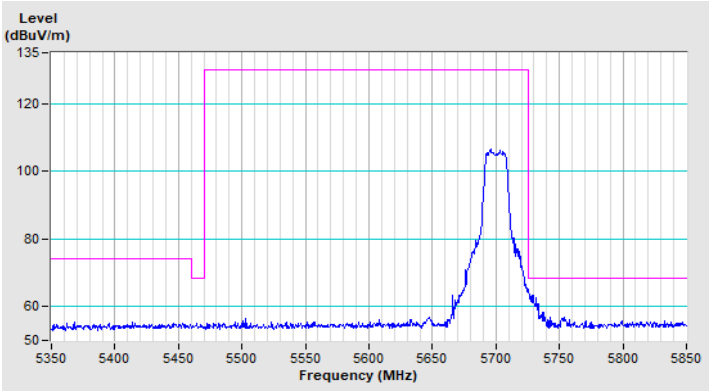


Vertical (Peak)

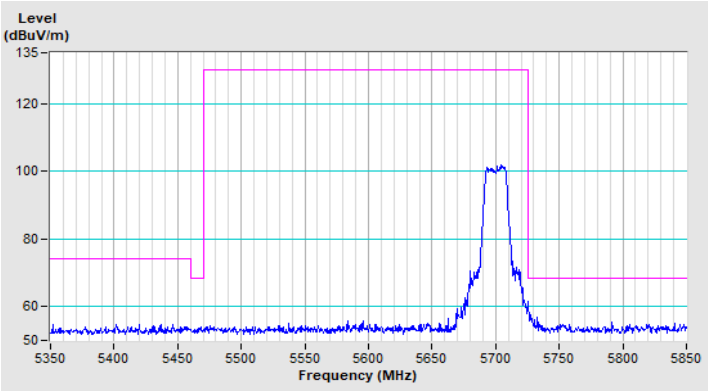


Vertical (Average)

802.11a Channel 140

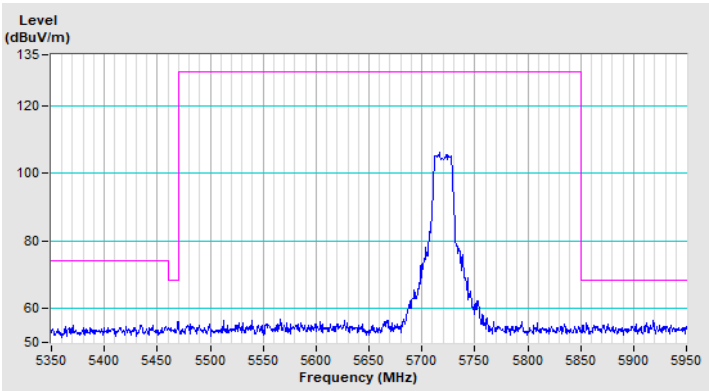


Horizontal (Peak)

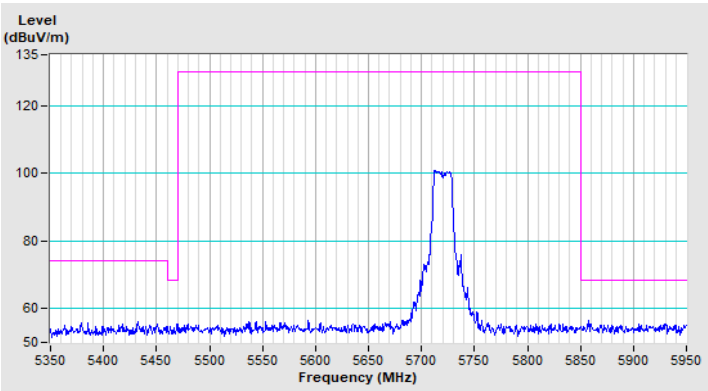


Vertical (Peak)

802.11a Channel 144

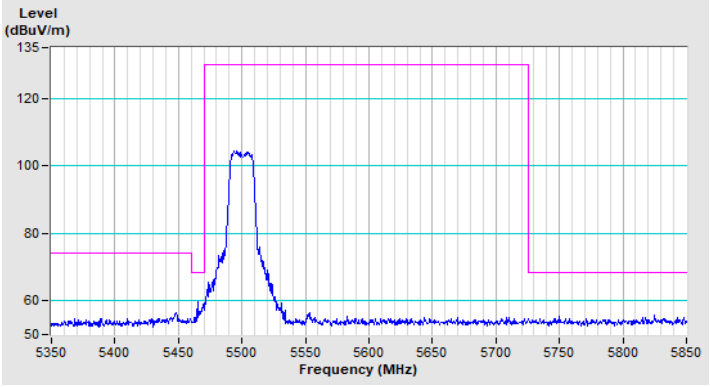


Horizontal (Peak)

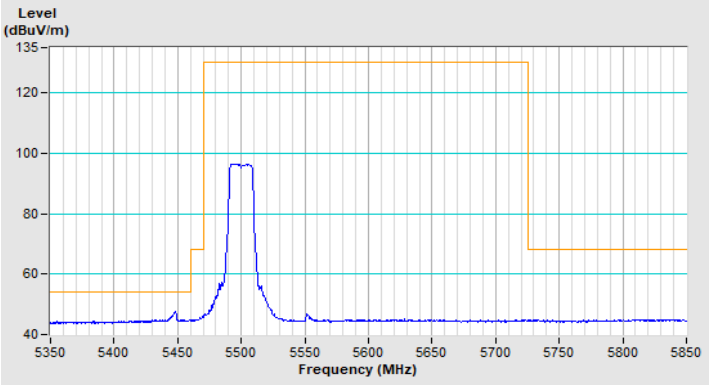


Vertical (Peak)

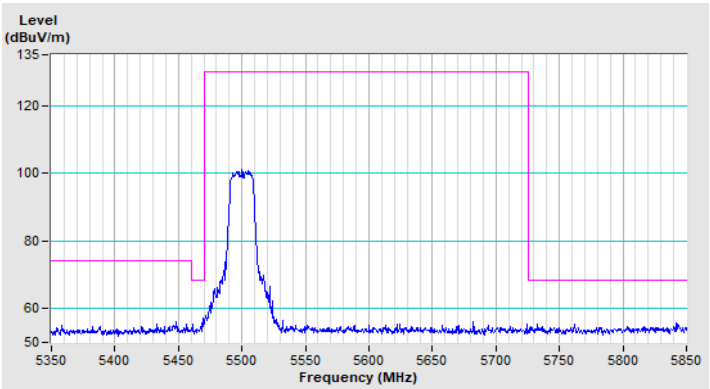
802.11ac (VHT20) Channel 100



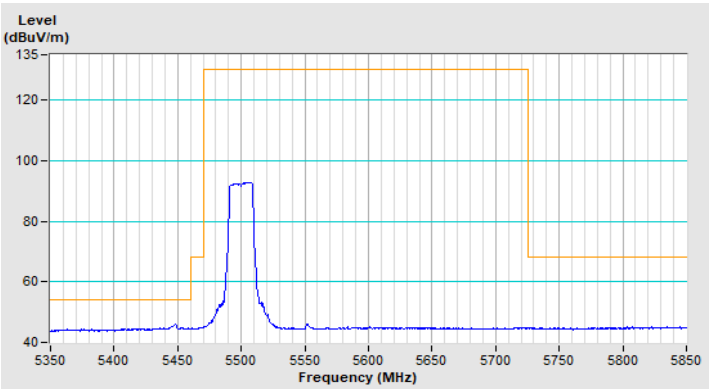
Horizontal (Peak)



Horizontal (Average)

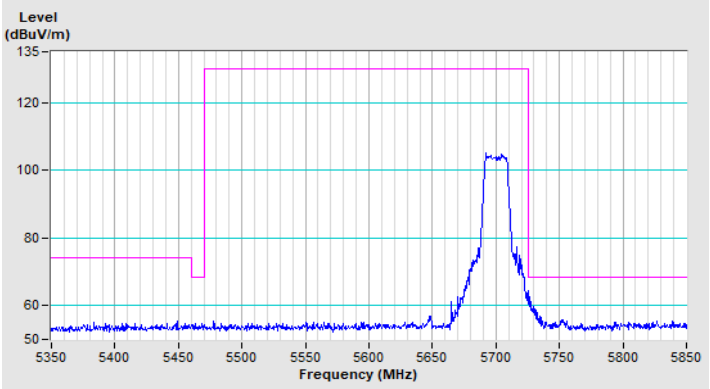


Vertical (Peak)

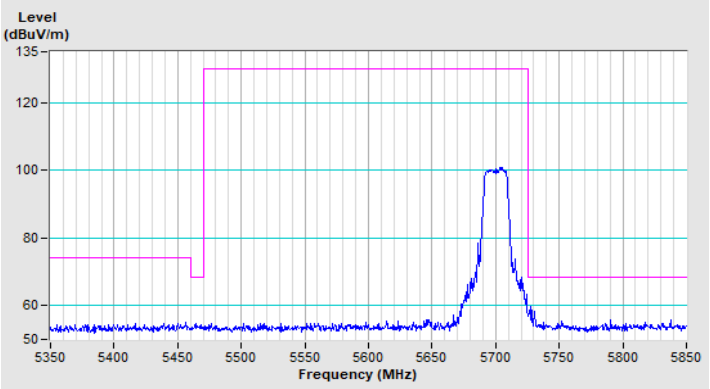


Vertical (Average)

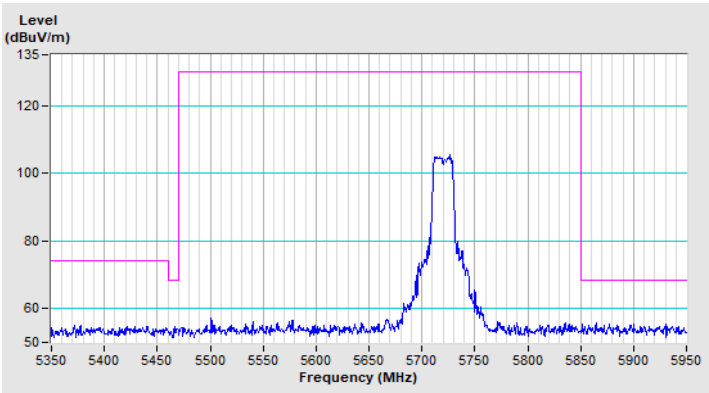
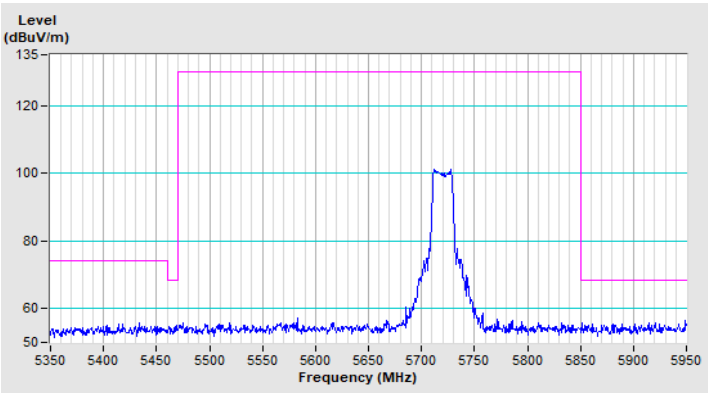
802.11ac (VHT20) Channel 140



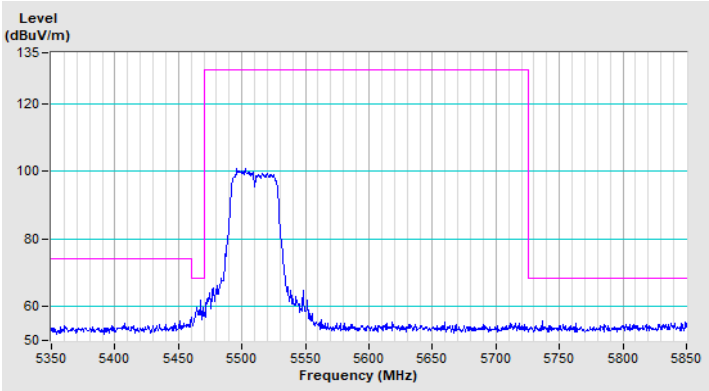
Horizontal (Peak)



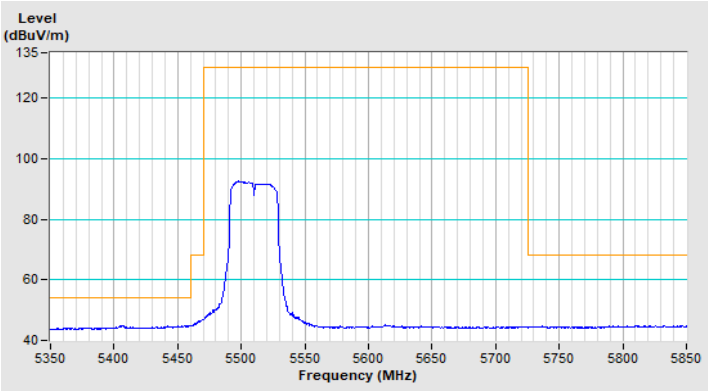
Vertical (Peak)

802.11ac (VHT20) Channel 144	
	
Horizontal (Peak)	Vertical (Peak)

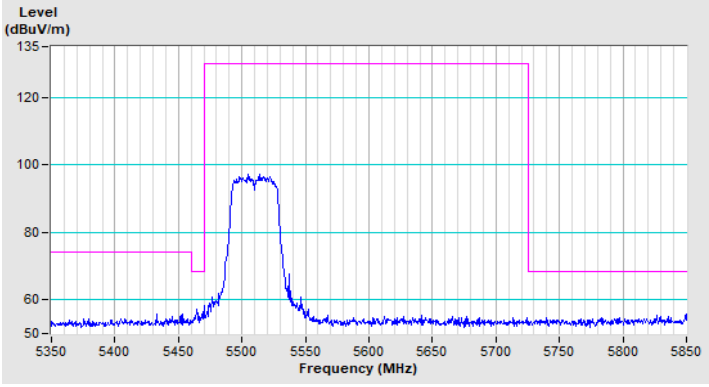
802.11ac (VHT40) Channel 102



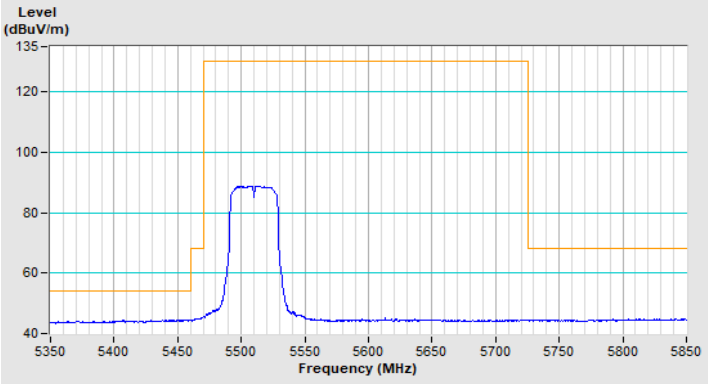
Horizontal (Peak)



Horizontal (Average)

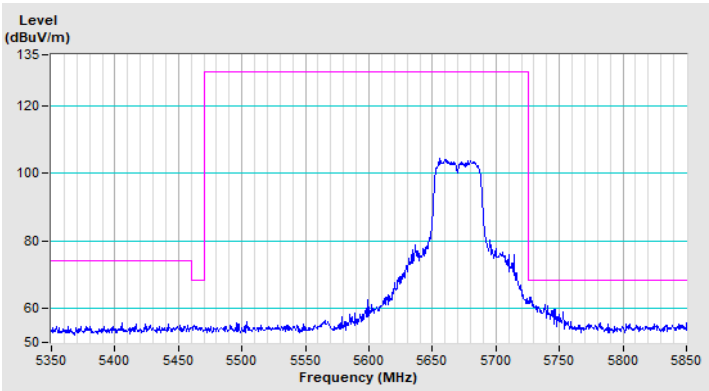


Vertical (Peak)

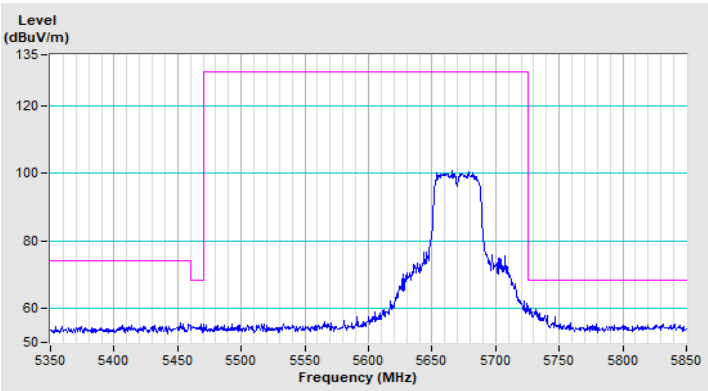


Vertical (Average)

802.11ac (VHT40) Channel 134

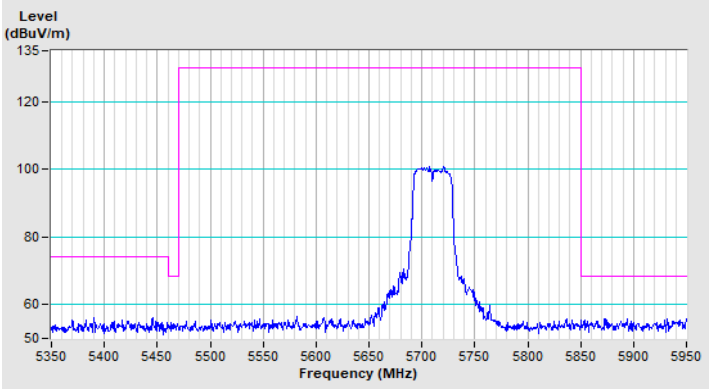


Horizontal (Peak)

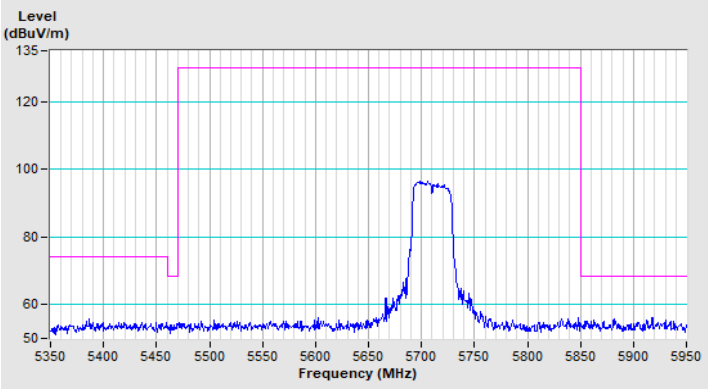


Vertical (Peak)

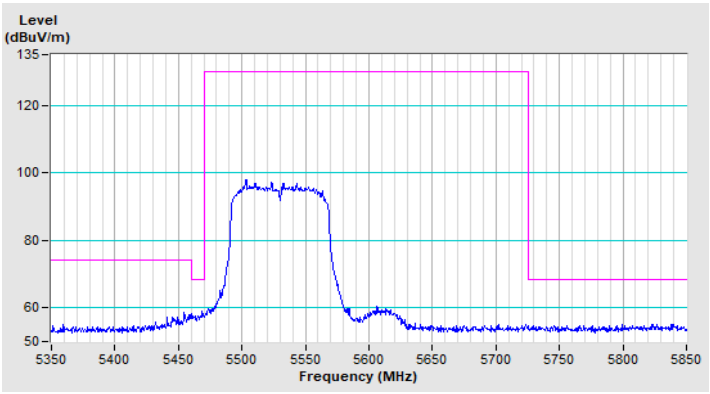
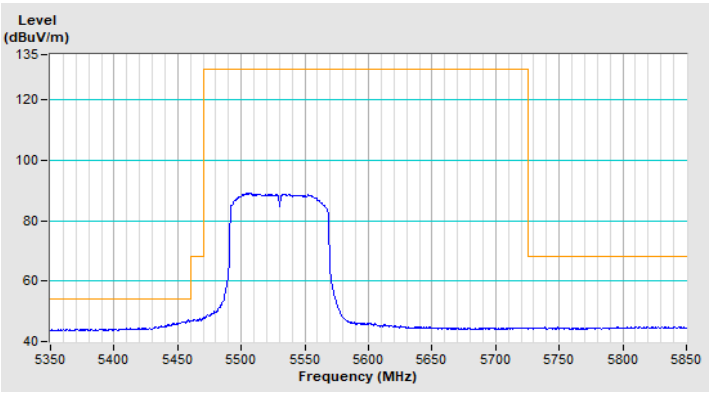
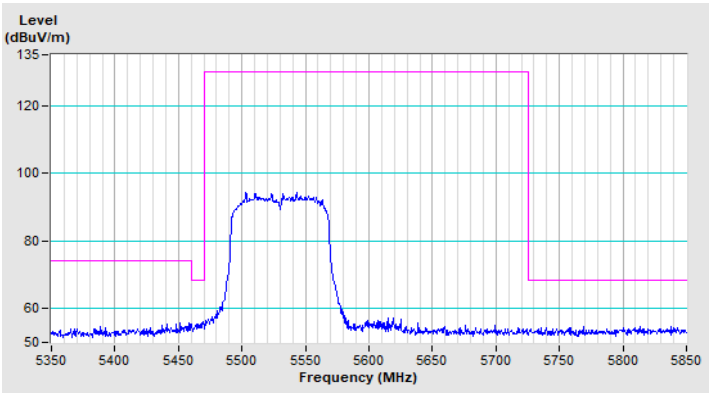
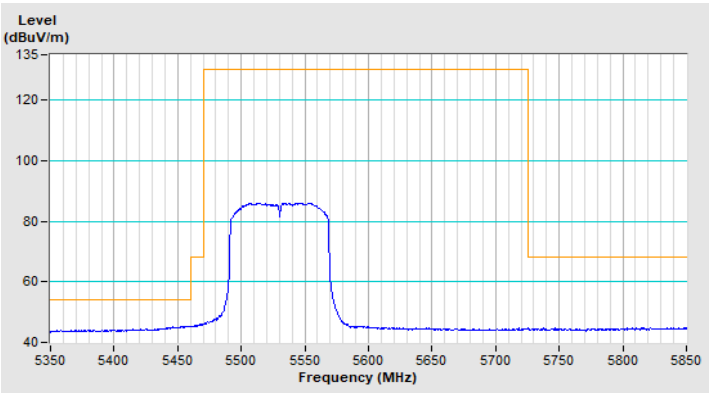
802.11ac (VHT40) Channel 142

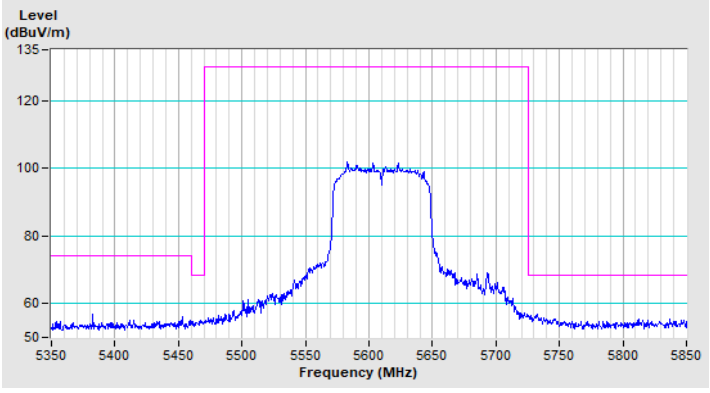
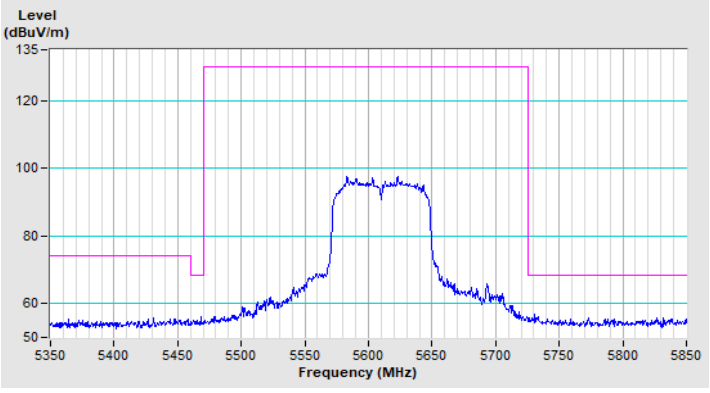


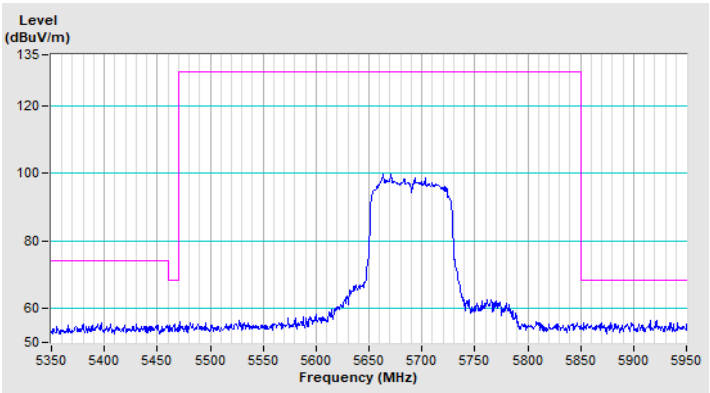
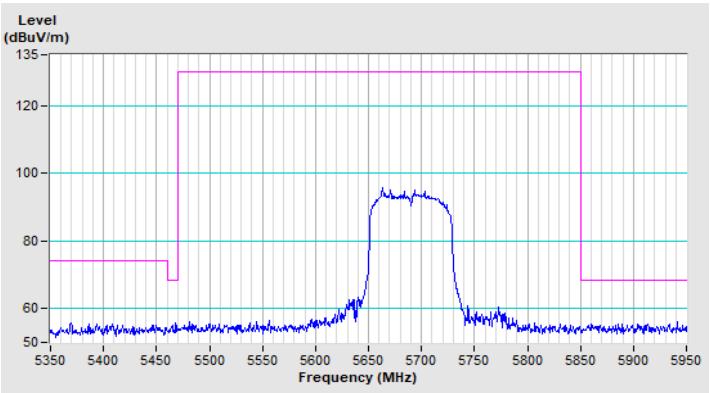
Horizontal (Peak)



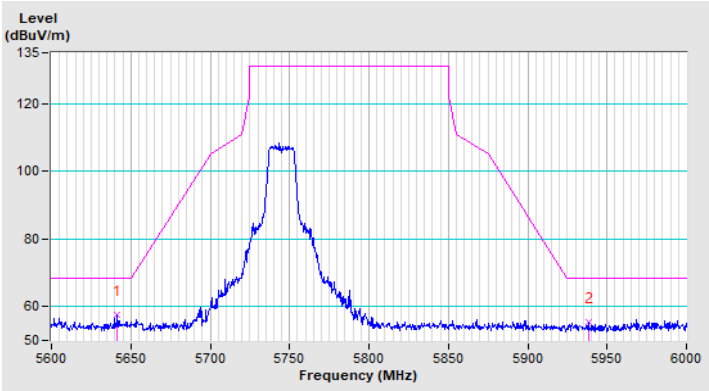
Vertical (Peak)

802.11ac (VHT80) Channel 106	
	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)

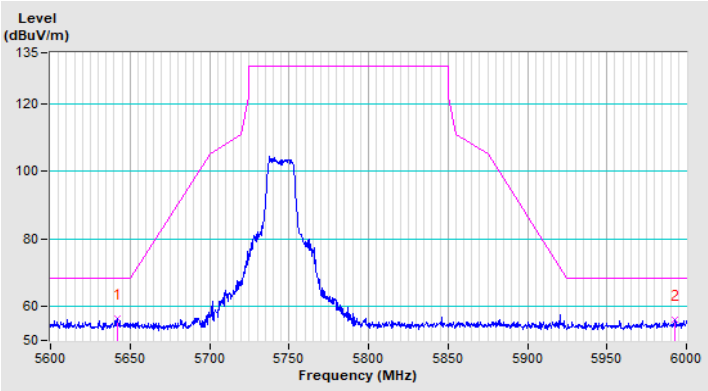
802.11ac (VHT80) Channel 122	
	
Horizontal (Peak)	Vertical (Peak)

802.11ac (VHT80) Channel 138	
	
Horizontal (Peak)	Vertical (Peak)

802.11a Channel 149

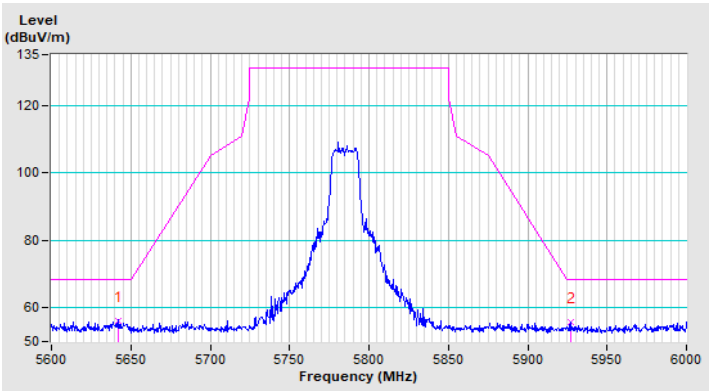


Horizontal (Peak)

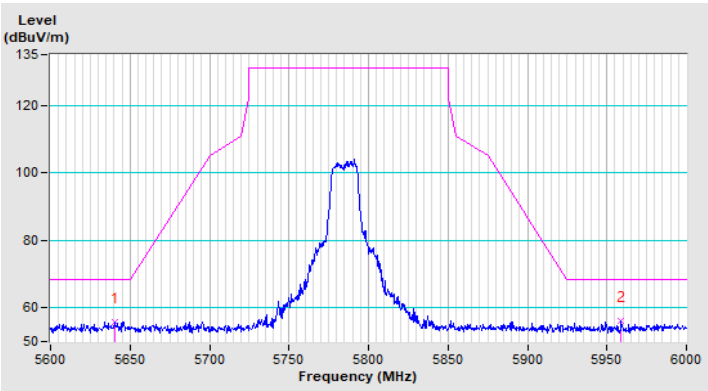


Vertical (Peak)

802.11a Channel 157

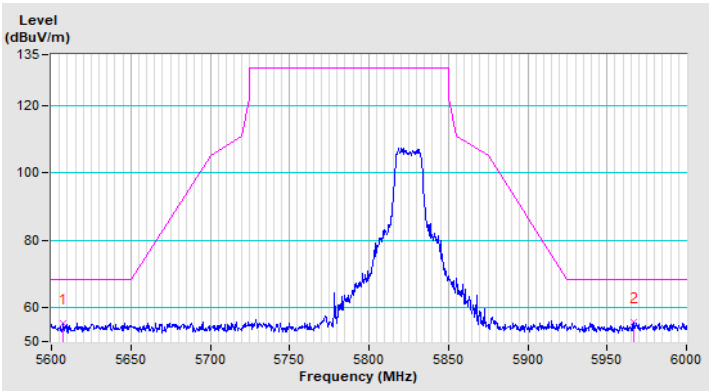


Horizontal (Peak)

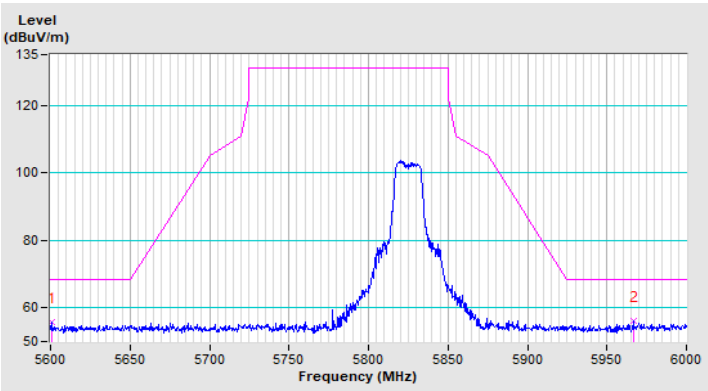


Vertical (Peak)

802.11a Channel 165

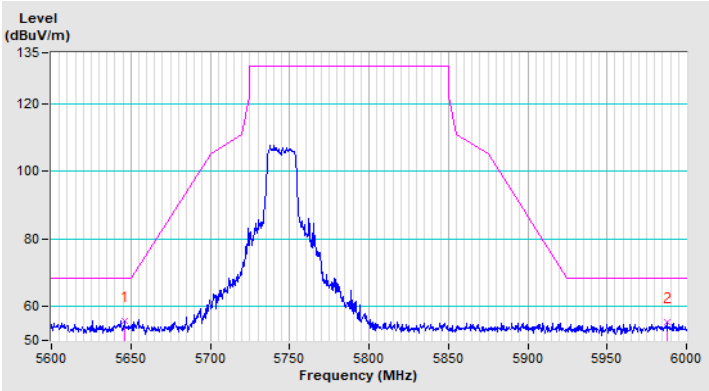


Horizontal (Peak)

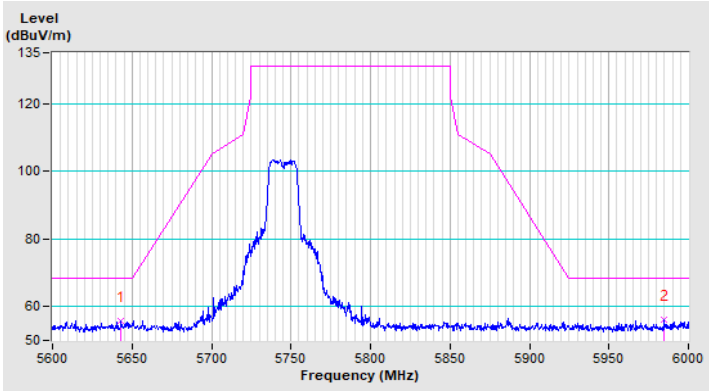


Vertical (Peak)

802.11ac (VHT20) Channel 149

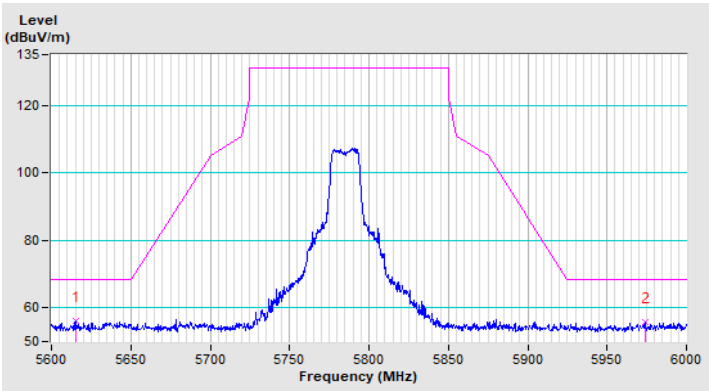


Horizontal (Peak)

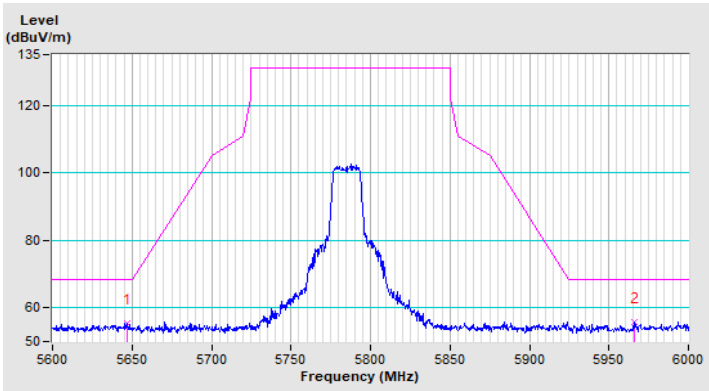


Vertical (Peak)

802.11ac (VHT20) Channel 157

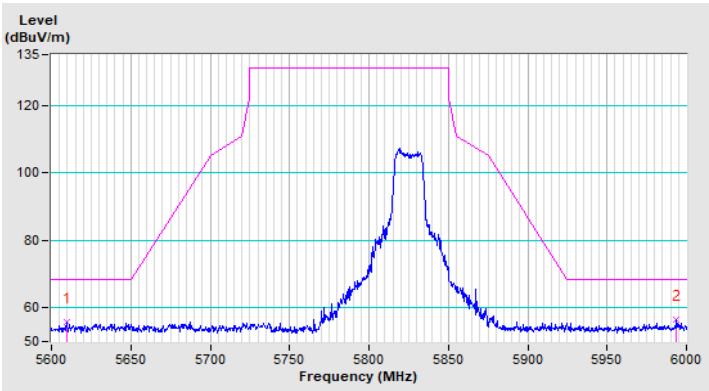


Horizontal (Peak)

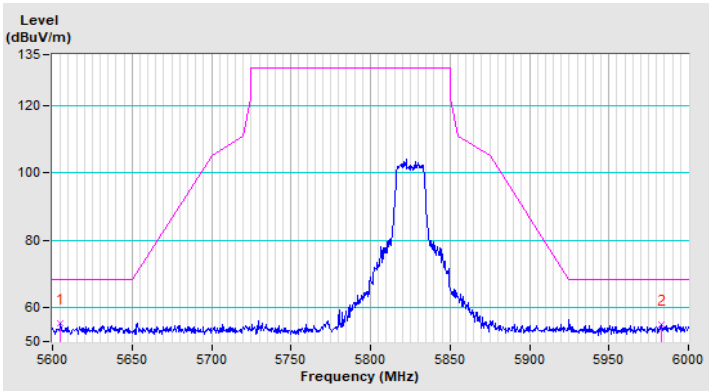


Vertical (Peak)

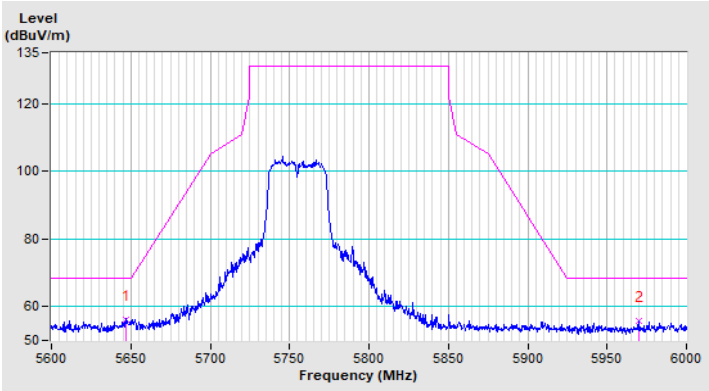
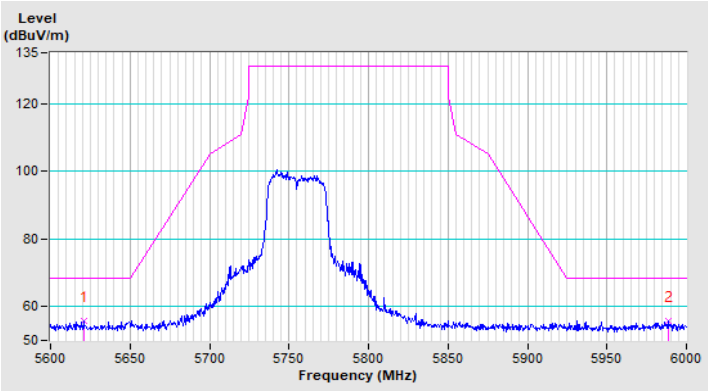
802.11ac (VHT20) Channel 165

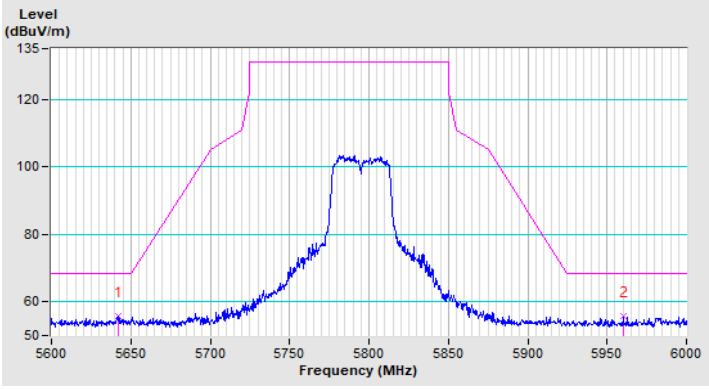
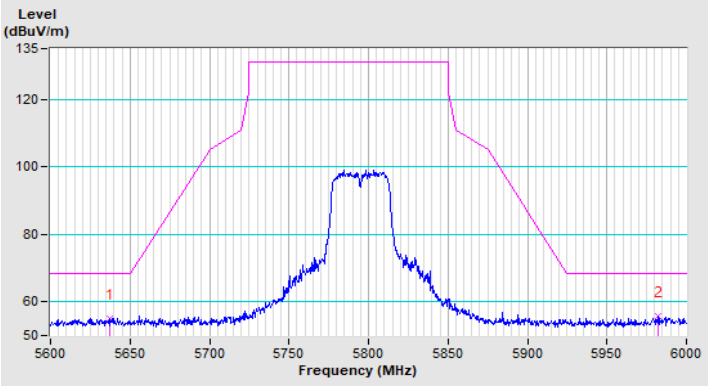


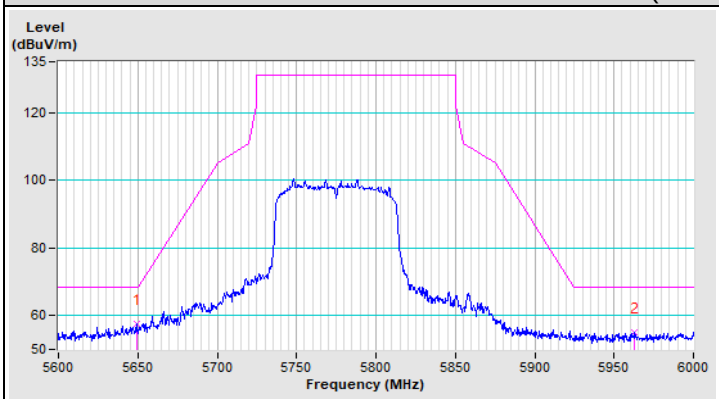
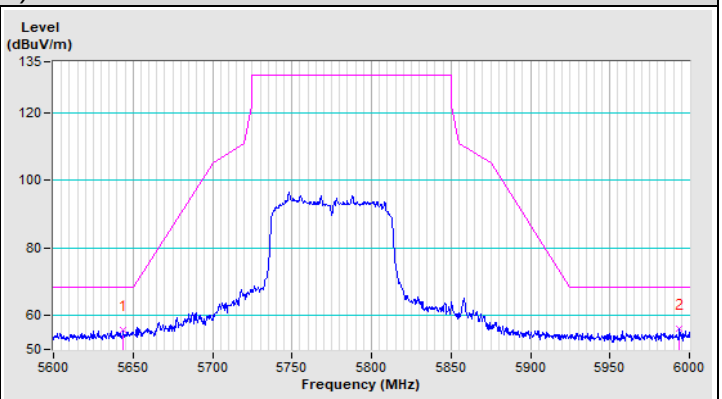
Horizontal (Peak)



Vertical (Peak)

802.11ac (VHT40) Channel 151	
	
Horizontal (Peak)	Vertical (Peak)

802.11ac (VHT40) Channel 159	
	
Horizontal (Peak)	Vertical (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:

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

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