FCC Test Report

Report No.:	RFBBQZ-WTW-P22040440-1
FCC ID:	PY322100554
Test Model:	WAX625
Received Date:	Apr. 13, 2022
Test Date:	May 09 ~ Jun. 27, 2022
Issued Date:	Jul. 14, 2022

Applicant and Manufacturer:	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-P22040440-1	Original release	Jul. 14, 2022

1 Certificate of Conformity

Product:	Insight Managed WiFi 6 AX5400 Access Point
Brand:	NETGEAR
Test Model:	WAX625
Sample Status:	Engineering sample
Applicant and Manufacturer:	NETGEAR, INC.
Test Date:	May 09 ~ Jun. 27, 2022
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 : Pettie Chen , **Date:** Jul. 14, 2022

Pettie Chen / Senior Specialist

Approved by : Jeremy Lin , **Date:** Jul. 14, 2022

Jeremy Lin / Senior 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)(9)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -11.60dB at 0.3300MHz.
15.407(b) (1/2/3/4(i/ii)/9)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5460.00, 5725.00MHz.
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 ipex(MHF) not a standard connector.

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

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.63 dB
Radiated Emissions above 1 GHz	200MHz ~1000MHz	3.64 dB
	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	Insight Managed WiFi 6 AX5400 Access Point
Brand	NETGEAR
Test Model	WAX625
Sample Status	Engineering sample
Power Supply Rating	12Vdc (adapter) 55.5Vdc (PoE)
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 (HT20/40): up to 600Mbps 802.11ac (VHT20/40/80/160): up to 6933.3Mbps 802.11ax (HE20/40/80/160): up to 4803.9Mbps
Operating Frequency	5180 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 8 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 4 802.11ac (VHT80), 802.11ax (HE80): 2 802.11ac (VHT160), 802.11ax (HE160): 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: 820.163mW 5260 ~ 5320MHz: 224.986mW 5500 ~ 5720MHz: 242.282mW 5745 ~ 5825MHz: 856.781mW Beamforming Mode: 5180 ~ 5240MHz: 820.163mW 5260 ~ 5320MHz: 224.986mW 5500 ~ 5720MHz: 242.282mW 5745 ~ 5825MHz: 856.781mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter
Cable Supplied	NA

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides 4 completed transmitters and 4 receivers.

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

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11n mode and HE20/HE40 on 802.11ax mode. The bandwidth and modulation are similar for VHT80/VHT160 on 802.11ac mode and 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/ac/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

2. The EUT uses following adapters and PoE.

Adapter 1	
Brand	NETGEAR
Model	ADS-40FPA-12 12030EPCU-L ADS-40FPA-12 12030EPC-L
P/N	332-11584-02
Input Power	100~120 Vac; 60 MHz; Max. 1A
Output Power	12Vdc; 2.5A
Power line	1.8m cable without core

Adapter 2	
Brand	NETGEAR
Model	AD2067F10
P/N	332-10944-02
Input Power	100~120 Vac; 60 MHz; Max. 1A
Output Power	12Vdc; 2.5A
Power line	1.8m cable without core

Adapter 3	
Brand	NETGEAR
Model	2ABL030F 1
P/N	332-10948-02
Input Power	100~120 Vac; 60 MHz; Max. 1A
Output Power	12Vdc; 2.5A
Power line	1.83m cable without core

PoE (Support Unit)	
Brand	BUFFALO
Model	BIJ-POE-1P2GH
Input Power	100~240Vac, 1.1A, 50/60Hz
Output Power	55.5Vdc, 0.54A

3. The antenna information is listed as below.

Antenna Type	Dipole
Connector Type	IPEX
Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	3.27
5150~5250MHz	6.02
5250~5350MHz	6.11
5470~5725MHz	6.15
5725~5850MHz	6.20

* The detailed antenna information, please refer to the Test report-Antenna Spec.pdf.

4. WLAN 2.4GHz & 5.0GHz technology can transmit at same time.

3.2 Description of Test Modes

For 5180 ~ 5320MHz:

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

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

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

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

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

Channel	Frequency	Channel	Frequency
42	5210MHz	58	5290MHz

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

Channel	Frequency
50	5250MHz

For 5500 ~ 5720MHz:

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

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

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

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

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

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

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

Channel	Frequency
114	5570MHz

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	
A	√	√	√	√	Power from adapter 1
B	-	√	√	-	Power from adapter 2
C	-	√	√	-	Power from adapter 3
D	-	√	√	-	Power from PoE

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 3 axis. The worst case was found when positioned on **X-plane**.
2. "-": Means no effect.

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)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (HE80)		42	42	OFDMA	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (HE80)		58	58	OFDMA	MCS0
	802.11ax (HE160)		50	50	OFDMA	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0
	802.11ax (HE160)		114	114	OFDMA	MCS0
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (HE80)		155	155	OFDMA	MCS0

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A, B, C, D	802.11ax (HE40)	5180-5240	38 to 46	151	OFDMA	MCS0
		5260-5320	54 to 62			
		5500-5720	102 to 142			
		5745-5825	151 to 159			

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)
A, B, C, D	802.11ax (HE40)	5180-5240	38 to 46	151	OFDMA	MCS0
		5260-5320	54 to 62			
		5500-5720	102 to 142			
		5745-5825	151 to 159			

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)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (HE80)		42	42	OFDMA	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (HE80)		58	58	OFDMA	MCS0
	802.11ax (HE160)		50	50	OFDMA	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0
	802.11ax (HE160)		114	114	OFDMA	MCS0
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (HE80)		155	155	OFDMA	MCS0

Test Condition:

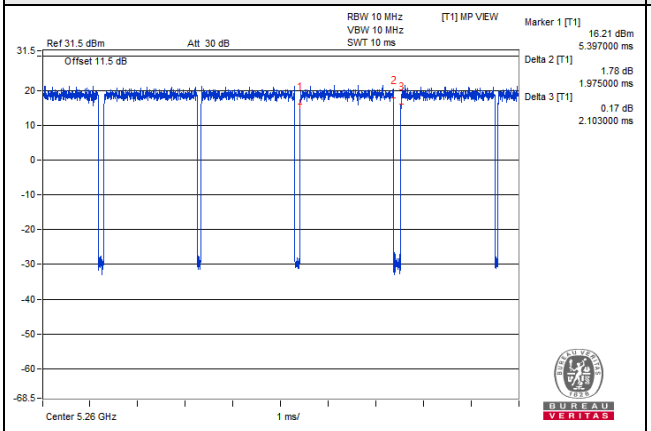
Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
RE<1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
PLC	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Jisyong Wang

3.3 Duty Cycle of Test Signal

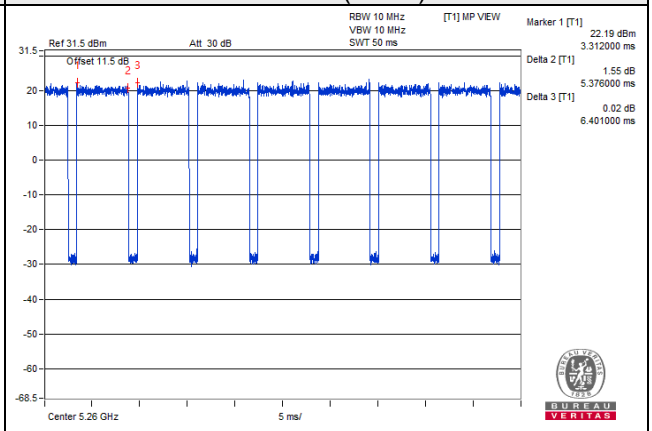
Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = 1.975/2.103 = 0.939, Duty factor = 10 * log (1/0.939) = 0.27
802.11ax (HE20): Duty cycle = 5.376/6.401 = 0.840, Duty factor = 10 * log (1/0.840) = 0.76
802.11ax (HE40): Duty cycle = 5.388/6.363 = 0.847, Duty factor = 10 * log (1/0.847) = 0.72
802.11ax (HE80): Duty cycle = 5.363/6.438 = 0.833, Duty factor = 10 * log (1/0.833) = 0.79
802.11ax (HE160): Duty cycle = 5.363/5.876 = 0.913, Duty factor = 10 * log (1/0.913) = 0.40

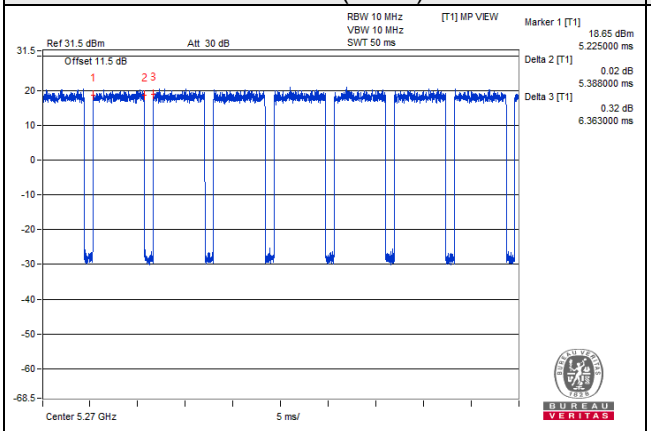
802.11a



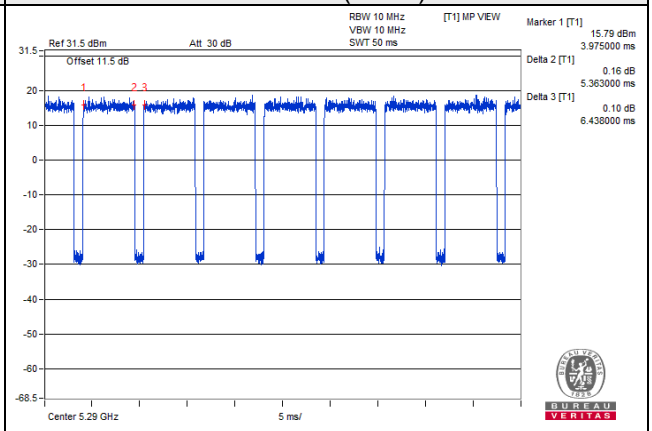
802.11ax (HE20)



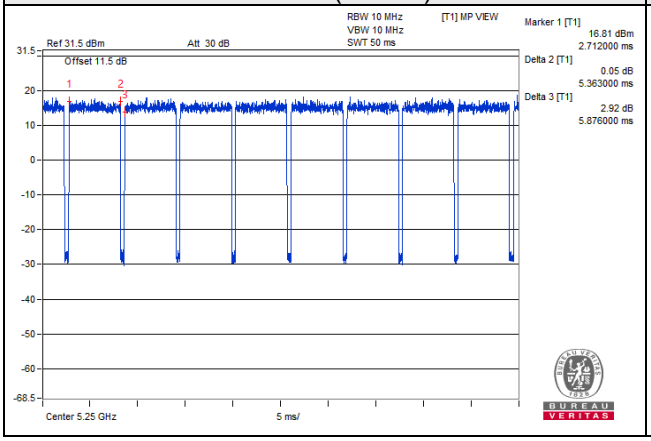
802.11ax (HE40)



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	-
C.	PoE	BUFFALO	BIJ-POE-1P2GH	NA	NA	Provided by client

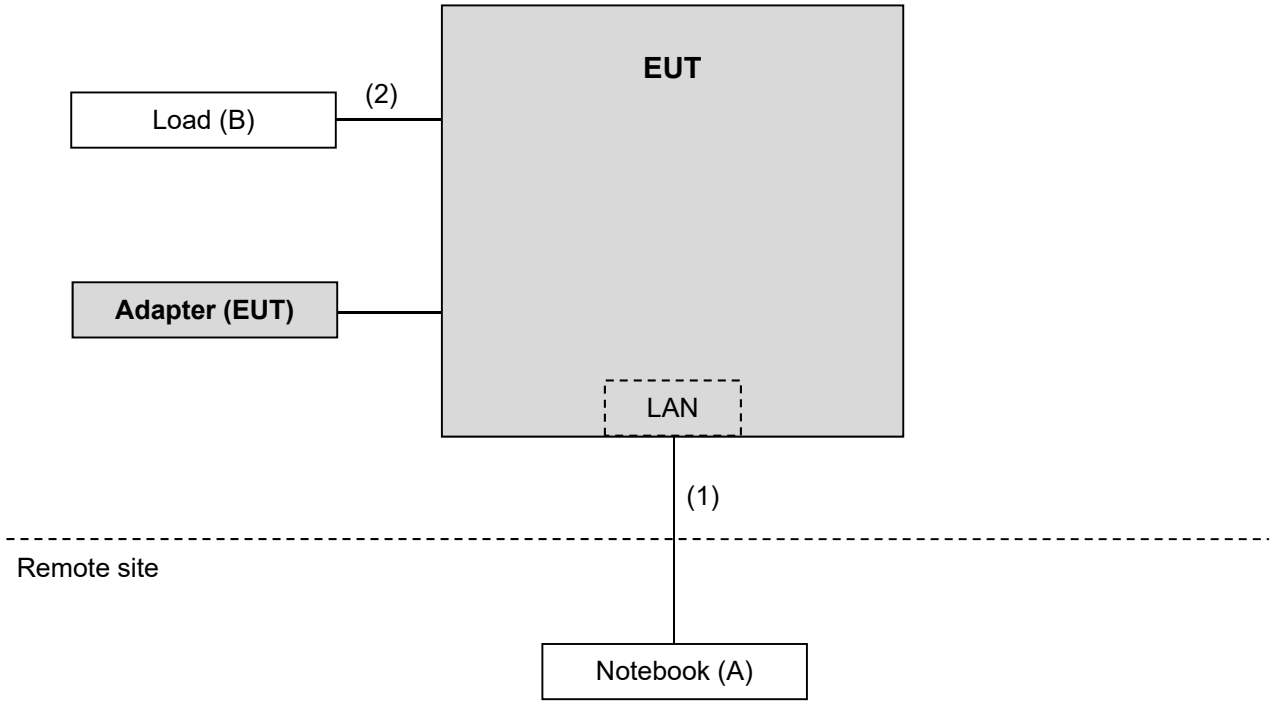
Note:

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.

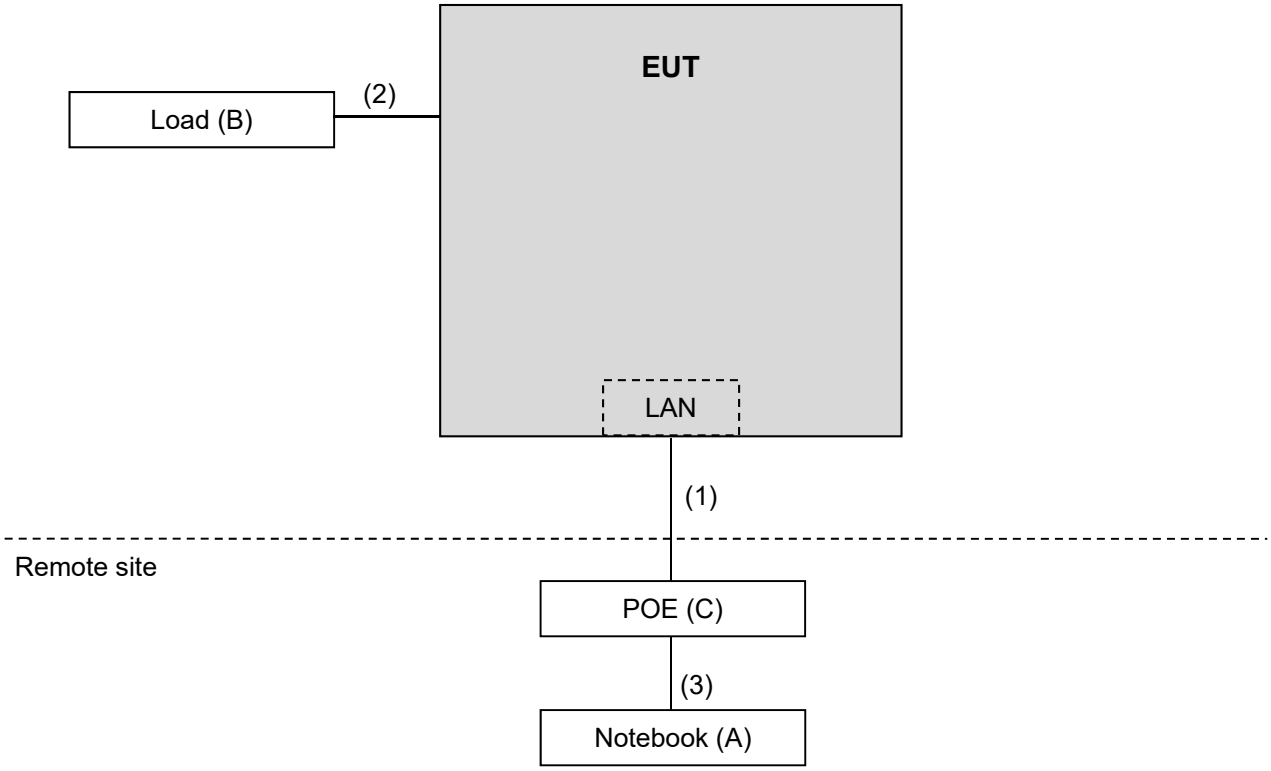
ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	1	10	N	0	RJ45, Cat5e
2.	LAN cable	1	1.5	N	0	RJ45, Cat5e
3.	LAN cable	1	1.5	N	0	RJ45, Cat5e

3.4.1 Configuration of System under Test

Test Mode A, B, C



Test Mode D



3.5 General Description of Applied Standards

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:

$$E = \frac{1000000\sqrt{30P}}{3}$$ 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. 30, 2021	Dec. 29, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 15, 2021	Sep. 14, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 01, 2021	Oct. 31, 2022
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Oct. 26, 2021	Oct. 25, 2022
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jun. 05, 2021	Jun. 04, 2022
			May 14, 2022	May 13, 2023
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 05, 2021	Jun. 04, 2022
			May 14, 2022	May 13, 2023
RF Coaxial Cable 57140938WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Jul. 24, 2021	Jul. 23, 2022
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Jul. 24, 2021	Jul. 23, 2022
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Jul. 24, 2021	Jul. 23, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 05, 2021	Jun. 04, 2022
			May 14, 2022	May 13, 2023
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 05, 2021	Jun. 04, 2022
			May 14, 2022	May 13, 2023
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
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 18, 2022	Jan. 17, 2023
Wideband Power Sensor KEYSIGHT	N1923A	MY58190002	May 06, 2022	May 05, 2023

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:

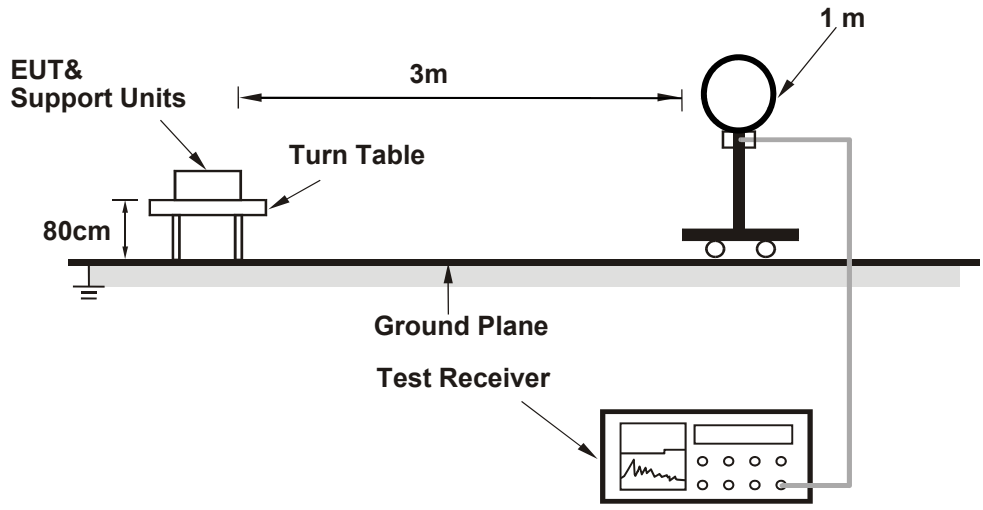
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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. (RBW = 1MHz, VBW = 1kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

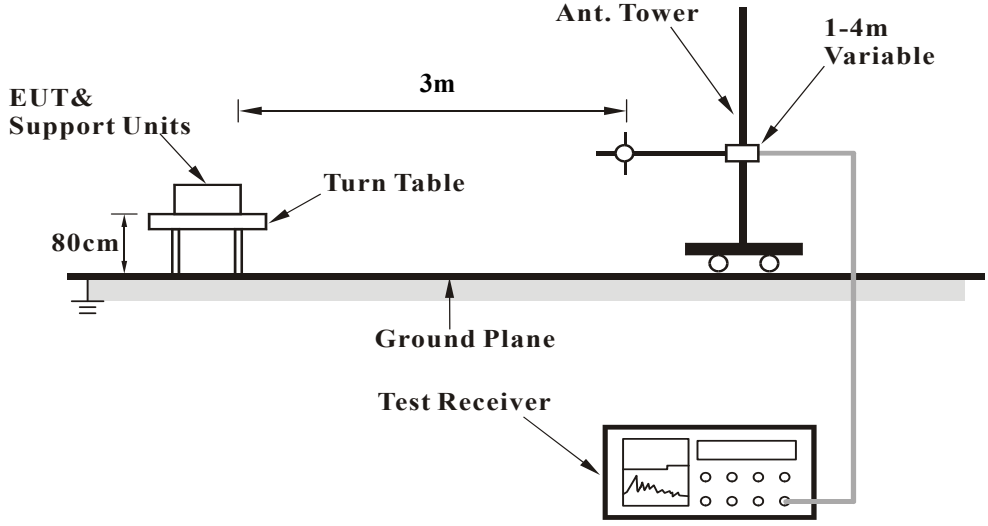
No deviation.

4.1.5 Test Setup

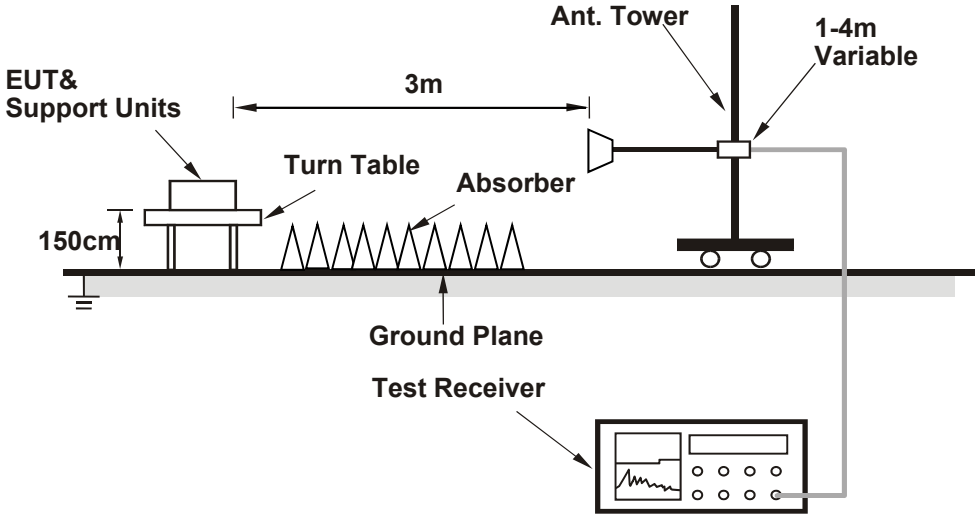
For Radiated emission below 30MHz



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.
d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

Above 1GHz data:

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.1 PK	74.0	-3.9	1.47 H	305	57.2	12.9
2	5150.00	53.4 AV	54.0	-0.6	1.47 H	305	40.5	12.9
3	*5180.00	120.8 PK			1.47 H	305	78.4	42.4
4	*5180.00	111.0 AV			1.47 H	305	68.6	42.4
5	#10360.00	62.0 PK	68.2	-6.2	2.25 H	158	39.4	22.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.5 PK	74.0	-6.5	3.71 V	3	54.6	12.9
2	5150.00	52.6 AV	54.0	-1.4	3.71 V	3	39.7	12.9
3	*5180.00	117.9 PK			3.71 V	3	75.5	42.4
4	*5180.00	108.9 AV			3.71 V	3	66.5	42.4
5	#10360.00	61.8 PK	68.2	-6.4	1.99 V	202	39.2	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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	123.1 PK			1.45 H	304	80.9	42.2
2	*5200.00	113.7 AV			1.45 H	304	71.5	42.2
5	#10400.00	62.4 PK	68.2	-5.8	2.29 H	154	39.6	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	119.7 PK			3.72 V	2	77.5	42.2
2	*5200.00	109.9 AV			3.72 V	2	67.7	42.2
3	#10400.00	62.1 PK	68.2	-6.1	1.95 V	205	39.3	22.8

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5050.00	62.2 PK	74.0	-11.8	1.58 H	305	49.4	12.8
2	5050.00	50.5 AV	54.0	-3.5	1.58 H	305	37.7	12.8
3	*5240.00	122.3 PK			1.58 H	305	80.1	42.2
4	*5240.00	112.9 AV			1.58 H	305	70.7	42.2
5	5350.00	62.6 PK	74.0	-11.4	1.58 H	305	49.6	13.0
6	5350.00	49.8 AV	54.0	-4.2	1.58 H	305	36.8	13.0
7	#10480.00	62.3 PK	68.2	-5.9	2.28 H	161	39.5	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5050.00	61.6 PK	74.0	-12.4	3.54 V	1	48.8	12.8
2	5050.00	49.7 AV	54.0	-4.3	3.54 V	1	36.9	12.8
3	*5240.00	119.0 PK			3.54 V	1	76.8	42.2
4	*5240.00	109.9 AV			3.54 V	1	67.7	42.2
5	5350.00	63.2 PK	74.0	-10.8	3.54 V	1	50.2	13.0
6	5350.00	49.7 AV	54.0	-4.3	3.54 V	1	36.7	13.0
7	#10480.00	62.0 PK	68.2	-6.2	1.93 V	204	39.2	22.8

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.9 PK	74.0	-13.1	1.08 H	303	48.0	12.9
2	5150.00	47.8 AV	54.0	-6.2	1.08 H	303	34.9	12.9
3	*5260.00	117.5 PK			1.08 H	303	75.2	42.3
4	*5260.00	107.8 AV			1.08 H	303	65.5	42.3
5	#10520.00	62.2 PK	68.2	-6.0	2.32 H	163	39.2	23.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.7 PK	74.0	-13.3	3.81 V	20	47.8	12.9
2	5150.00	47.4 AV	54.0	-6.6	3.81 V	20	34.5	12.9
3	*5260.00	113.2 PK			3.81 V	20	70.9	42.3
4	*5260.00	104.3 AV			3.81 V	20	62.0	42.3
5	#10520.00	61.9 PK	68.2	-6.3	2.02 V	215	38.9	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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.0 PK			1.35 H	304	74.7	42.3
2	*5300.00	107.0 AV			1.35 H	304	64.7	42.3
3	10600.00	62.8 PK	74.0	-11.2	2.35 H	165	39.3	23.5
4	10600.00	50.0 AV	54.0	-4.0	2.35 H	165	26.5	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	112.6 PK			3.81 V	360	70.3	42.3
2	*5300.00	103.7 AV			3.81 V	360	61.4	42.3
3	10600.00	62.3 PK	74.0	-11.7	2.05 V	214	38.8	23.5
4	10600.00	49.4 AV	54.0	-4.6	2.05 V	214	25.9	23.5

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.6 PK			1.33 H	305	74.2	42.4
2	*5320.00	107.5 AV			1.33 H	305	65.1	42.4
3	5350.00	62.3 PK	74.0	-11.7	1.33 H	305	49.3	13.0
4	5350.00	49.7 AV	54.0	-4.3	1.33 H	305	36.7	13.0
5	10640.00	62.7 PK	74.0	-11.3	2.35 H	164	39.2	23.5
6	10640.00	49.9 AV	54.0	-4.1	2.35 H	164	26.4	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	112.8 PK			3.78 V	1	70.4	42.4
2	*5320.00	103.8 AV			3.78 V	1	61.4	42.4
3	5350.00	62.0 PK	74.0	-12.0	3.78 V	1	49.0	13.0
4	5350.00	49.5 AV	54.0	-4.5	3.78 V	1	36.5	13.0
5	10640.00	62.3 PK	74.0	-11.7	2.07 V	212	38.8	23.5
6	10640.00	49.3 AV	54.0	-4.7	2.07 V	212	25.8	23.5

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.9 PK	74.0	-13.1	1.27 H	80	47.7	13.2
2	5460.00	48.1 AV	54.0	-5.9	1.27 H	80	34.9	13.2
3	#5470.00	61.4 PK	68.2	-6.8	1.27 H	80	48.0	13.4
4	*5500.00	117.9 PK			1.27 H	80	75.0	42.9
5	*5500.00	108.3 AV			1.27 H	80	65.4	42.9
6	11000.00	63.8 PK	74.0	-10.2	2.39 H	169	39.5	24.3
7	11000.00	50.9 AV	54.0	-3.1	2.39 H	169	26.6	24.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.7 PK	74.0	-13.3	3.69 V	69	47.5	13.2
2	5460.00	47.8 AV	54.0	-6.2	3.69 V	69	34.6	13.2
3	#5470.00	61.1 PK	68.2	-7.1	3.69 V	69	47.7	13.4
4	*5500.00	113.5 PK			3.69 V	69	70.6	42.9
5	*5500.00	104.0 AV			3.69 V	69	61.1	42.9
6	11000.00	63.3 PK	74.0	-10.7	2.11 V	215	39.0	24.3
7	11000.00	50.4 AV	54.0	-3.6	2.11 V	215	26.1	24.3

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	117.3 PK			1.27 H	81	74.4	42.9
2	*5580.00	108.1 AV			1.27 H	81	65.2	42.9
3	11160.00	63.4 PK	74.0	-10.6	2.32 H	167	39.2	24.2
4	11160.00	50.6 AV	54.0	-3.4	2.32 H	167	26.4	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	112.2 PK			3.52 V	71	69.3	42.9
2	*5580.00	103.0 AV			3.52 V	71	60.1	42.9
3	11160.00	63.3 PK	74.0	-10.7	2.08 V	216	39.1	24.2
4	11160.00	50.2 AV	54.0	-3.8	2.08 V	216	26.0	24.2

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	117.5 PK			1.45 H	121	74.5	43.0
2	*5700.00	107.2 AV			1.45 H	121	64.2	43.0
3	#5725.00	65.0 PK	68.2	-3.2	1.45 H	121	51.5	13.5
4	11400.00	64.4 PK	74.0	-9.6	2.38 H	169	39.3	25.1
5	11400.00	51.5 AV	54.0	-2.5	2.38 H	169	26.4	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	112.7 PK			3.75 V	180	69.7	43.0
2	*5700.00	103.2 AV			3.75 V	180	60.2	43.0
3	#5725.00	64.0 PK	68.2	-4.2	3.75 V	180	50.5	13.5
4	11440.00	64.2 PK	74.0	-9.8	2.01 V	211	39.1	25.1
5	11440.00	51.2 AV	54.0	-2.8	2.01 V	211	26.1	25.1

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	62.3 PK	68.2	-5.9	1.30 H	122	48.9	13.4
2	*5720.00	117.4 PK			1.30 H	122	74.2	43.2
3	*5720.00	106.8 AV			1.30 H	122	63.6	43.2
4	#5850.00	63.6 PK	68.2	-4.6	1.30 H	122	49.5	14.1
5	11440.00	64.2 PK	74.0	-9.8	2.38 H	167	39.1	25.1
6	11440.00	51.3 AV	54.0	-2.7	2.38 H	167	26.2	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.9 PK	68.2	-6.3	3.86 V	85	48.5	13.4
2	*5720.00	112.7 PK			3.86 V	85	69.5	43.2
3	*5720.00	103.2 AV			3.86 V	85	60.0	43.2
4	#5850.00	63.2 PK	68.2	-5.0	3.86 V	85	49.1	14.1
5	11440.00	64.1 PK	74.0	-9.9	2.05 V	218	39.0	25.1
6	11440.00	51.0 AV	54.0	-3.0	2.05 V	218	25.9	25.1

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.

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.20	61.2 PK	68.2	-7.0	1.29 H	123	47.8	13.4
2	*5745.00	123.5 PK			1.29 H	123	80.0	43.5
3	*5745.00	113.4 AV			1.29 H	123	69.9	43.5
4	#5989.60	61.6 PK	68.2	-6.6	1.29 H	123	47.4	14.2
5	11490.00	65.7 PK	74.0	-8.3	2.55 H	175	40.5	25.2
6	11490.00	52.4 AV	54.0	-1.6	2.55 H	175	27.2	25.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5623.60	61.8 PK	68.2	-6.4	3.93 V	185	48.4	13.4
2	*5745.00	121.6 PK			3.93 V	185	78.1	43.5
3	*5745.00	111.8 AV			3.93 V	185	68.3	43.5
4	#5980.40	62.4 PK	68.2	-5.8	3.93 V	185	48.2	14.2
5	11490.00	65.4 PK	74.0	-8.6	2.13 V	225	40.2	25.2
6	11490.00	51.8 AV	54.0	-2.2	2.13 V	225	26.6	25.2

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5624.40	61.9 PK	68.2	-6.3	1.28 H	122	48.5	13.4
2	*5785.00	123.3 PK			1.28 H	122	79.6	43.7
3	*5785.00	113.4 AV			1.28 H	122	69.7	43.7
4	#5965.60	62.1 PK	68.2	-6.1	1.28 H	122	47.9	14.2
5	11570.00	65.2 PK	74.0	-8.8	2.54 H	172	40.3	24.9
6	11570.00	52.0 AV	54.0	-2.0	2.54 H	172	27.1	24.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5615.60	61.1 PK	68.2	-7.1	3.85 V	180	47.7	13.4
2	*5785.00	119.8 PK			3.89 V	181	76.1	43.7
3	*5785.00	110.0 AV			3.89 V	181	66.3	43.7
4	#5974.00	62.0 PK	68.2	-6.2	3.85 V	180	47.8	14.2
5	11570.00	65.0 PK	74.0	-9.0	2.11 V	223	40.1	24.9
6	11570.00	51.8 AV	54.0	-2.2	2.11 V	223	26.9	24.9

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.00	61.4 PK	68.2	-6.8	1.48 H	124	48.0	13.4
2	*5825.00	123.3 PK			1.48 H	124	79.5	43.8
3	*5825.00	113.5 AV			1.48 H	124	69.7	43.8
4	#5998.80	62.8 PK	68.2	-5.4	1.48 H	124	48.6	14.2
5	11650.00	64.9 PK	74.0	-9.1	2.53 H	174	40.3	24.6
6	11650.00	51.8 AV	54.0	-2.2	2.53 H	174	27.2	24.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.00	61.6 PK	68.2	-6.6	3.89 V	167	48.2	13.4
2	*5825.00	120.2 PK			3.89 V	167	76.4	43.8
3	*5825.00	110.2 AV			3.89 V	167	66.4	43.8
4	#5959.20	61.9 PK	68.2	-6.3	3.89 V	167	47.7	14.2
5	11650.00	64.7 PK	74.0	-9.3	2.13 V	221	40.1	24.6
6	11650.00	51.5 AV	54.0	-2.5	2.13 V	221	26.9	24.6

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.2 PK	74.0	-7.8	1.32 H	296	53.3	12.9
2	5150.00	52.4 AV	54.0	-1.6	1.32 H	296	39.5	12.9
3	*5180.00	123.2 PK			1.32 H	296	80.8	42.4
4	*5180.00	110.0 AV			1.32 H	296	67.6	42.4
5	#10360.00	62.1 PK	68.2	-6.1	2.28 H	159	39.5	22.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.8 PK	74.0	-12.2	3.67 V	1	48.9	12.9
2	5150.00	49.1 AV	54.0	-4.9	3.67 V	1	36.2	12.9
3	*5180.00	119.0 PK			3.67 V	1	76.6	42.4
4	*5180.00	106.4 AV			3.67 V	1	64.0	42.4
5	#10360.00	61.7 PK	68.2	-6.5	1.93 V	205	39.1	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	124.9 PK			1.22 H	296	82.7	42.2
2	*5200.00	112.7 AV			1.22 H	296	70.5	42.2
3	#10400.00	62.4 PK	68.2	-5.8	2.31 H	162	39.6	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	121.6 PK			3.68 V	1	79.4	42.2
2	*5200.00	109.3 AV			3.68 V	1	67.1	42.2
3	#10400.00	62.1 PK	68.2	-6.1	1.95 V	202	39.3	22.8

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5045.00	60.8 PK	74.0	-13.2	1.13 H	297	48.0	12.8
2	5045.00	49.2 AV	54.0	-4.8	1.13 H	297	36.4	12.8
3	*5240.00	125.3 PK			1.13 H	297	83.1	42.2
4	*5240.00	112.6 AV			1.13 H	297	70.4	42.2
5	5350.00	62.3 PK	74.0	-11.7	1.13 H	297	49.3	13.0
6	5350.00	49.8 AV	54.0	-4.2	1.13 H	297	36.8	13.0
7	#10480.00	62.3 PK	68.2	-5.9	2.31 H	154	39.5	22.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5045.00	60.7 PK	74.0	-13.3	3.69 V	2	47.9	12.8
2	5045.00	49.2 AV	54.0	-4.8	3.69 V	2	36.4	12.8
3	*5240.00	122.5 PK			3.69 V	2	80.3	42.2
4	*5240.00	109.6 AV			3.69 V	2	67.4	42.2
5	5350.00	62.3 PK	74.0	-11.7	3.69 V	2	49.3	13.0
6	5350.00	49.6 AV	54.0	-4.4	3.69 V	2	36.6	13.0
7	#10480.00	62.0 PK	68.2	-6.2	1.99 V	207	39.2	22.8

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 52：5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.6 PK	74.0	-13.4	1.34 H	296	47.7	12.9
2	5150.00	47.5 AV	54.0	-6.5	1.34 H	296	34.6	12.9
3	*5260.00	119.0 PK			1.34 H	296	76.7	42.3
4	*5260.00	106.8 AV			1.34 H	296	64.5	42.3
5	#10520.00	62.2 PK	68.2	-6.0	2.33 H	162	39.2	23.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.4 PK	74.0	-13.6	3.48 V	360	47.5	12.9
2	5150.00	47.4 AV	54.0	-6.6	3.48 V	360	34.5	12.9
3	*5260.00	116.3 PK			3.48 V	360	74.0	42.3
4	*5260.00	103.7 AV			3.48 V	360	61.4	42.3
5	#10520.00	62.0 PK	68.2	-6.2	2.05 V	217	39.0	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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	118.2 PK			1.30 H	304	75.9	42.3
2	*5300.00	106.5 AV			1.30 H	304	64.2	42.3
3	10600.00	62.7 PK	74.0	-11.3	2.39 H	167	39.2	23.5
4	10600.00	49.9 AV	54.0	-4.1	2.39 H	167	26.4	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	116.2 PK			3.51 V	357	73.9	42.3
2	*5300.00	102.9 AV			3.51 V	357	60.6	42.3
3	10600.00	62.5 PK	74.0	-11.5	2.05 V	211	39.0	23.5
4	10600.00	49.5 AV	54.0	-4.5	2.05 V	211	26.0	23.5

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 64：5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	118.6 PK			1.32 H	306	76.2	42.4
2	*5320.00	106.2 AV			1.32 H	306	63.8	42.4
3	5350.00	63.0 PK	74.0	-11.0	1.32 H	306	50.0	13.0
4	5350.00	50.8 AV	54.0	-3.2	1.32 H	306	37.8	13.0
5	10640.00	62.7 PK	74.0	-11.3	2.35 H	164	39.2	23.5
6	10640.00	49.9 AV	54.0	-4.1	2.35 H	164	26.4	23.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.2 PK			3.54 V	358	73.8	42.4
2	*5320.00	103.2 AV			3.54 V	358	60.8	42.4
3	5350.00	62.1 PK	74.0	-11.9	3.54 V	358	49.1	13.0
4	5350.00	49.3 AV	54.0	-4.7	3.54 V	358	36.3	13.0
5	10640.00	62.6 PK	74.0	-11.4	2.01 V	215	39.1	23.5
6	10640.00	49.6 AV	54.0	-4.4	2.01 V	215	26.1	23.5

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.1 PK	74.0	-11.9	1.35 H	81	48.9	13.2
2	5460.00	48.2 AV	54.0	-5.8	1.35 H	81	35.0	13.2
3	#5470.00	61.8 PK	68.2	-6.4	1.35 H	81	48.4	13.4
4	*5500.00	119.8 PK			1.35 H	81	76.9	42.9
5	*5500.00	107.9 AV			1.35 H	81	65.0	42.9
6	11000.00	63.6 PK	74.0	-10.4	2.35 H	169	39.3	24.3
7	11000.00	50.7 AV	54.0	-3.3	2.35 H	169	26.4	24.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	3.61 V	67	48.3	13.2
2	5460.00	47.9 AV	54.0	-6.1	3.61 V	67	34.7	13.2
3	#5470.00	61.4 PK	68.2	-6.8	3.61 V	67	48.0	13.4
4	*5500.00	115.7 PK			3.61 V	67	72.8	42.9
5	*5500.00	103.0 AV			3.61 V	67	60.1	42.9
6	11000.00	63.3 PK	74.0	-10.7	2.09 V	214	39.0	24.3
7	11000.00	50.4 AV	54.0	-3.6	2.09 V	214	26.1	24.3

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 116：5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	119.4 PK			1.33 H	81	76.5	42.9
2	*5580.00	106.8 AV			1.33 H	81	63.9	42.9
3	11160.00	63.4 PK	74.0	-10.6	2.32 H	163	39.2	24.2
4	11160.00	50.5 AV	54.0	-3.5	2.32 H	163	26.3	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	114.4 PK			3.61 V	176	71.5	42.9
2	*5580.00	102.8 AV			3.61 V	176	59.9	42.9
3	11160.00	63.3 PK	74.0	-10.7	2.12 V	215	39.1	24.2
4	11160.00	50.2 AV	54.0	-3.8	2.12 V	215	26.0	24.2

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	118.1 PK			1.43 H	123	75.1	43.0
2	*5700.00	105.9 AV			1.43 H	123	62.9	43.0
3	**#5725.00**	**68.1 PK**	**68.2**	**-0.1**	**1.43 H**	**123**	**54.6**	**13.5**
4	11400.00	64.2 PK	74.0	-9.8	2.34 H	165	39.1	25.1
5	11400.00	51.3 AV	54.0	-2.7	2.34 H	165	26.2	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	115.8 PK			3.78 V	180	72.8	43.0
2	*5700.00	103.4 AV			3.78 V	180	60.4	43.0
3	#5725.00	67.7 PK	68.2	-0.5	3.78 V	180	54.2	13.5
4	11400.00	64.1 PK	74.0	-9.9	2.11 V	218	39.0	25.1
5	11400.00	51.0 AV	54.0	-3.0	2.11 V	218	25.9	25.1

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.2 PK	68.2	-7.0	1.35 H	139	47.8	13.4
2	*5720.00	119.1 PK			1.35 H	139	75.9	43.2
3	*5720.00	106.4 AV			1.35 H	139	63.2	43.2
4	#5850.00	64.1 PK	68.2	-4.1	1.35 H	139	50.0	14.1
5	11440.00	64.3 PK	74.0	-9.7	2.32 H	165	39.2	25.1
6	11440.00	51.6 AV	54.0	-2.4	2.32 H	165	26.5	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.9 PK	68.2	-7.3	3.77 V	179	47.5	13.4
2	*5720.00	115.1 PK			3.77 V	179	71.9	43.2
3	*5720.00	103.0 AV			3.77 V	179	59.8	43.2
4	#5850.00	63.6 PK	68.2	-4.6	3.77 V	179	49.5	14.1
5	11440.00	64.2 PK	74.0	-9.8	2.05 V	216	39.1	25.1
6	11440.00	51.2 AV	54.0	-2.8	2.05 V	216	26.1	25.1

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5627.60	61.5 PK	68.2	-6.7	1.26 H	123	48.1	13.4
2	*5745.00	124.1 PK			1.26 H	123	80.6	43.5
3	*5745.00	112.6 AV			1.26 H	123	69.1	43.5
4	#5938.00	62.1 PK	68.2	-6.1	1.26 H	123	48.0	14.1
5	11490.00	65.5 PK	74.0	-8.5	2.59 H	178	40.3	25.2
6	11490.00	52.3 AV	54.0	-1.7	2.59 H	178	27.1	25.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5632.40	61.3 PK	68.2	-6.9	3.90 V	183	47.9	13.4
2	*5745.00	120.9 PK			3.90 V	183	77.4	43.5
3	*5745.00	109.0 AV			3.90 V	183	65.5	43.5
4	#5985.60	62.6 PK	68.2	-5.6	3.90 V	183	48.4	14.2
5	11490.00	65.3 PK	74.0	-8.7	2.13 V	229	40.1	25.2
6	11490.00	52.1 AV	54.0	-1.9	2.13 V	229	26.9	25.2

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.00	61.7 PK	68.2	-6.5	1.24 H	123	48.3	13.4
2	*5785.00	124.7 PK			1.24 H	123	81.0	43.7
3	*5785.00	113.0 AV			1.24 H	123	69.3	43.7
4	#5963.60	62.3 PK	68.2	-5.9	1.24 H	123	48.1	14.2
5	11570.00	65.2 PK	74.0	-8.8	2.49 H	173	40.3	24.9
6	11570.00	52.2 AV	54.0	-1.8	2.49 H	173	27.3	24.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5624.40	61.2 PK	68.2	-7.0	3.85 V	181	47.8	13.4
2	*5785.00	122.6 PK			3.85 V	181	78.9	43.7
3	*5785.00	110.1 AV			3.85 V	181	66.4	43.7
4	#5968.80	62.1 PK	68.2	-6.1	3.85 V	181	47.9	14.2
5	11570.00	65.0 PK	74.0	-9.0	2.13 V	225	40.1	24.9
6	11570.00	51.9 AV	54.0	-2.1	2.13 V	225	27.0	24.9

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5639.60	61.5 PK	68.2	-6.7	1.33 H	124	48.1	13.4
2	*5825.00	125.6 PK			1.33 H	124	81.8	43.8
3	*5825.00	113.5 AV			1.33 H	124	69.7	43.8
4	#5992.80	62.9 PK	68.2	-5.3	1.33 H	124	48.7	14.2
5	11650.00	64.8 PK	74.0	-9.2	2.53 H	174	40.2	24.6
6	11650.00	52.0 AV	54.0	-2.0	2.53 H	174	27.4	24.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.40	61.1 PK	68.2	-7.1	3.85 V	182	47.7	13.4
2	*5825.00	122.6 PK			3.85 V	182	78.8	43.8
3	*5825.00	109.8 AV			3.85 V	182	66.0	43.8
4	#5930.40	62.4 PK	68.2	-5.8	3.85 V	182	48.3	14.1
5	11650.00	64.6 PK	74.0	-9.4	2.14 V	223	40.0	24.6
6	11650.00	51.5 AV	54.0	-2.5	2.14 V	223	26.9	24.6

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.1 PK	74.0	-5.9	1.26 H	296	55.2	12.9
2	5150.00	53.2 AV	54.0	-0.8	1.26 H	296	40.3	12.9
3	*5190.00	117.0 PK			1.26 H	296	74.7	42.3
4	*5190.00	104.0 AV			1.26 H	296	61.7	42.3
5	#10380.00	61.8 PK	68.2	-6.4	2.25 H	155	39.1	22.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.5 PK	74.0	-11.5	3.69 V	2	49.6	12.9
2	5150.00	49.6 AV	54.0	-4.4	3.69 V	2	36.7	12.9
3	*5190.00	113.7 PK			3.69 V	2	71.4	42.3
4	*5190.00	100.6 AV			3.69 V	2	58.3	42.3
5	#10380.00	61.5 PK	68.2	-6.7	1.93 V	202	38.8	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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.0 PK	74.0	-3.0	1.29 H	296	58.1	12.9
2	5150.00	53.4 AV	54.0	-0.6	1.29 H	296	40.5	12.9
3	*5230.00	121.8 PK			1.29 H	296	79.6	42.2
4	*5230.00	109.3 AV			1.29 H	296	67.1	42.2
5	5350.00	62.7 PK	74.0	-11.3	1.29 H	296	49.7	13.0
6	5350.00	50.0 AV	54.0	-4.0	1.29 H	296	37.0	13.0
7	#10460.00	62.2 PK	68.2	-6.0	2.31 H	162	39.3	22.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.0 PK	74.0	-11.0	3.75 V	2	50.1	12.9
2	5150.00	50.3 AV	54.0	-3.7	3.75 V	2	37.4	12.9
3	*5230.00	118.0 PK			3.75 V	2	75.8	42.2
4	*5230.00	105.9 AV			3.75 V	2	63.7	42.2
5	5350.00	62.5 PK	74.0	-11.5	3.75 V	2	49.5	13.0
6	5350.00	49.7 AV	54.0	-4.3	3.75 V	2	36.7	13.0
7	#10460.00	62.0 PK	68.2	-6.2	1.96 V	207	39.1	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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.0 PK	74.0	-13.0	1.21 H	296	48.1	12.9
2	5150.00	47.5 AV	54.0	-6.5	1.21 H	296	34.6	12.9
3	*5270.00	117.3 PK			1.21 H	296	75.0	42.3
4	*5270.00	104.6 AV			1.21 H	296	62.3	42.3
5	#10540.00	62.2 PK	68.2	-6.0	2.32 H	162	39.1	23.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.5 PK	74.0	-13.5	3.46 V	358	47.6	12.9
2	5150.00	47.1 AV	54.0	-6.9	3.46 V	358	34.2	12.9
3	*5270.00	114.4 PK			3.46 V	358	72.1	42.3
4	*5270.00	100.7 AV			3.46 V	358	58.4	42.3
5	#10540.00	61.8 PK	68.2	-6.4	2.02 V	211	38.7	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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 62：5310 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	115.4 PK			1.21 H	293	73.0	42.4
2	*5310.00	102.7 AV			1.21 H	293	60.3	42.4
3	5350.00	67.3 PK	74.0	-6.7	1.21 H	293	54.3	13.0
4	5350.00	53.5 AV	54.0	-0.5	1.21 H	293	40.5	13.0
5	10620.00	62.6 PK	74.0	-11.4	2.35 H	164	39.2	23.4
6	10620.00	49.7 AV	54.0	-4.3	2.35 H	164	26.3	23.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	112.4 PK			3.45 V	358	70.0	42.4
2	*5310.00	99.0 AV			3.45 V	358	56.6	42.4
3	5350.00	62.4 PK	74.0	-11.6	3.45 V	358	49.4	13.0
4	5350.00	50.8 AV	54.0	-3.2	3.45 V	358	37.8	13.0
5	10620.00	62.4 PK	74.0	-11.6	2.03 V	213	39.0	23.4
6	10620.00	49.5 AV	54.0	-4.5	2.03 V	213	26.1	23.4

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 102：5510 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	64.2 PK	74.0	-9.8	1.12 H	83	51.0	13.2
2	5460.00	49.3 AV	54.0	-4.7	1.12 H	83	36.1	13.2
3	#5470.00	64.6 PK	68.2	-3.6	1.12 H	83	51.2	13.4
4	*5510.00	117.3 PK			1.12 H	83	74.4	42.9
5	*5510.00	104.9 AV			1.12 H	83	62.0	42.9
6	11020.00	63.3 PK	74.0	-10.7	2.38 H	168	39.1	24.2
7	11020.00	50.4 AV	54.0	-3.6	2.38 H	168	26.2	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.7 PK	74.0	-11.3	3.65 V	69	49.5	13.2
2	5460.00	48.1 AV	54.0	-5.9	3.65 V	69	34.9	13.2
3	#5470.00	63.1 PK	68.2	-5.1	3.65 V	69	49.7	13.4
4	*5510.00	112.8 PK			3.65 V	69	69.9	42.9
5	*5510.00	100.3 AV			3.65 V	69	57.4	42.9
6	11020.00	63.0 PK	74.0	-11.0	2.09 V	213	38.8	24.2
7	11020.00	50.0 AV	54.0	-4.0	2.09 V	213	25.8	24.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	117.8 PK			1.30 H	81	74.9	42.9
2	*5550.00	104.6 AV			1.30 H	81	61.7	42.9
3	11100.00	63.4 PK	74.0	-10.6	2.33 H	162	39.2	24.2
4	11100.00	50.5 AV	54.0	-3.5	2.33 H	162	26.3	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	113.0 PK			3.63 V	69	70.1	42.9
2	*5550.00	100.0 AV			3.63 V	69	57.1	42.9
3	11100.00	63.1 PK	74.0	-10.9	2.02 V	213	38.9	24.2
4	11100.00	50.2 AV	54.0	-3.8	2.02 V	213	26.0	24.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	117.1 PK			1.42 H	139	74.1	43.0
2	*5670.00	104.0 AV			1.42 H	139	61.0	43.0
3	#5725.00	67.1 PK	68.2	-1.1	1.42 H	139	53.6	13.5
4	11340.00	64.1 PK	74.0	-9.9	2.31 H	169	39.2	24.9
5	11340.00	51.3 AV	54.0	-2.7	2.31 H	169	26.4	24.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	113.0 PK			3.68 V	170	70.0	43.0
2	*5670.00	100.2 AV			3.68 V	170	57.2	43.0
3	#5725.00	64.5 PK	68.2	-3.7	3.68 V	170	51.0	13.5
4	11340.00	63.9 PK	74.0	-10.1	2.06 V	218	39.0	24.9
5	11340.00	50.9 AV	54.0	-3.1	2.06 V	218	26.0	24.9

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.0 PK	68.2	-7.2	1.32 H	131	47.6	13.4
2	*5710.00	117.3 PK			1.32 H	131	74.2	43.1
3	*5710.00	103.7 AV			1.32 H	131	60.6	43.1
4	#5850.00	64.1 PK	68.2	-4.1	1.32 H	131	50.0	14.1
5	11420.00	64.2 PK	74.0	-9.8	2.29 H	159	39.0	25.2
6	11420.00	51.4 AV	54.0	-2.6	2.29 H	159	26.2	25.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.9 PK	68.2	-7.3	3.84 V	172	47.5	13.4
2	*5710.00	112.5 PK			3.84 V	172	69.4	43.1
3	*5710.00	100.2 AV			3.84 V	172	57.1	43.1
4	#5850.00	63.6 PK	68.2	-4.6	3.84 V	172	49.5	14.1
5	11420.00	64.0 PK	74.0	-10.0	2.11 V	215	38.8	25.2
6	11420.00	51.3 AV	54.0	-2.7	2.11 V	215	26.1	25.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.40	66.4 PK	68.2	-1.8	1.33 H	131	53.0	13.4
2	*5755.00	123.0 PK			1.33 H	131	79.5	43.5
3	*5755.00	111.5 AV			1.33 H	131	68.0	43.5
4	#5955.20	61.7 PK	68.2	-6.5	1.33 H	131	47.5	14.2
5	11510.00	65.3 PK	74.0	-8.7	2.49 H	172	40.2	25.1
6	11510.00	52.1 AV	54.0	-1.9	2.49 H	172	27.0	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.80	63.0 PK	68.2	-5.2	3.82 V	171	49.7	13.3
2	*5755.00	119.2 PK			3.82 V	171	75.7	43.5
3	*5755.00	106.6 AV			3.82 V	171	63.1	43.5
4	#5991.20	62.0 PK	68.2	-6.2	3.82 V	171	47.8	14.2
5	11510.00	65.1 PK	74.0	-8.9	2.11 V	221	40.0	25.1
6	11510.00	52.0 AV	54.0	-2.0	2.11 V	221	26.9	25.1

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5605.20	62.1 PK	68.2	-6.1	1.50 H	148	48.8	13.3
2	*5795.00	123.1 PK			1.50 H	148	79.3	43.8
3	*5795.00	110.9 AV			1.50 H	148	67.1	43.8
4	#5925.20	64.7 PK	68.2	-3.5	1.50 H	148	50.6	14.1
5	11590.00	64.8 PK	74.0	-9.2	2.45 H	177	40.1	24.7
6	11590.00	51.6 AV	54.0	-2.4	2.45 H	177	26.9	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5601.60	61.3 PK	68.2	-6.9	3.85 V	171	48.0	13.3
2	*5795.00	119.8 PK			3.85 V	171	76.0	43.8
3	*5795.00	107.5 AV			3.85 V	171	63.7	43.8
4	#5928.40	63.2 PK	68.2	-5.0	3.85 V	171	49.1	14.1
5	11590.00	64.3 PK	74.0	-9.7	2.19 V	228	39.6	24.7
6	11590.00	51.4 AV	54.0	-2.6	2.19 V	228	26.7	24.7

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.

RF Mode	TX 802.11ax (HE80)	Channel	CH 42：5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.8 PK	74.0	-6.2	1.21 H	295	54.9	12.9
2	5150.00	53.6 AV	54.0	-0.4	1.21 H	295	40.7	12.9
3	*5210.00	111.7 PK			1.21 H	295	69.5	42.2
4	*5210.00	99.1 AV			1.21 H	295	56.9	42.2
5	5350.00	62.3 PK	74.0	-11.7	1.21 H	295	49.3	13.0
6	5350.00	49.7 AV	54.0	-4.3	1.21 H	295	36.7	13.0
7	#10420.00	61.9 PK	68.2	-6.3	2.25 H	154	39.0	22.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.4 PK	74.0	-10.6	3.76 V	360	50.5	12.9
2	5150.00	50.5 AV	54.0	-3.5	3.76 V	360	37.6	12.9
3	*5210.00	108.0 PK			3.76 V	360	65.8	42.2
4	*5210.00	95.4 AV			3.76 V	360	53.2	42.2
5	5350.00	63.6 PK	74.0	-10.4	3.76 V	360	50.6	13.0
6	5350.00	49.6 AV	54.0	-4.4	3.76 V	360	36.6	13.0
7	#10420.00	61.7 PK	68.2	-6.5	1.93 V	202	38.8	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.

RF Mode	TX 802.11ax (HE80)	Channel	CH 58：5290 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.2 PK	74.0	-12.8	1.27 H	292	48.3	12.9
2	5150.00	47.8 AV	54.0	-6.2	1.27 H	292	34.9	12.9
3	*5290.00	111.6 PK			1.27 H	282	69.3	42.3
4	*5290.00	98.2 AV			1.27 H	282	55.9	42.3
5	5350.00	66.2 PK	74.0	-7.8	1.27 H	292	53.2	13.0
6	5350.00	53.5 AV	54.0	-0.5	1.27 H	292	40.5	13.0
7	#10580.00	62.3 PK	68.2	-5.9	2.35 H	165	38.9	23.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.6 PK	74.0	-13.4	3.47 V	357	47.7	12.9
2	5150.00	47.5 AV	54.0	-6.5	3.47 V	357	34.6	12.9
3	*5290.00	108.9 PK			3.47 V	357	66.6	42.3
4	*5290.00	95.2 AV			3.47 V	357	52.9	42.3
5	5350.00	62.6 PK	74.0	-11.4	3.47 V	357	49.6	13.0
6	5350.00	50.6 AV	54.0	-3.4	3.47 V	357	37.6	13.0
7	#10580.00	62.1 PK	68.2	-6.1	2.01 V	216	38.7	23.4

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 106：5530 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	67.3 PK	74.0	-6.7	1.32 H	82	54.1	13.2
2	5460.00	53.4 AV	54.0	-0.6	1.32 H	82	40.2	13.2
3	#5470.00	66.1 PK	68.2	-2.1	1.32 H	82	52.7	13.4
4	*5530.00	114.7 PK			1.32 H	82	71.8	42.9
5	*5530.00	101.6 AV			1.32 H	82	58.7	42.9
6	#5725.00	63.5 PK	68.2	-4.7	1.32 H	82	50.0	13.5
7	11060.00	63.3 PK	74.0	-10.7	2.39 H	165	39.1	24.2
8	11060.00	50.4 AV	54.0	-3.6	2.39 H	165	26.2	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.4 PK	74.0	-11.6	3.85 V	182	49.2	13.2
2	5460.00	50.0 AV	54.0	-4.0	3.85 V	182	36.8	13.2
3	#5470.00	63.8 PK	68.2	-4.4	3.85 V	182	50.4	13.4
4	*5530.00	110.1 PK			3.85 V	182	67.2	42.9
5	*5530.00	96.9 AV			3.85 V	182	54.0	42.9
6	#5725.00	63.0 PK	68.2	-5.2	3.85 V	182	49.5	13.5
7	11060.00	62.9 PK	74.0	-11.1	2.12 V	214	38.7	24.2
8	11060.00	50.1 AV	54.0	-3.9	2.12 V	214	25.9	24.2

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 122：5610 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.2 PK	74.0	-12.8	1.46 H	82	48.0	13.2
2	5460.00	48.2 AV	54.0	-5.8	1.46 H	82	35.0	13.2
3	#5470.00	61.6 PK	68.2	-6.6	1.46 H	82	48.2	13.4
4	*5610.00	114.1 PK			1.46 H	82	71.1	43.0
5	*5610.00	101.2 AV			1.46 H	82	58.2	43.0
6	#5725.00	63.2 PK	68.2	-5.0	1.46 H	82	49.7	13.5
7	11220.00	63.5 PK	74.0	-10.5	2.32 H	169	39.2	24.3
8	11220.00	50.6 AV	54.0	-3.4	2.32 H	169	26.3	24.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.0 PK	74.0	-13.0	3.87 V	171	47.8	13.2
2	5460.00	47.8 AV	54.0	-6.2	3.87 V	171	34.6	13.2
3	#5470.00	61.4 PK	68.2	-6.8	3.87 V	171	48.0	13.4
4	*5610.00	109.9 PK			3.87 V	171	66.9	43.0
5	*5610.00	96.8 AV			3.87 V	171	53.8	43.0
6	#5725.00	63.0 PK	68.2	-5.2	3.87 V	171	49.5	13.5
7	11220.00	63.3 PK	74.0	-10.7	2.02 V	209	39.0	24.3
8	11220.00	50.4 AV	54.0	-3.6	2.02 V	209	26.1	24.3

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.5 PK	68.2	-6.7	1.30 H	139	48.1	13.4
2	*5690.00	114.1 PK			1.30 H	139	71.1	43.0
3	*5690.00	100.7 AV			1.30 H	139	57.7	43.0
4	#5850.00	63.9 PK	68.2	-4.3	1.30 H	139	49.8	14.1
5	11380.00	64.0 PK	74.0	-10.0	2.33 H	161	39.0	25.0
6	11380.00	51.1 AV	54.0	-2.9	2.33 H	161	26.1	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.2 PK	68.2	-7.0	3.84 V	180	47.8	13.4
2	*5690.00	111.1 PK			3.84 V	180	68.1	43.0
3	*5690.00	98.1 AV			3.84 V	180	55.1	43.0
4	#5850.00	63.6 PK	68.2	-4.6	3.84 V	180	49.5	14.1
5	11380.00	63.9 PK	74.0	-10.1	2.11 V	218	38.9	25.0
6	11380.00	51.0 AV	54.0	-3.0	2.11 V	218	26.0	25.0

Remarks:

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

RF Mode	TX 802.11ax (HE80)	Channel	CH 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.00	67.5 PK	68.2	-0.7	1.23 H	131	54.1	13.4
2	*5775.00	117.2 PK			1.23 H	131	73.6	43.6
3	*5775.00	104.7 AV			1.23 H	131	61.1	43.6
4	#5933.60	65.3 PK	68.2	-2.9	1.23 H	131	51.2	14.1
5	11550.00	65.0 PK	74.0	-9.0	2.41 H	168	40.0	25.0
6	11550.00	51.8 AV	54.0	-2.2	2.41 H	168	26.8	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5647.60	66.3 PK	68.2	-1.9	3.84 V	180	53.0	13.3
2	*5775.00	113.9 PK			3.84 V	180	70.3	43.6
3	*5775.00	100.9 AV			3.84 V	180	57.3	43.6
4	#5926.40	62.9 PK	68.2	-5.3	3.84 V	180	48.8	14.1
5	11550.00	64.8 PK	74.0	-9.2	2.19 V	225	39.8	25.0
6	11550.00	51.5 AV	54.0	-2.5	2.19 V	225	26.5	25.0

Remarks:

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

RF Mode	TX 802.11ax (HE160)	Channel	CH 50：5250 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.3 PK	74.0	-7.7	1.17 H	296	53.4	12.9
2	5150.00	53.5 AV	54.0	-0.5	1.17 H	296	40.6	12.9
3	*5250.00	108.4 PK			1.17 H	296	66.2	42.2
4	*5250.00	95.1 AV			1.17 H	296	52.9	42.2
5	5350.00	64.3 PK	74.0	-9.7	1.17 H	296	51.3	13.0
6	5350.00	52.1 AV	54.0	-1.9	1.17 H	296	39.1	13.0
7	#10500.00	62.2 PK	68.2	-6.0	2.36 H	168	39.2	23.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.8 PK	74.0	-10.2	3.84 V	359	50.9	12.9
2	5150.00	49.7 AV	54.0	-4.3	3.84 V	359	36.8	12.9
3	*5250.00	104.1 PK			3.84 V	359	61.9	42.2
4	*5250.00	91.3 AV			3.84 V	359	49.1	42.2
5	5350.00	63.7 PK	74.0	-10.3	3.84 V	359	50.7	13.0
6	5350.00	50.9 AV	54.0	-3.1	3.84 V	359	37.9	13.0
7	#10500.00	62.0 PK	68.2	-6.2	2.01 V	213	39.0	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.

RF Mode	TX 802.11ax (HE160)	Channel	CH 114：5570 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	66.9 PK	74.0	-7.1	1.08 H	83	53.7	13.2
2	**5460.00**	**53.9 AV**	**54.0**	**-0.1**	**1.08 H**	**83**	**40.7**	**13.2**
3	#5470.00	66.6 PK	68.2	-1.6	1.08 H	83	53.2	13.4
4	*5570.00	111.4 PK			1.08 H	83	68.5	42.9
5	*5570.00	98.4 AV			1.08 H	83	55.5	42.9
6	#5725.00	67.7 PK	68.2	-0.5	1.08 H	83	54.2	13.5
7	11140.00	63.2 PK	74.0	-10.8	2.34 H	161	39.0	24.2
8	11140.00	50.4 AV	54.0	-3.6	2.34 H	161	26.2	24.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.0 PK	74.0	-12.0	3.60 V	67	48.8	13.2
2	5460.00	49.7 AV	54.0	-4.3	3.60 V	67	36.5	13.2
3	#5470.00	62.4 PK	68.2	-5.8	3.60 V	67	49.0	13.4
4	*5570.00	107.1 PK			3.60 V	67	64.2	42.9
5	*5570.00	94.1 AV			3.60 V	67	51.2	42.9
6	#5725.00	63.7 PK	68.2	-4.5	3.60 V	67	50.2	13.5
7	11140.00	62.9 PK	74.0	-11.1	2.02 V	213	38.7	24.2
8	11140.00	50.0 AV	54.0	-4.0	2.02 V	213	25.8	24.2

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.

Below 1GHz Worst-Case Data:

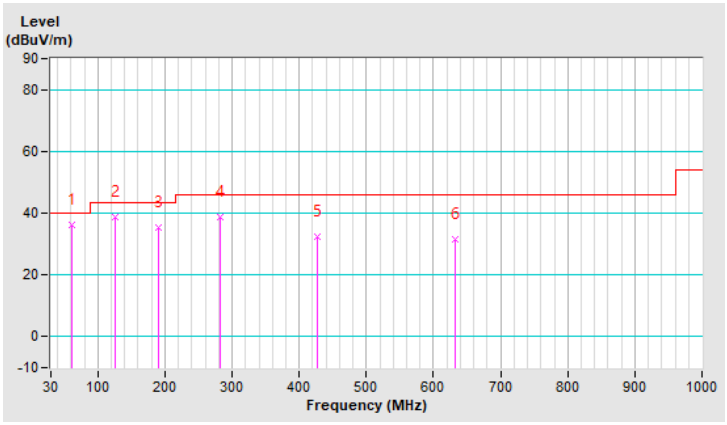
802.11ax (HE40)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

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	61.04	36.2 QP	40.0	-3.8	1.00 H	262	45.5	-9.3
2	125.06	38.7 QP	43.5	-4.8	1.00 H	126	49.4	-10.7
3	191.02	35.2 QP	43.5	-8.3	1.00 H	126	46.5	-11.3
4	282.20	38.7 QP	46.0	-7.3	1.00 H	124	46.7	-8.0
5	427.70	32.2 QP	46.0	-13.8	1.00 H	146	37.4	-5.2
6	631.40	31.7 QP	46.0	-14.3	1.00 H	124	32.8	-1.1

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

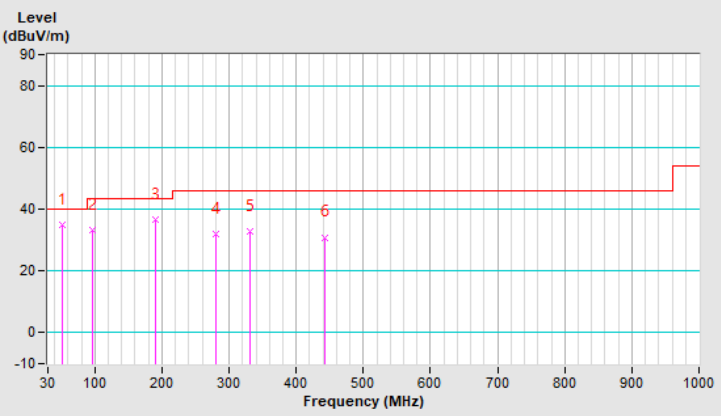


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

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	51.34	35.0 QP	40.0	-5.0	1.00 V	38	43.5	-8.5
2	95.96	33.2 QP	43.5	-10.3	1.00 V	106	47.3	-14.1
3	191.02	36.6 QP	43.5	-6.9	1.00 V	106	47.9	-11.3
4	280.26	32.0 QP	46.0	-14.0	1.49 V	159	40.0	-8.0
5	330.70	32.6 QP	46.0	-13.4	1.00 V	106	39.4	-6.8
6	443.22	30.9 QP	46.0	-15.1	1.00 V	157	35.8	-4.9

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. 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

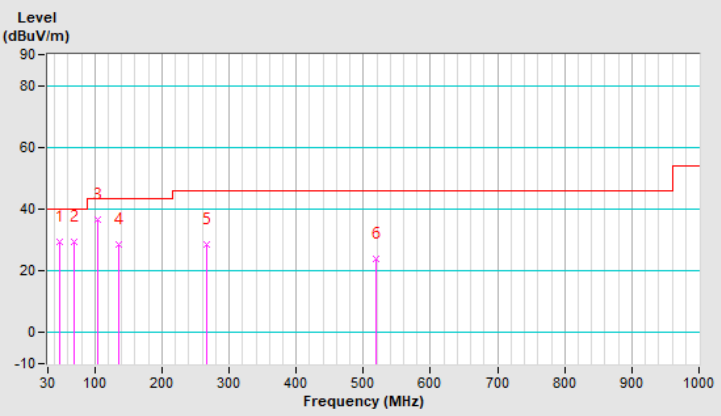


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

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	47.46	29.2 QP	40.0	-10.8	1.01 H	48	37.9	-8.7
2	68.80	29.3 QP	40.0	-10.7	1.50 H	277	39.9	-10.6
3	103.72	36.6 QP	43.5	-6.9	1.01 H	60	49.4	-12.8
4	134.76	28.5 QP	43.5	-15.0	1.01 H	254	38.1	-9.6
5	266.68	28.6 QP	46.0	-17.4	1.01 H	183	37.2	-8.6
6	518.88	24.0 QP	46.0	-22.0	1.50 H	268	27.6	-3.6

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. 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

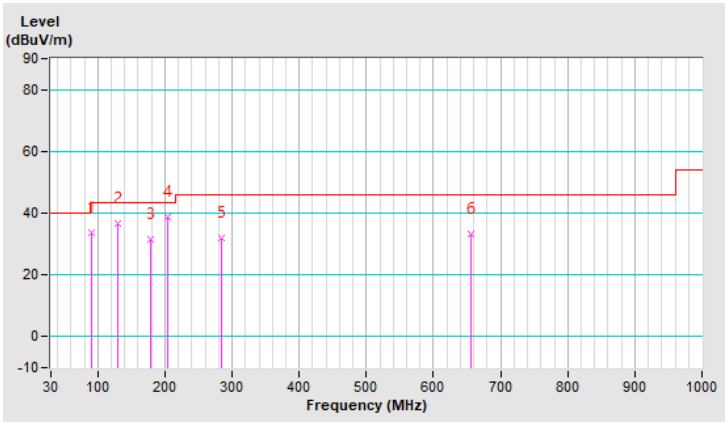


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

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	90.14	33.8 QP	43.5	-9.7	1.00 V	145	48.1	-14.3
2	128.94	36.5 QP	43.5	-7.0	1.49 V	273	46.8	-10.3
3	179.38	31.5 QP	43.5	-12.0	1.00 V	182	41.8	-10.3
4	204.60	38.7 QP	43.5	-4.8	1.00 V	182	50.4	-11.7
5	284.14	32.0 QP	46.0	-14.0	1.00 V	160	39.9	-7.9
6	656.62	33.2 QP	46.0	-12.8	1.00 V	174	34.0	-0.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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

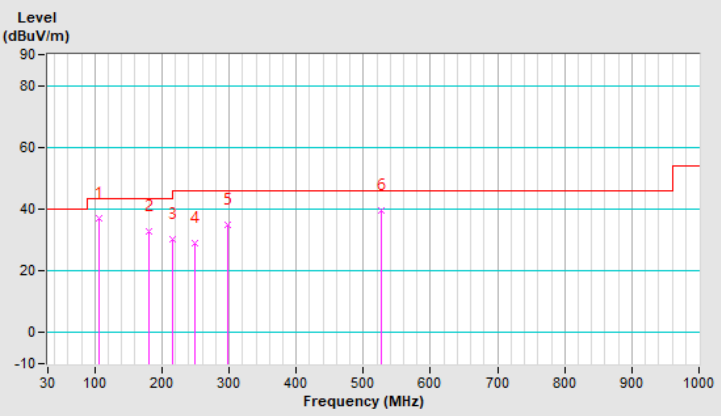


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	C

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	105.66	37.0 QP	43.5	-6.5	1.00 H	130	49.6	-12.6
2	181.32	32.8 QP	43.5	-10.7	1.00 H	118	43.2	-10.4
3	216.24	30.3 QP	46.0	-15.7	1.50 H	6	41.8	-11.5
4	249.22	28.8 QP	46.0	-17.2	1.00 H	130	38.2	-9.4
5	297.72	34.9 QP	46.0	-11.1	1.00 H	128	42.5	-7.6
6	526.64	39.6 QP	46.0	-6.4	1.00 H	81	43.2	-3.6

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. 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

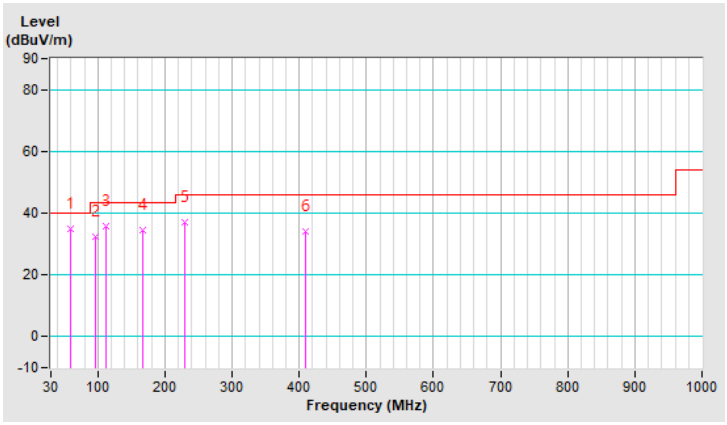


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	C

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	59.10	35.0 QP	40.0	-5.0	1.50 V	41	43.9	-8.9
2	95.96	32.4 QP	43.5	-11.1	1.00 V	5	46.5	-14.1
3	111.48	35.9 QP	43.5	-7.6	1.00 V	184	47.8	-11.9
4	167.74	34.4 QP	43.5	-9.1	1.50 V	94	43.4	-9.0
5	229.82	36.9 QP	46.0	-9.1	1.50 V	92	48.2	-11.3
6	410.24	34.2 QP	46.0	-11.8	1.00 V	175	40.0	-5.8

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. 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

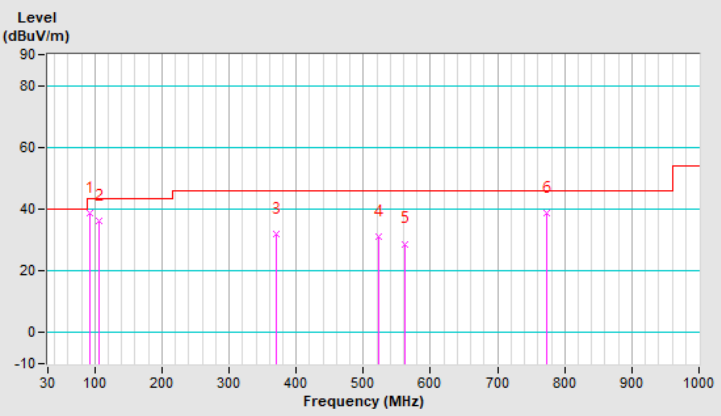


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	D

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	92.08	38.8 QP	43.5	-4.7	1.00 H	213	53.0	-14.2
2	105.66	36.2 QP	43.5	-7.3	1.00 H	217	48.8	-12.6
3	369.50	32.1 QP	46.0	-13.9	1.50 H	92	38.5	-6.4
4	522.76	31.1 QP	46.0	-14.9	1.50 H	93	34.8	-3.7
5	561.56	28.8 QP	46.0	-17.2	1.50 H	209	32.0	-3.2
6	773.02	38.9 QP	46.0	-7.1	1.00 H	102	36.8	2.1

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

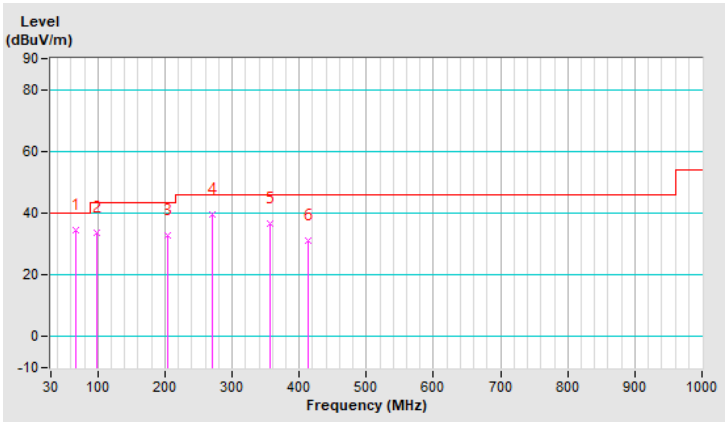


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	D

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	66.86	34.6 QP	40.0	-5.4	1.00 V	56	44.6	-10.0
2	97.90	33.6 QP	43.5	-9.9	1.00 V	65	47.2	-13.6
3	204.60	32.8 QP	43.5	-10.7	1.00 V	271	44.5	-11.7
4	270.56	39.5 QP	46.0	-6.5	1.50 V	183	47.9	-8.4
5	355.92	36.5 QP	46.0	-9.5	1.00 V	309	43.1	-6.6
6	414.12	31.2 QP	46.0	-14.8	1.50 V	204	36.8	-5.6

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. 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

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 03, 2021	Dec. 02, 2022
RF signal cable Woken	5D-FB	Cable-cond1-01	Jan. 15, 2022	Jan. 14, 2023
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Mar. 14, 2022	Mar. 13, 2023
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Sep. 07, 2021	Sep. 06, 2022
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.

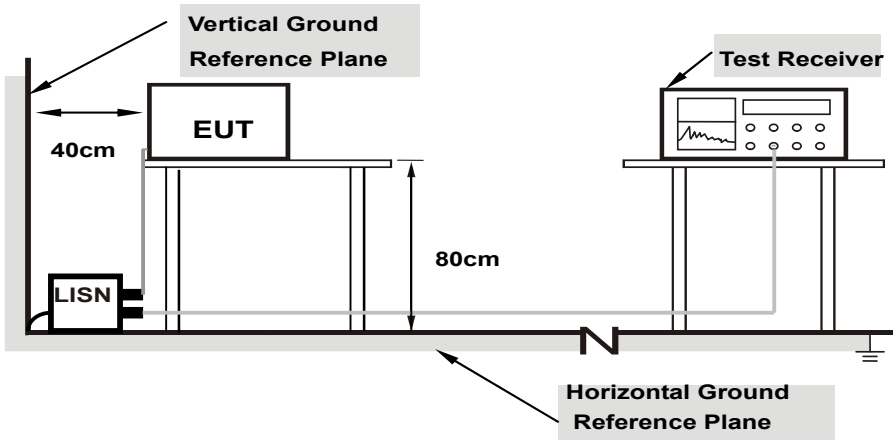
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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:

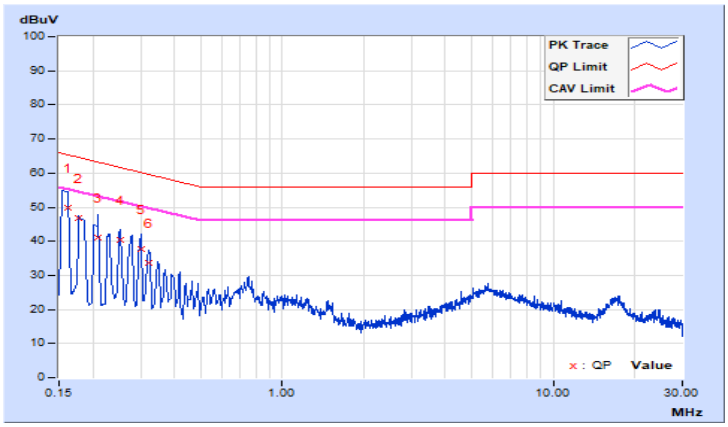
802.11ax (HE40)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

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	0.16200	9.69	40.11	22.04	49.80	31.73	65.36	55.36	-15.56	-23.63
2	0.17800	9.70	37.24	19.44	46.94	29.14	64.58	54.58	-17.64	-25.44
3	0.21000	9.72	31.20	13.45	40.92	23.17	63.21	53.21	-22.29	-30.04
4	0.25338	9.74	30.71	18.92	40.45	28.66	61.65	51.65	-21.20	-22.99
5	0.30200	9.76	27.95	15.57	37.71	25.33	60.19	50.19	-22.48	-24.86
6	0.32200	9.77	23.93	9.37	33.70	19.14	59.66	49.66	-25.96	-30.52

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.

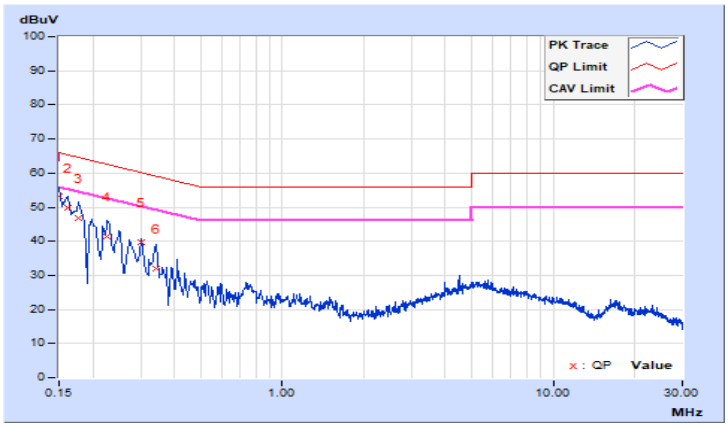


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

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	9.68	43.49	25.37	53.17	35.05	66.00	56.00	-12.83	-20.95
2	0.16105	9.69	40.23	21.68	49.92	31.37	65.41	55.41	-15.49	-24.04
3	0.17800	9.70	37.12	20.05	46.82	29.75	64.58	54.58	-17.76	-24.83
4	0.22600	9.73	31.68	19.01	41.41	28.74	62.60	52.60	-21.19	-23.86
5	0.30200	9.77	29.92	19.86	39.69	29.63	60.19	50.19	-20.50	-20.56
6	0.34200	9.78	22.14	10.11	31.92	19.89	59.15	49.15	-27.23	-29.26

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.

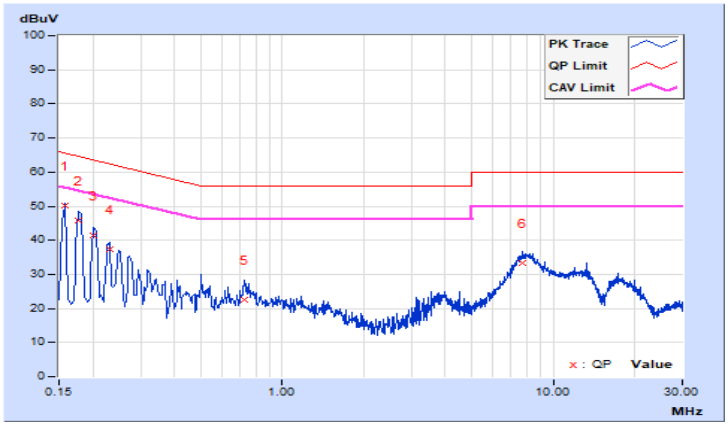


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	0.15800	9.69	40.45	25.07	50.14	34.76	65.57	55.57	-15.43	-20.81
2	0.17800	9.70	36.13	20.34	45.83	30.04	64.58	54.58	-18.75	-24.54
3	0.20200	9.72	31.78	16.87	41.50	26.59	63.53	53.53	-22.03	-26.94
4	0.22985	9.73	27.55	14.04	37.28	23.77	62.46	52.46	-25.18	-28.69
5	0.72200	9.82	12.66	7.62	22.48	17.44	56.00	46.00	-33.52	-28.56
6	7.74200	10.02	23.32	18.07	33.34	28.09	60.00	50.00	-26.66	-21.91

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.

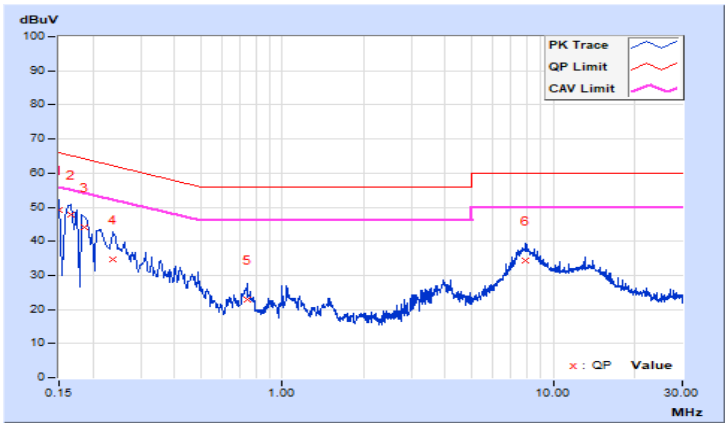


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	9.68	39.53	19.29	49.21	28.97	66.00	56.00	-16.79	-27.03
2	0.16579	9.69	37.97	17.67	47.66	27.36	65.17	55.17	-17.51	-27.81
3	0.18600	9.71	34.54	17.26	44.25	26.97	64.21	54.21	-19.96	-27.24
4	0.23800	9.74	24.89	12.89	34.63	22.63	62.17	52.17	-27.54	-29.54
5	0.74200	9.84	12.99	6.71	22.83	16.55	56.00	46.00	-33.17	-29.45
6	7.94600	10.03	24.46	19.12	34.49	29.15	60.00	50.00	-25.51	-20.85

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.

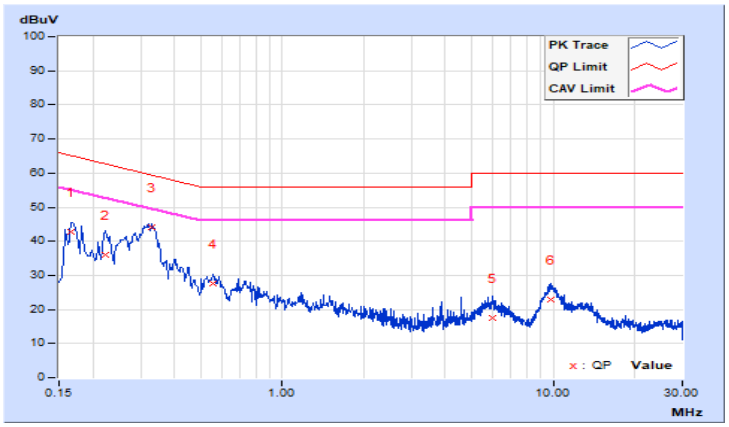


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

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	0.16600	9.69	33.15	18.20	42.84	27.89	65.16	55.16	-22.32	-27.27
2	0.22200	9.73	26.43	16.07	36.16	25.80	62.74	52.74	-26.58	-26.94
3	**0.33000**	**9.77**	**34.49**	**28.08**	**44.26**	**37.85**	**59.45**	**49.45**	**-15.19**	**-11.60**
4	0.55400	9.81	17.68	10.77	27.49	20.58	56.00	46.00	-28.51	-25.42
5	5.95400	9.99	7.40	0.72	17.39	10.71	60.00	50.00	-42.61	-39.29
6	9.81800	10.06	12.67	7.99	22.73	18.05	60.00	50.00	-37.27	-31.95

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.

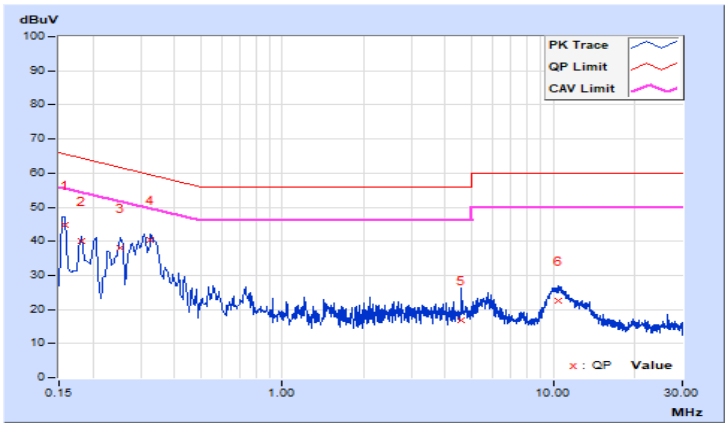


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

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	0.15800	9.69	35.10	19.68	44.79	29.37	65.57	55.57	-20.78	-26.20
2	0.18180	9.71	30.35	18.32	40.06	28.03	64.40	54.40	-24.34	-26.37
3	0.25400	9.74	28.38	21.82	38.12	31.56	61.63	51.63	-23.51	-20.07
4	0.32600	9.78	30.72	22.20	40.50	31.98	59.55	49.55	-19.05	-17.57
5	4.59800	9.98	6.76	1.23	16.74	11.21	56.00	46.00	-39.26	-34.79
6	10.43400	10.07	12.44	7.81	22.51	17.88	60.00	50.00	-37.49	-32.12

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.

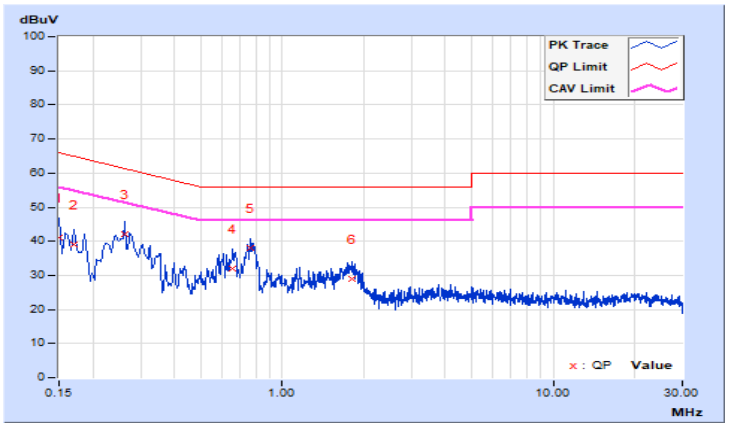


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	D		

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	9.62	31.41	19.74	41.03	29.36	66.00	56.00	-24.97	-26.64
2	0.17000	9.63	29.37	16.93	39.00	26.56	64.96	54.96	-25.96	-28.40
3	0.26200	9.66	32.48	22.01	42.14	31.67	61.37	51.37	-19.23	-19.70
4	0.65800	9.69	22.24	12.86	31.93	22.55	56.00	46.00	-24.07	-23.45
5	0.76200	9.70	28.50	18.89	38.20	28.59	56.00	46.00	-17.80	-17.41
6	1.81000	9.72	19.39	12.66	29.11	22.38	56.00	46.00	-26.89	-23.62

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.

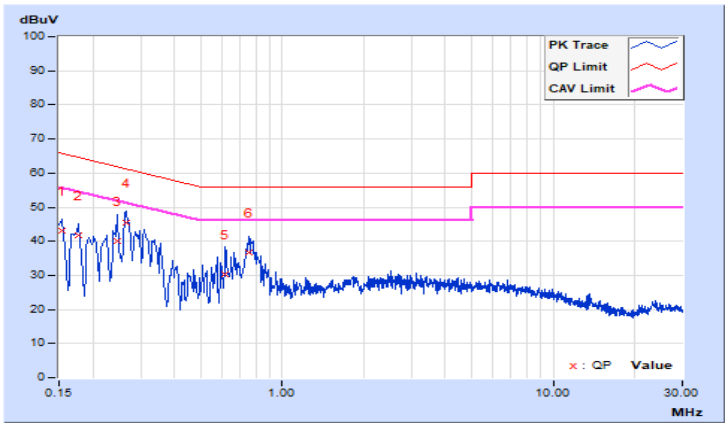


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	D		

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	0.15400	9.62	33.31	16.26	42.93	25.88	65.78	55.78	-22.85	-29.90
2	0.17800	9.63	31.97	14.55	41.60	24.18	64.58	54.58	-22.98	-30.40
3	0.24600	9.65	30.30	17.65	39.95	27.30	61.89	51.89	-21.94	-24.59
4	0.26499	9.66	35.69	23.18	45.35	32.84	61.27	51.27	-15.92	-18.43
5	0.61800	9.69	20.57	8.99	30.26	18.68	56.00	46.00	-25.74	-27.32
6	0.75400	9.70	27.10	16.77	36.80	26.47	56.00	46.00	-19.20	-19.53

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

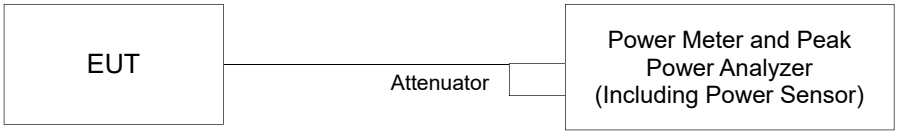
Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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 $N_{ANT} \geq 5$.

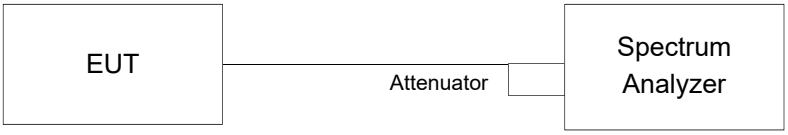
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

For Power Output



For 26dB Bandwidth and power output of ransmission above 5.725 GHz where the EBW crosses 5.725 GHz



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

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

For transmission above 5.725 GHz where the EBW crosses 5.725 GHz
For channel aggregation (channel 138, 142, 144) measurement refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II E 2 e) method SA-2A.

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

CDD Mode

802.11a

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				
36	5180	20.25	20.22	20.15	20.01	414.866	26.18	30.00	Pass
40	5200	23.01	22.96	22.93	23.13	799.608	29.03	30.00	Pass
48	5240	23.03	22.97	22.94	23.02	796.298	29.01	30.00	Pass
52	5260	17.22	17.11	17.02	17.07	205.410	23.13	24.00	Pass
60	5300	17.28	17.15	17.09	17.08	207.555	23.17	24.00	Pass
64	5320	17.25	17.16	17.07	17.06	206.837	23.16	24.00	Pass
100	5500	17.31	17.05	17.11	17.06	206.746	23.15	24.00	Pass
116	5580	17.46	16.96	17.18	17.06	208.433	23.19	24.00	Pass
140	5700	17.64	16.75	17.05	17.15	207.971	23.18	24.00	Pass
144	5720 (For U-NII-2C)	16.65	15.52	16.13	16.14	178.194	22.51	22.80	Pass
144	5720 (For U-NII-3)	11.27	10.12	10.71	10.73	51.370	17.11	30.00	Pass
149	5745	23.33	23.05	23.02	23.19	826.011	29.17	30.00	Pass
157	5785	23.34	23.09	23.07	23.15	828.785	29.18	30.00	Pass
165	5825	23.33	23.08	23.05	23.12	825.467	29.17	30.00	Pass

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (20.19) = 24.05 > 24dBm
2. 11dBm + 10log (20.26) = 24.06 > 24dBm
3. 11dBm + 10log (20.44) = 24.10 > 24dBm
4. 11dBm + 10log (20.50) = 24.11 > 24dBm
5. 11dBm + 10log (20.58) = 24.13 > 24dBm
6. 11dBm + 10log (20.24) = 24.06 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.75) = 22.83 < 24dBm

Chain 1
1. 11dBm + 10log (20.36) = 24.08 > 24dBm
2. 11dBm + 10log (20.42) = 24.10 > 24dBm
3. 11dBm + 10log (20.30) = 24.07 > 24dBm
4. 11dBm + 10log (20.43) = 24.10 > 24dBm
5. 11dBm + 10log (20.24) = 24.06 > 24dBm
6. 11dBm + 10log (20.17) = 24.04 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.85) = 22.80 < 24dBm

Chain 2

1. 11dBm + 10log (20.39) = 24.09 > 24dBm
2. 11dBm + 10log (20.56) = 24.13 > 24dBm
3. 11dBm + 10log (20.36) = 24.08 > 24dBm
4. 11dBm + 10log (20.34) = 24.08 > 24dBm
5. 11dBm + 10log (20.46) = 24.10 > 24dBm
6. 11dBm + 10log (20.33) = 24.08 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.77) = 22.82 < 24dBm

Chain 3

1. 11dBm + 10log (20.43) = 24.10 > 24dBm
2. 11dBm + 10log (20.52) = 24.12 > 24dBm
3. 11dBm + 10log (20.35) = 24.08 > 24dBm
4. 11dBm + 10log (20.59) = 24.13 > 24dBm
5. 11dBm + 10log (20.38) = 24.09 > 24dBm
6. 11dBm + 10log (20.25) = 24.06 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.82) = 22.81 < 24dBm

802.11ax (HE20)

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				
36	5180	20.05	20.08	20.15	20.01	406.762	26.09	30.00	Pass
40	5200	23.26	23.11	23.08	23.02	**820.163**	29.14	30.00	Pass
48	5240	23.01	22.96	23.05	23.04	800.892	29.04	30.00	Pass
52	5260	17.21	17.11	17.12	17.04	206.111	23.14	24.00	Pass
60	5300	17.22	17.08	17.16	17.09	206.941	23.16	24.00	Pass
64	5320	17.16	17.09	17.15	17.11	206.452	23.15	24.00	Pass
100	5500	17.22	17.19	17.15	17.06	207.779	23.18	24.00	Pass
116	5580	17.42	17.01	17.02	17.15	207.672	23.17	24.00	Pass
140	5700	17.65	16.75	16.91	17.21	207.218	23.16	24.00	Pass
144	5720 (For U-NII-2C)	15.90	15.28	15.30	15.42	168.302	22.26	22.97	Pass
144	5720 (For U-NII-3)	11.56	11.06	11.07	11.05	62.647	17.97	30.00	Pass
149	5745	23.15	23.02	23.01	23.09	810.676	29.09	30.00	Pass
157	5785	23.11	23.06	23.03	23.17	815.347	29.11	30.00	Pass
165	5825	23.01	23.11	23.02	23.18	813.048	29.10	30.00	Pass

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (22.23) = 24.46 > 24dBm
3. 11dBm + 10log (21.87) = 24.39 > 24dBm
4. 11dBm + 10log (21.86) = 24.39 > 24dBm
5. 11dBm + 10log (22.05) = 24.43 > 24dBm
6. 11dBm + 10log (21.86) = 24.39 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.23) = 22.97 < 24dBm

Chain 1
1. 11dBm + 10log (22.68) = 24.55 > 24dBm
2. 11dBm + 10log (21.76) = 24.37 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (22.22) = 24.46 > 24dBm
5. 11dBm + 10log (21.85) = 24.39 > 24dBm
6. 11dBm + 10log (21.94) = 24.41 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.11) = 23.01 < 24dBm

Chain 2
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (22.07) = 24.43 > 24dBm
3. 11dBm + 10log (22.14) = 24.45 > 24dBm
4. 11dBm + 10log (21.93) = 24.41 > 24dBm

5. 11dBm + 10log (22.30) = 24.48 > 24dBm
6. 11dBm + 10log (21.99) = 24.42 > 24dBm
7. 11dBm + 10log (5725.00 - 5708.96) = 23.05 < 24dBm

Chain 3

1. 11dBm + 10log (21.89) = 24.40 > 24dBm
2. 11dBm + 10log (22.26) = 24.47 > 24dBm
3. 11dBm + 10log (22.09) = 24.44 > 24dBm
4. 11dBm + 10log (22.11) = 24.44 > 24dBm
5. 11dBm + 10log (22.06) = 24.43 > 24dBm
6. 11dBm + 10log (21.79) = 24.38 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.05) = 23.02 < 24dBm

802.11ax (HE40)

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				
38	5190	19.03	18.94	18.95	19.21	320.218	25.05	30.00	Pass
46	5230	22.61	22.39	22.24	22.48	700.275	28.45	30.00	Pass
54	5270	17.64	17.51	17.39	17.46	**224.986**	23.52	24.00	Pass
62	5310	17.62	17.36	17.46	17.48	223.954	23.50	24.00	Pass
102	5510	17.15	17.25	17.02	17.05	206.018	23.14	24.00	Pass
110	5550	17.31	17.08	17.05	17.22	208.300	23.19	24.00	Pass
134	5670	17.53	16.64	16.95	17.21	204.902	23.12	24.00	Pass
142	5710 (For U-NII-2C)	16.82	16.34	16.34	16.82	215.257	23.33	24.00	Pass
142	5710 (For U-NII-3)	6.44	5.93	5.95	6.45	19.691	12.94	30.00	Pass
151	5755	23.38	23.19	23.31	23.35	**856.781**	29.33	30.00	Pass
159	5795	23.35	23.18	23.29	23.32	852.329	29.31	30.00	Pass

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (41.77) = 27.20 > 24dBm
2. 11dBm + 10log (41.75) = 27.20 > 24dBm
3. 11dBm + 10log (41.52) = 27.18 > 24dBm
4. 11dBm + 10log (42.00) = 27.23 > 24dBm
5. 11dBm + 10log (41.91) = 27.22 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.26) = 26.53 > 24dBm

Chain 1
1. 11dBm + 10log (41.87) = 27.21 > 24dBm
2. 11dBm + 10log (41.68) = 27.19 > 24dBm
3. 11dBm + 10log (41.86) = 27.21 > 24dBm
4. 11dBm + 10log (41.80) = 27.21 > 24dBm
5. 11dBm + 10log (41.72) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.11) = 26.54 > 24dBm

Chain 2
1. 11dBm + 10log (41.78) = 27.20 > 24dBm
2. 11dBm + 10log (41.56) = 27.18 > 24dBm
3. 11dBm + 10log (41.75) = 27.20 > 24dBm
4. 11dBm + 10log (41.80) = 27.21 > 24dBm
5. 11dBm + 10log (41.72) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.03) = 26.55 > 24dBm

Chain 3
1. 11dBm + 10log (41.70) = 27.20 > 24dBm
2. 11dBm + 10log (41.75) = 27.20 > 24dBm
3. 11dBm + 10log (41.94) = 27.22 > 24dBm

4. 11dBm + 10log (41.69) = 27.20 > 24dBm
5. 11dBm + 10log (41.71) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5688.99) = 26.56 > 24dBm

802.11ax (HE80)

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				
42	5210	17.99	17.90	17.91	17.84	247.225	23.93	30.00	Pass
58	5290	17.66	17.42	17.42	17.45	224.350	23.51	24.00	Pass
106	5530	17.39	17.12	17.23	17.31	213.022	23.28	24.00	Pass
122	5610	17.55	17.02	17.21	17.25	212.926	23.28	24.00	Pass
138	5690 (For U-NII-2C)	17.35	16.91	16.95	16.89	**242.282**	23.84	24.00	Pass
138	5690 (For U-NII-3)	3.44	2.90	2.91	2.96	9.711	9.87	30.00	Pass
155	5775	21.74	21.64	21.68	21.89	596.918	27.76	30.00	Pass

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (82.94) = 30.18 > 24dBm
2. 11dBm + 10log (83.11) = 30.19 > 24dBm
3. 11dBm + 10log (82.99) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.44) = 29.84 > 24dBm
Chain 1
1. 11dBm + 10log (82.97) = 30.18 > 24dBm
2. 11dBm + 10log (83.48) = 30.21 > 24dBm
3. 11dBm + 10log (83.13) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.57) = 29.83 > 24dBm
Chain 2
1. 11dBm + 10log (82.97) = 30.18 > 24dBm
2. 11dBm + 10log (83.09) = 30.19 > 24dBm
3. 11dBm + 10log (83.03) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.50) = 29.83 > 24dBm
Chain 3
1. 11dBm + 10log (83.16) = 30.19 > 24dBm
2. 11dBm + 10log (83.47) = 30.21 > 24dBm
3. 11dBm + 10log (83.73) = 30.22 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.54) = 29.83 > 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				
*50	5250 (For U-NII-1)	11.64	11.64	11.65	11.71	64.231	18.08	30.00	Pass
*50	5250 (For U-NII-2A)	12.13	12.16	12.15	12.77	74.618	18.73	24.00	Pass
114	5570	17.07	16.64	16.55	16.77	189.784	22.78	24.00	Pass

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (83.47) = 30.21 > 24dBm
2. 11dBm + 10log (167.98) = 33.25 > 24dBm
Chain 1
1. 11dBm + 10log (83.36) = 30.20 > 24dBm
2. 11dBm + 10log (168.13) = 33.25 > 24dBm
Chain 2
1. 11dBm + 10log (83.74) = 30.22 > 24dBm
2. 11dBm + 10log (167.77) = 33.24 > 24dBm
Chain 3
1. 11dBm + 10log (83.34) = 30.20 > 24dBm
2. 11dBm + 10log (168.20) = 33.25 > 24dBm

Beamforming Mode

802.11ax (HE20)

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				
36	5180	20.05	20.08	20.15	20.01	406.762	26.09	29.98	Pass
40	5200	23.26	23.11	23.08	23.02	**820.163**	29.14	29.98	Pass
48	5240	23.01	22.96	23.05	23.04	800.892	29.04	29.98	Pass
52	5260	17.21	17.11	17.12	17.04	206.111	23.14	23.89	Pass
60	5300	17.22	17.08	17.16	17.09	206.941	23.16	23.89	Pass
64	5320	17.16	17.09	17.15	17.11	206.452	23.15	23.89	Pass
100	5500	17.22	17.19	17.15	17.06	207.779	23.18	23.85	Pass
116	5580	17.42	17.01	17.02	17.15	207.672	23.17	23.85	Pass
140	5700	17.65	16.75	16.91	17.21	207.218	23.16	23.85	Pass
144	5720 (For U-NII-2C)	15.90	15.28	15.30	15.42	168.302	22.26	22.82	Pass
144	5720 (For U-NII-3)	11.56	11.06	11.07	11.05	62.647	17.97	29.80	Pass
149	5745	23.15	23.02	23.01	23.09	810.676	29.09	29.80	Pass
157	5785	23.11	23.06	23.03	23.17	815.347	29.11	29.80	Pass
165	5825	23.01	23.11	23.02	23.18	813.048	29.10	29.80	Pass

Note:

1. Directional gain is declared by client.
2. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power limit shall be reduced to 30-(6.02-6) = 29.98dBm.
3. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power limit shall be reduced to 24-(6.11-6) = 23.89dBm.
4. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power limit shall be reduced to 24-(6.15-6) = 23.85dBm.
5. For CH 144 (for U-NII-2C), The directional gain is 6.15 dBi > 6dBi, so the power limit shall be reduced to 22.97-(6.15-6) = 22.82dBm.
6. For U-NII-3, The directional gain is 6.20 dBi > 6dBi, so the power limit shall be reduced to 30-(6.20-6) = 29.80dBm.

Note:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log (21.82) = 24.38 > 24dBm
2. 11dBm + 10log (22.23) = 24.46 > 24dBm
3. 11dBm + 10log (21.87) = 24.39 > 24dBm
4. 11dBm + 10log (21.86) = 24.39 > 24dBm
5. 11dBm + 10log (22.05) = 24.43 > 24dBm
6. 11dBm + 10log (21.86) = 24.39 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.23) = 22.97 < 24dBm
Chain 1
1. 11dBm + 10log (22.68) = 24.55 > 24dBm
2. 11dBm + 10log (21.76) = 24.37 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (22.22) = 24.46 > 24dBm
5. 11dBm + 10log (21.85) = 24.39 > 24dBm
6. 11dBm + 10log (21.94) = 24.41 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.11) = 23.01 < 24dBm
Chain 2
1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (22.07) = 24.43 > 24dBm
3. 11dBm + 10log (22.14) = 24.45 > 24dBm
4. 11dBm + 10log (21.93) = 24.41 > 24dBm
5. 11dBm + 10log (22.30) = 24.48 > 24dBm
6. 11dBm + 10log (21.99) = 24.42 > 24dBm
7. 11dBm + 10log (5725.00 - 5708.96) = 23.05 < 24dBm
Chain 3
1. 11dBm + 10log (21.89) = 24.40 > 24dBm
2. 11dBm + 10log (22.26) = 24.47 > 24dBm
3. 11dBm + 10log (22.09) = 24.44 > 24dBm
4. 11dBm + 10log (22.11) = 24.44 > 24dBm
5. 11dBm + 10log (22.06) = 24.43 > 24dBm
6. 11dBm + 10log (21.79) = 24.38 > 24dBm
7. 11dBm + 10log (5725.00 - 5709.05) = 23.02 < 24dBm

802.11ax (HE40)

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				
38	5190	19.03	18.94	18.95	19.21	320.218	25.05	29.98	Pass
46	5230	22.61	22.39	22.24	22.48	700.275	28.45	29.98	Pass
54	5270	17.64	17.51	17.39	17.46	**224.986**	23.52	23.89	Pass
62	5310	17.62	17.36	17.46	17.48	223.954	23.50	23.89	Pass
102	5510	17.15	17.25	17.02	17.05	206.018	23.14	23.85	Pass
110	5550	17.31	17.08	17.05	17.22	208.300	23.19	23.85	Pass
134	5670	17.53	16.64	16.95	17.21	204.902	23.12	23.85	Pass
142	5710 (For U-NII-2C)	16.82	16.34	16.34	16.82	215.257	23.33	23.85	Pass
142	5710 (For U-NII-3)	6.44	5.93	5.95	6.45	19.691	12.94	29.80	Pass
151	5755	23.38	23.19	23.31	23.35	**856.781**	29.33	29.80	Pass
159	5795	23.35	23.18	23.29	23.32	852.329	29.31	29.80	Pass

Note:

1. Directional gain is declared by client.
2. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power limit shall be reduced to 30-(6.02-6) = 29.98dBm.
3. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power limit shall be reduced to 24-(6.11-6) = 23.89dBm.
4. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power limit shall be reduced to 24-(6.15-6) = 23.85dBm.
5. For U-NII-3, The directional gain is 6.20 dBi > 6dBi, so the power limit shall be reduced to 30-(6.20-6) = 29.80dBm.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log (41.77) = 27.20 > 24dBm
2. 11dBm + 10log (41.75) = 27.20 > 24dBm
3. 11dBm + 10log (41.52) = 27.18 > 24dBm
4. 11dBm + 10log (42.00) = 27.23 > 24dBm
5. 11dBm + 10log (41.91) = 27.22 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.26) = 26.53 > 24dBm

Chain 1

1. 11dBm + 10log (41.87) = 27.21 > 24dBm
2. 11dBm + 10log (41.68) = 27.19 > 24dBm
3. 11dBm + 10log (41.86) = 27.21 > 24dBm
4. 11dBm + 10log (41.80) = 27.21 > 24dBm
5. 11dBm + 10log (41.72) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.11) = 26.54 > 24dBm

Chain 2

1. 11dBm + 10log (41.78) = 27.20 > 24dBm
2. 11dBm + 10log (41.56) = 27.18 > 24dBm

3. 11dBm + 10log (41.75) = 27.20 > 24dBm
4. 11dBm + 10log (41.80) = 27.21 > 24dBm
5. 11dBm + 10log (41.72) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.03) = 26.55 > 24dBm

Chain 3

1. 11dBm + 10log (41.70) = 27.20 > 24dBm
2. 11dBm + 10log (41.75) = 27.20 > 24dBm
3. 11dBm + 10log (41.94) = 27.22 > 24dBm
4. 11dBm + 10log (41.69) = 27.20 > 24dBm
5. 11dBm + 10log (41.71) = 27.20 > 24dBm
6. 11dBm + 10log (5725.00 - 5688.99) = 26.56 > 24dBm

802.11ax (HE80)

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				
42	5210	17.99	17.90	17.91	17.84	247.225	23.93	29.98	Pass
58	5290	17.66	17.42	17.42	17.45	224.350	23.51	23.89	Pass
106	5530	17.39	17.12	17.23	17.31	213.022	23.28	23.85	Pass
122	5610	17.55	17.02	17.21	17.25	212.926	23.28	23.85	Pass
138	5690 (For U-NII-2C)	17.35	16.91	16.95	16.89	**242.282**	23.84	23.85	Pass
138	5690 (For U-NII-3)	3.44	2.90	2.91	2.96	9.711	9.87	29.80	Pass
155	5775	21.74	21.64	21.68	21.89	596.918	27.76	29.80	Pass

Note:

1. Directional gain is declared by client.
2. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power limit shall be reduced to 30-(6.02-6) = 29.98dBm.
3. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power limit shall be reduced to 24-(6.11-6) = 23.89dBm.
4. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power limit shall be reduced to 24-(6.15-6) = 23.85dBm.
5. For U-NII-3, The directional gain is 6.20 dBi > 6dBi, so the power limit shall be reduced to 30-(6.20-6) = 29.80dBm.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log (82.94) = 30.18 > 24dBm
2. 11dBm + 10log (83.11) = 30.19 > 24dBm
3. 11dBm + 10log (82.99) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.44) = 29.84 > 24dBm

Chain 1

1. 11dBm + 10log (82.97) = 30.18 > 24dBm
2. 11dBm + 10log (83.48) = 30.21 > 24dBm
3. 11dBm + 10log (83.13) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.57) = 29.83 > 24dBm

Chain 2

1. 11dBm + 10log (82.97) = 30.18 > 24dBm
2. 11dBm + 10log (83.09) = 30.19 > 24dBm
3. 11dBm + 10log (83.03) = 30.19 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.50) = 29.83 > 24dBm

Chain 3

1. 11dBm + 10log (83.16) = 30.19 > 24dBm
2. 11dBm + 10log (83.47) = 30.21 > 24dBm
3. 11dBm + 10log (83.73) = 30.22 > 24dBm
4. 11dBm + 10log (5725.00 - 5648.54) = 29.83 > 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				
*50	5250 (For U-NII-1)	11.64	11.64	11.65	11.71	64.231	18.08	29.98	Pass
*50	5250 (For U-NII-2A)	12.13	12.16	12.15	12.77	74.618	18.73	23.89	Pass
114	5570	17.07	16.64	16.55	16.77	189.784	22.78	23.85	Pass

Note:

1. Directional gain is declared by client.
2. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power limit shall be reduced to 30-(6.02-6) = 29.98dBm.
3. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power limit shall be reduced to 24-(6.11-6) = 23.89dBm.
4. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power limit shall be reduced to 24-(6.15-6) = 23.85dBm.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log (83.47) = 30.21 > 24dBm
2. 11dBm + 10log (167.98) = 33.25 > 24dBm

Chain 1

1. 11dBm + 10log (83.36) = 30.20 > 24dBm
2. 11dBm + 10log (168.13) = 33.25 > 24dBm

Chain 2

1. 11dBm + 10log (83.74) = 30.22 > 24dBm
2. 11dBm + 10log (167.77) = 33.24 > 24dBm

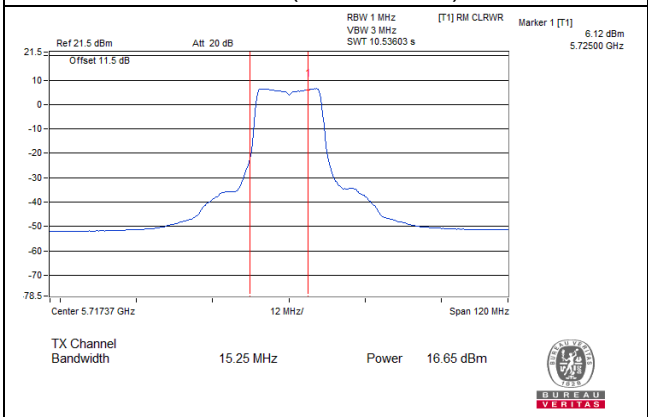
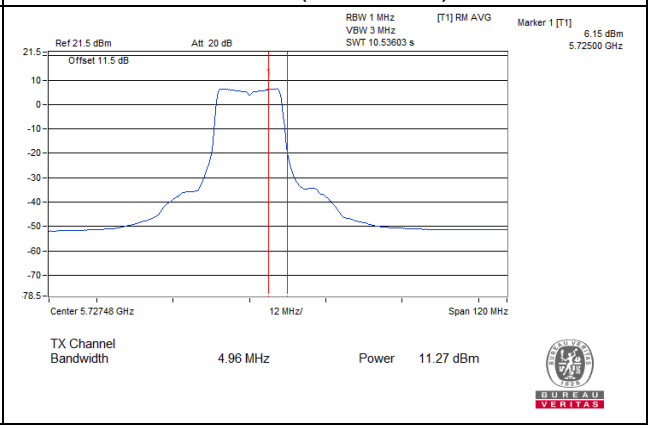
Chain 3

1. 11dBm + 10log (83.34) = 30.20 > 24dBm
2. 11dBm + 10log (168.20) = 33.25 > 24dBm

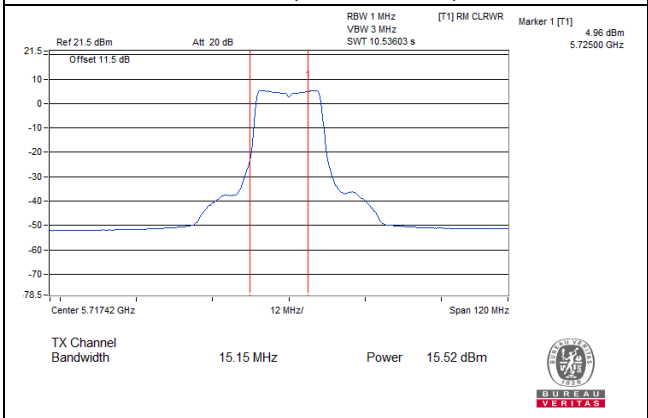
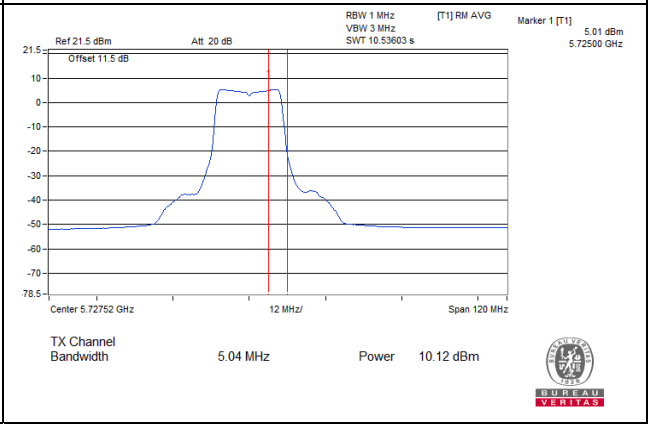
Straddle channel power plots:

802.11a

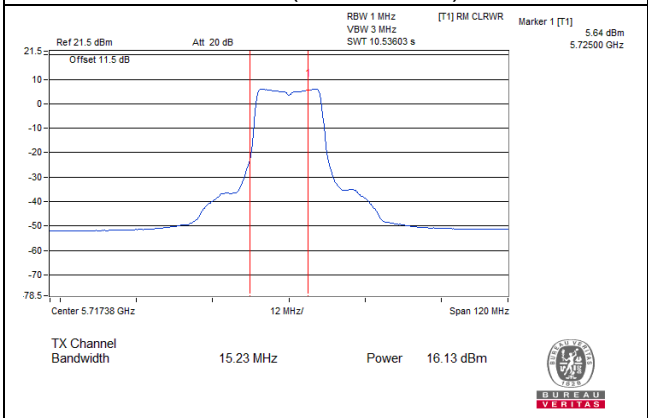
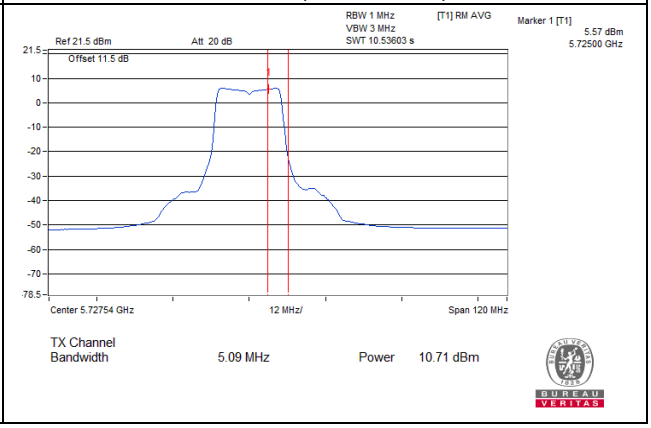
Chain 0

CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 15.25 MHz Power 16.65 dBm	TX Channel Bandwidth 4.96 MHz Power 11.27 dBm

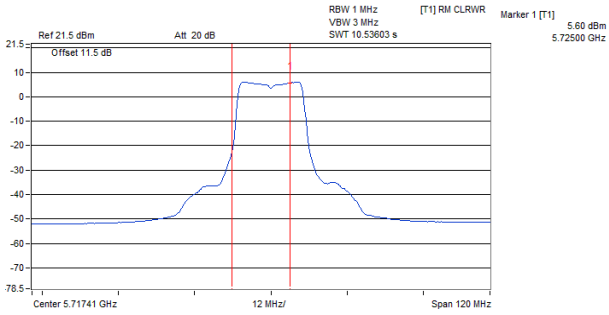
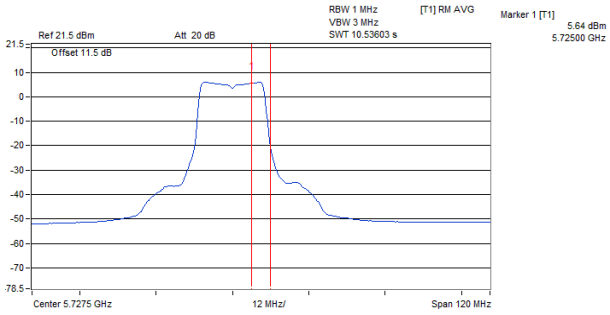
Chain 1

CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 15.15 MHz Power 15.52 dBm	TX Channel Bandwidth 5.04 MHz Power 10.12 dBm

Chain 2

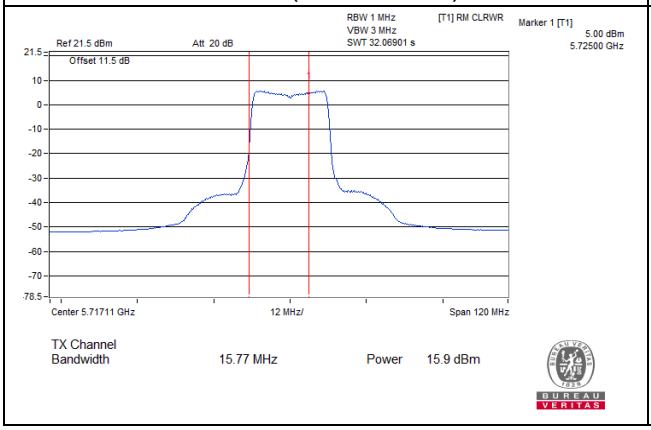
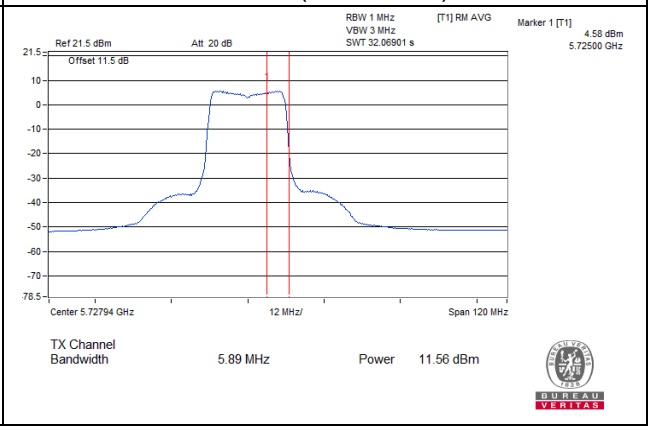
CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 15.23 MHz Power 16.13 dBm	TX Channel Bandwidth 5.09 MHz Power 10.71 dBm

Chain 3

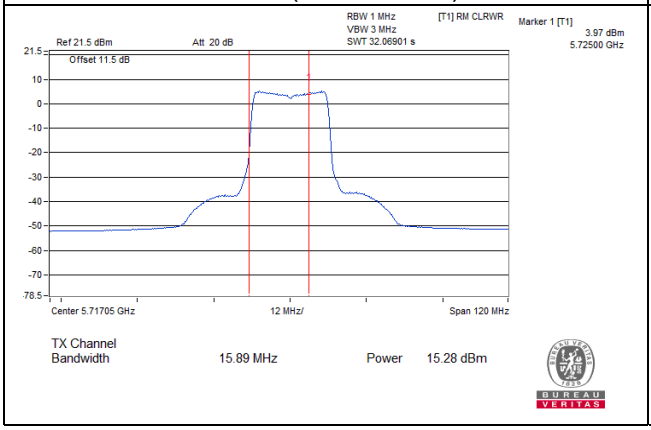
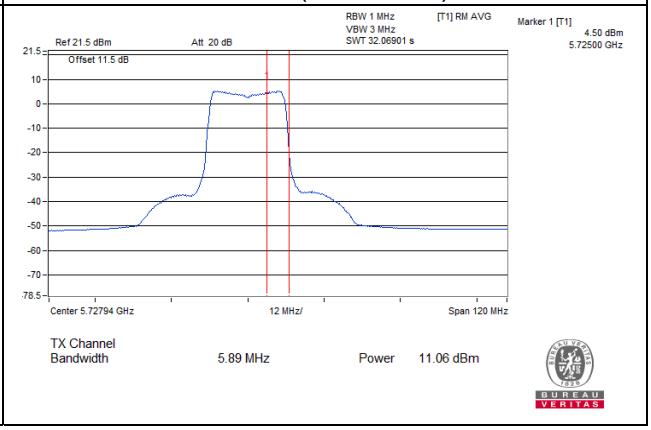
CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
 TX Channel Bandwidth 15.18 MHz Power 16.14 dBm	 TX Channel Bandwidth 5 MHz Power 10.73 dBm

802.11ax (HE20)

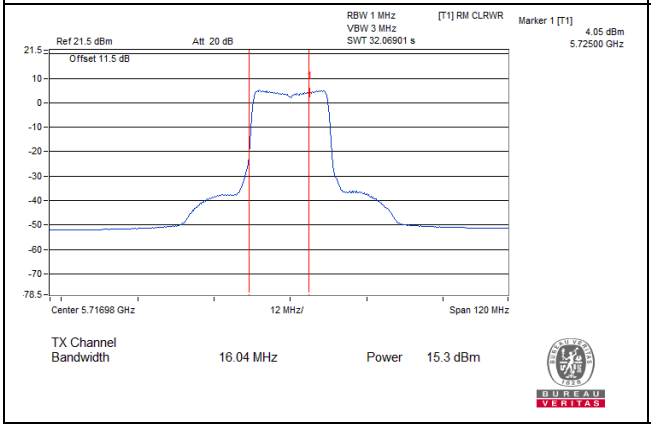
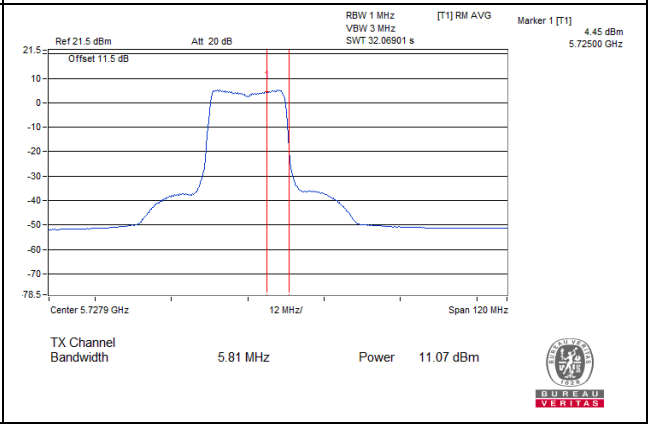
Chain 0

CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 15.77 MHz Power 15.9 dBm	TX Channel Bandwidth 5.89 MHz Power 11.56 dBm

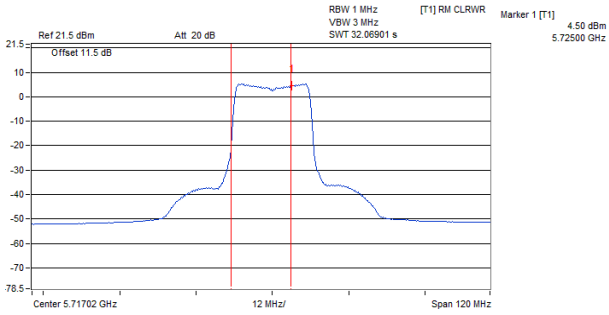
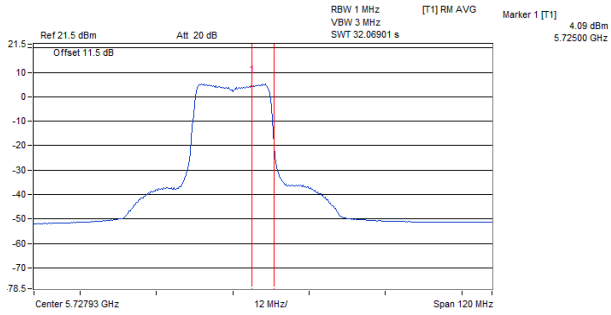
Chain 1

CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 15.89 MHz Power 15.28 dBm	TX Channel Bandwidth 5.89 MHz Power 11.06 dBm

Chain 2

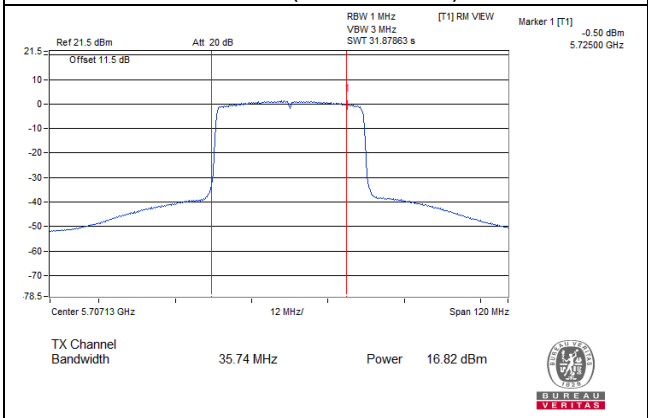
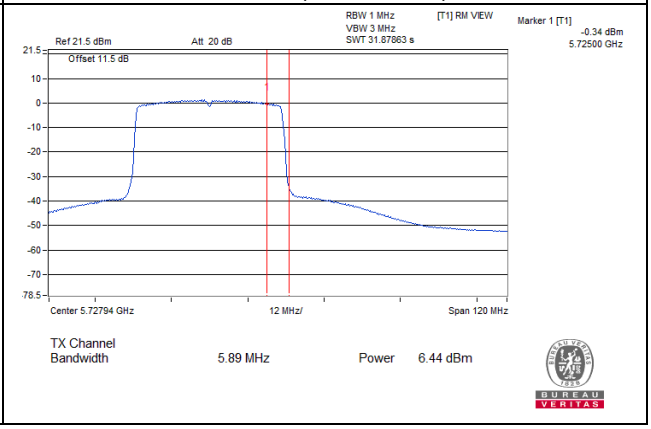
CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
	
TX Channel Bandwidth 16.04 MHz Power 15.3 dBm	TX Channel Bandwidth 5.81 MHz Power 11.07 dBm

Chain 3

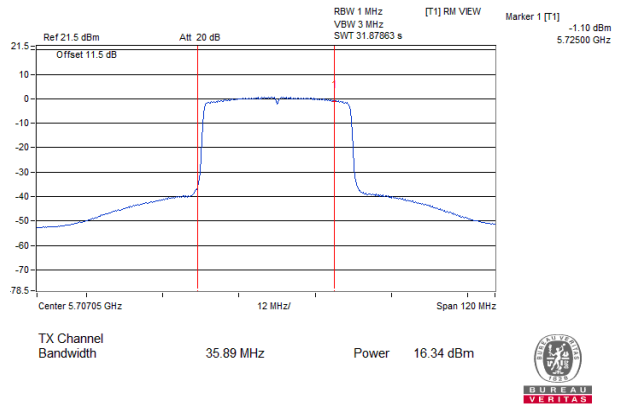
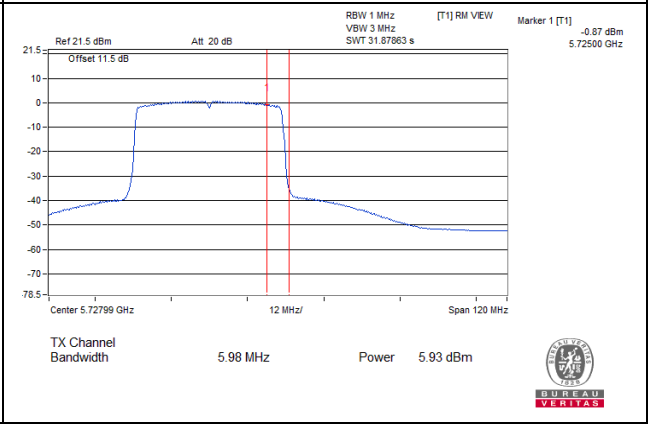
CH 144 (For U-NII-2C)	CH 144 (For U-NII-3)
 TX Channel Bandwidth 15.95 MHz Power 15.42 dBm	 TX Channel Bandwidth 5.86 MHz Power 11.05 dBm

802.11ax (HE40)

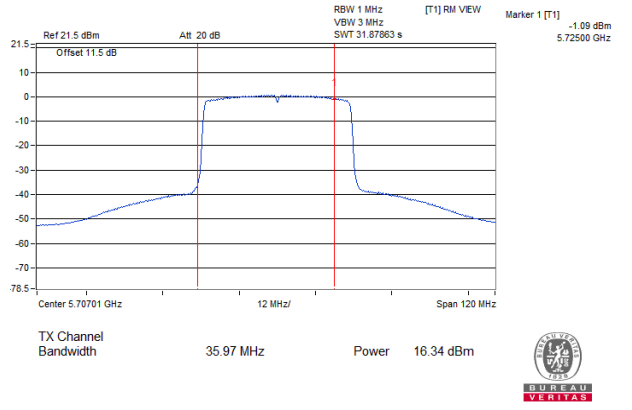
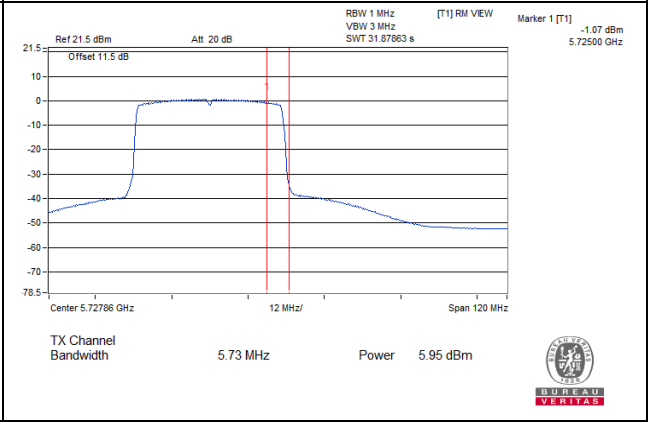
Chain 0

CH 142 (For U-NII-2C)	CH 142 (For U-NII-3)
	
TX Channel Bandwidth 35.74 MHz Power 16.82 dBm	TX Channel Bandwidth 5.89 MHz Power 6.44 dBm

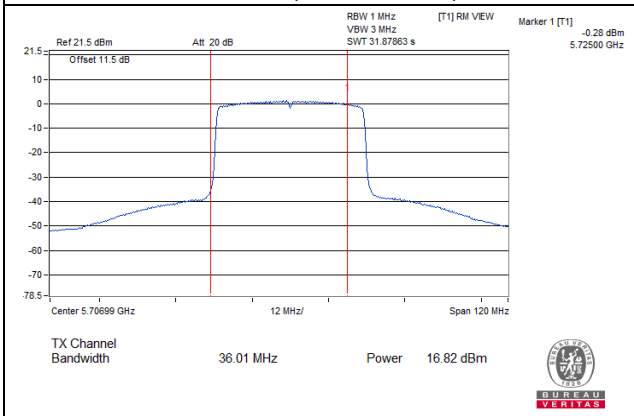
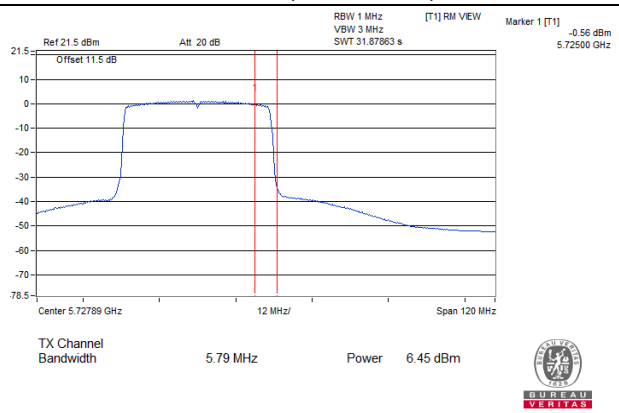
Chain 1

CH 142 (For U-NII-2C)	CH 142 (For U-NII-3)
	
TX Channel Bandwidth 35.89 MHz Power 16.34 dBm	TX Channel Bandwidth 5.98 MHz Power 5.93 dBm

Chain 2

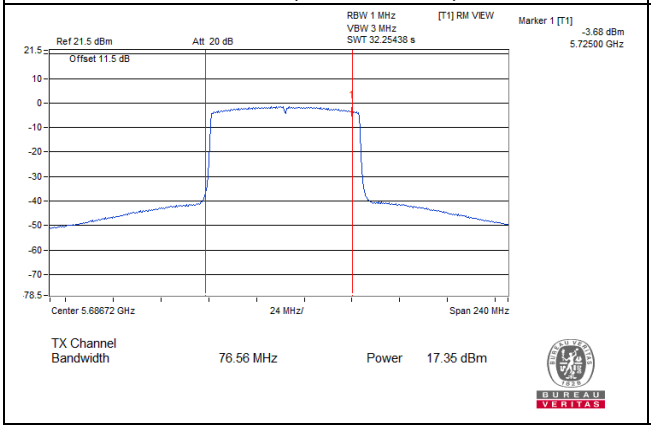
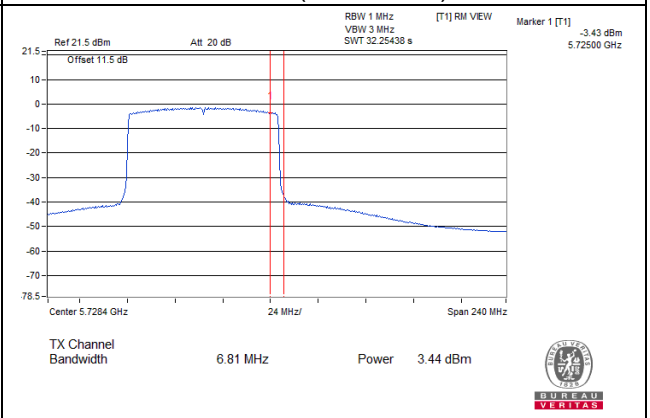
CH 142 (For U-NII-2C)	CH 142 (For U-NII-3)
	
TX Channel Bandwidth 35.97 MHz Power 16.34 dBm	TX Channel Bandwidth 5.73 MHz Power 5.95 dBm

Chain 3

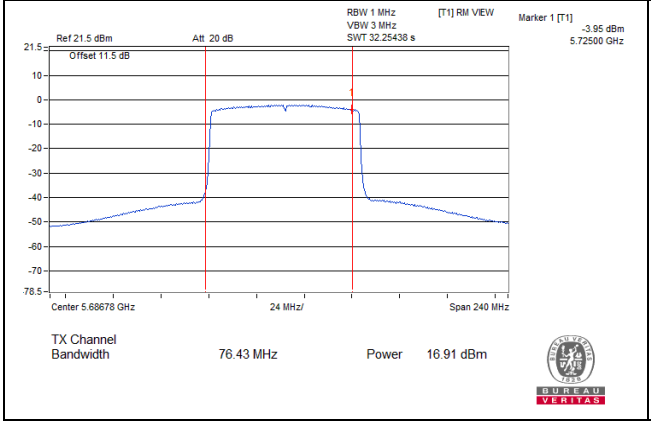
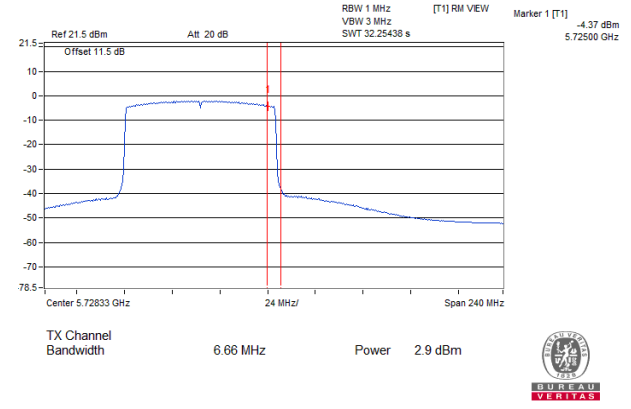
CH 142 (For U-NII-2C)	CH 142 (For U-NII-3)
 TX Channel Bandwidth 36.01 MHz Power 16.82 dBm	 TX Channel Bandwidth 5.79 MHz Power 6.45 dBm

802.11ax (HE80)

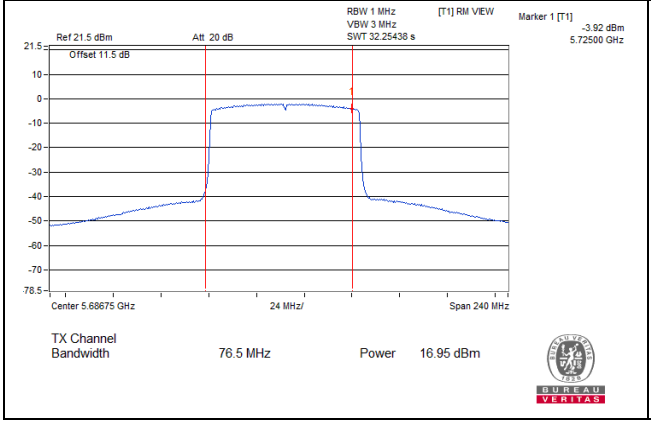
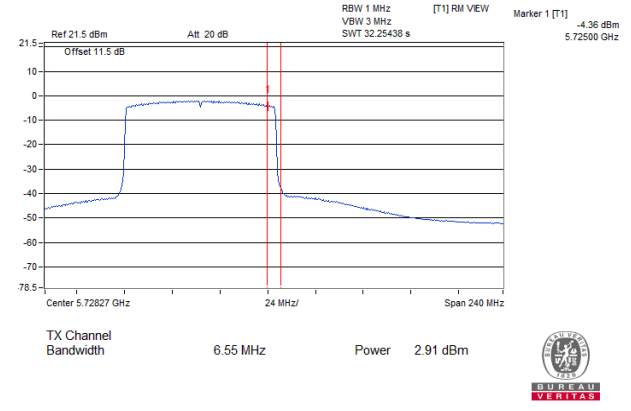
Chain 0

CH 138 (For U-NII-2C)	CH 138 (For U-NII-3)
	
TX Channel Bandwidth 76.56 MHz Power 17.35 dBm	TX Channel Bandwidth 6.81 MHz Power 3.44 dBm

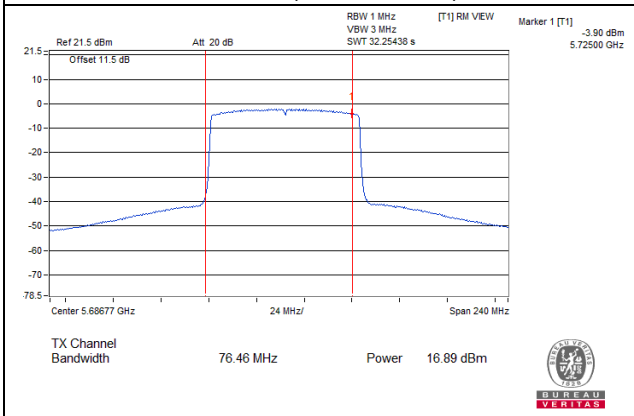
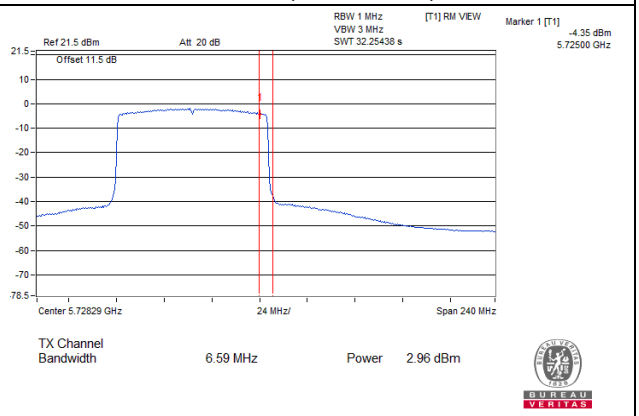
Chain 1

CH 138 (For U-NII-2C)	CH 138 (For U-NII-3)
	
TX Channel Bandwidth 76.43 MHz Power 16.91 dBm	TX Channel Bandwidth 6.66 MHz Power 2.9 dBm

Chain 2

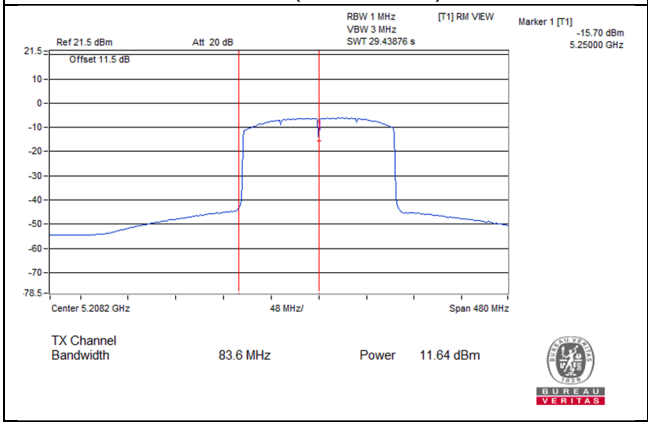
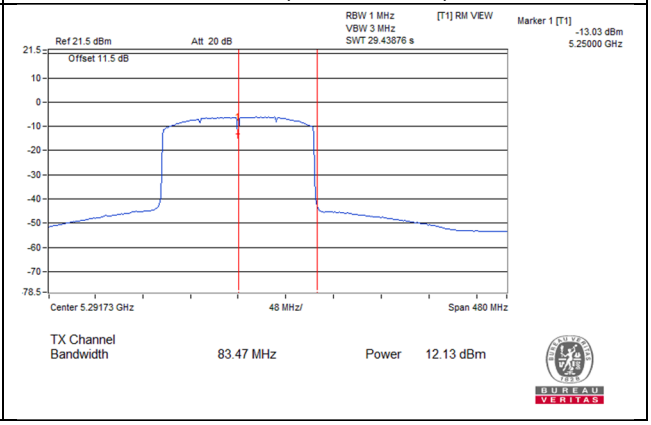
CH 138 (For U-NII-2C)	CH 138 (For U-NII-3)
	
TX Channel Bandwidth 76.5 MHz Power 16.95 dBm	TX Channel Bandwidth 6.55 MHz Power 2.91 dBm

Chain 3

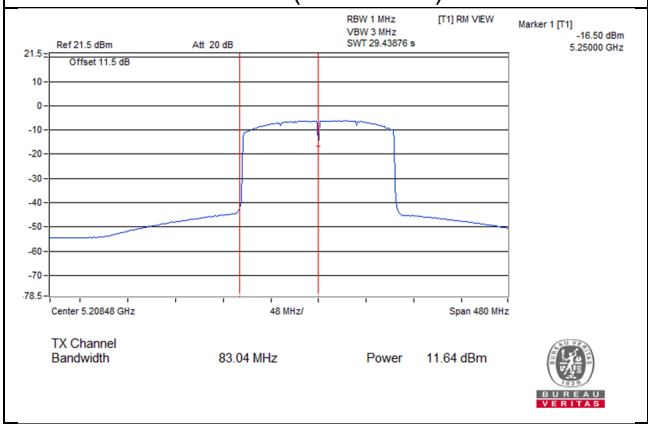
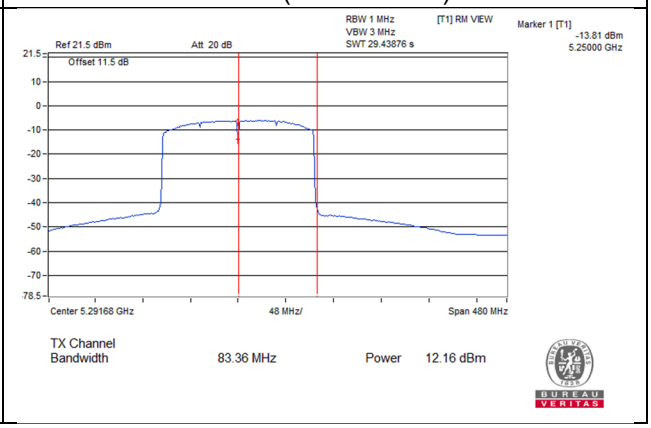
CH 138 (For U-NII-2C)	CH 138 (For U-NII-3)
 TX Channel Bandwidth 76.46 MHz Power 16.89 dBm	 TX Channel Bandwidth 6.59 MHz Power 2.96 dBm

802.11ax (HE160)

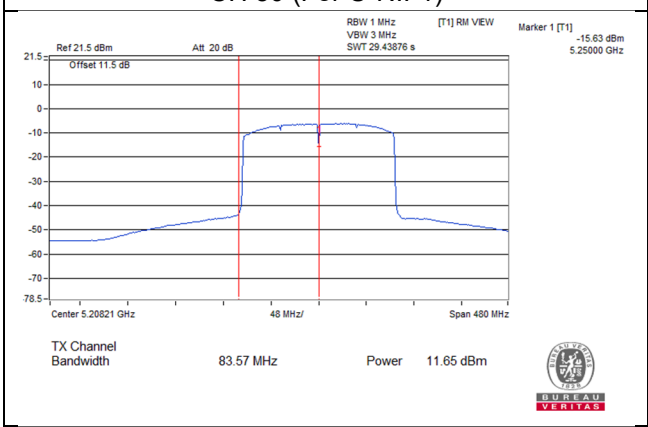
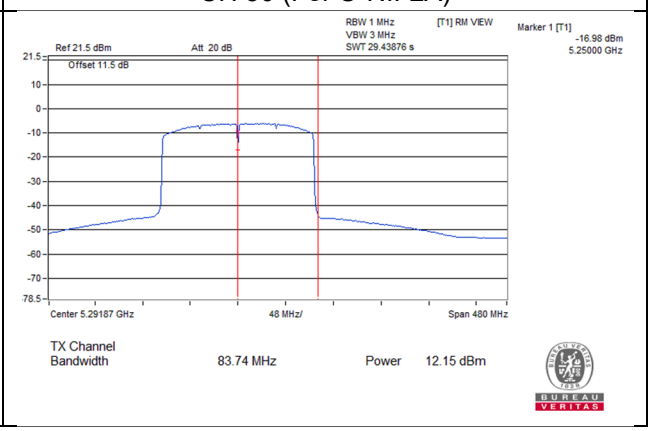
Chain 0

CH 50 (For U-NII-1)	CH 50 (For U-NII-2A)
	
TX Channel Bandwidth 83.6 MHz Power 11.64 dBm	TX Channel Bandwidth 83.47 MHz Power 12.13 dBm

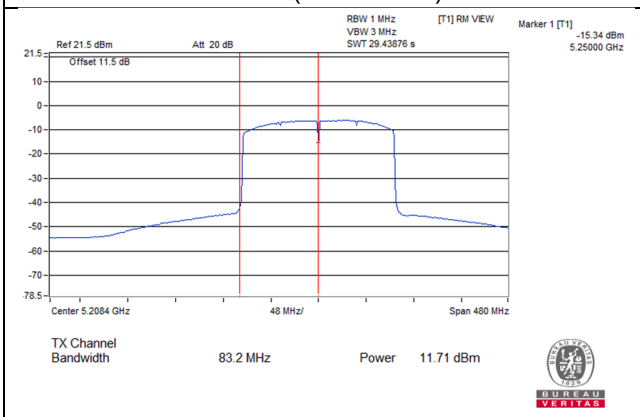
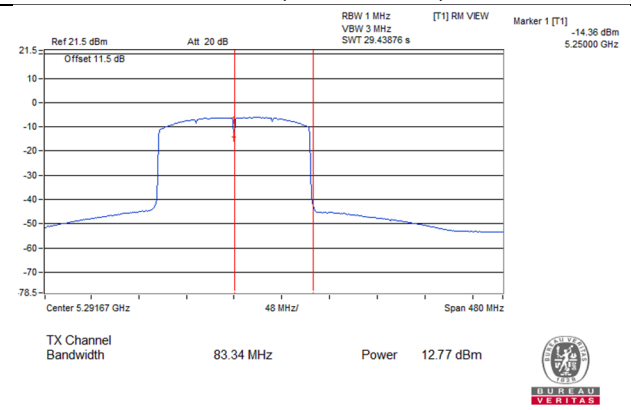
Chain 1

CH 50 (For U-NII-1)	CH 50 (For U-NII-2A)
	
TX Channel Bandwidth 83.04 MHz Power 11.64 dBm	TX Channel Bandwidth 83.36 MHz Power 12.16 dBm

Chain 2

CH 50 (For U-NII-1)	CH 50 (For U-NII-2A)
	
TX Channel Bandwidth 83.57 MHz Power 11.65 dBm	TX Channel Bandwidth 83.74 MHz Power 12.15 dBm

Chain 3

CH 50 (For U-NII-1)	CH 50 (For U-NII-2A)
	

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	20.19	20.36	20.39	20.43
60	5300	20.26	20.42	20.56	20.52
64	5320	20.44	20.30	20.36	20.35
100	5500	20.50	20.43	20.34	20.59
116	5580	20.58	20.24	20.46	20.38
140	5700	20.24	20.17	20.33	20.25
144	5720 (For U-NII-2C)	15.25	15.15	15.23	15.18

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11ax (HE20)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.82	22.68	21.77	21.89
60	5300	22.23	21.76	22.07	22.26
64	5320	21.87	21.94	22.14	22.09
100	5500	21.86	22.22	21.93	22.11
116	5580	22.05	21.85	22.30	22.06
140	5700	21.86	21.94	21.99	21.79
144	5720 (For U-NII-2C)	15.77	15.89	16.04	15.95

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.77	41.87	41.78	41.70
62	5310	41.75	41.68	41.56	41.75
102	5510	41.52	41.86	41.75	41.94
110	5550	42.00	41.80	41.80	41.69
134	5670	41.91	41.72	41.72	41.71
142	5710 (For U-NII-2C)	35.74	35.89	35.97	36.01

For CH142 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11ax (HE80)

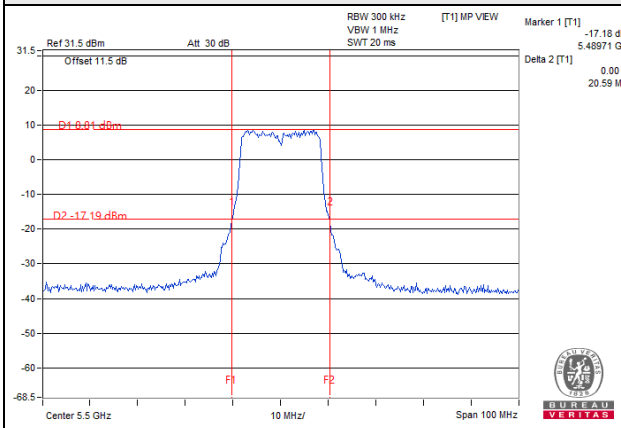
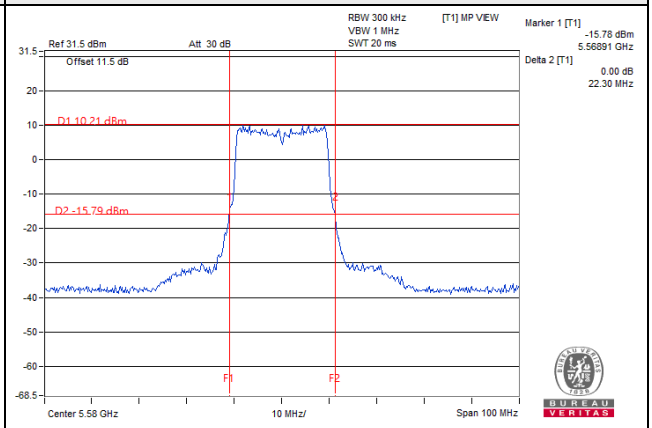
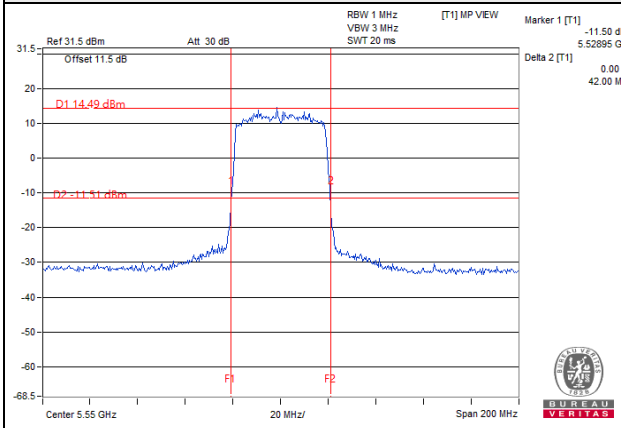
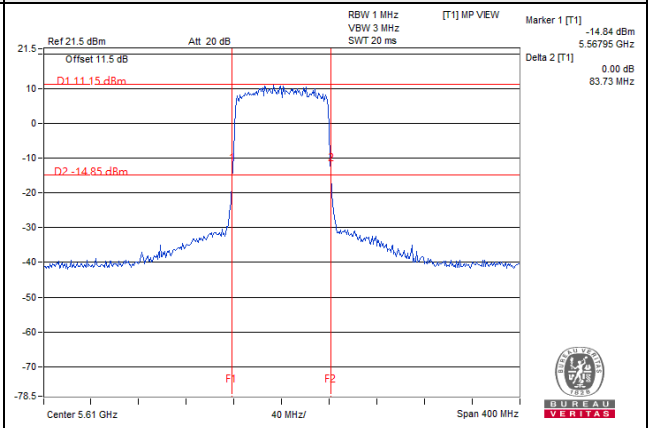
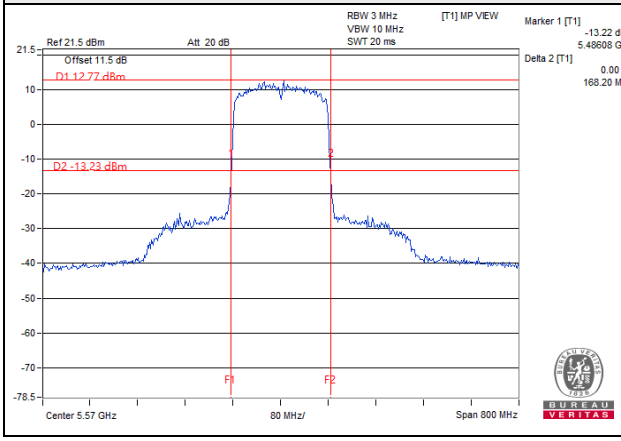
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.94	82.97	82.97	83.16
106	5530	83.11	83.48	83.09	83.47
122	5610	82.99	83.13	83.03	83.73
138	5690 (For U-NII-2C)	76.56	76.43	76.50	76.46

For CH138 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11ax (HE160)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
*50	5250 (For U-NII-2A)	83.47	83.36	83.74	83.34
114	5570	167.98	168.13	167.77	168.20

For CH50 (U-NII-2A Band): The 26dBc bandwidth above 5250MHz = Marker 1 + Delta 2 - 5250MHz

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

EUT Average Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	207.555	23.17
5470~5725	208.433	23.19

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	206.941	23.16
5470~5725	207.779	23.18

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	224.986	23.52
5470~5725	215.257	23.33

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	224.350	23.51
5470~5725	242.282	23.84

802.11ax (HE160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	74.618	18.73
5470~5725	189.784	22.78

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	206.941	23.16
5470~5725	207.779	23.18

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	224.986	23.52
5470~5725	215.257	23.33

802.11ax (HE80)

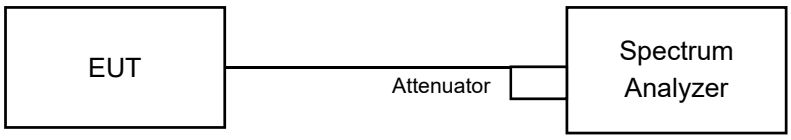
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	224.350	23.51
5470~5725	242.282	23.84

802.11ax (HE160)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	74.618	18.73
5470~5725	189.784	22.78

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

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.68	16.68	16.68	16.68
40	5200	17.28	17.28	17.28	17.28
48	5240	17.16	17.16	17.16	17.16
52	5260	16.68	16.68	16.68	16.68
60	5300	16.68	16.68	16.68	16.68
64	5320	16.68	16.68	16.68	16.68
100	5500	16.68	16.68	16.68	16.68
116	5580	16.68	16.68	16.68	16.68
140	5700	16.68	16.68	16.68	16.68
144	5720 (For U-NII-2C)	13.40	13.40	13.40	13.40
144	5720 (For U-NII-3)	3.28	3.28	3.28	3.28
149	5745	20.26	17.83	17.91	18.18
157	5785	23.05	19.04	19.31	19.13
165	5825	25.13	20.96	20.78	21.30

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

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

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.20	19.08	19.32	19.08
40	5200	19.44	19.44	19.56	19.44
48	5240	19.32	19.44	19.44	19.44
52	5260	19.08	19.08	19.20	19.08
60	5300	19.20	19.20	19.08	19.20
64	5320	19.20	19.08	19.20	19.08
100	5500	19.08	19.20	19.08	19.08
116	5580	19.08	19.08	19.08	19.08
140	5700	19.08	19.20	19.20	19.20
144	5720 (For U-NII-2C)	14.60	14.60	14.60	14.60
144	5720 (For U-NII-3)	4.48	4.48	4.48	4.48
149	5745	19.74	19.48	19.57	19.57
157	5785	20.00	19.57	19.57	19.48
165	5825	21.48	19.83	20.00	19.91

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

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

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.92	37.80	37.92	37.92
46	5230	38.88	38.88	38.88	38.88
54	5270	37.80	38.04	37.80	37.80
62	5310	38.04	37.92	37.92	37.80
102	5510	37.92	38.04	37.92	37.92
110	5550	37.92	38.09	37.92	37.92
134	5670	38.64	38.64	38.40	38.40
142	5710 (For U-NII-2C)	33.96	33.96	33.96	33.96
142	5710 (For U-NII-3)	3.96	3.96	3.96	3.96
151	5755	40.00	38.96	38.96	38.96
159	5795	38.69	38.52	38.44	38.52

For CH142 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

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

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.76	78.24	78.24	77.76
58	5290	77.76	77.76	77.28	77.76
106	5530	76.87	77.22	77.22	77.22
122	5610	77.76	77.76	77.52	77.76
138	5690 (For U-NII-2C)	73.88	73.88	73.88	73.88
138	5690 (For U-NII-3)	3.40	3.40	3.40	3.40
155	5775	77.57	77.22	77.22	77.22

For CH138 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

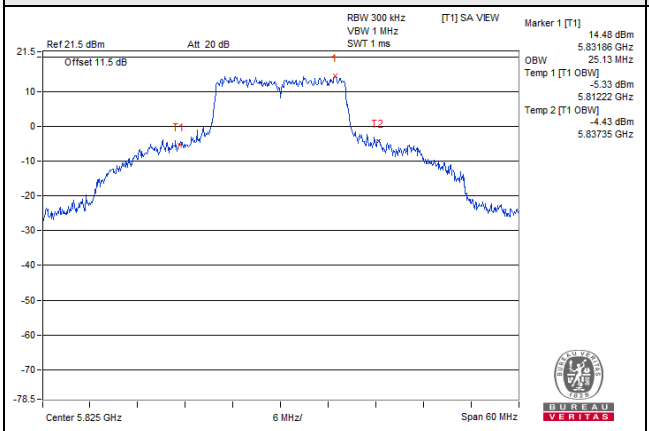
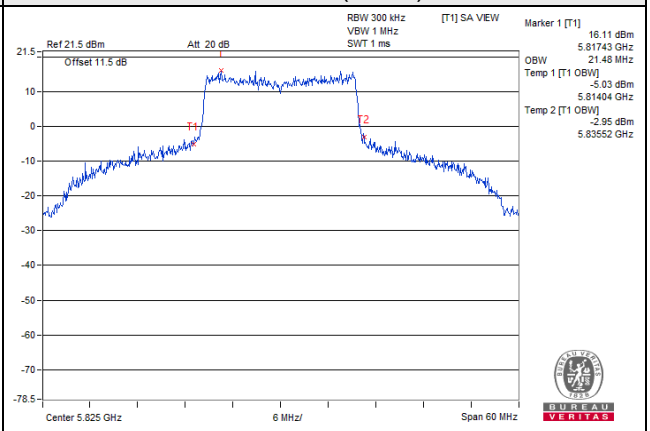
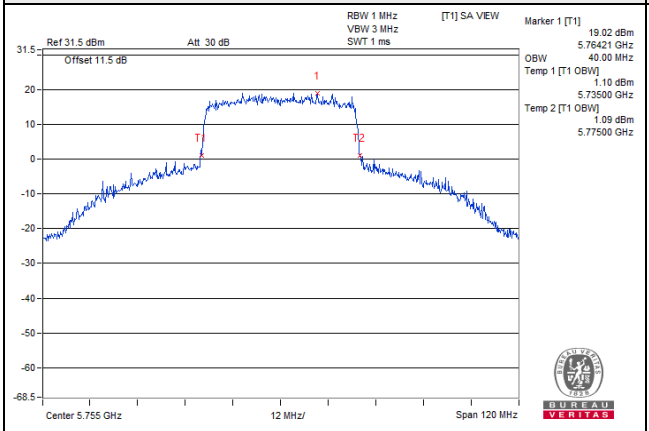
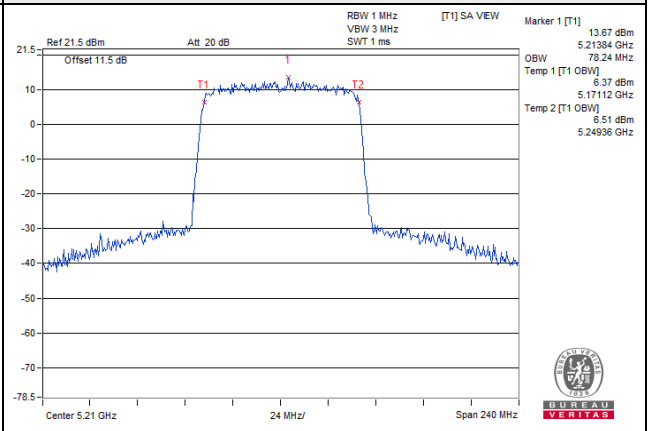
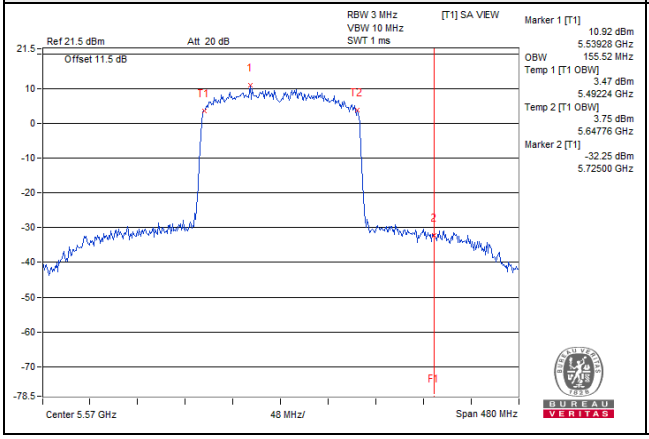
For CH138 (UNII-3 Band): The Occupied bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

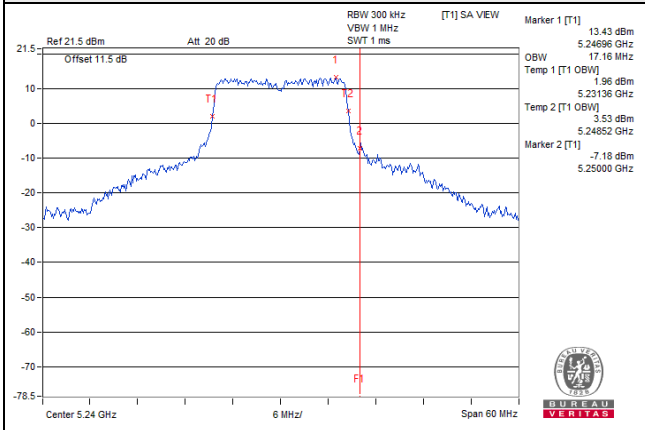
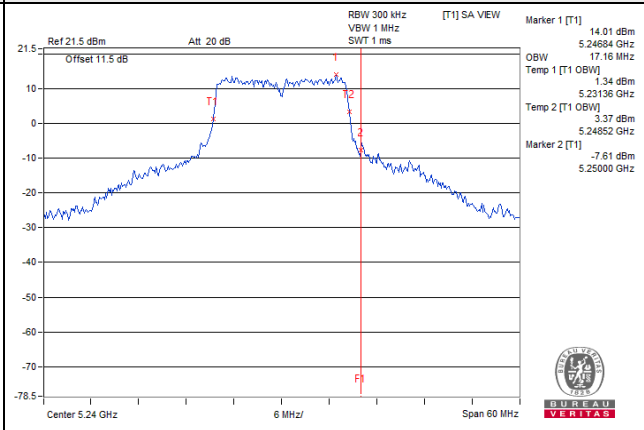
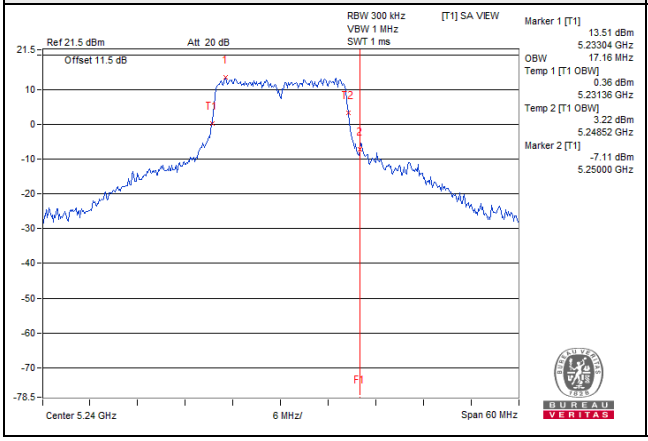
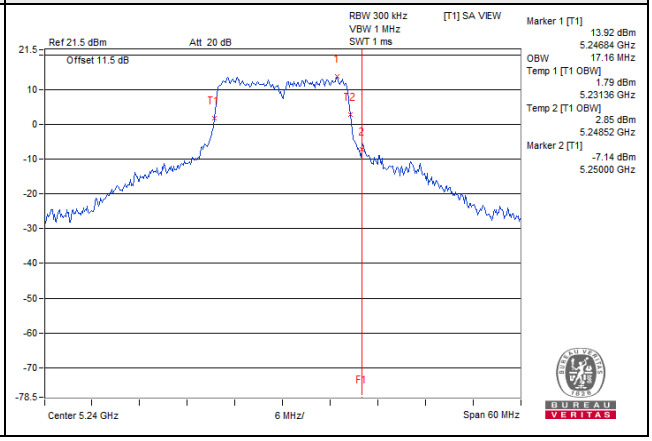
802.11ax (HE160)

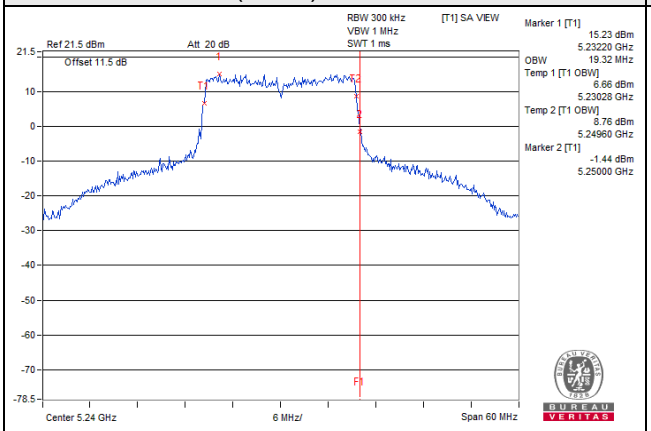
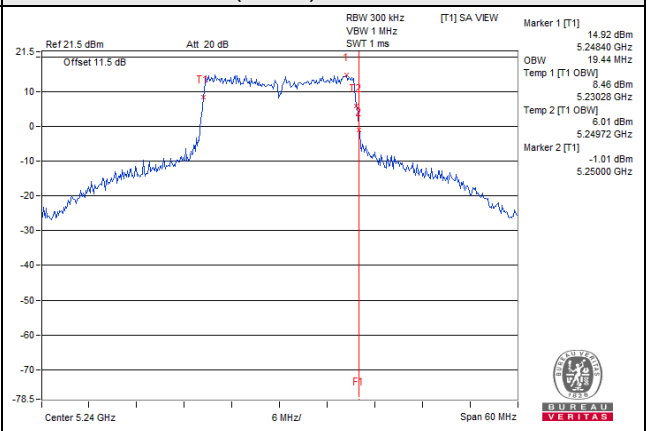
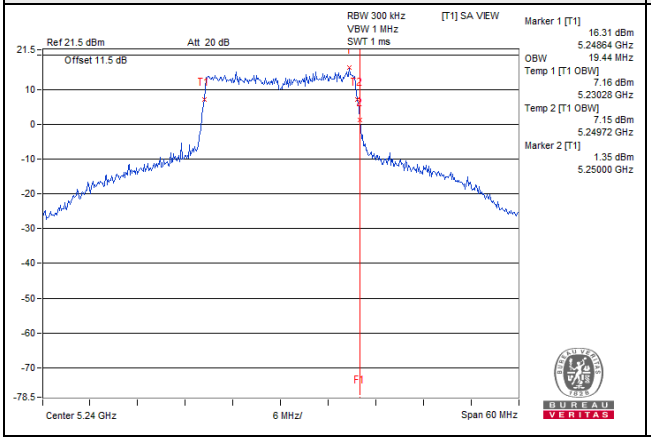
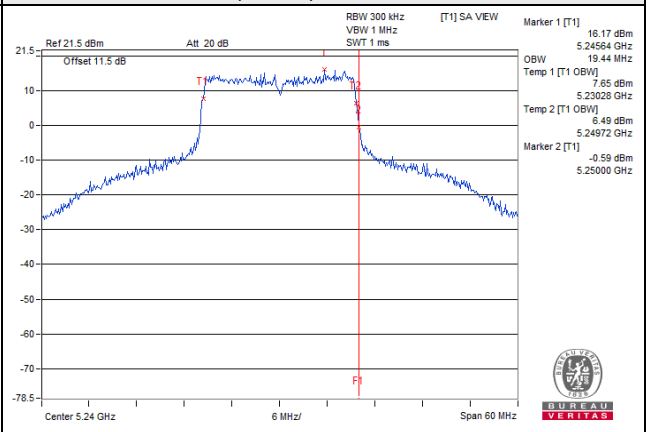
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
*50	5250 (For U-NII-1)	77.76	76.80	77.76	77.76
*50	5250 (For U-NII-2A)	77.76	77.76	77.76	77.76
114	5570	155.52	154.56	155.52	155.52

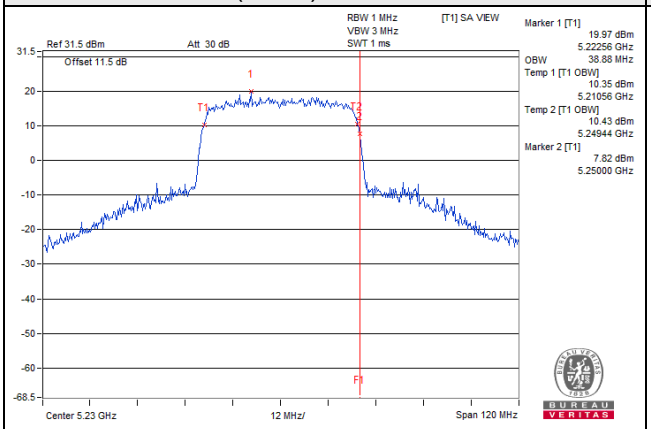
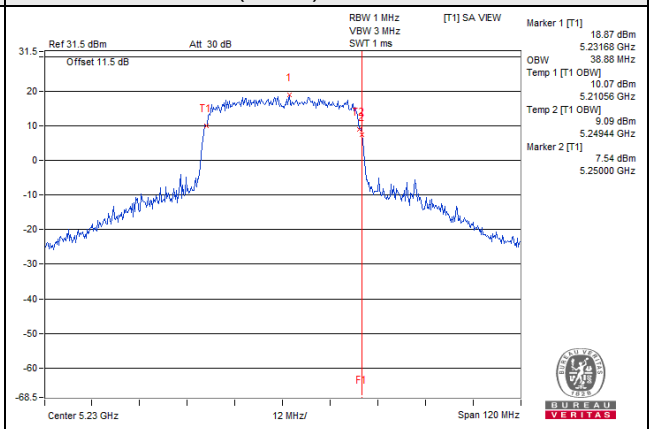
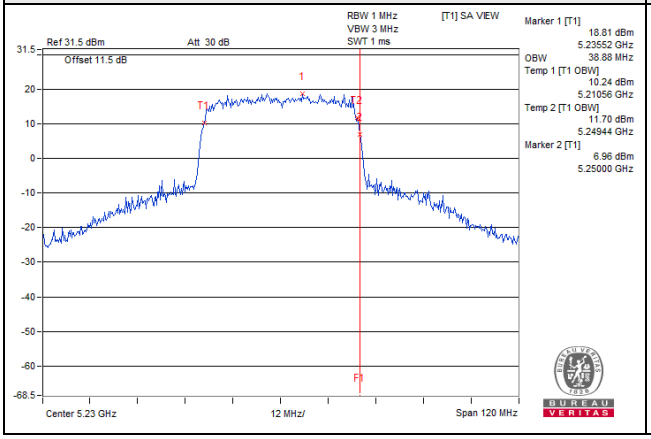
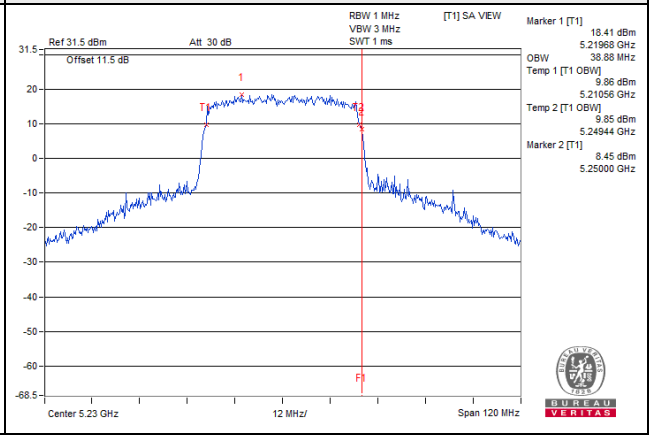
For CH50 (U-NII-1 Band): The Occupied bandwidth below 5250MHz = 5250MHz - Marker 1

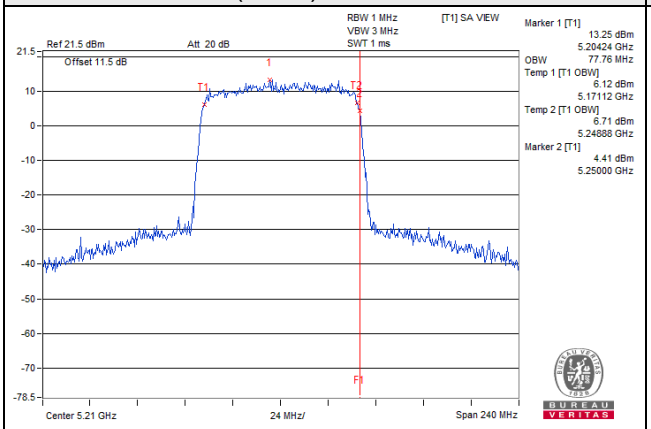
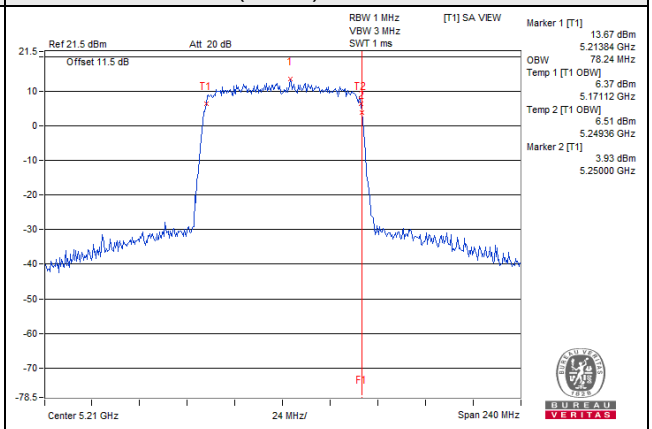
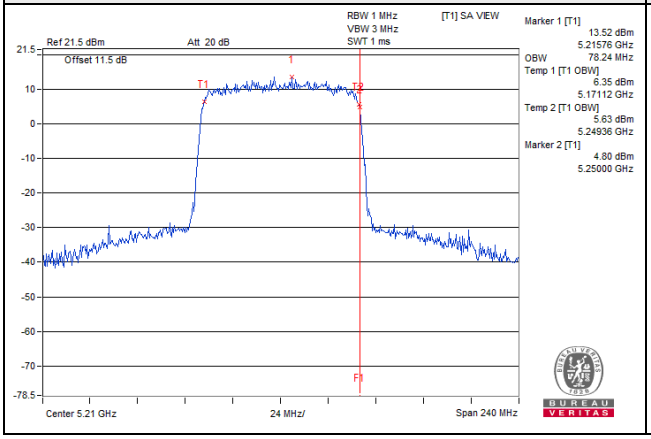
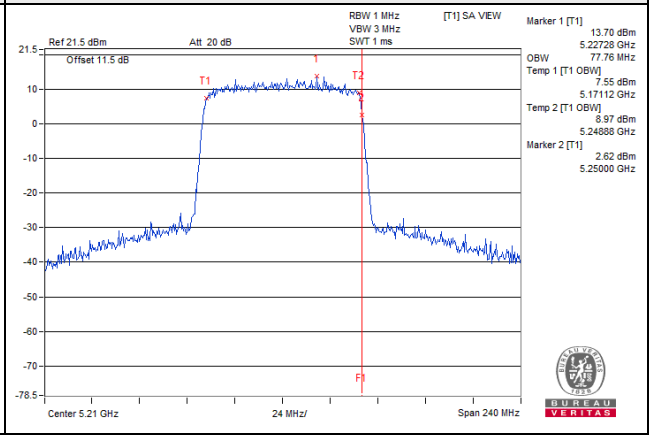
For CH50 (U-NII-2A Band): The Occupied bandwidth above 5250MHz = Marker 1 + Delta 2 - 5250MHz

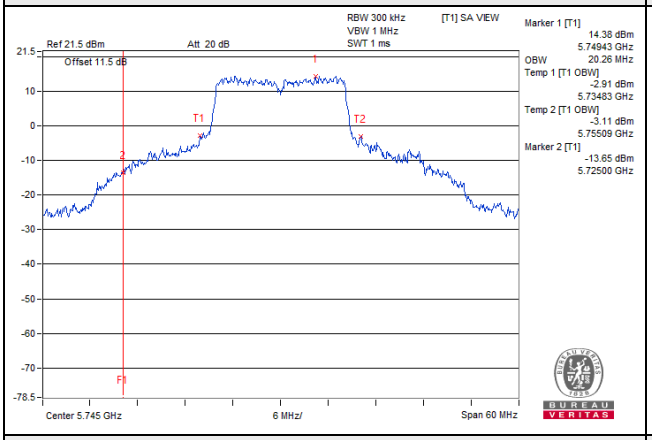
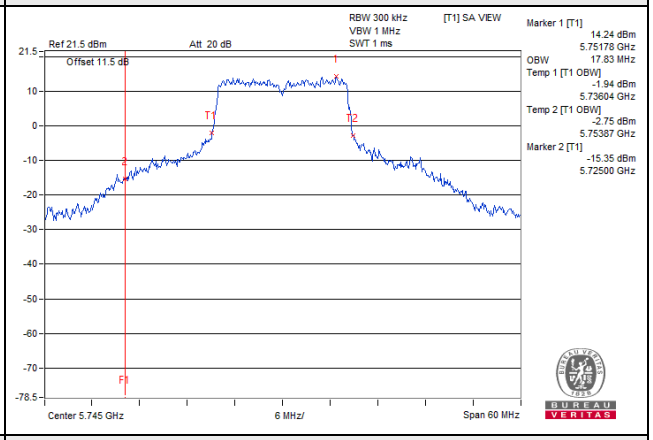
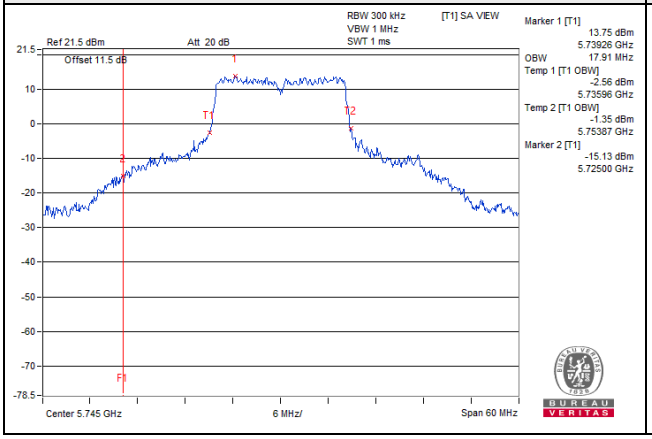
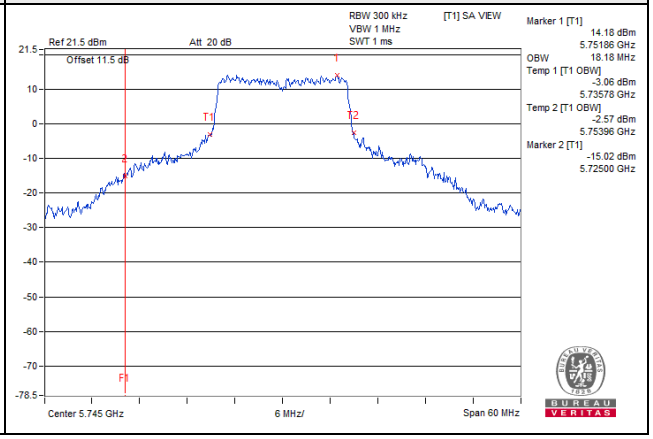
Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	
802.11ax (HE160)	
	

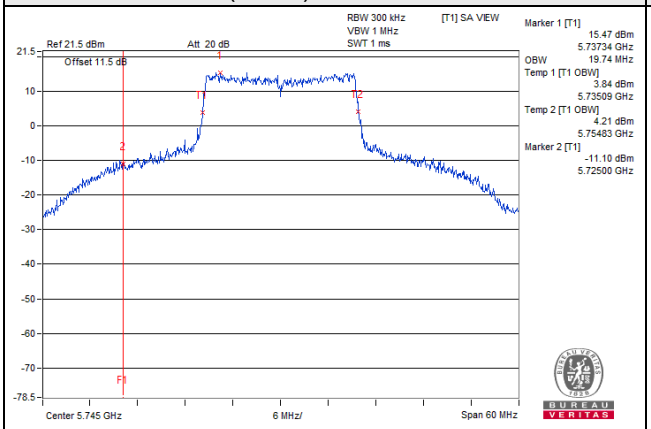
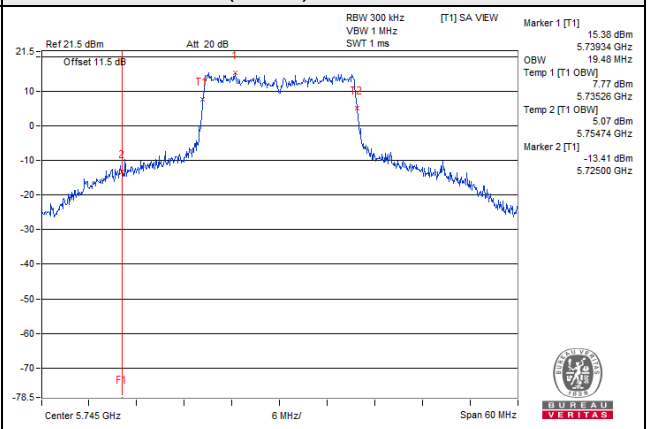
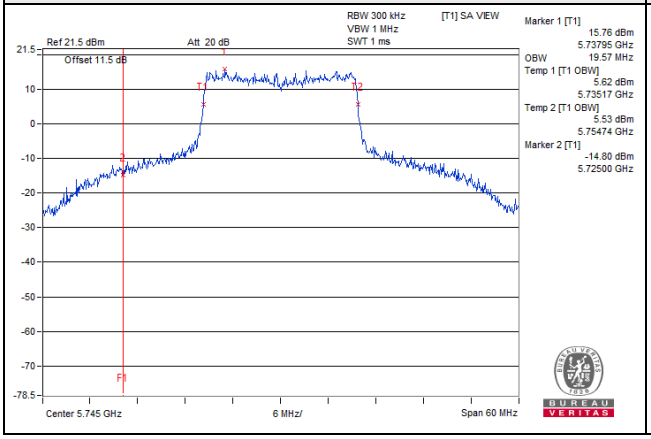
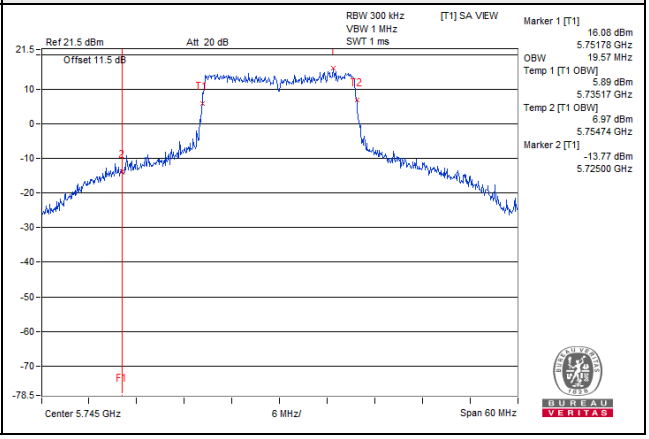
Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 48	802.11a / Chain 1 / CH 48
	
802.11a / Chain 2 / CH 48	802.11a / Chain 3 / CH 48
	

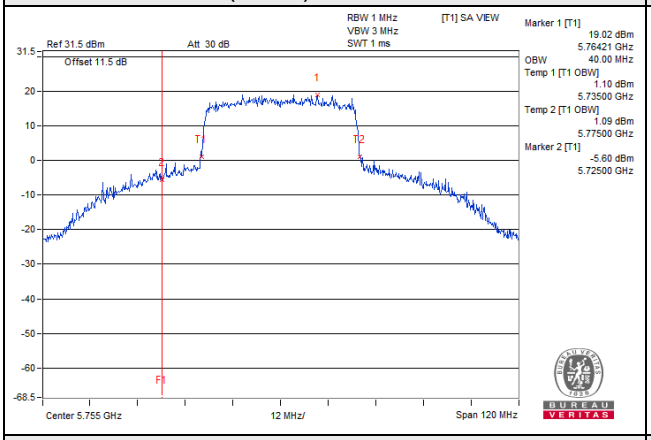
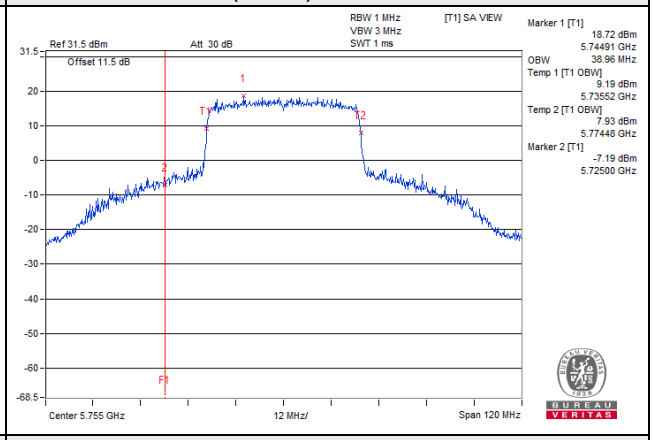
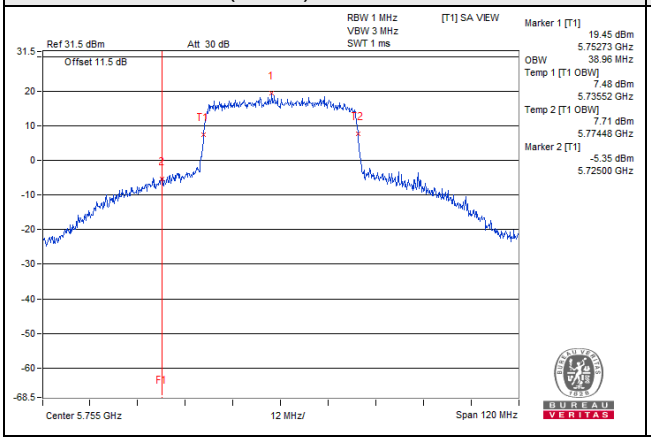
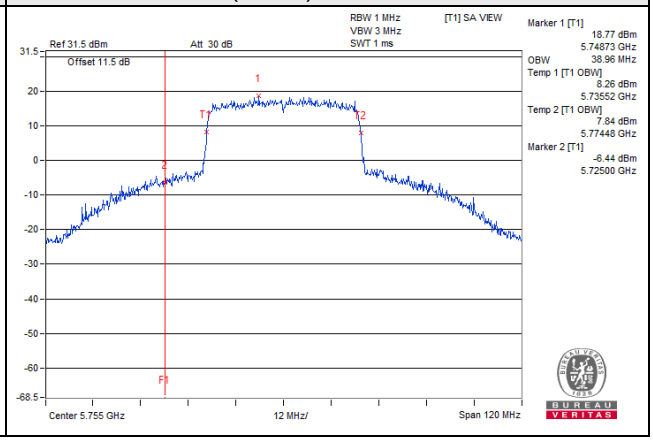
Spectrum Plot for near By DFS Band	
802.11ax (HE20) / Chain 0 / CH 48	802.11ax (HE20) / Chain 1 / CH 48
	
802.11ax (HE20) / Chain 2 / CH 48	802.11ax (HE20) / Chain 3 / CH 48
	

Spectrum Plot for near By DFS Band	
802.11ax (HE40) / Chain 0 / CH 46	802.11ax (HE40) / Chain 1 / CH 46
	
802.11ax (HE40) / Chain 2 / CH 46	802.11ax (HE40) / Chain 3 / CH 46
	

Spectrum Plot for near By DFS Band	
802.11ax (HE80) / Chain 0 / CH 42	802.11ax (HE80) / Chain 1 / CH 42
	
802.11ax (HE80) / Chain 2 / CH 42	802.11ax (HE80) / Chain 3 / CH 42
	

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

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

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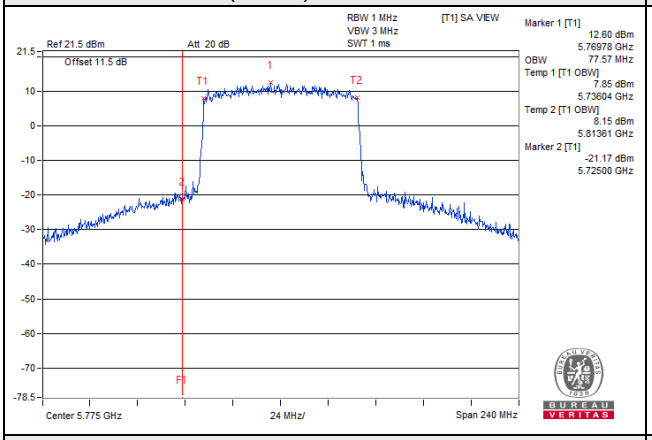
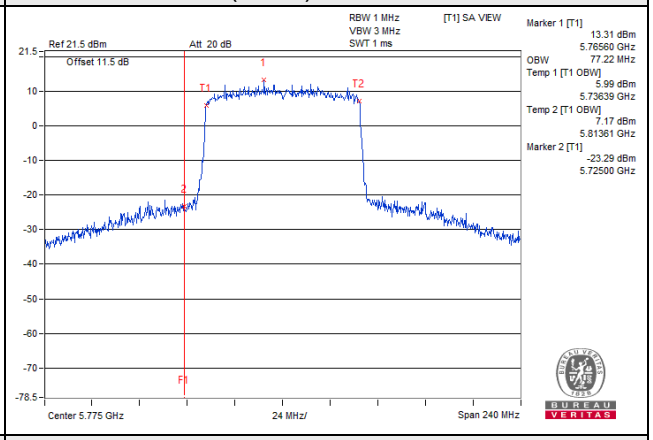
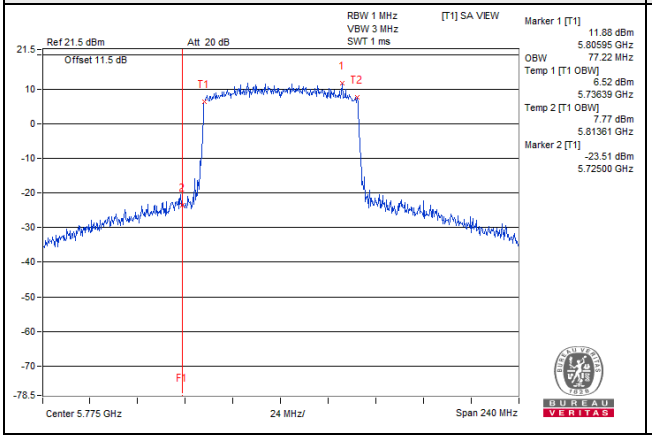
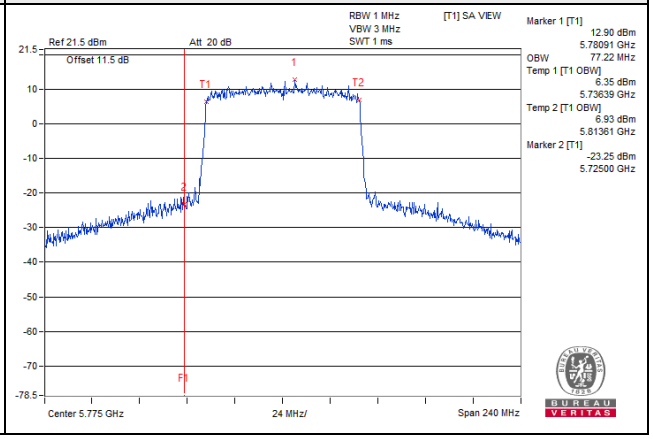
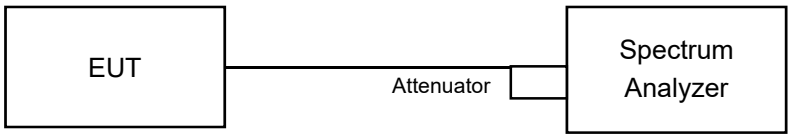
	
802.11ax (HE80) / Chain 2 / CH 155	802.11ax (HE80) / Chain 3 / CH 155
	

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:

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:

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 and U-NII-2C 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	Chain 2	Chain 3				
36	5180	7.06	7.04	6.91	7.00	0.27	13.29	16.98	Pass
40	5200	9.59	9.92	9.77	10.09	0.27	16.14	16.98	Pass
48	5240	9.76	9.84	9.73	9.96	0.27	16.11	16.98	Pass
52	5260	4.14	3.98	3.96	3.99	0.27	10.31	10.89	Pass
60	5300	4.22	4.04	4.06	3.81	0.27	10.33	10.89	Pass
64	5320	4.06	3.99	4.00	3.94	0.27	10.29	10.89	Pass
100	5500	4.25	3.75	4.02	3.91	0.27	10.28	10.85	Pass
116	5580	4.31	3.61	4.09	3.94	0.27	10.29	10.85	Pass
140	5700	4.54	3.55	3.97	4.04	0.27	10.33	10.85	Pass
144	5720 (For U-NII-2C)	4.42	3.60	3.69	3.90	0.27	10.20	10.85	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. Directional gain is declared by client.
3. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.02-6) = 16.98dBm.
4. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
5. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.15-6) = 10.85dBm.
6. 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	Chain 2	Chain 3				
36	5180	6.89	7.12	6.86	6.28	0.76	13.58	16.98	Pass
40	5200	10.21	10.09	10.00	10.00	0.76	16.86	16.98	Pass
48	5240	10.01	9.99	9.72	9.98	0.76	16.71	16.98	Pass
52	5260	4.18	3.53	4.18	3.68	0.76	10.68	10.89	Pass
60	5300	3.32	3.57	4.01	4.14	0.76	10.55	10.89	Pass
64	5320	3.80	4.11	3.74	4.14	0.76	10.73	10.89	Pass
100	5500	3.80	3.85	4.06	3.68	0.76	10.63	10.85	Pass
116	5580	3.96	3.76	4.05	4.12	0.76	10.76	10.85	Pass
140	5700	4.52	3.43	3.54	3.87	0.76	10.64	10.85	Pass
144	5720 (For U-NII-2C)	4.37	3.85	3.92	3.99	0.76	10.82	10.85	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. Directional gain is declared by client.
3. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.02-6) = 16.98dBm.
4. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
5. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.15-6) = 10.85dBm.
6. 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	Chain 2	Chain 3				
38	5190	3.02	2.96	2.95	3.12	0.72	9.75	16.98	Pass
46	5230	6.57	6.11	5.37	6.27	0.72	12.84	16.98	Pass
54	5270	1.05	1.25	0.99	0.98	0.72	7.81	10.89	Pass
62	5310	1.02	0.70	0.66	1.00	0.72	7.59	10.89	Pass
102	5510	0.90	0.87	0.45	1.13	0.72	7.58	10.85	Pass
110	5550	1.10	0.74	0.63	1.29	0.72	7.69	10.85	Pass
134	5670	0.94	0.31	0.96	1.23	0.72	7.61	10.85	Pass
142	5710 (For U-NII-2C)	1.21	0.41	0.46	1.03	0.72	7.53	10.85	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. Directional gain is declared by client.
3. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.02-6) = 16.98dBm.
4. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
5. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.15-6) = 10.85dBm.
6. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

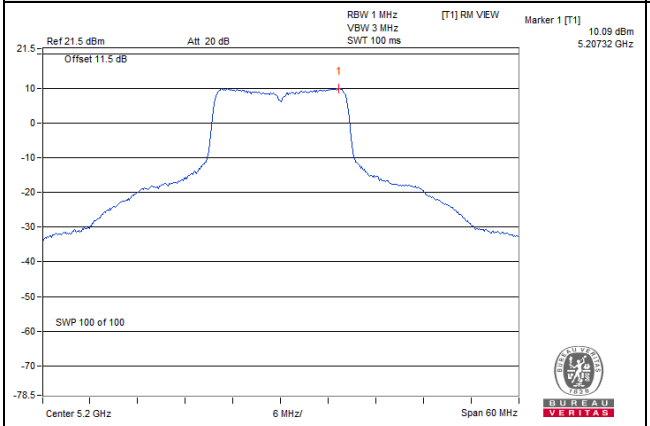
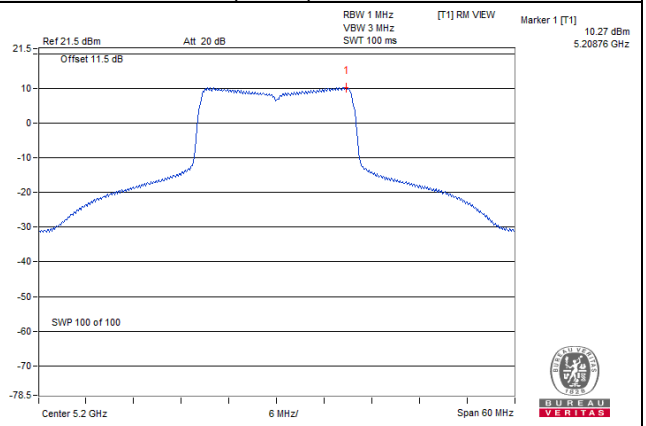
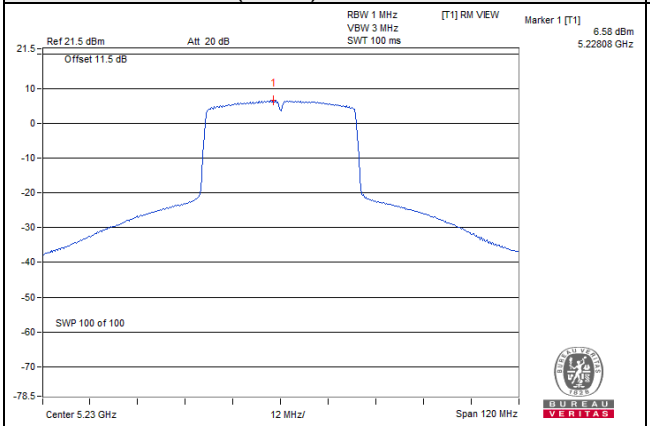
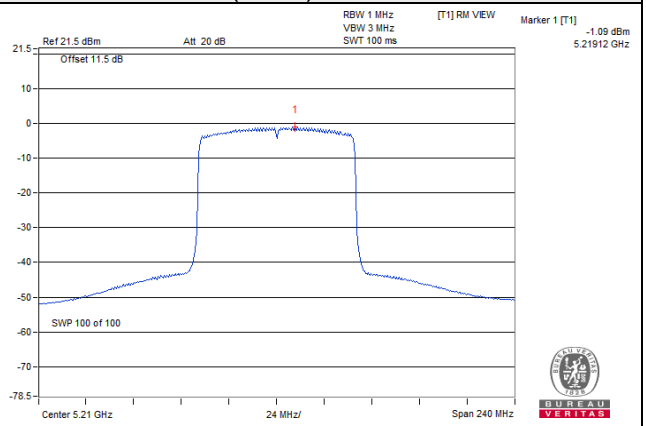
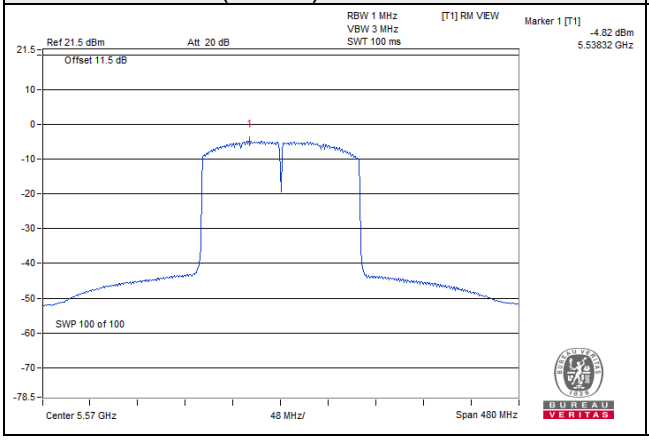
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	-1.09	-1.53	-1.14	-1.67	0.79	5.46	16.98	Pass
58	5290	-1.94	-1.96	-2.11	-2.28	0.79	4.74	10.89	Pass
106	5530	-1.68	-1.84	-1.87	-1.95	0.79	4.98	10.85	Pass
122	5610	-1.77	-1.79	-1.53	-1.95	0.79	5.05	10.85	Pass
138	5690 (For U-NII-2C)	-1.79	-2.08	-2.62	-1.78	0.79	4.76	10.85	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. Directional gain is declared by client.
3. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.02-6) = 16.98dBm.
4. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
5. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.15-6) = 10.85dBm.
6. Refer to section 3.3 for duty cycle spectrum plot.

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				
50 (U-NII-1)	5250	-6.49	-6.73	-6.89	-6.52	0.40	-0.23	16.98	Pass
50 (U-NII-2A)	5250	-6.21	-6.64	-6.40	-6.34	0.40	0.03	10.89	Pass
114	5570	-4.82	-5.70	-5.52	-5.56	0.40	1.03	10.85	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. Directional gain is declared by client.
3. For U-NII-1, The directional gain is 6.02 dBi > 6dBi, so the power density limit shall be reduced to 17-(6.02-6) = 16.98dBm.
4. For U-NII-2A, The directional gain is 6.11 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.11-6) = 10.89dBm.
5. For U-NII-2C, The directional gain is 6.15 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.15-6) = 10.85dBm.
6. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 3 / CH 40	802.11ax (HE20) / Chain 0 / CH 40
	
802.11ax (HE40) / Chain 0 / CH 46	802.11ax (HE80) / Chain 0 / CH 42
	
802.11ax (HE160) / Chain 0 / CH 114	
	

For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	144	5720 (For U-NII-3)	-3.48	-1.26	6.02	0.27	5.03	29.8	Pass
	149	5745	1.85	4.07	6.02	0.27	10.36	29.8	Pass
	157	5785	1.97	4.19	6.02	0.27	10.48	29.8	Pass
	165	5825	2.17	4.39	6.02	0.27	10.68	29.8	Pass
1	144	5720 (For U-NII-3)	-4.38	-2.16	6.02	0.27	4.13	29.8	Pass
	149	5745	1.25	3.47	6.02	0.27	9.76	29.8	Pass
	157	5785	1.49	3.71	6.02	0.27	10.00	29.8	Pass
	165	5825	1.47	3.69	6.02	0.27	9.98	29.8	Pass
2	144	5720 (For U-NII-3)	-3.91	-1.69	6.02	0.27	4.60	29.8	Pass
	149	5745	1.28	3.5	6.02	0.27	9.79	29.8	Pass
	157	5785	1.49	3.71	6.02	0.27	10.00	29.8	Pass
	165	5825	1.47	3.69	6.02	0.27	9.98	29.8	Pass
3	144	5720 (For U-NII-3)	-3.88	-1.66	6.02	0.27	4.63	29.8	Pass
	149	5745	1.39	3.61	6.02	0.27	9.90	29.8	Pass
	157	5785	1.38	3.6	6.02	0.27	9.89	29.8	Pass
	165	5825	1.73	3.95	6.02	0.27	10.24	29.8	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. Directional gain is declared by client.
3. For U-NII-3, The directional gain is 6.20dBi > 6dBi, so the power density limit shall be reduced to 30-(6.20-6) = 29.8dBm.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	144	5720 (For U-NII-3)	-9.01	-6.79	6.02	0.76	-0.01	29.8	Pass
	149	5745	-4.79	-2.57	6.02	0.76	4.21	29.8	Pass
	157	5785	-4.07	-1.85	6.02	0.76	4.93	29.8	Pass
	165	5825	-4.62	-2.40	6.02	0.76	4.38	29.8	Pass
1	144	5720 (For U-NII-3)	-10.65	-8.43	6.02	0.76	-1.65	29.8	Pass
	149	5745	-3.51	-1.29	6.02	0.76	5.49	29.8	Pass
	157	5785	-4.18	-1.96	6.02	0.76	4.82	29.8	Pass
	165	5825	-4.87	-2.65	6.02	0.76	4.13	29.8	Pass
2	144	5720 (For U-NII-3)	-10.45	-8.23	6.02	0.76	-1.45	29.8	Pass
	149	5745	-4.54	-2.32	6.02	0.76	4.46	29.8	Pass
	157	5785	-5.24	-3.02	6.02	0.76	3.76	29.8	Pass
	165	5825	-5.10	-2.88	6.02	0.76	3.90	29.8	Pass
3	144	5720 (For U-NII-3)	-10.37	-8.15	6.02	0.76	-1.37	29.8	Pass
	149	5745	-5.49	-3.27	6.02	0.76	3.51	29.8	Pass
	157	5785	-5.08	-2.86	6.02	0.76	3.92	29.8	Pass
	165	5825	-5.49	-3.27	6.02	0.76	3.51	29.8	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. Directional gain is declared by client.
3. For U-NII-3, The directional gain is 6.20dBi > 6dBi, so the power density limit shall be reduced to 30-(6.20-6) = 29.8dBm.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	142	5710 (For U-NII-3)	-15.56	-13.34	6.02	0.72	-6.60	29.8	Pass
	151	5755	-6.69	-4.47	6.02	0.72	2.27	29.8	Pass
	159	5795	-7.14	-4.92	6.02	0.72	1.82	29.8	Pass
1	142	5710 (For U-NII-3)	-15.58	-13.36	6.02	0.72	-6.62	29.8	Pass
	151	5755	-7.51	-5.29	6.02	0.72	1.45	29.8	Pass
	159	5795	-7.64	-5.42	6.02	0.72	1.32	29.8	Pass
2	142	5710 (For U-NII-3)	-15.44	-13.22	6.02	0.72	-6.48	29.8	Pass
	151	5755	-7.59	-5.37	6.02	0.72	1.37	29.8	Pass
	159	5795	-8.21	-5.99	6.02	0.72	0.75	29.8	Pass
3	142	5710 (For U-NII-3)	-15.40	-13.18	6.02	0.72	-6.44	29.8	Pass
	151	5755	-7.30	-5.08	6.02	0.72	1.66	29.8	Pass
	159	5795	-7.77	-5.55	6.02	0.72	1.19	29.8	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. Directional gain is declared by client.
3. For U-NII-3, The directional gain is 6.20dBi > 6dBi, so the power density limit shall be reduced to 30-(6.20-6) = 29.8dBm.
4. Refer to section 3.3 for duty cycle spectrum plot.

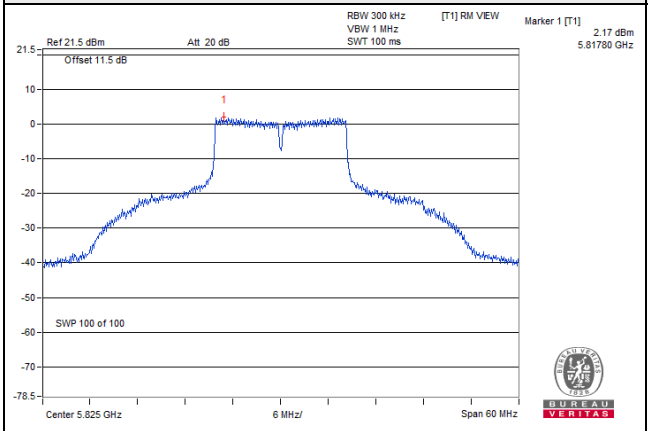
802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	138	5690 (For U-NII-3)	-17.27	-15.05	6.02	0.79	-8.24	29.8	Pass
	155	5775	-13.29	-11.07	6.02	0.79	-4.26	29.8	Pass
1	138	5690 (For U-NII-3)	-18.04	-15.82	6.02	0.79	-9.01	29.8	Pass
	155	5775	-12.93	-10.71	6.02	0.79	-3.90	29.8	Pass
2	138	5690 (For U-NII-3)	-17.63	-15.41	6.02	0.79	-8.60	29.8	Pass
	155	5775	-13.34	-11.12	6.02	0.79	-4.31	29.8	Pass
3	138	5690 (For U-NII-3)	-17.40	-15.18	6.02	0.79	-8.37	29.8	Pass
	155	5775	-13.29	-11.07	6.02	0.79	-4.26	29.8	Pass

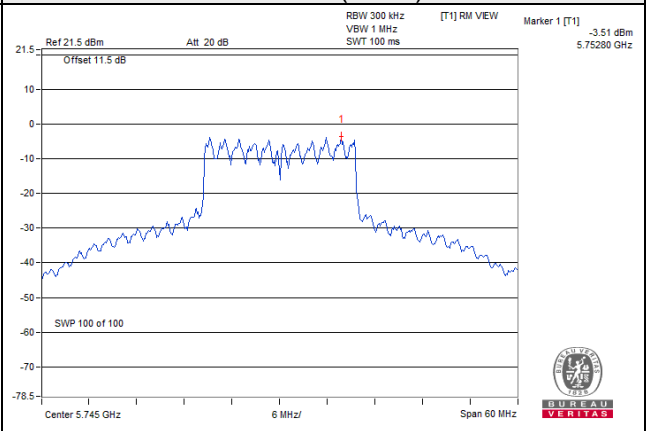
Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain is declared by client.
3. For U-NII-3, The directional gain is 6.20dBi > 6dBi, so the power density limit shall be reduced to 30-(6.20-6) = 29.8dBm.
4. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

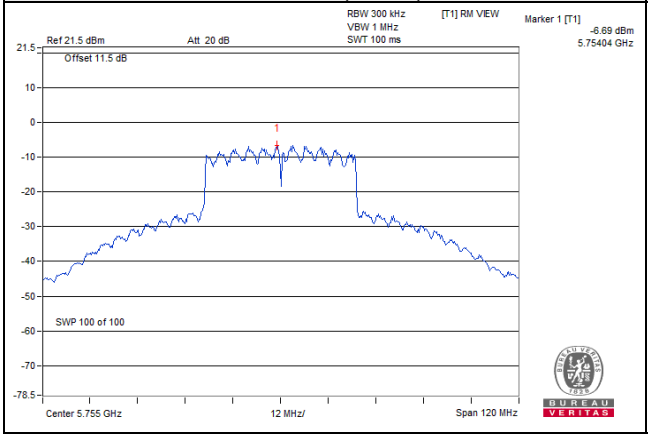
802.11a



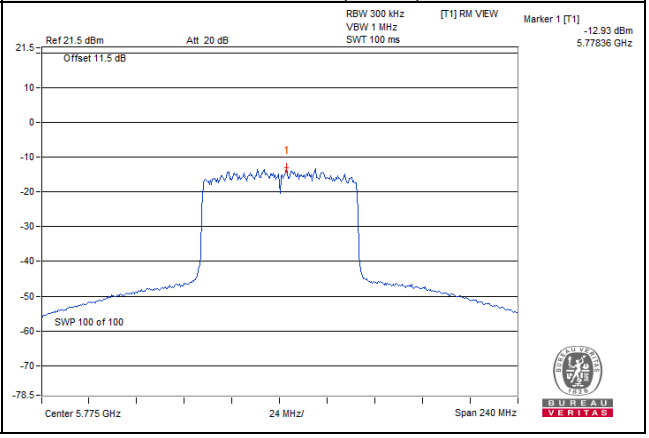
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)

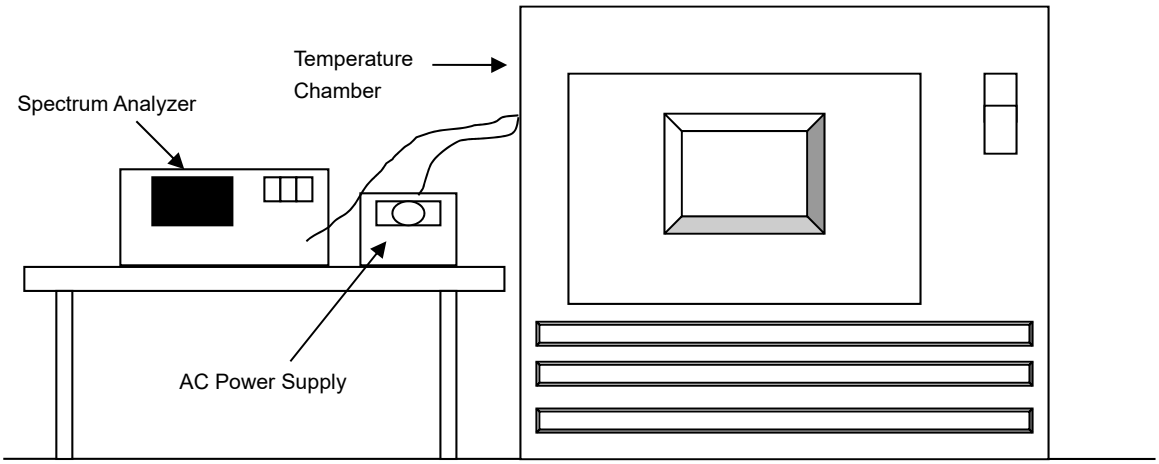


4.6 Frequency Stability

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

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 15, 2021	Sep. 14, 2022
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	May 30, 2022	May 29, 2023
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2022	Jun. 22, 2023
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.
2. Test Date: Jun. 27, 2022

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.

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 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	5179.9793	Pass	5179.9801	Pass	5179.9796	Pass	5179.9792	Pass
30	120	5179.9928	Pass	5179.9924	Pass	5179.9925	Pass	5179.9898	Pass
20	120	5179.9860	Pass	5179.9866	Pass	5179.9836	Pass	5179.9866	Pass
10	120	5179.9796	Pass	5179.9781	Pass	5179.9770	Pass	5179.9784	Pass
0	120	5180.0179	Pass	5180.0162	Pass	5180.0155	Pass	5180.0175	Pass

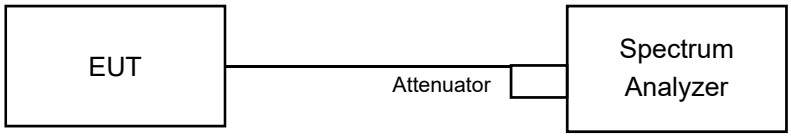
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.9855	Pass	5179.9853	Pass	5179.9869	Pass	5179.9839	Pass
	120	5179.9860	Pass	5179.9866	Pass	5179.9836	Pass	5179.9866	Pass
	102	5179.9941	Pass	5179.9956	Pass	5179.9922	Pass	5179.9952	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	5720 (For U-NII-3)	3.18	3.18	3.18	3.17	0.5	Pass
149	5745	16.38	16.39	16.39	16.39	0.5	Pass
157	5785	16.38	16.38	16.39	16.38	0.5	Pass
165	5825	16.39	16.39	16.38	16.39	0.5	Pass

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

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720 (For U-NII-3)	4.53	4.52	4.50	4.50	0.5	Pass
149	5745	19.03	19.08	19.08	19.07	0.5	Pass
157	5785	19.06	19.04	19.04	19.05	0.5	Pass
165	5825	19.14	19.05	19.09	19.06	0.5	Pass

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

802.11ax (HE40)

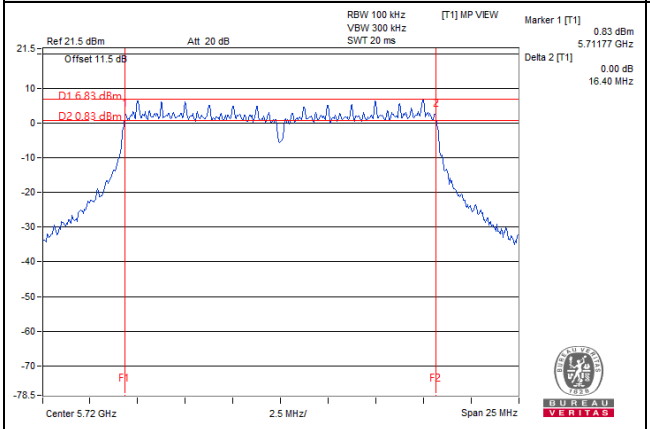
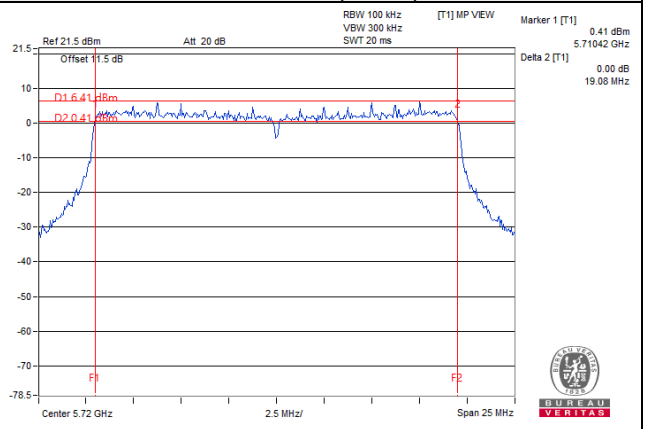
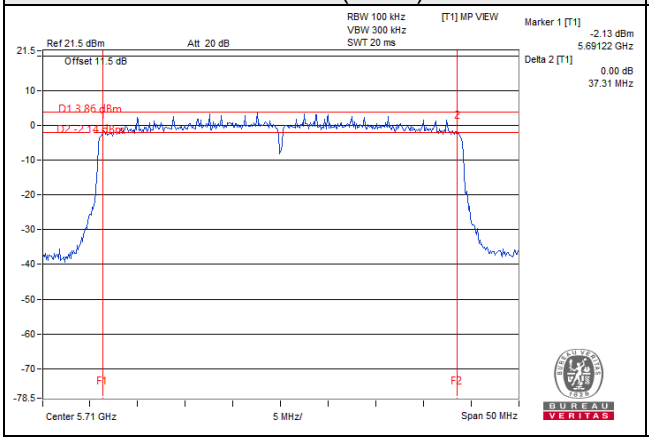
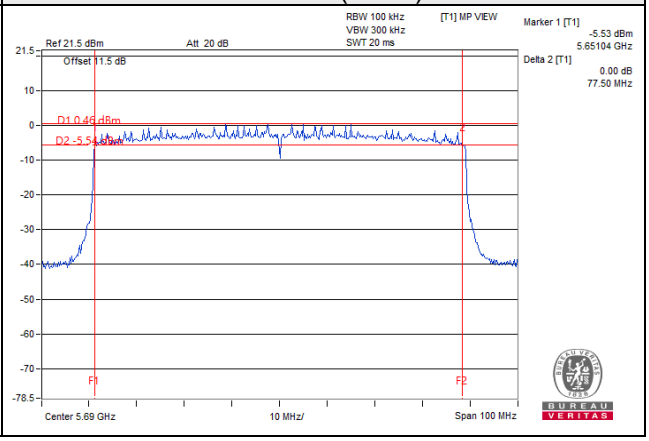
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
142	5710 (For U-NII-3)	4.00	3.73	3.78	3.53	0.5	Pass
151	5755	37.39	37.74	37.38	37.97	0.5	Pass
159	5795	37.29	37.76	37.77	37.51	0.5	Pass

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

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
138	5690 (For U-NII-3)	4.01	4.00	4.02	3.54	0.5	Pass
155	5775	77.18	77.75	77.35	77.29	0.5	Pass

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

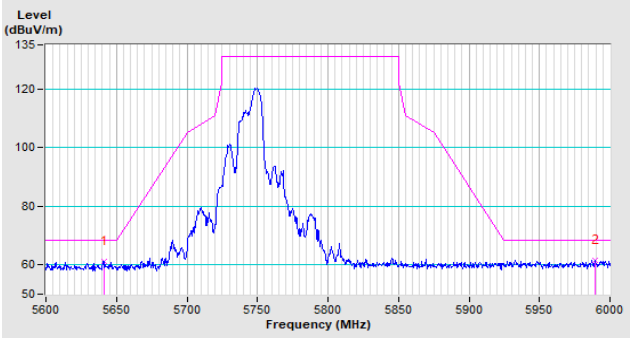
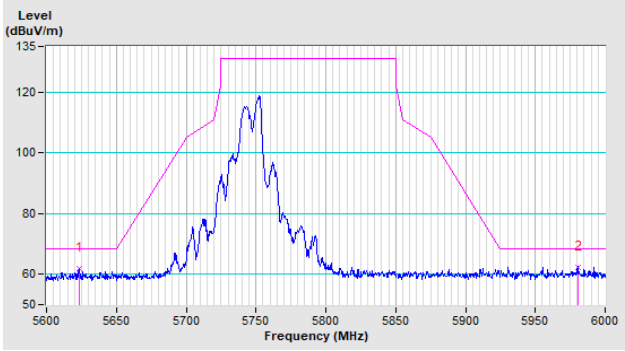
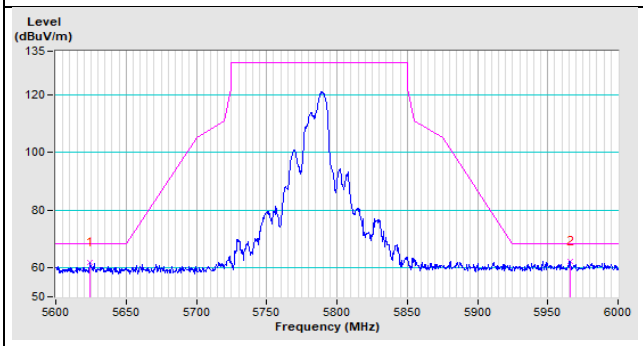
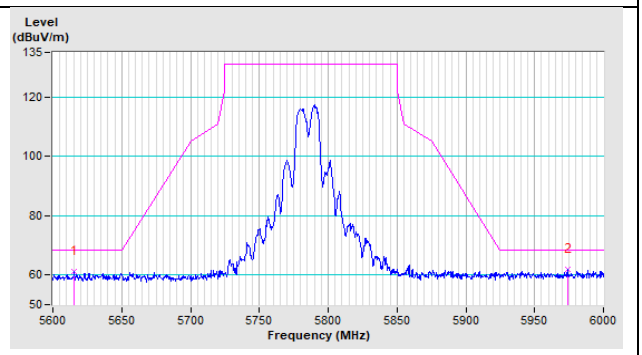
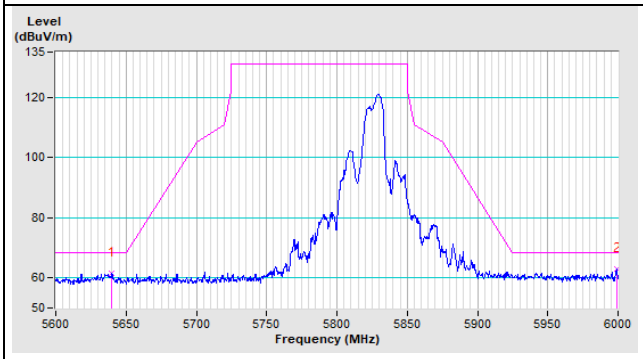
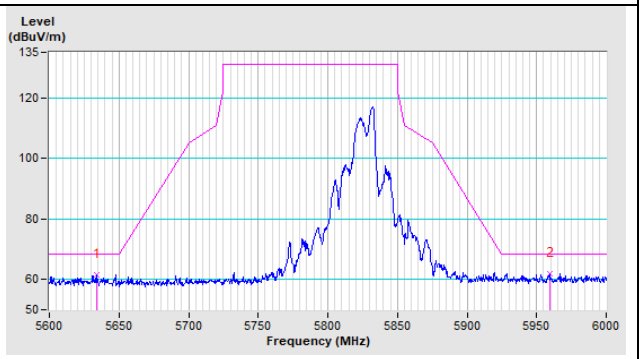
Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

5 Pictures of Test Arrangements

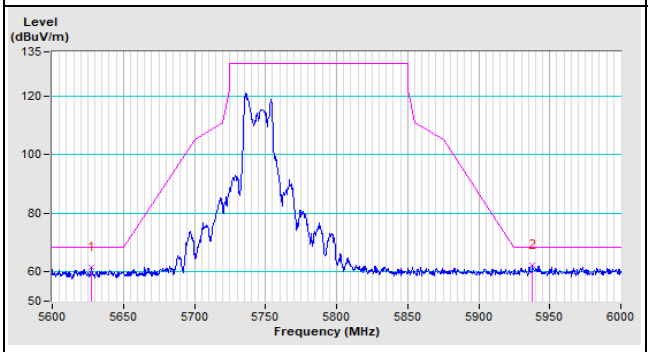
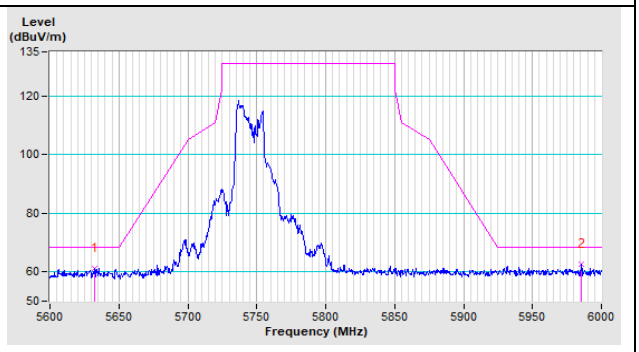
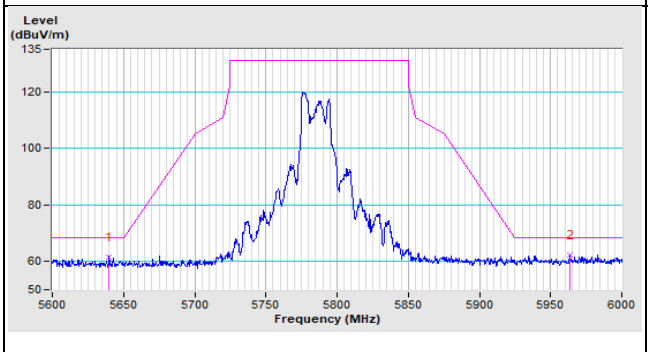
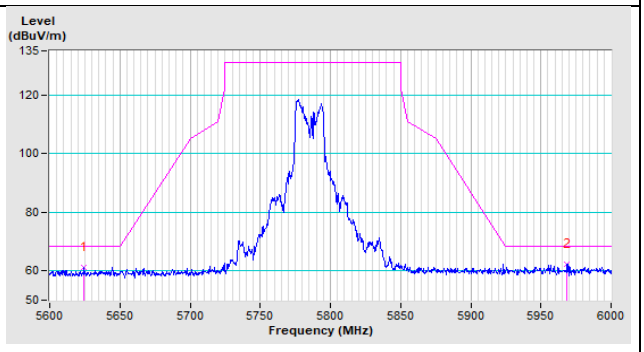
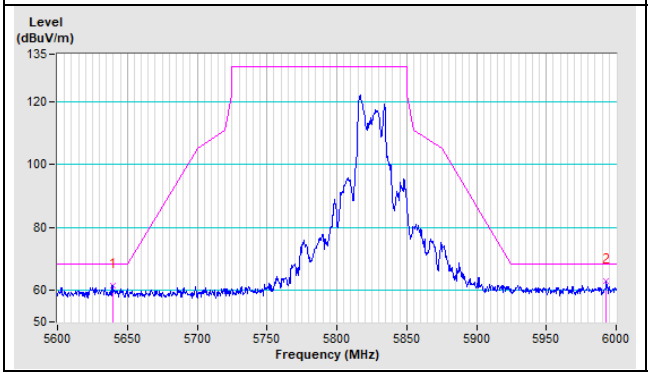
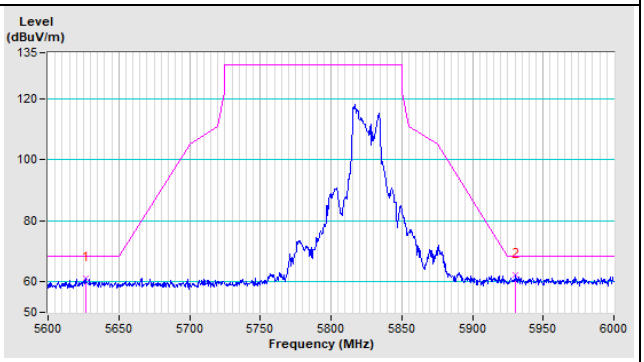
Please refer to the attached file (Test Setup Photo).

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

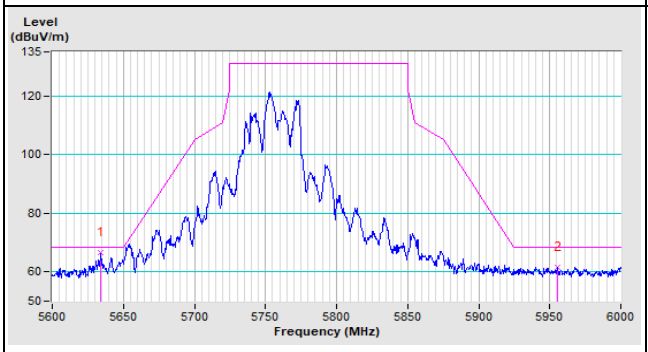
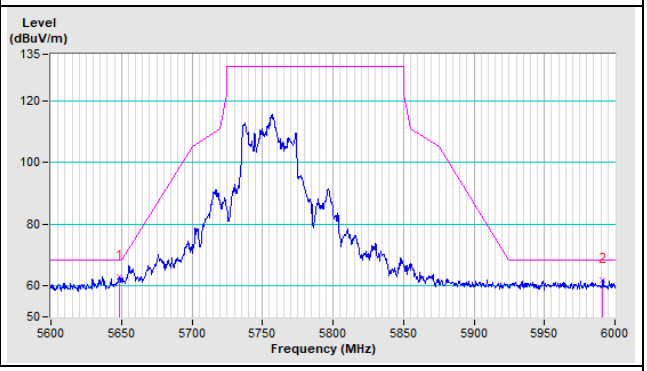
802.11a

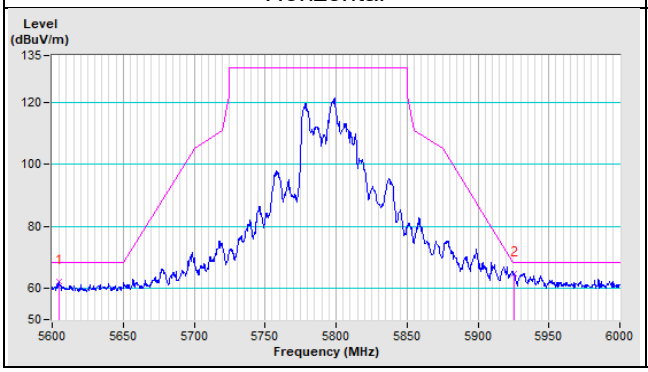
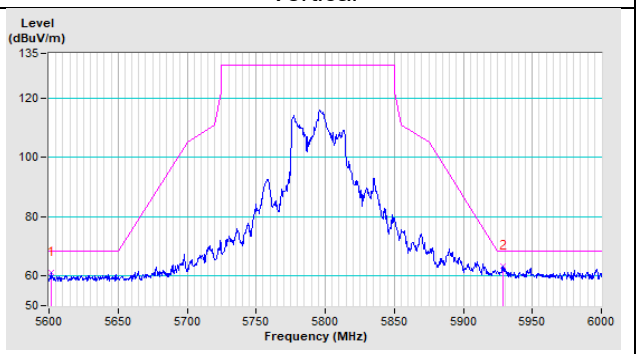
CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11ax (HE20)

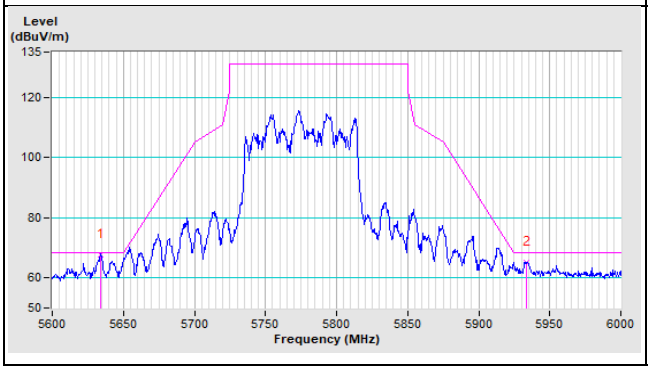
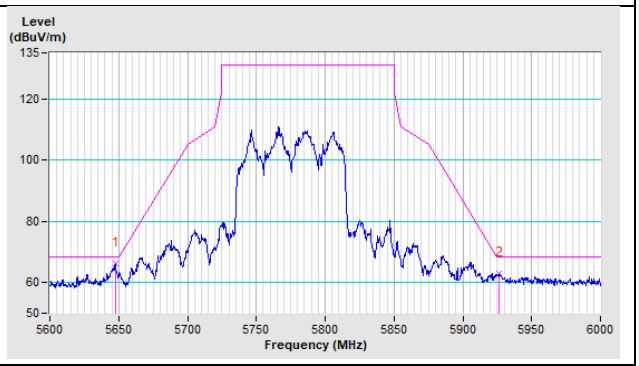
CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11ax (HE40)

CH151	
Horizontal	Vertical
	

CH159	
Horizontal	Vertical
	

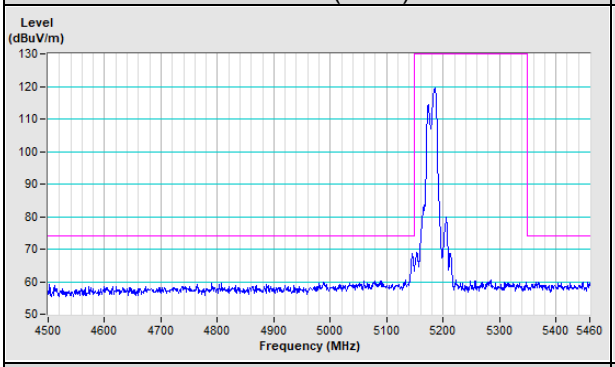
802.11ax (HE80)

CH155	
Horizontal	Vertical
	

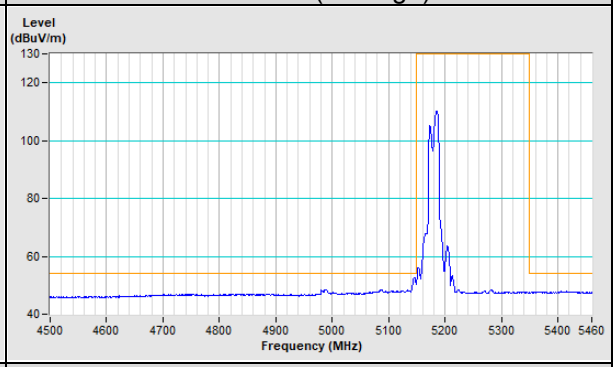
Annex B- Band Edge Measurement

802.11a Channel 36

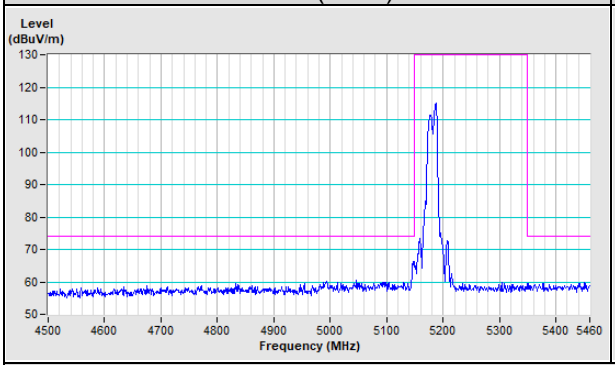
Horizontal (Peak)



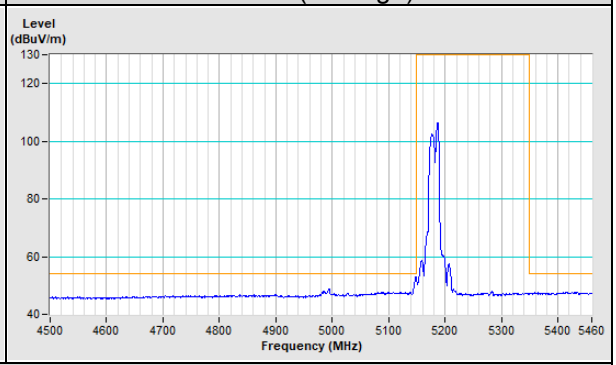
Horizontal (Average)



Vertical (Peak)

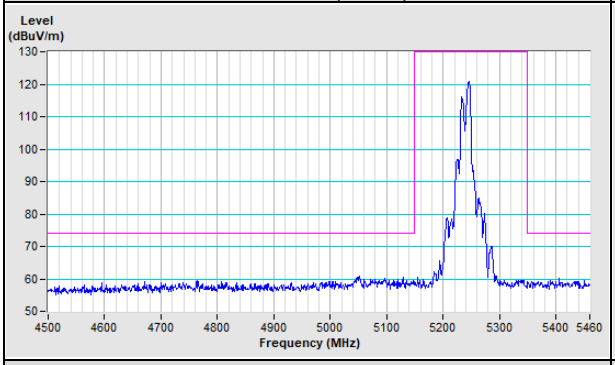


Vertical (Average)

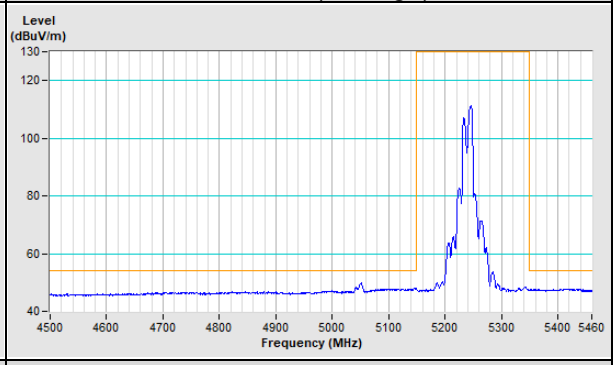


802.11a Channel 48

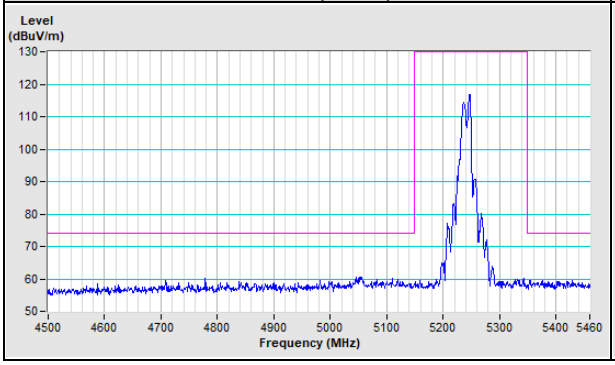
Horizontal (Peak)



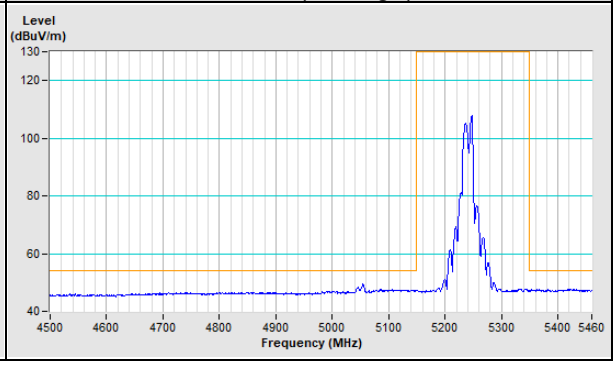
Horizontal (Average)

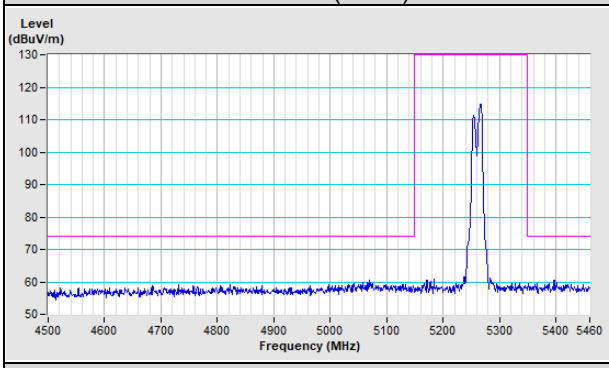
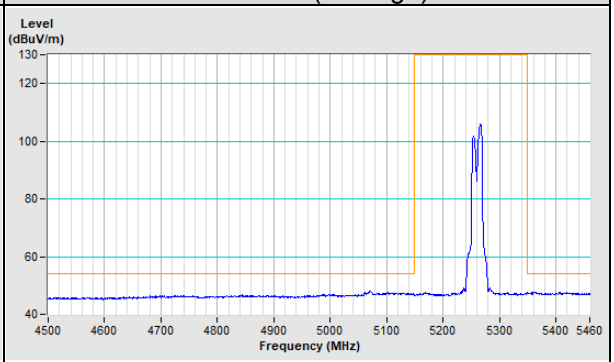
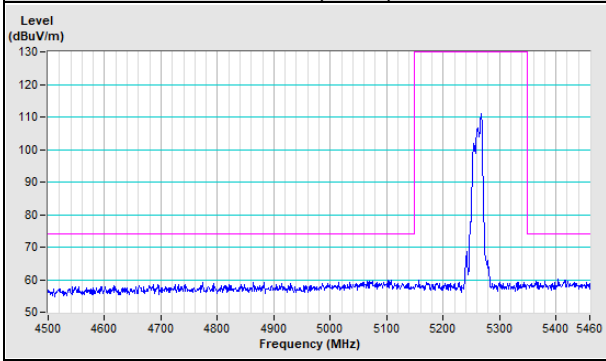
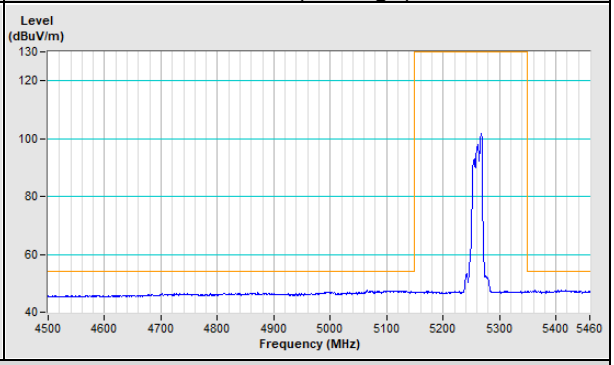
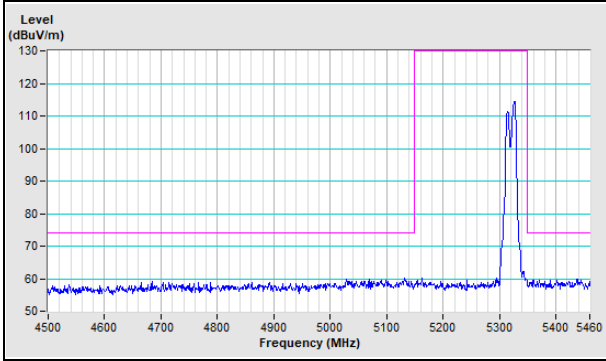
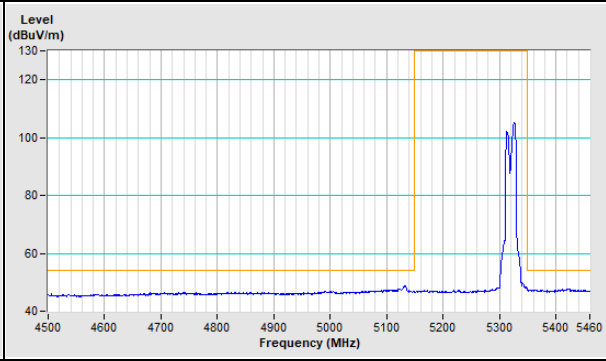
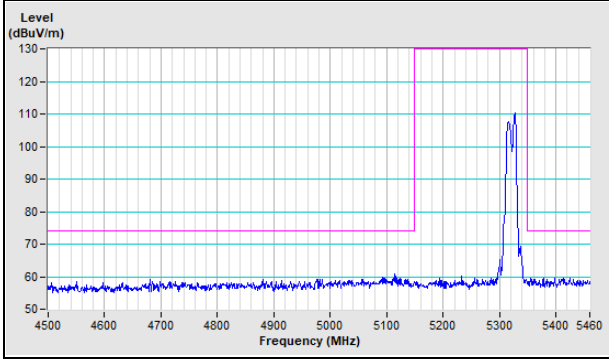
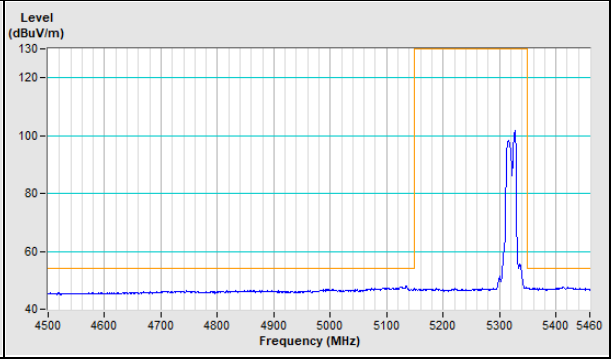


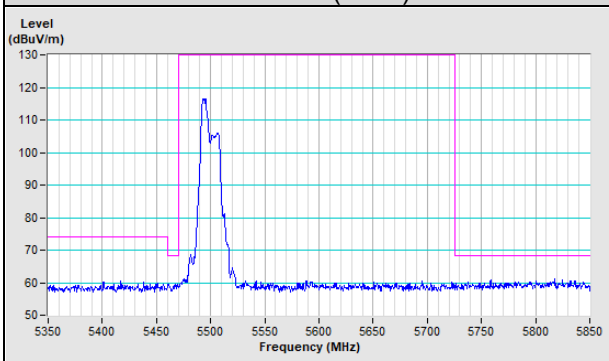
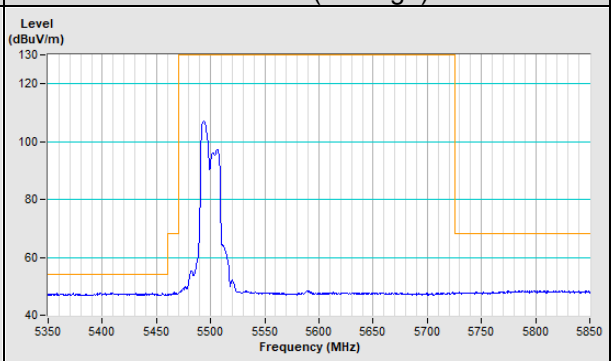
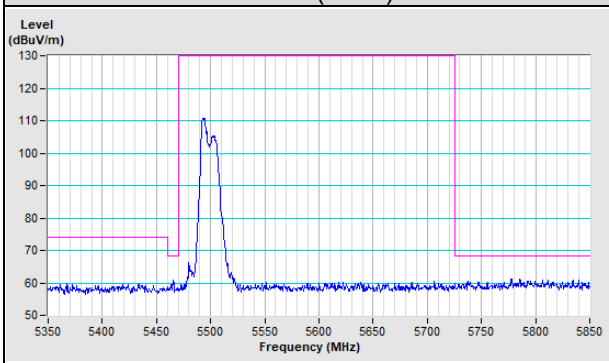
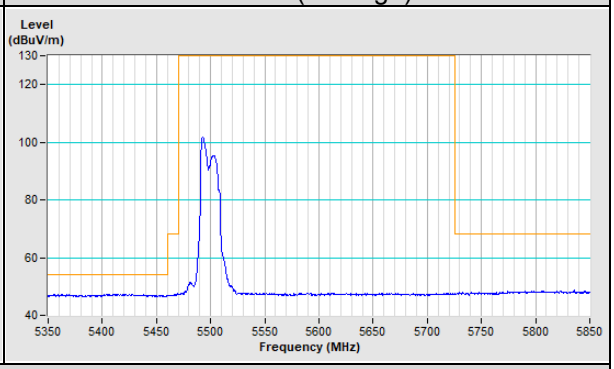
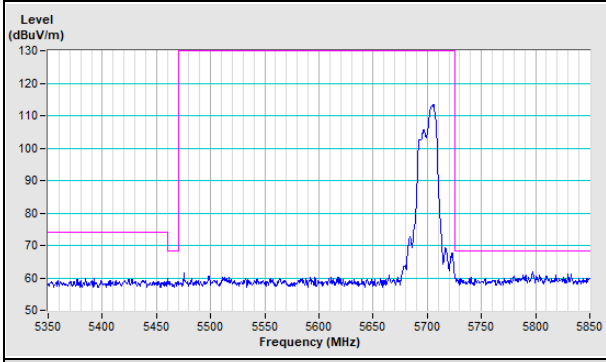
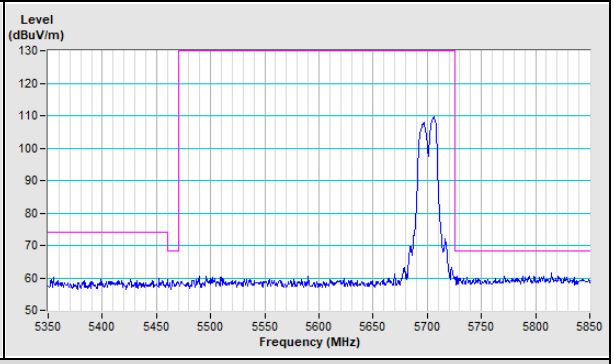
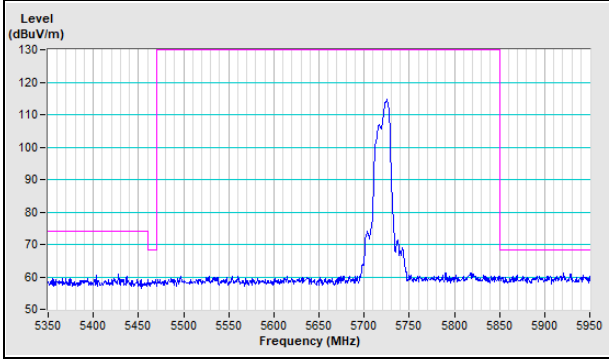
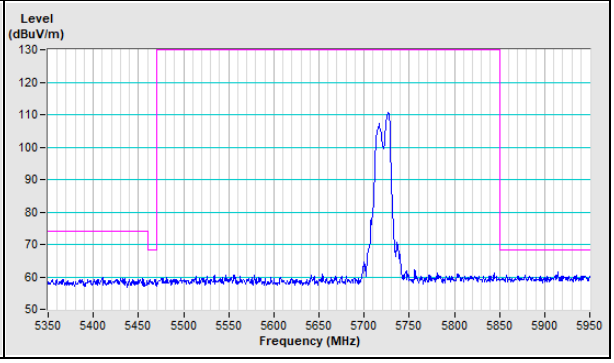
Vertical (Peak)

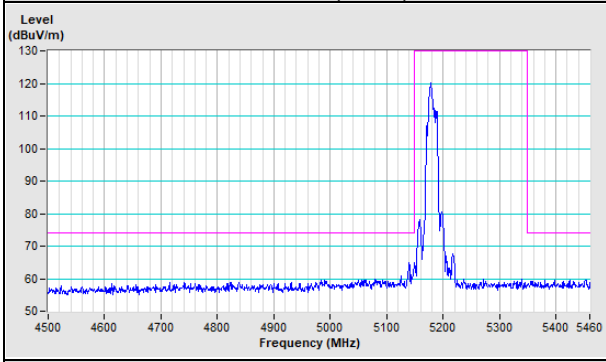
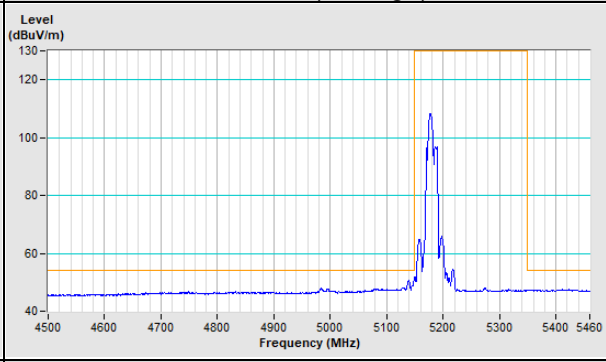
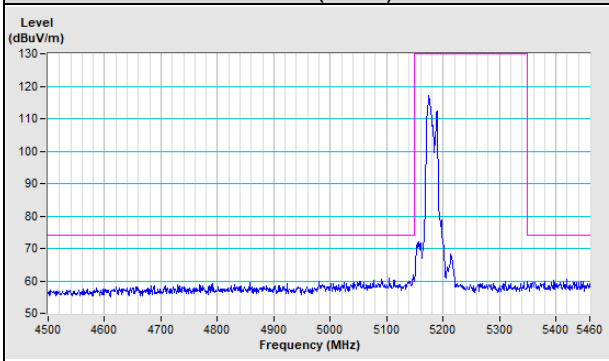
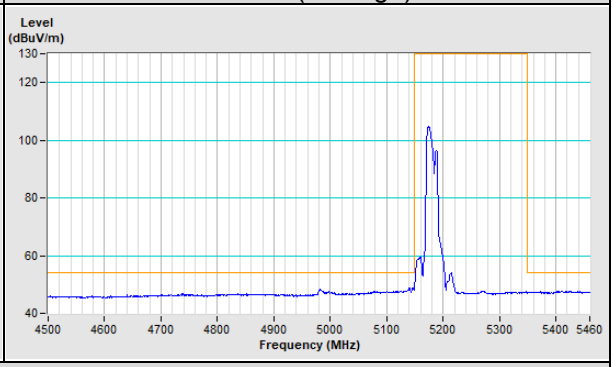
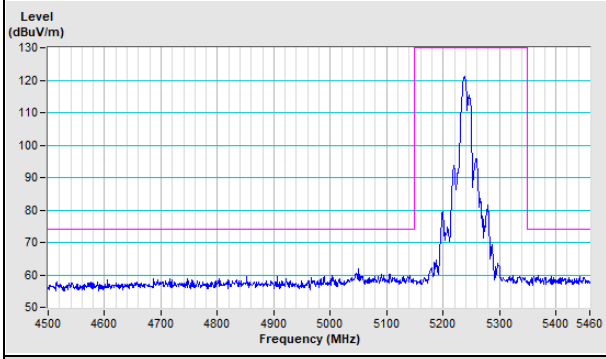
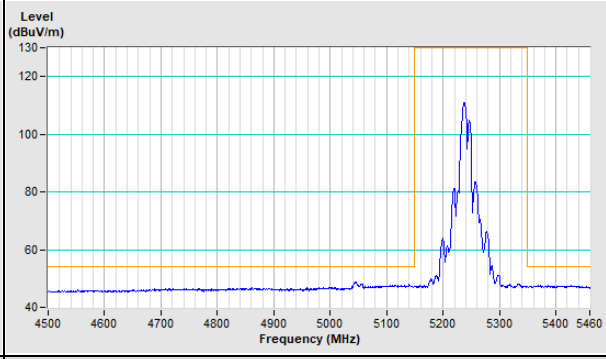
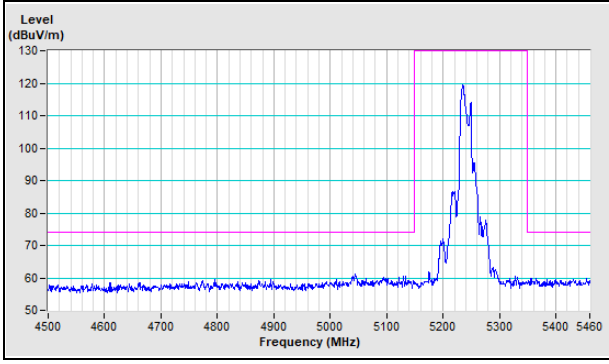
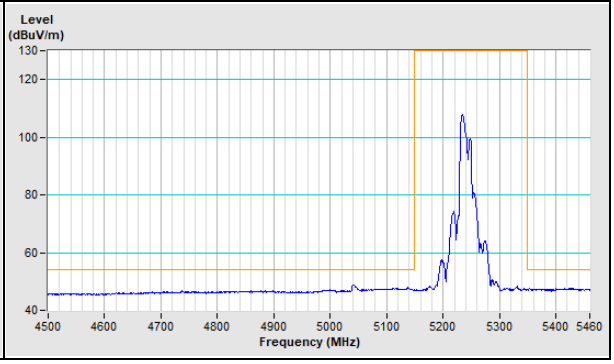


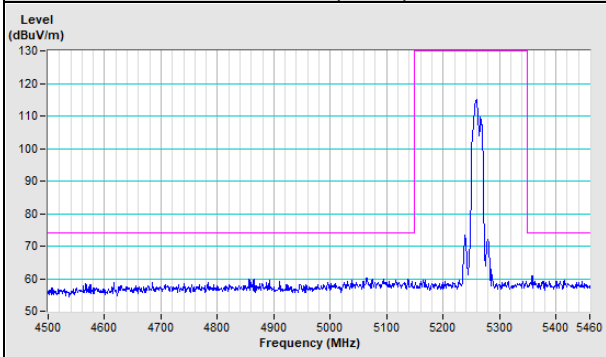
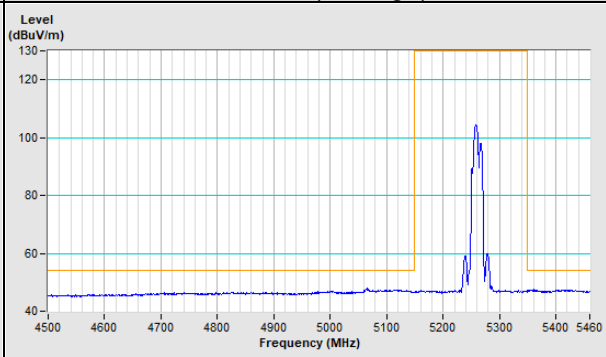
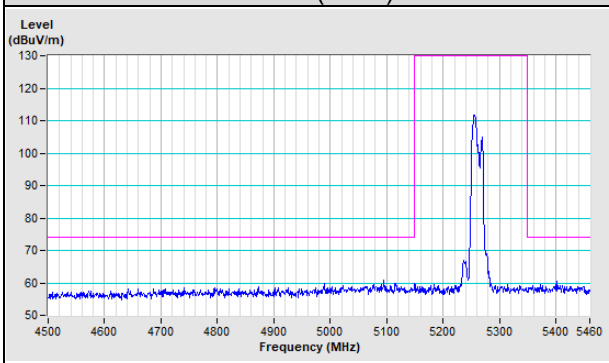
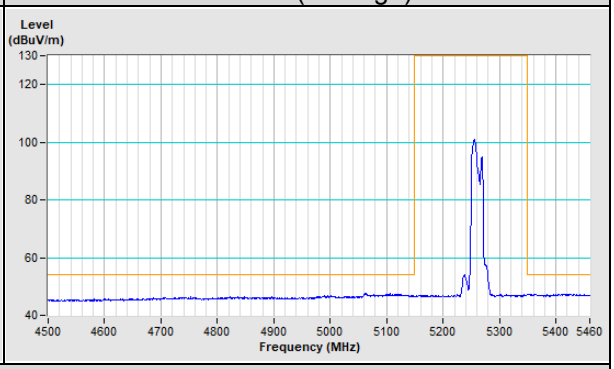
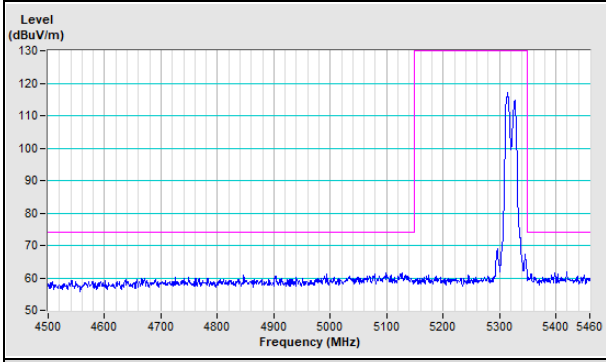
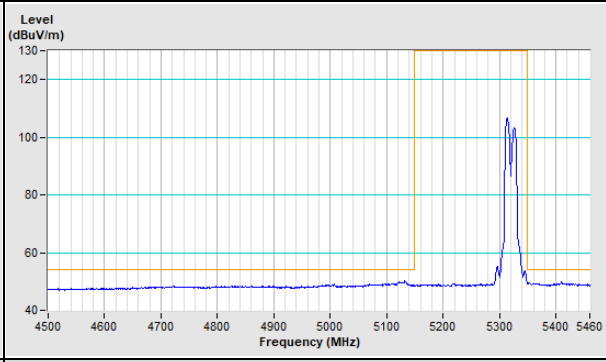
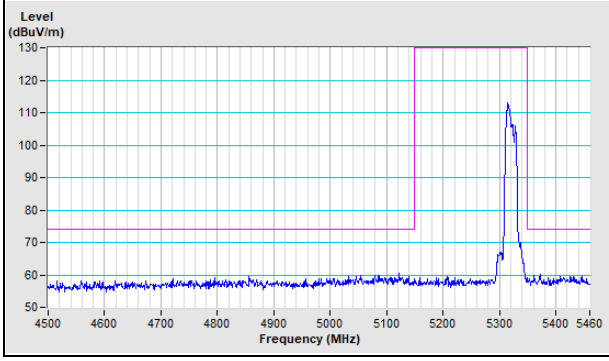
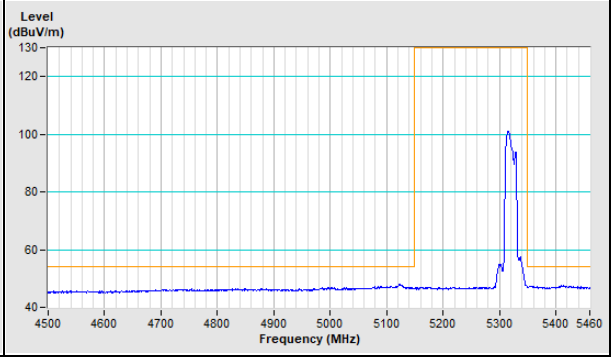
Vertical (Average)

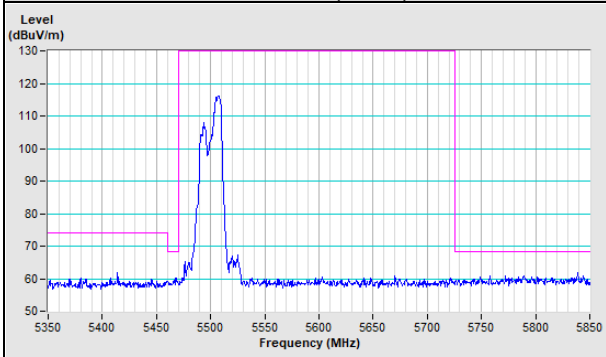
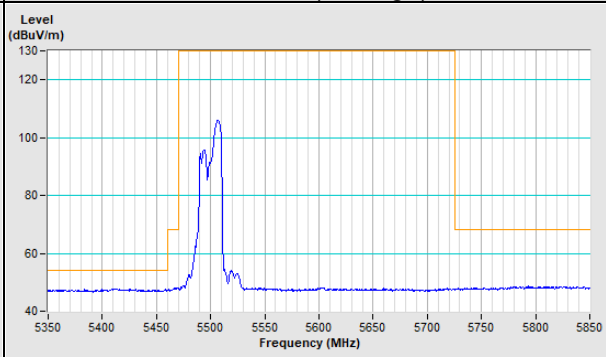
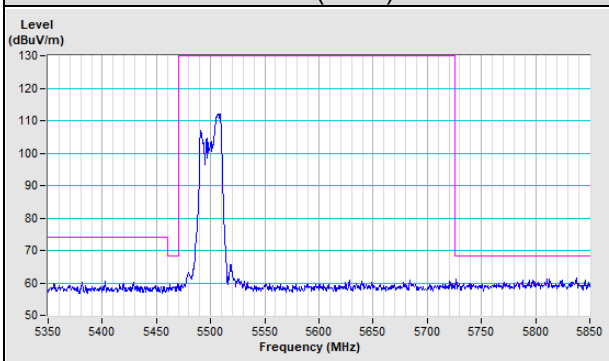
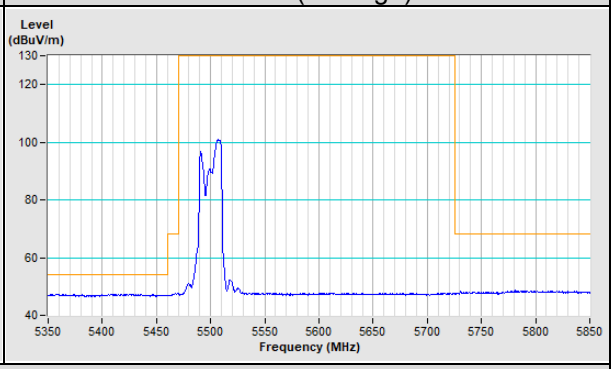
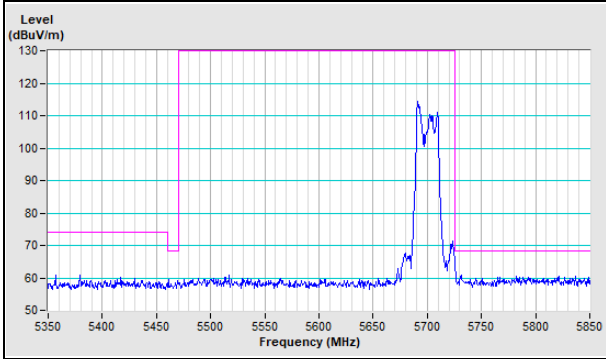
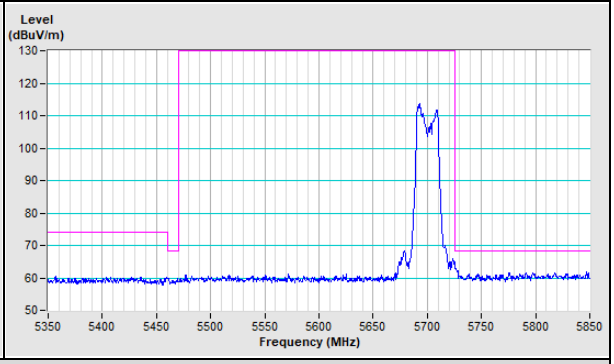
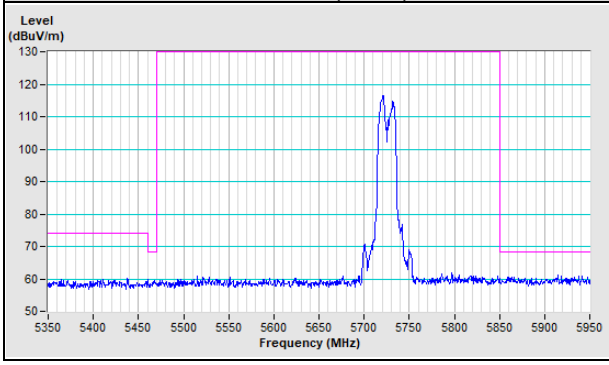
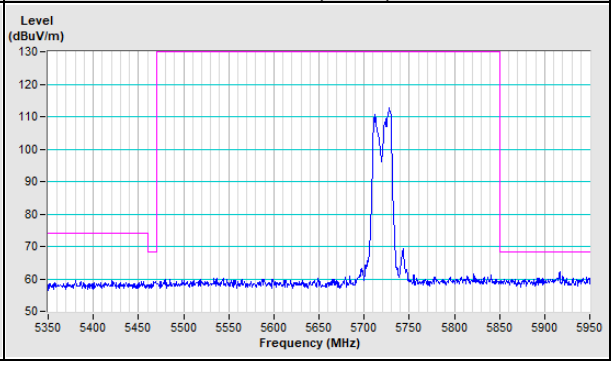


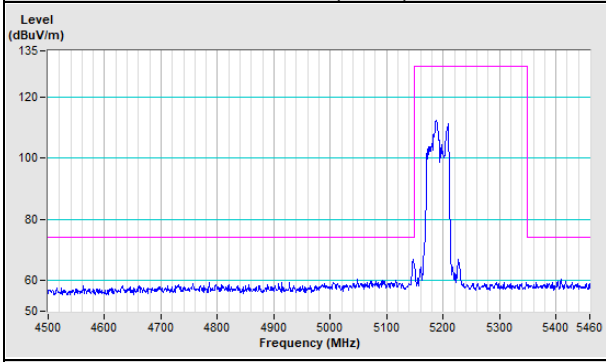
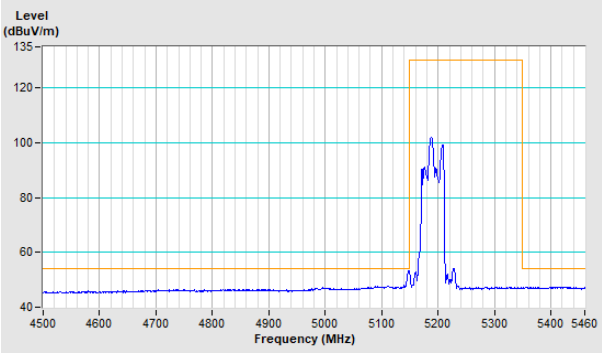
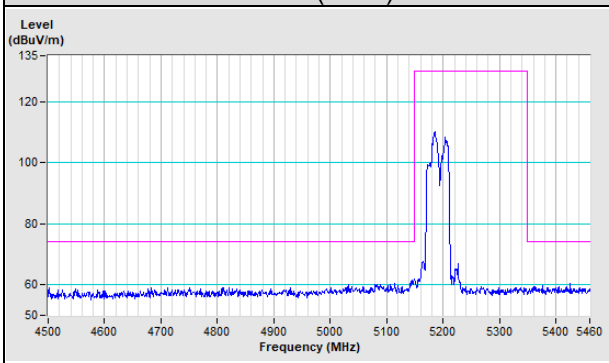
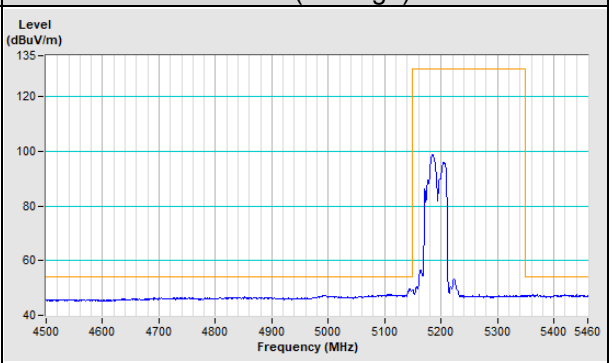
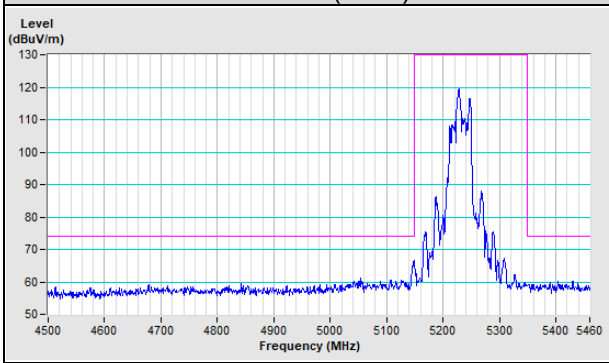
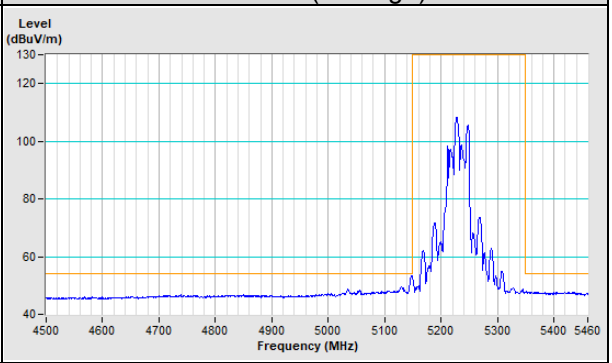
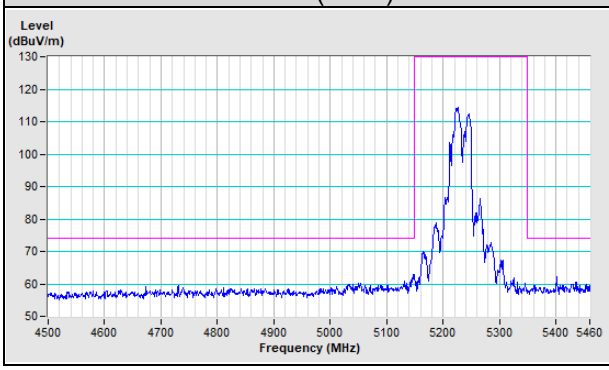
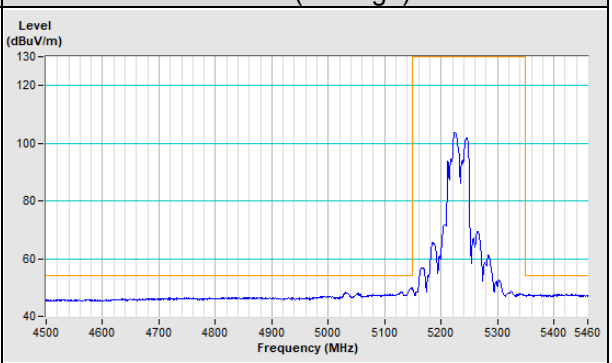
802.11a Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

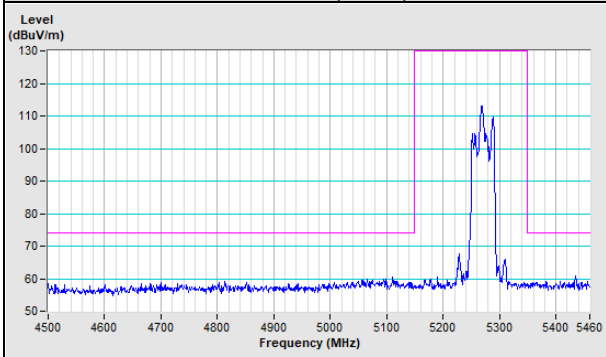
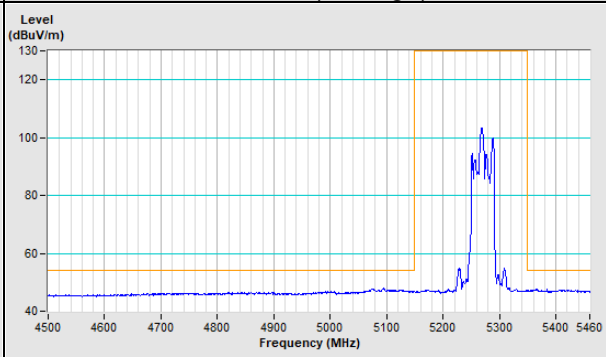
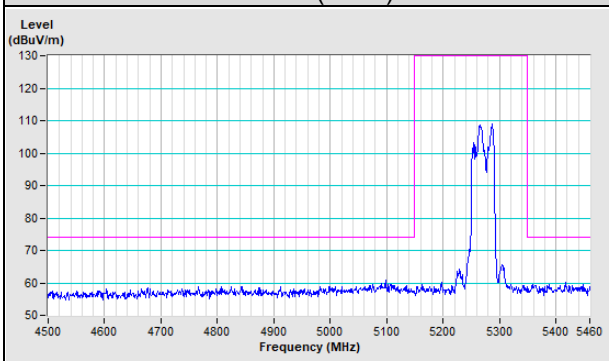
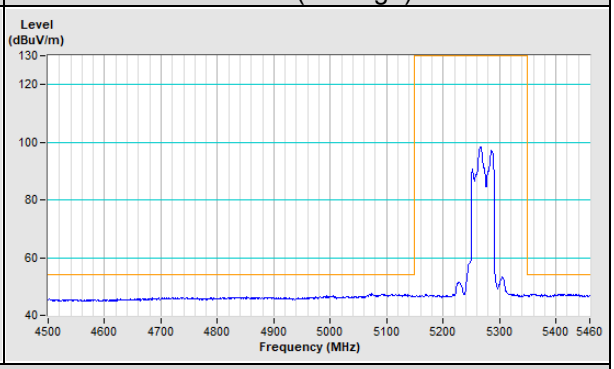
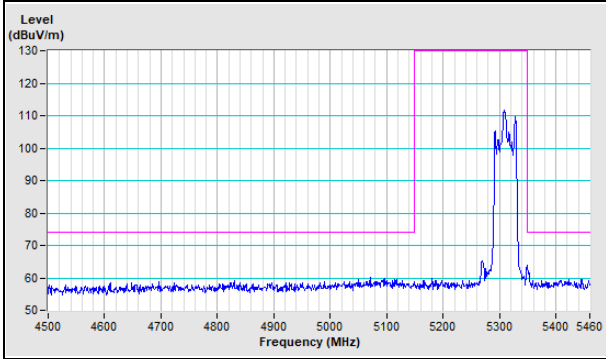
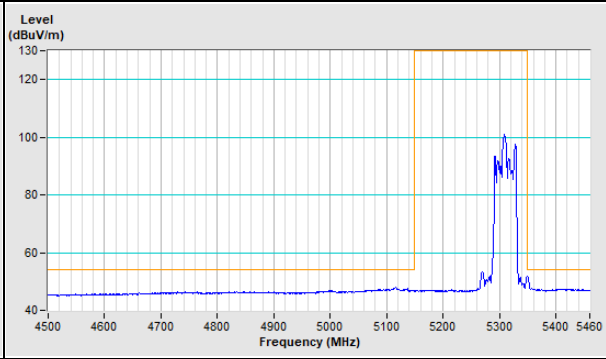
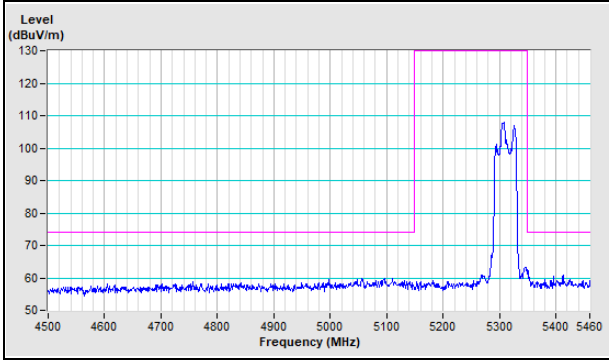
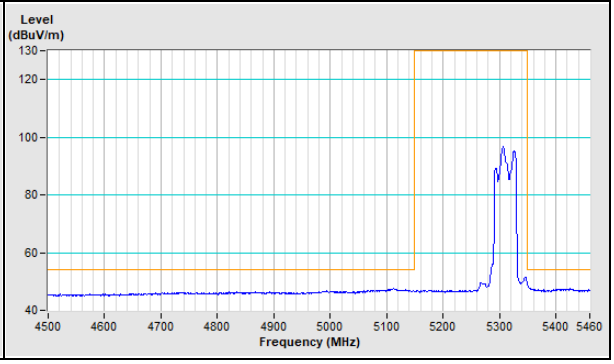
802.11a Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 140	
Horizontal (Peak)	Vertical (Peak)
	
802.11a Channel 144	
Horizontal (Peak)	Vertical (Peak)
	

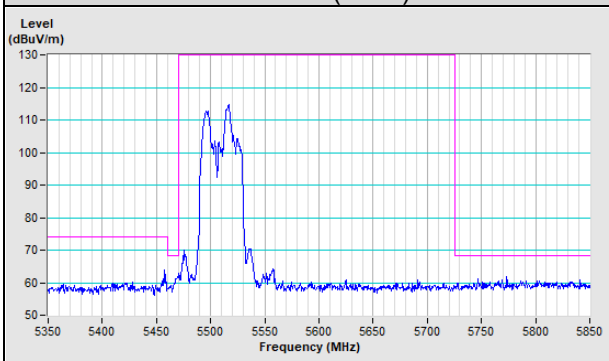
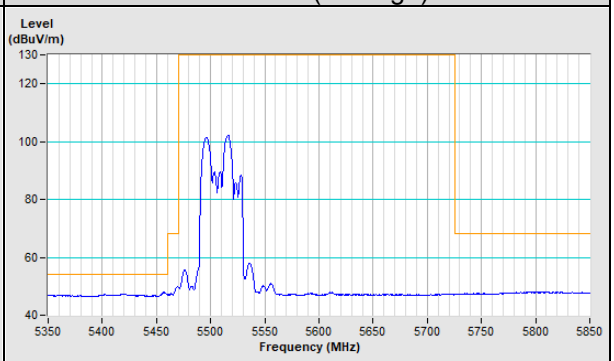
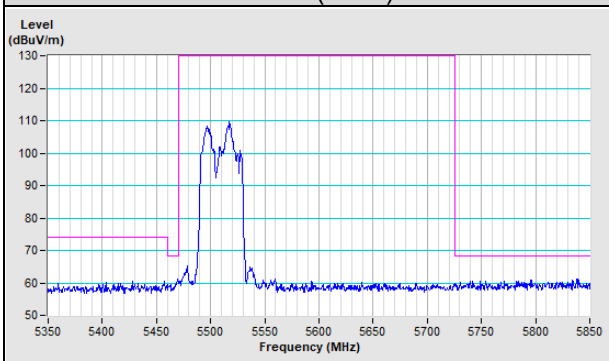
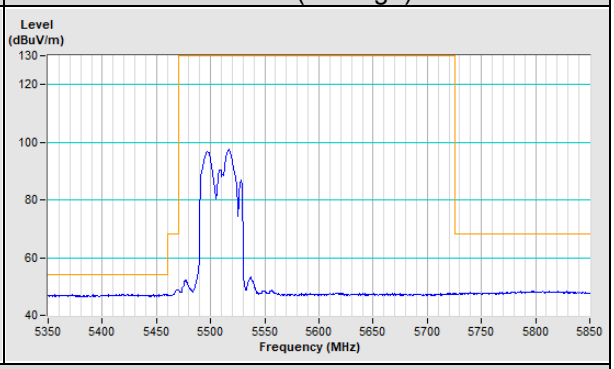
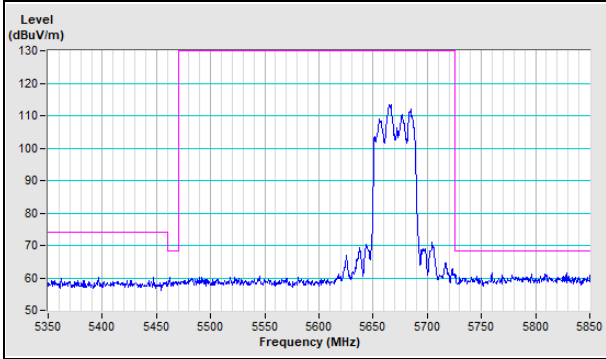
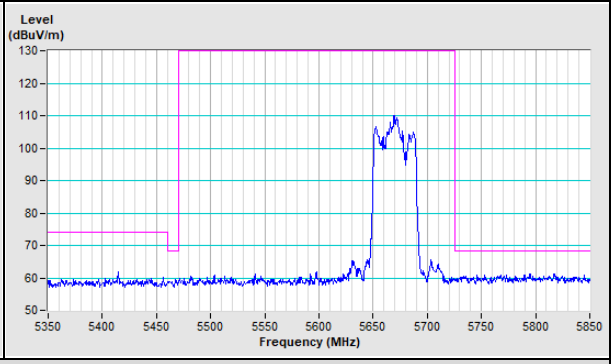
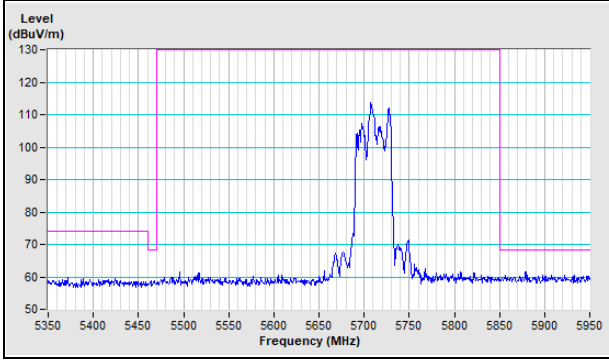
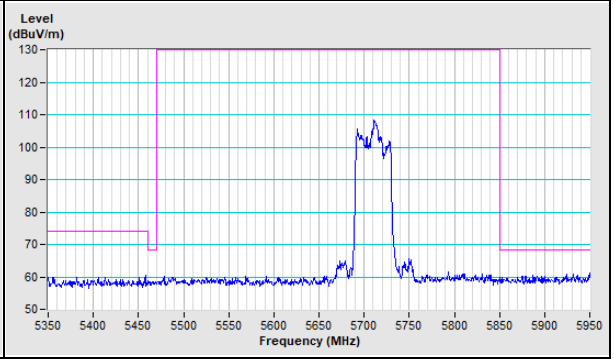
802.11ax (HE20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

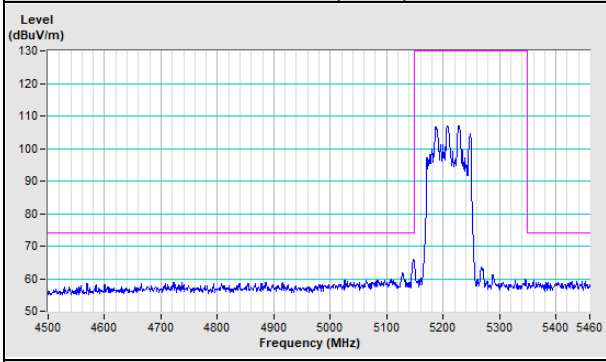
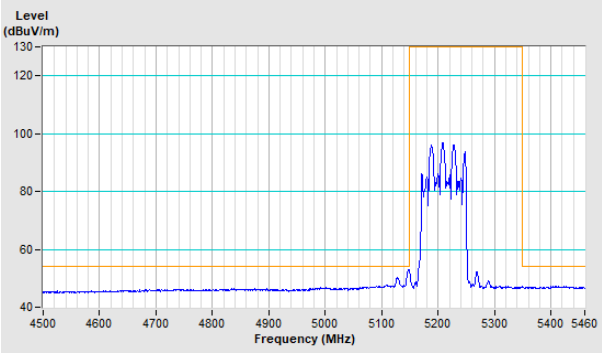
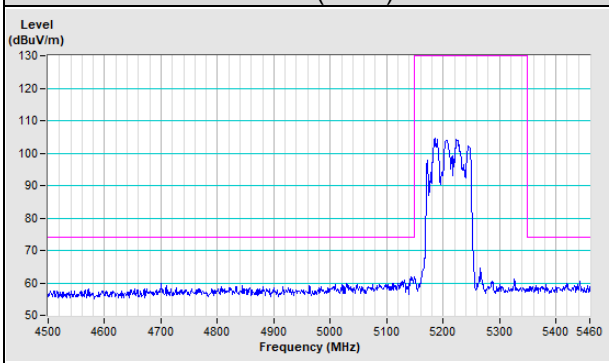
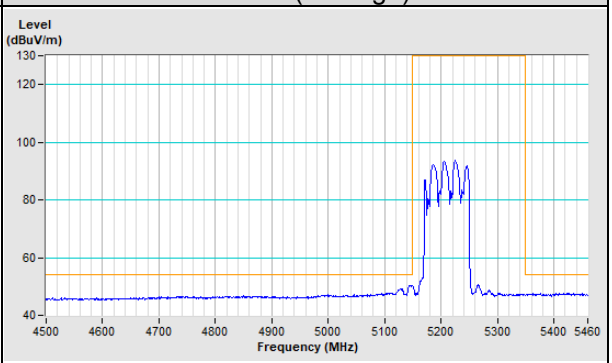
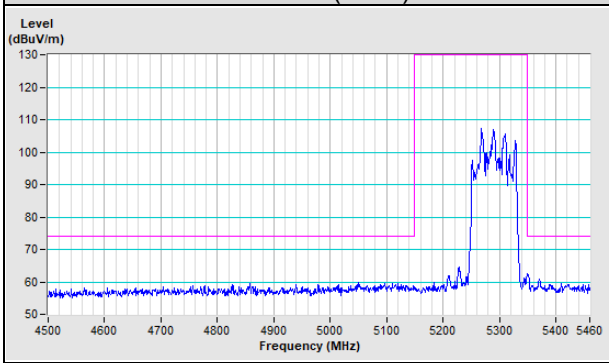
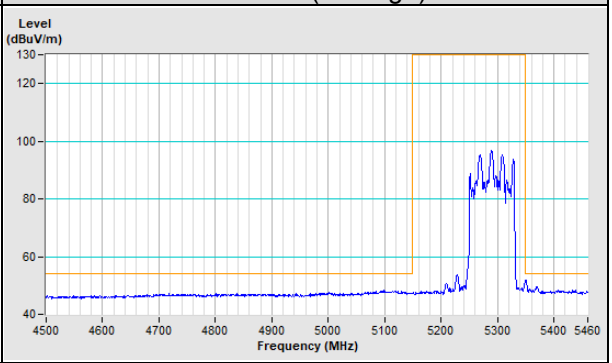
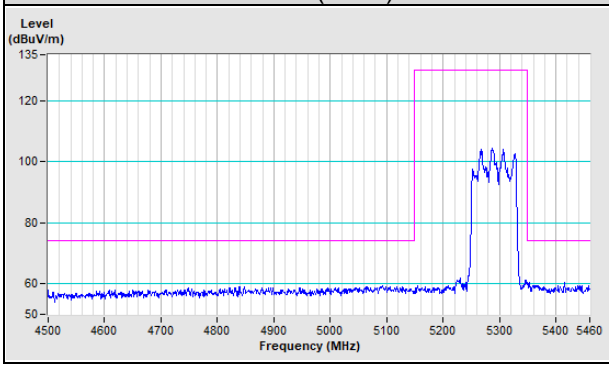
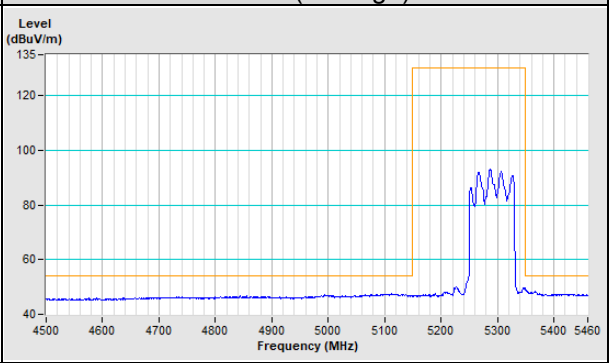
802.11ax (HE20) Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

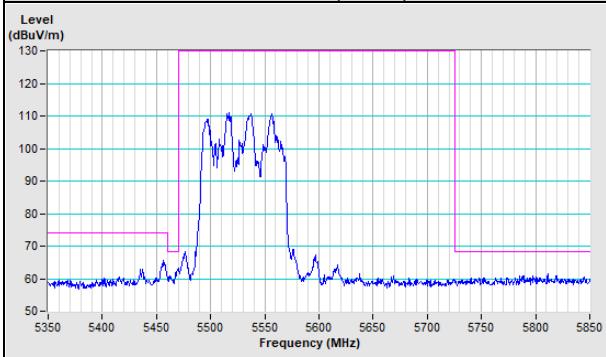
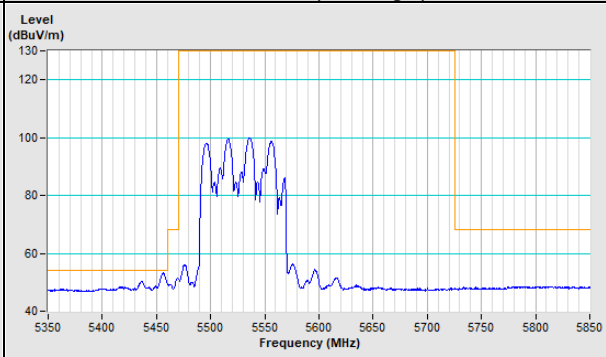
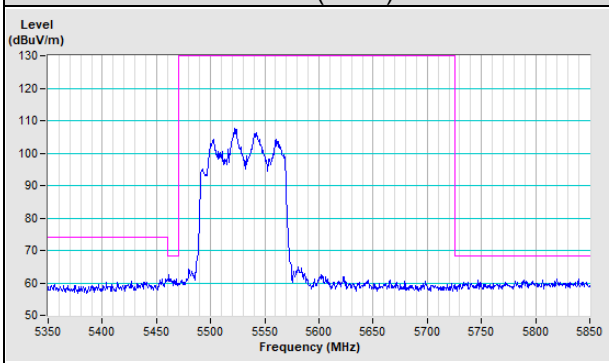
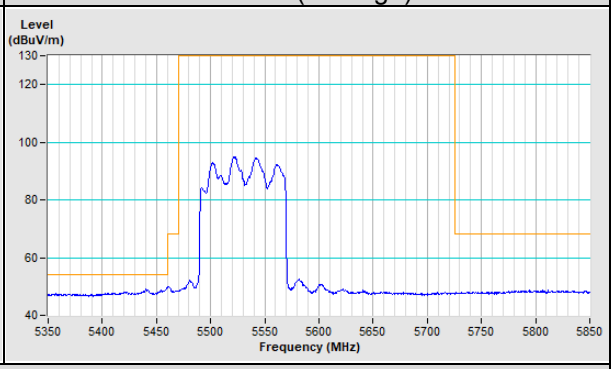
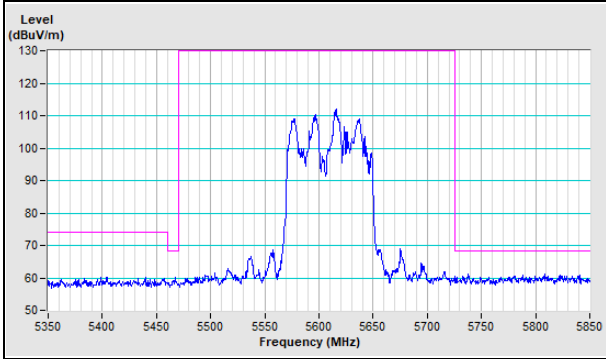
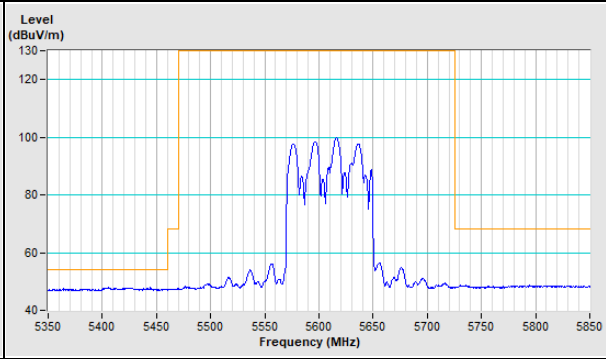
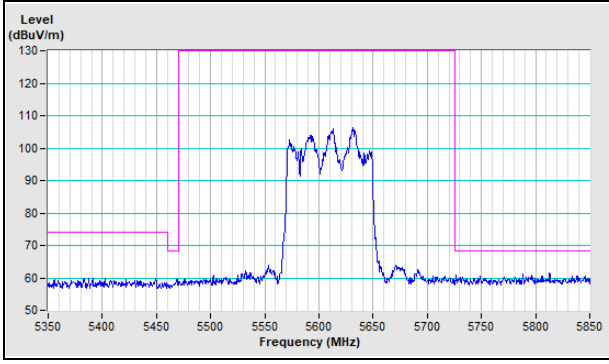
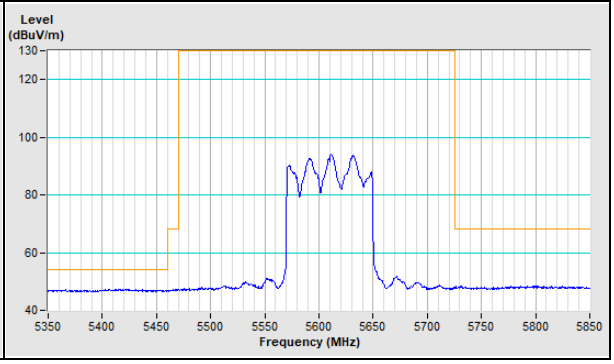
802.11ax (HE20) Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 140	
Horizontal (Peak)	Vertical (Peak)
	
802.11ax (HE20) Channel 144	
Horizontal (Peak)	Vertical (Peak)
	

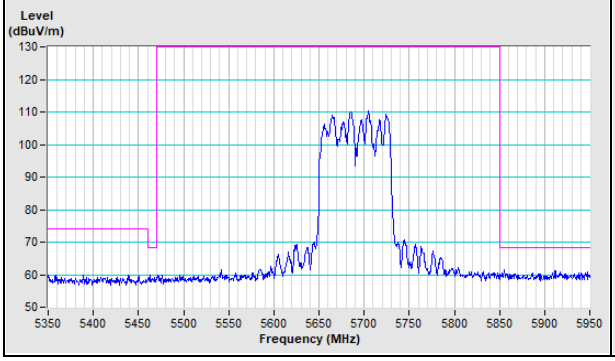
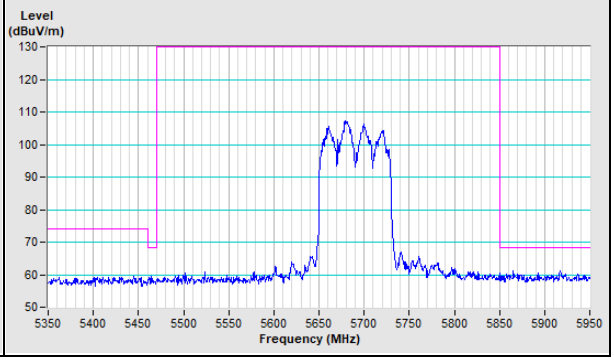
802.11ax (HE40) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE40) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

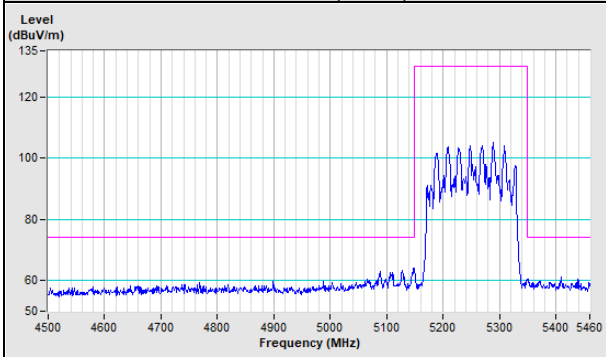
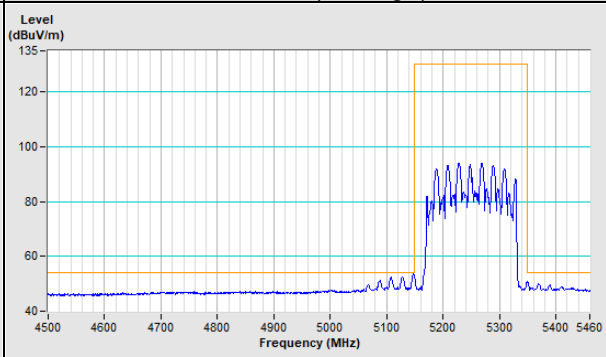
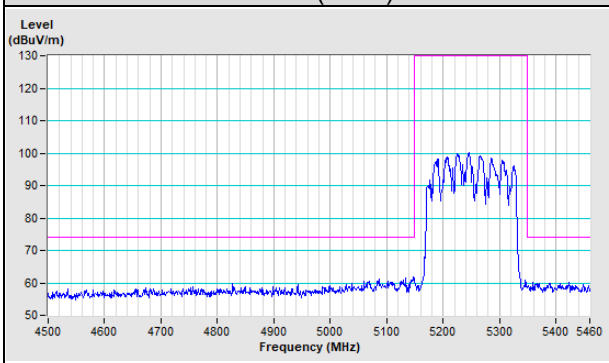
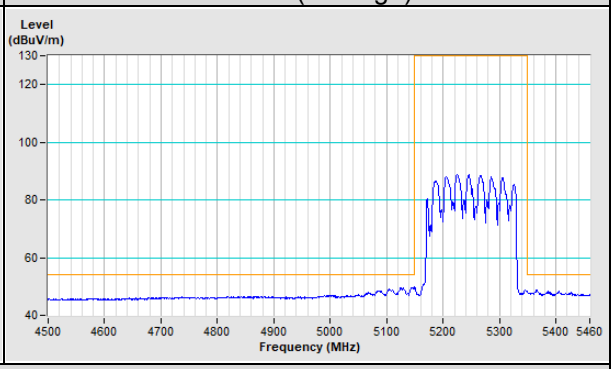
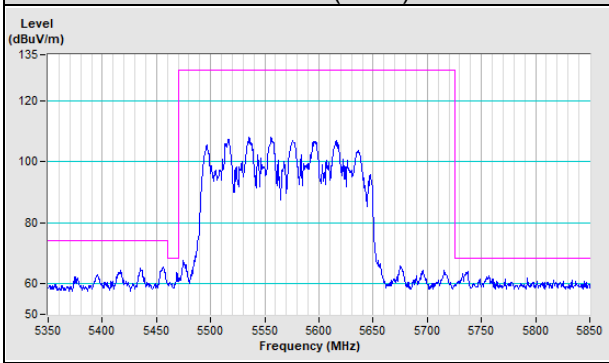
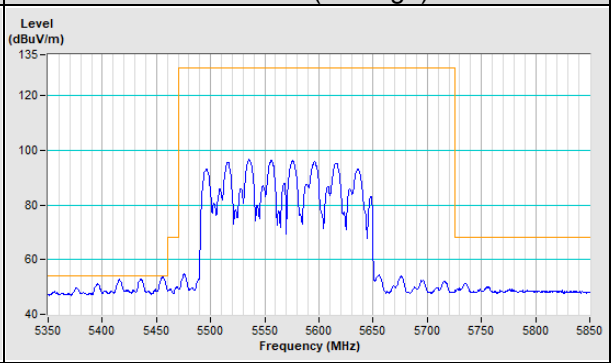
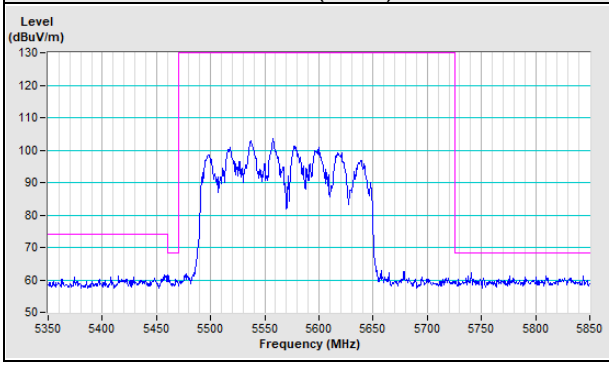
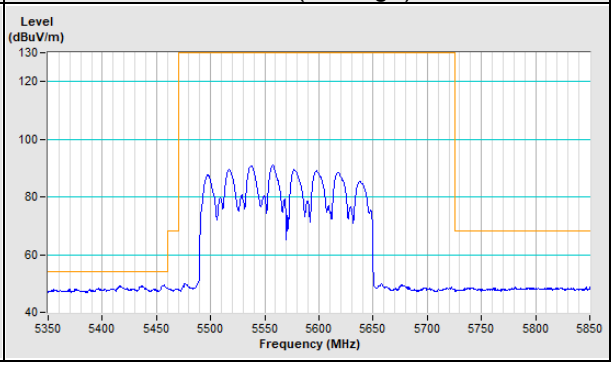
802.11ax (HE40) Channel 54	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE40) Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40) Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE40) Channel 134	
Horizontal (Peak)	Vertical (Peak)
	
802.11ax (HE40) Channel 142	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE80) Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80) Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE80) Channel 122	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80) Channel 138	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE160) Channel 50	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE160) Channel 114	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Appendix – Information of the Testing Laboratories

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

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

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

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

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

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