

## FCC Test Report

**Report No.:** RFBDWR-WTW-P20110623-1

**FCC ID:** 2AHKM-CODA4589

**Test Model:** CODA-4589

**Received Date:** Nov. 19, 2020

**Test Date:** Dec. 04, 2020 to Jan. 05, 2021

**Issued Date:** Feb. 24, 2021

**Applicant:** HitronTechnologies

**Address:** NO. 1-8, LISING 1ST RD., HSINCHU SCIENCE PARK, HSINCHU, 300, TAIWAN.

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

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

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

**FCC Registration / Designation Number:** 723255 / TW2022



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### Release Control Record

Issue No.	Description	Date Issued
RFBDWR-WTW-P20110623-1	Original release.	Feb. 24, 2021

## 1 Certificate of Conformity

**Product:** DOCSIS 3.1 WiFi Emta

**Brand:** Hitron

**Test Model:** CODA-4589

**Sample Status:** Engineering sample

**Applicant:** HitronTechnologies

**Test Date:** Dec. 04, 2020 to Jan. 05, 2021

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

ANSI C63.10: 2013

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 EMC characteristics under the conditions specified in this report.

**Prepared by :**  , **Date:** Feb. 24, 2021

Claire Kuan / Specialist

**Approved by :**  , **Date:** Feb. 24, 2021

Clark Lin / Technical Manager

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -9.80dB at 0.16562 MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	Pass	Meet the requirement of limit. Minimum passing margin is -0.1 dB at 5140.99 MHz, 5357.48 MHz, 5360.83 MHz and 5365.06 MHz
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	N/A	Refer to Note 4 below
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Note:

- For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
- For U-NII-1, U-NII-2A, U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- All test items (Except Frequency Stability test) were performed for this addendum. The others testing data refer to original test report.
- N/A: Not Applicable.

### 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	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.9 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.1 dB
	30MHz ~ 1GHz	5.5 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.1 dB
	18GHz ~ 40GHz	5.3 dB

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

Product	DOCSIS 3.1 WiFi Emta
Brand	Hitron
Test Model	CODA-4589
Status of EUT	Engineering sample
Power Supply Rating	AC 100-240V, 2.1A, 50/60Hz
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n: up to 600Mbps 802.11ac: up to 1733.3Mbps 802.11ac (80+80): up to 3466.7Mbps
Operating Frequency	5.18 ~ 5.24GHz, 5.26GHz ~ 5.32GHz, 5.50GHz ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6 802.11ac (VHT80+80): 15 sets
Output Power	<b>CDD Mode:</b> <b>5.18 ~ 5.25 GHz:</b> 543.615 mW <b>5.25 ~ 5.32GHz:</b> 167.917 mW <b>5.50 ~ 5.72GHz:</b> 237.111 mW <b>5.745 ~ 5.825 GHz:</b> 919.095 mW <b>Beamforming Mode:</b> <b>5.18 ~ 5.25 GHz:</b> 297.21 mW <b>5.25 ~ 5.32GHz:</b> 74.548 mW <b>5.50 ~ 5.72GHz:</b> 74.622 mW <b>5.745 ~ 5.825 GHz:</b> 298.147 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Power cord x1 (unshielded, 1.8m)
Data Cable Supplied	NA

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the Report No.: RF170503E08-1 & RF170503E08A-1 as the following:
  - ◆ Changed WLAN 5GHz FEM (Amplifier chip) from model: sky85735 to model: RTC7635. The new chip are met KDB 178919 D01v06 requirements as below, for more details please refer to internal photo and schematics exhibits.
    - The new chip component is pin-for-pin compatible.
    - The new chip has the same basic function as the old chip.
    - No change in radio parameters has occurred.
    - The same area (the same area as the chip) of the PCB is replaced with an equivalent chip.
2. According to above condition, test modes are presented in the report as below. And all data were verified to meet the requirements.
  - ◆ For 802.11ac (VHT80+80) test: all test items (Except Frequency Stability test) need to be performed.
  - ◆ For other modulation test: AC Power Conducted Emissions, Radiated Emissions & Band Edge Measurement and Max Average Transmit Power test items need to be performed.
3. Simultaneously transmission condition.

<b>Condition</b>	<b>Technology</b>	
1	WLAN 2.4GHz	WLAN 5GHz

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

4. The antennas provided to the EUT, please refer to the following table:

Antenna Set.	Transmitter Circuit	Brand	Model	Antenna Net. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length
A1	Chain (2)	AirGain	M2420SL0	3.69	2.4~2.4835	Dipole	i-pex(MHF)	50
A2	Chain (0)	AirGain	M2410CM	3.23	2.4~2.4835	Dipole	i-pex(MHF)	115
A3	Chain (1)	AirGain	M2420SL0	4.28	2.4~2.4835	Dipole	i-pex(MHF)	85
A4	Chain (2)	AirGain	M5X05C	4.51	5.15~5.85	Dipole	i-pex(MHF)	120
A5	Chain (1)	AirGain	M5X05C	6.1	5.15~5.85	Dipole	i-pex(MHF)	110
A6	Chain (0)	AirGain	M5X05C	4.94	5.15~5.85	Dipole	i-pex(MHF)	40
A7	Chain (3)	AirGain	M5X05C	4.83	5.15~5.85	Dipole	i-pex(MHF)	60

5. The EUT incorporates a MIMO function:

2.4GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11b	1 ~ 11Mbps	3TX	3RX
802.11g	6 ~ 54Mbps	3TX	3RX
802.11n (HT20)	MCS 0~7	3TX	3RX
	MCS 8~15	3TX	3RX
802.11n (HT40)	MCS 0~7	3TX	3RX
	MCS 8~15	3TX	3RX
5GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11a	6 ~ 54Mbps	4TX	4RX
802.11n (HT20)	MCS 0~7	4TX	4RX
	MCS 8~15	4TX	4RX
	MCS 16~23	4TX	4RX
	MCS 24~31	4TX	4RX
	MCS 0~7	4TX	4RX
802.11n (HT40)	MCS 8~15	4TX	4RX
	MCS 16~23	4TX	4RX
	MCS 24~31	4TX	4RX
	MCS0~8 NSS=1	4TX	4RX
802.11ac (VHT20)	MCS0~8 NSS=2	4TX	4RX
	MCS0~9 NSS=3	4TX	4RX
	MCS0~8 NSS=4	4TX	4RX
	MCS0~9 NSS=1	4TX	4RX
802.11ac (VHT40)	MCS0~9 NSS=2	4TX	4RX
	MCS0~9 NSS=3	4TX	4RX
	MCS0~9 NSS=4	4TX	4RX
	MCS0~9 NSS=1	4TX	4RX
802.11ac (VHT80)	MCS0~9 NSS=2	4TX	4RX
	MCS0~9 NSS=3	4TX	4RX
	MCS0~9 NSS=4	4TX	4RX
	MCS0~9 NSS=1	2TX+2TX	2RX+2RX
802.11ac (VHT80+VHT80)	MCS0~9 NSS=2	2TX+2TX	2RX+2RX

Note:

1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report (except Output power test item).
3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz) and 802.11ac mode for 20MHz (40MHz), therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)
6. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
7. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

### 3.2 Description of Test Modes

#### FOR 5180 ~ 5320MHz

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 channel is provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

#### FOR 5500 ~ 5720MHz

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	122	5610 MHz
138	5690 MHz		

**FOR 5745 ~ 5825MHz:**

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

**For simultaneous transmission:**

15 sets are provided for 802.11ac (VHT80+80):

Channel	Frequency	Channel	Frequency
42+58	5210 MHz + 5290 MHz	58+155	5290 MHz + 5775 MHz
42+106	5210 MHz + 5530 MHz	106+122	5530 MHz + 5610 MHz
42+122	5210 MHz + 5610 MHz	106+138	5530 MHz + 5690 MHz
42+138	5210 MHz + 5690 MHz	106+155	5530 MHz + 5775 MHz
42+155	5210MHz + 5775MHz	122+138	5610 MHz + 5690 MHz
58+106	5290 MHz + 5530 MHz	122+155	5610 MHz + 5775 MHz
58+122	5290 MHz + 5610 MHz	138+155	5690 MHz + 5775 MHz
58+138	5290 MHz + 5690 MHz		

### 3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where      **RE≥1G:** Radiated Emission above 1GHz      **RE<1G:** Radiated Emission below 1GHz  
**PLC:** Power Line Conducted Emission      **APCM:** Antenna Port Conducted Measurement

#### Radiated Emission Test (Above 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 62	38, 46, 54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		42, 58	42, 58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, ,122, 138	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3
802.11ac (VHT80+80)	5180-5320 5500-5720 5745-5825	42 to 155	42+58 42+106 42+122 42+138 42+155 58+106 58+122 58+138 58+155 106+122 106+138 106+155 122+138 122+155 138+155	OFDM	BPSK	58.5

**Radiated Emission Test (Below 1GHz):**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT40)	5180-5320 5500-5720 5745-5825	38 to 62 102 to 142 151 to 159	151	OFDM	BPSK	13.5

**Power Line Conducted Emission Test:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT40)	5180-5320 5500-5720 5745-5825	38 to 62 102 to 142 151 to 159	151	OFDM	BPSK	13.5

### Antenna Port Conducted Measurement:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

For output power						
CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 62	38, 46, 54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		42, 58	42, 58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3
802.11ac (VHT80+80)	5180-5320 5500-5720 5745-5825	42 to 155	42+58 42+106 42+122 42+138 42+155 58+106 58+122 58+138 58+155 106+122 106+138 106+155 122+138 122+155 138+155	OFDM	BPSK	58.5

Beamforming Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT20)	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 62	38, 46, 54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		42, 58	42, 58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11ac (VHT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3
802.11ac (VHT80+80)	5180-5320 5500-5720 5745-5825	42 to 155	42+58 42+106 42+122 42+138 42+155 58+106 58+122 58+138 58+155 106+122 106+138 106+155 122+138 122+155 138+155	OFDM	BPSK	58.5
For other test items						
CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT80+80)	5180-5320 5500-5720 5745-5825	42 to 155	42+58 42+106 42+122 42+138 42+155 58+106 58+122 58+138 58+155 106+122 106+138 106+155 122+138 122+155 138+155	OFDM	BPSK	58.5

**Test Condition:**

Applicable To	Environmental Conditions	Input Power	Tested By
<b>RE≥1G</b>	20deg. C, 70%RH 25deg. C, 65%RH	120Vac, 60Hz	Carter Lin
<b>RE&lt;1G</b>	23deg. C, 70%RH	120Vac, 60Hz	Carter Lin
<b>PLC</b>	25deg. C, 66%RH	120Vac, 60Hz	Tom Yang
<b>APCM</b>	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

### 3.3 Duty Cycle of Test Signal

If duty cycle of test signal is  $\geq 98\%$ , duty factor is not required.

If duty cycle of test signal is  $< 98\%$ , duty factor shall be considered.

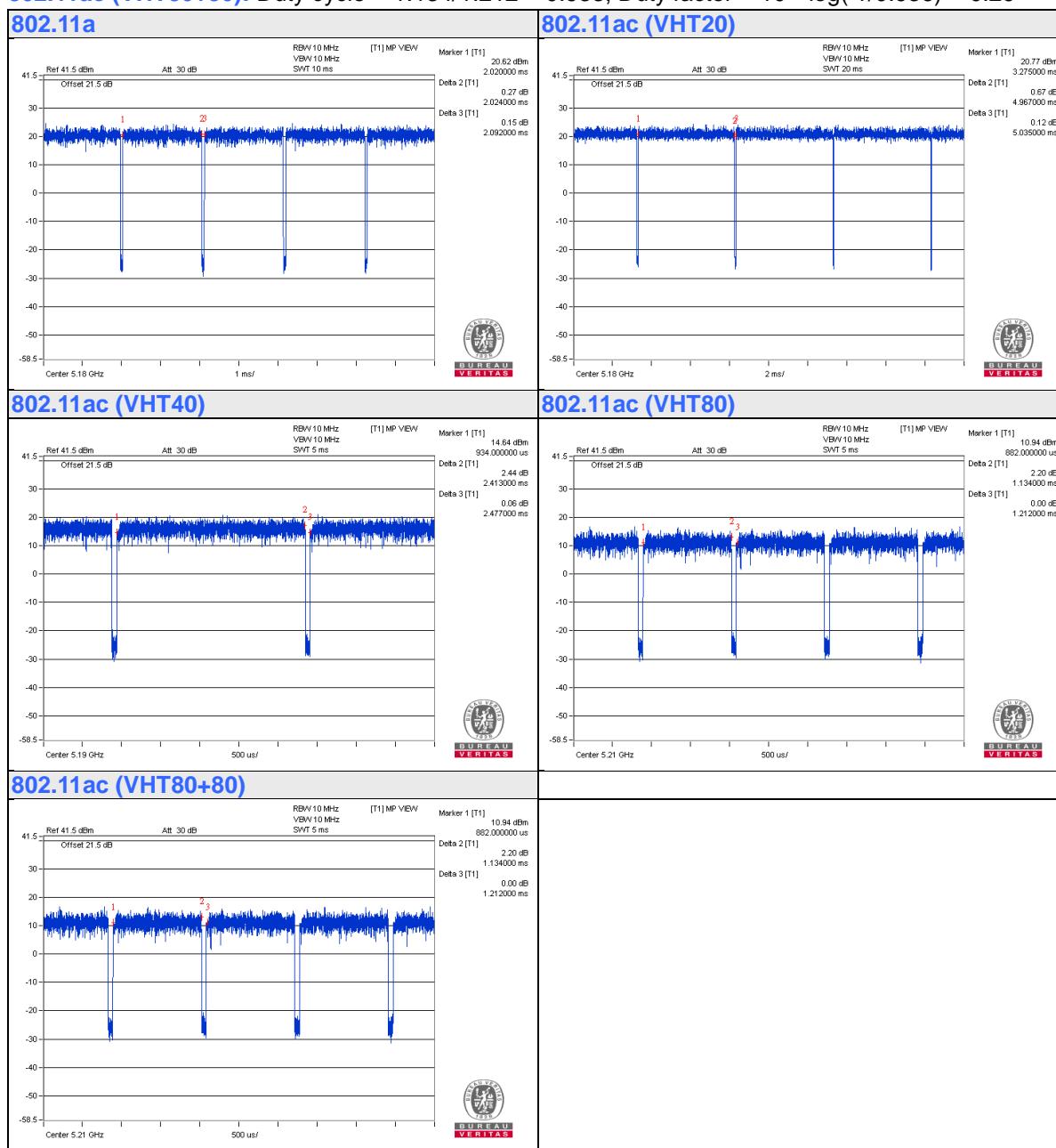
**802.11a:** Duty cycle =  $2.024/2.092 = 0.967$ , Duty factor =  $10 * \log(1/0.967) = 0.14$

**802.11ac (VHT20):** Duty cycle =  $4.967/5.035 = 0.986$

**802.11ac (VHT40):** Duty cycle =  $2.413/2.477 = 0.974$ , Duty factor =  $10 * \log(1/0.974) = 0.11$

**802.11ac (VHT80):** Duty cycle =  $1.134/1.212 = 0.936$ , Duty factor =  $10 * \log(1/0.936) = 0.29$

**802.11ac (VHT80+80):** Duty cycle =  $1.134/1.212 = 0.933$ , Duty factor =  $10 * \log(1/0.936) = 0.29$



### 3.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

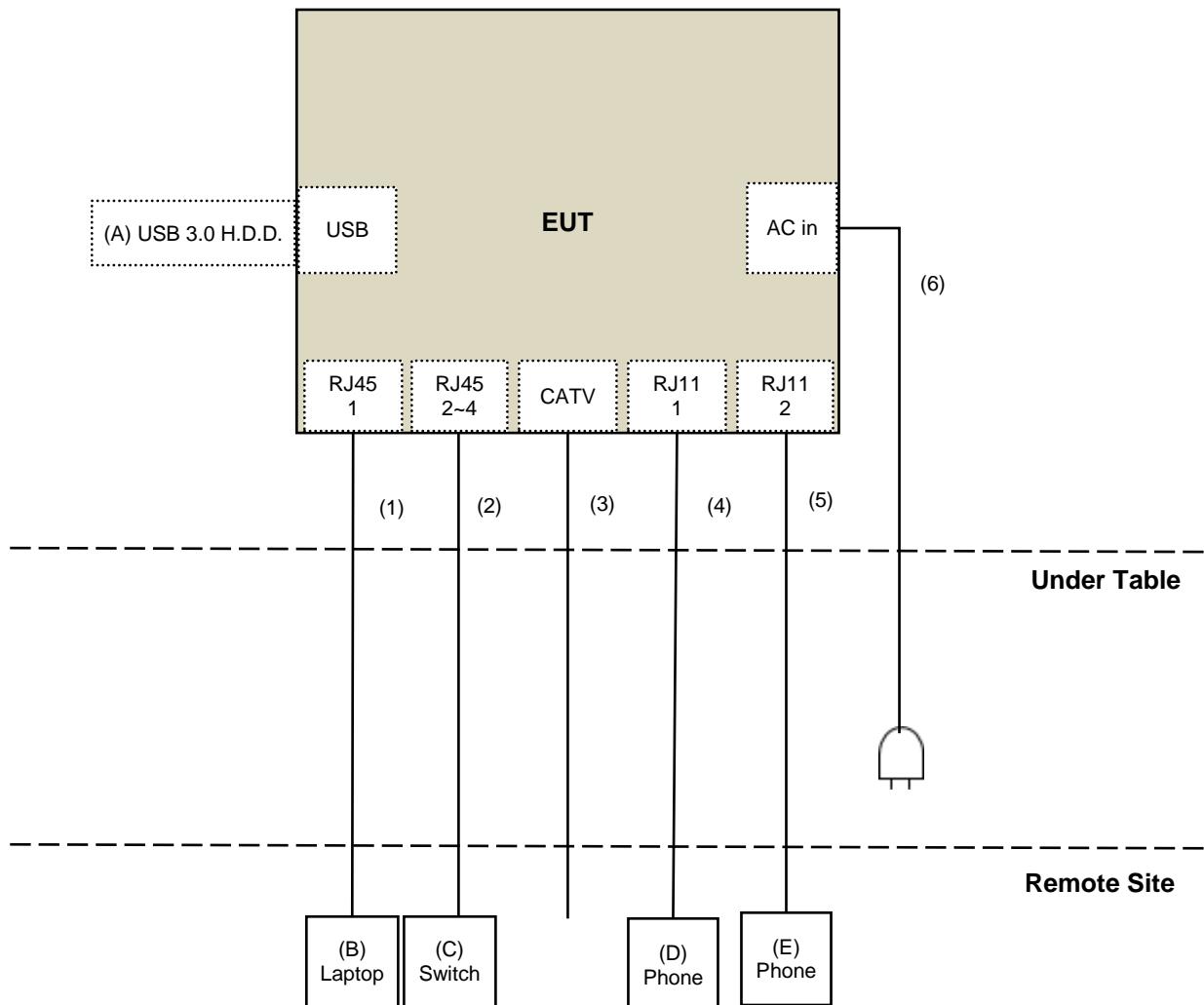
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	USB 3.0 Dongle	Transcend	JetFlash 700	NA	NA	Provided by Lab
B.	Laptop	DELL	E5430	HYV4VY1	DoC	Provided by Lab
C.	Switch	D-Link	DGS-1005D	DR8WC92000523	NA	Provided by Lab
D.	Phone	Romeo	TE-812	97280903	NA	Provided by Lab
E.	Phone	Romeo	TE-812	97280926	NA	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	3	10	No	0	Provided by Lab
3.	Coaxial Cable	1	10	Yes	0	Provided by Lab
4.	RJ-11 Cable	1	10	No	0	Provided by Lab
5.	RJ-11 Cable	1	10	No	0	Provided by Lab
6.	AC Cable	1	1.8	No	0	Supplied by client

### 3.4.1 Configuration of System under Test



### **3.5 General Description of Applied Standard and References**

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

**Test Standard:**

**FCC Part 15, Subpart E (15.407)**

**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.

**References Test Guidance:**

**KDB 789033 D02 General UNII Test Procedure New Rules v02r01**

**KDB 662911 D01 Multiple Transmitter Output v02r01**

All test items have been performed as a reference to the above KDB test guidance.

## 4 Test Types and Results

### 4.1 Radiated Emission and Bandedge Measurement

#### 4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dB<sub>UV</sub>/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, 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 20dB 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 3m	
Frequency Band	Applicable To	PK:74 (dB <sub>UV</sub> /m)	AV:54 (dB <sub>UV</sub> /m)
5150~5250 MHz	15.407(b)(1)		
5250~5350 MHz	15.407(b)(2)	PK:-27 (dB <sub>m</sub> /MHz)	PK:68.2(dB <sub>UV</sub> /m)
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dB <sub>m</sub> /MHz) <sup>*1</sup> PK:10 (dB <sub>m</sub> /MHz) <sup>*2</sup> PK:15.6 (dB <sub>m</sub> /MHz) <sup>*3</sup> PK:27 (dB <sub>m</sub> /MHz) <sup>*4</sup>	PK: 68.2(dB <sub>UV</sub> /m) <sup>*1</sup> PK:105.2 (dB <sub>UV</sub> /m) <sup>*2</sup> PK: 110.8(dB <sub>UV</sub> /m) <sup>*3</sup> PK:122.2 (dB <sub>UV</sub> /m) <sup>*4</sup>

<sup>\*1</sup> beyond 75 MHz or more above of the band edge.

<sup>\*2</sup> below the band edge increasing linearly to 10 dB<sub>m</sub>/MHz at 25 MHz above.

<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dB<sub>m</sub>/MHz at 5 MHz above.

<sup>\*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dB<sub>m</sub>/MHz at the band edge.

**Note:**

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

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

#### 4.1.2 Test Instruments

##### For Radiated Emission test, OOB and BandEdge test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 01, 2020	Nov. 30, 2021
Pre-Amplifier EMCI	EMC001340	980142	May 25, 2020	May 24, 2021
Loop Antenna Electro-Metrics	EM-6879	264	Feb. 18, 2020	Feb. 17, 2021
RF Cable	NA	LOOPCAB-001	Jan. 08, 2020	Jan. 07, 2021
RF Cable	NA	LOOPCAB-002	Jan. 08, 2020	Jan. 07, 2021
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	Apr. 28, 2020	Apr. 27, 2021
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 06, 2020	Nov. 05, 2021
RF Cable	8D	966-4-1	Mar. 18, 2020	Mar. 17, 2021
RF Cable	8D	966-4-2	Mar. 18, 2020	Mar. 17, 2021
RF Cable	8D	966-4-3	Mar. 18, 2020	Mar. 17, 2021
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Sep. 24, 2020	Sep. 23, 2021
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 22, 2020	Nov. 21, 2021
Pre-Amplifier EMCI	EMC 12630 SE	980638	Apr. 08, 2020	Apr. 07, 2021
RF Cable	EMC104-SM-SM-1200	160923	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC104-SM-SM-2000	180502	Apr. 29, 2020	Apr. 28, 2021
RF Cable	EMC104-SM-SM-6000	180418	Apr. 29, 2020	Apr. 28, 2021
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 15, 2020	Jan. 14, 2021
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 22, 2020	Nov. 21, 2021
RF Cable	EMC102-KM-KM-1200	160924	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC-KM-KM-4000	200214	Mar. 11, 2020	Mar. 10, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA

##### Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 4.
3. Tested Date: Dec. 04, 2020 to Jan. 01, 2021

**For other test items:**

<b>DESCRIPTION &amp; MANUFACTURER</b>	<b>MODEL NO.</b>	<b>SERIAL NO.</b>	<b>CALIBRATED DATE</b>	<b>CALIBRATED UNTIL</b>
Spectrum Analyzer R&S	FSV40	100964	May 29, 2020	May 28, 2021
Power meter Anritsu	ML2495A	1529002	July 22, 2020	July 21, 2021
Power sensor Anritsu	MA2411B	1339443	July 22, 2020	July 21, 2021
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021
AC Power Source Extech Electronics	6905S	1991551	NA	NA
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 16, 2020	Jan. 15, 2021
True RMS Clamp Meter FLUKE	325	31130711WS	June 06, 2020	June 05, 2021
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

- NOTE:**
1. The test was performed in Oven room 2.
  2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  3. Tested Date: Jan. 05, 2021

#### 4.1.3 Test Procedure

##### **For Radiated emission below 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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.

**Note:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

##### **For Radiated emission above 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) 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.
- f. 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.

**Note:**

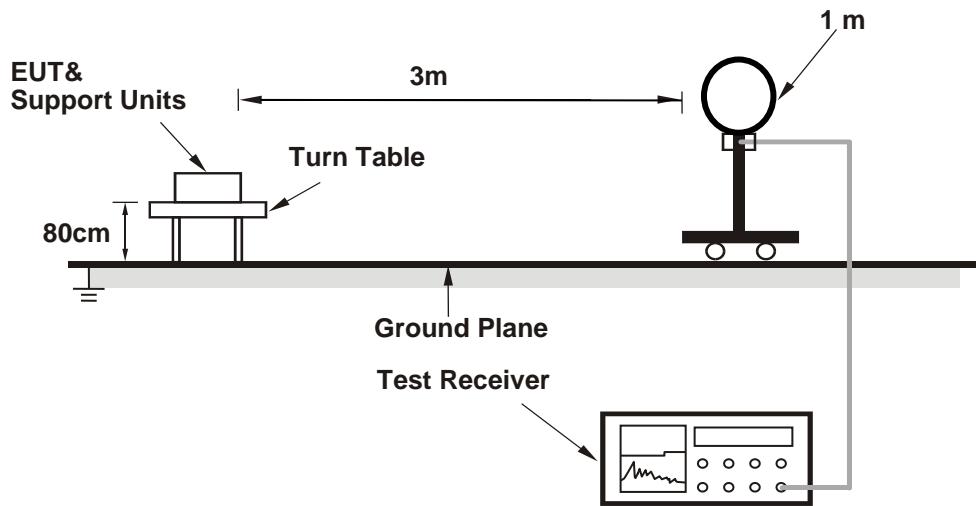
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

#### 4.1.4 Deviation from Test Standard

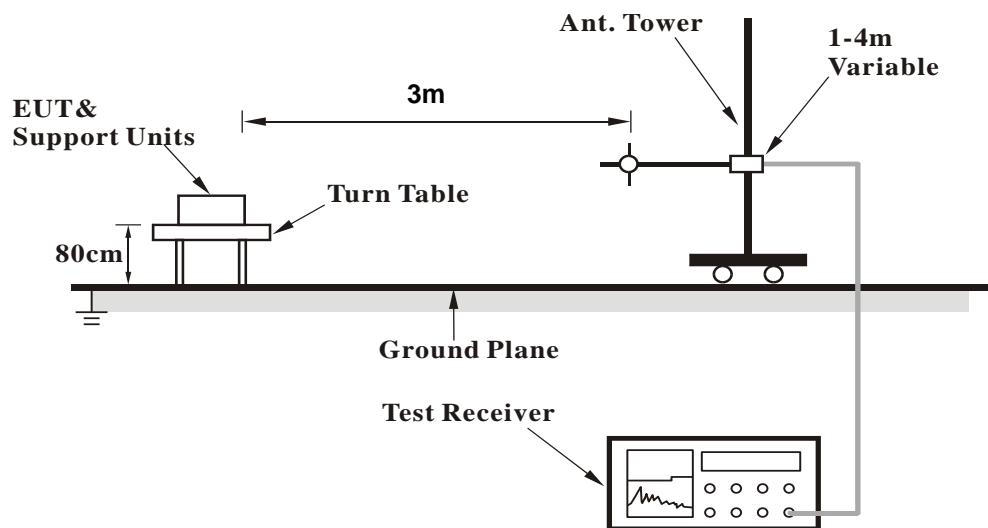
No deviation.

#### 4.1.5 Test Setup

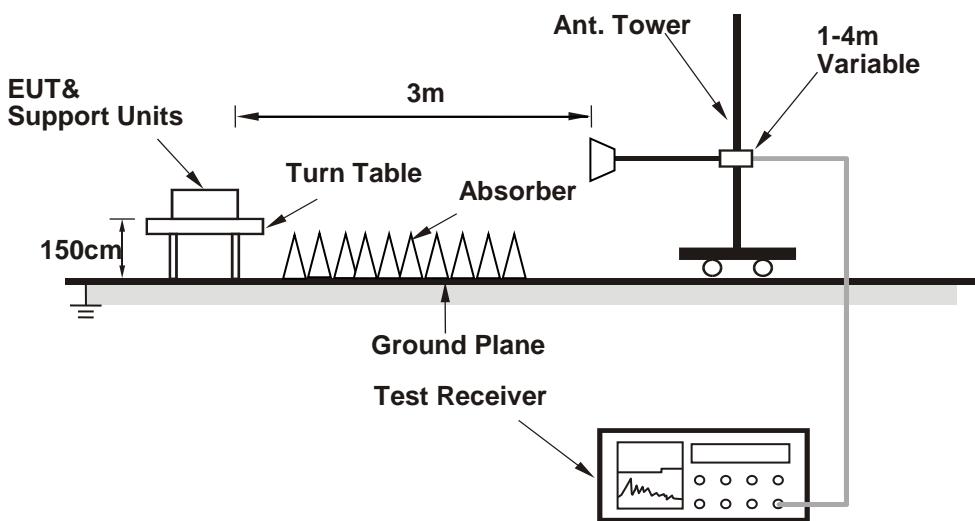
##### For Radiated emission below 30MHz



##### For Radiated emission 30MHz to 1GHz



**For Radiated emission above 1GHz**



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

#### 4.1.6 EUT Operating Condition

- Connected the EUT with the Laptop which is placed on remote site.
- Controlling software (QDART-Connectivity1000036) has been activated to set the EUT under transmission condition continuously.

#### 4.1.7 Test Results

##### Above 1GHz Data:

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 36 : 5180 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5136.50	52.0 PK	74.0	-22.0	1.42 H	36	50.7	1.3
2	5136.50	41.5 AV	54.0	-12.5	1.42 H	36	40.2	1.3
3	*5180.00	113.5 PK			1.42 H	36	112.3	1.2
4	*5180.00	103.6 AV			1.42 H	36	102.4	1.2
5	#10360.00	52.2 PK	68.2	-16.0	2.02 H	251	41.7	10.5
6	15540.00	50.5 PK	74.0	-23.5	1.11 H	195	38.1	12.4
7	15540.00	38.5 AV	54.0	-15.5	1.11 H	195	26.1	12.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5144.20	56.4 PK	74.0	-17.6	1.69 V	10	55.1	1.3
2	5144.20	46.0 AV	54.0	-8.0	1.69 V	10	44.7	1.3
3	*5180.00	120.0 PK			1.69 V	10	118.8	1.2
4	*5180.00	109.8 AV			1.69 V	10	108.6	1.2
5	#10360.00	50.8 PK	68.2	-17.4	1.29 V	175	40.3	10.5
6	15540.00	49.5 PK	74.0	-24.5	1.53 V	254	37.1	12.4
7	15540.00	37.3 AV	54.0	-16.7	1.53 V	254	24.9	12.4

##### Remarks:

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	113.7 PK			1.40 H	39	112.5	1.2
2	*5200.00	103.8 AV			1.40 H	39	102.6	1.2
3	#10400.00	51.0 PK	68.2	-17.2	2.03 H	237	40.3	10.7
4	15600.00	49.2 PK	74.0	-24.8	1.14 H	191	36.5	12.7
5	15600.00	36.9 AV	54.0	-17.1	1.14 H	191	24.2	12.7
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	*5200.00	119.8 PK			1.43 V	14	118.6	1.2
2	*5200.00	109.7 AV			1.43 V	14	108.5	1.2
3	#10400.00	50.2 PK	68.2	-18.0	1.27 V	161	39.5	10.7
4	15600.00	49.3 PK	74.0	-24.7	1.57 V	254	36.6	12.7
5	15600.00	37.2 AV	54.0	-16.8	1.57 V	254	24.5	12.7

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	113.0 PK			1.36 H	33	112.0	1.0
2	*5240.00	103.2 AV			1.36 H	33	102.2	1.0
3	5350.00	50.8 PK	74.0	-23.2	1.36 H	33	49.8	1.0
4	5350.00	38.8 AV	54.0	-15.2	1.36 H	33	37.8	1.0
5	#10480.00	51.0 PK	68.2	-17.2	2.05 H	223	40.5	10.5
6	15720.00	48.9 PK	74.0	-25.1	1.16 H	206	37.2	11.7
7	15720.00	36.4 AV	54.0	-17.6	1.16 H	206	24.7	11.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	119.4 PK			1.58 V	14	118.4	1.0
2	*5240.00	109.5 AV			1.58 V	14	108.5	1.0
3	5350.00	52.5 PK	74.0	-21.5	1.58 V	14	51.5	1.0
4	5350.00	41.0 AV	54.0	-13.0	1.58 V	14	40.0	1.0
5	#10480.00	50.9 PK	68.2	-17.3	1.32 V	185	40.4	10.5
6	15720.00	50.1 PK	74.0	-23.9	1.53 V	255	38.4	11.7
7	15720.00	37.6 AV	54.0	-16.4	1.53 V	255	25.9	11.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.3 PK	74.0	-23.7	1.46 H	22	49.0	1.3
2	5150.00	38.3 AV	54.0	-15.7	1.46 H	22	37.0	1.3
3	*5260.00	106.8 PK			1.46 H	22	105.9	0.9
4	*5260.00	97.4 AV			1.46 H	22	96.5	0.9
5	#10520.00	51.3 PK	68.2	-16.9	2.02 H	243	40.7	10.6
6	15780.00	49.5 PK	74.0	-24.5	1.18 H	186	38.0	11.5
7	15780.00	37.4 AV	54.0	-16.6	1.18 H	186	25.9	11.5

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.0 PK	74.0	-24.0	1.68 V	5	48.7	1.3
2	5150.00	38.4 AV	54.0	-15.6	1.68 V	5	37.1	1.3
3	*5260.00	113.1 PK			1.68 V	5	112.2	0.9
4	*5260.00	103.5 AV			1.68 V	5	102.6	0.9
5	#10520.00	50.7 PK	68.2	-17.5	1.24 V	170	40.1	10.6
6	15780.00	50.0 PK	74.0	-24.0	1.49 V	254	38.5	11.5
7	15780.00	37.8 AV	54.0	-16.2	1.49 V	254	26.3	11.5

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	107.3 PK			1.47 H	30	106.4	0.9
2	*5300.00	97.8 AV			1.47 H	30	96.9	0.9
3	10600.00	50.6 PK	74.0	-23.4	1.98 H	234	39.9	10.7
4	10600.00	38.9 AV	54.0	-15.1	1.98 H	234	28.2	10.7
5	15900.00	49.0 PK	74.0	-25.0	1.15 H	179	37.0	12.0
6	15900.00	36.4 AV	54.0	-17.6	1.15 H	179	24.4	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.3 PK			1.51 V	12	112.4	0.9
2	*5300.00	103.4 AV			1.51 V	12	102.5	0.9
3	10600.00	50.3 PK	74.0	-23.7	1.19 V	161	39.6	10.7
4	10600.00	38.9 AV	54.0	-15.1	1.19 V	161	28.2	10.7
5	15900.00	50.0 PK	74.0	-24.0	1.47 V	263	38.0	12.0
6	15900.00	37.7 AV	54.0	-16.3	1.47 V	263	25.7	12.0

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	108.1 PK			1.63 H	313	107.2	0.9
2	*5320.00	97.9 AV			1.63 H	313	97.0	0.9
3	5361.52	50.3 PK	74.0	-23.7	1.63 H	313	49.1	1.2
4	5361.52	38.5 AV	54.0	-15.5	1.63 H	313	37.3	1.2
5	10640.00	51.5 PK	74.0	-22.5	1.97 H	241	41.0	10.5
6	10640.00	39.5 AV	54.0	-14.5	1.97 H	241	29.0	10.5
7	15960.00	49.3 PK	74.0	-24.7	1.20 H	187	36.9	12.4
8	15960.00	37.2 AV	54.0	-16.8	1.20 H	187	24.8	12.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	112.8 PK			1.24 V	11	111.9	0.9
2	*5320.00	103.1 AV			1.24 V	11	102.2	0.9
3	5361.61	51.7 PK	74.0	-22.3	1.24 V	11	50.5	1.2
4	5361.61	40.6 AV	54.0	-13.4	1.24 V	11	39.4	1.2
5	10640.00	50.8 PK	74.0	-23.2	1.23 V	167	40.3	10.5
6	10640.00	39.2 AV	54.0	-14.8	1.23 V	167	28.7	10.5
7	15960.00	49.7 PK	74.0	-24.3	1.48 V	250	37.3	12.4
8	15960.00	37.3 AV	54.0	-16.7	1.48 V	250	24.9	12.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.1 PK	74.0	-23.9	1.53 H	315	48.7	1.4
2	5460.00	38.5 AV	54.0	-15.5	1.53 H	315	37.1	1.4
3	#5465.56	49.9 PK	68.2	-18.3	1.53 H	315	48.5	1.4
4	*5500.00	108.7 PK			1.53 H	315	107.3	1.4
5	*5500.00	98.5 AV			1.53 H	315	97.1	1.4
6	11000.00	51.1 PK	74.0	-22.9	2.04 H	228	39.5	11.6
7	11000.00	39.5 AV	54.0	-14.5	2.04 H	228	27.9	11.6
8	#16500.00	49.5 PK	68.2	-18.7	1.19 H	201	35.1	14.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	51.9 PK	74.0	-22.1	1.02 V	11	50.5	1.4
2	5460.00	40.2 AV	54.0	-13.8	1.02 V	11	38.8	1.4
3	#5463.16	51.3 PK	68.2	-16.9	1.02 V	11	49.9	1.4
4	*5500.00	113.4 PK			1.02 V	11	112.0	1.4
5	*5500.00	103.5 AV			1.02 V	11	102.1	1.4
6	11000.00	61.3 PK	74.0	-12.7	1.49 V	132	49.7	11.6
7	11000.00	46.6 AV	54.0	-7.4	1.49 V	132	35.0	11.6
8	#16500.00	57.2 PK	68.2	-11.0	3.61 V	186	42.8	14.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.0 PK			1.39 H	49	108.5	1.5
2	*5580.00	99.3 AV			1.39 H	49	97.8	1.5
3	11160.00	51.5 PK	74.0	-22.5	2.03 H	249	40.1	11.4
4	11160.00	39.7 AV	54.0	-14.3	2.03 H	249	28.3	11.4
5	#16740.00	49.3 PK	68.2	-18.9	1.10 H	190	33.6	15.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	114.0 PK			1.35 V	12	112.5	1.5
2	*5580.00	104.3 AV			1.35 V	12	102.8	1.5
3	11160.00	61.0 PK	74.0	-13.0	1.47 V	146	49.6	11.4
4	11160.00	46.5 AV	54.0	-7.5	1.47 V	146	35.1	11.4
5	#16740.00	57.0 PK	68.2	-11.2	3.51 V	190	41.3	15.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.6 PK			1.46 H	48	107.9	1.7
2	*5700.00	98.9 AV			1.46 H	48	97.2	1.7
3	#5725.00	52.2 PK	68.2	-16.0	1.46 H	48	50.4	1.8
4	11400.00	50.8 PK	74.0	-23.2	1.98 H	251	38.5	12.3
5	11400.00	39.2 AV	54.0	-14.8	1.98 H	251	26.9	12.3
6	#17100.00	49.1 PK	68.2	-19.1	1.10 H	192	31.8	17.3
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	*5700.00	113.6 PK			1.23 V	10	111.9	1.7
2	*5700.00	103.6 AV			1.23 V	10	101.9	1.7
3	#5725.00	58.8 PK	68.2	-9.4	1.23 V	10	57.0	1.8
4	11400.00	60.4 PK	74.0	-13.6	1.51 V	129	48.1	12.3
5	11400.00	46.1 AV	54.0	-7.9	1.51 V	129	33.8	12.3
6	#17100.00	56.8 PK	68.2	-11.4	3.58 V	181	39.5	17.3

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	49.5 PK	74.0	-24.5	1.37 H	50	48.1	1.4
2	5460.00	38.2 AV	54.0	-15.8	1.37 H	50	36.8	1.4
3	#5470.00	52.3 PK	68.2	-15.9	1.37 H	50	50.9	1.4
4	*5720.00	109.3 PK			1.37 H	50	107.5	1.8
5	*5720.00	98.7 AV			1.37 H	50	96.9	1.8
6	#5850.00	52.7 PK	68.2	-15.5	1.37 H	50	50.5	2.2
7	11440.00	51.1 PK	74.0	-22.9	2.01 H	234	38.8	12.3
8	11440.00	39.1 AV	54.0	-14.9	2.01 H	234	26.8	12.3
9	#17160.00	48.5 PK	68.2	-19.7	1.16 H	198	31.8	16.7

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	50.3 PK	74.0	-23.7	1.14 V	12	48.9	1.4
2	5460.00	39.2 AV	54.0	-14.8	1.14 V	12	37.8	1.4
3	#5470.00	50.5 PK	68.2	-17.7	1.14 V	12	49.1	1.4
4	*5720.00	113.8 PK			1.14 V	12	112.0	1.8
5	*5720.00	103.7 AV			1.14 V	12	101.9	1.8
6	#5850.00	51.0 PK	68.2	-17.2	1.14 V	12	48.8	2.2
7	11440.00	60.6 PK	74.0	-13.4	1.51 V	140	48.3	12.3
8	11440.00	46.3 AV	54.0	-7.7	1.51 V	140	34.0	12.3
9	#17160.00	56.1 PK	68.2	-12.1	3.56 V	209	39.4	16.7

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	#5562.69	50.0 PK	68.2	-18.2	1.62 H	324	48.5	1.5
2	*5745.00	119.2 PK			1.62 H	324	117.3	1.9
3	*5745.00	108.8 AV			1.62 H	324	106.9	1.9
4	#5998.31	49.7 PK	68.2	-18.5	1.62 H	324	47.6	2.1
5	11490.00	56.1 PK	74.0	-17.9	1.45 H	178	43.7	12.4
6	11490.00	43.8 AV	54.0	-10.2	1.45 H	178	31.4	12.4
7	#17235.00	63.4 PK	68.2	-4.8	2.19 H	254	47.2	16.2

**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	#5617.63	55.7 PK	68.2	-12.5	1.55 V	249	54.1	1.6
2	*5745.00	124.9 PK			1.55 V	249	123.0	1.9
3	*5745.00	115.3 AV			1.55 V	249	113.4	1.9
4	#5927.26	51.0 PK	68.2	-17.2	1.55 V	249	49.0	2.0
5	11490.00	60.7 PK	74.0	-13.3	1.51 V	134	48.3	12.4
6	11490.00	46.2 AV	54.0	-7.8	1.51 V	134	33.8	12.4
7	#17235.00	56.6 PK	68.2	-11.6	3.57 V	195	40.4	16.2

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	#5625.03	48.9 PK	68.2	-19.3	1.57 H	328	47.3	1.6
2	*5785.00	118.3 PK			1.57 H	328	116.3	2.0
3	*5785.00	108.0 AV			1.57 H	328	106.0	2.0
4	#5980.08	48.5 PK	68.2	-19.7	1.57 H	328	46.4	2.1
5	11570.00	56.2 PK	74.0	-17.8	1.40 H	184	44.0	12.2
6	11570.00	43.8 AV	54.0	-10.2	1.40 H	184	31.6	12.2
7	#17355.00	63.4 PK	68.2	-4.8	2.15 H	267	46.3	17.1

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	#5585.11	55.3 PK	68.2	-12.9	1.52 V	254	53.8	1.5
2	*5785.00	124.0 PK			1.52 V	254	122.0	2.0
3	*5785.00	115.0 AV			1.52 V	254	113.0	2.0
4	#5935.62	52.8 PK	68.2	-15.4	1.52 V	254	50.8	2.0
5	11570.00	60.8 PK	74.0	-13.2	1.55 V	122	48.6	12.2
6	11570.00	46.6 AV	54.0	-7.4	1.55 V	122	34.4	12.2
7	#17355.00	56.9 PK	68.2	-11.3	3.60 V	189	39.8	17.1

**Remarks:**

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

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	#5615.32	51.0 PK	68.2	-17.2	1.67 H	322	49.6	1.4
2	*5825.00	119.2 PK			1.67 H	322	117.1	2.1
3	*5825.00	108.7 AV			1.67 H	322	106.6	2.1
4	#5925.14	55.3 PK	68.2	-12.9	1.67 H	322	53.5	1.8
5	11650.00	56.3 PK	74.0	-17.7	1.44 H	193	44.4	11.9
6	11650.00	44.0 AV	54.0	-10.0	1.44 H	193	32.1	11.9
7	#17475.00	63.4 PK	68.2	-4.8	2.21 H	245	44.2	19.2

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	#5635.56	61.4 PK	68.2	-6.8	1.26 V	249	59.8	1.6
2	*5825.00	124.6 PK			1.26 V	249	122.5	2.1
3	*5825.00	115.4 AV			1.26 V	249	113.3	2.1
4	#5932.79	63.1 PK	68.2	-5.1	1.26 V	249	61.1	2.0
5	11650.00	60.5 PK	74.0	-13.5	1.55 V	118	48.6	11.9
6	11650.00	46.1 AV	54.0	-7.9	1.55 V	118	34.2	11.9
7	#17475.00	56.2 PK	68.2	-12.0	3.52 V	188	37.0	19.2

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 36 : 5180 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	52.6 PK	74.0	-21.4	1.67 H	312	51.3	1.3
2	5150.00	42.1 AV	54.0	-11.9	1.67 H	312	40.8	1.3
3	*5180.00	114.8 PK			1.67 H	312	113.6	1.2
4	*5180.00	103.5 AV			1.67 H	312	102.3	1.2
5	#10360.00	56.5 PK	68.2	-11.7	2.00 H	256	46.0	10.5
6	15540.00	54.2 PK	74.0	-19.8	2.65 H	255	41.8	12.4
7	15540.00	40.8 AV	54.0	-13.2	2.65 H	255	28.4	12.4

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5144.10	56.1 PK	74.0	-17.9	1.69 V	11	54.8	1.3
2	5144.10	45.9 AV	54.0	-8.1	1.69 V	11	44.6	1.3
3	*5180.00	120.0 PK			1.69 V	11	118.8	1.2
4	*5180.00	109.3 AV			1.69 V	11	108.1	1.2
5	#10360.00	47.1 PK	68.2	-21.1	1.56 V	175	36.6	10.5
6	15540.00	51.5 PK	74.0	-22.5	1.62 V	257	39.1	12.4
7	15540.00	40.4 AV	54.0	-13.6	1.62 V	257	28.0	12.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 40 : 5200 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	114.1 PK			1.70 H	325	112.9	1.2
2	*5200.00	103.0 AV			1.70 H	325	101.8	1.2
3	#10400.00	56.6 PK	68.2	-11.6	2.02 H	270	45.9	10.7
4	15600.00	54.0 PK	74.0	-20.0	2.64 H	242	41.3	12.7
5	15600.00	40.8 AV	54.0	-13.2	2.64 H	242	28.1	12.7

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	*5200.00	119.7 PK			1.75 V	8	118.5	1.2
2	*5200.00	109.0 AV			1.75 V	8	107.8	1.2
3	#10400.00	46.4 PK	68.2	-21.8	1.60 V	184	35.7	10.7
4	15600.00	51.6 PK	74.0	-22.4	1.63 V	253	38.9	12.7
5	15600.00	40.5 AV	54.0	-13.5	1.63 V	253	27.8	12.7

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 48 : 5240 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	113.7 PK			1.62 H	315	112.7	1.0
2	*5240.00	102.6 AV			1.62 H	315	101.6	1.0
3	5350.00	52.9 PK	74.0	-21.1	1.62 H	315	51.9	1.0
4	5350.00	42.2 AV	54.0	-11.8	1.62 H	315	41.2	1.0
5	#10480.00	56.5 PK	68.2	-11.7	1.95 H	254	46.0	10.5
6	15720.00	54.4 PK	74.0	-19.6	2.69 H	243	42.7	11.7
7	15720.00	40.7 AV	54.0	-13.3	2.69 H	243	29.0	11.7

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	119.5 PK			1.59 V	7	118.5	1.0
2	*5240.00	108.8 AV			1.59 V	7	107.8	1.0
3	5350.00	52.8 PK	74.0	-21.2	1.59 V	7	51.8	1.0
4	5350.00	41.8 AV	54.0	-12.2	1.59 V	7	40.8	1.0
5	#10480.00	47.2 PK	68.2	-21.0	1.57 V	188	36.7	10.5
6	15720.00	50.9 PK	74.0	-23.1	1.65 V	272	39.2	11.7
7	15720.00	40.0 AV	54.0	-14.0	1.65 V	272	28.3	11.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 52 : 5260 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	52.5 PK	74.0	-21.5	1.72 H	313	51.2	1.3
2	5150.00	41.9 AV	54.0	-12.1	1.72 H	313	40.6	1.3
3	*5260.00	108.9 PK			1.72 H	313	108.0	0.9
4	*5260.00	97.4 AV			1.72 H	313	96.5	0.9
5	#10520.00	56.4 PK	68.2	-11.8	1.99 H	264	45.8	10.6
6	15780.00	53.6 PK	74.0	-20.4	2.65 H	269	42.1	11.5
7	15780.00	40.4 AV	54.0	-13.6	2.65 H	269	28.9	11.5

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	53.1 PK	74.0	-20.9	1.30 V	8	51.8	1.3
2	5150.00	42.2 AV	54.0	-11.8	1.30 V	8	40.9	1.3
3	*5260.00	113.5 PK			1.30 V	8	112.6	0.9
4	*5260.00	102.0 AV			1.30 V	8	101.1	0.9
5	#10520.00	47.0 PK	68.2	-21.2	1.61 V	162	36.4	10.6
6	15780.00	51.2 PK	74.0	-22.8	1.59 V	245	39.7	11.5
7	15780.00	40.2 AV	54.0	-13.8	1.59 V	245	28.7	11.5

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 60 : 5300 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	109.3 PK			1.64 H	298	108.4	0.9
2	*5300.00	97.9 AV			1.64 H	298	97.0	0.9
3	10600.00	56.2 PK	74.0	-17.8	1.99 H	259	45.5	10.7
4	10600.00	43.7 AV	54.0	-10.3	1.99 H	259	33.0	10.7
5	15900.00	54.5 PK	74.0	-19.5	2.63 H	248	42.5	12.0
6	15900.00	41.2 AV	54.0	-12.8	2.63 H	248	29.2	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.5 PK			1.31 V	2	112.6	0.9
2	*5300.00	102.1 AV			1.31 V	2	101.2	0.9
3	10600.00	46.8 PK	74.0	-27.2	1.54 V	168	36.1	10.7
4	10600.00	35.1 AV	54.0	-18.9	1.54 V	168	24.4	10.7
5	15900.00	51.6 PK	74.0	-22.4	1.63 V	258	39.6	12.0
6	15900.00	40.8 AV	54.0	-13.2	1.63 V	258	28.8	12.0

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 64 : 5320 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	109.5 PK			1.59 H	311	108.6	0.9
2	*5320.00	97.9 AV			1.59 H	311	97.0	0.9
3	5352.54	51.0 PK	74.0	-23.0	1.59 H	311	50.0	1.0
4	5352.54	39.7 AV	54.0	-14.3	1.59 H	311	38.7	1.0
5	10640.00	56.0 PK	74.0	-18.0	1.95 H	245	45.5	10.5
6	10640.00	43.6 AV	54.0	-10.4	1.95 H	245	33.1	10.5
7	15960.00	54.7 PK	74.0	-19.3	2.69 H	232	42.3	12.4
8	15960.00	41.6 AV	54.0	-12.4	2.69 H	232	29.2	12.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	113.8 PK			1.26 V	9	112.9	0.9
2	*5320.00	102.3 AV			1.26 V	9	101.4	0.9
3	5362.97	51.7 PK	74.0	-22.3	1.26 V	9	50.5	1.2
4	5362.97	41.2 AV	54.0	-12.8	1.26 V	9	40.0	1.2
5	10640.00	46.4 PK	74.0	-27.6	1.55 V	163	35.9	10.5
6	10640.00	35.0 AV	54.0	-19.0	1.55 V	163	24.5	10.5
7	15960.00	52.3 PK	74.0	-21.7	1.68 V	264	39.9	12.4
8	15960.00	41.3 AV	54.0	-12.7	1.68 V	264	28.9	12.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 100 : 5500 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5453.50	49.4 PK	74.0	-24.6	1.67 H	320	48.0	1.4
2	5453.50	38.9 AV	54.0	-15.1	1.67 H	320	37.5	1.4
3	#5466.73	49.0 PK	68.2	-19.2	1.67 H	320	47.6	1.4
4	*5500.00	110.0 PK			1.67 H	320	108.6	1.4
5	*5500.00	98.3 AV			1.67 H	320	96.9	1.4
6	11000.00	61.7 PK	74.0	-12.3	1.83 H	167	50.1	11.6
7	11000.00	50.2 AV	54.0	-3.8	1.83 H	167	38.6	11.6
8	#16500.00	65.3 PK	68.2	-2.9	2.72 H	200	50.9	14.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	51.0 PK	74.0	-23.0	1.38 V	12	49.6	1.4
2	5460.00	40.3 AV	54.0	-13.7	1.38 V	12	38.9	1.4
3	#5462.48	52.3 PK	68.2	-15.9	1.38 V	12	50.9	1.4
4	*5500.00	114.2 PK			1.38 V	12	112.8	1.4
5	*5500.00	102.9 AV			1.38 V	12	101.5	1.4
6	11000.00	61.3 PK	74.0	-12.7	1.45 V	148	49.7	11.6
7	11000.00	47.6 AV	54.0	-6.4	1.45 V	148	36.0	11.6
8	#16500.00	55.8 PK	68.2	-12.4	4.00 V	201	41.4	14.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 116 : 5580 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.8 PK			1.64 H	300	109.3	1.5
2	*5580.00	98.9 AV			1.64 H	300	97.4	1.5
3	11160.00	61.3 PK	74.0	-12.7	1.83 H	188	49.9	11.4
4	11160.00	50.1 AV	54.0	-3.9	1.83 H	188	38.7	11.4
5	#16740.00	64.5 PK	68.2	-3.7	2.63 H	204	48.8	15.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	114.4 PK			1.39 V	10	112.9	1.5
2	*5580.00	103.0 AV			1.39 V	10	101.5	1.5
3	11160.00	61.2 PK	74.0	-12.8	1.44 V	147	49.8	11.4
4	11160.00	47.4 AV	54.0	-6.6	1.44 V	147	36.0	11.4
5	#16740.00	56.3 PK	68.2	-11.9	3.98 V	200	40.6	15.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 140 : 5700 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.0 PK			1.63 H	297	107.3	1.7
2	*5700.00	97.5 AV			1.63 H	297	95.8	1.7
3	#5725.00	51.2 PK	68.2	-17.0	1.63 H	297	49.4	1.8
4	11400.00	60.8 PK	74.0	-13.2	1.77 H	185	48.5	12.3
5	11400.00	49.5 AV	54.0	-4.5	1.77 H	185	37.2	12.3
6	#17100.00	64.7 PK	68.2	-3.5	2.64 H	193	47.4	17.3
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	*5700.00	113.4 PK			1.29 V	18	111.7	1.7
2	*5700.00	102.3 AV			1.29 V	18	100.6	1.7
3	#5725.00	51.6 PK	68.2	-16.6	1.29 V	18	49.8	1.8
4	11400.00	62.0 PK	74.0	-12.0	1.53 V	154	49.7	12.3
5	11400.00	47.9 AV	54.0	-6.1	1.53 V	154	35.6	12.3
6	#17100.00	56.6 PK	68.2	-11.6	4.00 V	207	39.3	17.3

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 144 : 5720 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	51.4 PK	74.0	-22.6	1.68 H	324	50.0	1.4
2	5460.00	39.8 AV	54.0	-14.2	1.68 H	324	38.4	1.4
3	#5470.00	48.5 PK	68.2	-19.7	1.68 H	324	47.1	1.4
4	*5720.00	108.7 PK			1.68 H	324	106.9	1.8
5	*5720.00	97.5 AV			1.68 H	324	95.7	1.8
6	#5850.00	49.4 PK	68.2	-18.8	1.68 H	324	47.2	2.2
7	11440.00	61.6 PK	74.0	-12.4	1.83 H	177	49.3	12.3
8	11440.00	50.2 AV	54.0	-3.8	1.83 H	177	37.9	12.3
9	#17160.00	64.6 PK	68.2	-3.6	2.65 H	221	47.9	16.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	50.4 PK	74.0	-23.6	1.23 V	16	49.0	1.4
2	5460.00	39.2 AV	54.0	-14.8	1.23 V	16	37.8	1.4
3	#5470.00	51.3 PK	68.2	-16.9	1.23 V	16	49.9	1.4
4	*5720.00	113.8 PK			1.23 V	16	112.0	1.8
5	*5720.00	102.6 AV			1.23 V	16	100.8	1.8
6	#5850.00	52.5 PK	68.2	-15.7	1.23 V	16	50.3	2.2
7	11440.00	61.8 PK	74.0	-12.2	1.54 V	141	49.5	12.3
8	11440.00	47.8 AV	54.0	-6.2	1.54 V	141	35.5	12.3
9	#17160.00	56.3 PK	68.2	-11.9	3.98 V	188	39.6	16.7

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 149 : 5745 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	#5584.40	50.8 PK	68.2	-17.4	1.73 H	317	49.3	1.5
2	*5745.00	119.7 PK			1.73 H	317	117.8	1.9
3	*5745.00	108.4 AV			1.73 H	317	106.5	1.9
4	#5933.80	50.1 PK	68.2	-18.1	1.73 H	317	48.1	2.0
5	11490.00	61.6 PK	74.0	-12.4	1.79 H	180	49.2	12.4
6	11490.00	50.1 AV	54.0	-3.9	1.79 H	180	37.7	12.4
7	#17235.00	65.2 PK	68.2	-3.0	2.70 H	208	49.0	16.2
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	#5641.48	57.3 PK	68.2	-10.9	1.34 V	248	55.7	1.6
2	*5745.00	125.9 PK			1.34 V	248	124.0	1.9
3	*5745.00	115.3 AV			1.34 V	248	113.4	1.9
4	#5938.41	52.4 PK	68.2	-15.8	1.34 V	248	50.4	2.0
5	11490.00	61.0 PK	74.0	-13.0	1.54 V	140	48.6	12.4
6	11490.00	47.1 AV	54.0	-6.9	1.54 V	140	34.7	12.4
7	#17235.00	56.2 PK	68.2	-12.0	3.99 V	203	40.0	16.2

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 157 : 5785 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	#5590.73	50.3 PK	68.2	-17.9	1.71 H	324	48.7	1.6
2	*5785.00	120.1 PK			1.71 H	324	118.1	2.0
3	*5785.00	109.0 AV			1.71 H	324	107.0	2.0
4	#5936.19	49.7 PK	68.2	-18.5	1.71 H	324	47.7	2.0
5	11570.00	61.5 PK	74.0	-12.5	1.88 H	176	49.3	12.2
6	11570.00	50.0 AV	54.0	-4.0	1.88 H	176	37.8	12.2
7	#17355.00	64.7 PK	68.2	-3.5	2.72 H	200	47.6	17.1
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	#5643.48	61.6 PK	68.2	-6.6	1.44 V	239	60.0	1.6
2	*5785.00	126.3 PK			1.44 V	239	124.3	2.0
3	*5785.00	115.8 AV			1.44 V	239	113.8	2.0
4	#5929.60	60.3 PK	68.2	-7.9	1.44 V	239	58.3	2.0
5	11570.00	61.4 PK	74.0	-12.6	1.47 V	129	49.2	12.2
6	11570.00	47.3 AV	54.0	-6.7	1.47 V	129	35.1	12.2
7	#17355.00	56.3 PK	68.2	-11.9	3.93 V	182	39.2	17.1

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT20)	<b>Channel</b>	CH 165 : 5825 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5645.36	51.2 PK	68.2	-17.0	1.51 H	323	49.6	1.6
2	*5825.00	120.6 PK			1.51 H	323	118.5	2.1
3	*5825.00	109.4 AV			1.51 H	323	107.3	2.1
4	#5972.42	53.8 PK	68.2	-14.4	1.51 H	323	51.7	2.1
5	11650.00	61.0 PK	74.0	-13.0	1.83 H	179	49.1	11.9
6	11650.00	49.7 AV	54.0	-4.3	1.83 H	179	37.8	11.9
7	#17475.00	64.9 PK	68.2	-3.3	2.68 H	209	45.7	19.2

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	#5636.64	62.4 PK	68.2	-5.8	1.39 V	245	60.8	1.6
2	*5825.00	126.7 PK			1.39 V	245	124.6	2.1
3	*5825.00	116.2 AV			1.39 V	245	114.1	2.1
4	#5930.72	65.2 PK	68.2	-3.0	1.39 V	245	63.2	2.0
5	11650.00	61.3 PK	74.0	-12.7	1.49 V	140	49.4	11.9
6	11650.00	47.4 AV	54.0	-6.6	1.49 V	140	35.5	11.9
7	#17475.00	56.3 PK	68.2	-11.9	3.96 V	193	37.1	19.2

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 38 : 5190 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.2 PK	74.0	-16.8	1.69 H	311	55.9	1.3
2	5150.00	44.5 AV	54.0	-9.5	1.69 H	311	43.2	1.3
3	*5190.00	111.9 PK			1.69 H	311	110.7	1.2
4	*5190.00	101.6 AV			1.69 H	311	100.4	1.2
5	#10380.00	47.3 PK	68.2	-20.9	1.78 H	170	36.7	10.6
6	15570.00	51.8 PK	74.0	-22.2	2.66 H	204	39.1	12.7
7	15570.00	40.9 AV	54.0	-13.1	2.66 H	204	28.2	12.7

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.6 PK	74.0	-6.4	1.52 V	12	66.3	1.3
2	5150.00	53.5 AV	54.0	-0.5	1.52 V	12	52.2	1.3
3	*5190.00	116.1 PK			1.52 V	12	114.9	1.2
4	*5190.00	107.1 AV			1.52 V	12	105.9	1.2
5	#10380.00	47.3 PK	68.2	-20.9	1.49 V	181	36.7	10.6
6	15570.00	51.1 PK	74.0	-22.9	1.60 V	249	38.4	12.7
7	15570.00	40.4 AV	54.0	-13.6	1.60 V	249	27.7	12.7

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 46 : 5230 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	52.3 PK	74.0	-21.7	1.60 H	319	51.0	1.3
2	5150.00	41.6 AV	54.0	-12.4	1.60 H	319	40.3	1.3
3	*5230.00	114.5 PK			1.60 H	319	113.4	1.1
4	*5230.00	104.4 AV			1.60 H	319	103.3	1.1
5	5350.00	51.9 PK	74.0	-22.1	1.60 H	319	50.9	1.0
6	5350.00	40.7 AV	54.0	-13.3	1.60 H	319	39.7	1.0
7	#10460.00	47.5 PK	68.2	-20.7	1.81 H	170	36.8	10.7
8	15690.00	52.3 PK	74.0	-21.7	2.65 H	210	40.5	11.8
9	15690.00	41.3 AV	54.0	-12.7	2.65 H	210	29.5	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	55.9 PK	74.0	-18.1	1.47 V	10	54.6	1.3
2	5150.00	45.8 AV	54.0	-8.2	1.47 V	10	44.5	1.3
3	*5230.00	119.7 PK			1.47 V	10	118.6	1.1
4	*5230.00	109.6 AV			1.47 V	10	108.5	1.1
5	5375.93	53.0 PK	74.0	-21.0	1.47 V	10	51.8	1.2
6	5375.93	44.5 AV	54.0	-9.5	1.47 V	10	43.3	1.2
7	#10460.00	46.5 PK	68.2	-21.7	1.49 V	166	35.8	10.7
8	15690.00	51.9 PK	74.0	-22.1	1.68 V	252	40.1	11.8
9	15690.00	41.2 AV	54.0	-12.8	1.68 V	252	29.4	11.8

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 54 : 5270 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	52.3 PK	74.0	-21.7	1.61 H	318	51.0	1.3
2	5150.00	41.5 AV	54.0	-12.5	1.61 H	318	40.2	1.3
3	*5270.00	107.8 PK			1.61 H	318	106.9	0.9
4	*5270.00	98.3 AV			1.61 H	318	97.4	0.9
5	#10540.00	47.1 PK	68.2	-21.1	1.77 H	186	36.5	10.6
6	15810.00	52.1 PK	74.0	-21.9	2.68 H	190	40.6	11.5
7	15810.00	41.0 AV	54.0	-13.0	2.68 H	190	29.5	11.5

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.3 PK	74.0	-18.7	1.34 V	4	54.0	1.3
2	5150.00	44.1 AV	54.0	-9.9	1.34 V	4	42.8	1.3
3	*5270.00	113.1 PK			1.34 V	4	112.2	0.9
4	*5270.00	103.2 AV			1.34 V	4	102.3	0.9
5	#10540.00	47.1 PK	68.2	-21.1	1.50 V	162	36.5	10.6
6	15810.00	52.1 PK	74.0	-21.9	1.67 V	262	40.6	11.5
7	15810.00	41.2 AV	54.0	-12.8	1.67 V	262	29.7	11.5

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 62 : 5310 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	108.1 PK			1.66 H	324	107.2	0.9
2	*5310.00	98.4 AV			1.66 H	324	97.5	0.9
3	5350.00	52.2 PK	74.0	-21.8	1.66 H	324	51.2	1.0
4	5350.00	41.5 AV	54.0	-12.5	1.66 H	324	40.5	1.0
5	10620.00	47.1 PK	74.0	-26.9	1.81 H	169	36.5	10.6
6	10620.00	35.2 AV	54.0	-18.8	1.81 H	169	24.6	10.6
7	15930.00	52.0 PK	74.0	-22.0	2.68 H	215	39.8	12.2
8	15930.00	41.0 AV	54.0	-13.0	2.68 H	215	28.8	12.2

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	113.5 PK			1.32 V	8	112.6	0.9
2	*5310.00	103.6 AV			1.32 V	8	102.7	0.9
3	5353.64	54.7 PK	74.0	-19.3	1.32 V	8	53.7	1.0
4	5353.64	43.7 AV	54.0	-10.3	1.32 V	8	42.7	1.0
5	10620.00	46.6 PK	74.0	-27.4	1.54 V	154	36.0	10.6
6	10620.00	35.0 AV	54.0	-19.0	1.54 V	154	24.4	10.6
7	15930.00	51.6 PK	74.0	-22.4	1.69 V	244	39.4	12.2
8	15930.00	40.9 AV	54.0	-13.1	1.69 V	244	28.7	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.

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 102 : 5510 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	51.3 PK	74.0	-22.7	1.65 H	313	49.9	1.4
2	5460.00	40.6 AV	54.0	-13.4	1.65 H	313	39.2	1.4
3	#5467.64	53.2 PK	68.2	-15.0	1.65 H	313	51.8	1.4
4	*5510.00	108.1 PK			1.65 H	313	106.7	1.4
5	*5510.00	98.1 AV			1.65 H	313	96.7	1.4
6	11020.00	47.8 PK	74.0	-26.2	1.80 H	165	36.2	11.6
7	11020.00	35.7 AV	54.0	-18.3	1.80 H	165	24.1	11.6
8	#16530.00	51.5 PK	68.2	-16.7	2.61 H	192	36.7	14.8

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.0 PK	74.0	-19.0	1.32 V	11	53.6	1.4
2	5460.00	42.1 AV	54.0	-11.9	1.32 V	11	40.7	1.4
3	#5470.00	56.9 PK	68.2	-11.3	1.32 V	11	55.5	1.4
4	*5510.00	114.1 PK			1.32 V	11	112.7	1.4
5	*5510.00	104.2 AV			1.32 V	11	102.8	1.4
6	11020.00	46.0 PK	74.0	-28.0	1.53 V	169	34.4	11.6
7	11020.00	34.6 AV	54.0	-19.4	1.53 V	169	23.0	11.6
8	#16530.00	51.5 PK	68.2	-16.7	1.67 V	246	36.7	14.8

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 110 : 5550 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	109.6 PK			1.72 H	315	108.2	1.4
2	*5550.00	99.7 AV			1.72 H	315	98.3	1.4
3	11100.00	47.3 PK	74.0	-26.7	1.81 H	162	35.9	11.4
4	11100.00	35.6 AV	54.0	-18.4	1.81 H	162	24.2	11.4
5	#16650.00	51.9 PK	68.2	-16.3	2.70 H	193	36.0	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	115.6 PK			1.35 V	327	114.2	1.4
2	*5550.00	105.6 AV			1.35 V	327	104.2	1.4
3	11100.00	45.3 PK	74.0	-28.7	1.55 V	164	33.9	11.4
4	11100.00	34.1 AV	54.0	-19.9	1.55 V	164	22.7	11.4
5	#16650.00	51.7 PK	68.2	-16.5	1.70 V	247	35.8	15.9

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 134 : 5670 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	110.0 PK			1.61 H	324	108.4	1.6
2	*5670.00	100.1 AV			1.61 H	324	98.5	1.6
3	#5725.00	51.6 PK	68.2	-16.6	1.61 H	324	49.8	1.8
4	11340.00	46.7 PK	74.0	-27.3	1.77 H	149	34.9	11.8
5	11340.00	35.1 AV	54.0	-18.9	1.77 H	149	23.3	11.8
6	#17010.00	51.9 PK	68.2	-16.3	2.75 H	206	34.2	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	115.2 PK			1.32 V	324	113.6	1.6
2	*5670.00	105.3 AV			1.32 V	324	103.7	1.6
3	#5725.00	56.0 PK	68.2	-12.2	1.32 V	324	54.2	1.8
4	11340.00	46.6 PK	74.0	-27.4	1.58 V	183	34.8	11.8
5	11340.00	35.1 AV	54.0	-18.9	1.58 V	183	23.3	11.8
6	#17010.00	51.6 PK	68.2	-16.6	1.67 V	252	33.9	17.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 142 : 5710 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.9 PK	74.0	-23.1	1.72 H	313	49.5	1.4
2	5460.00	40.2 AV	54.0	-13.8	1.72 H	313	38.8	1.4
3	#5470.00	52.3 PK	68.2	-15.9	1.72 H	313	50.9	1.4
4	*5710.00	108.9 PK			1.72 H	313	107.1	1.8
5	*5710.00	99.1 AV			1.72 H	313	97.3	1.8
6	#5850.00	51.0 PK	68.2	-17.2	1.72 H	313	48.8	2.2
7	11420.00	47.0 PK	74.0	-27.0	1.86 H	165	34.7	12.3
8	11420.00	35.5 AV	54.0	-18.5	1.86 H	165	23.2	12.3
9	#17130.00	51.8 PK	68.2	-16.4	2.72 H	205	34.8	17.0
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	5460.00	51.0 PK	74.0	-23.0	1.79 V	326	49.6	1.4
2	5460.00	40.5 AV	54.0	-13.5	1.79 V	326	39.1	1.4
3	#5470.00	51.5 PK	68.2	-16.7	1.79 V	326	50.1	1.4
4	*5710.00	114.9 PK			1.79 V	326	113.1	1.8
5	*5710.00	105.0 AV			1.79 V	326	103.2	1.8
6	#5850.00	52.8 PK	68.2	-15.4	1.79 V	326	50.6	2.2
7	11420.00	46.7 PK	74.0	-27.3	1.62 V	185	34.4	12.3
8	11420.00	35.0 AV	54.0	-19.0	1.62 V	185	22.7	12.3
9	#17130.00	51.7 PK	68.2	-16.5	1.61 V	240	34.7	17.0

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5644.25	57.5 PK	68.2	-10.7	1.54 H	321	56.1	1.4
2	*5755.00	117.2 PK			1.54 H	321	115.3	1.9
3	*5755.00	106.8 AV			1.54 H	321	104.9	1.9
4	#5968.66	49.3 PK	68.2	-18.9	1.54 H	321	47.5	1.8
5	11510.00	47.5 PK	74.0	-26.5	1.89 H	156	35.2	12.3
6	11510.00	35.8 AV	54.0	-18.2	1.89 H	156	23.5	12.3
7	#17265.00	51.7 PK	68.2	-16.5	2.76 H	191	35.6	16.1

**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	#5636.90	63.4 PK	68.2	-4.8	1.51 V	249	61.8	1.6
2	*5755.00	122.3 PK			1.51 V	249	120.4	1.9
3	*5755.00	113.1 AV			1.51 V	249	111.2	1.9
4	#5928.56	54.2 PK	68.2	-14.0	1.51 V	249	52.2	2.0
5	11510.00	47.0 PK	74.0	-27.0	1.57 V	173	34.7	12.3
6	11510.00	35.5 AV	54.0	-18.5	1.57 V	173	23.2	12.3
7	#17265.00	52.1 PK	68.2	-16.1	1.63 V	267	36.0	16.1

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 159 : 5795 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	#5633.60	54.0 PK	68.2	-14.2	1.48 H	326	52.4	1.6
2	*5795.00	117.3 PK			1.48 H	326	115.2	2.1
3	*5795.00	106.7 AV			1.48 H	326	104.6	2.1
4	#5934.99	56.2 PK	68.2	-12.0	1.48 H	326	54.2	2.0
5	11590.00	47.1 PK	74.0	-26.9	1.82 H	178	34.9	12.2
6	11590.00	35.8 AV	54.0	-18.2	1.82 H	178	23.6	12.2
7	#17385.00	52.1 PK	68.2	-16.1	2.71 H	205	34.1	18.0

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	#5644.68	65.8 PK	68.2	-2.4	1.15 V	250	64.2	1.6
2	*5795.00	123.3 PK			1.15 V	250	121.2	2.1
3	*5795.00	113.2 AV			1.15 V	250	111.1	2.1
4	#5930.00	65.8 PK	68.2	-2.4	1.15 V	250	63.8	2.0
5	11590.00	46.2 PK	74.0	-27.8	1.56 V	178	34.0	12.2
6	11590.00	34.6 AV	54.0	-19.4	1.56 V	178	22.4	12.2
7	#17385.00	52.0 PK	68.2	-16.2	1.65 V	242	34.0	18.0

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 42 : 5210 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5147.32	52.8 PK	74.0	-21.2	1.68 H	303	51.5	1.3
2	5147.32	43.1 AV	54.0	-10.9	1.68 H	303	41.8	1.3
3	*5210.00	105.5 PK			1.68 H	303	104.3	1.2
4	*5210.00	95.2 AV			1.68 H	303	94.0	1.2
5	5352.17	50.9 PK	74.0	-23.1	1.68 H	303	49.9	1.0
6	5352.17	39.3 AV	54.0	-14.7	1.68 H	303	38.3	1.0
7	#10420.00	47.3 PK	68.2	-20.9	1.81 H	164	36.6	10.7
8	15630.00	52.2 PK	74.0	-21.8	2.69 H	209	39.8	12.4
9	15630.00	40.6 AV	54.0	-13.4	2.69 H	209	28.2	12.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5137.99	63.4 PK	74.0	-10.6	1.65 V	321	62.1	1.3
2	5137.99	51.8 AV	54.0	-2.2	1.65 V	321	50.5	1.3
3	*5210.00	110.6 PK			1.65 V	321	109.4	1.2
4	*5210.00	101.0 AV			1.65 V	321	99.8	1.2
5	5350.00	53.1 PK	74.0	-20.9	1.65 V	321	52.1	1.0
6	5350.00	42.3 AV	54.0	-11.7	1.65 V	321	41.3	1.0
7	#10420.00	47.2 PK	68.2	-21.0	1.58 V	184	36.5	10.7
8	15630.00	51.5 PK	74.0	-22.5	1.68 V	243	39.1	12.4
9	15630.00	40.5 AV	54.0	-13.5	1.68 V	243	28.1	12.4

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 58 : 5290 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.2 PK	74.0	-23.8	1.69 H	315	48.9	1.3
2	5150.00	38.7 AV	54.0	-15.3	1.69 H	315	37.4	1.3
3	*5290.00	104.8 PK			1.69 H	315	103.9	0.9
4	*5290.00	94.7 AV			1.69 H	315	93.8	0.9
5	5350.00	57.8 PK	74.0	-16.2	1.69 H	315	56.8	1.0
6	5350.00	46.7 AV	54.0	-7.3	1.69 H	315	45.7	1.0
7	#10580.00	47.1 PK	68.2	-21.1	1.84 H	154	36.5	10.6
8	15870.00	52.3 PK	74.0	-21.7	2.75 H	212	40.4	11.9
9	15870.00	41.0 AV	54.0	-13.0	2.75 H	212	29.1	11.9

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	51.0 PK	74.0	-23.0	1.86 V	325	49.7	1.3
2	5150.00	40.6 AV	54.0	-13.4	1.86 V	325	39.3	1.3
3	*5290.00	109.7 PK			1.86 V	325	108.8	0.9
4	*5290.00	100.8 AV			1.86 V	325	99.9	0.9
5	5357.48	67.0 PK	74.0	-7.0	1.86 V	325	65.8	1.2
<b>6</b>	<b>5357.48</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.86 V</b>	<b>325</b>	<b>52.7</b>	<b>1.2</b>
7	#10580.00	46.6 PK	68.2	-21.6	1.57 V	171	36.0	10.6
8	15870.00	51.3 PK	74.0	-22.7	1.70 V	248	39.4	11.9
9	15870.00	40.5 AV	54.0	-13.5	1.70 V	248	28.6	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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 106 : 5530 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5452.58	56.1 PK	74.0	-17.9	1.57 H	311	54.7	1.4
2	5452.58	45.8 AV	54.0	-8.2	1.57 H	311	44.4	1.4
3	#5461.75	55.1 PK	68.2	-13.1	1.57 H	311	53.7	1.4
4	*5530.00	107.2 PK			1.57 H	311	105.8	1.4
5	*5530.00	96.8 AV			1.57 H	311	95.4	1.4
6	#5798.02	50.9 PK	68.2	-17.3	1.57 H	311	48.8	2.1
7	11060.00	47.5 PK	74.0	-26.5	1.84 H	175	35.9	11.6
8	11060.00	36.0 AV	54.0	-18.0	1.84 H	175	24.4	11.6
9	#16590.00	52.2 PK	68.2	-16.0	2.74 H	222	36.5	15.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5455.56	64.6 PK	74.0	-9.4	1.64 V	329	63.2	1.4
2	5455.56	53.0 AV	54.0	-1.0	1.64 V	329	51.6	1.4
3	#5468.23	66.2 PK	68.2	-2.0	1.64 V	329	64.8	1.4
4	*5530.00	111.4 PK			1.64 V	329	110.0	1.4
5	*5530.00	101.6 AV			1.64 V	329	100.2	1.4
6	#5725.00	53.8 PK	68.2	-14.4	1.64 V	329	52.0	1.8
7	11060.00	46.2 PK	74.0	-27.8	1.52 V	165	34.6	11.6
8	11060.00	34.6 AV	54.0	-19.4	1.52 V	165	23.0	11.6
9	#16590.00	51.3 PK	68.2	-16.9	1.60 V	247	35.6	15.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 122 : 5610 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	108.9 PK			1.61 H	322	107.3	1.6
2	*5610.00	97.3 AV			1.61 H	322	95.7	1.6
3	#5725.00	55.8 PK	68.2	-12.4	1.61 H	322	54.0	1.8
4	11220.00	46.6 PK	74.0	-27.4	1.81 H	163	35.2	11.4
5	11220.00	35.2 AV	54.0	-18.8	1.81 H	163	23.8	11.4
6	#16830.00	52.7 PK	68.2	-15.5	2.67 H	210	36.9	15.8
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	113.3 PK			1.77 V	328	111.7	1.6
2	*5610.00	104.2 AV			1.77 V	328	102.6	1.6
3	#5725.00	60.1 PK	68.2	-8.1	1.77 V	328	58.3	1.8
4	11220.00	46.5 PK	74.0	-27.5	1.54 V	174	35.1	11.4
5	11220.00	35.0 AV	54.0	-19.0	1.54 V	174	23.6	11.4
6	#16830.00	51.1 PK	68.2	-17.1	1.68 V	242	35.3	15.8

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 138 : 5690 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.9 PK	74.0	-23.1	1.67 H	302	49.5	1.4
2	5460.00	45.5 AV	54.0	-8.5	1.67 H	302	44.1	1.4
3	#5470.00	50.0 PK	68.2	-18.2	1.67 H	302	48.6	1.4
4	*5690.00	107.5 PK			1.67 H	302	105.8	1.7
5	*5690.00	97.2 AV			1.67 H	302	95.5	1.7
6	#5850.00	50.8 PK	68.2	-17.4	1.67 H	302	48.6	2.2
7	11380.00	46.4 PK	74.0	-27.6	1.83 H	152	34.4	12.0
8	11380.00	35.1 AV	54.0	-18.9	1.83 H	152	23.1	12.0
9	#17070.00	53.0 PK	68.2	-15.2	2.66 H	226	35.6	17.4
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	53.5 PK	74.0	-20.5	1.60 V	330	52.1	1.4
2	5460.00	41.5 AV	54.0	-12.5	1.60 V	330	40.1	1.4
3	#5470.00	53.9 PK	68.2	-14.3	1.60 V	330	52.5	1.4
4	*5690.00	112.9 PK			1.60 V	330	111.2	1.7
5	*5690.00	104.0 AV			1.60 V	330	102.3	1.7
6	#5850.00	56.2 PK	68.2	-12.0	1.60 V	330	54.0	2.2
7	11380.00	46.6 PK	74.0	-27.4	1.56 V	176	34.6	12.0
8	11380.00	35.0 AV	54.0	-19.0	1.56 V	176	23.0	12.0
9	#17070.00	51.9 PK	68.2	-16.3	1.60 V	253	34.5	17.4

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80)	<b>Channel</b>	CH 155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5645.71	53.9 PK	68.2	-14.3	1.57 H	319	52.3	1.6
2	*5775.00	111.0 PK			1.57 H	319	109.0	2.0
3	*5775.00	101.6 AV			1.57 H	319	99.6	2.0
4	#5932.29	52.8 PK	68.2	-15.4	1.57 H	319	50.8	2.0
5	11550.00	47.2 PK	74.0	-26.8	1.83 H	165	34.9	12.3
6	11550.00	35.7 AV	54.0	-18.3	1.83 H	165	23.4	12.3
7	#17325.00	51.8 PK	68.2	-16.4	2.71 H	213	35.3	16.5

**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	#5639.73	60.9 PK	68.2	-7.3	1.15 V	249	59.3	1.6
2	*5775.00	116.8 PK			1.15 V	249	114.8	2.0
3	*5775.00	107.0 AV			1.15 V	249	105.0	2.0
4	#5939.46	56.8 PK	68.2	-11.4	1.15 V	249	54.8	2.0
5	11550.00	46.6 PK	74.0	-27.4	1.54 V	159	34.3	12.3
6	11550.00	34.8 AV	54.0	-19.2	1.54 V	159	22.5	12.3
7	#17325.00	51.8 PK	68.2	-16.4	1.62 V	273	35.3	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 42+58 : 5290 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5143.69	55.3 PK	74.0	-18.7	1.81 H	318	54.0	1.3
2	5143.69	42.0 AV	54.0	-12.0	1.81 H	318	40.7	1.3
3	5144.90	52.0 PK	74.0	-22.0	1.75 H	320	50.7	1.3
4	5144.90	42.0 AV	54.0	-12.0	1.75 H	320	40.7	1.3
5	*5210.00	102.1 PK			1.75 H	320	100.9	1.2
6	*5210.00	91.4 AV			1.75 H	320	90.2	1.2
7	*5290.00	103.4 PK			1.81 H	318	102.5	0.9
8	*5290.00	93.0 AV			1.81 H	318	92.1	0.9
9	5359.63	57.0 PK	74.0	-17.0	1.81 H	318	55.8	1.2
10	5359.63	44.4 AV	54.0	-9.6	1.81 H	318	43.2	1.2
11	5360.27	55.4 PK	74.0	-18.6	1.75 H	320	54.2	1.2
12	5360.27	44.2 AV	54.0	-9.8	1.75 H	320	43.0	1.2
13	#10420.00	47.0 PK	68.2	-21.2	1.77 H	169	36.3	10.7
14	#10580.00	52.0 PK	68.2	-16.2	2.66 H	210	41.4	10.6
15	15630.00	46.5 PK	74.0	-27.5	1.87 H	177	34.1	12.4
16	15630.00	35.4 AV	54.0	-18.6	1.87 H	177	23.0	12.4
17	15870.00	51.2 PK	74.0	-22.8	2.66 H	221	39.3	11.9
18	15870.00	40.2 AV	54.0	-13.8	2.66 H	221	28.3	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	5140.99	64.9 PK	74.0	-9.1	1.66 V	134	63.6	1.3
2	<b>5140.99</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.66 V</b>	<b>134</b>	<b>52.6</b>	<b>1.3</b>
3	5145.36	58.4 PK	74.0	-15.6	1.73 V	314	57.1	1.3
4	5145.36	46.4 AV	54.0	-7.6	1.73 V	314	45.1	1.3
5	*5210.00	109.9 PK			1.66 V	134	108.7	1.2
6	*5210.00	99.2 AV			1.66 V	134	98.0	1.2
7	*5290.00	110.1 PK			1.73 V	314	109.2	0.9
8	*5290.00	102.2 AV			1.73 V	314	101.3	0.9
9	5359.06	57.1 PK	74.0	-16.9	1.66 V	134	55.9	1.2
10	5359.06	47.8 AV	54.0	-6.2	1.66 V	134	46.6	1.2
11	5365.06	70.2 PK	74.0	-3.8	1.73 V	314	69.0	1.2
12	<b>5365.06</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.73 V</b>	<b>314</b>	<b>52.7</b>	<b>1.2</b>
13	#10420.00	47.2 PK	68.2	-21.0	1.56 V	198	36.5	10.7
14	#10580.00	52.0 PK	68.2	-16.2	1.69 V	231	41.4	10.6
15	15630.00	46.5 PK	74.0	-27.5	1.62 V	159	34.1	12.4
16	15630.00	35.1 AV	54.0	-18.9	1.62 V	159	22.7	12.4
17	15870.00	51.5 PK	74.0	-22.5	1.70 V	259	39.6	11.9
18	15870.00	40.7 AV	54.0	-13.3	1.70 V	259	28.8	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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 42+106 : 5530 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5144.91	53.3 PK	74.0	-20.7	1.80 H	317	52.0	1.3
2	5144.91	41.0 AV	54.0	-13.0	1.80 H	317	39.7	1.3
3	*5210.00	102.1 PK			1.80 H	317	100.9	1.2
4	*5210.00	91.2 AV			1.80 H	317	90.0	1.2
5	5443.10	51.4 PK	74.0	-22.6	1.80 H	317	50.1	1.3
6	5443.10	40.4 AV	54.0	-13.6	1.80 H	317	39.1	1.3
7	5444.84	53.0 PK	74.0	-21.0	1.66 H	319	51.7	1.3
8	5444.84	40.7 AV	54.0	-13.3	1.66 H	319	39.4	1.3
9	#5463.34	51.4 PK	68.2	-16.8	1.66 H	319	50.0	1.4
10	*5530.00	102.3 PK			1.66 H	319	100.9	1.4
11	*5530.00	92.7 AV			1.66 H	319	91.3	1.4
12	#5824.55	53.9 PK	68.2	-14.3	1.66 H	319	51.8	2.1
13	#10420.00	47.3 PK	68.2	-20.9	1.80 H	142	36.6	10.7
14	11060.00	52.6 PK	74.0	-21.4	2.62 H	232	41.0	11.6
15	11060.00	40.5 AV	54.0	-13.5	2.62 H	232	28.9	11.6
16	15630.00	46.6 PK	74.0	-27.4	1.87 H	164	34.2	12.4
17	15630.00	35.4 AV	54.0	-18.6	1.87 H	164	23.0	12.4
18	#16590.00	51.4 PK	68.2	-16.8	2.74 H	201	35.7	15.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5140.22	63.8 PK	74.0	-10.2	1.64 V	134	62.5	1.3
2	5140.22	53.5 AV	54.0	-0.5	1.64 V	134	52.2	1.3
3	*5210.00	110.4 PK			1.64 V	134	109.2	1.2
4	*5210.00	100.6 AV			1.64 V	134	99.4	1.2
5	5459.00	56.3 PK	74.0	-17.7	1.64 V	134	54.9	1.4
6	5459.00	46.4 AV	54.0	-7.6	1.64 V	134	45.0	1.4
7	5460.00	63.3 PK	74.0	-10.7	1.52 V	326	61.9	1.4
8	5460.00	50.3 AV	54.0	-3.7	1.52 V	326	48.9	1.4
9	#5464.86	61.9 PK	68.2	-6.3	1.52 V	326	60.5	1.4
10	*5530.00	110.4 PK			1.52 V	326	109.0	1.4
11	*5530.00	101.9 AV			1.52 V	326	100.5	1.4
12	#5834.24	63.0 PK	68.2	-5.2	1.52 V	326	60.8	2.2
13	#10420.00	47.1 PK	68.2	-21.1	1.52 V	174	36.4	10.7
14	11060.00	51.4 PK	74.0	-22.6	1.70 V	250	39.8	11.6
15	11060.00	40.5 AV	54.0	-13.5	1.70 V	250	28.9	11.6
16	15630.00	46.2 PK	74.0	-27.8	1.61 V	184	33.8	12.4
17	15630.00	34.7 AV	54.0	-19.3	1.61 V	184	22.3	12.4
18	#16590.00	51.1 PK	68.2	-17.1	1.65 V	232	35.4	15.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 42+122 : 5610 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	50.7 PK	74.0	-23.3	1.50 H	231	49.4	1.3
2	5150.00	41.6 AV	54.0	-12.4	1.50 H	231	40.3	1.3
3	*5210.00	101.2 PK			1.50 H	231	100.0	1.2
4	*5210.00	92.2 AV			1.50 H	231	91.0	1.2
5	5350.00	49.4 PK	74.0	-24.6	1.50 H	231	48.4	1.0
6	5350.00	39.8 AV	54.0	-14.2	1.50 H	231	38.8	1.0
7	*5610.00	101.3 PK			1.57 H	315	99.7	1.6
8	*5610.00	91.3 AV			1.57 H	315	89.7	1.6
9	#5830.50	49.4 PK	68.2	-18.8	1.57 H	315	47.3	2.1
10	#10420.00	47.2 PK	68.2	-21.0	1.80 H	167	36.5	10.7
11	11220.00	52.6 PK	74.0	-21.4	2.63 H	218	41.2	11.4
12	11220.00	40.8 AV	54.0	-13.2	2.63 H	218	29.4	11.4
13	15630.00	46.9 PK	74.0	-27.1	1.85 H	162	34.5	12.4
14	15630.00	35.4 AV	54.0	-18.6	1.85 H	162	23.0	12.4
15	#16830.00	51.1 PK	68.2	-17.1	2.68 H	213	35.3	15.8

**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	5147.71	63.3 PK	74.0	-10.7	1.66 V	135	62.0	1.3
2	5147.71	53.4 AV	54.0	-0.6	1.66 V	135	52.1	1.3
3	*5210.00	110.6 PK			1.66 V	135	109.4	1.2
4	*5210.00	100.5 AV			1.66 V	135	99.3	1.2
5	5391.05	54.5 PK	74.0	-19.5	1.66 V	135	53.2	1.3
6	5391.05	42.6 AV	54.0	-11.4	1.66 V	135	41.3	1.3
7	*5610.00	110.6 PK			1.48 V	325	109.0	1.6
8	*5610.00	101.3 AV			1.48 V	325	99.7	1.6
9	#5730.04	51.6 PK	68.2	-16.6	1.48 V	325	49.8	1.8
10	#10420.00	47.4 PK	68.2	-20.8	1.58 V	169	36.7	10.7
11	11220.00	51.9 PK	74.0	-22.1	1.63 V	243	40.5	11.4
12	11220.00	40.9 AV	54.0	-13.1	1.63 V	243	29.5	11.4
13	15630.00	47.0 PK	74.0	-27.0	1.55 V	170	34.6	12.4
14	15630.00	35.6 AV	54.0	-18.4	1.55 V	170	23.2	12.4
15	#16830.00	50.7 PK	68.2	-17.5	1.74 V	258	34.9	15.8

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 42+138 : 5690 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5143.87	52.8 PK	74.0	-21.2	1.75 H	319	51.5	1.3
2	5143.87	41.4 AV	54.0	-12.6	1.75 H	319	40.1	1.3
3	*5210.00	102.2 PK			1.75 H	319	101.0	1.2
4	*5210.00	91.5 AV			1.75 H	319	90.3	1.2
5	5393.57	50.8 PK	74.0	-23.2	1.75 H	319	49.5	1.3
6	5393.57	39.1 AV	54.0	-14.9	1.75 H	319	37.8	1.3
7	5418.94	49.7 PK	74.0	-24.3	1.75 H	325	48.4	1.3
8	5418.94	38.2 AV	54.0	-15.8	1.75 H	325	36.9	1.3
9	#5460.07	49.3 PK	68.2	-18.9	1.75 H	325	47.9	1.4
10	*5690.00	102.1 PK			1.75 H	325	100.4	1.7
11	*5690.00	92.2 AV			1.75 H	325	90.5	1.7
12	#5926.96	49.4 PK	68.2	-18.8	1.75 H	325	47.4	2.0
13	#10420.00	46.7 PK	68.2	-21.5	1.77 H	156	36.0	10.7
14	11380.00	52.3 PK	74.0	-21.7	2.68 H	236	40.3	12.0
15	11380.00	40.6 AV	54.0	-13.4	2.68 H	236	28.6	12.0
16	15630.00	46.8 PK	74.0	-27.2	1.90 H	164	34.4	12.4
17	15630.00	35.3 AV	54.0	-18.7	1.90 H	164	22.9	12.4
18	#17070.00	51.3 PK	68.2	-16.9	2.68 H	216	33.9	17.4

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	5143.40	65.6 PK	74.0	-8.4	1.69 V	134	64.3	1.3
2	5143.40	53.6 AV	54.0	-0.4	1.69 V	134	52.3	1.3
3	*5210.00	110.7 PK			1.69 V	134	109.5	1.2
4	*5210.00	100.4 AV			1.69 V	134	99.2	1.2
5	5358.00	53.1 PK	74.0	-20.9	1.69 V	134	51.9	1.2
6	5358.00	41.9 AV	54.0	-12.1	1.69 V	134	40.7	1.2
7	5407.07	54.1 PK	74.0	-19.9	1.42 V	324	52.8	1.3
8	5407.07	42.3 AV	54.0	-11.7	1.42 V	324	41.0	1.3
9	#5468.36	53.2 PK	68.2	-15.0	1.42 V	324	51.8	1.4
10	*5690.00	110.8 PK			1.42 V	324	109.1	1.7
11	*5690.00	100.5 AV			1.42 V	324	98.8	1.7
12	#5919.79	51.0 PK	68.2	-17.2	1.42 V	324	49.0	2.0
13	#10420.00	46.5 PK	68.2	-21.7	1.57 V	178	35.8	10.7
14	11380.00	51.6 PK	74.0	-22.4	1.72 V	242	39.6	12.0
15	11380.00	40.8 AV	54.0	-13.2	1.72 V	242	28.8	12.0
16	15630.00	46.3 PK	74.0	-27.7	1.51 V	185	33.9	12.4
17	15630.00	34.6 AV	54.0	-19.4	1.51 V	185	22.2	12.4
18	#17070.00	52.4 PK	68.2	-15.8	1.57 V	239	35.0	17.4

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 42+155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	52.1 PK	74.0	-21.9	1.62 H	320	50.8	1.3
2	5150.00	40.7 AV	54.0	-13.3	1.62 H	320	39.4	1.3
3	*5210.00	102.1 PK			1.62 H	320	100.9	1.2
4	*5210.00	91.3 AV			1.62 H	320	90.1	1.2
5	5421.89	51.2 PK	74.0	-22.8	1.62 H	320	49.9	1.3
6	5421.89	38.8 AV	54.0	-15.2	1.62 H	320	37.5	1.3
7	#5641.69	51.4 PK	68.2	-16.8	1.53 H	319	49.8	1.6
8	*5775.00	104.3 PK			1.53 H	319	102.3	2.0
9	*5775.00	93.9 AV			1.53 H	319	91.9	2.0
10	#6017.80	48.6 PK	68.2	-19.6	1.53 H	319	46.5	2.1
11	#10420.00	47.1 PK	68.2	-21.1	1.76 H	157	36.4	10.7
12	11550.00	52.6 PK	74.0	-21.4	2.66 H	222	40.3	12.3
13	11550.00	40.7 AV	54.0	-13.3	2.66 H	222	28.4	12.3
14	15630.00	46.9 PK	74.0	-27.1	1.85 H	175	34.5	12.4
15	15630.00	35.6 AV	54.0	-18.4	1.85 H	175	23.2	12.4
16	#17325.00	51.5 PK	68.2	-16.7	2.72 H	214	35.0	16.5

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	5138.92	64.2 PK	74.0	-9.8	1.65 V	136	62.9	1.3
2	5138.92	53.8 AV	54.0	-0.2	1.65 V	136	52.5	1.3
3	*5210.00	111.4 PK			1.65 V	136	110.2	1.2
4	*5210.00	100.8 AV			1.65 V	136	99.6	1.2
5	5350.00	53.1 PK	74.0	-20.9	1.65 V	136	52.1	1.0
6	5350.00	41.9 AV	54.0	-12.1	1.65 V	136	40.9	1.0
7	#5644.18	54.6 PK	68.2	-13.6	1.42 V	324	53.0	1.6
8	*5775.00	111.4 PK			1.42 V	324	109.4	2.0
9	*5775.00	102.6 AV			1.42 V	324	100.6	2.0
10	#5936.56	50.4 PK	68.2	-17.8	1.42 V	324	48.4	2.0
11	#10420.00	47.0 PK	68.2	-21.2	1.59 V	198	36.3	10.7
12	11550.00	51.9 PK	74.0	-22.1	1.67 V	239	39.6	12.3
13	11550.00	40.6 AV	54.0	-13.4	1.67 V	239	28.3	12.3
14	15630.00	46.8 PK	74.0	-27.2	1.51 V	160	34.4	12.4
15	15630.00	34.9 AV	54.0	-19.1	1.51 V	160	22.5	12.4
16	#17325.00	52.2 PK	68.2	-16.0	1.66 V	268	35.7	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 58+106 : 5530 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5049.90	49.1 PK	74.0	-24.9	1.74 H	319	47.9	1.2
2	5049.90	40.2 AV	54.0	-13.8	1.74 H	319	39.0	1.2
3	*5290.00	102.4 PK			1.74 H	319	101.5	0.9
4	*5290.00	92.1 AV			1.74 H	319	91.2	0.9
5	5350.00	53.8 PK	74.0	-20.2	1.74 H	319	52.8	1.0
6	5350.00	43.3 AV	54.0	-10.7	1.74 H	319	42.3	1.0
7	5350.26	54.8 PK	74.0	-19.2	1.67 H	320	53.8	1.0
8	5350.26	43.5 AV	54.0	-10.5	1.67 H	320	42.5	1.0
9	#5465.73	51.9 PK	68.2	-16.3	1.67 H	320	50.5	1.4
10	*5530.00	101.0 PK			1.67 H	320	99.6	1.4
11	*5530.00	90.5 AV			1.67 H	320	89.1	1.4
12	#5784.71	52.8 PK	68.2	-15.4	1.67 H	320	50.8	2.0
13	#10580.00	46.6 PK	68.2	-21.6	1.77 H	150	36.0	10.6
14	11060.00	52.0 PK	74.0	-22.0	2.68 H	211	40.4	11.6
15	11060.00	40.2 AV	54.0	-13.8	2.68 H	211	28.6	11.6
16	15870.00	46.6 PK	74.0	-27.4	1.86 H	169	34.7	11.9
17	15870.00	35.3 AV	54.0	-18.7	1.86 H	169	23.4	11.9
18	#16590.00	51.4 PK	68.2	-16.8	2.73 H	199	35.7	15.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5052.92	57.6 PK	74.0	-16.4	1.63 V	230	56.3	1.3
2	5052.92	45.4 AV	54.0	-8.6	1.63 V	230	44.1	1.3
3	*5290.00	110.8 PK			1.63 V	230	109.9	0.9
4	*5290.00	99.9 AV			1.63 V	230	99.0	0.9
5	5356.78	65.6 PK	74.0	-8.4	1.63 V	230	64.5	1.1
6	5356.78	53.4 AV	54.0	-0.6	1.63 V	230	52.3	1.1
7	5449.97	62.5 PK	74.0	-11.5	1.51 V	46	61.2	1.3
8	5449.97	51.4 AV	54.0	-2.6	1.51 V	46	50.1	1.3
9	#5470.00	66.1 PK	68.2	-2.1	1.51 V	46	64.7	1.4
10	*5530.00	109.3 PK			1.51 V	46	107.9	1.4
11	*5530.00	99.1 AV			1.51 V	46	97.7	1.4
12	#5807.62	62.1 PK	68.2	-6.1	1.51 V	46	60.0	2.1
13	#10580.00	46.4 PK	68.2	-21.8	1.54 V	180	35.8	10.6
14	11060.00	50.6 PK	74.0	-23.4	1.66 V	255	39.0	11.6
15	11060.00	40.0 AV	54.0	-14.0	1.66 V	255	28.4	11.6
16	15870.00	46.2 PK	74.0	-27.8	1.56 V	186	34.3	11.9
17	15870.00	34.8 AV	54.0	-19.2	1.56 V	186	22.9	11.9
18	#16590.00	52.0 PK	68.2	-16.2	1.71 V	261	36.3	15.7

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 58+122 : 5610 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	4969.84	49.9 PK	74.0	-24.1	1.71 H	320	48.9	1.0
2	4969.84	38.7 AV	54.0	-15.3	1.71 H	320	37.7	1.0
3	*5290.00	102.1 PK			1.71 H	320	101.2	0.9
4	*5290.00	92.1 AV			1.71 H	320	91.2	0.9
5	5350.00	54.6 PK	74.0	-19.4	1.71 H	320	53.6	1.0
6	5350.00	43.7 AV	54.0	-10.3	1.71 H	320	42.7	1.0
7	5366.45	53.8 PK	74.0	-20.2	1.54 H	318	52.6	1.2
8	5366.45	42.5 AV	54.0	-11.5	1.54 H	318	41.3	1.2
9	#5461.81	50.0 PK	68.2	-18.2	1.54 H	318	48.6	1.4
10	*5610.00	101.3 PK			1.54 H	318	99.7	1.6
11	*5610.00	91.7 AV			1.54 H	318	90.1	1.6
12	#5766.94	50.2 PK	68.2	-18.0	1.54 H	318	48.2	2.0
13	#10580.00	47.2 PK	68.2	-21.0	1.76 H	171	36.6	10.6
14	11220.00	52.9 PK	74.0	-21.1	2.66 H	212	41.5	11.4
15	11220.00	40.7 AV	54.0	-13.3	2.66 H	212	29.3	11.4
16	15870.00	47.4 PK	74.0	-26.6	1.85 H	184	35.5	11.9
17	15870.00	35.9 AV	54.0	-18.1	1.85 H	184	24.0	11.9
18	#16830.00	51.4 PK	68.2	-16.8	2.74 H	205	35.6	15.8

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	4978.20	64.2 PK	74.0	-9.8	1.60 V	224	63.2	1.0
2	4978.20	46.0 AV	54.0	-8.0	1.60 V	224	45.0	1.0
3	*5290.00	110.6 PK			1.60 V	224	109.7	0.9
4	*5290.00	99.6 AV			1.60 V	224	98.7	0.9
5	5358.74	66.2 PK	74.0	-7.8	1.60 V	224	65.0	1.2
6	5358.74	53.3 AV	54.0	-0.7	1.60 V	224	52.1	1.2
7	5362.69	57.2 PK	74.0	-16.8	1.57 V	52	56.0	1.2
8	5362.69	45.9 AV	54.0	-8.1	1.57 V	52	44.7	1.2
9	#5465.90	53.6 PK	68.2	-14.6	1.57 V	52	52.2	1.4
10	*5610.00	109.5 PK			1.57 V	52	107.9	1.6
11	*5610.00	99.2 AV			1.57 V	52	97.6	1.6
12	#5848.43	54.3 PK	68.2	-13.9	1.57 V	52	52.1	2.2
13	#10580.00	46.5 PK	68.2	-21.7	1.59 V	157	35.9	10.6
14	11220.00	51.5 PK	74.0	-22.5	1.73 V	245	40.1	11.4
15	11220.00	40.5 AV	54.0	-13.5	1.73 V	245	29.1	11.4
16	15870.00	46.8 PK	74.0	-27.2	1.56 V	160	34.9	11.9
17	15870.00	35.3 AV	54.0	-18.7	1.56 V	160	23.4	11.9
18	#16830.00	51.1 PK	68.2	-17.1	1.67 V	237	35.3	15.8

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 58+138 : 5690 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	50.2 PK	74.0	-23.8	1.71 H	322	48.9	1.3
2	5150.00	38.0 AV	54.0	-16.0	1.71 H	322	36.7	1.3
3	*5290.00	101.4 PK			1.71 H	322	100.5	0.9
4	*5290.00	91.5 AV			1.71 H	322	90.6	0.9
5	5366.23	53.4 PK	74.0	-20.6	1.58 H	321	52.2	1.2
6	5366.23	43.2 AV	54.0	-10.8	1.58 H	321	42.0	1.2
7	5366.49	53.7 PK	74.0	-20.3	1.71 H	322	52.5	1.2
8	5366.49	43.0 AV	54.0	-11.0	1.71 H	322	41.8	1.2
9	#5463.13	50.0 PK	68.2	-18.2	1.58 H	321	48.6	1.4
10	*5690.00	101.7 PK			1.58 H	321	100.0	1.7
11	*5690.00	92.2 AV			1.58 H	321	90.5	1.7
12	#5938.10	49.0 PK	68.2	-19.2	1.58 H	321	47.0	2.0
13	#10580.00	46.7 PK	68.2	-21.5	1.77 H	151	36.1	10.6
14	11380.00	51.8 PK	74.0	-22.2	2.69 H	223	39.8	12.0
15	11380.00	40.2 AV	54.0	-13.8	2.69 H	223	28.2	12.0
16	15870.00	47.0 PK	74.0	-27.0	1.89 H	166	35.1	11.9
17	15870.00	35.9 AV	54.0	-18.1	1.89 H	166	24.0	11.9
18	#17070.00	51.3 PK	68.2	-16.9	2.72 H	213	33.9	17.4

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	4906.27	66.0 PK	74.0	-8.0	1.63 V	225	65.5	0.5
2	4906.27	48.4 AV	54.0	-5.6	1.63 V	225	47.9	0.5
3	*5290.00	110.3 PK			1.63 V	225	109.4	0.9
4	*5290.00	99.4 AV			1.63 V	225	98.5	0.9
5	5358.98	66.4 PK	74.0	-7.6	1.63 V	225	65.2	1.2
6	5358.98	53.7 AV	54.0	-0.3	1.63 V	225	52.5	1.2
7	5366.81	58.0 PK	74.0	-16.0	1.56 V	46	56.8	1.2
8	5366.81	46.6 AV	54.0	-7.4	1.56 V	46	45.4	1.2
9	#5466.28	52.5 PK	68.2	-15.7	1.56 V	46	51.1	1.4
10	*5690.00	110.0 PK			1.56 V	46	108.3	1.7
11	*5690.00	100.0 AV			1.56 V	46	98.3	1.7
12	#5882.66	50.7 PK	68.2	-17.5	1.56 V	46	48.6	2.1
13	#10580.00	45.9 PK	68.2	-22.3	1.59 V	172	35.3	10.6
14	11380.00	50.8 PK	74.0	-23.2	1.65 V	239	38.8	12.0
15	11380.00	40.3 AV	54.0	-13.7	1.65 V	239	28.3	12.0
16	15870.00	46.8 PK	74.0	-27.2	1.52 V	160	34.9	11.9
17	15870.00	35.5 AV	54.0	-18.5	1.52 V	160	23.6	11.9
18	#17070.00	51.7 PK	68.2	-16.5	1.66 V	251	34.3	17.4

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 58+155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	4804.82	49.3 PK	74.0	-24.7	1.74 H	320	49.0	0.3
2	4804.82	37.6 AV	54.0	-16.4	1.74 H	320	37.3	0.3
3	*5290.00	102.3 PK			1.74 H	320	101.4	0.9
4	*5290.00	92.2 AV			1.74 H	320	91.3	0.9
5	5366.16	54.4 PK	74.0	-19.6	1.74 H	320	53.2	1.2
6	5366.16	43.9 AV	54.0	-10.1	1.74 H	320	42.7	1.2
7	#5566.64	49.0 PK	68.2	-19.2	1.66 H	326	47.5	1.5
8	*5775.00	102.9 PK			1.66 H	326	100.9	2.0
9	*5775.00	92.8 AV			1.66 H	326	90.8	2.0
10	#6000.97	49.0 PK	68.2	-19.2	1.66 H	326	46.9	2.1
11	#10580.00	47.7 PK	68.2	-20.5	1.72 H	158	37.1	10.6
12	11550.00	52.9 PK	74.0	-21.1	2.70 H	230	40.6	12.3
13	11550.00	40.8 AV	54.0	-13.2	2.70 H	230	28.5	12.3
14	15870.00	46.8 PK	74.0	-27.2	1.88 H	173	34.9	11.9
15	15870.00	35.6 AV	54.0	-18.4	1.88 H	173	23.7	11.9
16	#17325.00	50.8 PK	68.2	-17.4	2.73 H	218	34.3	16.5

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	4821.53	66.5 PK	74.0	-7.5	1.60 V	225	66.1	0.4
2	4821.53	48.8 AV	54.0	-5.2	1.60 V	225	48.4	0.4
3	*5290.00	110.5 PK			1.60 V	225	109.6	0.9
4	*5290.00	99.6 AV			1.60 V	225	98.7	0.9
5	5360.83	64.8 PK	74.0	-9.2	1.60 V	225	63.6	1.2
6	<b>5360.83</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.60 V</b>	<b>225</b>	<b>52.7</b>	<b>1.2</b>
7	#5630.16	55.2 PK	68.2	-13.0	1.55 V	54	53.6	1.6
8	*5775.00	110.0 PK			1.55 V	54	108.0	2.0
9	*5775.00	101.1 AV			1.55 V	54	99.1	2.0
10	#5933.52	50.1 PK	68.2	-18.1	1.55 V	54	48.1	2.0
11	#10580.00	47.1 PK	68.2	-21.1	1.56 V	157	36.5	10.6
12	11550.00	50.9 PK	74.0	-23.1	1.70 V	263	38.6	12.3
13	11550.00	40.3 AV	54.0	-13.7	1.70 V	263	28.0	12.3
14	15870.00	46.6 PK	74.0	-27.4	1.60 V	155	34.7	11.9
15	15870.00	34.6 AV	54.0	-19.4	1.60 V	155	22.7	11.9
16	#17325.00	52.0 PK	68.2	-16.2	1.59 V	270	35.5	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 106+122 : 5610 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	5457.41	55.3 PK	74.0	-18.7	1.50 H	318	53.9	1.4
2	5457.41	41.5 AV	54.0	-12.5	1.50 H	318	40.1	1.4
3	5460.00	51.6 PK	74.0	-22.4	1.65 H	317	50.2	1.4
4	5460.00	41.5 AV	54.0	-12.5	1.65 H	317	40.1	1.4
5	#5462.66	52.8 PK	68.2	-15.4	1.65 H	317	51.4	1.4
6	#5463.75	54.6 PK	68.2	-13.6	1.50 H	318	53.2	1.4
7	*5530.00	101.0 PK			1.65 H	317	99.6	1.4
8	*5530.00	91.5 AV			1.65 H	317	90.1	1.4
9	*5610.00	100.7 PK			1.50 H	318	99.1	1.6
10	*5610.00	90.9 AV			1.50 H	318	89.3	1.6
11	#5746.30	49.3 PK	68.2	-18.9	1.65 H	317	47.4	1.9
12	#5763.90	51.5 PK	68.2	-16.7	1.50 H	318	49.5	2.0
13	11060.00	46.9 PK	74.0	-27.1	1.72 H	160	35.3	11.6
14	11060.00	35.6 AV	54.0	-18.4	1.72 H	160	24.0	11.6
15	11220.00	53.0 PK	74.0	-21.0	2.63 H	222	41.6	11.4
16	11220.00	41.2 AV	54.0	-12.8	2.63 H	222	29.8	11.4
17	#16590.00	46.9 PK	68.2	-21.3	1.86 H	174	31.2	15.7
18	#16830.00	51.5 PK	68.2	-16.7	2.76 H	225	35.7	15.8

**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	5455.86	63.2 PK	74.0	-10.8	1.60 V	232	61.8	1.4
2	5455.86	53.4 AV	54.0	-0.6	1.60 V	232	52.0	1.4
3	5460.00	58.8 PK	74.0	-15.2	1.68 V	54	57.4	1.4
4	5460.00	47.6 AV	54.0	-6.4	1.68 V	54	46.2	1.4
5	#5464.11	58.5 PK	68.2	-9.7	1.68 V	54	57.1	1.4
6	#5466.86	64.2 PK	68.2	-4.0	1.60 V	232	62.8	1.4
7	*5530.00	110.4 PK			1.60 V	232	109.0	1.4
8	*5530.00	100.3 AV			1.60 V	232	98.9	1.4
9	*5610.00	109.7 PK			1.68 V	54	108.1	1.6
10	*5610.00	99.7 AV			1.68 V	54	98.1	1.6
11	#5731.51	60.6 PK	68.2	-7.6	1.68 V	54	58.7	1.9
12	#5731.62	54.9 PK	68.2	-13.3	1.60 V	232	53.0	1.9
13	11060.00	46.6 PK	74.0	-27.4	1.53 V	152	35.0	11.6
14	11060.00	34.9 AV	54.0	-19.1	1.53 V	152	23.3	11.6
15	11220.00	51.9 PK	74.0	-22.1	1.60 V	239	40.5	11.4
16	11220.00	41.0 AV	54.0	-13.0	1.60 V	239	29.6	11.4
17	#16590.00	46.8 PK	68.2	-21.4	1.57 V	165	31.1	15.7
18	#16830.00	50.7 PK	68.2	-17.5	1.76 V	258	34.9	15.8

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 106+138 : 5690 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	52.7 PK	74.0	-21.3	1.61 H	319	51.3	1.4
2	5460.00	42.0 AV	54.0	-12.0	1.61 H	319	40.6	1.4
3	#5463.57	52.1 PK	68.2	-16.1	1.61 H	319	50.7	1.4
4	*5530.00	101.6 PK			1.61 H	319	100.2	1.4
5	*5530.00	92.0 AV			1.61 H	319	90.6	1.4
6	*5690.00	101.9 PK			1.59 H	318	100.2	1.7
7	*5690.00	92.4 AV			1.59 H	318	90.7	1.7
8	#5882.92	50.9 PK	68.2	-17.3	1.59 H	318	48.8	2.1
9	11060.00	46.7 PK	74.0	-27.3	1.76 H	158	35.1	11.6
10	11060.00	35.5 AV	54.0	-18.5	1.76 H	158	23.9	11.6
11	11380.00	52.3 PK	74.0	-21.7	2.68 H	208	40.3	12.0
12	11380.00	40.6 AV	54.0	-13.4	2.68 H	208	28.6	12.0
13	#16590.00	46.2 PK	68.2	-22.0	1.84 H	185	30.5	15.7
14	#17070.00	51.6 PK	68.2	-16.6	2.68 H	217	34.2	17.4

**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	5456.28	63.5 PK	74.0	-10.5	1.66 V	238	62.1	1.4
2	5456.28	53.6 AV	54.0	-0.4	1.66 V	238	52.2	1.4
3	#5463.05	62.9 PK	68.2	-5.3	1.66 V	238	61.5	1.4
4	*5530.00	110.5 PK			1.66 V	238	109.1	1.4
5	*5530.00	100.4 AV			1.66 V	238	99.0	1.4
6	*5690.00	111.2 PK			1.68 V	56	109.5	1.7
7	*5690.00	101.2 AV			1.68 V	56	99.5	1.7
8	#5864.52	61.4 PK	68.2	-6.8	1.68 V	56	59.2	2.2
9	11060.00	46.4 PK	74.0	-27.6	1.50 V	160	34.8	11.6
10	11060.00	35.0 AV	54.0	-19.0	1.50 V	160	23.4	11.6
11	11380.00	51.4 PK	74.0	-22.6	1.60 V	243	39.4	12.0
12	11380.00	40.6 AV	54.0	-13.4	1.60 V	243	28.6	12.0
13	#16590.00	47.0 PK	68.2	-21.2	1.55 V	186	31.3	15.7
14	#17070.00	51.6 PK	68.2	-16.6	1.54 V	243	34.2	17.4

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 106+155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	52.7 PK	74.0	-21.3	1.65 H	324	51.3	1.4
2	5460.00	41.1 AV	54.0	-12.9	1.65 H	324	39.7	1.4
3	#5464.30	52.3 PK	68.2	-15.9	1.65 H	324	50.9	1.4
4	*5530.00	101.8 PK			1.65 H	324	100.4	1.4
5	*5530.00	91.6 AV			1.65 H	324	90.2	1.4
6	*5775.00	100.5 PK			1.47 H	311	98.5	2.0
7	*5775.00	89.8 AV			1.47 H	311	87.8	2.0
8	#5971.35	50.5 PK	68.2	-17.7	1.47 H	311	48.7	1.8
9	11060.00	47.1 PK	74.0	-26.9	1.77 H	152	35.5	11.6
10	11060.00	35.8 AV	54.0	-18.2	1.77 H	152	24.2	11.6
11	11550.00	52.7 PK	74.0	-21.3	2.69 H	235	40.4	12.3
12	11550.00	41.0 AV	54.0	-13.0	2.69 H	235	28.7	12.3
13	#16590.00	47.2 PK	68.2	-21.0	1.86 H	180	31.5	15.7
14	#17325.00	51.2 PK	68.2	-17.0	2.76 H	199	34.7	16.5

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	5456.14	65.6 PK	74.0	-8.4	1.65 V	237	64.2	1.4
2	5456.14	53.5 AV	54.0	-0.5	1.65 V	237	52.1	1.4
3	#5466.19	65.1 PK	68.2	-3.1	1.65 V	237	63.7	1.4
4	*5530.00	110.9 PK			1.65 V	237	109.5	1.4
5	*5530.00	100.2 AV			1.65 V	237	98.8	1.4
6	*5775.00	112.5 PK			1.59 V	53	110.5	2.0
7	*5775.00	103.4 AV			1.59 V	53	101.4	2.0
8	#6012.15	63.8 PK	68.2	-4.4	1.59 V	53	61.7	2.1
9	11060.00	46.4 PK	74.0	-27.6	1.55 V	167	34.8	11.6
10	11060.00	35.0 AV	54.0	-19.0	1.55 V	167	23.4	11.6
11	11550.00	51.3 PK	74.0	-22.7	1.61 V	245	39.0	12.3
12	11550.00	40.6 AV	54.0	-13.4	1.61 V	245	28.3	12.3
13	#16590.00	46.8 PK	68.2	-21.4	1.57 V	171	31.1	15.7
14	#17325.00	51.7 PK	68.2	-16.5	1.57 V	267	35.2	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 122+138 : 5690 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	49.5 PK	74.0	-24.5	1.80 H	245	48.1	1.4
2	5460.00	38.1 AV	54.0	-15.9	1.80 H	245	36.7	1.4
3	#5466.20	49.6 PK	68.2	-18.6	1.80 H	245	48.2	1.4
4	*5610.00	102.3 PK			1.80 H	245	100.7	1.6
5	*5610.00	91.7 AV			1.80 H	245	90.1	1.6
6	*5690.00	101.3 PK			1.55 H	311	99.6	1.7
7	*5690.00	90.6 AV			1.55 H	311	88.9	1.7
8	#5912.00	50.1 PK	68.2	-18.1	1.55 H	311	48.1	2.0
9	11220.00	46.9 PK	74.0	-27.1	1.75 H	162	35.5	11.4
10	11220.00	35.1 AV	54.0	-18.9	1.75 H	162	23.7	11.4
11	11380.00	52.7 PK	74.0	-21.3	2.66 H	231	40.7	12.0
12	11380.00	40.8 AV	54.0	-13.2	2.66 H	231	28.8	12.0
13	#16830.00	47.3 PK	68.2	-20.9	1.85 H	181	31.5	15.8
14	#17070.00	51.0 PK	68.2	-17.2	2.68 H	226	33.6	17.4

**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	59.3 PK	74.0	-14.7	1.63 V	232	57.9	1.4
2	5460.00	49.2 AV	54.0	-4.8	1.63 V	232	47.8	1.4
3	#5470.00	63.8 PK	68.2	-4.4	1.63 V	232	62.4	1.4
4	*5610.00	111.2 PK			1.63 V	232	109.6	1.6
5	*5610.00	101.3 AV			1.63 V	232	99.7	1.6
6	*5690.00	110.3 PK			1.65 V	56	108.6	1.7
7	*5690.00	100.9 AV			1.65 V	56	99.2	1.7
8	#5850.00	52.3 PK	68.2	-15.9	1.65 V	56	50.1	2.2
9	11220.00	46.5 PK	74.0	-27.5	1.49 V	170	35.1	11.4
10	11220.00	35.0 AV	54.0	-19.0	1.49 V	170	23.6	11.4
11	11380.00	51.4 PK	74.0	-22.6	1.68 V	250	39.4	12.0
12	11380.00	40.5 AV	54.0	-13.5	1.68 V	250	28.5	12.0
13	#16830.00	46.3 PK	68.2	-21.9	1.59 V	184	30.5	15.8
14	#17070.00	52.4 PK	68.2	-15.8	1.54 V	257	35.0	17.4

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 122+155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

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	5444.80	50.5 PK	74.0	-23.5	1.81 H	247	49.2	1.3
2	5444.80	39.1 AV	54.0	-14.9	1.81 H	247	37.8	1.3
3	#5462.70	50.8 PK	68.2	-17.4	1.81 H	247	49.4	1.4
4	*5610.00	102.9 PK			1.81 H	247	101.3	1.6
5	*5610.00	92.3 AV			1.81 H	247	90.7	1.6
6	*5775.00	102.6 PK			1.49 H	308	100.6	2.0
7	*5775.00	91.4 AV			1.49 H	308	89.4	2.0
8	#5935.43	49.7 PK	68.2	-18.5	1.49 H	308	47.9	1.8
9	11220.00	47.4 PK	74.0	-26.6	1.82 H	163	36.0	11.4
10	11220.00	35.7 AV	54.0	-18.3	1.82 H	163	24.3	11.4
11	11550.00	53.2 PK	74.0	-20.8	2.68 H	227	40.9	12.3
12	11550.00	41.0 AV	54.0	-13.0	2.68 H	227	28.7	12.3
13	#16830.00	46.7 PK	68.2	-21.5	1.80 H	165	30.9	15.8
14	#17325.00	51.0 PK	68.2	-17.2	2.73 H	207	34.5	16.5

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	5443.95	64.3 PK	74.0	-9.7	1.31 V	226	63.0	1.3
2	5443.95	53.3 AV	54.0	-0.7	1.31 V	226	52.0	1.3
3	#5463.81	63.2 PK	68.2	-5.0	1.31 V	226	61.8	1.4
4	*5610.00	112.3 PK			1.31 V	226	110.7	1.6
5	*5610.00	101.7 AV			1.31 V	226	100.1	1.6
6	*5775.00	112.7 PK			1.77 V	56	110.7	2.0
7	*5775.00	102.0 AV			1.77 V	56	100.0	2.0
8	#5954.93	66.9 PK	68.2	-1.3	1.77 V	56	64.8	2.1
9	11220.00	46.2 PK	74.0	-27.8	1.50 V	190	34.8	11.4
10	11220.00	34.6 AV	54.0	-19.4	1.50 V	190	23.2	11.4
11	11550.00	51.8 PK	74.0	-22.2	1.72 V	232	39.5	12.3
12	11550.00	40.8 AV	54.0	-13.2	1.72 V	232	28.5	12.3
13	#16830.00	46.4 PK	68.2	-21.8	1.57 V	158	30.6	15.8
14	#17325.00	52.2 PK	68.2	-16.0	1.62 V	271	35.7	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

<b>RF Mode</b>	TX 802.11ac (VHT80+80)	<b>Channel</b>	CH 138+155 : 5775 MHz
<b>Frequency Range</b>	1GHz ~ 40GHz	<b>Detector Function</b>	Peak (PK) Average (AV)

**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	53.1 PK	74.0	-20.9	1.58 H	315	51.7	1.4
2	5460.00	41.4 AV	54.0	-12.6	1.58 H	315	40.0	1.4
3	#5465.74	54.4 PK	68.2	-13.8	1.58 H	315	53.0	1.4
4	*5690.00	104.4 PK			1.58 H	315	102.7	1.7
5	*5690.00	95.3 AV			1.58 H	315	93.6	1.7
6	*5775.00	108.5 PK			1.45 H	304	106.5	2.0
7	*5775.00	96.4 AV			1.45 H	304	94.4	2.0
8	#5926.73	61.1 PK	68.2	-7.1	1.45 H	304	59.3	1.8
9	11380.00	46.8 PK	74.0	-27.2	1.70 H	166	34.8	12.0
10	11380.00	35.2 AV	54.0	-18.8	1.70 H	166	23.2	12.0
11	11550.00	53.0 PK	74.0	-21.0	2.60 H	226	40.7	12.3
12	11550.00	40.9 AV	54.0	-13.1	2.60 H	226	28.6	12.3
13	#17070.00	47.6 PK	68.2	-20.6	1.87 H	171	30.2	17.4
14	#17325.00	52.2 PK	68.2	-16.0	2.77 H	207	35.7	16.5

**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	5375.87	55.5 PK	74.0	-18.5	1.60 V	227	54.3	1.2
2	5375.87	46.1 AV	54.0	-7.9	1.60 V	227	44.9	1.2
3	#5469.67	54.4 PK	68.2	-13.8	1.60 V	227	53.0	1.4
4	*5690.00	115.3 PK			1.60 V	227	113.6	1.7
5	*5690.00	104.9 AV			1.60 V	227	103.2	1.7
6	*5775.00	116.5 PK			1.59 V	53	114.5	2.0
7	*5775.00	105.2 AV			1.59 V	53	103.2	2.0
8	#5928.61	64.3 PK	68.2	-3.9	1.59 V	53	62.3	2.0
9	11380.00	46.9 PK	74.0	-27.1	1.54 V	188	34.9	12.0
10	11380.00	35.4 AV	54.0	-18.6	1.54 V	188	23.4	12.0
11	11550.00	51.6 PK	74.0	-22.4	1.58 V	258	39.3	12.3
12	11550.00	40.9 AV	54.0	-13.1	1.58 V	258	28.6	12.3
13	#17070.00	47.0 PK	68.2	-21.2	1.58 V	170	29.6	17.4
14	#17325.00	52.0 PK	68.2	-16.2	1.61 V	278	35.5	16.5

**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.
6. " # ": The radiated frequency is out of the restricted band.

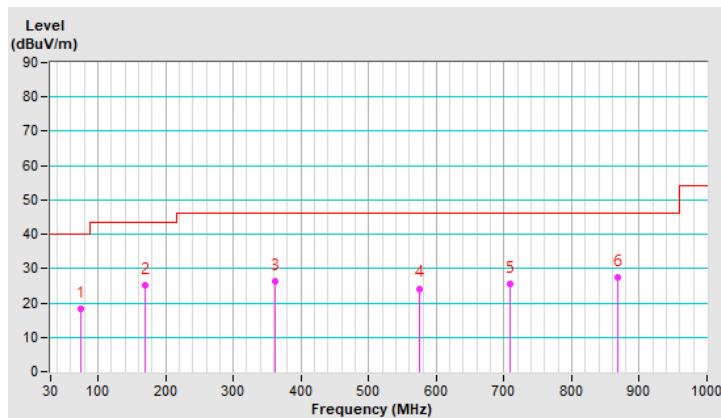
**Below 1GHz Data:**

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	9kHz ~ 1GHz	<b>Detector Function</b>	Quasi-Peak (QP)

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	74.94	18.2 QP	40.0	-21.8	1.00 H	188	30.4	-12.2
2	169.85	25.3 QP	43.5	-18.2	2.00 H	256	34.2	-8.9
3	361.01	26.3 QP	46.0	-19.7	1.00 H	50	32.0	-5.7
4	575.43	24.2 QP	46.0	-21.8	2.00 H	360	24.5	-0.3
5	708.76	25.5 QP	46.0	-20.5	3.00 H	184	23.3	2.2
6	868.57	27.4 QP	46.0	-18.6	2.00 H	246	22.1	5.3

**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 of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

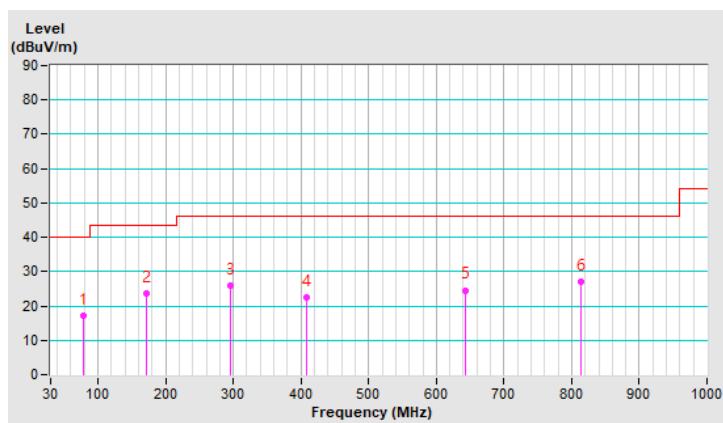


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	9kHz ~ 1GHz	<b>Detector Function</b>	Quasi-Peak (QP)

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	78.21	17.1 QP	40.0	-22.9	2.00 V	198	30.2	-13.1
2	171.21	23.6 QP	43.5	-19.9	2.00 V	360	32.5	-8.9
3	296.51	26.0 QP	46.0	-20.0	1.00 V	56	33.4	-7.4
4	407.96	22.6 QP	46.0	-23.4	1.00 V	16	27.1	-4.5
5	642.26	24.6 QP	46.0	-21.4	1.00 V	360	23.2	1.4
6	813.44	27.0 QP	46.0	-19.0	2.00 V	37	22.7	4.3

**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 of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



## 4.2 Conducted Emission Measurement

### 4.2.1 Limits of Conducted Emission Measurement

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

Note: 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 0.50MHz.

### 4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 20, 2020	Oct. 19, 2021
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 27, 2020	Oct. 26, 2021
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 19, 2020	Mar. 18, 2021
50 ohms Terminator	50	3	Oct. 26, 2020	Oct. 25, 2021
RF Cable	5D-FB	COCCAB-001	Sep. 26, 2020	Sep. 25, 2021
Fixed attenuator EMCI	STI02-2200-10	005	Aug. 29, 2020	Aug. 28, 2021
Software BVADT	BVADT_Cond_V7.3.7.4	NA	NA	NA

**Note:**

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Conduction 1.
3. Tested Date: Jan.01, 2021

#### 4.2.3 Test Procedure

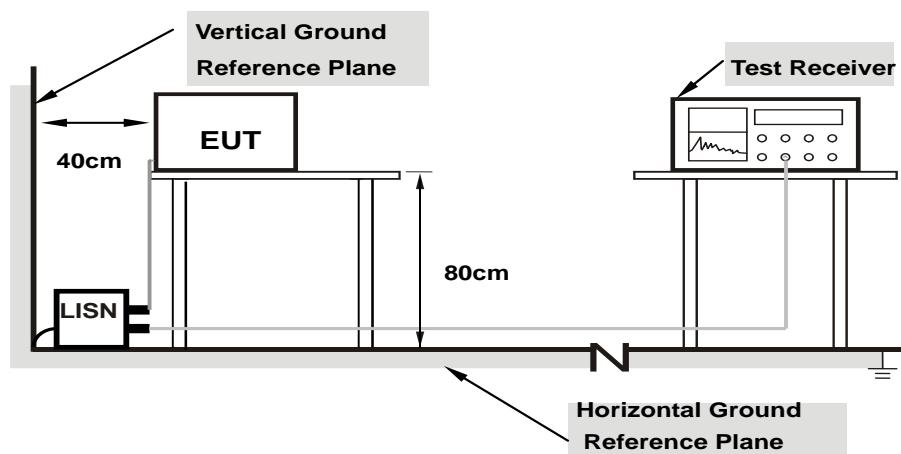
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

**Note:** All modes of operation were investigated and the worst-case emissions are reported.

#### 4.2.4 Deviation from Test Standard

No deviation.

#### 4.2.5 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).

#### 4.2.6 EUT Operating Condition

Same as 4.1.6.

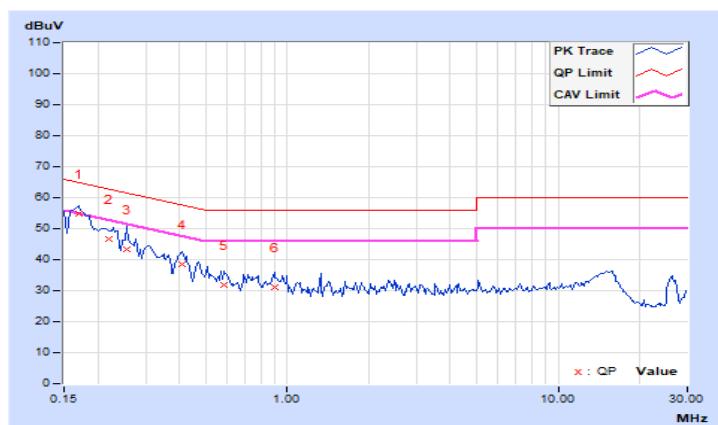
#### 4.2.7 Test Results

<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	150kHz ~ 30MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9kHz

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	9.96	44.95	29.08	54.91	39.04	64.98	54.98	-10.07	-15.94
2	0.22031	9.97	36.86	25.10	46.83	35.07	62.81	52.81	-15.98	-17.74
3	0.25547	9.98	33.39	24.89	43.37	34.87	61.58	51.58	-18.21	-16.71
4	0.40781	9.99	28.67	20.81	38.66	30.80	57.69	47.69	-19.03	-16.89
5	0.58359	10.00	21.95	12.27	31.95	22.27	56.00	46.00	-24.05	-23.73
6	0.89609	10.02	21.01	12.53	31.03	22.55	56.00	46.00	-24.97	-23.45

#### 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

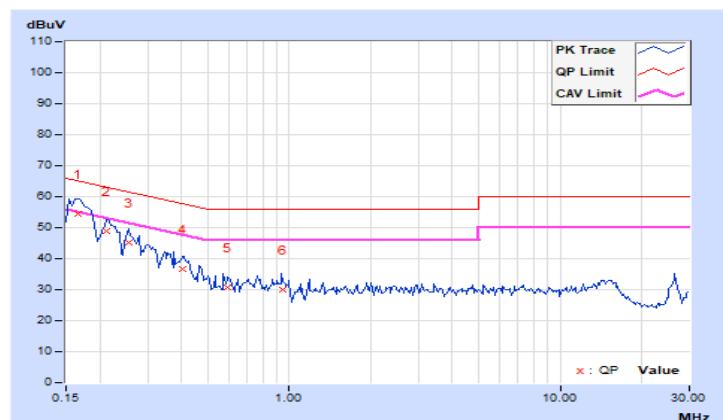


<b>RF Mode</b>	TX 802.11ac (VHT40)	<b>Channel</b>	CH 151 : 5755 MHz
<b>Frequency Range</b>	150kHz ~ 30MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
<b>No</b>	<b>Frequency (MHz)</b>	<b>Correction Factor (dB)</b>	<b>Reading Value (dBuV)</b>		<b>Emission Level (dBuV)</b>		<b>Limit (dBuV)</b>		<b>Margin (dB)</b>	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	<b>0.16562</b>	<b>9.93</b>	<b>44.44</b>	<b>35.45</b>	<b>54.37</b>	<b>45.38</b>	<b>65.18</b>	<b>55.18</b>	<b>-10.81</b>	<b>-9.80</b>
2	0.21250	9.95	38.86	25.86	48.81	35.81	63.11	53.11	-14.30	-17.30
3	0.25547	9.95	35.18	23.71	45.13	33.66	61.58	51.58	-16.45	-17.92
4	0.40391	9.96	26.72	17.45	36.68	27.41	57.77	47.77	-21.09	-20.36
5	0.59141	9.97	20.85	16.07	30.82	26.04	56.00	46.00	-25.18	-19.96
6	0.94688	10.00	19.95	11.01	29.95	21.01	56.00	46.00	-26.05	-24.99

**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



### 4.3 Transmit Power Measurement

#### 4.3.1 Limits of Transmit Power Measurement

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)
	$\checkmark$	Indoor Access Point	1 Watt (30 dBm)
		Client device	250mW (24 dBm)
U-NII-2A	$\checkmark$		250mW (24 dBm) or $11 \text{ dBm} + 10 \log B^*$
U-NII-2C	$\checkmark$		250mW (24 dBm) or $11 \text{ dBm} + 10 \log B^*$
U-NII-3	$\checkmark$		1 Watt (30 dBm)

\*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for  $N_{\text{ANT}} \leq 4$ ;

Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40 \text{ MHz}$  for any  $N_{\text{ANT}}$ ;

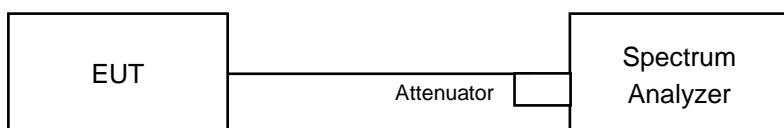
Array Gain =  $5 \log(N_{\text{ANT}}/N_{\text{SS}})$  dB or 3 dB, whichever is less for 20-MHz channel widths with  $N_{\text{ANT}} \geq 5$ .

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

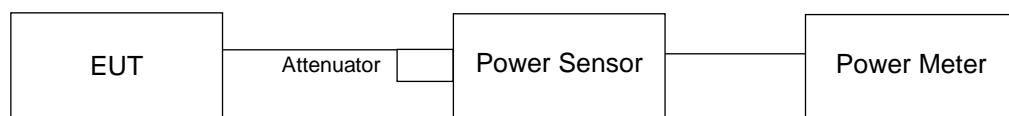
#### 4.3.2 Test Setup

##### FOR POWER OUTPUT MEASUREMENT

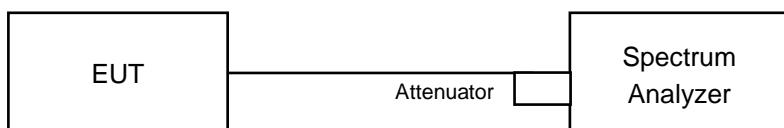
For channel straddling 5250MHz & channel straddling 5725MHz:



For other channels:



##### FOR 26dB OCCUPIED BANDWIDTH



#### 4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.3.4 Test Procedure

#### **FOR POWER OUTPUT MEASUREMENT**

##### **For channel straddling 5725MHz:**

Follow FCC KDB 789033 UNII test procedure:

##### **802.11ac (VHT20)**

Method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1MHz.
3. Set the VBW  $\geq 3 \times$  RBW.
4. Number of points in sweep  $\geq 2$  Span / RBW.
5. Sweep time = auto.
6. Set trigger to free run (duty cycle  $\geq 98$  percent)
7. Detector = RMS.
8. Trace average at least 100 traces in power averaging mode
9. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

##### **For channel straddling 5250MHz**

Follow FCC KDB 789033 UNII test procedure:

##### **Other Modulation mode**

Method SA-2

1. Set span to encompass the emission bandwidth (EBW) of the signal.
2. Set RBW = 1MHz.
3. Set the VBW  $\geq 3 \times$  RBW.
4. Number of points in sweep  $\geq 2$  Span / RBW.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging mode
8. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
9. Duty factor need added to measured value (duty cycle < 98 percent).

##### **For other channels:**

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. Duty factor is not added to measured value.

#### **FOR 26dB OCCUPIED BANDWIDTH**

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW  $>$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. 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%.

#### 4.3.5 Deviation from Test Standard

No deviation.

#### 4.3.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

#### 4.3.7 Test Results

##### POWER OUTPUT

###### CDD Mode

###### 802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	18.48	17.94	18.24	18.64	272.494	24.35	29.9	Pass
40	5200	18.50	18.36	18.61	18.73	286.599	24.57	29.9	Pass
48	5240	18.64	18.02	18.56	19.02	288.08	24.60	29.9	Pass
52	5260	12.13	11.96	12.57	12.38	67.404	18.29	23.84	Pass
60	5300	11.77	12.21	12.11	12.95	67.645	18.30	23.8	Pass
64	5320	11.51	12.47	11.36	13.16	66.197	18.21	23.78	Pass
100	5500	12.46	11.48	12.44	12.37	66.477	18.23	23.81	Pass
116	5580	12.03	12.43	12.31	13.19	71.324	18.53	23.85	Pass
140	5700	12.05	12.49	12.86	13.26	74.278	18.71	23.84	Pass
*144 (U-NII-2C Band)	5720	7.79	8.68	8.46	8.33	28.127	14.49	22.62	Pass
*144 (U-NII-3 Band)	5720	1.69	2.95	2.90	2.63	7.473	8.73	29.9	Pass
149	5745	22.14	23.68	22.92	23.59	821.472	29.15	29.9	Pass
157	5785	21.85	23.11	22.37	23.09	734.041	28.66	29.9	Pass
165	5825	22.07	23.71	22.49	23.43	793.739	29.00	29.9	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the
  - For UNII-1 & UNII-3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to  $30 - (6.10 - 6) = 29.90\text{dBm}$ .
  - For UNII-2A & UNII-2C: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit" - (6.10-6).

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

Power Limit = $11\text{dBm} + 10\log_2 < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	19.68	23.94 < 24
60	5300	19.54	23.9 < 24
64	5320	19.41	23.88 < 24
100	5500	19.56	23.91 < 24
116	5580	19.76	23.95 < 24
140	5700	19.70	23.94 < 24
144 (U-NII-2C Band)	5720	14.89	22.72 < 24

**802.11ac (VHT20)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	18.32	18.30	18.60	18.47	278.279	24.44	29.9	Pass
40	5200	18.26	18.32	18.75	18.54	281.348	24.49	29.9	Pass
48	5240	18.16	17.89	18.31	18.47	265.053	24.23	29.9	Pass
52	5260	12.28	12.04	12.52	12.56	68.795	18.38	23.88	Pass
60	5300	11.87	12.44	12.05	12.98	68.814	18.38	23.9	Pass
64	5320	11.72	12.61	11.42	13.25	68.101	18.33	23.9	Pass
100	5500	12.40	13.26	12.58	12.54	74.622	18.73	23.9	Pass
116	5580	11.71	12.26	11.90	12.81	66.239	18.21	23.9	Pass
140	5700	11.70	12.25	12.43	12.85	68.353	18.35	23.9	Pass
*144 (U-NII-2C Band)	5720	8.16	8.25	8.57	8.41	27.359	14.37	22.77	Pass
*144 (U-NII-3 Band)	5720	2.35	3.48	3.36	2.79	8.015	9.04	29.9	Pass
149	5745	21.95	22.97	22.61	23.15	743.755	28.71	29.9	Pass
157	5785	22.54	23.65	23.17	23.74	855.296	29.32	29.9	Pass
165	5825	23.01	23.93	23.30	23.79	900.286	29.54	29.9	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
  - For UNII-1 & UNII-3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 30-(6.10-6) = 29.90dBm.
  - For UNII-2A & UNII-2C: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit" - (6.10-6).

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

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C}$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	19.87	23.98 < 24
60	5300	20.38	24.09 > 24
64	5320	20.47	24.11 > 24
100	5500	20.62	24.14 > 24
116	5580	20.54	24.12 > 24
140	5700	20.57	24.13 > 24
144 (U-NII-2C Band)	5720	15.40	22.87 < 24

**802.11ac (VHT40)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	18.55	17.71	18.59	18.40	272.095	24.35	29.9	Pass
46	5230	21.27	20.92	21.74	21.36	543.615	27.35	29.9	Pass
54	5270	15.46	15.26	15.67	15.81	143.734	21.58	23.9	Pass
62	5310	15.06	15.31	15.20	16.36	142.39	21.53	23.9	Pass
102	5510	14.96	14.84	15.49	15.51	132.775	21.23	23.9	Pass
110	5550	15.01	15.50	15.27	15.81	138.935	21.43	23.9	Pass
134	5670	14.67	15.90	15.61	16.05	144.877	21.61	23.9	Pass
*142 (U-NII-2C Band)	5710	11.72	12.24	12.40	11.84	65.967	18.19	23.9	Pass
*142 (U-NII-3 Band)	5710	0.81	1.18	1.00	0.78	5.105	7.08	29.9	Pass
151	5755	23.32	23.93	23.55	23.63	919.095	29.63	29.9	Pass
159	5795	22.57	23.95	23.33	23.70	878.732	29.44	29.9	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the
  - For UNII-1 & UNII-3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to  $30 - (6.10 - 6) = 29.90$  dBm.
  - For UNII-2A & UNII-2C: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit" - (6.10 - 6).

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

Power Limit = $11\text{dBm} + 10\log_2 B < \text{U-NII-2A, U-NII-2C}$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	40.63	27.08 > 24
62	5310	40.60	27.08 > 24
102	5510	40.63	27.08 > 24
110	5550	40.86	27.11 > 24
134	5670	40.79	27.1 > 24
142 (U-NII-2C Band)	5710	35.23	26.46 > 24

**802.11ac (VHT80)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	16.09	15.76	16.17	15.95	159.07	22.02	29.9	Pass
58	5290	16.03	16.16	15.97	16.72	167.917	22.25	23.9	Pass
106	5530	17.53	17.46	17.87	18.03	237.111	23.75	23.9	Pass
122	5610	16.85	17.97	17.14	18.15	228.152	23.58	23.9	Pass
*138 (U-NII-2C Band)	5690	13.68	13.67	14.16	13.62	102.273	20.10	23.9	Pass
*138 (U-NII-3 Band)	5690	0.54	0.35	0.08	-0.21	4.4758	6.51	29.9	Pass
155	5775	19.84	21.29	20.60	21.07	473.722	26.76	29.9	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the
  - For UNII-1 & UNII-3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 30-(6.10-6) = 29.90dBm.
  - For UNII-2A & UNII-2C: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit" - (6.10-6).

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	84.04	30.24 > 24
106	5530	84.48	30.26 > 24
122	5610	84.76	30.28 > 24
138 (U-NII-2C Band)	5690	76.59	29.84 > 24

**802.11ac (VHT80+80)**
**POWER OUTPUT:**

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58	5210	16.61	15.85	-	-	84.273	19.26	29.9	Pass
	5290	-	-	16.67	17.15	98.332	19.93	24	Pass
42+106	5210	16.51	15.85	-	-	83.231	19.20	29.9	Pass
	5530	-	-	16.47	16.15	85.571	19.32	24	Pass
42+122	5210	16.51	15.85	-	-	83.231	19.20	29.9	Pass
	5610	-	-	16.30	16.05	82.93	19.19	24	Pass
42+ 138* (UNII-2C)+ 138* (UNII-3)	5210	16.51	15.85	-	-	83.231	19.20	29.9	Pass
	5690	-	-	13.08	13.51	43.987	16.43	24	Pass
	5690	-	-	-2.00	-0.86	1.4929	1.74	30	Pass
42+155	5210	16.51	15.85	-	-	83.231	19.20	29.9	Pass
	5775	-	-	16.71	17.11	98.286	19.92	30	Pass
58+106	5290	15.64	15.14	-	-	69.303	18.41	23.9	Pass
	5530	-	-	15.36	15.20	67.469	18.29	24	Pass
58+122	5290	15.64	15.14	-	-	69.303	18.41	23.9	Pass
	5610	-	-	15.29	15.23	67.149	18.27	24	Pass
58+ 138* (UNII-2C)+ 138* (UNII-3)	5290	15.64	15.14	-	-	69.303	18.41	23.9	Pass
	5690	-	-	12.21	12.49	35.361	15.49	24	Pass
	5690	-	-	-2.87	-2.58	1.0991	0.41	30	Pass
58+155	5290	15.64	15.14	-	-	69.303	18.41	23.9	Pass
	5775	-	-	15.85	15.79	76.391	18.83	30	Pass
106+122	5530	15.91	15.72	-	-	170.786	22.32	23.9	Pass
	5610	-	-	16.48	16.99				
106+ 138*(UNII-2C)+ 138*(UNII-3)	5530	15.91	15.72	-	-	119.184	20.76	23.9	Pass
	5690	-	-	13.23	13.39				
	5690	-	-	-1.53	-1.35				
106+155	5530	15.91	15.72	-	-	76.319	18.83	23.9	Pass
	5775	-	-	16.78	16.99	97.647	19.90	30	Pass

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
122+ 138*(UNII-2C)+ 138*(UNII-3)	5610	16.12	17.21	-	-	147.511	21.69	23.9	Pass
	5690	-	-	14.45	14.17				
	5690	-	-	0.87	1.17				
122+155	5610	16.52	17.58	-	-	102.154	20.09	23.9	Pass
	5775	-	-	18.58	18.56	143.89	21.58	30	Pass
138* (UNII-2C)+ 138* (UNII-3)+ 155	5690	17.35	17.68	-	-	116.174	20.65	23.9	Pass
	5690	3.66	4.01	-	-	224.782	23.52	29.9	Pass
	5775	-	-	19.42	21.01				Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the
  - For UNII-1 & UNII-3: For Chain 0 & Chain 1: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 30-(6.10-6) = 29.90dBm.
  - For UNII-2A & UNII-2C: For Chain 0 & Chain 1: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 24-(6.10-6) = 23.90dBm.
  - For UNII-1 & UNII-3: For Chain 2 & Chain 3: The max antenna gain = 4.83dBi < 6dBi, so the power limit shall not be reduced.
  - For UNII-2A & UNII-2C: For Chain 2 & Chain 3: The max antenna gain = 4.83dBi < 6dBi, so the power limit shall not be reduced.
  - For UNII-2C: For Chain 0 & Chain 1 & Chain 2 & Chain 3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 24-(6.10-6) = 23.90dBm.
  - For UNII-3: For Chain 0 & Chain 1 & Chain 2 & Chain 3: The max antenna gain = 6.10dBi > 6dBi, so the power limit shall be reduced to 30-(6.10-6) = 29.90dBm.

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

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
42+58	5210	-	-
	5290	86.96	30.39 > 24
42+106	5210	-	-
	5530	86.49	30.36 > 24
42+122	5210	-	-
	5610	85.94	30.34 > 24
42+138 (UNII-2C)	5210	-	-
	5690	78.05	29.92 > 24
58+106	5290	86.69	30.37 > 24
	5530	86.61	30.37 > 24
58+122	5290	86.69	30.37 > 24
	5610	85.99	30.34 > 24
58+138 (UNII-2C)+138 (UNII-3)	5290	86.69	30.37 > 24
	5690	78.55	29.95 > 24
	5690	-	-
58+155	5290	86.69	30.37 > 24
	5775	-	-
106+122	5530	86.43	30.36 > 24
	5610	85.45	30.31 > 24
106+138 (UNII-2C)+138 (UNII-3)	5530	86.43	30.36 > 24
	5690	77.76	29.9 > 24
	5690	-	- 24
106+155	5530	86.43	30.36 > 24
	5775	-	-
122+155	5610	86.21	30.35 > 24
	5775	-	-

**Beamforming Mode**
**802.11ac (VHT20)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	18.32	18.30	18.60	18.47	278.279	24.44	24.86	Pass
40	5200	18.26	18.32	18.75	18.54	281.348	24.49	24.86	Pass
48	5240	18.16	17.89	18.31	18.47	265.053	24.23	24.86	Pass
52	5260	12.28	12.04	12.52	12.56	68.795	18.38	18.84	Pass
60	5300	11.87	12.44	12.05	12.98	68.814	18.38	18.86	Pass
64	5320	11.72	12.61	11.42	13.25	68.101	18.33	18.86	Pass
100	5500	12.40	13.26	12.58	12.54	74.622	18.73	18.86	Pass
116	5580	11.71	12.26	11.90	12.81	66.239	18.21	18.86	Pass
140	5700	11.70	12.25	12.43	12.85	68.353	18.35	18.86	Pass
*144 (U-NII-2C Band)	5720	8.16	8.25	8.57	8.41	27.359	14.37	17.73	Pass
*144 (U-NII-3 Band)	5720	2.35	3.48	3.36	2.79	8.015	9.04	24.86	Pass
149	5745	17.93	18.95	18.63	19.11	295.027	24.70	24.86	Pass
157	5785	17.56	18.62	18.15	18.76	270.27	24.32	24.86	Pass
165	5825	18.19	18.88	18.31	18.75	285.939	24.56	24.86	Pass

- Note:
1. \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
  2. For UNII-1 & UNII-3: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (11.14 - 6) = 24.86\text{dBm}$ .
  3. For UNII-2A & UNII-2C: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit" -(11.14-6).

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	19.87	23.98 < 24
60	5300	20.38	24.09 > 24
64	5320	20.47	24.11 > 24
100	5500	20.62	24.14 > 24
116	5580	20.54	24.12 > 24
140	5700	20.57	24.13 > 24
144 (U-NII-2C Band)	5720	15.40	22.87 < 24

**802.11ac (VHT40)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	18.55	17.71	18.59	18.40	272.095	24.35	24.86	Pass
46	5230	18.65	18.30	19.13	18.72	297.21	24.73	24.86	Pass
54	5270	12.39	12.16	12.60	12.71	70.643	18.49	18.86	Pass
62	5310	11.95	12.21	12.08	13.25	69.58	18.42	18.86	Pass
102	5510	11.99	11.86	12.47	12.49	66.561	18.23	18.86	Pass
110	5550	12.06	12.52	12.31	12.80	70.01	18.45	18.86	Pass
134	5670	11.71	12.88	12.64	13.01	72.598	18.61	18.86	Pass
*142 (U-NII-2C Band)	5710	8.49	8.84	9.01	8.91	31.269	14.95	18.86	Pass
*142 (U-NII-3 Band)	5710	-1.94	-2.36	-2.52	-2.19	2.4474	3.89	24.86	Pass
151	5755	17.64	18.92	18.61	18.69	282.631	24.51	24.86	Pass
159	5795	17.65	18.96	18.35	18.68	279.096	24.46	24.86	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.
  - For UNII-1 & UNII-3: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14 \text{dBi} > 6 \text{dBi}$ , so the power limit shall be reduced to  $30 - (11.14 - 6) = 24.86 \text{dBm}$ .
  - For UNII-2A & UNII-2C: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14 \text{dBi} > 6 \text{dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit" -(11.14-6).

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

Power Limit = $11 \text{dBm} + 10 \log B < \text{U-NII-2A, U-NII-2C}$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	40.63	27.08 > 24
62	5310	40.60	27.08 > 24
102	5510	40.63	27.08 > 24
110	5550	40.86	27.11 > 24
134	5670	40.79	27.1 > 24
142 (U-NII-2C Band)	5710	35.23	26.46 > 24

**802.11ac (VHT80)**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	16.09	15.76	16.17	15.95	159.07	22.02	24.86	Pass
58	5290	12.05	12.17	12.09	12.68	67.23	18.28	18.86	Pass
106	5530	12.51	12.44	12.83	13.01	74.548	18.72	18.86	Pass
122	5610	11.94	12.77	12.14	12.98	70.784	18.50	18.86	Pass
*138 (U-NII-2C Band)	5690	8.24	8.95	8.86	8.57	31.429	14.97	18.86	Pass
*138 (U-NII-3 Band)	5690	-4.69	-4.67	-4.69	-4.68	1.4545	1.63	24.86	Pass
155	5775	17.86	19.25	18.64	19.02	298.147	24.74	24.86	Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.
  - For UNII-1 & UNII-3: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14 \text{dBi} > 6 \text{dBi}$ , so the power limit shall be reduced to  $30 - (11.14 - 6) = 24.86 \text{dBm}$ .
  - For UNII-2A & UNII-2C: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14 \text{dBi} > 6 \text{dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit" -(11.14-6).

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

Power Limit = $11 \text{dBm} + 10 \log B < \text{U-NII-2A, U-NII-2C}$ >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	84.04	30.24 > 24
106	5530	84.48	30.26 > 24
122	5610	84.76	30.28 > 24
138 (U-NII-2C Band)	5690	76.59	29.84 > 24

**802.11ac (VHT80+80)**
**POWER OUTPUT:**

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58	5210	16.61	15.85	-	-	84.273	19.26	27.45	Pass
	5290	-	-	16.67	17.15	98.332	19.93	22.32	Pass
42+106	5210	16.51	15.85	-	-	83.231	19.20	27.45	Pass
	5530	-	-	16.47	16.15	85.571	19.32	22.32	Pass
42+122	5210	16.51	15.85	-	-	83.231	19.20	27.45	Pass
	5610	-	-	16.30	16.05	82.93	19.19	22.32	Pass
42+ 138* (UNII-2C)+ 138* (UNII-3)	5210	16.51	15.85	-	-	83.231	19.20	27.45	Pass
	5690	-	-	13.08	13.51	43.987	16.43	22.32	Pass
	5690	-	-	-2.00	-0.86	1.4929	1.74	28.32	Pass
42+155	5210	16.51	15.85	-	-	83.231	19.20	27.45	Pass
	5775	-	-	16.71	17.11	98.286	19.92	28.32	Pass
58+106	5290	15.64	15.14	-	-	69.303	18.41	21.45	Pass
	5530	-	-	15.36	15.20	67.469	18.29	22.32	Pass
58+122	5290	15.64	15.14	-	-	69.303	18.41	21.45	Pass
	5610	-	-	15.29	15.23	67.149	18.27	22.32	Pass
58+ 138* (UNII-2C)+ 138* (UNII-3)	5290	15.64	15.14	-	-	69.303	18.41	21.45	Pass
	5690	-	-	12.21	12.49	35.361	15.49	22.32	Pass
	5690	-	-	-2.87	-2.58	1.0991	0.41	28.32	Pass
58+155	5290	15.64	15.14	-	-	69.303	18.41	21.45	Pass
	5775	-	-	15.85	15.79	76.391	18.83	28.32	Pass
106+122	5530	12.46	12.14	-	-	68.703	18.37	18.86	Pass
	5610	-	-	12.02	12.74				
106+ 138*(UNII-2C)+ 138*(UNII-3)	5530	12.46	12.14	-	-	53.365	17.27	18.86	Pass
	5690	-	-	10.18	9.52				
	5690	-	-	-3.19	-3.20				
106+155	5530	15.91	15.72	-	-	76.319	18.83	21.45	Pass
	5775	-	-	16.78	16.99	97.647	19.90	28.32	Pass

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
122+ 138*(UNII-2C)+ 138*(UNII-3)	5610	11.12	12.21	-	-	49.049	16.91	18.86	Pass
	5690	-	-	10.22	9.52				
	5690	-	-	-3.40	-3.22				
122+155	5610	17.33	18.35	-	-	122.467	20.88	21.45	Pass
	5775	-	-	17.35	19.00	133.758	21.26	28.32	Pass
138* (UNII-2C)+ 138* (UNII-3)+ 155	5690	14.47	14.58	-	-	58.322	17.66	21.45	Pass
	5690	1.25	0.99	-	-	130.732	21.16	24.86	Pass
	5775	-	-	17.08	18.66				Pass

- Note:
- \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.
  - For UNII-1 & UNII-3: For Chain 0 & Chain 1: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 8.55\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30-(8.55-6) = 27.45\text{dBm}$ .
  - For UNII-2A & UNII-2C: For Chain 0 & Chain 1: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 8.55\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24-(8.55-6) = 21.45\text{dBm}$ .
  - For UNII-1 & UNII-3: For Chain 2 & Chain 3: Directional gain =  $10 \log[(10^{G3/20} + 10^{G4/20})^2 / 2] = 7.68\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30-(7.68-6) = 28.32\text{dBm}$ .
  - For UNII-2A & UNII-2C: For Chain 2 & Chain 3: Directional gain =  $10 \log[(10^{G3/20} + 10^{G4/20})^2 / 2] = 7.68\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24-(7.68-6) = 22.32\text{dBm}$ .
  - For UNII-2C: For Chain 0 & Chain 1 & Chain 2 & Chain 3: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24-(11.14-6) = 18.86\text{dBm}$ .
  - For UNII-3: For Chain 0 & Chain 1 & Chain 2 & Chain 3: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30-(11.14-6) = 24.86\text{dBm}$ .

**26dB BANDWIDTH:**

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58	5210	86.58	86.39	-	-
	5290	-	-	87.17	86.96
42+106	5210	86.58	86.39	-	-
	5530	-	-	86.49	86.5
42+122	5210	86.58	86.39	-	-
	5610	-	-	85.94	86.89
42+ 138 (UNII-2C)+ 138 (UNII-3)	5210	86.58	86.39	-	-
	5690	-	-	78.05	78.59
	5690	-	-	7.9	7.52
42+155	5210	86.58	86.39	-	-
	5775	-	-	86.37	86.61
58+106	5290	86.83	86.69	-	-
	5530	-	-	86.61	86.87
58+122	5290	86.83	86.69	-	-
	5610	-	-	86.26	85.99
58+138 (UNII-2C)+ 138 (UNII-3)	5290	86.83	86.69	-	-
	5690	-	-	78.55	78.57
	5690	-	-	7.78	8.21
58+155	5290	86.83	86.69	-	-
	5775	-	-	86.97	86.69
106+122	5530	86.43	87.73	-	-
	5610	-	-	85.45	85.69
106+138 (UNII-2C)+ 138 (UNII-3)	5530	86.43	87.73	-	-
	5690	-	-	77.76	77.85
	5690	-	-	7.6	7.42
106+155	5530	86.43	87.73	-	-
	5775	-	-	86.56	86.24
122+155	5610	86.21	86.69	-	-
	5775	-	-	86.56	86.25

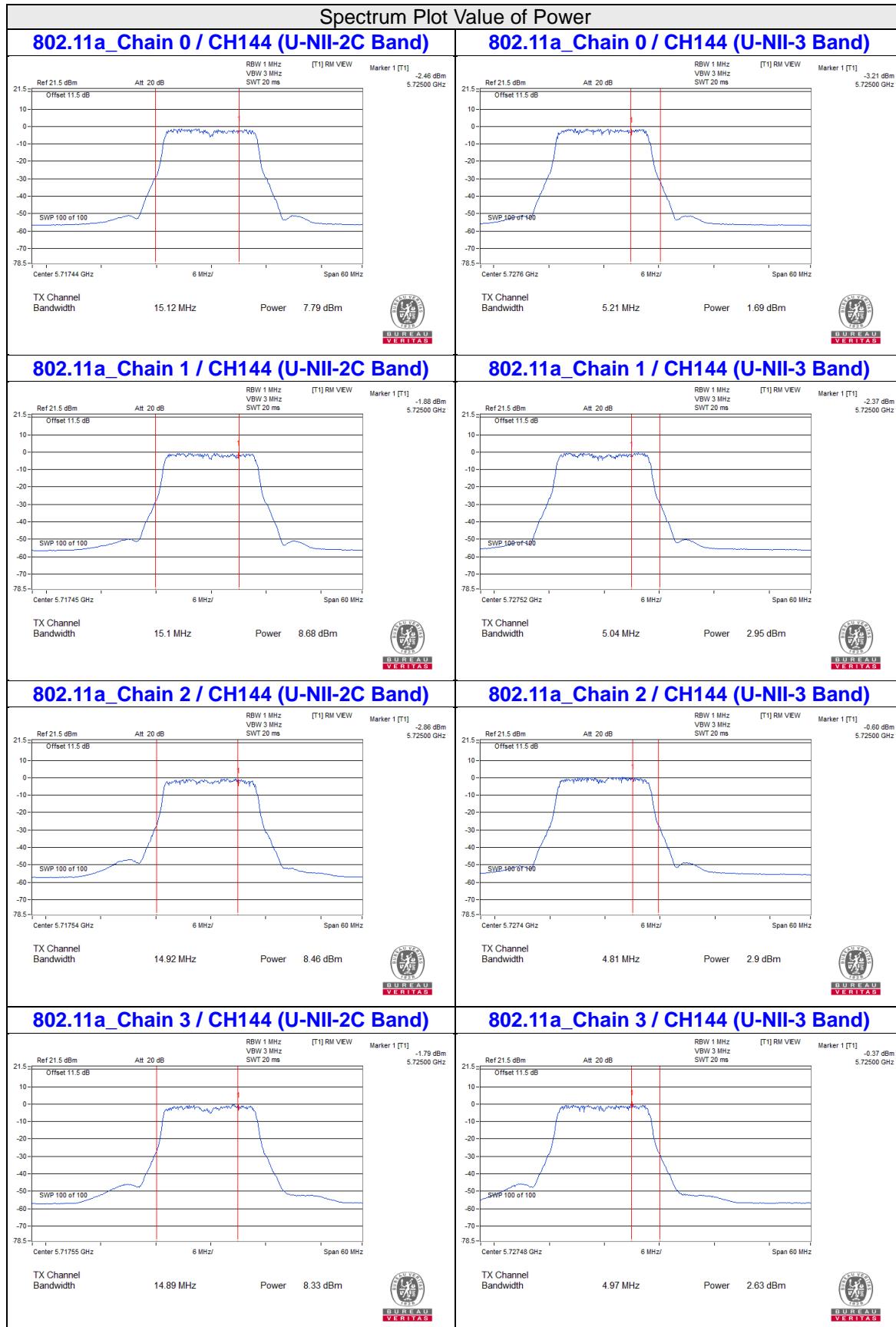
**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < U\_NII-2A, U\_NII-2C >

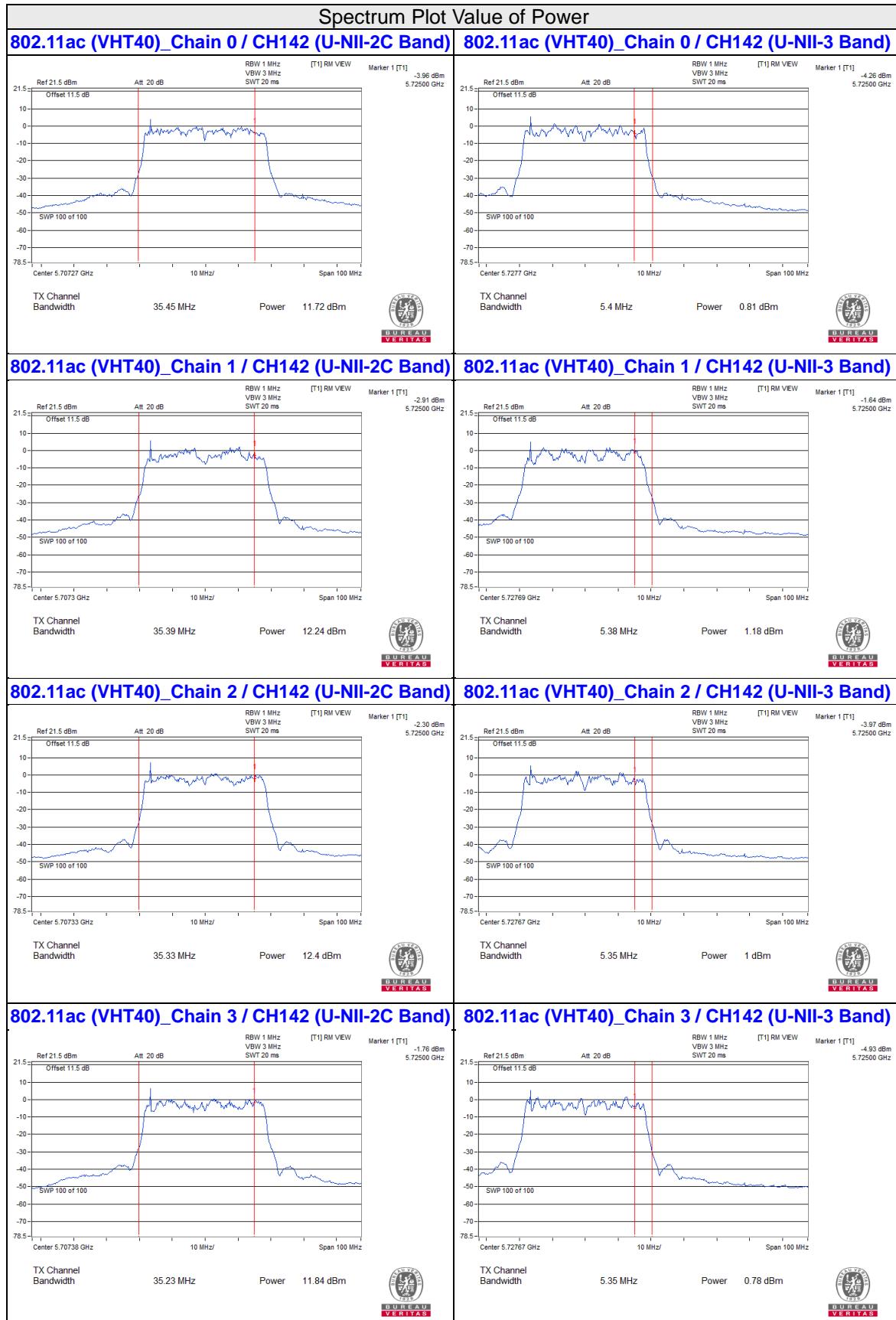
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
42+58	5210	-	-
	5290	86.96	30.39 > 24
42+106	5210	-	-
	5530	86.49	30.36 > 24
42+122	5210	-	-
	5610	85.94	30.34 > 24
42+ 138 (UNII-2C)	5210	-	-
	5690	78.05	29.92 > 24
58+106	5290	86.69	30.37 > 24
	5530	86.61	30.37 > 24
58+122	5290	86.69	30.37 > 24
	5610	85.99	30.34 > 24
58+138 (UNII-2C)+ 138 (UNII-3)	5290	86.69	30.37 > 24
	5690	78.55	29.95 > 24
	5690	-	-
58+155	5290	86.69	30.37 > 24
	5775	-	-
106+122	5530	86.43	30.36 > 24
	5610	85.45	30.31 > 24
106+138 (UNII-2C)+ 138 (UNII-3)	5530	86.43	30.36 > 24
	5690	77.76	29.9 > 24
	5690	-	- 24
106+155	5530	86.43	30.36 > 24
	5775	-	-
122+155	5610	86.21	30.35 > 24
	5775	-	-

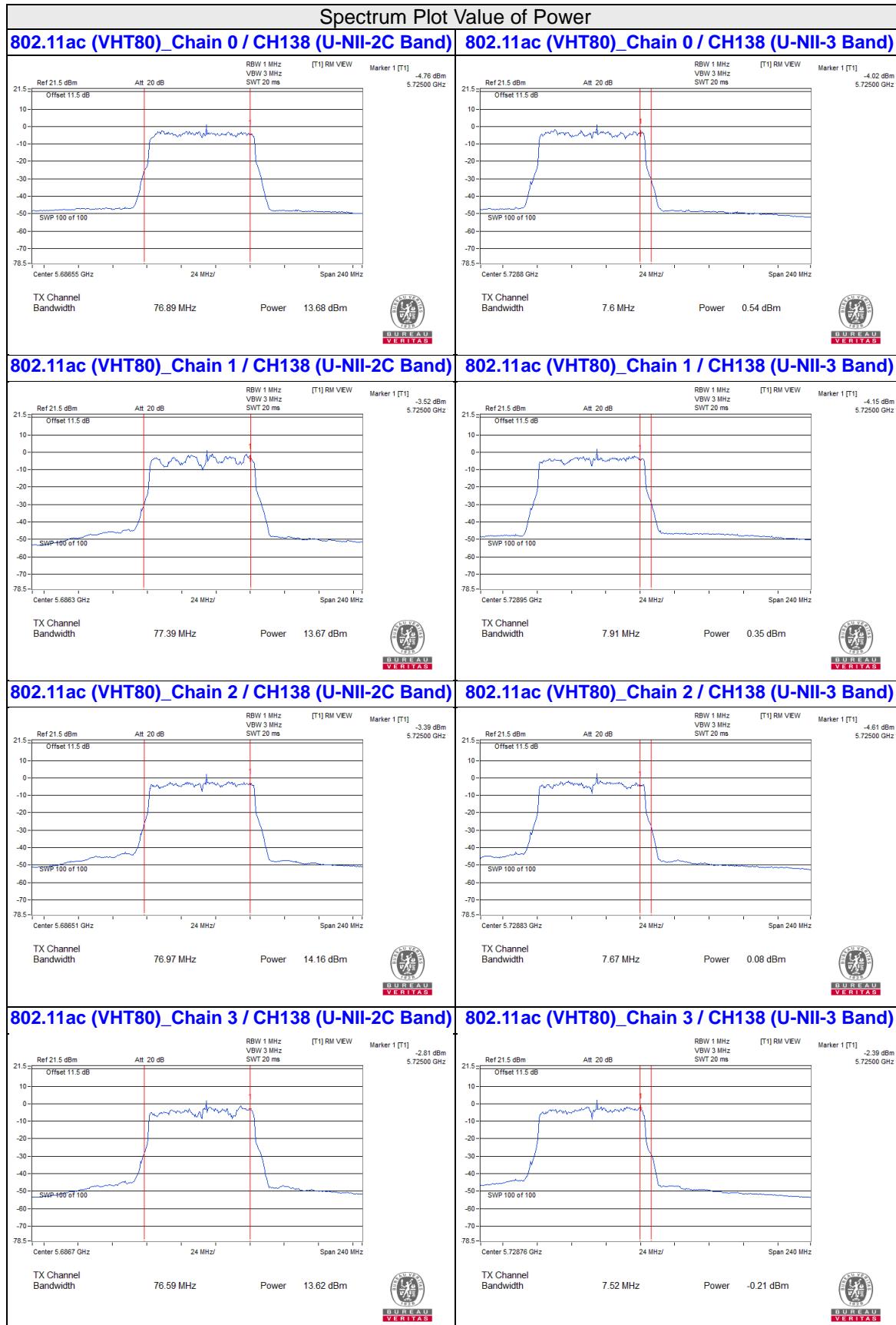
## For channel straddling 5725MHz of Power

### CDD Mode

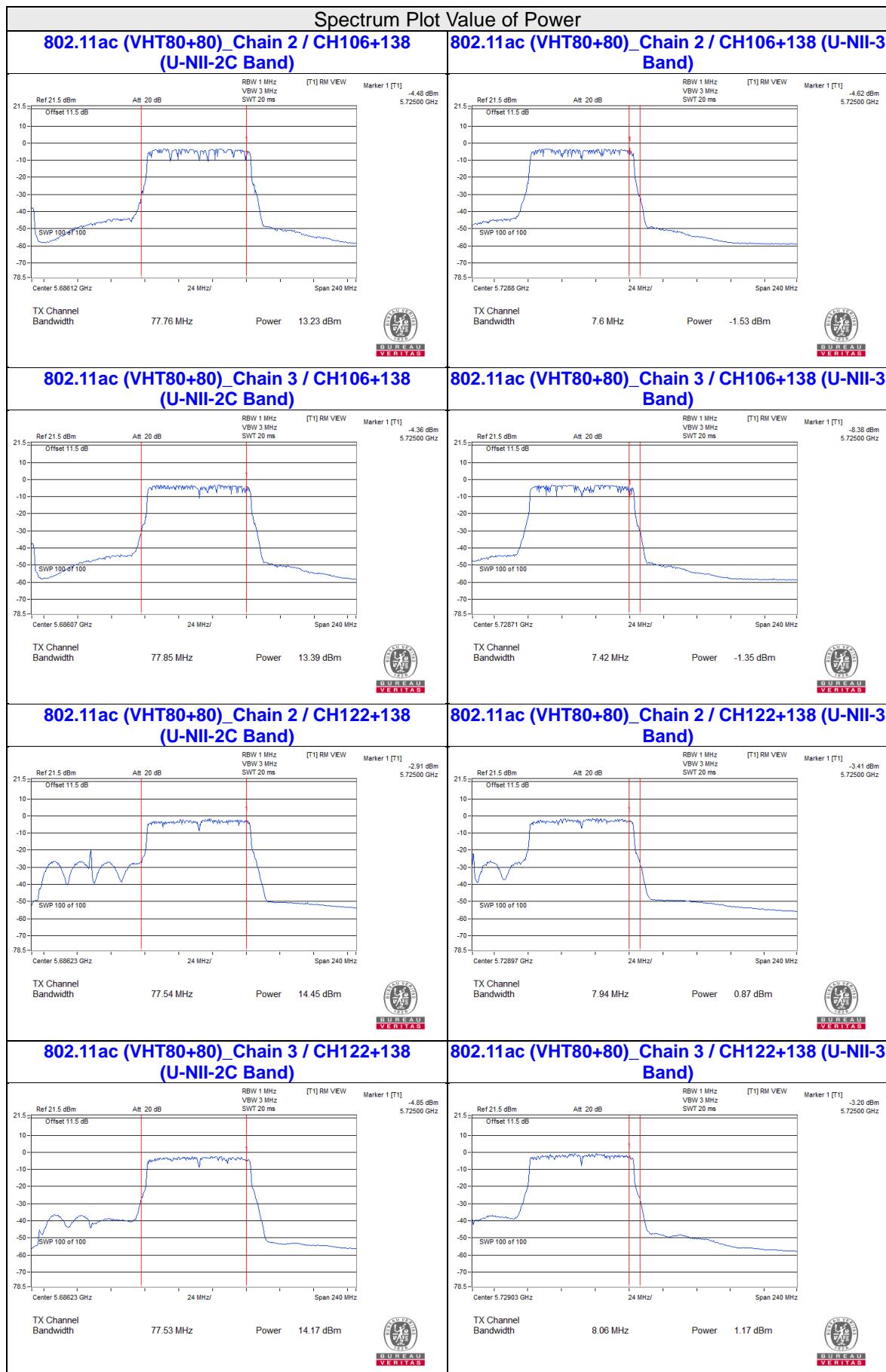


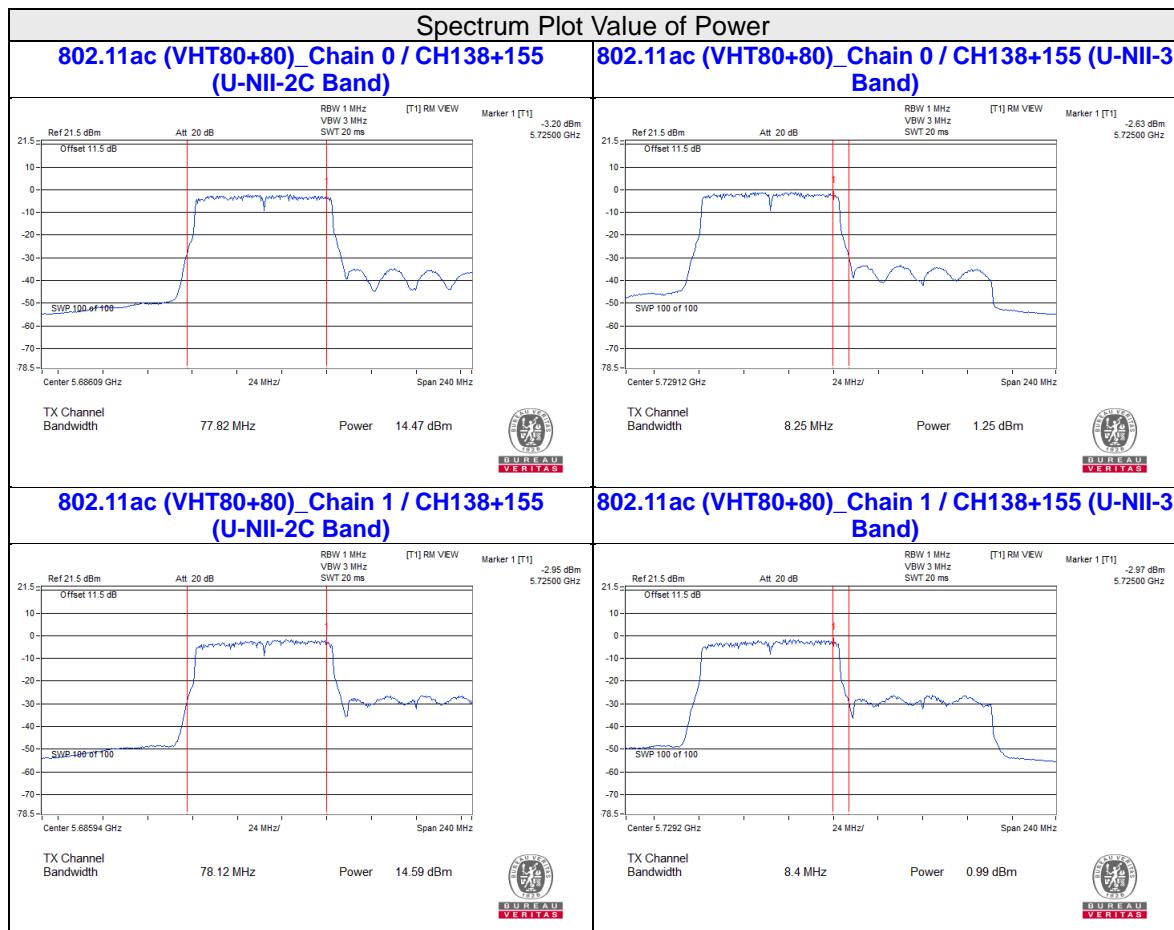




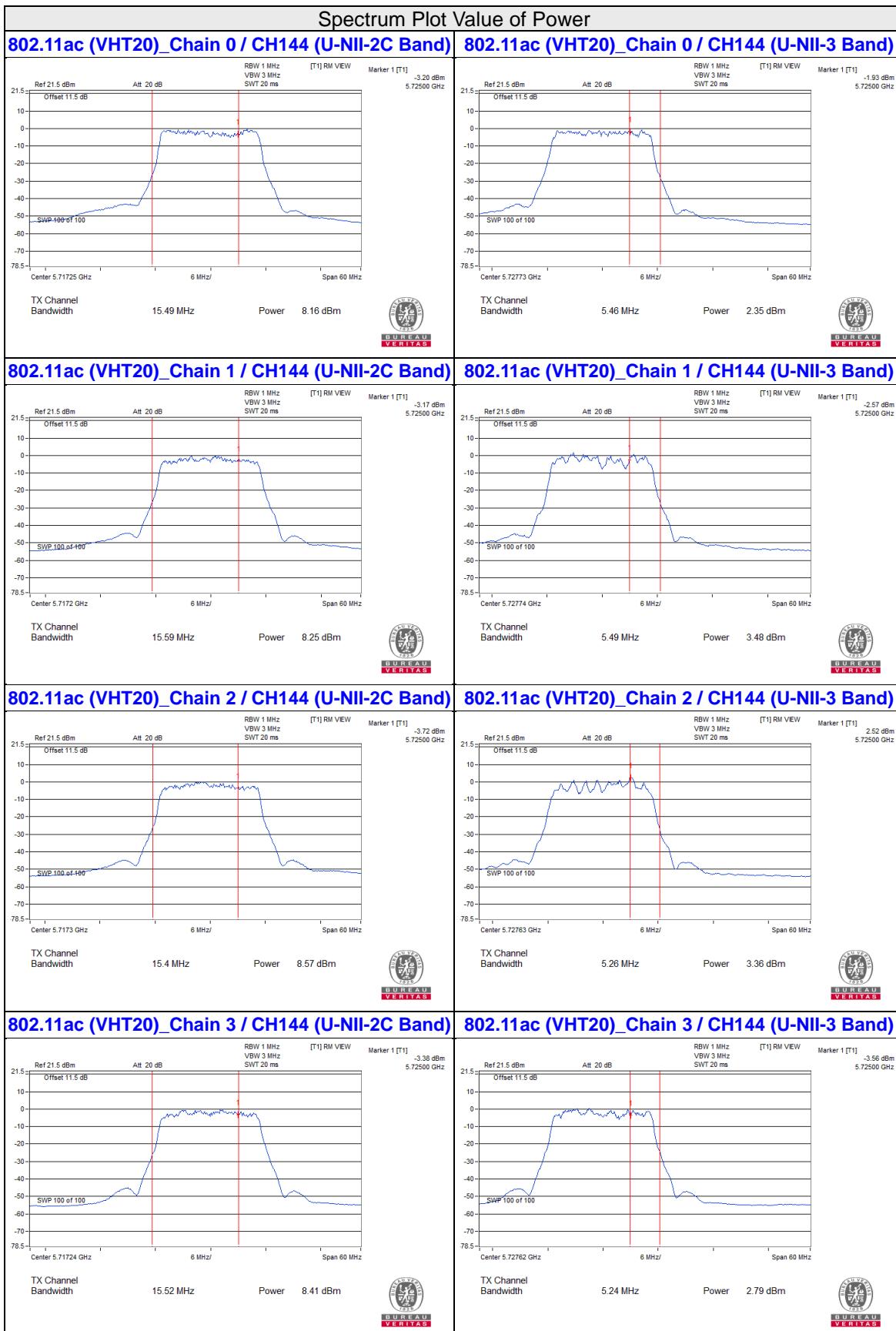








## Beamforming Mode

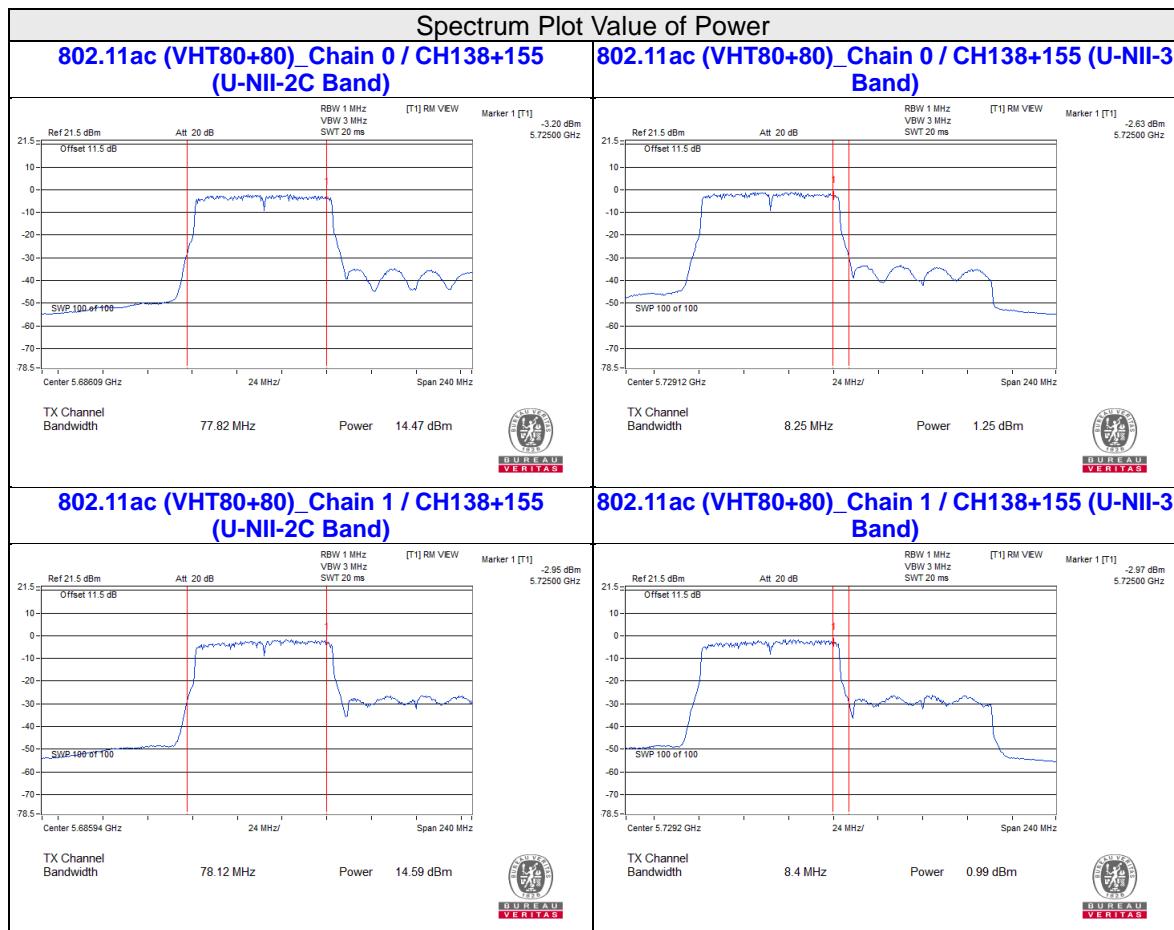












## 4.4 Occupied Bandwidth Measurement

### 4.4.1 Test Setup



### 4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

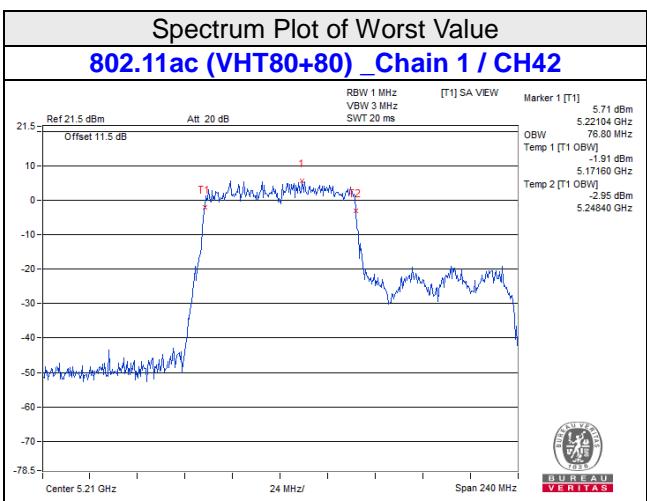
### 4.4.3 Test Procedure

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 SAMPLE. 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.

#### 4.4.4 Test Results

##### 802.11ac (VHT80+80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42+58	5210	75.84	76.8	-	-
	5290	-	-	76.32	76.32
42+106	5210	75.84	76.8	-	-
	5530	-	-	75.84	75.84
42+122	5210	75.84	76.8	-	-
	5610	-	-	76.32	75.84
42+ 138 (UNII-2C)+ 138 (UNII-3)	5210	75.84	76.8	-	-
	5690	-	-	73.4	73.4
	5690	-	-	2.44	2.44
42+155	5210	75.84	76.8	-	-
	5775	-	-	75.84	75.84
58+106	5290	75.84	75.84	-	-
	5530	-	-	75.84	75.84
58+122	5290	75.84	75.84	-	-
	5610	-	-	75.84	76.32
58+138 (UNII-2C)+ 138 (UNII-3)	5290	75.84	75.84	-	-
	5690	-	-	73.4	73.4
	5690	-	-	2.44	2.44
58+155	5290	75.84	75.84	-	-
	5775	-	-	75.84	75.84
106+122	5530	75.84	75.84	-	-
	5610	-	-	76.32	75.84
106+138 (UNII-2C)+ 138 (UNII-3)	5530	75.84	75.84	-	-
	5690	-	-	73.4	72.92
	5690	-	-	2.44	2.44
106+155	5530	75.84	75.84	-	-
	5775	-	-	75.84	75.84
122+155	5610	75.84	76.32	-	-
	5775	-	-	75.84	75.84



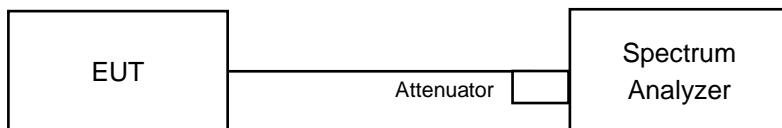
## 4.5 Peak Power Spectral Density Measurement

### 4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
	✓	Indoor Access Point	
		Client device	11dBm/ MHz
U-NII-2A	✓		11dBm/ MHz
U-NII-2C	✓		11dBm/ MHz
U-NII-3	✓		30dBm/ 500kHz

Note: This device can support different category application which switched by access point mode and client mode by software.

### 4.5.2 Test Setup



### 4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.5.4 Test Procedure

##### **802.11ac (VHT80+80)**

##### **For U-NII-1, U-NII-2A, and U-NII-2C band:**

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

##### **For U-NII-3:**

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW  $\geq$  1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)
- 1.

#### 4.5.5 Deviation from Test Standard

No deviation.

#### 4.5.6 EUT Operating Condition

Same as Item 4.3.6.

#### 4.5.7 Test Results

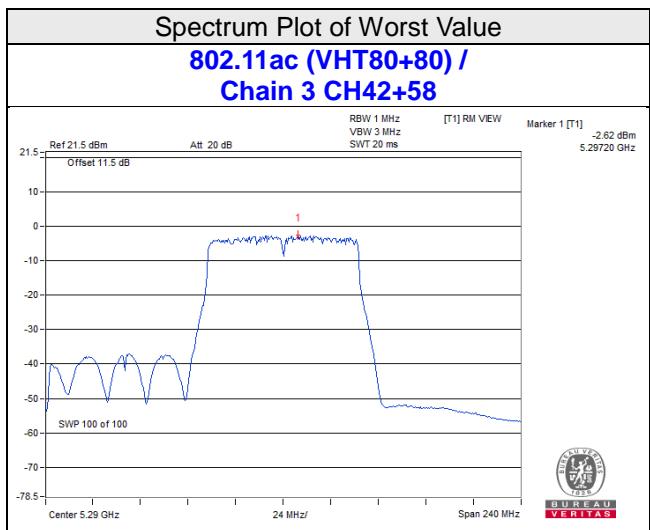
**802.11ac (VHT80+80)**

**For U\_NII-1, U\_NII-2A, U\_NII-2C**

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42+58	5210	-3.07	-4.22			0.12	-0.47	14.45	Pass
	5290			-3.03	-2.79	0.12	0.22	9.32	Pass
42+106	5210	-3.07	-4.22			0.12	-0.47	14.45	Pass
	5530			-2.87	-3.46	0.12	-0.02	9.32	Pass
42+122	5210	-3.07	-4.22			0.12	-0.47	14.45	Pass
	5610			-4.92	-3.77	0.12	-1.17	9.32	Pass
42+ 138(UNII-2C)	5210	-3.07	-4.22			0.12	-0.47	14.45	Pass
	5610			-3.74	-3.17	0.12	-0.31	9.32	Pass
42+155	5210	-3.07	-4.22			0.12	-0.47	14.45	Pass
	5775	Test results refer to U_NII-3 data							
58+106	5290	-4.40	-4.03			0.12	-1.08	8.45	Pass
	5530			-4.36	-4.49	0.12	-1.29	9.32	Pass
58+122	5290	-4.40	-4.03			0.12	-1.08	8.45	Pass
	5610			-5.43	-4.92	0.12	-2.03	9.32	Pass
58+ 138 (UNII-2C)+ 138(UNII-3)	5290	-4.40	-4.03			0.12	-1.08	8.45	Pass
	5690			-4.53	-4.27	0.12	-1.27	9.32	Pass
	5690	Test results refer to U_NII-3 data							
58+155	5290	-4.40	-4.03	-	-	0.12	-1.08	8.45	Pass
	5775	Test results refer to U_NII-3 data							
106+122	5530	-3.76	-3.73			0.12	2.28	5.86	Pass
	5610			-4.02	-3.94				
106 +138(UNII-2C) +138(UNII-3)	5530	-3.76	-3.73			0.12	2.46	5.86	Pass
	5690			-3.66	-3.59				
	5690	Test results refer to U_NII-3 data							
106+155	5530	-3.76	-3.73	-	-	0.12	-0.61	8.45	Pass
	5775	Test results refer to U_NII-3 data							
122+155	5610	-3.96	-3.83	-	-	0.12	-0.76	8.45	Pass
	5775	Test results refer to U_NII-3 data							

- Note:**
- Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
  - For U\_NII-1:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 8.55 \text{ dBi} > 6 \text{ dBi}$ , so the power density limit shall be reduced to  $17 - (8.55 - 6) = 14.45 \text{ dBm}$ .
  - For U\_NII-2A & U\_NII-2C:** For Chain 0 & Chain 1: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 8.55 \text{ dBi} > 6 \text{ dBi}$ , so the power density limit shall be reduced to  $11 - (8.55 - 6) = 8.45 \text{ dBm}$ .

5. **For U\_NII-2A & U\_NII-2C:** For Chain 2 & Chain 3: Directional gain =  $10 \log[(10^{G3/20} + 10^{G4/20})^2 / 2]$   
 $= 7.68\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.68-6) = 9.32\text{dBm}$ .
4. **For U\_NII-2A & U\_NII-2C: (chain 0+chain 1+chain 2+chain 3):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / 4] = 11.14\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(11.14-6) = 5.86\text{dBm}$ .
5. Refer to section 3.3 for duty cycle spectrum plot.

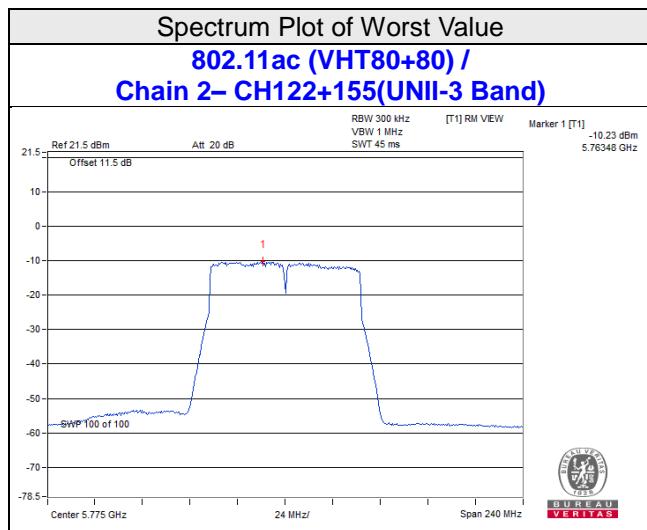


**For U\_NII-3**

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/ 300kHz)	Total PSD (dBm/ 300kHz)	Total PSD (dBm/ 500kHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
42+ 138 (UNII-3)	5210	Test results refer to U_NII-1 data									
	5690			-14.69	-13.58	0.12	0.08004	-10.97	-8.75	28.32	Pass
42+ 155 (UNII-3)	5210	Test results refer to U_NII-1 data									
	5775			-11.75	-11.54	0.12	0.1409	-8.51	-6.29	28.32	Pass
58+ 138 (UNII-3)	5290	Test results refer to U_NII-2A data									
	5690			-15.37	-14.76	0.12	0.06425	-11.92	-9.70	28.32	Pass
58+ 155 (UNII-3)	5290	Test results refer to U_NII-2A data									
	5775			-12.76	-12.30	0.12	0.11506	-9.39	-7.17	28.32	Pass
106+ 138 (UNII-3)	5530	Test results refer to U_NII-2C data									
	5690			-13.58	-13.43	0.12	0.0918	-10.37	-8.15	28.32	Pass
106+ 155 (UNII-3)	5530	Test results refer to U_NII-2C data									
	5775			-11.76	-11.58	0.12	0.14008	-8.54	-6.32	28.32	Pass
122+ 155 (UNII-3)	5610	Test results refer to U_NII-2C data									
	5775			-10.23	-10.27	0.12	0.19422	-7.12	-4.90	28.32	Pass

**Note:** 1. Directional gain =  $10 \log[(10^{G3/20} + 10^{G4/20})^2 / 2] = 7.68 \text{ dBi} > 6 \text{ dBi}$ , so the power density limit shall be reduced to  $30 - (7.68 - 6) = 28.32 \text{ dBm}$ .

2. Refer to section 3.3 for duty cycle spectrum plot.



## 4.6 6dB Bandwidth Measurement

### 4.6.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

### 4.6.2 Test Setup



### 4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.6.4 Test Procedure

#### **MEASUREMENT PROCEDURE REF**

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

### 4.6.5 Deviation from Test Standard

No deviation.

### 4.6.6 EUT Operating Condition

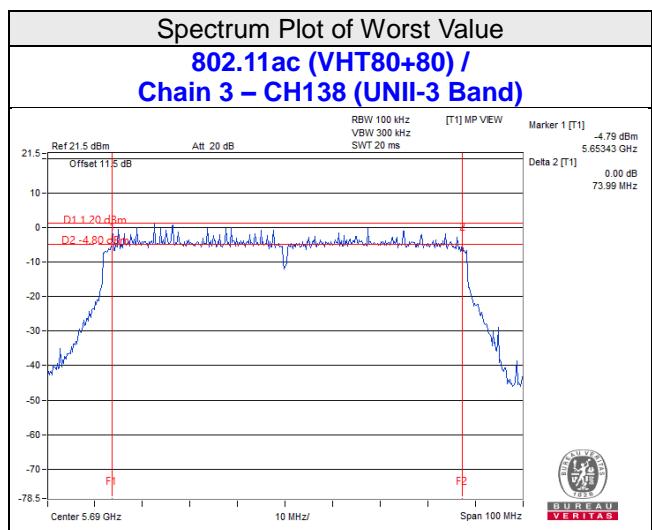
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

#### 4.6.7 Test Results

##### 802.11ac (VHT80+80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
42+ 138(UNII-3)	5210					-	
	5690	-	-	2.58	2.65	0.5	Pass
42+ 155	5210					-	
	5775	-	-	73.06	73.05	0.5	Pass
58+ 138(UNII-3)	5290					-	
	5690	-	-	2.57	2.44	0.5	Pass
58+155	5290					-	
	5775	-	-	75.71	75.33	0.5	Pass
106+ 138(UNII-3)	5530					-	
	5690	-	-	2.62	2.42	0.5	Pass
106+155	5530					-	
	5775	-	-	74.28	75.34	0.5	Pass
122+155	5610					-	
	5775	-	-	74.16	75.71	0.5	Pass

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz



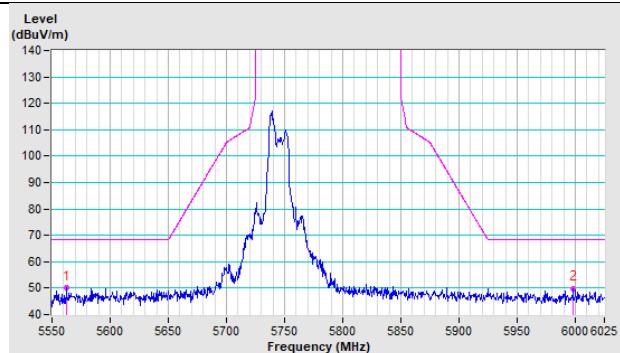
## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

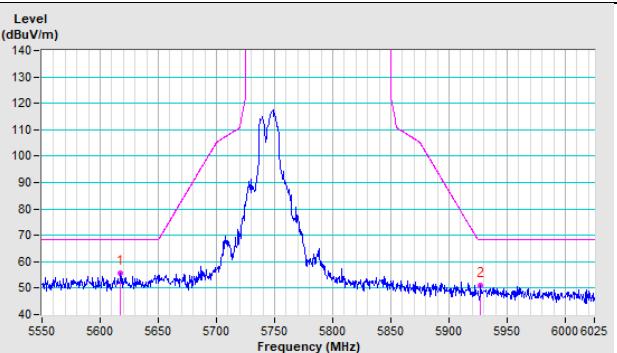
### Annex A - Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

**802.11a CH 149 : 5745 MHz**

**Horizontal**

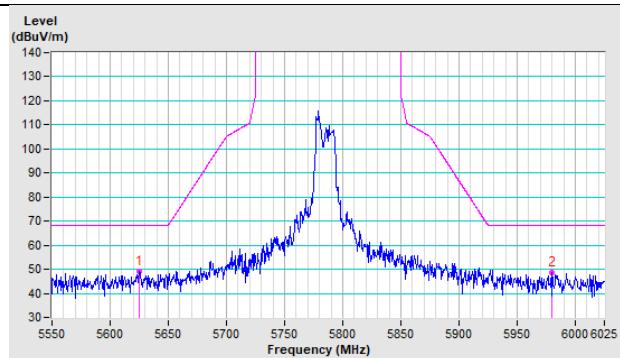


**Vertical**

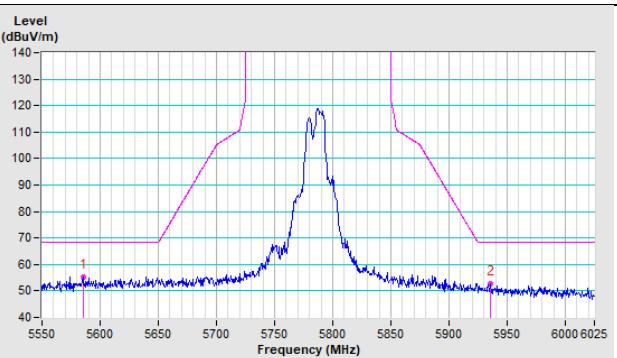


**802.11a CH 157 : 5785 MHz**

**Horizontal**

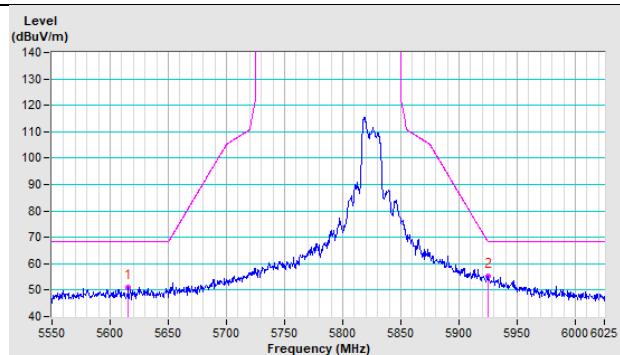


**Vertical**

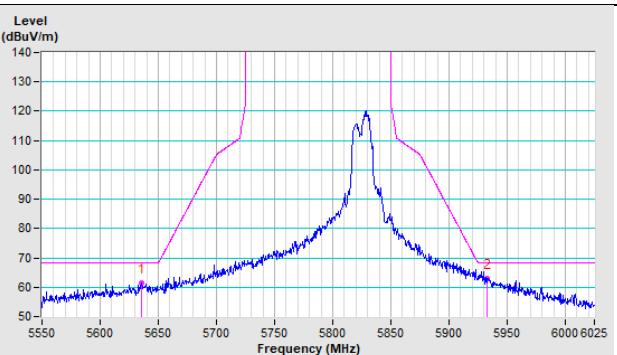


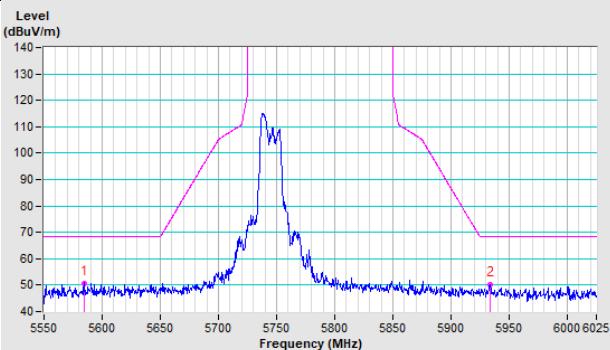
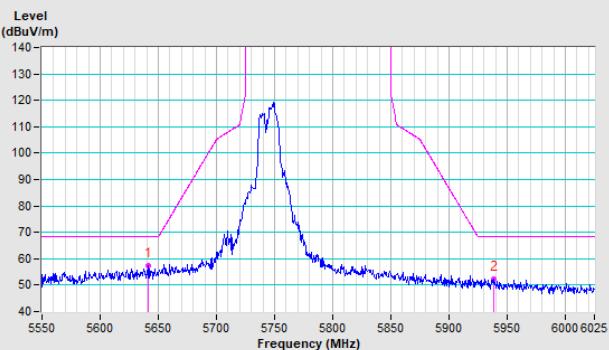
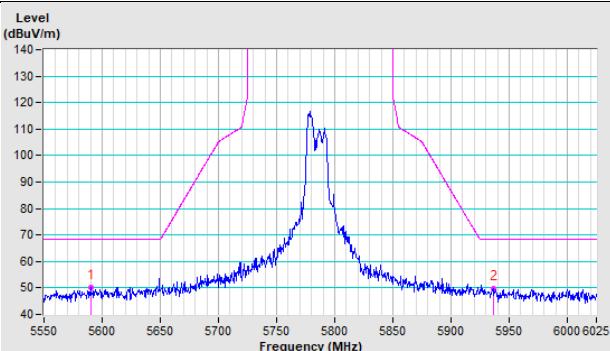
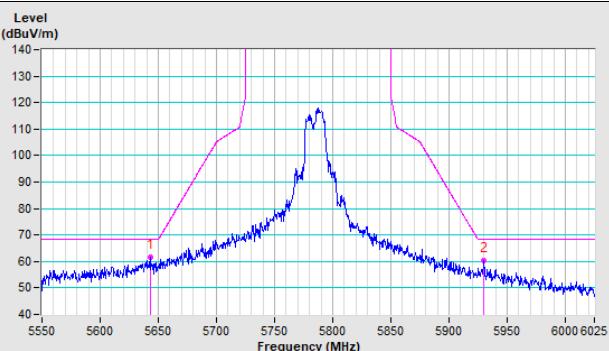
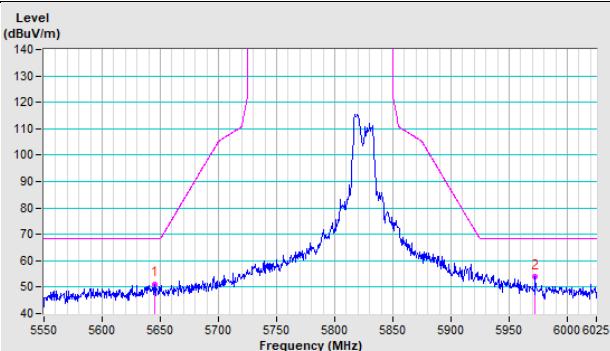
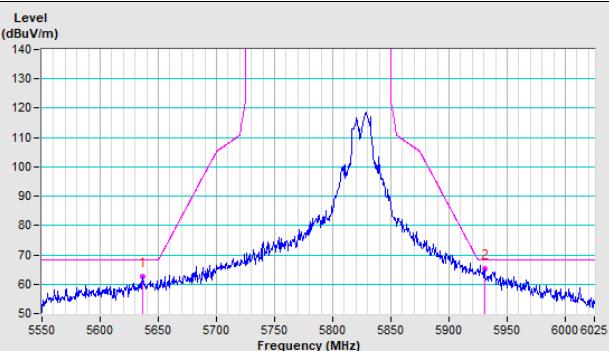
**802.11a CH 165 : 5825 MHz**

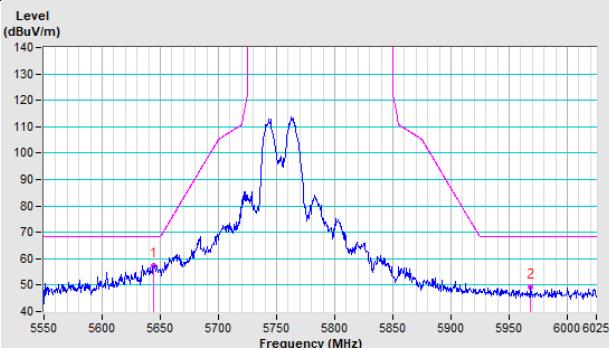
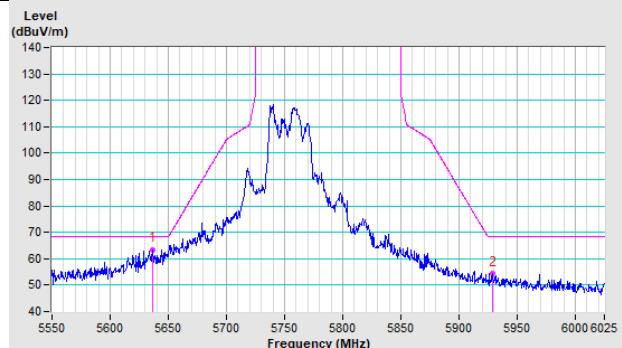
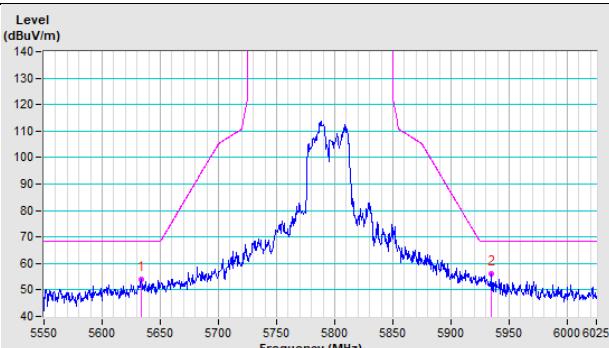
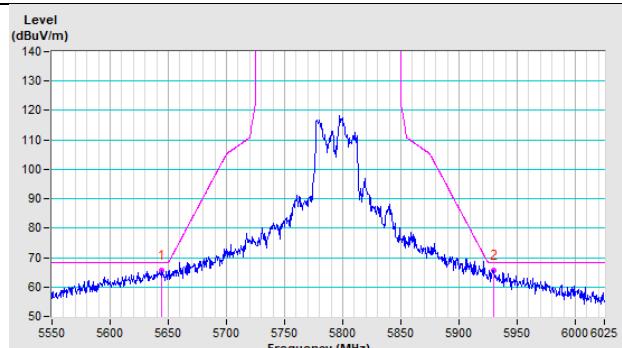
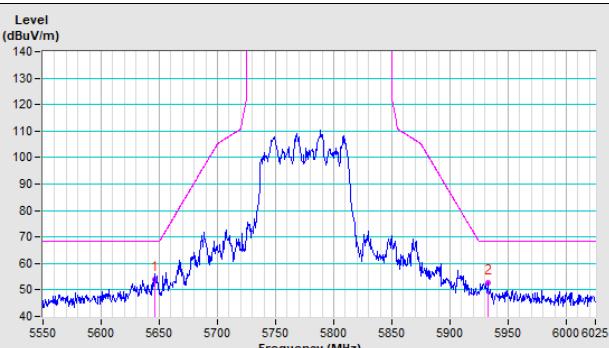
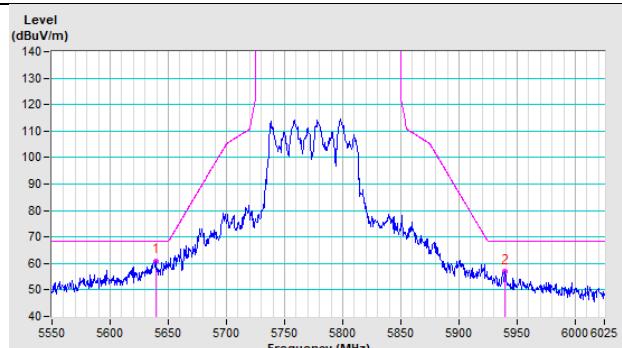
**Horizontal**

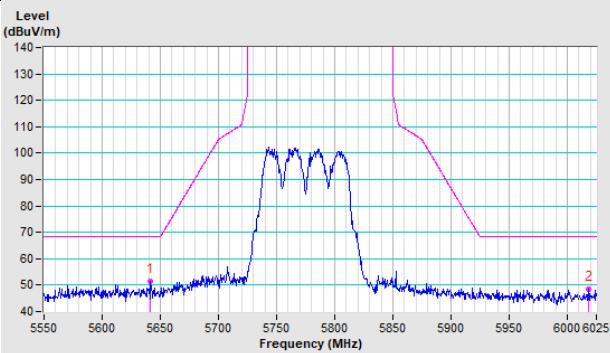
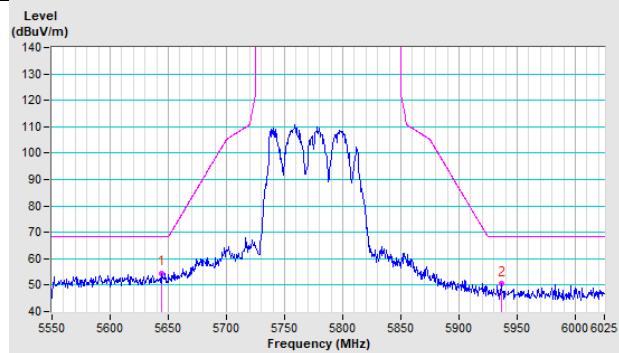
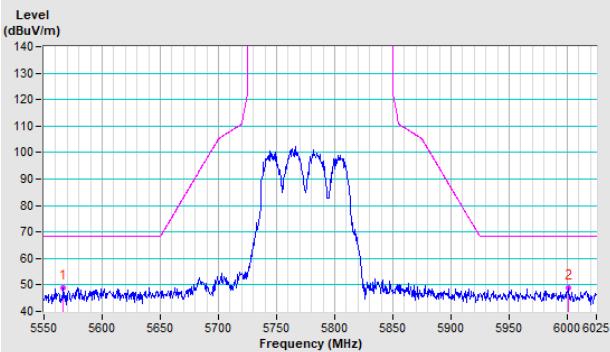
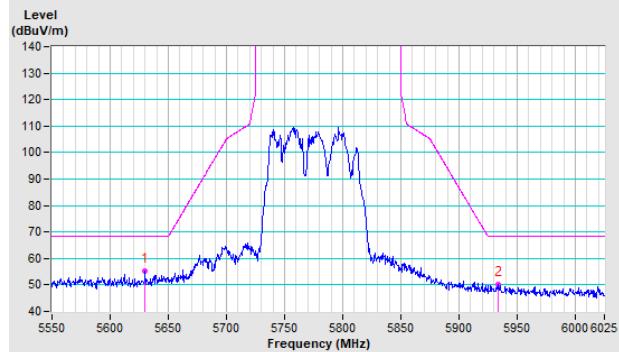
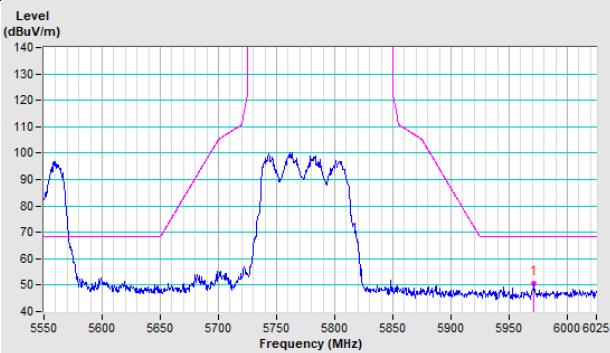
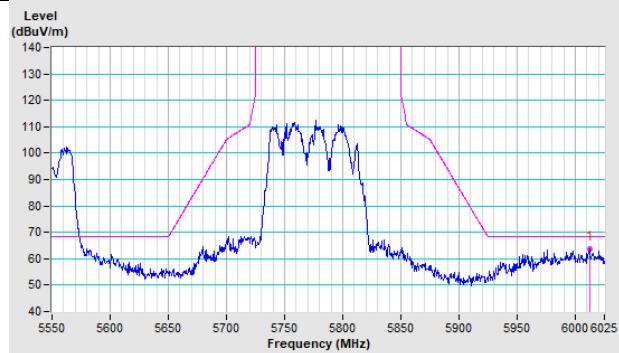
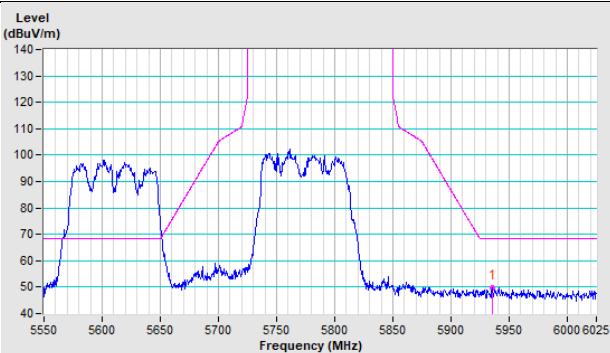
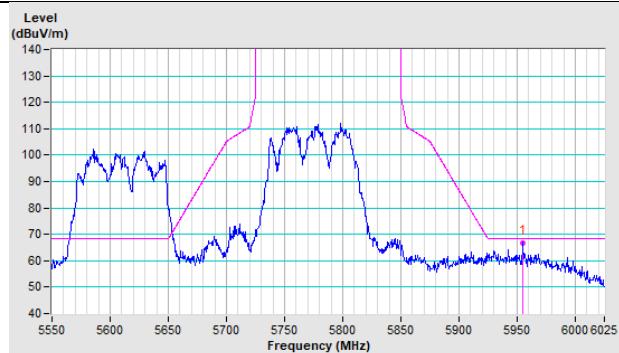


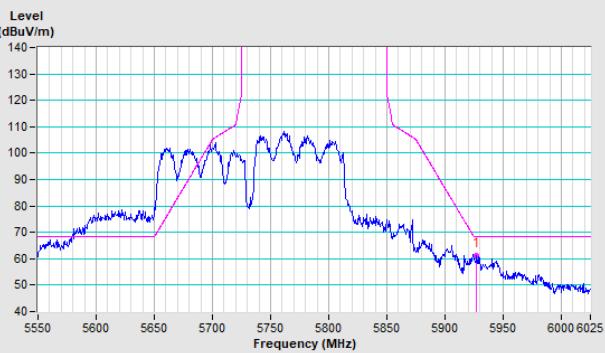
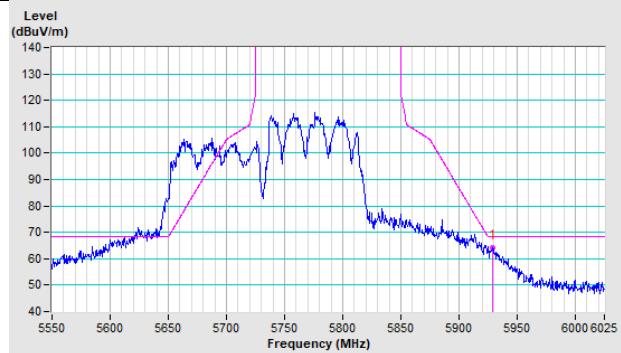
**Vertical**

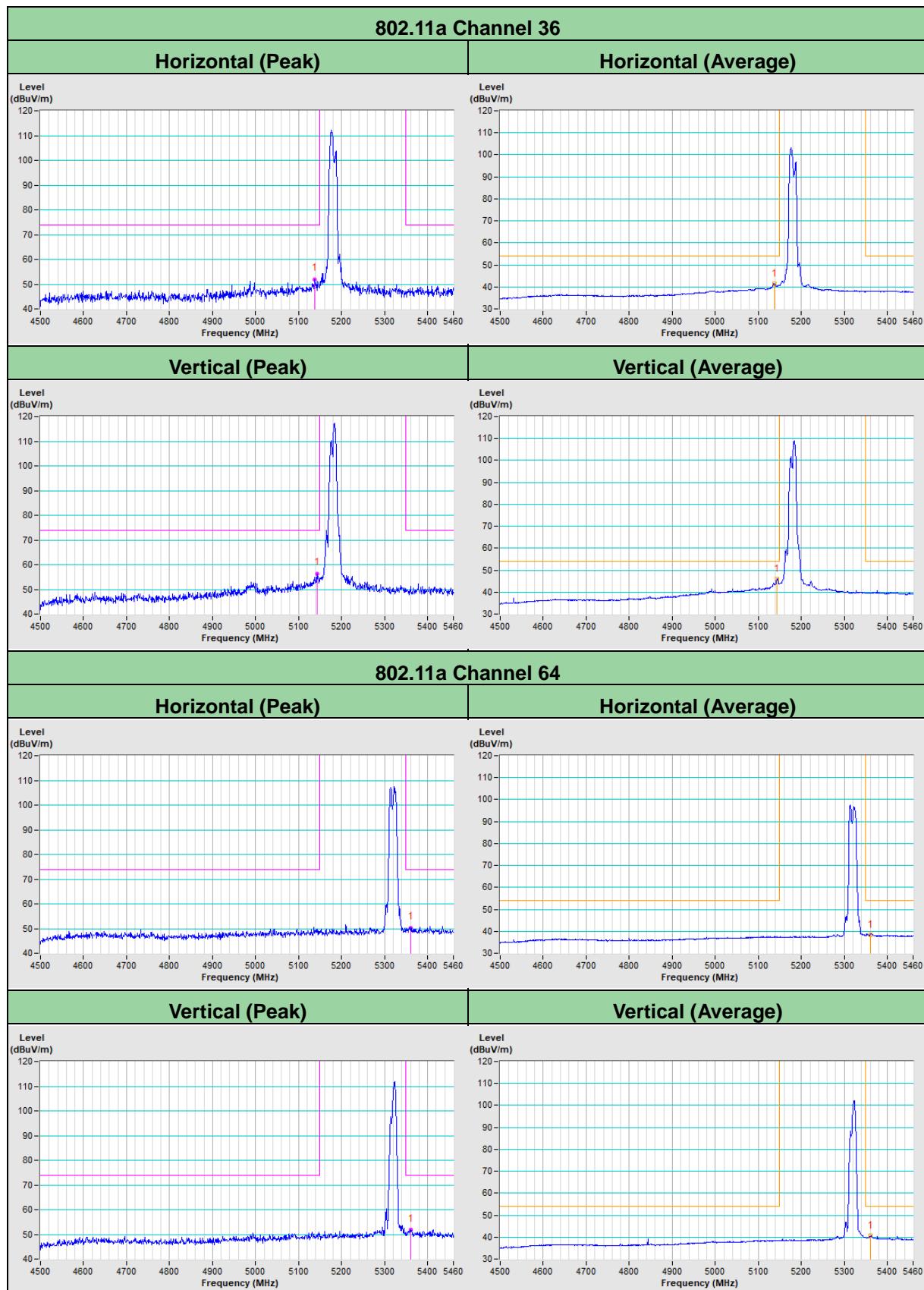


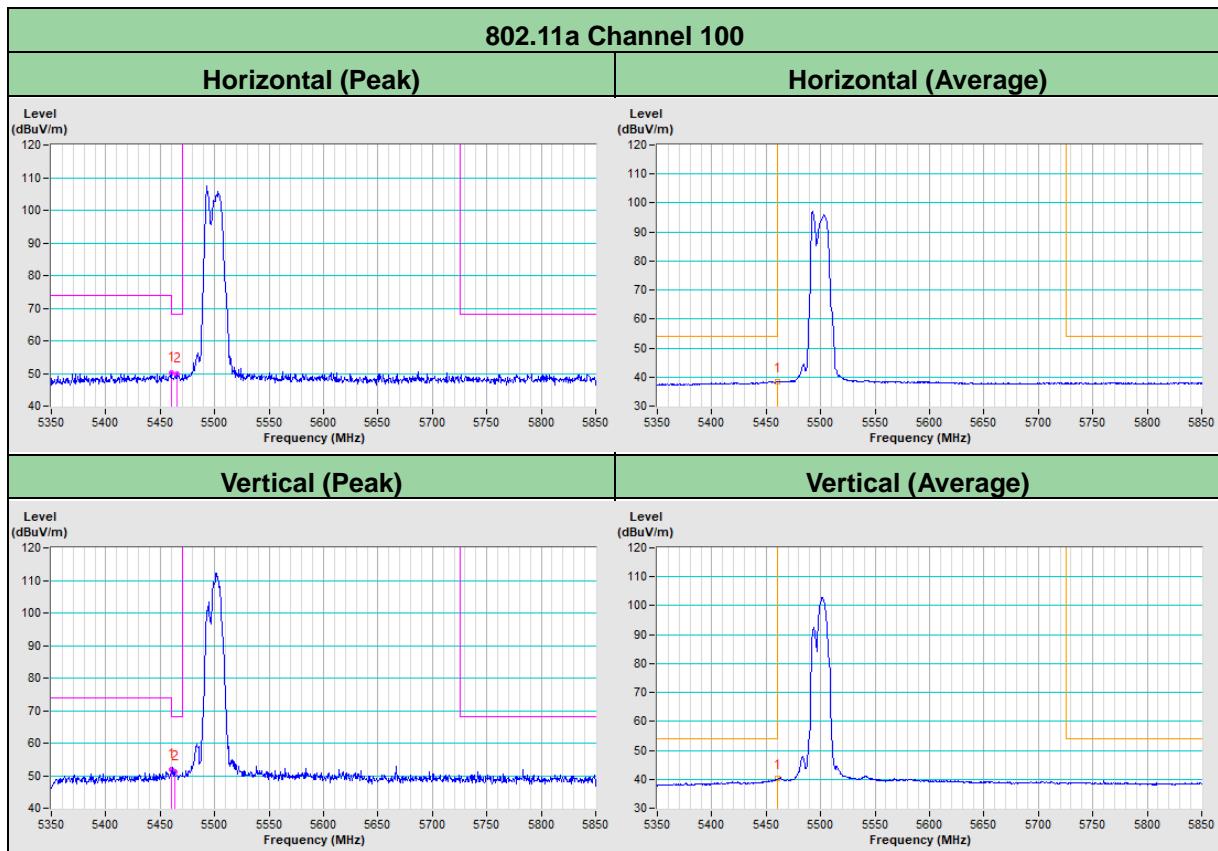
**802.11ac (VHT20) CH 149 : 5745 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT20) CH 157 : 5785 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT20) CH 165 : 5825 MHz**
**Horizontal**

**Vertical**


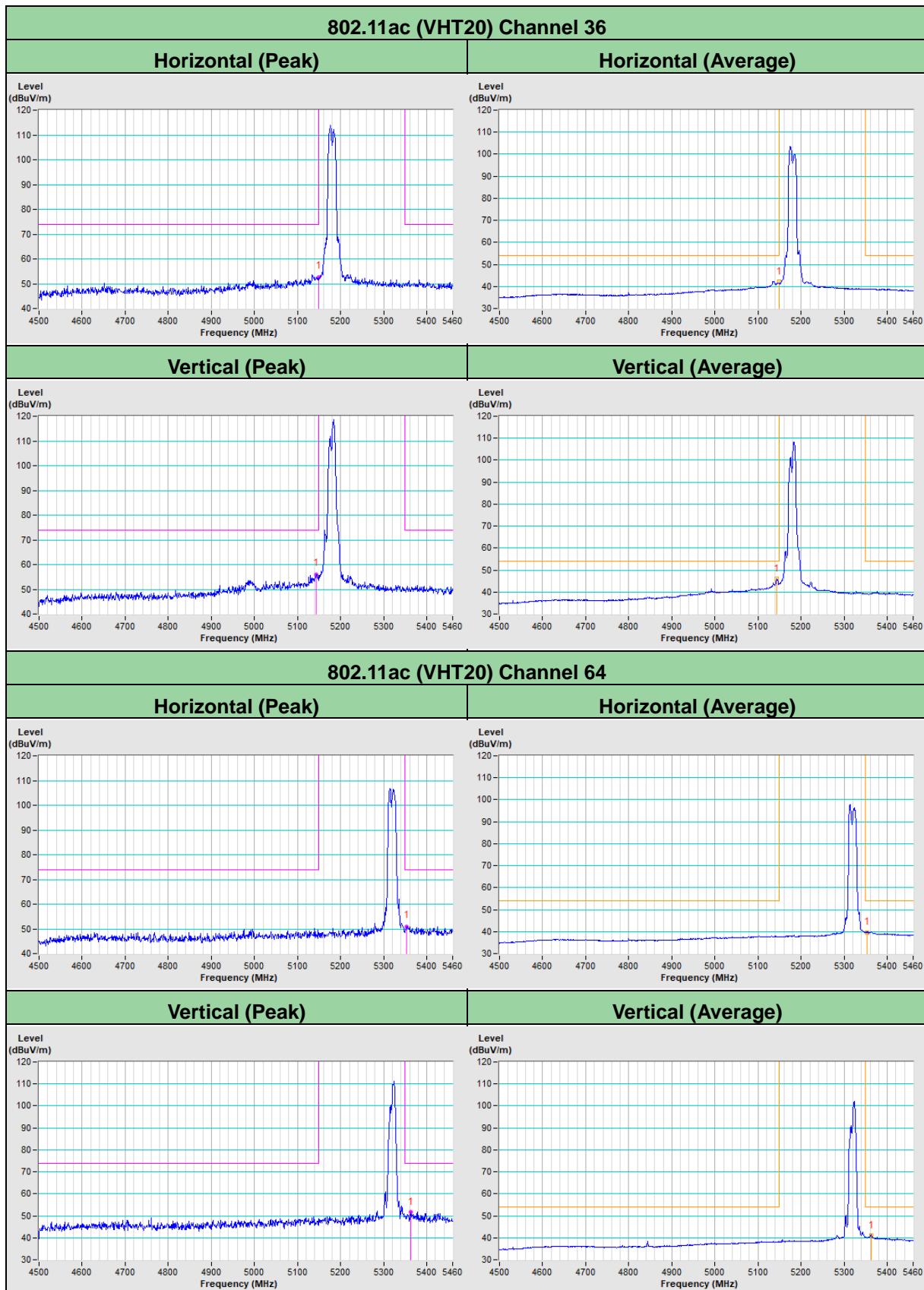
**802.11ac (VHT40) CH 151 : 5755 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT40) CH 159 : 5795 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT80) CH 155 : 5775 MHz**
**Horizontal**

**Vertical**


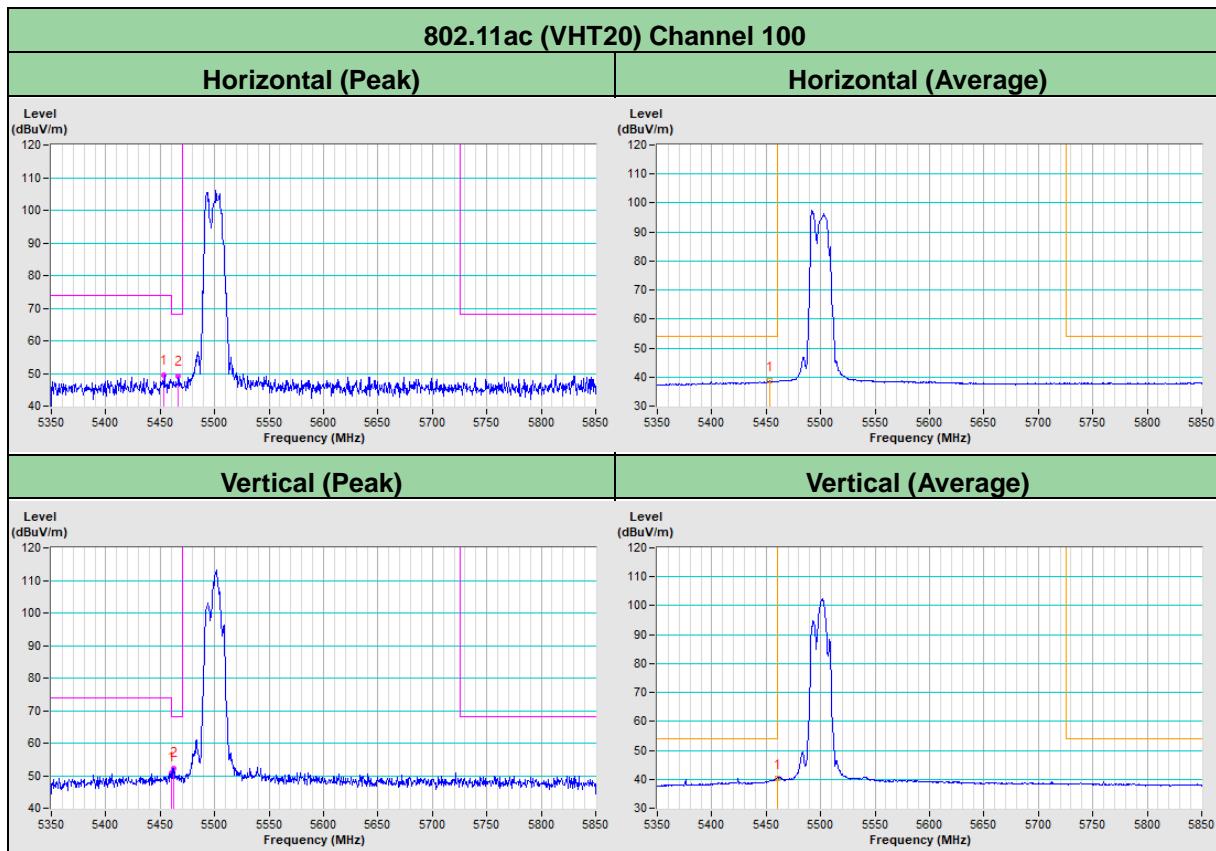
**802.11ac (VHT80+80) CH 42+155 : 5775 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT80+80) CH 58+155 : 5775 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT80+80) CH 106+155 : 5775 MHz**
**Horizontal**

**Vertical**

**802.11ac (VHT80+80) CH 122+155 : 5775 MHz**
**Horizontal**

**Vertical**


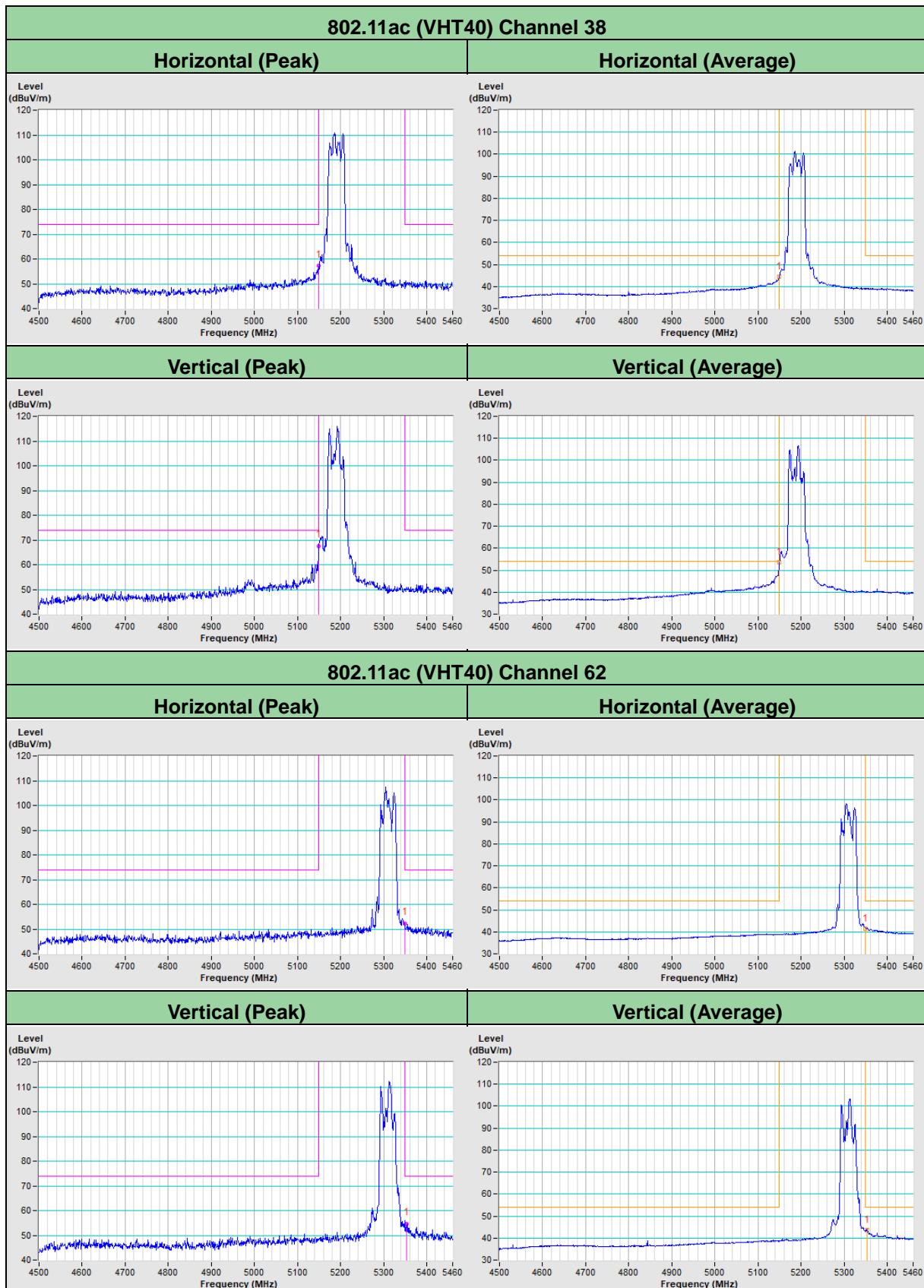
**802.11ac (VHT80+80) CH 138+155 : 5775 MHz****Horizontal****Vertical**

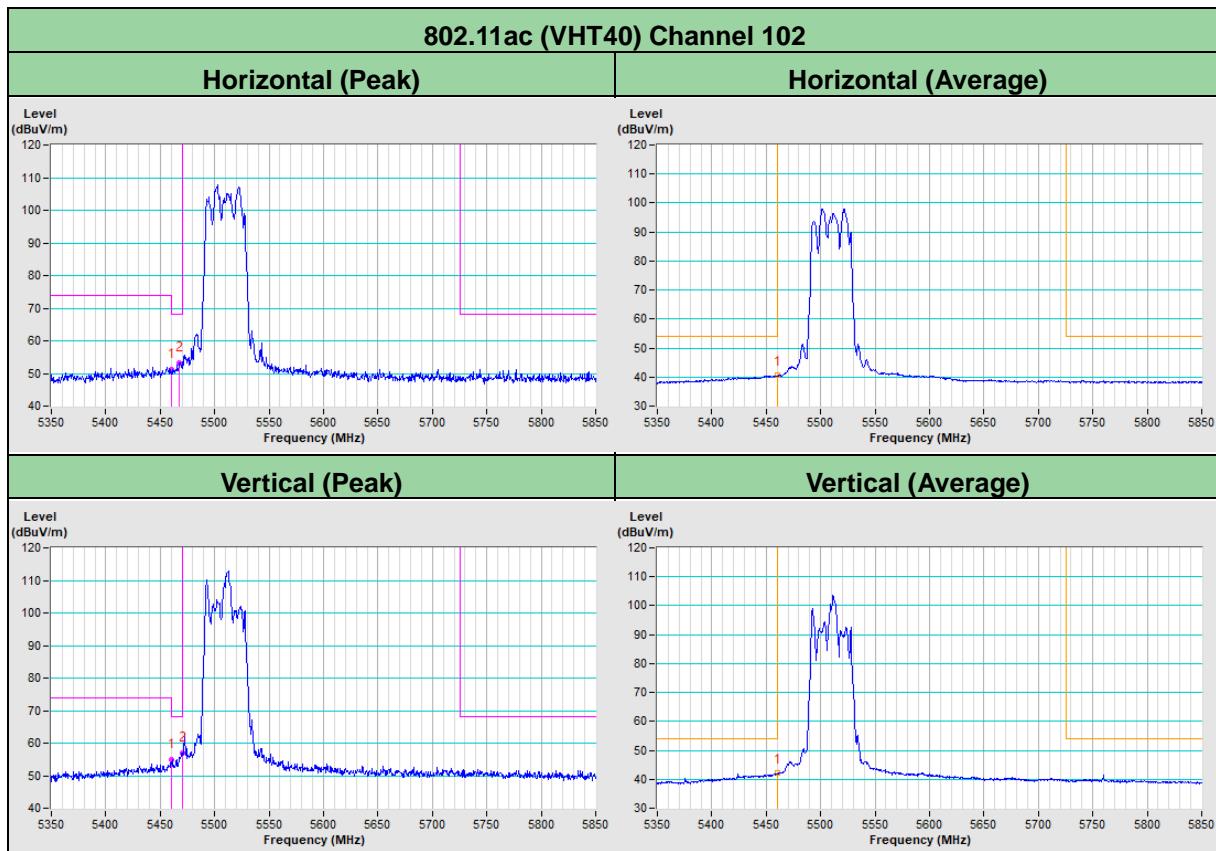
**Annex B - Band-Edge Measurement (For U-NII-1, U-NII-2A, U-NII-2C band)**


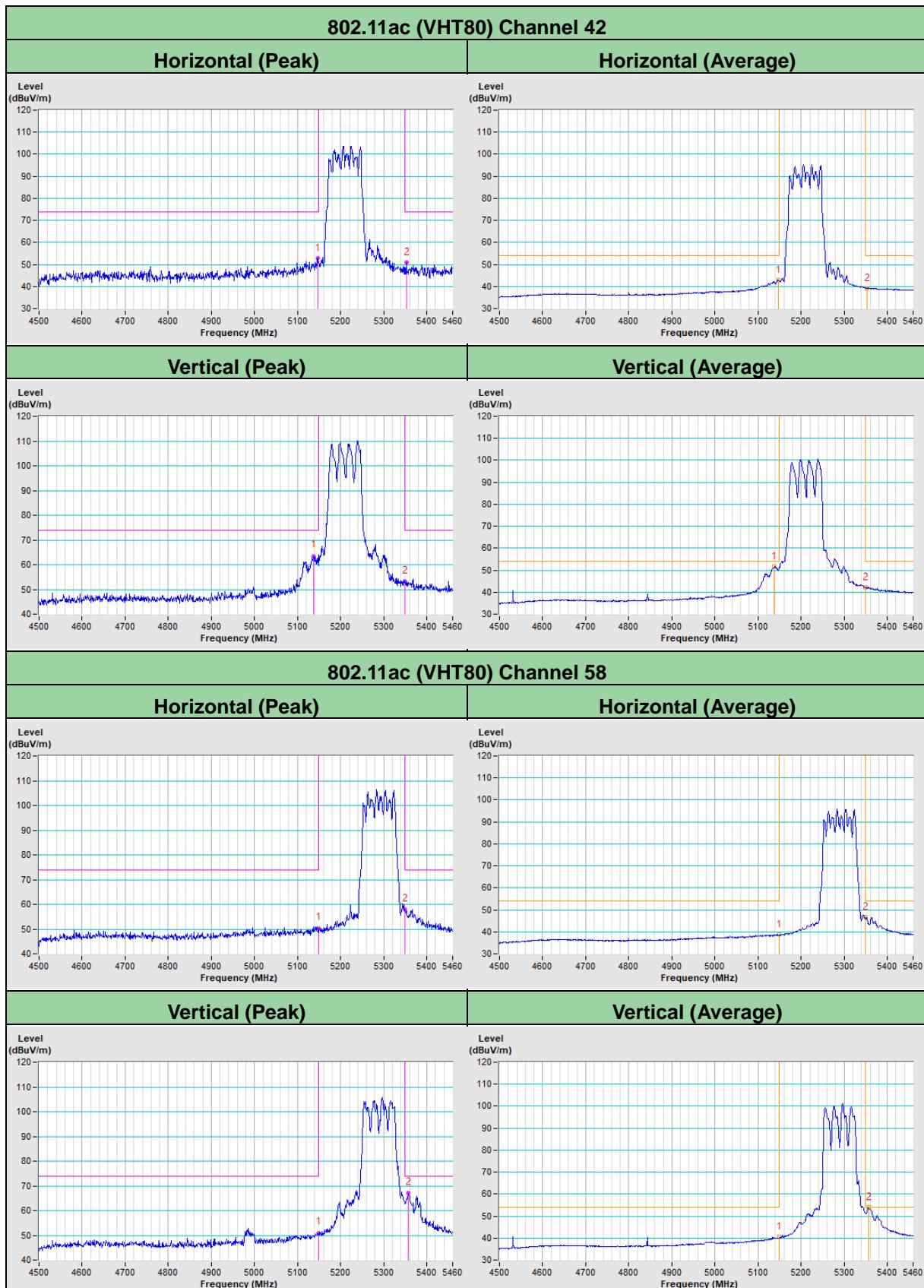


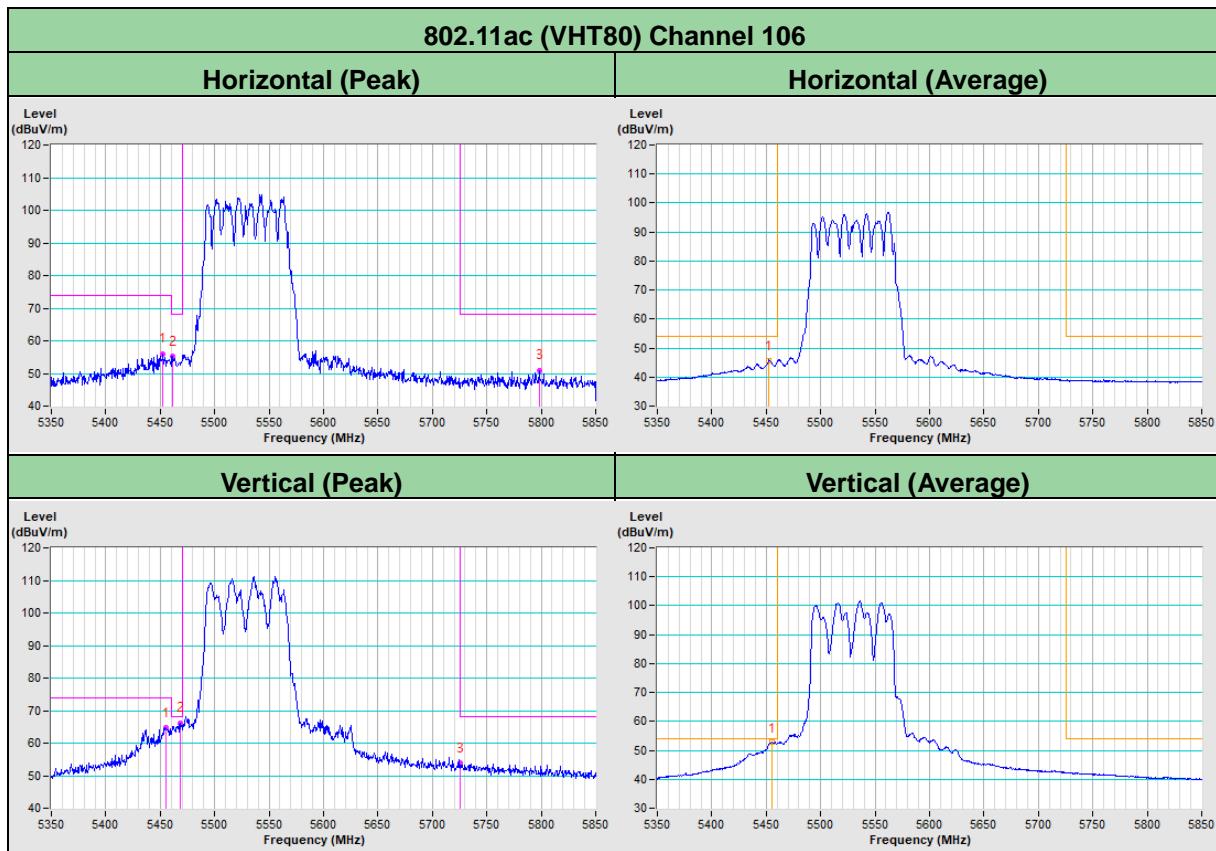


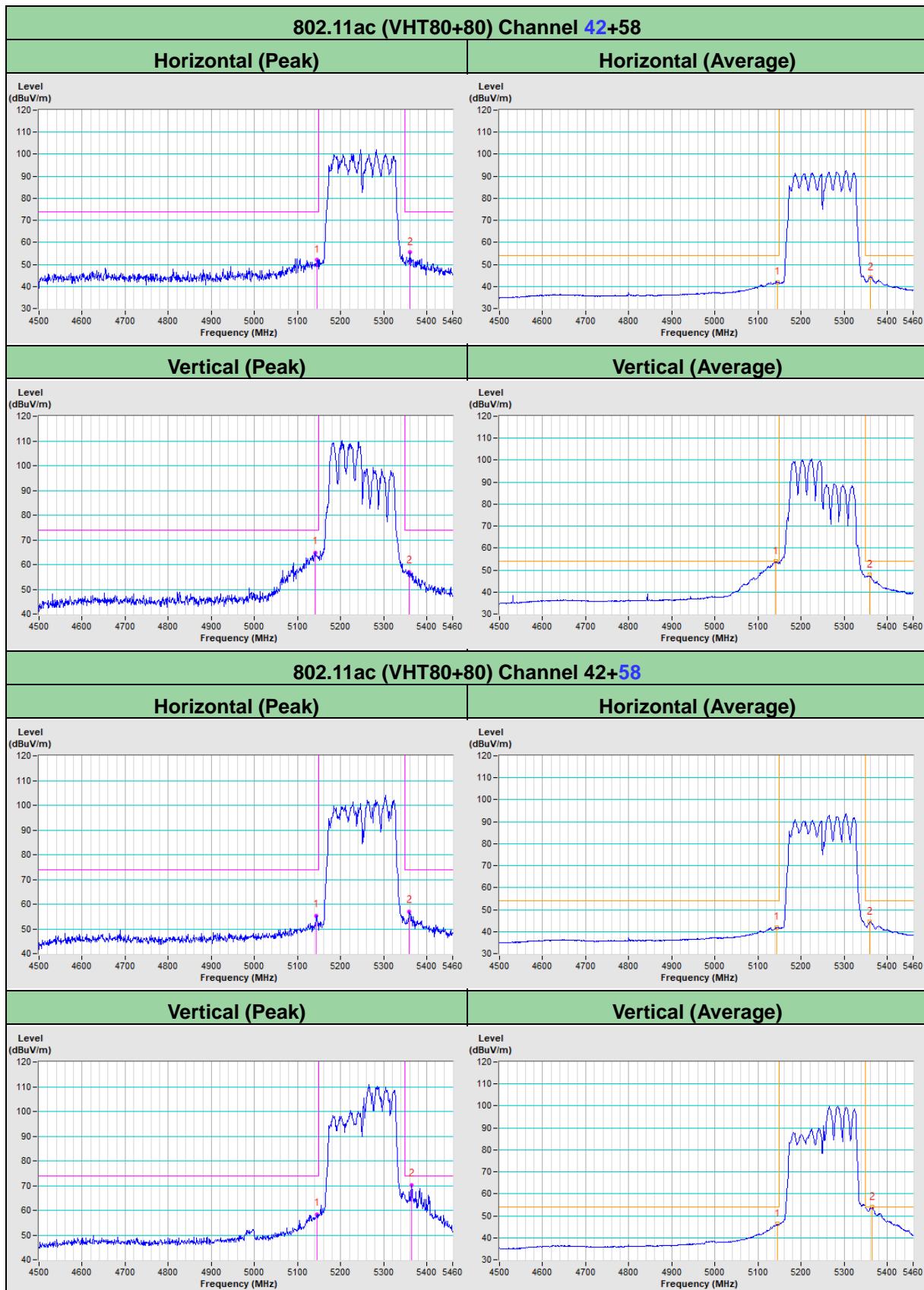


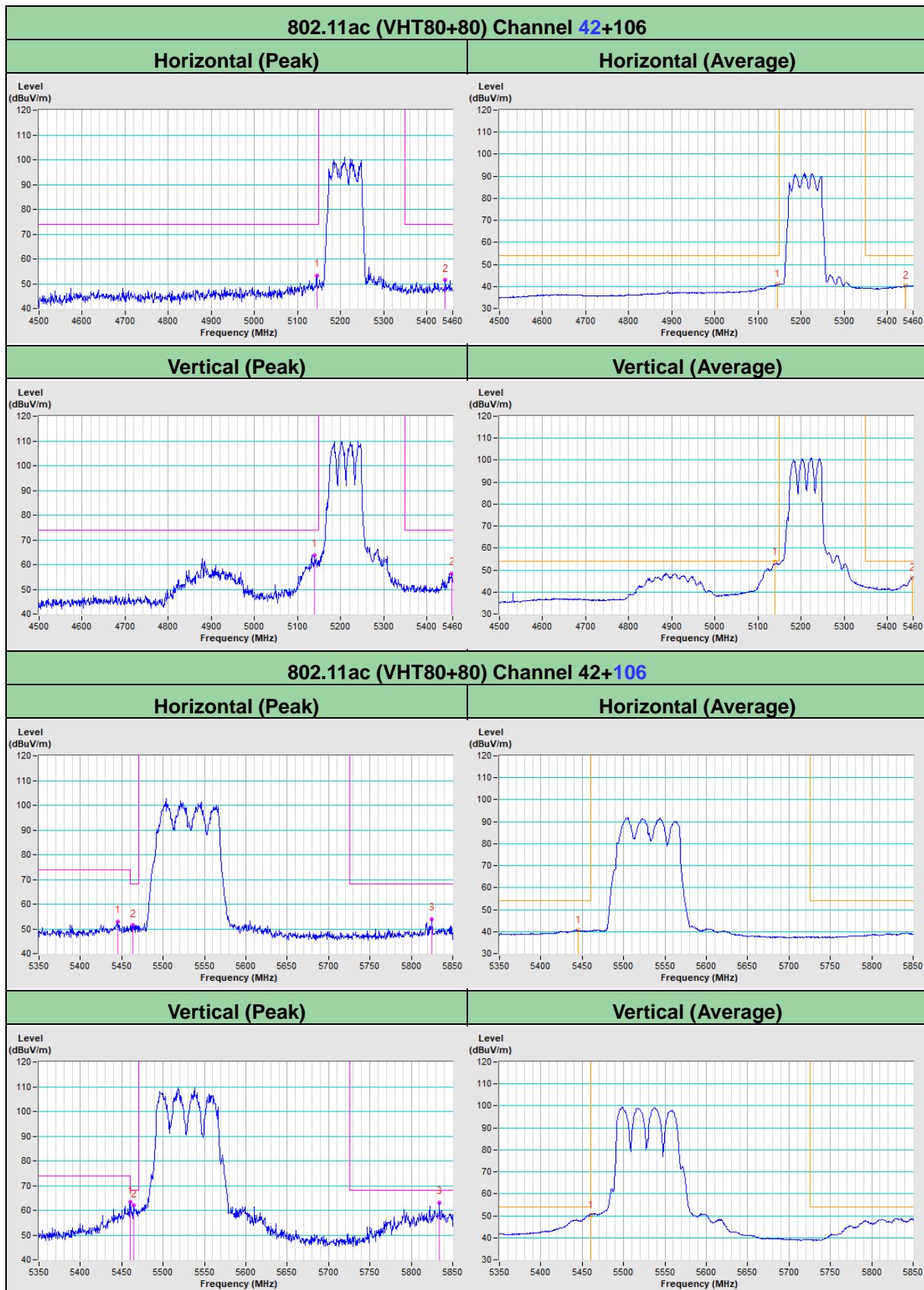


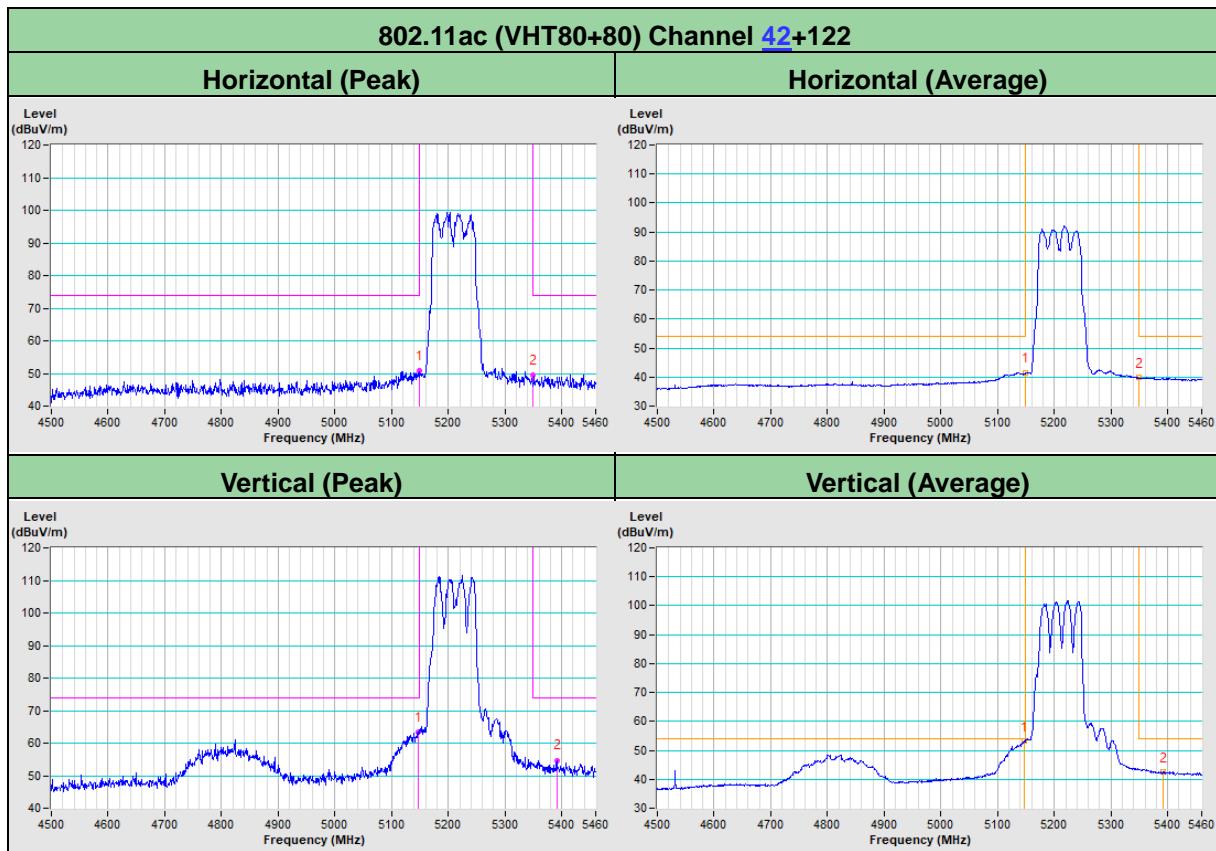


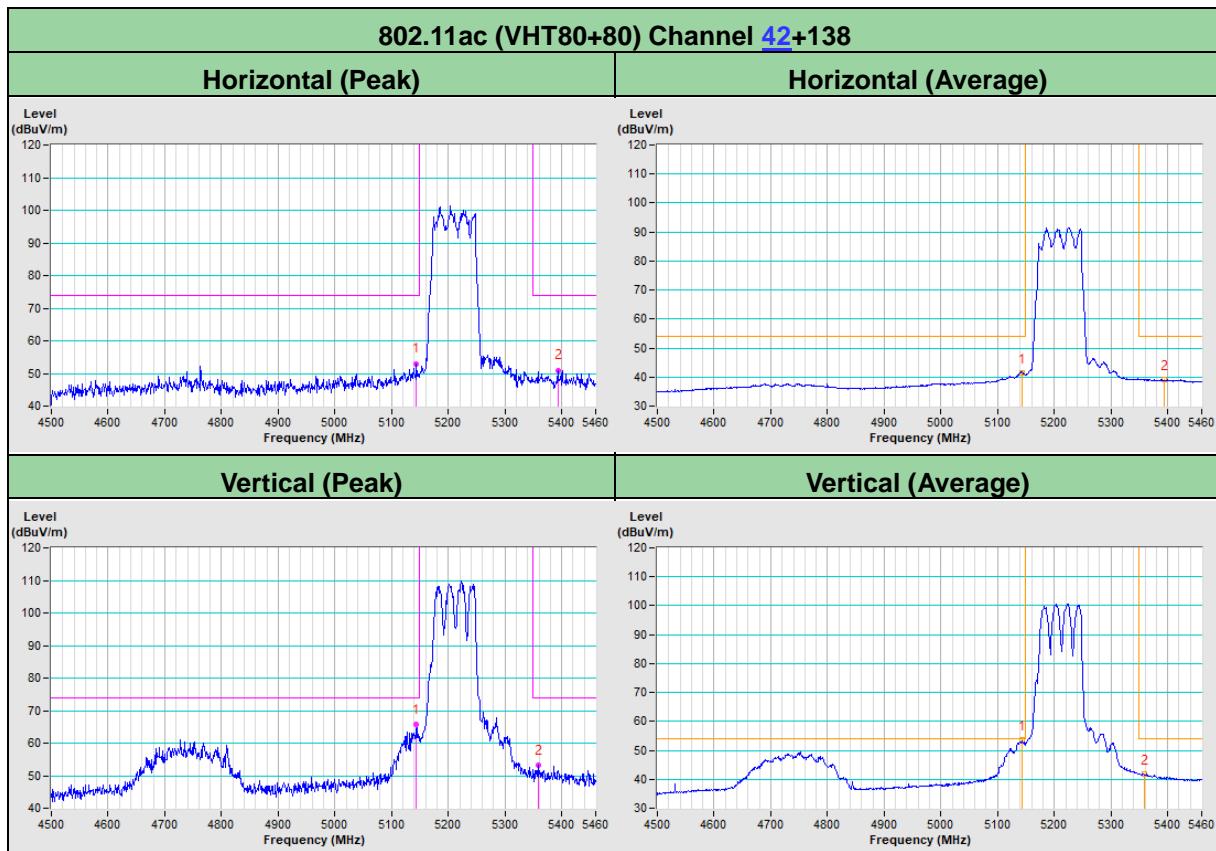


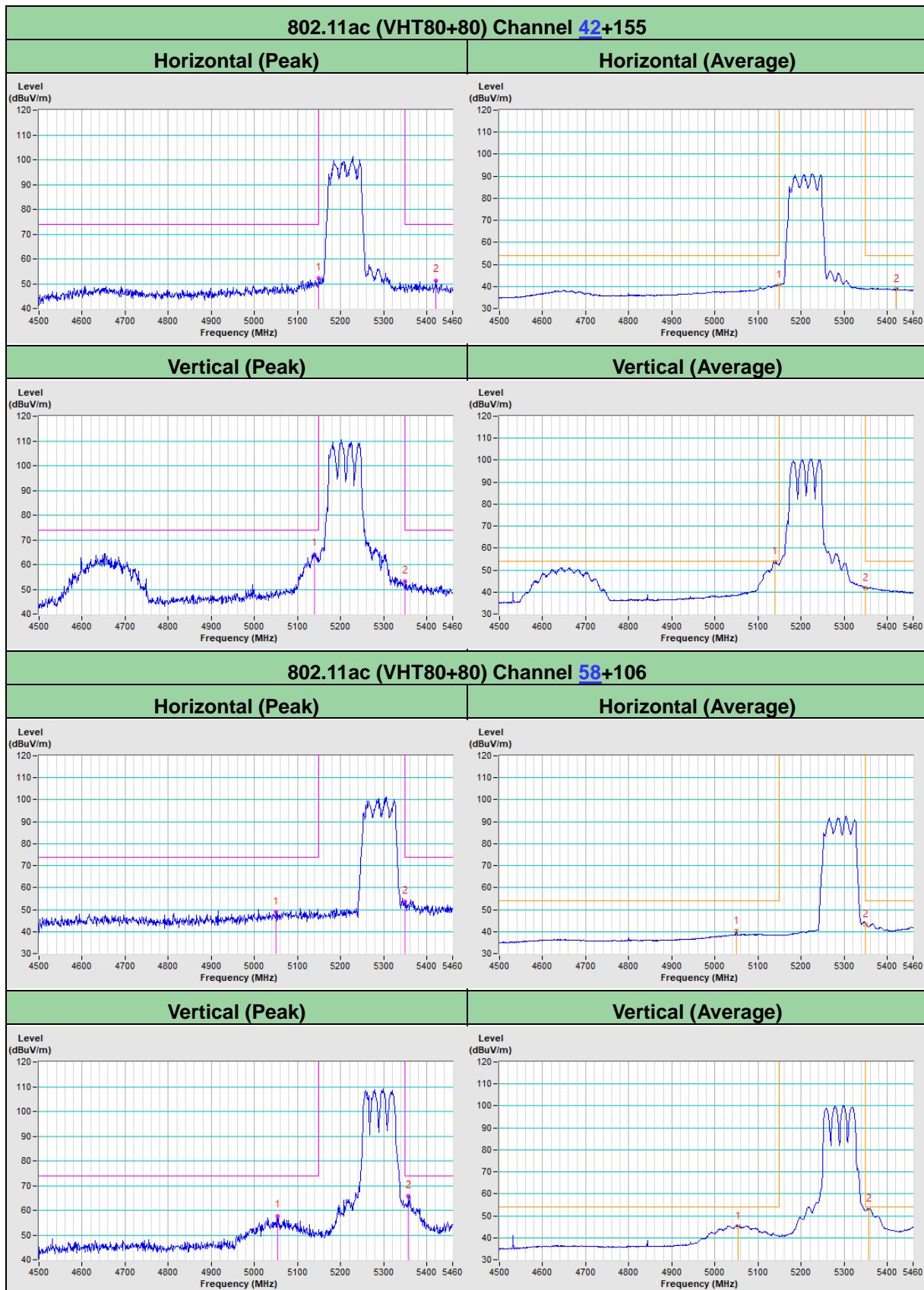


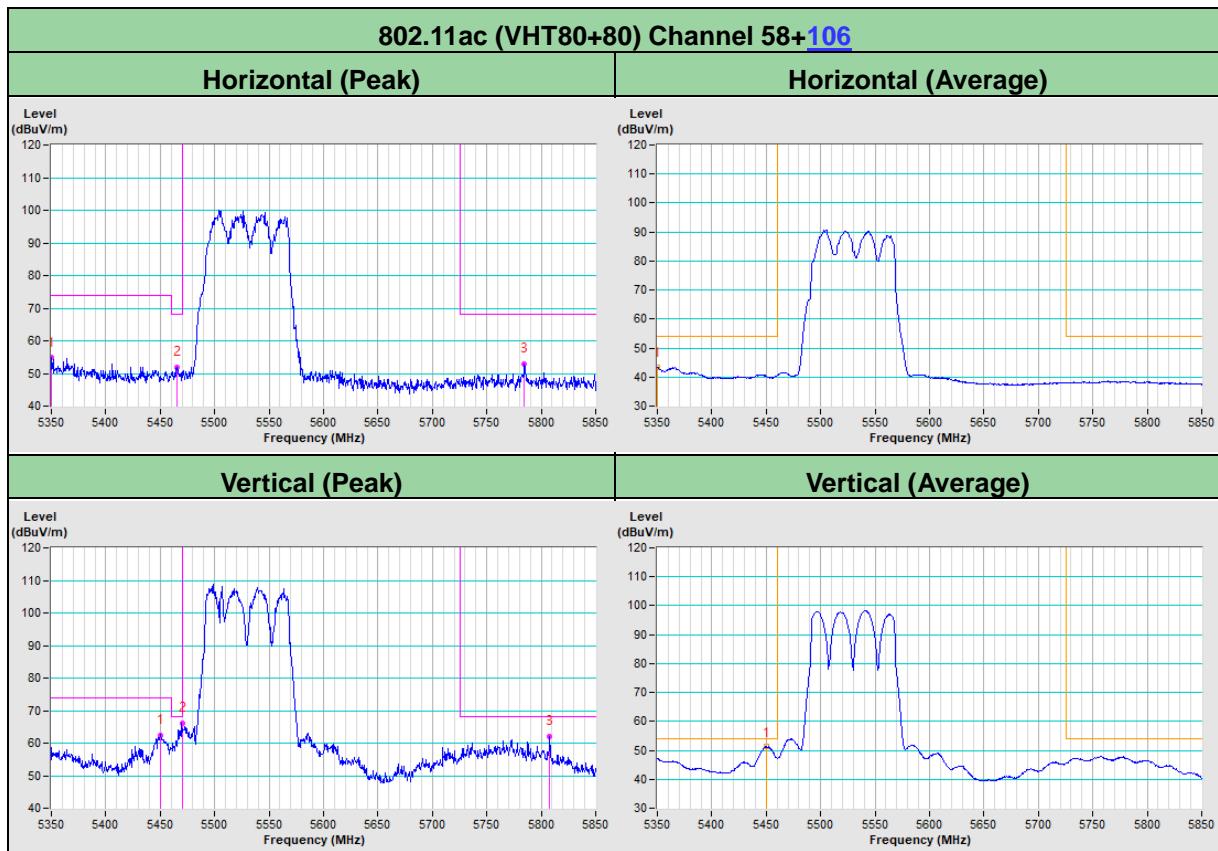


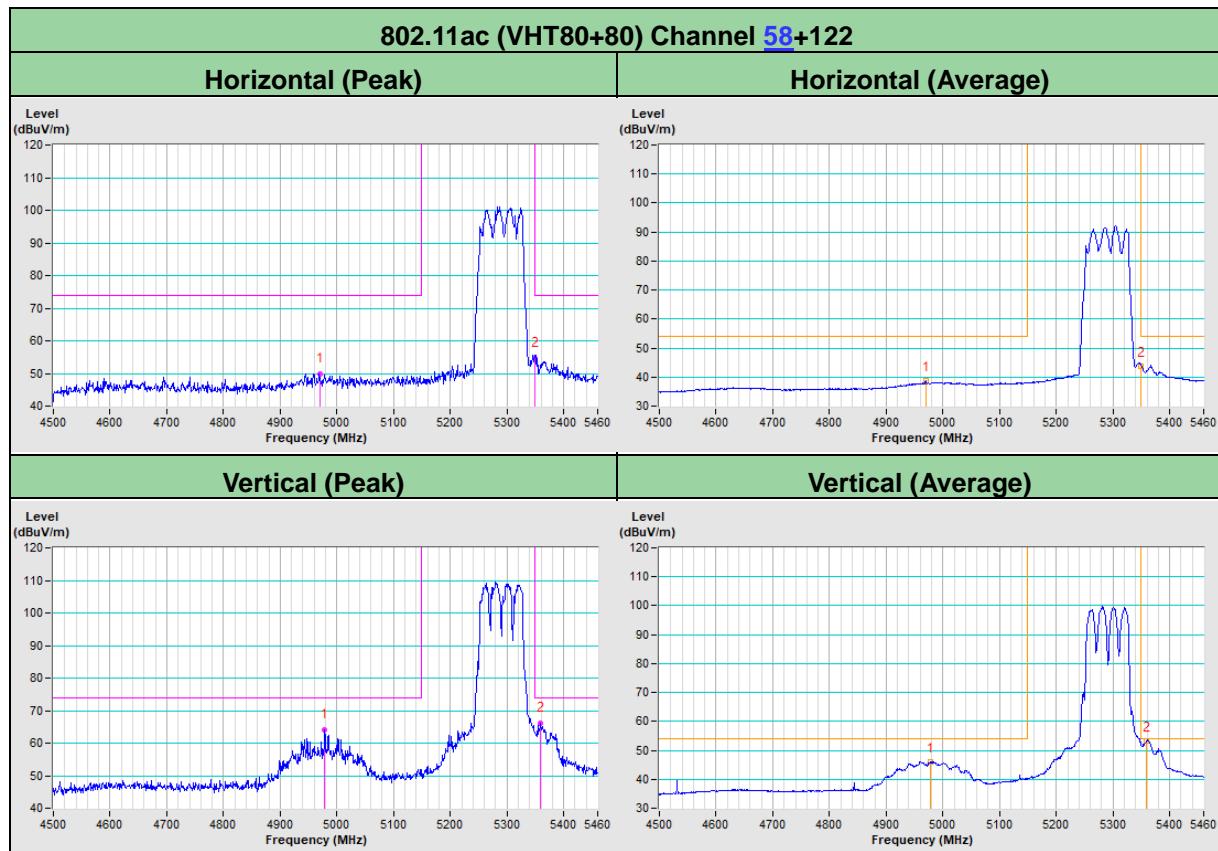


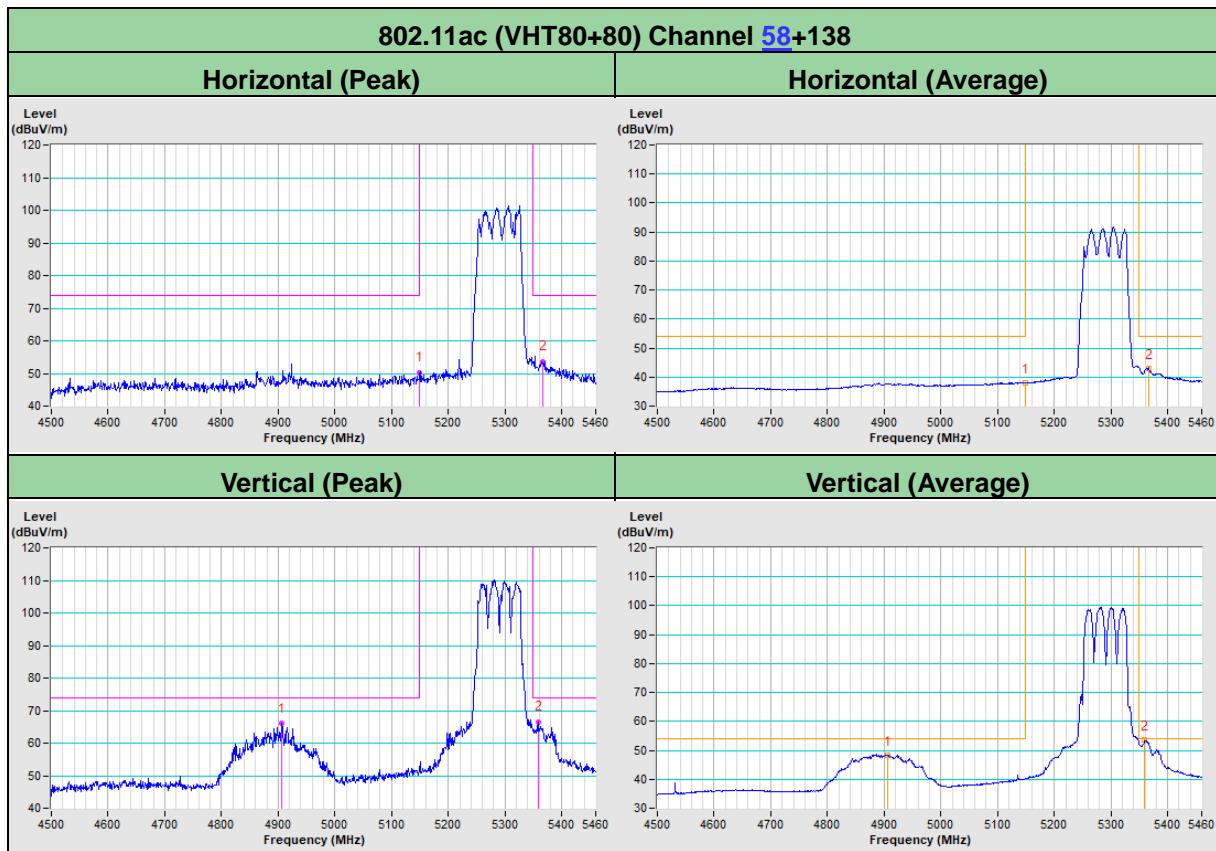


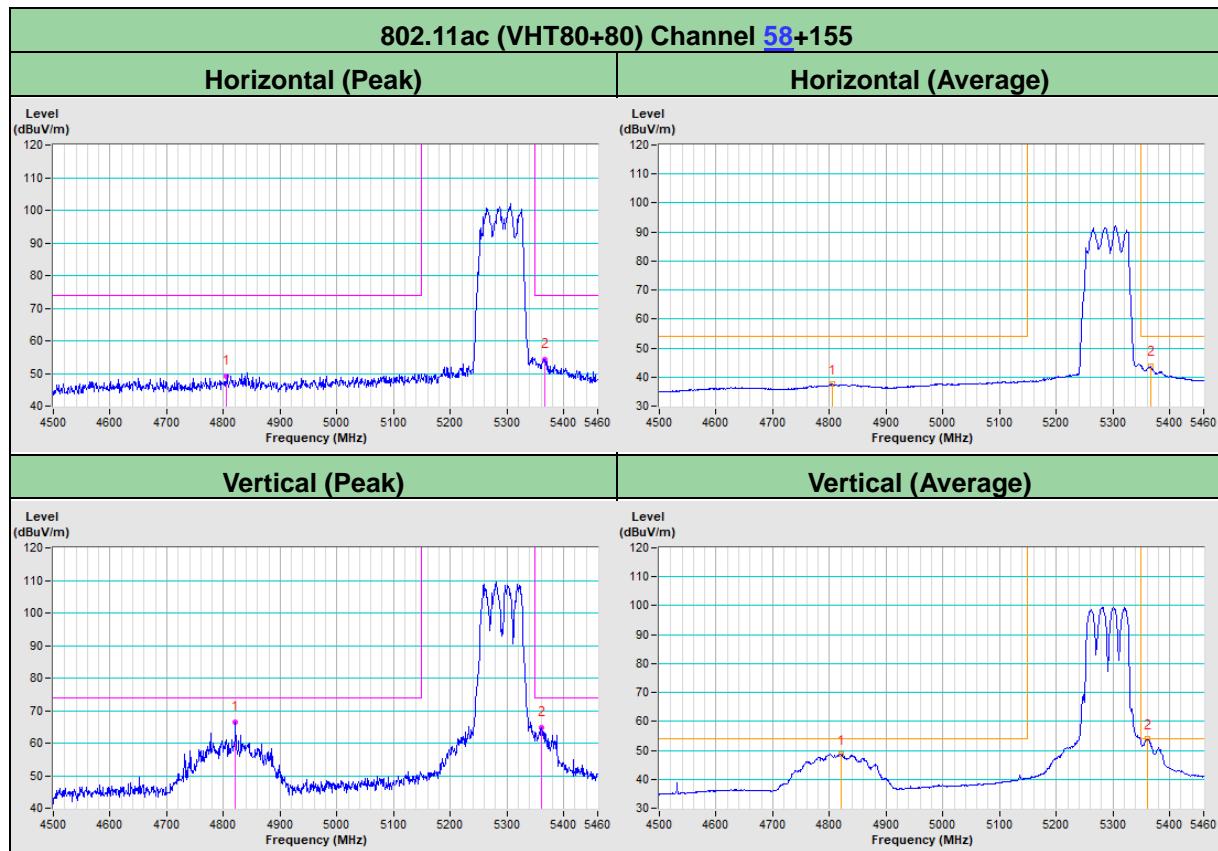


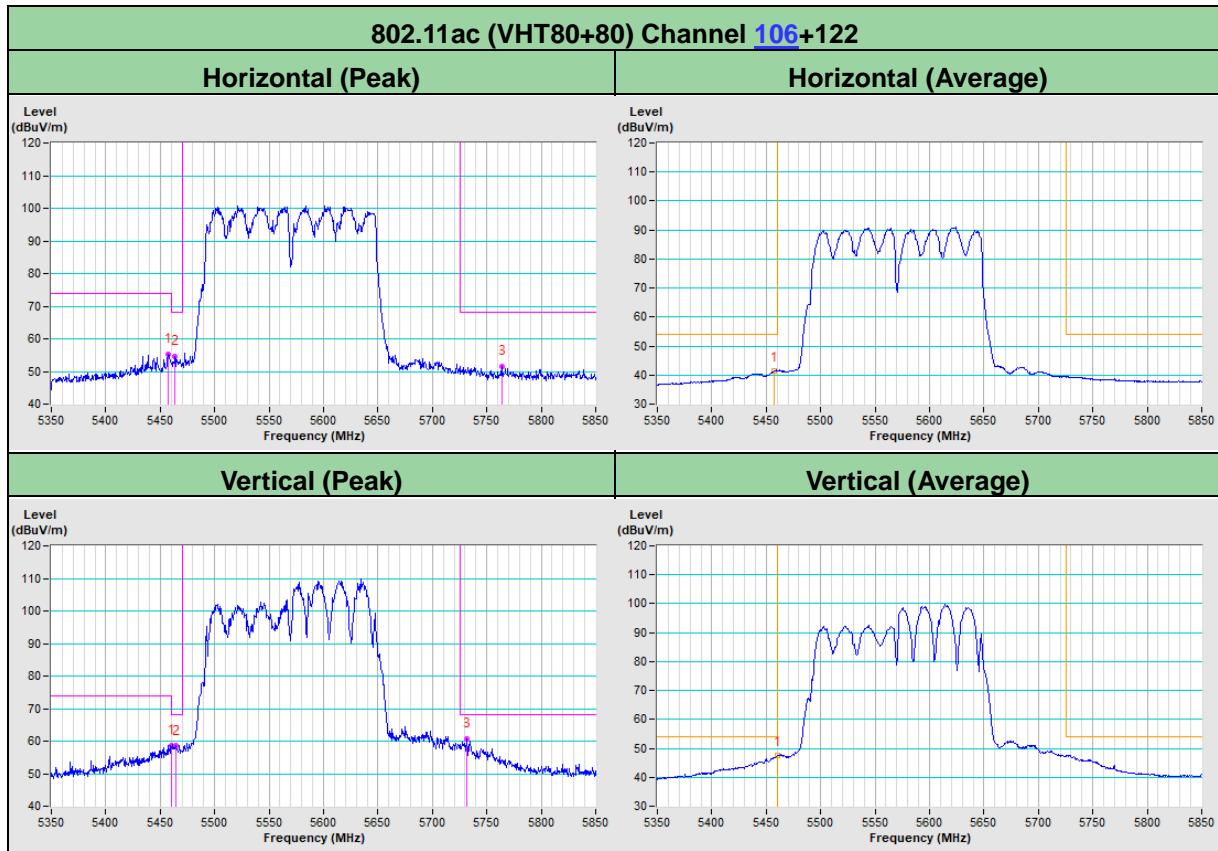


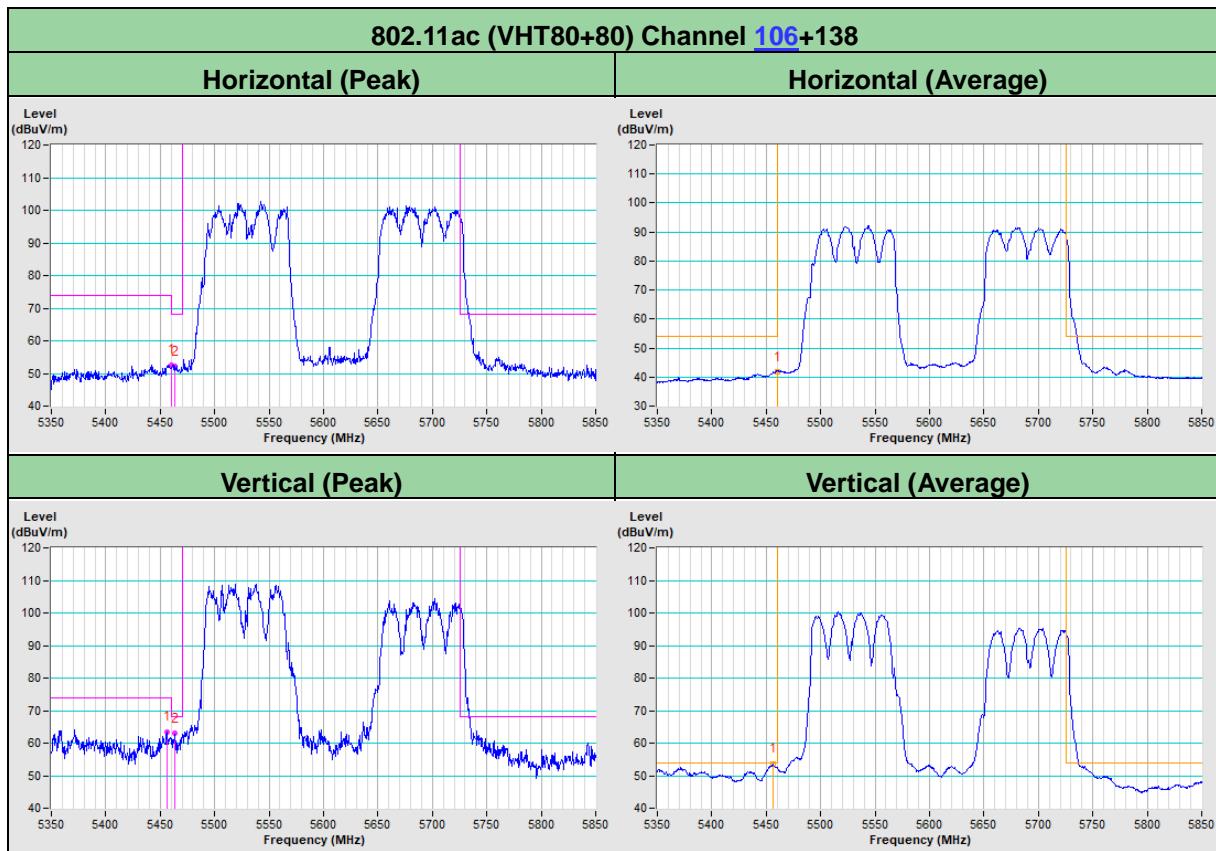


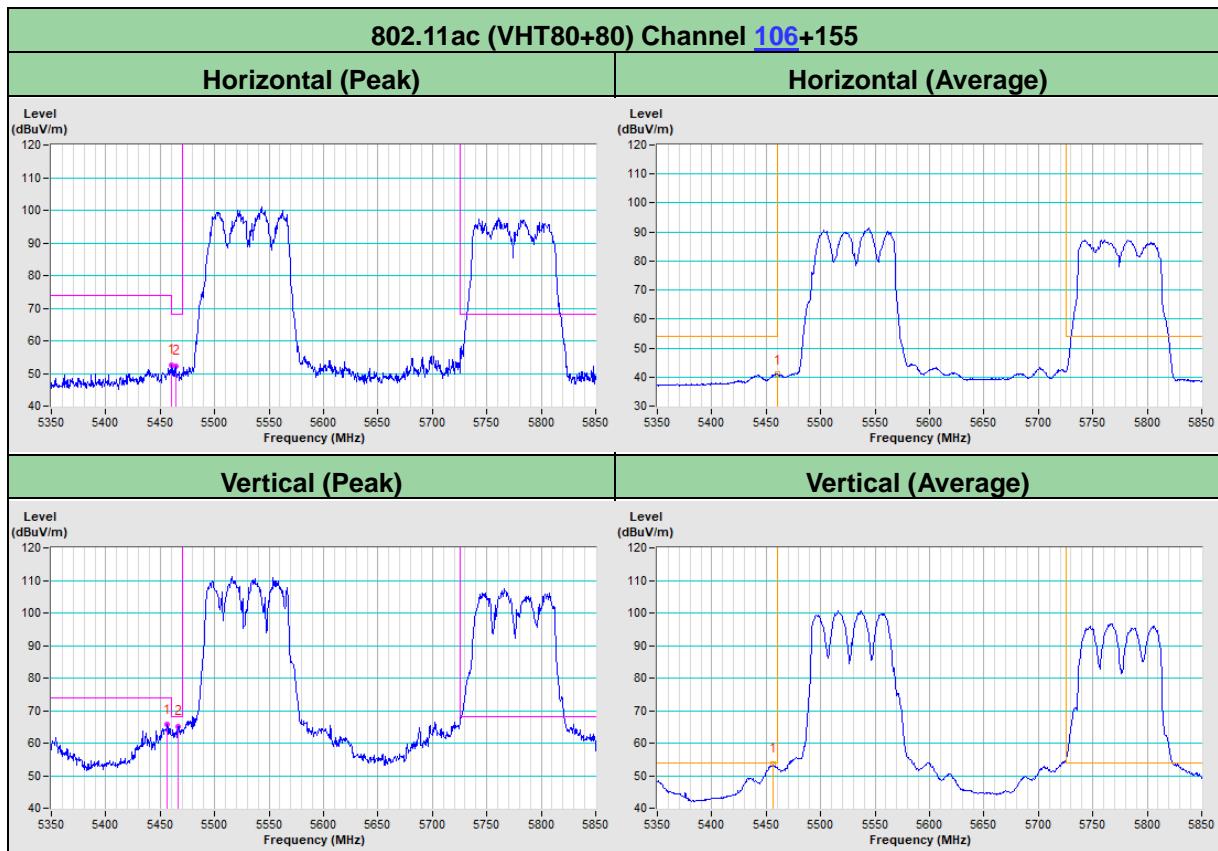












## Appendix – Information of the Testing Laboratories

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

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

**Lin Kou EMC/RF Lab**

Tel: 886-2-26052180

Fax: 886-2-26051924

**Hsin Chu EMC/RF/Telecom Lab**

Tel: 886-3-6668565

Fax: 886-3-6668323

**Hwa Ya EMC/RF/Safety Lab**

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)

Web Site: [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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

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