FCC Test Report

Report No.:	RFBBQZ-WTW-P20070219-1
FCC ID:	PY320100478
Test Model:	RAX70
Series Mode:	RAX78 (refer to item 3.1 for more details)
Received Date:	Jul. 10, 2020
Test Date:	Jul.14 ~ Jul. 31, 2020
Issued Date:	Aug. 26, 2020
Applicant:	NETGEAR, INC.
Address:	350 East Plumeria Drive, San Jose, CA 95134, USA
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN
FCC Registration / Designation Number:	788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P20070219-1	Original release	Aug. 26, 2020

1 Certificate of Conformity

Product:	NIGHTHAWK ® AX8 8-Stream Tri-Band AX WiFi Router (refer to item 3.1 for more details)
Brand:	NETGEAR
Test Model:	RAX70
Series Mode:	RAX78 (refer to item 3.1 for more details)
Sample Status:	Engineering sample
Applicant:	NETGEAR, INC.
Test Date:	Jul.14 ~ Jul. 31, 2020
Standards:	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 RF characteristics under the conditions specified in this report.

Prepared by : Polly Chien , **Date:** Aug. 26, 2020

Polly Chien / Specialist

Approved by : Bruce Chen , **Date:** Aug. 26, 2020

Bruce Chen / Senior Project Engineer

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 -16.26dB at 0.41588MHz.
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 -0.1dB at 5150.00MHz.
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 not a standard connector.

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.
3. For U-NII-1, U-NII-2A and U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.

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	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.64 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	NIGHTHAWK ® AX8 8-Stream Tri-Band AX WiFi Router (refer to note for more details)
Brand	NETGEAR
Test Model	RAX70
Series Model	RAX78
Model Difference	Refer to note for more details
Sample Status	Engineering sample
Power Supply Rating	12Vdc (adapter)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/HT40): up to 600Mbps 802.11ac (VHT20/VHT40/VHT80/VHT160): up to 4333Mbps 802.11ax (HE20/HE40/HE80/HE160): up to 4804Mbps
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5260 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5500 ~ 5720MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 802.11ac (VHT160), 802.11ax (HE160): 1 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1

Output Power	CDD Mode: 5180 ~ 5240MHz: 828.430mW 5260 ~ 5320MHz: 225.593mW 5500 ~ 5720MHz: 215.338mW 5745 ~ 5825MHz: 843.465mW Beamforming Mode: 5180 ~ 5240MHz: 803.584mW 5260 ~ 5320MHz: 219.932mW 5500 ~ 5720MHz: 181.039mW 5745 ~ 5825MHz: 843.465mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter
Cable Supplied	1.95m non-shielded LAN cable without core

Note:

1. All models are electrically identical and the software firmware are the same as well. Model: RAX70 is the representative for final test.

Brand	Model	Product Name	RF module	Difference
NETGEAR	RAX70	NIGHTHAWK ® AX8 8-Stream Tri-Band AX WiFi Router	RF module 1	2.4G and 5G modulation supports 16 QAM / 64 QAM / 256 QAM / 1024 QAM, QPSK, BPSK.
			RF module 2	
	RAX78	NIGHTHAWK ® AX8 8-Stream Tri-Band AX WiFi Router	RF module 1	2.4G and 5G low band modulation supports 16 QAM / 64 QAM / 256QAM, QPSK, BPSK.
			RF module 2	

2. The EUT incorporates a MIMO function.

Band	Modulation Mode	TX Function	Beamforming
5GHz Band 1, 2	802.11a	2TX	Not Support
	802.11n (HT20)	2TX	Support
	802.11n (HT40)	2TX	Support
	802.11ac (VHT20)	2TX	Support
	802.11ac (VHT40)	2TX	Support
	802.11ac (VHT80)	2TX	Support
	802.11ax (HE20)	2TX	Support
	802.11ax (HE40)	2TX	Support
	802.11ax (HE80)	2TX	Support

Band	Modulation Mode	TX Function	Beamforming
5GHz Band 3	802.11a	4TX	Not Support
	802.11n (HT20)	4TX	Support
	802.11n (HT40)	4TX	Support
	802.11ac (VHT20)	4TX	Support
	802.11ac (VHT40)	4TX	Support
	802.11ac (VHT80)	4TX	Support
	802.11ac (VHT160)	4TX	Support
	802.11ax (HE20)	4TX	Support
	802.11ax (HE40)	4TX	Support
	802.11ax (HE80)	4TX	Support
	802.11ax (HE160)	4TX	Support
5GHz Band 4	802.11a	4TX	Not Support
	802.11n (HT20)	4TX	Support
	802.11n (HT40)	4TX	Support
	802.11ac (VHT20)	4TX	Support
	802.11ac (VHT40)	4TX	Support
	802.11ac (VHT80)	4TX	Support
	802.11ax (HE20)	4TX	Support
	802.11ax (HE40)	4TX	Support
	802.11ax (HE80)	4TX	Support

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40/VHT80/VHT160 on 802.11ac mode and HE20/HE40/HE80/HE160 on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

* For 802.11n/ax, CDD mode and Beamforming mode are presented in power output test item.

3. The following antenna was provided to the EUT.

Ant. Type	Dipole				
Connecter Type	I-PEX				
Directional Antenna Gain (dBi)					
Frequency	2.4G	5G Band 1	5G Band 2	5G Band 3	5G Band 4
-	4.15	6.18	6.11	7.38	6.61

*For detailed antenna information, please refer to the antenna report.

*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.

4. The EUT has two different solutions by thermal pad on PCB, and the Option A was the worst case for final test.

Option	Solution	Remark
Option A	PCB with thermal pad	Different size.
Option B		

5. The EUT consumes power from the following adapters.

Adapter 1	
Brand	NETGEAR
Model	AD2150F10
P/N	332-11494-01
Input Power	100-120Vac, 50-60Hz, 1.0A
Output Power	12Vdc, 3.5A
Power Line	1.8m non-shielded power cable without core

Adapter 2	
Brand	NETGEAR
Model	ADS-45FI-12 12042EPCU-L ADS-45FI-12 12042EPC-L
P/N	332-11526-01
Input Power	100-120Vac, 60Hz Max. 1.5A
Output Power	12Vdc, 3.5A
Power Line	1.78m non-shielded power cable without core

*Adapter 1 & 2 are identical to each other, therefore only adapter 1 was for final test and presented in the test report.

6. WLAN 2.4GHz & WLAN 5GHz technology can transmit at same time.

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	5210MHz

For 5260 ~ 5320MHz:

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

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

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

Channel	Frequency
58	5290MHz

For 5500 ~ 5720MHz:

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

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

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

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

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

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

1 channels are provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570 MHz

For 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

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

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

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

Where RE≥1G: Radiated Emission above 1GHz & Bandedge Measurement RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission APCM: Antenna Port Conducted Measurement

Note:

1. The EUT had been pre-tested on the positioned of each 2 axis (X-plane & Z-plane). The worst case was found when positioned on **X-plane**.
2. Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.

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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	6.0	2TX
	802.11ax (HE20)		36 to 48	36, 44, 48	OFDMA	MCS0	2TX
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	2TX
	802.11ax (HE80)		42	42	OFDMA	MCS0	2TX
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	2TX
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0	2TX
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0	2TX
	802.11ax (HE80)		58	58	OFDMA	MCS0	2TX
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0	4TX
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0	4TX
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0	4TX
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0	4TX
	802.11ax (HE160)		114	114	OFDMA	MCS0	4TX
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	4TX
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	4TX
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	4TX
	802.11ax (HE80)		155	155	OFDMA	MCS0	4TX

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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240 5260-5320	36 to 48 52 to 64	44	OFDM	6.0	2TX
-	802.11ax (HE20)	5500-5720 5745-5825	100 to 144 149 to 165	149	OFDMA	MCS0	4TX

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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240 5260-5320	36 to 48 52 to 64	44	OFDM	6.0	2TX
-	802.11ax (HE20)	5500-5720 5745-5825	100 to 144 149 to 165	149	OFDMA	MCS0	4TX

Conducted Emission 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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	6.0	2TX
	802.11ac (VHT20)		36 to 48	36, 44, 48	OFDM	7.2	2TX
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	15.0	2TX
	802.11ac (VHT80)		42	42	OFDM	29.3	2TX
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	2TX
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	2TX
	802.11ax (HE80)		42	42	OFDMA	MCS0	2TX
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	2TX
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	7.2	2TX
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	15.0	2TX
	802.11ac (VHT80)		58	58	OFDM	29.3	2TX
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0	2TX
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0	2TX
	802.11ax (HE80)		58	58	OFDMA	MCS0	2TX
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0	4TX
	802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	7.2	4TX
	802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	15.0	4TX
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3	4TX
	802.11ac (VHT160)		114	114	OFDM	58.5	4TX
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0	4TX
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0	4TX
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0	4TX
	802.11ax (HE160)		114	114	OFDMA	MCS0	4TX
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	4TX
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	7.2	4TX
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	15.0	4TX
	802.11ac (VHT80)		155	155	OFDM	29.3	4TX
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	4TX
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	4TX
	802.11ax (HE80)		155	155	OFDMA	MCS0	4TX

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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	6.0	2TX
	802.11ax (HE20)		36 to 48	36, 44, 48	OFDMA	MCS0	2TX
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	2TX
	802.11ax (HE80)		42	42	OFDMA	MCS0	2TX
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	2TX
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0	2TX
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0	2TX
	802.11ax (HE80)		58	58	OFDMA	MCS0	2TX
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0	4TX
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0	4TX
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0	4TX
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0	4TX
	802.11ax (HE160)		114	114	OFDMA	MCS0	4TX
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	4TX
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	4TX
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	4TX
	802.11ax (HE80)		155	155	OFDMA	MCS0	4TX

Test Condition:

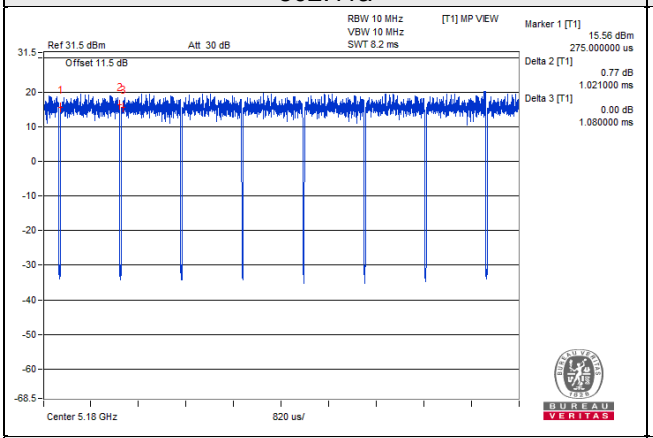
Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 70% RH	120Vac, 60Hz	Noah Chang
RE<1G	23 deg. C, 66% RH	120Vac, 60Hz	Adair Peng
PLC	25 deg. C, 75% RH	120Vac, 60Hz	Noah Chang
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Chris Lin

3.3 Duty Cycle of Test Signal

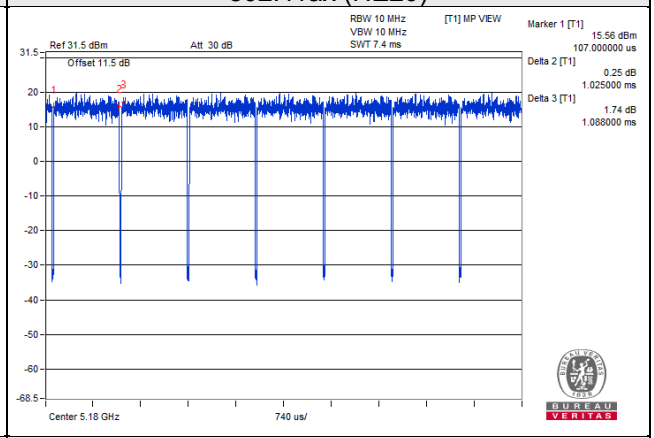
Duty cycle of test signal is ≥ 98%, duty factor is not required.
Duty cycle of test signal is < 98%, duty factor is required.

For 5180 ~ 5240MHz, 5260 ~ 5320MHz:
802.11a: Duty cycle = 1.021/1.080 = 0.945, Duty factor = 10 * log(1/0.945) = 0.24
802.11ax (HE20): Duty cycle = 1.025/1.088 = 0.942, Duty factor = 10 * log(1/0.942) = 0.26
802.11ax (HE40): Duty cycle = 0.549/0.599 = 0.917, Duty factor = 10 * log(1/0.917) = 0.38
802.11ax (HE80): Duty cycle = 0.234/0.282 = 0.830, Duty factor = 10 * log(1/0.830) = 0.81

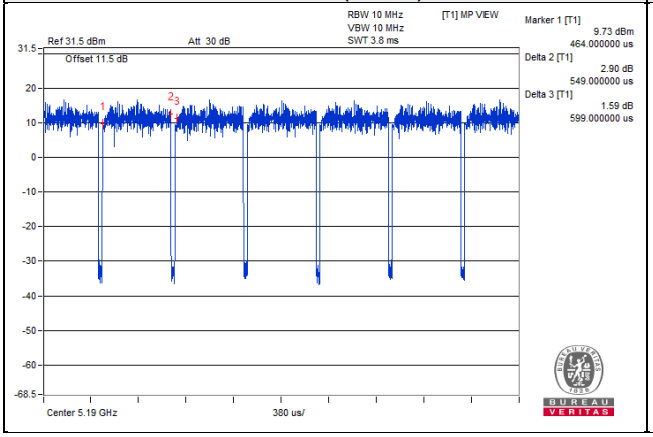
802.11a



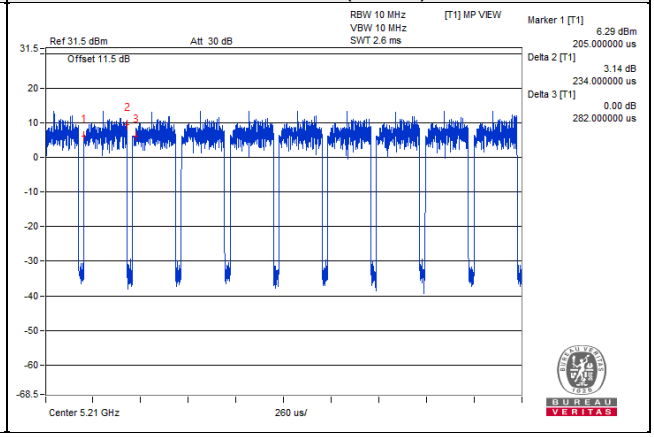
802.11ax (HE20)



802.11ax (HE40)

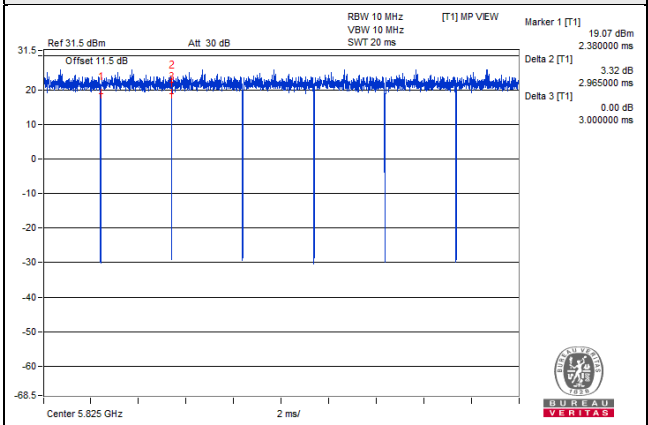


802.11ax (HE80)

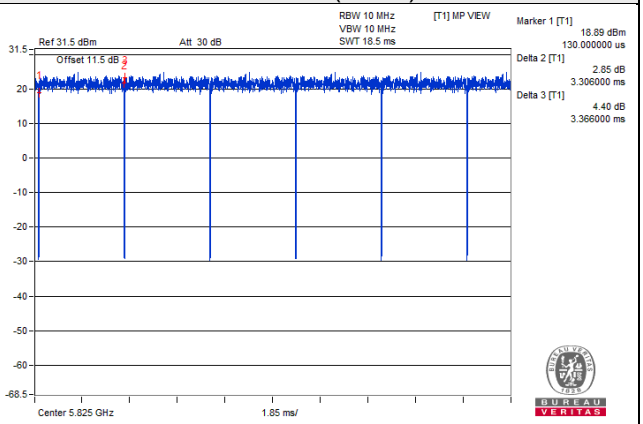


For 5500 ~ 5720MHz, 5745 ~ 5825MHz:
802.11a: Duty cycle = 2.965/3.000 = 0.988
802.11ax (HE20): Duty cycle = 3.306/3.366 = 0.982
802.11ax (HE40): Duty cycle = 2.486/2.530 = 0.983
802.11ax (HE80): Duty cycle = 2.457/2.503 = 0.982
802.11ax (HE160): Duty cycle = 0.233/0.267 = 0.873, Duty factor = 10 * log(1/0.873) = 0.59

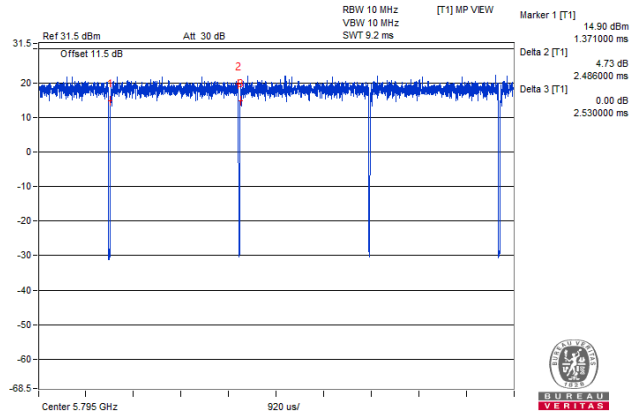
802.11a



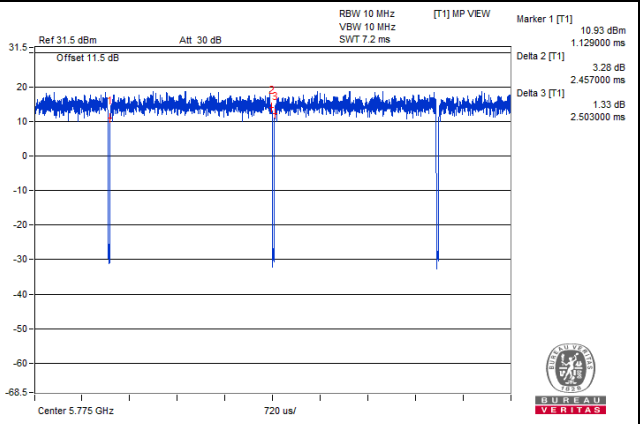
802.11ax (HE20)



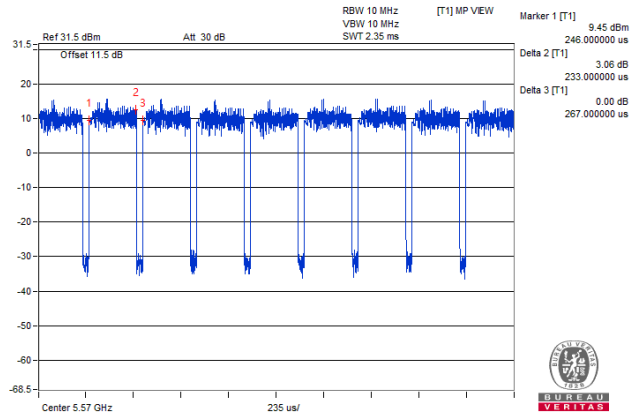
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



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.

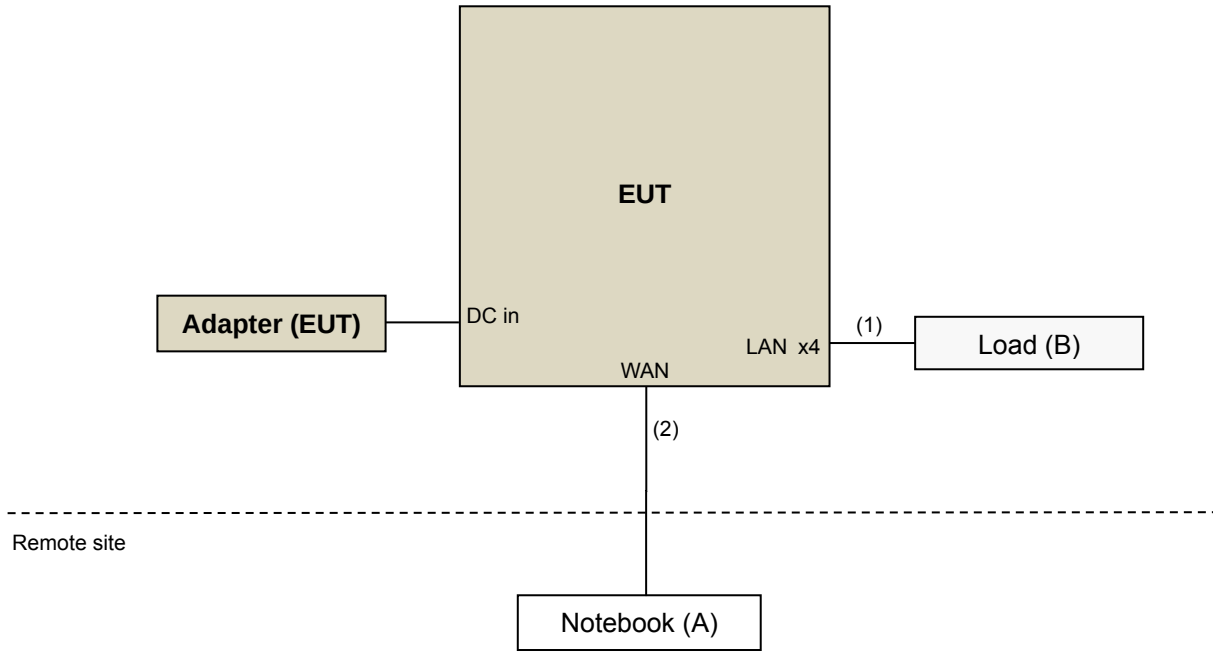
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	Load	NA	NA	NA	NA	-

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	4	1.5	N	0	Provided by Lab RJ45, Cat5e
2.	LAN cable	1	7	N	0	Provided by Lab RJ45, Cat5e

3.4.1 Configuration of System under 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

<table>
<tr><td colspan="3">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="3" rowspan="2">789033 D02 General UNII Test Procedure New Rules v02r01</td><td colspan="2">Field Strength at 3m</td></tr>
<tr><td>PK: 74 (dBμV/m)</td><td>AV: 54 (dBμV/m)</td></tr>
<tr><td>Frequency Band</td><td colspan="2">Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3m</td></tr>
<tr><td>5150~5250 MHz</td><td colspan="2">15.407(b)(1)</td><td rowspan="3">PK: -27 (dBm/MHz)</td><td rowspan="3">PK: 68.2(dBμV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td colspan="2">15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td colspan="2">15.407(b)(3)</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>☒</td><td>15.407(b)(4)(i)</td><td>PK: -27 (dBm/MHz) *1
PK: 10 (dBm/MHz) *2
PK: 15.6 (dBm/MHz) *3
PK: 27 (dBm/MHz) *4</td><td>PK: 68.2(dBμV/m) *1
PK: 105.2 (dBμV/m) *2
PK: 110.8(dBμV/m) *3
PK: 122.2 (dBμV/m) *4</td></tr>
<tr><td>☐</td><td>15.407(b)(4)(ii)</td><td colspan="2">Emission limits in section 15.247(d)</td></tr>
<tr><td colspan="5">*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.</td></tr>
</table>

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2019	Dec. 30, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 23, 2019	Sep. 22, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jun. 08, 2020	Jun. 07, 2021
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 08, 2020	Jun. 07, 2021
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 08, 2020	Jun. 07, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 08, 2020	Jun. 07, 2021
Software BV ADT	ADT_Radiated_V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 05, 2019	Sep. 04, 2020
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190004/MY55190007/MY55210005	Jul. 13, 2020	Jul. 12, 2021

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 HwaYa Chamber 4.

4.1.3 Test Procedures

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 detect 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. (For 5180 ~ 5240MHz, 5260 ~ 5320MHz: 802.11a: RBW = 1MHz, VBW = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 3kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 10kHz) (For 5500 ~ 5720MHz, 5745 ~ 5825MHz: 802.11a: RBW = 1MHz, VBW = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE160): RBW = 1MHz, VBW = 10kHz)

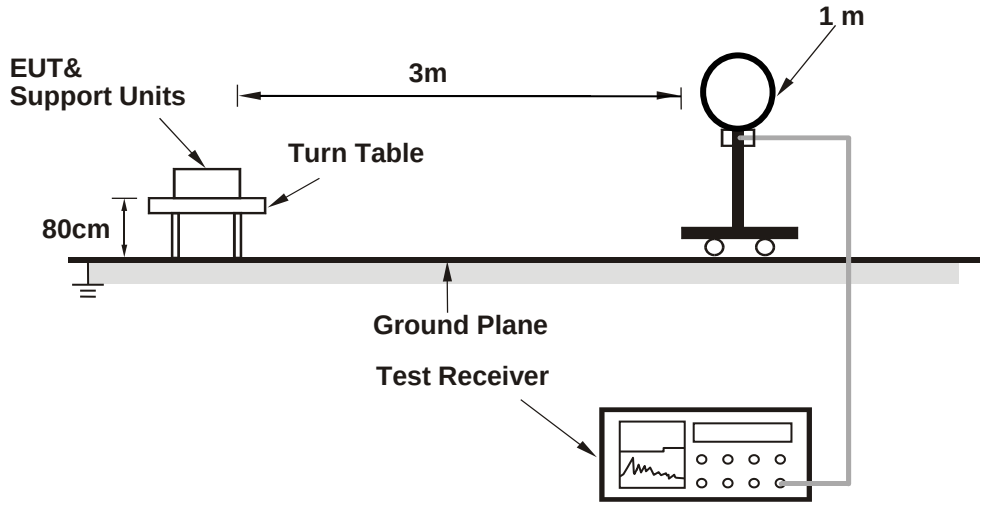
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

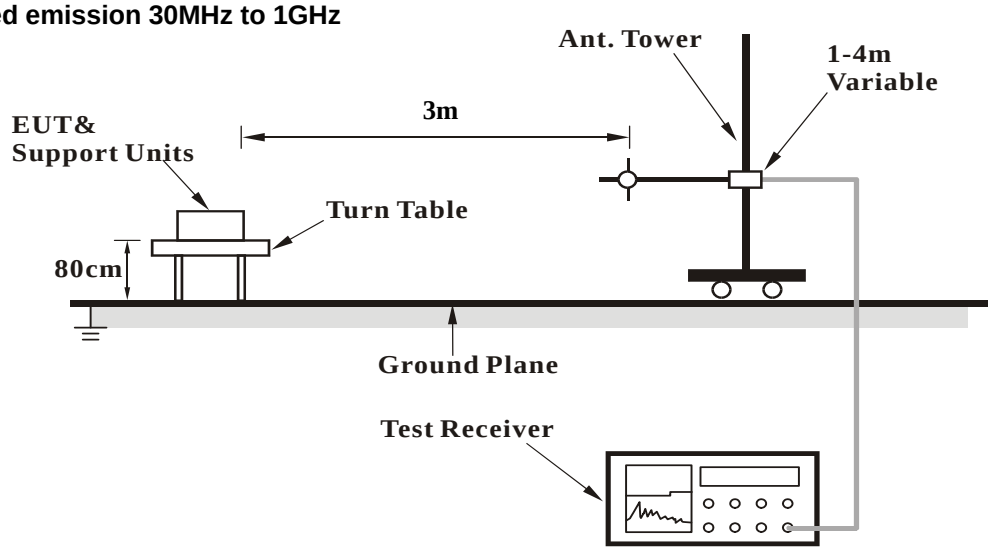
No deviation.

4.1.5 Test Setup

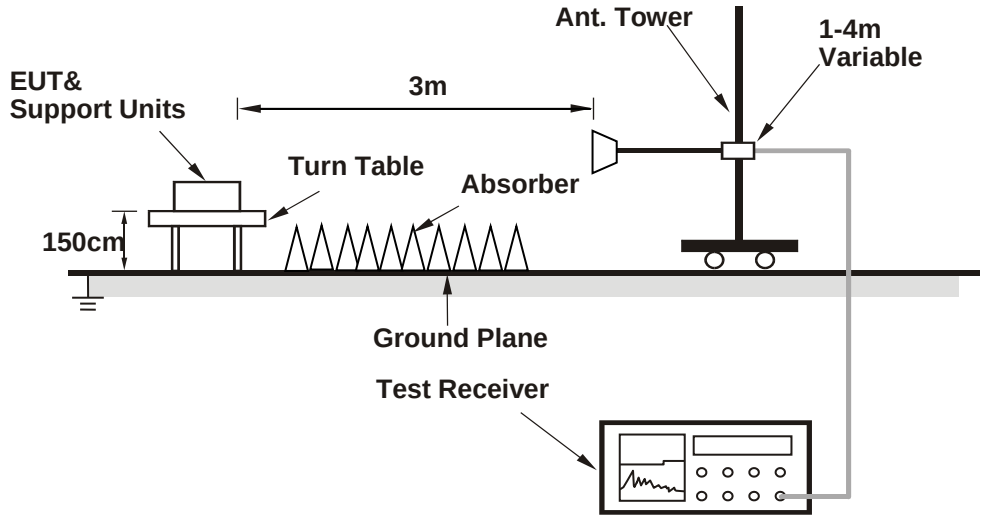
For Radiated emission below 30MHz



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 Conditions

a. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.3 PK	74.0	-15.7	1.05 H	2	47.8	10.5
2	5150.00	44.3 AV	54.0	-9.7	1.05 H	2	33.8	10.5
3	*5180.00	105.6 PK			1.05 H	2	66.0	39.6
4	*5180.00	96.9 AV			1.05 H	2	57.3	39.6
5	#10360.00	59.6 PK	68.2	-8.6	2.88 H	155	38.5	21.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	70.3 PK	74.0	-3.7	1.00 V	322	59.8	10.5
2	5150.00	53.8 AV	54.0	-0.2	1.00 V	322	43.3	10.5
3	*5180.00	115.2 PK			1.00 V	322	75.6	39.6
4	*5180.00	107.1 AV			1.00 V	322	67.5	39.6
5	#10360.00	58.7 PK	68.2	-9.5	2.15 V	200	37.6	21.1

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.

CHANNEL	TX Channel 44	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5220.00	108.3 PK			1.00 H	15	68.9	39.4
2	*5220.00	99.8 AV			1.00 H	15	60.4	39.4
3	#10440.00	60.4 PK	68.2	-7.8	2.00 H	105	39.1	21.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5220.00	118.3 PK			1.00 V	337	78.9	39.4
2	*5220.00	109.9 AV			1.00 V	337	70.5	39.4
3	#10440.00	60.6 PK	68.2	-7.6	1.63 V	322	39.3	21.3

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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	107.7 PK			1.00 H	21	68.5	39.2
2	*5240.00	98.7 AV			1.00 H	21	59.5	39.2
3	5350.00	56.4 PK	74.0	-17.6	1.00 H	21	46.5	9.9
4	5350.00	45.7 AV	54.0	-8.3	1.00 H	21	35.8	9.9
5	#10480.00	59.4 PK	68.2	-8.8	2.16 H	211	38.5	20.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	118.0 PK			1.00 V	337	78.8	39.2
2	*5240.00	109.6 AV			1.00 V	337	70.4	39.2
3	5350.00	55.8 PK	74.0	-18.2	1.00 V	337	45.9	9.9
4	5350.00	45.6 AV	54.0	-8.4	1.00 V	337	35.7	9.9
5	#10480.00	59.9 PK	68.2	-8.3	1.66 V	306	39.0	20.9

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.

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.5 PK	74.0	-21.5	2.10 H	59	42.0	10.5
2	5150.00	44.2 AV	54.0	-9.8	2.10 H	59	33.7	10.5
3	*5260.00	108.4 PK			2.10 H	59	69.2	39.2
4	*5260.00	100.0 AV			2.10 H	59	60.8	39.2
5	#10520.00	60.1 PK	68.2	-8.1	1.31 H	111	39.2	20.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.4 PK	74.0	-15.6	2.44 V	177	47.9	10.5
2	5150.00	46.4 AV	54.0	-7.6	2.44 V	177	35.9	10.5
3	*5260.00	116.7 PK			2.44 V	177	77.5	39.2
4	*5260.00	107.9 AV			2.44 V	177	68.7	39.2
5	#10520.00	61.1 PK	68.2	-7.1	1.64 V	122	40.2	20.9

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.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.7 PK			1.59 H	30	67.4	39.3
2	*5300.00	98.0 AV			1.59 H	30	58.7	39.3
3	10600.00	61.6 PK	74.0	-12.4	1.06 H	115	39.8	21.8
4	10600.00	49.1 AV	54.0	-4.9	1.06 H	115	27.3	21.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	117.0 PK			2.44 V	180	77.7	39.3
2	*5300.00	108.1 AV			2.44 V	180	68.8	39.3
3	10600.00	62.3 PK	74.0	-11.7	1.69 V	105	40.5	21.8
4	10600.00	48.9 AV	54.0	-5.1	1.69 V	105	27.1	21.8

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.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.0 PK			2.15 H	19	68.7	39.3
2	*5320.00	99.5 AV			2.15 H	19	60.2	39.3
3	5350.00	57.8 PK	74.0	-16.2	2.15 H	19	47.9	9.9
4	5350.00	44.3 AV	54.0	-9.7	2.15 H	19	34.4	9.9
5	10640.00	61.2 PK	74.0	-12.8	1.01 H	147	39.3	21.9
6	10640.00	48.4 AV	54.0	-5.6	1.01 H	147	26.5	21.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	116.9 PK			2.32 V	179	77.6	39.3
2	*5320.00	107.8 AV			2.32 V	179	68.5	39.3
3	5350.00	63.0 PK	74.0	-11.0	2.32 V	179	53.1	9.9
4	5350.00	50.5 AV	54.0	-3.5	2.32 V	179	40.6	9.9
5	10640.00	62.2 PK	74.0	-11.8	1.07 V	136	40.3	21.9
6	10640.00	49.1 AV	54.0	-4.9	1.07 V	136	27.2	21.9

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.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.8 PK	74.0	-20.2	1.09 H	306	43.5	10.3
2	5460.00	42.9 AV	54.0	-11.1	1.09 H	306	32.6	10.3
3	#5470.00	55.9 PK	68.2	-12.3	1.09 H	306	45.6	10.3
4	*5500.00	102.6 PK			1.09 H	306	62.9	39.7
5	*5500.00	93.7 AV			1.09 H	306	54.0	39.7
6	11000.00	61.2 PK	74.0	-12.8	1.09 H	306	38.8	22.4
7	11000.00	50.4 AV	54.0	-3.6	1.09 H	306	28.0	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.8 PK	74.0	-16.2	1.00 V	166	47.5	10.3
2	5460.00	47.0 AV	54.0	-7.0	1.00 V	166	36.7	10.3
3	#5470.00	60.3 PK	68.2	-7.9	1.00 V	166	50.0	10.3
4	*5500.00	111.3 PK			1.00 V	166	71.6	39.7
5	*5500.00	103.2 AV			1.00 V	166	63.5	39.7
6	11000.00	61.7 PK	74.0	-12.3	1.25 V	136	39.3	22.4
7	11000.00	50.4 AV	54.0	-3.6	1.25 V	136	28.0	22.4

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.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	102.8 PK			1.09 H	300	63.0	39.8
2	*5580.00	94.8 AV			1.09 H	300	55.0	39.8
3	11160.00	60.9 PK	74.0	-13.1	1.96 H	323	38.5	22.4
4	11160.00	50.2 AV	54.0	-3.8	1.96 H	323	27.8	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	113.1 PK			1.00 V	167	73.3	39.8
2	*5580.00	105.3 AV			1.00 V	167	65.5	39.8
3	11160.00	61.3 PK	74.0	-12.7	1.36 V	105	38.9	22.4
4	11160.00	50.6 AV	54.0	-3.4	1.36 V	105	28.2	22.4

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.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	105.2 PK			1.36 H	300	65.2	40.0
2	*5700.00	96.4 AV			1.36 H	300	56.4	40.0
3	#5725.00	54.4 PK	68.2	-13.8	1.36 H	300	44.0	10.4
4	11400.00	61.1 PK	74.0	-12.9	1.05 H	139	37.9	23.2
5	11400.00	50.5 AV	54.0	-3.5	1.05 H	139	27.3	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	114.0 PK			1.00 V	148	74.0	40.0
2	*5700.00	104.8 AV			1.00 V	148	64.8	40.0
3	#5725.00	60.1 PK	68.2	-8.1	1.00 V	148	49.7	10.4
4	11400.00	62.1 PK	74.0	-11.9	1.96 V	326	38.9	23.2
5	11400.00	51.5 AV	54.0	-2.5	1.96 V	326	28.3	23.2

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.

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.8 PK	68.2	-10.4	2.11 H	63	47.5	10.3
2	*5720.00	110.5 PK			2.11 H	63	70.4	40.1
3	*5720.00	101.1 AV			2.11 H	63	61.0	40.1
4	#5850.00	58.3 PK	68.2	-9.9	2.11 H	63	47.1	11.2
5	11440.00	61.2 PK	74.0	-12.8	2.59 H	140	38.1	23.1
6	11440.00	51.0 AV	54.0	-3.0	2.59 H	140	27.9	23.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.1 PK	68.2	-10.1	1.84 V	3	47.8	10.3
2	*5720.00	116.3 PK			1.84 V	3	76.2	40.1
3	*5720.00	107.7 AV			1.84 V	3	67.6	40.1
4	#5850.00	58.5 PK	68.2	-9.7	1.84 V	3	47.3	11.2
5	11440.00	61.5 PK	74.0	-12.5	2.41 V	165	38.4	23.1
6	11440.00	51.1 AV	54.0	-2.9	2.41 V	165	28.0	23.1

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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.40	58.6 PK	68.2	-9.6	1.00 H	325	48.2	10.4
2	*5745.00	109.9 PK			1.00 H	325	69.7	40.2
3	*5745.00	100.7 AV			1.00 H	325	60.5	40.2
4	#5971.20	58.5 PK	68.2	-9.7	1.00 H	325	47.6	10.9
5	11490.00	62.3 PK	74.0	-11.7	2.10 H	115	39.2	23.1
6	11490.00	50.7 AV	54.0	-3.3	2.10 H	115	27.6	23.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.20	59.1 PK	68.2	-9.1	1.68 V	12	48.7	10.4
2	*5745.00	120.6 PK			1.68 V	12	80.4	40.2
3	*5745.00	112.2 AV			1.68 V	12	72.0	40.2
4	#5955.20	60.9 PK	68.2	-7.3	1.68 V	12	49.9	11.0
5	11490.00	61.5 PK	74.0	-12.5	1.55 V	126	38.4	23.1
6	11490.00	50.3 AV	54.0	-3.7	1.55 V	126	27.2	23.1

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.00	57.5 PK	68.2	-10.7	1.00 H	326	47.1	10.4
2	*5785.00	109.2 PK			1.00 H	326	68.8	40.4
3	*5785.00	100.4 AV			1.00 H	326	60.0	40.4
4	#5992.40	58.0 PK	68.2	-10.2	1.00 H	326	47.0	11.0
5	11570.00	61.7 PK	74.0	-12.3	1.66 H	105	38.8	22.9
6	11570.00	50.8 AV	54.0	-3.2	1.66 H	105	27.9	22.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	59.8 PK	68.2	-8.4	1.68 V	11	49.4	10.4
2	*5785.00	121.3 PK			1.68 V	11	80.9	40.4
3	*5785.00	112.9 AV			1.68 V	11	72.5	40.4
4	#5983.20	60.6 PK	68.2	-7.6	1.68 V	11	49.7	10.9
5	11570.00	62.1 PK	74.0	-11.9	1.33 V	106	39.2	22.9
6	11570.00	50.8 AV	54.0	-3.2	1.33 V	106	27.9	22.9

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	56.8 PK	68.2	-11.4	1.50 H	12	46.4	10.4
2	*5825.00	109.8 PK			1.50 H	12	69.1	40.7
3	*5825.00	100.8 AV			1.50 H	12	60.1	40.7
4	#5942.80	58.0 PK	68.2	-10.2	1.50 H	12	47.1	10.9
5	11650.00	61.4 PK	74.0	-12.6	2.00 H	201	38.8	22.6
6	11650.00	49.5 AV	54.0	-4.5	2.00 H	201	26.9	22.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5637.60	61.8 PK	68.2	-6.4	1.75 V	11	51.4	10.4
2	*5825.00	121.4 PK			1.75 V	11	80.7	40.7
3	*5825.00	112.8 AV			1.75 V	11	72.1	40.7
4	#5943.20	60.2 PK	68.2	-8.0	1.75 V	11	49.3	10.9
5	11650.00	61.7 PK	74.0	-12.3	1.63 V	320	39.1	22.6
6	11650.00	50.2 AV	54.0	-3.8	1.63 V	320	27.6	22.6

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.

802.11ax (HE20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.2 PK	74.0	-14.8	1.05 H	15	48.7	10.5
2	5150.00	48.5 AV	54.0	-5.5	1.05 H	15	38.0	10.5
3	*5180.00	106.2 PK			1.05 H	15	66.6	39.6
4	*5180.00	94.8 AV			1.05 H	15	55.2	39.6
5	#10360.00	59.2 PK	68.2	-9.0	2.05 H	100	38.1	21.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	68.0 PK	74.0	-6.0	1.00 V	317	57.5	10.5
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.00 V**	**317**	**43.4**	**10.5**
3	*5180.00	116.1 PK			1.00 V	317	76.5	39.6
4	*5180.00	105.1 AV			1.00 V	317	65.5	39.6
5	#10360.00	59.6 PK	68.2	-8.6	1.06 V	326	38.5	21.1

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.

CHANNEL	TX Channel 44	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5220.00	108.0 PK			1.01 H	13	68.6	39.4
2	*5220.00	97.2 AV			1.01 H	13	57.8	39.4
3	#10440.00	60.8 PK	68.2	-7.4	2.13 H	200	39.5	21.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5220.00	120.1 PK			1.00 V	323	80.7	39.4
2	*5220.00	108.4 AV			1.00 V	323	69.0	39.4
3	#10440.00	60.5 PK	68.2	-7.7	2.16 V	200	39.2	21.3

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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	108.4 PK			1.00 H	10	69.2	39.2
2	*5240.00	98.0 AV			1.00 H	10	58.8	39.2
3	5350.00	56.5 PK	74.0	-17.5	1.00 H	10	46.6	9.9
4	5350.00	45.7 AV	54.0	-8.3	1.00 H	10	35.8	9.9
5	#10480.00	59.8 PK	68.2	-8.4	1.69 H	322	38.9	20.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	119.4 PK			1.00 V	318	80.2	39.2
2	*5240.00	109.9 AV			1.00 V	318	70.7	39.2
3	5350.00	58.8 PK	74.0	-15.2	1.00 V	318	48.9	9.9
4	5350.00	48.2 AV	54.0	-5.8	1.00 V	318	38.3	9.9
5	#10480.00	59.2 PK	68.2	-9.0	1.05 V	111	38.3	20.9

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.

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.1 PK	74.0	-20.9	2.11 H	30	42.6	10.5
2	5150.00	42.5 AV	54.0	-11.5	2.11 H	30	32.0	10.5
3	*5260.00	106.7 PK			2.11 H	30	67.5	39.2
4	*5260.00	98.1 AV			2.11 H	30	58.9	39.2
5	#10520.00	60.0 PK	68.2	-8.2	3.00 H	100	39.1	20.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.7 PK	74.0	-14.3	2.32 V	179	49.2	10.5
2	5150.00	47.6 AV	54.0	-6.4	2.32 V	179	37.1	10.5
3	*5260.00	115.3 PK			2.32 V	179	76.1	39.2
4	*5260.00	107.0 AV			2.32 V	179	67.8	39.2
5	#10520.00	60.8 PK	68.2	-7.4	1.33 V	144	39.9	20.9

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.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.5 PK			1.69 H	36	68.2	39.3
2	*5300.00	97.4 AV			1.69 H	36	58.1	39.3
3	10600.00	61.2 PK	74.0	-12.8	3.11 H	315	39.4	21.8
4	10600.00	48.8 AV	54.0	-5.2	3.11 H	315	27.0	21.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	115.9 PK			2.33 V	170	76.6	39.3
2	*5300.00	107.5 AV			2.33 V	170	68.2	39.3
3	10600.00	62.1 PK	74.0	-11.9	1.69 V	326	40.3	21.8
4	10600.00	49.1 AV	54.0	-4.9	1.69 V	326	27.3	21.8

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.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	110.0 PK			2.19 H	66	70.7	39.3
2	*5320.00	99.7 AV			2.19 H	66	60.4	39.3
3	5350.00	62.6 PK	74.0	-11.4	2.19 H	66	52.7	9.9
4	5350.00	46.7 AV	54.0	-7.3	2.19 H	66	36.8	9.9
5	10640.00	61.1 PK	74.0	-12.9	1.99 H	199	39.2	21.9
6	10640.00	48.4 AV	54.0	-5.6	1.99 H	199	26.5	21.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	117.0 PK			2.32 V	178	77.7	39.3
2	*5320.00	107.5 AV			2.32 V	178	68.2	39.3
3	5350.00	69.9 PK	74.0	-4.1	2.32 V	178	60.0	9.9
4	5350.00	53.6 AV	54.0	-0.4	2.32 V	178	43.7	9.9
5	10640.00	61.9 PK	74.0	-12.1	1.31 V	300	40.0	21.9
6	10640.00	49.2 AV	54.0	-4.8	1.31 V	300	27.3	21.9

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.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.0 PK	74.0	-20.0	1.00 H	316	43.7	10.3
2	5460.00	42.9 AV	54.0	-11.1	1.00 H	316	32.6	10.3
3	#5470.00	55.4 PK	68.2	-12.8	1.00 H	316	45.1	10.3
4	*5500.00	103.6 PK			1.00 H	316	63.9	39.7
5	*5500.00	94.7 AV			1.00 H	316	55.0	39.7
6	11000.00	61.2 PK	74.0	-12.8	1.33 H	139	38.8	22.4
7	11000.00	50.0 AV	54.0	-4.0	1.33 H	139	27.6	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.3 PK	74.0	-16.7	1.00 V	167	47.0	10.3
2	5460.00	47.0 AV	54.0	-7.0	1.00 V	167	36.7	10.3
3	#5470.00	59.2 PK	68.2	-9.0	1.00 V	167	48.9	10.3
4	*5500.00	112.2 PK			1.00 V	167	72.5	39.7
5	*5500.00	72.9 AV			1.00 V	167	62.6	10.3
6	11000.00	61.4 PK	74.0	-12.6	1.96 V	326	39.0	22.4
7	11000.00	50.7 AV	54.0	-3.3	1.96 V	326	28.3	22.4

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.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	105.4 PK			2.00 H	301	65.6	39.8
2	*5580.00	94.1 AV			2.00 H	301	54.3	39.8
3	11160.00	61.0 PK	74.0	-13.0	3.16 H	309	38.6	22.4
4	11160.00	49.4 AV	54.0	-4.6	3.16 H	309	27.0	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	114.8 PK			1.00 V	171	75.0	39.8
2	*5580.00	104.5 AV			1.00 V	171	64.7	39.8
3	11160.00	61.3 PK	74.0	-12.7	1.39 V	133	38.9	22.4
4	11160.00	50.0 AV	54.0	-4.0	1.39 V	133	27.6	22.4

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.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	106.9 PK			1.36 H	313	66.9	40.0
2	*5700.00	95.9 AV			1.36 H	313	55.9	40.0
3	#5725.00	57.0 PK	68.2	-11.2	1.36 H	313	46.6	10.4
4	11400.00	61.7 PK	74.0	-12.3	3.13 H	306	38.5	23.2
5	11400.00	50.4 AV	54.0	-3.6	3.13 H	306	27.2	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	115.3 PK			1.00 V	150	75.3	40.0
2	*5700.00	104.9 AV			1.00 V	150	64.9	40.0
3	#5725.00	65.2 PK	68.2	-3.0	1.00 V	150	54.8	10.4
4	11400.00	62.1 PK	74.0	-11.9	1.36 V	105	38.9	23.2
5	11400.00	50.5 AV	54.0	-3.5	1.36 V	105	27.3	23.2

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.

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.5 PK	68.2	-10.7	2.01 H	65	47.2	10.3
2	*5720.00	110.2 PK			2.01 H	65	70.1	40.1
3	*5720.00	99.6 AV			2.01 H	65	59.5	40.1
4	#5850.00	58.2 PK	68.2	-10.0	2.01 H	65	47.0	11.2
5	11440.00	61.3 PK	74.0	-12.7	1.47 H	230	38.2	23.1
6	11440.00	50.9 AV	54.0	-3.1	1.47 H	230	27.8	23.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.2 PK	68.2	-10.0	1.84 V	9	47.9	10.3
2	*5720.00	116.2 PK			1.84 V	9	76.1	40.1
3	*5720.00	106.3 AV			1.84 V	9	66.2	40.1
4	#5850.00	58.6 PK	68.2	-9.6	1.84 V	9	47.4	11.2
5	11440.00	61.6 PK	74.0	-12.4	2.24 V	196	38.5	23.1
6	11440.00	51.4 AV	54.0	-2.6	2.24 V	196	28.3	23.1

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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5637.60	57.9 PK	68.2	-10.3	1.05 H	309	47.5	10.4
2	*5745.00	109.5 PK			1.05 H	309	69.3	40.2
3	*5745.00	100.0 AV			1.05 H	309	59.8	40.2
4	#5970.80	58.3 PK	68.2	-9.9	1.05 H	309	47.4	10.9
5	11490.00	62.2 PK	74.0	-11.8	1.05 H	147	39.1	23.1
6	11490.00	50.4 AV	54.0	-3.6	1.05 H	147	27.3	23.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	59.6 PK	68.2	-8.6	1.78 V	14	49.2	10.4
2	*5745.00	120.7 PK			1.78 V	14	80.5	40.2
3	*5745.00	111.4 AV			1.78 V	14	71.2	40.2
4	#5997.60	59.7 PK	68.2	-8.5	1.78 V	14	48.7	11.0
5	11490.00	62.7 PK	74.0	-11.3	1.33 V	20	39.6	23.1
6	11490.00	50.1 AV	54.0	-3.9	1.33 V	20	27.0	23.1

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5615.60	56.1 PK	68.2	-12.1	1.00 H	258	45.7	10.4
2	*5785.00	112.0 PK			1.00 H	258	71.6	40.4
3	*5785.00	100.4 AV			1.00 H	258	60.0	40.4
4	#5996.80	56.6 PK	68.2	-11.6	1.00 H	258	45.6	11.0
5	11570.00	61.7 PK	74.0	-12.3	2.39 H	323	38.8	22.9
6	11570.00	50.0 AV	54.0	-4.0	2.39 H	323	27.1	22.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.60	59.4 PK	68.2	-8.8	1.78 V	6	49.1	10.3
2	*5785.00	122.3 PK			1.78 V	6	81.9	40.4
3	*5785.00	111.3 AV			1.78 V	6	70.9	40.4
4	#5956.00	59.8 PK	68.2	-8.4	1.78 V	6	48.8	11.0
5	11570.00	61.9 PK	74.0	-12.1	1.05 V	115	39.0	22.9
6	11570.00	50.2 AV	54.0	-3.8	1.05 V	115	27.3	22.9

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.60	58.3 PK	68.2	-9.9	1.25 H	126	47.9	10.4
2	*5825.00	108.8 PK			1.25 H	126	68.1	40.7
3	*5825.00	99.2 AV			1.25 H	126	58.5	40.7
4	#5966.40	57.6 PK	68.2	-10.6	1.25 H	126	46.6	11.0
5	11650.00	61.8 PK	74.0	-12.2	2.16 H	205	39.2	22.6
6	11650.00	49.9 AV	54.0	-4.1	2.16 H	205	27.3	22.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.60	58.7 PK	68.2	-9.5	1.78 V	7	48.3	10.4
2	*5825.00	120.8 PK			1.78 V	7	80.1	40.7
3	*5825.00	111.1 AV			1.78 V	7	70.4	40.7
4	#5961.20	59.5 PK	68.2	-8.7	1.78 V	7	48.5	11.0
5	11650.00	61.8 PK	74.0	-12.2	1.69 V	236	39.2	22.6
6	11650.00	49.9 AV	54.0	-4.1	1.69 V	236	27.3	22.6

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.

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	62.8 PK	74.0	-11.2	1.05 H	16	52.3	10.5
2	5150.00	48.6 AV	54.0	-5.4	1.05 H	16	38.1	10.5
3	*5190.00	102.4 PK			1.05 H	16	62.8	39.6
4	*5190.00	90.5 AV			1.05 H	16	50.9	39.6
5	#10380.00	60.1 PK	68.2	-8.1	2.15 H	150	38.7	21.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	69.4 PK	74.0	-4.6	1.00 V	319	58.9	10.5
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.00 V**	**319**	**43.4**	**10.5**
3	*5190.00	112.1 PK			1.00 V	319	72.5	39.6
4	*5190.00	101.2 AV			1.00 V	319	61.6	39.6
5	#10380.00	59.5 PK	68.2	-8.7	2.11 V	100	38.1	21.4

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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.4 PK	74.0	-14.6	1.00 H	319	48.9	10.5
2	5150.00	48.0 AV	54.0	-6.0	1.00 H	319	37.5	10.5
3	*5230.00	105.4 PK			1.00 H	25	66.1	39.3
4	*5230.00	94.0 AV			1.00 H	25	54.7	39.3
5	5350.00	59.8 PK	74.0	-14.2	1.00 H	319	49.9	9.9
6	5350.00	48.4 AV	54.0	-5.6	1.00 H	319	38.5	9.9
7	#10460.00	59.2 PK	68.2	-9.0	1.55 H	102	38.1	21.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	67.4 PK	74.0	-6.6	1.00 V	319	56.9	10.5
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.00 V**	**319**	**43.4**	**10.5**
3	*5230.00	117.0 PK			1.00 V	319	77.7	39.3
4	*5230.00	104.6 AV			1.00 V	319	65.3	39.3
5	5350.00	59.6 PK	74.0	-14.4	1.00 V	319	49.7	9.9
6	5350.00	49.3 AV	54.0	-4.7	1.00 V	319	39.4	9.9
7	#10460.00	60.1 PK	68.2	-8.1	2.11 V	122	39.0	21.1

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.

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.0 PK	74.0	-19.0	2.15 H	23	44.5	10.5
2	5150.00	44.2 AV	54.0	-9.8	2.15 H	23	33.7	10.5
3	*5270.00	106.7 PK			2.15 H	23	67.5	39.2
4	*5270.00	96.6 AV			2.15 H	23	57.4	39.2
5	#10540.00	60.1 PK	68.2	-8.1	1.06 H	139	39.0	21.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.1 PK	74.0	-14.9	2.32 V	197	48.6	10.5
2	5150.00	48.2 AV	54.0	-5.8	2.32 V	197	37.7	10.5
3	*5270.00	114.4 PK			2.32 V	197	75.2	39.2
4	*5270.00	105.0 AV			2.32 V	197	65.8	39.2
5	#10540.00	61.1 PK	68.2	-7.1	1.33 V	102	40.0	21.1

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.

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	106.3 PK			2.20 H	13	67.0	39.3
2	*5310.00	95.1 AV			2.20 H	13	55.8	39.3
3	5350.00	62.0 PK	74.0	-12.0	2.20 H	13	52.1	9.9
4	5350.00	46.3 AV	54.0	-7.7	2.20 H	13	36.4	9.9
5	10620.00	60.9 PK	74.0	-13.1	1.33 H	166	39.0	21.9
6	10620.00	48.2 AV	54.0	-5.8	1.33 H	166	26.3	21.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	114.6 PK			2.32 V	177	75.3	39.3
2	*5310.00	104.0 AV			2.32 V	177	64.7	39.3
3	5350.00	68.0 PK	74.0	-6.0	2.32 V	177	58.1	9.9
4	5350.00	53.5 AV	54.0	-0.5	2.32 V	177	43.6	9.9
5	10620.00	62.1 PK	74.0	-11.9	1.65 V	107	40.2	21.9
6	10620.00	49.3 AV	54.0	-4.7	1.65 V	107	27.4	21.9

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.

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.2 PK	74.0	-19.8	1.00 H	306	43.9	10.3
2	5460.00	43.2 AV	54.0	-10.8	1.00 H	306	32.9	10.3
3	#5470.00	57.2 PK	68.2	-11.0	1.00 H	306	46.9	10.3
4	*5510.00	102.1 PK			1.00 H	306	62.4	39.7
5	*5510.00	92.1 AV			1.00 H	306	52.4	39.7
6	11020.00	61.2 PK	74.0	-12.8	1.36 H	322	38.8	22.4
7	11020.00	49.7 AV	54.0	-4.3	1.36 H	322	27.3	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.1 PK	74.0	-15.9	1.00 V	168	47.8	10.3
2	5460.00	47.5 AV	54.0	-6.5	1.00 V	168	37.2	10.3
3	#5470.00	61.1 PK	68.2	-7.1	1.00 V	168	50.8	10.3
4	*5510.00	110.8 PK			1.00 V	168	71.1	39.7
5	*5510.00	101.1 AV			1.00 V	168	61.4	39.7
6	11020.00	61.3 PK	74.0	-12.7	1.39 V	105	38.9	22.4
7	11020.00	49.6 AV	54.0	-4.4	1.39 V	105	27.2	22.4

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.

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	100.8 PK			2.63 H	239	61.0	39.8
2	*5550.00	90.7 AV			2.63 H	239	50.9	39.8
3	11100.00	60.6 PK	74.0	-13.4	2.19 H	106	38.2	22.4
4	11100.00	49.7 AV	54.0	-4.3	2.19 H	106	27.3	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	109.0 PK			1.00 V	172	69.2	39.8
2	*5550.00	100.4 AV			1.00 V	172	60.6	39.8
3	11100.00	61.7 PK	74.0	-12.3	1.69 V	136	39.3	22.4
4	11100.00	49.7 AV	54.0	-4.3	1.69 V	136	27.3	22.4

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.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	102.2 PK			1.59 H	306	62.3	39.9
2	*5670.00	92.6 AV			1.59 H	306	52.7	39.9
3	#5725.00	55.0 PK	68.2	-13.2	1.59 H	306	44.6	10.4
4	11340.00	61.0 PK	74.0	-13.0	2.16 H	209	38.3	22.7
5	11340.00	50.8 AV	54.0	-3.2	2.16 H	209	28.1	22.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	111.0 PK			1.00 V	215	71.1	39.9
2	*5670.00	102.2 AV			1.00 V	215	62.3	39.9
3	#5725.00	59.8 PK	68.2	-8.4	1.00 V	215	49.4	10.4
4	11340.00	61.4 PK	74.0	-12.6	1.06 V	126	38.7	22.7
5	11340.00	49.6 AV	54.0	-4.4	1.06 V	126	26.9	22.7

Remarks:

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

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.6 PK	68.2	-10.6	2.28 H	41	47.3	10.3
2	*5710.00	106.4 PK			2.28 H	41	66.4	40.0
3	*5710.00	96.8 AV			2.28 H	41	56.8	40.0
4	#5850.00	58.2 PK	68.2	-10.0	2.28 H	41	47.0	11.2
5	11420.00	61.5 PK	74.0	-12.5	2.89 H	310	38.3	23.2
6	11420.00	50.8 AV	54.0	-3.2	2.89 H	310	27.6	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.2 PK	68.2	-10.0	1.84 V	9	47.9	10.3
2	*5710.00	113.4 PK			1.84 V	9	73.4	40.0
3	*5710.00	103.4 AV			1.84 V	9	63.4	40.0
4	#5850.00	58.7 PK	68.2	-9.5	1.84 V	9	47.5	11.2
5	11420.00	62.0 PK	74.0	-12.0	2.31 V	147	38.8	23.2
6	11420.00	51.6 AV	54.0	-2.4	2.31 V	147	28.4	23.2

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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.80	56.7 PK	68.2	-11.5	1.05 H	105	46.4	10.3
2	*5755.00	106.0 PK			1.05 H	105	65.8	40.2
3	*5755.00	96.8 AV			1.05 H	105	56.6	40.2
4	#5962.00	56.8 PK	68.2	-11.4	1.05 H	105	45.8	11.0
5	11510.00	62.0 PK	74.0	-12.0	1.22 H	105	39.0	23.0
6	11510.00	50.0 AV	54.0	-4.0	1.22 H	105	27.0	23.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.00	59.0 PK	68.2	-9.2	1.75 V	15	48.6	10.4
2	*5755.00	118.5 PK			1.75 V	15	78.3	40.2
3	*5755.00	108.6 AV			1.75 V	15	68.4	40.2
4	#5986.80	59.5 PK	68.2	-8.7	1.75 V	15	48.6	10.9
5	11510.00	62.1 PK	74.0	-11.9	1.09 V	151	39.1	23.0
6	11510.00	50.5 AV	54.0	-3.5	1.09 V	151	27.5	23.0

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.20	56.9 PK	68.2	-11.3	1.25 H	126	46.5	10.4
2	*5795.00	106.5 PK			1.25 H	126	65.9	40.6
3	*5795.00	96.7 AV			1.25 H	126	56.1	40.6
4	#5952.40	57.4 PK	68.2	-10.8	1.25 H	126	46.4	11.0
5	11590.00	60.2 PK	74.0	-13.8	1.05 H	117	37.5	22.7
6	11590.00	49.8 AV	54.0	-4.2	1.05 H	117	27.1	22.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	59.7 PK	68.2	-8.5	1.75 V	9	49.3	10.4
2	*5795.00	117.8 PK			1.75 V	9	77.2	40.6
3	*5795.00	108.4 AV			1.75 V	9	67.8	40.6
4	#5947.60	60.5 PK	68.2	-7.7	1.75 V	9	49.6	10.9
5	11590.00	62.1 PK	74.0	-11.9	2.16 V	152	39.4	22.7
6	11590.00	50.3 AV	54.0	-3.7	2.16 V	152	27.6	22.7

Remarks:

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

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CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	1.00 H	10	52.7	10.5
2	5150.00	48.5 AV	54.0	-5.5	1.00 H	10	38.0	10.5
3	*5210.00	97.3 PK			1.00 H	10	57.8	39.5
4	*5210.00	86.7 AV			1.00 H	10	47.2	39.5
5	5350.00	57.0 PK	74.0	-17.0	1.00 H	10	47.1	9.9
6	5350.00	45.7 AV	54.0	-8.3	1.00 H	10	35.8	9.9
7	#10420.00	59.7 PK	68.2	-8.5	2.15 H	215	38.2	21.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	70.9 PK	74.0	-3.1	1.00 V	317	60.4	10.5
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.00 V**	**317**	**43.4**	**10.5**
3	*5210.00	108.2 PK			1.00 V	317	68.7	39.5
4	*5210.00	99.1 AV			1.00 V	317	59.6	39.5
5	5350.00	59.4 PK	74.0	-14.6	1.00 V	317	49.5	9.9
6	5350.00	49.2 AV	54.0	-4.8	1.00 V	317	39.3	9.9
7	#10420.00	60.5 PK	68.2	-7.7	2.00 V	216	39.0	21.5

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.

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.4 PK	74.0	-18.6	2.31 H	50	44.9	10.5
2	5150.00	45.0 AV	54.0	-9.0	2.31 H	50	34.5	10.5
3	*5290.00	102.5 PK			2.31 H	50	63.2	39.3
4	*5290.00	91.6 AV			2.31 H	50	52.3	39.3
5	5350.00	57.2 PK	74.0	-16.8	2.31 H	50	47.3	9.9
6	5350.00	46.4 AV	54.0	-7.6	2.31 H	50	36.5	9.9
7	#10580.00	60.8 PK	68.2	-7.4	1.36 H	155	39.2	21.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.4 PK	74.0	-13.6	2.33 V	187	49.9	10.5
2	5150.00	48.6 AV	54.0	-5.4	2.33 V	187	38.1	10.5
3	*5290.00	110.5 PK			2.33 V	187	71.2	39.3
4	*5290.00	99.7 AV			2.33 V	187	60.4	39.3
5	5350.00	66.1 PK	74.0	-7.9	2.33 V	187	56.2	9.9
6	5350.00	53.4 AV	54.0	-0.6	2.33 V	187	43.5	9.9
7	#10580.00	62.4 PK	68.2	-5.8	1.59 V	106	40.8	21.6

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.

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.1 PK	74.0	-19.9	1.23 H	136	43.8	10.3
2	5460.00	43.4 AV	54.0	-10.6	1.23 H	136	33.1	10.3
3	#5470.00	55.8 PK	68.2	-12.4	1.23 H	136	45.5	10.3
4	*5530.00	100.2 PK			1.00 H	168	60.5	39.7
5	*5530.00	88.9 AV			1.00 H	168	49.2	39.7
6	#5725.00	54.3 PK	68.2	-13.9	1.23 H	136	43.9	10.4
7	11060.00	61.5 PK	74.0	-12.5	1.32 H	205	39.2	22.3
8	11060.00	49.6 AV	54.0	-4.4	1.32 H	205	27.3	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.9 PK	74.0	-15.1	1.00 V	168	48.6	10.3
2	5460.00	47.7 AV	54.0	-6.3	1.00 V	168	37.4	10.3
3	#5470.00	60.5 PK	68.2	-7.7	1.00 V	168	50.2	10.3
4	*5530.00	107.7 PK			1.00 V	168	68.0	39.7
5	*5530.00	98.6 AV			1.00 V	168	58.9	39.7
6	#5725.00	59.1 PK	68.2	-9.1	1.00 V	168	48.7	10.4
7	11060.00	61.3 PK	74.0	-12.7	3.16 V	300	39.0	22.3
8	11060.00	49.4 AV	54.0	-4.6	3.16 V	300	27.1	22.3

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.

CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.4 PK	74.0	-19.6	1.56 H	166	44.1	10.3
2	5460.00	43.2 AV	54.0	-10.8	1.56 H	166	32.9	10.3
3	#5470.00	55.3 PK	68.2	-12.9	1.56 H	166	45.0	10.3
4	*5610.00	103.7 PK			1.56 H	166	63.8	39.9
5	*5610.00	93.1 AV			1.56 H	166	53.2	39.9
6	#5725.00	55.8 PK	68.2	-12.4	1.56 H	166	45.4	10.4
7	11220.00	61.2 PK	74.0	-12.8	1.39 H	159	38.9	22.3
8	11220.00	49.6 AV	54.0	-4.4	1.39 H	159	27.3	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.2 PK	74.0	-15.8	2.42 V	9	47.9	10.3
2	5460.00	47.3 AV	54.0	-6.7	2.42 V	9	37.0	10.3
3	#5470.00	59.5 PK	68.2	-8.7	2.42 V	9	49.2	10.3
4	*5610.00	109.9 PK			2.42 V	9	70.0	39.9
5	*5610.00	101.2 AV			2.42 V	9	61.3	39.9
6	#5725.00	59.6 PK	68.2	-8.6	2.42 V	9	49.2	10.4
7	11220.00	61.5 PK	74.0	-12.5	1.36 V	108	39.2	22.3
8	11220.00	49.8 AV	54.0	-4.2	1.36 V	108	27.5	22.3

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.

CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.8 PK	68.2	-10.4	2.48 H	33	47.5	10.3
2	*5690.00	105.3 PK			2.48 H	33	65.3	40.0
3	*5690.00	93.5 AV			2.48 H	33	53.5	40.0
4	#5850.00	58.4 PK	68.2	-9.8	2.48 H	33	47.2	11.2
5	11380.00	61.0 PK	74.0	-13.0	1.02 H	217	38.0	23.0
6	11380.00	50.6 AV	54.0	-3.4	1.02 H	217	27.6	23.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.2 PK	68.2	-10.0	1.77 V	10	47.9	10.3
2	*5690.00	109.7 PK			1.77 V	10	69.7	40.0
3	*5690.00	99.8 AV			1.77 V	10	59.8	40.0
4	#5850.00	58.6 PK	68.2	-9.6	1.77 V	10	47.4	11.2
5	11380.00	61.5 PK	74.0	-12.5	1.65 V	220	38.5	23.0
6	11380.00	51.1 AV	54.0	-2.9	1.65 V	220	28.1	23.0

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.

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.20	58.7 PK	68.2	-9.5	1.05 H	147	48.3	10.4
2	*5775.00	104.8 PK			1.05 H	147	64.5	40.3
3	*5775.00	92.6 AV			1.05 H	147	52.3	40.3
4	#5952.00	57.4 PK	68.2	-10.8	1.05 H	147	46.4	11.0
5	11550.00	61.0 PK	74.0	-13.0	1.24 H	110	38.1	22.9
6	11550.00	49.9 AV	54.0	-4.1	1.24 H	110	27.0	22.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.60	67.6 PK	68.2	-0.6	1.73 V	13	57.3	10.3
2	*5775.00	114.0 PK			1.73 V	13	73.7	40.3
3	*5775.00	74.7 AV			1.73 V	13	64.1	10.6
4	#5928.00	64.0 PK	68.2	-4.2	1.73 V	13	53.0	11.0
5	11550.00	61.4 PK	74.0	-12.6	1.69 V	321	38.5	22.9
6	11550.00	50.1 AV	54.0	-3.9	1.69 V	321	27.2	22.9

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.

802.11ax (HE160)

CHANNEL	TX Channel 114	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.0 PK	74.0	-16.0	2.41 H	39	47.7	10.3
2	5460.00	44.0 AV	54.0	-10.0	2.41 H	39	33.7	10.3
3	#5470.00	57.4 PK	68.2	-10.8	2.41 H	39	47.1	10.3
4	*5570.00	102.3 PK			2.41 H	39	62.5	39.8
5	*5570.00	90.7 AV			2.41 H	39	50.9	39.8
6	#5725.00	60.7 PK	68.2	-7.5	2.41 H	39	50.3	10.4
7	11140.00	60.4 PK	74.0	-13.6	3.19 H	145	38.0	22.4
8	11140.00	50.2 AV	54.0	-3.8	3.19 H	145	27.8	22.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.6 PK	74.0	-10.4	1.67 V	2	53.3	10.3
2	5460.00	39.5 AV	54.0	-14.5	1.67 V	2	29.2	10.3
3	#5470.00	63.4 PK	68.2	-4.8	1.67 V	2	53.1	10.3
4	*5570.00	109.5 PK			1.67 V	2	69.7	39.8
5	*5570.00	96.5 AV			1.67 V	2	56.7	39.8
6	#5725.00	61.5 PK	68.2	-6.7	1.67 V	2	51.1	10.4
7	11140.00	60.8 PK	74.0	-13.2	2.33 V	140	38.4	22.4
8	11140.00	50.4 AV	54.0	-3.6	2.33 V	140	28.0	22.4

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.

Below 1GHz Worst-Case Data:

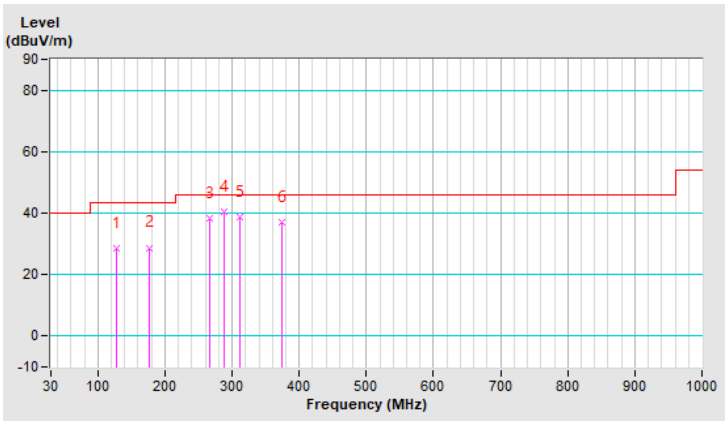
802.11a

CHANNEL	TX Channel 44	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	128.41	28.6 QP	43.5	-14.9	1.50 H	243	38.8	-10.2
2	176.20	28.8 QP	43.5	-14.7	1.00 H	244	38.2	-9.4
3	267.58	38.1 QP	46.0	-7.9	1.00 H	75	46.7	-8.6
4	287.26	40.5 QP	46.0	-5.5	1.00 H	109	48.2	-7.7
5	312.57	38.9 QP	46.0	-7.1	1.00 H	13	45.9	-7.0
6	374.42	36.9 QP	46.0	-9.1	1.00 H	120	42.0	-5.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
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.

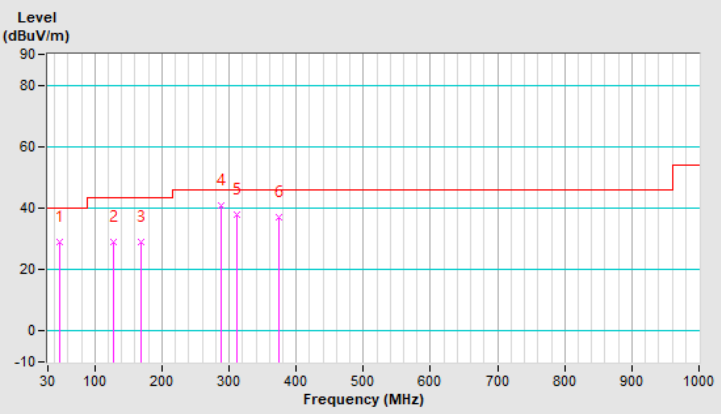


CHANNEL	TX Channel 44	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	46.87	29.1 QP	40.0	-10.9	1.49 V	50	38.0	-8.9
2	128.41	28.9 QP	43.5	-14.6	2.00 V	246	39.1	-10.2
3	169.17	28.8 QP	43.5	-14.7	1.49 V	269	37.7	-8.9
4	287.26	40.7 QP	46.0	-5.3	1.00 V	89	48.4	-7.7
5	312.57	38.0 QP	46.0	-8.0	1.00 V	181	45.0	-7.0
6	374.42	37.0 QP	46.0	-9.0	1.00 V	120	42.1	-5.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
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.



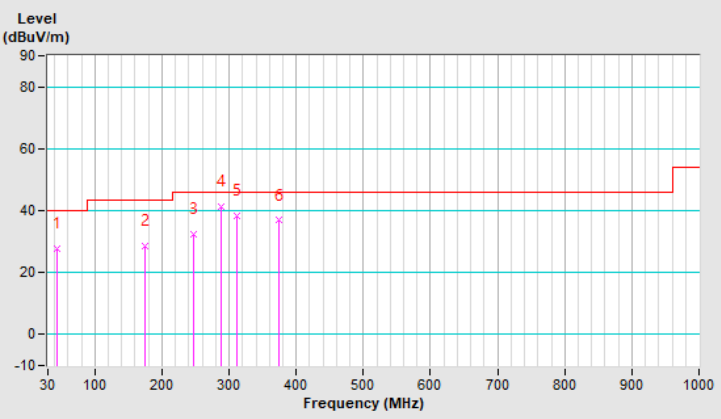
802.11ax (HE20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	44.06	27.7 QP	40.0	-12.3	1.49 H	265	36.7	-9.0
2	174.80	28.7 QP	43.5	-14.8	1.49 H	231	37.9	-9.2
3	246.49	32.4 QP	46.0	-13.6	1.00 H	157	42.0	-9.6
4	287.26	41.2 QP	46.0	-4.8	1.00 H	89	48.9	-7.7
5	312.57	38.2 QP	46.0	-7.8	1.00 H	169	45.2	-7.0
6	374.42	36.8 QP	46.0	-9.2	1.00 H	117	41.9	-5.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
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.

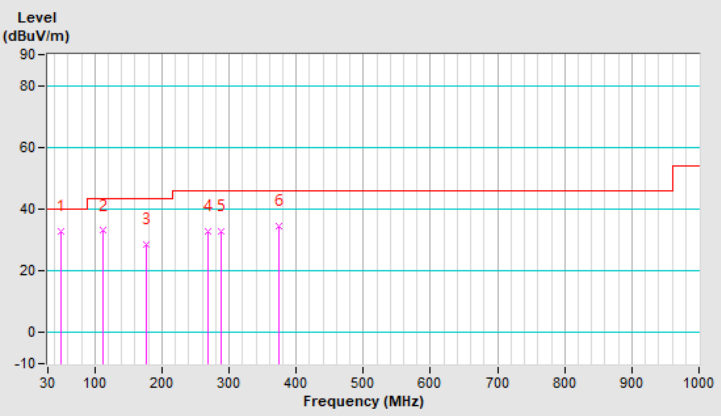


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	49.68	32.7 QP	40.0	-7.3	1.00 V	269	41.5	-8.8
2	111.54	33.0 QP	43.5	-10.5	1.00 V	43	44.8	-11.8
3	177.61	28.5 QP	43.5	-15.0	1.00 V	103	38.1	-9.6
4	268.99	32.6 QP	46.0	-13.4	1.00 V	27	41.1	-8.5
5	287.26	32.6 QP	46.0	-13.4	1.00 V	74	40.3	-7.7
6	374.42	34.7 QP	46.0	-11.3	1.51 V	132	39.8	-5.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
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

Tested date: Jul. 16, 2020

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 11, 2019	Dec. 10, 2020
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 20, 2020	Feb. 19, 2021
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 22, 2019	Aug. 21, 2020
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1 (Conduction 1).
3. The VCCI Site Registration No. is C-12040.

4.2.3 Test Procedures

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.

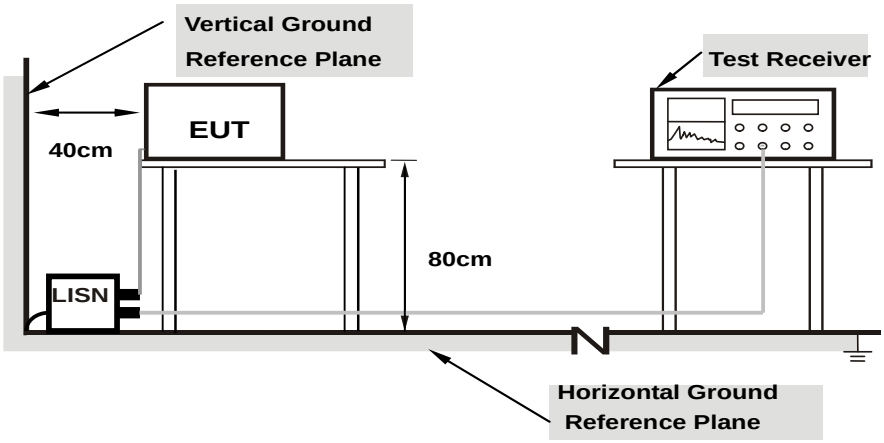
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

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 Conditions

Same as 4.1.6.

4.2.7 Test Results

Worst-case data:

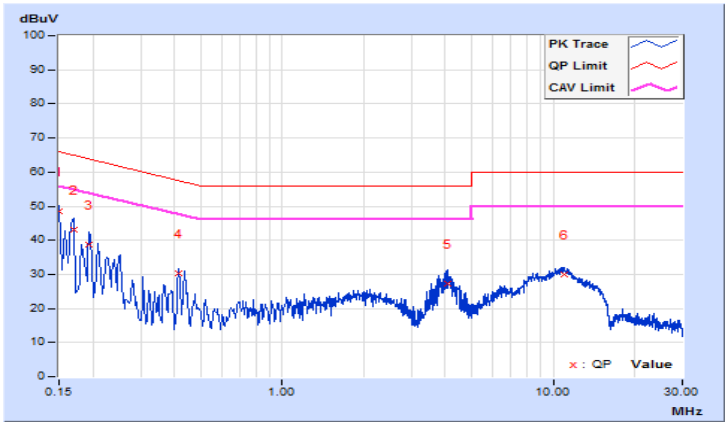
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Channel	TX Channel 44		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.80	38.60	24.16	48.40	33.96	66.00	56.00	-17.60	-22.04
2	0.16955	9.80	33.22	17.86	43.02	27.66	64.98	54.98	-21.96	-27.32
3	0.19301	9.81	28.81	15.77	38.62	25.58	63.91	53.91	-25.29	-28.33
4	0.41560	9.86	20.52	20.37	30.38	30.23	57.54	47.54	-27.16	-17.31
5	4.07564	10.05	17.28	4.74	27.33	14.79	56.00	46.00	-28.67	-31.21
6	11.00807	10.15	19.81	12.73	29.96	22.88	60.00	50.00	-30.04	-27.12

Remarks:

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

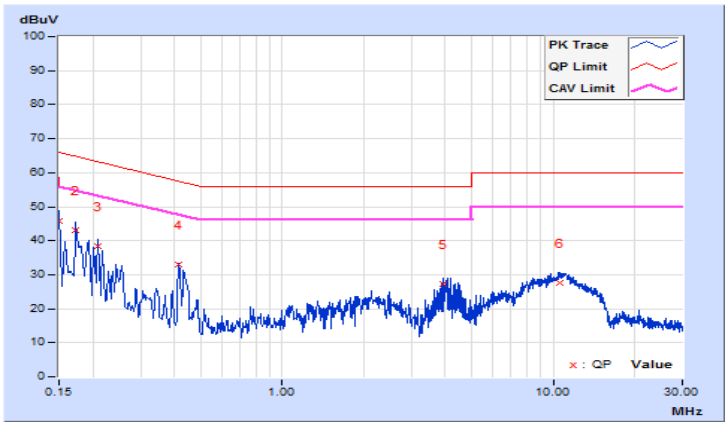


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Channel	TX Channel 44		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.82	36.04	21.98	45.86	31.80	66.00	56.00	-20.14	-24.20
2	0.17346	9.82	33.39	17.67	43.21	27.49	64.79	54.79	-21.58	-27.30
3	0.20865	9.81	28.70	14.47	38.51	24.28	63.26	53.26	-24.75	-28.98
4	**0.41588**	**9.89**	**23.26**	**21.38**	**33.15**	**31.27**	**57.53**	**47.53**	**-24.38**	**-16.26**
5	3.93879	10.09	17.03	5.85	27.12	15.94	56.00	46.00	-28.88	-30.06
6	10.57015	10.22	17.45	10.43	27.67	20.65	60.00	50.00	-32.33	-29.35

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.



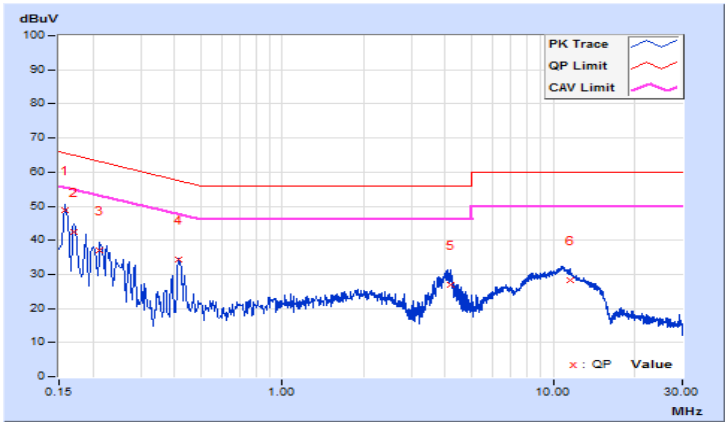
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Channel	TX Channel 149		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15782	9.80	38.95	22.27	48.75	32.07	65.58	55.58	-16.83	-23.51
2	0.16955	9.80	32.59	17.57	42.39	27.37	64.98	54.98	-22.59	-27.61
3	0.21256	9.81	27.23	14.74	37.04	24.55	63.10	53.10	-26.06	-28.55
4	0.41560	9.86	24.40	20.28	34.26	30.14	57.54	47.54	-23.28	-17.40
5	4.18512	10.05	16.95	5.47	27.00	15.52	56.00	46.00	-29.00	-30.48
6	11.53201	10.16	18.23	11.92	28.39	22.08	60.00	50.00	-31.61	-27.92

Remarks:

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

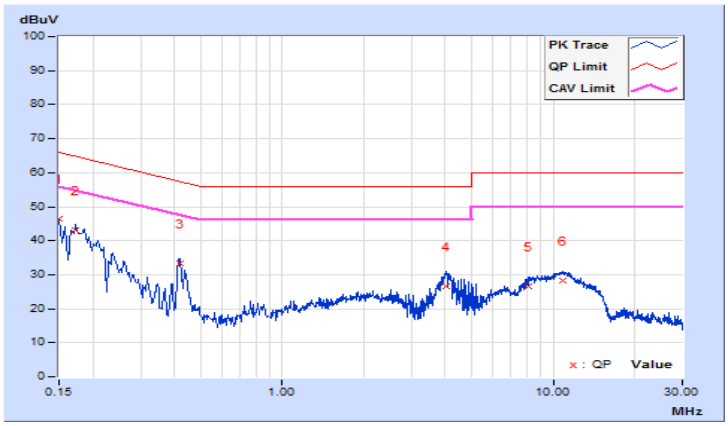


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Channel	TX Channel 149		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.82	36.51	23.25	46.33	33.07	66.00	56.00	-19.67	-22.93
2	0.17328	9.82	33.15	18.24	42.97	28.06	64.80	54.80	-21.83	-26.74
3	0.41979	9.89	23.52	18.39	33.41	28.28	57.45	47.45	-24.04	-19.17
4	4.02090	10.09	16.66	5.24	26.75	15.33	56.00	46.00	-29.25	-30.67
5	8.14595	10.17	16.55	9.20	26.72	19.37	60.00	50.00	-33.28	-30.63
6	10.91814	10.23	18.02	10.96	28.25	21.19	60.00	50.00	-31.75	-28.81

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.



4.3 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)
		Mobile and Portable 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

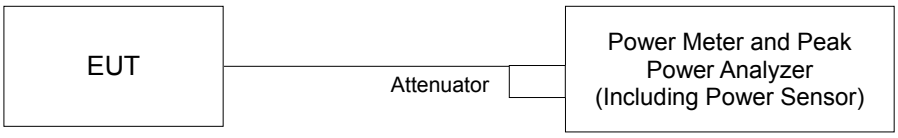
Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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 $N_{ANT} \geq 5$.

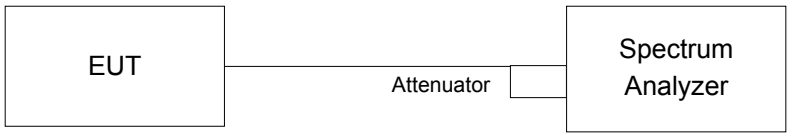
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

For Power Output



For 26dB Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

802.11a, 802.11ac (VHT20), 802.11ac (VHT40), 802.11ax (HE20), 802.11ax (HE40)

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.

802.11ac (VHT80), 802.11ac (VHT160), 802.11ax (HE80), 802.11ax (HE160)

a. Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
b. Set sweep trigger to “free run”.
c. Set RBW = 1 MHz
d. Set VBW ≥ 3 MHz
e. Number of points in sweep ≥ 2 Span / RBW
f. Sweep time ≤ (number of points in sweep) * T
g. Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
h. Detector = RMS
i. Trace mode = max hold
j. Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
k. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

For 26dB Bandwidth

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

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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 Result

Power Output:

CDD Mode

For U-NII-1 & U-NII-2A Band

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	22.17	22.82	356.242	25.52	30.00	Pass
44	5220	26.03	26.31	**828.430**	29.18	30.00	Pass
48	5240	25.63	25.50	720.408	28.58	30.00	Pass
52	5260	20.06	20.19	205.863	23.14	24.00	Pass
60	5300	20.36	20.68	**225.593**	23.53	24.00	Pass
64	5320	20.09	20.26	208.264	23.19	24.00	Pass

Note:
For U-NII-2A Band:
Chain 0
1. 11dBm + 10log (21.54) = 24.33 > 24dBm
2. 11dBm + 10log (21.65) = 24.35 > 24dBm
3. 11dBm + 10log (21.58) = 24.34 > 24dBm

Chain 1
1. 11dBm + 10log (21.58) = 24.34 > 24dBm
2. 11dBm + 10log (21.59) = 24.34 > 24dBm
3. 11dBm + 10log (21.53) = 24.33 > 24dBm

For For U-NII-2C & U-NII-3 Band

802.11a

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	16.38	16.66	16.28	16.50	176.926	22.48	24.00	Pass
116	5580	16.69	16.52	15.55	17.14	179.193	22.53	24.00	Pass
140	5700	16.71	16.55	15.80	16.68	176.644	22.47	24.00	Pass
144	5720 For U-NII-2C	12.64	12.62	13.56	14.46	87.270	19.41	22.95	Pass
144	5720 For U-NII-3	6.50	7.52	7.94	7.44	21.885	13.40	30.00	Pass
149	5745	22.86	22.90	23.20	23.62	827.255	29.18	30.00	Pass
157	5785	23.00	22.85	23.23	23.56	829.643	29.19	30.00	Pass
165	5825	22.95	22.89	23.15	23.60	827.403	29.18	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.63) = 24.35 > 24dBm
2. 11dBm + 10log (21.64) = 24.35 > 24dBm
3. 11dBm + 10log (21.57) = 24.33 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.25) = 22.97 < 24dBm

Chain 1
1. 11dBm + 10log (21.81) = 24.38 > 24dBm
2. 11dBm + 10log (21.87) = 24.39 > 24dBm
3. 11dBm + 10log (21.85) = 24.39 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.33) = 22.95 < 24dBm

Chain 2
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.78) = 24.38 > 24dBm
3. 11dBm + 10log (21.72) = 24.36 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.18) = 22.99 < 24dBm

Chain 3
1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.48) = 24.32 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.32) = 22.95 < 24dBm

802.11ax (HE20)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	21.79	22.59	332.560	25.22	30.00	Pass
44	5220	26.05	26.03	803.584	29.05	30.00	Pass
48	5240	25.55	25.54	717.018	28.56	30.00	Pass
52	5260	20.10	20.26	208.499	23.19	24.00	Pass
60	5300	20.26	20.56	219.932	23.42	24.00	Pass
64	5320	20.26	20.43	216.577	23.36	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (22.13) = 24.44 > 24dBm
2. 11dBm + 10log (22.77) = 24.57 > 24dBm
3. 11dBm + 10log (22.28) = 24.47 > 24dBm

Chain 1

1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	16.68	16.62	16.17	16.63	179.904	22.55	24.00	Pass
116	5580	16.80	16.41	15.41	16.83	174.564	22.42	24.00	Pass
140	5700	16.22	16.90	16.07	16.65	177.553	22.49	24.00	Pass
144	5720 For U-NII-2C	14.13	14.93	14.96	14.84	118.811	20.75	22.96	Pass
144	5720 For U-NII-3	9.75	9.59	10.14	9.74	38.286	15.83	30.00	Pass
149	5745	22.71	23.04	23.38	23.76	**843.465**	29.26	30.00	Pass
157	5785	22.79	22.91	23.30	23.80	839.221	29.24	30.00	Pass
165	5825	22.81	22.89	23.28	23.79	837.667	29.23	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.71) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.12) = 23.00 < 24dBm

Chain 1
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.27) = 22.96 < 24dBm

Chain 2
1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.89) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.13) = 23.00 < 24dBm

Chain 3
1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.81) = 24.38 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.20) = 22.98 < 24dBm

802.11ax (HE40)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.66	21.18	247.633	23.94	30.00	Pass
46	5230	24.81	25.01	619.648	27.92	30.00	Pass
54	5270	20.26	20.31	213.568	23.30	24.00	Pass
62	5310	20.23	19.87	202.490	23.06	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.37) = 27.16 > 24dBm

Chain 1

1. 11dBm + 10log (41.40) = 27.17 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	17.41	17.16	16.59	17.37	207.260	23.17	24.00	Pass
110	5550	16.57	17.55	16.72	18.20	**215.338**	23.33	24.00	Pass
134	5670	17.49	17.25	16.77	17.48	212.703	23.28	24.00	Pass
142	5710 For U-NII-2C	14.49	15.10	14.47	14.50	116.652	20.67	24.00	Pass
142	5710 For U-NII-3	5.58	5.71	3.92	6.20	13.973	11.45	30.00	Pass
151	5755	23.18	23.09	23.00	23.42	830.986	29.20	30.00	Pass
159	5795	22.82	23.49	23.01	23.33	830.047	29.19	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (41.35) = 27.16 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.45) = 26.50 > 24dBm

Chain 1
1. 11dBm + 10log (41.07) = 27.13 > 24dBm
2. 11dBm + 10log (41.12) = 27.14 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.48) = 26.50 > 24dBm

Chain 2
1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.15) = 27.14 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.51) = 26.50 > 24dBm

Chain 3
1. 11dBm + 10log (41.35) = 27.16 > 24dBm
2. 11dBm + 10log (41.29) = 27.15 > 24dBm
3. 11dBm + 10log (41.25) = 27.15 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.40) = 26.51 > 24dBm

802.11ax (HE80)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	19.92	20.20	202.888	23.07	30.00	Pass
58	5290	19.27	18.99	163.778	22.14	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (81.94) = 30.13 > 24dBm

Chain 1

1. 11dBm + 10log (81.86) = 30.13 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	17.16	17.41	16.77	17.31	208.441	23.19	24.00	Pass
122	5610	16.89	17.46	16.62	17.87	211.739	23.26	24.00	Pass
138	5690 For U-NII-2C	13.37	13.50	13.63	13.29	88.512	19.47	24.00	Pass
138	5690 For U-NII-3	-0.56	0.92	2.39	0.40	4.9453	6.94	30.00	Pass
155	5775	22.79	23.58	22.71	23.09	808.484	29.08	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (81.97) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.20) = 29.79 > 24dBm

Chain 1
1. 11dBm + 10log (81.74) = 30.12 > 24dBm
2. 11dBm + 10log (81.63) = 30.11 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.14) = 29.80 > 24dBm

Chain 2
1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.02) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5648.95) = 29.81 > 24dBm

Chain 3
1. 11dBm + 10log (82.17) = 30.14 > 24dBm
2. 11dBm + 10log (82.33) = 30.15 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.05) = 29.80 > 24dBm

802.11ax (HE160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	17.02	17.05	16.52	17.92	207.868	23.18	24.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (162.55) = 33.10 > 24dBm
Chain 1
1. 11dBm + 10log (163.27) = 33.12 > 24dBm
Chain 2
1. 11dBm + 10log (162.61) = 33.11 > 24dBm
Chain 3
1. 11dBm + 10log (162.38) = 33.10 > 24dBm

802.11ac (VHT20)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	21.78	22.53	329.721	25.18	30.00	Pass
44	5220	26.04	25.96	796.248	29.01	30.00	Pass
48	5240	25.54	25.45	708.848	28.51	30.00	Pass
52	5260	20.06	20.18	205.623	23.13	24.00	Pass
60	5300	20.21	20.53	217.934	23.38	24.00	Pass
64	5320	20.15	20.30	210.666	23.24	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (22.13) = 24.44 > 24dBm
2. 11dBm + 10log (22.77) = 24.57 > 24dBm
3. 11dBm + 10log (22.28) = 24.47 > 24dBm

Chain 1

1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	16.58	16.47	16.09	16.52	175.379	22.44	24.00	Pass
116	5580	16.69	16.40	15.38	16.70	171.605	22.35	24.00	Pass
140	5700	16.04	16.73	15.97	16.63	172.839	22.38	24.00	Pass
144	5720 For U-NII-2C	14.13	14.93	14.96	14.84	118.811	20.75	22.96	Pass
144	5720 For U-NII-3	9.75	9.59	10.14	9.74	38.286	15.83	30.00	Pass
149	5745	22.61	22.94	23.35	23.64	826.657	29.17	30.00	Pass
157	5785	22.72	22.85	23.21	23.76	826.916	29.17	30.00	Pass
165	5825	22.76	22.84	23.19	23.70	823.980	29.16	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.71) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.12) = 23.00 < 24dBm

Chain 1
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.27) = 22.96 < 24dBm

Chain 2
1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.89) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.13) = 23.00 < 24dBm

Chain 3
1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.81) = 24.38 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.20) = 22.98 < 24dBm

802.11ac (VHT40)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.49	21.02	238.417	23.77	30.00	Pass
46	5230	24.64	24.89	599.391	27.78	30.00	Pass
54	5270	20.20	20.20	209.426	23.21	24.00	Pass
62	5310	20.06	19.76	196.015	22.92	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.37) = 27.16 > 24dBm

Chain 1

1. 11dBm + 10log (41.40) = 27.17 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	17.24	17.10	16.58	17.36	204.202	23.10	24.00	Pass
110	5550	16.41	17.50	16.57	18.07	209.501	23.21	24.00	Pass
134	5670	17.35	17.17	16.67	17.34	207.096	23.16	24.00	Pass
142	5710 For U-NII-2C	14.49	15.10	14.47	14.50	116.652	20.67	24.00	Pass
142	5710 For U-NII-3	5.58	5.71	3.92	6.20	13.973	11.45	30.00	Pass
151	5755	23.19	23.02	23.02	23.37	826.614	29.17	30.00	Pass
159	5795	22.77	23.56	22.93	23.26	824.393	29.16	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (41.35) = 27.16 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.45) = 26.50 > 24dBm

Chain 1
1. 11dBm + 10log (41.07) = 27.13 > 24dBm
2. 11dBm + 10log (41.12) = 27.14 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.48) = 26.50 > 24dBm

Chain 2
1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.15) = 27.14 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.51) = 26.50 > 24dBm

Chain 3
1. 11dBm + 10log (41.35) = 27.16 > 24dBm
2. 11dBm + 10log (41.29) = 27.15 > 24dBm
3. 11dBm + 10log (41.25) = 27.15 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.40) = 26.51 > 24dBm

802.11ac (VHT80)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	19.95	20.11	201.421	23.04	30.00	Pass
58	5290	19.08	18.87	158.000	21.99	24.00	Pass

Note:

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (81.94) = 30.13 > 24dBm

Chain 1

1. 11dBm + 10log (81.86) = 30.13 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	16.99	17.38	16.67	17.30	204.860	23.11	24.00	Pass
122	5610	16.76	17.44	16.59	17.72	207.647	23.17	24.00	Pass
138	5690 For U-NII-2C	13.37	13.50	13.63	13.29	88.512	19.47	24.00	Pass
138	5690 For U-NII-3	-0.56	0.92	2.39	0.40	4.945	6.94	30.00	Pass
155	5775	22.81	23.49	22.63	23.03	798.483	29.02	30.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (81.97) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.20) = 29.79 > 24dBm

Chain 1
1. 11dBm + 10log (81.74) = 30.12 > 24dBm
2. 11dBm + 10log (81.63) = 30.11 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.14) = 29.80 > 24dBm

Chain 2
1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.02) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5648.95) = 29.81 > 24dBm

Chain 3
1. 11dBm + 10log (82.17) = 30.14 > 24dBm
2. 11dBm + 10log (82.33) = 30.15 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.05) = 29.80 > 24dBm

802.11ac (VHT160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	16.89	16.96	16.35	17.82	202.210	23.06	24.00	Pass

Note:
For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (162.55) = 33.10 > 24dBm
Chain 1
1. 11dBm + 10log (163.27) = 33.12 > 24dBm
Chain 2
1. 11dBm + 10log (162.61) = 33.11 > 24dBm
Chain 3
1. 11dBm + 10log (162.38) = 33.10 > 24dBm

Beamforming Mode

802.11ax (HE20)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	21.79	22.59	332.560	25.22	29.82	Pass
44	5220	26.05	26.03	**803.584**	29.05	29.82	Pass
48	5240	25.55	25.54	717.018	28.56	29.82	Pass
52	5260	20.10	20.26	208.499	23.19	23.89	Pass
60	5300	20.26	20.56	**219.932**	23.42	23.89	Pass
64	5320	20.26	20.43	216.577	23.36	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (22.13) = 24.44 > 24dBm
2. 11dBm + 10log (22.77) = 24.57 > 24dBm
3. 11dBm + 10log (22.28) = 24.47 > 24dBm

Chain 1

1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	16.68	16.62	16.17	16.63	179.904	22.55	22.62	Pass
116	5580	16.80	16.41	15.41	16.83	174.564	22.42	22.62	Pass
140	5700	16.22	16.90	16.07	16.65	177.553	22.49	22.62	Pass
144	5720 For U-NII-2C	14.13	14.93	14.96	14.84	118.811	20.75	21.58	Pass
144	5720 For U-NII-3	9.75	9.59	10.14	9.74	38.286	15.83	29.39	Pass
149	5745	22.71	23.04	23.38	23.76	**843.465**	29.26	29.39	Pass
157	5785	22.79	22.91	23.30	23.80	839.221	29.24	29.39	Pass
165	5825	22.81	22.89	23.28	23.79	837.667	29.23	29.39	Pass

Note:
5500~5700MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 22.96-(7.38-6) = 21.58dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:

Chain 0

1. 11dBm + 10log (21.71) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.12) = 23.00 < 24dBm

Chain 1

1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.27) = 22.96 < 24dBm

Chain 2

1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.89) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.13) = 23.00 < 24dBm

Chain 3

1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.81) = 24.38 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.20) = 22.98 < 24dBm

802.11ax (HE40)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.66	21.18	247.633	23.94	29.82	Pass
46	5230	24.81	25.01	619.648	27.92	29.82	Pass
54	5270	20.26	20.31	213.568	23.30	23.89	Pass
62	5310	20.23	19.87	202.490	23.06	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.37) = 27.16 > 24dBm

Chain 1

1. 11dBm + 10log (41.40) = 27.17 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	16.89	16.54	16.02	16.73	**181.039**	22.58	22.62	Pass
110	5550	15.83	16.81	15.96	17.42	180.909	22.57	22.62	Pass
134	5670	16.77	16.47	16.06	16.65	178.497	22.52	22.62	Pass
142	5710 For U-NII-2C	14.49	15.10	14.47	14.50	116.652	20.67	22.62	Pass
142	5710 For U-NII-3	5.58	5.71	3.92	6.20	13.973	11.45	29.39	Pass
151	5755	23.18	23.09	23.00	23.42	830.986	29.20	29.39	Pass
159	5795	22.82	23.49	23.01	23.33	830.047	29.19	29.39	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (41.35) = 27.16 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.45) = 26.50 > 24dBm

Chain 1
1. 11dBm + 10log (41.07) = 27.13 > 24dBm
2. 11dBm + 10log (41.12) = 27.14 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.48) = 26.50 > 24dBm

Chain 2
1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.15) = 27.14 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.51) = 26.50 > 24dBm

Chain 3
1. 11dBm + 10log (41.35) = 27.16 > 24dBm
2. 11dBm + 10log (41.29) = 27.15 > 24dBm
3. 11dBm + 10log (41.25) = 27.15 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.40) = 26.51 > 24dBm

802.11ax (HE80)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	19.92	20.20	202.888	23.07	29.82	Pass
58	5290	19.27	18.99	163.778	22.14	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (81.94) = 30.13 > 24dBm

Chain 1

1. 11dBm + 10log (81.86) = 30.13 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	16.43	16.70	16.06	16.51	175.864	22.45	22.62	Pass
122	5610	16.05	16.71	15.88	17.12	177.402	22.49	22.62	Pass
138	5690 For U-NII-2C	13.37	13.50	13.63	13.29	88.512	19.47	22.62	Pass
138	5690 For U-NII-3	-0.56	0.92	2.39	0.40	4.945	6.94	29.39	Pass
155	5775	22.79	23.58	22.71	23.09	808.484	29.08	29.39	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (81.97) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.20) = 29.79 > 24dBm
Chain 1
1. 11dBm + 10log (81.74) = 30.12 > 24dBm
2. 11dBm + 10log (81.63) = 30.11 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.14) = 29.80 > 24dBm
Chain 2
1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.02) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5648.95) = 29.81 > 24dBm
Chain 3
1. 11dBm + 10log (82.17) = 30.14 > 24dBm
2. 11dBm + 10log (82.33) = 30.15 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.05) = 29.80 > 24dBm

802.11ax (HE160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	16.27	16.32	15.81	17.14	175.086	22.43	22.62	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (162.55) = 33.10 > 24dBm
Chain 1
1. 11dBm + 10log (163.27) = 33.12 > 24dBm
Chain 2
1. 11dBm + 10log (162.61) = 33.11 > 24dBm
Chain 3
1. 11dBm + 10log (162.38) = 33.10 > 24dBm

802.11ac (VHT20)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	21.78	22.53	329.721	25.18	29.82	Pass
44	5220	26.04	25.96	796.248	29.01	29.82	Pass
48	5240	25.54	25.45	708.848	28.51	29.82	Pass
52	5260	20.06	20.18	205.623	23.13	23.89	Pass
60	5300	20.21	20.53	217.934	23.38	23.89	Pass
64	5320	20.15	20.30	210.666	23.24	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (22.13) = 24.44 > 24dBm
2. 11dBm + 10log (22.77) = 24.57 > 24dBm
3. 11dBm + 10log (22.28) = 24.47 > 24dBm

Chain 1

1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	16.58	16.47	16.09	16.52	175.379	22.44	22.62	Pass
116	5580	16.69	16.40	15.38	16.70	171.605	22.35	22.62	Pass
140	5700	16.04	16.73	15.97	16.63	172.839	22.38	22.62	Pass
144	5720 For U-NII-2C	14.13	14.93	14.96	14.84	118.811	20.75	21.58	Pass
144	5720 For U-NII-3	9.75	9.59	10.14	9.74	38.286	15.83	29.39	Pass
149	5745	22.61	22.94	23.35	23.64	826.657	29.17	29.39	Pass
157	5785	22.72	22.85	23.21	23.76	826.916	29.17	29.39	Pass
165	5825	22.76	22.84	23.19	23.70	823.980	29.16	29.39	Pass

Note:
5500~5700MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 22.96-(7.38-6) = 21.58dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.71) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.12) = 23.00 < 24dBm

Chain 1
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.27) = 22.96 < 24dBm

Chain 2
1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.89) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.13) = 23.00 < 24dBm

Chain 3
1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.81) = 24.38 > 24dBm
4. 11dBm + 10log (5725.00 - 5709.20) = 22.98 < 24dBm

802.11ac (VHT40)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.49	21.02	238.417	23.77	29.82	Pass
46	5230	24.64	24.89	599.391	27.78	29.82	Pass
54	5270	20.20	20.20	209.426	23.21	23.89	Pass
62	5310	20.06	19.76	196.015	22.92	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.37) = 27.16 > 24dBm

Chain 1

1. 11dBm + 10log (41.40) = 27.17 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	16.76	16.35	15.90	16.64	175.612	22.45	22.62	Pass
110	5550	15.79	16.66	15.94	17.38	178.242	22.51	22.62	Pass
134	5670	16.65	16.38	15.93	16.52	173.738	22.40	22.62	Pass
142	5710 For U-NII-2C	14.49	15.10	14.47	14.50	116.652	20.67	22.62	Pass
142	5710 For U-NII-3	5.58	5.71	3.92	6.20	13.973	11.45	29.39	Pass
151	5755	23.19	23.02	23.02	23.37	826.614	29.17	29.39	Pass
159	5795	22.77	23.56	22.93	23.26	824.393	29.16	29.39	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (41.35) = 27.16 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.45) = 26.50 > 24dBm

Chain 1
1. 11dBm + 10log (41.07) = 27.13 > 24dBm
2. 11dBm + 10log (41.12) = 27.14 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.48) = 26.50 > 24dBm

Chain 2
1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.15) = 27.14 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.51) = 26.50 > 24dBm

Chain 3
1. 11dBm + 10log (41.35) = 27.16 > 24dBm
2. 11dBm + 10log (41.29) = 27.15 > 24dBm
3. 11dBm + 10log (41.25) = 27.15 > 24dBm
4. 11dBm + 10log (5725.00 - 5689.40) = 26.51 > 24dBm

802.11ac (VHT80)

For U-NII-1 & U-NII-2A Band

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	19.95	20.11	201.421	23.04	29.82	Pass
58	5290	19.08	18.87	158.000	21.99	23.89	Pass

Note:
5180~5240MHz Directional Gain = 6.18dBi > 6dBi, so the limit shall be reduced to 30-(6.18-6) = 29.82dBm.
5260~5320MHz Directional Gain = 6.11dBi > 6dBi, so the limit shall be reduced to 24-(6.11-6) = 23.89dBm.

For U-NII-2A Band:

Chain 0

1. 11dBm + 10log (81.94) = 30.13 > 24dBm

Chain 1

1. 11dBm + 10log (81.86) = 30.13 > 24dBm

For For U-NII-2C & U-NII-3 Band

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	16.27	16.53	15.95	16.50	171.366	22.34	22.62	Pass
122	5610	16.00	16.60	15.72	17.07	173.778	22.40	22.62	Pass
138	5690 For U-NII-2C	13.37	13.50	13.63	13.29	88.512	19.47	22.62	Pass
138	5690 For U-NII-3	-0.56	0.92	2.39	0.40	4.945	6.94	29.39	Pass
155	5775	22.81	23.49	22.63	23.03	798.483	29.02	29.39	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.
5745~5825MHz Directional Gain = 6.61dBi > 6dBi, so the limit shall be reduced to 30-(6.61-6) = 29.39dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (81.97) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.20) = 29.79 > 24dBm

Chain 1
1. 11dBm + 10log (81.74) = 30.12 > 24dBm
2. 11dBm + 10log (81.63) = 30.11 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.14) = 29.80 > 24dBm

Chain 2
1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.02) = 30.13 > 24dBm
3. 11dBm + 10log (5725.00 - 5648.95) = 29.81 > 24dBm

Chain 3
1. 11dBm + 10log (82.17) = 30.14 > 24dBm
2. 11dBm + 10log (82.33) = 30.15 > 24dBm
3. 11dBm + 10log (5725.00 - 5649.05) = 29.80 > 24dBm

802.11ac (VHT160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	16.20	16.22	15.65	17.12	171.817	22.35	22.62	Pass

Note:
5500~5720MHz Directional Gain = 7.38dBi > 6dBi, so the limit shall be reduced to 24-(7.38-6) = 22.62dBm.

For U-NII-2C Band:
Chain 0
1. 11dBm + 10log (162.55) = 33.10 > 24dBm
Chain 1
1. 11dBm + 10log (163.27) = 33.12 > 24dBm
Chain 2
1. 11dBm + 10log (162.61) = 33.11 > 24dBm
Chain 3
1. 11dBm + 10log (162.38) = 33.10 > 24dBm

26dB Bandwidth:

For U-NII-2A Band

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	21.54	21.58
60	5300	21.65	21.59
64	5320	21.58	21.53

802.11ax (HE20)

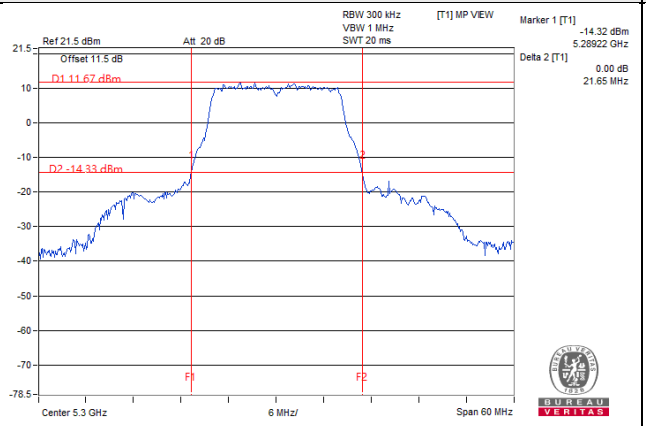
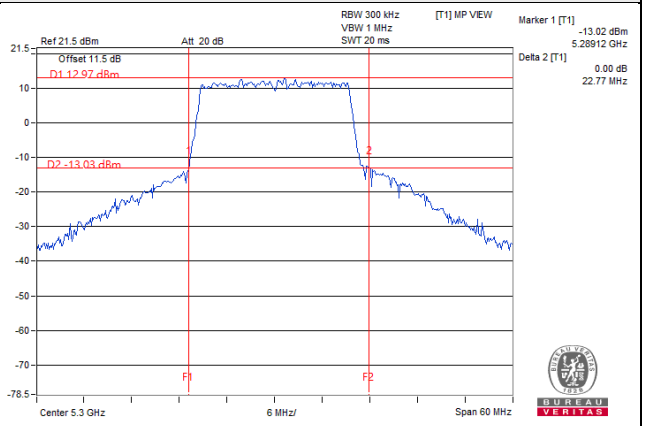
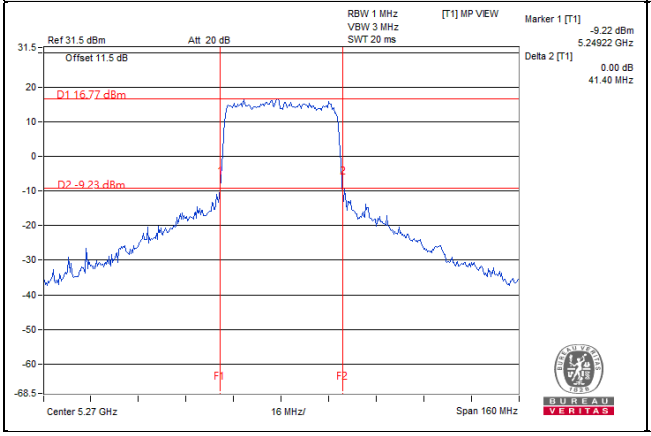
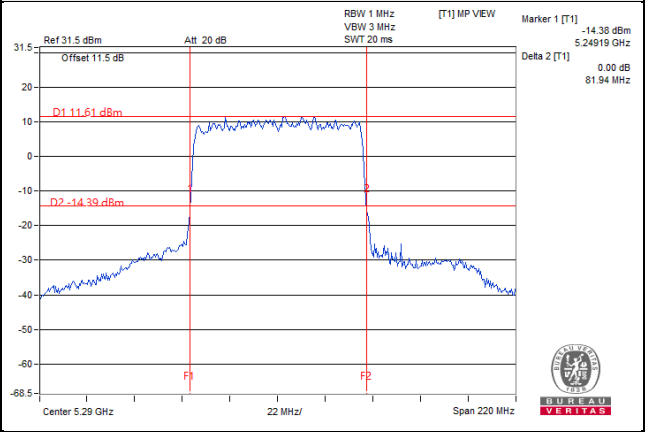
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	22.13	21.82
60	5300	22.77	21.69
64	5320	22.28	21.79

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	41.34	41.40
62	5310	41.37	41.34

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	81.94	81.86

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

For For U-NII-2C & U-NII-3 Band

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.63	21.81	21.77	21.69
116	5580	21.64	21.87	21.78	21.48
140	5700	21.57	21.85	21.72	21.67
144	5720 (For U-NII-2C)	15.75	15.67	15.82	15.68
144	5720 (For U-NII-3)	5.91	6.01	5.94	5.98

802.11ax (HE20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.71	21.77	21.78	21.85
116	5580	21.71	21.67	21.89	21.92
140	5700	21.88	21.83	21.94	21.81
144	5720 (For U-NII-2C)	15.88	15.73	15.87	15.80
144	5720 (For U-NII-3)	5.95	5.90	6.00	6.07

802.11ax (HE40)

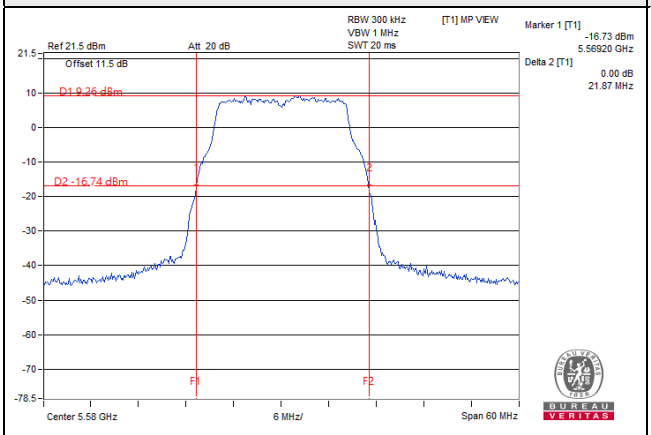
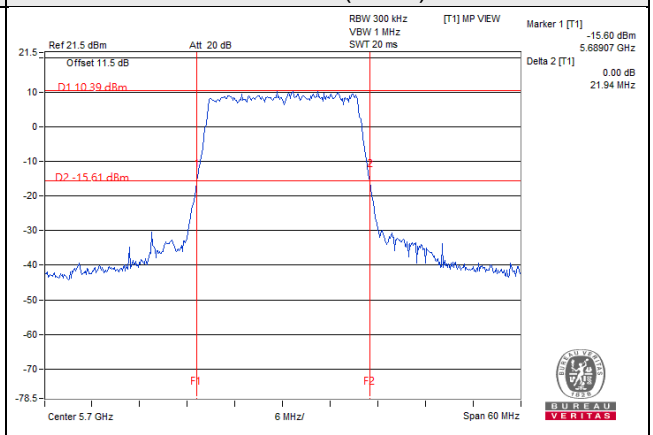
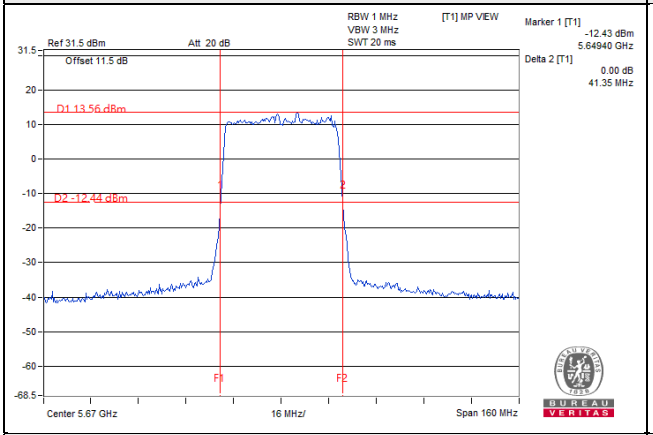
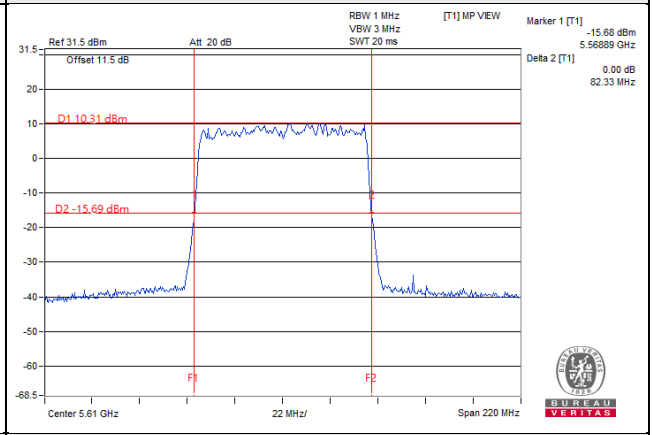
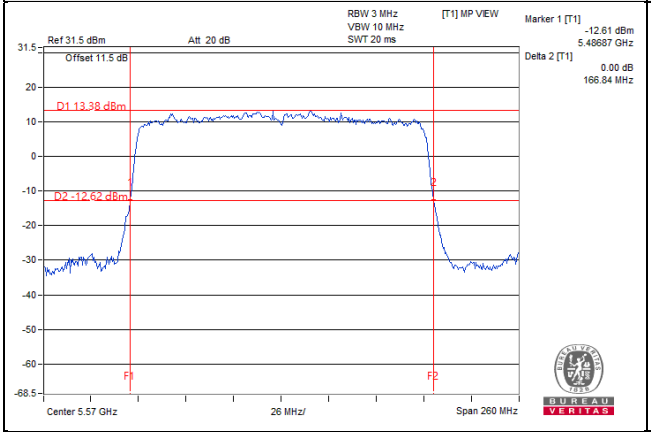
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	41.31	41.07	41.30	41.35
110	5550	41.31	41.12	41.25	41.29
134	5670	41.35	41.08	41.15	41.25
142	5710 (For U-NII-2C)	35.55	35.52	35.49	35.60
142	5710 (For U-NII-3)	5.67	5.50	5.67	5.68

802.11ax (HE80)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	81.98	81.74	81.82	82.17
122	5610	81.97	81.63	82.02	82.33
138	5690 (For U-NII-2C)	75.80	75.86	76.05	75.95
138	5690 (For U-NII-3)	6.25	5.96	6.03	6.17

802.11ax (HE160)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	166.03	166.59	166.77	166.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	
802.11ax (HE160)	
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	225.593	23.53
5470~5725	179.193	22.53

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	219.932	23.42
5470~5725	179.904	22.55

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	213.568	23.30
5470~5725	215.338	23.33

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	163.778	22.14
5470~5725	211.739	23.26

802.11ax (HE160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5470~5725	207.868	23.18

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	217.934	23.38
5470~5725	175.379	22.44

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	209.426	23.21
5470~5725	209.501	23.21

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	158.000	21.99
5470~5725	207.647	23.17

802.11ac (VHT160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5470~5725	202.210	23.06

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	219.932	23.42
5470~5725	179.904	22.55

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	213.568	23.30
5470~5725	181.039	22.58

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	163.778	22.14
5470~5725	177.402	22.49

802.11ax (HE160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5470~5725	175.086	22.43

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	217.934	23.38
5470~5725	175.379	22.44

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	209.426	23.21
5470~5725	178.242	22.51

802.11ac (VHT80)

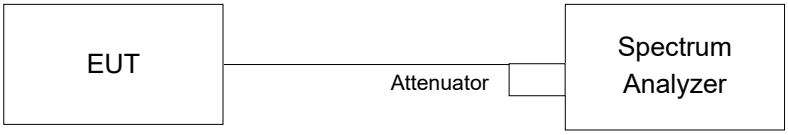
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	158.000	21.99
5470~5725	173.778	22.40

802.11ac (VHT160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5470~5725	171.817	22.35

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 sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Result

For U-NII-1 & U-NII-2A Band

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.04	16.80
44	5220	18.12	18.24
48	5240	18.24	17.64
52	5260	17.04	17.04
60	5300	17.04	17.04
64	5320	17.04	17.04

802.11ax (HE20)

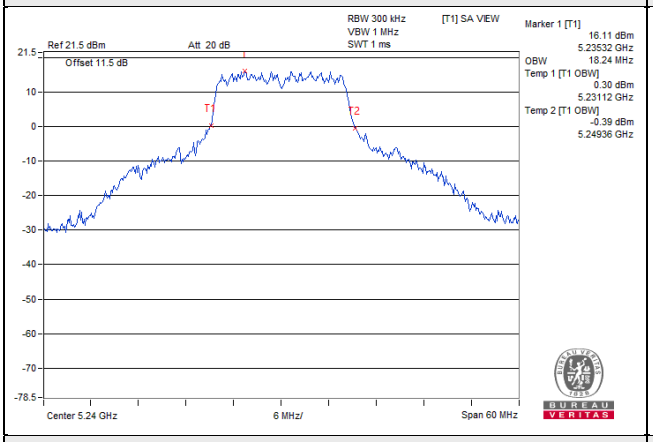
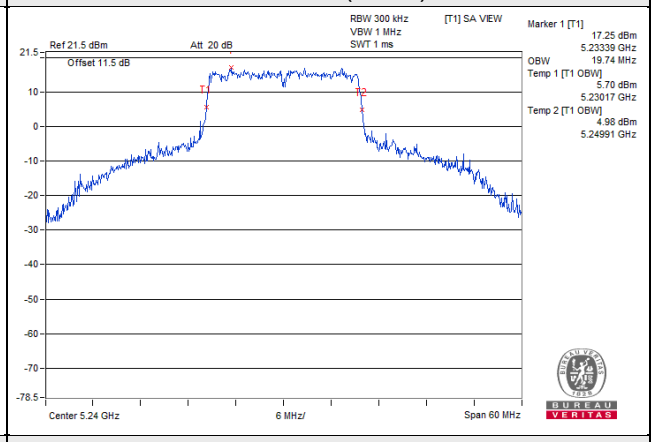
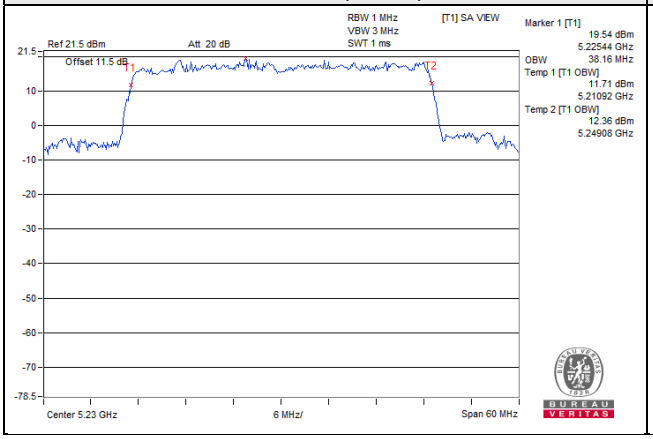
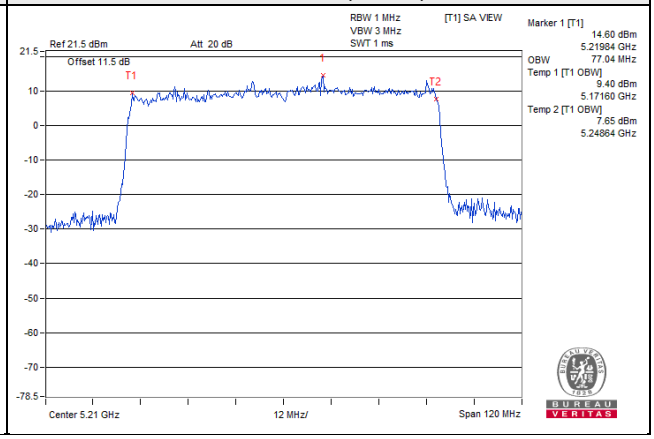
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.20	19.20
44	5220	19.20	19.08
48	5240	19.74	19.68
52	5260	19.20	19.08
60	5300	19.20	19.08
64	5320	19.20	19.08

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.68
46	5230	38.16	38.16
54	5270	37.68	37.80
62	5310	37.80	37.68

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.04	77.04
58	5290	77.04	76.80

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Spectrum Plot for near By DFS Band	
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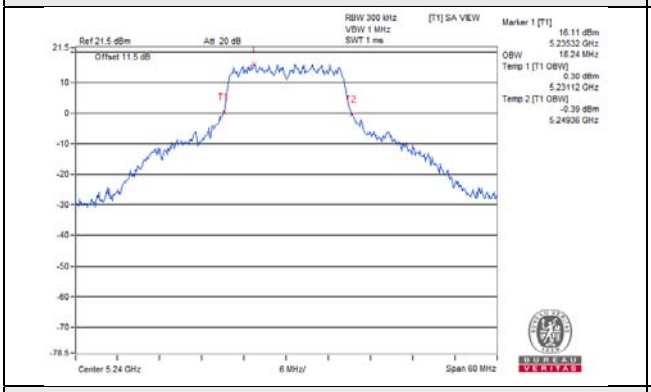	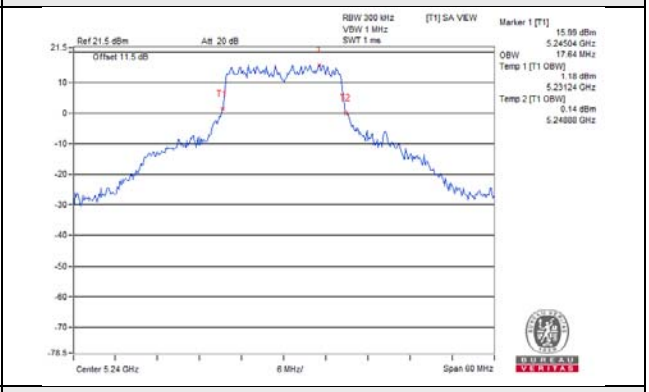
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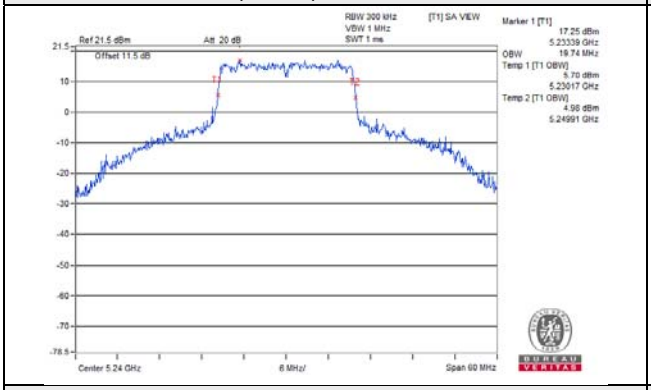	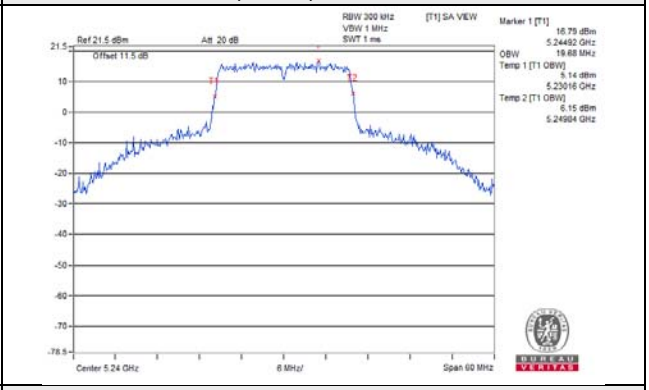
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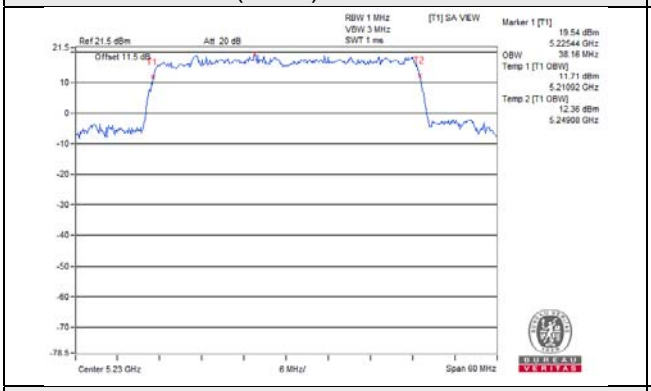
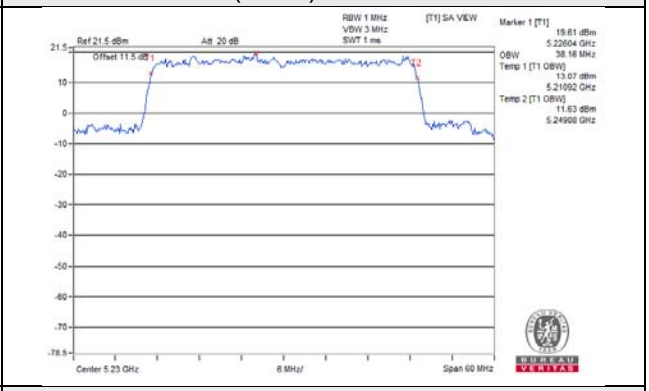
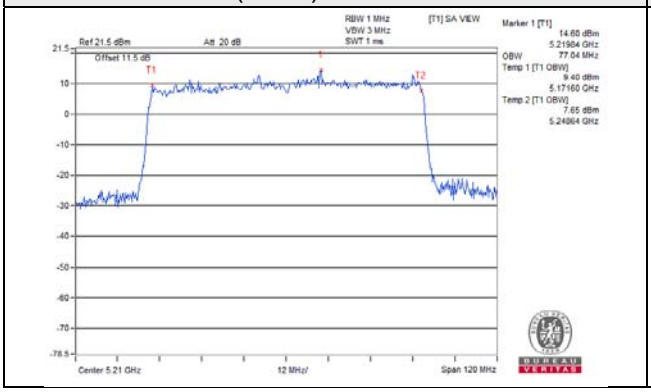
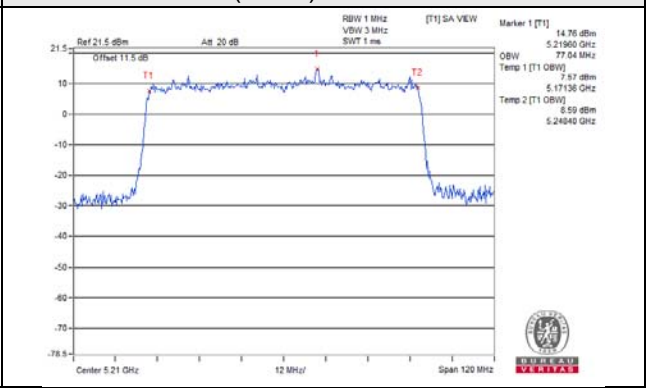
	
802.11ax (HE80) / Chain 0 / CH 42	802.11ax (HE80) / Chain 1 / CH 42
	

For For U-NII-2C & U-NII-3 Band

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	17.04	17.04	16.92	16.92
116	5580	16.92	17.16	17.04	16.92
140	5700	16.92	17.16	17.04	16.92
144	5720 (For U-NII-2C)	13.40	13.52	13.52	13.40
144	5720 (For U-NII-3)	3.64	3.64	3.52	3.52
149	5745	17.22	17.04	16.95	17.04
157	5785	17.28	17.04	17.04	17.16
165	5825	17.40	17.16	17.04	17.40

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	19.08	19.08	19.20	19.20
116	5580	19.08	19.08	19.20	19.32
140	5700	19.08	19.08	19.32	19.20
144	5720 (For U-NII-2C)	14.48	14.48	14.60	14.60
144	5720 (For U-NII-3)	4.48	4.60	4.60	4.72
149	5745	19.20	19.20	19.08	19.44
157	5785	19.20	19.20	19.20	18.24
165	5825	19.20	19.20	19.20	19.44

802.11ax (HE40)

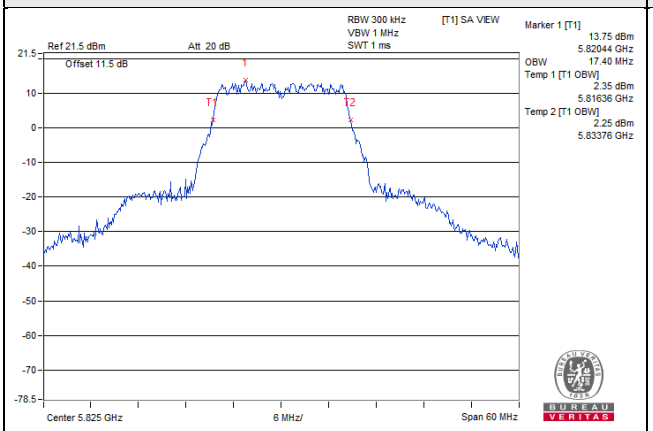
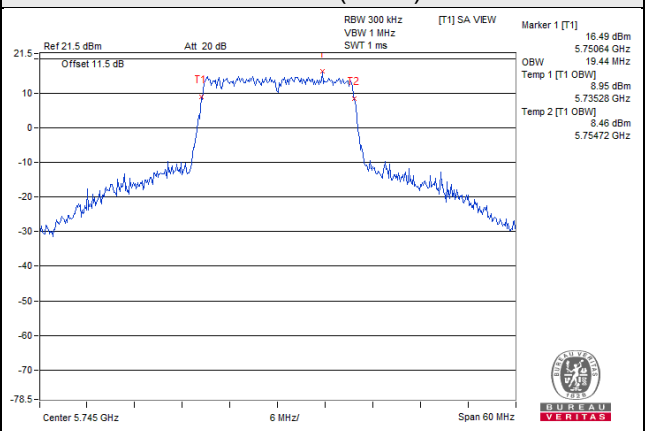
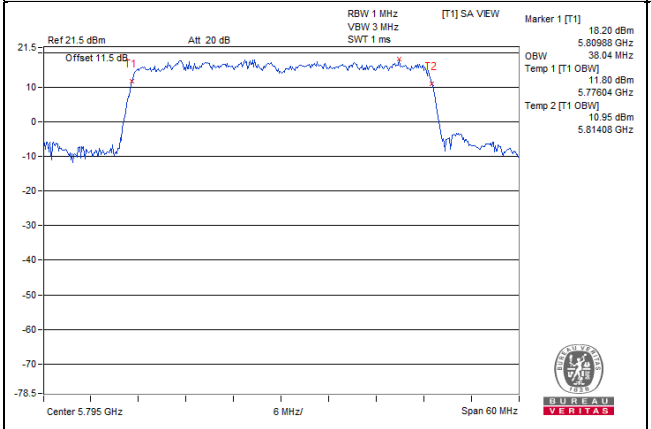
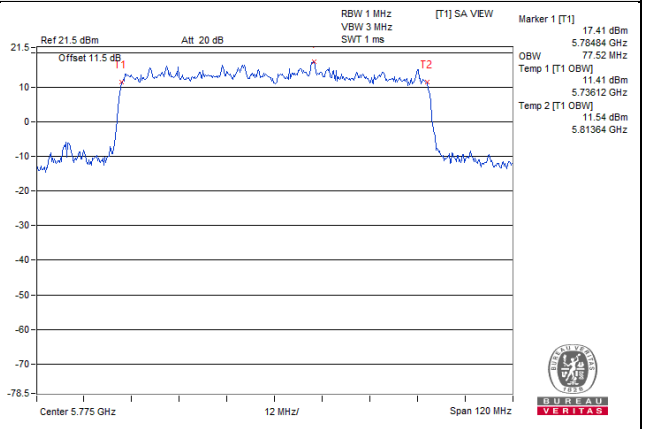
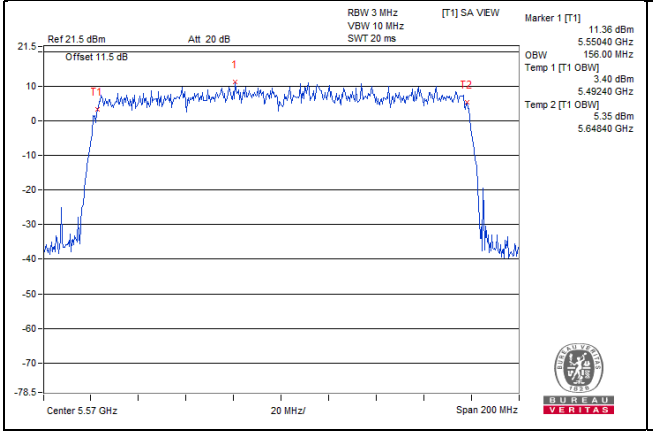
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	37.80	37.68	37.80	37.68
110	5550	37.80	37.68	37.68	37.80
134	5670	37.68	37.68	37.68	37.68
142	5710 (For U-NII-2C)	33.84	33.96	33.84	33.96
142	5710 (For U-NII-3)	3.84	3.84	3.84	3.84
151	5755	37.92	38.04	38.04	38.04
159	5795	38.04	38.04	38.04	38.04

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	77.04	76.80	76.80	76.80
122	5610	76.80	77.04	76.80	77.04
138	5690 (For U-NII-2C)	73.40	73.40	73.40	73.40
138	5690 (For U-NII-3)	3.64	3.40	3.64	3.40
155	5775	77.28	77.52	77.28	77.28

802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
114	5570	156.00	156.00	156.00	155.60

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	
802.11ax (HE160)	
	

Spectrum Plot for near By DFS Band	
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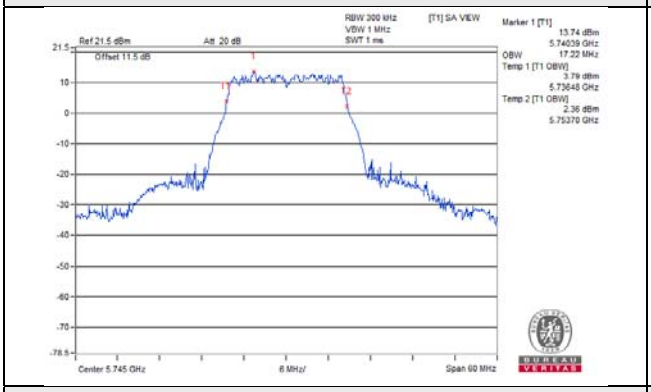
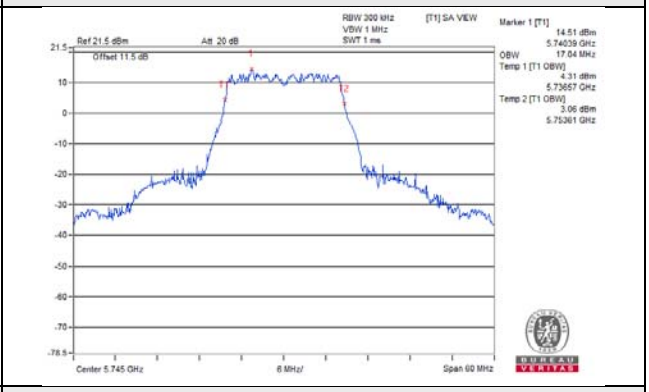
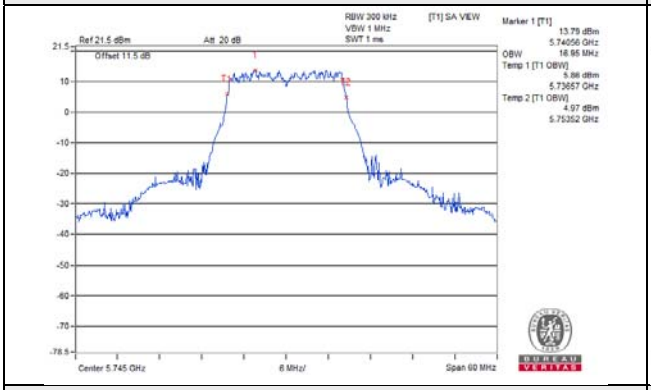
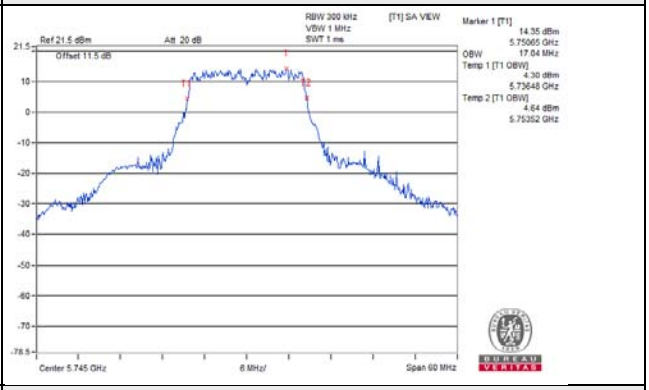
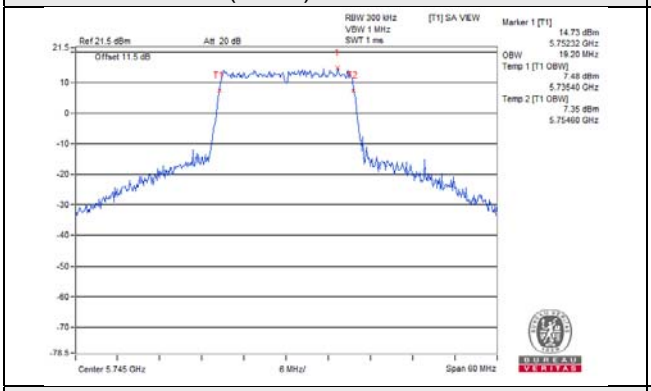
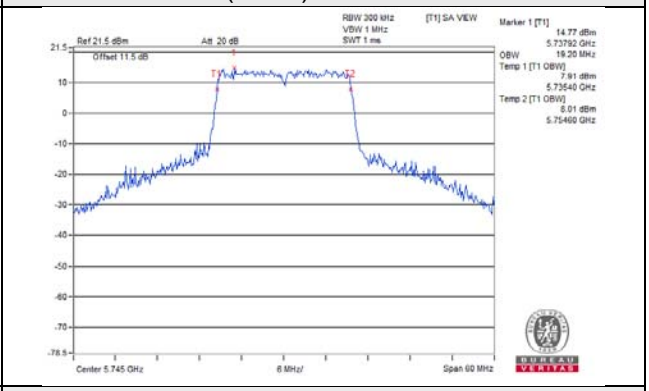
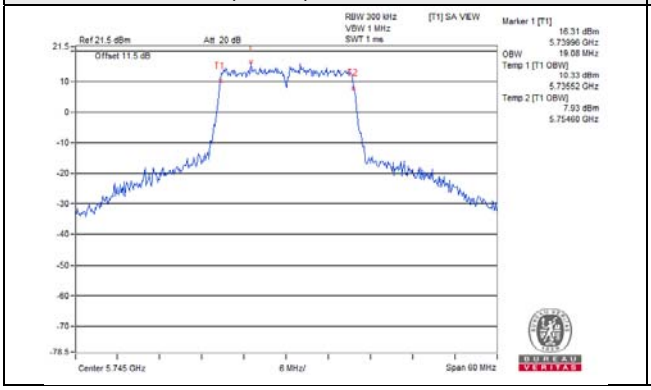
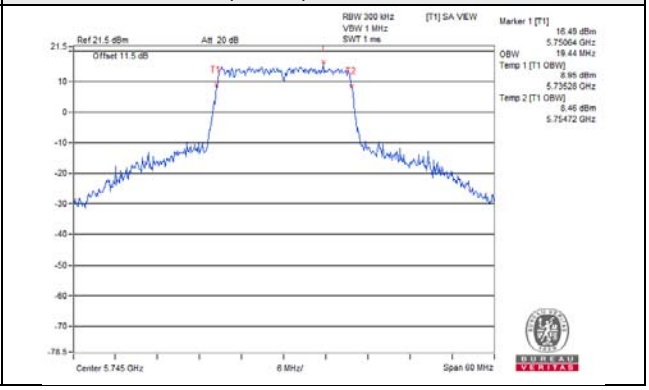
	
802.11a / Chain 2 / CH 149	802.11a / Chain 3 / CH 149
	
802.11ax (HE20) / Chain 0 / CH 149	802.11ax (HE20) / Chain 1 / CH 149
	
802.11ax (HE20) / Chain 2 / CH 149	802.11ax (HE20) / Chain 3 / CH 149
	

Spectrum Plot for near By DFS Band	
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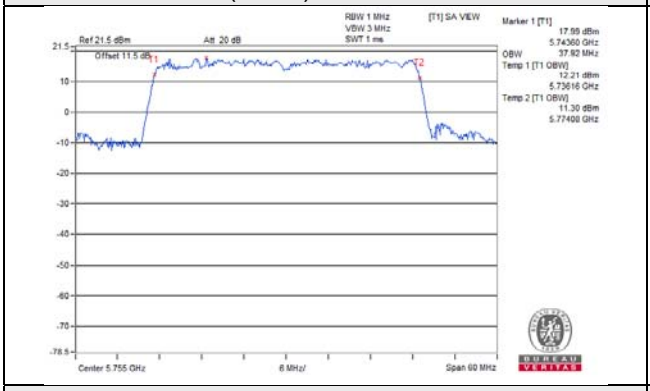
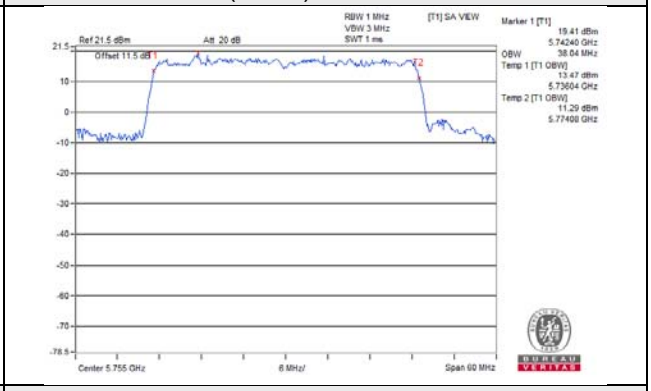
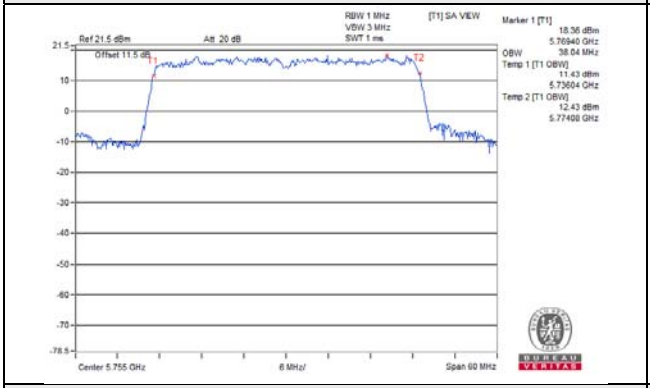
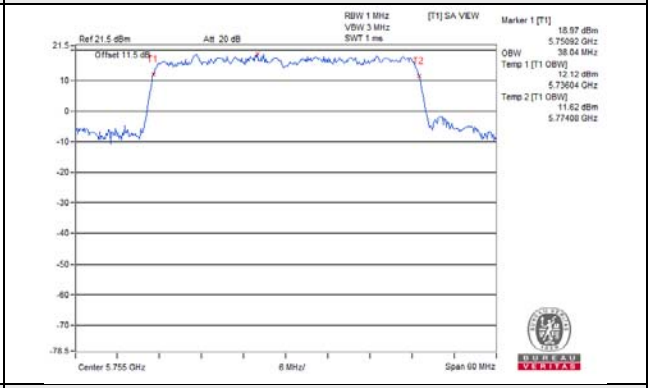
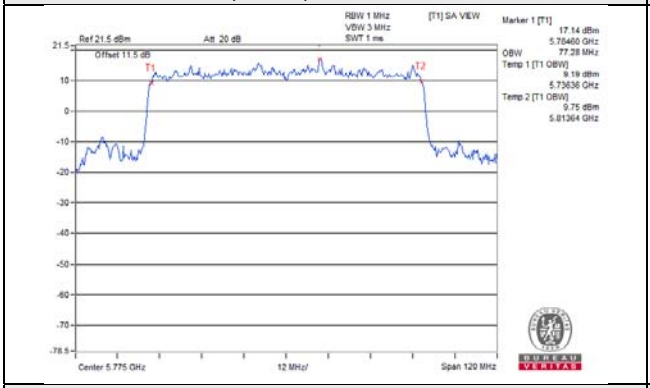
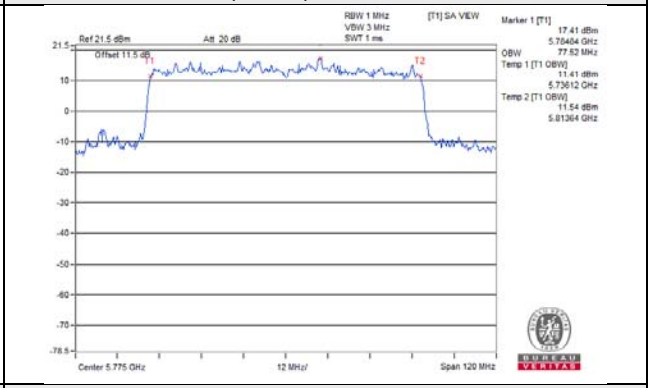
	
802.11ax (HE40) / Chain 2 / CH 151	802.11ax (HE40) / Chain 3 / CH 151
	
802.11ax (HE80) / Chain 0 / CH 155	802.11ax (HE80) / Chain 1 / CH 155
	
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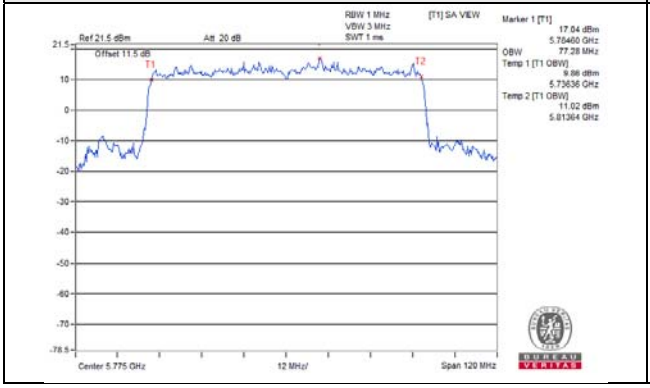
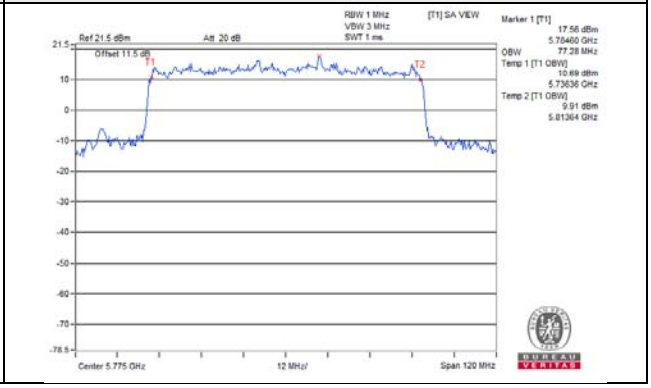
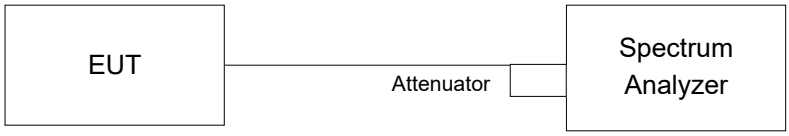
	

4.5 Peak Power Spectral Density Measurement

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	
		Mobile and Portable 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 Procedures

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

Duty cycle of test signal is > 98%

Using method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Sweep time = auto, trigger set to “free run”.

d. Trace average at least 100 traces in power averaging mode.

e. Record the max value

Duty cycle of test signal is < 98%

Using method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Set Channel power measure = 1MHz

d. Sweep time = auto, trigger set to “free run”.

e. Trace average at least 100 traces in power averaging mode.

f. Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

Duty cycle of test signal is > 98%

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS

c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.

d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)

e. Sweep time = auto, trigger set to “free run”.

f. Trace average at least 100 traces in power averaging mode.

g. Record the max value

Duty cycle of test signal is < 98%

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS

c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.

d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz / 300 kHz)

e. Sweep time = auto, trigger set to “free run”.

f. Trace average at least 100 traces in power averaging mode.

g. 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 Conditions

Same as 4.3.6.

4.5.7 Test Results

For U-NII-1 & U-NII-2A Band

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	6.41	7.02	0.24	9.98	16.82	Pass
44	5220	11.00	10.80	0.24	14.15	16.82	Pass
48	5240	10.83	10.09	0.24	13.73	16.82	Pass
52	5260	6.87	7.11	0.24	10.24	10.89	Pass
60	5300	6.98	6.92	0.24	10.20	10.89	Pass
64	5320	6.45	6.21	0.24	9.58	10.89	Pass

Note:

1. Method E) 2) 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. 5180~5240MHz Directional gain = 6.18dBi > 6dBi, so the power density limit shall be reduced to 17-(6.18-6) = 16.82dBm.
   5260~5320MHz Directional gain = 6.11dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	7.45	7.77	0.26	10.88	16.82	Pass
44	5220	10.93	10.71	0.26	14.09	16.82	Pass
48	5240	10.51	10.16	0.26	13.61	16.82	Pass
52	5260	6.92	6.98	0.26	10.22	10.89	Pass
60	5300	6.63	6.63	0.26	9.90	10.89	Pass
64	5320	6.40	6.24	0.26	9.59	10.89	Pass

Note:
1. Method E) 2) 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. 5180~5240MHz Directional gain = 6.18dBi > 6dBi, so the power density limit shall be reduced to 17-(6.18-6) = 16.82dBm.
   5260~5320MHz Directional gain = 6.11dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	3.13	3.79	0.38	6.86	16.82	Pass
46	5230	7.61	7.55	0.38	10.97	16.82	Pass
54	5270	4.29	4.36	0.38	7.72	10.89	Pass
62	5310	2.92	2.77	0.38	6.24	10.89	Pass

Note:
1. Method E) 2) 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. 5180~5240MHz Directional gain = 6.18dBi > 6dBi, so the power density limit shall be reduced to 17-(6.18-6) = 16.82dBm.
   5260~5320MHz Directional gain = 6.11dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

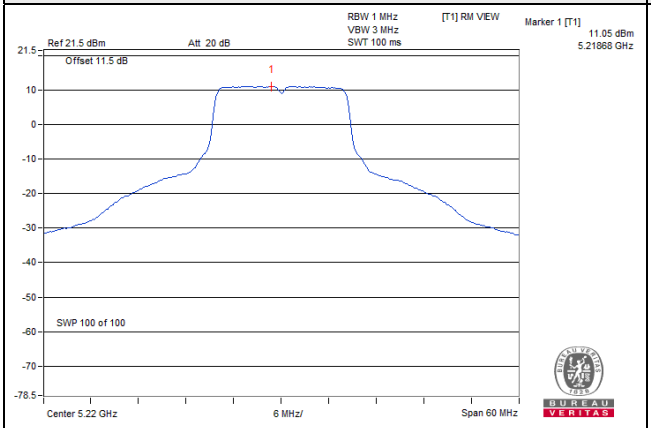
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	1.11	0.77	0.81	4.76	16.82	Pass
58	5290	-1.06	-0.37	0.81	3.12	10.89	Pass

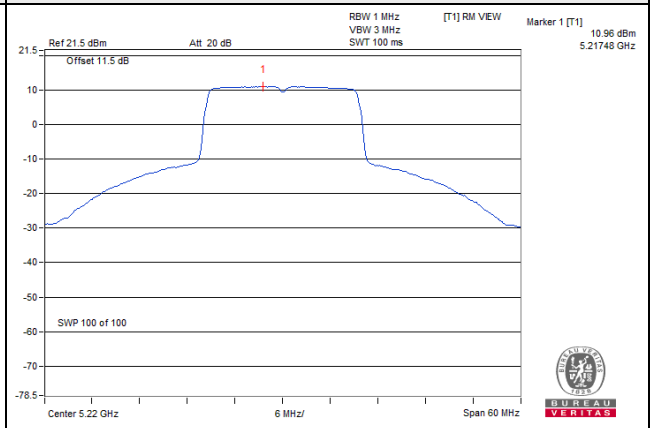
Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5180~5240MHz Directional gain = 6.18dBi > 6dBi, so the power density limit shall be reduced to 17-(6.18-6) = 16.82dBm.
   5260~5320MHz Directional gain = 6.11dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

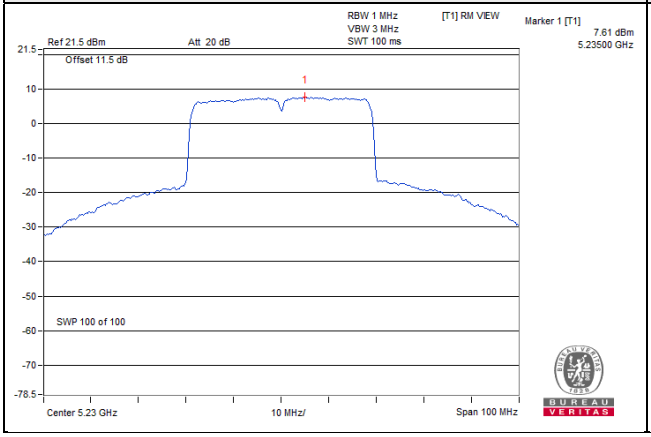
802.11a / Chain 0 / CH 44



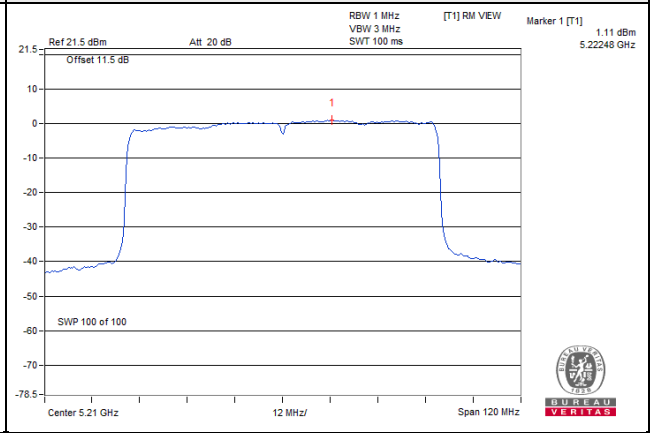
802.11ax (HE20) / Chain 0 / CH 44



802.11ax (HE40) / Chain 0 / CH 46



802.11ax (HE80) / Chain 0 / 42



For For U-NII-2C Band

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
100	5500	3.54	3.49	3.54	3.68	9.58	9.62	Pass
116	5580	3.02	3.65	3.51	3.87	9.54	9.62	Pass
140	5700	3.41	3.64	3.54	3.67	9.59	9.62	Pass
144	5720 For U-NII-2C	3.52	3.67	3.47	3.66	9.60	9.62	Pass

Note:
1. Method E) 2) 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.
2.5500~5720MHz Directional gain = 7.38dBi > 6dBi, so the power density limit shall be reduced to 11-(7.38-6) = 9.62dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
100	5500	3.43	3.52	3.44	3.73	9.55	9.62	Pass
116	5580	2.98	3.75	3.71	3.74	9.58	9.62	Pass
140	5700	3.56	3.38	3.71	3.49	9.56	9.62	Pass
144	5720 For U-NII-2C	3.39	3.59	3.51	3.76	9.59	9.62	Pass

Note:
1. Method E) 2) 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.
2.5500~5720MHz Directional gain = 7.38dBi > 6dBi, so the power density limit shall be reduced to 11-(7.38-6) = 9.62dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
102	5510	0.58	1.43	0.99	1.11	7.06	9.62	Pass
110	5550	1.31	2.23	2.20	2.08	7.99	9.62	Pass
134	5670	0.66	1.42	0.94	1.12	7.06	9.62	Pass
142	5710 For U-NII-2C	0.76	1.37	0.89	1.18	7.08	9.62	Pass

Note:
1. Method E) 2) 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.
2.5500~5720MHz Directional gain = 7.38dBi > 6dBi, so the power density limit shall be reduced to 11-(7.38-6) = 9.62dBm.

02.11ax (HE80)

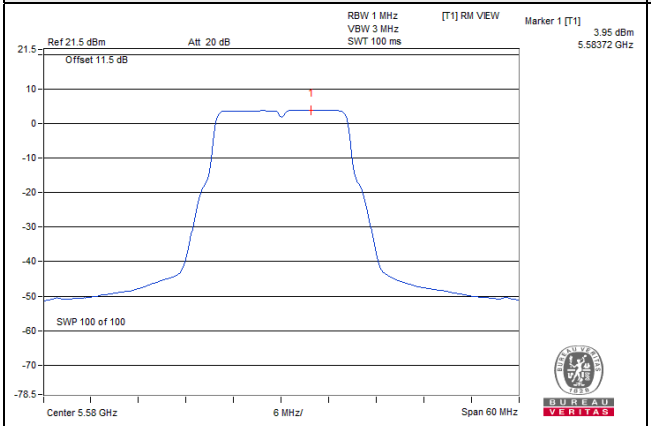
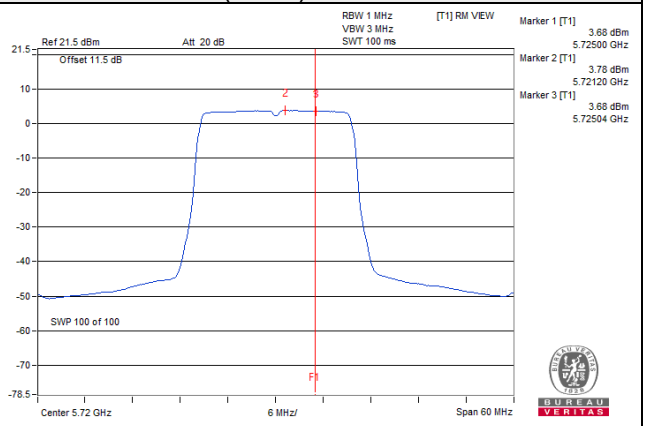
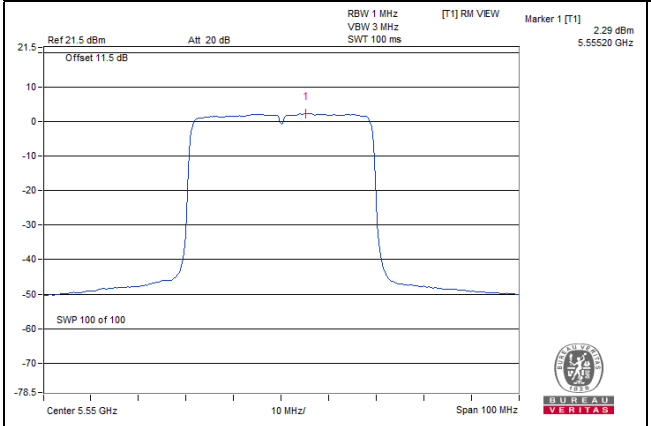
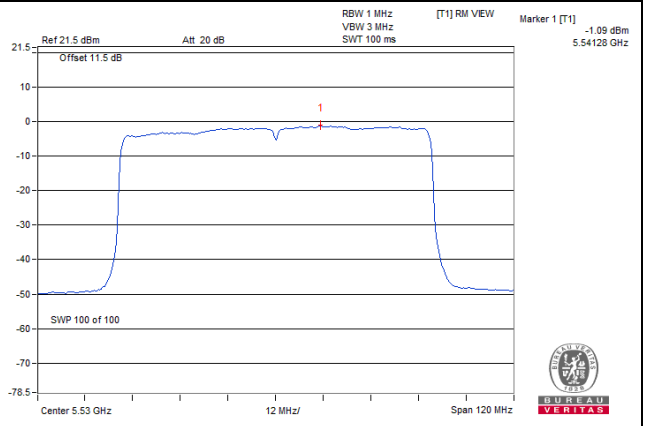
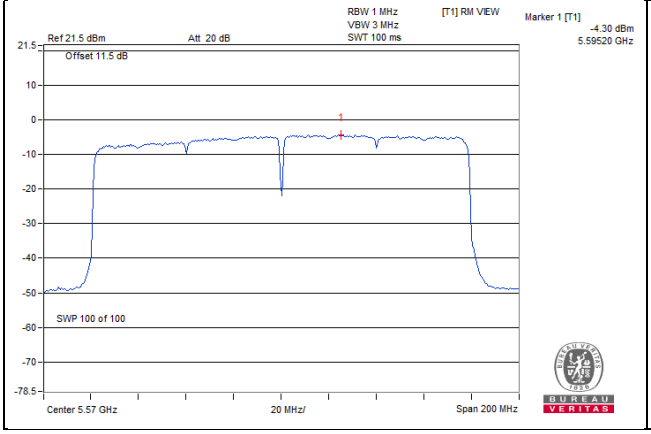
Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
106	5530	-1.56	-1.12	-1.19	-1.09	4.78	9.62	Pass
122	5610	-2.46	-1.68	-2.15	-2.36	3.87	9.62	Pass
138	5690 For U-NII-2C	-2.30	-2.03	-2.03	-2.16	3.89	9.62	Pass

Note:
1. Method E) 2) 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.
2.5500~5720MHz Directional gain = 7.38dBi > 6dBi, so the power density limit shall be reduced to 11-(7.38-6) = 9.62dBm.

802.11ax (HE160)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
114	5570	-5.41	-4.34	-4.91	-4.84	0.59	1.75	9.62	Pass

Note:
1. Method E) 2) 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.
2.5500~5720MHz Directional gain = 7.38dBi > 6dBi, so the power density limit shall be reduced to 11-(7.38-6) = 9.62dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 3 / CH 116	802.11ax (HE20) / Chain 3 / CH 144
	
802.11ax (HE40) / Chain 1 / CH 110	802.11ax (HE80) / Chain 3 / CH 106
	
802.11ax (HE160) / Chain 1 / CH 114	
	

For U-NII-3 band:

802.11a

TX chain	Channel	Chan. Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Total PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/ 300kHz)	(dBm/ 500kHz)				
0	144	5720 For 5745~5825MHz	-4.90	-2.68	6.02	3.34	29.39	Pass
	149	5745	0.08	2.30	6.02	8.43	29.39	Pass
	157	5785	0.19	2.41	6.02	8.45	29.39	Pass
	165	5825	0.21	2.43	6.02	8.35	29.39	Pass
1	144	5720 For 5745~5825MHz	-4.92	-2.70	6.02	3.32	29.39	Pass
	149	5745	0.11	2.33	6.02	8.35	29.39	Pass
	157	5785	0.22	2.44	6.02	8.46	29.39	Pass
	165	5825	0.26	2.48	6.02	8.50	29.39	Pass
2	144	5720 For 5745~5825MHz	-5.06	-2.84	6.02	3.18	29.39	Pass
	149	5745	0.78	3.00	6.02	9.02	29.39	Pass
	157	5785	0.74	2.96	6.02	8.98	29.39	Pass
	165	5825	0.67	2.89	6.02	8.91	29.39	Pass
3	144	5720 For 5745~5825MHz	-4.76	-2.54	6.02	3.48	29.39	Pass
	149	5745	0.94	3.16	6.02	9.18	29.39	Pass
	157	5785	0.89	3.11	6.02	9.13	29.39	Pass
	165	5825	0.65	2.87	6.02	8.89	29.39	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. 5745~5825MHz Directional gain 6.61dBi > 6dBi, so the power density limit shall be reduced to 30-(6.61-6) = 29.39dBm.

802.11ax (HE20)

TX chain	Channel	Chan. Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Total PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/ 300kHz)	(dBm/ 500kHz)				
0	144	5720 For 5745~5825MHz	-5.74	-3.52	6.02	2.50	29.39	Pass
	149	5745	0.58	2.80	6.02	8.82	29.39	Pass
	157	5785	1.04	3.26	6.02	9.28	29.39	Pass
	165	5825	0.81	3.03	6.02	9.05	29.39	Pass
1	144	5720 For 5745~5825MHz	-5.85	-3.63	6.02	2.39	29.39	Pass
	149	5745	0.72	2.94	6.02	8.96	29.39	Pass
	157	5785	0.80	3.02	6.02	9.04	29.39	Pass
	165	5825	0.75	2.97	6.02	8.99	29.39	Pass
2	144	5720 For 5745~5825MHz	-5.78	-3.56	6.02	2.46	29.39	Pass
	149	5745	1.27	3.49	6.02	9.51	29.39	Pass
	157	5785	1.54	3.76	6.02	9.78	29.39	Pass
	165	5825	1.16	3.38	6.02	9.40	29.39	Pass
3	144	5720 For 5745~5825MHz	-5.52	-3.30	6.02	2.72	29.39	Pass
	149	5745	1.65	3.87	6.02	9.89	29.39	Pass
	157	5785	2.11	4.33	6.02	10.35	29.39	Pass
	165	5825	1.73	3.95	6.02	9.97	29.39	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. 5745~5825MHz Directional gain 6.61dBi > 6dBi, so the power density limit shall be reduced to 30-(6.61-6) = 29.39dBm.

802.11ax (HE40)

TX chain	Channel	Chan. Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Total PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/ 300kHz)	(dBm/ 500kHz)				
0	142	5710 For 5745~5825MHz	-8.72	-6.50	6.02	-0.48	29.39	Pass
	151	5755	-2.10	0.12	6.02	6.14	29.39	Pass
	159	5795	-1.94	0.28	6.02	6.30	29.39	Pass
1	142	5710 For 5745~5825MHz	-8.55	-6.33	6.02	-0.31	29.39	Pass
	151	5755	-1.31	0.91	6.02	6.93	29.39	Pass
	159	5795	-1.14	1.08	6.02	7.10	29.39	Pass
2	142	5710 For 5745~5825MHz	-8.85	-6.63	6.02	-0.61	29.39	Pass
	151	5755	-1.71	0.51	6.02	6.53	29.39	Pass
	159	5795	-1.64	0.58	6.02	6.60	29.39	Pass
3	142	5710 For 5745~5825MHz	-8.28	-6.06	6.02	-0.04	29.39	Pass
	151	5755	-1.32	0.90	6.02	6.92	29.39	Pass
	159	5795	-1.38	0.84	6.02	6.86	29.39	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. 5745~5825MHz Directional gain 6.61dBi > 6dBi, so the power density limit shall be reduced to 30-(6.61-6) = 29.39dBm.

802.11ax (HE80)

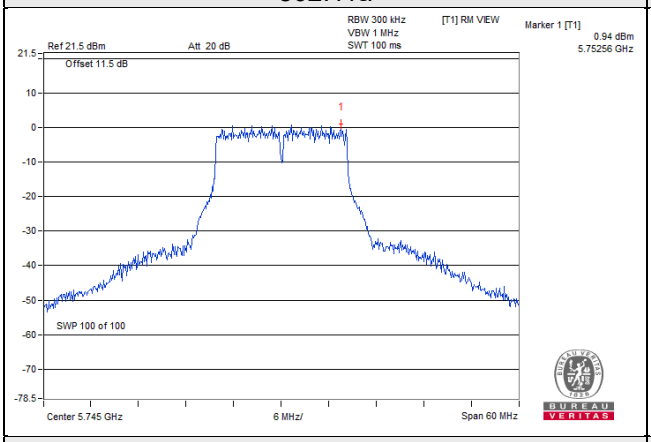
TX chain	Channel	Chan. Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Total PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/ 300kHz)	(dBm/ 500kHz)				
0	138	5690 For 5745~5825MHz	-11.85	-9.63	6.02	-3.61	29.39	Pass
	155	5775	-5.14	-2.92	6.02	3.10	29.39	Pass
1	138	5690 For 5745~5825MHz	-12.62	-10.40	6.02	-4.38	29.39	Pass
	155	5775	-4.43	-2.21	6.02	3.81	29.39	Pass
2	138	5690 For 5745~5825MHz	-12.18	-9.96	6.02	-3.94	29.39	Pass
	155	5775	-4.83	-2.61	6.02	3.41	29.39	Pass
3	138	5690 For 5745~5825MHz	-12.12	-9.90	6.02	-3.88	29.39	Pass
	155	5775	-4.60	-2.38	6.02	3.64	29.39	Pass

Note:

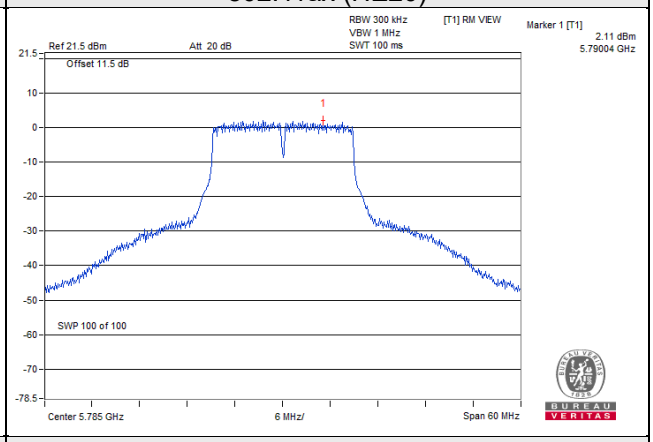
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. 5745~5825MHz Directional gain 6.61dBi > 6dBi, so the power density limit shall be reduced to 30-(6.61-6) = 29.39dBm.

Spectrum Plot of Worst Value

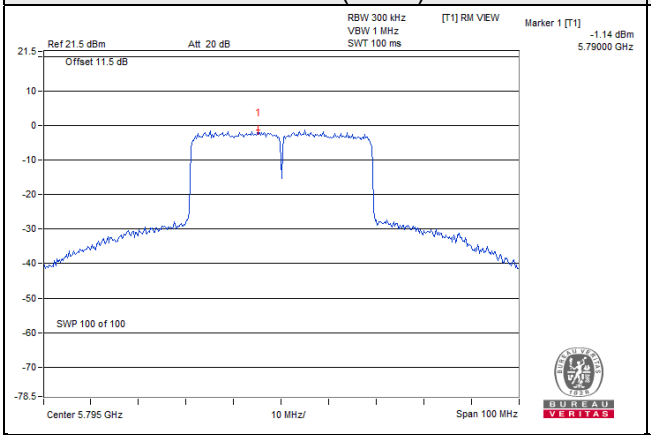
802.11a



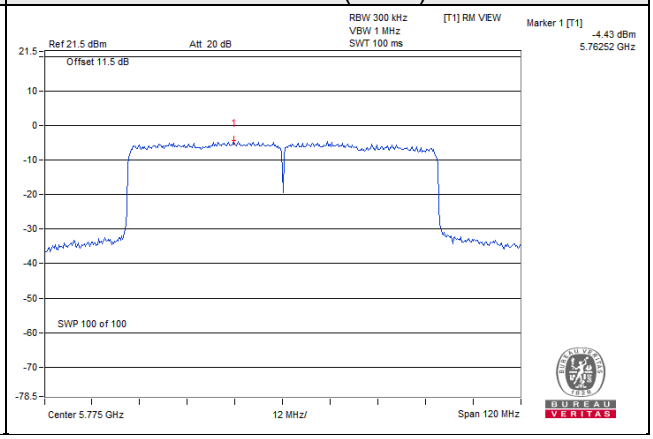
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)

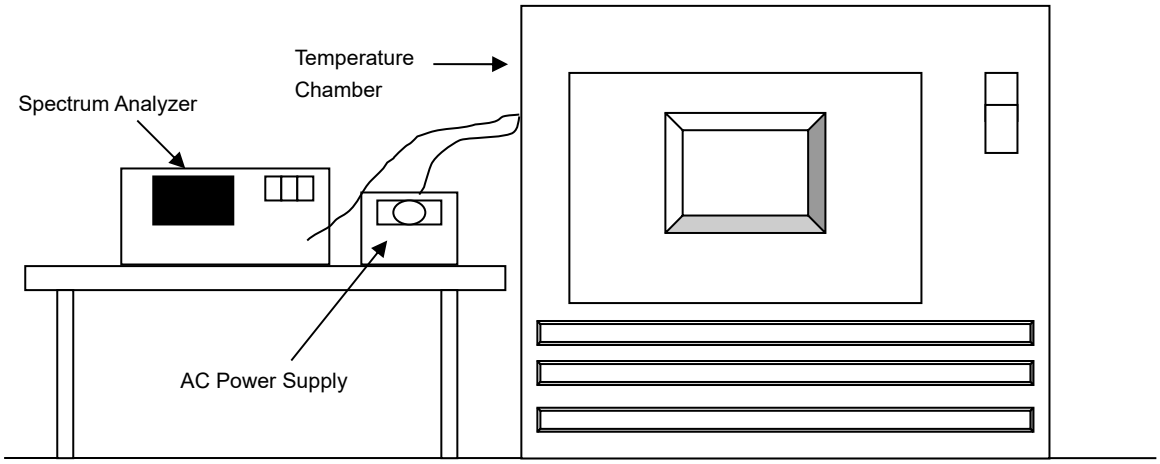


4.6 Frequency Stability

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

Tested date: Jul. 25, 2020

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 12, 2020	Jun. 11, 2021
Standard Temperature And Humidity Chamber	MHU-225AU	920842	May 28, 2020	May 27, 2021
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2020	Jun. 22, 2021
AC Power Supply Extech	CFW-105	E000603	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

For U-NII-1 & U-NII-2A Band

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
40	120	5179.9761	Pass	5179.9764	Pass	5179.9727	Pass	5179.9748	Pass
30	120	5180.0021	Pass	5180.0018	Pass	5179.9999	Pass	5180.0038	Pass
20	120	5180.0126	Pass	5180.0145	Pass	5180.0133	Pass	5180.0144	Pass
10	120	5180.0206	Pass	5180.0207	Pass	5180.0183	Pass	5180.0188	Pass
0	120	5180.0046	Pass	5180.0065	Pass	5180.0062	Pass	5180.0050	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0116	Pass	5180.0139	Pass	5180.0137	Pass	5180.0146	Pass
	120	5180.0126	Pass	5180.0145	Pass	5180.0133	Pass	5180.0144	Pass
	102	5180.0131	Pass	5180.0149	Pass	5180.0131	Pass	5180.0152	Pass

For For U-NII-2C & U-NII-3 Band

Frequency Stability Versus Temp.									
Operating Frequency: 5500MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
40	120	5500.0078	Pass	5500.0100	Pass	5500.0079	Pass	5500.0050	Pass
30	120	5500.0040	Pass	5500.0049	Pass	5500.0049	Pass	5500.0074	Pass
20	120	5499.9905	Pass	5499.9913	Pass	5499.9928	Pass	5499.9887	Pass
10	120	5500.0086	Pass	5500.0106	Pass	5500.0109	Pass	5500.0101	Pass
0	120	5499.9908	Pass	5499.9939	Pass	5499.9920	Pass	5499.9903	Pass

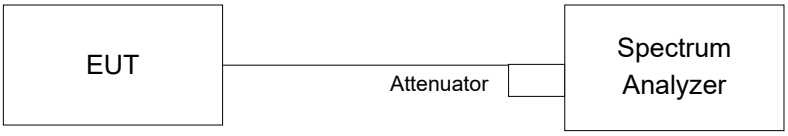
Frequency Stability Versus Voltage									
Operating Frequency: 5500MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5499.9897	Pass	5499.9923	Pass	5499.9917	Pass	5499.9895	Pass
	120	5499.9905	Pass	5499.9913	Pass	5499.9928	Pass	5499.9887	Pass
	102	5499.9898	Pass	5499.9914	Pass	5499.9936	Pass	5499.9894	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

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (For U-NII-3)	5720	3.24	3.22	3.24	3.22	0.5	Pass
149	5745	16.11	16.10	16.12	16.11	0.5	Pass
157	5785	16.14	16.12	16.12	16.12	0.5	Pass
165	5825	16.12	16.12	16.13	16.31	0.5	Pass

802.11ax (HE20)

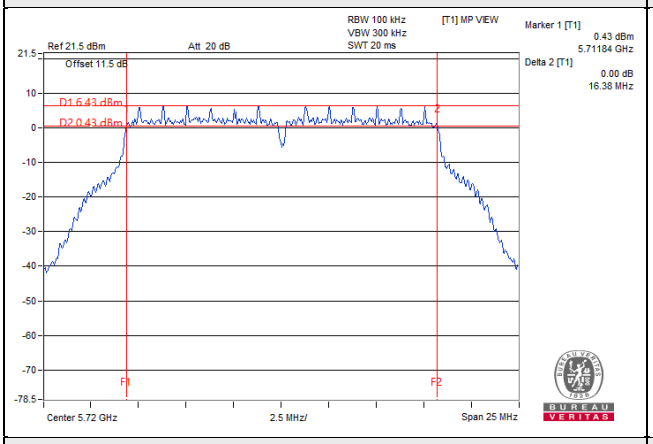
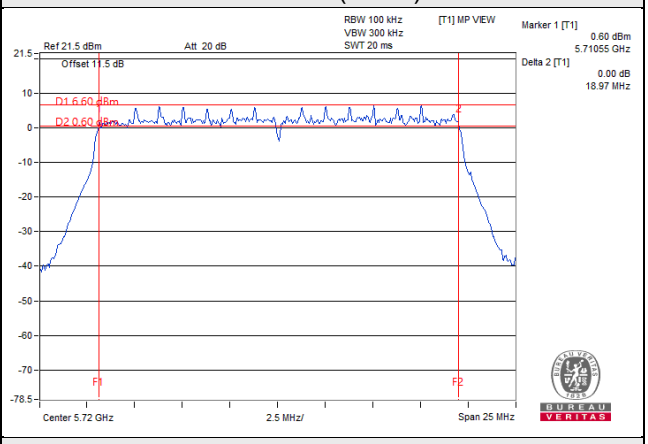
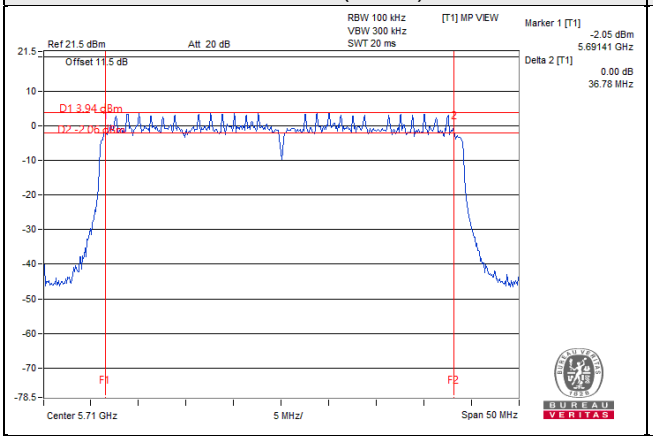
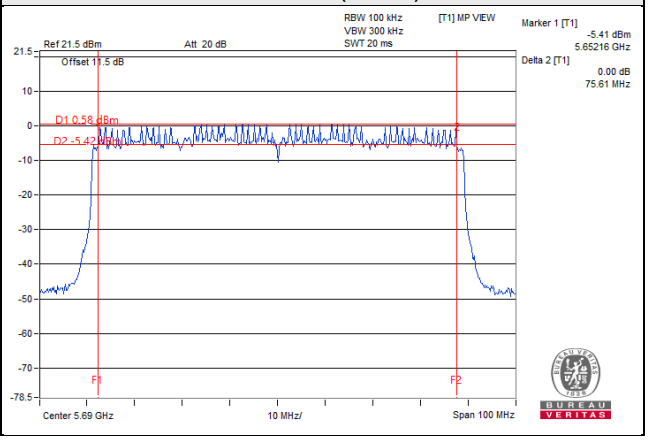
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (For U-NII-3)	5720	4.55	4.55	4.52	4.54	0.5	Pass
149	5745	18.94	18.80	18.66	18.88	0.5	Pass
157	5785	18.93	18.89	18.67	17.62	0.5	Pass
165	5825	19.02	18.72	18.66	18.87	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
142 (For U-NII-3)	5710	3.80	3.19	3.84	3.63	0.5	Pass
151	5755	37.38	37.15	37.73	37.46	0.5	Pass
159	5795	37.49	37.13	37.74	36.61	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		
138 (For U-NII-3)	5690	3.69	2.77	2.89	3.20	0.5	Pass
155	5775	76.44	75.66	75.72	75.63	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Note:

For CH144 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

For CH142 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

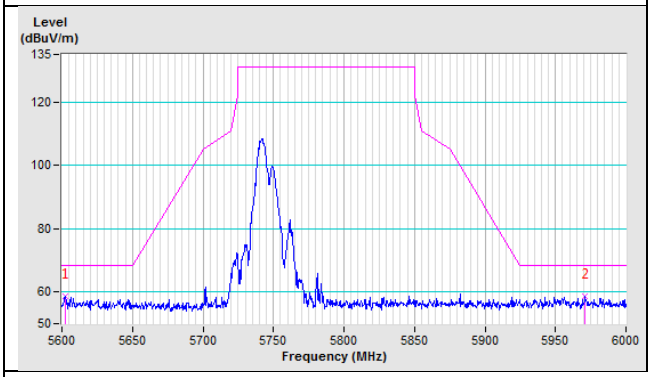
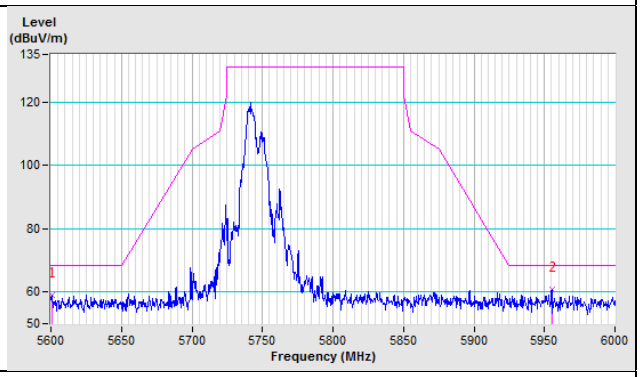
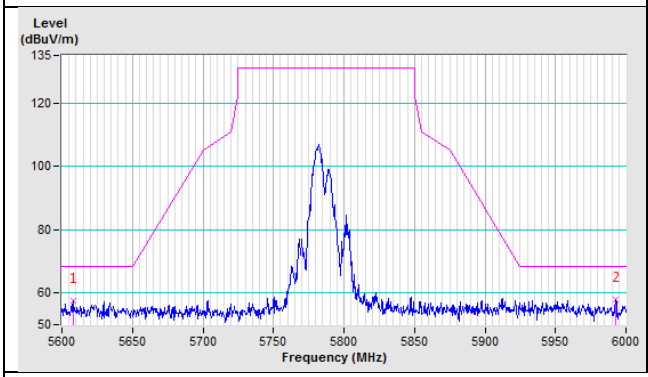
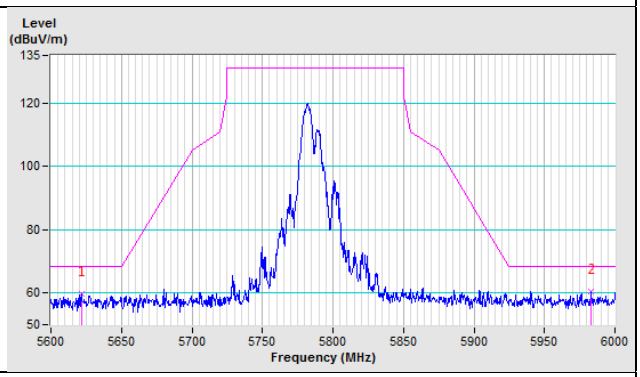
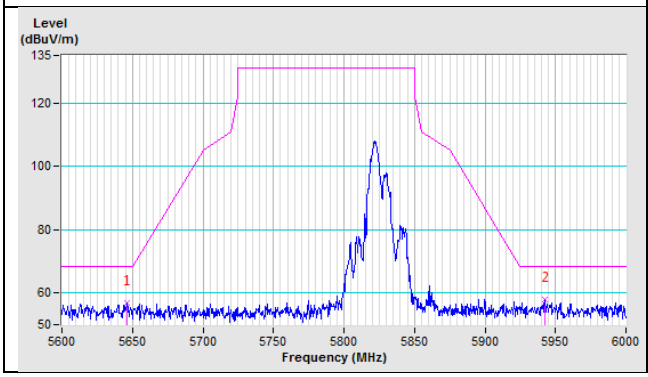
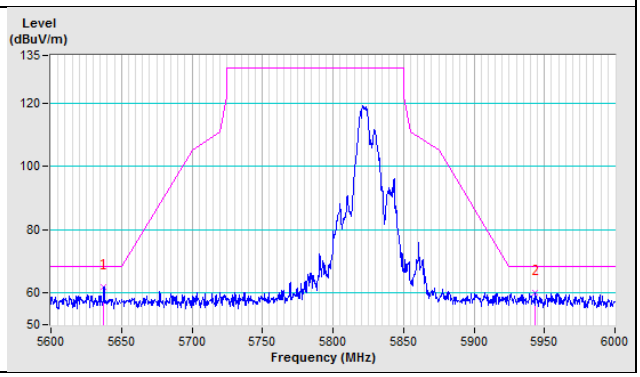
For CH138 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

5 Pictures of Test Arrangements

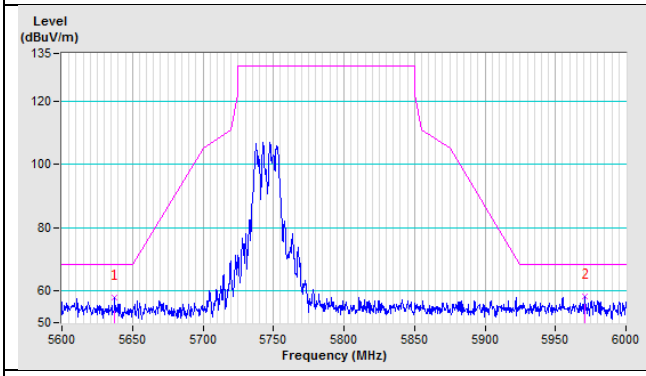
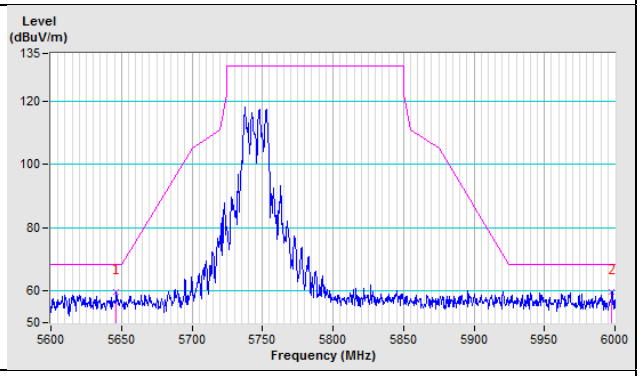
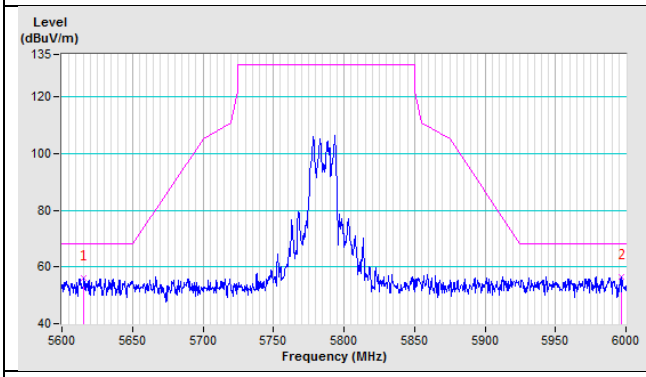
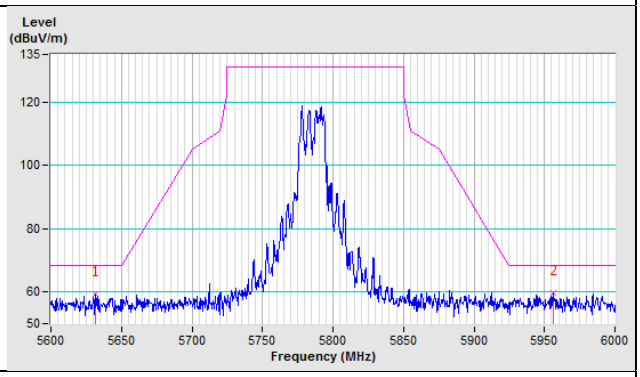
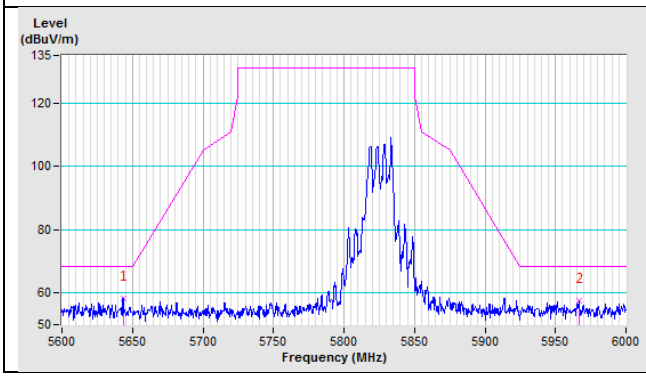
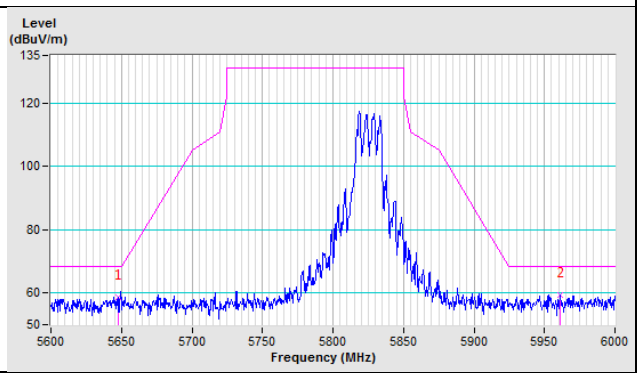
Please refer to the attached file (Test Setup Photo).

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

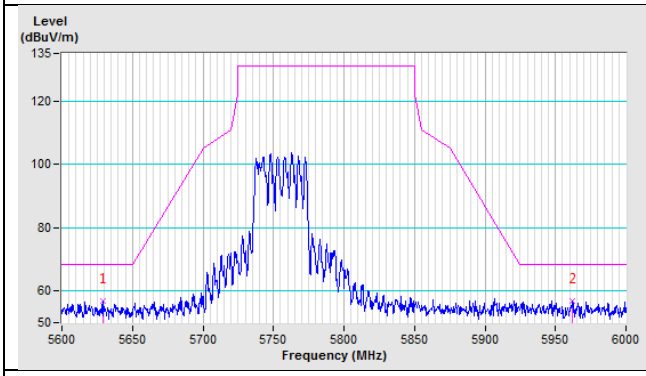
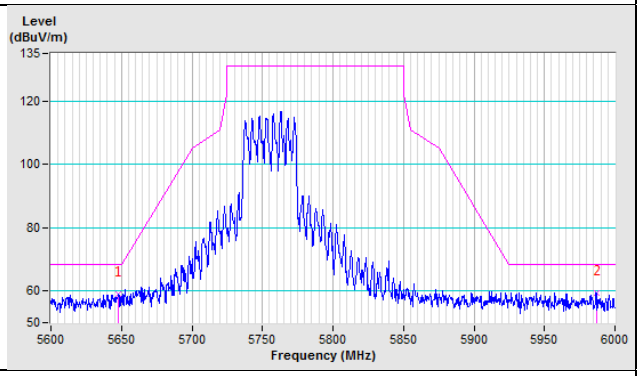
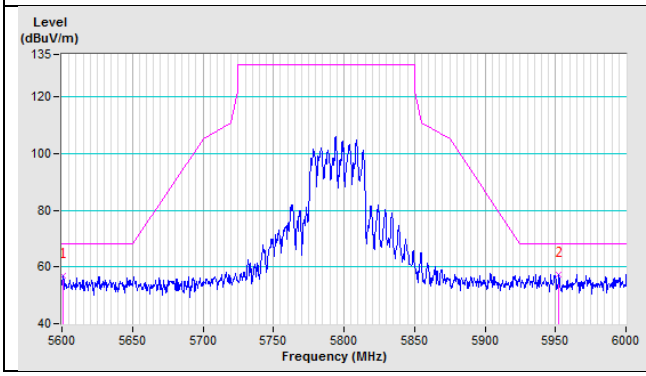
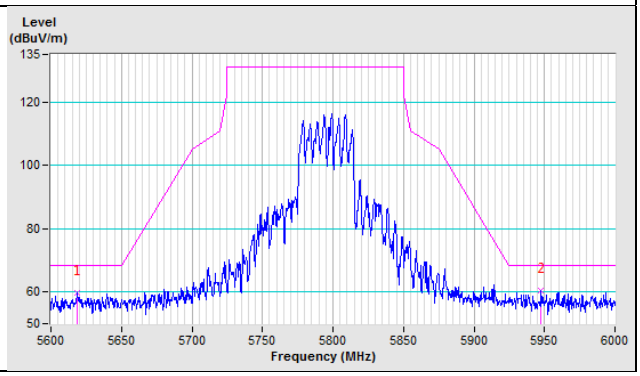
802.11a

CH 149 5745 MHz	
Horizontal	Vertical
	
CH 157 5785 MHz	
Horizontal	Vertical
	
CH 165 5825 MHz	
Horizontal	Vertical
	

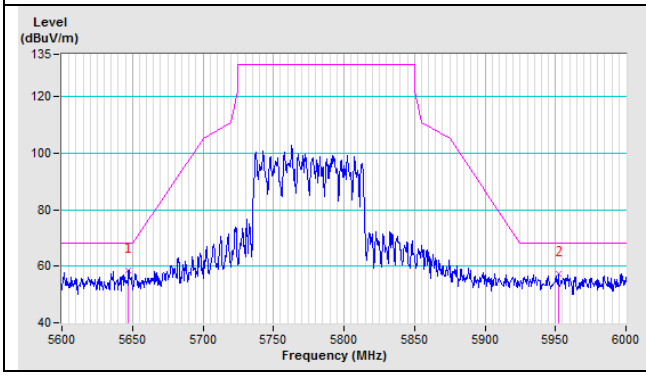
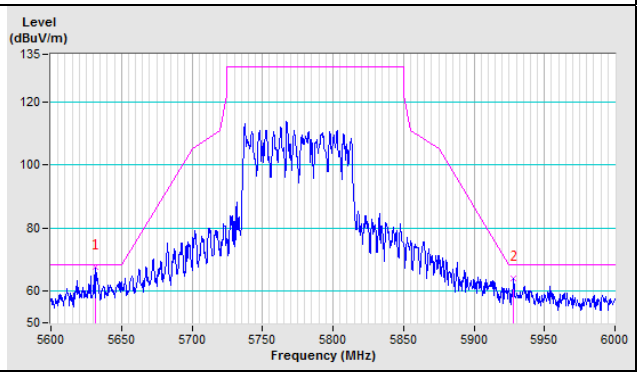
802.11ax (HE20)

CH 149 5745 MHz	
Horizontal	Vertical
	
CH 157 5785 MHz	
Horizontal	Vertical
	
CH 165 5825 MHz	
Horizontal	Vertical
	

802.11ax (HE40)

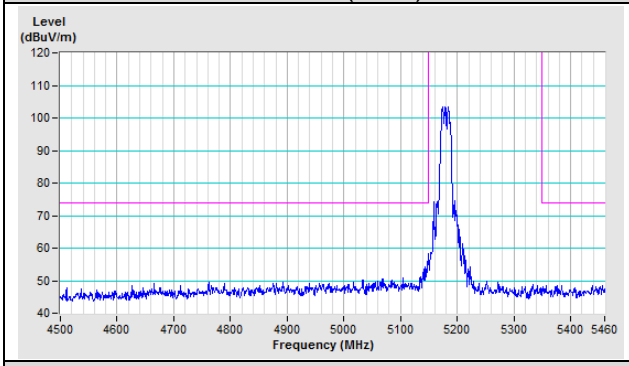
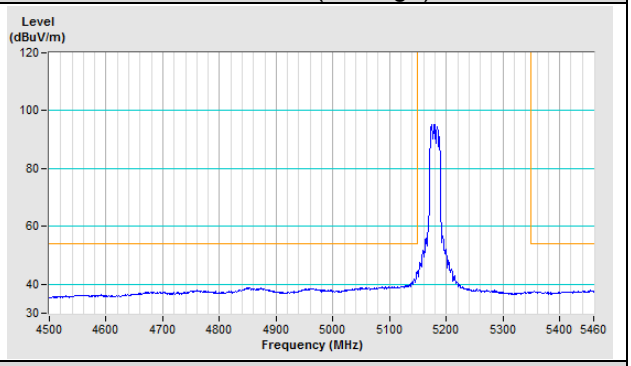
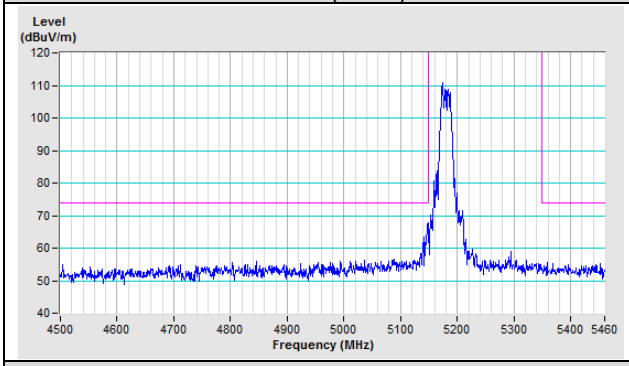
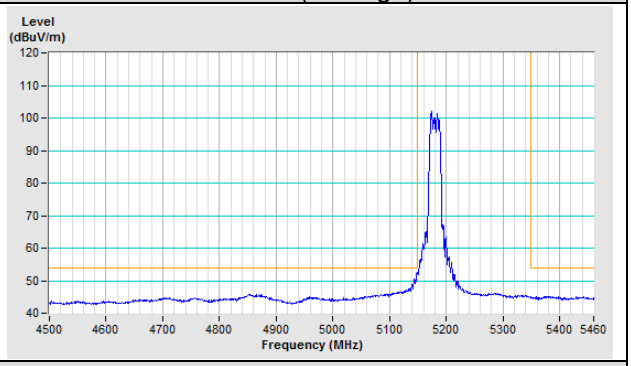
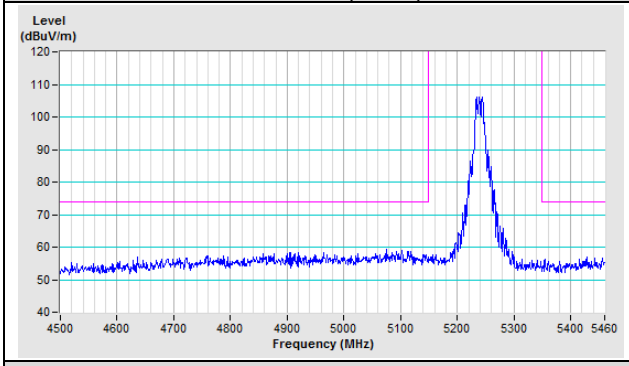
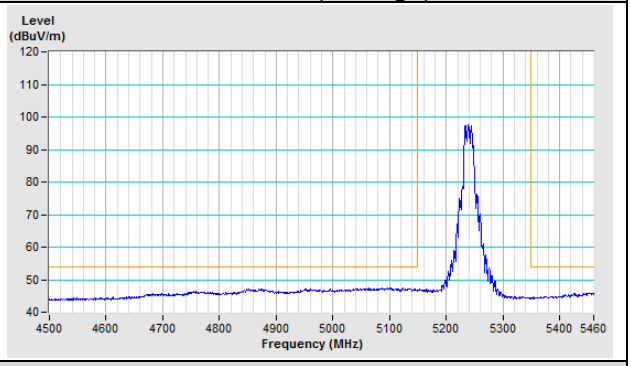
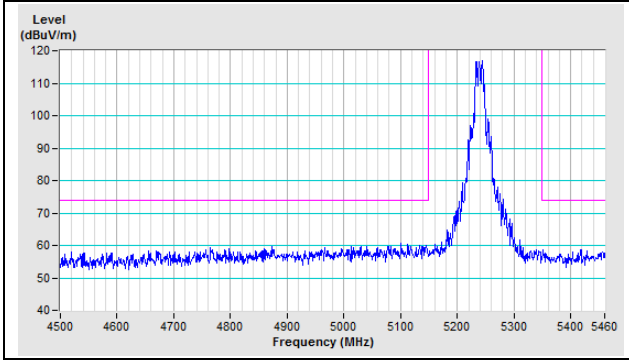
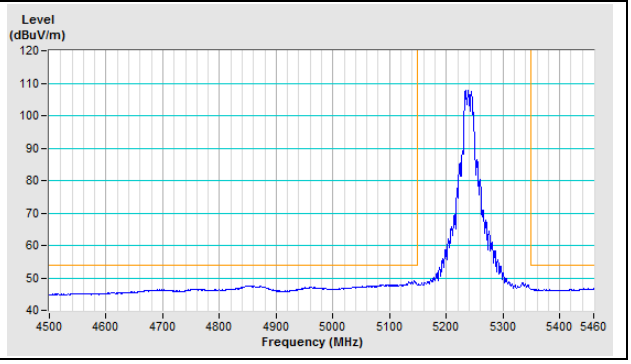
CH 151 5755 MHz	
Horizontal	Vertical
	
CH 159 5795 MHz	
Horizontal	Vertical
	

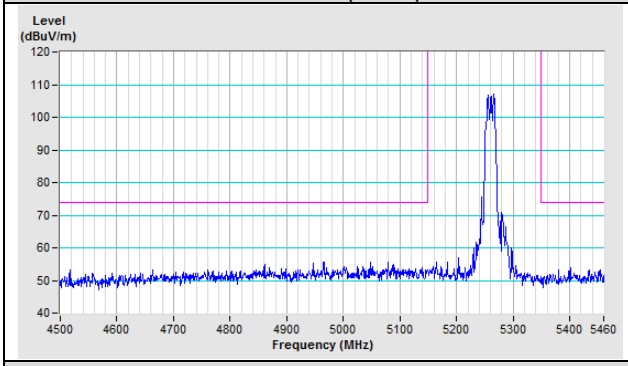
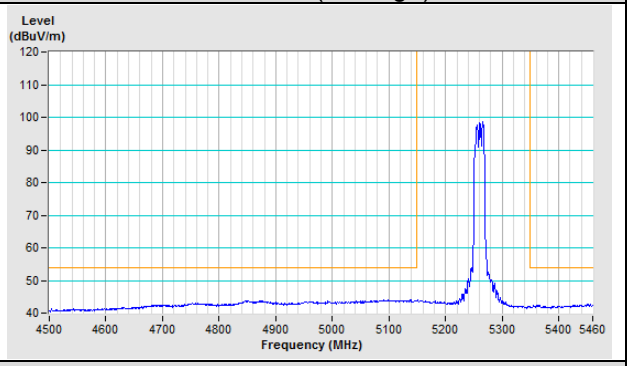
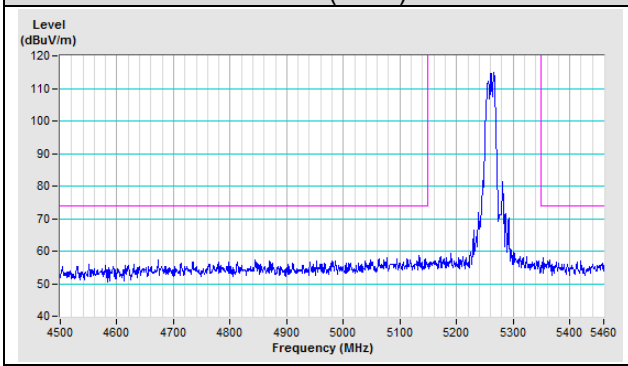
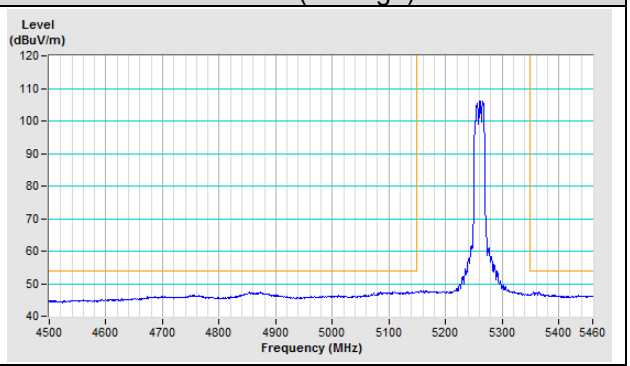
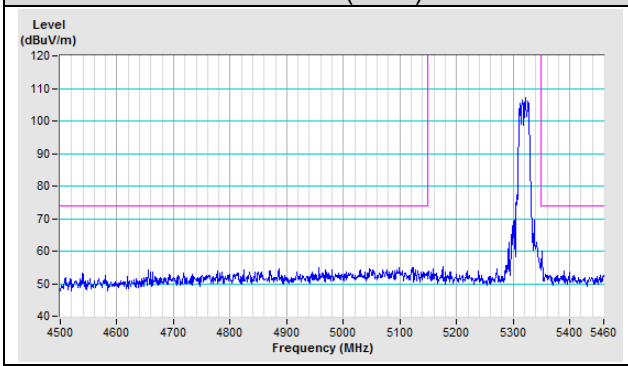
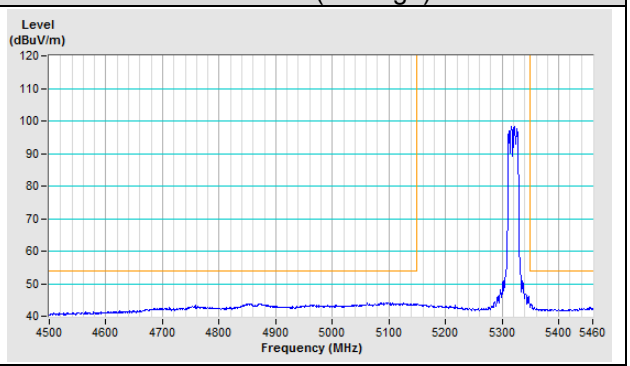
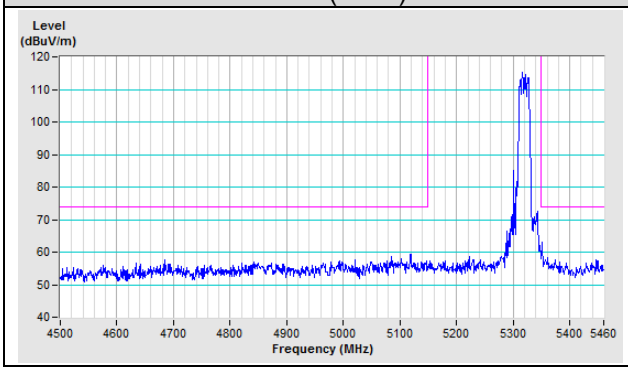
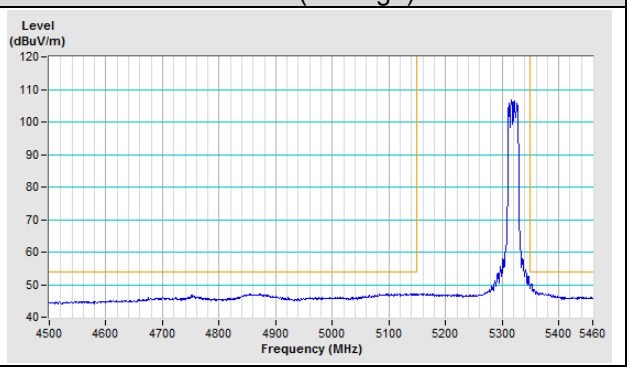
802.11ax (HE80)

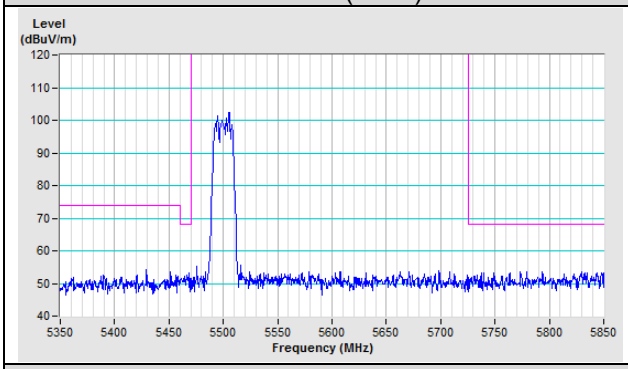
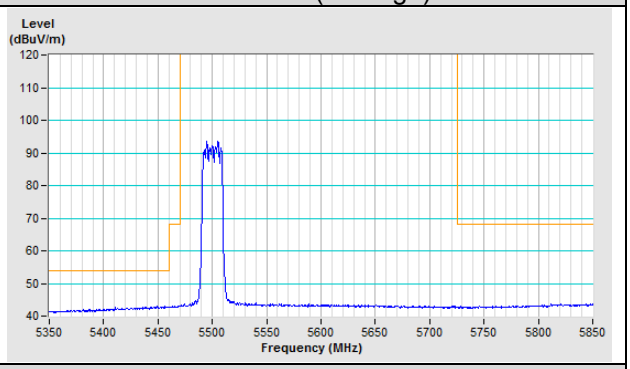
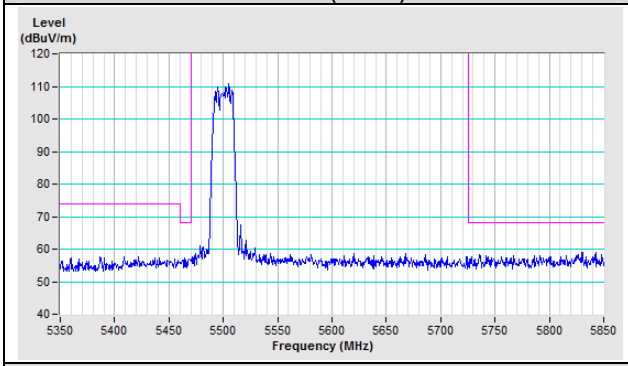
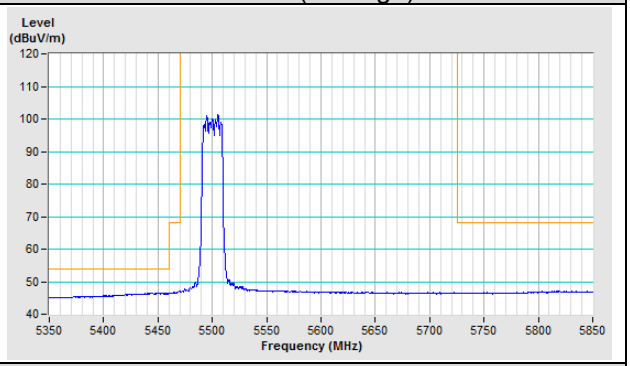
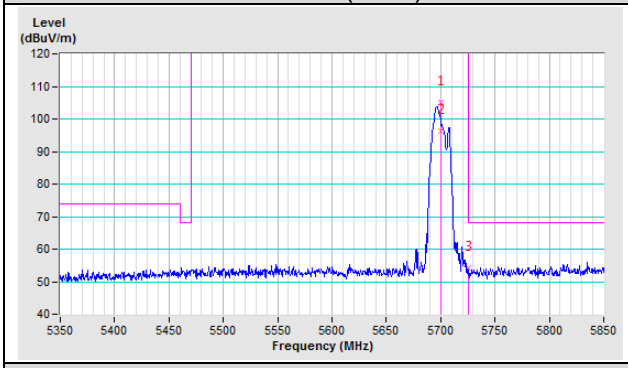
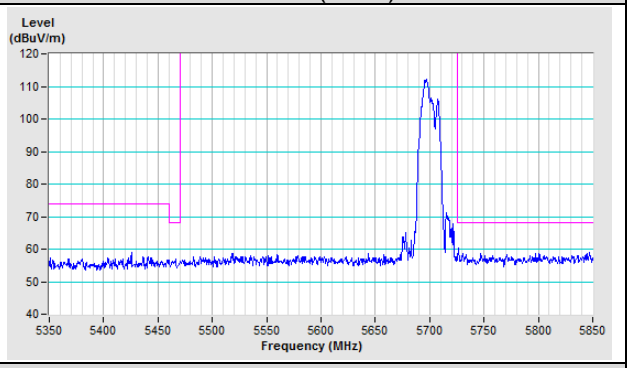
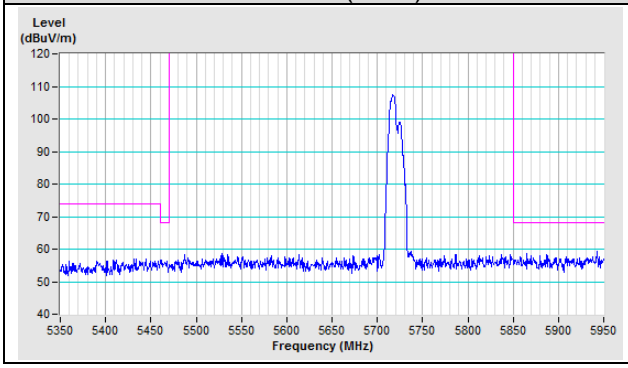
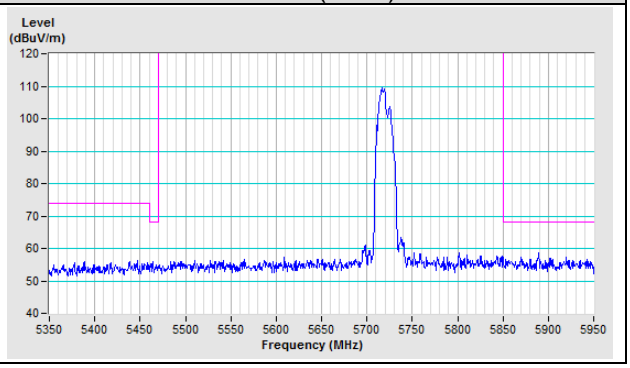
CH 155 5775 MHz	
Horizontal	Vertical
	

Annex B- Band Edge Measurement

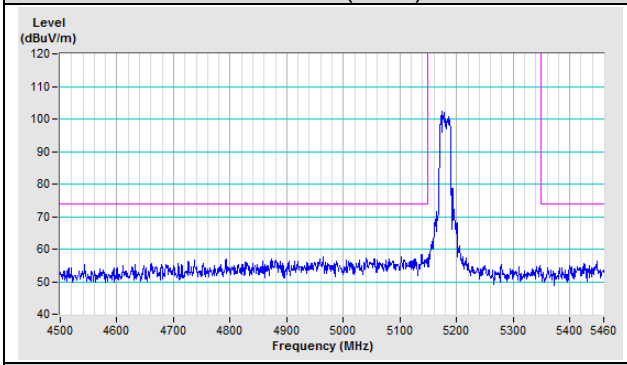
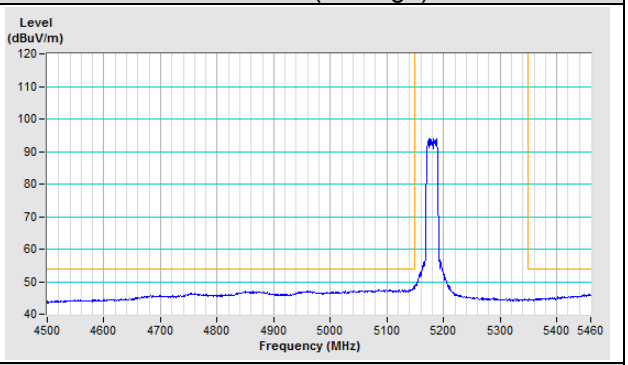
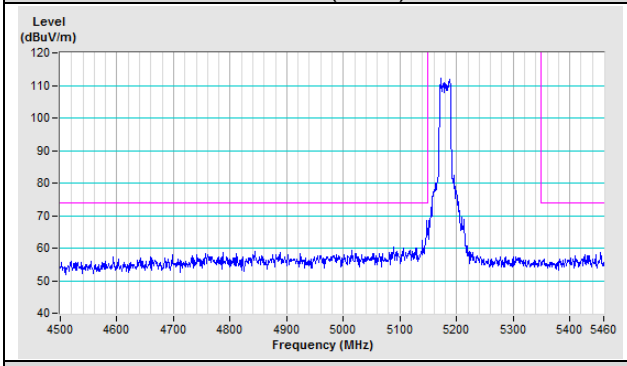
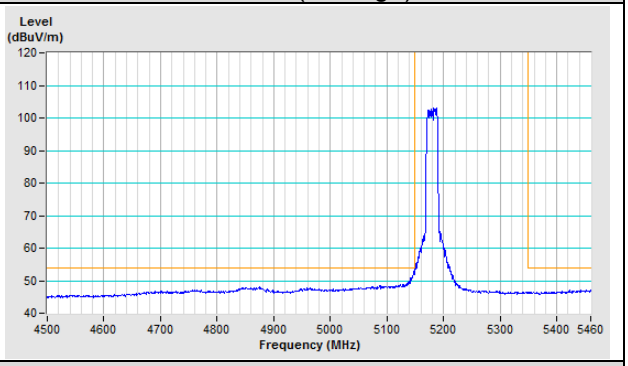
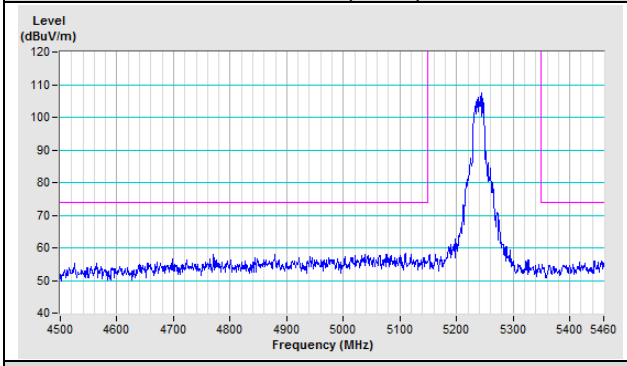
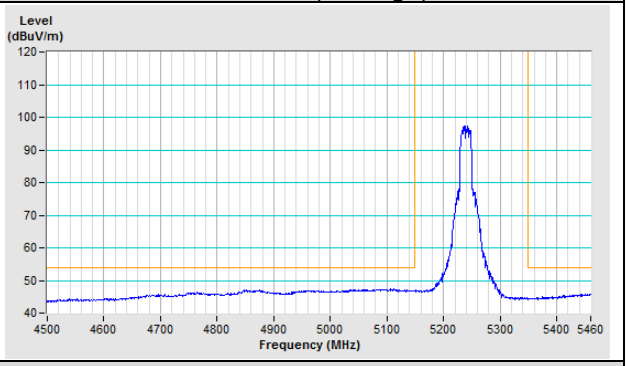
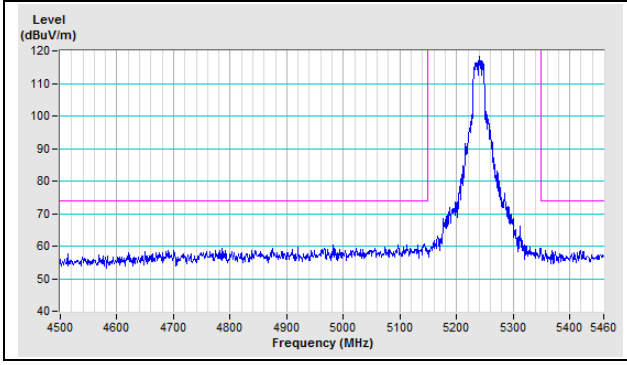
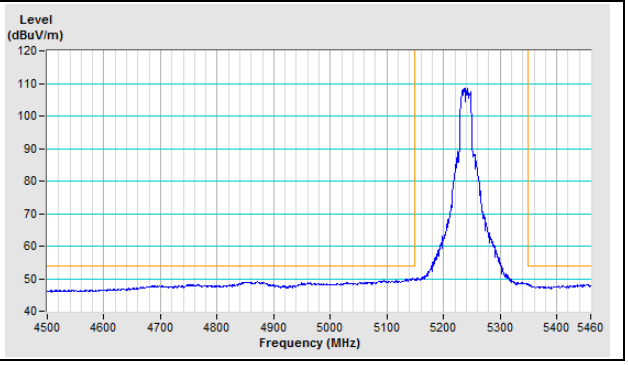
802.11a

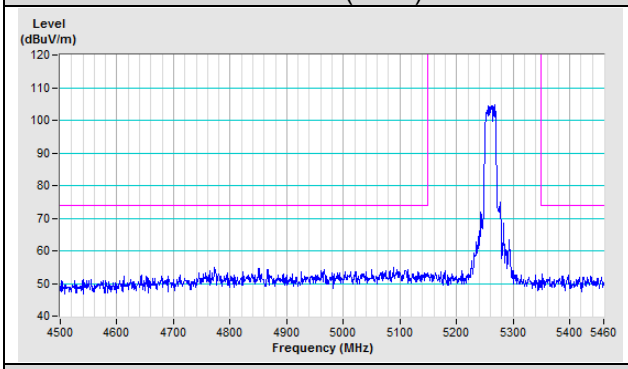
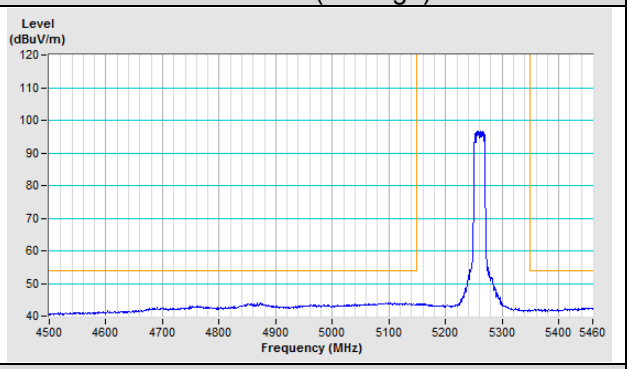
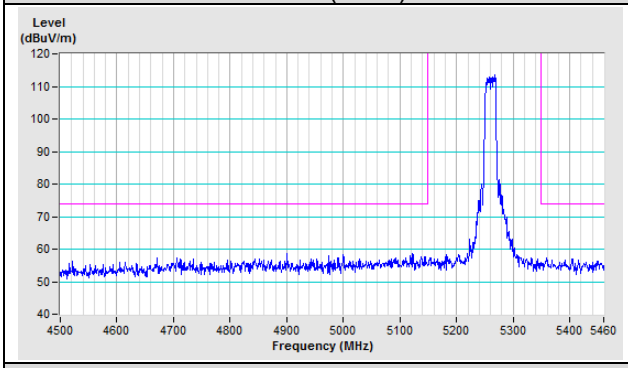
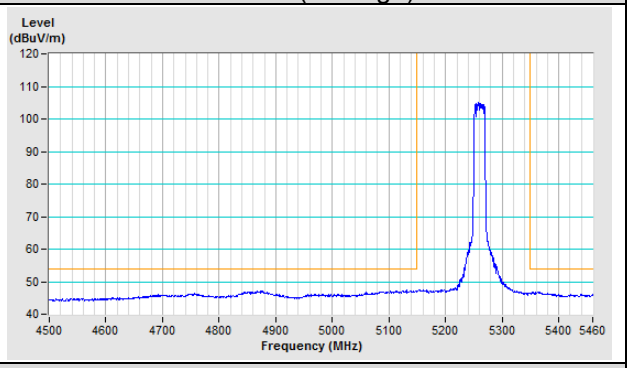
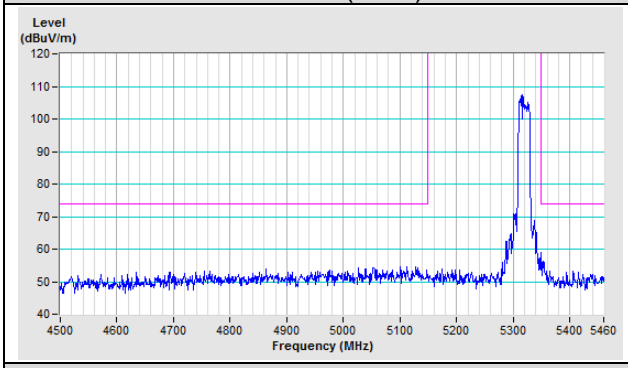
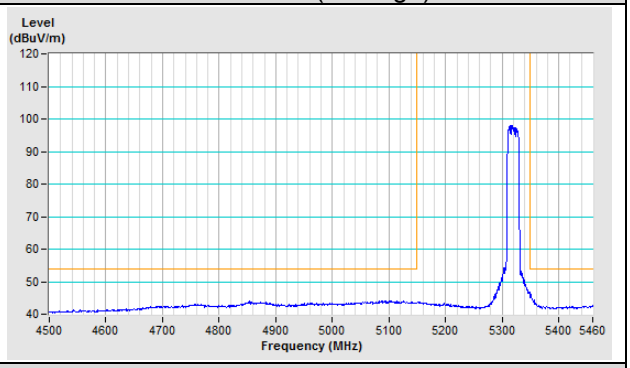
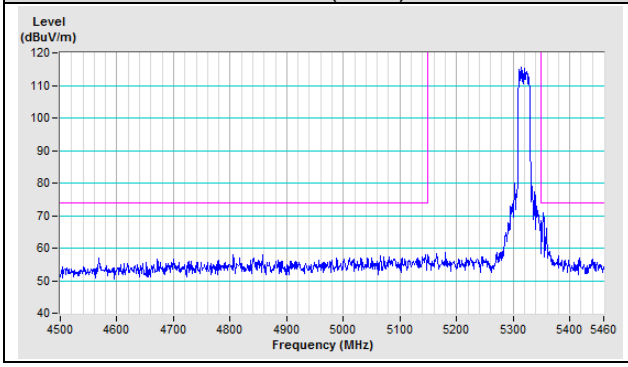
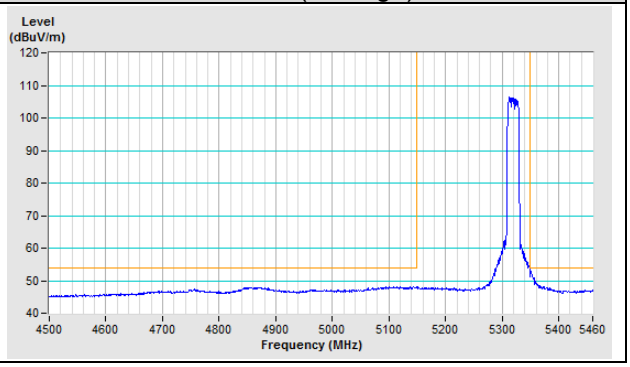
Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

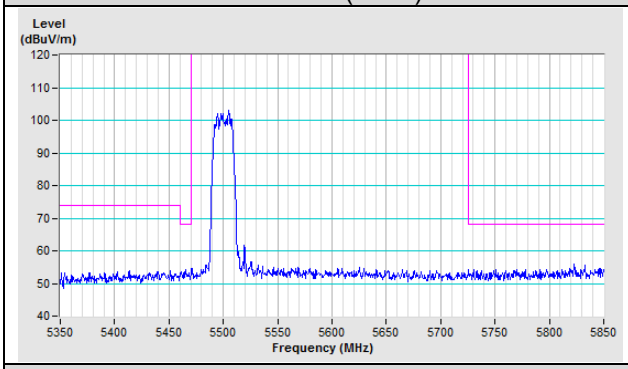
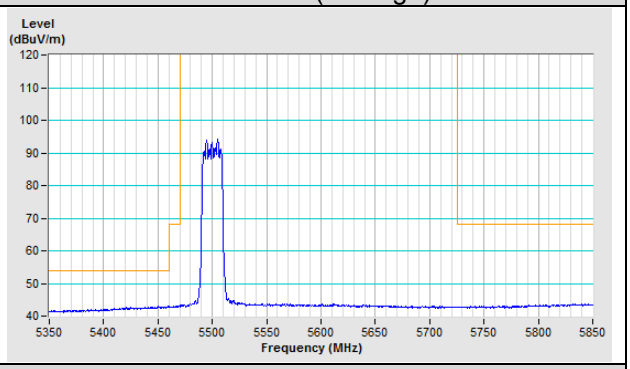
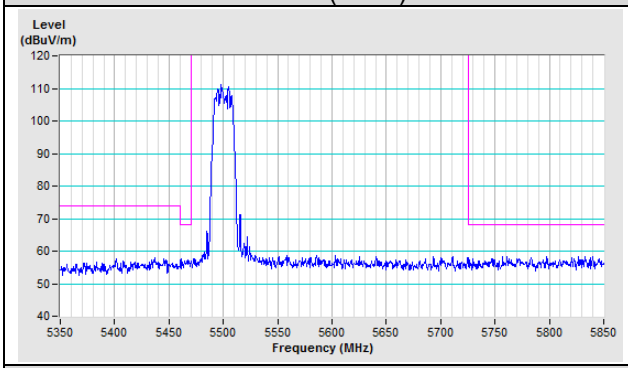
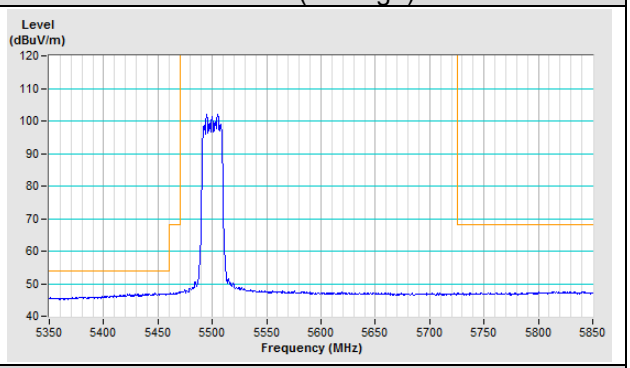
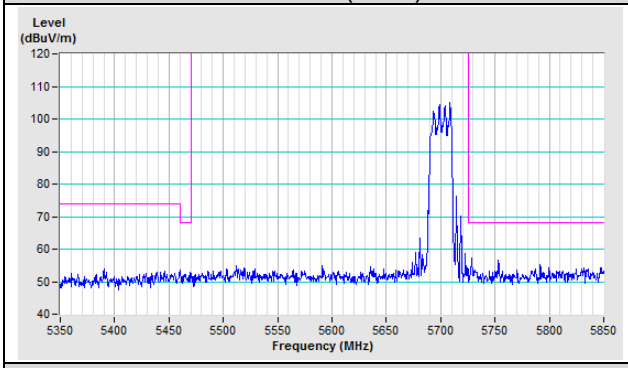
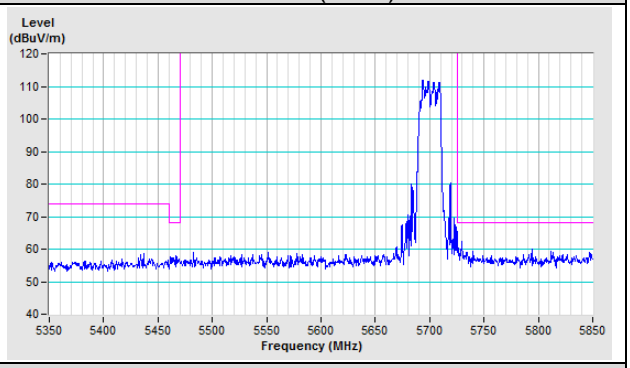
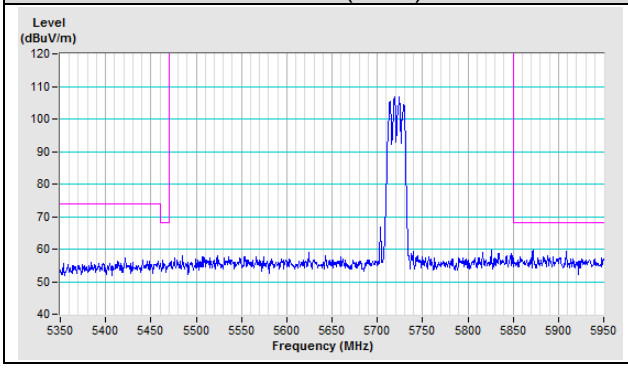
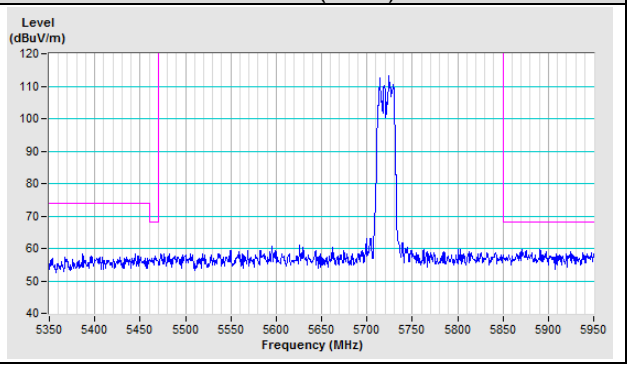
Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 140	
Horizontal (Peak)	Vertical (Peak)
	
Channel 144	
Horizontal (Peak)	Vertical (Peak)
	

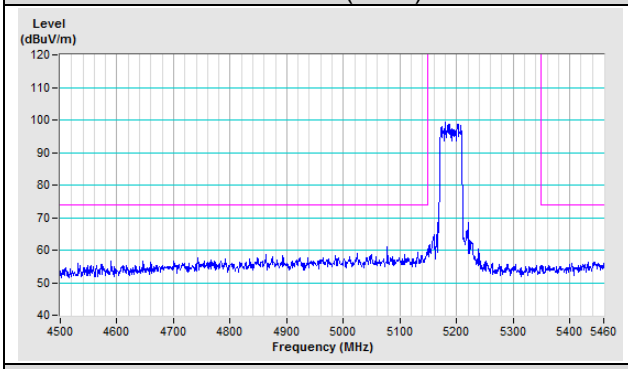
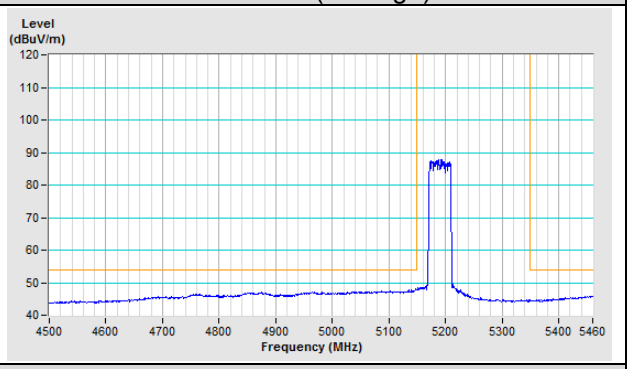
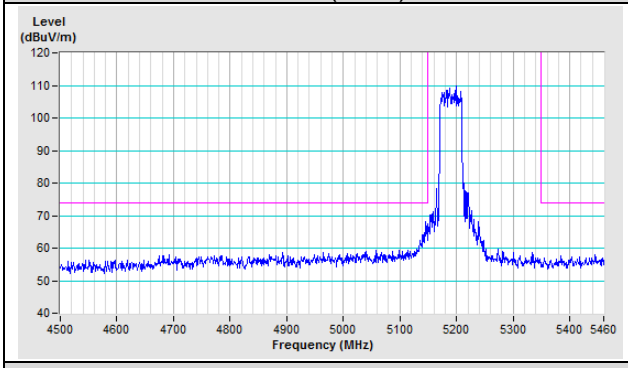
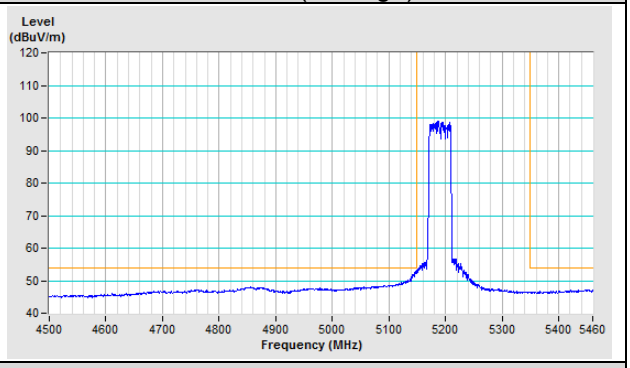
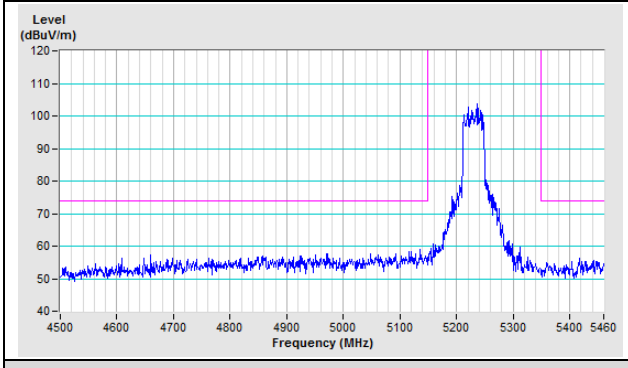
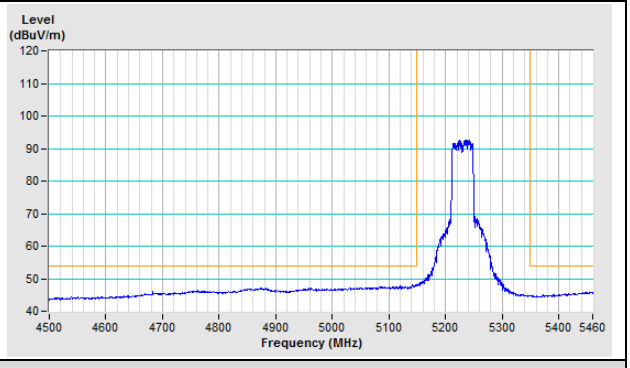
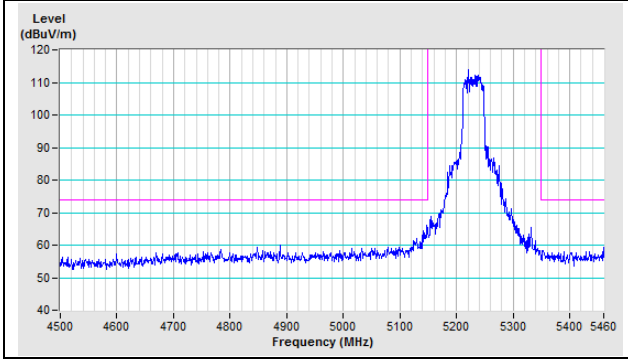
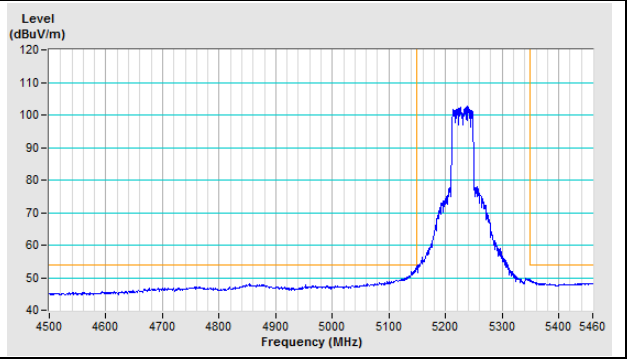
802.11ax (HE20)

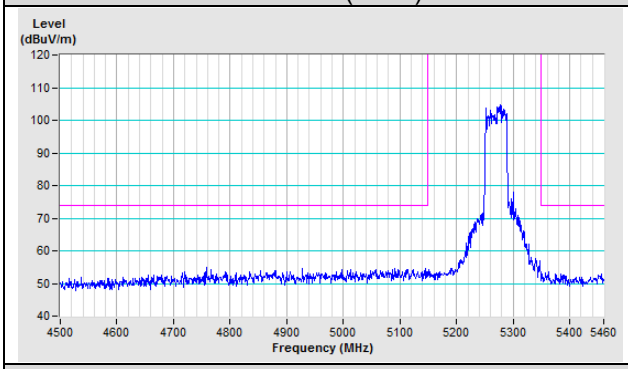
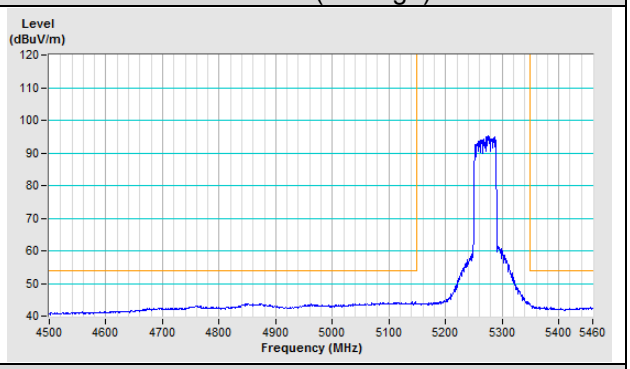
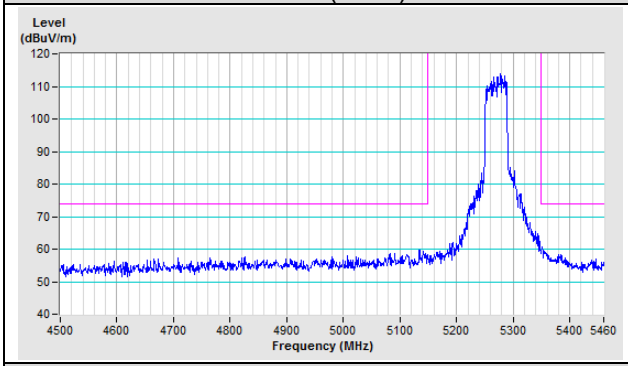
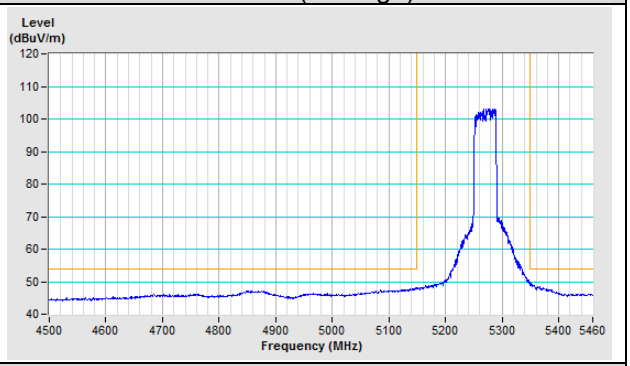
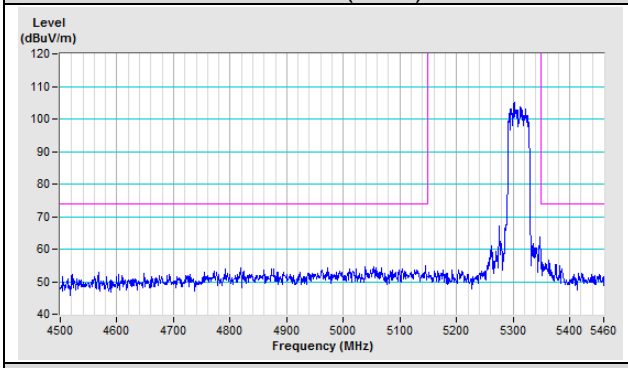
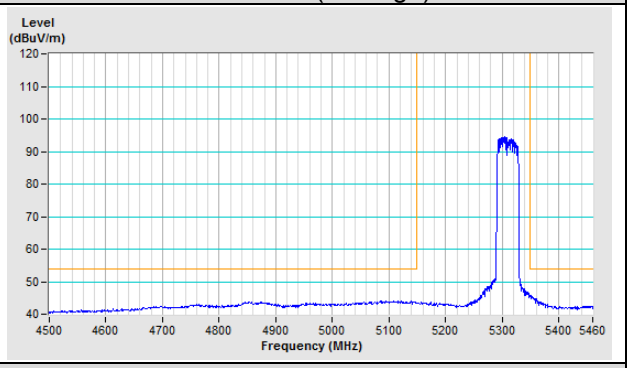
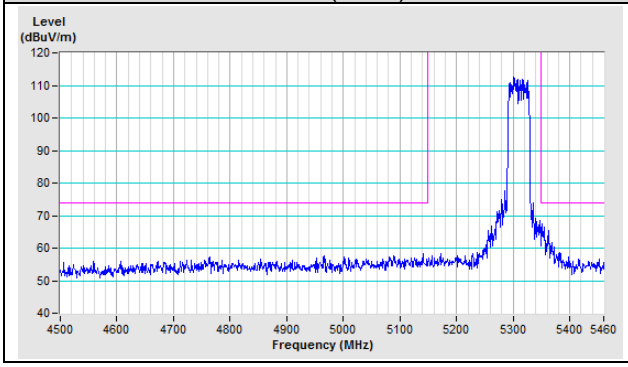
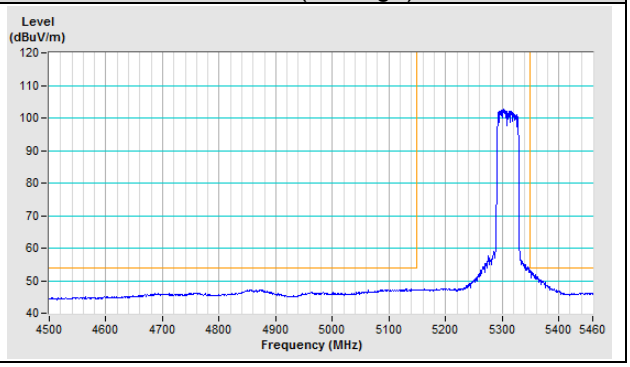
Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

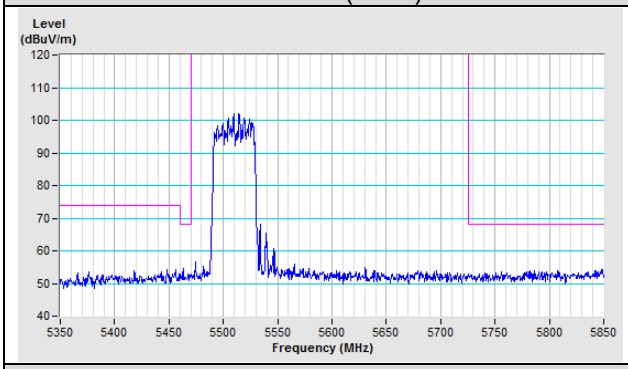
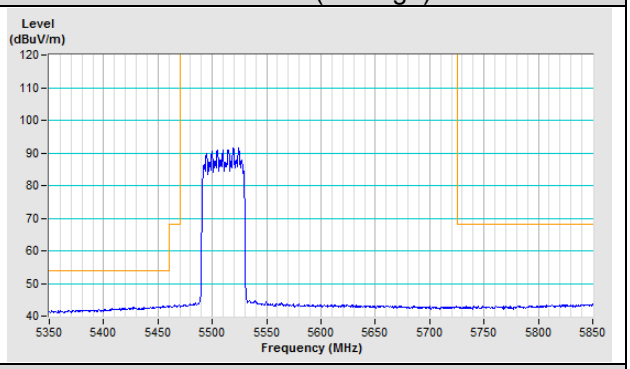
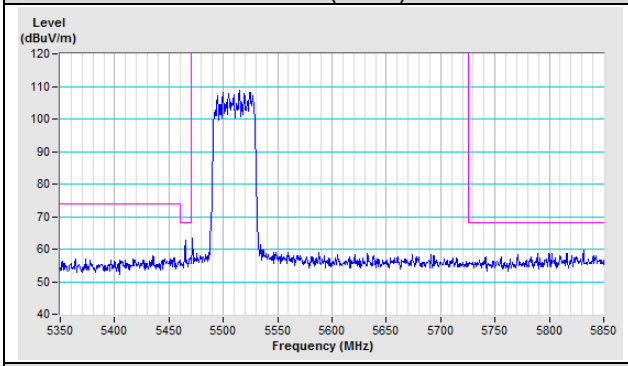
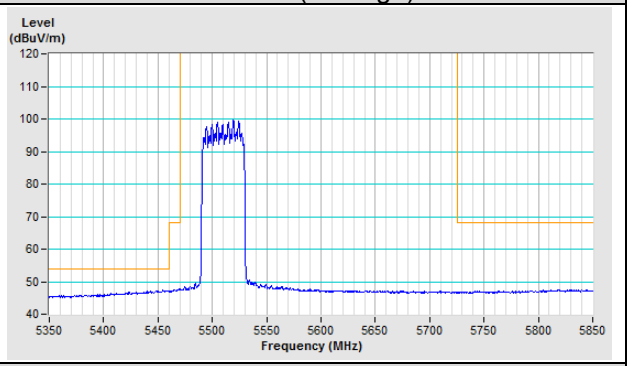
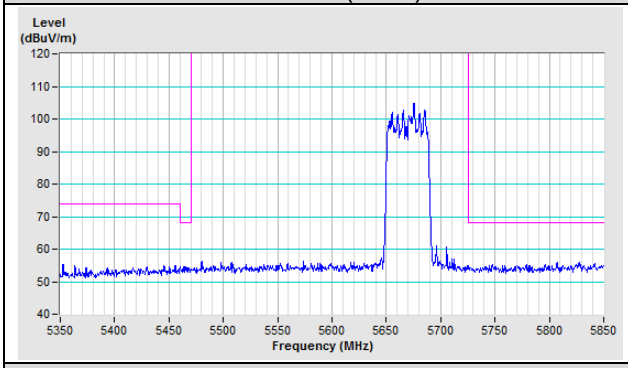
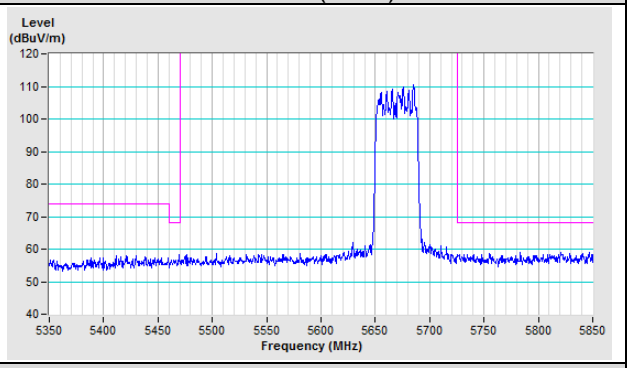
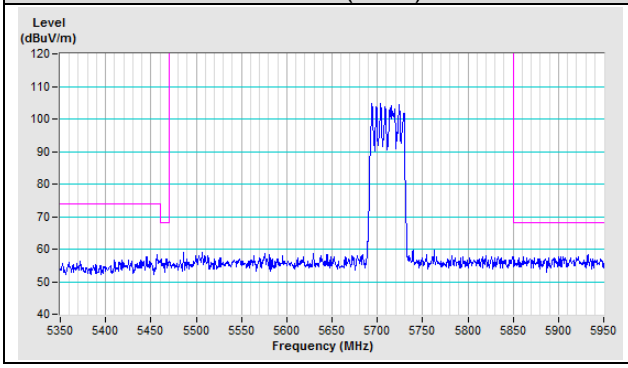
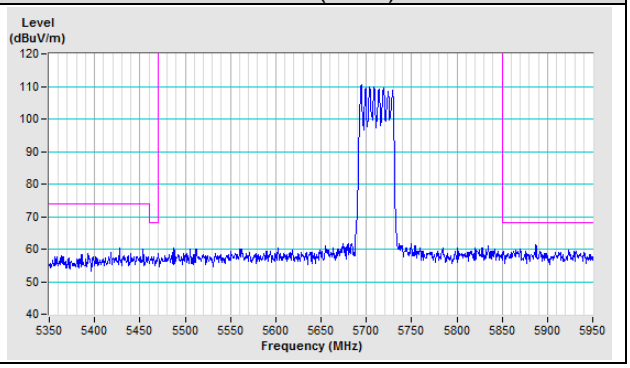
Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 140	
Horizontal (Peak)	Vertical (Peak)
	
Channel 144	
Horizontal (Peak)	Vertical (Peak)
	

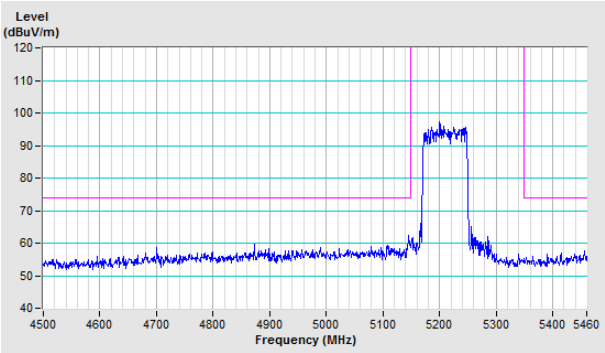
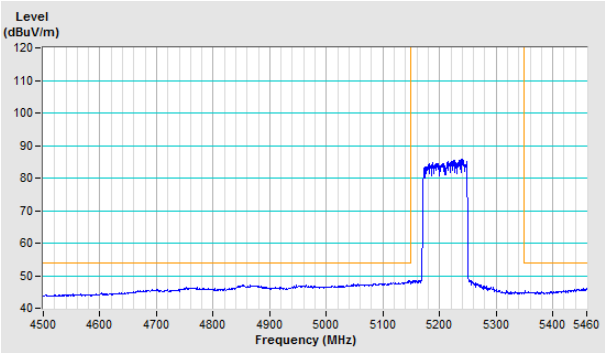
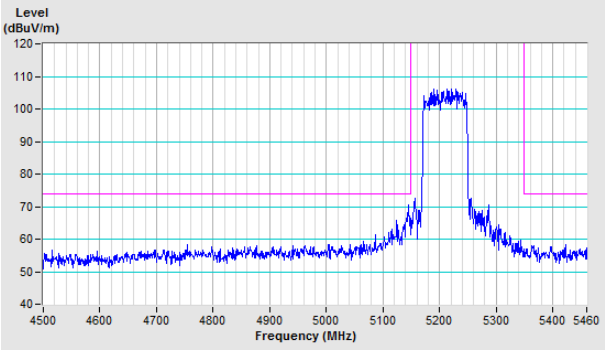
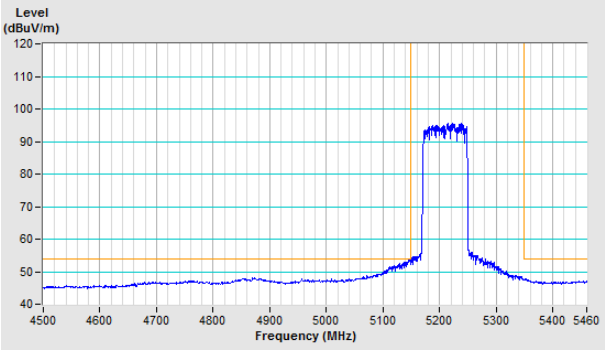
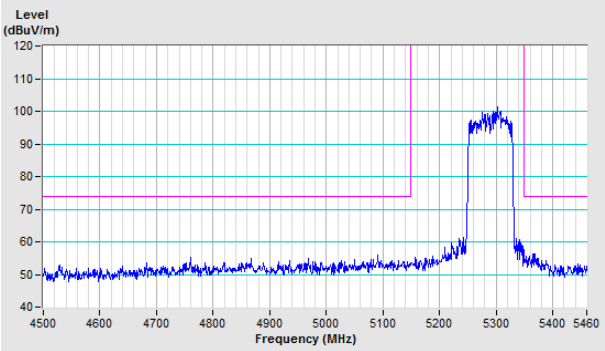
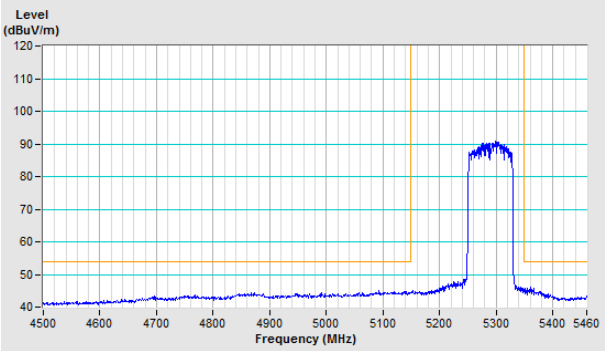
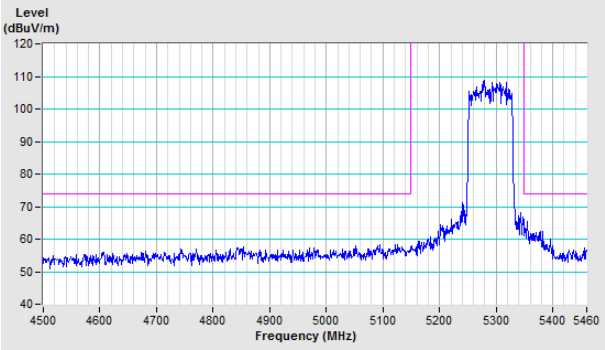
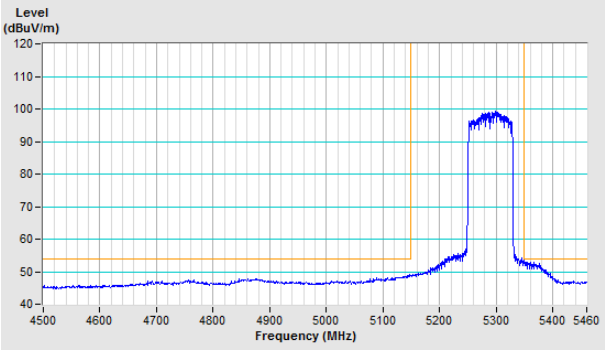
802.11ax (HE40)

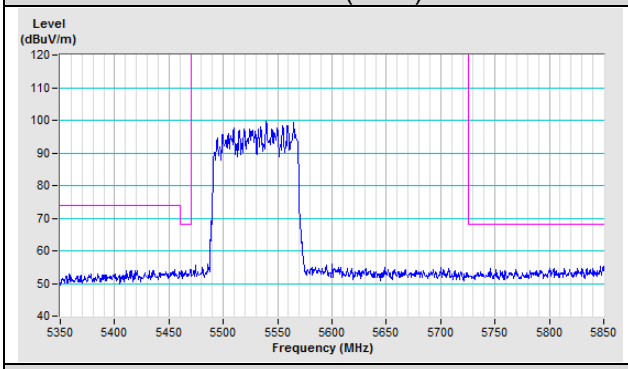
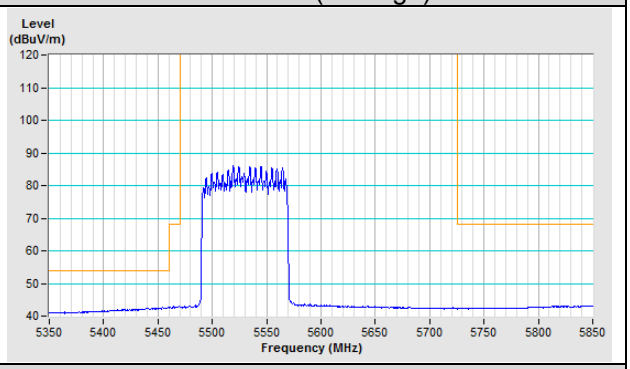
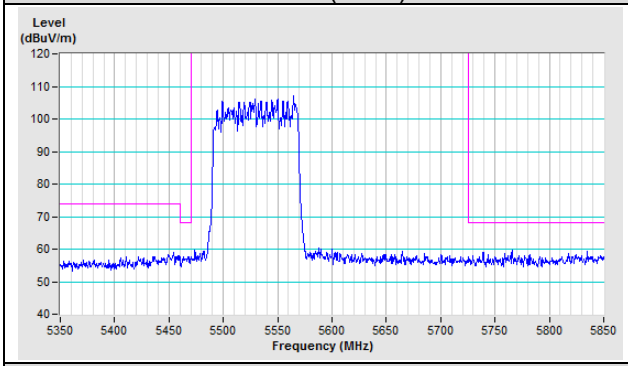
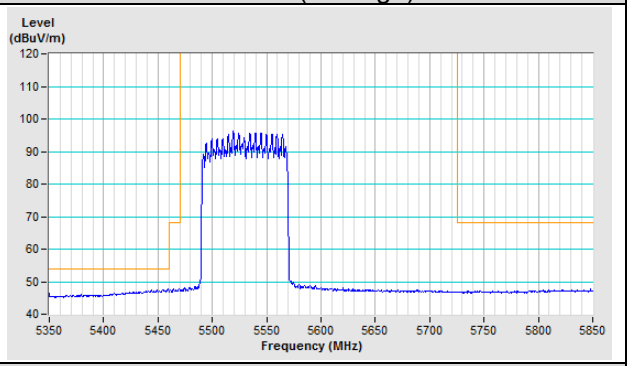
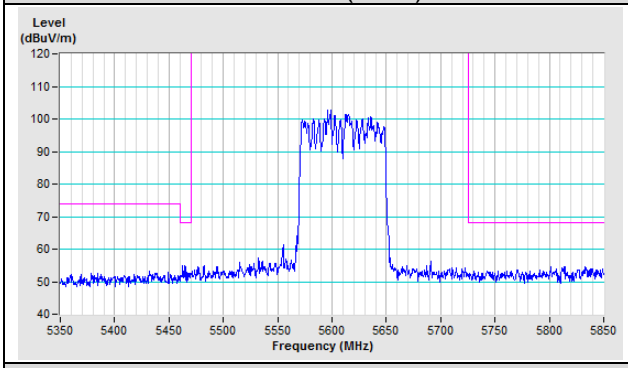
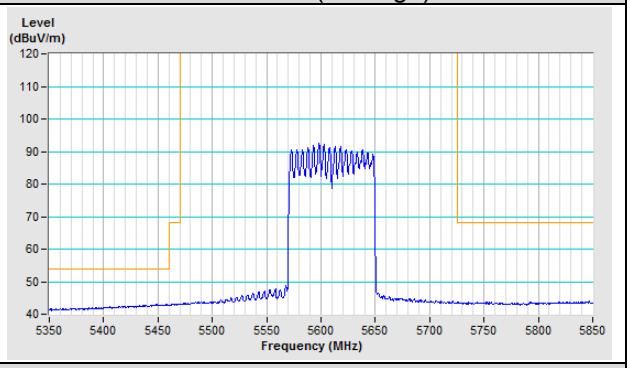
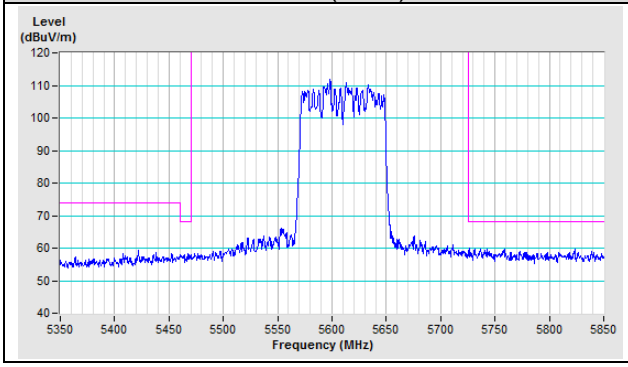
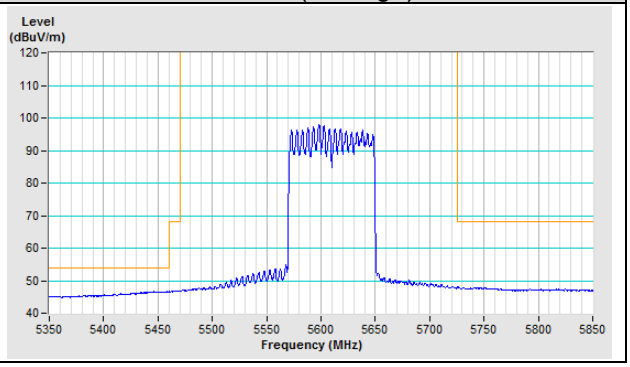
Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

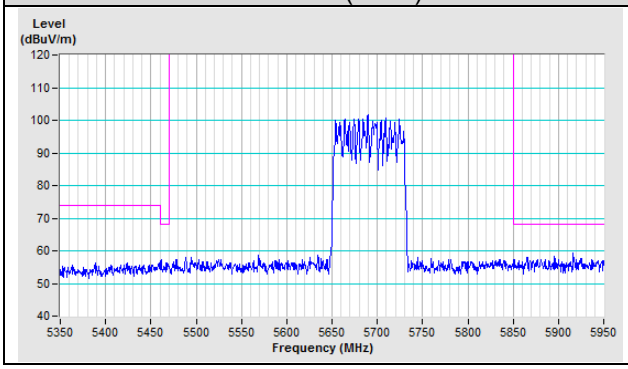
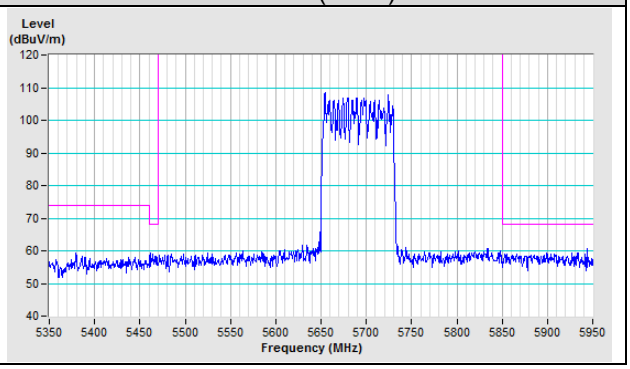
Channel 54	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 134	
Horizontal (Peak)	Vertical (Peak)
	
Channel 142	
Horizontal (Peak)	Vertical (Peak)
	

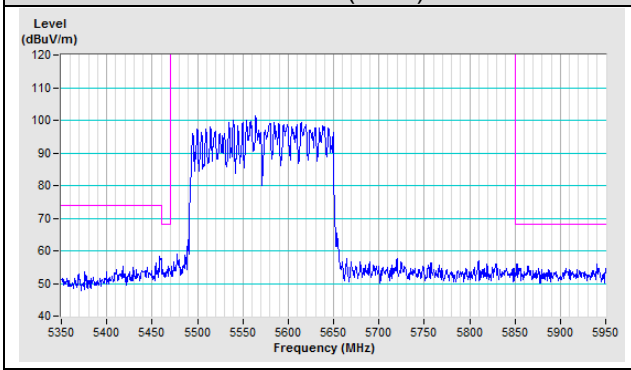
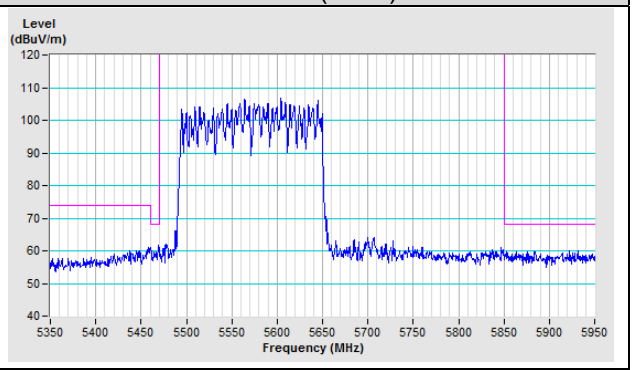
802.11ax (HE80)

Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 122	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Channel 138	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE160)

Channel 114	
Horizontal (Peak)	Vertical (Peak)
	

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 and approved according to ISO/IEC 17025.

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

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

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