

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBEDV-WTW-P24080720-1
FCC ID: VUI-F2660C
Product: Nura4K
Brand: PEGATRON
Model No.: MC1521-Q60
Received Date: 2023/4/27
Test Date: 2023/5/13 ~ 2023/6/13
Issued Date: 2024/10/1
Applicant: PEGATRON CORPORATION
Address: 5F, NO. 76, LIGONG ST., BEITOU DISTRICT, TAIPEI CITY 113, TAIWAN
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
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FCC Registration / 788550 / TW0003
Designation Number:

Approved by: _____

Jeremy Lin

Jeremy Lin / Project Engineer

, Date: _____

2024/10/1

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Prepared by : Polly Chien / Specialist



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Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Antenna Description of EUT	8
3.3 Channel List.....	9
3.4 Test Mode Applicability and Tested Channel Detail.....	11
3.5 Duty Cycle of Test Signal.....	13
3.6 Test Program Used and Operation Descriptions	15
3.7 Connection Diagram of EUT and Peripheral Devices	15
3.8 Configuration of Peripheral Devices and Cable Connections	15
4 Test Instruments	16
4.1 26 dB Bandwidth	16
4.2 RF Output Power.....	16
4.3 Power Spectral Density	16
4.4 6 dB Bandwidth	16
4.5 Occupied Bandwidth.....	16
4.6 Frequency Stability	17
4.7 AC Power Conducted Emissions	17
4.8 Unwanted Emissions below 1 GHz	18
4.9 Unwanted Emissions above 1 GHz.....	19
5 Limits of Test Items.....	20
5.1 26 dB Bandwidth	20
5.2 RF Output Power.....	20
5.3 Power Spectral Density	20
5.4 6 dB Bandwidth	20
5.5 Occupied Bandwidth.....	20
5.6 Frequency Stability	20
5.7 AC Power Conducted Emissions	21
5.8 Unwanted Emissions below 1 GHz	21
5.9 Unwanted Emissions above 1 GHz.....	22
6 Test Arrangements.....	24
6.1 26 dB Bandwidth	24
6.1.1 Test Setup	24
6.1.2 Test Procedure	24
6.2 RF Output Power.....	24
6.2.1 Test Setup	24
6.2.2 Test Procedure	24
6.3 Power Spectral Density	25
6.3.1 Test Setup	25
6.3.2 Test Procedure	25
6.4 6 dB Bandwidth	25
6.4.1 Test Setup	25
6.4.2 Test Procedure	25
6.5 Occupied Bandwidth.....	26
6.5.1 Test Setup	26
6.5.2 Test Procedure	26
6.6 Frequency Stability	26
6.6.1 Test Setup	26
6.6.2 Test Procedure	26
6.7 AC Power Conducted Emissions	27

6.7.1	Test Setup	27
6.7.2	Test Procedure	27
6.8	Unwanted Emissions below 1 GHz	28
6.8.1	Test Setup	28
6.8.2	Test Procedure	29
6.9	Unwanted Emissions above 1 GHz	30
6.9.1	Test Setup	30
6.9.2	Test Procedure	30
7	Test Results of Test Item	31
7.1	26 dB Bandwidth	31
7.2	RF Output Power	37
7.3	Power Spectral Density	44
7.4	6 dB Bandwidth	48
7.5	Occupied Bandwidth	50
7.6	Frequency Stability	55
7.7	AC Power Conducted Emissions	56
7.8	Unwanted Emissions below 1 GHz	58
7.9	Unwanted Emissions above 1 GHz	60
8	Pictures of Test Arrangements	124
9	Information of the Testing Laboratories	125

Release Control Record

Issue No.	Description	Date Issued
RFBEDV-WTW-P24080720-1	Original release.	2024/10/1

1 Certificate

Product: Nura4K

Brand: PEGATRON

Test Model: MC1521-Q60

Sample Status: Engineering sample

Applicant: PEGATRON CORPORATION

Test Date: 2023/5/13 ~ 2023/6/13

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

Measurement ANSI C63.10-2013

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

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -14.82 dB at 0.50932 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -10.0 dB at 33.88 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.0 dB at 5150.00, 5350.00, 5460.00 and 5725.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Notes:

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Occupied Bandwidth	-	491.896 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.79 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	33.951 Hz
	30 MHz ~ 1 GHz	2.95 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 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	Nura4K
Brand	PEGATRON
Test Model	MC1521-Q60
Status of EUT	Engineering sample
Power Supply Rating	5 Vdc or 9 Vdc or 12 Vdc or 15 Vdc (from adapter)
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	OFDM
Transfer Rate	Up to 433.3 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.50 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	5.18 GHz ~ 5.32 GHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 8 802.11n (HT40), 802.11ac (VHT40): 4 802.11ac (VHT80): 2 5.50 GHz ~ 5.72 GHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 12 802.11n (HT40), 802.11ac (VHT40): 6 802.11ac (VHT80): 3 5.745 GHz ~ 5.825 GHz: 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 : 68.391 mW (18.35 dBm) 5.26 GHz ~ 5.32 GHz : 72.611 mW (18.61 dBm) 5.50 GHz ~ 5.72 GHz : 67.143 mW (18.27 dBm) 5.745 GHz ~ 5.825 GHz : 67.608 mW (18.3 dBm)
EUT Category	Client device
Contains FCC ID	VUI-F2892C

Note:

1. The EUT uses following accessories.

AC Adapter		
Brand	Model	Specification
DELTA	ADH-36DW B	AC Input: 100-240 V, 0.8 A, 50-60 Hz DC Output: 5.0 Vdc, 3.0A / 9.0Vdc, 3.0A / 12.0Vdc, 3.0A /15Vdc, 2.4A, 36.0W DC Output Cable: USB Type C 1.8m

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Ant. Type	Connector	Frequency range	Gain (dBi)
Dipole	ipex(MHF)	2.4~2.4835GHz	3.53
		5.15~5.25GHz	0.95
		5.25~5.35GHz	2.29
		5.47~5.725GHz	3.03
		5.745 GHz ~ 5.825 GHz	2.37

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

2. The EUT incorporates a SISO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11n (HT40)	1TX	1RX
802.11ac (VHT20)	1TX	1RX
802.11ac (VHT40)	1TX	1RX
802.11ac (VHT80)	1TX	1RX

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

3.3 Channel List

FOR 5180 ~ 5320 MHz

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

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

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

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

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

FOR 5500 ~ 5720 MHz

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

FOR 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. 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	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	A	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	A	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
Power Spectral Density	A	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
		802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
		802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
		802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
6 dB Bandwidth	A	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	A	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	A	802.11a	36	unmodulated	-
AC Power Conducted Emissions	B	802.11a	60	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	B	802.11a	60	BPSK	6Mb/s

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
Unwanted Emissions above 1 GHz	B	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
EUT Configure Mode:	A	Conducted			
	B	Radiated			

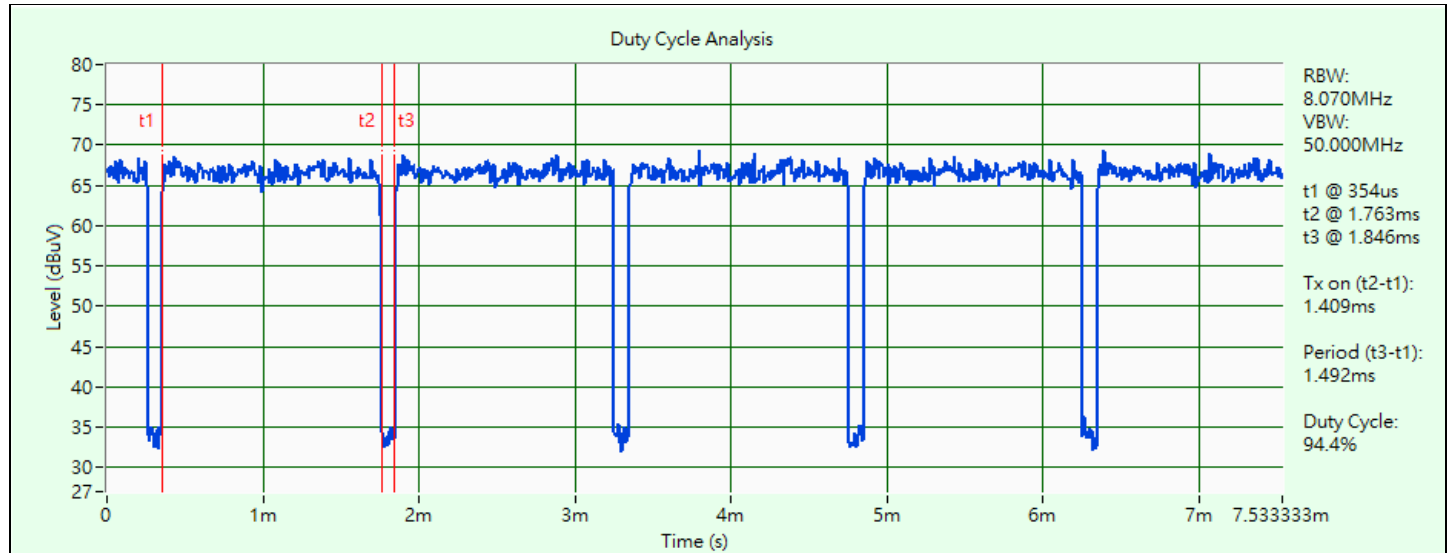
3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 1.409 ms / 1.492 ms x 100% = 94.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.25 \text{ dB}$

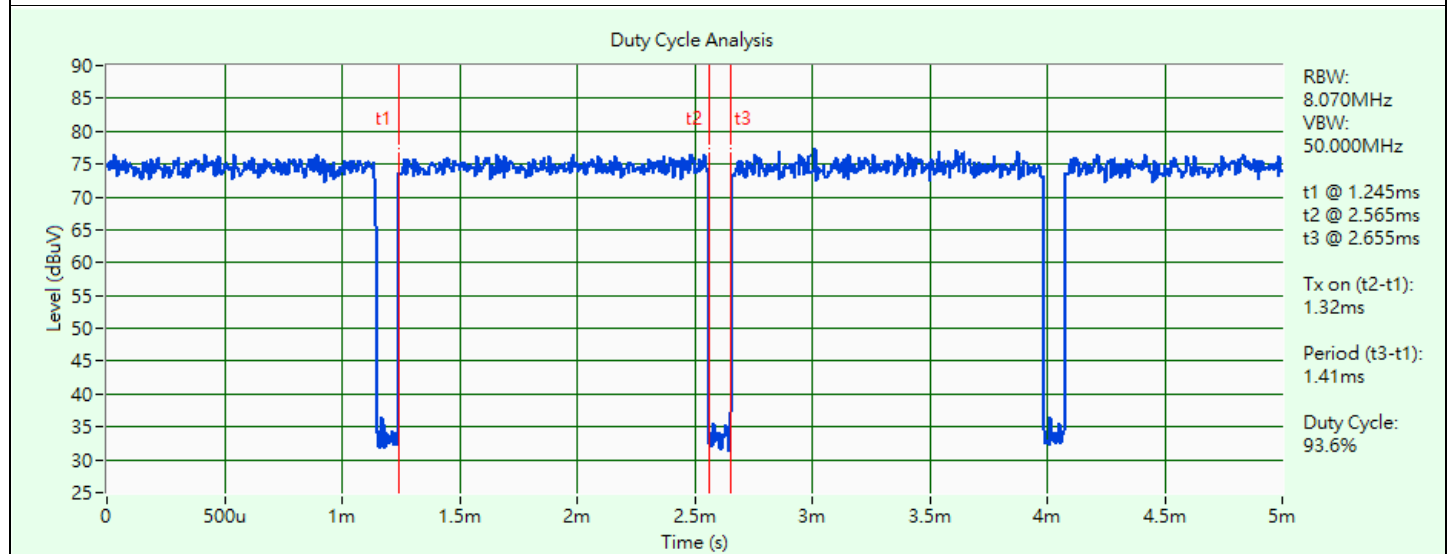
802.11ac (VHT20): Duty cycle = 1.32 ms / 1.41 ms x 100% = 93.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.29 \text{ dB}$

802.11ac (VHT40): Duty cycle = 0.66 ms / 0.756 ms x 100% = 87.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.59 \text{ dB}$

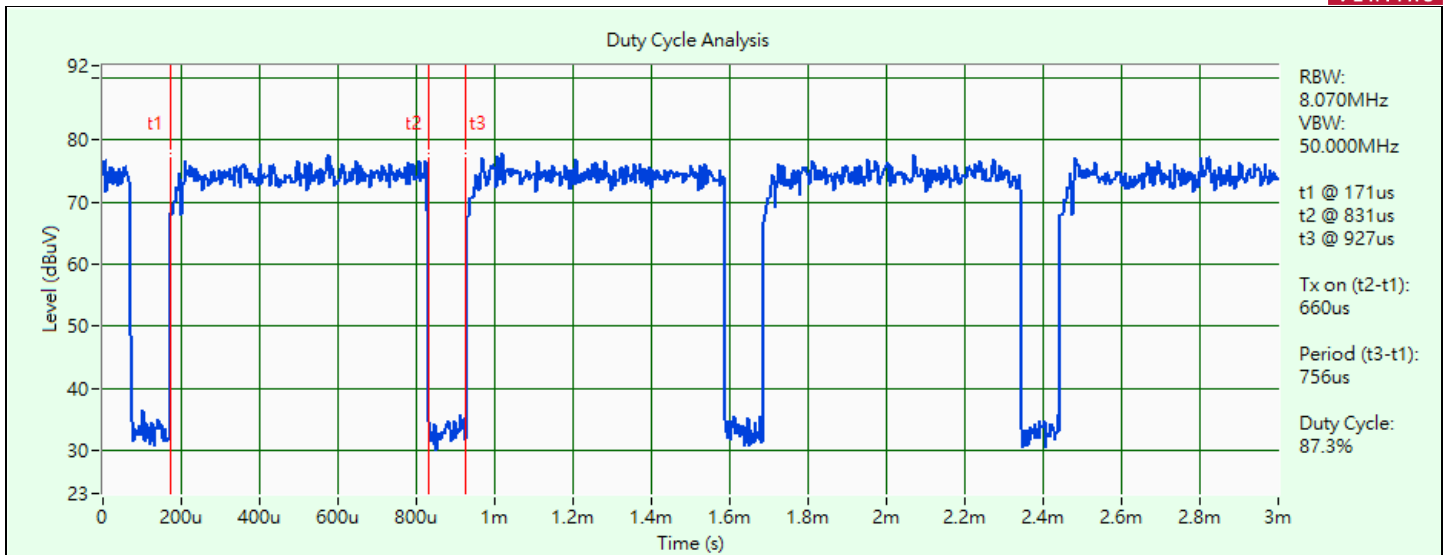
802.11ac (VHT80): Duty cycle = 0.325 ms / 0.424 ms x 100% = 76.7%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.15 \text{ dB}$



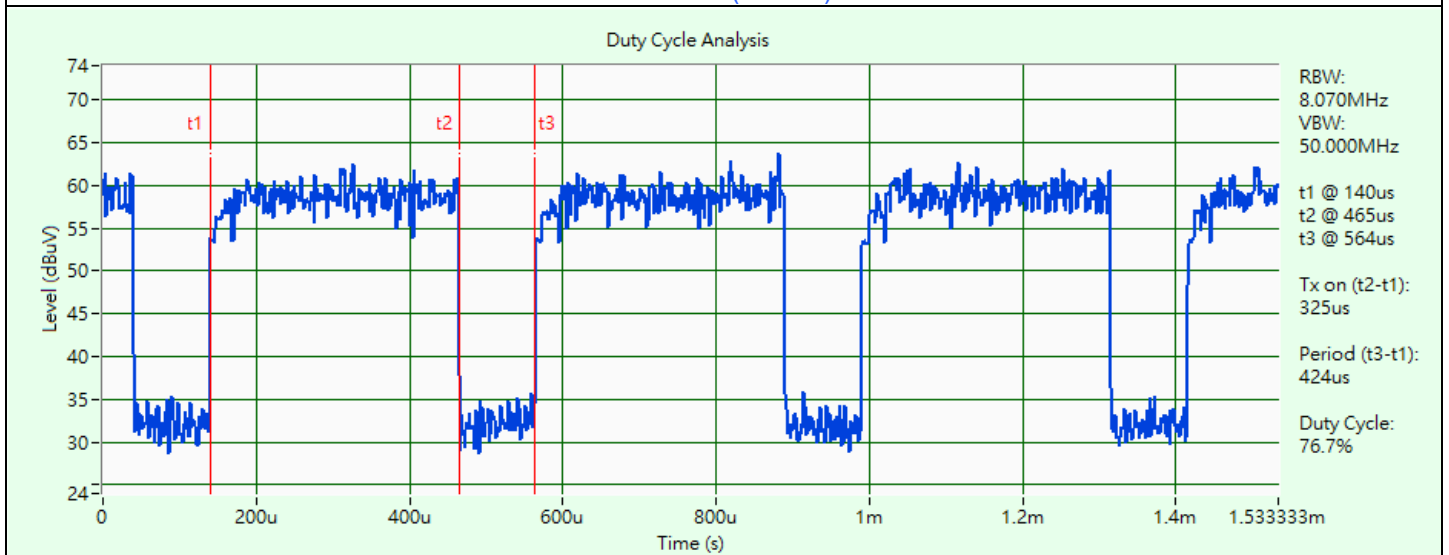
802.11a



802.11ac (VHT20)



802.11ac (VHT40)

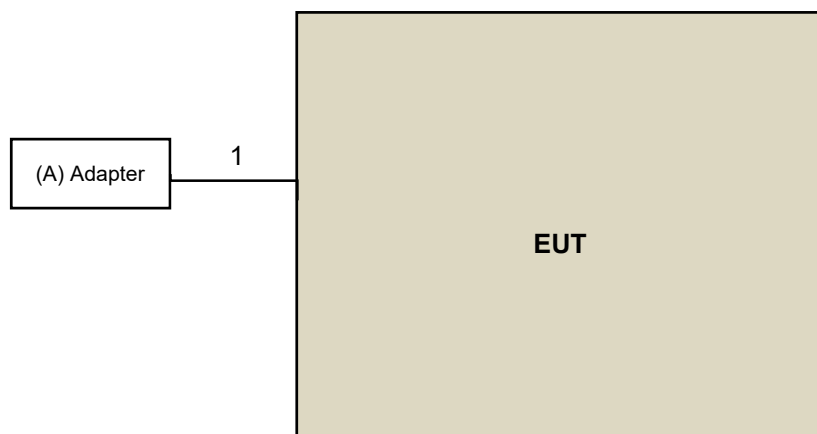


802.11ac (VHT80)

3.6 Test Program Used and Operation Descriptions

Controlling software Teratorm has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



Under Table

Remote Site

3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	Delta	ADH-36DW B	N/A	N/A	Accessory of EUT

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.8	N	0	Accessory of EUT

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
Signal & Spectrum Analyzer R&S	FSV3044	101105	2023/2/22	2024/2/21
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/6/13

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2023/1/19	2024/1/18
Signal & Spectrum Analyzer R&S	FSV3044	101105	2023/2/22	2024/2/21
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Wideband Power Sensor Keysight	N1923A	MY58020002	2023/1/18	2024/1/17
		MY58140009	2023/1/18	2024/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/6/13

4.3 Power Spectral Density

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

4.4 6 dB Bandwidth

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

4.5 Occupied Bandwidth

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

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Supply JIN YIH Technology	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	87III	70360742	2022/6/23	2023/6/22
Signal & Spectrum Analyzer R&S	FSV3044	101105	2023/2/22	2024/2/21
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
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: 2023/6/13

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2022/11/9	2023/11/8
EMI Test Receiver R&S	ESR3	102783	2022/12/21	2023/12/20
LISN R&S	ESH2-Z5	100100	2023/3/7	2024/3/6
	ESH3-Z5	100116	2023/2/15	2024/2/14
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2022/9/3	2023/9/2
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2022/8/31	2023/8/30

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2023/5/24

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-472	2022/10/21	2023/10/20
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Loop Antenna Electro-Metrics	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Preamplifier EMCI	EMC 330H	980112	2022/10/1	2023/9/30
	EMC001340	980201	2022/9/23	2023/9/22
RF Coaxial Cable Woken	8D-FB	Cable-Ch10-01	2022/10/1	2023/9/30
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/5/18

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2022/11/13	2023/11/12
	BBHA 9170	148	2022/11/13	2023/11/12
Preamplifier EMCI	EMC 012645	980115	2022/10/1	2023/9/30
	EMC 184045	980116	2022/10/1	2023/9/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2022/7/9	2023/7/8
	EMC102-KM-KM-3000	150929	2022/7/9	2023/7/8
	EMC104-SM-SM-8000+3000	171005	2022/10/1	2023/9/30
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	2022/10/1	2023/9/30
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/5/13 ~ 2023/5/24

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

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

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

*B is the 26 dB emission bandwidth in megahertz

5.3 Power Spectral Density

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

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Frequency Stability

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

5.7 AC Power Conducted Emissions

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

Notes:

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

5.8 Unwanted Emissions below 1 GHz

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

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

Notes:

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

5.9 Unwanted Emissions above 1 GHz

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

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

Notes:

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

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.15-5.25 GHz band:

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

For transmitters operating in the 5.25-5.35 GHz band:

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

For transmitters operating in the 5.47-5.725 GHz band:

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

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK: 105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK: 122.2 (dBμV/m) ^{*4}
^{*1} beyond 75 MHz or more above of the band edge. ^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. ^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

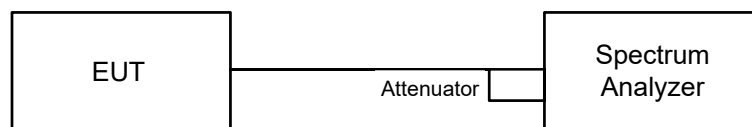
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

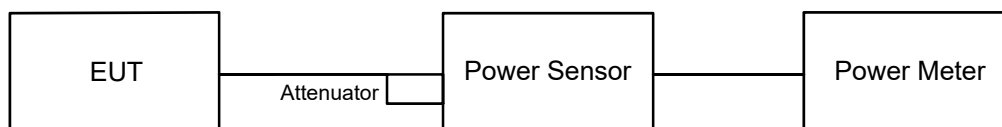


6.1.2 Test Procedure

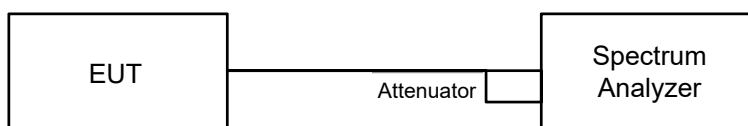
- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

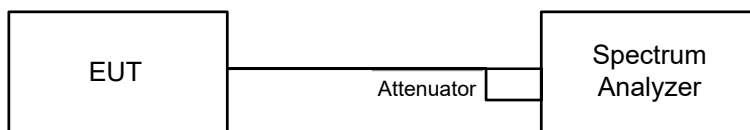
Method SA-2A

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
- Sweep points ≥ $[2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
- Manually set sweep time ≥ $10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$.
- Perform a single sweep.
- Record the max value and add $10 \log (1/\text{duty cycle})$.

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- Record the max value and add 10 log (1/duty cycle).

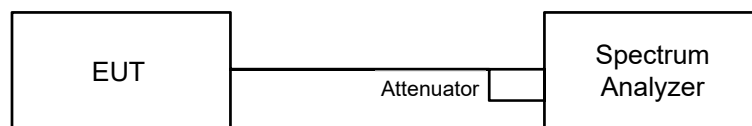
For specified measurement bandwidth 500 kHz:

Method SA-2

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

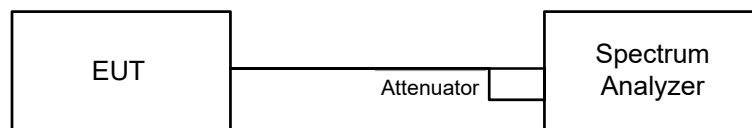


6.4.2 Test Procedure

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

6.5 Occupied Bandwidth

6.5.1 Test Setup

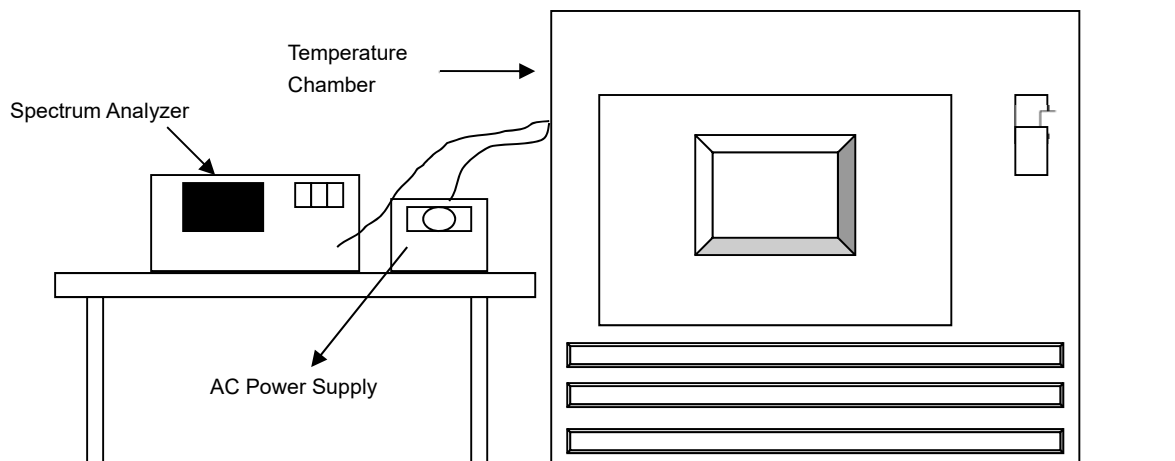


6.5.2 Test Procedure

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

6.6 Frequency Stability

6.6.1 Test Setup

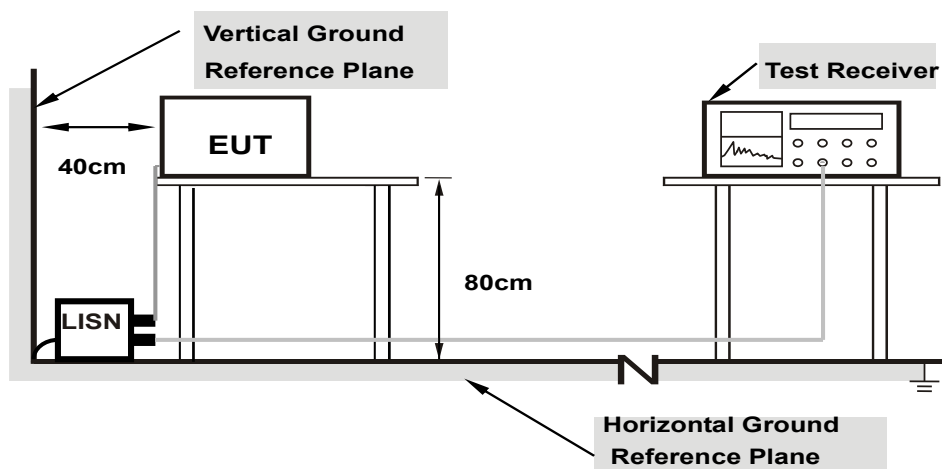


6.6.2 Test Procedure

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

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



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

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

6.7.2 Test Procedure

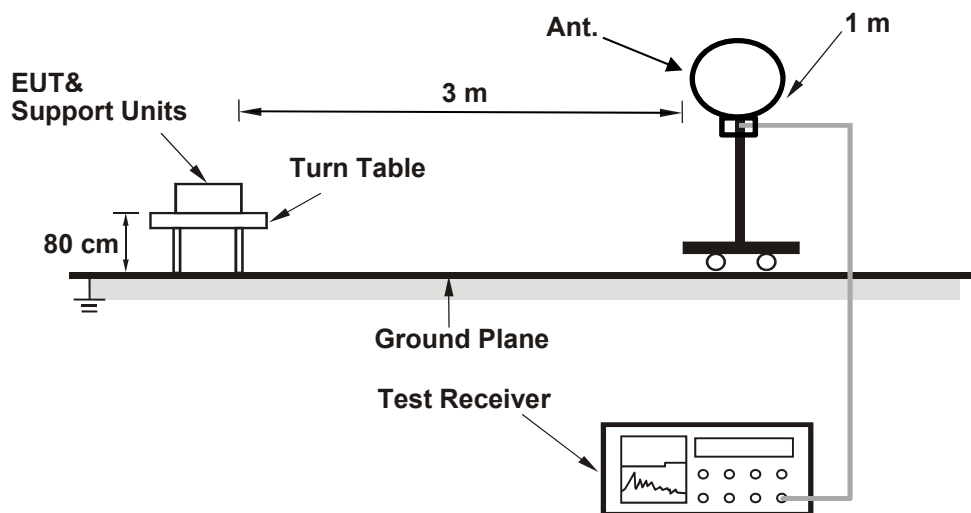
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

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

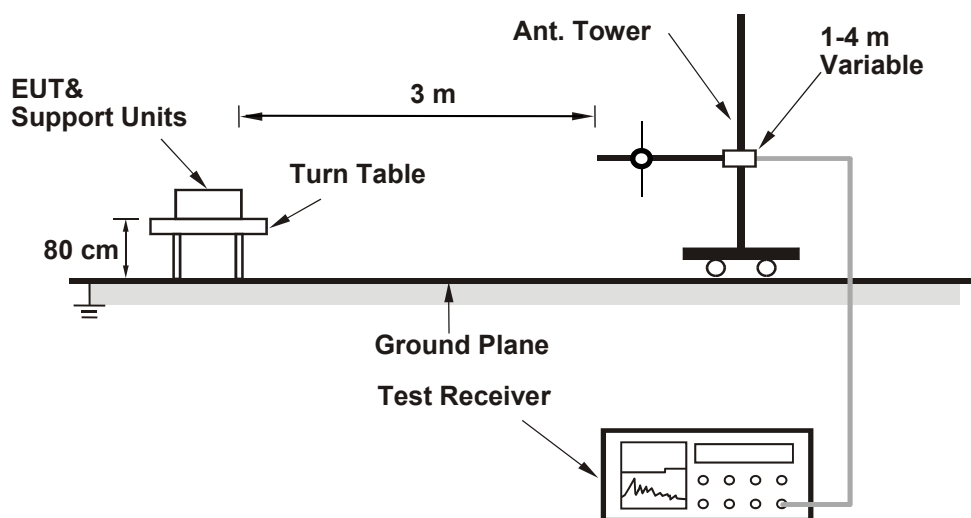
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.8.2 Test Procedure

For Radiated emission below 30 MHz

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

Notes:

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

For Radiated emission above 30 MHz

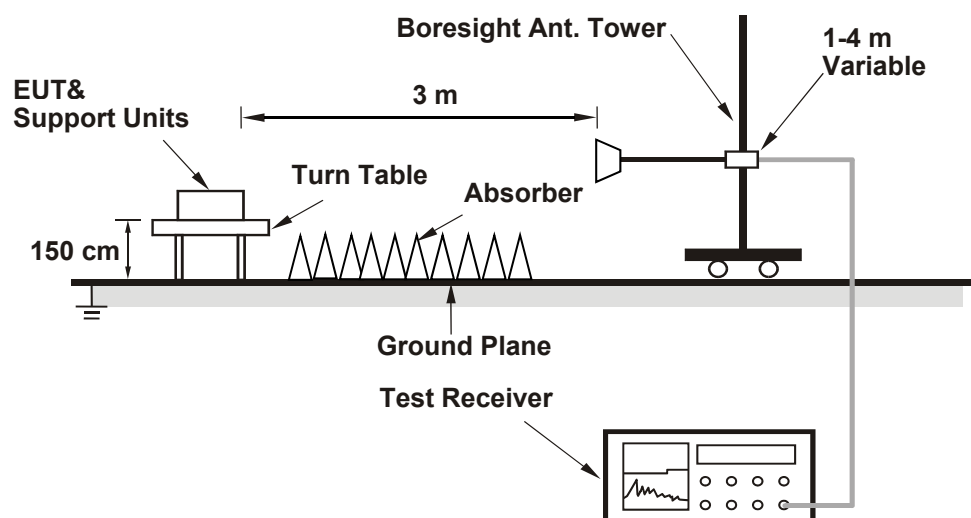
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the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

Notes:

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

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



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

6.9.2 Test Procedure

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

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	29.53
60	5300	29.14
64	5320	21.6
100	5500	21.05
116	5580	28.75
140	5700	21
144 (U-NII-2C)	5720	19.69
144 (U-NII-3)	5720	9.08

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	29.53	25.7	>	24
60	5300	29.14	25.64	>	24
64	5320	21.60	24.34	>	24
100	5500	21.05	24.23	>	24
116	5580	28.75	25.58	>	24
140	5700	21.00	24.22	>	24
144 (U-NII-2C)	5720	19.69	23.94	<	24

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

802.11n (HT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
52	5260	24.25
60	5300	27.04
64	5320	21.44
100	5500	21.38
116	5580	26.51
140	5700	21.28
144 (U-NII-2C)	5720	17.53
144 (U-NII-3)	5720	9.74

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	24.25	24.84 > 24
60	5300	27.04	25.32 > 24
64	5320	21.44	24.31 > 24
100	5500	21.38	24.3 > 24
116	5580	26.51	25.23 > 24
140	5700	21.28	24.27 > 24
144 (U-NII-2C)	5720	17.53	23.43 < 24

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

802.11n (HT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
54	5270	48.86
62	5310	39.36
102	5510	39.37
110	5550	56.74
134	5670	39.77
142 (U-NII-2C)	5710	37.05
142 (U-NII-3)	5710	15.91

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	48.86	27.88	>	24
62	5310	39.36	26.95	>	24
102	5510	39.37	26.95	>	24
110	5550	56.74	28.53	>	24
134	5670	39.77	26.99	>	24
142 (U-NII-2C)	5710	37.05	26.68	>	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	28.4
60	5300	31.64
64	5320	21.37
100	5500	21.45
116	5580	31.73
140	5700	21.31
144 (U-NII-2C)	5720	19.13
144 (U-NII-3)	5720	11.62

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	28.40	25.53 > 24
60	5300	31.64	26 > 24
64	5320	21.37	24.29 > 24
100	5500	21.45	24.31 > 24
116	5580	31.73	26.01 > 24
140	5700	21.31	24.28 > 24
144 (U-NII-2C)	5720	19.13	23.81 < 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	46.21
62	5310	39.43
102	5510	39.36
110	5550	60.58
134	5670	42.46
142 (U-NII-2C)	5710	41.62
142 (U-NII-3)	5710	20.96

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	46.21	27.64	>	24
62	5310	39.43	26.95	>	24
102	5510	39.36	26.95	>	24
110	5550	60.58	28.82	>	24
134	5670	42.46	27.27	>	24
142 (U-NII-2C)	5710	41.62	27.19	>	24

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

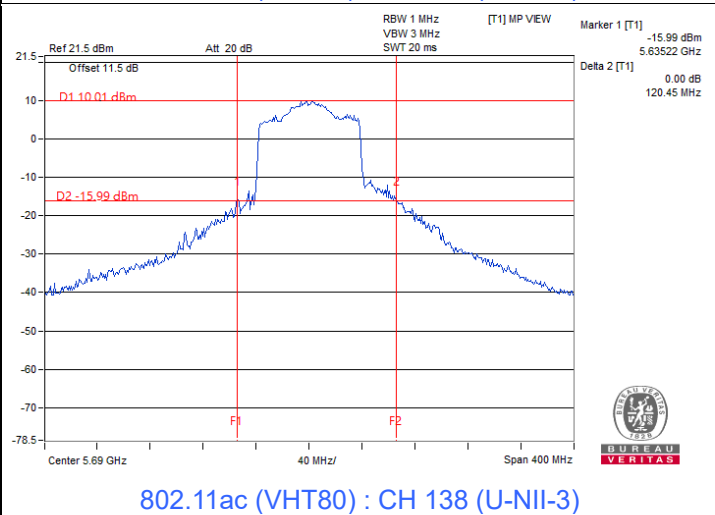
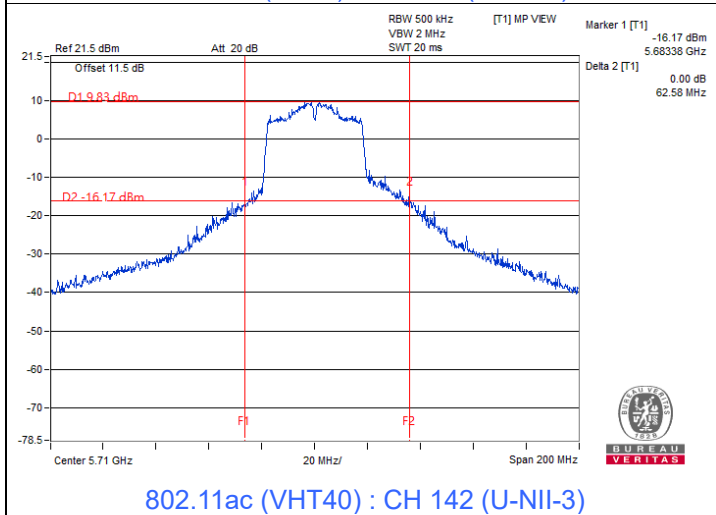
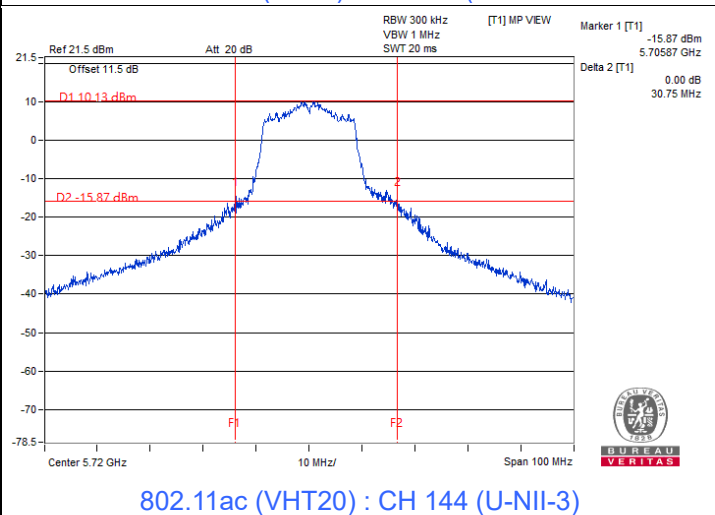
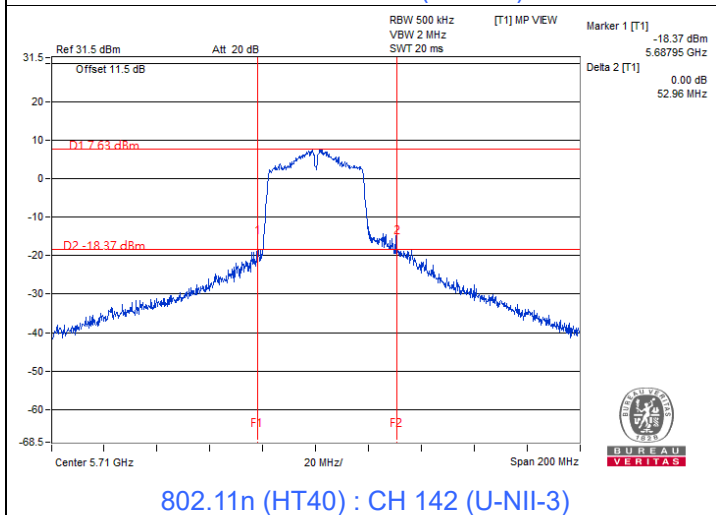
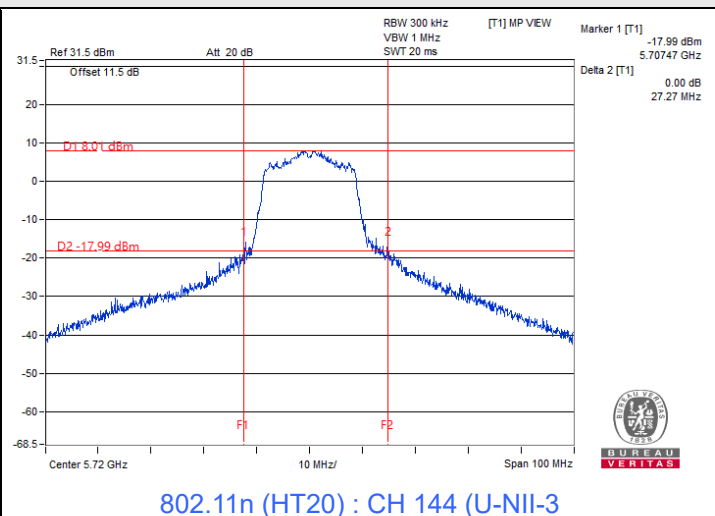
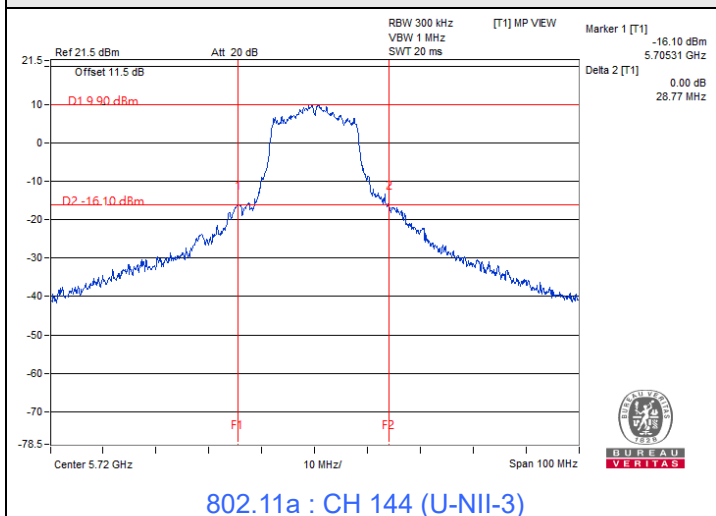
802.11ac (VHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
58	5290	82.36
106	5530	81.97
122	5610	93.87
138 (U-NII-2C)	5690	89.78
138 (U-NII-3)	5690	30.67

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	82.36	30.15	>	24
106	5530	81.97	30.13	>	24
122	5610	93.87	30.72	>	24
138 (U-NII-2C)	5690	89.78	30.53	>	24

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

Spectrum Plot of Minimum Value



Notes:

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

7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	26.607	14.25	24	Pass
40	5200	44.259	16.46	24	Pass
48	5240	68.391	18.35	24	Pass
52	5260	69.502	18.42	24	Pass
60	5300	72.611	18.61	24	Pass
64	5320	61.094	17.86	24	Pass
100	5500	41.495	16.18	24	Pass
116	5580	67.143	18.27	24	Pass
140	5700	23.335	13.68	24	Pass
*144 (U-NII-2C)	5720	45.694	16.60	23.94	Pass
*144 (U-NII-3)	5720	6.666	8.24	30	Pass
149	5745	67.143	18.27	30	Pass
157	5785	63.241	18.01	30	Pass
165	5825	61.235	17.87	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 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	23.335	13.68	24	Pass
40	5200	63.533	18.03	24	Pass
48	5240	67.764	18.31	24	Pass
52	5260	58.21	17.65	24	Pass
60	5300	63.096	18.00	24	Pass
64	5320	33.42	15.24	24	Pass
100	5500	24.889	13.96	24	Pass
116	5580	60.395	17.81	24	Pass
140	5700	18.836	12.75	24	Pass
*144 (U-NII-2C)	5720	43.616	16.40	23.43	Pass
*144 (U-NII-3)	5720	7.441	8.72	30	Pass
149	5745	67.298	18.28	30	Pass
157	5785	64.565	18.10	30	Pass
165	5825	59.02	17.71	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 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	10.765	10.32	24	Pass
46	5230	28.708	14.58	24	Pass
54	5270	35.481	15.50	24	Pass
62	5310	13.614	11.34	24	Pass
102	5510	23.174	13.65	24	Pass
110	5550	63.68	18.04	24	Pass
134	5670	30.62	14.86	24	Pass
*142 (U-NII-2C)	5710	53.7	17.30	24	Pass
*142 (U-NII-3)	5710	3.404	5.32	30	Pass
151	5755	63.241	18.01	30	Pass
159	5795	61.376	17.88	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 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	23.933	13.79	24	Pass
40	5200	64.417	18.09	24	Pass
48	5240	67.92	18.32	24	Pass
52	5260	60.395	17.81	24	Pass
60	5300	64.863	18.12	24	Pass
64	5320	34.119	15.33	24	Pass
100	5500	25.061	13.99	24	Pass
116	5580	61.518	17.89	24	Pass
140	5700	18.923	12.77	24	Pass
*144 (U-NII-2C)	5720	44.735	16.51	23.81	Pass
*144 (U-NII-3)	5720	7.58	8.80	30	Pass
149	5745	67.608	18.30	30	Pass
157	5785	66.527	18.23	30	Pass
165	5825	60.534	17.82	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 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	11.272	10.52	24	Pass
46	5230	29.376	14.68	24	Pass
54	5270	36.813	15.66	24	Pass
62	5310	13.868	11.42	24	Pass
102	5510	23.496	13.71	24	Pass
110	5550	65.013	18.13	24	Pass
134	5670	31.842	15.03	24	Pass
*142 (U-NII-2C)	5710	55.078	17.41	24	Pass
*142 (U-NII-3)	5710	3.507	5.45	30	Pass
151	5755	63.533	18.03	30	Pass
159	5795	61.944	17.92	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the output power limit shall not be reduced.

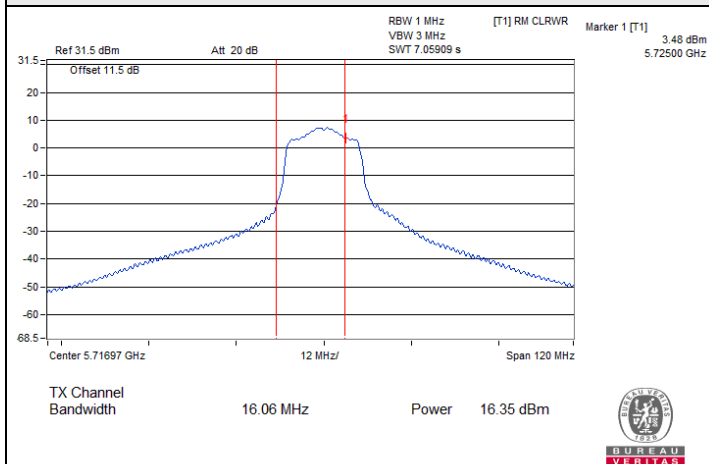
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	14.859	11.72	24	Pass
58	5290	16.406	12.15	24	Pass
106	5530	15.453	11.89	24	Pass
122	5610	43.152	16.35	24	Pass
*138 (U-NII-2C)	5690	41.926	16.22	24	Pass
*138 (U-NII-3)	5690	1.2147	0.84	30	Pass
155	5775	54.325	17.35	30	Pass

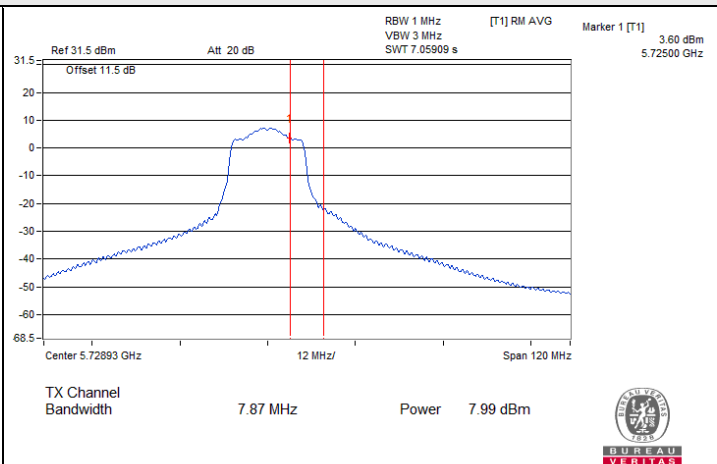
Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 0.95 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the output power limit shall not be reduced.

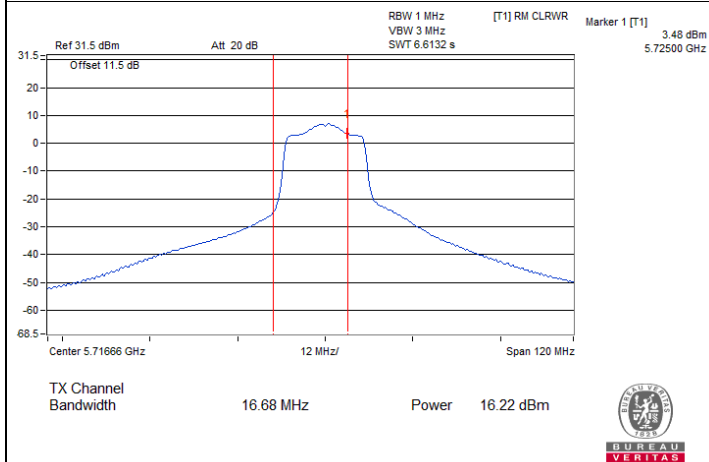
Spectrum Plot for channel straddling



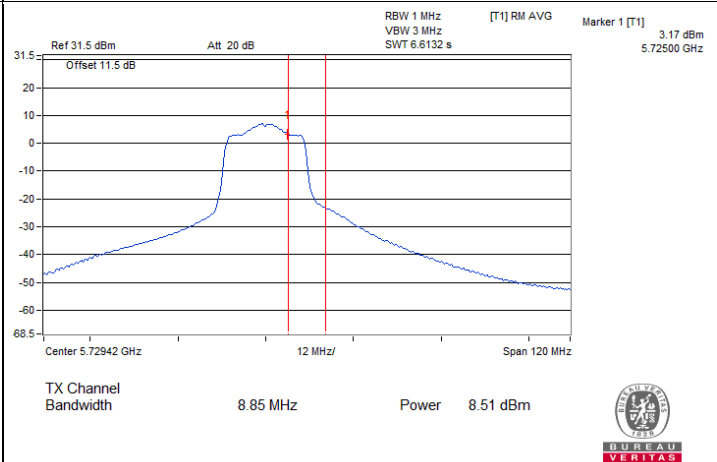
802.11a : CH 144 (U-NII-2C)



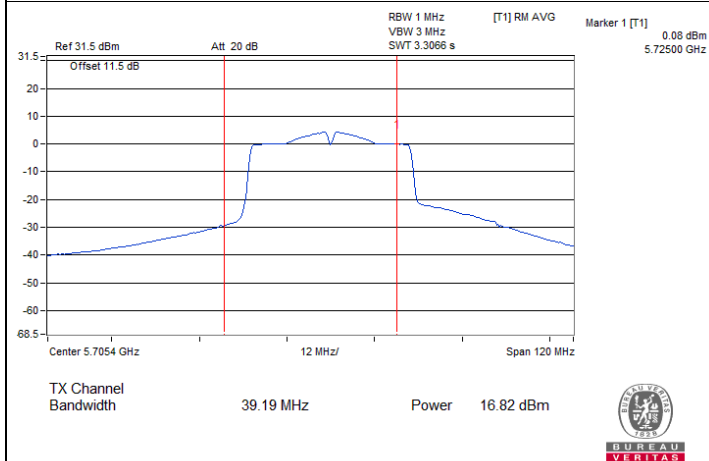
802.11a : CH 144 (U-NII-3)



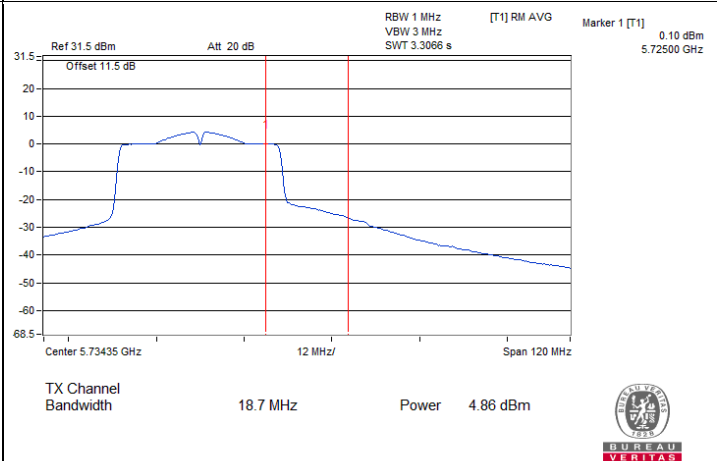
802.11ac (VHT20) : CH 144 (U-NII-2C)



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

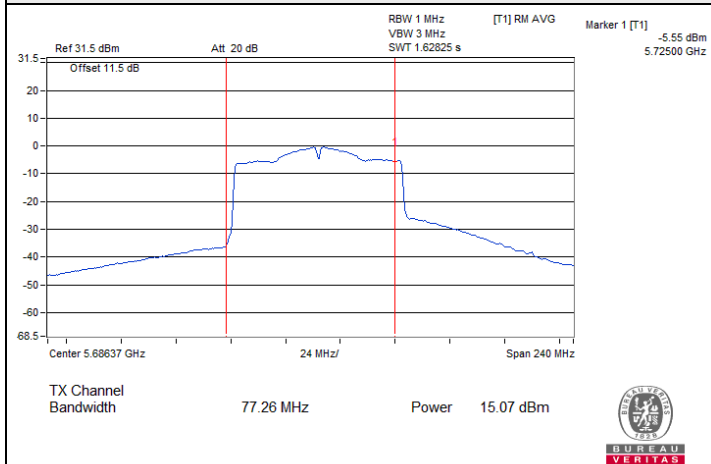


802.11ac (VHT40) : CH 142 (U-NII-2C)

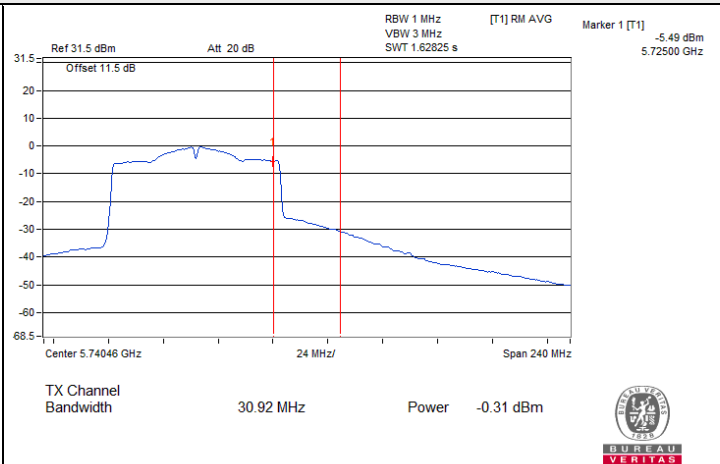


802.11ac (VHT40) : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



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



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

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	1.29	0.25	1.54	11	Pass
40	5200	3.42	0.25	3.67	11	Pass
48	5240	5.38	0.25	5.63	11	Pass
52	5260	5.39	0.25	5.64	11	Pass
60	5300	5.66	0.25	5.91	11	Pass
64	5320	4.86	0.25	5.11	11	Pass
100	5500	3.22	0.25	3.47	11	Pass
116	5580	5.24	0.25	5.49	11	Pass
140	5700	0.62	0.25	0.87	11	Pass
144 (U-NII-2C)	5720	5.04	0.25	5.29	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 0.95 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	0.75	0.29	1.04	11	Pass
40	5200	5.04	0.29	5.33	11	Pass
48	5240	5.30	0.29	5.59	11	Pass
52	5260	4.77	0.29	5.06	11	Pass
60	5300	5.12	0.29	5.41	11	Pass
64	5320	2.31	0.29	2.60	11	Pass
100	5500	0.95	0.29	1.24	11	Pass
116	5580	4.89	0.29	5.18	11	Pass
140	5700	-0.22	0.29	0.07	11	Pass
144 (U-NII-2C)	5720	5.25	0.29	5.54	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 0.95 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	-5.54	0.59	-4.95	11	Pass
46	5230	-1.35	0.59	-0.76	11	Pass
54	5270	-0.38	0.59	0.21	11	Pass
62	5310	-4.48	0.59	-3.89	11	Pass
102	5510	-2.28	0.59	-1.69	11	Pass
110	5550	2.19	0.59	2.78	11	Pass
134	5670	-0.98	0.59	-0.39	11	Pass
142 (U-NII-2C)	5710	1.97	0.59	2.56	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 0.95 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	-7.28	1.15	-6.13	11	Pass
58	5290	-6.91	1.15	-5.76	11	Pass
106	5530	-7.09	1.15	-5.94	11	Pass
122	5610	-2.67	1.15	-1.52	11	Pass
138 (U-NII-2C)	5690	-1.38	1.15	-0.23	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 0.95 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.29 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 3.03 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.64	0.25	0.83	30	Pass
149	5745	3.78	0.25	6.25	30	Pass
157	5785	3.51	0.25	5.98	30	Pass
165	5825	3.4	0.25	5.87	30	Pass

Note: For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.9	0.29	0.61	30	Pass
149	5745	3.74	0.29	6.25	30	Pass
157	5785	3.62	0.29	6.13	30	Pass
165	5825	3.28	0.29	5.79	30	Pass

Note: For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

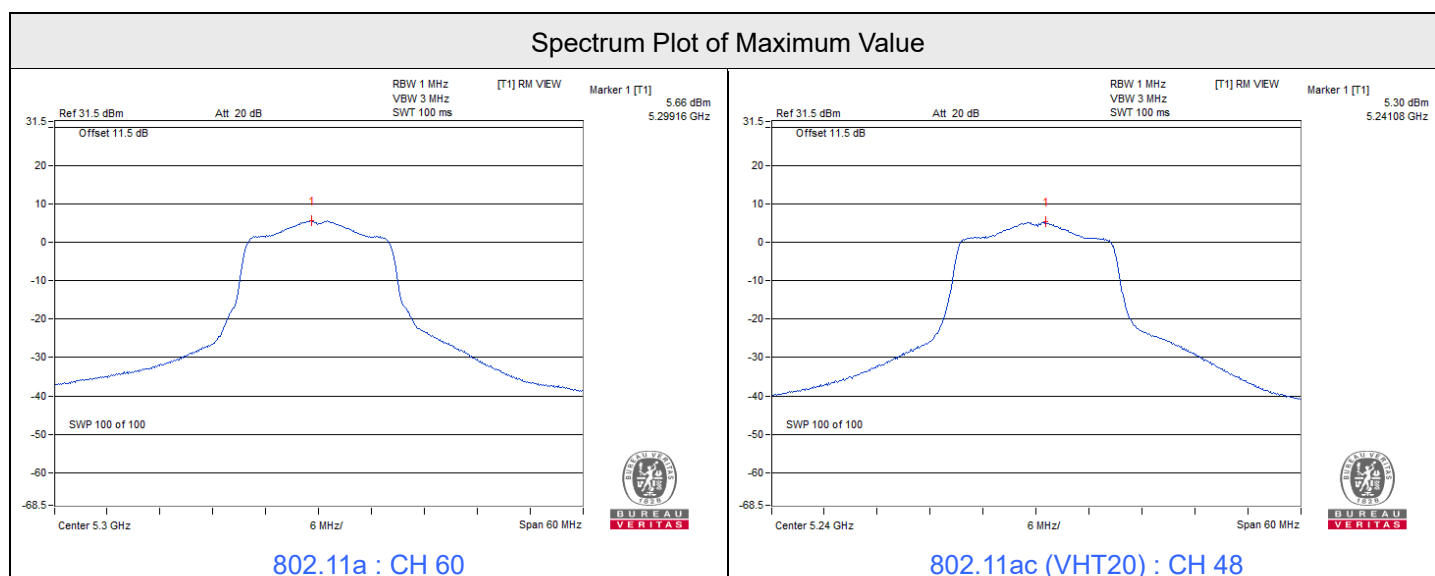
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
142 (U-NII-3)	5710	-4.97	0.59	-2.16	30	Pass
151	5755	-0.8	0.59	2.01	30	Pass
159	5795	-0.88	0.59	1.93	30	Pass

Note: For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the power density limit shall not be reduced.

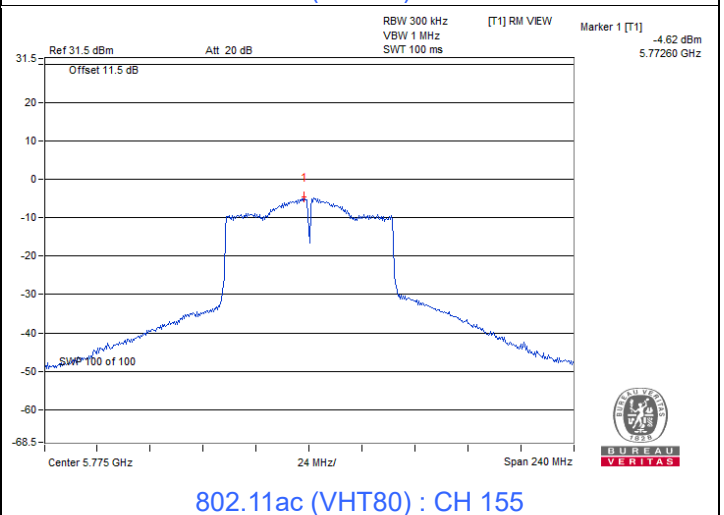
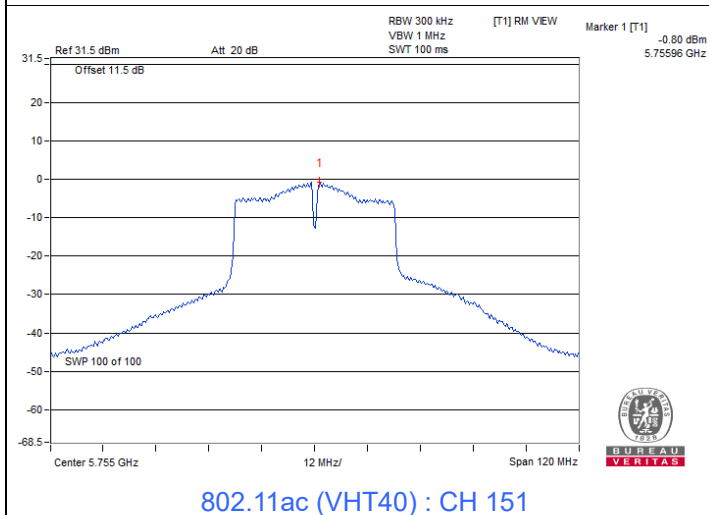
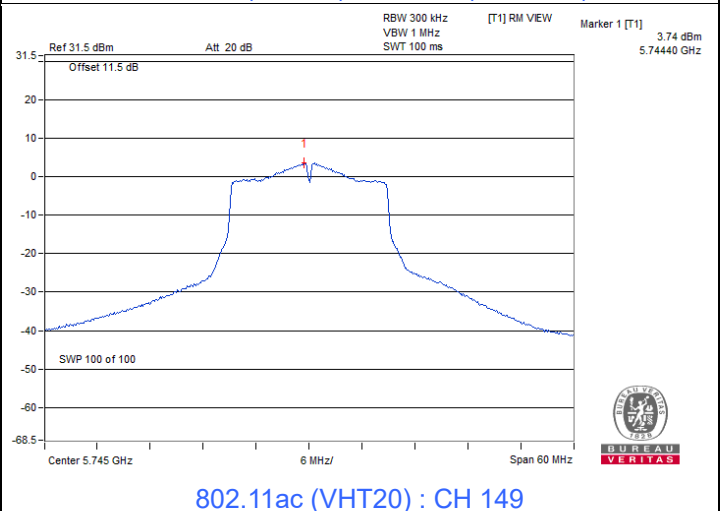
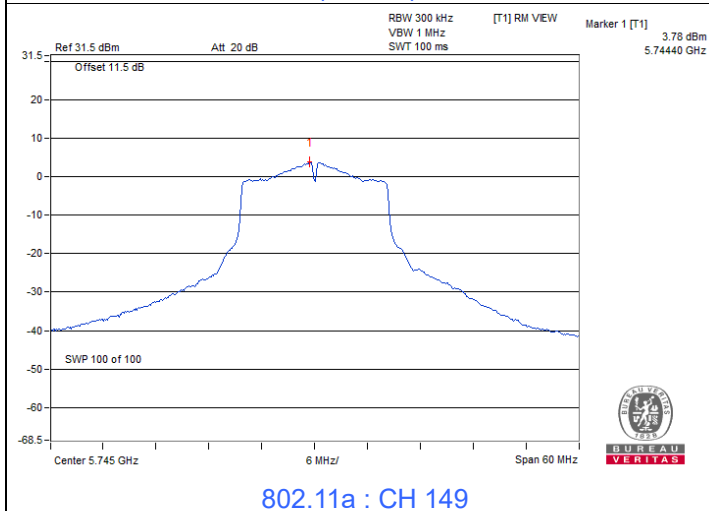
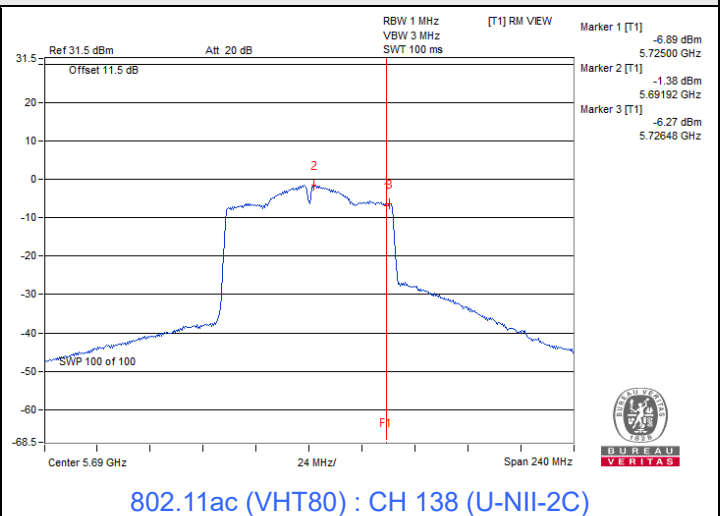
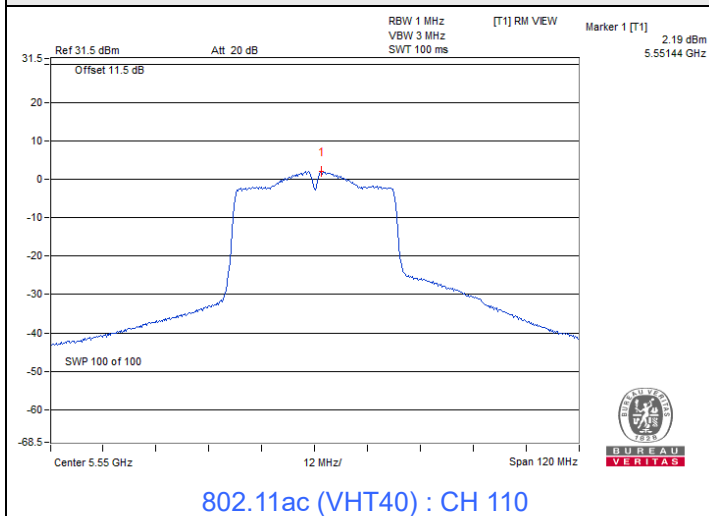
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
138 (U-NII-3)	5690	-10.18	1.15	-6.81	30	Pass
155	5775	-4.62	1.15	-1.25	30	Pass

Note: For U-NII-3, the antenna gain is 2.37 dBi < 6 dBi, so the power density limit shall not be reduced.



Spectrum Plot of Maximum Value



7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	2.87	0.5	Pass
149	5745	16.08	0.5	Pass
157	5785	15.77	0.5	Pass
165	5825	15.81	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.4	0.5	Pass
149	5745	16.13	0.5	Pass
157	5785	15.5	0.5	Pass
165	5825	16.15	0.5	Pass

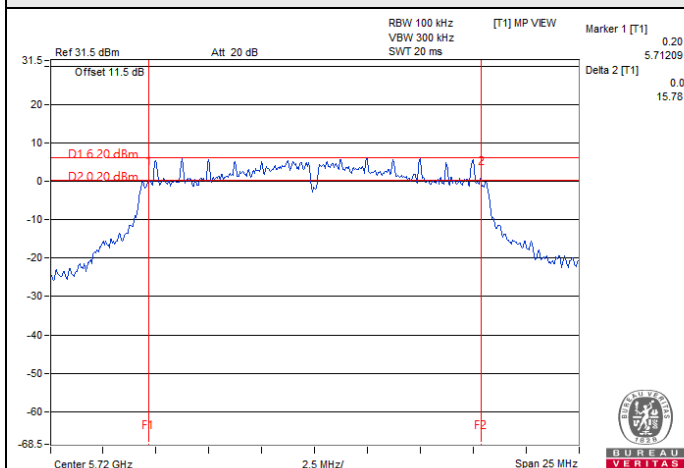
802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
142 (U-NII-3)	5710	2.68	0.5	Pass
151	5755	35.53	0.5	Pass
159	5795	35.6	0.5	Pass

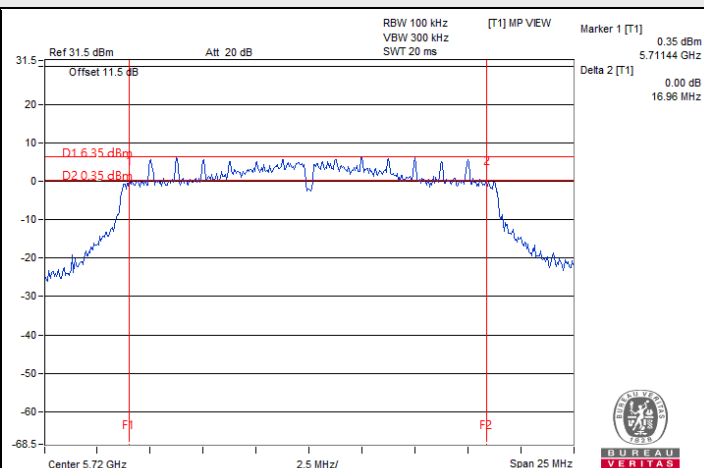
802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
138 (U-NII-3)	5690	2.76	0.5	Pass
155	5775	75.69	0.5	Pass

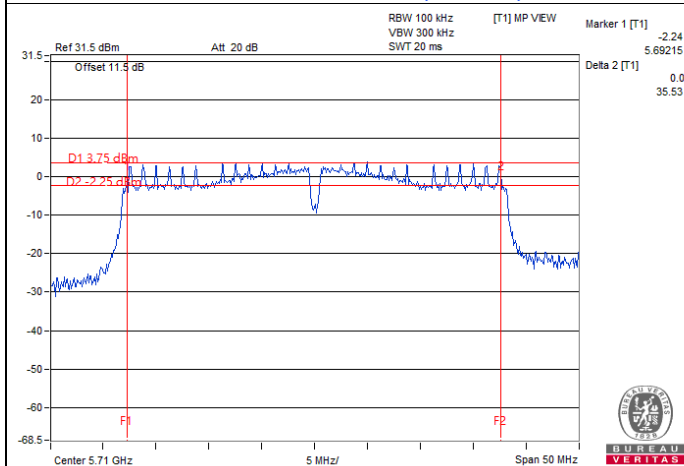
Spectrum Plot of Minimum Value



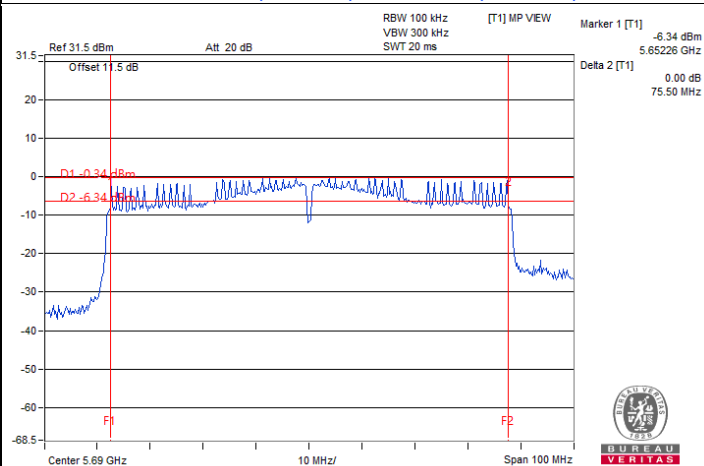
802.11a : CH 144 (U-NII-3)



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:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.8
40	5200	16.92
48	5240	17.4
52	5260	17.28
60	5300	17.16
64	5320	17.04
100	5500	16.92
116	5580	17.16
140	5700	16.8
144 (U-NII-2C)	5720	13.64
144 (U-NII-3)	5720	3.52
149	5745	17.4
157	5785	17.4
165	5825	17.64

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.88
40	5200	18.48
48	5240	18.12
52	5260	18.12
60	5300	18.12
64	5320	18
100	5500	17.88
116	5580	18.24
140	5700	17.88
144 (U-NII-2C)	5720	14.12
144 (U-NII-3)	5720	4
149	5745	18.3
157	5785	18.24
165	5825	18.24

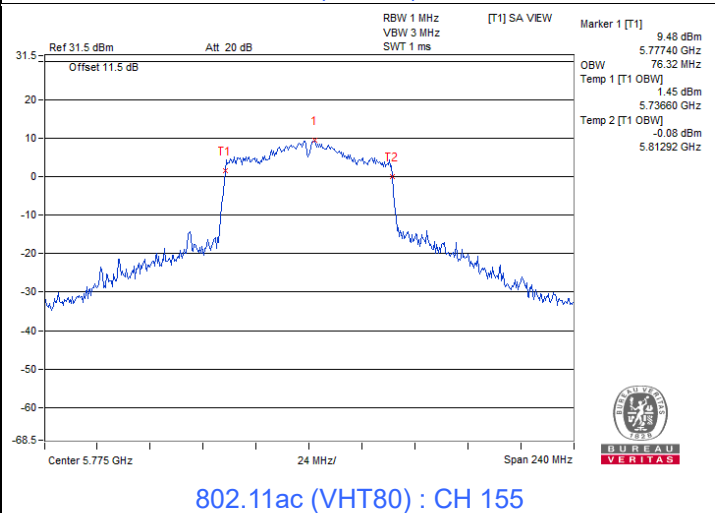
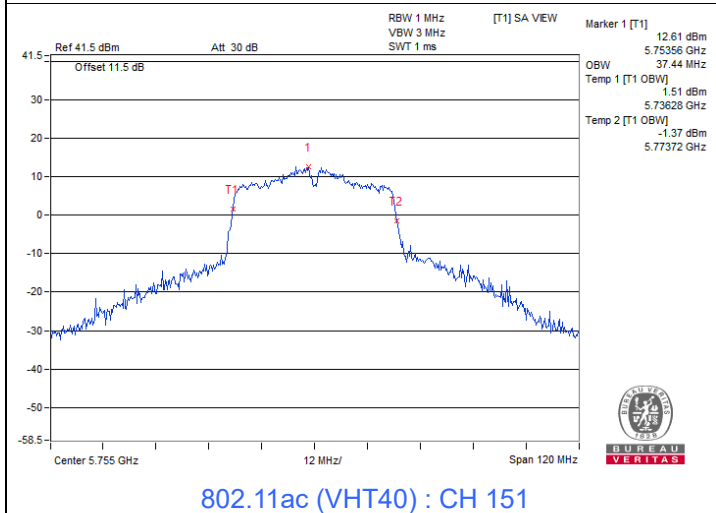
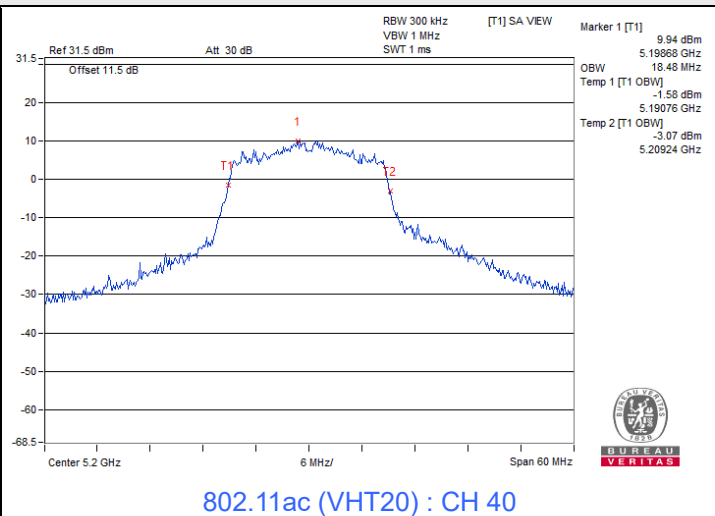
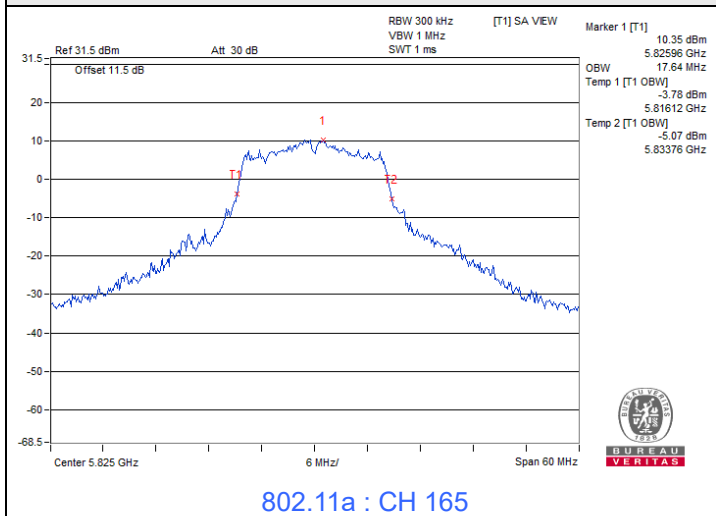
802.11ac (VHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.24
46	5230	36.48
54	5270	36.48
62	5310	36.24
102	5510	36.48
110	5550	36.84
134	5670	36.24
142 (U-NII-2C)	5710	33.24
142 (U-NII-3)	5710	3.48
151	5755	37.44
159	5795	37.44

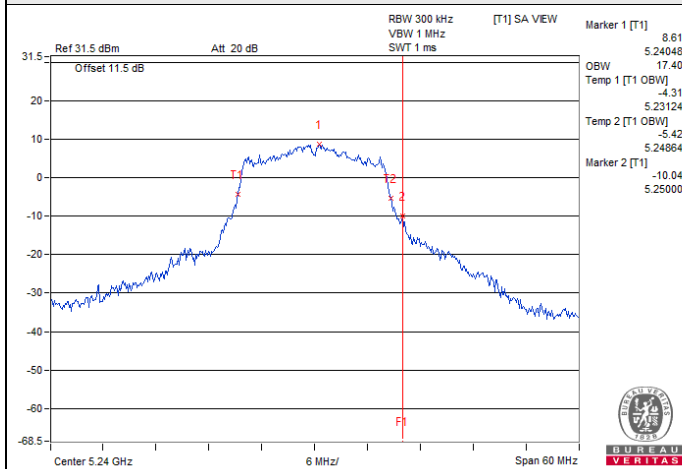
802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.36
58	5290	75.36
106	5530	75.36
122	5610	75.36
138 (U-NII-2C)	5690	72.92
138 (U-NII-3)	5690	2.92
155	5775	76.32

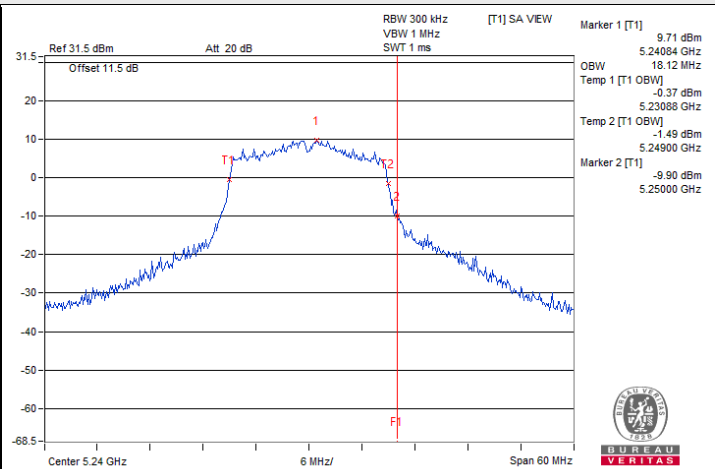
Spectrum Plot of Maximum Value



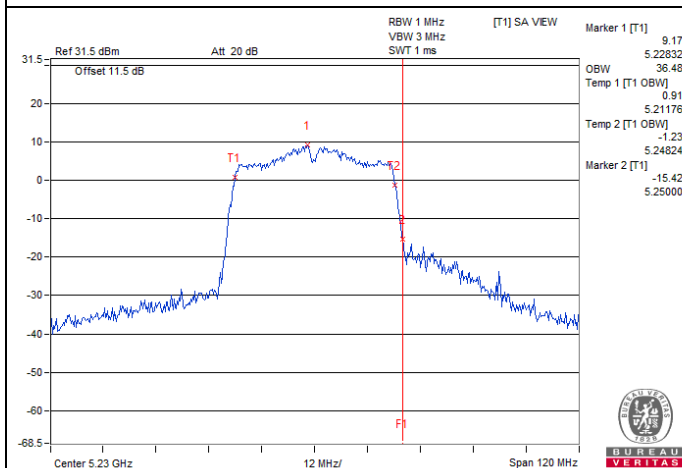
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



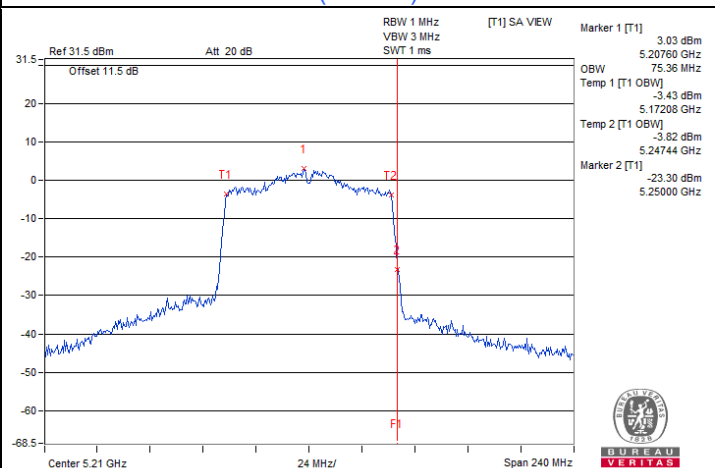
802.11a : CH 48



802.11ac (VHT20) : CH 48

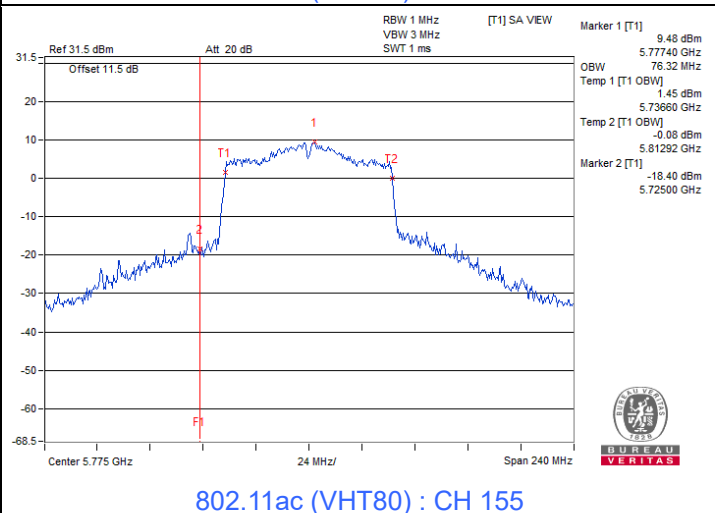
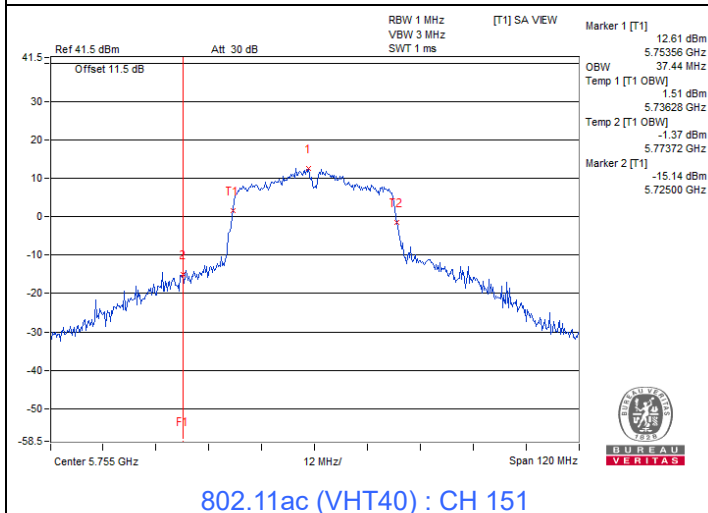
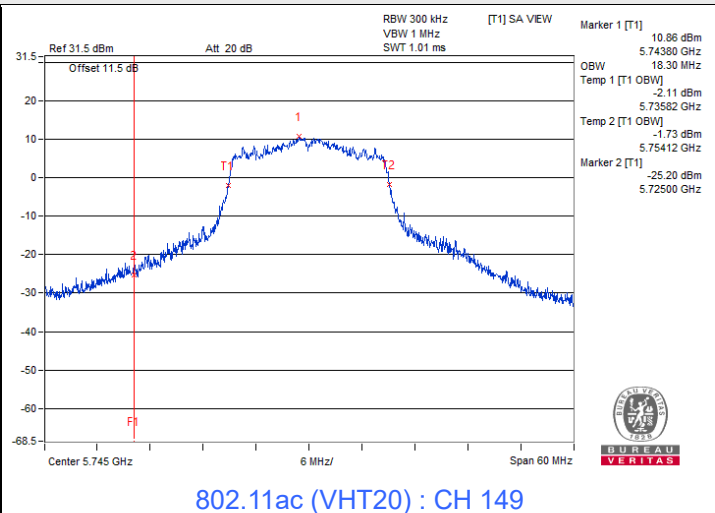
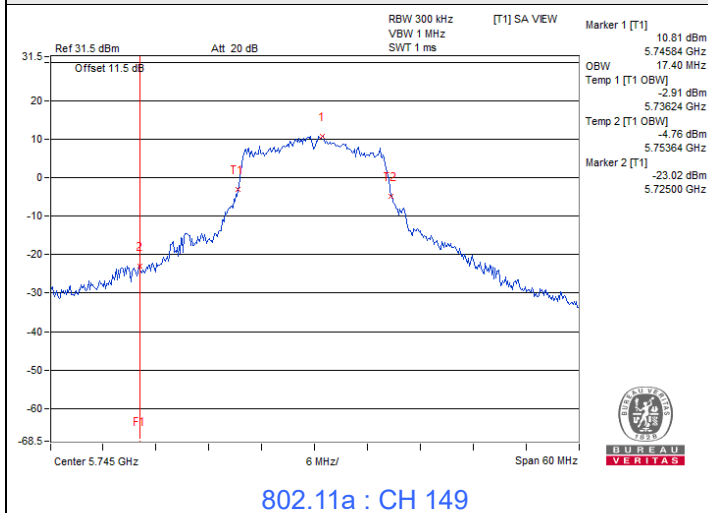


802.11ac (VHT40) : CH 46



802.11ac (VHT80) : CH 42

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



7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 55% RH	Tested By:	Henry Hsu
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802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5179.9974	Pass	5179.9962	Pass	5179.9983	Pass	5179.9973	Pass
30	120	5179.9838	Pass	5179.9848	Pass	5179.9831	Pass	5179.9831	Pass
20	120	5179.9795	Pass	5179.977	Pass	5179.9793	Pass	5179.9753	Pass
10	120	5179.9908	Pass	5179.9884	Pass	5179.987	Pass	5179.9874	Pass
0	120	5180.014	Pass	5180.0137	Pass	5180.0131	Pass	5180.015	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5179.981	Pass	5179.9831	Pass	5179.9856	Pass	5179.981	Pass
	120	5179.9795	Pass	5179.977	Pass	5179.9793	Pass	5179.9753	Pass
	102	5179.9687	Pass	5179.969	Pass	5179.9705	Pass	5179.9674	Pass

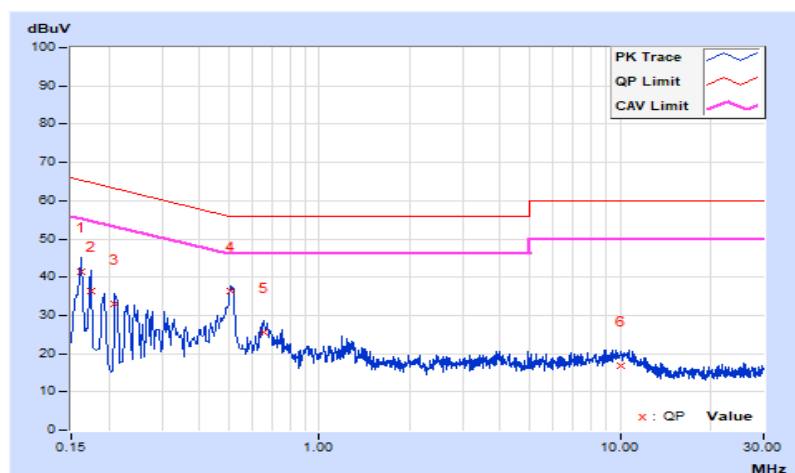
7.7 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	21.4 °C, 70.6 % RH
Tested By	Thomas Cheng		

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	0.16200	10.11	31.33	12.79	41.44	22.90	65.36	55.36	-23.92	-32.46
2	0.17400	10.12	26.34	11.09	36.46	21.21	64.77	54.77	-28.31	-33.56
3	0.21000	10.13	23.01	3.65	33.14	13.78	63.21	53.21	-30.07	-39.43
4	0.50932	10.14	26.14	21.04	36.28	31.18	56.00	46.00	-19.72	-14.82
5	0.65400	10.15	15.57	8.43	25.72	18.58	56.00	46.00	-30.28	-27.42
6	10.08200	10.27	6.68	1.41	16.95	11.68	60.00	50.00	-43.05	-38.32

Remarks:

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

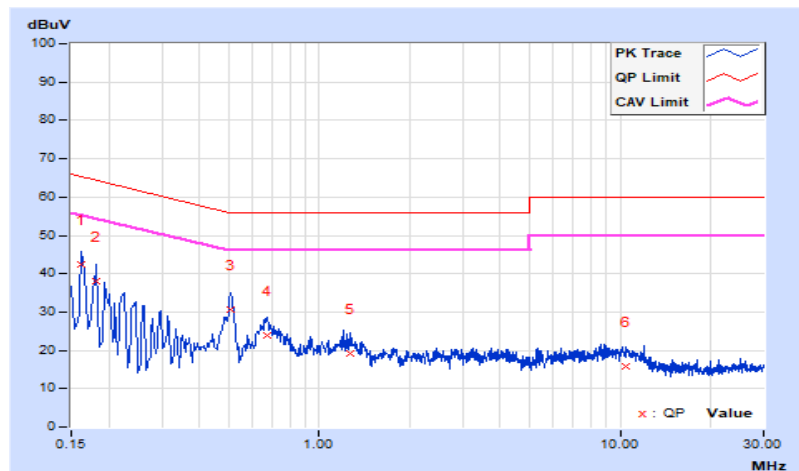


RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	21.4 °C, 70.6 % RH
Tested By	Thomas Cheng		

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	0.16200	10.13	32.40	13.87	42.53	24.00	65.36	55.36	-22.83	-31.36
2	0.18200	10.14	28.05	9.26	38.19	19.40	64.39	54.39	-26.20	-34.99
3	0.50798	10.16	20.43	15.20	30.59	25.36	56.00	46.00	-25.41	-20.64
4	0.66987	10.17	13.79	6.58	23.96	16.75	56.00	46.00	-32.04	-29.25
5	1.26600	10.19	8.98	1.80	19.17	11.99	56.00	46.00	-36.83	-34.01
6	10.44600	10.37	5.38	1.39	15.75	11.76	60.00	50.00	-44.25	-38.24

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



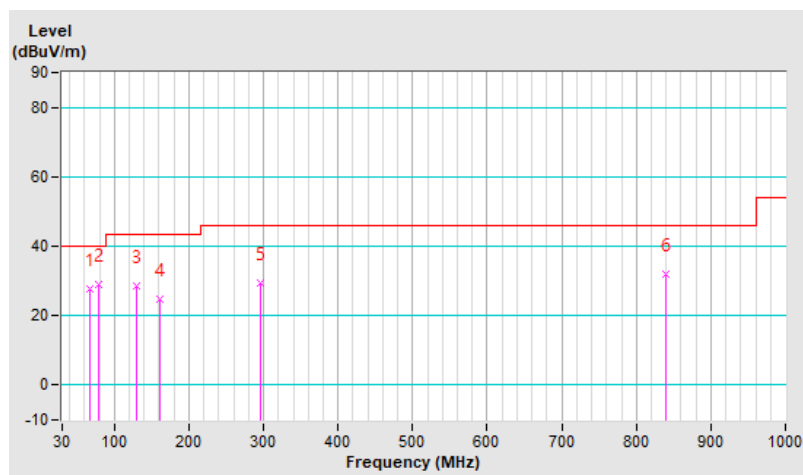
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	21 °C, 66 % RH
Tested By	Thomas Cheng		

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	66.86	27.9 QP	40.0	-12.1	2.00 H	81	41.7	-13.8
2	78.50	28.8 QP	40.0	-11.2	1.50 H	65	45.2	-16.4
3	128.94	28.5 QP	43.5	-15.0	2.00 H	179	42.1	-13.6
4	160.95	24.7 QP	43.5	-18.8	1.50 H	87	37.3	-12.6
5	296.75	29.5 QP	46.0	-16.5	1.00 H	186	41.4	-11.9
6	838.98	32.1 QP	46.0	-13.9	2.00 H	177	33.6	-1.5

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

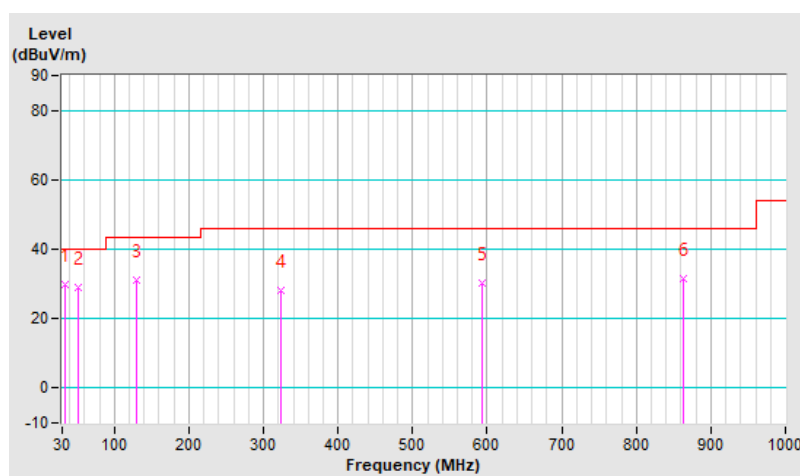


RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	21 °C, 66 % RH
Tested By	Thomas Cheng		

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	33.88	30.0 QP	40.0	-10.0	1.00 V	152	42.8	-12.8
2	52.31	28.8 QP	40.0	-11.2	1.50 V	139	41.1	-12.3
3	128.94	31.3 QP	43.5	-12.2	1.99 V	200	44.9	-13.6
4	323.91	28.1 QP	46.0	-17.9	2.50 V	258	39.2	-11.1
5	593.57	30.2 QP	46.0	-15.8	2.00 V	180	35.8	-5.6
6	862.26	31.5 QP	46.0	-14.5	1.50 V	193	33.0	-1.5

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.9 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.6 PK	74.0	-6.4	1.29 H	338	61.6	6.0
2	5150.00	52.7 AV	54.0	-1.3	1.29 H	338	46.7	6.0
3	*5180.00	104.3 PK			1.29 H	338	62.7	41.6
4	*5180.00	97.0 AV			1.29 H	338	55.4	41.6
5	#10360.00	59.0 PK	68.2	-9.2	2.25 H	153	46.4	12.6
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	66.2 PK	74.0	-7.8	1.21 V	46	60.2	6.0
2	5150.00	51.7 AV	54.0	-2.3	1.21 V	46	45.7	6.0
3	*5180.00	102.9 PK			1.21 V	46	61.3	41.6
4	*5180.00	95.6 AV			1.21 V	46	54.0	41.6
5	#10360.00	58.8 PK	68.2	-9.4	2.25 V	158	46.2	12.6

Remarks:

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

RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.7 PK	74.0	-10.3	1.01 H	334	57.7	6.0
2	5150.00	52.8 AV	54.0	-1.2	1.01 H	334	46.8	6.0
3	*5200.00	106.1 PK			1.01 H	334	64.7	41.4
4	*5200.00	98.7 AV			1.01 H	334	57.3	41.4
5	#10400.00	58.4 PK	68.2	-9.8	2.52 H	152	46.2	12.2
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	64.6 PK	74.0	-9.4	1.07 V	49	58.6	6.0
2	5150.00	52.4 AV	54.0	-1.6	1.07 V	49	46.4	6.0
3	*5200.00	105.5 PK			1.07 V	49	64.1	41.4
4	*5200.00	98.4 AV			1.07 V	49	57.0	41.4
5	#10400.00	57.6 PK	68.2	-10.6	2.54 V	111	45.4	12.2

Remarks:

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

RF Mode	802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	107.8 PK			1.49 H	333	66.4	41.4
2	*5240.00	100.6 AV			1.49 H	333	59.2	41.4
3	5350.00	61.9 PK	74.0	-12.1	1.49 H	333	56.0	5.9
4	5350.00	50.0 AV	54.0	-4.0	1.49 H	333	44.1	5.9
5	#10480.00	59.2 PK	68.2	-9.0	2.41 H	113	46.3	12.9
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	*5240.00	107.1 PK			1.09 V	51	65.7	41.4
2	*5240.00	100.0 AV			1.09 V	51	58.6	41.4
3	5350.00	61.2 PK	74.0	-12.8	1.09 V	51	55.3	5.9
4	5350.00	50.0 AV	54.0	-4.0	1.09 V	51	44.1	5.9
5	#10480.00	58.5 PK	68.2	-9.7	2.16 V	226	45.4	13.1

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 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.6 PK	74.0	-13.4	1.23 H	351	54.6	6.0
2	5150.00	50.0 AV	54.0	-4.0	1.23 H	351	44.0	6.0
3	*5260.00	107.9 PK			1.23 H	351	66.5	41.4
4	*5260.00	100.7 AV			1.23 H	351	59.3	41.4
5	#10520.00	59.4 PK	68.2	-8.8	2.24 H	287	46.2	13.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.9 PK	74.0	-13.1	1.01 V	65	54.9	6.0
2	5150.00	49.9 AV	54.0	-4.1	1.01 V	65	43.9	6.0
3	*5260.00	107.7 PK			1.01 V	65	66.3	41.4
4	*5260.00	100.5 AV			1.01 V	65	59.1	41.4
5	#10520.00	58.3 PK	68.2	-9.9	2.41 V	116	45.1	13.2

Remarks:

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

RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	107.8 PK			1.41 H	351	66.5	41.3
2	*5300.00	100.7 AV			1.41 H	351	59.4	41.3
3	10600.00	60.0 PK	74.0	-14.0	2.03 H	144	46.4	13.6
4	10600.00	49.9 AV	54.0	-4.1	2.03 H	144	36.3	13.6
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	*5300.00	106.9 PK			1.00 V	50	65.6	41.3
2	*5300.00	99.6 AV			1.00 V	50	58.3	41.3
3	10600.00	59.0 PK	74.0	-15.0	1.58 V	337	45.4	13.6
4	10600.00	48.8 AV	54.0	-5.2	1.58 V	337	35.2	13.6

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	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	107.3 PK			1.52 H	352	65.9	41.4
2	*5320.00	100.0 AV			1.52 H	352	58.6	41.4
3	5350.00	64.2 PK	74.0	-9.8	1.52 H	352	58.3	5.9
4	5350.00	53.0 AV	54.0	-1.0	1.52 H	352	47.1	5.9
5	10640.00	60.0 PK	74.0	-14.0	2.41 H	118	46.2	13.8
6	10640.00	49.9 AV	54.0	-4.1	2.41 H	118	36.1	13.8
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			1.00 V	63	65.5	41.4
2	*5320.00	99.6 AV			1.00 V	63	58.2	41.4
3	5350.00	63.3 PK	74.0	-10.7	1.00 V	63	57.4	5.9
4	5350.00	52.6 AV	54.0	-1.4	1.00 V	63	46.7	5.9
5	10640.00	59.1 PK	74.0	-14.9	2.42 V	116	45.3	13.8
6	10640.00	49.2 AV	54.0	-4.8	2.42 V	116	35.4	13.8

Remarks:

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

RF Mode	802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	64.6 PK	74.0	-9.4	1.32 H	70	58.5	6.1
2	5460.00	52.5 AV	54.0	-1.5	1.32 H	70	46.4	6.1
3	#5470.00	67.1 PK	68.2	-1.1	1.32 H	70	61.0	6.1
4	*5500.00	108.6 PK			1.32 H	70	67.0	41.6
5	*5500.00	101.3 AV			1.32 H	70	59.7	41.6
6	11000.00	60.0 PK	74.0	-14.0	2.12 H	153	46.4	13.6
7	11000.00	49.8 AV	54.0	-4.2	2.12 H	153	36.2	13.6
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	63.8 PK	74.0	-10.2	1.18 V	101	57.7	6.1
2	5460.00	52.7 AV	54.0	-1.3	1.18 V	101	46.6	6.1
3	#5470.00	67.0 PK	68.2	-1.2	1.18 V	101	60.9	6.1
4	*5500.00	108.4 PK			1.18 V	101	66.8	41.6
5	*5500.00	101.0 AV			1.18 V	101	59.4	41.6
6	11000.00	58.7 PK	74.0	-15.3	1.77 V	325	45.3	13.4
7	11000.00	48.5 AV	54.0	-5.5	1.77 V	325	35.1	13.4

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	802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	111.4 PK			1.23 H	68	69.5	41.9
2	*5580.00	104.3 AV			1.23 H	68	62.4	41.9
3	11160.00	59.7 PK	74.0	-14.3	2.13 H	146	46.2	13.5
4	11160.00	49.5 AV	54.0	-4.5	2.13 H	146	36.0	13.5
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	*5580.00	111.3 PK			1.27 V	110	69.4	41.9
2	*5580.00	104.0 AV			1.27 V	110	62.1	41.9
3	11160.00	58.8 PK	74.0	-15.2	2.32 V	155	45.3	13.5
4	11160.00	48.9 AV	54.0	-5.1	2.32 V	155	35.4	13.5

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.

RF Mode	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	106.7 PK			1.60 H	178	64.7	42.0
2	*5700.00	99.3 AV			1.60 H	178	57.3	42.0
3	#5725.00	67.2 PK	68.2	-1.0	1.60 H	178	60.4	6.8
4	11400.00	60.3 PK	74.0	-13.7	2.52 H	166	46.3	14.0
5	11400.00	50.0 AV	54.0	-4.0	2.52 H	166	36.0	14.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	106.5 PK			1.63 V	178	64.5	42.0
2	*5700.00	99.1 AV			1.63 V	178	57.1	42.0
3	#5725.00	66.5 PK	68.2	-1.7	1.63 V	176	59.7	6.8
4	11400.00	59.3 PK	74.0	-14.7	2.32 V	278	45.3	14.0
5	11400.00	49.6 AV	54.0	-4.4	2.32 V	278	35.6	14.0

Remarks:

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

RF Mode	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5720.00	111.6 PK			1.39 H	71	69.5	42.1
2	*5720.00	104.2 AV			1.39 H	71	62.1	42.1
3	#5850.00	63.2 PK	68.2	-5.0	1.39 H	71	55.7	7.5
4	11440.00	59.9 PK	74.0	-14.1	2.31 H	164	45.6	14.3
5	11440.00	49.7 AV	54.0	-4.3	2.31 H	164	35.4	14.3
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	*5720.00	110.3 PK			2.01 V	169	68.2	42.1
2	*5720.00	102.9 AV			2.01 V	169	60.8	42.1
3	#5850.00	62.2 PK	68.2	-6.0	2.01 V	169	54.7	7.5
4	11440.00	58.9 PK	74.0	-15.1	1.25 V	278	44.6	14.3
5	11440.00	48.6 AV	54.0	-5.4	1.25 V	278	34.3	14.3

Remarks:

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

RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5601.20	60.9 PK	68.2	-7.3	1.39 H	71	54.6	6.3
2	*5745.00	111.4 PK			1.39 H	71	69.1	42.3
3	*5745.00	104.4 AV			1.39 H	71	62.1	42.3
4	#5988.40	61.7 PK	68.2	-6.5	1.39 H	71	54.1	7.6
5	11490.00	59.7 PK	74.0	-14.3	2.31 H	165	45.3	14.4
6	11490.00	49.8 AV	54.0	-4.2	2.31 H	165	35.4	14.4
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	#5644.80	61.2 PK	68.2	-7.0	1.59 V	177	54.7	6.5
2	*5745.00	111.2 PK			1.59 V	177	68.9	42.3
3	*5745.00	103.9 AV			1.59 V	177	61.6	42.3
4	#5982.40	61.8 PK	68.2	-6.4	1.59 V	177	54.2	7.6
5	11490.00	59.0 PK	74.0	-15.0	3.25 V	13	44.6	14.4
6	11490.00	49.1 AV	54.0	-4.9	3.25 V	13	34.7	14.4

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.

RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5618.80	60.6 PK	68.2	-7.6	1.00 H	61	54.1	6.5
2	*5785.00	112.8 PK			1.00 H	61	70.3	42.5
3	*5785.00	105.6 AV			1.00 H	61	63.1	42.5
4	#5940.40	61.1 PK	68.2	-7.1	1.00 H	61	53.6	7.5
5	11570.00	60.2 PK	74.0	-13.8	2.63 H	189	45.2	15.0
6	11570.00	50.0 AV	54.0	-4.0	2.63 H	189	35.0	15.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5610.40	60.6 PK	68.2	-7.6	1.26 V	181	54.2	6.4
2	*5785.00	112.2 PK			1.26 V	181	69.7	42.5
3	*5785.00	104.3 AV			1.26 V	181	61.8	42.5
4	#5974.80	62.5 PK	68.2	-5.7	1.26 V	181	55.0	7.5
5	11570.00	59.3 PK	74.0	-14.7	3.26 V	177	44.3	15.0
6	11570.00	49.6 AV	54.0	-4.4	3.26 V	177	34.6	15.0

Remarks:

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

RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5623.60	61.6 PK	68.2	-6.6	1.20 H	63	55.1	6.5
2	*5825.00	112.8 PK			1.20 H	63	70.2	42.6
3	*5825.00	105.8 AV			1.20 H	63	63.2	42.6
4	#5935.60	62.0 PK	68.2	-6.2	1.20 H	63	54.3	7.7
5	11650.00	59.8 PK	74.0	-14.2	2.36 H	155	45.2	14.6
6	11650.00	49.7 AV	54.0	-4.3	2.36 H	155	35.1	14.6
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	#5605.60	61.2 PK	68.2	-7.0	1.45 V	181	54.9	6.3
2	*5825.00	112.0 PK			1.45 V	181	69.4	42.6
3	*5825.00	104.8 AV			1.45 V	181	62.2	42.6
4	#5932.40	61.3 PK	68.2	-6.9	1.45 V	181	53.6	7.7
5	11650.00	58.8 PK	74.0	-15.2	2.32 V	23	44.2	14.6
6	11650.00	48.9 AV	54.0	-5.1	2.32 V	23	34.3	14.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.4 PK	74.0	-5.6	1.34 H	241	62.4	6.0
2	5150.00	52.9 AV	54.0	-1.1	1.34 H	241	46.9	6.0
3	*5180.00	104.2 PK			1.34 H	241	62.6	41.6
4	*5180.00	96.2 AV			1.34 H	241	54.6	41.6
5	#10360.00	59.0 PK	68.2	-9.2	2.20 H	165	46.4	12.6
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	68.8 PK	74.0	-5.2	1.16 V	53	62.8	6.0
2	5150.00	51.5 AV	54.0	-2.5	1.16 V	53	45.5	6.0
3	*5180.00	101.6 PK			1.16 V	53	60.0	41.6
4	*5180.00	94.1 AV			1.16 V	53	52.5	41.6
5	#10360.00	58.1 PK	68.2	-10.1	2.71 V	235	45.5	12.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.2 PK	74.0	-10.8	1.23 H	287	57.2	6.0
2	5150.00	52.8 AV	54.0	-1.2	1.23 H	287	46.8	6.0
3	*5200.00	109.0 PK			1.23 H	287	67.6	41.4
4	*5200.00	100.9 AV			1.23 H	287	59.5	41.4
5	#10400.00	58.5 PK	68.2	-9.7	2.54 H	222	46.3	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.5 PK	74.0	-11.5	1.25 V	33	56.5	6.0
2	5150.00	52.1 AV	54.0	-1.9	1.25 V	33	46.1	6.0
3	*5200.00	106.5 PK			1.25 V	33	65.1	41.4
4	*5200.00	98.3 AV			1.25 V	33	56.9	41.4
5	#10400.00	57.4 PK	68.2	-10.8	1.78 V	265	45.2	12.2

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	108.2 PK			1.36 H	302	66.8	41.4
2	*5240.00	100.0 AV			1.36 H	302	58.6	41.4
3	5350.00	60.6 PK	74.0	-13.4	1.36 H	302	54.7	5.9
4	5350.00	50.1 AV	54.0	-3.9	1.36 H	302	44.2	5.9
5	#10480.00	59.5 PK	68.2	-8.7	2.04 H	165	46.4	13.1
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	*5240.00	108.0 PK			1.02 V	213	66.6	41.4
2	*5240.00	99.4 AV			1.02 V	213	58.0	41.4
3	5350.00	60.9 PK	74.0	-13.1	1.02 V	213	55.0	5.9
4	5350.00	50.0 AV	54.0	-4.0	1.02 V	213	44.1	5.9
5	#10480.00	58.7 PK	68.2	-9.5	1.88 V	142	45.6	13.1

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 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.6 PK	74.0	-10.4	1.63 H	287	55.4	8.2
2	5150.00	52.3 AV	54.0	-1.7	1.63 H	287	44.1	8.2
3	*5260.00	108.3 PK			1.63 H	287	66.9	41.4
4	*5260.00	100.3 AV			1.63 H	287	58.9	41.4
5	#10520.00	59.6 PK	68.2	-8.6	2.03 H	222	46.5	13.1
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	5150.00	63.0 PK	74.0	-11.0	1.25 V	44	54.8	8.2
2	5150.00	51.9 AV	54.0	-2.1	1.25 V	44	43.7	8.2
3	*5260.00	107.5 PK			1.25 V	44	66.1	41.4
4	*5260.00	99.6 AV			1.25 V	44	58.2	41.4
5	#10520.00	58.9 PK	68.2	-9.3	1.52 V	278	45.8	13.1

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 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	107.3 PK			1.39 H	335	66.0	41.3
2	*5300.00	99.1 AV			1.39 H	335	57.8	41.3
3	10600.00	59.9 PK	74.0	-14.1	1.52 H	203	46.7	13.2
4	10600.00	49.6 AV	54.0	-4.4	1.52 H	204	36.4	13.2
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	106.9 PK			1.52 V	228	65.6	41.3
2	*5300.00	98.7 AV			1.52 V	228	57.4	41.3
3	10600.00	58.5 PK	74.0	-15.5	1.10 V	357	45.3	13.2
4	10600.00	48.7 AV	54.0	-5.3	1.10 V	357	35.5	13.2

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	104.9 PK			1.42 H	288	63.5	41.4
2	*5320.00	97.2 AV			1.42 H	288	55.8	41.4
3	5350.00	63.7 PK	74.0	-10.3	1.42 H	288	55.7	8.0
4	5350.00	52.8 AV	54.0	-1.2	1.42 H	288	44.8	8.0
5	10640.00	60.0 PK	74.0	-14.0	1.83 H	201	46.5	13.5
6	10640.00	50.2 AV	54.0	-3.8	1.83 H	201	36.7	13.5
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	*5320.00	104.3 PK			1.03 V	88	62.9	41.4
2	*5320.00	96.6 AV			1.03 V	88	55.2	41.4
3	5350.00	64.0 PK	74.0	-10.0	1.03 V	88	56.0	8.0
4	5350.00	52.7 AV	54.0	-1.3	1.03 V	88	44.7	8.0
5	10640.00	59.0 PK	74.0	-15.0	2.15 V	203	45.5	13.5
6	10640.00	48.8 AV	54.0	-5.2	2.15 V	203	35.3	13.5

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.

RF Mode	802.11ac (VHT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	65.1 PK	74.0	-8.9	1.06 H	252	56.9	8.2
2	5460.00	52.8 AV	54.0	-1.2	1.06 H	252	44.6	8.2
3	#5470.00	67.1 PK	68.2	-1.1	1.06 H	252	58.9	8.2
4	*5500.00	106.8 PK			1.06 H	252	65.2	41.6
5	*5500.00	99.2 AV			1.06 H	252	57.6	41.6
6	11000.00	59.1 PK	74.0	-14.9	1.88 H	266	44.2	14.9
7	11000.00	49.4 AV	54.0	-4.6	1.88 H	266	34.5	14.9
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	63.0 PK	74.0	-11.0	1.43 V	66	54.8	8.2
2	5460.00	52.1 AV	54.0	-1.9	1.43 V	66	43.9	8.2
3	#5470.00	65.0 PK	68.2	-3.2	1.43 V	66	56.8	8.2
4	*5500.00	104.9 PK			1.43 V	66	63.3	41.6
5	*5500.00	97.4 AV			1.43 V	66	55.8	41.6
6	11000.00	60.2 PK	74.0	-13.8	2.39 V	110	45.3	14.9
7	11000.00	49.4 AV	54.0	-4.6	2.39 V	110	34.5	14.9

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.9 PK			1.05 H	123	69.0	41.9
2	*5580.00	103.1 AV			1.05 H	123	61.2	41.9
3	11160.00	60.2 PK	74.0	-13.8	2.25 H	152	45.7	14.5
4	11160.00	49.7 AV	54.0	-4.3	2.25 H	152	35.2	14.5
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	*5580.00	109.4 PK			1.32 V	78	67.5	41.9
2	*5580.00	101.7 AV			1.32 V	78	59.8	41.9
3	11160.00	58.8 PK	74.0	-15.2	1.82 V	225	44.3	14.5
4	11160.00	49.1 AV	54.0	-4.9	1.82 V	225	34.6	14.5

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	106.7 PK			1.35 H	118	64.7	42.0
2	*5700.00	99.0 AV			1.35 H	118	57.0	42.0
3	#5725.00	67.2 PK	68.2	-1.0	1.35 H	118	58.4	8.8
4	11400.00	61.7 PK	74.0	-12.3	2.53 H	334	46.5	15.2
5	11400.00	49.8 AV	54.0	-4.2	2.53 H	334	34.6	15.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	105.9 PK			1.63 V	225	63.9	42.0
2	*5700.00	98.2 AV			1.63 V	225	56.2	42.0
3	#5725.00	67.0 PK	68.2	-1.2	1.63 V	225	58.2	8.8
4	11400.00	60.8 PK	74.0	-13.2	2.82 V	115	45.6	15.2
5	11400.00	49.5 AV	54.0	-4.5	2.82 V	115	34.3	15.2

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5720.00	112.2 PK			1.42 H	82	70.1	42.1
2	*5720.00	103.7 AV			1.42 H	82	61.6	42.1
3	#5850.00	62.7 PK	68.2	-5.5	1.42 H	82	55.2	7.5
4	11440.00	59.6 PK	74.0	-14.4	2.23 H	155	45.3	14.3
5	11440.00	50.0 AV	54.0	-4.0	2.23 H	155	35.7	14.3
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	*5720.00	111.1 PK			1.36 V	99	69.0	42.1
2	*5720.00	103.4 AV			1.36 V	99	61.3	42.1
3	#5850.00	62.6 PK	68.2	-5.6	1.36 V	99	55.1	7.5
4	11440.00	58.7 PK	74.0	-15.3	2.05 V	117	44.4	14.3
5	11440.00	48.6 AV	54.0	-5.4	2.05 V	117	34.3	14.3

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	#5626.00	63.4 PK	68.2	-4.8	1.13 H	27	70.2	-6.8
2	*5745.00	111.6 PK			1.13 H	27	69.3	42.3
3	*5745.00	104.2 AV			1.13 H	27	61.9	42.3
4	#5992.00	63.6 PK	68.2	-4.6	1.13 H	27	69.4	-5.8
5	11490.00	61.9 PK	74.0	-12.1	2.87 H	225	46.3	15.6
6	11490.00	49.8 AV	54.0	-4.2	2.87 H	225	34.2	15.6
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	#5618.30	63.7 PK	68.2	-4.5	1.03 V	109	70.5	-6.8
2	*5745.00	110.2 PK			1.03 V	109	67.9	42.3
3	*5745.00	102.9 AV			1.03 V	109	60.6	42.3
4	#5941.20	62.9 PK	68.2	-5.3	1.03 V	109	68.8	-5.9
5	11490.00	61.3 PK	74.0	-12.7	1.77 V	222	45.7	15.6
6	11490.00	49.8 AV	54.0	-4.2	1.77 V	122	34.2	15.6

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 (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.40	62.8 PK	68.2	-5.4	1.26 H	78	69.6	-6.8
2	*5785.00	111.6 PK			1.26 H	78	69.1	42.5
3	*5785.00	104.3 AV			1.26 H	78	61.8	42.5
4	#5945.30	63.7 PK	68.2	-4.5	1.26 H	78	69.5	-5.8
5	11570.00	62.5 PK	74.0	-11.5	2.63 H	152	46.6	15.9
6	11570.00	49.8 AV	54.0	-4.2	2.63 H	152	33.9	15.9
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	#5630.40	62.5 PK	68.2	-5.7	1.09 V	122	69.3	-6.8
2	*5785.00	110.3 PK			1.09 V	122	67.8	42.5
3	*5785.00	103.4 AV			1.09 V	122	60.9	42.5
4	#5950.40	63.2 PK	68.2	-5.0	1.09 V	122	69.1	-5.9
5	11570.00	61.7 PK	74.0	-12.3	1.52 V	77	45.8	15.9
6	11570.00	50.5 AV	54.0	-3.5	1.52 V	77	34.6	15.9

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	#5611.20	63.2 PK	68.2	-5.0	1.26 H	57	70.1	-6.9
2	*5825.00	111.9 PK			1.26 H	57	69.3	42.6
3	*5825.00	104.4 AV			1.26 H	57	61.8	42.6
4	#5970.40	62.9 PK	68.2	-5.3	1.26 H	57	68.8	-5.9
5	11650.00	61.2 PK	74.0	-12.8	2.78 H	255	45.8	15.4
6	11650.00	49.7 AV	54.0	-4.3	2.78 H	255	34.3	15.4
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	#5635.60	62.7 PK	68.2	-5.5	1.04 V	123	69.5	-6.8
2	*5825.00	110.3 PK			1.04 V	123	67.7	42.6
3	*5825.00	102.9 AV			1.04 V	123	60.3	42.6
4	#5988.80	62.8 PK	68.2	-5.4	1.04 V	123	68.6	-5.8
5	11650.00	60.6 PK	74.0	-13.4	1.52 V	187	45.2	15.4
6	11650.00	49.6 AV	54.0	-4.4	1.52 V	187	34.2	15.4

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 38 : 5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.0 PK	74.0	-10.0	1.27 H	312	55.8	8.2
2	5150.00	52.9 AV	54.0	-1.1	1.27 H	312	44.7	8.2
3	*5190.00	98.8 PK			1.27 H	312	57.4	41.4
4	*5190.00	91.5 AV			1.27 H	312	50.1	41.4
5	#10380.00	58.6 PK	68.2	-9.6	2.52 H	197	46.3	12.3
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	5150.00	62.9 PK	74.0	-11.1	1.06 V	45	54.7	8.2
2	5150.00	52.7 AV	54.0	-1.3	1.06 V	45	44.5	8.2
3	*5190.00	97.4 PK			1.06 V	45	56.0	41.4
4	*5190.00	89.8 AV			1.06 V	45	48.4	41.4
5	#10380.00	57.9 PK	68.2	-10.3	3.25 V	225	45.6	12.3

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 46 : 5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.4 PK	74.0	-9.6	1.16 H	324	56.2	8.2
2	5150.00	53.0 AV	54.0	-1.0	1.16 H	324	44.8	8.2
3	*5230.00	103.0 PK			1.16 H	324	61.6	41.4
4	*5230.00	95.3 AV			1.16 H	324	53.9	41.4
5	#10460.00	58.9 PK	68.2	-9.3	1.75 H	225	46.1	12.8
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	63.1 PK	74.0	-10.9	1.05 V	44	54.9	8.2
2	5150.00	52.7 AV	54.0	-1.3	1.05 V	44	44.5	8.2
3	*5230.00	101.6 PK			1.05 V	44	60.2	41.4
4	*5230.00	94.0 AV			1.05 V	44	52.6	41.4
5	#10460.00	58.1 PK	68.2	-10.1	1.12 V	245	45.3	12.8

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 54 : 5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5270.00	103.9 PK			1.15 H	325	62.5	41.4
2	*5270.00	95.9 AV			1.15 H	325	54.5	41.4
3	5350.00	63.6 PK	74.0	-10.4	1.15 H	325	55.6	8.0
4	5350.00	52.8 AV	54.0	-1.2	1.15 H	325	44.8	8.0
5	#10540.00	59.5 PK	68.2	-8.7	1.63 H	287	46.3	13.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5270.00	102.6 PK			1.15 V	56	61.2	41.4
2	*5270.00	94.7 AV			1.15 V	56	53.3	41.4
3	5350.00	63.4 PK	74.0	-10.6	1.15 V	56	55.4	8.0
4	5350.00	52.7 AV	54.0	-1.3	1.15 V	56	44.7	8.0
5	#10540.00	58.4 PK	68.2	-9.8	2.87 V	265	45.2	13.2

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 62 : 5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	98.4 PK			1.15 H	321	57.1	41.3
2	*5310.00	90.7 AV			1.15 H	321	49.4	41.3
3	5350.00	62.8 PK	74.0	-11.2	1.15 H	321	54.8	8.0
4	5350.00	53.0 AV	54.0	-1.0	1.15 H	321	45.0	8.0
5	10620.00	59.3 PK	74.0	-14.7	2.08 H	188	46.0	13.3
6	10620.00	49.6 AV	54.0	-4.4	2.08 H	188	36.3	13.3
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	*5310.00	97.1 PK			1.24 V	33	55.8	41.3
2	*5310.00	89.8 AV			1.24 V	33	48.5	41.3
3	5350.00	62.4 PK	74.0	-11.6	1.24 V	33	54.4	8.0
4	5350.00	52.6 AV	54.0	-1.4	1.24 V	33	44.6	8.0
5	10620.00	58.8 PK	74.0	-15.2	2.32 V	297	45.5	13.3
6	10620.00	49.1 AV	54.0	-4.9	2.32 V	297	35.8	13.3

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.

RF Mode	802.11ac (VHT40)	Channel	CH 102 : 5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	63.5 PK	74.0	-10.5	1.19 H	69	55.3	8.2
2	5460.00	52.9 AV	54.0	-1.1	1.19 H	69	44.7	8.2
3	#5470.00	67.0 PK	68.2	-1.2	1.19 H	69	58.8	8.2
4	*5510.00	102.1 PK			1.19 H	69	60.4	41.7
5	*5510.00	94.5 AV			1.19 H	69	52.8	41.7
6	11020.00	61.0 PK	74.0	-13.0	3.27 H	17	46.3	14.7
7	11020.00	50.3 AV	54.0	-3.7	3.27 H	17	35.6	14.7
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	5460.00	63.2 PK	74.0	-10.8	1.35 V	55	55.0	8.2
2	5460.00	52.8 AV	54.0	-1.2	1.35 V	55	44.6	8.2
3	#5470.00	66.1 PK	68.2	-2.1	1.35 V	55	57.9	8.2
4	*5510.00	100.9 PK			1.35 V	55	59.2	41.7
5	*5510.00	93.4 AV			1.35 V	55	51.7	41.7
6	11020.00	60.5 PK	74.0	-13.5	1.63 V	101	45.8	14.7
7	11020.00	49.5 AV	54.0	-4.5	1.63 V	101	34.8	14.7

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 110 : 5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	107.4 PK			1.15 H	78	65.6	41.8
2	*5550.00	99.9 AV			1.15 H	78	58.1	41.8
3	11100.00	60.1 PK	74.0	-13.9	1.85 H	166	46.1	14.0
4	11100.00	49.5 AV	54.0	-4.5	1.85 H	166	35.5	14.0
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	106.2 PK			1.33 V	62	64.4	41.8
2	*5550.00	98.7 AV			1.33 V	62	56.9	41.8
3	11100.00	59.6 PK	74.0	-14.4	2.78 V	152	45.6	14.0
4	11100.00	49.4 AV	54.0	-4.6	2.78 V	152	35.4	14.0

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 134 : 5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	105.4 PK			1.35 H	95	63.4	42.0
2	*5670.00	97.7 AV			1.35 H	95	55.7	42.0
3	#5725.00	67.1 PK	68.2	-1.1	1.35 H	95	58.3	8.8
4	11340.00	60.7 PK	74.0	-13.3	2.01 H	262	45.6	15.1
5	11340.00	49.3 AV	54.0	-4.7	2.01 H	262	34.2	15.1
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	*5670.00	104.3 PK			1.27 V	67	62.3	42.0
2	*5670.00	96.7 AV			1.27 V	67	54.7	42.0
3	#5725.00	66.7 PK	68.2	-1.5	1.27 V	67	57.9	8.8
4	11340.00	60.7 PK	74.0	-13.3	2.24 V	139	45.6	15.1
5	11340.00	49.3 AV	54.0	-4.7	2.24 V	139	34.2	15.1

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 142 : 5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	*5710.00	108.5 PK			1.15 H	76	66.4	42.1
2	*5710.00	101.2 AV			1.15 H	76	59.1	42.1
3	#5850.00	63.1 PK	68.2	-5.1	1.15 H	76	55.6	7.5
4	11420.00	59.7 PK	74.0	-14.3	2.23 H	157	45.6	14.1
5	11420.00	49.8 AV	54.0	-4.2	2.23 H	157	35.7	14.1
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	*5710.00	107.7 PK			1.65 V	223	65.6	42.1
2	*5710.00	99.9 AV			1.65 V	223	57.8	42.1
3	#5850.00	62.6 PK	68.2	-5.6	1.65 V	223	55.1	7.5
4	11420.00	58.4 PK	74.0	-15.6	2.64 V	107	44.3	14.1
5	11420.00	48.6 AV	54.0	-5.4	2.64 V	107	34.5	14.1

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 151 : 5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5644.80	64.2 PK	68.2	-4.0	1.12 H	69	71.0	-6.8
2	*5755.00	108.7 PK			1.12 H	69	66.4	42.3
3	*5755.00	101.0 AV			1.12 H	69	58.7	42.3
4	#5925.40	64.3 PK	68.2	-3.9	1.12 H	69	70.1	-5.8
5	11510.00	61.2 PK	74.0	-12.8	2.03 H	54	45.5	15.7
6	11510.00	50.3 AV	54.0	-3.7	2.03 H	54	34.6	15.7
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	#5648.40	64.0 PK	68.2	-4.2	1.15 V	93	70.8	-6.8
2	*5755.00	107.7 PK			1.15 V	93	65.4	42.3
3	*5755.00	99.9 AV			1.15 V	93	57.6	42.3
4	#5928.80	63.0 PK	68.2	-5.2	1.15 V	93	68.8	-5.8
5	11510.00	59.9 PK	74.0	-14.1	2.23 V	251	44.2	15.7
6	11510.00	49.8 AV	54.0	-4.2	2.23 V	251	34.1	15.7

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 (VHT40)	Channel	CH 159 : 5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	#5618.40	63.1 PK	68.2	-5.1	1.23 H	57	69.9	-6.8
2	*5795.00	109.1 PK			1.23 H	57	66.6	42.5
3	*5795.00	101.4 AV			1.23 H	57	58.9	42.5
4	#5979.20	64.7 PK	68.2	-3.5	1.23 H	57	70.5	-5.8
5	11590.00	61.5 PK	74.0	-12.5	3.12 H	288	45.6	15.9
6	11590.00	50.4 AV	54.0	-3.6	3.12 H	288	34.5	15.9
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	#5622.40	62.5 PK	68.2	-5.7	1.15 V	99	69.3	-6.8
2	*5795.00	107.6 PK			1.15 V	99	65.1	42.5
3	*5795.00	100.1 AV			1.15 V	99	57.6	42.5
4	#5952.40	63.6 PK	68.2	-4.6	1.15 V	99	69.5	-5.9
5	11590.00	60.7 PK	74.0	-13.3	2.52 V	177	44.8	15.9
6	11590.00	50.0 AV	54.0	-4.0	2.52 V	177	34.1	15.9

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 42 : 5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	62.7 PK	74.0	-11.3	1.33 H	330	56.7	6.0
2	5150.00	53.0 AV	54.0	-1.0	1.33 H	330	47.0	6.0
3	*5210.00	97.0 PK			1.33 H	330	55.5	41.5
4	*5210.00	89.1 AV			1.33 H	330	47.6	41.5
5	#10420.00	59.1 PK	68.2	-9.1	2.07 H	242	46.6	12.5
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	5150.00	60.7 PK	74.0	-13.3	1.00 V	56	54.7	6.0
2	5150.00	52.5 AV	54.0	-1.5	1.00 V	56	46.5	6.0
3	*5210.00	94.7 PK			1.00 V	56	53.2	41.5
4	*5210.00	87.4 AV			1.00 V	56	45.9	41.5
5	#10420.00	58.2 PK	68.2	-10.0	2.17 V	339	45.7	12.5

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 58 : 5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	96.3 PK			1.30 H	334	54.9	41.4
2	*5290.00	88.8 AV			1.30 H	334	47.4	41.4
3	5350.00	62.2 PK	74.0	-11.8	1.30 H	334	56.3	5.9
4	5350.00	52.9 AV	54.0	-1.1	1.30 H	334	47.0	5.9
5	#10580.00	60.1 PK	68.2	-8.1	2.77 H	213	46.4	13.7
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	*5290.00	94.7 PK			1.00 V	62	53.3	41.4
2	*5290.00	87.4 AV			1.00 V	62	46.0	41.4
3	5350.00	61.9 PK	74.0	-12.1	1.00 V	62	56.0	5.9
4	5350.00	52.6 AV	54.0	-1.4	1.00 V	62	46.7	5.9
5	#10580.00	59.6 PK	68.2	-8.6	3.33 V	40	45.9	13.7

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 106 : 5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.2 PK	74.0	-11.8	1.31 H	133	56.1	6.1
2	5460.00	53.0 AV	54.0	-1.0	1.31 H	133	46.9	6.1
3	#5470.00	63.6 PK	68.2	-4.6	1.31 H	133	57.5	6.1
4	*5530.00	97.1 PK			1.31 H	133	55.4	41.7
5	*5530.00	89.9 AV			1.31 H	133	48.2	41.7
6	11060.00	59.8 PK	74.0	-14.2	2.22 H	124	46.4	13.4
7	11060.00	49.2 AV	54.0	-4.8	2.22 H	124	35.8	13.4
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	61.2 PK	74.0	-12.8	1.15 V	56	55.1	6.1
2	5460.00	52.5 AV	54.0	-1.5	1.15 V	56	46.4	6.1
3	#5470.00	62.6 PK	68.2	-5.6	1.15 V	56	56.5	6.1
4	*5530.00	95.9 PK			1.15 V	56	54.2	41.7
5	*5530.00	88.5 AV			1.15 V	56	46.8	41.7
6	11060.00	59.2 PK	74.0	-14.8	2.00 V	173	45.8	13.4
7	11060.00	48.9 AV	54.0	-5.1	2.00 V	173	35.5	13.4

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 (VHT80)	Channel	CH 122 : 5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.7 PK	74.0	-13.3	1.14 H	62	54.6	6.1
2	5460.00	51.8 AV	54.0	-2.2	1.14 H	62	45.7	6.1
3	#5470.00	61.4 PK	68.2	-6.8	1.14 H	62	55.3	6.1
4	*5610.00	105.1 PK			1.14 H	62	63.2	41.9
5	*5610.00	97.7 AV			1.14 H	62	55.8	41.9
6	#5725.00	67.1 PK	68.2	-1.1	1.14 H	62	60.3	6.8
7	11220.00	59.4 PK	74.0	-14.6	2.16 H	293	45.7	13.7
8	11220.00	49.6 AV	54.0	-4.4	2.16 H	293	35.9	13.7
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	5460.00	60.6 PK	74.0	-13.4	1.00 V	63	54.5	6.1
2	5460.00	51.7 AV	54.0	-2.3	1.00 V	63	45.6	6.1
3	#5470.00	61.3 PK	68.2	-6.9	1.00 V	63	55.2	6.1
4	*5610.00	103.9 PK			1.00 V	63	62.0	41.9
5	*5610.00	96.3 AV			1.00 V	63	54.4	41.9
6	#5725.00	66.0 PK	68.2	-2.2	1.00 V	63	59.2	6.8
7	11220.00	59.2 PK	74.0	-14.8	2.89 V	322	45.5	13.7
8	11220.00	49.2 AV	54.0	-4.8	2.89 V	322	35.5	13.7

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 138 : 5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	*5690.00	105.5 PK			1.13 H	62	63.5	42.0
2	*5690.00	98.1 AV			1.13 H	62	56.1	42.0
3	#5850.00	63.8 PK	68.2	-4.4	1.13 H	62	56.3	7.5
4	11380.00	60.3 PK	74.0	-13.7	1.44 H	184	46.2	14.1
5	11380.00	49.8 AV	54.0	-4.2	1.44 H	184	35.7	14.1
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	*5690.00	104.2 PK			1.00 V	65	62.2	42.0
2	*5690.00	97.0 AV			1.00 V	65	55.0	42.0
3	#5850.00	62.2 PK	68.2	-6.0	1.00 V	65	54.7	7.5
4	11380.00	60.0 PK	74.0	-14.0	1.79 V	170	45.9	14.1
5	11380.00	49.5 AV	54.0	-4.5	1.79 V	170	35.4	14.1

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 155 : 5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22 °C, 64.7 % RH
Tested By	Thomas Cheng		

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	#5649.20	64.6 PK	68.2	-3.6	1.15 H	59	58.1	6.5
2	*5775.00	106.1 PK			1.15 H	59	63.7	42.4
3	*5775.00	98.8 AV			1.15 H	59	56.4	42.4
4	#5929.60	64.4 PK	68.2	-3.8	1.15 H	59	56.7	7.7
5	11550.00	60.5 PK	74.0	-13.5	2.33 H	359	45.7	14.8
6	11550.00	49.9 AV	54.0	-4.1	2.33 H	359	35.1	14.8
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	#5648.40	63.7 PK	68.2	-4.5	1.10 V	244	57.2	6.5
2	*5775.00	104.7 PK			1.10 V	244	62.3	42.4
3	*5775.00	97.5 AV			1.10 V	244	55.1	42.4
4	#5924.40	62.6 PK	68.6	-6.0	1.10 V	244	54.9	7.7
5	11550.00	60.3 PK	74.0	-13.7	1.10 V	244	45.5	14.8
6	11550.00	49.7 AV	54.0	-4.3	1.10 V	244	34.9	14.8

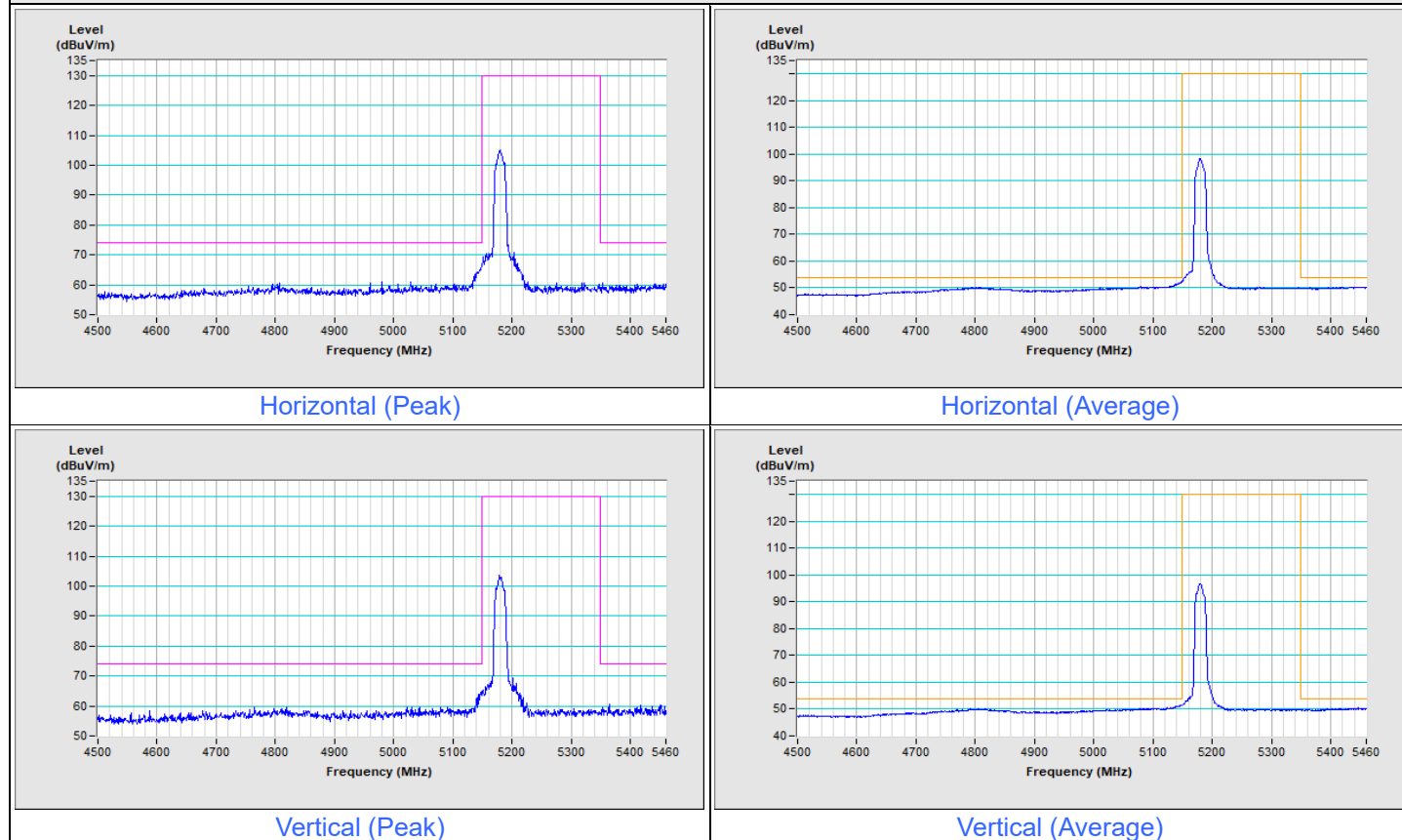
Remarks:

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

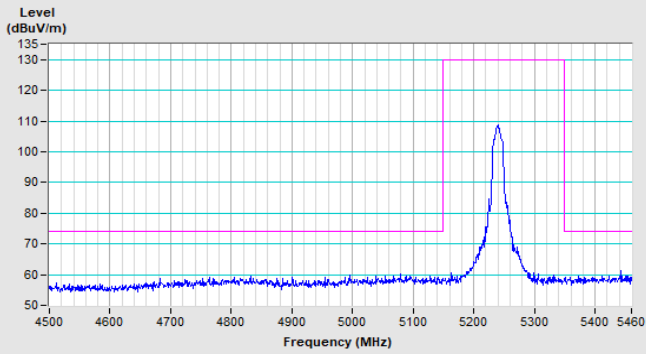
Plot of Band Edge

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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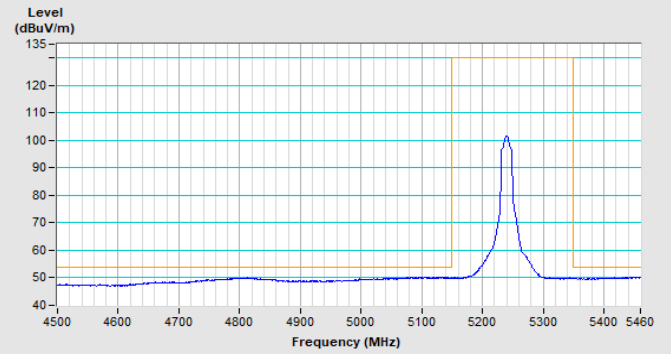
802.11a Channel 36



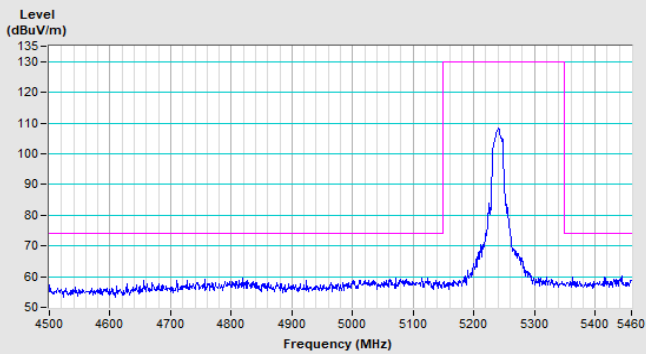
802.11a Channel 48



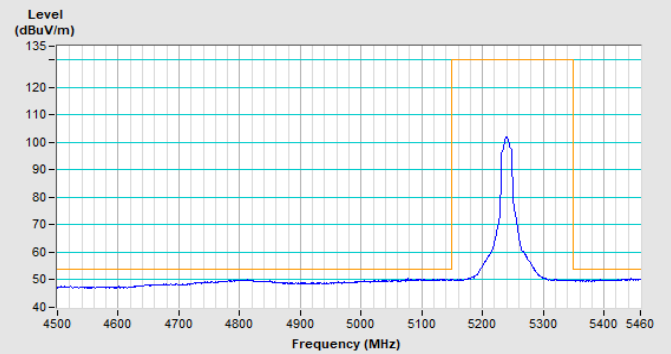
Horizontal (Peak)



Horizontal (Average)

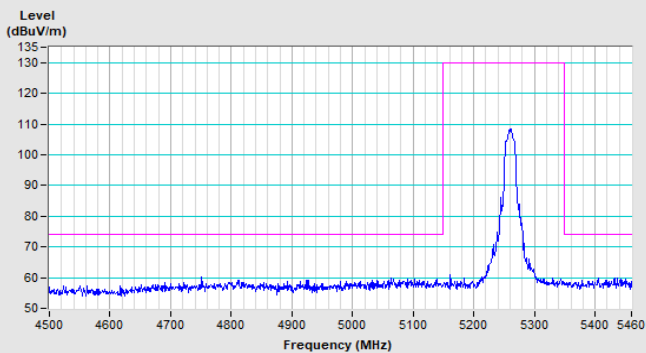


Vertical (Peak)

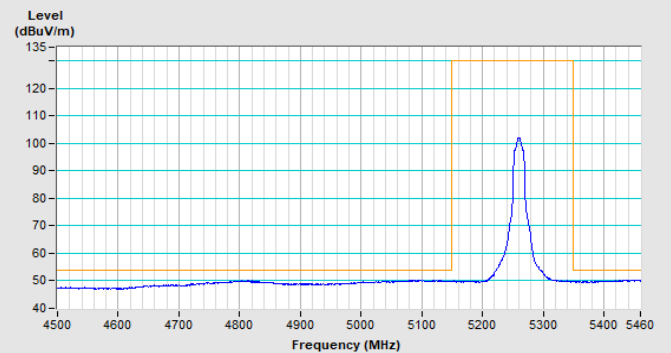


Vertical (Average)

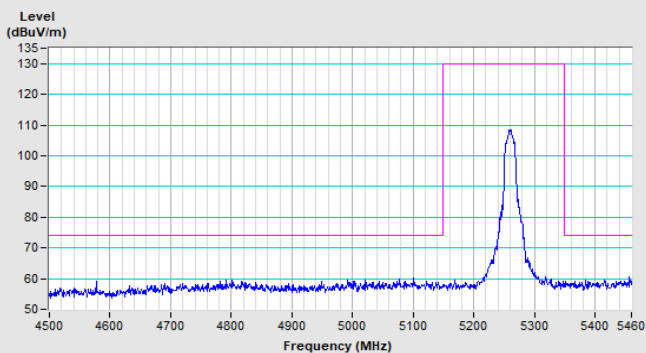
802.11a Channel 52



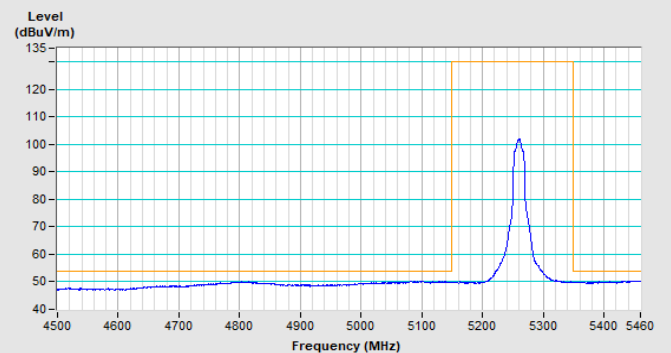
Horizontal (Peak)



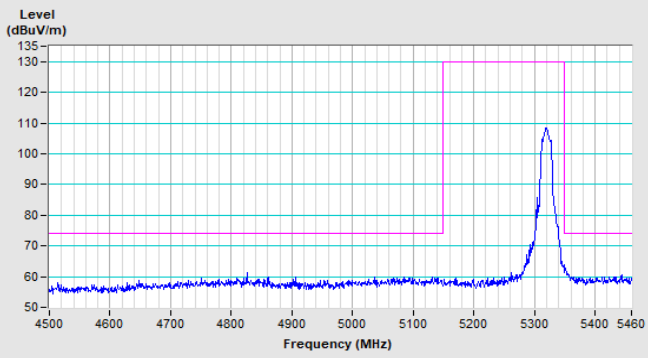
Horizontal (Average)



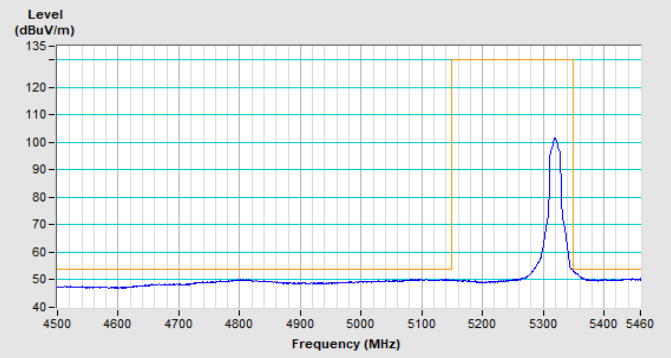
Vertical (Peak)



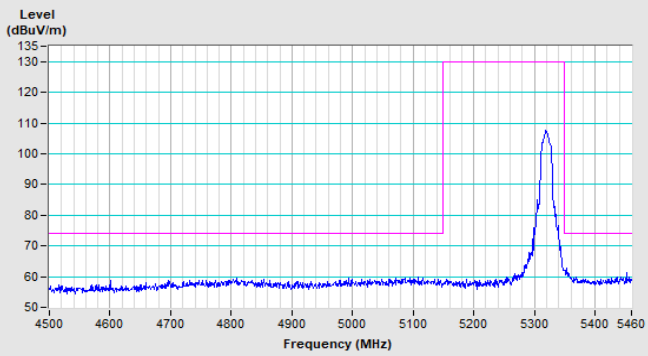
Vertical (Average)

802.11a Channel 64

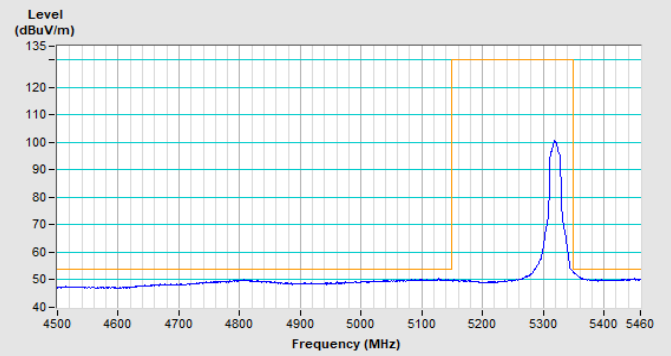
Horizontal (Peak)



Horizontal (Average)



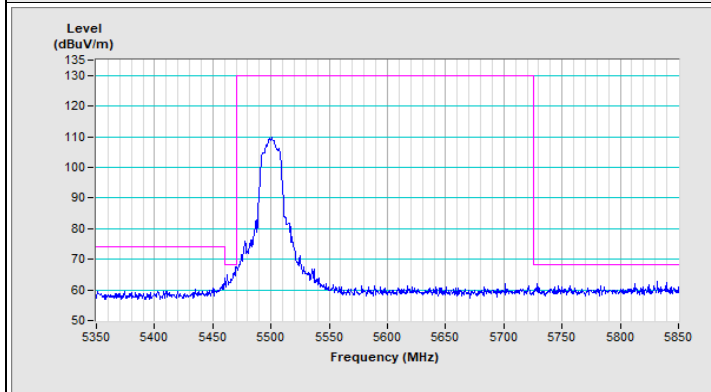
Vertical (Peak)



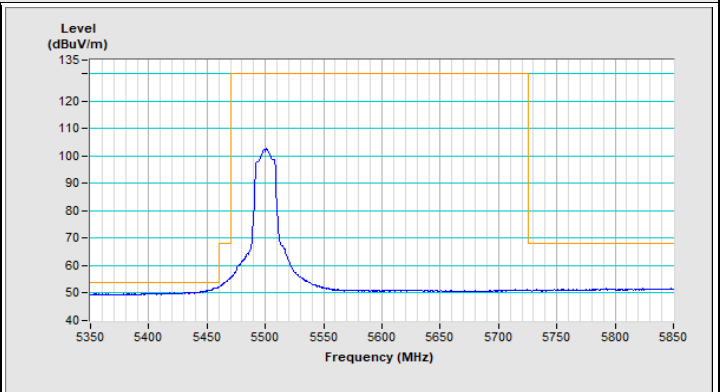
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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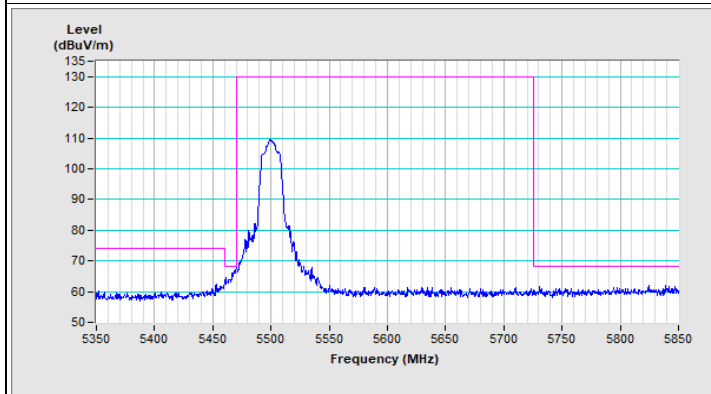
802.11a Channel 100



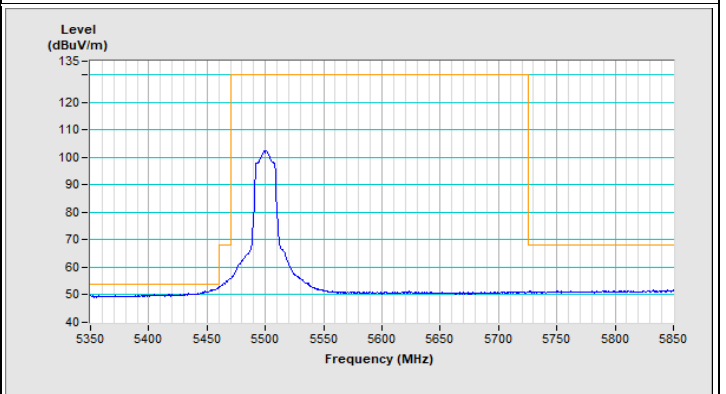
Horizontal (Peak)



Horizontal (Average)

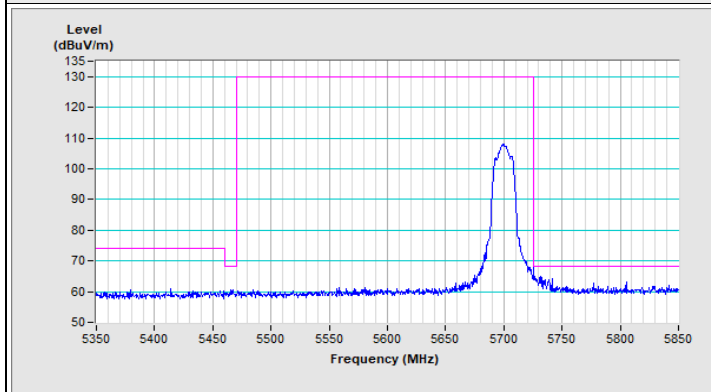


Vertical (Peak)

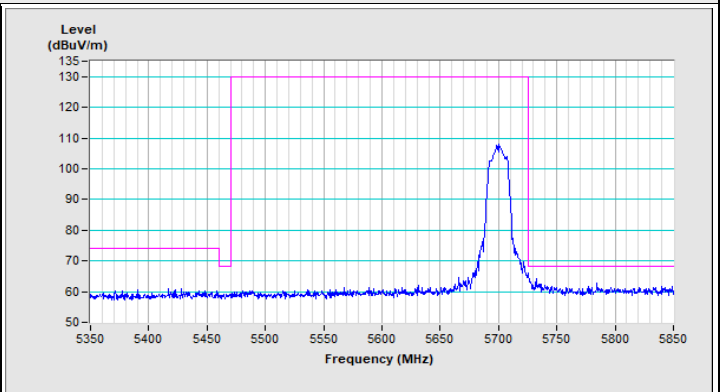


Vertical (Average)

802.11a Channel 140



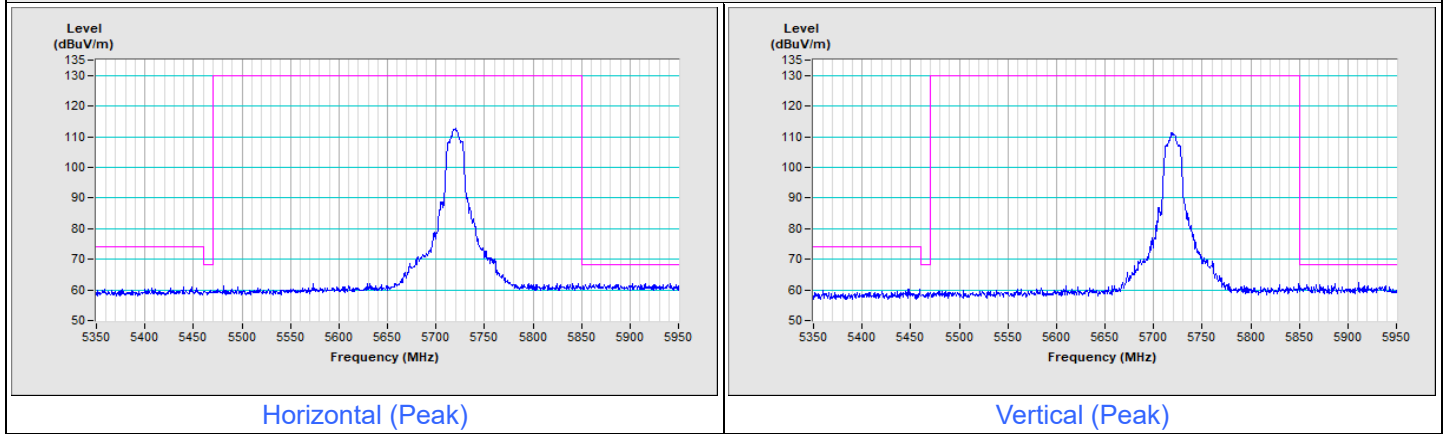
Horizontal (Peak)



Vertical (Peak)

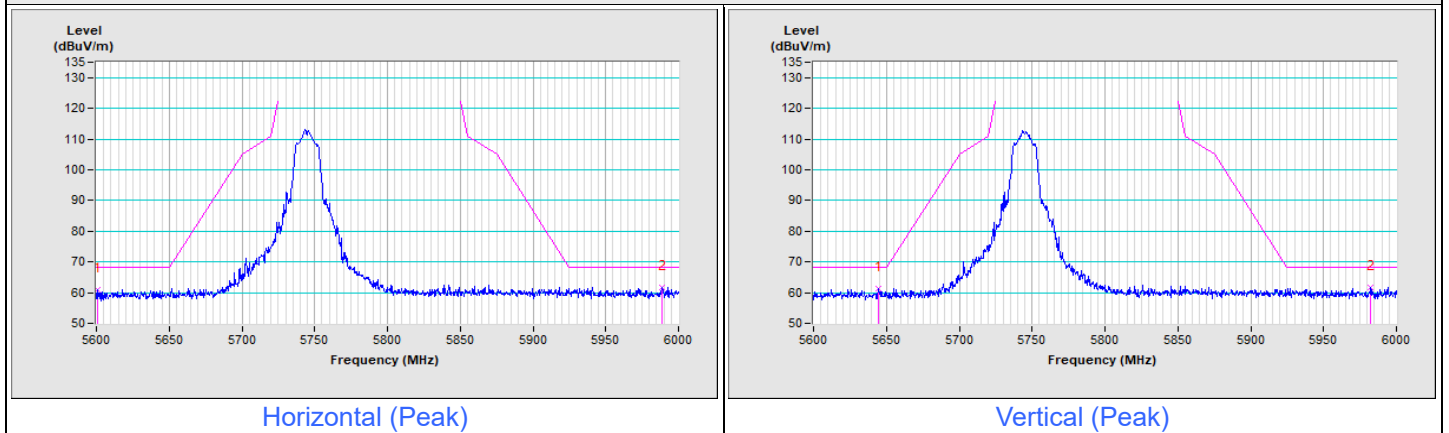
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11a Channel 144

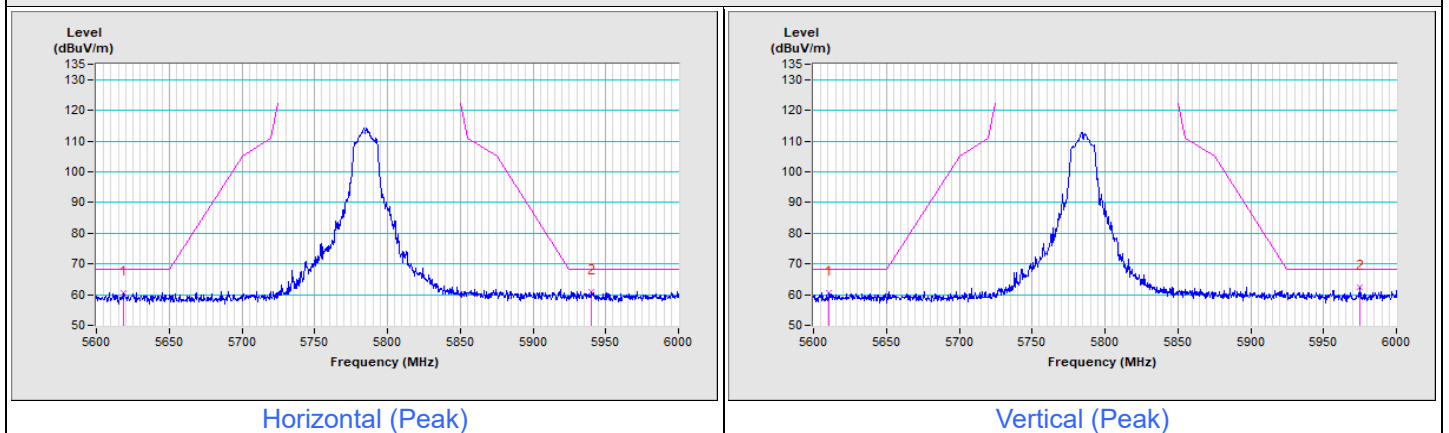


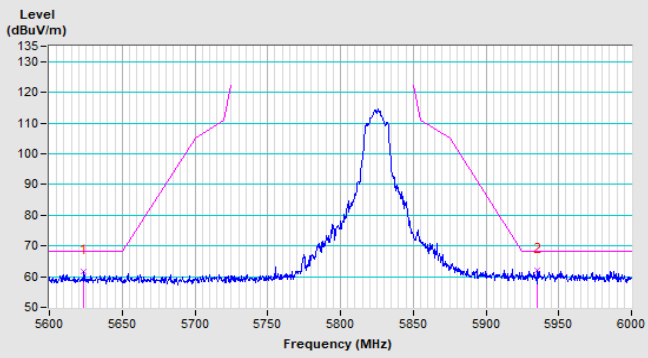
Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11a Channel 149

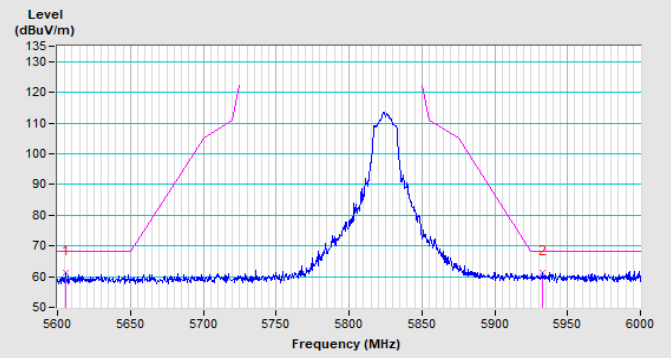


802.11a Channel 157



802.11a Channel 165

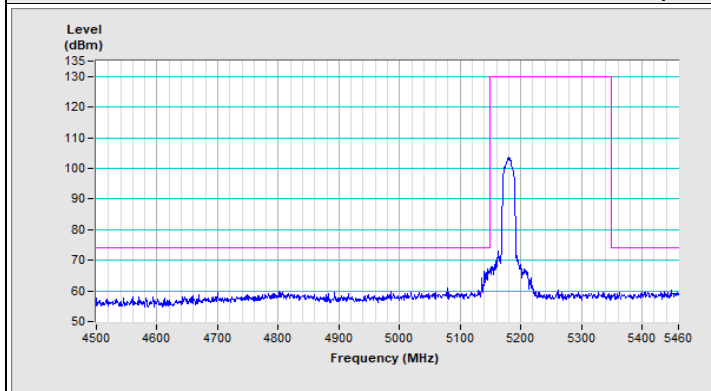
Horizontal (Peak)



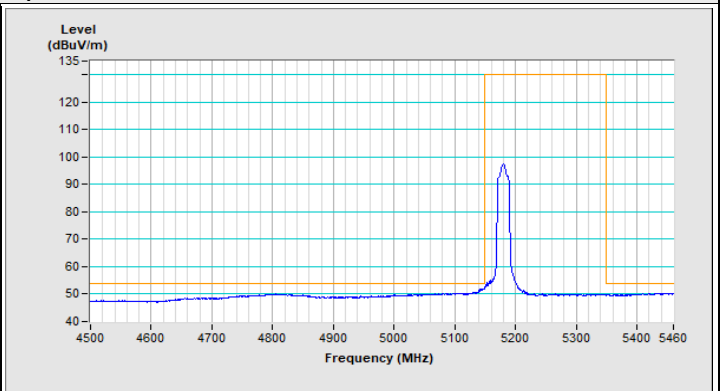
Vertical (Peak)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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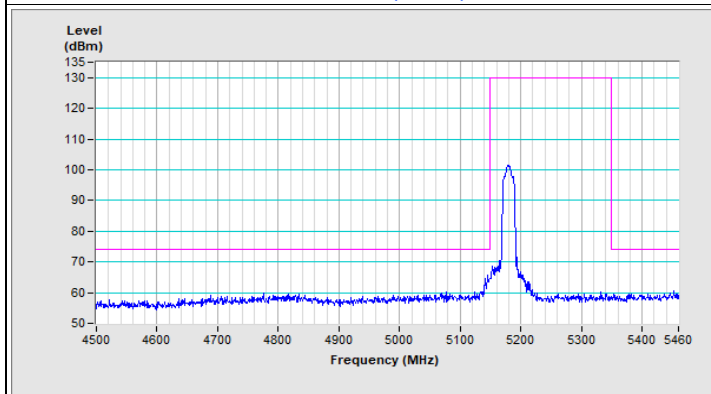
802.11ac (VHT20) Channel 36



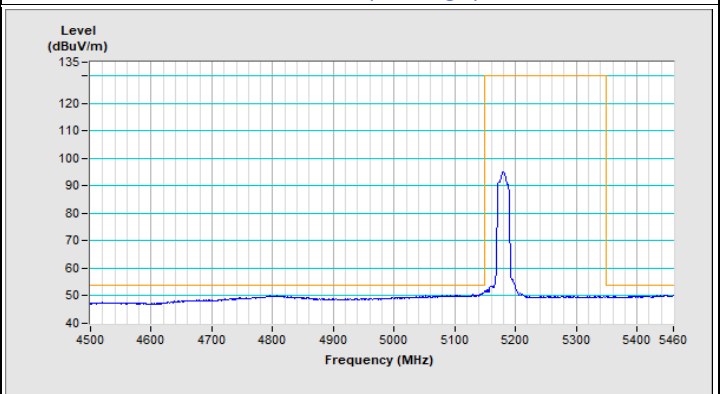
Horizontal (Peak)



Horizontal (Average)

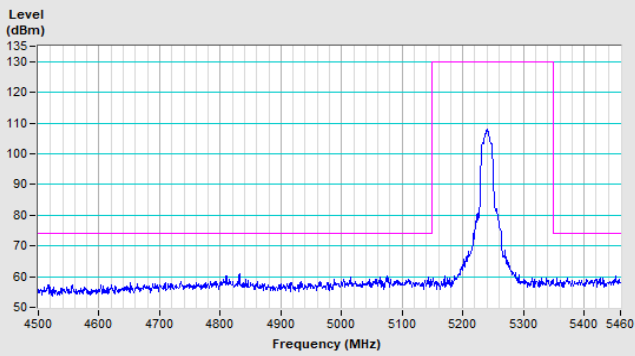


Vertical (Peak)

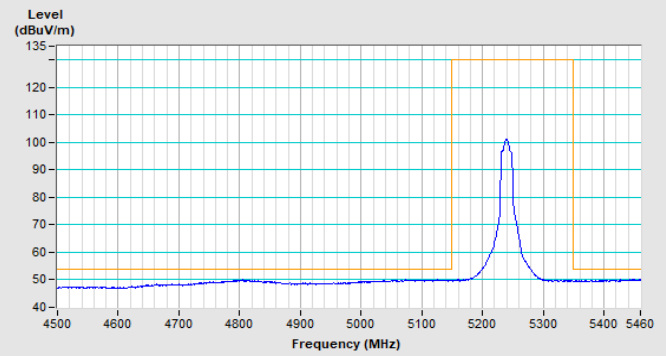


Vertical (Average)

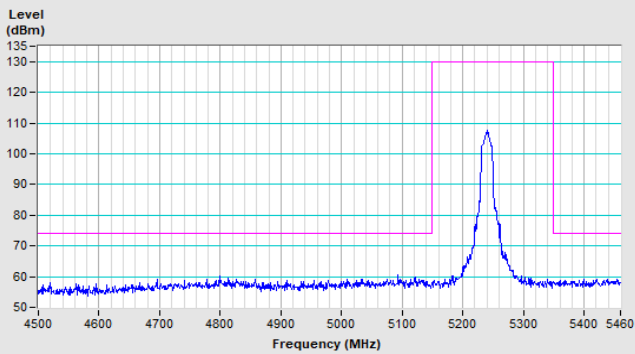
802.11ac (VHT20) Channel 48



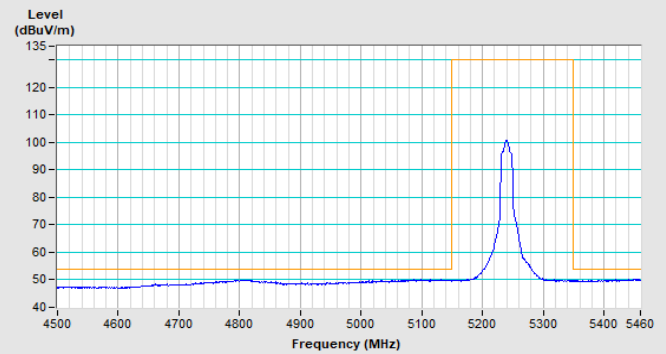
Horizontal (Peak)



Horizontal (Average)

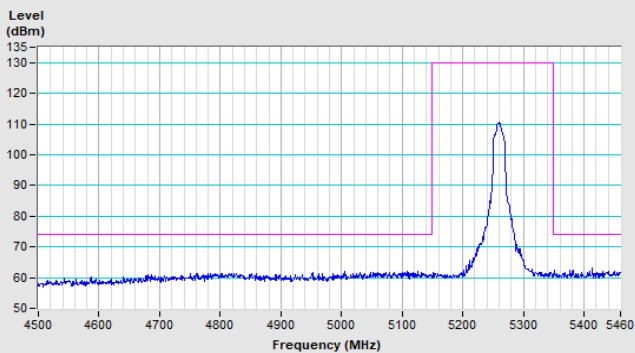


Vertical (Peak)

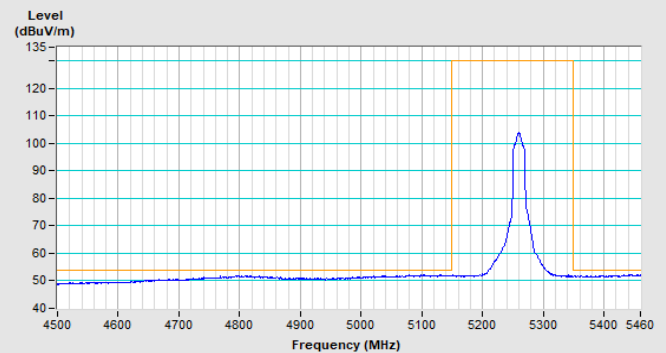


Vertical (Average)

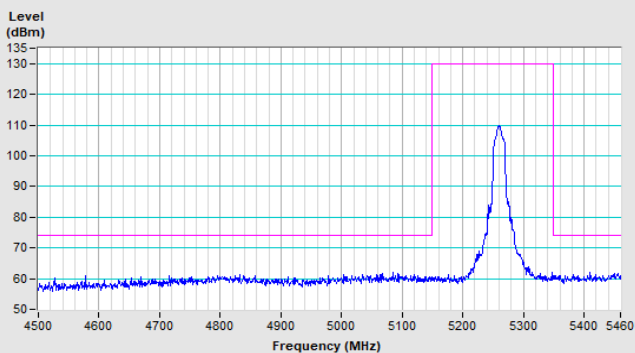
802.11ac (VHT20) Channel 52



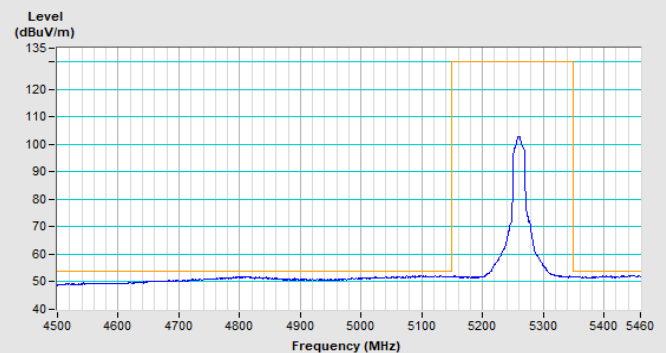
Horizontal (Peak)



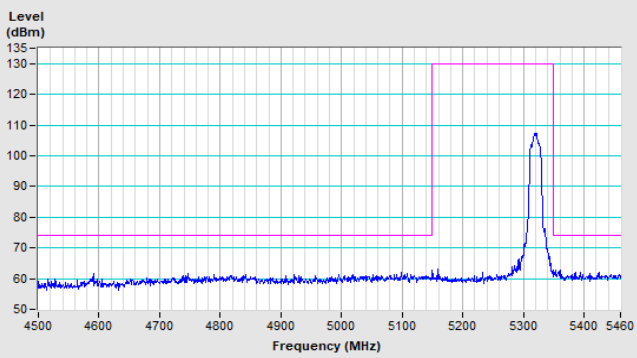
Horizontal (Average)



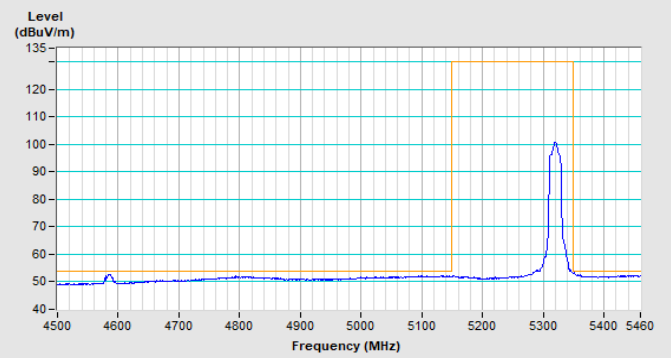
Vertical (Peak)



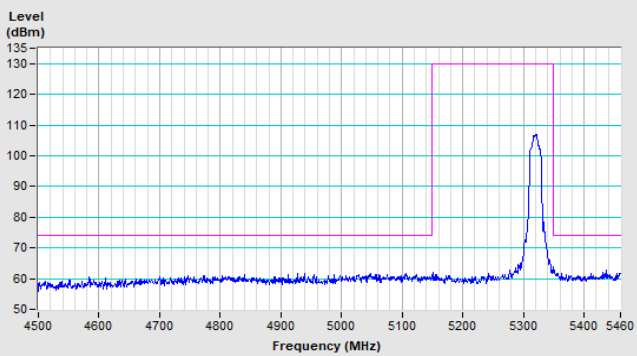
Vertical (Average)

802.11ac (VHT20) Channel 64

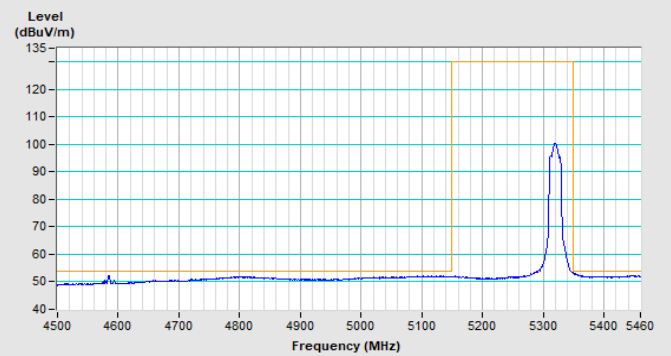
Horizontal (Peak)



Horizontal (Average)



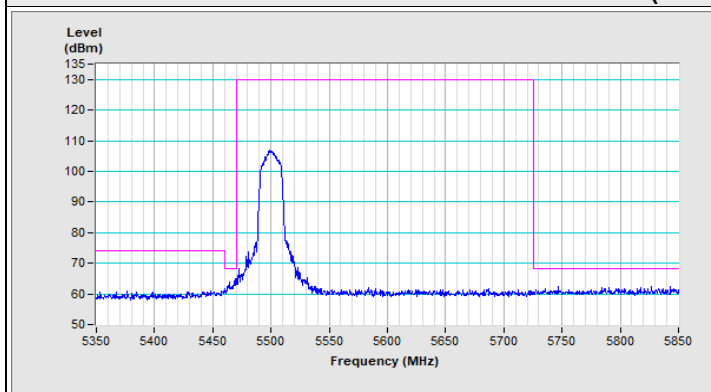
Vertical (Peak)



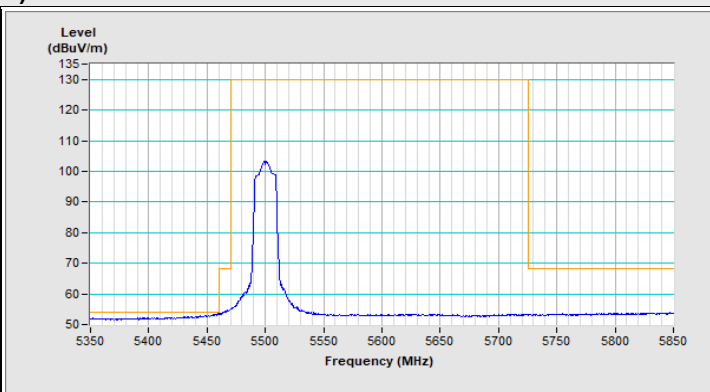
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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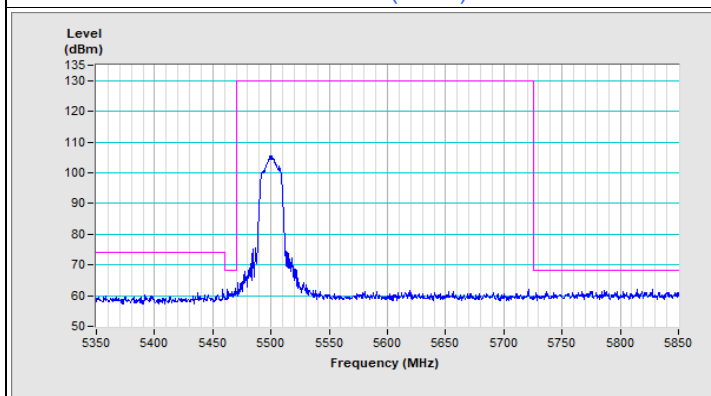
802.11ac (VHT20) Channel 100



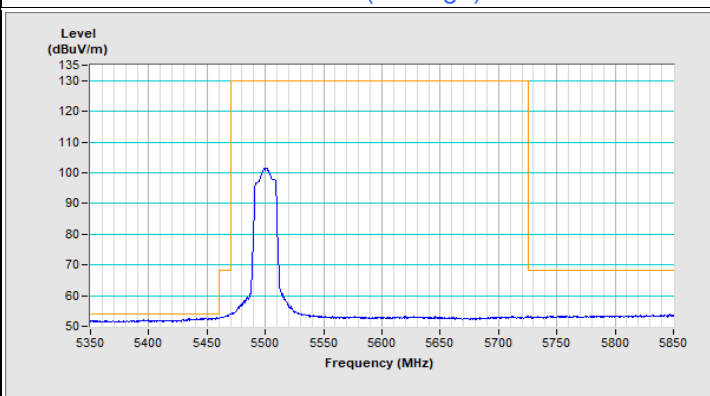
Horizontal (Peak)



Horizontal (Average)

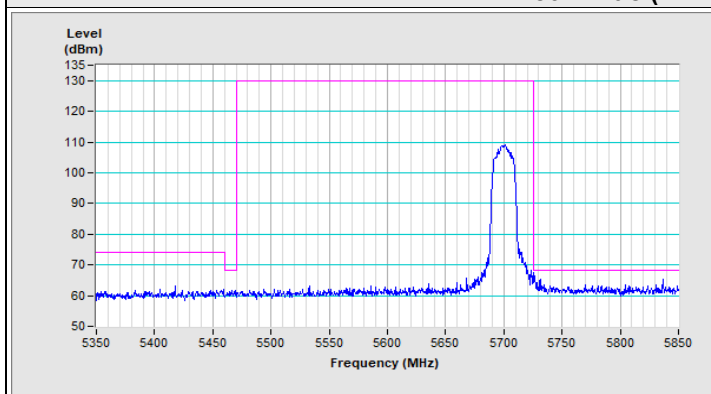


Vertical (Peak)

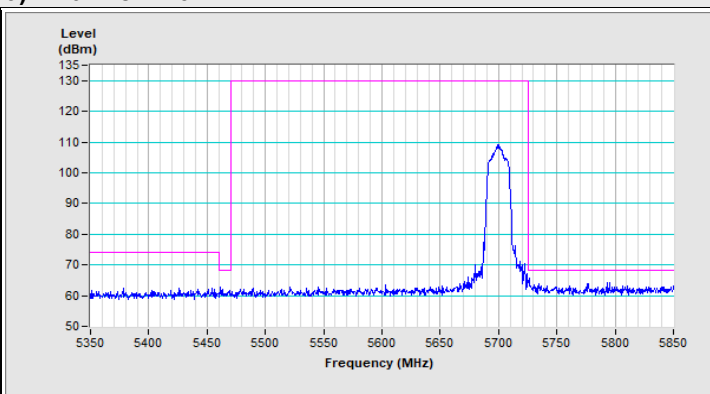


Vertical (Average)

802.11ac (VHT20) Channel 140



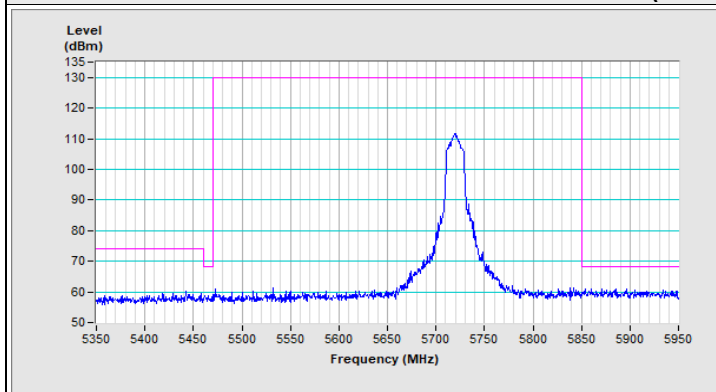
Horizontal (Peak)



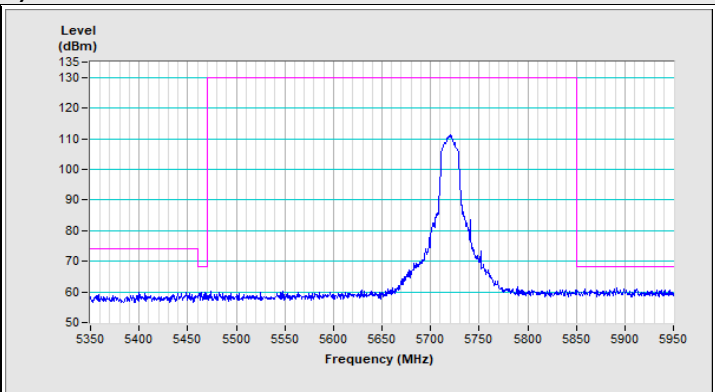
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT20) Channel 144



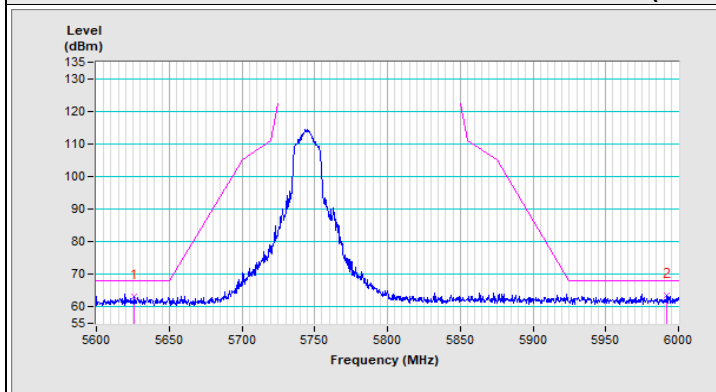
Horizontal (Peak)



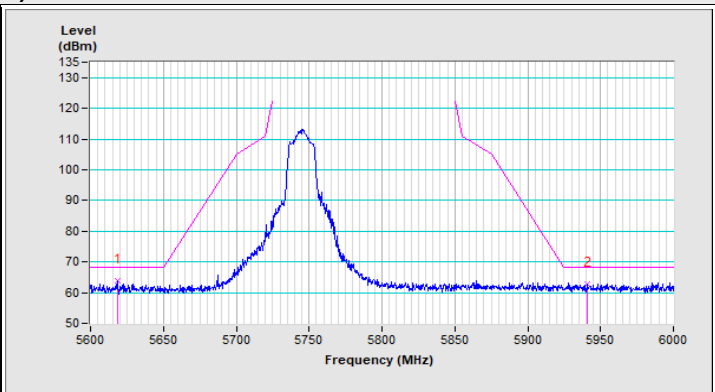
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT20) Channel 149

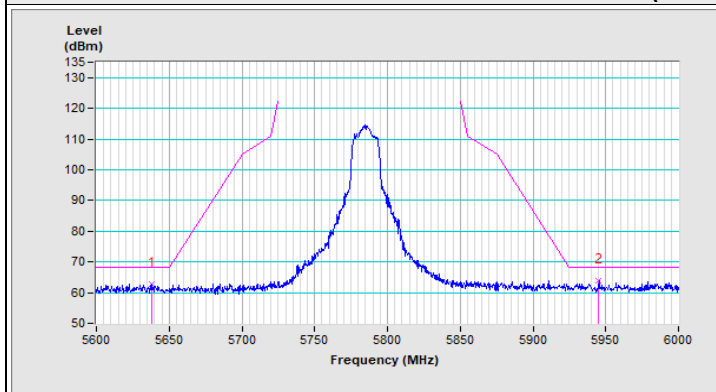


Horizontal (Peak)

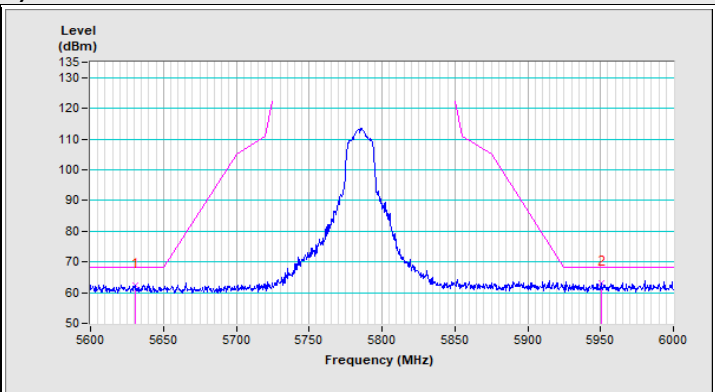


Vertical (Peak)

802.11ac (VHT20) Channel 157

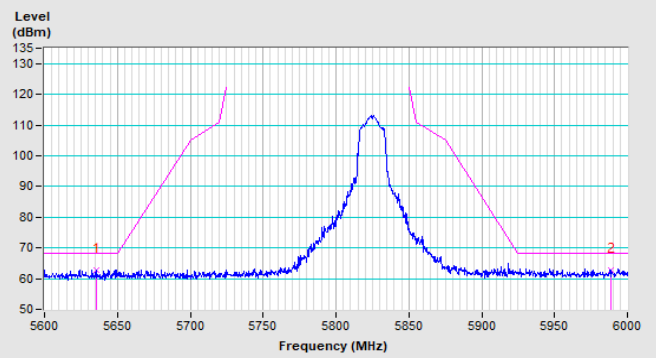
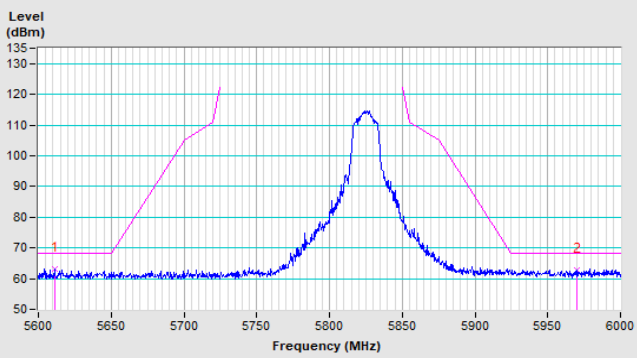


Horizontal (Peak)



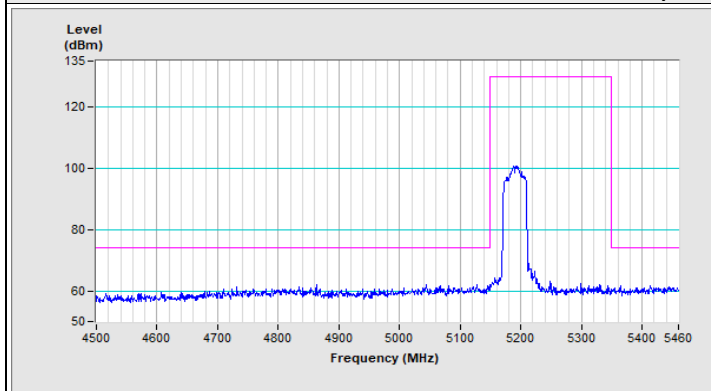
Vertical (Peak)

802.11ac (VHT20) Channel 165

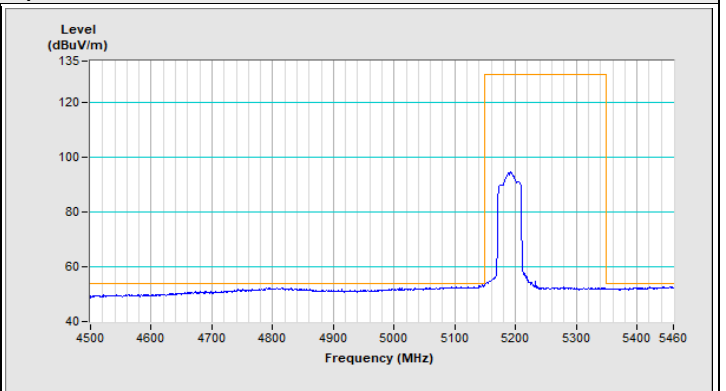


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
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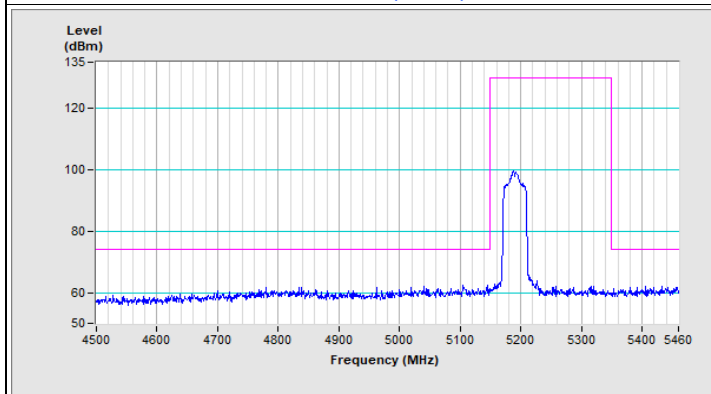
802.11ac (VHT40) Channel 38



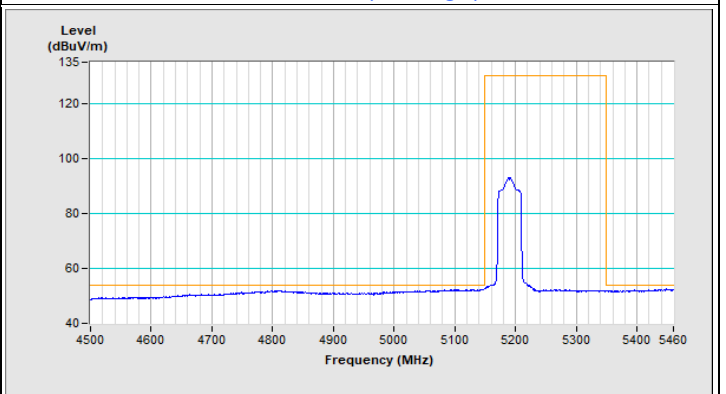
Horizontal (Peak)



Horizontal (Average)

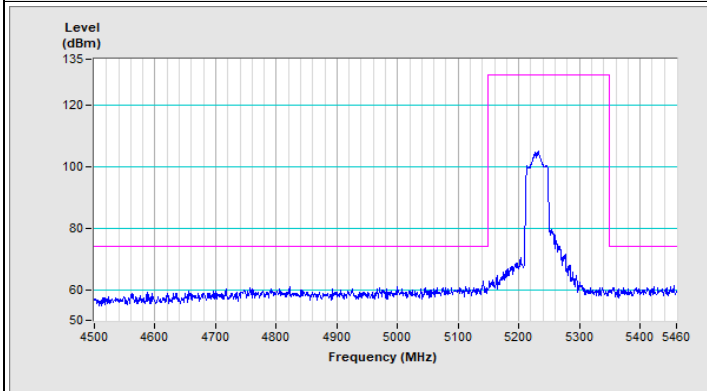


Vertical (Peak)

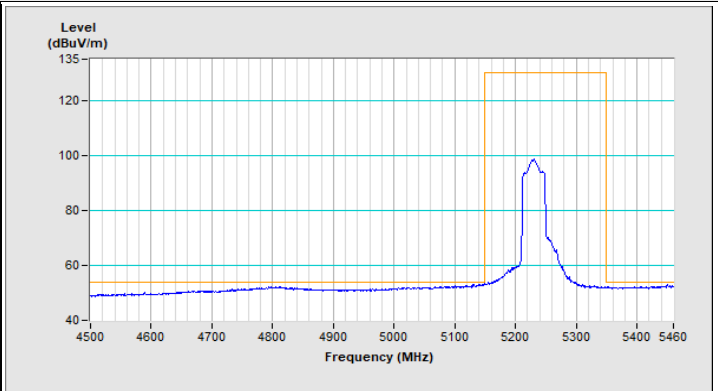


Vertical (Average)

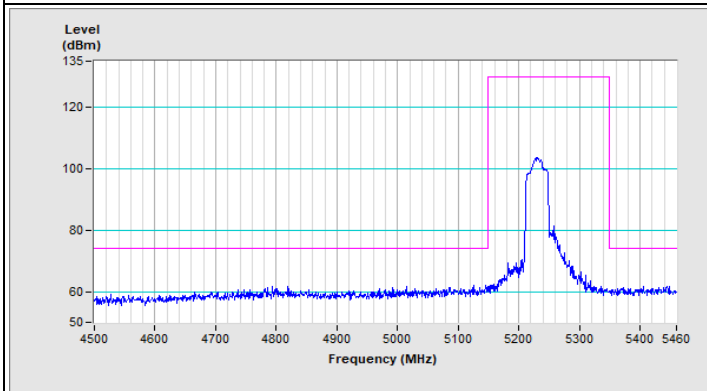
802.11ac (VHT40) Channel 46



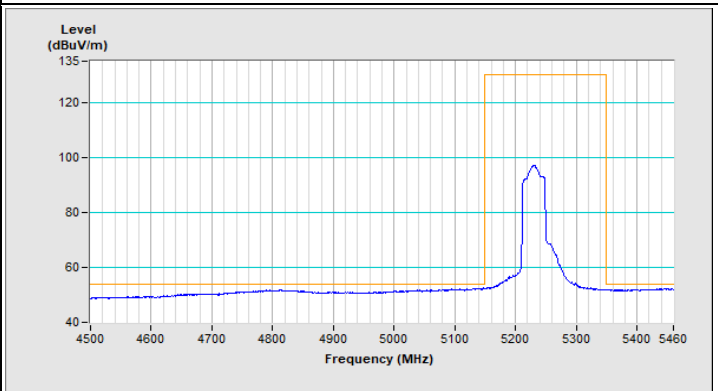
Horizontal (Peak)



Horizontal (Average)

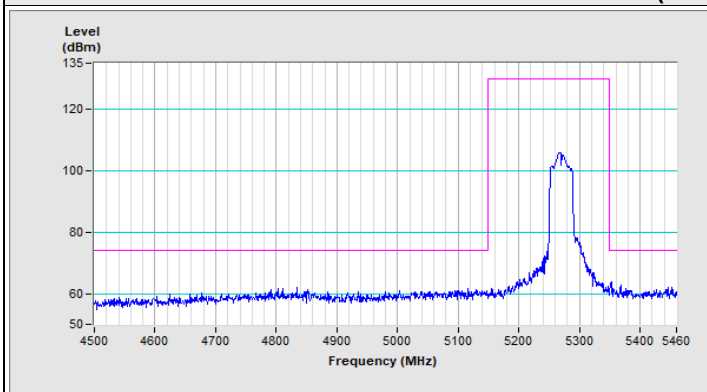


Vertical (Peak)

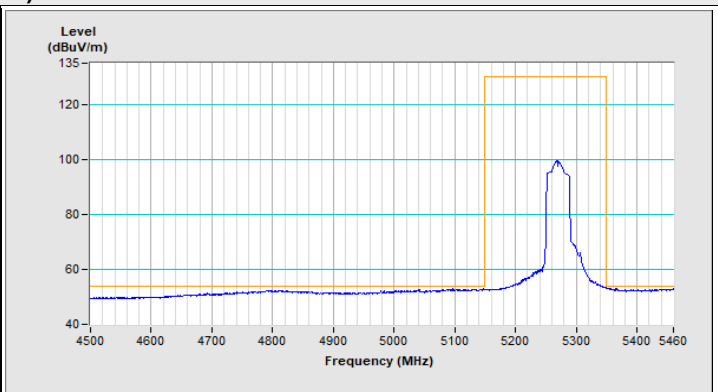


Vertical (Average)

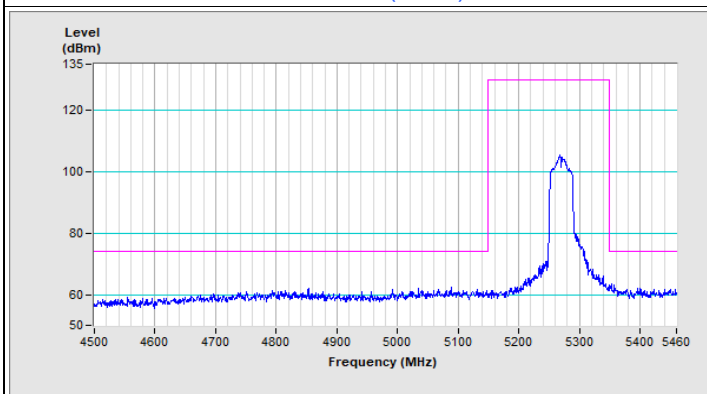
802.11ac (VHT40) Channel 54



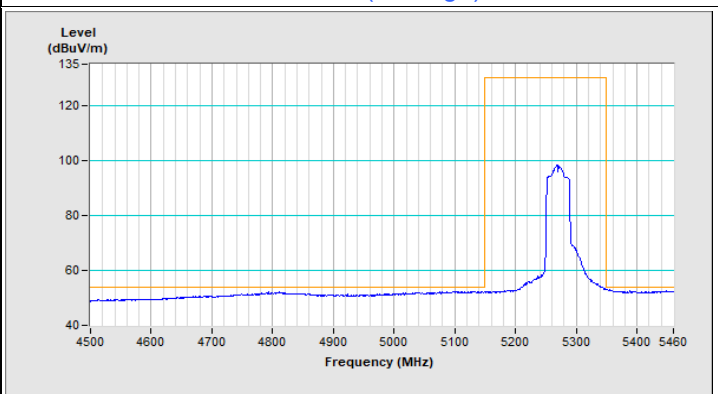
Horizontal (Peak)



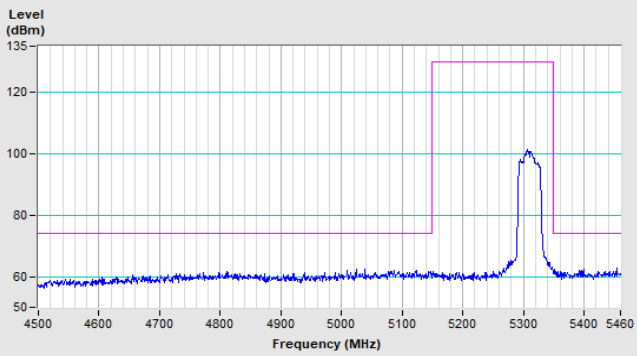
Horizontal (Average)



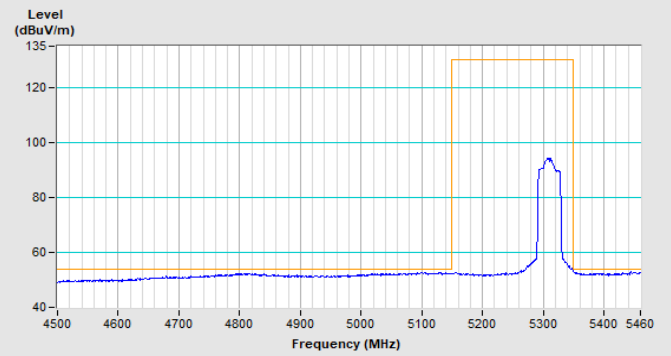
Vertical (Peak)



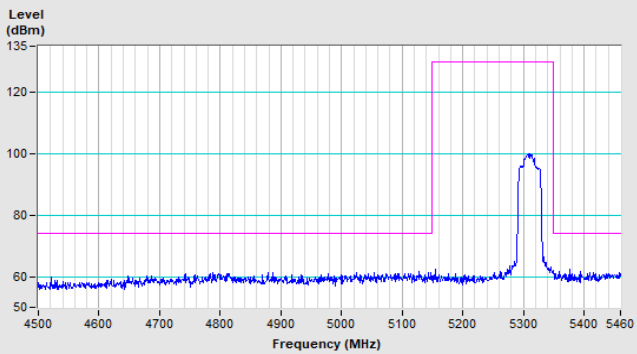
Vertical (Average)

802.11ac (VHT40) Channel 62

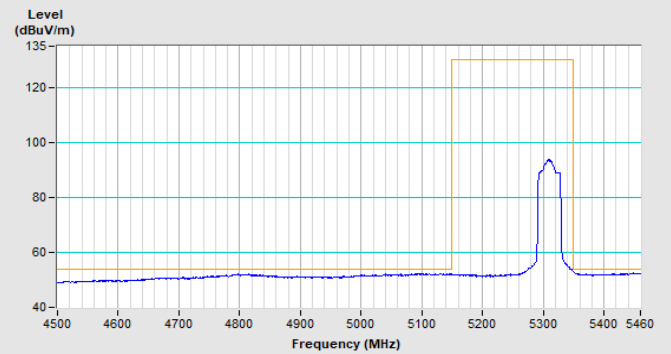
Horizontal (Peak)



Horizontal (Average)



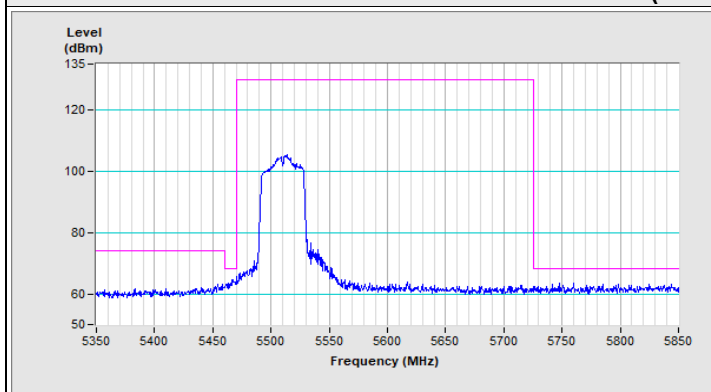
Vertical (Peak)



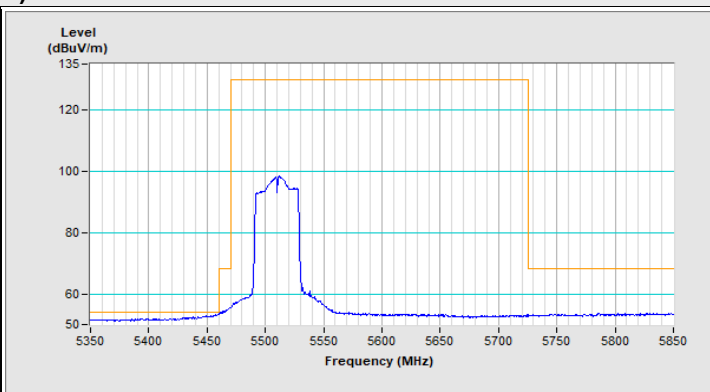
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
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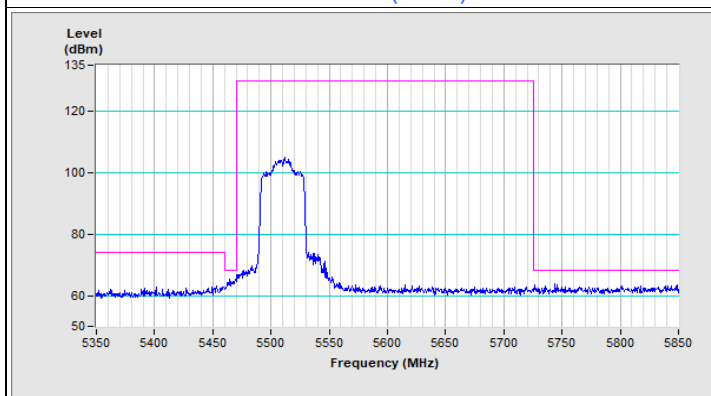
802.11ac (VHT40) Channel 102



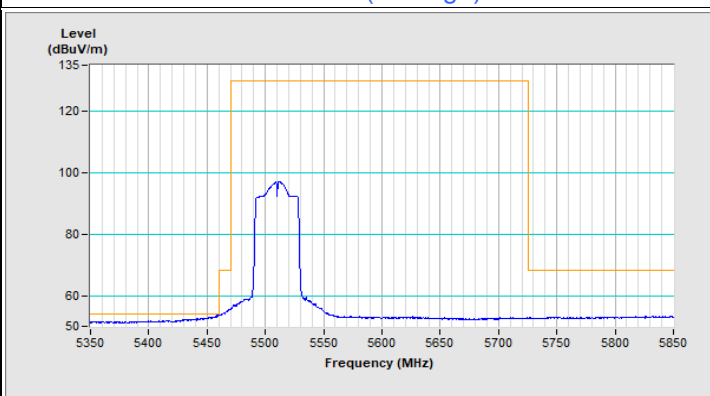
Horizontal (Peak)



Horizontal (Average)

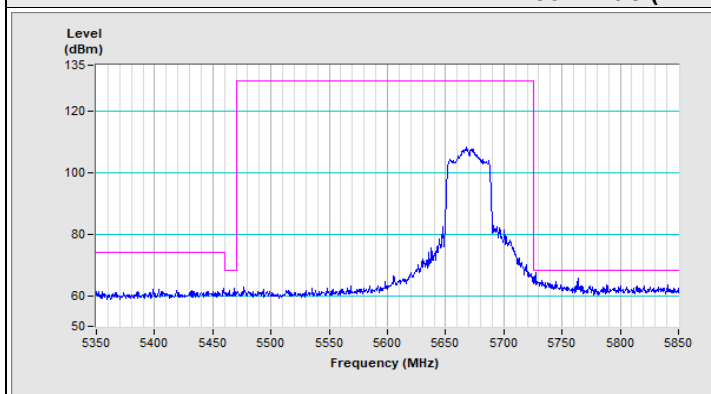


Vertical (Peak)

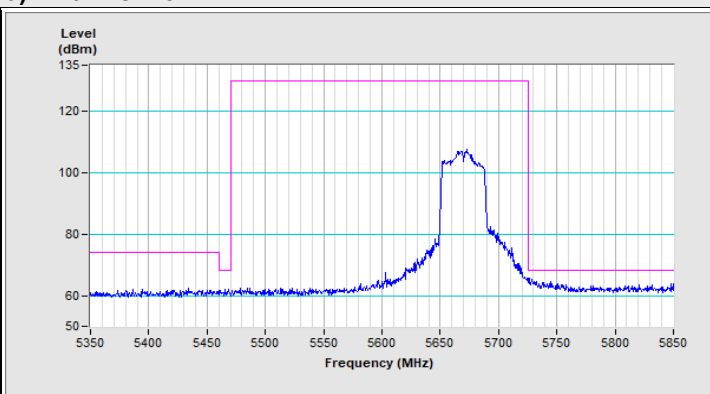


Vertical (Average)

802.11ac (VHT40) Channel 134



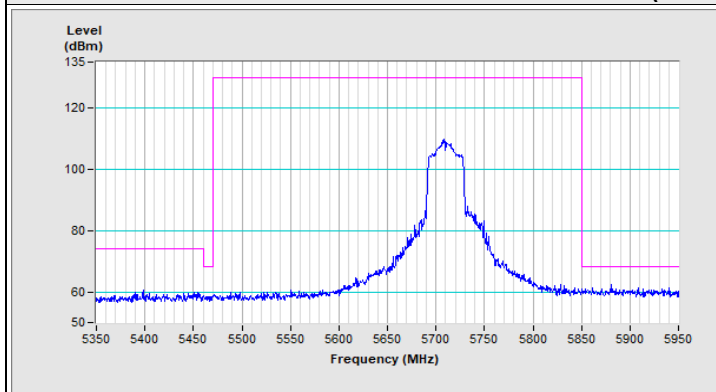
Horizontal (Peak)



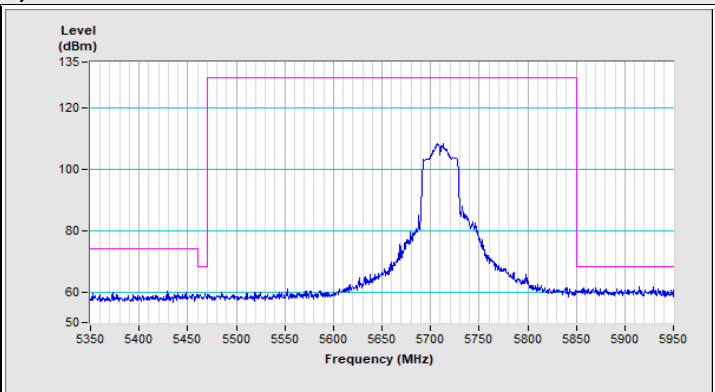
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT40) Channel 142



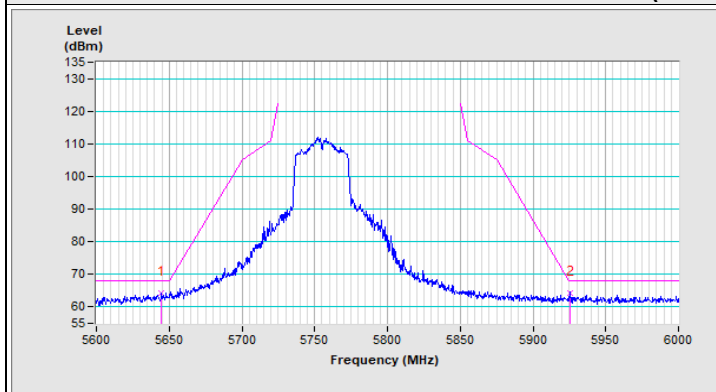
Horizontal (Peak)



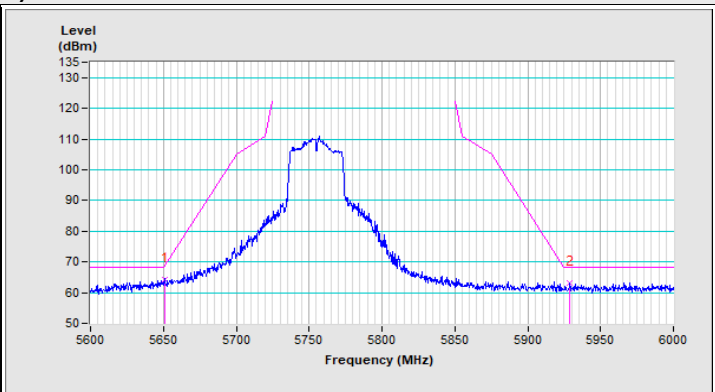
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT40) Channel 151

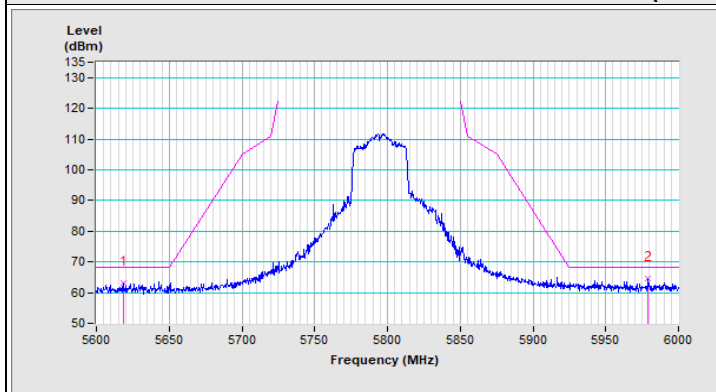


Horizontal (Peak)

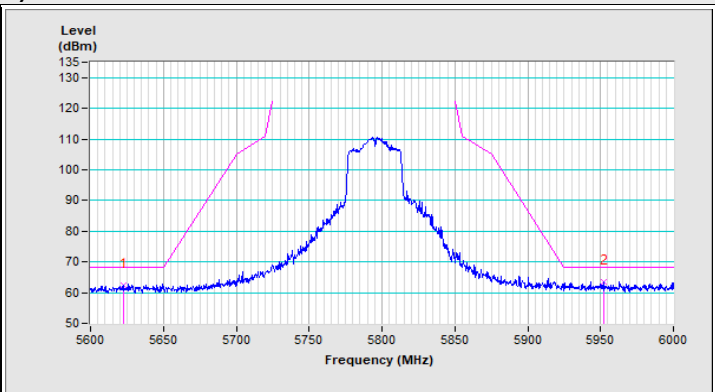


Vertical (Peak)

802.11ac (VHT40) Channel 159



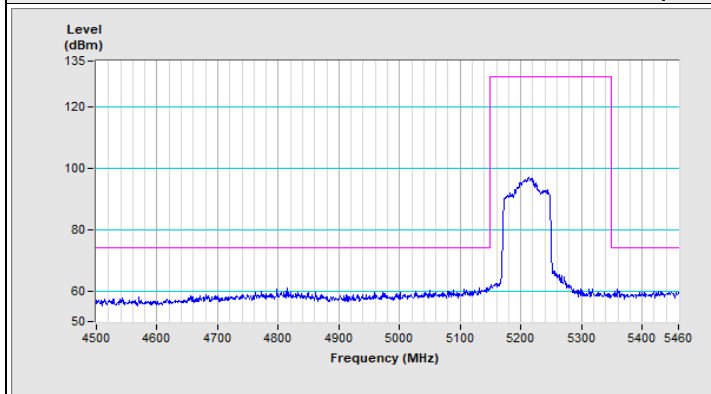
Horizontal (Peak)



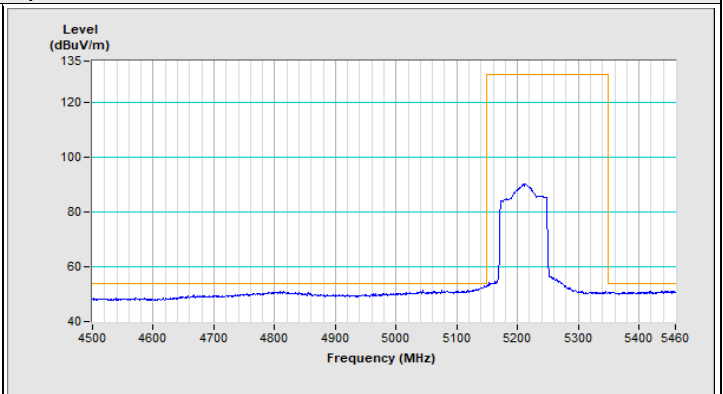
Vertical (Peak)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
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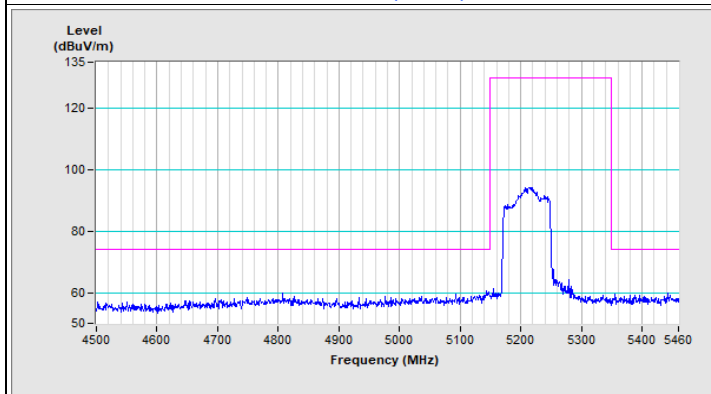
802.11ac (VHT80) Channel 42



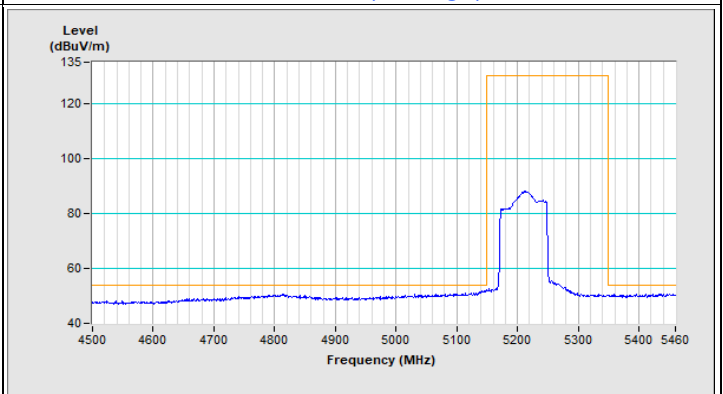
Horizontal (Peak)



Horizontal (Average)

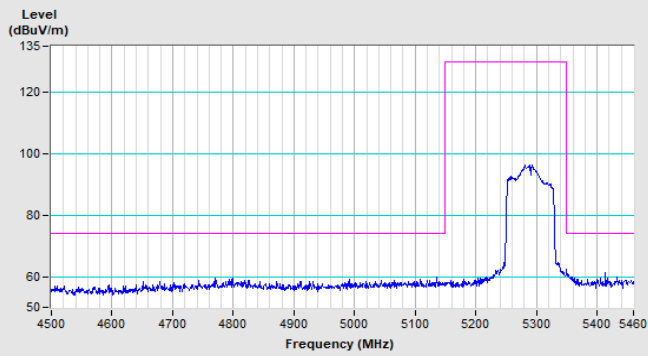


Vertical (Peak)

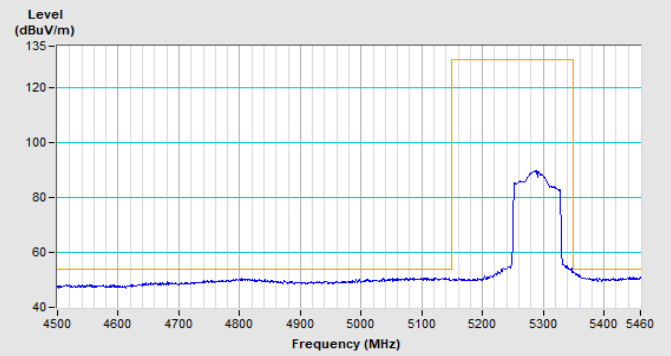


Vertical (Average)

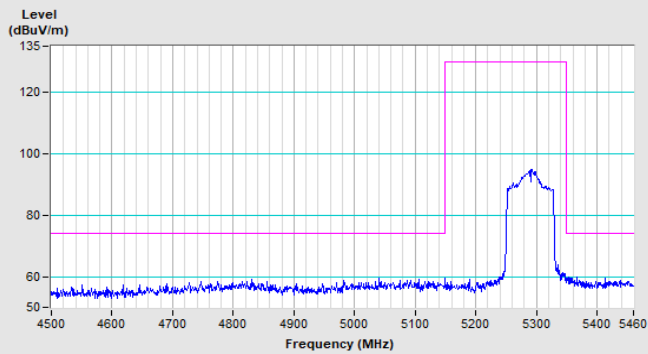
802.11ac (VHT80) Channel 58



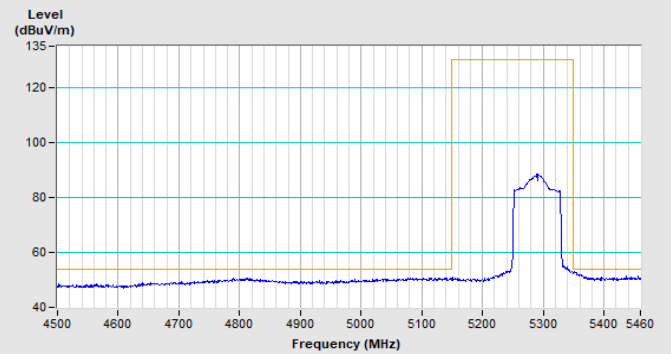
Horizontal (Peak)



Horizontal (Average)



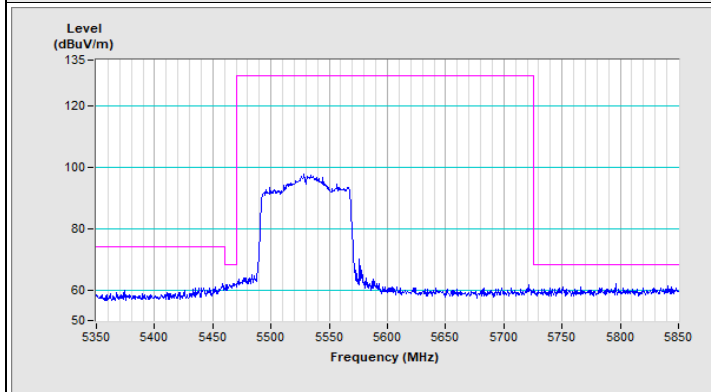
Vertical (Peak)



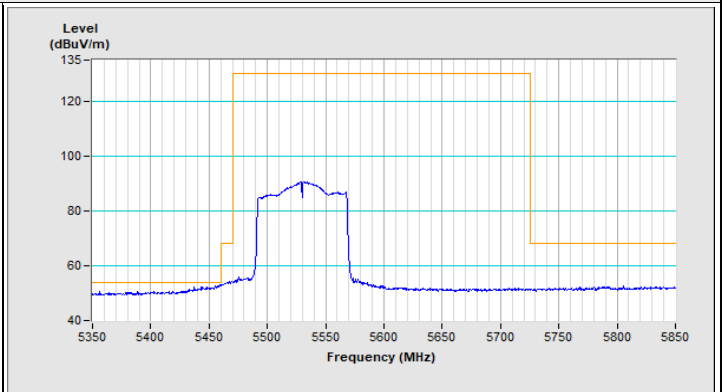
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
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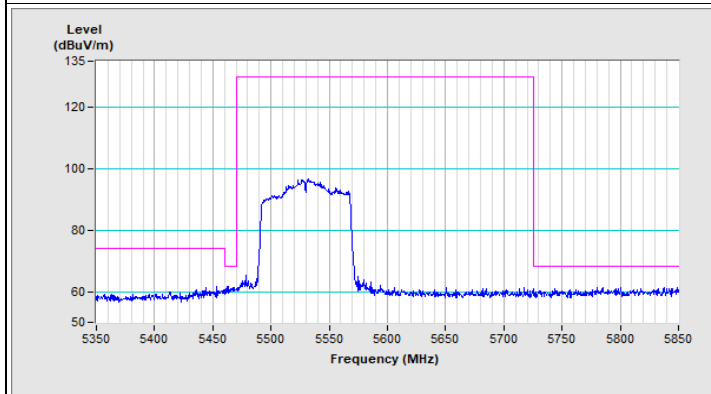
802.11ac (VHT80) Channel 106



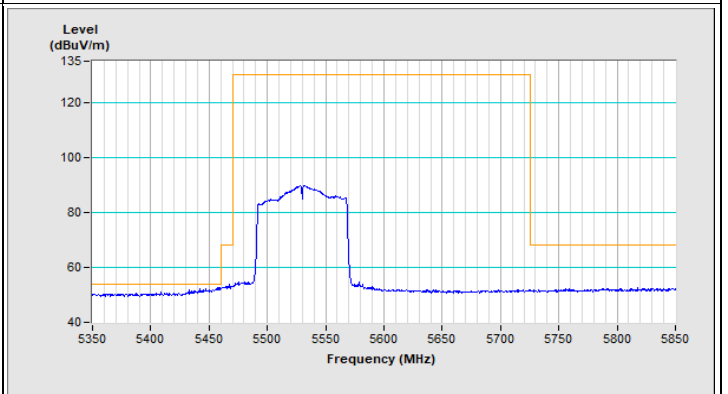
Horizontal (Peak)



Horizontal (Average)

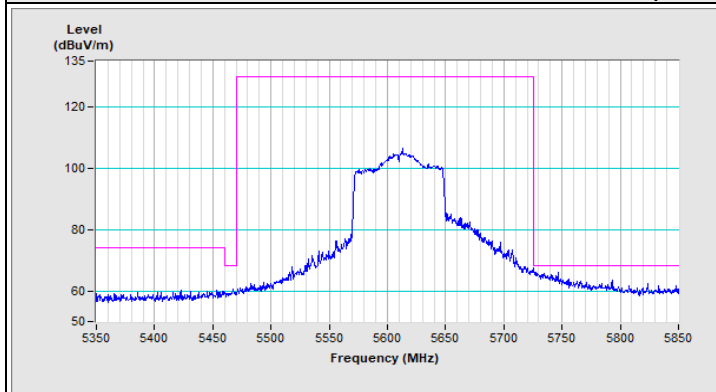


Vertical (Peak)

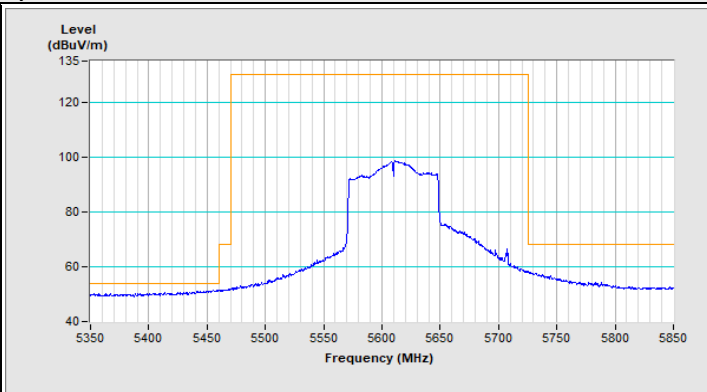


Vertical (Average)

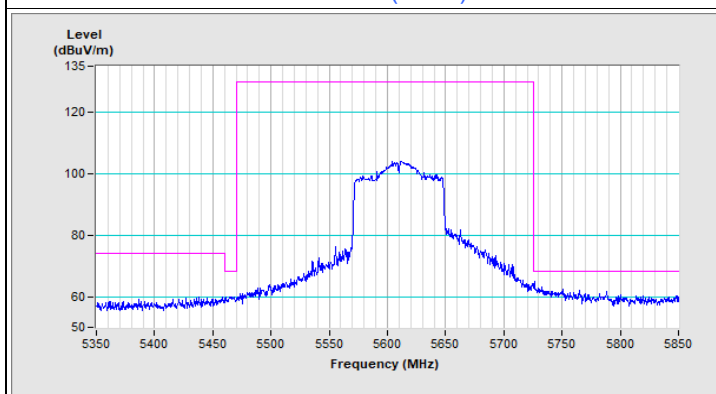
802.11ac (VHT80) Channel 122



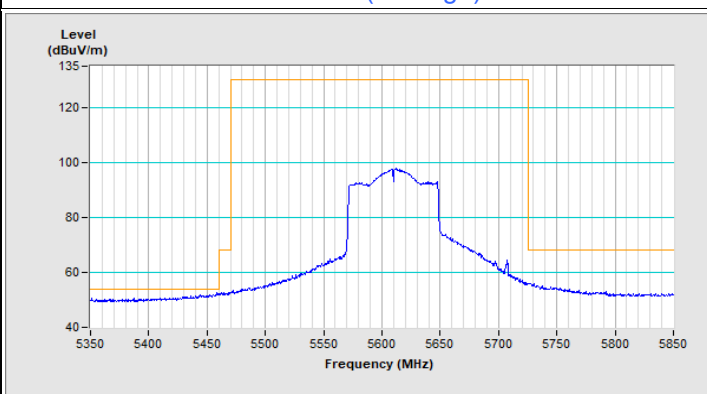
Horizontal (Peak)



Horizontal (Average)



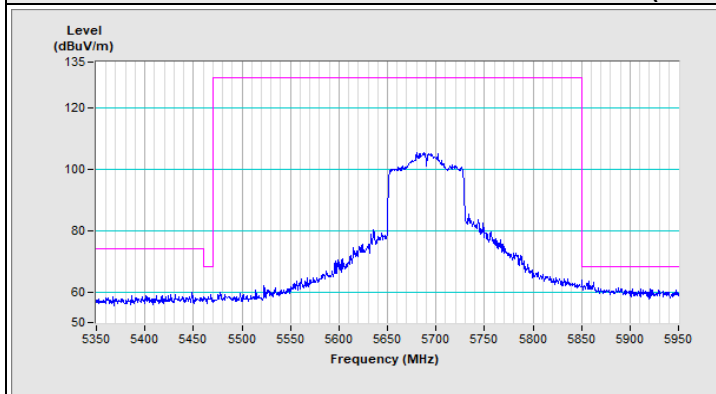
Vertical (Peak)



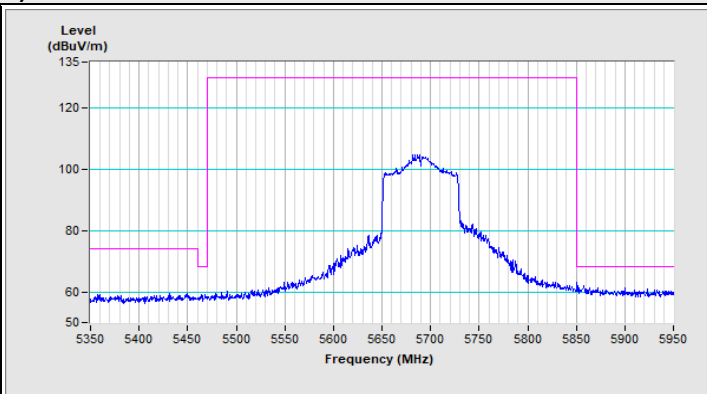
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT80) Channel 138



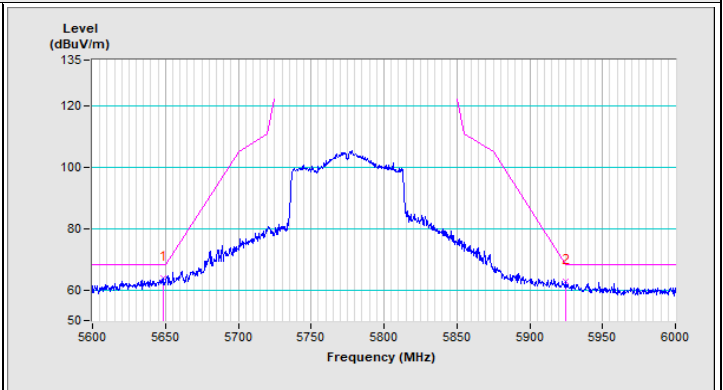
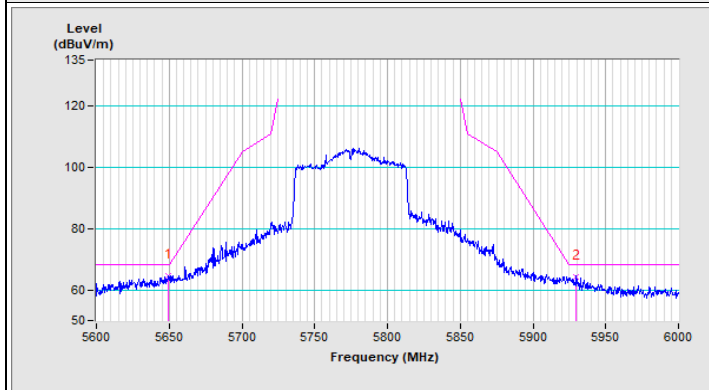
Horizontal (Peak)



Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT80) Channel 155



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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Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

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

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