FCC Test Report (WLAN)

Report No.:	RFBDYL-WTW-P21050433-1
FCC ID:	2ARF9CSW630
Test Model:	CSW630
Received Date:	2021/05/12
Test Date:	2021/6/2 ~ 2021/8/27
Issued Date:	2021/9/8
Applicant:	Versa Networks
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Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
RFBDYL-WTW-P21050433-1	Original release.	2021/9/8

1 Certificate of Conformity

Product:	Versa Cloud Services Access Point
Brand:	Versa Networks
Test Model:	CSW630
Sample Status:	Engineering sample
Applicant:	Versa Networks
Test Date:	2021/6/2 ~ 2021/8/27
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 : Vivian Huang , **Date:** 2021/9/8

Vivian Huang / Specialist

Approved by : , **Date:** 2021/9/8

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 -6.06 dB at 0.15000 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 -0.2 dB at 5150.00 MHz, 5646.99 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:
1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.
2. For U-NII-1 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.
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	5.4 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.0 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 (WLAN)

Product	Versa Cloud Services Access Point
Brand	Versa Networks
Test Model	CSW630
Status of EUT	Engineering sample
Power Supply Rating	DC 48V from POE DC 12V from power adapter
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 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	5.18 ~ 5.24 GHz, 5.745 ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 9 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 4 802.11ac (VHT80), 802.11ax (HE80): 2
Output Power	**For 8TX:** **CDD Mode:** **5.18 ~ 5.24GHz (Master):** 271.667 mW **5.18 ~ 5.24GHz (Client):** 131.966 mW **5.745 ~ 5.825GHz:** 926.412 mW **Beamforming Mode:** **5.18 ~ 5.24GHz (Master):** 128.856 mW **5.18 ~ 5.24GHz (Client):** 32.531 mW **5.745 ~ 5.825GHz:** 129.209 mW **For 4TX:** **CDD Mode:** **5.18 ~ 5.24GHz (Master):** 257.064 mW **5.18 ~ 5.24GHz (Client):** 134.693 mW **5.745 ~ 5.825GHz:** 292.814 mW **Beamforming Mode:** **5.18 ~ 5.24GHz (Master):** 253.844 mW **5.18 ~ 5.24GHz (Client):** 66.873 mW **5.745 ~ 5.825GHz:** 247.832 mW **For Scanning Radio** **5.18 ~ 5.24GHz:** 39.355 mW **5.745 ~ 5.825GHz:** 41.02 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. The EUT has below radios as following table:

Radio 1	Radio 2	Radio 3	Radio 4
WLAN (2.4GHz + 5GHz)	WLAN (5GHz)	Bluetooth	2.4GHz / 5GHz Scanning Radio

2. Simultaneously transmission condition.

Condition	Technology			
1	WLAN (2.4GHz)	WLAN (8TX_5GHz)	Bluetooth	2.4GHz Scanning Radio
2	WLAN (2.4GHz)	WLAN (8TX_5GHz)	Bluetooth	5GHz Scanning Radio
3	WLAN (2.4GHz)	WLAN (4TX_5GHz Low band)	Bluetooth	2.4GHz Scanning Radio
4	WLAN (2.4GHz)	WLAN (4TX_5GHz Low band)	Bluetooth	5GHz Scanning Radio
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.				

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

Antenna NO.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
5G0_baseline	5.7	DBS:5.15~5.85GHz/SBS:5.15~5.35GHz	PIFA	i-pex(MHF)
5G1_baseline	5.9	DBS:5.15~5.85GHz/SBS:5.15~5.35GHz	PIFA	i-pex(MHF)
5G2_baseline	5.3	DBS:5.15~5.85GHz/SBS:5.15~5.35GHz	PIFA	i-pex(MHF)
5G3_baseline	5.6	DBS:5.15~5.85GHz/SBS:5.15~5.35GHz	PIFA	i-pex(MHF)
DUAL0	5.1	2.4~2.4835GHz	PIFA	i-pex(MHF)
	6.3	DBS:5.15~5.85GHz/SBS:5.47~5.85GHz		
DUAL1	3.4	2.4~2.4835GHz	PIFA	i-pex(MHF)
	5.9	DBS:5.15~5.85GHz/SBS:5.47~5.85GHz		
DUAL2	4.7	2.4~2.4835GHz	PIFA	i-pex(MHF)
	5.8	DBS:5.15~5.85GHz/SBS:5.47~5.85GHz		
DUAL3	4.1	2.4~2.4835GHz	PIFA	i-pex(MHF)
	6	DBS:5.15~5.85GHz/SBS:5.47~5.85GHz		
BLE_baseline	4.5	2.4~2.4835GHz	PIFA	i-pex(MHF)
SCANNING_baseline	5.1	2.4~2.4835GHz	PIFA	i-pex(MHF)
	5.2	5.15~5.85GHz		

4. The EUT was pre-tested under the following modes:

Pre-test Mode	Description
Mode A	Power from adapter
Mode B	**Power from PoE, ETH1**
Mode C	Power from PoE, ETH2
Mode D	**Power from PoE, ETH1+2**

From the above modes, the worst case Radiated Emission was found in **Mode D** and Conducted Emission was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

5. The EUT incorporates a MIMO function:

Modulation Mode	Radio 1 + 2 - 5GHz Band TX & RX Configuration		Radio 1 - 5GHz High Band TX & RX Configuration		Radio 2 - 5GHz Low Band TX & RX Configuration		Radio 4 - 5GHz Band (Scanning Radio) TX & RX Configuration	
802.11a	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11n (HT20)	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11n (HT40)	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11ac (VHT20)	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11ac (VHT40)	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11ac (VHT80)	8TX	8RX	4TX	4RX	4TX	4RX	1TX	1RX
802.11ax (HE20)	8TX	8RX	4TX	4RX	4TX	4RX	-	-
802.11ax (HE40)	8TX	8RX	4TX	4RX	4TX	4RX	-	-
802.11ax (HE80)	8TX	8RX	4TX	4RX	4TX	4RX	-	-

Note:
1. All of modulation mode support beamforming function except 802.11a 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) and 802.11ax mode for 20MHz (40MH, 80MHz), therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax or more lower than it and investigated worst case to representative mode in test report.

6. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
7. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

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

Channel	Frequency
42	5210 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	
1	√	√	√	√	8TX
2	√	√	√	√	4TX
3	√	√	√	√	1TX (Scanning Radio)

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 3 axis. The worst case was found when positioned on **Z-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.

For Mode 1 & Mode 2						
CDD Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	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
For Mode 3						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80)		42	42	OFDM	BPSK	MCS0
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ac (VHT20)		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

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.

For Mode 1 & Mode 2						
CDD Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240 5745-5825	36 to 48 149 to 165	40	OFDM	BPSK	MCS0
For Mode 3						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11ac (VHT20)	5180-5240 5745-5825	36 to 48 149 to 165	165	OFDM	BPSK	MCS0

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.

For Mode 1 & Mode 2						
CDD Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240 5745-5825	36 to 48 149 to 165	40	OFDM	BPSK	MCS0
For Mode 3						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11ac (VHT20)	5180-5240 5745-5825	36 to 48 149 to 165	165	OFDM	BPSK	MCS0

Antenna Port Conducted Measurement:

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

For Mode 1 & Mode 2						
CDD Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (output power only)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40) (output power only)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80) (output power only)		42	42	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	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)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80)		42	42	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	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

For Mode 3						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80)		42	42	OFDM	BPSK	MCS0
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ac (VHT20)		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

Test Condition:

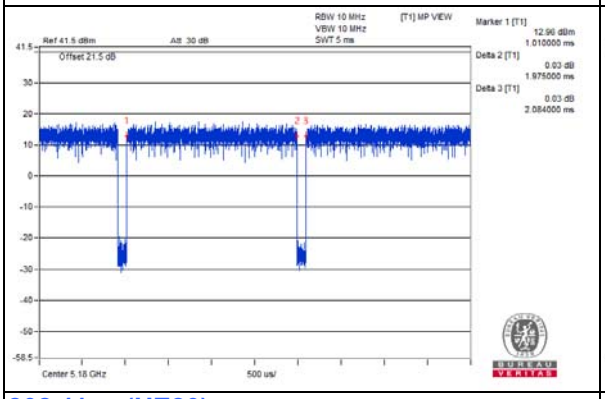
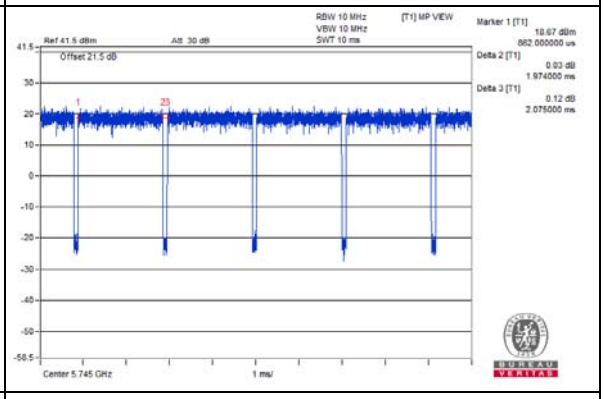
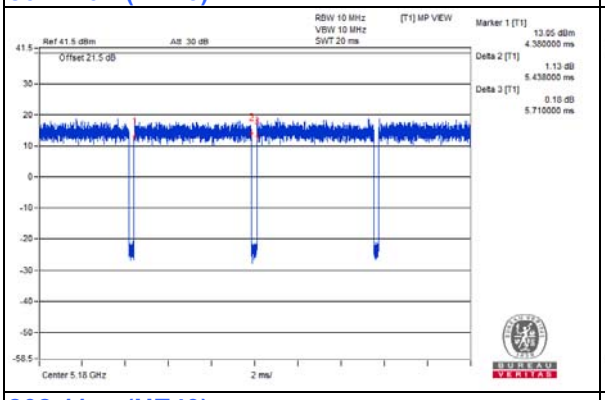
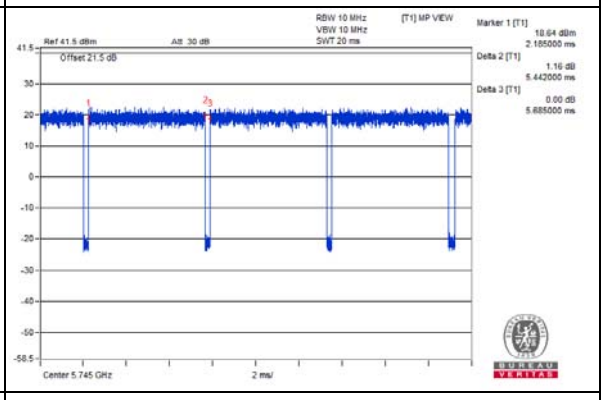
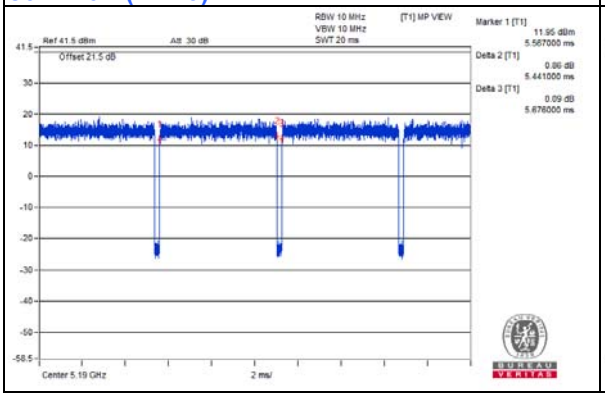
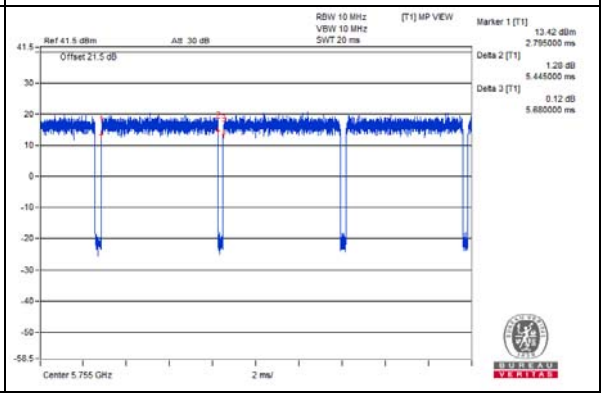
Applicable To	Environmental Conditions	Input Power (System)	Tested By
RE≥1G	25deg. C, 75%RH	120Vac, 60Hz	Eric Peng
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Carter Lin
PLC	25deg. C, 64%RH	120Vac, 60Hz	Sampson Chen
APCM	21deg. C, 60%RH	120Vac, 60Hz	Nick Chen

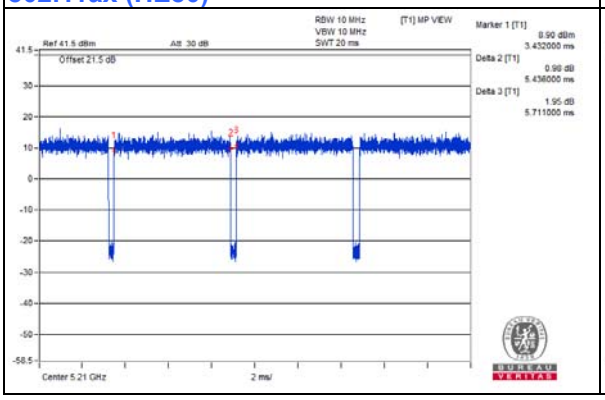
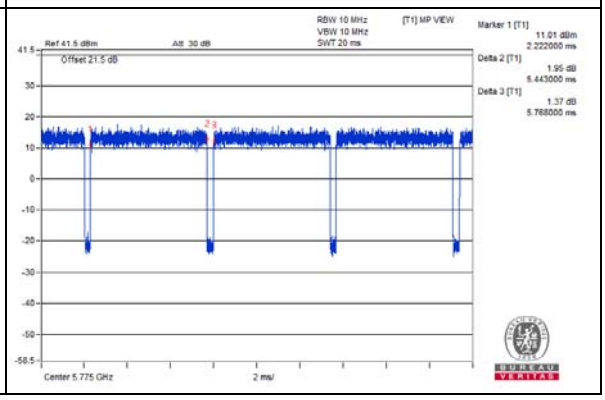
3.3 Duty Cycle of Test Signal

For 8TX Condition: Master

Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms /2.084 ms=0.948, Duty factor = 10 * log (1/Duty cycle) = 0.23 dB
802.11ax (HE20): Duty cycle = 5.438 ms /5.71 ms=0.952, Duty factor = 10 * log (1/Duty cycle) = 0.21 dB
802.11ax (HE40): Duty cycle = 5.441 ms /5.676 ms=0.959, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE80): Duty cycle = 5.436 ms /5.711 ms=0.952, Duty factor = 10 * log (1/Duty cycle) = 0.21 dB

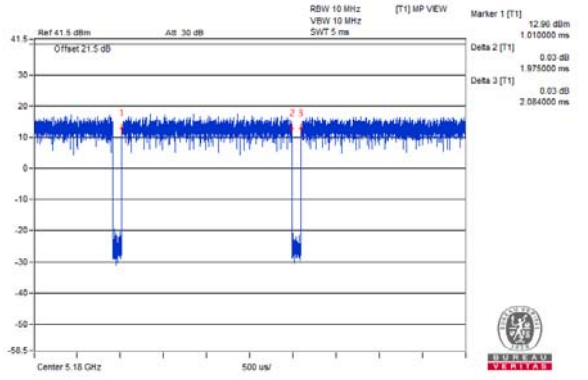
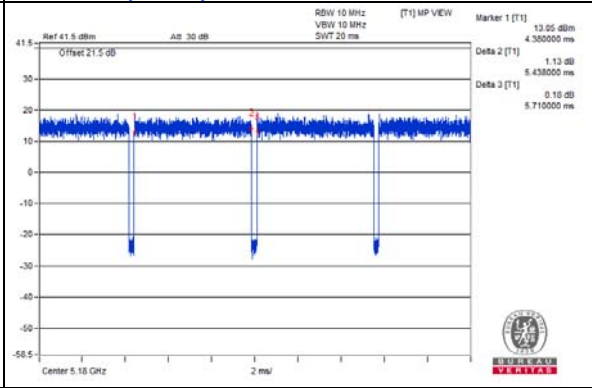
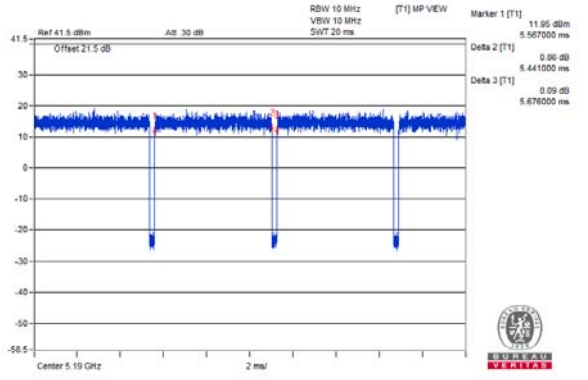
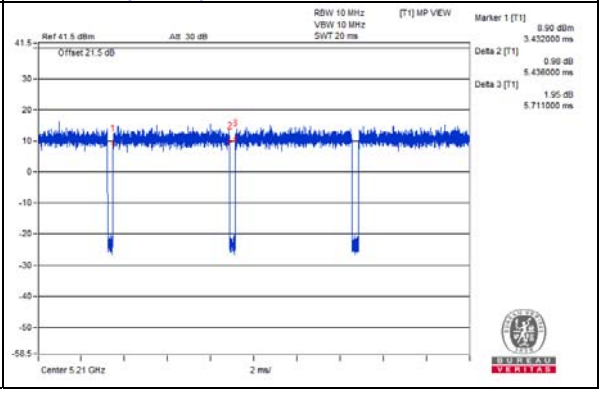
802.11a	
	
802.11ax (HE20)	
	
802.11ax (HE40)	
	

802.11ax (HE80)	
	

For 8TX Condition: Client

Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms /2.084 ms=0.948, Duty factor = 10 * log (1/Duty cycle) = 0.23 dB
802.11ax (HE20): Duty cycle = 5.438 ms /5.71 ms=0.952, Duty factor = 10 * log (1/Duty cycle) = 0.21 dB
802.11ax (HE40): Duty cycle = 5.441 ms /5.676 ms=0.959, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE80): Duty cycle = 5.436 ms /5.711 ms=0.952, Duty factor = 10 * log (1/Duty cycle) = 0.21 dB

802.11a	802.11ax (HE20)
	
802.11ax (HE40)	**802.11ax (HE80)**
	

For 4TX Condition:

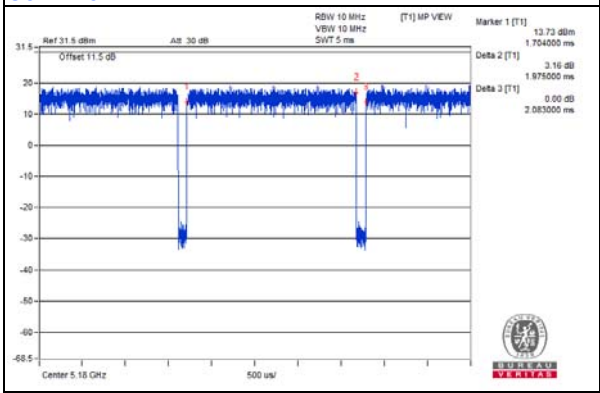
For U-NII-1:

For Master

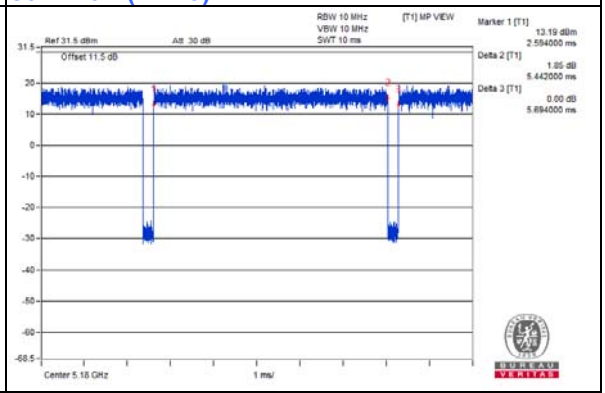
Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms /2.083 ms=0.948, Duty factor = 10 * log (1/Duty cycle) = 0.23 dB
802.11ax (HE20): Duty cycle = 5.442 ms /5.694 ms=0.956, Duty factor = 10 * log (1/Duty cycle) = 0.20 dB
802.11ax (HE40): Duty cycle = 5.443 ms /5.675 ms=0.959, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE80): Duty cycle = 5.444 ms /5.759 ms=0.945, Duty factor = 10 * log (1/Duty cycle) = 0.24 dB

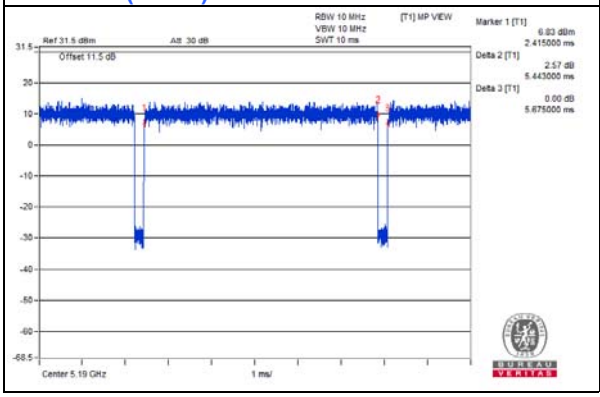
802.11a



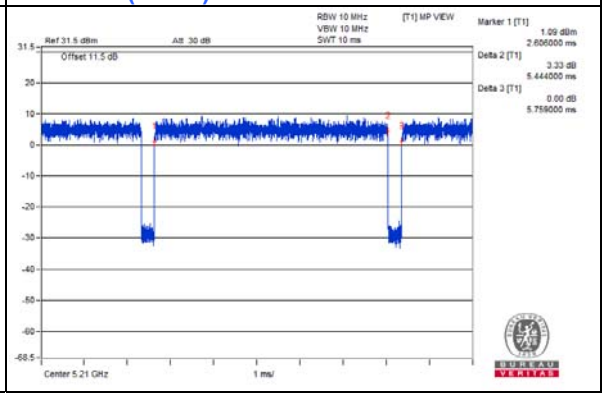
802.11ax (HE20)



802.11ax (HE40)



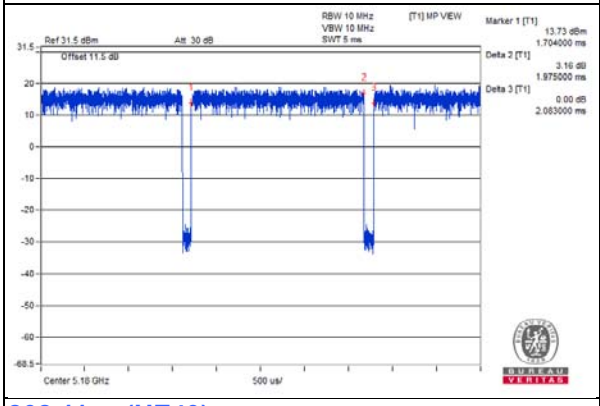
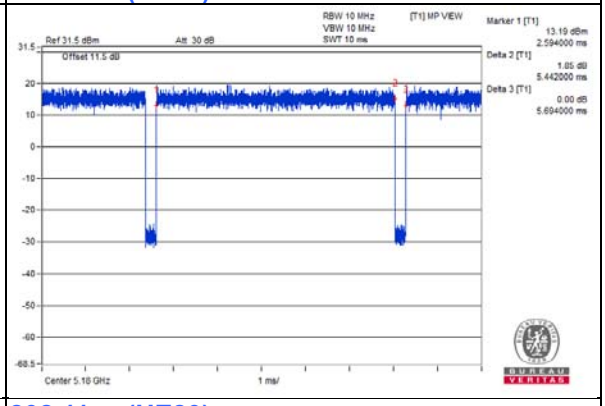
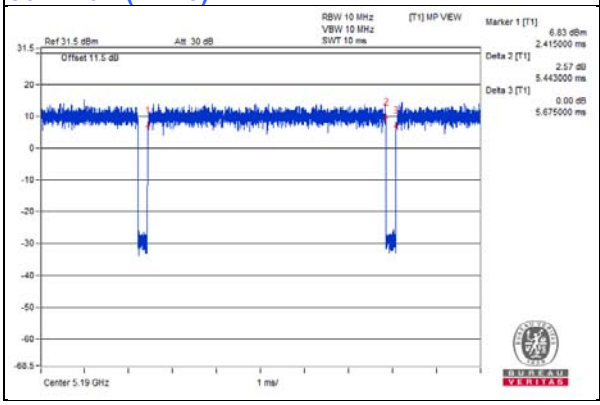
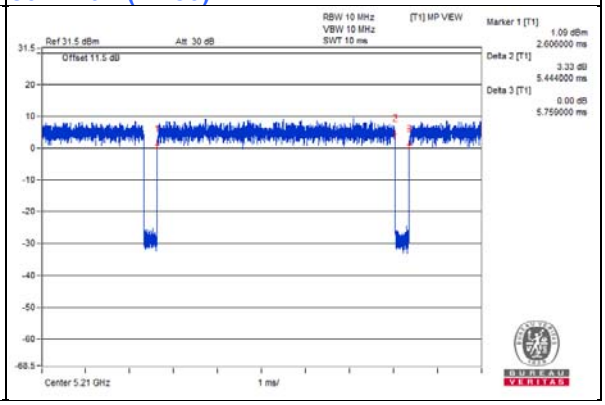
802.11ax (HE80)



For Client

Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms /2.083 ms=0.948, Duty factor = 10 * log (1/Duty cycle) = 0.23 dB
802.11ax (HE20): Duty cycle = 5.442 ms /5.694 ms=0.956, Duty factor = 10 * log (1/Duty cycle) = 0.20 dB
802.11ax (HE40): Duty cycle = 5.443 ms /5.675 ms=0.959, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE80): Duty cycle = 5.444 ms /5.759 ms=0.945, Duty factor = 10 * log (1/Duty cycle) = 0.24 dB

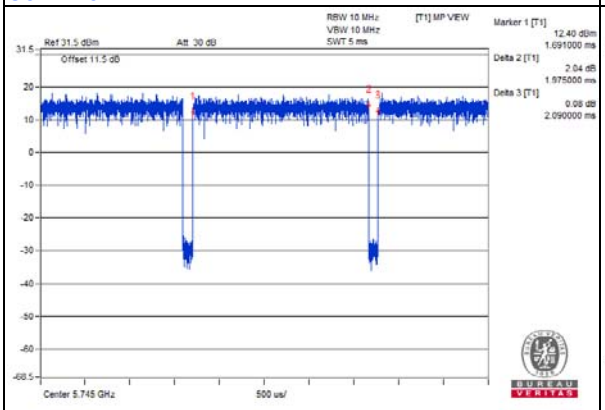
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	**802.11ax (HE80)**
	

For U-NII-3:

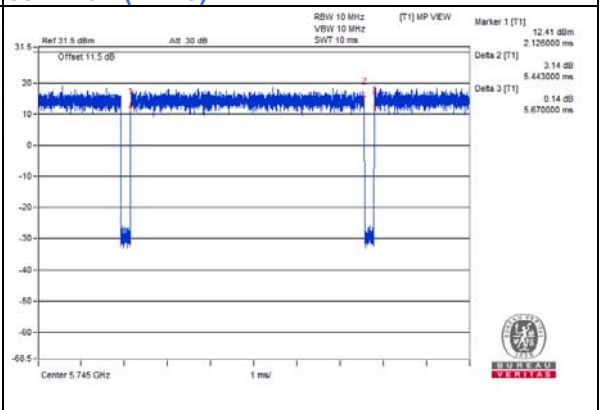
Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms /2.09 ms=0.945, Duty factor = 10 * log (1/Duty cycle) = 0.25 dB
802.11ax (HE20): Duty cycle = 5.443 ms /5.67 ms=0.96, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE40): Duty cycle = 5.443 ms /5.689 ms=0.957, Duty factor = 10 * log (1/Duty cycle) = 0.19 dB
802.11ax (HE80): Duty cycle = 5.443 ms /5.769 ms=0.943, Duty factor = 10 * log (1/Duty cycle) = 0.25 dB

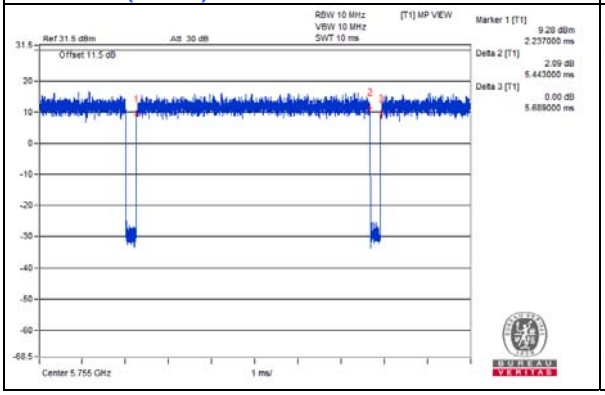
802.11a



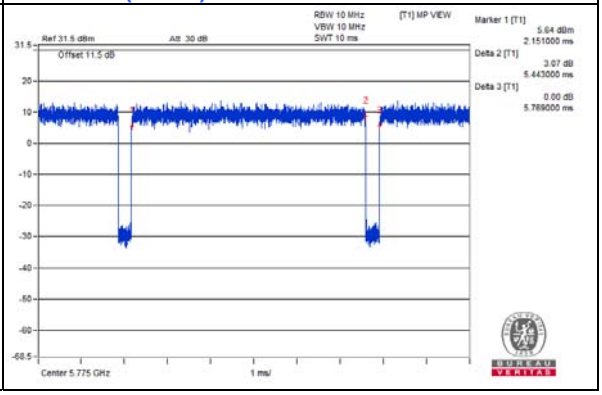
802.11ax (HE20)



802.11ax (HE40)



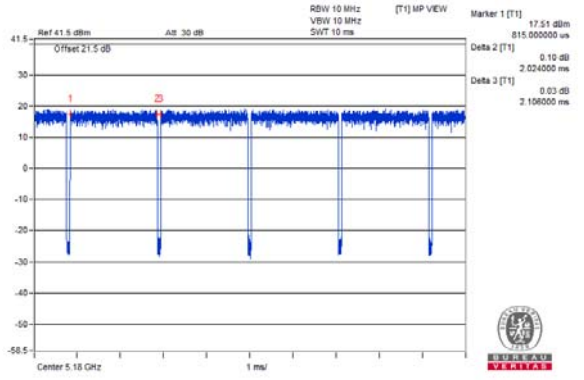
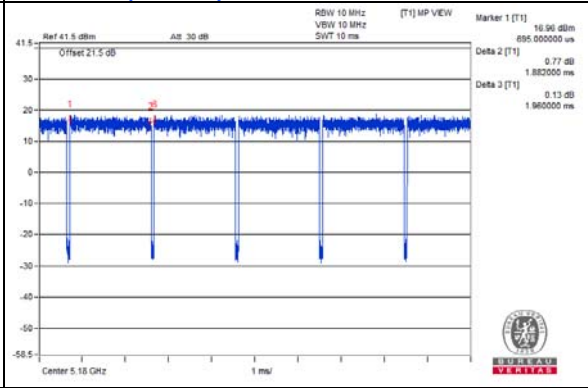
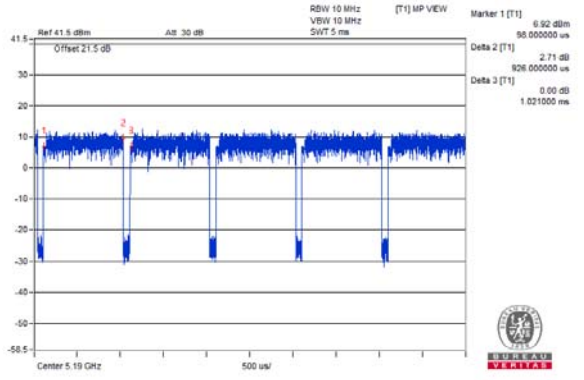
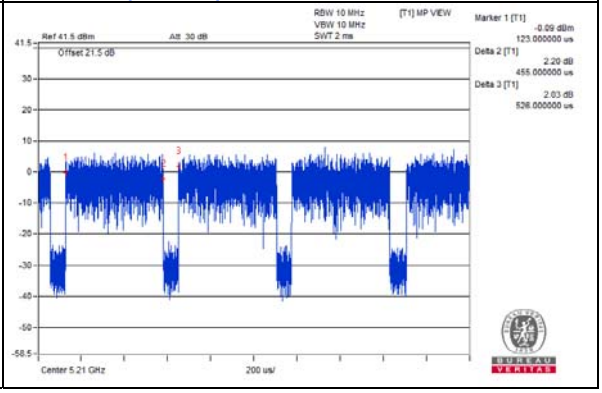
802.11ax (HE80)



For Scanning Radio

Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 2.024 ms /2.106 ms=0.961, Duty factor = 10 * log (1/Duty cycle) = 0.17 dB
802.11ac (VHT20): Duty cycle = 1.882 ms /1.96 ms=0.952, Duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ac (VHT40): Duty cycle = 0.926 ms /1.021 ms=0.907, Duty factor = 10 * log (1/Duty cycle) = 0.42 dB
802.11ac (VHT80): Duty cycle = 0.455 ms /0.526 ms=0.865, Duty factor = 10 * log (1/Duty cycle) = 0.63 dB

802.11a	802.11ac (VHT20)
	
802.11ac (VHT40)	**802.11ac (VHT80)**
	

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.	PoE Adapter	GME	GME40B-480135FDA	NA	NA	Supplied by client
B.	Laptop	Lenovo	20U5S01X00 L14	PF-28LKK7	NA	Provided by Lab
C.	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	NA	Provided by Lab
D.	USB Disk	SanDink	BM181225896Z	NA	NA	Provided by Lab
E.	PoE Adapter	MICROELECTRONICS TECH. INC.	TR60A-POE-L	NA	NA	Supplied by client

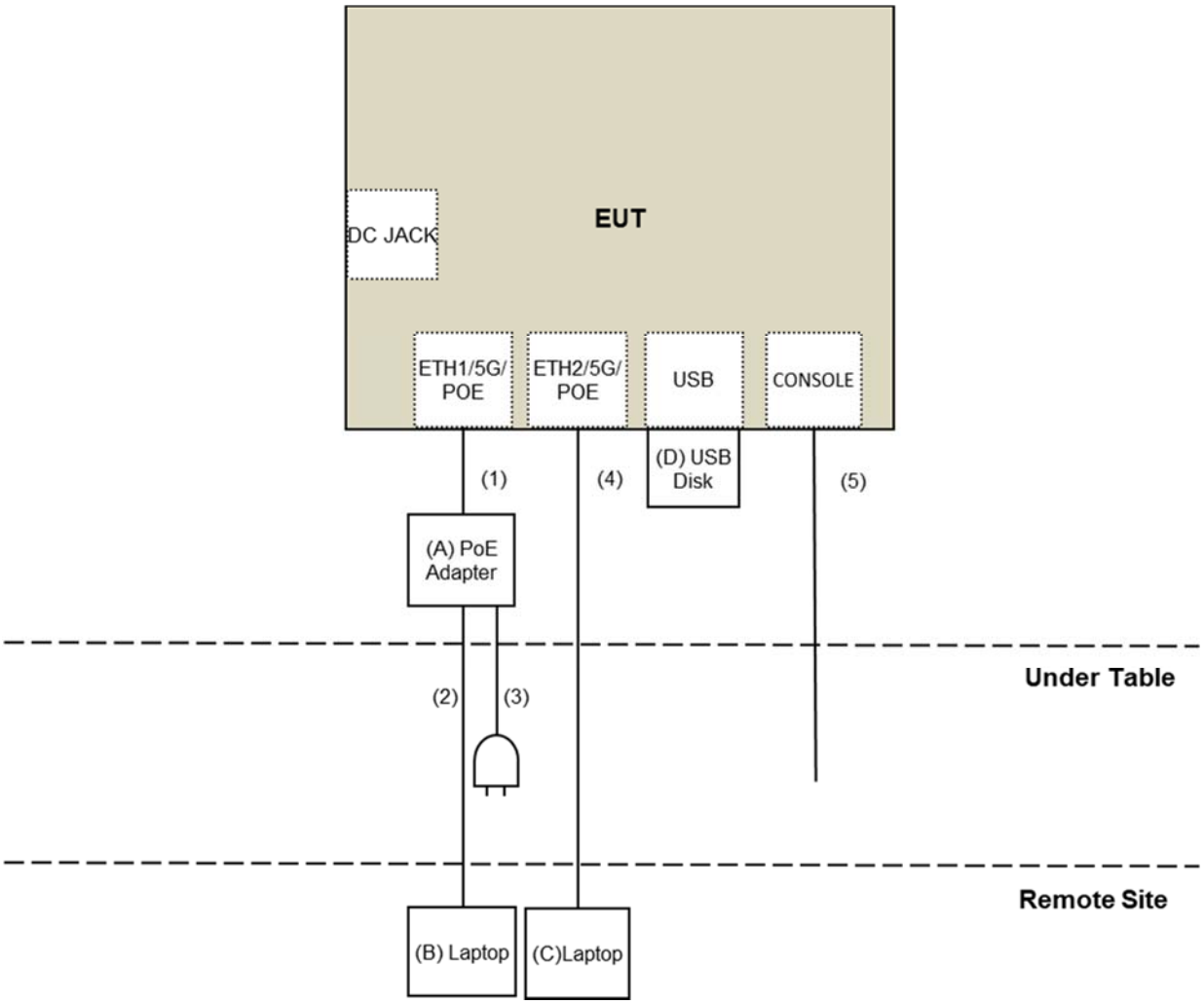
Note:

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

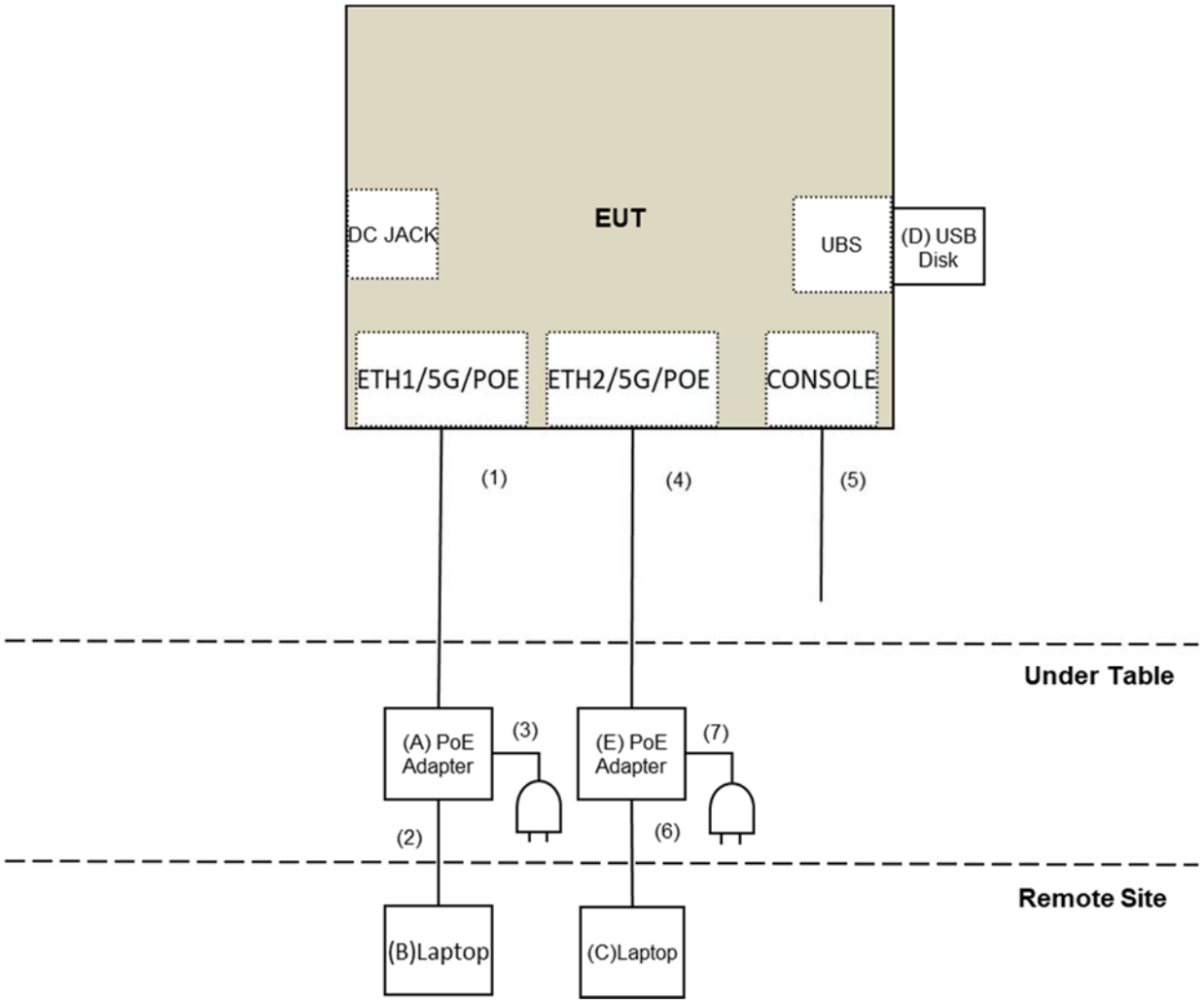
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	3	No	0	Provided by Lab
2.	RJ-45 Cable	1	10	No	0	Provided by Lab
3.	AC Cable	1	1.8	No	0	Provided by Lab
4.	RJ-45 Cable	1	10	No	0	Provided by Lab
5.	Console Cable	1	1.8	No	0	Provided by Lab
6.	RJ-45 Cable	1	10	No	0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

3.4.1 Configuration of System under Test

AC Power Conducted Emissions test



Radiated Emissions test:



3.5 General Description of Applied Standards 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 (dBuV/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	
		PK:74 (dBμV/m)	AV:54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/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 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK:122.2 (dBμV/m) *4

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

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

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

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

Note:

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

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

4.1.2 Test Instruments

For Bandedge & OOBE test (For DBS):

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	2020/7/24	2021/7/23
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Horn Antenna Schwarzbeck	BBHA9120-D	9120D-406	2020/11/22	2021/11/21
Pre_Amplifier EMCI	EMC12630SE	980384	2021/1/11	2022/1/10
RF Coaxial Cable EMCI	EMC104-SM-SM-1500	180504	2021/4/26	2022/4/25
RF Coaxial Cable EMCI	EMC104-SM-SM-2000	180601	2020/6/9	2021/6/8
RF Coaxial Cable EMCI	EMC104-SM-SM-6000	210201	2021/5/13	2022/5/12
Fix tool for Boresight antenna tower LIOW GUU	FBA-01	FBA_SIP01	NA	NA
Spectrum Analyzer Keysight	N9030A	MY54490679	2020/7/13	2021/7/12
Pre_Amplifier EMCI	EMC184045SE	980387	2021/1/11	2022/1/10
SHF-EHF Horn Schwarzbeck	BBHA 9170	BBHA9170519	2020/11/22	2021/11/21
RF Cable-Frequency range: 1-40GHz EMCI	EMC102-KM-KM-1200	160924	2021/1/11	2022/1/10
RF cable (40GHz) EMCI	EMC-KM-KM-4000	200214	2021/3/10	2022/3/9

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. 3.
3. Tested Date: 2021/6/2 ~ 2021/6/3

For Bandedge (For SBS & Scan Radio) & OOBE (For Scan Radio) test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	2020/7/24	2021/7/23
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Horn Antenna Schwarzbeck	BBHA9120-D	9120D-406	2020/11/22	2021/11/21
Pre_Amplifier EMCI	EMC12630SE	980384	2021/1/11	2022/1/10
RF Coaxial Cable EMCI	EMC104-SM-SM-1500	180504	2021/4/26	2022/4/25
RF Coaxial Cable EMCI	EMC104-SM-SM-2000	180601	2021/6/8	2022/6/7
RF Coaxial Cable EMCI	EMC104-SM-SM-6000	210201	2021/5/13	2022/5/12
Fix tool for Boresight antenna tower LIOW GUU	FBA-01	FBA_SIP01	NA	NA
Spectrum Analyzer Keysight	N9030A	MY54490679	2020/7/13	2021/7/12
Pre_Amplifier EMCI	EMC184045SE	980387	2021/1/11	2022/1/10
SHF-EHF Horn Schwarzbeck	BBHA 9170	BBHA9170519	2020/11/22	2021/11/21
RF Cable-Frequency range: 1-40GHz EMCI	EMC102-KM-KM-1200	160924	2021/1/11	2022/1/10
RF cable (40GHz) EMCI	EMC-KM-KM-4000	200214	2021/3/10	2022/3/9

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. 3.
3. Tested Date: 2021/6/18

For radiated emission test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	2021/7/22	2022/7/21
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Pre_Amplifier EMCI	EMC001340	980142	2021/5/24	2022/5/23
LOOP ANTENNA Electro-Metrics	EM-6879	264	2021/3/5	2022/3/4
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2021/1/7	2022/1/6
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-002	2021/1/7	2022/1/6
Pre_Amplifier Mini-Circuits	ZFL-1000VH2	QA0838008	2020/10/20	2021/10/19
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	2020/11/5	2021/11/4
RF Coaxial Cable COMMATE/PEWC	8D	966-3-1	2021/3/16	2022/3/15
RF Coaxial Cable COMMATE/PEWC	8D	966-3-2	2021/3/16	2022/3/15
RF Coaxial Cable COMMATE/PEWC	8D	966-3-3	2021/3/16	2022/3/15
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	2020/9/24	2021/9/23
Horn Antenna Schwarzbeck	BBHA9120-D	9120D-406	2020/11/22	2021/11/21
Pre_Amplifier EMCI	EMC12630SE	980384	2021/1/11	2022/1/10
RF Coaxial Cable EMCI	EMC104-SM-SM-1500	180504	2021/4/26	2022/4/25
RF Coaxial Cable EMCI	EMC104-SM-SM-2000	180601	2021/6/8	2022/6/7
RF Coaxial Cable EMCI	EMC104-SM-SM-6000	210201	2021/5/13	2022/5/12
Fix tool for Boresight antenna tower LIOW GUU	FBA-01	FBA_SIP01	NA	NA
Spectrum Analyzer Keysight	N9030A	MY54490679	2021/7/9	2022/7/8
Pre_Amplifier EMCI	EMC184045SE	980387	2021/1/11	2022/1/10
SHF-EHF Horn Schwarzbeck	BBHA 9170	BBHA9170519	2020/11/22	2021/11/21
RF Cable-Frequency range: 1-40GHz EMCI	EMC102-KM-KM-1200	160924	2021/1/11	2022/1/10
RF cable (40GHz) EMCI	EMC-KM-KM-4000	200214	2021/3/10	2022/3/9
Spectrum Analyzer Keysight	N9030A	MY54490679	2021/7/9	2022/7/8

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. 3.
3. Tested Date: 2021/7/31 ~ 2021/8/4

For other test items:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	101516	2021/3/8	2022/3/7
Power Meter Anritsu	ML2495A	1529002	2021/6/21	2022/6/20
Pulse Power Sensor Anritsu	MA2411B	1339443	2021/5/31	2022/5/30
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2021/4/13	2022/4/12
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA
DC POWER SUPPLY Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2021/1/14	2022/1/13
True RMS Clamp Meter Fluke	325	31130711WS	2021/6/2	2022/6/1

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: 2021/8/19 ~ 2021/8/27

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:

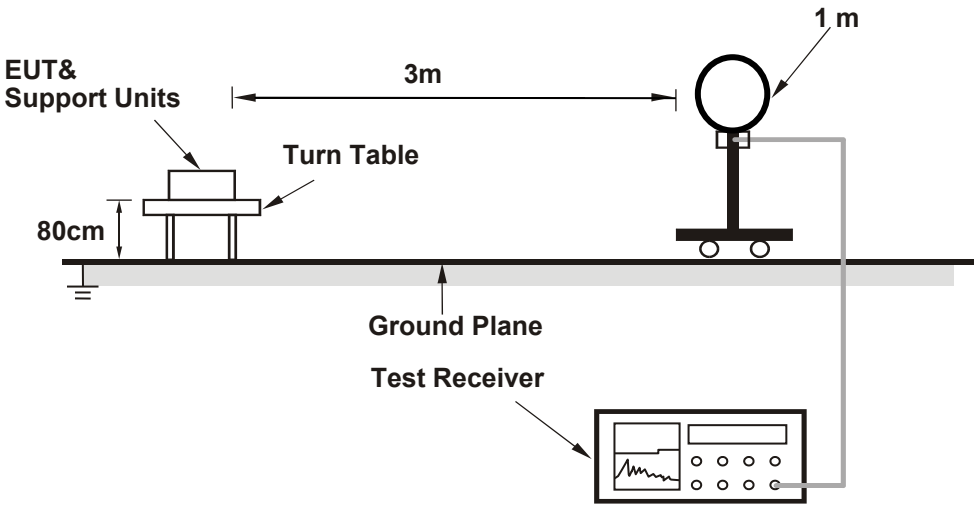
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 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

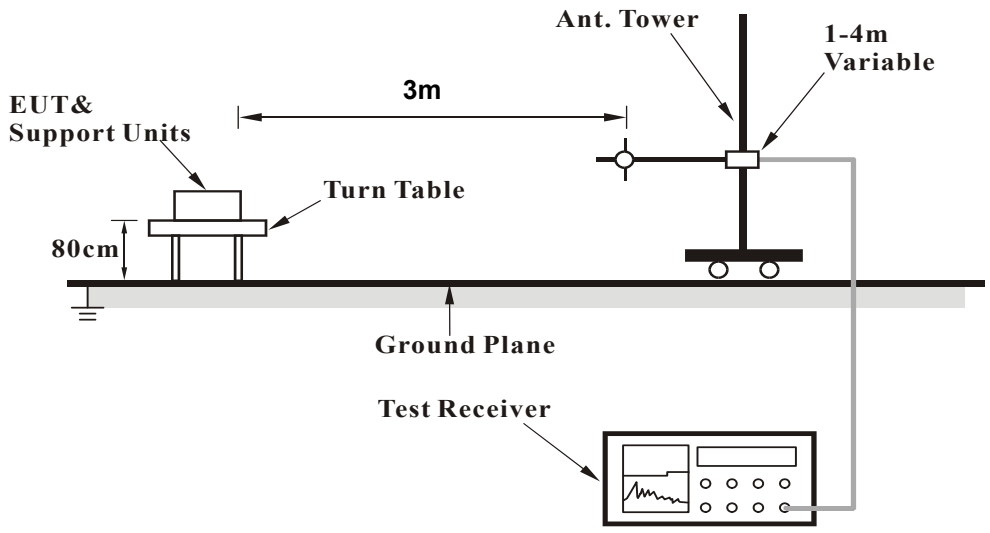
No deviation.

4.1.5 Test Setup

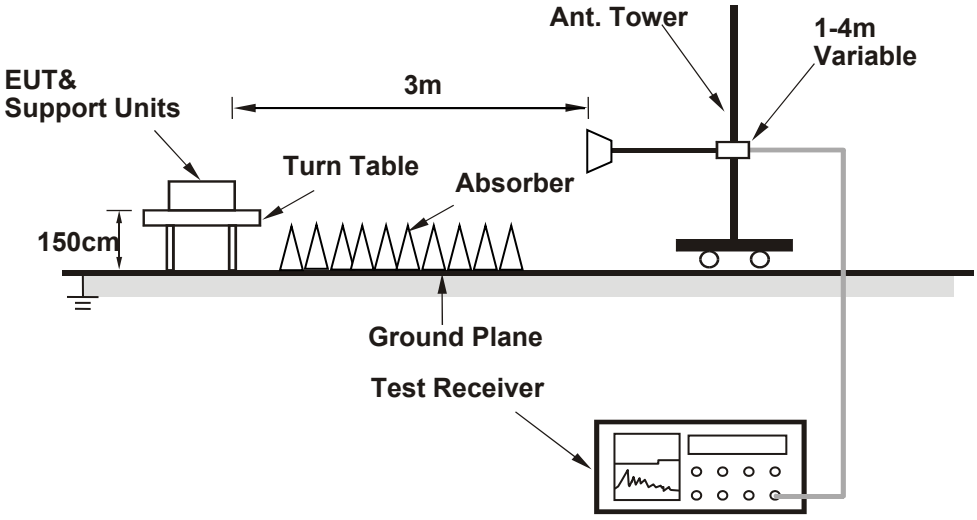
For Radiated emission below 30MHz



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

a. Connected the EUT with the Laptop which is placed on on remote site.
b. Controlling software (QSPR Version 5.0-00188) has been activated to set the EUT under transmission condition continuously at specific channel frenquency.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	5145.65	55.9 PK	74.0	-18.1	1.53 H	360	51.1	4.8
2	5145.65	43.4 AV	54.0	-10.6	1.53 H	360	38.6	4.8
3	*5180.00	116.7 PK			1.53 H	360	112.1	4.6
4	*5180.00	106.0 AV			1.53 H	360	101.4	4.6
5	#10360.00	58.0 PK	68.2	-10.2	1.03 H	289	44.6	13.4
6	15540.00	51.2 PK	74.0	-22.8	1.86 H	343	36.7	14.5
7	15540.00	39.7 AV	54.0	-14.3	1.86 H	343	25.2	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5145.06	54.9 PK	74.0	-19.1	2.10 V	34	50.1	4.8
2	5145.06	43.2 AV	54.0	-10.8	2.10 V	34	38.4	4.8
3	*5180.00	115.3 PK			2.10 V	34	110.7	4.6
4	*5180.00	106.8 AV			2.10 V	34	102.2	4.6
5	#10360.00	53.3 PK	68.2	-14.9	1.05 V	356	39.9	13.4
6	15540.00	51.1 PK	74.0	-22.9	1.38 V	14	36.6	14.5
7	15540.00	40.2 AV	54.0	-13.8	1.38 V	14	25.7	14.5

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	116.1 PK			1.47 H	360	111.7	4.4
2	*5200.00	105.5 AV			1.47 H	360	101.1	4.4
3	#10400.00	57.7 PK	68.2	-10.5	1.04 H	299	44.1	13.6
4	15600.00	50.9 PK	74.0	-23.1	1.84 H	333	36.4	14.5
5	15600.00	39.7 AV	54.0	-14.3	1.84 H	333	25.2	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	115.8 PK			2.12 V	35	111.4	4.4
2	*5200.00	107.3 AV			2.12 V	35	102.9	4.4
3	#10400.00	53.3 PK	68.2	-14.9	1.03 V	341	39.7	13.6
4	15600.00	51.2 PK	74.0	-22.8	1.38 V	33	36.7	14.5
5	15600.00	39.9 AV	54.0	-14.1	1.38 V	33	25.4	14.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	118.3 PK			1.90 H	356	113.9	4.4
2	*5240.00	106.6 AV			1.90 H	356	102.2	4.4
3	5350.00	53.4 PK	74.0	-20.6	1.90 H	356	49.1	4.3
4	5350.00	43.0 AV	54.0	-11.0	1.90 H	356	38.7	4.3
5	#10480.00	51.1 PK	68.2	-17.1	1.93 H	328	37.4	13.7
6	15720.00	50.2 PK	74.0	-23.8	1.53 H	300	35.8	14.4
7	15720.00	39.5 AV	54.0	-14.5	1.53 H	300	25.1	14.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	116.7 PK			2.09 V	12	112.3	4.4
2	*5240.00	107.5 AV			2.09 V	12	103.1	4.4
3	5437.30	53.0 PK	74.0	-21.0	2.09 V	12	48.6	4.4
4	5437.30	41.6 AV	54.0	-12.4	2.09 V	12	37.2	4.4
5	#10480.00	53.8 PK	68.2	-14.4	1.03 V	350	40.1	13.7
6	15720.00	51.4 PK	74.0	-22.6	1.33 V	39	37.0	14.4
7	15720.00	40.0 AV	54.0	-14.0	1.33 V	39	25.6	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.

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5560.73	55.6 PK	68.2	-12.6	1.75 H	314	51.1	4.5
2	*5745.00	115.8 PK			1.75 H	314	110.8	5.0
3	*5745.00	107.2 AV			1.75 H	314	102.2	5.0
4	#5939.10	55.6 PK	68.2	-12.6	1.75 H	314	50.6	5.0
5	11490.00	57.7 PK	74.0	-16.3	1.00 H	289	43.1	14.6
6	11490.00	47.2 AV	54.0	-6.8	1.00 H	289	32.6	14.6
7	#17235.00	51.3 PK	68.2	-16.9	1.87 H	328	33.3	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	#5646.20	55.7 PK	68.2	-12.5	2.24 V	10	51.2	4.5
2	*5745.00	117.3 PK			2.24 V	10	112.3	5.0
3	*5745.00	108.4 AV			2.24 V	10	103.4	5.0
4	#5990.21	55.3 PK	68.2	-12.9	2.24 V	10	50.1	5.2
5	11490.00	53.4 PK	74.0	-20.6	1.00 V	342	38.8	14.6
6	11490.00	43.6 AV	54.0	-10.4	1.00 V	342	29.0	14.6
7	#17235.00	51.2 PK	68.2	-17.0	1.37 V	29	33.2	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.

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5609.37	54.5 PK	68.2	-13.7	1.72 H	306	50.0	4.5
2	*5785.00	116.3 PK			1.72 H	306	111.2	5.1
3	*5785.00	107.6 AV			1.72 H	306	102.5	5.1
4	#6021.77	54.9 PK	68.2	-13.3	1.72 H	306	49.7	5.2
5	11570.00	58.2 PK	74.0	-15.8	1.04 H	303	43.6	14.6
6	11570.00	47.6 AV	54.0	-6.4	1.04 H	303	33.0	14.6
7	#17355.00	51.3 PK	68.2	-16.9	1.91 H	328	33.1	18.2
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	#5597.31	55.0 PK	68.2	-13.2	2.30 V	12	50.5	4.5
2	*5785.00	117.1 PK			2.30 V	12	112.0	5.1
3	*5785.00	108.3 AV			2.30 V	12	103.2	5.1
4	#5952.63	55.1 PK	68.2	-13.1	2.30 V	12	50.0	5.1
5	11570.00	53.9 PK	74.0	-20.1	1.12 V	351	39.3	14.6
6	11570.00	43.9 AV	54.0	-10.1	1.12 V	351	29.3	14.6
7	#17355.00	50.6 PK	68.2	-17.6	1.37 V	42	32.4	18.2

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.

RF Mode	TX 802.11a	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5631.39	55.2 PK	68.2	-13.0	1.79 H	303	50.7	4.5
2	*5825.00	116.1 PK			1.79 H	303	111.1	5.0
3	*5825.00	107.6 AV			1.79 H	303	102.6	5.0
4	#5928.61	55.6 PK	68.2	-12.6	1.79 H	303	50.6	5.0
5	11650.00	57.8 PK	74.0	-16.2	1.02 H	304	43.4	14.4
6	11650.00	47.4 AV	54.0	-6.6	1.02 H	304	33.0	14.4
7	#17475.00	51.7 PK	68.2	-16.5	1.82 H	321	32.9	18.8
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	#5634.95	55.8 PK	68.2	-12.4	2.25 V	3	51.3	4.5
2	*5825.00	117.5 PK			2.25 V	3	112.5	5.0
3	*5825.00	108.4 AV			2.25 V	3	103.4	5.0
4	#6020.49	55.4 PK	68.2	-12.8	2.25 V	3	50.2	5.2
5	11650.00	53.5 PK	74.0	-20.5	1.08 V	331	39.1	14.4
6	11650.00	43.5 AV	54.0	-10.5	1.08 V	331	29.1	14.4
7	#17475.00	51.5 PK	68.2	-16.7	1.42 V	36	32.7	18.8

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	54.9 PK	74.0	-19.1	1.46 H	356	50.2	4.7
2	5150.00	43.5 AV	54.0	-10.5	1.46 H	356	38.8	4.7
3	*5180.00	118.5 PK			1.46 H	356	113.9	4.6
4	*5180.00	106.2 AV			1.46 H	356	101.6	4.6
5	#10360.00	57.9 PK	68.2	-10.3	1.04 H	292	44.5	13.4
6	15540.00	51.5 PK	74.0	-22.5	1.84 H	324	37.0	14.5
7	15540.00	40.0 AV	54.0	-14.0	1.84 H	324	25.5	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	2.17 V	19	60.2	4.7
2	**5150.00**	**53.8 AV**	**54.0**	**-0.2**	**2.17 V**	**19**	**49.1**	**4.7**
3	*5180.00	118.0 PK			2.17 V	19	113.4	4.6
4	*5180.00	105.3 AV			2.17 V	19	100.7	4.6
5	#10360.00	53.3 PK	68.2	-14.9	1.02 V	340	39.9	13.4
6	15540.00	51.9 PK	74.0	-22.1	1.41 V	41	37.4	14.5
7	15540.00	40.6 AV	54.0	-13.4	1.41 V	41	26.1	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	118.6 PK			1.42 H	357	114.2	4.4
2	*5200.00	106.5 AV			1.42 H	357	102.1	4.4
3	#10400.00	57.1 PK	68.2	-11.1	1.01 H	284	43.5	13.6
4	15600.00	51.5 PK	74.0	-22.5	1.90 H	314	37.0	14.5
5	15600.00	40.3 AV	54.0	-13.7	1.90 H	314	25.8	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	117.8 PK			2.13 V	14	113.4	4.4
2	*5200.00	105.3 AV			2.13 V	14	100.9	4.4
3	#10400.00	53.7 PK	68.2	-14.5	1.01 V	333	40.1	13.6
4	15600.00	51.5 PK	74.0	-22.5	1.33 V	17	37.0	14.5
5	15600.00	40.5 AV	54.0	-13.5	1.33 V	17	26.0	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	119.2 PK			1.60 H	315	114.8	4.4
2	*5240.00	107.2 AV			1.60 H	315	102.8	4.4
3	5433.95	52.1 PK	74.0	-21.9	1.60 H	315	47.7	4.4
4	5433.95	40.8 AV	54.0	-13.2	1.60 H	315	36.4	4.4
5	#10480.00	57.8 PK	68.2	-10.4	1.06 H	301	44.1	13.7
6	15720.00	50.8 PK	74.0	-23.2	1.89 H	343	36.4	14.4
7	15720.00	39.7 AV	54.0	-14.3	1.89 H	343	25.3	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	*5240.00	119.3 PK			2.17 V	12	114.9	4.4
2	*5240.00	106.8 AV			2.17 V	12	102.4	4.4
3	5430.37	53.6 PK	74.0	-20.4	2.17 V	12	49.2	4.4
4	5430.37	41.8 AV	54.0	-12.2	2.17 V	12	37.4	4.4
5	#10480.00	54.0 PK	68.2	-14.2	1.02 V	334	40.3	13.7
6	15720.00	50.5 PK	74.0	-23.5	1.31 V	27	36.1	14.4
7	15720.00	39.7 AV	54.0	-14.3	1.31 V	27	25.3	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5647.33	55.5 PK	68.2	-12.7	1.71 H	329	51.0	4.5
2	*5745.00	117.2 PK			1.71 H	329	112.2	5.0
3	*5745.00	105.1 AV			1.71 H	329	100.1	5.0
4	#5932.56	54.9 PK	68.2	-13.3	1.71 H	329	49.9	5.0
5	11490.00	58.1 PK	74.0	-15.9	1.06 H	292	43.5	14.6
6	11490.00	47.5 AV	54.0	-6.5	1.06 H	292	32.9	14.6
7	#17235.00	51.3 PK	68.2	-16.9	1.82 H	336	33.3	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	#5608.04	55.7 PK	68.2	-12.5	2.05 V	13	51.2	4.5
2	*5745.00	116.1 PK			2.05 V	13	111.1	5.0
3	*5745.00	105.2 AV			2.05 V	13	100.2	5.0
4	#5929.71	55.2 PK	68.2	-13.0	2.05 V	13	50.2	5.0
5	11490.00	53.1 PK	74.0	-20.9	1.09 V	349	38.5	14.6
6	11490.00	43.1 AV	54.0	-10.9	1.09 V	349	28.5	14.6
7	#17235.00	51.2 PK	68.2	-17.0	1.35 V	44	33.2	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5561.73	55.5 PK	68.2	-12.7	1.66 H	331	51.0	4.5
2	*5785.00	117.4 PK			1.66 H	331	112.3	5.1
3	*5785.00	105.5 AV			1.66 H	331	100.4	5.1
4	#5987.81	55.6 PK	68.2	-12.6	1.66 H	331	50.4	5.2
5	11570.00	57.6 PK	74.0	-16.4	1.02 H	282	43.0	14.6
6	11570.00	47.1 AV	54.0	-6.9	1.02 H	282	32.5	14.6
7	#17355.00	51.1 PK	68.2	-17.1	1.85 H	334	32.9	18.2
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	#5580.70	54.5 PK	68.2	-13.7	1.92 V	34	50.0	4.5
2	*5785.00	117.5 PK			1.92 V	34	112.4	5.1
3	*5785.00	105.2 AV			1.92 V	34	100.1	5.1
4	#5971.33	54.8 PK	68.2	-13.4	1.92 V	34	49.6	5.2
5	11570.00	53.1 PK	74.0	-20.9	1.06 V	330	38.5	14.6
6	11570.00	43.2 AV	54.0	-10.8	1.06 V	330	28.6	14.6
7	#17355.00	51.4 PK	68.2	-16.8	1.34 V	30	33.2	18.2

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5587.43	54.9 PK	68.2	-13.3	1.68 H	316	50.4	4.5
2	*5825.00	117.2 PK			1.68 H	316	112.2	5.0
3	*5825.00	104.9 AV			1.68 H	316	99.9	5.0
4	#6009.09	54.4 PK	68.2	-13.8	1.68 H	316	49.2	5.2
5	11650.00	57.5 PK	74.0	-16.5	1.05 H	301	43.1	14.4
6	11650.00	47.2 AV	54.0	-6.8	1.05 H	301	32.8	14.4
7	#17475.00	51.6 PK	68.2	-16.6	1.89 H	315	32.8	18.8
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	#5625.36	56.1 PK	68.2	-12.1	1.95 V	4	51.6	4.5
2	*5825.00	117.4 PK			1.95 V	4	112.4	5.0
3	*5825.00	106.6 AV			1.95 V	4	101.6	5.0
4	#5927.24	55.5 PK	68.2	-12.7	1.95 V	4	50.5	5.0
5	11650.00	53.7 PK	74.0	-20.3	1.01 V	338	39.3	14.4
6	11650.00	43.8 AV	54.0	-10.2	1.01 V	338	29.4	14.4
7	#17475.00	51.2 PK	68.2	-17.0	1.38 V	21	32.4	18.8

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	56.3 PK	74.0	-17.7	1.22 H	319	51.6	4.7
2	5150.00	46.7 AV	54.0	-7.3	1.22 H	319	42.0	4.7
3	*5190.00	113.5 PK			1.22 H	319	109.0	4.5
4	*5190.00	103.0 AV			1.22 H	319	98.5	4.5
5	#10380.00	58.1 PK	68.2	-10.1	1.04 H	278	44.7	13.4
6	15570.00	50.9 PK	74.0	-23.1	1.93 H	340	36.3	14.6
7	15570.00	39.6 AV	54.0	-14.4	1.93 H	340	25.0	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5143.49	64.7 PK	74.0	-9.3	2.17 V	10	59.9	4.8
2	5143.49	53.2 AV	54.0	-0.8	2.17 V	10	48.4	4.8
3	*5190.00	114.7 PK			2.17 V	10	110.2	4.5
4	*5190.00	103.1 AV			2.17 V	10	98.6	4.5
5	#10380.00	53.1 PK	68.2	-15.1	1.12 V	351	39.7	13.4
6	15570.00	51.2 PK	74.0	-22.8	1.38 V	37	36.6	14.6
7	15570.00	40.1 AV	54.0	-13.9	1.38 V	37	25.5	14.6

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	63.7 PK	74.0	-10.3	1.09 H	239	59.0	4.7
2	5150.00	52.4 AV	54.0	-1.6	1.09 H	239	47.7	4.7
3	*5230.00	121.0 PK			1.09 H	239	116.6	4.4
4	*5230.00	109.2 AV			1.09 H	239	104.8	4.4
5	5350.00	53.6 PK	74.0	-20.4	1.09 H	239	49.3	4.3
6	5350.00	41.8 AV	54.0	-12.2	1.09 H	239	37.5	4.3
7	#10460.00	58.2 PK	68.2	-10.0	1.04 H	298	44.6	13.6
8	15690.00	51.9 PK	74.0	-22.1	1.82 H	323	37.4	14.5
9	15690.00	40.3 AV	54.0	-13.7	1.82 H	323	25.8	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.0 PK	74.0	-9.0	1.69 V	159	60.3	4.7
2	**5150.00**	**53.8 AV**	**54.0**	**-0.2**	**1.69 V**	**159**	**49.1**	**4.7**
3	*5230.00	119.3 PK			1.69 V	159	114.9	4.4
4	*5230.00	108.0 AV			1.69 V	159	103.6	4.4
5	5364.84	54.8 PK	74.0	-19.2	1.69 V	159	50.4	4.4
6	5364.84	43.5 AV	54.0	-10.5	1.69 V	159	39.1	4.4
7	#10460.00	53.0 PK	68.2	-15.2	1.05 V	342	39.4	13.6
8	15690.00	51.4 PK	74.0	-22.6	1.39 V	44	36.9	14.5
9	15690.00	40.6 AV	54.0	-13.4	1.39 V	44	26.1	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	**#5646.99**	**68.0 PK**	**68.2**	**-0.2**	**1.12 H**	**239**	**63.5**	**4.5**
2	*5755.00	121.7 PK			1.12 H	239	116.7	5.0
3	*5755.00	109.9 AV			1.12 H	239	104.9	5.0
4	#5927.24	54.8 PK	68.2	-13.4	1.12 H	239	49.7	5.1
5	11510.00	57.3 PK	74.0	-16.7	1.01 H	276	42.7	14.6
6	11510.00	46.9 AV	54.0	-7.1	1.01 H	276	32.3	14.6
7	#17265.00	51.1 PK	68.2	-17.1	1.90 H	313	33.2	17.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5630.56	61.3 PK	68.2	-6.9	1.71 V	192	56.8	4.5
2	*5755.00	119.6 PK			1.71 V	192	114.6	5.0
3	*5755.00	108.7 AV			1.71 V	192	103.7	5.0
4	#5952.99	54.8 PK	68.2	-13.4	1.71 V	192	49.6	5.2
5	11510.00	53.2 PK	74.0	-20.8	1.05 V	356	38.6	14.6
6	11510.00	43.1 AV	54.0	-10.9	1.05 V	356	28.5	14.6
7	#17265.00	50.7 PK	68.2	-17.5	1.34 V	45	32.8	17.9

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5647.42	65.2 PK	68.2	-3.0	1.12 H	240	60.7	4.5
2	*5795.00	122.4 PK			1.12 H	240	117.3	5.1
3	*5795.00	110.2 AV			1.12 H	240	105.1	5.1
4	#5928.15	65.2 PK	68.2	-3.0	1.12 H	240	60.1	5.1
5	11590.00	58.0 PK	74.0	-16.0	1.01 H	295	43.4	14.6
6	11590.00	47.6 AV	54.0	-6.4	1.01 H	295	33.0	14.6
7	#17385.00	51.5 PK	68.2	-16.7	1.85 H	332	33.2	18.3
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	#5649.70	62.0 PK	68.2	-6.2	1.71 V	193	57.5	4.5
2	*5795.00	121.5 PK			1.71 V	193	116.4	5.1
3	*5795.00	111.0 AV			1.71 V	193	105.9	5.1
4	#5938.12	66.8 PK	68.2	-1.4	1.71 V	193	61.7	5.1
5	11590.00	53.4 PK	74.0	-20.6	1.06 V	332	38.8	14.6
6	11590.00	43.9 AV	54.0	-10.1	1.06 V	332	29.3	14.6
7	#17385.00	50.5 PK	68.2	-17.7	1.39 V	37	32.2	18.3

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.

RF Mode	TX 802.11ax (HE80)	Channel	CH 42：5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	5133.94	63.0 PK	74.0	-11.0	1.10 H	323	58.2	4.8
2	5133.94	51.1 AV	54.0	-2.9	1.10 H	323	46.3	4.8
3	*5210.00	110.2 PK			1.10 H	323	105.8	4.4
4	*5210.00	98.9 AV			1.10 H	323	94.5	4.4
5	5350.00	51.1 PK	74.0	-22.9	1.10 H	323	46.8	4.3
6	5350.00	40.0 AV	54.0	-14.0	1.10 H	323	35.7	4.3
7	#10420.00	57.6 PK	68.2	-10.6	1.01 H	299	44.1	13.5
8	15630.00	51.8 PK	74.0	-22.2	1.92 H	328	37.2	14.6
9	15630.00	40.3 AV	54.0	-13.7	1.92 H	328	25.7	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5134.35	65.9 PK	74.0	-8.1	2.13 V	27	61.1	4.8
2	5134.35	53.6 AV	54.0	-0.4	2.13 V	27	48.8	4.8
3	*5210.00	109.2 PK			2.13 V	27	104.8	4.4
4	*5210.00	98.1 AV			2.13 V	27	93.7	4.4
5	5350.00	51.1 PK	74.0	-22.9	2.13 V	27	46.8	4.3
6	5350.00	39.5 AV	54.0	-14.5	2.13 V	27	35.2	4.3
7	#10420.00	53.6 PK	68.2	-14.6	1.02 V	345	40.1	13.5
8	15630.00	51.2 PK	74.0	-22.8	1.42 V	26	36.6	14.6
9	15630.00	40.3 AV	54.0	-13.7	1.42 V	26	25.7	14.6

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5649.85	67.4 PK	68.2	-0.8	1.08 H	237	62.9	4.5
2	*5775.00	114.7 PK			1.08 H	237	109.6	5.1
3	*5775.00	104.3 AV			1.08 H	237	99.2	5.1
4	#5926.53	64.7 PK	68.2	-3.5	1.08 H	237	59.6	5.1
5	11550.00	58.2 PK	74.0	-15.8	1.00 H	288	43.6	14.6
6	11550.00	47.6 AV	54.0	-6.4	1.00 H	288	33.0	14.6
7	#17325.00	51.1 PK	68.2	-17.1	1.85 H	333	33.0	18.1
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	#5639.16	67.5 PK	68.2	-0.7	1.73 V	193	63.0	4.5
2	*5775.00	115.9 PK			1.73 V	193	110.8	5.1
3	*5775.00	105.1 AV			1.73 V	193	100.0	5.1
4	#5938.50	62.4 PK	68.2	-5.8	1.73 V	193	57.3	5.1
5	11550.00	53.8 PK	74.0	-20.2	1.01 V	345	39.2	14.6
6	11550.00	43.9 AV	54.0	-10.1	1.01 V	345	29.3	14.6
7	#17325.00	51.5 PK	68.2	-16.7	1.39 V	30	33.4	18.1

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.

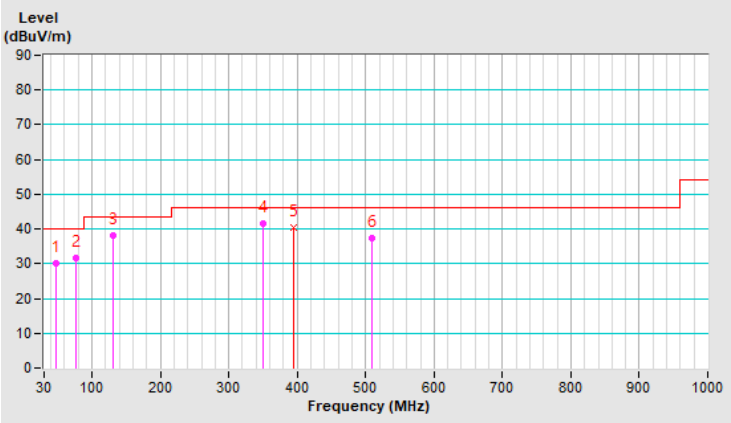
Below 1GHz Data:

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	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	46.81	30.2 QP	40.0	-9.8	2.50 H	348	38.4	-8.2
2	76.81	31.8 QP	40.0	-8.2	2.00 H	259	44.0	-12.2
3	131.46	38.0 QP	43.5	-5.5	1.50 H	247	46.7	-8.7
4	350.10	41.5 QP	46.0	-4.5	1.00 H	134	46.7	-5.2
5	395.17	40.5 QP	46.0	-5.5	1.00 H	346	44.5	-4.0
6	509.08	37.2 QP	46.0	-8.8	1.50 H	335	37.9	-0.7

Remarks:

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

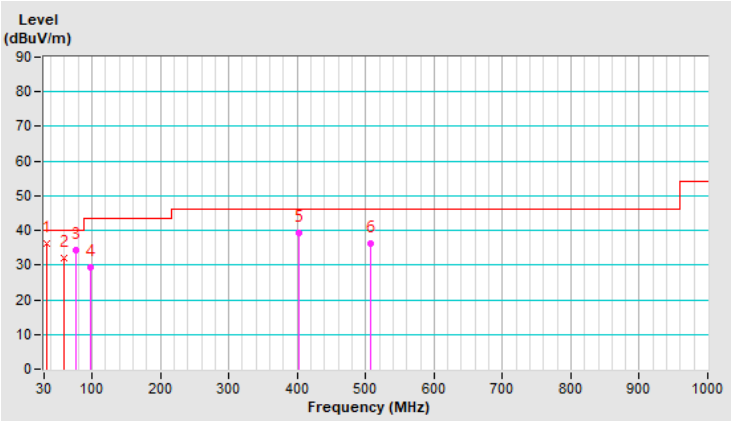


RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	33.49	36.2 QP	40.0	-3.8	1.00 V	134	45.4	-9.2
2	59.16	32.1 QP	40.0	-7.9	1.00 V	341	40.7	-8.6
3	75.61	34.2 QP	40.0	-5.8	1.00 V	157	46.1	-11.9
4	98.33	29.5 QP	43.5	-14.0	1.00 V	167	42.2	-12.7
5	401.73	39.3 QP	46.0	-6.7	1.00 V	297	43.0	-3.7
6	506.88	36.2 QP	46.0	-9.8	1.00 V	308	37.0	-0.8

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 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.



4.1.8 Test Results (Mode 2)

Above 1GHz Data:

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	1.02 H	252	64.4	4.7
2	5150.00	53.5 AV	54.0	-0.5	1.02 H	252	48.8	4.7
3	*5180.00	114.9 PK			1.02 H	252	110.3	4.6
4	*5180.00	105.9 AV			1.02 H	252	101.3	4.6
5	#10360.00	60.4 PK	68.2	-7.8	3.94 H	171	47.0	13.4
6	15540.00	60.2 PK	74.0	-13.8	1.53 H	179	45.7	14.5
7	15540.00	47.3 AV	54.0	-6.7	1.53 H	179	32.8	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.2 PK	74.0	-10.8	2.86 V	155	58.5	4.7
2	5150.00	47.9 AV	54.0	-6.1	2.86 V	155	43.2	4.7
3	*5180.00	111.6 PK			2.86 V	155	107.0	4.6
4	*5180.00	102.9 AV			2.86 V	155	98.3	4.6
5	#10360.00	60.8 PK	68.2	-7.4	1.37 V	230	47.4	13.4
6	15540.00	64.5 PK	74.0	-9.5	1.21 V	206	50.0	14.5
7	15540.00	52.6 AV	54.0	-1.4	1.21 V	206	38.1	14.5

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	64.4 PK	74.0	-9.6	2.89 H	240	59.7	4.7
2	5150.00	52.1 AV	54.0	-1.9	2.89 H	240	47.4	4.7
3	*5200.00	115.5 PK			2.89 H	240	111.1	4.4
4	*5200.00	106.7 AV			2.89 H	240	102.3	4.4
5	5350.00	51.2 PK	74.0	-22.8	2.89 H	240	46.9	4.3
6	5350.00	39.4 AV	54.0	-14.6	2.89 H	240	35.1	4.3
7	#10400.00	63.1 PK	68.2	-5.1	3.94 H	170	49.5	13.6
8	15600.00	63.0 PK	74.0	-11.0	1.48 H	188	48.5	14.5
9	15600.00	50.3 AV	54.0	-3.7	1.48 H	188	35.8	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.0 PK	74.0	-12.0	2.92 V	222	57.3	4.7
2	5150.00	51.0 AV	54.0	-3.0	2.92 V	222	46.3	4.7
3	*5200.00	113.0 PK			2.92 V	222	108.6	4.4
4	*5200.00	102.6 AV			2.92 V	222	98.2	4.4
5	5350.00	51.0 PK	74.0	-23.0	2.92 V	222	46.7	4.3
6	5350.00	39.4 AV	54.0	-14.6	2.92 V	222	35.1	4.3
7	#10400.00	62.0 PK	68.2	-6.2	1.38 V	234	48.4	13.6
8	15600.00	65.2 PK	74.0	-8.8	1.17 V	219	50.7	14.5
9	15600.00	52.1 AV	54.0	-1.9	1.17 V	219	37.6	14.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	112.9 PK			1.08 H	136	108.5	4.4
2	*5240.00	104.3 AV			1.08 H	136	99.9	4.4
3	5350.00	51.7 PK	74.0	-22.3	1.08 H	136	47.4	4.3
4	5350.00	40.0 AV	54.0	-14.0	1.08 H	136	35.7	4.3
5	#10480.00	63.1 PK	68.2	-5.1	3.93 H	180	49.4	13.7
6	15720.00	62.4 PK	74.0	-11.6	1.50 H	194	48.0	14.4
7	15720.00	49.2 AV	54.0	-4.8	1.50 H	194	34.8	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	*5240.00	113.7 PK			3.15 V	160	109.3	4.4
2	*5240.00	105.0 AV			3.15 V	160	100.6	4.4
3	5350.00	51.1 PK	74.0	-22.9	3.15 V	160	46.8	4.3
4	5350.00	40.2 AV	54.0	-13.8	3.15 V	160	35.9	4.3
5	#10480.00	62.6 PK	68.2	-5.6	1.38 V	230	48.9	13.7
6	15720.00	64.8 PK	74.0	-9.2	1.20 V	204	50.4	14.4
7	15720.00	51.7 AV	54.0	-2.3	1.20 V	204	37.3	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.

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5598.69	55.6 PK	68.2	-12.6	1.32 H	154	51.1	4.5
2	*5745.00	119.8 PK			1.32 H	154	114.8	5.0
3	*5745.00	110.1 AV			1.32 H	154	105.1	5.0
4	#5940.45	52.9 PK	68.2	-15.3	1.32 H	154	47.8	5.1
5	11490.00	63.0 PK	74.0	-11.0	3.88 H	165	48.4	14.6
6	11490.00	49.6 AV	54.0	-4.4	3.88 H	165	35.0	14.6
7	#17235.00	61.8 PK	68.2	-6.4	1.48 H	187	43.8	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	#5556.89	56.8 PK	68.2	-11.4	2.44 V	188	52.3	4.5
2	*5745.00	119.4 PK			2.44 V	188	114.4	5.0
3	*5745.00	110.8 AV			2.44 V	188	105.8	5.0
4	#5990.75	54.1 PK	68.2	-14.1	2.44 V	188	48.9	5.2
5	11490.00	62.5 PK	74.0	-11.5	1.43 V	245	47.9	14.6
6	11490.00	50.1 AV	54.0	-3.9	1.43 V	245	35.5	14.6
7	#17235.00	66.8 PK	68.2	-1.4	1.17 V	208	48.8	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.

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5586.62	55.8 PK	68.2	-12.4	1.30 H	151	51.3	4.5
2	*5785.00	119.6 PK			1.30 H	151	114.5	5.1
3	*5785.00	109.7 AV			1.30 H	151	104.6	5.1
4	#5974.70	53.7 PK	68.2	-14.5	1.30 H	151	48.5	5.2
5	11570.00	63.1 PK	74.0	-10.9	3.89 H	152	48.5	14.6
6	11570.00	49.8 AV	54.0	-4.2	3.89 H	152	35.2	14.6
7	#17355.00	61.4 PK	68.2	-6.8	1.53 H	196	43.2	18.2
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	#5599.87	56.9 PK	68.2	-11.3	2.41 V	183	52.4	4.5
2	*5785.00	119.3 PK			2.41 V	183	114.2	5.1
3	*5785.00	110.9 AV			2.41 V	183	105.8	5.1
4	#5954.37	53.2 PK	68.2	-15.0	2.41 V	183	48.0	5.2
5	11570.00	62.8 PK	74.0	-11.2	1.40 V	260	48.2	14.6
6	11570.00	50.5 AV	54.0	-3.5	1.40 V	260	35.9	14.6
7	#17355.00	66.4 PK	68.2	-1.8	1.11 V	199	48.2	18.2

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5625.81	56.2 PK	68.2	-12.0	1.28 H	155	51.7	4.5
2	*5825.00	119.6 PK			1.28 H	155	114.6	5.0
3	*5825.00	109.6 AV			1.28 H	155	104.6	5.0
4	#5925.58	53.5 PK	68.2	-14.7	1.28 H	155	48.4	5.1
5	11650.00	63.4 PK	74.0	-10.6	3.90 H	168	49.0	14.4
6	11650.00	50.1 AV	54.0	-3.9	3.90 H	168	35.7	14.4
7	#17475.00	61.7 PK	68.2	-6.5	1.51 H	200	42.9	18.8
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	#5628.52	57.0 PK	68.2	-11.2	2.46 V	179	52.5	4.5
2	*5825.00	119.4 PK			2.46 V	179	114.4	5.0
3	*5825.00	111.1 AV			2.46 V	179	106.1	5.0
4	#6004.48	53.7 PK	68.2	-14.5	2.46 V	179	48.5	5.2
5	11650.00	62.4 PK	74.0	-11.6	1.38 V	271	48.0	14.4
6	11650.00	50.3 AV	54.0	-3.7	1.38 V	271	35.9	14.4
7	#17475.00	67.5 PK	68.2	-0.7	1.14 V	211	48.7	18.8

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	67.6 PK	74.0	-6.4	2.72 H	238	62.9	4.7
2	5150.00	53.4 AV	54.0	-0.6	2.72 H	238	48.7	4.7
3	*5180.00	115.6 PK			2.72 H	238	111.0	4.6
4	*5180.00	104.0 AV			2.72 H	238	99.4	4.6
5	#10360.00	60.5 PK	68.2	-7.7	3.92 H	156	47.1	13.4
6	15540.00	59.9 PK	74.0	-14.1	1.52 H	173	45.4	14.5
7	15540.00	46.9 AV	54.0	-7.1	1.52 H	173	32.4	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	2.93 V	159	57.7	4.7
2	5150.00	50.5 AV	54.0	-3.5	2.93 V	159	45.8	4.7
3	*5180.00	112.9 PK			2.93 V	159	108.3	4.6
4	*5180.00	100.9 AV			2.93 V	159	96.3	4.6
5	#10360.00	62.4 PK	68.2	-5.8	1.44 V	218	49.0	13.4
6	15540.00	64.6 PK	74.0	-9.4	1.15 V	195	50.1	14.5
7	15540.00	51.6 AV	54.0	-2.4	1.15 V	195	37.1	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	64.6 PK	74.0	-9.4	2.93 H	252	59.9	4.7
2	5150.00	52.4 AV	54.0	-1.6	2.93 H	252	47.7	4.7
3	*5200.00	115.3 PK			2.89 H	240	110.9	4.4
4	*5200.00	106.3 AV			2.89 H	240	101.9	4.4
5	5350.00	51.4 PK	74.0	-22.6	2.85 H	236	47.1	4.3
6	5350.00	39.6 AV	54.0	-14.4	2.85 H	236	35.3	4.3
7	#10400.00	63.0 PK	68.2	-5.2	3.91 H	191	49.4	13.6
8	15600.00	62.4 PK	74.0	-11.6	1.53 H	192	47.9	14.5
9	15600.00	49.0 AV	54.0	-5.0	1.53 H	192	34.5	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.9 PK	74.0	-12.1	2.94 V	234	57.2	4.7
2	5150.00	50.9 AV	54.0	-3.1	2.94 V	234	46.2	4.7
3	*5200.00	112.7 PK			2.94 V	234	108.3	4.4
4	*5200.00	102.4 AV			2.94 V	234	98.0	4.4
5	5350.00	51.6 PK	74.0	-22.4	2.94 V	234	47.3	4.3
6	5350.00	39.8 AV	54.0	-14.2	2.94 V	234	35.5	4.3
7	#10400.00	62.4 PK	68.2	-5.8	1.38 V	223	48.8	13.6
8	15600.00	64.8 PK	74.0	-9.2	1.15 V	192	50.3	14.5
9	15600.00	51.6 AV	54.0	-2.4	1.15 V	192	37.1	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	117.1 PK			1.02 H	245	112.7	4.4
2	*5240.00	106.9 AV			1.02 H	245	102.5	4.4
3	5350.00	51.3 PK	74.0	-22.7	1.02 H	245	47.0	4.3
4	5350.00	39.9 AV	54.0	-14.1	1.02 H	245	35.6	4.3
5	#10480.00	63.3 PK	68.2	-4.9	3.93 H	184	49.6	13.7
6	15720.00	62.6 PK	74.0	-11.4	1.52 H	190	48.2	14.4
7	15720.00	49.5 AV	54.0	-4.5	1.52 H	190	35.1	14.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	116.2 PK			2.91 V	156	111.8	4.4
2	*5240.00	104.7 AV			2.91 V	156	100.3	4.4
3	5350.00	51.2 PK	74.0	-22.8	2.91 V	156	46.9	4.3
4	5350.00	40.0 AV	54.0	-14.0	2.91 V	156	35.7	4.3
5	#10480.00	62.0 PK	68.2	-6.2	1.42 V	216	48.3	13.7
6	15720.00	64.3 PK	74.0	-9.7	1.22 V	213	49.9	14.4
7	15720.00	51.3 AV	54.0	-2.7	1.22 V	213	36.9	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5557.36	57.4 PK	68.2	-10.8	1.26 H	155	52.9	4.5
2	*5745.00	119.8 PK			1.26 H	155	114.8	5.0
3	*5745.00	107.9 AV			1.26 H	155	102.9	5.0
4	#5944.91	54.1 PK	68.2	-14.1	1.26 H	155	49.0	5.1
5	11490.00	63.1 PK	74.0	-10.9	3.86 H	178	48.5	14.6
6	11490.00	49.7 AV	54.0	-4.3	3.86 H	178	35.1	14.6
7	#17235.00	62.1 PK	68.2	-6.1	1.50 H	194	44.1	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.68	56.4 PK	68.2	-11.8	2.36 V	181	51.9	4.5
2	*5745.00	119.0 PK			2.36 V	181	114.0	5.0
3	*5745.00	110.7 AV			2.36 V	181	105.7	5.0
4	#5999.30	53.6 PK	68.2	-14.6	2.36 V	181	48.4	5.2
5	11490.00	61.9 PK	74.0	-12.1	1.45 V	237	47.3	14.6
6	11490.00	49.6 AV	54.0	-4.4	1.45 V	237	35.0	14.6
7	#17235.00	66.7 PK	68.2	-1.5	1.17 V	216	48.7	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5597.69	56.1 PK	68.2	-12.1	1.24 H	147	51.6	4.5
2	*5785.00	119.2 PK			1.24 H	147	114.1	5.1
3	*5785.00	107.5 AV			1.24 H	147	102.4	5.1
4	#5975.98	54.2 PK	68.2	-14.0	1.24 H	147	49.0	5.2
5	11570.00	63.3 PK	74.0	-10.7	3.91 H	153	48.7	14.6
6	11570.00	50.0 AV	54.0	-4.0	3.91 H	153	35.4	14.6
7	#17355.00	62.6 PK	68.2	-5.6	1.53 H	182	44.4	18.2
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	#5594.08	58.5 PK	68.2	-9.7	2.42 V	170	54.0	4.5
2	*5785.00	119.1 PK			2.42 V	170	114.0	5.1
3	*5785.00	110.9 AV			2.42 V	170	105.8	5.1
4	#6022.06	55.3 PK	68.2	-12.9	2.42 V	170	50.1	5.2
5	11570.00	62.6 PK	74.0	-11.4	1.38 V	257	48.0	14.6
6	11570.00	50.1 AV	54.0	-3.9	1.38 V	257	35.5	14.6
7	#17355.00	67.1 PK	68.2	-1.1	1.12 V	199	48.9	18.2

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5636.88	55.6 PK	68.2	-12.6	1.32 H	157	51.1	4.5
2	*5825.00	119.3 PK			1.32 H	157	114.3	5.0
3	*5825.00	107.7 AV			1.32 H	157	102.7	5.0
4	#6011.13	53.8 PK	68.2	-14.4	1.32 H	157	48.6	5.2
5	11650.00	63.4 PK	74.0	-10.6	3.89 H	168	49.0	14.4
6	11650.00	50.0 AV	54.0	-4.0	3.89 H	168	35.6	14.4
7	#17475.00	62.1 PK	68.2	-6.1	1.51 H	179	43.3	18.8
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	#5638.78	57.9 PK	68.2	-10.3	2.35 V	185	53.4	4.5
2	*5825.00	119.6 PK			2.35 V	185	114.6	5.0
3	*5825.00	111.3 AV			2.35 V	185	106.3	5.0
4	#5971.42	54.9 PK	68.2	-13.3	2.35 V	185	49.7	5.2
5	11650.00	62.1 PK	74.0	-11.9	1.40 V	229	47.7	14.4
6	11650.00	49.7 AV	54.0	-4.3	1.40 V	229	35.3	14.4
7	#17475.00	66.8 PK	68.2	-1.4	1.13 V	193	48.0	18.8

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	66.1 PK	74.0	-7.9	1.06 H	246	61.4	4.7
2	5150.00	53.5 AV	54.0	-0.5	1.06 H	246	48.8	4.7
3	*5190.00	111.3 PK			1.06 H	246	106.8	4.5
4	*5190.00	100.2 AV			1.06 H	246	95.7	4.5
5	#10380.00	59.9 PK	68.2	-8.3	3.92 H	173	46.5	13.4
6	15570.00	60.2 PK	74.0	-13.8	1.51 H	182	45.6	14.6
7	15570.00	47.4 AV	54.0	-6.6	1.51 H	182	32.8	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5147.79	60.2 PK	74.0	-13.8	2.90 V	159	55.4	4.8
2	5147.79	46.6 AV	54.0	-7.4	2.90 V	159	41.8	4.8
3	*5190.00	107.5 PK			2.90 V	159	103.0	4.5
4	*5190.00	96.4 AV			2.90 V	159	91.9	4.5
5	#10380.00	62.5 PK	68.2	-5.7	1.41 V	229	49.1	13.4
6	15570.00	64.8 PK	74.0	-9.2	1.15 V	208	50.2	14.6
7	15570.00	51.9 AV	54.0	-2.1	1.15 V	208	37.3	14.6

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	65.8 PK	74.0	-8.2	1.06 H	248	61.1	4.7
2	5150.00	53.2 AV	54.0	-0.8	1.06 H	248	48.5	4.7
3	*5230.00	114.4 PK			1.06 H	248	110.0	4.4
4	*5230.00	104.3 AV			1.06 H	248	99.9	4.4
5	5350.00	52.4 PK	74.0	-21.6	1.06 H	248	48.1	4.3
6	5350.00	41.1 AV	54.0	-12.9	1.06 H	248	36.8	4.3
7	#10460.00	63.4 PK	68.2	-4.8	3.98 H	189	49.8	13.6
8	15690.00	62.9 PK	74.0	-11.1	1.54 H	181	48.4	14.5
9	15690.00	49.6 AV	54.0	-4.4	1.54 H	181	35.1	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.7 PK	74.0	-12.3	2.85 V	160	57.0	4.7
2	5150.00	47.8 AV	54.0	-6.2	2.85 V	160	43.1	4.7
3	*5230.00	112.1 PK			2.85 V	160	107.7	4.4
4	*5230.00	101.8 AV			2.85 V	160	97.4	4.4
5	5350.00	51.7 PK	74.0	-22.3	2.85 V	160	47.4	4.3
6	5350.00	40.4 AV	54.0	-13.6	2.85 V	160	36.1	4.3
7	#10460.00	62.3 PK	68.2	-5.9	1.35 V	238	48.7	13.6
8	15690.00	64.5 PK	74.0	-9.5	1.19 V	195	50.0	14.5
9	15690.00	51.3 AV	54.0	-2.7	1.19 V	195	36.8	14.5

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5647.90	62.5 PK	68.2	-5.7	1.44 H	160	58.0	4.5
2	*5755.00	117.9 PK			1.44 H	160	112.9	5.0
3	*5755.00	106.9 AV			1.44 H	160	101.9	5.0
4	#5925.73	54.1 PK	68.2	-14.1	1.44 H	160	49.0	5.1
5	11510.00	63.4 PK	74.0	-10.6	3.96 H	156	48.8	14.6
6	11510.00	50.3 AV	54.0	-3.7	3.96 H	156	35.7	14.6
7	#17265.00	62.3 PK	68.2	-5.9	1.48 H	188	44.4	17.9
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	#5645.81	67.6 PK	68.2	-0.6	2.33 V	185	63.1	4.5
2	*5755.00	120.5 PK			2.33 V	185	115.5	5.0
3	*5755.00	108.1 AV			2.33 V	185	103.1	5.0
4	#5929.05	54.8 PK	68.2	-13.4	2.33 V	185	49.7	5.1
5	11510.00	62.2 PK	74.0	-11.8	1.39 V	248	47.6	14.6
6	11510.00	49.7 AV	54.0	-4.3	1.39 V	248	35.1	14.6
7	#17265.00	66.6 PK	68.2	-1.6	1.20 V	208	48.7	17.9

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5599.31	56.4 PK	68.2	-11.8	1.36 H	163	51.9	4.5
2	*5795.00	120.3 PK			1.36 H	163	115.2	5.1
3	*5795.00	107.2 AV			1.36 H	163	102.1	5.1
4	#5930.57	54.9 PK	68.2	-13.3	1.36 H	163	49.8	5.1
5	11590.00	63.8 PK	74.0	-10.2	3.89 H	166	49.2	14.6
6	11590.00	50.2 AV	54.0	-3.8	3.89 H	166	35.6	14.6
7	#17385.00	62.5 PK	68.2	-5.7	1.52 H	172	44.2	18.3
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	#5600.67	53.5 PK	68.2	-14.7	1.63 V	160	49.0	4.5
2	*5795.00	116.3 PK			1.63 V	160	111.2	5.1
3	*5795.00	106.9 AV			1.63 V	160	101.8	5.1
4	#5982.84	52.3 PK	68.2	-15.9	1.63 V	160	47.1	5.2
5	11590.00	61.4 PK	74.0	-12.6	1.44 V	229	46.8	14.6
6	11590.00	49.4 AV	54.0	-4.6	1.44 V	229	34.8	14.6
7	#17385.00	66.9 PK	68.2	-1.3	1.23 V	210	48.6	18.3

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.

RF Mode	TX 802.11ax (HE80)	Channel	CH 42：5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	5139.93	65.6 PK	74.0	-8.4	1.02 H	255	60.8	4.8
2	5139.93	52.6 AV	54.0	-1.4	1.02 H	255	47.8	4.8
3	*5210.00	108.0 PK			1.02 H	255	103.6	4.4
4	*5210.00	96.3 AV			1.02 H	255	91.9	4.4
5	5350.00	53.0 PK	74.0	-21.0	1.02 H	255	48.7	4.3
6	5350.00	40.5 AV	54.0	-13.5	1.02 H	255	36.2	4.3
7	#10420.00	60.6 PK	68.2	-7.6	3.89 H	187	47.1	13.5
8	15630.00	59.9 PK	74.0	-14.1	1.49 H	178	45.3	14.6
9	15630.00	47.1 AV	54.0	-6.9	1.49 H	178	32.5	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.71	58.5 PK	74.0	-15.5	2.87 V	159	53.7	4.8
2	5135.71	46.7 AV	54.0	-7.3	2.87 V	159	41.9	4.8
3	5147.62	58.5 PK	74.0	-15.5	2.87 V	159	53.7	4.8
4	5147.62	46.7 AV	54.0	-7.3	2.87 V	159	41.9	4.8
5	*5210.00	102.5 PK			2.87 V	159	98.1	4.4
6	*5210.00	91.4 AV			2.87 V	159	87.0	4.4
7	5350.00	51.8 PK	74.0	-22.2	2.87 V	159	47.5	4.3
8	5350.00	40.1 AV	54.0	-13.9	2.87 V	159	35.8	4.3
9	#10420.00	62.7 PK	68.2	-5.5	1.39 V	214	49.2	13.5
10	15630.00	64.6 PK	74.0	-9.4	1.21 V	206	50.0	14.6
11	15630.00	51.7 AV	54.0	-2.3	1.21 V	206	37.1	14.6

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5633.98	65.2 PK	68.2	-3.0	1.36 H	161	60.7	4.5
2	*5775.00	112.4 PK			1.36 H	161	107.3	5.1
3	*5775.00	102.3 AV			1.36 H	161	97.2	5.1
4	#5931.61	59.5 PK	68.2	-8.7	1.36 H	161	54.4	5.1
5	11550.00	63.3 PK	74.0	-10.7	3.86 H	138	48.7	14.6
6	11550.00	50.1 AV	54.0	-3.9	3.86 H	138	35.5	14.6
7	#17325.00	62.6 PK	68.2	-5.6	1.53 H	174	44.5	18.1
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	#5633.34	62.7 PK	68.2	-5.5	1.46 V	162	58.2	4.5
2	*5775.00	112.3 PK			1.46 V	162	107.2	5.1
3	*5775.00	102.2 AV			1.46 V	162	97.1	5.1
4	#5929.99	55.8 PK	68.2	-12.4	1.46 V	162	50.7	5.1
5	11550.00	61.9 PK	74.0	-12.1	1.41 V	222	47.3	14.6
6	11550.00	49.6 AV	54.0	-4.4	1.41 V	222	35.0	14.6
7	#17325.00	66.3 PK	68.2	-1.9	1.14 V	201	48.2	18.1

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.

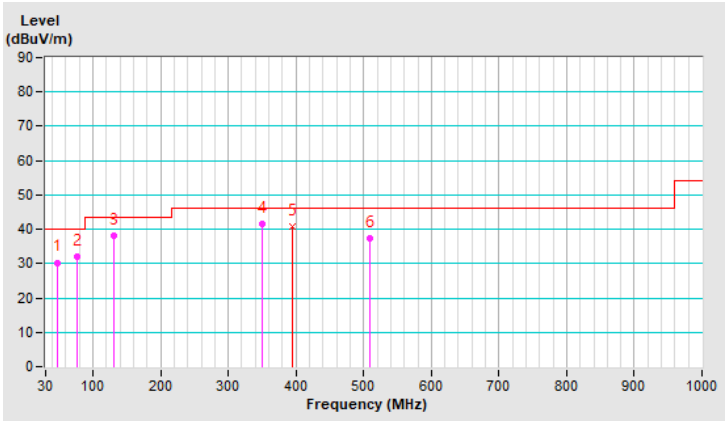
Below 1GHz Data:

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	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	46.92	30.3 QP	40.0	-9.7	2.50 H	351	38.5	-8.2
2	76.88	32.0 QP	40.0	-8.0	2.00 H	276	44.2	-12.2
3	131.55	38.1 QP	43.5	-5.4	1.50 H	254	46.8	-8.7
4	350.20	41.7 QP	46.0	-4.3	1.00 H	127	46.9	-5.2
5	395.28	40.7 QP	46.0	-5.3	1.00 H	355	44.7	-4.0
6	509.19	37.4 QP	46.0	-8.6	1.50 H	323	38.1	-0.7

Remarks:

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

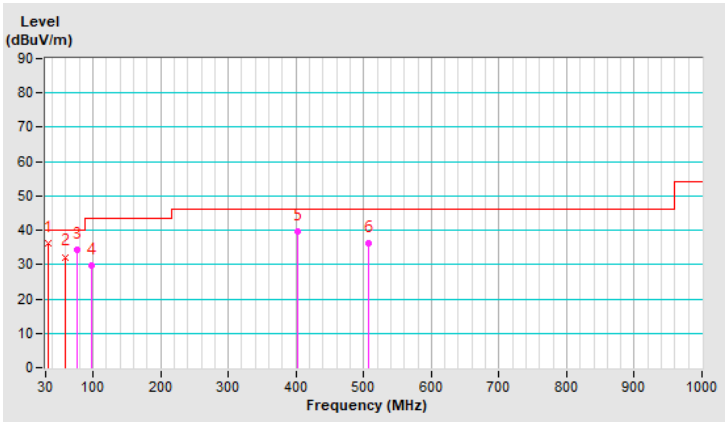


RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	33.58	36.3 QP	40.0	-3.7	1.00 V	142	45.5	-9.2
2	59.25	32.2 QP	40.0	-7.8	1.00 V	357	40.8	-8.6
3	75.69	34.4 QP	40.0	-5.6	1.00 V	175	46.3	-11.9
4	98.43	29.7 QP	43.5	-13.8	1.00 V	157	42.3	-12.6
5	401.84	39.5 QP	46.0	-6.5	1.00 V	305	43.2	-3.7
6	506.98	36.3 QP	46.0	-9.7	1.00 V	329	37.1	-0.8

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 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.



4.1.9 Test Results (Mode 3)

Above 1GHz Data:

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	65.6 PK	74.0	-8.4	1.04 H	14	60.9	4.7
2	5150.00	53.0 AV	54.0	-1.0	1.04 H	14	48.3	4.7
3	*5180.00	108.3 PK			1.04 H	14	103.7	4.6
4	*5180.00	98.9 AV			1.04 H	14	94.3	4.6
5	#10360.00	52.9 PK	68.2	-15.3	2.95 H	193	39.5	13.4
6	15540.00	57.5 PK	74.0	-16.5	1.95 H	169	43.0	14.5
7	15540.00	46.1 AV	54.0	-7.9	1.95 H	169	31.6	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.2 PK	74.0	-12.8	1.05 V	126	56.5	4.7
2	5150.00	48.8 AV	54.0	-5.2	1.05 V	126	44.1	4.7
3	*5180.00	105.1 PK			1.05 V	126	100.5	4.6
4	*5180.00	95.7 AV			1.05 V	126	91.1	4.6
5	#10360.00	51.6 PK	68.2	-16.6	1.50 V	243	38.2	13.4
6	15540.00	53.4 PK	74.0	-20.6	1.04 V	325	38.9	14.5
7	15540.00	43.6 AV	54.0	-10.4	1.04 V	325	29.1	14.5

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	109.6 PK			1.08 H	201	105.2	4.4
2	*5200.00	100.1 AV			1.08 H	201	95.7	4.4
3	#10400.00	52.8 PK	68.2	-15.4	2.90 H	189	39.2	13.6
4	15600.00	57.9 PK	74.0	-16.1	1.91 H	178	43.4	14.5
5	15600.00	46.2 AV	54.0	-7.8	1.91 H	178	31.7	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	104.9 PK			1.07 V	130	100.5	4.4
2	*5200.00	95.5 AV			1.07 V	130	91.1	4.4
3	#10400.00	52.0 PK	68.2	-16.2	1.41 V	251	38.4	13.6
4	15600.00	53.4 PK	74.0	-20.6	1.08 V	351	38.9	14.5
5	15600.00	43.5 AV	54.0	-10.5	1.08 V	351	29.0	14.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.8 PK			1.05 H	12	105.4	4.4
2	*5240.00	100.3 AV			1.05 H	12	95.9	4.4
3	5350.00	51.7 PK	74.0	-22.3	1.05 H	12	47.4	4.3
4	5350.00	40.5 AV	54.0	-13.5	1.05 H	12	36.2	4.3
5	#10480.00	52.9 PK	68.2	-15.3	2.89 H	187	39.2	13.7
6	15720.00	57.7 PK	74.0	-16.3	1.96 H	191	43.3	14.4
7	15720.00	46.3 AV	54.0	-7.7	1.96 H	191	31.9	14.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	105.2 PK			1.03 V	124	100.8	4.4
2	*5240.00	95.8 AV			1.03 V	124	91.4	4.4
3	5350.00	51.8 PK	74.0	-22.2	1.03 V	124	47.5	4.3
4	5350.00	39.7 AV	54.0	-14.3	1.03 V	124	35.4	4.3
5	#10480.00	51.7 PK	68.2	-16.5	1.42 V	255	38.0	13.7
6	15720.00	53.6 PK	74.0	-20.4	1.00 V	350	39.2	14.4
7	15720.00	44.0 AV	54.0	-10.0	1.00 V	350	29.6	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.

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5556.79	54.2 PK	68.2	-14.0	1.48 H	206	49.7	4.5
2	*5745.00	107.4 PK			1.48 H	206	102.4	5.0
3	*5745.00	98.1 AV			1.48 H	206	93.1	5.0
4	#5978.21	52.8 PK	68.2	-15.4	1.48 H	206	47.6	5.2
5	11490.00	52.6 PK	74.0	-21.4	2.86 H	190	38.0	14.6
6	11490.00	40.5 AV	54.0	-13.5	2.86 H	190	25.9	14.6
7	#17235.00	58.0 PK	68.2	-10.2	1.94 H	175	40.0	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	#5574.41	53.3 PK	68.2	-14.9	1.12 V	122	48.7	4.6
2	*5745.00	104.2 PK			1.12 V	122	99.2	5.0
3	*5745.00	94.8 AV			1.12 V	122	89.8	5.0
4	#5926.77	51.8 PK	68.2	-16.4	1.12 V	122	46.7	5.1
5	11490.00	52.6 PK	74.0	-21.4	1.53 V	264	38.0	14.6
6	11490.00	40.5 AV	54.0	-13.5	1.53 V	264	25.9	14.6
7	#17235.00	54.8 PK	68.2	-13.4	1.01 V	324	36.8	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.

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5555.27	53.9 PK	68.2	-14.3	1.51 H	203	49.4	4.5
2	*5785.00	107.0 PK			1.51 H	203	101.9	5.1
3	*5785.00	98.0 AV			1.51 H	203	92.9	5.1
4	#5939.60	52.4 PK	68.2	-15.8	1.51 H	203	47.3	5.1
5	11570.00	52.5 PK	74.0	-21.5	2.94 H	195	37.9	14.6
6	11570.00	40.7 AV	54.0	-13.3	2.94 H	195	26.1	14.6
7	#17355.00	57.8 PK	68.2	-10.4	1.96 H	184	39.6	18.2
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	#5615.36	52.8 PK	68.2	-15.4	1.15 V	123	48.3	4.5
2	*5785.00	104.4 PK			1.15 V	123	99.3	5.1
3	*5785.00	95.2 AV			1.15 V	123	90.1	5.1
4	#5993.32	52.1 PK	68.2	-16.1	1.15 V	123	46.9	5.2
5	11570.00	51.6 PK	74.0	-22.4	1.52 V	243	37.0	14.6
6	11570.00	40.0 AV	54.0	-14.0	1.52 V	243	25.4	14.6
7	#17355.00	54.4 PK	68.2	-13.8	1.01 V	327	36.2	18.2

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.

RF Mode	TX 802.11a	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5595.27	52.2 PK	68.2	-16.0	1.47 H	221	47.7	4.5
2	*5825.00	106.9 PK			1.47 H	221	101.9	5.0
3	*5825.00	97.8 AV			1.47 H	221	92.8	5.0
4	#5955.08	51.2 PK	68.2	-17.0	1.47 H	221	46.0	5.2
5	11650.00	52.6 PK	74.0	-21.4	2.84 H	185	38.2	14.4
6	11650.00	41.0 AV	54.0	-13.0	2.84 H	185	26.6	14.4
7	#17475.00	58.1 PK	68.2	-10.1	1.96 H	169	39.3	18.8
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	#5627.57	52.1 PK	68.2	-16.1	1.15 V	115	47.6	4.5
2	*5825.00	104.5 PK			1.15 V	115	99.5	5.0
3	*5825.00	95.3 AV			1.15 V	115	90.3	5.0
4	#5958.12	52.2 PK	68.2	-16.0	1.15 V	115	47.0	5.2
5	11650.00	52.4 PK	74.0	-21.6	1.43 V	256	38.0	14.4
6	11650.00	40.5 AV	54.0	-13.5	1.43 V	256	26.1	14.4
7	#17475.00	54.4 PK	68.2	-13.8	1.00 V	351	35.6	18.8

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.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	64.9 PK	74.0	-9.1	1.04 H	13	60.2	4.7
2	5150.00	53.0 AV	54.0	-1.0	1.04 H	13	48.3	4.7
3	*5180.00	107.9 PK			1.04 H	13	103.3	4.6
4	*5180.00	98.5 AV			1.04 H	13	93.9	4.6
5	#10360.00	52.4 PK	68.2	-15.8	2.95 H	175	39.0	13.4
6	15540.00	57.9 PK	74.0	-16.1	1.87 H	166	43.4	14.5
7	15540.00	46.0 AV	54.0	-8.0	1.87 H	166	31.5	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.5 PK	74.0	-15.5	1.06 V	126	53.8	4.7
2	5150.00	48.3 AV	54.0	-5.7	1.06 V	126	43.6	4.7
3	*5180.00	104.2 PK			1.06 V	126	99.6	4.6
4	*5180.00	94.7 AV			1.06 V	126	90.1	4.6
5	#10360.00	51.8 PK	68.2	-16.4	1.47 V	252	38.4	13.4
6	15540.00	53.6 PK	74.0	-20.4	1.03 V	340	39.1	14.5
7	15540.00	43.8 AV	54.0	-10.2	1.03 V	340	29.3	14.5

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	108.8 PK			1.02 H	20	104.4	4.4
2	*5200.00	100.1 AV			1.02 H	20	95.7	4.4
3	#10400.00	53.4 PK	68.2	-14.8	2.92 H	204	39.8	13.6
4	15600.00	57.7 PK	74.0	-16.3	1.91 H	162	43.2	14.5
5	15600.00	45.9 AV	54.0	-8.1	1.91 H	162	31.4	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	106.0 PK			1.08 V	134	101.6	4.4
2	*5200.00	96.4 AV			1.08 V	134	92.0	4.4
3	#10400.00	51.5 PK	68.2	-16.7	1.43 V	242	37.9	13.6
4	15600.00	53.9 PK	74.0	-20.1	1.07 V	347	39.4	14.5
5	15600.00	44.1 AV	54.0	-9.9	1.07 V	347	29.6	14.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.2 PK			1.05 H	12	104.8	4.4
2	*5240.00	100.2 AV			1.05 H	12	95.8	4.4
3	5350.00	52.3 PK	74.0	-21.7	1.05 H	12	48.0	4.3
4	5350.00	40.8 AV	54.0	-13.2	1.05 H	12	36.5	4.3
5	#10480.00	52.2 PK	68.2	-16.0	2.85 H	181	38.5	13.7
6	15720.00	57.8 PK	74.0	-16.2	1.85 H	179	43.4	14.4
7	15720.00	45.9 AV	54.0	-8.1	1.85 H	179	31.5	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	*5240.00	105.5 PK			1.07 V	125	101.1	4.4
2	*5240.00	96.1 AV			1.07 V	125	91.7	4.4
3	5350.00	51.4 PK	74.0	-22.6	1.07 V	125	47.1	4.3
4	5350.00	39.6 AV	54.0	-14.4	1.07 V	125	35.3	4.3
5	#10480.00	51.7 PK	68.2	-16.5	1.45 V	238	38.0	13.7
6	15720.00	54.4 PK	74.0	-19.6	1.05 V	343	40.0	14.4
7	15720.00	44.6 AV	54.0	-9.4	1.05 V	343	30.2	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.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5574.13	51.7 PK	68.2	-16.5	1.48 H	206	47.1	4.6
2	*5745.00	107.8 PK			1.48 H	206	102.8	5.0
3	*5745.00	97.9 AV			1.48 H	206	92.9	5.0
4	#5948.72	52.1 PK	68.2	-16.1	1.48 H	206	47.0	5.1
5	11490.00	52.3 PK	74.0	-21.7	2.86 H	195	37.7	14.6
6	11490.00	40.7 AV	54.0	-13.3	2.86 H	195	26.1	14.6
7	#17235.00	58.0 PK	68.2	-10.2	1.92 H	164	40.0	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	#5566.48	52.3 PK	68.2	-15.9	1.09 V	135	47.7	4.6
2	*5745.00	103.5 PK			1.09 V	135	98.5	5.0
3	*5745.00	94.3 AV			1.09 V	135	89.3	5.0
4	#5945.82	52.2 PK	68.2	-16.0	1.09 V	135	47.1	5.1
5	11490.00	52.1 PK	74.0	-21.9	1.49 V	248	37.5	14.6
6	11490.00	40.3 AV	54.0	-13.7	1.49 V	248	25.7	14.6
7	#17235.00	54.2 PK	68.2	-14.0	1.00 V	337	36.2	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.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5583.01	52.0 PK	68.2	-16.2	1.52 H	200	47.5	4.5
2	*5785.00	108.0 PK			1.52 H	200	102.9	5.1
3	*5785.00	98.3 AV			1.52 H	200	93.2	5.1
4	#5983.20	53.3 PK	68.2	-14.9	1.52 H	200	48.1	5.2
5	11570.00	52.1 PK	74.0	-21.9	2.90 H	196	37.5	14.6
6	11570.00	40.5 AV	54.0	-13.5	2.90 H	196	25.9	14.6
7	#17355.00	57.6 PK	68.2	-10.6	1.93 H	172	39.4	18.2
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	#5571.42	52.7 PK	68.2	-15.5	1.15 V	132	48.1	4.6
2	*5785.00	103.5 PK			1.15 V	132	98.4	5.1
3	*5785.00	94.3 AV			1.15 V	132	89.2	5.1
4	#5962.87	52.1 PK	68.2	-16.1	1.15 V	132	46.9	5.2
5	11570.00	52.2 PK	74.0	-21.8	1.54 V	238	37.6	14.6
6	11570.00	40.2 AV	54.0	-13.8	1.54 V	238	25.6	14.6
7	#17355.00	54.9 PK	68.2	-13.3	1.00 V	329	36.7	18.2

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.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5588.10	52.3 PK	68.2	-15.9	1.52 H	195	47.8	4.5
2	*5825.00	107.9 PK			1.52 H	195	102.9	5.0
3	*5825.00	98.3 AV			1.52 H	195	93.3	5.0
4	#5980.87	52.2 PK	68.2	-16.0	1.52 H	195	47.0	5.2
5	11650.00	53.3 PK	74.0	-20.7	2.92 H	191	38.9	14.4
6	11650.00	41.2 AV	54.0	-12.8	2.92 H	191	26.8	14.4
7	#17475.00	57.4 PK	68.2	-10.8	1.95 H	168	38.6	18.8
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	#5608.47	51.9 PK	68.2	-16.3	1.12 V	122	47.4	4.5
2	*5825.00	104.3 PK			1.12 V	122	99.3	5.0
3	*5825.00	94.8 AV			1.12 V	122	89.8	5.0
4	#5964.86	52.3 PK	68.2	-15.9	1.12 V	122	47.1	5.2
5	11650.00	52.0 PK	74.0	-22.0	1.45 V	256	37.6	14.4
6	11650.00	40.3 AV	54.0	-13.7	1.45 V	256	25.9	14.4
7	#17475.00	53.8 PK	68.2	-14.4	1.00 V	345	35.0	18.8

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.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	62.7 PK	74.0	-11.3	1.08 H	192	58.0	4.7
2	5150.00	53.6 AV	54.0	-0.4	1.08 H	192	48.9	4.7
3	*5190.00	100.4 PK			1.08 H	192	95.9	4.5
4	*5190.00	91.5 AV			1.08 H	192	87.0	4.5
5	#10380.00	52.3 PK	68.2	-15.9	2.91 H	163	38.9	13.4
6	15570.00	58.7 PK	74.0	-15.3	1.90 H	158	44.1	14.6
7	15570.00	46.4 AV	54.0	-7.6	1.90 H	158	31.8	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.8 PK	74.0	-12.2	1.06 V	127	57.1	4.7
2	5150.00	50.8 AV	54.0	-3.2	1.06 V	127	46.1	4.7
3	*5190.00	97.9 PK			1.06 V	127	93.4	4.5
4	*5190.00	87.7 AV			1.06 V	127	83.2	4.5
5	#10380.00	51.6 PK	68.2	-16.6	1.39 V	251	38.2	13.4
6	15570.00	54.9 PK	74.0	-19.1	1.01 V	333	40.3	14.6
7	15570.00	44.8 AV	54.0	-9.2	1.01 V	333	30.2	14.6

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	104.7 PK			1.26 H	189	100.3	4.4
2	*5230.00	95.2 AV			1.26 H	189	90.8	4.4
3	5350.00	51.6 PK	74.0	-22.4	1.26 H	189	47.3	4.3
4	5350.00	41.9 AV	54.0	-12.1	1.26 H	189	37.6	4.3
5	#10460.00	52.9 PK	68.2	-15.3	3.00 H	188	39.3	13.6
6	15690.00	58.3 PK	74.0	-15.7	1.89 H	166	43.8	14.5
7	15690.00	46.5 AV	54.0	-7.5	1.89 H	166	32.0	14.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	100.7 PK			1.05 V	123	96.3	4.4
2	*5230.00	91.9 AV			1.05 V	123	87.5	4.4
3	5350.00	50.9 PK	74.0	-23.1	1.05 V	123	46.6	4.3
4	5350.00	41.1 AV	54.0	-12.9	1.05 V	123	36.8	4.3
5	#10460.00	51.5 PK	68.2	-16.7	1.46 V	240	37.9	13.6
6	15690.00	54.0 PK	74.0	-20.0	1.05 V	328	39.5	14.5
7	15690.00	44.2 AV	54.0	-9.8	1.05 V	328	29.7	14.5

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5649.42	54.3 PK	68.2	-13.9	1.35 H	205	49.8	4.5
2	*5755.00	103.4 PK			1.35 H	205	98.4	5.0
3	*5755.00	94.6 AV			1.35 H	205	89.6	5.0
4	#5928.95	51.4 PK	68.2	-16.8	1.35 H	205	46.3	5.1
5	11510.00	52.6 PK	74.0	-21.4	2.82 H	182	38.0	14.6
6	11510.00	40.8 AV	54.0	-13.2	2.82 H	182	26.2	14.6
7	#17265.00	58.1 PK	68.2	-10.1	1.92 H	178	40.2	17.9
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	#5648.90	52.7 PK	68.2	-15.5	1.14 V	144	48.2	4.5
2	*5755.00	101.7 PK			1.14 V	144	96.7	5.0
3	*5755.00	91.2 AV			1.14 V	144	86.2	5.0
4	#5997.83	52.2 PK	68.2	-16.0	1.14 V	144	47.0	5.2
5	11510.00	52.4 PK	74.0	-21.6	1.50 V	243	37.8	14.6
6	11510.00	40.2 AV	54.0	-13.8	1.50 V	243	25.6	14.6
7	#17265.00	54.7 PK	68.2	-13.5	1.00 V	328	36.8	17.9

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.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5622.06	51.6 PK	68.2	-16.6	1.32 H	207	47.1	4.5
2	*5795.00	103.0 PK			1.32 H	207	97.9	5.1
3	*5795.00	94.4 AV			1.32 H	207	89.3	5.1
4	#5989.42	53.0 PK	68.2	-15.2	1.32 H	207	47.8	5.2
5	11590.00	52.8 PK	74.0	-21.2	2.80 H	180	38.2	14.6
6	11590.00	41.1 AV	54.0	-12.9	2.80 H	180	26.5	14.6
7	#17385.00	58.0 PK	68.2	-10.2	2.01 H	164	39.7	18.3
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	#5558.88	52.8 PK	68.2	-15.4	1.12 V	153	48.3	4.5
2	*5795.00	101.7 PK			1.12 V	153	96.6	5.1
3	*5795.00	91.1 AV			1.12 V	153	86.0	5.1
4	#5975.36	51.8 PK	68.2	-16.4	1.12 V	153	46.6	5.2
5	11590.00	52.7 PK	74.0	-21.3	1.57 V	249	38.1	14.6
6	11590.00	40.6 AV	54.0	-13.4	1.57 V	249	26.0	14.6
7	#17385.00	55.2 PK	68.2	-13.0	1.00 V	328	36.9	18.3

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.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 42：5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	62.5 PK	74.0	-11.5	1.31 H	190	57.8	4.7
2	5150.00	53.5 AV	54.0	-0.5	1.31 H	190	48.8	4.7
3	*5210.00	95.9 PK			1.31 H	190	91.5	4.4
4	*5210.00	86.8 AV			1.31 H	190	82.4	4.4
5	5350.00	52.8 PK	74.0	-21.2	1.31 H	190	48.5	4.3
6	5350.00	40.6 AV	54.0	-13.4	1.31 H	190	36.3	4.3
7	#10420.00	52.4 PK	68.2	-15.8	2.95 H	178	38.9	13.5
8	15630.00	58.3 PK	74.0	-15.7	1.85 H	167	43.7	14.6
9	15630.00	46.3 AV	54.0	-7.7	1.85 H	167	31.7	14.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.05 V	126	55.2	4.7
2	5150.00	50.0 AV	54.0	-4.0	1.05 V	126	45.3	4.7
3	*5210.00	92.6 PK			1.05 V	126	88.2	4.4
4	*5210.00	83.8 AV			1.05 V	126	79.4	4.4
5	5350.00	51.4 PK	74.0	-22.6	1.05 V	126	47.1	4.3
6	5350.00	40.1 AV	54.0	-13.9	1.05 V	126	35.8	4.3
7	#10420.00	52.0 PK	68.2	-16.2	1.49 V	223	38.5	13.5
8	15630.00	54.5 PK	74.0	-19.5	1.01 V	350	39.9	14.6
9	15630.00	44.5 AV	54.0	-9.5	1.01 V	350	29.9	14.6

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	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	#5649.42	63.8 PK	68.2	-4.4	1.47 H	207	59.3	4.5
2	*5775.00	100.1 PK			1.47 H	207	95.0	5.1
3	*5775.00	90.4 AV			1.47 H	207	85.3	5.1
4	#5928.77	52.4 PK	68.2	-15.8	1.47 H	207	47.3	5.1
5	11550.00	52.2 PK	74.0	-21.8	2.85 H	198	37.6	14.6
6	11550.00	40.5 AV	54.0	-13.5	2.85 H	198	25.9	14.6
7	#17325.00	58.0 PK	68.2	-10.2	1.98 H	163	39.9	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5643.77	56.8 PK	68.2	-11.4	1.04 V	122	52.3	4.5
2	*5775.00	98.1 PK			1.04 V	122	93.0	5.1
3	*5775.00	88.4 AV			1.04 V	122	83.3	5.1
4	#5926.72	52.2 PK	68.2	-16.0	1.04 V	122	47.1	5.1
5	11550.00	52.4 PK	74.0	-21.6	1.54 V	232	37.8	14.6
6	11550.00	40.3 AV	54.0	-13.7	1.54 V	232	25.7	14.6
7	#17325.00	54.4 PK	68.2	-13.8	1.00 V	340	36.3	18.1

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.

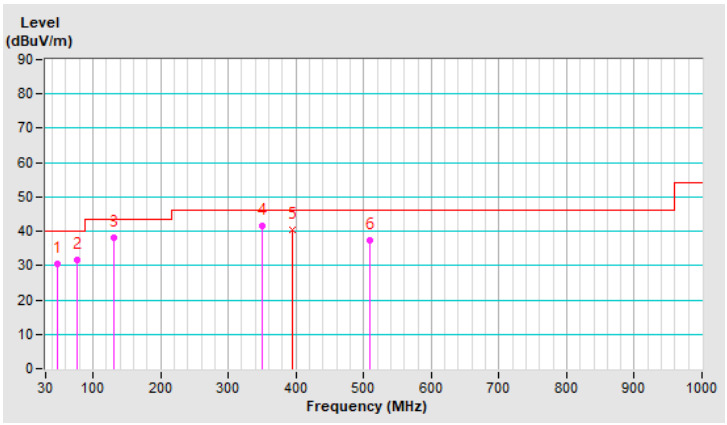
Below 1GHz Data:

RF Mode	TX 802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	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	46.71	30.4 QP	40.0	-9.6	2.50 H	322	38.6	-8.2
2	76.94	31.6 QP	40.0	-8.4	2.00 H	258	43.9	-12.3
3	131.58	38.1 QP	43.5	-5.4	1.50 H	244	46.8	-8.7
4	350.27	41.4 QP	46.0	-4.6	1.00 H	182	46.6	-5.2
5	395.30	40.5 QP	46.0	-5.5	1.00 H	312	44.5	-4.0
6	509.18	37.5 QP	46.0	-8.5	1.50 H	326	38.2	-0.7

Remarks:

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

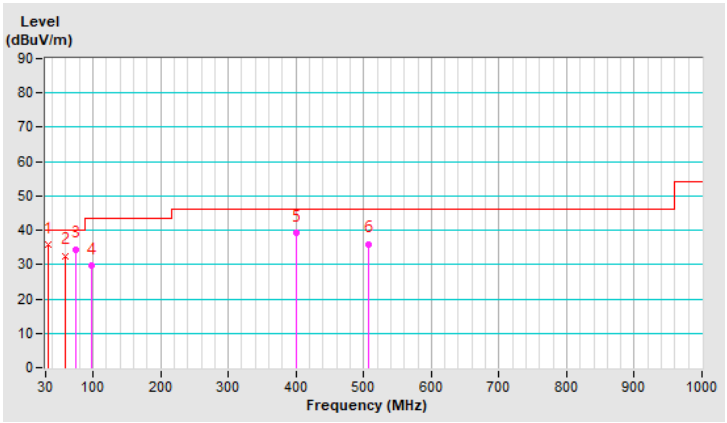


RF Mode	TX 802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	33.26	35.9 QP	40.0	-4.1	1.00 V	147	45.2	-9.3
2	59.12	32.6 QP	40.0	-7.4	1.00 V	311	41.2	-8.6
3	75.35	34.5 QP	40.0	-5.5	1.00 V	152	46.2	-11.7
4	98.09	29.7 QP	43.5	-13.8	1.00 V	163	42.4	-12.7
5	401.45	39.4 QP	46.0	-6.6	1.00 V	248	43.1	-3.7
6	506.65	36.0 QP	46.0	-10.0	1.00 V	259	36.8	-0.8

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 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	2020/10/20	2021/10/19
LISN R&S	ESH3-Z5	848773/004	2020/10/27	2021/10/26
LISN R & S	ESH3-Z5	835239/001	2021/3/26	2022/3/25
50 ohms Terminator	50	3	2020/10/26	2021/10/25
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2020/9/26	2021/9/25
Fixed attenuator STI	STI02-2200-10	005	2020/8/29	2021/8/28
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: 2021/8/4

4.2.3 Test Procedure

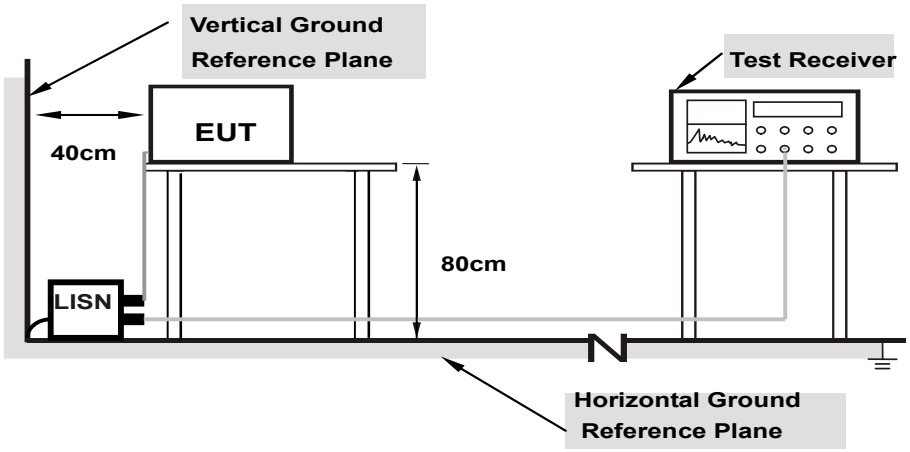
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

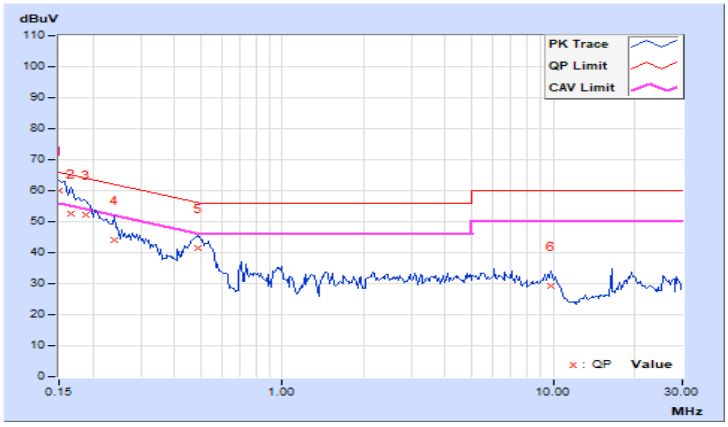
4.2.7 Test Results (Mode 1)

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

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	**0.15000**	**9.95**	**49.99**	**33.26**	**59.94**	**43.21**	**66.00**	**56.00**	**-6.06**	**-12.79**
2	0.16562	9.96	42.62	26.40	52.58	36.36	65.18	55.18	-12.60	-18.82
3	0.18906	9.97	42.40	28.28	52.37	38.25	64.08	54.08	-11.71	-15.83
4	0.23984	9.97	33.94	22.93	43.91	32.90	62.10	52.10	-18.19	-19.20
5	0.48594	10.00	31.49	26.08	41.49	36.08	56.24	46.24	-14.75	-10.16
6	9.75391	10.52	18.74	13.29	29.26	23.81	60.00	50.00	-30.74	-26.19

Remarks:

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

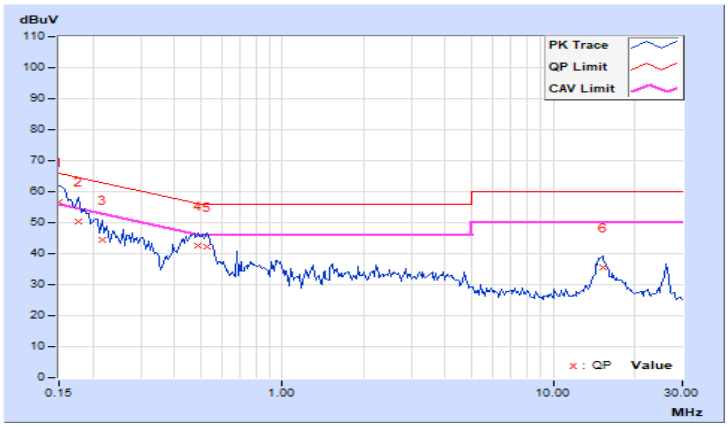


RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	46.68	34.44	56.60	44.36	66.00	56.00	-9.40	-11.64
2	0.17734	9.94	40.39	27.18	50.33	37.12	64.61	54.61	-14.28	-17.49
3	0.21641	9.95	34.35	23.18	44.30	33.13	62.96	52.96	-18.66	-19.83
4	0.48984	9.97	32.65	27.38	42.62	37.35	56.17	46.17	-13.55	-8.82
5	0.52891	9.97	32.18	26.98	42.15	36.95	56.00	46.00	-13.85	-9.05
6	15.24609	10.65	24.92	19.54	35.57	30.19	60.00	50.00	-24.43	-19.81

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



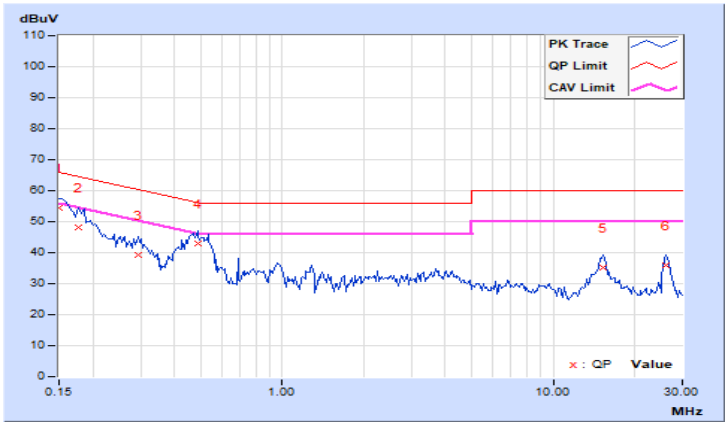
4.2.8 Test Results (Mode 2)

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

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	0.15000	9.95	44.58	32.00	54.53	41.95	66.00	56.00	-11.47	-14.05
2	0.17734	9.96	38.07	24.69	48.03	34.65	64.61	54.61	-16.58	-19.96
3	0.29453	9.98	29.23	22.88	39.21	32.86	60.40	50.40	-21.19	-17.54
4	0.48594	10.00	32.85	27.55	42.85	37.55	56.24	46.24	-13.39	-8.69
5	15.30469	10.85	24.39	18.86	35.24	29.71	60.00	50.00	-24.76	-20.29
6	25.96094	11.24	24.70	21.59	35.94	32.83	60.00	50.00	-24.06	-17.17

Remarks:

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

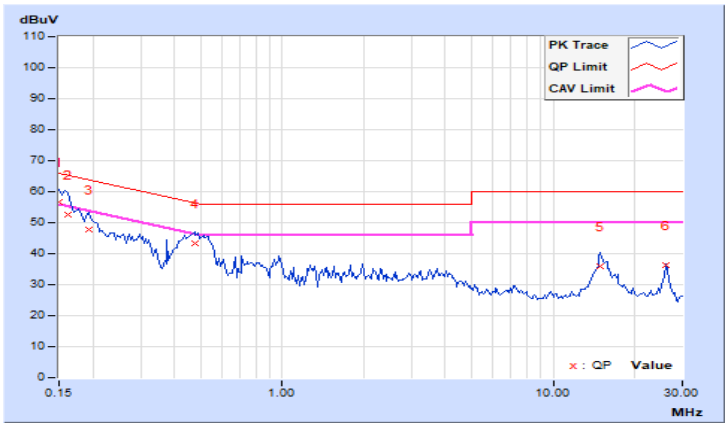


RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	46.74	33.12	56.66	43.04	66.00	56.00	-9.34	-12.96
2	0.16172	9.93	42.53	30.16	52.46	40.09	65.38	55.38	-12.92	-15.29
3	0.19297	9.95	37.81	25.28	47.76	35.23	63.91	53.91	-16.15	-18.68
4	0.47422	9.96	33.24	28.35	43.20	38.31	56.44	46.44	-13.24	-8.13
5	15.00391	10.64	25.24	19.83	35.88	30.47	60.00	50.00	-24.12	-19.53
6	26.24219	10.91	25.31	21.38	36.22	32.29	60.00	50.00	-23.78	-17.71

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



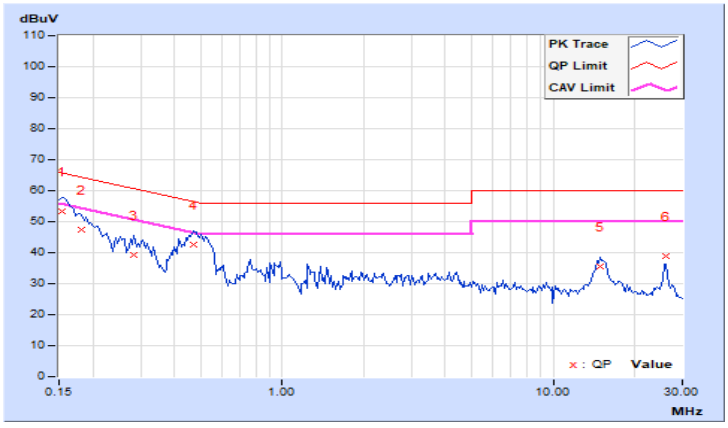
4.2.9 Test Results (Mode 3)

RF Mode	TX 802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

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	0.15391	9.95	43.25	31.28	53.20	41.23	65.79	55.79	-12.59	-14.56
2	0.18125	9.96	37.28	23.71	47.24	33.67	64.43	54.43	-17.19	-20.76
3	0.28281	9.98	29.36	22.49	39.34	32.47	60.73	50.73	-21.39	-18.26
4	0.47031	9.99	32.74	27.81	42.73	37.80	56.51	46.51	-13.78	-8.71
5	14.92969	10.83	24.75	19.20	35.58	30.03	60.00	50.00	-24.42	-19.97
6	25.95313	11.24	27.64	22.67	38.88	33.91	60.00	50.00	-21.12	-16.09

Remarks:

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

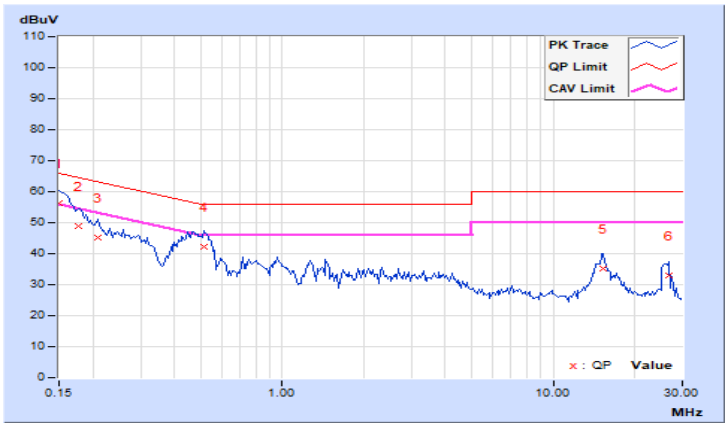


RF Mode	TX 802.11ac (VHT20)	Channel	CH 165：5825 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	46.32	32.86	56.24	42.78	66.00	56.00	-9.76	-13.22
2	0.17734	9.94	38.94	26.17	48.88	36.11	64.61	54.61	-15.73	-18.50
3	0.20859	9.95	35.37	23.44	45.32	33.39	63.26	53.26	-17.94	-19.87
4	0.51719	9.97	32.34	27.40	42.31	37.37	56.00	46.00	-13.69	-8.63
5	15.34766	10.65	24.49	18.96	35.14	29.61	60.00	50.00	-24.86	-20.39
6	26.83984	10.91	22.05	19.45	32.96	30.36	60.00	50.00	-27.04	-19.64

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 ≦ 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 dBm+10 log B*
U-NII-2C			250mW (24 dBm) or 11 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 $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

4.3.2 Test Setup

4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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

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 (Mode 1)

For 8TX

U-NII-1: Master / U-NII-3

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	12.08	12.12	12.27	12.17	12.13	12.05	11.52	11.94	127.969	21.07	26.7	Pass
40	5200	12.29	12.20	12.19	12.28	12.14	12.04	11.41	11.94	128.832	21.10	26.7	Pass
48	5240	12.16	11.95	11.83	12.23	12.23	11.69	12.21	12.02	128.087	21.08	26.7	Pass
149	5745	17.34	17.26	17.56	18.17	17.15	17.33	17.28	17.19	441.814	26.45	26.7	Pass
157	5785	17.47	16.89	16.47	16.48	19.03	17.51	17.02	17.04	430.816	26.34	26.7	Pass
165	5825	17.71	17.34	16.58	17.33	19.02	17.75	17.16	17.39	458.987	26.62	26.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3 dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 30 dBm-(9.3 dBi - 6 dBi) = 26.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	12.23	12.02	12.29	12.28	12.47	12.03	11.29	10.83	125.665	20.99	26.7	Pass
40	5200	12.16	12.28	11.51	12.07	12.46	12.22	11.55	10.72	123.997	20.93	26.7	Pass
48	5240	12.21	11.92	12.42	11.45	12.69	12.05	11.27	11.22	124.866	20.96	26.7	Pass
149	5745	17.18	16.86	17.37	17.49	18.51	17.12	16.45	16.75	425.402	26.29	26.7	Pass
157	5785	17.05	16.61	17.88	18.03	18.44	17.23	16.47	16.40	432.103	26.36	26.7	Pass
165	5825	17.22	17.12	17.57	17.61	18.13	17.31	16.71	17.22	437.515	26.41	26.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3 dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 30 dBm-(9.3 dBi - 6 dBi) = 26.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	15.43	15.18	15.01	14.94	14.55	14.53	14.96	15.46	254.138	24.05	29.7	Pass
46	5230	15.17	14.88	15.25	14.67	14.78	15.32	15.12	15.27	256.713	24.09	29.7	Pass
151	5755	18.35	19.02	18.38	19.30	20.68	18.88	18.59	19.66	661.134	28.20	29.7	Pass
159	5795	20.47	20.52	20.61	20.47	20.87	20.76	20.71	20.59	924.275	29.66	29.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	13.56	13.71	13.56	13.52	14.31	14.10	14.62	13.97	197.985	22.97	29.7	Pass
155	5775	17.12	15.91	16.79	16.12	18.27	16.76	16.24	17.34	390.036	25.91	29.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	12.02	11.96	11.49	12.20	12.53	12.54	12.03	11.94	129.758	21.13	26.7	Pass
40	5200	12.17	12.20	11.80	11.89	12.55	12.42	11.99	12.18	131.445	21.19	26.7	Pass
48	5240	12.08	12.15	11.40	11.92	12.30	12.78	11.84	12.42	130.596	21.16	26.7	Pass
149	5745	16.81	17.23	17.17	17.44	18.38	17.76	17.09	16.91	437.228	26.41	26.7	Pass
157	5785	17.40	16.62	16.98	17.36	18.74	17.48	17.04	17.94	448.818	26.52	26.7	Pass
165	5825	16.98	17.67	16.84	16.66	18.88	17.56	17.28	17.93	452.846	26.56	26.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3 dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 30 dBm-(9.3 dBi - 6 dBi) = 26.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	15.18	15.20	15.31	15.28	15.17	15.06	15.58	15.66	271.667	24.34	29.7	Pass
46	5230	15.21	15.01	15.33	14.82	15.98	15.36	15.20	15.38	270.954	24.33	29.7	Pass
151	5755	18.35	19.13	18.38	19.30	20.75	18.88	18.58	19.90	670.169	28.26	29.7	Pass
159	5795	20.47	20.51	20.66	20.45	20.85	20.76	20.73	20.65	926.412	29.67	29.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	14.06	14.14	14.02	13.61	14.52	14.42	13.94	14.07	205.891	23.14	29.7	Pass
155	5775	17.12	15.91	16.81	16.12	18.36	16.83	16.24	17.47	394.08	25.96	29.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	11.78	11.55	11.82	11.85	12.01	11.57	10.84	10.42	113.261	20.54	21.15	Pass
40	5200	11.79	11.92	11.27	11.72	12.09	11.85	11.31	10.48	115.098	20.61	21.15	Pass
48	5240	11.77	11.49	11.99	11.03	12.21	11.62	10.85	10.79	112.925	20.53	21.15	Pass
149	5745	11.72	11.39	11.85	11.95	12.99	11.67	11.01	11.28	120.252	20.80	21.15	Pass
157	5785	11.59	11.16	12.33	12.55	12.88	11.69	10.95	10.92	121.542	20.85	21.15	Pass
165	5825	11.75	11.67	12.11	12.14	12.67	11.89	11.23	11.78	124.561	20.95	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	12.28	12.06	11.89	11.85	11.41	11.39	11.81	12.25	123.304	20.91	21.15	Pass
46	5230	11.85	11.59	11.98	11.43	11.52	12.05	11.90	11.87	120.5	20.81	21.15	Pass
151	5755	11.21	11.89	11.16	12.15	13.47	11.78	11.45	12.57	127.468	21.05	21.15	Pass
159	5795	11.89	11.95	12.04	11.91	12.32	12.18	12.14	11.90	128.076	21.07	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	11.53	11.73	11.59	11.51	12.28	12.06	12.58	11.99	124.596	20.96	21.15	Pass
155	5775	12.08	10.96	11.76	11.10	13.25	11.74	11.22	12.31	122.825	20.89	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	11.55	11.48	11.01	11.76	12.09	12.11	11.62	11.49	117.015	20.68	21.15	Pass
40	5200	11.73	12.76	11.32	11.45	12.10	12.01	11.54	11.73	122.542	20.88	21.15	Pass
48	5240	11.61	11.69	10.94	11.45	11.83	12.31	11.37	11.95	117.263	20.69	21.15	Pass
149	5745	11.33	11.77	11.70	12.01	12.85	12.25	11.61	11.43	123.742	20.93	21.15	Pass
157	5785	11.98	11.15	11.52	11.92	13.21	12.02	11.58	12.46	127.429	21.05	21.15	Pass
165	5825	11.52	12.15	11.36	11.19	13.30	12.07	11.82	12.46	127.737	21.06	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.75	11.76	11.81	12.11	12.07	12.06	12.33	12.30	127.644	21.06	21.15	Pass
46	5230	11.75	11.55	11.87	11.34	12.44	11.92	11.77	11.96	122.081	20.87	21.15	Pass
151	5755	11.22	12.01	11.25	12.21	13.51	11.76	11.42	12.68	128.937	21.10	21.15	Pass
159	5795	11.91	11.98	12.10	11.89	12.28	12.21	12.17	12.10	129.209	21.11	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	12.03	12.11	11.98	11.58	12.46	12.39	11.91	12.04	128.856	21.10	21.15	Pass
155	5775	12.12	10.91	11.81	11.12	13.36	11.83	11.24	12.47	124.619	20.96	21.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

For U-NII-1: Client

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	6.11	6.15	6.21	6.14	6.10	6.07	5.59	5.98	32.199	15.08	20.7	Pass
40	5200	6.26	6.15	6.13	6.21	6.09	6.01	5.55	5.96	32.216	15.08	20.7	Pass
48	5240	6.13	5.97	5.88	6.19	6.16	5.75	6.15	6.05	32.124	15.07	20.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(9.3-6) = 20.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	6.33	6.05	6.18	6.22	6.38	6.01	5.43	5.01	31.656	15.00	20.7	Pass
40	5200	6.15	6.22	5.59	6.04	6.39	6.18	5.62	5.85	31.947	15.04	20.7	Pass
48	5240	6.18	5.99	6.39	5.55	6.61	6.09	5.35	5.32	31.543	14.99	20.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(9.3-6) = 20.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	9.41	9.16	9.05	8.99	8.61	8.57	9.01	9.49	64.241	18.08	23.7	Pass
46	5230	9.22	8.92	9.29	8.73	8.92	9.31	9.15	9.33	65.233	18.14	23.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(6.3-6) = 23.7 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	11.63	11.79	11.67	11.62	12.36	12.21	12.68	12.09	127.435	21. 05	23.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(6.3-6) = 23.7 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	6.09	5.98	5.55	6.15	6.48	6.42	6.02	5.98	32.531	15.12	20.7	Pass
40	5200	6.15	6.18	5.83	5.92	6.35	6.37	6.04	6.11	32.759	15.15	20.7	Pass
48	5240	6.05	6.11	5.49	5.96	6.23	6.69	5.77	6.35	32.55	15.13	20.7	Pass

Note: 1. Directional gain is the maximum gain (6.3 dBi) of antennas + array gain(3dBi) = 9.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(9.3-6) = 20.7 dBm.
2. Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	9.22	9.24	9.33	9.21	9.15	9.04	9.47	9.62	67.91	18.32	23.7	Pass
46	5230	9.17	9.04	9.25	8.99	9.96	9.42	9.25	9.41	68.418	18.35	23.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(6.3-6) = 23.7 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	12.09	12.16	12.08	11.74	12.55	12.46	12.11	12.15	131.966	21.20	23.7	Pass

Note: 1. Maximum gain = 6.3 dBi > 6 dBi, so the power limit shall be reduced to 24-(6.3-6) = 23.7 dBm.

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	6.33	6.05	6.18	6.22	6.38	6.01	5.43	5.01	31.656	15.00	15.15	Pass
40	5200	5.75	5.82	5.19	5.63	5.99	5.78	5.22	5.45	29.128	14.64	15.15	Pass
48	5240	5.78	5.59	5.99	5.15	6.21	5.69	4.95	4.92	28.768	14.59	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	5.89	5.61	6.10	5.43	5.10	5.08	5.47	5.84	28.904	14.61	15.15	Pass
46	5230	5.58	5.38	5.65	5.16	5.35	5.68	5.52	5.74	28.46	14.54	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	5.58	5.71	5.53	5.53	6.21	6.08	6.51	6.02	31.193	14.94	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	6.09	5.98	5.55	6.15	6.48	6.42	6.02	5.98	32.531	15.12	15.15	Pass
40	5200	5.71	5.77	5.39	5.47	5.89	5.91	5.62	5.69	29.618	14.72	15.15	Pass
48	5240	5.59	5.64	5.01	5.50	5.79	6.21	5.32	5.88	29.253	14.66	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	5.79	5.84	5.86	5.75	5.70	5.59	6.02	6.21	30.759	14.88	15.15	Pass
46	5230	5.77	5.62	5.81	5.55	6.48	5.86	5.78	5.99	30.881	14.90	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)								Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	6.02	6.11	6.00	5.68	6.43	6.33	6.01	6.11	32.526	15.12	15.15	Pass

Note: The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 24-(14.85-6) = 15.15 dBm.

4.3.8 Test Results (Mode 2)

For 4TX

For U-NII-1: Master

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	14.29	12.04	12.05	12.67	77.374	18.89	30	Pass
40	5200	19.61	17.32	17.42	17.52	257.064	24.10	30	Pass
48	5240	17.03	14.91	15.10	15.03	145.642	21.63	30	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	14.20	12.05	12.01	12.33	75.321	18.77	30	Pass
40	5200	19.55	16.89	17.22	17.35	246.07	23.91	30	Pass
48	5240	17.34	15.10	15.28	15.62	156.764	21.95	30	Pass

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.15	9.55	9.18	9.52	39.28	15.94	30	Pass
46	5230	16.62	14.47	14.39	14.72	131.037	21.17	30	Pass

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.36	7.48	7.65	7.10	25.177	14.01	30	Pass

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	14.32	12.14	12.17	12.58	78.003	18.92	30	Pass
40	5200	19.70	17.02	17.36	17.46	253.844	24.05	30	Pass
48	5240	17.48	15.24	15.39	15.77	161.746	22.09	30	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.31	9.58	9.24	9.66	40.241	16.05	30	Pass
46	5230	16.77	14.57	14.51	14.81	134.693	21.29	30	Pass

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.49	7.52	7.75	7.20	25.746	14.11	30	Pass

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	14.20	12.05	12.01	12.33	75.321	18.77	24.35	Pass
40	5200	19.55	16.89	17.22	17.35	246.07	23.91	24.35	Pass
48	5240	17.34	15.10	15.28	15.62	156.764	21.95	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.15	9.55	9.18	9.52	39.28	15.94	24.35	Pass
46	5230	16.62	14.47	14.39	14.72	131.037	21.17	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.36	7.48	7.65	7.10	25.177	14.01	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	14.32	12.14	12.17	12.58	78.003	18.92	24.35	Pass
40	5200	19.70	17.02	17.36	17.46	253.844	24.05	24.35	Pass
48	5240	17.48	15.24	15.39	15.77	161.746	22.09	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.31	9.58	9.24	9.66	40.241	16.05	24.35	Pass
46	5230	16.77	14.57	14.51	14.81	134.693	21.29	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.49	7.52	7.75	7.20	25.746	14.11	24.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 30-(11.65-6) = 24.35 dBm.

For U-NII-1: Client

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	13.18	11.16	11.25	11.55	61.483	17.89	24	Pass
40	5200	13.57	11.53	11.43	11.20	64.056	18.07	24	Pass
48	5240	13.53	11.18	11.35	11.14	62.312	17.95	24	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	13.26	11.52	11.32	11.99	64.739	18.11	24	Pass
40	5200	13.72	11.29	11.52	11.62	65.721	18.18	24	Pass
48	5240	13.43	11.31	11.45	11.19	62.666	17.97	24	Pass

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.18	9.46	9.13	9.51	39.071	15.92	24	Pass
46	5230	16.58	14.42	14.33	14.67	129.579	21.13	24	Pass

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.57	7.38	7.61	7.08	25.4	14.05	24	Pass

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	13.41	11.62	11.40	12.10	66.471	18.23	24	Pass
40	5200	13.89	11.33	11.68	11.70	67.588	18.30	24	Pass
48	5240	13.51	11.47	11.56	11.30	64.278	18.08	24	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.31	9.58	9.24	9.66	40.241	16.05	24	Pass
46	5230	16.77	14.57	14.51	14.81	134.693	21.29	24	Pass

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.77	7.45	7.75	7.20	26.248	14.19	24	Pass

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	13.26	11.52	11.32	11.99	64.739	18.11	18.35	Pass
40	5200	13.51	10.84	11.06	11.15	60.369	17.81	18.35	Pass
48	5240	13.43	11.31	11.45	11.19	62.666	17.97	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[($10^{G4/20}$ + $10^{G5/20}$ + $10^{G6/20}$ + $10^{G7/20}$)^2 / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.18	9.46	9.13	9.51	39.071	15.92	18.35	Pass
46	5230	13.56	11.45	11.37	11.65	64.993	18.13	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[($10^{G4/20}$ + $10^{G5/20}$ + $10^{G6/20}$ + $10^{G7/20}$)^2 / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.57	7.38	7.61	7.08	25.4	14.05	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[($10^{G4/20}$ + $10^{G5/20}$ + $10^{G6/20}$ + $10^{G7/20}$)^2 / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	13.41	11.62	11.40	12.10	66.471	18.23	18.35	Pass
40	5200	13.45	10.85	11.19	11.22	60.688	17.83	18.35	Pass
48	5240	13.51	11.47	11.56	11.30	64.278	18.08	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	11.31	9.58	9.24	9.66	40.241	16.05	18.35	Pass
46	5230	13.74	11.52	11.48	11.75	66.873	18.25	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	9.77	7.45	7.75	7.20	26.248	14.19	18.35	Pass

Note: 1. For U-NII-1: The directional gain= 10 log[$(10^{G4/20} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20})^2$ / 4] = 11.65 dBi > 6 dBi, so the power limit shall be reduced to 24-(11.65-6) = 18.35 dBm.

For U-NII-3:

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	18.53	18.12	18.04	18.53	271.114	24.33	29.7	Pass
157	5785	18.31	18.18	18.09	18.35	266.338	24.25	29.7	Pass
165	5825	18.75	17.87	18.21	17.81	262.841	24.20	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	18.35	17.65	17.91	17.62	246.213	23.91	29.7	Pass
157	5785	18.17	17.35	18.16	18.35	253.794	24.04	29.7	Pass
165	5825	18.51	17.82	18.08	18.56	267.54	24.27	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	17.99	17.15	17.89	17.07	227.281	23.57	29.7	Pass
159	5795	19.15	17.90	18.92	18.02	285.254	24.55	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	17.05	16.11	17.02	15.94	181.146	22.58	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	18.48	17.70	18.02	17.79	252.858	24.03	29.7	Pass
157	5785	18.28	17.47	18.21	18.48	259.836	24.15	29.7	Pass
165	5825	18.61	17.97	18.22	18.68	275.437	24.40	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	18.09	17.29	18.05	17.23	234.667	23.70	29.7	Pass
159	5795	19.31	17.98	19.03	18.11	292.814	24.67	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	17.18	16.20	17.15	16.01	185.709	22.69	29.7	Pass

Note: 1. For U-NII-3: Maximum gain = 6.3 dB > 6 dBi, so the power limit shall be reduced to 30-(6.3-6) = 29.7 dBm.

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	17.96	17.24	17.55	17.15	224.249	23.51	23.98	Pass
157	5785	17.71	16.88	17.69	17.88	227.898	23.58	23.98	Pass
165	5825	18.05	17.41	17.61	18.04	240.263	23.81	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	17.99	17.15	17.89	17.07	227.281	23.57	23.98	Pass
159	5795	18.49	17.26	18.30	17.41	246.532	23.92	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	17.05	16.11	17.02	15.94	181.146	22.58	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	18.02	17.22	17.56	17.32	227.077	23.56	23.98	Pass
157	5785	17.81	17.02	17.75	18.00	233.407	23.68	23.98	Pass
165	5825	18.14	17.52	17.77	18.21	247.719	23.94	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	18.09	17.29	18.05	17.23	234.667	23.70	23.98	Pass
159	5795	18.56	17.26	18.35	17.36	247.832	23.94	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	17.18	16.20	17.15	16.01	185.709	22.69	23.98	Pass

Note: 1. For U-NII-3: The directional gain= 10 log[$(10^{G0/20} + 10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2$ / 4] = 12.02 dBi > 6 dBi, so the power limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

4.3.9 Test Results (Mode 3)

For Scanning Radio

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
36	5180	34.754	15.41	30	Pass
40	5200	36.224	15.59	30	Pass
48	5240	39.084	15.92	30	Pass
149	5745	28.973	14.62	30	Pass
157	5785	31.117	14.93	30	Pass
165	5825	38.194	15.82	30	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
36	5180	28.973	14.62	30	Pass
40	5200	35.727	15.53	30	Pass
48	5240	39.355	15.95	30	Pass
149	5745	31.696	15.01	30	Pass
157	5785	33.574	15.26	30	Pass
165	5825	41.02	16.13	30	Pass

802.11ac (VHT40)

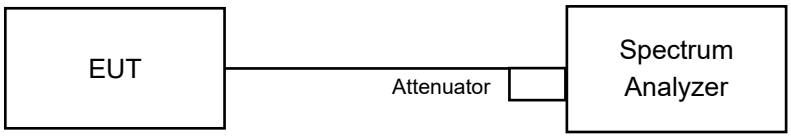
Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
38	5190	11.641	10.66	30	Pass
46	5230	25.351	14.04	30	Pass
151	5755	28.973	14.62	30	Pass
159	5795	33.729	15.28	30	Pass

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
42	5210	7.031	8.47	30	Pass
155	5775	18.707	12.72	30	Pass

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 (Mode 1)

For 8TX

For U-NII-1: Master / U-NII-3

CDD Mode

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
36	5180	16.44	16.56	16.44	16.56	16.56	16.56	16.44	16.56
40	5200	16.56	16.56	16.56	16.44	16.56	16.56	16.44	16.56
48	5240	16.56	16.44	16.44	16.56	16.44	16.44	16.44	16.56
149	5745	16.68	16.56	16.56	17.16	16.68	16.68	16.56	16.44
157	5785	16.68	16.8	16.56	16.56	23.16	16.92	16.56	16.56
165	5825	16.8	16.68	16.68	16.8	25.08	17.52	16.8	16.8

802.11ax (HE20)

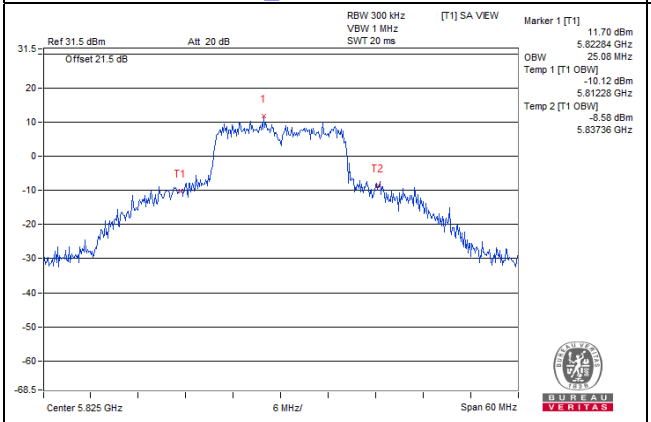
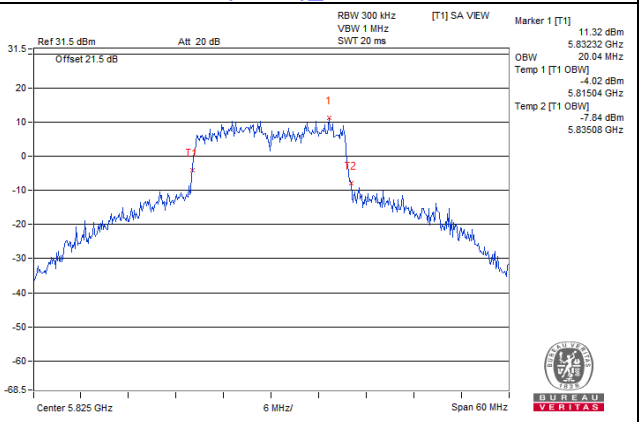
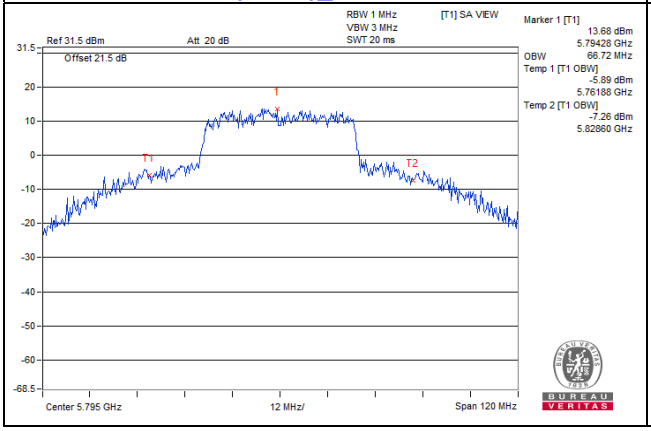
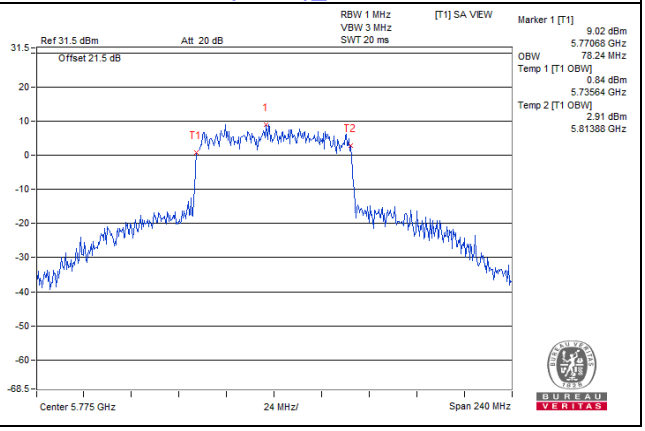
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
36	5180	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96
40	5200	18.96	18.96	18.96	18.96	18.96	18.96	18.84	18.96
48	5240	18.96	19.08	19.08	18.96	18.96	18.96	18.96	18.96
149	5745	18.96	19.2	19.08	19.08	19.2	19.08	18.96	18.96
157	5785	19.08	18.96	19.08	19.08	19.8	19.2	19.2	18.96
165	5825	19.08	19.08	19.08	19.2	20.04	19.2	19.08	19.2

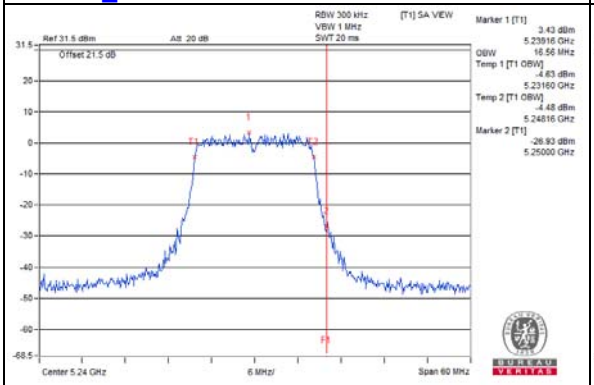
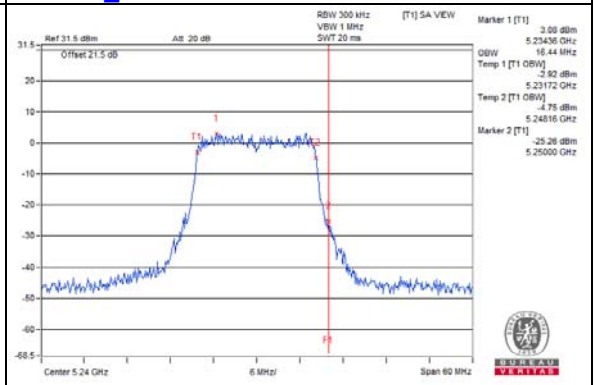
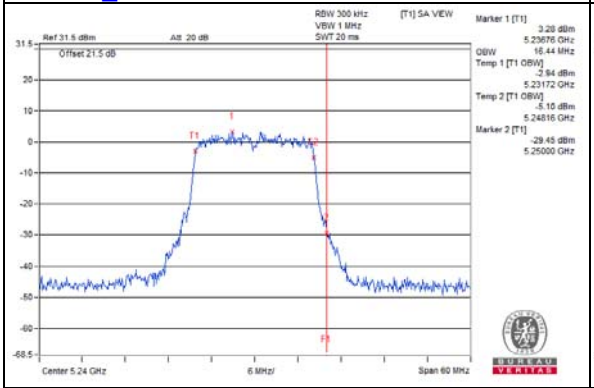
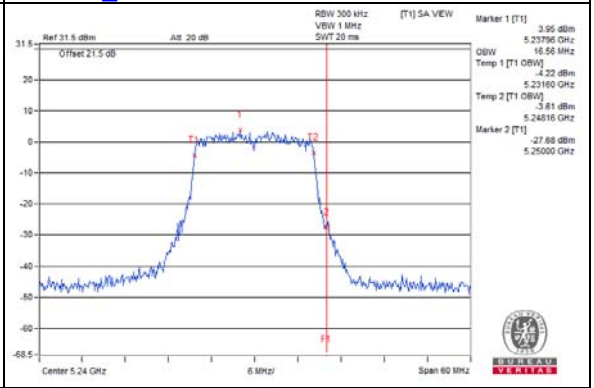
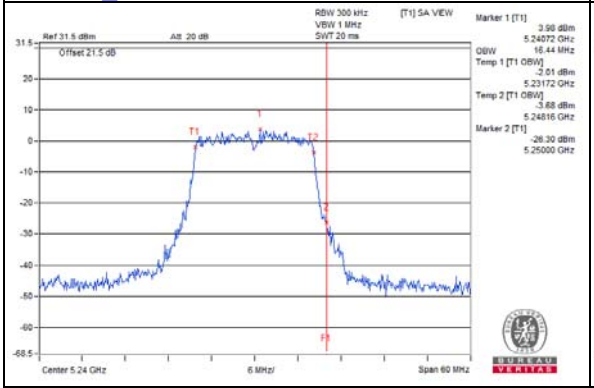
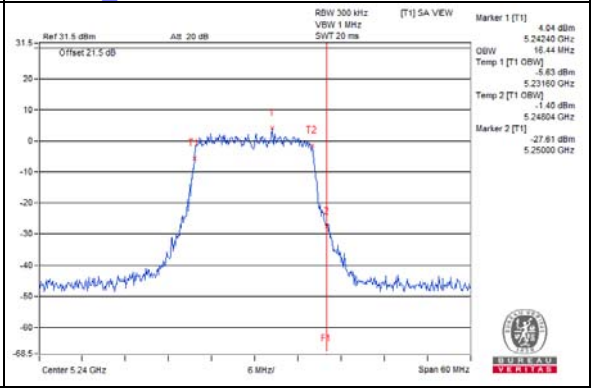
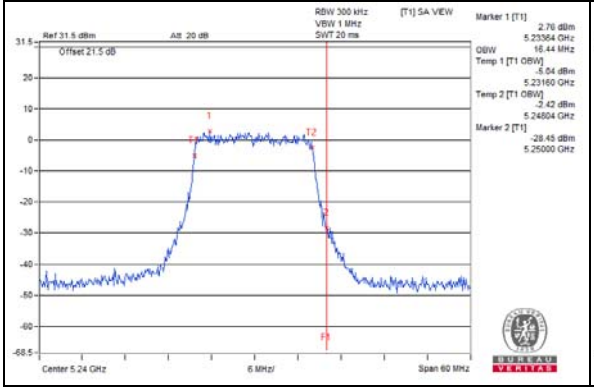
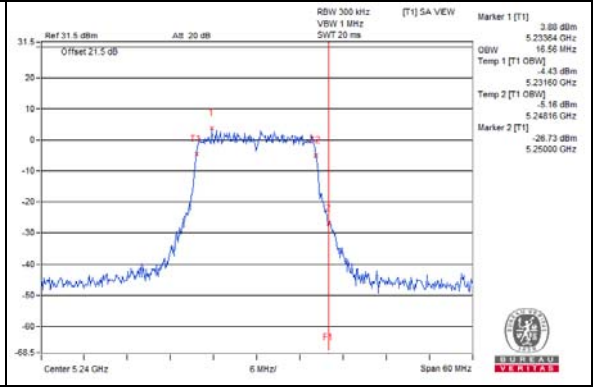
802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
38	5190	38.16	38.16	38.16	38.16	38.16	38.16	38.16	37.92
46	5230	38.16	38.16	38.16	37.92	38.16	37.92	38.16	38.16
151	5755	38.4	38.64	38.64	41.52	59.76	38.88	38.64	40.32
159	5795	65.52	59.04	62.16	64.56	66.72	63.6	62.64	63.36

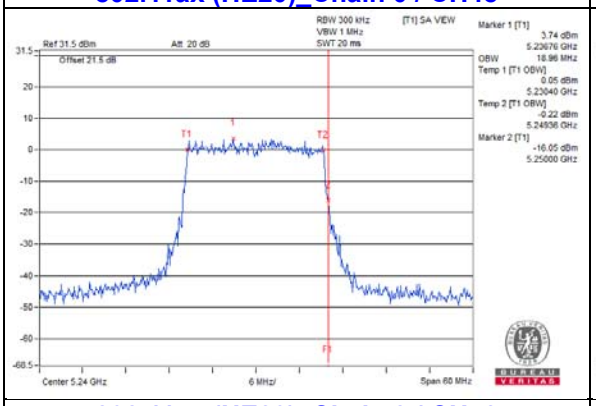
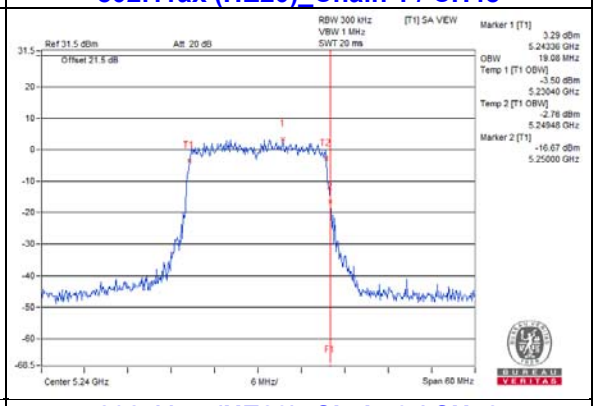
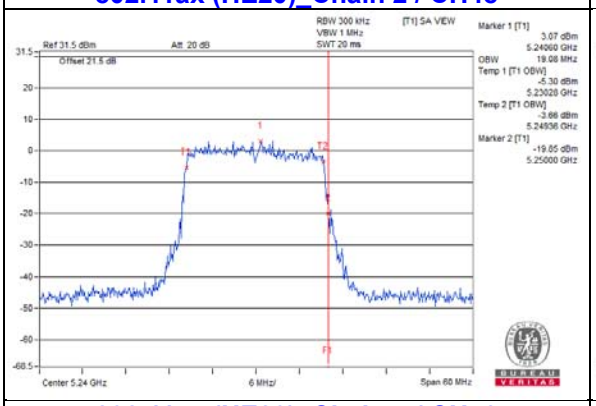
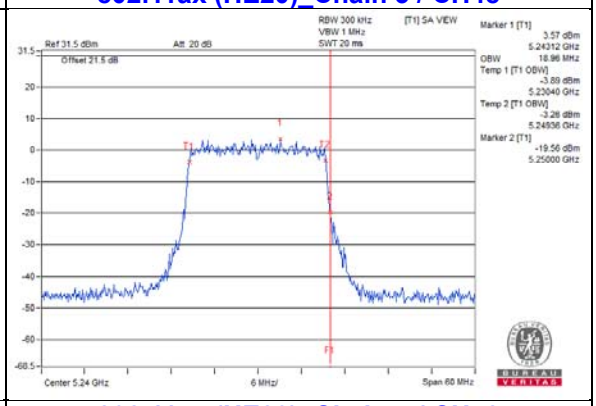
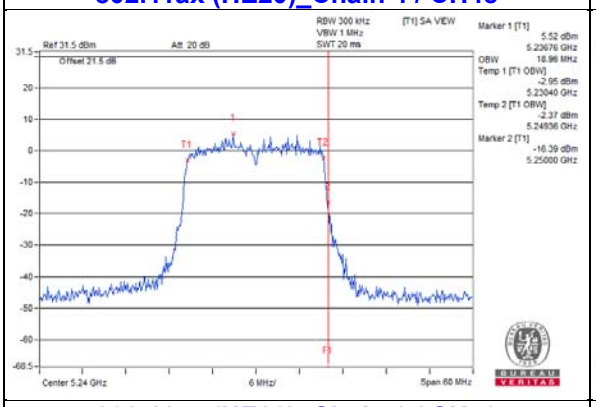
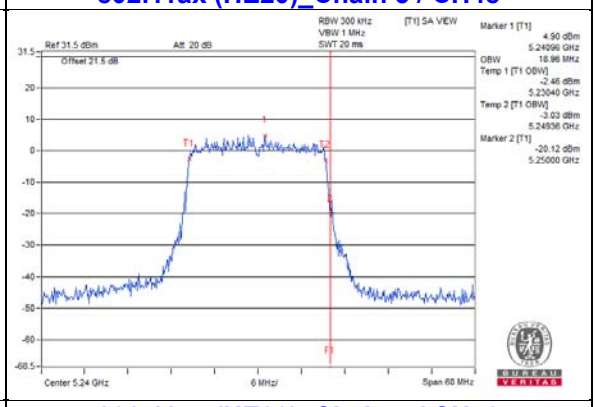
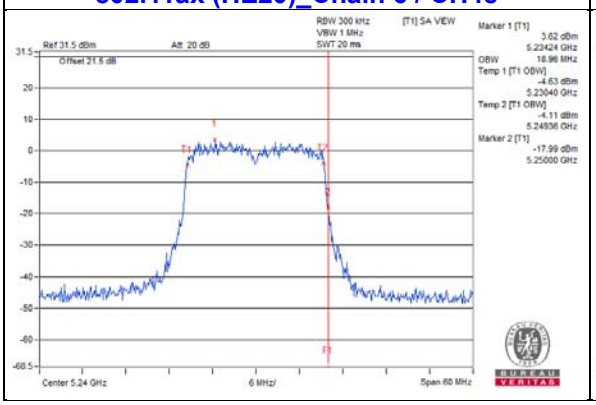
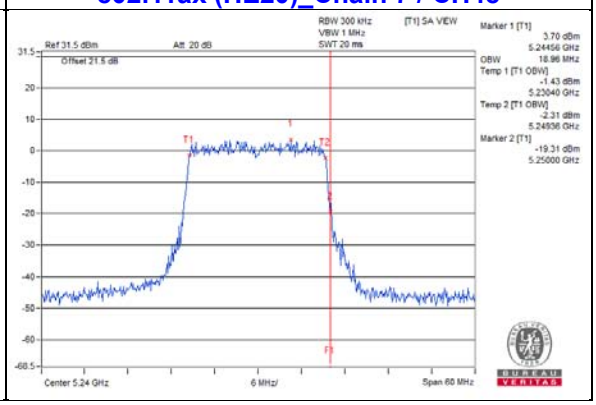
802.11ax (HE80)

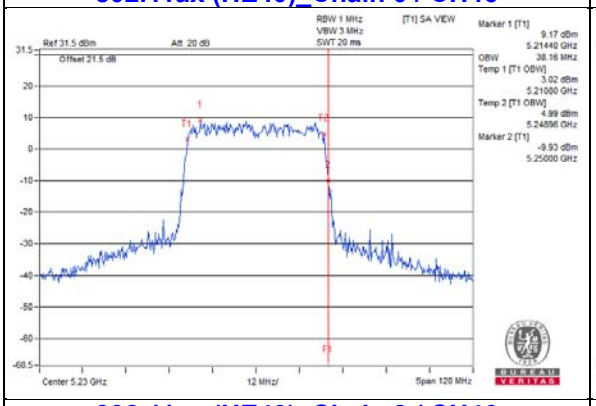
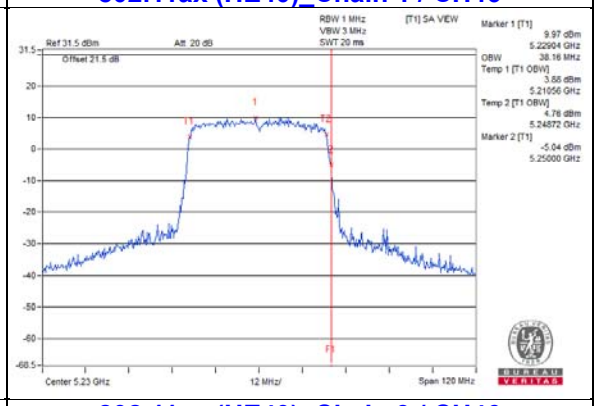
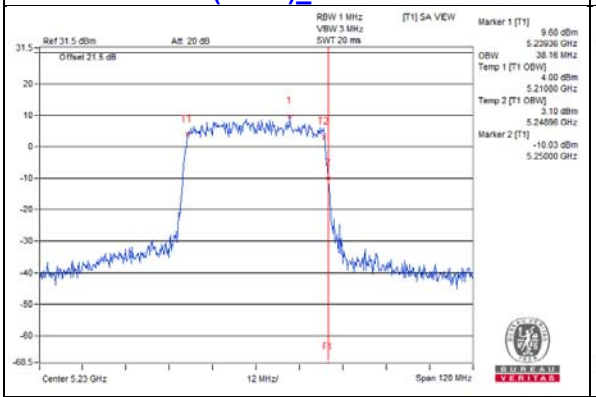
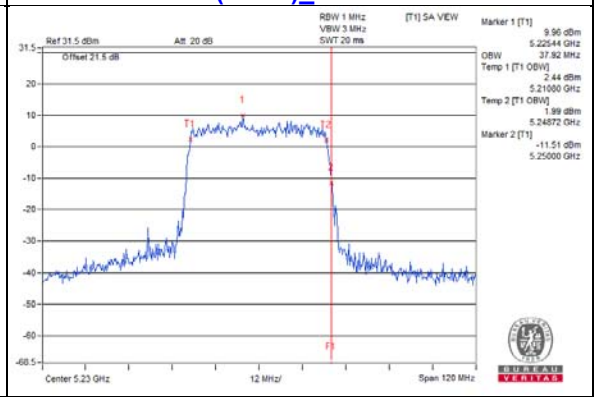
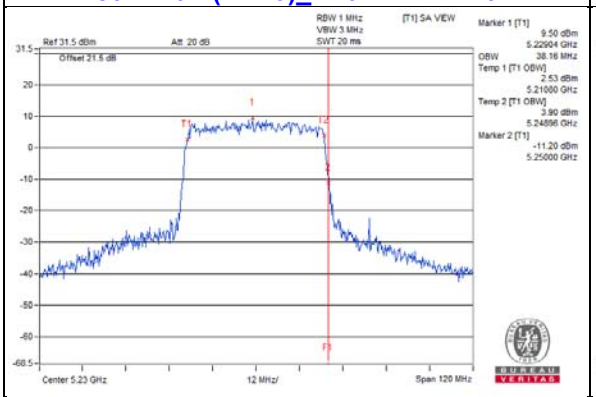
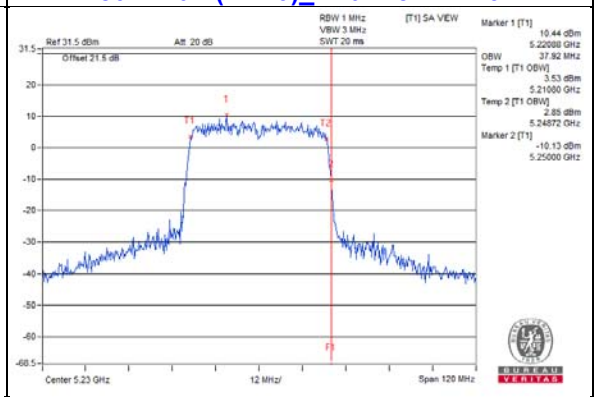
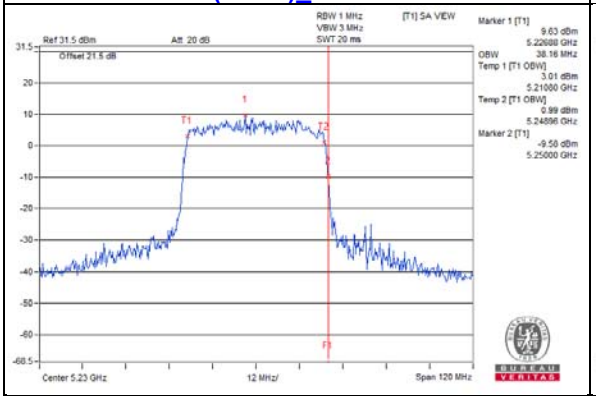
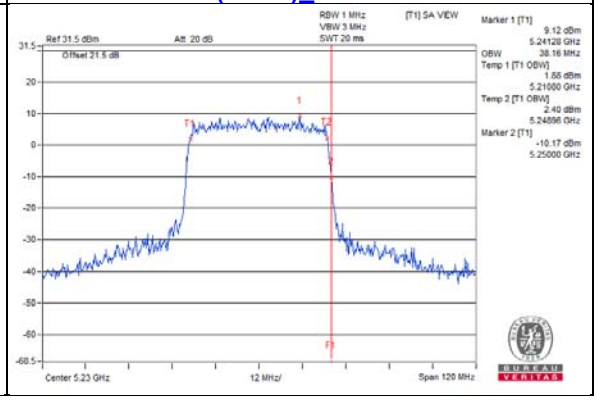
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
42	5210	77.28	77.28	77.76	77.28	77.28	77.28	77.76	77.28
155	5775	77.28	76.8	77.28	77.28	78.24	77.28	77.76	78.24

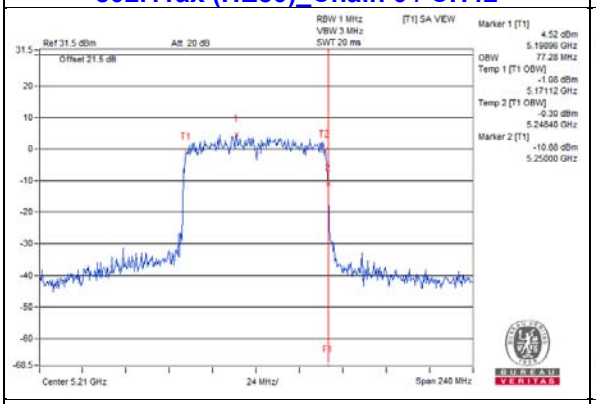
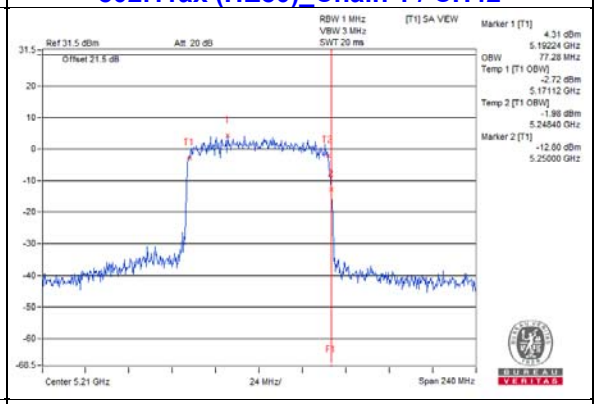
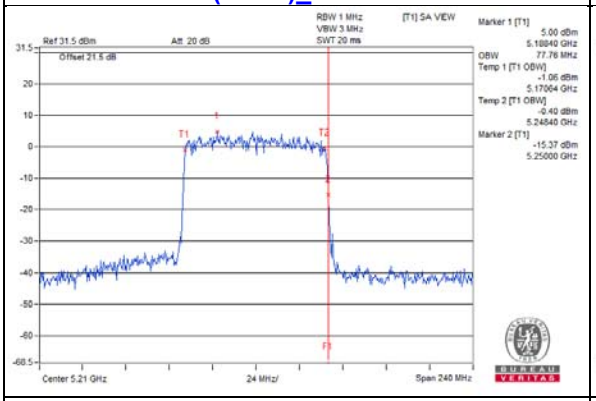
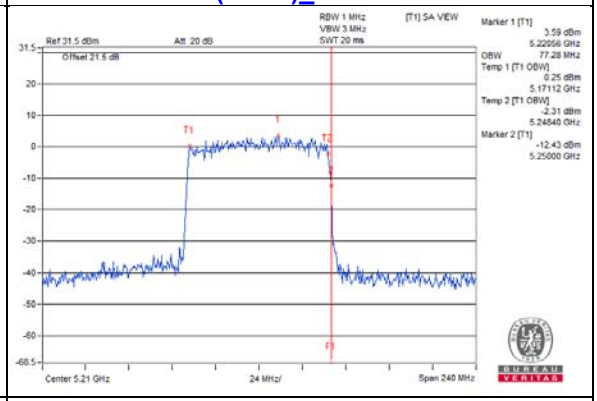
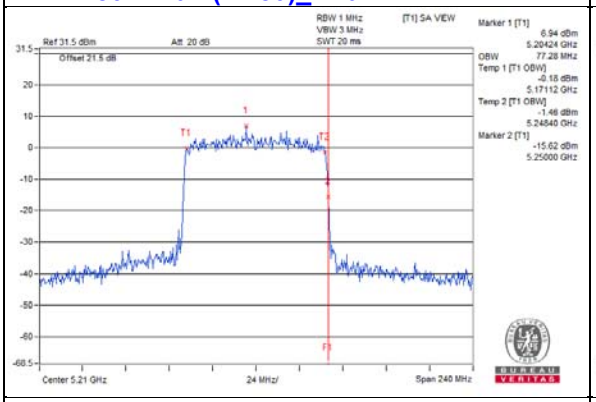
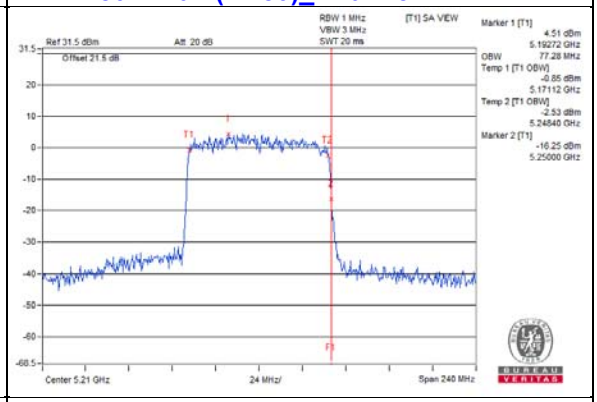
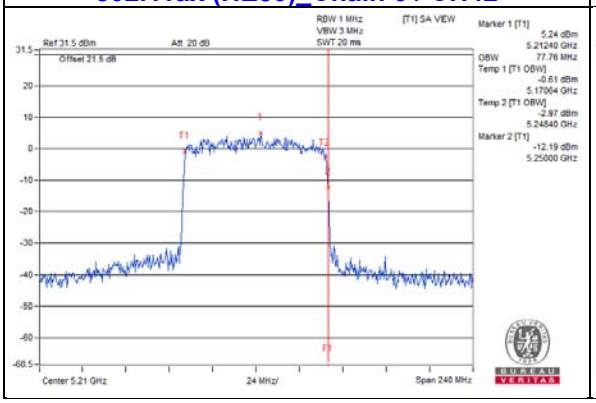
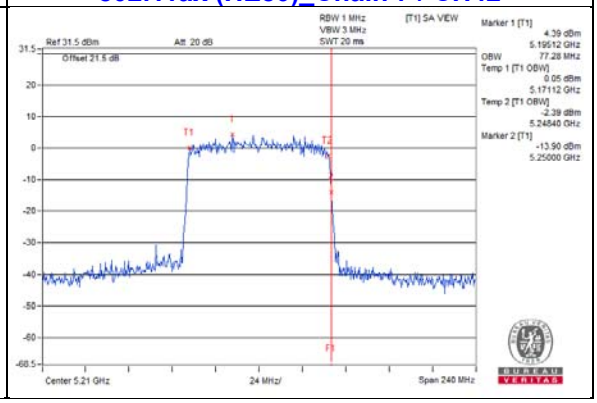
Spectrum Plot of Max. Value	
802.11a_Chain 4 / CH165	**802.11ax (HE20)_Chain 4 / CH165**
	
802.11ax (HE40)_Chain 4 / CH159	**802.11ax (HE80)_Chain 4 / CH155**
	

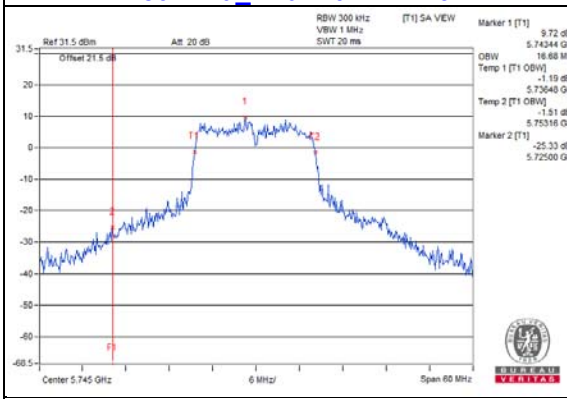
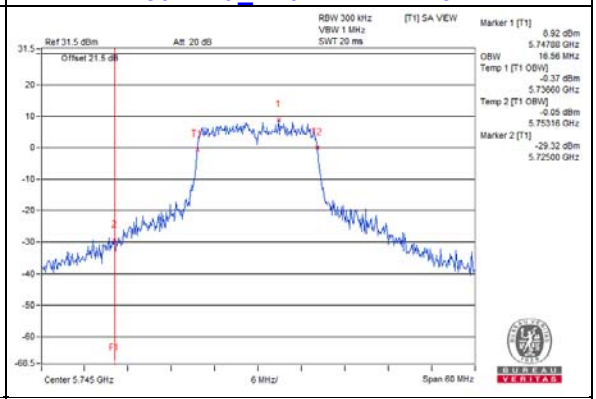
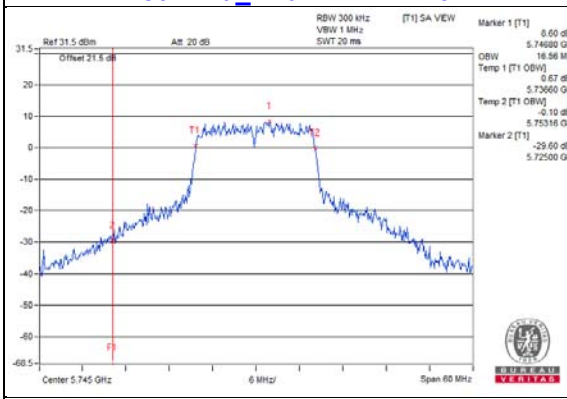
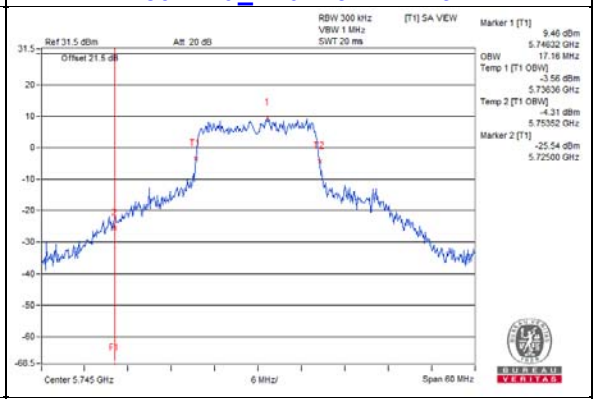
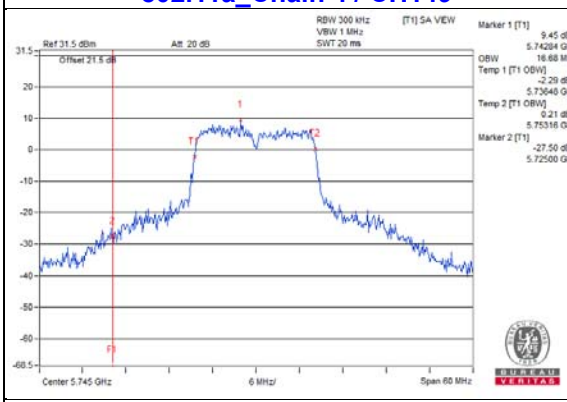
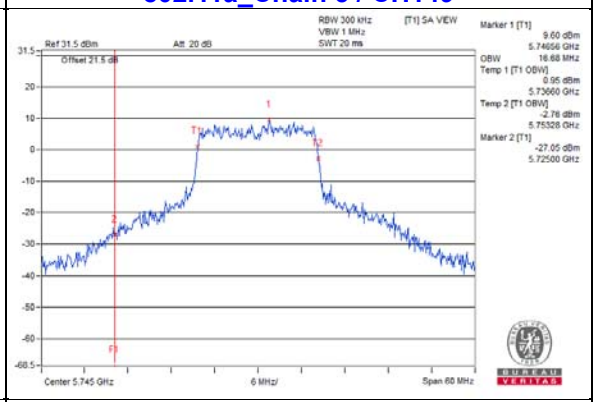
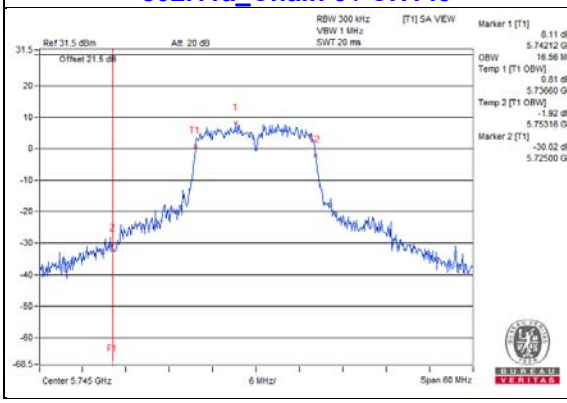
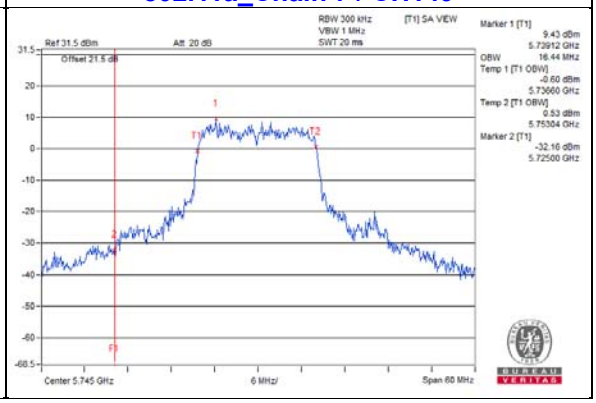
Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11a_Chain 0 / CH48	**802.11a_Chain 1 / CH48**
	
802.11a_Chain 2 / CH48	**802.11a_Chain 3 / CH48**
	
802.11a_Chain 4 / CH48	**802.11a_Chain 5 / CH48**
	
802.11a_Chain 6 / CH48	**802.11a_Chain 7 / CH48**
	

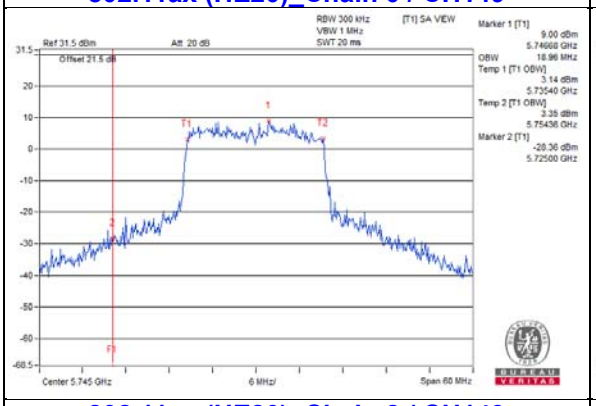
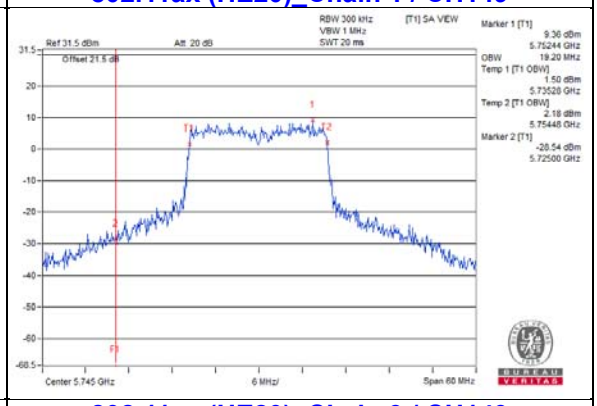
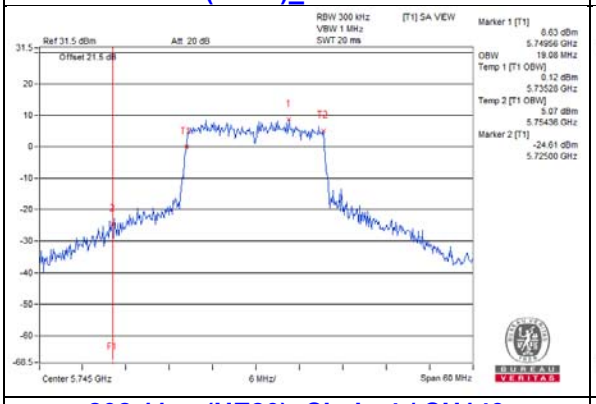
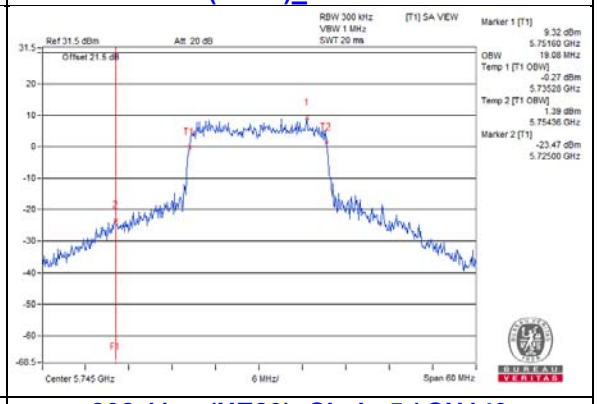
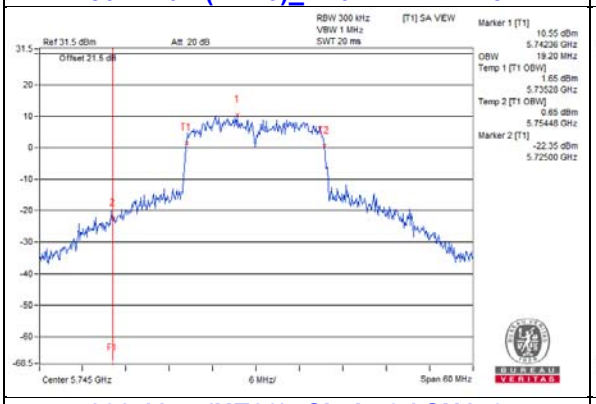
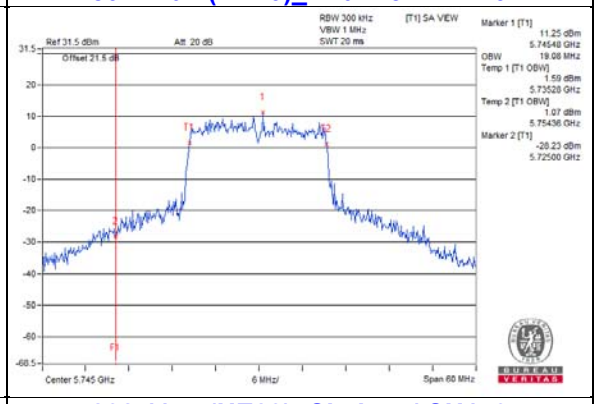
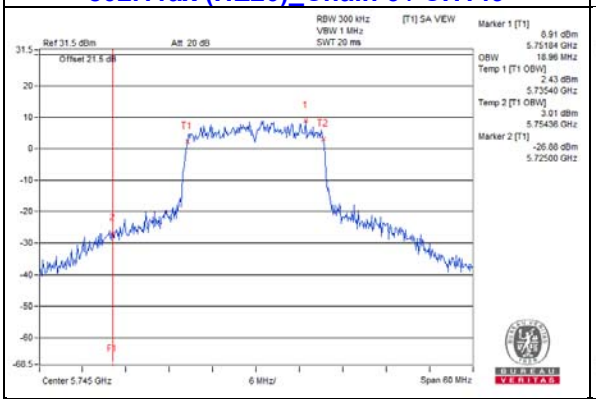
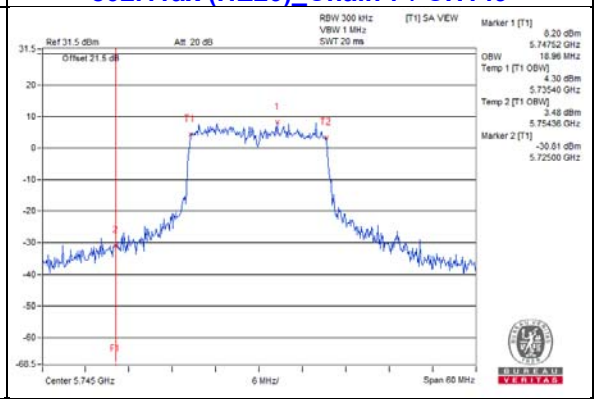
Spectrum Plot for near by DFS band

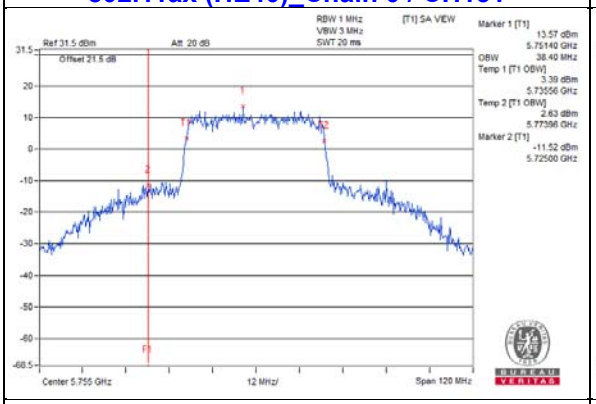
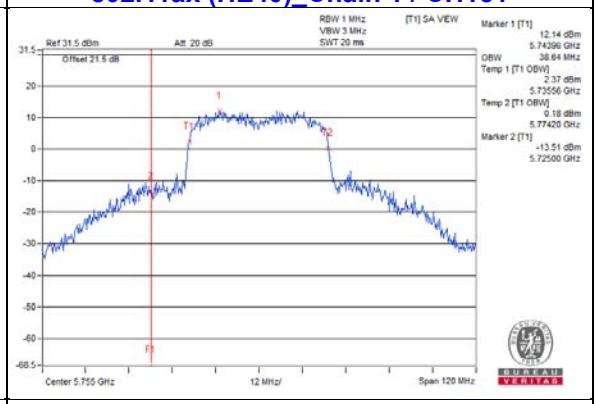
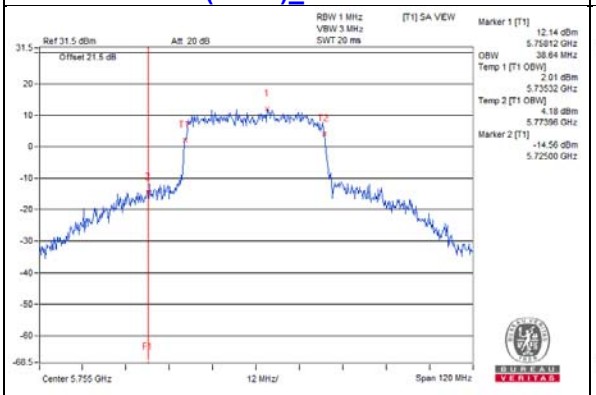
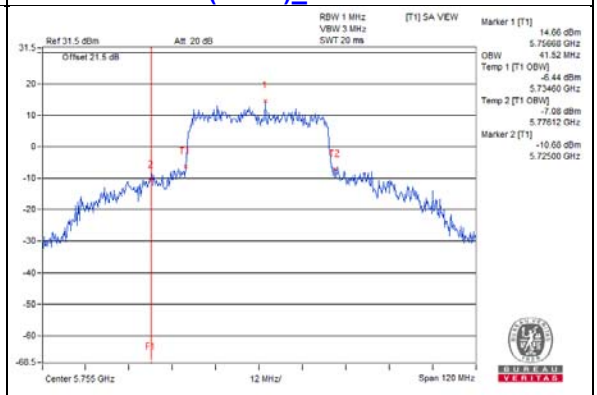
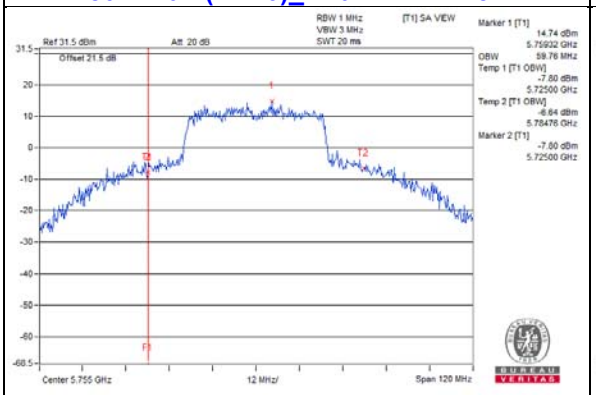
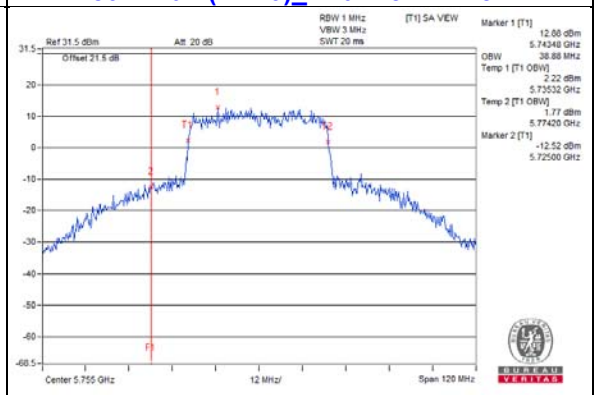
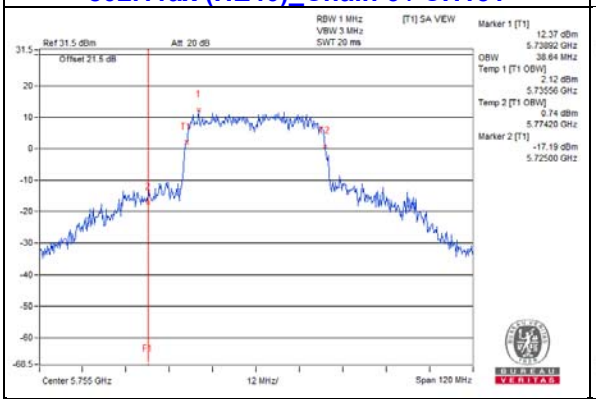
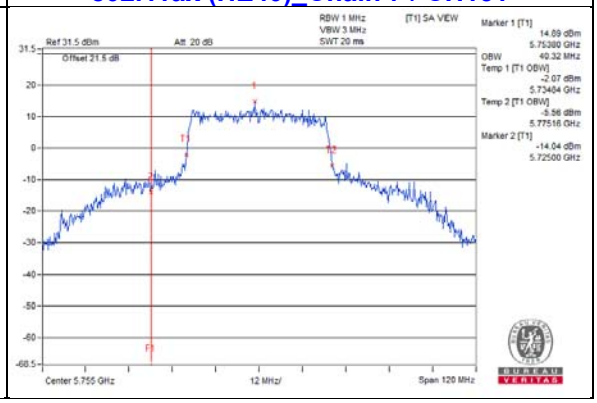
(DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11ax (HE20)_Chain 0 / CH48	**802.11ax (HE20)_Chain 1 / CH48**
	
802.11ax (HE20)_Chain 2 / CH48	**802.11ax (HE20)_Chain 3 / CH48**
	
802.11ax (HE20)_Chain 4 / CH48	**802.11ax (HE20)_Chain 5 / CH48**
	
802.11ax (HE20)_Chain 6 / CH48	**802.11ax (HE20)_Chain 7 / CH48**
	

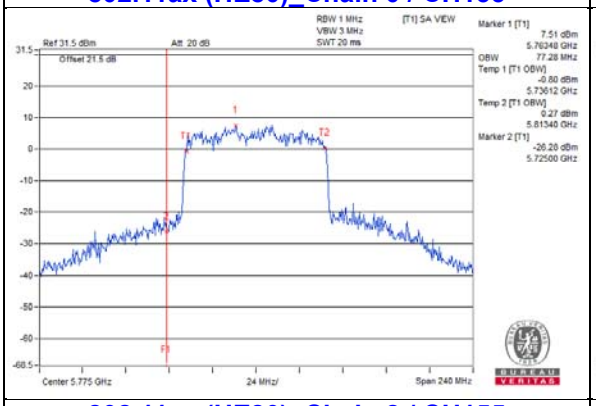
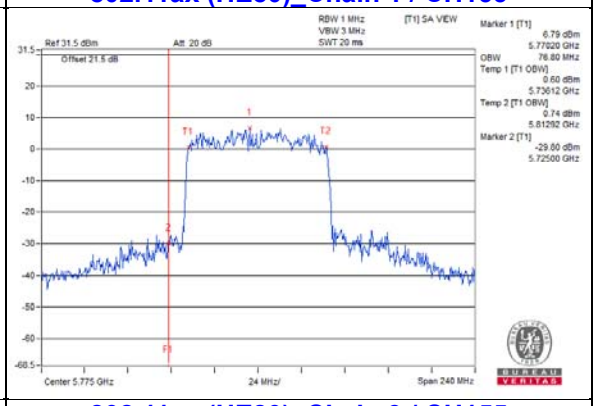
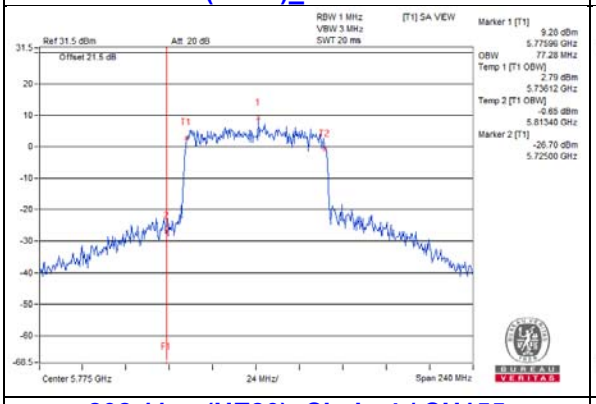
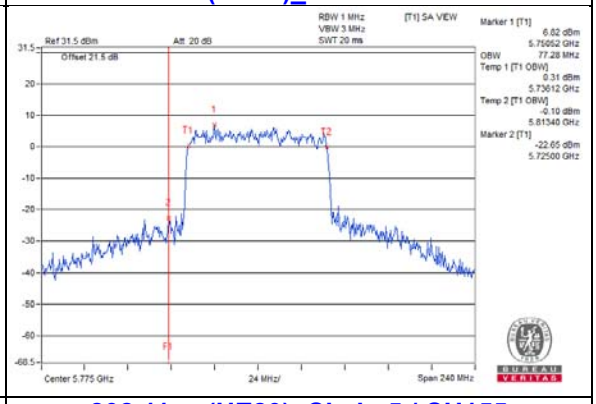
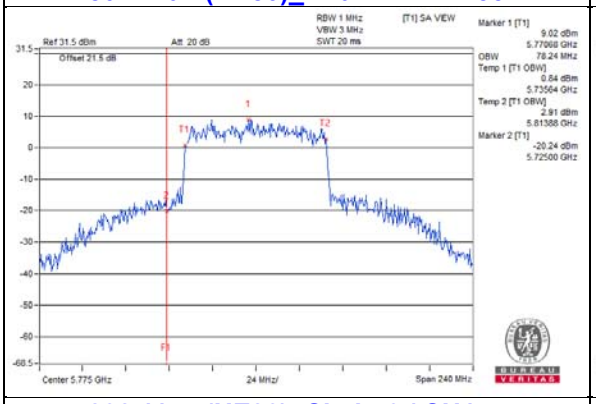
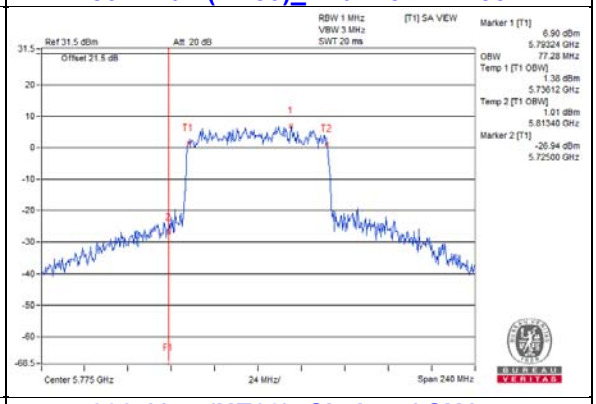
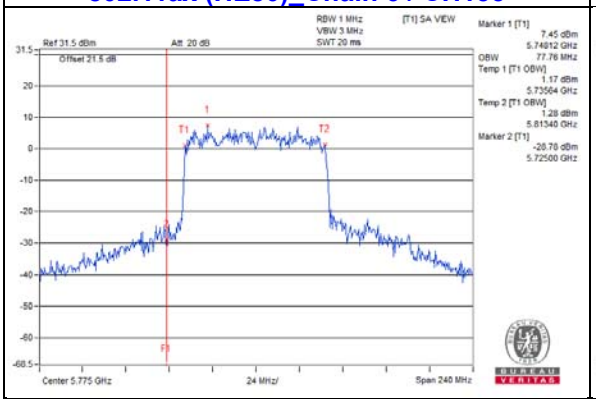
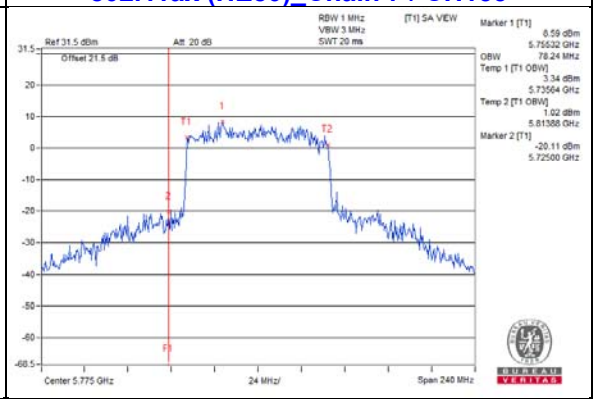
Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11ax (HE40)_Chain 0 / CH46	**802.11ax (HE40)_Chain 1 / CH46**
	
802.11ax (HE40)_Chain 2 / CH46	**802.11ax (HE40)_Chain 3 / CH46**
	
802.11ax (HE40)_Chain 4 / CH46	**802.11ax (HE40)_Chain 5 / CH46**
	
802.11ax (HE40)_Chain 6 / CH46	**802.11ax (HE40)_Chain 7 / CH46**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11ax (HE80)_Chain 0 / CH42	**802.11ax (HE80)_Chain 1 / CH42**
	
802.11ax (HE80)_Chain 2 / CH42	**802.11ax (HE80)_Chain 3 / CH42**
	
802.11ax (HE80)_Chain 4 / CH42	**802.11ax (HE80)_Chain 5 / CH42**
	
802.11ax (HE80)_Chain 6 / CH42	**802.11ax (HE80)_Chain 7 / CH42**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11a_Chain 0 / CH149	**802.11a_Chain 1 / CH149**
	
802.11a_Chain 2 / CH149	**802.11a_Chain 3 / CH149**
	
802.11a_Chain 4 / CH149	**802.11a_Chain 5 / CH149**
	
802.11a_Chain 6 / CH149	**802.11a_Chain 7 / CH149**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11ax (HE20)_Chain 0 / CH149	**802.11ax (HE20)_Chain 1 / CH149**
	
802.11ax (HE20)_Chain 2 / CH149	**802.11ax (HE20)_Chain 3 / CH149**
	
802.11ax (HE20)_Chain 4 / CH149	**802.11ax (HE20)_Chain 5 / CH149**
	
802.11ax (HE20)_Chain 6 / CH149	**802.11ax (HE20)_Chain 7 / CH149**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11ax (HE40)_Chain 0 / CH151	**802.11ax (HE40)_Chain 1 / CH151**
	
802.11ax (HE40)_Chain 2 / CH151	**802.11ax (HE40)_Chain 3 / CH151**
	
802.11ax (HE40)_Chain 4 / CH151	**802.11ax (HE40)_Chain 5 / CH151**
	
802.11ax (HE40)_Chain 6 / CH151	**802.11ax (HE40)_Chain 7 / CH151**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11ax (HE80)_Chain 0 / CH155	**802.11ax (HE80)_Chain 1 / CH155**
	
802.11ax (HE80)_Chain 2 / CH155	**802.11ax (HE80)_Chain 3 / CH155**
	
802.11ax (HE80)_Chain 4 / CH155	**802.11ax (HE80)_Chain 5 / CH155**
	
802.11ax (HE80)_Chain 6 / CH155	**802.11ax (HE80)_Chain 7 / CH155**
	

For U-NII-1: Client

CDD Mode

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
36	5180	16.44	16.44	16.44	16.44	16.44	16.56	16.56	16.44
40	5200	16.56	16.44	16.44	16.44	16.56	16.44	16.56	16.44
48	5240	16.44	16.44	16.44	16.56	16.44	16.44	16.44	16.56

802.11ax (HE20)

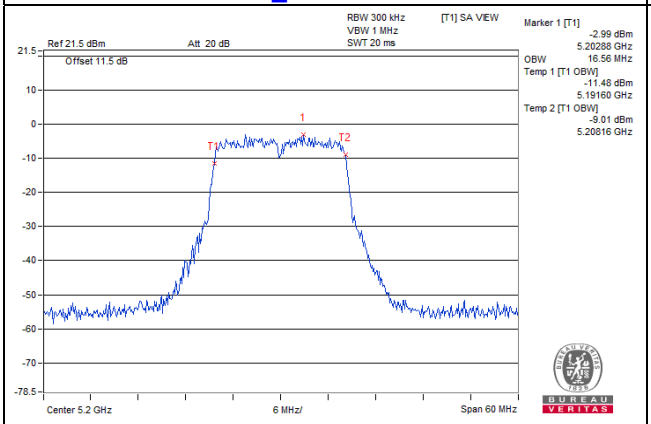
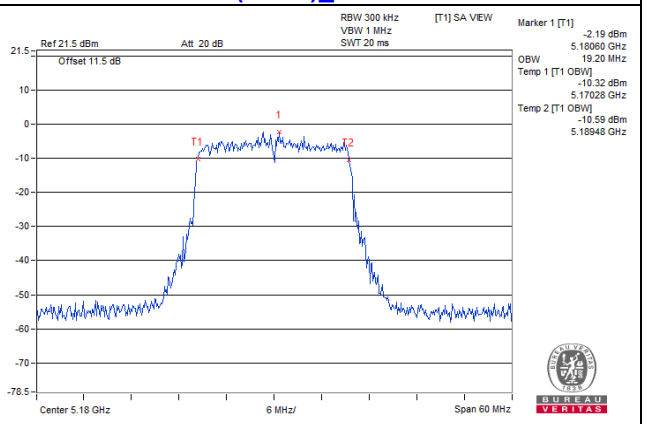
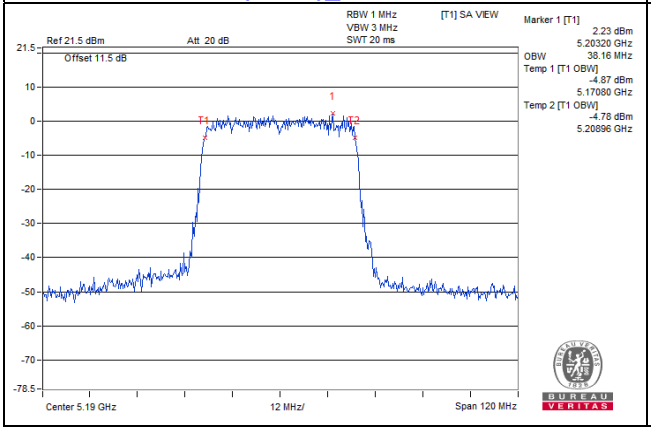
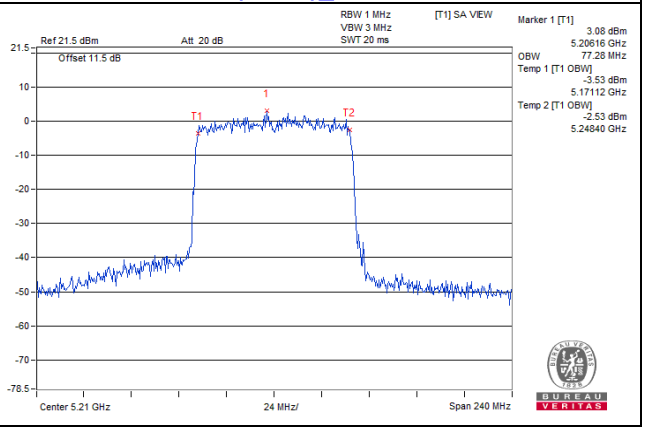
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
36	5180	19.08	19.08	19.2	19.08	19.08	18.84	19.08	18.96
40	5200	18.96	19.08	19.08	18.84	18.96	19.08	19.08	19.08
48	5240	18.96	18.96	19.08	19.08	19.08	19.08	18.96	18.96

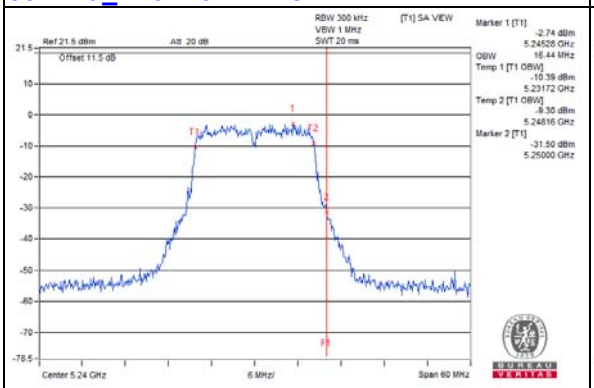
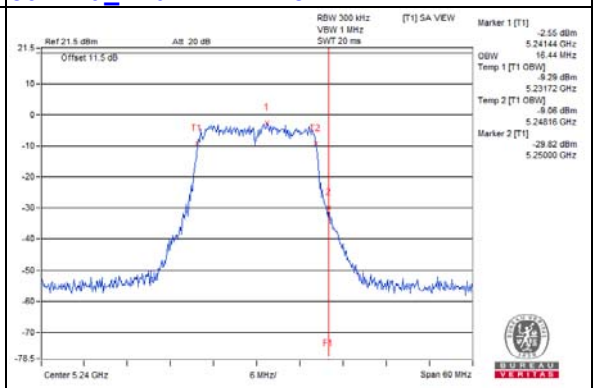
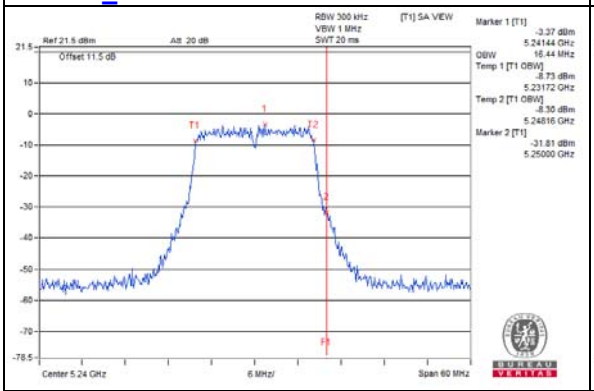
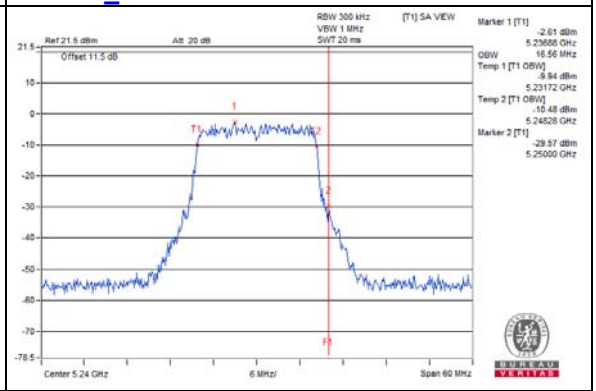
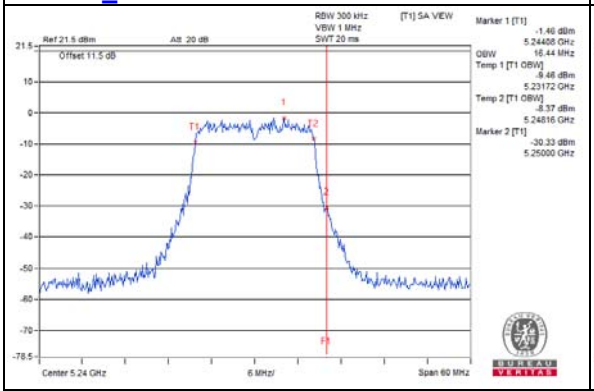
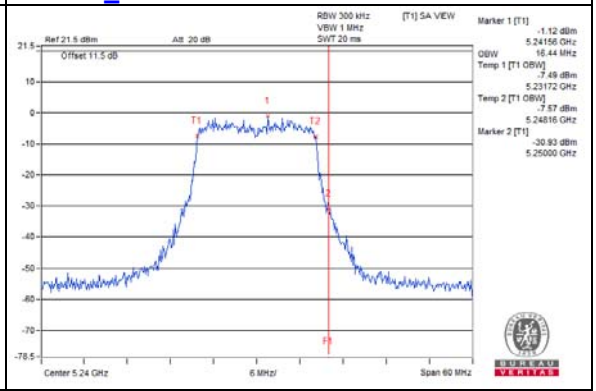
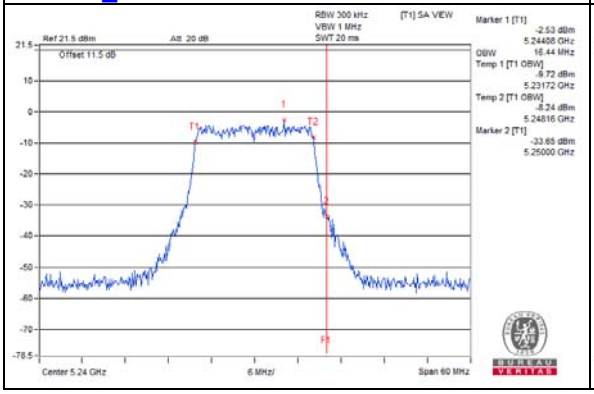
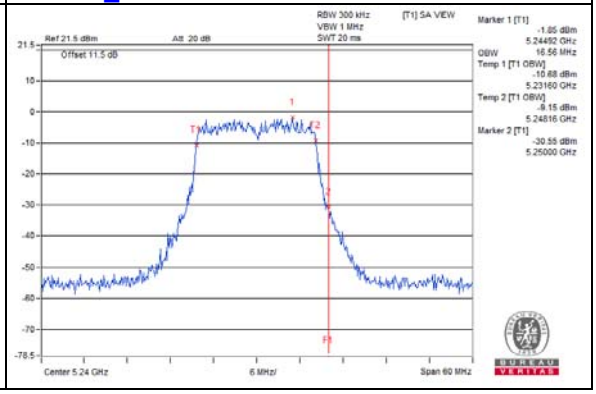
802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
38	5190	38.16	38.16	38.16	38.16	38.16	37.92	38.16	37.92
46	5230	38.16	38.16	38.16	38.16	37.92	37.68	38.16	38.16

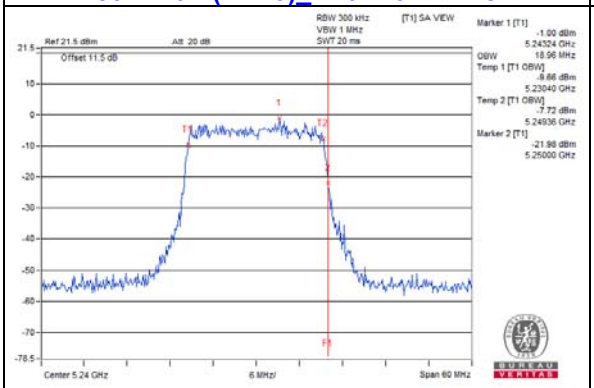
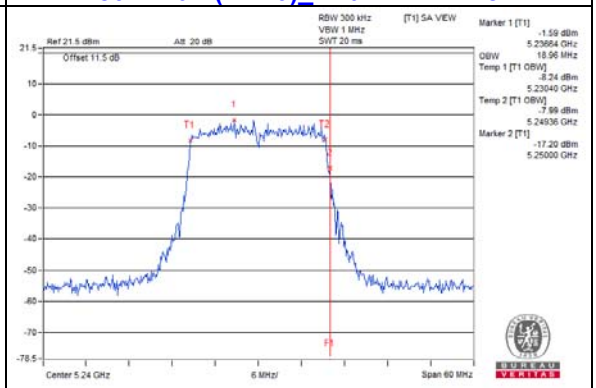
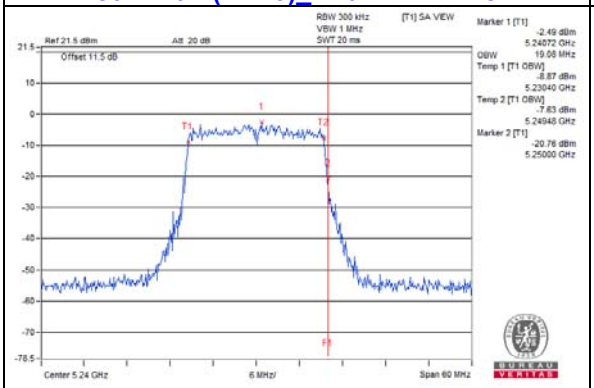
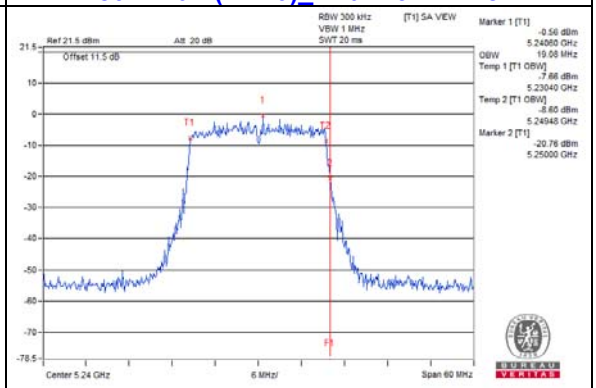
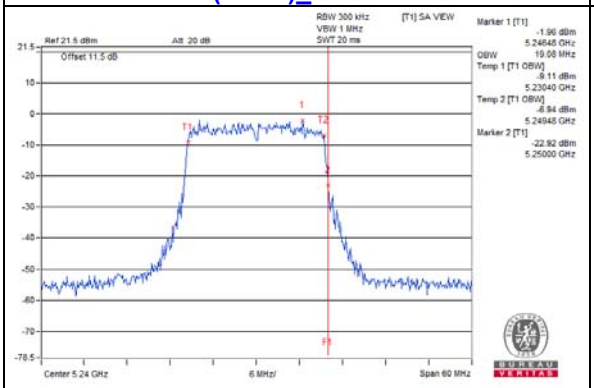
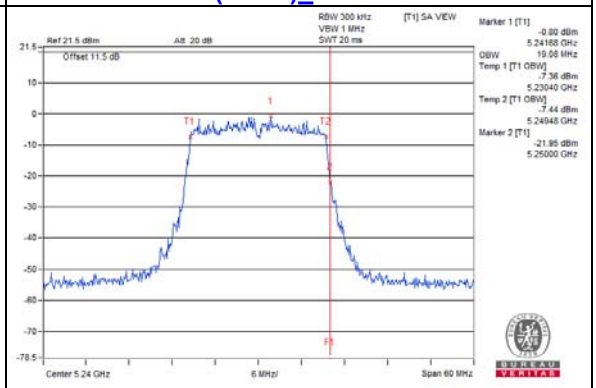
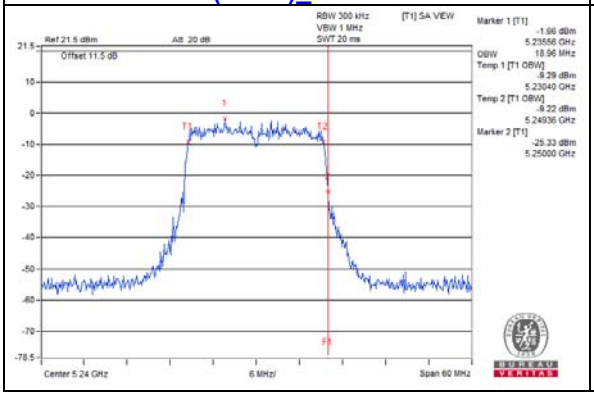
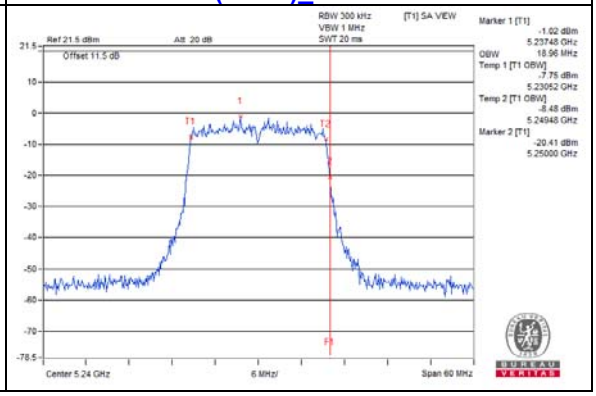
802.11ax (HE80)

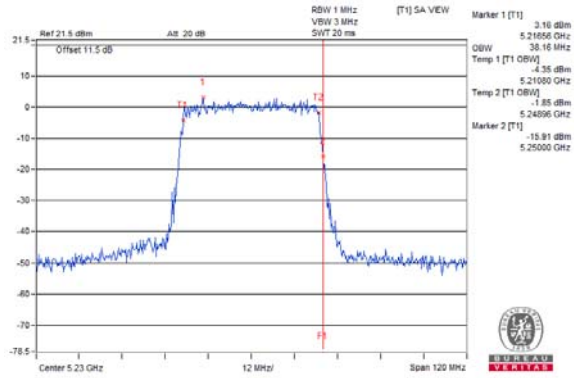
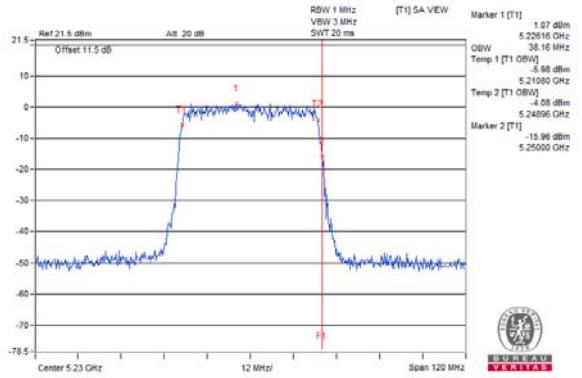
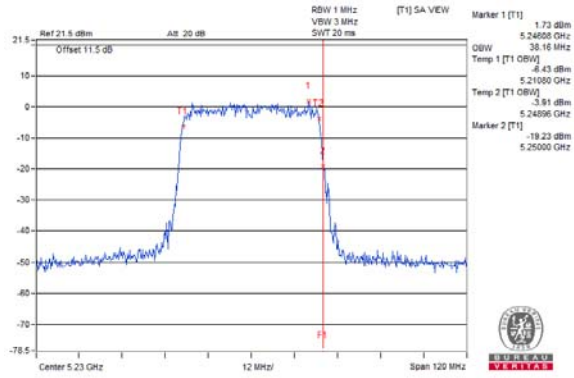
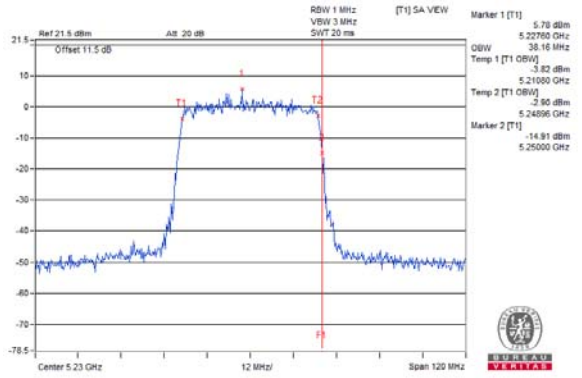
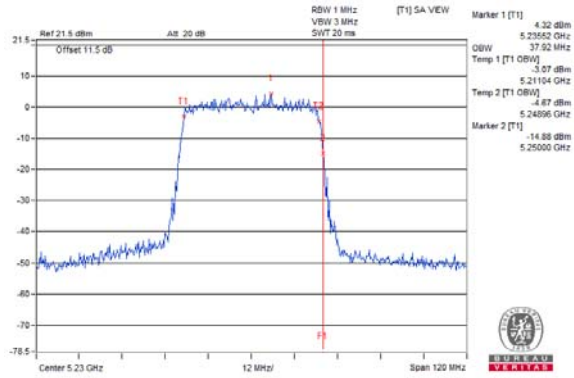
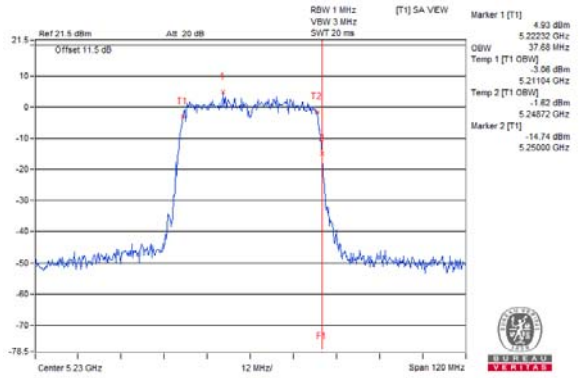
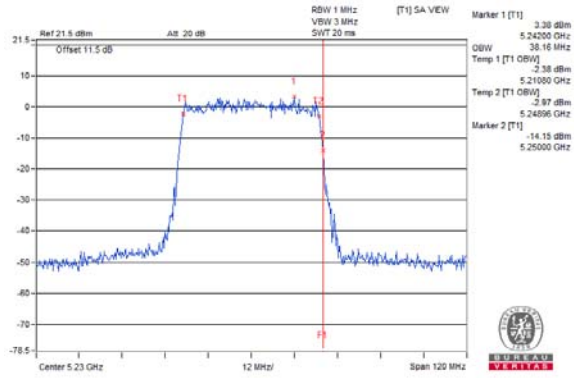
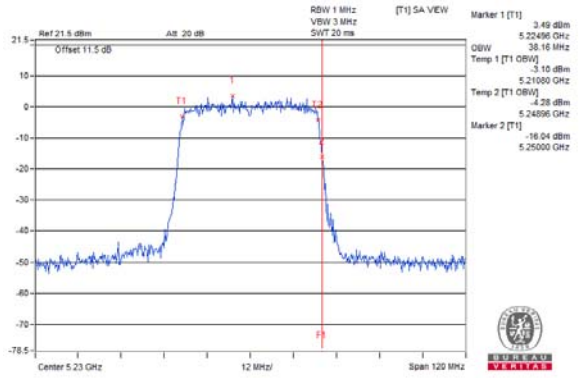
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7
42	5210	77.28	77.28	77.28	77.28	77.28	77.28	77.28	77.28

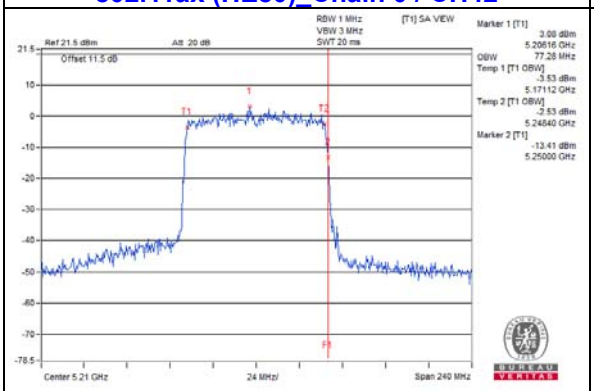
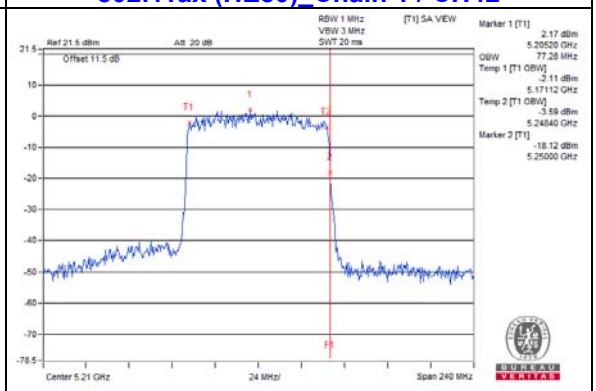
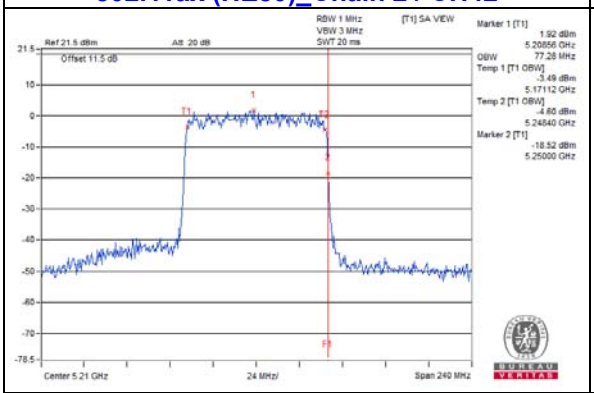
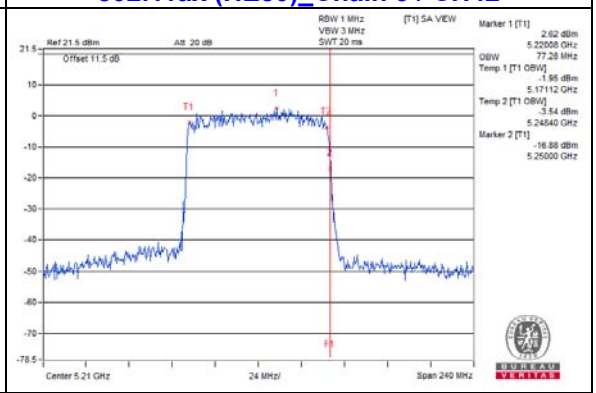
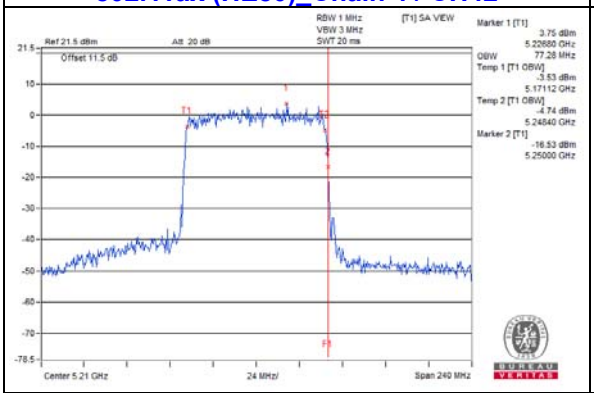
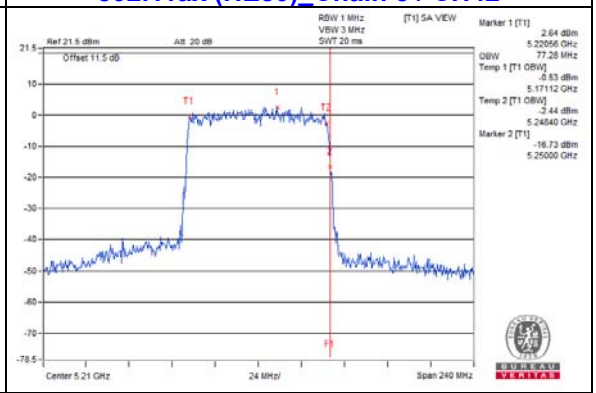
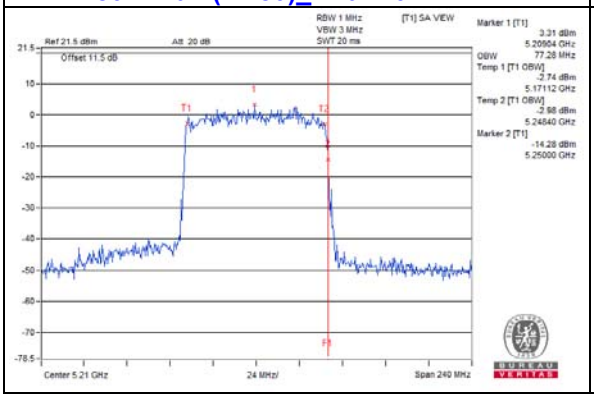
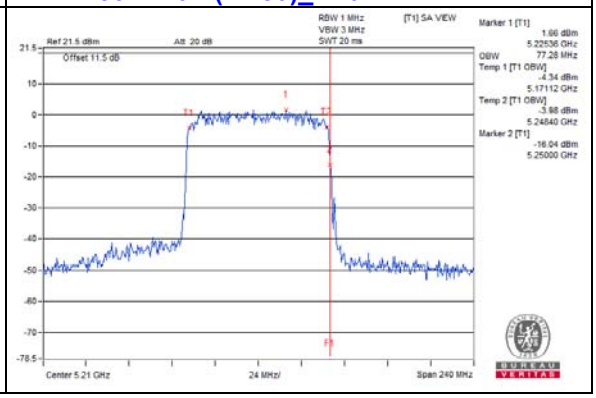
Spectrum Plot of Max. Value	
802.11a_Chain 0 / CH40	**802.11ax (HE20)_Chain 2 / CH36**
	
802.11ax (HE40)_Chain 0 / CH38	**802.11ax (HE80)_Chain 0 / CH42**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11a_Chain 0 / CH48	**802.11a_Chain 1 / CH48**
	
802.11a_Chain 2 / CH48	**802.11a_Chain 3 / CH48**
	
802.11a_Chain 4 / CH48	**802.11a_Chain 5 / CH48**
	
802.11a_Chain 6 / CH48	**802.11a_Chain 7 / CH48**
	

Spectrum Plot for near by DFS band

(DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11ax (HE20)_Chain 0 / CH48	**802.11ax (HE20)_Chain 1 / CH48**
	
802.11ax (HE20)_Chain 2 / CH48	**802.11ax (HE20)_Chain 3 / CH48**
	
802.11ax (HE20)_Chain 4 / CH48	**802.11ax (HE20)_Chain 5 / CH48**
	
802.11ax (HE20)_Chain 6 / CH48	**802.11ax (HE20)_Chain 7 / CH48**
	

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 (HE40)_Chain 4 / CH46	**802.11ax (HE40)_Chain 5 / CH46**
	
802.11ax (HE40)_Chain 6 / CH46	**802.11ax (HE40)_Chain 7 / CH46**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11ax (HE80)_Chain 0 / CH42	**802.11ax (HE80)_Chain 1 / CH42**
	
802.11ax (HE80)_Chain 2 / CH42	**802.11ax (HE80)_Chain 3 / CH42**
	
802.11ax (HE80)_Chain 4 / CH42	**802.11ax (HE80)_Chain 5 / CH42**
	
802.11ax (HE80)_Chain 6 / CH42	**802.11ax (HE80)_Chain 7 / CH42**
	

4.4.5 Test Results (Mode 2)

For 4TX

For U-NII-1: Master

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.44	16.44	16.56	16.44
40	5200	28.92	17.4	17.04	17.04
48	5240	16.8	16.56	16.44	16.44

802.11ax (HE20)

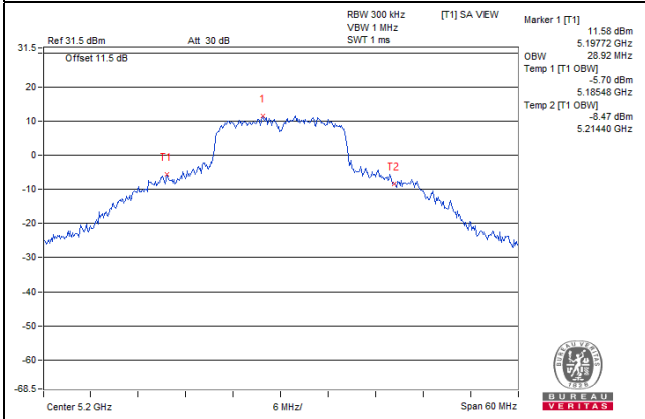
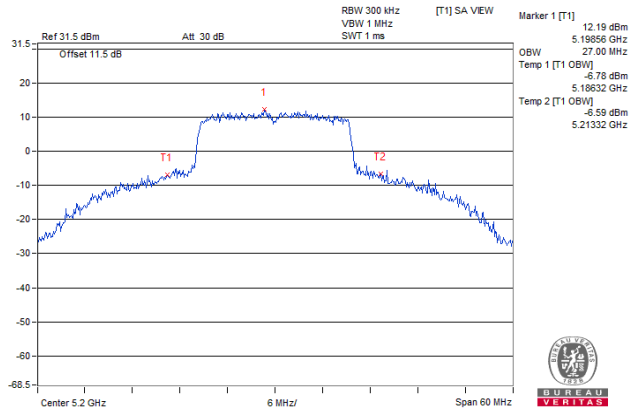
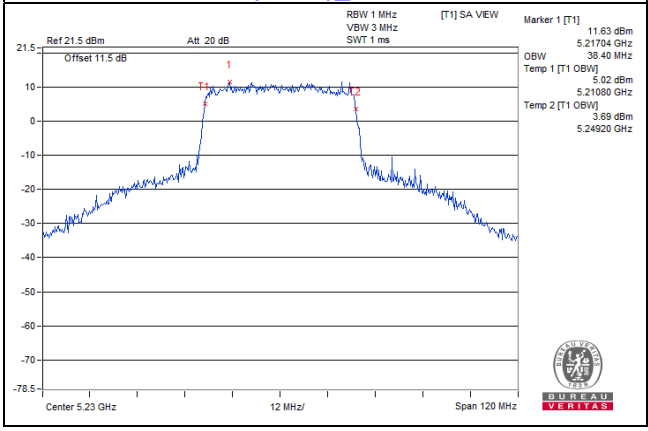
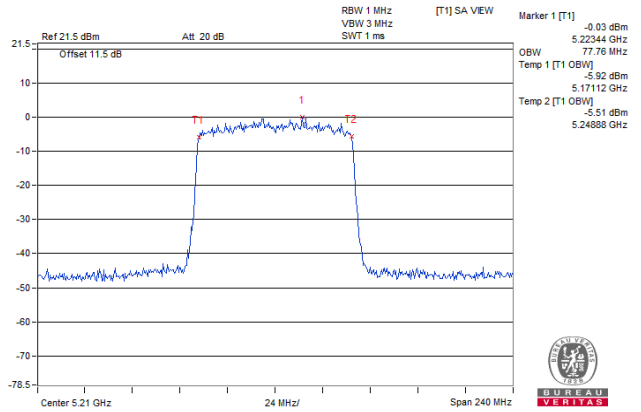
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.08	19.08	18.96	19.08
40	5200	27	19.2	19.2	19.08
48	5240	19.32	18.96	18.84	18.96

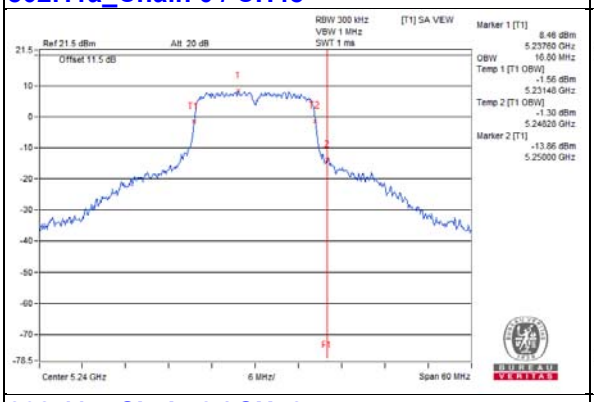
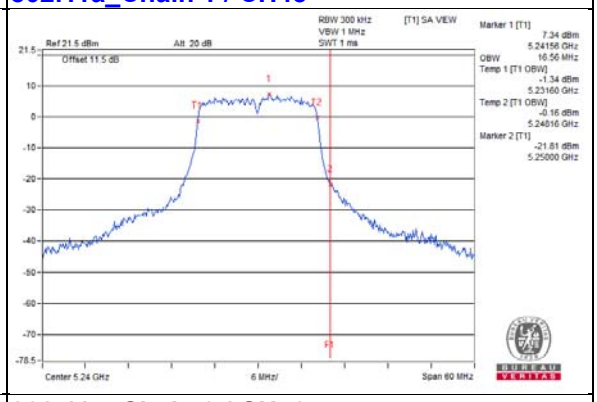
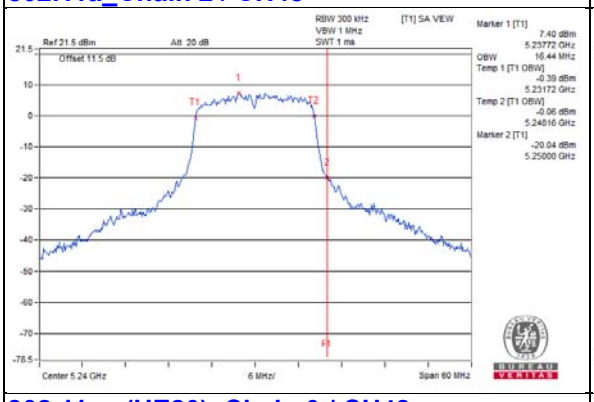
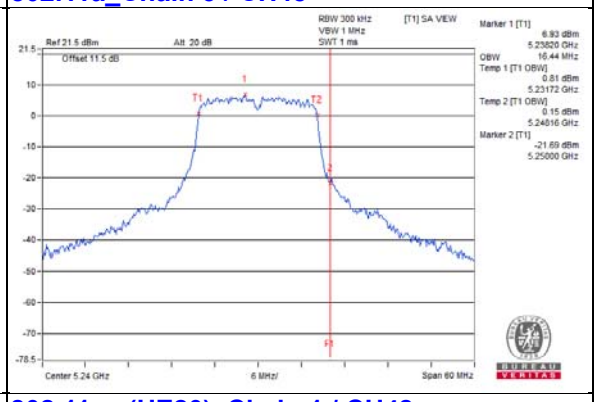
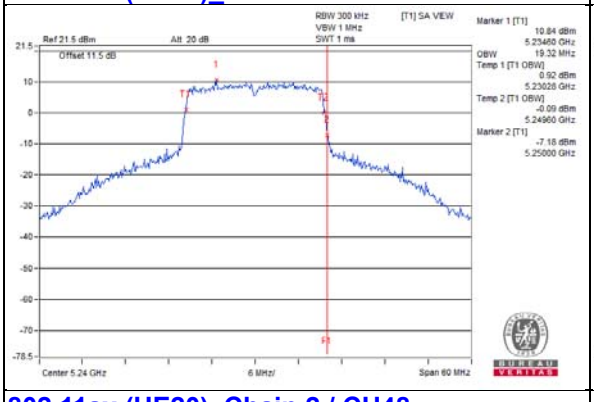
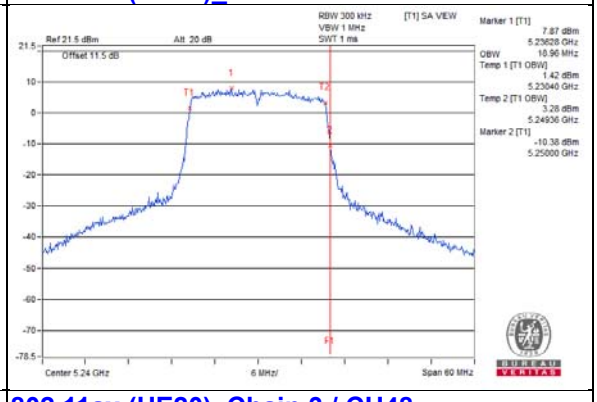
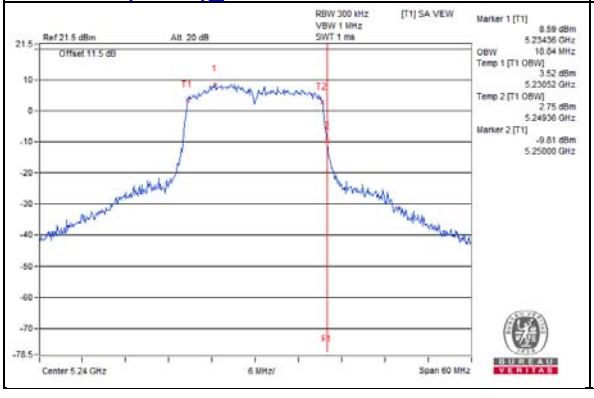
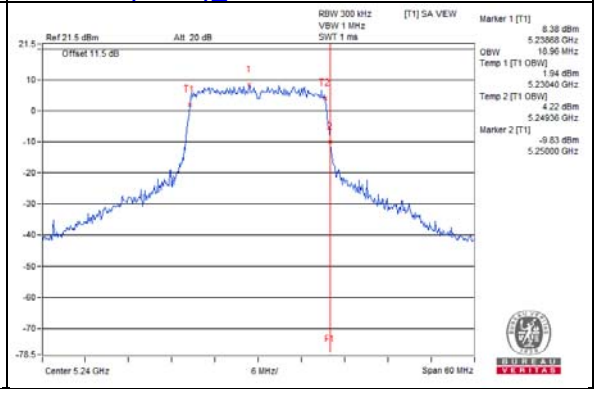
802.11ax (HE40)

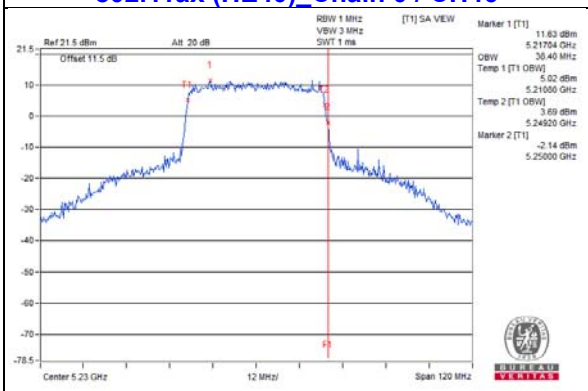
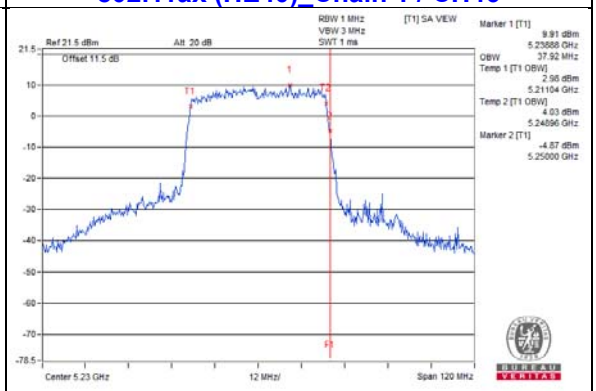
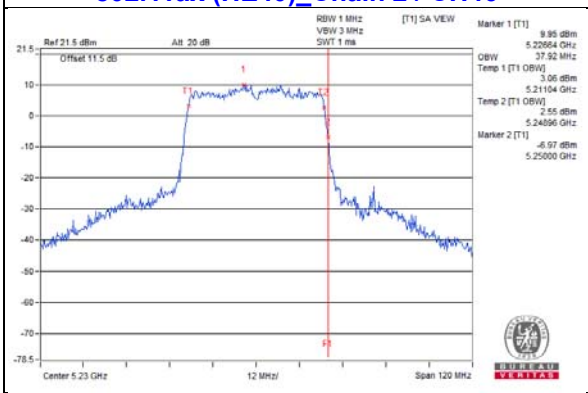
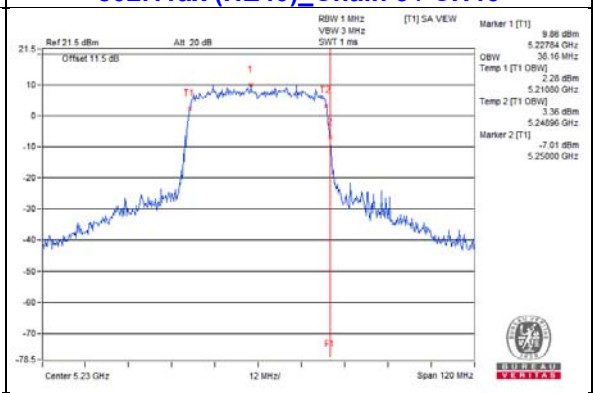
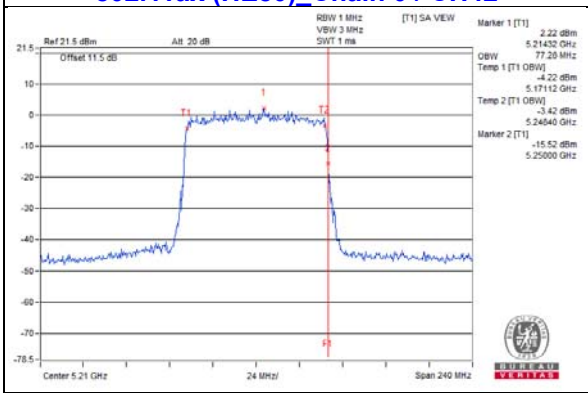
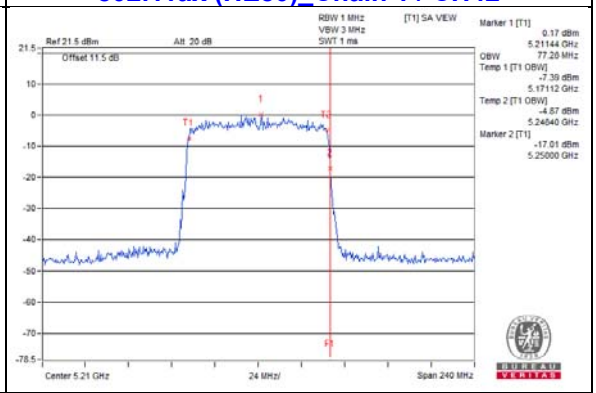
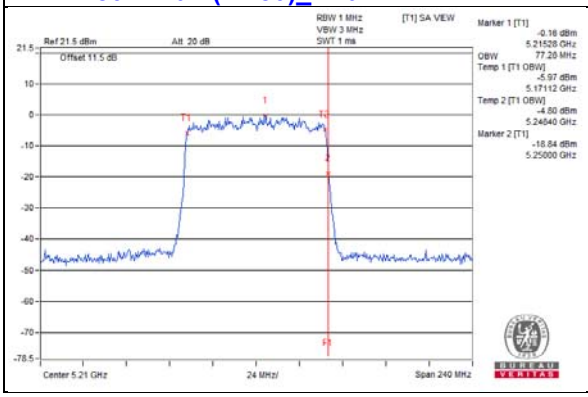
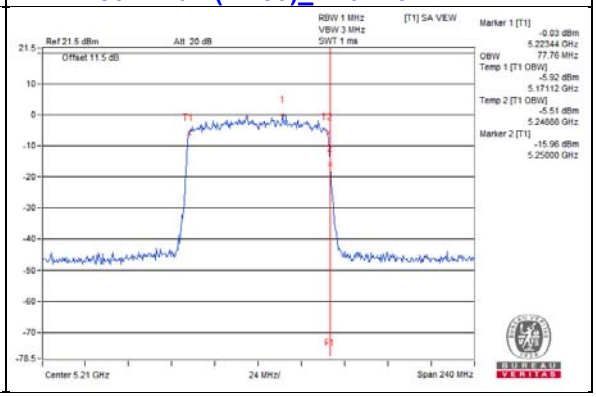
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.92	38.16	38.16	38.16
46	5230	38.4	37.92	37.92	38.16

802.11ax (HE80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.28	77.76

Spectrum Plot of Max. Value	
802.11a_Chain 0 / CH40	**802.11ax (HE20)_Chain 0 / CH40**
	
802.11ax (HE40)_Chain 0 / C46	**802.11ax (HE80)_Chain 3 / CH42**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11a_Chain 0 / CH48	**802.11a_Chain 1 / CH48**
	
802.11a_Chain 2 / CH48	**802.11a_Chain 3 / CH48**
	
802.11ax (HE20)_Chain 0 / CH48	**802.11ax (HE20)_Chain 1 / CH48**
	
802.11ax (HE20)_Chain 2 / CH48	**802.11ax (HE20)_Chain 3 / CH48**
	

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**
	

For U-NII-1: Client

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.56	16.56	16.56	16.44
40	5200	16.56	16.44	16.44	16.44
48	5240	16.44	16.44	16.32	16.44

802.11ax (HE20)

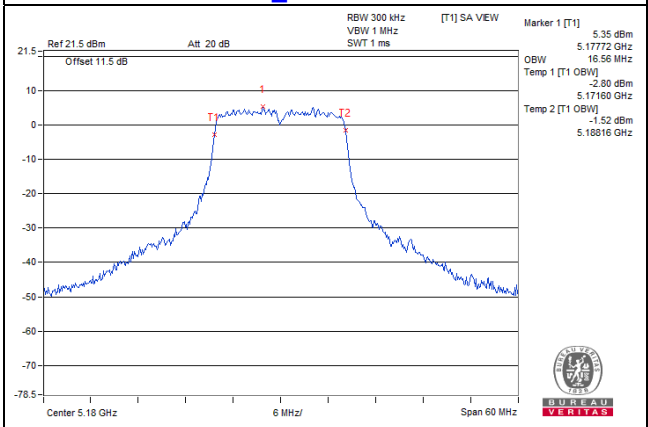
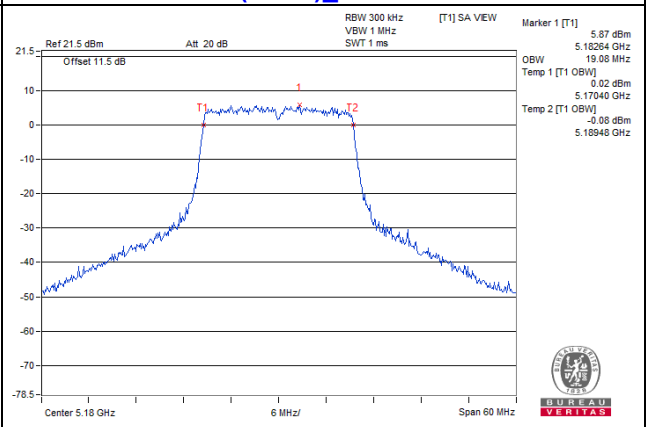
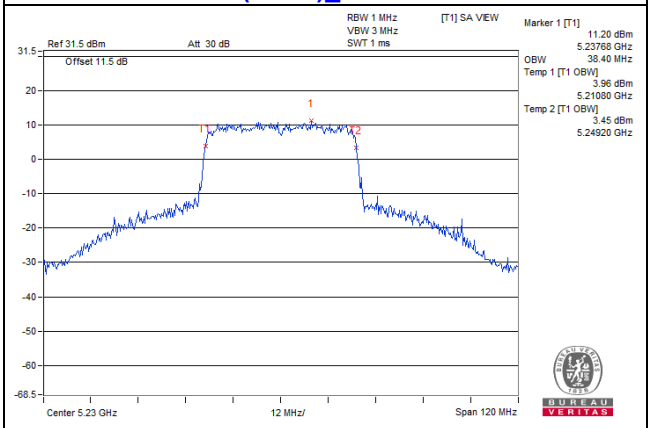
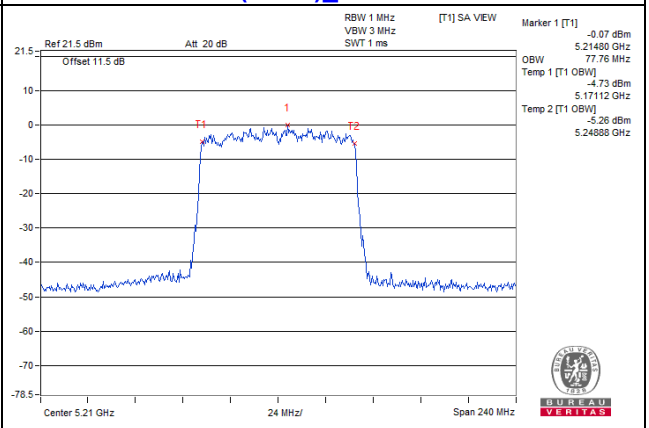
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.08	18.96	19.08	18.96
40	5200	19.08	18.96	18.84	18.96
48	5240	18.96	18.84	19.08	18.84

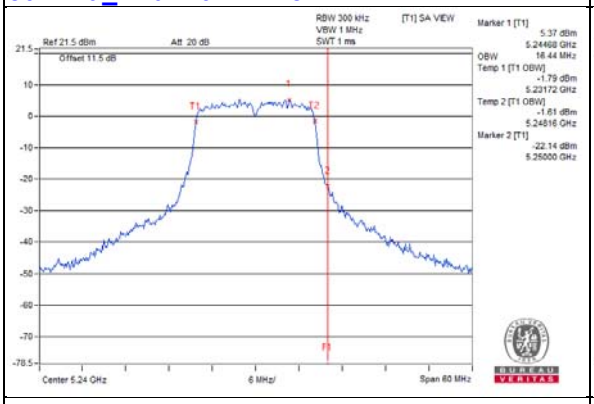
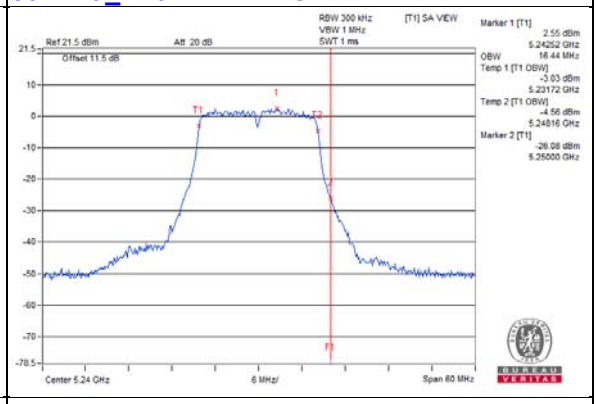
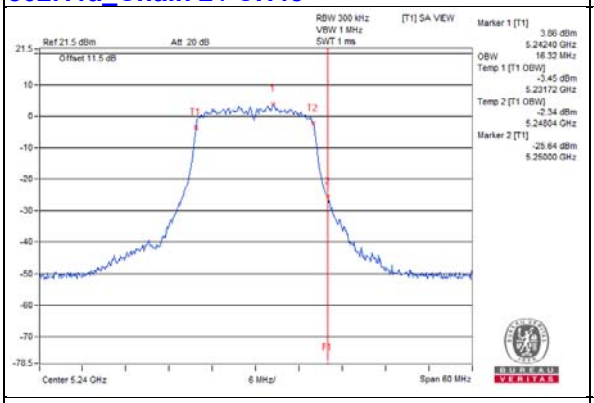
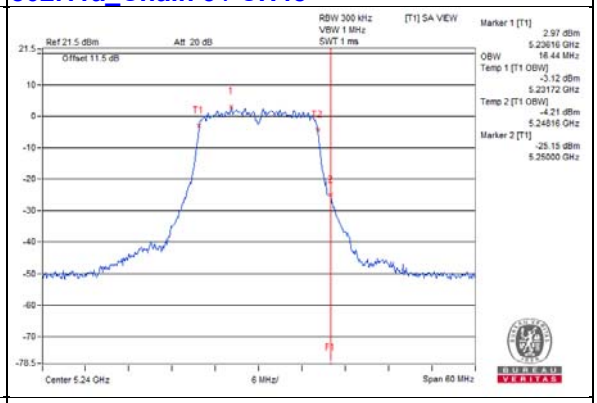
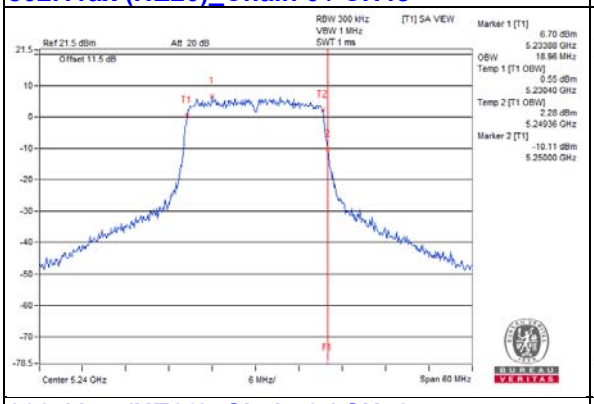
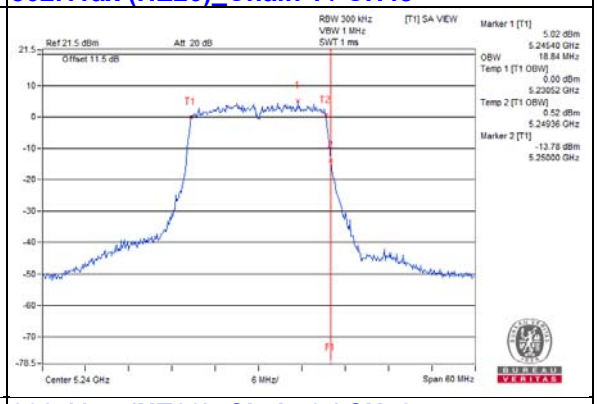
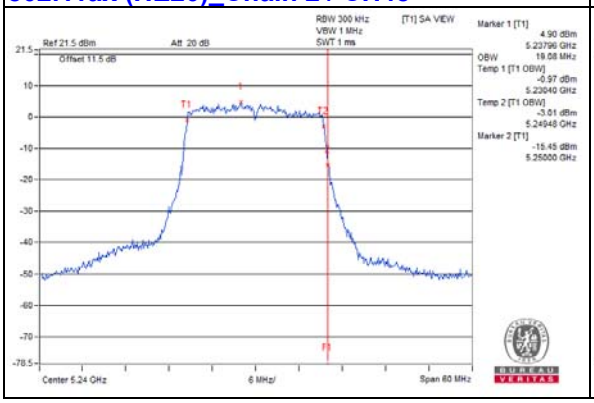
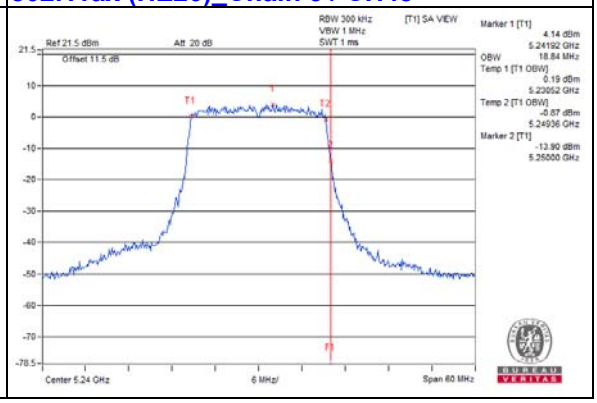
802.11ax (HE40)

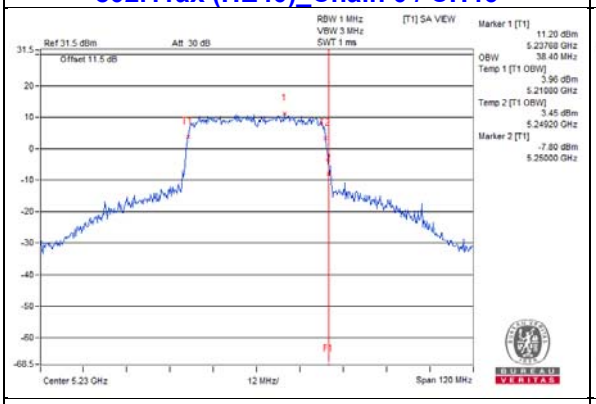
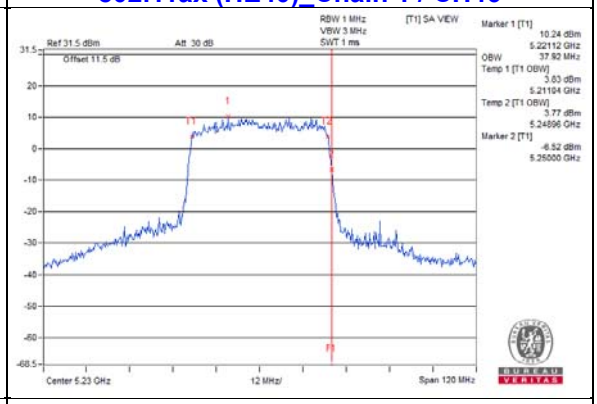
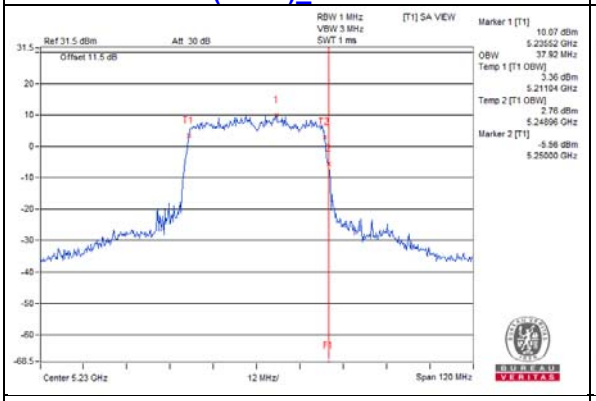
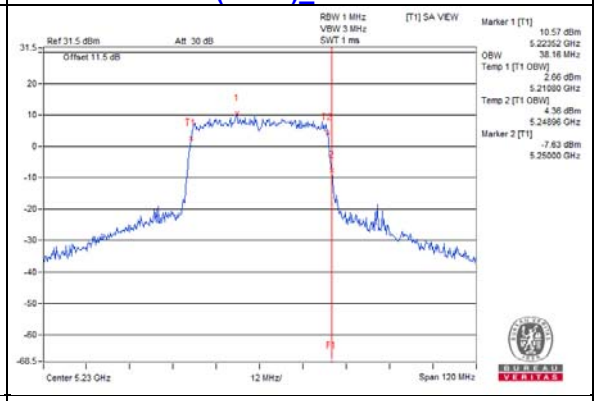
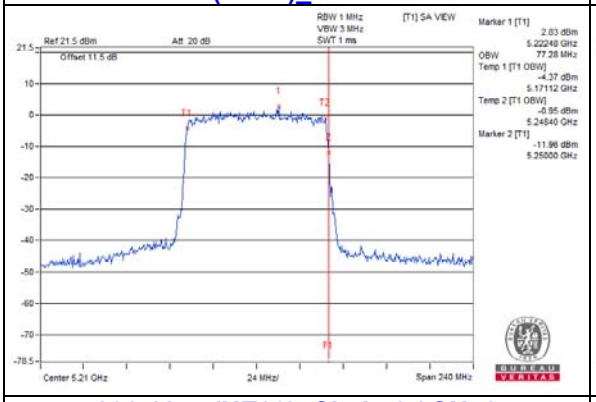
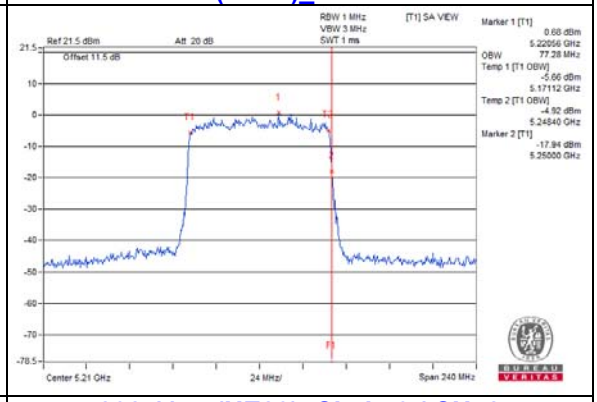
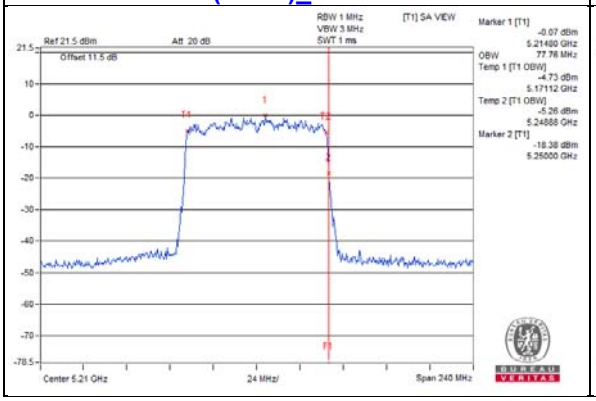
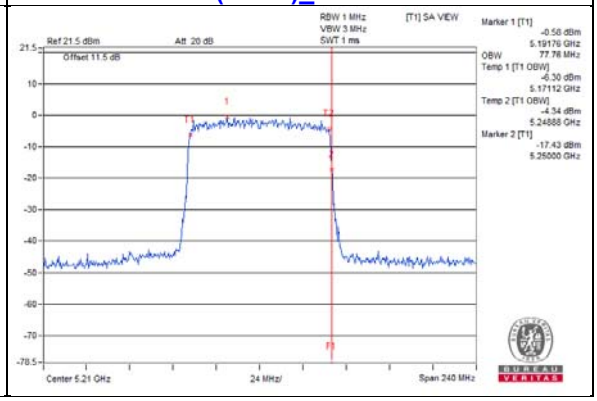
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	38.16	38.16	38.16	38.16
46	5230	38.4	37.92	37.92	38.16

802.11ax (HE80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.76	77.76

Spectrum Plot of Max. Value	
802.11a_Chain 0 / CH36	**802.11ax (HE20)_Chain 0 / CH36**
	
802.11ax (HE40)_Chain 0 / CH46	**802.11ax (HE80)_Chain 2 / CH42**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11a_Chain 0 / CH48	**802.11a_Chain 1 / CH48**
	
802.11a_Chain 2 / CH48	**802.11a_Chain 3 / CH48**
	
802.11ax (HE20)_Chain 0 / CH48	**802.11ax (HE20)_Chain 1 / CH48**
	
802.11ax (HE20)_Chain 2 / CH48	**802.11ax (HE20)_Chain 3 / CH48**
	

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**
	

For U-NII-3:

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	16.96	16.87	16.6	18.17
157	5785	17.04	17.04	16.92	16.8
165	5825	20.64	16.8	19.08	18.12

802.11ax (HE20)

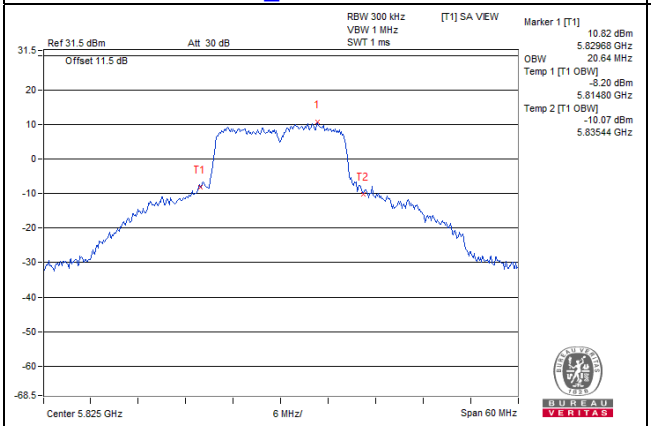
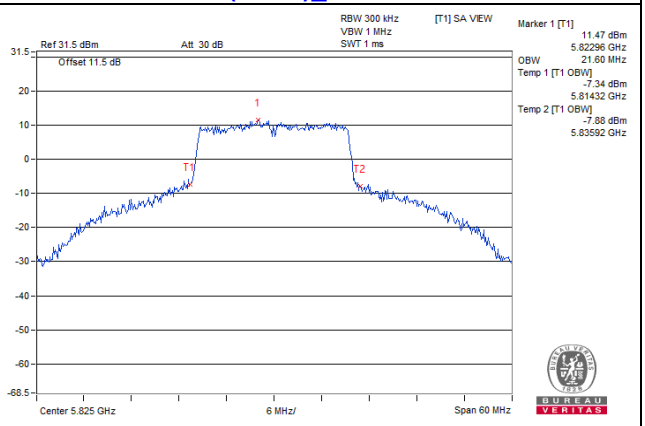
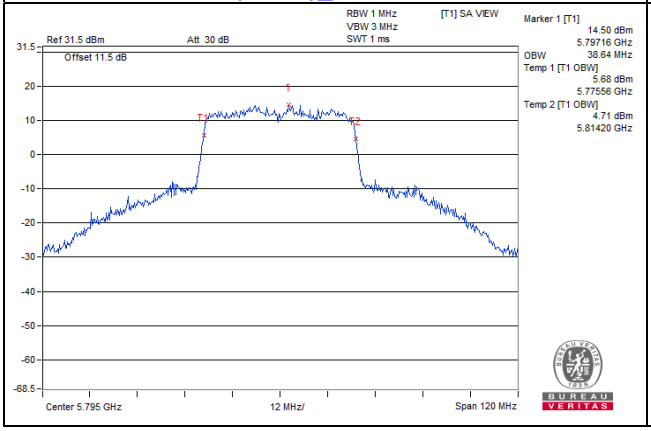
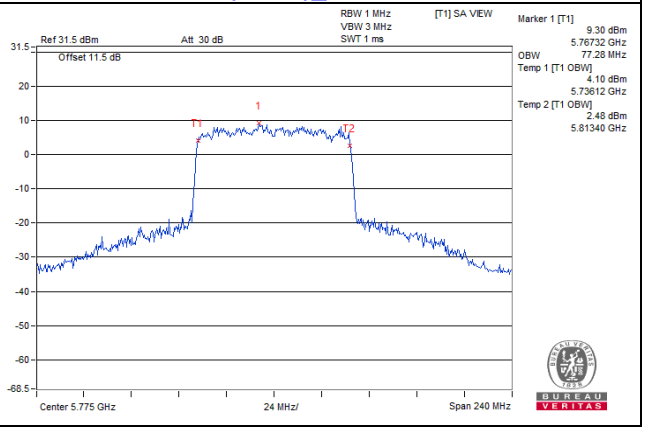
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	19.08	19.08	19.08	19.2
157	5785	19.2	18.96	19.08	19.08
165	5825	21.6	19.32	19.44	19.68

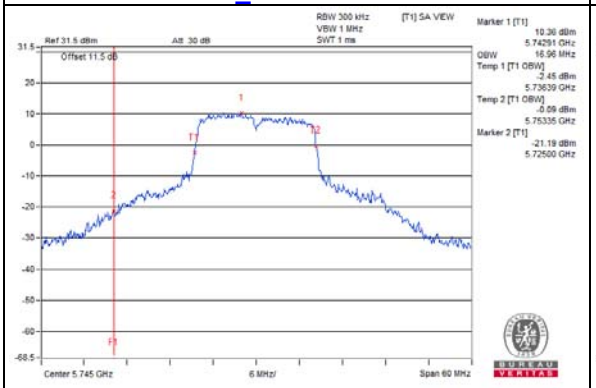
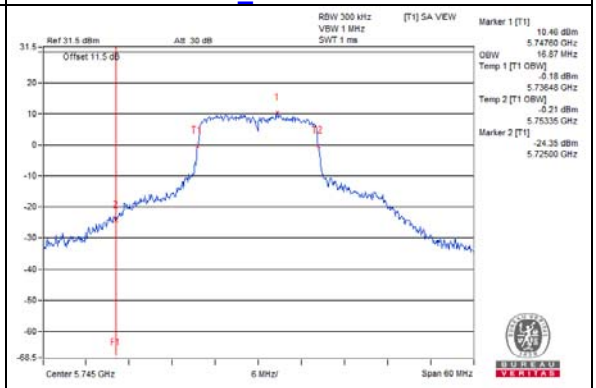
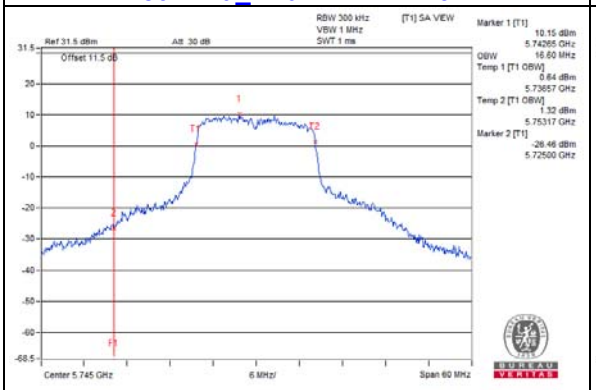
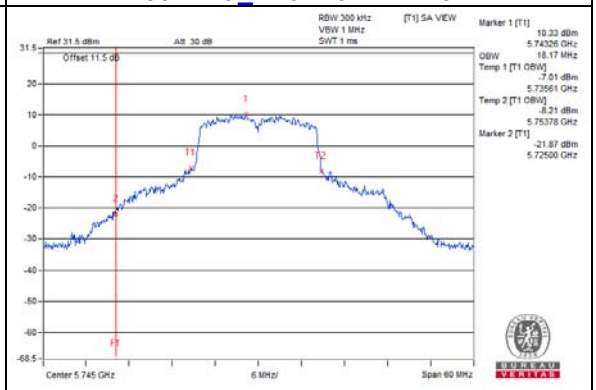
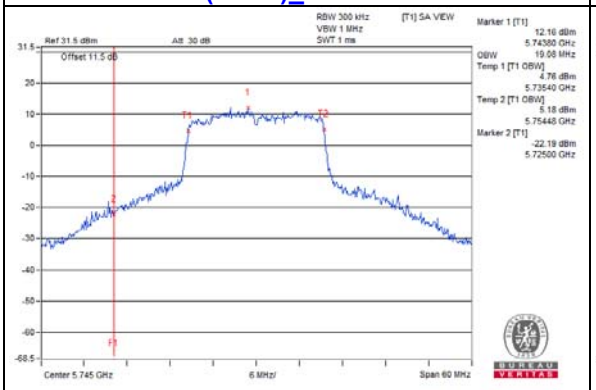
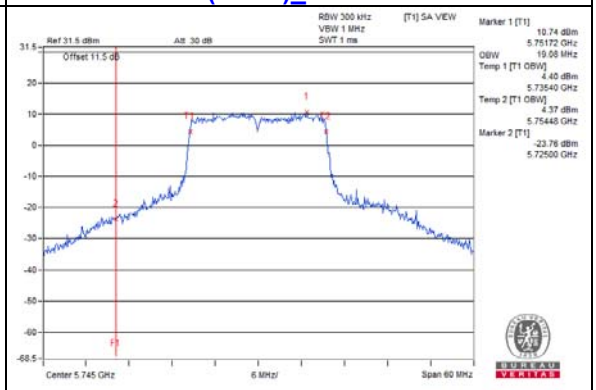
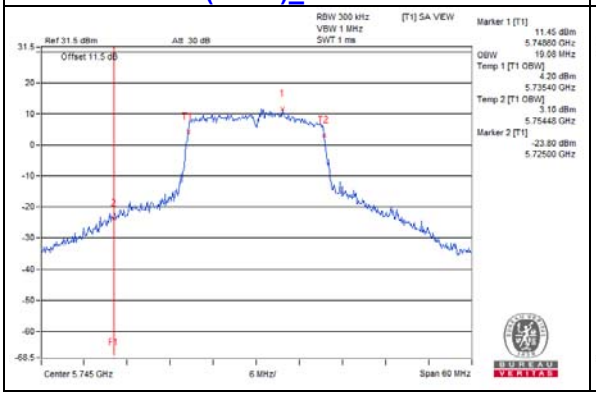
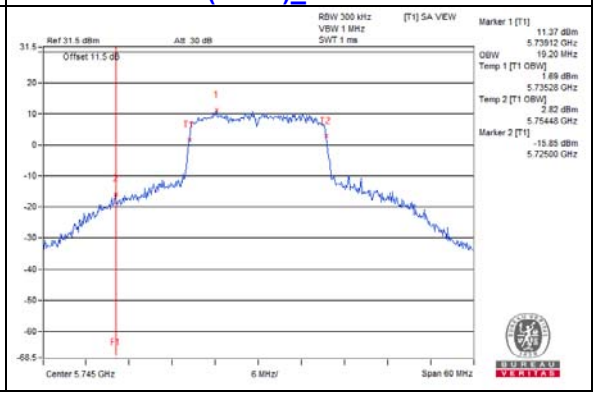
802.11ax (HE40)

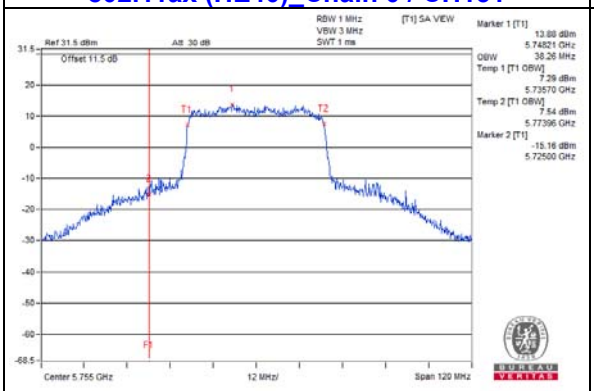
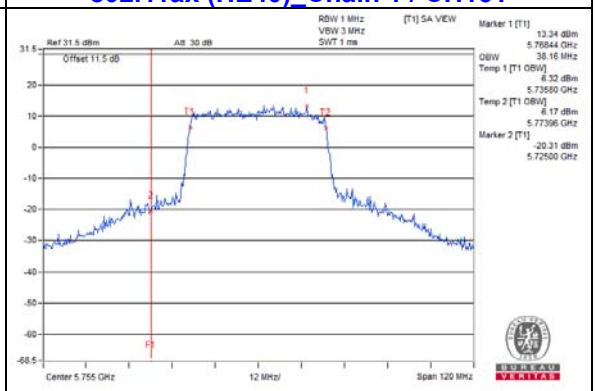
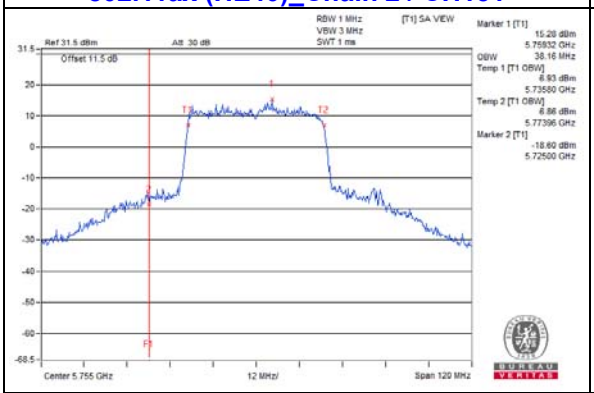
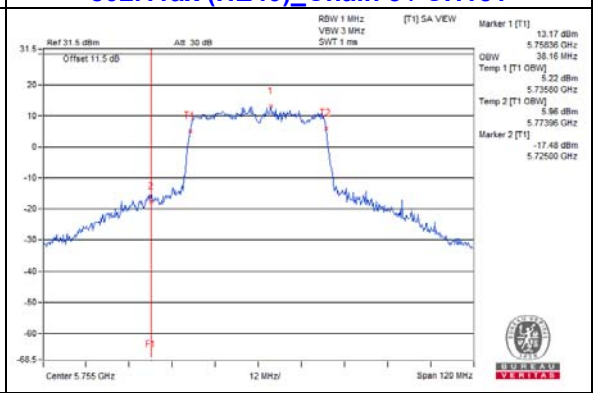
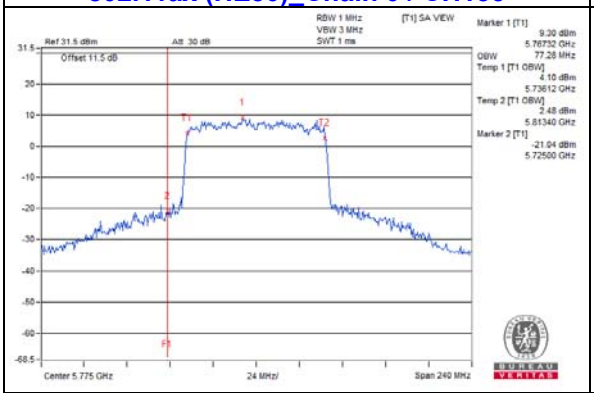
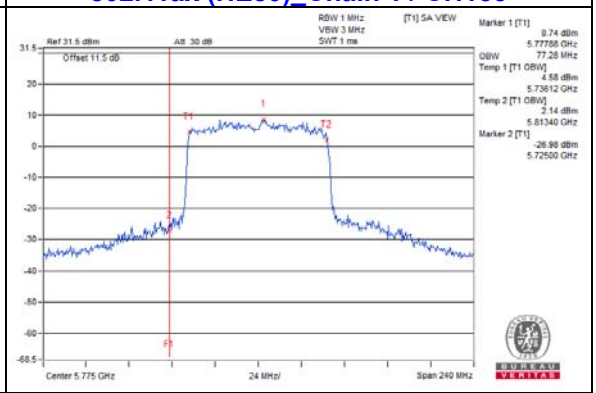
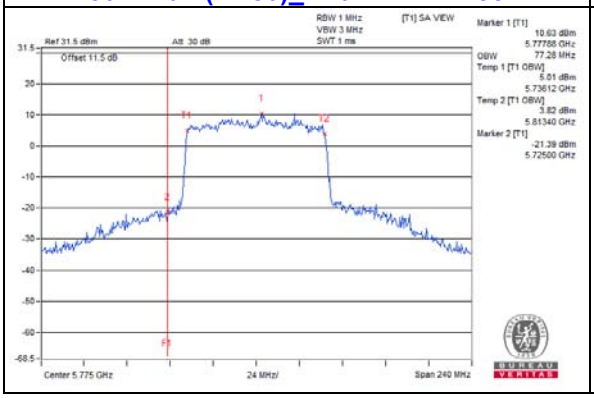
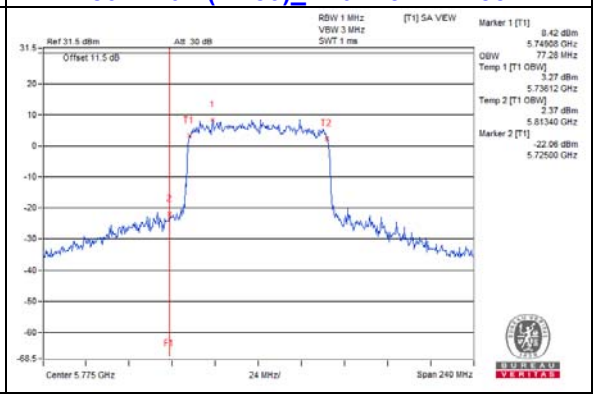
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	38.26	38.16	38.16	38.16
159	5795	38.64	38.4	38.64	38.64

802.11ax (HE80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.28	77.28	77.28	77.28

Spectrum Plot of Max. Value	
802.11a_Chain 0 / CH165	**802.11ax (HE20)_Chain 0 / CH165**
	
802.11ax (HE40)_Chain 0 / CH159	**802.11ax (HE80)_Chain 0 / CH155**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11a_Chain 0 / CH149	**802.11a_Chain 1 / CH149**
	
802.11a_Chain 2 / CH149	**802.11a_Chain 3 / CH149**
	
802.11ax (HE20)_Chain 0 / CH149	**802.11ax (HE20)_Chain 1 / CH149**
	
802.11ax (HE20)_Chain 2 / CH149	**802.11ax (HE20)_Chain 3 / CH149**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11ax (HE40)_Chain 0 / CH151	**802.11ax (HE40)_Chain 1 / CH151**
	
802.11ax (HE40)_Chain 2 / CH151	**802.11ax (HE40)_Chain 3 / CH151**
	
802.11ax (HE80)_Chain 0 / CH155	**802.11ax (HE80)_Chain 1 / CH155**
	
802.11ax (HE80)_Chain 2 / CH155	**802.11ax (HE80)_Chain 3 / CH155**
	

4.4.6 Test Results (Mode 3)

For Scanning Radio

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	20.28
40	5200	20.16
48	5240	19.08
149	5745	23.88
157	5785	22.44
165	5825	24.96

802.11ac (VHT20)

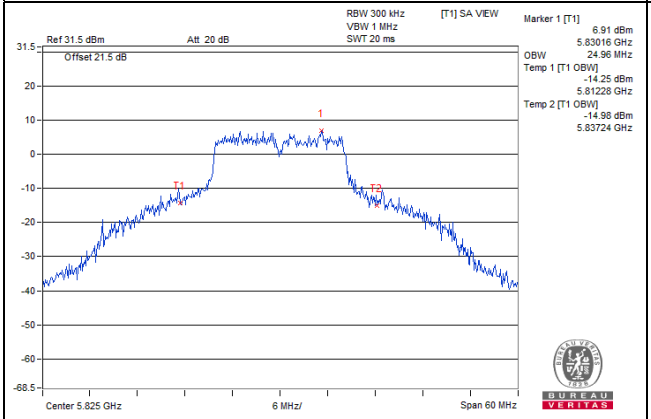
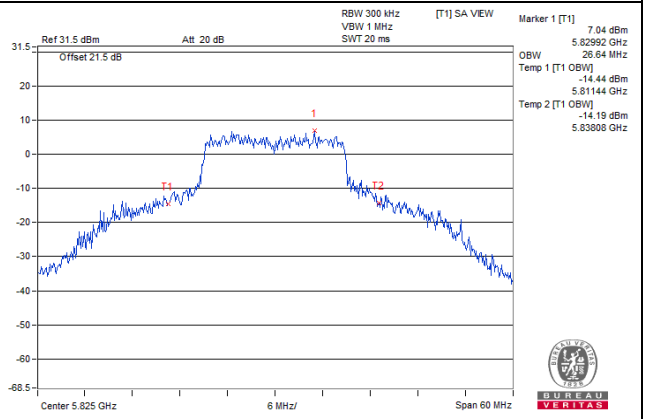
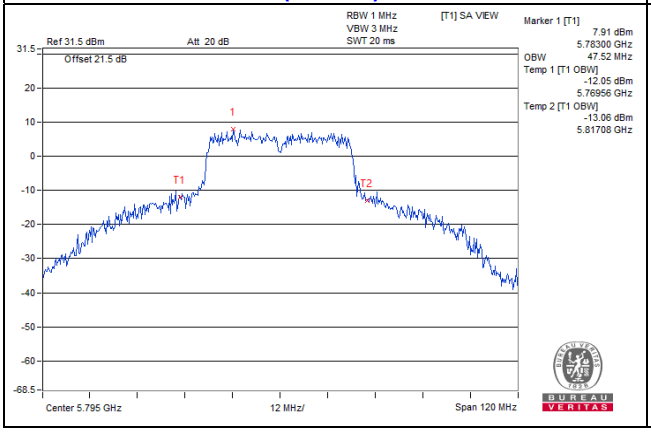
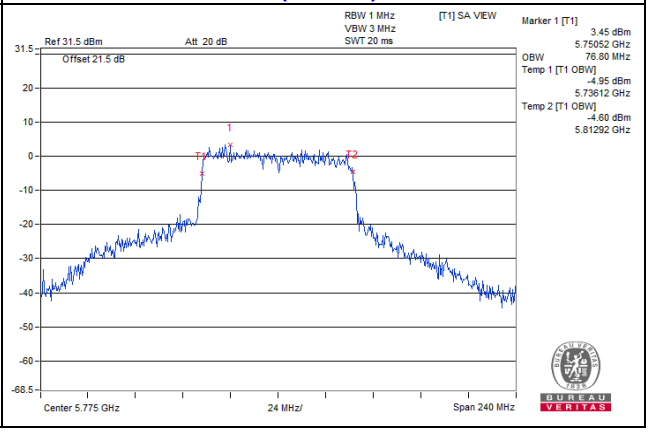
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	19.32
40	5200	21.24
48	5240	19.32
149	5745	26.04
157	5785	24.36
165	5825	26.64

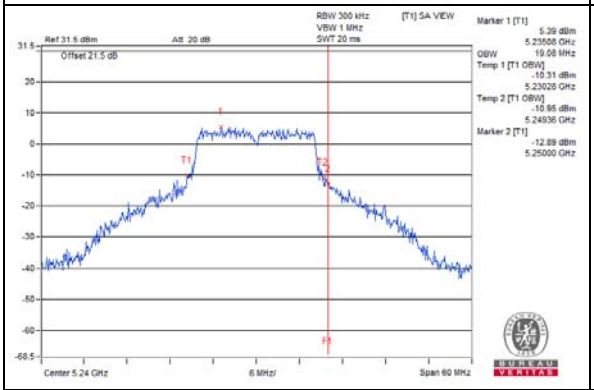
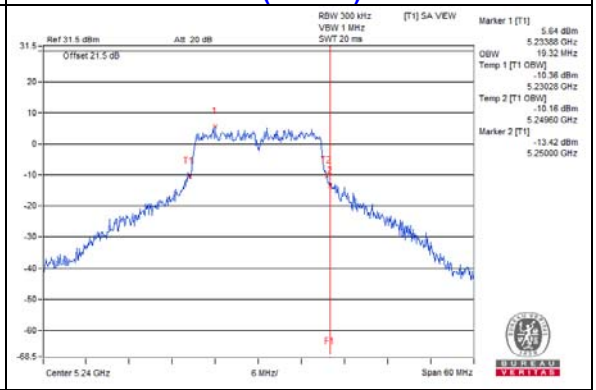
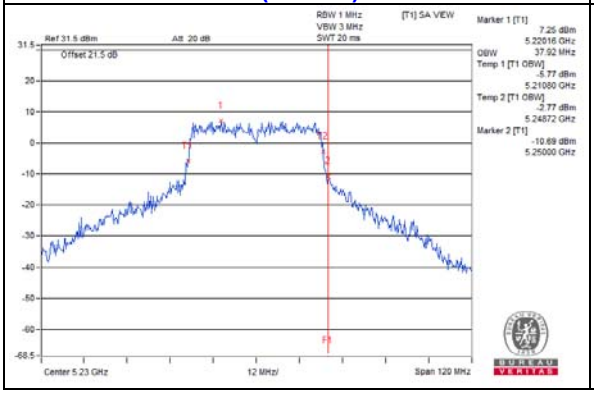
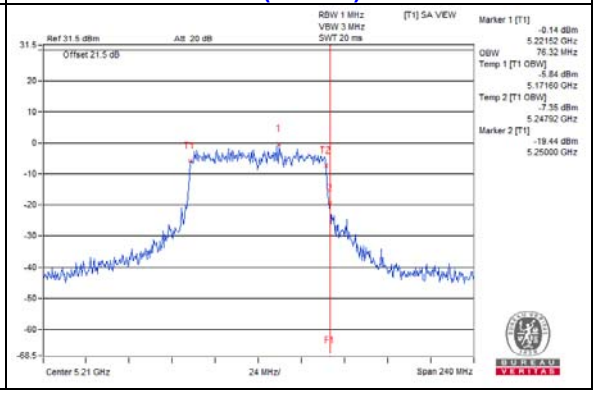
802.11ac (VHT40)

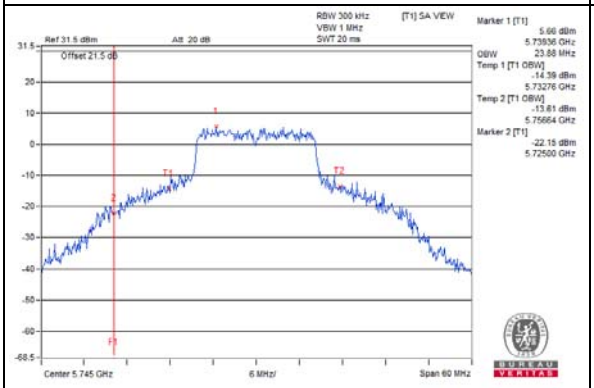
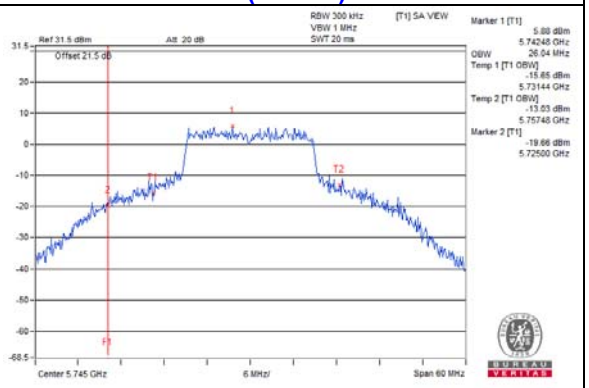
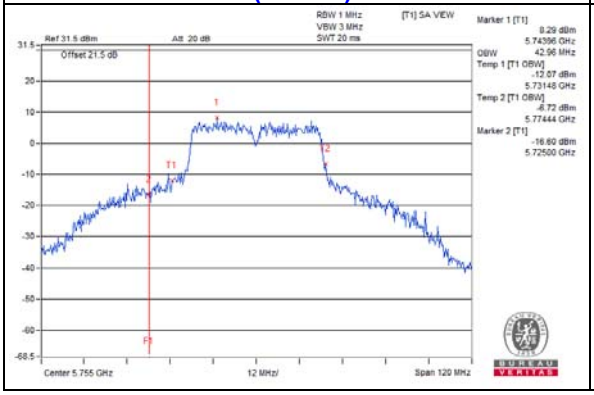
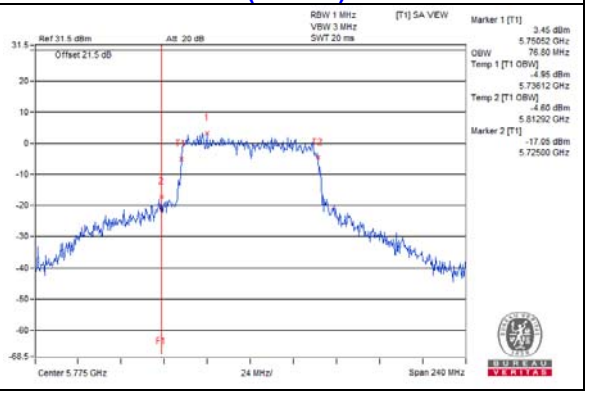
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.96
46	5230	37.92
151	5755	42.96
159	5795	47.52

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	76.32
155	5775	76.8

Spectrum Plot of Worst Value	
802.11a / CH165	**802.11ac (VHT20) / CH165**
	
802.11ac (VHT40) / CH159	**802.11ac (VHT80) / CH155**
	

Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2A band)	
802.11a / CH48	**802.11ac (VHT20) / CH48**
	
802.11ac (VHT40) / CH46	**802.11ac (VHT80) / CH42**
	

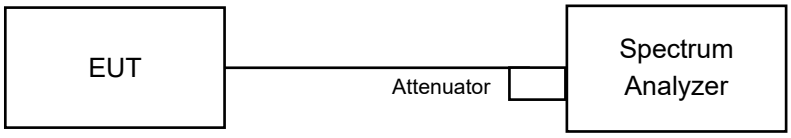
Spectrum Plot for near by DFS band (DFS is required, if 99% OCP straddle into U-NII-2C band)	
802.11a / CH149	**802.11ac (VHT20) / CH149**
	
802.11ac (VHT40) / CH151	**802.11ac (VHT80) / CH155**
	

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 band:

Using method SA-2

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

For U-NII-3 band:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 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 = 10log(500kHz/300kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

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 (Mode 1)

For 8TX

U-NII-1: Master

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	-1.99	-1.63	-0.94	-1.45	-1.90	-1.95	-1.67	-1.83	0.23	7.61	8.15	Pass
40	5200	-1.28	-1.39	-1.08	-1.53	-1.72	-1.10	-2.04	-1.95	0.23	7.77	8.15	Pass
48	5240	-1.30	-1.39	-1.19	-1.22	-0.81	-2.39	-1.61	-1.46	0.23	7.86	8.15	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. The directional gain = 10 log[$(10^{02/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 17-(14.85-6) = 8.15 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	-3.07	-4.12	-3.69	-2.91	-1.48	-1.34	-2.68	-2.82	0.21	6.57	8.15	Pass
40	5200	-3.03	-2.60	-3.82	-2.16	-1.35	-2.20	-3.62	-2.25	0.21	6.68	8.15	Pass
48	5240	-2.82	-2.93	-2.96	-2.13	-1.04	-1.00	-3.38	-1.92	0.21	7.05	8.15	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. The directional gain = 10 log[$(10^{02/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 17-(14.85-6) = 8.15 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	-3.25	-3.56	-2.71	-2.20	-1.28	-1.85	-2.39	-2.02	0.18	6.86	8.15	Pass
46	5230	-1.89	-2.69	-2.30	-1.40	-0.38	-1.13	-2.90	-1.65	0.18	7.49	8.15	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. The directional gain = 10 log[$(10^{02/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 17-(14.85-6) = 8.15 dBm.

802.11ax (HE80)

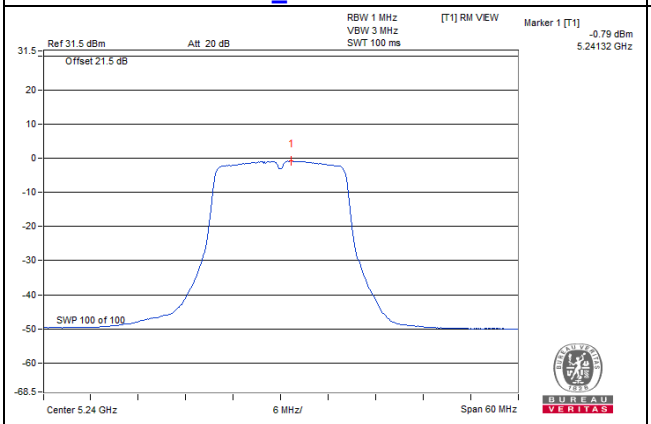
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	-7.03	-7.56	-6.27	-6.35	-4.99	-5.08	-6.77	-6.09	0.21	3.06	8.15	Pass

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.

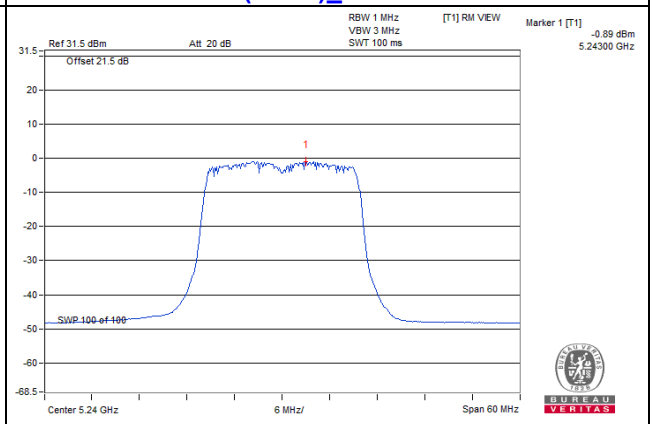
2. The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 17-(14.85-6) = 8.15 dBm.

Spectrum Plot of Worst Value

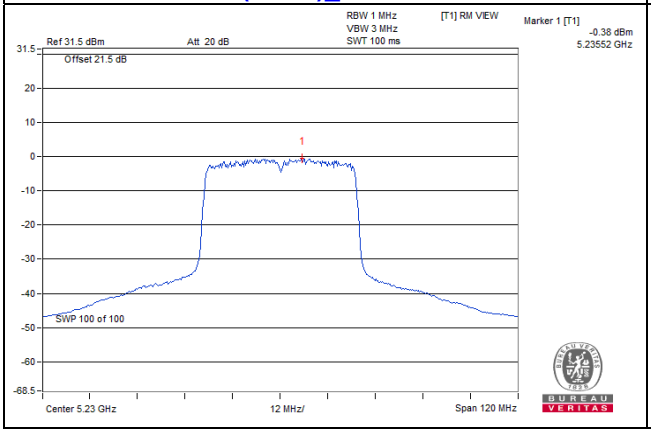
802.11a_Chain 4 / CH48



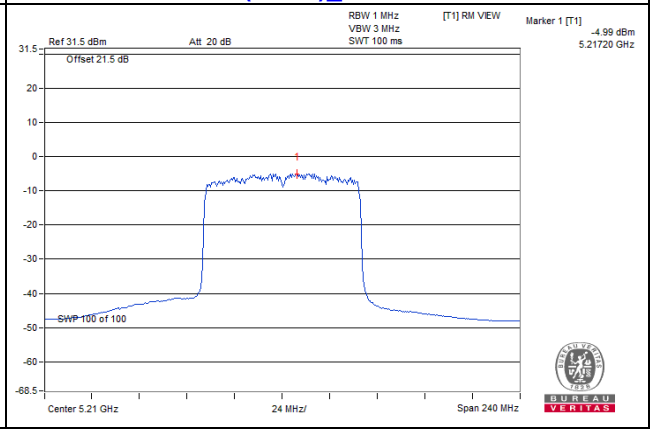
802.11ax (HE20)_Chain 5 / CH48



802.11ax (HE40)_Chain 4 / CH46



802.11ax (HE80)_Chain 4 / CH42



U-NII-1: Client

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	-7.52	-7.38	-7.44	-7.90	-6.46	-7.04	-8.60	-7.13	0.23	1.87	2.15	Pass
40	5200	-7.25	-6.82	-6.83	-7.46	-6.95	-7.24	-8.58	-7.13	0.23	2.01	2.15	Pass
48	5240	-6.96	-7.50	-7.70	-7.43	-6.51	-6.78	-8.11	-6.81	0.23	2.07	2.15	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. The directional gain = 10 log[($10^{02/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 11-(14.85-6) = 2.15 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
36	5180	-8.26	-8.32	-9.46	-8.90	-7.65	-8.33	-9.17	-8.23	0.21	0.74	2.15	Pass
40	5200	-8.10	-8.71	-9.54	-8.92	-7.17	-8.13	-8.31	-8.05	0.21	0.93	2.15	Pass
48	5240	-8.45	-7.51	-8.39	-7.59	-8.36	-7.96	-7.94	-7.69	0.21	1.27	2.15	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. The directional gain = 10 log[($10^{02/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 11-(14.85-6) = 2.15 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
38	5190	-8.44	-8.29	-9.33	-8.55	-7.60	-7.29	-9.10	-8.27	0.18	0.90	2.15	Pass
46	5230	-7.43	-9.14	-8.83	-7.74	-7.95	-7.01	-7.62	-7.65	0.18	1.34	2.15	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. The directional gain = 10 log[($10^{02/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 11-(14.85-6) = 2.15 dBm.

802.11ax (HE80)

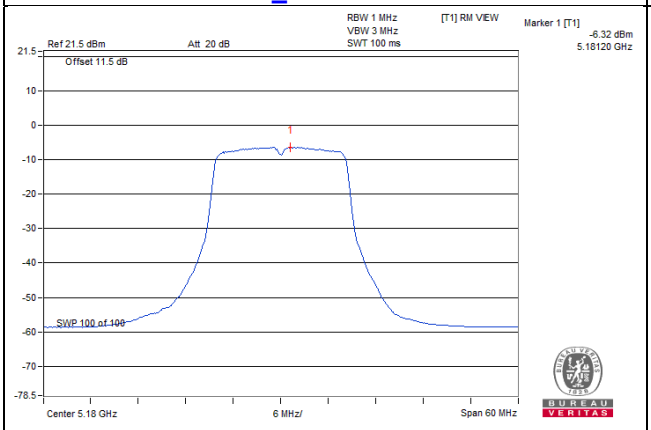
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)								Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7				
42	5210	-7.61	-8.67	-8.04	-8.28	-7.42	-7.41	-9.22	-7.98	0.21	1.21	2.15	Pass

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.

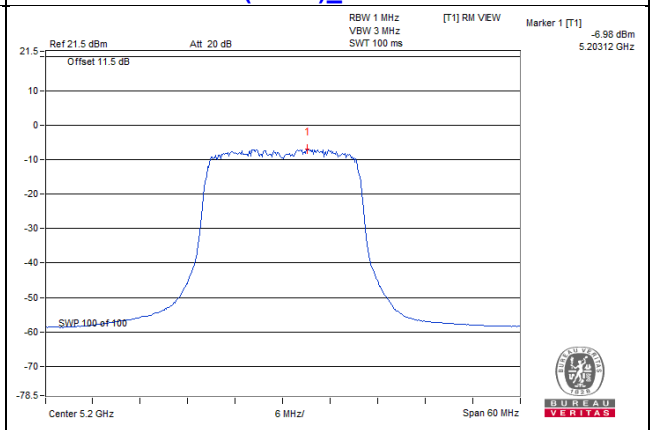
2. The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$ + $10^{G5/20}$+ $10^{G6/20}$+ $10^{G7/20}$)^2 / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 11-(14.85-6) = 2.15 dBm.

Spectrum Plot of Worst Value

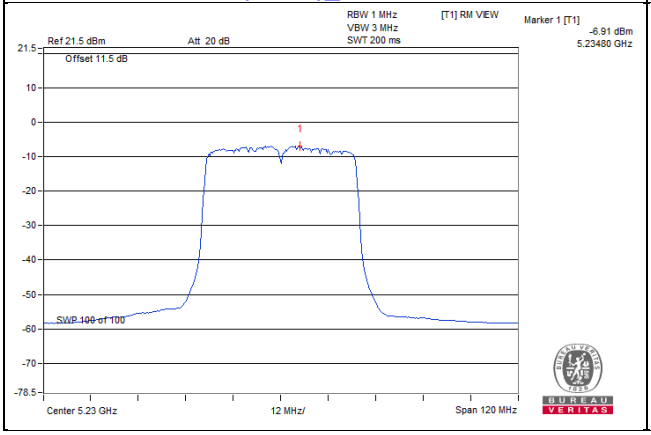
802.11a_Chain 4 / CH36



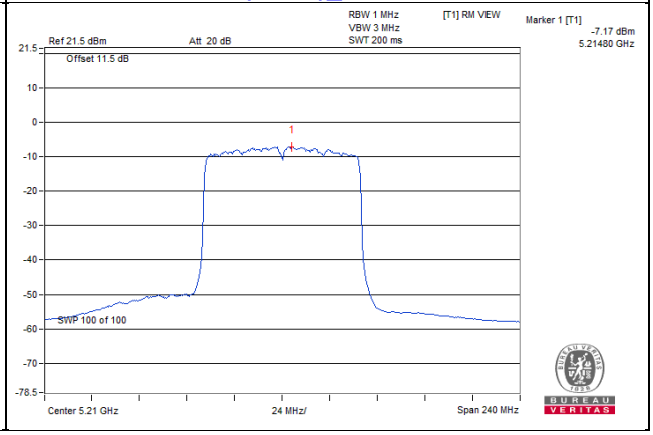
802.11ax (HE20)_Chain 4 / CH40



802.11ax (HE40)_Chain 5 / CH46



802.11ax (HE80)_Chain 5 / CH42



For U-NII-3:

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)								Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7						
149	5745	-3.28	-4.00	-3.92	-2.94	-3.65	-3.29	-3.67	-3.77	0.23	3.7262	5.71	7.93	21.15	PASS
157	5785	-3.80	-4.63	-4.95	-4.27	-1.81	-2.85	-4.12	-3.49	0.23	3.6596	5.63	7.85	21.15	PASS
165	5825	-3.60	-4.20	-4.53	-2.99	-1.54	-2.92	-3.42	-2.99	0.23	4.0527	6.08	8.30	21.15	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)								Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7						
149	5745	-5.83	-6.73	-5.61	-5.91	-4.26	-4.55	-6.14	-4.95	0.21	2.4083	3.82	6.04	21.15	PASS
157	5785	-5.57	-6.85	-5.60	-5.79	-4.50	-5.54	-5.69	-5.64	0.21	2.3097	3.64	5.86	21.15	PASS
165	5825	-5.30	-6.77	-6.17	-5.71	-4.10	-4.84	-5.46	-5.47	0.21	2.416	3.83	6.05	21.15	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE40)

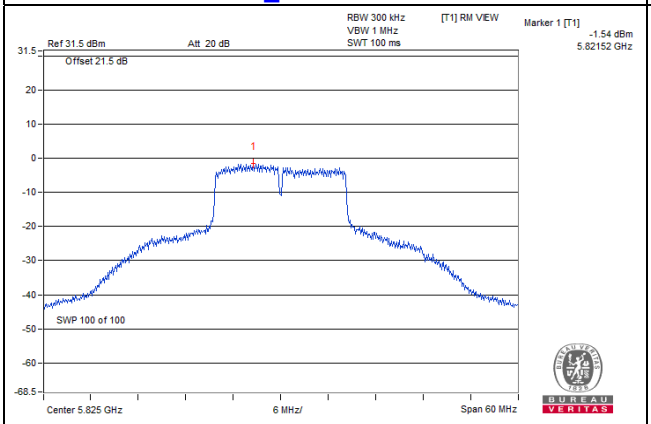
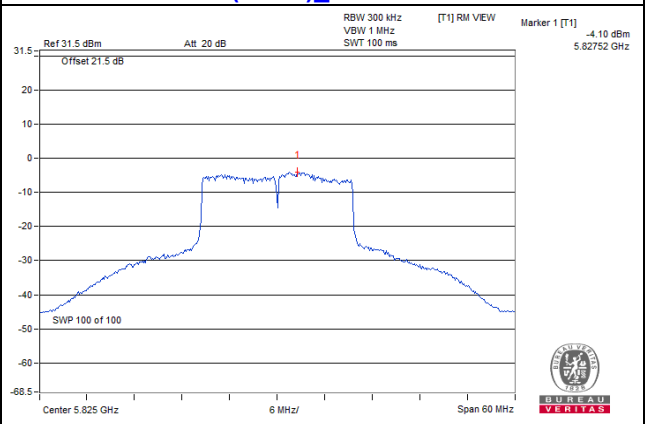
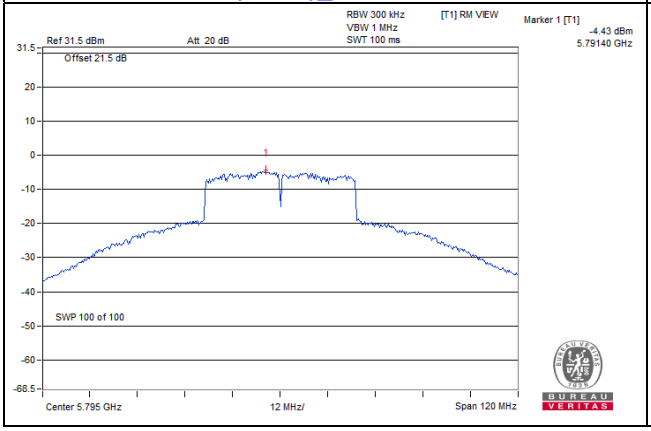
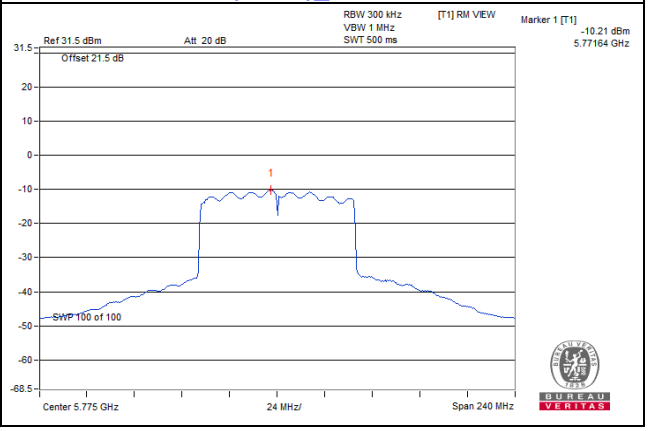
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)								Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7						
151	5755	-6.47	-8.09	-6.78	-6.94	-5.27	-6.78	-6.71	-5.51	0.18	1.8719	2.72	4.94	21.15	PASS
159	5795	-5.01	-6.98	-5.41	-5.43	-4.43	-5.61	-4.93	-4.46	0.18	2.5088	3.99	6.21	21.15	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)								Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7						
155	5775	-11.06	-12.52	-11.37	-11.87	-10.21	-11.32	-11.60	-10.60	0.21	0.62786	-2.02	0.20	21.15	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20}+10^{G4/20}+10^{G5/20}+10^{G6/20}+10^{G7/20})^2$ / 8] = 14.85 dBi > 6dBi, so the power density limit shall be reduced to 30-(14.85-6) = 21.15 dBm.

Spectrum Plot of Worst Value	
802.11a_Chain 4 / CH165	**802.11ax (HE20)_Chain 4 / CH165**
	
802.11ax (HE40)_Chain 4 / CH159	**802.11ax (HE80)_Chain 4 / CH155**
	

4.5.8 Test Results (Mode 2)

For 4TX

For U-NII-1: Master

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	2.74	1.11	0.54	1.59	0.23	7.82	11.35	Pass
40	5200	6.73	4.20	4.21	4.20	0.23	11.24	11.35	Pass
48	5240	5.29	4.01	3.96	3.38	0.23	10.47	11.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 17-(11.65-6) = 11.35 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	2.63	0.23	0.62	0.20	0.20	7.26	11.35	Pass
40	5200	6.10	4.56	4.80	4.81	0.20	11.33	11.35	Pass
48	5240	5.50	3.22	4.34	2.87	0.20	10.32	11.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 17-(11.65-6) = 11.35 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	-3.14	-4.68	-5.25	-5.28	0.18	1.71	11.35	Pass
46	5230	1.96	0.22	0.16	-0.09	0.18	6.85	11.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 17-(11.65-6) = 11.35 dBm.

802.11ax (HE80)

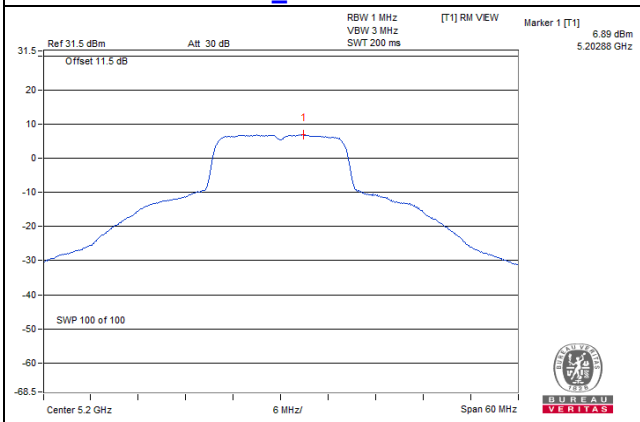
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	-8.15	-9.81	-9.84	-10.61	0.24	-3.24	11.35	Pass

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.

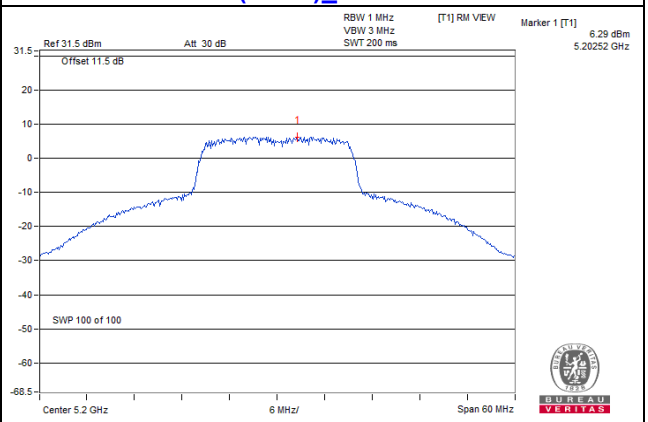
2. The directional gain = 10 log[($10^{G0/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$)^2 / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 17-(11.65-6) = 11.35 dBm.

Spectrum Plot of Worst Value

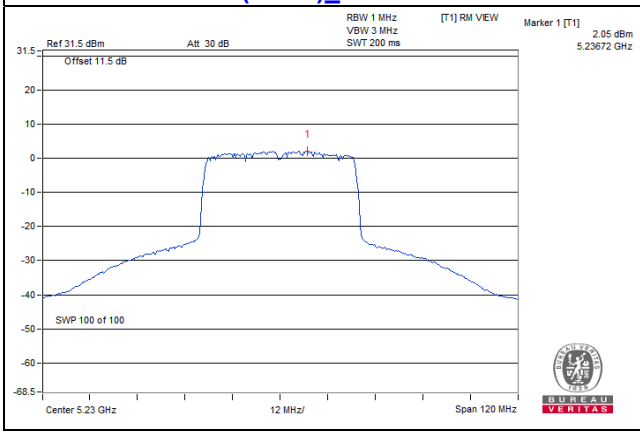
802.11a_Chain 0 / CH40



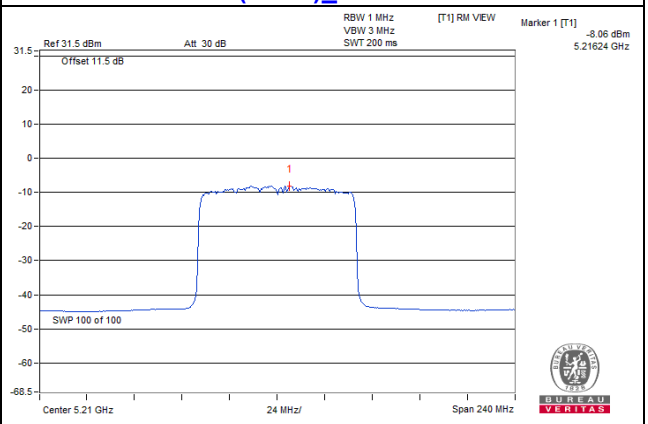
802.11ax (HE20)_Chain 0 / CH40



802.11ax (HE40)_Chain 0 / CH46



802.11ax (HE80)_Chain 0 / CH42



For U-NII-1: Client

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	0.58	-2.40	-1.35	-1.96	0.23	5.13	5.35	Pass
40	5200	0.95	-2.04	-1.42	-2.92	0.23	5.15	5.35	Pass
48	5240	0.92	-2.17	-2.22	-1.89	0.23	5.13	5.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 11-(11.65-6) = 5.35 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	1.02	-2.22	-1.55	-3.15	0.20	5.04	5.35	Pass
40	5200	1.15	-1.72	-2.13	-2.23	0.20	5.23	5.35	Pass
48	5240	0.75	-1.85	-2.08	-1.97	0.20	5.11	5.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 11-(11.65-6) = 5.35 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	-4.84	-6.93	-7.65	-8.14	0.18	-0.49	5.35	Pass
46	5230	-1.87	-1.68	-1.84	-1.62	0.18	4.45	5.35	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. The directional gain = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 11-(11.65-6) = 5.35 dBm.

802.11ax (HE80)

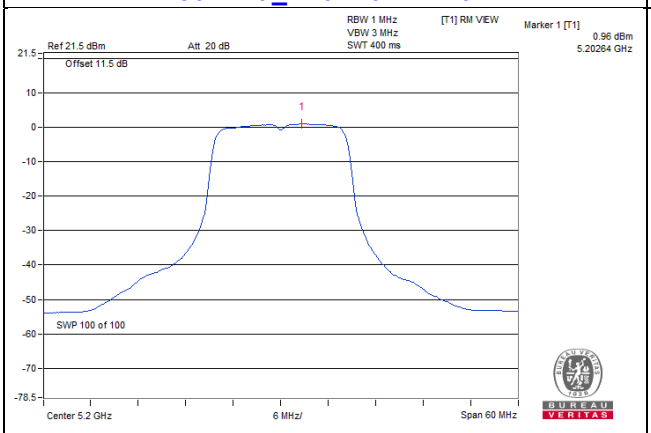
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	-9.13	-11.83	-11.96	-11.61	0.24	-4.70	5.35	Pass

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.

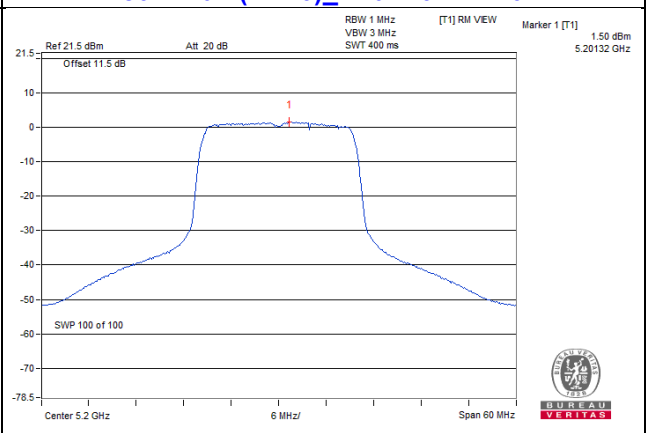
2. The directional gain = 10 log[($10^{02/20}$ +$10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$)^2 / 4] = 11.65 dBi > 6dBi, so the power density limit shall be reduced to 11-(11.65-6) = 5.35 dBm.

Spectrum Plot of Worst Value

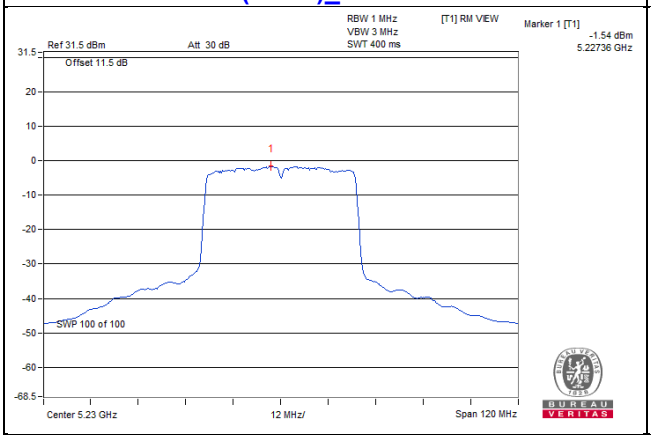
802.11a_Chain 0 / CH40



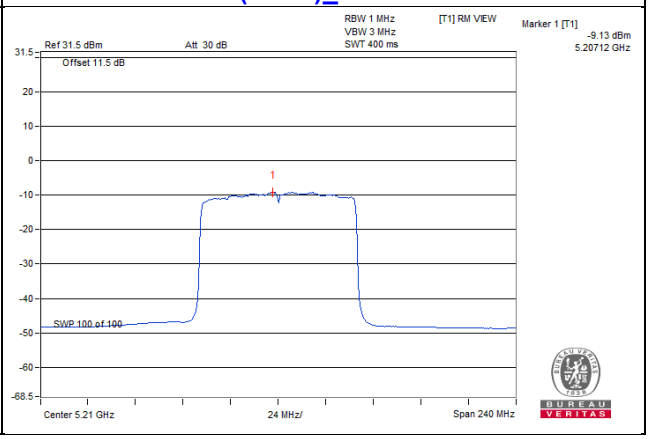
802.11ax (HE20)_Chain 0 / CH40



802.11ax (HE40)_Chain 3 / CH46



802.11ax (HE80)_Chain 0 / CH42



For U-NII-3:

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
149	5745	2.03	1.88	1.78	2.25	0.25	6.691	8.25	10.47	23.98	PASS
157	5785	1.87	2.52	2.20	1.48	0.25	6.762	8.30	10.52	23.98	PASS
165	5825	2.17	1.96	2.33	1.77	0.25	6.806	8.33	10.55	23.98	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 12.02 dBi > 6dBi, so the power density limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
149	5745	1.92	1.08	1.45	1.12	0.18	5.759	7.60	9.82	23.98	PASS
157	5785	1.91	1.31	1.65	0.93	0.18	5.839	7.66	9.88	23.98	PASS
165	5825	2.26	1.63	2.01	1.44	0.18	6.375	8.04	10.26	23.98	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 12.02 dBi > 6dBi, so the power density limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE40)

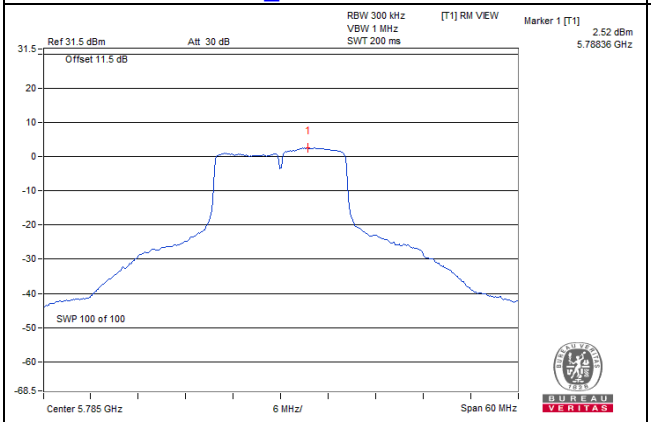
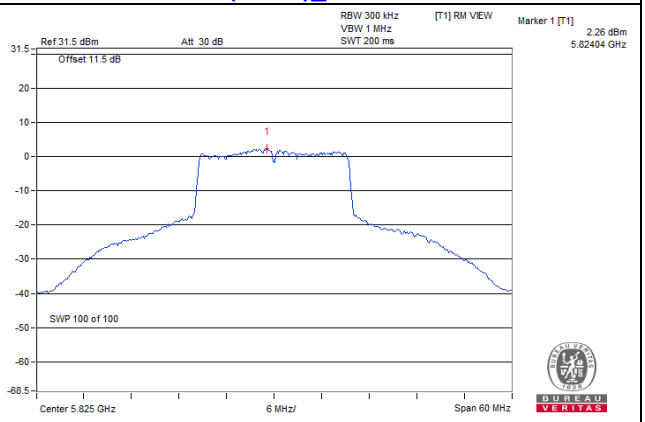
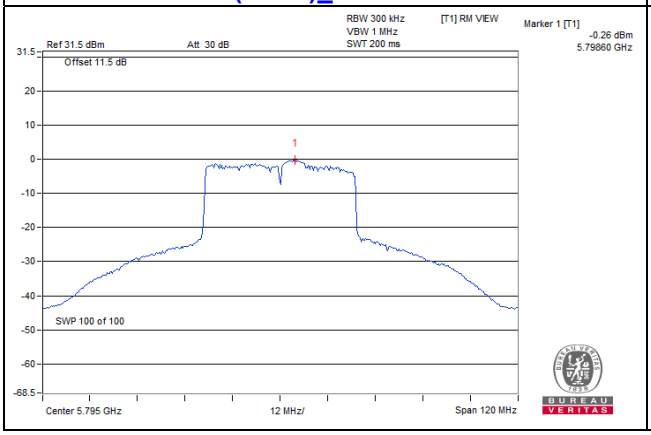
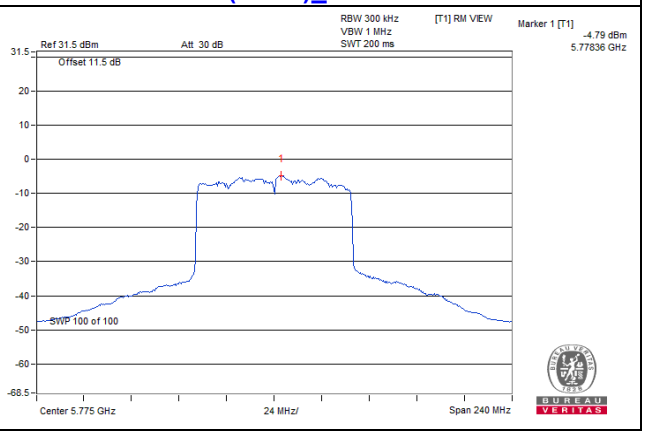
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
151	5755	-1.41	-1.88	-1.50	-2.41	0.19	2.7734	4.43	6.65	23.98	PASS
159	5795	-0.85	-1.29	-0.26	-1.16	0.19	3.4207	5.34	7.56	23.98	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 12.02 dBi > 6dBi, so the power density limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
155	5775	-5.25	-5.62	-4.79	-5.94	0.25	1.2287	0.89	3.11	23.98	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 = 10 log[$(10^{G0/20}+10^{G1/20}+10^{G2/20}+10^{G3/20})^2$ / 4] = 12.02 dBi > 6dBi, so the power density limit shall be reduced to 30-(12.02-6) = 23.98 dBm.

Spectrum Plot of Worst Value	
802.11a_Chain 1 / CH157	**802.11ax (HE20)_Chain 0 / CH165**
	
802.11ax (HE40)_Chain 2 / CH159	**802.11ax (HE80)_Chain 2 / CH155**
	

4.5.9 Test Results (Mode 3)

For Scan Radio

For U-NII-1:

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
36	5180	1.52	0.17	1.69	17.00	Pass
40	5200	1.70	0.17	1.87	17.00	Pass
48	5240	0.95	0.17	1.12	17.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
36	5180	0.42	0.18	0.60	17.00	Pass
40	5200	1.41	0.18	1.59	17.00	Pass
48	5240	0.31	0.18	0.49	17.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

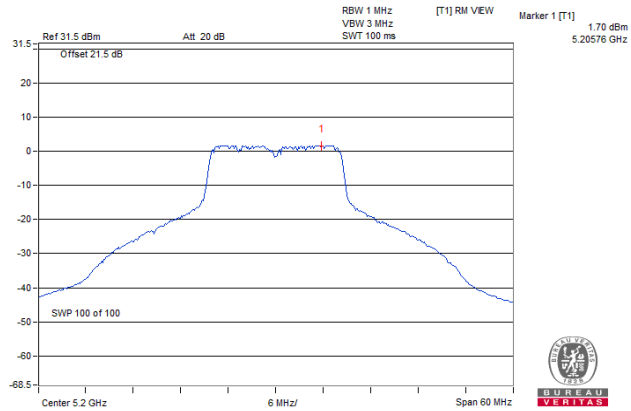
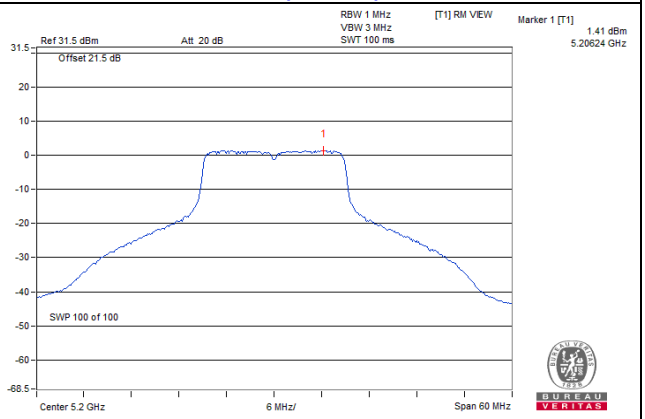
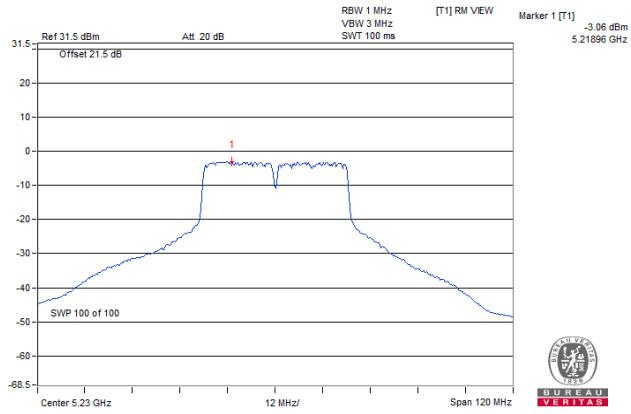
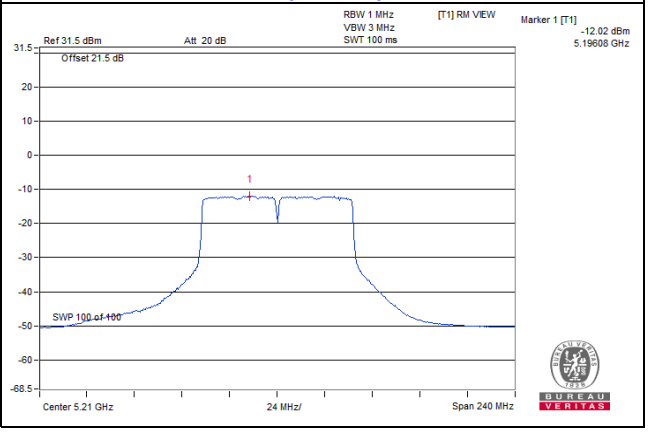
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
38	5190	-6.51	0.42	-6.09	17.00	Pass
46	5230	-3.06	0.42	-2.64	17.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
42	5210	-12.02	0.63	-11.39	17.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / CH40	**802.11ac (VHT20) / CH40**
	
802.11ac (VHT40) / CH46	**802.11ac (VHT80) / CH42**
	

For U-NII-3:

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
149	5745	-6.36	0.17	-6.19	-3.97	30.00	Pass
157	5785	-6.96	0.17	-6.79	-4.57	30.00	Pass
165	5825	-5.62	0.17	-5.45	-3.23	30.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
149	5745	-6.78	0.18	-6.60	-4.38	30.00	Pass
157	5785	-6.84	0.18	-6.66	-4.44	30.00	Pass
165	5825	-5.94	0.18	-5.76	-3.54	30.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

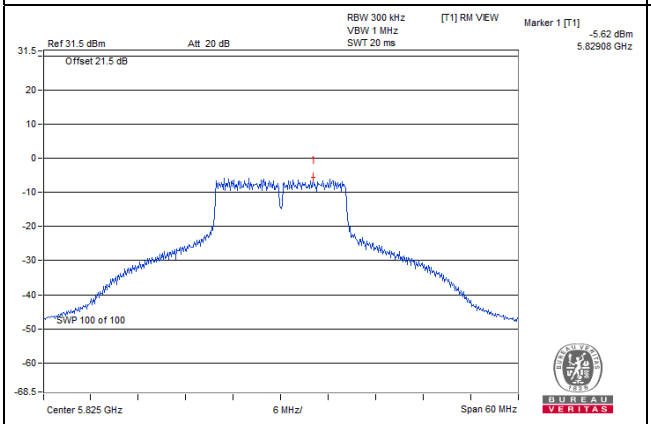
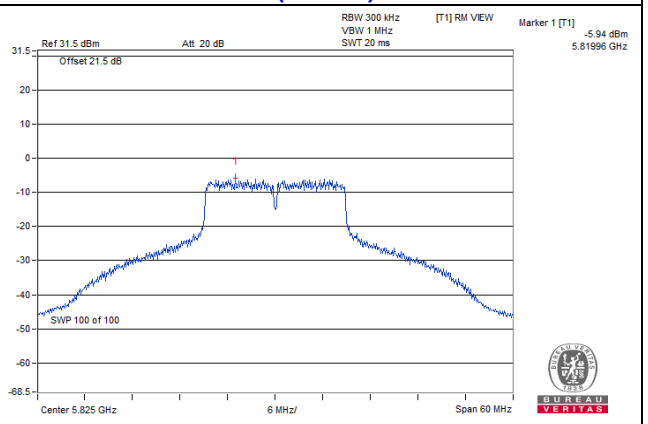
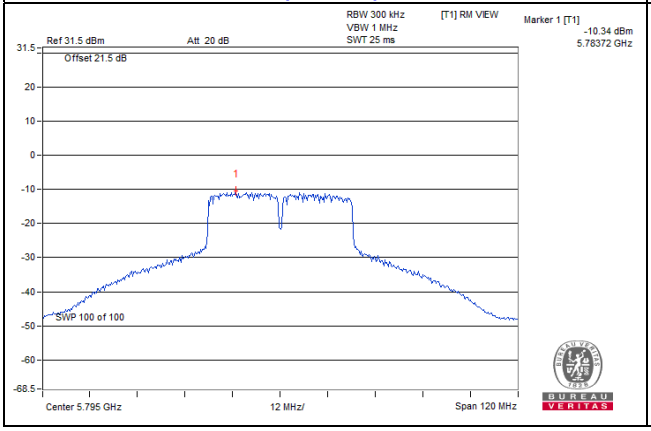
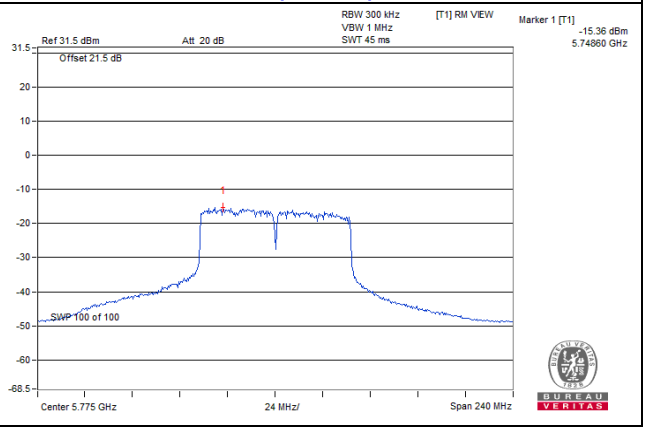
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
151	5755	-10.91	0.42	-10.49	-8.27	30.00	Pass
159	5795	-10.34	0.42	-9.92	-7.70	30.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
155	5775	-15.36	0.63	-14.73	-12.51	30.00	Pass

Note: 1. The directional gain = 5.2 dBi < 6dBi, so the power density limit shall not be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

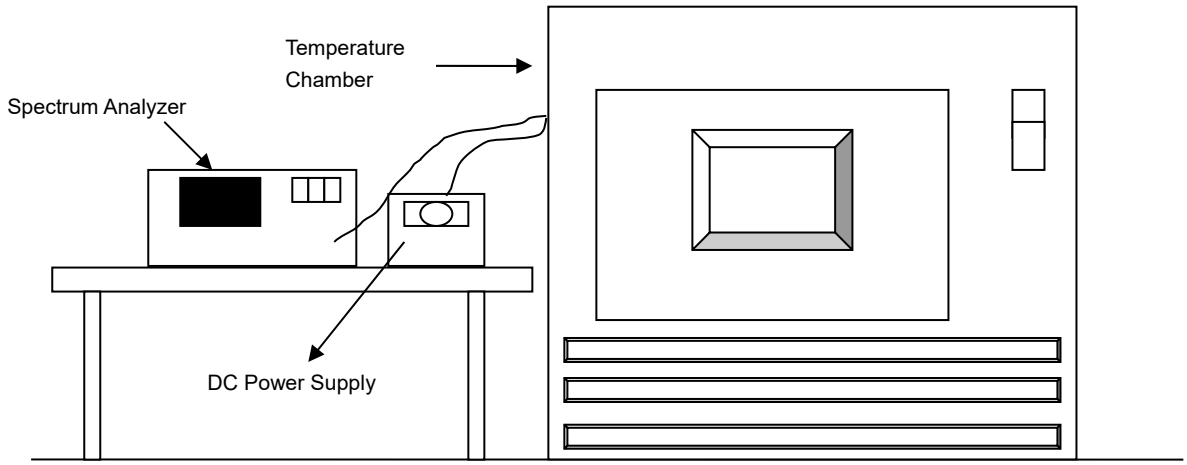
Spectrum Plot of Worst Value	
802.11a / CH165	**802.11ac (VHT20) / CH165**
	
802.11ac (VHT40) / CH159	**802.11ac (VHT80) / CH155**
	

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 DC 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 (Mode 1)

U-NII-1: Master

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5179.9948	Pass	5179.9963	Pass	5179.9956	Pass	5179.9952	Pass
30	12	5179.9722	Pass	5179.9722	Pass	5179.9755	Pass	5179.9757	Pass
20	12	5179.9785	Pass	5179.9781	Pass	5179.9801	Pass	5179.9781	Pass
10	12	5180.0112	Pass	5180.0101	Pass	5180.0125	Pass	5180.0103	Pass
0	12	5180.0076	Pass	5180.0043	Pass	5180.0052	Pass	5180.007	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5179.9777	Pass	5179.9775	Pass	5179.9795	Pass	5179.9784	Pass
	12	5179.9785	Pass	5179.9781	Pass	5179.9801	Pass	5179.9781	Pass
	10.2	5179.9785	Pass	5179.9772	Pass	5179.9807	Pass	5179.9774	Pass

U-NII-1: Client

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5179.9786	Pass	5179.9789	Pass	5179.9804	Pass	5179.9774	Pass
30	12	5180.0211	Pass	5180.0247	Pass	5180.0213	Pass	5180.0246	Pass
20	12	5179.9734	Pass	5179.9736	Pass	5179.9724	Pass	5179.9734	Pass
10	12	5180.0041	Pass	5180.0062	Pass	5180.0029	Pass	5180.0062	Pass
0	12	5179.9916	Pass	5179.9877	Pass	5179.9891	Pass	5179.9881	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5179.9743	Pass	5179.9739	Pass	5179.9718	Pass	5179.9734	Pass
	12	5179.9734	Pass	5179.9736	Pass	5179.9724	Pass	5179.9734	Pass
	10.2	5179.9742	Pass	5179.9728	Pass	5179.9728	Pass	5179.9743	Pass

4.6.8 Test Results (Mode 2)

For U-NII-1: Master

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5179.9812	Pass	5179.9817	Pass	5179.9832	Pass	5179.9834	Pass
30	12	5180.016	Pass	5180.0164	Pass	5180.0154	Pass	5180.0122	Pass
20	12	5180.007	Pass	5180.0075	Pass	5180.0113	Pass	5180.011	Pass
10	12	5179.9808	Pass	5179.9793	Pass	5179.9797	Pass	5179.9779	Pass
0	12	5179.9921	Pass	5179.9918	Pass	5179.9934	Pass	5179.9952	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5180.006	Pass	5180.0074	Pass	5180.0114	Pass	5180.0108	Pass
	12	5180.007	Pass	5180.0075	Pass	5180.0113	Pass	5180.011	Pass
	10.2	5180.0064	Pass	5180.0069	Pass	5180.012	Pass	5180.0103	Pass

For U-NII-1: Client

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5180.0246	PASS	5180.0227	PASS	5180.0238	PASS	5180.0277	PASS
30	12	5180.0002	PASS	5179.9977	PASS	5179.9978	PASS	5179.9989	PASS
20	12	5179.9899	PASS	5179.9885	PASS	5179.9851	PASS	5179.9882	PASS
10	12	5179.9978	PASS	5179.9952	PASS	5179.9962	PASS	5179.9952	PASS
0	12	5180.012	PASS	5180.009	PASS	5180.0112	PASS	5180.0083	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5179.9902	PASS	5179.9879	PASS	5179.9859	PASS	5179.9887	PASS
	12	5179.9899	PASS	5179.9885	PASS	5179.9851	PASS	5179.9882	PASS
	10.2	5179.9899	PASS	5179.9894	PASS	5179.986	PASS	5179.9877	PASS

For U-NII-3:

Frequency Stability Versus Temp.									
Operating Frequency: 5745 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5744.9759	Pass	5744.9717	Pass	5744.9743	Pass	5744.9724	Pass
30	12	5744.9747	Pass	5744.9749	Pass	5744.9695	Pass	5744.971	Pass
20	12	5744.997	Pass	5744.9978	Pass	5744.9934	Pass	5744.9964	Pass
10	12	5745.0193	Pass	5745.0245	Pass	5745.0222	Pass	5745.0203	Pass
0	12	5744.9985	Pass	5744.9976	Pass	5744.9989	Pass	5744.9971	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5745 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5744.9966	Pass	5744.9967	Pass	5744.9929	Pass	5744.9955	Pass
	12	5744.997	Pass	5744.9978	Pass	5744.9934	Pass	5744.9964	Pass
	10.2	5744.9974	Pass	5744.9978	Pass	5744.9932	Pass	5744.9967	Pass

4.6.9 Test Results (Mode 3)

For Scan Radio

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	12	5180.0214	Pass	5180.0211	Pass	5180.0187	Pass	5180.0188	Pass
30	12	5179.9935	Pass	5179.9945	Pass	5179.9906	Pass	5179.9948	Pass
20	12	5180.0246	Pass	5180.027	Pass	5180.0238	Pass	5180.0225	Pass
10	12	5180.0075	Pass	5180.0091	Pass	5180.0094	Pass	5180.0115	Pass
0	12	5180.0018	Pass	5180.0023	Pass	5180.0004	Pass	5180.0009	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vdc)	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	13.8	5180.0238	Pass	5180.0277	Pass	5180.0246	Pass	5180.0216	Pass
	12	5180.0246	Pass	5180.027	Pass	5180.0238	Pass	5180.0225	Pass
	10.2	5180.0246	Pass	5180.026	Pass	5180.0236	Pass	5180.0221	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

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x 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 (Mode 1)

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)								Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7		
149	5745	15.74	16.11	16.33	16.38	16.3	15.87	16.08	15.41	0.5	Pass
157	5785	15.91	16.37	16.34	15.18	15.67	15.94	15.68	15.38	0.5	Pass
165	5825	15.33	16.37	16.09	15.39	15.59	16.09	15.72	16.32	0.5	Pass

802.11ax (HE20)

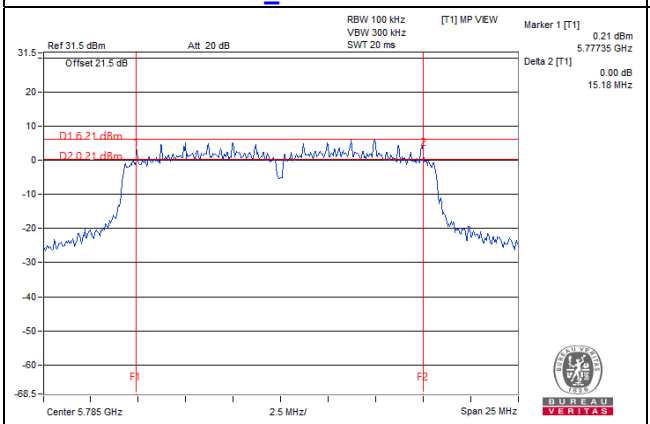
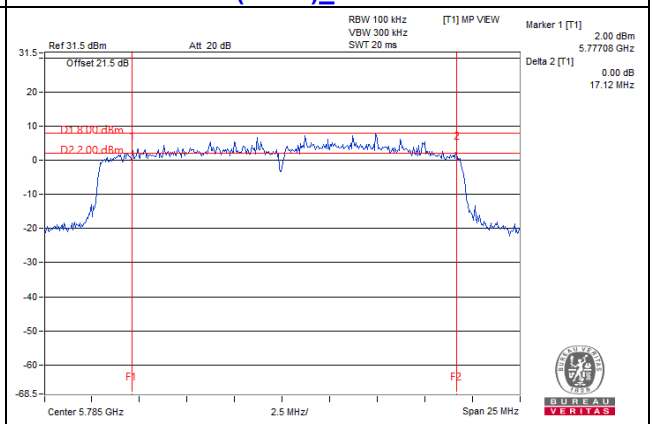
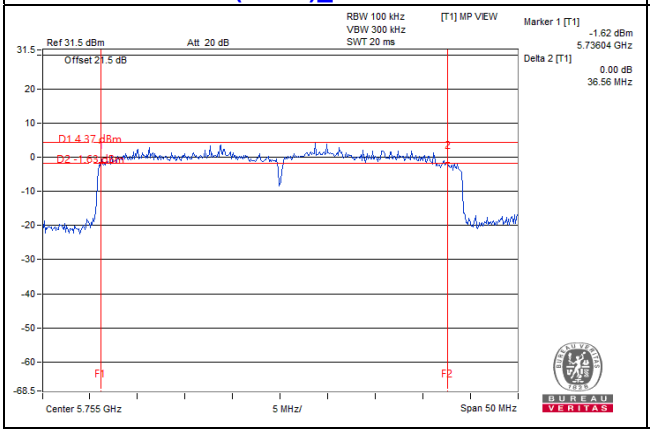
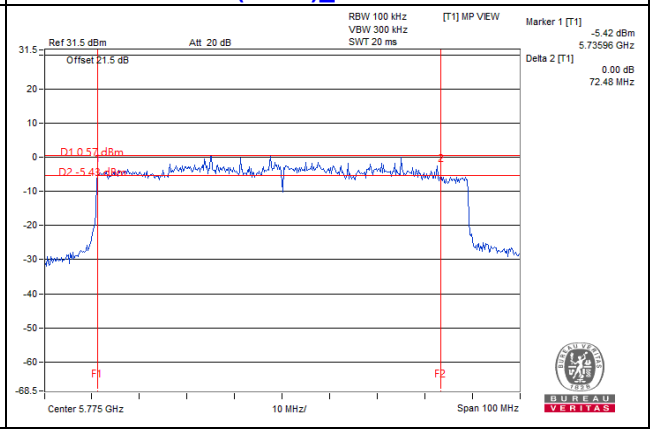
Channel	Frequency (MHz)	6dB Bandwidth (MHz)								Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7		
149	5745	18.74	18.94	18.97	18.5	17.62	18.7	18.99	18.96	0.5	Pass
157	5785	18.53	18.33	18.87	18.83	18.8	18.63	19.09	17.12	0.5	Pass
165	5825	18.29	17.58	18.66	18.84	18.66	18.64	18.79	18.83	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)								Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7		
151	5755	37.19	37.56	37.75	37.35	37.88	38.17	36.56	38.24	0.5	Pass
159	5795	38.15	37.61	37.72	37.68	37.37	38.22	38.03	37.93	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)								Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 4	Chain 5	Chain 6	Chain 7		
155	5775	72.6	76.92	74.82	76.93	77.12	77.29	72.94	72.48	0.5	Pass

Spectrum Plot of Worst Value	
802.11a_Chain 3 / CH157	**802.11ax (HE20)_Chain 7 / CH157**
	
802.11ax (HE40)_Chain 6 / CH151	**802.11ax (HE80)_Chain 7 / CH155**
	

4.7.8 Test Results (Mode 2)

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	15.75	16.06	15.75	16.06	0.5	Pass
157	5785	15.98	15.94	15.97	16.33	0.5	Pass
165	5825	16.36	15.73	16.32	16.07	0.5	Pass

802.11ax (HE20)

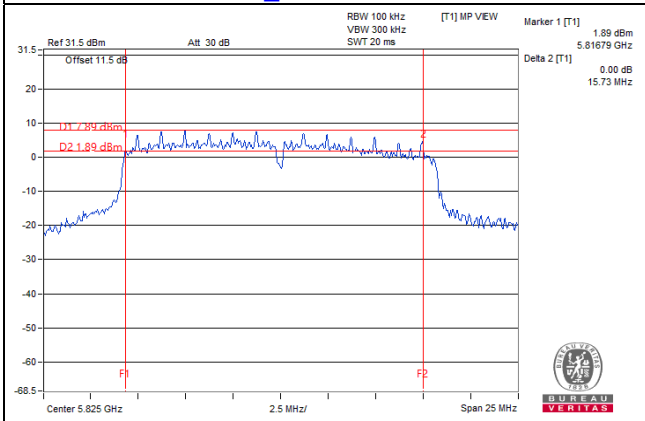
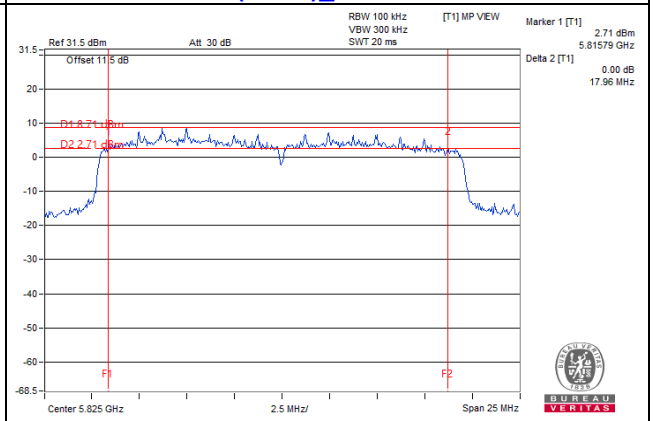
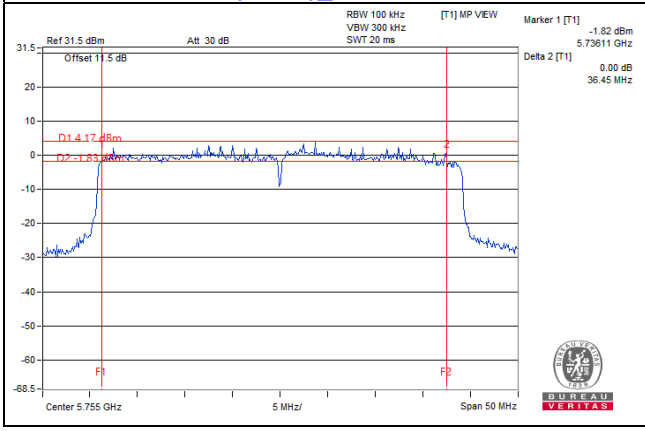
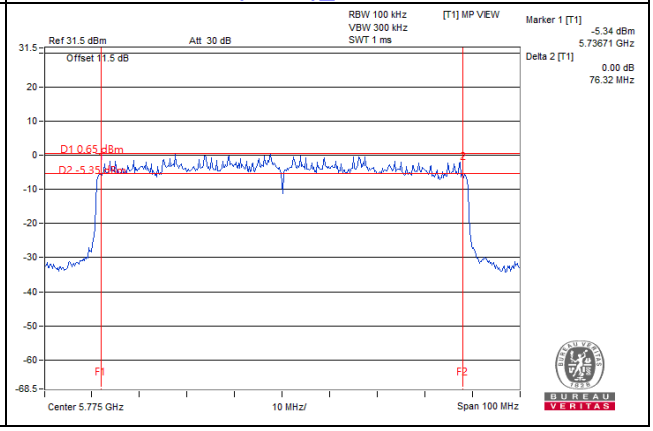
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	18.58	18.94	18.52	18.27	0.5	Pass
157	5785	18.39	18.53	18.66	18.96	0.5	Pass
165	5825	18.98	18.94	17.96	18.07	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.81	36.45	36.9	36.74	0.5	Pass
159	5795	37.73	37.45	36.62	37.52	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.12	76.72	76.58	76.32	0.5	Pass

Spectrum Plot of Worst Value	
802.11a_Chain 1 / CH165	**802.11ax (HE20)_Chain 2 / CH165**
	
802.11ax (HE40)_Chain 1 / CH151	**802.11ax (HE80)_Chain 3 / CH155**
	

4.7.9 Test Results (Mode 3)

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.38	0.5	Pass
157	5785	16.35	0.5	Pass
165	5825	16.38	0.5	Pass

802.11ac (VHT20)

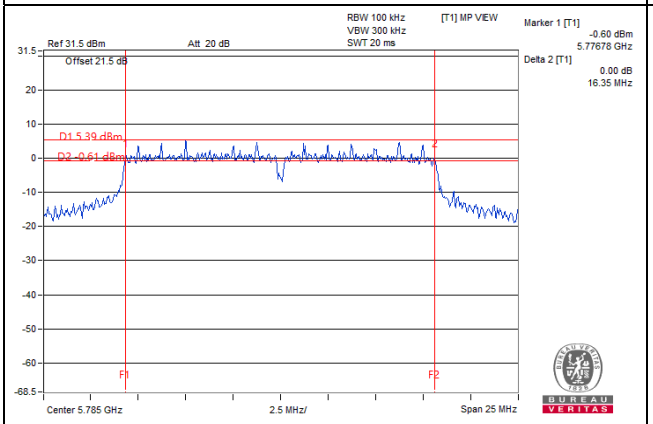
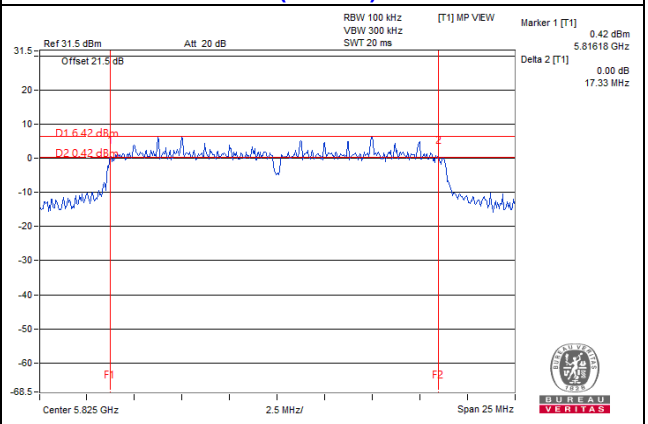
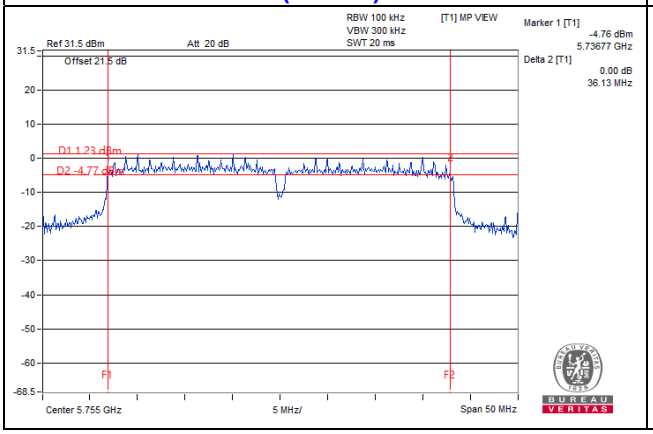
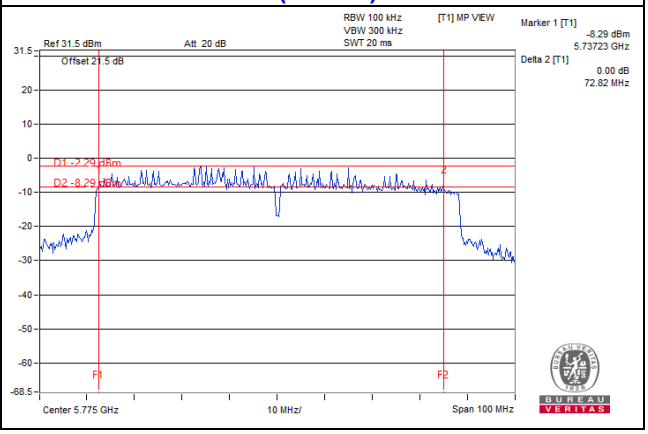
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	17.34	0.5	Pass
157	5785	17.35	0.5	Pass
165	5825	17.33	0.5	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	36.13	0.5	Pass
159	5795	36.33	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
155	5775	72.82	0.5	Pass

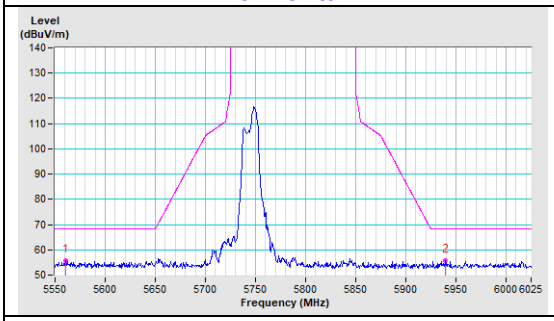
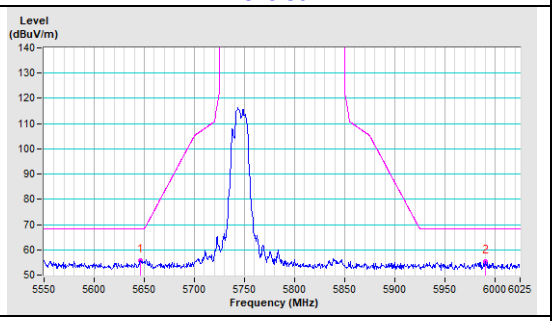
Spectrum Plot of Worst Value	
802.11a / CH157	**802.11ac (VHT20) / CH165**
	
802.11ac (VHT40) / CH151	**802.11ac (VHT80) / CH155**
	

5 Pictures of Test Arrangements

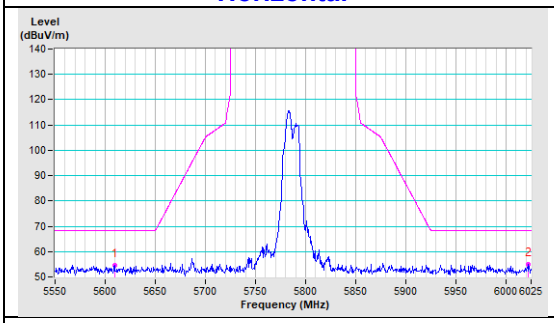
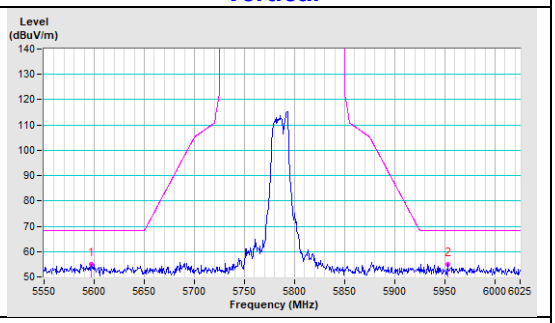
Please refer to the attached file (Test Setup Photo).

Annex A.1 - Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 1)

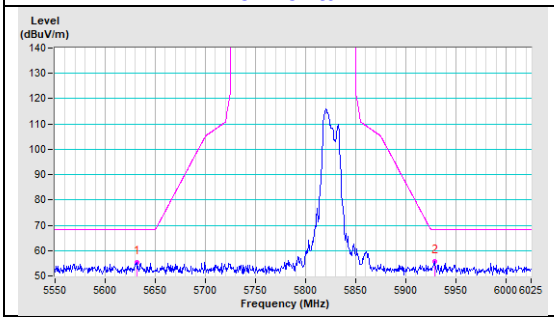
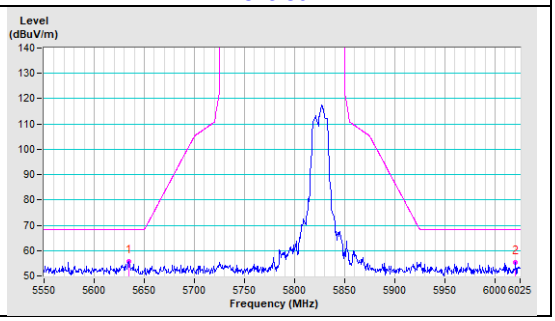
802.11a CH 149 : 5745 MHz

Horizontal	Vertical
	

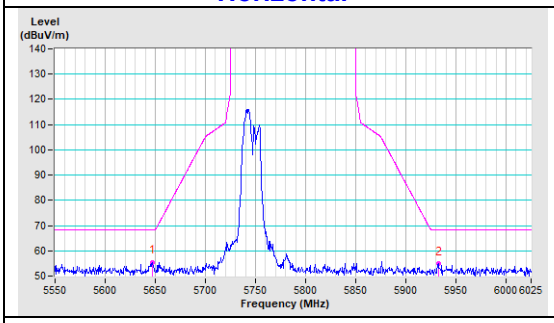
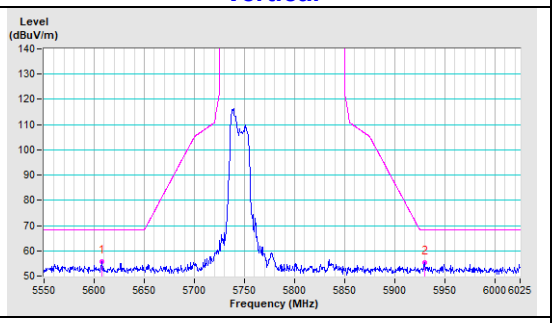
802.11a CH 157 : 5785 MHz

Horizontal	Vertical
	

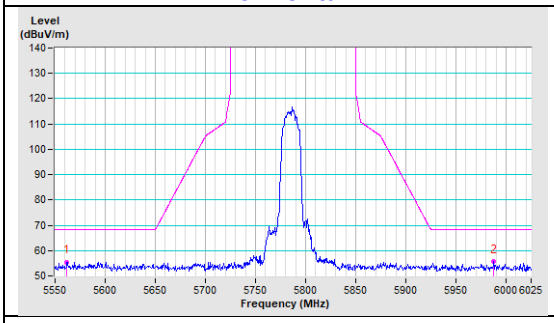
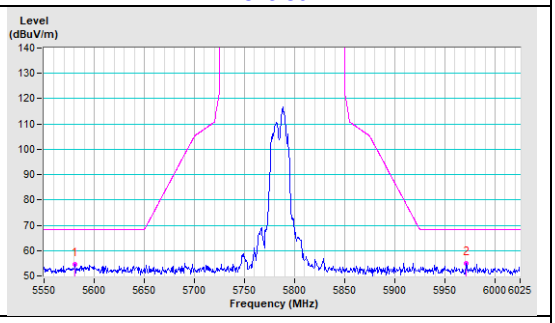
802.11a CH 165 : 5825 MHz

Horizontal	Vertical
	

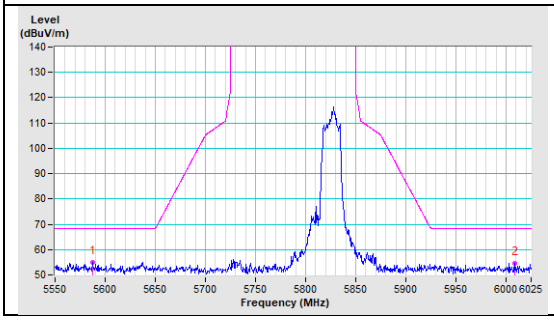
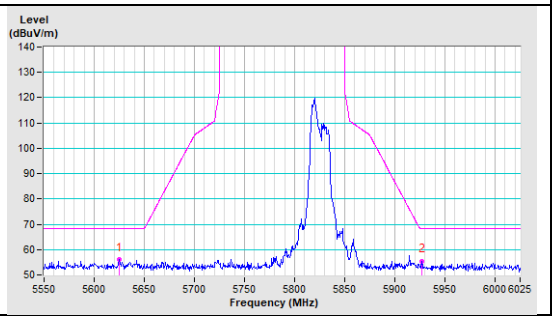
802.11ax (HE20) CH 149 : 5745 MHz

Horizontal	Vertical
	

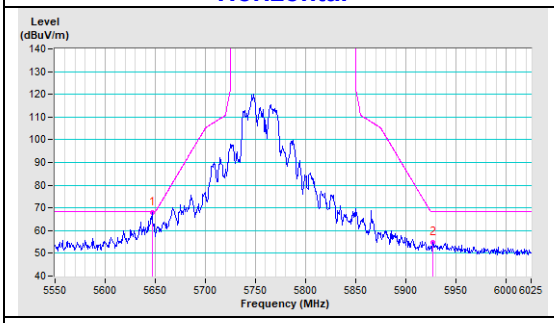
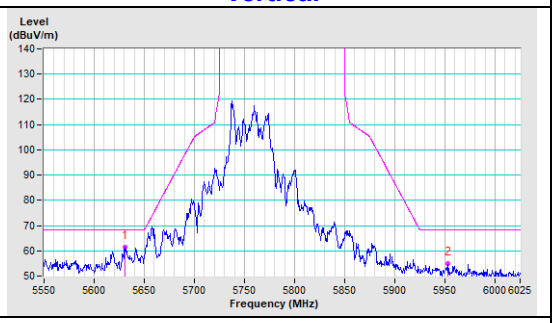
802.11ax (HE20) CH 157 : 5785 MHz

Horizontal	Vertical
	

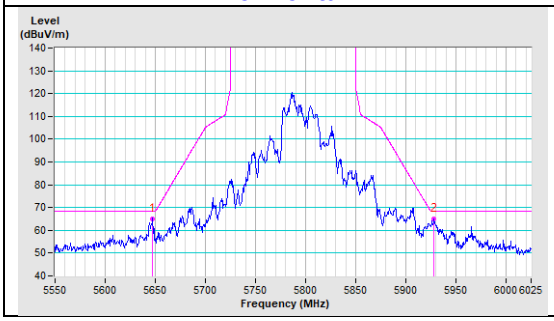
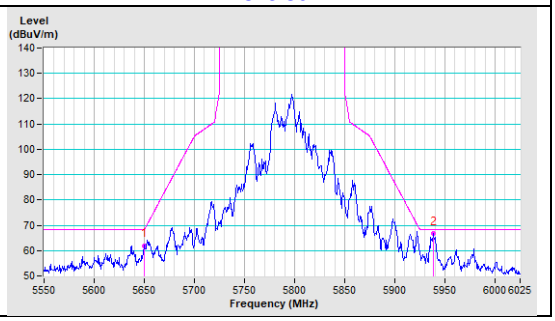
802.11ax (HE20) CH 165 : 5825 MHz

Horizontal	Vertical
	

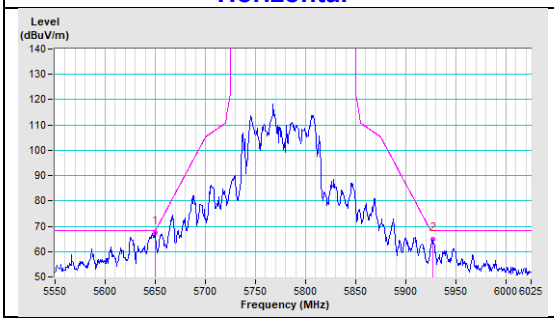
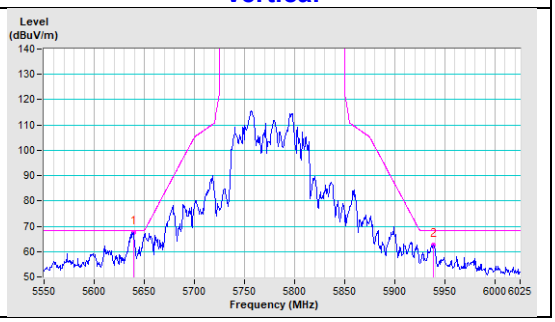
802.11ax (HE40) CH 151 : 5755 MHz

Horizontal	Vertical
	

802.11ax (HE40) CH 159 : 5795 MHz

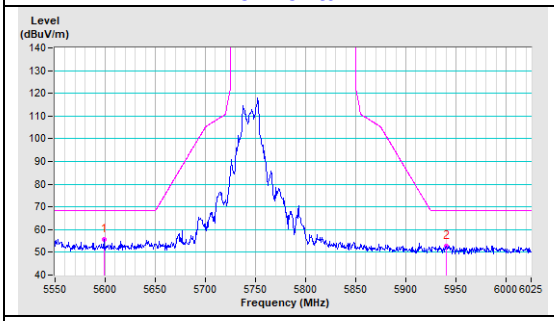
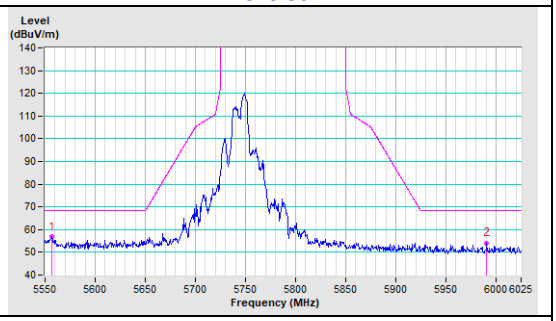
Horizontal	Vertical
	

802.11ax (HE80) CH 155 : 5775 MHz

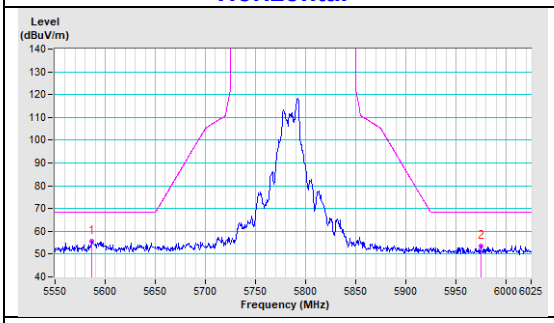
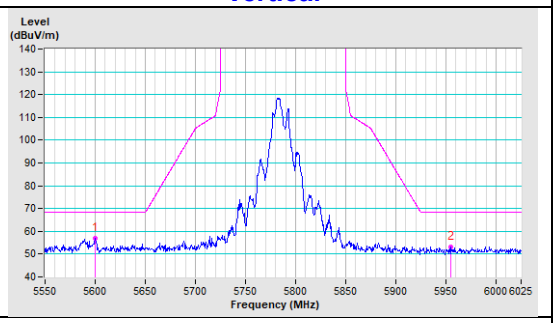
Horizontal	Vertical
	

Annex A.2 - Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 2)

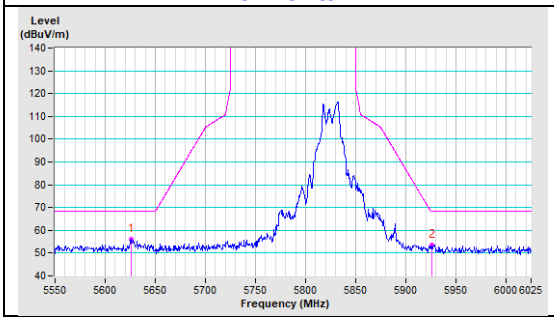
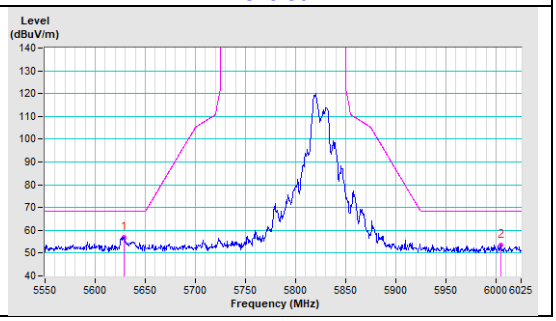
802.11a CH 149 : 5745 MHz

Horizontal	Vertical
	

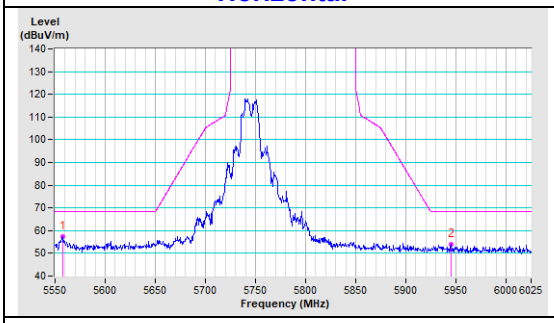
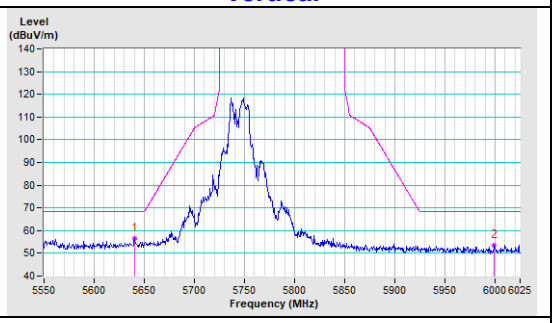
802.11a CH 157 : 5785 MHz

Horizontal	Vertical
	

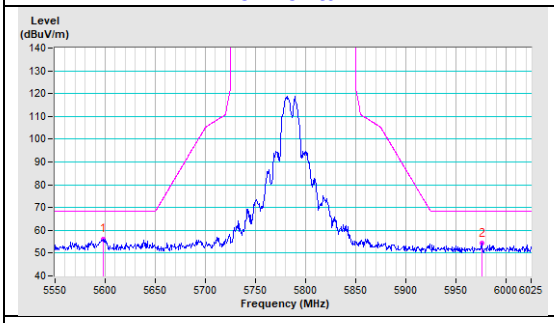
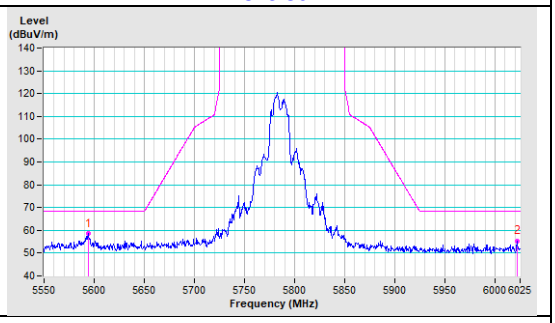
802.11a CH 165 : 5825 MHz

Horizontal	Vertical
	

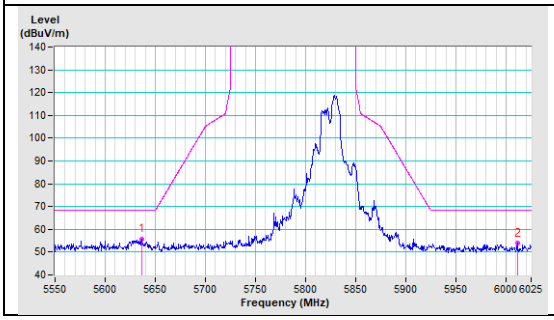
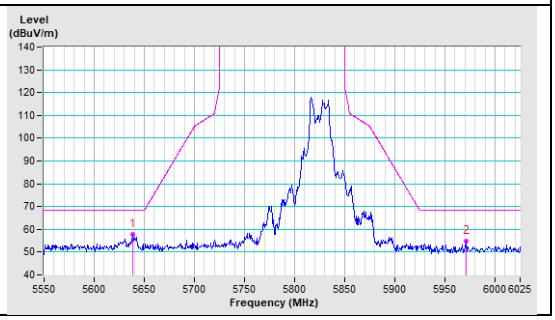
802.11ax (HE20) CH 149 : 5745 MHz

Horizontal	Vertical
	

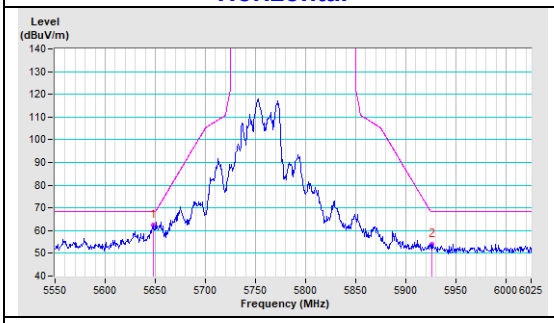
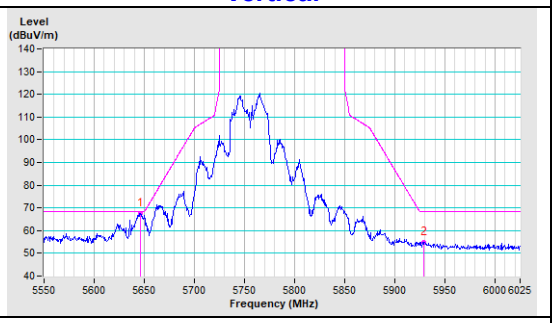
802.11ax (HE20) CH 157 : 5785 MHz

Horizontal	Vertical
	

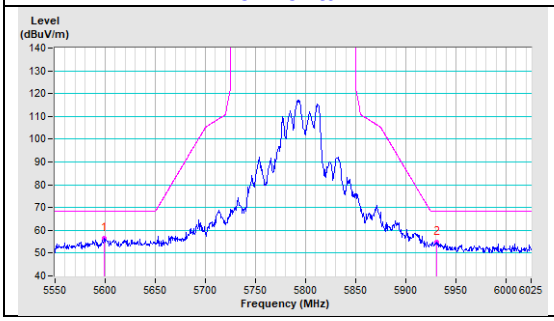
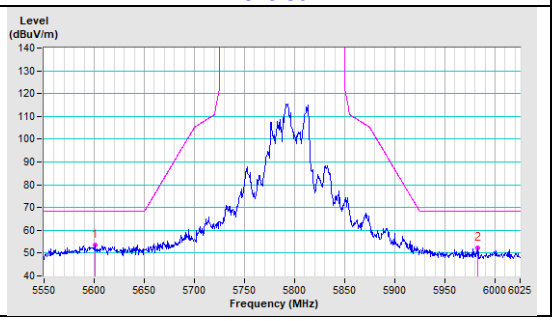
802.11ax (HE20) CH 165 : 5825 MHz

Horizontal	Vertical
	

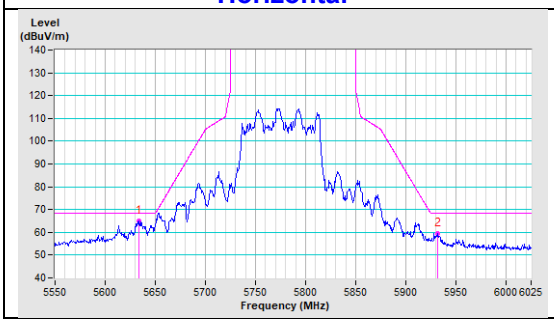
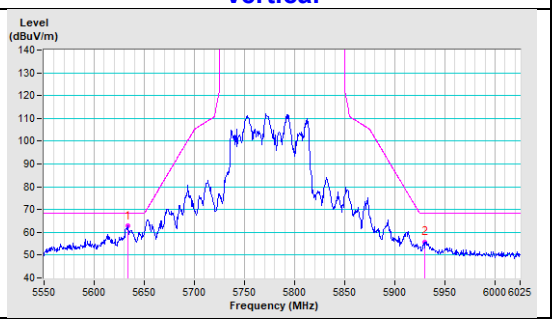
802.11ax (HE40) CH 151 : 5755 MHz

Horizontal	Vertical
	

802.11ax (HE40) CH 159 : 5795 MHz

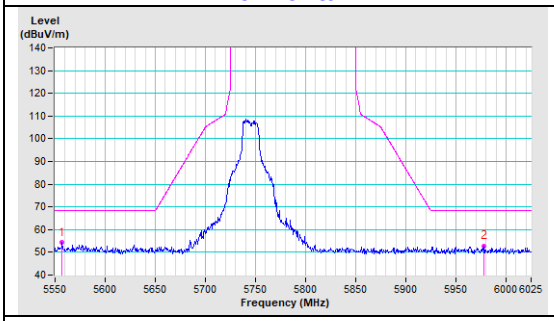
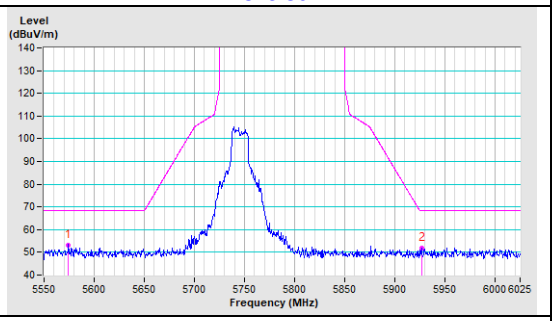
Horizontal	Vertical
	

802.11ax (HE80) CH 155 : 5775 MHz

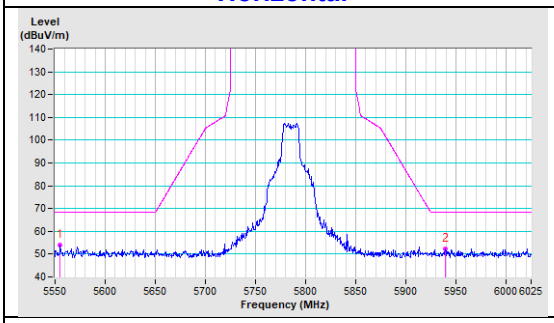
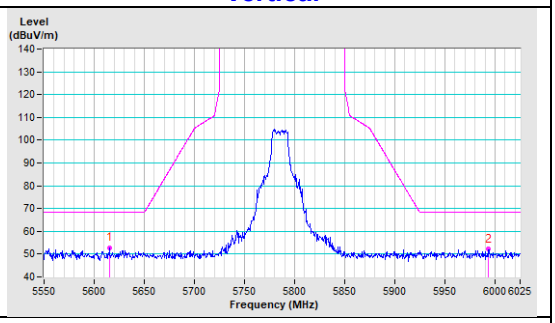
Horizontal	Vertical
	

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

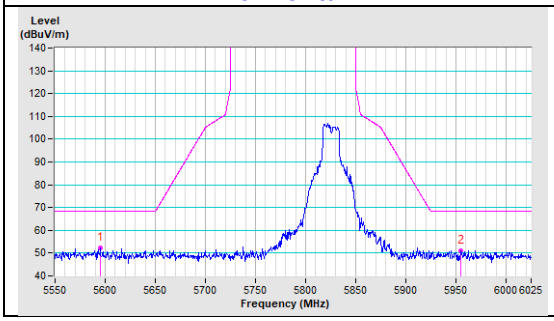
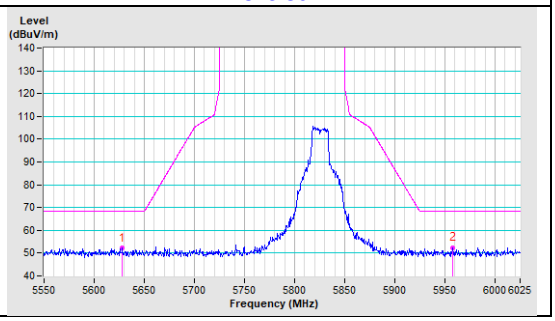
802.11a CH 149 : 5745 MHz

Horizontal	Vertical
	

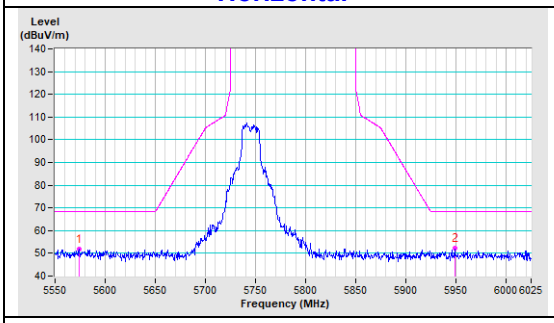
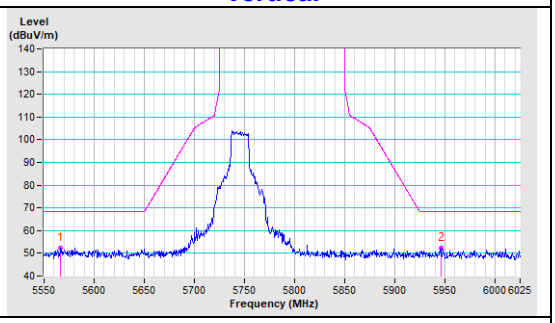
802.11a CH 157 : 5785 MHz

Horizontal	Vertical
	

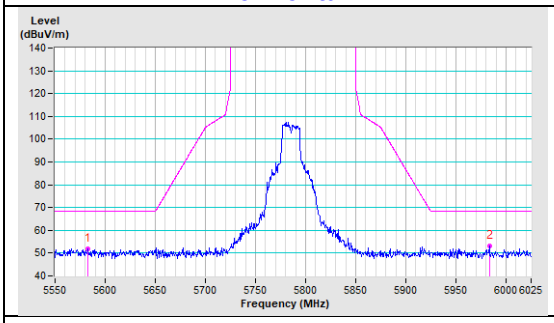
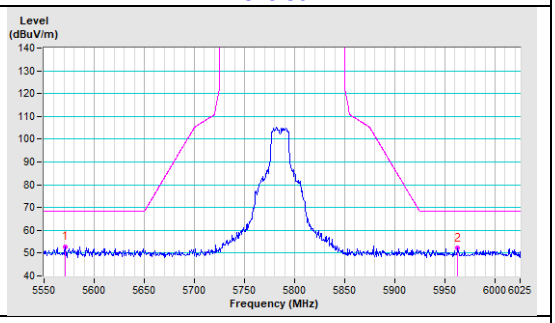
802.11a CH 165 : 5825 MHz

Horizontal	Vertical
	

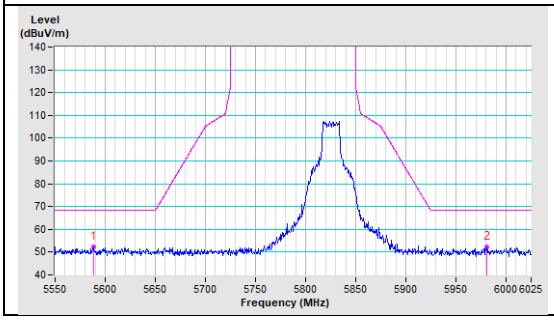
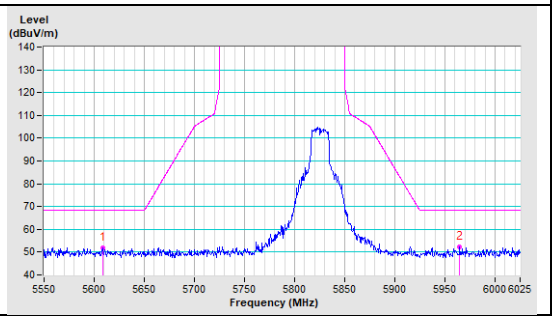
802.11ax (HE20) CH 149 : 5745 MHz

Horizontal	Vertical
	

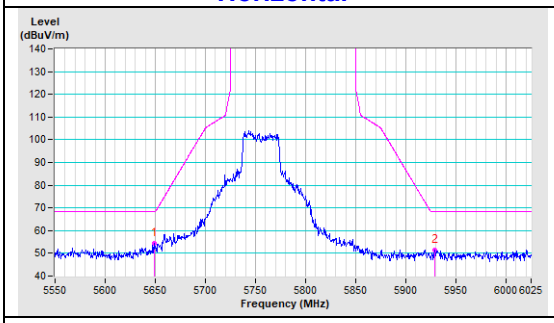
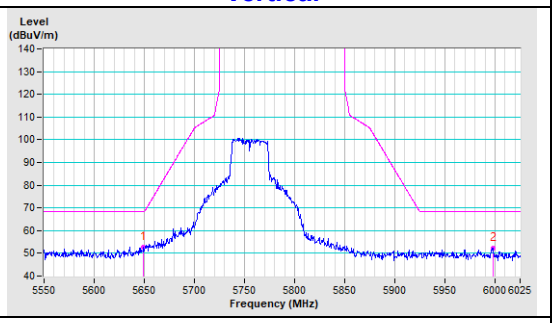
802.11ax (HE20) CH 157 : 5785 MHz

Horizontal	Vertical
	

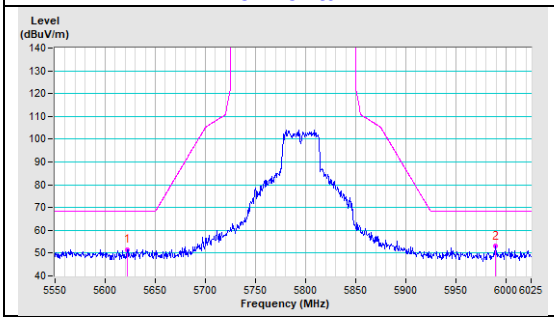
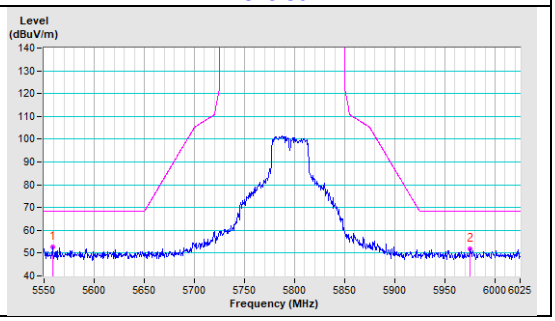
802.11ax (HE20) CH 165 : 5825 MHz

Horizontal	Vertical
	

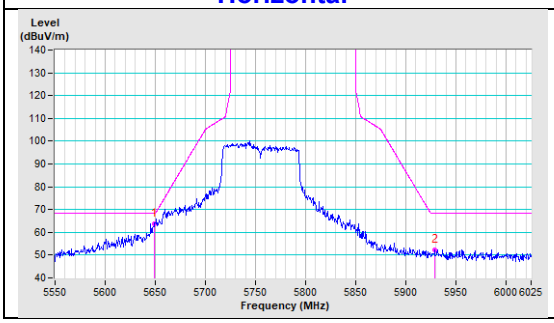
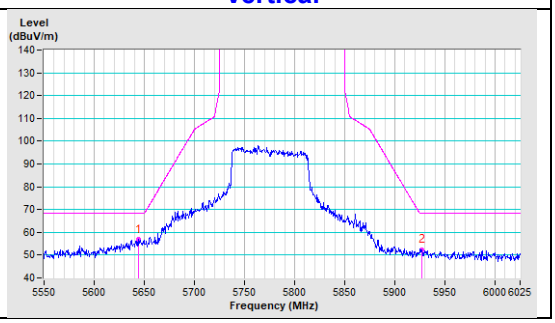
802.11ax (HE40) CH 151 : 5755 MHz

Horizontal	Vertical
	

802.11ax (HE40) CH 159 : 5795 MHz

Horizontal	Vertical
	

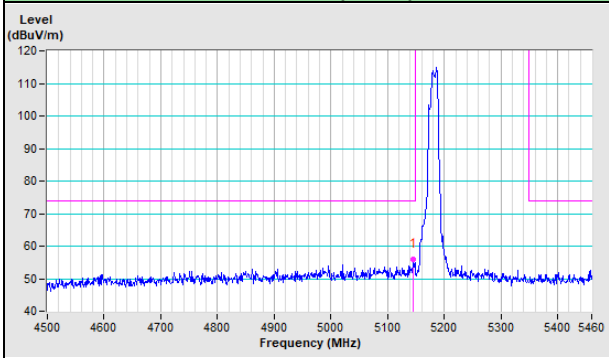
802.11ax (HE80) CH 155 : 5775 MHz

Horizontal	Vertical
	

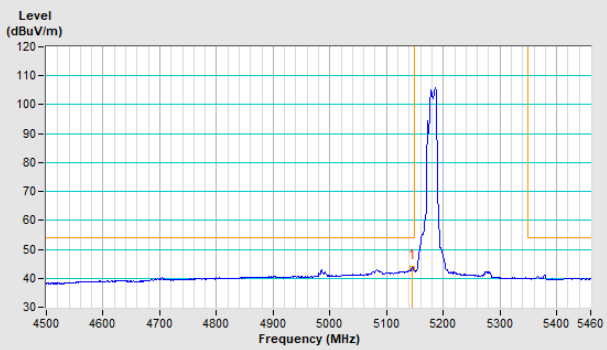
Annex B.1 - Band-Edge Measurement (For U-NII-1 band) (Mode 1)

802.11a Channel 36

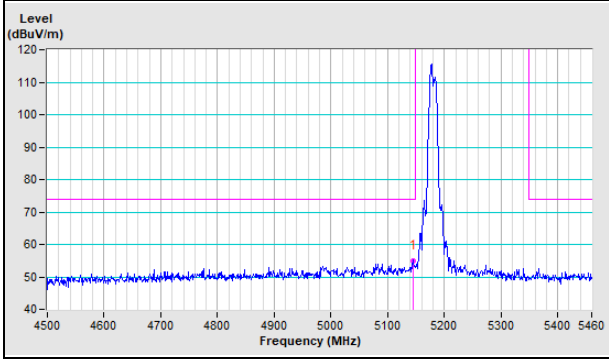
Horizontal (Peak)



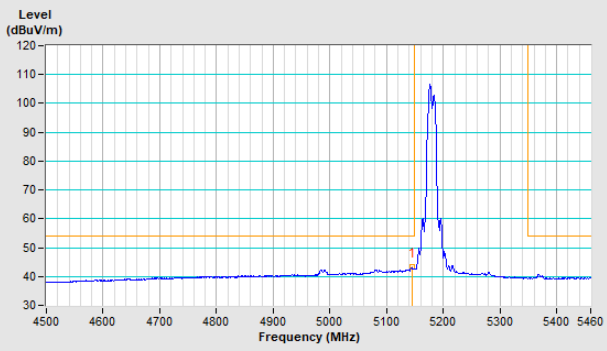
Horizontal (Average)



Vertical (Peak)

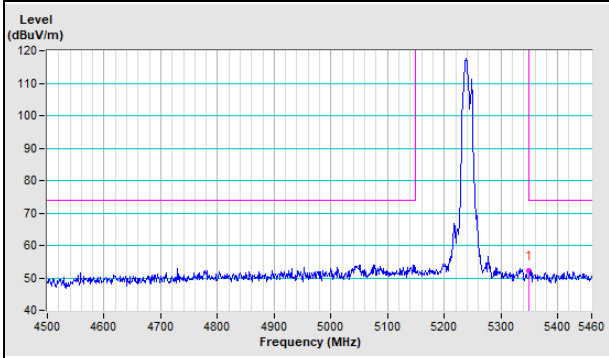


Vertical (Average)

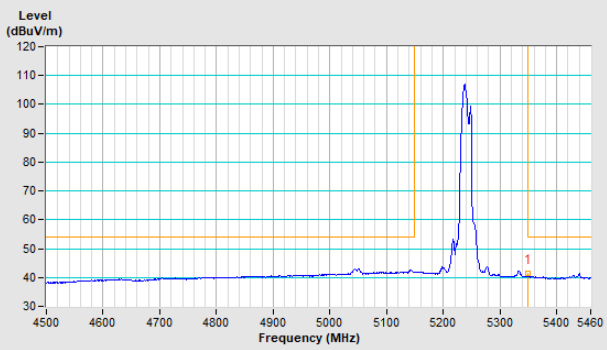


802.11a Channel 48

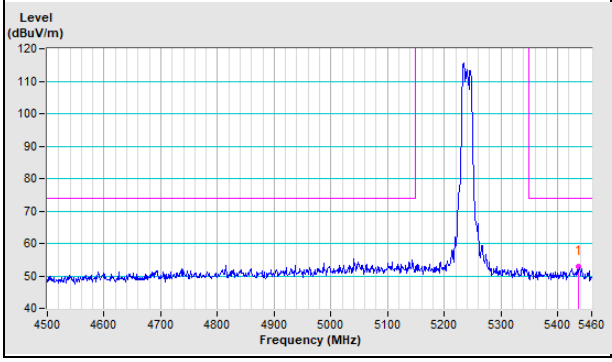
Horizontal (Peak)



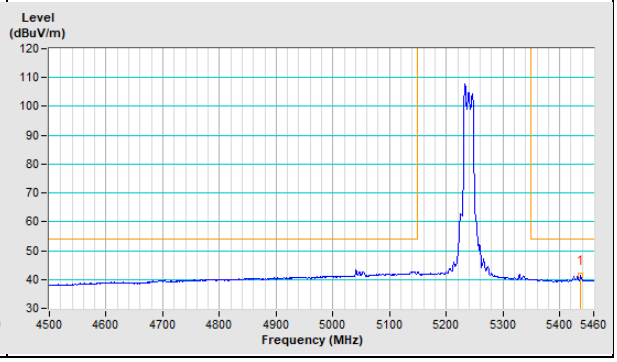
Horizontal (Average)



Vertical (Peak)

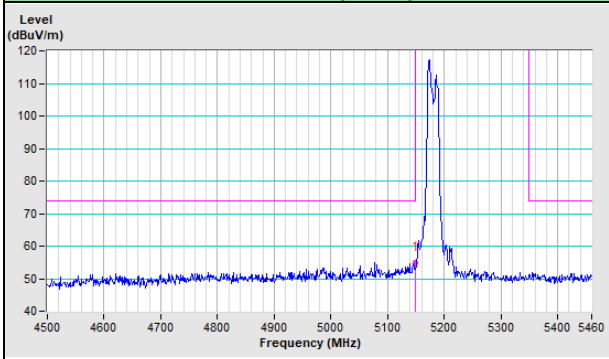


Vertical (Average)

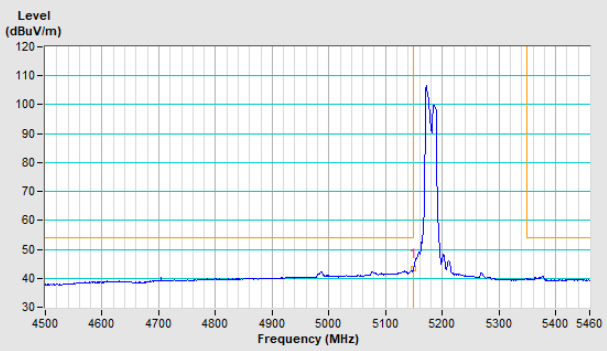


802.11ax (HE20) Channel 36

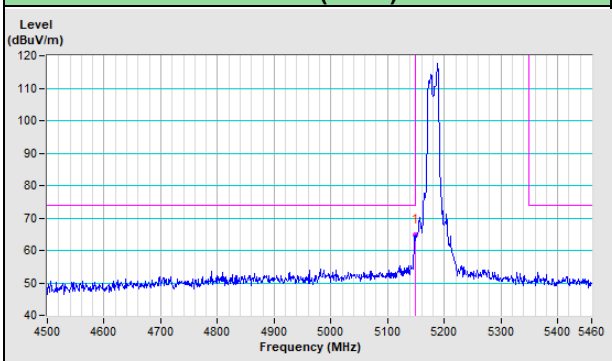
Horizontal (Peak)



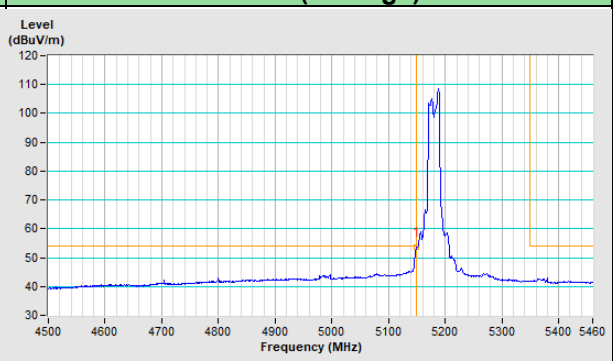
Horizontal (Average)



Vertical (Peak)

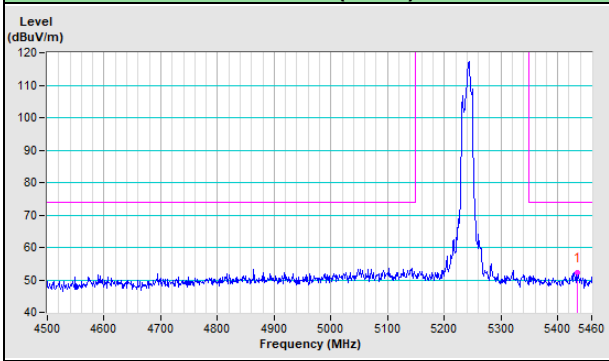


Vertical (Average)

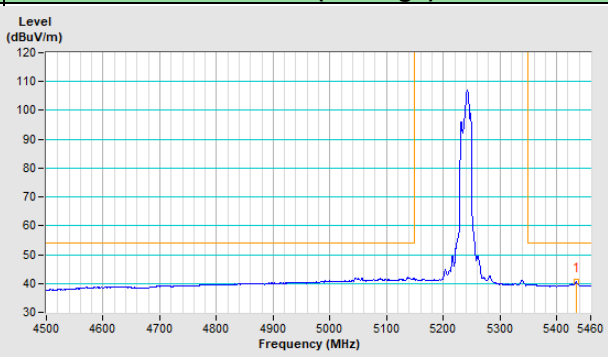


802.11ax (HE20) Channel 48

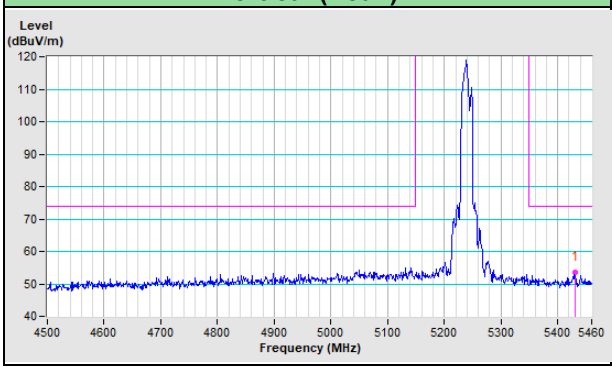
Horizontal (Peak)



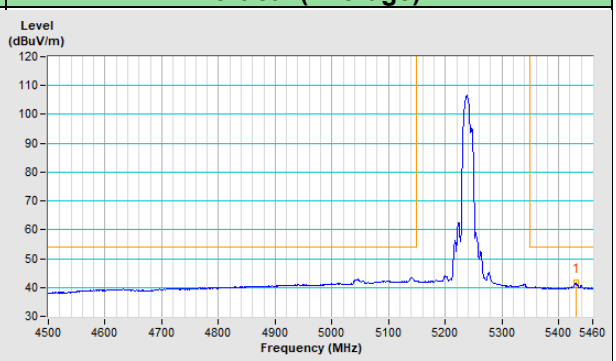
Horizontal (Average)



Vertical (Peak)

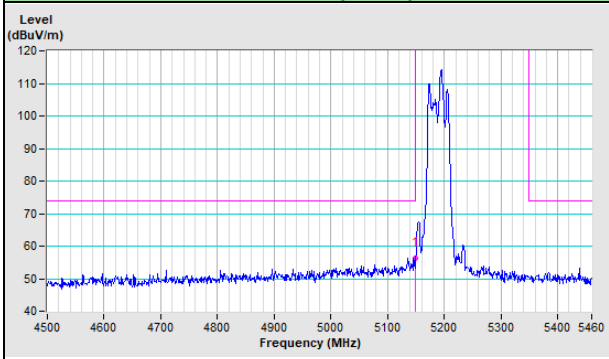


Vertical (Average)

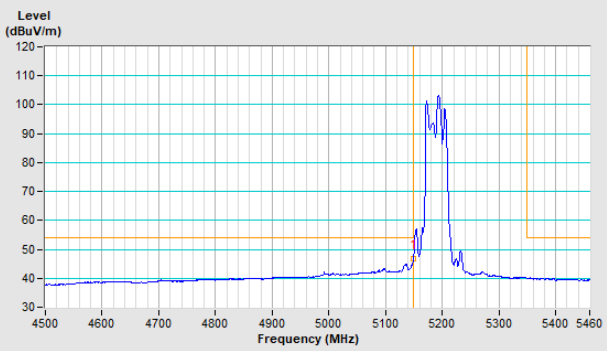


802.11ax (HE40) Channel 38

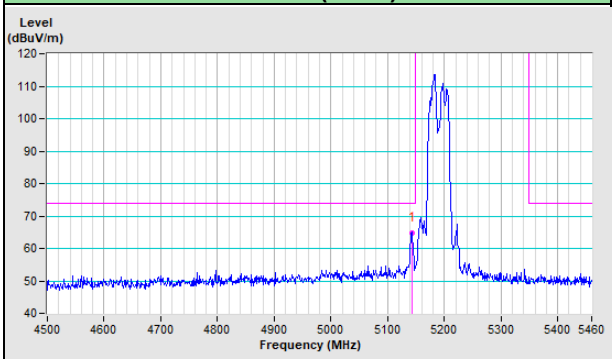
Horizontal (Peak)



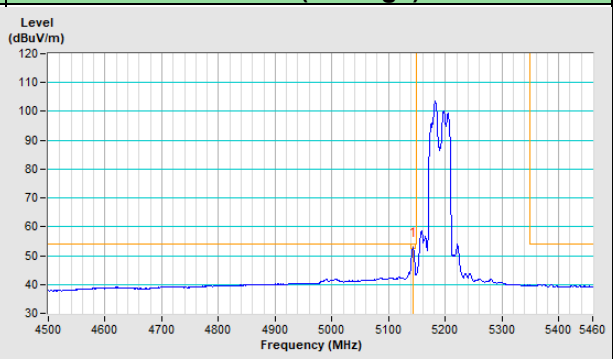
Horizontal (Average)



Vertical (Peak)

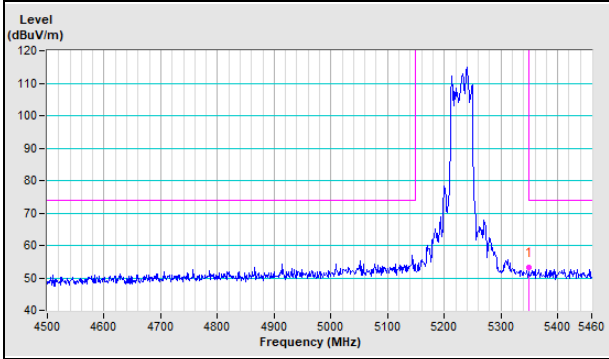


Vertical (Average)

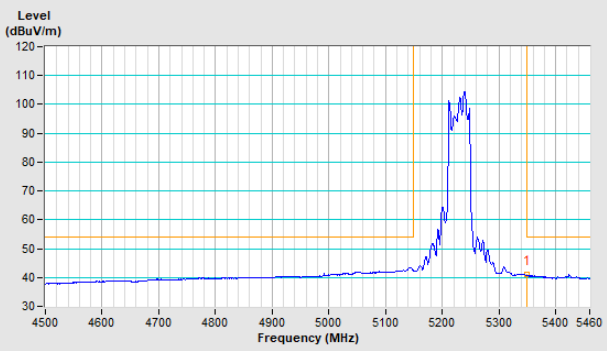


802.11ax (HE40) Channel 46

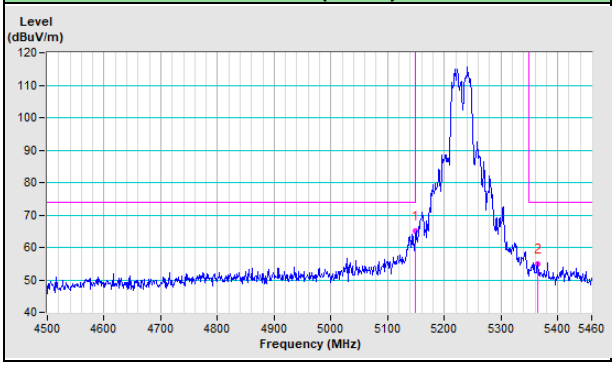
Horizontal (Peak)



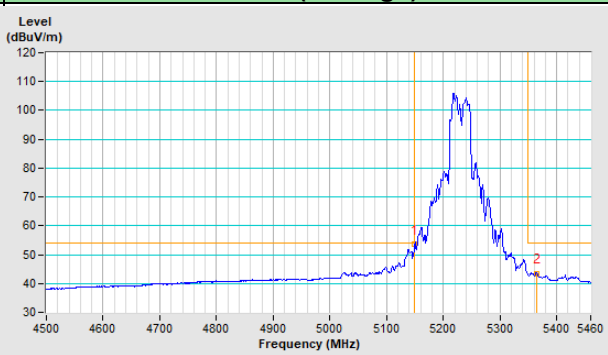
Horizontal (Average)

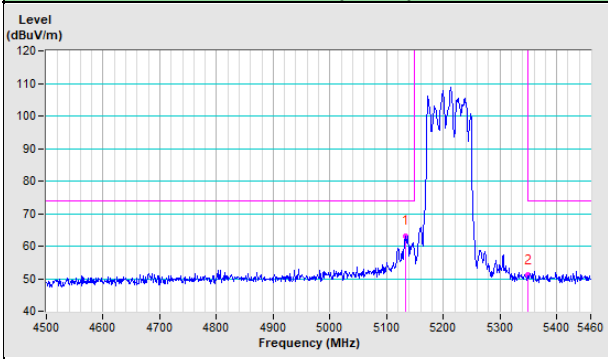
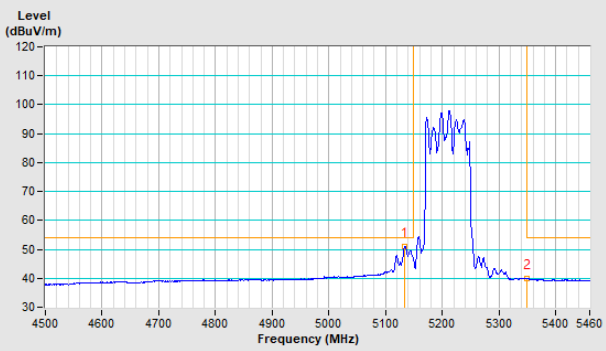
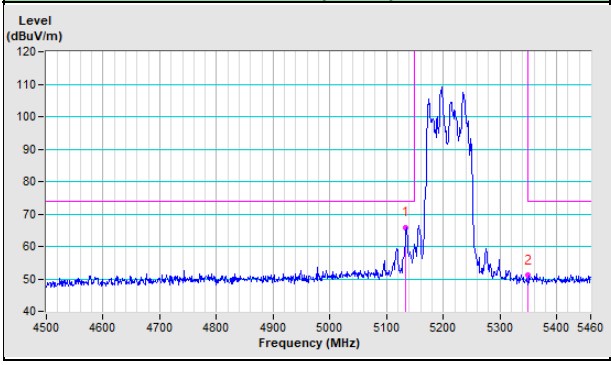
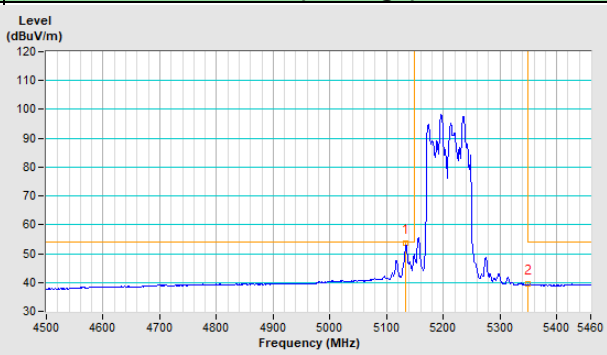


Vertical (Peak)



Vertical (Average)

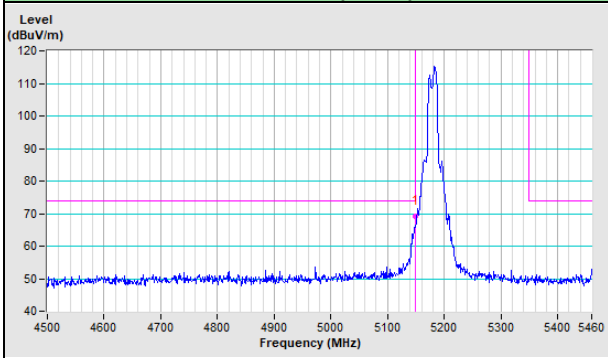


802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

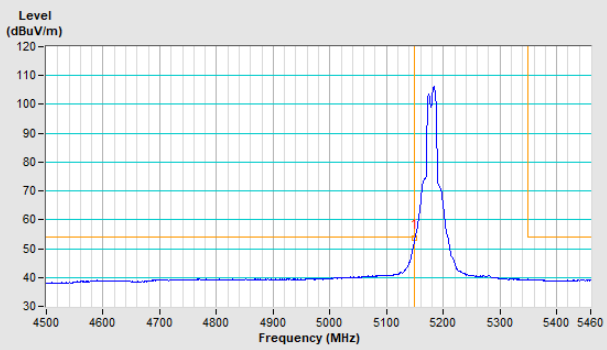
Annex B.2 - Band-Edge Measurement (For U-NII-1 band) (Mode 2)

802.11a Channel 36

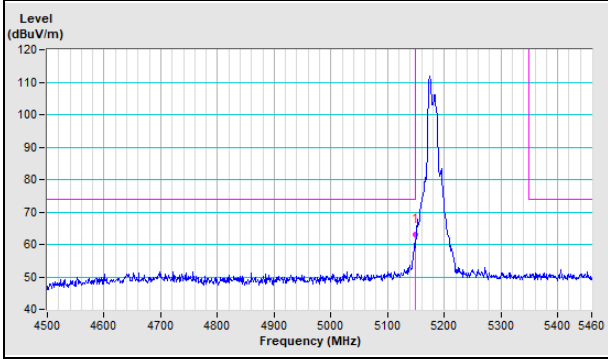
Horizontal (Peak)



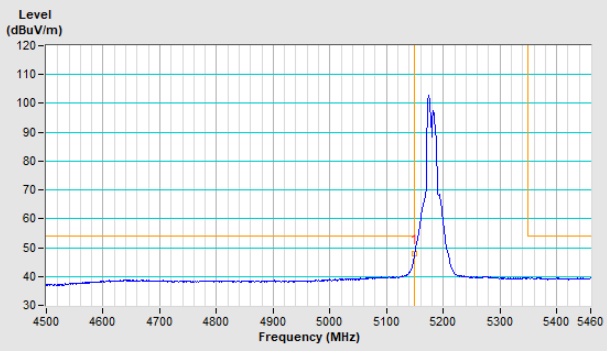
Horizontal (Average)



Vertical (Peak)

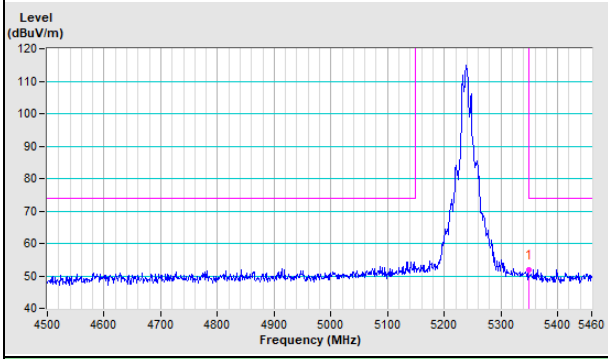


Vertical (Average)

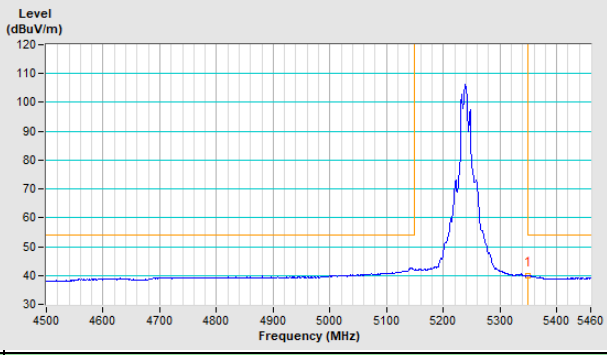


802.11a Channel 48

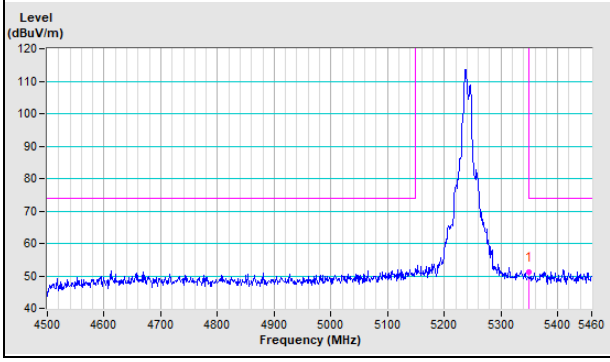
Horizontal (Peak)



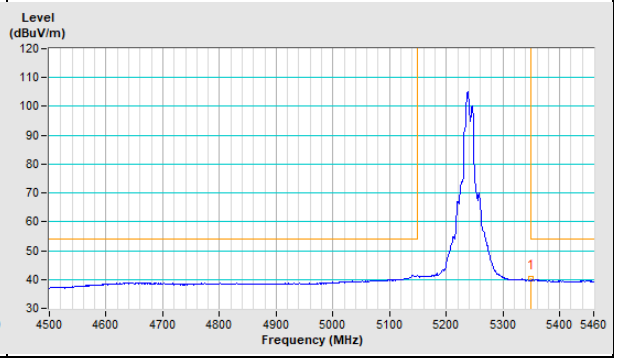
Horizontal (Average)



Vertical (Peak)

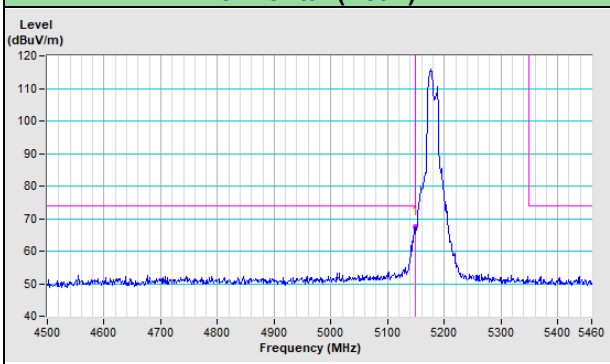


Vertical (Average)

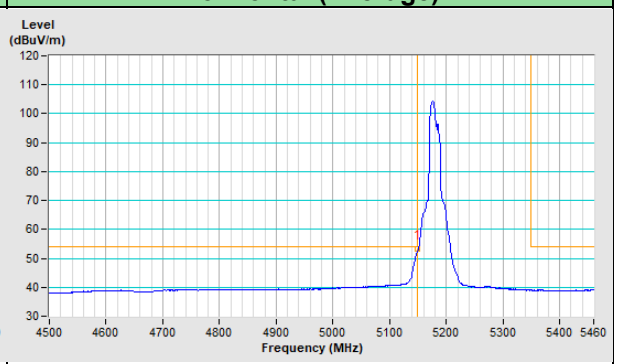


802.11ax (HE20) Channel 36

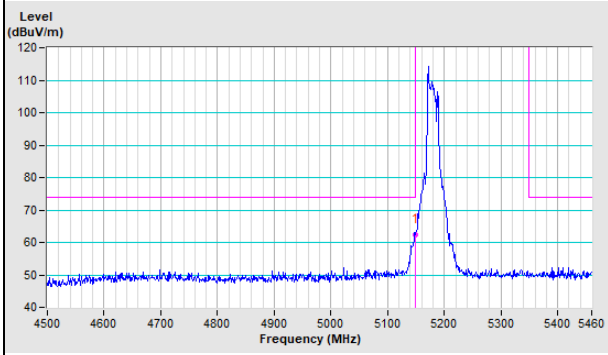
Horizontal (Peak)



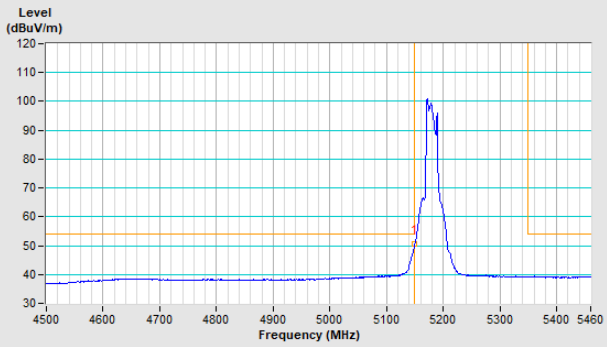
Horizontal (Average)



Vertical (Peak)

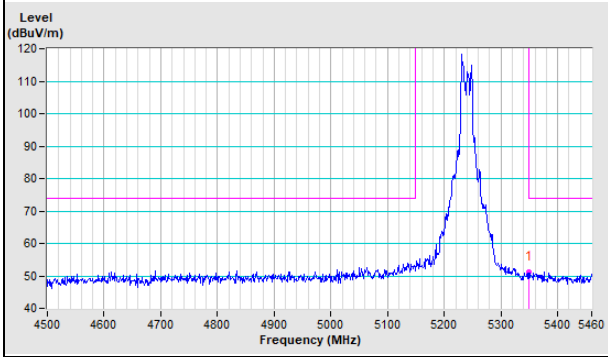


Vertical (Average)

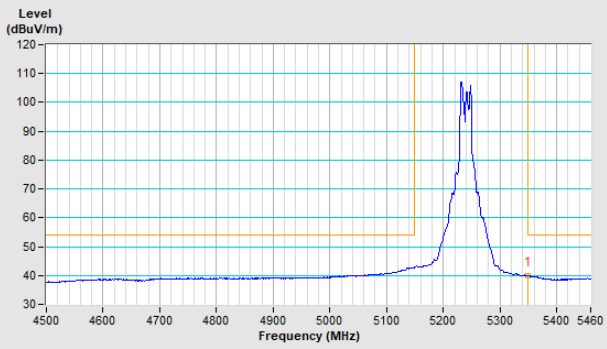


802.11ax (HE20) Channel 48

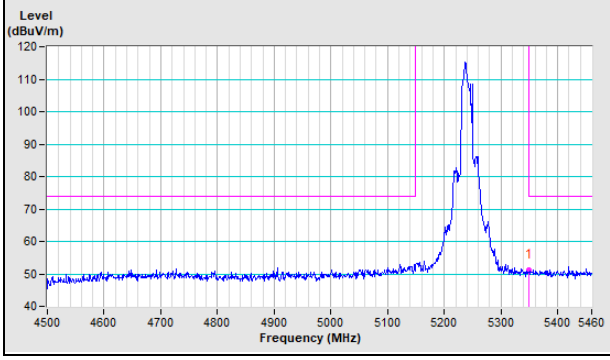
Horizontal (Peak)



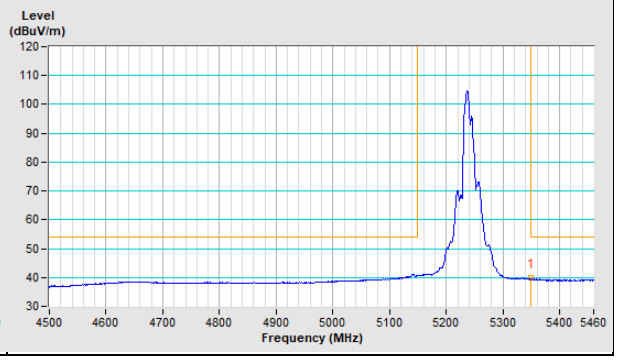
Horizontal (Average)



Vertical (Peak)

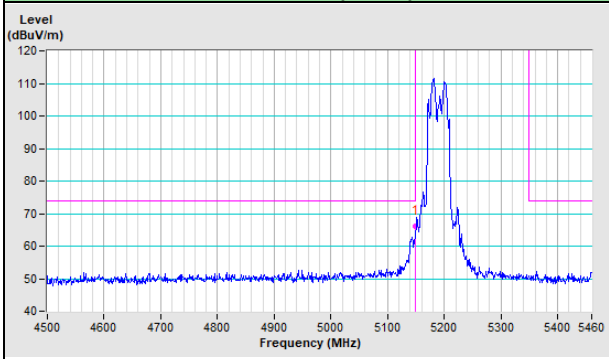


Vertical (Average)

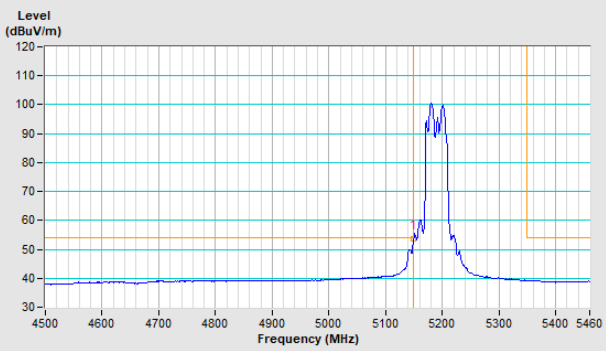


802.11ax (HE40) Channel 38

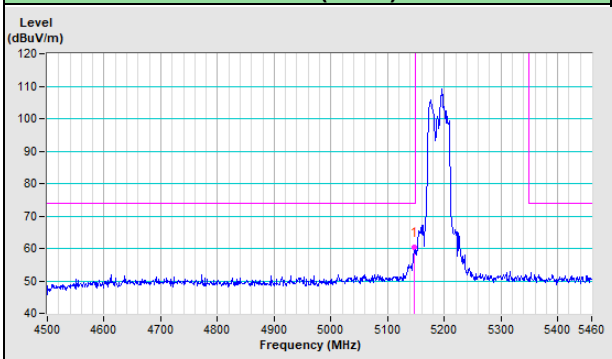
Horizontal (Peak)



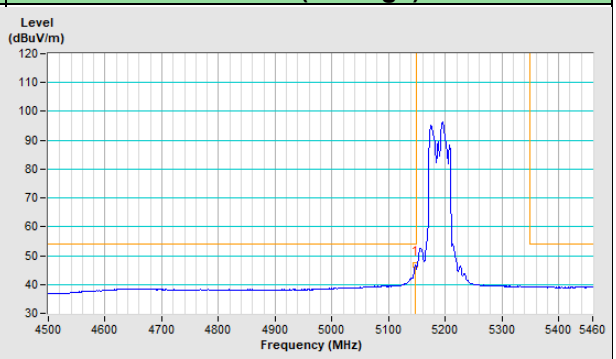
Horizontal (Average)



Vertical (Peak)

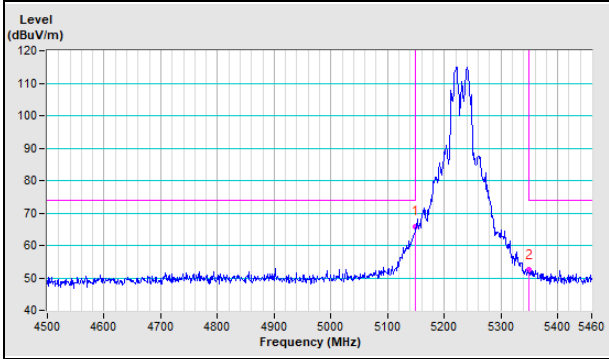


Vertical (Average)

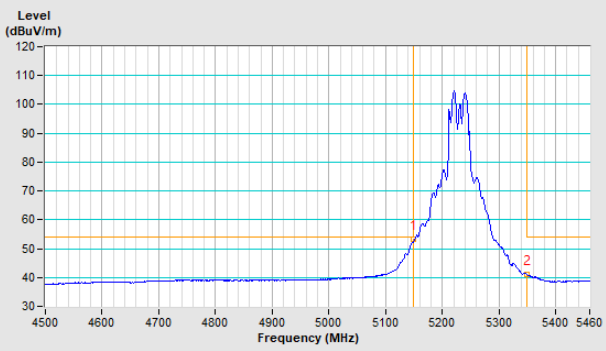


802.11ax (HE40) Channel 46

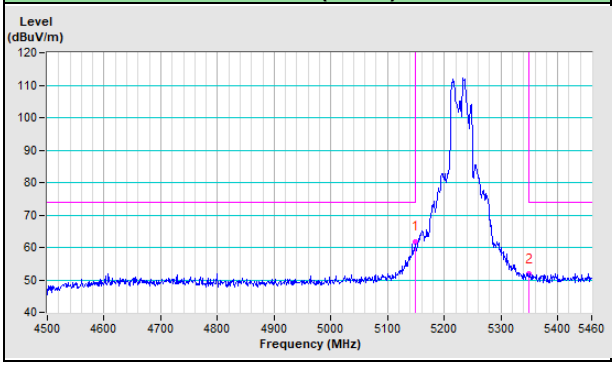
Horizontal (Peak)



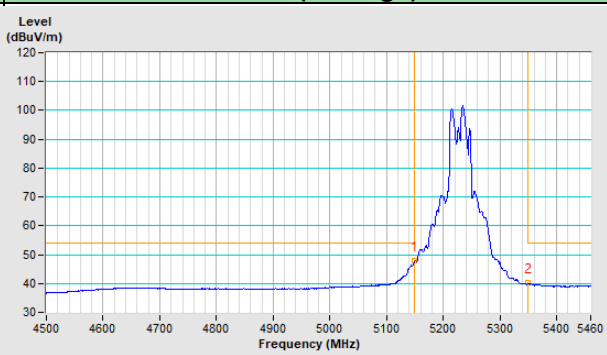
Horizontal (Average)

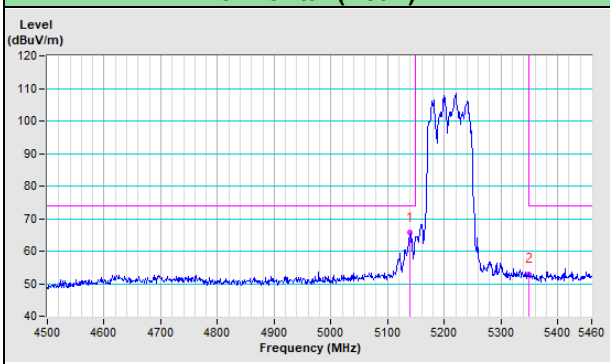
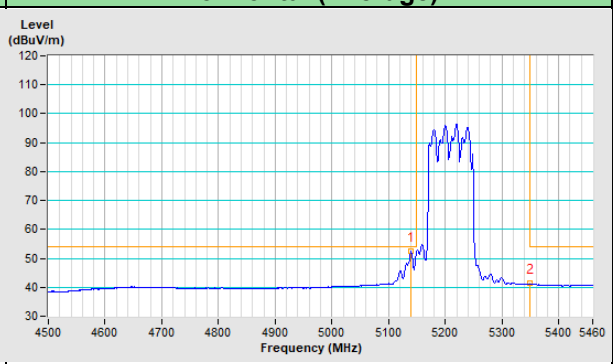
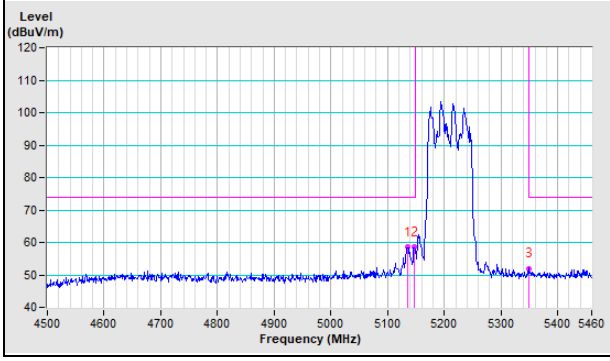
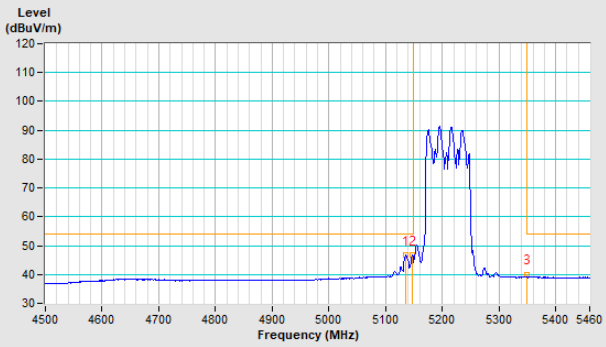


Vertical (Peak)



Vertical (Average)

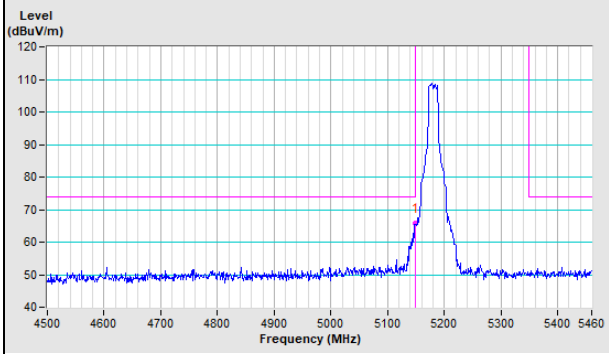


802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

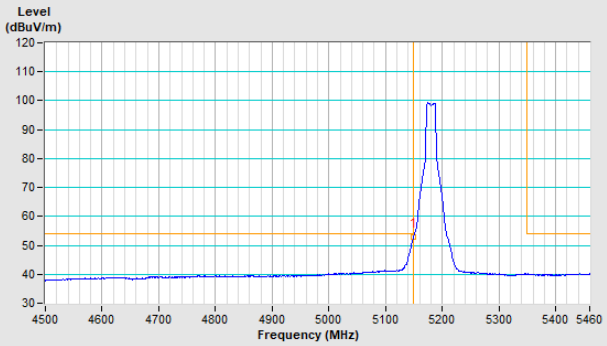
Annex B.3 - Band-Edge Measurement (For U-NII-1 band) (Mode 3)

802.11a Channel 36

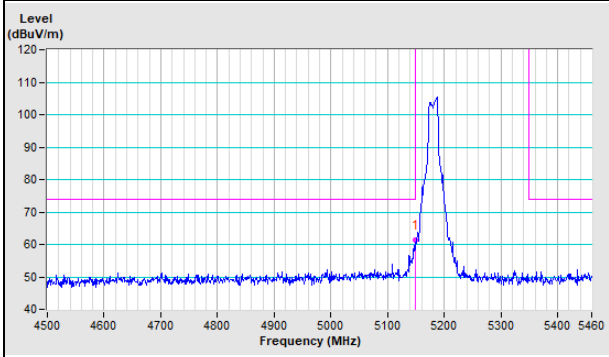
Horizontal (Peak)



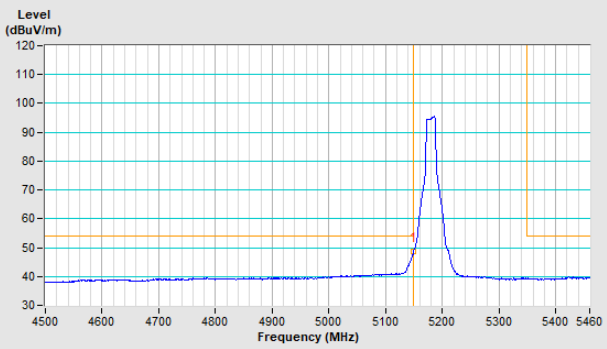
Horizontal (Average)



Vertical (Peak)

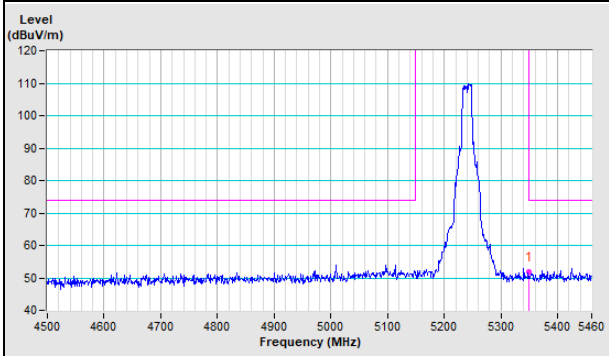


Vertical (Average)

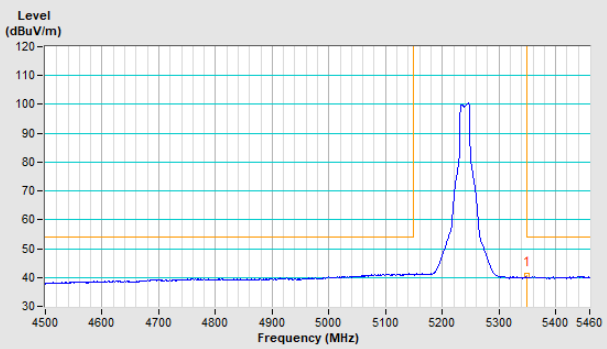


802.11a Channel 48

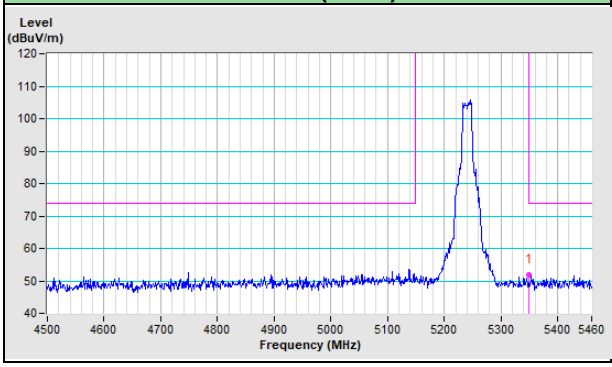
Horizontal (Peak)



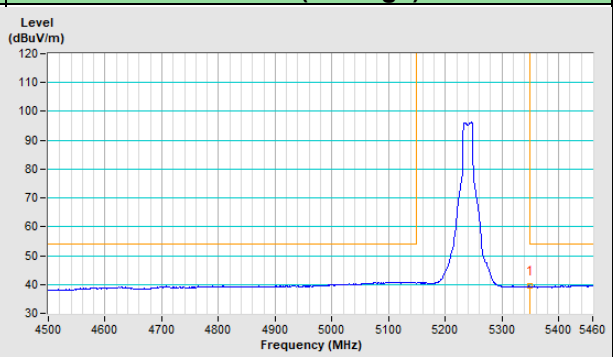
Horizontal (Average)



Vertical (Peak)

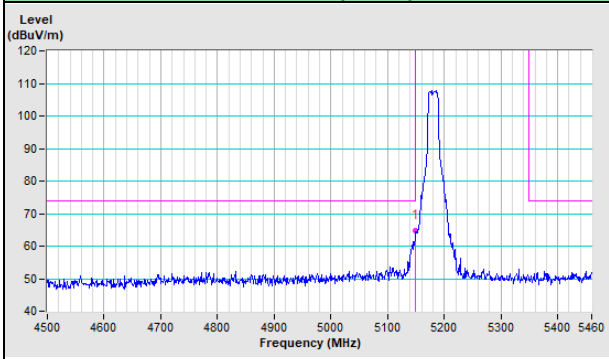


Vertical (Average)

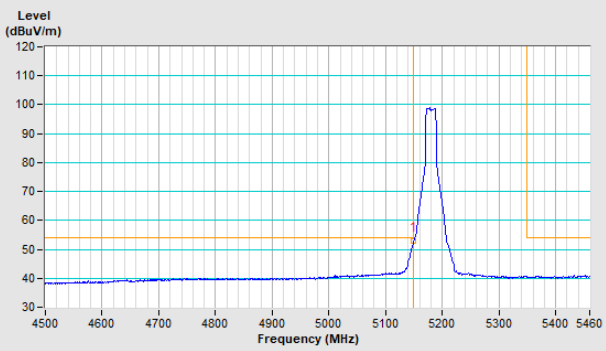


802.11ax (HE20) Channel 36

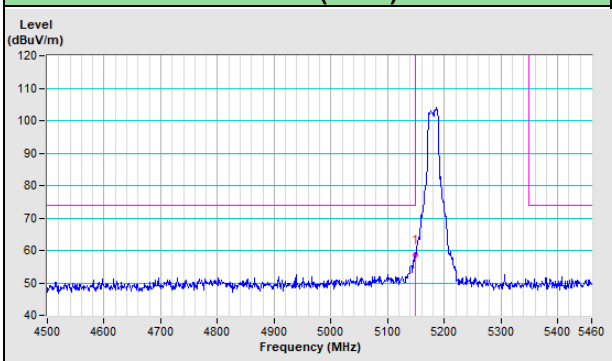
Horizontal (Peak)



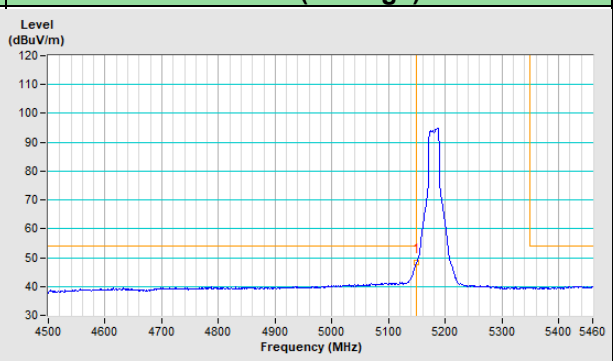
Horizontal (Average)



Vertical (Peak)

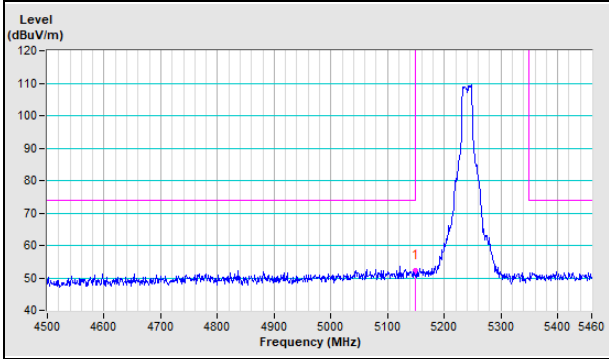


Vertical (Average)

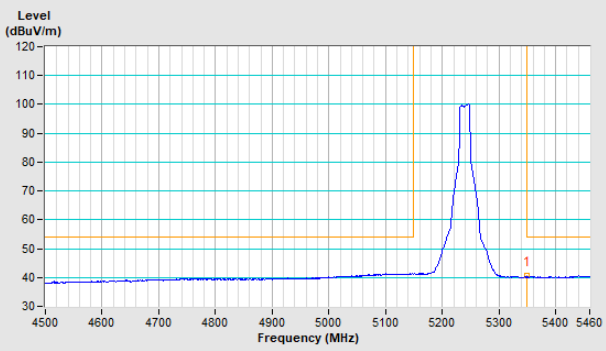


802.11ax (HE20) Channel 48

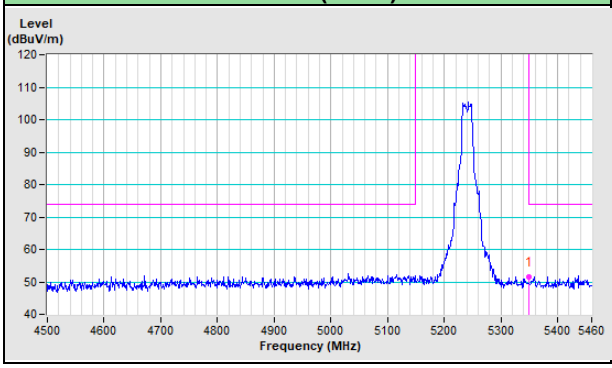
Horizontal (Peak)



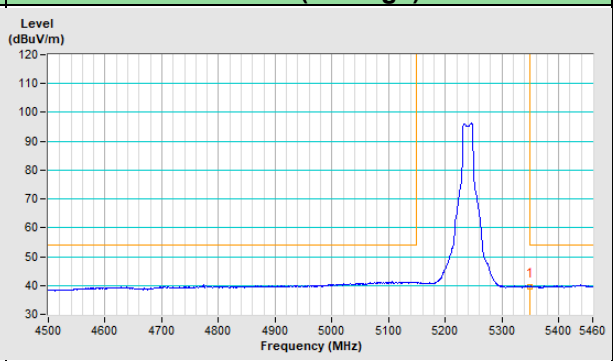
Horizontal (Average)



Vertical (Peak)

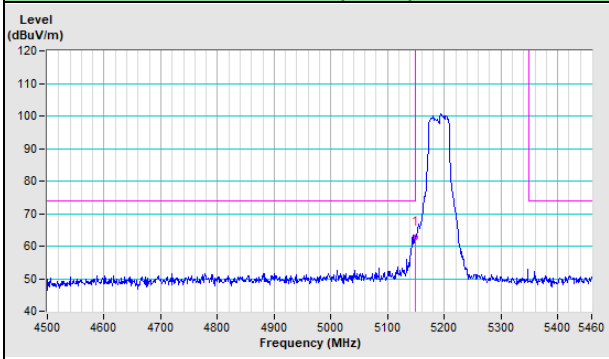


Vertical (Average)

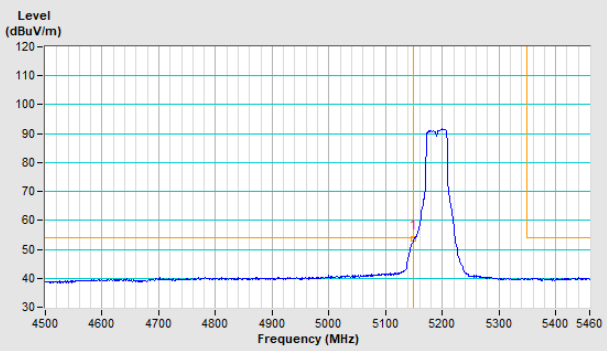


802.11ax (HE40) Channel 38

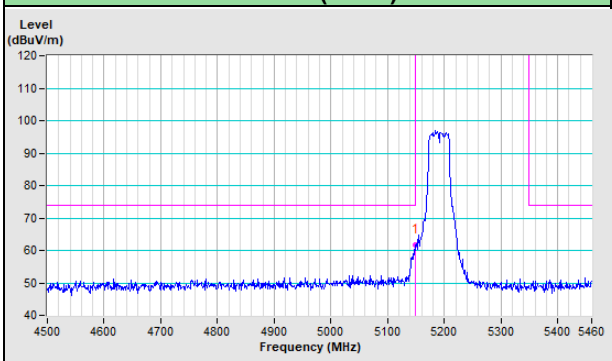
Horizontal (Peak)



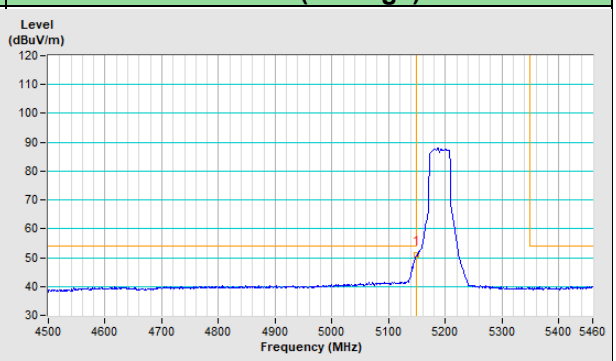
Horizontal (Average)



Vertical (Peak)

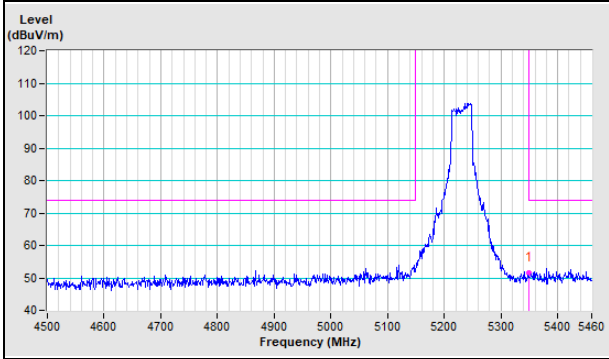


Vertical (Average)

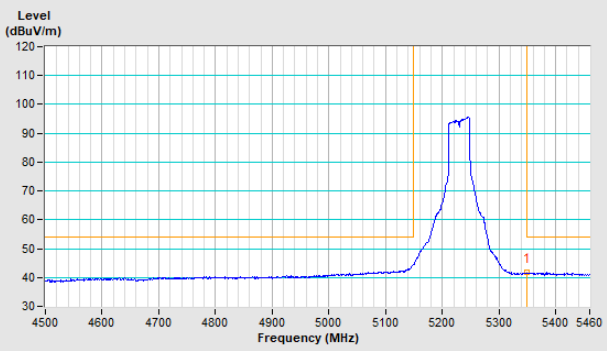


802.11ax (HE40) Channel 46

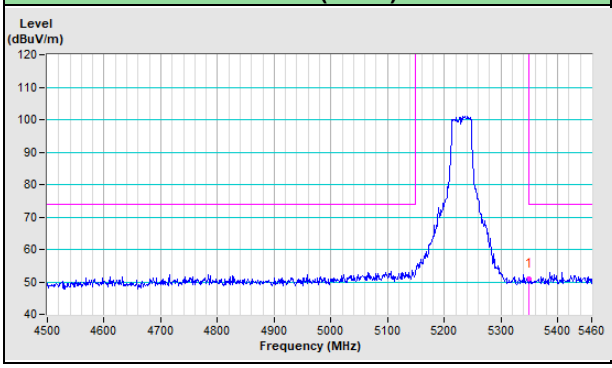
Horizontal (Peak)



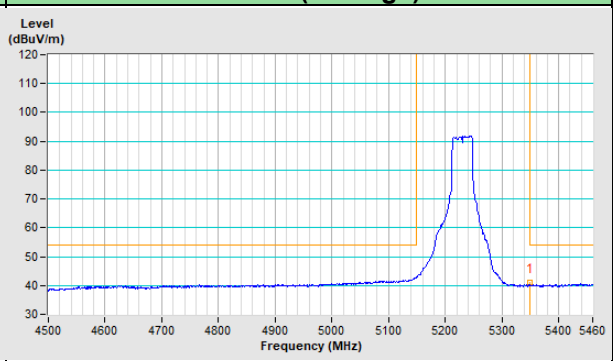
Horizontal (Average)

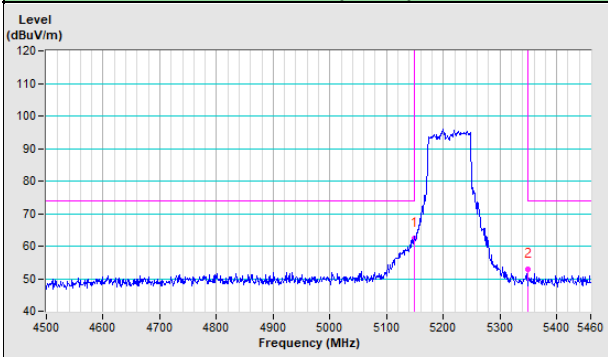
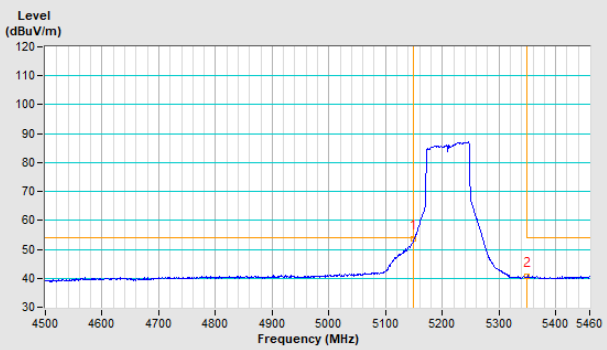
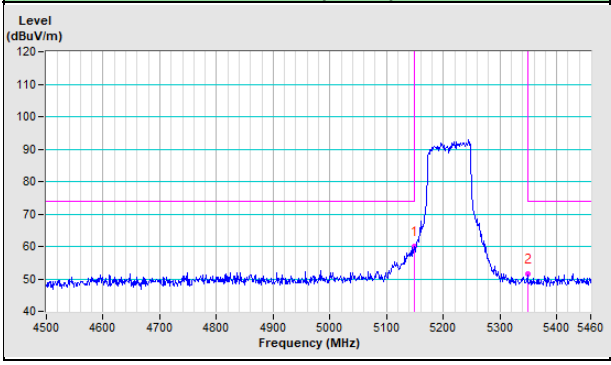
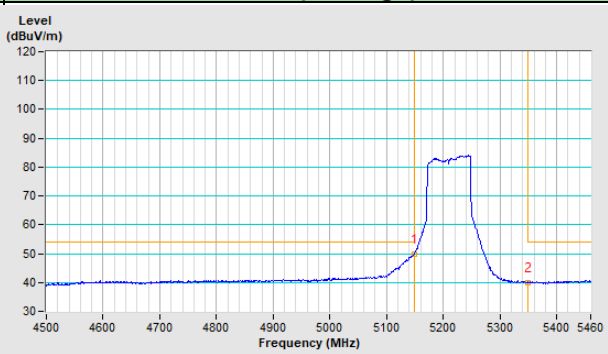


Vertical (Peak)



Vertical (Average)



802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

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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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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