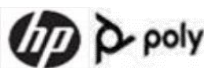


TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBIDGE-WTW-P24100076-3
FCC ID: PU5-STV12R
Product: POLY STUDIO V12 (Video Conference Equipment)
Brand: 
hp, HP, HP Inc.,
Model No.: PATX-STV-12R
Received Date: 2024/8/7
Test Date: 2024/8/7 ~ 2024/11/7
Issued Date: 2024/12/4
Applicant: Wistron Corporation
Address: 21F., No. 88, Sec. 1, HsinTai 5th Rd., Hsichi Dist, N/A, New Taipei City 221
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location (1): No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
Test Location (2): No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
FCC Registration / 788550 / TW0003
Designation Number: 281270 / TW0032

Approved by:  , **Date:** 2024/12/4
Jeremy Lin / Project Engineer

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Prepared by : Lena Wang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBDGE-WTW-P24100076-3	Original release.	2024/12/4

1 Certificate

Product: POLY STUDIO V12 (Video Conference Equipment)

Brand:

hp, HP, HP Inc., 

Test Model: PATX-STV-12R

Sample Status: Engineering sample

Applicant: Wistron Corporation

Test Date: 2024/8/7 ~ 2024/11/7

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

Measurement ANSI C63.10-2013

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

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -16.38 dB at 0.41000 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -0.6 dB at 288.99 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 5460.00, 15540.00, 15600.00, 15690.00, 15720.00 and 15780.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

Notes:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 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	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 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	POLY STUDIO V12 (Video Conference Equipment)
Brand	hp, HP, HP Inc., 
Test Model	PATX-STV-12R
Status of EUT	Engineering sample
Power Supply Rating	Refer to note
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.3 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	5.18 GHz ~ 5.24 GHz : 27.733 mW (14.43 dBm) 5.26 GHz ~ 5.32 GHz : 29.444 mW (14.69 dBm) 5.5 GHz ~ 5.72 GHz : 30.549 mW (14.85 dBm) 5.745 GHz ~ 5.825 GHz : 31.261 mW (14.95 dBm)
EUT Category	Client device

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Part Number	Specification
AC Adapter (Support unit)	HP	TPN-DA20	L6550-003	AC Input : 100-240V~1.7A 50-60Hz DC Output : 5.0V=3.0A,15.0W or 9.0V=3.0A or 12.0V=5.0A or 15.0V=4.33A or 20.0V=3.25A,65.0W DC Output Cable : 1.75M / without core power cord : 1.75M BSMI ID : R33030 Manufacturer : Delta Electronics, Inc.
RJ-45 cable	-	-	-	Signal Line : 2M
Type C cable	-	-	-	Signal Line : 2M

2. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) technology used for the EUT.
3. Bluetooth & WLAN technology cannot transmit at same time.
4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type	PCB				
Antenna Connector	i-pex(MHF)				
Antenna No.	Gain (dBi)				
	2.4~2.4835GHz	5.15~5.25GHz	5.25~5.35GHz	5.47~5.725GHz	5.725~5.85GHz
Main	2.84	4.42	4.39	4.8	4.8
Aux	2.62	4.78	4.78	4.79	4.79

*For BT: during testing to set aux antenna.

*For WLAN 2.4G and 5G: during testing to set main antenna.

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

*BT and WLAN does not support diversity function.

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), 802.11ac mode for 20 MHz (40 MHz, 80 MHz). Therefore, the investigated worst case is the representative mode in test report.

3.3 Channel List

FOR 5180 ~ 5320 MHz

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

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

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

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

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

FOR 5500 ~ 5720 MHz

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

FOR 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Worst Case:	X-AXIS, Adapter
-------------	-----------------

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

Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ac (VHT40)	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	58, 106, 122, 138	BPSK	MCS0
RF Output Power	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
Power Spectral Density	802.11a	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	42, 58, 106, 122, 138, 155	BPSK	MCS0
6 dB Bandwidth	802.11a	144, 149, 157, 165	BPSK	6Mb/s
	802.11ac (VHT20)	144, 149, 157, 165	BPSK	MCS0
	802.11ac (VHT40)	142, 151, 159	BPSK	MCS0
	802.11ac (VHT80)	138, 155	BPSK	MCS0

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

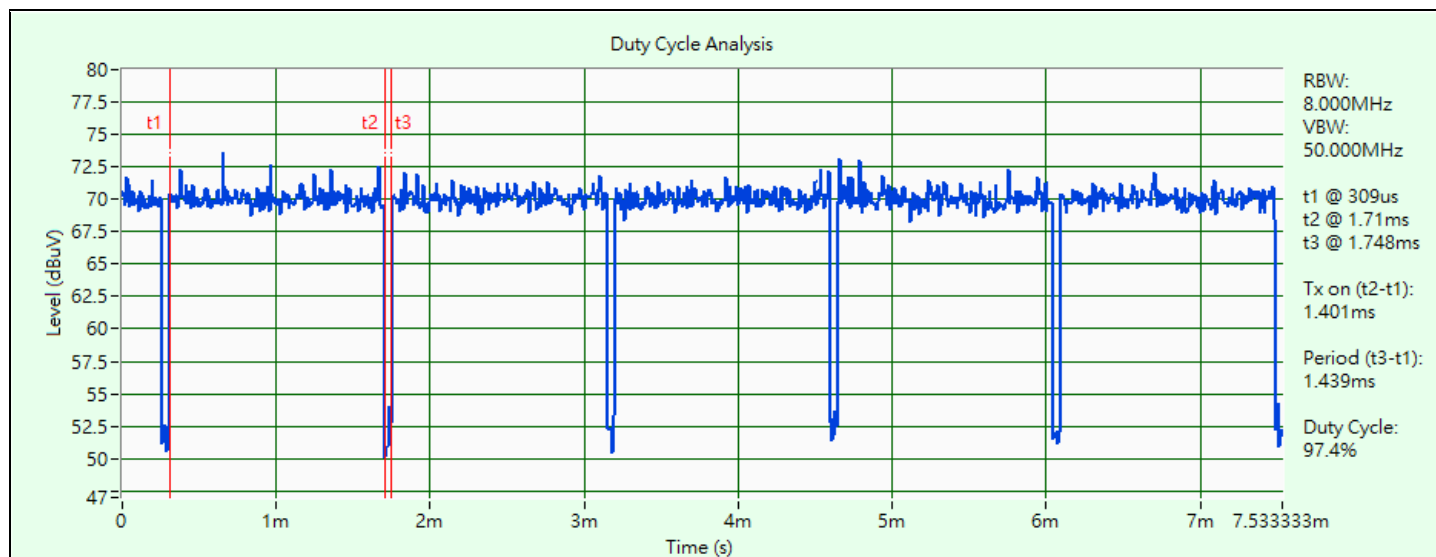
3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = $1.401 \text{ ms} / 1.439 \text{ ms} \times 100\% = 97.4\%$, duty factor = $10 * \log (1/\text{Duty cycle}) = 0.12 \text{ dB}$

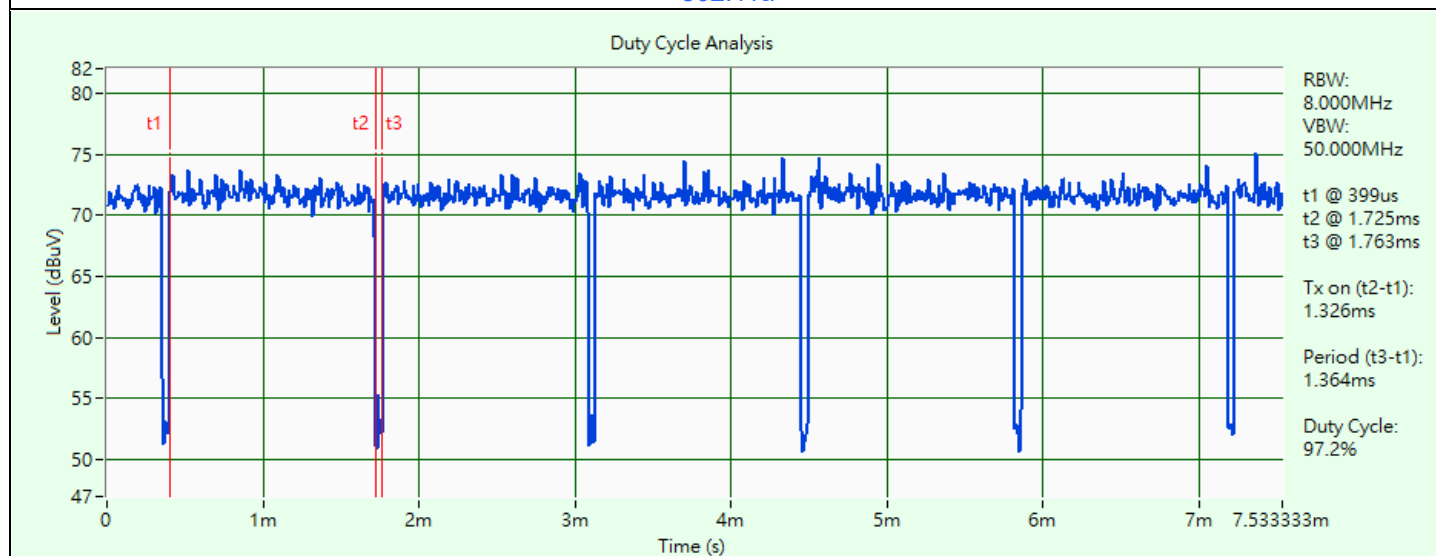
802.11ac (VHT20): Duty cycle = $1.326 \text{ ms} / 1.364 \text{ ms} \times 100\% = 97.2\%$, duty factor = $10 * \log (1/\text{Duty cycle}) = 0.12 \text{ dB}$

802.11ac (VHT40): Duty cycle = $0.654 \text{ ms} / 0.702 \text{ ms} \times 100\% = 93.2\%$, duty factor = $10 * \log (1/\text{Duty cycle}) = 0.31 \text{ dB}$

802.11ac (VHT80): Duty cycle = $0.326 \text{ ms} / 0.374 \text{ ms} \times 100\% = 87.2\%$, duty factor = $10 * \log (1/\text{Duty cycle}) = 0.60 \text{ dB}$

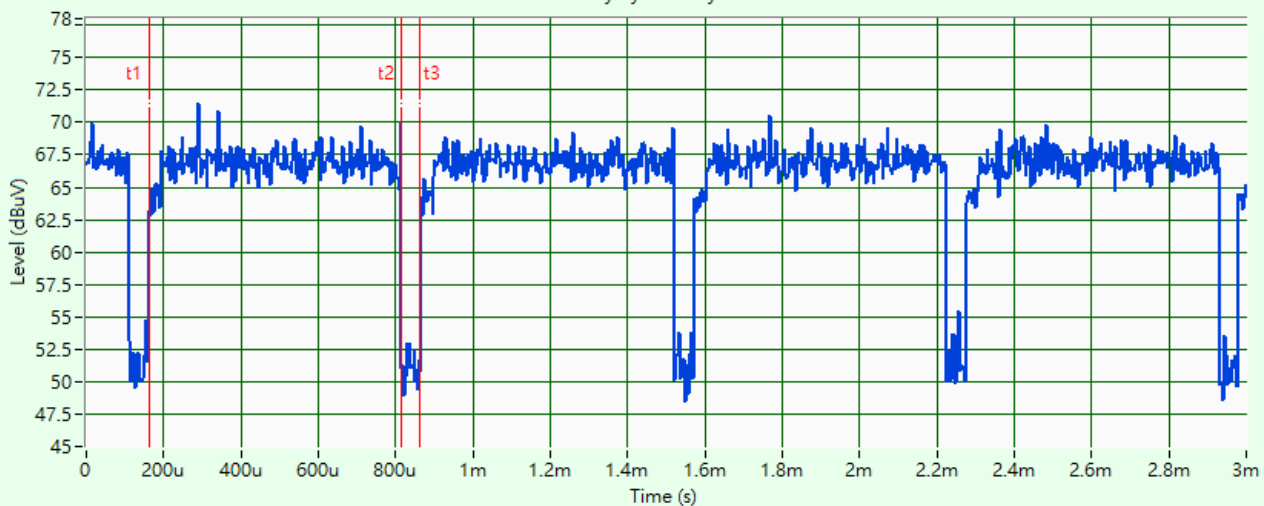


802.11a



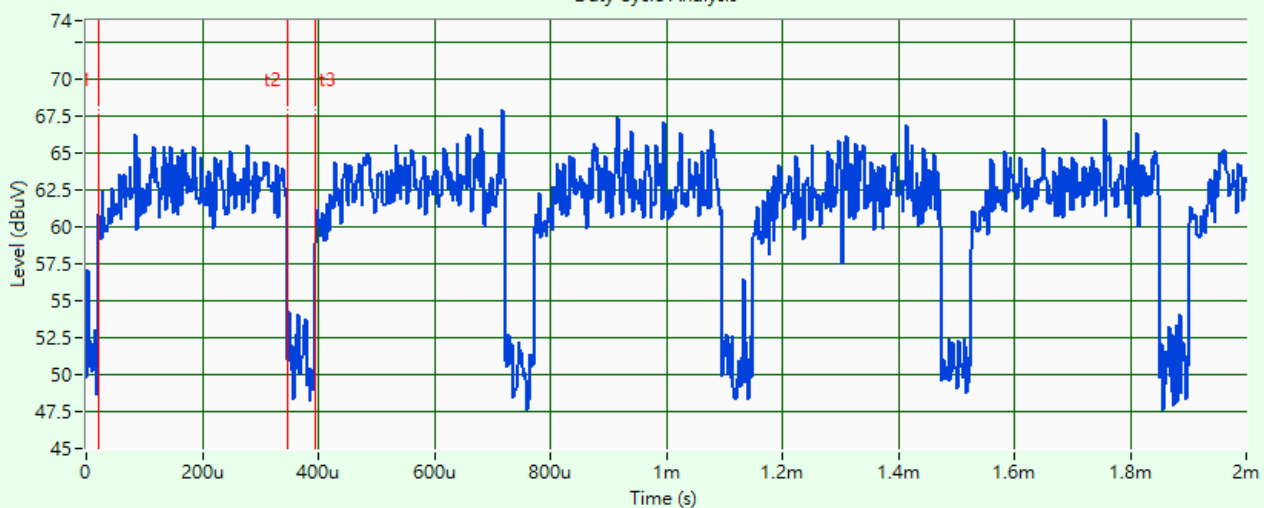
802.11ac (VHT20)

Duty Cycle Analysis



802.11ac (VHT40)

Duty Cycle Analysis

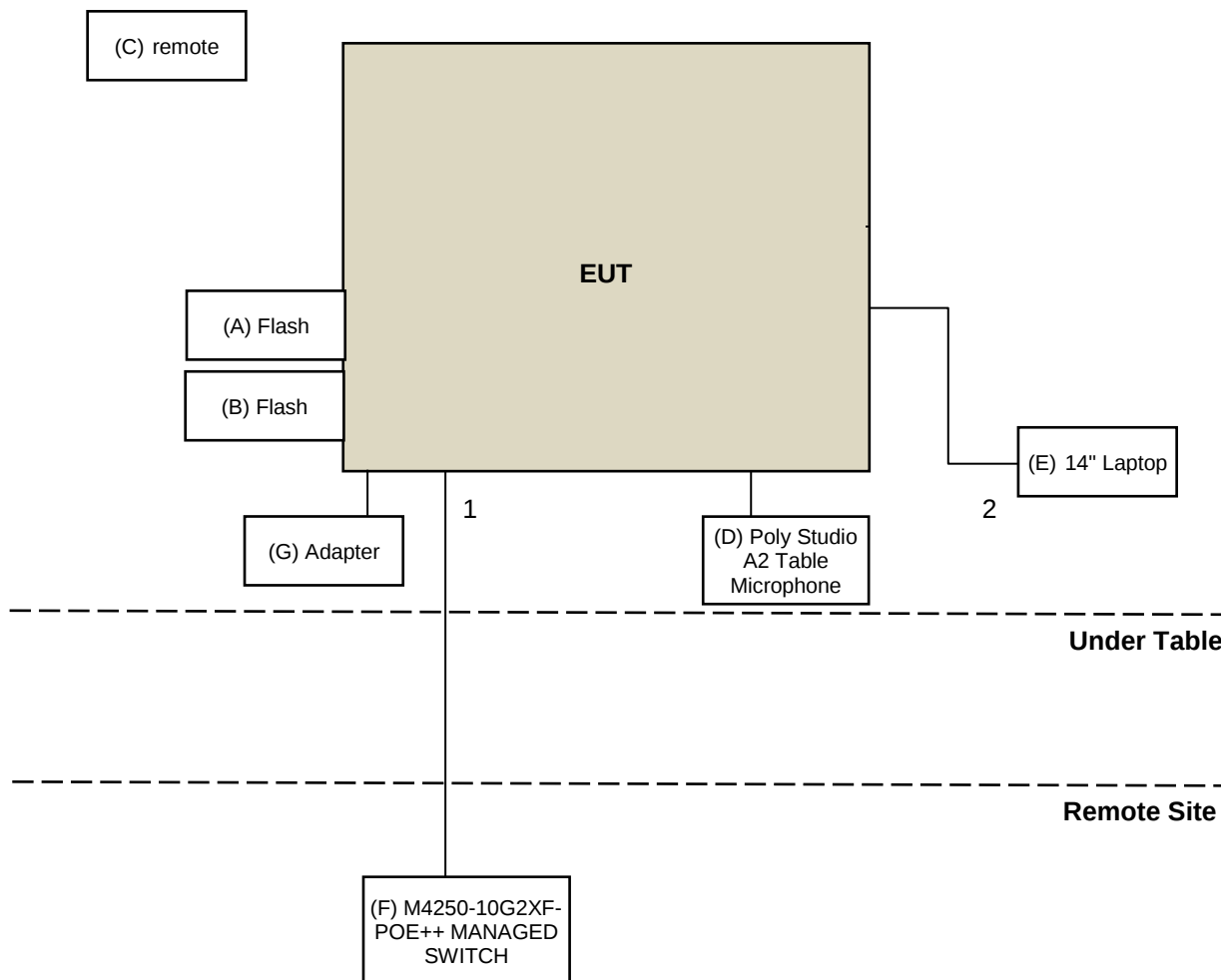


802.11ac (VHT80)

3.6 Test Program Used and Operation Descriptions

Controlling software adb_4.2.2 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	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
B	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
C	remote	poly	R30/USB BRC	N/A	N/A	Supplied by applicant
D	Poly Studio A2 Table Microphone	poly	PATX-STA-2TM	N/A	N/A	Supplied by applicant
E	14" Laptop	Lenovo	L440	R9-0GFJJK	N/A	Provided by Lab
F	M4250-10G2XF-POE++ MANAGED SWITCH	NETGEAR	GSM4212YX-100EUS	N/A	N/A	Supplied by applicant
G	Adapter	HP	TPN-DA20	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	2	N	0	Accessory of the EUT
2	typeC Cable	1	2	N	0	Accessory of the EUT

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
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: 2024/10/29

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17
		MY58140009	2024/1/18	2025/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/10/29

4.3 Power Spectral Density

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

4.4 6 dB Bandwidth

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

4.5 Occupied Bandwidth

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

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2023/11/22	2024/11/21
50 ohm terminal resistance	E1-011279	04	2023/11/22	2024/11/21
	E1-011280	05	2023/11/22	2024/11/21
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESR3	102783	2023/12/13	2024/12/12
Fixed Attenuator STI	BNC5W10dB	PAD-COND2-01	2024/8/25	2025/8/24
LISN R&S	ESH2-Z5	100100	2024/3/6	2025/3/5
	ESH3-Z5	100312	2024/9/9	2025/9/8
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2024/8/25	2025/8/24
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2024/10/29

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFA-515BSN	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-1214	2024/10/15	2025/10/14
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Agilent	N9038A	MY52260177	2024/9/19	2025/9/18
Preamplifier EMCI	EMC330N	980798	2024/1/15	2025/1/14
	EMC001340	980201	2024/9/24	2025/9/23
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201248	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-3000	201249	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-9000	201251(with PAD)	2024/1/15	2025/1/14
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	MF-7802BS	MF780208676	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 9.
2. Tested Date: 2024/10/29 ~ 2024/11/7

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFA-515BSN	N/A	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Horn Antenna RFSPIN	DRH18-E	210104A18E	2023/11/12	2024/11/11
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2023/11/12	2024/11/11
MXE EMI Receiver Agilent	N9038A	MY52260177	2023/9/15	2024/9/14
Preamplifier Agilent	83017A	MY39501357	2024/6/12	2025/6/11
Preamplifier EMCI	EMC184045SE	980788	2024/1/15	2025/1/14
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2024/1/15	2025/1/14
	EMC101G-KM-KM-3000	201258	2024/1/15	2025/1/14
	EMC101G-KM-KM-5000	201261	2024/1/15	2025/1/14
	EMC104-SM-SM-1000	210103	2024/1/15	2025/1/14
	EMC104-SM-SM-3000	201241	2024/1/15	2025/1/14
	EMC104-SM-SM-9000	201244	2024/1/15	2025/1/14
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	MF-7802BS	MF780208676	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 9.
2. Tested Date: 2024/8/7 ~ 2024/8/8

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 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.

5.7 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).

5.8 Unwanted Emissions above 1 GHz

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

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

Notes:

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

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.15-5.25 GHz band:

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

For transmitters operating in the 5.25-5.35 GHz band:

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

For transmitters operating in the 5.47-5.725 GHz band:

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

For transmitters operating in the 5.725-5.850 GHz band:

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

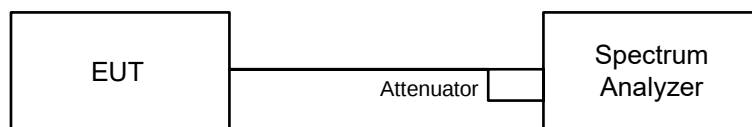
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

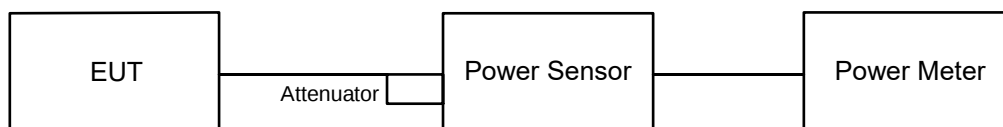


6.1.2 Test Procedure

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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

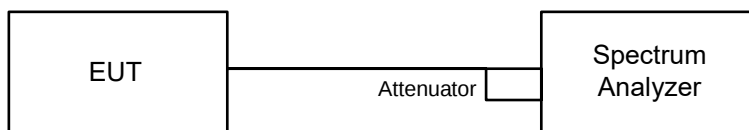
Method SA-2A

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

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-2

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

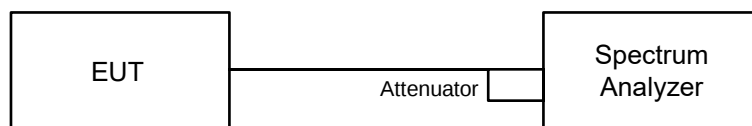
For specified measurement bandwidth 500 kHz:

Method SA-2

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

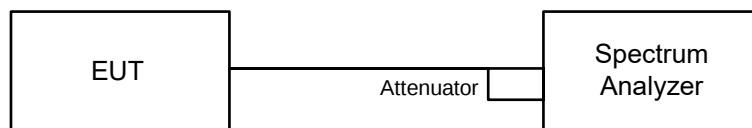


6.4.2 Test Procedure

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

6.5 Occupied Bandwidth

6.5.1 Test Setup

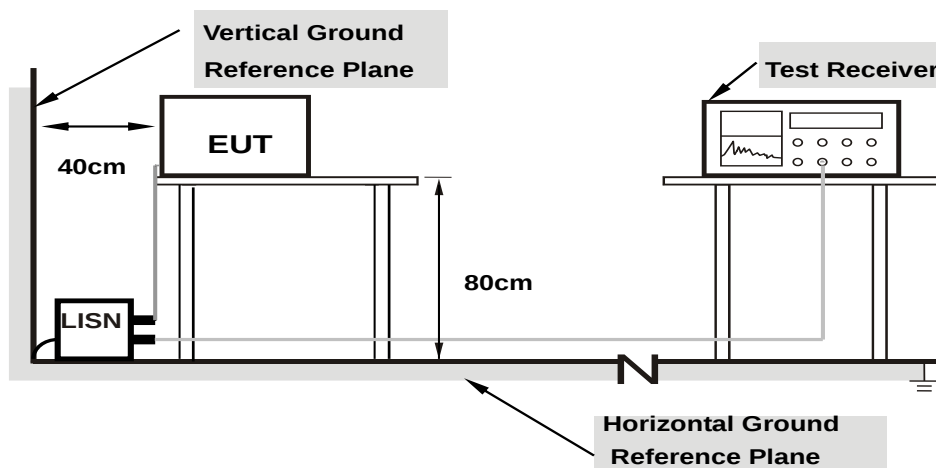


6.5.2 Test Procedure

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

6.6 AC Power Conducted Emissions

6.6.1 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).

6.6.2 Test Procedure

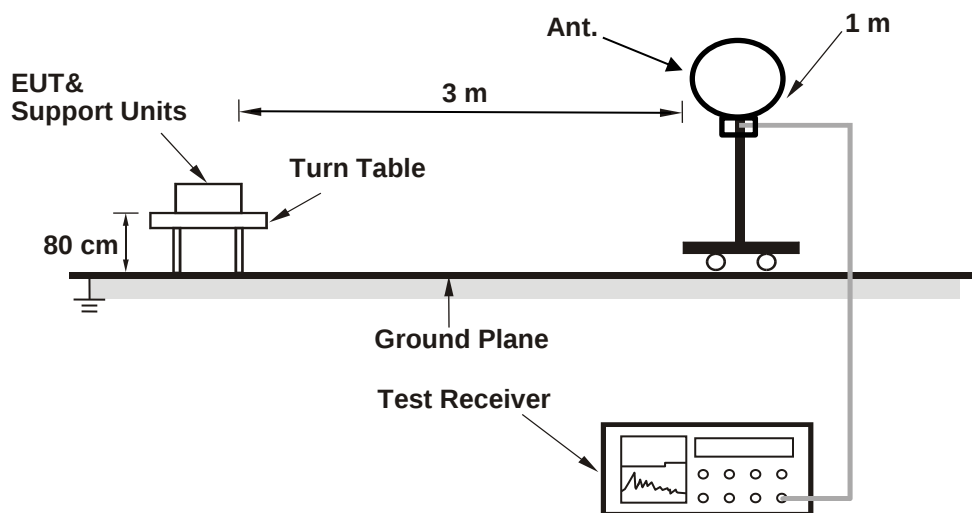
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

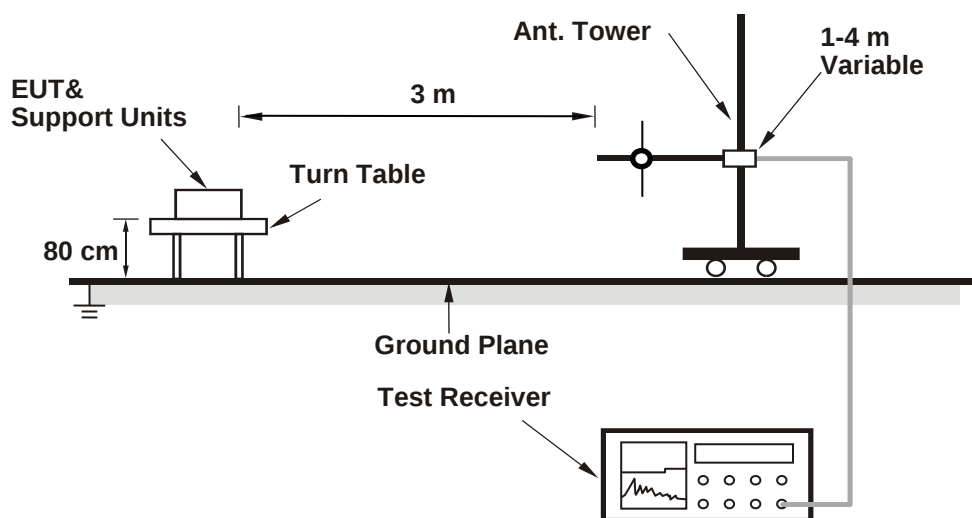
6.7 Unwanted Emissions below 1 GHz

6.7.1 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).

6.7.2 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

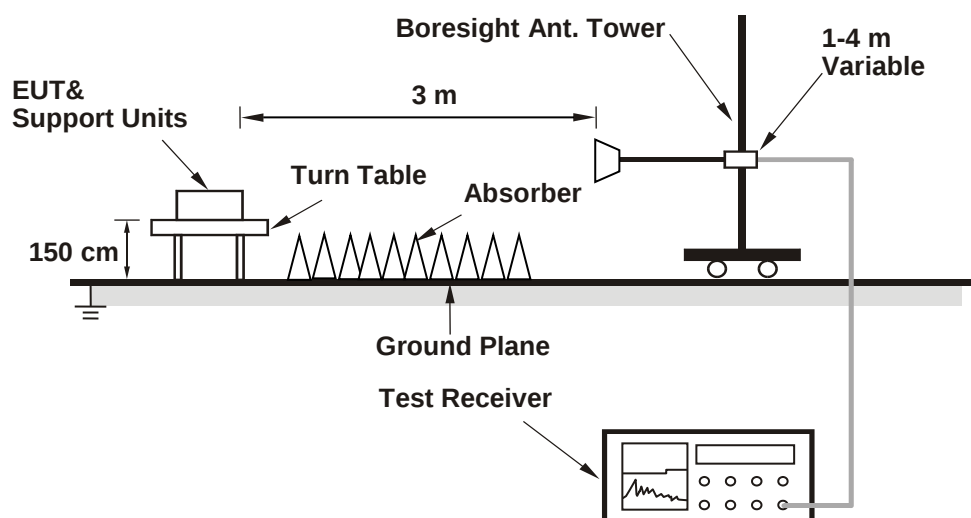
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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.

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



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

6.8.2 Test Procedure

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

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	20.15
60	5300	20.16
64	5320	20.12
100	5500	20.06
116	5580	20.22
140	5700	20.28
144 (U-NII-2C)	5720	15.09
144 (U-NII-3)	5720	5.16

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.15	24.04	>	24
60	5300	20.16	24.04	>	24
64	5320	20.12	24.03	>	24
100	5500	20.06	24.02	>	24
116	5580	20.22	24.05	>	24
140	5700	20.28	24.07	>	24
144 (U-NII-2C)	5720	15.09	22.78	<	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	20.36
60	5300	20.36
64	5320	20.37
100	5500	20.3
116	5580	20.33
140	5700	20.34
144 (U-NII-2C)	5720	15.22
144 (U-NII-3)	5720	5.12

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	20.36	24.08 > 24
60	5300	20.36	24.08 > 24
64	5320	20.37	24.08 > 24
100	5500	20.30	24.07 > 24
116	5580	20.33	24.08 > 24
140	5700	20.34	24.08 > 24
144 (U-NII-2C)	5720	15.22	22.82 < 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	41.33
62	5310	41.32
102	5510	41.11
110	5550	41.24
134	5670	41.44
142 (U-NII-2C)	5710	35.72
142 (U-NII-3)	5710	5.66

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	41.33	27.16 > 24
62	5310	41.32	27.16 > 24
102	5510	41.11	27.13 > 24
110	5550	41.24	27.15 > 24
134	5670	41.44	27.17 > 24
142 (U-NII-2C)	5710	35.72	26.52 > 24

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

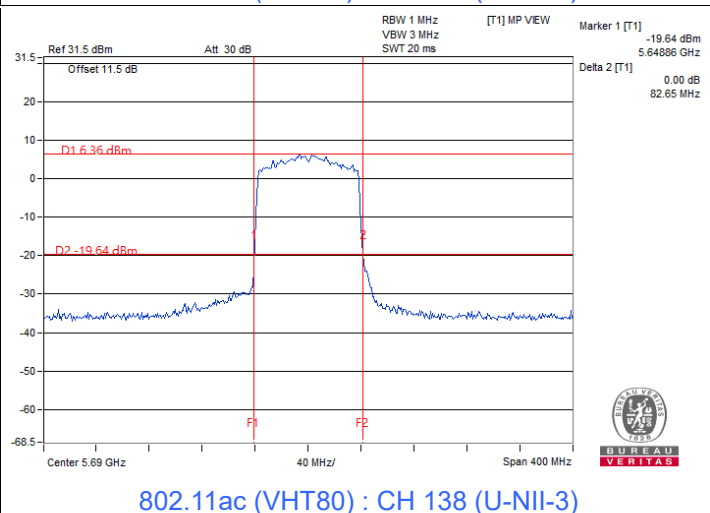
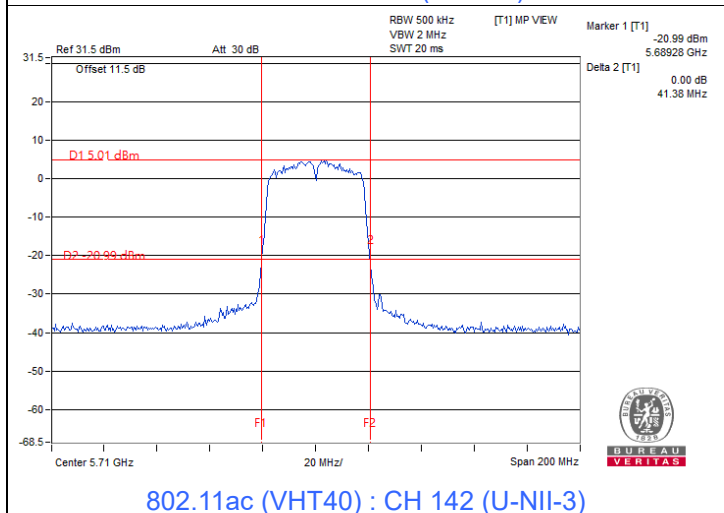
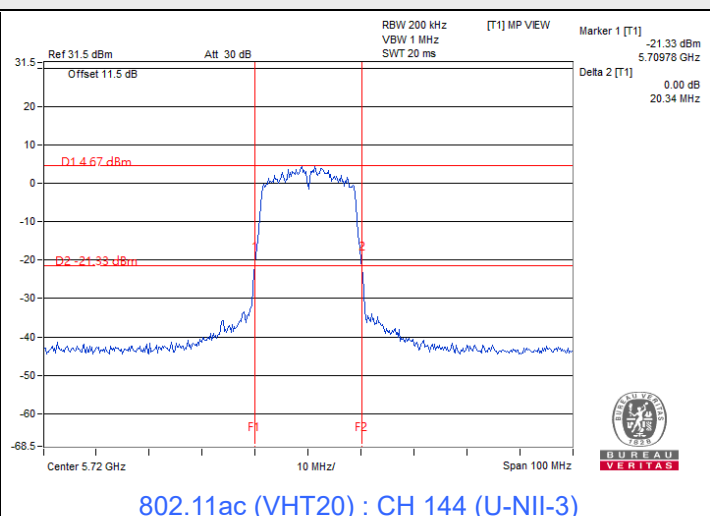
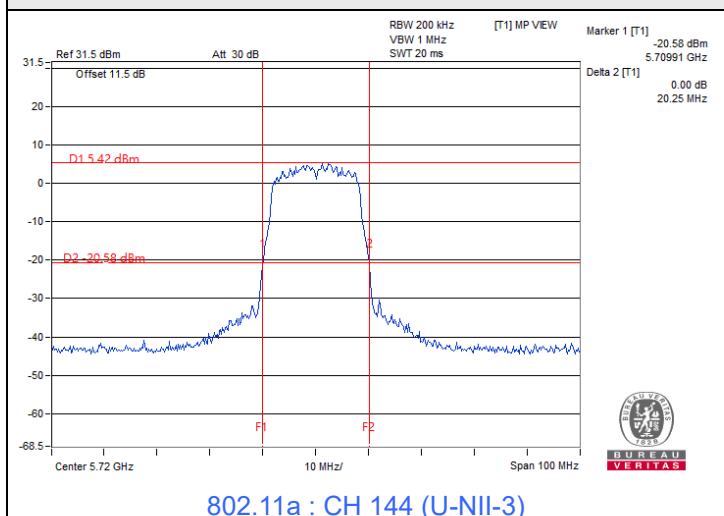
802.11ac (VHT80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
58	5290	83.03
106	5530	82.7
122	5610	82.85
138 (U-NII-2C)	5690	76.14
138 (U-NII-3)	5690	6.51

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	83.03	30.19 > 24
106	5530	82.70	30.17 > 24
122	5610	82.85	30.18 > 24
138 (U-NII-2C)	5690	76.14	29.81 > 24

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

Spectrum Plot of Minimum Value



Notes:

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

7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	27.733	14.43	24	Pass
40	5200	26.485	14.23	24	Pass
48	5240	26.669	14.26	24	Pass
52	5260	27.102	14.33	24	Pass
60	5300	27.542	14.40	24	Pass
64	5320	29.444	14.69	24	Pass
100	5500	29.648	14.72	24	Pass
116	5580	28.973	14.62	24	Pass
140	5700	30.549	14.85	24	Pass
*144 (U-NII-2C)	5720	25.741	14.11	22.78	Pass
*144 (U-NII-3)	5720	4.684	6.71	30	Pass
149	5745	30.269	14.81	30	Pass
157	5785	30.479	14.84	30	Pass
165	5825	31.261	14.95	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 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	21.528	13.33	24	Pass
40	5200	20.277	13.07	24	Pass
48	5240	20.184	13.05	24	Pass
52	5260	20.512	13.12	24	Pass
60	5300	20.606	13.14	24	Pass
64	5320	21.928	13.41	24	Pass
100	5500	23.014	13.62	24	Pass
116	5580	22.08	13.44	24	Pass
140	5700	23.55	13.72	24	Pass
*144 (U-NII-2C)	5720	19.023	12.79	22.82	Pass
*144 (U-NII-3)	5720	3.709	5.69	30	Pass
149	5745	23.014	13.62	30	Pass
157	5785	23.121	13.64	30	Pass
165	5825	23.496	13.71	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 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	22.856	13.59	24	Pass
46	5230	21.777	13.38	24	Pass
54	5270	21.827	13.39	24	Pass
62	5310	23.014	13.62	24	Pass
102	5510	24.044	13.81	24	Pass
110	5550	23.388	13.69	24	Pass
134	5670	24.378	13.87	24	Pass
*142 (U-NII-2C)	5710	22.686	13.56	24	Pass
*142 (U-NII-3)	5710	1.373	1.38	30	Pass
151	5755	23.988	13.80	30	Pass
159	5795	24.491	13.89	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 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	21.677	13.36	24	Pass
40	5200	20.512	13.12	24	Pass
48	5240	20.559	13.13	24	Pass
52	5260	20.893	13.20	24	Pass
60	5300	20.941	13.21	24	Pass
64	5320	22.594	13.54	24	Pass
100	5500	23.335	13.68	24	Pass
116	5580	22.491	13.52	24	Pass
140	5700	23.933	13.79	24	Pass
*144 (U-NII-2C)	5720	19.466	12.89	22.82	Pass
*144 (U-NII-3)	5720	3.752	5.74	30	Pass
149	5745	23.55	13.72	30	Pass
157	5785	23.659	13.74	30	Pass
165	5825	24.266	13.85	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 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	23.335	13.68	24	Pass
46	5230	21.979	13.42	24	Pass
54	5270	22.182	13.46	24	Pass
62	5310	23.281	13.67	24	Pass
102	5510	24.21	13.84	24	Pass
110	5550	23.823	13.77	24	Pass
134	5670	24.604	13.91	24	Pass
*142 (U-NII-2C)	5710	23.055	13.63	24	Pass
*142 (U-NII-3)	5710	1.396	1.45	30	Pass
151	5755	24.491	13.89	30	Pass
159	5795	24.946	13.97	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

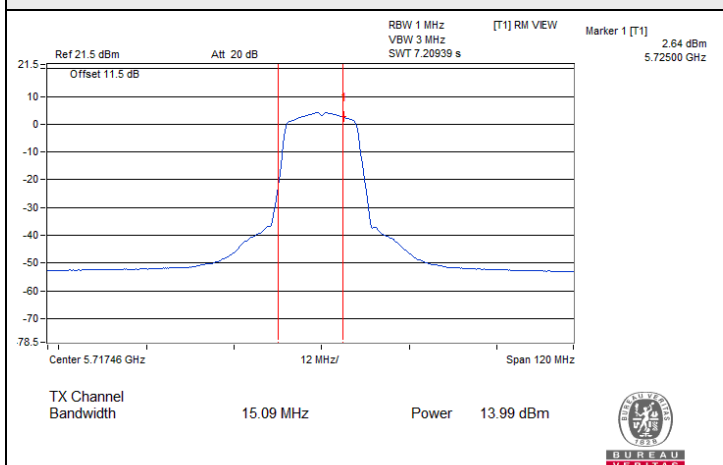
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	21.827	13.39	24	Pass
58	5290	22.439	13.51	24	Pass
106	5530	23.281	13.67	24	Pass
122	5610	23.605	13.73	24	Pass
*138 (U-NII-2C)	5690	24.869	13.96	24	Pass
*138 (U-NII-3)	5690	0.7459	-1.27	30	Pass
155	5775	23.605	13.73	30	Pass

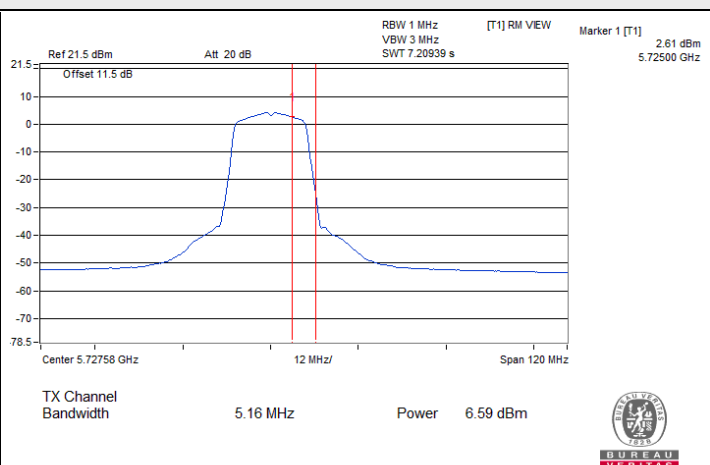
Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

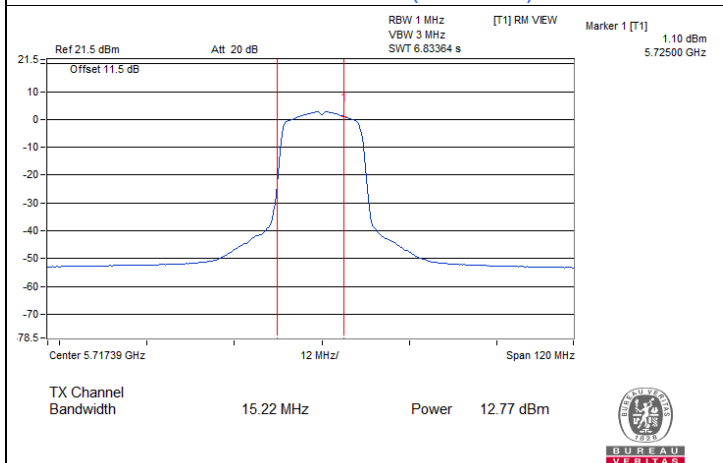
Spectrum Plot for channel straddling



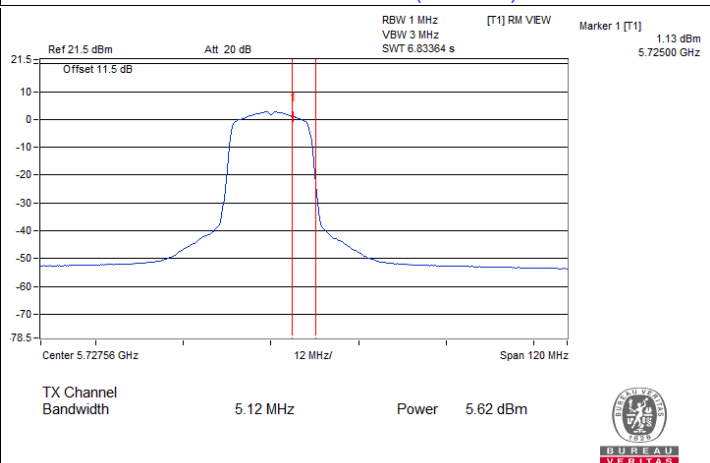
802.11a : CH 144 (U-NII-2C)



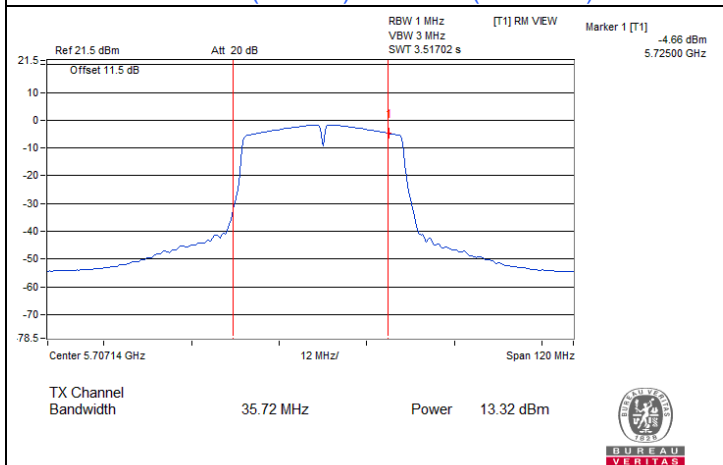
802.11a : CH 144 (U-NII-3)



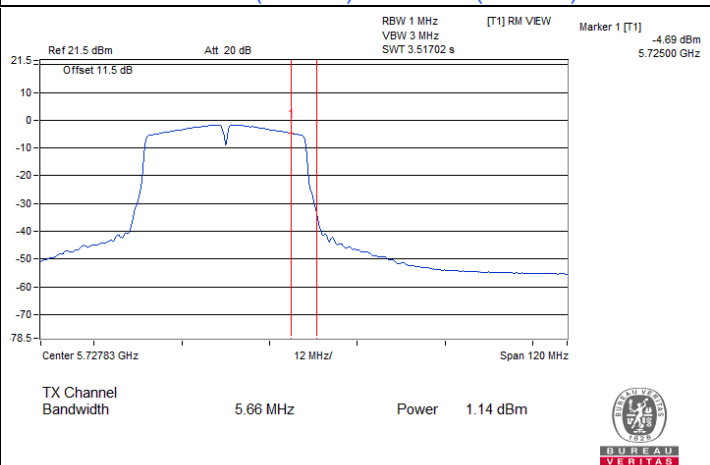
802.11ac (VHT20) : CH 144 (U-NII-2C)



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

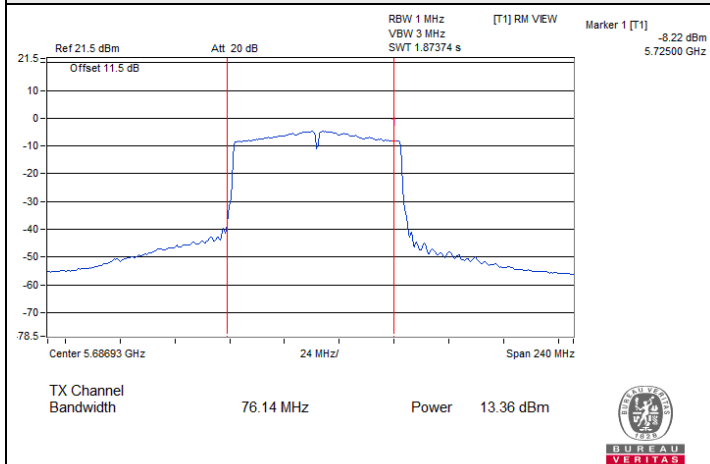


802.11ac (VHT40) : CH 142 (U-NII-2C)

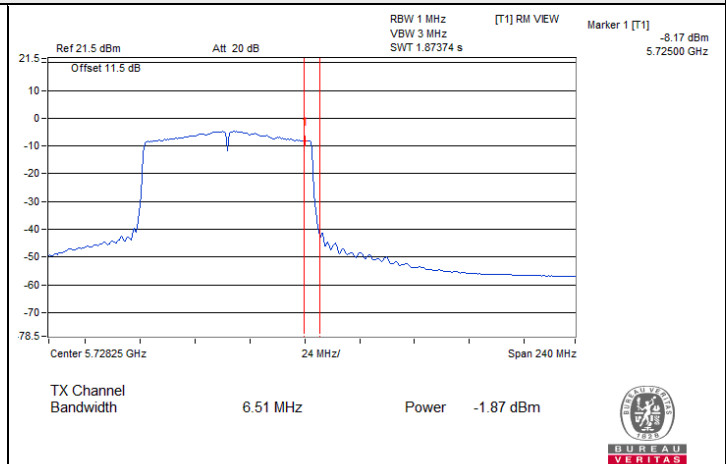


802.11ac (VHT40) : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



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



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

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyoung Wang
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802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	1.45	0.12	1.57	11	Pass
40	5200	1.27	0.12	1.39	11	Pass
48	5240	1.16	0.12	1.28	11	Pass
52	5260	1.18	0.12	1.30	11	Pass
60	5300	1.36	0.12	1.48	11	Pass
64	5320	1.62	0.12	1.74	11	Pass
100	5500	1.71	0.12	1.83	11	Pass
116	5580	1.69	0.12	1.81	11	Pass
140	5700	1.87	0.12	1.99	11	Pass
144 (U-NII-2C)	5720	1.79	0.12	1.91	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.42 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	0.36	0.12	0.48	11	Pass
40	5200	0.07	0.12	0.19	11	Pass
48	5240	0.26	0.12	0.38	11	Pass
52	5260	0.28	0.12	0.40	11	Pass
60	5300	0.24	0.12	0.36	11	Pass
64	5320	0.57	0.12	0.69	11	Pass
100	5500	0.63	0.12	0.75	11	Pass
116	5580	0.46	0.12	0.58	11	Pass
140	5700	0.84	0.12	0.96	11	Pass
144 (U-NII-2C)	5720	0.83	0.12	0.95	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.42 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	-2.29	0.31	-1.98	11	Pass
46	5230	-2.62	0.31	-2.31	11	Pass
54	5270	-2.61	0.31	-2.30	11	Pass
62	5310	-2.30	0.31	-1.99	11	Pass
102	5510	-2.17	0.31	-1.86	11	Pass
110	5550	-2.15	0.31	-1.84	11	Pass
134	5670	-2.11	0.31	-1.80	11	Pass
142 (U-NII-2C)	5710	-2.13	0.31	-1.82	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.42 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	-5.63	0.60	-5.03	11	Pass
58	5290	-5.54	0.60	-4.94	11	Pass
106	5530	-5.35	0.60	-4.75	11	Pass
122	5610	-5.13	0.60	-4.53	11	Pass
138 (U-NII-2C)	5690	-5.36	0.60	-4.76	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.42 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.39 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-5.88	0.12	-3.54	30	Pass
149	5745	-5.58	0.12	-3.24	30	Pass
157	5785	-5.55	0.12	-3.21	30	Pass
165	5825	-5.51	0.12	-3.17	30	Pass

Note: For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-7.55	0.12	-5.21	30	Pass
149	5745	-7.66	0.12	-5.32	30	Pass
157	5785	-7.56	0.12	-5.22	30	Pass
165	5825	-7.45	0.12	-5.11	30	Pass

Note: For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ac (VHT40)

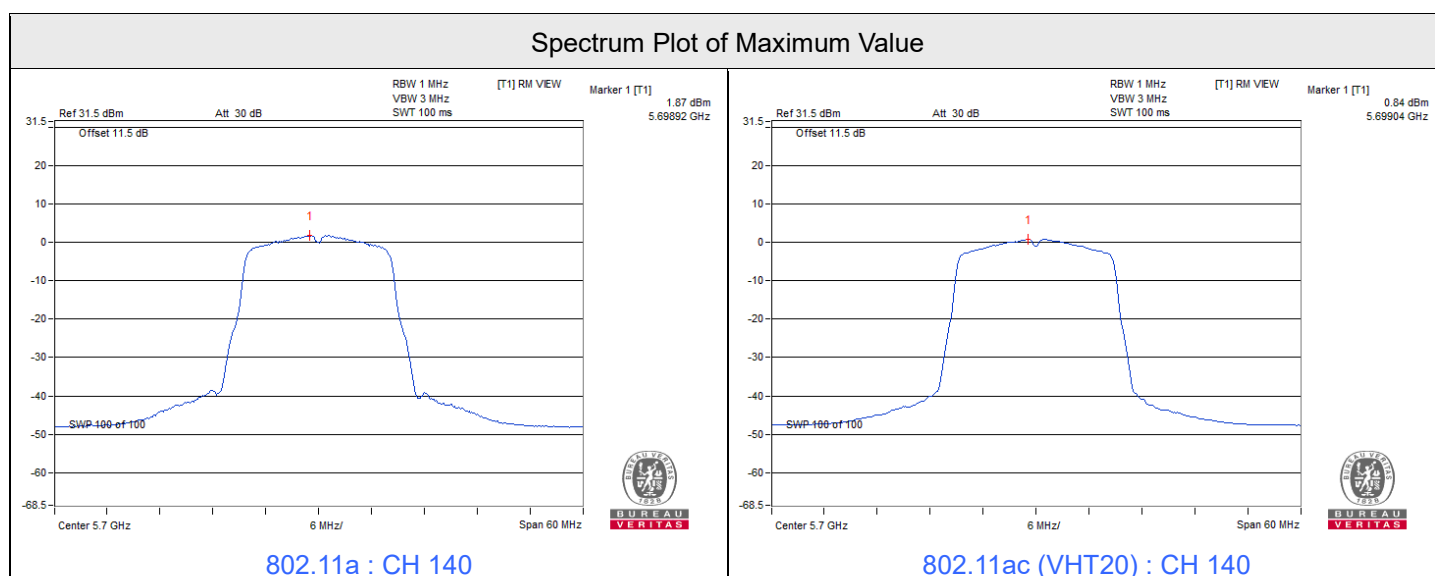
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
142 (U-NII-3)	5710	-12.19	0.31	-9.66	30	Pass
151	5755	-11.87	0.31	-9.34	30	Pass
159	5795	-11.41	0.31	-8.88	30	Pass

Note: For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.

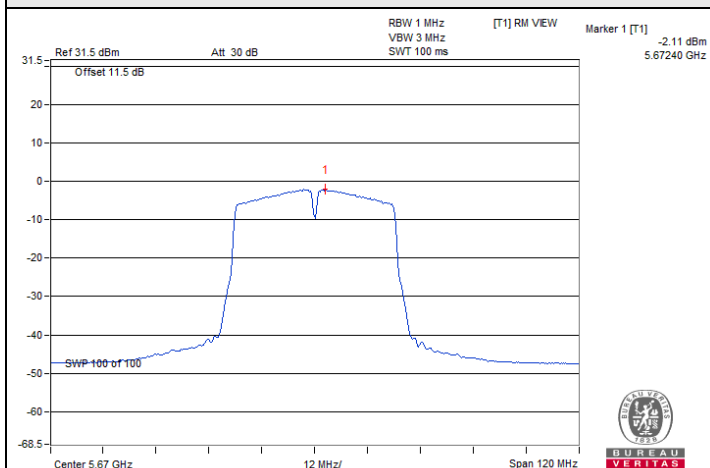
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
138 (U-NII-3)	5690	-16.85	0.6	-14.03	30	Pass
155	5775	-16.02	0.6	-13.20	30	Pass

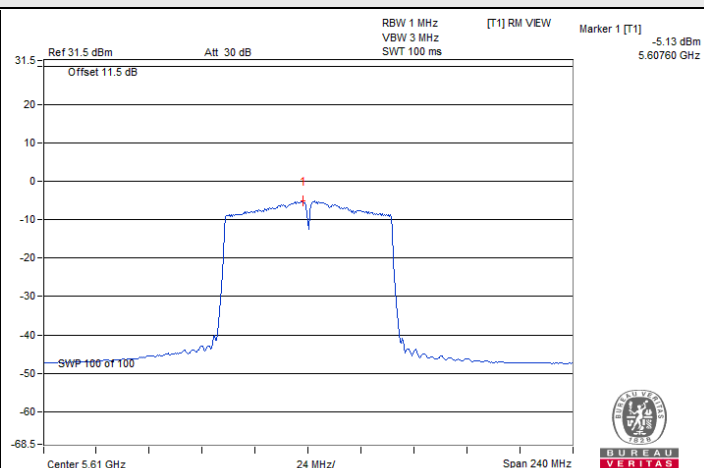
Note: For U-NII-3, the antenna gain is 4.8 dBi < 6 dBi, so the power density limit shall not be reduced.



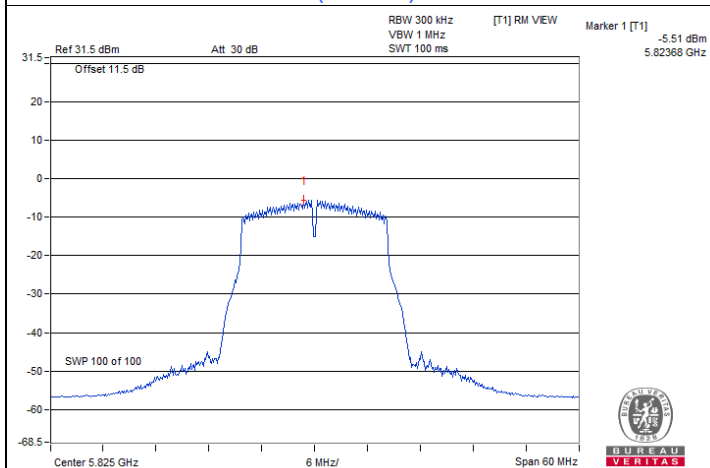
Spectrum Plot of Maximum Value



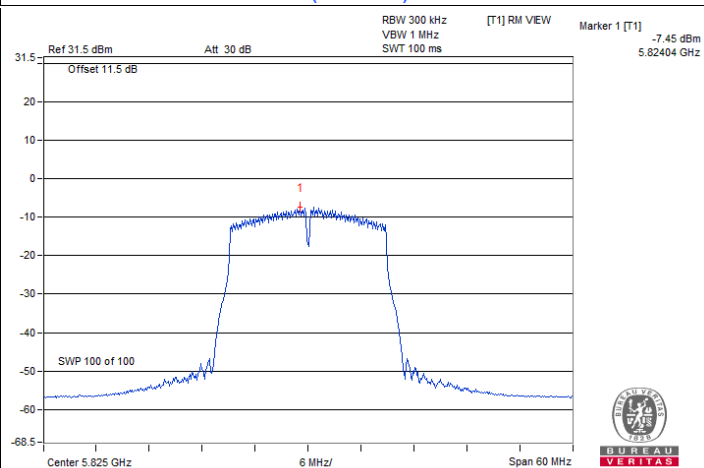
802.11ac (VHT40) : CH 134



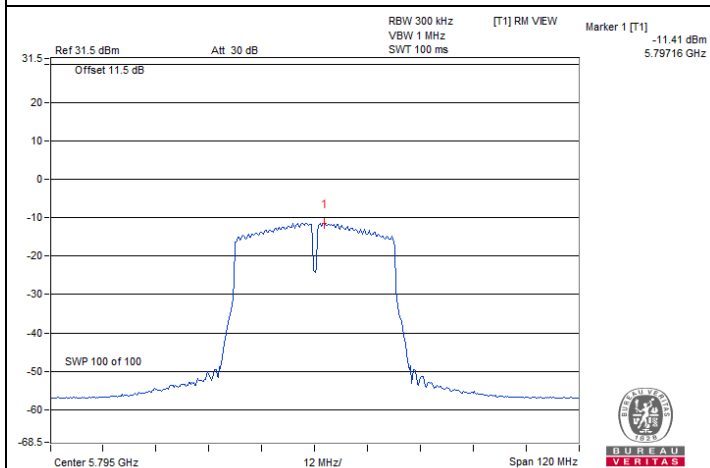
802.11ac (VHT80) : CH 122



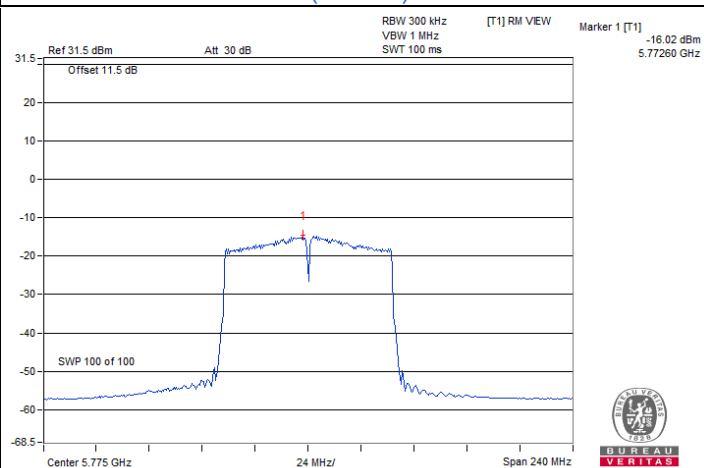
802.11a : CH 165



802.11ac (VHT20) : CH 165



802.11ac (VHT40) : CH 159



802.11ac (VHT80) : CH 155

7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	2.57	0.5	Pass
149	5745	15.15	0.5	Pass
157	5785	15.18	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
144 (U-NII-3)	5720	2.57	0.5	Pass
149	5745	15.14	0.5	Pass
157	5785	15.19	0.5	Pass
165	5825	15.19	0.5	Pass

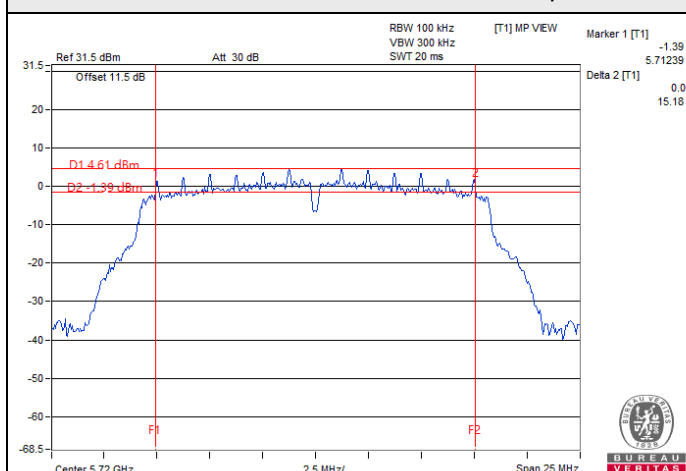
802.11ac (VHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
142 (U-NII-3)	5710	2.62	0.5	Pass
151	5755	35.26	0.5	Pass
159	5795	35.28	0.5	Pass

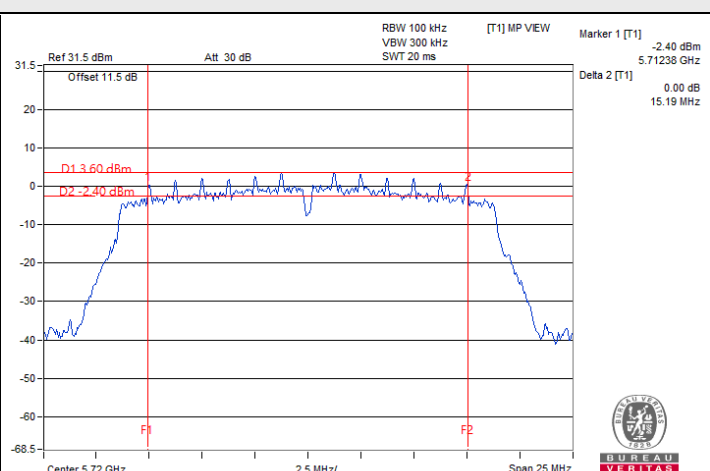
802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
138 (U-NII-3)	5690	2.7	0.5	Pass
155	5775	75.41	0.5	Pass

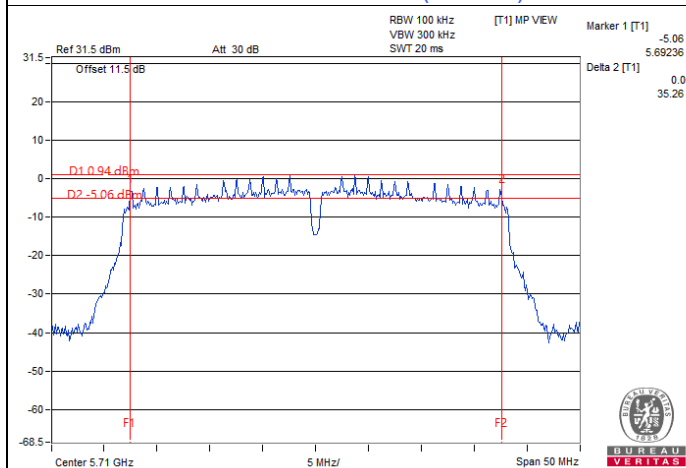
Spectrum Plot of Minimum Value



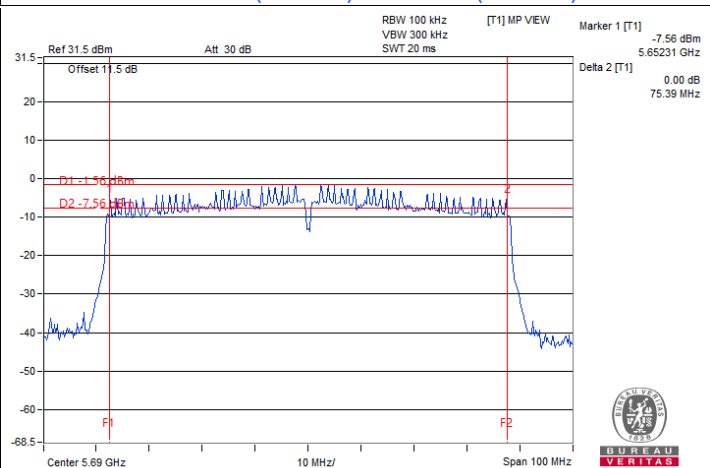
802.11a : CH 144 (U-NII-3)



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



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



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

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

7.5 Occupied Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyoung Wang
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.8
40	5200	16.8
48	5240	16.8
52	5260	16.8
60	5300	16.8
64	5320	16.56
100	5500	16.8
116	5580	16.8
140	5700	16.8
144 (U-NII-2C)	5720	13.4
144 (U-NII-3)	5720	3.28
149	5745	16.68
157	5785	16.68
165	5825	16.8

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.76
40	5200	17.76
48	5240	17.76
52	5260	17.76
60	5300	17.76
64	5320	17.76
100	5500	17.76
116	5580	17.76
140	5700	17.76
144 (U-NII-2C)	5720	13.88
144 (U-NII-3)	5720	3.76
149	5745	17.7
157	5785	17.64
165	5825	17.64

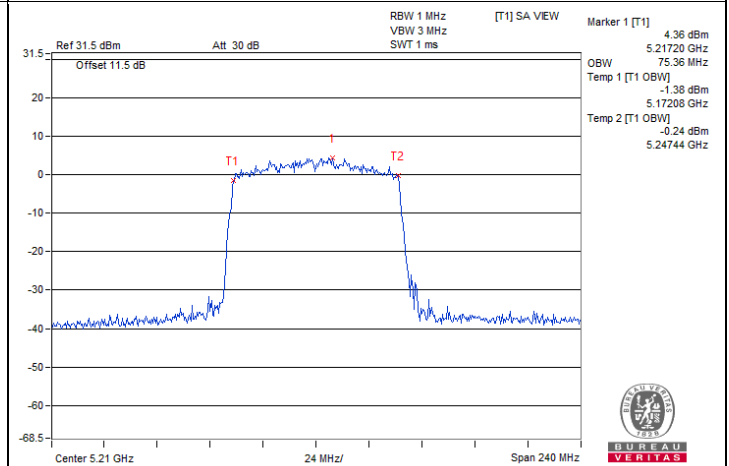
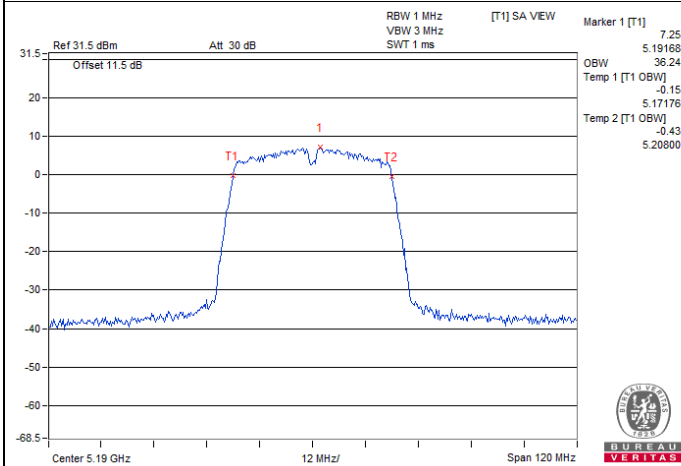
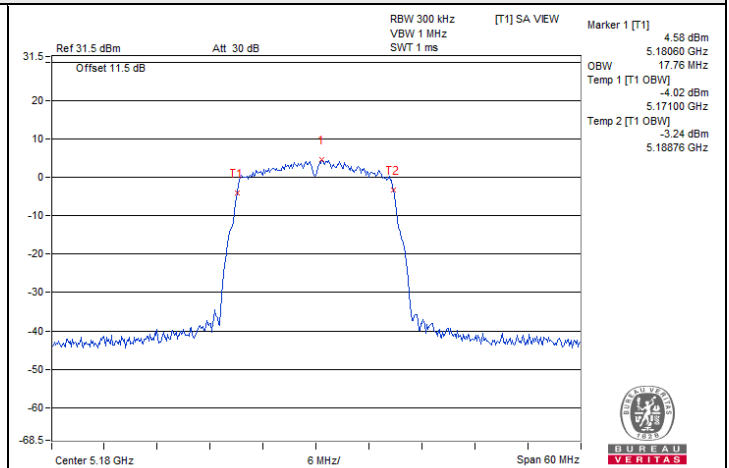
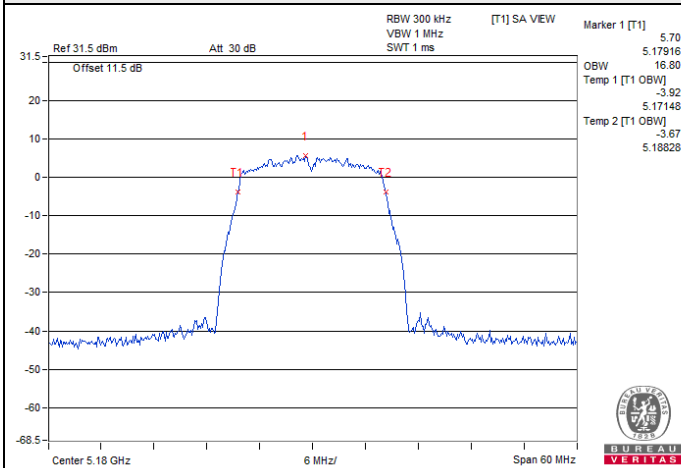
802.11ac (VHT40)

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

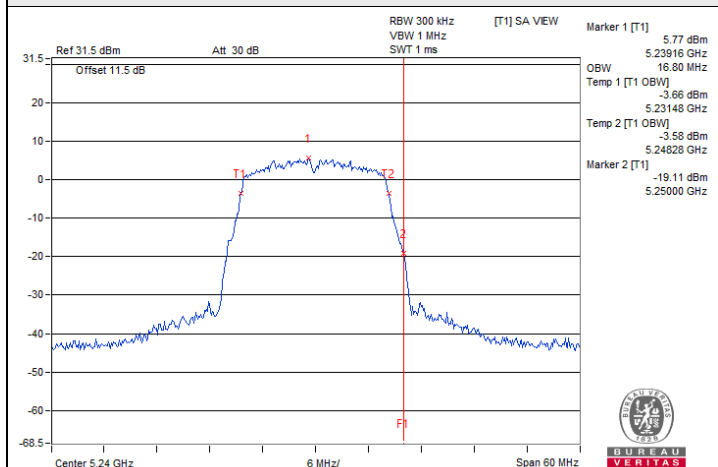
802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.36
58	5290	75.36
106	5530	75.36
122	5610	75.36
138 (U-NII-2C)	5690	72.92
138 (U-NII-3)	5690	2.44
155	5775	75.36

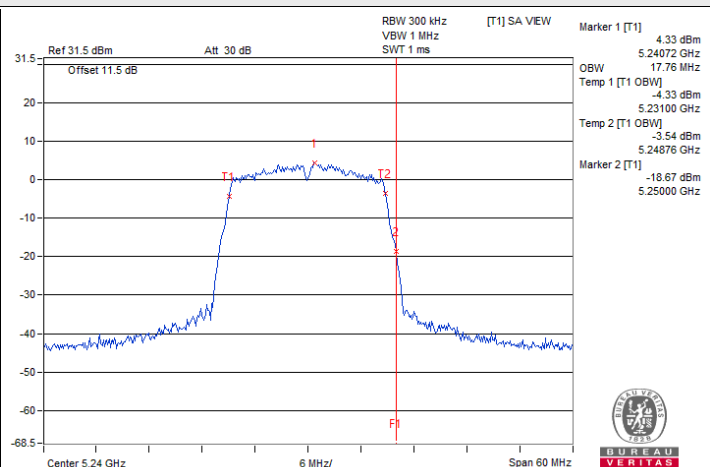
Spectrum Plot of Maximum Value



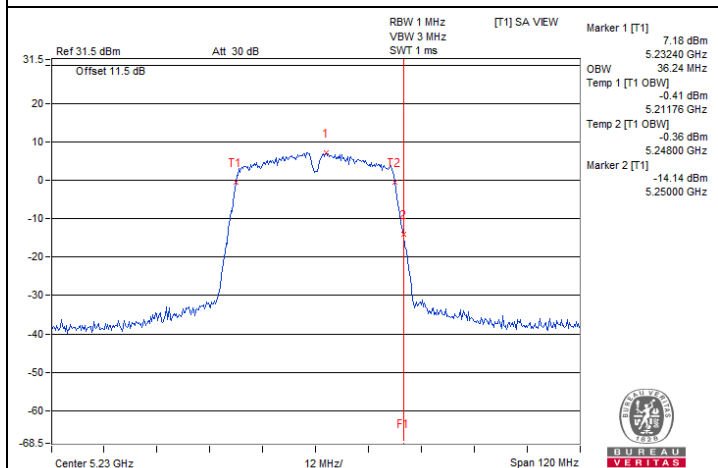
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



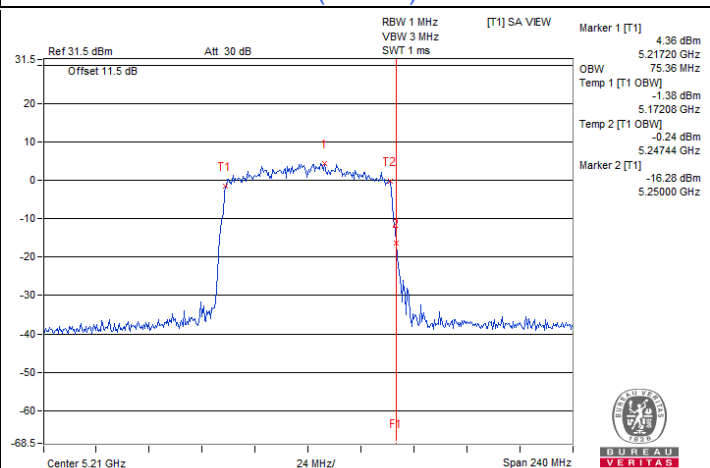
802.11a : CH 48



802.11ac (VHT20) : CH 48

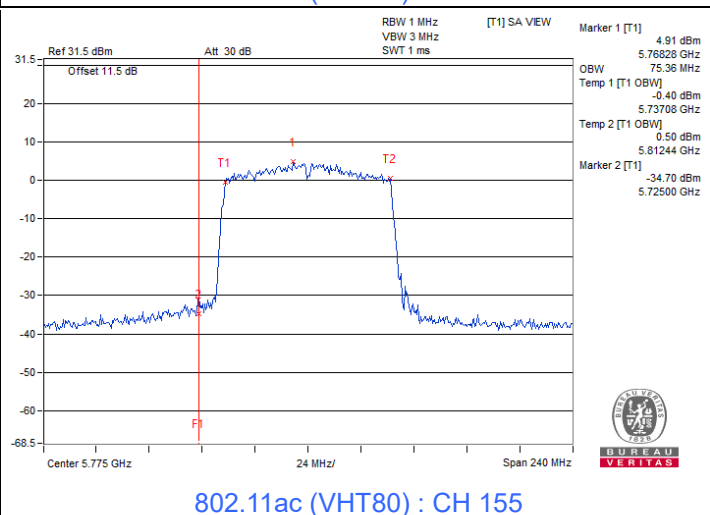
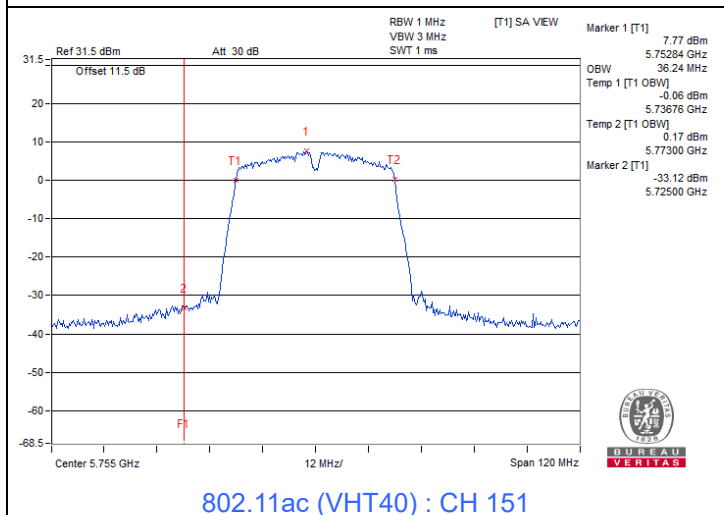
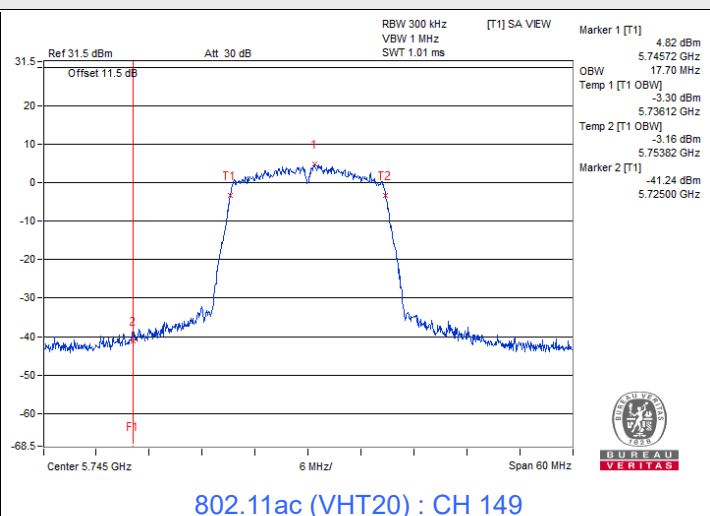
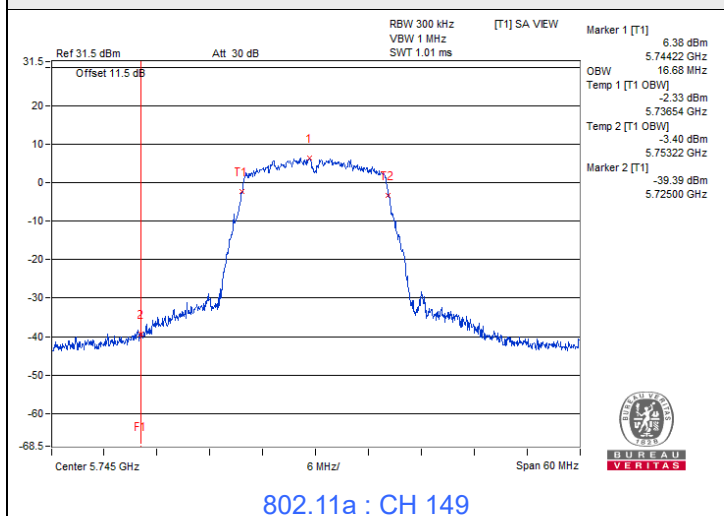


802.11ac (VHT40) : CH 46



802.11ac (VHT80) : CH 42

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



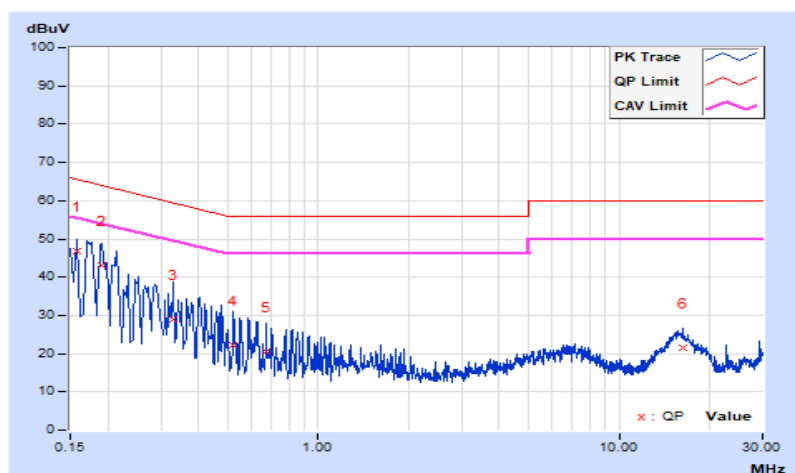
7.6 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 165 : 5825 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	25 °C, 75 % RH
Tested By	Tank Wu		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	10.15	36.77	17.23	46.92	27.38	65.57	55.57	-18.65	-28.19
2	0.19000	10.17	32.88	15.39	43.05	25.56	64.04	54.04	-20.99	-28.48
3	0.33000	10.18	18.76	3.86	28.94	14.04	59.45	49.45	-30.51	-35.41
4	0.52200	10.19	12.15	3.64	22.34	13.83	56.00	46.00	-33.66	-32.17
5	0.67000	10.21	10.29	2.07	20.50	12.28	56.00	46.00	-35.50	-33.72
6	16.25400	10.66	10.96	4.98	21.62	15.64	60.00	50.00	-38.38	-34.36

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

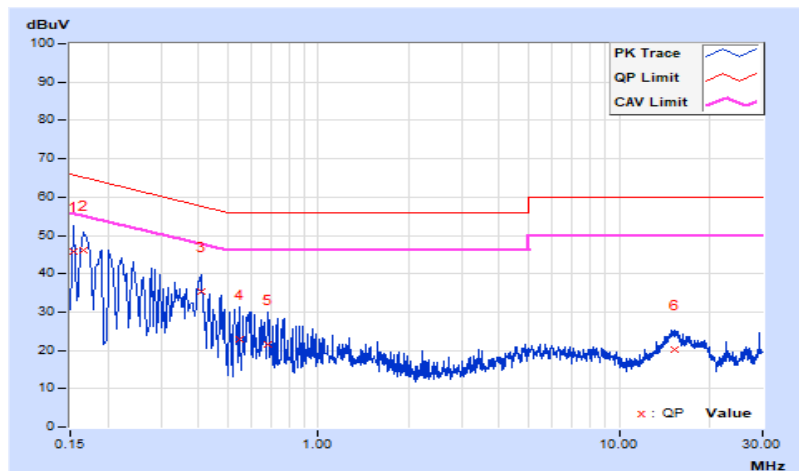


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Tank Wu		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	10.18	35.53	15.52	45.71	25.70	65.78	55.78	-20.07	-30.08
2	0.16600	10.19	35.83	17.44	46.02	27.63	65.16	55.16	-19.14	-27.53
3	0.41000	10.21	25.06	21.06	35.27	31.27	57.65	47.65	-22.38	-16.38
4	0.54600	10.23	12.60	4.61	22.83	14.84	56.00	46.00	-33.17	-31.16
5	0.67800	10.24	11.29	3.76	21.53	14.00	56.00	46.00	-34.47	-32.00
6	15.38600	10.75	9.54	3.86	20.29	14.61	60.00	50.00	-39.71	-35.39

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



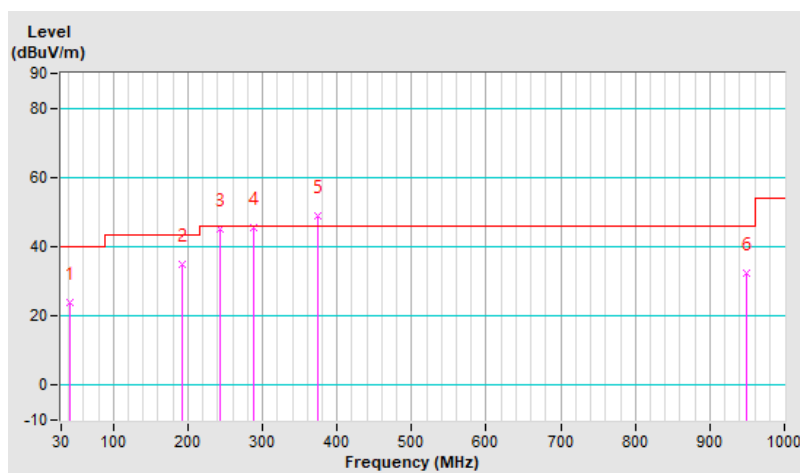
7.7 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	42.61	24.0 QP	40.0	-16.0	1.99 H	18	36.3	-12.3
2	191.99	35.0 QP	43.5	-8.5	1.99 H	67	50.1	-15.1
3	243.40	45.2 QP	46.0	-0.8	1.24 H	113	58.9	-13.7
4	288.99	45.4 QP	46.0	-0.6	1.00 H	152	57.3	-11.9
*5	373.38	49.0 QP	46.0	3.0	1.00 H	11	58.9	-9.9
6	948.59	32.3 QP	46.0	-13.7	1.00 H	53	31.7	0.6

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 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.
- * Radiated emissions were evaluated with RF module off to determine whether failing results were originating from the RF module (See RF module off Mode data). After verification, frequencies denoted by the * These are failing have been identified as coming from unintentional emission signal brought out by the power supply. All unintentional emissions are addressed in the test report no. FDBDGE-WTW-P24100076.

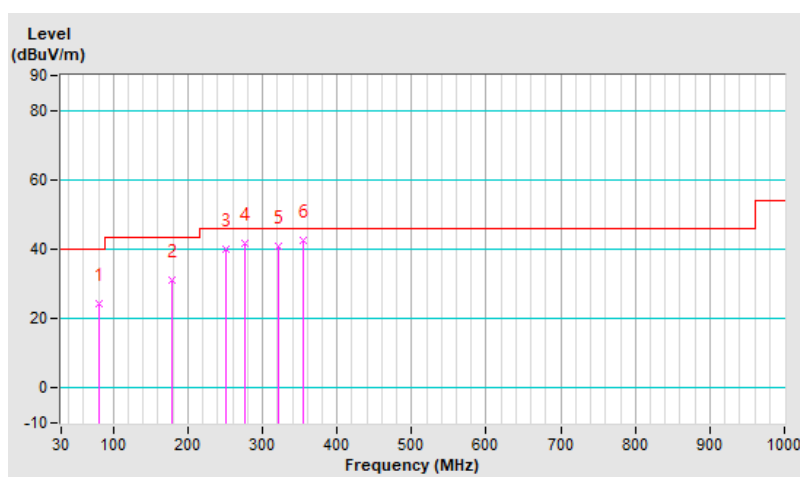


RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	81.41	24.4 QP	40.0	-15.6	1.00 V	160	41.7	-17.3
2	178.41	31.2 QP	43.5	-12.3	1.25 V	134	44.7	-13.5
3	250.19	40.2 QP	46.0	-5.8	1.50 V	206	53.8	-13.6
4	276.38	41.5 QP	46.0	-4.5	1.50 V	199	53.8	-12.3
5	321.97	40.9 QP	46.0	-5.1	2.00 V	212	51.8	-10.9
6	353.98	42.5 QP	46.0	-3.5	1.00 V	165	53.1	-10.6

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 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.
- * Radiated emissions were evaluated with RF module off to determine whether failing results were originating from the RF module (See RF module off Mode data). After verification, frequencies denoted by the * These are failing have been identified as coming from unintentional emission signal brought out by the power supply. All unintentional emissions are addressed in the test report no. FBDGE-WTW-P24100076.

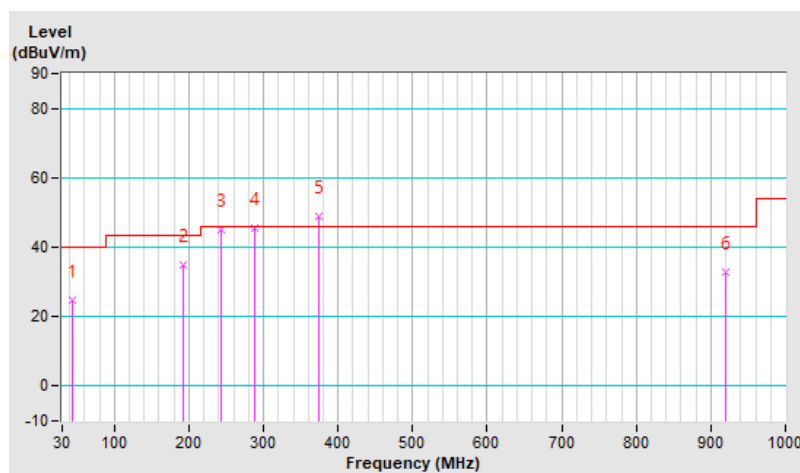


RF Mode	TX off		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.66	24.6 QP	40.0	-15.4	2.00 H	120	36.9	-12.3
2	191.99	35.0 QP	43.5	-8.5	1.24 H	250	50.1	-15.1
3	243.20	45.0 QP	46.0	-1.0	1.25 H	142	58.7	-13.7
4	288.45	45.7 QP	46.0	-0.3	1.00 H	154	57.6	-11.9
*5	373.38	48.7 QP	46.0	2.7	1.00 H	21	58.6	-9.9
6	920.46	32.9 QP	46.0	-13.1	1.00 H	13	32.8	0.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
 3. Margin value = Emission Level – Limit value
 4. The other emission levels were very low against the limit 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.
- * Radiated emissions were evaluated with RF module off to determine whether failing results were originating from the RF module (See RF module off Mode data). After verification, frequencies denoted by the * These are failing have been identified as coming from unintentional emission signal brought out by the power supply. All unintentional emissions are addressed in the test report no. FBDGE-WTW-P24100076.

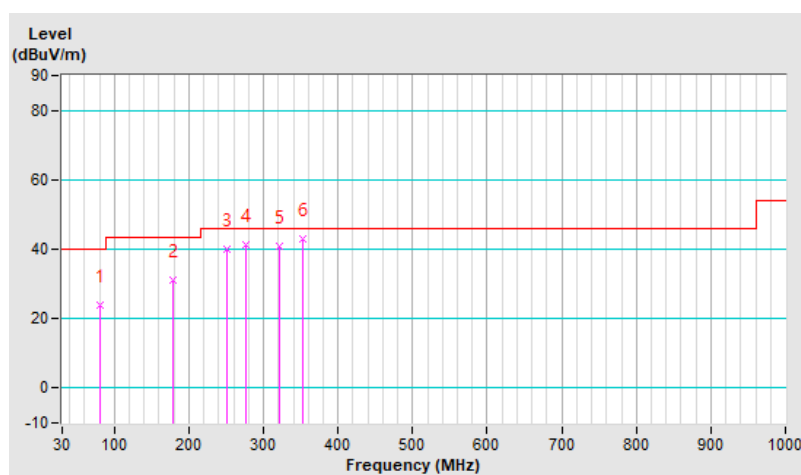


RF Mode	TX off		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	81.32	24.1 QP	40.0	-15.9	1.00 V	166	41.4	-17.3
2	178.15	31.0 QP	43.5	-12.5	1.25 V	142	44.5	-13.5
3	250.19	40.0 QP	46.0	-6.0	1.50 V	217	53.6	-13.6
4	276.44	41.3 QP	46.0	-4.7	1.50 V	231	53.6	-12.3
5	321.23	41.0 QP	46.0	-5.0	2.00 V	224	51.9	-10.9
6	353.02	42.8 QP	46.0	-3.2	1.00 V	178	53.4	-10.6

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 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.
- * Radiated emissions were evaluated with RF module off to determine whether failing results were originating from the RF module (See RF module off Mode data). After verification, frequencies denoted by the * These are failing have been identified as coming from unintentional emission signal brought out by the power supply. All unintentional emissions are addressed in the test report no. FBDGE-WTW-P24100076.



7.8 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.0 PK	74.0	-10.0	1.80 H	161	61.4	2.6
2	5150.00	53.3 AV	54.0	-0.7	1.80 H	161	50.7	2.6
3	*5180.00	113.9 PK			1.80 H	161	73.1	40.8
4	*5180.00	107.2 AV			1.80 H	161	66.4	40.8
5	#10360.00	60.3 PK	68.2	-7.9	1.71 H	355	50.8	9.5
6	15540.00	62.8 PK	74.0	-11.2	3.01 H	247	51.0	11.8
7	15540.00	53.8 AV	54.0	-0.2	3.01 H	247	42.0	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	5150.00	57.0 PK	74.0	-17.0	3.70 V	129	54.4	2.6
2	5150.00	47.8 AV	54.0	-6.2	3.70 V	129	45.2	2.6
3	*5180.00	108.0 PK			3.70 V	129	67.2	40.8
4	*5180.00	101.2 AV			3.70 V	129	60.4	40.8
5	#10360.00	58.7 PK	68.2	-9.5	1.85 V	202	49.2	9.5
6	15540.00	62.6 PK	74.0	-11.4	3.07 V	188	50.8	11.8
7	15540.00	53.5 AV	54.0	-0.5	3.07 V	188	41.7	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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	114.0 PK			1.81 H	154	73.2	40.8
2	*5200.00	107.5 AV			1.81 H	154	66.7	40.8
3	#10400.00	58.4 PK	68.2	-9.8	1.75 H	357	49.0	9.4
4	15600.00	63.0 PK	74.0	-11.0	3.01 H	251	51.2	11.8
5	15600.00	53.8 AV	54.0	-0.2	3.01 H	251	42.0	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	*5200.00	108.3 PK			3.89 V	134	67.5	40.8
2	*5200.00	101.7 AV			3.89 V	134	60.9	40.8
3	#10400.00	57.6 PK	68.2	-10.6	1.82 V	205	48.2	9.4
4	15600.00	61.8 PK	74.0	-12.2	3.02 V	190	50.0	11.8
5	15600.00	53.3 AV	54.0	-0.7	3.02 V	190	41.5	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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	114.3 PK			1.95 H	156	73.4	40.9
2	*5240.00	108.0 AV			1.95 H	156	67.1	40.9
3	5350.00	53.0 PK	74.0	-21.0	1.95 H	156	50.2	2.8
4	5350.00	44.4 AV	54.0	-9.6	1.95 H	156	41.6	2.8
5	#10480.00	57.0 PK	68.2	-11.2	1.60 H	353	47.8	9.2
6	15720.00	62.8 PK	74.0	-11.2	3.09 H	246	50.6	12.2
7	15720.00	53.8 AV	54.0	-0.2	3.09 H	246	41.6	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	*5240.00	109.1 PK			3.83 V	131	68.2	40.9
2	*5240.00	102.4 AV			3.83 V	131	61.5	40.9
3	5350.00	51.4 PK	74.0	-22.6	3.83 V	131	48.6	2.8
4	5350.00	43.2 AV	54.0	-10.8	3.83 V	131	40.4	2.8
5	#10480.00	56.4 PK	68.2	-11.8	1.82 V	199	47.2	9.2
6	15720.00	62.2 PK	74.0	-11.8	3.05 V	193	50.0	12.2
7	15720.00	53.4 AV	54.0	-0.6	3.05 V	193	41.2	12.2

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.2 PK	74.0	-11.8	1.96 H	154	59.6	2.6
2	5150.00	53.4 AV	54.0	-0.6	1.96 H	154	50.8	2.6
3	*5180.00	113.0 PK			1.96 H	154	72.2	40.8
4	*5180.00	106.6 AV			1.96 H	154	65.8	40.8
5	#10360.00	57.3 PK	68.2	-10.9	1.77 H	354	47.8	9.5
6	15540.00	62.6 PK	74.0	-11.4	3.01 H	247	50.8	11.8
7	15540.00	53.0 AV	54.0	-1.0	3.01 H	247	41.2	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	5150.00	58.8 PK	74.0	-15.2	3.97 V	118	56.2	2.6
2	5150.00	49.2 AV	54.0	-4.8	3.97 V	118	46.6	2.6
3	*5180.00	109.1 PK			3.97 V	118	68.3	40.8
4	*5180.00	102.8 AV			3.97 V	118	62.0	40.8
5	#10360.00	56.7 PK	68.2	-11.5	1.88 V	201	47.2	9.5
6	15540.00	61.4 PK	74.0	-12.6	3.09 V	190	49.6	11.8
7	15540.00	52.8 AV	54.0	-1.2	3.09 V	190	41.0	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.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11ac (VHT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	113.4 PK			1.83 H	156	72.6	40.8
2	*5200.00	107.2 AV			1.83 H	156	66.4	40.8
3	#10400.00	58.0 PK	68.2	-10.2	1.68 H	353	48.6	9.4
4	15600.00	62.2 PK	74.0	-11.8	3.04 H	254	50.4	11.8
5	15600.00	53.6 AV	54.0	-0.4	3.04 H	254	41.8	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	*5200.00	109.6 PK			3.93 V	118	68.8	40.8
2	*5200.00	103.3 AV			3.93 V	118	62.5	40.8
3	#10400.00	57.4 PK	68.2	-10.8	1.82 V	205	48.0	9.4
4	15600.00	61.3 PK	74.0	-12.7	3.02 V	190	49.5	11.8
5	15600.00	53.0 AV	54.0	-1.0	3.02 V	190	41.2	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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ac (VHT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	114.1 PK			1.89 H	158	73.2	40.9
2	*5240.00	107.0 AV			1.89 H	158	66.1	40.9
3	5350.00	51.8 PK	74.0	-22.2	1.89 H	158	49.0	2.8
4	5350.00	44.3 AV	54.0	-9.7	1.89 H	158	41.5	2.8
5	#10480.00	57.2 PK	68.2	-11.0	1.60 H	355	48.0	9.2
6	15720.00	62.2 PK	74.0	-11.8	3.01 H	249	50.0	12.2
7	15720.00	53.8 AV	54.0	-0.2	3.01 H	249	41.6	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	*5240.00	110.5 PK			3.84 V	121	69.6	40.9
2	*5240.00	104.1 AV			3.84 V	121	63.2	40.9
3	5350.00	51.5 PK	74.0	-22.5	3.84 V	121	48.7	2.8
4	5350.00	43.6 AV	54.0	-10.4	3.84 V	121	40.8	2.8
5	#10480.00	56.6 PK	68.2	-11.6	1.82 V	198	47.4	9.2
6	15720.00	61.7 PK	74.0	-12.3	3.05 V	190	49.5	12.2
7	15720.00	53.4 AV	54.0	-0.6	3.05 V	190	41.2	12.2

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 38 : 5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	59.0 PK	74.0	-15.0	1.68 H	357	56.4	2.6
2	5150.00	50.8 AV	54.0	-3.2	1.68 H	357	48.2	2.6
3	*5190.00	108.5 PK			1.68 H	357	67.7	40.8
4	*5190.00	101.9 AV			1.68 H	357	61.1	40.8
5	#10380.00	54.4 PK	68.2	-13.8	1.72 H	354	45.0	9.4
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	54.1 PK	74.0	-19.9	3.92 V	136	51.5	2.6
2	5150.00	44.8 AV	54.0	-9.2	3.92 V	136	42.2	2.6
3	*5190.00	103.0 PK			3.92 V	136	62.2	40.8
4	*5190.00	96.5 AV			3.92 V	136	55.7	40.8
5	#10380.00	53.6 PK	68.2	-14.6	1.82 V	209	44.2	9.4

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 46 : 5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.8 PK	74.0	-15.2	1.78 H	154	56.2	2.6
2	5150.00	50.4 AV	54.0	-3.6	1.78 H	154	47.8	2.6
3	*5230.00	112.4 PK			1.78 H	154	71.6	40.8
4	*5230.00	105.7 AV			1.78 H	154	64.9	40.8
5	5350.00	52.8 PK	74.0	-21.2	1.78 H	154	50.0	2.8
6	5350.00	45.0 AV	54.0	-9.0	1.78 H	154	42.2	2.8
7	#10460.00	57.0 PK	68.2	-11.2	1.56 H	354	47.7	9.3
8	15690.00	62.7 PK	74.0	-11.3	3.31 H	254	50.5	12.2
9	15690.00	53.8 AV	54.0	-0.2	3.31 H	254	41.6	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	5150.00	53.1 PK	74.0	-20.9	3.64 V	128	50.5	2.6
2	5150.00	44.9 AV	54.0	-9.1	3.64 V	128	42.3	2.6
3	*5230.00	106.9 PK			3.64 V	128	66.1	40.8
4	*5230.00	100.2 AV			3.64 V	128	59.4	40.8
5	5350.00	51.4 PK	74.0	-22.6	3.64 V	128	48.6	2.8
6	5350.00	43.6 AV	54.0	-10.4	3.64 V	128	40.8	2.8
7	#10460.00	56.3 PK	68.2	-11.9	1.82 V	205	47.0	9.3
8	15690.00	62.2 PK	74.0	-11.8	3.05 V	190	50.0	12.2
9	15690.00	53.4 AV	54.0	-0.6	3.05 V	190	41.2	12.2

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 42 : 5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	60.4 PK	74.0	-13.6	1.74 H	146	57.8	2.6
2	5150.00	53.6 AV	54.0	-0.4	1.74 H	146	51.0	2.6
3	*5210.00	104.2 PK			1.74 H	146	63.4	40.8
4	*5210.00	98.0 AV			1.74 H	146	57.2	40.8
5	5350.00	52.2 PK	74.0	-21.8	1.74 H	146	49.4	2.8
6	5350.00	44.8 AV	54.0	-9.2	1.74 H	146	42.0	2.8
7	#10420.00	54.0 PK	68.2	-14.2	1.72 H	352	44.8	9.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.8 PK	74.0	-19.2	3.67 V	127	52.2	2.6
2	5150.00	46.4 AV	54.0	-7.6	3.67 V	127	43.8	2.6
3	*5210.00	99.2 PK			3.67 V	127	58.4	40.8
4	*5210.00	93.1 AV			3.67 V	127	52.3	40.8
5	5350.00	51.1 PK	74.0	-22.9	3.67 V	127	48.3	2.8
6	5350.00	43.8 AV	54.0	-10.2	3.67 V	127	41.0	2.8
7	#10420.00	53.2 PK	68.2	-15.0	1.88 V	205	44.0	9.2

Remarks:

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

RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.3 PK	74.0	-19.7	1.78 H	152	51.7	2.6
2	5150.00	44.4 AV	54.0	-9.6	1.78 H	152	41.8	2.6
3	*5260.00	113.9 PK			1.78 H	152	73.0	40.9
4	*5260.00	107.2 AV			1.78 H	152	66.3	40.9
5	#10520.00	58.9 PK	68.2	-9.3	1.75 H	355	49.6	9.3
6	15780.00	63.2 PK	74.0	-10.8	3.16 H	244	51.3	11.9
7	15780.00	53.8 AV	54.0	-0.2	3.16 H	244	41.9	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	52.4 PK	74.0	-21.6	3.80 V	134	49.8	2.6
2	5150.00	42.8 AV	54.0	-11.2	3.80 V	134	40.2	2.6
3	*5260.00	108.6 PK			3.80 V	134	67.7	40.9
4	*5260.00	102.0 AV			3.80 V	134	61.1	40.9
5	#10520.00	58.4 PK	68.2	-9.8	1.88 V	200	49.1	9.3
6	15780.00	62.5 PK	74.0	-11.5	3.07 V	184	50.6	11.9
7	15780.00	53.5 AV	54.0	-0.5	3.07 V	184	41.6	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	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.1 PK			1.71 H	144	72.3	40.8
2	*5300.00	106.5 AV			1.71 H	144	65.7	40.8
3	10600.00	59.6 PK	74.0	-14.4	1.69 H	351	50.3	9.3
4	10600.00	50.7 AV	54.0	-3.3	1.69 H	351	41.4	9.3
5	15900.00	62.9 PK	74.0	-11.1	3.08 H	257	51.0	11.9
6	15900.00	53.7 AV	54.0	-0.3	3.08 H	257	41.8	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	*5300.00	109.3 PK			3.73 V	123	68.5	40.8
2	*5300.00	102.7 AV			3.73 V	123	61.9	40.8
3	10600.00	59.2 PK	74.0	-14.8	1.89 V	203	49.9	9.3
4	10600.00	50.2 AV	54.0	-3.8	1.89 V	203	40.9	9.3
5	15900.00	62.5 PK	74.0	-11.5	3.00 V	188	50.6	11.9
6	15900.00	53.4 AV	54.0	-0.6	3.00 V	188	41.5	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	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	113.3 PK			1.87 H	153	72.6	40.7
2	*5320.00	106.9 AV			1.87 H	153	66.2	40.7
3	5350.00	64.3 PK	74.0	-9.7	1.87 H	153	61.5	2.8
4	5350.00	52.8 AV	54.0	-1.2	1.87 H	153	50.0	2.8
5	10640.00	60.1 PK	74.0	-13.9	1.86 H	347	50.8	9.3
6	10640.00	50.9 AV	54.0	-3.1	1.86 H	347	41.6	9.3
7	15960.00	62.6 PK	74.0	-11.4	3.12 H	247	50.5	12.1
8	15960.00	53.6 AV	54.0	-0.4	3.12 H	247	41.5	12.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.0 PK			3.91 V	119	69.3	40.7
2	*5320.00	103.7 AV			3.91 V	119	63.0	40.7
3	5350.00	59.2 PK	74.0	-14.8	3.91 V	119	56.4	2.8
4	5350.00	50.4 AV	54.0	-3.6	3.91 V	119	47.6	2.8
5	10640.00	58.0 PK	74.0	-16.0	1.83 V	192	48.7	9.3
6	10640.00	49.9 AV	54.0	-4.1	1.83 V	192	40.6	9.3
7	15960.00	61.7 PK	74.0	-12.3	3.06 V	189	49.6	12.1
8	15960.00	53.1 AV	54.0	-0.9	3.06 V	189	41.0	12.1

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.0 PK	74.0	-20.0	1.90 H	151	51.4	2.6
2	5150.00	44.4 AV	54.0	-9.6	1.90 H	151	41.8	2.6
3	*5260.00	112.1 PK			1.90 H	151	71.2	40.9
4	*5260.00	105.9 AV			1.90 H	151	65.0	40.9
5	#10520.00	57.3 PK	68.2	-10.9	1.74 H	351	48.0	9.3
6	15780.00	62.3 PK	74.0	-11.7	3.26 H	240	50.4	11.9
7	15780.00	53.2 AV	54.0	-0.8	3.26 H	240	41.3	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	5150.00	52.1 PK	74.0	-21.9	3.80 V	125	49.5	2.6
2	5150.00	42.6 AV	54.0	-11.4	3.80 V	125	40.0	2.6
3	*5260.00	108.7 PK			3.80 V	125	67.8	40.9
4	*5260.00	102.1 AV			3.80 V	125	61.2	40.9
5	#10520.00	57.8 PK	68.2	-10.4	1.81 V	203	48.5	9.3
6	15780.00	61.7 PK	74.0	-12.3	3.12 V	183	49.8	11.9
7	15780.00	52.7 AV	54.0	-1.3	3.12 V	183	40.8	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 (VHT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.1 PK			1.99 H	152	72.3	40.8
2	*5300.00	106.6 AV			1.99 H	152	65.8	40.8
3	10600.00	61.2 PK	74.0	-12.8	1.81 H	310	51.9	9.3
4	10600.00	52.9 AV	54.0	-1.1	1.81 H	310	43.6	9.3
5	15900.00	62.9 PK	74.0	-11.1	3.32 H	241	51.0	11.9
6	15900.00	53.5 AV	54.0	-0.5	3.32 H	241	41.6	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	*5300.00	108.6 PK			3.92 V	125	67.8	40.8
2	*5300.00	102.4 AV			3.92 V	125	61.6	40.8
3	10600.00	59.6 PK	74.0	-14.4	1.89 V	203	50.3	9.3
4	10600.00	51.2 AV	54.0	-2.8	1.89 V	203	41.9	9.3
5	15900.00	62.1 PK	74.0	-11.9	3.00 V	181	50.2	11.9
6	15900.00	52.8 AV	54.0	-1.2	3.00 V	181	40.9	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 (VHT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	112.8 PK			1.91 H	151	72.1	40.7
2	*5320.00	106.6 AV			1.91 H	151	65.9	40.7
3	5350.00	64.9 PK	74.0	-9.1	1.91 H	151	62.1	2.8
4	5350.00	53.6 AV	54.0	-0.4	1.91 H	151	50.8	2.8
5	10640.00	60.7 PK	74.0	-13.3	1.79 H	310	51.4	9.3
6	10640.00	52.5 AV	54.0	-1.5	1.79 H	310	43.2	9.3
7	15960.00	62.7 PK	74.0	-11.3	3.20 H	238	50.6	12.1
8	15960.00	53.2 AV	54.0	-0.8	3.20 H	238	41.1	12.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	108.2 PK			3.89 V	127	67.5	40.7
2	*5320.00	102.0 AV			3.89 V	127	61.3	40.7
3	5350.00	58.4 PK	74.0	-15.6	3.89 V	127	55.6	2.8
4	5350.00	50.3 AV	54.0	-3.7	3.89 V	127	47.5	2.8
5	10640.00	59.6 PK	74.0	-14.4	1.79 V	207	50.3	9.3
6	10640.00	50.5 AV	54.0	-3.5	1.79 V	207	41.2	9.3
7	15960.00	62.1 PK	74.0	-11.9	3.02 V	193	50.0	12.1
8	15960.00	53.0 AV	54.0	-1.0	3.02 V	193	40.9	12.1

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 54 : 5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.6 PK	74.0	-19.4	2.72 H	154	52.0	2.6
2	5150.00	45.6 AV	54.0	-8.4	2.72 H	154	43.0	2.6
3	*5270.00	112.3 PK			2.72 H	154	71.4	40.9
4	*5270.00	106.0 AV			2.72 H	154	65.1	40.9
5	5350.00	58.0 PK	74.0	-16.0	2.72 H	154	55.2	2.8
6	5350.00	49.3 AV	54.0	-4.7	2.72 H	154	46.5	2.8
7	#10540.00	58.1 PK	68.2	-10.1	1.56 H	355	48.8	9.3
8	15810.00	62.1 PK	74.0	-11.9	3.33 H	256	50.3	11.8
9	15810.00	53.2 AV	54.0	-0.8	3.33 H	256	41.4	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	5150.00	51.2 PK	74.0	-22.8	3.76 V	126	48.6	2.6
2	5150.00	43.0 AV	54.0	-11.0	3.76 V	126	40.4	2.6
3	*5270.00	106.8 PK			3.76 V	126	65.9	40.9
4	*5270.00	100.4 AV			3.76 V	126	59.5	40.9
5	5350.00	53.6 PK	74.0	-20.4	3.76 V	126	50.8	2.8
6	5350.00	45.6 AV	54.0	-8.4	3.76 V	126	42.8	2.8
7	#10540.00	57.8 PK	68.2	-10.4	1.83 V	207	48.5	9.3
8	15810.00	61.4 PK	74.0	-12.6	3.06 V	193	49.6	11.8
9	15810.00	52.6 AV	54.0	-1.4	3.06 V	193	40.8	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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ac (VHT40)	Channel	CH 62 : 5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

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	107.9 PK			2.72 H	150	67.2	40.7
2	*5310.00	101.3 AV			2.72 H	150	60.6	40.7
3	5350.00	59.3 PK	74.0	-14.7	2.72 H	150	56.5	2.8
4	5350.00	50.8 AV	54.0	-3.2	2.72 H	150	48.0	2.8
5	10620.00	56.2 PK	74.0	-17.8	1.55 H	351	46.9	9.3
6	10620.00	49.5 AV	54.0	-4.5	1.55 H	351	40.2	9.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	103.5 PK			3.95 V	122	62.8	40.7
2	*5310.00	97.6 AV			3.95 V	122	56.9	40.7
3	5350.00	55.1 PK	74.0	-18.9	3.95 V	122	52.3	2.8
4	5350.00	46.8 AV	54.0	-7.2	3.95 V	122	44.0	2.8
5	10620.00	55.4 PK	74.0	-18.6	3.07 V	185	46.1	9.3
6	10620.00	49.3 AV	54.0	-4.7	3.07 V	185	40.0	9.3

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 (VHT80)	Channel	CH 58 : 5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.4 PK	74.0	-19.6	2.73 H	150	51.8	2.6
2	5150.00	44.9 AV	54.0	-9.1	2.73 H	150	42.3	2.6
3	*5290.00	105.3 PK			2.73 H	150	64.5	40.8
4	*5290.00	97.8 AV			2.73 H	150	57.0	40.8
5	5350.00	60.8 PK	74.0	-13.2	2.73 H	150	58.0	2.8
6	5350.00	53.5 AV	54.0	-0.5	2.73 H	150	50.7	2.8
7	#10580.00	54.0 PK	68.2	-14.2	1.71 H	345	44.8	9.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	51.7 PK	74.0	-22.3	3.99 V	120	49.1	2.6
2	5150.00	42.5 AV	54.0	-11.5	3.99 V	120	39.9	2.6
3	*5290.00	100.8 PK			3.99 V	120	60.0	40.8
4	*5290.00	93.8 AV			3.99 V	120	53.0	40.8
5	5350.00	54.5 PK	74.0	-19.5	3.99 V	120	51.7	2.8
6	5350.00	47.5 AV	54.0	-6.5	3.99 V	120	44.7	2.8
7	#10580.00	53.4 PK	68.2	-14.8	1.82 V	207	44.2	9.2

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 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Edison Lee		

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	59.3 PK	74.0	-14.7	2.77 H	144	56.2	3.1
2	5460.00	51.0 AV	54.0	-3.0	2.77 H	144	47.9	3.1
3	#5470.00	66.5 PK	68.2	-1.7	2.77 H	144	63.3	3.2
4	*5500.00	114.3 PK			2.77 H	144	73.0	41.3
5	*5500.00	107.7 AV			2.77 H	144	66.4	41.3
6	11000.00	64.8 PK	74.0	-9.2	1.57 H	334	55.4	9.4
7	11000.00	53.4 AV	54.0	-0.6	1.57 H	334	44.0	9.4
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	56.9 PK	74.0	-17.1	4.00 V	110	53.8	3.1
2	5460.00	46.9 AV	54.0	-7.1	4.00 V	110	43.8	3.1
3	#5470.00	62.7 PK	68.2	-5.5	4.00 V	110	59.5	3.2
4	*5500.00	110.4 PK			4.00 V	110	69.1	41.3
5	*5500.00	103.7 AV			4.00 V	110	62.4	41.3
6	11000.00	61.6 PK	74.0	-12.4	1.79 V	207	52.2	9.4
7	11000.00	51.4 AV	54.0	-2.6	1.79 V	207	42.0	9.4

Remarks:

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

RF Mode	802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	116.0 PK			2.81 H	146	74.6	41.4
2	*5580.00	109.1 AV			2.81 H	146	67.7	41.4
3	11160.00	62.9 PK	74.0	-11.1	1.60 H	337	53.3	9.6
4	11160.00	53.2 AV	54.0	-0.8	1.60 H	337	43.6	9.6
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	*5580.00	112.9 PK			3.94 V	115	71.5	41.4
2	*5580.00	106.1 AV			3.94 V	115	64.7	41.4
3	11160.00	59.6 PK	74.0	-14.4	1.71 V	209	50.0	9.6
4	11160.00	50.7 AV	54.0	-3.3	1.71 V	209	41.1	9.6

Remarks:

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

RF Mode	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	115.2 PK			2.82 H	144	72.8	42.4
2	*5700.00	108.0 AV			2.82 H	144	65.6	42.4
3	#5725.00	67.4 PK	68.2	-0.8	2.82 H	144	62.8	4.6
4	11400.00	60.6 PK	74.0	-13.4	1.67 H	312	50.8	9.8
5	11400.00	51.3 AV	54.0	-2.7	1.67 H	312	41.5	9.8
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	*5700.00	111.3 PK			3.94 V	114	68.9	42.4
2	*5700.00	104.1 AV			3.94 V	114	61.7	42.4
3	#5725.00	63.9 PK	68.2	-4.3	3.94 V	114	59.3	4.6
4	11400.00	59.0 PK	74.0	-15.0	1.72 V	211	49.2	9.8
5	11400.00	49.8 AV	54.0	-4.2	1.72 V	211	40.0	9.8

Remarks:

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

RF Mode	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	53.5 PK	68.2	-14.7	2.80 H	142	50.3	3.2
2	*5720.00	119.7 PK			2.80 H	142	77.3	42.4
3	*5720.00	112.6 AV			2.80 H	142	70.2	42.4
4	#5850.00	55.4 PK	68.2	-12.8	2.80 H	142	50.4	5.0
5	11440.00	63.1 PK	74.0	-10.9	1.67 H	312	53.3	9.8
6	11440.00	53.4 AV	54.0	-0.6	1.67 H	312	43.6	9.8
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	#5470.00	52.7 PK	68.2	-15.5	3.85 V	127	49.5	3.2
2	*5720.00	114.7 PK			3.85 V	127	72.3	42.4
3	*5720.00	108.1 AV			3.85 V	127	65.7	42.4
4	#5850.00	54.6 PK	68.2	-13.6	3.85 V	127	49.6	5.0
5	11440.00	59.8 PK	74.0	-14.2	1.72 V	205	50.0	9.8
6	11440.00	50.9 AV	54.0	-3.1	1.72 V	205	41.1	9.8

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	59.8 PK	74.0	-14.2	2.80 H	144	56.7	3.1
2	5460.00	51.2 AV	54.0	-2.8	2.80 H	144	48.1	3.1
3	#5470.00	66.6 PK	68.2	-1.6	2.80 H	144	63.4	3.2
4	*5500.00	114.9 PK			2.80 H	144	73.6	41.3
5	*5500.00	108.1 AV			2.80 H	144	66.8	41.3
6	11000.00	60.2 PK	74.0	-13.8	1.71 H	336	50.8	9.4
7	11000.00	50.7 AV	54.0	-3.3	1.71 H	336	41.3	9.4
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	57.1 PK	74.0	-16.9	3.87 V	129	54.0	3.1
2	5460.00	47.1 AV	54.0	-6.9	3.87 V	129	44.0	3.1
3	#5470.00	63.0 PK	68.2	-5.2	3.87 V	129	59.8	3.2
4	*5500.00	109.9 PK			3.87 V	129	68.6	41.3
5	*5500.00	103.5 AV			3.87 V	129	62.2	41.3
6	11000.00	58.6 PK	74.0	-15.4	1.72 V	209	49.2	9.4
7	11000.00	49.2 AV	54.0	-4.8	1.72 V	209	39.8	9.4

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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	116.6 PK			2.79 H	144	75.2	41.4
2	*5580.00	109.5 AV			2.79 H	144	68.1	41.4
3	11160.00	63.8 PK	74.0	-10.2	1.62 H	337	54.2	9.6
4	11160.00	52.8 AV	54.0	-1.2	1.62 H	337	43.2	9.6
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	*5580.00	112.4 PK			3.91 V	125	71.0	41.4
2	*5580.00	105.6 AV			3.91 V	125	64.2	41.4
3	11160.00	59.8 PK	74.0	-14.2	1.72 V	210	50.2	9.6
4	11160.00	50.4 AV	54.0	-3.6	1.72 V	210	40.8	9.6

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	112.4 PK			2.82 H	143	70.0	42.4
2	*5700.00	105.6 AV			2.82 H	143	63.2	42.4
3	#5725.00	66.9 PK	68.2	-1.3	2.82 H	143	62.3	4.6
4	11400.00	59.8 PK	74.0	-14.2	1.68 H	315	50.0	9.8
5	11400.00	50.6 AV	54.0	-3.4	1.68 H	315	40.8	9.8
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	*5700.00	109.1 PK			3.92 V	116	66.7	42.4
2	*5700.00	102.8 AV			3.92 V	116	60.4	42.4
3	#5725.00	61.1 PK	68.2	-7.1	3.92 V	116	56.5	4.6
4	11400.00	58.6 PK	74.0	-15.4	1.72 V	210	48.8	9.8
5	11400.00	49.5 AV	54.0	-4.5	1.72 V	210	39.7	9.8

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	52.9 PK	68.2	-15.3	2.86 H	140	49.7	3.2
2	*5720.00	117.9 PK			2.86 H	140	75.5	42.4
3	*5720.00	110.9 AV			2.86 H	140	68.5	42.4
4	#5850.00	54.3 PK	68.2	-13.9	2.86 H	140	49.3	5.0
5	11440.00	61.3 PK	74.0	-12.7	1.68 H	311	51.5	9.8
6	11440.00	52.8 AV	54.0	-1.2	1.68 H	311	43.0	9.8
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	#5470.00	52.1 PK	68.2	-16.1	3.90 V	116	48.9	3.2
2	*5720.00	115.1 PK			3.90 V	116	72.7	42.4
3	*5720.00	108.7 AV			3.90 V	116	66.3	42.4
4	#5850.00	54.0 PK	68.2	-14.2	3.90 V	116	49.0	5.0
5	11440.00	60.0 PK	74.0	-14.0	1.72 V	208	50.2	9.8
6	11440.00	51.2 AV	54.0	-2.8	1.72 V	208	41.4	9.8

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 102 : 5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	58.9 PK	74.0	-15.1	2.81 H	147	55.8	3.1
2	5460.00	51.4 AV	54.0	-2.6	2.81 H	147	48.3	3.1
3	#5470.00	66.3 PK	68.2	-1.9	2.81 H	147	63.1	3.2
4	*5510.00	112.1 PK			2.81 H	147	70.8	41.3
5	*5510.00	104.8 AV			2.81 H	147	63.5	41.3
6	11020.00	56.6 PK	74.0	-17.4	1.70 H	335	47.2	9.4
7	11020.00	47.4 AV	54.0	-6.6	1.70 H	335	38.0	9.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.9 PK	74.0	-18.1	3.81 V	123	52.8	3.1
2	5460.00	46.5 AV	54.0	-7.5	3.81 V	123	43.4	3.1
3	#5470.00	60.0 PK	68.2	-8.2	3.81 V	123	56.8	3.2
4	*5510.00	106.0 PK			3.81 V	123	64.7	41.3
5	*5510.00	99.5 AV			3.81 V	123	58.2	41.3
6	11020.00	56.4 PK	74.0	-17.6	1.72 V	212	47.0	9.4
7	11020.00	47.0 AV	54.0	-7.0	1.72 V	212	37.6	9.4

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 110 : 5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	60.9 PK	74.0	-13.1	2.96 H	143	57.8	3.1
2	5460.00	52.3 AV	54.0	-1.7	2.96 H	143	49.2	3.1
3	#5470.00	66.7 PK	68.2	-1.5	2.96 H	143	63.5	3.2
4	*5550.00	115.4 PK			2.96 H	143	74.1	41.3
5	*5550.00	107.5 AV			2.96 H	143	66.2	41.3
6	11100.00	59.3 PK	74.0	-14.7	1.72 H	337	49.8	9.5
7	11100.00	50.3 AV	54.0	-3.7	1.72 H	337	40.8	9.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.1 PK	74.0	-15.9	3.93 V	125	55.0	3.1
2	5460.00	48.7 AV	54.0	-5.3	3.93 V	125	45.6	3.1
3	#5470.00	59.7 PK	68.2	-8.5	3.93 V	125	56.5	3.2
4	*5550.00	111.6 PK			3.93 V	125	70.3	41.3
5	*5550.00	104.5 AV			3.93 V	125	63.2	41.3
6	11100.00	58.1 PK	74.0	-15.9	1.78 V	211	48.6	9.5
7	11100.00	49.0 AV	54.0	-5.0	1.78 V	211	39.5	9.5

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 134 : 5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	113.1 PK			2.78 H	146	70.9	42.2
2	*5670.00	106.1 AV			2.78 H	146	63.9	42.2
3	#5725.00	66.9 PK	68.2	-1.3	2.78 H	146	62.3	4.6
4	11340.00	58.2 PK	74.0	-15.8	1.75 H	336	48.2	10.0
5	11340.00	49.2 AV	54.0	-4.8	1.75 H	336	39.2	10.0
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	*5670.00	109.3 PK			3.94 V	124	67.1	42.2
2	*5670.00	102.8 AV			3.94 V	124	60.6	42.2
3	#5725.00	61.6 PK	68.2	-6.6	3.94 V	124	57.0	4.6
4	11340.00	57.8 PK	74.0	-16.2	1.77 V	208	47.8	10.0
5	11340.00	48.5 AV	54.0	-5.5	1.77 V	208	38.5	10.0

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 142 : 5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	53.2 PK	68.2	-15.0	2.92 H	141	50.0	3.2
2	*5710.00	115.9 PK			2.92 H	141	73.5	42.4
3	*5710.00	108.9 AV			2.92 H	141	66.5	42.4
4	#5850.00	55.3 PK	68.2	-12.9	2.92 H	141	50.3	5.0
5	11420.00	60.7 PK	74.0	-13.3	1.75 H	334	50.9	9.8
6	11420.00	52.8 AV	54.0	-1.2	1.75 H	334	43.0	9.8
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	#5470.00	52.7 PK	68.2	-15.5	3.88 V	114	49.5	3.2
2	*5710.00	113.4 PK			3.88 V	114	71.0	42.4
3	*5710.00	106.5 AV			3.88 V	114	64.1	42.4
4	#5850.00	54.6 PK	68.2	-13.6	3.88 V	114	49.6	5.0
5	11420.00	58.8 PK	74.0	-15.2	1.72 V	211	49.0	9.8
6	11420.00	50.7 AV	54.0	-3.3	1.72 V	211	40.9	9.8

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 106 : 5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.3 PK	74.0	-11.7	2.93 H	145	59.2	3.1
2	5460.00	53.8 AV	54.0	-0.2	2.93 H	145	50.7	3.1
3	#5470.00	64.0 PK	68.2	-4.2	2.93 H	145	60.8	3.2
4	*5530.00	107.0 PK			2.93 H	145	65.7	41.3
5	*5530.00	100.4 AV			2.93 H	145	59.1	41.3
6	11060.00	56.6 PK	74.0	-17.4	1.72 H	334	47.2	9.4
7	11060.00	47.2 AV	54.0	-6.8	1.72 H	334	37.8	9.4
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	58.6 PK	74.0	-15.4	3.99 V	124	55.5	3.1
2	5460.00	50.1 AV	54.0	-3.9	3.99 V	124	47.0	3.1
3	#5470.00	59.2 PK	68.2	-9.0	3.99 V	124	56.0	3.2
4	*5530.00	103.2 PK			3.99 V	124	61.9	41.3
5	*5530.00	96.7 AV			3.99 V	124	55.4	41.3
6	11060.00	56.4 PK	74.0	-17.6	1.82 V	210	47.0	9.4
7	11060.00	46.9 AV	54.0	-7.1	1.82 V	210	37.5	9.4

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 122 : 5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	112.1 PK			2.89 H	142	70.5	41.6
2	*5610.00	104.7 AV			2.89 H	142	63.1	41.6
3	#5725.00	67.6 PK	68.2	-0.6	2.89 H	142	63.0	4.6
4	11220.00	58.8 PK	74.0	-15.2	1.72 H	335	49.0	9.8
5	11220.00	49.6 AV	54.0	-4.4	1.72 H	335	39.8	9.8
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	*5610.00	109.8 PK			3.98 V	114	68.2	41.6
2	*5610.00	103.1 AV			3.98 V	114	61.5	41.6
3	#5725.00	63.6 PK	68.2	-4.6	3.98 V	114	59.0	4.6
4	11220.00	57.6 PK	74.0	-16.4	1.72 V	212	47.8	9.8
5	11220.00	48.4 AV	54.0	-5.6	1.72 V	212	38.6	9.8

Remarks:

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

RF Mode	802.11ac (VHT80)	Channel	CH 138 : 5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.6 PK	68.2	-9.6	2.86 H	141	55.4	3.2
2	*5690.00	112.8 PK			2.86 H	141	70.4	42.4
3	*5690.00	106.2 AV			2.86 H	141	63.8	42.4
4	#5850.00	66.8 PK	68.2	-1.4	2.86 H	141	61.8	5.0
5	11380.00	59.1 PK	74.0	-14.9	1.64 H	311	49.2	9.9
6	11380.00	52.4 AV	54.0	-1.6	1.64 H	311	42.5	9.9
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	#5470.00	54.9 PK	68.2	-13.3	3.98 V	115	51.7	3.2
2	*5690.00	110.4 PK			3.98 V	115	68.0	42.4
3	*5690.00	103.3 AV			3.98 V	115	60.9	42.4
4	#5850.00	63.2 PK	68.2	-5.0	3.98 V	115	58.2	5.0
5	11380.00	57.7 PK	74.0	-16.3	1.75 V	208	47.8	9.9
6	11380.00	49.9 AV	54.0	-4.1	1.75 V	208	40.0	9.9

Remarks:

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

RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	#5638.80	56.7 PK	68.2	-11.5	2.77 H	142	52.6	4.1
2	*5745.00	118.5 PK			2.77 H	142	76.1	42.4
3	*5745.00	111.5 AV			2.77 H	142	69.1	42.4
4	#5945.60	56.8 PK	68.2	-11.4	2.77 H	142	52.1	4.7
5	11490.00	62.6 PK	74.0	-11.4	1.55 H	334	53.0	9.6
6	11490.00	52.9 AV	54.0	-1.1	1.55 H	334	43.3	9.6
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	#5642.80	54.7 PK	68.2	-13.5	4.00 V	115	50.6	4.1
2	*5745.00	114.5 PK			4.00 V	115	72.1	42.4
3	*5745.00	107.8 AV			4.00 V	115	65.4	42.4
4	#5954.80	54.1 PK	68.2	-14.1	4.00 V	115	49.4	4.7
5	11490.00	59.9 PK	74.0	-14.1	1.77 V	211	50.3	9.6
6	11490.00	51.0 AV	54.0	-3.0	1.77 V	211	41.4	9.6

Remarks:

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

RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5623.20	54.9 PK	68.2	-13.3	2.76 H	144	51.2	3.7
2	*5785.00	117.2 PK			2.76 H	144	74.7	42.5
3	*5785.00	110.3 AV			2.76 H	144	67.8	42.5
4	#5939.60	55.5 PK	68.2	-12.7	2.76 H	144	50.8	4.7
5	11570.00	62.0 PK	74.0	-12.0	1.54 H	334	52.2	9.8
6	11570.00	53.1 AV	54.0	-0.9	1.54 H	334	43.3	9.8
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	#5630.00	53.1 PK	68.2	-15.1	3.97 V	115	49.3	3.8
2	*5785.00	115.0 PK			3.97 V	115	72.5	42.5
3	*5785.00	108.3 AV			3.97 V	115	65.8	42.5
4	#5972.00	54.0 PK	68.2	-14.2	3.97 V	115	49.3	4.7
5	11570.00	59.8 PK	74.0	-14.2	1.75 V	209	50.0	9.8
6	11570.00	51.3 AV	54.0	-2.7	1.75 V	209	41.5	9.8

Remarks:

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

RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	#5647.60	54.3 PK	68.2	-13.9	2.91 H	139	50.2	4.1
2	*5825.00	117.4 PK			2.91 H	139	74.7	42.7
3	*5825.00	110.8 AV			2.91 H	139	68.1	42.7
4	#5929.20	56.5 PK	68.2	-11.7	2.39 H	139	51.8	4.7
5	11650.00	62.2 PK	74.0	-11.8	1.77 H	312	52.2	10.0
6	11650.00	52.9 AV	54.0	-1.1	1.77 H	312	42.9	10.0
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	#5612.00	52.9 PK	68.2	-15.3	3.94 V	111	49.2	3.7
2	*5825.00	114.6 PK			3.94 V	111	71.9	42.7
3	*5825.00	108.0 AV			3.94 V	111	65.3	42.7
4	#5944.40	55.2 PK	68.2	-13.0	3.94 V	111	50.5	4.7
5	11650.00	60.1 PK	74.0	-13.9	1.80 V	211	50.1	10.0
6	11650.00	51.0 AV	54.0	-3.0	1.80 V	211	41.0	10.0

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 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5631.20	56.1 PK	68.2	-12.1	2.78 H	143	52.3	3.8
2	*5745.00	117.6 PK			2.78 H	143	75.2	42.4
3	*5745.00	111.0 AV			2.78 H	143	68.6	42.4
4	#5952.00	56.1 PK	68.2	-12.1	2.78 H	143	51.4	4.7
5	11490.00	62.7 PK	74.0	-11.3	1.55 H	335	53.1	9.6
6	11490.00	53.1 AV	54.0	-0.9	1.55 H	335	43.5	9.6
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	#5635.60	53.4 PK	68.2	-14.8	3.95 V	114	49.6	3.8
2	*5745.00	114.0 PK			3.95 V	114	71.6	42.4
3	*5745.00	106.9 AV			3.95 V	114	64.5	42.4
4	#5974.00	53.7 PK	68.2	-14.5	3.95 V	114	49.0	4.7
5	11490.00	59.8 PK	74.0	-14.2	1.82 V	211	50.2	9.6
6	11490.00	51.2 AV	54.0	-2.8	1.82 V	211	41.6	9.6

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 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	#5621.60	56.2 PK	68.2	-12.0	2.85 H	143	52.5	3.7
2	*5785.00	117.0 PK			2.85 H	143	74.5	42.5
3	*5785.00	110.1 AV			2.85 H	143	67.6	42.5
4	#5943.20	56.1 PK	68.2	-12.1	2.85 H	143	51.4	4.7
5	11570.00	63.5 PK	74.0	-10.5	1.78 H	310	53.7	9.8
6	11570.00	53.5 AV	54.0	-0.5	1.78 H	310	43.7	9.8
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	#5632.40	53.0 PK	68.2	-15.2	3.95 V	118	49.2	3.8
2	*5785.00	114.3 PK			3.95 V	118	71.8	42.5
3	*5785.00	107.6 AV			3.95 V	118	65.1	42.5
4	#5942.80	54.0 PK	68.2	-14.2	3.95 V	118	49.3	4.7
5	11570.00	61.0 PK	74.0	-13.0	1.85 V	205	51.2	9.8
6	11570.00	51.3 AV	54.0	-2.7	1.85 V	205	41.5	9.8

Remarks:

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

RF Mode	802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	#5620.00	55.4 PK	68.2	-12.8	2.82 H	142	51.7	3.7
2	*5825.00	117.5 PK			2.82 H	142	74.8	42.7
3	*5825.00	110.5 AV			2.82 H	142	67.8	42.7
4	#5938.80	56.3 PK	68.2	-11.9	2.82 H	142	51.6	4.7
5	11650.00	63.0 PK	74.0	-11.0	1.78 H	310	53.0	10.0
6	11650.00	52.8 AV	54.0	-1.2	1.78 H	310	42.8	10.0
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	#5641.60	52.8 PK	68.2	-15.4	3.92 V	110	48.7	4.1
2	*5825.00	113.9 PK			3.92 V	110	71.2	42.7
3	*5825.00	107.2 AV			3.92 V	110	64.5	42.7
4	#5955.60	54.0 PK	68.2	-14.2	3.92 V	110	49.3	4.7
5	11650.00	60.2 PK	74.0	-13.8	1.82 V	210	50.2	10.0
6	11650.00	50.5 AV	54.0	-3.5	1.82 V	210	40.5	10.0

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 151 : 5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.00	58.4 PK	68.2	-9.8	3.06 H	138	54.2	4.2
2	*5755.00	114.2 PK			3.06 H	138	71.8	42.4
3	*5755.00	107.6 AV			3.06 H	138	65.2	42.4
4	#5931.20	53.7 PK	68.2	-14.5	3.06 H	138	49.0	4.7
5	11510.00	61.5 PK	74.0	-12.5	1.76 H	310	51.8	9.7
6	11510.00	52.9 AV	54.0	-1.1	1.76 H	310	43.2	9.7
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	#5641.60	55.7 PK	68.2	-12.5	3.99 V	117	51.6	4.1
2	*5755.00	112.1 PK			3.99 V	117	69.7	42.4
3	*5755.00	105.5 AV			3.99 V	117	63.1	42.4
4	#5940.40	54.6 PK	68.2	-13.6	3.99 V	117	49.9	4.7
5	11510.00	59.7 PK	74.0	-14.3	1.80 V	208	50.0	9.7
6	11510.00	51.2 AV	54.0	-2.8	1.80 V	208	41.5	9.7

Remarks:

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

RF Mode	802.11ac (VHT40)	Channel	CH 159 : 5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.00	55.7 PK	68.2	-12.5	2.87 H	143	51.5	4.2
2	*5795.00	114.2 PK			2.87 H	143	71.6	42.6
3	*5795.00	107.5 AV			2.87 H	143	64.9	42.6
4	#5934.80	56.0 PK	68.2	-12.2	2.87 H	143	51.3	4.7
5	11590.00	62.5 PK	74.0	-11.5	1.75 H	310	52.5	10.0
6	11590.00	53.7 AV	54.0	-0.3	1.75 H	310	43.7	10.0
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	#5648.40	53.4 PK	68.2	-14.8	3.98 V	115	49.2	4.2
2	*5795.00	112.0 PK			3.98 V	115	69.4	42.6
3	*5795.00	104.8 AV			3.98 V	115	62.2	42.6
4	#5932.80	54.2 PK	68.2	-14.0	3.98 V	115	49.5	4.7
5	11590.00	60.2 PK	74.0	-13.8	1.82 V	210	50.2	10.0
6	11590.00	51.7 AV	54.0	-2.3	1.82 V	210	41.7	10.0

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 155 : 5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	#5647.60	67.0 PK	68.2	-1.2	2.82 H	139	62.9	4.1
2	*5775.00	110.1 PK			2.82 H	139	67.6	42.5
3	*5775.00	104.2 AV			2.82 H	139	61.7	42.5
4	#5926.00	64.2 PK	68.2	-4.0	2.82 H	139	59.5	4.7
5	11550.00	58.0 PK	74.0	-16.0	1.72 H	310	48.2	9.8
6	11550.00	51.3 AV	54.0	-2.7	1.72 H	310	41.5	9.8
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	#5649.20	62.5 PK	68.2	-5.7	3.96 V	115	58.3	4.2
2	*5775.00	107.1 PK			3.96 V	115	64.6	42.5
3	*5775.00	101.4 AV			3.96 V	115	58.9	42.5
4	#5926.40	58.4 PK	68.2	-9.8	3.96 V	115	53.7	4.7
5	11550.00	57.4 PK	74.0	-16.6	1.79 V	208	47.6	9.8
6	11550.00	50.0 AV	54.0	-4.0	1.79 V	208	40.2	9.8

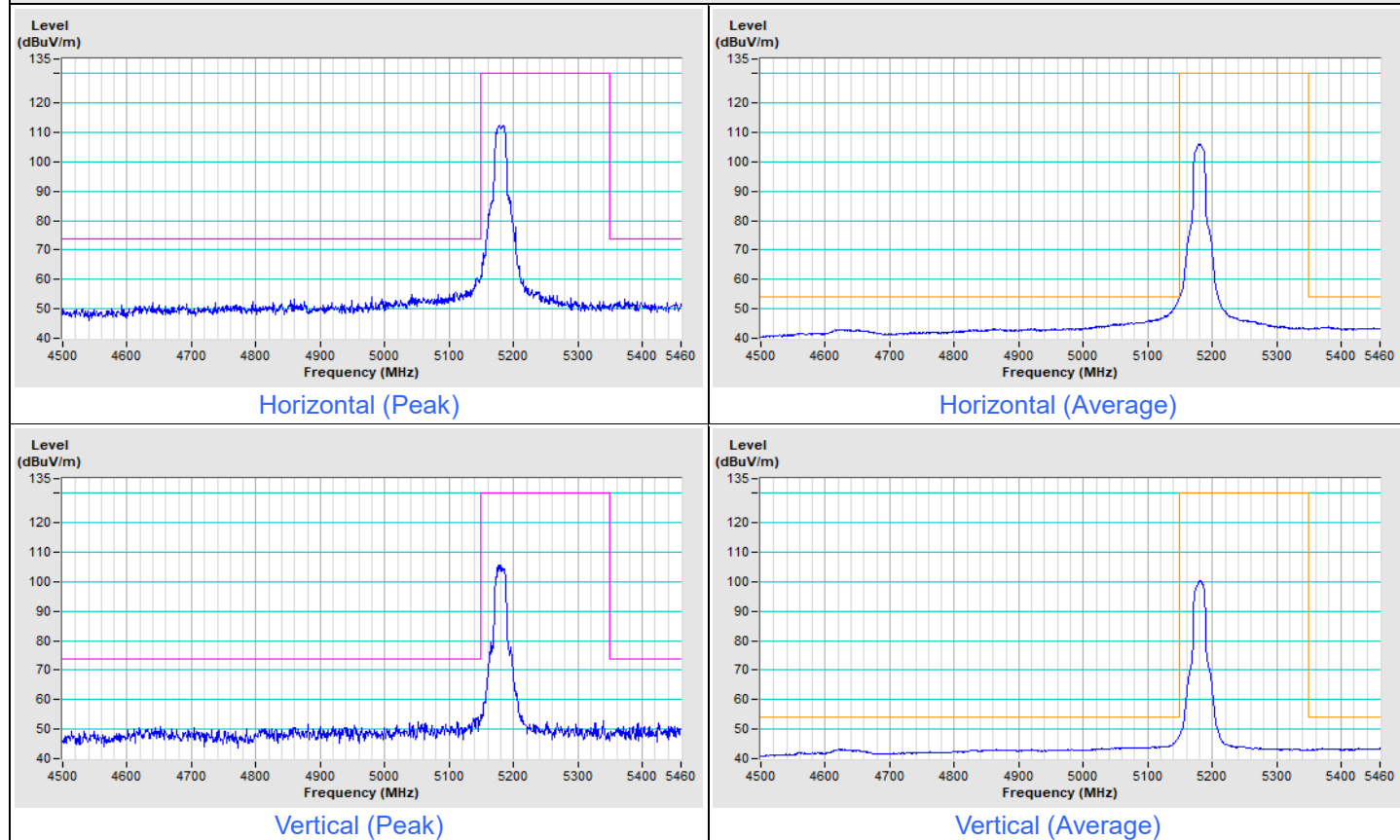
Remarks:

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

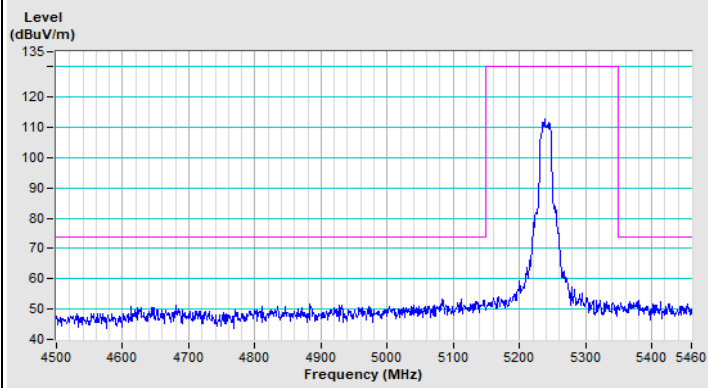
Plot of Band Edge

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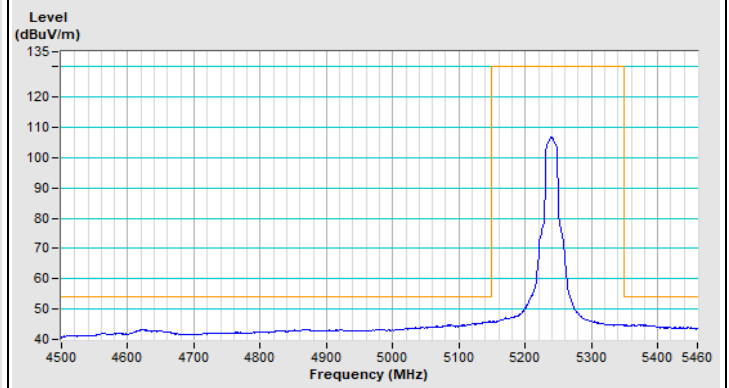
802.11a Channel 36



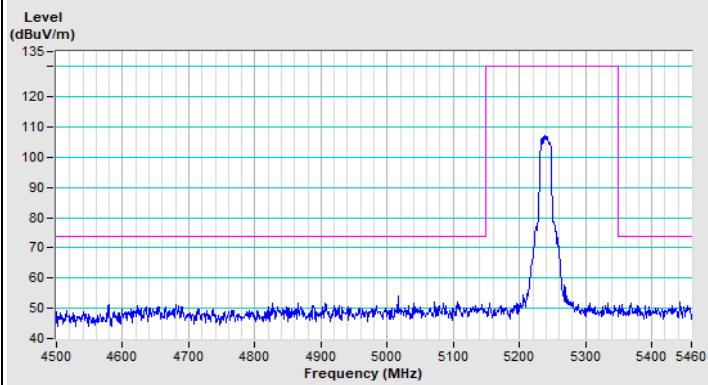
802.11a Channel 48



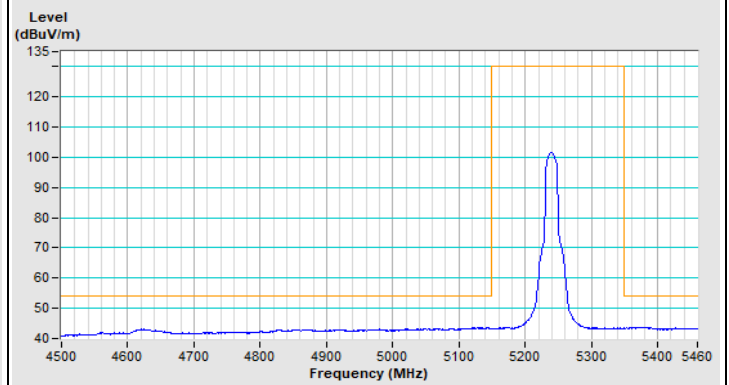
Horizontal (Peak)



Horizontal (Average)



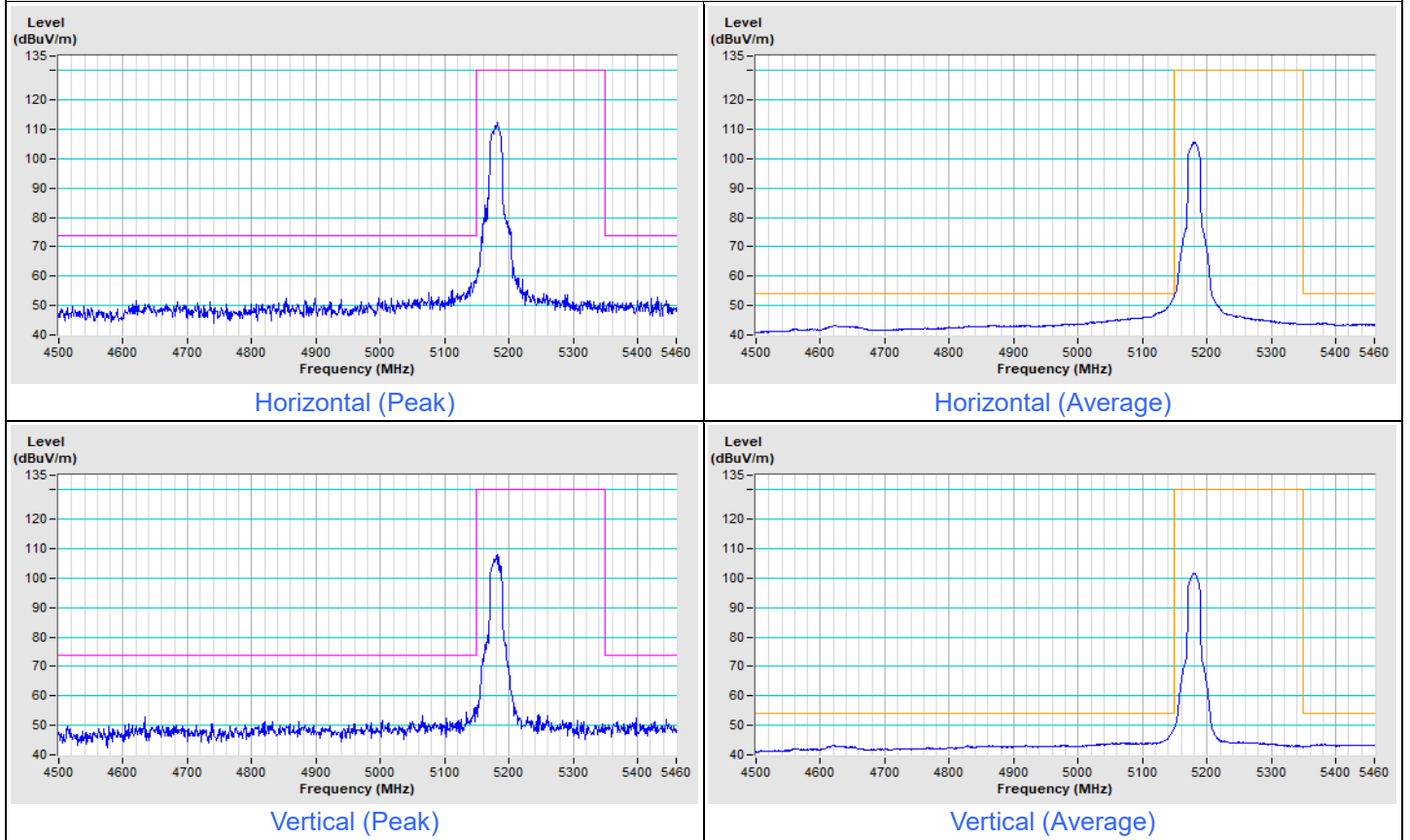
Vertical (Peak)



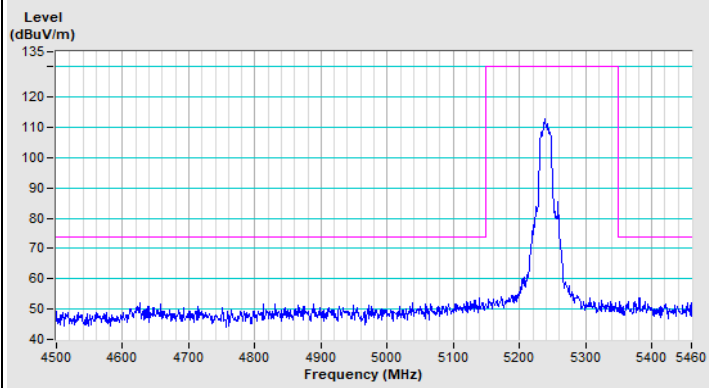
Vertical (Average)

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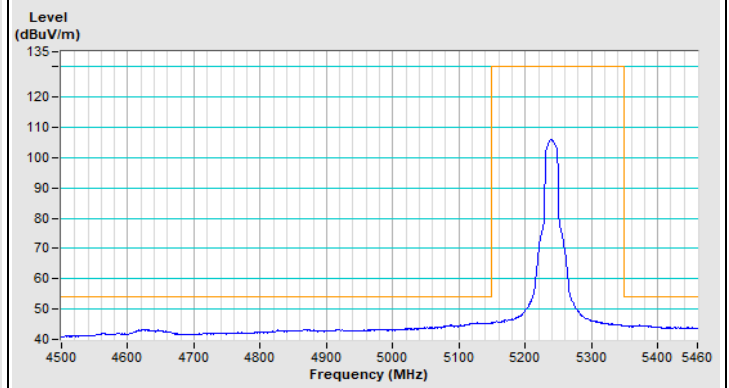
802.11ac (VHT20) Channel 36



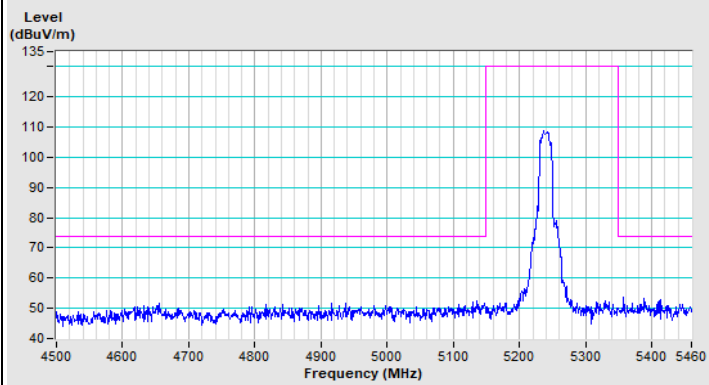
802.11ac (VHT20) Channel 48



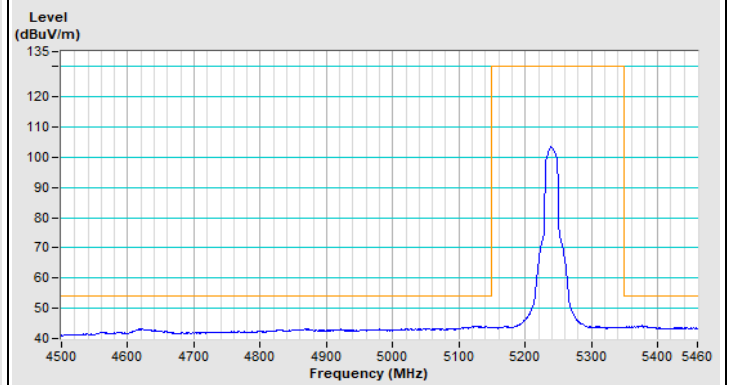
Horizontal (Peak)



Horizontal (Average)



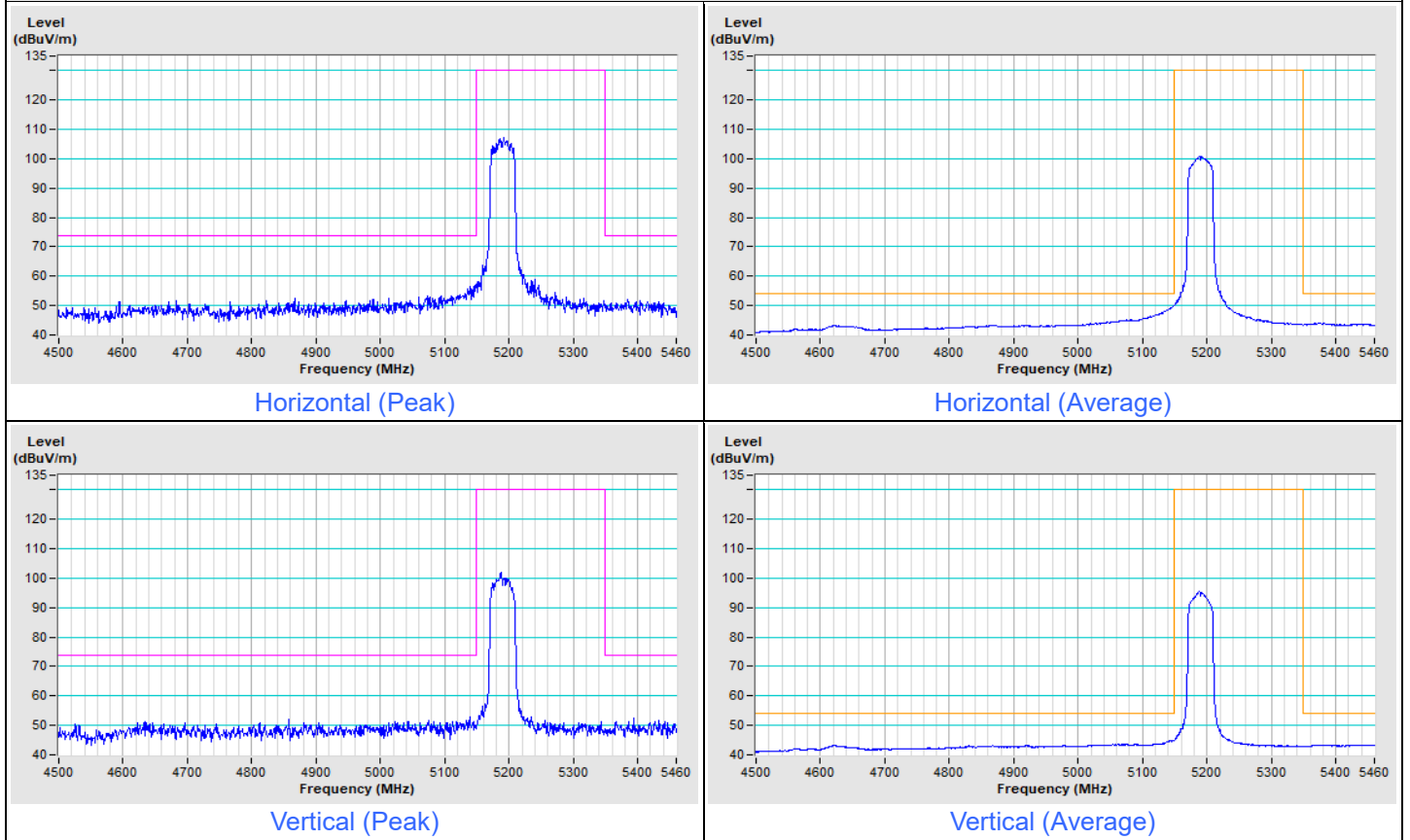
Vertical (Peak)

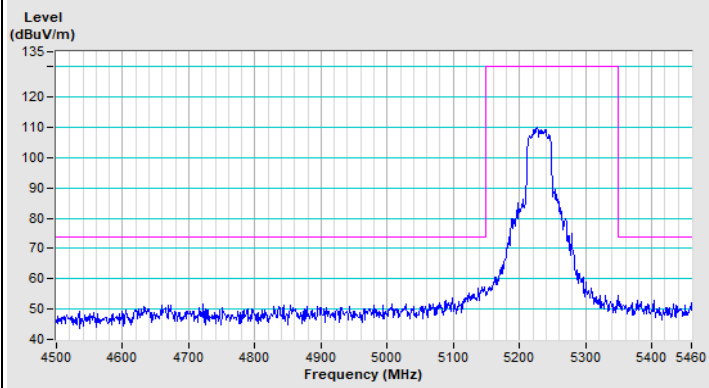


Vertical (Average)

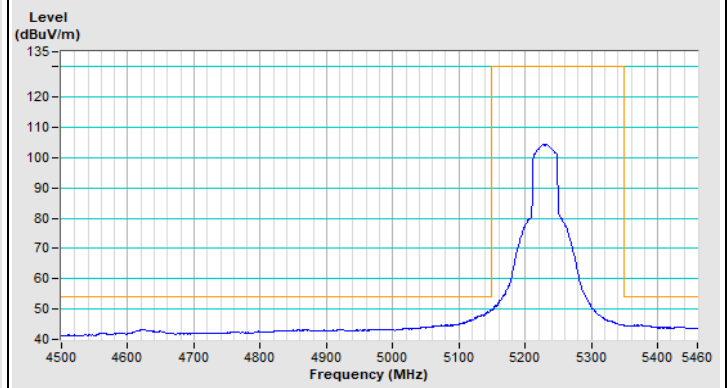
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
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802.11ac (VHT40) Channel 38

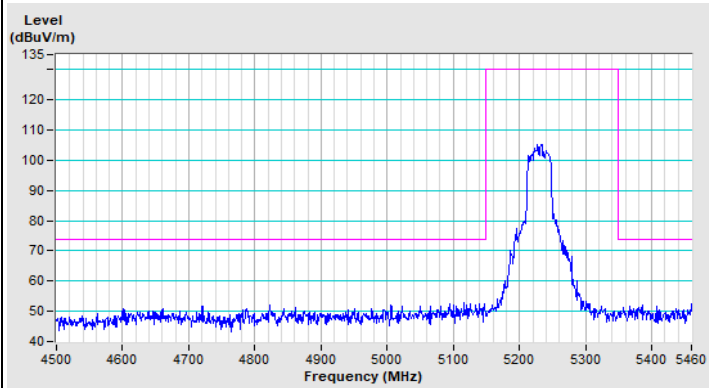


802.11ac (VHT40) Channel 46

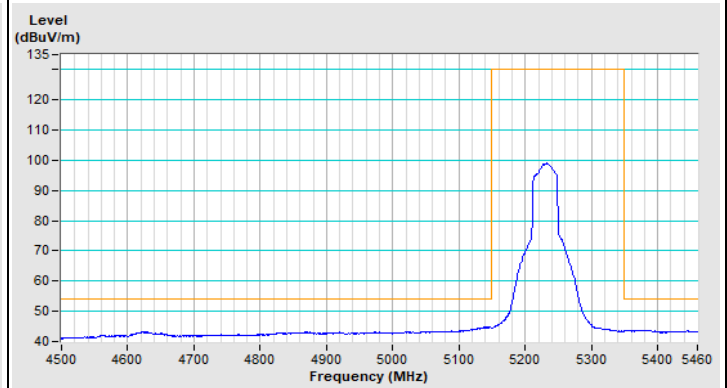
Horizontal (Peak)



Horizontal (Average)



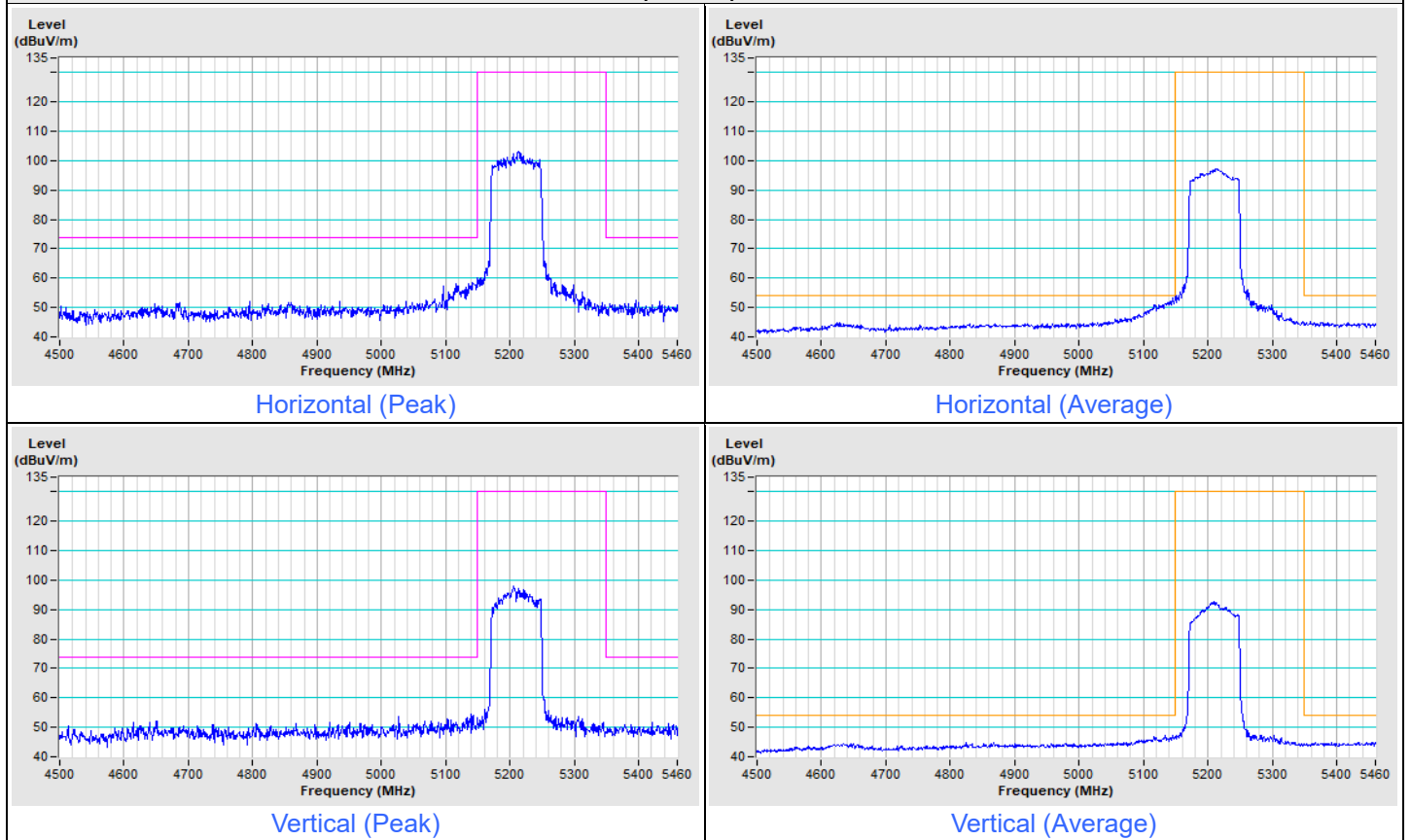
Vertical (Peak)



Vertical (Average)

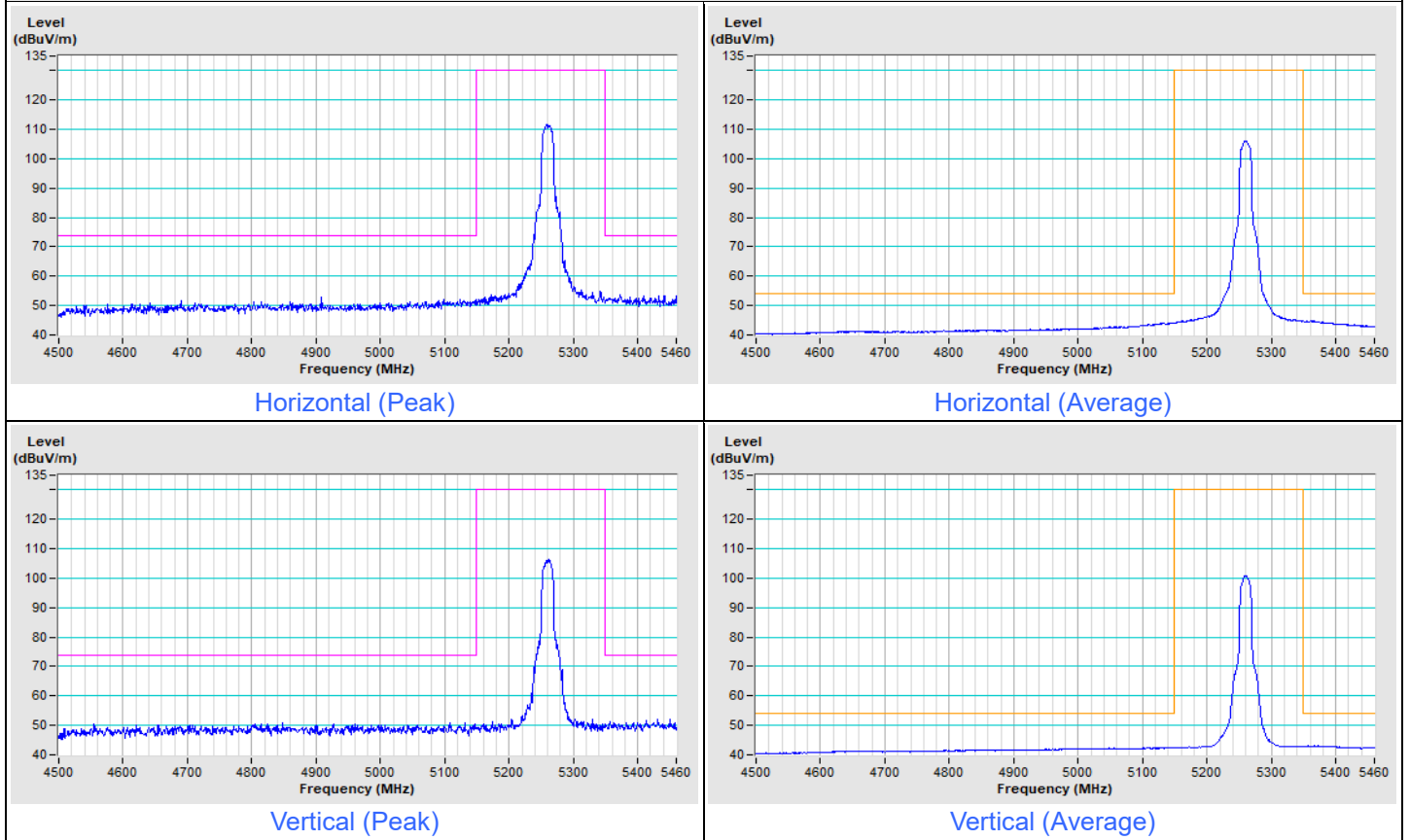
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
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802.11ac (VHT80) Channel 42

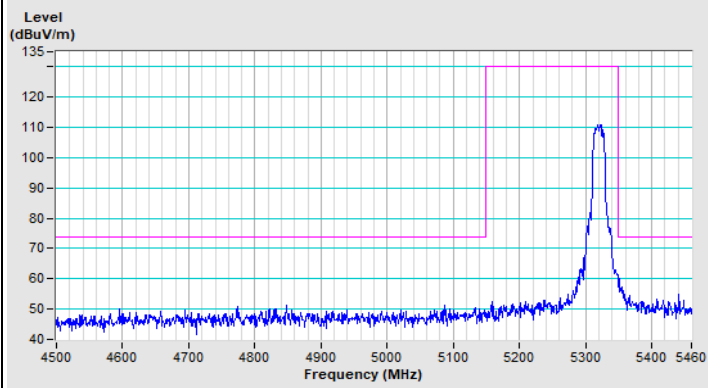


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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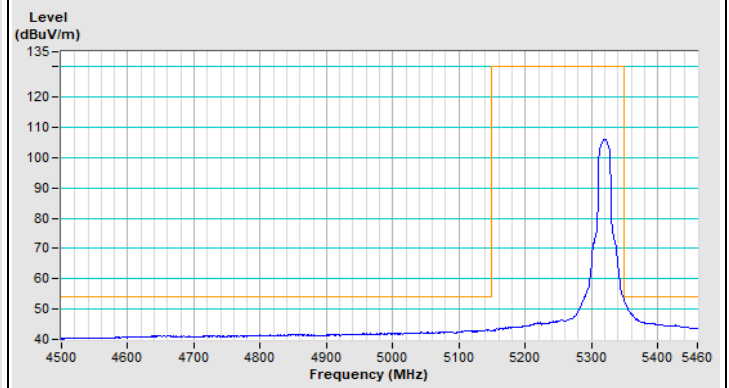
802.11a Channel 52



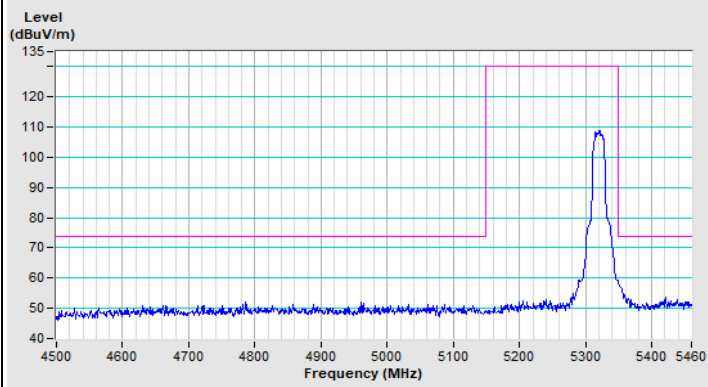
802.11a Channel 64



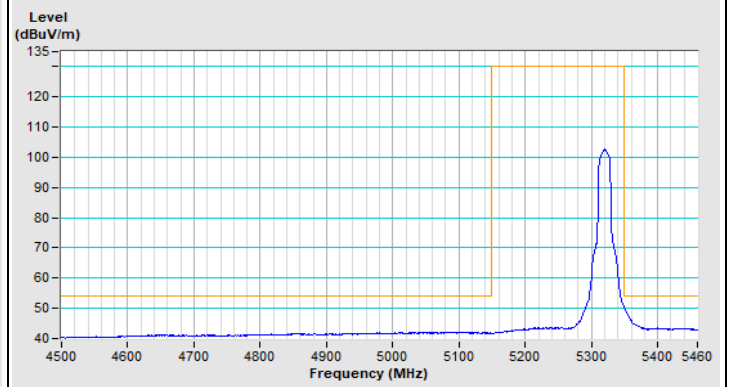
Horizontal (Peak)



Horizontal (Average)



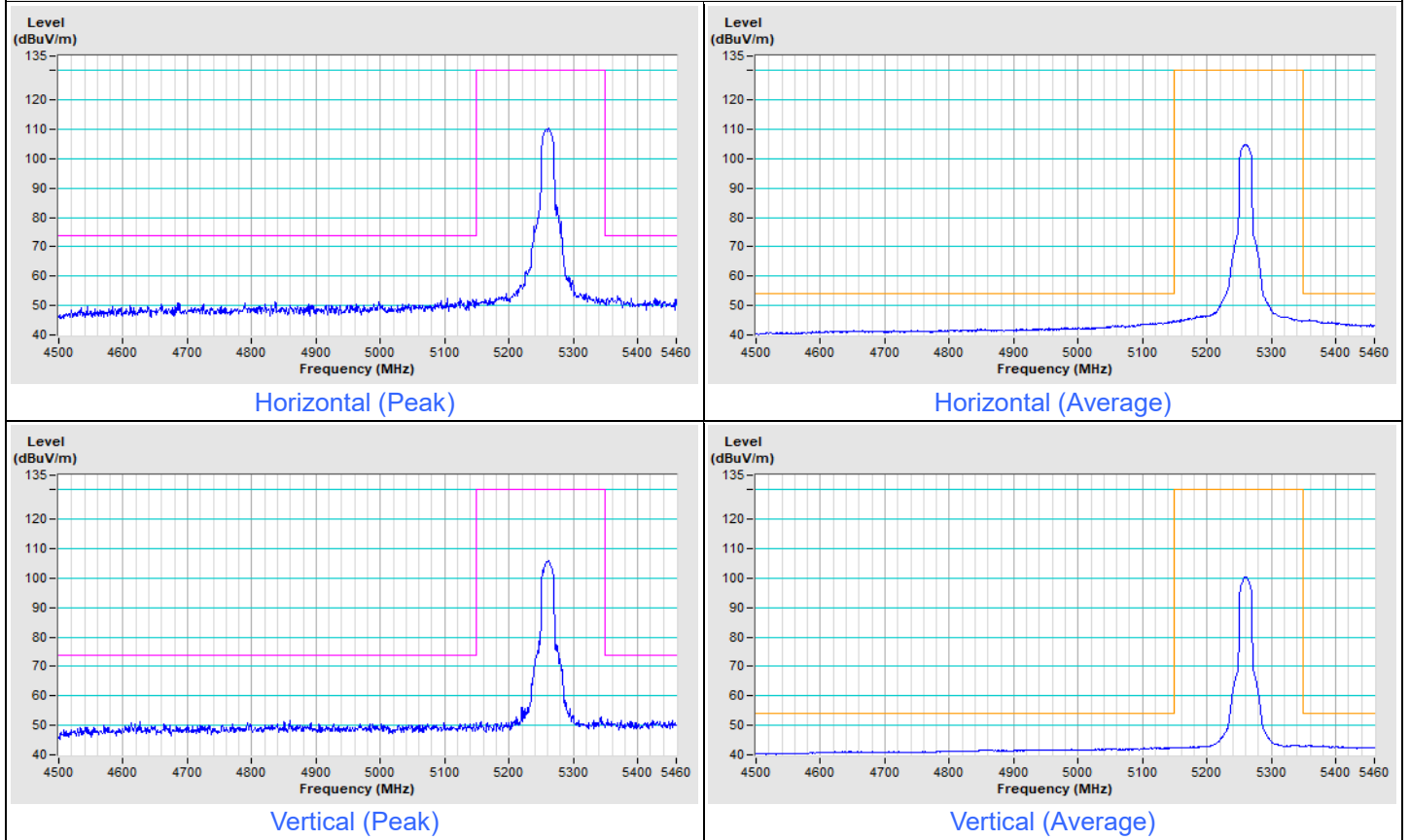
Vertical (Peak)



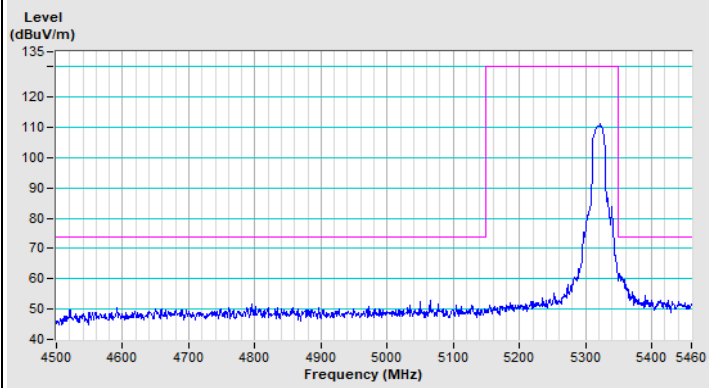
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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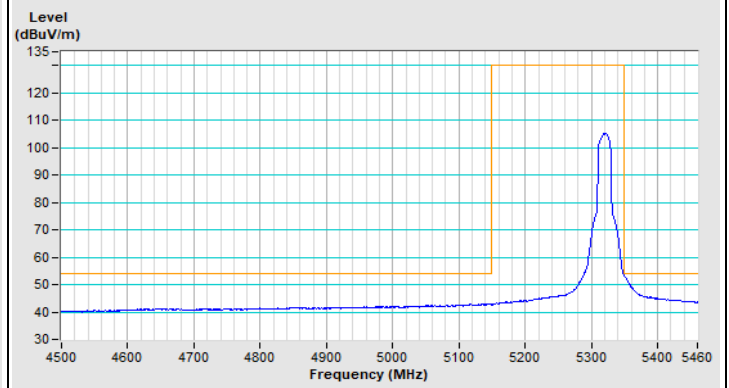
802.11ac (VHT20) Channel 52



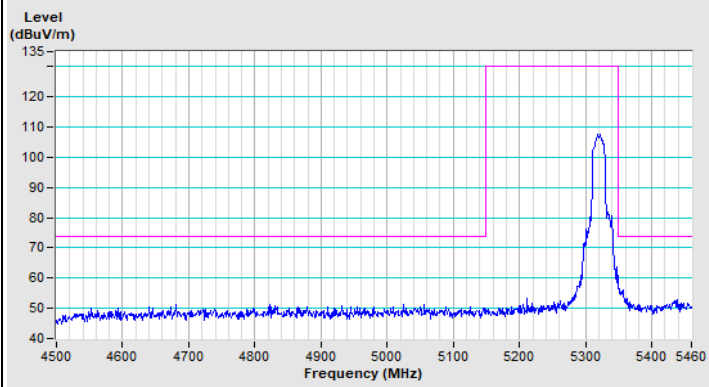
802.11ac (VHT20) Channel 64



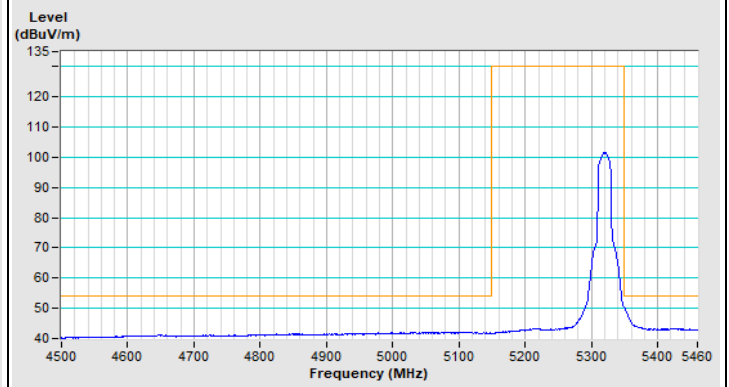
Horizontal (Peak)



Horizontal (Average)



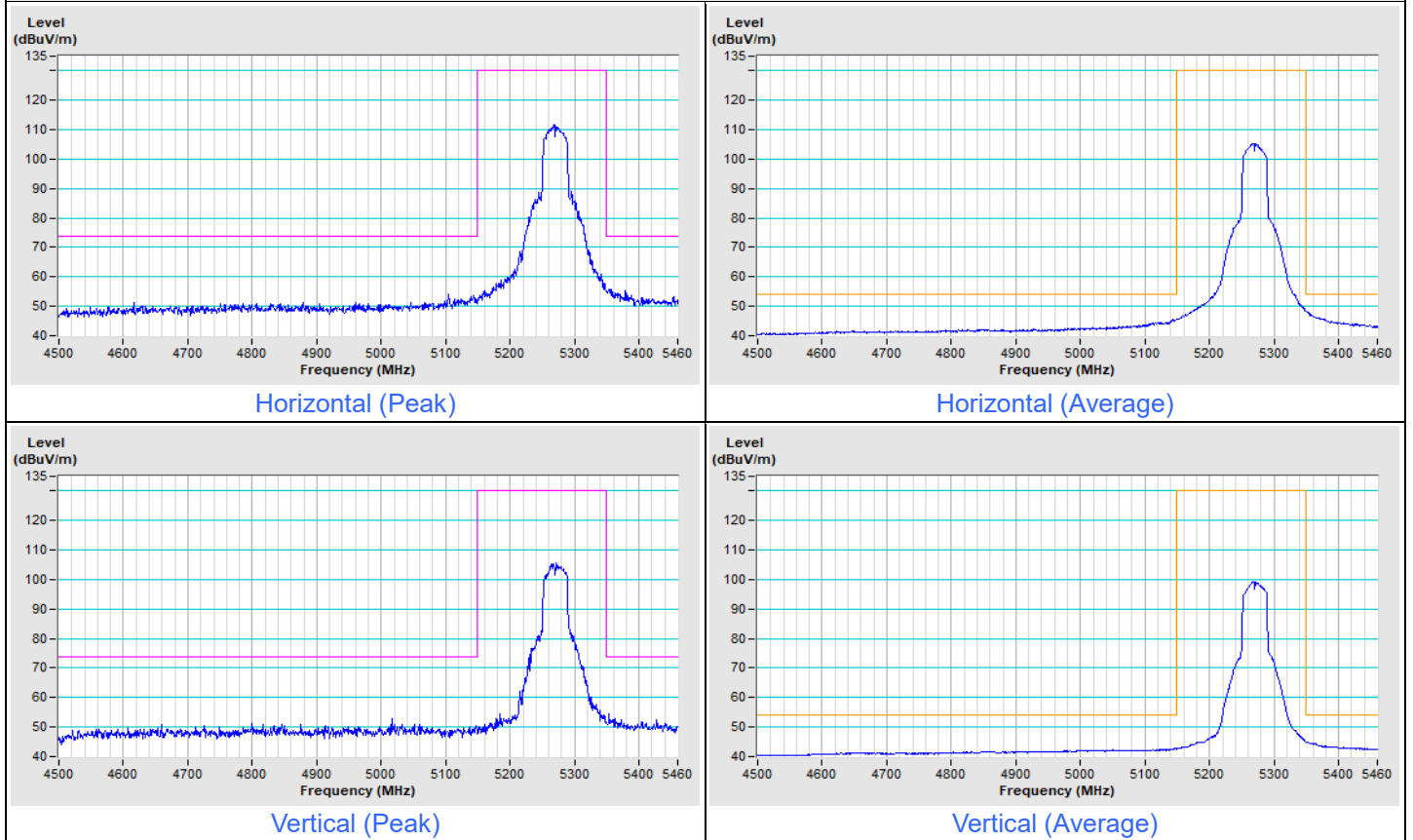
Vertical (Peak)



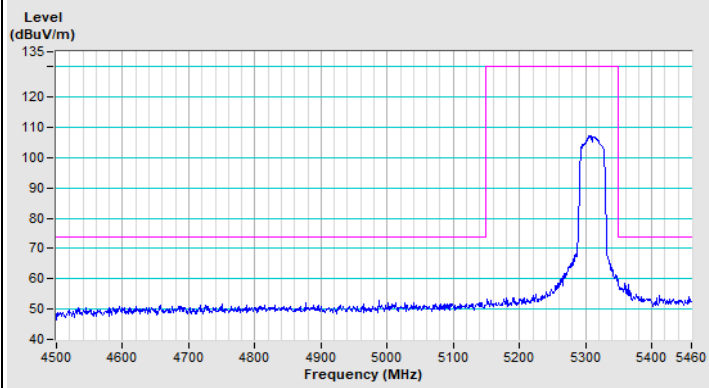
Vertical (Average)

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
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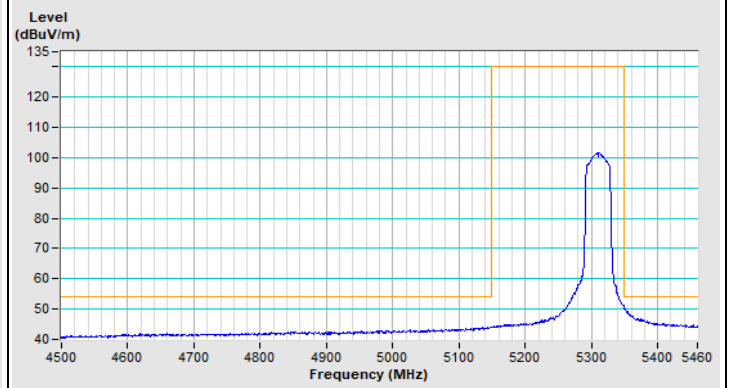
802.11ac (VHT40) Channel 54



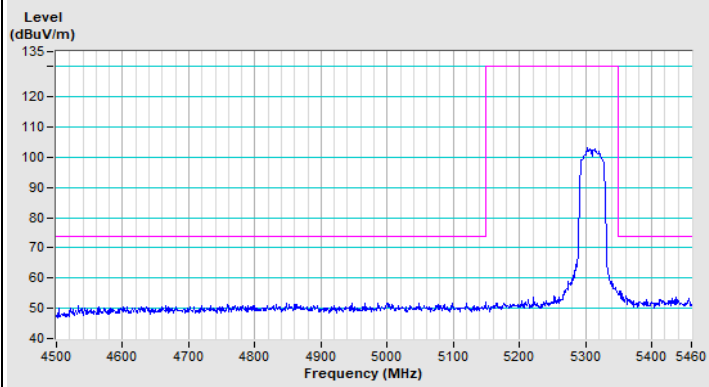
802.11ac (VHT40) Channel 62



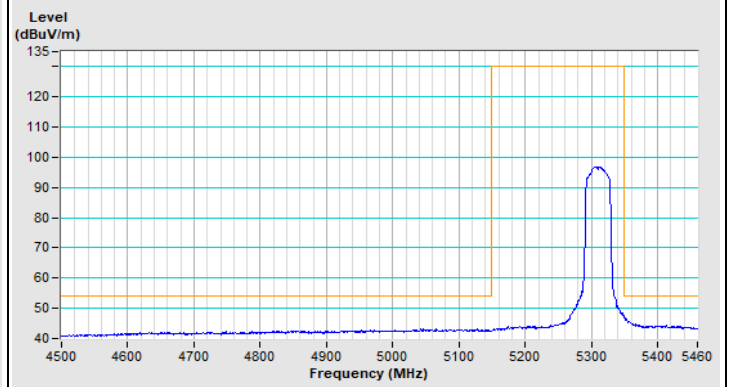
Horizontal (Peak)



Horizontal (Average)



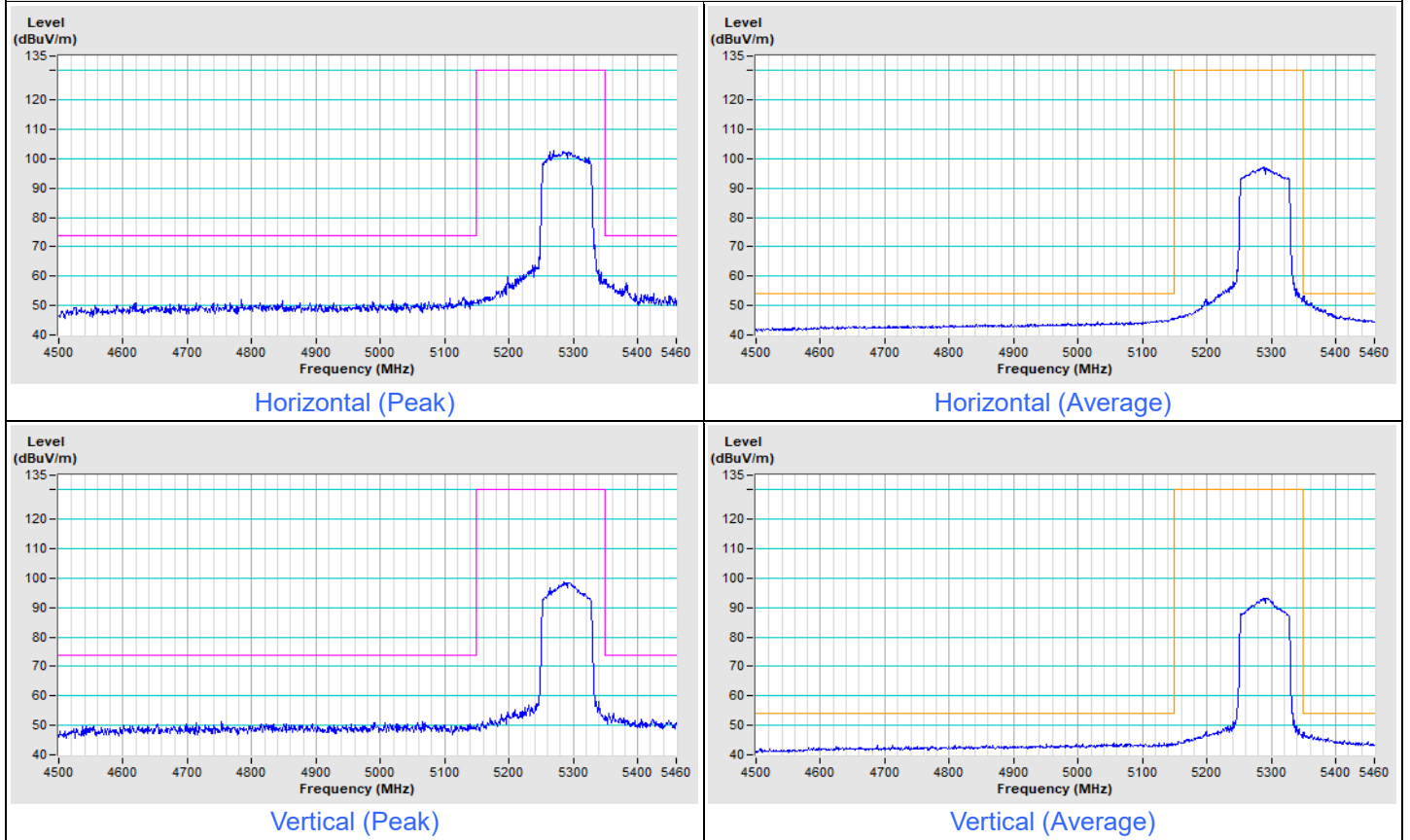
Vertical (Peak)



Vertical (Average)

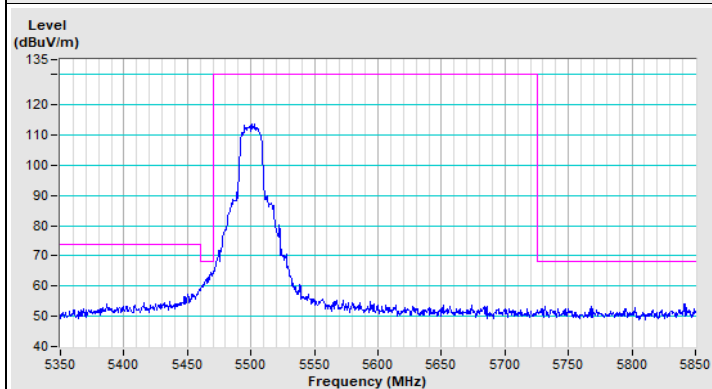
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
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802.11ac (VHT80) Channel 58

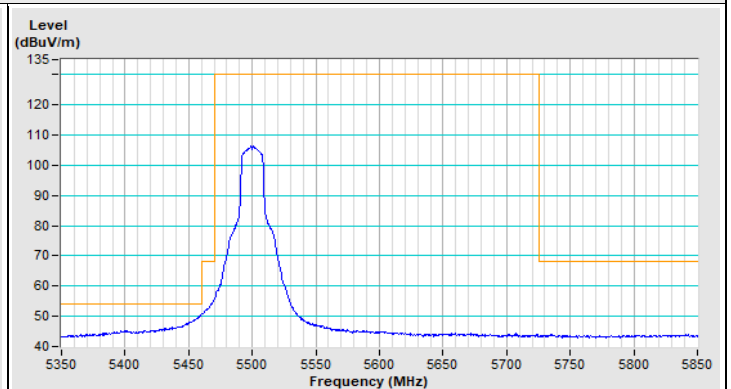


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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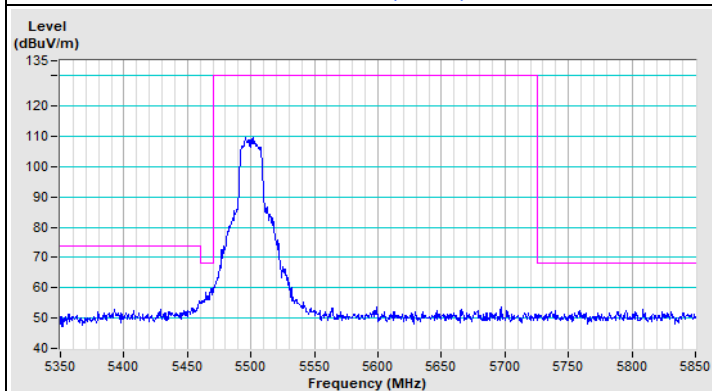
802.11a Channel 100



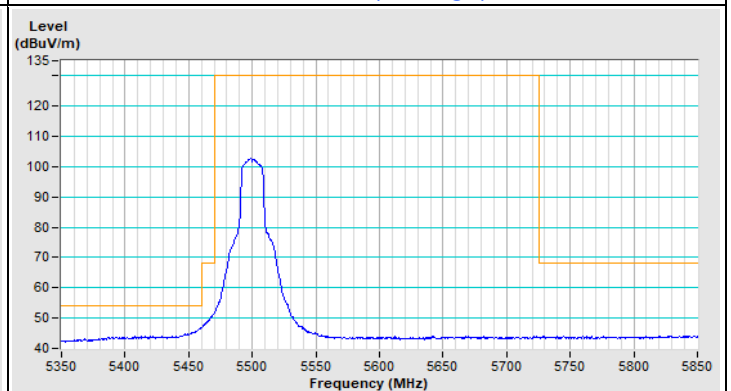
Horizontal (Peak)



Horizontal (Average)

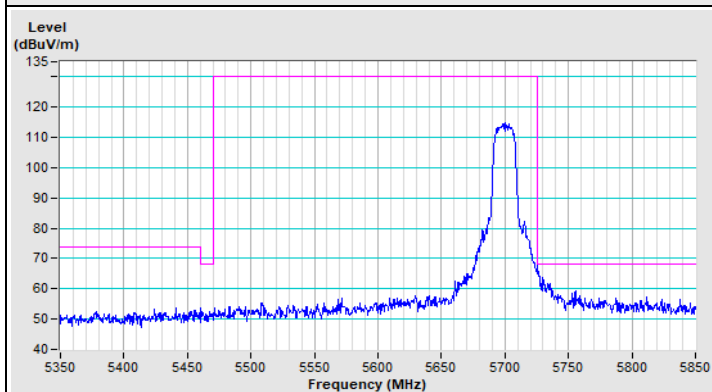


Vertical (Peak)

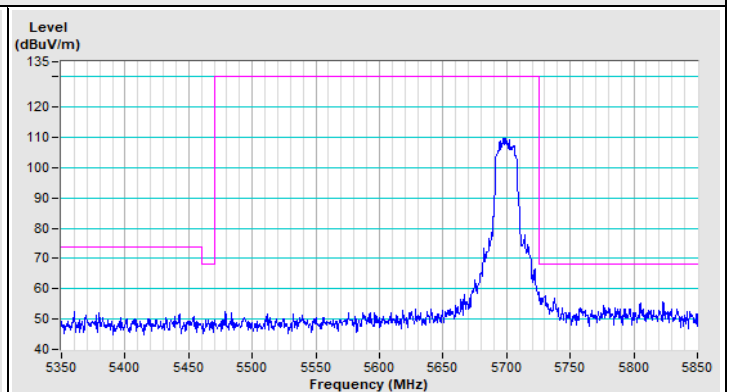


Vertical (Average)

802.11a Channel 140



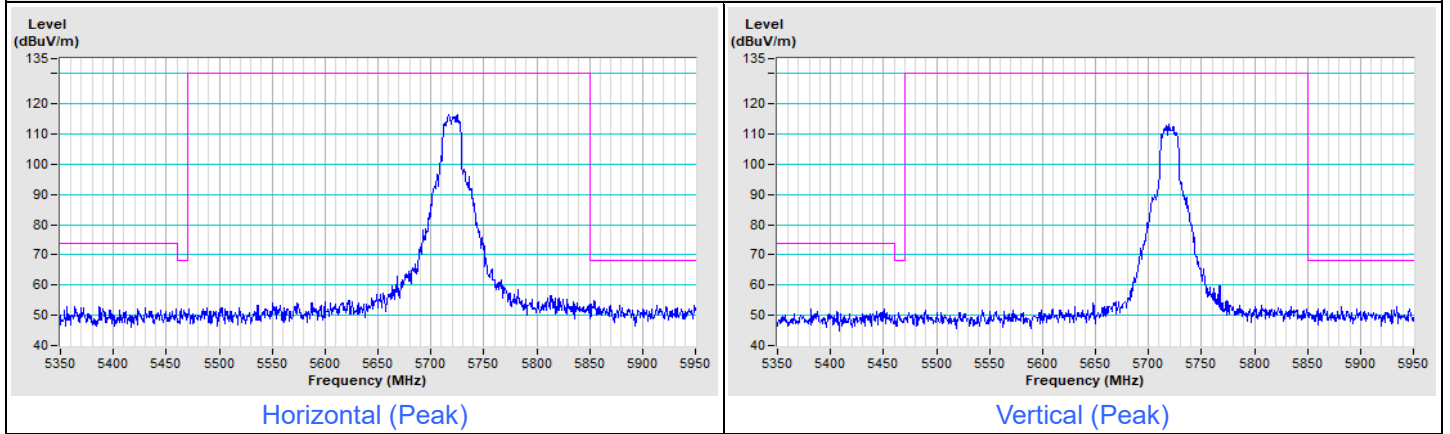
Horizontal (Peak)



Vertical (Peak)

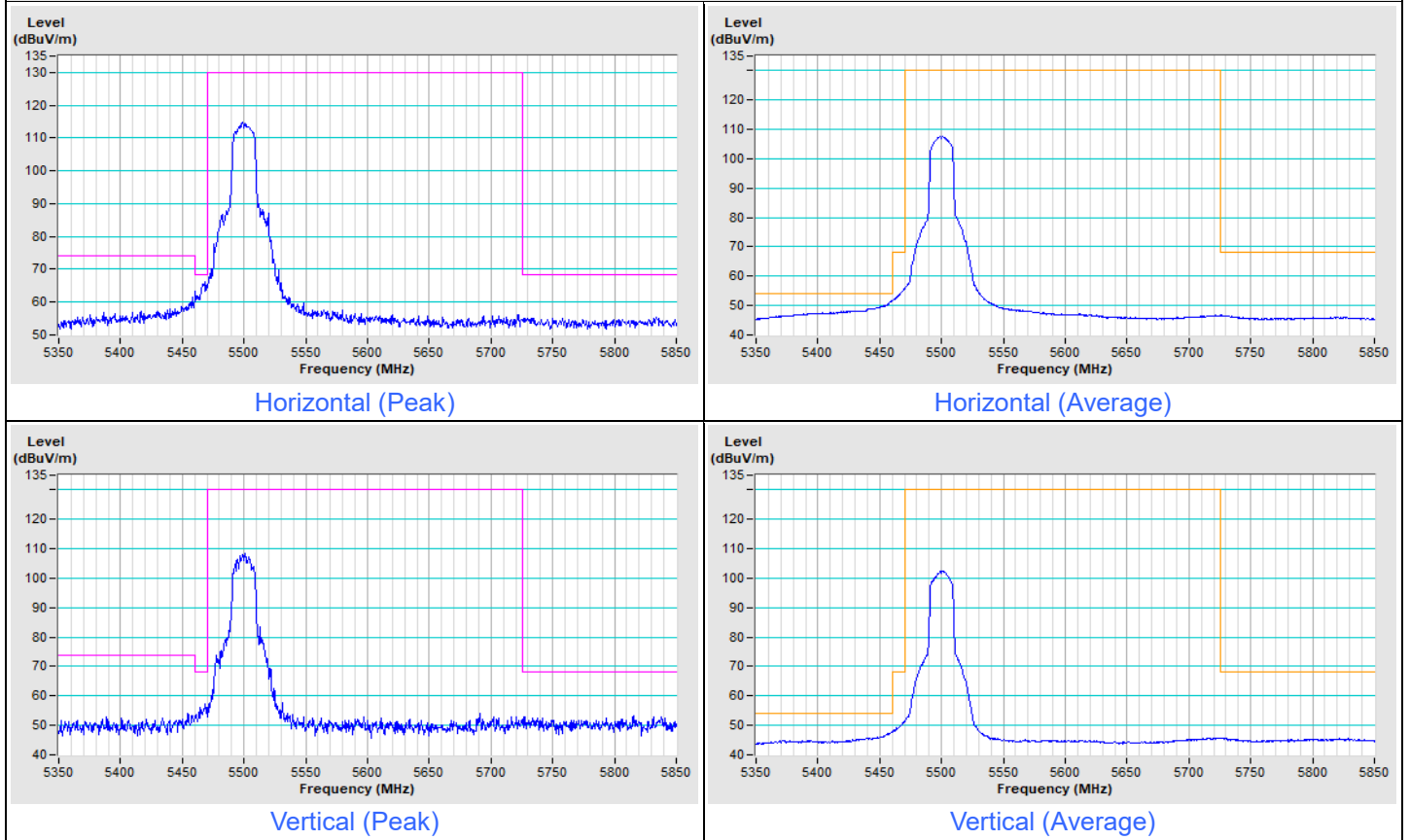
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11a Channel 144

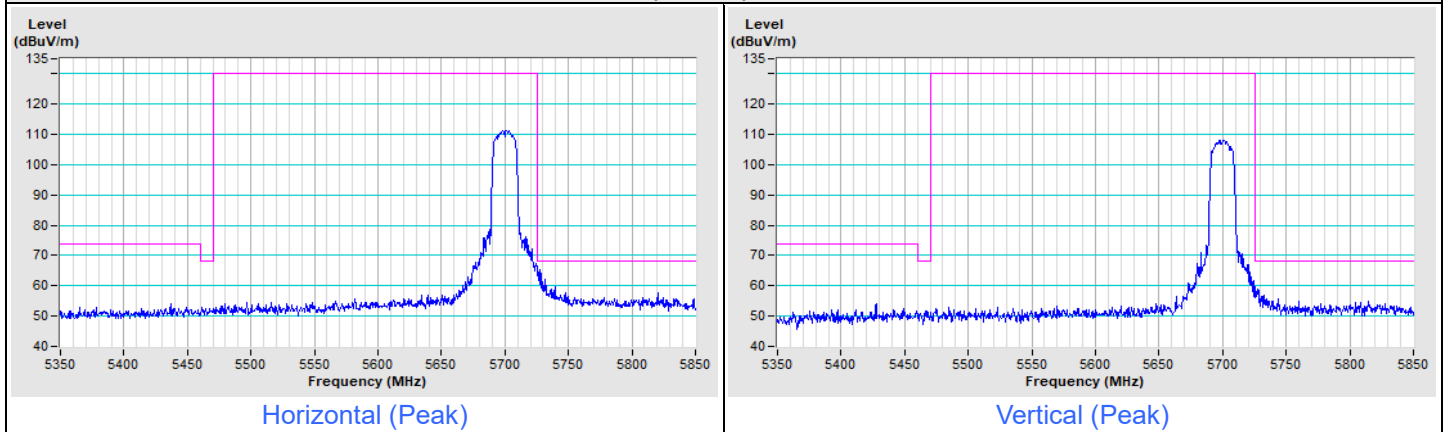


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
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802.11ac (VHT20) Channel 100

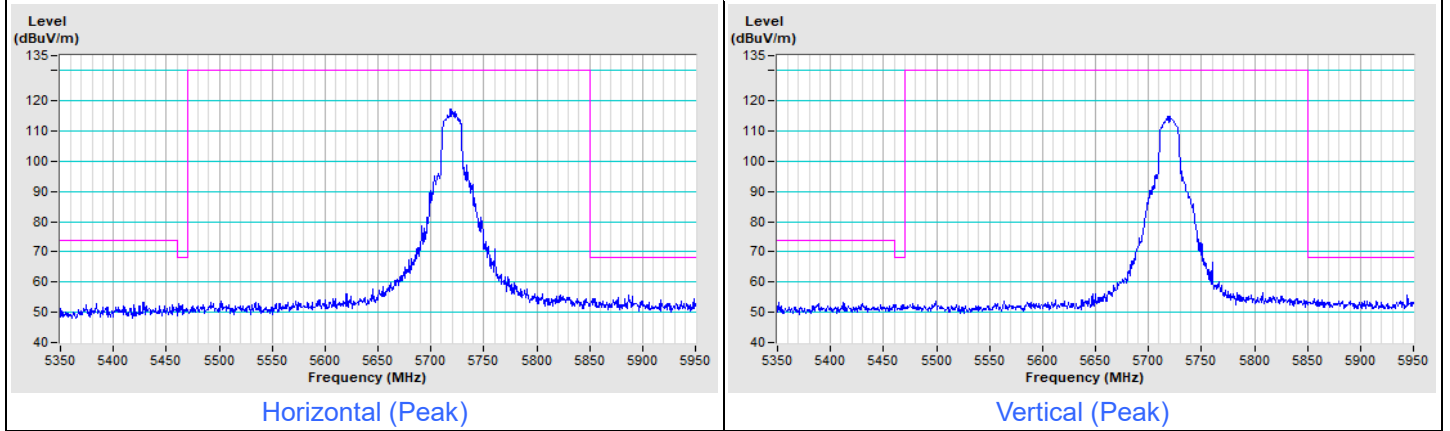


802.11ac (VHT20) Channel 140



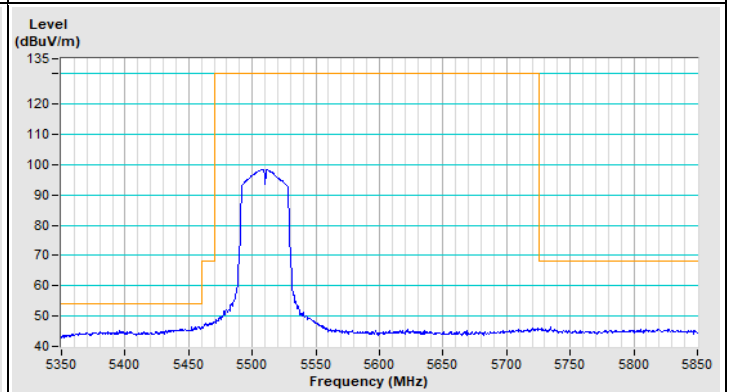
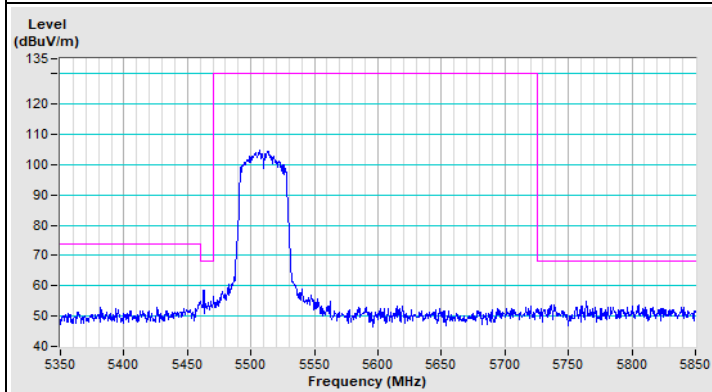
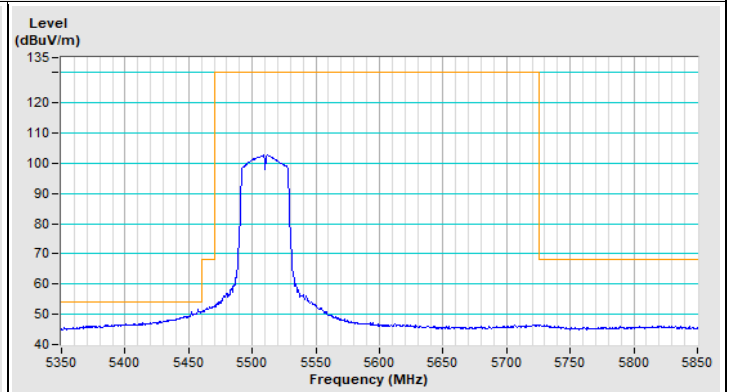
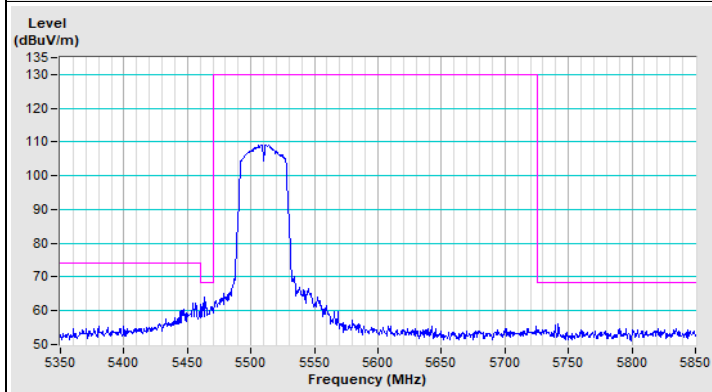
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT20) Channel 144

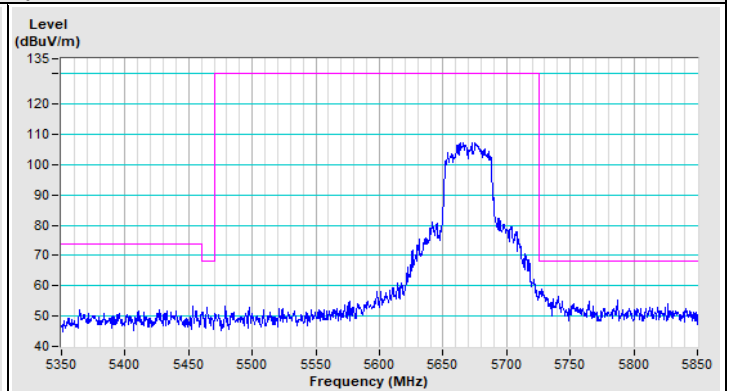
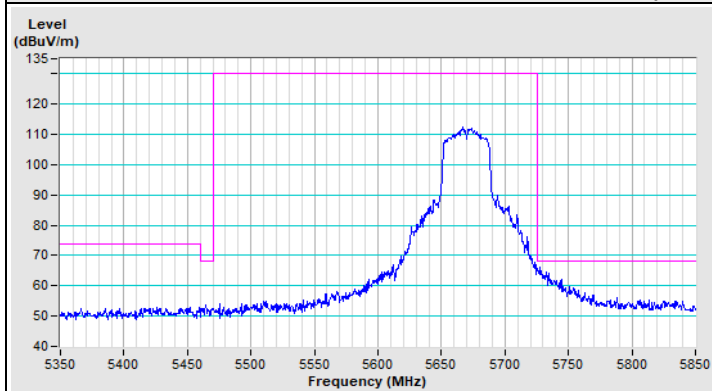


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=2 kHz, DET=Peak
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802.11ac (VHT40) Channel 102

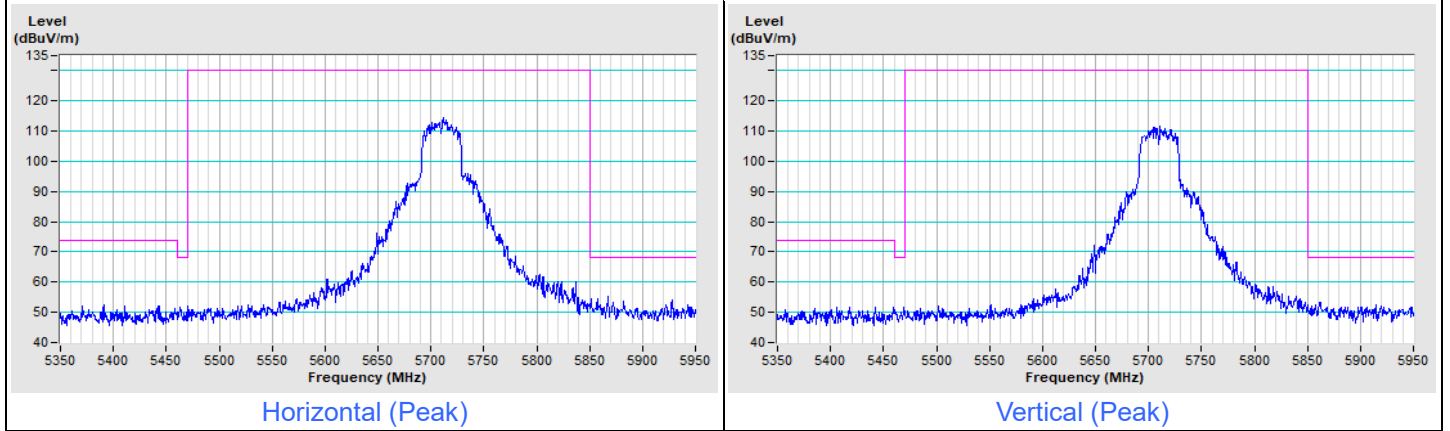


802.11ac (VHT40) Channel 134



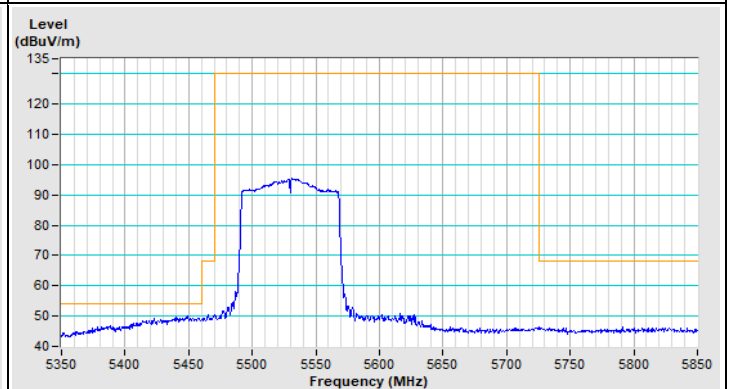
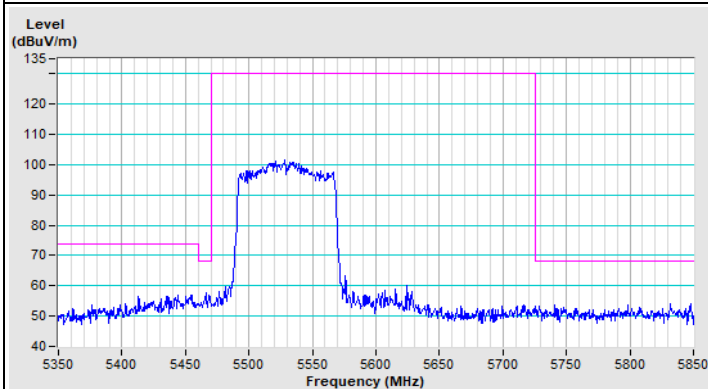
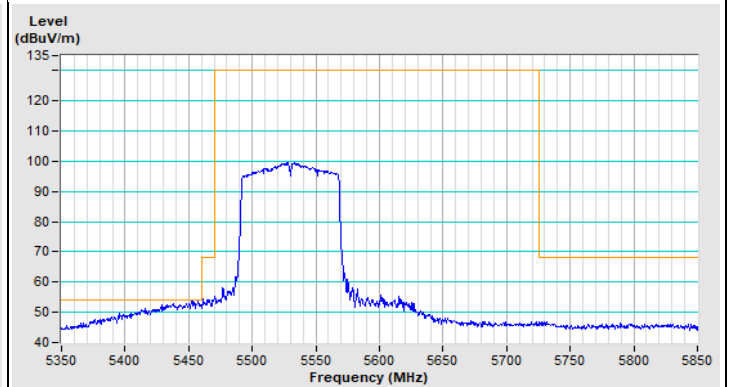
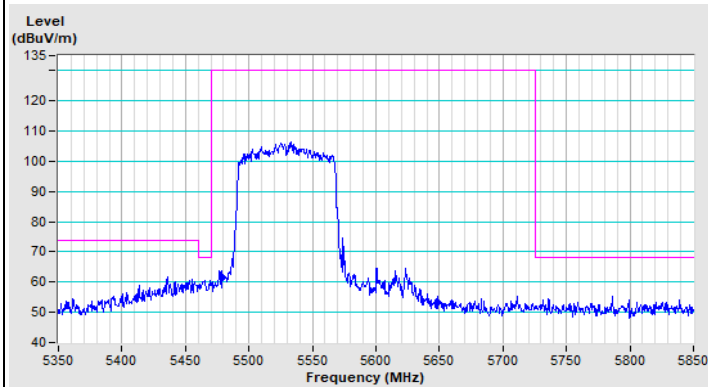
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT40) Channel 142

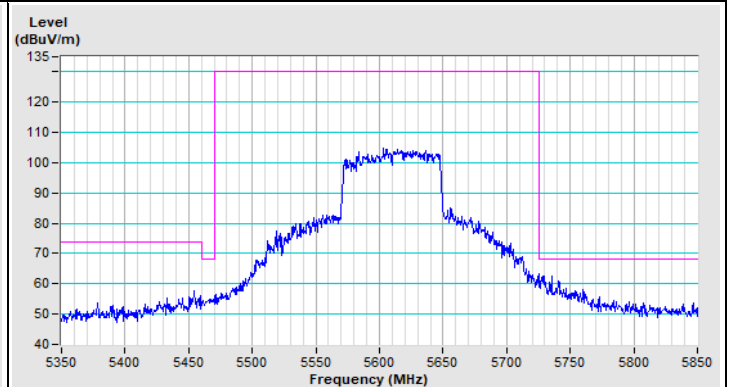
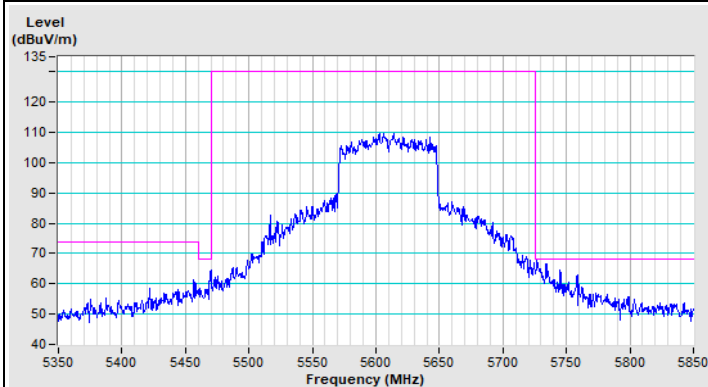


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=5.1 kHz, DET=Peak
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802.11ac (VHT80) Channel 106

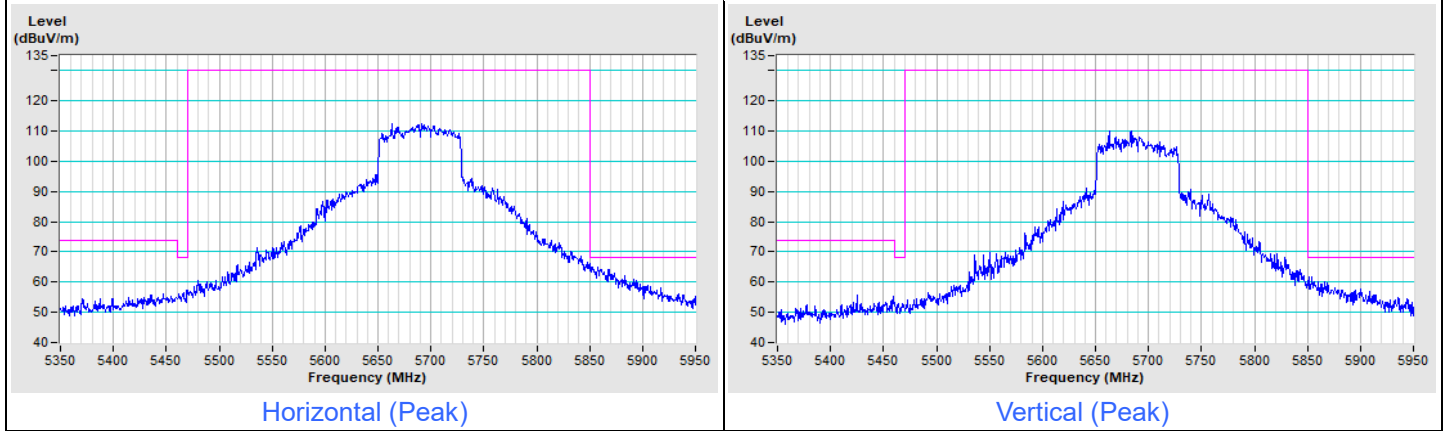


802.11ac (VHT80) Channel 122



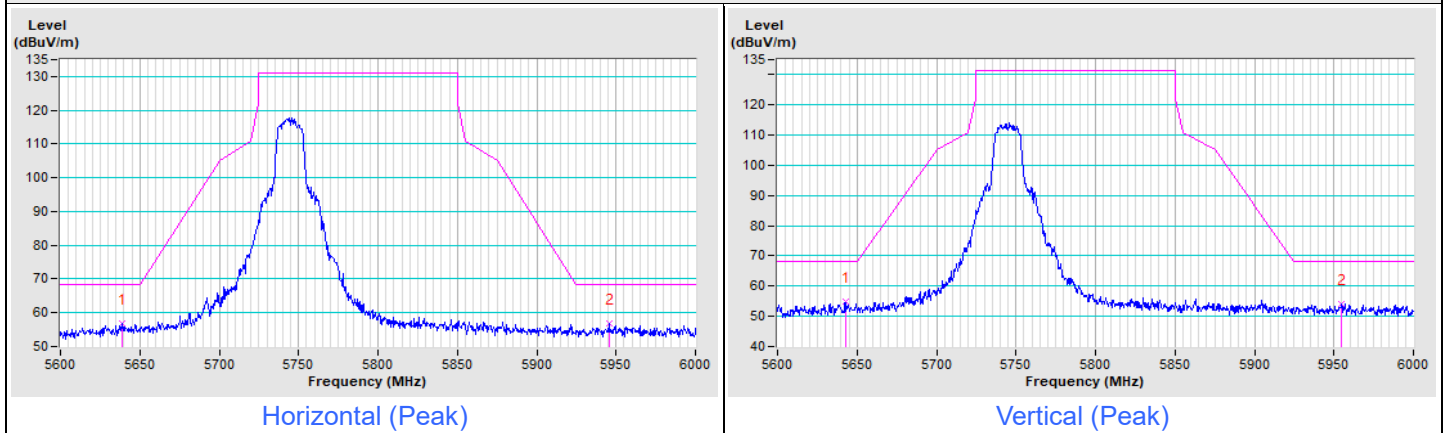
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT80) Channel 138

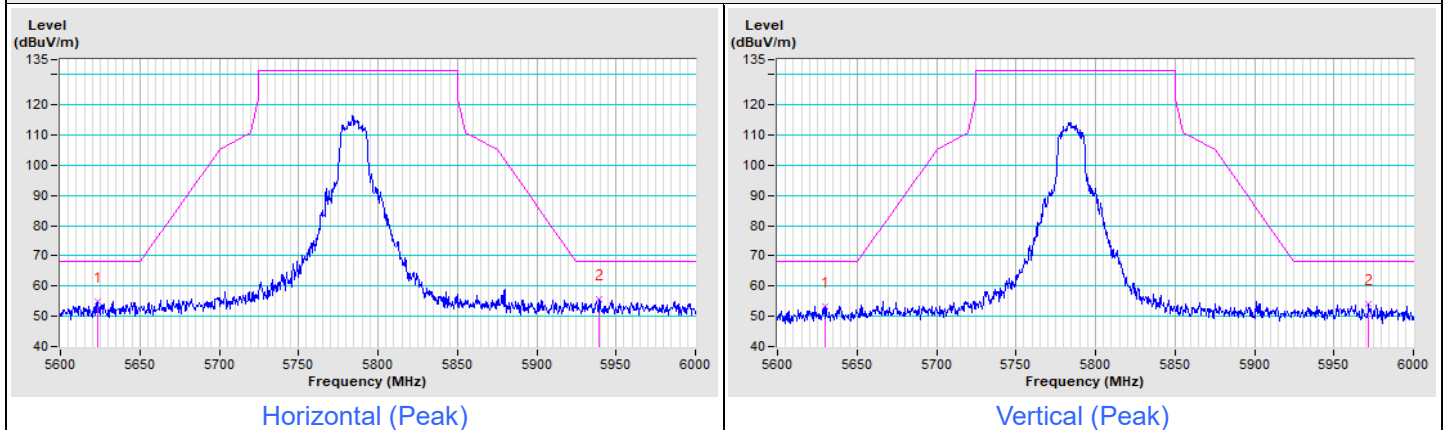


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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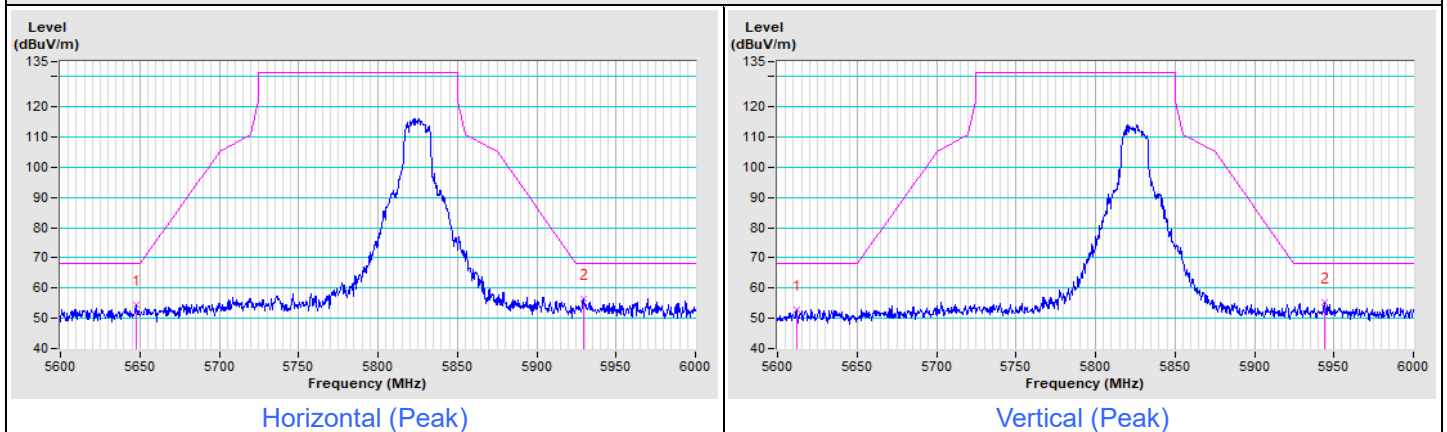
802.11a Channel 149



802.11a Channel 157

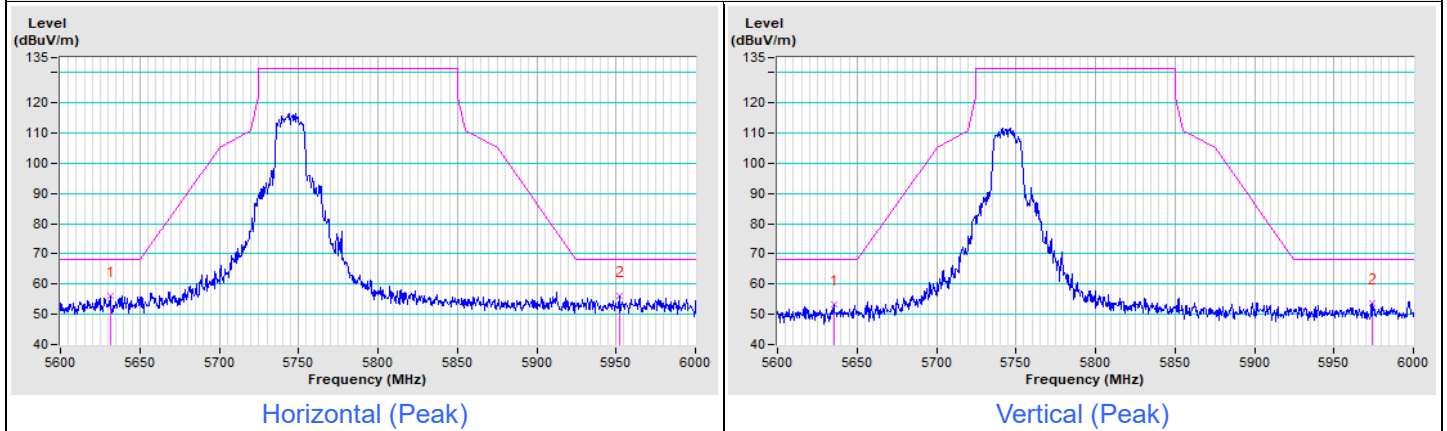


802.11a Channel 165

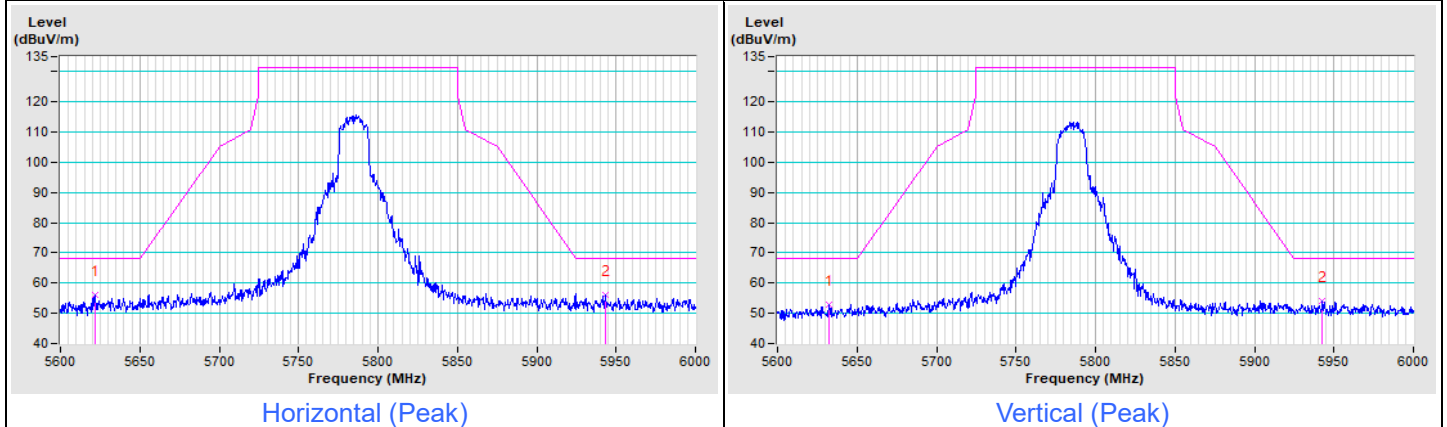


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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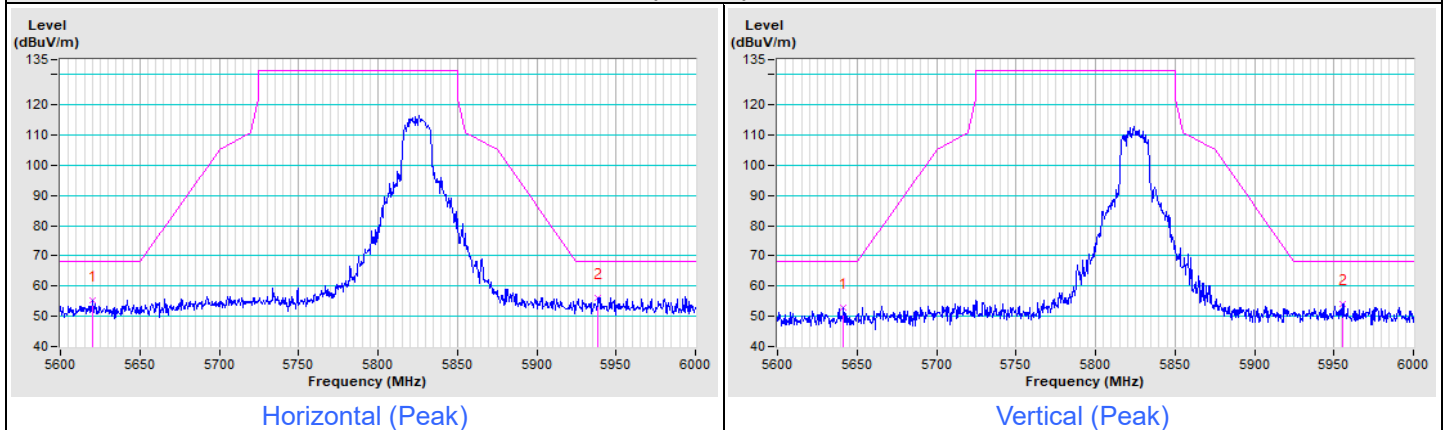
802.11ac (VHT20) Channel 149



802.11ac (VHT20) Channel 157

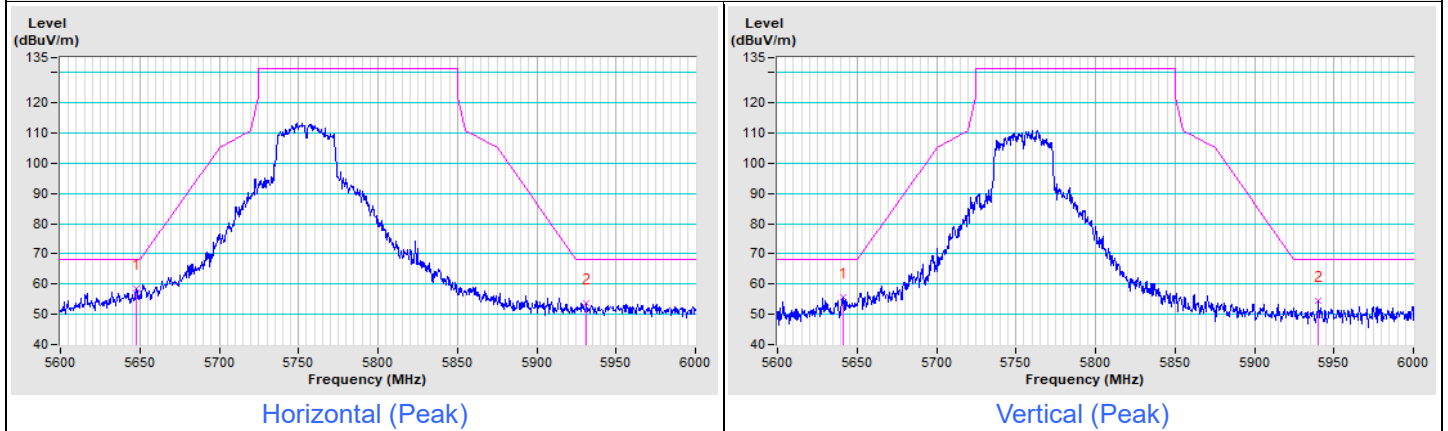


802.11ac (VHT20) Channel 165

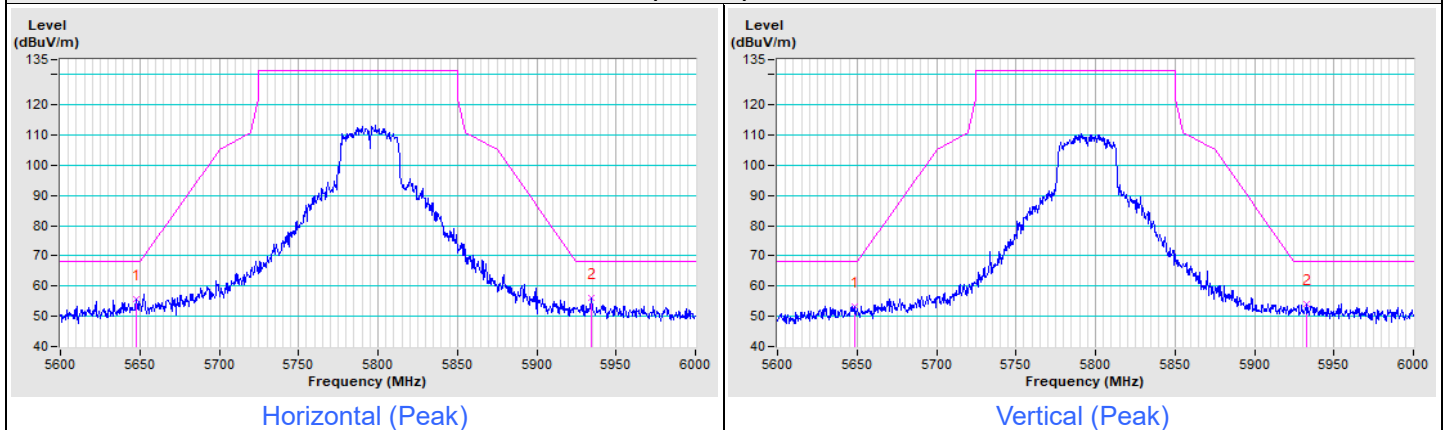


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ac (VHT40) Channel 151

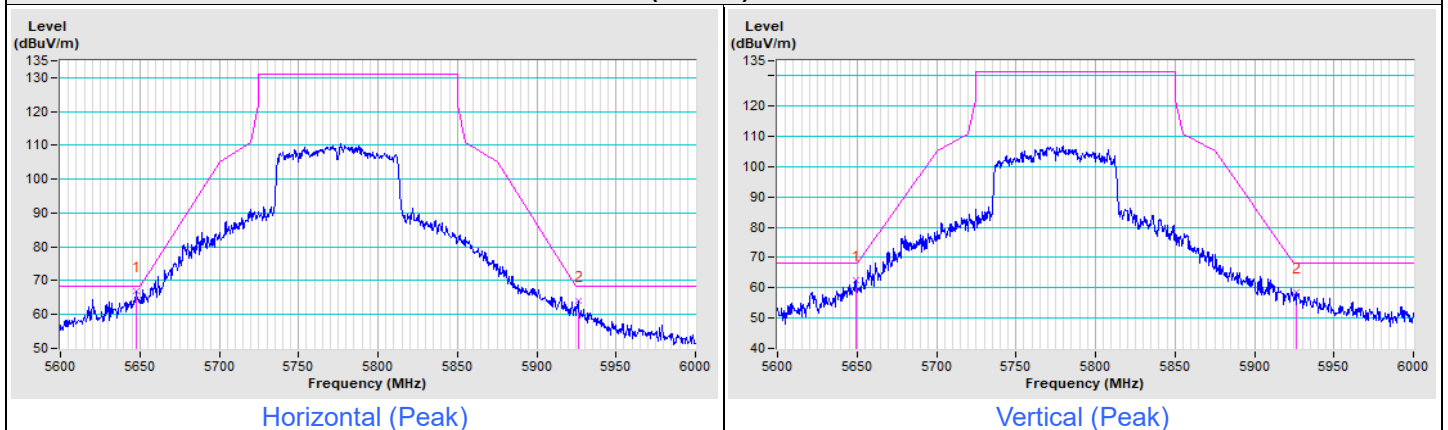


802.11ac (VHT40) Channel 159



Frequency Range	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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