

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBFOK-WTW-P23090593-3
FCC ID: RYQGP3
Product: LTE smartphone
Brand: Gabb
Model No.: GP3
Received Date: 2023/9/26
Test Date: 2023/10/17 ~ 2023/11/13
Issued Date: 2023/11/24
Applicant: FIH CO., LTD.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / 788550 / TW0003
Designation Number:

Approved by: _____

Jeremy Lin

Jeremy Lin / Project Engineer

, Date: _____

2023/11/24

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Prepared by : Vera Huang / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBFOK-WTW-P23090593-3	Original Release	2023/11/24

1 Certificate

Product: LTE smartphone
Brand: Gabb
Test Model: GP3
Sample Status: Engineering sample
Applicant: FIH CO., LTD.
Test Date: 2023/10/17 ~ 2023/11/13
Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure: ANSI C63.10-2013
KDB 789033 D02 General UNII Test Procedure New Rules v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 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 -17.54 dB at 0.63400 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -11.1 dB at 41.64 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 -2.1 dB at 5470.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is FIT not a standard connector.

Notes:

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
26 dB Bandwidth	-	206.5 Hz
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	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	LTE smartphone
Brand	Gabb
Test Model	GP3
Status of EUT	Engineering sample
Power Supply Rating	Refer to note
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps 802.11ac: up to 433.3Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.7 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20):24 802.11n (HT40), 802.11ac (VHT40):11 802.11ac (VHT80):5
Output Power	5.18 GHz ~ 5.24 GHz : 27.353 mW (14.37 dBm) 5.26 GHz ~ 5.32 GHz : 28.054 mW (14.48 dBm) 5.5 GHz ~ 5.7 GHz : 27.925 mW (14.46 dBm) 5.745 GHz ~ 5.825 GHz : 27.542 mW (14.40 dBm)
EUT Category	Client device

Note:

1. The EUT uses following accessories.

Battery	Brand	Zhongshan Tianmao Battery Co.,Ltd.
	Model	HE401
	Rated Capacity	3400mAh/13.09Wh
	Typical Capacity	3500mAh/13.475Wh
	Rated Voltage	3.85V
AC Adapter	Brand	TRAVEL CHARGER
	Model	RT-C6
	AC Input	100-240V~ 50/60Hz 0.35A
	DC Output	5.0V / 2.0A 10.0W
	Manufacturer	RongTaiFeng Technology Co.,Ltd
USB 2.0 Type-C 2A Cable	Brand	RongTaiFeng Technology Co.,Ltd
	Model	20503007
	Line length	0.95m shielded cable w/o core

2. Simultaneously transmission condition.

Condition	Technology	
1	WWAN	WLAN 2.4GHz
2	WWAN	WLAN 5GHz
3	WWAN	Bluetooth

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

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Gain (dBi)	Antenna Type	Connector Type
2.60	PIFA	FIT

* 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 more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

For 5180 ~ 5320 MHz

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

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

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

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

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

For 5500 ~ 5700 MHz

11 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		

5 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		

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530 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:	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:	X-axis

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

Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	52, 60, 64, 100, 116, 140	BPSK	6Mb/s
	802.11ac (VHT20)	52, 60, 64, 100, 116, 140	BPSK	MCS0
	802.11ac (VHT40)	54, 62, 102, 110, 134	BPSK	MCS0
	802.11ac (VHT80)	58, 106, 122	BPSK	MCS0
RF Output Power	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	38, 46, 54, 62, 102, 110, 134, 151, 159	BPSK	MCS0
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 155	BPSK	MCS0
Power Spectral Density	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 155	BPSK	MCS0
6 dB Bandwidth	802.11a	149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	151, 159	BPSK	MCS0
	802.11ac (VHT80)	155	BPSK	MCS0

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

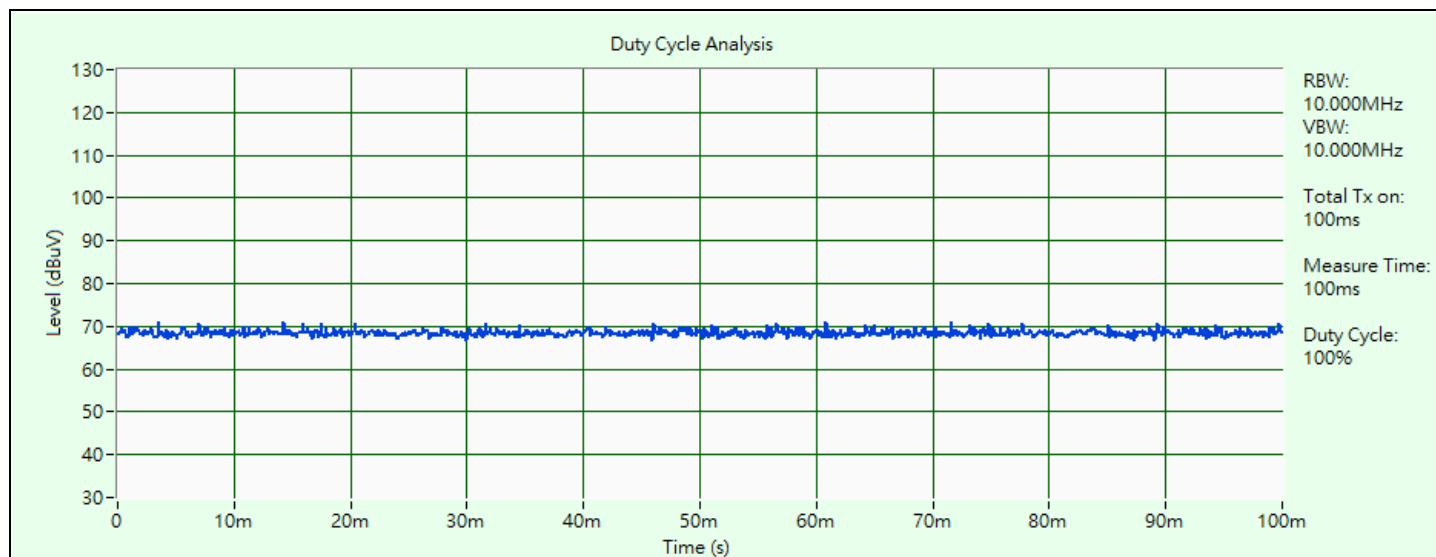
3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 100 ms / 100 ms x 100% = 100.0%

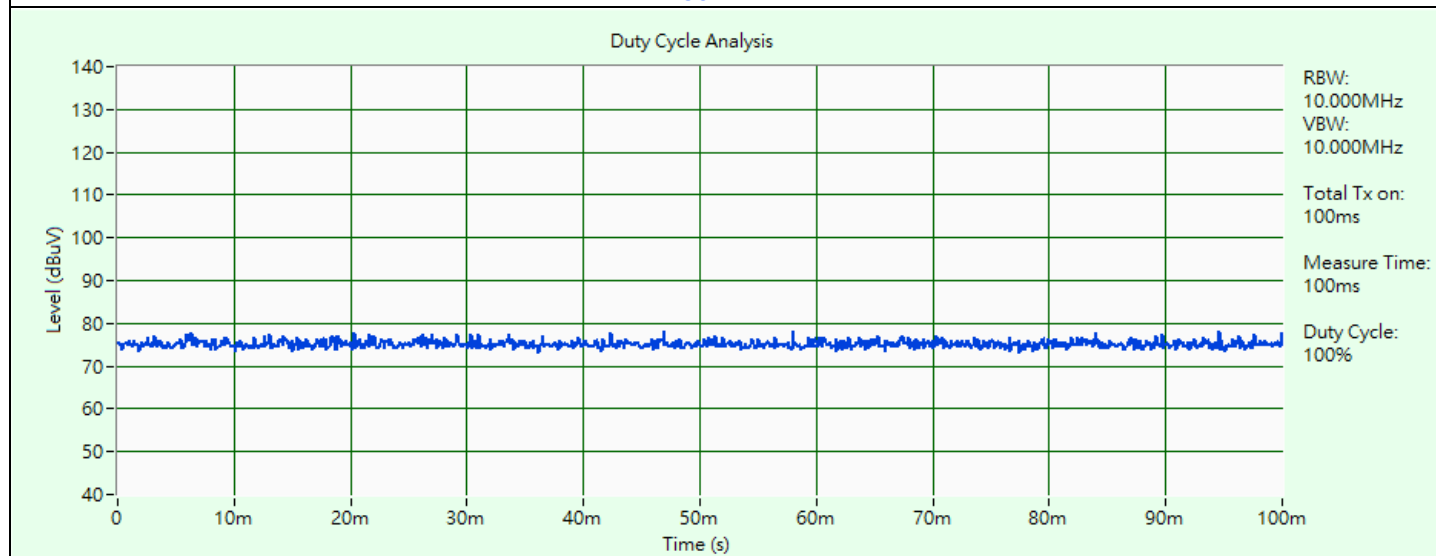
802.11ac (VHT20): Duty cycle = 100 ms / 100 ms x 100% = 100.0%

802.11ac (VHT40): Duty cycle = 100 ms / 100 ms x 100% = 100.0%

802.11ac (VHT80): Duty cycle = 100 ms / 100 ms x 100% = 100.0%

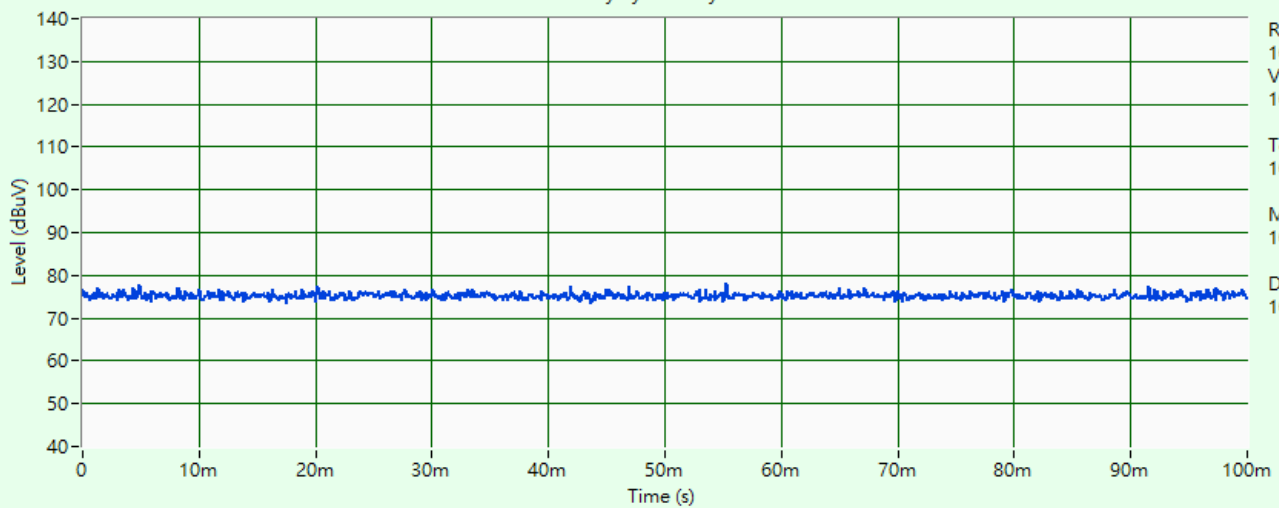


802.11a



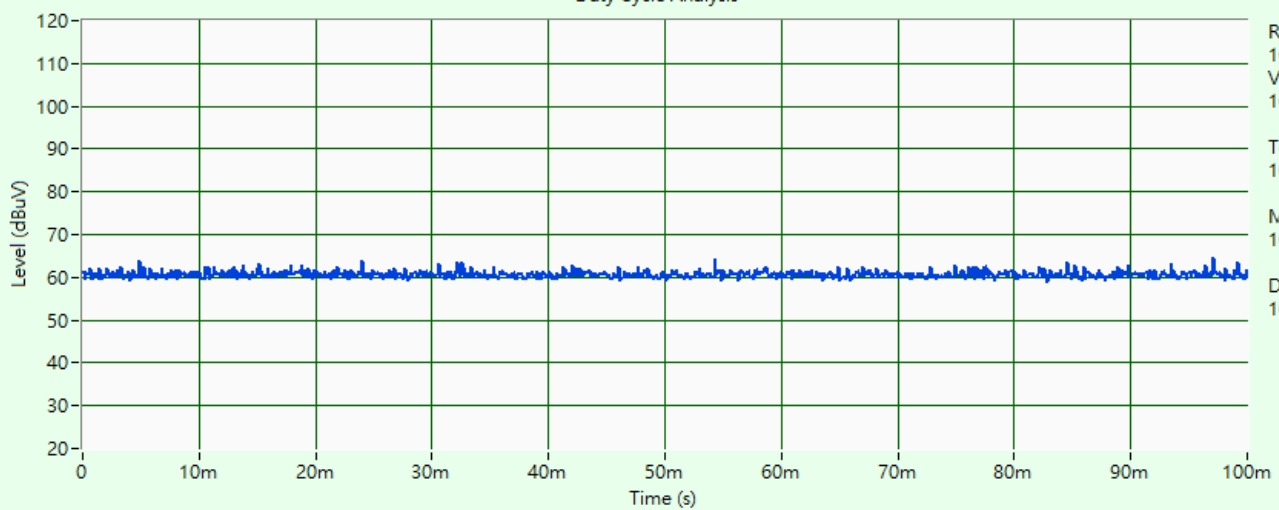
802.11ac (VHT20)

Duty Cycle Analysis



802.11ac (VHT40)

Duty Cycle Analysis

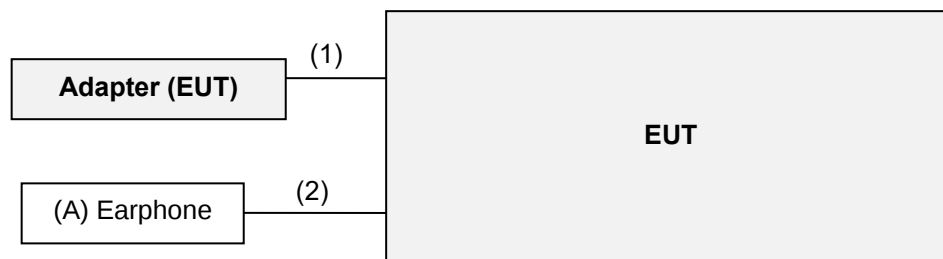


802.11ac (VHT80)

3.6 Test Program Used and Operation Descriptions

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

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Earphone	HTC	MAX320	N/A	N/A	Provided by Lab (for RF Setup)

No.	Cable Descriptions	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Qty.)	Remark
1.	USB Cable	1	0.95	Yes	0	Accessory of EUT
2.	Audio Cable	1	1.2	No	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/11/13

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
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: 2023/11/13

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
3-channel DC power supply JIN YIH Technology	ODP3033	ODP30332128138	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	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: 2023/11/13

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2022/11/17	2023/11/16
50 ohm terminal resistance	E1-011280	05	2022/11/21	2023/11/20
	E1-011311	09	2022/11/17	2023/11/16
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
Fixed Attenuator SGH	BNC10W10dB	PAD-COND2-01	2023/9/2	2024/9/1
LISN R&S	ESH2-Z5	100100	2023/3/7	2024/3/6
	ESH3-Z5	100312	2023/9/12	2024/9/11
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2023/9/2	2024/9/1
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2023/8/31	2024/8/30

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2023/10/17

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	2023/10/16	2024/10/15
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Preamplifier EMCI	EMC 330H	980112	2023/9/27	2024/9/26
	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
RF Coaxial Cable Woken	8D-FB	Cable-Ch10-01	2023/9/27	2024/9/26
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: 2023/11/10

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
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Notch Filter Micro-Tronics	BRM17690	004	2023/1/11	2024/1/10
	BRM50716	060	2023/1/11	2024/1/10
Preamplifier EMCI	EMC 012645	980115	2023/9/27	2024/9/26
	EMC 184045	980116	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
	EMC104-SM-SM- 8000+3000	171005	2023/9/27	2024/9/26
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	EMC104-SM-SM- 1000(140807)	2023/9/27	2024/9/26
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: 2023/11/10 ~ 2023/11/11

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

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

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

*B is the 26 dB emission bandwidth in megahertz

5.3 Power Spectral Density

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

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Frequency Stability

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

5.7 AC Power Conducted Emissions

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

Notes:

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

5.8 Unwanted Emissions below 1 GHz

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

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

Notes:

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

5.9 Unwanted Emissions above 1 GHz

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

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

Notes:

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

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.15-5.25 GHz band:

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

For transmitters operating in the 5.25-5.35 GHz band:

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

For transmitters operating in the 5.47-5.725 GHz band:

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

For transmitters operating in the 5.725-5.850 GHz band:

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

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

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

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

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

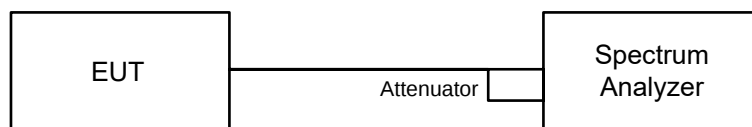
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

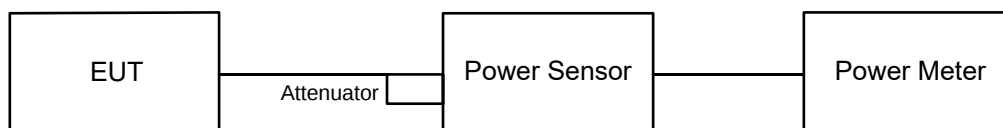


6.1.2 Test Procedure

- 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

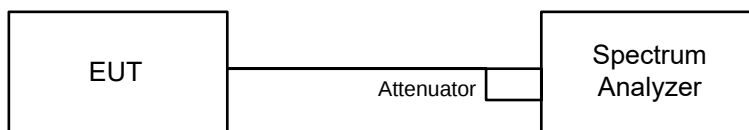


6.2.2 Test Procedure

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.

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-1

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

For specified measurement bandwidth 500 kHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, 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.
- Record the max value

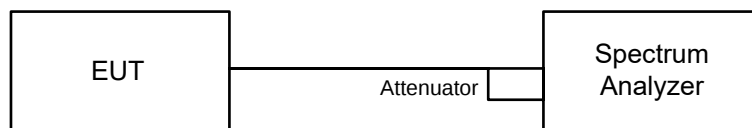
For specified measurement bandwidth 500 kHz:

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 $10 \log (1/\text{duty cycle})$.

6.4 6 dB Bandwidth

6.4.1 Test Setup

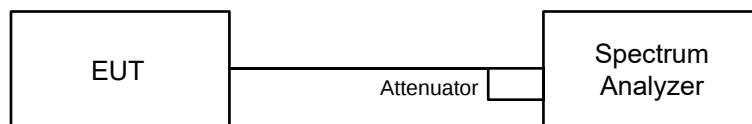


6.4.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ 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

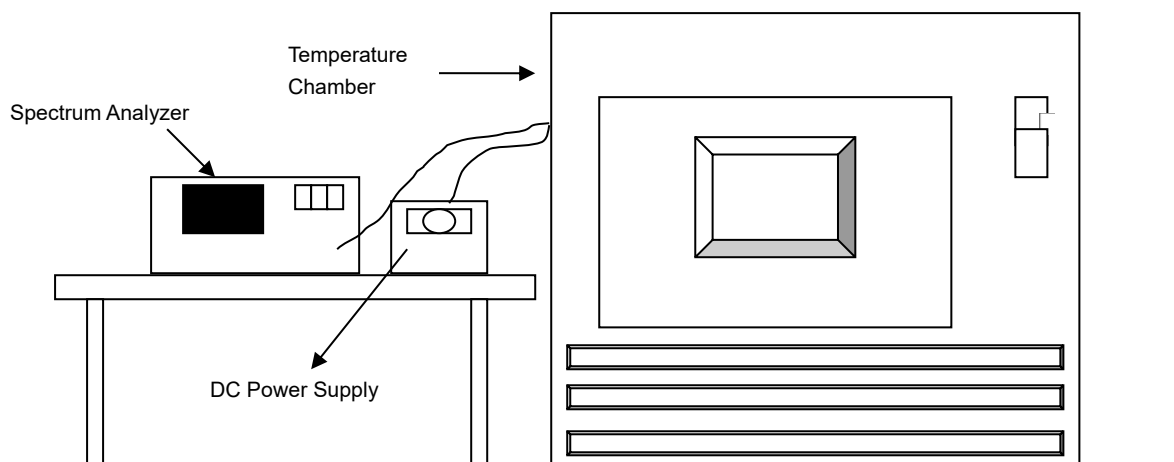


6.5.2 Test Procedure

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

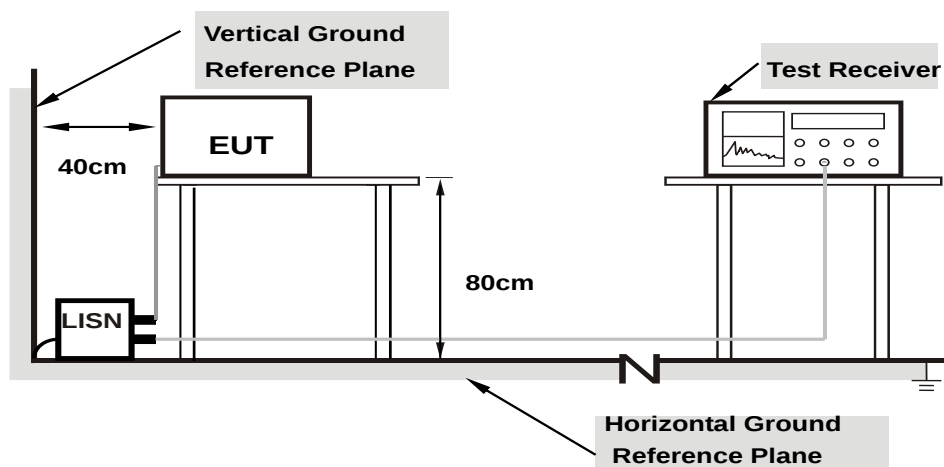


6.6.2 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC 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

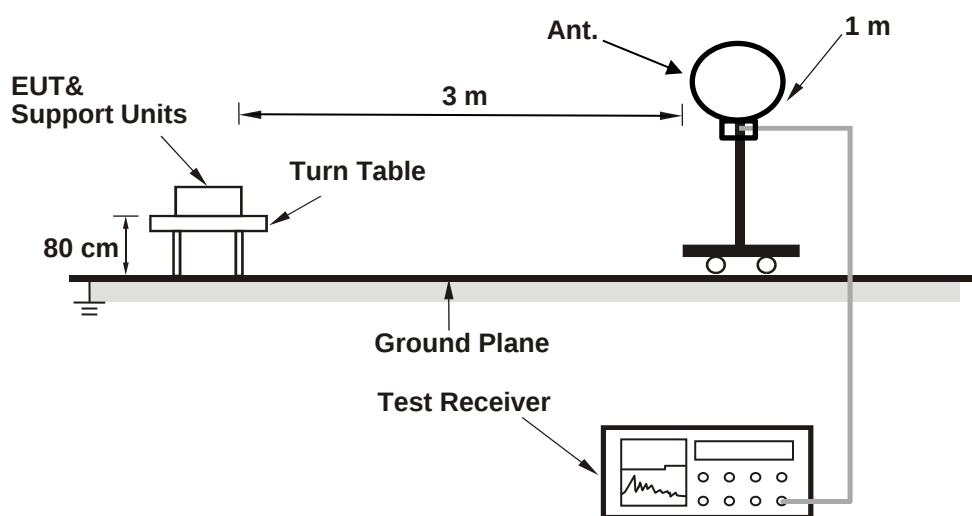
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The 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.

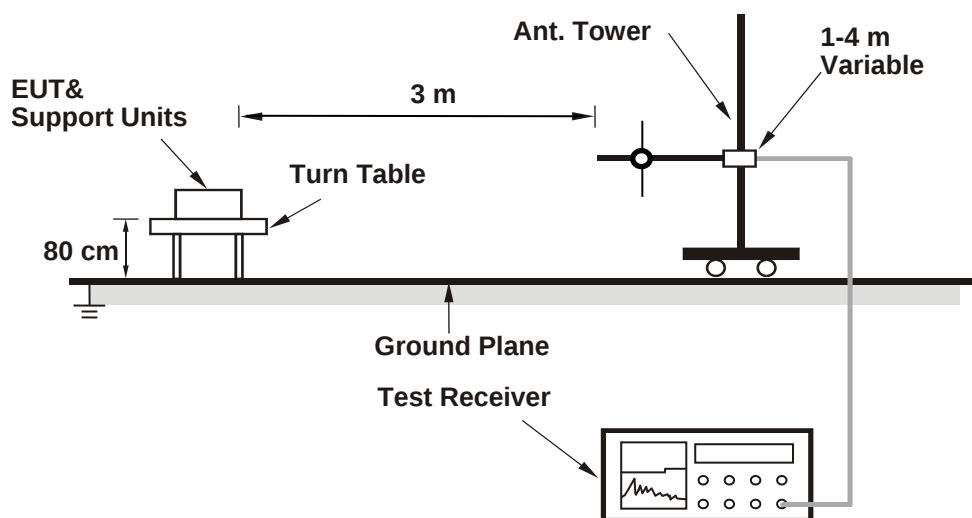
6.8 Unwanted Emissions below 1 GHz

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

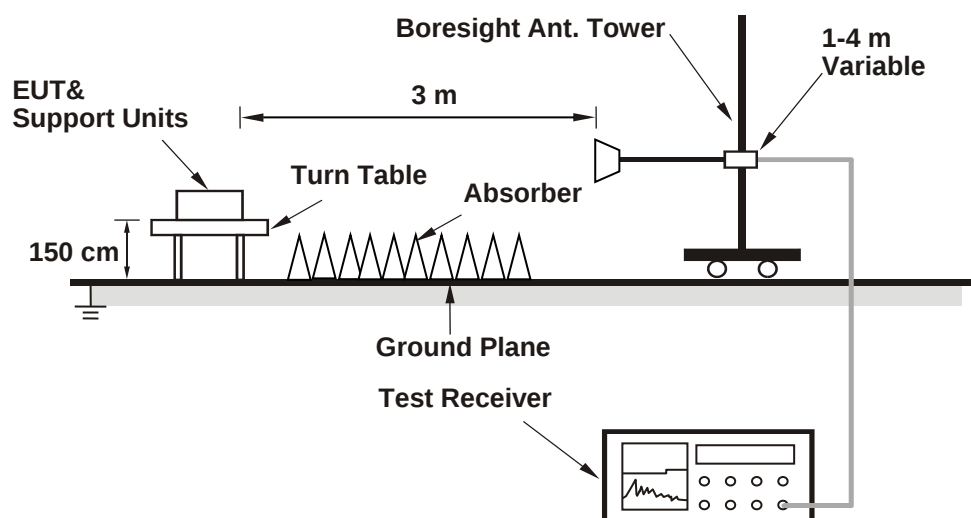
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	20.46
60	5300	20.52
64	5320	20.58
100	5500	20.47
116	5580	20.49
140	5700	20.55

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.46	24.1	>	24
60	5300	20.52	24.12	>	24
64	5320	20.58	24.13	>	24
100	5500	20.47	24.11	>	24
116	5580	20.49	24.11	>	24
140	5700	20.55	24.12	>	24

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

802.11ac (VHT20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	20.77
60	5300	20.83
64	5320	20.72
100	5500	20.88
116	5580	20.79
140	5700	20.71

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.77	24.17	>	24
60	5300	20.83	24.18	>	24
64	5320	20.72	24.16	>	24
100	5500	20.88	24.19	>	24
116	5580	20.79	24.17	>	24
140	5700	20.71	24.16	>	24

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

802.11ac (VHT40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
54	5270	41.52
62	5310	41.59
102	5510	41.65
110	5550	41.61
134	5670	41.61

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	41.52	27.18	>	24
62	5310	41.59	27.18	>	24
102	5510	41.65	27.19	>	24
110	5550	41.61	27.19	>	24
134	5670	41.61	27.19	>	24

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

802.11ac (VHT80)

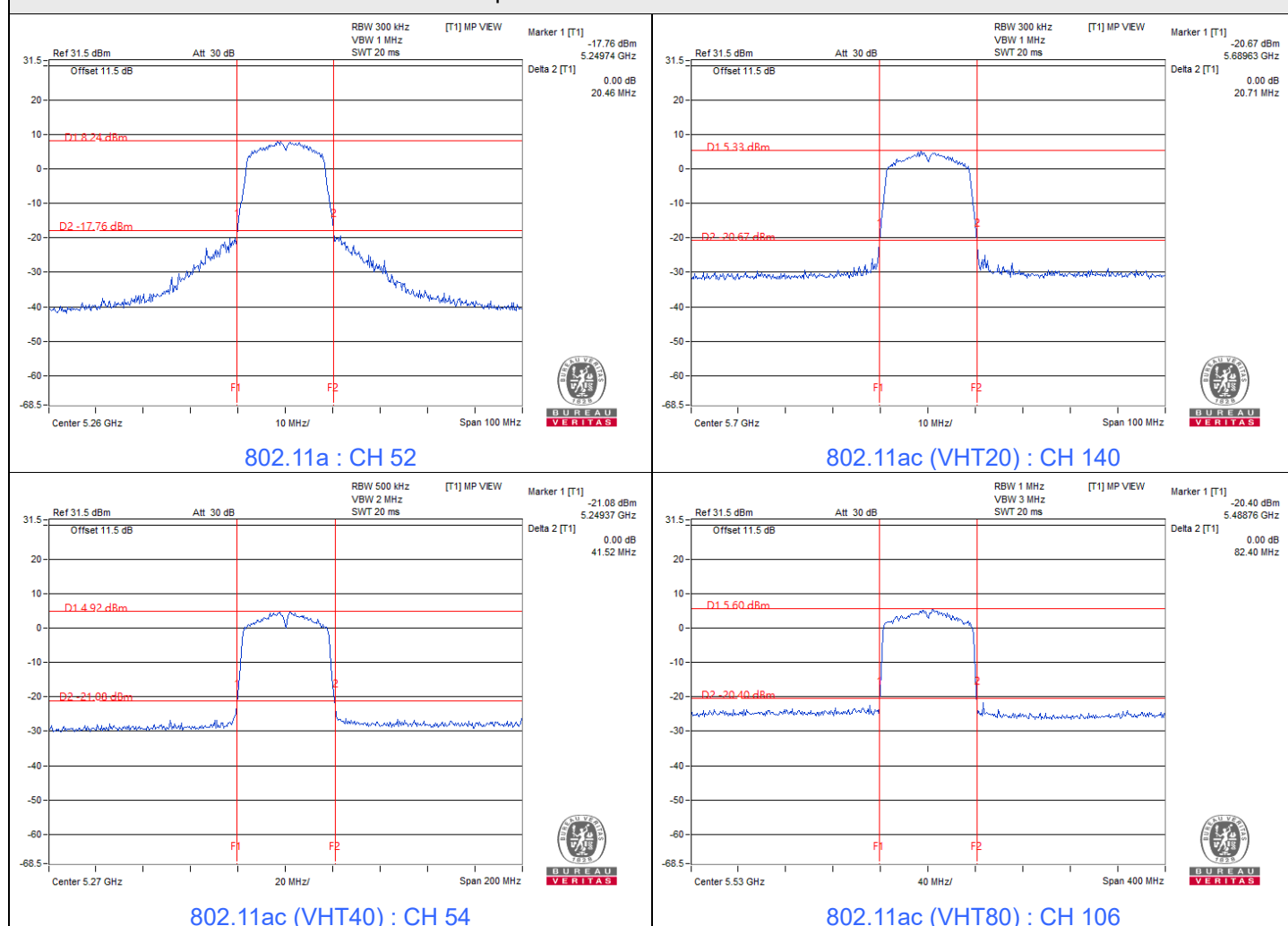
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
58	5290	82.53
106	5530	82.4
122	5610	82.71

Determined Output Power Limit

Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	82.53	30.16	>	24
106	5530	82.40	30.15	>	24
122	5610	82.71	30.17	>	24

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

Spectrum Plot of Minimum Value



7.2 RF Output Power

Input Power:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	27.04	14.32	24	Pass
40	5200	27.227	14.35	24	Pass
48	5240	27.353	14.37	24	Pass
52	5260	27.606	14.41	24	Pass
60	5300	27.797	14.44	24	Pass
64	5320	28.054	14.48	24	Pass
100	5500	27.925	14.46	24	Pass
116	5580	27.861	14.45	24	Pass
140	5700	27.733	14.43	24	Pass
149	5745	27.542	14.40	30	Pass
157	5785	27.416	14.38	30	Pass
165	5825	27.227	14.35	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.6 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	20.989	13.22	24	Pass
40	5200	21.038	13.23	24	Pass
48	5240	21.184	13.26	24	Pass
52	5260	21.478	13.32	24	Pass
60	5300	21.627	13.35	24	Pass
64	5320	21.677	13.36	24	Pass
100	5500	21.577	13.34	24	Pass
116	5580	21.429	13.31	24	Pass
140	5700	21.38	13.30	24	Pass
149	5745	21.281	13.28	30	Pass
157	5785	21.135	13.25	30	Pass
165	5825	21.086	13.24	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.6 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	21.184	13.26	24	Pass
46	5230	21.281	13.28	24	Pass
54	5270	21.38	13.30	24	Pass
62	5310	21.478	13.32	24	Pass
102	5510	21.577	13.34	24	Pass
110	5550	21.429	13.31	24	Pass
134	5670	21.33	13.29	24	Pass
151	5755	21.135	13.25	30	Pass
159	5795	21.038	13.23	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.6 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	21.429	13.31	24	Pass
40	5200	21.577	13.34	24	Pass
48	5240	21.777	13.38	24	Pass
52	5260	21.979	13.42	24	Pass
60	5300	22.182	13.46	24	Pass
64	5320	22.284	13.48	24	Pass
100	5500	22.233	13.47	24	Pass
116	5580	22.131	13.45	24	Pass
140	5700	21.979	13.42	24	Pass
149	5745	21.878	13.40	30	Pass
157	5785	21.827	13.39	30	Pass
165	5825	21.727	13.37	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.6 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	21.528	13.33	24	Pass
46	5230	21.627	13.35	24	Pass
54	5270	21.878	13.40	24	Pass
62	5310	21.979	13.42	24	Pass
102	5510	27.925	14.46	24	Pass
110	5550	27.733	14.43	24	Pass
134	5670	27.606	14.41	24	Pass
151	5755	21.727	13.37	30	Pass
159	5795	21.577	13.34	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.6 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.6 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	19.454	12.89	24	Pass
58	5290	19.588	12.92	24	Pass
106	5530	19.815	12.97	24	Pass
122	5610	19.724	12.95	24	Pass
155	5775	19.364	12.87	30	Pass

Notes:

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

7.3 Power Spectral Density

Input Power:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	1.58	11	Pass
40	5200	1.49	11	Pass
48	5240	1.65	11	Pass
52	5260	1.73	11	Pass
60	5300	1.72	11	Pass
64	5320	1.51	11	Pass
100	5500	1.60	11	Pass
116	5580	1.59	11	Pass
140	5700	1.63	11	Pass

Notes:

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

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	0.55	11	Pass
40	5200	0.62	11	Pass
48	5240	0.65	11	Pass
52	5260	0.62	11	Pass
60	5300	0.66	11	Pass
64	5320	0.63	11	Pass
100	5500	0.55	11	Pass
116	5580	0.63	11	Pass
140	5700	0.49	11	Pass

Notes:

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

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	-2.50	11	Pass
46	5230	-2.54	11	Pass
54	5270	-2.65	11	Pass
62	5310	-2.45	11	Pass
102	5510	-2.55	11	Pass
110	5550	-2.50	11	Pass
134	5670	-2.60	11	Pass

Notes:

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

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	-6.30	11	Pass
58	5290	-6.23	11	Pass
106	5530	-6.07	11	Pass
122	5610	-6.13	11	Pass

Notes:

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

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	-5.67	-3.45	30	Pass
157	5785	-5.9	-3.68	30	Pass
165	5825	-6.09	-3.87	30	Pass

Note: For U-NII-3, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	-6.83	-4.61	30	Pass
157	5785	-7.06	-4.84	30	Pass
165	5825	-7.15	-4.93	30	Pass

Note: For U-NII-3, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
151	5755	-10.12	-7.90	30	Pass
159	5795	-10.18	-7.96	30	Pass

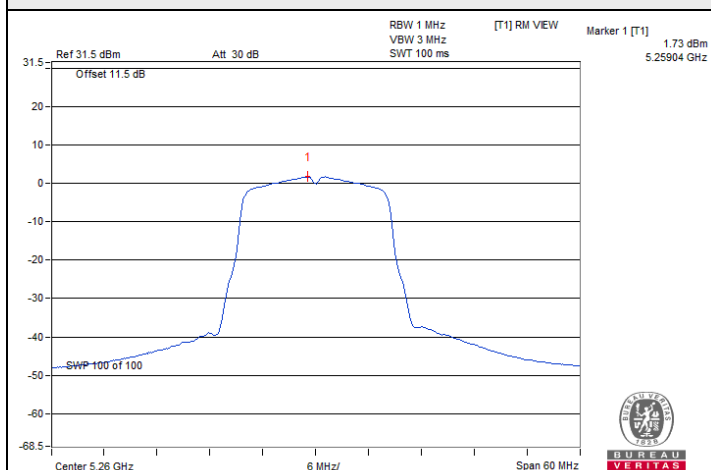
Note: For U-NII-3, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT80)

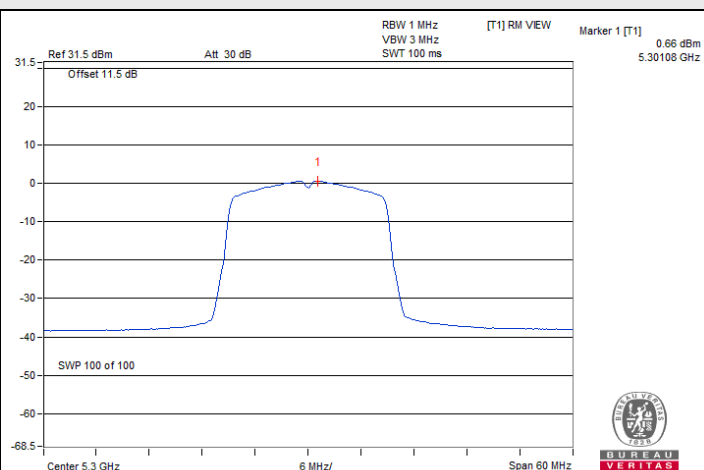
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
155	5775	-13.95	-11.73	30	Pass

Note: For U-NII-3, the antenna gain is 2.6 dBi < 6 dBi, so the power density limit shall not be reduced.

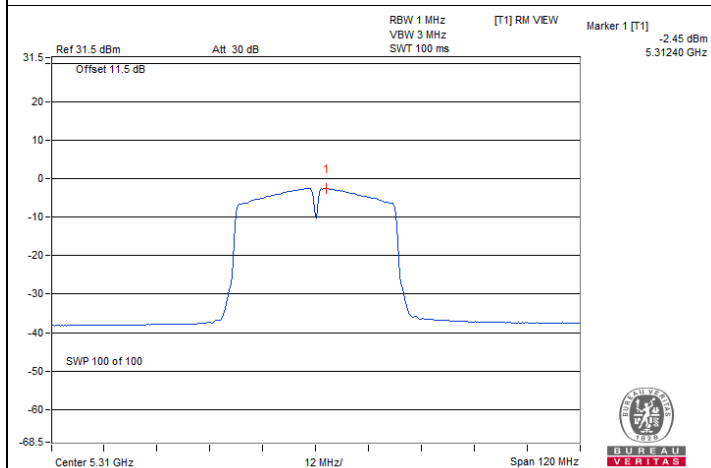
Spectrum Plot of Maximum Value



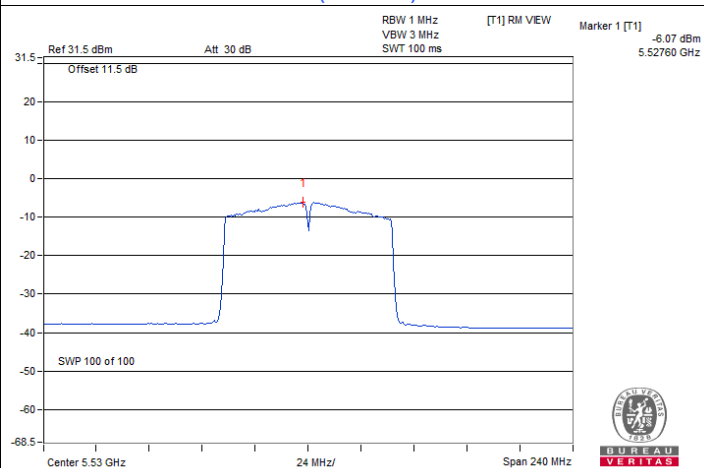
802.11a : CH 52



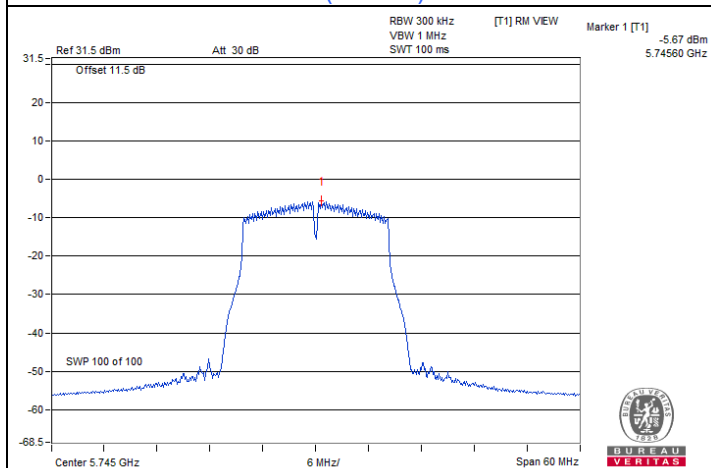
802.11ac (VHT20) : CH 60



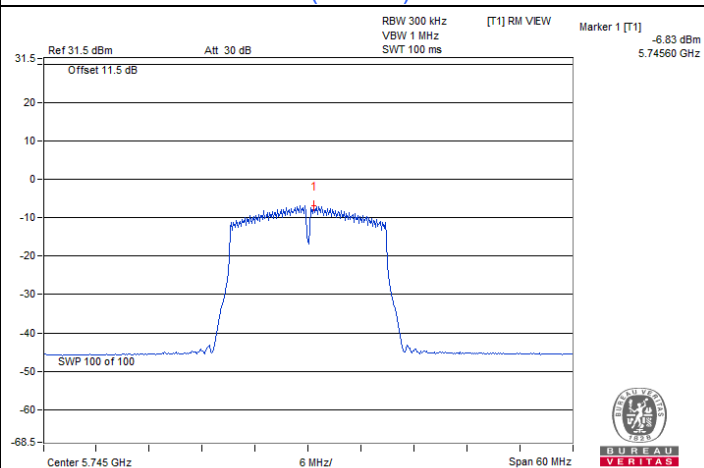
802.11ac (VHT40) : CH 62



802.11ac (VHT80) : CH 106

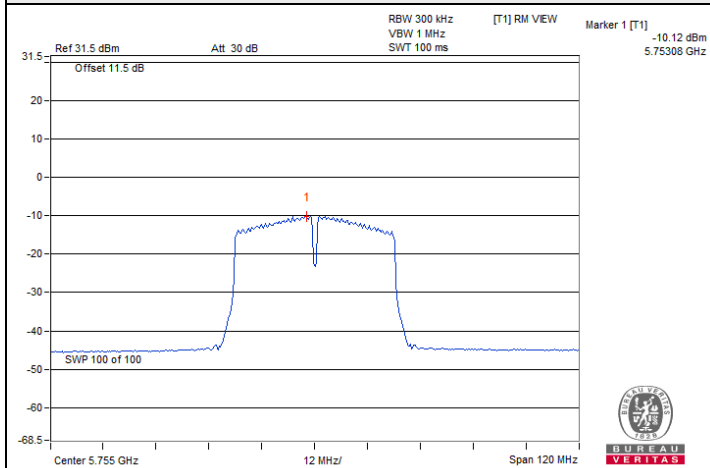


802.11a : CH 149

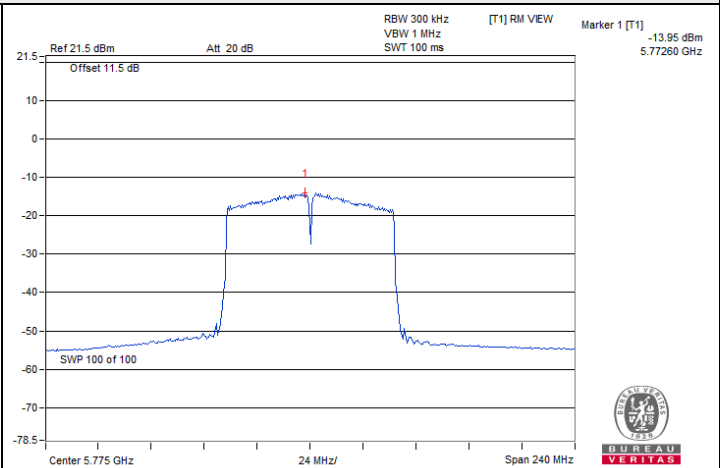


802.11ac (VHT20) : CH 149

Spectrum Plot of Maximum Value



802.11ac (VHT40) : CH 151



802.11ac (VHT80) : CH 155

7.4 6 dB Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	15.21	0.5	Pass
157	5785	15.56	0.5	Pass
165	5825	15.19	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	15.21	0.5	Pass
157	5785	15.18	0.5	Pass
165	5825	15.18	0.5	Pass

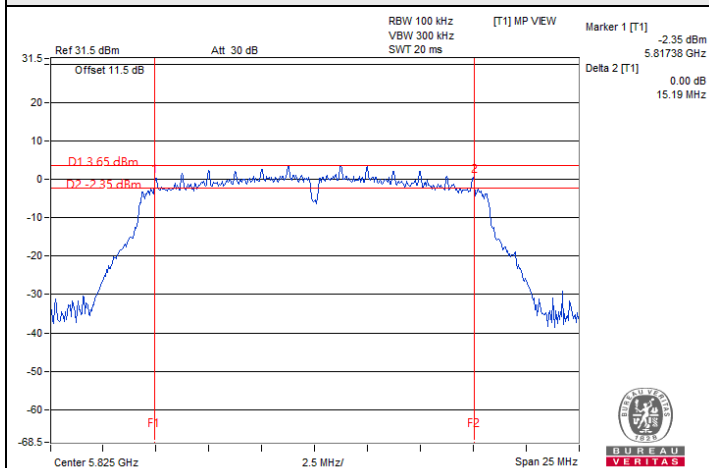
802.11ac (VHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
151	5755	35.26	0.5	Pass
159	5795	35.25	0.5	Pass

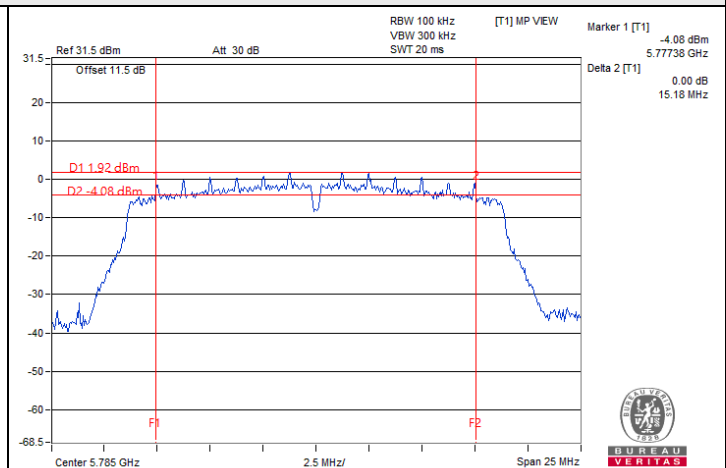
802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
155	5775	75.39	0.5	Pass

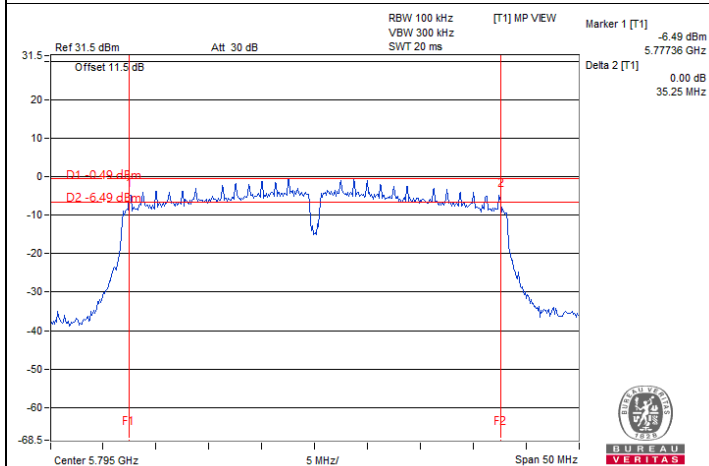
Spectrum Plot of Minimum Value



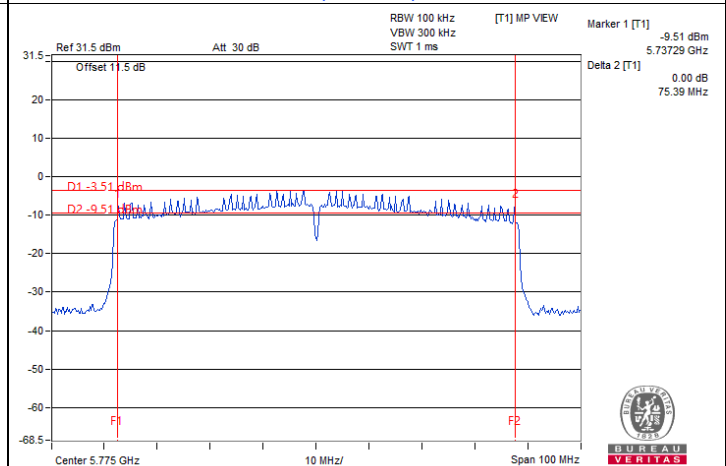
802.11a : CH 165



802.11ac (VHT20) : CH 157



802.11ac (VHT40) : CH 159



802.11ac (VHT80) : CH 155

7.5 Occupied Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.68
40	5200	16.68
48	5240	16.68
52	5260	16.92
60	5300	16.92
64	5320	16.68
100	5500	16.8
116	5580	16.68
140	5700	16.8
149	5745	16.8
157	5785	16.8
165	5825	16.68

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.76
40	5200	17.88
48	5240	17.88
52	5260	17.76
60	5300	17.76
64	5320	17.64
100	5500	17.76
116	5580	17.88
140	5700	17.88
149	5745	17.88
157	5785	17.88
165	5825	17.76

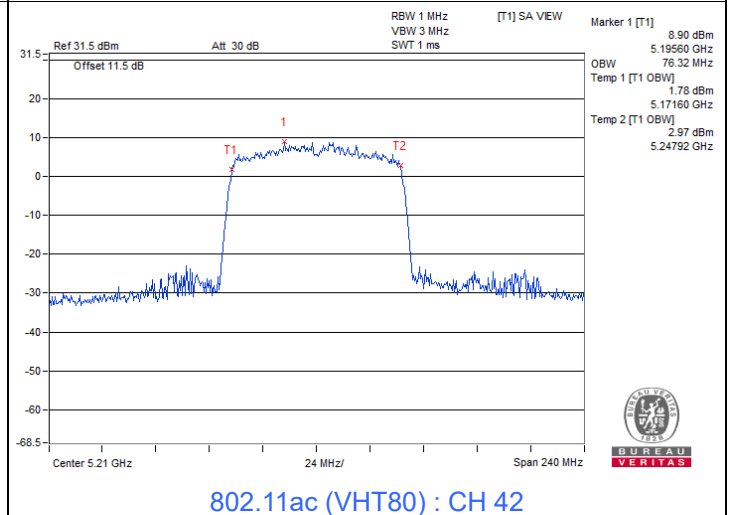
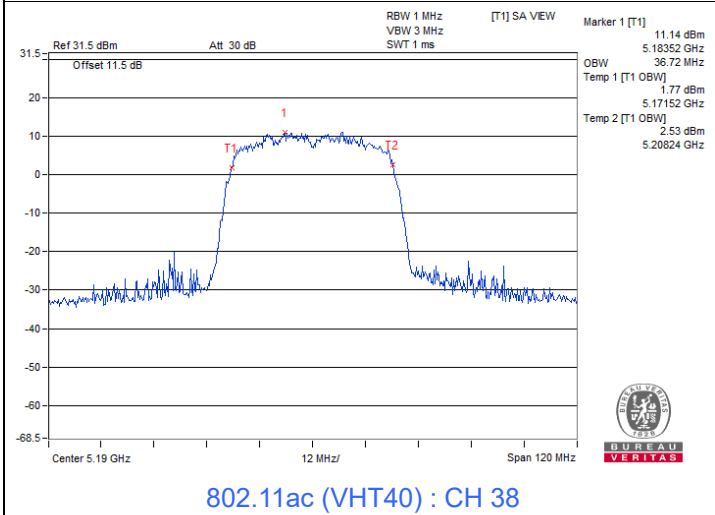
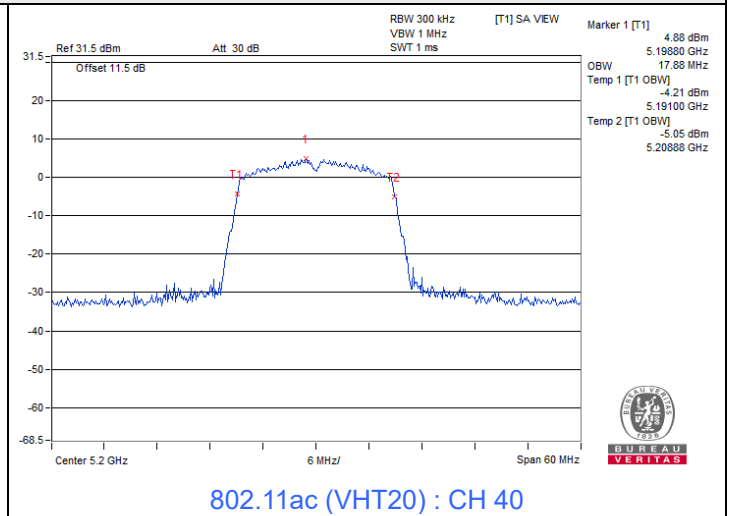
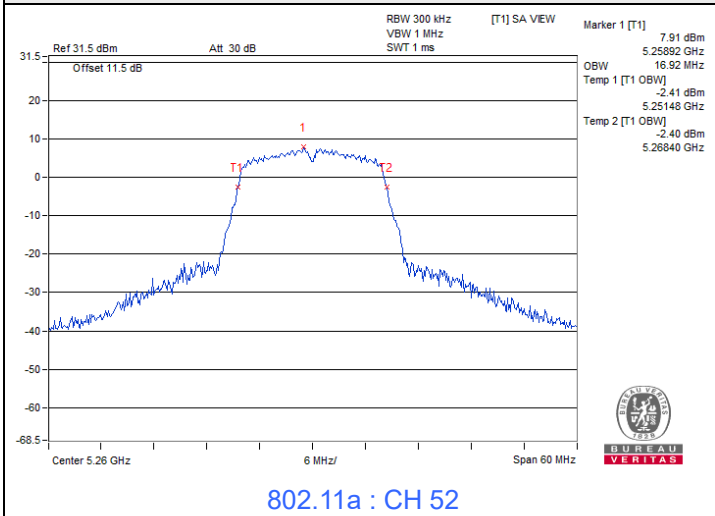
802.11ac (VHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.72
46	5230	36.48
54	5270	36.48
62	5310	36.48
102	5510	36.72
110	5550	36.48
134	5670	36.72
151	5755	36.72
159	5795	36.72

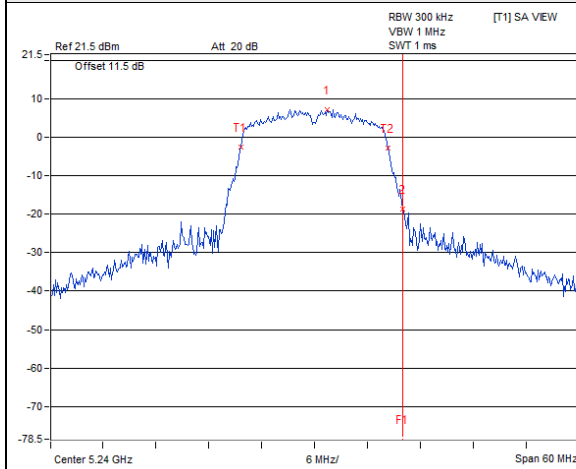
802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	76.32
58	5290	75.84
106	5530	75.36
122	5610	75.84
155	5775	75.84

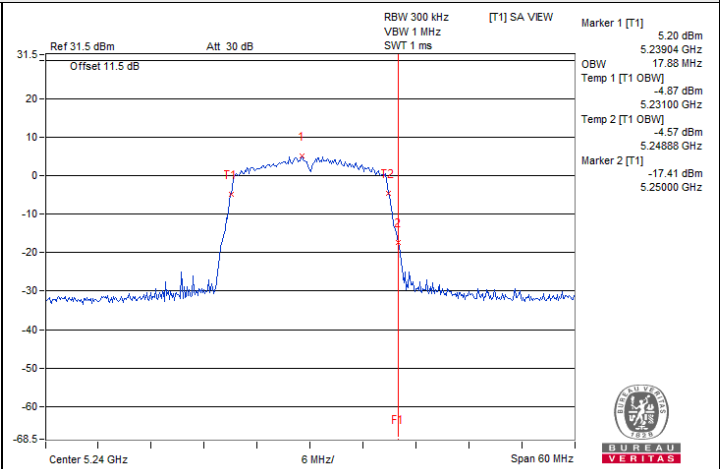
Spectrum Plot of Maximum Value



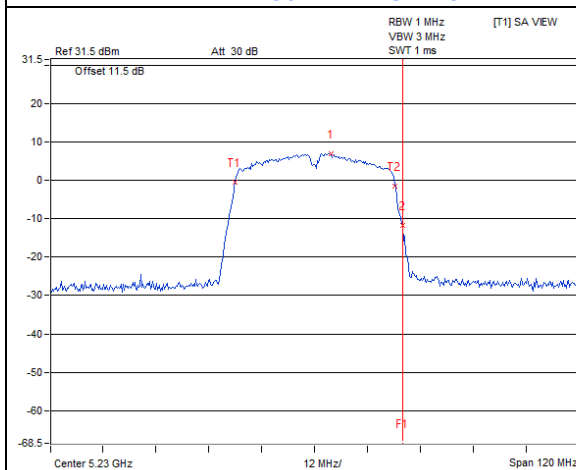
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



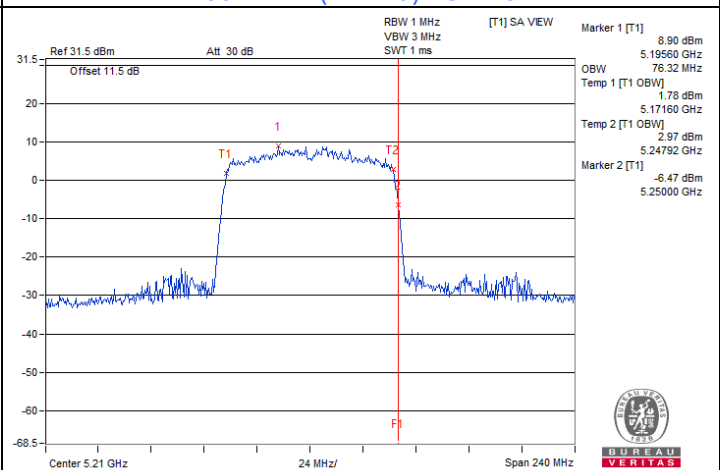
802.11a : CH 48



802.11ac (VHT20) : CH 48

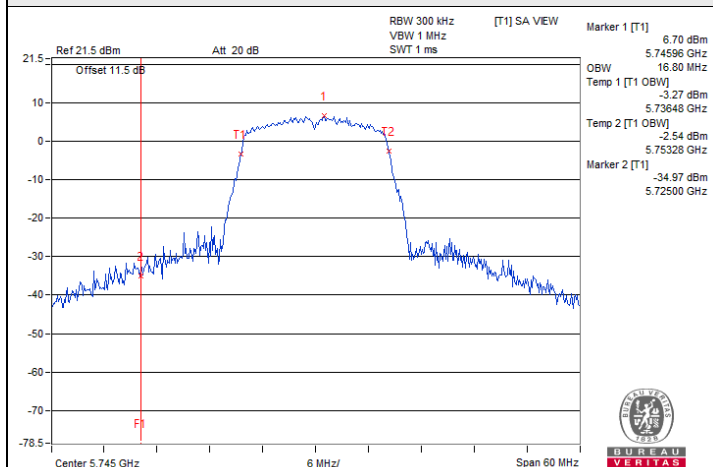


802.11ac (VHT40) : CH 46

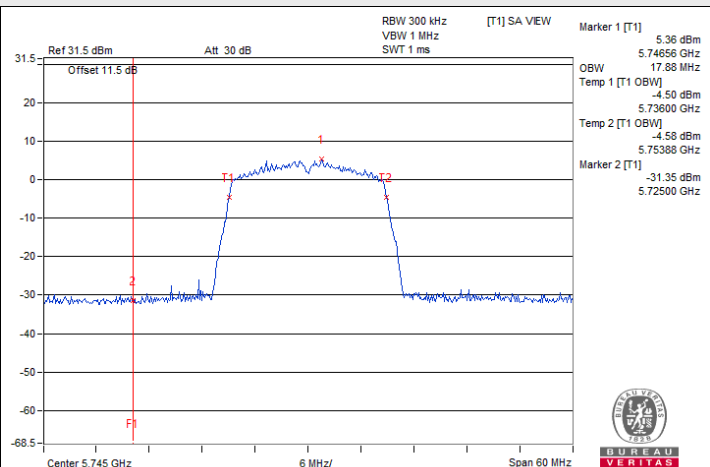


802.11ac (VHT80) : CH 42

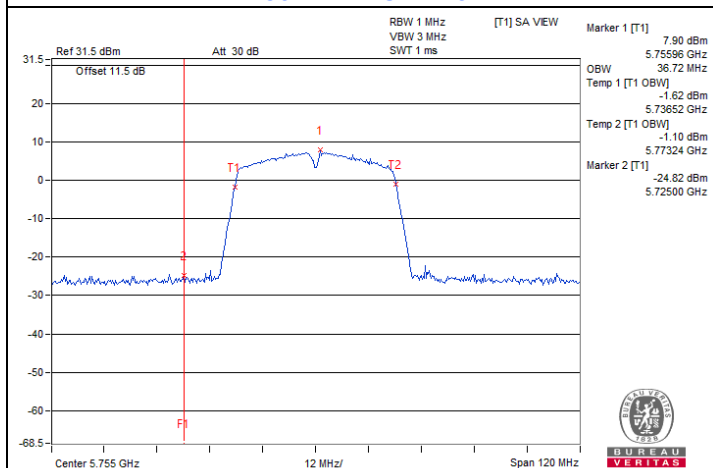
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



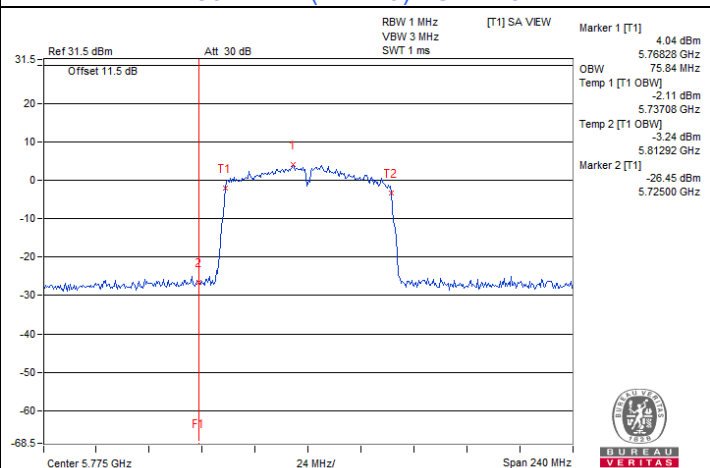
802.11a : CH 149



802.11ac (VHT20) : CH 149



802.11ac (VHT40) : CH 151



802.11ac (VHT80) : CH 155

7.6 Frequency Stability

Input Power:	3.85 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	3.85	5179.9781	Pass	5179.977	Pass	5179.9739	Pass	5179.9781	Pass
40	3.85	5180.0112	Pass	5180.0122	Pass	5180.0157	Pass	5180.0156	Pass
30	3.85	5180.0069	Pass	5180.0096	Pass	5180.0066	Pass	5180.0079	Pass
20	3.85	5180.0182	Pass	5180.0199	Pass	5180.0185	Pass	5180.0189	Pass
10	3.85	5179.9832	Pass	5179.983	Pass	5179.9823	Pass	5179.979	Pass
5	3.85	5179.9759	Pass	5179.978	Pass	5179.9753	Pass	5179.9759	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	4.4275	5180.0169	Pass	5180.0172	Pass	5180.0187	Pass	5180.0156	Pass
	3.85	5180.0182	Pass	5180.0199	Pass	5180.0185	Pass	5180.0189	Pass
	3.2725	5180.017	Pass	5180.018	Pass	5180.0175	Pass	5180.0152	Pass

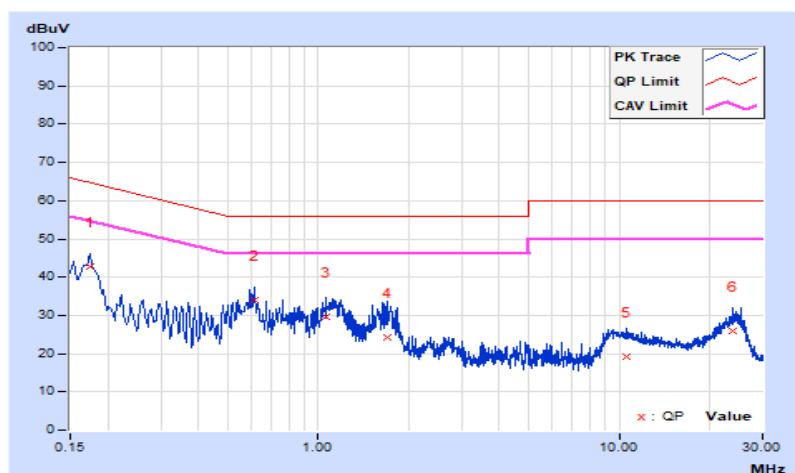
7.7 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 64 : 5320 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	22°C, 72% RH
Tested By	Vincent Chen		

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	0.17400	10.38	32.53	26.14	42.91	36.52	64.77	54.77	-21.86	-18.25
2	0.61400	10.51	23.61	15.66	34.12	26.17	56.00	46.00	-21.88	-19.83
3	1.05800	10.54	18.93	11.29	29.47	21.83	56.00	46.00	-26.53	-24.17
4	1.70600	10.55	13.75	6.74	24.30	17.29	56.00	46.00	-31.70	-28.71
5	10.64200	10.74	8.61	2.87	19.35	13.61	60.00	50.00	-40.65	-36.39
6	24.01000	10.83	15.05	2.79	25.88	13.62	60.00	50.00	-34.12	-36.38

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

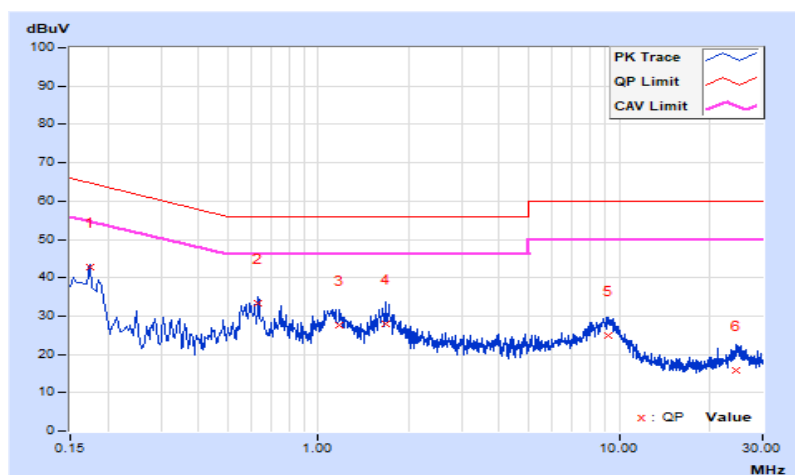


RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 72% RH
Tested By	Vincent Chen		

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	0.17400	10.42	32.35	25.71	42.77	36.13	64.77	54.77	-22.00	-18.64
2	0.63400	10.54	22.71	17.92	33.25	28.46	56.00	46.00	-22.75	-17.54
3	1.17400	10.56	17.18	11.01	27.74	21.57	56.00	46.00	-28.26	-24.43
4	1.67400	10.57	17.41	10.30	27.98	20.87	56.00	46.00	-28.02	-25.13
5	9.19800	10.83	14.20	3.34	25.03	14.17	60.00	50.00	-34.97	-35.83
6	24.44200	10.99	4.96	1.53	15.95	12.52	60.00	50.00	-44.05	-37.48

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



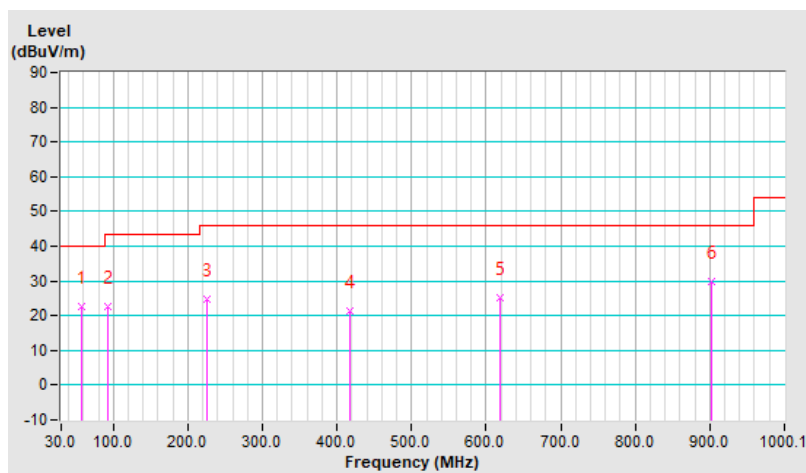
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 68% RH
Tested By	Tim 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	58.13	22.8 QP	40.0	-17.2	2.00 H	54	35.8	-13.0
2	92.09	22.6 QP	43.5	-20.9	1.50 H	198	40.7	-18.1
3	224.99	24.8 QP	46.0	-21.2	1.00 H	70	40.9	-16.1
4	417.07	21.4 QP	46.0	-24.6	1.50 H	43	30.6	-9.2
5	618.85	25.2 QP	46.0	-20.8	2.00 H	60	29.8	-4.6
6	902.12	29.8 QP	46.0	-16.2	2.00 H	335	30.5	-0.7

Remarks:

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

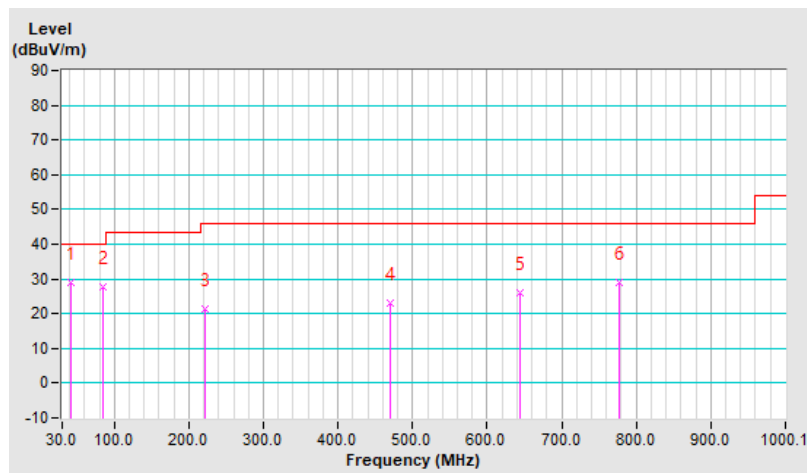


RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 68% RH
Tested By	Tim Chen		

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	41.64	28.9 QP	40.0	-11.1	1.50 V	259	41.5	-12.6
2	84.33	27.8 QP	40.0	-12.2	2.00 V	50	46.0	-18.2
3	222.08	21.3 QP	46.0	-24.7	1.50 V	2	37.3	-16.0
4	469.46	23.0 QP	46.0	-23.0	1.00 V	156	30.7	-7.7
5	645.04	26.0 QP	46.0	-20.0	2.00 V	269	30.1	-4.1
6	777.95	28.8 QP	46.0	-17.2	1.00 V	237	29.7	-0.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.7 PK	74.0	-14.3	1.08 H	151	56.2	3.5
2	5150.00	46.7 AV	54.0	-7.3	1.08 H	151	43.2	3.5
3	*5180.00	107.1 PK			1.08 H	151	66.1	41.0
4	*5180.00	96.8 AV			1.08 H	151	55.8	41.0
5	#10360.00	60.3 PK	68.2	-7.9	2.41 H	223	48.3	12.0
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	5150.00	59.3 PK	74.0	-14.7	2.92 V	286	55.8	3.5
2	5150.00	45.5 AV	54.0	-8.5	2.92 V	286	42.0	3.5
3	*5180.00	100.7 PK			2.92 V	286	59.7	41.0
4	*5180.00	90.7 AV			2.92 V	286	49.7	41.0
5	#10360.00	59.4 PK	68.2	-8.8	1.25 V	226	47.4	12.0

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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5200.00	107.6 PK			1.07 H	113	66.6	41.0
2	*5200.00	97.6 AV			1.07 H	113	56.6	41.0
3	#10400.00	60.4 PK	68.2	-7.8	3.25 H	167	48.4	12.0
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	*5200.00	100.1 PK			2.81 V	172	59.1	41.0
2	*5200.00	90.1 AV			2.81 V	172	49.1	41.0
3	#10400.00	59.6 PK	68.2	-8.6	3.34 V	256	47.6	12.0

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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	108.4 PK			1.05 H	114	67.6	40.8
2	*5240.00	98.2 AV			1.05 H	114	57.4	40.8
3	5350.00	58.3 PK	74.0	-15.7	1.05 H	114	55.5	2.8
4	5350.00	45.0 AV	54.0	-9.0	1.05 H	114	42.2	2.8
5	#10480.00	60.5 PK	68.2	-7.7	2.25 H	196	48.2	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	*5240.00	99.8 PK			2.61 V	171	59.0	40.8
2	*5240.00	89.7 AV			2.61 V	171	48.9	40.8
3	5350.00	58.0 PK	74.0	-16.0	2.61 V	171	55.2	2.8
4	5350.00	44.6 AV	54.0	-9.4	2.61 V	171	41.8	2.8
5	#10480.00	59.6 PK	68.2	-8.6	1.52 V	226	47.3	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	802.11a	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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.4 PK	74.0	-14.6	1.09 H	114	55.9	3.5
2	5150.00	45.6 AV	54.0	-8.4	1.09 H	114	42.1	3.5
3	*5260.00	108.1 PK			1.09 H	114	67.4	40.7
4	*5260.00	98.1 AV			1.09 H	114	57.4	40.7
5	#10520.00	61.0 PK	68.2	-7.2	3.14 H	211	48.6	12.4
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	5150.00	58.3 PK	74.0	-15.7	2.58 V	183	54.8	3.5
2	5150.00	45.3 AV	54.0	-8.7	2.58 V	183	41.8	3.5
3	*5260.00	99.7 PK			2.58 V	183	59.0	40.7
4	*5260.00	89.4 AV			2.58 V	183	48.7	40.7
5	#10520.00	59.7 PK	68.2	-8.5	1.35 V	257	47.3	12.4

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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	107.9 PK			1.05 H	113	67.3	40.6
2	*5300.00	98.1 AV			1.05 H	113	57.5	40.6
3	10600.00	60.7 PK	74.0	-13.3	2.52 H	179	48.4	12.3
4	10600.00	47.9 AV	54.0	-6.1	2.52 H	179	35.6	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	*5300.00	99.5 PK			2.42 V	172	58.9	40.6
2	*5300.00	89.2 AV			2.42 V	172	48.6	40.6
3	10600.00	59.5 PK	74.0	-14.5	1.06 V	235	47.2	12.3
4	10600.00	46.9 AV	54.0	-7.1	1.06 V	235	34.6	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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	108.0 PK			1.03 H	112	67.4	40.6
2	*5320.00	97.9 AV			1.03 H	112	57.3	40.6
3	5350.00	59.0 PK	74.0	-15.0	1.03 H	112	56.2	2.8
4	5350.00	46.2 AV	54.0	-7.8	1.03 H	112	43.4	2.8
5	10640.00	60.5 PK	74.0	-13.5	2.41 H	269	48.2	12.3
6	10640.00	47.4 AV	54.0	-6.6	2.41 H	269	35.1	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	*5320.00	99.4 PK			2.40 V	169	58.8	40.6
2	*5320.00	89.2 AV			2.40 V	169	48.6	40.6
3	5350.00	58.2 PK	74.0	-15.8	2.40 V	169	55.4	2.8
4	5350.00	44.7 AV	54.0	-9.3	2.40 V	169	41.9	2.8
5	10640.00	59.9 PK	74.0	-14.1	1.53 V	269	47.6	12.3
6	10640.00	46.8 AV	54.0	-7.2	1.53 V	269	34.5	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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.4 PK	74.0	-14.6	1.00 H	114	56.1	3.3
2	5460.00	46.5 AV	54.0	-7.5	1.00 H	114	43.2	3.3
3	#5470.00	59.7 PK	68.2	-8.5	1.00 H	114	56.4	3.3
4	*5500.00	107.1 PK			1.00 H	114	66.0	41.1
5	*5500.00	97.0 AV			1.00 H	114	55.9	41.1
6	11000.00	60.0 PK	74.0	-14.0	2.32 H	178	48.6	11.4
7	11000.00	46.7 AV	54.0	-7.3	2.32 H	178	35.3	11.4
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	57.8 PK	74.0	-16.2	2.67 V	187	54.5	3.3
2	5460.00	45.5 AV	54.0	-8.5	2.67 V	187	42.2	3.3
3	#5470.00	57.9 PK	68.2	-10.3	2.67 V	187	54.6	3.3
4	*5500.00	100.0 PK			2.67 V	187	58.9	41.1
5	*5500.00	89.9 AV			2.67 V	187	48.8	41.1
6	11000.00	58.7 PK	74.0	-15.3	1.52 V	236	47.3	11.4
7	11000.00	45.6 AV	54.0	-8.4	1.52 V	236	34.2	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	105.9 PK			1.26 H	125	64.6	41.3
2	*5580.00	95.7 AV			1.26 H	125	54.4	41.3
3	11160.00	60.2 PK	74.0	-13.8	2.35 H	178	48.4	11.8
4	11160.00	47.2 AV	54.0	-6.8	2.35 H	178	35.4	11.8
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	*5580.00	99.9 PK			2.69 V	282	58.6	41.3
2	*5580.00	89.6 AV			2.69 V	282	48.3	41.3
3	11160.00	59.1 PK	74.0	-14.9	1.82 V	163	47.3	11.8
4	11160.00	46.2 AV	54.0	-7.8	1.82 V	163	34.4	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	105.5 PK			1.25 H	148	64.1	41.4
2	*5700.00	95.2 AV			1.25 H	148	53.8	41.4
3	#5725.00	65.7 PK	68.2	-2.5	1.25 H	148	61.9	3.8
4	11400.00	60.7 PK	74.0	-13.3	2.74 H	236	48.5	12.2
5	11400.00	47.8 AV	54.0	-6.2	2.74 H	236	35.6	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	*5700.00	98.6 PK			2.87 V	289	57.2	41.4
2	*5700.00	88.6 AV			2.87 V	289	47.2	41.4
3	#5725.00	58.3 PK	68.2	-9.9	2.87 V	289	54.5	3.8
4	11400.00	59.5 PK	74.0	-14.5	1.52 V	223	47.3	12.2
5	11400.00	46.4 AV	54.0	-7.6	1.52 V	223	34.2	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	802.11a	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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5611.20	58.2 PK	68.2	-10.0	1.31 H	149	54.6	3.6
2	*5745.00	105.4 PK			1.31 H	149	63.8	41.6
3	*5745.00	95.0 AV			1.31 H	149	53.4	41.6
4	#5992.80	60.0 PK	68.2	-8.2	1.31 H	149	55.6	4.4
5	11490.00	60.0 PK	74.0	-14.0	2.35 H	277	48.2	11.8
6	11490.00	47.4 AV	54.0	-6.6	2.35 H	277	35.6	11.8
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	#5613.60	58.5 PK	68.2	-9.7	2.86 V	288	54.9	3.6
2	*5745.00	98.7 PK			2.86 V	288	57.1	41.6
3	*5745.00	88.9 AV			2.86 V	288	47.3	41.6
4	#5988.80	59.9 PK	68.2	-8.3	2.86 V	288	55.5	4.4
5	11490.00	59.3 PK	74.0	-14.7	1.52 V	23	47.5	11.8
6	11490.00	46.1 AV	54.0	-7.9	1.52 V	23	34.3	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5624.80	58.2 PK	68.2	-10.0	1.20 H	149	54.6	3.6
2	*5785.00	105.0 PK			1.20 H	149	63.3	41.7
3	*5785.00	94.8 AV			1.20 H	149	53.1	41.7
4	#5992.80	59.4 PK	68.2	-8.8	1.20 H	149	55.0	4.4
5	11570.00	60.2 PK	74.0	-13.8	2.03 H	118	48.6	11.6
6	11570.00	47.0 AV	54.0	-7.0	2.03 H	118	35.4	11.6
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	#5601.60	58.1 PK	68.2	-10.1	2.68 V	287	54.5	3.6
2	*5785.00	98.6 PK			2.68 V	287	56.9	41.7
3	*5785.00	88.3 AV			2.68 V	287	46.6	41.7
4	#5977.20	59.4 PK	68.2	-8.8	2.86 V	287	55.0	4.4
5	11570.00	59.3 PK	74.0	-14.7	1.35 V	222	47.7	11.6
6	11570.00	46.2 AV	54.0	-7.8	1.35 V	222	34.6	11.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5645.20	58.2 PK	68.2	-10.0	1.18 H	148	54.6	3.6
2	*5825.00	105.0 PK			1.18 H	148	63.1	41.9
3	*5825.00	95.0 AV			1.18 H	148	53.1	41.9
4	#5954.80	59.0 PK	68.2	-9.2	1.18 H	148	54.5	4.5
5	11650.00	58.6 PK	74.0	-15.4	2.38 H	278	47.3	11.3
6	11650.00	45.8 AV	54.0	-8.2	2.38 H	278	34.5	11.3
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	#5633.60	58.3 PK	68.2	-9.9	3.13 V	357	54.7	3.6
2	*5825.00	98.7 PK			3.13 V	357	56.8	41.9
3	*5825.00	88.6 AV			3.13 V	357	46.7	41.9
4	#5968.80	58.9 PK	68.2	-9.3	3.13 V	357	54.4	4.5
5	11650.00	58.4 PK	74.0	-15.6	2.21 V	106	47.1	11.3
6	11650.00	45.6 AV	54.0	-8.4	2.21 V	106	34.3	11.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.4 PK	74.0	-14.6	1.39 H	131	55.9	3.5
2	5150.00	46.8 AV	54.0	-7.2	1.39 H	131	43.3	3.5
3	*5180.00	106.6 PK			1.39 H	131	65.6	41.0
4	*5180.00	96.1 AV			1.39 H	131	55.1	41.0
5	#10360.00	60.4 PK	68.2	-7.8	2.52 H	310	48.4	12.0
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	5150.00	59.2 PK	74.0	-14.8	4.00 V	262	55.7	3.5
2	5150.00	45.7 AV	54.0	-8.3	4.00 V	262	42.2	3.5
3	*5180.00	101.3 PK			4.00 V	262	60.3	41.0
4	*5180.00	90.9 AV			4.00 V	262	49.9	41.0
5	#10360.00	59.6 PK	68.2	-8.6	1.63 V	113	47.6	12.0

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5200.00	105.7 PK			1.00 H	150	64.7	41.0
2	*5200.00	95.6 AV			1.00 H	150	54.6	41.0
3	#10400.00	60.4 PK	68.2	-7.8	2.10 H	222	48.4	12.0
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	*5200.00	99.8 PK			4.00 V	257	58.8	41.0
2	*5200.00	89.9 AV			4.00 V	257	48.9	41.0
3	#10400.00	59.2 PK	68.2	-9.0	2.34 V	156	47.2	12.0

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	106.9 PK			1.02 H	148	66.1	40.8
2	*5240.00	96.4 AV			1.02 H	148	55.6	40.8
3	5350.00	58.1 PK	74.0	-15.9	1.02 H	148	55.3	2.8
4	5350.00	44.8 AV	54.0	-9.2	1.02 H	148	42.0	2.8
5	#10480.00	60.4 PK	68.2	-7.8	2.06 H	232	48.1	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	*5240.00	100.8 PK			3.59 V	271	60.0	40.8
2	*5240.00	90.4 AV			3.59 V	271	49.6	40.8
3	5350.00	58.0 PK	74.0	-16.0	3.59 V	271	55.2	2.8
4	5350.00	44.7 AV	54.0	-9.3	3.59 V	271	41.9	2.8
5	#10480.00	59.9 PK	68.2	-8.3	2.23 V	157	47.6	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 (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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.4 PK	74.0	-14.6	1.00 H	115	55.9	3.5
2	5150.00	45.6 AV	54.0	-8.4	1.00 H	115	42.1	3.5
3	*5260.00	106.5 PK			1.00 H	115	65.8	40.7
4	*5260.00	96.6 AV			1.00 H	115	55.9	40.7
5	#10520.00	60.8 PK	68.2	-7.4	3.31 H	152	48.4	12.4
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	5150.00	58.8 PK	74.0	-15.2	3.58 V	268	55.3	3.5
2	5150.00	45.4 AV	54.0	-8.6	3.58 V	268	41.9	3.5
3	*5260.00	100.8 PK			3.58 V	268	60.1	40.7
4	*5260.00	90.4 AV			3.58 V	268	49.7	40.7
5	#10520.00	59.7 PK	68.2	-8.5	1.52 V	193	47.3	12.4

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 (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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	107.0 PK			1.07 H	113	66.4	40.6
2	*5300.00	96.7 AV			1.07 H	113	56.1	40.6
3	10600.00	60.7 PK	74.0	-13.3	2.15 H	266	48.4	12.3
4	10600.00	47.6 AV	54.0	-6.4	2.15 H	266	35.3	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	*5300.00	100.0 PK			3.74 V	271	59.4	40.6
2	*5300.00	90.0 AV			3.74 V	271	49.4	40.6
3	10600.00	59.9 PK	74.0	-14.1	2.32 V	157	47.6	12.3
4	10600.00	46.9 AV	54.0	-7.1	2.32 V	157	34.6	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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	106.4 PK			1.13 H	113	65.8	40.6
2	*5320.00	96.0 AV			1.13 H	113	55.4	40.6
3	5350.00	60.7 PK	74.0	-13.3	1.13 H	113	57.9	2.8
4	5350.00	46.1 AV	54.0	-7.9	1.13 H	113	43.3	2.8
5	10640.00	60.9 PK	74.0	-13.1	2.23 H	278	48.6	12.3
6	10640.00	47.7 AV	54.0	-6.3	2.23 H	278	35.4	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	*5320.00	100.0 PK			3.70 V	264	59.4	40.6
2	*5320.00	90.1 AV			3.70 V	264	49.5	40.6
3	5350.00	58.4 PK	74.0	-15.6	3.70 V	264	55.6	2.8
4	5350.00	44.7 AV	54.0	-9.3	3.70 V	264	41.9	2.8
5	10640.00	59.6 PK	74.0	-14.4	1.63 V	204	47.3	12.3
6	10640.00	46.5 AV	54.0	-7.5	1.63 V	204	34.2	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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	58.3 PK	74.0	-15.7	1.11 H	113	55.0	3.3
2	5460.00	45.8 AV	54.0	-8.2	1.11 H	113	42.5	3.3
3	#5470.00	59.9 PK	68.2	-8.3	1.11 H	113	56.6	3.3
4	*5500.00	105.3 PK			1.11 H	113	64.2	41.1
5	*5500.00	95.2 AV			1.11 H	113	54.1	41.1
6	11000.00	59.6 PK	74.0	-14.4	2.35 H	198	48.2	11.4
7	11000.00	46.5 AV	54.0	-7.5	2.35 H	198	35.1	11.4
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	57.7 PK	74.0	-16.3	3.24 V	282	54.4	3.3
2	5460.00	45.6 AV	54.0	-8.4	3.24 V	282	42.3	3.3
3	#5470.00	57.9 PK	68.2	-10.3	3.24 V	282	54.6	3.3
4	*5500.00	100.2 PK			3.24 V	282	59.1	41.1
5	*5500.00	89.9 AV			3.24 V	282	48.8	41.1
6	11000.00	59.0 PK	74.0	-15.0	1.75 V	165	47.6	11.4
7	11000.00	45.6 AV	54.0	-8.4	1.75 V	165	34.2	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	105.5 PK			1.11 H	113	64.2	41.3
2	*5580.00	95.0 AV			1.11 H	113	53.7	41.3
3	11160.00	59.4 PK	74.0	-14.6	3.14 H	226	47.6	11.8
4	11160.00	47.2 AV	54.0	-6.8	3.14 H	226	35.4	11.8
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	*5580.00	99.0 PK			3.51 V	284	57.7	41.3
2	*5580.00	88.8 AV			3.51 V	284	47.5	41.3
3	11160.00	59.3 PK	74.0	-14.7	2.32 V	174	47.5	11.8
4	11160.00	46.3 AV	54.0	-7.7	2.32 V	174	34.5	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	104.3 PK			1.00 H	146	62.9	41.4
2	*5700.00	93.9 AV			1.00 H	146	52.5	41.4
3	#5725.00	59.2 PK	68.2	-9.0	1.00 H	146	55.4	3.8
4	11400.00	60.5 PK	74.0	-13.5	2.34 H	191	48.3	12.2
5	11400.00	47.6 AV	54.0	-6.4	2.34 H	191	35.4	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	*5700.00	97.7 PK			3.70 V	265	56.3	41.4
2	*5700.00	87.2 AV			3.70 V	265	45.8	41.4
3	#5725.00	59.1 PK	68.2	-9.1	3.70 V	265	55.3	3.8
4	11400.00	59.7 PK	74.0	-14.3	1.93 V	201	47.5	12.2
5	11400.00	46.8 AV	54.0	-7.2	1.93 V	201	34.6	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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5642.40	58.3 PK	68.2	-9.9	1.00 H	146	54.6	3.7
2	*5745.00	104.4 PK			1.00 H	146	62.8	41.6
3	*5745.00	93.8 AV			1.00 H	146	52.2	41.6
4	#5958.00	59.1 PK	68.2	-9.1	1.00 H	146	54.6	4.5
5	11490.00	60.3 PK	74.0	-13.7	2.42 H	263	48.5	11.8
6	11490.00	47.2 AV	54.0	-6.8	2.42 H	263	35.4	11.8
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	#5602.80	58.7 PK	68.2	-9.5	3.65 V	264	55.1	3.6
2	*5745.00	97.4 PK			3.65 V	264	55.8	41.6
3	*5745.00	87.4 AV			3.65 V	264	45.8	41.6
4	#5973.60	59.1 PK	68.2	-9.1	3.65 V	264	54.7	4.4
5	11490.00	59.1 PK	74.0	-14.9	2.46 V	114	47.3	11.8
6	11490.00	46.0 AV	54.0	-8.0	2.46 V	114	34.2	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5647.20	58.3 PK	68.2	-9.9	1.00 H	147	54.7	3.6
2	*5785.00	103.6 PK			1.00 H	147	61.9	41.7
3	*5785.00	93.5 AV			1.00 H	147	51.8	41.7
4	#5954.00	58.7 PK	68.2	-9.5	1.00 H	147	54.2	4.5
5	11570.00	60.2 PK	74.0	-13.8	2.23 H	252	48.6	11.6
6	11570.00	47.3 AV	54.0	-6.7	2.23 H	252	35.7	11.6
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	#5623.60	58.2 PK	68.2	-10.0	3.43 V	291	54.6	3.6
2	*5785.00	96.7 PK			3.43 V	291	55.0	41.7
3	*5785.00	86.5 AV			3.43 V	291	44.8	41.7
4	#5954.80	58.7 PK	68.2	-9.5	3.43 V	291	54.2	4.5
5	11570.00	58.9 PK	74.0	-15.1	2.06 V	111	47.3	11.6
6	11570.00	46.0 AV	54.0	-8.0	2.06 V	111	34.4	11.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5644.40	57.9 PK	68.2	-10.3	1.00 H	117	54.2	3.7
2	*5825.00	103.7 PK			1.00 H	117	61.8	41.9
3	*5825.00	93.3 AV			1.00 H	117	51.4	41.9
4	#5949.20	58.5 PK	68.2	-9.7	1.00 H	117	54.0	4.5
5	11650.00	59.7 PK	74.0	-14.3	2.35 H	274	48.4	11.3
6	11650.00	46.8 AV	54.0	-7.2	2.35 H	274	35.5	11.3
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	#5620.40	58.4 PK	68.2	-9.8	3.24 V	295	54.8	3.6
2	*5825.00	97.1 PK			3.24 V	295	55.2	41.9
3	*5825.00	86.9 AV			3.24 V	295	45.0	41.9
4	#5987.60	59.1 PK	68.2	-9.1	3.24 V	295	54.7	4.4
5	11650.00	58.9 PK	74.0	-15.1	1.52 V	203	47.6	11.3
6	11650.00	45.7 AV	54.0	-8.3	1.52 V	203	34.4	11.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.7 PK	74.0	-14.3	1.00 H	114	56.2	3.5
2	5150.00	47.8 AV	54.0	-6.2	1.00 H	114	44.3	3.5
3	*5190.00	104.6 PK			1.00 H	114	63.6	41.0
4	*5190.00	94.3 AV			1.00 H	114	53.3	41.0
5	#10380.00	60.0 PK	68.2	-8.2	1.43 H	219	48.1	11.9
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	5150.00	59.6 PK	74.0	-14.4	3.29 V	282	56.1	3.5
2	5150.00	45.9 AV	54.0	-8.1	3.29 V	282	42.4	3.5
3	*5190.00	98.3 PK			3.29 V	282	57.3	41.0
4	*5190.00	88.1 AV			3.29 V	282	47.1	41.0
5	#10380.00	59.1 PK	68.2	-9.1	1.44 V	248	47.2	11.9

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5230.00	105.4 PK			1.00 H	113	64.5	40.9
2	*5230.00	95.0 AV			1.00 H	113	54.1	40.9
3	5350.00	58.3 PK	74.0	-15.7	1.00 H	113	55.5	2.8
4	5350.00	45.2 AV	54.0	-8.8	1.00 H	113	42.4	2.8
5	#10460.00	60.4 PK	68.2	-7.8	1.43 H	29	48.1	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	*5230.00	97.4 PK			3.28 V	290	56.5	40.9
2	*5230.00	86.8 AV			3.28 V	290	45.9	40.9
3	5350.00	58.7 PK	74.0	-15.3	3.28 V	290	55.9	2.8
4	5350.00	45.3 AV	54.0	-8.7	3.28 V	290	42.5	2.8
5	#10460.00	59.5 PK	68.2	-8.7	2.04 V	197	47.2	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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	60.0 PK	74.0	-14.0	1.00 H	113	56.5	3.5
2	5150.00	46.3 AV	54.0	-7.7	1.00 H	113	42.8	3.5
3	*5270.00	104.6 PK			1.00 H	133	63.9	40.7
4	*5270.00	94.4 AV			1.00 H	133	53.7	40.7
5	#10540.00	60.9 PK	68.2	-7.3	1.67 H	244	48.5	12.4
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	5150.00	59.1 PK	74.0	-14.9	3.18 V	274	55.6	3.5
2	5150.00	45.4 AV	54.0	-8.6	3.18 V	274	41.9	3.5
3	*5270.00	98.5 PK			3.18 V	274	57.8	40.7
4	*5270.00	87.6 AV			3.18 V	274	46.9	40.7
5	#10540.00	59.6 PK	68.2	-8.6	1.76 V	234	47.2	12.4

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 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5310.00	104.6 PK			1.33 H	127	64.0	40.6
2	*5310.00	94.3 AV			1.33 H	127	53.7	40.6
3	5350.00	61.5 PK	74.0	-12.5	1.33 H	127	58.7	2.8
4	5350.00	47.3 AV	54.0	-6.7	1.33 H	127	44.5	2.8
5	10620.00	60.6 PK	74.0	-13.4	1.72 H	207	48.4	12.2
6	10620.00	47.4 AV	54.0	-6.6	1.72 H	207	35.2	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	*5310.00	96.7 PK			2.65 V	278	56.1	40.6
2	*5310.00	86.8 AV			2.65 V	278	46.2	40.6
3	5350.00	58.9 PK	74.0	-15.1	2.65 V	278	56.1	2.8
4	5350.00	45.4 AV	54.0	-8.6	2.65 V	278	42.6	2.8
5	10620.00	59.4 PK	74.0	-14.6	1.88 V	62	47.2	12.2
6	10620.00	46.5 AV	54.0	-7.5	1.88 V	62	34.3	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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	59.7 PK	74.0	-14.3	1.27 H	125	56.4	3.3
2	5460.00	46.6 AV	54.0	-7.4	1.27 H	125	43.3	3.3
3	#5470.00	65.7 PK	68.2	-2.5	1.27 H	125	62.4	3.3
4	*5510.00	102.7 PK			1.27 H	125	61.6	41.1
5	*5510.00	92.0 AV			1.27 H	125	50.9	41.1
6	11020.00	60.0 PK	74.0	-14.0	1.66 H	207	48.4	11.6
7	11020.00	46.8 AV	54.0	-7.2	1.66 H	207	35.2	11.6
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	58.7 PK	74.0	-15.3	3.40 V	282	55.4	3.3
2	5460.00	45.5 AV	54.0	-8.5	3.40 V	282	42.2	3.3
3	#5470.00	59.7 PK	68.2	-8.5	3.40 V	282	56.4	3.3
4	*5510.00	97.5 PK			3.40 V	282	56.4	41.1
5	*5510.00	87.0 AV			3.40 V	282	45.9	41.1
6	11020.00	58.7 PK	74.0	-15.3	1.74 V	205	47.1	11.6
7	11020.00	45.8 AV	54.0	-8.2	1.74 V	205	34.2	11.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5550.00	102.5 PK			1.30 H	122	61.2	41.3
2	*5550.00	91.7 AV			1.30 H	122	50.4	41.3
3	11100.00	60.5 PK	74.0	-13.5	1.52 H	244	48.6	11.9
4	11100.00	47.2 AV	54.0	-6.8	1.52 H	244	35.3	11.9
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	*5550.00	97.9 PK			3.43 V	285	56.6	41.3
2	*5550.00	87.6 AV			3.43 V	285	46.3	41.3
3	11100.00	59.1 PK	74.0	-14.9	2.01 V	37	47.2	11.9
4	11100.00	46.0 AV	54.0	-8.0	2.01 V	37	34.1	11.9

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.

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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5670.00	101.3 PK			1.00 H	148	59.9	41.4
2	*5670.00	91.2 AV			1.00 H	148	49.8	41.4
3	#5725.00	59.2 PK	68.2	-9.0	1.00 H	148	55.4	3.8
4	11340.00	60.3 PK	74.0	-13.7	1.77 H	148	48.1	12.2
5	11340.00	46.9 AV	54.0	-7.1	1.77 H	148	34.7	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	*5670.00	95.0 PK			3.07 V	286	53.6	41.4
2	*5670.00	84.5 AV			3.07 V	286	43.1	41.4
3	#5725.00	58.9 PK	68.2	-9.3	3.07 V	286	55.1	3.8
4	11340.00	59.4 PK	74.0	-14.6	1.86 V	247	47.2	12.2
5	11340.00	46.3 AV	54.0	-7.7	1.86 V	247	34.1	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 (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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5622.80	58.4 PK	68.2	-9.8	1.30 H	131	54.8	3.6
2	*5755.00	101.2 PK			1.30 H	131	59.5	41.7
3	*5755.00	90.9 AV			1.30 H	131	49.2	41.7
4	#5964.80	59.4 PK	68.2	-8.8	1.30 H	131	54.9	4.5
5	11510.00	59.7 PK	74.0	-14.3	1.65 H	214	48.0	11.7
6	11510.00	46.4 AV	54.0	-7.6	1.65 H	214	34.7	11.7
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	#5618.80	58.7 PK	68.2	-9.5	2.53 V	291	55.1	3.6
2	*5755.00	94.3 PK			2.53 V	291	52.6	41.7
3	*5755.00	83.9 AV			2.53 V	291	42.2	41.7
4	#5950.00	59.2 PK	68.2	-9.0	2.53 V	291	54.7	4.5
5	11510.00	58.9 PK	74.0	-15.1	1.62 V	133	47.2	11.7
6	11510.00	45.9 AV	54.0	-8.1	1.62 V	133	34.2	11.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5638.40	58.6 PK	68.2	-9.6	1.46 H	129	54.9	3.7
2	*5795.00	101.6 PK			1.46 H	129	59.9	41.7
3	*5795.00	90.9 AV			1.46 H	129	49.2	41.7
4	#5932.40	59.1 PK	68.2	-9.1	1.46 H	129	54.7	4.4
5	11590.00	59.3 PK	74.0	-14.7	1.04 H	109	47.8	11.5
6	11590.00	46.1 AV	54.0	-7.9	1.04 H	109	34.6	11.5
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	#5634.00	59.0 PK	68.2	-9.2	2.28 V	293	55.4	3.6
2	*5795.00	93.8 PK			2.28 V	293	52.1	41.7
3	*5795.00	83.6 AV			2.28 V	293	41.9	41.7
4	#5951.20	59.4 PK	68.2	-8.8	2.28 V	293	54.9	4.5
5	11590.00	58.6 PK	74.0	-15.4	1.98 V	216	47.1	11.5
6	11590.00	45.7 AV	54.0	-8.3	1.98 V	216	34.2	11.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	60.3 PK	74.0	-13.7	1.08 H	152	56.8	3.5
2	5150.00	48.0 AV	54.0	-6.0	1.08 H	152	44.5	3.5
3	*5210.00	100.6 PK			1.08 H	152	59.7	40.9
4	*5210.00	89.7 AV			1.08 H	152	48.8	40.9
5	#10420.00	60.2 PK	68.2	-8.0	1.77 H	269	48.2	12.0
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	5150.00	59.7 PK	74.0	-14.3	3.24 V	281	56.2	3.5
2	5150.00	46.3 AV	54.0	-7.7	3.24 V	281	42.8	3.5
3	*5210.00	95.5 PK			3.24 V	281	54.6	40.9
4	*5210.00	84.7 AV			3.24 V	281	43.8	40.9
5	#10420.00	59.3 PK	68.2	-8.9	1.86 V	208	47.3	12.0

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 58 : 5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5290.00	100.2 PK			1.09 H	152	59.6	40.6
2	*5290.00	89.0 AV			1.09 H	152	48.4	40.6
3	5350.00	61.4 PK	74.0	-12.6	1.09 H	152	58.6	2.8
4	5350.00	48.2 AV	54.0	-5.8	1.09 H	152	45.4	2.8
5	#10580.00	60.4 PK	68.2	-7.8	1.22 H	309	48.1	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	*5290.00	94.3 PK			3.52 V	265	53.7	40.6
2	*5290.00	83.9 AV			3.52 V	265	43.3	40.6
3	5350.00	58.7 PK	74.0	-15.3	3.52 V	265	55.9	2.8
4	5350.00	45.6 AV	54.0	-8.4	3.52 V	265	42.8	2.8
5	#10580.00	59.4 PK	68.2	-8.8	1.06 V	307	47.1	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 (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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	60.8 PK	74.0	-13.2	1.07 H	147	57.5	3.3
2	5460.00	48.1 AV	54.0	-5.9	1.07 H	147	44.8	3.3
3	#5470.00	66.1 PK	68.2	-2.1	1.07 H	147	62.8	3.3
4	*5530.00	99.3 PK			1.07 H	147	58.1	41.2
5	*5530.00	88.1 AV			1.07 H	147	46.9	41.2
6	11060.00	60.1 PK	74.0	-13.9	1.23 H	196	48.4	11.7
7	11060.00	47.2 AV	54.0	-6.8	1.23 H	196	35.5	11.7
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	59.5 PK	74.0	-14.5	3.20 V	282	56.2	3.3
2	5460.00	46.5 AV	54.0	-7.5	3.20 V	282	43.2	3.3
3	#5470.00	61.4 PK	68.2	-6.8	3.20 V	282	58.1	3.3
4	*5530.00	93.0 PK			3.20 V	282	51.8	41.2
5	*5530.00	82.9 AV			3.20 V	282	41.7	41.2
6	11060.00	58.9 PK	74.0	-15.1	1.93 V	222	47.2	11.7
7	11060.00	46.0 AV	54.0	-8.0	1.93 V	222	34.3	11.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	*5610.00	98.5 PK			1.43 H	134	57.1	41.4
2	*5610.00	87.7 AV			1.43 H	134	46.3	41.4
3	#5725.00	59.4 PK	68.2	-8.8	1.43 H	134	55.6	3.8
4	11220.00	60.1 PK	74.0	-13.9	1.43 H	210	48.2	11.9
5	11220.00	46.7 AV	54.0	-7.3	1.43 H	210	34.8	11.9
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	*5610.00	92.5 PK			2.97 V	287	51.1	41.4
2	*5610.00	81.5 AV			2.97 V	287	40.1	41.4
3	#5725.00	59.2 PK	68.2	-9.0	2.97 V	287	55.4	3.8
4	11220.00	58.9 PK	74.0	-15.1	1.52 V	166	47.0	11.9
5	11220.00	46.0 AV	54.0	-8.0	1.52 V	166	34.1	11.9

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 155 : 5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	24°C, 66% RH
Tested By	Tim Chen/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	#5643.20	58.9 PK	68.2	-9.3	1.00 H	151	55.2	3.7
2	*5775.00	97.3 PK			1.00 H	151	55.6	41.7
3	*5775.00	86.5 AV			1.00 H	151	44.8	41.7
4	#5939.60	59.1 PK	68.2	-9.1	1.00 H	151	54.7	4.4
5	11550.00	59.6 PK	74.0	-14.4	1.21 H	168	48.0	11.6
6	11550.00	46.3 AV	54.0	-7.7	1.21 H	168	34.7	11.6
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	#5616.00	58.5 PK	68.2	-9.7	3.61 V	265	54.9	3.6
2	*5775.00	90.9 PK			3.61 V	265	49.2	41.7
3	*5775.00	80.5 AV			3.61 V	265	38.8	41.7
4	#5964.40	59.2 PK	68.2	-9.0	3.61 V	265	54.7	4.5
5	11550.00	58.4 PK	74.0	-15.6	1.77 V	201	46.8	11.6
6	11550.00	45.3 AV	54.0	-8.7	1.77 V	201	33.7	11.6

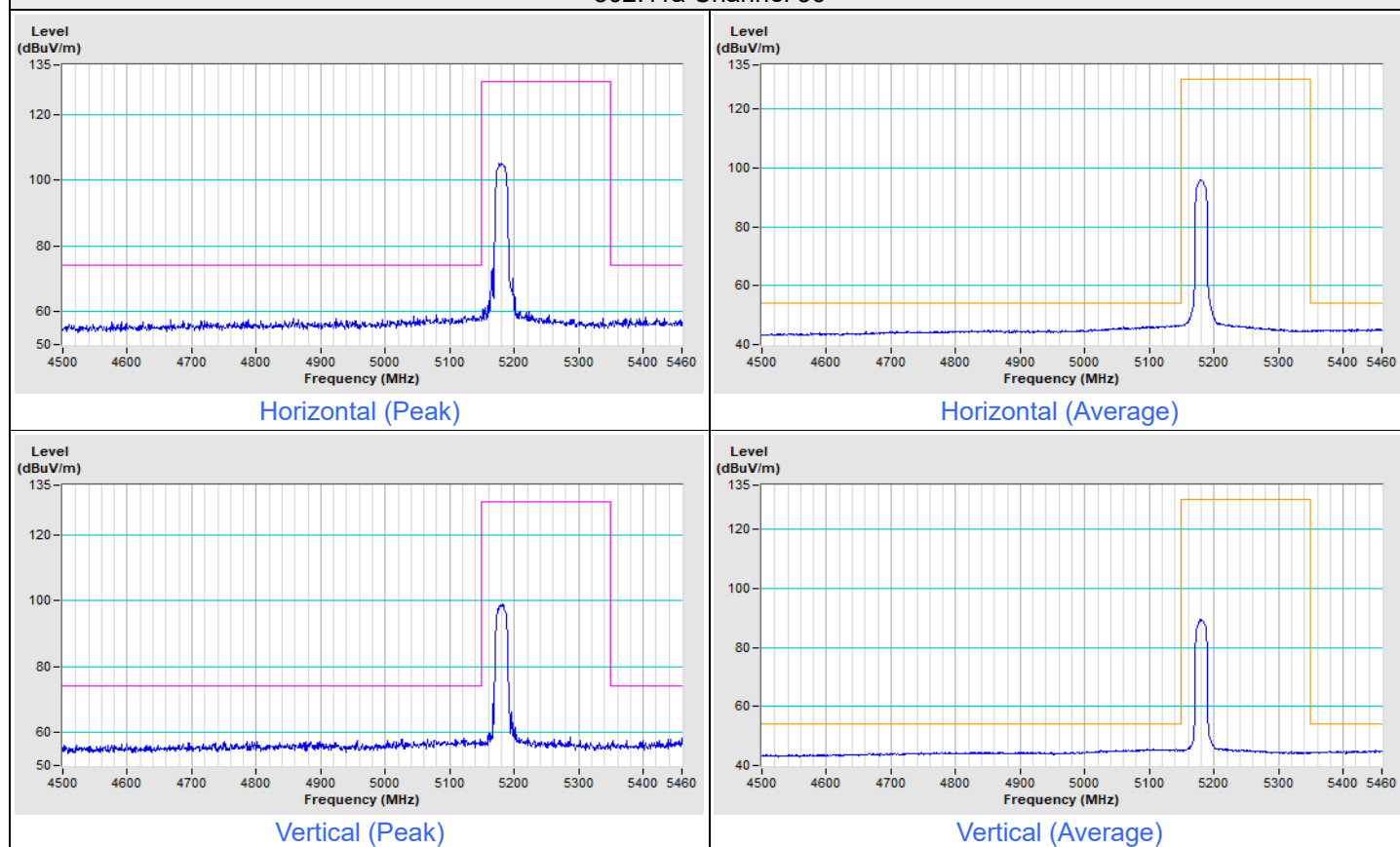
Remarks:

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

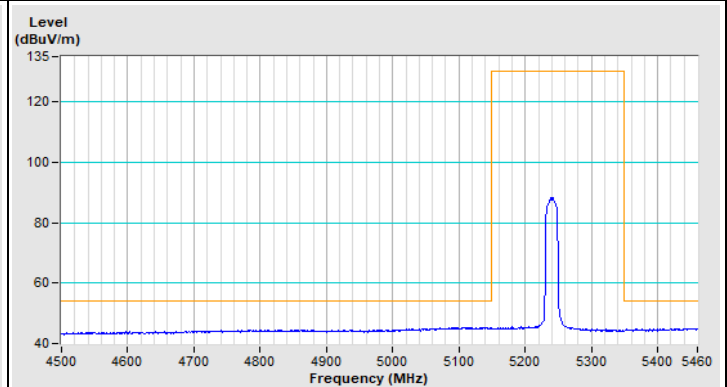
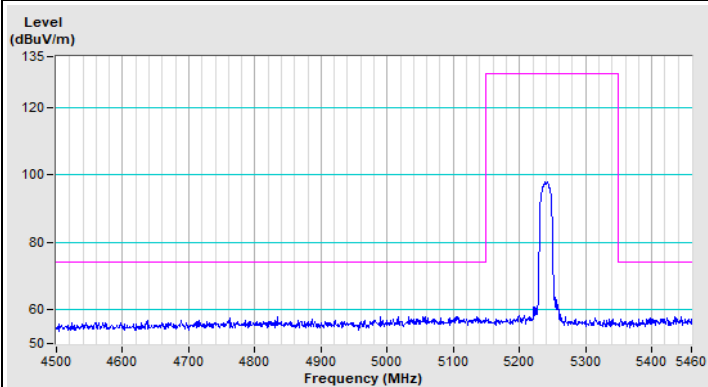
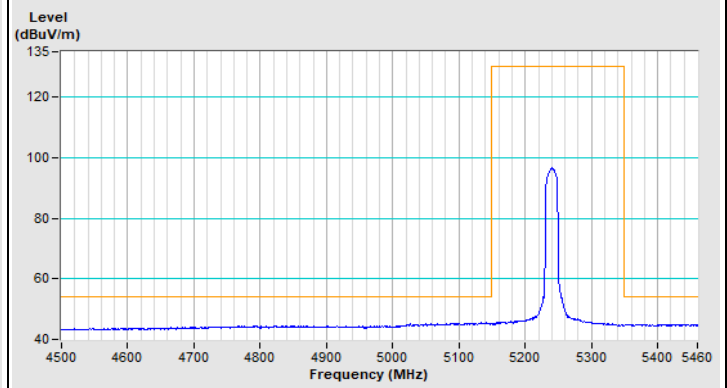
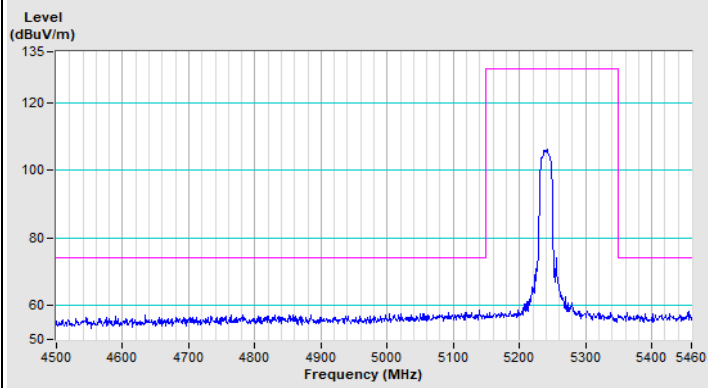
Plot of Band Edge

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=10 Hz, DET=Peak
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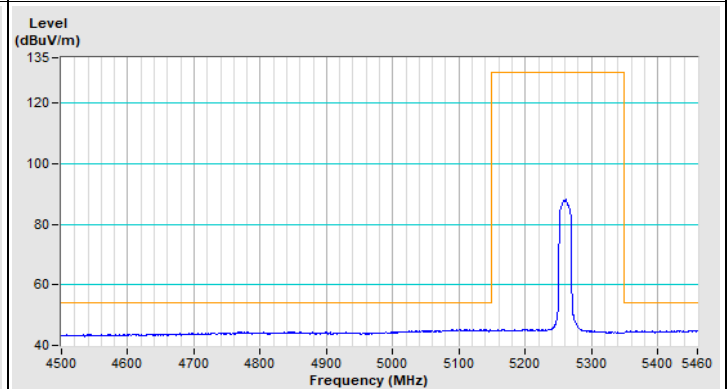
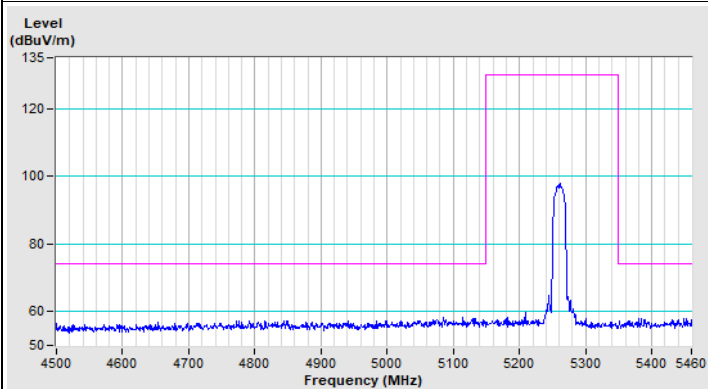
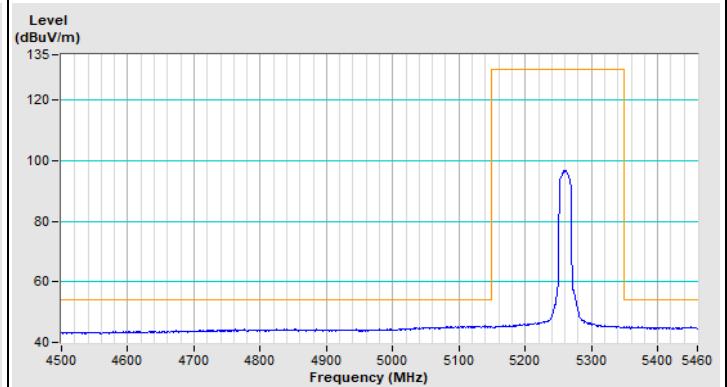
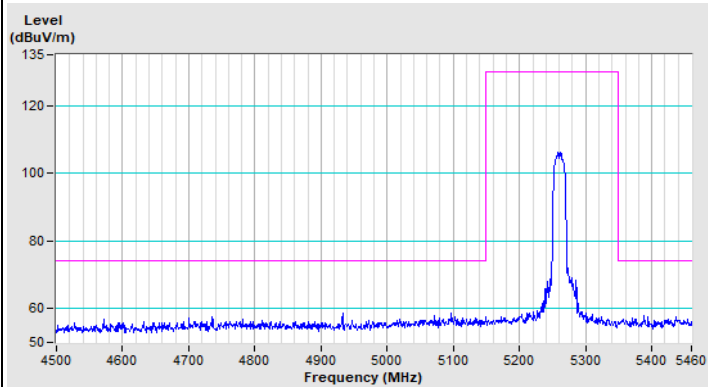
802.11a Channel 36



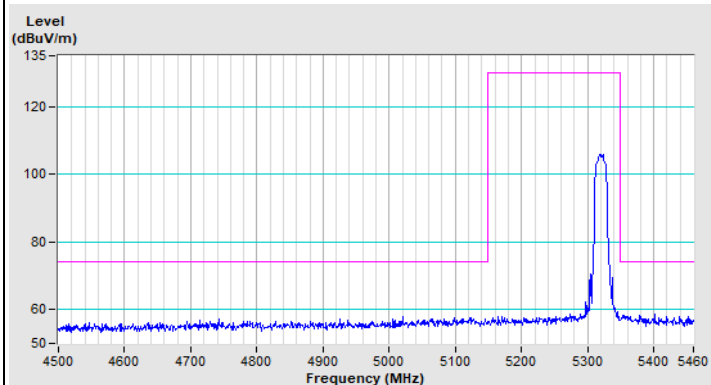
802.11a Channel 48



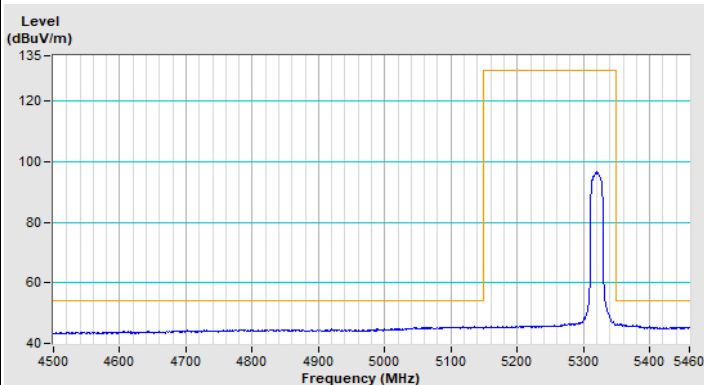
802.11a Channel 52



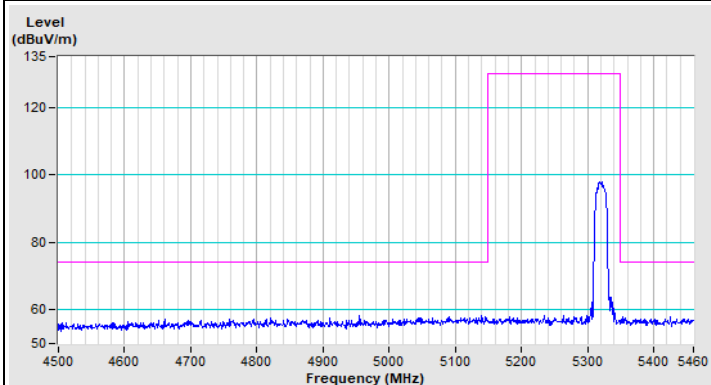
802.11a Channel 64



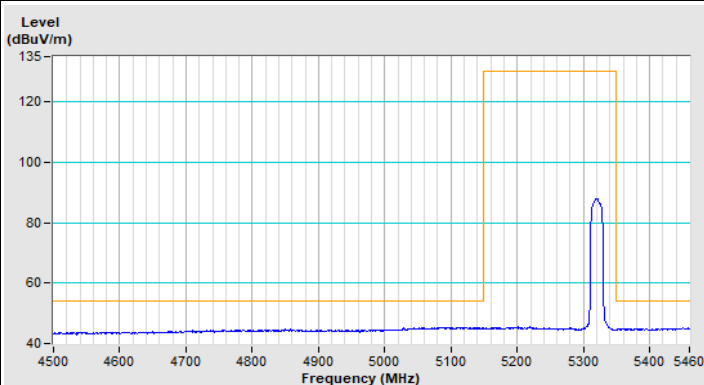
Horizontal (Peak)



Horizontal (Average)



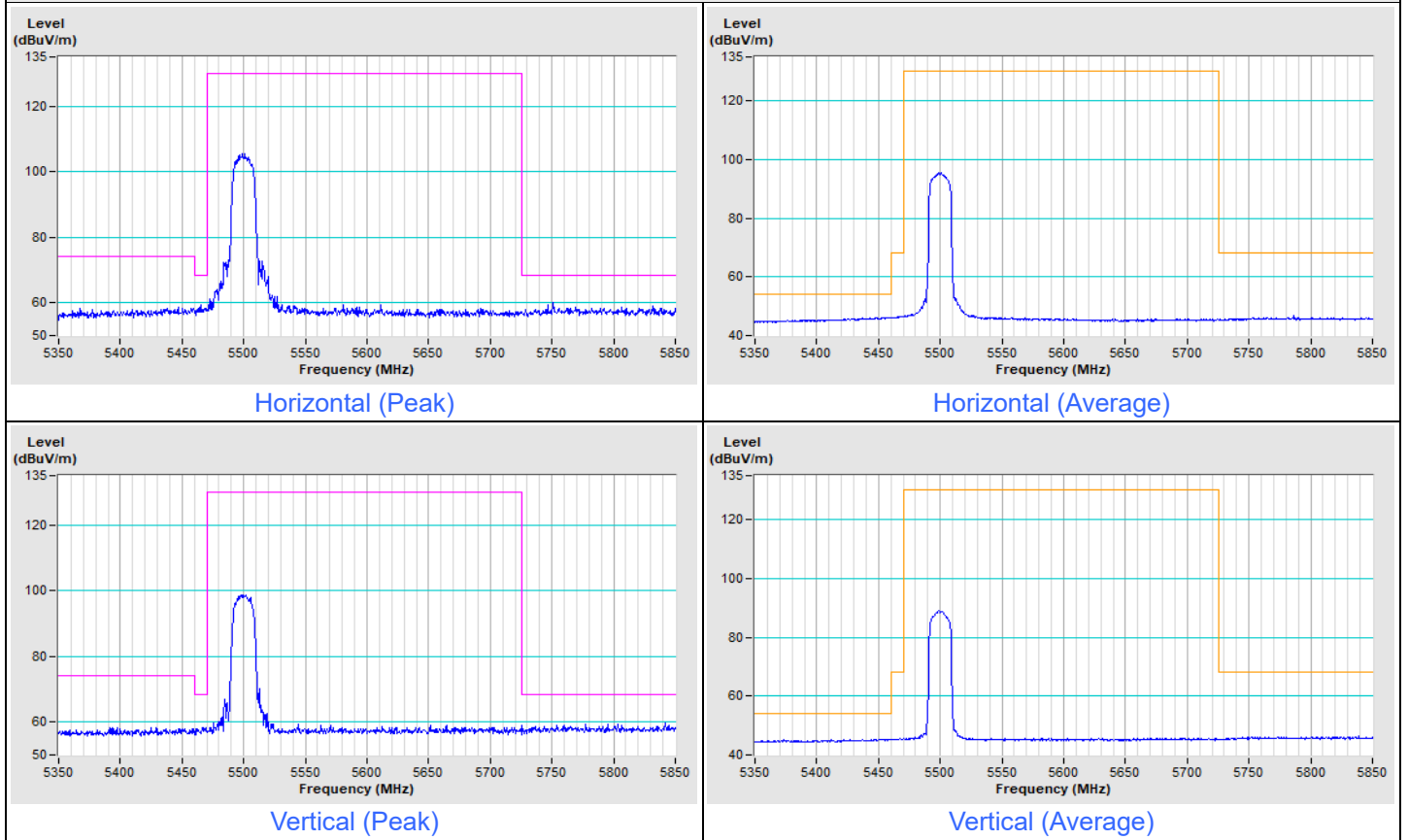
Vertical (Peak)



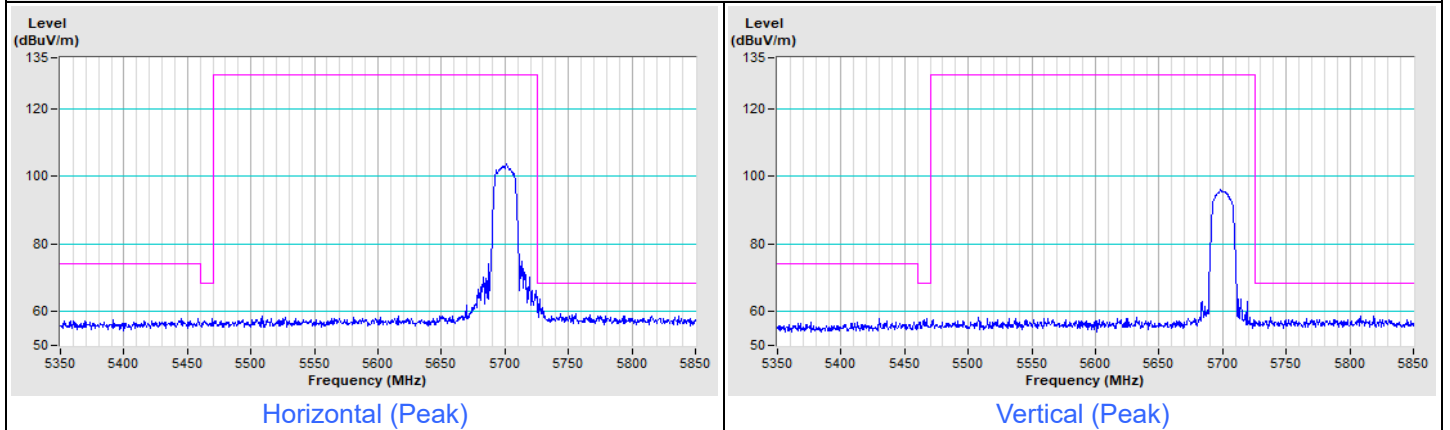
Vertical (Average)

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=10 Hz, DET=Peak
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802.11a Channel 100

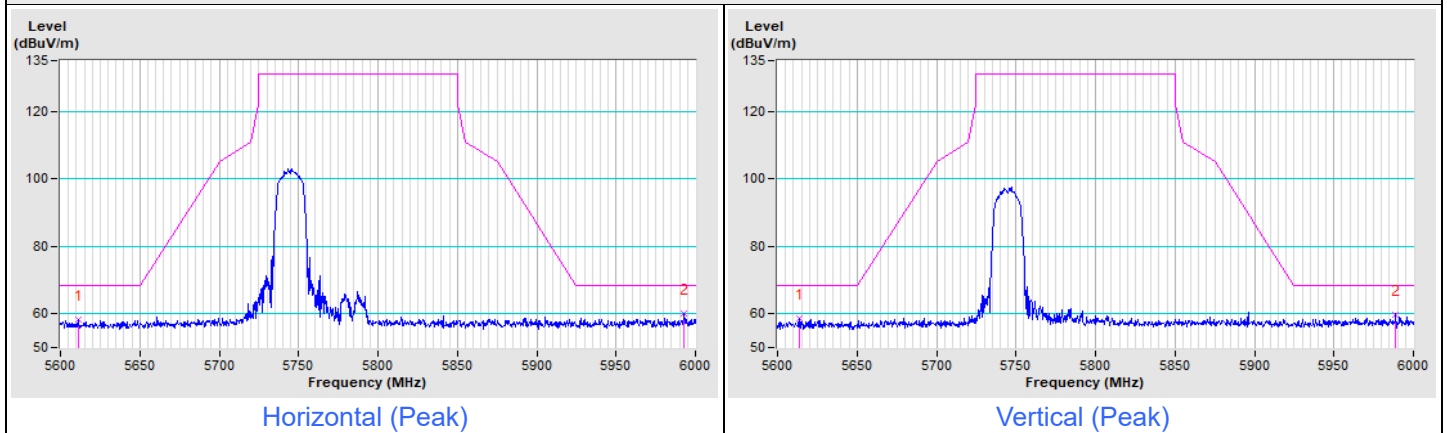


802.11a Channel 140

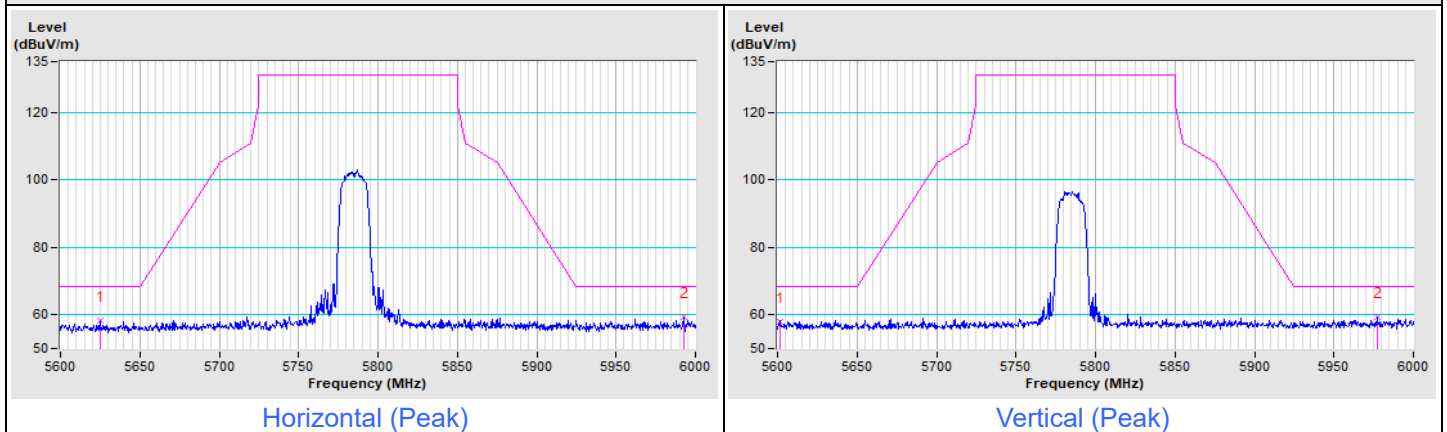


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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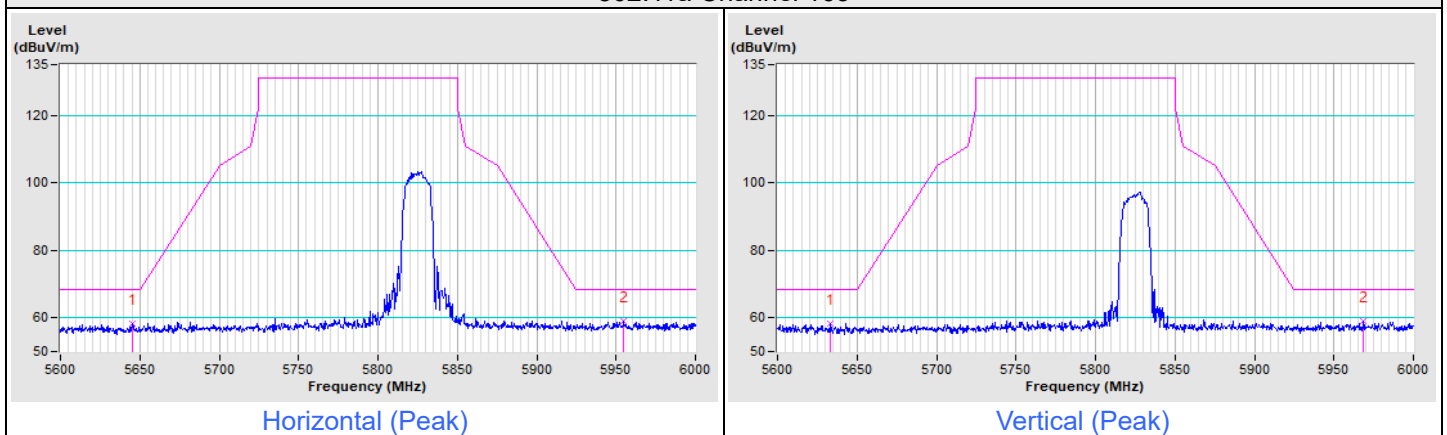
802.11a Channel 149



802.11a Channel 157

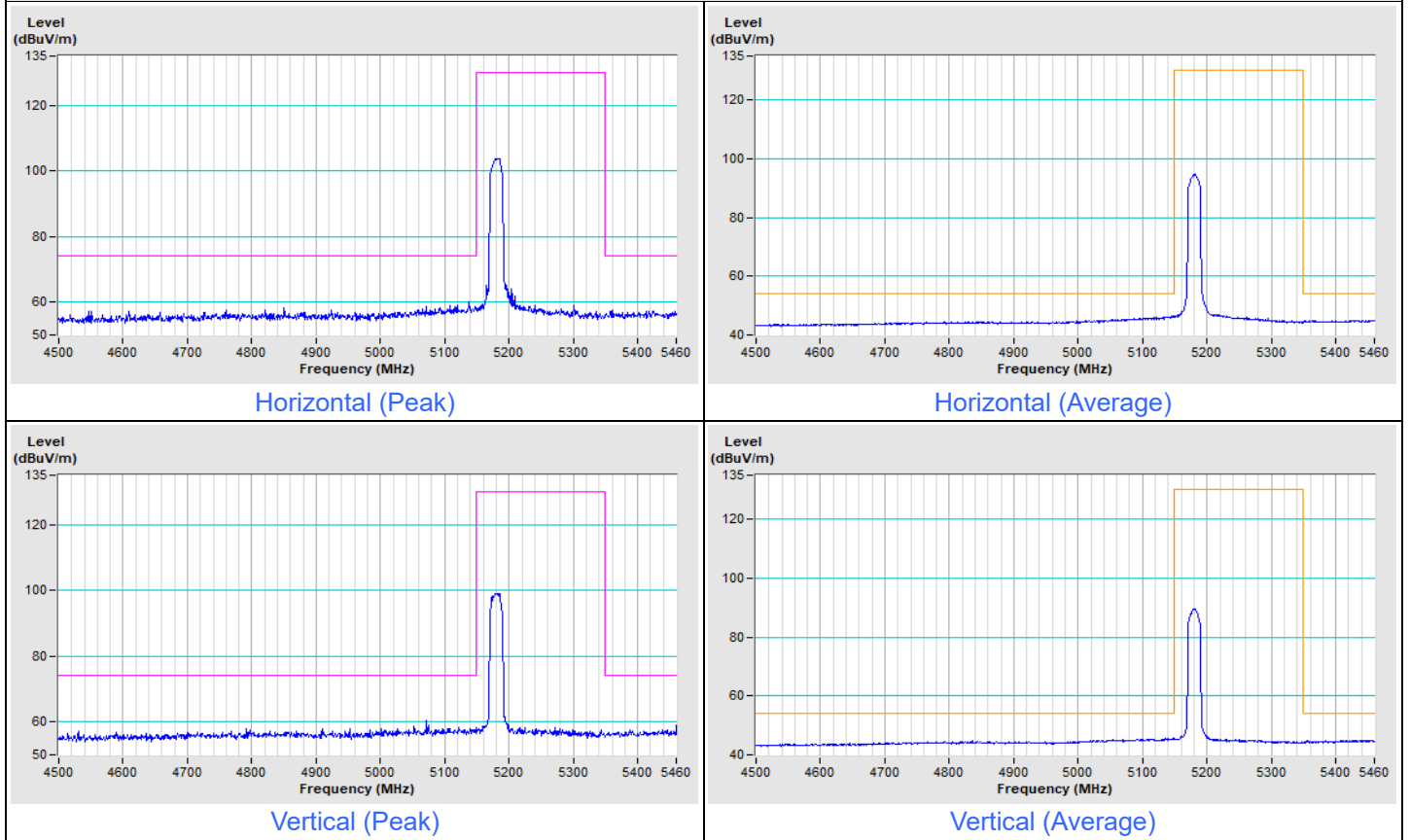


802.11a Channel 165

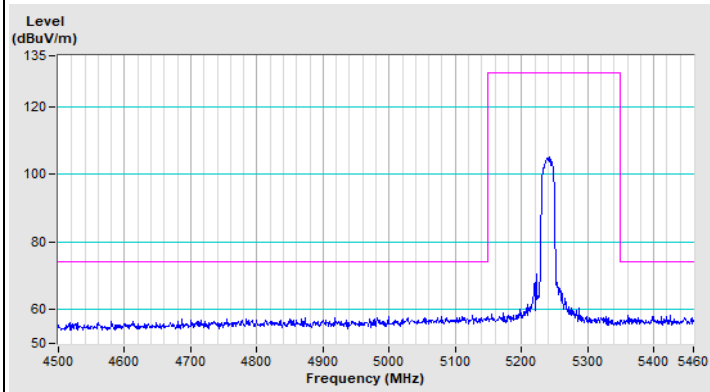


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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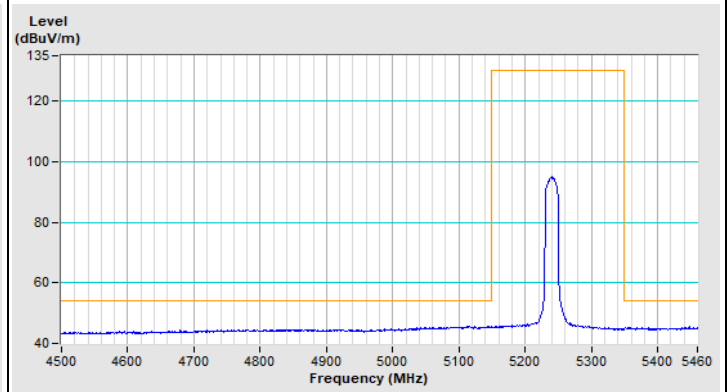
802.11ac (VHT20) Channel 36



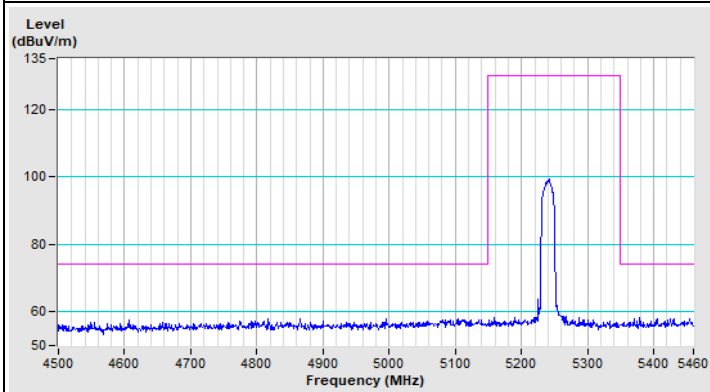
802.11ac (VHT20) Channel 48



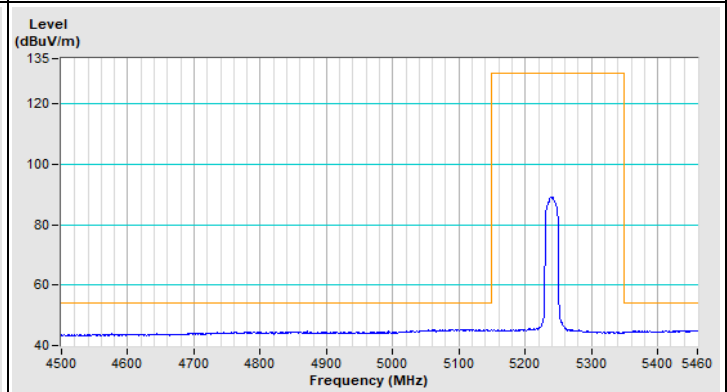
Horizontal (Peak)



Horizontal (Average)

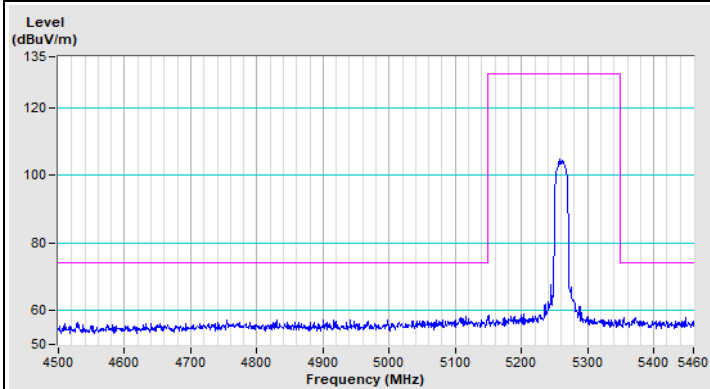


Vertical (Peak)

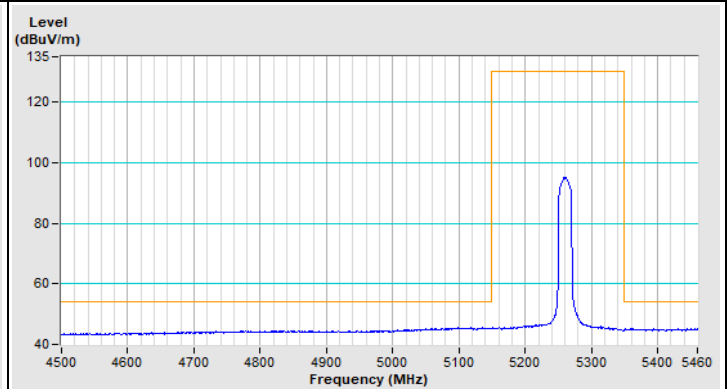


Vertical (Average)

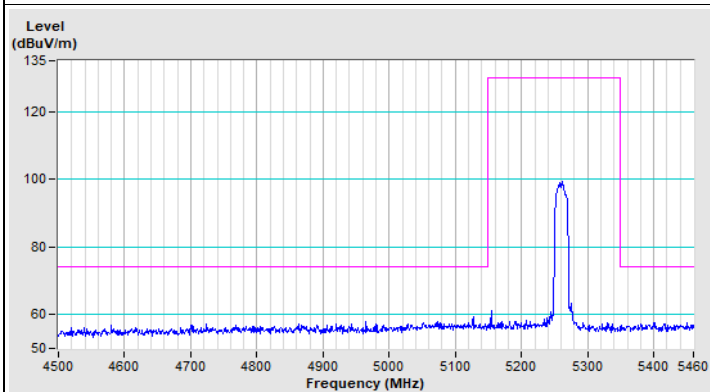
802.11ac (VHT20) Channel 52



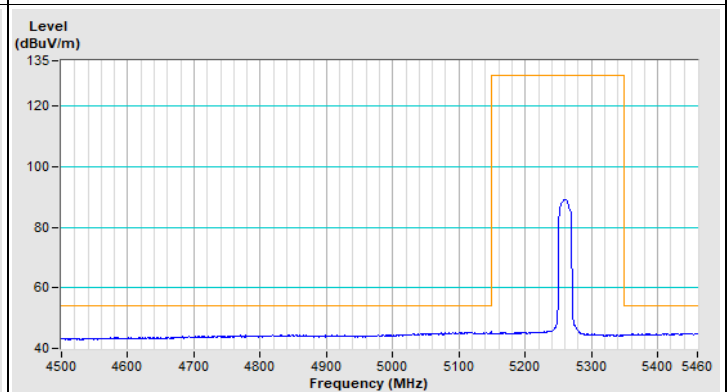
Horizontal (Peak)



Horizontal (Average)

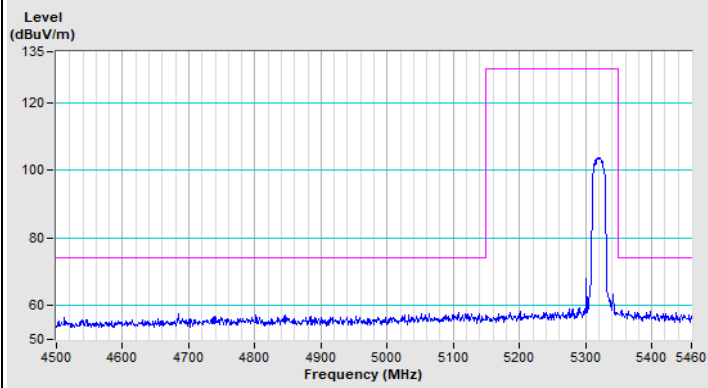


Vertical (Peak)

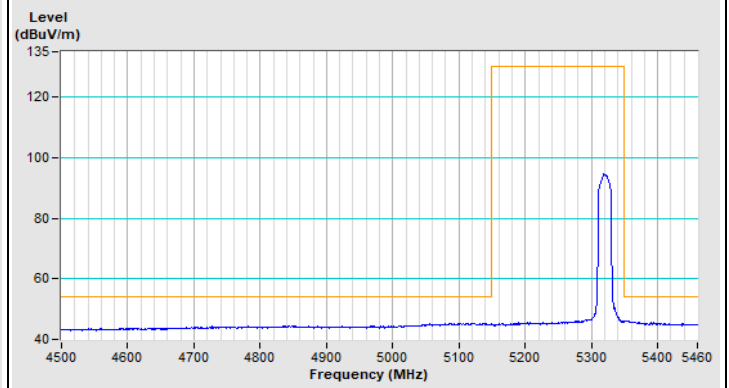


Vertical (Average)

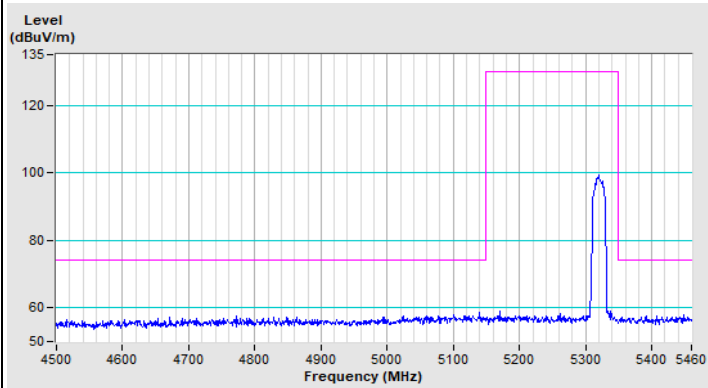
802.11ac (VHT20) Channel 64



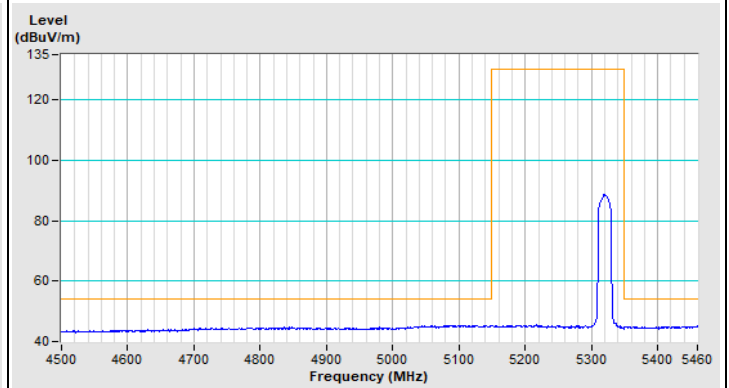
Horizontal (Peak)



Horizontal (Average)



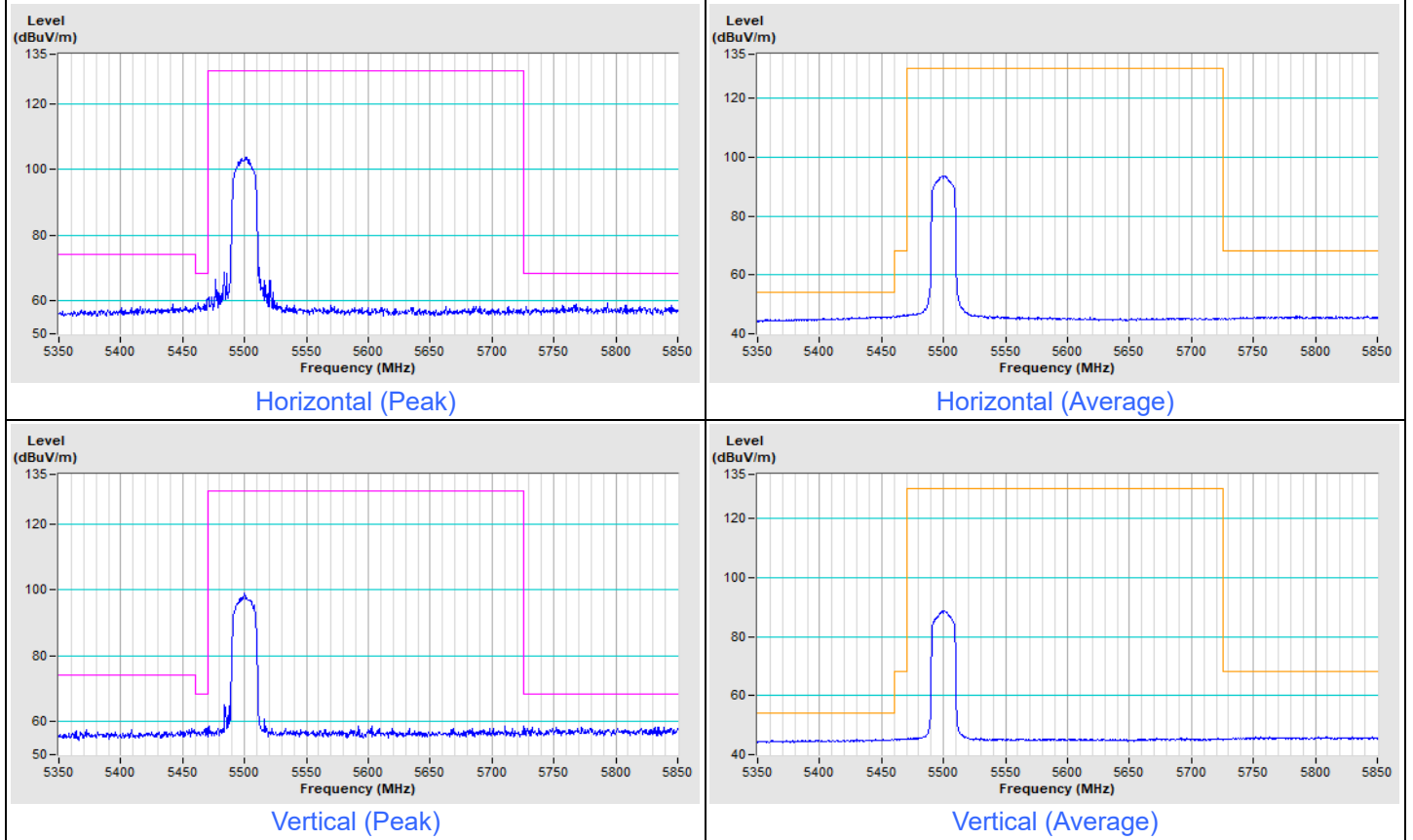
Vertical (Peak)



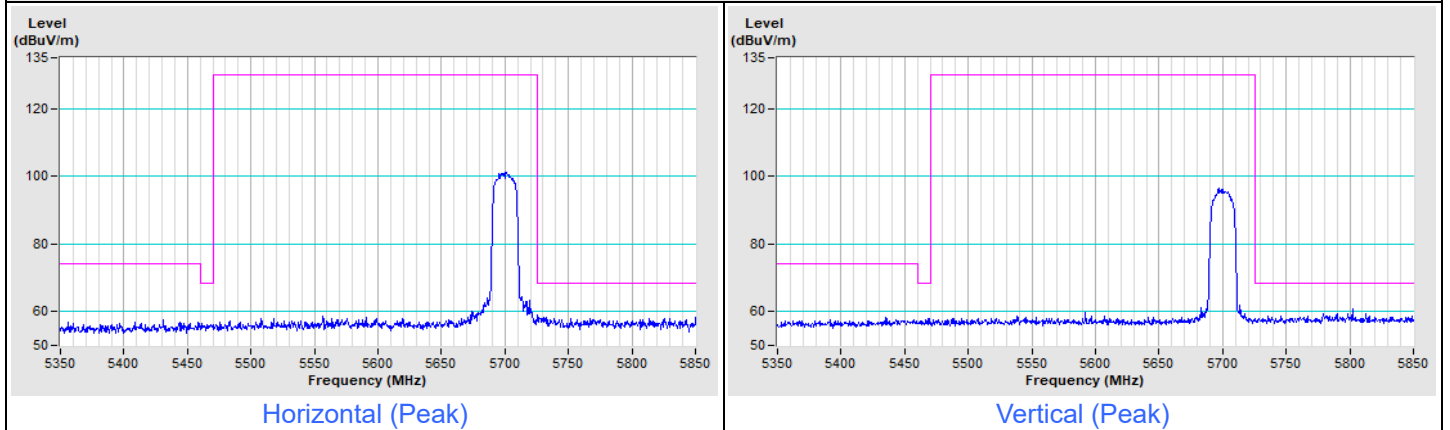
Vertical (Average)

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=10 Hz, DET=Peak
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802.11ac (VHT20) Channel 100

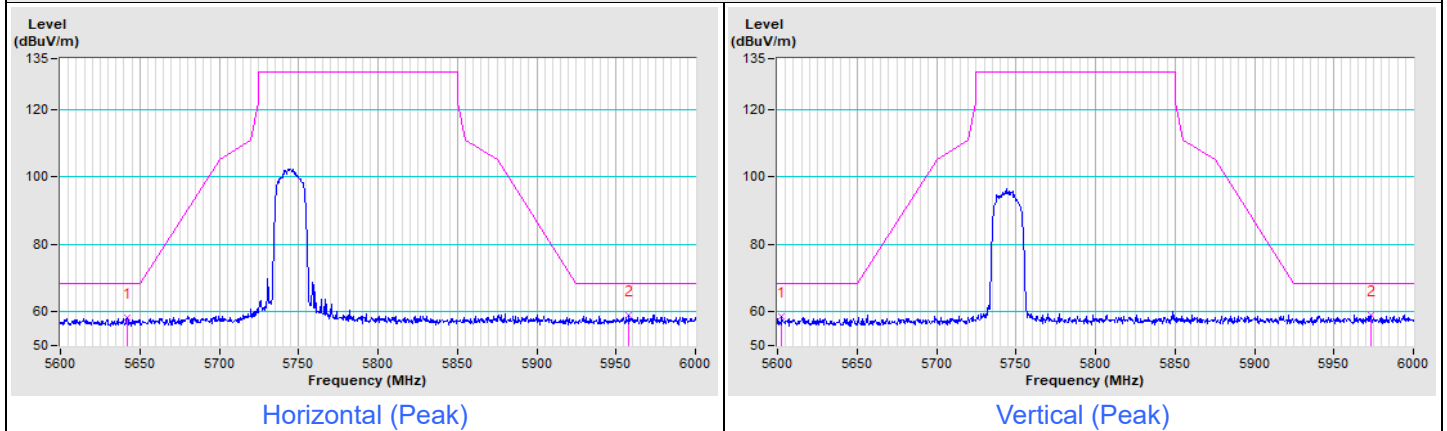


802.11ac (VHT20) Channel 140

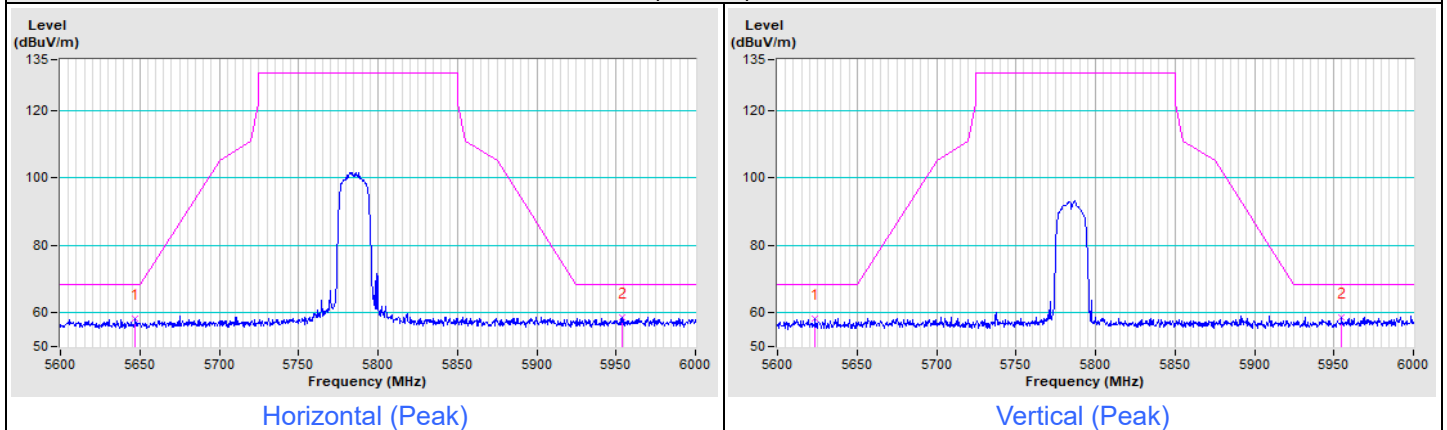


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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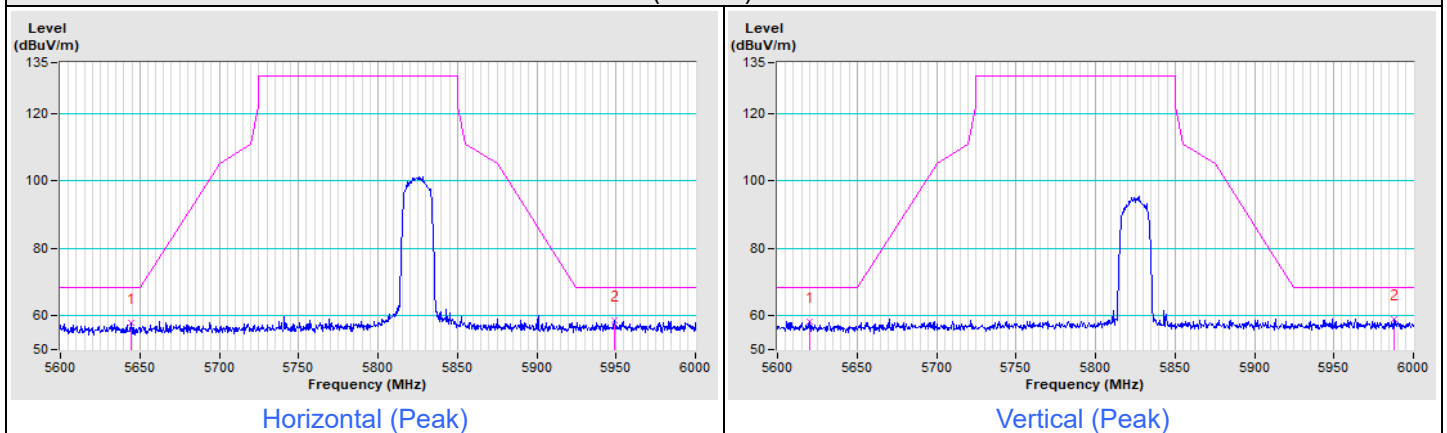
802.11ac (VHT20) Channel 149



802.11ac (VHT20) Channel 157

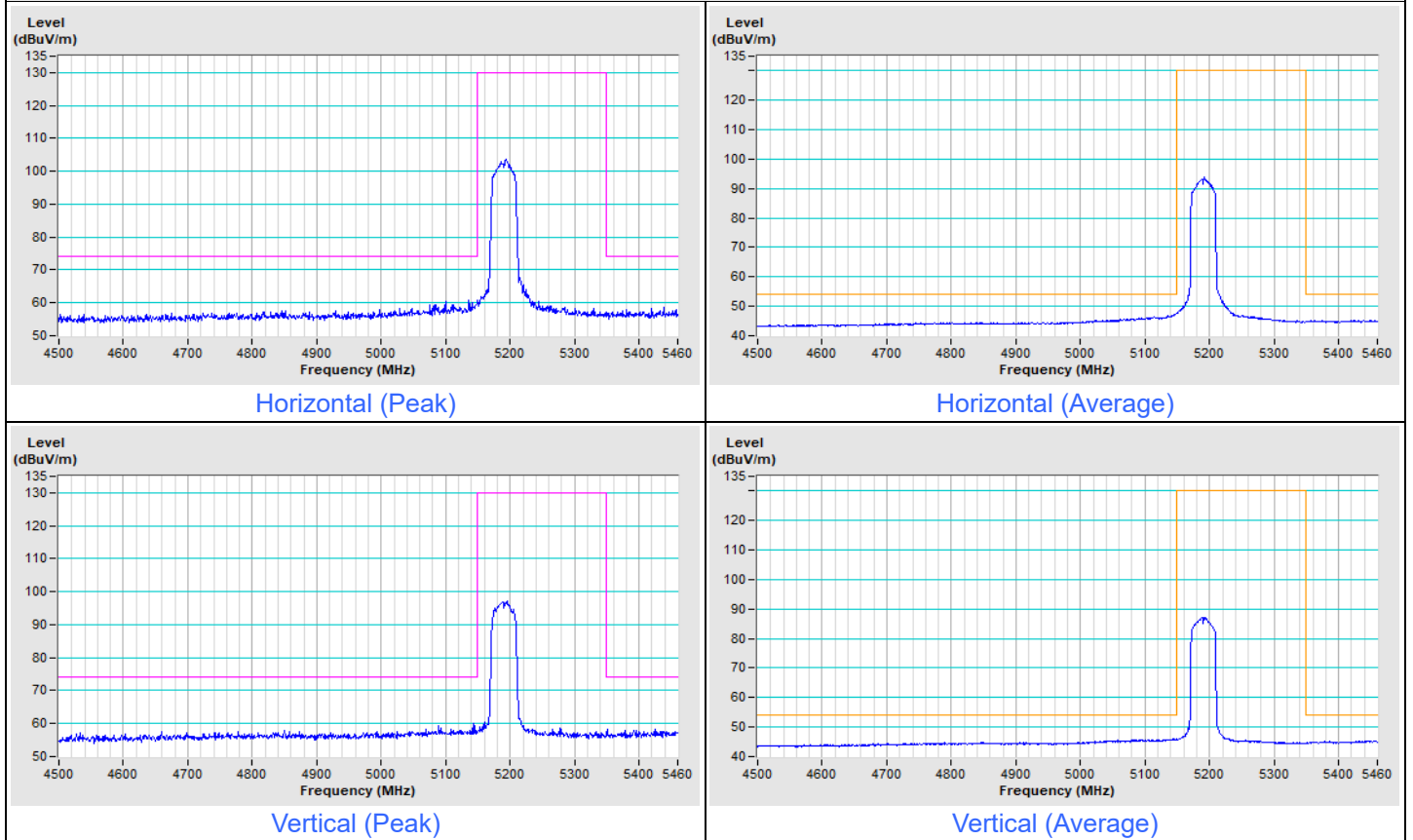


802.11ac (VHT20) Channel 165

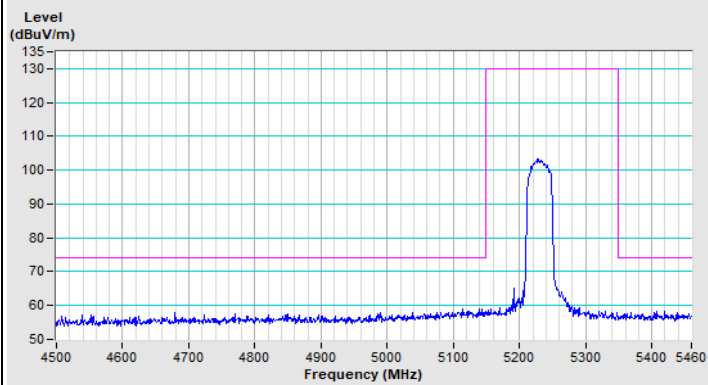


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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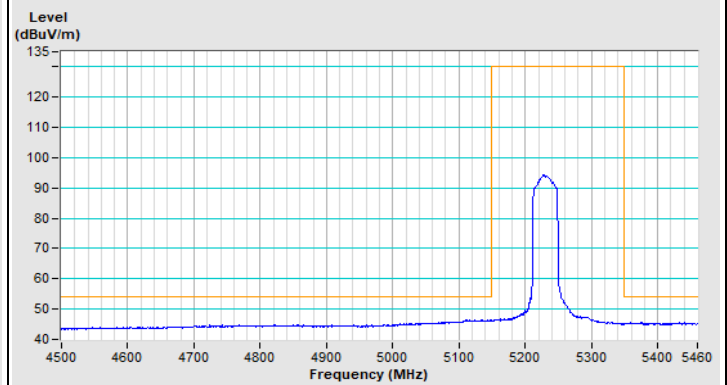
802.11ac (VHT40) Channel 38



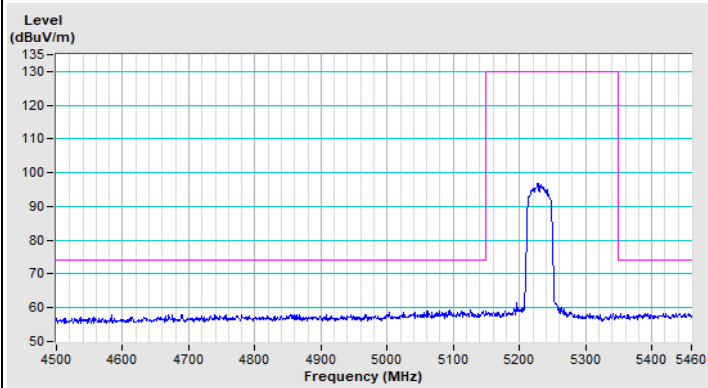
802.11ac (VHT40) Channel 46



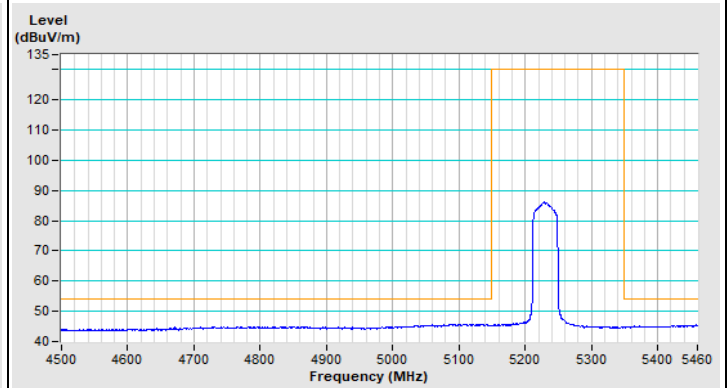
Horizontal (Peak)



Horizontal (Average)

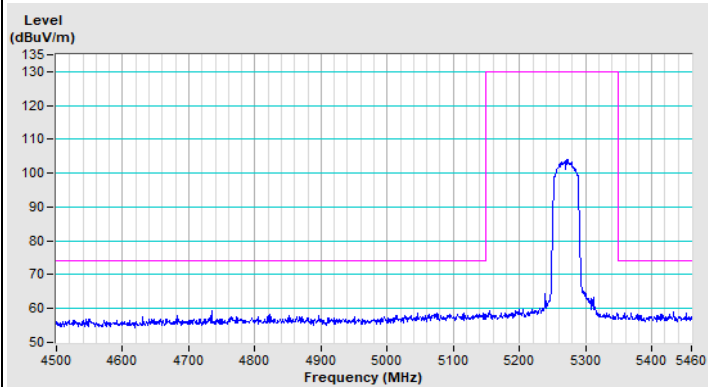


Vertical (Peak)

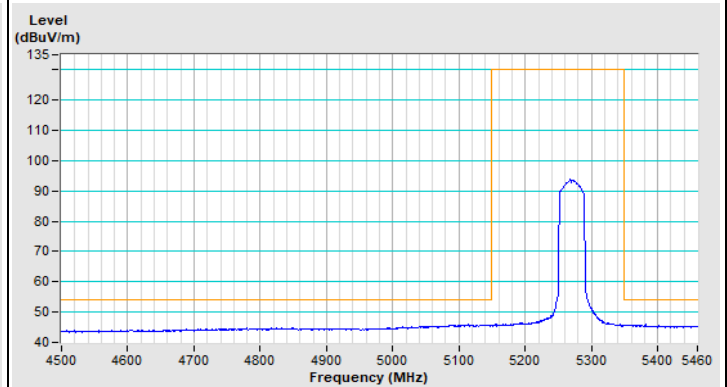


Vertical (Average)

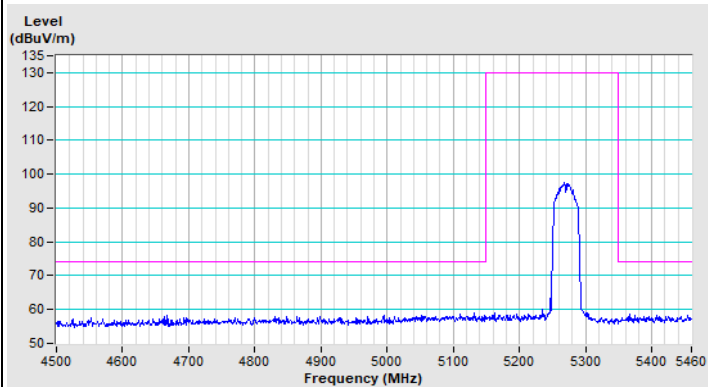
802.11ac (VHT40) Channel 54



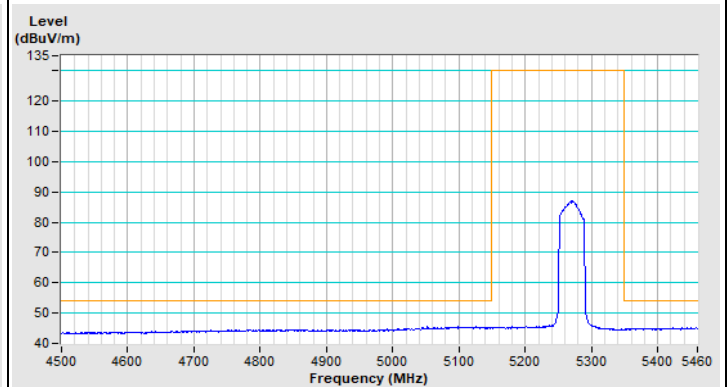
Horizontal (Peak)



Horizontal (Average)

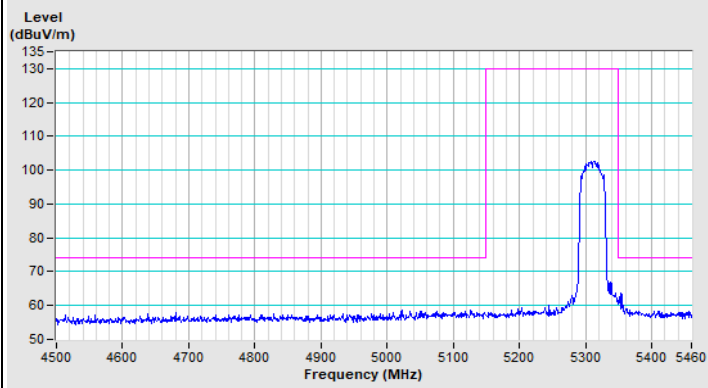


Vertical (Peak)

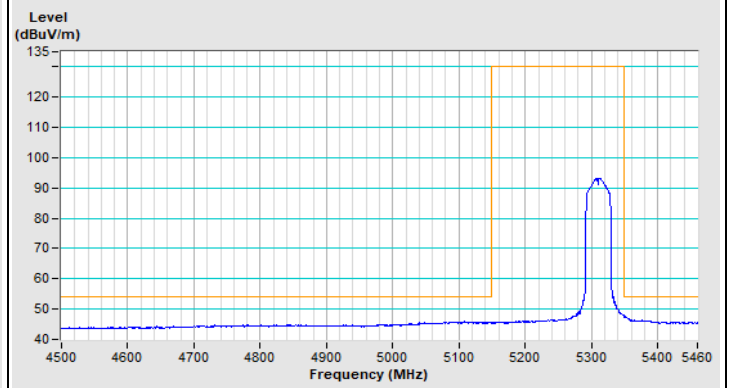


Vertical (Average)

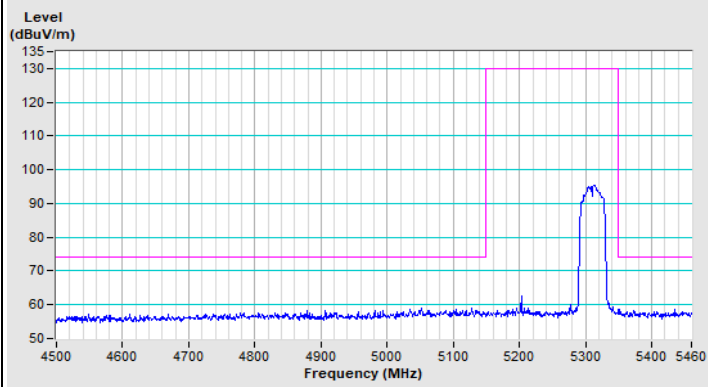
802.11ac (VHT40) Channel 62



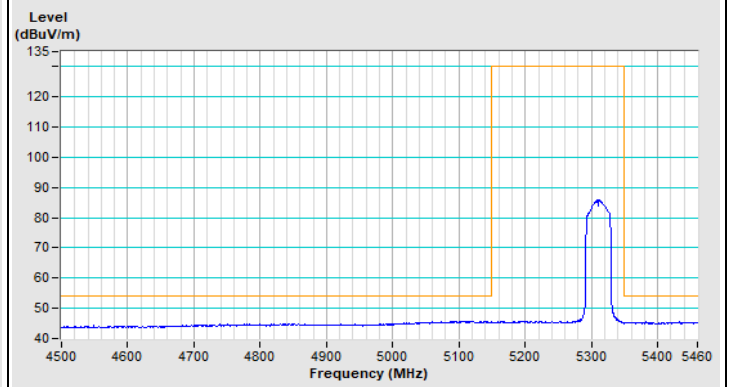
Horizontal (Peak)



Horizontal (Average)



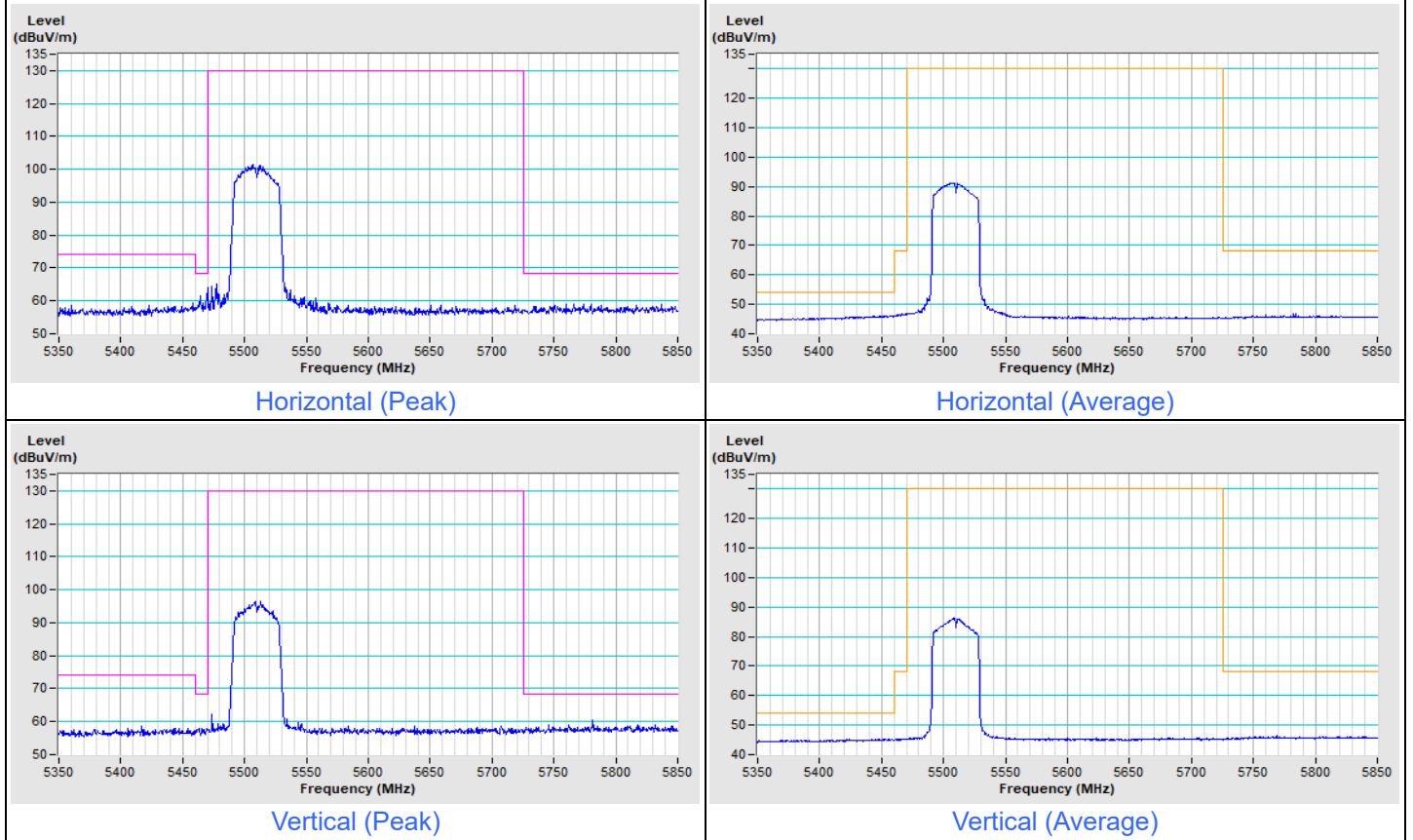
Vertical (Peak)



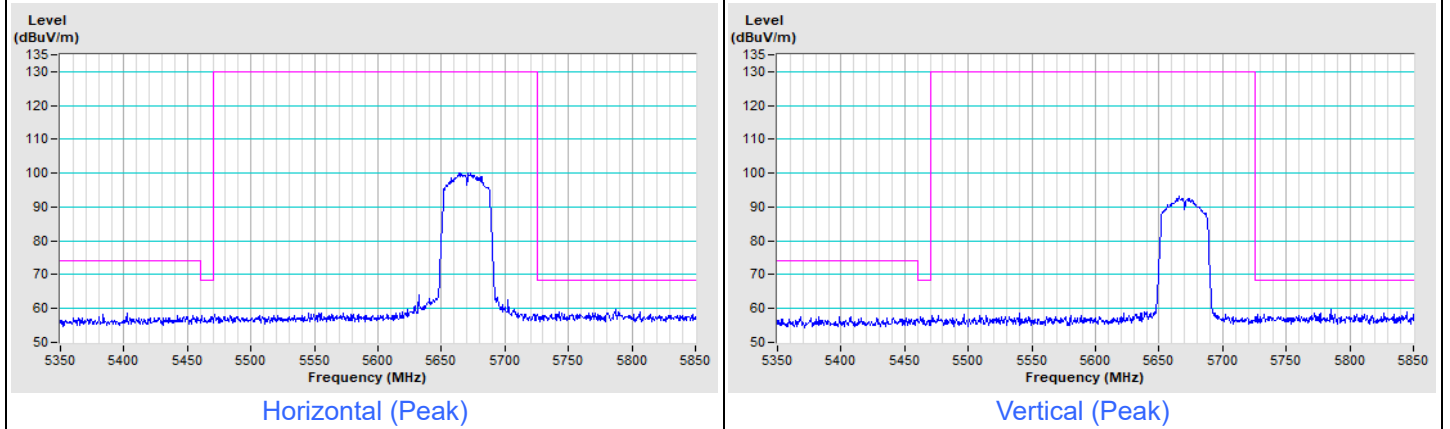
Vertical (Average)

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=10 Hz, DET=Peak
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802.11ac (VHT40) Channel 102

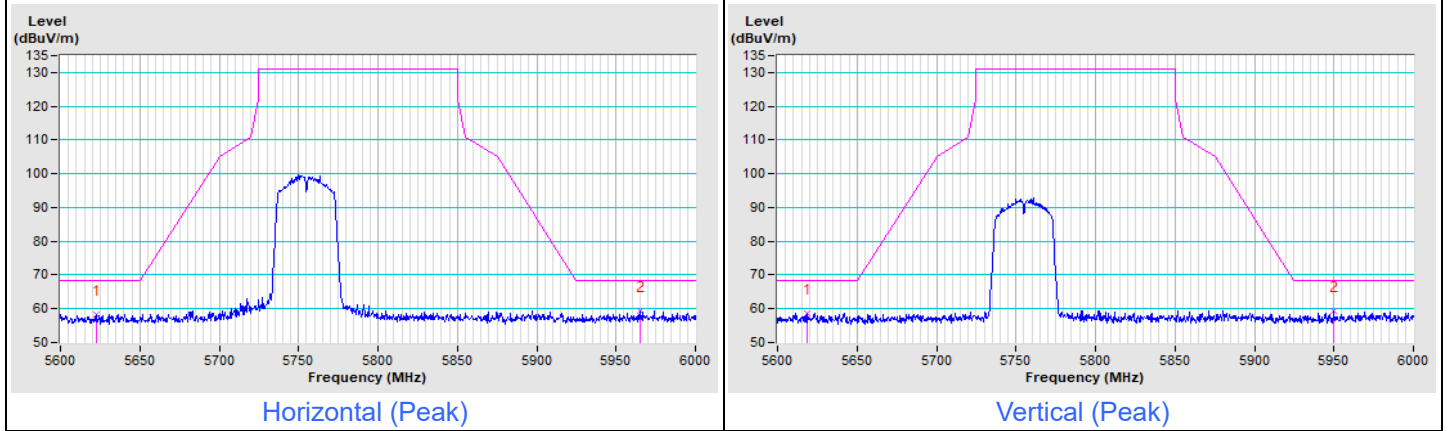


802.11ac (VHT40) Channel 134

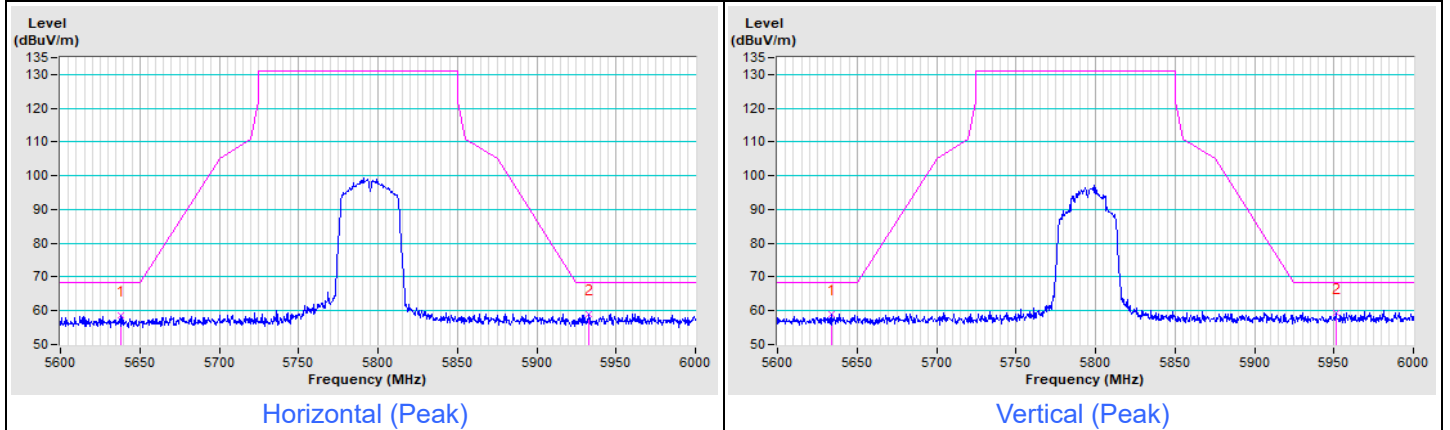


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT40) Channel 151

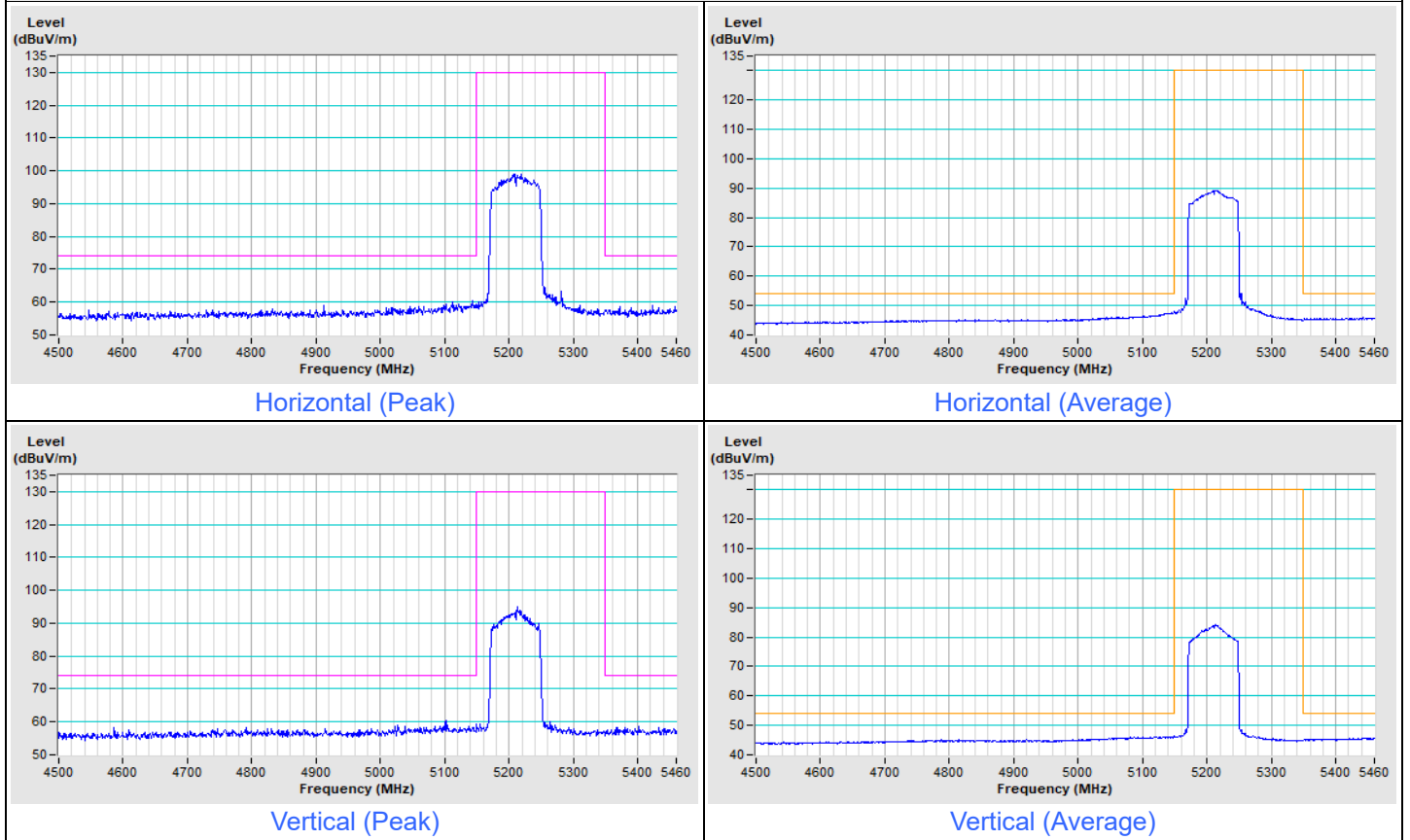


802.11ac (VHT40) Channel 159

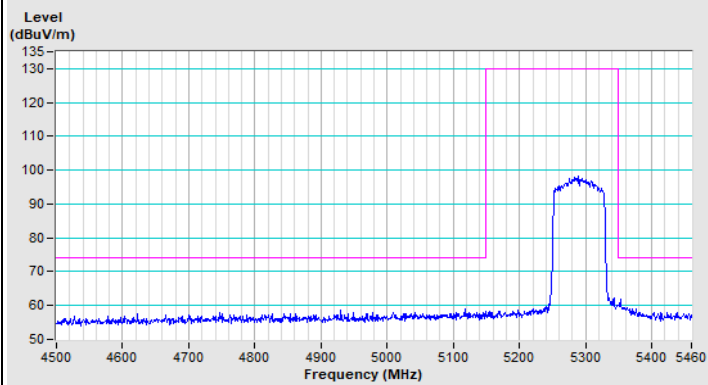


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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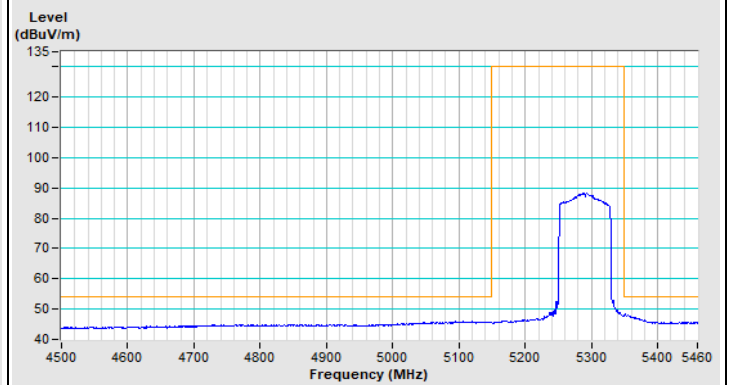
802.11ac (VHT80) Channel 42



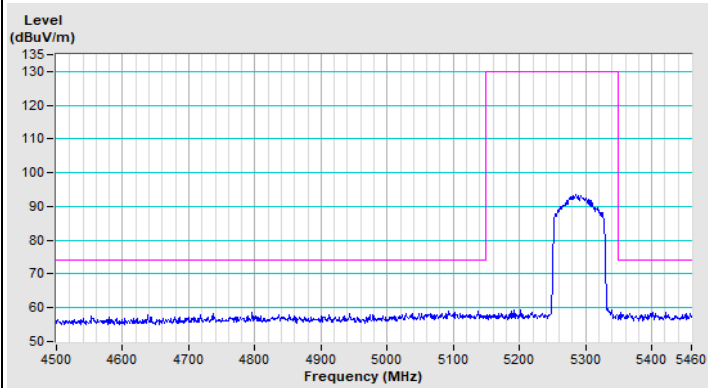
802.11ac (VHT80) Channel 58



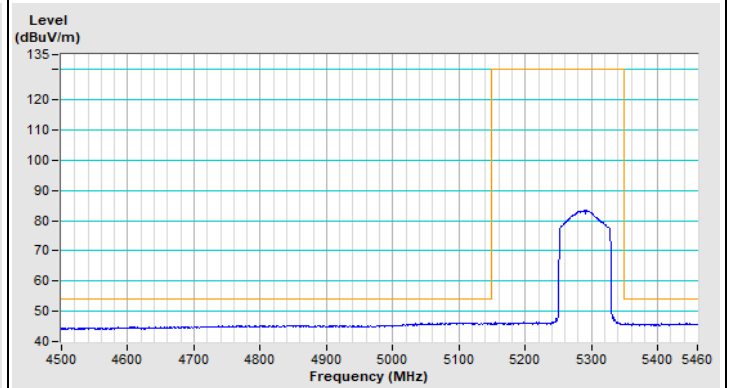
Horizontal (Peak)



Horizontal (Average)



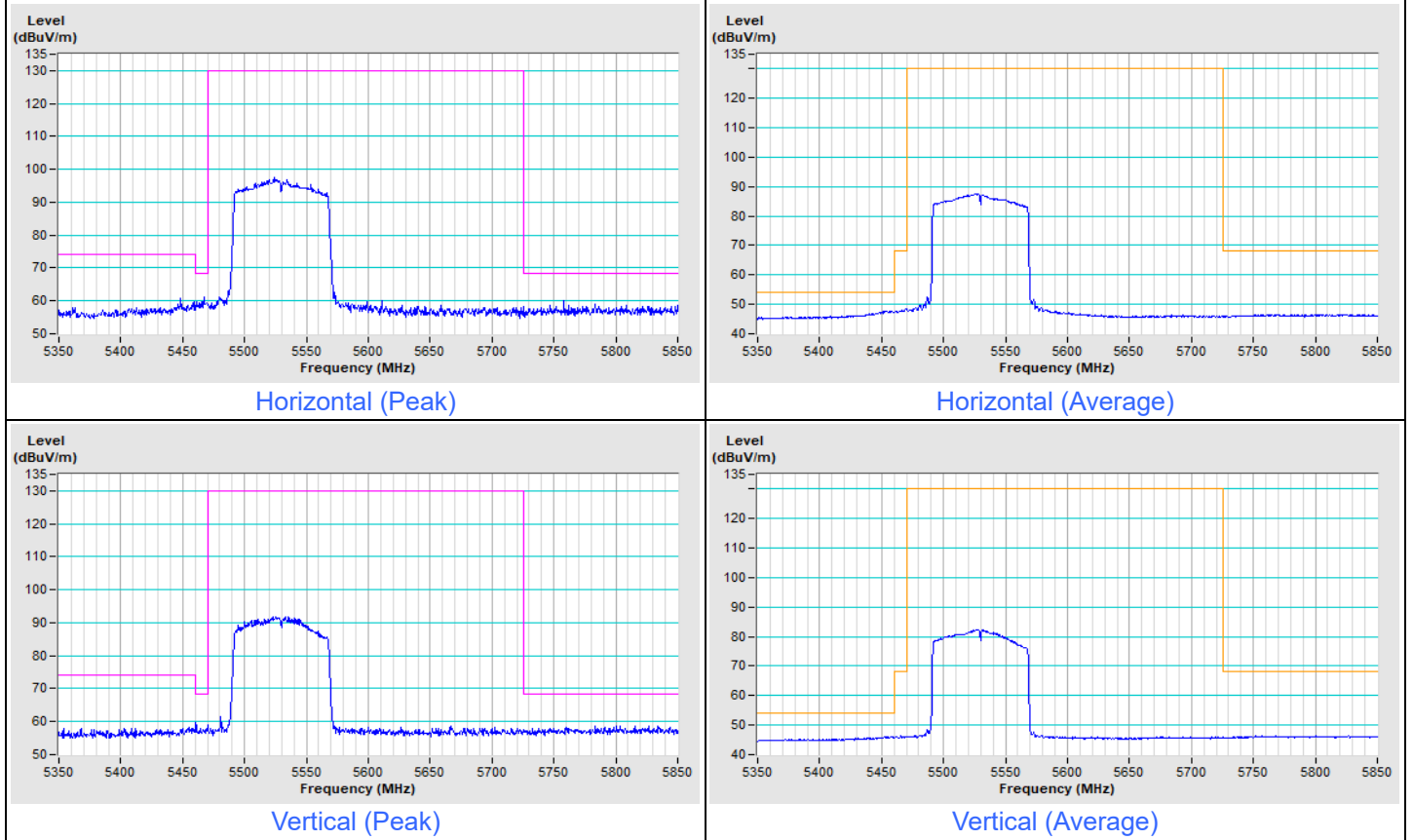
Vertical (Peak)



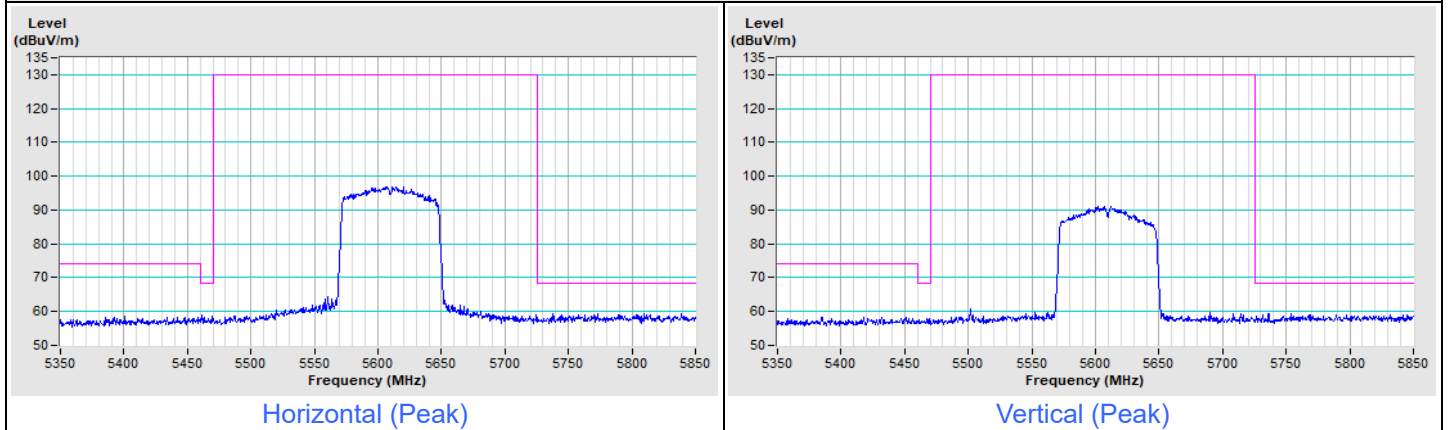
Vertical (Average)

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=10 Hz, DET=Peak
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802.11ac (VHT80) Channel 106

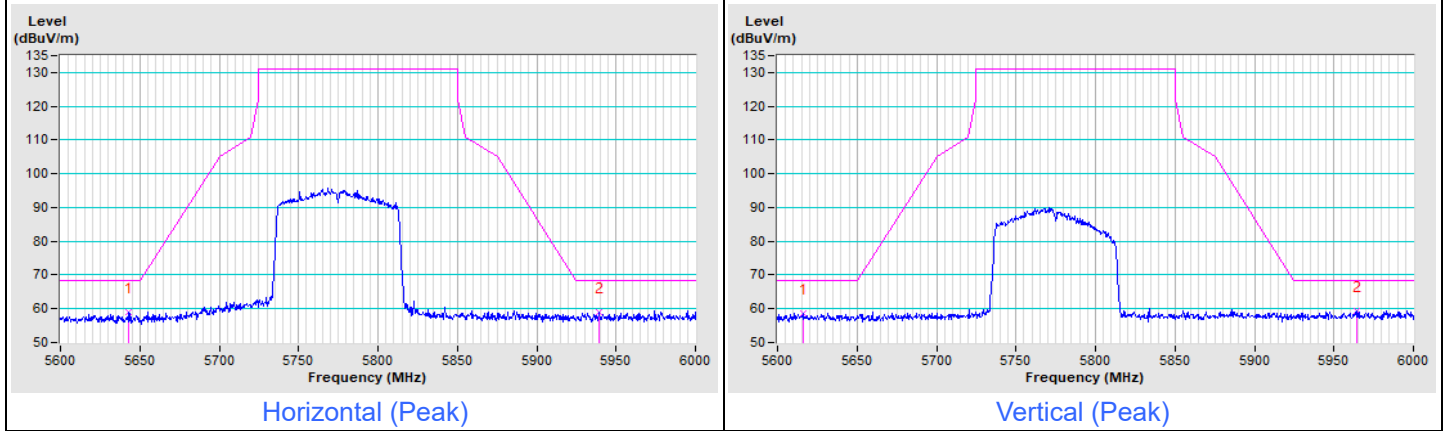


802.11ac (VHT80) Channel 122



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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