

FCC Test Report

Report No.: RFBCIB-WTW-P22030369-3

FCC ID: HFSJA1

Test Model: JA1

Received Date: Mar. 09, 2022

Test Date: May 03, 2022 ~ May 23, 2022

Issued Date: Jul. 18, 2022

Applicant: QUANTA COMPUTER INC

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003

Designation Number: 281270 / TW0032



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Release Control Record

Issue No.	Description	Date Issued
RFBCIB-WTW-P22030369-3	Original Release	Jul. 18, 2022

1 Certificate of Conformity

Product: Coral Wireless Add-on

Brand: Google

Test Model: JA1

Sample Status: Engineering Sample

Applicant: QUANTA COMPUTER INC

Test Date: May 03, 2022 ~ May 23, 2022

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Vera Huang, **Date:** Jul. 18, 2022
Vera Huang / Specialist

Approved by : Jeremy Lin, **Date:** Jul. 18, 2022
Jeremy Lin / 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)(9)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -18.79 dB at 1.60452 MHz.
15.407(b) (1/2/3/4(i/ii)/ 9)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.2 dB at 5470.00 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 OOB 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) ($\pm$)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~1000MHz	2.93 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	1.76 dB
	18GHz ~ 40GHz	1.77 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Coral Wireless Add-on
Brand	Google
Test Model	JA1
Status of EUT	Engineering Sample
Power Supply Rating	4.85 Vdc (host equipment)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
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 150 Mbps 802.11ac: up to 433.3 Mbps
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5720 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5500 ~ 5720 MHz: 12 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 6 for 802.11n (HT40), 802.11ac (VHT40) 3 for 802.11ac (VHT80) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
Output Power	37.239 mW for 5180 ~ 5240 MHz 37.584 mW for 5260 ~ 5320 MHz 43.33 mW for 5500 ~ 5720 MHz 39.355 mW for 5745 ~ 5825 MHz
Antenna Type	Chip antenna with 1 dBi gain (5180 ~ 5240 MHz) Chip antenna with 1 dBi gain (5260 ~ 5320 MHz) Chip antenna with 1.5 dBi gain (5500 ~ 5720 MHz) Chip antenna with 2.3 dBi gain (5745 ~ 5825 MHz)
Antenna Connector	N/A
Accessory Device	N/A
Data Cable Supplied	N/A

Note:

1. The EUT provides 1 completed transmitter and 1 receiver.

Modulation Mode	Tx Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

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

2. The above Antenna information refers to the manufacturer's antenna specifications, the laboratory shall not be held responsible.
3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or User's Manual.

3.2 Description of Test Modes

For 5180 ~ 5240 MHz

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

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):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

For 5260 ~ 5320 MHz

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

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):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
58	5290

For 5500 ~ 5720 MHz

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

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	144	5720

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

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

3 channels are provided for 802.11ac (VHT80):

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

For 5745 ~ 5825 MHz:

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

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):

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

1 channels are provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
155	5775

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE $\geq$ 1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE $\geq$ 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. For radiated emission (below 1GHz) and power line conducted emission test items chosen the worst maximum power.

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	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	36, 40, 48	OFDM	6.0
-		802.11ac (VHT20)	36 to 48	36, 40, 48	OFDM	7.2
-		802.11ac (VHT40)	38 to 46	38, 46	OFDM	15.0
-		802.11ac (VHT80)	42	42	OFDM	29.3
-	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	6.0
-		802.11ac (VHT20)	52 to 64	52, 60, 64	OFDM	7.2
-		802.11ac (VHT40)	54 to 62	54, 62	OFDM	15.0
-		802.11ac (VHT80)	58	58	OFDM	29.3
-	5500-5720	802.11a	100 to 144	100, 116, 140, 144	OFDM	6.0
-		802.11ac (VHT20)	100 to 144	100, 116, 140, 144	OFDM	7.2
-		802.11ac (VHT40)	102 to 142	102, 110, 134, 142	OFDM	15.0
-		802.11ac (VHT80)	106 to 138	106, 122, 138	OFDM	29.3
-	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	6.0
-		802.11ac (VHT20)	149 to 165	149, 157, 165	OFDM	7.2
-		802.11ac (VHT40)	151 to 159	151, 159	OFDM	15.0
-		802.11ac (VHT80)	155	155	OFDM	29.3

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	Data Rate (Mbps)
-	5500-5720	802.11ac (VHT40)	102 to 142	142	OFDM	15.0

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	Data Rate (Mbps)
-	5500-5720	802.11ac (VHT40)	102 to 142	142	OFDM	15.0

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	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	36, 40, 48	OFDM	6.0
-		802.11ac (VHT20)	36 to 48	36, 40, 48	OFDM	7.2
-		802.11ac (VHT40)	38 to 46	38, 46	OFDM	15.0
-		802.11ac (VHT80)	42	42	OFDM	29.3
-	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	6.0
-		802.11ac (VHT20)	52 to 64	52, 60, 64	OFDM	7.2
-		802.11ac (VHT40)	54 to 62	54, 62	OFDM	15.0
-		802.11ac (VHT80)	58	58	OFDM	29.3
-	5500-5720	802.11a	100 to 144	100, 116, 140, 144	OFDM	6.0
-		802.11ac (VHT20)	100 to 144	100, 116, 140, 144	OFDM	7.2
-		802.11ac (VHT40)	102 to 142	102, 110, 134, 142	OFDM	15.0
-		802.11ac (VHT80)	106 to 138	106, 122, 138	OFDM	29.3
-	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	6.0
-		802.11ac (VHT20)	149 to 165	149, 157, 165	OFDM	7.2
-		802.11ac (VHT40)	151 to 159	151, 159	OFDM	15.0
-		802.11ac (VHT80)	155	155	OFDM	29.3

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE $\geq$ 1G	23 deg. C, 68 % RH	120 Vac, 60 Hz	Adair Peng
RE<1G	25 deg. C, 70 % RH	120 Vac, 60 Hz	Randy Wu
PLC	22 deg. C, 71 % RH	120 Vac, 60 Hz	Greg Lin
APCM	25 deg. C, 60 % RH	120 Vac, 60 Hz	Alan Wu

3.3 Duty Cycle of Test Signal

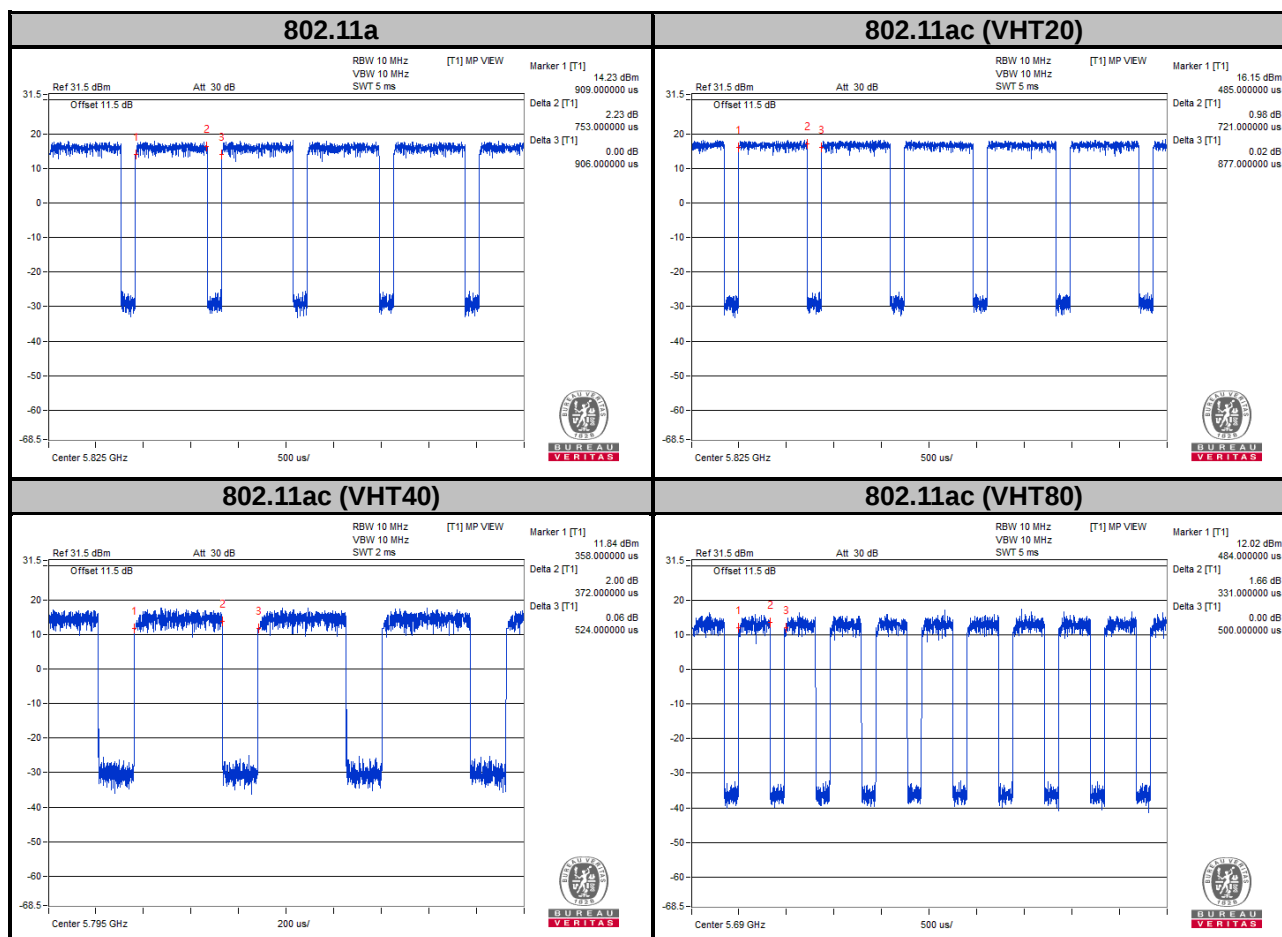
Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = $0.753/0.906 = 0.831$, Duty factor = $10 * \log(1/0.831) = 0.80$

802.11ac (VHT20): Duty cycle = $0.721/0.877 = 0.822$, Duty factor = $10 * \log(1/0.822) = 0.85$

802.11ac (VHT40): Duty cycle = $0.372/0.524 = 0.71$, Duty factor = $10 * \log(1/0.71) = 1.49$

802.11ac (VHT80): Duty cycle = $0.331/0.5 = 0.662$, Duty factor = $10 * \log(1/0.662) = 1.79$



3.4 Description of Support Units

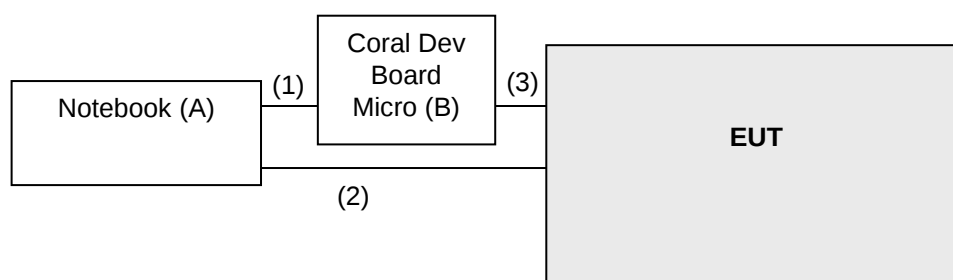
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Notebook	Lenovo	80Q7	PF0KUGU6	N/A	Provided by lab
B	Coral Dev Board Micro	Quanta	VA1	N/A	N/A	Provided by client

Note: Item A acted as a communication partner to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB extension cable	1	2	N	N	Provided by Lab
2.	USB Type C	1	1	N	N	Provided by Lab
3.	Mechanical tool	1	0.1	N	N	Provided by client

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

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}
	☐ 15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

^{*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:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver Rohde & Schwarz	ESR3	102782	Dec. 10, 2021	Dec. 09, 2022
Spectrum Analyzer Rohde & Schwarz	FSW43	101582	Apr. 13, 2022	Apr. 12, 2023
BILOG Antenna SCHWARZBECK	VULB9168	9168-1213	Oct. 27, 2021	Oct. 26, 2022
HORN Antenna RF SPIN	DRH18-E	210103A18E	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	9170-1049	Nov. 14, 2021	Nov. 13, 2022
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier EMCI	EMC330N	980782	Jan. 17, 2022	Jan. 16, 2023
Preamplifier EMCI	EMC118A45SE	980808	Dec. 30, 2021	Dec. 29, 2022
Preamplifier EMCI	EMC184045SE	980788	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC104-SM-SM- (9000+2000+1000)	201243+ 201231+ 210102	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMCCFD400-NM-NM- (9000+300+500)	201236+ 201235+ 201233	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC101G-KM-KM- (5000+3000+2000)	201260+201257+201254	Jan. 17, 2022	Jan. 16, 2023
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFT-151SS-0.5T	NA	NA	NA
Turn Table Max-Full	MF-7802BS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208674	NA	NA
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	Jan. 17, 2022	Jan. 16, 2023
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 18, 2022	Jan. 17, 2023
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Jan. 27, 2022	Jan. 26, 2023
Temperature & Humidity Chamber GIANT FORCE	GTH-120-40-CP-AR	MAA1306-019	Sep. 10, 2021	Sep. 09, 2022
DC power supply Keysight	U8002A	MY56330015	NA	NA
Digital Multimeter Fluke	87-III	70360755	Jul. 08, 2021	Jul. 07, 2022

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 WM Chamber 8.

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:

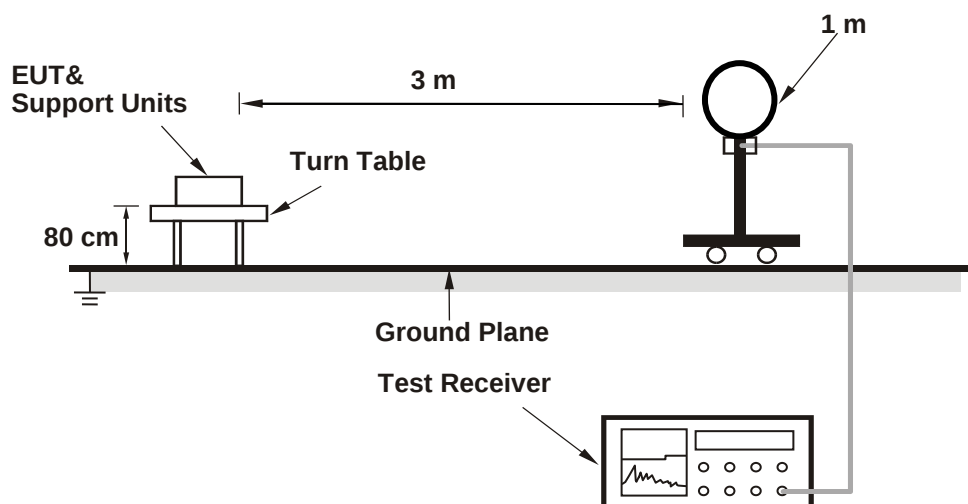
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98 %) or 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
(11a: RBW = 1 MHz, VBW = 2 kHz ; 11ac (VHT20): RBW = 1 MHz, VBW = 2 kHz ;
11ac (VHT40): RBW = 1 MHz, VBW = 3 kHz, 11ac (VHT80): RBW = 1 MHz, VBW = 3 kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

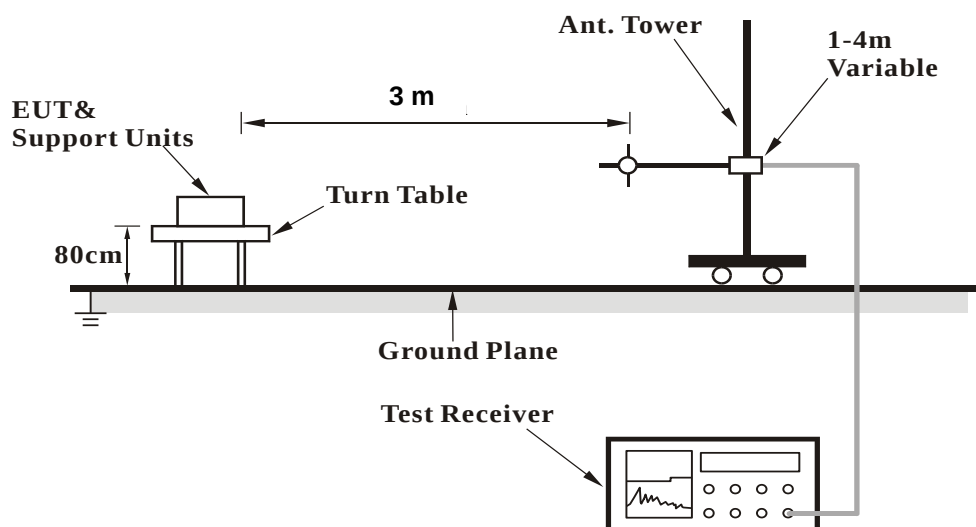
No deviation.

4.1.5 Test Setup

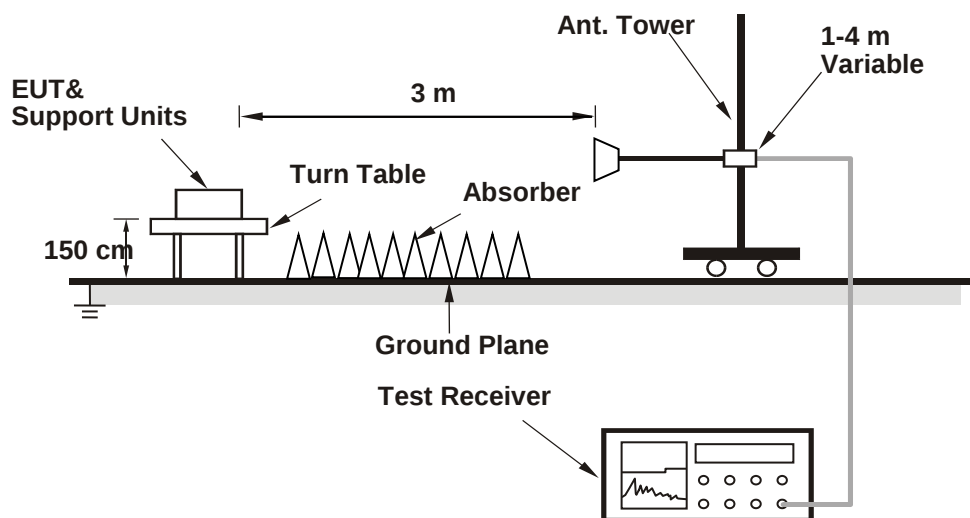
<Radiated Emission below 30 MHz>



<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

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

4.1.7 Test Results

Above 1 GHz Data :

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	2.20 H	117	56.8	5.6
2	5150.00	46.0 AV	54.0	-8.0	2.20 H	117	40.4	5.6
3	*5180.00	102.6 PK			2.20 H	117	62.6	40.0
4	*5180.00	92.5 AV			2.20 H	117	52.5	40.0
5	#10360.00	58.3 PK	68.2	-9.9	2.51 H	117	40.8	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.5 PK	74.0	-3.5	1.98 V	74	64.9	5.6
2	5150.00	52.6 AV	54.0	-1.4	1.98 V	74	47.0	5.6
3	*5180.00	109.8 PK			1.98 V	74	69.8	40.0
4	*5180.00	100.2 AV			1.98 V	74	60.2	40.0
5	#10360.00	59.1 PK	68.2	-9.1	2.17 V	96	41.6	17.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	104.5 PK			2.22 H	119	64.5	40.0
2	*5200.00	95.1 AV			2.22 H	119	55.1	40.0
3	#10400.00	58.9 PK	68.2	-9.3	2.55 H	122	41.4	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	111.6 PK			2.27 V	77	71.6	40.0
2	*5200.00	102.2 AV			2.27 V	77	62.2	40.0
3	#10400.00	59.5 PK	68.2	-8.7	2.02 V	101	42.0	17.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	104.3 PK			2.27 H	115	64.4	39.9
2	*5240.00	94.8 AV			2.27 H	115	54.9	39.9
3	5350.00	55.4 PK	74.0	-18.6	2.27 H	115	50.1	5.3
4	5350.00	43.3 AV	54.0	-10.7	2.27 H	115	38.0	5.3
5	#10480.00	58.7 PK	68.2	-9.5	2.46 H	114	41.1	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	111.5 PK			2.17 V	74	71.6	39.9
2	*5240.00	102.2 AV			2.17 V	74	62.3	39.9
3	5350.00	55.9 PK	74.0	-18.1	2.17 V	74	50.6	5.3
4	5350.00	43.4 AV	54.0	-10.6	2.17 V	74	38.1	5.3
5	#10480.00	59.4 PK	68.2	-8.8	1.98 V	99	41.8	17.6

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	56.8 PK	74.0	-17.2	2.29 H	121	51.2	5.6
2	5150.00	43.8 AV	54.0	-10.2	2.29 H	121	38.2	5.6
3	*5260.00	104.5 PK			2.29 H	121	64.6	39.9
4	*5260.00	95.1 AV			2.29 H	121	55.2	39.9
5	#10520.00	58.4 PK	68.2	-9.8	2.28 H	118	40.8	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	2.11 V	68	51.4	5.6
2	5150.00	44.5 AV	54.0	-9.5	2.11 V	68	38.9	5.6
3	*5260.00	112.5 PK			2.11 V	68	72.6	39.9
4	*5260.00	102.2 AV			2.11 V	68	62.3	39.9
5	#10520.00	58.7 PK	68.2	-9.5	1.97 V	108	41.1	17.6

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	104.7 PK			2.30 H	120	65.1	39.6
2	*5300.00	95.1 AV			2.30 H	120	55.5	39.6
3	10600.00	58.6 PK	74.0	-15.4	2.33 H	112	40.6	18.0
4	10600.00	44.6 AV	54.0	-9.4	2.33 H	112	26.6	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	112.0 PK			2.08 V	69	72.4	39.6
2	*5300.00	102.5 AV			2.08 V	69	62.9	39.6
3	10600.00	58.8 PK	74.0	-15.2	1.95 V	102	40.8	18.0
4	10600.00	44.7 AV	54.0	-9.3	1.95 V	102	26.7	18.0

Remarks:

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

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	105.0 PK			2.36 H	123	65.4	39.6
2	*5320.00	95.3 AV			2.36 H	123	55.7	39.6
3	5350.00	65.2 PK	74.0	-8.8	2.36 H	123	59.9	5.3
4	5350.00	49.0 AV	54.0	-5.0	2.36 H	123	43.7	5.3
5	10640.00	58.6 PK	74.0	-15.4	2.29 H	117	40.7	17.9
6	10640.00	44.6 AV	54.0	-9.4	2.29 H	117	26.7	17.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	111.9 PK			2.27 V	67	72.3	39.6
2	*5320.00	102.4 AV			2.27 V	67	62.8	39.6
3	5350.00	69.6 PK	74.0	-4.4	2.27 V	67	64.3	5.3
4	5350.00	53.5 AV	54.0	-0.5	2.27 V	67	48.2	5.3
5	10640.00	58.9 PK	74.0	-15.1	2.01 V	100	41.0	17.9
6	10640.00	44.9 AV	54.0	-9.1	2.01 V	100	27.0	17.9

Remarks:

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

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	57.2 PK	74.0	-16.8	2.71 H	154	51.0	6.2
2	5460.00	44.3 AV	54.0	-9.7	2.71 H	154	38.1	6.2
3	#5470.00	61.2 PK	68.2	-7.0	2.71 H	154	55.0	6.2
4	*5500.00	101.1 PK			2.71 H	154	60.6	40.5
5	*5500.00	91.6 AV			2.71 H	154	51.1	40.5
6	11000.00	59.6 PK	74.0	-14.4	2.29 H	120	40.8	18.8
7	11000.00	46.7 AV	54.0	-7.3	2.29 H	120	27.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.9 PK	74.0	-13.1	2.13 V	60	54.7	6.2
2	5460.00	46.5 AV	54.0	-7.5	2.13 V	60	40.3	6.2
3	#5470.00	67.2 PK	68.2	-1.0	2.13 V	60	61.0	6.2
4	*5500.00	108.2 PK			2.13 V	60	67.7	40.5
5	*5500.00	98.7 AV			2.13 V	60	58.2	40.5
6	11000.00	59.8 PK	74.0	-14.2	2.05 V	115	41.0	18.8
7	11000.00	47.0 AV	54.0	-7.0	2.05 V	115	28.2	18.8

Remarks:

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

RF Mode	TX 802.11a	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	102.6 PK			2.58 H	148	62.3	40.3
2	*5580.00	93.5 AV			2.58 H	148	53.2	40.3
3	11160.00	59.0 PK	74.0	-15.0	2.33 H	122	40.9	18.1
4	11160.00	46.1 AV	54.0	-7.9	2.33 H	122	28.0	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	109.8 PK			2.20 V	66	69.5	40.3
2	*5580.00	100.6 AV			2.20 V	66	60.3	40.3
3	11160.00	59.2 PK	74.0	-14.8	2.08 V	110	41.1	18.1
4	11160.00	46.3 AV	54.0	-7.7	2.08 V	110	28.2	18.1

Remarks:

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

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	101.0 PK			2.72 H	150	60.3	40.7
2	*5700.00	91.6 AV			2.72 H	150	50.9	40.7
3	#5725.00	61.3 PK	68.2	-6.9	2.72 H	150	54.8	6.5
4	11400.00	59.8 PK	74.0	-14.2	2.25 H	118	41.0	18.8
5	11400.00	46.7 AV	54.0	-7.3	2.25 H	118	27.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	108.1 PK			2.21 V	66	67.4	40.7
2	*5700.00	98.6 AV			2.21 V	66	57.9	40.7
3	#5725.00	67.7 PK	68.2	-0.5	2.21 V	66	61.2	6.5
4	11400.00	60.1 PK	74.0	-13.9	2.10 V	113	41.3	18.8
5	11400.00	47.1 AV	54.0	-6.9	2.10 V	113	28.3	18.8

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.8 PK	68.2	-11.4	2.35 H	287	50.6	6.2
2	*5720.00	104.5 PK			2.35 H	287	63.7	40.8
3	*5720.00	95.3 AV			2.35 H	287	54.5	40.8
4	#5850.00	57.3 PK	68.2	-10.9	2.35 H	287	50.3	7.0
5	11440.00	59.9 PK	74.0	-14.1	2.21 H	159	41.2	18.7
6	11440.00	47.0 AV	54.0	-7.0	2.21 H	159	28.3	18.7
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	#5470.00	56.9 PK	68.2	-11.3	2.17 V	105	50.7	6.2
2	*5720.00	109.3 PK			2.17 V	105	68.5	40.8
3	*5720.00	99.8 AV			2.17 V	105	59.0	40.8
4	#5850.00	57.8 PK	68.2	-10.4	2.17 V	105	50.8	7.0
5	11440.00	59.9 PK	74.0	-14.1	2.07 V	102	41.2	18.7
6	11440.00	47.0 AV	54.0	-7.0	2.07 V	102	28.3	18.7

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 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	*5745.00	101.6 PK			2.58 H	148	60.7	40.9
2	*5745.00	92.3 AV			2.58 H	148	51.4	40.9
3	11490.00	59.6 PK	74.0	-14.4	2.30 H	120	41.0	18.6
4	11490.00	46.8 AV	54.0	-7.2	2.30 H	120	28.2	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	108.8 PK			2.17 V	64	67.9	40.9
2	*5745.00	99.4 AV			2.17 V	64	58.5	40.9
3	11490.00	59.9 PK	74.0	-14.1	2.16 V	54	41.3	18.6
4	11490.00	47.0 AV	54.0	-7.0	2.16 V	54	28.4	18.6

Remarks:

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

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	*5785.00	101.3 PK			2.61 H	150	60.3	41.0
2	*5785.00	91.7 AV			2.61 H	150	50.7	41.0
3	11570.00	59.3 PK	74.0	-14.7	2.33 H	123	40.9	18.4
4	11570.00	46.5 AV	54.0	-7.5	2.33 H	123	28.1	18.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	108.1 PK			2.16 V	63	67.1	41.0
2	*5785.00	98.7 AV			2.16 V	63	57.7	41.0
3	11570.00	59.6 PK	74.0	-14.4	2.13 V	58	41.2	18.4
4	11570.00	46.7 AV	54.0	-7.3	2.13 V	58	28.3	18.4

Remarks:

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

RF Mode	TX 802.11a	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	*5825.00	102.7 PK			2.62 H	153	61.5	41.2
2	*5825.00	92.7 AV			2.62 H	153	51.5	41.2
3	11650.00	59.1 PK	74.0	-14.9	2.33 H	118	40.9	18.2
4	11650.00	46.5 AV	54.0	-7.5	2.33 H	118	28.3	18.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	109.2 PK			2.10 V	47	68.0	41.2
2	*5825.00	99.5 AV			2.10 V	47	58.3	41.2
3	11650.00	59.6 PK	74.0	-14.4	2.08 V	59	41.4	18.2
4	11650.00	46.7 AV	54.0	-7.3	2.08 V	59	28.5	18.2

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.5 PK	74.0	-10.5	2.26 H	127	57.9	5.6
2	5150.00	48.4 AV	54.0	-5.6	2.26 H	127	42.8	5.6
3	*5180.00	104.7 PK			2.26 H	127	64.7	40.0
4	*5180.00	95.5 AV			2.26 H	127	55.5	40.0
5	#10360.00	58.5 PK	68.2	-9.7	2.49 H	119	41.0	17.5

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	69.2 PK	74.0	-4.8	2.18 V	97	63.6	5.6
2	5150.00	53.0 AV	54.0	-1.0	2.18 V	97	47.4	5.6
3	*5180.00	112.3 PK			2.18 V	97	72.3	40.0
4	*5180.00	102.7 AV			2.18 V	97	62.7	40.0
5	#10360.00	58.9 PK	68.2	-9.3	2.04 V	107	41.4	17.5

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	105.8 PK			2.39 H	110	65.8	40.0
2	*5200.00	96.5 AV			2.39 H	110	56.5	40.0
3	#10400.00	58.8 PK	68.2	-9.4	2.42 H	127	41.3	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	113.3 PK			2.51 V	56	73.3	40.0
2	*5200.00	104.0 AV			2.51 V	56	64.0	40.0
3	#10400.00	59.2 PK	68.2	-9.0	2.16 V	110	41.7	17.5

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	106.1 PK			2.36 H	108	66.2	39.9
2	*5240.00	97.0 AV			2.36 H	108	57.1	39.9
3	5350.00	55.7 PK	74.0	-18.3	2.36 H	108	50.4	5.3
4	5350.00	43.1 AV	54.0	-10.9	2.36 H	108	37.8	5.3
5	#10480.00	58.8 PK	68.2	-9.4	2.47 H	111	41.2	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	114.2 PK			2.14 V	97	74.3	39.9
2	*5240.00	104.3 AV			2.14 V	97	64.4	39.9
3	5350.00	55.7 PK	74.0	-18.3	2.14 V	97	50.4	5.3
4	5350.00	43.2 AV	54.0	-10.8	2.14 V	97	37.9	5.3
5	#10480.00	59.4 PK	68.2	-8.8	2.10 V	108	41.8	17.6

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	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	56.5 PK	74.0	-17.5	2.37 H	129	50.9	5.6
2	5150.00	43.9 AV	54.0	-10.1	2.37 H	129	38.3	5.6
3	*5260.00	108.2 PK			2.37 H	129	68.3	39.9
4	*5260.00	98.6 AV			2.37 H	129	58.7	39.9
5	#10520.00	58.2 PK	68.2	-10.0	2.14 H	115	40.6	17.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.6 PK	74.0	-17.4	2.27 V	99	51.0	5.6
2	5150.00	44.0 AV	54.0	-10.0	2.27 V	99	38.4	5.6
3	*5260.00	115.0 PK			2.27 V	99	75.1	39.9
4	*5260.00	105.6 AV			2.27 V	99	65.7	39.9
5	#10520.00	58.6 PK	68.2	-9.6	1.99 V	112	41.0	17.6

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	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	107.1 PK			2.33 H	127	67.5	39.6
2	*5300.00	97.7 AV			2.33 H	127	58.1	39.6
3	10600.00	58.8 PK	74.0	-15.2	2.19 H	112	40.8	18.0
4	10600.00	45.1 AV	54.0	-8.9	2.19 H	112	27.1	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	114.4 PK			2.14 V	85	74.8	39.6
2	*5300.00	105.1 AV			2.14 V	85	65.5	39.6
3	10600.00	59.1 PK	74.0	-14.9	1.95 V	111	41.1	18.0
4	10600.00	45.4 AV	54.0	-8.6	1.95 V	111	27.4	18.0

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	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	103.9 PK			2.33 H	123	64.3	39.6
2	*5320.00	94.5 AV			2.33 H	123	54.9	39.6
3	5350.00	61.5 PK	74.0	-12.5	2.33 H	123	56.2	5.3
4	5350.00	46.7 AV	54.0	-7.3	2.33 H	123	41.4	5.3
5	10640.00	58.7 PK	74.0	-15.3	2.26 H	117	40.8	17.9
6	10640.00	44.9 AV	54.0	-9.1	2.26 H	117	27.0	17.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	111.3 PK			2.12 V	106	71.7	39.6
2	*5320.00	101.5 AV			2.12 V	106	61.9	39.6
3	5350.00	69.7 PK	74.0	-4.3	2.12 V	106	64.4	5.3
4	5350.00	53.7 AV	54.0	-0.3	2.12 V	106	48.4	5.3
5	10640.00	58.9 PK	74.0	-15.1	2.00 V	110	41.0	17.9
6	10640.00	45.2 AV	54.0	-8.8	2.00 V	110	27.3	17.9

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	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	56.9 PK	74.0	-17.1	2.73 H	152	50.7	6.2
2	5460.00	44.4 AV	54.0	-9.6	2.73 H	152	38.2	6.2
3	#5470.00	63.0 PK	68.2	-5.2	2.73 H	152	56.8	6.2
4	*5500.00	101.8 PK			2.73 H	152	61.3	40.5
5	*5500.00	92.4 AV			2.73 H	152	51.9	40.5
6	11000.00	59.9 PK	74.0	-14.1	2.28 H	119	41.1	18.8
7	11000.00	46.7 AV	54.0	-7.3	2.28 H	119	27.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.5 PK	74.0	-11.5	2.15 V	58	56.3	6.2
2	5460.00	46.4 AV	54.0	-7.6	2.15 V	58	40.2	6.2
3	#5470.00	68.0 PK	68.2	-0.2	2.15 V	58	61.8	6.2
4	*5500.00	108.7 PK			2.15 V	58	68.2	40.5
5	*5500.00	99.5 AV			2.15 V	58	59.0	40.5
6	11000.00	60.2 PK	74.0	-13.8	2.07 V	105	41.4	18.8
7	11000.00	46.9 AV	54.0	-7.1	2.07 V	105	28.1	18.8

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 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	105.3 PK			2.66 H	156	65.0	40.3
2	*5580.00	95.5 AV			2.66 H	156	55.2	40.3
3	11160.00	59.4 PK	74.0	-14.6	2.23 H	123	41.3	18.1
4	11160.00	46.1 AV	54.0	-7.9	2.23 H	123	28.0	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	112.4 PK			2.14 V	42	72.1	40.3
2	*5580.00	102.7 AV			2.14 V	42	62.4	40.3
3	11160.00	59.7 PK	74.0	-14.3	2.00 V	109	41.6	18.1
4	11160.00	46.4 AV	54.0	-7.6	2.00 V	109	28.3	18.1

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	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	103.2 PK			2.74 H	154	62.5	40.7
2	*5700.00	93.7 AV			2.74 H	154	53.0	40.7
3	#5725.00	60.4 PK	68.2	-7.8	2.74 H	154	53.9	6.5
4	11400.00	59.7 PK	74.0	-14.3	2.23 H	127	40.9	18.8
5	11400.00	46.5 AV	54.0	-7.5	2.23 H	127	27.7	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.7 PK			2.26 V	51	69.0	40.7
2	*5700.00	100.3 AV			2.26 V	51	59.6	40.7
3	#5725.00	67.4 PK	68.2	-0.8	2.26 V	51	60.9	6.5
4	11400.00	60.1 PK	74.0	-13.9	2.03 V	104	41.3	18.8
5	11400.00	46.8 AV	54.0	-7.2	2.03 V	104	28.0	18.8

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.6 PK	68.2	-11.6	2.36 H	287	50.4	6.2
2	*5720.00	107.3 PK			2.36 H	287	66.5	40.8
3	*5720.00	97.9 AV			2.36 H	287	57.1	40.8
4	#5850.00	57.3 PK	68.2	-10.9	2.36 H	287	50.3	7.0
5	11440.00	59.6 PK	74.0	-14.4	2.23 H	154	40.9	18.7
6	11440.00	46.9 AV	54.0	-7.1	2.23 H	154	28.2	18.7
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	#5470.00	56.9 PK	68.2	-11.3	2.16 V	103	50.7	6.2
2	*5720.00	111.3 PK			2.16 V	103	70.5	40.8
3	*5720.00	101.9 AV			2.16 V	103	61.1	40.8
4	#5850.00	57.5 PK	68.2	-10.7	2.16 V	103	50.5	7.0
5	11440.00	60.2 PK	74.0	-13.8	2.04 V	106	41.5	18.7
6	11440.00	47.1 AV	54.0	-6.9	2.04 V	106	28.4	18.7

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 802.11ac (VHT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	104.4 PK			2.59 H	152	63.5	40.9
2	*5745.00	95.0 AV			2.59 H	152	54.1	40.9
3	11490.00	59.3 PK	74.0	-14.7	2.36 H	117	40.7	18.6
4	11490.00	46.5 AV	54.0	-7.5	2.36 H	117	27.9	18.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	111.1 PK			2.21 V	64	70.2	40.9
2	*5745.00	102.0 AV			2.21 V	64	61.1	40.9
3	11490.00	59.7 PK	74.0	-14.3	2.09 V	52	41.1	18.6
4	11490.00	46.9 AV	54.0	-7.1	2.09 V	52	28.3	18.6

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	103.4 PK			2.49 H	149	62.4	41.0
2	*5785.00	94.0 AV			2.49 H	149	53.0	41.0
3	11570.00	59.3 PK	74.0	-14.7	2.34 H	124	40.9	18.4
4	11570.00	46.3 AV	54.0	-7.7	2.34 H	124	27.9	18.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	111.2 PK			2.16 V	69	70.2	41.0
2	*5785.00	101.0 AV			2.16 V	69	60.0	41.0
3	11570.00	59.6 PK	74.0	-14.4	2.11 V	54	41.2	18.4
4	11570.00	46.6 AV	54.0	-7.4	2.11 V	54	28.2	18.4

Remarks:

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

RF Mode	TX 802.11ac (VHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	103.5 PK			2.67 H	153	62.3	41.2
2	*5825.00	93.8 AV			2.67 H	153	52.6	41.2
3	11650.00	58.9 PK	74.0	-15.1	2.27 H	116	40.7	18.2
4	11650.00	45.9 AV	54.0	-8.1	2.27 H	116	27.7	18.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	110.7 PK			2.22 V	80	69.5	41.2
2	*5825.00	100.9 AV			2.22 V	80	59.7	41.2
3	11650.00	59.2 PK	74.0	-14.8	2.09 V	57	41.0	18.2
4	11650.00	46.1 AV	54.0	-7.9	2.09 V	57	27.9	18.2

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 38 : 5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.9 PK	74.0	-12.1	2.17 H	111	56.3	5.6
2	5150.00	47.1 AV	54.0	-6.9	2.17 H	111	41.5	5.6
3	*5190.00	98.7 PK			2.17 H	111	58.7	40.0
4	*5190.00	89.2 AV			2.17 H	111	49.2	40.0
5	#10380.00	58.5 PK	68.2	-9.7	2.37 H	120	40.9	17.6

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.6 PK	74.0	-6.4	2.16 V	96	62.0	5.6
2	5150.00	52.6 AV	54.0	-1.4	2.16 V	96	47.0	5.6
3	*5190.00	106.0 PK			2.16 V	96	66.0	40.0
4	*5190.00	96.5 AV			2.16 V	96	56.5	40.0
5	#10380.00	59.0 PK	68.2	-9.2	2.02 V	113	41.4	17.6

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 46 : 5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	103.2 PK			2.28 H	114	63.2	40.0
2	*5230.00	93.7 AV			2.28 H	114	53.7	40.0
3	5350.00	56.6 PK	74.0	-17.4	2.28 H	114	51.3	5.3
4	5350.00	43.9 AV	54.0	-10.1	2.28 H	114	38.6	5.3
5	#10460.00	58.6 PK	68.2	-9.6	2.48 H	120	41.1	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	110.6 PK			2.14 V	98	70.6	40.0
2	*5230.00	101.1 AV			2.14 V	98	61.1	40.0
3	5350.00	56.5 PK	74.0	-17.5	2.14 V	98	51.2	5.3
4	5350.00	44.2 AV	54.0	-9.8	2.14 V	98	38.9	5.3
5	#10460.00	59.0 PK	68.2	-9.2	2.06 V	109	41.5	17.5

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 54 : 5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	2.37 H	125	50.6	5.6
2	5150.00	43.9 AV	54.0	-10.1	2.37 H	125	38.3	5.6
3	*5270.00	104.0 PK			2.37 H	125	64.2	39.8
4	*5270.00	94.3 AV			2.37 H	125	54.5	39.8
5	5350.00	57.5 PK	74.0	-16.5	2.37 H	125	52.2	5.3
6	5350.00	45.0 AV	54.0	-9.0	2.37 H	125	39.7	5.3
7	#10540.00	58.5 PK	68.2	-9.7	2.22 H	119	40.8	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.6 PK	74.0	-14.4	2.14 V	86	54.0	5.6
2	5150.00	46.1 AV	54.0	-7.9	2.14 V	86	40.5	5.6
3	*5270.00	111.6 PK			2.14 V	86	71.8	39.8
4	*5270.00	101.8 AV			2.14 V	86	62.0	39.8
5	5350.00	64.9 PK	74.0	-9.1	2.14 V	86	59.6	5.3
6	5350.00	51.7 AV	54.0	-2.3	2.14 V	86	46.4	5.3
7	#10540.00	58.7 PK	68.2	-9.5	2.08 V	113	41.0	17.7

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	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	99.4 PK			2.36 H	122	59.8	39.6
2	*5310.00	89.8 AV			2.36 H	122	50.2	39.6
3	5350.00	65.9 PK	74.0	-8.1	2.36 H	122	60.6	5.3
4	5350.00	47.8 AV	54.0	-6.2	2.36 H	122	42.5	5.3
5	10620.00	58.8 PK	74.0	-15.2	2.30 H	120	40.8	18.0
6	10620.00	46.3 AV	54.0	-7.7	2.30 H	120	28.3	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	106.6 PK			2.14 V	107	67.0	39.6
2	*5310.00	96.9 AV			2.14 V	107	57.3	39.6
3	5350.00	71.0 PK	74.0	-3.0	2.14 V	107	65.7	5.3
4	5350.00	52.7 AV	54.0	-1.3	2.14 V	107	47.4	5.3
5	10620.00	59.0 PK	74.0	-15.0	2.02 V	115	41.0	18.0
6	10620.00	46.8 AV	54.0	-7.2	2.02 V	115	28.8	18.0

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	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	58.4 PK	74.0	-15.6	2.63 H	151	52.2	6.2
2	5460.00	45.8 AV	54.0	-8.2	2.63 H	151	39.6	6.2
3	#5470.00	62.0 PK	68.2	-6.2	2.63 H	151	55.8	6.2
4	*5510.00	98.0 PK			2.63 H	151	57.5	40.5
5	*5510.00	88.7 AV			2.63 H	151	48.2	40.5
6	11020.00	59.3 PK	74.0	-14.7	2.21 H	115	40.6	18.7
7	11020.00	46.0 AV	54.0	-8.0	2.21 H	115	27.3	18.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	63.8 PK	74.0	-10.2	2.17 V	50	57.6	6.2
2	5460.00	50.2 AV	54.0	-3.8	2.17 V	50	44.0	6.2
3	#5470.00	67.4 PK	68.2	-0.8	2.17 V	50	61.2	6.2
4	*5510.00	105.3 PK			2.17 V	50	64.8	40.5
5	*5510.00	96.0 AV			2.17 V	50	55.5	40.5
6	11020.00	59.6 PK	74.0	-14.4	2.08 V	109	40.9	18.7
7	11020.00	46.5 AV	54.0	-7.5	2.08 V	109	27.8	18.7

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 802.11ac (VHT40)	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	102.8 PK			2.66 H	152	62.4	40.4
2	*5550.00	92.9 AV			2.66 H	152	52.5	40.4
3	11100.00	58.8 PK	74.0	-15.2	2.23 H	122	41.0	17.8
4	11100.00	45.6 AV	54.0	-8.4	2.23 H	122	27.8	17.8
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	*5550.00	109.9 PK			2.18 V	60	69.5	40.4
2	*5550.00	100.1 AV			2.18 V	60	59.7	40.4
3	11100.00	59.0 PK	74.0	-15.0	2.13 V	115	41.2	17.8
4	11100.00	46.0 AV	54.0	-8.0	2.13 V	115	28.2	17.8

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.

RF Mode	TX 802.11ac (VHT40)	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	102.2 PK			2.73 H	153	61.8	40.4
2	*5670.00	92.6 AV			2.73 H	153	52.2	40.4
3	#5725.00	59.1 PK	68.2	-9.1	2.73 H	153	52.6	6.5
4	11340.00	59.8 PK	74.0	-14.2	2.22 H	126	40.9	18.9
5	11340.00	46.6 AV	54.0	-7.4	2.22 H	126	27.7	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	109.5 PK			2.21 V	67	69.1	40.4
2	*5670.00	99.6 AV			2.21 V	67	59.2	40.4
3	#5725.00	66.8 PK	68.2	-1.4	2.21 V	67	60.3	6.5
4	11340.00	60.2 PK	74.0	-13.8	2.09 V	111	41.3	18.9
5	11340.00	46.9 AV	54.0	-7.1	2.09 V	111	28.0	18.9

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 142 : 5710 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.6 PK	68.2	-11.6	2.41 H	286	50.4	6.2
2	*5710.00	103.1 PK			2.41 H	286	62.4	40.7
3	*5710.00	94.2 AV			2.41 H	286	53.5	40.7
4	#5850.00	58.3 PK	68.2	-9.9	2.41 H	286	51.3	7.0
5	11420.00	59.5 PK	74.0	-14.5	2.24 H	158	40.7	18.8
6	11420.00	46.7 AV	54.0	-7.3	2.24 H	158	27.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.9 PK	68.2	-11.3	2.25 V	129	50.7	6.2
2	*5710.00	110.2 PK			2.25 V	129	69.5	40.7
3	*5710.00	100.6 AV			2.25 V	129	59.9	40.7
4	#5850.00	58.4 PK	68.2	-9.8	2.25 V	129	51.4	7.0
5	11420.00	59.6 PK	74.0	-14.4	2.15 V	114	40.8	18.8
6	11420.00	46.9 AV	54.0	-7.1	2.15 V	114	28.1	18.8

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 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	*5755.00	101.1 PK			2.59 H	150	60.2	40.9
2	*5755.00	91.4 AV			2.59 H	150	50.5	40.9
3	11510.00	58.8 PK	74.0	-15.2	2.36 H	118	40.3	18.5
4	11510.00	45.8 AV	54.0	-8.2	2.36 H	118	27.3	18.5
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	*5755.00	108.0 PK			2.06 V	40	67.1	40.9
2	*5755.00	98.5 AV			2.06 V	40	57.6	40.9
3	11510.00	59.1 PK	74.0	-14.9	2.12 V	59	40.6	18.5
4	11510.00	45.9 AV	54.0	-8.1	2.12 V	59	27.4	18.5

Remarks:

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

RF Mode	TX 802.11ac (VHT40)	Channel	CH 159 : 5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	101.6 PK			2.59 H	151	60.5	41.1
2	*5795.00	91.9 AV			2.59 H	151	50.8	41.1
3	11590.00	58.8 PK	74.0	-15.2	2.37 H	122	40.5	18.3
4	11590.00	45.7 AV	54.0	-8.3	2.37 H	122	27.4	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	108.6 PK			2.32 V	39	67.5	41.1
2	*5795.00	99.2 AV			2.32 V	39	58.1	41.1
3	11590.00	59.0 PK	74.0	-15.0	2.09 V	54	40.7	18.3
4	11590.00	46.0 AV	54.0	-8.0	2.09 V	54	27.7	18.3

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 42 : 5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.1 PK	74.0	-12.9	2.37 H	120	55.5	5.6
2	5150.00	48.8 AV	54.0	-5.2	2.37 H	120	43.2	5.6
3	*5210.00	96.5 PK			2.37 H	120	56.5	40.0
4	*5210.00	86.1 AV			2.37 H	120	46.1	40.0
5	#10420.00	58.2 PK	68.2	-10.0	2.39 H	112	40.7	17.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.1 PK	74.0	-7.9	2.16 V	50	60.5	5.6
2	5150.00	53.4 AV	54.0	-0.6	2.16 V	50	47.8	5.6
3	*5210.00	103.6 PK			2.16 V	50	63.6	40.0
4	*5210.00	93.4 AV			2.16 V	50	53.4	40.0
5	#10420.00	58.5 PK	68.2	-9.7	1.99 V	117	41.0	17.5

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	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	*5290.00	96.1 PK			2.31 H	121	56.4	39.7
2	*5290.00	86.0 AV			2.31 H	121	46.3	39.7
3	5350.00	60.1 PK	74.0	-13.9	2.31 H	121	54.8	5.3
4	5350.00	46.1 AV	54.0	-7.9	2.31 H	121	40.8	5.3
5	#10580.00	58.4 PK	68.2	-9.8	2.22 H	115	40.6	17.8
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	*5290.00	103.3 PK			2.36 V	85	63.6	39.7
2	*5290.00	93.0 AV			2.36 V	85	53.3	39.7
3	5350.00	69.0 PK	74.0	-5.0	2.36 V	85	63.7	5.3
4	5350.00	52.5 AV	54.0	-1.5	2.36 V	85	47.2	5.3
5	#10580.00	58.7 PK	68.2	-9.5	2.08 V	113	40.9	17.8

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	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	61.7 PK	74.0	-12.3	2.68 H	150	55.5	6.2
2	5460.00	49.2 AV	54.0	-4.8	2.68 H	150	43.0	6.2
3	#5470.00	63.0 PK	68.2	-5.2	2.68 H	150	56.8	6.2
4	*5530.00	96.7 PK			2.68 H	150	56.3	40.4
5	*5530.00	86.3 AV			2.68 H	150	45.9	40.4
6	11060.00	58.6 PK	74.0	-15.4	2.31 H	126	40.3	18.3
7	11060.00	46.2 AV	54.0	-7.8	2.31 H	126	27.9	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	65.1 PK	74.0	-8.9	2.21 V	65	58.9	6.2
2	5460.00	52.2 AV	54.0	-1.8	2.21 V	65	46.0	6.2
3	#5470.00	67.8 PK	68.2	-0.4	2.21 V	65	61.6	6.2
4	*5530.00	103.2 PK			2.21 V	65	62.8	40.4
5	*5530.00	93.1 AV			2.21 V	65	52.7	40.4
6	11060.00	58.9 PK	74.0	-15.1	2.02 V	108	40.6	18.3
7	11060.00	46.5 AV	54.0	-7.5	2.02 V	108	28.2	18.3

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	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	*5610.00	96.8 PK			2.58 H	149	56.6	40.2
2	*5610.00	86.6 AV			2.58 H	149	46.4	40.2
3	#5725.00	57.2 PK	68.2	-11.0	2.58 H	149	50.7	6.5
4	11220.00	58.9 PK	74.0	-15.1	2.22 H	121	40.6	18.3
5	11220.00	46.3 AV	54.0	-7.7	2.22 H	121	28.0	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	103.9 PK			2.19 V	46	63.7	40.2
2	*5610.00	93.9 AV			2.19 V	46	53.7	40.2
3	#5725.00	59.1 PK	68.2	-9.1	2.19 V	46	52.6	6.5
4	11220.00	59.2 PK	74.0	-14.8	1.99 V	109	40.9	18.3
5	11220.00	46.6 AV	54.0	-7.4	1.99 V	109	28.3	18.3

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 138 : 5690 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.5 PK	68.2	-11.7	2.25 H	287	50.3	6.2
2	*5690.00	97.6 PK			2.25 H	287	57.1	40.5
3	*5690.00	87.4 AV			2.25 H	287	46.9	40.5
4	#5850.00	58.3 PK	68.2	-9.9	2.25 H	287	51.3	7.0
5	11380.00	59.5 PK	74.0	-14.5	2.33 H	154	40.7	18.8
6	11380.00	46.7 AV	54.0	-7.3	2.33 H	154	27.9	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	56.6 PK	68.2	-11.6	2.25 V	128	50.4	6.2
2	*5690.00	104.1 PK			2.25 V	128	63.6	40.5
3	*5690.00	94.1 AV			2.25 V	128	53.6	40.5
4	#5850.00	58.7 PK	68.2	-9.5	2.25 V	128	51.7	7.0
5	11380.00	59.7 PK	74.0	-14.3	1.97 V	104	40.9	18.8
6	11380.00	47.0 AV	54.0	-7.0	1.97 V	104	28.2	18.8

Remarks:

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 155 : 5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5775.00	95.0 PK			2.58 H	153	54.0	41.0
2	*5775.00	84.8 AV			2.58 H	153	43.8	41.0
3	11550.00	58.5 PK	74.0	-15.5	2.29 H	127	40.1	18.4
4	11550.00	45.5 AV	54.0	-8.5	2.29 H	127	27.1	18.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5775.00	102.5 PK			2.37 V	57	61.5	41.0
2	*5775.00	92.1 AV			2.37 V	57	51.1	41.0
3	11550.00	58.8 PK	74.0	-15.2	2.12 V	59	40.4	18.4
4	11550.00	45.9 AV	54.0	-8.1	2.12 V	59	27.5	18.4

Remarks:

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

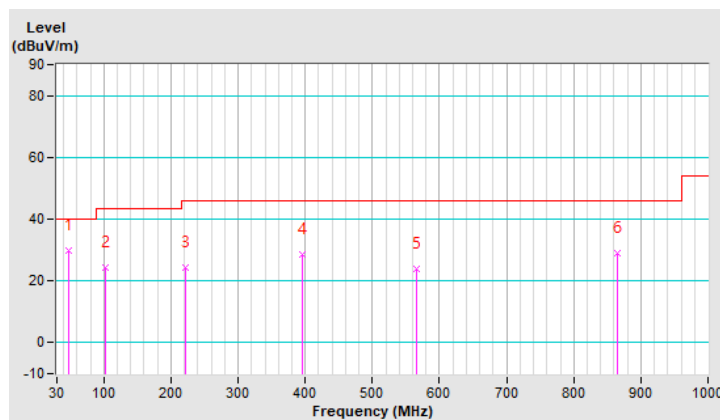
Below 1 GHz Data:

RF Mode	TX 802.11ac (VHT40)	Channel	CH 142 : 5710 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.28	29.91 QP	40.00	-10.09	2.00 H	9	42.98	-13.07
2	101.70	24.12 QP	43.50	-19.38	2.00 H	286	41.52	-17.40
3	222.59	24.15 QP	46.00	-21.85	1.51 H	334	40.69	-16.54
4	395.51	28.40 QP	46.00	-17.60	1.00 H	99	38.66	-10.26
5	565.61	23.89 QP	46.00	-22.11	1.51 H	220	30.43	-6.54
6	865.04	29.14 QP	46.00	-16.86	1.00 H	18	30.79	-1.65

Remarks:

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

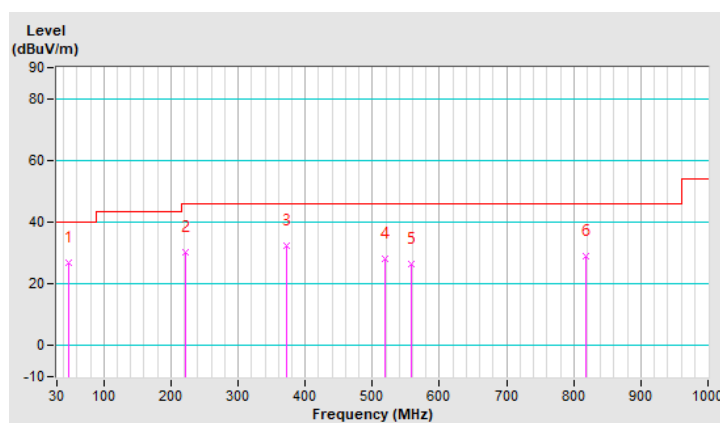


RF Mode	TX 802.11ac (VHT40)	Channel	CH 142 : 5710 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.28	26.94 QP	40.00	-13.06	1.99 V	186	40.01	-13.07
2	222.59	30.24 QP	46.00	-15.76	1.49 V	280	46.78	-16.54
3	371.61	32.57 QP	46.00	-13.43	1.00 V	269	43.39	-10.82
4	519.22	28.15 QP	46.00	-17.85	1.00 V	264	35.59	-7.44
5	557.17	26.30 QP	46.00	-19.70	1.00 V	180	33.06	-6.76
6	817.25	29.15 QP	46.00	-16.85	1.49 V	143	31.32	-2.17

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. 20, 2021	Dec. 19, 2022
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 04, 2021	Sep. 03, 2022
LISN/AMN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Feb. 17, 2022	Feb. 16, 2023
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Sep. 17, 2021	Sep. 16, 2022
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

- Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2. (Conduction 2)
 3. The VCCI Site Registration No. is C-12047.

4.2.3 Test Procedures

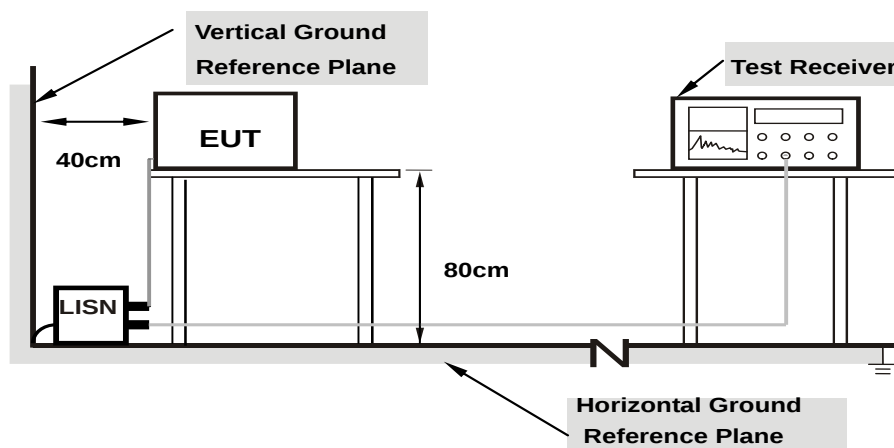
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

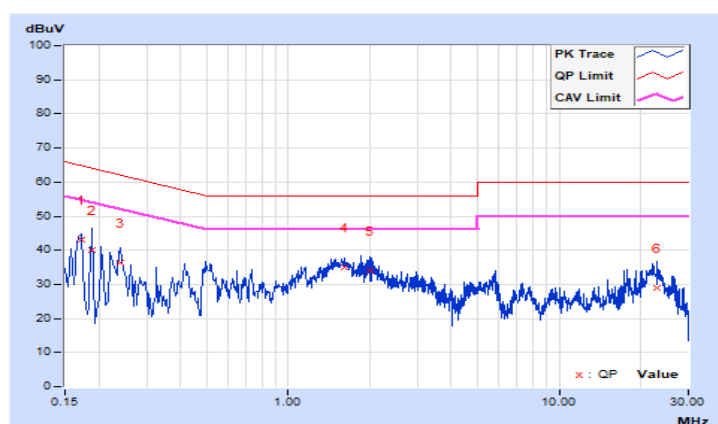
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	22 °C, 71% RH
Tested by	Greg Lin		

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	0.17237	10.13	32.99	22.11	43.12	32.24	64.85	54.85	-21.73	-22.61
2	0.18903	10.14	30.03	10.84	40.17	20.98	64.08	54.08	-23.91	-33.10
3	0.23993	10.14	26.30	19.37	36.44	29.51	62.10	52.10	-25.66	-22.59
4	1.60452	10.21	24.64	17.00	34.85	27.21	56.00	46.00	-21.15	-18.79
5	2.01507	10.22	23.70	14.25	33.92	24.47	56.00	46.00	-22.08	-21.53
6	23.04305	10.30	18.81	8.64	29.11	18.94	60.00	50.00	-30.89	-31.06

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

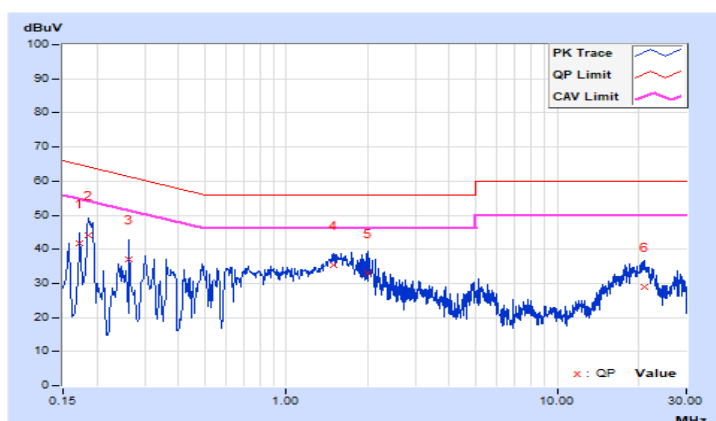


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	22 °C, 71% RH
Tested by	Greg Lin		

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	0.17346	10.14	31.45	24.52	41.59	34.66	64.79	54.79	-23.20	-20.13
2	0.18519	10.15	34.05	17.15	44.20	27.30	64.25	54.25	-20.05	-26.95
3	0.26339	10.16	26.74	14.53	36.90	24.69	61.32	51.32	-24.42	-26.63
4	1.50286	10.22	25.02	15.27	35.24	25.49	56.00	46.00	-20.76	-20.51
5	2.00334	10.23	22.72	12.23	32.95	22.46	56.00	46.00	-23.05	-23.54
6	21.04504	10.51	18.46	8.30	28.97	18.81	60.00	50.00	-31.03	-31.19

Remarks:

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



4.3 Transmit Power Measurement

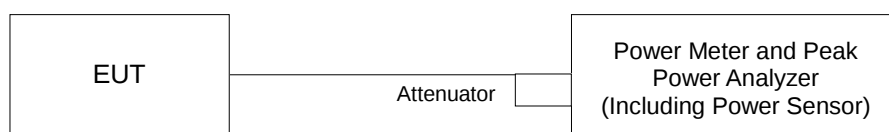
4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 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

4.3.2 Test Setup

For Power Output



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



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

Average Power Measurement

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

For transmission above 5.725 GHz where the EBW crosses 5.725 GHz

For channel aggregation (channel 138, 142, 144) measurement refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II E 2 e) method SA-2A and tested with a spectrum analyzer. If the duty cycle is less than 98%, the duty cycle factor is included in the total power. The duty cycle factor can be found in chapter 3.3 of the report.

26 dB Bandwidth

- a. Set RBW = approximately 1 % of the emission bandwidth.
- b. Set the VBW $\geq 3 \times$ 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:

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	18.664	12.71	24	Pass
40	5200	22.08	13.44	24	Pass
48	5240	21.727	13.37	24	Pass
52	5260	21.429	13.31	24	Pass
60	5300	21.281	13.28	24	Pass
64	5320	17.1	12.33	24	Pass
100	5500	13.092	11.17	24	Pass
116	5580	23.659	13.74	24	Pass
140	5700	15.031	11.77	24	Pass
144	5720 (U-NII-2C)	21.694	13.36	24	Pass
144	5720 (U-NII-3)	3.805	5.80	30	Pass
149	5745	21.727	13.37	30	Pass
157	5785	20.324	13.08	30	Pass
165	5825	23.014	13.62	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log(36.23) = 26.59\text{dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(28.43) = 25.53\text{dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(26.89) = 25.29\text{dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(21.73) = 24.37\text{dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(23.96) = 24.79\text{dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(21.70) = 24.36\text{dBm} > 24 \text{ dBm}$.
7. $11 \text{ dBm} + 10\log(20.60) = 24.13\text{dBm} > 24 \text{ dBm}$.

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	18.88	12.76	24	Pass
40	5200	37.239	15.71	24	Pass
48	5240	30.061	14.78	24	Pass
52	5260	37.584	15.75	24	Pass
60	5300	37.325	15.72	24	Pass
64	5320	18.836	12.75	24	Pass
100	5500	13.9	11.43	24	Pass
116	5580	38.815	15.89	24	Pass
140	5700	19.634	12.93	24	Pass
144	5720 (U-NII-2C)	33.811	15.29	24	Pass
144	5720 (U-NII-3)	7.89	8.97	30	Pass
149	5745	35.237	15.47	30	Pass
157	5785	34.514	15.38	30	Pass
165	5825	32.211	15.08	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log(44.18) = 27.45\text{dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(44.76) = 27.50\text{dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(37.76) = 26.77\text{dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(26.70) = 25.26\text{dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(43.09) = 27.34\text{dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(26.42) = 25.21\text{dBm} > 24 \text{ dBm}$.
7. $11 \text{ dBm} + 10\log(25.15) = 25.00\text{dBm} > 24 \text{ dBm}$.

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	8.091	9.08	24	Pass
46	5230	26.182	14.18	24	Pass
54	5270	31.989	15.05	24	Pass
62	5310	10.139	10.06	24	Pass
102	5510	12.794	11.07	24	Pass
110	5550	32.434	15.11	24	Pass
134	5670	36.475	15.62	24	Pass
142	5710 (U-NII-2C)	43.33	16.37	24	Pass
142	5710 (U-NII-3)	3.183	5.03	30	Pass
151	5755	32.063	15.06	30	Pass
159	5795	39.355	15.95	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log (82.94) = 30.18\text{dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log (57.22) = 28.57\text{dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log (50.53) = 28.03\text{dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log (73.64) = 29.67\text{dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log (79.16) = 29.98\text{dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log (61.19) = 28.86\text{dBm} > 24 \text{ dBm}$.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	13.213	11.21	24	Pass
58	5290	8.035	9.05	24	Pass
106	5530	12.735	11.05	24	Pass
122	5610	17.418	12.41	24	Pass
138	5690 (U-NII-2C)	23.396	13.69	24	Pass
138	5690 (U-NII-3)	0.9641	-0.16	30	Pass
155	5775	16.144	12.08	30	Pass

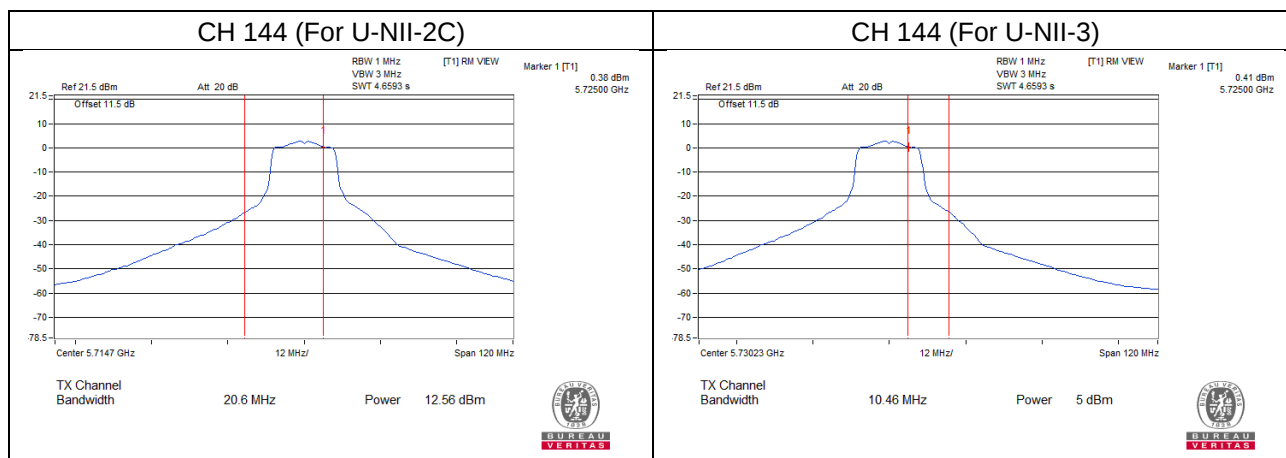
Note:

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

1. $11 \text{ dBm} + 10\log (86.64) = 30.37\text{dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log (82.40) = 30.15\text{dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log (97.15) = 30.87\text{dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log (124.89) = 31.96\text{dBm} > 24 \text{ dBm}$.

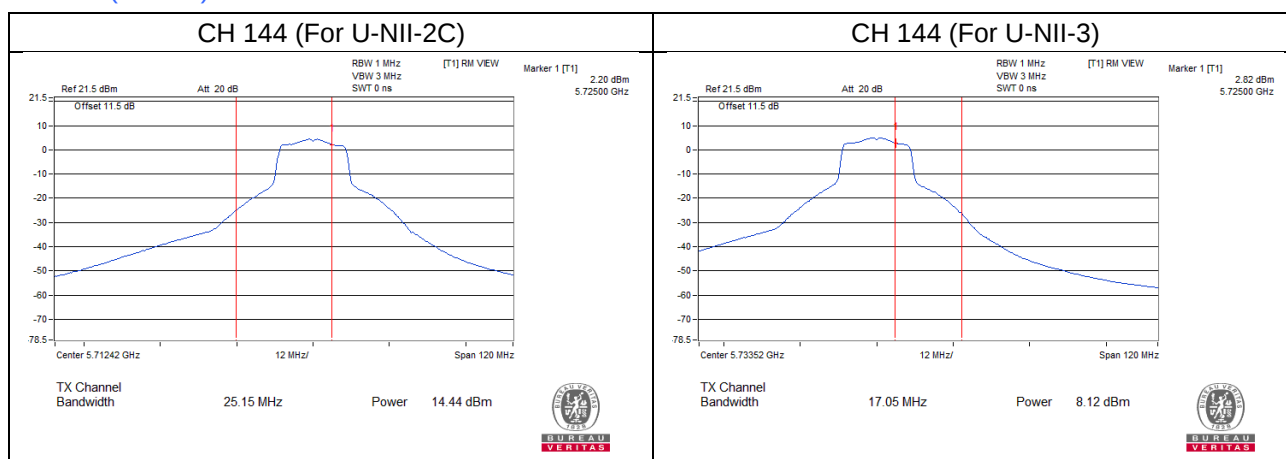
Straddle channel power plots:

802.11a



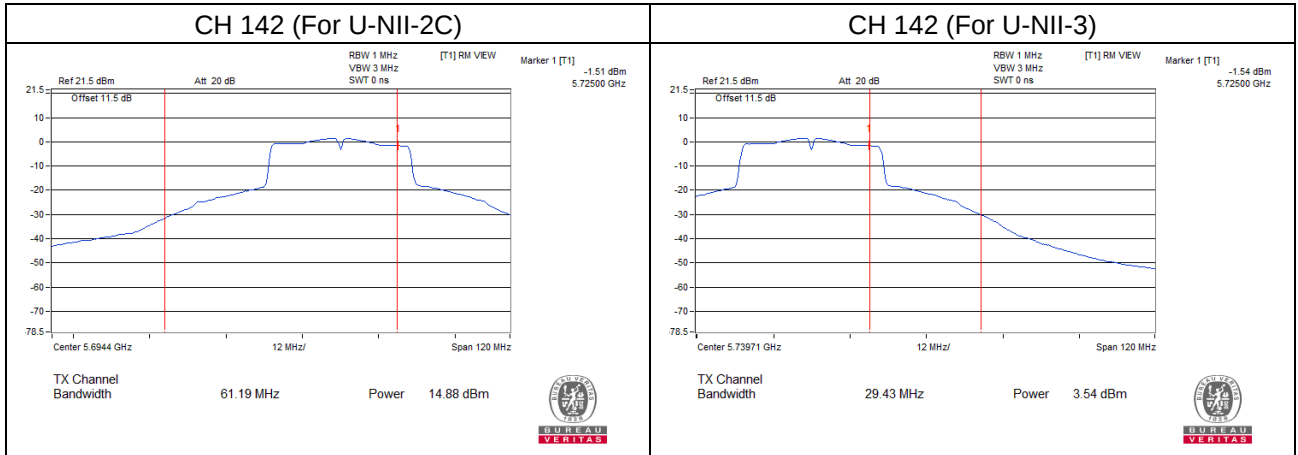
* Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test, the duty factor was included in the total power.

802.11ac (VHT20)



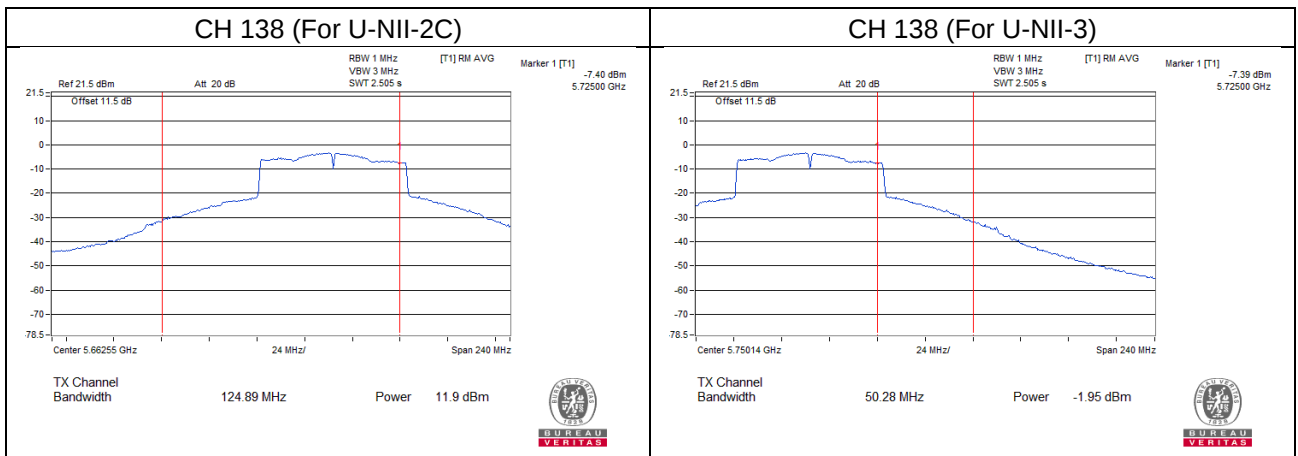
* Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test, the duty factor was included in the total power.

802.11ac (VHT40)



* Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test, the duty factor was included in the total power.

802.11ac (VHT80)



* Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test, the duty factor was included in the total power.

26 dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
52	5260	36.23
60	5300	28.43
64	5320	26.89
100	5500	21.73
116	5580	23.96
140	5700	21.70
144	5720 (U-NII-2C)	20.60

802.11ac (VHT20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
52	5260	44.18
60	5300	44.76
64	5320	37.76
100	5500	26.70
116	5580	43.09
140	5700	26.42
144	5720 (U-NII-2C)	25.15

802.11ac (VHT40)

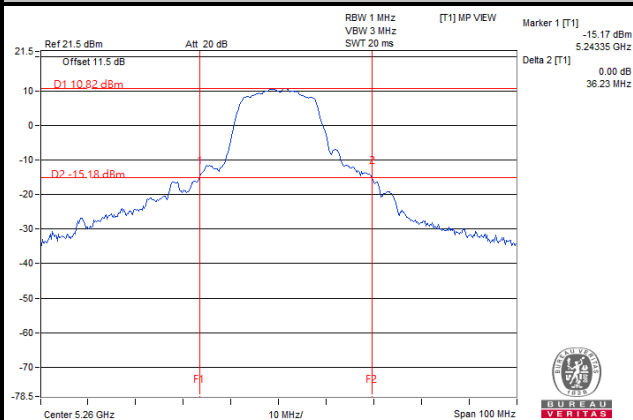
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
54	5270	82.94
62	5310	57.22
102	5510	50.53
110	5550	73.64
134	5670	79.16
142	5710 (U-NII-2C)	61.19

802.11ac (VHT80)

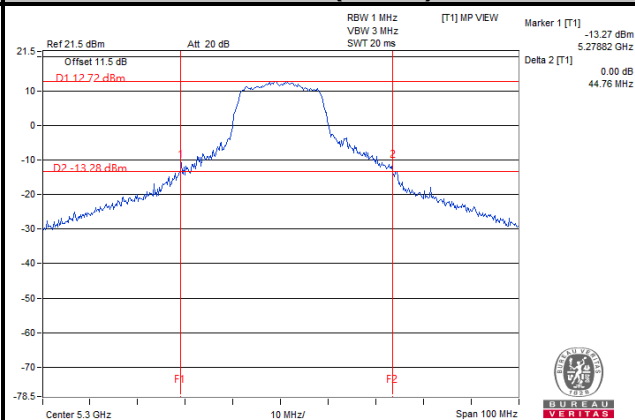
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
58	5290	86.64
106	5530	82.40
122	5610	97.15
138	5690 (U-NII-2C)	124.89

Spectrum Plot of Worst Value

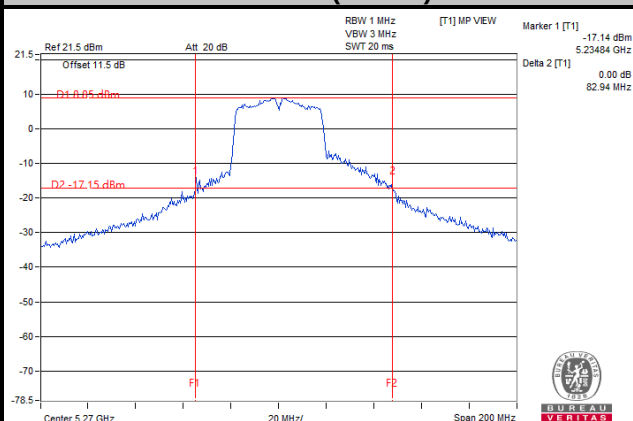
802.11a



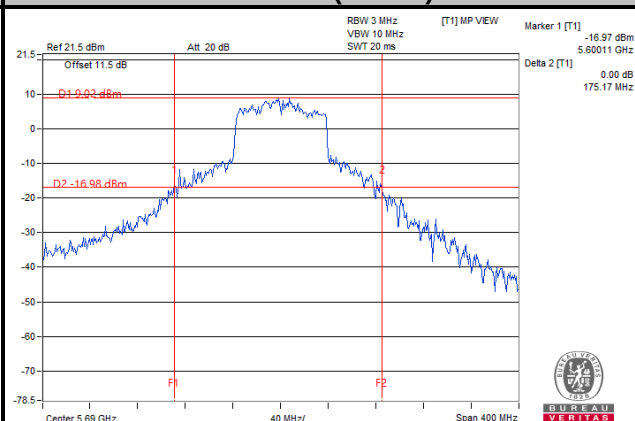
802.11ac (VHT20)



802.11ac (VHT40)

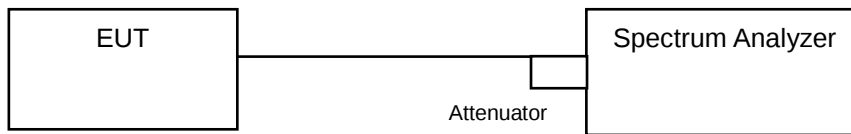


802.11ac (VHT80)



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)
36	5180	17.76
40	5200	18.24
48	5240	18.60
52	5260	18.72
60	5300	18.24
64	5320	17.88
100	5500	17.28
116	5580	17.52
140	5700	17.28
144	5720 (U-NII-2C)	14.36
144	5720 (U-NII-3)	4.00
149	5745	17.40
157	5785	17.40
165	5825	17.28

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	19.44
40	5200	22.44
48	5240	18.36
52	5260	23.40
60	5300	22.68
64	5320	18.36
100	5500	18.24
116	5580	20.04
140	5700	18.12
144	5720 (U-NII-2C)	14.48
144	5720 (U-NII-3)	4.36
149	5745	19.56
157	5785	19.68
165	5825	19.56

802.11ac (VHT40)

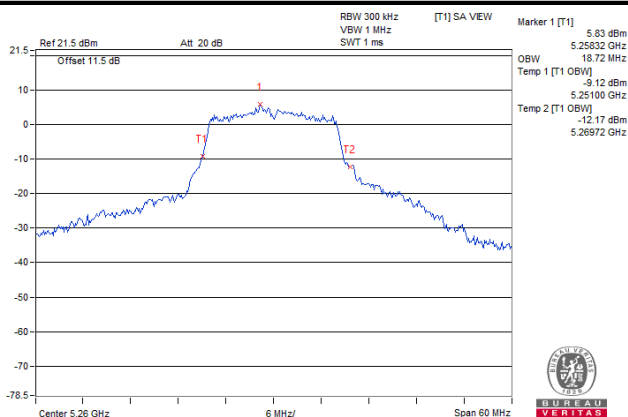
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.60
46	5230	36.92
54	5270	40.32
62	5310	36.72
102	5510	36.84
110	5550	38.88
134	5670	38.40
142	5710 (U-NII-2C)	39.48
142	5710 (U-NII-3)	10.68
151	5755	37.92
159	5795	39.60

802.11ac (VHT80)

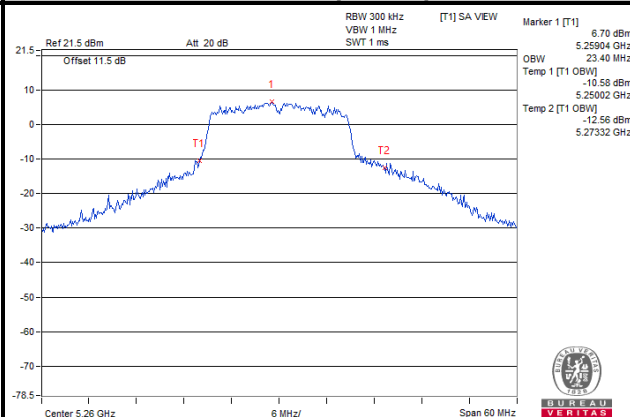
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.38
58	5290	76.08
106	5530	76.80
122	5610	75.84
138	5690 (U-NII-2C)	90.20
138	5690 (U-NII-3)	15.40
155	5775	75.39

Spectrum Plot of Worst Value

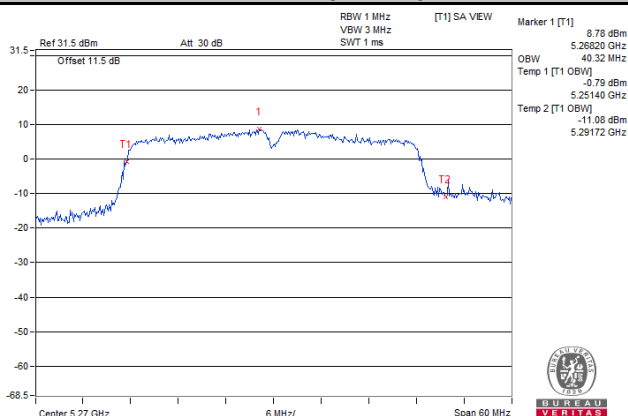
802.11a



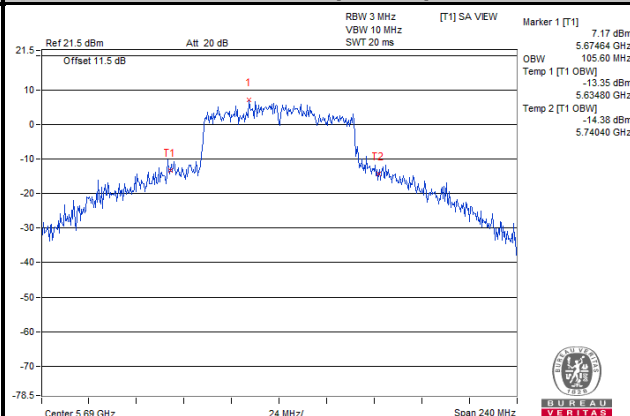
802.11ac (VHT20)



802.11ac (VHT40)



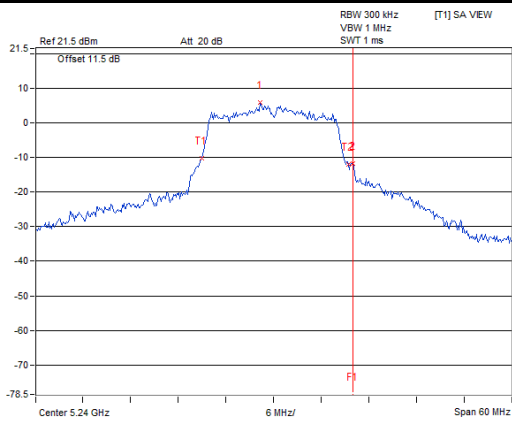
802.11ac (VHT80)



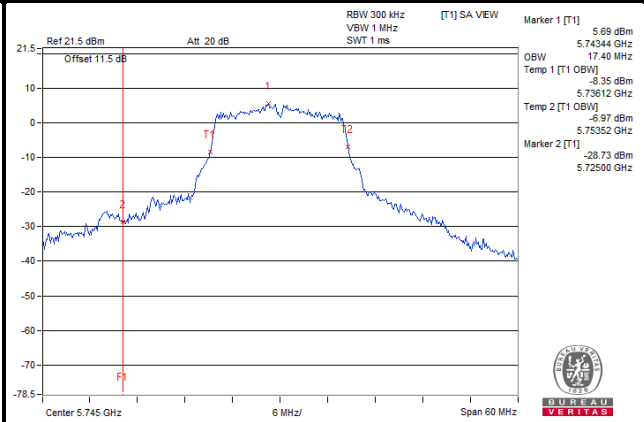
Spectrum Plot for Nearby DFS Band

802.11a

Ch 48 (5240 MHz)

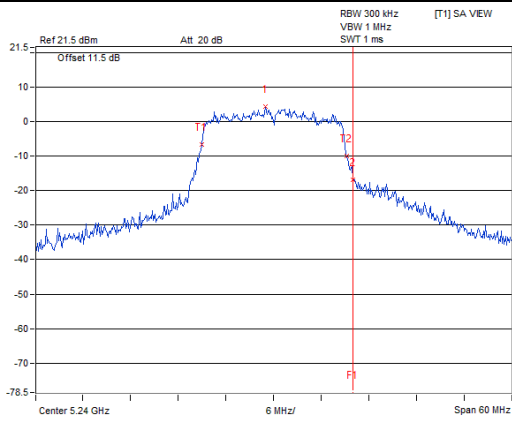


Ch 149 (5745 MHz)

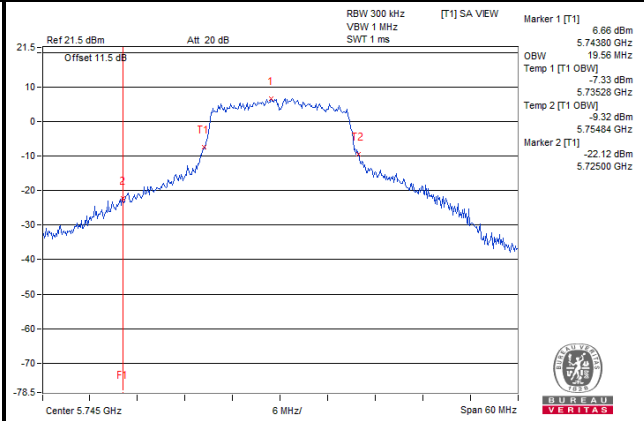


802.11ac (VHT20)

Ch 48 (5240 MHz)

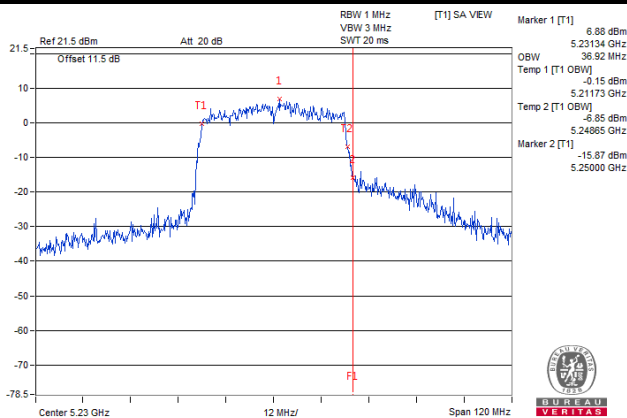


Ch 149 (5745 MHz)

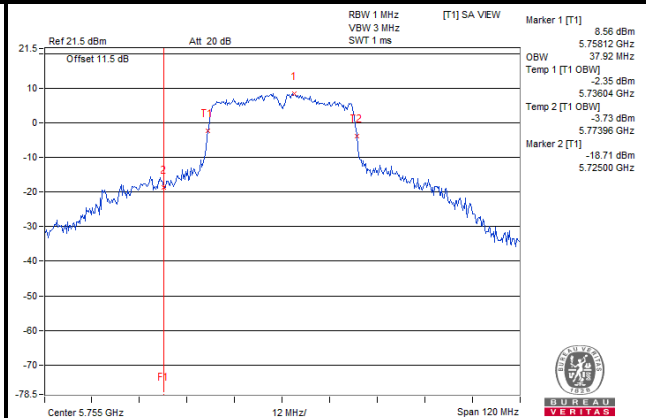


802.11ac (VHT40)

Ch 46 (5230 MHz)

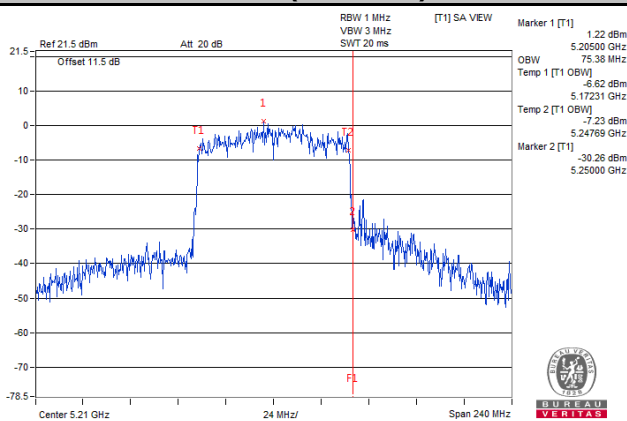


Ch 151 (5755 MHz)

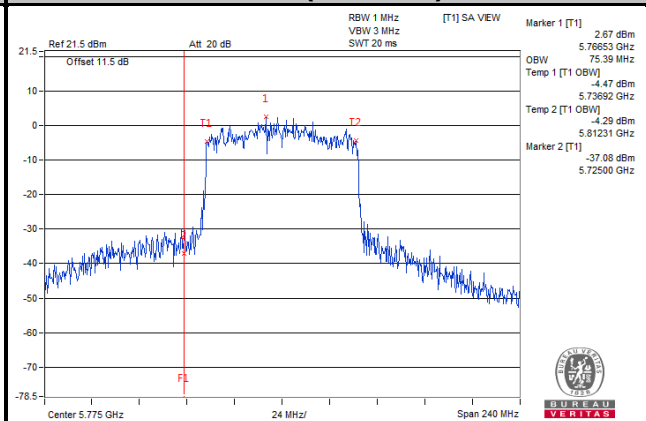


802.11ac (VHT80)

Ch 42 (5210 MHz)



Ch 155 (5775 MHz)

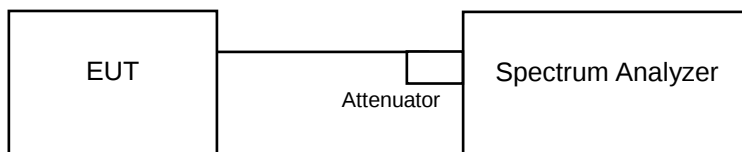


4.5 Peak Power Spectral Density Measurement

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-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW $\geq$ 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 and add $10 \log (1/\text{duty cycle})$

✖ **For U-NII-3:**

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

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 w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
36	5180	-0.40	0.80	0.40	11	Pass
40	5200	0.89	0.80	1.69	11	Pass
48	5240	0.78	0.80	1.58	11	Pass
52	5260	0.72	0.80	1.52	11	Pass
60	5300	0.96	0.80	1.76	11	Pass
64	5320	-0.39	0.80	0.41	11	Pass
100	5500	-1.92	0.80	-1.12	11	Pass
116	5580	0.71	0.80	1.51	11	Pass
140	5700	-1.18	0.80	-0.38	11	Pass
144	5720 (U-NII-2C)	0.26	0.80	1.06	11	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
36	5180	-0.10	0.85	0.75	11	Pass
40	5200	1.97	0.85	2.82	11	Pass
48	5240	0.56	0.85	1.41	11	Pass
52	5260	2.01	0.85	2.86	11	Pass
60	5300	2.20	0.85	3.05	11	Pass
64	5320	-0.75	0.85	0.10	11	Pass
100	5500	-1.37	0.85	-0.52	11	Pass
116	5580	2.09	0.85	2.94	11	Pass
140	5700	-0.46	0.85	0.39	11	Pass
144	5720 (U-NII-2C)	2.56	0.85	3.41	11	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
38	5190	-7.10	1.49	-5.61	11	Pass
46	5230	-3.92	1.49	-2.43	11	Pass
54	5270	-2.47	1.49	-0.98	11	Pass
62	5310	-5.99	1.49	-4.50	11	Pass
102	5510	-5.45	1.49	-3.96	11	Pass
110	5550	-2.72	1.49	-1.23	11	Pass
134	5670	-2.21	1.49	-0.72	11	Pass
142	5710 (U-NII-2C)	-1.45	1.49	0.04	11	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

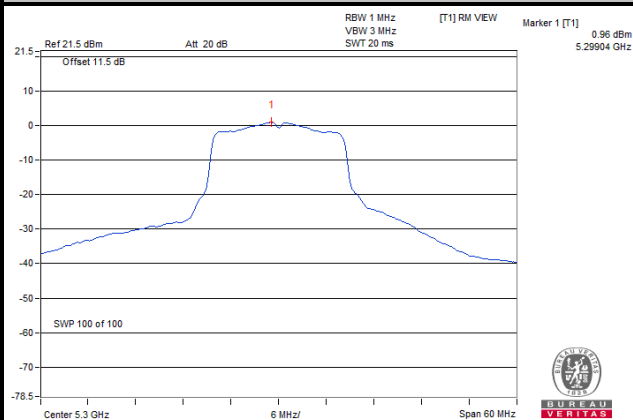
802.11ac (VHT80)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
42	5210	-7.90	1.79	-6.11	11	Pass
58	5290	-9.91	1.79	-8.12	11	Pass
106	5530	-8.83	1.79	-7.04	11	Pass
122	5610	-8.37	1.79	-6.58	11	Pass
138	5690 (U-NII-2C)	-7.15	1.79	-5.36	11	Pass

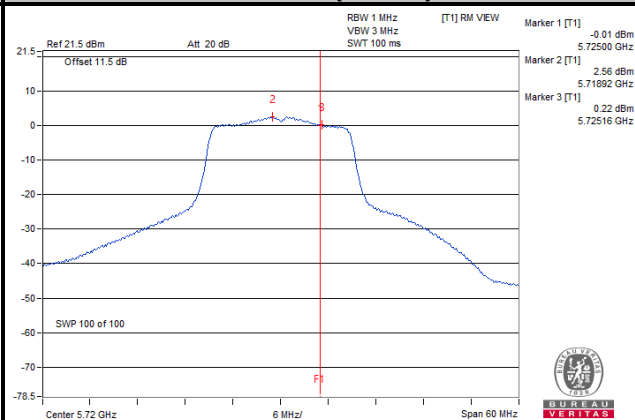
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

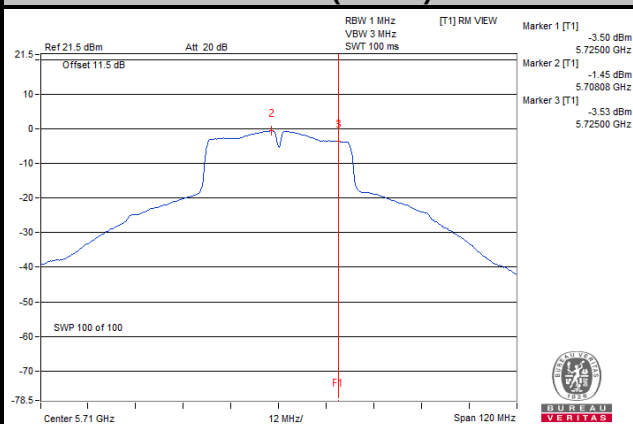
802.11a



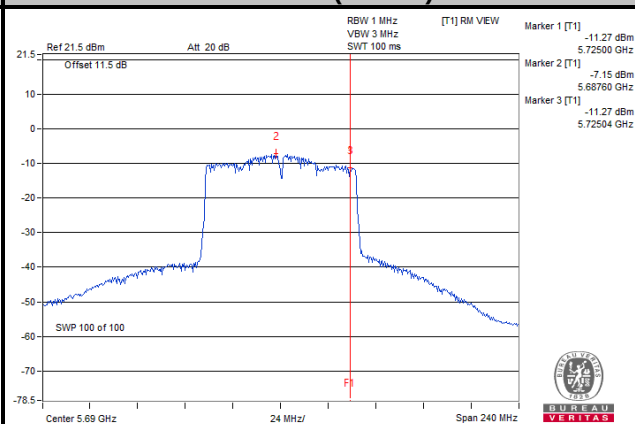
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



For U-NII-3 Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-4.76	-2.54	0.8	-1.74	30	Pass
149	5745	-6.99	-4.77	0.8	-3.97	30	Pass
157	5785	-7.24	-5.02	0.8	-4.22	30	Pass
165	5825	-7.35	-5.13	0.8	-4.33	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-4.99	-2.77	0.85	-1.92	30	Pass
149	5745	-5.92	-3.7	0.85	-2.85	30	Pass
157	5785	-6.07	-3.85	0.85	-3	30	Pass
165	5825	-6.17	-3.95	0.85	-3.1	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
142	5710 (U-NII-3)	-6.63	-4.41	1.49	-2.92	30	Pass
151	5755	-10.04	-7.82	1.49	-6.33	30	Pass
159	5795	-10.16	-7.94	1.49	-6.45	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

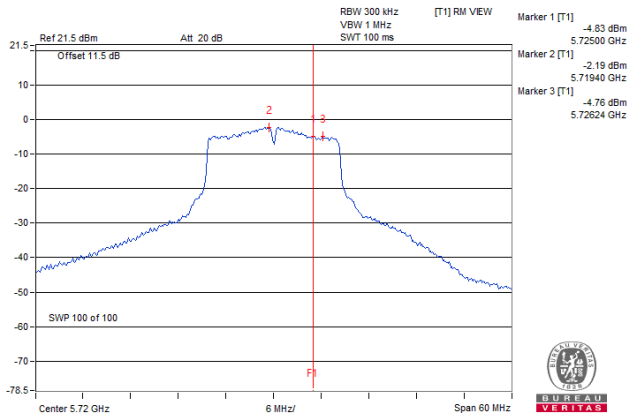
802.11ac (VHT80)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
138	5690 (U-NII-3)	-16.38	-14.16	1.79	-12.37	30	Pass
155	5775	-17.15	-14.93	1.79	-13.14	30	Pass

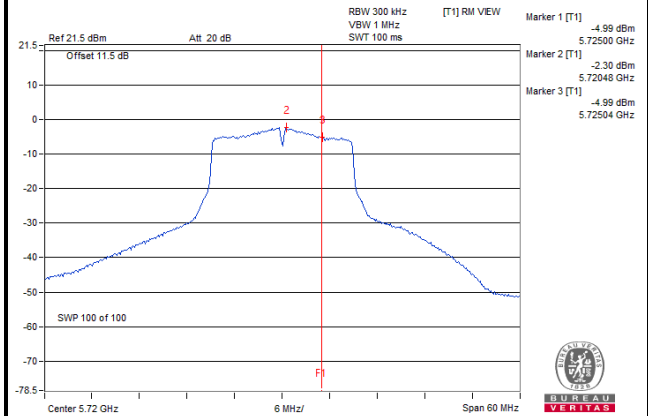
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

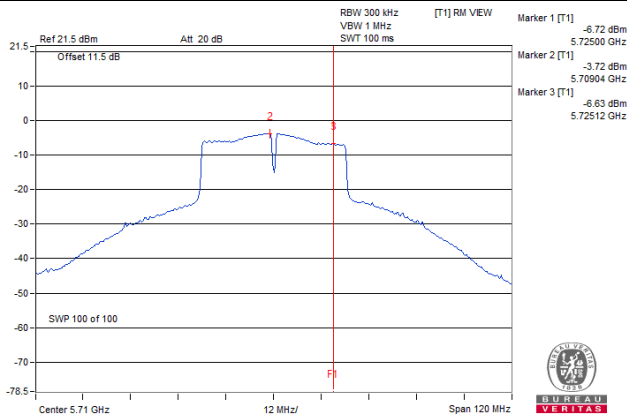
802.11a



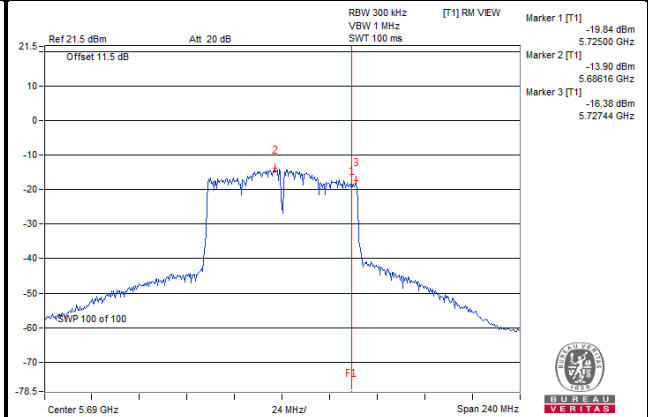
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)

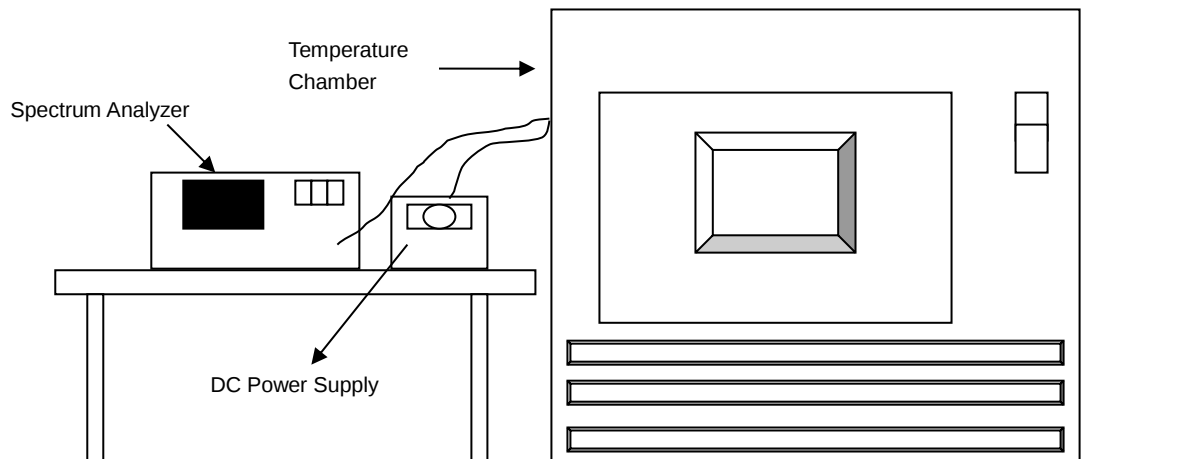


4.6 Frequency Stability

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

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (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
85	4.85	5179.9845	Pass	5179.9799	Pass	5179.9836	Pass	5179.9806	Pass
80	4.85	5179.9765	Pass	5179.9813	Pass	5179.9811	Pass	5179.9805	Pass
70	4.85	5179.9785	Pass	5179.9778	Pass	5179.9796	Pass	5179.9757	Pass
60	4.85	5179.9775	Pass	5179.9757	Pass	5179.9779	Pass	5179.978	Pass
50	4.85	5180.004	Pass	5180.002	Pass	5180.0007	Pass	5180.0041	Pass
40	4.85	5180.0183	Pass	5180.0227	Pass	5180.0206	Pass	5180.0194	Pass
30	4.85	5179.998	Pass	5179.9967	Pass	5179.9974	Pass	5179.9956	Pass
20	4.85	5179.9957	Pass	5179.9976	Pass	5179.9975	Pass	5179.9939	Pass
10	4.85	5179.9761	Pass	5179.9764	Pass	5179.9784	Pass	5179.9776	Pass
0	4.85	5179.9795	Pass	5179.977	Pass	5179.9794	Pass	5179.9768	Pass
-10	4.85	5179.9723	Pass	5179.9731	Pass	5179.9765	Pass	5179.976	Pass
-20	4.85	5180.0184	Pass	5180.0199	Pass	5180.0184	Pass	5180.0159	Pass
-25	4.85	5179.9821	Pass	5179.9783	Pass	5179.9827	Pass	5179.9829	Pass

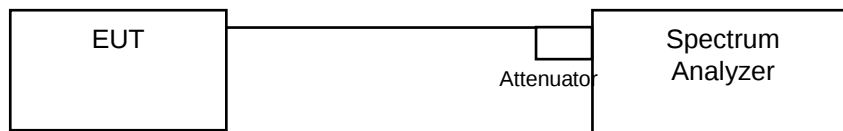
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	5.5775	5179.9855	Pass	5179.9872	Pass	5179.988	Pass	5179.9833	Pass
	4.85	5179.9957	Pass	5179.9976	Pass	5179.9975	Pass	5179.9939	Pass
	4.1225	5179.9898	Pass	5179.9919	Pass	5179.99	Pass	5179.9885	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

- Set resolution bandwidth (RBW) = 100 kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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
144	5720 (U-NII-3)	2.92	0.5	Pass
149	5745	16.34	0.5	Pass
157	5785	16.35	0.5	Pass
165	5825	16.32	0.5	Pass

802.11ac (VHT20)

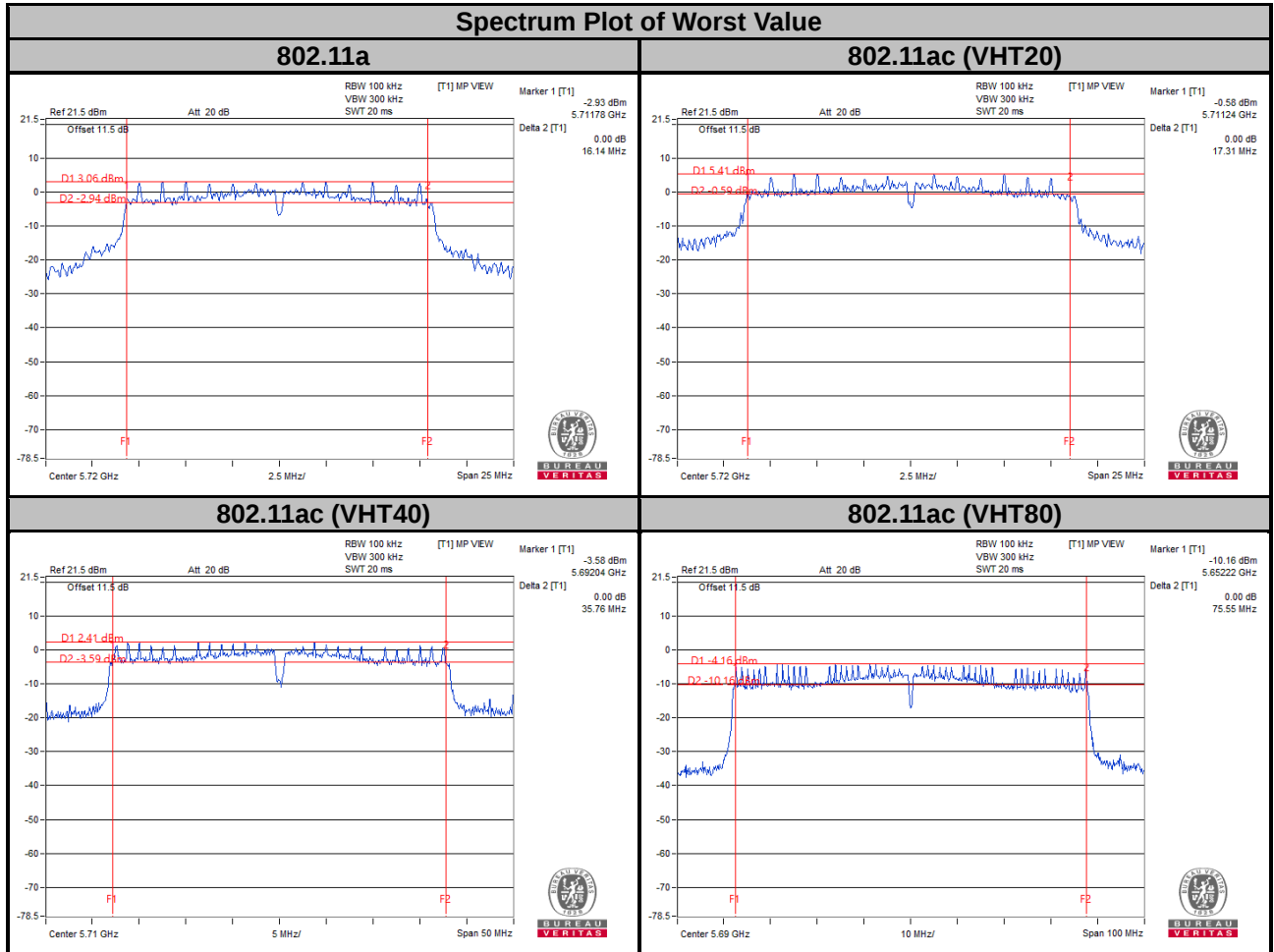
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	3.55	0.5	Pass
149	5745	17.58	0.5	Pass
157	5785	17.32	0.5	Pass
165	5825	17.32	0.5	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 (U-NII-3)	2.80	0.5	Pass
151	5755	35.68	0.5	Pass
159	5795	35.89	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 (U-NII-3)	2.77	0.5	Pass
155	5775	75.56	0.5	Pass



Note:

For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

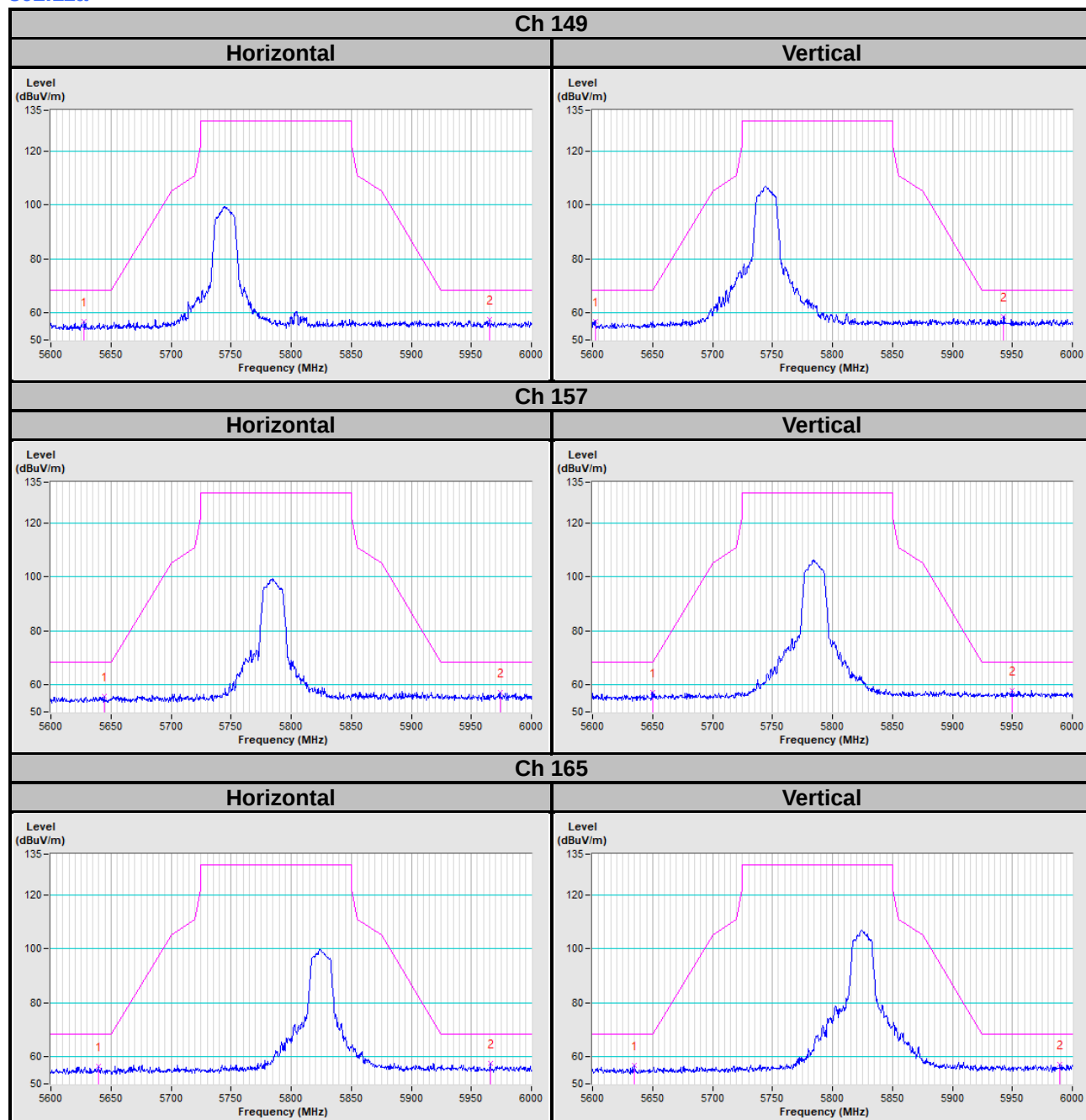
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

5 Pictures of Test Arrangements

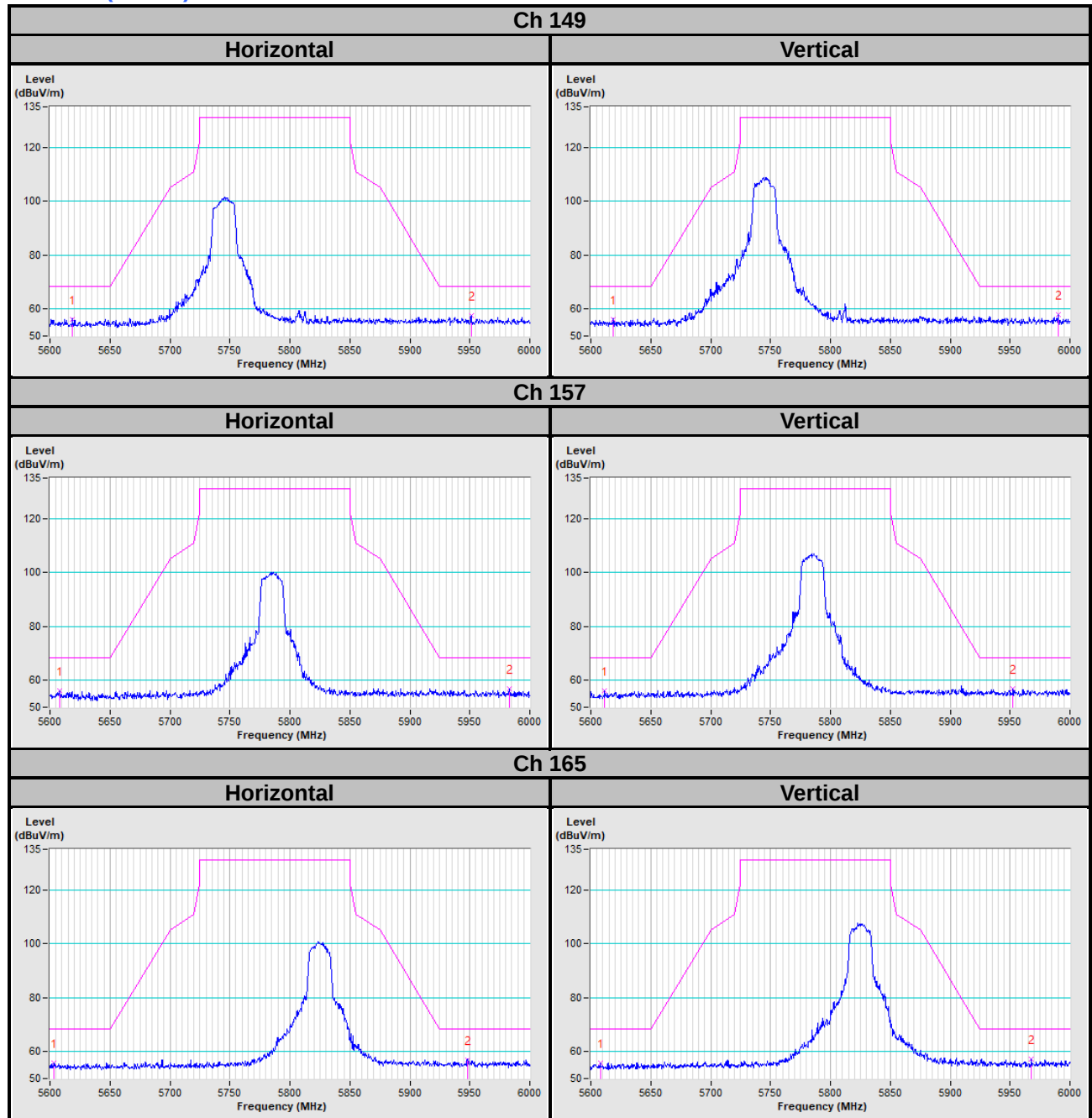
Please refer to the attached file (Test Setup Photo).

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

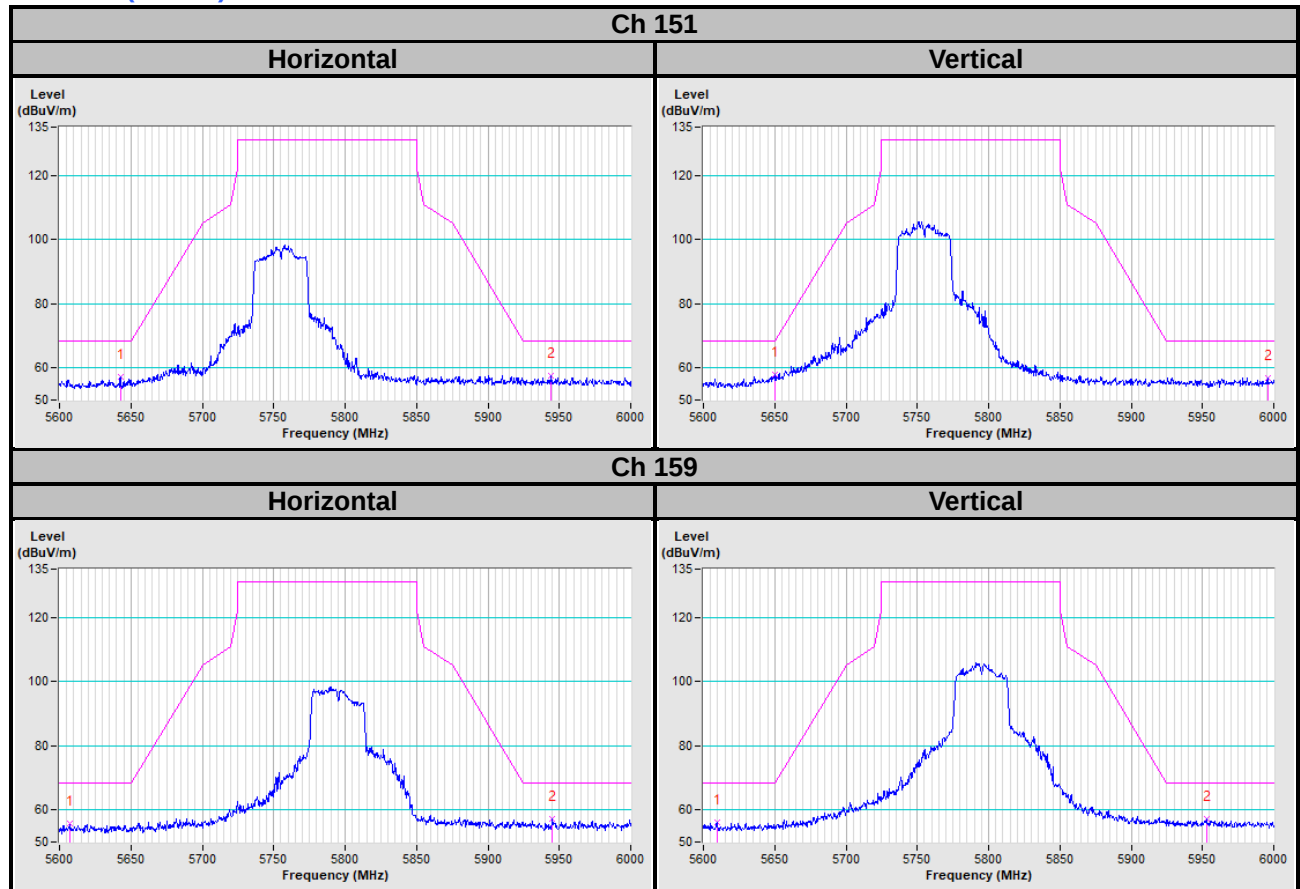
802.11a



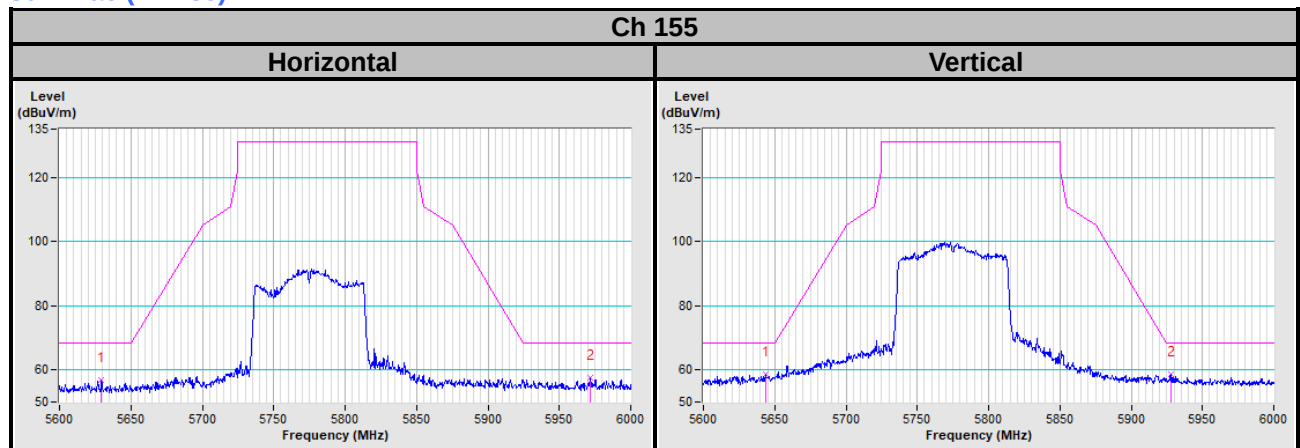
802.11ac (VHT20)



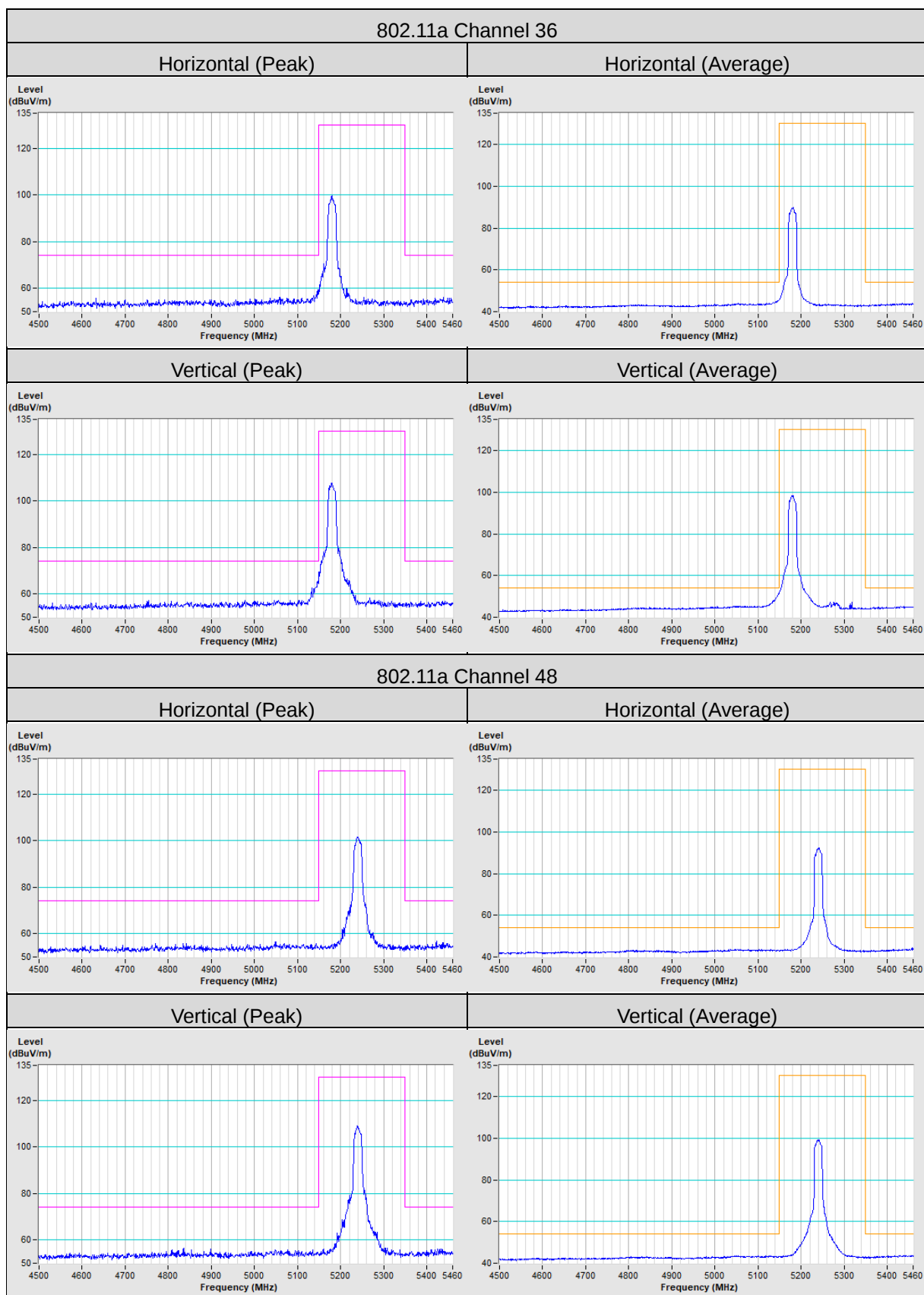
802.11ac (VHT40)

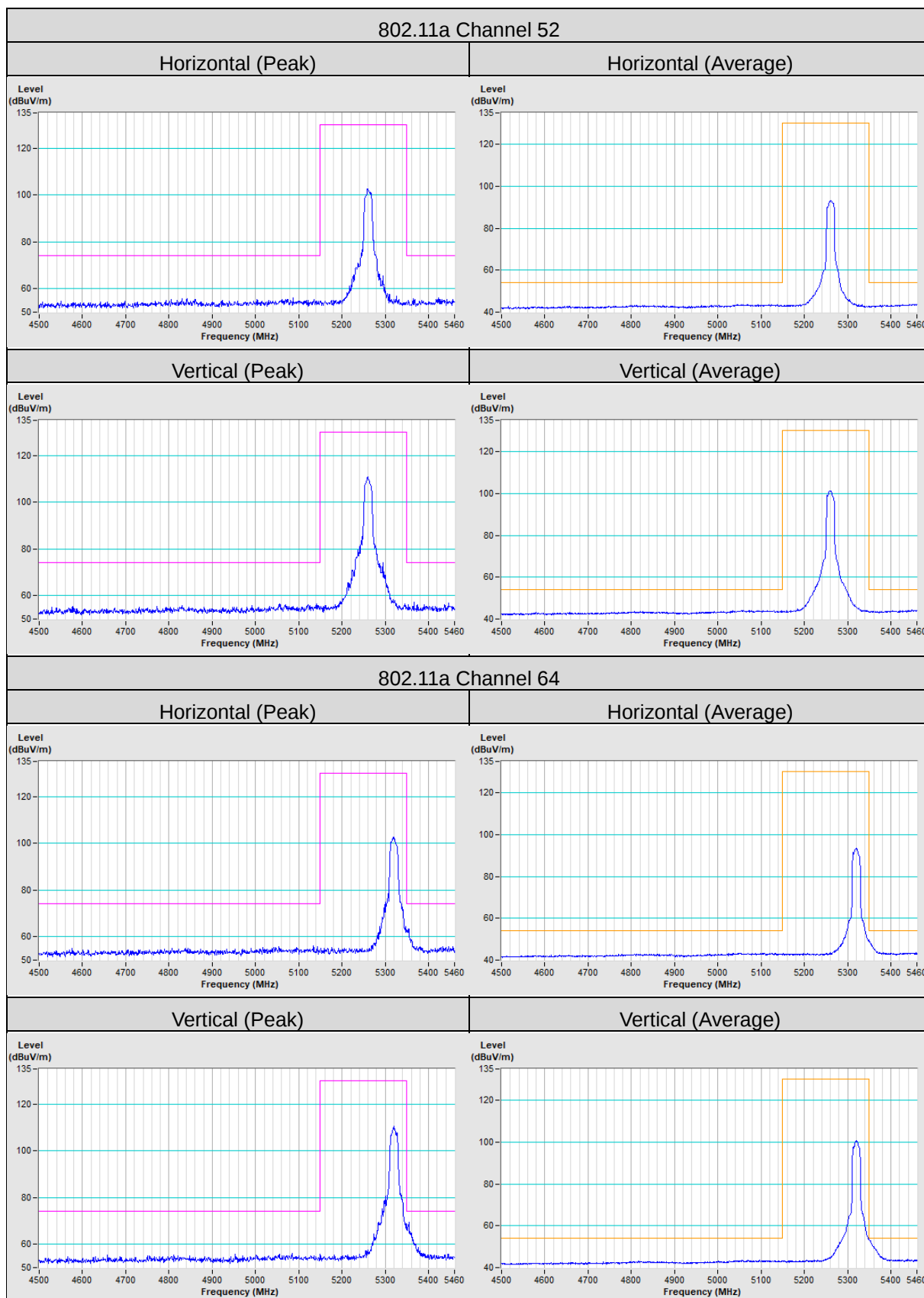


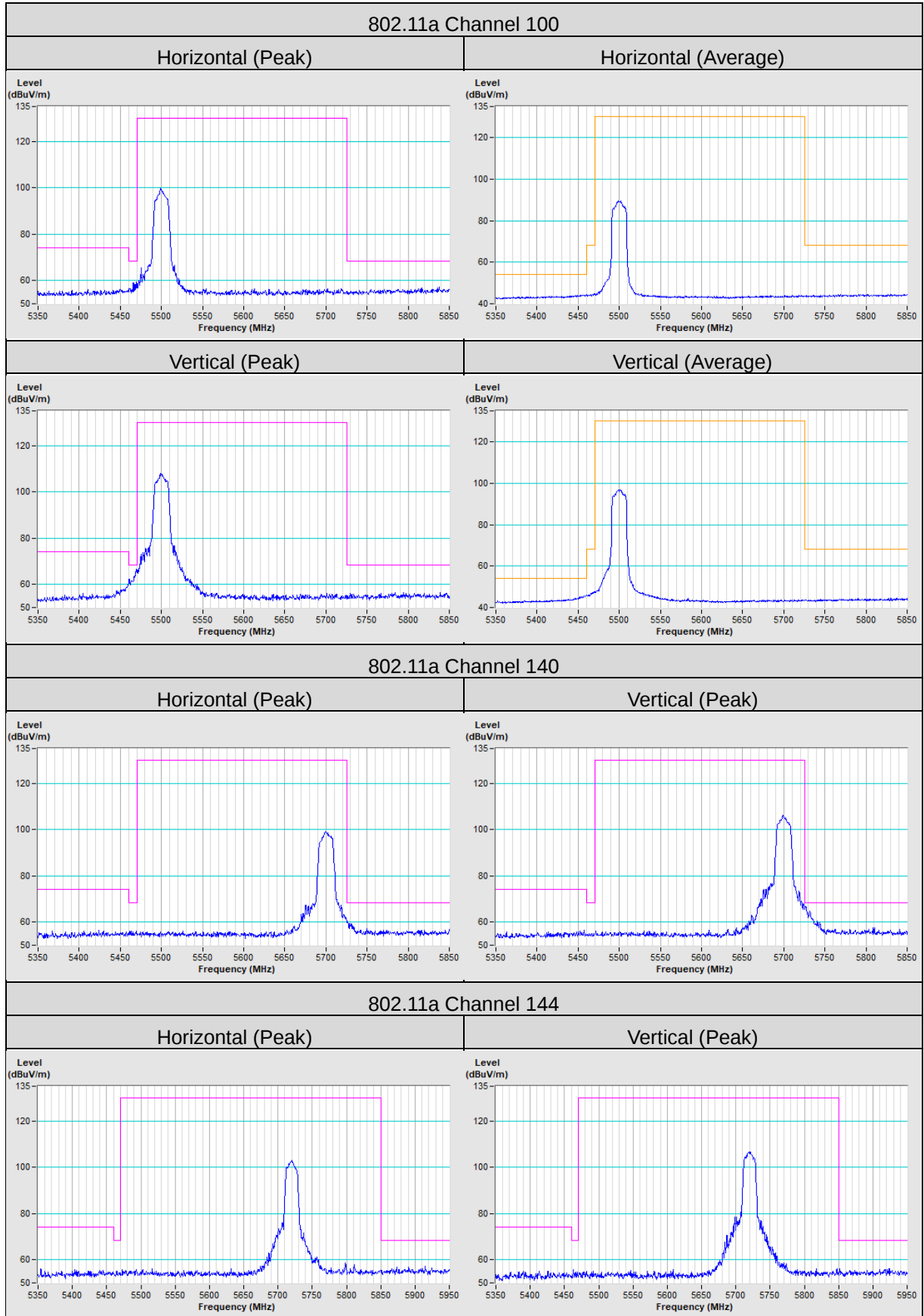
802.11ac (VHT80)

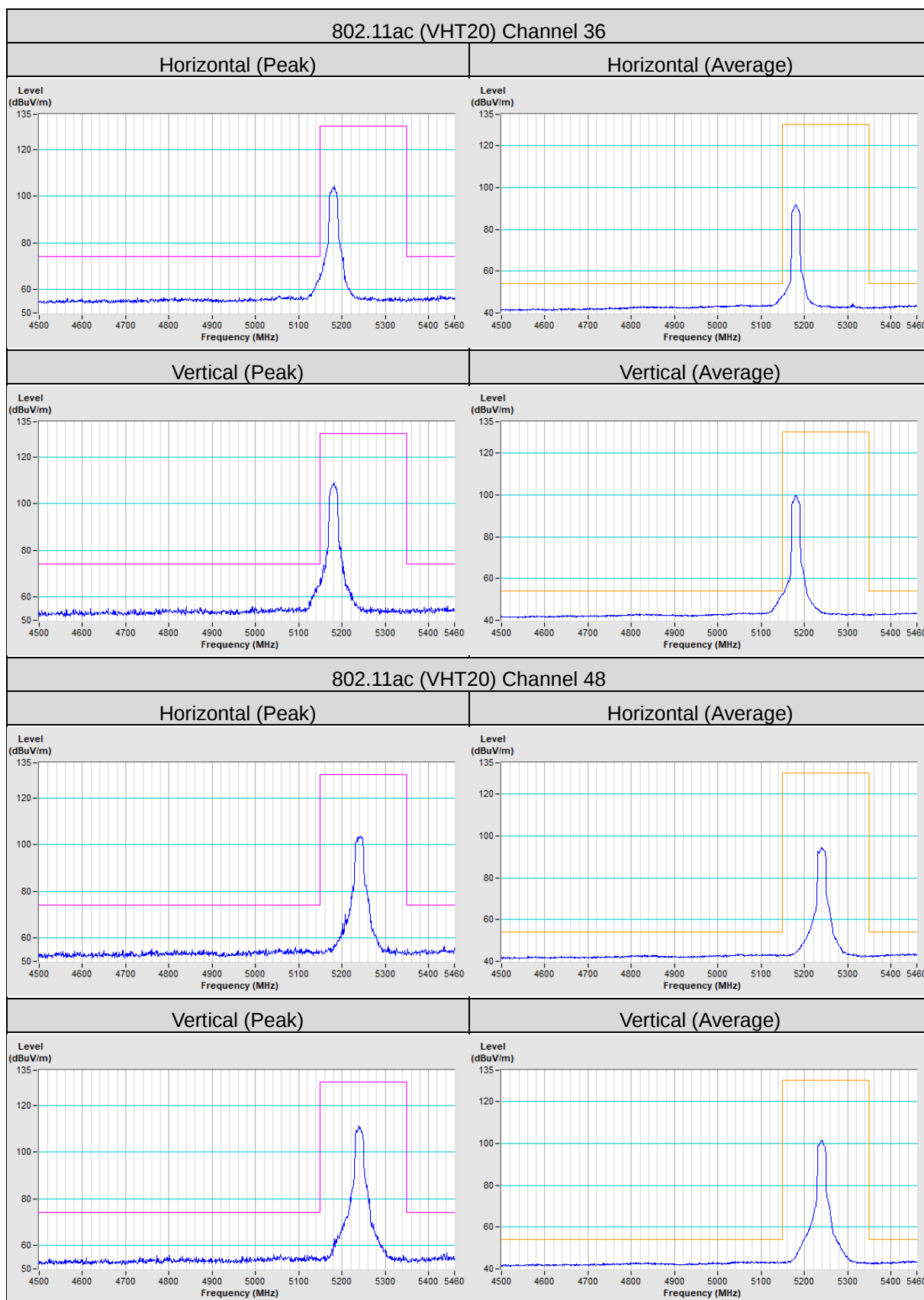


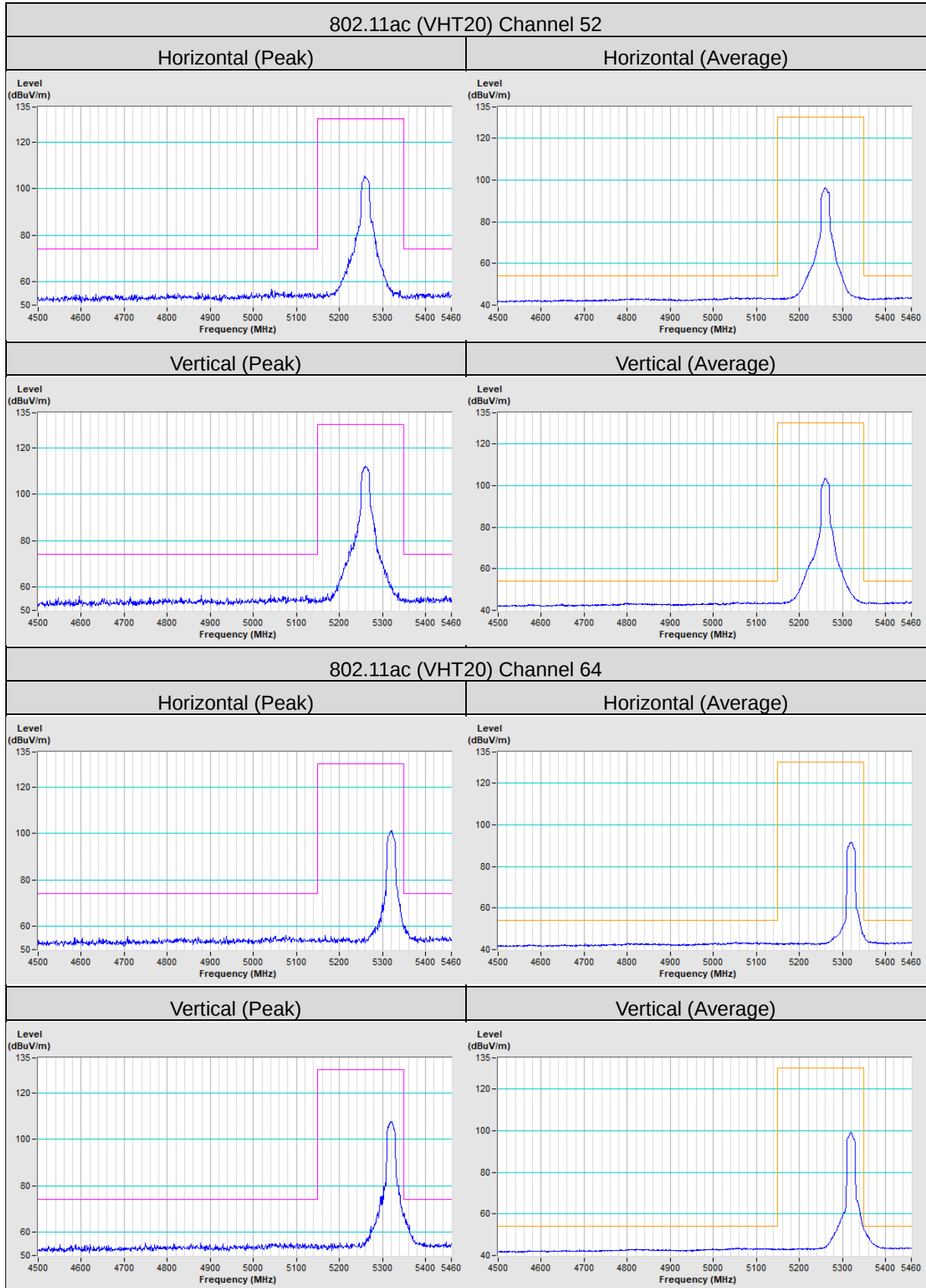
Annex B- Band Edge Measurement

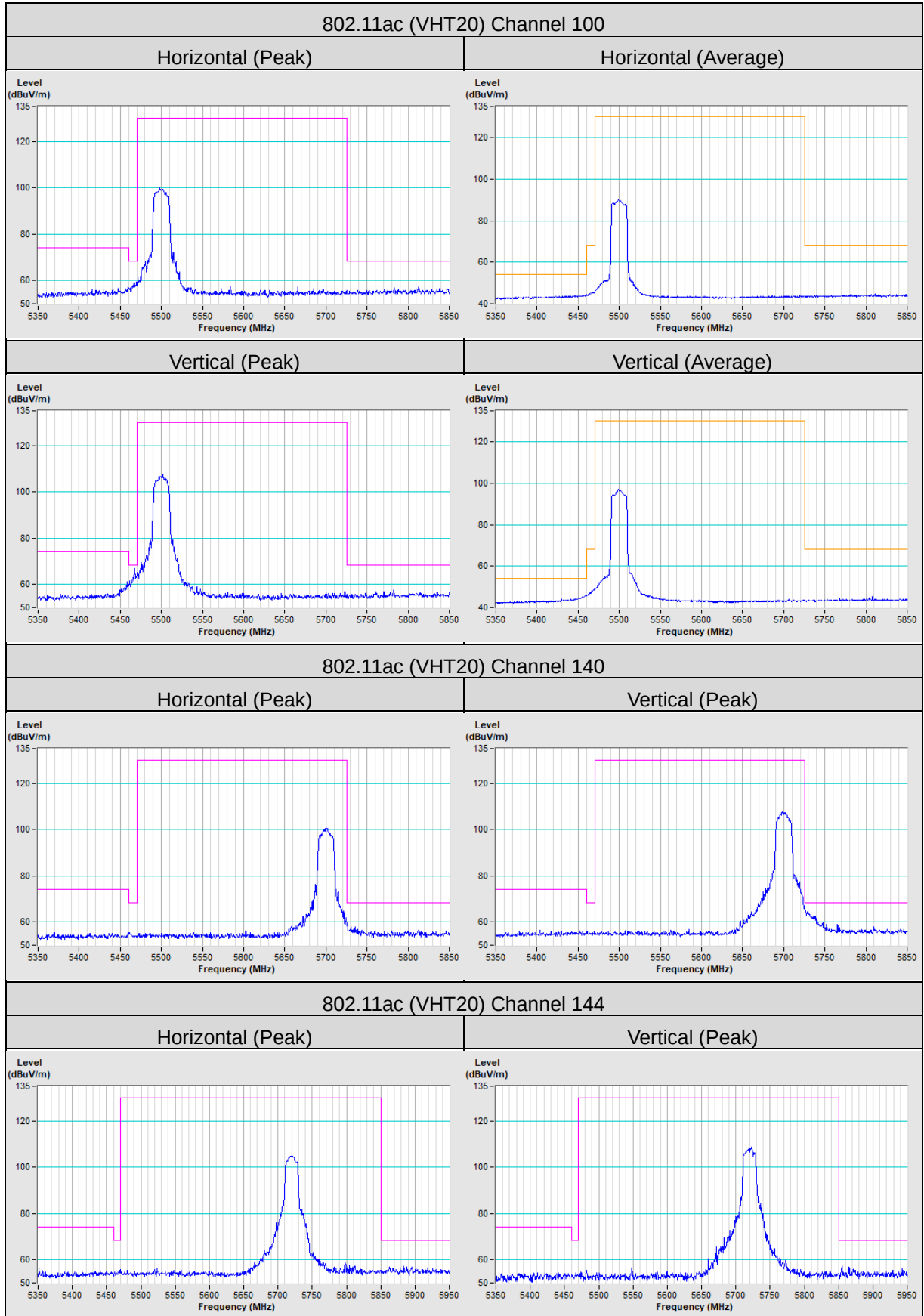


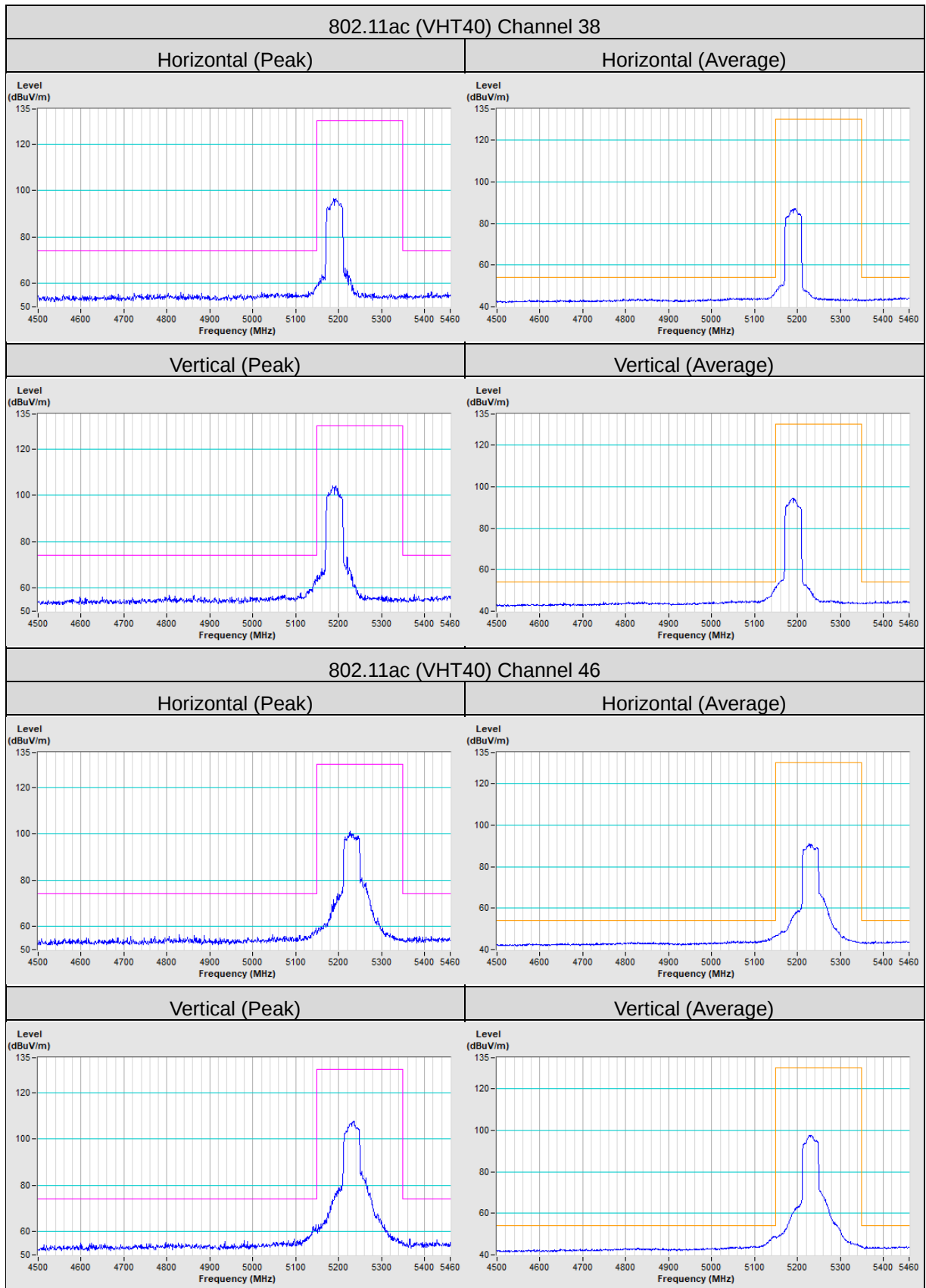






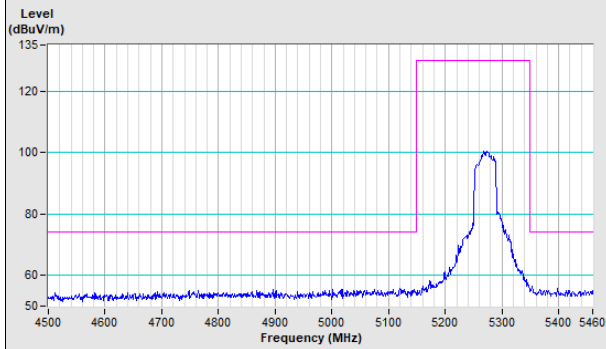




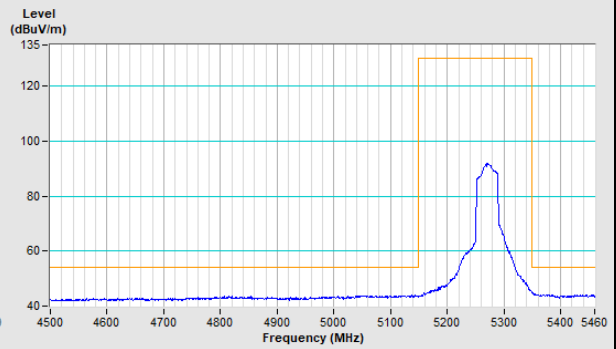


802.11ac (VHT40) Channel 54

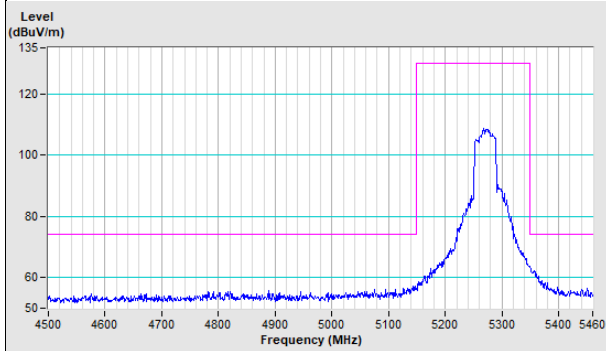
Horizontal (Peak)



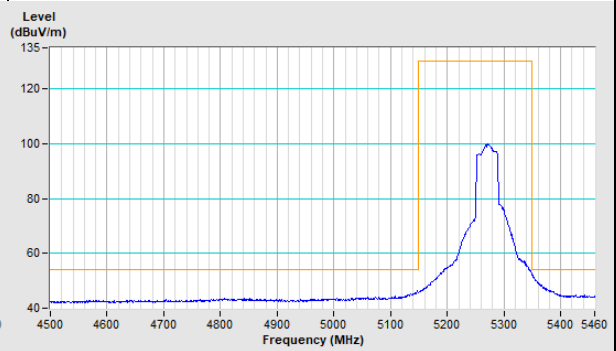
Horizontal (Average)



Vertical (Peak)

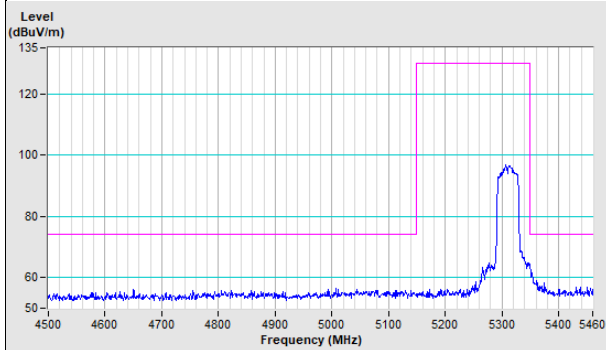


Vertical (Average)

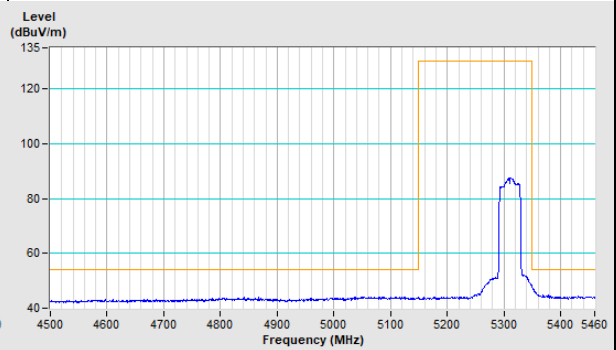


802.11ac (VHT40) Channel 62

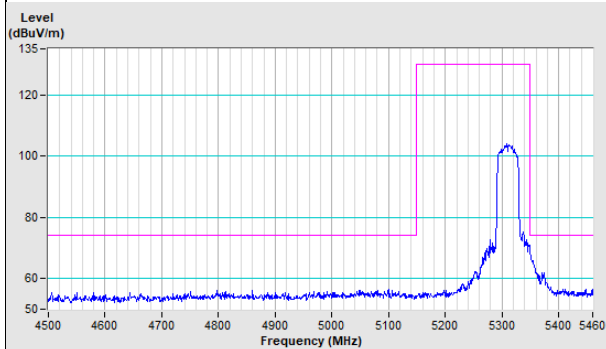
Horizontal (Peak)



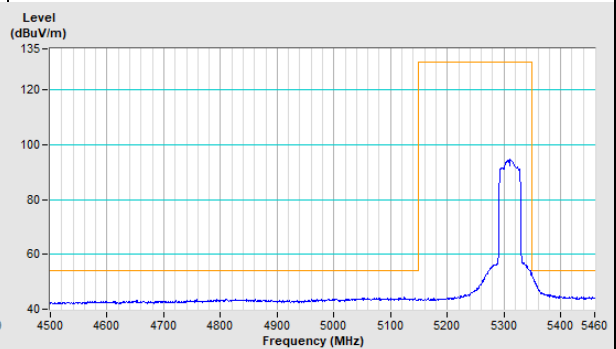
Horizontal (Average)

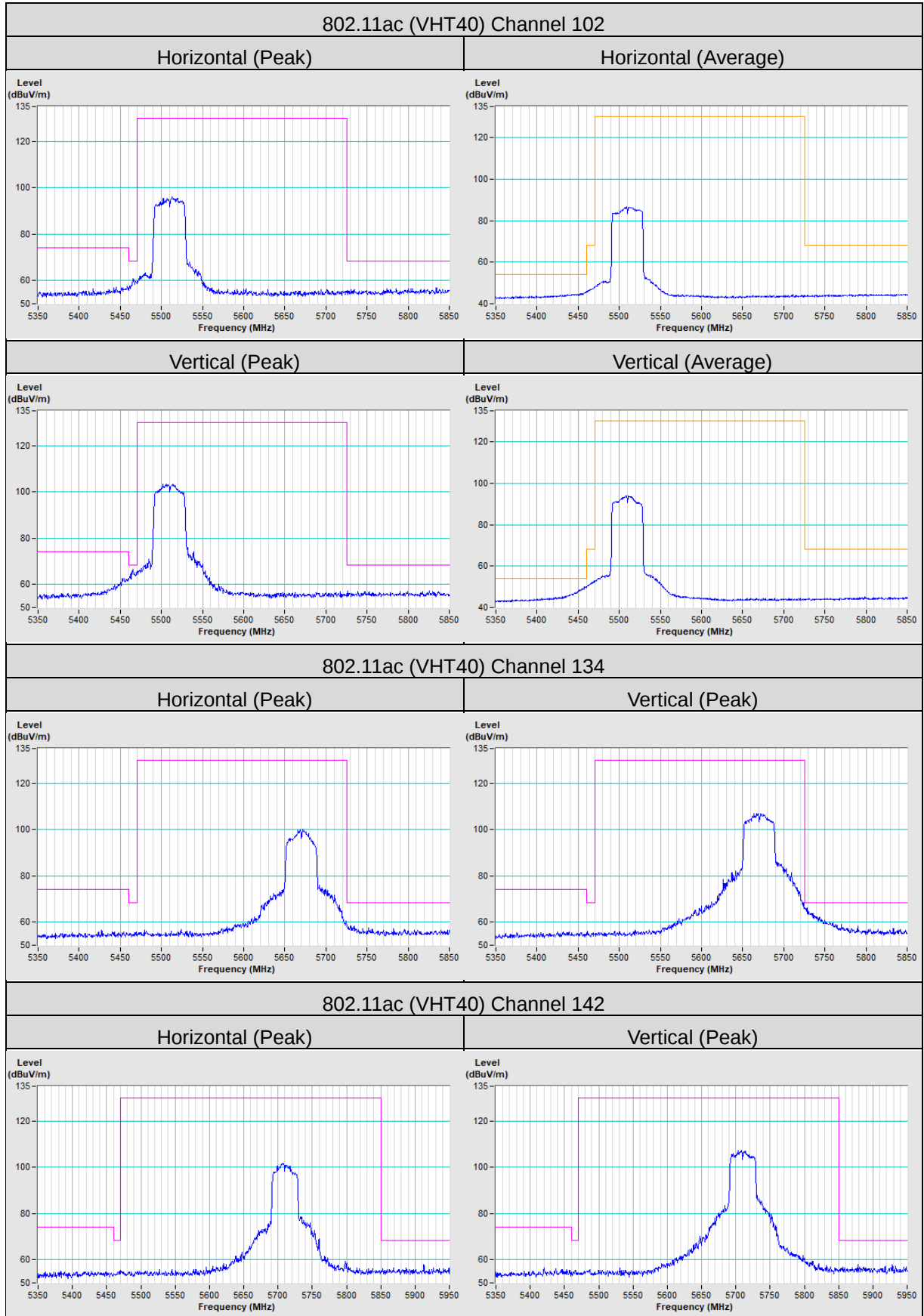


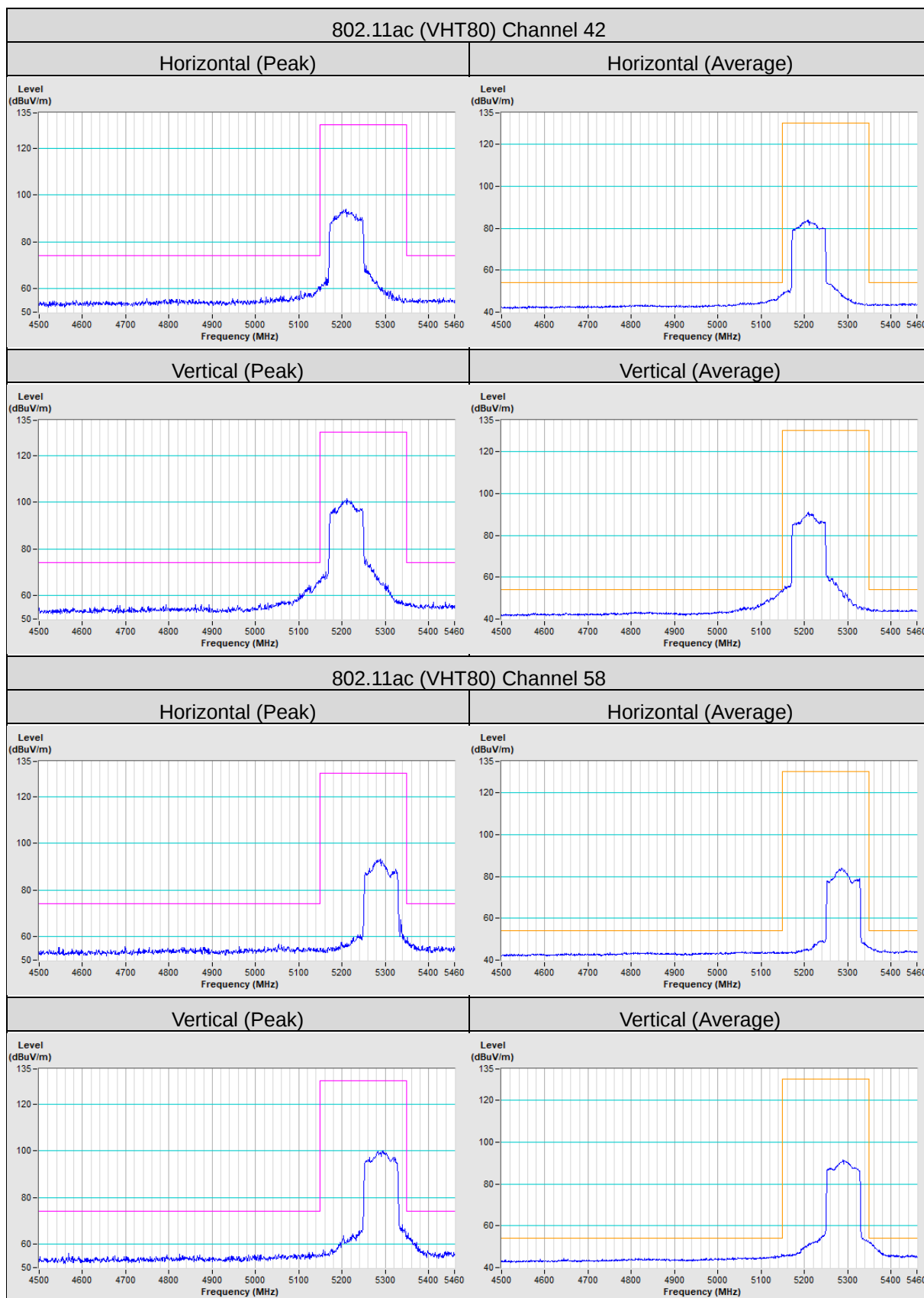
Vertical (Peak)

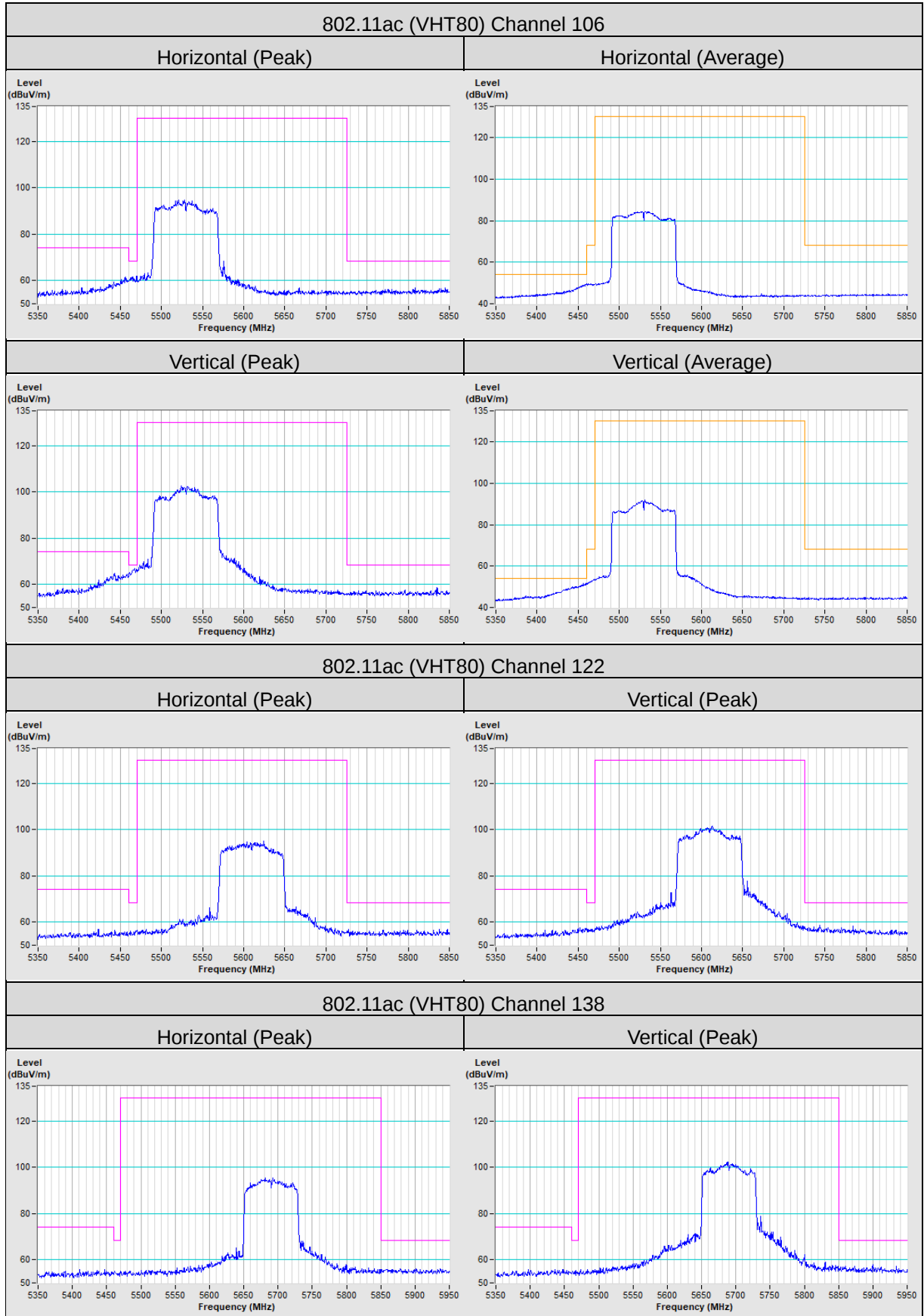


Vertical (Average)









Appendix – Information of the Testing Laboratories

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

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

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

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