

## FCC Test Report

**Report No.:** RFBBQZ-WTW-P20110526-1

**FCC ID:** PY320300508

**Test Model:** RAXE500

**Received Date:** Nov. 17, 2020

**Test Date:** Nov. 21 to Dec. 03, 2020

**Issued Date:** Dec. 21, 2020

**Applicant:** NETGEAR, Inc.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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**FCC Registration /  
Designation Number:** 723255 / TW2022



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### Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P20110526-1	Original release.	Dec. 21, 2020

## 1 Certificate of Conformity

**Product:** Nighthawk AXE11000 Tri-Band WiFi 6E Router

**Brand:** NETGEAR

**Test Model:** RAXE500

**Sample Status:** Engineering sample

**Applicant:** NETGEAR, Inc.

**Test Date:** Nov. 21 to Dec. 03, 2020

**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:** Dec. 21, 2020

Claire Kuan / Specialist

**Approved by :**  , **Date:** Dec. 21, 2020

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 -15.66dB at 0.15781 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 5150.00 MHz, 5350.00 MHz, 5470.00 MHz, 5648.42 MHz and 5725.00 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	Pass	Meet the requirement of limit.
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.

### 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	Nighthawk AXE11000 Tri-Band WiFi 6E Router
Brand	NETGEAR
Test Model	RAXE500
Status of EUT	Engineering sample
Power Supply Rating	19Vdc from power adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT20/40 in 2.4GHz 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	DSSS,OFDM, OFDMA
Transfer Rate	802.11b: up to 11 Mbps 802.11a/g: up to 54 Mbps 802.11n: up to 600 Mbps 802.11ac: up to 3466.7 Mbps 802.11ax: up to 4803.9 Mbps
Operating Frequency	<b>2.4GHz:</b> 2.412 ~ 2.462GHz <b>5GHz:</b> 5.18 ~ 5.32GHz, 5.50 ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	<b>2.4GHz:</b> 802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20): 11 802.11n (HT40), VHT40, 802.11ax (HE40): 7 <b>5GHz:</b> 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 25 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 12 802.11ac (VHT80), 802.11ax (HE80): 6 802.11ac (VHT160), 802.11ax (HE160): 2
Output Power	<b>CDD Mode:</b> <b>2.412 ~ 2.462 GHz:</b> 991.895 mW <b>5.18 ~ 5.25 GHz:</b> 988.171 mW <b>5.25 ~ 5.32GHz:</b> 245.795 mW <b>5.50 ~ 5.72GHz:</b> 249.67 mW <b>5.745 ~ 5.825 GHz:</b> 992.202 mW <b>Beamforming Mode:</b> <b>2.412 ~ 2.462 GHz:</b> 781.432 mW <b>5.18 ~ 5.25 GHz:</b> 774.723 mW <b>5.25 ~ 5.32GHz:</b> 198.285 mW <b>5.50 ~ 5.72GHz:</b> 194.272 mW <b>5.745 ~ 5.825 GHz:</b> 731.937 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter x1
Data Cable Supplied	NA

Note:

1. The EUT has three radios as following table:

Radio 1	Radio 2	Radio 3
WLAN(2.4 GHz)	WLAN(5GHz)	WLAN(6GHz)

2. Simultaneously transmission condition.

Condition	Technology
1	WLAN(2.4GHz) + WLAN(5GHz) + WLAN(6GHz)

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

3. The EUT must be supplied one power adapter and following different models could be chosen as following table:

No.	Brand	Model name	P/N	Spec
1	NETGEAR	2ABS060K	332-11474-01	Input: 100-240Vac, 50-60Hz, 1.7A Output: 19Vdc, 3.16A Output Cable: Unshielded, 1.8m
2	NETGEAR	AD2073F20	332-11482-01	Input: 100-240Vac, 50-60Hz, 1.5A Output: 19Vdc, 3.16A Output Cable: Unshielded, 1.8m

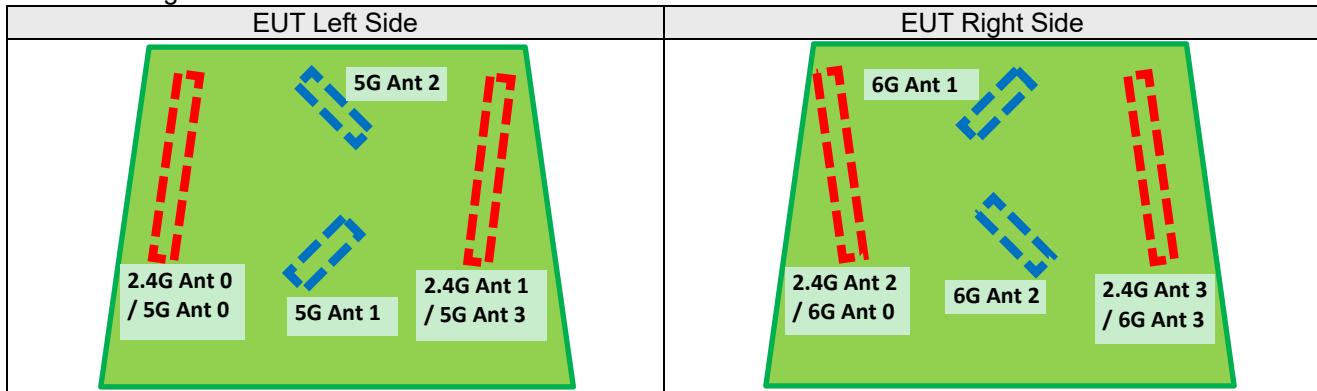
Note: From the above models, the worst Radiated Emissions and Conducted Emissions test was found in Adapter 1. Therefore only the test data of the modes were recorded in this report.

4. The directional antenna gain, please refer to the following table:

Frequency Range (GHz)	Directional Antenna Gain (dBi)	Antenna Type	Antenna Connector
2.4~2.4835	7.02	Dipole	i-pex(MHF)
5.15~5.25	7.07		
5.25~5.35	6.98		
5.47~5.725	7.09		
5.725~5.85	7.32		

Note: More detailed information, please refer to antenna specification.

Antenna diagram



5. The EUT has two different pin-to-pin FEM, after pretest the mode 1 was the worst case for final test.

Mode	Description
1	1 <sup>st</sup> FEM
2	2 <sup>nd</sup> FEM

Note: The detail information please refer to "Internal Photo"

6. The EUT incorporates a MIMO function:

MODULATION MODE	2.4GHz Band	
	TX & RX CONFIGURATION	
<b>802.11b</b>	4TX	4RX
<b>802.11g</b>	4TX	4RX
<b>802.11n (HT20)</b>	4TX	4RX
<b>802.11n (HT40)</b>	4TX	4RX
<b>VHT20</b>	4TX	4RX
<b>VHT40</b>	4TX	4RX
<b>802.11ax (HE20)</b>	4TX	4RX
<b>802.11ax (HE40)</b>	4TX	4RX
5GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
	4TX	4RX
<b>802.11a</b>	4TX	4RX
<b>802.11n (HT20)</b>	4TX	4RX
<b>802.11n (HT40)</b>	4TX	4RX
<b>802.11ac (VHT20)</b>	4TX	4RX
<b>802.11ac (VHT40)</b>	4TX	4RX
<b>802.11ac (VHT80)</b>	4TX	4RX
<b>802.11ac (VHT160)</b>	4TX	4RX
<b>802.11ax (HE20)</b>	4TX	4RX
<b>802.11ax (HE40)</b>	4TX	4RX
<b>802.11ax (HE80)</b>	4TX	4RX
<b>802.11ax (HE160)</b>	4TX	4RX

Note:

1. All of modulation mode support beamforming function except 802.11abg 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.
3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), 802.11ac mode for 20MHz (40MHz, 80MHz, 160MHz) and 802.11ax mode for 20MHz (40MHz, 80MHz, 160MHz), therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax mode or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.1)

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

### 3.2 Description of Test Modes

#### **FOR 5180 ~ 5320MHz**

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

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

2 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
50	5250 MHz

### FOR 5500 ~ 5720MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

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), 802.11ax (HE80):

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

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570 MHz

### FOR 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
155	5775 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

**Note:** The EUT had been pre-tested on the positioned of each 2 axis. The worst case was found when positioned on **X-plane**.

#### 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 Parameter
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6Mb/s
802.11ax (HE20)		36 to 64	36, 40, 48, 52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 62	38, 46, 54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		42, 58	42, 58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6Mb/s
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, , 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0

**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 Parameter
802.11a	5180-5320 5500-5720 5745-5825	36 to 64 100 to 144 149 to 165	165	OFDM	BPSK	6Mb/s

**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 Parameter
802.11a	5180-5320 5500-5720 5745-5825	36 to 64 100 to 144 149 to 165	165	OFDM	BPSK	6Mb/s

### 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.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		38 to 62	38, 46, 54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		42, 58	42, 58	OFDM	BPSK	MCS0
802.11ac (VHT160) (Output power only)		50	50	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 64	36, 40, 48, 52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 62	38, 46, 54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		42, 58	42, 58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		100 to 144	100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		102 to 142	102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		106 to 138	106, 122, 138	OFDM	BPSK	MCS0
802.11ac (VHT160) (Output power only)		114	114	OFDM	BPSK	MCS0
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		151 to 159	151, 159	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		155	155	OFDM	BPSK	MCS0
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0

Beamforming Mode (output power only)						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ac (VHT20)	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40)		38 to 62	38, 46, 54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80)		42, 58	42, 58	OFDM	BPSK	MCS0
802.11ac (VHT160)		50	50	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 64	36, 40, 48, 52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 62	38, 46, 54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		42, 58	42, 58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	MCS0
802.11ac (VHT160)		114	114	OFDM	BPSK	MCS0
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	MCS0
802.11ac (VHT80)		155	155	OFDM	BPSK	MCS0
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0

### Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
<b>RE≥1G</b>	24deg. C, 69%RH	120Vac, 60Hz	Sampson Chen
<b>RE&lt;1G</b>	23deg. C, 65%RH	120Vac, 60Hz	Sampson Chen
<b>PLC</b>	25deg. C, 66%RH	120Vac, 60Hz	Sampson Chen
<b>APCM</b>	25deg. C, 60%RH	120Vac, 60Hz	Eric Peng

### 3.3 Duty Cycle of Test Signal

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

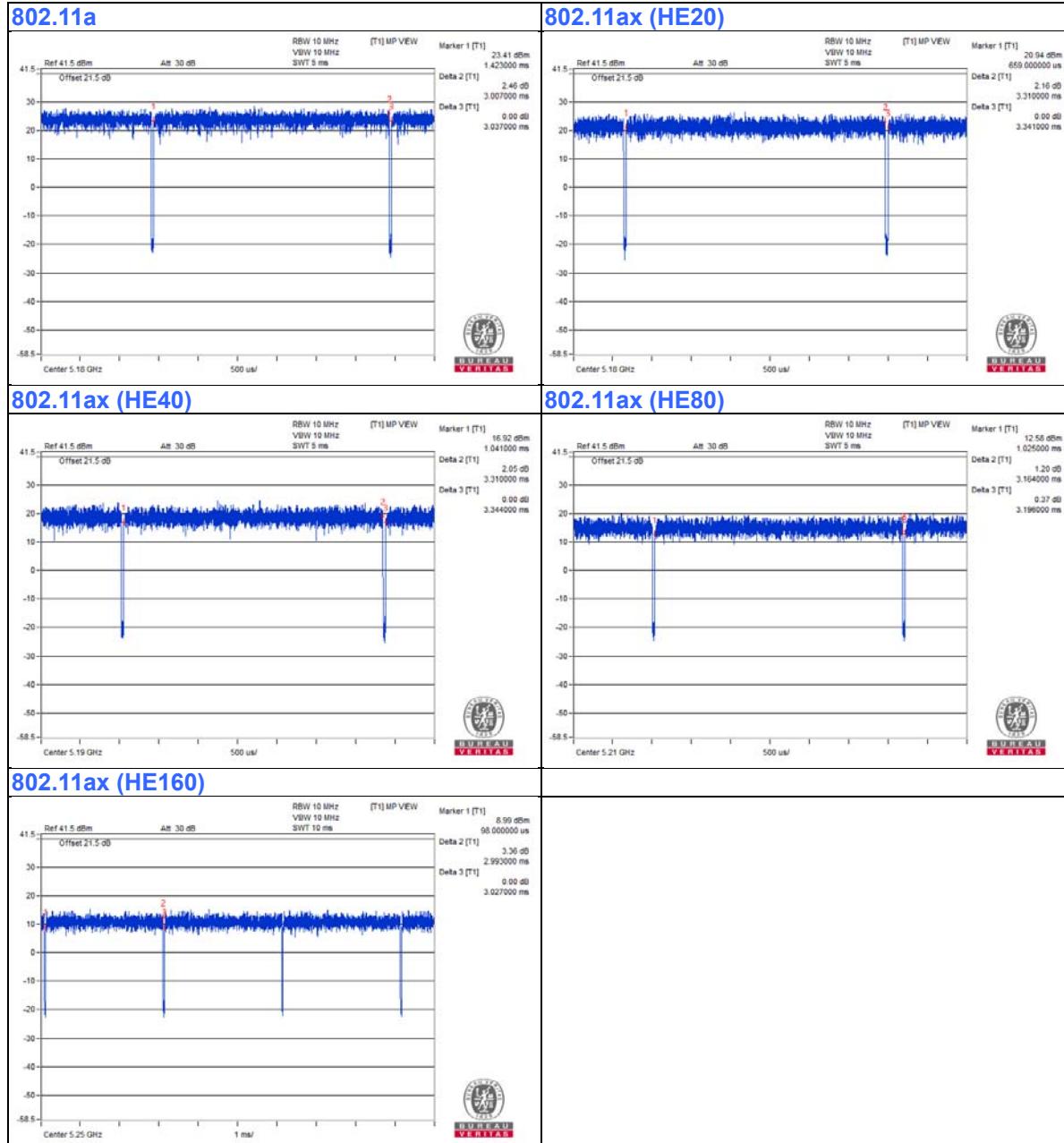
**802.11a:** Duty cycle = 3.007 ms /3.037 ms=0.99

**802.11ax (HE20):** Duty cycle = 3.31 ms /3.341 ms=0.991

**802.11ax (HE40):** Duty cycle = 3.31 ms /3.344 ms=0.99

**802.11ax (HE80):** Duty cycle = 3.164 ms /3.196 ms=0.99

**802.11ax (HE160):** Duty cycle = 2.993 ms /3.027 ms=0.989



### 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.

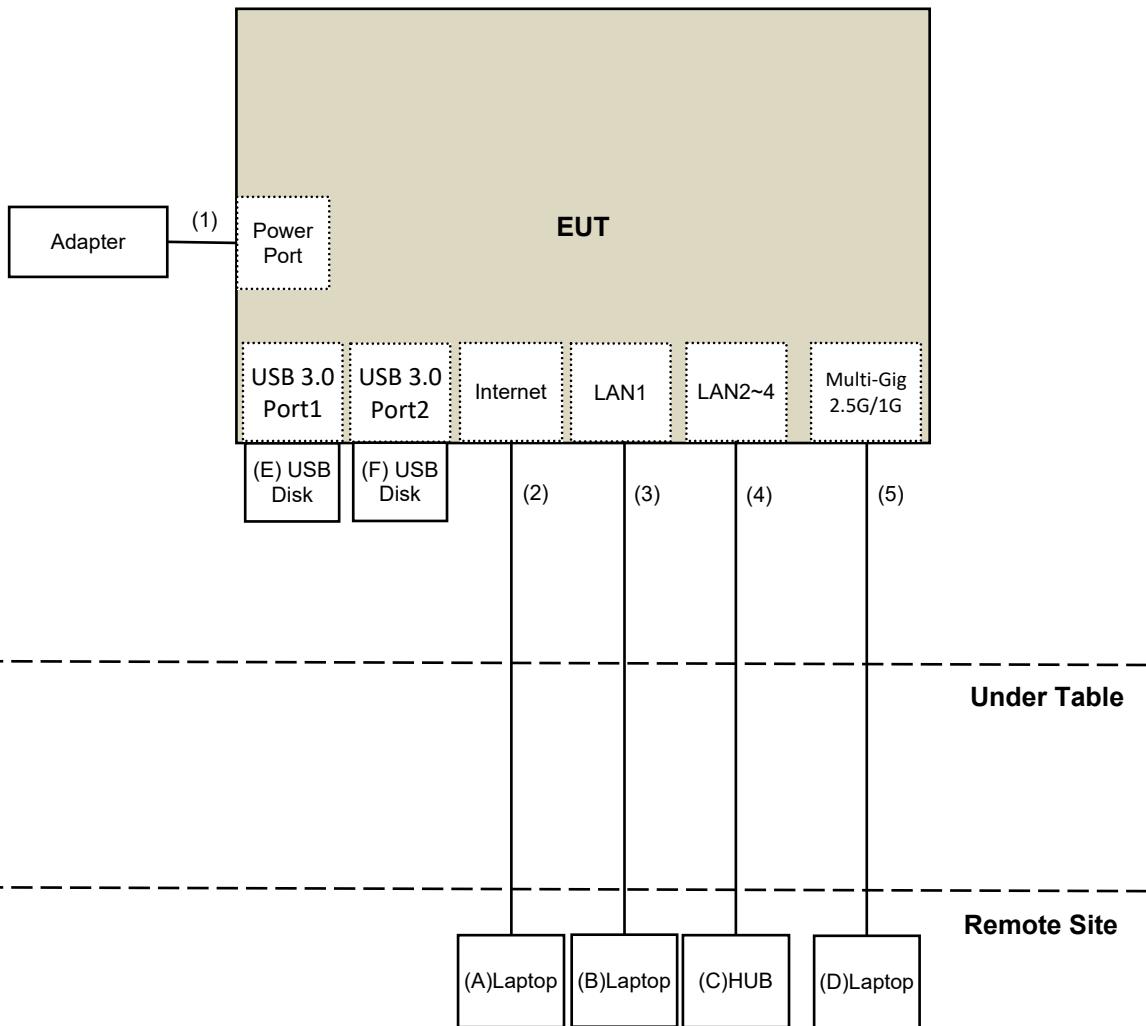
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E6420	H62T3R1	DoC	Provided by Lab
B.	Laptop	DELL	E6420	482T3R1	DoC	Provided by Lab
C.	HUB	D-Link	DGS-1005D	DR8WC92000523	NA	Provided by Lab
D.	Laptop	EDLL	E5430	HL3SKV1	DoC	Provided by Lab
E.	USB Disk	SanDisk	BM181225896Z	NA	NA	Provided by Lab
F.	USB Disk	SanDisk	BM181225896Z	NA	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.	DC Cable	1	1.8	No	0	Supplied by client
2.	RJ-45 Cable	1	10	No	0	Provided by Lab
3.	RJ-45 Cable	1	10	No	0	Provided by Lab
4.	RJ-45 Cable	3	10	No	0	Provided by Lab
5.	RJ-45 Cable	1	10	No	0	Provided by Lab

### 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	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dB <sub>M</sub> V/m)	PK:68.2(dB <sub>UV</sub> /m)
5250~5350 MHz	15.407(b)(2)		
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:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 13, 2019	Dec. 12, 2020
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: Nov. 26, 2020

**For OOB & BandEdge test:**

<b>DESCRIPTION &amp; MANUFACTURER</b>	<b>MODEL NO.</b>	<b>SERIAL NO.</b>	<b>CALIBRATED DATE</b>	<b>CALIBRATED UNTIL</b>
Test Receiver Agilent	N9038A	MY51210202	Dec. 13, 2019	Dec. 12, 2020
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 24, 2019	Nov. 23, 2020
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 9120D	9120D-783	Nov. 24, 2019	Nov. 23, 2020
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: Nov. 21, 2020

**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	6205	1440452	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: Dec. 03, 2020

#### 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:**

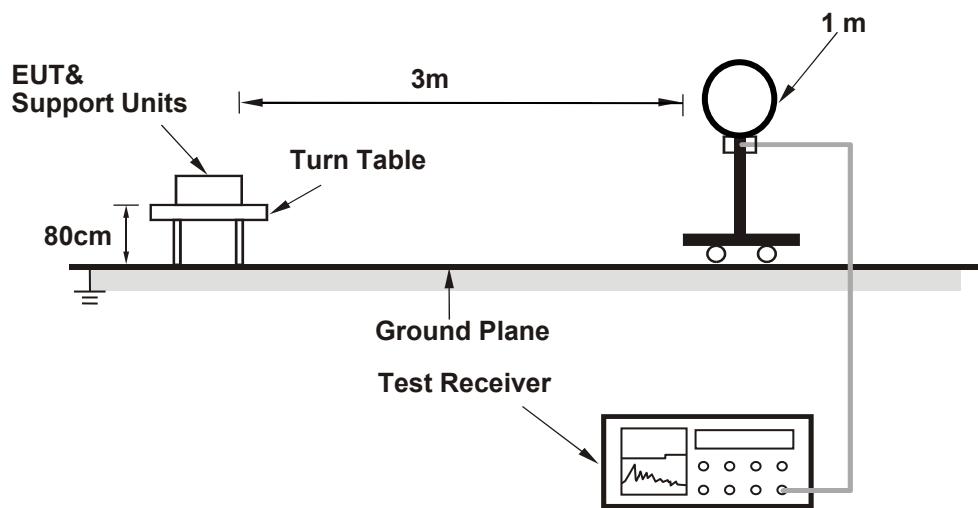
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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

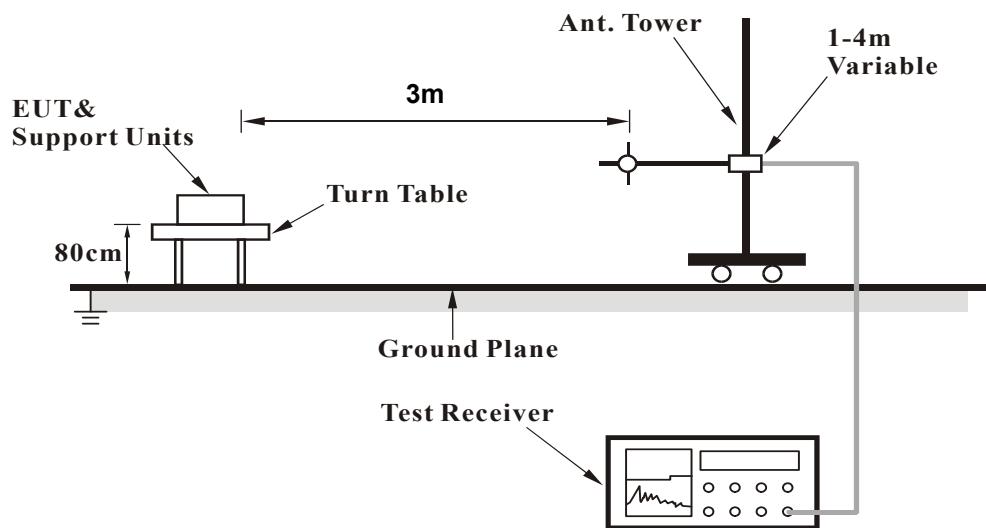
No deviation.

#### 4.1.5 Test Setup

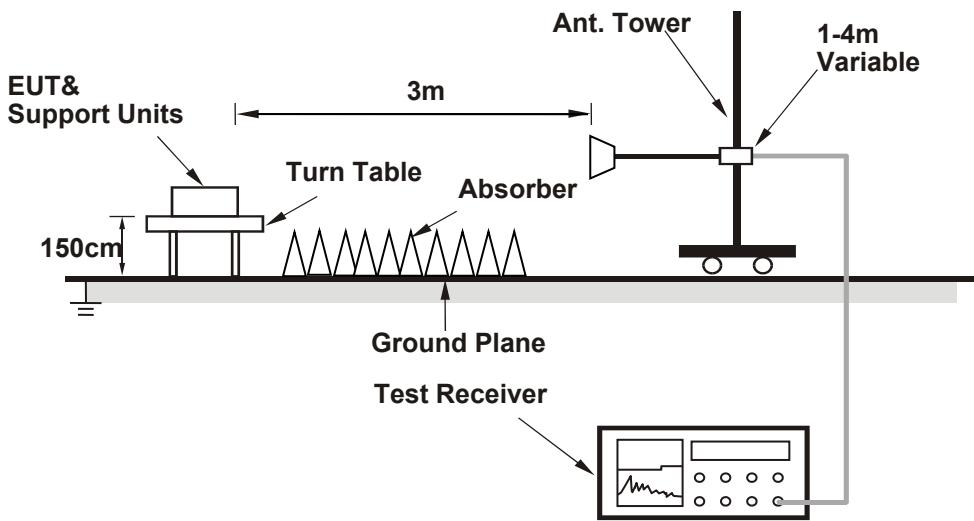
##### **For Radiated emission below 30MHz**



##### **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 (accessMTool\_REL\_3\_2\_1-1.zip) 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	5150.00	69.1 PK	74.0	-4.9	1.85 H	298	67.8	1.3
2	5150.00	53.5 AV	54.0	-0.5	1.85 H	298	52.2	1.3
3	*5180.00	119.7 PK			1.85 H	298	118.5	1.2
4	*5180.00	109.5 AV			1.85 H	298	108.3	1.2
5	#10360.00	46.6 PK	68.2	-21.6	1.78 H	349	36.1	10.5
6	15540.00	53.2 PK	74.0	-20.8	1.66 H	338	40.8	12.4
7	15540.00	40.3 AV	54.0	-13.7	1.66 H	338	27.9	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	5144.75	70.1 PK	74.0	-3.9	1.88 V	312	68.8	1.3
2	5144.75	53.8 AV	54.0	-0.2	1.88 V	312	52.5	1.3
3	*5180.00	123.7 PK			1.88 V	312	122.5	1.2
4	*5180.00	112.5 AV			1.88 V	312	111.3	1.2
5	#10360.00	46.5 PK	68.2	-21.7	1.81 V	357	36.0	10.5
6	15540.00	52.6 PK	74.0	-21.4	1.70 V	343	40.2	12.4
7	15540.00	39.9 AV	54.0	-14.1	1.70 V	343	27.5	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	5150.00	60.5 PK	74.0	-13.5	1.83 H	302	59.2	1.3
2	5150.00	48.0 AV	54.0	-6.0	1.83 H	302	46.7	1.3
3	*5200.00	121.4 PK			1.83 H	302	120.2	1.2
4	*5200.00	111.3 AV			1.83 H	302	110.1	1.2
5	#10400.00	47.0 PK	68.2	-21.2	1.85 H	343	36.3	10.7
6	15600.00	53.1 PK	74.0	-20.9	1.66 H	342	40.4	12.7
7	15600.00	40.3 AV	54.0	-13.7	1.66 H	342	27.6	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	69.6 PK	74.0	-4.4	1.79 V	314	68.3	1.3
2	5150.00	53.0 AV	54.0	-1.0	1.79 V	314	51.7	1.3
3	*5200.00	123.9 PK			1.79 V	314	122.7	1.2
4	*5200.00	114.8 AV			1.79 V	314	113.6	1.2
5	#10400.00	46.8 PK	68.2	-21.4	1.80 V	352	36.1	10.7
6	15600.00	52.8 PK	74.0	-21.2	1.64 V	349	40.1	12.7
7	15600.00	40.4 AV	54.0	-13.6	1.64 V	349	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 802.11a	<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	5150.00	56.2 PK	74.0	-17.8	1.89 H	286	54.9	1.3
2	5150.00	47.2 AV	54.0	-6.8	1.89 H	286	45.9	1.3
3	*5240.00	120.4 PK			1.89 H	286	119.4	1.0
4	*5240.00	111.0 AV			1.89 H	286	110.0	1.0
5	5350.00	60.4 PK	74.0	-13.6	1.89 H	286	59.4	1.0
6	5350.00	48.1 AV	54.0	-5.9	1.89 H	286	47.1	1.0
7	#10480.00	46.1 PK	68.2	-22.1	1.80 H	359	35.6	10.5
8	15720.00	52.3 PK	74.0	-21.7	1.71 H	348	40.6	11.7
9	15720.00	39.6 AV	54.0	-14.4	1.71 H	348	27.9	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	5150.00	56.3 PK	74.0	-17.7	1.84 V	323	55.0	1.3
2	5150.00	47.1 AV	54.0	-6.9	1.84 V	323	45.8	1.3
3	*5240.00	122.6 PK			1.84 V	323	121.6	1.0
4	*5240.00	114.1 AV			1.84 V	323	113.1	1.0
5	5350.00	60.4 PK	74.0	-13.6	1.84 V	323	59.4	1.0
6	5350.00	47.9 AV	54.0	-6.1	1.84 V	323	46.9	1.0
7	#10480.00	46.9 PK	68.2	-21.3	1.76 V	337	36.4	10.5
8	15720.00	52.7 PK	74.0	-21.3	1.66 V	355	41.0	11.7
9	15720.00	40.2 AV	54.0	-13.8	1.66 V	355	28.5	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	55.7 PK	74.0	-18.3	1.85 H	302	54.4	1.3
2	5150.00	46.3 AV	54.0	-7.7	1.85 H	302	45.0	1.3
3	*5260.00	119.1 PK			1.85 H	302	118.2	0.9
4	*5260.00	110.6 AV			1.85 H	302	109.7	0.9
5	5350.00	60.2 PK	74.0	-13.8	1.85 H	302	59.2	1.0
6	5350.00	48.2 AV	54.0	-5.8	1.85 H	302	47.2	1.0
7	#10520.00	46.3 PK	68.2	-21.9	1.76 H	5	35.7	10.6
8	15780.00	52.4 PK	74.0	-21.6	1.64 H	343	40.9	11.5
9	15780.00	39.6 AV	54.0	-14.4	1.64 H	343	28.1	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	1.81 V	311	54.0	1.3
2	5150.00	45.9 AV	54.0	-8.1	1.81 V	311	44.6	1.3
3	*5260.00	123.1 PK			1.81 V	311	122.2	0.9
4	*5260.00	114.2 AV			1.81 V	311	113.3	0.9
5	5350.00	60.2 PK	74.0	-13.8	1.81 V	311	59.2	1.0
6	5350.00	48.2 AV	54.0	-5.8	1.81 V	311	47.2	1.0
7	#10520.00	46.9 PK	68.2	-21.3	1.76 V	8	36.3	10.6
8	15780.00	52.8 PK	74.0	-21.2	1.65 V	337	41.3	11.5
9	15780.00	40.3 AV	54.0	-13.7	1.65 V	337	28.8	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	120.1 PK			1.84 H	289	119.2	0.9
2	*5300.00	110.5 AV			1.84 H	289	109.6	0.9
3	5350.00	55.7 PK	74.0	-18.3	1.84 H	289	54.7	1.0
4	5350.00	46.0 AV	54.0	-8.0	1.84 H	289	45.0	1.0
5	10600.00	46.7 PK	74.0	-27.3	1.85 H	355	36.0	10.7
6	10600.00	37.0 AV	54.0	-17.0	1.85 H	355	26.3	10.7
7	15900.00	51.8 PK	74.0	-22.2	1.70 H	334	39.8	12.0
8	15900.00	39.3 AV	54.0	-14.7	1.70 H	334	27.3	12.0

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	122.5 PK			1.72 V	318	121.6	0.9
2	*5300.00	113.7 AV			1.72 V	318	112.8	0.9
3	5350.00	67.2 PK	74.0	-6.8	1.72 V	318	66.2	1.0
4	5350.00	53.8 AV	54.0	-0.2	1.72 V	318	52.8	1.0
5	10600.00	47.1 PK	74.0	-26.9	1.84 V	339	36.4	10.7
6	10600.00	37.2 AV	54.0	-16.8	1.84 V	339	26.5	10.7
7	15900.00	53.5 PK	74.0	-20.5	1.39 V	259	41.5	12.0
8	15900.00	41.5 AV	54.0	-12.5	1.39 V	259	29.5	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	117.4 PK			1.94 H	250	116.5	0.9
2	*5320.00	107.8 AV			1.94 H	250	106.9	0.9
3	5350.00	62.6 PK	74.0	-11.4	1.94 H	250	61.6	1.0
4	5350.00	46.0 AV	54.0	-8.0	1.94 H	250	45.0	1.0
5	10640.00	45.7 PK	74.0	-28.3	1.83 H	2	35.2	10.5
6	10640.00	36.4 AV	54.0	-17.6	1.83 H	2	25.9	10.5
7	15960.00	52.0 PK	74.0	-22.0	1.75 H	3	39.6	12.4
8	15960.00	39.1 AV	54.0	-14.9	1.75 H	3	26.7	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	120.5 PK			1.80 V	2	119.6	0.9
2	*5320.00	111.8 AV			1.80 V	2	110.9	0.9
3	5350.00	69.7 PK	74.0	-4.3	1.80 V	2	68.7	1.0
4	<b>5350.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.80 V</b>	<b>2</b>	<b>52.9</b>	<b>1.0</b>
5	10640.00	47.4 PK	74.0	-26.6	1.76 V	358	36.9	10.5
6	10640.00	37.3 AV	54.0	-16.7	1.76 V	358	26.8	10.5
7	15960.00	52.5 PK	74.0	-21.5	1.67 V	352	40.1	12.4
8	15960.00	40.3 AV	54.0	-13.7	1.67 V	352	27.9	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	52.7 PK	74.0	-21.3	1.81 H	249	51.3	1.4
2	5460.00	41.1 AV	54.0	-12.9	1.81 H	249	39.7	1.4
3	#5467.00	55.1 PK	68.2	-13.1	1.81 H	249	53.7	1.4
4	*5500.00	113.4 PK			1.81 H	249	112.0	1.4
5	*5500.00	104.2 AV			1.81 H	249	102.8	1.4
6	11000.00	46.0 PK	74.0	-28.0	1.83 H	342	34.4	11.6
7	11000.00	36.7 AV	54.0	-17.3	1.83 H	342	25.1	11.6
8	#16500.00	52.8 PK	68.2	-15.4	1.66 H	350	38.4	14.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5445.46	59.6 PK	74.0	-14.4	1.89 V	357	58.3	1.3
2	5445.46	45.8 AV	54.0	-8.2	1.89 V	357	44.5	1.3
3	#5470.00	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.89 V</b>	<b>357</b>	<b>66.7</b>	<b>1.4</b>
4	*5500.00	118.4 PK			1.89 V	357	117.0	1.4
5	*5500.00	108.9 AV			1.89 V	357	107.5	1.4
6	11000.00	47.1 PK	74.0	-26.9	1.84 V	356	35.5	11.6
7	11000.00	37.4 AV	54.0	-16.6	1.84 V	356	25.8	11.6
8	#16500.00	52.1 PK	68.2	-16.1	1.72 V	358	37.7	14.4

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
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	117.7 PK			1.90 H	301	116.2	1.5
2	*5580.00	107.1 AV			1.90 H	301	105.6	1.5
3	11160.00	46.4 PK	74.0	-27.6	1.78 H	342	35.0	11.4
4	11160.00	36.6 AV	54.0	-17.4	1.78 H	342	25.2	11.4
5	#16740.00	52.5 PK	68.2	-15.7	1.73 H	328	36.8	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	123.4 PK			1.73 V	300	121.9	1.5
2	*5580.00	112.4 AV			1.73 V	300	110.9	1.5
3	11160.00	46.3 PK	74.0	-27.7	1.82 V	343	34.9	11.4
4	11160.00	36.9 AV	54.0	-17.1	1.82 V	343	25.5	11.4
5	#16740.00	52.9 PK	68.2	-15.3	1.68 V	342	37.2	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	113.8 PK			1.83 H	314	112.1	1.7
2	*5700.00	104.6 AV			1.83 H	314	102.9	1.7
3	#5725.00	64.6 PK	68.2	-3.6	1.83 H	314	62.8	1.8
4	11400.00	46.8 PK	74.0	-27.2	1.85 H	355	34.5	12.3
5	11400.00	37.1 AV	54.0	-16.9	1.85 H	355	24.8	12.3
6	#17100.00	52.4 PK	68.2	-15.8	1.72 H	340	35.1	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	118.8 PK			1.74 V	310	117.1	1.7
2	*5700.00	109.1 AV			1.74 V	310	107.4	1.7
3	#5725.00	68.0 PK	68.2	-0.2	1.74 V	310	66.2	1.8
4	11400.00	46.6 PK	74.0	-27.4	1.82 V	13	34.3	12.3
5	11400.00	37.0 AV	54.0	-17.0	1.82 V	13	24.7	12.3
6	#17100.00	52.6 PK	68.2	-15.6	1.73 V	334	35.3	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 802.11a	<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	56.8 PK	74.0	-17.2	1.90 H	308	55.4	1.4
2	5460.00	44.1 AV	54.0	-9.9	1.90 H	308	42.7	1.4
3	#5470.00	55.7 PK	68.2	-12.5	1.90 H	308	54.3	1.4
4	*5720.00	117.7 PK			1.90 H	308	115.9	1.8
5	*5720.00	107.2 AV			1.90 H	308	105.4	1.8
6	#5850.00	53.7 PK	68.2	-14.5	1.90 H	308	51.5	2.2
7	11440.00	47.1 PK	74.0	-26.9	1.76 H	355	34.8	12.3
8	11440.00	37.3 AV	54.0	-16.7	1.76 H	355	25.0	12.3
9	#17160.00	52.7 PK	68.2	-15.5	1.71 H	358	36.0	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	56.3 PK	74.0	-17.7	1.80 V	298	54.9	1.4
2	5460.00	43.9 AV	54.0	-10.1	1.80 V	298	42.5	1.4
3	#5470.00	56.1 PK	68.2	-12.1	1.80 V	298	54.7	1.4
4	*5720.00	123.1 PK			1.80 V	298	121.3	1.8
5	*5720.00	112.1 AV			1.80 V	298	110.3	1.8
6	#5850.00	53.6 PK	68.2	-14.6	1.80 V	298	51.4	2.2
7	11440.00	46.4 PK	74.0	-27.6	1.85 V	356	34.1	12.3
8	11440.00	36.5 AV	54.0	-17.5	1.85 V	356	24.2	12.3
9	#17160.00	52.6 PK	68.2	-15.6	1.68 V	354	35.9	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	#5637.72	59.3 PK	68.2	-8.9	1.91 H	140	57.7	1.6
2	*5745.00	118.5 PK			1.91 H	140	116.6	1.9
3	*5745.00	109.3 AV			1.91 H	140	107.4	1.9
4	#5937.68	49.7 PK	68.2	-18.5	1.91 H	140	47.7	2.0
5	11490.00	46.1 PK	74.0	-27.9	1.85 H	11	33.7	12.4
6	11490.00	36.6 AV	54.0	-17.4	1.85 H	11	24.2	12.4
7	#17235.00	52.6 PK	68.2	-15.6	1.66 H	340	36.4	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	#5643.84	58.8 PK	68.2	-9.4	1.74 V	274	57.2	1.6
2	*5745.00	123.1 PK			1.74 V	274	121.2	1.9
3	*5745.00	114.3 AV			1.74 V	274	112.4	1.9
4	#5922.78	52.0 PK	69.8	-17.8	1.74 V	274	50.0	2.0
5	11490.00	46.4 PK	74.0	-27.6	1.86 V	358	34.0	12.4
6	11490.00	36.7 AV	54.0	-17.3	1.86 V	358	24.3	12.4
7	#17235.00	52.5 PK	68.2	-15.7	1.73 V	328	36.3	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	#5648.02	52.8 PK	68.2	-15.4	1.87 H	145	51.2	1.6
2	*5785.00	118.6 PK			1.87 H	145	116.6	2.0
3	*5785.00	109.5 AV			1.87 H	145	107.5	2.0
4	#5925.63	50.8 PK	68.2	-17.4	1.87 H	145	48.8	2.0
5	11570.00	46.5 PK	74.0	-27.5	1.83 H	346	34.3	12.2
6	11570.00	36.7 AV	54.0	-17.3	1.83 H	346	24.5	12.2
7	#17355.00	53.1 PK	68.2	-15.1	1.66 H	349	36.0	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	#5575.96	56.5 PK	68.2	-11.7	1.84 V	218	55.0	1.5
2	*5785.00	123.4 PK			1.84 V	218	121.4	2.0
3	*5785.00	114.2 AV			1.84 V	218	112.2	2.0
4	#5929.04	50.8 PK	68.2	-17.4	1.84 V	218	48.8	2.0
5	11570.00	46.4 PK	74.0	-27.6	1.87 V	10	34.2	12.2
6	11570.00	37.0 AV	54.0	-17.0	1.87 V	10	24.8	12.2
7	#17355.00	52.5 PK	68.2	-15.7	1.69 V	329	35.4	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	#5633.81	53.9 PK	68.2	-14.3	1.92 H	147	52.3	1.6
2	*5825.00	118.4 PK			1.92 H	147	116.3	2.1
3	*5825.00	109.4 AV			1.92 H	147	107.3	2.1
4	#5926.91	50.3 PK	68.2	-17.9	1.92 H	147	48.3	2.0
5	11650.00	46.8 PK	74.0	-27.2	1.85 H	13	34.9	11.9
6	11650.00	37.0 AV	54.0	-17.0	1.85 H	13	25.1	11.9
7	#17475.00	52.5 PK	68.2	-15.7	1.66 H	332	33.3	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	#5570.32	56.7 PK	68.2	-11.5	1.89 V	208	55.2	1.5
2	*5825.00	123.1 PK			1.89 V	208	121.0	2.1
3	*5825.00	114.4 AV			1.89 V	208	112.3	2.1
4	#5930.07	52.3 PK	68.2	-15.9	1.89 V	208	50.3	2.0
5	11650.00	47.1 PK	74.0	-26.9	1.80 V	349	35.2	11.9
6	11650.00	37.3 AV	54.0	-16.7	1.80 V	349	25.4	11.9
7	#17475.00	52.2 PK	68.2	-16.0	1.74 V	345	33.0	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 802.11ax (HE20)	<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	65.3 PK	74.0	-8.7	2.00 H	242	64.0	1.3
2	5150.00	46.6 AV	54.0	-7.4	2.00 H	242	45.3	1.3
3	*5180.00	116.4 PK			2.00 H	242	115.2	1.2
4	*5180.00	106.9 AV			2.00 H	242	105.7	1.2
5	#10360.00	46.4 PK	68.2	-21.8	1.76 H	346	35.9	10.5
6	15540.00	52.2 PK	74.0	-21.8	1.75 H	345	39.8	12.4
7	15540.00	39.7 AV	54.0	-14.3	1.75 H	345	27.3	12.4

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

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.8 PK	74.0	-9.2	1.89 V	356	63.5	1.3
2	5150.00	53.7 AV	54.0	-0.3	1.89 V	356	52.4	1.3
3	*5180.00	120.7 PK			1.89 V	356	119.5	1.2
4	*5180.00	110.8 AV			1.89 V	356	109.6	1.2
5	#10360.00	45.8 PK	68.2	-22.4	1.83 V	358	35.3	10.5
6	15540.00	52.8 PK	74.0	-21.2	1.67 V	346	40.4	12.4
7	15540.00	39.8 AV	54.0	-14.2	1.67 V	346	27.4	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 802.11ax (HE20)	<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	118.1 PK			1.95 H	242	116.9	1.2
2	*5200.00	108.1 AV			1.95 H	242	106.9	1.2
3	#10400.00	45.6 PK	68.2	-22.6	1.84 H	351	34.9	10.7
4	15600.00	52.4 PK	74.0	-21.6	1.66 H	350	39.7	12.7
5	15600.00	39.6 AV	54.0	-14.4	1.66 H	350	26.9	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	122.6 PK			1.87 V	360	121.4	1.2
2	*5200.00	112.6 AV			1.87 V	360	111.4	1.2
3	#10400.00	46.6 PK	68.2	-21.6	1.79 V	342	35.9	10.7
4	15600.00	53.1 PK	74.0	-20.9	1.69 V	357	40.4	12.7
5	15600.00	40.2 AV	54.0	-13.8	1.69 V	357	27.5	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 802.11ax (HE20)	<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	5150.00	55.6 PK	74.0	-18.4	1.95 H	256	54.3	1.3
2	5150.00	45.4 AV	54.0	-8.6	1.95 H	256	44.1	1.3
3	*5240.00	116.9 PK			1.95 H	256	115.9	1.0
4	*5240.00	107.2 AV			1.95 H	256	106.2	1.0
5	5350.00	58.8 PK	74.0	-15.2	1.95 H	256	57.8	1.0
6	5350.00	48.3 AV	54.0	-5.7	1.95 H	256	47.3	1.0
7	#10480.00	46.3 PK	68.2	-21.9	1.79 H	346	35.8	10.5
8	15720.00	52.1 PK	74.0	-21.9	1.67 H	346	40.4	11.7
9	15720.00	39.4 AV	54.0	-14.6	1.67 H	346	27.7	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	5150.00	55.8 PK	74.0	-18.2	1.91 V	350	54.5	1.3
2	5150.00	45.8 AV	54.0	-8.2	1.91 V	350	44.5	1.3
3	*5240.00	122.5 PK			1.91 V	350	121.5	1.0
4	*5240.00	111.9 AV			1.91 V	350	110.9	1.0
5	5350.00	59.0 PK	74.0	-15.0	1.91 V	350	58.0	1.0
6	5350.00	48.3 AV	54.0	-5.7	1.91 V	350	47.3	1.0
7	#10480.00	46.7 PK	68.2	-21.5	1.80 V	352	36.2	10.5
8	15720.00	52.9 PK	74.0	-21.1	1.74 V	349	41.2	11.7
9	15720.00	40.2 AV	54.0	-13.8	1.74 V	349	28.5	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 802.11ax (HE20)	<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	57.3 PK	74.0	-16.7	2.01 H	248	56.0	1.3
2	5150.00	45.8 AV	54.0	-8.2	2.01 H	248	44.5	1.3
3	*5260.00	118.1 PK			2.01 H	248	117.2	0.9
4	*5260.00	107.6 AV			2.01 H	248	106.7	0.9
5	5350.00	59.9 PK	74.0	-14.1	2.01 H	248	58.9	1.0
6	5350.00	48.4 AV	54.0	-5.6	2.01 H	248	47.4	1.0
7	#10520.00	45.9 PK	68.2	-22.3	1.83 H	2	35.3	10.6
8	15780.00	52.5 PK	74.0	-21.5	1.73 H	342	41.0	11.5
9	15780.00	39.9 AV	54.0	-14.1	1.73 H	342	28.4	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	57.6 PK	74.0	-16.4	1.95 V	348	56.3	1.3
2	5150.00	46.1 AV	54.0	-7.9	1.95 V	348	44.8	1.3
3	*5260.00	122.8 PK			1.95 V	348	121.9	0.9
4	*5260.00	112.1 AV			1.95 V	348	111.2	0.9
5	5350.00	60.4 PK	74.0	-13.6	1.95 V	348	59.4	1.0
6	5350.00	48.8 AV	54.0	-5.2	1.95 V	348	47.8	1.0
7	#10520.00	46.5 PK	68.2	-21.7	1.75 V	358	35.9	10.6
8	15780.00	52.6 PK	74.0	-21.4	1.69 V	340	41.1	11.5
9	15780.00	39.8 AV	54.0	-14.2	1.69 V	340	28.3	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 802.11ax (HE20)	<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	116.7 PK			2.06 H	248	115.8	0.9
2	*5300.00	107.7 AV			2.06 H	248	106.8	0.9
3	5350.00	56.7 PK	74.0	-17.3	2.06 H	248	55.7	1.0
4	5350.00	45.4 AV	54.0	-8.6	2.06 H	248	44.4	1.0
5	10600.00	46.2 PK	74.0	-27.8	1.85 H	7	35.5	10.7
6	10600.00	36.6 AV	54.0	-17.4	1.85 H	7	25.9	10.7
7	15900.00	52.7 PK	74.0	-21.3	1.69 H	357	40.7	12.0
8	15900.00	39.8 AV	54.0	-14.2	1.69 H	357	27.8	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	123.8 PK			2.05 V	351	122.9	0.9
2	*5300.00	112.4 AV			2.05 V	351	111.5	0.9
3	5350.00	67.7 PK	74.0	-6.3	2.05 V	351	66.7	1.0
4	5350.00	53.7 AV	54.0	-0.3	2.05 V	351	52.7	1.0
5	10600.00	46.7 PK	74.0	-27.3	1.78 V	9	36.0	10.7
6	10600.00	37.2 AV	54.0	-16.8	1.78 V	9	26.5	10.7
7	15900.00	53.1 PK	74.0	-20.9	1.69 V	342	41.1	12.0
8	15900.00	40.1 AV	54.0	-13.9	1.69 V	342	28.1	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 802.11ax (HE20)	<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	115.4 PK			2.05 H	251	114.5	0.9
2	*5320.00	106.8 AV			2.05 H	251	105.9	0.9
3	5350.00	64.0 PK	74.0	-10.0	2.05 H	251	63.0	1.0
4	5350.00	47.4 AV	54.0	-6.6	2.05 H	251	46.4	1.0
5	10640.00	45.7 PK	74.0	-28.3	1.75 H	5	35.2	10.5
6	10640.00	36.3 AV	54.0	-17.7	1.75 H	5	25.8	10.5
7	15960.00	52.3 PK	74.0	-21.7	1.71 H	350	39.9	12.4
8	15960.00	39.8 AV	54.0	-14.2	1.71 H	350	27.4	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	*5320.00	122.3 PK			1.81 V	4	121.4	0.9
2	*5320.00	111.3 AV			1.81 V	4	110.4	0.9
3	5354.12	69.2 PK	74.0	-4.8	1.81 V	4	68.2	1.0
4	5354.12	53.8 AV	54.0	-0.2	1.81 V	4	52.8	1.0
5	10640.00	47.0 PK	74.0	-27.0	1.78 V	354	36.5	10.5
6	10640.00	37.2 AV	54.0	-16.8	1.78 V	354	26.7	10.5
7	15960.00	52.1 PK	74.0	-21.9	1.66 V	357	39.7	12.4
8	15960.00	39.4 AV	54.0	-14.6	1.66 V	357	27.0	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.

<b>RF Mode</b>	TX 802.11ax (HE20)	<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	55.8 PK	74.0	-18.2	2.00 H	245	54.4	1.4
2	5460.00	42.4 AV	54.0	-11.6	2.00 H	245	41.0	1.4
3	#5469.00	58.4 PK	68.2	-9.8	2.00 H	245	57.0	1.4
4	*5500.00	115.8 PK			2.00 H	245	114.4	1.4
5	*5500.00	105.7 AV			2.00 H	245	104.3	1.4
6	11000.00	46.6 PK	74.0	-27.4	1.85 H	356	35.0	11.6
7	11000.00	37.1 AV	54.0	-16.9	1.85 H	356	25.5	11.6
8	#16500.00	52.4 PK	68.2	-15.8	1.71 H	330	38.0	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	5459.50	62.2 PK	74.0	-11.8	1.66 V	8	60.8	1.4
2	5459.50	49.2 AV	54.0	-4.8	1.66 V	8	47.8	1.4
3	#5468.71	67.6 PK	68.2	-0.6	1.66 V	8	66.2	1.4
4	*5500.00	122.0 PK			1.66 V	8	120.6	1.4
5	*5500.00	110.4 AV			1.66 V	8	109.0	1.4
6	11000.00	46.3 PK	74.0	-27.7	1.79 V	355	34.7	11.6
7	11000.00	36.4 AV	54.0	-17.6	1.79 V	355	24.8	11.6
8	#16500.00	53.2 PK	68.2	-15.0	1.67 V	348	38.8	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 802.11ax (HE20)	<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	117.2 PK			2.02 H	239	115.7	1.5
2	*5580.00	107.8 AV			2.02 H	239	106.3	1.5
3	11160.00	46.6 PK	74.0	-27.4	1.78 H	5	35.2	11.4
4	11160.00	37.2 AV	54.0	-16.8	1.78 H	5	25.8	11.4
5	#16740.00	52.6 PK	68.2	-15.6	1.69 H	354	36.9	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	123.9 PK			2.11 V	339	122.4	1.5
2	*5580.00	112.5 AV			2.11 V	339	111.0	1.5
3	11160.00	47.0 PK	74.0	-27.0	1.87 V	9	35.6	11.4
4	11160.00	37.4 AV	54.0	-16.6	1.87 V	9	26.0	11.4
5	#16740.00	53.1 PK	68.2	-15.1	1.68 V	346	37.4	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 802.11ax (HE20)	<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	112.4 PK			1.97 H	247	110.7	1.7
2	*5700.00	102.9 AV			1.97 H	247	101.2	1.7
3	#5725.00	63.7 PK	68.2	-4.5	1.97 H	247	61.9	1.8
4	11400.00	46.3 PK	74.0	-27.7	1.82 H	353	34.0	12.3
5	11400.00	36.4 AV	54.0	-17.6	1.82 H	353	24.1	12.3
6	#17100.00	52.5 PK	68.2	-15.7	1.70 H	339	35.2	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	118.2 PK			2.07 V	344	116.5	1.7
2	*5700.00	107.5 AV			2.07 V	344	105.8	1.7
3	#5725.00	68.0 PK	68.2	-0.2	2.07 V	344	66.2	1.8
4	11400.00	46.7 PK	74.0	-27.3	1.82 V	355	34.4	12.3
5	11400.00	36.9 AV	54.0	-17.1	1.82 V	355	24.6	12.3
6	#17100.00	53.2 PK	68.2	-15.0	1.64 V	351	35.9	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 802.11ax (HE20)	<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	56.8 PK	74.0	-17.2	1.94 H	233	55.4	1.4
2	5460.00	44.9 AV	54.0	-9.1	1.94 H	233	43.5	1.4
3	#5470.00	58.4 PK	68.2	-9.8	1.94 H	233	57.0	1.4
4	*5720.00	117.1 PK			1.94 H	233	115.3	1.8
5	*5720.00	107.6 AV			1.94 H	233	105.8	1.8
6	#5850.00	56.3 PK	68.2	-11.9	1.94 H	233	54.1	2.2
7	11440.00	46.2 PK	74.0	-27.8	1.84 H	341	33.9	12.3
8	11440.00	36.8 AV	54.0	-17.2	1.84 H	341	24.5	12.3
9	#17160.00	52.9 PK	68.2	-15.3	1.66 H	346	36.2	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	57.2 PK	74.0	-16.8	2.11 V	349	55.8	1.4
2	5460.00	45.0 AV	54.0	-9.0	2.11 V	349	43.6	1.4
3	#5470.00	57.8 PK	68.2	-10.4	2.11 V	349	56.4	1.4
4	*5720.00	123.6 PK			2.11 V	349	121.8	1.8
5	*5720.00	112.8 AV			2.11 V	349	111.0	1.8
6	#5850.00	55.7 PK	68.2	-12.5	2.11 V	349	53.5	2.2
7	11440.00	46.7 PK	74.0	-27.3	1.76 V	358	34.4	12.3
8	11440.00	37.0 AV	54.0	-17.0	1.76 V	358	24.7	12.3
9	#17160.00	53.0 PK	68.2	-15.2	1.65 V	332	36.3	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 802.11ax (HE20)	<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	#5647.15	58.4 PK	68.2	-9.8	2.01 H	254	56.8	1.6
2	*5745.00	119.4 PK			2.01 H	254	117.5	1.9
3	*5745.00	109.0 AV			2.01 H	254	107.1	1.9
4	#5925.63	49.0 PK	68.2	-19.2	2.01 H	254	47.0	2.0
5	11490.00	47.1 PK	74.0	-26.9	1.80 H	342	34.7	12.4
6	11490.00	37.4 AV	54.0	-16.6	1.80 H	342	25.0	12.4
7	#17235.00	52.2 PK	68.2	-16.0	1.75 H	341	36.0	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	#5628.32	60.4 PK	68.2	-7.8	1.62 V	21	58.8	1.6
2	*5745.00	122.4 PK			1.62 V	21	120.5	1.9
3	*5745.00	113.9 AV			1.62 V	21	112.0	1.9
4	#5928.12	51.5 PK	68.2	-16.7	1.62 V	21	49.5	2.0
5	11490.00	46.4 PK	74.0	-27.6	1.80 V	10	34.0	12.4
6	11490.00	36.8 AV	54.0	-17.2	1.80 V	10	24.4	12.4
7	#17235.00	52.7 PK	68.2	-15.5	1.75 V	335	36.5	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 802.11ax (HE20)	<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	#5648.47	55.2 PK	68.2	-13.0	2.05 H	288	53.6	1.6
2	*5785.00	119.8 PK			2.05 H	288	117.8	2.0
3	*5785.00	109.3 AV			2.05 H	288	107.3	2.0
4	#5925.10	49.6 PK	68.2	-18.6	2.05 H	288	47.6	2.0
5	11570.00	46.7 PK	74.0	-27.3	1.80 H	8	34.5	12.2
6	11570.00	37.1 AV	54.0	-16.9	1.80 H	8	24.9	12.2
7	#17355.00	52.4 PK	68.2	-15.8	1.65 H	336	35.3	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	#5618.45	57.8 PK	68.2	-10.4	1.61 V	20	56.2	1.6
2	*5785.00	123.1 PK			1.61 V	20	121.1	2.0
3	*5785.00	114.2 AV			1.61 V	20	112.2	2.0
4	#5928.39	51.9 PK	68.2	-16.3	1.61 V	20	49.9	2.0
5	11570.00	46.7 PK	74.0	-27.3	1.80 V	5	34.5	12.2
6	11570.00	37.0 AV	54.0	-17.0	1.80 V	5	24.8	12.2
7	#17355.00	52.4 PK	68.2	-15.8	1.73 V	337	35.3	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 802.11ax (HE20)	<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	#5610.25	54.6 PK	68.2	-13.6	2.00 H	249	53.1	1.5
2	*5825.00	119.7 PK			2.00 H	249	117.6	2.1
3	*5825.00	109.1 AV			2.00 H	249	107.0	2.1
4	#5927.97	50.6 PK	68.2	-17.6	2.00 H	249	48.6	2.0
5	11650.00	46.1 PK	74.0	-27.9	1.76 H	349	34.2	11.9
6	11650.00	36.5 AV	54.0	-17.5	1.76 H	349	24.6	11.9
7	#17475.00	52.3 PK	68.2	-15.9	1.65 H	358	33.1	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	#5569.50	59.1 PK	68.2	-9.1	1.60 V	16	57.6	1.5
2	*5825.00	123.4 PK			1.60 V	16	121.3	2.1
3	*5825.00	114.3 AV			1.60 V	16	112.2	2.1
4	#5927.97	52.3 PK	68.2	-15.9	1.60 V	16	50.3	2.0
5	11650.00	46.0 PK	74.0	-28.0	1.83 V	357	34.1	11.9
6	11650.00	36.6 AV	54.0	-17.4	1.83 V	357	24.7	11.9
7	#17475.00	52.0 PK	68.2	-16.2	1.67 V	354	32.8	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 802.11ax (HE40)	<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	58.9 PK	74.0	-15.1	2.27 H	225	57.6	1.3
2	5150.00	49.8 AV	54.0	-4.2	2.27 H	225	48.5	1.3
3	*5190.00	109.7 PK			2.27 H	225	108.5	1.2
4	*5190.00	101.1 AV			2.27 H	225	99.9	1.2
5	#10380.00	46.5 PK	68.2	-21.7	1.81 H	5	35.9	10.6
6	15570.00	53.6 PK	74.0	-20.4	1.65 H	348	40.9	12.7
7	15570.00	40.4 AV	54.0	-13.6	1.65 H	348	27.7	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	69.2 PK	74.0	-4.8	1.73 V	13	67.9	1.3
2	5150.00	53.7 AV	54.0	-0.3	1.73 V	13	52.4	1.3
3	*5190.00	117.1 PK			1.73 V	13	115.9	1.2
4	*5190.00	106.5 AV			1.73 V	13	105.3	1.2
5	#10380.00	47.0 PK	68.2	-21.2	1.87 V	346	36.4	10.6
6	15570.00	52.4 PK	74.0	-21.6	1.66 V	343	39.7	12.7
7	15570.00	39.7 AV	54.0	-14.3	1.66 V	343	27.0	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 802.11ax (HE40)	<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	*5230.00	115.3 PK			2.21 H	239	114.2	1.1
2	*5230.00	105.7 AV			2.21 H	239	104.6	1.1
3	5350.00	58.9 PK	74.0	-15.1	2.21 H	239	57.9	1.0
4	5350.00	50.1 AV	54.0	-3.9	2.21 H	239	49.1	1.0
5	#10460.00	46.3 PK	68.2	-21.9	1.73 H	336	35.6	10.7
6	15690.00	53.9 PK	74.0	-20.1	1.68 H	346	42.1	11.8
7	15690.00	40.7 AV	54.0	-13.3	1.68 H	346	28.9	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	*5230.00	121.5 PK			1.71 V	7	120.4	1.1
2	*5230.00	110.5 AV			1.71 V	7	109.4	1.1
3	5350.00	64.6 PK	74.0	-9.4	1.71 V	7	63.6	1.0
4	5350.00	53.6 AV	54.0	-0.4	1.71 V	7	52.6	1.0
5	#10460.00	46.7 PK	68.2	-21.5	1.83 V	9	36.0	10.7
6	15690.00	52.8 PK	74.0	-21.2	1.73 V	329	41.0	11.8
7	15690.00	40.0 AV	54.0	-14.0	1.73 V	329	28.2	11.8

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ax (HE40)	<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	58.4 PK	74.0	-15.6	2.29 H	212	57.1	1.3
2	5150.00	49.6 AV	54.0	-4.4	2.29 H	212	48.3	1.3
3	*5270.00	115.1 PK			2.29 H	212	114.2	0.9
4	*5270.00	104.2 AV			2.29 H	212	103.3	0.9
5	#10540.00	46.0 PK	68.2	-22.2	1.78 H	349	35.4	10.6
6	15810.00	54.0 PK	74.0	-20.0	1.66 H	333	42.5	11.5
7	15810.00	40.6 AV	54.0	-13.4	1.66 H	333	29.1	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	73.4 PK	74.0	-0.6	1.68 V	15	72.1	1.3
2	5150.00	53.6 AV	54.0	-0.4	1.68 V	15	52.3	1.3
3	*5270.00	120.3 PK			1.68 V	15	119.4	0.9
4	*5270.00	109.7 AV			1.68 V	15	108.8	0.9
5	#10540.00	45.9 PK	68.2	-22.3	1.76 V	3	35.3	10.6
6	15810.00	52.8 PK	74.0	-21.2	1.71 V	345	41.3	11.5
7	15810.00	40.3 AV	54.0	-13.7	1.71 V	345	28.8	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 802.11ax (HE40)	<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	109.4 PK			2.50 H	234	108.5	0.9
2	*5310.00	99.3 AV			2.50 H	234	98.4	0.9
3	5360.00	55.6 PK	74.0	-18.4	2.50 H	234	54.4	1.2
4	5360.00	43.9 AV	54.0	-10.1	2.50 H	234	42.7	1.2
5	10620.00	46.4 PK	74.0	-27.6	1.75 H	338	35.8	10.6
6	10620.00	37.1 AV	54.0	-16.9	1.75 H	338	26.5	10.6
7	15930.00	53.8 PK	74.0	-20.2	1.65 H	340	41.6	12.2
8	15930.00	40.7 AV	54.0	-13.3	1.65 H	340	28.5	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	116.6 PK			1.68 V	1	115.7	0.9
2	*5310.00	104.0 AV			1.68 V	1	103.1	0.9
3	5350.00	68.0 PK	74.0	-6.0	1.68 V	1	67.0	1.0
4	<b>5350.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.68 V</b>	<b>1</b>	<b>52.9</b>	<b>1.0</b>
5	10620.00	46.9 PK	74.0	-27.1	1.79 V	7	36.3	10.6
6	10620.00	37.2 AV	54.0	-16.8	1.79 V	7	26.6	10.6
7	15930.00	52.2 PK	74.0	-21.8	1.74 V	344	40.0	12.2
8	15930.00	39.5 AV	54.0	-14.5	1.74 V	344	27.3	12.2

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ax (HE40)	<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	63.9 PK	74.0	-10.1	2.45 H	231	62.5	1.4
2	5460.00	46.2 AV	54.0	-7.8	2.45 H	231	44.8	1.4
3	#5465.00	65.4 PK	68.2	-2.8	2.45 H	231	64.0	1.4
4	*5510.00	109.3 PK			2.45 H	231	107.9	1.4
5	*5510.00	100.4 AV			2.45 H	231	99.0	1.4
6	11020.00	46.8 PK	74.0	-27.2	1.76 H	354	35.2	11.6
7	11020.00	37.4 AV	54.0	-16.6	1.76 H	354	25.8	11.6
8	#16530.00	53.7 PK	68.2	-14.5	1.70 H	353	38.9	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	69.3 PK	74.0	-4.7	1.50 V	10	67.9	1.4
2	5460.00	51.9 AV	54.0	-2.1	1.50 V	10	50.5	1.4
3	#5470.00	67.7 PK	68.2	-0.5	1.50 V	10	66.3	1.4
4	*5510.00	117.4 PK			1.50 V	10	116.0	1.4
5	*5510.00	105.3 AV			1.50 V	10	103.9	1.4
6	11020.00	46.6 PK	74.0	-27.4	1.85 V	353	35.0	11.6
7	11020.00	37.3 AV	54.0	-16.7	1.85 V	353	25.7	11.6
8	#16530.00	52.9 PK	68.2	-15.3	1.65 V	337	38.1	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 802.11ax (HE40)	<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	114.1 PK			2.42 H	220	112.7	1.4
2	*5550.00	105.5 AV			2.42 H	220	104.1	1.4
3	11100.00	46.4 PK	74.0	-27.6	1.78 H	347	35.0	11.4
4	11100.00	36.8 AV	54.0	-17.2	1.78 H	347	25.4	11.4
5	#16650.00	53.1 PK	68.2	-15.1	1.65 H	323	37.2	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	122.7 PK			1.67 V	8	121.3	1.4
2	*5550.00	110.7 AV			1.67 V	8	109.3	1.4
3	11100.00	47.0 PK	74.0	-27.0	1.86 V	10	35.6	11.4
4	11100.00	37.4 AV	54.0	-16.6	1.86 V	10	26.0	11.4
5	#16650.00	52.2 PK	68.2	-16.0	1.75 V	349	36.3	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 802.11ax (HE40)	<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	109.3 PK			2.47 H	241	107.7	1.6
2	*5670.00	101.5 AV			2.47 H	241	99.9	1.6
3	#5725.00	64.8 PK	68.2	-3.4	2.47 H	241	63.0	1.8
4	11340.00	46.8 PK	74.0	-27.2	1.77 H	340	35.0	11.8
5	11340.00	37.3 AV	54.0	-16.7	1.77 H	340	25.5	11.8
6	#17010.00	53.8 PK	68.2	-14.4	1.66 H	347	36.1	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	117.9 PK			1.71 V	10	116.3	1.6
2	*5670.00	106.4 AV			1.71 V	10	104.8	1.6
3	#5725.00	67.9 PK	68.2	-0.3	1.71 V	10	66.1	1.8
4	11340.00	46.8 PK	74.0	-27.2	1.79 V	351	35.0	11.8
5	11340.00	37.3 AV	54.0	-16.7	1.79 V	351	25.5	11.8
6	#17010.00	52.5 PK	68.2	-15.7	1.69 V	349	34.8	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 802.11ax (HE40)	<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	55.7 PK	74.0	-18.3	2.50 H	223	54.3	1.4
2	5460.00	44.1 AV	54.0	-9.9	2.50 H	223	42.7	1.4
3	#5470.00	56.0 PK	68.2	-12.2	2.50 H	223	54.6	1.4
4	*5710.00	115.8 PK			2.50 H	223	114.0	1.8
5	*5710.00	105.4 AV			2.50 H	223	103.6	1.8
6	#5850.00	56.0 PK	68.2	-12.2	2.50 H	223	53.8	2.2
7	11420.00	47.0 PK	74.0	-27.0	1.81 H	355	34.7	12.3
8	11420.00	37.5 AV	54.0	-16.5	1.81 H	355	25.2	12.3
9	#17130.00	53.7 PK	68.2	-14.5	1.65 H	323	36.7	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	57.0 PK	74.0	-17.0	1.74 V	15	55.6	1.4
2	5460.00	44.9 AV	54.0	-9.1	1.74 V	15	43.5	1.4
3	#5470.00	57.0 PK	68.2	-11.2	1.74 V	15	55.6	1.4
4	*5710.00	120.6 PK			1.74 V	15	118.8	1.8
5	*5710.00	110.4 AV			1.74 V	15	108.6	1.8
6	#5850.00	58.7 PK	68.2	-9.5	1.74 V	15	56.5	2.2
7	11420.00	46.3 PK	74.0	-27.7	1.87 V	345	34.0	12.3
8	11420.00	36.5 AV	54.0	-17.5	1.87 V	345	24.2	12.3
9	#17130.00	52.5 PK	68.2	-15.7	1.74 V	333	35.5	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 802.11ax (HE40)	<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	#5646.44	57.1 PK	68.2	-11.1	1.50 H	331	55.5	1.6
2	*5755.00	111.1 PK			1.50 H	331	109.2	1.9
3	*5755.00	101.5 AV			1.50 H	331	99.6	1.9
4	#5953.56	48.7 PK	68.2	-19.5	1.50 H	331	46.6	2.1
5	11510.00	46.0 PK	74.0	-28.0	1.80 H	1	33.7	12.3
6	11510.00	36.7 AV	54.0	-17.3	1.80 H	1	24.4	12.3
7	#17265.00	53.7 PK	68.2	-14.5	1.63 H	340	37.6	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	#5633.96	67.8 PK	68.2	-0.4	1.59 V	12	66.2	1.6
2	*5755.00	120.6 PK			1.59 V	12	118.7	1.9
3	*5755.00	110.2 AV			1.59 V	12	108.3	1.9
4	#5927.98	54.6 PK	68.2	-13.6	1.59 V	12	52.6	2.0
5	11510.00	46.9 PK	74.0	-27.1	1.86 V	347	34.6	12.3
6	11510.00	37.1 AV	54.0	-16.9	1.86 V	347	24.8	12.3
7	#17265.00	53.0 PK	68.2	-15.2	1.75 V	341	36.9	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 802.11ax (HE40)	<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	#5647.15	54.2 PK	68.2	-14.0	1.52 H	329	52.6	1.6
2	*5795.00	112.3 PK			1.52 H	329	110.2	2.1
3	*5795.00	102.4 AV			1.52 H	329	100.3	2.1
4	#5928.04	53.1 PK	68.2	-15.1	1.52 H	329	51.1	2.0
5	11590.00	47.0 PK	74.0	-27.0	1.82 H	333	34.8	12.2
6	11590.00	37.3 AV	54.0	-16.7	1.82 H	333	25.1	12.2
7	#17385.00	52.8 PK	68.2	-15.4	1.60 H	325	34.8	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	#5627.39	67.8 PK	68.2	-0.4	1.65 V	15	66.2	1.6
2	*5795.00	121.2 PK			1.65 V	15	119.1	2.1
3	*5795.00	111.4 AV			1.65 V	15	109.3	2.1
4	#5934.52	66.2 PK	68.2	-2.0	1.65 V	15	64.2	2.0
5	11590.00	46.7 PK	74.0	-27.3	1.81 V	344	34.5	12.2
6	11590.00	36.8 AV	54.0	-17.2	1.81 V	344	24.6	12.2
7	#17385.00	52.0 PK	68.2	-16.2	1.76 V	327	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 802.11ax (HE80)	<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	5150.00	56.9 PK	74.0	-17.1	1.15 H	59	55.6	1.3
2	5150.00	45.4 AV	54.0	-8.6	1.15 H	59	44.1	1.3
3	*5210.00	110.7 PK			1.15 H	59	109.5	1.2
4	*5210.00	97.1 AV			1.15 H	59	95.9	1.2
5	5350.00	51.7 PK	74.0	-22.3	1.15 H	59	50.7	1.0
6	5350.00	39.9 AV	54.0	-14.1	1.15 H	59	38.9	1.0
7	#10420.00	46.8 PK	68.2	-21.4	1.81 H	333	36.1	10.7
8	15630.00	53.8 PK	74.0	-20.2	1.62 H	330	41.4	12.4
9	15630.00	40.7 AV	54.0	-13.3	1.62 H	330	28.3	12.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.9 PK	74.0	-2.1	1.74 V	27	70.6	1.3
2	<b>5150.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.74 V</b>	<b>27</b>	<b>52.6</b>	<b>1.3</b>
3	*5210.00	112.4 PK			1.74 V	27	111.2	1.2
4	*5210.00	102.8 AV			1.74 V	27	101.6	1.2
5	5350.00	59.4 PK	74.0	-14.6	1.74 V	27	58.4	1.0
6	5350.00	47.4 AV	54.0	-6.6	1.74 V	27	46.4	1.0
7	#10420.00	46.2 PK	68.2	-22.0	1.84 V	346	35.5	10.7
8	15630.00	52.7 PK	74.0	-21.3	1.66 V	335	40.3	12.4
9	15630.00	39.9 AV	54.0	-14.1	1.66 V	335	27.5	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 802.11ax (HE80)	<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	50.6 PK	74.0	-23.4	1.18 H	63	49.3	1.3
2	5150.00	40.4 AV	54.0	-13.6	1.18 H	63	39.1	1.3
3	*5290.00	105.6 PK			1.18 H	63	104.7	0.9
4	*5290.00	94.4 AV			1.18 H	63	93.5	0.9
5	5350.00	59.7 PK	74.0	-14.3	1.18 H	63	58.7	1.0
6	5350.00	43.6 AV	54.0	-10.4	1.18 H	63	42.6	1.0
7	#10580.00	46.6 PK	68.2	-21.6	1.72 H	346	36.0	10.6
8	15870.00	53.2 PK	74.0	-20.8	1.66 H	339	41.3	11.9
9	15870.00	40.1 AV	54.0	-13.9	1.66 H	339	28.2	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	54.3 PK	74.0	-19.7	1.68 V	349	53.0	1.3
2	5150.00	44.9 AV	54.0	-9.1	1.68 V	349	43.6	1.3
3	*5290.00	108.9 PK			1.68 V	349	108.0	0.9
4	*5290.00	100.0 AV			1.68 V	349	99.1	0.9
5	5350.00	66.6 PK	74.0	-7.4	1.68 V	349	65.6	1.0
6	5350.00	53.7 AV	54.0	-0.3	1.68 V	349	52.7	1.0
7	#10580.00	46.0 PK	68.2	-22.2	1.81 V	356	35.4	10.6
8	15870.00	52.0 PK	74.0	-22.0	1.67 V	329	40.1	11.9
9	15870.00	39.5 AV	54.0	-14.5	1.67 V	329	27.6	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 802.11ax (HE80)	<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	5458.00	65.9 PK	74.0	-8.1	1.14 H	54	64.5	1.4
2	5458.00	47.3 AV	54.0	-6.7	1.14 H	54	45.9	1.4
3	#5468.00	66.1 PK	68.2	-2.1	1.14 H	54	64.7	1.4
4	*5530.00	106.1 PK			1.14 H	54	104.7	1.4
5	*5530.00	95.3 AV			1.14 H	54	93.9	1.4
6	#5823.00	50.6 PK	68.2	-17.6	1.14 H	54	48.5	2.1
7	11060.00	46.0 PK	74.0	-28.0	1.74 H	357	34.4	11.6
8	11060.00	36.7 AV	54.0	-17.3	1.74 H	357	25.1	11.6
9	#16590.00	53.8 PK	68.2	-14.4	1.69 H	339	38.1	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	5460.00	68.8 PK	74.0	-5.2	1.71 V	347	67.4	1.4
2	5460.00	53.7 AV	54.0	-0.3	1.71 V	347	52.3	1.4
3	<b>#5470.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.71 V</b>	<b>347</b>	<b>66.7</b>	<b>1.4</b>
4	*5530.00	110.6 PK			1.71 V	347	109.2	1.4
5	*5530.00	100.1 AV			1.71 V	347	98.7	1.4
6	#5728.00	52.3 PK	68.2	-15.9	1.71 V	347	50.5	1.8
7	11060.00	46.5 PK	74.0	-27.5	1.77 V	359	34.9	11.6
8	11060.00	36.9 AV	54.0	-17.1	1.77 V	359	25.3	11.6
9	#16590.00	52.4 PK	68.2	-15.8	1.64 V	351	36.7	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 802.11ax (HE80)	<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	111.4 PK			1.09 H	44	109.8	1.6
2	*5610.00	98.1 AV			1.09 H	44	96.5	1.6
3	#5725.00	57.1 PK	68.2	-11.1	1.09 H	44	55.3	1.8
4	11220.00	46.5 PK	74.0	-27.5	1.74 H	352	35.1	11.4
5	11220.00	36.9 AV	54.0	-17.1	1.74 H	352	25.5	11.4
6	#16830.00	53.4 PK	68.2	-14.8	1.64 H	341	37.6	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	*5610.00	115.5 PK			1.74 V	354	113.9	1.6
2	*5610.00	103.5 AV			1.74 V	354	101.9	1.6
3	#5725.00	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.74 V</b>	<b>354</b>	<b>66.3</b>	<b>1.8</b>
4	11220.00	46.6 PK	74.0	-27.4	1.87 V	8	35.2	11.4
5	11220.00	36.9 AV	54.0	-17.1	1.87 V	8	25.5	11.4
6	#16830.00	52.8 PK	68.2	-15.4	1.68 V	357	37.0	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 802.11ax (HE80)	<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	50.8 PK	74.0	-23.2	1.12 H	56	49.4	1.4
2	5460.00	40.8 AV	54.0	-13.2	1.12 H	56	39.4	1.4
3	#5470.00	60.0 PK	68.2	-8.2	1.12 H	56	58.6	1.4
4	*5690.00	111.9 PK			1.12 H	56	110.2	1.7
5	*5690.00	100.3 AV			1.12 H	56	98.6	1.7
6	#5850.00	59.7 PK	68.2	-8.5	1.12 H	56	57.5	2.2
7	11380.00	47.2 PK	74.0	-26.8	1.83 H	359	35.2	12.0
8	11380.00	37.4 AV	54.0	-16.6	1.83 H	359	25.4	12.0
9	#17070.00	52.6 PK	68.2	-15.6	1.72 H	325	35.2	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	5460.00	63.3 PK	74.0	-10.7	1.69 V	344	61.9	1.4
2	5460.00	49.0 AV	54.0	-5.0	1.69 V	344	47.6	1.4
3	#5470.00	65.6 PK	68.2	-2.6	1.69 V	344	64.2	1.4
4	*5690.00	115.9 PK			1.69 V	344	114.2	1.7
5	*5690.00	105.3 AV			1.69 V	344	103.6	1.7
6	#5850.00	67.9 PK	68.2	-0.3	1.69 V	344	65.7	2.2
7	11380.00	46.6 PK	74.0	-27.4	1.85 V	357	34.6	12.0
8	11380.00	37.3 AV	54.0	-16.7	1.85 V	357	25.3	12.0
9	#17070.00	52.8 PK	68.2	-15.4	1.65 V	340	35.4	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 802.11ax (HE80)	<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	#5649.57	59.5 PK	68.2	-8.7	2.49 H	230	57.9	1.6
2	*5775.00	111.6 PK			2.49 H	230	109.6	2.0
3	*5775.00	98.3 AV			2.49 H	230	96.3	2.0
4	#5934.25	52.1 PK	68.2	-16.1	2.49 H	230	50.1	2.0
5	11550.00	46.3 PK	74.0	-27.7	1.83 H	3	34.0	12.3
6	11550.00	36.7 AV	54.0	-17.3	1.83 H	3	24.4	12.3
7	#17325.00	53.2 PK	68.2	-15.0	1.67 H	344	36.7	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	#5648.42	68.1 PK	68.2	-0.1	1.59 V	206	66.5	1.6
2	*5775.00	113.8 PK			1.59 V	206	111.8	2.0
3	*5775.00	103.8 AV			1.59 V	206	101.8	2.0
4	#5925.25	56.5 PK	68.2	-11.7	1.59 V	206	54.5	2.0
5	11550.00	46.2 PK	74.0	-27.8	1.83 V	354	33.9	12.3
6	11550.00	36.7 AV	54.0	-17.3	1.83 V	354	24.4	12.3
7	#17325.00	53.2 PK	68.2	-15.0	1.72 V	328	36.7	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 802.11ax (HE160)	<b>Channel</b>	CH 50 : 5250 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	5148.00	51.8 PK	74.0	-22.2	2.41 H	235	50.5	1.3
2	5148.00	39.5 AV	54.0	-14.5	2.41 H	235	38.2	1.3
3	*5250.00	100.1 PK			2.41 H	235	99.2	0.9
4	*5250.00	91.2 AV			2.41 H	235	90.3	0.9
5	5377.00	51.6 PK	74.0	-22.4	2.41 H	235	50.4	1.2
6	5377.00	40.4 AV	54.0	-13.6	2.41 H	235	39.2	1.2
7	#10500.00	46.7 PK	68.2	-21.5	1.82 H	2	36.2	10.5
8	15750.00	53.4 PK	74.0	-20.6	1.71 H	324	41.8	11.6
9	15750.00	40.7 AV	54.0	-13.3	1.71 H	324	29.1	11.6

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.9 PK	74.0	-10.1	1.57 V	345	62.6	1.3
2	5150.00	53.6 AV	54.0	-0.4	1.57 V	345	52.3	1.3
3	*5250.00	106.6 PK			1.57 V	345	105.7	0.9
4	*5250.00	96.8 AV			1.57 V	345	95.9	0.9
5	5354.60	61.8 PK	74.0	-12.2	1.57 V	345	60.8	1.0
6	5354.60	52.6 AV	54.0	-1.4	1.57 V	345	51.6	1.0
7	5390.00	65.3 PK	74.0	-8.7	1.57 V	345	64.0	1.3
8	5390.00	51.0 AV	54.0	-3.0	1.57 V	345	49.7	1.3
9	#10500.00	46.9 PK	68.2	-21.3	1.82 V	358	36.4	10.5
10	15750.00	52.9 PK	74.0	-21.1	1.65 V	344	41.3	11.6
11	15750.00	40.3 AV	54.0	-13.7	1.65 V	344	28.7	11.6

**Remarks:**

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

<b>RF Mode</b>	TX 802.11ax (HE160)	<b>Channel</b>	CH 114 : 5570 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	5454.00	57.8 PK	74.0	-16.2	1.65 H	293	56.4	1.4
2	5454.00	45.8 AV	54.0	-8.2	1.65 H	293	44.4	1.4
3	#5470.00	58.9 PK	68.2	-9.3	1.65 H	293	57.5	1.4
4	*5570.00	101.1 PK			1.65 H	293	99.6	1.5
5	*5570.00	92.3 AV			1.65 H	293	90.8	1.5
6	#5734.00	53.4 PK	68.2	-14.8	1.65 H	293	51.5	1.9
7	11140.00	46.0 PK	74.0	-28.0	1.80 H	3	34.6	11.4
8	11140.00	36.7 AV	54.0	-17.3	1.80 H	3	25.3	11.4
9	#16710.00	53.5 PK	68.2	-14.7	1.70 H	352	37.9	15.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5455.00	70.7 PK	74.0	-3.3	1.61 V	340	69.3	1.4
2	5455.00	53.7 AV	54.0	-0.3	1.61 V	340	52.3	1.4
3	<b>#5470.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.61 V</b>	<b>340</b>	<b>66.7</b>	<b>1.4</b>
4	*5570.00	108.3 PK			1.61 V	340	106.8	1.5
5	*5570.00	97.6 AV			1.61 V	340	96.1	1.5
6	#5775.00	63.1 PK	68.2	-5.1	1.61 V	340	61.1	2.0
7	11140.00	46.1 PK	74.0	-27.9	1.80 V	344	34.7	11.4
8	11140.00	36.8 AV	54.0	-17.2	1.80 V	344	25.4	11.4
9	#16710.00	52.7 PK	68.2	-15.5	1.69 V	333	37.1	15.6

**Remarks:**

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

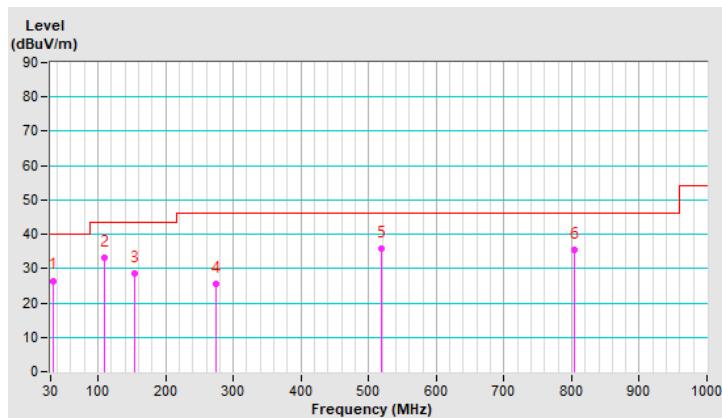
**Below 1GHz Data:**

<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 165 : 5825 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	34.30	26.5 QP	40.0	-13.5	4.00 H	360	35.3	-8.8
2	109.40	33.1 QP	43.5	-10.4	2.00 H	141	43.6	-10.5
3	153.26	28.5 QP	43.5	-15.0	2.00 H	343	35.9	-7.4
4	273.56	25.5 QP	46.0	-20.5	1.00 H	100	32.8	-7.3
5	519.41	35.9 QP	46.0	-10.1	2.00 H	10	36.5	-0.6
6	804.18	35.4 QP	46.0	-10.6	1.00 H	10	30.3	5.1

**Remarks:**

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

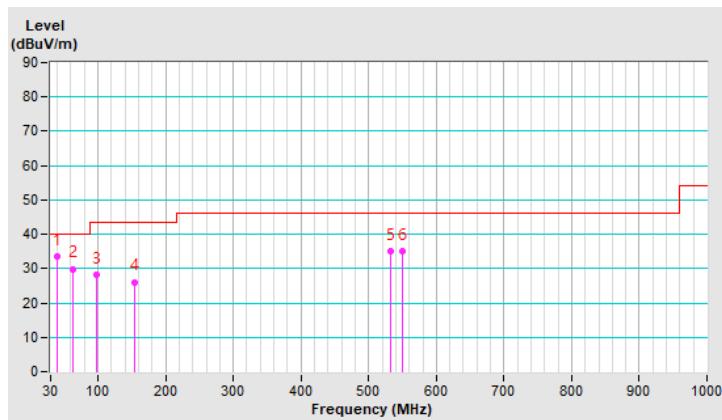


<b>RF Mode</b>	TX 802.11a	<b>Channel</b>	CH 165 : 5825 MHz
<b>FREQUENCY RANGE</b>	9kHz ~ 1GHz	<b>Detector Function</b>	Quasi-Peak (QP)

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	40.40	33.5 QP	40.0	-6.5	1.00 V	322	41.9	-8.4
2	63.41	29.9 QP	40.0	-10.1	2.00 V	333	38.7	-8.8
3	97.12	28.1 QP	43.5	-15.4	3.00 V	245	40.5	-12.4
4	153.41	26.1 QP	43.5	-17.4	1.00 V	106	33.4	-7.3
5	532.11	35.1 QP	46.0	-10.9	1.00 V	10	35.5	-0.4
6	550.10	35.0 QP	46.0	-11.0	1.00 V	39	35.1	-0.1

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 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: Nov. 25, 2020

#### 4.2.3 Test Procedure

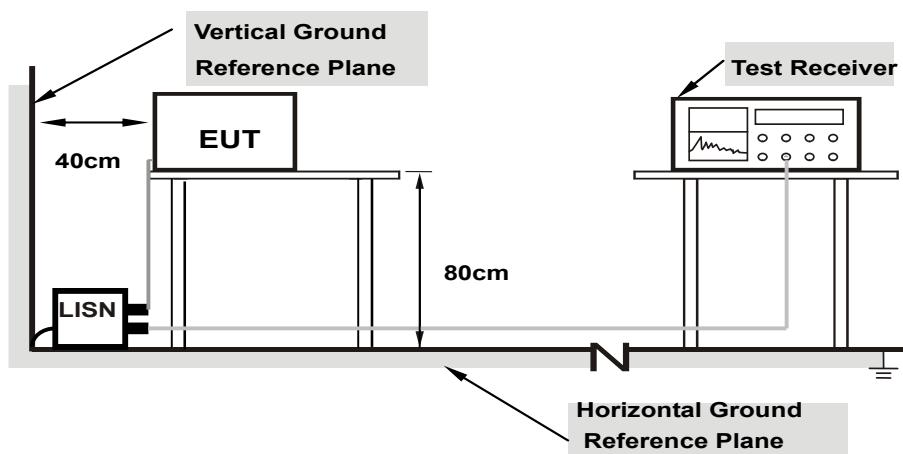
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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.

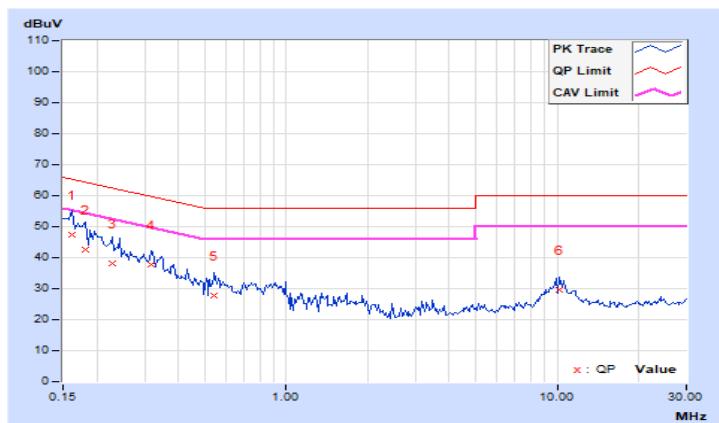
#### 4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	9.97	37.55	19.21	47.52	29.18	65.38	55.38	-17.86	-26.20
2	0.18125	9.98	32.74	15.64	42.72	25.62	64.43	54.43	-21.71	-28.81
3	0.22812	9.99	28.15	13.95	38.14	23.94	62.52	52.52	-24.38	-28.58
4	0.31797	10.01	27.77	21.48	37.78	31.49	59.76	49.76	-21.98	-18.27
5	0.54453	10.03	17.61	9.44	27.64	19.47	56.00	46.00	-28.36	-26.53
6	10.22266	10.74	18.90	13.36	29.64	24.10	60.00	50.00	-30.36	-25.90

**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

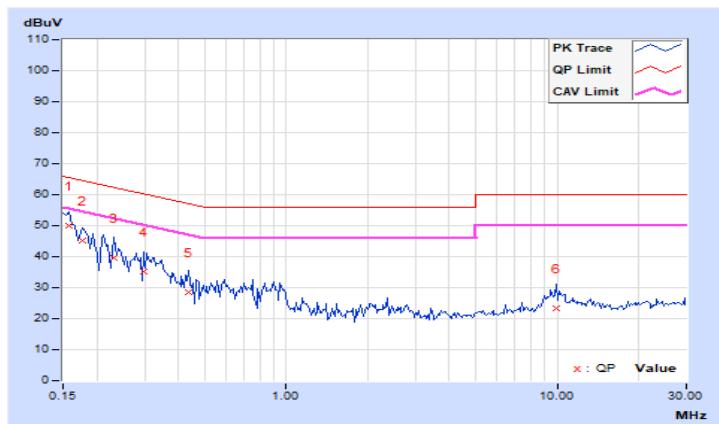


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	<b>0.15781</b>	<b>9.95</b>	<b>39.97</b>	<b>22.62</b>	<b>49.92</b>	<b>32.57</b>	<b>65.58</b>	<b>55.58</b>	<b>-15.66</b>	<b>-23.01</b>
2	0.17734	9.96	35.33	17.66	45.29	27.62	64.61	54.61	-19.32	-26.99
3	0.23203	9.98	29.48	15.33	39.46	25.31	62.38	52.38	-22.92	-27.07
4	0.29844	9.99	25.25	11.85	35.24	21.84	60.29	50.29	-25.05	-28.45
5	0.43516	10.01	18.46	9.03	28.47	19.04	57.15	47.15	-28.68	-28.11
6	9.89063	10.61	12.76	7.09	23.37	17.70	60.00	50.00	-36.63	-32.30

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

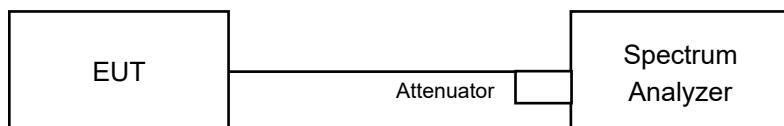
Array Gain =  $5 \log(N_{\text{ANT}}/N_{\text{SS}})$  dB or 3 dB, whichever is less for 20-MHz channel widths with  $N_{\text{ANT}} \geq 5$ .

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

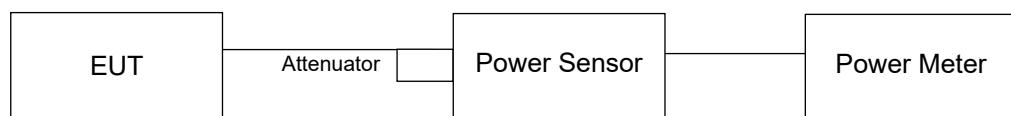
#### 4.3.2 Test Setup

##### FOR POWER OUTPUT MEASUREMENT

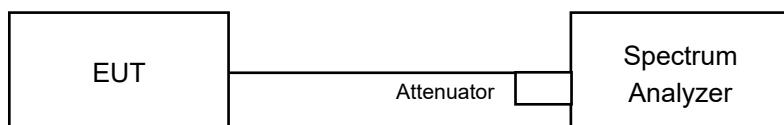
For channel straddling 5250MHz & channel straddling 5725MHz:



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:

###### 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:

###### 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	22.82	22.00	22.65	22.60	715.962	28.55	30	Pass
40	5200	22.58	22.19	22.55	22.46	702.796	28.47	30	Pass
48	5240	22.44	22.17	22.46	22.65	700.479	28.45	30	Pass
52	5260	16.65	16.76	16.82	16.98	191.635	22.82	24	Pass
60	5300	16.72	16.91	17.08	16.57	192.525	22.84	24	Pass
64	5320	16.89	17.13	16.87	16.59	194.751	22.89	24	Pass
100	5500	16.46	17.40	16.34	16.85	190.683	22.80	24	Pass
116	5580	16.11	17.81	16.50	16.91	194.986	22.90	24	Pass
140	5700	16.15	17.05	17.79	16.30	194.684	22.89	24	Pass
*144 (U-NII-2C Band)	5720	16.23	16.56	17.67	16.44	189.8	22.78	22.92	Pass
*144 (U-NII-3 Band)	5720	9.90	10.44	11.40	10.15	44.994	16.53	30	Pass
149	5745	23.17	24.55	24.38	23.51	991.139	29.96	30	Pass
157	5785	23.06	24.79	24.07	23.55	985.337	29.94	30	Pass
165	5825	23.47	24.65	23.82	23.75	992.202	29.97	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	21.7	24.36 > 24
60	5300	21.66	24.35 > 24
64	5320	21.63	24.35 > 24
100	5500	21.35	24.29 > 24
116	5580	21.48	24.32 > 24
140	5700	21.56	24.33 > 24
144 (U-NII-2C Band)	5720	15.57	22.92 < 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	21.96	21.43	21.92	21.40	589.667	27.71	30	Pass
40	5200	22.76	22.61	22.75	22.74	747.485	28.74	30	Pass
48	5240	22.81	22.63	23.14	22.19	745.857	28.73	30	Pass
52	5260	16.81	16.91	16.89	16.47	190.29	22.79	24	Pass
60	5300	16.72	17.05	16.72	16.48	189.141	22.77	24	Pass
64	5320	16.75	17.21	16.69	16.41	190.335	22.80	24	Pass
100	5500	16.07	17.60	17.03	15.88	187.193	22.72	24	Pass
116	5580	16.18	17.69	16.82	15.86	186.876	22.72	24	Pass
140	5700	16.15	17.11	17.56	15.86	188.178	22.75	24	Pass
*144 (U-NII-2C Band)	5720	14.07	15.02	15.64	14.67	123.248	20.91	23.02	Pass
*144 (U-NII-3 Band)	5720	8.61	9.55	10.32	9.44	35.832	15.54	30	Pass
149	5745	23.04	24.07	24.42	22.85	926.089	29.67	30	Pass
157	5785	23.04	24.30	24.13	23.12	934.463	29.71	30	Pass
165	5825	23.49	24.36	23.60	23.04	926.714	29.67	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	21.88	24.4 > 24
60	5300	21.78	24.38 > 24
64	5320	21.83	24.39 > 24
100	5500	21.89	24.4 > 24
116	5580	21.97	24.41 > 24
140	5700	21.87	24.39 > 24
144 (U-NII-2C Band)	5720	15.95	23.02 < 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	20.11	20.56	20.60	21.03	457.908	26.61	30	Pass
46	5230	23.46	24.14	24.03	23.01	934.154	29.70	30	Pass
54	5270	17.29	18.01	18.06	17.12	232.317	23.66	24	Pass
62	5310	16.46	17.29	17.22	16.31	193.318	22.86	24	Pass
102	5510	18.08	17.30	17.33	17.97	234.709	23.71	24	Pass
110	5550	17.07	18.23	18.54	16.75	236.225	23.73	24	Pass
134	5670	17.41	18.02	18.01	17.29	235.289	23.72	24	Pass
*142 (U-NII-2C Band)	5710	16.83	17.46	17.67	16.61	208.207	23.18	24	Pass
*142 (U-NII-3 Band)	5710	6.64	7.38	7.89	6.74	20.956	13.21	30	Pass
151	5755	23.28	24.54	23.98	22.68	932.648	29.70	30	Pass
159	5795	23.41	24.41	23.73	22.90	926.371	29.67	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	41.41	27.17 > 24
62	5310	41.39	27.16 > 24
102	5510	41.44	27.17 > 24
110	5550	41.36	27.16 > 24
134	5670	41.34	27.16 > 24
142 (U-NII-2C Band)	5710	35.7	26.52 > 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	20.75	20.95	21.17	21.20	506.046	27.04	30	Pass
58	5290	16.22	17.40	17.19	15.80	187.212	22.72	24	Pass
106	5530	16.71	18.48	18.32	16.80	233.134	23.68	24	Pass
122	5610	17.70	18.11	18.10	16.75	235.479	23.72	24	Pass
*138 (U-NII-2C Band)	5690	17.15	17.89	17.98	16.74	223.41	23.49	24	Pass
*138 (U-NII-3 Band)	5690	2.98	3.62	4.08	3.06	8.869	9.48	30	Pass
155	5775	23.43	23.30	23.07	23.49	860.214	29.35	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	82.3	30.15 > 24
106	5530	82.22	30.14 > 24
122	5610	82.26	30.15 > 24
138 (U-NII-2C Band)	5690	76.13	29.81 > 24

**802.11ac (VHT160)**

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				
*50 (U-NII-1 Band)	5250	13.30	13.98	14.01	12.20	88.156	19.45	30	Pass
*50 (U-NII-2A Band)	5250	14.48	14.01	13.05	13.18	94.212	19.74	24	Pass
114	5570	17.19	17.93	18.20	16.27	222.881	23.48	24	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 total power.

**Note: For U-NII-2A 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)
50 (U-NII-2A Band)	5250	83.36	30.2 > 24
114	5570	167.55	33.24 > 24

**802.11ax (HE20)**

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	22.22	21.71	22.19	21.68	627.785	27.98	30	Pass
40	5200	22.85	22.63	22.80	22.74	754.462	28.78	30	Pass
48	5240	22.94	22.85	23.24	22.36	772.591	28.88	30	Pass
52	5260	16.92	17.02	17.01	16.62	195.708	22.92	24	Pass
60	5300	16.89	17.21	16.83	16.54	194.743	22.89	24	Pass
64	5320	16.94	17.32	16.79	16.41	194.887	22.90	24	Pass
100	5500	16.28	17.68	17.25	16.01	194.067	22.88	24	Pass
116	5580	16.35	17.83	16.99	15.94	193.093	22.86	24	Pass
140	5700	16.25	17.22	17.71	15.98	193.541	22.87	24	Pass
*144 (U-NII-2C Band)	5720	14.38	15.25	15.88	15.13	132.222	21.21	23.02	Pass
*144 (U-NII-3 Band)	5720	8.86	9.80	10.55	9.67	37.86	15.78	30	Pass
149	5745	23.27	24.36	24.68	23.15	985.525	29.94	30	Pass
157	5785	23.26	24.52	24.35	23.41	986.526	29.94	30	Pass
165	5825	23.70	24.57	23.88	23.26	977.02	29.90	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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)
52	5260	21.88	24.4 > 24
60	5300	21.78	24.38 > 24
64	5320	21.83	24.39 > 24
100	5500	21.89	24.4 > 24
116	5580	21.97	24.41 > 24
140	5700	21.87	24.39 > 24
144 (U-NII-2C Band)	5720	15.95	23.02 < 24

**802.11ax (HE40)**

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	20.32	20.85	20.84	21.28	484.881	26.86	30	Pass
46	5230	23.74	24.38	24.25	23.25	988.171	29.95	30	Pass
54	5270	17.52	18.25	18.35	17.33	245.795	23.91	24	Pass
62	5310	16.75	17.51	17.43	16.56	204.304	23.10	24	Pass
102	5510	18.29	17.51	17.57	18.21	247.186	23.93	24	Pass
110	5550	17.36	18.44	18.76	17.01	249.67	23.97	24	Pass
134	5670	17.64	18.27	18.29	17.49	248.777	23.96	24	Pass
*142 (U-NII-2C Band)	5710	16.98	17.85	18.12	16.86	224.234	23.51	24	Pass
*142 (U-NII-3 Band)	5710	6.86	7.85	8.28	6.95	22.633	13.55	30	Pass
151	5755	23.56	24.80	24.22	22.97	991.375	29.96	30	Pass
159	5795	23.69	24.65	24.00	23.11	981.46	29.92	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	41.41	27.17 > 24
62	5310	41.39	27.16 > 24
102	5510	41.44	27.17 > 24
110	5550	41.36	27.16 > 24
134	5670	41.34	27.16 > 24
142 (U-NII-2C Band)	5710	35.7	26.52 > 24

**802.11ax (HE80)**

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	20.39	21.18	21.39	21.47	518.618	27.15	30	Pass
58	5290	16.52	17.61	17.44	16.05	198.285	22.97	24	Pass
106	5530	16.99	18.74	18.59	17.01	247.332	23.93	24	Pass
122	5610	17.97	18.33	18.35	17.03	249.596	23.97	24	Pass
*138 (U-NII-2C Band)	5690	17.46	18.07	18.16	17.05	236.002	23.73	24	Pass
*138 (U-NII-3 Band)	5690	3.38	3.93	4.33	3.34	9.517	9.79	30	Pass
155	5775	23.39	23.49	23.32	23.59	884.973	29.47	30	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

**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	82.3	30.15 > 24
106	5530	82.22	30.14 > 24
122	5610	82.26	30.15 > 24
138 (U-NII-2C Band)	5690	76.13	29.81 > 24

**802.11ax (HE160)**

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				
*50 (U-NII-1 Band)	5250	13.37	14.40	14.39	12.51	94.572	19.76	30	Pass
*50 (U-NII-2A Band)	5250	14.53	14.19	13.39	13.45	98.58	19.94	24	Pass
114	5570	17.46	18.23	18.49	16.52	237.752	23.76	24	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 total power.

**Note: For U-NII-2A 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)
50 (U-NII-2A Band)	5250	83.36	30.2 > 24
114	5570	167.55	33.24 > 24

**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	21.96	21.43	21.92	21.40	589.667	27.71	28.93	Pass
40	5200	22.76	22.61	22.75	22.74	747.485	28.74	28.93	Pass
48	5240	22.81	22.63	23.14	22.19	745.857	28.73	28.93	Pass
52	5260	16.81	16.91	16.89	16.47	190.29	22.79	23.02	Pass
60	5300	16.72	17.05	16.72	16.48	189.141	22.77	23.02	Pass
64	5320	16.75	17.21	16.69	16.41	190.335	22.80	23.02	Pass
100	5500	16.07	17.60	17.03	15.88	187.193	22.72	22.91	Pass
116	5580	16.18	17.69	16.82	15.86	186.876	22.72	22.91	Pass
140	5700	16.15	17.11	17.56	15.86	188.178	22.75	22.91	Pass
*144 (U-NII-2C Band)	5720	14.07	15.02	15.64	14.67	123.248	20.91	21.93	Pass
*144 (U-NII-3 Band)	5720	8.61	9.55	10.32	9.44	35.832	15.54	28.68	Pass
149	5745	21.83	22.85	23.21	21.66	701.124	28.46	28.68	Pass
157	5785	21.81	23.08	22.95	21.96	709.219	28.51	28.68	Pass
165	5825	22.27	23.14	22.36	21.88	701.075	28.46	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to  $30-(7.07-6) = 28.93$  dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to  $30-(7.32-6) = 28.68$  dBm.

**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	21.88	24.4 > 24
60	5300	21.78	24.38 > 24
64	5320	21.83	24.39 > 24
100	5500	21.89	24.4 > 24
116	5580	21.97	24.41 > 24
140	5700	21.87	24.39 > 24
144 (U-NII-2C Band)	5720	15.95	23.02 < 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	20.11	20.56	20.60	21.03	457.908	26.61	28.93	Pass
46	5230	22.45	23.11	23.05	22.06	742.968	28.71	28.93	Pass
54	5270	16.51	17.21	17.28	16.34	193.882	22.88	23.02	Pass
62	5310	16.46	17.29	17.22	16.31	193.318	22.86	23.02	Pass
102	5510	17.06	16.32	16.35	16.94	186.254	22.70	22.91	Pass
110	5550	16.11	17.20	17.46	15.81	187.138	22.72	22.91	Pass
134	5670	16.44	17.01	16.98	16.33	187.132	22.72	22.91	Pass
*142 (U-NII-2C Band)	5710	15.62	16.55	16.70	15.53	164.162	22.15	22.91	Pass
*142 (U-NII-3 Band)	5710	5.46	6.46	6.94	5.60	16.515	12.18	28.68	Pass
151	5755	22.08	23.29	22.80	21.52	707.192	28.50	28.68	Pass
159	5795	22.22	23.24	22.45	21.78	704.041	28.48	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.07-6) = 28.93dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.32-6) = 28.68dBm.

**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)
54	5270	41.41	27.17 > 24
62	5310	41.39	27.16 > 24
102	5510	41.44	27.17 > 24
110	5550	41.36	27.16 > 24
134	5670	41.34	27.16 > 24
142 (U-NII-2C Band)	5710	35.7	26.52 > 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	20.75	20.95	21.17	21.20	506.046	27.04	28.93	Pass
58	5290	16.22	17.40	17.19	15.80	187.212	22.72	23.02	Pass
106	5530	15.74	17.45	17.34	15.85	185.747	22.69	22.91	Pass
122	5610	16.72	17.08	17.12	15.80	187.582	22.73	22.91	Pass
*138 (U-NII-2C Band)	5690	15.96	16.63	16.69	15.63	168.697	22.27	22.91	Pass
*138 (U-NII-3 Band)	5690	2.02	2.50	2.97	1.98	6.93	8.41	28.68	Pass
155	5775	22.56	22.43	22.20	22.62	704.055	28.48	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.07-6) = 28.93dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.32-6) = 28.68dBm.

**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)
58	5290	82.3	30.15 > 24
106	5530	82.22	30.14 > 24
122	5610	82.26	30.15 > 24
138 (U-NII-2C Band)	5690	76.13	29.81 > 24

**802.11ac (VHT160)**

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				
*50 (U-NII-1 Band)	5250	13.05	14.04	14.03	12.64	89.193	19.50	28.93	Pass
*50 (U-NII-2A Band)	5250	14.17	13.87	13.33	13.36	93.705	19.72	23.02	Pass
114	5570	16.28	17.01	17.30	15.39	180.993	22.58	22.91	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 total power.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.07-6) = 28.93dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".

**Note: For U-NII-2A 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)
50 (U-NII-2A Band)	5250	83.36	30.2 > 24
114	5570	167.55	33.24 > 24

**802.11ax (HE20)**

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	22.22	21.71	22.19	21.68	627.785	27.98	28.93	Pass
40	5200	22.85	22.63	22.80	22.74	754.462	28.78	28.93	Pass
48	5240	22.94	22.85	23.24	22.36	772.591	28.88	28.93	Pass
52	5260	16.95	17.02	17.01	16.62	196.049	22.92	23.02	Pass
60	5300	16.89	17.21	16.83	16.54	194.743	22.89	23.02	Pass
64	5320	16.94	17.32	16.79	16.41	194.887	22.90	23.02	Pass
100	5500	16.28	17.68	17.25	16.01	194.067	22.88	22.91	Pass
116	5580	16.35	17.83	16.99	15.94	193.093	22.86	22.91	Pass
140	5700	16.25	17.22	17.71	15.98	193.541	22.87	22.91	Pass
*144 (U-NII-2C Band)	5720	14.38	15.25	15.88	15.13	132.222	21.21	21.93	Pass
*144 (U-NII-3 Band)	5720	8.86	9.80	10.55	9.67	37.86	15.78	28.68	Pass
149	5745	22.02	23.05	23.38	21.85	731.937	28.64	28.68	Pass
157	5785	21.98	23.21	23.05	22.07	730.074	28.63	28.68	Pass
165	5825	22.42	23.30	22.61	22.03	730.356	28.64	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to  $30-(7.07-6) = 28.93$  dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to  $30-(7.32-6) = 28.68$  dBm.

**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	21.88	24.4 > 24
60	5300	21.78	24.38 > 24
64	5320	21.83	24.39 > 24
100	5500	21.89	24.4 > 24
116	5580	21.97	24.41 > 24
140	5700	21.87	24.39 > 24
144 (U-NII-2C Band)	5720	15.95	23.02 < 24

**802.11ax (HE40)**

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	20.32	20.85	20.84	21.28	484.881	26.86	28.93	Pass
46	5230	22.71	23.28	23.20	22.21	774.723	28.89	28.93	Pass
54	5270	16.53	17.23	17.31	16.38	195.101	22.90	23.02	Pass
62	5310	16.51	17.28	17.18	16.33	193.421	22.87	23.02	Pass
102	5510	17.09	16.35	16.28	17.01	187.016	22.72	22.91	Pass
110	5550	16.15	17.18	17.48	15.90	188.33	22.75	22.91	Pass
134	5670	16.41	17.05	17.07	16.28	187.846	22.74	22.91	Pass
*142 (U-NII-2C Band)	5710	15.94	16.73	16.91	15.85	173.912	22.40	22.91	Pass
*142 (U-NII-3 Band)	5710	5.79	6.79	6.99	5.87	17.432	12.41	28.68	Pass
151	5755	22.28	23.42	22.88	21.68	730.15	28.63	28.68	Pass
159	5795	22.39	23.35	22.71	21.83	728.695	28.63	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.07-6) = 28.93dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to 30-(7.32-6) = 28.68dBm.

**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	41.41	27.17 > 24
62	5310	41.39	27.16 > 24
102	5510	41.44	27.17 > 24
110	5550	41.36	27.16 > 24
134	5670	41.34	27.16 > 24
142 (U-NII-2C Band)	5710	35.7	26.52 > 24

**802.11ax (HE80)**

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	20.39	21.18	21.39	21.47	518.618	27.15	28.93	Pass
58	5290	16.52	17.61	17.44	16.05	198.285	22.97	23.02	Pass
106	5530	15.96	17.68	17.52	15.99	194.272	22.88	22.91	Pass
122	5610	16.87	17.20	17.24	15.98	193.716	22.87	22.91	
*138 (U-NII-2C Band)	5690	16.37	16.89	16.95	15.86	180.309	22.56	22.91	Pass
*138 (U-NII-3 Band)	5690	2.17	2.72	3.15	2.08	7.199	8.57	28.68	Pass
155	5775	22.70	22.54	22.37	22.76	727.065	28.62	28.68	Pass

Note: \* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to  $30 - (7.07 - 6) = 28.93$  dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".
4. For UNII-3: The directional gain = 7.32 dBi > 6 dBi, so the power limit shall be reduced to  $30 - (7.32 - 6) = 28.68$  dBm.

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

Power Limit = $11 \text{ dBm} + 10 \log_2 B$ < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.3	30.15 > 24
106	5530	82.22	30.14 > 24
122	5610	82.26	30.15 > 24
138 (U-NII-2C Band)	5690	76.13	29.81 > 24

**802.11ax (HE160)**

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				
*50 (U-NII-1 Band)	5250	13.43	14.14	14.15	12.37	91.231	19.60	28.93	Pass
*50 (U-NII-2A Band)	5250	14.39	14.02	13.26	13.32	95.376	19.79	23.02	Pass
114	5570	16.48	17.21	17.47	15.58	189.053	22.77	22.91	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 total power.

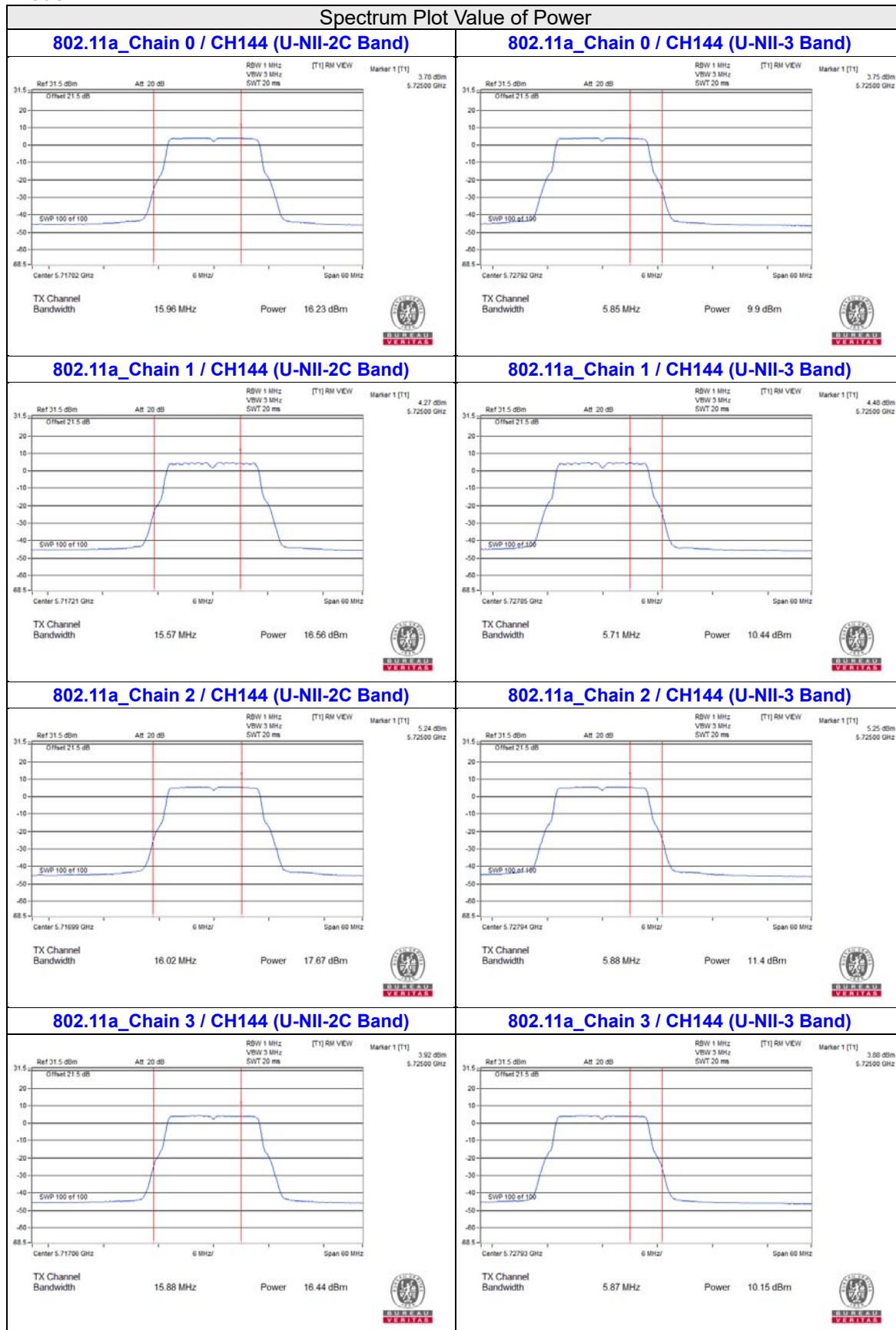
1. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the power limit shall be reduced to  $30 - (7.07 - 6) = 28.93$  dBm.
2. For UNII-2A: The directional gain = 6.98dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(6.98-6)".
3. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the power limit shall be reduced to "Determined Conducted Limit-(7.09-6)".

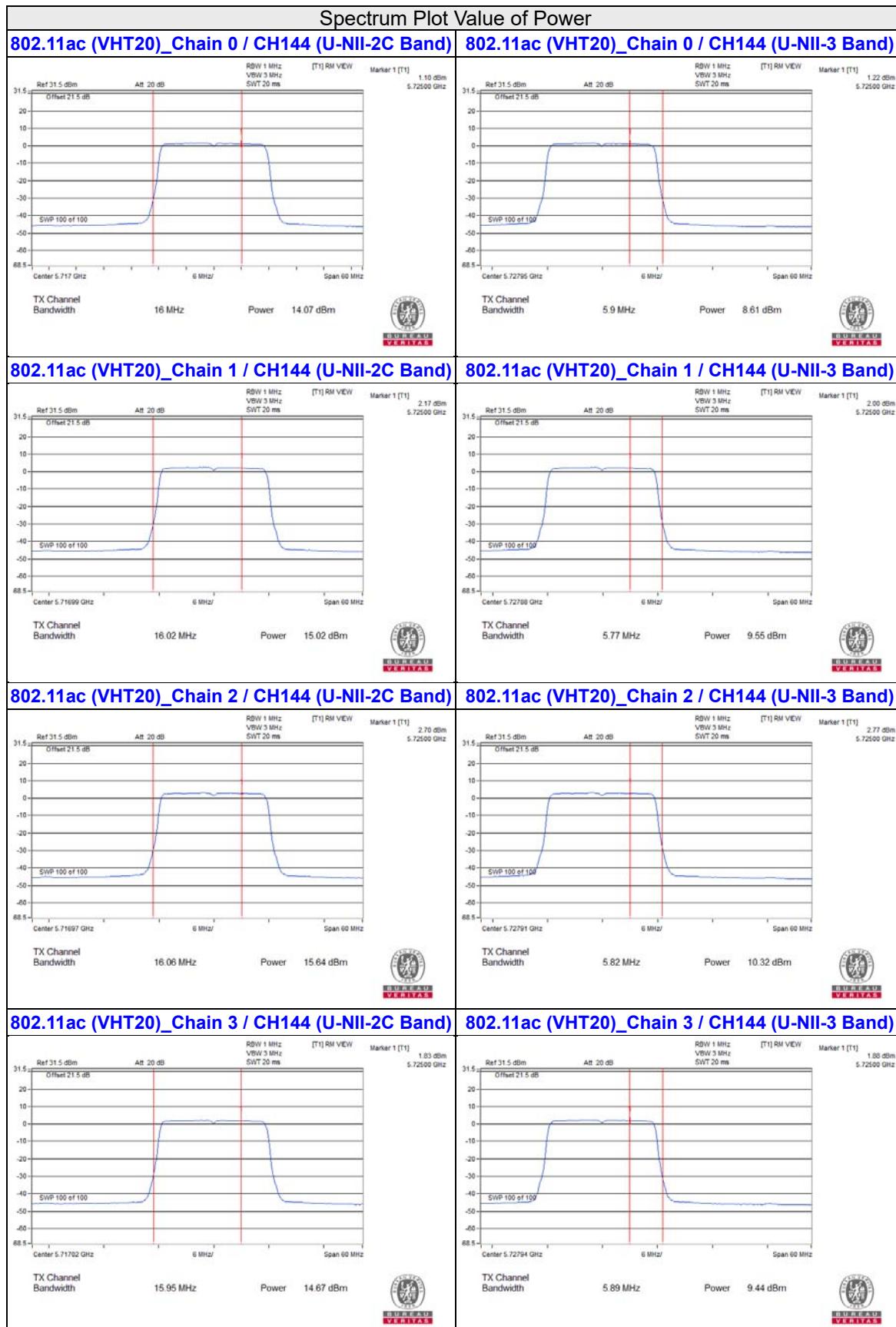
**Note: For U-NII-2A Band output power limitation is determined based on 26dBc bandwidth.**

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)
50 (U-NII-2A Band)	5250	83.36	30.2 > 24
114	5570	167.55	33.24 > 24

## For channel straddling 5725MHz of Power

### CDD Mode

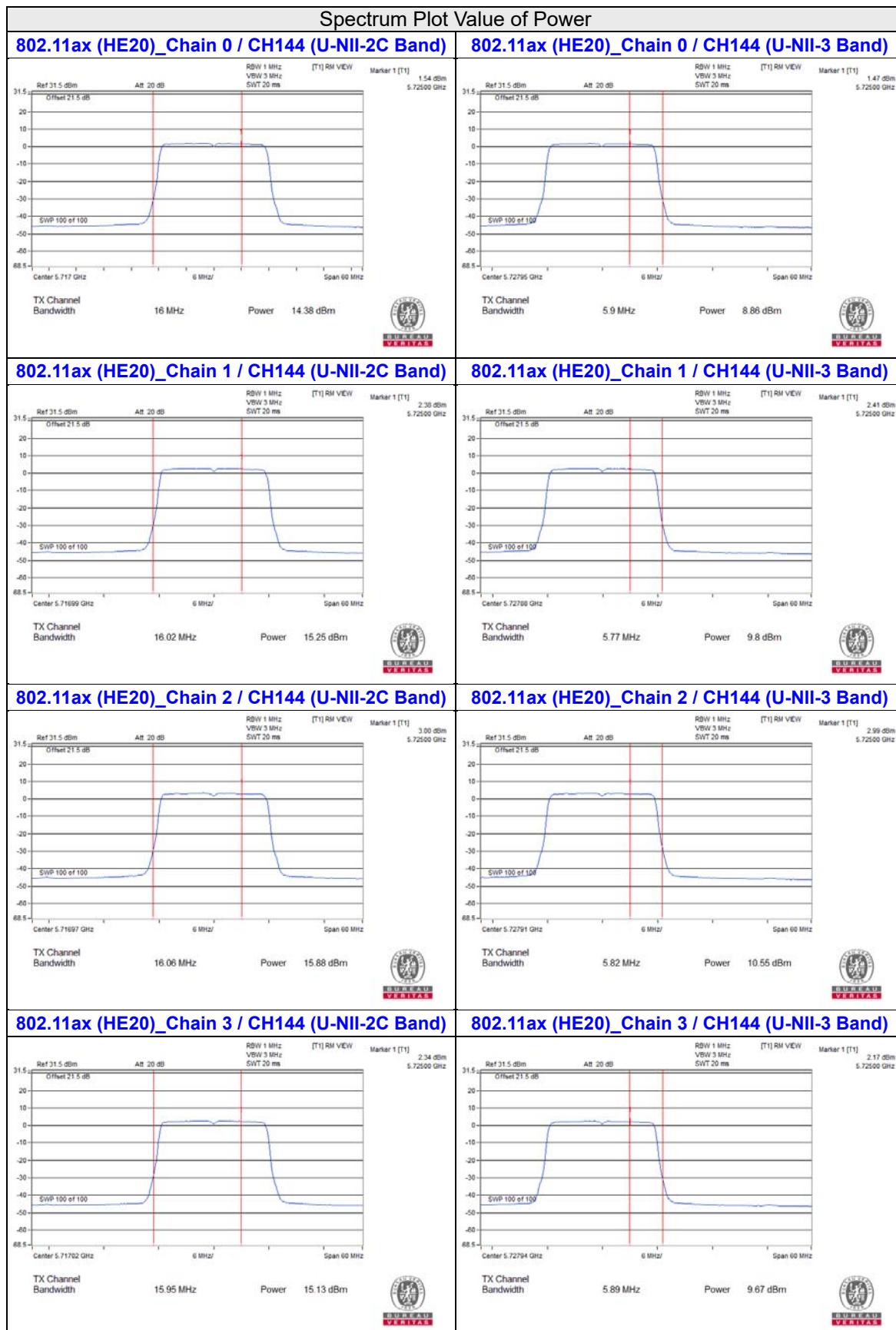


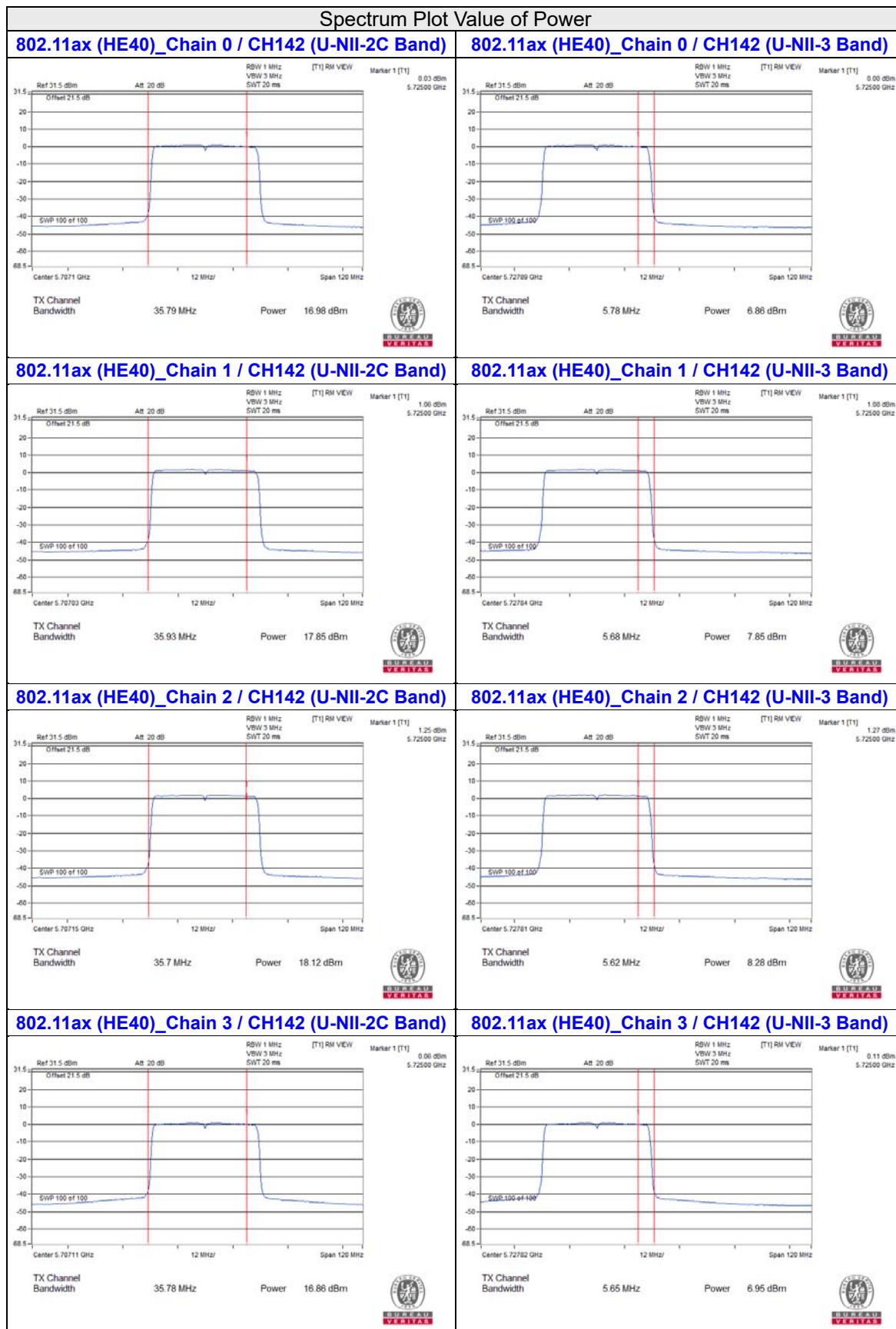




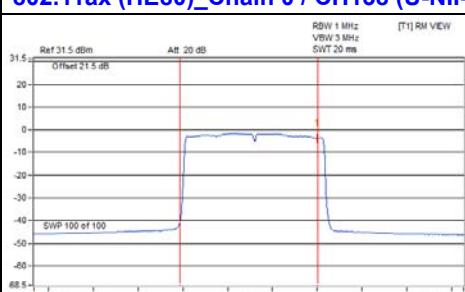
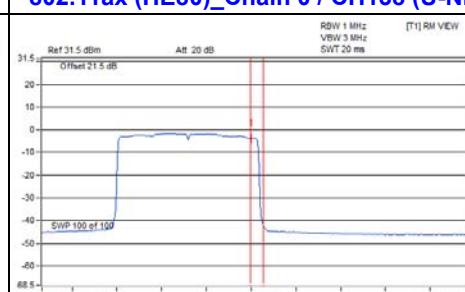
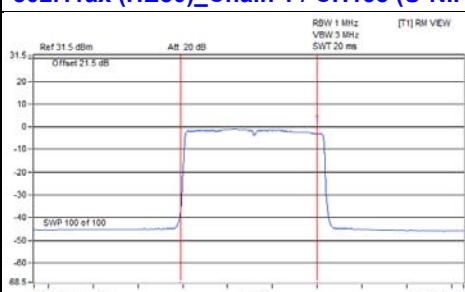
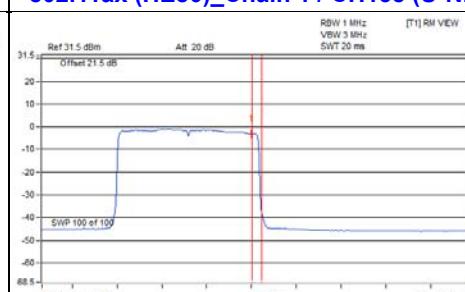
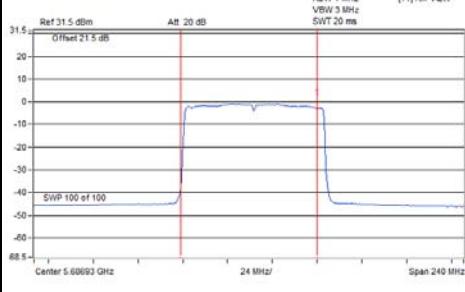
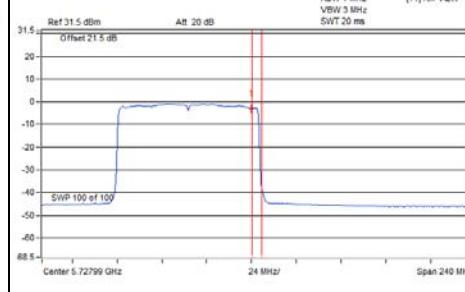
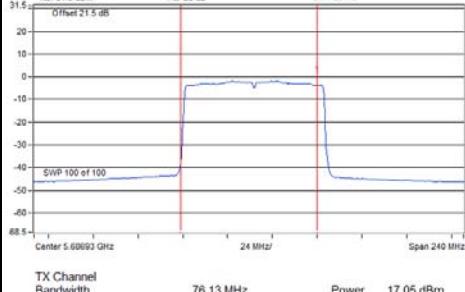
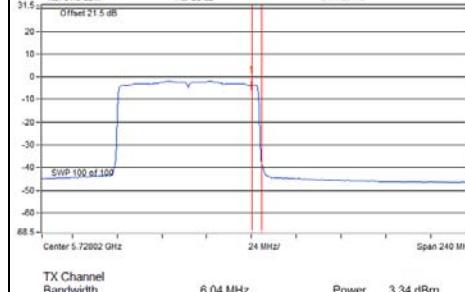






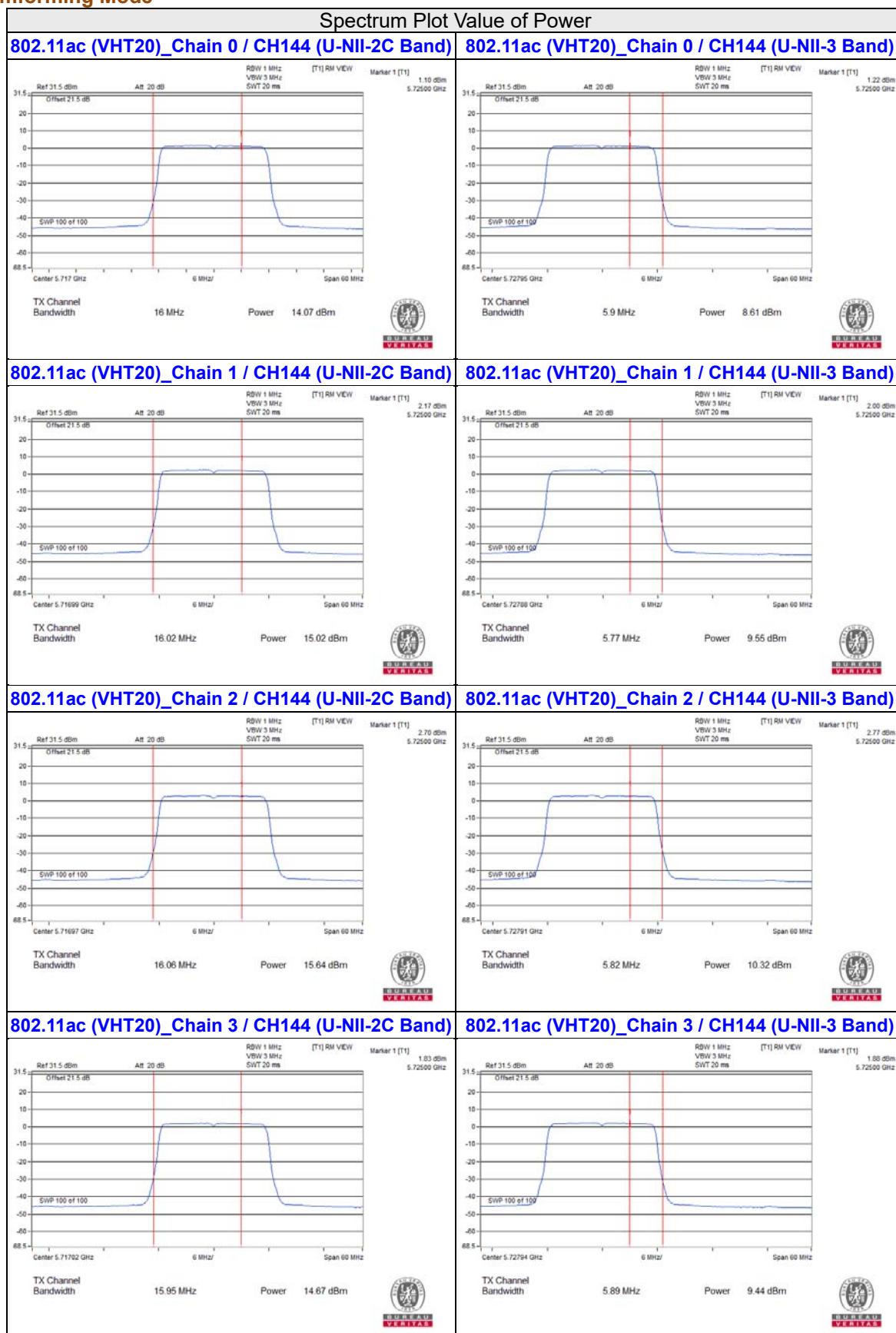


### Spectrum Plot Value of Power

802.11ax (HE80)_Chain 0 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 0 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.37 MHz Power: 17.46 dBm</p>	 <p>TX Channel Bandwidth: 6.36 MHz Power: 3.38 dBm</p>
802.11ax (HE80)_Chain 1 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 1 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.24 MHz Power: 18.07 dBm</p>	 <p>TX Channel Bandwidth: 6.08 MHz Power: 3.93 dBm</p>
802.11ax (HE80)_Chain 2 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 2 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.13 MHz Power: 18.16 dBm</p>	 <p>TX Channel Bandwidth: 5.98 MHz Power: 4.33 dBm</p>
802.11ax (HE80)_Chain 3 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 3 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.13 MHz Power: 17.05 dBm</p>	 <p>TX Channel Bandwidth: 6.04 MHz Power: 3.34 dBm</p>



## Beamforming Mode

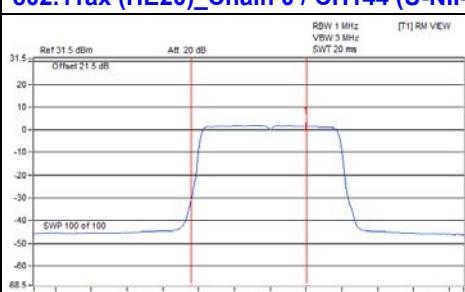
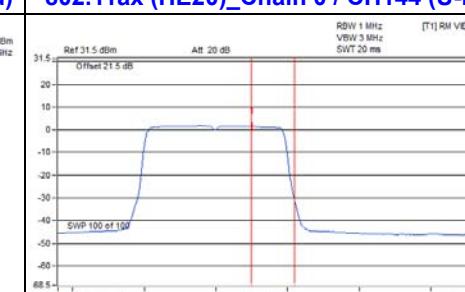
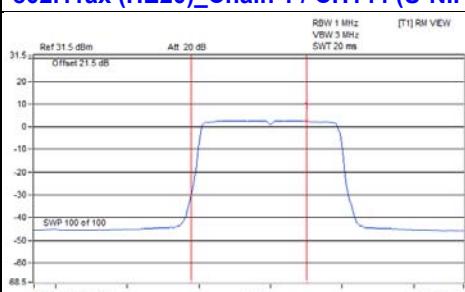
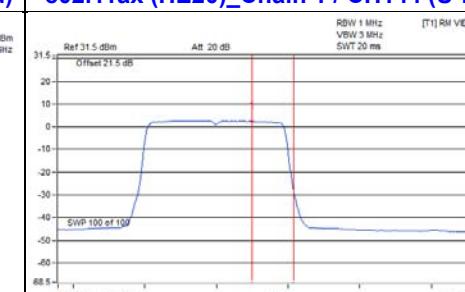
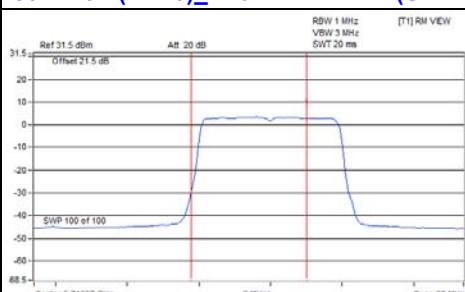
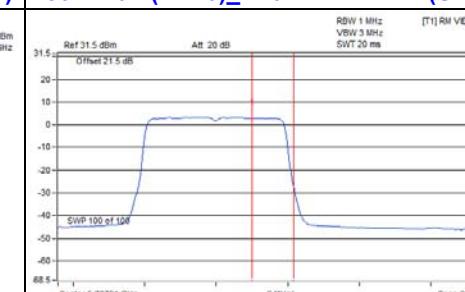
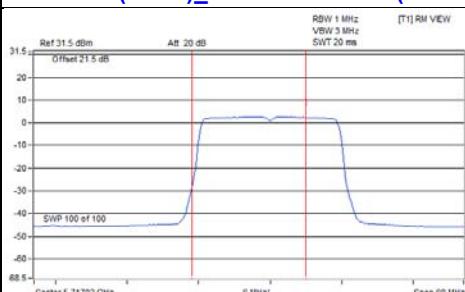
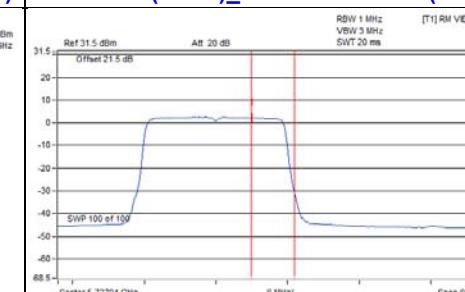


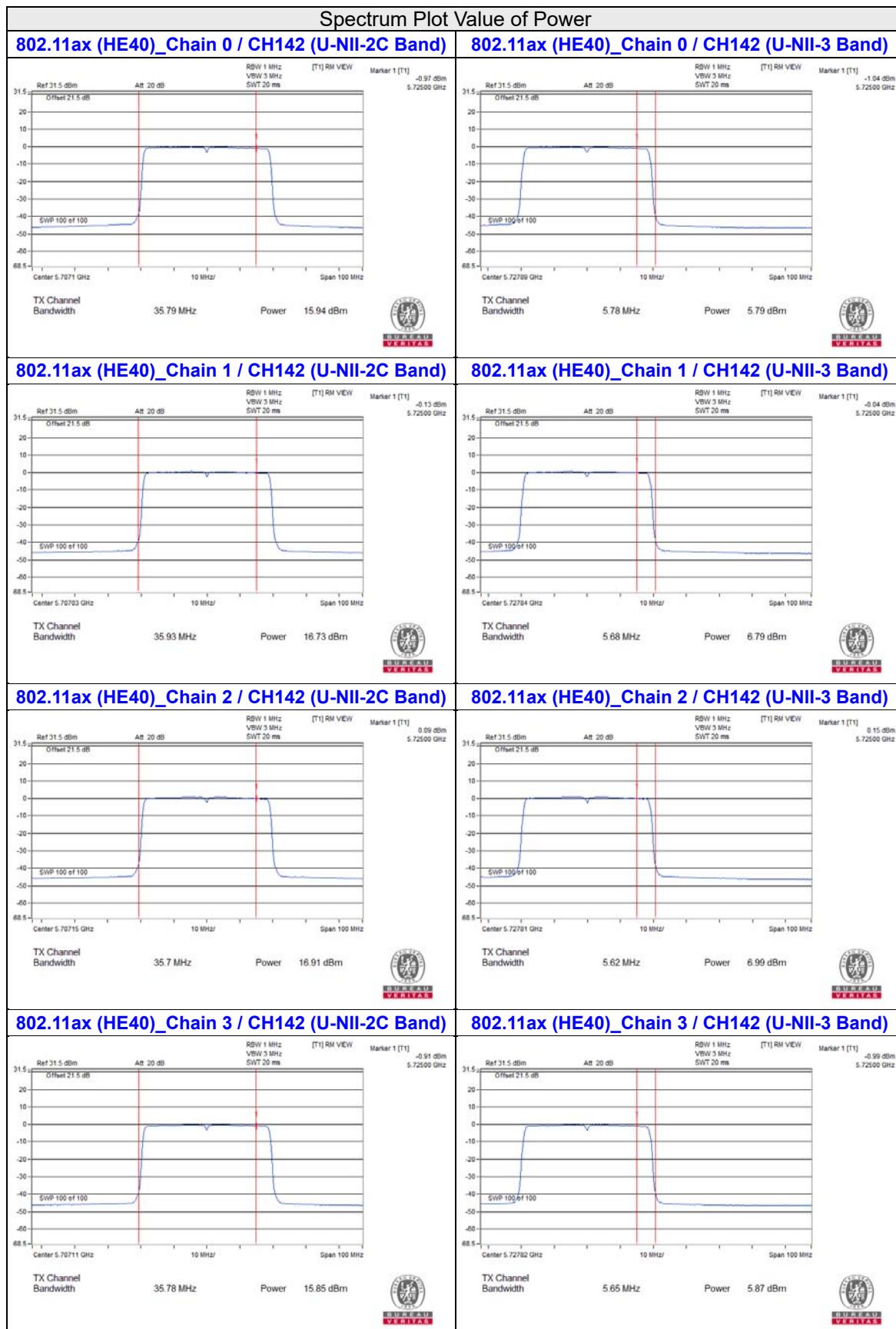




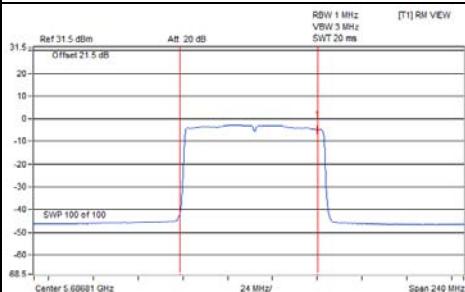
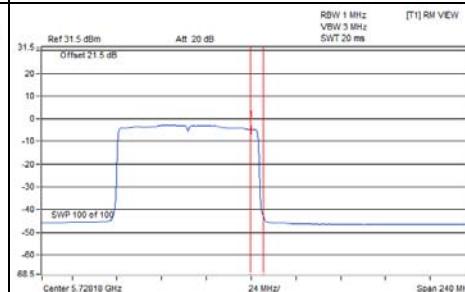
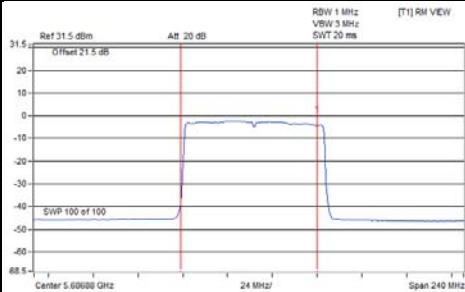
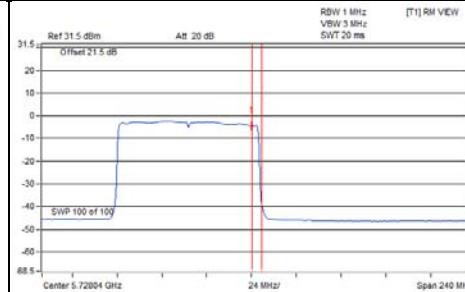
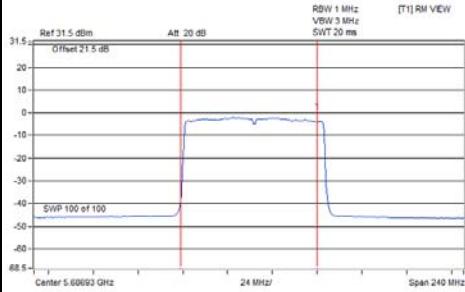
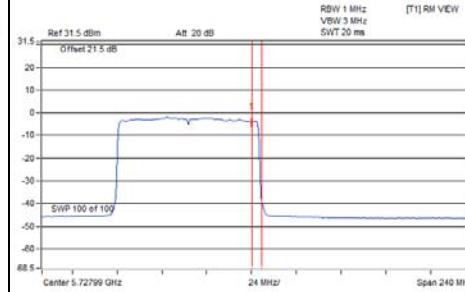
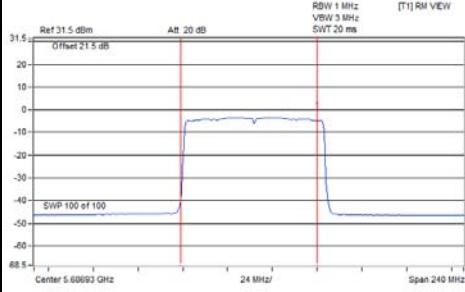
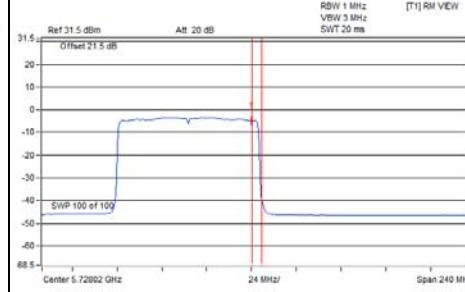


### Spectrum Plot Value of Power

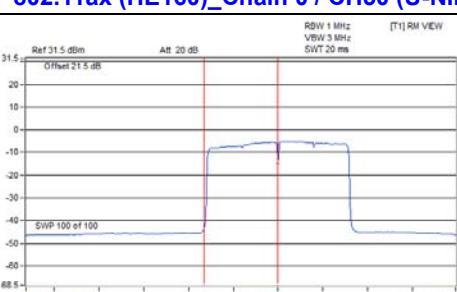
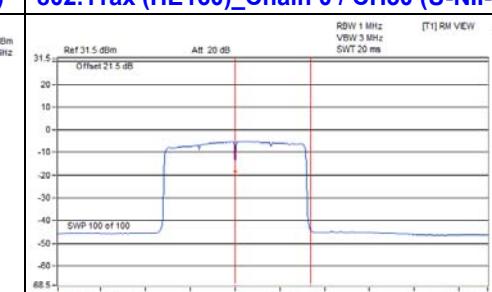
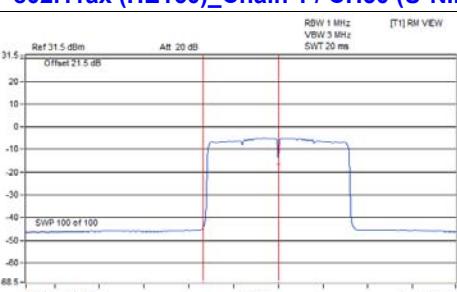
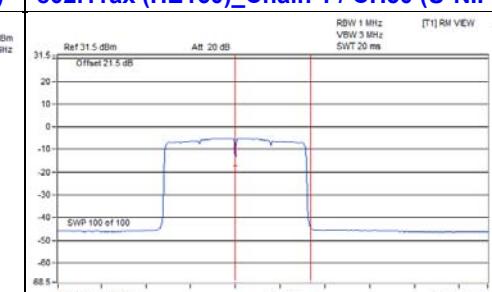
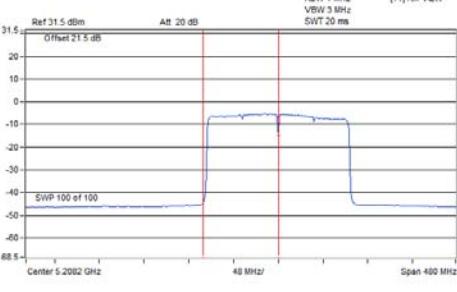
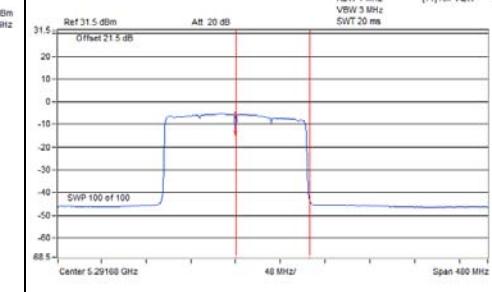
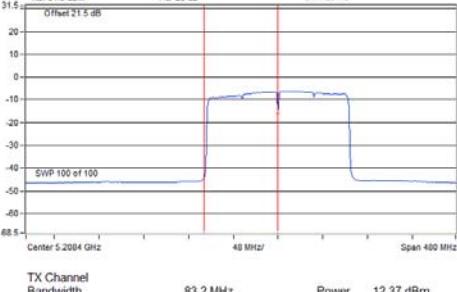
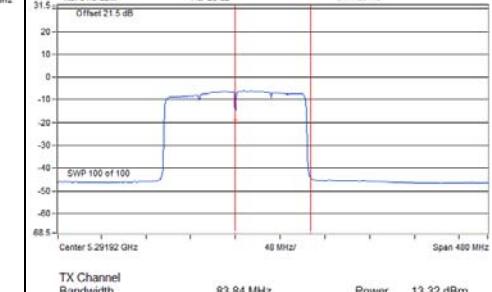
<b>802.11ax (HE20)_Chain 0 / CH144 (U-NII-2C Band)</b>	<b>802.11ax (HE20)_Chain 0 / CH144 (U-NII-3 Band)</b>
 <p>TX Channel Bandwidth    16 MHz    Power 14.38 dBm</p>	 <p>TX Channel Bandwidth    5.9 MHz    Power 8.86 dBm</p>
<b>802.11ax (HE20)_Chain 1 / CH144 (U-NII-2C Band)</b>	<b>802.11ax (HE20)_Chain 1 / CH144 (U-NII-3 Band)</b>
 <p>TX Channel Bandwidth    16.02 MHz    Power 15.25 dBm</p>	 <p>TX Channel Bandwidth    5.77 MHz    Power 9.8 dBm</p>
<b>802.11ax (HE20)_Chain 2 / CH144 (U-NII-2C Band)</b>	<b>802.11ax (HE20)_Chain 2 / CH144 (U-NII-3 Band)</b>
 <p>TX Channel Bandwidth    16.06 MHz    Power 15.88 dBm</p>	 <p>TX Channel Bandwidth    5.82 MHz    Power 10.55 dBm</p>
<b>802.11ax (HE20)_Chain 3 / CH144 (U-NII-2C Band)</b>	<b>802.11ax (HE20)_Chain 3 / CH144 (U-NII-3 Band)</b>
 <p>TX Channel Bandwidth    15.95 MHz    Power 15.13 dBm</p>	 <p>TX Channel Bandwidth    5.89 MHz    Power 9.67 dBm</p>



### Spectrum Plot Value of Power

802.11ax (HE80)_Chain 0 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 0 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.37 MHz Power: 16.37 dBm</p>	 <p>TX Channel Bandwidth: 6.36 MHz Power: 2.17 dBm</p>
802.11ax (HE80)_Chain 1 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 1 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.24 MHz Power: 16.89 dBm</p>	 <p>TX Channel Bandwidth: 6.08 MHz Power: 2.72 dBm</p>
802.11ax (HE80)_Chain 2 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 2 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.13 MHz Power: 16.95 dBm</p>	 <p>TX Channel Bandwidth: 5.98 MHz Power: 3.15 dBm</p>
802.11ax (HE80)_Chain 3 / CH138 (U-NII-2C Band)	802.11ax (HE80)_Chain 3 / CH138 (U-NII-3 Band)
 <p>TX Channel Bandwidth: 78.13 MHz Power: 15.86 dBm</p>	 <p>TX Channel Bandwidth: 6.04 MHz Power: 2.08 dBm</p>

### Spectrum Plot Value of Power

<b>802.11ax (HE160)_Chain 0 / CH50 (U-NII-1 Band)</b>	<b>802.11ax (HE160)_Chain 0 / CH50 (U-NII-2A Band)</b>
 <p>TX Channel Bandwidth: 83.16 MHz Power: 13.43 dBm</p>	 <p>TX Channel Bandwidth: 84.2 MHz Power: 14.39 dBm</p>
<b>802.11ax (HE160)_Chain 1 / CH50 (U-NII-1 Band)</b>	<b>802.11ax (HE160)_Chain 1 / CH50 (U-NII-2A Band)</b>
 <p>TX Channel Bandwidth: 83.8 MHz Power: 14.14 dBm</p>	 <p>TX Channel Bandwidth: 83.83 MHz Power: 14.02 dBm</p>
<b>802.11ax (HE160)_Chain 2 / CH50 (U-NII-1 Band)</b>	<b>802.11ax (HE160)_Chain 2 / CH50 (U-NII-2A Band)</b>
 <p>TX Channel Bandwidth: 83.59 MHz Power: 14.15 dBm</p>	 <p>TX Channel Bandwidth: 83.36 MHz Power: 13.26 dBm</p>
<b>802.11ax (HE160)_Chain 3 / CH50 (U-NII-1 Band)</b>	<b>802.11ax (HE160)_Chain 3 / CH50 (U-NII-2A Band)</b>
 <p>TX Channel Bandwidth: 83.2 MHz Power: 12.37 dBm</p>	 <p>TX Channel Bandwidth: 83.84 MHz Power: 13.32 dBm</p>

## 26dB OCCUPIED BANDWIDTH

### 802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
36	5180	39.71	40.05	43.27	39.92
40	5200	27.49	43.58	41.96	39.8
48	5240	39.88	29.72	40.31	39.79
52	5260	21.81	21.83	21.7	21.7
60	5300	21.66	21.81	21.85	21.66
64	5320	21.74	21.92	21.82	21.63
100	5500	21.79	21.35	21.79	21.72
116	5580	21.8	21.48	21.75	21.57
140	5700	21.78	21.56	21.82	21.66
144 (U-NII-2C Band)	5720	15.96	15.57	16.02	15.88
144 (U-NII-3 Band)	5720	5.85	5.71	5.88	5.87
149	5745	41.68	27.08	29.78	41.43
157	5785	40.92	27.28	41.3	43.43
165	5825	44.76	29.45	42.12	46.23

### 802.11ax (HE20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
36	5180	21.94	21.92	22.14	21.82
40	5200	23.23	39.58	42.51	33.47
48	5240	27.66	33.68	42.62	24.62
52	5260	21.88	21.96	21.95	22.03
60	5300	21.9	21.84	21.92	21.78
64	5320	21.87	21.87	21.83	21.93
100	5500	21.95	21.89	22.08	21.92
116	5580	21.99	21.97	22.06	21.97
140	5700	21.91	21.87	22.1	21.92
144 (U-NII-2C Band)	5720	16	16.02	16.06	15.95
144 (U-NII-3 Band)	5720	5.9	5.77	5.82	5.89
149	5745	46.47	41.69	41.6	47.35
157	5785	45.05	41.76	45.98	47.76
165	5825	49.64	43.26	48.57	51.58

### 802.11ax (HE40)

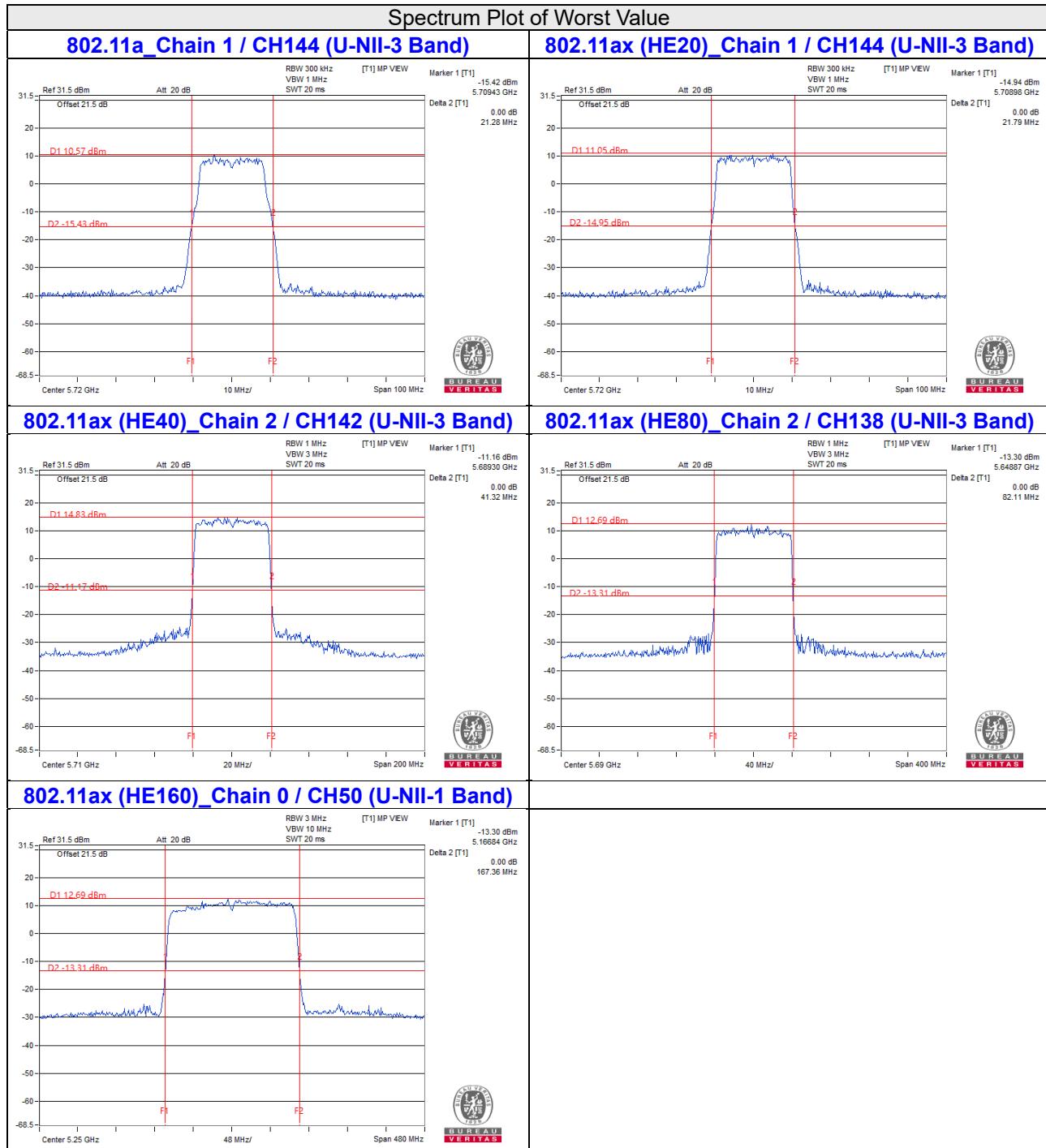
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
38	5190	41.63	41.61	41.38	57.48
46	5230	65.08	70.79	70.2	74.58
54	5270	41.72	41.61	41.41	41.49
62	5310	41.58	41.85	41.43	41.39
102	5510	41.56	41.48	41.44	41.53
110	5550	41.36	41.69	41.53	41.51
134	5670	41.34	41.75	41.52	41.53
142 (U-NII-2C Band)	5710	35.79	35.93	35.7	35.78
142 (U-NII-3 Band)	5710	5.78	5.68	5.62	5.65
151	5755	77.33	80.94	70.2	83.15
159	5795	78.26	83.69	84.48	95.31

### 802.11ax (HE80)

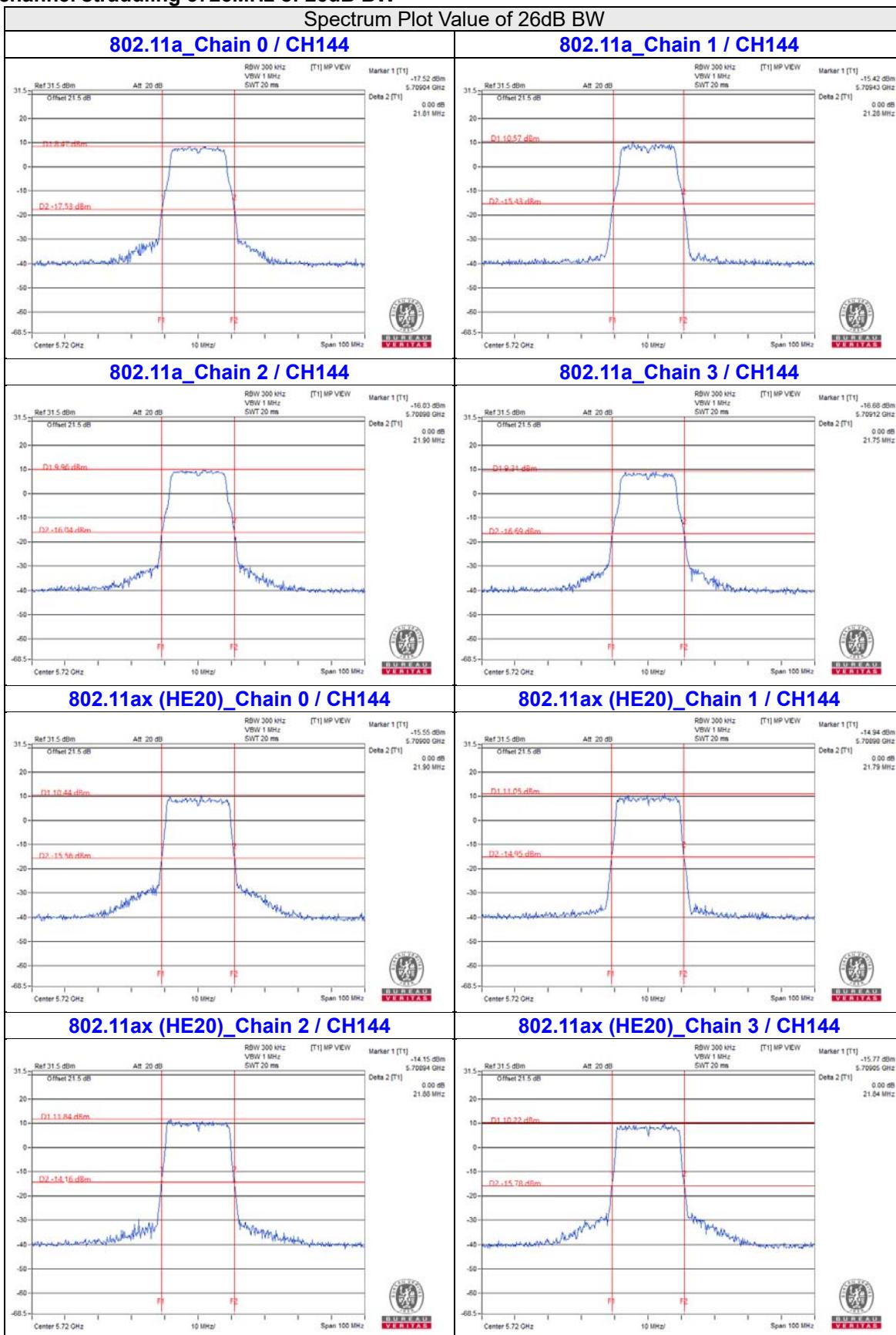
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
42	5210	82.51	82.41	82.37	82.57
58	5290	82.56	82.39	82.32	82.3
106	5530	82.49	82.34	82.22	82.4
122	5610	82.6	82.34	82.52	82.26
138 (U-NII-2C Band)	5690	76.37	76.24	76.13	76.13
138 (U-NII-3 Band)	5690	6.36	6.08	5.98	6.04
155	5775	96.81	83.07	96.6	176.46

### 802.11ax (HE160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
50 (U-NII-1 Band)	5250	83.16	83.8	83.59	83.2
50 (U-NII-2A Band)	5250	84.2	83.83	83.36	83.84
114	5570	168.67	167.98	167.55	168.97

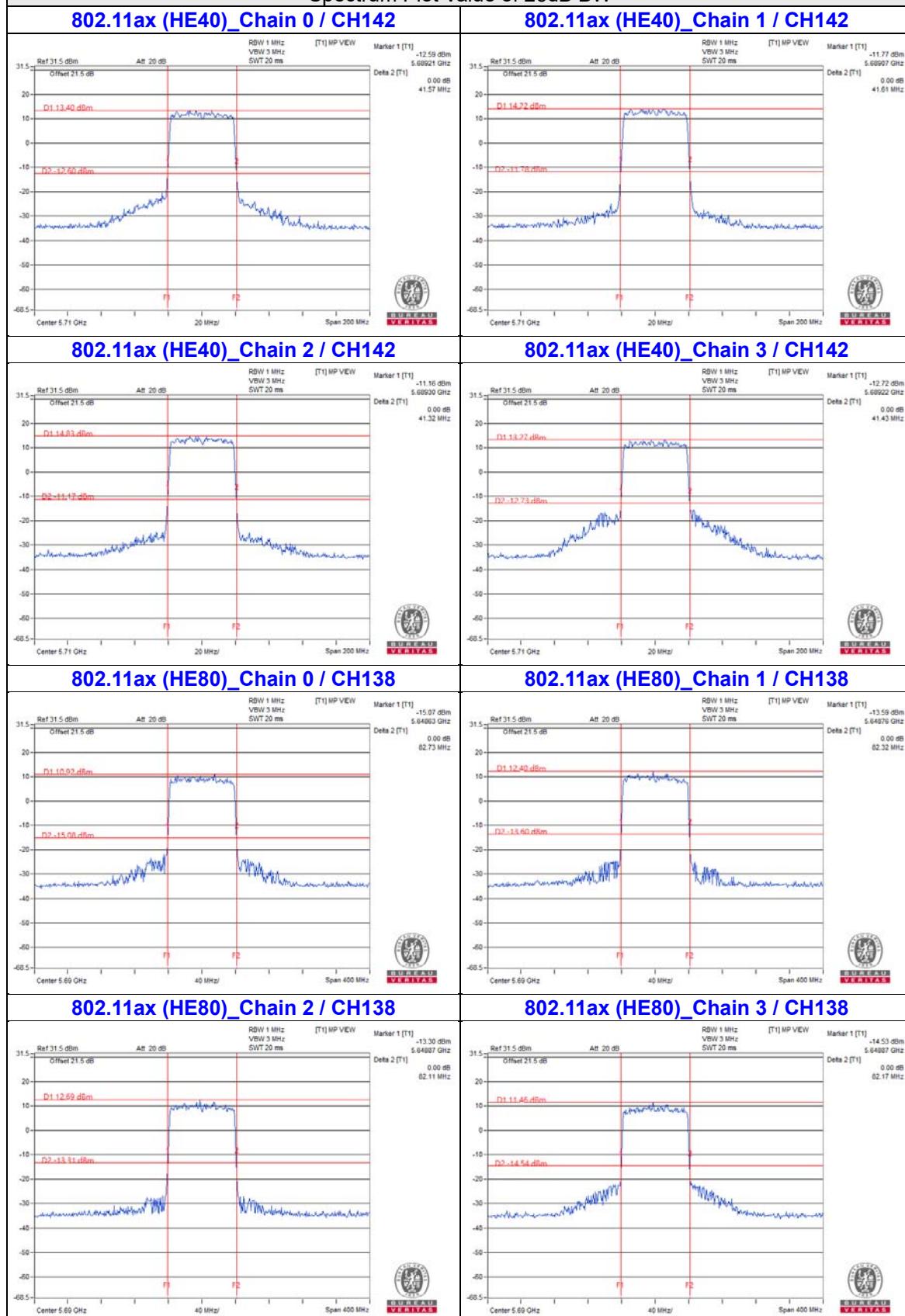

**Note:**

- For CH144 (U-NII-3) = Delta 2 - (5725MHz - Marker 1)
- For CH142 (U-NII-3) = Delta 2 - (5725MHz - Marker 1)
- For CH138 (U-NII-3) = Delta 2 - (5725MHz - Marker 1)
- For CH50 (U-NII-1) = 5250MHz - Marker 1

**For channel straddling 5725MHz of 26dB BW**

**Note:**

For CH144 (U-NII-2C) = 5725MHz - Marker 1

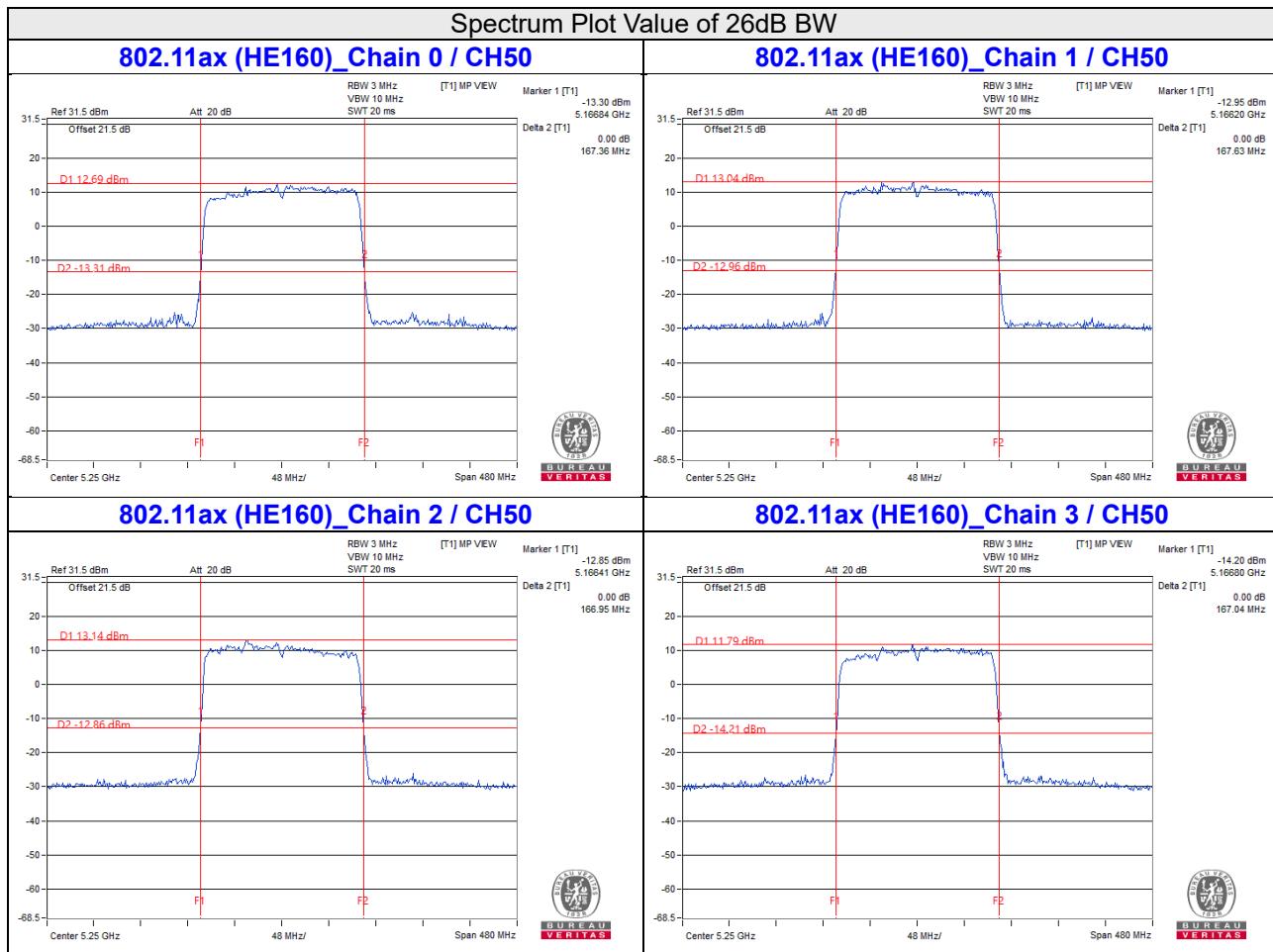
### Spectrum Plot Value of 26dB BW



**Note:**

For CH142 (U-NII-2C) = 5725MHz - Marker 1  
 For CH138 (U-NII-2C) = 5725MHz - Marker 1

**For channel straddling 5250MHz of 26dB BW**



**Note:** For CH50 (U-NII-2A) = Delta 2 – (5250MHz - Marker 1)

## 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

##### CDD Mode

###### 802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	17.28	17.52	18.48	17.52
40	5200	17.28	19.32	17.88	17.52
48	5240	17.4	17.4	17.64	17.64
52	5260	17.04	17.04	17.04	16.92
60	5300	17.04	17.04	17.04	16.92
64	5320	17.04	17.04	17.04	16.92
100	5500	17.04	17.04	17.04	16.92
116	5580	17.04	16.92	17.04	16.92
140	5700	17.04	17.04	16.92	16.92
144 (U-NII-2C Band)	5720	13.52	13.52	13.64	13.52
144 (U-NII-3 Band)	5720	3.52	3.52	3.52	3.4
149	5745	18.12	17.04	17.52	17.88
157	5785	17.76	17.28	17.88	18.72
165	5825	22.56	17.28	17.88	26.28

###### 802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.2	19.08	19.08	19.08
40	5200	19.32	19.32	19.44	19.32
48	5240	19.32	19.32	19.44	19.32
52	5260	19.08	19.08	19.2	19.08
60	5300	19.32	19.08	19.2	19.08
64	5320	19.2	19.08	19.08	19.08
100	5500	19.32	19.08	19.2	19.08
116	5580	19.2	19.08	19.2	19.08
140	5700	19.2	19.2	19.2	19.08
144 (U-NII-2C Band)	5720	14.72	14.72	14.72	14.6
144 (U-NII-3 Band)	5720	4.48	4.48	4.48	4.48
149	5745	20.28	19.32	19.44	20.04
157	5785	19.8	19.44	19.92	22.92
165	5825	24	19.44	19.92	28.44

**802.11ax (HE40)**

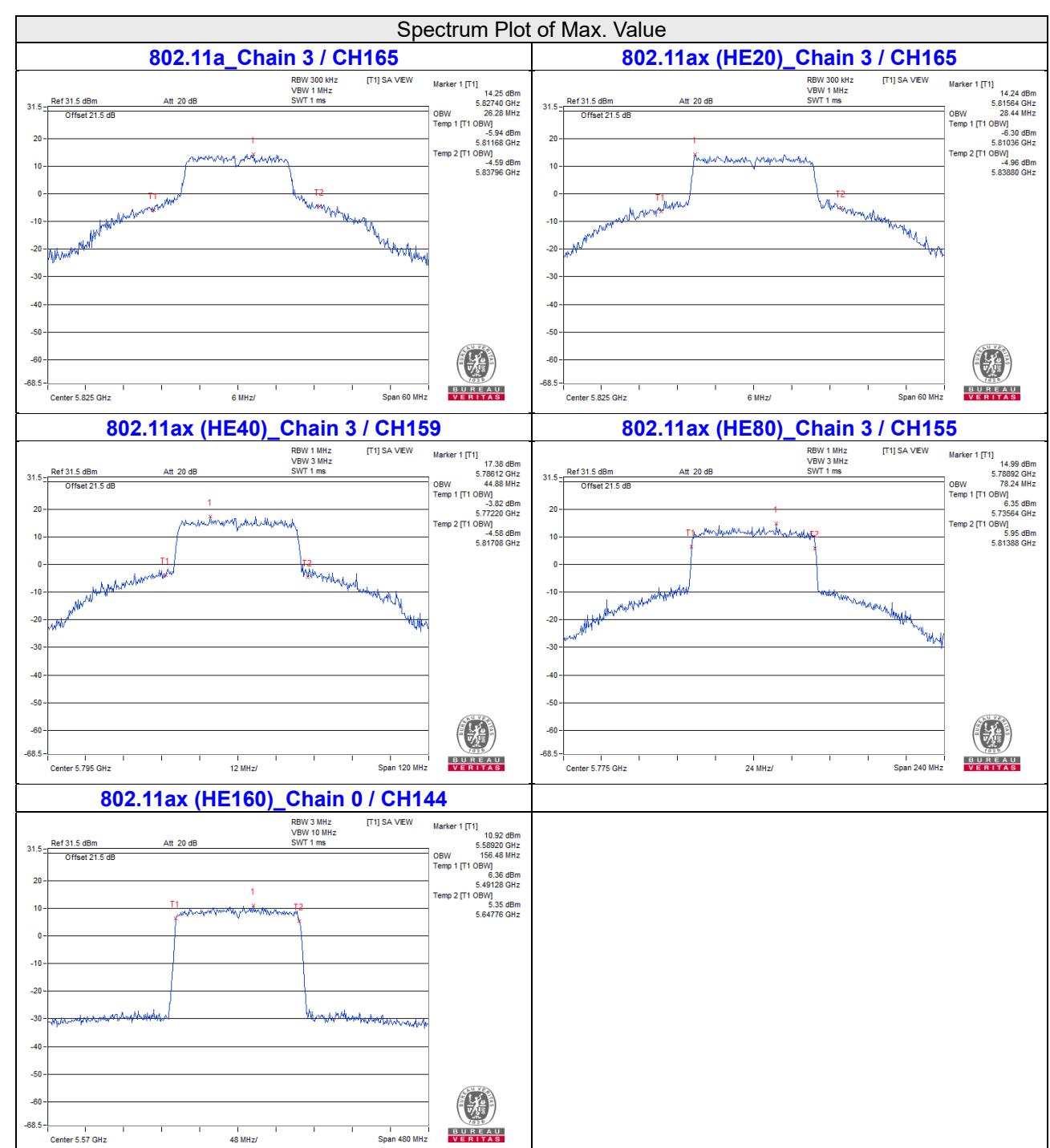
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.92	37.92	37.92	37.92
46	5230	38.16	38.64	38.16	38.4
54	5270	37.68	37.68	37.68	37.92
62	5310	37.92	38.16	37.68	38.16
102	5510	37.92	37.68	37.92	37.68
110	5550	36.72	37.92	37.92	37.68
134	5670	36.72	37.68	38.16	37.92
142 (U-NII-2C Band)	5710	34.2	34.2	33.96	33.96
142 (U-NII-3 Band)	5710	3.72	3.72	3.72	3.72
151	5755	38.88	38.88	38.64	39.12
159	5795	38.64	39.36	38.88	44.88

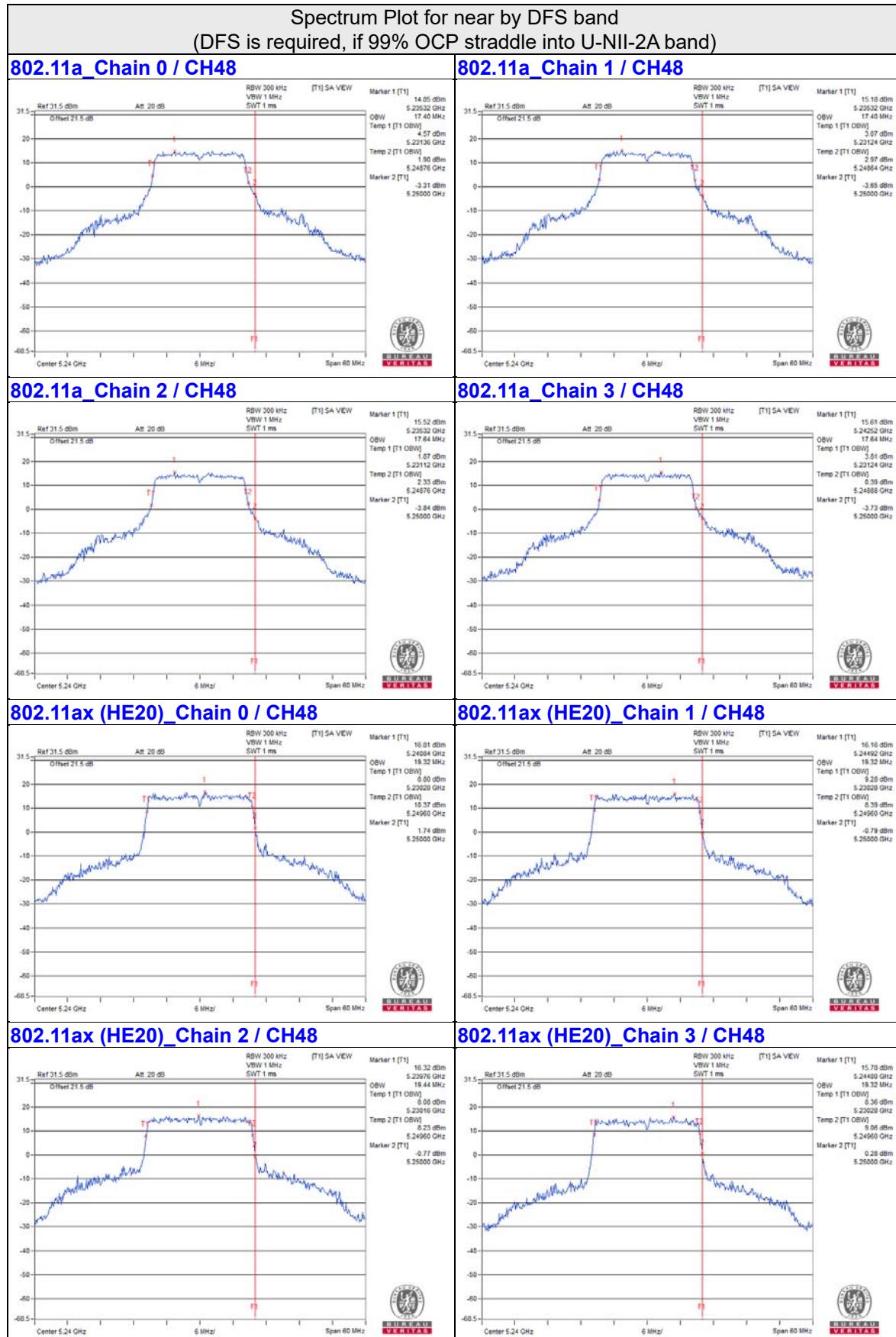
**802.11ax (HE80)**

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.28	77.28
58	5290	76.8	77.28	77.28	77.28
106	5530	77.28	77.28	77.28	77.28
122	5610	77.28	77.28	77.28	77.28
138 (U-NII-2C Band)	5690	73.88	73.88	73.88	73.4
138 (U-NII-3 Band)	5690	3.4	3.4	3.4	3.4
155	5775	77.76	77.28	77.28	78.24

**802.11ax (HE160)**

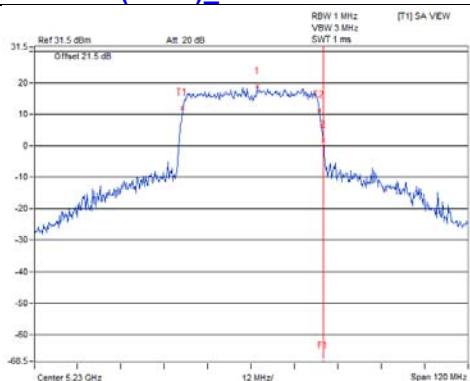
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1 Band)	5250	77.76	77.76	78.72	77.76
50 (U-NII-2A Band)	5250	77.76	77.76	77.76	77.76
114	5570	156.48	156.48	154.56	156.48



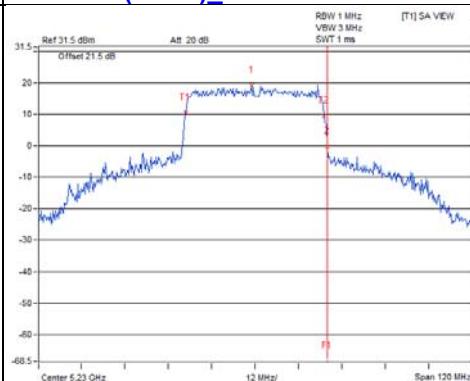


**Spectrum Plot for near by DFS band**  
**(DFS is required, if 99% OCP straddle into U-NII-2A band)**

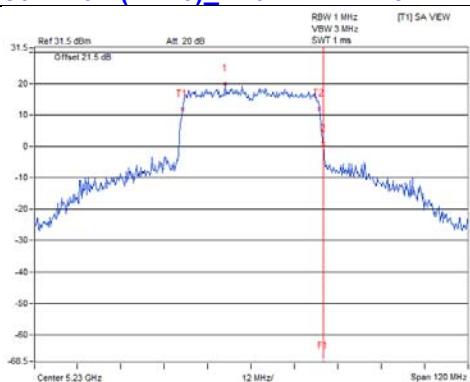
**802.11ax (HE40)\_Chain 0 / CH46**



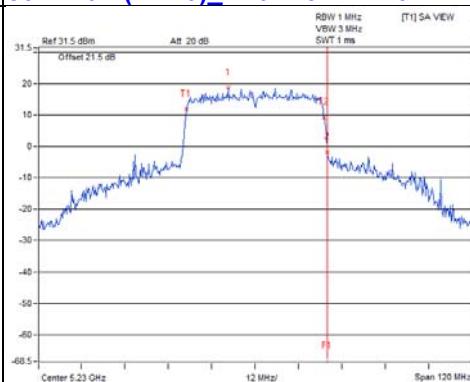
**802.11ax (HE40)\_Chain 1 / CH46**



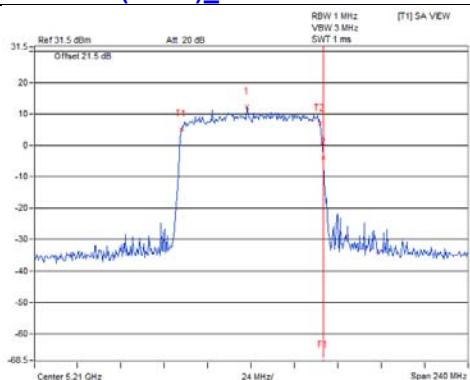
**802.11ax (HE40)\_Chain 2 / CH46**



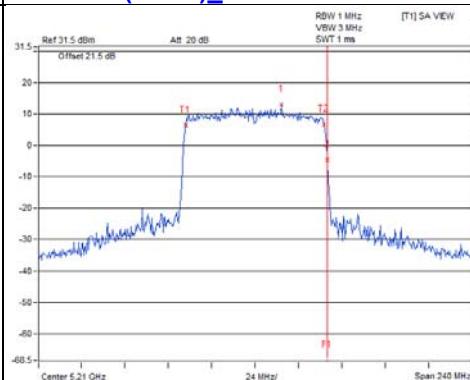
**802.11ax (HE40)\_Chain 3 / CH46**



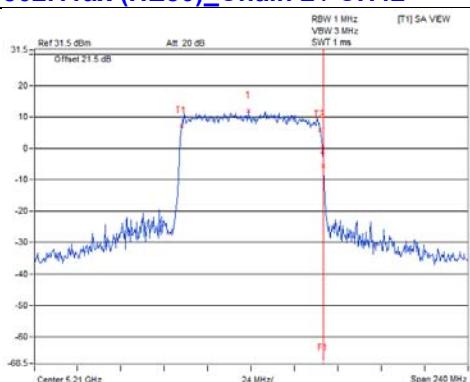
**802.11ax (HE80)\_Chain 0 / CH42**



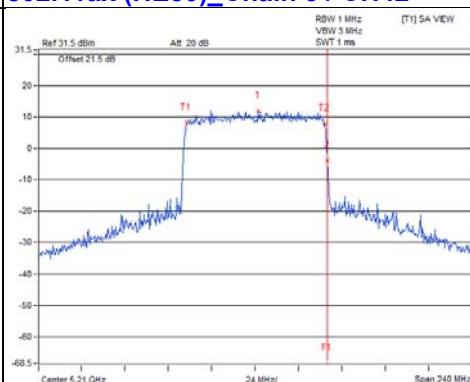
**802.11ax (HE80)\_Chain 1 / CH42**

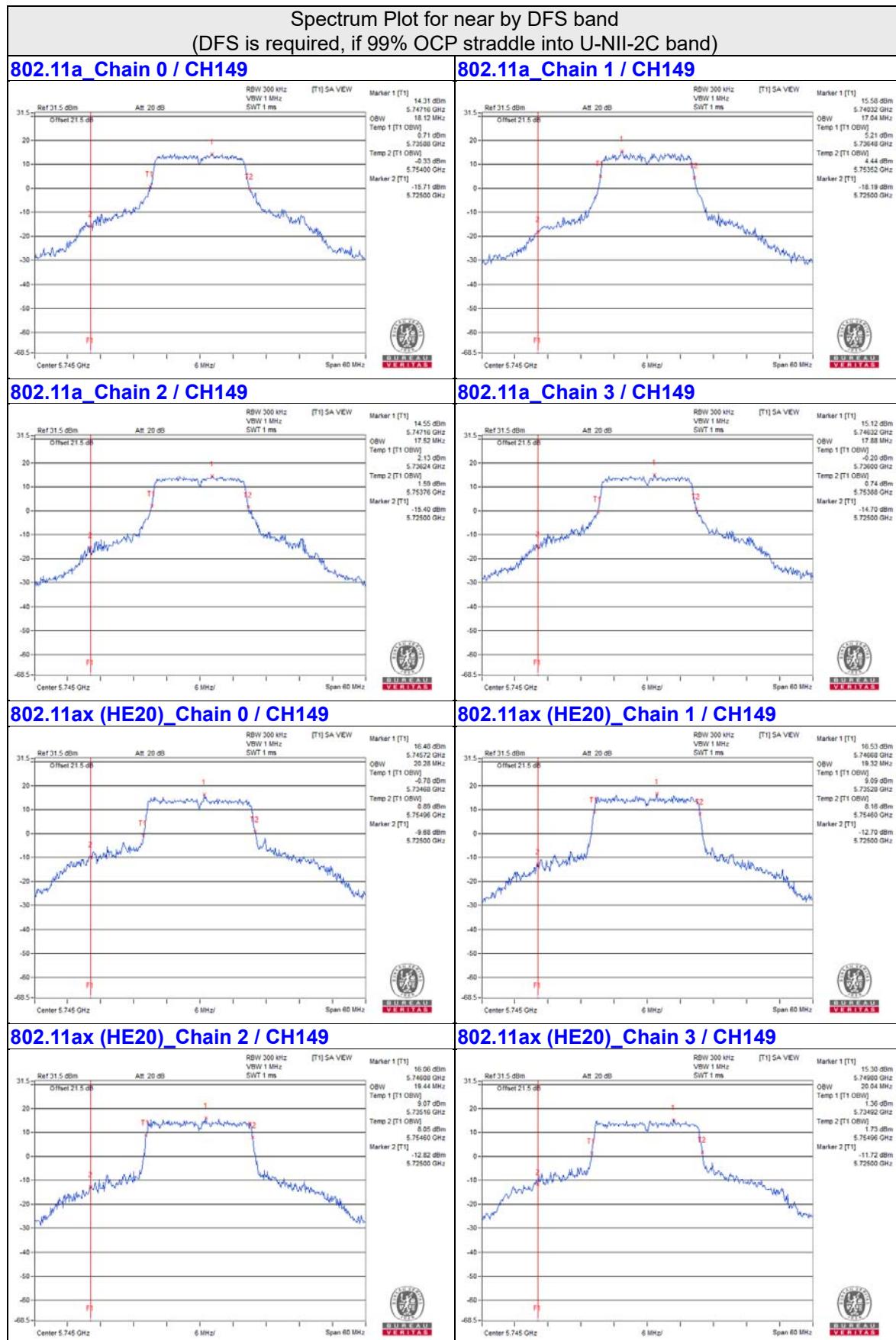


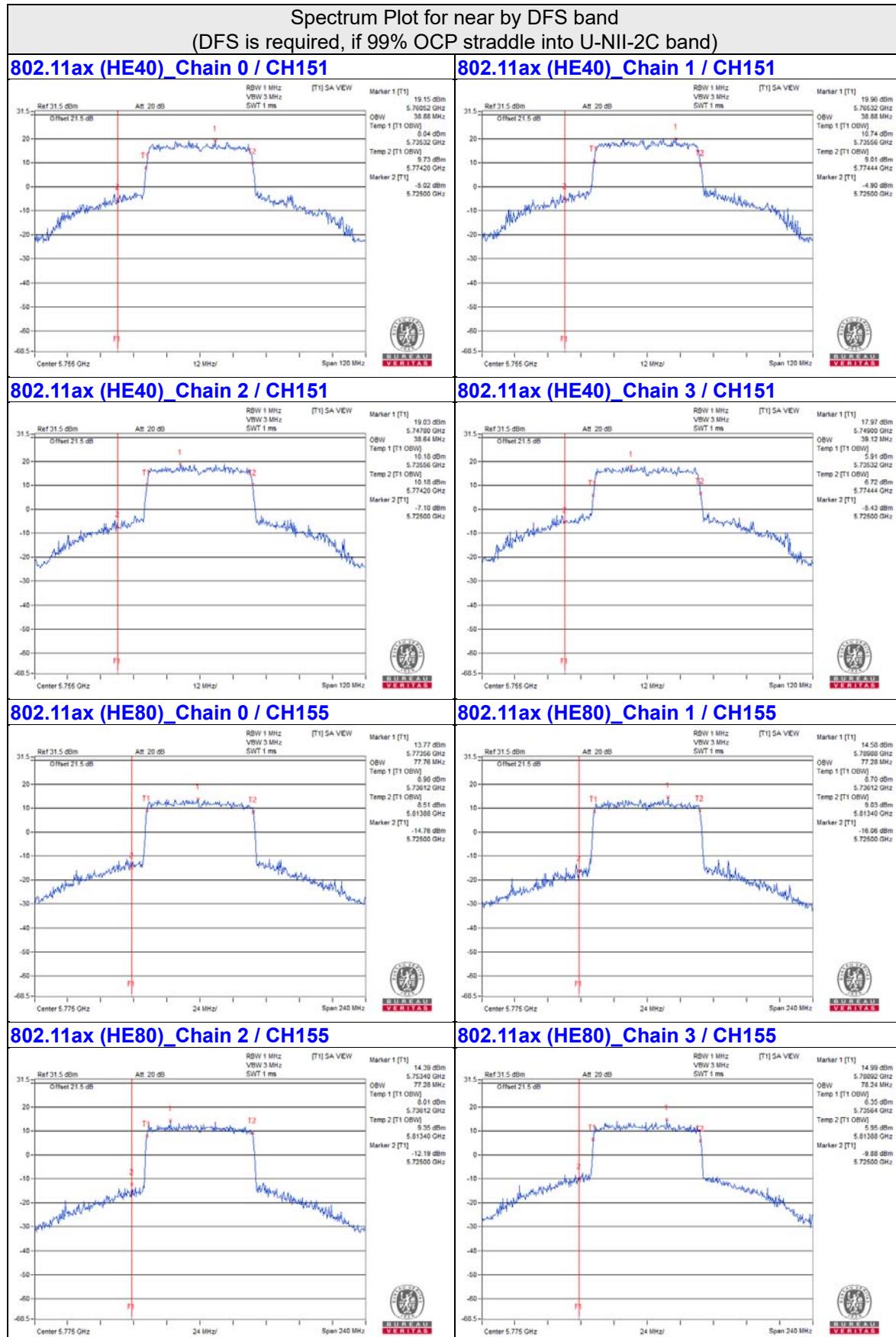
**802.11ax (HE80)\_Chain 2 / CH42**



**802.11ax (HE80)\_Chain 3 / CH42**







## 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

### 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

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

Using method SA-1

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

#### For U-NII-3 band:

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 (increasing) 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

#### 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

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

**CDD Mode**

**802.11a**

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
36	5180	9.67	9.34	9.48	9.43	15.50	15.93	Pass
40	5200	9.59	9.33	9.75	9.21	15.50	15.93	Pass
48	5240	9.91	9.21	9.53	9.30	15.52	15.93	Pass
52	5260	3.41	3.66	3.60	3.84	9.65	10.02	Pass
60	5300	3.45	3.74	3.86	3.40	9.64	10.02	Pass
64	5320	3.85	3.88	3.68	3.46	9.74	10.02	Pass
100	5500	3.14	4.27	3.19	3.63	9.60	9.91	Pass
116	5580	2.99	4.82	3.22	3.72	9.77	9.91	Pass
140	5700	3.00	3.74	4.35	3.07	9.60	9.91	Pass
144 (U-NII-2C Band)	5720	2.82	3.71	4.42	3.10	9.58	9.91	Pass

- Note:
1. 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.
  2. For UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the so the power density limit shall be reduced to  $17-(7.07-6) = 15.93$  dBm.
  3. For UNII-2A: The directional gain = 6.98 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(6.98-6) = 10.02$  dBm.
  4. For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(7.09-6) = 9.91$  dBm.

**802.11ax (HE20)**

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
36	5180	8.04	7.47	7.80	7.41	13.71	15.93	Pass
40	5200	9.68	9.06	9.70	9.28	15.46	15.93	Pass
48	5240	9.69	9.34	10.07	9.01	15.57	15.93	Pass
52	5260	3.81	3.69	3.99	3.18	9.70	10.02	Pass
60	5300	3.66	3.87	3.77	3.21	9.66	10.02	Pass
64	5320	3.78	3.81	3.44	2.95	9.53	10.02	Pass
100	5500	3.14	4.18	4.14	2.58	9.58	9.91	Pass
116	5580	3.03	4.71	3.66	2.30	9.54	9.91	Pass
140	5700	2.70	4.17	4.26	2.59	9.52	9.91	Pass
144 (U-NII-2C Band)	5720	3.14	3.79	4.60	2.54	9.61	9.91	Pass

- 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 UNII-1: The directional gain = 7.07 dB > 6 dB, so the power density limit shall be reduced to 17-(7.07-6) = 15.93dBm.
  - For UNII-2A: The directional gain = 6.98 dB > 6 dB, so the power density limit shall be reduced to 11-(6.98-6) = 10.02dBm.
  - For UNII-2C: The directional gain = 7.09 dB > 6 dB, so the power density limit shall be reduced to 11-(7.09-6) = 9.91dBm.

**802.11ax (HE40)**

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
38	5190	3.17	3.75	3.73	4.10	9.72	15.93	Pass
46	5230	6.98	7.80	7.44	6.67	13.26	15.93	Pass
54	5270	0.76	1.62	1.71	0.51	7.20	10.02	Pass
62	5310	0.06	1.05	0.71	0.00	6.50	10.02	Pass
102	5510	1.62	0.85	1.11	1.40	7.28	9.91	Pass
110	5550	1.14	1.80	2.13	0.43	7.44	9.91	Pass
134	5670	1.62	1.49	1.59	0.81	7.41	9.91	Pass
142 (U-NII-2C Band)	5710	0.98	1.81	1.93	0.67	7.40	9.91	Pass

- 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 UNII-1: The directional gain = 7.07 dB > 6 dB, so the power density limit shall be reduced to 17-(7.07-6) = 15.93dBm.
  - For UNII-2A: The directional gain = 6.98 dB > 6 dB, so the power density limit shall be reduced to 11-(6.98-6) = 10.02dBm.
  - For UNII-2C: The directional gain = 7.09 dB > 6 dB, so the power density limit shall be reduced to 11-(7.09-6) = 9.91dBm.

### 802.11ax (HE80)

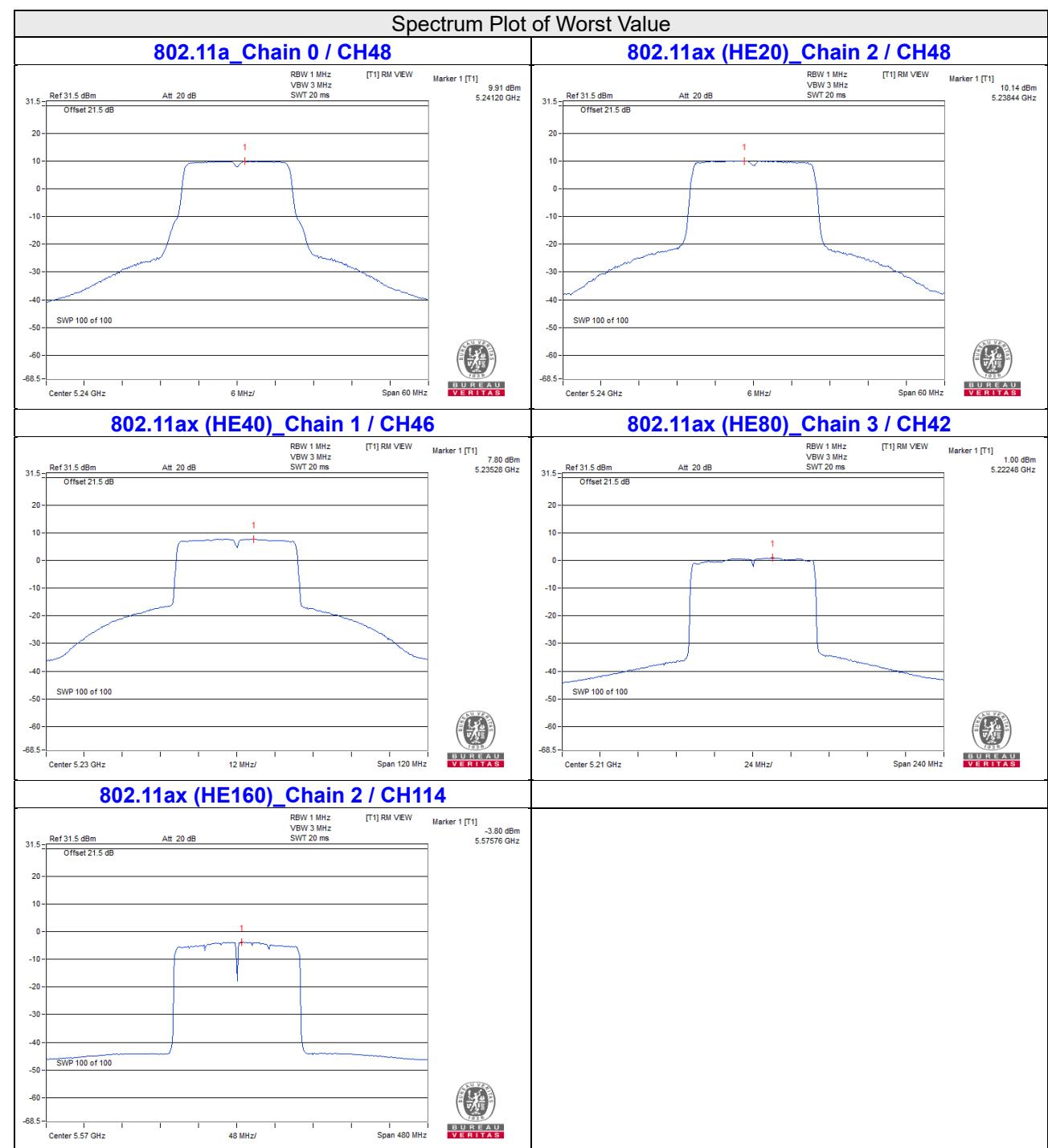
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
42	5210	-0.12	0.71	0.67	0.93	6.59	15.93	Pass
58	5290	-2.87	-1.96	-2.13	-3.23	3.50	10.02	Pass
106	5530	-2.55	-0.91	-0.83	-2.47	4.41	9.91	Pass
122	5610	-1.50	-1.24	-0.96	-2.39	4.53	9.91	Pass
138 (U-NII-2C Band)	5690	-1.74	-1.00	-1.03	-2.30	4.54	9.91	Pass

- 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 UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the so the power density limit shall be reduced to  $17-(7.07-6) = 15.93$  dBm.
  - For UNII-2A: The directional gain = 6.98 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(6.98-6) = 10.02$  dBm.
  - For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(7.09-6) = 9.91$  dBm.

### 802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
50 (U-NII-1 Band)	5250	-5.52	-4.92	-5.14	-6.57	0.53	15.93	Pass
50 (U-NII-2A Band)	5250	-5.12	-4.98	-5.49	-6.12	0.61	10.02	Pass
114	5570	-5.28	-3.95	-3.86	-6.05	1.33	9.91	Pass

- 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 UNII-1: The directional gain = 7.07 dBi > 6 dBi, so the so the power density limit shall be reduced to  $17-(7.07-6) = 15.93$  dBm.
  - For UNII-2A: The directional gain = 6.98 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(6.98-6) = 10.02$  dBm.
  - For UNII-2C: The directional gain = 7.09 dBi > 6 dBi, so the so the power density limit shall be reduced to  $11-(7.09-6) = 9.91$  dBm.



**For U-NII-3 band:**

**CDD Mode**

**802.11a**

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Total PSD (dBm/300k Hz)	Total PSD (dBm/500k Hz)	PSD Limit (dBm/500k Hz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
144 (U-NII-3 Band)	5720	-5.85	-4.79	-4.18	-5.48	0.99	3.21	28.68	Pass
149	5745	1.36	3.24	1.97	1.93	8.20	10.42	28.68	Pass
157	5785	1.26	2.49	1.57	1.65	7.79	10.01	28.68	Pass
165	5825	1.65	2.13	1.20	1.70	7.70	9.92	28.68	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
 2. The directional gain = 7.32 dBi > 6 dBi, so the so the power density limit shall be reduced to  $30 - (7.32 - 6) = 28.68$  dBm.

**802.11ax (HE20)**

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Total PSD (dBm/300k Hz)	Total PSD (dBm/500k Hz)	PSD Limit (dBm/500k Hz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
144 (U-NII-3 Band)	5720	-6.40	-5.49	-5.05	-6.82	0.14	2.36	28.68	Pass
149	5745	-0.20	0.82	0.55	-0.03	6.33	8.55	28.68	Pass
157	5785	-0.10	0.61	1.03	-0.17	6.39	8.61	28.68	Pass
165	5825	-0.84	0.28	0.31	-1.10	5.73	7.95	28.68	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
 2. The directional gain = 7.32 dBi > 6 dBi, so the so the power density limit shall be reduced to  $30 - (7.32 - 6) = 28.68$  dBm.

**802.11ax (HE40)**

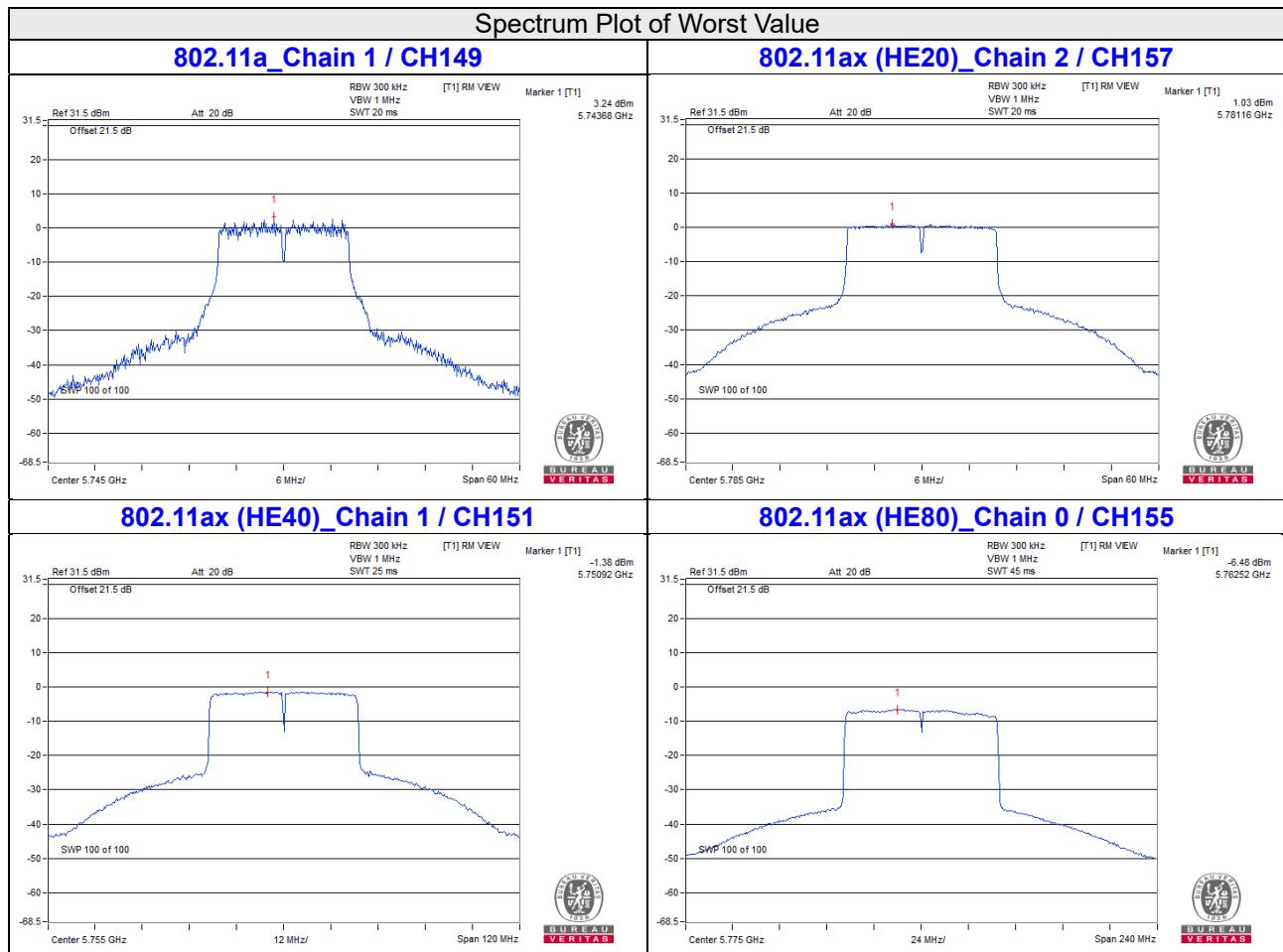
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Total PSD (dBm/300k Hz)	Total PSD (dBm/500k Hz)	PSD Limit (dBm/500k Hz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
142 (U-NII-3 Band)	5710	-9.14	-8.10	-7.80	-9.23	-2.50	-0.28	28.68	Pass
151	5755	-2.39	-1.38	-2.48	-3.04	3.74	5.96	28.68	Pass
159	5795	-2.38	-1.47	-2.18	-3.30	3.74	5.96	28.68	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
 2. The directional gain = 7.32 dBi > 6 dBi, so the so the power density limit shall be reduced to  $30 - (7.32 - 6) = 28.68$  dBm.

### 802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Total PSD (dBm/300k Hz)	Total PSD (dBm/500k Hz)	PSD Limit (dBm/500k Hz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
138 (U-NII-3 Band)	5690	-12.89	-12.22	-11.81	-12.82	-6.39	-4.17	28.68	Pass
155	5775	-6.48	-6.77	-7.00	-6.55	-0.67	1.55	28.68	Pass

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
 2. The directional gain = 7.32 dBi > 6 dBi, so the so the power density limit shall be reduced to 30-(7.32-6) = 28.68dBm.

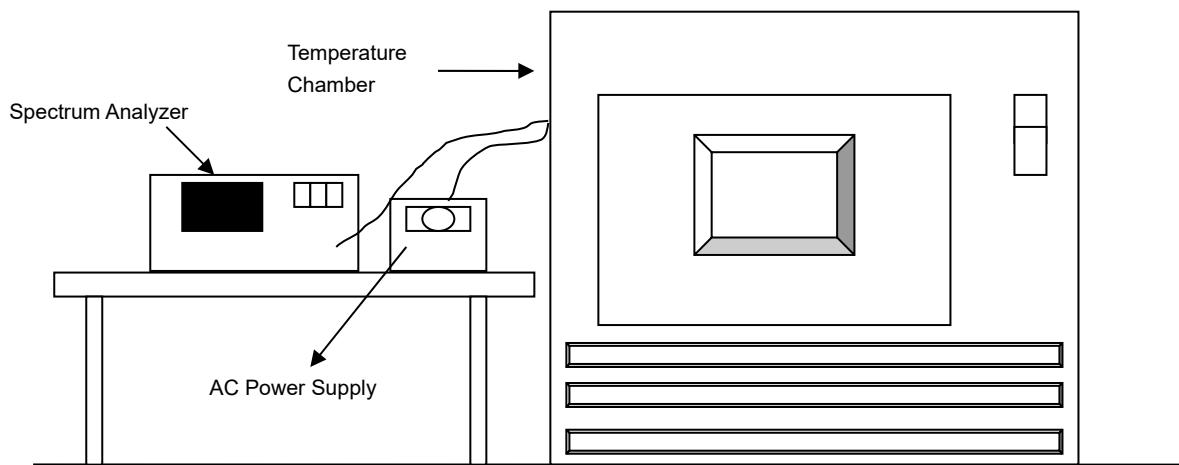


## 4.6 Frequency Stability Measurement

### 4.6.1 Limits of Frequency Stability Measurement

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

### 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

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

### 4.6.5 Deviation from Test Standard

No deviation.

### 4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

#### 4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
40	120	5180.011	PASS	5180.0116	PASS	5180.0136	PASS	5180.0154	PASS
30	120	5179.9843	PASS	5179.9869	PASS	5179.9879	PASS	5179.9844	PASS
20	120	5180.0064	PASS	5180.0057	PASS	5180.0032	PASS	5180.0044	PASS
10	120	5180.0113	PASS	5180.0113	PASS	5180.0105	PASS	5180.0126	PASS
0	120	5179.9798	PASS	5179.9838	PASS	5179.9836	PASS	5179.9835	PASS

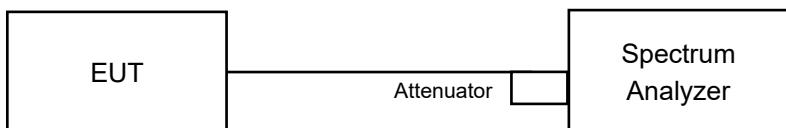
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	138	5180.0056	PASS	5180.0065	PASS	5180.004	PASS	5180.0053	PASS
	120	5180.0064	PASS	5180.0057	PASS	5180.0032	PASS	5180.0044	PASS
	102	5180.0057	PASS	5180.0063	PASS	5180.0034	PASS	5180.0035	PASS

## 4.7 6dB Bandwidth Measurement

### 4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

### 4.7.2 Test Setup



### 4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.7.4 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

### 4.7.5 Deviation from Test Standard

No deviation.

### 4.7.6 EUT Operating Condition

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

#### 4.7.7 Test Results

##### CDD Mode

###### 802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	
144 (U-NII-3 Band)	5720	3.16	3.13	3.13	3.15	Pass
149	5745	16.38	16.12	16.39	16.38	Pass
157	5785	16.36	16.1	16.4	16.39	Pass
165	5825	16.38	16.09	16.38	16.38	Pass

###### 802.11ax (HE20)

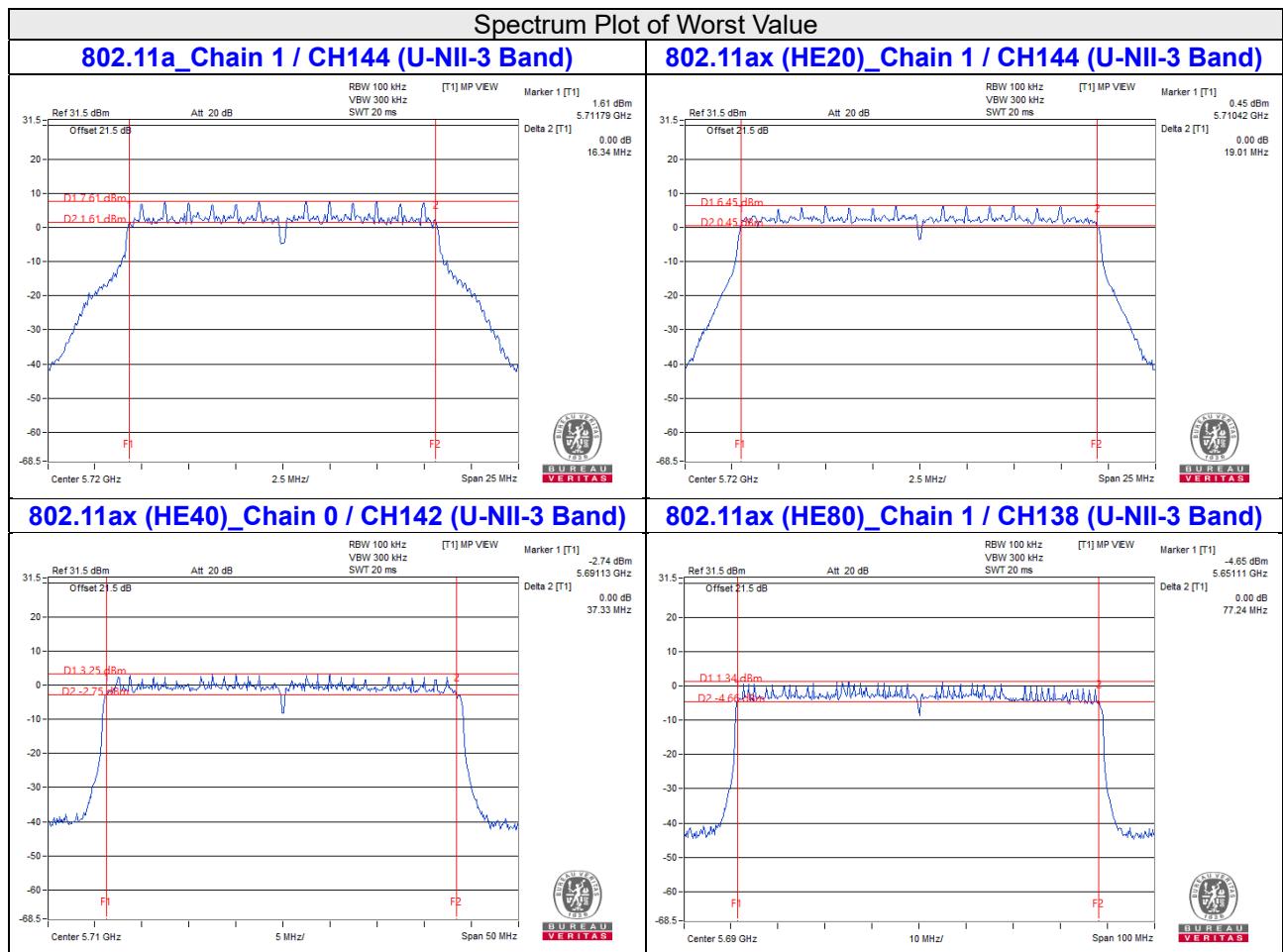
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	
144 (U-NII-3 Band)	5720	4.46	4.43	4.45	4.44	Pass
149	5745	18.98	18.98	18.86	18.93	Pass
157	5785	18.8	19.01	18.84	18.79	Pass
165	5825	18.99	18.97	18.87	18.75	Pass

###### 802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	
142 (U-NII-3 Band)	5710	3.46	3.51	3.72	3.62	Pass
151	5755	37.38	37.72	37.51	37.62	Pass
159	5795	37.48	37.63	37.57	37.66	Pass

###### 802.11ax (HE80)

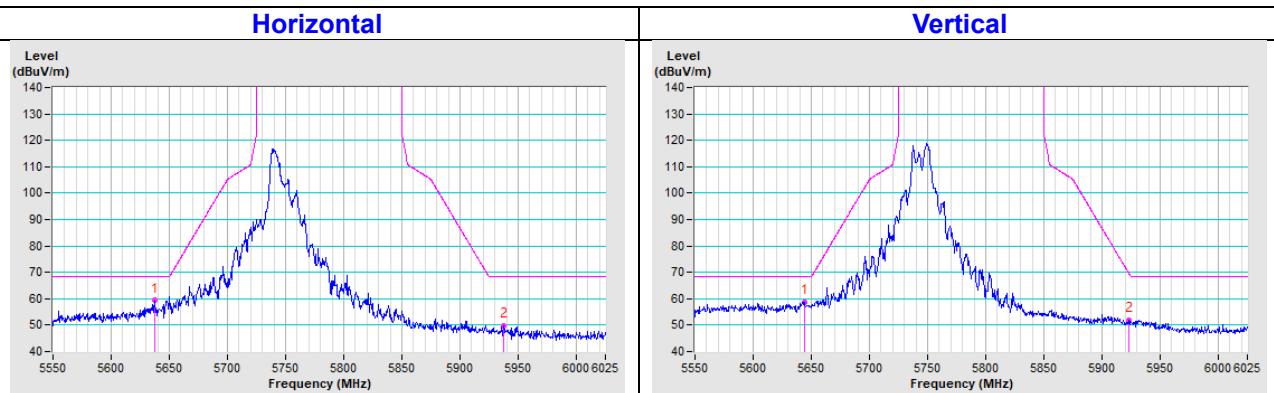
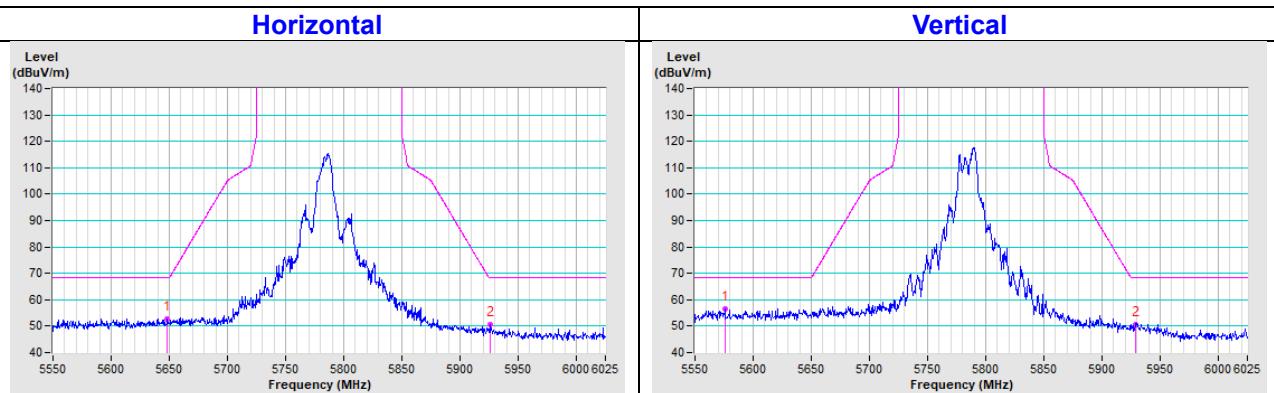
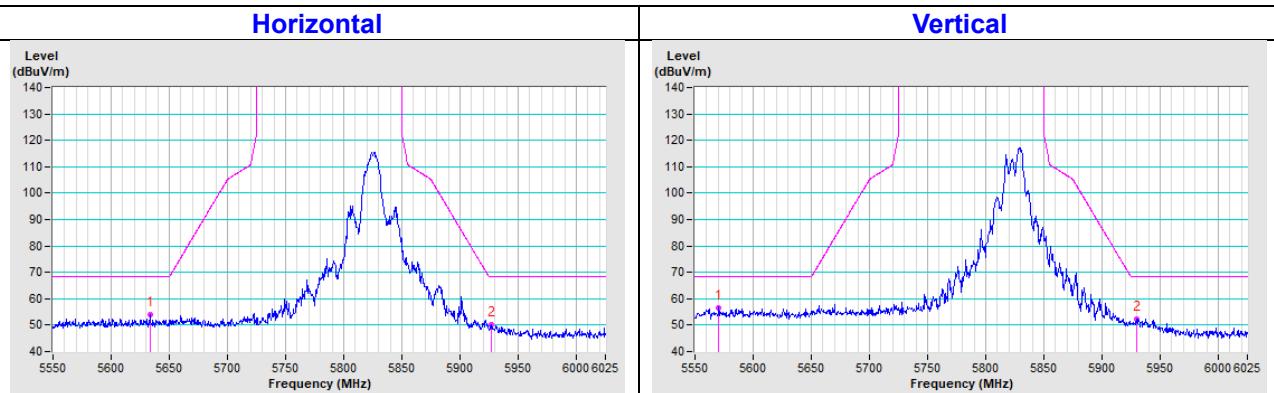
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	
138 (U-NII-3 Band)	5690	3.45	3.35	3.39	3.4	Pass
155	5775	77.39	77.04	77.06	75.83	Pass

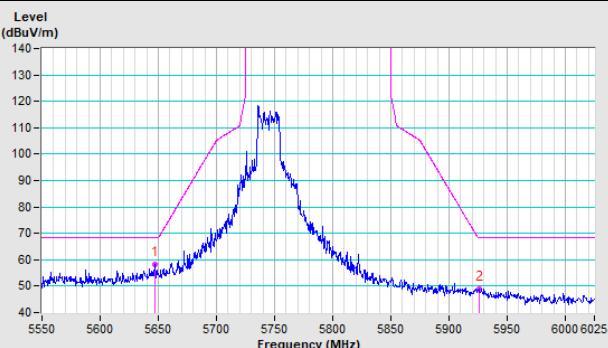
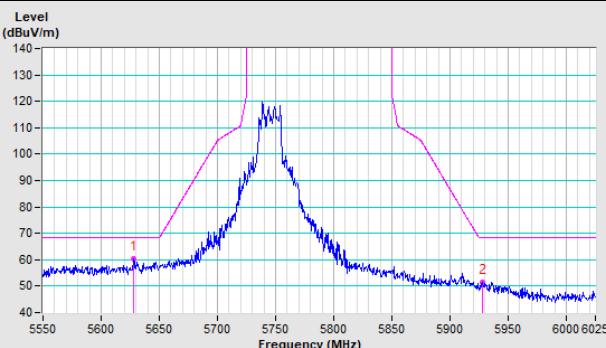
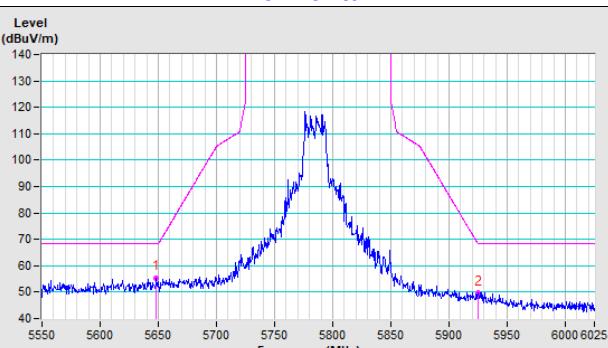
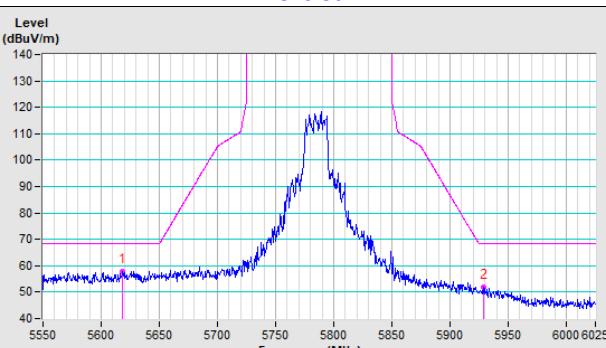
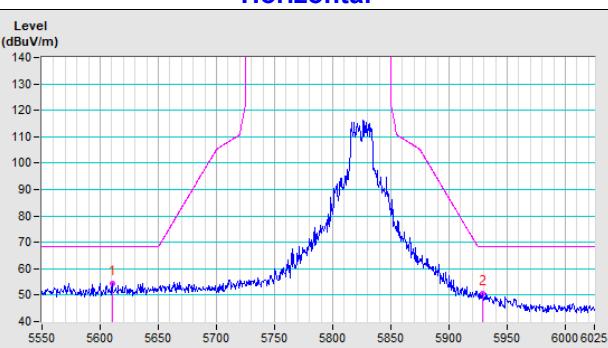
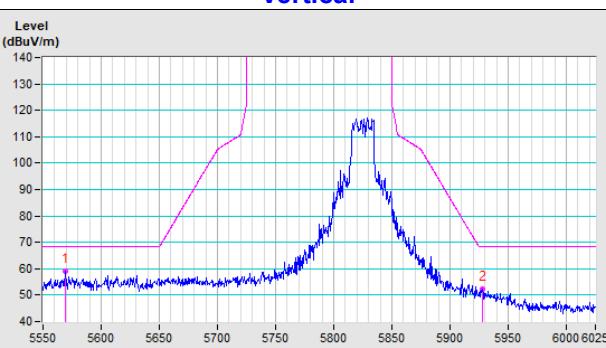


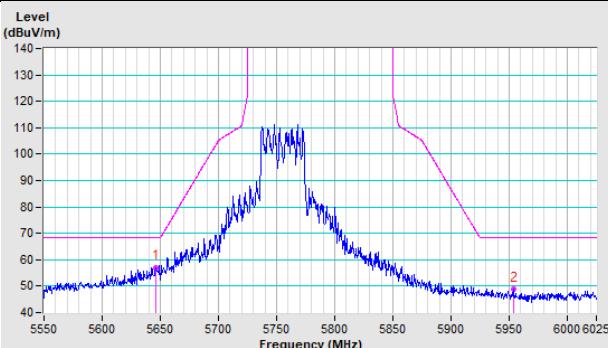
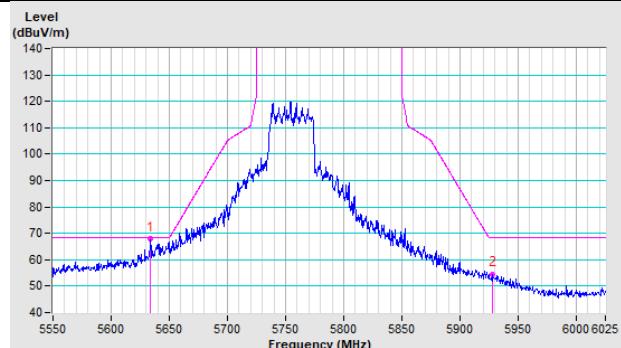
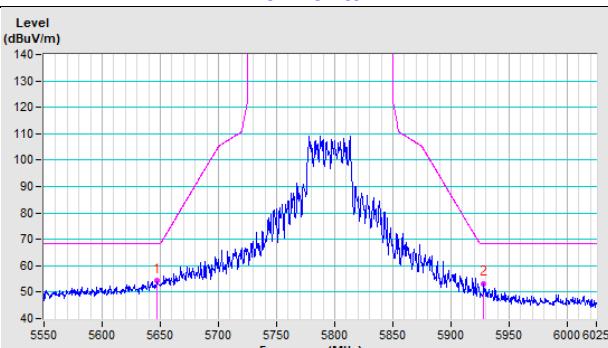
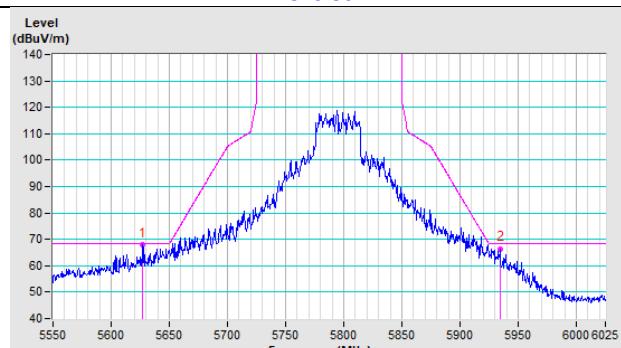
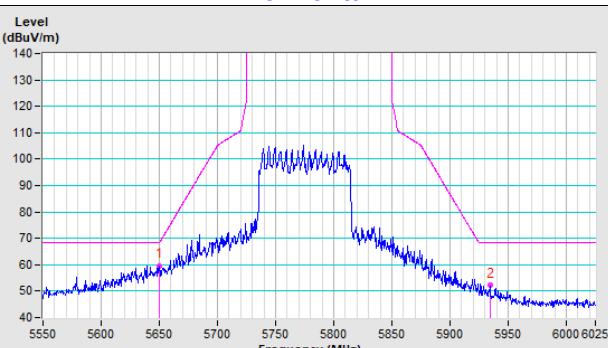
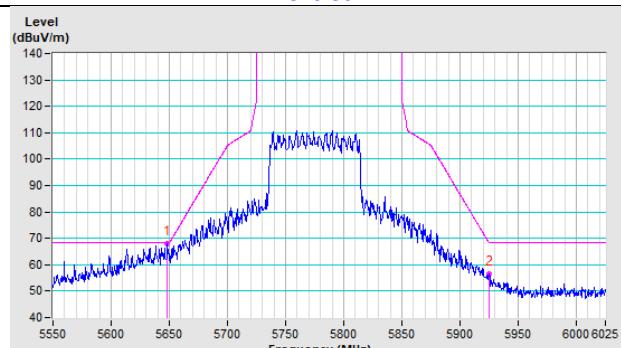
Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

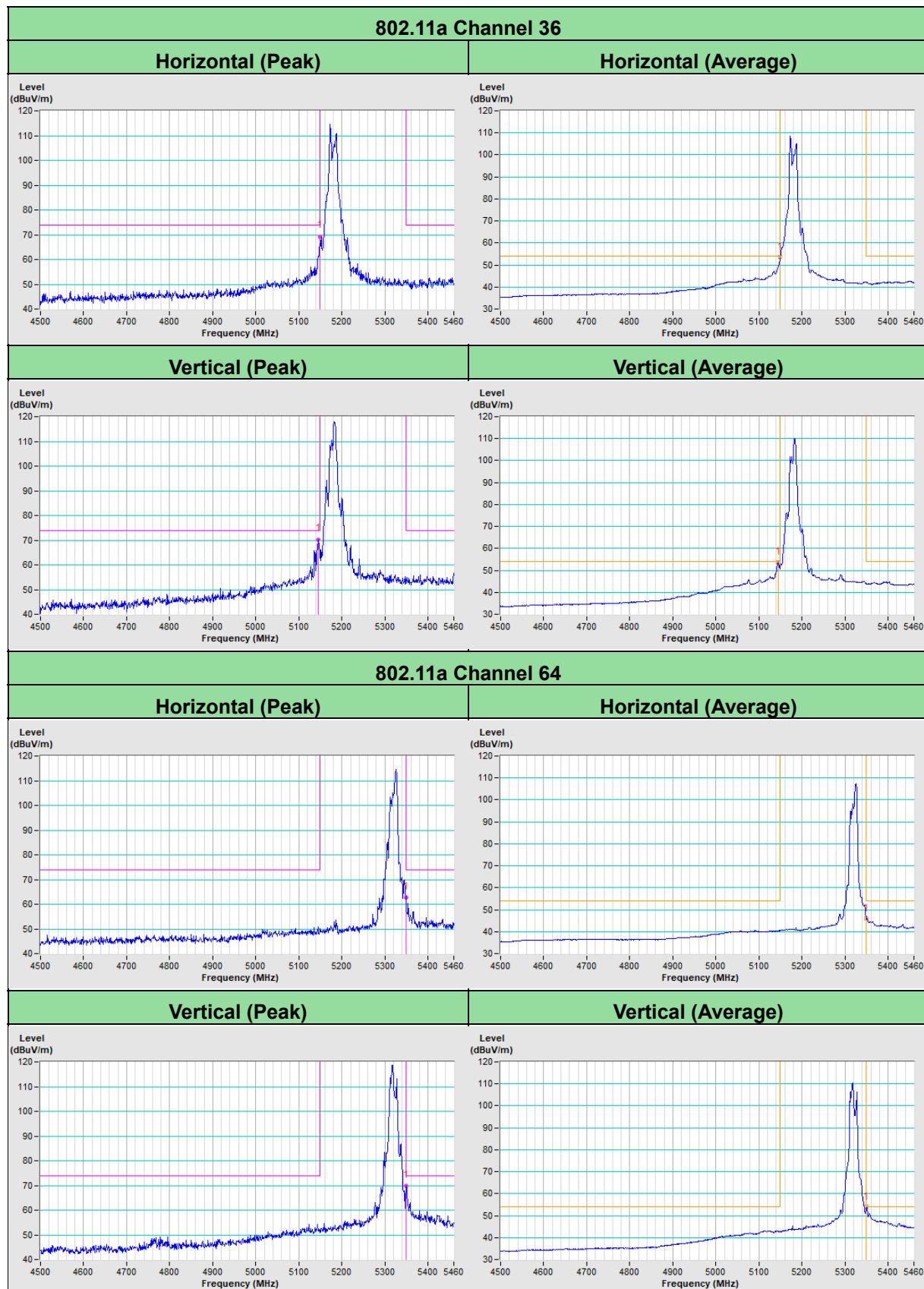
## 5 Pictures of Test Arrangements

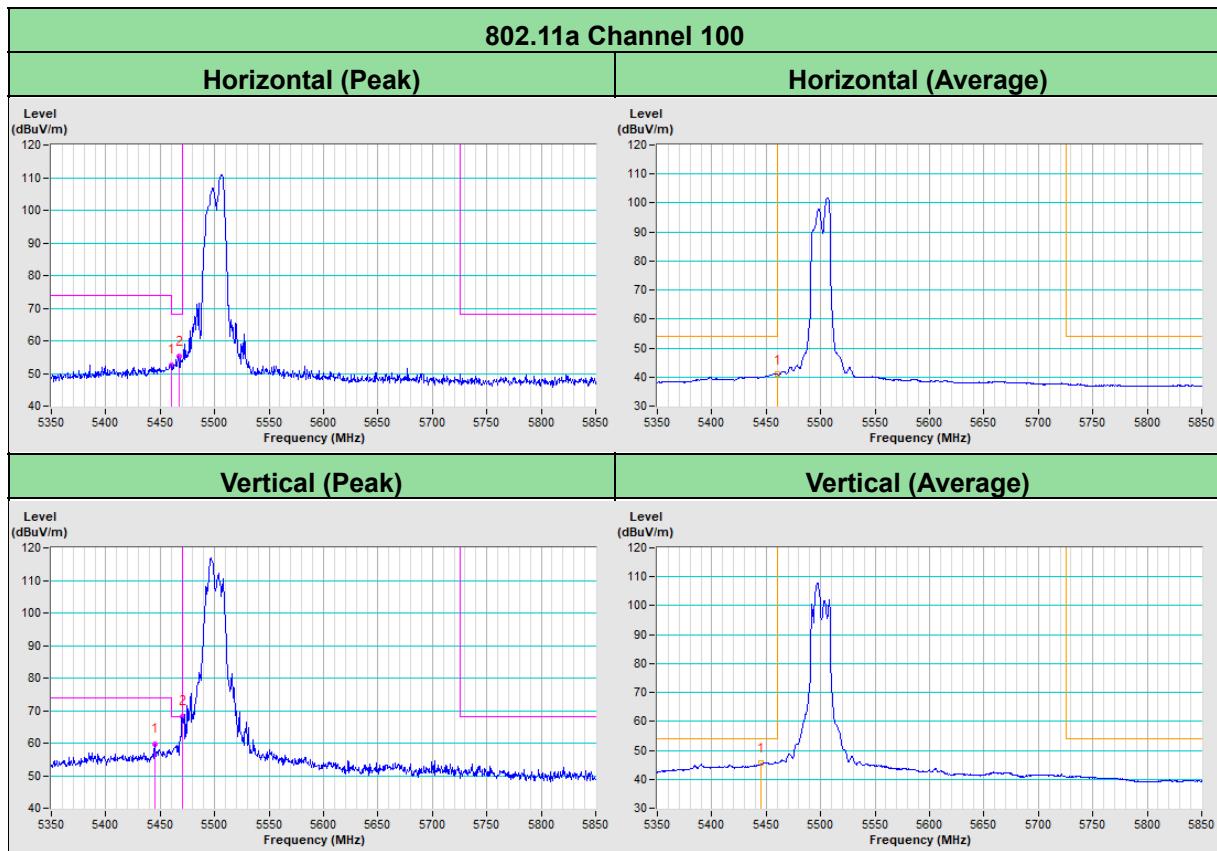
Please refer to the attached file (Test Setup Photo).

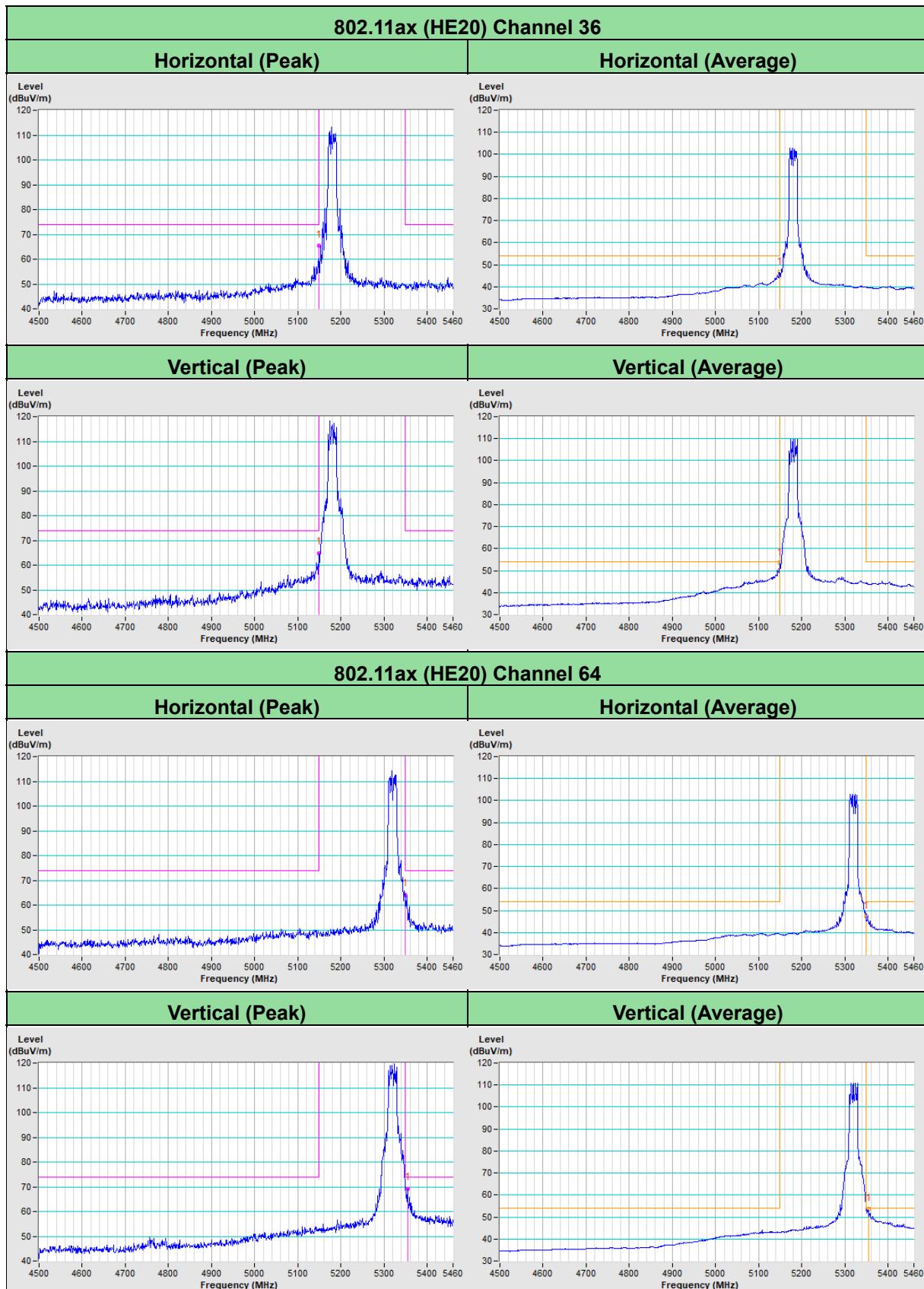
**Annex A - Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)**
**802.11a CH 149 : 5745 MHz**

**802.11a CH 157 : 5785 MHz**

**802.11a CH 165 : 5825 MHz**


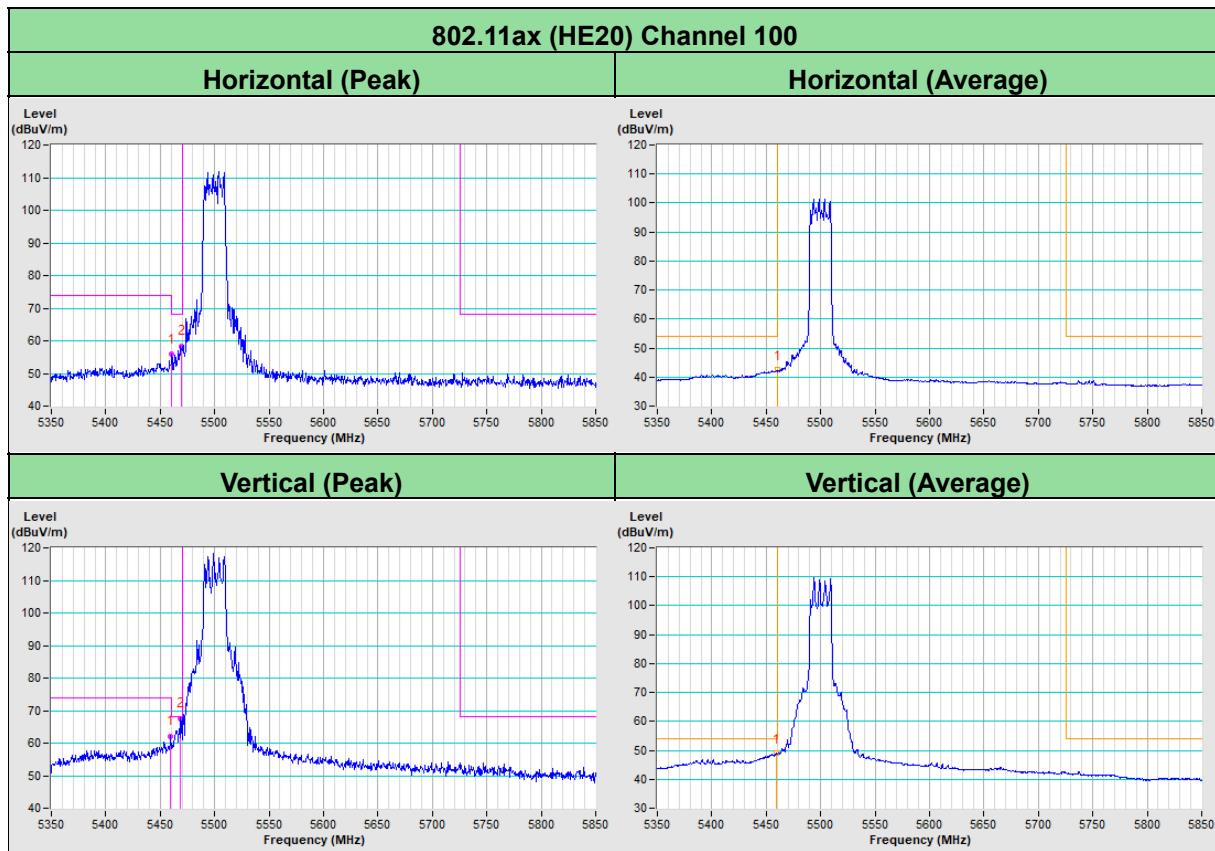
**802.11ax (HE20) CH 149 : 5745 MHz**
**Horizontal**

**Vertical**

**802.11ax (HE20) CH 157 : 5785 MHz**
**Horizontal**

**Vertical**

**802.11ax (HE20) CH 165 : 5825 MHz**
**Horizontal**

**Vertical**


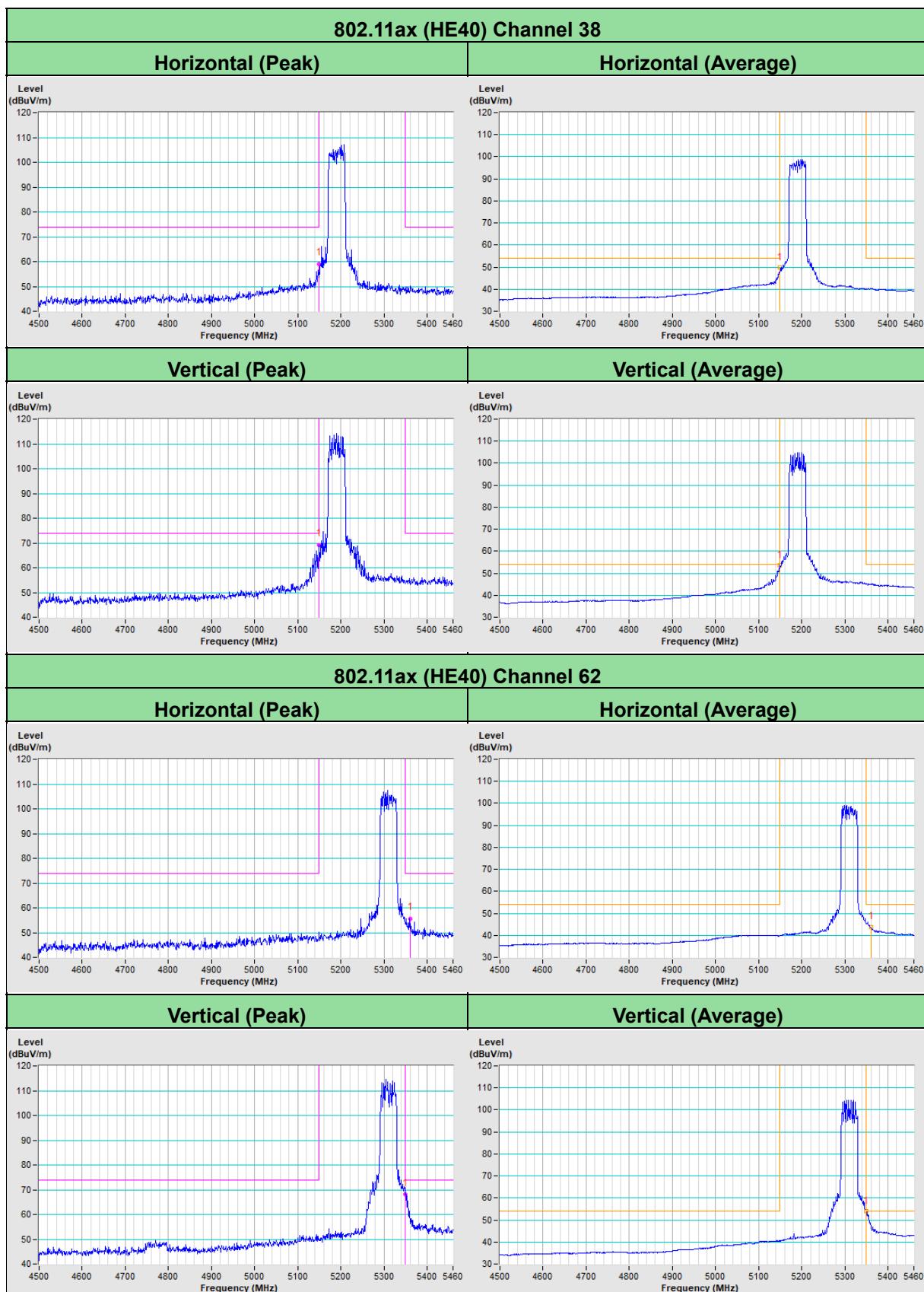
**802.11ax (HE40) CH 151 : 5755 MHz**
**Horizontal**

**Vertical**

**802.11ax (HE40) CH 159 : 5795 MHz**
**Horizontal**

**Vertical**

**802.11ax (HE80) CH 155 : 5775 MHz**
**Horizontal**

**Vertical**


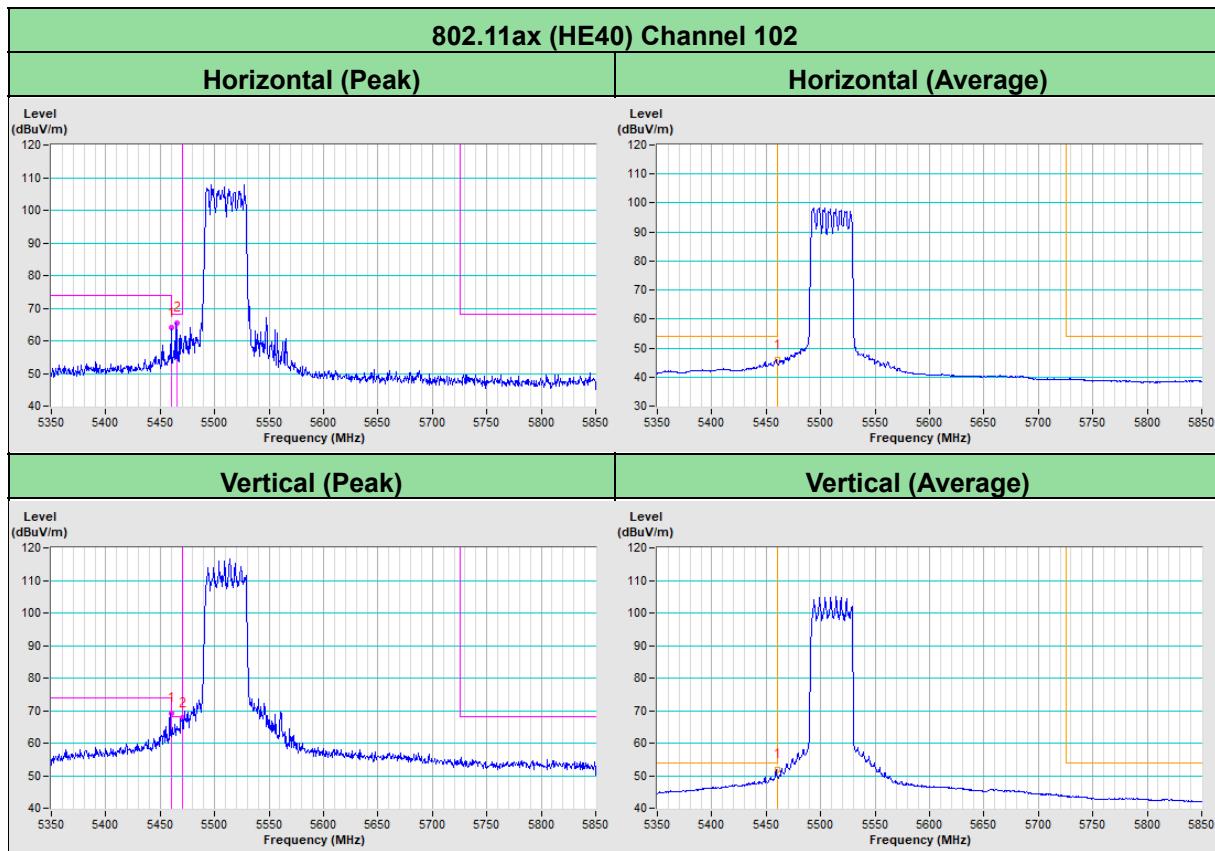
**Annex B - Band-Edge Measurement (For U-NII-1, U-NII-2A, U-NII-2C band)**


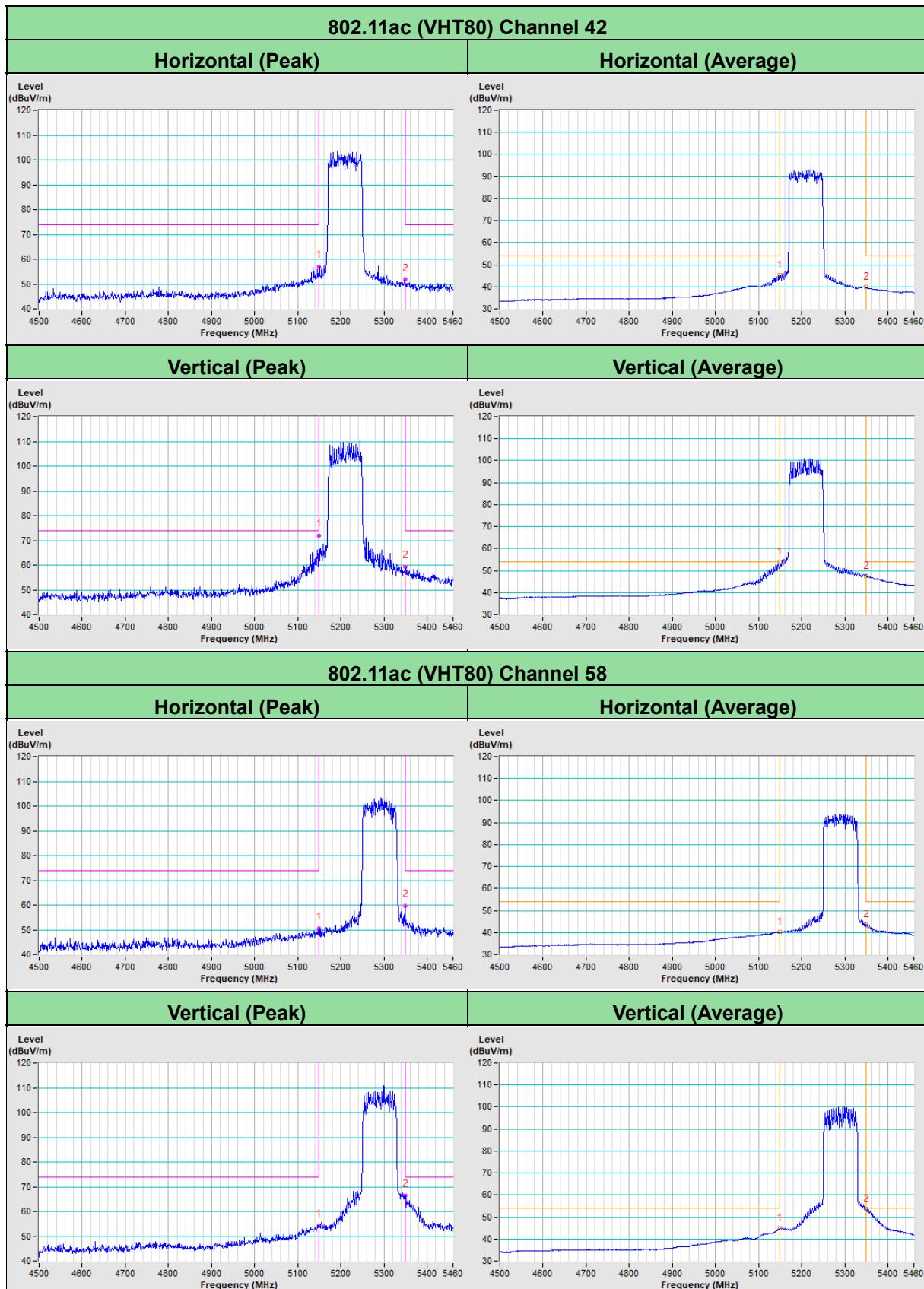


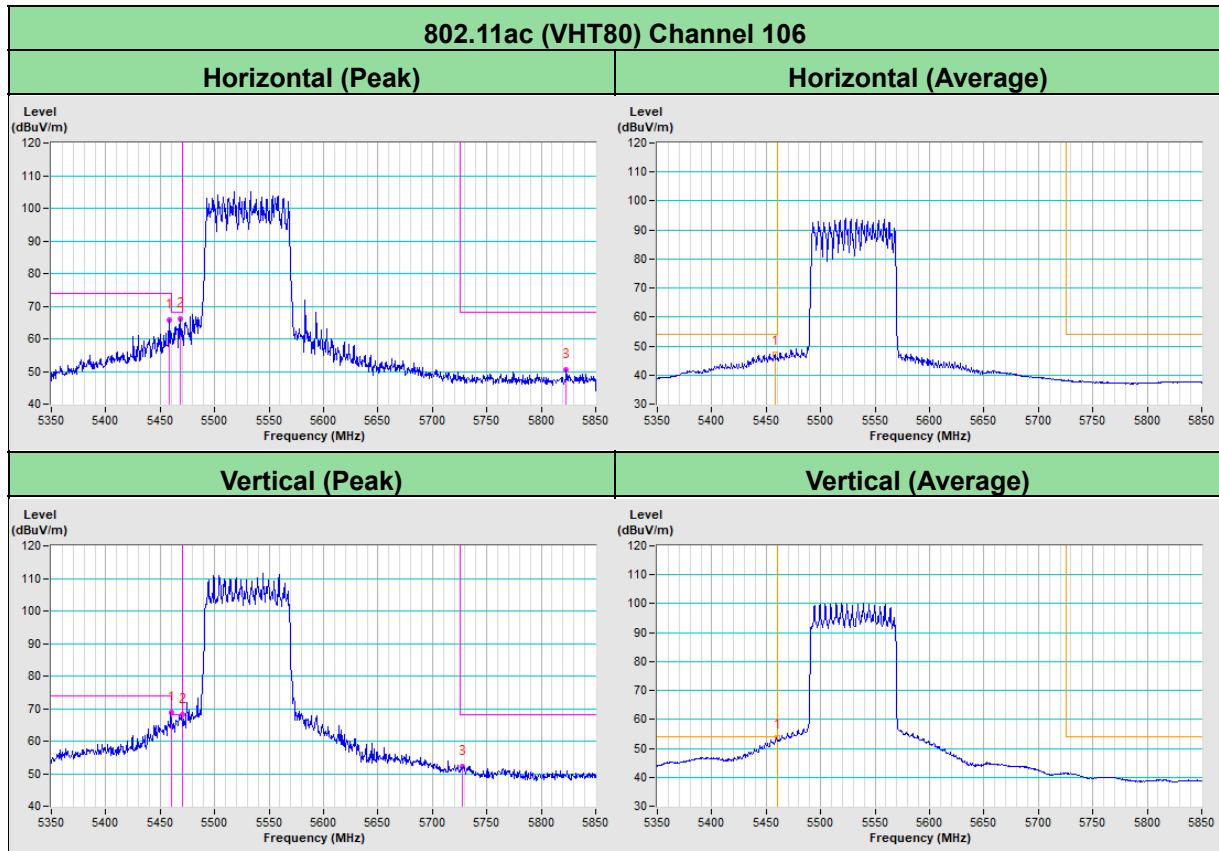


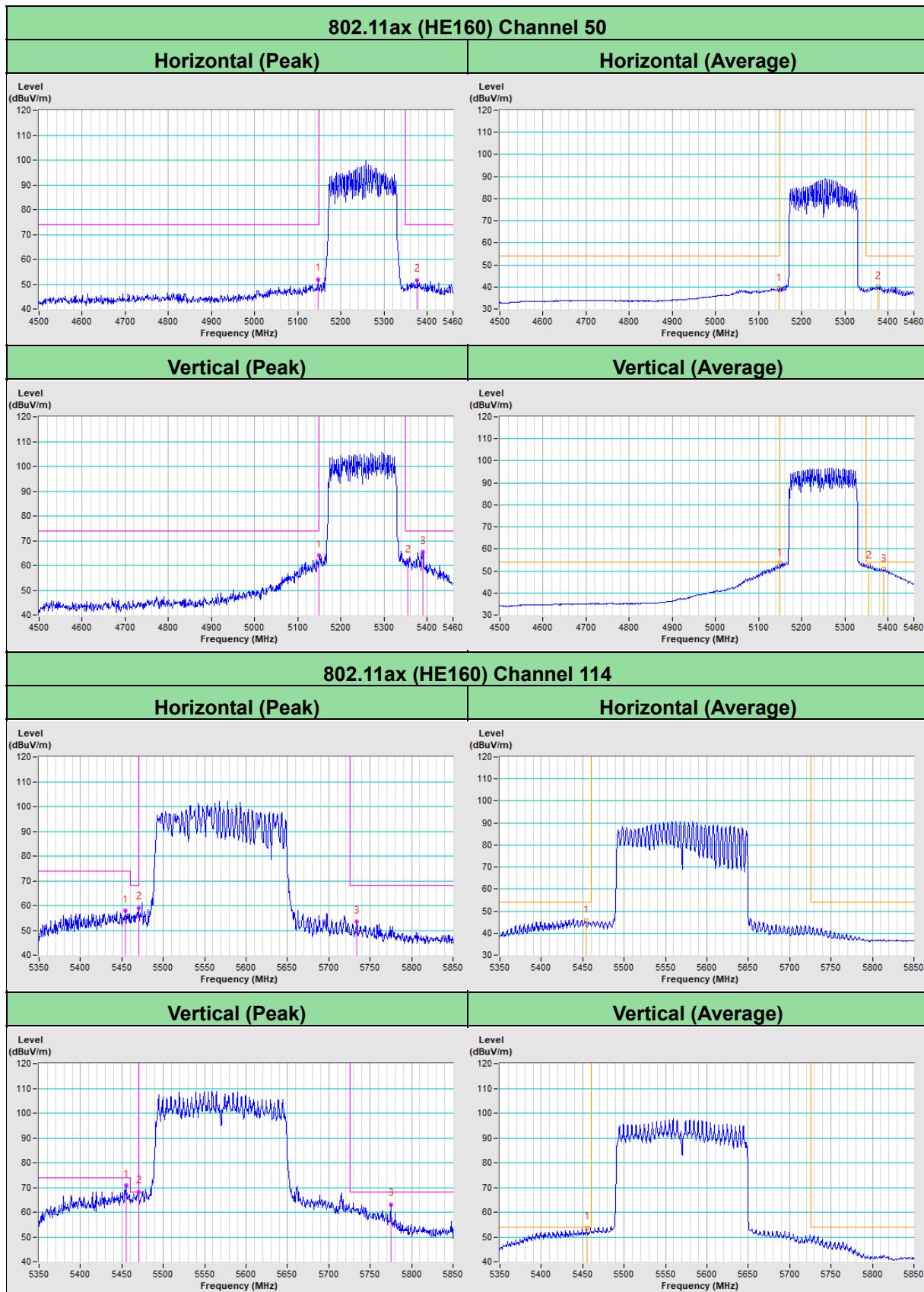












## Appendix – Information of the Testing Laboratories

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:

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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.

--- END ---