

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
47 CFR FCC Part 15, Subpart E (Section 15.407)

Report No.: RFBAPP-WTW-P25120629-5

FCC ID: PD5-NWA1200

Product: Indoor Wireless AP

Brand: Nile Global

Model No.: NWA1200

Received Date: 2025/12/22

Test Date: 2026/3/3 ~ 2026/5/19

Issued Date: 2026/6/3

Applicant: Delta Electronics, Inc.

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

Designation Number:

Approved by:

Jeremy Lin

Date:

2026/6/3

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist

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Table of Contents

Release Control Record	3
1 Certificate.....	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Supplementary Information	5
3 General Information	6
3.1 General Description of EUT	6
3.2 Antenna Description of EUT	7
3.3 Test Mode Applicability and Tested Channel Detail	9
3.4 Test Program Used and Operation Descriptions	10
3.5 Connection Diagram of EUT and Peripheral Devices	10
3.6 Configuration of Peripheral Devices and Cable Connections	10
4 Test Instruments	11
4.1 Unwanted Emissions below 1 GHz	11
4.2 Unwanted Emissions above 1 GHz	12
4.3 Conducted Out of Band Emissions	12
5 Limits of Test Items.....	13
5.1 Unwanted Emissions below 1 GHz	13
5.2 Unwanted Emissions above 1 GHz	14
5.3 Conducted Out of Band Emissions	15
6 Test Arrangements.....	16
6.1 Unwanted Emissions below 1 GHz	16
6.1.1 Test Setup	16
6.1.2 Test Procedure	17
6.2 Unwanted Emissions above 1 GHz	18
6.2.1 Test Setup	18
6.2.2 Test Procedure	18
6.3 Conducted Out of Band Emissions	19
6.3.1 Test Setup	19
6.3.2 Test Procedure	19
7 Test Results of Test Item	20
7.1 Unwanted Emissions below 1 GHz	20
7.2 Unwanted Emissions above 1 GHz	26
7.3 Conducted Out of Band Emissions	42
8 Pictures of Test Arrangements	43
9 Information of the Testing Laboratories	44

Release Control Record

Issue No.	Description	Date Issued
RFBAPP-WTW-P25120629-5	Original release.	2026/6/3

1 Certificate

Product: Indoor Wireless AP

Brand: Nile Global

Test Model: NWA1200

Sample Status: Engineering sample

Applicant: Delta Electronics, Inc.

Test Date: 2026/3/3 ~ 2026/5/19

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
47 CFR FCC Part 15, Subpart E (Section 15.407)

Measurement procedure: ANSI C63.10-2020

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.

2 Summary of Test Results

Standard / Clause	Test Item	Result	Remark
15.205 /15.209 /15.247(d) 15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Meet the requirement of limit.
15.205 /15.209 /15.247(d) 15.407(b)(1/4(i)/10) 15.407(b)(6/10)	Unwanted Emissions above 1 GHz	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.

Note: 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:

Parameter	Specification	Uncertainty (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.6 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.79 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Indoor Wireless AP	
Brand	Nile Global	
Test Model	NWA1200	
Modulation Technology	BT-LE	DTS
	WLAN	DSSS, OFDM, OFDMA
Operating Frequency	BT	2402 ~ 2480 MHz
	WLAN	2412 ~ 2462 MHz 5180 ~ 5240 MHz 5745 ~ 5825 MHz 6ID: 5955 ~ 6415 MHz 6425 ~ 6525 MHz 6535 ~ 6865 MHz 6875 ~ 7115 MHz 6XD 5955 ~ 6415 MHz 6435 ~ 6525 MHz 6535 ~ 6865 MHz 6875 ~ 7115 MHz

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
Ethernet Extension Cable	-	-	Signal Line: 0.2M

2. There are five modules for the EUT.

Mode	Function	Radio
Traffic	WLAN (2.4G)	1
Traffic	WLAN (5G)	2
Traffic	WLAN (6G)	3
Scan	WLAN (2.4G+5G+6G)	4
Traffic	BT	5

3. Simultaneously transmission condition.

Condition	Technology				
1	WLAN 2.4G (Radio 1)	WLAN 5G (Radio 2)	WLAN 6G (Radio 3)	BT LE (Radio 5)	WLAN 2.4G (Radio 4)
2	WLAN 2.4G (Radio 1)	WLAN 5G (Radio 2)	WLAN 6G (Radio 3)	BT LE (Radio 5)	WLAN 5G (Radio 4)
3	WLAN 2.4G (Radio 1)	WLAN 5G (Radio 2)	WLAN 6G (Radio 3)	BT LE (Radio 5)	WLAN 6G (Radio 4)

Note: The emission of the simultaneous operation has been evaluated, and no non-compliance was found.

4. There are Bluetooth and WLAN (2.4 GHz & 5 GHz & 6 GHz & Scan radio) technology used for the EUT.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	Radio	Mode	Antenna Net Gain (dBi)	Frequency range (MHz)	Antenna Type	Connector Type
Ant. 1	1, 2	WLAN	3.70	2400	PIFA	ipex
			4.01	2450	PIFA	ipex
			4.08	2500	PIFA	ipex
			6.86	5150	PIFA	ipex
			7.08	5350	PIFA	ipex
			6.72	5550	PIFA	ipex
			6.94	5850	PIFA	ipex
Ant. 2		WLAN	3.53	2400	PIFA	ipex
			4.49	2450	PIFA	ipex
			3.54	2500	PIFA	ipex
			5.88	5150	PIFA	ipex
			6.49	5350	PIFA	ipex
			6.60	5550	PIFA	ipex
			7.01	5850	PIFA	ipex
Ant. 3	2	WLAN	5.81	5150	PIFA	ipex
			6.91	5350	PIFA	ipex
			6.57	5550	PIFA	ipex
			6.59	5850	PIFA	ipex
Ant. 4		WLAN	6.14	5150	PIFA	ipex
			6.56	5350	PIFA	ipex
			5.47	5550	PIFA	ipex
			6.08	5850	PIFA	ipex
Ant. 5	3	WLAN	4.49	5925	PCB dipole	ipex
			4.18	6550	PCB dipole	ipex
			3.78	6950	PCB dipole	ipex
			3.82	7125	PCB dipole	ipex
Ant. 6		WLAN	4.39	5925	PCB dipole	ipex
			4.35	6550	PCB dipole	ipex
			4.63	6950	PCB dipole	ipex
			4.50	7125	PCB dipole	ipex
Ant. 7		WLAN	4.28	5925	PCB dipole	ipex
			4.94	6550	PCB dipole	ipex
			4.31	6950	PCB dipole	ipex
			4.80	7125	PCB dipole	ipex
Ant. 8		WLAN	4.37	5925	PCB dipole	ipex
			3.80	6550	PCB dipole	ipex
			4.16	6950	PCB dipole	ipex
			4.69	7125	PCB dipole	ipex

Antenna No.	Radio	Mode	Antenna Net Gain (dBi)	Frequency range (MHz)	Antenna Type	Connector Type
Ant. 9	4	WLAN	3.97	2400	PIFA	ipex
			4.72	2450	PIFA	ipex
			5.21	2500	PIFA	ipex
			4.76	5150	PIFA	ipex
			5.27	5550	PIFA	ipex
			4.86	5850	PIFA	ipex
			5.69	5925	PIFA	ipex
			5.71	6550	PIFA	ipex
			6.01	6950	PIFA	ipex
			6.54	7125	PIFA	ipex
Ant. 10		WLAN	4.72	2400	PIFA	ipex
			4.50	2450	PIFA	ipex
			4.81	2500	PIFA	ipex
			6.02	5150	PIFA	ipex
			5.95	5550	PIFA	ipex
			5.14	5850	PIFA	ipex
			4.70	5925	PIFA	ipex
			4.98	6550	PIFA	ipex
			6.49	6950	PIFA	ipex
			6.34	7125	PIFA	ipex
Ant. 12	5	BT	4.44	2400	PIFA	ipex
			5.09	2450	PIFA	ipex
			4.99	2500	PIFA	ipex

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

3.3 Test Mode Applicability and Tested Channel Detail

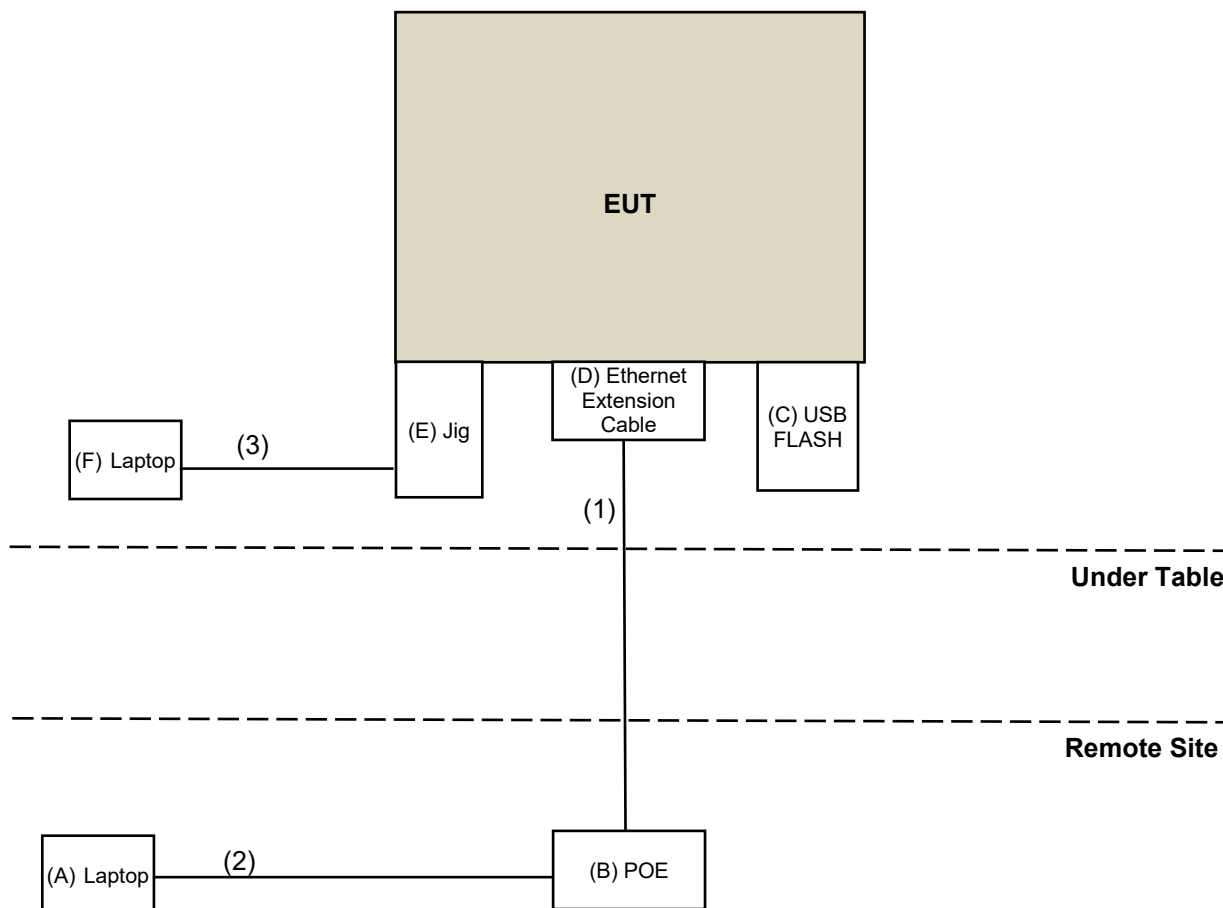
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Combination	EUT Configure Mode	Mode	Tested Channel
Unwanted Emissions below 1 GHz	1	A	802.11b	6
			802.11a	149
			802.11be (EHT320)	127
			BT-LE 1M	0
	2	A	802.11b	11
			802.11b	6
			802.11a	149
			802.11be (EHT320)	127
	3	A	BT-LE 1M	0
			802.11ax (HE20)	165
			802.11b	6
			802.11a	149
Unwanted Emissions above 1 GHz	1	A	802.11be (EHT320)	127
			BT-LE 1M	0
			802.11b	11
	2	A	802.11b	6
			802.11a	149
			802.11be (EHT320)	127
			BT-LE 1M	0
	3	A	802.11ax (HE20)	165
			802.11b	6
			802.11a	149
			802.11be (EHT320)	127
Conducted Out of Band Emissions	1	A	BT-LE 1M	0
			802.11ax (HE40)	123
EUT Configure Mode:	A	Traffic Radio (Radio 1 / Radio 2 / Radio 3 / Radio 5)		
	B	Scan Radio (Radio 4)		

3.4 Test Program Used and Operation Descriptions

Controlling software QSPR Version 6.00.00234.1 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	X250	PC04UZN1	NA	Provided by Lab
B	POE	NA	NA	NA	NA	Supplied by applicant
C	USB FLASH	SanDisk	SDDDC3-032G	NA	NA	Provided by Lab
D	Ethernet Extension Cable	NA	NA	NA	NA	Supplied by applicant
E	Jig	NA	NA	NA	NA	Supplied by applicant
F	Laptop	Lenovo	X260 4G	PC0ECUAT	NA	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	LAN Cable	1	6	N	N	Provided by Lab
2	LAN Cable	1	1.5	N	N	Provided by Lab
3	USB Cable	1	0.8	N	N	Provided by Lab

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn BV ADT	AT100	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-160	2025/9/16	2026/9/15
Loop Antenna TESEQ	HLA 6121	45745	2025/9/1	2026/8/31
MXE EMI Receiver Agilent	N9038A	MY51210203	2025/8/27	2026/8/26
Preamplifier Agilent	8447D	2944A10638	2026/4/18	2027/4/17
Preamplifier EMCI	EMC001340	980201	2025/9/21	2026/9/20
RF Coaxial Cable Woken	8D-FB	Cable-CH9-01	2026/4/18	2027/4/17
Signal & Spectrum Analyzer R&S	FSW43	101582	2026/5/2	2027/5/1
Software BV ADT	ADT_Radiated_ V7.7.1.1.1	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4(Hwaya).
2. Tested Date: 2026/5/14

4.2 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn BV ADT	AT100	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-1169	2025/11/9	2026/11/8
	BBHA 9170	9170-480	2025/11/9	2026/11/8
		BBHA9170243	2025/11/9	2026/11/8
MXE EMI Receiver Agilent	N9038A	MY51210203	2025/8/27	2026/8/26
Preamplifier Agilent	8449B	3008A02367	2026/1/3	2027/1/2
Preamplifier EMCI	EMC 184045	980116	2025/9/21	2026/9/20
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2025/6/30	2026/6/29
	EMC102-KM-KM-3000	150929	2025/6/30	2026/6/29
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2026/1/3	2027/1/2
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2026/1/3	2027/1/2
Signal & Spectrum Analyzer R&S	FSW43	101582	2025/4/15 2026/5/2	2026/4/14 2027/5/1
Software BV ADT	ADT_Radiated_ V7.7.1.1.1	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4(Hwaya).
2. Tested Date: 2026/3/3 ~ 2026/5/19

4.3 Conducted Out of Band Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Signal & Spectrum Analyzer R&S	FSV3044	101504	2025/6/18	2026/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/4/8

5 Limits of Test Items

5.1 Unwanted Emissions below 1 GHz

For FCC 15.247:

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

For FCC 15.407:

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

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.2 Unwanted Emissions above 1 GHz

For FCC 15.247:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

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.

For FCC 15.407 transmitters operating in the 5.150-5.850 GHz band:

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

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

Limits of unwanted emission out of the restricted bands

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(3)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK: 105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK: 122.2 (dBμV/m) ^{*4}

^{*1} beyond 75 MHz or more above of the band edge.

^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

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

For FCC 15.407 transmitters operating in the 5.925-7.125 GHz band:

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

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

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3 m
5925 MHz > F > 7125 MHz	Peak: -7 (dBm/MHz)	88.2 (dBuV/m)
	Average: -27 (dBm/MHz)	68.2 (dBuV/m)

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

5.3 Conducted Out of Band Emissions

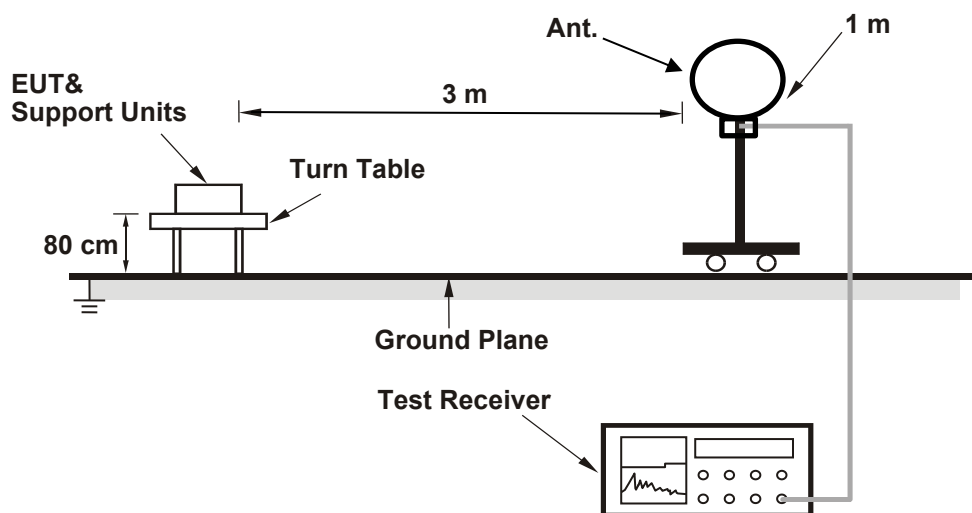
Below 30 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

6 Test Arrangements

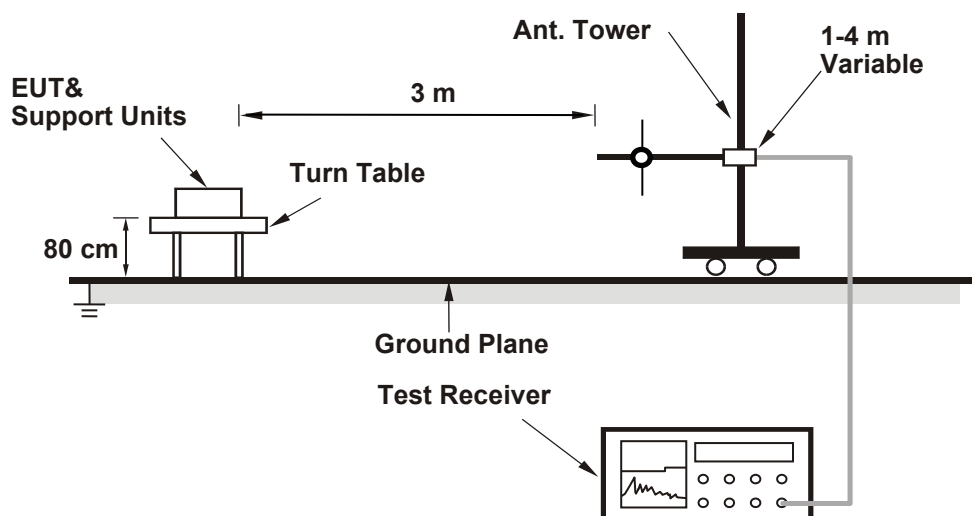
6.1 Unwanted Emissions below 1 GHz

6.1.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.1.2 Test Procedure

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 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. 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 (however, peak detector measurements may be used to determine compliance with QP requirements), except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

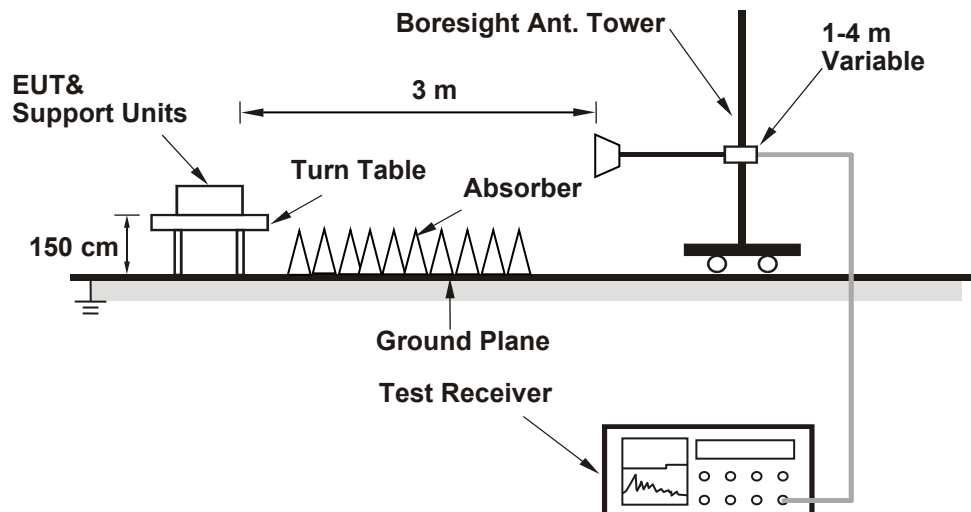
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz (however, peak detector measurements may be used to determine compliance with QP requirements).
2. All modes of operation were investigated and the worst-case emissions are reported.

6.2 Unwanted Emissions above 1 GHz

6.2.1 Test Setup



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

6.2.2 Test Procedure

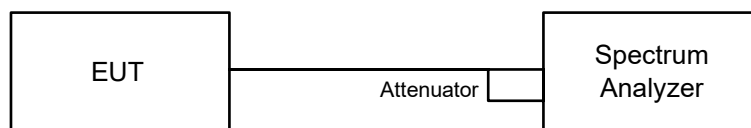
- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to peak and average detects 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.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

6.3 Conducted Out of Band Emissions

6.3.1 Test Setup



6.3.2 Test Procedure

MEASUREMENT PROCEDURE REF

- Set instrument center frequency to DTS channel center frequency.
- Set the span to ≥ 1.5 times the DTS bandwidth.
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum PSD level.

MEASUREMENT PROCEDURE OOB

- Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.
- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = No faster than coupled (auto) time.
- Trace Mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level.

7 Test Results of Test Item

7.1 Unwanted Emissions below 1 GHz

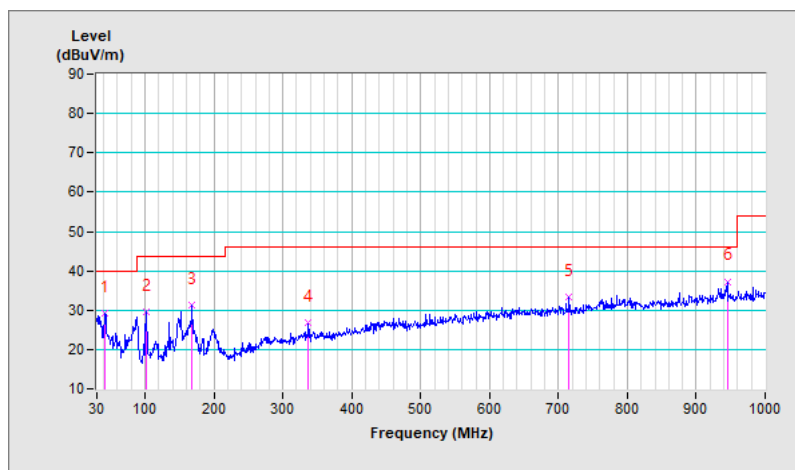
FCC 15.247 / FCC 15.407

Combination	1		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	29.1 QP	40.0	-10.9	2.00 H	264	38.6	-9.5
2	100.81	29.7 QP	43.5	-13.8	1.00 H	355	43.1	-13.4
3	167.74	31.4 QP	43.5	-12.1	1.50 H	177	40.4	-9.0
4	336.52	26.7 QP	46.0	-19.3	1.00 H	252	33.2	-6.5
5	715.79	33.3 QP	46.0	-12.7	1.50 H	338	32.0	1.3
6	944.71	37.3 QP	46.0	-8.7	1.00 H	106	31.4	5.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

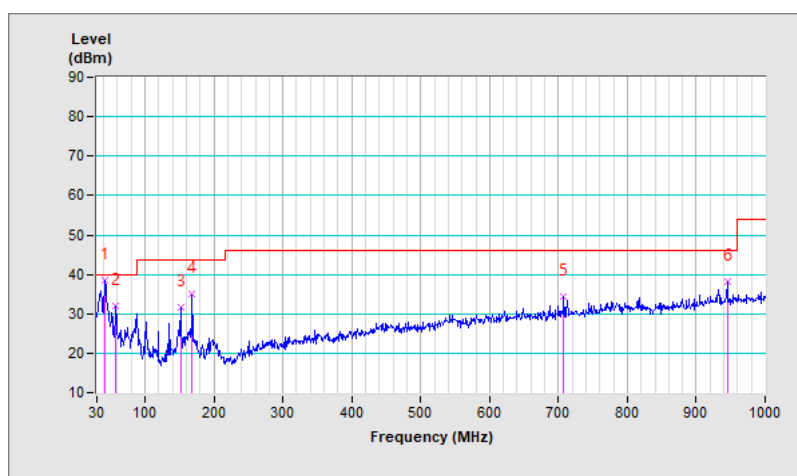


Combination	1		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	38.5 QP	40.0	-1.5	1.50 V	111	48.0	-9.5
2	57.16	32.1 QP	40.0	-7.9	1.50 V	264	41.7	-9.6
3	151.25	31.6 QP	43.5	-11.9	1.00 V	77	40.2	-8.6
4	167.74	34.9 QP	43.5	-8.6	2.00 V	352	43.9	-9.0
5	708.03	34.5 QP	46.0	-11.5	1.00 V	127	33.3	1.2
6	944.71	38.3 QP	46.0	-7.7	1.50 V	222	32.4	5.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

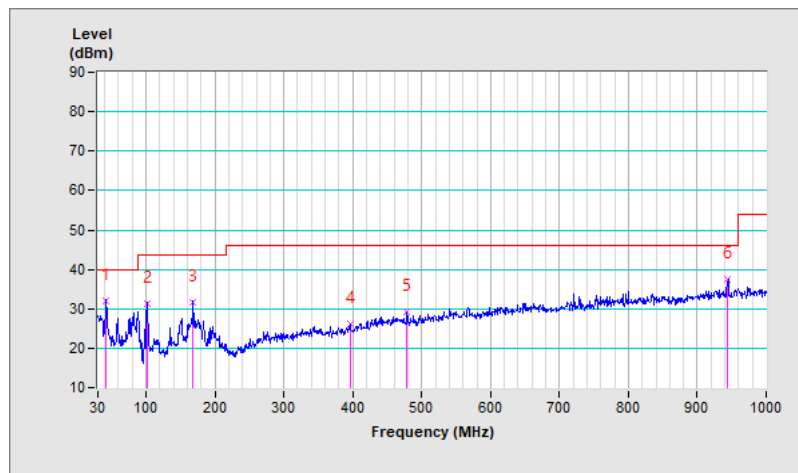


Combination	2		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	32.0 QP	40.0	-8.0	1.25 H	120	41.5	-9.5
2	100.81	31.4 QP	43.5	-12.1	1.50 H	132	44.8	-13.4
3	167.74	31.8 QP	43.5	-11.7	1.00 H	265	40.8	-9.0
4	396.66	26.3 QP	46.0	-19.7	1.00 H	36	31.6	-5.3
5	478.14	29.1 QP	46.0	-16.9	1.00 H	176	32.8	-3.7
6	943.63	37.3 QP	46.0	-8.7	1.25 H	165	31.4	5.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

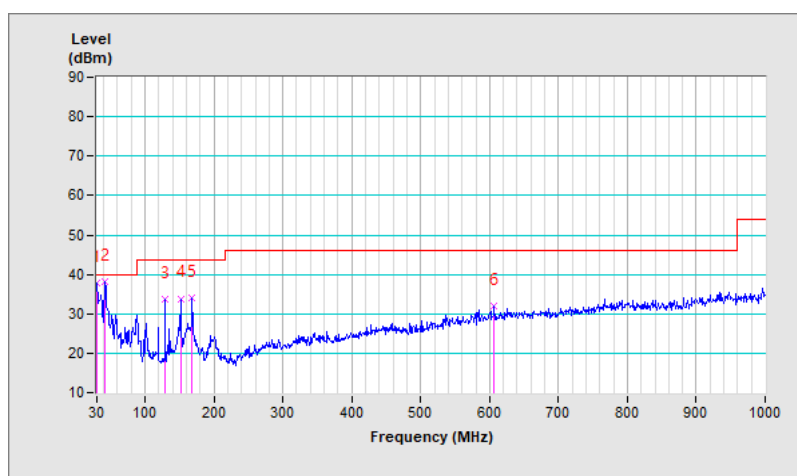


Combination	2		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30	37.7 QP	40.0	-2.3	1.50 V	12	48.2	-10.5
2	41.64	38.0 QP	40.0	-2.0	1.50 V	119	47.5	-9.5
3	128.94	33.6 QP	43.5	-9.9	1.50 V	236	43.9	-10.3
4	151.25	33.9 QP	43.5	-9.6	1.00 V	89	42.5	-8.6
5	167.74	33.9 QP	43.5	-9.6	1.50 V	154	42.9	-9.0
6	607.15	32.1 QP	46.0	-13.9	1.00 V	78	32.7	-0.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

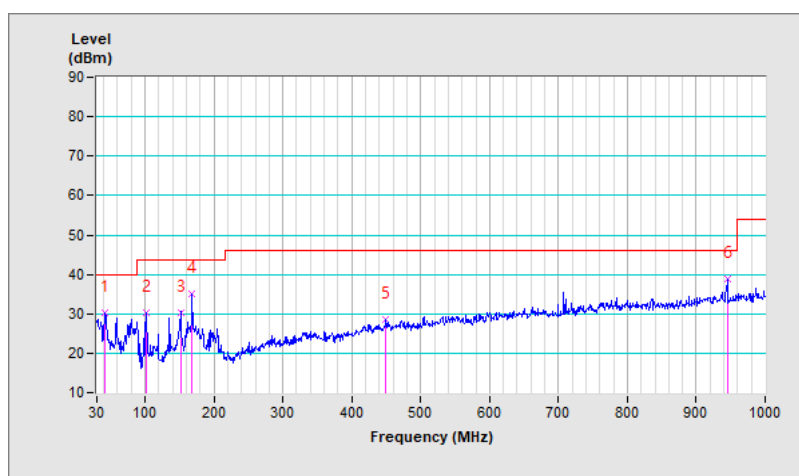


Combination	3		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	40.67	30.4 QP	40.0	-9.6	1.50 H	90	40.0	-9.6
2	100.81	30.1 QP	43.5	-13.4	1.50 H	112	43.5	-13.4
3	151.25	30.3 QP	43.5	-13.2	1.00 H	253	38.9	-8.6
4	167.74	35.1 QP	43.5	-8.4	2.00 H	268	44.1	-9.0
5	449.04	28.6 QP	46.0	-17.4	1.00 H	325	32.6	-4.0
6	944.71	38.9 QP	46.0	-7.1	1.50 H	245	33.0	5.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

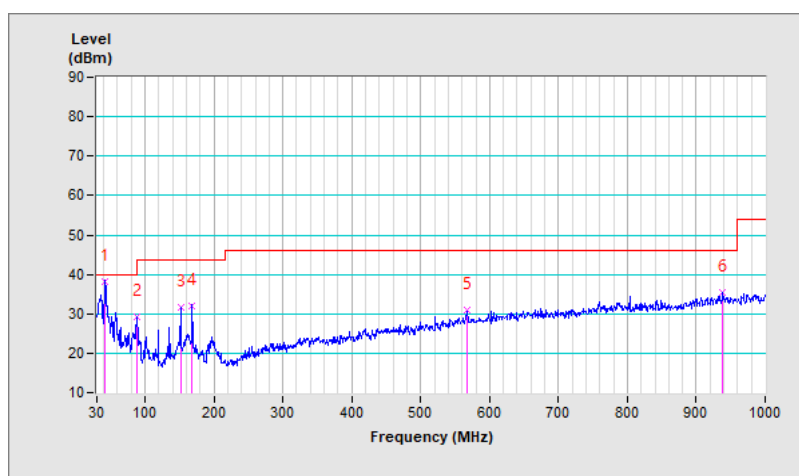


Combination	3		
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	38.2 QP	40.0	-1.8	1.25 V	110	47.7	-9.5
2	87.23	29.1 QP	40.0	-10.9	1.00 V	68	43.7	-14.6
3	151.25	31.6 QP	43.5	-11.9	2.00 V	214	40.2	-8.6
4	167.74	32.0 QP	43.5	-11.5	1.50 V	336	41.0	-9.0
5	567.38	30.8 QP	46.0	-15.2	1.00 V	5	32.7	-1.9
6	938.89	35.3 QP	46.0	-10.7	1.00 V	51	29.4	5.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.2 Unwanted Emissions above 1 GHz

FCC 15.247

Combination	1		
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.7 PK	74.0	-13.3	1.61 H	130	25.7	35.0
2	2390	47.2 AV	54.0	-6.8	1.61 H	130	12.2	35.0
3	*2402	96.1 PK			1.61 H	130	61.2	34.9
4	*2402	95.1 AV			1.61 H	130	60.2	34.9
5	*2437	114.6 PK			3.72 H	180	79.7	34.9
6	*2437	111.9 AV			3.72 H	180	77.0	34.9
7	*2462	111.4 PK			3.71 H	290	76.5	34.9
8	*2462	109.1 AV			3.71 H	290	74.2	34.9
9	2483.5	60.9 PK	74.0	-13.1	3.72 H	180	26.0	34.9
10	2483.5	49.9 AV	54.0	-4.1	3.72 H	180	15.0	34.9
11	4804	51.8 PK	74.0	-22.2	2.55 H	110	40.3	11.5
12	4804	42.6 AV	54.0	-11.4	2.55 H	110	31.1	11.5
13	4874	51.5 PK	74.0	-22.5	2.55 H	137	40.0	11.5
14	4874	39.9 AV	54.0	-14.1	2.55 H	137	28.4	11.5
15	4924	51.6 PK	74.0	-22.4	3.09 H	119	40.1	11.5
16	4924	38.5 AV	54.0	-15.5	3.09 H	119	27.0	11.5
17	7311	58.4 PK	74.0	-15.6	2.69 H	343	39.5	18.9
18	7311	45.7 AV	54.0	-8.3	2.69 H	343	26.8	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.9 PK	74.0	-13.1	2.05 V	252	25.9	35.0
2	2390	47.2 AV	54.0	-6.8	2.05 V	252	12.2	35.0
3	*2402	101.6 PK			2.05 V	252	66.7	34.9
4	*2402	100.9 AV			2.05 V	252	66.0	34.9
5	*2437	118.3 PK			3.33 V	323	83.4	34.9
6	*2437	115.6 AV			3.33 V	323	80.7	34.9
7	*2462	116.9 PK			2.69 V	57	82.0	34.9
8	*2462	114.4 AV			2.69 V	57	79.5	34.9
9	2483.5	61.9 PK	74.0	-12.1	2.69 V	57	27.0	34.9
10	2483.5	52.9 AV	54.0	-1.1	2.69 V	57	18.0	34.9
11	4804	54.1 PK	74.0	-19.9	3.95 V	195	42.6	11.5
12	4804	42.9 AV	54.0	-11.1	3.95 V	195	31.4	11.5
13	4874	51.8 PK	74.0	-22.2	2.57 V	303	40.3	11.5
14	4874	41.1 AV	54.0	-12.9	2.57 V	303	29.6	11.5
15	4924	52.0 PK	74.0	-22.0	2.80 V	111	40.5	11.5
16	4924	38.9 AV	54.0	-15.1	2.80 V	111	27.4	11.5
17	7311	58.8 PK	74.0	-15.2	2.26 V	335	39.9	18.9
18	7311	48.2 AV	54.0	-5.8	2.26 V	335	29.3	18.9

Remarks:

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

FCC 15.407

Combination	1		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785	119.7 PK			2.89 H	271	77.2	42.5
2	*5785	107.7 AV			2.89 H	271	65.2	42.5
3	11570	64.0 PK	74.0	-10.0	2.42 H	209	39.0	25.0
4	11570	50.1 AV	54.0	-3.9	2.42 H	209	25.1	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785	126.9 PK			2.88 V	246	84.4	42.5
2	*5785	114.6 AV			2.88 V	246	72.1	42.5
3	11570	64.2 PK	74.0	-9.8	1.80 V	190	39.2	25.0
4	11570	50.3 AV	54.0	-3.7	1.80 V	190	25.3	25.0

Remarks:

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

Combination	1		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6585.00	110.5 PK			1.95 H	142	66.7	43.8
2	*6585.00	98.0 AV			1.95 H	142	54.2	43.8
3	13170.00	59.8 PK	88.2	-28.4	2.55 H	64	41.0	18.8
4	13170.00	46.8 AV	68.2	-21.4	2.55 H	64	28.0	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6585.00	98.3 PK			2.77 V	214	54.5	43.8
2	*6585.00	85.6 AV			2.77 V	214	41.8	43.8
3	13170.00	59.4 PK	88.2	-28.8	2.22 V	264	40.6	18.8
4	13170.00	46.5 AV	68.2	-21.7	2.22 V	264	27.7	18.8

Remarks:

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

FCC 15.247

Combination	2		
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.6 PK	74.0	-13.4	1.65 H	133	25.6	35.0
2	2390	47.2 AV	54.0	-6.8	1.65 H	133	12.2	35.0
3	*2402	96.0 PK			1.65 H	133	61.1	34.9
4	*2402	95.0 AV			1.65 H	133	60.1	34.9
5	*2437	114.5 PK			3.71 H	182	79.6	34.9
6	*2437	111.8 AV			3.71 H	182	76.9	34.9
7	2483.5	60.8 PK	74.0	-13.2	3.71 H	182	25.9	34.9
8	2483.5	49.8 AV	54.0	-4.2	3.71 H	182	14.9	34.9
9	4804	51.7 PK	74.0	-22.3	2.57 H	111	40.2	11.5
10	4804	42.5 AV	54.0	-11.5	2.57 H	111	31.0	11.5
11	4874	51.4 PK	74.0	-22.6	2.57 H	133	39.9	11.5
12	4874	39.9 AV	54.0	-14.1	2.57 H	133	28.4	11.5
13	7311	58.3 PK	74.0	-15.7	2.70 H	340	39.4	18.9
14	7311	45.6 AV	54.0	-8.4	2.70 H	340	26.7	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.9 PK	74.0	-13.1	2.05 V	252	25.9	35.0
2	2390	47.2 AV	54.0	-6.8	2.05 V	252	12.2	35.0
3	*2402	101.6 PK			2.05 V	252	66.7	34.9
4	*2402	100.9 AV			2.05 V	252	66.0	34.9
5	*2437	118.3 PK			3.33 V	323	83.4	34.9
6	*2437	115.6 AV			3.33 V	323	80.7	34.9
7	2483.5	61.5 PK	74.0	-12.5	3.33 V	323	26.6	34.9
8	2483.5	52.1 AV	54.0	-1.9	3.33 V	323	17.2	34.9
9	4804	54.1 PK	74.0	-19.9	3.95 V	195	42.6	11.5
10	4804	42.9 AV	54.0	-11.1	3.95 V	195	31.4	11.5
11	4874	51.8 PK	74.0	-22.2	2.57 V	303	40.3	11.5
12	4874	41.1 AV	54.0	-12.9	2.57 V	303	29.6	11.5
13	7311	58.8 PK	74.0	-15.2	2.26 V	335	39.9	18.9
14	7311	48.2 AV	54.0	-5.8	2.26 V	335	29.3	18.9

Remarks:

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

FCC 15.407

Combination	2		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak Traffic Radio AV: RB=1 MHz, VB=10 Hz, DET= Peak Scan Radio AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745	114.1 PK			2.59 H	230	71.8	42.3
2	*5745	103.8 AV			2.59 H	230	61.5	42.3
3	*5785	119.0 PK			2.92 H	265	76.5	42.5
4	*5785	107.3 AV			2.92 H	265	64.8	42.5
5	11490	63.5 PK	74.0	-10.5	2.02 H	160	38.7	24.8
6	11490	50.1 AV	54.0	-3.9	2.02 H	160	25.3	24.8
7	11570	63.8 PK	74.0	-10.2	2.40 H	210	38.8	25.0
8	11570	50.0 AV	54.0	-4.0	2.40 H	210	25.0	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745	117.3 PK			2.58 V	220	75.0	42.3
2	*5745	107.4 AV			2.58 V	220	65.1	42.3
3	*5785	126.5 PK			2.90 V	242	84.0	42.5
4	*5785	114.3 AV			2.90 V	242	71.8	42.5
5	11490	63.6 PK	74.0	-10.4	1.65 V	123	38.8	24.8
6	11490	50.3 AV	54.0	-3.7	1.65 V	123	25.5	24.8
7	11570	64.1 PK	74.0	-9.9	1.79 V	187	39.1	25.0
8	11570	50.2 AV	54.0	-3.8	1.79 V	187	25.2	25.0

Remarks:

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

Combination	2		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6585.00	110.6 PK			1.96 H	142	66.8	43.8
2	*6585.00	98.1 AV			1.96 H	142	54.3	43.8
3	13170.00	59.5 PK	88.2	-28.7	2.54 H	64	40.7	18.8
4	13170.00	47.0 AV	68.2	-21.2	2.54 H	64	28.2	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6585.00	98.4 PK			2.80 V	213	54.6	43.8
2	*6585.00	85.8 AV			2.80 V	213	42.0	43.8
3	13170.00	59.3 PK	88.2	-28.9	2.22 V	265	40.5	18.8
4	13170.00	46.5 AV	68.2	-21.7	2.22 V	265	27.7	18.8

Remarks:

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

FCC 15.247

Combination	3		
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.4 PK	74.0	-13.6	1.65 H	133	25.4	35.0
2	2390	47.2 AV	54.0	-6.8	1.65 H	133	12.2	35.0
3	*2402	95.9 PK			1.65 H	133	61.0	34.9
4	*2402	94.9 AV			1.65 H	133	60.0	34.9
5	*2437	114.3 PK			3.70 H	182	79.4	34.9
6	*2437	111.5 AV			3.70 H	182	76.6	34.9
7	2483.5	60.5 PK	74.0	-13.5	3.70 H	182	25.6	34.9
8	2483.5	49.7 AV	54.0	-4.3	3.70 H	182	14.8	34.9
9	4804	51.5 PK	74.0	-22.5	2.57 H	111	40.0	11.5
10	4804	42.5 AV	54.0	-11.5	2.57 H	111	31.0	11.5
11	4874	51.2 PK	74.0	-22.8	2.56 H	134	39.7	11.5
12	4874	39.9 AV	54.0	-14.1	2.56 H	134	28.4	11.5
13	7311	58.2 PK	74.0	-15.8	2.74 H	340	39.3	18.9
14	7311	45.5 AV	54.0	-8.5	2.74 H	340	26.6	18.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390	60.8 PK	74.0	-13.2	2.00 V	254	25.8	35.0
2	2390	47.4 AV	54.0	-6.6	2.00 V	254	12.4	35.0
3	*2402	101.5 PK			2.00 V	254	66.6	34.9
4	*2402	100.8 AV			2.00 V	254	65.9	34.9
5	*2437	118.3 PK			3.39 V	324	83.4	34.9
6	*2437	115.6 AV			3.39 V	324	80.7	34.9
7	2483.5	61.4 PK	74.0	-12.6	3.39 V	324	26.5	34.9
8	2483.5	51.9 AV	54.0	-2.1	3.39 V	324	17.0	34.9
9	4804	53.9 PK	74.0	-20.1	3.95 V	196	42.4	11.5
10	4804	42.7 AV	54.0	-11.3	3.95 V	196	31.2	11.5
11	4874	51.7 PK	74.0	-22.3	2.57 V	303	40.2	11.5
12	4874	41.1 AV	54.0	-12.9	2.57 V	303	29.6	11.5
13	7311	58.7 PK	74.0	-15.3	2.24 V	335	39.8	18.9
14	7311	47.9 AV	54.0	-6.1	2.24 V	335	29.0	18.9

Remarks:

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

FCC 15.407

Combination	3		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET= Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785	120.3 PK			2.95 H	270	77.8	42.5
2	*5785	107.7 AV			2.95 H	270	65.2	42.5
3	11570	63.6 PK	74.0	-10.4	2.35 H	205	38.6	25.0
4	11570	49.8 AV	54.0	-4.2	2.35 H	205	24.8	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785	127.6 PK			2.82 V	240	85.1	42.5
2	*5785	114.5 AV			2.82 V	240	72.0	42.5
3	11570	64.2 PK	74.0	-9.8	1.80 V	188	39.2	25.0
4	11570	50.3 AV	54.0	-3.7	1.80 V	188	25.3	25.0

Remarks:

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

Combination	3		
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak Traffic Radio AV: RB=1 MHz, VB=10 Hz, DET= Peak Scan Radio AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6505.00	107.0 PK			2.45 H	236	63.6	43.4
2	*6505.00	99.8 AV			2.45 H	236	56.4	43.4
3	*6585.00	110.5 PK			1.95 H	133	66.7	43.8
4	*6585.00	98.1 AV			1.95 H	133	54.3	43.8
5	#13010.00	59.2 PK	88.2	-29.0	1.77 H	180	40.6	18.6
6	#13010.00	46.4 AV	68.2	-21.8	1.77 H	180	27.8	18.6
7	#13170.00	59.8 PK	88.2	-28.4	2.55 H	62	41.0	18.8
8	#13170.00	47.0 AV	68.2	-21.2	2.55 H	62	28.2	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6505.00	115.4 PK			2.74 V	194	72.0	43.4
2	*6505.00	103.7 AV			2.74 V	194	60.3	43.4
3	*6585.00	98.4 PK			2.80 V	214	54.6	43.8
4	*6585.00	85.6 AV			2.80 V	214	41.8	43.8
5	#13010.00	59.6 PK	88.2	-28.6	2.77 V	220	41.0	18.6
6	#13010.00	46.6 AV	68.2	-21.6	2.74 V	220	28.0	18.6
7	#13170.00	59.5 PK	88.2	-28.7	2.24 V	263	40.7	18.8
8	#13170.00	46.6 AV	68.2	-21.6	2.24 V	263	27.8	18.8

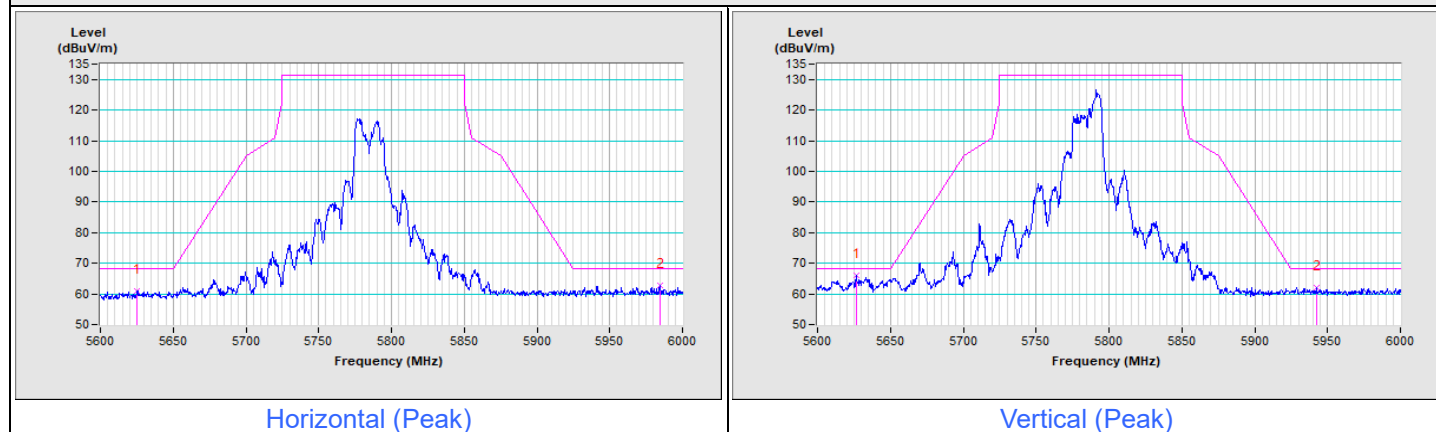
Remarks:

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

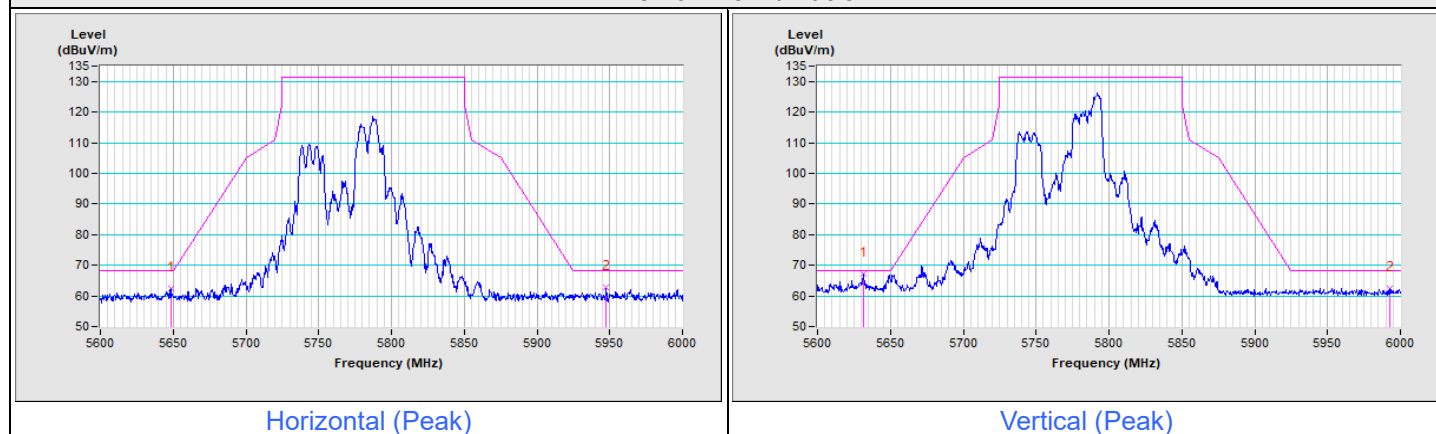
Plot of Band Edge

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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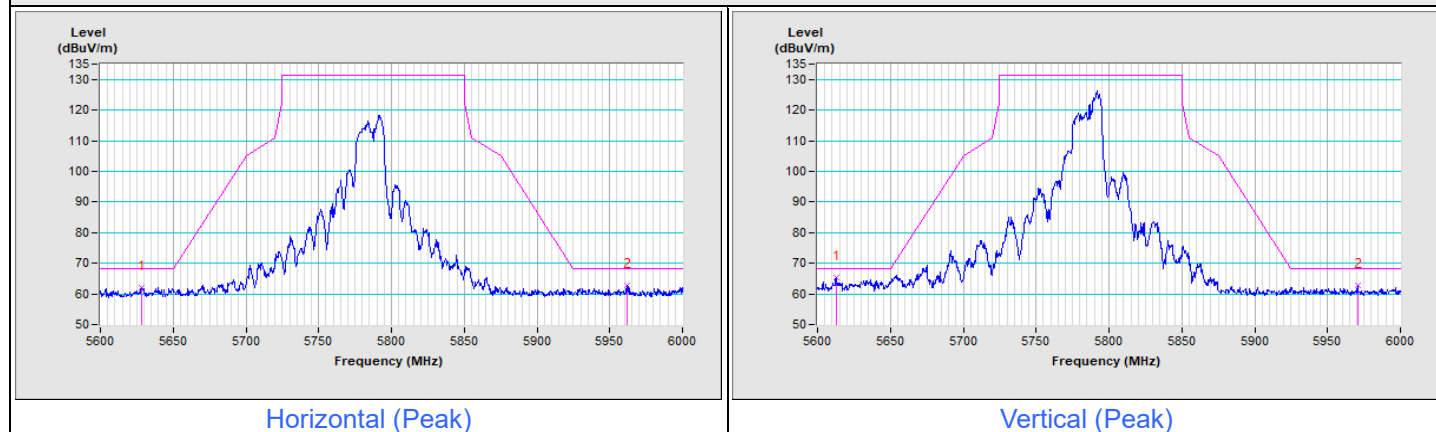
FCC 15.407 Combination 1



FCC 15.407 Combination 2



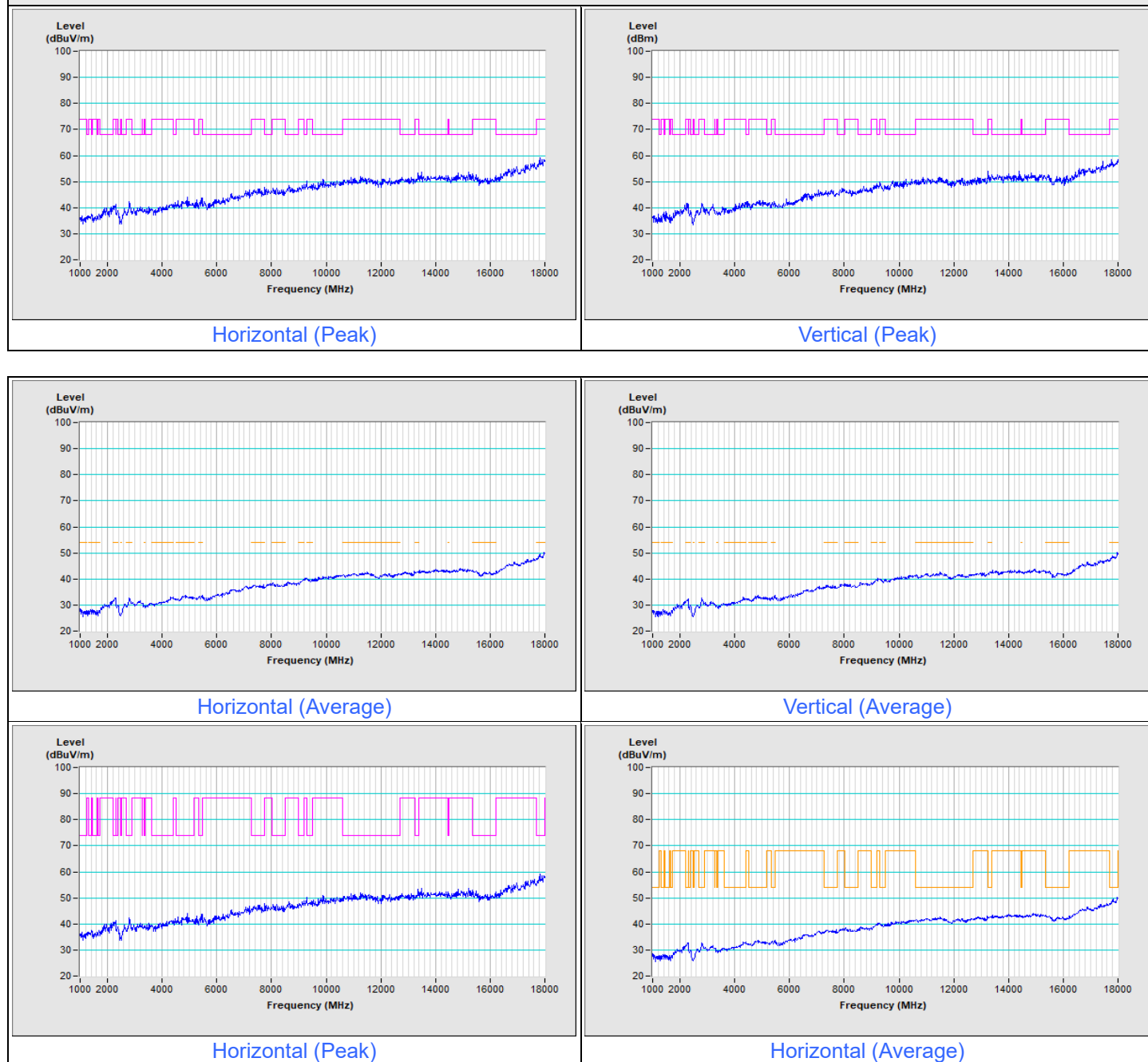
FCC 15.407 Combination 3

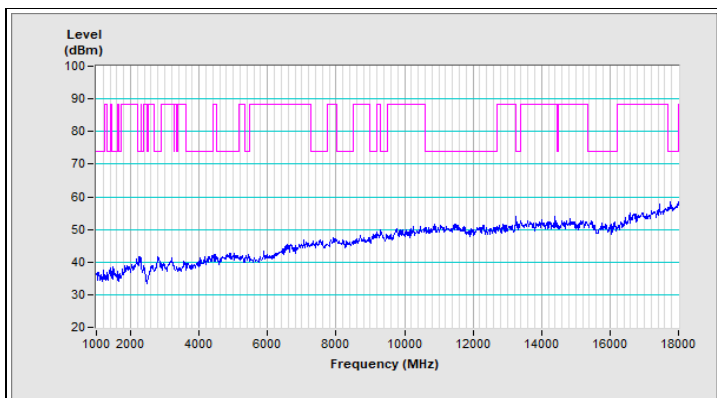


Plot of Other Emission

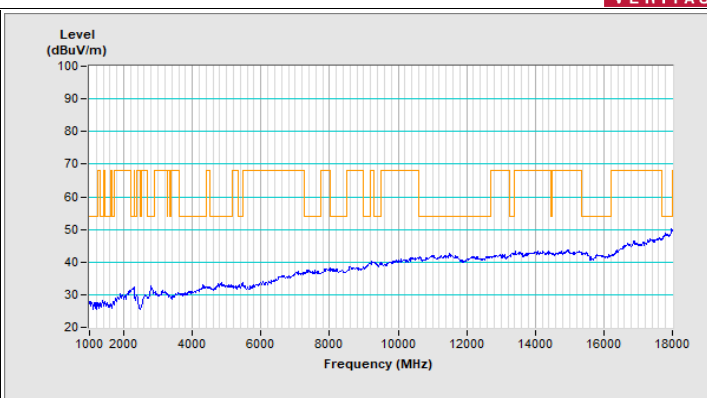
Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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FCC 15.407 Combination 1



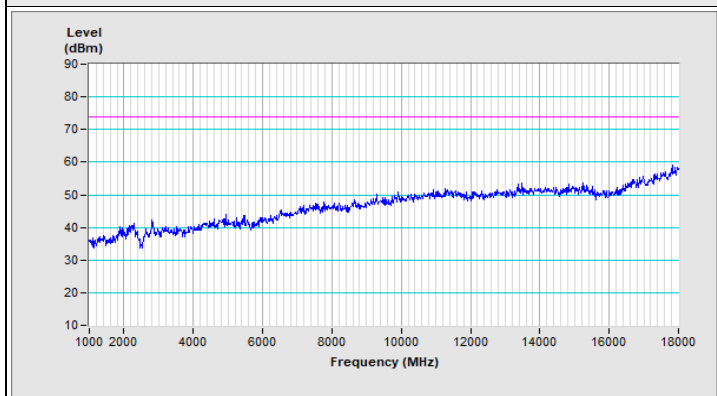


Vertical (Peak)

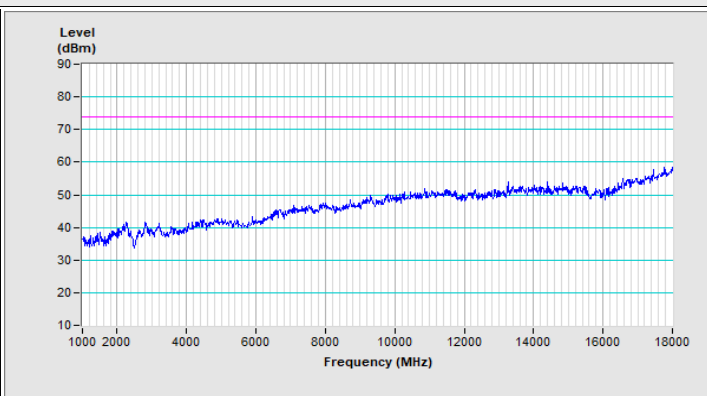


Vertical (Average)

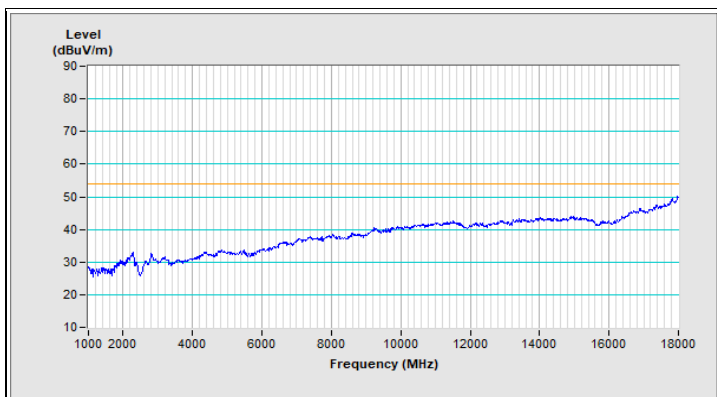
FCC 15.247 Combination 1



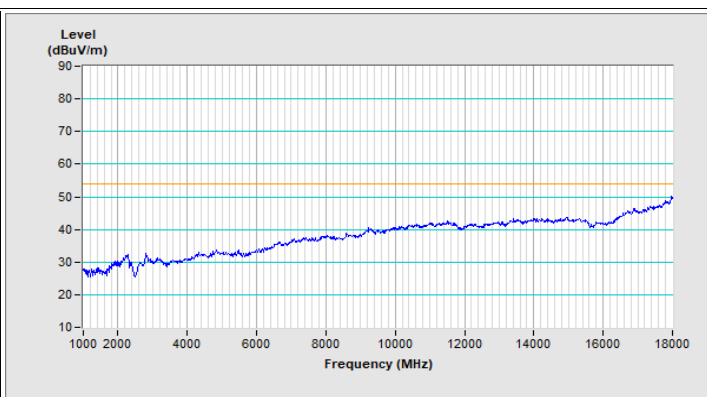
Horizontal (Peak)



Vertical (Peak)



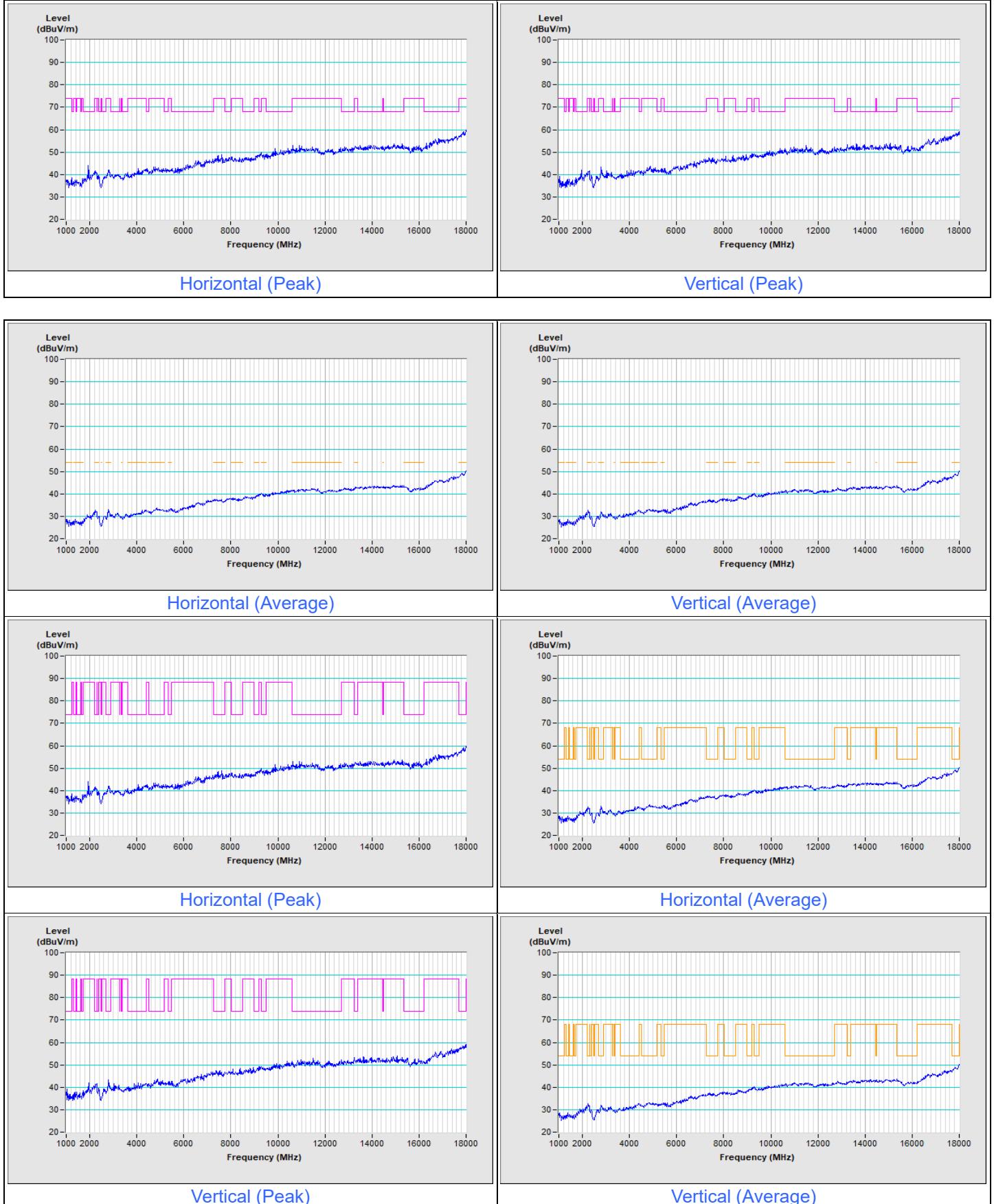
Horizontal (Average)



Vertical (Average)

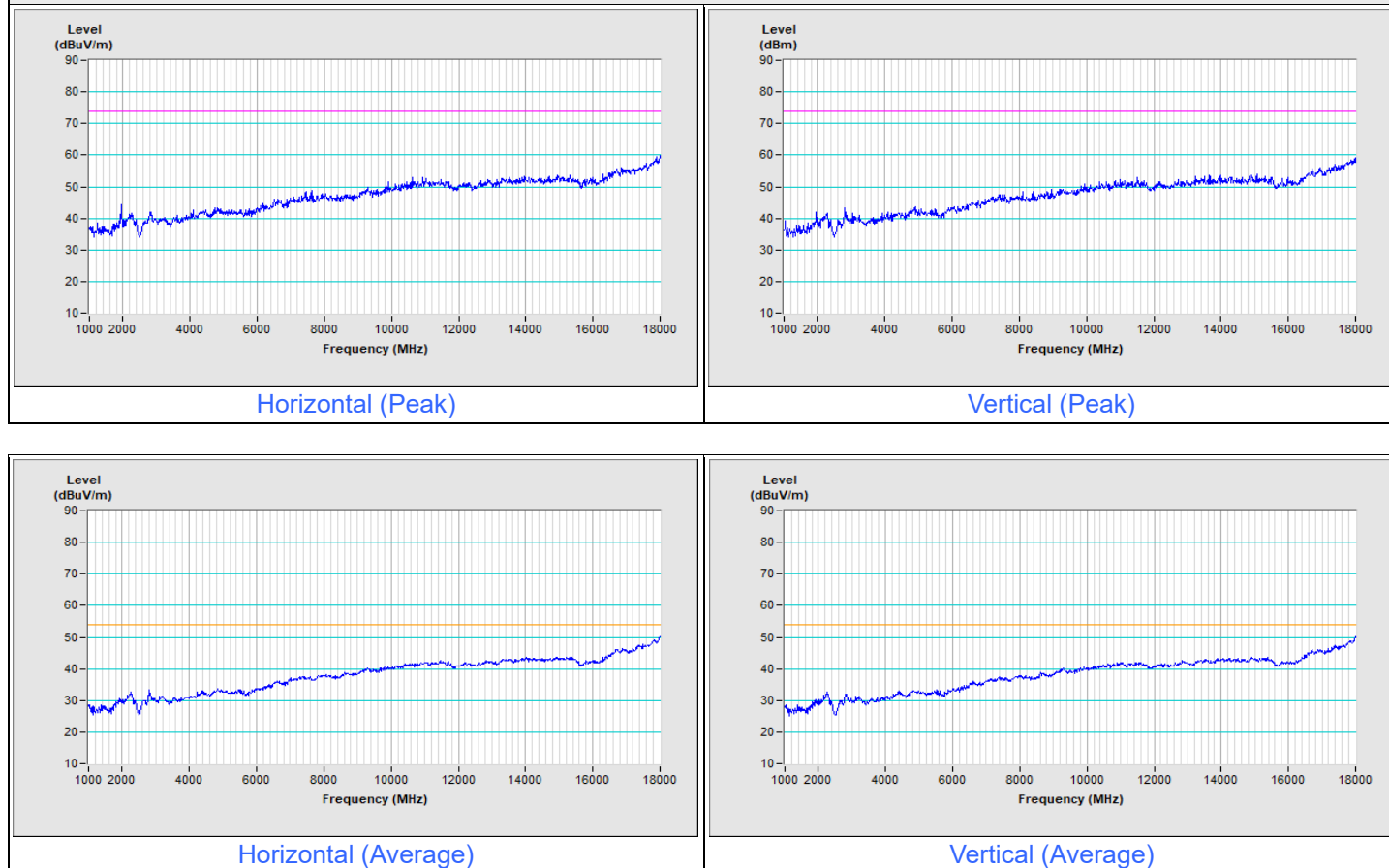
Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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FCC 15.407 Combination 2



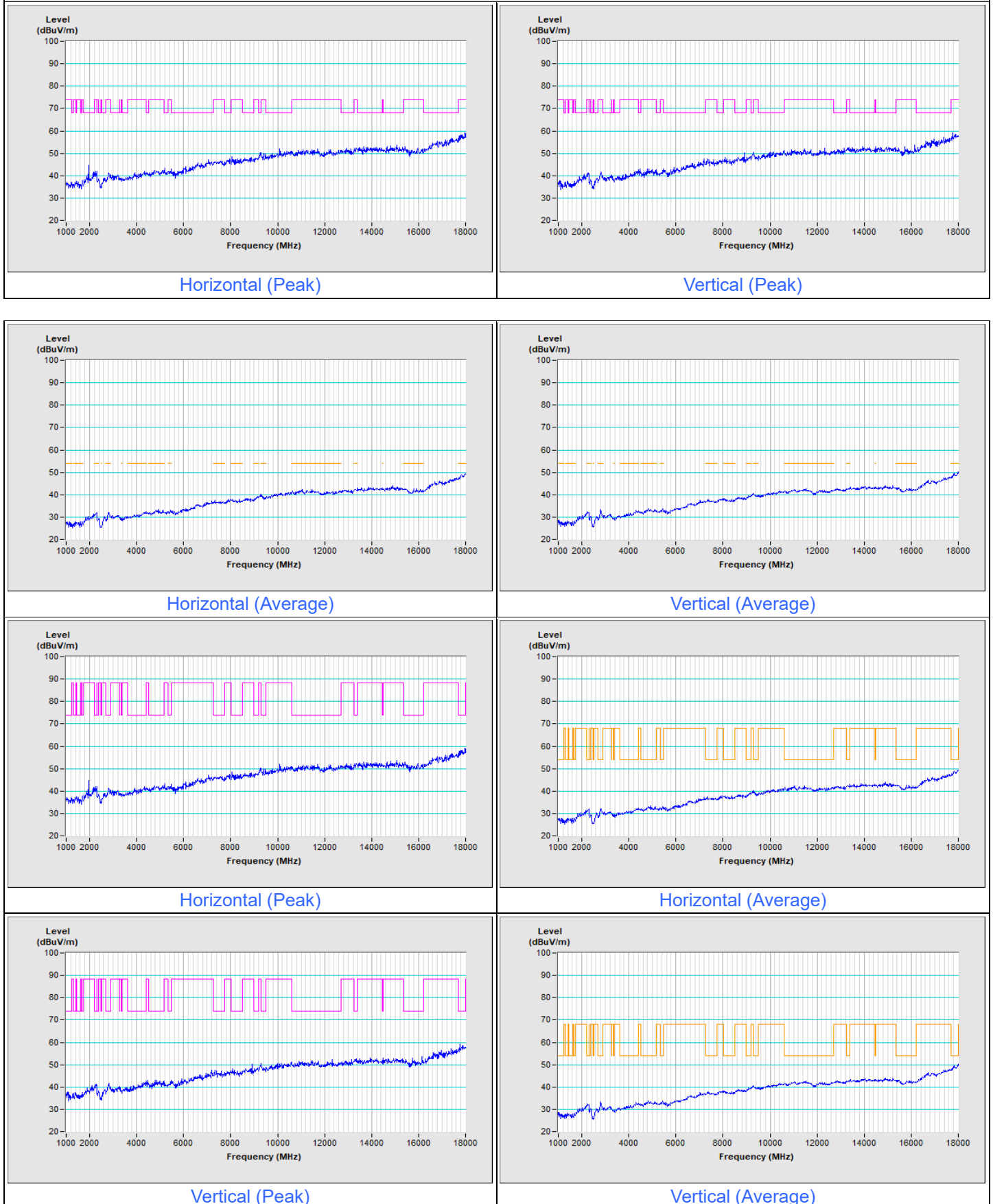
Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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FCC 15.247 Combination 2



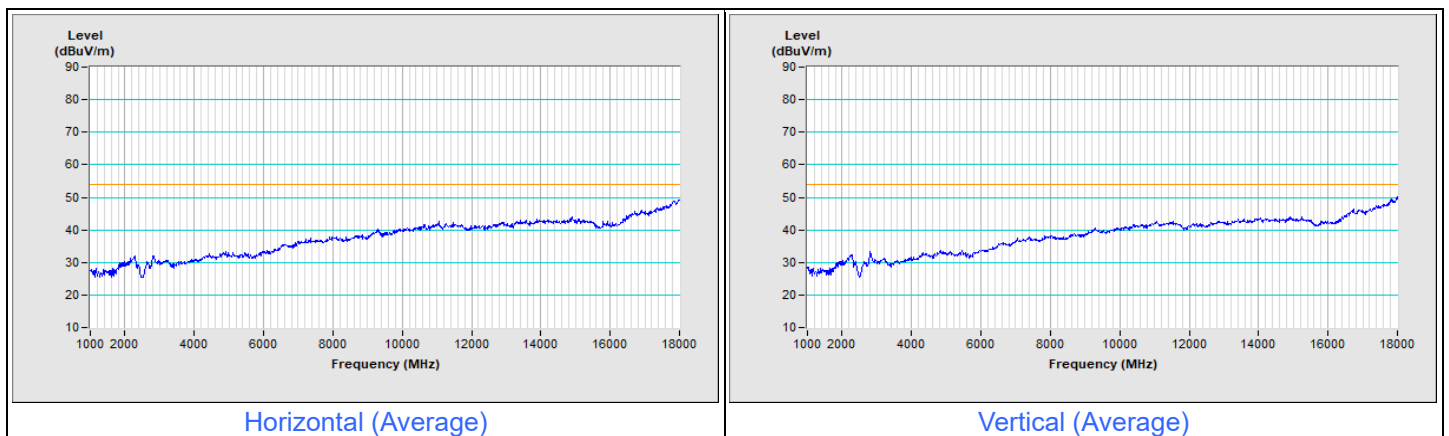
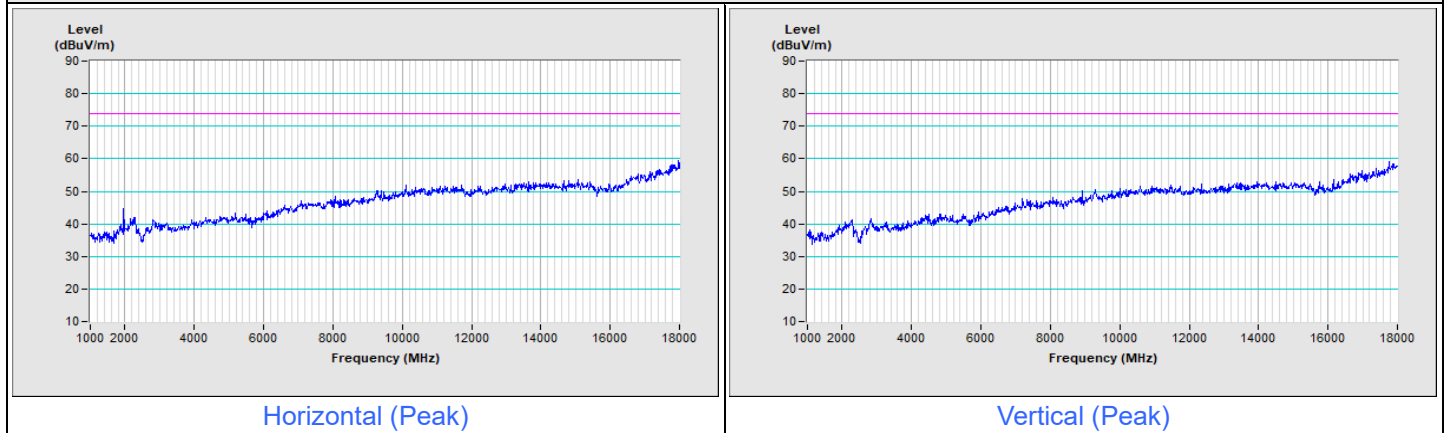
Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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FCC 15.407 Combination 3



Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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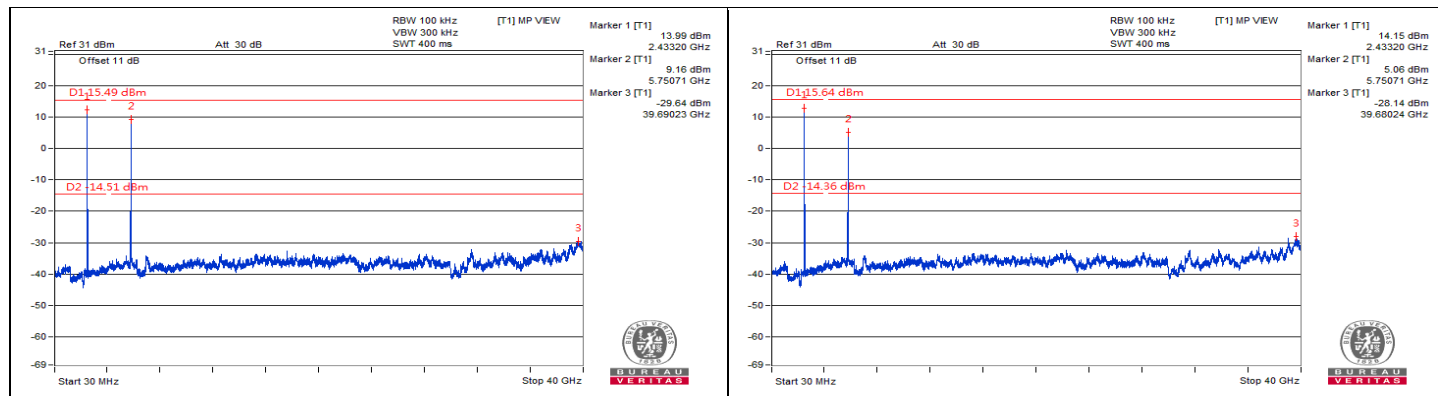
FCC 15.247 Combination 3



7.3 Conducted Out of Band Emissions

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 65% RH	Tested By:	Wayne Lin
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Combination 1



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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Web Site: <http://ee.bureauveritas.com.tw>

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

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