FCC Test Report

Report No.:	RFBEBW-WTW-P21020566-1
FCC ID:	KA2WAX1850A1
Test Model:	DWA-X1850
Received Date:	Feb. 25, 2021
Test Date:	Mar. 10 ~ Jun. 18, 2021
Issued Date:	Jul. 01, 2021
Applicant:	D-Link Corporation
Address:	14420 Myford Road Suite 100 Irvine, California United States 92606
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

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFBEBW-WTW-P21020566-1	Original Release	Jul. 01, 2021

1 Certificate of Conformity

Product:	AX1800 Wi-Fi 6 USB Adapter
Brand:	D-Link
Test Model:	DWA-X1850
Sample Status:	Engineering Sample
Applicant:	D-Link Corporation
Test Date:	Mar. 10 ~ Jun. 18, 2021
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 : Lena Wang , **Date:** Jul. 01, 2021

Lena Wang / Specialist

Approved by : , **Date:** Jul. 01, 2021

Dylan Chiou / Senior Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	**Test Item**	**Result**	**Remarks**
15.407(b)(8)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -15.17 dB at 0.37000 MHz.
15.407(b) (1/2/3/4(i/ii)/8)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.2 dB at 10360.00 MHz and 10480.00 MHz and 15720.00 MHz and 5725.00 MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB 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	No antenna connector is used.

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, U-NII-2A, U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
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	150 kHz ~ 30 MHz	2.79 dB
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.04 dB
	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	AX1800 Wi-Fi 6 USB Adapter
Brand	D-Link
Test Model	DWA-X1850
Status of EUT	Engineering Sample
Power Supply Rating	5.0 Vdc (host equipment)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 866.7 Mbps 802.11ax: up to 1200 Mbps
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5700 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20) 2 for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40) 1 for 802.11ac (VHT80), 802.11ax (HE80) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20) 2 for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40) 1 for 802.11ac (VHT80), 802.11ax (HE80) 5500 ~ 5700 MHz: 11 for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20) 5 for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40) 2 for 802.11ac (VHT80), 802.11ax (HE80) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20) 2 for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40) 1 for 802.11ac (VHT80), 802.11ax (HE80)
Output Power	CDD Mode: 31.379 mW for 5180 ~ 5240 MHz 61.951 mW for 5260 ~ 5320 MHz 50.241 mW for 5500 ~ 5700 MHz 59.441 mW for 5745 ~ 5825 MHz Beamforming: 15.69 mW for 5180 ~ 5240 MHz 30.978 mW for 5260 ~ 5320 MHz 25.122 mW for 5500 ~ 5700 MHz 29.903 mW for 5745 ~ 5825 MHz
Antenna Type	Chain 0 PIFA antenna with 1.2 dBi gain (5180 ~ 5240 MHz) PIFA antenna with 1.1 dBi gain (5260 ~ 5320 MHz)

	PIFA antenna with 2.2 dBi gain (5500 ~ 5700 MHz) PIFA antenna with 2 dBi gain (5745 ~ 5825 MHz) Chain 1 PCB antenna with 2.1 dBi gain (5180 ~ 5240 MHz) PCB antenna with 2.1 dBi gain (5260 ~ 5320 MHz) PCB antenna with 2.1 dBi gain (5500 ~ 5700 MHz) PCB antenna with 0.2 dBi gain (5745 ~ 5825 MHz)
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

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

Modulation Mode	CDD	Beamforming	TX Function
802.11a	Support	Not Support	2TX (MIMO)
802.11n (HT20)	Support	Support	2TX (MIMO)
802.11n (HT40)	Support	Support	2TX (MIMO)
802.11ac (VHT20)	Support	Support	2TX (MIMO)
802.11ac (VHT40)	Support	Support	2TX (MIMO)
802.11ac (VHT80)	Support	Support	2TX (MIMO)
802.11ax (HE20)	Support	Support	2TX (MIMO)
802.11ax (HE40)	Support	Support	2TX (MIMO)
802.11ax (HE80)	Support	Support	2TX (MIMO)

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

   *For 802.11n and 802.11ac and 802.11ax, 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 contains following accessory devices.

Product	Brand	Model	Description
Cradle	Nienyi	NA	I/P: +5 Vdc, 0.9 A O/P: 5 Vdc, 0.9 A Power code:0.91m, non-shielded cable, with w/o ferrite core

3. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
5. The difference between Main and second sources is changing flash. The EUT has been pre-tested and the worst case is the main source.
6. 2.4 and 5GHz WLAN cannot transmit simultaneously

3.2 Description of Test Modes

For 5180 ~ 5240 MHz

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

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

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

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

Channel	Frequency (MHz)
42	5210

For 5260 ~ 5320 MHz

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

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

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

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

Channel	Frequency (MHz)
58	5290

For 5500 ~ 5700 MHz

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

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

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590		

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	122	5610

For 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

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

Channel	Frequency (MHz)
155	5775

3.2.1 Test Mode Applicability and Tested Channel Detail

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

Where **RE≥1G:** Radiated Emission above 1 GHz **RE<1G:** Radiated Emission below 1 GHz
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 **Y-plane**.
2. "-" means no effect.

Radiated Emission Test (Above 1 GHz):

☒ 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	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-		802.11ax (HE20)	36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	38 to 46	38, 46	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	42	42	OFDMA	BPSK	MCS0
-	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-		802.11ax (HE20)	52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
-		802.11n (HT40)	54 to 62	54, 62	OFDM	BPSK	13.5
-		802.11ax (HE80)	58	58	OFDMA	BPSK	MCS0
-	5500-5700	802.11a	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-		802.11ax (HE20)	100 to 140	100, 116, 140	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	102 to 134	102, 110, 134	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	106 to 122	106, 122	OFDMA	BPSK	MCS0
-	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-		802.11ax (HE20)	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	151 to 159	151, 159	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	155	155	OFDMA	BPSK	MCS0

Radiated Emission Test (Below 1 GHz):

☒ 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	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	48	OFDM	BPSK	6.0

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	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	48	OFDM	BPSK	6.0

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	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-		802.11ax (HE20)	36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	38 to 46	38, 46	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	42	42	OFDMA	BPSK	MCS0
-	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-		802.11ax (HE20)	52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
-		802.11n (HT40)	54 to 62	54, 62	OFDM	BPSK	13.5
-		802.11ax (HE80)	58	58	OFDMA	BPSK	MCS0
-	5500-5700	802.11a	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-		802.11ax (HE20)	100 to 140	100, 116, 140	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	102 to 134	102, 110, 134	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	106 to 122	106, 122	OFDMA	BPSK	MCS0
-	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-		802.11ax (HE20)	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
-		802.11ax (HE40)	151 to 159	151, 159	OFDMA	BPSK	MCS0
-		802.11ax (HE80)	155	155	OFDMA	BPSK	MCS0

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Adair Peng
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Noah Chang
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Edison Lee
APCM	25 deg. C, 65 % RH	120 Vac, 60 Hz	Wayne Lin

3.3 Duty Cycle of Test Signal

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

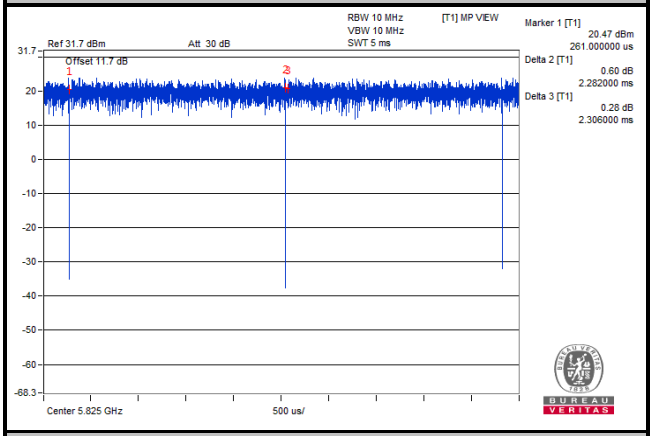
802.11a: Duty cycle = 2.282/2.306 = 0.99

802.11ax (HE20): Duty cycle = 5.406/5.47 = 0.988

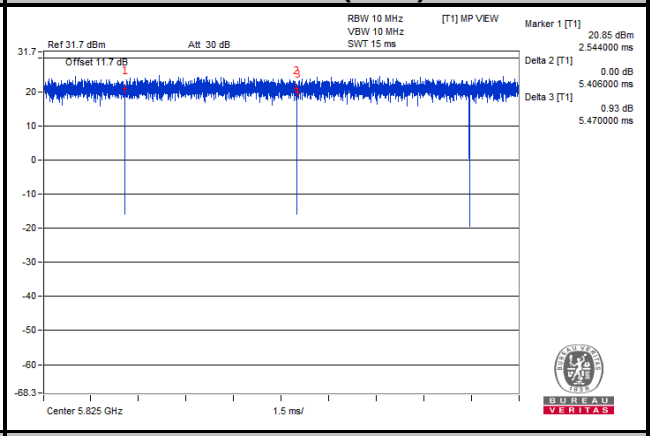
802.11ax (HE40): Duty cycle = 4.652/4.684 = 0.993

802.11ax (HE80): Duty cycle = 5.353/5.41 = 0.989

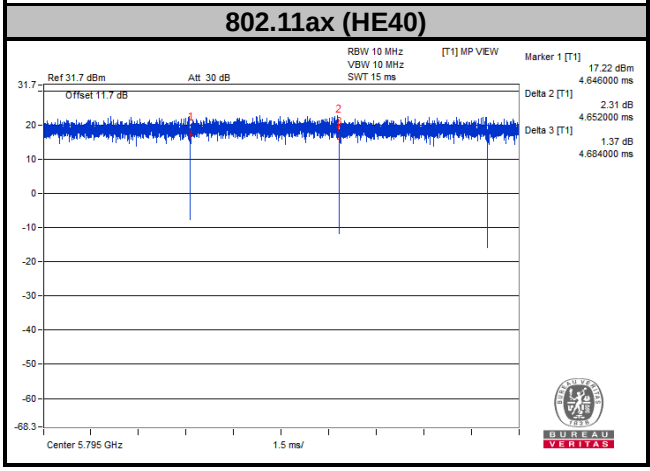
802.11a



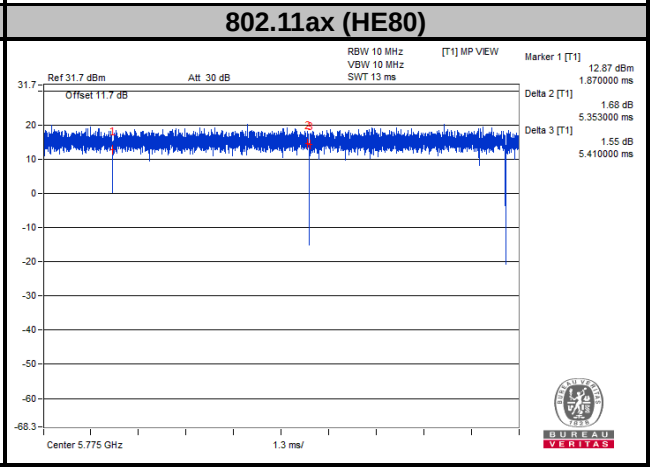
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



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.

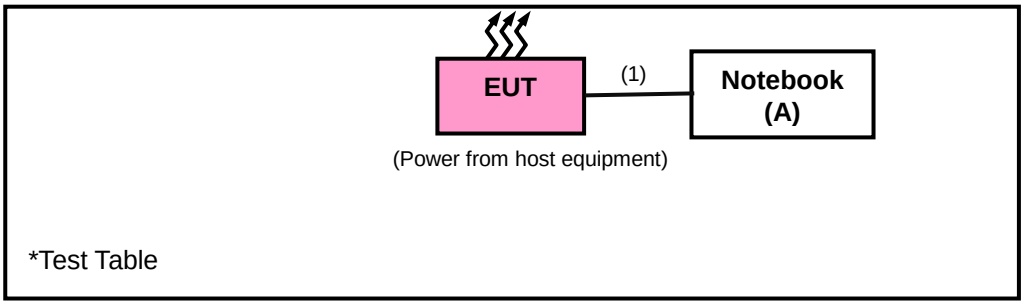
No.	Product	Brand	Model No.	Serial No.	FCC ID
A	Notebook	DELL	E5410	1HC2XM1	N/A

No.	Signal Cable Description of The Above Support Units
1.	USB Extension cord: 0.9m

Note:

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

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

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

Test Standard:

FCC Part 15, Subpart E (15.407)
ANSI C63.10-2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedures 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 1000 MHz, 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 20 dB under any condition of modulation.

Limits of Unwanted Emission Out of the Restricted Bands

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v02r01		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	**Applicable To**	**EIRP Limit**	**Equivalent Field Strength at 3 m**
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK:122.2 (dBμV/m) *4
*1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.			

Note:

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2020	Dec. 30, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 16, 2020	Sep. 15, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 03, 2020	Nov. 02, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jun. 08, 2020	Jun. 07, 2021
			Jun. 05, 2021	Jun. 04, 2022
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 08, 2020	Jun. 07, 2021
			Jun. 05, 2021	Jun. 04, 2022
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Aug. 16, 2020	Aug. 15, 2021
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Aug. 16, 2020	Aug. 15, 2021
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 08, 2020	Jun. 07, 2021
			Jun. 05, 2021	Jun. 04, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 08, 2020	Jun. 07, 2021
			Jun. 05, 2021	Jun. 04, 2022
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 04, 2020	Sep. 03, 2021
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190004/MY55190007/MY55210005	Jul. 13, 2020	Jul. 12, 2021
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Feb. 03, 2021	Feb. 02, 2022
Temperature & Humidity Chamber GIANT FORC	GTH-120-40-CP-AR	MAA1306-019	Sep. 09, 2020	Sep. 08, 2021
DC power supply Keysight	U8002A	MY56330015	NA	NA
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2020	Jun. 22, 2021

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 10.

4.1.3 Test Procedures

For Radiated Emission below 30 MHz

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 9 kHz at frequency below 30 MHz.

For Radiated Emission above 30 MHz

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

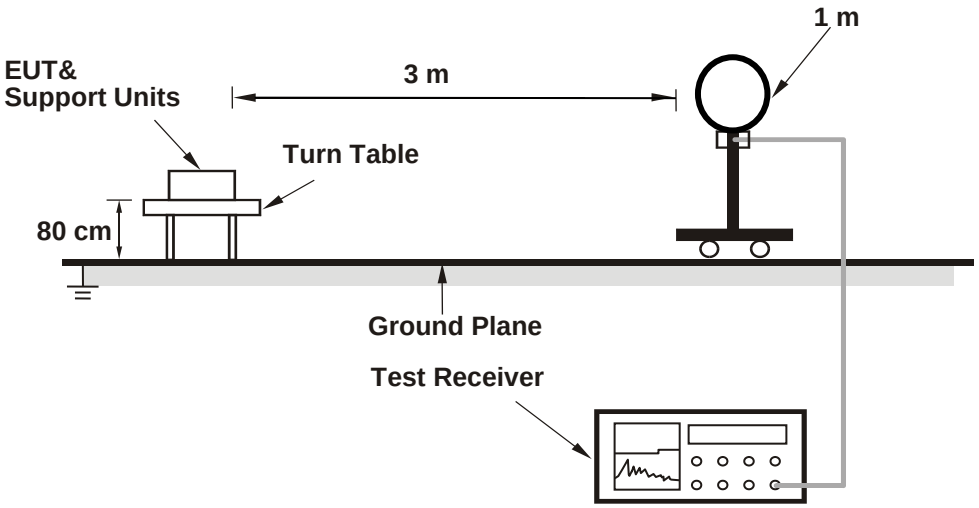
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98 %) or 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
   (11a: RBW = 1 MHz, VBW = 10 Hz ; 11ax (HE20): RBW = 1 MHz, VBW = 10 Hz ;
   11ax (HE40): RBW = 1 MHz, VBW = 10 Hz ; 11ax (HE80): RBW = 1 MHz, VBW = 10 Hz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

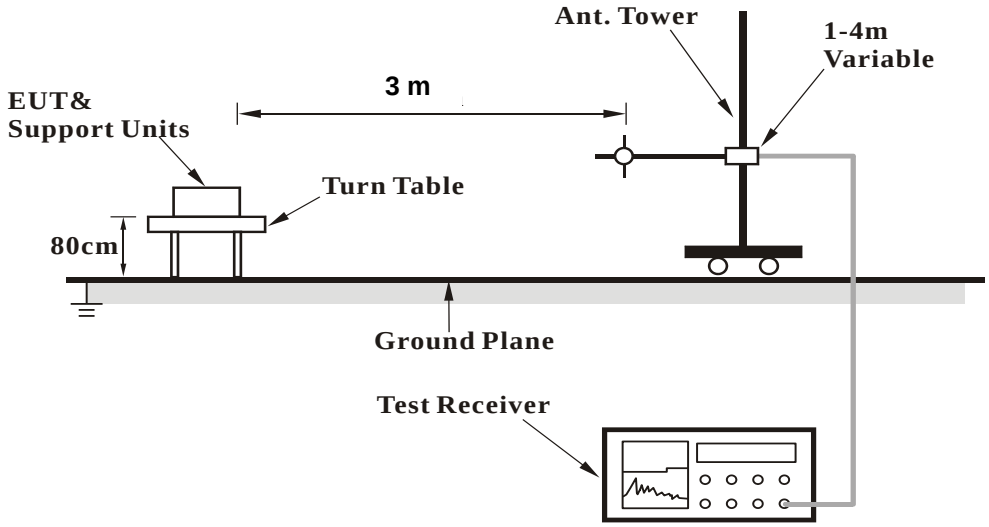
No deviation.

4.1.5 Test Setup

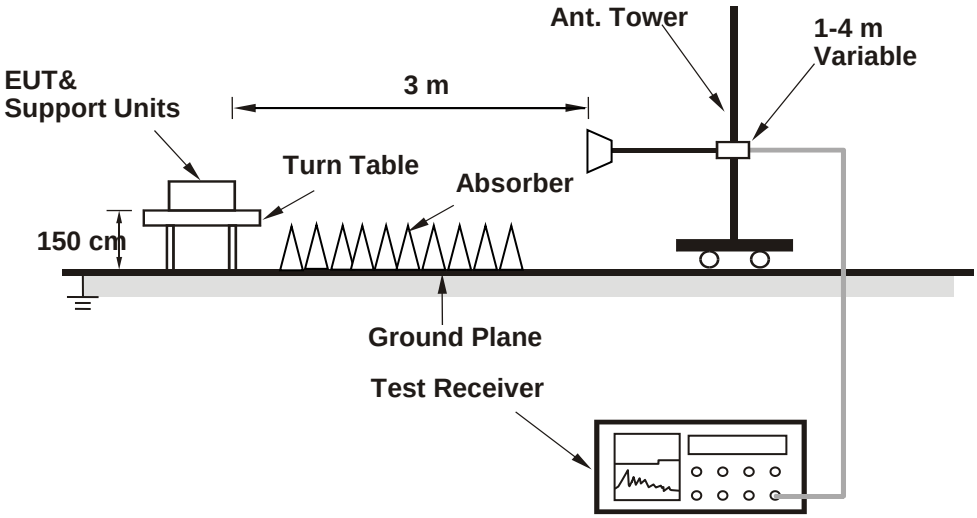
<Radiated Emission below 30 MHz>



<Radiated Emission 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



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 a testing table.
b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1 GHz Data：

802.11a

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	56.2 PK	74.0	-17.8	2.08 H	120	54.9	1.3
2	5150.00	45.1 AV	54.0	-8.9	2.08 H	120	43.8	1.3
3	*5180.00	110.0 PK			2.08 H	120	70.6	39.4
4	*5180.00	101.1 AV			2.08 H	120	61.7	39.4
5	**#10360.00**	**67.7 PK**	**68.2**	**-0.5**	**2.60 H**	**275**	**57.7**	**10.0**
6	15540.00	66.2 PK	74.0	-7.8	2.35 H	320	59.3	6.9
7	15540.00	53.2 AV	54.0	-0.8	2.35 H	320	46.3	6.9
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	67.5 PK	74.0	-6.5	3.06 V	280	66.2	1.3
2	5150.00	49.0 AV	54.0	-5.0	3.06 V	280	47.7	1.3
3	*5180.00	116.1 PK			3.06 V	280	76.7	39.4
4	*5180.00	106.1 AV			3.06 V	280	66.7	39.4
5	#10360.00	66.2 PK	68.2	-2.0	2.50 V	310	56.2	10.0
6	15540.00	64.4 PK	74.0	-9.6	1.60 V	350	57.5	6.9
7	15540.00	52.0 AV	54.0	-2.0	1.60 V	355	45.1	6.9

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 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	109.0 PK			1.95 H	120	69.6	39.4
2	*5200.00	100.0 AV			1.95 H	120	60.6	39.4
3	#10400.00	66.3 PK	68.2	-1.9	2.70 H	270	56.4	9.9
4	15600.00	65.2 PK	74.0	-8.8	2.55 H	280	58.4	6.8
5	15600.00	52.4 AV	54.0	-1.6	2.55 H	280	45.6	6.8
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	114.0 PK			3.10 V	280	74.6	39.4
2	*5200.00	105.0 AV			3.10 V	280	65.6	39.4
3	#10400.00	64.0 PK	68.2	-4.2	3.49 V	345	54.1	9.9
4	15600.00	63.5 PK	74.0	-10.5	1.68 V	359	56.7	6.8
5	15600.00	50.4 AV	54.0	-3.6	1.68 V	359	43.6	6.8

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	*5240.00	111.0 PK			1.90 H	125	71.8	39.2
2	*5240.00	101.0 AV			1.90 H	125	61.8	39.2
3	5350.00	55.0 PK	74.0	-19.0	1.95 H	120	53.9	1.1
4	5350.00	43.3 AV	54.0	-10.7	1.95 H	120	42.2	1.1
5	#10480.00	67.6 PK	68.2	-0.6	2.70 H	275	57.8	9.8
6	15720.00	67.1 PK	74.0	-6.9	2.40 H	320	60.2	6.9
7	**15720.00**	**53.5 AV**	**54.0**	**-0.5**	**2.40 H**	**320**	**46.6**	**6.9**
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	*5240.00	117.4 PK			3.10 V	289	78.2	39.2
2	*5240.00	107.0 AV			3.10 V	289	67.8	39.2
3	5350.00	56.5 PK	74.0	-17.5	3.10 V	289	55.4	1.1
4	5350.00	44.4 AV	54.0	-9.6	3.10 V	289	43.3	1.1
5	#10480.00	67.0 PK	68.2	-1.2	3.55 V	320	57.2	9.8
6	15720.00	67.2 PK	74.0	-6.8	1.70 V	354	60.3	6.9
7	15720.00	52.7 AV	54.0	-1.3	1.70 V	354	45.8	6.9

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 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	55.0 PK	74.0	-19.0	1.11 H	250	53.7	1.3
2	5150.00	43.0 AV	54.0	-11.0	1.11 H	250	41.7	1.3
3	*5260.00	111.5 PK			1.11 H	250	72.3	39.2
4	*5260.00	102.4 AV			1.11 H	250	63.2	39.2
5	#10520.00	65.7 PK	68.2	-2.5	1.09 H	270	55.8	9.9
6	15780.00	67.1 PK	74.0	-6.9	1.10 H	280	60.4	6.7
7	**15780.00**	**53.5 AV**	**54.0**	**-0.5**	**1.10 H**	**280**	**46.8**	**6.7**
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	55.7 PK	74.0	-18.3	2.35 V	299	54.4	1.3
2	5150.00	43.0 AV	54.0	-11.0	2.35 V	299	41.7	1.3
3	*5260.00	112.0 PK			2.35 V	299	72.8	39.2
4	*5260.00	103.2 AV			2.35 V	299	64.0	39.2
5	#10520.00	65.7 PK	68.2	-2.5	1.19 V	319	55.8	9.9
6	15780.00	66.0 PK	74.0	-8.0	1.09 V	359	59.3	6.7
7	15780.00	52.4 AV	54.0	-1.6	1.09 V	359	45.7	6.7

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 802.11a	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	110.2 PK			1.20 H	250	71.1	39.1
2	*5300.00	102.0 AV			1.20 H	250	62.9	39.1
3	10600.00	65.0 PK	74.0	-9.0	1.00 H	275	54.8	10.2
4	10600.00	53.0 AV	54.0	-1.0	1.00 H	275	42.8	10.2
5	15900.00	63.4 PK	74.0	-10.6	1.02 H	284	56.2	7.2
6	15900.00	51.5 AV	54.0	-2.5	1.02 H	284	44.3	7.2
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	*5300.00	111.8 PK			2.24 V	288	72.7	39.1
2	*5300.00	102.4 AV			2.24 V	288	63.3	39.1
3	10600.00	62.5 PK	74.0	-11.5	1.00 V	319	52.3	10.2
4	10600.00	52.0 AV	54.0	-2.0	1.00 V	319	41.8	10.2
5	15900.00	63.0 PK	74.0	-11.0	1.11 V	351	55.8	7.2
6	15900.00	49.8 AV	54.0	-4.2	1.11 V	351	42.6	7.2

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 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	111.6 PK			1.20 H	245	72.5	39.1
2	*5320.00	102.0 AV			1.20 H	245	62.9	39.1
3	5350.00	62.4 PK	74.0	-11.6	1.20 H	245	61.3	1.1
4	5350.00	47.4 AV	54.0	-6.6	1.20 H	245	46.3	1.1
5	10640.00	65.0 PK	74.0	-9.0	1.24 H	275	54.8	10.2
6	10640.00	53.2 AV	54.0	-0.8	1.24 H	275	43.0	10.2
7	15960.00	65.5 PK	74.0	-8.5	1.10 H	283	58.3	7.2
8	15960.00	51.0 AV	54.0	-3.0	1.10 H	283	43.8	7.2
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	*5320.00	112.8 PK			2.45 V	280	73.7	39.1
2	*5320.00	103.7 AV			2.45 V	280	64.6	39.1
3	5350.00	65.0 PK	74.0	-9.0	2.45 V	280	63.9	1.1
4	5350.00	48.0 AV	54.0	-6.0	2.45 V	280	46.9	1.1
5	10640.00	64.5 PK	74.0	-9.5	1.00 V	332	54.3	10.2
6	10640.00	52.5 AV	54.0	-1.5	1.00 V	332	42.3	10.2
7	15960.00	62.4 PK	74.0	-11.6	1.16 V	350	55.2	7.2
8	15960.00	50.0 AV	54.0	-4.0	1.16 V	350	42.8	7.2

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 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	55.2 PK	74.0	-18.8	1.07 H	240	53.7	1.5
2	5460.00	44.1 AV	54.0	-9.9	1.07 H	240	42.6	1.5
3	#5470.00	59.3 PK	68.2	-8.9	1.07 H	240	57.8	1.5
4	*5500.00	109.3 PK			1.07 H	240	69.6	39.7
5	*5500.00	100.2 AV			1.07 H	240	60.5	39.7
6	11000.00	65.2 PK	74.0	-8.8	1.11 H	263	54.3	10.9
7	11000.00	53.2 AV	54.0	-0.8	1.11 H	263	42.3	10.9
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	5460.00	57.0 PK	74.0	-17.0	2.38 V	277	55.5	1.5
2	5460.00	43.7 AV	54.0	-10.3	2.38 V	277	42.2	1.5
3	#5470.00	59.0 PK	68.2	-9.2	2.38 V	277	57.5	1.5
4	*5500.00	109.9 PK			2.38 V	277	70.2	39.7
5	*5500.00	100.0 AV			2.38 V	277	60.3	39.7
6	11000.00	62.6 PK	74.0	-11.4	1.11 V	320	51.7	10.9
7	11000.00	51.9 AV	54.0	-2.1	1.11 V	320	41.0	10.9

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 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	111.7 PK			1.14 H	242	71.8	39.9
2	*5580.00	103.3 AV			1.14 H	242	63.4	39.9
3	11160.00	63.1 PK	74.0	-10.9	1.00 H	257	53.2	9.9
4	11160.00	53.2 AV	54.0	-0.8	1.00 H	257	43.3	9.9
5	#16740.00	64.8 PK	68.2	-3.4	1.10 H	270	54.3	10.5
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	*5580.00	112.6 PK			2.55 V	269	72.7	39.9
2	*5580.00	103.9 AV			2.55 V	269	64.0	39.9
3	11160.00	60.6 PK	74.0	-13.4	1.05 V	315	50.7	9.9
4	11160.00	50.9 AV	54.0	-3.1	1.05 V	315	41.0	9.9
5	#16740.00	63.0 PK	68.2	-5.2	1.19 V	359	52.5	10.5

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	111.7 PK			1.09 H	226	71.5	40.2
2	*5700.00	102.8 AV			1.09 H	226	62.6	40.2
3	#5725.00	62.5 PK	68.2	-5.7	1.09 H	226	60.2	2.3
4	11400.00	63.7 PK	74.0	-10.3	1.00 H	281	53.2	10.5
5	11400.00	53.2 AV	54.0	-0.8	1.00 H	281	42.7	10.5
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	*5700.00	113.5 PK			2.28 V	265	73.3	40.2
2	*5700.00	104.6 AV			2.28 V	265	64.4	40.2
3	#5725.00	65.7 PK	68.2	-2.5	2.28 V	265	63.4	2.3
4	11400.00	61.2 PK	74.0	-12.8	1.11 V	322	50.7	10.5
5	11400.00	51.7 AV	54.0	-2.3	1.11 V	322	41.2	10.5

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	#5646.40	56.6 PK	68.2	-11.6	1.02 H	229	54.5	2.1
2	*5745.00	114.0 PK			1.02 H	229	73.6	40.4
3	*5745.00	104.3 AV			1.02 H	229	63.9	40.4
4	#5990.40	58.2 PK	68.2	-10.0	1.02 H	229	55.3	2.9
5	11490.00	66.3 PK	74.0	-7.7	1.04 H	274	56.1	10.2
6	11490.00	53.5 AV	54.0	-0.5	1.04 H	274	43.3	10.2
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	#5644.80	56.9 PK	68.2	-11.3	2.40 V	269	54.8	2.1
2	*5745.00	116.0 PK			2.40 V	269	75.6	40.4
3	*5745.00	106.5 AV			2.40 V	269	66.1	40.4
4	#5999.60	57.1 PK	68.2	-11.1	2.40 V	269	54.2	2.9
5	11490.00	64.0 PK	74.0	-10.0	1.11 V	330	53.8	10.2
6	11490.00	51.8 AV	54.0	-2.2	1.11 V	330	41.6	10.2

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	#5625.20	58.6 PK	68.2	-9.6	1.08 H	230	56.6	2.0
2	*5785.00	114.2 PK			1.08 H	230	73.6	40.6
3	*5785.00	104.3 AV			1.08 H	230	63.7	40.6
4	#5970.40	58.7 PK	68.2	-9.5	1.08 H	230	55.9	2.8
5	11570.00	64.9 PK	74.0	-9.1	1.03 H	286	55.0	9.9
6	11570.00	53.6 AV	54.0	-0.4	1.03 H	286	43.7	9.9
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	#5615.20	56.5 PK	68.2	-11.7	2.49 V	270	54.6	1.9
2	*5785.00	115.0 PK			2.49 V	270	74.4	40.6
3	*5785.00	105.9 AV			2.49 V	270	65.3	40.6
4	#5937.60	56.9 PK	68.2	-11.3	2.49 V	270	54.1	2.8
5	11570.00	62.4 PK	74.0	-11.6	1.10 V	321	52.5	9.9
6	11570.00	51.9 AV	54.0	-2.1	1.10 V	321	42.0	9.9

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	#5614.40	56.0 PK	68.2	-12.2	1.06 H	221	54.1	1.9
2	*5825.00	113.2 PK			1.06 H	221	72.5	40.7
3	*5825.00	104.4 AV			1.06 H	221	63.7	40.7
4	#5978.80	58.5 PK	68.2	-9.7	1.06 H	221	55.7	2.8
5	11650.00	65.0 PK	74.0	-9.0	1.02 H	290	55.1	9.9
6	11650.00	53.5 AV	54.0	-0.5	1.02 H	290	43.6	9.9
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	#5638.80	55.5 PK	68.2	-12.7	2.56 V	270	53.4	2.1
2	*5825.00	115.3 PK			2.56 V	270	74.6	40.7
3	*5825.00	106.5 AV			2.56 V	270	65.8	40.7
4	#5931.20	57.8 PK	68.2	-10.4	2.56 V	270	54.9	2.9
5	11650.00	62.7 PK	74.0	-11.3	1.07 V	315	52.8	9.9
6	11650.00	51.8 AV	54.0	-2.2	1.07 V	315	41.9	9.9

Remarks:

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

802.11ax (HE20)

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	60.0 PK	74.0	-14.0	1.88 H	130	58.7	1.3
2	5150.00	46.2 AV	54.0	-7.8	1.88 H	130	44.9	1.3
3	*5180.00	111.0 PK			1.88 H	130	71.6	39.4
4	*5180.00	98.5 AV			1.88 H	130	59.1	39.4
5	#10360.00	66.7 PK	68.2	-1.5	2.70 H	270	56.7	10.0
6	15540.00	66.0 PK	74.0	-8.0	2.31 H	320	59.1	6.9
7	15540.00	52.8 AV	54.0	-1.2	2.31 H	320	45.9	6.9
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	69.7 PK	74.0	-4.3	2.99 V	280	68.4	1.3
2	5150.00	50.5 AV	54.0	-3.5	2.99 V	280	49.2	1.3
3	*5180.00	116.0 PK			2.99 V	280	76.6	39.4
4	*5180.00	104.1 AV			2.99 V	280	64.7	39.4
5	#10360.00	66.2 PK	68.2	-2.0	3.60 V	324	56.2	10.0
6	15540.00	65.7 PK	74.0	-8.3	1.75 V	350	58.8	6.9
7	15540.00	52.5 AV	54.0	-1.5	1.75 V	350	45.6	6.9

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 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	111.8 PK			1.79 H	125	72.4	39.4
2	*5200.00	99.0 AV			1.79 H	125	59.6	39.4
3	#10400.00	67.6 PK	68.2	-0.6	2.75 H	275	57.7	9.9
4	15600.00	64.4 PK	74.0	-9.6	2.30 H	330	57.6	6.8
5	15600.00	52.4 AV	54.0	-1.6	2.30 H	330	45.6	6.8
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	116.0 PK			3.03 V	280	76.6	39.4
2	*5200.00	105.0 AV			3.03 V	280	65.6	39.4
3	#10400.00	67.1 PK	68.2	-1.1	3.48 V	330	57.2	9.9
4	15600.00	63.4 PK	74.0	-10.6	1.90 V	359	56.6	6.8
5	15600.00	52.0 AV	54.0	-2.0	1.90 V	359	45.2	6.8

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	*5240.00	110.4 PK			2.09 H	124	71.2	39.2
2	*5240.00	99.4 AV			2.09 H	124	60.2	39.2
3	5350.00	54.0 PK	74.0	-20.0	2.09 H	124	52.9	1.1
4	5350.00	43.3 AV	54.0	-10.7	2.09 H	124	42.2	1.1
5	#10480.00	66.3 PK	68.2	-1.9	2.72 H	270	56.5	9.8
6	15720.00	66.5 PK	74.0	-7.5	2.55 H	310	59.6	6.9
7	15720.00	52.8 AV	54.0	-1.2	2.55 H	310	45.9	6.9
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	*5240.00	116.4 PK			2.86 V	290	77.2	39.2
2	*5240.00	105.1 AV			2.86 V	290	65.9	39.2
3	5350.00	55.7 PK	74.0	-18.3	2.86 V	290	54.6	1.1
4	5350.00	44.6 AV	54.0	-9.4	2.86 V	290	43.5	1.1
5	#10480.00	65.5 PK	68.2	-2.7	3.49 V	320	55.7	9.8
6	15720.00	65.4 PK	74.0	-8.6	1.77 V	340	58.5	6.9
7	15720.00	52.2 AV	54.0	-1.8	1.77 V	340	45.3	6.9

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 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	55.0 PK	74.0	-19.0	1.20 H	245	53.7	1.3
2	5150.00	43.4 AV	54.0	-10.6	1.20 H	245	42.1	1.3
3	*5260.00	112.0 PK			1.20 H	245	72.8	39.2
4	*5260.00	101.3 AV			1.20 H	245	62.1	39.2
5	#10520.00	65.2 PK	68.2	-3.0	1.00 H	280	55.3	9.9
6	15780.00	67.0 PK	74.0	-7.0	1.05 H	280	60.3	6.7
7	15780.00	53.0 AV	54.0	-1.0	1.05 H	277	46.3	6.7
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	54.7 PK	74.0	-19.3	2.79 V	273	53.4	1.3
2	5150.00	43.0 AV	54.0	-11.0	2.79 V	273	41.7	1.3
3	*5260.00	113.0 PK			2.79 V	273	73.8	39.2
4	*5260.00	102.5 AV			2.79 V	273	63.3	39.2
5	#10520.00	63.1 PK	68.2	-5.1	1.10 V	320	53.2	9.9
6	15780.00	66.0 PK	74.0	-8.0	1.23 V	350	59.3	6.7
7	15780.00	52.5 AV	54.0	-1.5	1.23 V	350	45.8	6.7

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 (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	113.0 PK			1.14 H	246	73.9	39.1
2	*5300.00	102.2 AV			1.10 H	246	63.1	39.1
3	10600.00	64.0 PK	74.0	-10.0	1.00 H	272	53.8	10.2
4	10600.00	52.1 AV	54.0	-1.9	1.00 H	272	41.9	10.2
5	15900.00	64.3 PK	74.0	-9.7	1.00 H	270	57.1	7.2
6	15900.00	53.1 AV	54.0	-0.9	1.00 H	270	45.9	7.2
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	*5300.00	113.2 PK			2.46 V	265	74.1	39.1
2	*5300.00	102.3 AV			2.46 V	265	63.2	39.1
3	10600.00	61.5 PK	74.0	-12.5	1.05 V	316	51.3	10.2
4	10600.00	50.6 AV	54.0	-3.4	1.05 V	316	40.4	10.2
5	15900.00	62.4 PK	74.0	-11.6	1.11 V	345	55.2	7.2
6	15900.00	52.0 AV	54.0	-2.0	1.11 V	345	44.8	7.2

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 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	112.6 PK			1.20 H	245	73.5	39.1
2	*5320.00	100.0 AV			1.20 H	245	60.9	39.1
3	5350.00	64.1 PK	74.0	-9.9	1.20 H	245	63.0	1.1
4	5350.00	51.4 AV	54.0	-2.6	1.20 H	245	50.3	1.1
5	10640.00	63.5 PK	74.0	-10.5	1.01 H	270	53.3	10.2
6	10640.00	51.6 AV	54.0	-2.4	1.01 H	270	41.4	10.2
7	15960.00	61.4 PK	74.0	-12.6	1.10 H	270	54.2	7.2
8	15960.00	52.6 AV	54.0	-1.4	1.10 H	270	45.4	7.2
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	*5320.00	113.0 PK			2.30 V	260	73.9	39.1
2	*5320.00	101.0 AV			2.30 V	260	61.9	39.1
3	5350.00	66.6 PK	74.0	-7.4	2.30 V	260	65.5	1.1
4	5350.00	53.3 AV	54.0	-0.7	2.30 V	260	52.2	1.1
5	10640.00	61.0 PK	74.0	-13.0	1.05 V	320	50.8	10.2
6	10640.00	50.0 AV	54.0	-4.0	1.05 V	320	39.8	10.2
7	15960.00	60.0 PK	74.0	-14.0	1.10 V	354	52.8	7.2
8	15960.00	51.0 AV	54.0	-3.0	1.10 V	354	43.8	7.2

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 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	55.5 PK	74.0	-18.5	1.13 H	237	54.0	1.5
2	5460.00	44.0 AV	54.0	-10.0	1.13 H	237	42.5	1.5
3	#5470.00	61.2 PK	68.2	-7.0	1.13 H	237	59.7	1.5
4	*5500.00	110.5 PK			1.13 H	237	70.8	39.7
5	*5500.00	99.4 AV			1.13 H	237	59.7	39.7
6	11000.00	64.4 PK	74.0	-9.6	1.07 H	255	53.5	10.9
7	11000.00	53.2 AV	54.0	-0.8	1.07 H	255	42.3	10.9
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	5460.00	56.7 PK	74.0	-17.3	2.53 V	290	55.2	1.5
2	5460.00	43.6 AV	54.0	-10.4	2.53 V	290	42.1	1.5
3	#5470.00	59.1 PK	68.2	-9.1	2.53 V	290	57.6	1.5
4	*5500.00	108.8 PK			2.53 V	290	69.1	39.7
5	*5500.00	97.3 AV			2.53 V	290	57.6	39.7
6	11000.00	61.7 PK	74.0	-12.3	1.04 V	309	50.8	10.9
7	11000.00	51.9 AV	54.0	-2.1	1.04 V	309	41.0	10.9

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 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	115.4 PK			1.03 H	235	75.5	39.9
2	*5580.00	104.6 AV			1.03 H	235	64.7	39.9
3	11160.00	64.7 PK	74.0	-9.3	1.10 H	295	54.8	9.9
4	11160.00	53.7 AV	54.0	-0.3	1.10 H	295	43.8	9.9
5	#16740.00	65.4 PK	68.2	-2.8	1.01 H	262	54.9	10.5
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	*5580.00	114.0 PK			2.71 V	281	74.1	39.9
2	*5580.00	103.0 AV			2.71 V	281	63.1	39.9
3	11160.00	62.1 PK	74.0	-11.9	1.03 V	313	52.2	9.9
4	11160.00	52.5 AV	54.0	-1.5	1.03 V	313	42.6	9.9
5	#16740.00	63.7 PK	68.2	-4.5	1.20 V	352	53.2	10.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 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	111.3 PK			1.04 H	233	71.1	40.2
2	*5700.00	100.7 AV			1.04 H	233	60.5	40.2
3	#5725.00	66.8 PK	68.2	-1.4	1.04 H	233	64.5	2.3
4	11400.00	63.8 PK	74.0	-10.2	1.00 H	277	53.3	10.5
5	11400.00	52.5 AV	54.0	-1.5	1.00 H	277	42.0	10.5
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	*5700.00	113.2 PK			2.46 V	270	73.0	40.2
2	*5700.00	100.8 AV			2.46 V	270	60.6	40.2
3	#5725.00	67.6 PK	68.2	-0.6	2.46 V	270	65.3	2.3
4	11400.00	61.2 PK	74.0	-12.8	1.10 V	310	50.7	10.5
5	11400.00	51.2 AV	54.0	-2.8	1.10 V	310	40.7	10.5

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 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	#5629.20	57.1 PK	68.2	-11.1	1.16 H	223	55.1	2.0
2	*5745.00	113.5 PK			1.16 H	223	73.1	40.4
3	*5745.00	103.2 AV			1.16 H	223	62.8	40.4
4	#5929.20	57.4 PK	68.2	-10.8	1.16 H	223	54.5	2.9
5	11490.00	64.9 PK	74.0	-9.1	1.11 H	284	54.7	10.2
6	11490.00	53.3 AV	54.0	-0.7	1.11 H	284	43.1	10.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.20	57.1 PK	68.2	-11.1	2.50 V	262	55.0	2.1
2	*5745.00	114.9 PK			2.50 V	262	74.5	40.4
3	*5745.00	102.7 AV			2.50 V	262	62.3	40.4
4	#5941.60	57.3 PK	68.2	-10.9	2.50 V	262	54.5	2.8
5	11490.00	62.5 PK	74.0	-11.5	1.07 V	310	52.3	10.2
6	11490.00	51.7 AV	54.0	-2.3	1.07 V	310	41.5	10.2

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	#5635.60	56.5 PK	68.2	-11.7	1.05 H	237	54.4	2.1
2	*5785.00	112.0 PK			1.05 H	237	71.4	40.6
3	*5785.00	102.2 AV			1.05 H	237	61.6	40.6
4	#5996.80	56.4 PK	68.2	-11.8	1.05 H	237	53.5	2.9
5	11570.00	65.8 PK	74.0	-8.2	1.07 H	287	55.9	9.9
6	11570.00	53.5 AV	54.0	-0.5	1.07 H	287	43.6	9.9
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	#5609.60	55.9 PK	68.2	-12.3	2.67 V	268	54.0	1.9
2	*5785.00	114.5 PK			2.67 V	268	73.9	40.6
3	*5785.00	103.3 AV			2.67 V	268	62.7	40.6
4	#5952.80	57.5 PK	68.2	-10.7	2.67 V	268	54.7	2.8
5	11570.00	63.3 PK	74.0	-10.7	1.03 V	319	53.4	9.9
6	11570.00	51.8 AV	54.0	-2.2	1.03 V	319	41.9	9.9

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	#5645.60	57.4 PK	68.2	-10.8	1.09 H	229	55.3	2.1
2	*5825.00	113.8 PK			1.09 H	229	73.1	40.7
3	*5825.00	103.2 AV			1.09 H	229	62.5	40.7
4	#5953.20	57.6 PK	68.2	-10.6	1.09 H	229	54.8	2.8
5	11650.00	65.5 PK	74.0	-8.5	1.02 H	290	55.6	9.9
6	11650.00	53.4 AV	54.0	-0.6	1.02 H	290	43.5	9.9
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	#5628.40	56.2 PK	68.2	-12.0	2.53 V	255	54.2	2.0
2	*5825.00	116.2 PK			2.53 V	255	75.5	40.7
3	*5825.00	103.8 AV			2.53 V	255	63.1	40.7
4	#5992.40	57.4 PK	68.2	-10.8	2.53 V	255	54.5	2.9
5	11650.00	63.1 PK	74.0	-10.9	1.10 V	310	53.2	9.9
6	11650.00	51.7 AV	54.0	-2.3	1.10 V	310	41.8	9.9

Remarks:

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

802.11ax (HE40)

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	57.8 PK	74.0	-16.2	1.10 H	250	56.5	1.3
2	5150.00	46.3 AV	54.0	-7.7	1.10 H	250	45.0	1.3
3	*5190.00	103.5 PK			1.10 H	250	64.1	39.4
4	*5190.00	93.2 AV			1.10 H	250	53.8	39.4
5	#10380.00	59.0 PK	68.2	-9.2	2.56 H	266	49.0	10.0
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	68.4 PK	74.0	-5.6	3.00 V	286	67.1	1.3
2	5150.00	53.3 AV	54.0	-0.7	3.00 V	286	52.0	1.3
3	*5190.00	110.2 PK			3.00 V	286	70.8	39.4
4	*5190.00	99.4 AV			3.00 V	286	60.0	39.4
5	#10380.00	57.3 PK	68.2	-10.9	2.50 V	325	47.3	10.0

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 (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	*5230.00	106.2 PK			2.60 H	174	66.9	39.3
2	*5230.00	97.2 AV			2.60 H	174	57.9	39.3
3	5350.00	55.2 PK	74.0	-18.8	2.60 H	174	54.1	1.1
4	5350.00	43.0 AV	54.0	-11.0	2.60 H	174	41.9	1.1
5	#10460.00	67.5 PK	68.2	-0.7	2.68 H	270	57.8	9.7
6	15690.00	64.0 PK	74.0	-10.0	2.39 H	325	57.0	7.0
7	15690.00	53.1 AV	54.0	-0.9	2.39 H	325	46.1	7.0
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	*5230.00	114.0 PK			3.02 V	280	74.7	39.3
2	*5230.00	103.5 AV			3.02 V	280	64.2	39.3
3	5350.00	55.4 PK	74.0	-18.6	3.02 V	280	54.3	1.1
4	5350.00	45.4 AV	54.0	-8.6	3.02 V	4	44.3	1.1
5	#10460.00	67.0 PK	68.2	-1.2	2.60 V	329	57.3	9.7
6	15690.00	64.4 PK	74.0	-9.6	1.84 V	355	57.4	7.0
7	15690.00	53.0 AV	54.0	-1.0	1.84 V	355	46.0	7.0

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.

802.11n (HT40)

RF Mode	TX 802.11n (HT40)	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	*5270.00	109.4 PK			1.20 H	246	70.2	39.2
2	*5270.00	100.0 AV			1.20 H	246	60.8	39.2
3	5350.00	63.2 PK	74.0	-10.8	1.20 H	246	62.1	1.1
4	5350.00	49.0 AV	54.0	-5.0	1.20 H	246	47.9	1.1
5	#10540.00	66.7 PK	68.2	-1.5	1.35 H	279	56.7	10.0
6	15810.00	65.0 PK	74.0	-9.0	1.05 H	279	58.5	6.5
7	15810.00	53.4 AV	54.0	-0.6	1.05 H	279	46.9	6.5
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	*5270.00	111.0 PK			2.30 V	263	71.8	39.2
2	*5270.00	102.2 AV			2.30 V	263	63.0	39.2
3	5350.00	64.4 PK	74.0	-9.6	2.30 V	263	63.3	1.1
4	5350.00	52.7 AV	54.0	-1.3	2.30 V	263	51.6	1.1
5	#10540.00	64.2 PK	68.2	-4.0	1.09 V	315	54.2	10.0
6	15810.00	63.4 PK	74.0	-10.6	1.20 V	359	56.9	6.5
7	15810.00	52.0 AV	54.0	-2.0	1.20 V	359	45.5	6.5

Remarks:

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

RF Mode	TX 802.11n (HT40)	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	104.5 PK			1.08 H	245	65.4	39.1
2	*5310.00	96.2 AV			1.08 H	245	57.1	39.1
3	5350.00	69.0 PK	74.0	-5.0	1.08 H	245	67.9	1.1
4	5350.00	51.1 AV	54.0	-2.9	1.08 H	245	50.0	1.1
5	10620.00	60.0 PK	74.0	-14.0	1.22 H	271	49.7	10.3
6	10620.00	47.2 AV	54.0	-6.8	1.22 H	271	36.9	10.3
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	*5310.00	106.1 PK			2.40 V	260	67.0	39.1
2	*5310.00	96.3 AV			2.40 V	260	57.2	39.1
3	5350.00	66.0 PK	74.0	-8.0	2.40 V	260	64.9	1.1
4	5350.00	53.0 AV	54.0	-1.0	2.40 V	260	51.9	1.1
5	10620.00	62.2 PK	74.0	-11.8	1.20 V	355	51.9	10.3
6	10620.00	48.2 AV	54.0	-5.8	1.20 V	350	37.9	10.3

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.

802.11ax (HE40)

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	57.9 PK	74.0	-16.1	1.10 H	240	56.4	1.5
2	5460.00	47.5 AV	54.0	-6.5	1.10 H	240	46.0	1.5
3	#5470.00	67.9 PK	68.2	-0.3	1.10 H	240	66.4	1.5
4	*5510.00	106.8 PK			1.10 H	240	67.1	39.7
5	*5510.00	96.0 AV			1.10 H	240	56.3	39.7
6	11020.00	63.2 PK	74.0	-10.8	1.01 H	256	52.4	10.8
7	11020.00	52.3 AV	54.0	-1.7	1.01 H	256	41.5	10.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	2.50 V	254	60.0	1.5
2	5460.00	45.5 AV	54.0	-8.5	2.50 V	254	44.0	1.5
3	#5470.00	67.8 PK	68.2	-0.4	2.50 V	254	66.3	1.5
4	*5510.00	104.7 PK			2.50 V	254	65.0	39.7
5	*5510.00	94.6 AV			2.50 V	254	54.9	39.7
6	11020.00	60.8 PK	74.0	-13.2	1.07 V	315	50.0	10.8
7	11020.00	51.1 AV	54.0	-2.9	1.07 V	315	40.3	10.8

Remarks:

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

RF Mode	TX 802.11ax (HE40)	Channel	CH 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	114.2 PK			1.07 H	233	74.4	39.8
2	*5550.00	101.7 AV			1.07 H	233	61.9	39.8
3	11100.00	59.1 PK	74.0	-14.9	1.05 H	326	49.2	9.9
4	11100.00	48.9 AV	54.0	-5.1	1.05 H	326	39.0	9.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	111.3 PK			2.65 V	286	71.5	39.8
2	*5550.00	100.6 AV			2.65 V	286	60.8	39.8
3	11100.00	59.3 PK	74.0	-14.7	1.03 V	318	49.4	9.9
4	11100.00	50.7 AV	54.0	-3.3	1.03 V	318	40.8	9.9

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.

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	112.7 PK			1.11 H	230	72.5	40.2
2	*5670.00	101.0 AV			1.11 H	230	60.8	40.2
3	#5725.00	64.7 PK	68.2	-3.5	1.11 H	230	62.4	2.3
4	11340.00	62.5 PK	74.0	-11.5	1.04 H	255	52.0	10.5
5	11340.00	51.5 AV	54.0	-2.5	1.04 H	255	41.0	10.5
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	*5670.00	111.8 PK			2.33 V	264	71.6	40.2
2	*5670.00	101.0 AV			2.33 V	264	60.8	40.2
3	#5725.00	67.8 PK	68.2	-0.4	2.33 V	264	65.5	2.3
4	11340.00	60.0 PK	74.0	-14.0	1.08 V	308	49.5	10.5
5	11340.00	50.2 AV	54.0	-3.8	1.08 V	308	39.7	10.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5623.20	55.8 PK	68.2	-12.4	1.05 H	226	53.9	1.9
2	*5755.00	113.6 PK			1.05 H	226	73.1	40.5
3	*5755.00	102.1 AV			1.05 H	226	61.6	40.5
4	#5931.20	57.6 PK	68.2	-10.6	1.05 H	226	54.7	2.9
5	11510.00	64.1 PK	74.0	-9.9	1.04 H	270	54.0	10.1
6	11510.00	53.3 AV	54.0	-0.7	1.04 H	270	43.2	10.1
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	#5646.40	57.7 PK	68.2	-10.5	2.48 V	264	55.6	2.1
2	*5755.00	114.3 PK			2.48 V	264	73.8	40.5
3	*5755.00	103.2 AV			2.48 V	264	62.7	40.5
4	#5948.00	57.3 PK	68.2	-10.9	2.48 V	264	54.5	2.8
5	11510.00	61.7 PK	74.0	-12.3	1.15 V	317	51.6	10.1
6	11510.00	51.5 AV	54.0	-2.5	1.15 V	317	41.4	10.1

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	#5620.40	56.5 PK	68.2	-11.7	1.01 H	228	54.6	1.9
2	*5795.00	112.2 PK			1.01 H	228	71.6	40.6
3	*5795.00	102.0 AV			1.01 H	228	61.4	40.6
4	#5935.60	56.8 PK	68.2	-11.4	1.01 H	228	54.0	2.8
5	11590.00	64.4 PK	74.0	-9.6	1.04 H	284	54.6	9.8
6	11590.00	53.4 AV	54.0	-0.6	1.04 H	284	43.6	9.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5628.40	56.1 PK	68.2	-12.1	2.67 V	251	54.1	2.0
2	*5795.00	116.0 PK			2.67 V	251	75.4	40.6
3	*5795.00	103.3 AV			2.67 V	251	62.7	40.6
4	#5978.00	56.2 PK	68.2	-12.0	2.67 V	251	53.4	2.8
5	11590.00	62.0 PK	74.0	-12.0	1.14 V	303	52.2	9.8
6	11590.00	51.8 AV	54.0	-2.2	1.14 V	303	42.0	9.8

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.

802.11ax (HE80)

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	60.0 PK	74.0	-14.0	2.07 H	126	58.7	1.3
2	5150.00	49.2 AV	54.0	-4.8	2.07 H	126	47.9	1.3
3	*5210.00	102.0 PK			2.07 H	126	62.7	39.3
4	*5210.00	91.5 AV			2.07 H	126	52.2	39.3
5	5350.00	55.0 PK	74.0	-19.0	2.07 H	126	53.9	1.1
6	5350.00	44.0 AV	54.0	-10.0	2.07 H	126	42.9	1.1
7	#10420.00	58.1 PK	68.2	-10.1	2.75 H	260	48.2	9.9
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	62.0 PK	74.0	-12.0	3.06 V	282	60.7	1.3
2	5150.00	53.0 AV	54.0	-1.0	3.06 V	282	51.7	1.3
3	*5210.00	107.6 PK			3.06 V	282	68.3	39.3
4	*5210.00	97.7 AV			3.06 V	282	58.4	39.3
5	5350.00	56.3 PK	74.0	-17.7	3.06 V	282	55.2	1.1
6	5350.00	46.0 AV	54.0	-8.0	3.06 V	282	44.9	1.1
7	#10420.00	57.6 PK	68.2	-10.6	2.60 V	335	47.7	9.9

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	55.5 PK	74.0	-18.5	1.15 H	251	54.2	1.3
2	5150.00	43.6 AV	54.0	-10.4	1.15 H	251	42.3	1.3
3	*5290.00	101.0 PK			1.15 H	251	61.9	39.1
4	*5290.00	92.4 AV			1.15 H	251	53.3	39.1
5	5350.00	65.3 PK	74.0	-8.7	1.15 H	251	64.2	1.1
6	5350.00	49.9 AV	54.0	-4.1	1.15 H	251	48.8	1.1
7	#10580.00	56.4 PK	68.2	-11.8	1.05 H	255	46.3	10.1
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	55.2 PK	74.0	-18.8	2.56 V	279	53.9	1.3
2	5150.00	44.0 AV	54.0	-10.0	2.56 V	279	42.7	1.3
3	*5290.00	102.9 PK			2.56 V	279	63.8	39.1
4	*5290.00	92.0 AV			2.56 V	279	52.9	39.1
5	5350.00	66.7 PK	74.0	-7.3	2.56 V	279	65.6	1.1
6	5350.00	52.7 AV	54.0	-1.3	2.56 V	279	51.6	1.1
7	#10580.00	55.5 PK	68.2	-12.7	1.22 V	350	45.4	10.1

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 (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	62.8 PK	74.0	-11.2	1.04 H	228	61.3	1.5
2	5460.00	52.9 AV	54.0	-1.1	1.04 H	228	51.4	1.5
3	#5470.00	65.5 PK	68.2	-2.7	1.04 H	228	64.0	1.5
4	*5530.00	102.1 PK			1.04 H	228	62.3	39.8
5	*5530.00	91.7 AV			1.04 H	228	51.9	39.8
6	#5725.00	57.4 PK	68.2	-10.8	1.04 H	228	55.1	2.3
7	11060.00	59.8 PK	74.0	-14.2	1.05 H	264	49.5	10.3
8	11060.00	49.0 AV	54.0	-5.0	1.05 H	264	38.7	10.3
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	63.0 PK	74.0	-11.0	2.19 V	279	61.5	1.5
2	5460.00	53.0 AV	54.0	-1.0	2.19 V	279	51.5	1.5
3	#5470.00	66.1 PK	68.2	-2.1	2.19 V	279	64.6	1.5
4	*5530.00	102.5 PK			2.19 V	279	62.7	39.8
5	*5530.00	91.8 AV			2.19 V	279	52.0	39.8
6	#5725.00	56.7 PK	68.2	-11.5	2.19 V	279	54.4	2.3
7	11060.00	57.4 PK	74.0	-16.6	1.09 V	314	47.1	10.3
8	11060.00	47.6 AV	54.0	-6.4	1.09 V	314	37.3	10.3

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 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	56.1 PK	74.0	-17.9	1.14 H	230	54.6	1.5
2	5460.00	46.9 AV	54.0	-7.1	1.14 H	230	45.4	1.5
3	#5470.00	58.9 PK	68.2	-9.3	1.14 H	230	57.4	1.5
4	*5610.00	108.8 PK			1.14 H	230	68.8	40.0
5	*5610.00	96.5 AV			1.14 H	230	56.5	40.0
6	#5725.00	65.9 PK	68.2	-2.3	1.14 H	230	63.6	2.3
7	11220.00	62.6 PK	74.0	-11.4	1.07 H	299	52.7	9.9
8	11220.00	51.4 AV	54.0	-2.6	1.07 H	299	41.5	9.9
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	5460.00	55.7 PK	74.0	-18.3	2.58 V	271	54.2	1.5
2	5460.00	45.0 AV	54.0	-9.0	2.58 V	271	43.5	1.5
3	#5470.00	58.7 PK	68.2	-9.5	2.58 V	271	57.2	1.5
4	*5610.00	109.2 PK			2.58 V	271	69.2	40.0
5	*5610.00	97.2 AV			2.58 V	271	57.2	40.0
6	**#5725.00**	**68.0 PK**	**68.2**	**-0.2**	**2.56 V**	**273**	**65.7**	**2.3**
7	11220.00	59.4 PK	74.0	-14.6	1.11 V	315	49.5	9.9
8	11220.00	49.8 AV	54.0	-4.2	1.11 V	315	39.9	9.9

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 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5649.60	64.8 PK	68.2	-3.4	1.11 H	231	62.7	2.1
2	#5650.00	63.5 PK	68.2	-4.7	1.11 H	231	61.3	2.2
3	*5775.00	109.5 PK			1.11 H	231	68.9	40.6
4	*5775.00	98.6 AV			1.11 H	231	58.0	40.6
5	#5925.00	61.0 PK	68.2	-7.2	1.11 H	231	58.0	3.0
6	#5925.60	62.0 PK	68.2	-6.2	1.11 H	231	59.1	2.9
7	11550.00	61.7 PK	74.0	-12.3	1.03 H	289	51.7	10.0
8	11550.00	51.7 AV	54.0	-2.3	1.03 H	289	41.7	10.0
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	#5650.00	66.7 PK	68.2	-1.5	2.69 V	268	64.5	2.2
2	#5650.00	66.6 PK	68.2	-1.6	2.69 V	268	64.4	2.2
3	*5775.00	110.4 PK			2.69 V	268	69.8	40.6
4	*5775.00	100.9 AV			2.69 V	268	60.3	40.6
5	#5925.00	65.0 PK	68.2	-3.2	2.69 V	268	62.0	3.0
6	#5926.40	65.0 PK	68.2	-3.2	2.69 V	268	62.1	2.9
7	11550.00	59.8 PK	74.0	-14.2	1.17 V	318	49.8	10.0
8	11550.00	50.0 AV	54.0	-4.0	1.17 V	318	40.0	10.0

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.

9 kHz ~ 30 MHz Data:

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

30 MHz ~ 1 GHz Worst-Case Data:

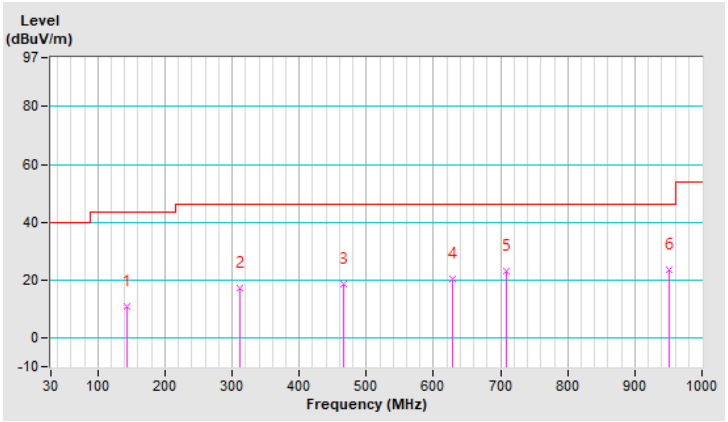
802.11a

RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	142.52	11.0 QP	43.5	-32.5	1.50 H	121	29.5	-18.5
2	312.27	17.0 QP	46.0	-29.0	1.00 H	197	34.7	-17.7
3	465.53	18.6 QP	46.0	-27.4	1.00 H	25	32.6	-14.0
4	628.49	20.3 QP	46.0	-25.7	1.00 H	216	31.0	-10.7
5	709.00	22.9 QP	46.0	-23.1	1.00 H	116	32.5	-9.6
6	951.50	23.7 QP	46.0	-22.3	1.50 H	196	30.1	-6.4

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

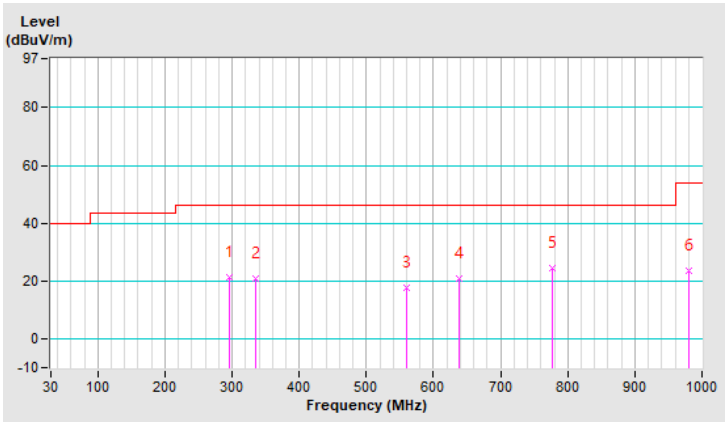


RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	296.75	21.1 QP	46.0	-24.9	1.00 V	244	39.4	-18.3
2	334.58	21.0 QP	46.0	-25.0	1.00 V	30	38.1	-17.1
3	560.59	17.7 QP	46.0	-28.3	1.00 V	326	29.9	-12.2
4	639.16	20.7 QP	46.0	-25.3	1.00 V	144	31.2	-10.5
5	777.87	24.4 QP	46.0	-21.6	1.00 V	77	32.7	-8.3
6	979.63	23.7 QP	54.0	-30.3	1.00 V	219	29.4	-5.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



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 0.50 MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESR3	102783	Dec. 21, 2020	Dec. 20, 2021
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 04, 2020	Sep. 03, 2021
LISN/AMN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 28, 2021	Jan. 27, 2022
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 18, 2020	Aug. 17, 2021
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 2 (Conduction 2).
3. The VCCI Site Registration No. is C-12047.

4.2.3 Test Procedures

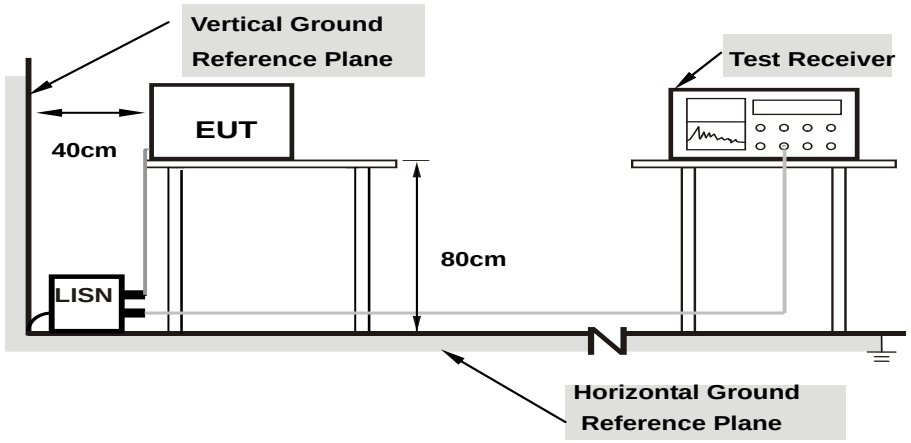
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT Operating Conditions

a. Placed the EUT on a testing table.
b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

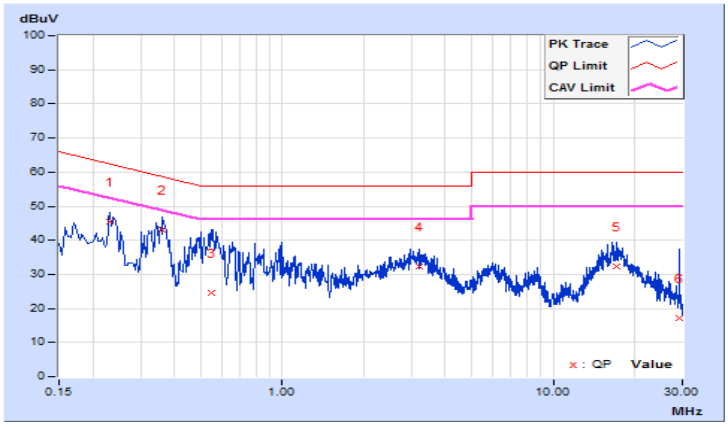
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 69%RH
Tested by	Edison Lee	**Test Date**	2021/3/25

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.23000	10.08	35.36	22.44	45.44	32.52	62.45	52.45	-17.01	-19.93
2	0.36200	10.09	32.99	23.06	43.08	33.15	58.68	48.68	-15.60	-15.53
3	0.55000	10.10	14.33	8.37	24.43	18.47	56.00	46.00	-31.57	-27.53
4	3.19000	10.20	22.02	15.83	32.22	26.03	56.00	46.00	-23.78	-19.97
5	17.21800	10.41	21.99	13.26	32.40	23.67	60.00	50.00	-27.60	-26.33
6	29.19800	10.22	7.10	0.36	17.32	10.58	60.00	50.00	-42.68	-39.42

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

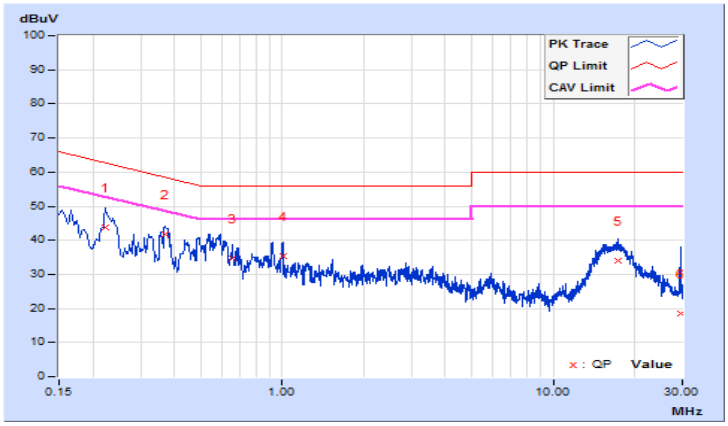


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 69%RH
Tested by	Edison Lee	**Test Date**	2021/3/25

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.22200	10.08	33.71	20.44	43.79	30.52	62.74	52.74	-18.95	-22.22
2	**0.37000**	**10.10**	**31.70**	**23.23**	**41.80**	**33.33**	**58.50**	**48.50**	**-16.70**	**-15.17**
3	0.65400	10.12	24.53	11.15	34.65	21.27	56.00	46.00	-21.35	-24.73
4	1.00503	10.15	25.14	10.61	35.29	20.76	56.00	46.00	-20.71	-25.24
5	17.46200	10.59	23.44	14.08	34.03	24.67	60.00	50.00	-25.97	-25.33
6	29.51000	10.39	7.97	1.33	18.36	11.72	60.00	50.00	-41.64	-38.28

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 ≦ 125 mW (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	250 mW (24 dBm)
U-NII-2A	√		250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-2C	√		250 mW (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 $N_{ANT} \leq 4$;

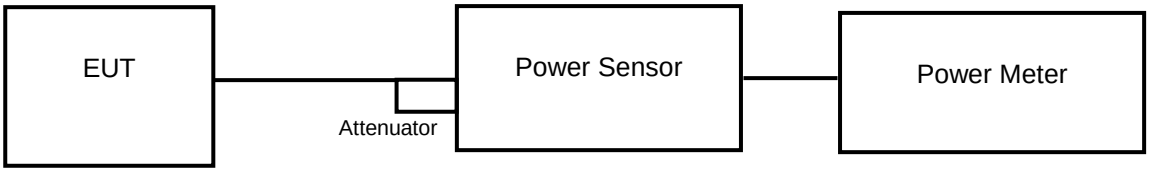
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

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

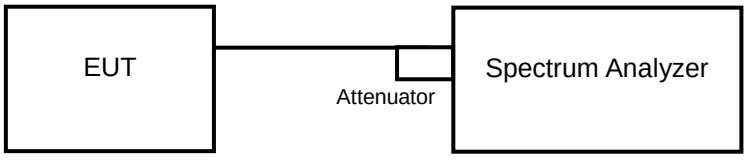
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

<Power Output Measurement>



<26 dB Bandwidth>



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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. Duty factor is not added to measured value.

26 dB Bandwidth

a. Set RBW = approximately 1 % of the emission bandwidth.
b. Set the VBW ≥ 3 x 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 Results

Power Output:

CDD Mode

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	11.03	11.52	26.867	14.29	24	Pass
40	5200	9.94	10.40	20.828	13.19	24	Pass
48	5240	11.11	11.41	26.748	14.27	24	Pass
52	5260	12.65	12.85	37.683	15.76	24	Pass
60	5300	11.22	11.93	28.839	14.60	24	Pass
64	5320	11.62	11.94	30.153	14.79	24	Pass
100	5500	9.07	9.41	16.802	12.25	24	Pass
116	5580	11.63	11.95	30.222	14.80	24	Pass
140	5700	10.72	11.36	25.48	14.06	24	Pass
149	5745	12.12	12.23	33.004	15.19	30	Pass
157	5785	12.67	12.78	37.46	15.74	30	Pass
165	5825	13.57	13.70	46.193	16.65	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (24.68) = 24.92 dBm > 24 dBm.
2. 11 dBm + 10log (22.83) = 24.58 dBm > 24 dBm.
3. 11 dBm + 10log (22.42) = 24.50 dBm > 24 dBm.
4. 11 dBm + 10log (22.68) = 24.55 dBm > 24 dBm.
5. 11 dBm + 10log (25.29) = 25.02 dBm > 24 dBm.
6. 11 dBm + 10log (26.67) = 25.26 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (22.91) = 24.60 dBm > 24 dBm.
2. 11 dBm + 10log (22.92) = 24.60 dBm > 24 dBm.
3. 11 dBm + 10log (22.92) = 24.60 dBm > 24 dBm.
4. 11 dBm + 10log (22.78) = 24.57 dBm > 24 dBm.
5. 11 dBm + 10log (22.95) = 24.60 dBm > 24 dBm.
6. 11 dBm + 10log (22.93) = 24.60 dBm > 24 dBm.

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.52	11.05	24.007	13.80	24	Pass
40	5200	10.57	11.13	24.374	13.87	24	Pass
48	5240	10.69	11.01	24.34	13.86	24	Pass
52	5260	13.25	13.31	42.564	16.29	24	Pass
60	5300	12.53	13.04	38.043	15.80	24	Pass
64	5320	12.08	12.44	33.682	15.27	24	Pass
100	5500	8.29	8.41	13.68	11.36	24	Pass
116	5580	13.25	13.43	43.164	16.35	24	Pass
140	5700	9.25	9.27	16.867	12.27	24	Pass
149	5745	12.60	12.67	36.69	15.65	30	Pass
157	5785	12.52	12.73	36.615	15.64	30	Pass
165	5825	13.51	13.80	46.427	16.67	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	8.02	8.29	13.084	11.17	24	Pass
46	5230	11.66	11.85	29.966	14.77	24	Pass
54	5270	14.87	14.95	61.951	17.92	24	Pass
62	5310	9.08	9.35	16.701	12.23	24	Pass
102	5510	7.49	7.77	11.595	10.64	24	Pass
110	5550	13.77	13.86	48.145	16.83	24	Pass
134	5670	12.09	12.13	32.511	15.12	24	Pass
151	5755	14.66	14.40	56.784	17.54	30	Pass
159	5795	14.33	14.58	55.81	17.47	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.61	11.13	24.48	13.89	24	Pass
40	5200	10.68	11.22	24.938	13.97	24	Pass
48	5240	10.80	11.09	24.876	13.96	24	Pass
52	5260	13.37	13.39	43.554	16.39	24	Pass
60	5300	12.72	13.11	39.171	15.93	24	Pass
64	5320	12.20	12.52	34.461	15.37	24	Pass
100	5500	8.37	8.49	13.934	11.44	24	Pass
116	5580	13.35	13.51	44.066	16.44	24	Pass
140	5700	9.33	9.39	17.26	12.37	24	Pass
149	5745	12.59	12.71	36.819	15.66	30	Pass
157	5785	12.61	12.75	37.075	15.69	30	Pass
165	5825	13.51	13.80	46.427	16.67	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	8.12	8.38	13.373	11.26	24	Pass
46	5230	11.76	11.95	30.664	14.87	24	Pass
54	5270	14.79	14.85	60.679	17.83	24	Pass
62	5310	9.20	9.44	17.108	12.33	24	Pass
102	5510	7.62	7.89	11.933	10.77	24	Pass
110	5550	13.86	13.96	49.211	16.92	24	Pass
134	5670	12.19	12.26	33.384	15.24	24	Pass
151	5755	14.55	14.69	57.954	17.63	30	Pass
159	5795	14.61	14.72	58.555	17.68	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	8.24	8.57	13.863	11.42	24	Pass
58	5290	7.72	8.01	12.24	10.88	24	Pass
106	5530	8.12	8.07	12.898	11.11	24	Pass
122	5610	12.99	13.07	40.184	16.04	24	Pass
155	5775	14.16	14.30	52.977	17.24	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (81.43) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.73) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (131.71) = 32.19 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (81.38) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.80) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (91.73) = 30.62 dBm > 24 dBm.

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.73	11.26	25.196	14.01	24	Pass
40	5200	10.75	11.32	25.437	14.05	24	Pass
48	5240	10.88	11.17	25.338	14.04	24	Pass
52	5260	13.46	13.51	44.621	16.50	24	Pass
60	5300	12.81	13.22	40.088	16.03	24	Pass
64	5320	12.32	12.61	35.3	15.48	24	Pass
100	5500	8.48	8.61	14.308	11.56	24	Pass
116	5580	13.49	13.62	45.35	16.57	24	Pass
140	5700	9.42	9.48	17.621	12.46	24	Pass
149	5745	12.59	12.71	36.819	15.66	30	Pass
157	5785	12.65	12.76	37.288	15.72	30	Pass
165	5825	13.66	13.74	46.887	16.71	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	8.22	8.47	13.668	11.36	24	Pass
46	5230	11.86	12.05	31.379	14.97	24	Pass
54	5270	14.67	14.73	59.026	17.71	24	Pass
62	5310	9.32	9.52	17.504	12.43	24	Pass
102	5510	7.87	8.01	12.448	10.95	24	Pass
110	5550	13.95	14.05	50.241	17.01	24	Pass
134	5670	12.28	12.37	34.163	15.34	24	Pass
151	5755	14.62	14.73	58.69	17.69	30	Pass
159	5795	14.66	14.80	59.441	17.74	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	8.35	8.67	14.201	11.52	24	Pass
58	5290	7.83	8.11	12.539	10.98	24	Pass
106	5530	8.21	8.17	13.184	11.20	24	Pass
122	5610	13.11	13.15	41.118	16.14	24	Pass
155	5775	14.22	14.31	53.401	17.28	30	Pass

Note:

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

Chain 0

1. 11 dBm + 10log (81.43) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.73) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (131.71) = 32.19 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (81.38) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.80) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (91.73) = 30.62 dBm > 24 dBm.

Beamforming Mode

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	7.51	8.04	12.004	10.79	24	Pass
40	5200	7.56	8.12	12.188	10.86	24	Pass
48	5240	7.68	8.00	12.171	10.85	24	Pass
52	5260	10.24	10.30	21.283	13.28	24	Pass
60	5300	9.52	10.03	19.023	12.79	24	Pass
64	5320	9.07	9.43	16.842	12.26	24	Pass
100	5500	5.28	5.40	6.84	8.35	24	Pass
116	5580	10.24	10.42	21.584	13.34	24	Pass
140	5700	6.24	6.26	8.434	9.26	24	Pass
149	5745	9.59	9.66	18.346	12.64	30	Pass
157	5785	9.51	9.72	18.309	12.63	30	Pass
165	5825	10.50	10.79	23.215	13.66	30	Pass

Note:

NOTE:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	5.01	5.28	6.542	8.16	24	Pass
46	5230	8.65	8.84	14.984	11.76	24	Pass
54	5270	11.86	11.94	30.978	14.91	24	Pass
62	5310	6.07	6.34	8.351	9.22	24	Pass
102	5510	4.48	4.76	5.798	7.63	24	Pass
110	5550	10.76	10.85	24.074	13.82	24	Pass
134	5670	9.08	9.12	16.257	12.11	24	Pass
151	5755	11.65	11.39	28.394	14.53	30	Pass
159	5795	11.62	11.87	29.903	14.76	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	7.60	8.12	12.241	10.88	24	Pass
40	5200	7.67	8.21	12.47	10.96	24	Pass
48	5240	7.79	8.08	12.439	10.95	24	Pass
52	5260	10.36	10.38	21.779	13.38	24	Pass
60	5300	9.71	10.10	19.587	12.92	24	Pass
64	5320	9.19	9.51	17.232	12.36	24	Pass
100	5500	5.36	5.48	6.967	8.43	24	Pass
116	5580	10.34	10.50	22.035	13.43	24	Pass
140	5700	6.32	6.38	8.631	9.36	24	Pass
149	5745	9.58	9.70	18.411	12.65	30	Pass
157	5785	9.60	9.74	18.539	12.68	30	Pass
165	5825	10.50	10.79	23.215	13.66	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	5.11	5.37	6.687	8.25	24	Pass
46	5230	8.75	8.94	15.333	11.86	24	Pass
54	5270	11.78	11.84	30.342	14.82	24	Pass
62	5310	6.19	6.43	8.555	9.32	24	Pass
102	5510	4.61	4.88	5.967	7.76	24	Pass
110	5550	10.85	10.95	24.607	13.91	24	Pass
134	5670	9.18	9.25	16.693	12.23	24	Pass
151	5755	11.54	11.68	28.979	14.62	30	Pass
159	5795	11.60	11.71	29.28	14.67	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	5.23	5.56	6.932	8.41	24	Pass
58	5290	4.71	5.00	6.12	7.87	24	Pass
106	5530	5.11	5.06	6.45	8.10	24	Pass
122	5610	9.98	10.06	20.093	13.03	24	Pass
155	5775	11.15	11.29	26.49	14.23	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (81.43) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.73) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (131.71) = 32.19 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (81.38) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.80) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (91.73) = 30.62 dBm > 24 dBm.

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	7.72	8.25	12.599	11.00	24	Pass
40	5200	7.74	8.31	12.719	11.04	24	Pass
48	5240	7.87	8.16	12.67	11.03	24	Pass
52	5260	10.45	10.50	22.312	13.49	24	Pass
60	5300	9.80	10.21	20.045	13.02	24	Pass
64	5320	9.31	9.60	17.651	12.47	24	Pass
100	5500	5.47	5.60	7.154	8.55	24	Pass
116	5580	10.48	10.61	22.677	13.56	24	Pass
140	5700	6.41	6.47	8.811	9.45	24	Pass
149	5745	9.58	9.70	18.411	12.65	30	Pass
157	5785	9.64	9.75	18.645	12.71	30	Pass
165	5825	10.65	10.73	23.445	13.70	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (26.42) = 25.21 dBm > 24 dBm.
2. 11 dBm + 10log (26.79) = 25.28 dBm > 24 dBm.
3. 11 dBm + 10log (23.26) = 24.66 dBm > 24 dBm.
4. 11 dBm + 10log (23.06) = 24.62 dBm > 24 dBm.
5. 11 dBm + 10log (40.91) = 27.11 dBm > 24 dBm.
6. 11 dBm + 10log (23.87) = 24.77 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (25.83) = 25.12 dBm > 24 dBm.
2. 11 dBm + 10log (29.17) = 25.64 dBm > 24 dBm.
3. 11 dBm + 10log (27.74) = 25.43 dBm > 24 dBm.
4. 11 dBm + 10log (24.43) = 24.87 dBm > 24 dBm.
5. 11 dBm + 10log (38.11) = 26.81 dBm > 24 dBm.
6. 11 dBm + 10log (23.69) = 24.74 dBm > 24 dBm.

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	5.21	5.46	6.835	8.35	24	Pass
46	5230	8.85	9.04	15.69	11.96	24	Pass
54	5270	11.66	11.72	29.515	14.70	24	Pass
62	5310	6.31	6.51	8.753	9.42	24	Pass
102	5510	4.86	5.00	6.224	7.94	24	Pass
110	5550	10.94	11.04	25.122	14.00	24	Pass
134	5670	9.27	9.36	17.083	12.33	24	Pass
151	5755	11.61	11.72	29.347	14.68	30	Pass
159	5795	11.65	11.79	29.723	14.73	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (65.15) = 29.13 dBm > 24 dBm.
2. 11 dBm + 10log (46.41) = 27.66 dBm > 24 dBm.
3. 11 dBm + 10log (45.54) = 27.58 dBm > 24 dBm.
4. 11 dBm + 10log (79.81) = 30.02 dBm > 24 dBm.
5. 11 dBm + 10log (61.27) = 28.87 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (55.52) = 28.44 dBm > 24 dBm.
2. 11 dBm + 10log (46.10) = 27.63 dBm > 24 dBm.
3. 11 dBm + 10log (45.35) = 27.56 dBm > 24 dBm.
4. 11 dBm + 10log (63.68) = 29.04 dBm > 24 dBm.
5. 11 dBm + 10log (50.92) = 28.06 dBm > 24 dBm.

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	5.34	5.66	7.101	8.51	24	Pass
58	5290	4.82	5.10	6.27	7.97	24	Pass
106	5530	5.20	5.16	6.592	8.19	24	Pass
122	5610	10.10	10.14	20.561	13.13	24	Pass
155	5775	11.21	11.30	26.703	14.27	30	Pass

Note:

5180~5240 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi

5260~5320 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi

5500~5700 MHz :

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi

5745~5825 MHz:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] = 4.16$ dBi

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

Chain 0

1. 11 dBm + 10log (81.43) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.73) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (131.71) = 32.19 dBm > 24 dBm.

Chain 1

1. 11 dBm + 10log (81.38) = 30.10 dBm > 24 dBm.
2. 11 dBm + 10log (81.80) = 30.12 dBm > 24 dBm.
3. 11 dBm + 10log (91.73) = 30.62 dBm > 24 dBm.

26 dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	22.78	22.85
40	5200	21.96	22.78
48	5240	22.28	22.87
52	5260	24.68	22.91
60	5300	22.83	22.92
64	5320	22.42	22.92
100	5500	22.68	22.78
116	5580	25.29	22.95
140	5700	26.67	22.93

802.11ax (HE20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	24.13	23.48
40	5200	23.55	23.54
48	5240	23.18	23.46
52	5260	26.42	25.83
60	5300	26.79	29.17
64	5320	23.26	27.74
100	5500	23.06	24.43
116	5580	40.91	38.11
140	5700	23.87	23.69

802.11n (HT40)

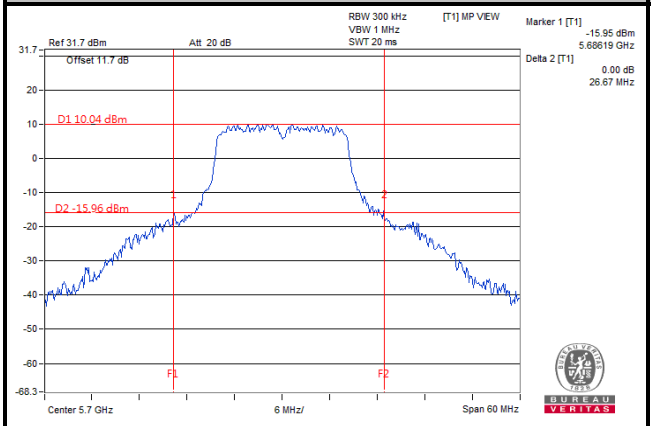
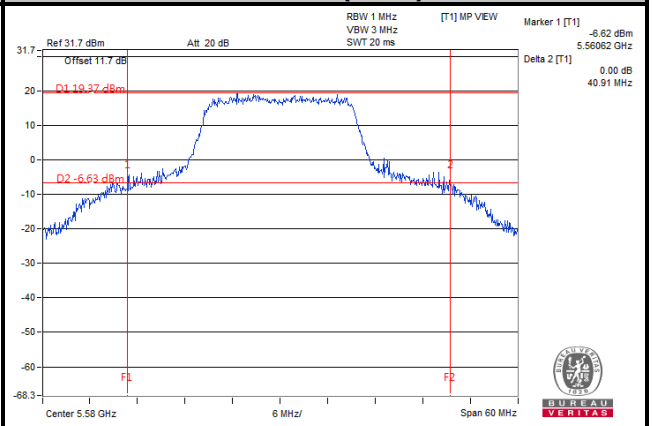
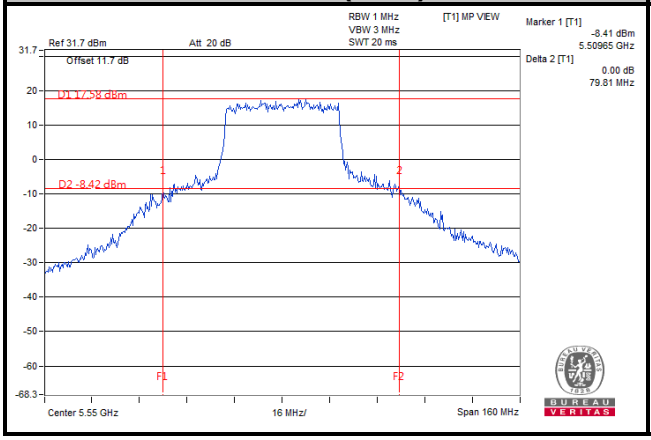
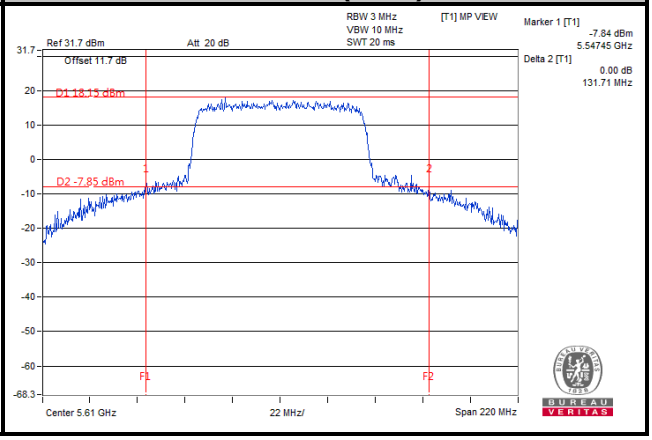
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	65.15	55.52
62	5310	46.41	46.10

802.11ax (HE40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	45.61	45.42
46	5230	46.33	45.74
102	5510	45.54	45.35
110	5550	79.81	63.68
134	5670	61.27	50.92

802.11ax (HE80)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	81.78	81.40
58	5290	81.43	81.38
106	5530	81.73	81.80
122	5610	131.71	91.73

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

EUT HIGHEST AND LOWEST CONDUCTED POWER

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	37.683	15.76
5470~5725	30.222	14.80

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	42.564	16.29
5470~5725	43.164	16.35

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	61.951	17.92
5470~5725	48.145	16.83

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	43.554	16.39
5470~5725	44.066	16.44

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	60.679	17.83
5470~5725	49.211	16.92

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	12.24	10.88
5470~5725	40.184	16.04

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	44.621	16.50
5470~5725	45.35	16.57

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	59.026	17.71
5470~5725	50.241	17.01

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	12.539	10.98
5470~5725	41.118	16.14

Beamforming Mode

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	21.283	13.28
5470~5725	21.584	13.34

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	30.978	14.91
5470~5725	24.074	13.82

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	21.779	13.38
5470~5725	22.035	13.43

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	30.342	14.82
5470~5725	24.607	13.91

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	6.12	7.87
5470~5725	20.093	13.03

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	22.312	13.49
5470~5725	22.677	13.56

802.11ax (HE40)

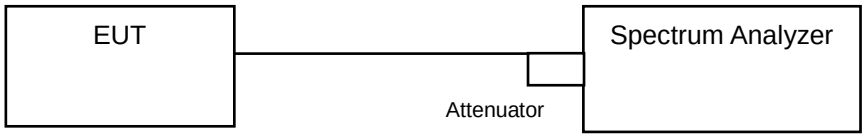
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	29.515	14.70
5470~5725	25.122	14.00

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	6.27	7.97
5470~5725	20.561	13.13

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1 % to 5 % of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

4.4.4 Test Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.68	16.73
40	5200	16.80	16.73
48	5240	16.68	16.83
52	5260	16.80	16.93
60	5300	16.68	16.73
64	5320	16.80	16.73
100	5500	16.68	16.83
116	5580	16.68	16.83
140	5700	16.68	16.73
149	5745	16.92	16.83
157	5785	16.83	16.93
165	5825	16.92	17.11

802.11ax (HE20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.08	19.08
40	5200	18.96	19.20
48	5240	19.08	19.20
52	5260	18.96	19.08
60	5300	19.08	19.08
64	5320	18.96	19.08
100	5500	19.08	19.08
116	5580	19.32	19.20
140	5700	19.08	18.96
149	5745	19.14	19.14
157	5785	19.14	19.14
165	5825	19.24	19.24

802.11n (HT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	38.40	38.40
62	5310	38.16	38.16

802.11ax (HE40)

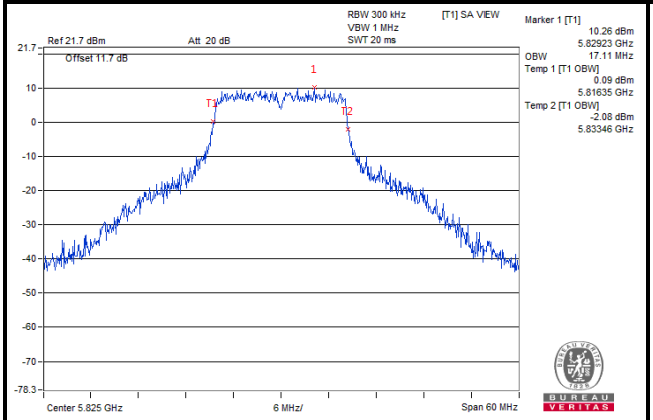
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	38.16	38.40
46	5230	38.16	38.16
102	5510	38.16	38.16
110	5550	38.88	38.64
134	5670	38.64	38.16
151	5755	39.12	38.64
159	5795	38.88	38.64

802.11ax (HE80)

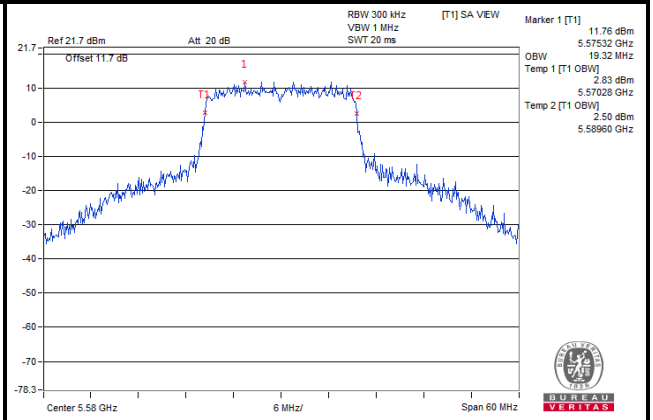
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	76.80
58	5290	76.32	77.28
106	5530	77.28	78.24
122	5610	77.28	77.28
155	5775	77.70	77.31

Spectrum Plot of Worst Value

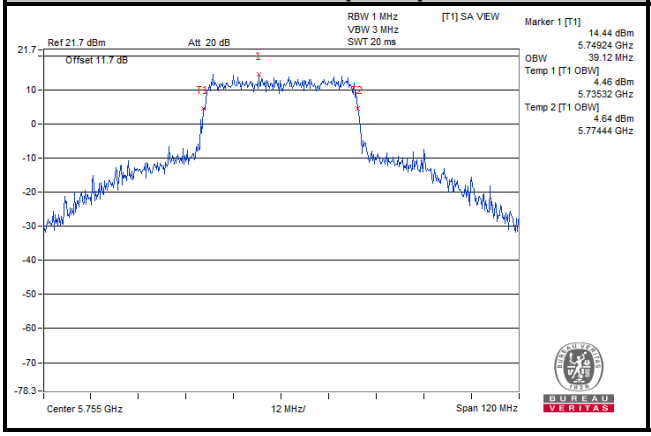
802.11a



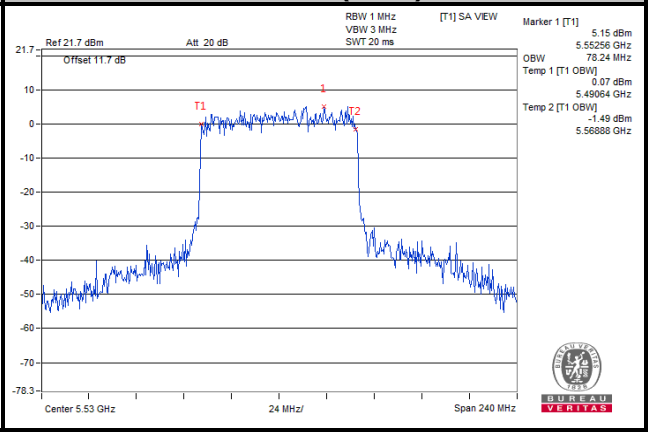
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)

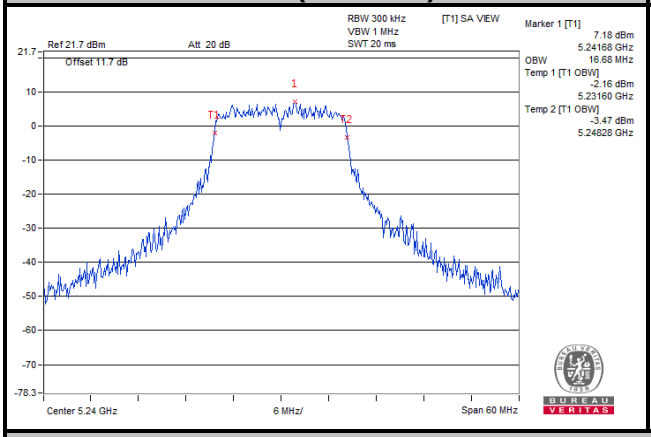


Chain 0

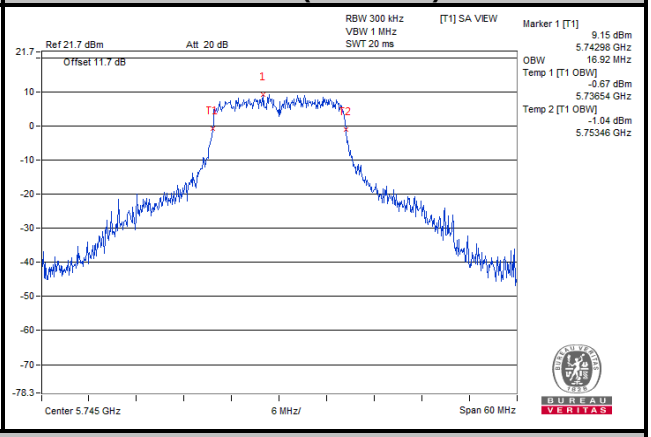
Spectrum Plot for Nearby DFS Band

802.11a

Ch 48 (5240 MHz)

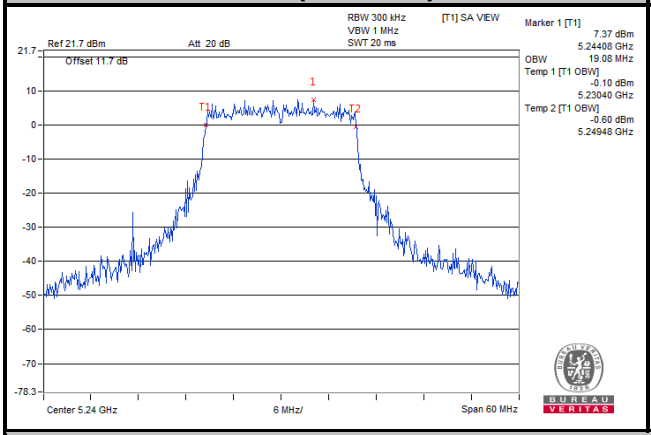


Ch 149 (5745 MHz)

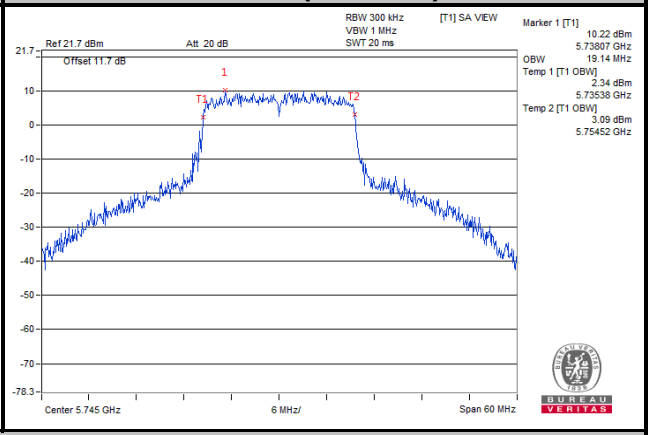


802.11ax (HE20)

Ch 48 (5240 MHz)

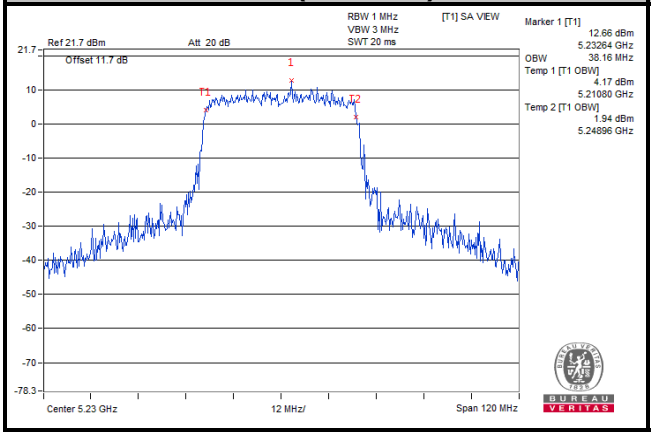


Ch 149 (5745 MHz)

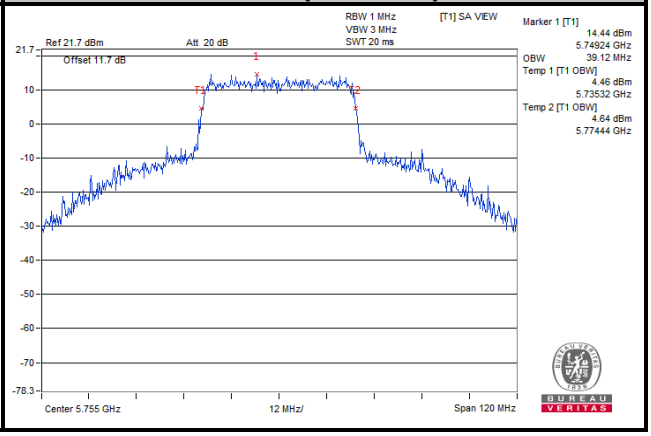


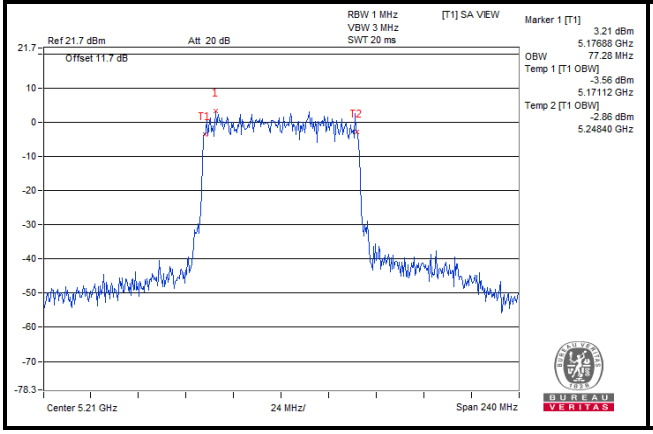
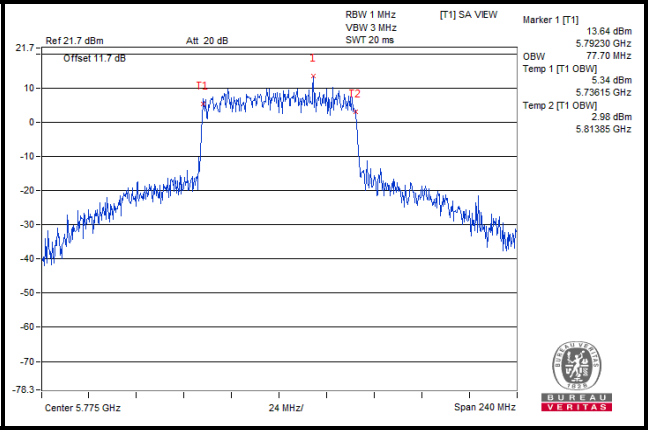
802.11ax (HE40)

Ch 46 (5230 MHz)

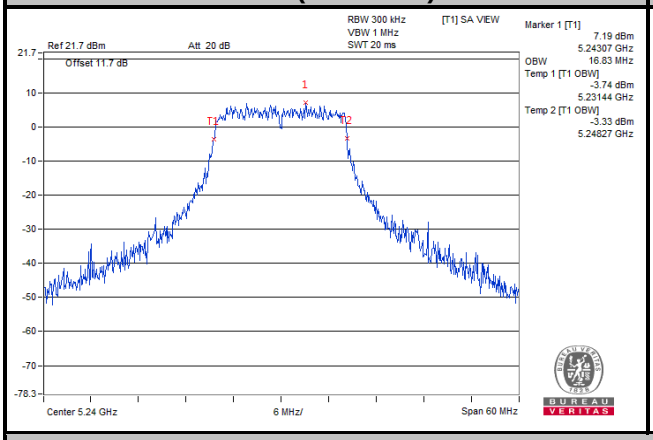
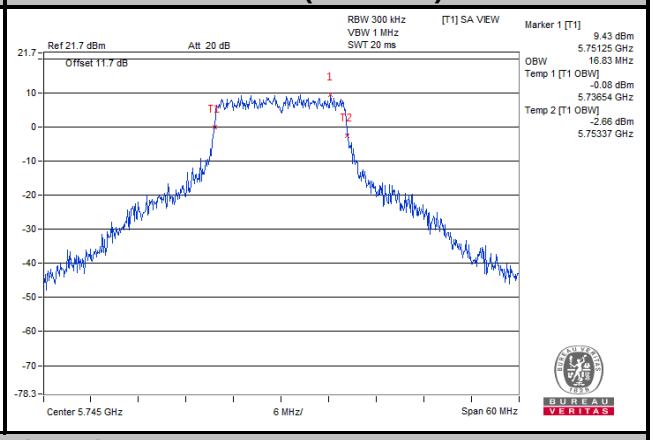
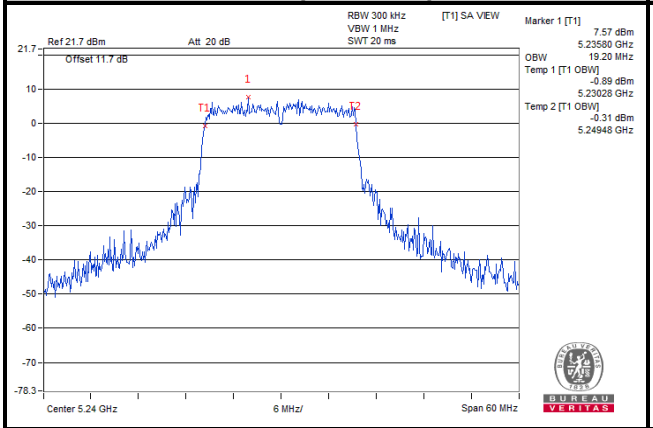
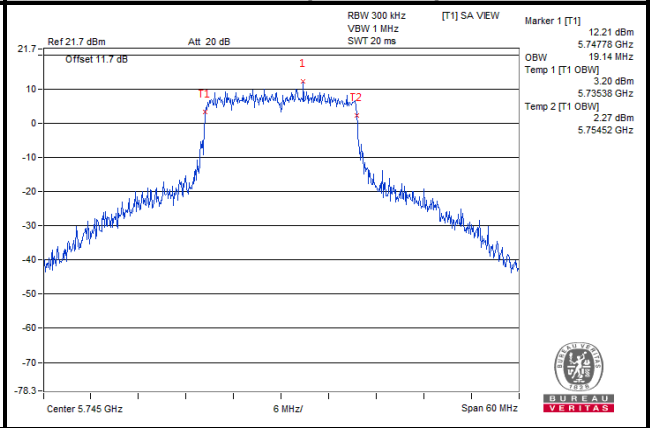
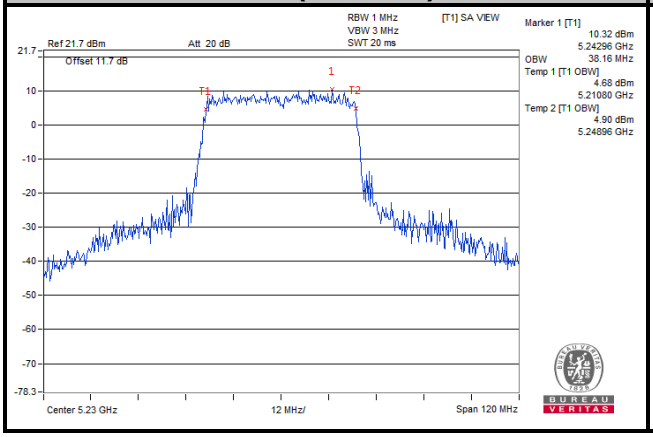
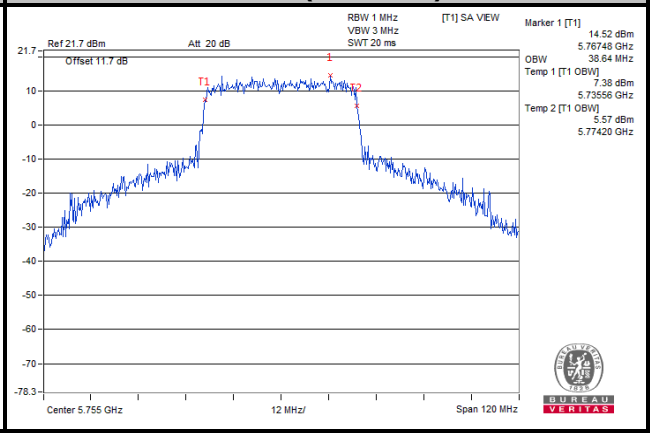


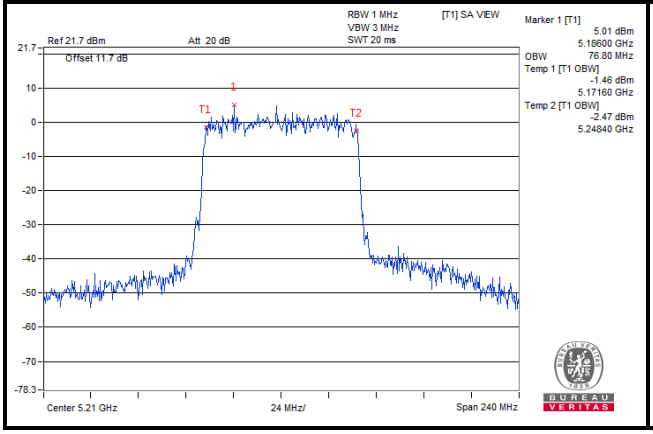
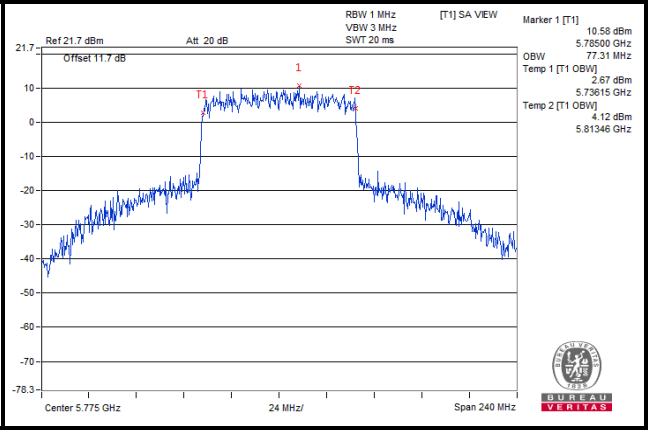
Ch 151 (5755 MHz)



802.11ax (HE80)	
Ch 42 (5210 MHz)	Ch 155 (5775 MHz)
	

Chain 1

Spectrum Plot for Nearby DFS Band	
802.11a	
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	
802.11ax (HE20)	
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	
802.11ax (HE40)	
Ch 46 (5230 MHz)	Ch 151 (5755 MHz)
	

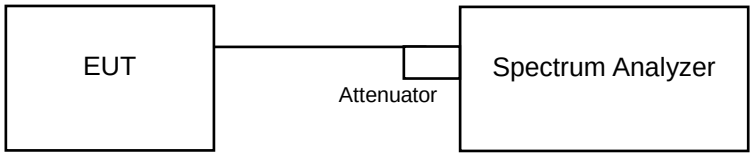
802.11ax (HE80)	
Ch 42 (5210 MHz)	Ch 155 (5775 MHz)
	

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	17 dBm/MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11 dBm/MHz
U-NII-2A	√		11 dBm/MHz
U-NII-2C	√		11 dBm/MHz
U-NII-3	√		30 dBm/500 kHz

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, U-NII-2C band:

Using method SA-1

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

※For U-NII-3:

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

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

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

4.5.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-2.12	-2.13	0.89	11	Pass
40	5200	-3.38	-2.90	-0.12	11	Pass
48	5240	-2.02	-1.69	1.16	11	Pass
52	5260	-1.06	-0.79	2.09	11	Pass
60	5300	-2.00	-1.47	1.28	11	Pass
64	5320	-1.96	-2.01	1.03	11	Pass
100	5500	-4.00	-4.03	-1.00	11	Pass
116	5580	-2.09	-2.08	0.93	11	Pass
140	5700	-2.94	-1.92	0.61	11	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. **For U-NII-1 Band:**
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi < 6 dBi, so the limit no need to be reduced.
   For U-NII-2A Band:
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi < 6 dBi, so the limit no need to be reduced.
   For U-NII-2C Band:
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi < 6 dBi, so the limit no need to be reduced.

802.11ax (HE20)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-2.47	-2.06	0.75	11	Pass
40	5200	-2.43	-2.39	0.60	11	Pass
48	5240	-2.37	-2.05	0.80	11	Pass
52	5260	0.01	-0.06	2.99	11	Pass
60	5300	-0.70	-0.22	2.56	11	Pass
64	5320	-0.87	-0.66	2.25	11	Pass
100	5500	-4.71	-4.50	-1.59	11	Pass
116	5580	-0.05	0.05	3.01	11	Pass
140	5700	-3.78	-3.67	-0.71	11	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. **For U-NII-1 Band:**
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ = 4.67 dBi < 6 dBi, so the limit no need to be reduced.
   For U-NII-2A Band:
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ = 4.62 dBi < 6 dBi, so the limit no need to be reduced.
   For U-NII-2C Band:
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ = 5.16 dBi < 6 dBi, so the limit no need to be reduced.

802.11n (HT40)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
54	5270	-1.78	-1.76	1.24	11	Pass
62	5310	-7.13	-6.78	-3.94	11	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. **For U-NII-2A Band:**
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi < 6 dBi, so the limit no need to be reduced.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
38	5190	-8.60	-7.56	-5.04	11	Pass
46	5230	-4.18	-4.27	-1.21	11	Pass
102	5510	-8.52	-7.95	-5.22	11	Pass
110	5550	-2.13	-2.11	0.89	11	Pass
134	5670	-3.81	-4.08	-0.93	11	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. **For U-NII-1 Band:**
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi < 6 dBi, so the limit no need to be reduced.
   For U-NII-2C Band:
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi < 6 dBi, so the limit no need to be reduced.

802.11ax (HE80):

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
42	5210	-10.55	-10.43	-7.48	11	Pass
58	5290	-11.62	-11.34	-8.47	11	Pass
106	5530	-10.85	-10.71	-7.77	11	Pass
122	5610	-6.18	-6.21	-3.18	11	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. **For U-NII-1 Band:**

   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.67$ dBi < 6 dBi, so the limit no need to be reduced.

   For U-NII-2A Band:

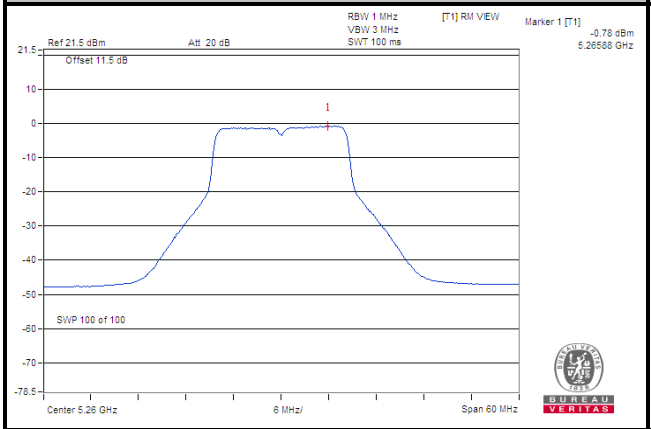
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 4.62$ dBi < 6 dBi, so the limit no need to be reduced.

   For U-NII-2C Band:

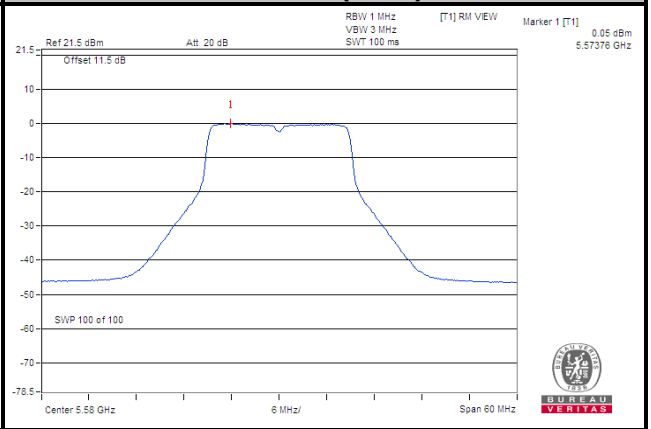
   Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}] = 5.16$ dBi < 6 dBi, so the limit no need to be reduced.

Spectrum Plot of Worst Value

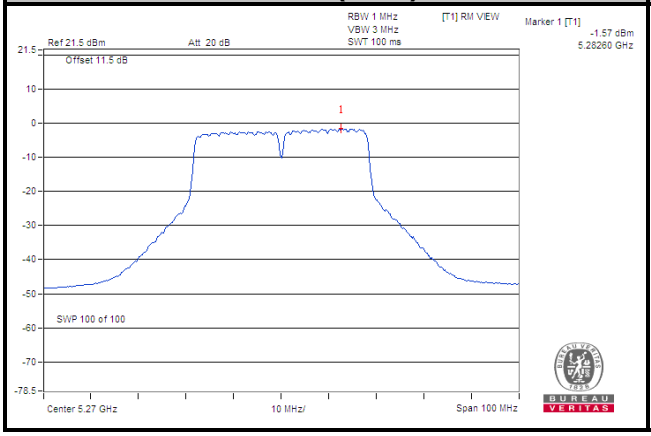
802.11a



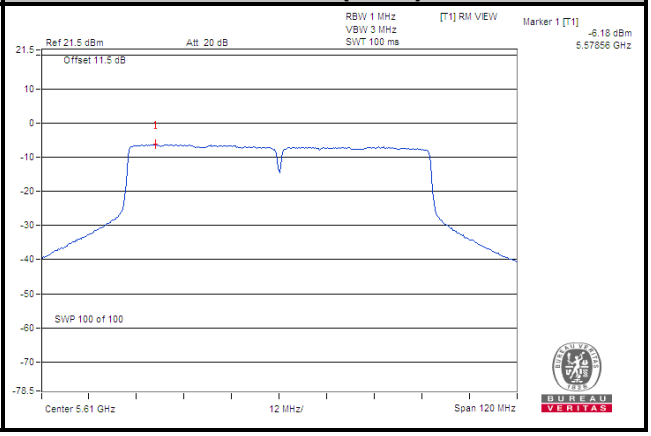
802.11ax (HE20)



802.11n (HT40)



802.11ax (HE80)



For U-NII-3 Band

802.11a

TX Chain	Channel	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	149	5745	-9.18	-6.96	3.01	-3.95	30	Pass
	157	5785	-8.6	-6.38	3.01	-3.37	30	Pass
	165	5825	-8.3	-6.08	3.01	-3.07	30	Pass
1	149	5745	-9.23	-7.01	3.01	-4	30	Pass
	157	5785	-8.78	-6.56	3.01	-3.55	30	Pass
	165	5825	-7.73	-5.51	3.01	-2.5	30	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 4.16 < 6 dBi, so the limit no need to be reduced.

802.11ax (HE20)

TX Chain	Channel	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	149	5745	-8.92	-6.7	3.01	-3.69	30	Pass
	157	5785	-9.06	-6.84	3.01	-3.83	30	Pass
	165	5825	-8.14	-5.92	3.01	-2.91	30	Pass
1	149	5745	-8.91	-6.69	3.01	-3.68	30	Pass
	157	5785	-9.02	-6.8	3.01	-3.79	30	Pass
	165	5825	-8.14	-5.92	3.01	-2.91	30	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 4.16 < 6 dBi, so the limit no need to be reduced.

802.11ax (HE40)

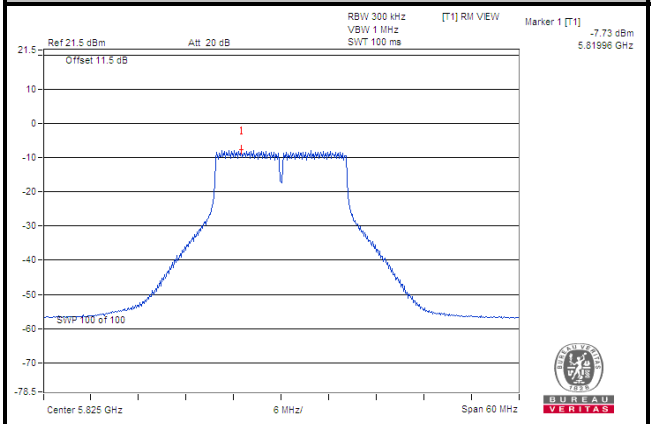
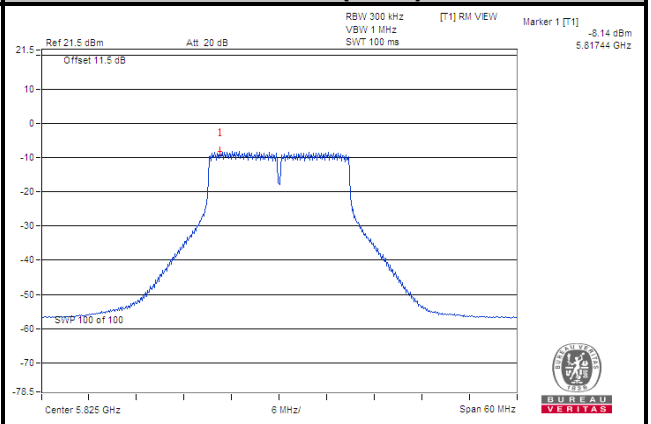
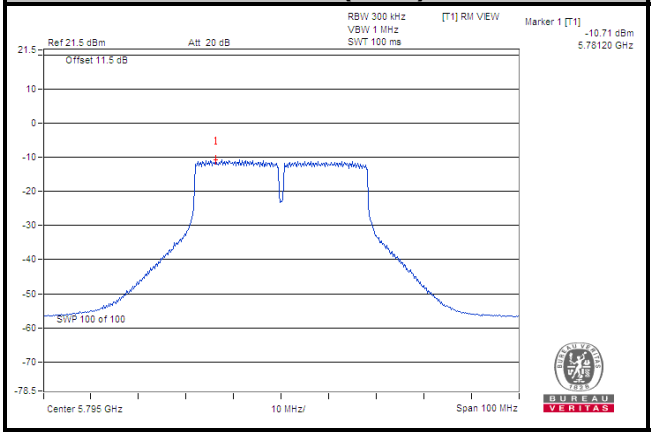
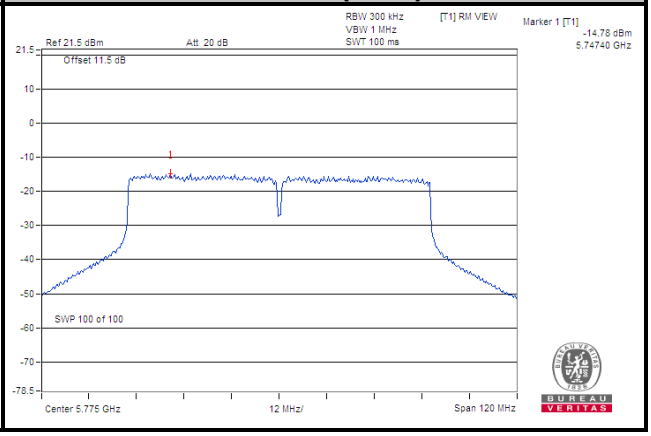
TX Chain	Channel	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	151	5755	-11.01	-8.79	3.01	-5.78	30	Pass
	159	5795	-10.71	-8.49	3.01	-5.48	30	Pass
1	151	5755	-10.81	-8.59	3.01	-5.58	30	Pass
	159	5795	-10.76	-8.54	3.01	-5.53	30	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 4.16 < 6 dBi, so the limit no need to be reduced.

802.11ax (HE80)

TX Chain	Channel	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	155	5775	-14.92	-12.7	3.01	-9.69	30	Pass
1	155	5775	-14.78	-12.56	3.01	-9.55	30	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 4.16 < 6 dBi, so the limit no need to be reduced.

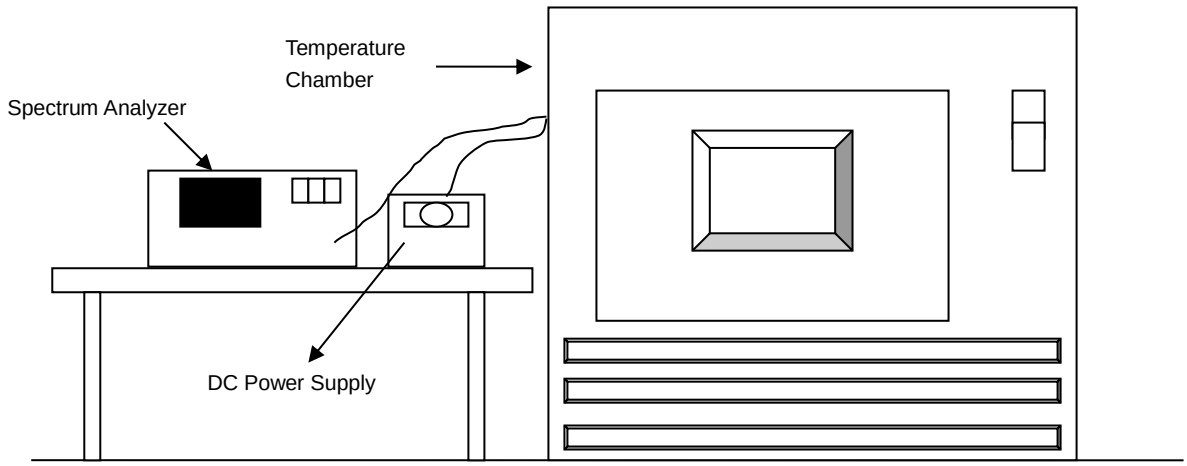
Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

4.6 Frequency Stability

4.6.1 Limit of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vdc)	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	3.8	5180.0015	PASS	5180.0028	PASS	5180.0017	PASS	5180.0003	PASS
30	3.8	5180.0098	PASS	5180.012	PASS	5180.0118	PASS	5180.0085	PASS
20	3.8	5179.9937	PASS	5179.9961	PASS	5179.9965	PASS	5179.9943	PASS
10	3.8	5180.0164	PASS	5180.0164	PASS	5180.0159	PASS	5180.0162	PASS
0	3.8	5180.0048	PASS	5180.0054	PASS	5180.0092	PASS	5180.0053	PASS

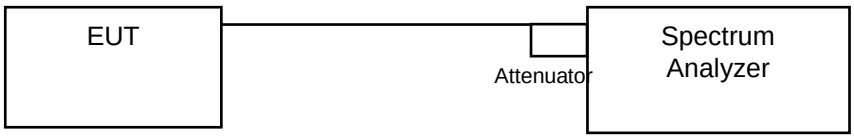
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	4.37	5179.9928	PASS	5179.9966	PASS	5179.9959	PASS	5179.9947	PASS
	3.8	5179.9937	PASS	5179.9961	PASS	5179.9965	PASS	5179.9943	PASS
	3.23	5179.9939	PASS	5179.9951	PASS	5179.9968	PASS	5179.9935	PASS

4.7 6 dB Bandwidth Measurement

4.7.1 Limits of 6 dB Bandwidth Measurement

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

MEASUREMENT PROCEDURE REF

a. Set resolution bandwidth (RBW) = 100 kHz
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)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	16.38	18.16	0.5	Pass
157	5785	16.39	18.15	0.5	Pass
165	5825	16.39	17.57	0.5	Pass

802.11ax (HE20)

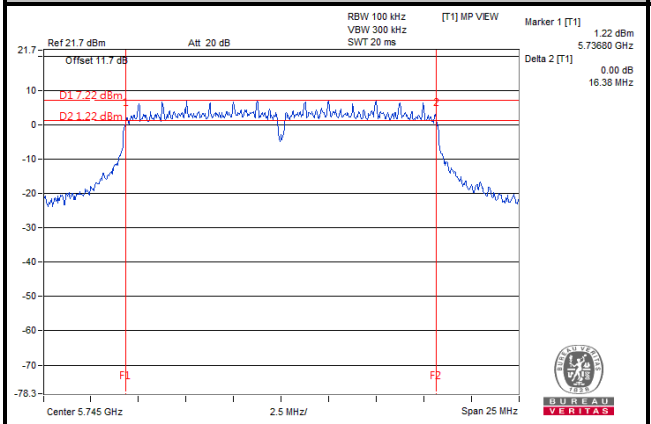
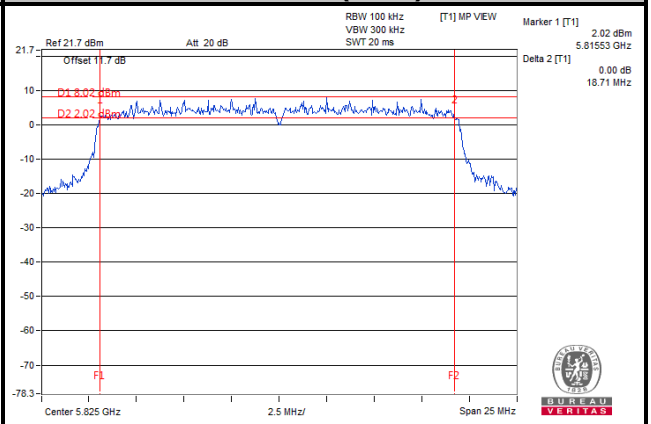
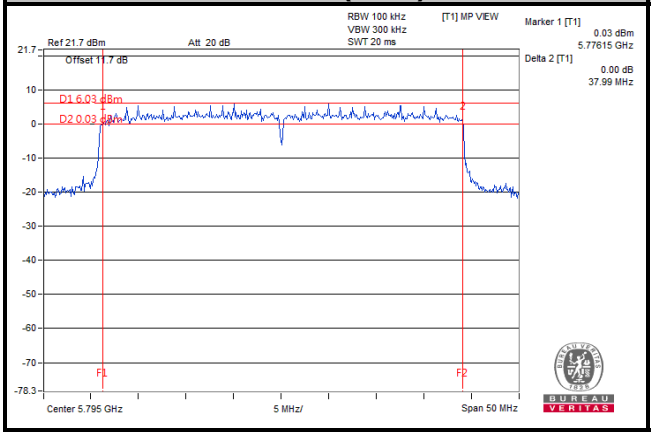
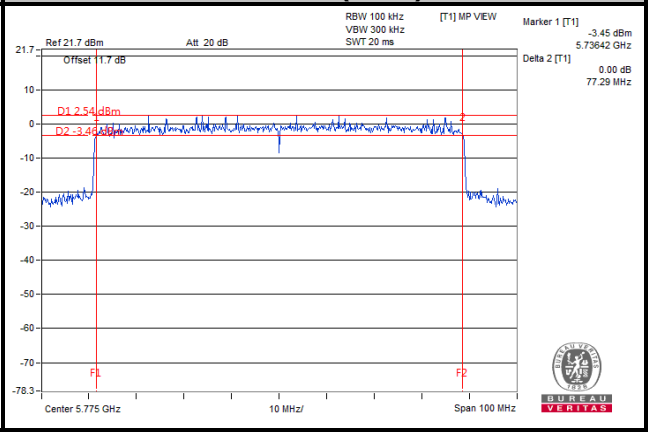
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	18.97	18.98	0.5	Pass
157	5785	18.97	18.99	0.5	Pass
165	5825	18.71	18.92	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	38.05	38.19	0.5	Pass
159	5795	38.20	37.99	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	77.29	77.59	0.5	Pass

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

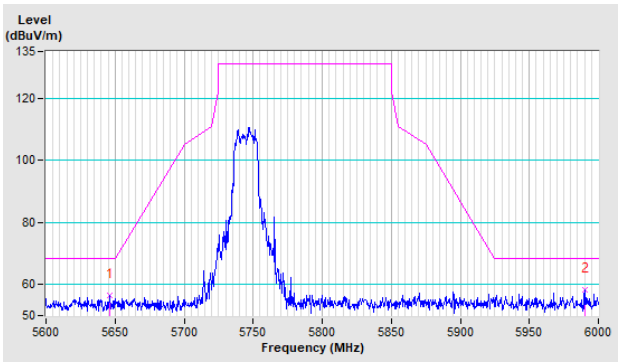
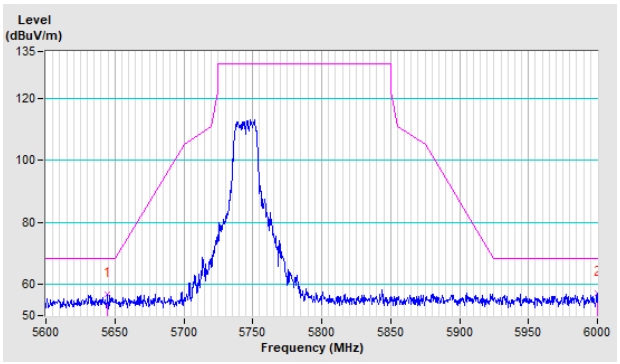
5 Pictures of Test Arrangements

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

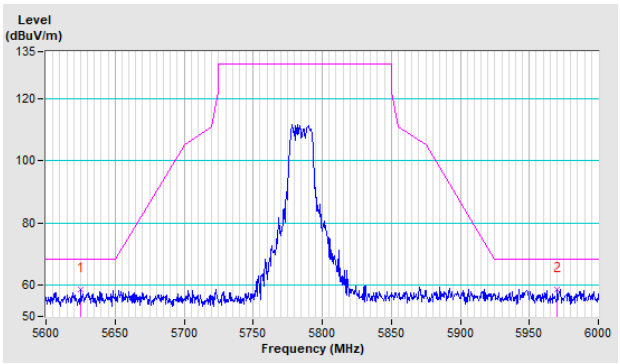
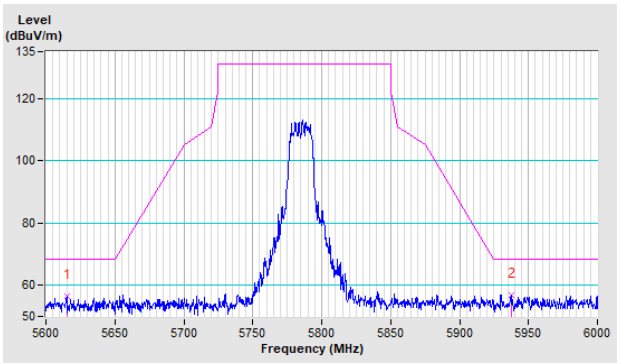
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

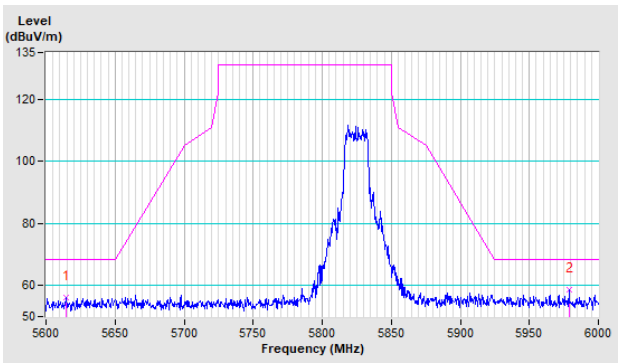
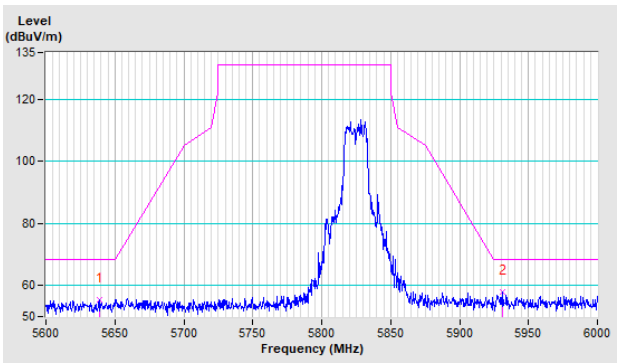
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

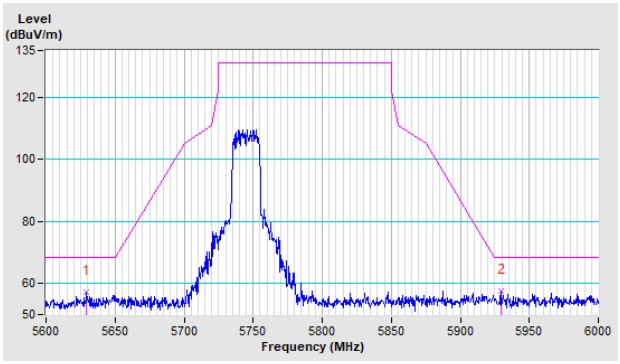
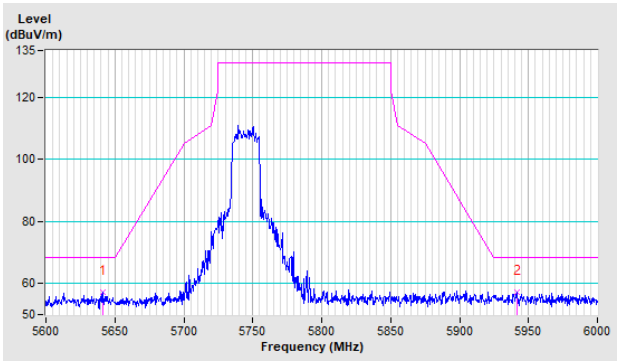
Horizontal	Vertical
	

CH 165 5825 MHz

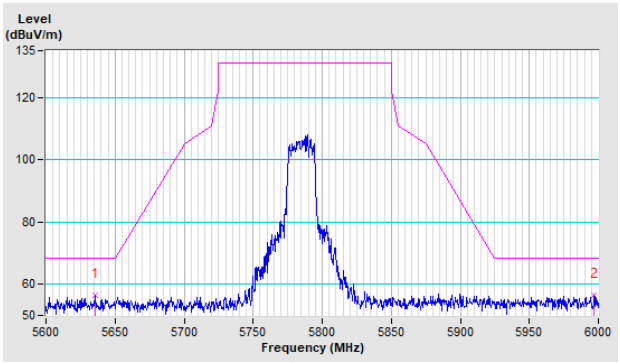
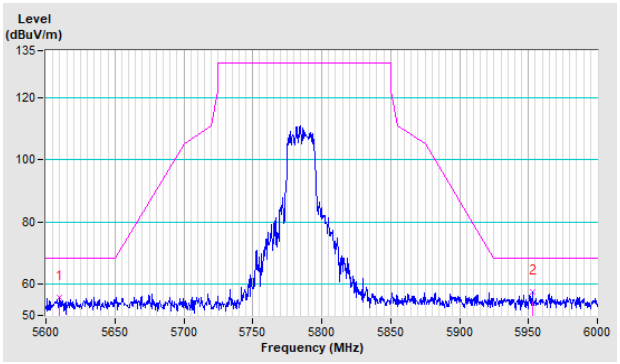
Horizontal	Vertical
	

802.11ax (HE20)

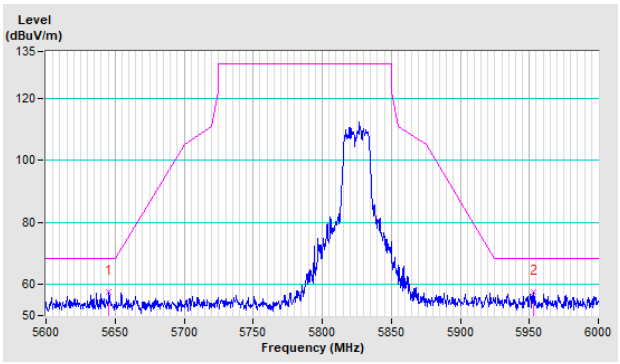
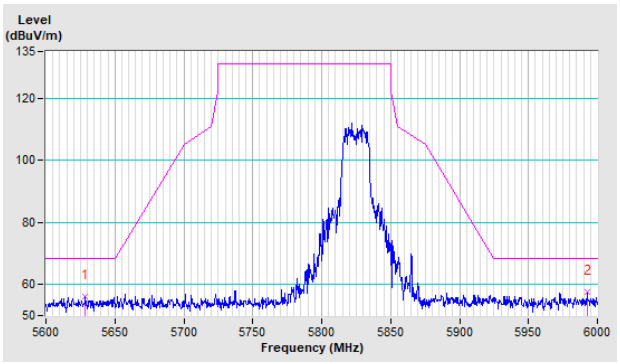
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

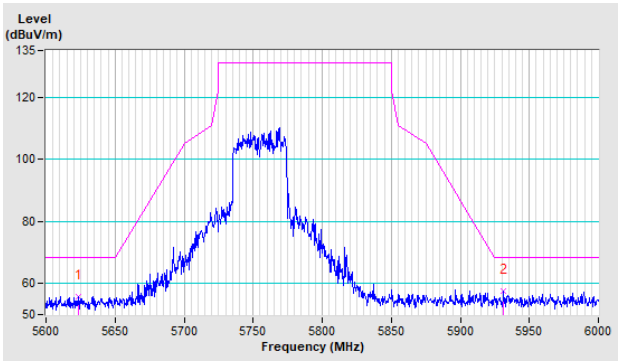
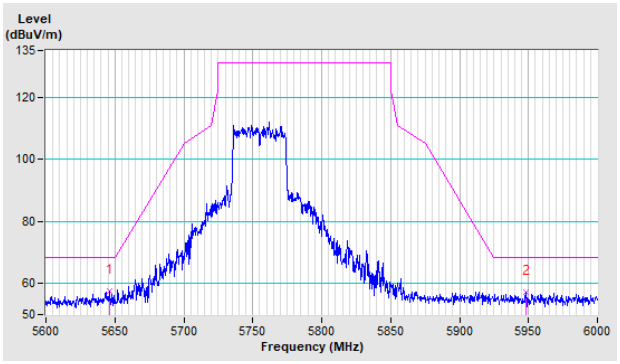
Horizontal	Vertical
	

CH 165 5825 MHz

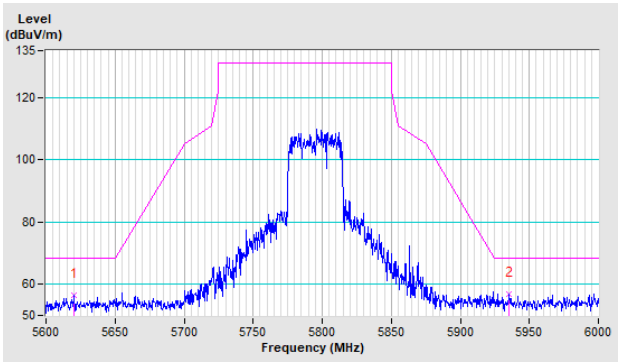
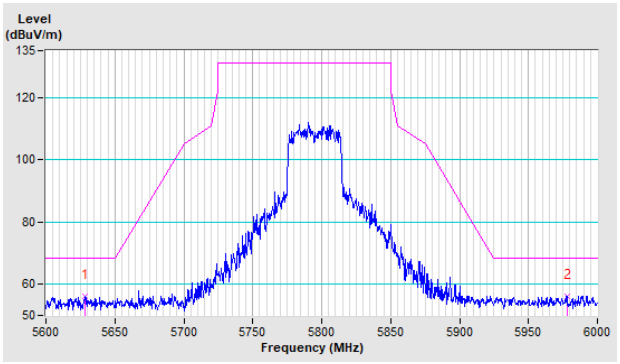
Horizontal	Vertical
	

802.11ax (HE40)

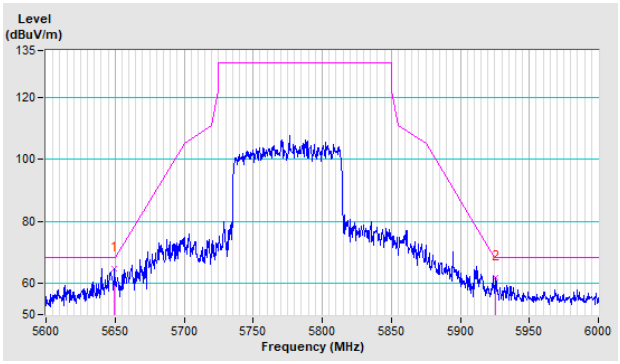
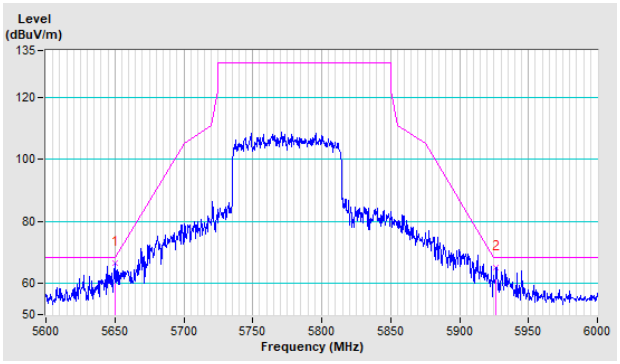
CH 151 5755 MHz

Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

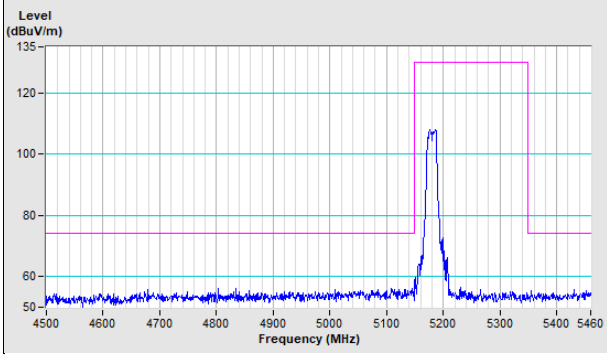
802.11ax (HE80)

CH 155 5775 MHz	
Horizontal	**Vertical**
	

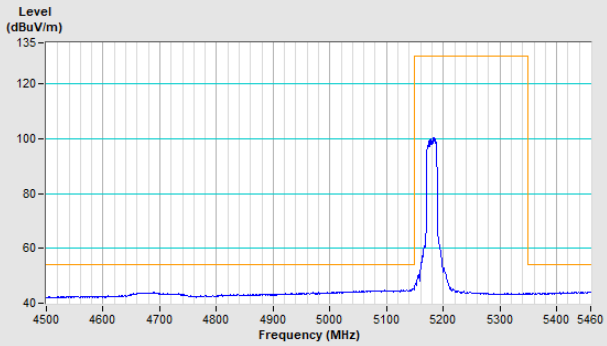
Annex B- Band-edge measurement

802.11a Channel 36

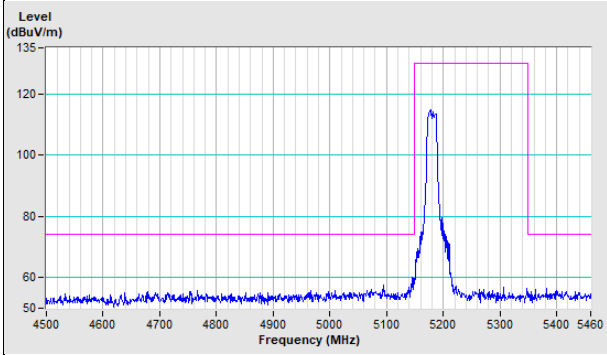
Horizontal (Peak)



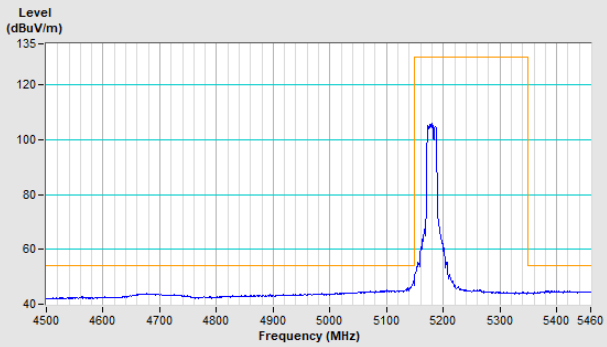
Horizontal (Average)



Vertical (Peak)

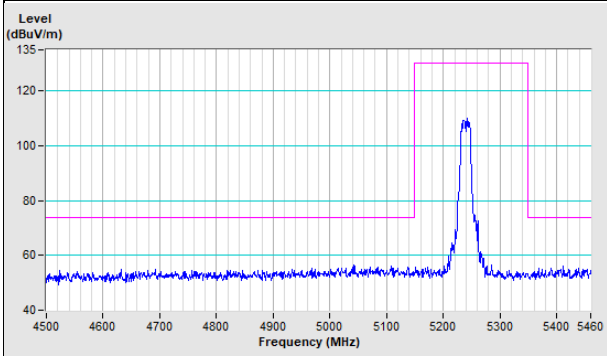


Vertical (Average)

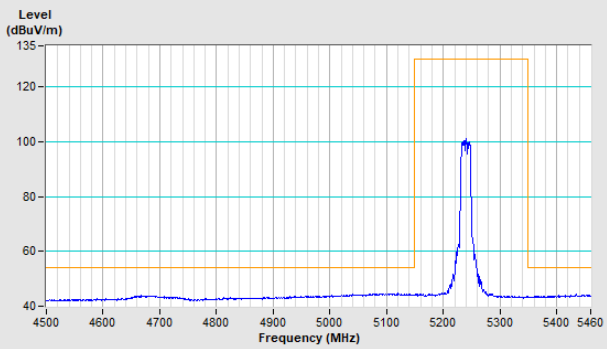


802.11a Channel 48

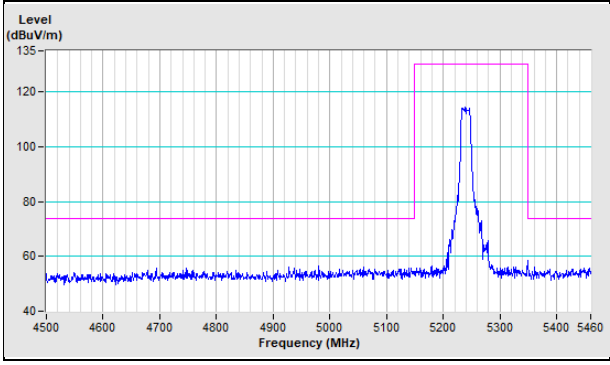
Horizontal (Peak)



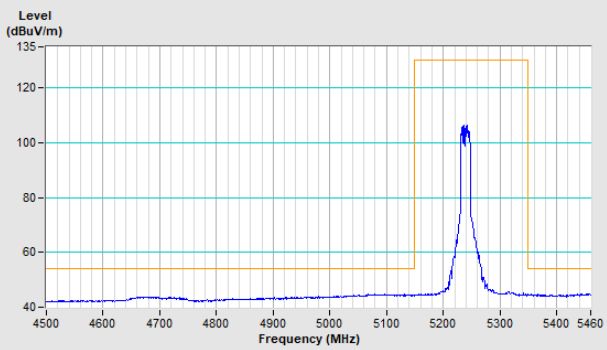
Horizontal (Average)

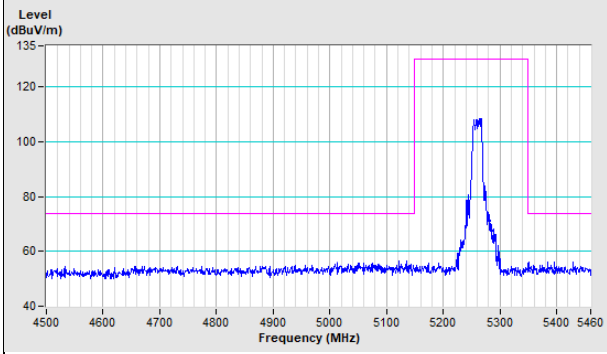
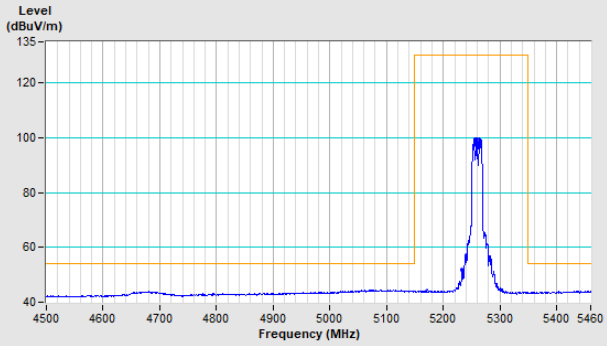
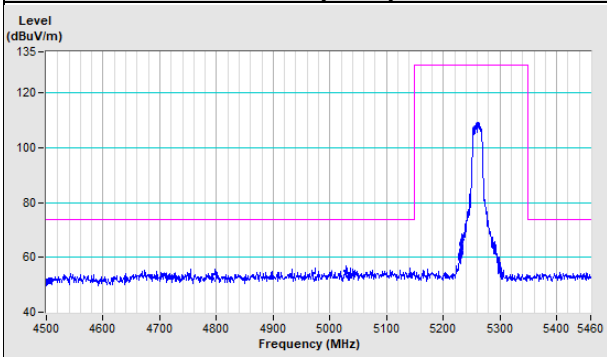
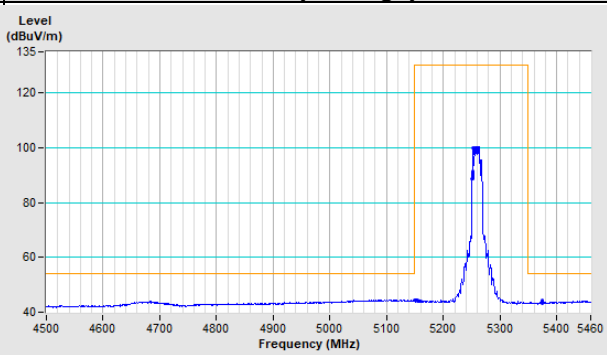
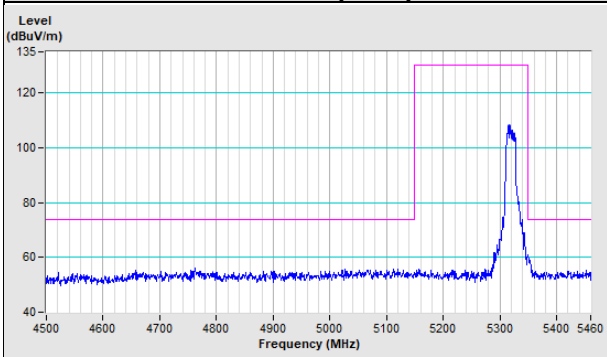
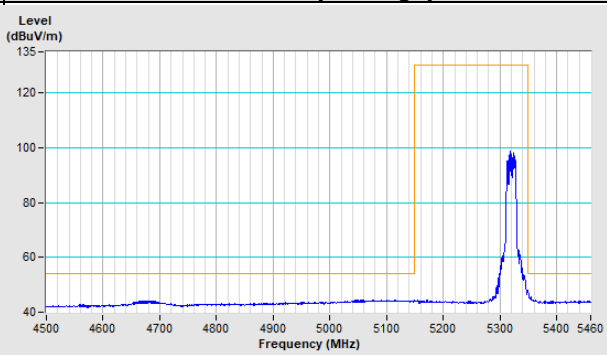
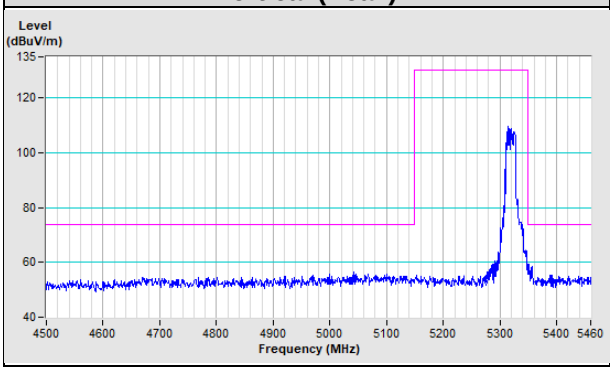
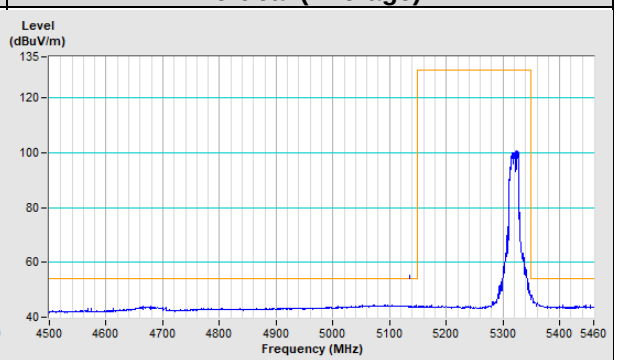


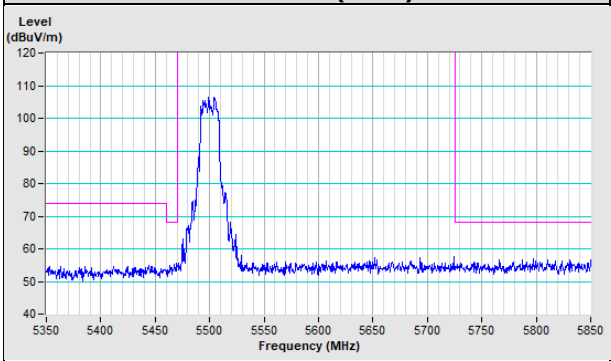
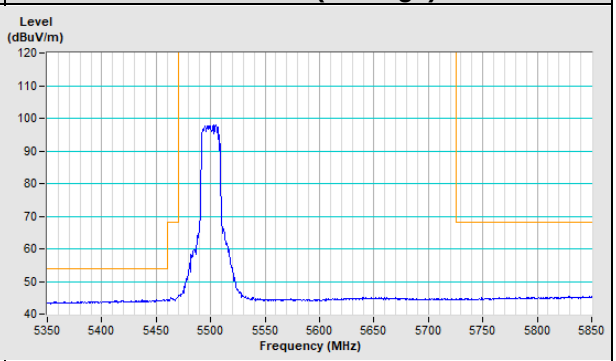
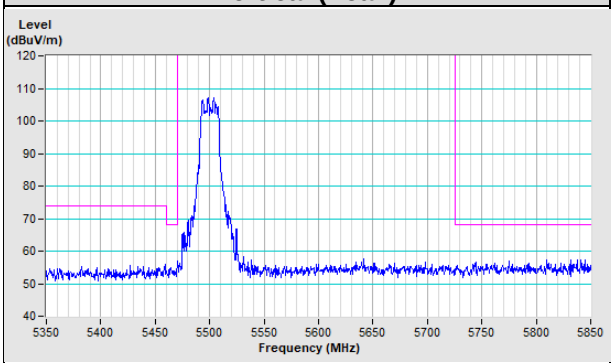
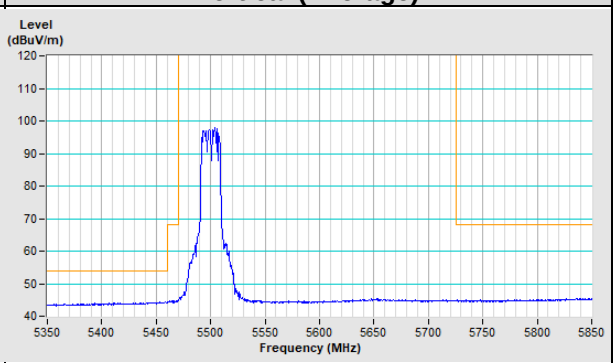
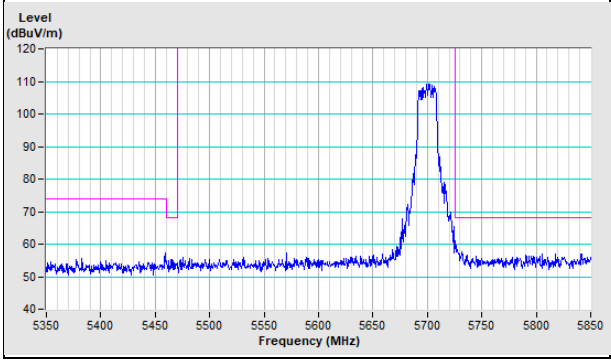
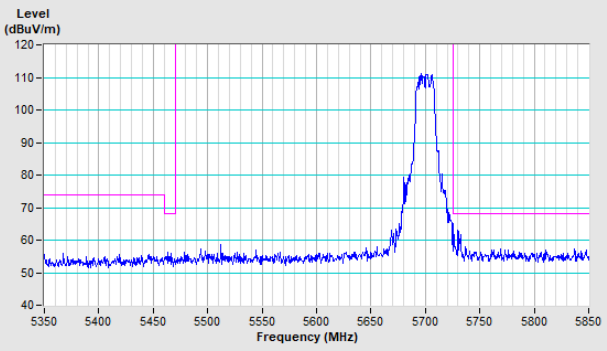
Vertical (Peak)



Vertical (Average)

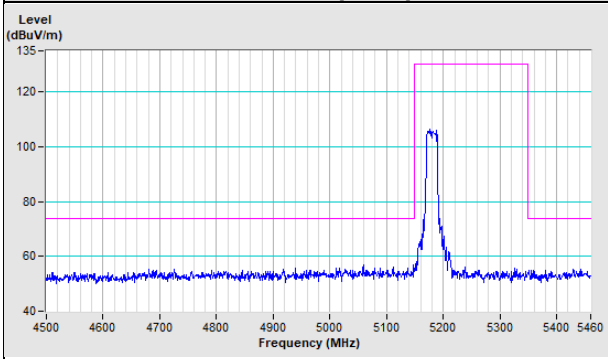


802.11a Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

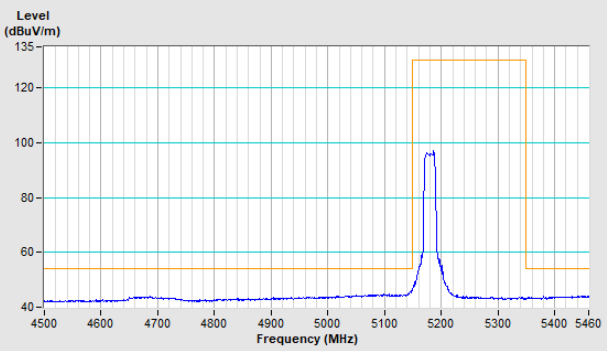
802.11a Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE20) Channel 36

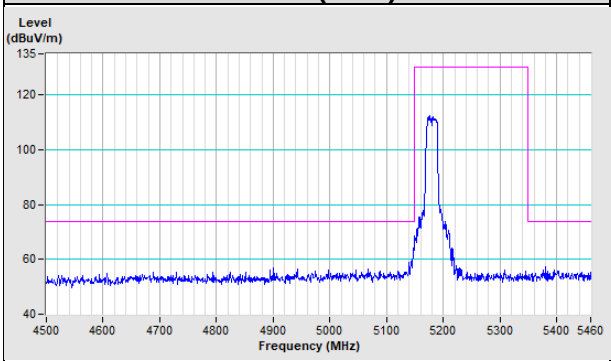
Horizontal (Peak)



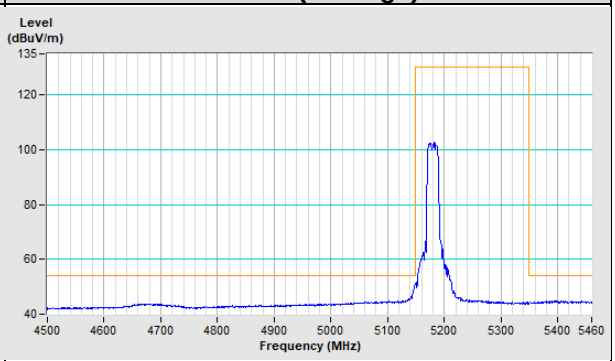
Horizontal (Average)



Vertical (Peak)

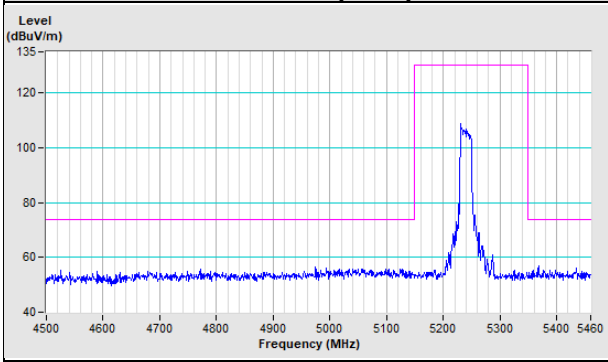


Vertical (Average)

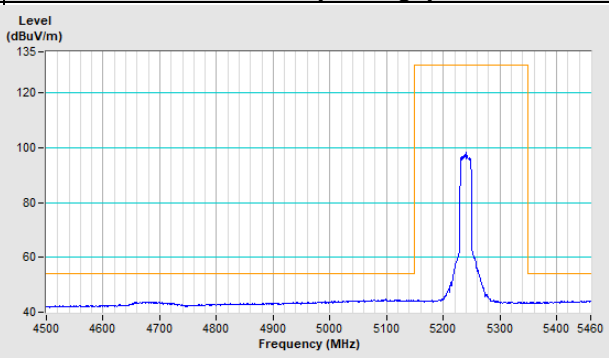


802.11ax (HE20) Channel 48

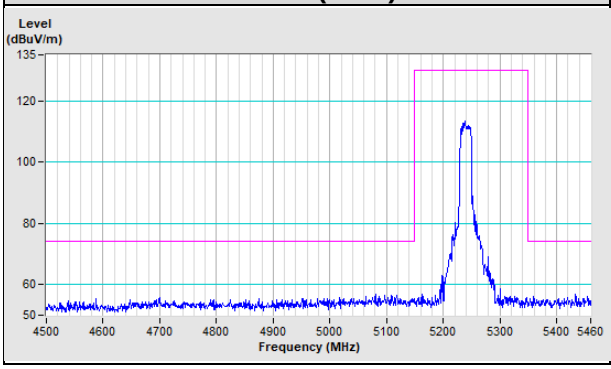
Horizontal (Peak)



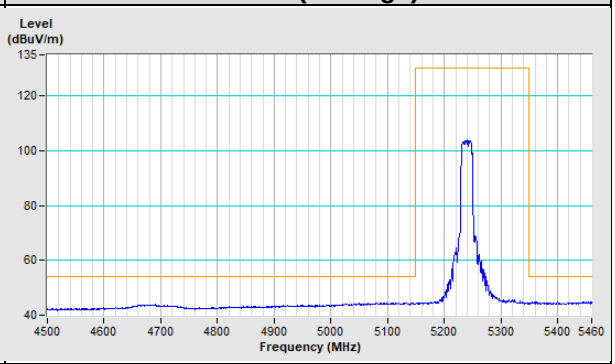
Horizontal (Average)

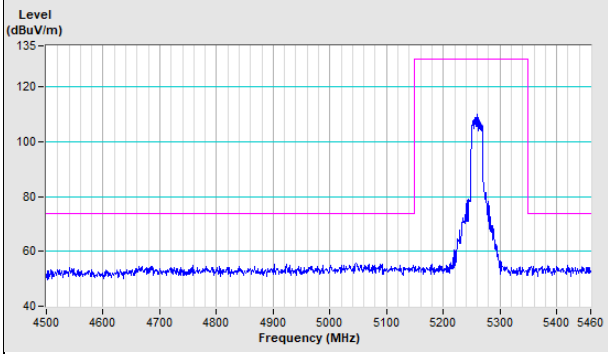
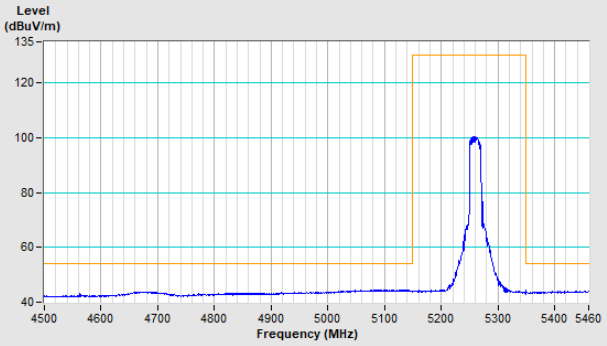
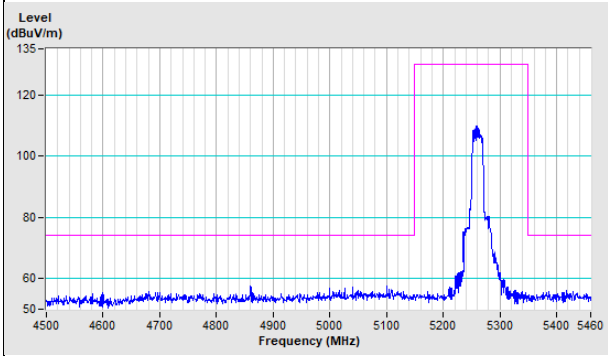
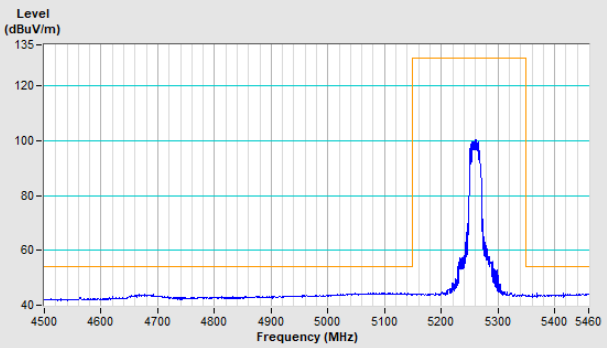
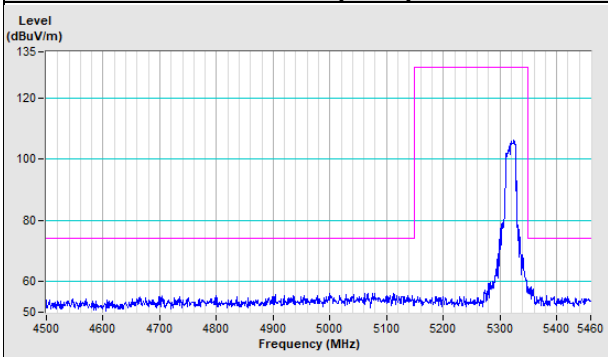
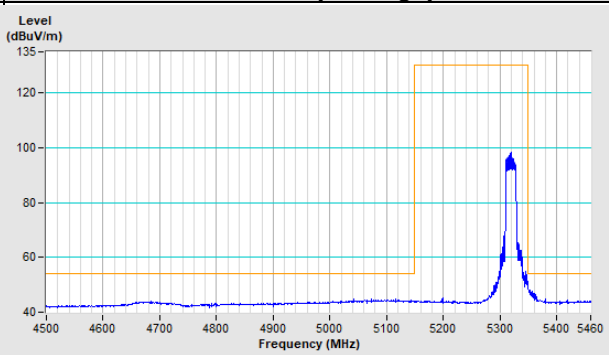
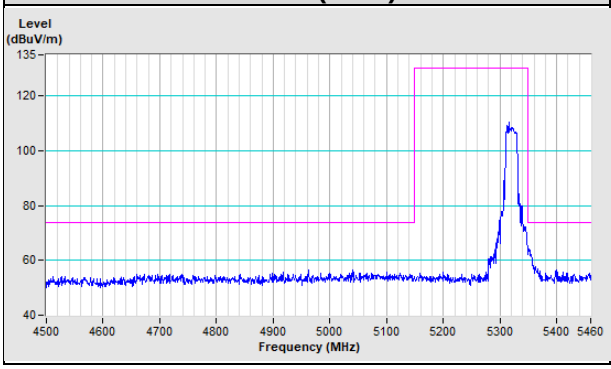
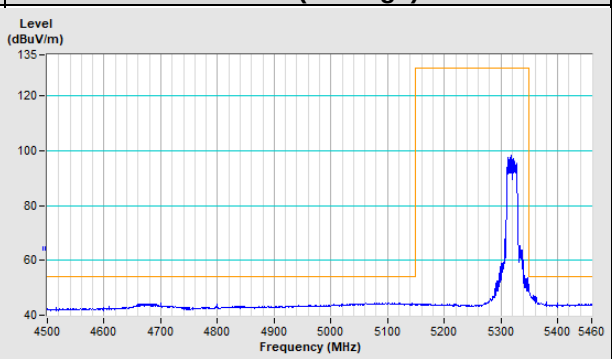


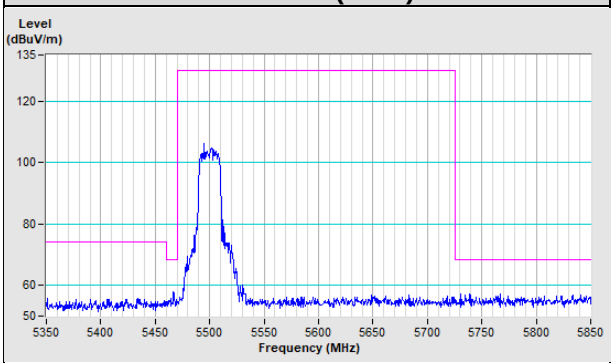
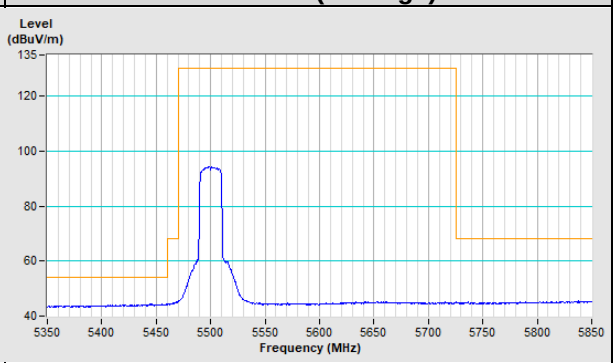
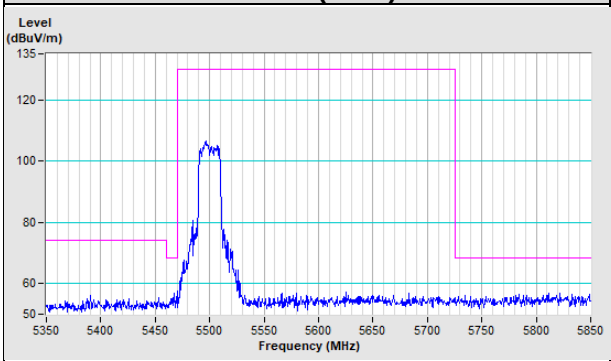
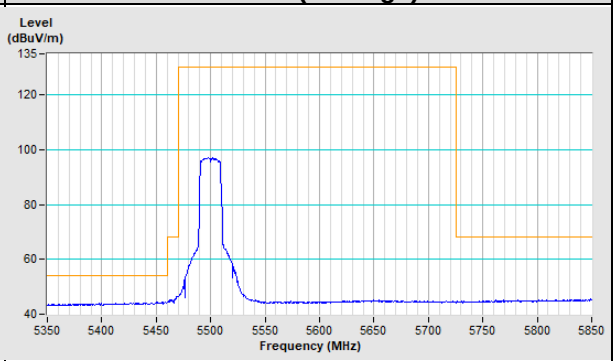
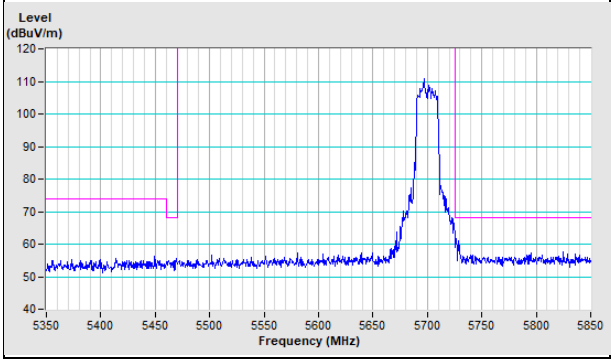
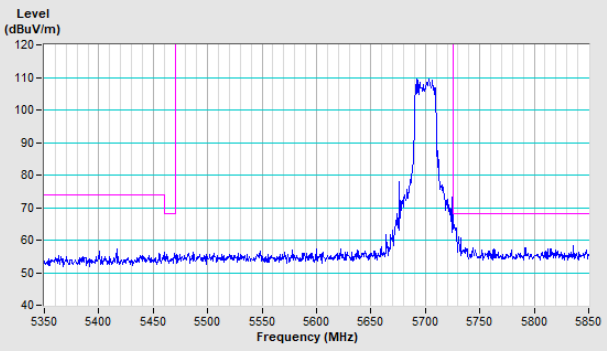
Vertical (Peak)



Vertical (Average)

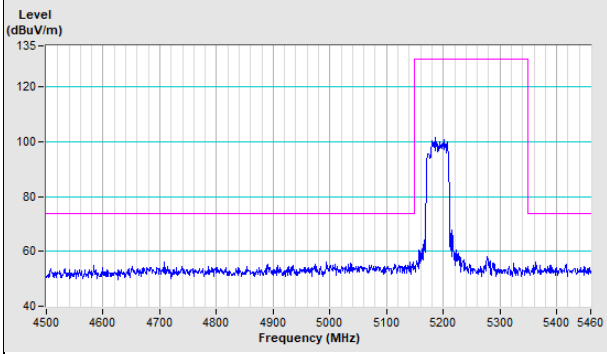


802.11ax (HE20) Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

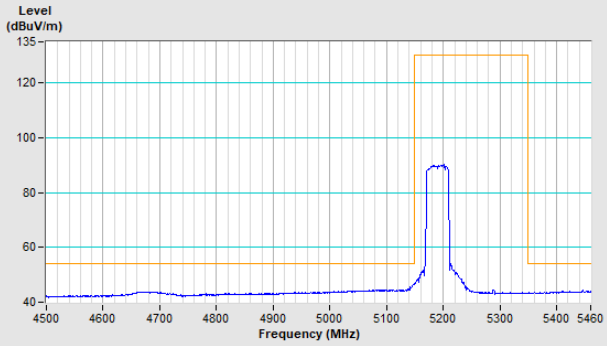
802.11ax (HE20) Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE40) Channel 38

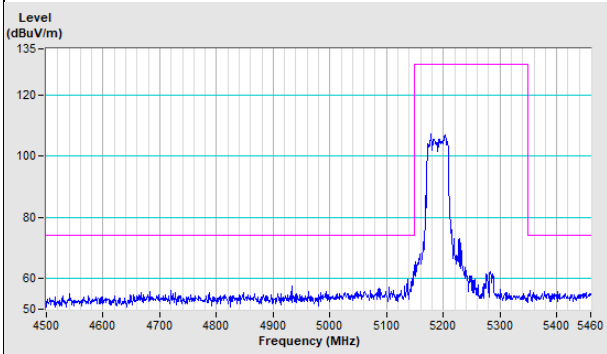
Horizontal (Peak)



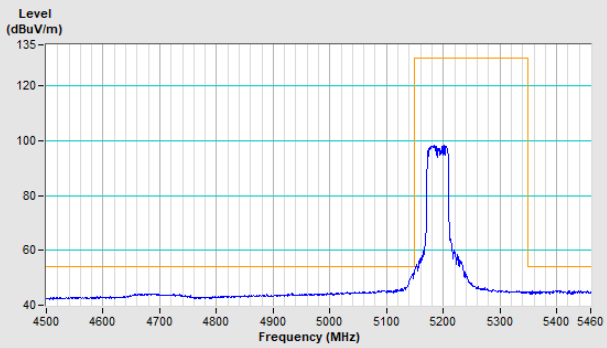
Horizontal (Average)



Vertical (Peak)

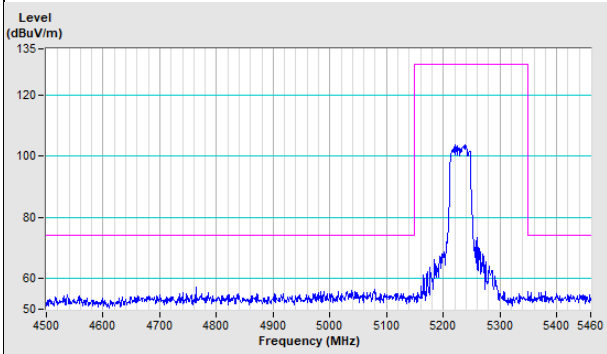


Vertical (Average)

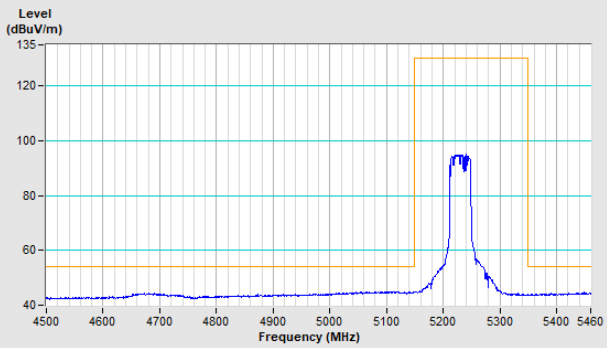


802.11ax (HE40) Channel 46

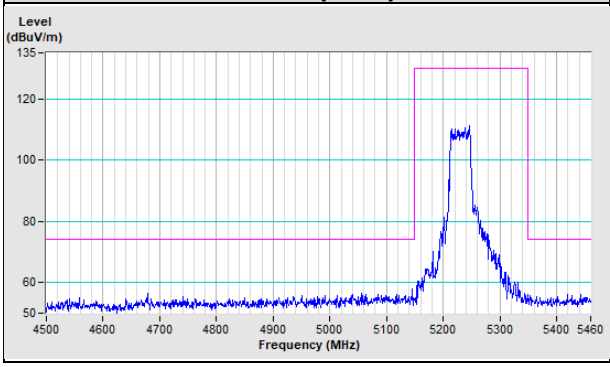
Horizontal (Peak)



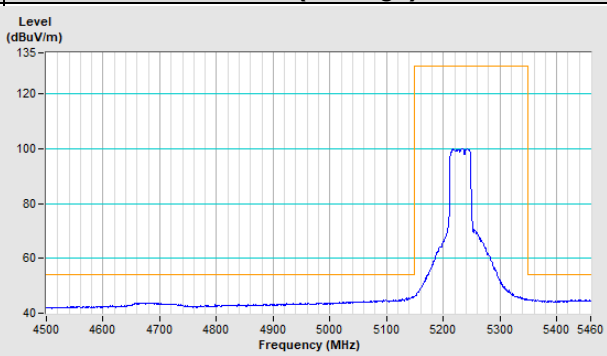
Horizontal (Average)

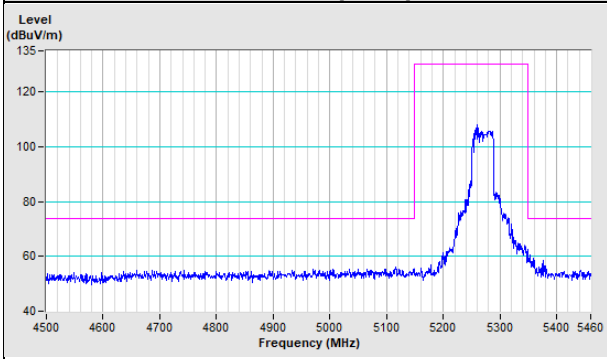
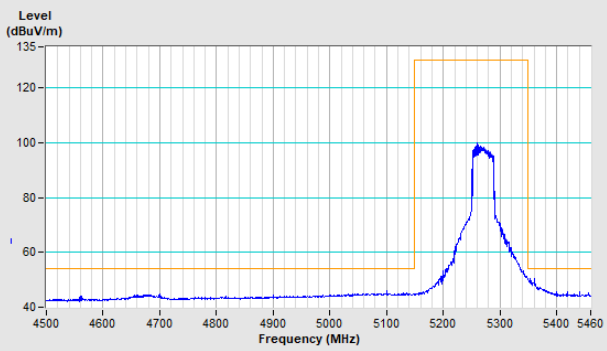
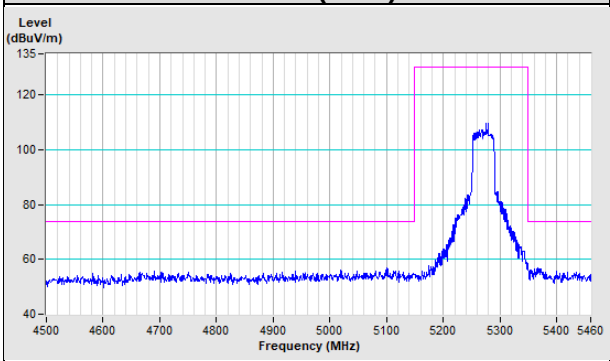
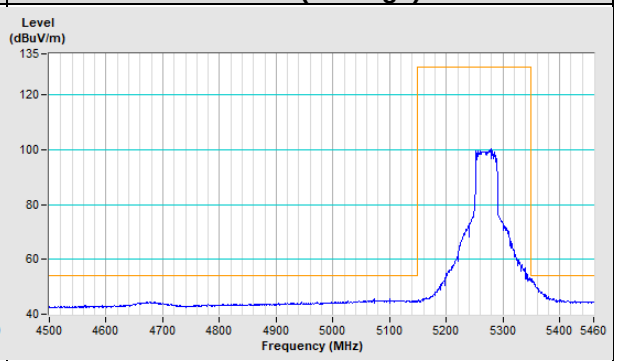
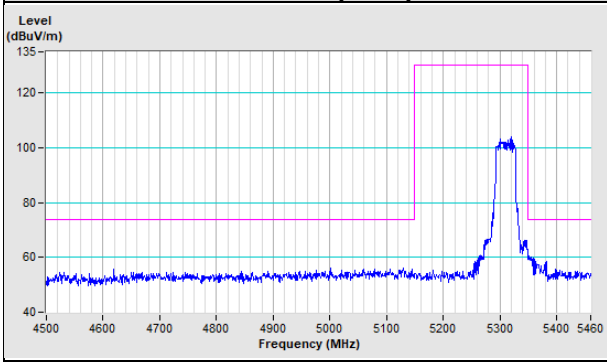
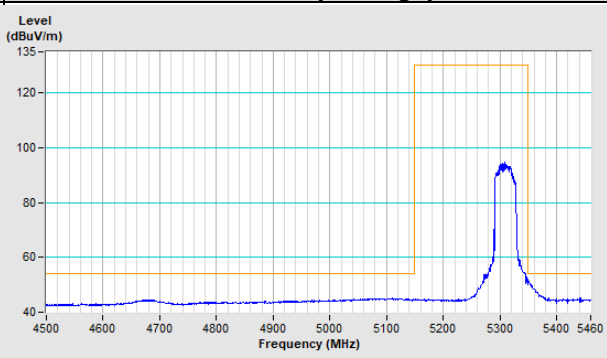
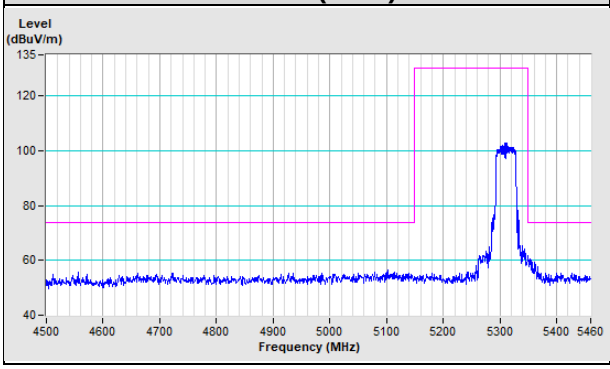
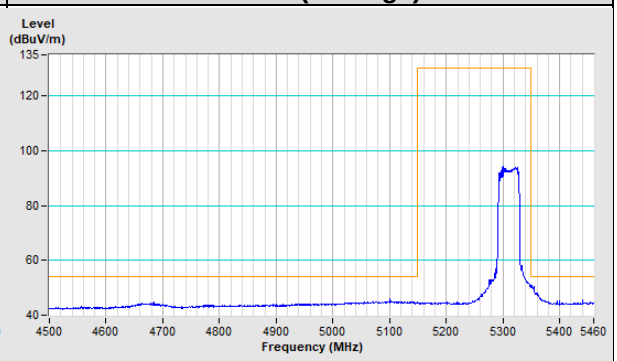


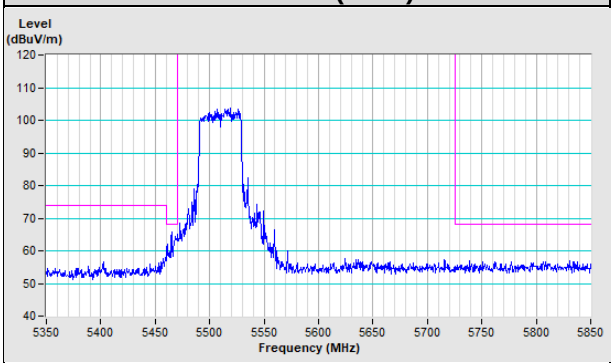
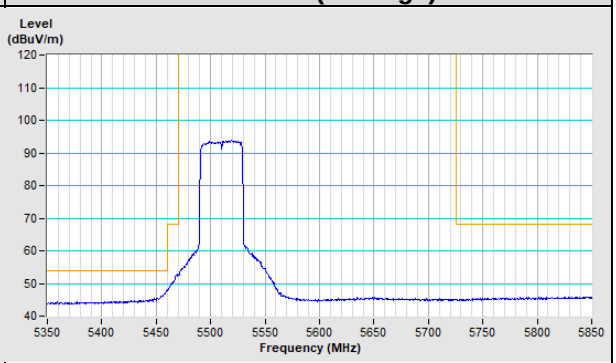
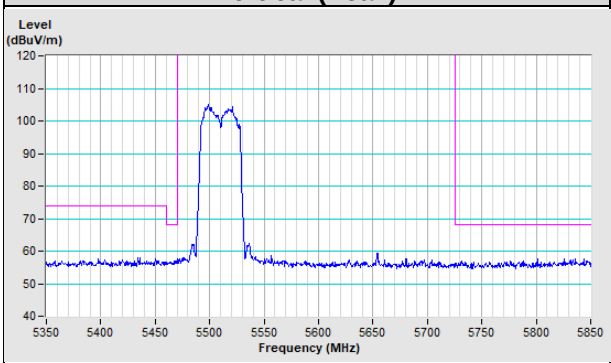
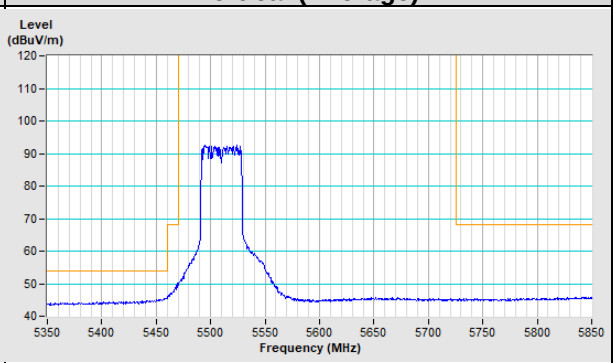
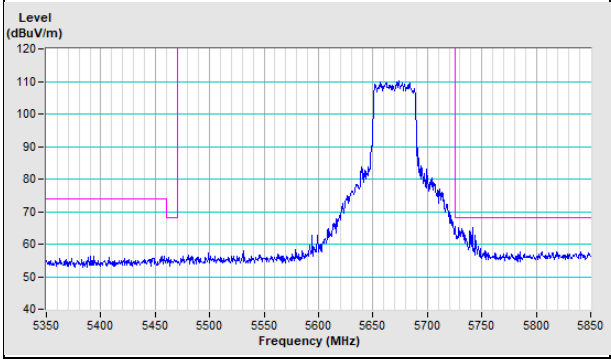
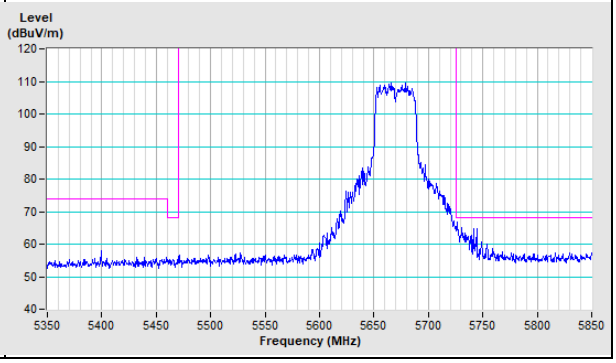
Vertical (Peak)

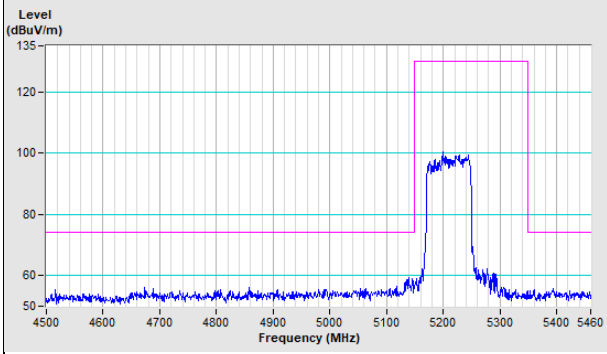
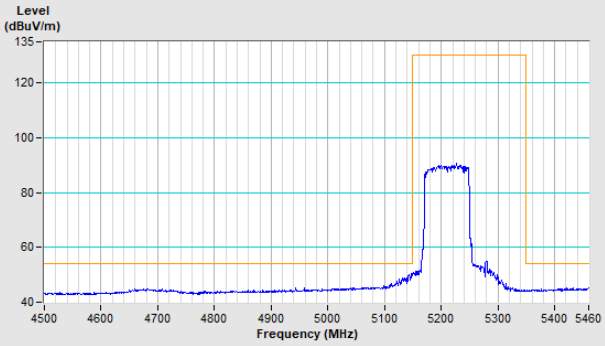
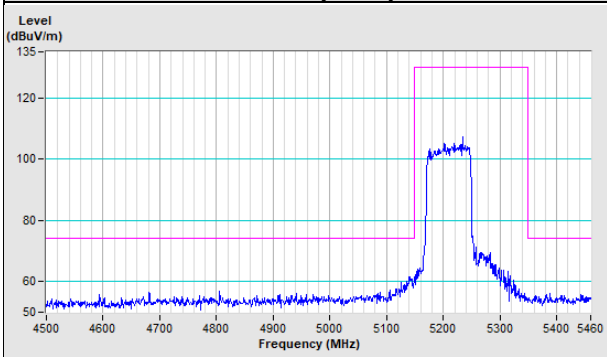
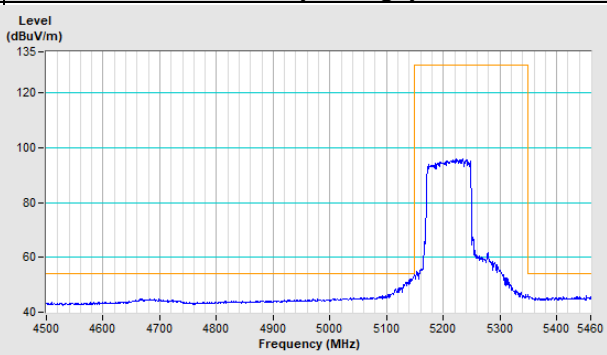
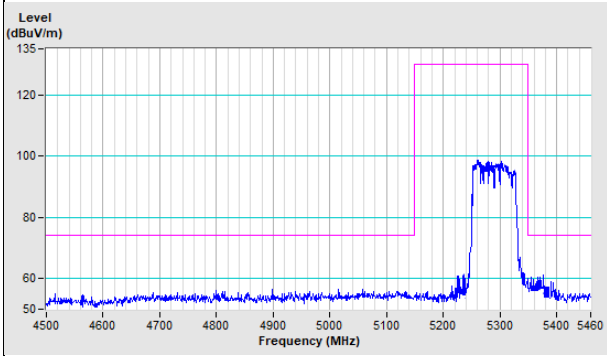
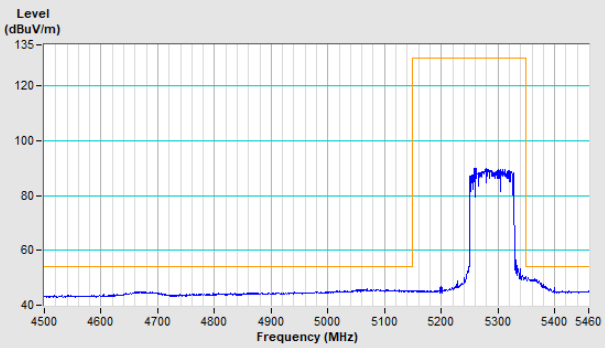
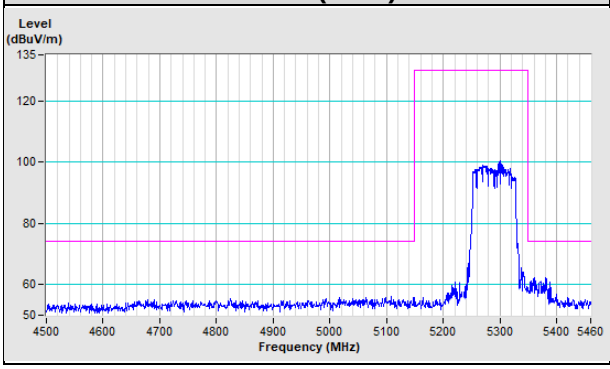
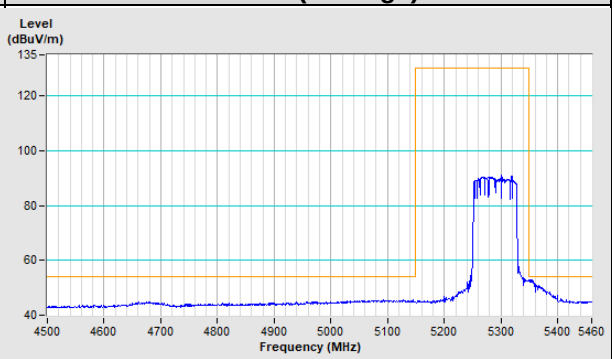


Vertical (Average)



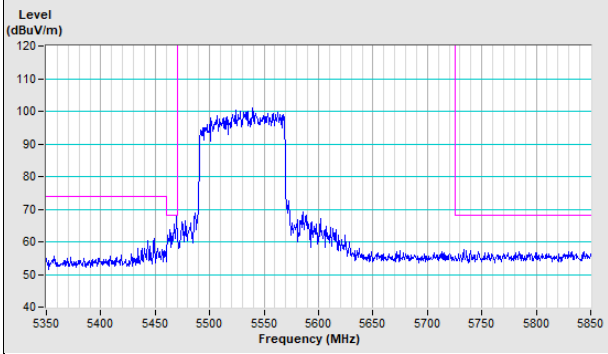
802.11n (HT40) Channel 54	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11n (HT40) Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

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

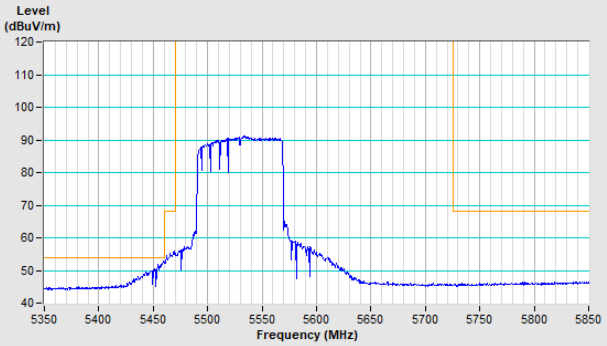
802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE80) Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80) Channel 106

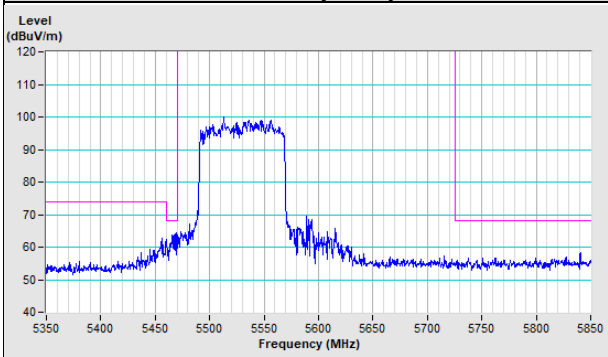
Horizontal (Peak)



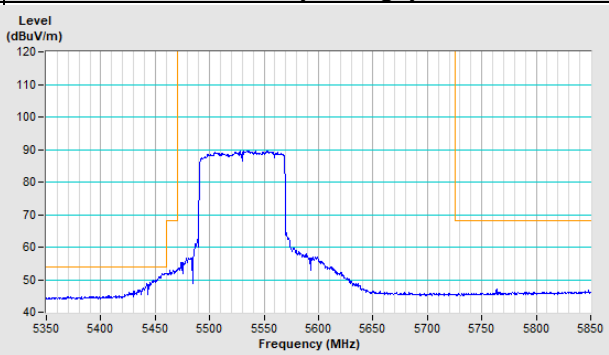
Horizontal (Average)



Vertical (Peak)

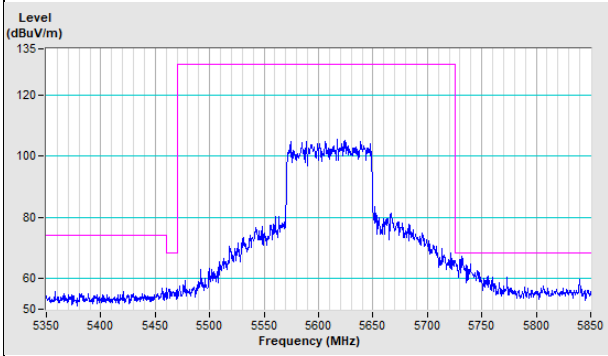


Vertical (Average)

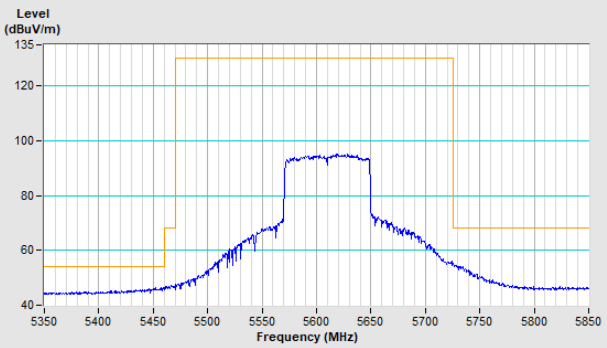


802.11ax (HE80) Channel 122

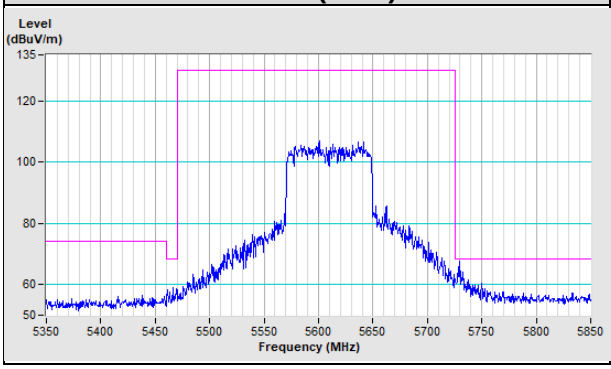
Horizontal (Peak)



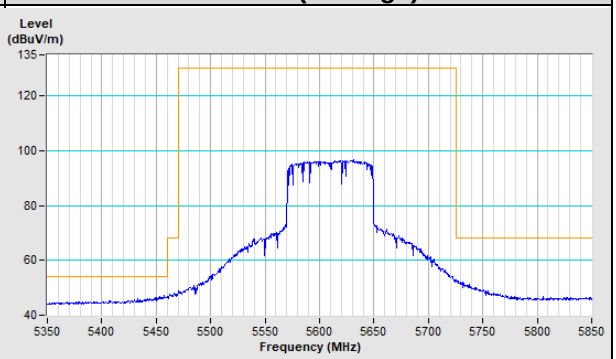
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



Appendix – Information of the Testing Laboratories

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

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

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

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

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

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

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

--- END ---