

Partial FCC Test Report

Report No.: RF201027C01-3

FCC ID: PPD-QCNFA324

Test Model: QCNFA324

Received Date: Oct. 27, 2020

Test Date: Nov. 11 ~ Dec. 01, 2020

Issued Date: Dec. 07, 2020

Applicant: Qualcomm Atheros, Inc.

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



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Release Control Record

Issue No.	Description	Date Issued
RF201027C01-3	Original Release	Dec. 07, 2020

1 Certificate of Conformity

Product: 2x2 802.11A/B/G/N/AC WIFI + BLUETOOTH MODULE

Brand: Qualcomm Atheros

Test Model: QCNFA324

Sample Status: Engineering Sample

Applicant: Qualcomm Atheros, Inc.

Test Date: Nov. 11 ~ Dec. 01, 2020

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

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

Prepared by : Gina Liu, **Date:** Dec. 07, 2020
Gina Liu / Specialist

Approved by : Dylan Chiou, **Date:** Dec. 07, 2020
Dylan Chiou / Senior Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -10.50 dB at 0.15000 MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.86 dB at 63.95 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	N/A	Refer to Note
15.407(e)	6 dB Bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	N/A	No antenna connector is used.

Note:

1. This report is a partial report, only test item of Conducted Emission, Radiated Emissions and Maximum Peak Output Power were performed for this report. Other testing data please refer to BV CPS report no.: RF140808E04 for module (Brand: Qualcomm Atheros, Model: QCNFA324).
2. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
3. 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.
4. 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	9 kHz ~ 30 MHz	3.04 dB
	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	2x2 802.11A/B/G/N/AC WIFI + BLUETOOTH MODULE
Brand	Qualcomm Atheros
Test Model	QCNFA324
Status of EUT	Engineering Sample
Power Supply Rating	3.3Vdc form 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 300.0 Mbps 802.11ac: up to 866.7 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	46.559 mW for 5180 ~ 5240 MHz 71.779 mW for 5260 ~ 5320 MHz 66.069 mW for 5500 ~ 5720 MHz 67.143 mW for 5745 ~ 5825 MHz
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	N/A
Data Cable Supplied	N/A

Note:

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

Modulation Mode	Tx Function
802.11a	2TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX
802.11ac (VHT20)	2TX
802.11ac (VHT40)	2TX
802.11ac (VHT80)	2TX

* 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 EUT was installed in a specific End-product.

Equipment Name	Brand Name	Model Name
Tarantino (11.6"/Chromebook x 360)	HP	TPN-Q259

3. The antenna information is listed as below.

Antenna Type	Manufacturer	Parts Number	Mode	Antenna Gain			
				BT / WLAN 2.4 GHz	WLAN 5.15~5.35 GHz	WLAN 5.47~5.725 GHz	WLAN 5.725~5.85 GHz
PIFA	High-Tek Electronics Co., Ltd	Tx1/ Rx1 (Ant. 1): DQ60ACQD091 (0ACQD020015N) Tx2/ Rx2 (Ant. 2): DQ60ACQD091 (0ACQD020015N)	Tablet	TX1: -2.97 TX2: -0.93	TX1: -2.73 TX2: -2.26	TX1: -2.71 TX2: -2.76	TX1: -2.25 TX2: -3.61
			Laptop	TX1: -0.11 TX2: 1.15	TX1: 1.01 TX2: -1.83	TX1: -1.40 TX2: -2.36	TX1: -1.40 TX2: -2.73
	Wistron Neweb Corporation	Tx1 (Ant. 1): DQ6B15GC100 (81EABB15.GC1) Tx2 (Ant. 2): DQ6B15GC100 (81EABB15.GC1)	Tablet	TX1: -0.54 TX2: -1.32	TX1: -1.10 TX2: -0.74	TX1: -0.72 TX2: -1.06	TX1: -1.43 TX2: -2.07
			Laptop	TX1: 0.24 TX2: 1.56	TX1: 0.31 TX2: 1.04	TX1: -0.29 TX2: -0.03	TX1: -2.24 TX2: -1.38

*The WNC antenna of Laptop mode were chosen for final test.

- The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
- 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 channel is 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≥1G	RE<1G	PLC	Power	
-	√	√	√	√	-

Where **RE≥1G**: Radiated Emission above 1 GHz

RE<1G: Radiated Emission below 1 GHz

PLC: Power Line Conducted Emission

Power: Maximum Output Power Measurement

Note: “-” means no effect.

Radiated Emission Test (Above 1 GHz):

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

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

Power Line Conducted Emission Test:

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5500-5720	802.11ac (VHT20)	100 to 144	140	OFDM	BPSK	7.2

Maximum Output Power Measurement:

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

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

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Cyril Chen
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Cyril Chen
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Cyril Chen
Power	25 deg. C, 65 % RH	120 Vac, 60 Hz	Jisyoung Wang

3.3 Description of Support Units

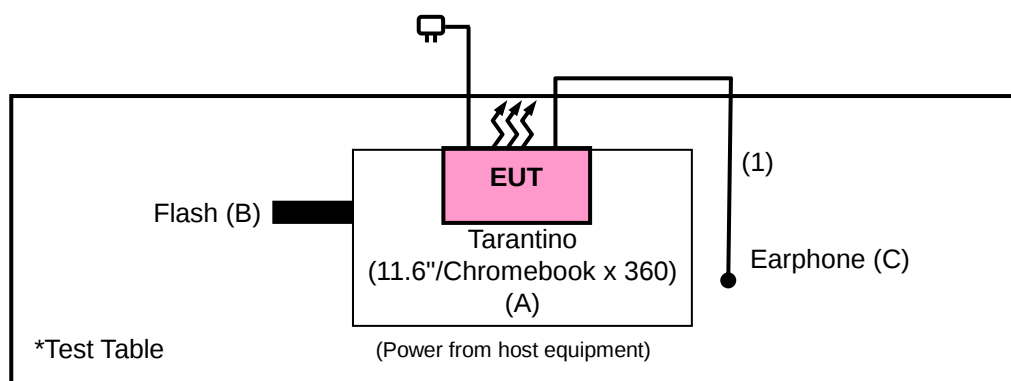
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Tarantino (11.6"/Chromebook x 360)	HP	TPN-Q259	N/A	N/A	Provided by client
B.	USB 2.0 FLASH	HP	v250W	N/A	N/A	--
C.	Earphone	AIWA	EW101BK	N/A	N/A	--

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Earphone Cable	1	12	N	0	-

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

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards and References

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

Test Standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10-2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of Unwanted Emission Out of the Restricted Bands

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v02r01		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	☒ 15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK:105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK:122.2 (dBμV/m) ^{*4}
	☐ 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:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Mar. 18, 2020	Mar. 17, 2021
Spectrum Analyzer Agilent	N9010A	MY52220314	Dec. 12, 2019	Dec. 11, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Apr. 16, 2020	Apr. 15, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 24, 2019 Nov. 22, 2020	Nov. 23, 2020 Nov. 21, 2021
BILOG Antenna SCHWARZBECK	VULB 9168	9168-472	Nov. 06, 2020	Nov. 05, 2021
Fixed Attenuator WORKEN	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021
Loop Antenna	EM-6879	269	Sep. 17, 2020	Sep. 16, 2021
Preamplifier EMCI	EMC 330H	980112	Oct. 07, 2020	Oct. 06, 2021
Power Meter Anritsu	ML2495A	1012010	Sep. 01, 2020	Aug. 31, 2021
Power Sensor Anritsu	MA2411B	1315050	Sep. 01, 2020	Aug. 31, 2021
RF Coaxial Cable EMCI	EMC104-SM-SM-8000	171005	Oct. 07, 2020	Oct. 06, 2021
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	Oct. 07, 2020	Oct. 06, 2021
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Oct. 07, 2020	Oct. 06, 2021
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	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 Chamber 10.

4.1.3 Test Procedures

For Radiated Emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.

For Radiated Emission above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

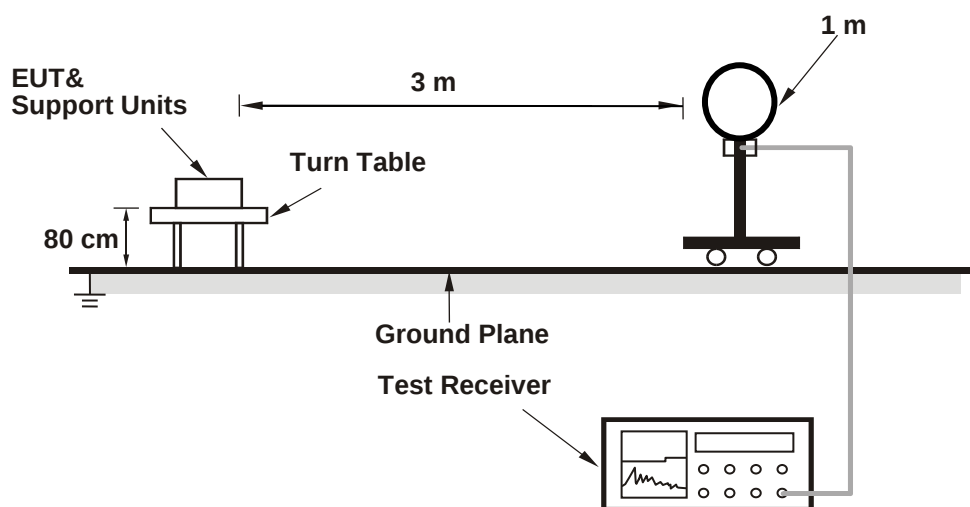
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK)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

4.1.4 Deviation from Test Standard

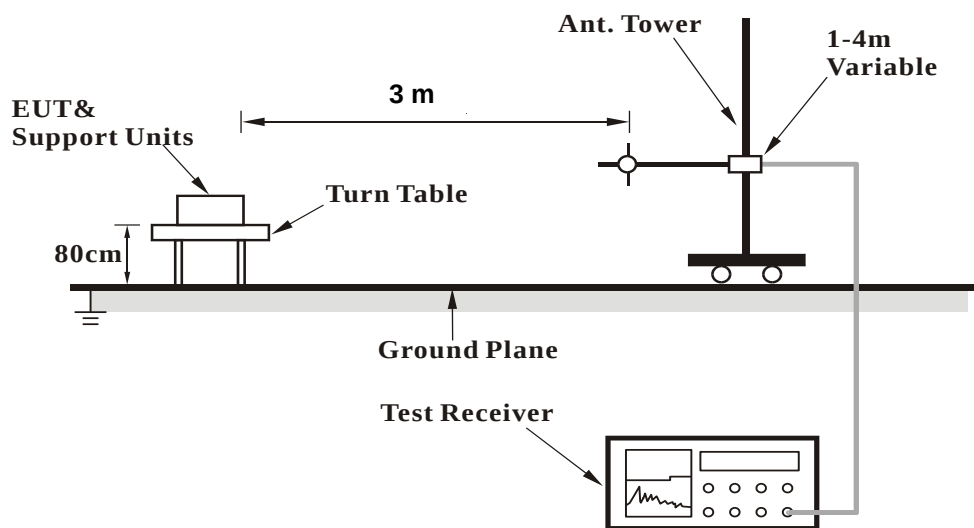
No deviation.

4.1.5 Test Setup

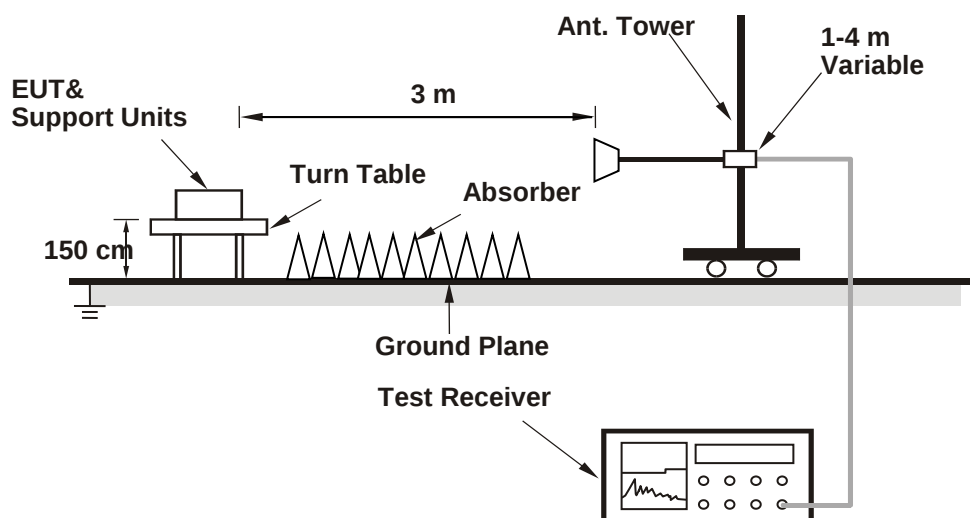
<Radiated Emission below 30 MHz>



<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.

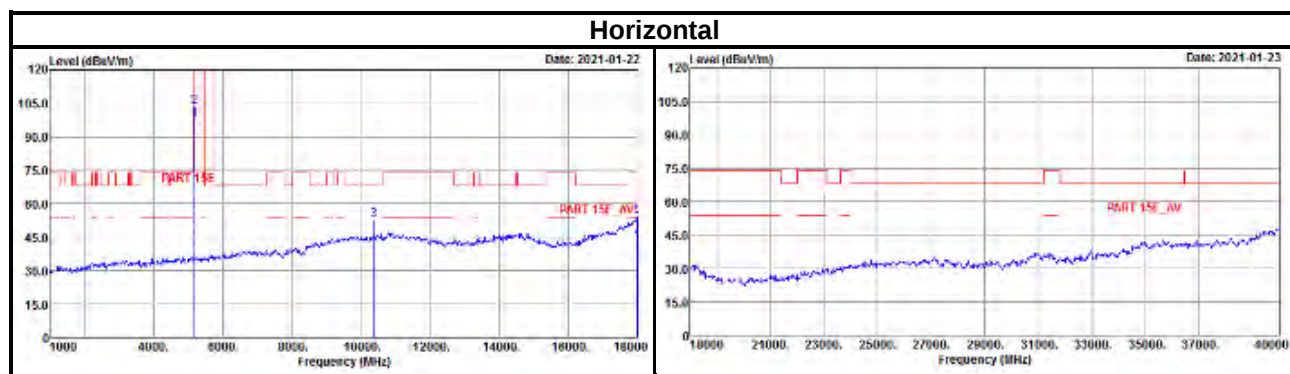
4.1.7 Test Results
Above 1 GHz Data :
802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

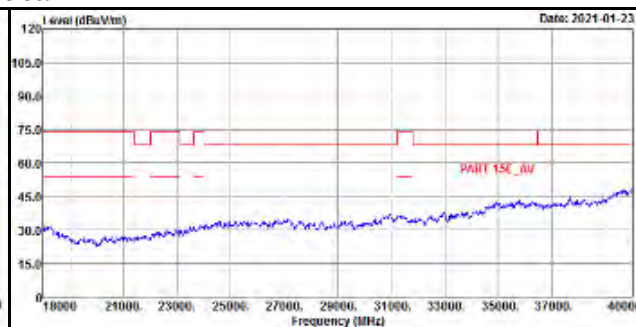
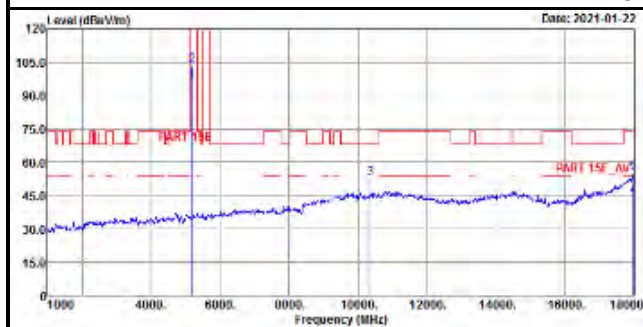
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	43.81	43.39	0.42	54	-10.19	162	315	Average
5150	51.49	51.07	0.42	74	-22.51	162	315	Peak
5180	97.45	97.19	0.26	-----	-----	162	315	Average
5180	103.48	103.22	0.26	-----	-----	162	315	Peak
10360	52.59	54.51	-1.92	68.2	-15.61	144	151	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	43.89	43.47	0.42	54	-10.11	271	272	Average
5150	51.31	50.89	0.42	74	-22.69	271	272	Peak
5180	96.55	96.29	0.26	-----	-----	271	272	Average
5180	103.52	103.26	0.26	-----	-----	271	272	Peak
10360	52.77	54.69	-1.92	68.2	-15.43	181	240	Peak

Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5180 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit



Vertical

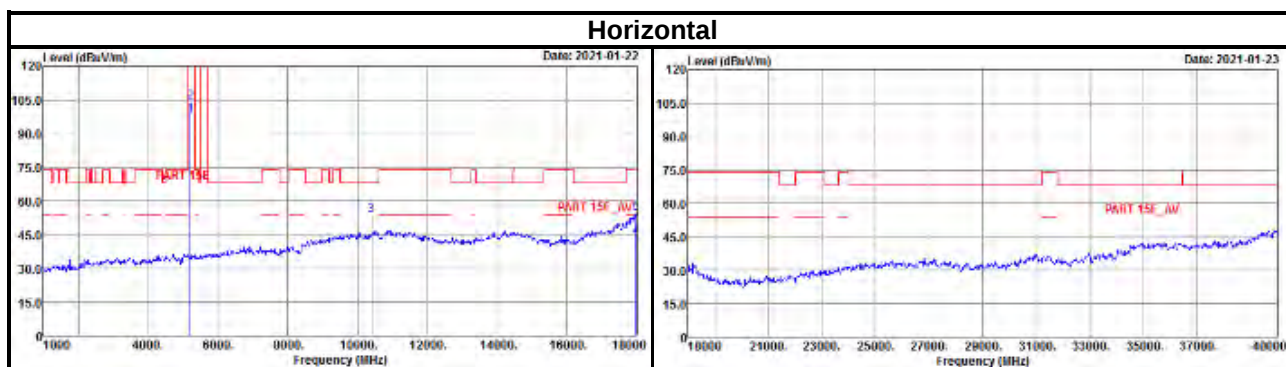


EUT Test Condition		Measurement Detail	
Channel	Channel 40	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

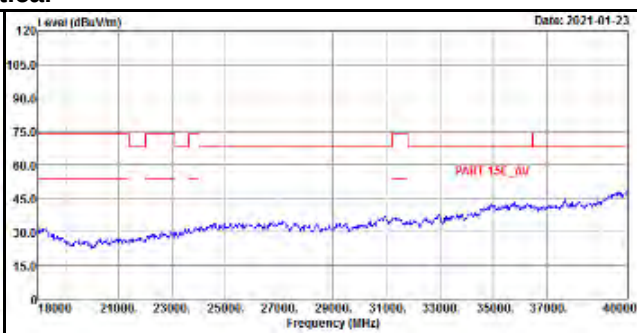
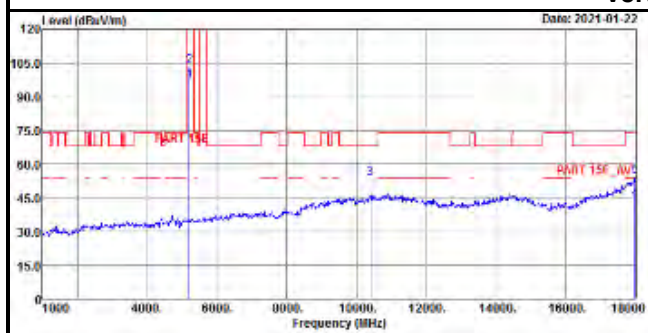
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.13	39.71	0.42	54	-13.87	161	314	Average
5150	49.05	48.63	0.42	74	-24.95	161	314	Peak
5200	98.13	97.99	0.14	-----	-----	161	314	Average
5200	104.28	104.14	0.14	-----	-----	161	314	Peak
5350	39.4	39.07	0.33	54	-14.6	161	314	Average
5350	49.02	48.69	0.33	74	-24.98	161	314	Peak
10400	53.72	55.54	-1.82	68.2	-14.48	148	170	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.06	39.64	0.42	54	-13.94	280	275	Average
5150	49	48.58	0.42	74	-25	280	275	Peak
5200	97.19	97.05	0.14	-----	-----	280	275	Average
5200	103.42	103.28	0.14	-----	-----	280	275	Peak
5350	39.19	38.86	0.33	54	-14.81	280	275	Average
5350	49.5	49.17	0.33	74	-24.5	280	275	Peak
10400	53.68	55.5	-1.82	68.2	-14.52	172	137	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5200 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

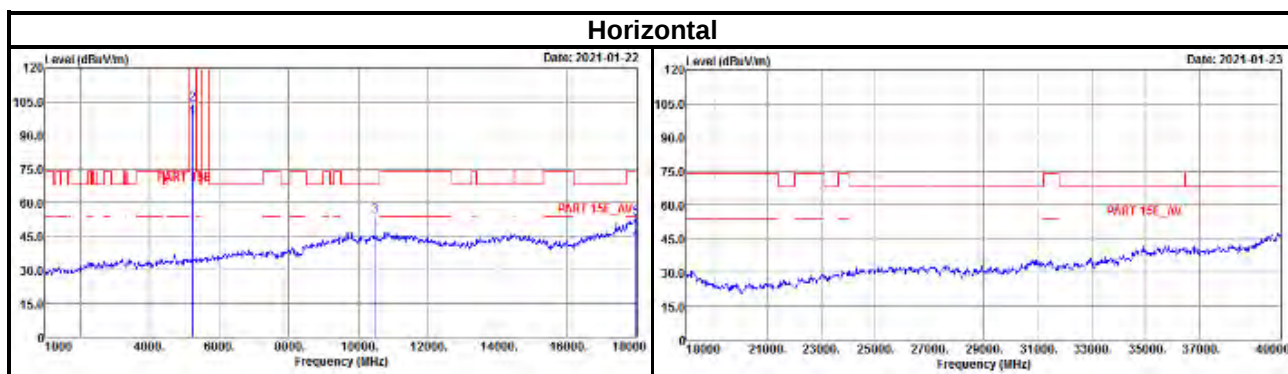


EUT Test Condition		Measurement Detail	
Channel	Channel 48	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

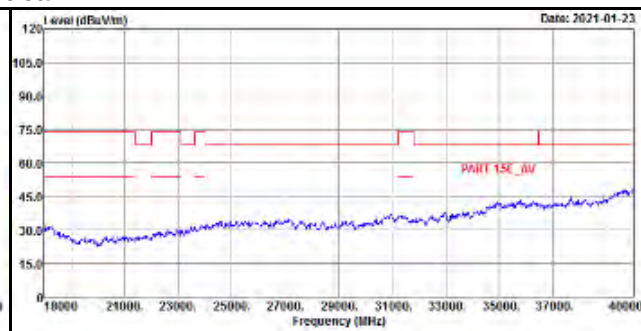
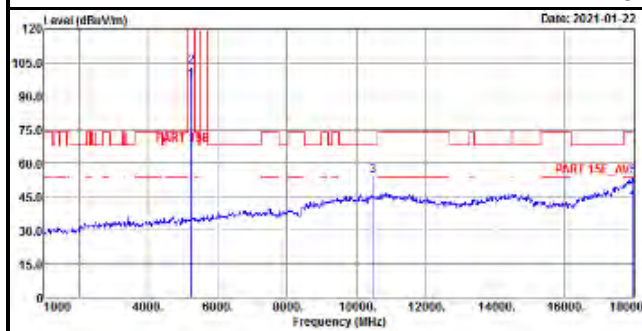
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.58	39.16	0.42	54	-14.42	162	316	Average
5150	48.84	48.42	0.42	74	-25.16	162	316	Peak
5240	97.85	97.75	0.1	-----	-----	162	316	Average
5240	104.22	104.12	0.1	-----	-----	162	316	Peak
5350	39.26	38.93	0.33	54	-14.74	162	316	Average
5350	48.54	48.21	0.33	74	-25.46	162	316	Peak
10480	54	55.48	-1.48	68.2	-14.2	178	182	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.48	39.06	0.42	54	-14.52	276	271	Average
5150	49.04	48.62	0.42	74	-24.96	276	271	Peak
5240	96.86	96.76	0.1	-----	-----	276	271	Average
5240	103.23	103.13	0.1	-----	-----	276	271	Peak
5350	39.35	39.02	0.33	54	-14.65	276	271	Average
5350	49.76	49.43	0.33	74	-24.24	276	271	Peak
10480	54.32	55.8	-1.48	68.2	-13.88	167	119	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

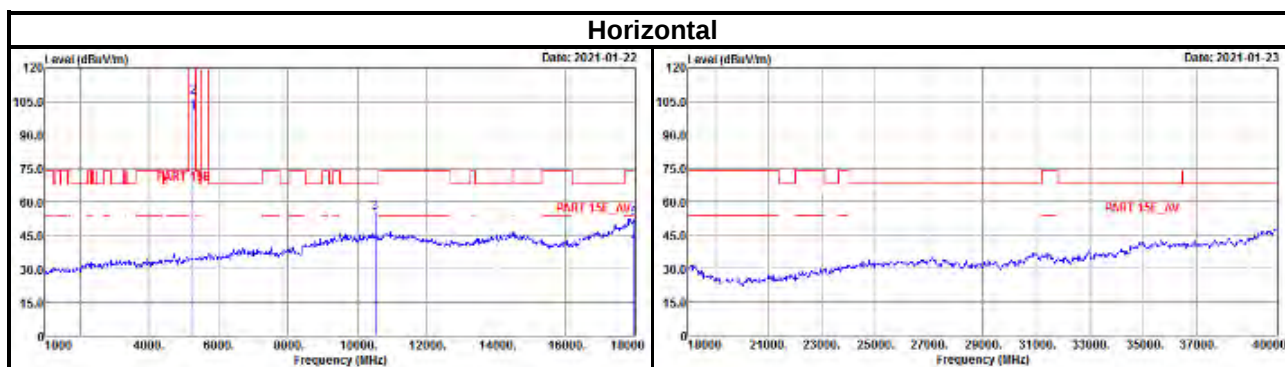


EUT Test Condition		Measurement Detail	
Channel	Channel 52	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

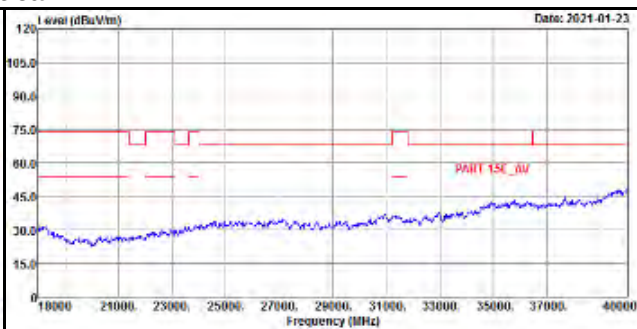
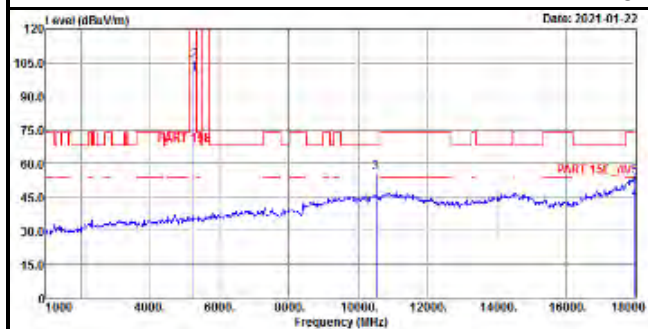
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.57	39.15	0.42	54	-14.43	165	317	Average
5150	48.58	48.16	0.42	74	-25.42	165	317	Peak
5260	100.08	99.95	0.13	-----	-----	165	317	Average
5260	106.97	106.84	0.13	-----	-----	165	317	Peak
5350	39.81	39.48	0.33	54	-14.19	165	317	Average
5350	47.87	47.54	0.33	74	-26.13	165	317	Peak
10520	55.57	57.02	-1.45	68.2	-12.63	169	166	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.5	39.08	0.42	54	-14.5	284	273	Average
5150	48.95	48.53	0.42	74	-25.05	284	273	Peak
5260	99.88	99.75	0.13	-----	-----	284	273	Average
5260	105.78	105.65	0.13	-----	-----	284	273	Peak
5350	39.62	39.29	0.33	54	-14.38	284	273	Average
5350	48.81	48.48	0.33	74	-25.19	284	273	Peak
10520	55.65	57.1	-1.45	68.2	-12.55	178	179	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

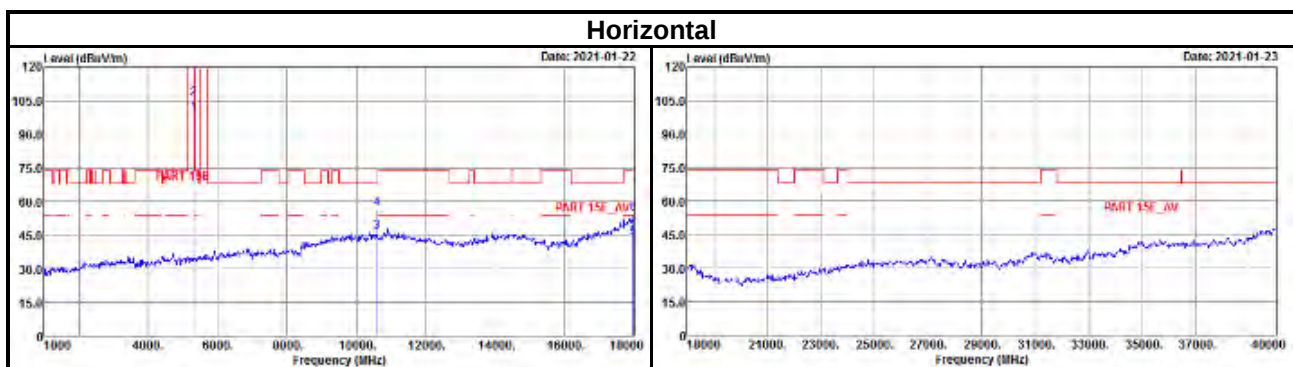


EUT Test Condition		Measurement Detail	
Channel	Channel 60	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

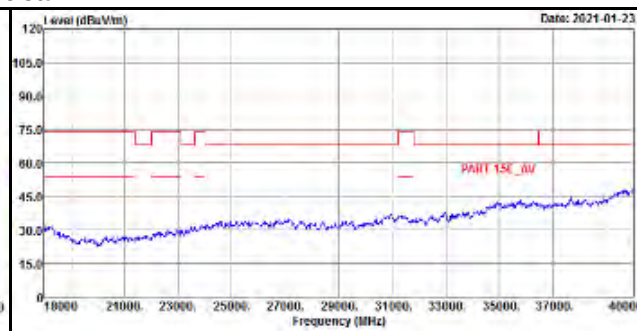
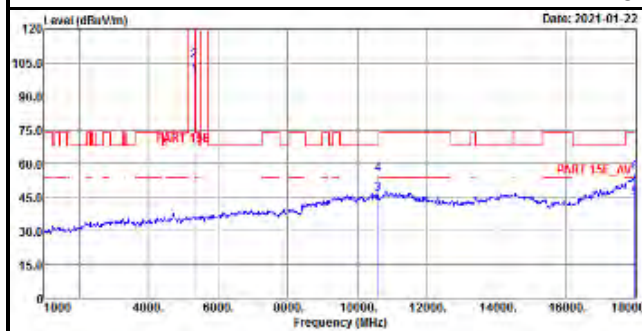
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.53	39.11	0.42	54	-14.47	172	317	Average
5150	49.39	48.97	0.42	74	-24.61	172	317	Peak
5300	99.38	99.17	0.21	-----	-----	172	317	Average
5300	105.85	105.64	0.21	-----	-----	172	317	Peak
5350	41.01	40.68	0.33	54	-12.99	172	317	Average
5350	49.65	49.32	0.33	74	-24.35	172	317	Peak
10600	46.59	48.2	-1.61	54	-7.41	147	148	Average
10600	56.63	58.24	-1.61	74	-17.37	147	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.5	39.08	0.42	54	-14.5	273	273	Average
5150	48.31	47.89	0.42	74	-25.69	273	273	Peak
5300	99.31	99.1	0.21	-----	-----	273	273	Average
5300	105.65	105.44	0.21	-----	-----	273	273	Peak
5350	40.54	40.21	0.33	54	-13.46	273	273	Average
5350	55.43	55.1	0.33	74	-18.57	273	273	Peak
10600	46.35	47.96	-1.61	54	-7.65	172	187	Average
10600	55.57	57.18	-1.61	74	-18.43	172	187	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

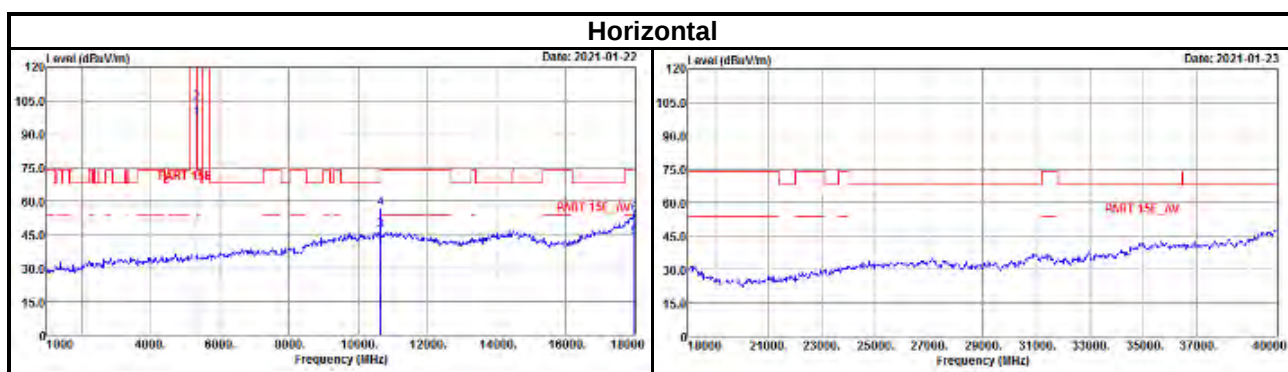


EUT Test Condition		Measurement Detail	
Channel	Channel 64	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

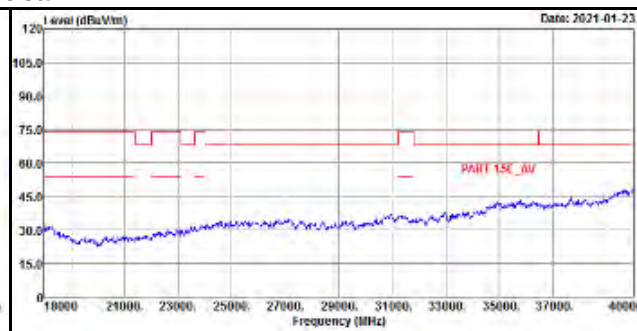
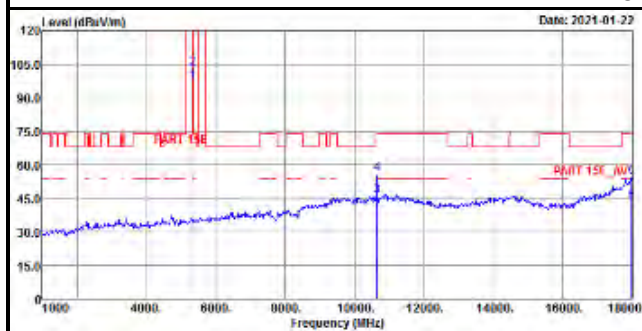
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	97.62	97.36	0.26	-----	-----	175	317	Average
5320	104.05	103.79	0.26	-----	-----	175	317	Peak
5350	44.24	43.91	0.33	54	-9.76	175	317	Average
5350	50.94	50.61	0.33	74	-23.06	175	317	Peak
10640	46.9	48.52	-1.62	54	-7.1	140	196	Average
10640	56.82	58.44	-1.62	74	-17.18	140	196	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	97.41	97.15	0.26	-----	-----	274	274	Average
5320	103.18	102.92	0.26	-----	-----	274	274	Peak
5350	43.16	42.83	0.33	54	-10.84	274	274	Average
5350	50.78	50.45	0.33	74	-23.22	274	274	Peak
10640	45.99	47.61	-1.62	54	-8.01	140	152	Average
10640	55.98	57.6	-1.62	74	-18.02	140	152	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

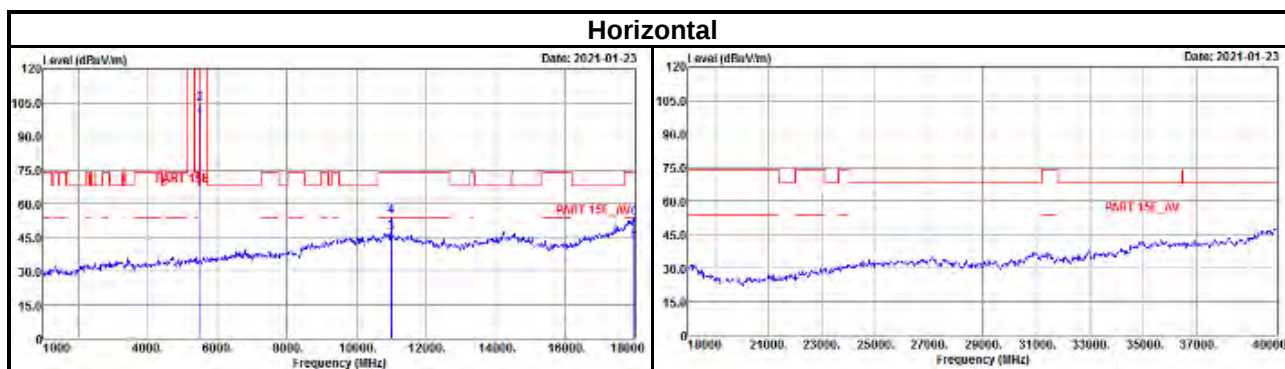


EUT Test Condition		Measurement Detail	
Channel	Channel 100	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

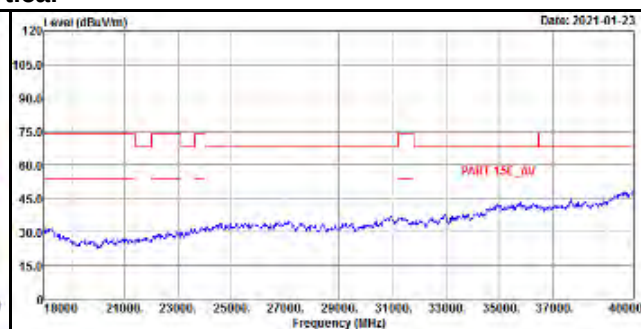
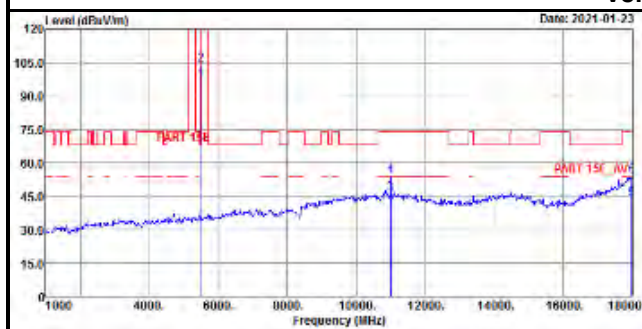
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	41.98	41.23	0.75	54	-12.02	164	317	Average
5460	50.14	49.39	0.75	74	-23.86	164	317	Peak
5470	53.95	53.18	0.77	68.2	-14.25	164	317	Peak
5500	97.19	96.3	0.89	-----	-----	164	317	Average
5500	104.72	103.83	0.89	-----	-----	164	317	Peak
5725	47.64	46.77	0.87	68.2	-20.56	164	317	Peak
11000	46.91	48.22	-1.31	54	-7.09	140	208	Average
11000	54.44	55.75	-1.31	74	-19.56	140	208	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.95	40.2	0.75	54	-13.05	256	272	Average
5460	49.46	48.71	0.75	74	-24.54	256	272	Peak
5470	51.89	51.12	0.77	68.2	-16.31	256	272	Peak
5500	97.15	96.26	0.89	-----	-----	256	272	Average
5500	104.01	103.12	0.89	-----	-----	256	272	Peak
5725	47.72	46.85	0.87	68.2	-20.48	256	272	Peak
11000	46.03	47.34	-1.31	54	-7.97	153	157	Average
11000	54.12	55.43	-1.31	74	-19.88	153	157	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

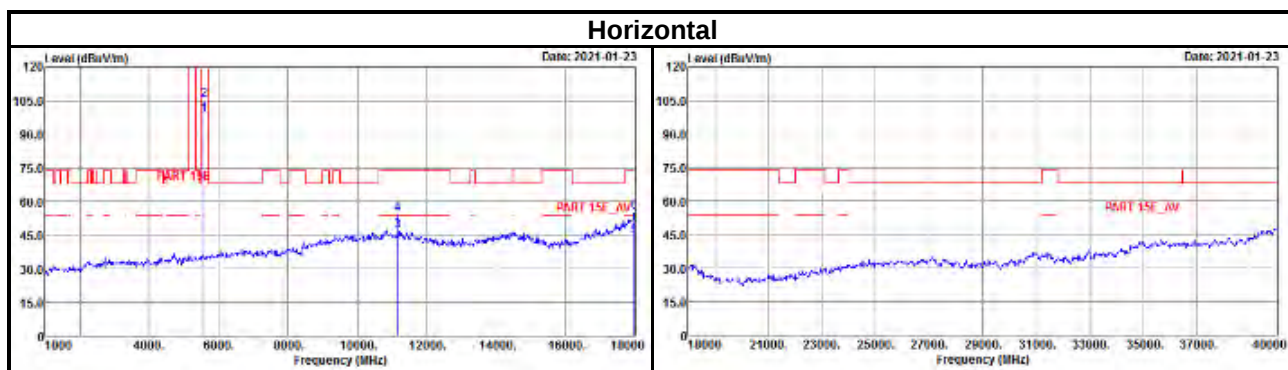


EUT Test Condition		Measurement Detail	
Channel	Channel 116	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

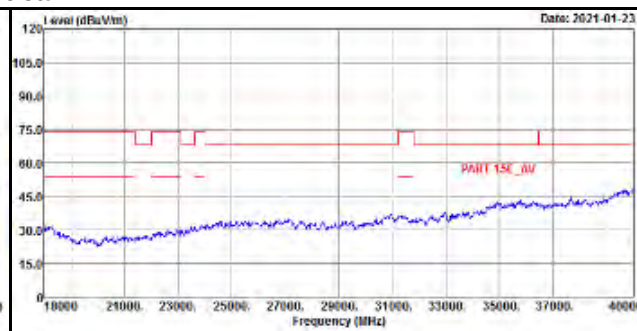
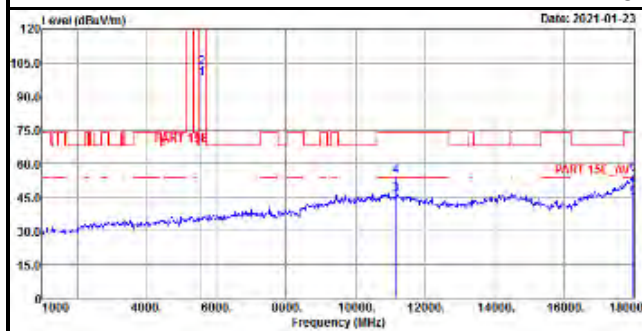
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.36	38.61	0.75	54	-14.64	156	318	Average
5460	48.3	47.55	0.75	74	-25.7	156	318	Peak
5470	47.34	46.57	0.77	68.2	-20.86	156	318	Peak
5580	98.68	97.88	0.8	-----	-----	156	318	Average
5580	105.23	104.43	0.8	-----	-----	156	318	Peak
5725	55.08	54.21	0.87	68.2	-13.12	156	318	Peak
11160	46.99	48.52	-1.53	54	-7.01	136	215	Average
11160	54.37	55.9	-1.53	74	-19.63	136	215	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.13	38.38	0.75	54	-14.87	263	275	Average
5460	47.29	46.54	0.75	74	-26.71	263	275	Peak
5470	47.76	46.99	0.77	68.2	-20.44	263	275	Peak
5580	97.69	96.89	0.8	-----	-----	263	275	Average
5580	102.85	102.05	0.8	-----	-----	263	275	Peak
5725	48.84	47.97	0.87	68.2	-19.36	263	275	Peak
11160	46.1	47.63	-1.53	54	-7.9	135	128	Average
11160	54.62	56.15	-1.53	74	-19.38	135	128	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

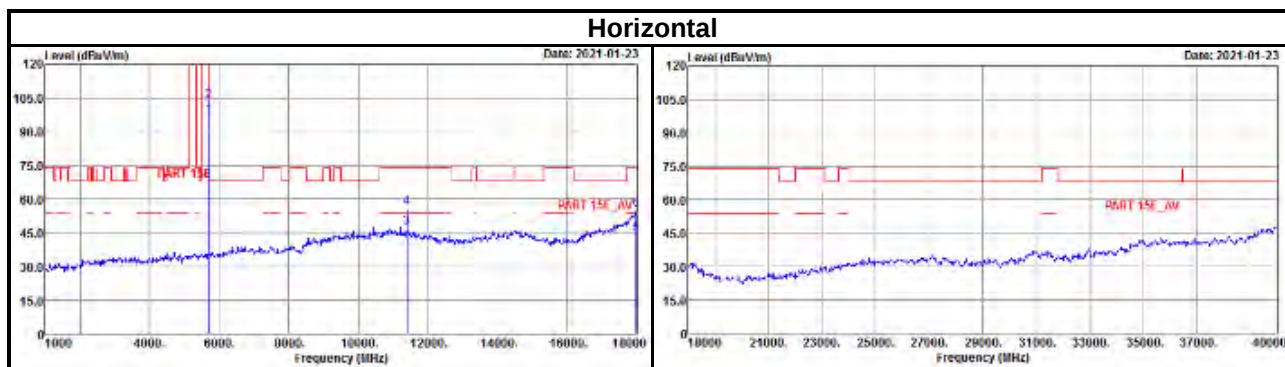


EUT Test Condition		Measurement Detail	
Channel	Channel 140	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

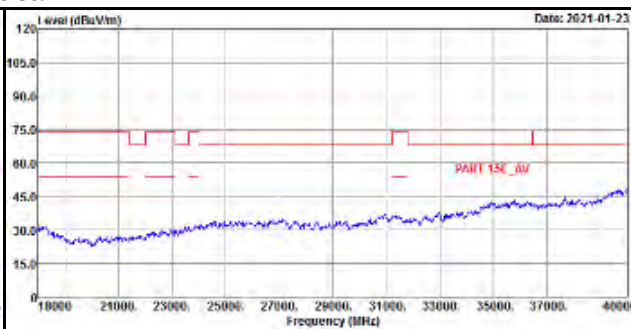
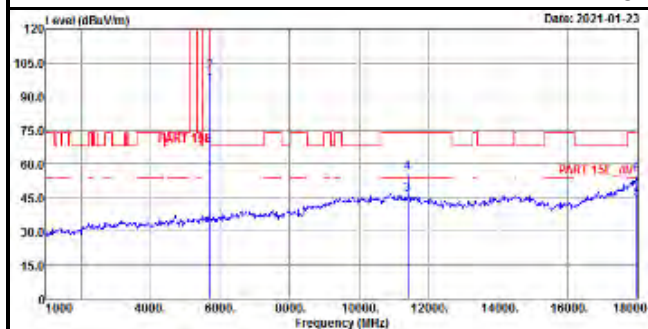
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.19	39.44	0.75	54	-13.81	156	319	Average
5460	48.95	48.2	0.75	74	-25.05	156	319	Peak
5470	47.67	46.9	0.77	68.2	-20.53	156	319	Peak
5700	97.01	96.16	0.85	-----	-----	156	319	Average
5700	103.44	102.59	0.85	-----	-----	156	319	Peak
5725	54.46	53.59	0.87	68.2	-13.74	156	319	Peak
11400	47.26	48.61	-1.35	54	-6.74	147	222	Average
11400	56.09	57.44	-1.35	74	-17.91	147	222	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.9	39.15	0.75	54	-14.1	264	275	Average
5460	48.69	47.94	0.75	74	-25.31	264	275	Peak
5470	47.24	46.47	0.77	68.2	-20.96	264	275	Peak
5700	95.21	94.36	0.85	-----	-----	264	275	Average
5700	101.08	100.23	0.85	-----	-----	264	275	Peak
5725	53.5	52.63	0.87	68.2	-14.7	264	275	Peak
11400	46.28	47.63	-1.35	54	-7.72	134	147	Average
11400	56	57.35	-1.35	74	-18	134	147	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

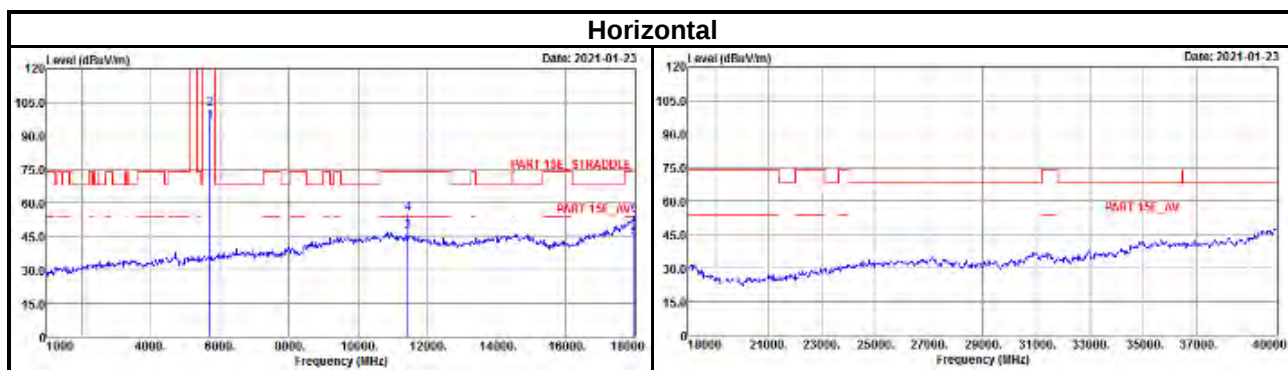


EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

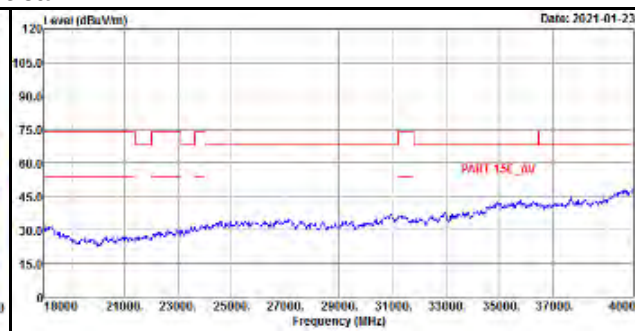
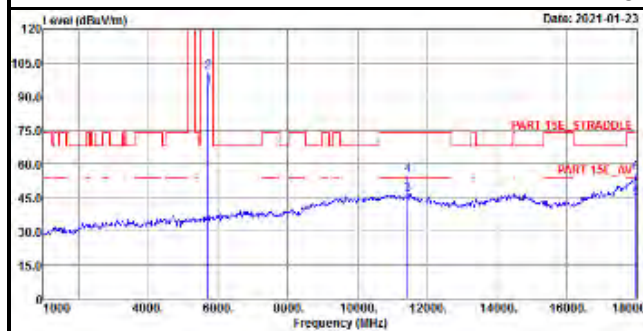
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	38.82	38.07	0.75	54	-15.18	156	320	Average
5460	48.98	48.23	0.75	74	-25.02	156	320	Peak
5470	46.82	46.05	0.77	68.2	-21.38	156	320	Peak
5720	96.01	95.15	0.86	-----	-----	156	320	Average
5720	102.34	101.48	0.86	-----	-----	156	320	Peak
5890	49.48	48.21	1.27	68.2	-18.72	156	320	Peak
11440	47.11	48.44	-1.33	54	-6.89	141	192	Average
11440	55.23	56.56	-1.33	74	-18.77	141	192	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	38.77	38.02	0.75	54	-15.23	258	273	Average
5460	48.75	48	0.75	74	-25.25	258	273	Peak
5470	46.92	46.15	0.77	68.2	-21.28	258	273	Peak
5720	94.3	93.44	0.86	-----	-----	258	273	Average
5720	100.84	99.98	0.86	-----	-----	258	273	Peak
5905	49.31	48.02	1.29	68.2	-18.89	258	273	Peak
11440	46.44	47.77	-1.33	54	-7.56	146	148	Average
11440	55.12	56.45	-1.33	74	-18.88	146	148	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5720 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	94.35	56	38.35	-----	-----	200	314	Average
5745	100.69	62.34	38.35	-----	-----	200	314	Peak
11490	44.88	46.2	-1.32	54	-9.12	162	162	Average
11490	55.12	56.44	-1.32	74	-18.88	162	162	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	93.44	55.09	38.35	-----	-----	264	276	Average
5745	100.22	61.87	38.35	-----	-----	264	276	Peak
11490	45.24	46.56	-1.32	54	-8.76	175	182	Average
11490	55.09	56.41	-1.32	74	-18.91	175	182	Peak

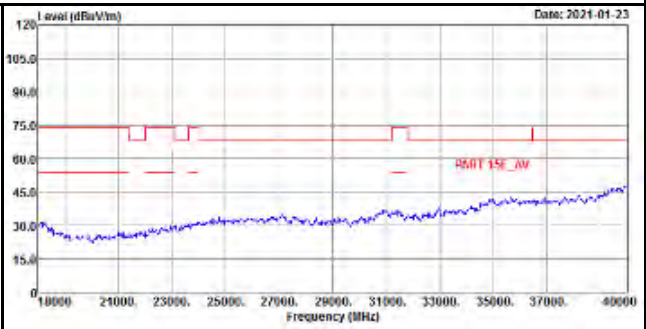
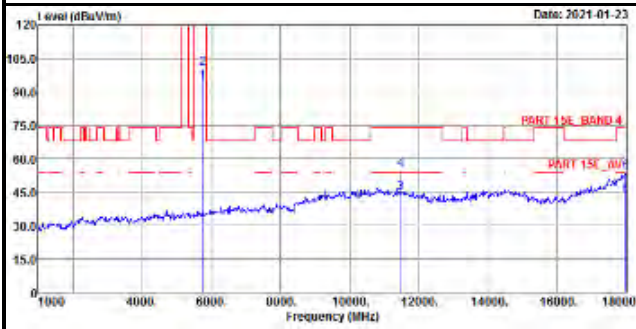
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5574.225	50.58	49.75	0.83	68.2	-17.62	200	314	Peak
5659.725	48.89	48.22	0.67	75.42	-26.53	200	314	Peak
5915.75	50.99	49.69	1.3	75.02	-24.03	200	314	Peak
6015.975	50.89	49.46	1.43	68.2	-17.31	200	314	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5566.15	49.53	48.7	0.83	68.2	-18.67	264	276	Peak
5652.125	49	48.31	0.69	69.78	-20.78	264	276	Peak
5921.45	51.15	49.85	1.3	70.82	-19.67	264	276	Peak
5996.975	50.68	49.3	1.38	68.2	-17.52	264	276	Peak

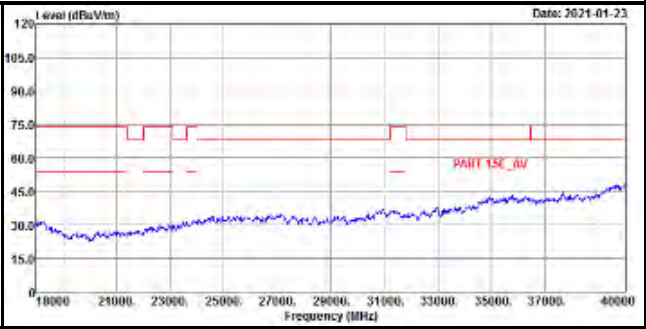
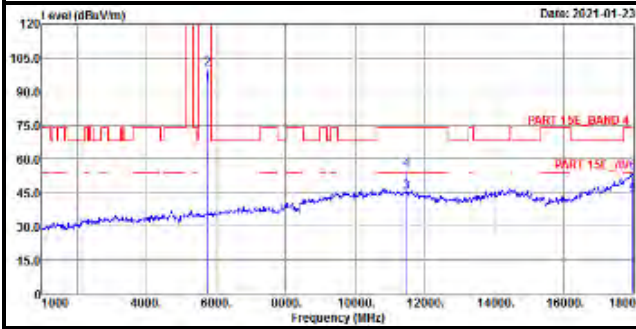
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 157	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	95.08	56.62	38.46	-----	-----	121	293	Average
5785	101.83	63.37	38.46	-----	-----	121	293	Peak
11570	44.46	46.17	-1.71	54	-9.54	107	106	Average
11570	54.59	56.3	-1.71	74	-19.41	107	106	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	94.7	56.24	38.46	-----	-----	258	276	Average
5785	101.37	62.91	38.46	-----	-----	258	276	Peak
11570	43.8	45.51	-1.71	54	-10.2	165	189	Average
11570	54.17	55.88	-1.71	74	-19.83	165	189	Peak

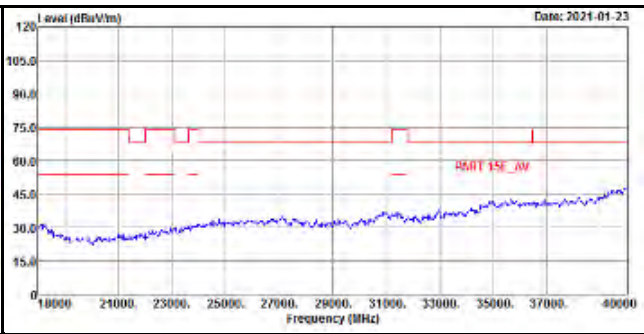
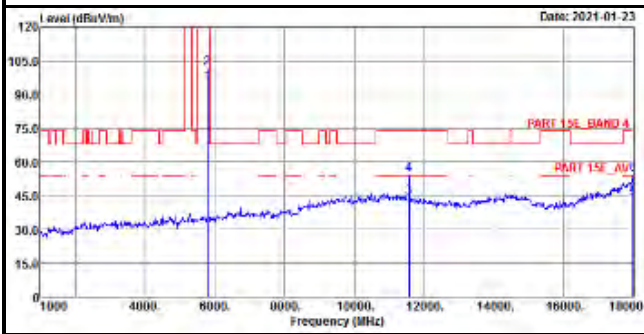
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5580.4	51.25	50.45	0.8	68.2	-16.95	121	293	Peak
5652.6	48.38	47.69	0.69	70.13	-21.75	121	293	Peak
5916.7	49.9	48.6	1.3	74.32	-24.42	121	293	Peak
5990.325	51.65	50.28	1.37	68.2	-16.55	121	293	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5596.075	49.5	48.71	0.79	68.2	-18.7	258	276	Peak
5656.875	49.2	48.55	0.65	73.31	-24.11	258	276	Peak
5922.875	50.99	49.69	1.3	69.77	-18.78	258	276	Peak
5933.325	51.28	49.98	1.3	68.2	-16.92	258	276	Peak

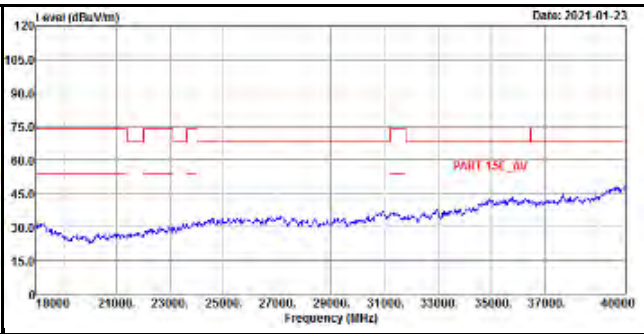
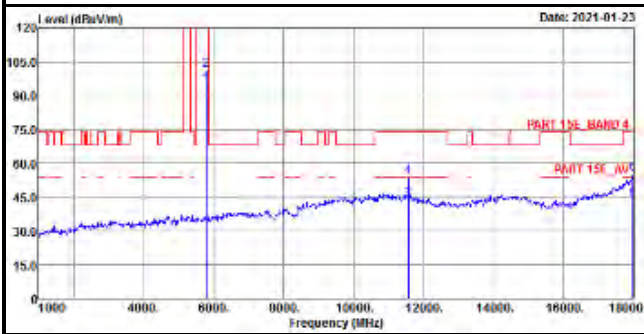
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	96.08	57.49	38.59	-----	-----	113	291	Average
5825	103.11	64.52	38.59	-----	-----	113	291	Peak
11650	43.08	45.14	-2.06	54	-10.92	121	132	Average
11650	53.39	55.45	-2.06	74	-20.61	121	132	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	95.1	56.51	38.59	-----	-----	265	276	Average
5825	101.57	62.98	38.59	-----	-----	265	276	Peak
11650	42.12	44.18	-2.06	54	-11.88	140	172	Average
11650	52.47	54.53	-2.06	74	-21.53	140	172	Peak

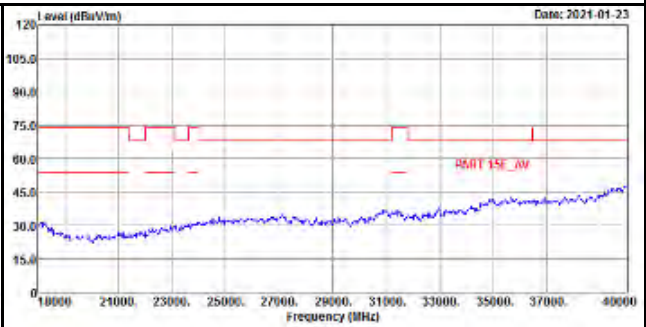
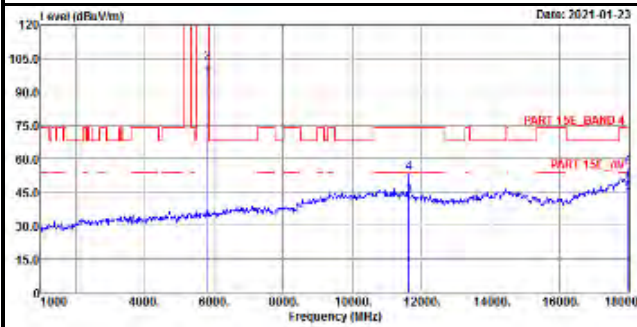
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5597.5	49.38	48.59	0.79	68.2	-18.82	113	291	Peak
5653.075	48.88	48.18	0.7	70.49	-21.61	113	291	Peak
5916.7	49.21	47.91	1.3	74.32	-25.11	113	291	Peak
5933.325	51.25	49.95	1.3	68.2	-16.95	113	291	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5645.95	50.08	49.41	0.67	68.2	-18.12	265	276	Peak
5658.3	48.35	47.69	0.66	74.36	-26.01	265	276	Peak
5921.45	50.34	49.04	1.3	70.82	-20.48	265	276	Peak
5938.55	50.79	49.47	1.32	68.2	-17.41	265	276	Peak

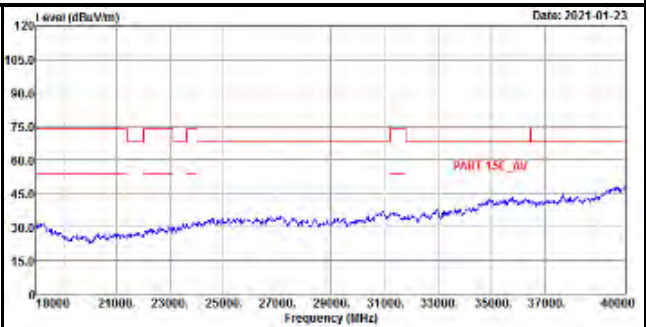
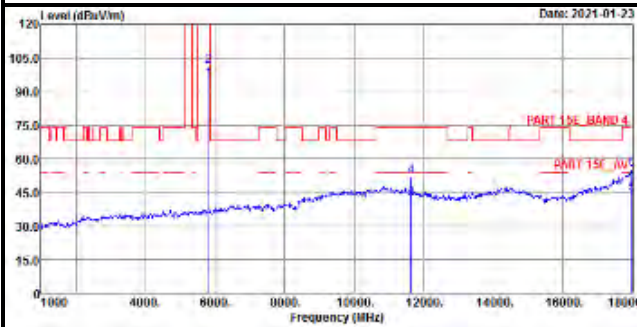
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



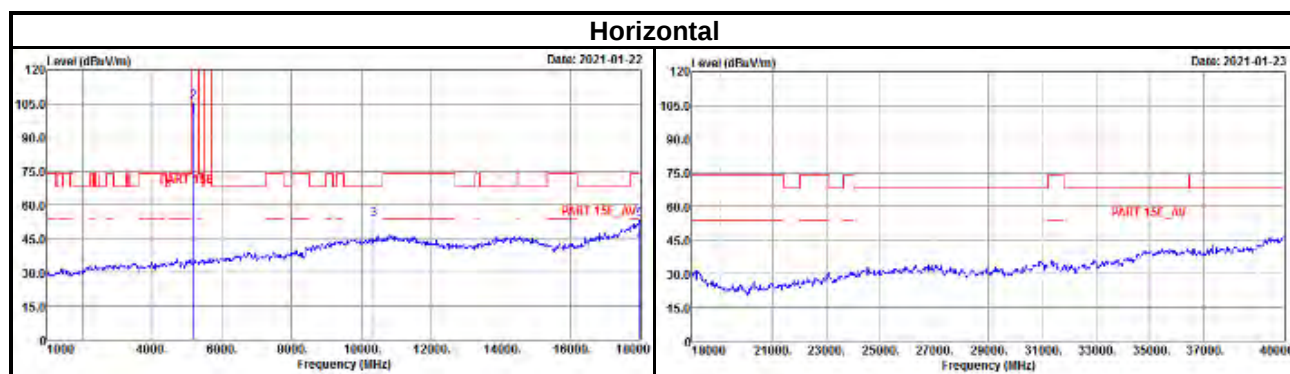
802.11ac (VHT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

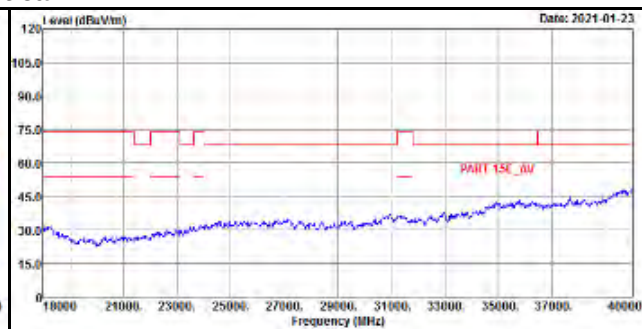
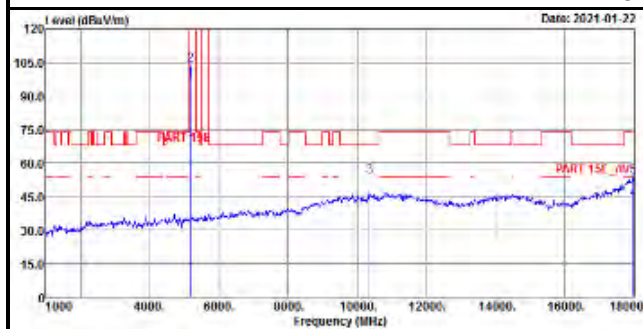
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	46.76	46.34	0.42	54	-7.24	173	313	Average
5150	51.75	51.33	0.42	74	-22.25	173	313	Peak
5180	99.5	99.24	0.26	-----	-----	173	313	Average
5180	105.97	105.71	0.26	-----	-----	173	313	Peak
10360	53.38	55.3	-1.92	68.2	-14.82	140	157	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	44.18	43.76	0.42	54	-9.82	271	272	Average
5150	51.6	51.18	0.42	74	-22.4	271	272	Peak
5180	97.28	97.02	0.26	-----	-----	271	272	Average
5180	103.89	103.63	0.26	-----	-----	271	272	Peak
10360	53.92	55.84	-1.92	68.2	-14.28	193	186	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

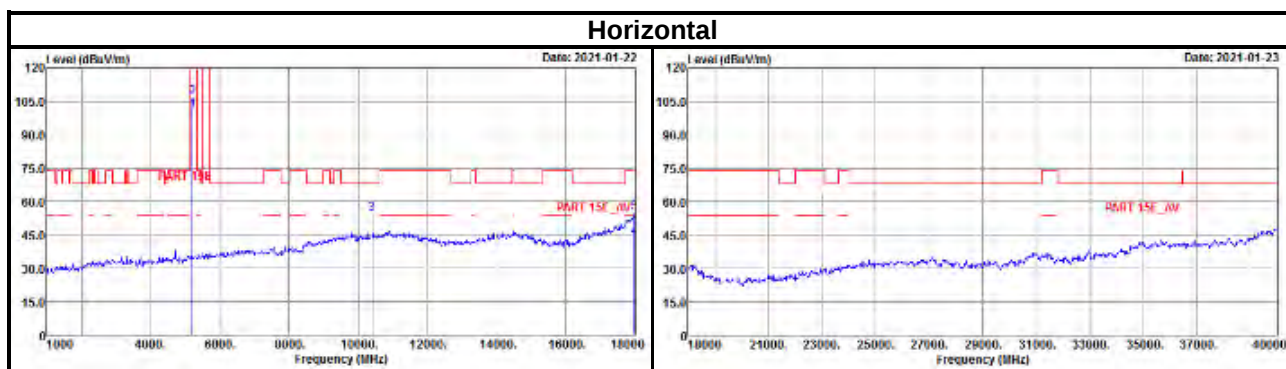


EUT Test Condition		Measurement Detail	
Channel	Channel 40	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

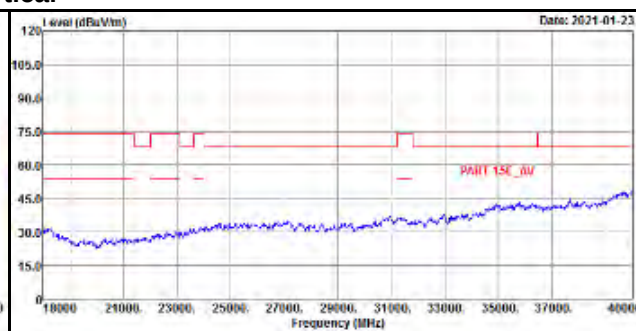
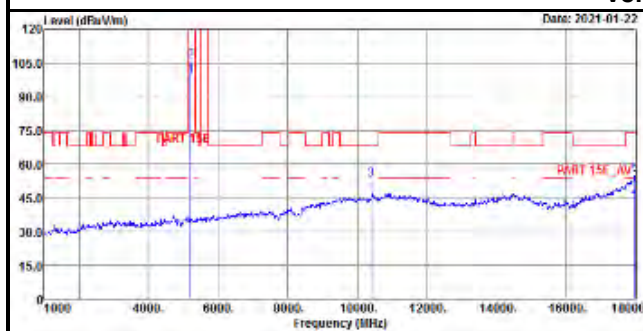
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	41.01	40.59	0.42	54	-12.99	167	315	Average
5150	47.98	47.56	0.42	74	-26.02	167	315	Peak
5200	100.89	100.75	0.14	-----	-----	167	315	Average
5200	106.67	106.53	0.14	-----	-----	167	315	Peak
5350	39.51	39.18	0.33	54	-14.49	167	315	Average
5350	48.33	48	0.33	74	-25.67	167	315	Peak
10400	54.47	56.29	-1.82	68.2	-13.73	146	164	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.75	40.33	0.42	54	-13.25	281	276	Average
5150	49.37	48.95	0.42	74	-24.63	281	276	Peak
5200	98.99	98.85	0.14	-----	-----	281	276	Average
5200	105.61	105.47	0.14	-----	-----	281	276	Peak
5350	39.49	39.16	0.33	54	-14.51	281	276	Average
5350	48.62	48.29	0.33	74	-25.38	281	276	Peak
10400	53.02	54.84	-1.82	68.2	-15.18	182	190	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5200 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

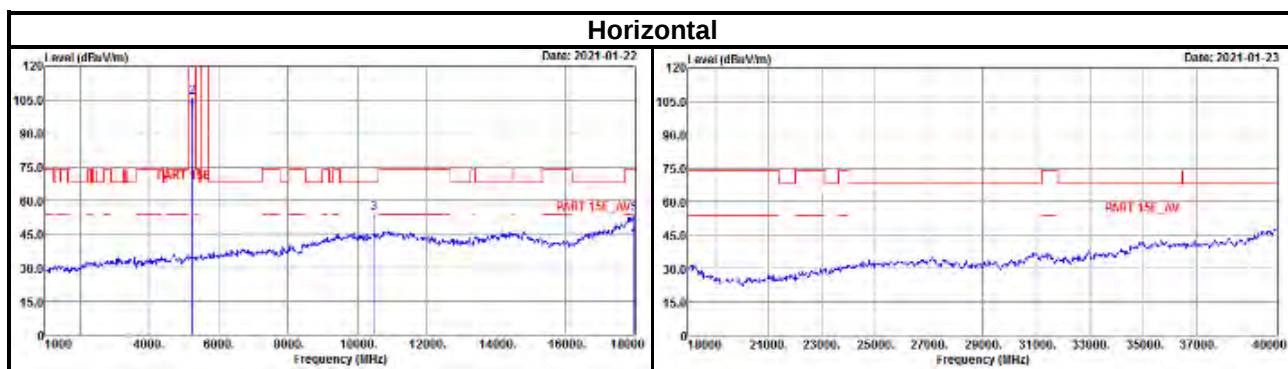


EUT Test Condition		Measurement Detail	
Channel	Channel 48	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

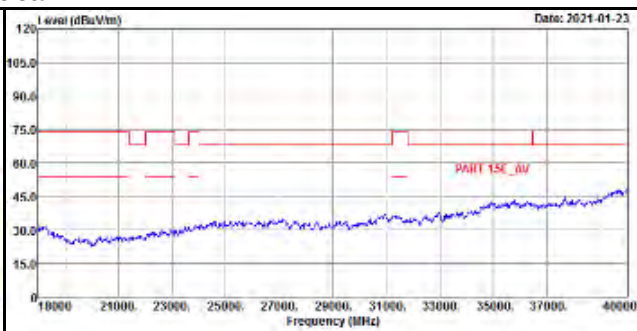
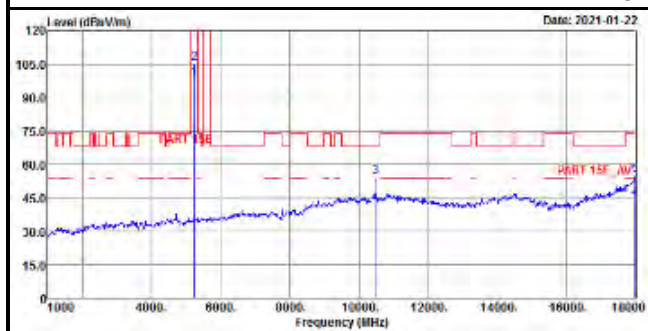
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.75	39.33	0.42	54	-14.25	158	314	Average
5150	49.74	49.32	0.42	74	-24.26	158	314	Peak
5240	99.49	99.39	0.1	-----	-----	158	314	Average
5240	106.36	106.26	0.1	-----	-----	158	314	Peak
5350	39.59	39.26	0.33	54	-14.41	158	314	Average
5350	48.06	47.73	0.33	74	-25.94	158	314	Peak
10480	54.35	55.83	-1.48	68.2	-13.85	162	133	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.69	39.27	0.42	54	-14.31	274	273	Average
5150	49.36	48.94	0.42	74	-24.64	274	273	Peak
5240	98.68	98.58	0.1	-----	-----	274	273	Average
5240	105.23	105.13	0.1	-----	-----	274	273	Peak
5350	39.56	39.23	0.33	54	-14.44	274	273	Average
5350	48.74	48.41	0.33	74	-25.26	274	273	Peak
10480	54.61	56.09	-1.48	68.2	-13.59	132	185	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

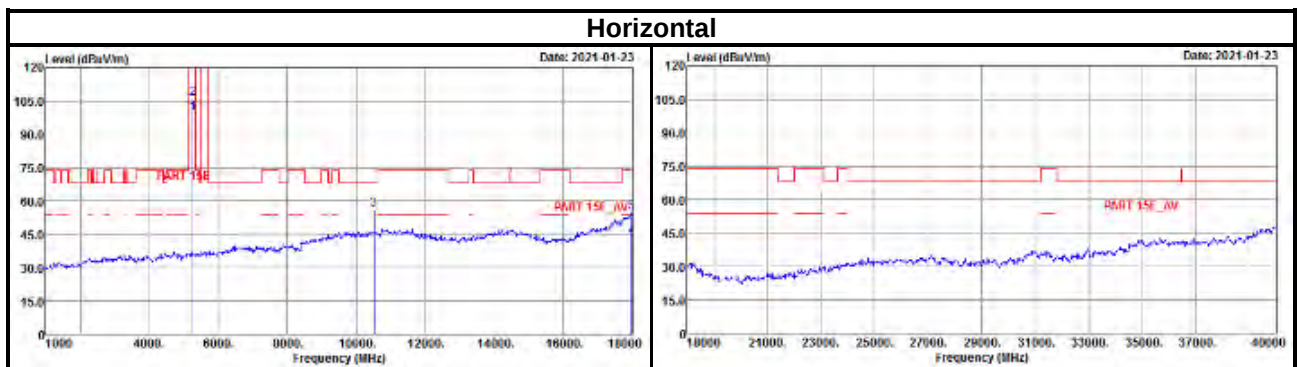


EUT Test Condition		Measurement Detail	
Channel	Channel 52	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

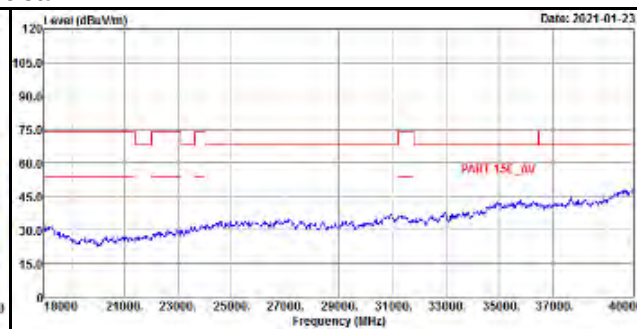
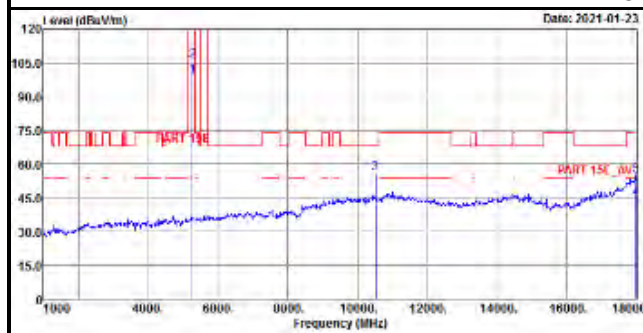
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.61	39.19	0.42	54	-14.39	170	314	Average
5150	48.85	48.43	0.42	74	-25.15	170	314	Peak
5260	99.42	99.29	0.13	-----	-----	170	314	Average
5260	106.34	106.21	0.13	-----	-----	170	314	Peak
5350	39.74	39.41	0.33	54	-14.26	170	314	Average
5350	48.64	48.31	0.33	74	-25.36	170	314	Peak
10520	56.09	57.54	-1.45	68.2	-12.11	176	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.66	39.24	0.42	54	-14.34	278	271	Average
5150	48.16	47.74	0.42	74	-25.84	278	271	Peak
5260	99.25	99.12	0.13	-----	-----	278	271	Average
5260	105.85	105.72	0.13	-----	-----	278	271	Peak
5350	39.6	39.27	0.33	54	-14.4	278	271	Average
5350	48.36	48.03	0.33	74	-25.64	278	271	Peak
10520	55.94	57.39	-1.45	68.2	-12.26	143	190	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

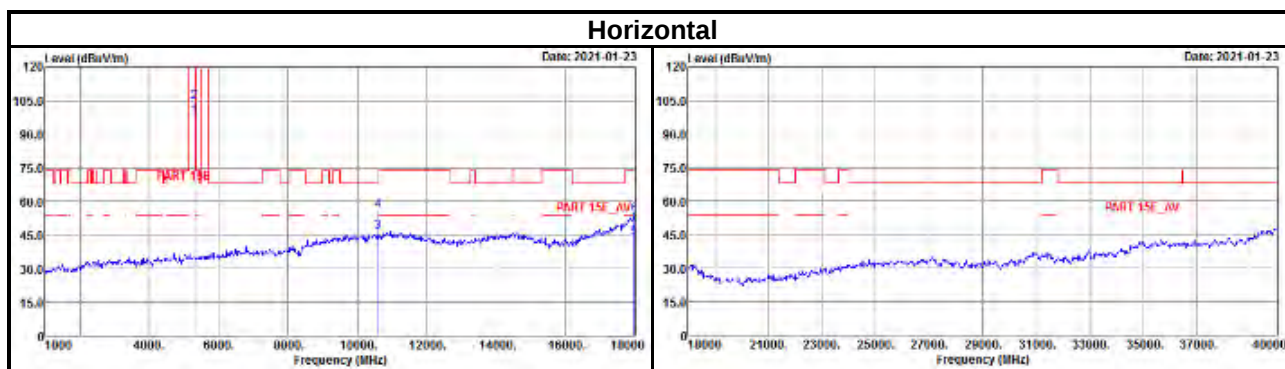


EUT Test Condition		Measurement Detail	
Channel	Channel 60	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

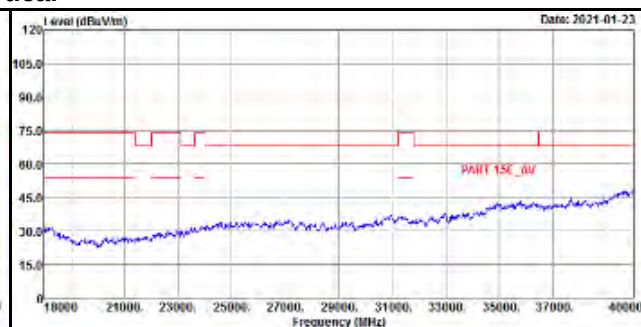
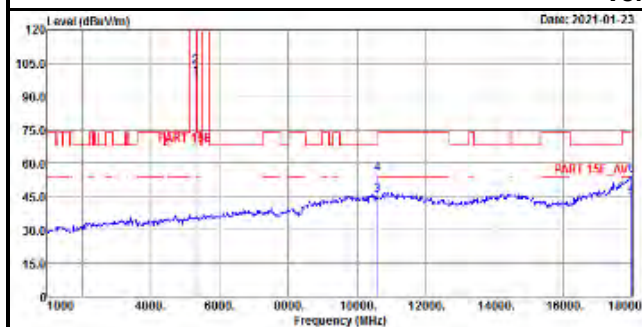
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.51	39.09	0.42	54	-14.49	164	315	Average
5150	48.39	47.97	0.42	74	-25.61	164	315	Peak
5300	97.79	97.58	0.21	-----	-----	164	315	Average
5300	104.65	104.44	0.21	-----	-----	164	315	Peak
5350	40.43	40.1	0.33	54	-13.57	164	315	Average
5350	50.04	49.71	0.33	74	-23.96	164	315	Peak
10600	46.34	47.95	-1.61	54	-7.66	168	113	Average
10600	55.64	57.25	-1.61	74	-18.36	168	113	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.52	39.1	0.42	54	-14.48	275	274	Average
5150	48.9	48.48	0.42	74	-25.1	275	274	Peak
5300	98.39	98.18	0.21	-----	-----	275	274	Average
5300	103.78	103.57	0.21	-----	-----	275	274	Peak
5350	40.3	39.97	0.33	54	-13.7	275	274	Average
5350	48.74	48.41	0.33	74	-25.26	275	274	Peak
10600	45.58	47.19	-1.61	54	-8.42	183	170	Average
10600	55.27	56.88	-1.61	74	-18.73	183	170	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

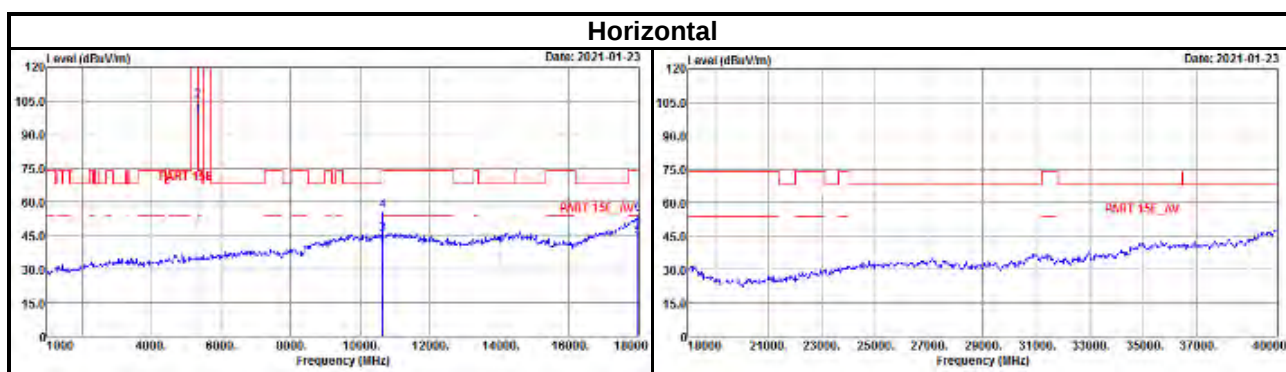


EUT Test Condition		Measurement Detail	
Channel	Channel 64	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

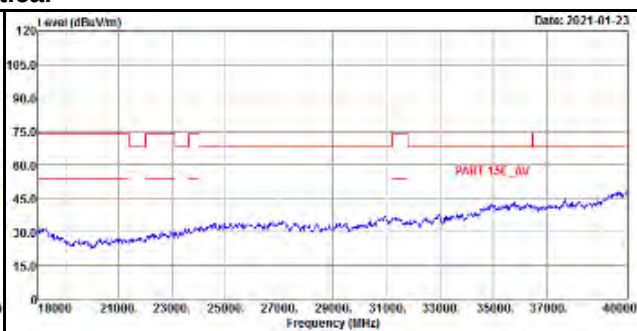
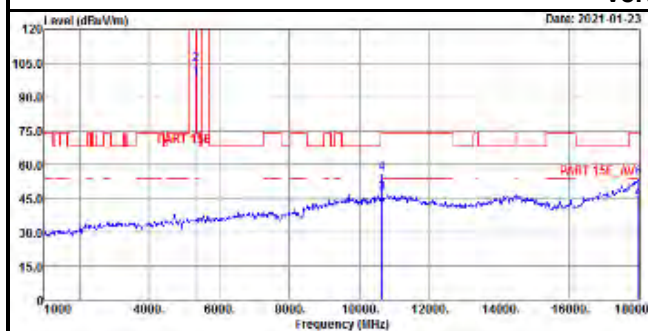
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	98.17	97.91	0.26	-----	-----	166	319	Average
5320	105.06	104.8	0.26	-----	-----	166	319	Peak
5350	45.81	45.48	0.33	54	-8.19	166	319	Average
5350	51.39	51.06	0.33	74	-22.61	166	319	Peak
10640	45.58	47.2	-1.62	54	-8.42	160	262	Average
10640	55.72	57.34	-1.62	74	-18.28	160	262	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	98.15	97.89	0.26	-----	-----	266	272	Average
5320	104.69	104.43	0.26	-----	-----	266	272	Peak
5350	44.81	44.48	0.33	54	-9.19	266	272	Average
5350	57.93	57.6	0.33	74	-16.07	266	272	Peak
10640	47.37	48.99	-1.62	54	-6.63	149	162	Average
10640	56.39	58.01	-1.62	74	-17.61	149	162	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

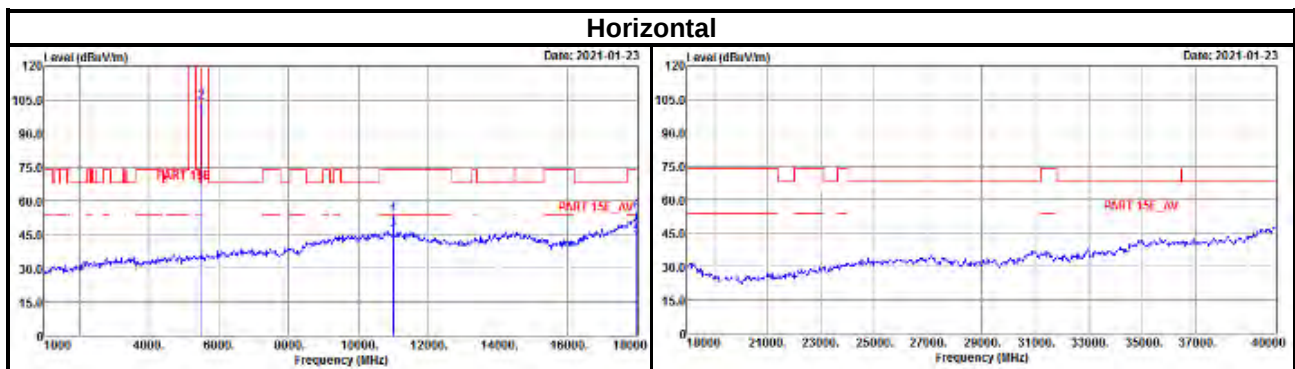


EUT Test Condition		Measurement Detail	
Channel	Channel 100	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

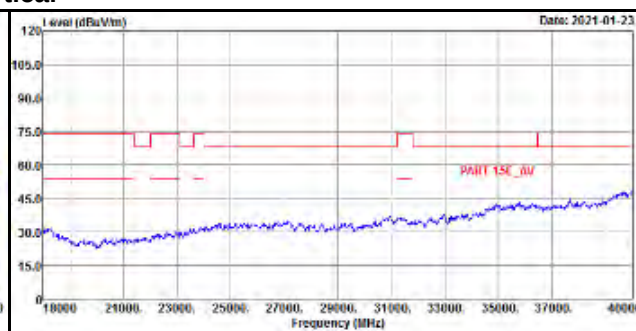
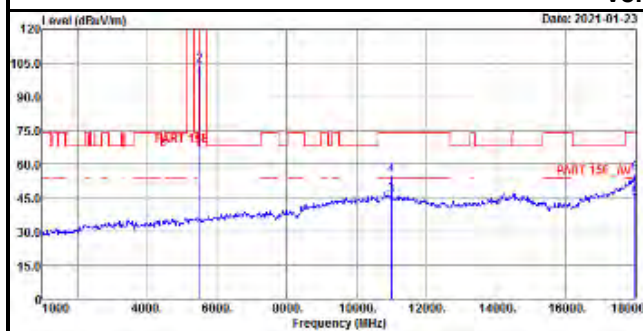
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	41.8	41.05	0.75	54	-12.2	162	319	Average
5460	50.23	49.48	0.75	74	-23.77	162	319	Peak
5470	53.5	52.73	0.77	68.2	-14.7	162	319	Peak
5500	97.61	96.72	0.89	-----	-----	162	319	Average
5500	104.05	103.16	0.89	-----	-----	162	319	Peak
5725	52.59	51.72	0.87	68.2	-15.61	162	319	Peak
11000	47.26	48.57	-1.31	54	-6.74	142	228	Average
11000	54.17	55.48	-1.31	74	-19.83	142	228	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	41.2	40.45	0.75	54	-12.8	268	273	Average
5460	48.26	47.51	0.75	74	-25.74	268	273	Peak
5470	50.79	50.02	0.77	68.2	-17.41	268	273	Peak
5500	97.36	96.47	0.89	-----	-----	268	273	Average
5500	103.86	102.97	0.89	-----	-----	268	273	Peak
5725	47.7	46.83	0.87	68.2	-20.5	268	273	Peak
11000	46.17	47.48	-1.31	54	-7.83	139	153	Average
11000	54.73	56.04	-1.31	74	-19.27	139	153	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

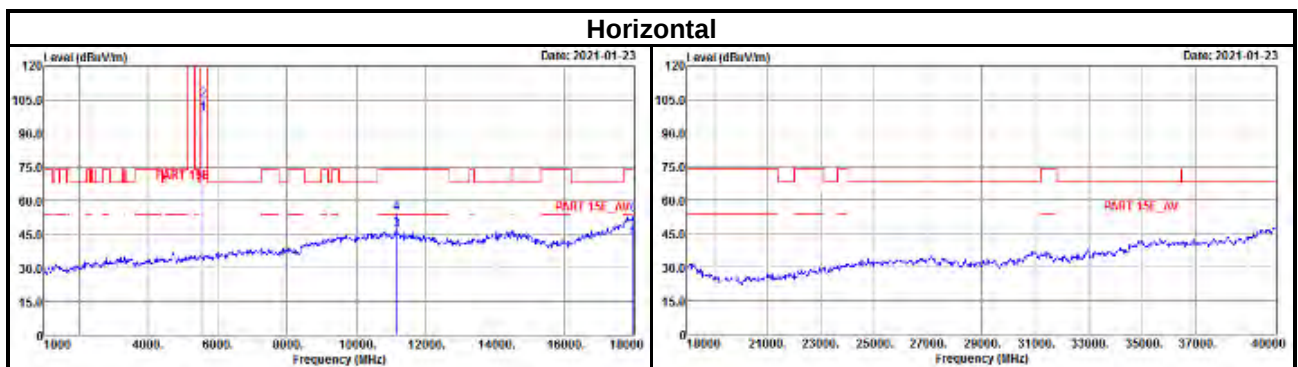


EUT Test Condition		Measurement Detail	
Channel	Channel 116	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

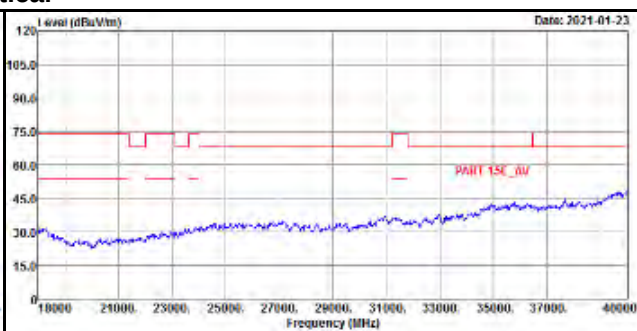
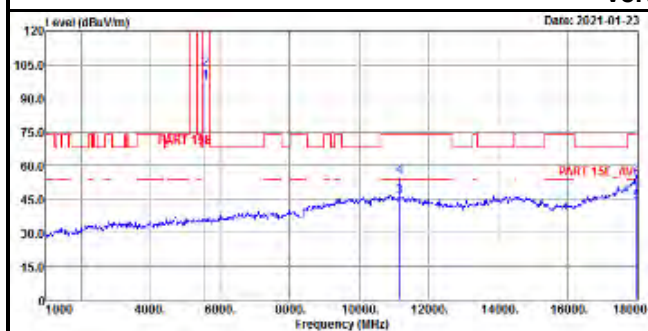
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.36	38.61	0.75	54	-14.64	158	319	Average
5460	48.04	47.29	0.75	74	-25.96	158	319	Peak
5470	47.76	46.99	0.77	68.2	-20.44	158	319	Peak
5580	98.57	97.77	0.8	-----	-----	158	319	Average
5580	104.83	104.03	0.8	-----	-----	158	319	Peak
5725	50.32	49.45	0.87	68.2	-17.88	158	319	Peak
11160	47.12	48.65	-1.53	54	-6.88	149	213	Average
11160	54.49	56.02	-1.53	74	-19.51	149	213	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.12	38.37	0.75	54	-14.88	262	273	Average
5460	48.27	47.52	0.75	74	-25.73	262	273	Peak
5470	46.52	45.75	0.77	68.2	-21.68	262	273	Peak
5580	97.2	96.4	0.8	-----	-----	262	273	Average
5580	103.3	102.5	0.8	-----	-----	262	273	Peak
5725	49.4	48.53	0.87	68.2	-18.8	262	273	Peak
11160	45.99	47.52	-1.53	54	-8.01	144	141	Average
11160	55.09	56.62	-1.53	74	-18.91	144	141	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



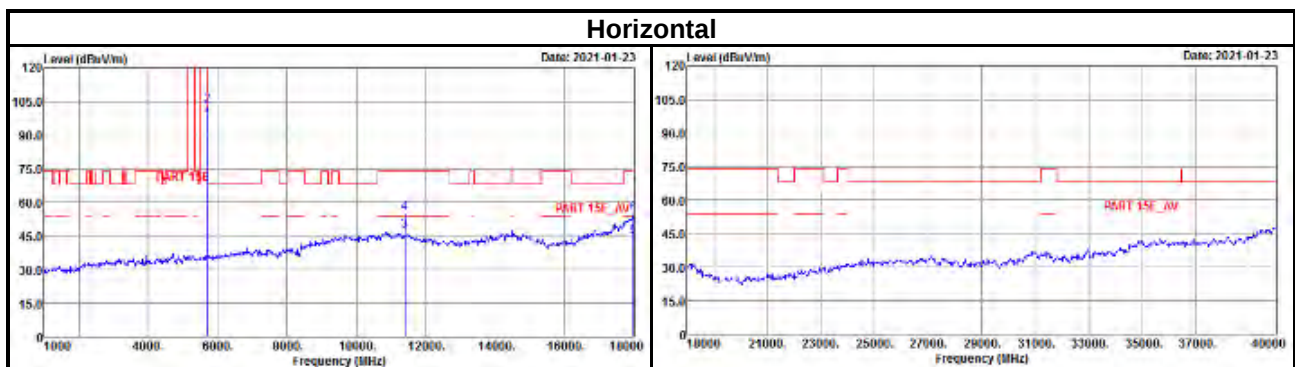
EUT Test Condition		Measurement Detail	
Channel	Channel 140	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.64	38.89	0.75	54	-14.36	157	320	Average
5460	48.78	48.03	0.75	74	-25.22	157	320	Peak
5470	46.58	45.81	0.77	68.2	-21.62	157	320	Peak
5700	96.43	95.58	0.85	-----	-----	157	320	Average
5700	103.23	102.38	0.85	-----	-----	157	320	Peak
5725	54	53.13	0.87	68.2	-14.2	157	320	Peak
11400	47.36	48.71	-1.35	54	-6.64	142	202	Average
11400	55.24	56.59	-1.35	74	-18.76	142	202	Peak

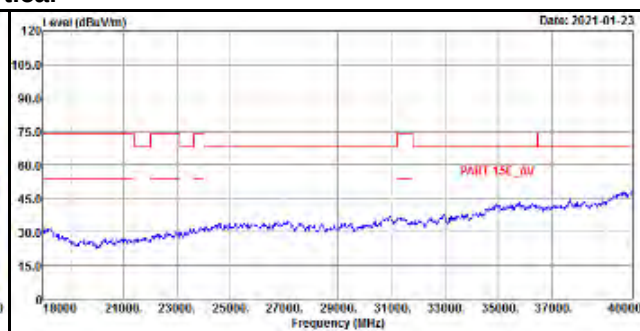
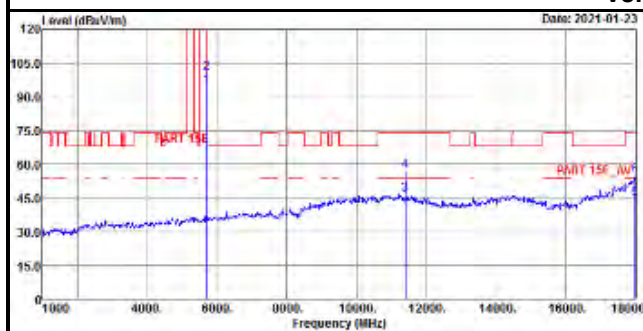
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.78	39.03	0.75	54	-14.22	262	274	Average
5460	48.03	47.28	0.75	74	-25.97	262	274	Peak
5470	47	46.23	0.77	68.2	-21.2	262	274	Peak
5700	94.89	94.04	0.85	-----	-----	262	274	Average
5700	100.63	99.78	0.85	-----	-----	262	274	Peak
5725	49.68	48.81	0.87	68.2	-18.52	262	274	Peak
11400	46.47	47.82	-1.35	54	-7.53	146	138	Average
11400	57.2	58.55	-1.35	74	-16.8	146	138	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

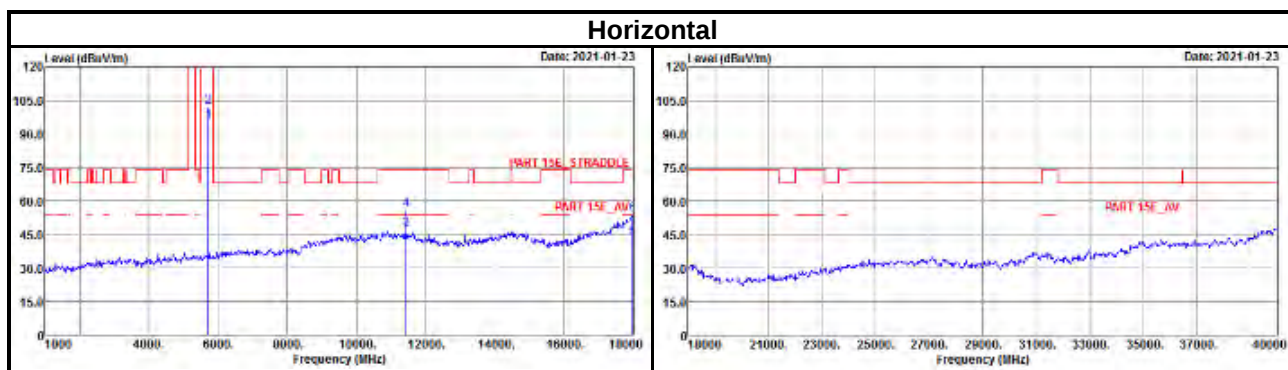


EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

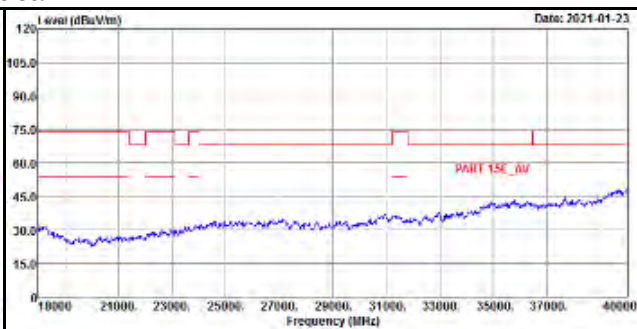
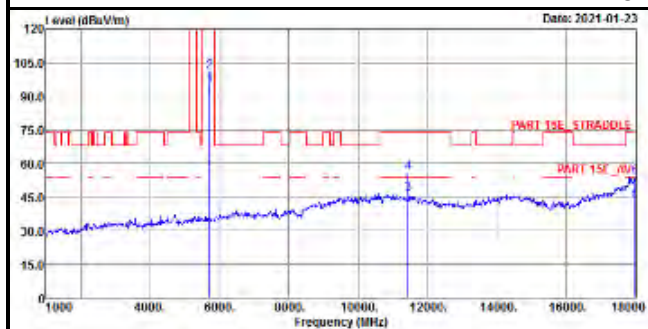
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.05	38.3	0.75	54	-14.95	149	319	Average
5460	48.39	47.64	0.75	74	-25.61	149	319	Peak
5470	46.8	46.03	0.77	68.2	-21.4	149	319	Peak
5720	95.75	94.89	0.86	-----	-----	149	319	Average
5720	102.39	101.53	0.86	-----	-----	149	319	Peak
5896	49.44	48.16	1.28	68.2	-18.76	149	319	Peak
11440	47.3	48.63	-1.33	54	-6.7	154	183	Average
11440	55.71	57.04	-1.33	74	-18.29	154	183	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	38.75	38	0.75	54	-15.25	261	272	Average
5460	49.29	48.54	0.75	74	-24.71	261	272	Peak
5470	46.69	45.92	0.77	68.2	-21.51	261	272	Peak
5720	94.54	93.68	0.86	-----	-----	261	272	Average
5720	100.95	100.09	0.86	-----	-----	261	272	Peak
5856.4	49.53	48.35	1.18	68.2	-18.67	261	272	Peak
11440	46.46	47.79	-1.33	54	-7.54	153	137	Average
11440	55.7	57.03	-1.33	74	-18.3	153	137	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5720 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	95.09	56.74	38.35	-----	-----	120	291	Average
5745	101.72	63.37	38.35	-----	-----	120	291	Peak
11490	45.14	46.46	-1.32	54	-8.86	124	130	Average
11490	54.71	56.03	-1.32	74	-19.29	124	130	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	94.26	55.91	38.35	-----	-----	263	275	Average
5745	101.16	62.81	38.35	-----	-----	263	275	Peak
11490	44.79	46.11	-1.32	54	-9.21	147	195	Average
11490	55	56.32	-1.32	74	-19	147	195	Peak

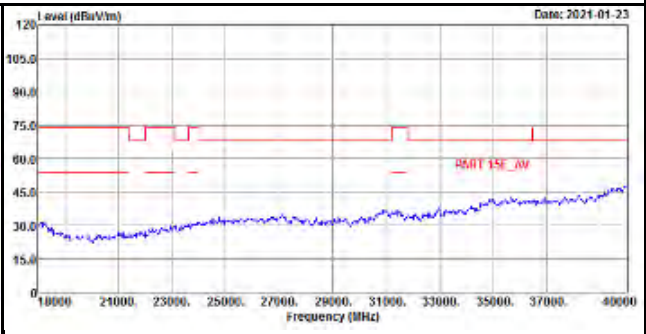
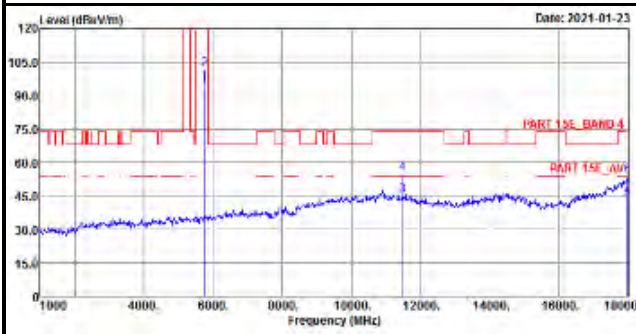
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5645.95	49.81	49.14	0.67	68.2	-18.39	120	291	Peak
5659.725	49.04	48.37	0.67	75.42	-26.38	120	291	Peak
5920.5	51.53	50.23	1.3	71.52	-19.99	120	291	Peak
6006.95	51.65	50.25	1.4	68.2	-16.55	120	291	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5645.95	50.94	50.27	0.67	68.2	-17.26	263	275	Peak
5653.55	50.62	49.92	0.7	70.84	-20.22	263	275	Peak
5916.7	51.53	50.23	1.3	74.32	-22.79	263	275	Peak
6015.025	51.65	50.23	1.42	68.2	-16.55	263	275	Peak

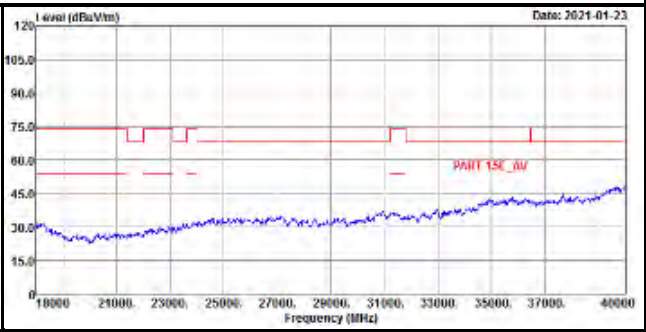
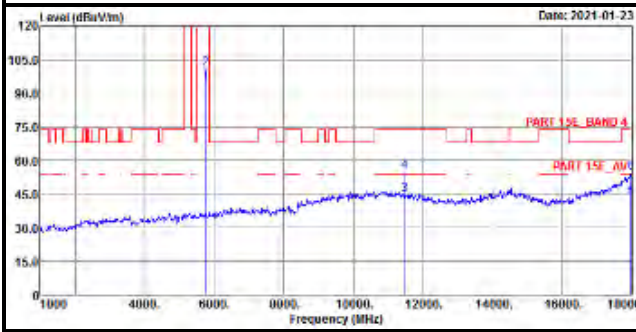
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 157	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	95.9	94.98	0.92	-----	-----	121	293	Average
5785	102.28	101.36	0.92	-----	-----	121	293	Peak
11570	43.79	45.5	-1.71	54	-10.21	178	182	Average
11570	54.22	55.93	-1.71	74	-19.78	178	182	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	96.31	95.39	0.92	-----	-----	259	276	Average
5785	101.75	100.83	0.92	-----	-----	259	276	Peak
11570	43.76	45.47	-1.71	54	-10.24	178	162	Average
11570	54.22	55.93	-1.71	74	-19.78	178	162	Peak

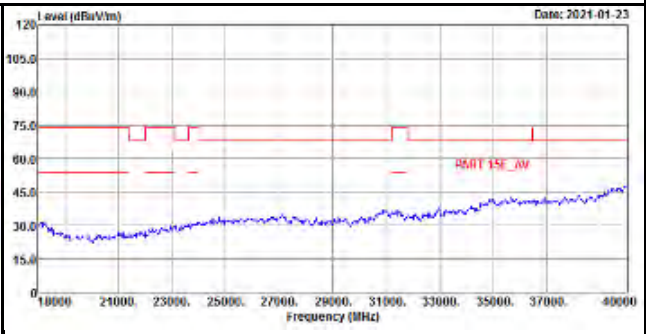
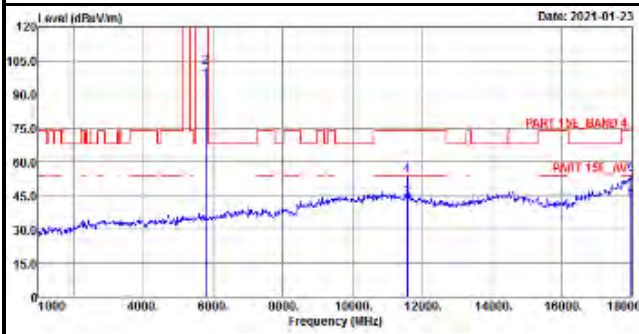
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
Frequency (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	A/Pos (cm)	T/Pos (deg)	Remark
5643.575	49.77	49.09	0.68	68.2	-18.43	121	293	Peak
5654.975	49.2	48.56	0.64	71.9	-22.7	121	293	Peak
5918.125	49.52	48.22	1.3	73.27	-23.75	121	293	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5645	50.01	49.34	0.67	68.2	-18.19	259	276	Peak
5650.7	48.6	47.92	0.68	68.72	-20.12	259	276	Peak
5916.7	48.73	47.43	1.3	74.32	-25.59	259	276	Peak
5960.875	49.41	48.09	1.32	68.2	-18.79	259	276	Peak

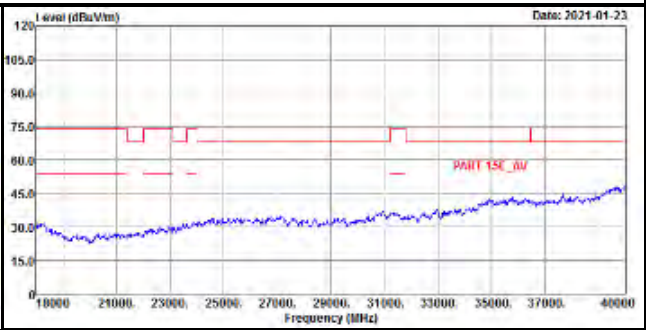
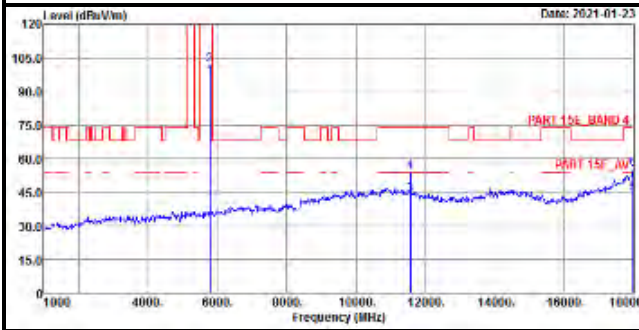
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	96.36	95.3	1.06	-----	-----	118	292	Average
5825	102.08	101.02	1.06	-----	-----	118	292	Peak
11650	43.57	45.63	-2.06	54	-10.43	165	81	Average
11650	53.4	55.46	-2.06	74	-20.6	165	81	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	94.55	93.49	1.06	-----	-----	264	275	Average
5825	101.11	100.05	1.06	-----	-----	264	275	Peak
11650	43.09	45.15	-2.06	54	-10.91	133	176	Average
11650	53.21	55.27	-2.06	74	-20.79	133	176	Peak

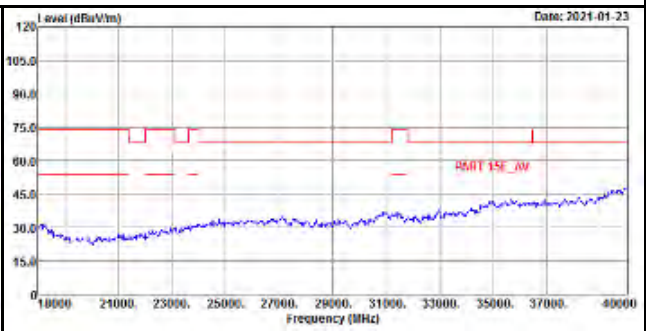
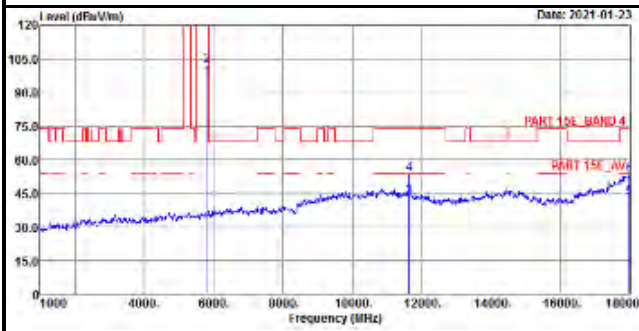
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5566.625	48.87	48.04	0.83	68.2	-19.33	118	292	Peak
5658.775	47.98	47.32	0.66	74.72	-26.74	118	292	Peak
5922.4	49.78	48.48	1.3	70.12	-20.34	118	292	Peak
5999.35	50.86	49.48	1.38	68.2	-17.34	118	292	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5593.7	48.87	48.08	0.79	68.2	-19.33	264	275	Peak
5652.6	47.59	46.9	0.69	70.13	-22.54	264	275	Peak
5923.825	48.92	47.62	1.3	69.07	-20.15	264	275	Peak
6006.475	50.27	48.87	1.4	68.2	-17.93	264	275	Peak

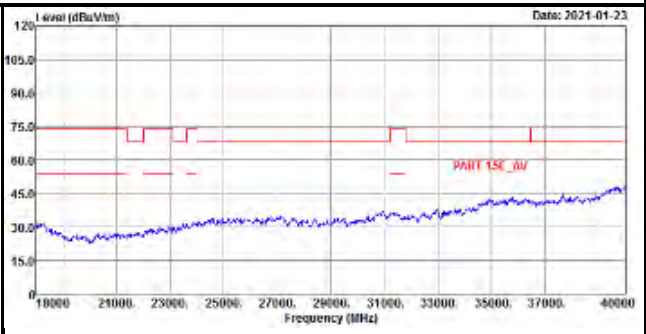
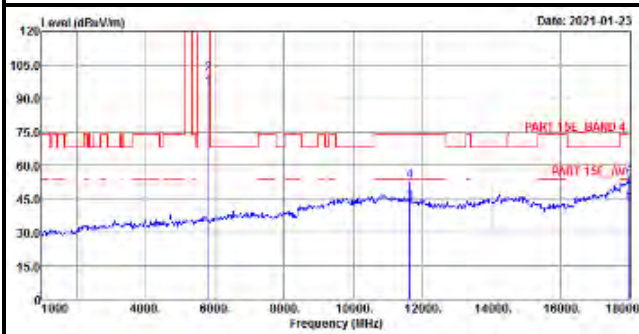
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



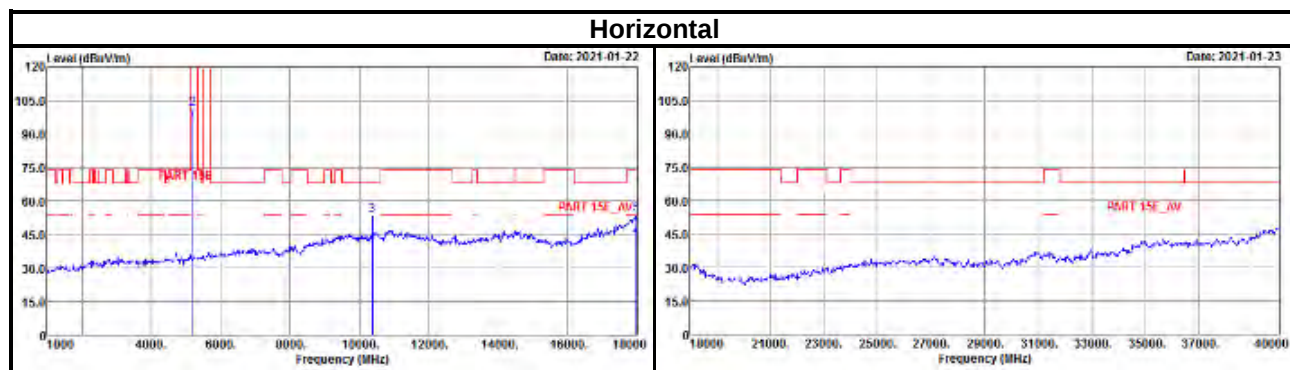
802.11ac (VHT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

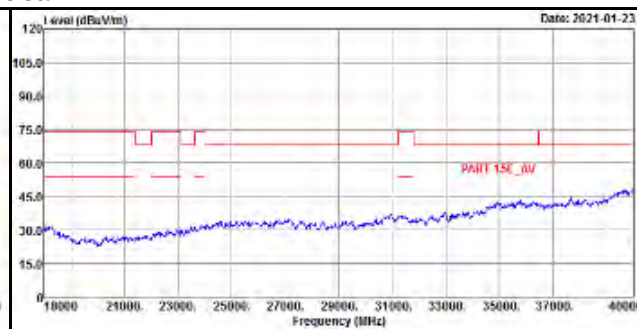
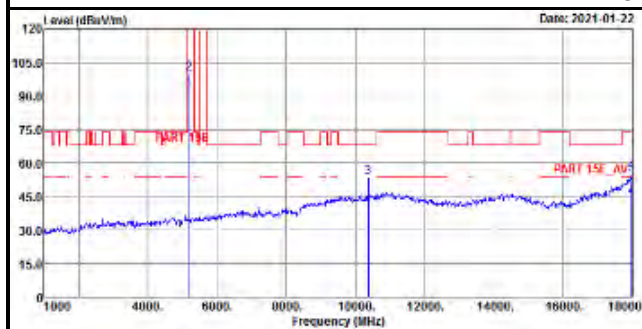
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.32	44.9	0.42	54	-8.68	163	314	Average
5150	53.33	52.91	0.42	74	-20.67	163	314	Peak
5190	94.18	93.98	0.2	-----	-----	163	314	Average
5190	101.26	101.06	0.2	-----	-----	163	314	Peak
5350	39.62	39.29	0.33	54	-14.38	163	314	Average
5350	48.62	48.29	0.33	74	-25.38	163	314	Peak
10380	53.48	55.34	-1.86	68.2	-14.72	173	144	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.42	45	0.42	54	-8.58	282	272	Average
5150	55.69	55.27	0.42	74	-18.31	282	272	Peak
5190	93.17	92.97	0.2	-----	-----	282	272	Average
5190	99.94	99.74	0.2	-----	-----	282	272	Peak
5350	39.64	39.31	0.33	54	-14.36	282	272	Average
5350	48.7	48.37	0.33	74	-25.3	282	272	Peak
10380	53.69	55.55	-1.86	68.2	-14.51	152	149	Peak

Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5190 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit



Vertical

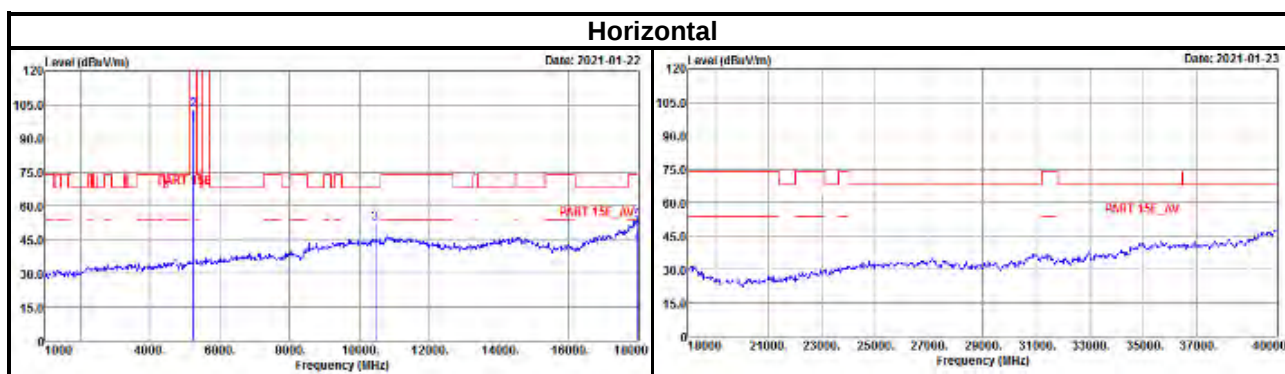


EUT Test Condition		Measurement Detail	
Channel	Channel 46	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

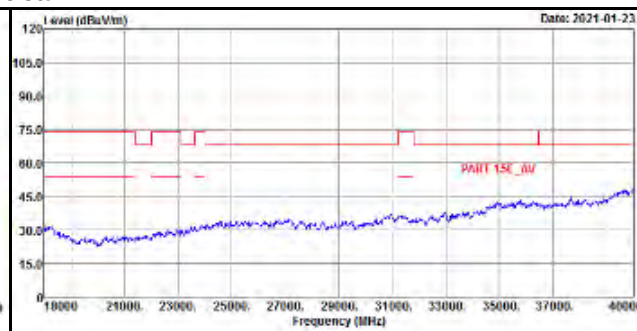
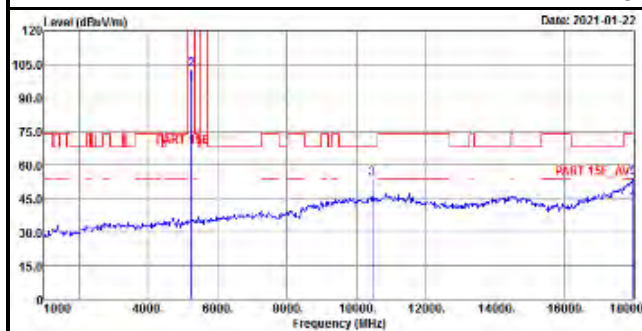
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.62	40.2	0.42	54	-13.38	165	317	Average
5150	49.72	49.3	0.42	74	-24.28	165	317	Peak
5230	96.24	96.12	0.12	-----	-----	165	317	Average
5230	102.73	102.61	0.12	-----	-----	165	317	Peak
5350	39.68	39.35	0.33	54	-14.32	165	317	Average
5350	49.38	49.05	0.33	74	-24.62	165	317	Peak
10460	52.21	53.8	-1.59	68.2	-15.99	190	122	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.57	40.15	0.42	54	-13.43	278	274	Average
5150	49.36	48.94	0.42	74	-24.64	278	274	Peak
5230	96.1	95.98	0.12	-----	-----	278	274	Average
5230	102.71	102.59	0.12	-----	-----	278	274	Peak
5350	39.86	39.53	0.33	54	-14.14	278	274	Average
5350	49.31	48.98	0.33	74	-24.69	278	274	Peak
10460	53.98	55.57	-1.59	68.2	-14.22	136	174	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

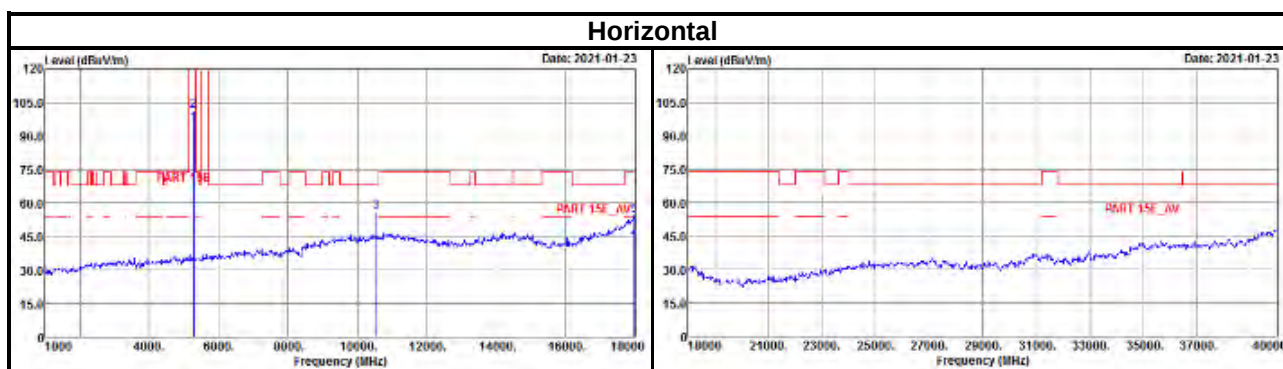


EUT Test Condition		Measurement Detail	
Channel	Channel 54	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

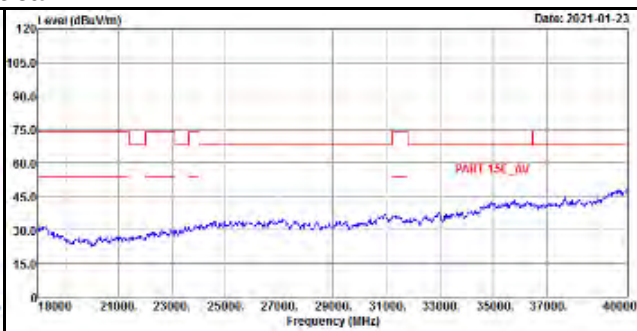
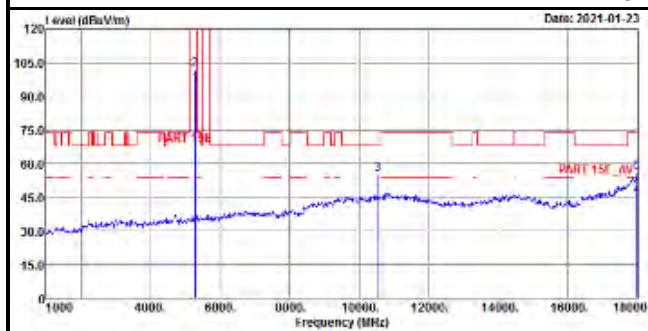
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.56	39.14	0.42	54	-14.44	169	316	Average
5150	51.11	50.69	0.42	74	-22.89	169	316	Peak
5270	95.44	95.31	0.13	-----	-----	169	316	Average
5270	101.4	101.27	0.13	-----	-----	169	316	Peak
5350	40.57	40.24	0.33	54	-13.43	169	316	Average
5350	50.1	49.77	0.33	74	-23.9	169	316	Peak
10540	56.13	57.62	-1.49	68.2	-12.07	172	180	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.71	39.29	0.42	54	-14.29	274	273	Average
5150	49.21	48.79	0.42	74	-24.79	274	273	Peak
5270	95.15	95.02	0.13	-----	-----	274	273	Average
5270	101.68	101.55	0.13	-----	-----	274	273	Peak
5350	40.02	39.69	0.33	54	-13.98	274	273	Average
5350	53.32	52.99	0.33	74	-20.68	274	273	Peak
10540	55.43	56.92	-1.49	68.2	-12.77	175	136	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

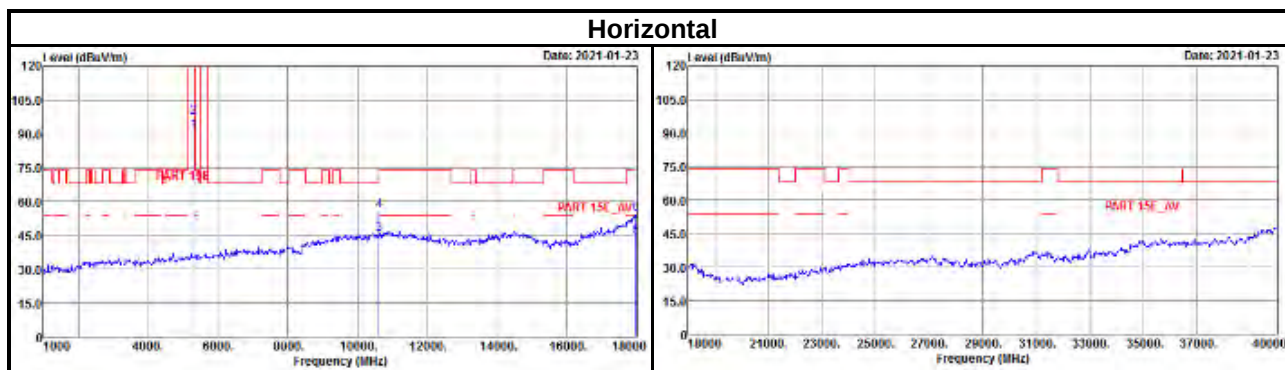


EUT Test Condition		Measurement Detail	
Channel	Channel 62	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

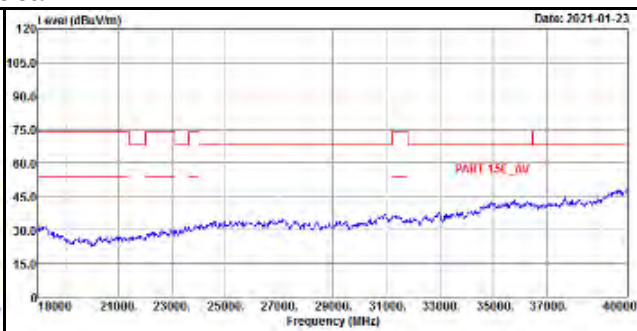
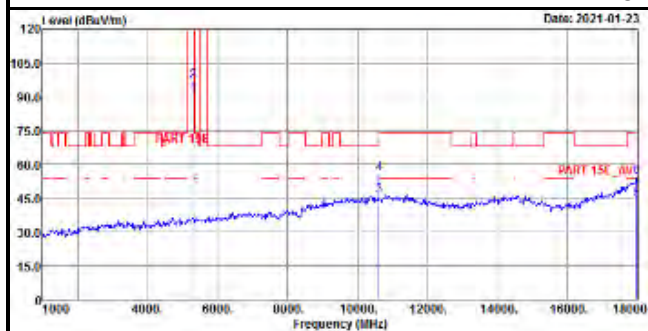
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.58	39.16	0.42	54	-14.42	179	315	Average
5150	48.38	47.96	0.42	74	-25.62	179	315	Peak
5310	91.01	90.78	0.23	-----	-----	179	315	Average
5310	97.56	97.33	0.23	-----	-----	179	315	Peak
5350	45.32	44.99	0.33	54	-8.68	179	315	Average
5350	52.59	52.26	0.33	74	-21.41	179	315	Peak
10620	45.6	47.22	-1.62	54	-8.4	146	141	Average
10620	55.61	57.23	-1.62	74	-18.39	146	141	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	39.44	39.02	0.42	54	-14.56	271	274	Average
5150	48.71	48.29	0.42	74	-25.29	271	274	Peak
5310	90.9	90.67	0.23	-----	-----	271	274	Average
5310	97.16	96.93	0.23	-----	-----	271	274	Peak
5350	45.72	45.39	0.33	54	-8.28	271	274	Average
5350	51.99	51.66	0.33	74	-22.01	271	274	Peak
10620	45.95	47.57	-1.62	54	-8.05	172	192	Average
10620	55.79	57.41	-1.62	74	-18.21	172	192	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

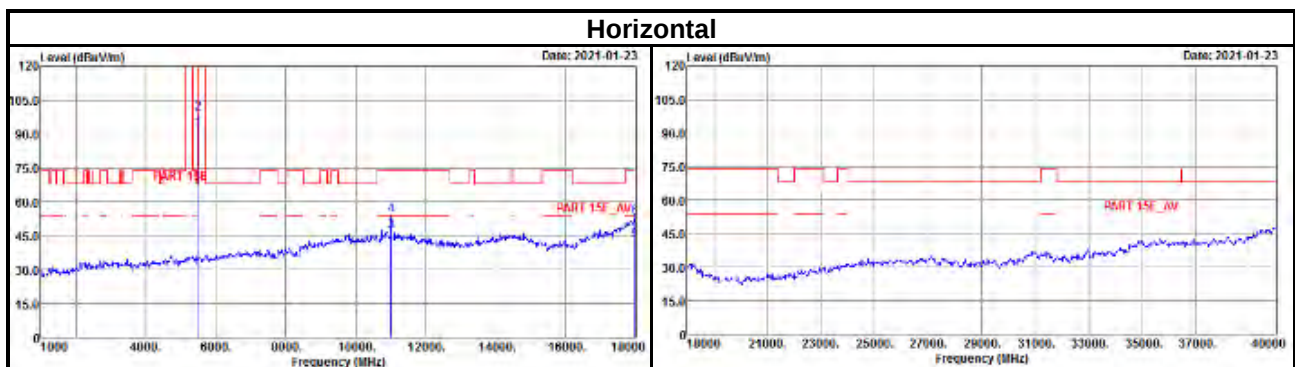


EUT Test Condition		Measurement Detail	
Channel	Channel 102	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

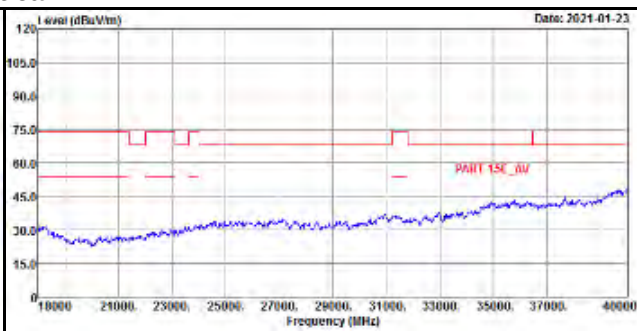
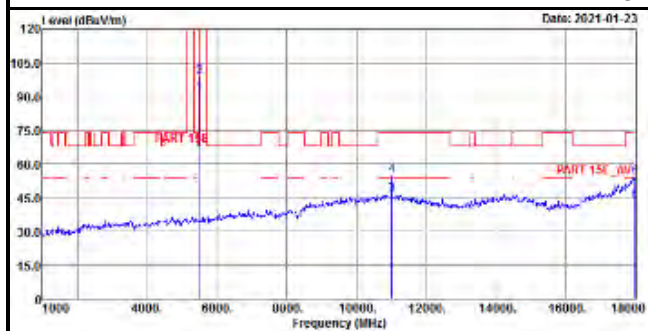
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.88	42.13	0.75	54	-11.12	163	319	Average
5460	54.91	54.16	0.75	74	-19.09	163	319	Peak
5470	55.16	54.39	0.77	68.2	-13.04	163	319	Peak
5510	92.18	91.31	0.87	-----	-----	163	319	Average
5510	99.39	98.52	0.87	-----	-----	163	319	Peak
5725	52.39	51.52	0.87	68.2	-15.81	163	319	Peak
11020	47.05	48.38	-1.33	54	-6.95	138	187	Average
11020	54.13	55.46	-1.33	74	-19.87	138	187	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.05	41.3	0.75	54	-11.95	258	272	Average
5460	51.32	50.57	0.75	74	-22.68	258	272	Peak
5470	52.84	52.07	0.77	68.2	-15.36	258	272	Peak
5510	91.56	90.69	0.87	-----	-----	258	272	Average
5510	98.56	97.69	0.87	-----	-----	258	272	Peak
5725	48.21	47.34	0.87	68.2	-19.99	258	272	Peak
11020	46.34	47.67	-1.33	54	-7.66	143	146	Average
11020	55.12	56.45	-1.33	74	-18.88	143	146	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

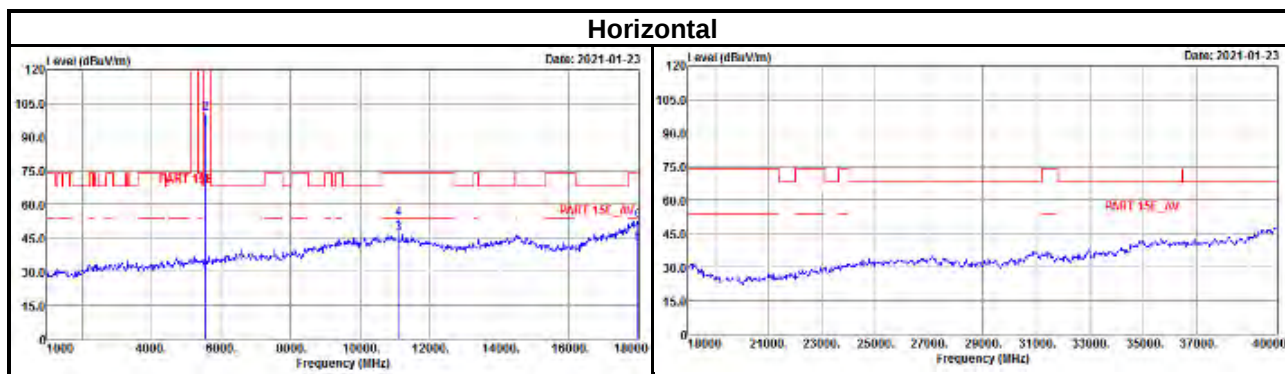


EUT Test Condition		Measurement Detail	
Channel	Channel 110	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

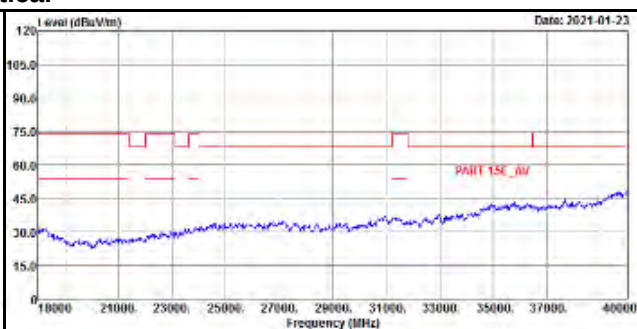
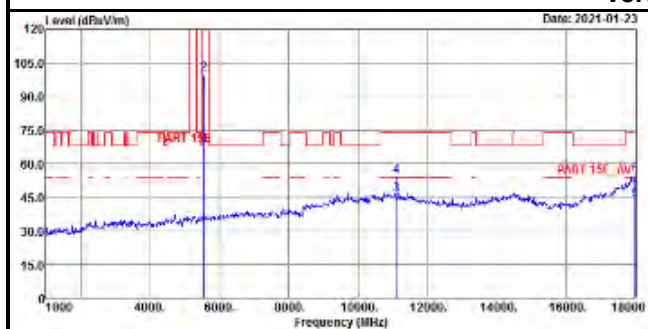
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.21	39.46	0.75	54	-13.79	173	317	Average
5460	48.43	47.68	0.75	74	-25.57	173	317	Peak
5470	47.72	46.95	0.77	68.2	-20.48	173	317	Peak
5550	93.85	92.98	0.87	-----	-----	173	317	Average
5550	100.51	99.64	0.87	-----	-----	173	317	Peak
5725	49.12	48.25	0.87	68.2	-19.08	173	317	Peak
11100	46.95	48.34	-1.39	54	-7.05	142	197	Average
11100	53.51	54.9	-1.39	74	-20.49	142	197	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.19	39.44	0.75	54	-13.81	251	273	Average
5460	48.92	48.17	0.75	74	-25.08	251	273	Peak
5470	48.43	47.66	0.77	68.2	-19.77	251	273	Peak
5550	93.26	92.39	0.87	-----	-----	251	273	Average
5550	99.98	99.11	0.87	-----	-----	251	273	Peak
5725	48.03	47.16	0.87	68.2	-20.17	251	273	Peak
11100	46.18	47.57	-1.39	54	-7.82	139	136	Average
11100	54.62	56.01	-1.39	74	-19.38	139	136	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

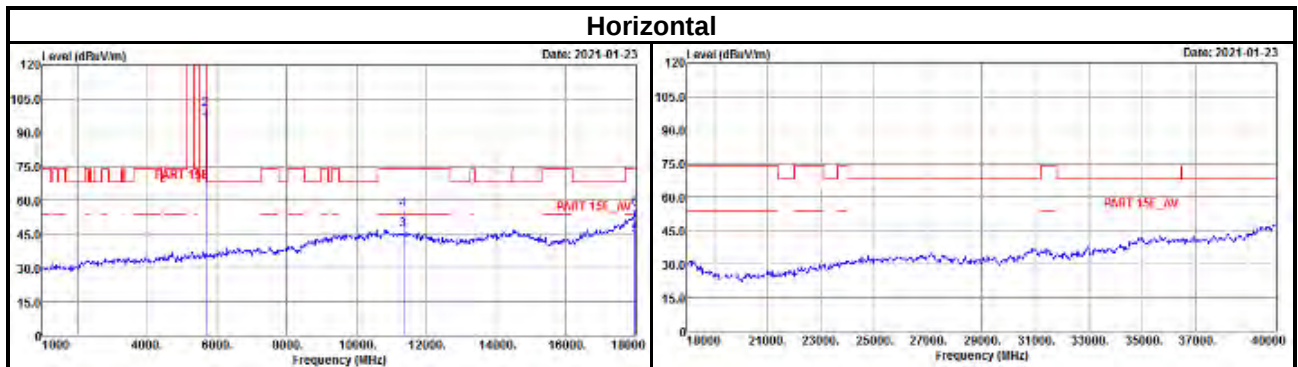


EUT Test Condition		Measurement Detail	
Channel	Channel 134	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

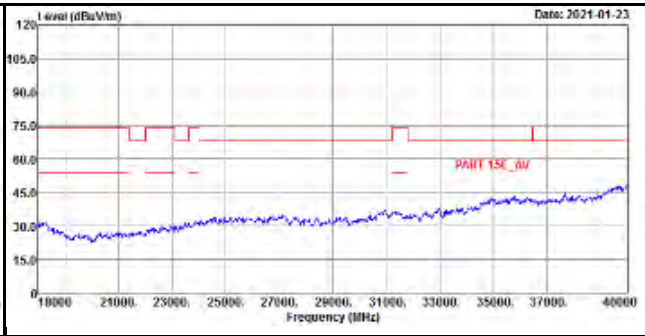
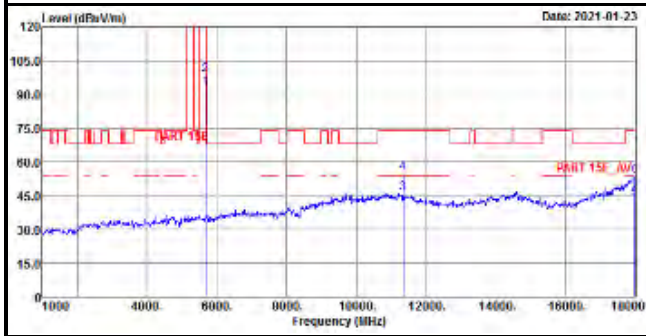
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.07	38.32	0.75	54	-14.93	151	318	Average
5460	49.27	48.52	0.75	74	-24.73	151	318	Peak
5470	47.96	47.19	0.77	68.2	-20.24	151	318	Peak
5670	93.95	93.22	0.73	-----	-----	151	318	Average
5670	100.62	99.89	0.73	-----	-----	151	318	Peak
5725	53.38	52.51	0.87	68.2	-14.82	151	318	Peak
11340	46.94	48.55	-1.61	54	-7.06	140	188	Average
11340	55.96	57.57	-1.61	74	-18.04	140	188	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	38.94	38.19	0.75	54	-15.06	253	274	Average
5460	49.91	49.16	0.75	74	-24.09	253	274	Peak
5470	48.67	47.9	0.77	68.2	-19.53	253	274	Peak
5670	92.34	91.61	0.73	-----	-----	253	274	Average
5670	98.73	98	0.73	-----	-----	253	274	Peak
5725	49.94	49.07	0.87	68.2	-18.26	253	274	Peak
11340	46.16	47.77	-1.61	54	-7.84	142	160	Average
11340	54.91	56.52	-1.61	74	-19.09	142	160	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

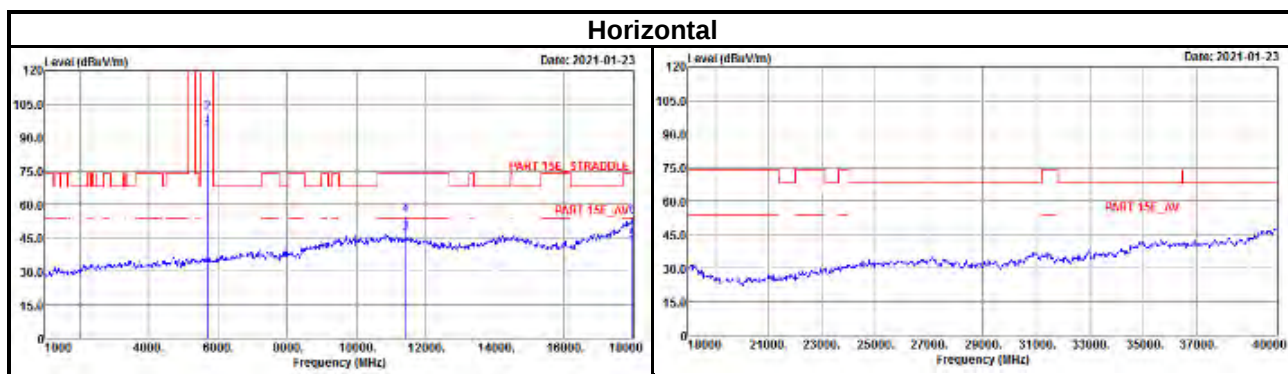


EUT Test Condition		Measurement Detail	
Channel	Channel 142	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

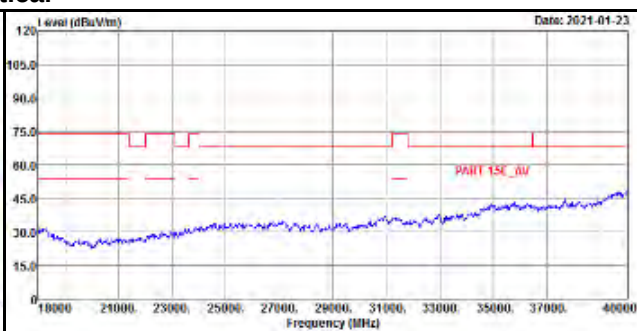
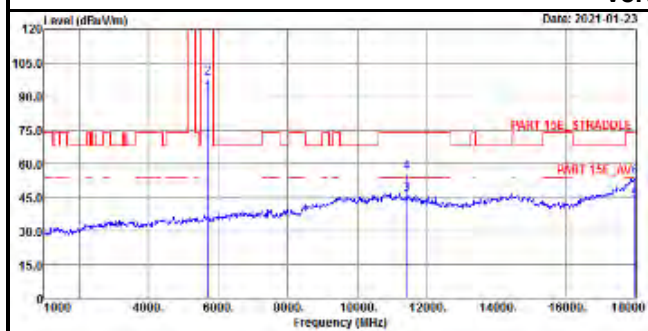
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.12	38.37	0.75	54	-14.88	154	318	Average
5460	48.35	47.6	0.75	74	-25.65	154	318	Peak
5470	47.95	47.18	0.77	68.2	-20.25	154	318	Peak
5710	93.21	92.37	0.84	-----	-----	154	318	Average
5710	100.91	100.07	0.84	-----	-----	154	318	Peak
5908	49.16	47.87	1.29	68.2	-19.04	154	318	Peak
11420	47.18	48.53	-1.35	54	-6.82	149	199	Average
11420	55.11	56.46	-1.35	74	-18.89	149	199	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	38.9	38.15	0.75	54	-15.1	260	275	Average
5460	48.26	47.51	0.75	74	-25.74	260	275	Peak
5470	48.36	47.59	0.77	68.2	-19.84	260	275	Peak
5710	91.3	90.46	0.84	-----	-----	260	275	Average
5710	98.15	97.31	0.84	-----	-----	260	275	Peak
5923	49.68	48.38	1.3	68.2	-18.52	260	275	Peak
11420	46.5	47.85	-1.35	54	-7.5	145	144	Average
11420	56.32	57.67	-1.35	74	-17.68	145	144	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5710 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 151	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	89.68	88.77	0.91	-----	-----	118	293	Average
5755	96.12	95.21	0.91	-----	-----	118	293	Peak
11510	45.85	47.2	-1.35	54	-8.15	160	150	Average
11510	56.23	57.58	-1.35	74	-17.77	160	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	88.35	87.44	0.91	-----	-----	260	275	Average
5755	95.27	94.36	0.91	-----	-----	260	275	Peak
11510	44.85	46.2	-1.35	54	-9.15	170	185	Average
11510	55.07	56.42	-1.35	74	-18.93	170	185	Peak

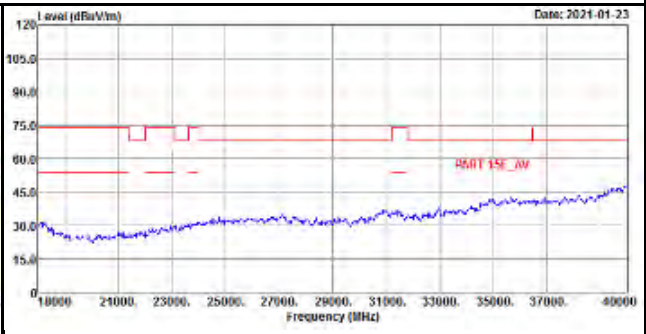
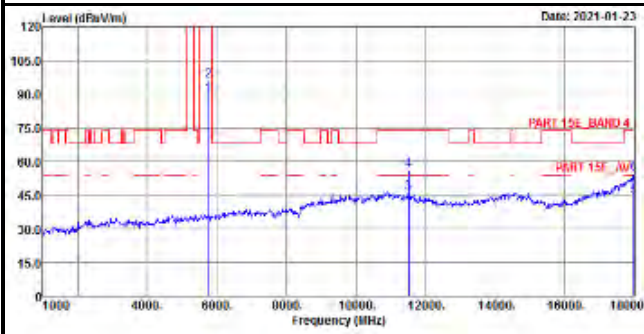
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5564.725	49.18	48.35	0.83	68.2	-19.02	118	293	Peak
5656.875	48.34	47.69	0.65	73.31	-24.97	118	293	Peak
5916.7	49.82	48.52	1.3	74.32	-24.5	118	293	Peak
6017.4	49.57	48.13	1.44	68.2	-18.63	118	293	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5636.925	49.17	48.5	0.67	68.2	-19.03	260	275	Peak
5656.875	47.91	47.26	0.65	73.31	-25.4	260	275	Peak
5923.825	49.41	48.11	1.3	69.07	-19.66	260	275	Peak
5932.375	50.12	48.82	1.3	68.2	-18.08	260	275	Peak

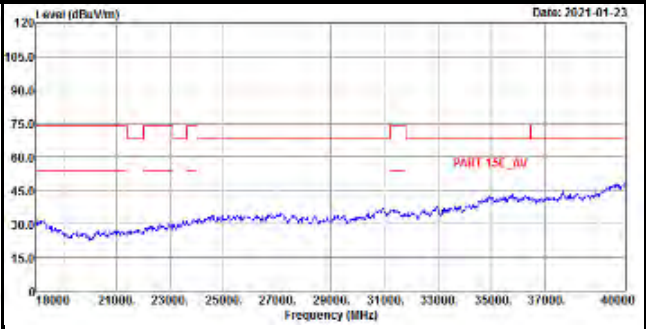
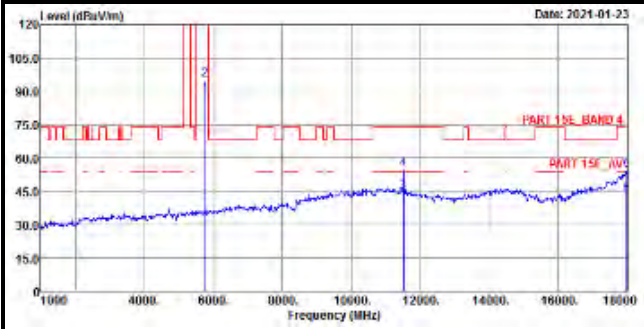
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5755 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 159	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	90.65	89.7	0.95	-----	-----	121	292	Average
5795	96.88	95.93	0.95	-----	-----	121	292	Peak
11590	44.39	46.19	-1.8	54	-9.61	182	200	Average
11590	53.2	55	-1.8	74	-20.8	182	200	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	90.22	89.27	0.95	-----	-----	264	275	Average
5795	96.35	95.4	0.95	-----	-----	264	275	Peak
11590	44.32	46.12	-1.8	54	-9.68	159	150	Average
11590	53.59	55.39	-1.8	74	-20.41	159	150	Peak

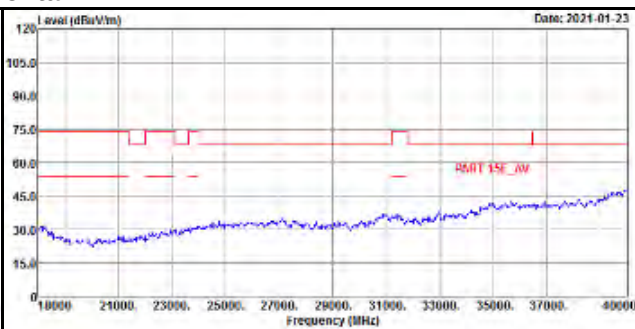
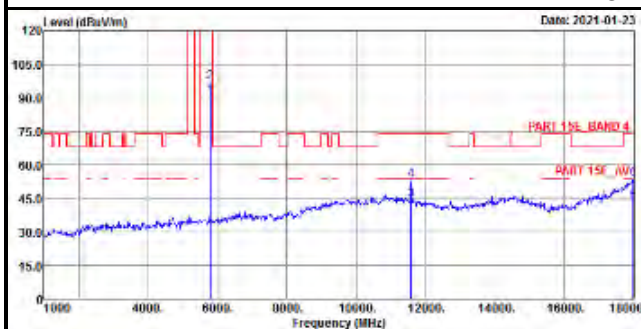
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5562.825	48.35	47.52	0.83	68.2	-19.85	121	292	Peak
5638.35	47.51	46.84	0.67	68.2	-20.69	121	292	Peak
5929.05	48.54	47.24	1.3	68.2	-19.66	121	292	Peak
6005.525	49.64	48.25	1.39	68.2	-18.56	121	292	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5607.95	49.72	48.99	0.73	68.2	-18.48	264	275	Peak
5657.35	49.43	48.77	0.66	73.66	-24.23	264	275	Peak
5922.875	48.9	47.6	1.3	69.77	-20.87	264	275	Peak
5981.775	50.03	48.68	1.35	68.2	-18.17	264	275	Peak

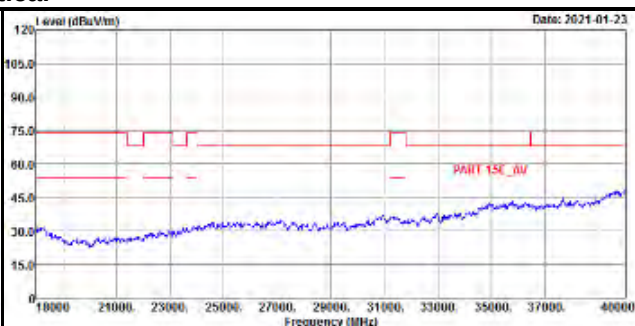
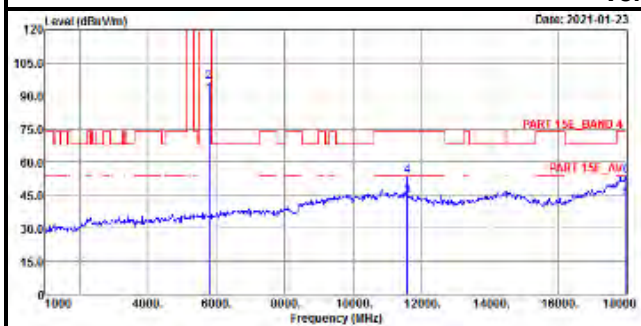
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5795 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



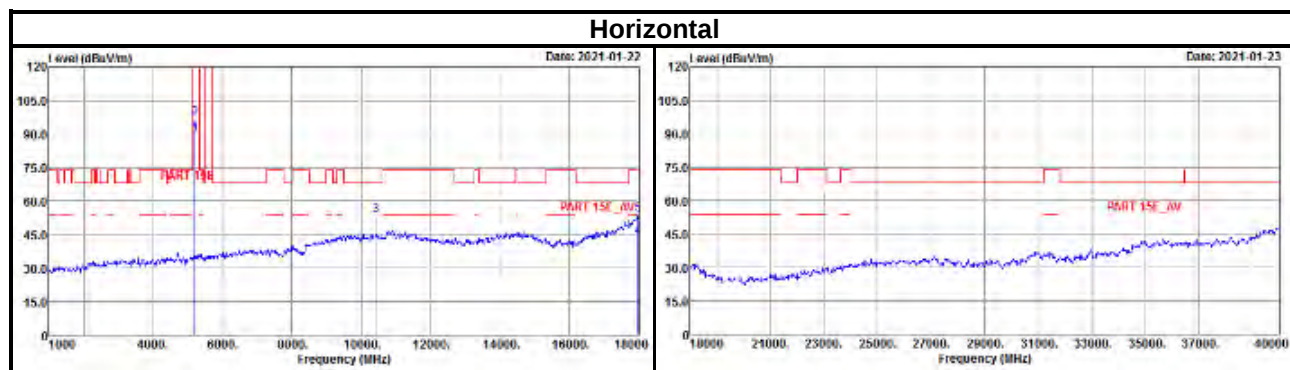
802.11ac (VHT80)

EUT Test Condition		Measurement Detail	
Channel	Channel 42	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

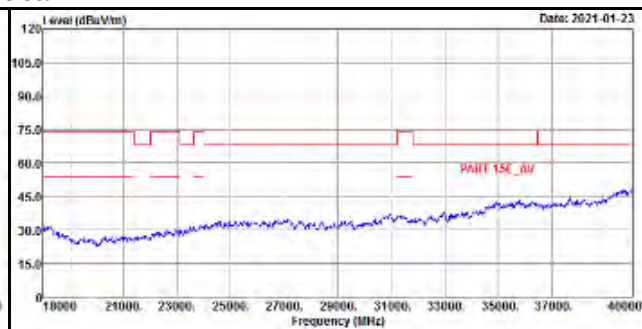
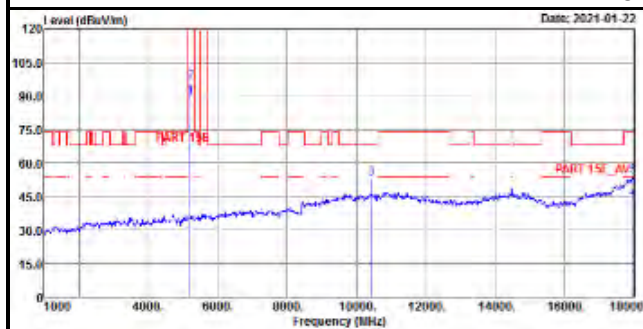
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.31	44.89	0.42	54	-8.69	171	316	Average
5150	51.51	51.09	0.42	74	-22.49	171	316	Peak
5210	89.87	89.75	0.12	-----	-----	171	316	Average
5210	96.9	96.78	0.12	-----	-----	171	316	Peak
5350	40.61	40.28	0.33	54	-13.39	171	316	Average
5350	47.96	47.63	0.33	74	-26.04	171	316	Peak
10420	53.48	55.22	-1.74	68.2	-14.72	196	173	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.02	44.6	0.42	54	-8.98	286	274	Average
5150	51.26	50.84	0.42	74	-22.74	286	274	Peak
5210	89.53	89.41	0.12	-----	-----	286	274	Average
5210	96.03	95.91	0.12	-----	-----	286	274	Peak
5350	40.13	39.8	0.33	54	-13.87	286	274	Average
5350	46.91	46.58	0.33	74	-27.09	286	274	Peak
10420	53.28	55.02	-1.74	68.2	-14.92	154	171	Peak

Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5210 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit



Vertical

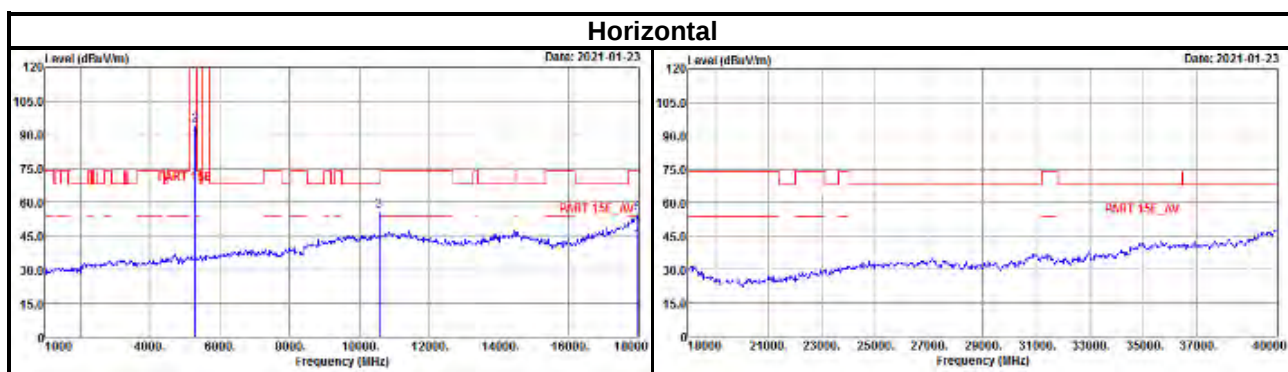


EUT Test Condition		Measurement Detail	
Channel	Channel 58	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

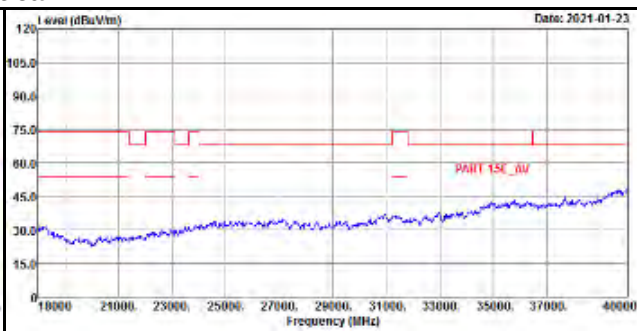
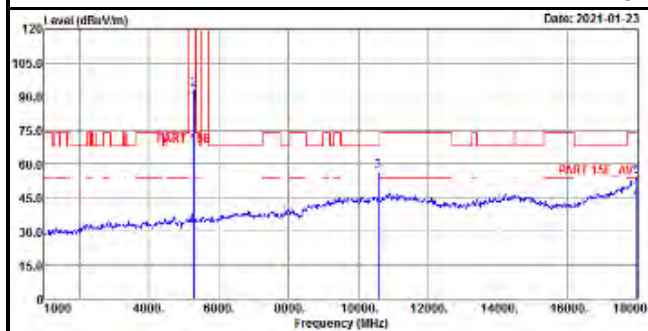
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.41	39.99	0.42	54	-13.59	275	274	Average
5150	48.92	48.5	0.42	74	-25.08	275	274	Peak
5290	87.4	87.23	0.17	-----	-----	275	274	Average
5290	94.3	94.13	0.17	-----	-----	275	274	Peak
5350	44.54	44.21	0.33	54	-9.46	275	274	Average
5350	55.84	55.51	0.33	74	-18.16	275	274	Peak
10580	56.32	57.89	-1.57	68.2	-11.88	161	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	40.68	40.26	0.42	54	-13.32	167	315	Average
5150	52.5	52.08	0.42	74	-21.5	167	315	Peak
5290	87.19	87.02	0.17	-----	-----	167	315	Average
5290	93.51	93.34	0.17	-----	-----	167	315	Peak
5350	44.88	44.55	0.33	54	-9.12	167	315	Average
5350	53.35	53.02	0.33	74	-20.65	167	315	Peak
10580	56.65	58.22	-1.57	68.2	-11.55	176	189	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5290 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

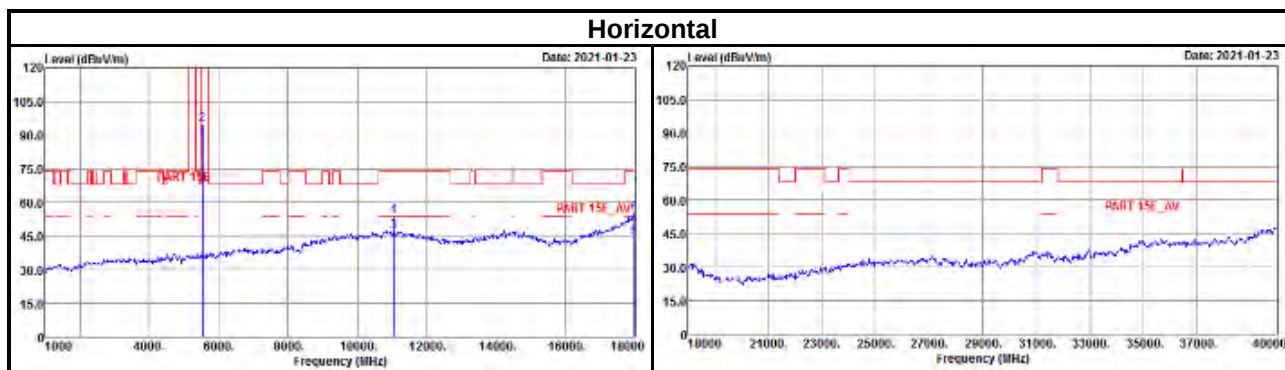


EUT Test Condition		Measurement Detail	
Channel	Channel 106	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

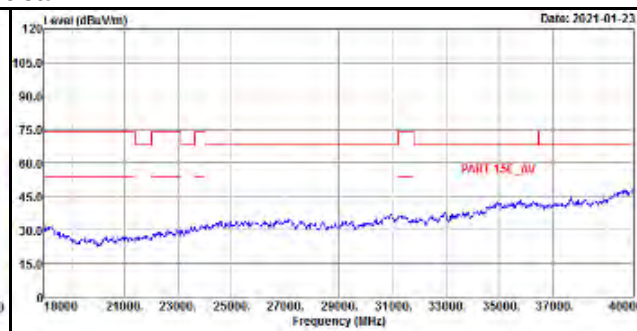
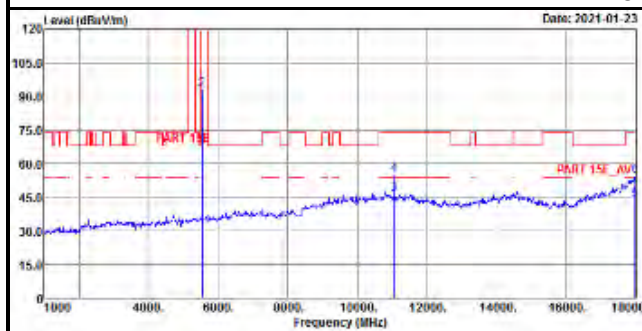
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	45.13	44.38	0.75	54	-8.87	173	318	Average
5460	55.27	54.52	0.75	74	-18.73	173	318	Peak
5470	54.2	53.43	0.77	68.2	-14	173	318	Peak
5530	87.87	87.01	0.86	-----	-----	173	318	Average
5530	94.95	94.09	0.86	-----	-----	173	318	Peak
5725	48.92	48.05	0.87	68.2	-19.28	173	318	Peak
11060	47.11	48.46	-1.35	54	-6.89	157	187	Average
11060	53.89	55.24	-1.35	74	-20.11	157	187	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	43.39	42.64	0.75	54	-10.61	252	269	Average
5460	51.4	50.65	0.75	74	-22.6	252	269	Peak
5470	51.48	50.71	0.77	68.2	-16.72	252	269	Peak
5530	86.82	85.96	0.86	-----	-----	252	269	Average
5530	93.14	92.28	0.86	-----	-----	252	269	Peak
5725	48.73	47.86	0.87	68.2	-19.47	252	269	Peak
11060	46.39	47.74	-1.35	54	-7.61	139	170	Average
11060	54.77	56.12	-1.35	74	-19.23	139	170	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5530 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical

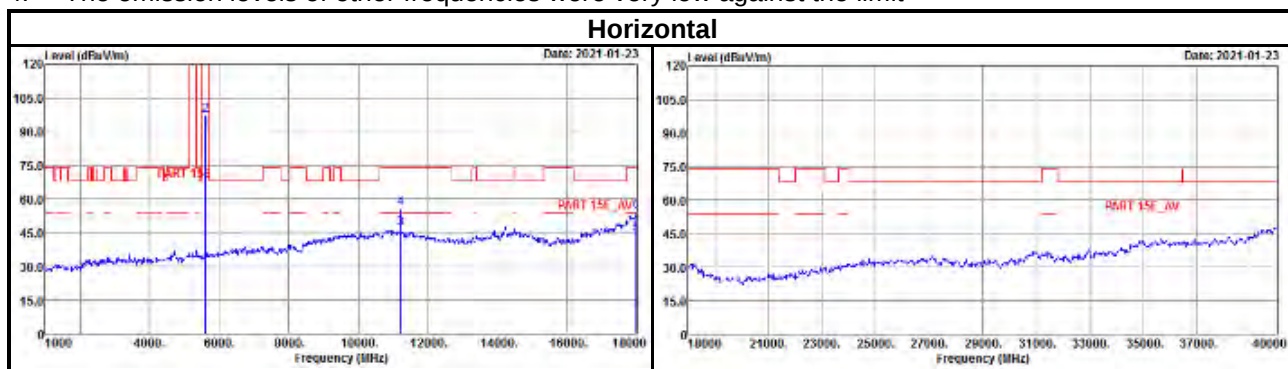


EUT Test Condition		Measurement Detail	
Channel	Channel 122	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

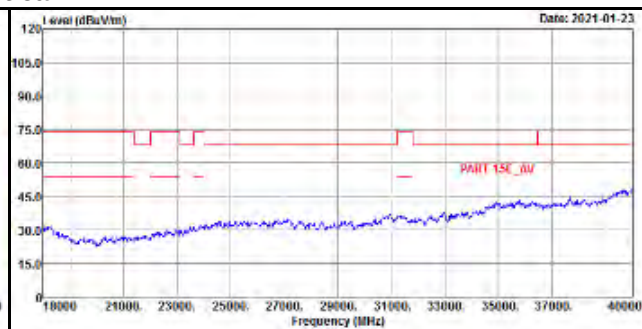
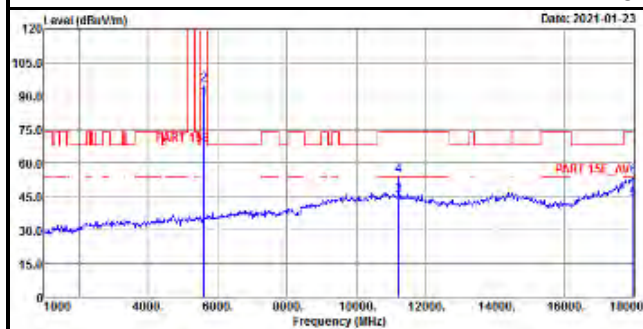
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.88	40.13	0.75	54	-13.12	152	317	Average
5460	46.31	45.56	0.75	74	-27.69	152	317	Peak
5470	50.05	49.28	0.77	68.2	-18.15	152	317	Peak
5610	90.39	89.66	0.73	-----	-----	152	317	Average
5610	97.48	96.75	0.73	-----	-----	152	317	Peak
5725	51.04	50.17	0.87	68.2	-17.16	152	317	Peak
11220	46.92	48.58	-1.66	54	-7.08	151	201	Average
11220	55.91	57.57	-1.66	74	-18.09	151	201	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	40.94	40.19	0.75	54	-13.06	256	268	Average
5460	50.73	49.98	0.75	74	-23.27	256	268	Peak
5470	50.48	49.71	0.77	68.2	-17.72	256	268	Peak
5610	89.18	88.45	0.73	-----	-----	256	268	Average
5610	95.1	94.37	0.73	-----	-----	256	268	Peak
5725	50.67	49.8	0.87	68.2	-17.53	256	268	Peak
11220	45.79	47.45	-1.66	54	-8.21	147	154	Average
11220	54.42	56.08	-1.66	74	-19.58	147	154	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5610 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



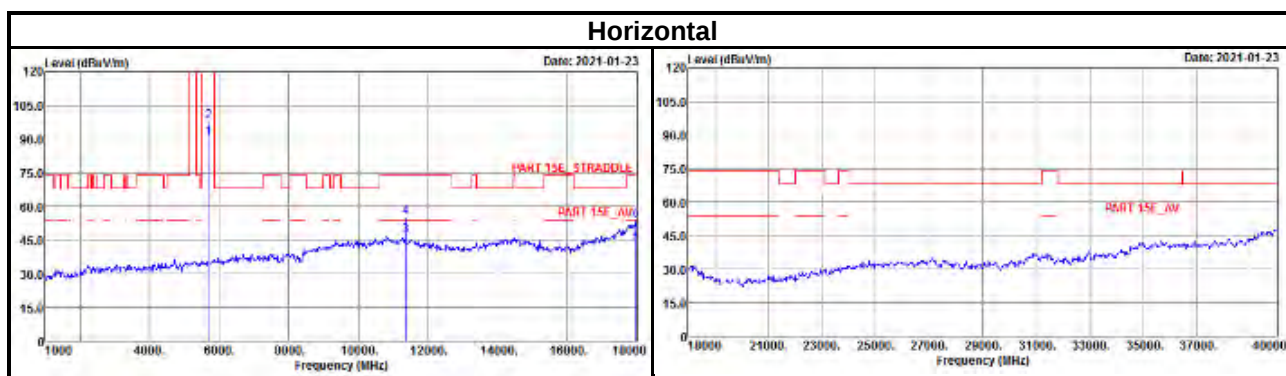
EUT Test Condition		Measurement Detail	
Channel	Channel 138	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.62	38.87	0.75	54	-14.38	157	319	Average
5460	49.79	49.04	0.75	74	-24.21	157	319	Peak
5470	48.91	48.14	0.77	68.2	-19.29	157	319	Peak
5690	90.65	89.86	0.79	-----	-----	157	319	Average
5690	97.77	96.98	0.79	-----	-----	157	319	Peak
5885.2	49.98	48.72	1.26	68.2	-18.22	157	319	Peak
11380	47.15	48.57	-1.42	54	-6.85	147	205	Average
11380	55.28	56.7	-1.42	74	-18.72	147	205	Peak

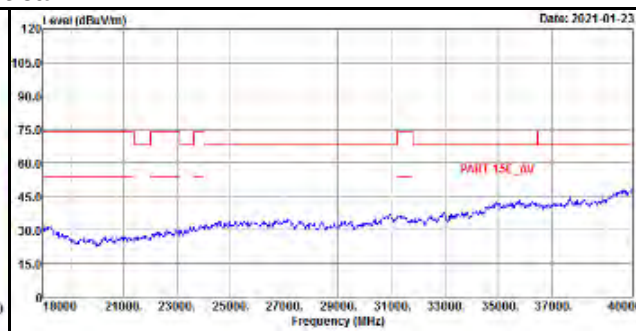
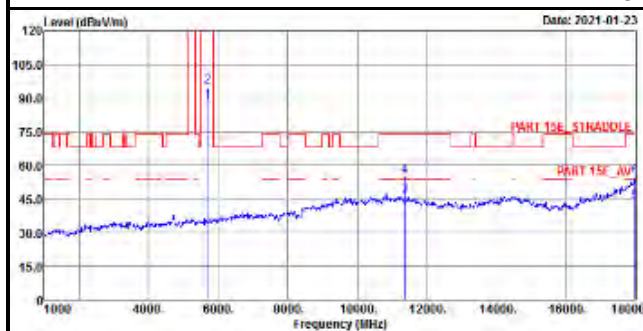
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	39.65	38.9	0.75	54	-14.35	256	274	Average
5460	49.43	48.68	0.75	74	-24.57	256	274	Peak
5470	48.44	47.67	0.77	68.2	-19.76	256	274	Peak
5690	88.68	87.89	0.79	-----	-----	256	274	Average
5690	95.37	94.58	0.79	-----	-----	256	274	Peak
5905	50.02	48.73	1.29	68.2	-18.18	256	274	Peak
11380	46.39	47.81	-1.42	54	-7.61	141	143	Average
11380	55.21	56.63	-1.42	74	-18.79	141	143	Peak

Remarks:

1. Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
2. 5690 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit



Vertical



EUT Test Condition		Measurement Detail	
Channel	Channel 155	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	85.02	84.08	0.94	-----	-----	125	291	Average
5775	91.83	90.89	0.94	-----	-----	125	291	Peak
11550	44.61	46.21	-1.6	54	-9.39	168	124	Average
11550	54.62	56.22	-1.6	74	-19.38	168	124	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	84.87	83.93	0.94	-----	-----	259	275	Average
5775	91.44	90.5	0.94	-----	-----	259	275	Peak
11550	44.78	46.38	-1.6	54	-9.22	132	145	Average
11550	55.01	56.61	-1.6	74	-18.99	132	145	Peak

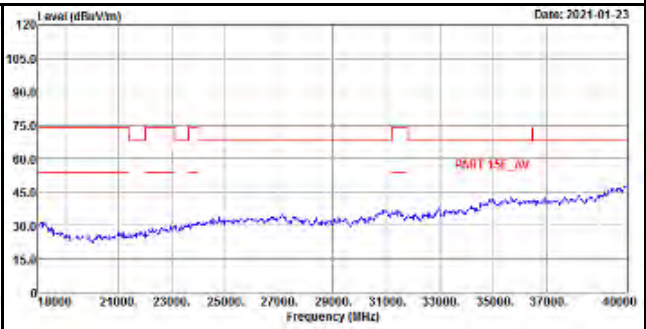
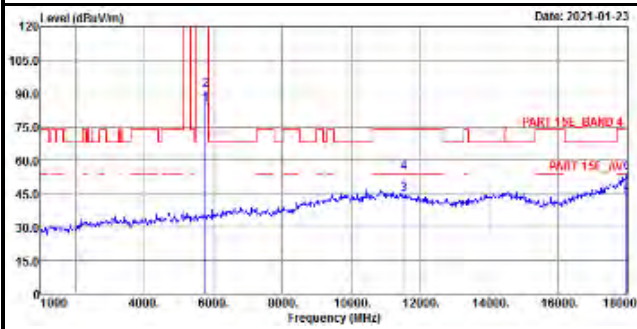
<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5643.575	51.8	51.12	0.68	68.2	-16.4	125	291	Peak
5657.825	50.57	49.91	0.66	74.01	-23.44	125	291	Peak
5916.7	48.97	47.67	1.3	74.32	-25.35	125	291	Peak
5995.075	49.27	47.89	1.38	68.2	-18.93	125	291	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5647.85	50.32	49.65	0.67	68.2	-17.88	259	275	Peak
5654.5	51.44	50.8	0.64	71.54	-20.1	259	275	Peak
5920.025	49.88	48.58	1.3	71.87	-21.99	259	275	Peak
6005.525	50.66	49.27	1.39	68.2	-17.54	259	275	Peak

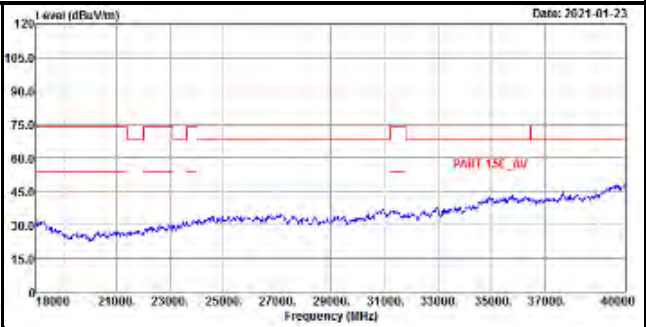
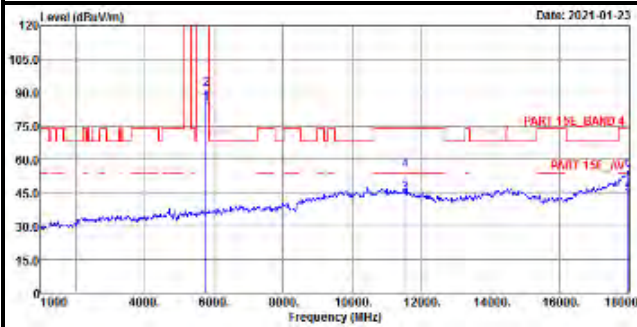
Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- 5775 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Horizontal



Vertical



9 kHz ~ 30 MHz Data:

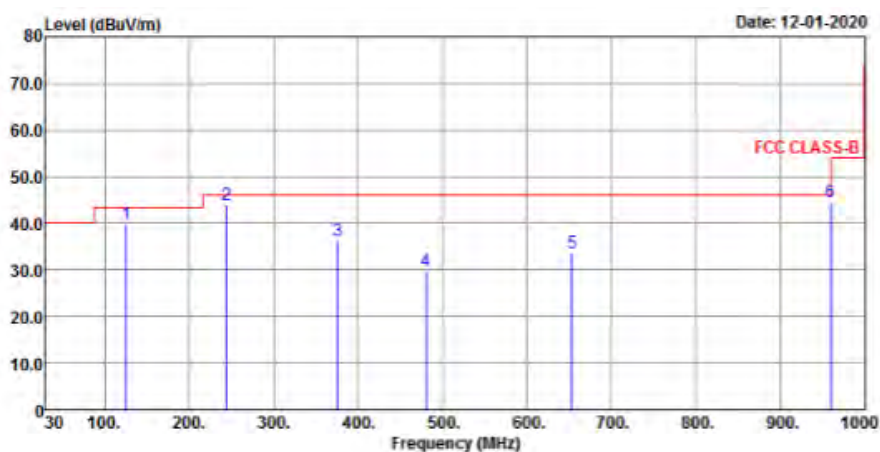
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

30 MHz ~ 1 GHz Worst-Case Data:

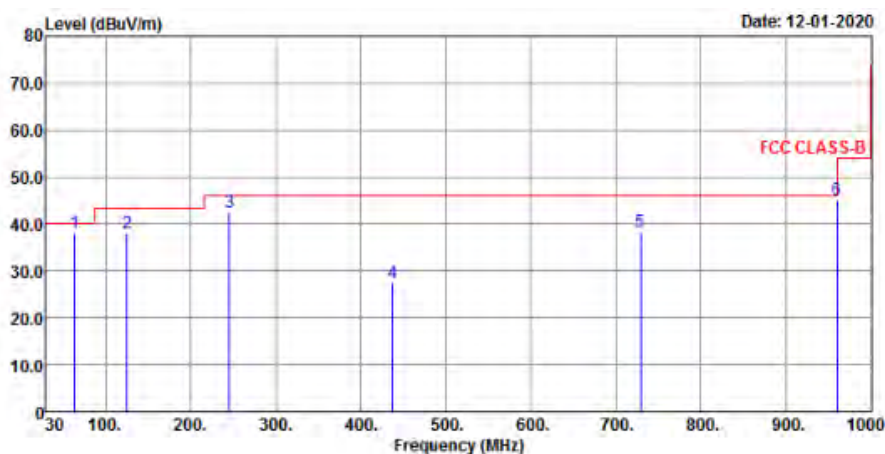
802.11ac (VHT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 140	Frequency Range	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Cyril Chen

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
125.06	39.78	53.13	-13.35	43.5	-3.72	147	168	QP
244.37	44.09	57.27	-13.18	46	-1.91	194	348	QP
375.32	36.21	45.05	-8.84	46	-9.79	164	331	QP
480.08	29.73	35.54	-5.81	46	-16.27	155	127	QP
653.71	33.56	35.11	-1.55	46	-12.44	149	163	QP
960.23	44.44	40.73	3.71	54	-9.56	156	168	QP
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
63.95	38.14	50.86	-12.72	40	-1.86	150	294	QP
125.06	38.07	51.42	-13.35	43.5	-5.43	147	288	QP
245.34	42.41	55.56	-13.15	46	-3.59	133	185	QP
437.4	27.42	34.19	-6.77	46	-18.58	127	165	QP
729.37	38.39	38.1	0.29	46	-7.61	148	168	QP
960.23	45.2	41.49	3.71	54	-8.8	133	158	QP

Remarks:

- Emission Level = Read Level + Factor
Margin value = Emission level – Limit value
- The emission levels of other frequencies were very low against the limit

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	ESCI	100613	Dec. 11, 2019	Dec. 10, 2020
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 04, 2020	Sep. 03, 2021
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 20, 2020	Feb. 19, 2021
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 28, 2020	Aug. 27, 2021
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

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

4.2.3 Test Procedures

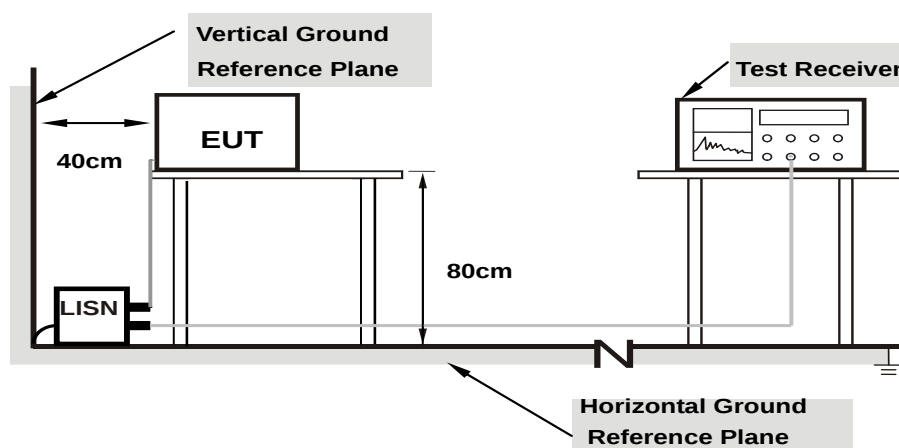
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

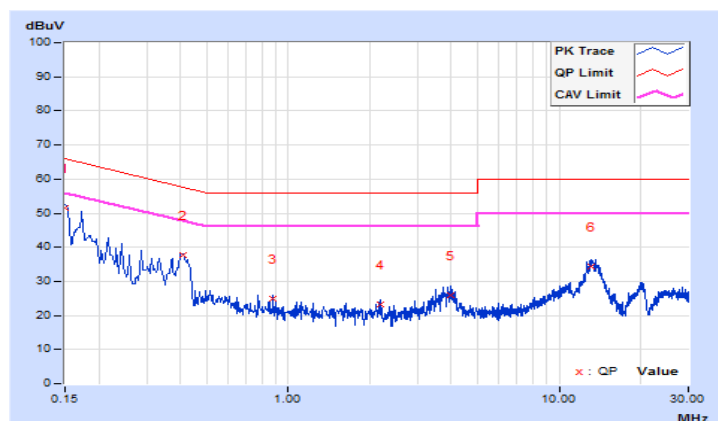
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	21°C, 65%RH
Tested by	Cyril Chen	Test Date	2020/12/1

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.65	41.73	35.85	51.38	45.50	66.00	56.00	-14.62	-10.50
2	0.40806	9.66	28.20	20.38	37.86	30.04	57.69	47.69	-19.83	-17.65
3	0.88117	9.67	15.35	9.81	25.02	19.48	56.00	46.00	-30.98	-26.52
4	2.17929	9.70	13.54	7.48	23.24	17.18	56.00	46.00	-32.76	-28.82
5	3.99353	9.74	16.02	8.02	25.76	17.76	56.00	46.00	-30.24	-28.24
6	13.16639	9.83	24.36	17.74	34.19	27.57	60.00	50.00	-25.81	-22.43

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

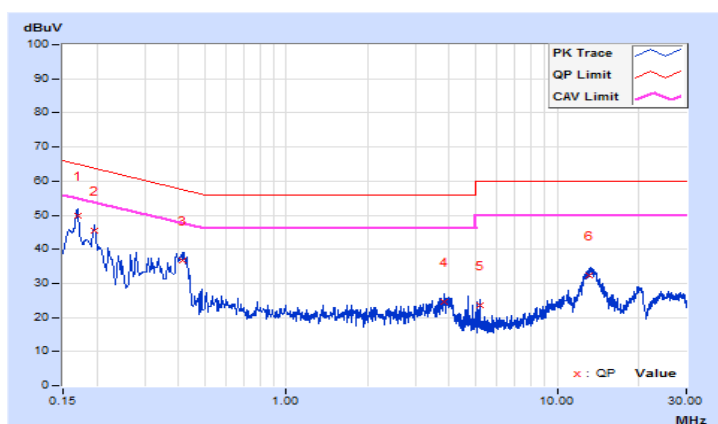


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	21°C, 65%RH
Tested by	Cyril Chen	Test Date	2020/12/1

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	0.16955	9.68	40.19	33.92	49.87	43.60	64.98	54.98	-15.11	-11.38
2	0.19665	9.68	35.75	28.94	45.43	38.62	63.75	53.75	-18.32	-15.13
3	0.41560	9.68	27.01	19.21	36.69	28.89	57.54	47.54	-20.85	-18.65
4	3.84886	9.77	14.94	7.53	24.71	17.30	56.00	46.00	-31.29	-28.70
5	5.17044	9.78	13.65	7.75	23.43	17.53	60.00	50.00	-36.57	-32.47
6	13.18203	9.89	22.60	15.25	32.49	25.14	60.00	50.00	-27.51	-24.86

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

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

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

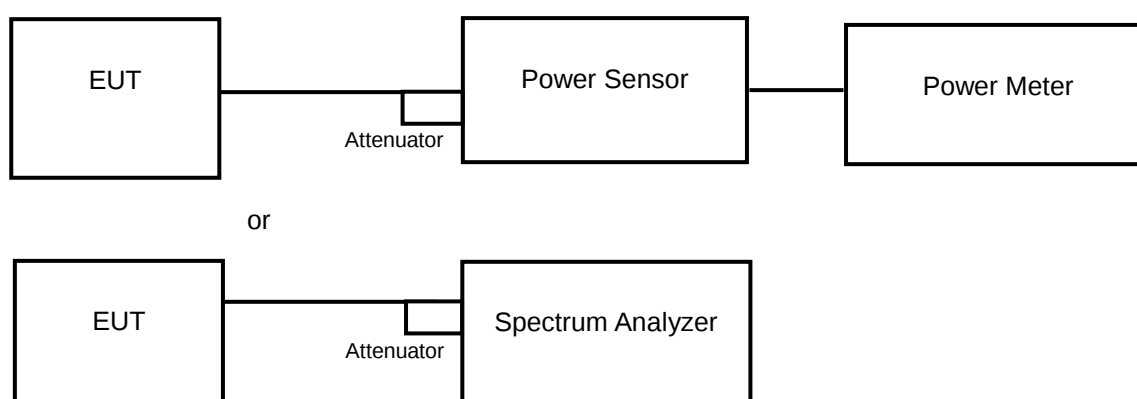
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

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

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

4.3.2 Test Setup

<Power Output Measurement>



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

<802.11a, 802.11n (HT20), 802.11n (HT40)>

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

<802.11ac (VHT80)>

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

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 (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	11.84	12.83	34.435	15.37	24	Pass
40	5200	12.18	13.35	38.107	15.81	24	Pass
48	5240	12.31	13.28	38.282	15.83	24	Pass
52	5260	15.00	16.03	71.779	18.56	24	Pass
60	5300	15.43	15.48	70.232	18.47	24	Pass
64	5320	13.48	13.57	45.082	16.54	24	Pass
100	5500	14.38	13.65	50.590	17.04	24	Pass
116	5580	14.85	15.51	66.069	18.20	24	Pass
140	5700	13.12	13.86	44.834	16.52	24	Pass
144	5720	13.45	14.50	50.315	17.02	24	Pass
149	5745	15.77	14.05	63.167	18.00	30	Pass
157	5785	14.50	15.90	67.143	18.27	30	Pass
165	5825	13.64	16.06	63.533	18.03	30	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	12.89	13.37	41.210	16.15	24	Pass
40	5200	12.56	13.27	39.264	15.94	24	Pass
48	5240	12.70	13.21	39.537	15.97	24	Pass
52	5260	14.52	15.38	62.806	17.98	24	Pass
60	5300	14.25	14.61	55.463	17.44	24	Pass
64	5320	14.11	14.03	51.050	17.08	24	Pass
100	5500	13.60	13.37	44.636	16.50	24	Pass
116	5580	14.01	14.07	50.699	17.05	24	Pass
140	5700	13.12	12.85	39.787	16.00	24	Pass
144	5720	12.50	14.29	44.636	16.50	24	Pass
149	5745	14.39	13.55	50.125	17.00	30	Pass
157	5785	13.75	14.47	51.761	17.14	30	Pass
165	5825	13.56	14.95	53.951	17.32	30	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	10.15	10.80	22.374	13.50	24	Pass
46	5230	13.22	14.08	46.559	16.68	24	Pass
54	5270	13.50	13.58	45.186	16.55	24	Pass
62	5310	10.76	10.31	22.646	13.55	24	Pass
102	5510	11.08	10.90	25.119	14.00	24	Pass
110	5550	13.31	13.65	44.566	16.49	24	Pass
134	5670	13.20	14.02	46.132	16.64	24	Pass
142	5710	13.18	14.11	46.559	16.68	24	Pass
151	5755	12.11	11.05	28.973	14.62	30	Pass
159	5795	12.13	13.86	40.653	16.09	30	Pass

802.11ac (VHT80)

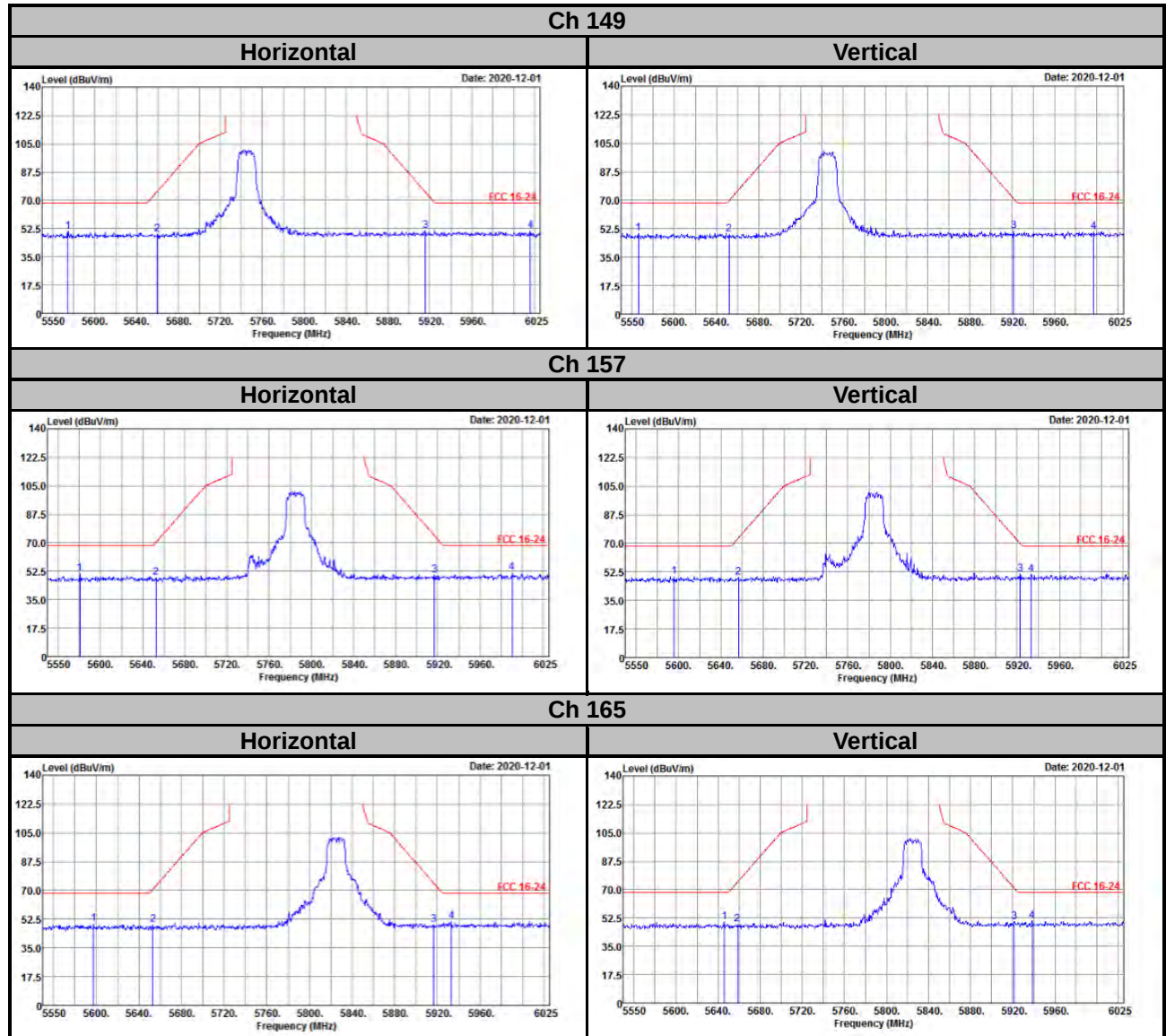
Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	9.82	10.53	20.892	13.20	24	Pass
58	5290	9.75	9.43	18.211	12.60	24	Pass
106	5530	10.66	10.31	22.381	13.50	24	Pass
122	5610	13.01	13.45	42.170	16.25	24	Pass
138	5690	12.98	13.77	43.652	16.40	24	Pass
155	5775	10.81	10.42	23.067	13.63	30	Pass

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)

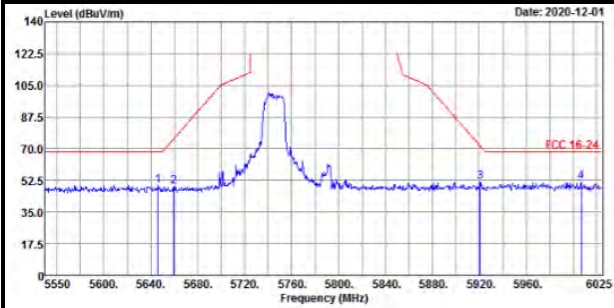
802.11a



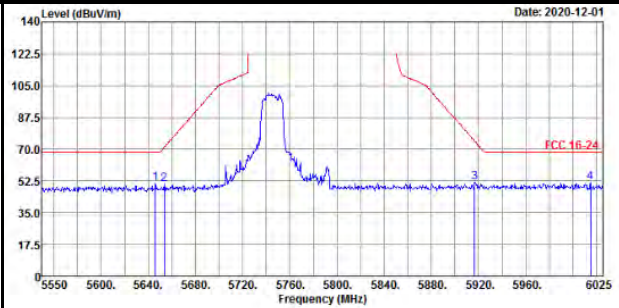
802.11ac (VHT20)

Ch 149

Horizontal

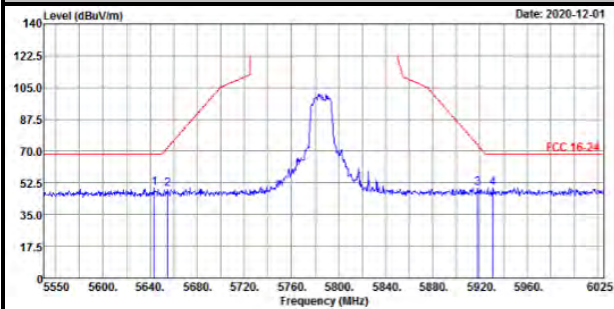


Vertical

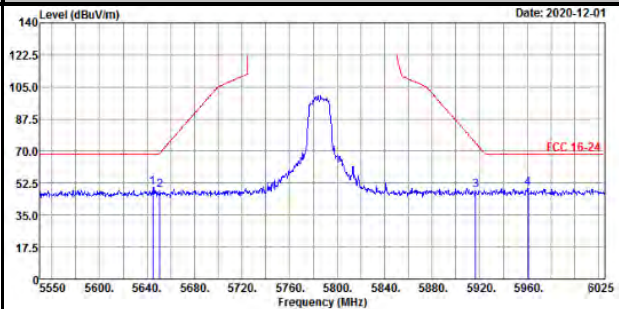


Ch 157

Horizontal

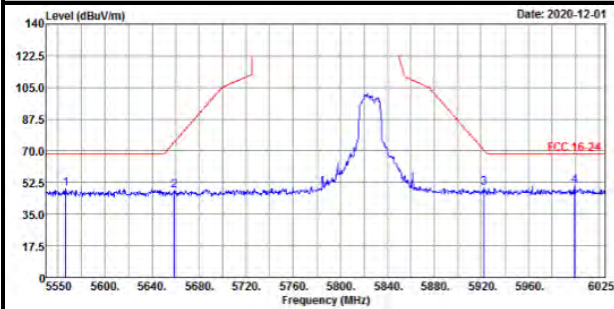


Vertical

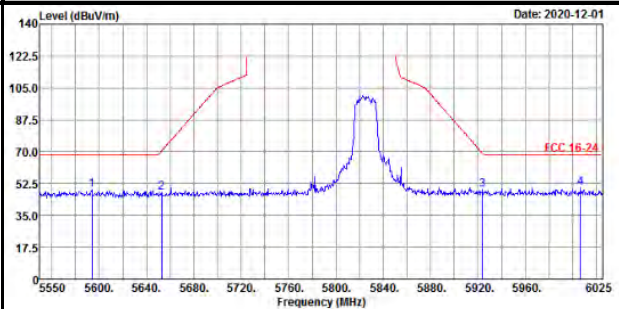


Ch 165

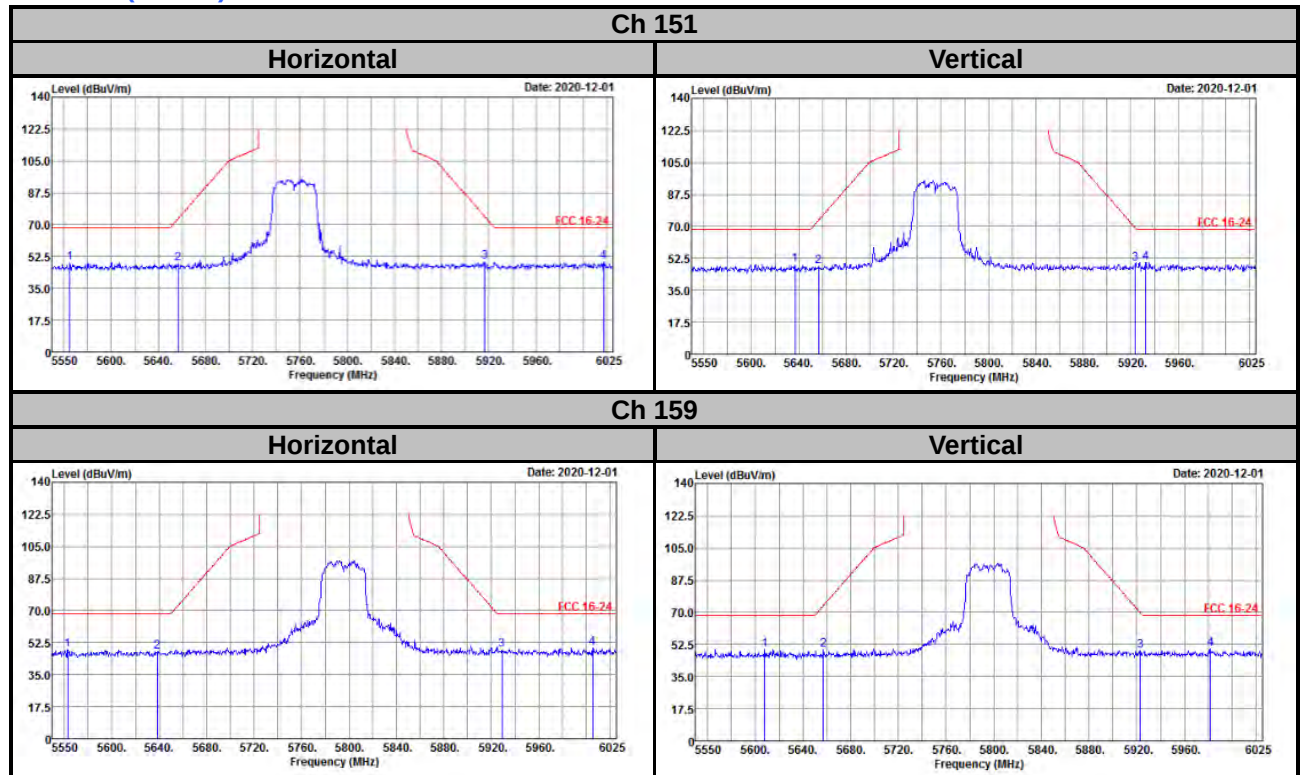
Horizontal



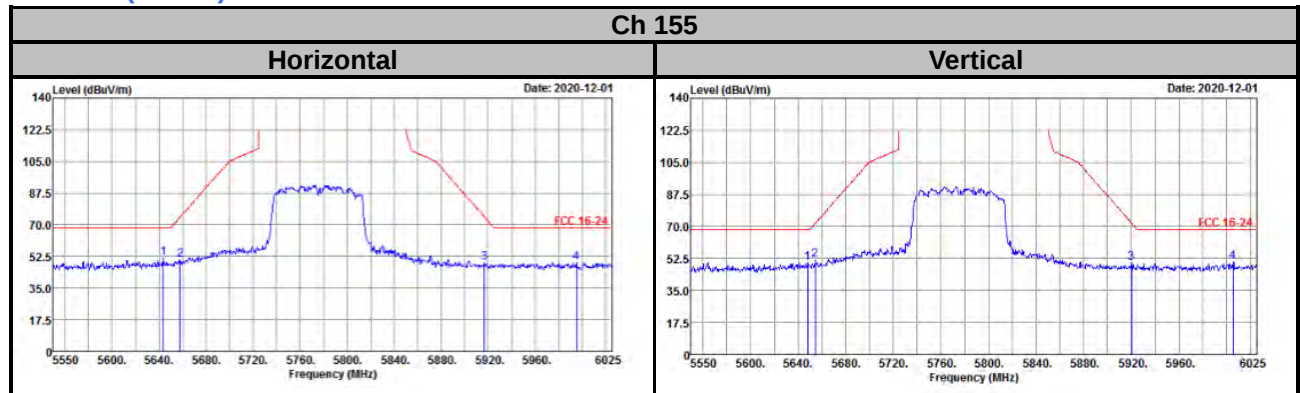
Vertical



802.11ac (VHT40)

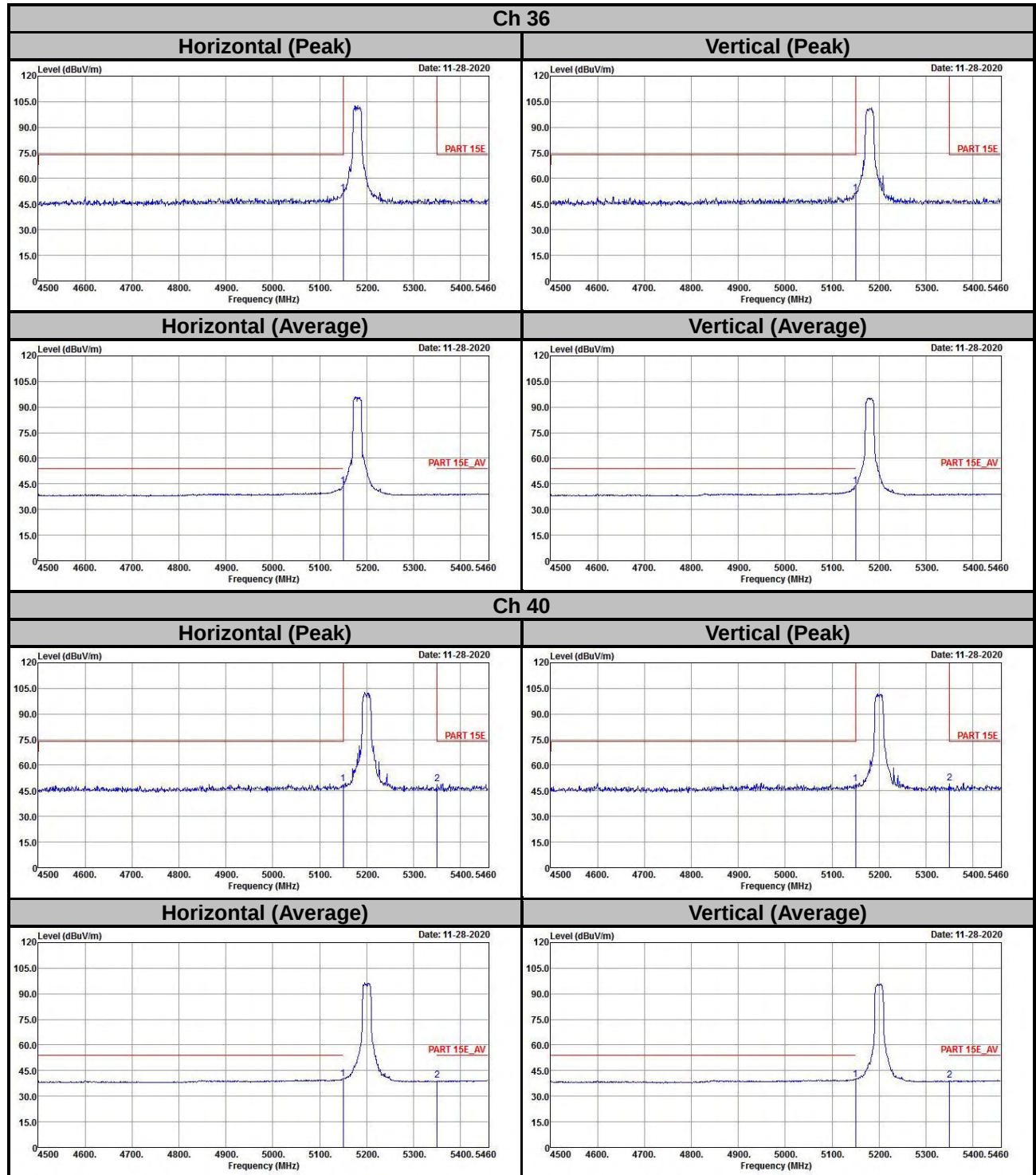


802.11ac (VHT80)



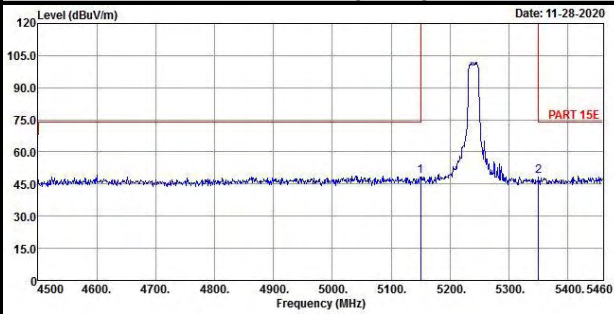
Annex B- Radiated Out of Band Emission (OOBE) Measurement

802.11a

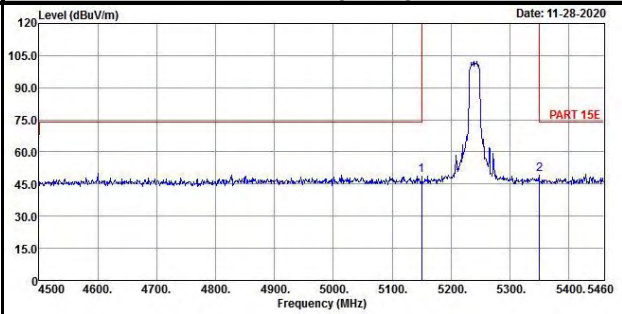


Ch 48

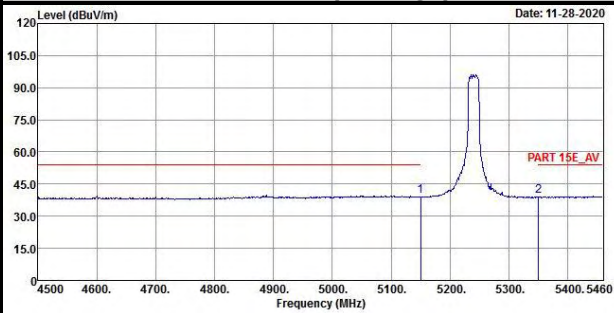
Horizontal (Peak)



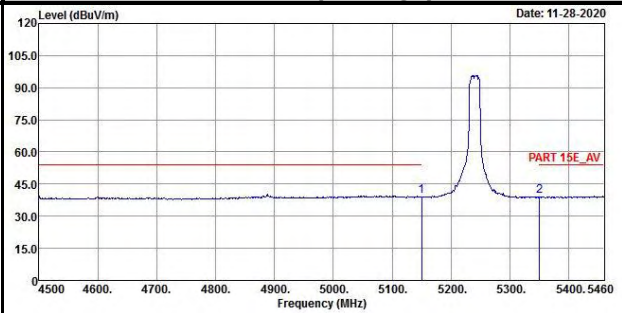
Vertical (Peak)



Horizontal (Average)

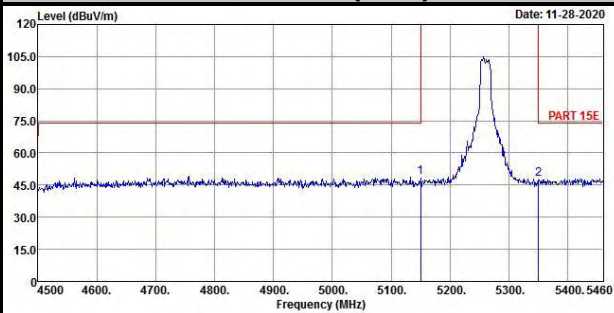


Vertical (Average)

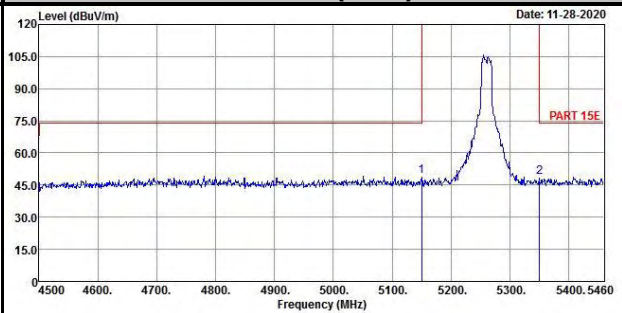


Ch 52

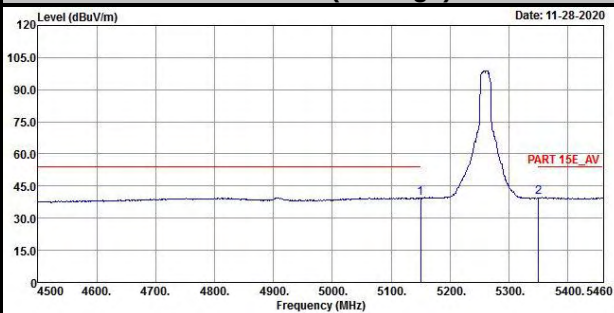
Horizontal (Peak)



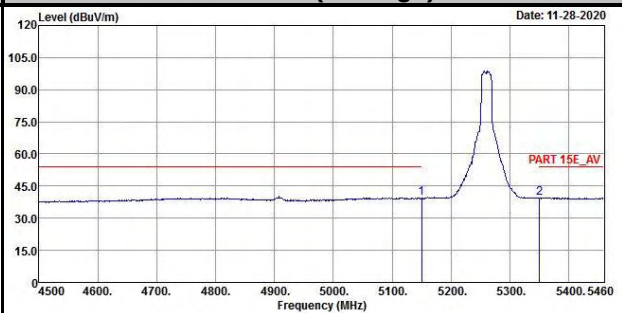
Vertical (Peak)



Horizontal (Average)

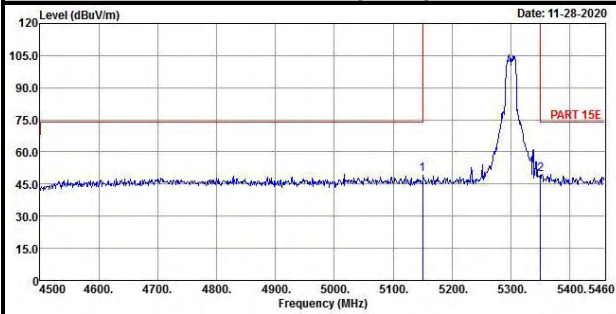


Vertical (Average)

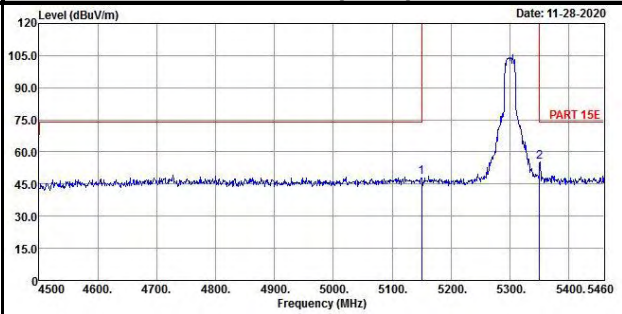


Ch 60

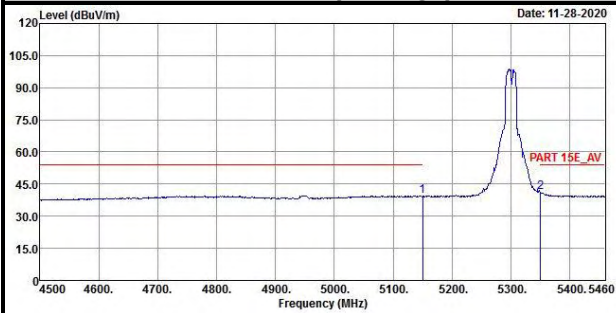
Horizontal (Peak)



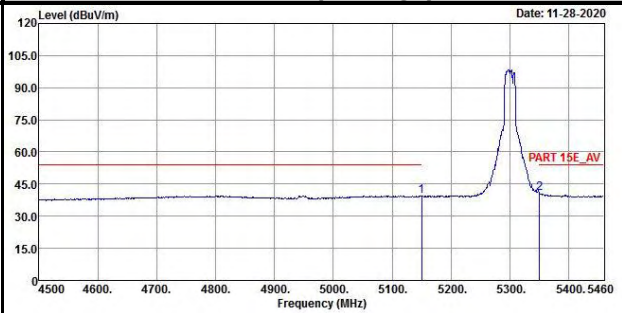
Vertical (Peak)



Horizontal (Average)

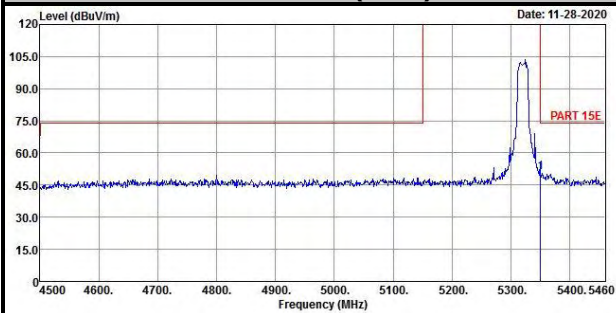


Vertical (Average)

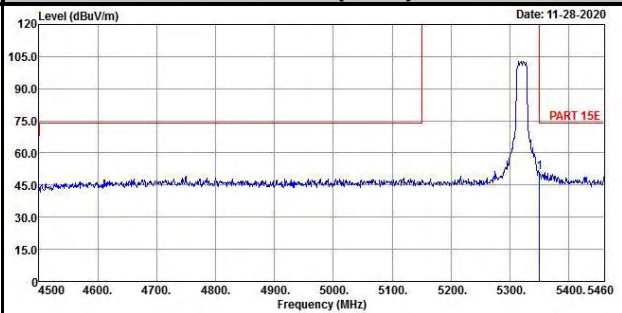


Ch 64

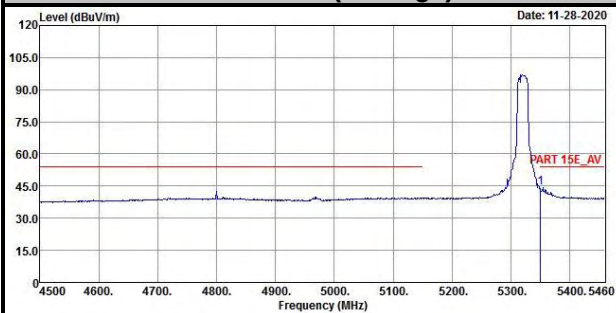
Horizontal (Peak)



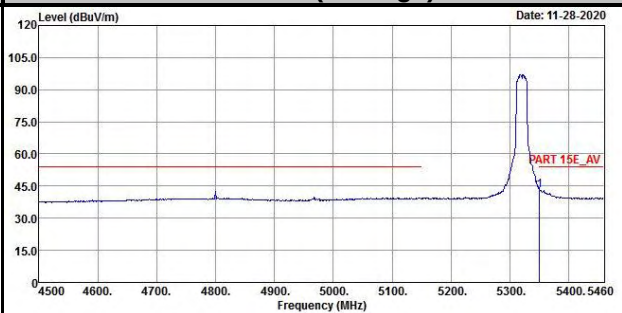
Vertical (Peak)



Horizontal (Average)

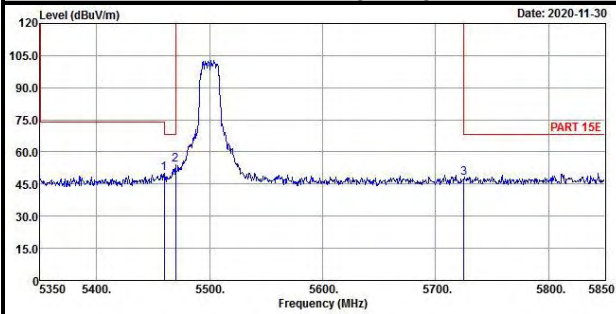


Vertical (Average)

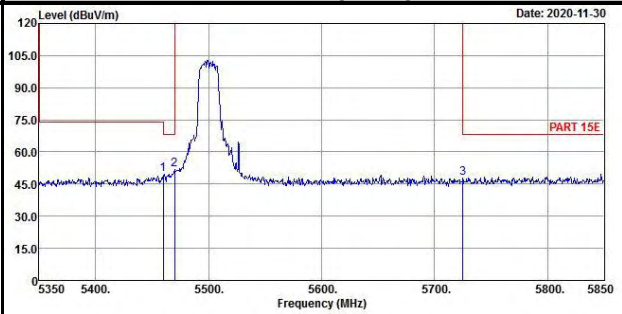


Ch 100

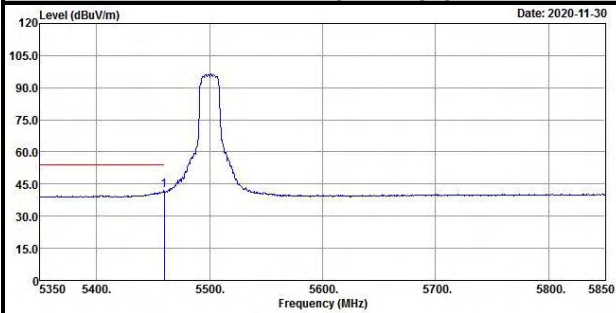
Horizontal (Peak)



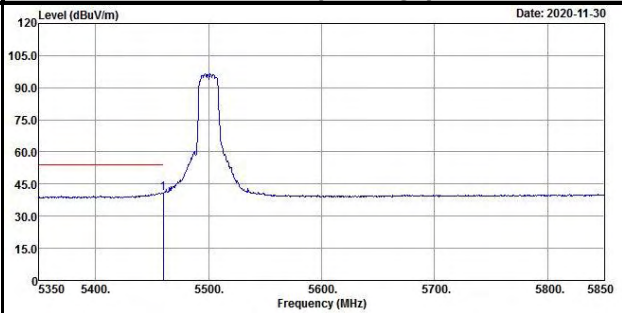
Vertical (Peak)



Horizontal (Average)

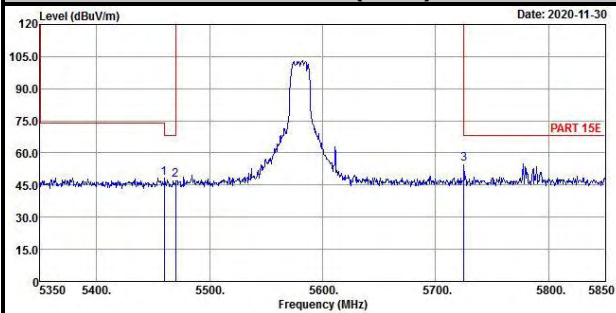


Vertical (Average)

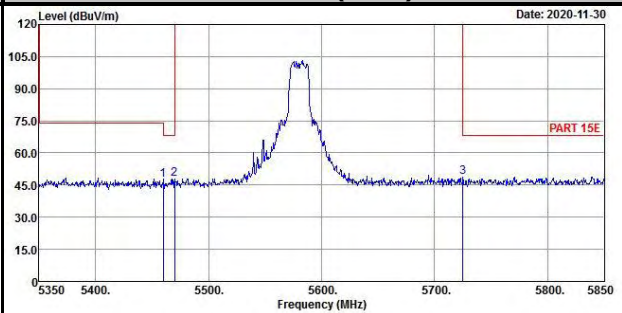


Ch 116

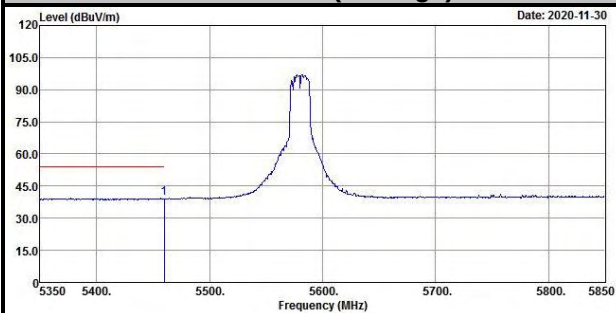
Horizontal (Peak)



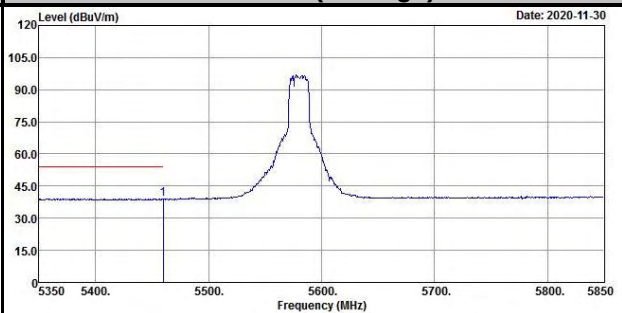
Vertical (Peak)



Horizontal (Average)

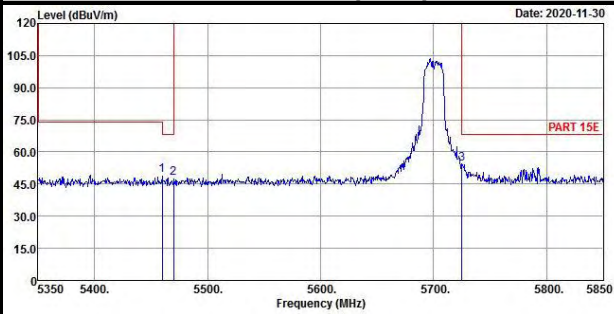


Vertical (Average)

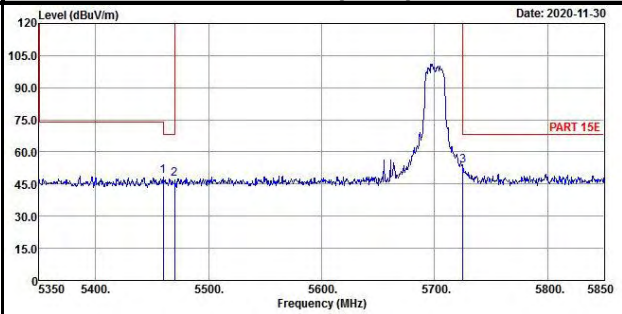


Ch 140

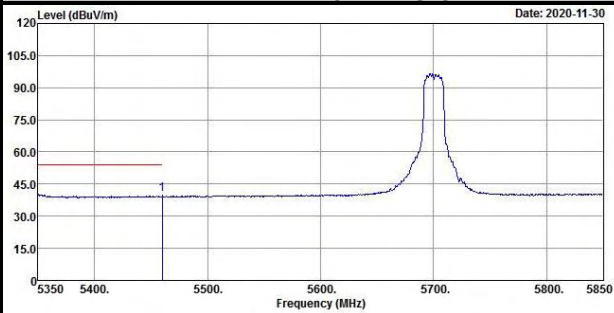
Horizontal (Peak)



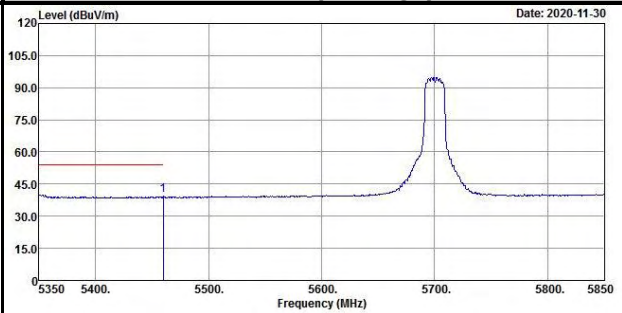
Vertical (Peak)



Horizontal (Average)

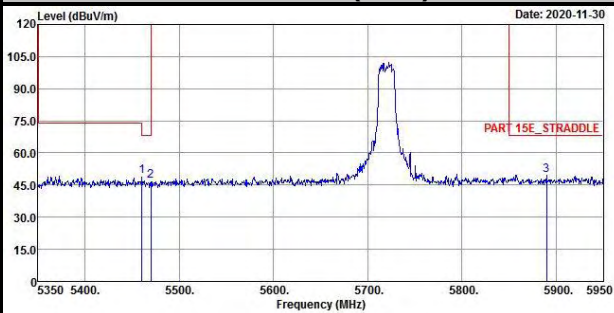


Vertical (Average)

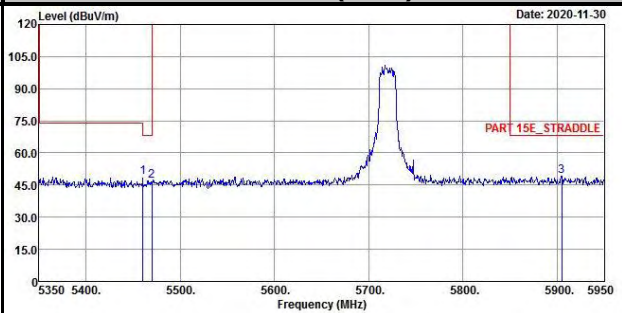


Ch 144

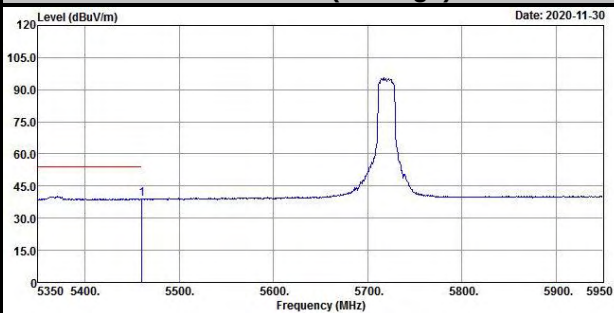
Horizontal (Peak)



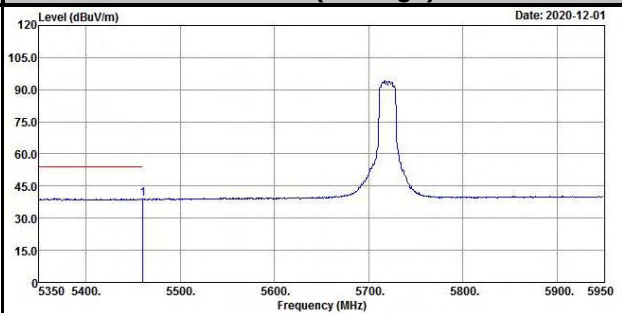
Vertical (Peak)



Horizontal (Average)



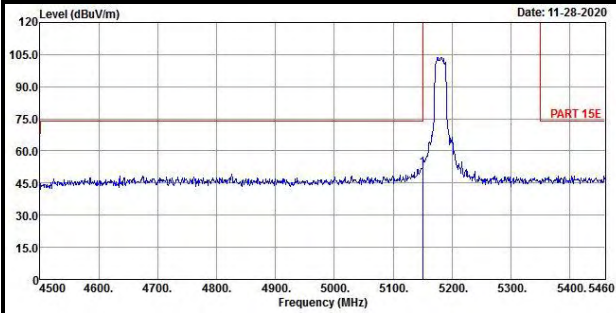
Vertical (Average)



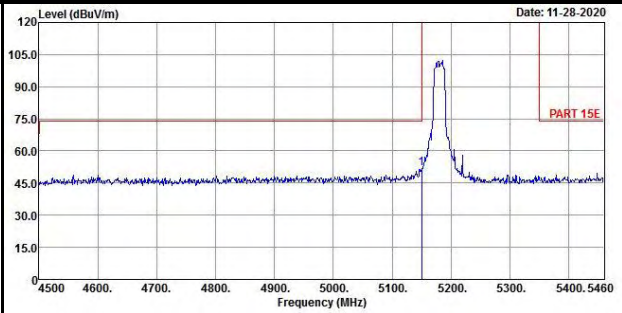
802.11ac (VHT20)

Ch 36

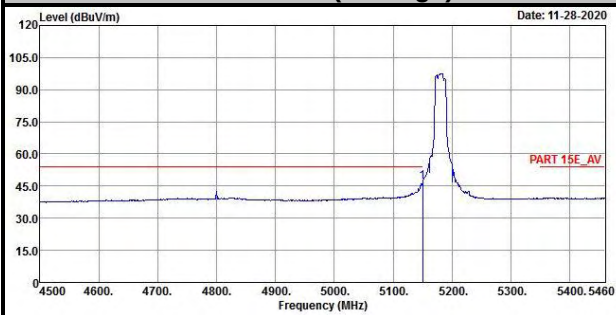
Horizontal (Peak)



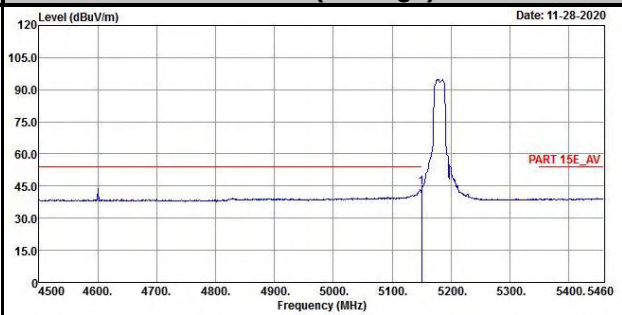
Vertical (Peak)



Horizontal (Average)

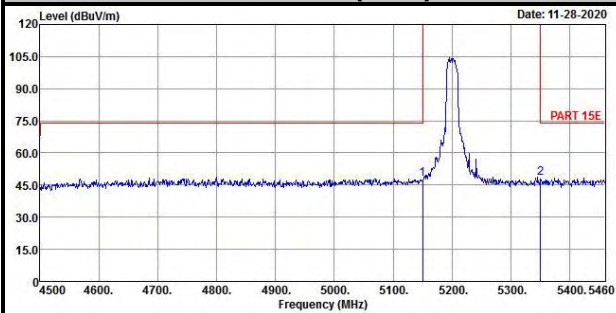


Vertical (Average)

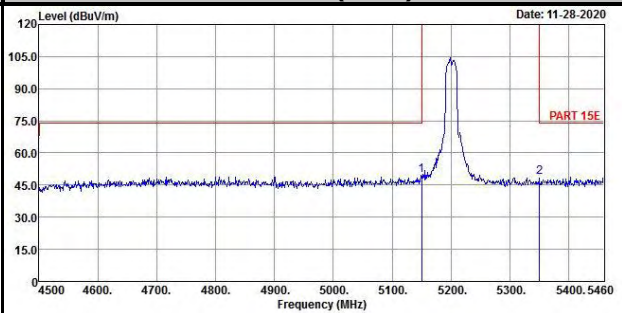


Ch 40

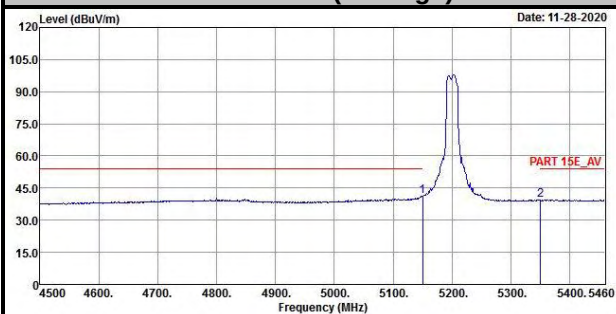
Horizontal (Peak)



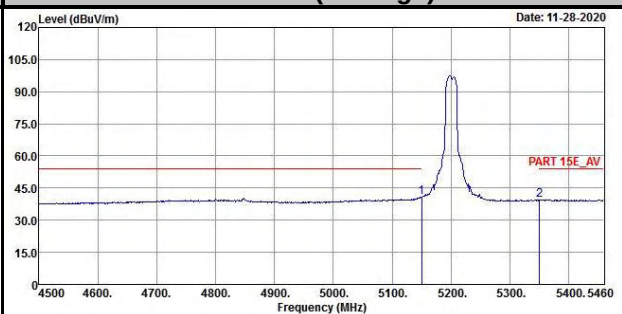
Vertical (Peak)



Horizontal (Average)

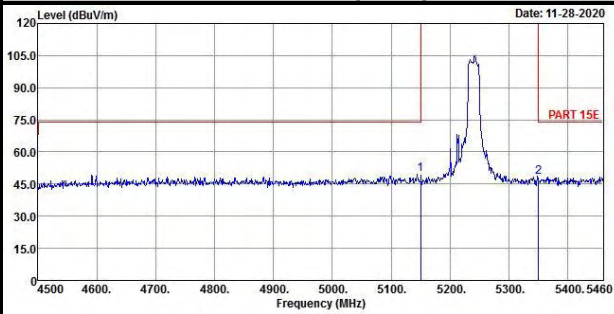


Vertical (Average)

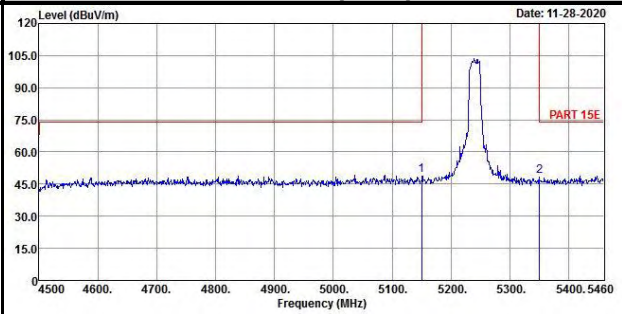


Ch 48

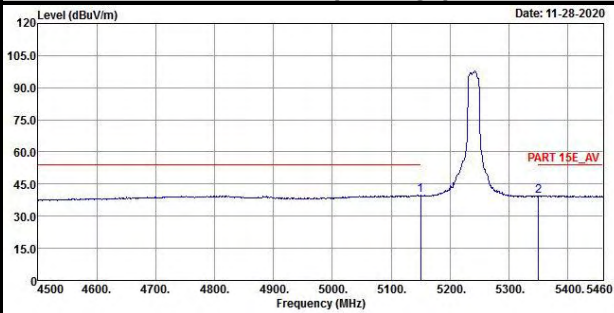
Horizontal (Peak)



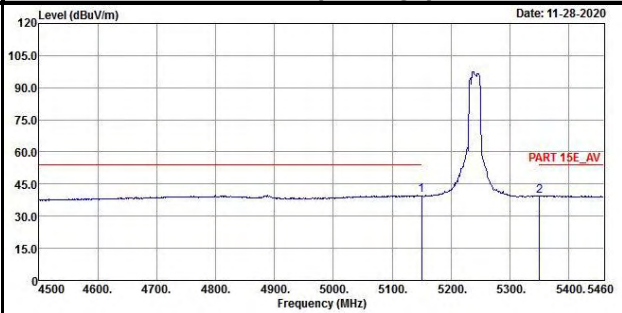
Vertical (Peak)



Horizontal (Average)

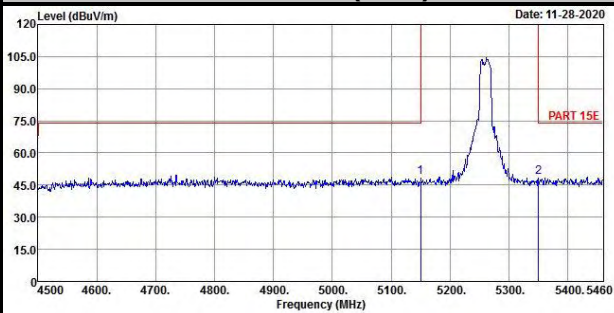


Vertical (Average)

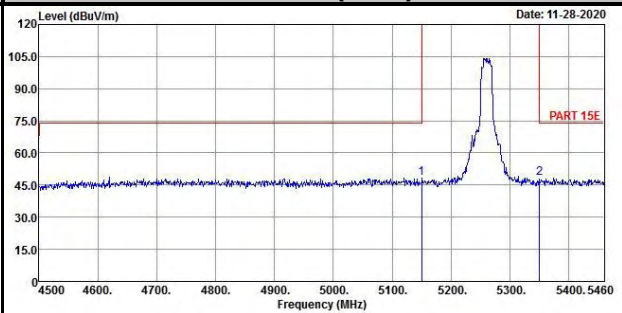


Ch 52

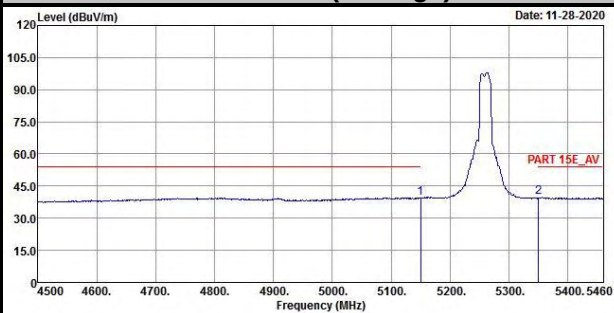
Horizontal (Peak)



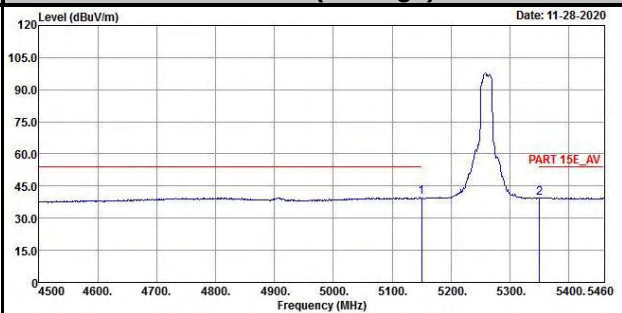
Vertical (Peak)



Horizontal (Average)

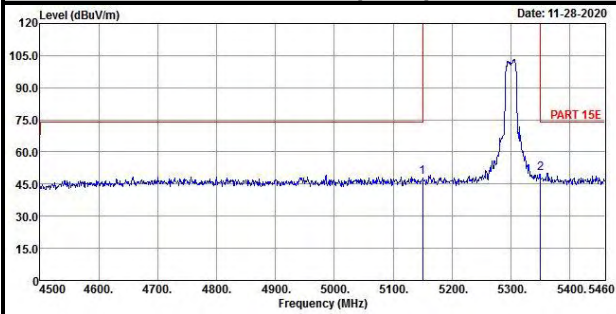


Vertical (Average)

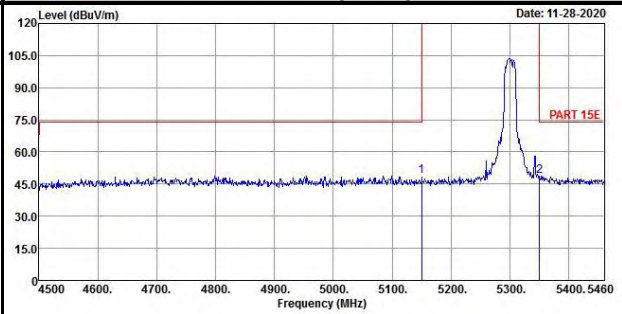


Ch 60

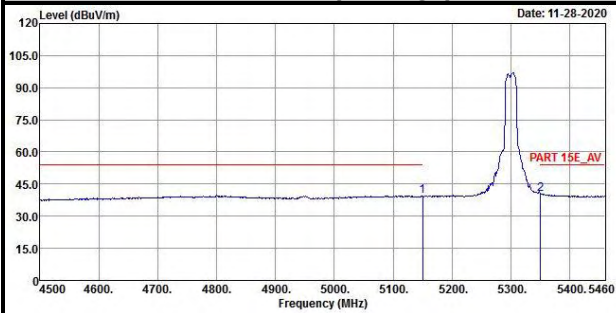
Horizontal (Peak)



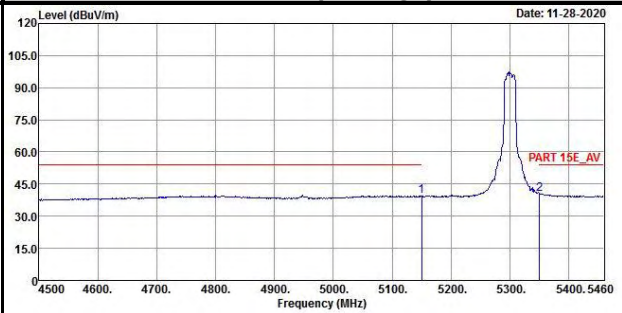
Vertical (Peak)



Horizontal (Average)

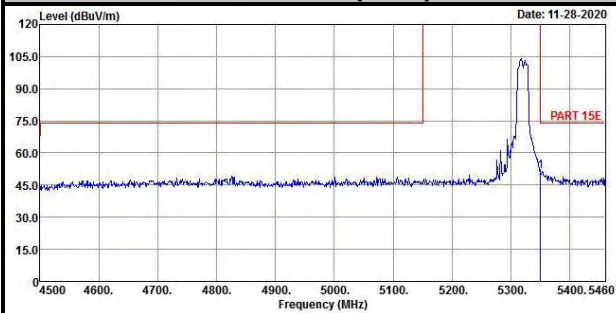


Vertical (Average)

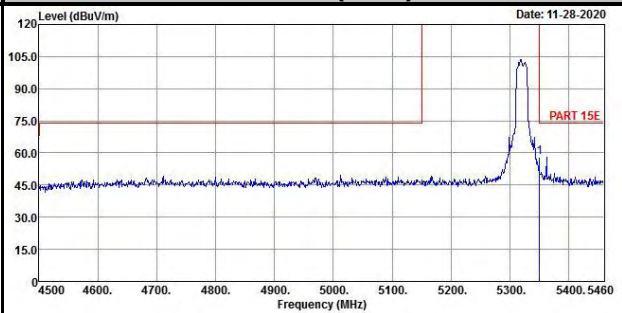


Ch 64

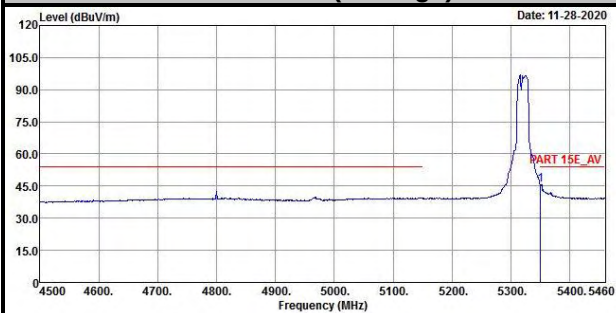
Horizontal (Peak)



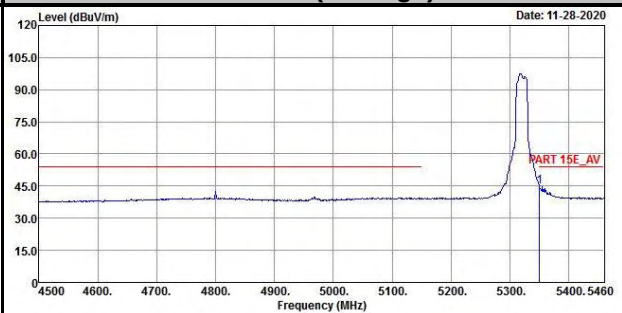
Vertical (Peak)



Horizontal (Average)

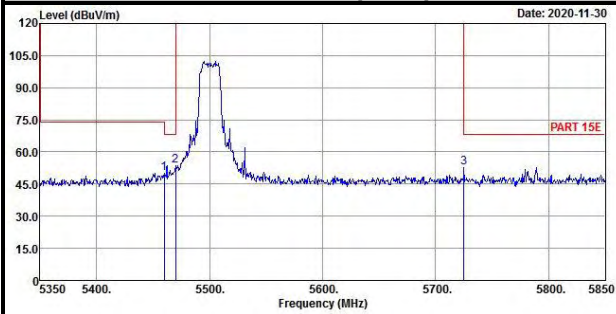


Vertical (Average)

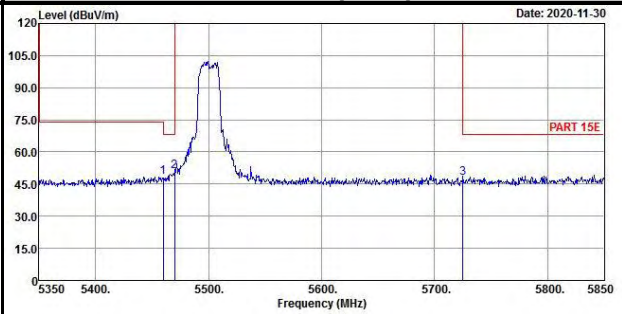


Ch 100

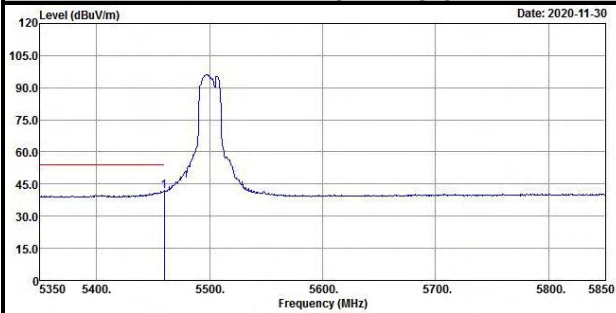
Horizontal (Peak)



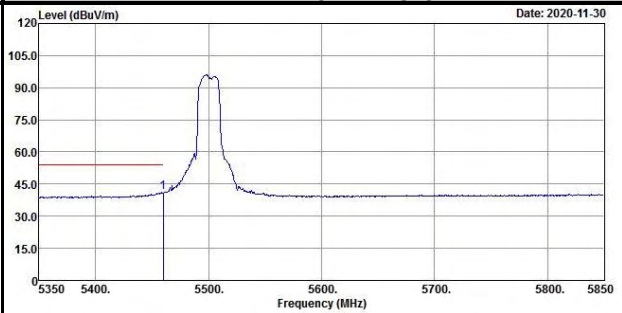
Vertical (Peak)



Horizontal (Average)

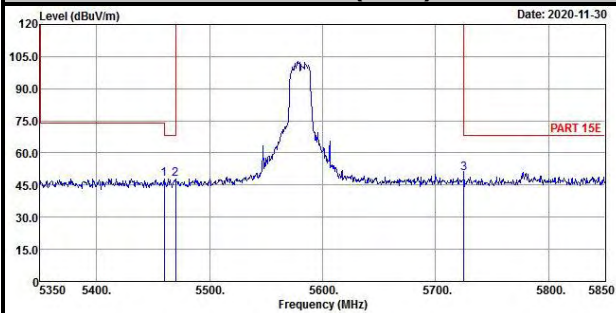


Vertical (Average)

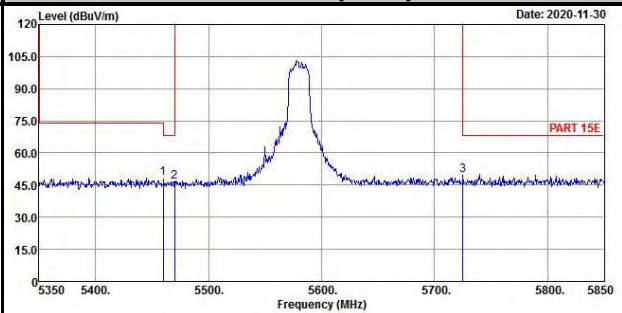


Ch 116

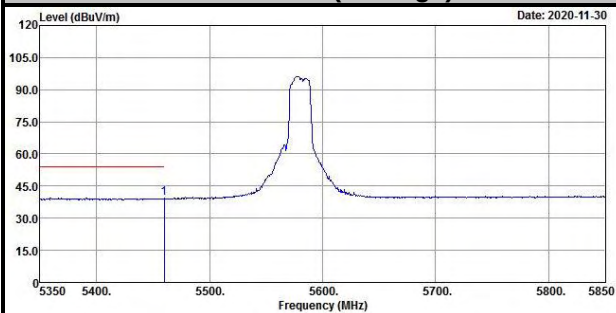
Horizontal (Peak)



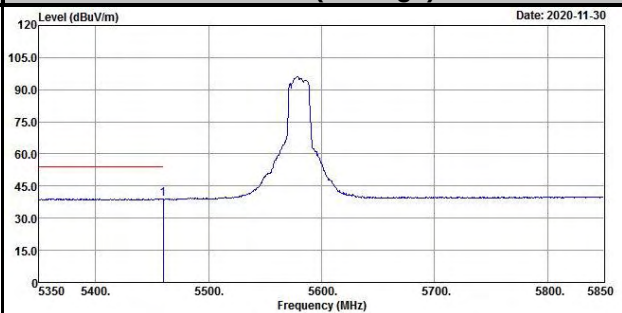
Vertical (Peak)



Horizontal (Average)

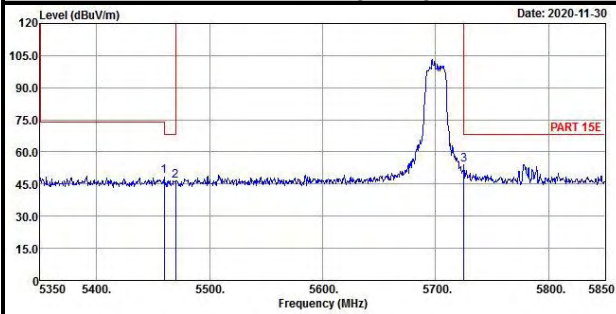


Vertical (Average)

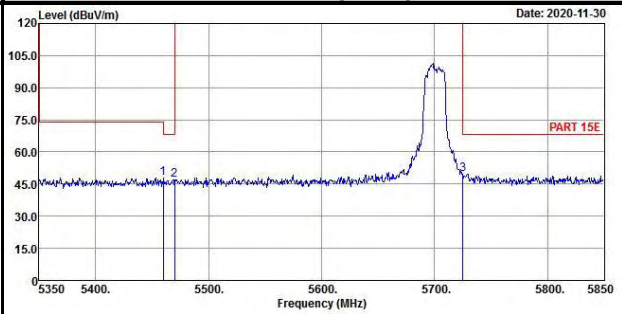


Ch 140

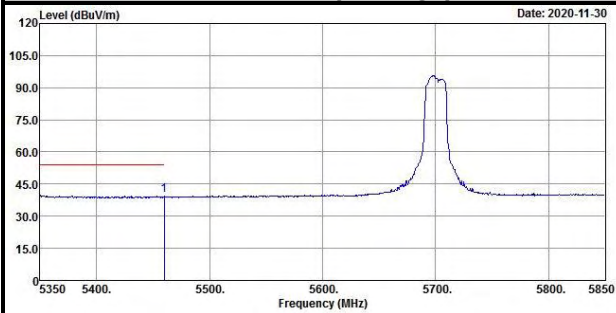
Horizontal (Peak)



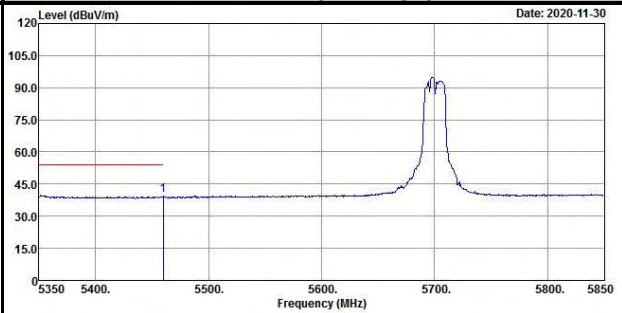
Vertical (Peak)



Horizontal (Average)

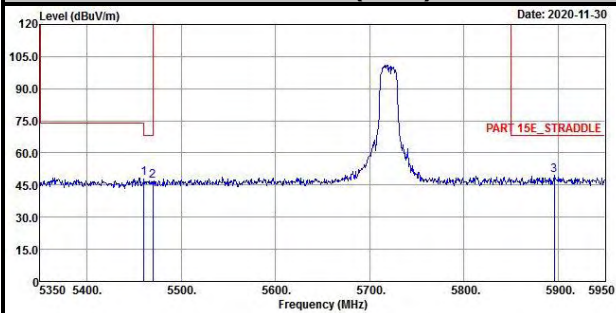


Vertical (Average)

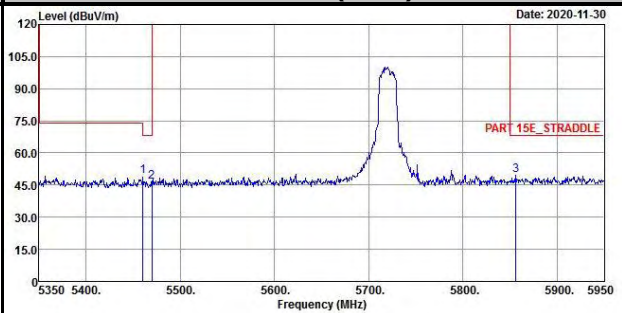


Ch 144

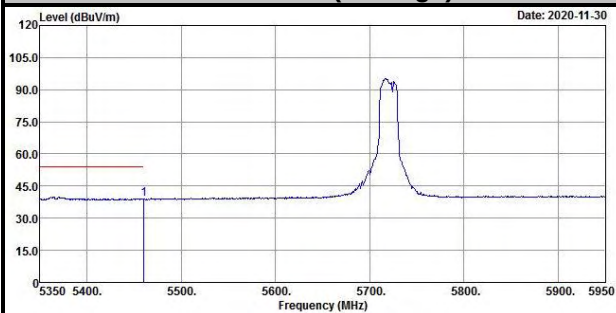
Horizontal (Peak)



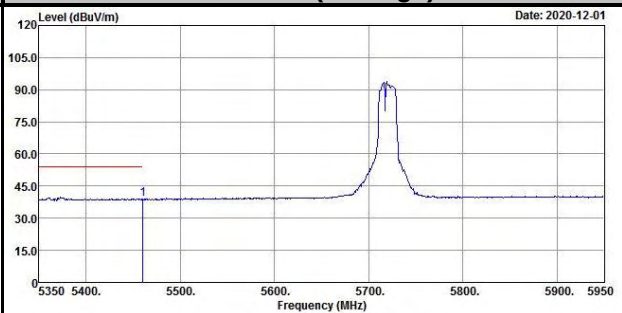
Vertical (Peak)



Horizontal (Average)



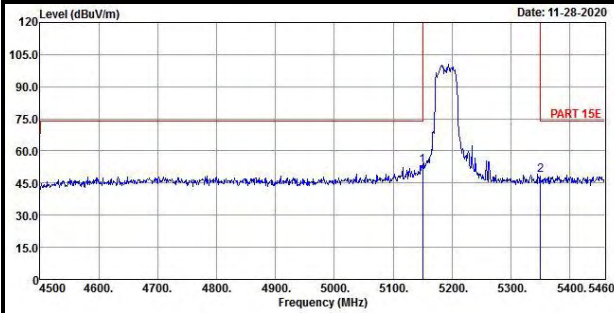
Vertical (Average)



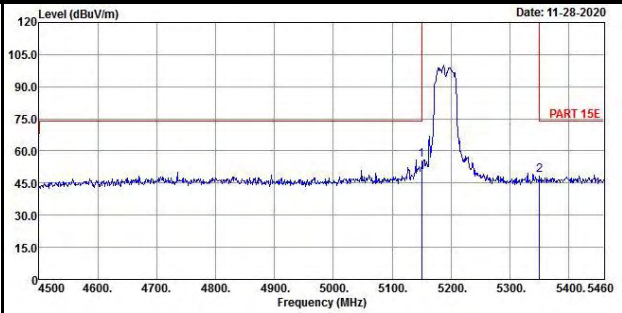
802.11ac (VHT40)

Ch 38

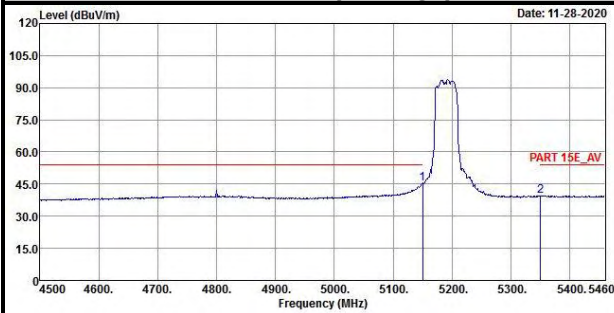
Horizontal (Peak)



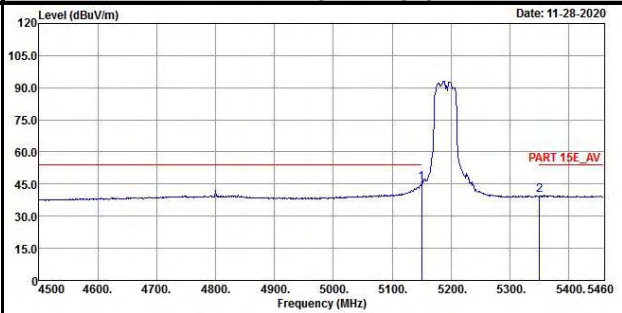
Vertical (Peak)



Horizontal (Average)

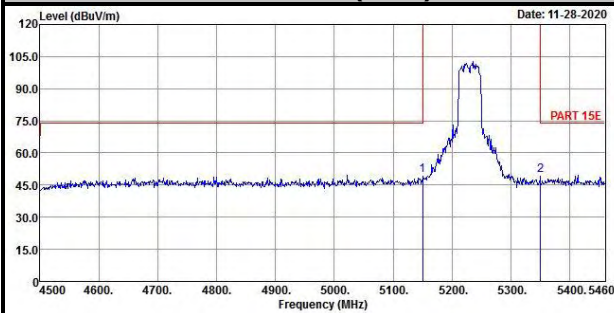


Vertical (Average)

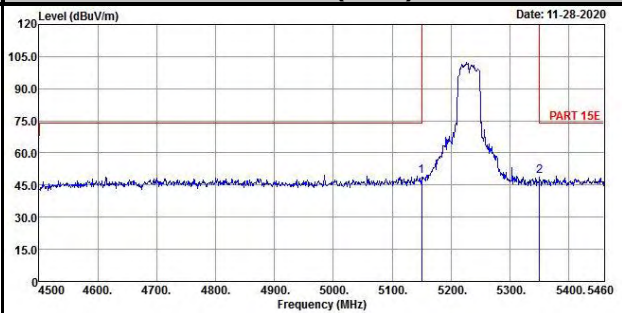


Ch 46

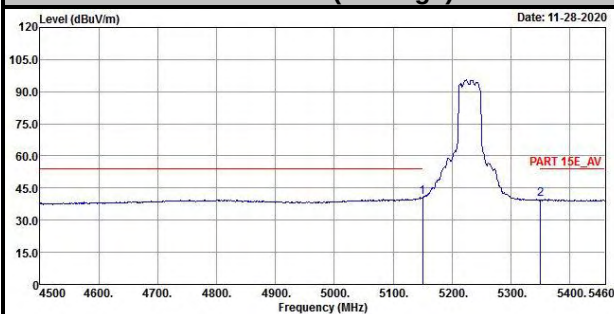
Horizontal (Peak)



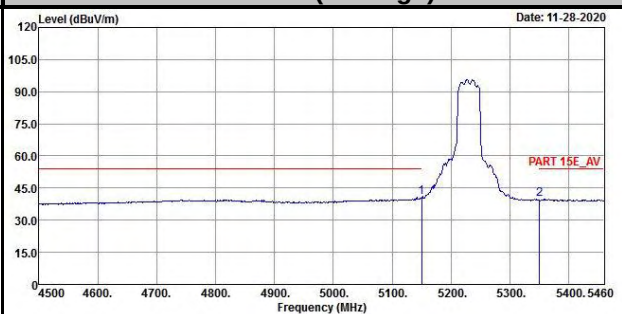
Vertical (Peak)



Horizontal (Average)

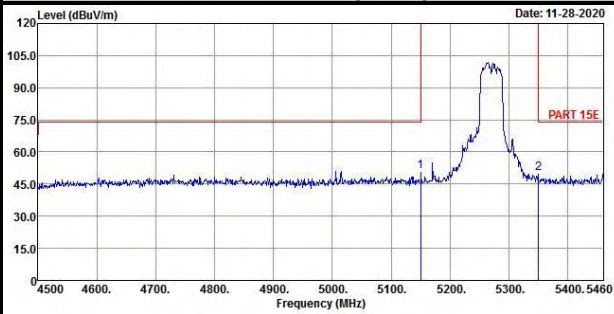


Vertical (Average)

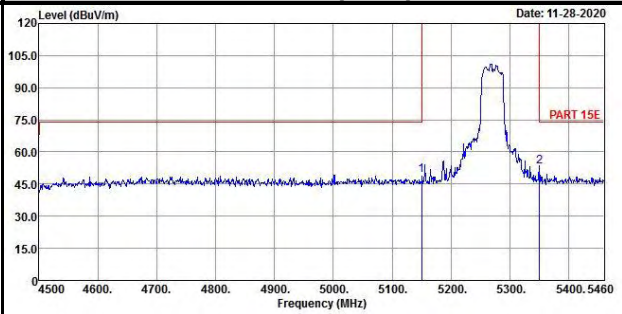


Ch 54

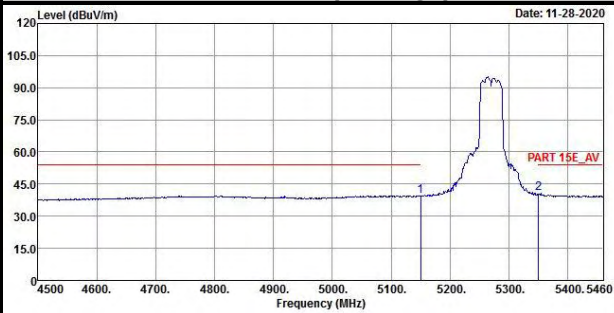
Horizontal (Peak)



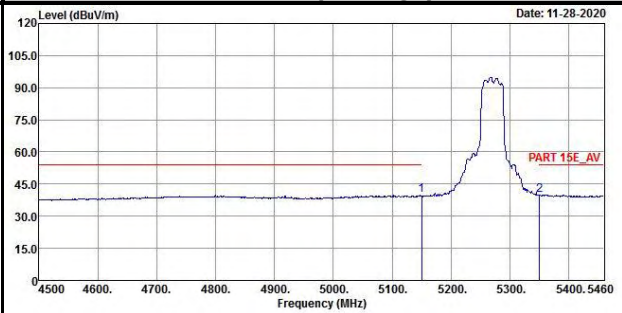
Vertical (Peak)



Horizontal (Average)

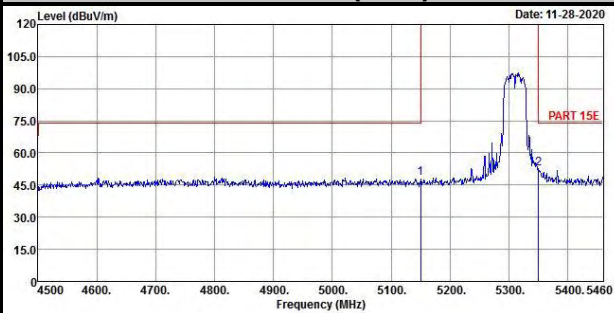


Vertical (Average)

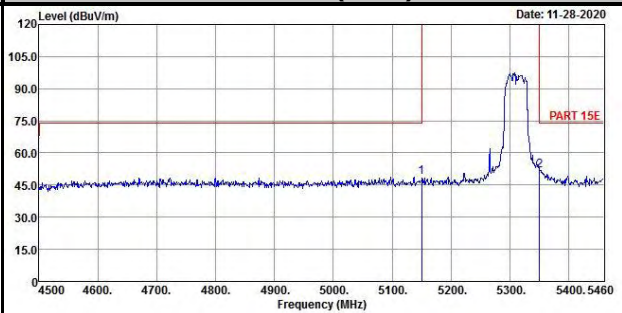


Ch 62

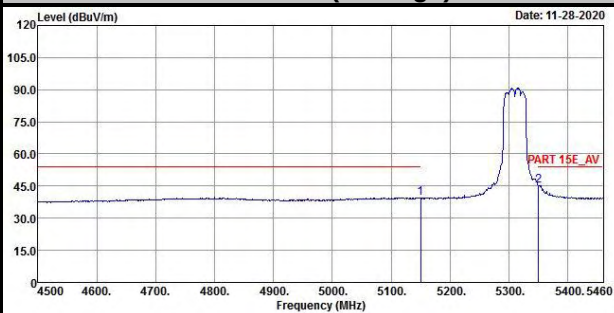
Horizontal (Peak)



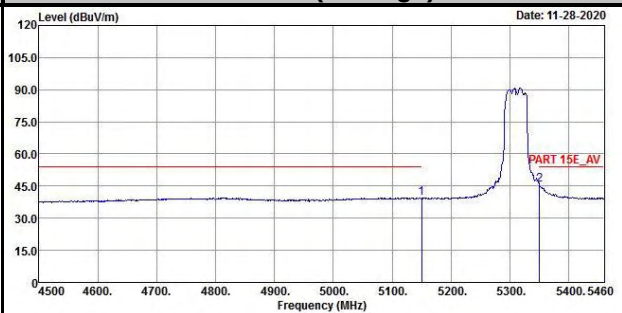
Vertical (Peak)



Horizontal (Average)

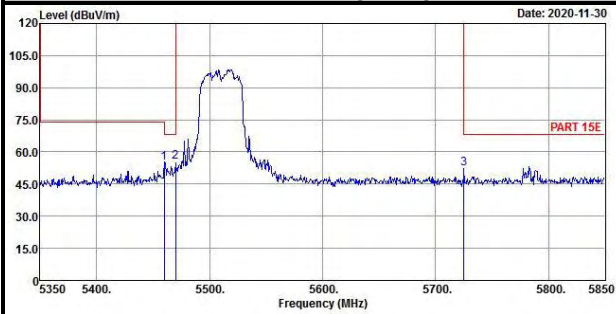


Vertical (Average)

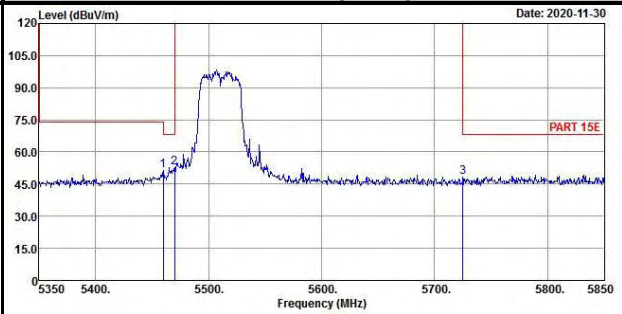


Ch 102

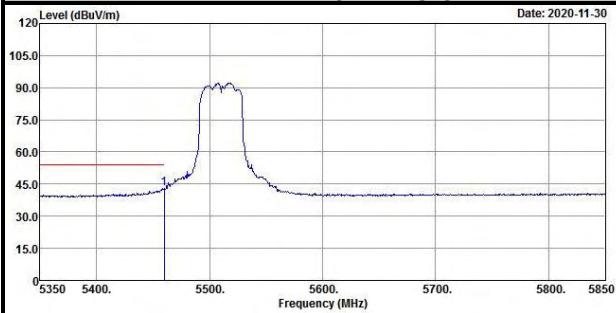
Horizontal (Peak)



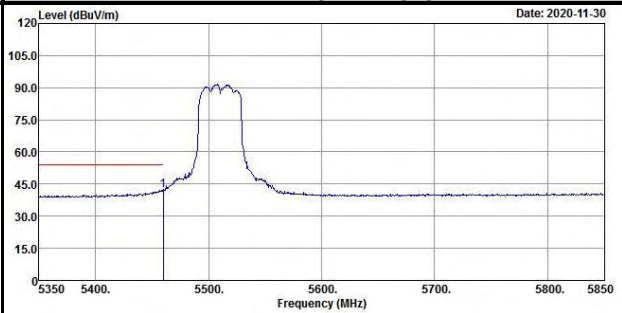
Vertical (Peak)



Horizontal (Average)

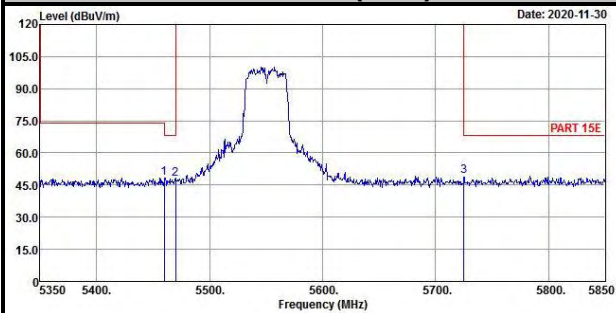


Vertical (Average)

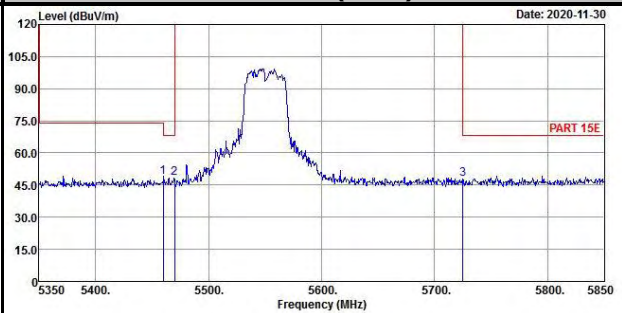


Ch 110

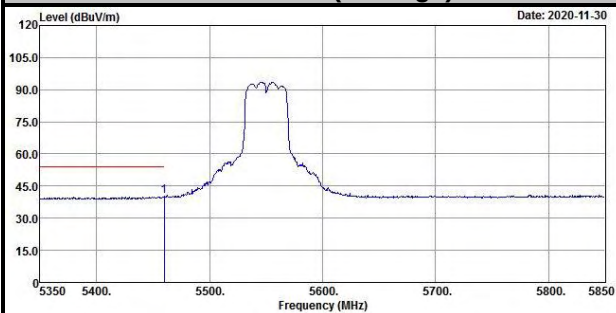
Horizontal (Peak)



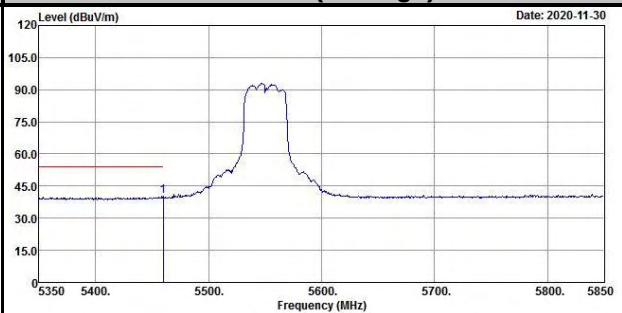
Vertical (Peak)



Horizontal (Average)

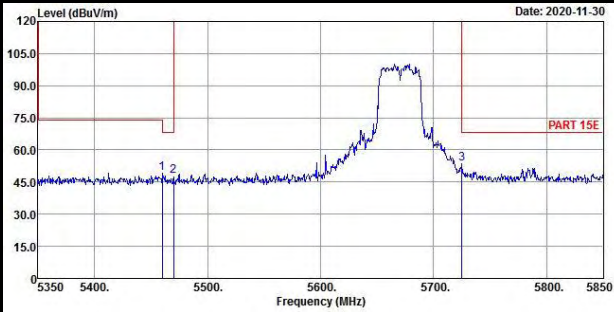


Vertical (Average)

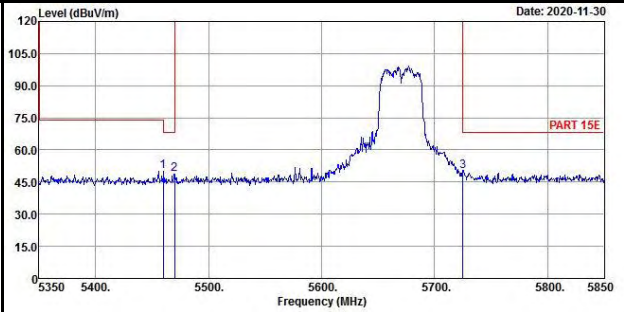


Ch 134

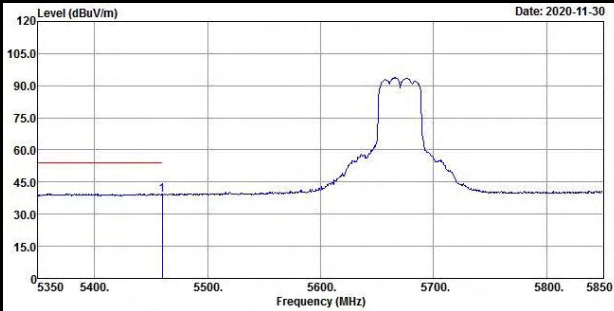
Horizontal (Peak)



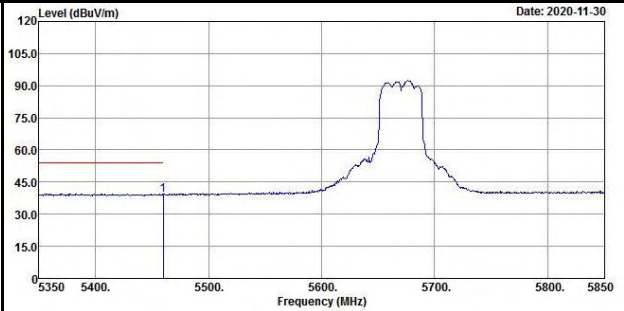
Vertical (Peak)



Horizontal (Average)

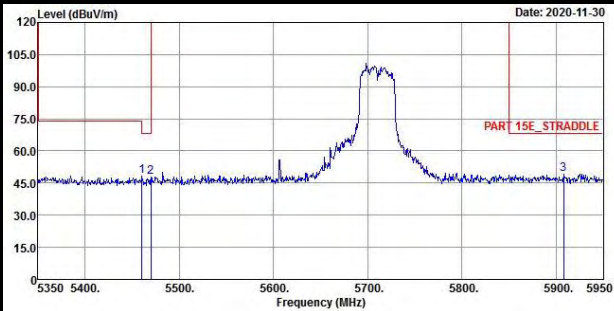


Vertical (Average)

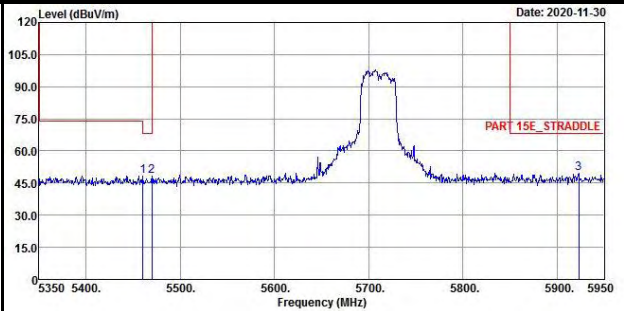


Ch 142

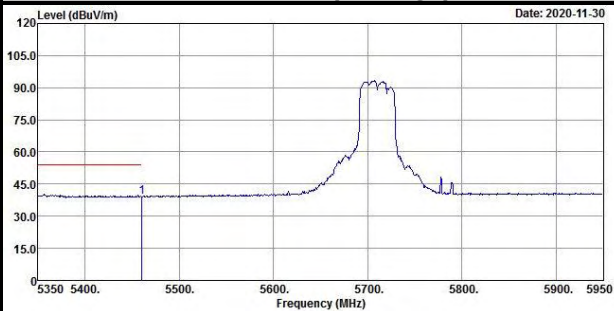
Horizontal (Peak)



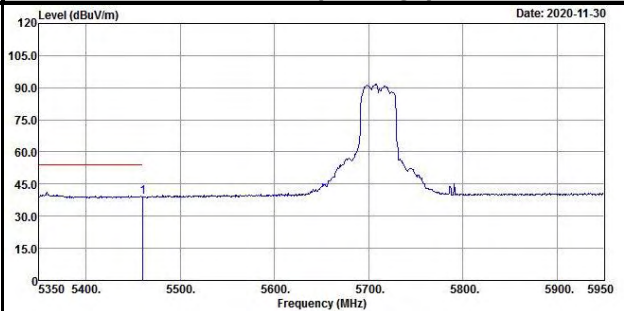
Vertical (Peak)



Horizontal (Average)



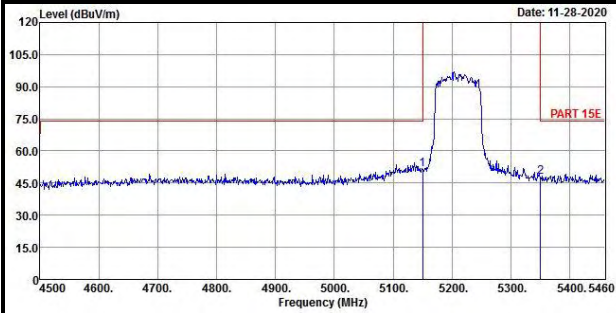
Vertical (Average)



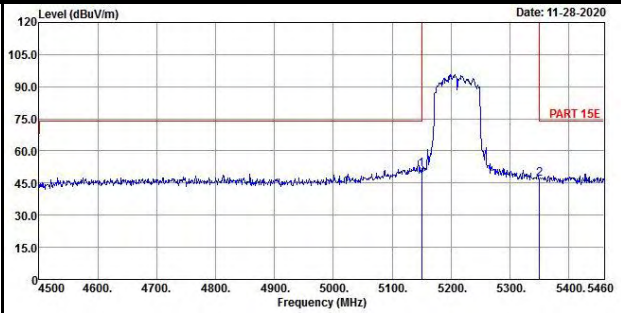
802.11ac (VHT80)

Ch 42

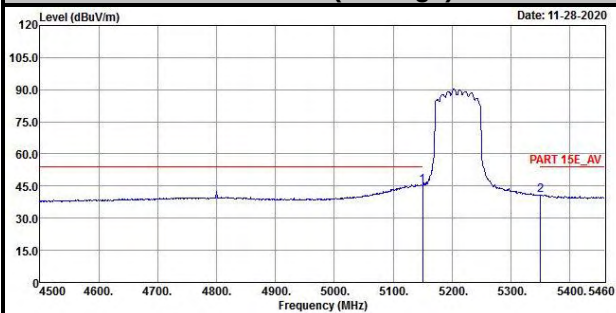
Horizontal (Peak)



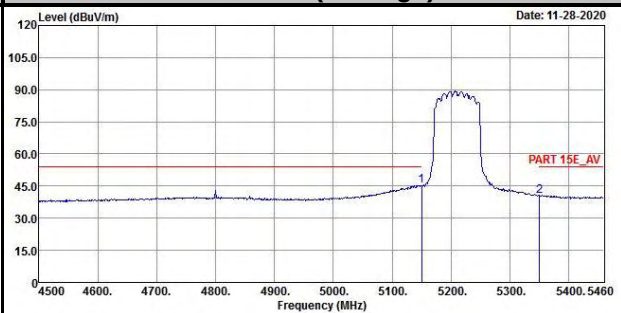
Vertical (Peak)



Horizontal (Average)

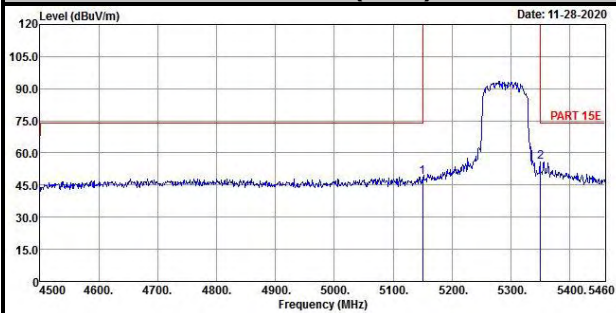


Vertical (Average)

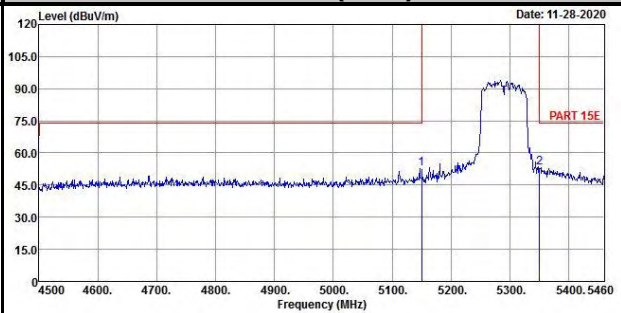


Ch 58

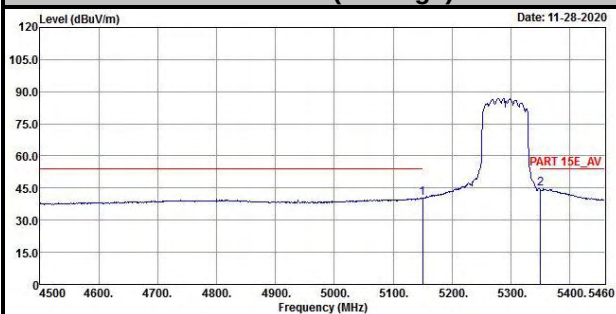
Horizontal (Peak)



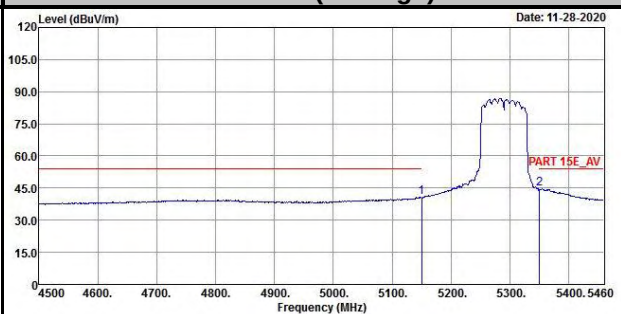
Vertical (Peak)



Horizontal (Average)

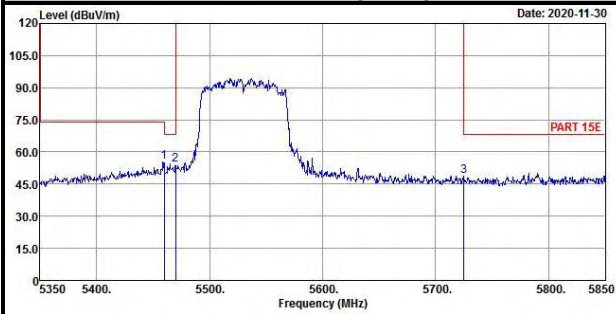


Vertical (Average)

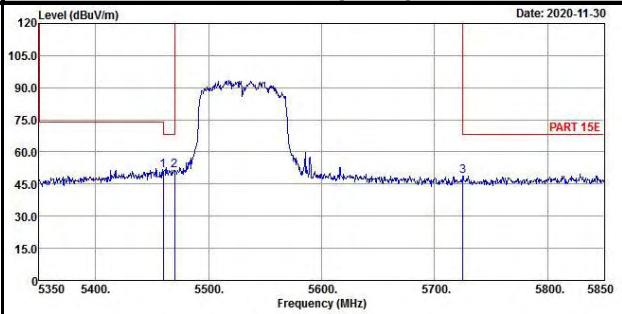


Ch 106

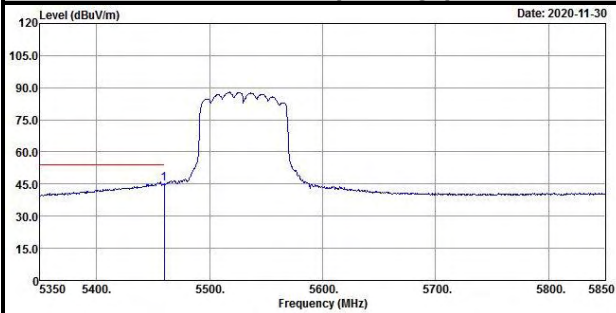
Horizontal (Peak)



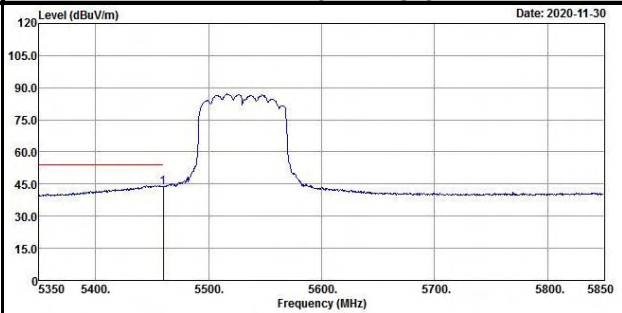
Vertical (Peak)



Horizontal (Average)

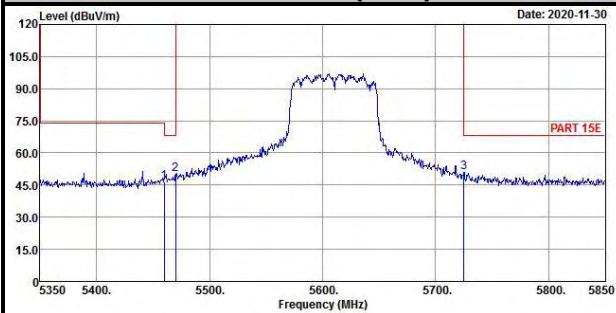


Vertical (Average)

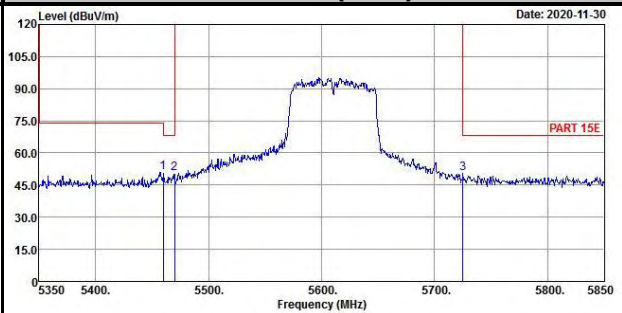


Ch 122

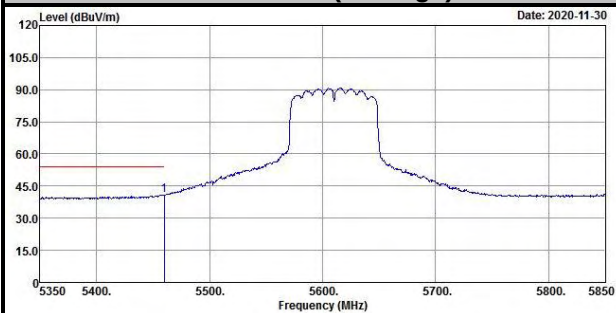
Horizontal (Peak)



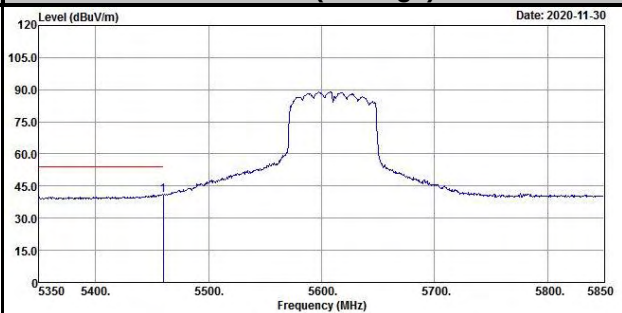
Vertical (Peak)



Horizontal (Average)

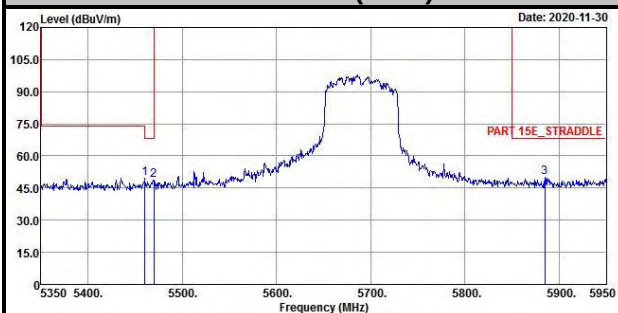


Vertical (Average)

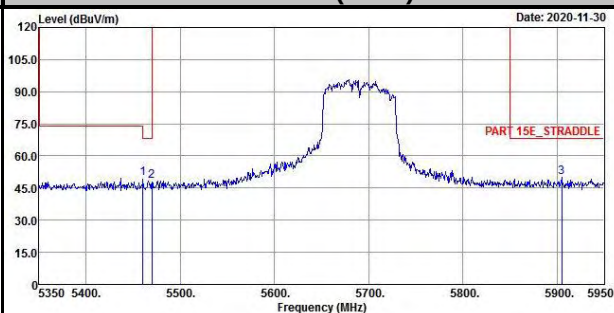


Ch 138

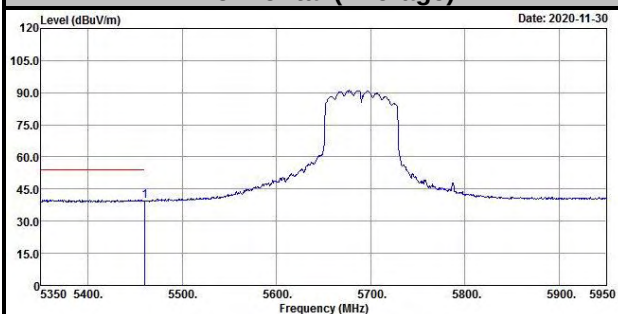
Horizontal (Peak)



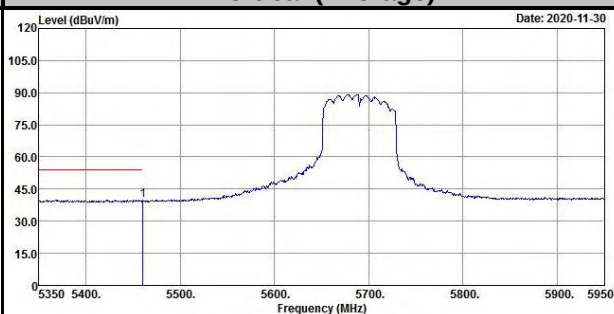
Vertical (Peak)



Horizontal (Average)



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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Web Site: www.bureauveritas-adt.com

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

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