Partial FCC Test Report

Report No.:	RF200428C08-2
FCC ID:	QYLAX200NG
Test Model:	AX200NGW
Received Date:	Apr. 28, 2020
Test Date:	May 12 ~ May 29, 2020
Issued Date:	Jun. 11, 2020
Applicant:	Getac Technology Corporation
Address:	5F., Building A, No. 209, Sec.1, Nangang Rd.,Nangang Dist., Taipei City 11568, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
RF200428C08-2	Original Release	Jun. 11, 2020

1 Certificate of Conformity

Product:	Wireless module
Brand:	Getac
Test Model:	AX200NGW
Sample Status:	Identical Prototype
Applicant:	Getac Technology Corporation
Test Date:	May 12 ~ May 29, 2020
Standards:	47 CFR FCC Part 15, Subpart C (Section 15.247) 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 : _____ , **Date:** Jun. 11, 2020

Gina Liu / Specialist

Approved by : _____ , **Date:** Jun. 11, 2020

Dylan Chiou / Senior Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
FCC Clause	**Test Item**	**Result**	**Remarks**
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -3.17 dB at 1.082 MHz.
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.52 dB at 2483.5 MHz.
15.247(d)	Antenna Port Emission	N/A	Refer to Note
15.247(a)(2)	6 dB Bandwidth	N/A	Refer to Note
---	Occupied Bandwidth Measurement	N/A	Refer to Note
15.247(b)	Conducted power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	N/A	Refer to Note
15.203	Antenna Requirement	N/A	Refer to Note

Note:

1. Only test item of Conducted Power, Radiated Emissions test and AC Power Conducted Emission tests were performed for this report. For other test data, please refer to Intel Report No.: 181210-03.TR04 for module (Brand: Intel, Model: AX200NGW).
2. For 2.4G band compliance with rule 15.247(d) of the band-edge items, the test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.
3. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	**Frequency**	**Expanded Uncertainty (k=2) (±)**
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.79 dB
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.04 dB
	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Wireless module
Brand	Getac
Test Model	AX200NGW
Status of EUT	Identical Prototype
Power Supply Rating	19 Vdc (adapter) 11.1 Vdc (Li-ion battery)
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: 11.0 / 5.5 / 2.0 / 1.0 Mbps 802.11g: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11n: up to 300.0 Mbps 802.11ax: up to 573.5 Mbps
Operating Frequency	2412 ~ 2472 MHz
Number of Channel	13 for 802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20) 9 for 802.11n (HT40) , 802.11ax (HE40)
Output Power (Measured Max. Peak)	420.294 mW
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

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

Modulation Mode	Tx Function
802.11b	1TX
802.11g	1TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX
802.11ax (HE20)	2TX
802.11ax (HE40)	2TX

   * The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ax mode for HE20 / HE40, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)
2. The EUT is authorized for use in specific End-product. Please refer to below table for more details.

Product	Brand	Model
Notebook	Getac	V110 , V110G6

3. The following accessories were for the End-product.

Product	Brand	Model	Description
Adapter	Getac	MTA190474W4	I/P: 100-240 Vac, 50-60 Hz, 1.6 A O/P: 19 Vdc, 4.74 A, 90W
Battery	Getac	BP3S1P2100-S	11.1 Vdc, 2100 mAh
WLAN Module	Getac	AX200NGW	--
LCD Panel 1	New IPS KD	KD116N11-30NP-A9	11.6"
LCD Panel 2	KingDisplay	KD Full HD Panel 800 nits	11.6"
Bottom Camera	Foxlink	FN80AF-443H	8M
RFID	NXP	PN-7462	13.56MHz
Digitizer	Microchip	PIC32MX270	250-290kHz
GPS	GlobalSat	MC1010	--
CPU 1	Intel	Kaby lake	i7-10510U
CPU 2	Intel	Comet lake	i7-10710U
DDR 1	Kingston	N/A	32GB (16GB+16GB)
DDR 2	Kingston	N/A	16GB
SSD 1	Lite-on	N/A	512GB
SSD 2	Sandisk	N/A	1TB
SD Card reder	N/A	N/A	N/A
Smart Card	N/A	N/A	N/A
USB 3.1 (Type C)	N/A	N/A	N/A

4. The antenna information is listed.

Ant. Type	Manufacturer	Parts Number	Frequency (MHz)				
			2400~2500	5150~5250	5250~5350	5470~5725	5725~5850
PIFA	GETAC	WLAN Main Antenna: 421129000002	2.06 dBi	2.40 dBi	3.51 dBi	3.19 dBi	2.26 dBi
		WLAN Aux. Antenna: 421129000003	-0.14 dBi	0.97 dBi	1.67 dBi	1.62 dBi	1.35 dBi

5. The configurations of all SKU are listed as below.

Part	Brand	Model	Specification	Configurations	
				SKU 1	SKU 2
CPU	Intel	Kaby lake	i7-10510U	V	
	Intel	Comet lake	i7-10710U		V
DDR	Kingston	N/A	32GB (16GB+16GB)	V	
	Kingston	N/A	16GB		V
SSD	Lite-on	N/A	512GB	V	
	Sandisk	N/A	1TB		V
LCD Panel	New IPS KD	KD116N11-30NP-A9	11.6"	V	V
	KingDisplay	KD Full HD Panel 800 nits	11.6"	V	
SD Card reder	N/A	N/A	N/A	V	
Smart Card	N/A	N/A	N/A	V	
USB 3.1 (Type C)	N/A	N/A	N/A		V
WLAN/ BT Module	Intel	Intel AX200NGW	--	V	V
GPS	GlobalSat	MC1010	--	V	
Adapter	Getac Technology Corp.	MTA190474W4	100-240V~1.6A 50-60Hz 19V / 4.74A(90.0W)	V	V
Battery	Getac Technology Corp.	BP3S1P2100-S	11.1Vdc, 2100mAh	V	V
Bottom Camera	Foxlink	FN80AF-443H	8M	V	
RFID	NXP	PN-7462	13.56MHz		V
Digitizer	Microchip	PIC32MX270	250-290kHz		V

* After pre-tested all the configurations and found SKU 2 was the worst. Therefore only SKU 2 was for the final test and presented in the test

6. 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

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20) and 802.11ax (HE20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437	13	2472
7	2442		

9 channels are provided for 802.11n (HT40), 802.11ax (HE40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	8	2447
4	2427	9	2452
5	2432	10	2457
6	2437	11	2462
7	2442		

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	Power	
A	√	√	-	√	1TX
B	√	√	√	√	2TX

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	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	802.11b	1 to 13	1, 6, 11, 12, 13	DSSS	DBPSK	1.0
A	802.11g	1 to 13	1, 6, 11, 12, 13	OFDM	BPSK	6.0
B	802.11n (HT20)	1 to 13	1, 6, 11, 12, 13	OFDM	BPSK	6.5
B	802.11n (HT40)	3 to 11	3, 6, 9, 10, 11	OFDM	BPSK	13.5
B	802.11ax (HE20)	1 to 13	1, 6, 11, 12, 13	OFDMA	BPSK	MCS0
B	802.11ax (HE40)	3 to 11	3, 6, 9, 10, 11	OFDMA	BPSK	MCS0

Radiated Emission Test (Below 1 GHz):

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

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
B	802.11ax (HE40)	3 to 11	11	OFDMA	BPSK	MCS0

Power Line Conducted Emission Test:

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

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
B	802.11ax (HE40)	3 to 11	11	OFDMA	BPSK	MCS0

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	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	802.11b	1 to 13	1, 6, 11, 12, 13	DSSS	DBPSK	1.0
A	802.11g	1 to 13	1, 6, 11, 12, 13	OFDM	BPSK	6.0
B	802.11n (HT20)	1 to 13	1, 6, 11, 12, 13	OFDM	BPSK	6.5
B	802.11n (HT40)	3 to 11	3, 6, 9, 10, 11	OFDM	BPSK	13.5
B	802.11ax (HE20)	1 to 13	1, 6, 11, 12, 13	OFDMA	BPSK	MCS0
B	802.11ax (HE40)	3 to 11	3, 6, 9, 10, 11	OFDMA	BPSK	MCS0

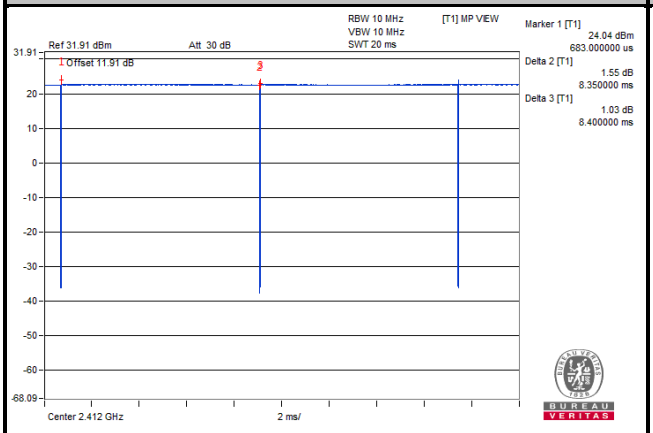
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Getaz Yang, Tim Chen, Jisyong Wang
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Jisyong Wang
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Jisyong Wang
APCM	25 deg. C, 65 % RH	11.1 Vdc	Wayne Lin

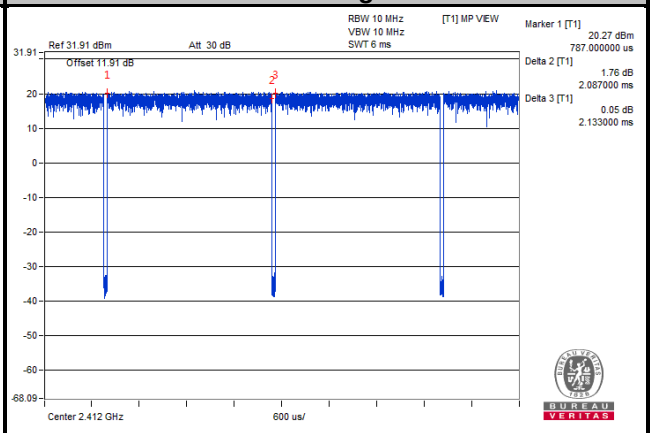
3.3 Duty Cycle of Test Signal

802.11b: Duty cycle of test signal is ≥ 98 %, duty factor is not required.
Duty cycle of test signal is < 98 %, duty factor shall be considered.
802.11g: Duty cycle = 2.087/2.133 = 0.978, Duty factor = 10 * log(1/0.978) = 0.10
802.11n (HT20): Duty cycle of test signal is ≥ 98 %, duty factor is not required.
802.11n (HT40): Duty cycle of test signal is ≥ 98 %, duty factor is not required.
802.11ax (HE20): Duty cycle of test signal is ≥ 98 %, duty factor is not required.
802.11ax (HE40): Duty cycle of test signal is ≥ 98 %, duty factor is not required.

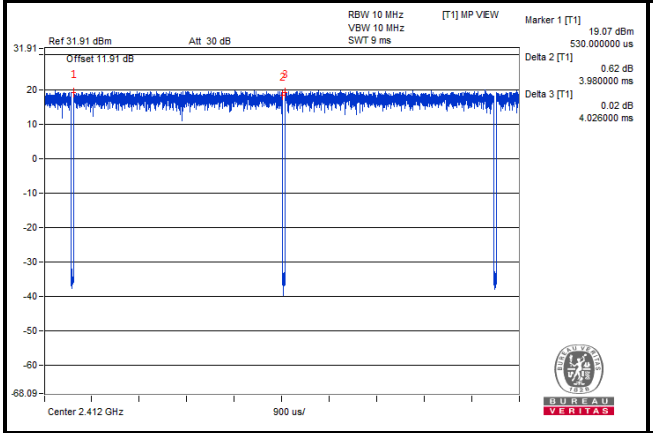
802.11b



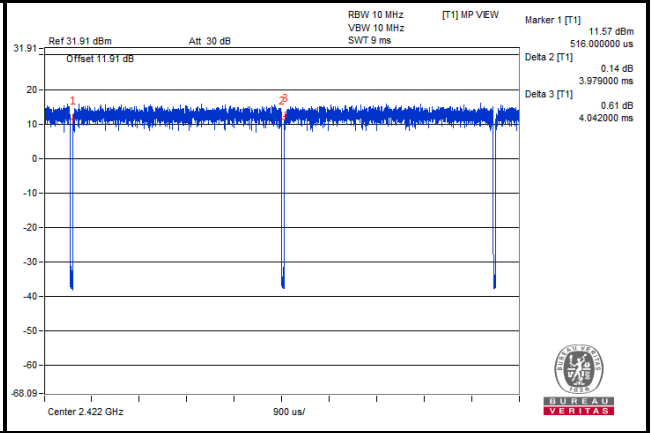
802.11g



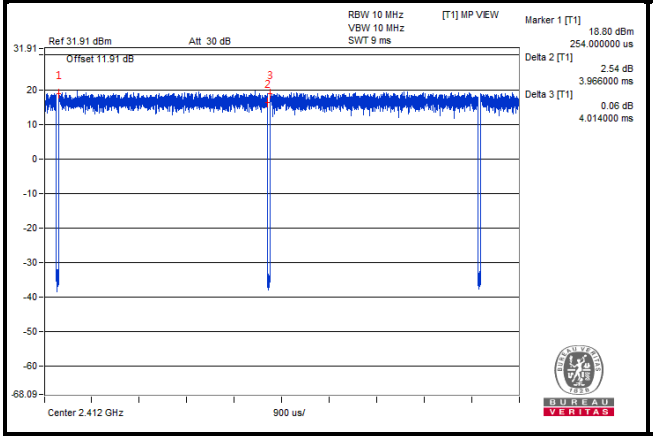
802.11n (HT20)



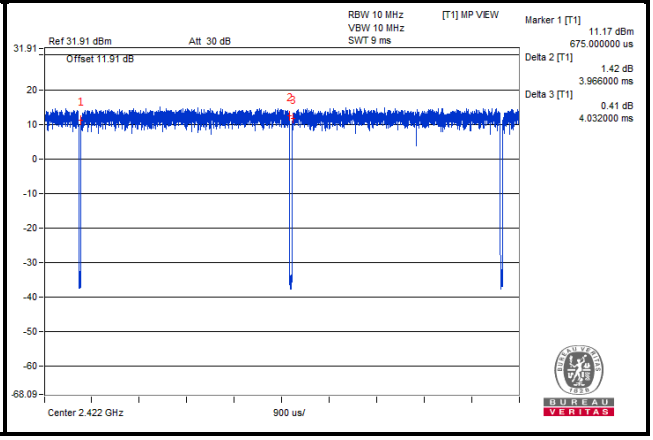
802.11n (HT40)



802.11ax (HE20)



802.11ax (HE40)



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	Getac	V110 , V110G6	N/A	N/A	Provided by Client
B.	Bluetooth Tester	R&S	CBT	100980	N/A	Provided by Lab
C.	Microphone	Labtec	LVA7313	N/A	N/A	Provided by Lab
D.	HDD*2	TOSHIBA	DTB305	45TGCN0IT3ZB 45U6CMSPT3ZB	N/A	Provided by Lab
E.	MODEM	ACEEX	1414V/3	0401008243	IFAXDM1414	Provided by Lab
F.	MONITOR	DELL	U2410	CN-0J257M-72872-0A6-08JL	Doc	Provided by Lab
G.	USB MOUSE	DELL	MS111-P	CN-011D3V-71581-1CJ-0936	FCC DoC Approved	Provided by Lab
H.	SD Card	Transcend	16GB	N/A	N/A	Provided by Lab
I.	Terminal	N/A	N/A	N/A	N/A	Provided by Lab

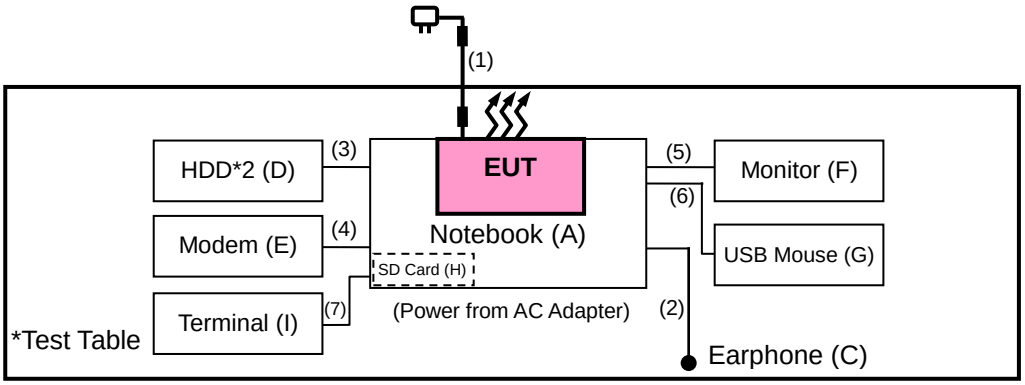
Note:

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

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Adapter Cable	1	1.55	Y	2	Accessory of the EUT
2.	Microphone Cable	1	1.0	Y	0	Provided by Lab
3.	USB Cable	1	0.5	N	0	Provided by Lab
4.	RS-232 Cable	1	1.2	Y	0	Provided by Lab
5.	HDMI Cable	1	2.0	Y	0	Provided by Lab HDMI 2.0 (Amber / HDMI-AA120)
6.	USB Cable	1	1.8	Y	0	Provided by Lab
7.	RJ45 Cable	1	1.5	N	0	Provided by Lab

Note: The core(s) is(are) originally attached to the cable(s).

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

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

Test Standard:

FCC Part 15, Subpart C (15.247)
ANSI C63.10-2013

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

References Test Guidance:

KDB 558074 D01 Meas Guidance v05r02
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. Other emissions shall be at least 20 dB below the highest level of the desired power:

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.

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
Broadband Horn Antenna SCHWARZBECK	BBHA 9170	148	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 24, 2019	Nov. 23, 2020
BILOG Antenna SCHWARZBECK	VULB 9168	9168-472	Nov. 08, 2019	Nov. 07, 2020
Fixed Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021
Loop Antenna	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier EMCI	EMC001340	980201	Oct. 14, 2019	Oct. 13, 2020
Preamplifier EMCI	EMC 012645	980115	Oct. 08, 2019	Oct. 07, 2020
Preamplifier EMCI	EMC 184045	980116	Oct. 08, 2019	Oct. 07, 2020
Preamplifier EMCI	EMC 330H	980112	Oct. 08, 2019	Oct. 07, 2020
Power Meter Anritsu	ML2495A	1012010	Sep. 04, 2019	Sep. 03, 2020
Power Sensor Anritsu	MA2411B	1315050	Sep. 04, 2019	Sep. 03, 2020
RF Coaxial Cable HUBER+SUHNNER	EMC104-SM-SM-8000&3000	140811+170717	Oct. 08, 2019	Oct. 07, 2020
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	Oct. 08, 2019	Oct. 07, 2020
RF Coaxial Cable WOKEN	8D-FB	Cable-Ch10-01	Oct. 08, 2019	Oct. 07, 2020
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:

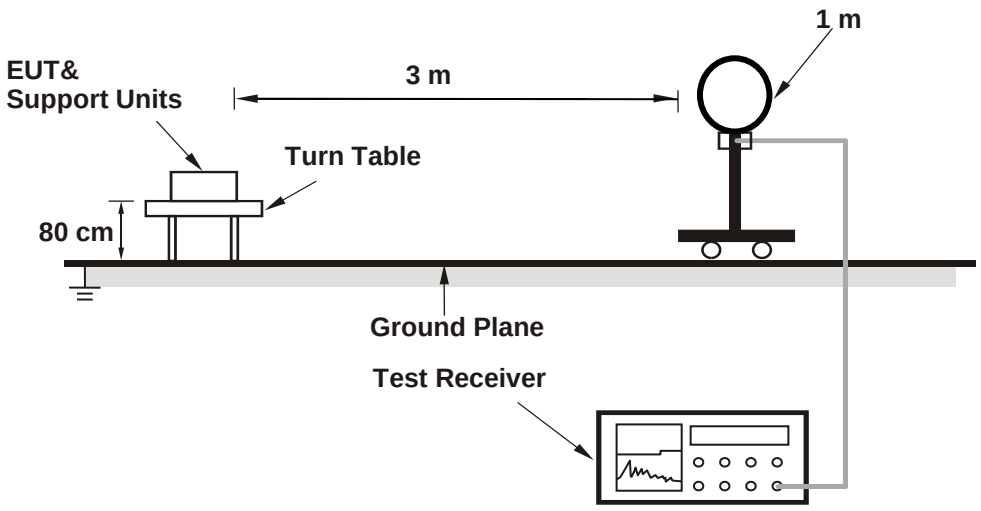
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98 %) or 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz. (11b: RBW = 1 MHz, VBW =10 Hz ; 11g: RBW = 1 MHz, VBW = 1 kHz ; 11n (HT20): RBW = 1 MHz, VBW = 10 Hz ; 11n (HT40): RBW = 1 MHz, VBW = 10 Hz ; 11ax (HE20): RBW = 1 MHz, VBW = 10 Hz ; 11ax (HE40): RBW = 1 MHz, VBW = 10 Hz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

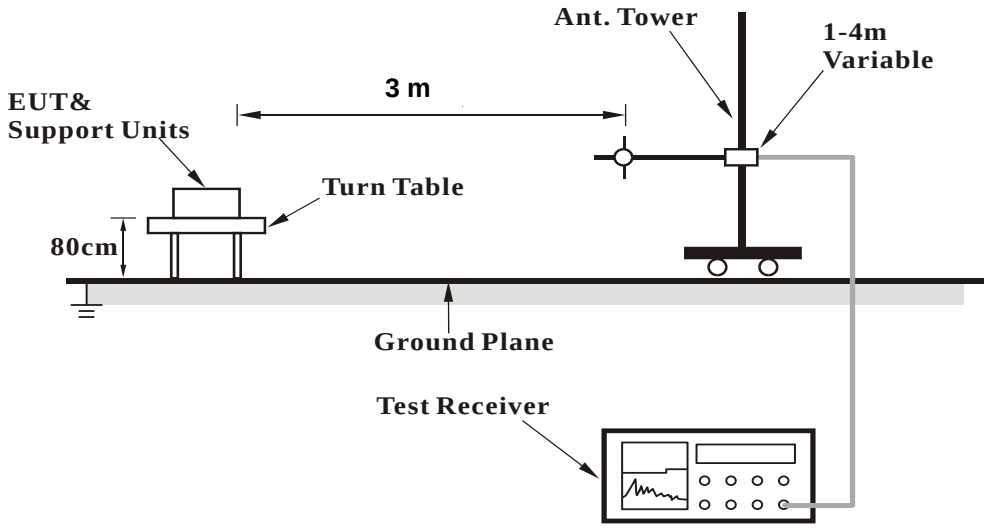
No deviation.

4.1.5 Test Set Up

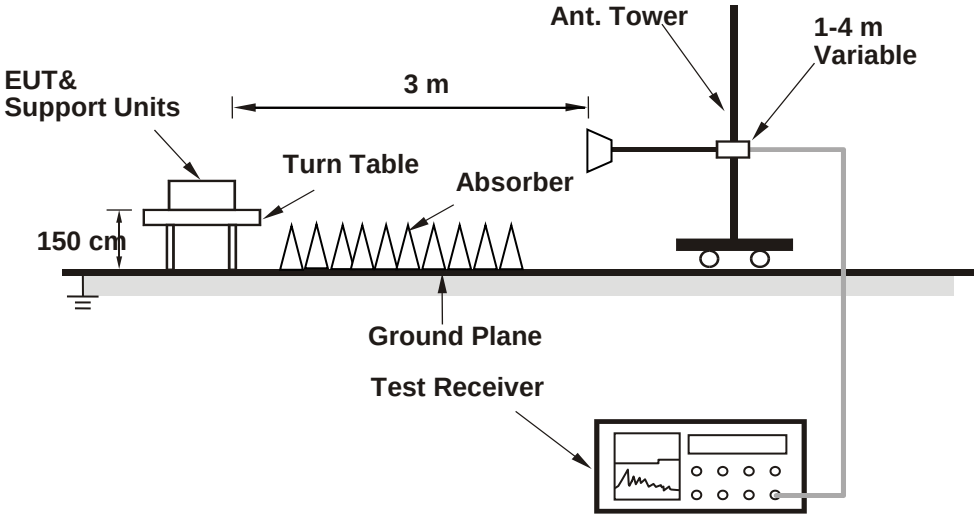
<Radiated Emission below 30 MHz>



<Radiated Emission 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



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

4.1.6 EUT Operating Conditions

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

4.1.7 Test Results

Above 1 GHz Data：

802.11b

EUT Test Condition		Measurement Detail	
Channel	Channel 1	**Frequency Range**	1 GHz ~ 25 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**
2385.48	39.71	45.61	-5.9	54	-14.29	104	236	Average
2385.48	48.26	54.16	-5.9	74	-25.74	104	236	Peak
2412	100.79	106.74	-5.95	------	------	104	236	Average
2412	104.49	110.44	-5.95	------	------	104	236	Peak
4824	43.53	59.15	-15.62	54	-10.47	284	252	Average
4824	46.06	61.68	-15.62	74	-27.94	284	252	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**
2385.582	39.45	45.35	-5.9	54	-14.55	302	74	Average
2385.582	47.72	53.62	-5.9	74	-26.28	302	74	Peak
2412	100.39	106.34	-5.95	------	------	302	74	Average
2412	104.56	110.51	-5.95	------	------	302	74	Peak
4824	40.21	55.83	-15.62	54	-13.79	133	342	Average
4824	44.69	60.31	-15.62	74	-29.31	133	342	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2412 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 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**
2369.66	36.37	42.23	-5.86	54	-17.63	108	237	Average
2369.66	47.32	53.18	-5.86	74	-26.68	108	237	Peak
2437	103.58	109.47	-5.89	------	------	108	237	Average
2437	105.86	111.75	-5.89	------	------	108	237	Peak
2491.83	36.55	42.16	-5.61	54	-17.45	108	237	Average
2491.83	46.56	52.17	-5.61	74	-27.44	108	237	Peak
4874	47.92	63.48	-15.56	54	-6.08	284	252	Average
4874	49.73	65.29	-15.56	74	-24.27	284	252	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**
2356.36	36.34	42.17	-5.83	54	-17.66	305	65	Average
2356.36	46.8	52.63	-5.83	74	-27.2	305	65	Peak
2437	104.35	110.24	-5.89	------	------	305	65	Average
2437	107.91	113.8	-5.89	------	------	305	65	Peak
2490.5	36.19	41.87	-5.68	54	-17.81	305	65	Average
2490.5	47.29	52.97	-5.68	74	-26.71	305	65	Peak
4874	48.04	63.6	-15.56	54	-5.96	202	120	Average
4874	49.5	65.06	-15.56	74	-24.5	202	120	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 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**
2462	101.88	107.69	-5.81	------	------	106	236	Average
2462	104.34	110.15	-5.81	------	------	106	236	Peak
2488.296	36.9	42.58	-5.68	54	-17.1	106	236	Average
2488.296	47.62	53.3	-5.68	74	-26.38	106	236	Peak
4924	40.69	56.2	-15.51	54	-13.31	285	257	Average
4924	44.41	59.92	-15.51	74	-29.59	285	257	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**
2462	102.12	107.93	-5.81	------	------	301	68	Average
2462	104.51	110.32	-5.81	------	------	301	68	Peak
2484.192	36.94	42.64	-5.7	54	-17.06	301	68	Average
2484.192	47.9	53.6	-5.7	74	-26.1	301	68	Peak
4924	40.51	56.02	-15.51	54	-13.49	110	68	Average
4924	44.57	60.08	-15.51	74	-29.43	110	68	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 12	**Frequency Range**	1 GHz ~ 25 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**
2467	101.1	106.82	-5.72	------	------	108	237	Average
2467	104.4	110.12	-5.72	------	------	108	237	Peak
2483.698	39.53	45.23	-5.7	54	-14.47	108	237	Average
2483.698	49.36	55.06	-5.7	74	-24.64	108	237	Peak
4934	38.72	54.23	-15.51	54	-15.28	290	256	Average
4934	43.21	58.72	-15.51	74	-30.79	290	256	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**
2467	101.9	107.62	-5.72	------	------	302	68	Average
2467	104.12	109.84	-5.72	------	------	302	68	Peak
2483.584	39.48	45.18	-5.7	54	-14.52	302	68	Average
2483.584	48.6	54.3	-5.7	74	-25.4	302	68	Peak
4934	37.68	53.19	-15.51	54	-16.32	163	68	Average
4934	44.18	59.69	-15.51	74	-29.82	163	68	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2467 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 13	**Frequency Range**	1 GHz ~ 25 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**
2472	98.68	104.39	-5.71	------	------	113	238	Average
2472	101.9	107.61	-5.71	------	------	113	238	Peak
2483.926	39.97	45.67	-5.7	54	-14.03	113	238	Average
2483.926	61.67	67.37	-5.7	74	-12.33	113	238	Peak
4944	36.07	51.56	-15.49	54	-17.93	275	254	Average
4944	42.17	57.66	-15.49	74	-31.83	275	254	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**
2472	99.39	105.1	-5.71	------	------	302	68	Average
2472	101.91	107.62	-5.71	------	------	302	68	Peak
2483.66	39.37	45.07	-5.7	54	-14.63	302	68	Average
2483.66	60.71	66.41	-5.7	74	-13.29	302	68	Peak
4944	34.67	50.16	-15.49	54	-19.33	151	66	Average
4944	42.19	57.68	-15.49	74	-31.81	151	66	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2472 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

802.11g

EUT Test Condition		Measurement Detail	
Channel	Channel 1	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Tim 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**
2390	42.2	48.12	-5.92	54	-11.8	116	236	Average
2390	53.89	59.81	-5.92	74	-20.11	116	236	Peak
2412	97.73	103.68	-5.95	------	------	116	236	Average
2412	104.96	110.91	-5.95	------	------	116	236	Peak
4824	34.74	50.36	-15.62	54	-19.26	167	208	Average
4824	43.19	58.81	-15.62	74	-30.81	167	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**
2390	40.14	46.06	-5.92	54	-13.86	304	80	Average
2390	51.24	57.16	-5.92	74	-22.76	304	80	Peak
2412	96.81	102.76	-5.95	------	------	304	80	Average
2412	104.01	109.96	-5.95	------	------	304	80	Peak
4824	34.22	49.84	-15.62	54	-19.78	123	101	Average
4824	42.62	58.24	-15.62	74	-31.38	123	101	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2412 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Tim 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**
2390	39.23	45.15	-5.92	54	-14.77	135	238	Average
2390	52.87	58.79	-5.92	74	-21.13	135	238	Peak
2437	102.25	108.14	-5.89	------	------	135	238	Average
2437	108.67	114.56	-5.89	------	------	135	238	Peak
2483.5	39.08	44.78	-5.7	54	-14.92	135	238	Average
2483.5	49.73	55.43	-5.7	74	-24.27	135	238	Peak
4874	33.81	49.37	-15.56	54	-20.19	133	267	Average
4874	41.6	57.16	-15.56	74	-32.4	133	267	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**
2390	37.92	43.84	-5.92	54	-16.08	276	85	Average
2390	48.3	54.22	-5.92	74	-25.7	276	85	Peak
2437	101.59	107.48	-5.89	------	------	276	85	Average
2437	109.13	115.02	-5.89	------	------	276	85	Peak
2483.5	39.11	44.81	-5.7	54	-14.89	276	85	Average
2483.5	49.74	55.44	-5.7	74	-24.26	276	85	Peak
4874	34.48	50.04	-15.56	54	-19.52	198	180	Average
4874	43.18	58.74	-15.56	74	-30.82	198	180	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Tim 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**
2462	95.51	101.32	-5.81	------	------	115	238	Average
2462	102.54	108.35	-5.81	------	------	115	238	Peak
2483.5	37.95	43.65	-5.7	54	-16.05	115	238	Average
2483.5	48.03	53.73	-5.7	74	-25.97	115	238	Peak
4924	34.12	49.63	-15.51	54	-19.88	169	277	Average
4924	42.88	58.39	-15.51	74	-31.12	169	277	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**
2462	92.96	98.77	-5.81	------	------	203	29	Average
2462	100.09	105.9	-5.81	------	------	203	29	Peak
2483.5	37.18	42.88	-5.7	54	-16.82	203	29	Average
2483.5	47.61	53.31	-5.7	74	-26.39	203	29	Peak
4924	34.8	50.31	-15.51	54	-19.2	111	74	Average
4924	42.89	58.4	-15.51	74	-31.11	111	74	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 12	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Tim 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**
2467	92.63	98.35	-5.72	------	------	115	237	Average
2467	100.74	106.46	-5.72	------	------	115	237	Peak
2483.5	40.93	46.63	-5.7	54	-13.07	115	237	Average
2483.5	51.22	56.92	-5.7	74	-22.78	115	237	Peak
4934	33.66	49.17	-15.51	54	-20.34	183	202	Average
4934	41.55	57.06	-15.51	74	-32.45	183	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**
2467	93.08	98.8	-5.72	------	------	371	34	Average
2467	100.19	105.91	-5.72	------	------	371	34	Peak
2483.5	40.48	46.18	-5.7	54	-13.52	371	34	Average
2483.5	51.26	56.96	-5.7	74	-22.74	371	34	Peak
4934	34.13	49.64	-15.51	54	-19.87	127	301	Average
4934	41.91	57.42	-15.51	74	-32.09	127	301	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2467 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 13	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Tim 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**
2472	91.34	97.05	-5.71	------	------	113	238	Average
2472	98.19	103.9	-5.71	------	------	113	238	Peak
2483.5	45.95	51.65	-5.7	54	-8.05	113	238	Average
2483.5	66.73	72.43	-5.7	74	-7.27	113	238	Peak
4944	33.06	48.55	-15.49	54	-20.94	153	307	Average
4944	41.12	56.61	-15.49	74	-32.88	153	307	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**
2472	91.5	97.21	-5.71	------	------	372	35	Average
2472	98.74	104.45	-5.71	------	------	372	35	Peak
2483.5	47.58	53.28	-5.7	54	-6.42	372	35	Average
2483.5	67.31	73.01	-5.7	74	-6.69	372	35	Peak
4944	33.89	49.38	-15.49	54	-20.11	171	93	Average
4944	42.01	57.5	-15.49	74	-31.99	171	93	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2472 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 1	**Frequency Range**	1 GHz ~ 25 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**
2389.866	47.74	53.66	-5.92	54	-6.26	200	119	Average
2389.866	59.01	64.93	-5.92	74	-14.99	200	119	Peak
2412	97.33	103.28	-5.95	------	------	200	119	Average
2412	105.49	111.44	-5.95	------	------	200	119	Peak
4824	33.25	48.87	-15.62	54	-20.75	190	253	Average
4824	41.36	56.98	-15.62	74	-32.64	190	253	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**
2389.968	45.87	51.79	-5.92	54	-8.13	198	184	Average
2389.968	56.94	62.86	-5.92	74	-17.06	198	184	Peak
2412	98.32	104.27	-5.95	------	------	198	184	Average
2412	106.63	112.58	-5.95	------	------	198	184	Peak
4824	33.55	49.17	-15.62	54	-20.45	194	100	Average
4824	41.93	57.55	-15.62	74	-32.07	194	100	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2412 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 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**
2389.99	39.19	45.11	-5.92	54	-14.81	195	119	Average
2389.99	50.98	56.9	-5.92	74	-23.02	195	119	Peak
2437	100.79	106.68	-5.89	------	------	195	119	Average
2437	108.62	114.51	-5.89	------	------	195	119	Peak
2483.66	38.62	44.32	-5.7	54	-15.38	195	119	Average
2483.66	49.91	55.61	-5.7	74	-24.09	195	119	Peak
4874	35.64	51.2	-15.56	54	-18.36	174	253	Average
4874	43.74	59.3	-15.56	74	-30.26	174	253	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**
2389.8	38.99	44.91	-5.92	54	-15.01	178	187	Average
2389.8	51.92	57.84	-5.92	74	-22.08	178	187	Peak
2437	101.66	107.55	-5.89	------	------	178	187	Average
2437	110.09	115.98	-5.89	------	------	178	187	Peak
2483.6	49.19	54.89	-5.7	74	-24.81	178	187	Peak
2483.66	38.33	44.03	-5.7	54	-15.67	178	187	Average
4874	35.8	51.36	-15.56	54	-18.2	190	91	Average
4874	44.08	59.64	-15.56	74	-29.92	190	91	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 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**
2462	95.76	101.57	-5.81	------	------	200	118	Average
2462	103.66	109.47	-5.81	------	------	200	118	Peak
2483.698	39.22	44.92	-5.7	54	-14.78	200	118	Average
2483.698	51.22	56.92	-5.7	74	-22.78	200	118	Peak
4924	33.24	48.75	-15.51	54	-20.76	180	259	Average
4924	40.48	55.99	-15.51	74	-33.52	180	259	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**
2462	97.48	103.29	-5.81	------	------	197	188	Average
2462	105.59	111.4	-5.81	------	------	197	188	Peak
2483.546	39.33	45.03	-5.7	54	-14.67	197	188	Average
2483.546	50.55	56.25	-5.7	74	-23.45	197	188	Peak
4924	33.47	48.98	-15.51	54	-20.53	193	95	Average
4924	41.04	56.55	-15.51	74	-32.96	193	95	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 12	**Frequency Range**	1 GHz ~ 25 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**
2467	93.4	99.12	-5.72	------	------	196	118	Average
2467	102.28	108	-5.72	------	------	196	118	Peak
2483.546	42.32	48.02	-5.7	54	-11.68	196	118	Average
2483.546	54.55	60.25	-5.7	74	-19.45	196	118	Peak
4934	33.21	48.72	-15.51	54	-20.79	188	263	Average
4934	41.02	56.53	-15.51	74	-32.98	188	263	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**
2467	94.57	100.29	-5.72	------	------	200	180	Average
2467	103.19	108.91	-5.72	------	------	200	180	Peak
2483.546	42.46	48.16	-5.7	54	-11.54	200	180	Average
2483.546	52.09	57.79	-5.7	74	-21.91	200	180	Peak
4934	33.4	48.91	-15.51	54	-20.6	192	82	Average
4934	41.09	56.6	-15.51	74	-32.91	192	82	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2467 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 13	**Frequency Range**	1 GHz ~ 25 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**
2472	88.19	93.9	-5.71	------	------	199	124	Average
2472	96.69	102.4	-5.71	------	------	199	124	Peak
2483.546	40.87	46.57	-5.7	54	-13.13	199	124	Average
2483.546	57.46	63.16	-5.7	74	-16.54	199	124	Peak
4944	33.07	48.56	-15.49	54	-20.93	171	245	Average
4944	40.78	56.27	-15.49	74	-33.22	171	245	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**
2472	90.05	95.76	-5.71	------	------	195	190	Average
2472	98.22	103.93	-5.71	------	------	195	190	Peak
2483.546	41.93	47.63	-5.7	54	-12.07	195	190	Average
2483.546	60.45	66.15	-5.7	74	-13.55	195	190	Peak
4944	33.25	48.74	-15.49	54	-20.75	198	100	Average
4944	40.41	55.9	-15.49	74	-33.59	198	100	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2472 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 3	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2389	44.88	50.78	-5.9	54	-9.12	150	206	Average
2389	55.63	61.53	-5.9	74	-18.37	150	206	Peak
2422	92.12	98	-5.88	------	------	150	206	Average
2422	100.28	106.16	-5.88	------	------	150	206	Peak
2484	36.77	42.47	-5.7	54	-17.23	150	206	Average
2484	46.02	51.72	-5.7	74	-27.98	150	206	Peak
4844	36.33	51.92	-15.59	54	-17.67	152	162	Average
4844	43.32	58.91	-15.59	74	-30.68	152	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**
2389	40.85	46.75	-5.9	54	-13.15	308	90	Average
2389	51.69	57.59	-5.9	74	-22.31	308	90	Peak
2422	91.57	97.45	-5.88	------	------	308	90	Average
2422	99.68	105.56	-5.88	------	------	308	90	Peak
2488	36.44	42.12	-5.68	54	-17.56	308	90	Average
2488	46.3	51.98	-5.68	74	-27.7	308	90	Peak
4844	35.54	51.13	-15.59	54	-18.46	145	162	Average
4844	43.59	59.18	-15.59	74	-30.41	145	162	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2422 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2389	39.56	45.46	-5.9	54	-14.44	154	206	Average
2389	50.07	55.97	-5.9	74	-23.93	154	206	Peak
2437	92.04	97.93	-5.89	------	------	154	206	Average
2437	101.05	106.94	-5.89	------	------	154	206	Peak
2484	39.05	44.75	-5.7	54	-14.95	154	206	Average
2484	48.92	54.62	-5.7	74	-25.08	154	206	Peak
4874	35.67	51.23	-15.56	54	-18.33	111	147	Average
4874	43.66	59.22	-15.56	74	-30.34	111	147	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**
2387	37.17	43.06	-5.89	54	-16.83	307	89	Average
2387	46.99	52.88	-5.89	74	-27.01	307	89	Peak
2437	91.42	97.31	-5.89	------	------	307	89	Average
2437	100.06	105.95	-5.89	------	------	307	89	Peak
2484	37.48	43.18	-5.7	54	-16.52	307	89	Average
2484	46.99	52.69	-5.7	74	-27.01	307	89	Peak
4874	35.63	51.19	-15.56	54	-18.37	132	265	Average
4874	43.59	59.15	-15.56	74	-30.41	132	265	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 9	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2385	37.05	42.95	-5.9	54	-16.95	149	205	Average
2385	46.52	52.42	-5.9	74	-27.48	149	205	Peak
2452	91.56	97.38	-5.82	------	------	149	205	Average
2452	100.48	106.3	-5.82	------	------	149	205	Peak
2486	40.43	46.13	-5.7	54	-13.57	149	205	Average
2486	49.4	55.1	-5.7	74	-24.6	149	205	Peak
4904	35.98	51.53	-15.55	54	-18.02	111	145	Average
4904	44.02	59.57	-15.55	74	-29.98	111	145	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**
2376	36.42	42.3	-5.88	54	-17.58	306	64	Average
2376	46.5	52.38	-5.88	74	-27.5	306	64	Peak
2452	92.09	97.91	-5.82	------	------	306	64	Average
2452	100.63	106.45	-5.82	------	------	306	64	Peak
2483.5	39.03	44.73	-5.7	54	-14.97	306	64	Average
2483.5	53.33	59.03	-5.7	74	-20.67	306	64	Peak
4904	35.71	51.26	-15.55	54	-18.29	111	162	Average
4904	43.76	59.31	-15.55	74	-30.24	111	162	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2452 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 10	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2375	36.27	42.14	-5.87	54	-17.73	152	205	Average
2375	46.82	52.69	-5.87	74	-27.18	152	205	Peak
2457	84.4	90.21	-5.81	------	------	152	205	Average
2457	93.54	99.35	-5.81	------	------	152	205	Peak
2483.5	42.68	48.38	-5.7	54	-11.32	152	205	Average
2483.5	51.57	57.27	-5.7	74	-22.43	152	205	Peak
4914	35.87	51.4	-15.53	54	-18.13	111	132	Average
4914	43.87	59.4	-15.53	74	-30.13	111	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**
2352	36.16	41.98	-5.82	54	-17.84	308	66	Average
2352	45.88	51.7	-5.82	74	-28.12	308	66	Peak
2457	83.81	89.62	-5.81	------	------	308	66	Average
2457	92.82	98.63	-5.81	------	------	308	66	Peak
2483.5	41.82	47.52	-5.7	54	-12.18	308	66	Average
2483.5	51.78	57.48	-5.7	74	-22.22	308	66	Peak
4914	36.17	51.7	-15.53	54	-17.83	152	231	Average
4914	44.18	59.71	-15.53	74	-29.82	152	231	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2457 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2387	36.46	42.35	-5.89	54	-17.54	154	206	Average
2387	45.74	51.63	-5.89	74	-28.26	154	206	Peak
2462	88.11	93.92	-5.81	------	------	154	206	Average
2462	95.7	101.51	-5.81	------	------	154	206	Peak
2483.5	45.36	51.06	-5.7	54	-8.64	154	206	Average
2483.5	61.72	67.42	-5.7	74	-12.28	154	206	Peak
4924	35.87	51.38	-15.51	54	-18.13	152	142	Average
4924	43.87	59.38	-15.51	74	-30.13	152	142	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**
2387	36.26	42.15	-5.89	54	-17.74	328	62	Average
2387	47.35	53.24	-5.89	74	-26.65	328	62	Peak
2462	87.44	93.25	-5.81	------	------	328	62	Average
2462	95.46	101.27	-5.81	------	------	328	62	Peak
2483.5	47.06	52.76	-5.7	54	-6.94	328	62	Average
2483.5	61.57	67.27	-5.7	74	-12.43	328	62	Peak
4924	36.17	51.68	-15.51	54	-17.83	132	251	Average
4924	44.18	59.69	-15.51	74	-29.82	132	251	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 1	**Frequency Range**	1 GHz ~ 25 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**
2389.866	48.02	53.94	-5.92	54	-5.98	198	120	Average
2389.866	65.94	71.86	-5.92	74	-8.06	198	120	Peak
2412	94.49	100.44	-5.95	------	------	198	120	Average
2412	104.02	109.97	-5.95	------	------	198	120	Peak
4824	33.4	49.02	-15.62	54	-20.6	171	242	Average
4824	41.65	57.27	-15.62	74	-32.35	171	242	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**
2389.968	46.63	52.55	-5.92	54	-7.37	196	184	Average
2389.968	64.45	70.37	-5.92	74	-9.55	196	184	Peak
2412	95.43	101.38	-5.95	------	------	196	184	Average
2412	104.68	110.63	-5.95	------	------	196	184	Peak
4824	33.5	49.12	-15.62	54	-20.5	189	94	Average
4824	41.7	57.32	-15.62	74	-32.3	189	94	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2412 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 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**
2389.99	41.08	47	-5.92	54	-12.92	193	121	Average
2389.99	57.24	63.16	-5.92	74	-16.76	193	121	Peak
2437	97.94	103.83	-5.89	------	------	193	121	Average
2437	106.7	112.59	-5.89	------	------	193	121	Peak
2484.23	41.49	47.19	-5.7	54	-12.51	193	121	Average
2484.23	58.5	64.2	-5.7	74	-15.5	193	121	Peak
4874	34.5	50.06	-15.56	54	-19.5	175	262	Average
4874	41.95	57.51	-15.56	74	-32.05	175	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**
2389.99	41.12	47.04	-5.92	54	-12.88	179	184	Average
2389.99	57.05	62.97	-5.92	74	-16.95	179	184	Peak
2437	99.42	105.31	-5.89	------	------	179	184	Average
2437	109.22	115.11	-5.89	------	------	179	184	Peak
2483.85	41.79	47.49	-5.7	54	-12.21	179	184	Average
2483.85	57.66	63.36	-5.7	74	-16.34	179	184	Peak
4874	34.72	50.28	-15.56	54	-19.28	192	71	Average
4874	42.57	58.13	-15.56	74	-31.43	192	71	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 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**
2462	92.78	98.59	-5.81	------	------	203	123	Average
2462	101.17	106.98	-5.81	------	------	203	123	Peak
2483.584	40.06	45.76	-5.7	54	-13.94	203	123	Average
2483.584	60.11	65.81	-5.7	74	-13.89	203	123	Peak
4924	33.33	48.84	-15.51	54	-20.67	168	236	Average
4924	42.13	57.64	-15.51	74	-31.87	168	236	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**
2462	94.44	100.25	-5.81	------	------	197	186	Average
2462	103.15	108.96	-5.81	------	------	197	186	Peak
2483.622	40.84	46.54	-5.7	54	-13.16	197	186	Average
2483.622	59.37	65.07	-5.7	74	-14.63	197	186	Peak
4924	33.46	48.97	-15.51	54	-20.54	188	92	Average
4924	42.23	57.74	-15.51	74	-31.77	188	92	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 12	**Frequency Range**	1 GHz ~ 25 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**
2467	90.92	96.64	-5.72	------	------	198	124	Average
2467	100.19	105.91	-5.72	------	------	198	124	Peak
2483.622	41.79	47.49	-5.7	54	-12.21	198	124	Average
2483.622	62.24	67.94	-5.7	74	-11.76	198	124	Peak
4934	33.23	48.74	-15.51	54	-20.77	173	229	Average
4934	40.9	56.41	-15.51	74	-33.1	173	229	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**
2467	92.84	98.56	-5.72	------	------	195	189	Average
2467	101.87	107.59	-5.72	------	------	195	189	Peak
2483.546	42.54	48.24	-5.7	54	-11.46	195	189	Average
2483.546	62.35	68.05	-5.7	74	-11.65	195	189	Peak
4934	33.37	48.88	-15.51	54	-20.63	190	108	Average
4934	40.94	56.45	-15.51	74	-33.06	190	108	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2467 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 13	**Frequency Range**	1 GHz ~ 25 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**
2472	88.17	93.88	-5.71	------	------	196	124	Average
2472	97.59	103.3	-5.71	------	------	196	124	Peak
2483.546	41.52	47.22	-5.7	54	-12.48	196	124	Average
2483.546	61.63	67.33	-5.7	74	-12.37	196	124	Peak
4944	33.03	48.52	-15.49	54	-20.97	188	92	Average
4944	41.72	57.21	-15.49	74	-32.28	188	92	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**
2472	90.47	96.18	-5.71	------	------	191	183	Average
2472	99.08	104.79	-5.71	------	------	191	183	Peak
2483.546	42.79	48.49	-5.7	54	-11.21	191	183	Average
2483.546	64.36	70.06	-5.7	74	-9.64	191	183	Peak
4944	33.2	48.69	-15.49	54	-20.8	188	92	Average
4944	41.72	57.21	-15.49	74	-32.28	188	92	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2472 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 3	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2386	42.35	48.25	-5.9	54	-11.65	148	204	Average
2386	51.51	57.41	-5.9	74	-22.49	148	204	Peak
2422	91.1	96.98	-5.88	------	------	148	204	Average
2422	99.39	105.27	-5.88	------	------	148	204	Peak
2493	36.8	42.41	-5.61	54	-17.2	148	204	Average
2493	46.49	52.1	-5.61	74	-27.51	148	204	Peak
4844	35.67	51.26	-15.59	54	-18.33	102	251	Average
4844	43.67	59.26	-15.59	74	-30.33	102	251	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**
2389	39.82	45.72	-5.9	54	-14.18	308	90	Average
2389	48.76	54.66	-5.9	74	-25.24	308	90	Peak
2422	90.1	95.98	-5.88	------	------	308	90	Average
2422	97.97	103.85	-5.88	------	------	308	90	Peak
2484	36.47	42.17	-5.7	54	-17.53	308	90	Average
2484	46.06	51.76	-5.7	74	-27.94	308	90	Peak
4844	35.72	51.31	-15.59	54	-18.28	165	192	Average
4844	43.74	59.33	-15.59	74	-30.26	165	192	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2422 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 6	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2386	38.99	44.89	-5.9	54	-15.01	156	206	Average
2386	48.64	54.54	-5.9	74	-25.36	156	206	Peak
2437	93.09	98.98	-5.89	------	------	156	206	Average
2437	101.4	107.29	-5.89	------	------	156	206	Peak
2486	38.05	43.75	-5.7	54	-15.95	156	206	Average
2486	48.24	53.94	-5.7	74	-25.76	156	206	Peak
4874	35.57	51.13	-15.56	54	-18.43	125	165	Average
4874	43.58	59.14	-15.56	74	-30.42	125	165	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**
2387	37.56	43.45	-5.89	54	-16.44	337	60	Average
2387	47.91	53.8	-5.89	74	-26.09	337	60	Peak
2437	94.09	99.98	-5.89	------	------	337	60	Average
2437	102.47	108.36	-5.89	------	------	337	60	Peak
2484	37.67	43.37	-5.7	54	-16.33	337	60	Average
2484	47.97	53.67	-5.7	74	-26.03	337	60	Peak
4874	35.99	51.55	-15.56	54	-18.01	145	152	Average
4874	43.87	59.43	-15.56	74	-30.13	145	152	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2437 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 9	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2384	36.83	42.72	-5.89	54	-17.17	147	205	Average
2384	46.74	52.63	-5.89	74	-27.26	147	205	Peak
2452	93.09	98.91	-5.82	------	------	147	205	Average
2452	101.32	107.14	-5.82	------	------	147	205	Peak
2484	39.35	45.05	-5.7	54	-14.65	147	205	Average
2484	49.51	55.21	-5.7	74	-24.49	147	205	Peak
4904	35.98	51.53	-15.55	54	-18.02	132	265	Average
4904	44	59.55	-15.55	74	-30	132	265	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**
2379	36.92	42.8	-5.88	54	-17.08	355	150	Average
2379	47.26	53.14	-5.88	74	-26.74	355	150	Peak
2452	91.98	97.8	-5.82	------	------	355	150	Average
2452	100	105.82	-5.82	------	------	355	150	Peak
2483.5	40.05	45.75	-5.7	54	-13.95	355	150	Average
2483.5	52.02	57.72	-5.7	74	-21.98	355	150	Peak
4904	36.09	51.64	-15.55	54	-17.91	162	231	Average
4904	44.1	59.65	-15.55	74	-29.9	162	231	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2452 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 10	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2335	36.38	42.11	-5.73	54	-17.62	139	206	Average
2335	46.36	52.09	-5.73	74	-27.64	139	206	Peak
2457	89.2	95.01	-5.81	------	------	139	206	Average
2457	96.66	102.47	-5.81	------	------	139	206	Peak
2483.5	46.48	52.18	-5.7	54	-7.52	139	206	Average
2483.5	55.98	61.68	-5.7	74	-18.02	139	206	Peak
4914	36.37	51.9	-15.53	54	-17.63	145	152	Average
4914	44.37	59.9	-15.53	74	-29.63	145	152	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**
2341	36.28	42.05	-5.77	54	-17.72	376	181	Average
2341	46.78	52.55	-5.77	74	-27.22	376	181	Peak
2457	90.1	95.91	-5.81	------	------	376	181	Average
2457	98.48	104.29	-5.81	------	------	376	181	Peak
2483.5	49.77	55.47	-5.7	54	-4.23	376	181	Average
2483.5	58.33	64.03	-5.7	74	-15.67	376	181	Peak
4914	35.7	51.23	-15.53	54	-18.3	132	162	Average
4914	43.69	59.22	-15.53	74	-30.31	132	162	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2457 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	1 GHz ~ 25 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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**
2388	38.96	44.85	-5.89	54	-15.04	150	206	Average
2388	51.15	57.04	-5.89	74	-22.85	150	206	Peak
2462	90.21	96.02	-5.81	------	------	150	206	Average
2462	98.05	103.86	-5.81	------	------	150	206	Peak
2483.5	53.48	59.18	-5.7	54	-0.52	150	206	Average
2483.5	67.64	73.34	-5.7	74	-6.36	150	206	Peak
4924	36.1	51.61	-15.51	54	-17.9	102	251	Average
4924	44.37	59.88	-15.51	74	-29.63	102	251	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**
2389	38.06	43.96	-5.9	54	-15.94	333	93	Average
2389	48.74	54.64	-5.9	74	-25.26	333	93	Peak
2462	89.82	95.63	-5.81	------	------	333	93	Average
2462	97.99	103.8	-5.81	------	------	333	93	Peak
2485	52.62	58.32	-5.7	54	-1.38	333	93	Average
2485	66.54	72.24	-5.7	74	-7.46	333	93	Peak
4924	35.49	51	-15.51	54	-18.51	165	231	Average
4924	43.69	59.2	-15.51	74	-30.31	165	231	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value
2. 2462 MHz: Fundamental frequency.
3. The emission levels of other frequencies were very low against the limit.

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:

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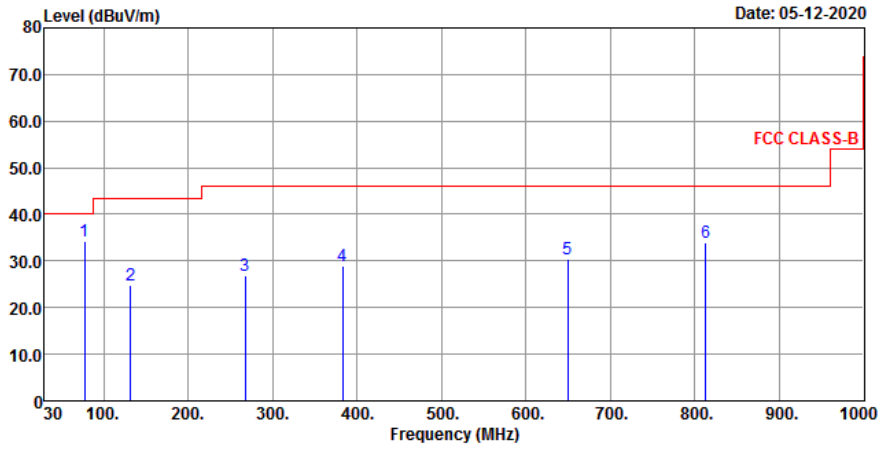
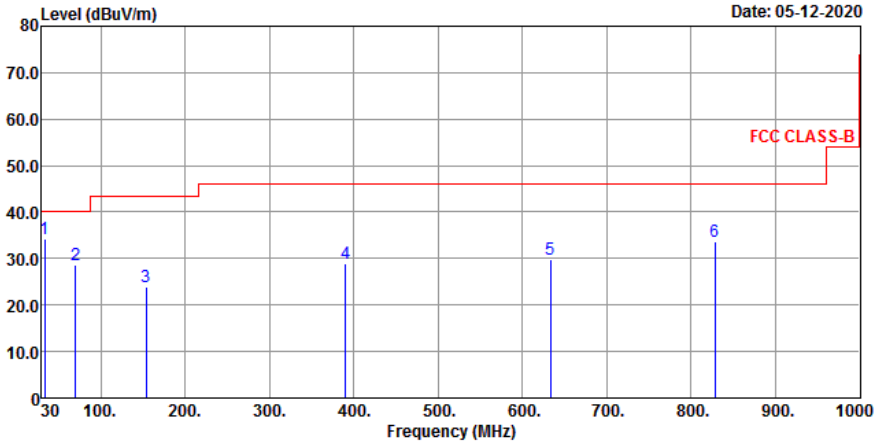
EUT Test Condition		Measurement Detail	
Channel	Channel 11	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Jisyong Wang

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
77.53	34.27	50.14	-15.87	40	-5.73	152	231	Peak
131.85	24.93	37.75	-12.82	43.5	-18.57	111	142	Peak
267.65	26.89	39.14	-12.25	46	-19.11	162	258	Peak
383.08	29.08	37.76	-8.68	46	-16.92	102	231	Peak
649.83	30.54	32.15	-1.61	46	-15.46	111	147	Peak
812.79	33.82	31.84	1.98	46	-12.18	132	251	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
33.88	34.14	47.01	-12.87	40	-5.86	192	251	Peak
69.77	28.76	42.61	-13.85	40	-11.24	111	142	Peak
154.16	23.77	35.33	-11.56	43.5	-19.73	162	253	Peak
389.87	28.91	37.49	-8.58	46	-17.09	125	152	Peak
633.34	29.8	31.55	-1.75	46	-16.2	132	251	Peak
828.31	33.66	31.42	2.24	46	-12.34	111	162	Peak

Remarks:

1. Emission Level = Read Level + Factor
   Margin value = Emission level – Limit value.
2. 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	ESR3	102412	Feb. 17, 2020	Feb. 16, 2021
RF signal cable Woken	5D-FB	Cable-cond2-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 20, 2020	Jan. 19, 2021
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 13, 2019	Aug. 12, 2020
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

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

4.2.3 Test Procedures

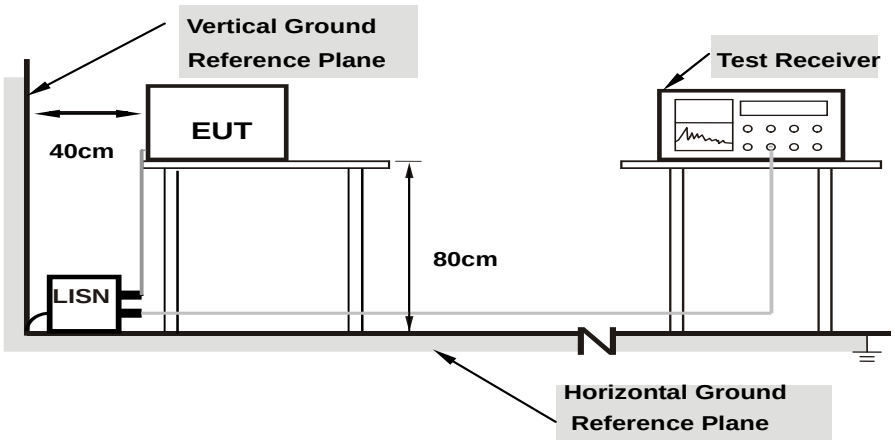
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50 uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

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

4.2.6 EUT Operating Conditions

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

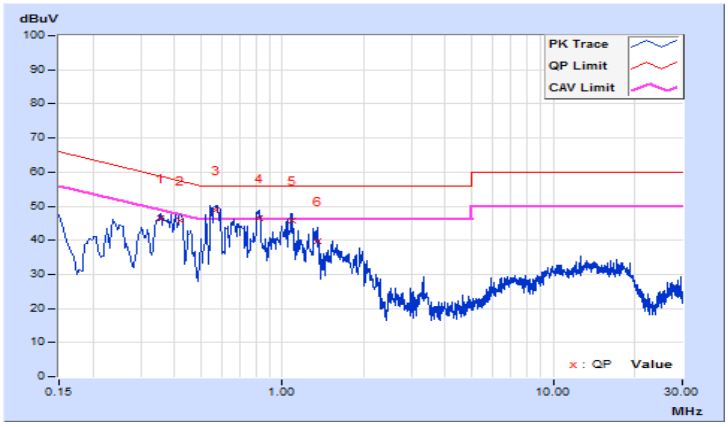
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Jisyong Wang	Test Date	2020/5/14

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	0.35400	10.19	36.17	30.56	46.36	40.75	58.87	48.87	-12.51	-8.12
2	0.41799	10.20	35.62	26.57	45.82	36.77	57.49	47.49	-11.67	-10.72
3	0.56591	10.22	38.53	30.87	48.75	41.09	56.00	46.00	-7.25	-4.91
4	0.81800	10.24	36.06	28.30	46.30	38.54	56.00	46.00	-9.70	-7.46
5	1.08600	10.26	35.39	27.64	45.65	37.90	56.00	46.00	-10.35	-8.10
6	1.34600	10.27	29.33	20.25	39.60	30.52	56.00	46.00	-16.40	-15.48

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

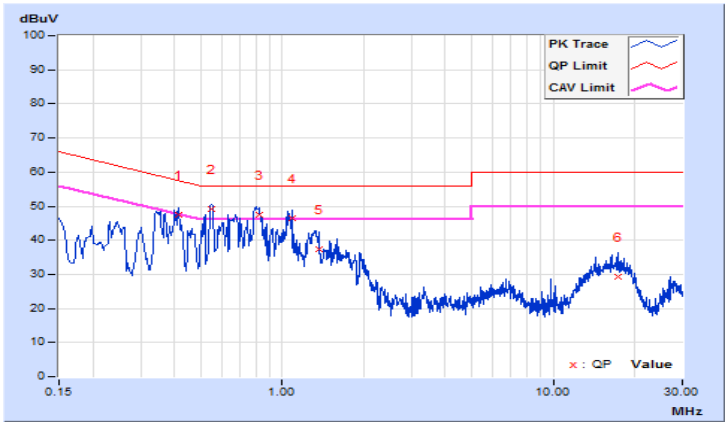


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Jisyong Wang	Test Date	2020/5/14

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	0.41400	10.18	37.30	28.35	47.48	38.53	57.57	47.57	-10.09	-9.04
2	0.54542	10.19	38.83	29.00	49.02	39.19	56.00	46.00	-6.98	-6.81
3	0.81800	10.22	37.23	29.14	47.45	39.36	56.00	46.00	-8.55	-6.64
4	**1.08200**	**10.24**	**36.19**	**32.59**	**46.43**	**42.83**	**56.00**	**46.00**	**-9.57**	**-3.17**
5	1.36200	10.25	27.09	20.78	37.34	31.03	56.00	46.00	-18.66	-14.97
6	17.30200	10.74	18.61	12.68	29.35	23.42	60.00	50.00	-30.65	-26.58

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 Conducted Output Power Measurement

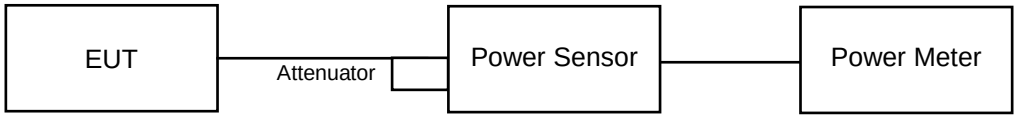
4.3.1 Limits of Conducted Output Power Measurement

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)
Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20 MHz channel widths with NANT ≥ 5.

For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedures

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average power sensor was 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.

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

Peak Power

802.11b

Chain 0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	157.761	21.98	30	Pass
6	2437	177.419	22.49	30	Pass
11	2462	122.744	20.89	30	Pass
12	2467	100.462	20.02	30	Pass
13	2472	55.719	17.46	30	Pass

Chain 1

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	137.404	21.38	30	Pass
6	2437	189.234	22.77	30	Pass
11	2462	136.773	21.36	30	Pass
12	2467	78.524	18.95	30	Pass
13	2472	44.361	16.47	30	Pass

802.11g

Chain 0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	138.357	21.41	30	Pass
6	2437	259.418	24.14	30	Pass
11	2462	98.855	19.95	30	Pass
12	2467	63.313	18.15	30	Pass
13	2472	107.399	20.31	30	Pass

Chain 1

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	145.546	21.63	30	Pass
6	2437	255.859	24.08	30	Pass
11	2462	93.756	19.72	30	Pass
12	2467	71.779	18.56	30	Pass
13	2472	107.895	20.33	30	Pass

802.11n (HT20)

Chain 0+1

Channel	Frequency (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	20.23	20.49	217.382	23.37	30	Pass
6	2437	23.18	23.27	420.294	26.24	30	Pass
11	2462	18.57	18.95	150.468	21.77	30	Pass
12	2467	15.09	15.84	70.656	18.49	30	Pass
13	2472	16.99	17.19	102.363	20.10	30	Pass

802.11n (HT40)

Chain 0+1

Channel	Frequency (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	19.46	19.71	181.849	22.60	30	Pass
6	2437	20.22	20.35	213.589	23.30	30	Pass
9	2452	20.32	20.49	219.59	23.42	30	Pass
10	2457	13.16	13.10	41.119	16.14	30	Pass
11	2462	19.37	19.79	181.776	22.60	30	Pass

802.11ax (HE20)

Chain 0+1

Channel	Frequency (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	20.91	20.97	248.336	23.95	30	Pass
6	2437	21.73	21.76	298.905	24.76	30	Pass
11	2462	19.83	19.48	184.877	22.67	30	Pass
12	2467	16.16	16.70	88.078	19.45	30	Pass
13	2472	18.92	18.95	156.507	21.95	30	Pass

802.11ax (HE40)

Chain 0+1

Channel	Frequency (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	20.83	20.66	237.472	23.76	30	Pass
6	2437	20.84	20.76	240.463	23.81	30	Pass
9	2452	20.29	20.20	211.618	23.26	30	Pass
10	2457	13.00	12.93	39.586	15.98	30	Pass
11	2462	20.79	20.84	241.546	23.83	30	Pass

Average Power

802.11b

Chain 0

Channel	Frequency (MHz)	Power (mW)	Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	95.280	19.79	30	Pass
6	2437	105.439	20.23	30	Pass
11	2462	73.961	18.69	30	Pass
12	2467	60.117	17.79	30	Pass
13	2472	32.961	15.18	30	Pass

Chain 1

Channel	Frequency (MHz)	Power (mW)	Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	83.946	19.24	30	Pass
6	2437	121.619	20.85	30	Pass
11	2462	83.176	19.20	30	Pass
12	2467	47.863	16.80	30	Pass
13	2472	26.792	14.28	30	Pass

802.11g

Chain 0

Channel	Frequency (MHz)	Power (mW)	Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	47.753	16.79	30	Pass
6	2437	103.992	20.17	30	Pass
11	2462	32.734	15.15	30	Pass
12	2467	21.135	13.25	30	Pass
13	2472	15.136	11.80	30	Pass

Chain 1

Channel	Frequency (MHz)	Power (mW)	Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	46.132	16.64	30	Pass
6	2437	112.46	20.51	30	Pass
11	2462	29.376	14.68	30	Pass
12	2467	23.281	13.67	30	Pass
13	2472	14.256	11.54	30	Pass

802.11n (HT20)

Chain 0+1

Channel	Frequency (MHz)	Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	15.75	15.56	73.559	18.67	30	Pass
6	2437	18.94	18.75	153.332	21.86	30	Pass
11	2462	14.07	13.96	50.416	17.03	30	Pass
12	2467	12.06	11.81	31.24	14.95	30	Pass
13	2472	7.73	7.65	11.75	10.70	30	Pass

802.11n (HT40)

Chain 0+1

Channel	Frequency (MHz)	Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	14.15	14.21	52.365	17.19	30	Pass
6	2437	14.69	14.66	58.686	17.69	30	Pass
9	2452	14.63	14.60	57.881	17.63	30	Pass
10	2457	7.82	7.63	11.848	10.74	30	Pass
11	2462	10.37	10.21	21.385	13.30	30	Pass

802.11ax (HE20)

Chain 0+1

Channel	Frequency (MHz)	Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	15.79	15.44	72.926	18.63	30	Pass
6	2437	16.73	16.45	91.255	19.60	30	Pass
11	2462	14.09	13.89	50.135	17.00	30	Pass
12	2467	11.10	10.81	24.933	13.97	30	Pass
13	2472	8.16	8.12	13.033	11.15	30	Pass

802.11ax (HE40)

Chain 0+1

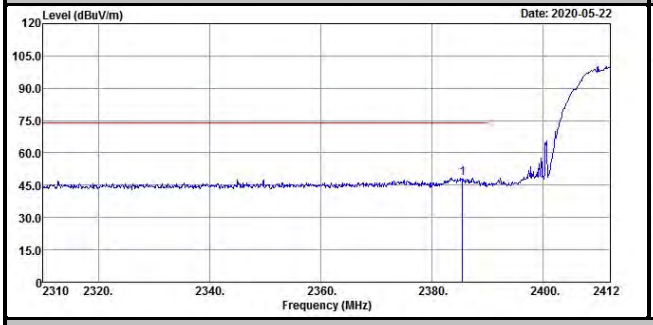
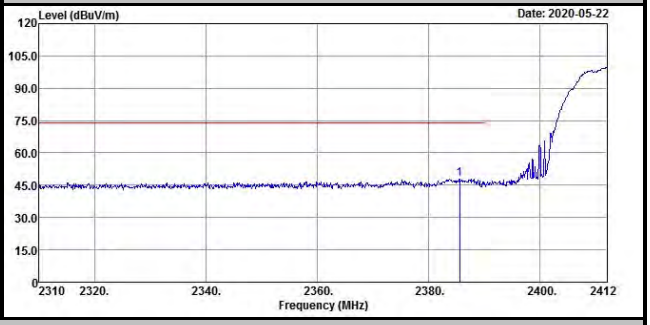
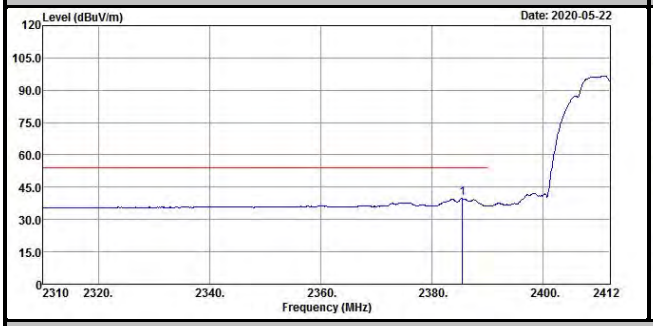
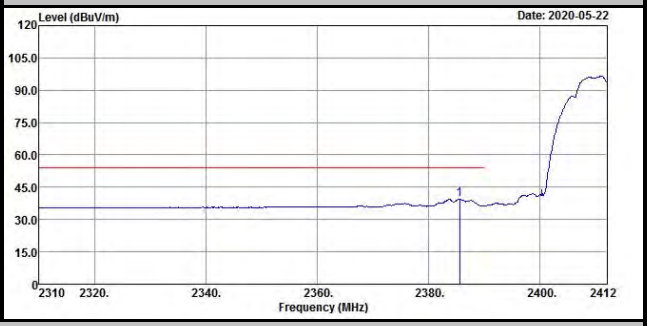
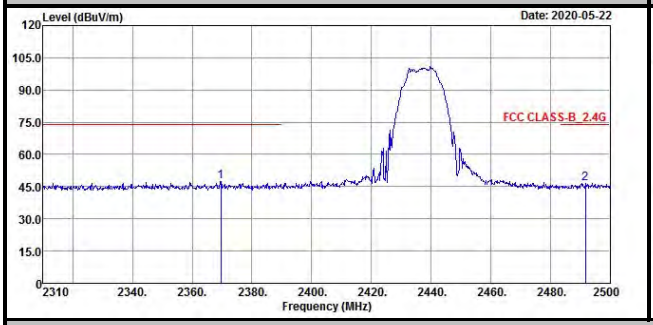
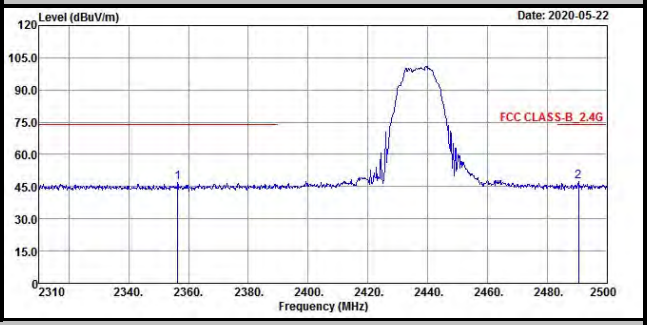
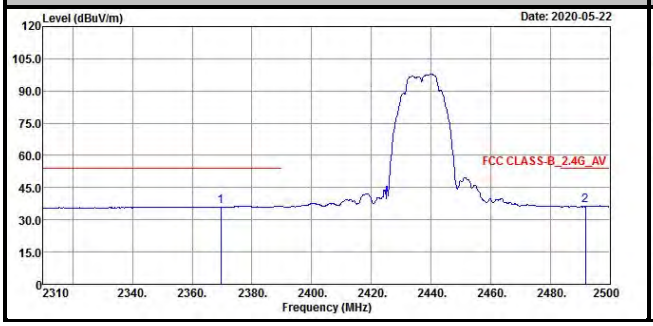
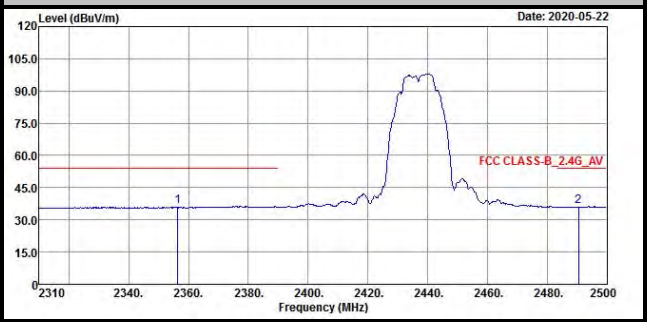
Channel	Frequency (MHz)	Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	14.85	14.91	61.523	17.89	30	Pass
6	2437	14.99	14.98	63.028	18.00	30	Pass
9	2452	14.40	14.34	54.707	17.38	30	Pass
10	2457	7.42	7.22	10.793	10.33	30	Pass
11	2462	11.01	11.23	25.882	14.13	30	Pass

5 Pictures of Test Arrangements

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

Annex A- Band Edge Measurement

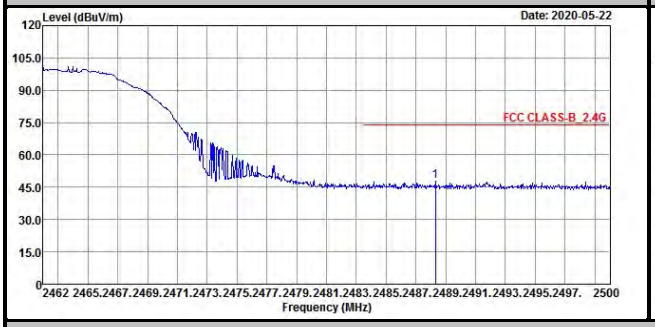
802.11b

Ch 1	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	
Ch 6	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

Ch 11

Peak

Horizontal



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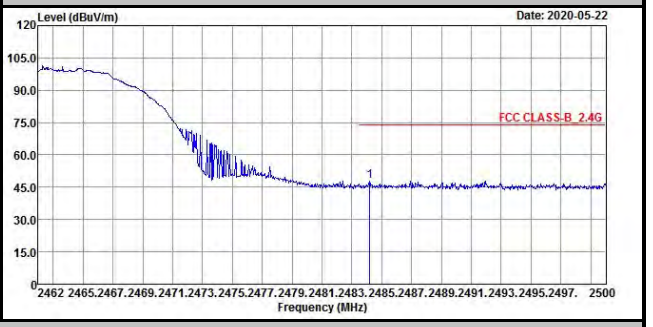
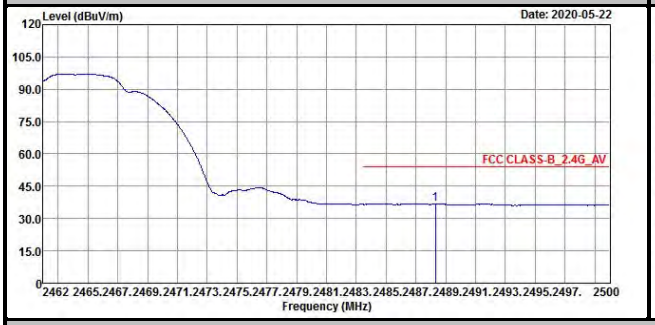


Average

Horizontal



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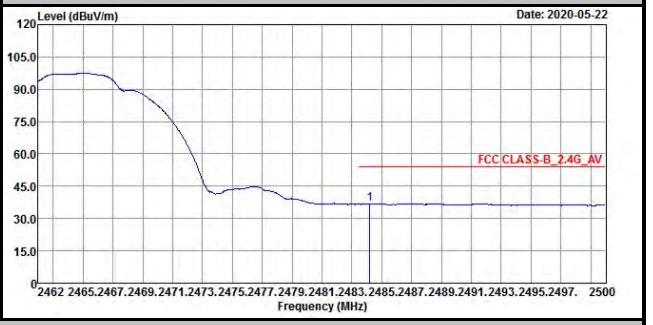
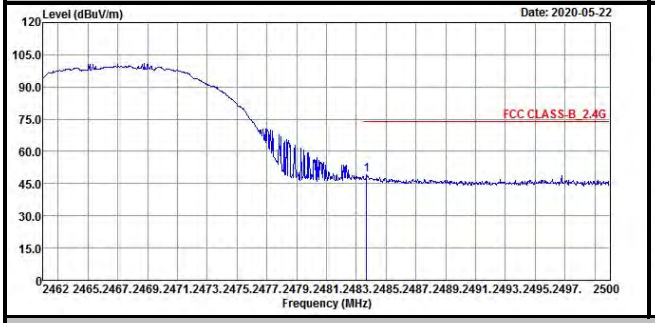


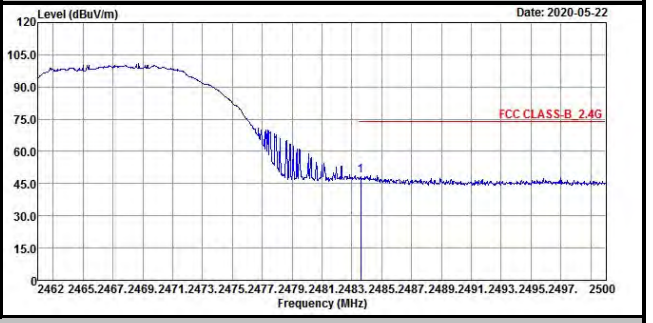
Ch 12

Peak

Horizontal

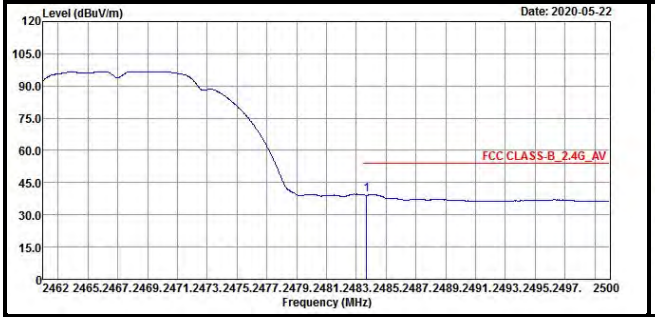


Vertical

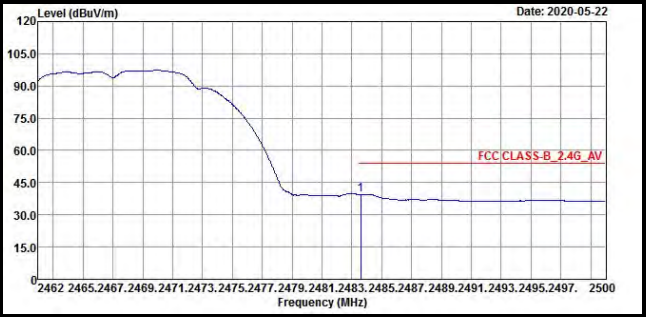


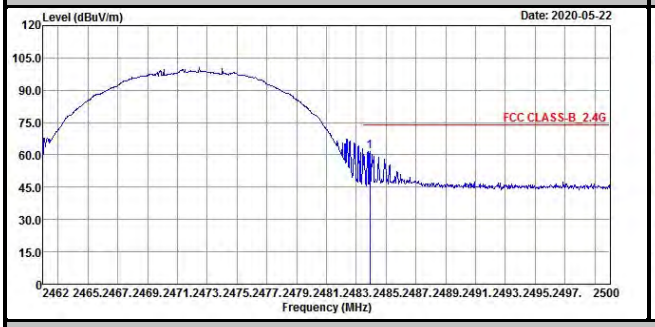
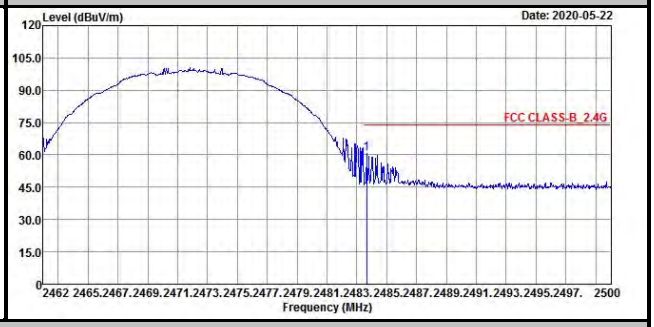
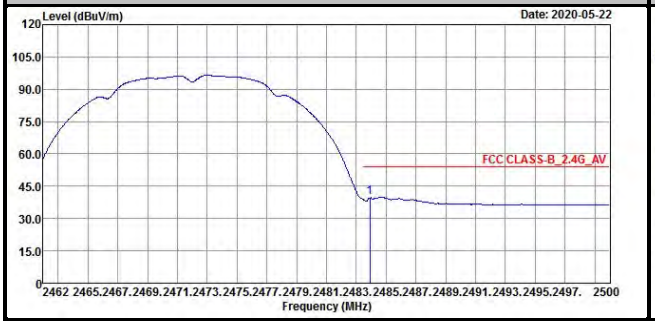
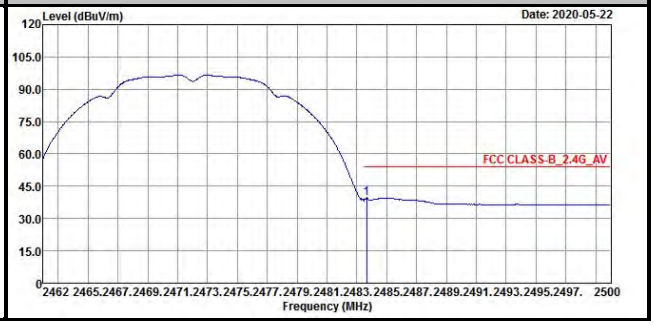
Average

Horizontal



Vertical



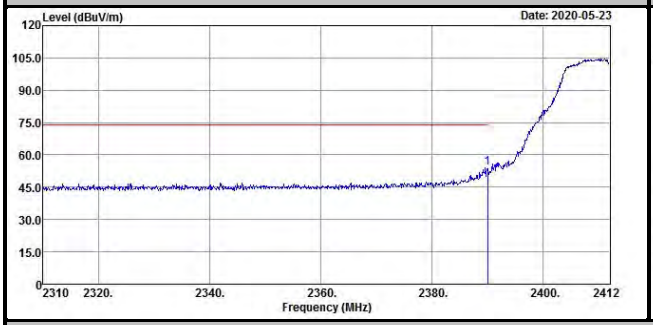
Ch 13	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

802.11g

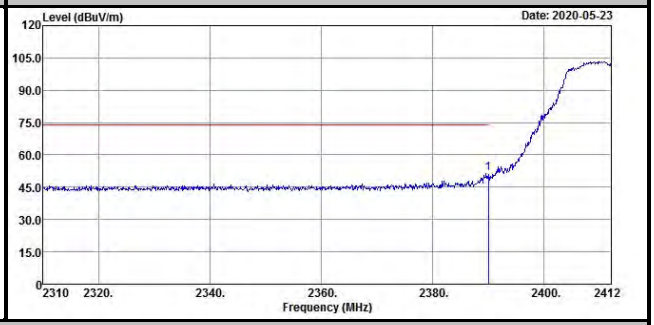
Ch 1

Peak

Horizontal

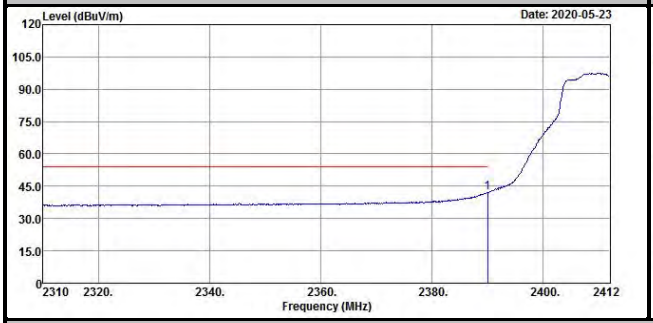


Vertical



Average

Horizontal



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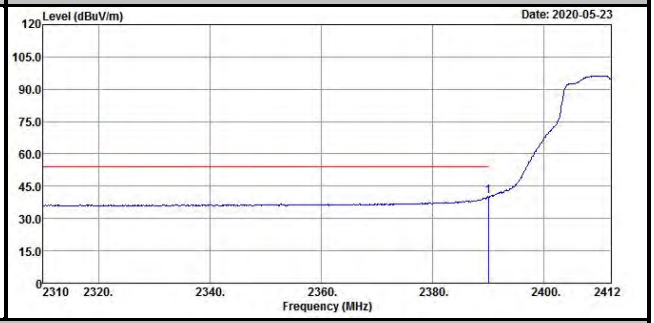
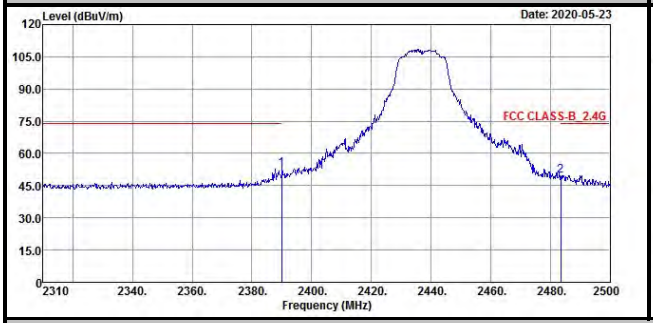


Ch 6

Peak

Horizontal



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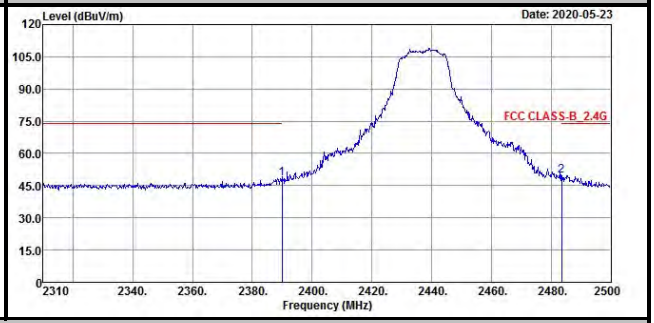
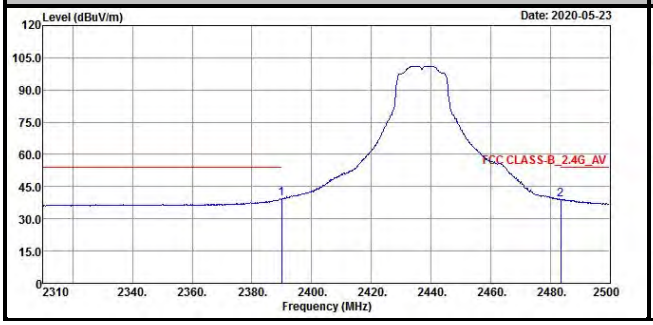
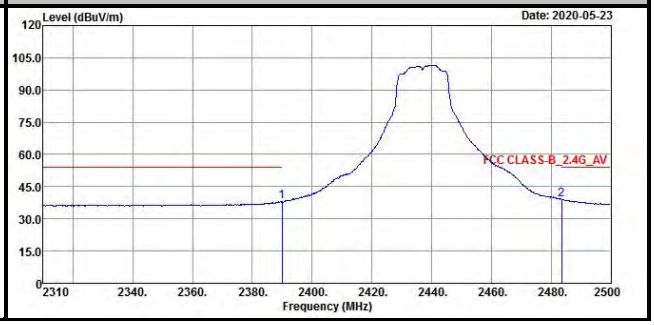


Average

Horizontal



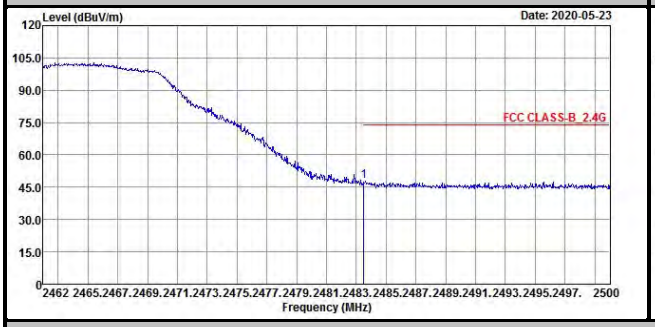
Vertical



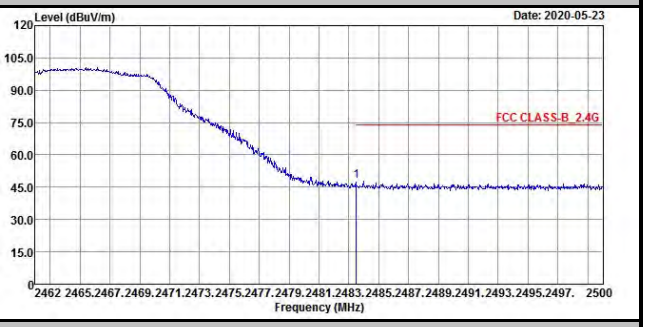
Ch 11

Peak

Horizontal

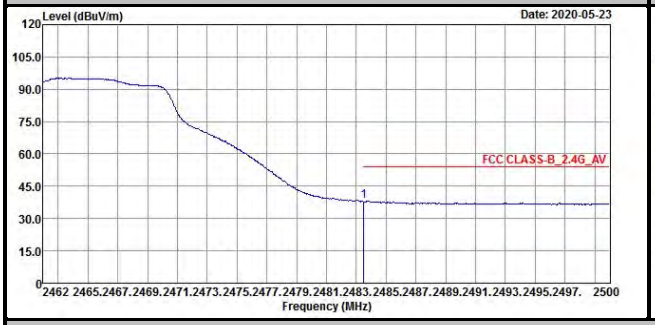


Vertical

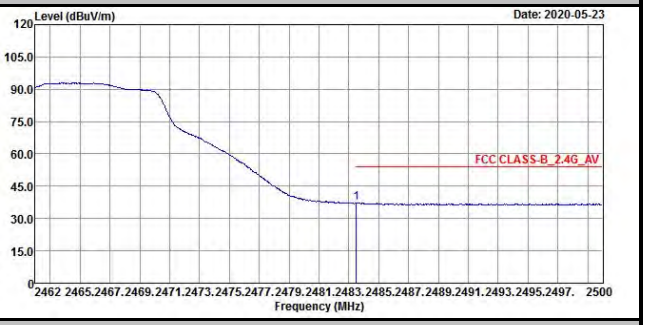


Average

Horizontal



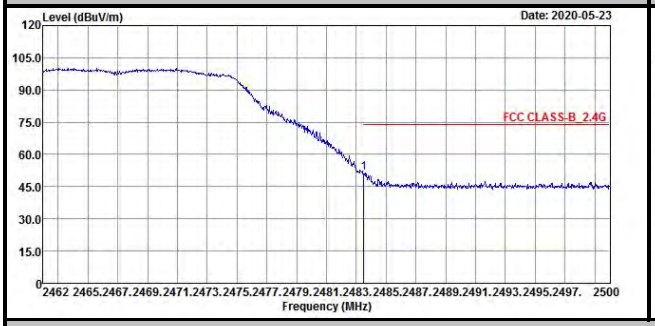
Vertical



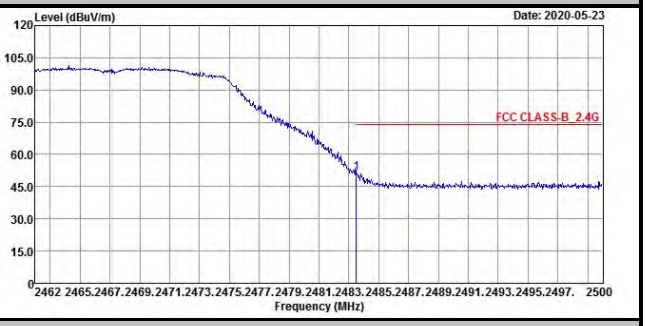
Ch 12

Peak

Horizontal

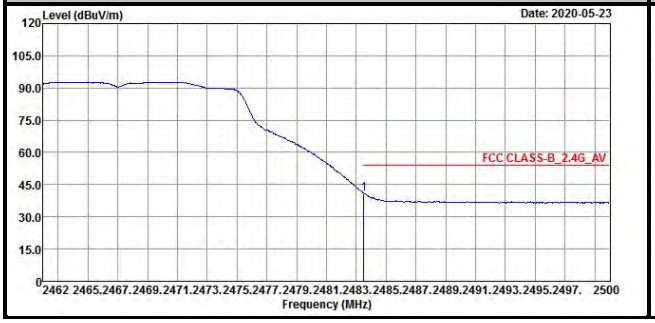


Vertical

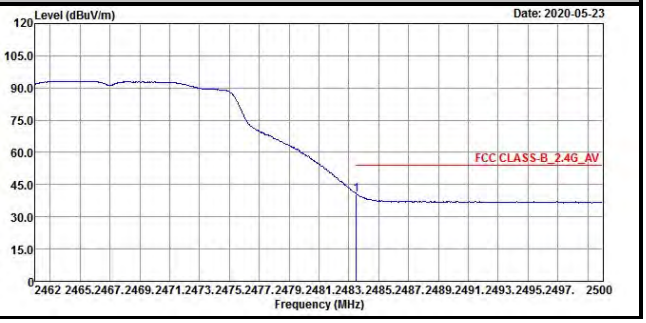


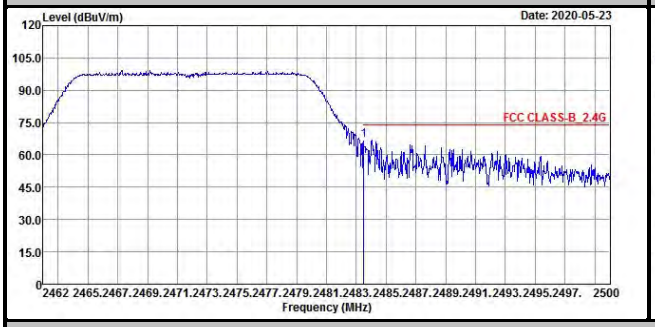
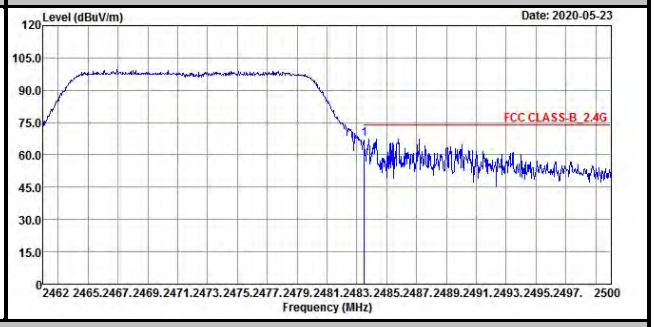
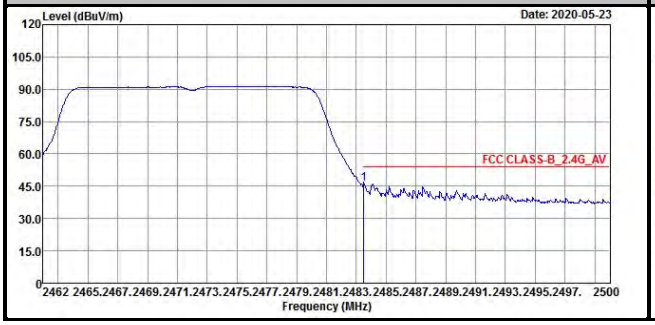
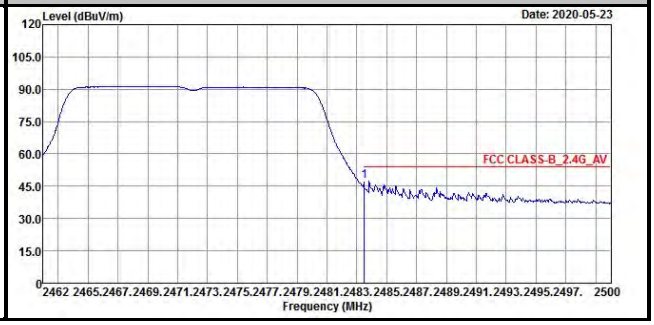
Average

Horizontal



Vertical

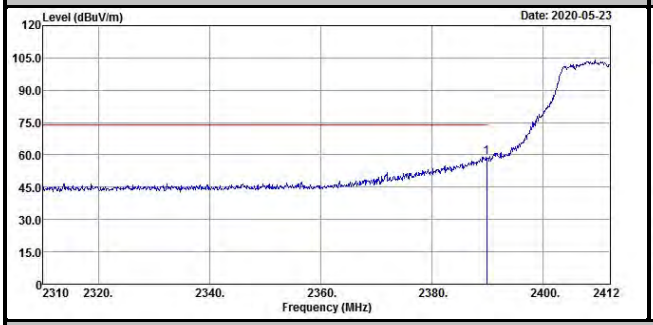
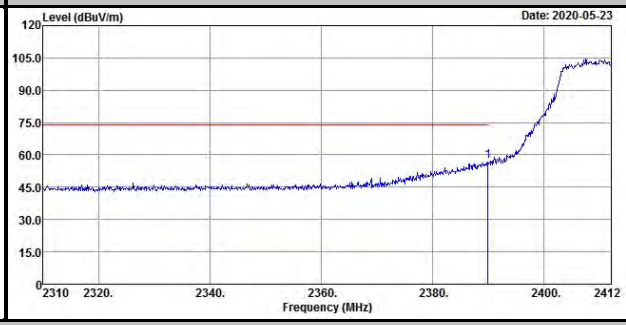


Ch 13	
Peak	
Horizontal	**Vertical**
	
Average	
Horizontal	**Vertical**
	

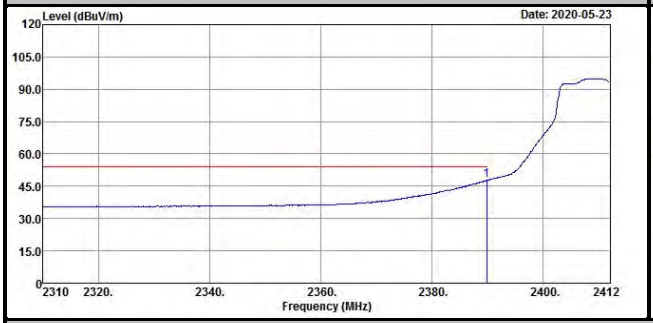
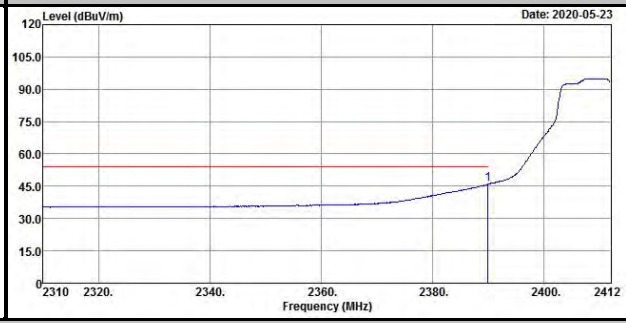
802.11n (HT20)

Ch 1

Peak

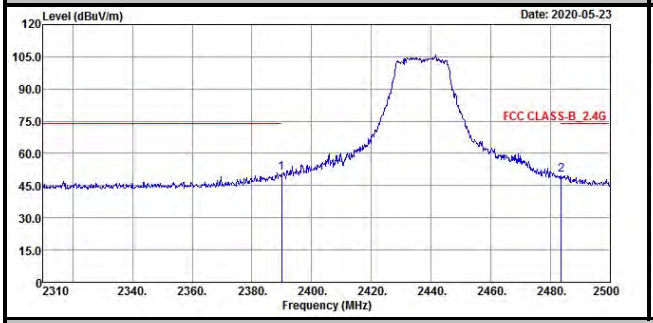
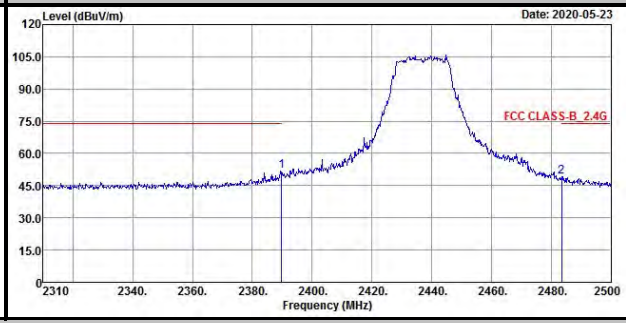
Horizontal	Vertical
	

Average

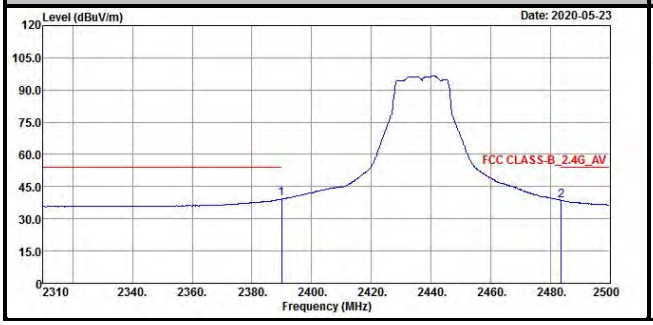
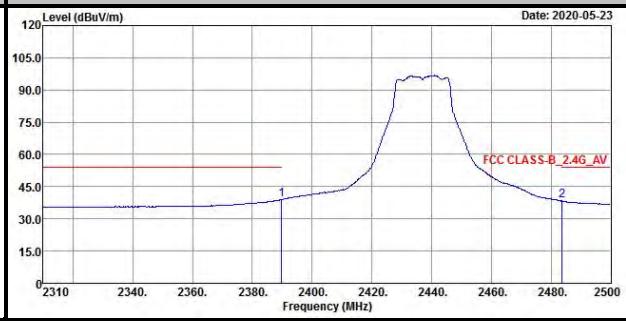
Horizontal	Vertical
	

Ch 6

Peak

Horizontal	Vertical
	

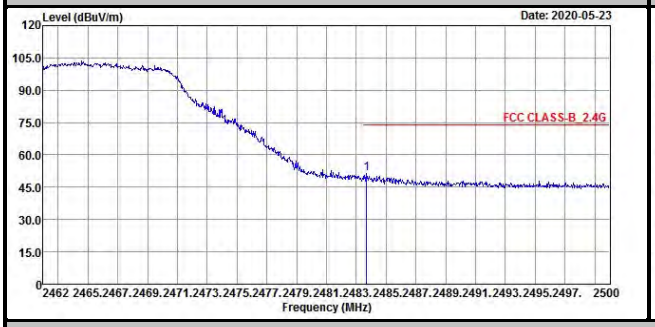
Average

Horizontal	Vertical
	

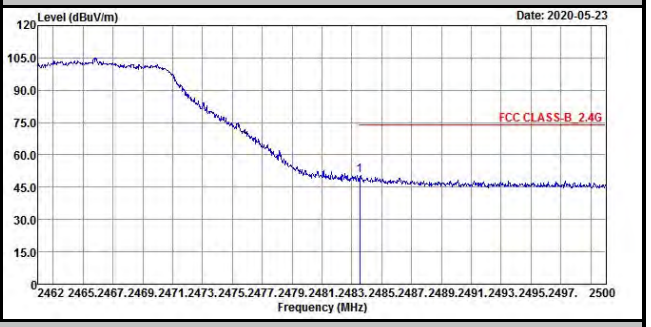
Ch 11

Peak

Horizontal

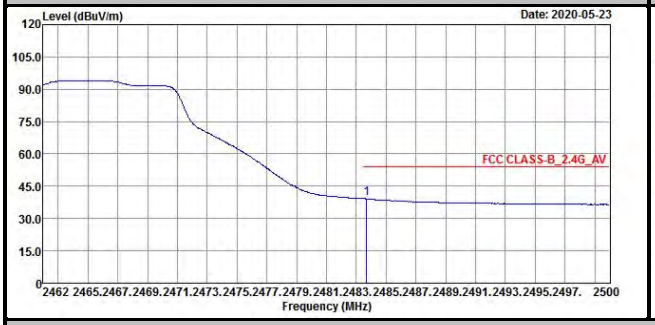


Vertical

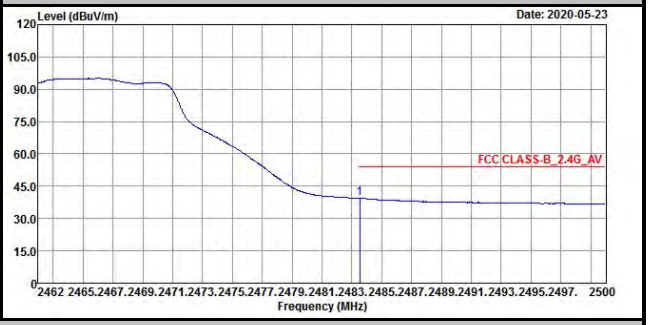


Average

Horizontal



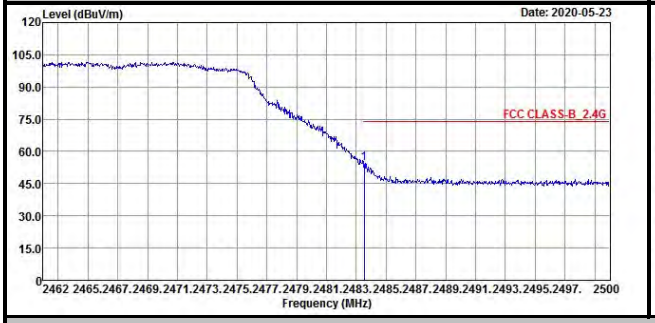
Vertical



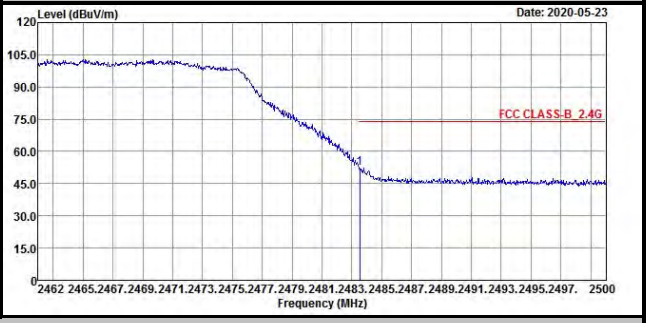
Ch 12

Peak

Horizontal

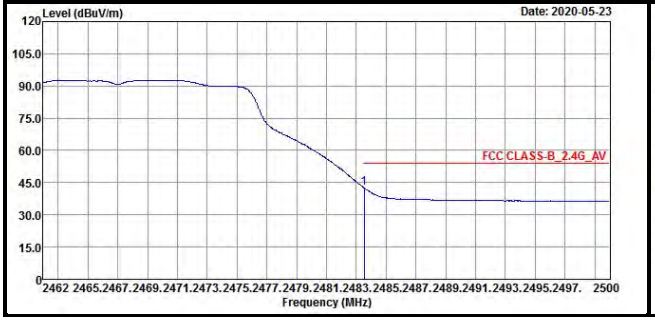


Vertical

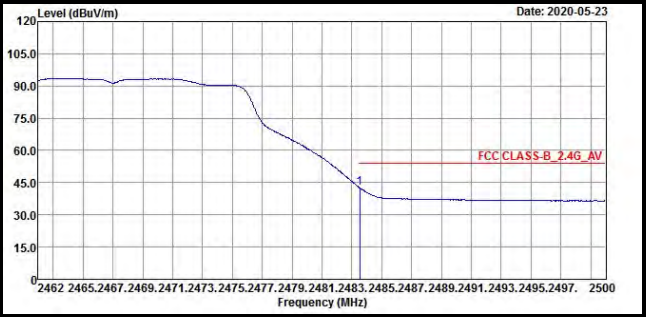


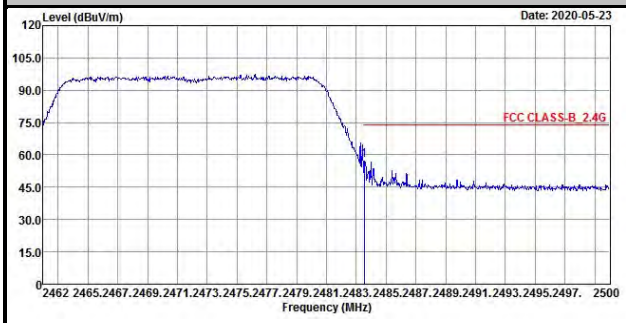
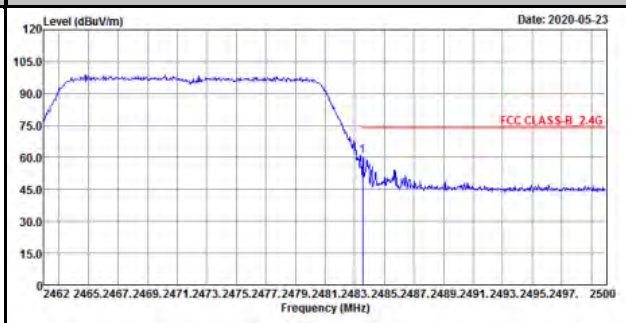
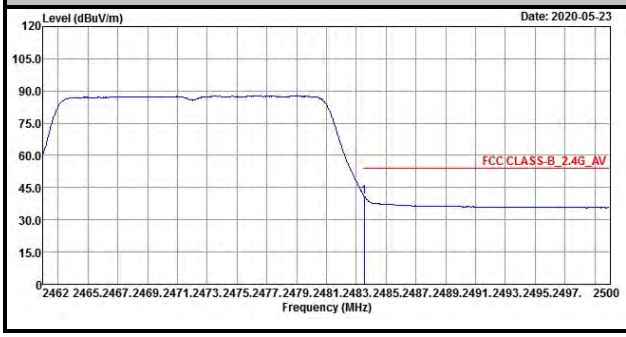
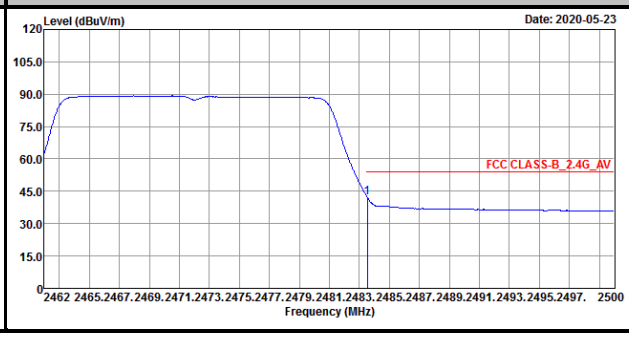
Average

Horizontal



Vertical

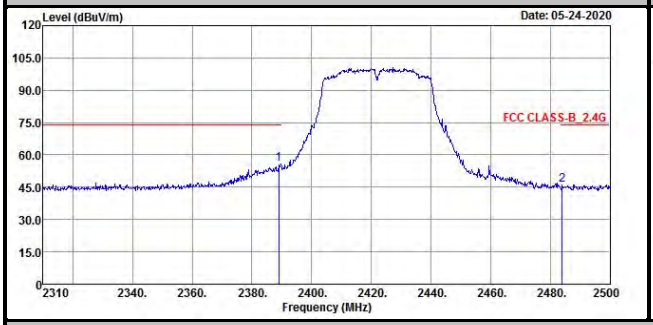
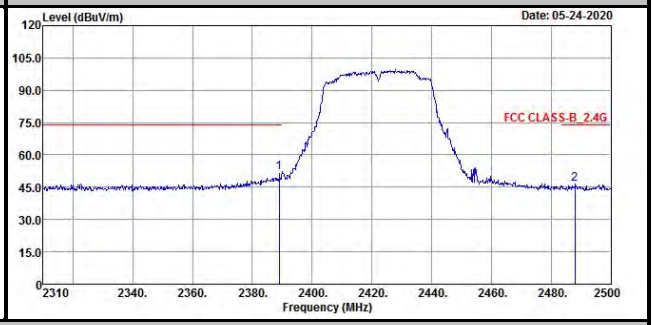


Ch 13	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

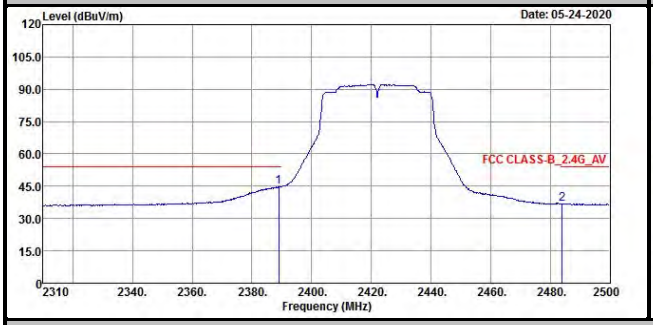
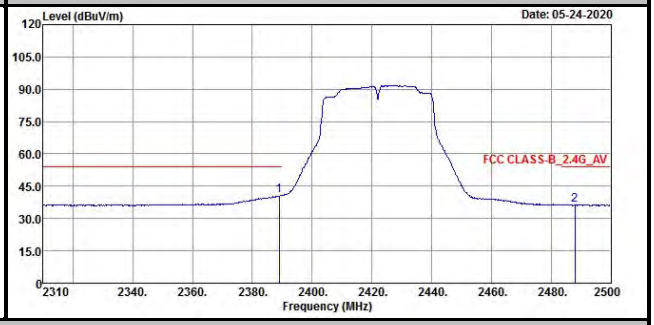
802.11n (HT40)

Ch 3

Peak

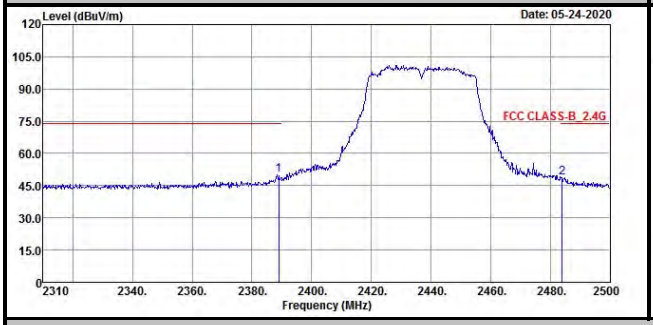
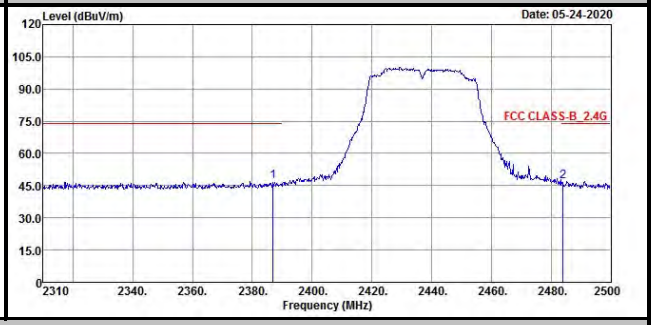
Horizontal	Vertical
	

Average

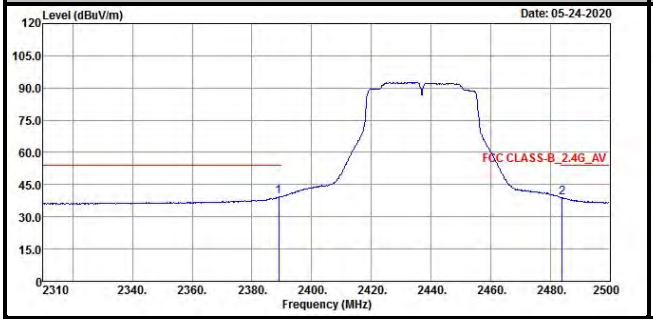
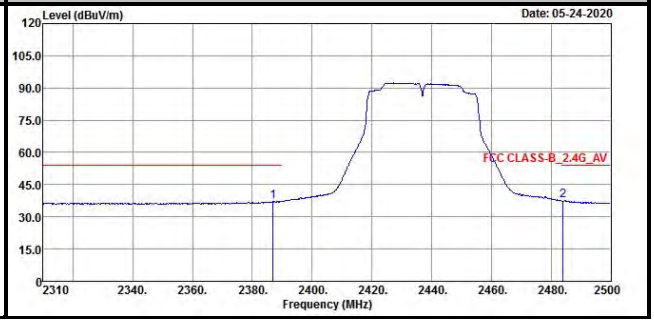
Horizontal	Vertical
	

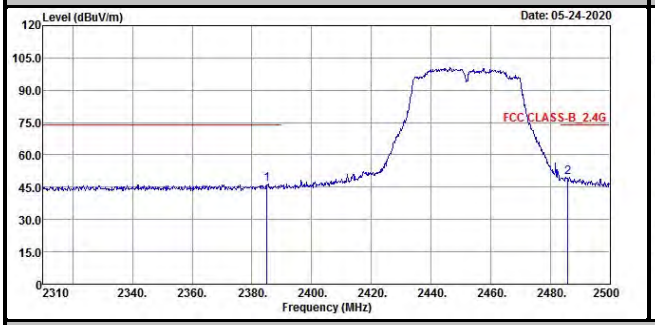
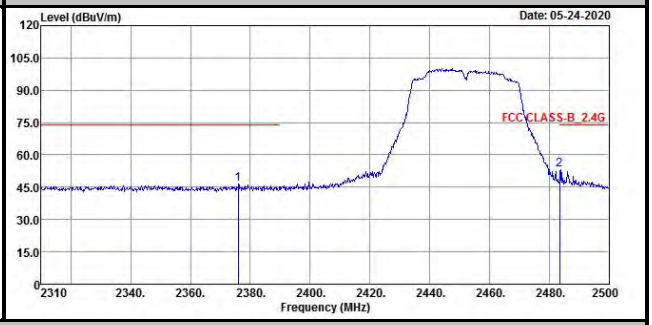
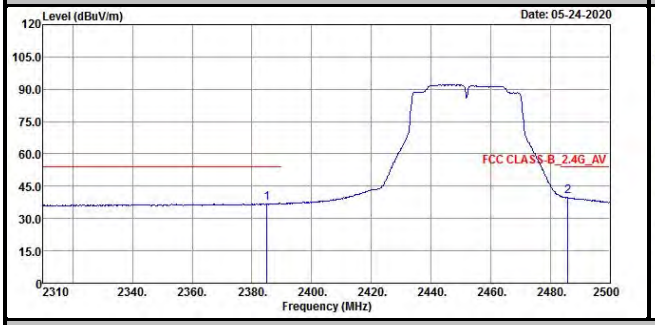
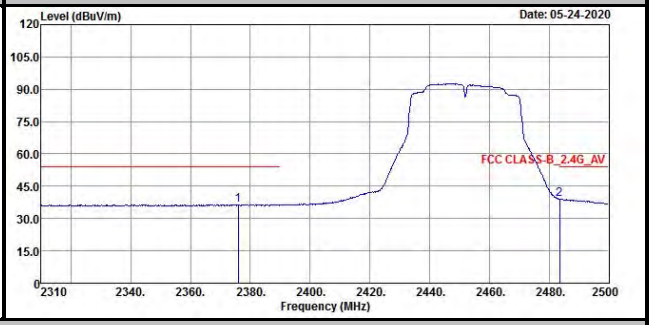
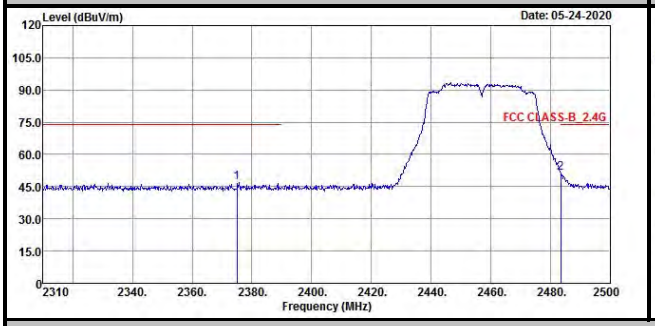
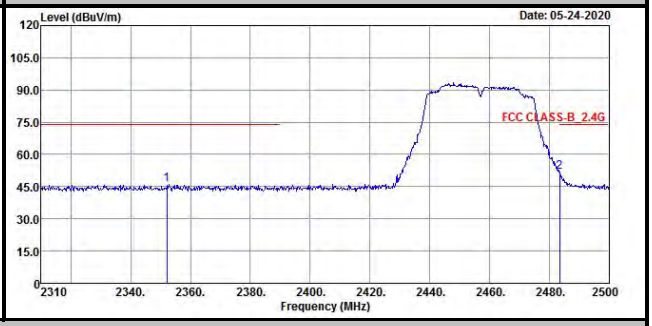
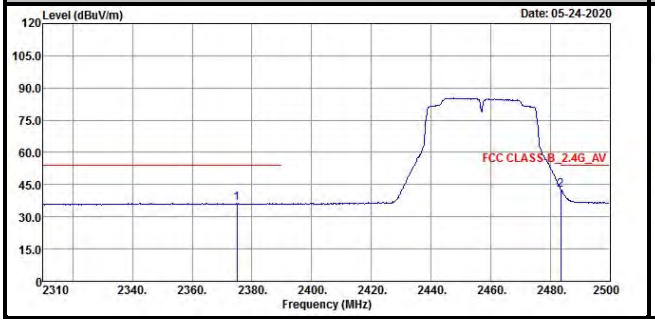
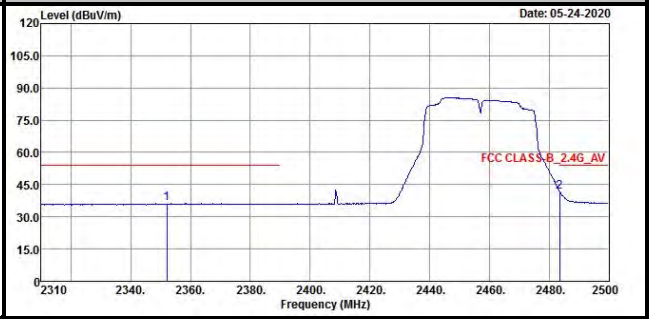
Ch 6

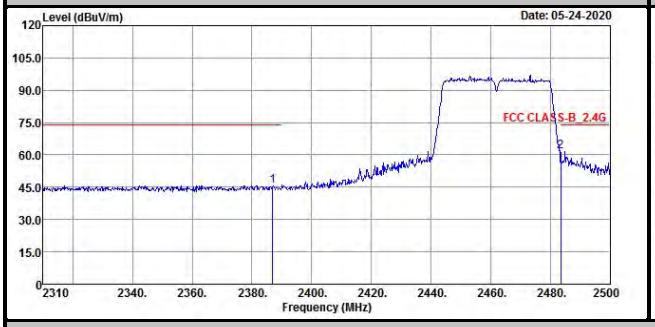
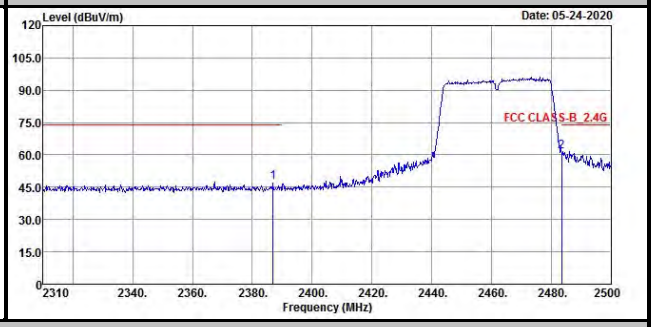
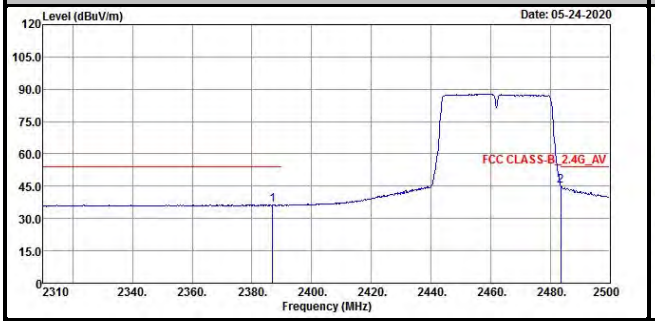
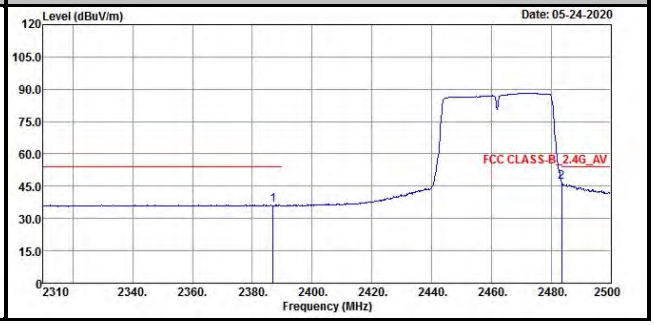
Peak

Horizontal	Vertical
	

Average

Horizontal	Vertical
	

Ch 9	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	
Ch 10	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

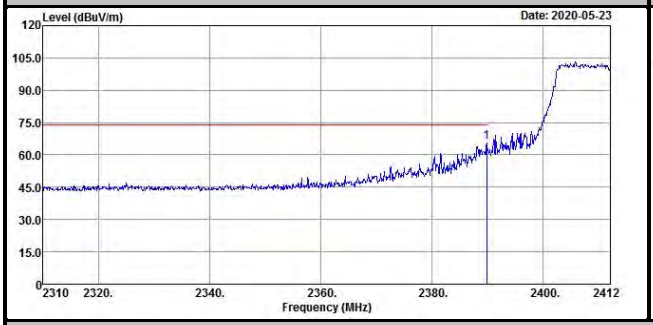
Ch 11	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

802.11ax (HE20)

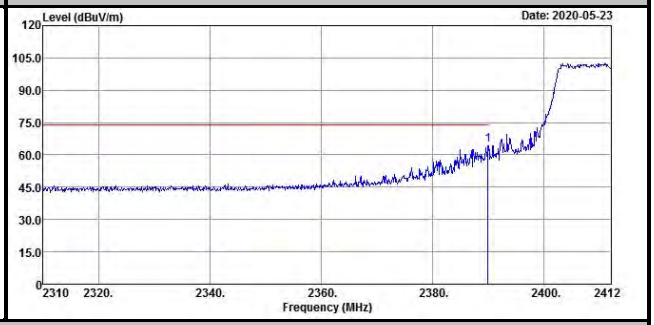
Ch 1

Peak

Horizontal

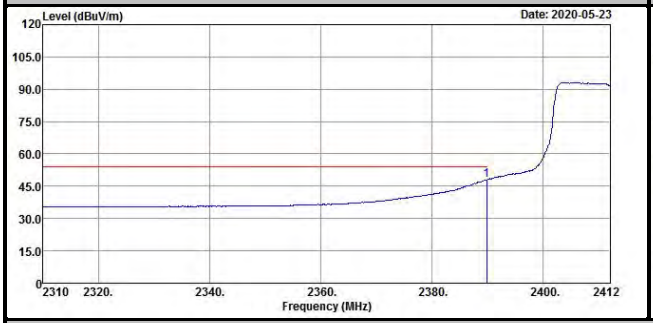


Vertical

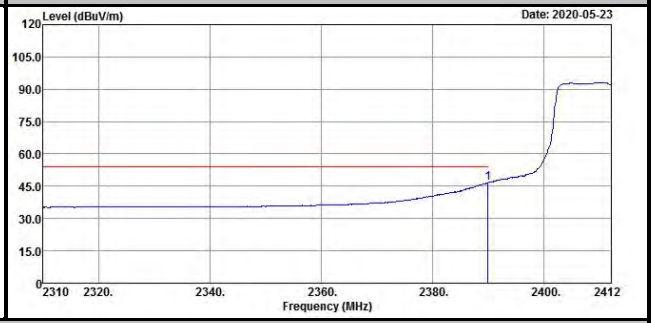


Average

Horizontal



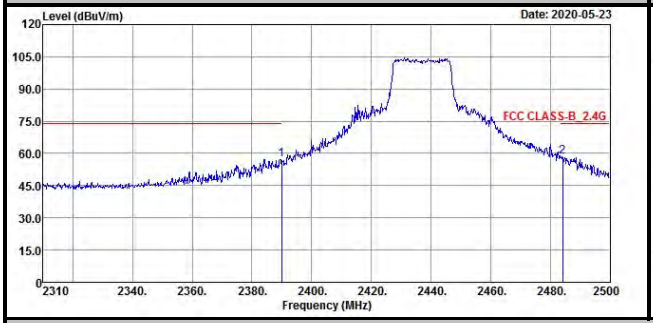
Vertical



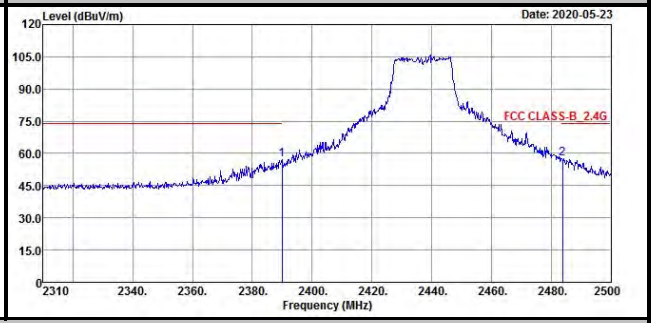
Ch 6

Peak

Horizontal

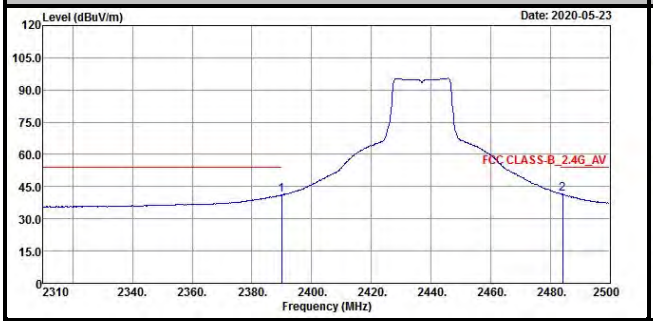


Vertical

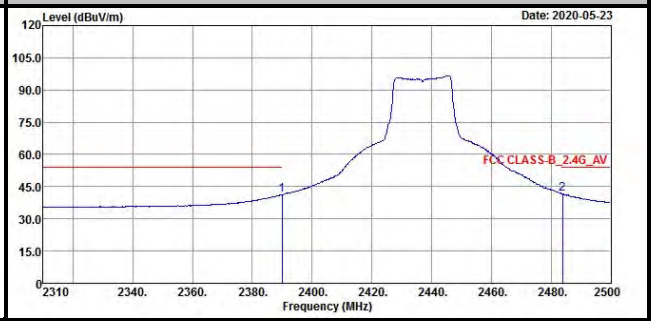


Average

Horizontal



Vertical



Ch 11	
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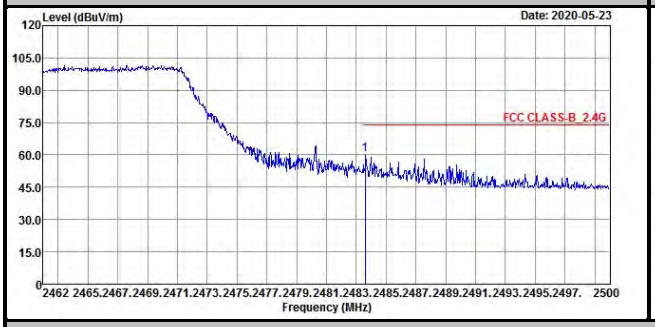
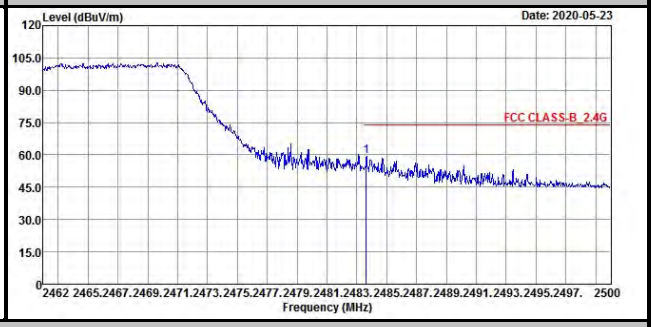
Horizontal	Vertical
	
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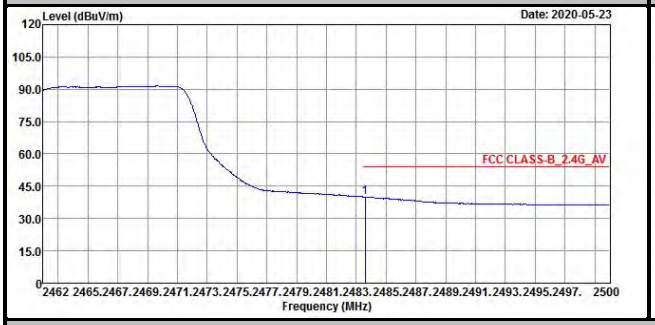
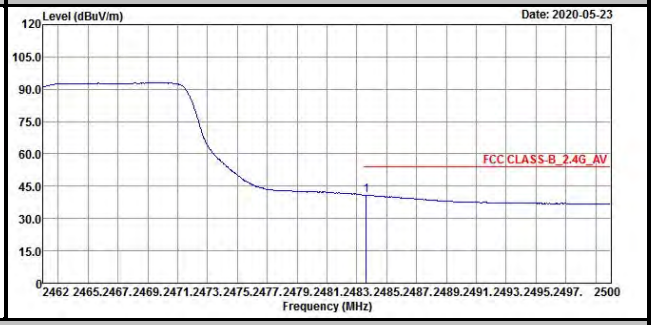
Horizontal	Vertical
	
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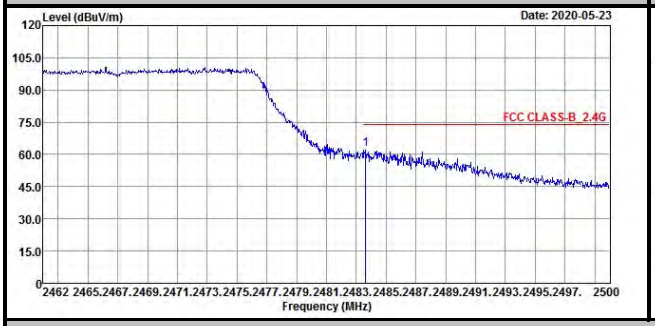
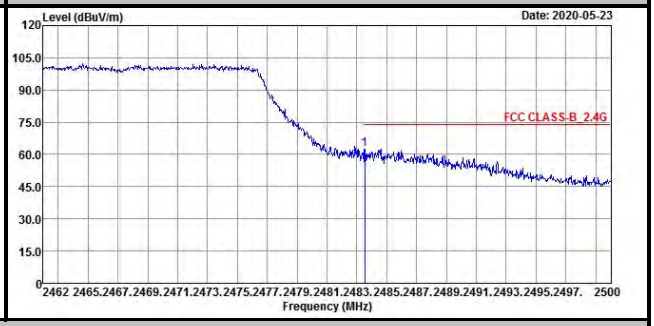
Peak	
Horizontal	Vertical
	
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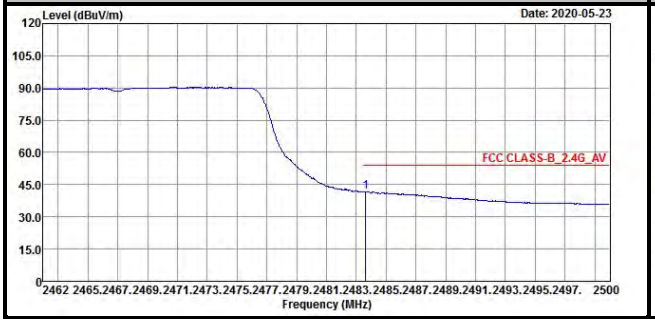
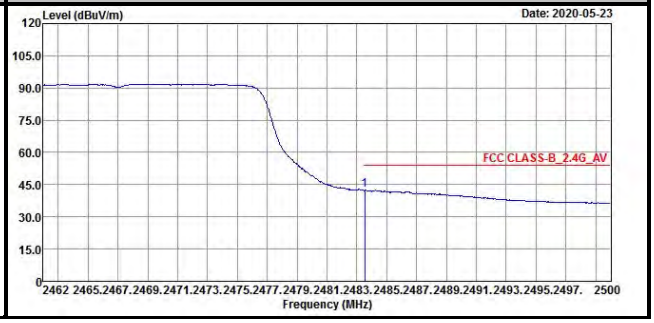
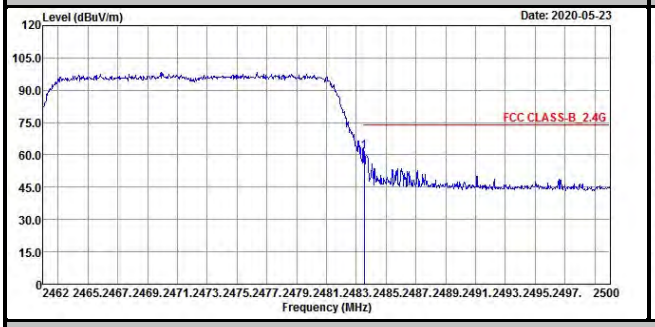
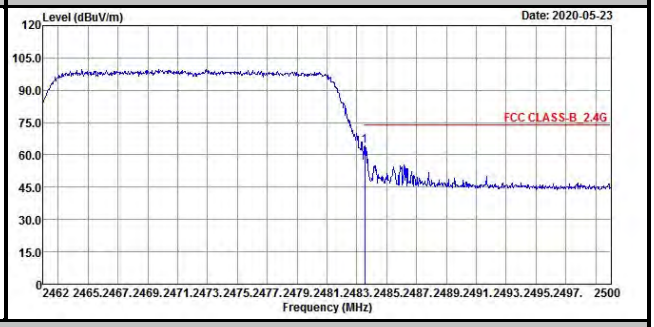
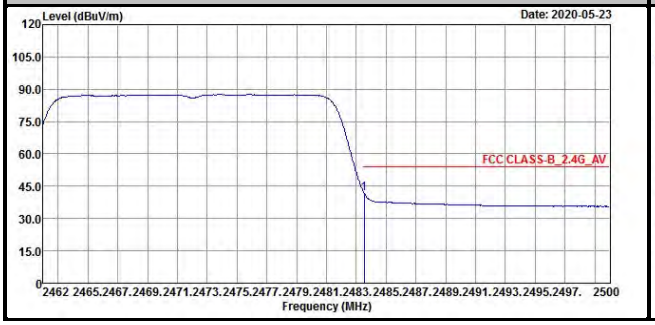
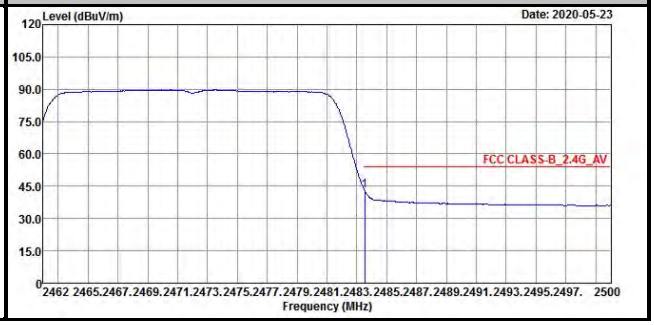
Horizontal	Vertical
	

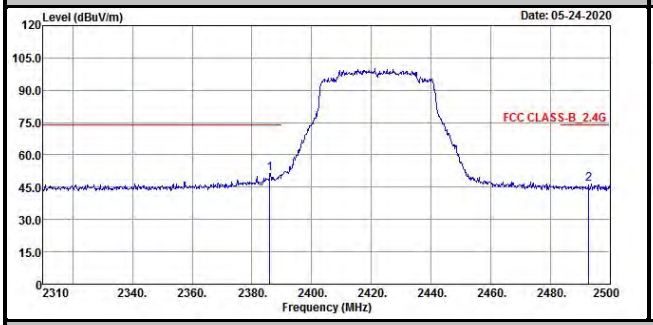
Ch 13	
Peak	
Horizontal	Vertical
	
Average	
Horizontal	Vertical
	

802.11ax (HE40)

Ch 3

Peak

Horizontal



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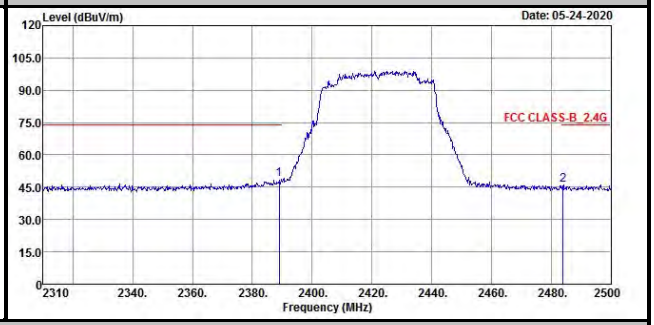
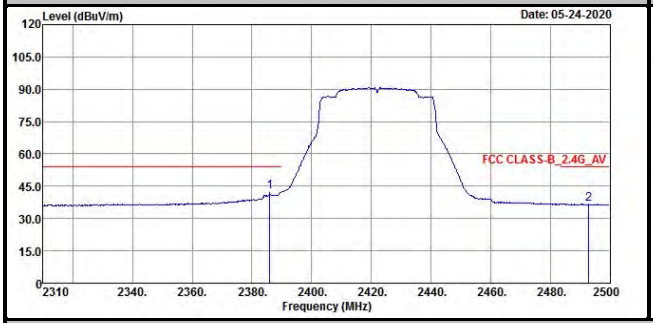
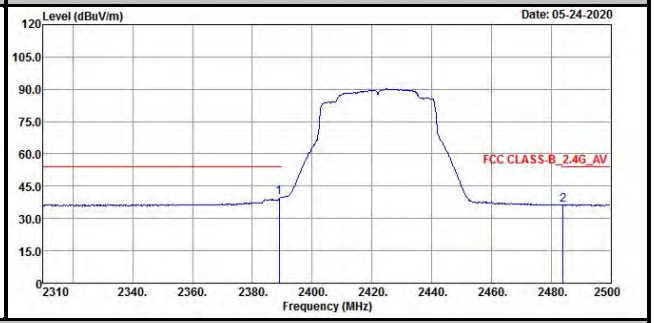


Average

Horizontal



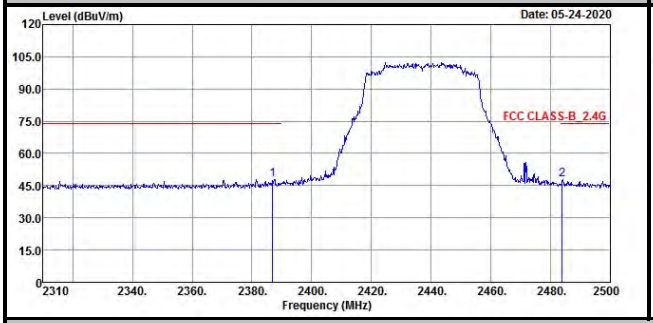
Vertical



Ch 6

Peak

Horizontal



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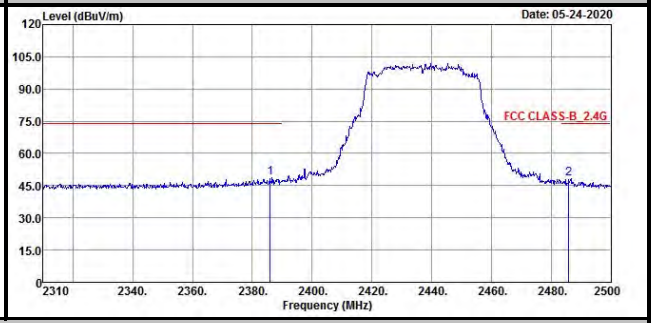
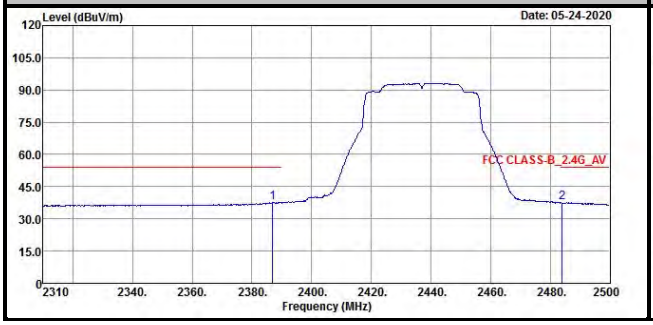
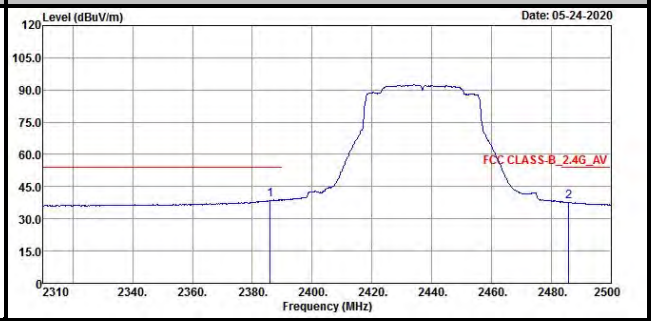


Average

Horizontal



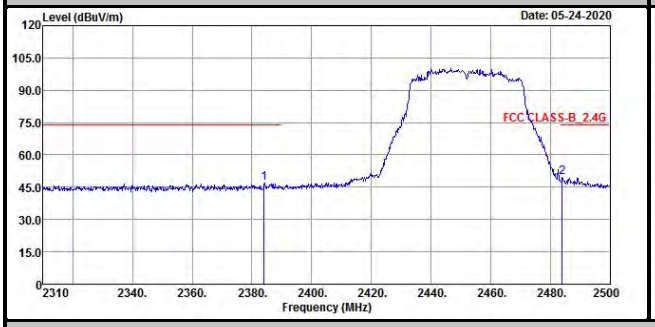
Vertical



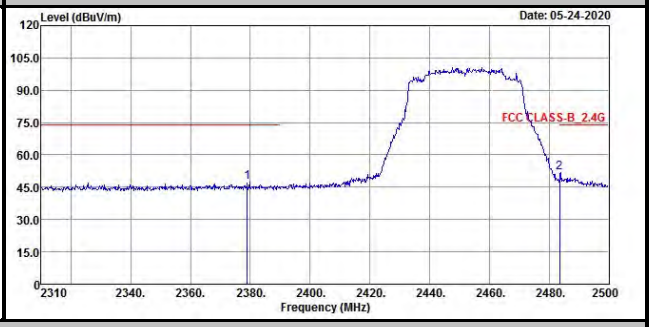
Ch 9

Peak

Horizontal

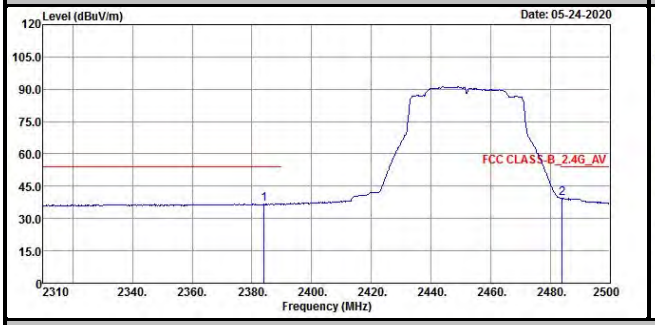


Vertical

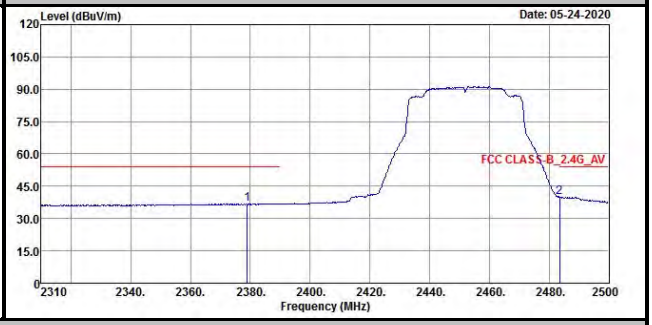


Average

Horizontal



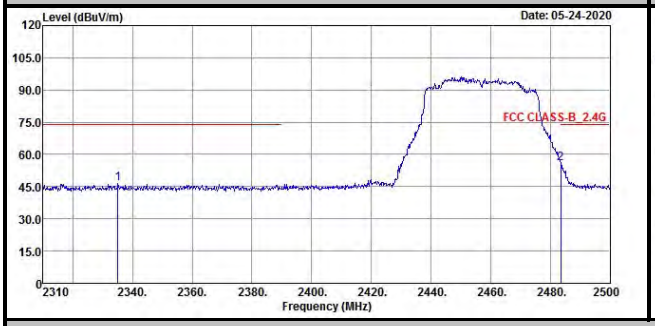
Vertical



Ch 10

Peak

Horizontal



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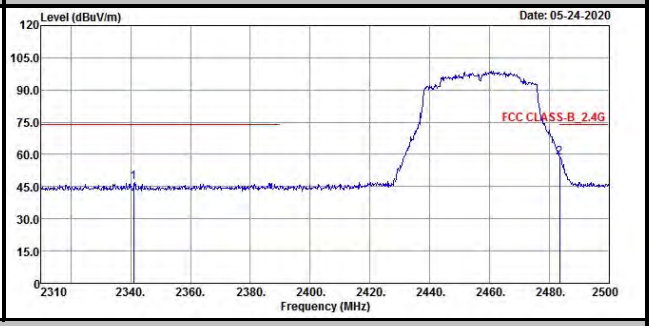

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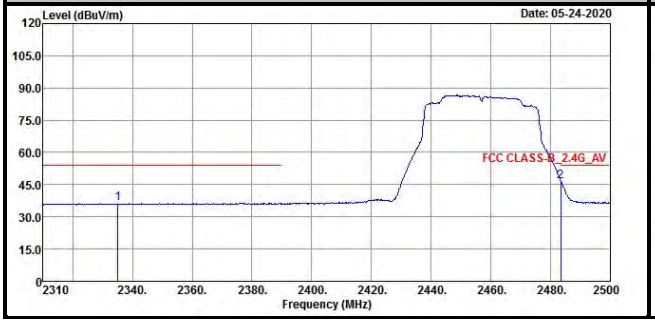
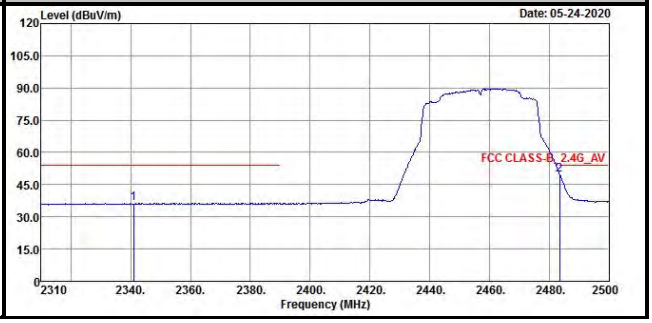
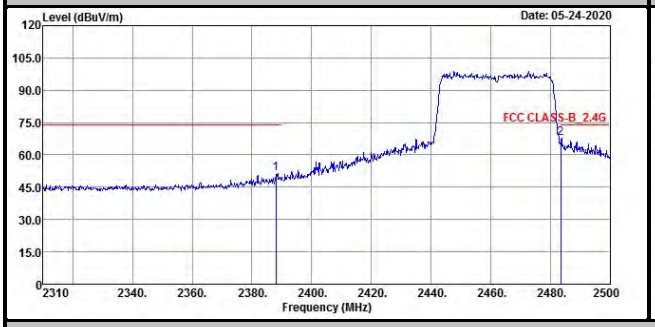
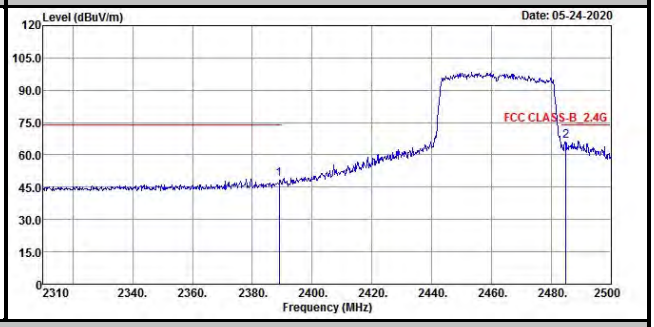
Horizontal



Vertical



Ch 11	
Peak	
Horizontal	Vertical
	
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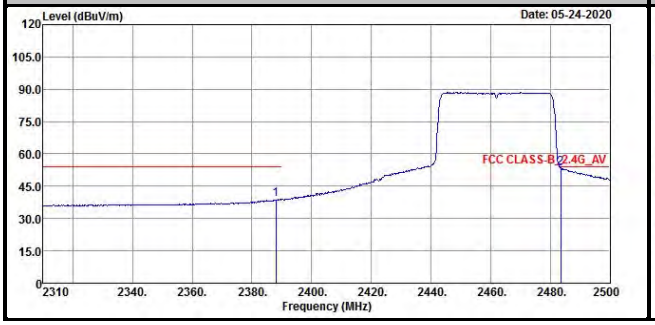
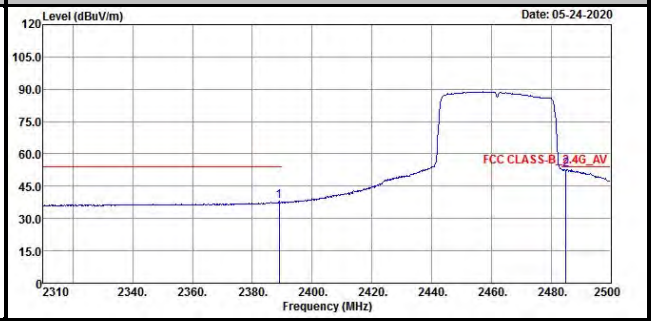
Horizontal	Vertical
	

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

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

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