

Partial FCC Test Report

Report No.: RF160526C29-3

FCC ID: PPD-AR5B22

Test Model: AR5B22

Received Date: May 26, 2016

Test Date: Jun. 02, 2016 ~ Jun. 16, 2016

Issued Date: Jun. 24, 2016

Applicant: Qualcomm Atheros, Inc.

Address: 1700 Technology Drive, San Jose, CA95110

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
(R.O.C)

Test Location (1): No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan
Hsien 333, Taiwan, R.O.C.

Test Location (2): No.215, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan,
R.O.C



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Release Control Record

Issue No.	Description	Date Issued
RF160526C29-3	Original Release	Jun. 24, 2016

1 Certificate of Conformity

Product: PCIE 802.11a/b/g/n 2.4GHz/5GHz+USB BT 4.0 card

Brand: Atheros

Test Model: AR5B22

Sample Status: Identical Prototype

Applicant: Qualcomm Atheros, Inc.

Test Date: Jun. 02, 2016 ~ Jun. 16, 2016

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

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

Prepared by : Evonne Liu, **Date:** Jun. 24, 2016
Evonne Liu / Specialist

Approved by : Stanley Wu, **Date:** Jun. 24, 2016
Stanley Wu / Assistant Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -20.44 dB at 0.15000 MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.09 dB at 5470 MHz.
15.407(a)(1/2 /3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a)(1/2 /3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6 dB Bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	N/A	Refer to Note

Note: Only test item of Conducted and Radiated Emissions, Conducted power were performed for this report. Other testing data is referring to module report (Test Report No.: RF140212E04S-1 and RF110907E02-1 R1).

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) (±)
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.0153 dB
	200 MHz ~1000 MHz	2.0224 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	1.0121 dB
	18 GHz ~ 40 GHz	1.1508 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	PCIE 802.11a/b/g/n 2.4GHz/5GHz+USB BT 4.0 card
Brand	Atheros
Test Model	AR5B22
Status of EUT	Identical Prototype
Power Supply Rating	19.5 Vdc (adapter)
Modulation Type	64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to MCS7
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5700 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (VHT40) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (VHT40) 5500 ~ 5700 MHz: 11 for 802.11a, 802.11n (HT20) 5 for 802.11n (VHT40) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (VHT40)
Output Power	44.21 mW for 5180 ~ 5240 MHz 86.70 mW for 5260 ~ 5320 MHz 59.37 mW for 5500 ~ 5700 MHz 50.04 mW for 5745 ~ 5825 MHz
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	N/A
Data Cable Supplied	N/A

Note:

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

Modulation Mode	Tx Function
802.11a	2TX(MIMO)
802.11n (HT20)	2TX(MIMO)
802.11n (HT40)	2TX(MIMO)

- The EUT is authorized for use in specific End-product. Please refer to below table for more details.

Item	Brand	Model
Industrial Computer	Dell	N02PC

3. The antenna information is listed as below.

Antenna Type	Brand Name	Parts Number	Antenna Gain (dBi)			
			5180-5240 MHz	5260-5320 MHz	5500-5700 MHz	5745-5825 MHz
Dipole	Laird	WLAN Main Antenna: PDV24515-DE1 WLAN Aux Antenna: PDV24515-DE1	Main: 4.0 Aux: 4.0	Main: 4.0 Aux: 4.0	Main: 4.0 Aux: 4.0	Main: 3.9 Aux: 3.9
Monopole	Taoglas Antenna Solution Ltd.	WLAN Main Antenna: MA761.B.BICG.014 WLAN Aux Antenna: MA761.B.BICG.014	Main: 4.11 Aux: 4.51	Main: 4.11 Aux: 4.51	Main: 4.11 Aux: 4.51	Main: 4.11 Aux: 4.51

Note: The EUT antenna is a specified antenna: Professional installation antenna. It complies with the standard requirement.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

FOR 5180 ~ 5240 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

FOR 5260 ~ 5320 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

FOR 5500 ~ 5700 MHz

11 channels are provided for 802.11a, 802.11n (HT20):

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

5 channels are provided for 802.11n (HT40):

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

FOR 5745 ~ 5825 MHz:

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

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

2 channels are provided for 802.11n (HT40):

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

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	√	√	√	-	Dipol Antenna
B	√	√	√	-	Momopole Antenna

Where **RE $\geq$ 1G**: Radiated Emission above 1 GHz **RE<1G**: Radiated Emission below 1 GHz
PLC: Power Line Conducted Emission **APCM**: Antenna Port Conducted Measurement

NOTE:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane**.
2. "-" means no effect.

Radiated Emission Test (Above 1 GHz):

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B	5180-5240	802.11a	36 to 48	36, 44, 48	OFDM	BPSK	6.0
		802.11n (HT20)	36 to 48	36, 44, 48	OFDM	BPSK	MCS0
		802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	MCS0
	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	BPSK	6.0
		802.11n (HT20)	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
		802.11n (HT40)	54 to 62	54, 62	OFDM	BPSK	MCS0
	5500-5700	802.11a	100 to 140	100, 116, 140	OFDM	BPSK	6.0
		802.11n (HT20)	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
		802.11n (HT40)	102 to 134	102, 110, 134	OFDM	BPSK	MCS0
	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
		802.11n (HT20)	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
		802.11n (HT40)	151 to 159	151, 159	OFDM	BPSK	MCS0

Radiated Emission Test (Below 1 GHz):

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5180-5240	802.11n (HT40)	38 to 46	38	OFDM	BPSK	MCS0
	5260-5320	802.11n (HT40)	54 to 62	62	OFDM	BPSK	MCS0
	5500-5700	802.11n (HT40)	102 to 134	110	OFDM	BPSK	MCS0
	5745-5825	802.11n (HT20)	149 to 165	165	OFDM	BPSK	MCS0
B	5180-5240	802.11n (HT40)	38 to 46	38	OFDM	BPSK	MCS0
	5260-5320	802.11n (HT40)	54 to 62	62	OFDM	BPSK	MCS0
	5500-5700	802.11n (HT20)	100 to 140	100	OFDM	BPSK	MCS0
	5745-5825	802.11n (HT20)	149 to 165	165	OFDM	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	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5500-5700	802.11n (HT40)	102 to 134	110	OFDM	BPSK	MCS0
B	5500-5700	802.11n (HT20)	100 to 140	100	OFDM	BPSK	MCS0

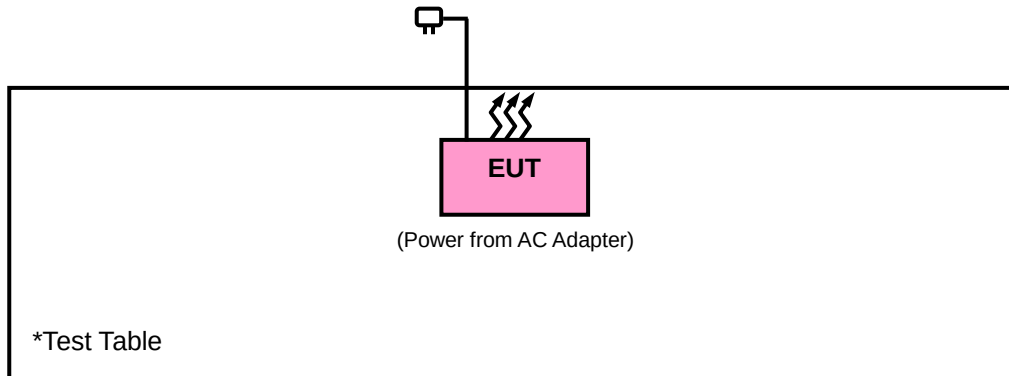
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE $\geq$ 1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Charles Hsiao
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Charles Hsiao
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Toby Tian

3.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01r02

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

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

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:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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 Limits of Unwanted Emission Out of the Restricted Bands

Applicable To	Limit	
789033 D02 General UNII Test Procedures New Rules v01r02	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)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) ^{*1} PK: -17 (dBm/MHz) ^{*2}	PK: 68.2 (dBμV/m) ^{*1} PK: 78.2 (dBμV/m) ^{*2}

NOTE: ^{*1} beyond 10 MHz of the band edge ^{*2} within 10 MHz of band edge

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

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

4.1.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent Technologies	N9038A	MY50010135	Jul. 18, 2015	Jul. 17, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2015	Dec. 16, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Jan. 07, 2016	Jan. 06, 2017
HORN Antenna ETS-Lindgren	3117	00143293	Jan. 04, 2016	Jan. 03, 2017
Bluetooth Tester	CBT	100980	Apr. 27, 2015	Apr. 26, 2017
Loop Antenna	EM-6879	269	Jul. 31, 2015	Jul. 30, 2016
Agilent Communications Tester-Wireless	8960 Series 10	MY53201073	Jul. 03, 2015	Jul. 02, 2017
Preamplifier Agilent	310N	187226	Jun. 29, 2015	Jun. 28, 2016
Preamplifier Agilent	83017A	MY39501357	Jun. 29, 2015	Jun. 28, 2016
Power Meter Anritsu	ML2495A	1232002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor Anritsu	MA2411B	1207325	Sep. 21, 2015	Sep. 20, 2016
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(R FC-SMS-100-SM S-120+RFC-SMS -100-SMS-400)	Jun. 27, 2015	Jun. 26, 2016
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(R FC-SMS-100-SM S-24)	Jun. 27, 2015	Jun. 26, 2016
Software BV ADT	E3 8.130425b	NA	NA	NA
Antenna Tower MF	NA	NA	NA	NA
Turn Table MF	NA	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 HsinTien Chamber 1.
3. The horn antenna and preamplifier (model: 83017A) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The FCC Site Registration No. is 149147.
5. The IC Site Registration No. is IC7450I-1.

4.1.4 Test Procedures

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

Note:

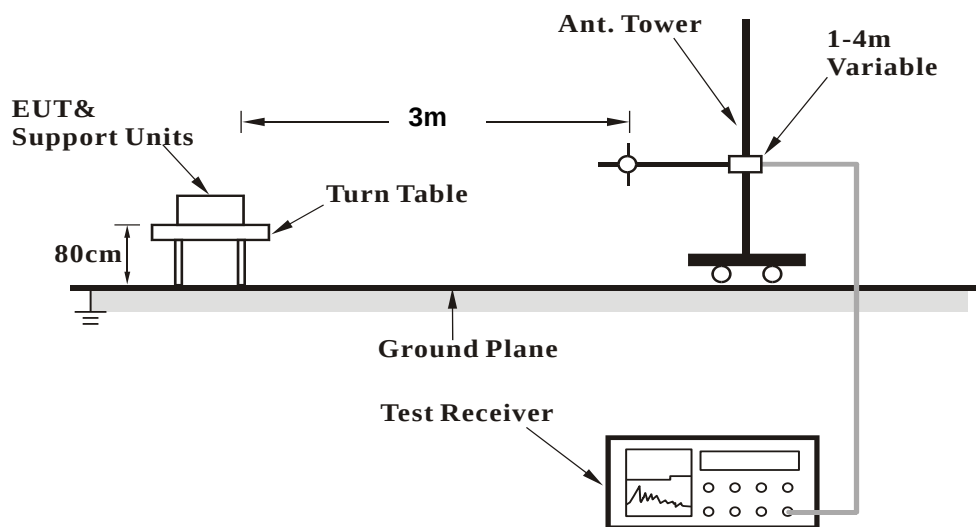
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for RMS Average (Duty cycle < 98 %) for Average detection (AV) at frequency above 1 GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz (Duty cycle $\geq 98 \%$) for Average detection (AV) at frequency above 1 GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 Deviation from Test Standard

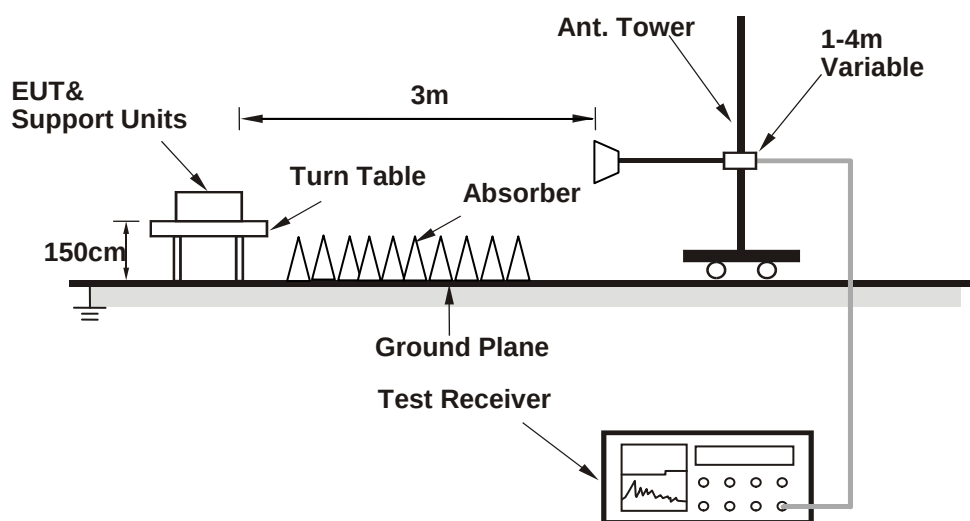
No deviation.

4.1.6 Test Set Up

<Frequency Range below 1 GHz>



<Frequency Range above 1 GHz>



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

4.1.7 EUT Operating Conditions

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

4.1.8 Test Results

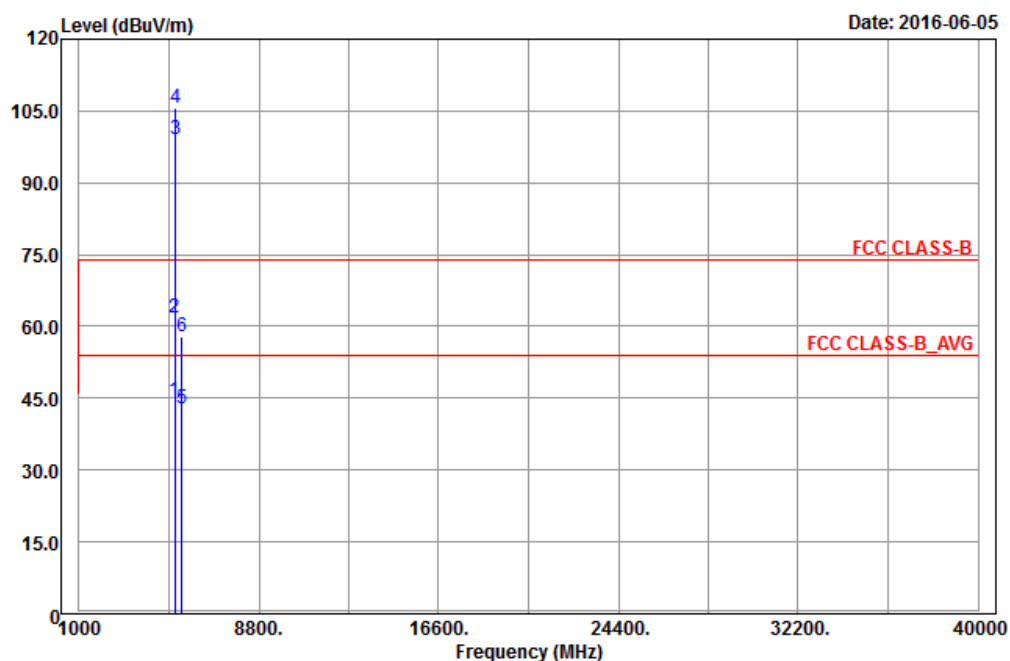
Above 1 GHz Data :

Mode A

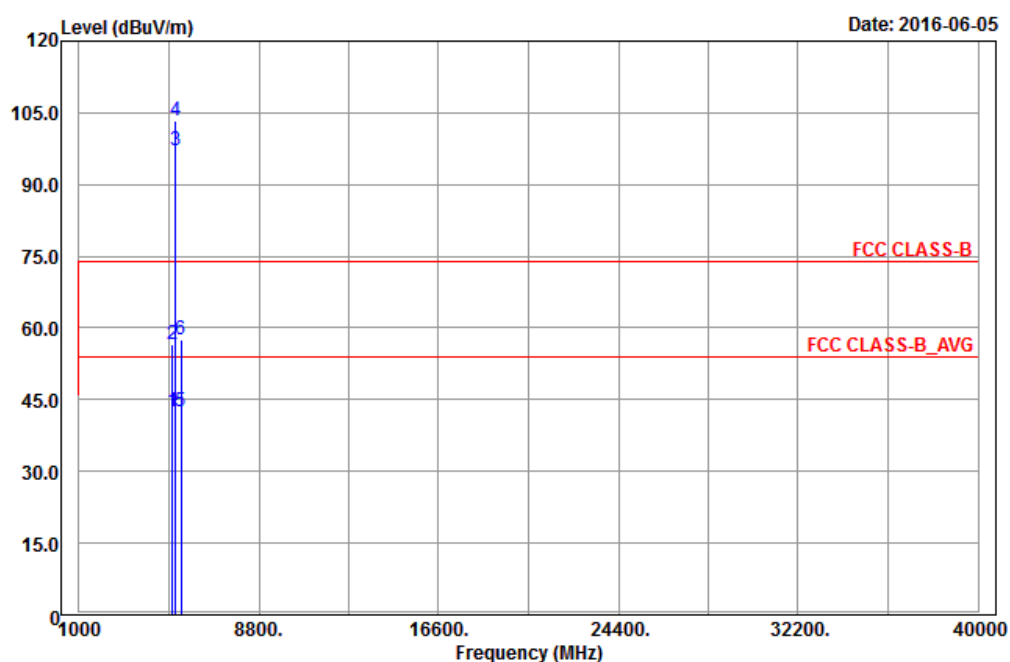
802.11a

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

Horizontal



Vertical



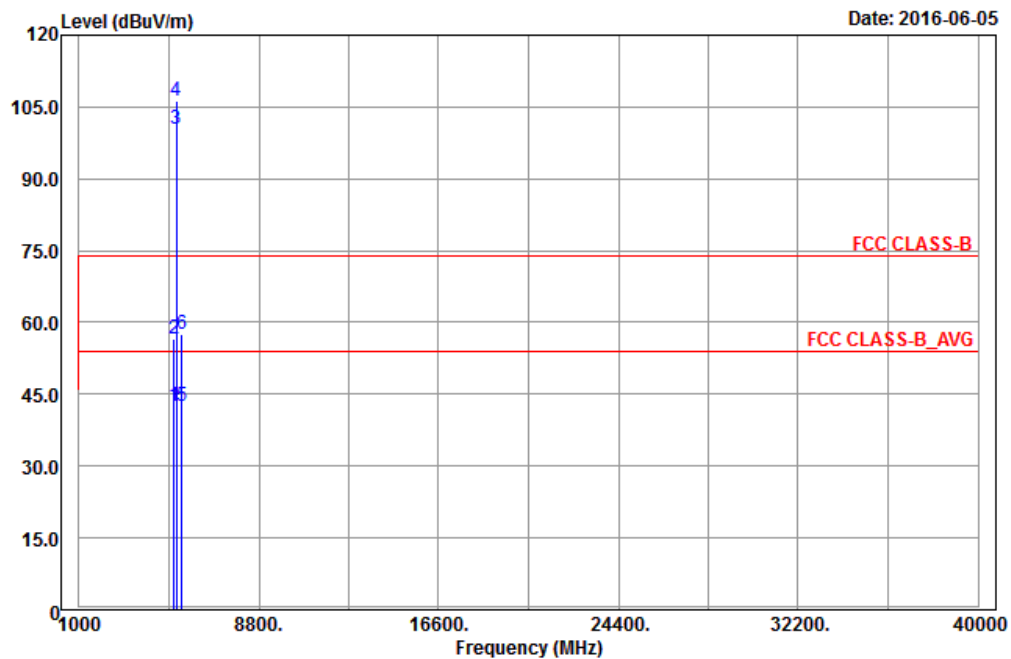
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	44.59	36.34	54	-9.41	34.12	8.13	34	107	24	Average
5150	61.67	53.42	74	-12.33	34.12	8.13	34	107	24	Peak
5180	99.02	90.71			34.15	8.16	34	102	29	Average
5180	105.72	97.41			34.15	8.16	34	102	29	Peak
5458	42.82	34	54	-11.18	34.36	8.51	34.05	102	29	Average
5458	57.93	49.11	74	-16.07	34.36	8.51	34.05	102	29	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5068	42.5	34.4	54	-11.5	34.05	8.03	33.98	120	146	Average
5068	56.72	48.62	74	-17.28	34.05	8.03	33.98	120	146	Peak
5180	97.17	88.86			34.15	8.16	34	120	146	Average
5180	103.44	95.13			34.15	8.16	34	120	146	Peak
5420	42.65	33.88	54	-11.35	34.33	8.48	34.04	120	146	Average
5420	57.43	48.66	74	-16.57	34.33	8.48	34.04	120	146	Peak

Remarks:

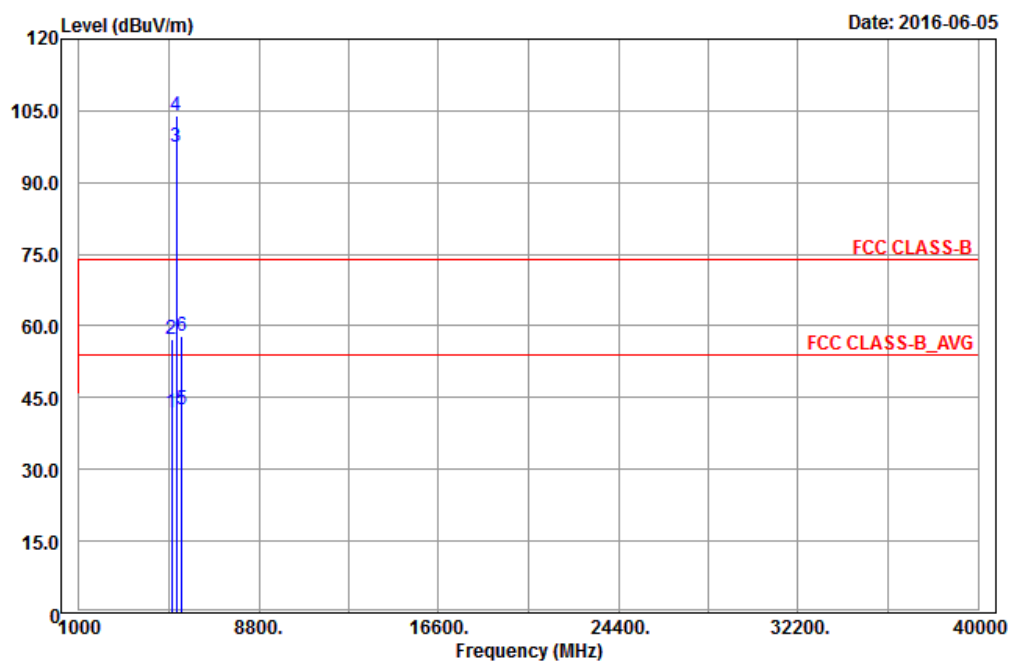
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5180 MHz: Fundamental Frequency

EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Charles Hsiao

Horizontal



Vertical



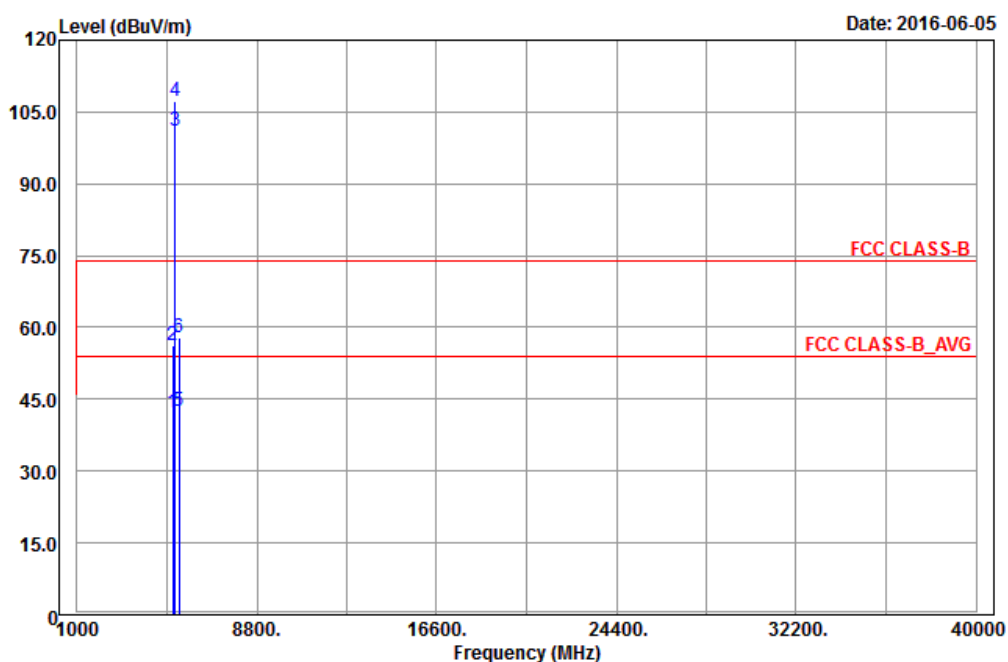
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5134	42.54	34.29	54	-11.46	34.11	8.13	33.99	101	27	Average
5134	56.44	48.19	74	-17.56	34.11	8.13	33.99	101	27	Peak
5220	100.27	91.88			34.17	8.22	34	101	27	Average
5220	106.26	97.87			34.17	8.22	34	101	27	Peak
5458	42.56	33.74	54	-11.44	34.36	8.51	34.05	101	27	Average
5458	57.42	48.6	74	-16.58	34.36	8.51	34.05	101	27	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5024	41.88	33.85	54	-12.12	34.03	7.97	33.97	120	147	Average
5024	57.21	49.18	74	-16.79	34.03	7.97	33.97	120	147	Peak
5220	97.41	89.02			34.17	8.22	34	120	147	Average
5220	103.9	95.51			34.17	8.22	34	120	147	Peak
5446	42.53	33.7	54	-11.47	34.36	8.51	34.04	120	147	Average
5446	58.01	49.18	74	-15.99	34.36	8.51	34.04	120	147	Peak

Remarks:

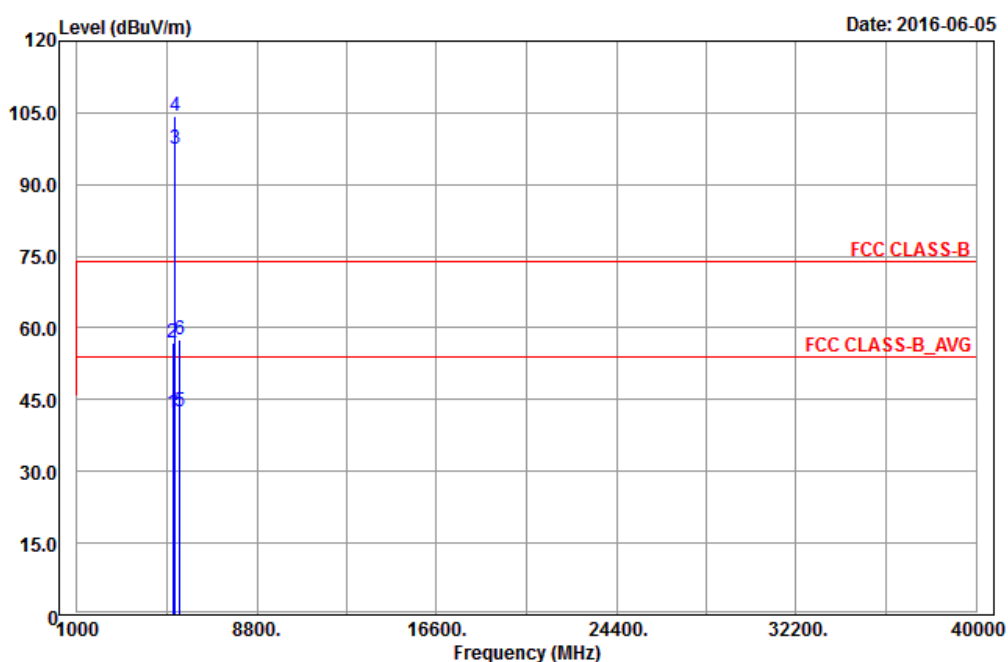
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5220 MHz: Fundamental Frequency

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

Horizontal



Vertical



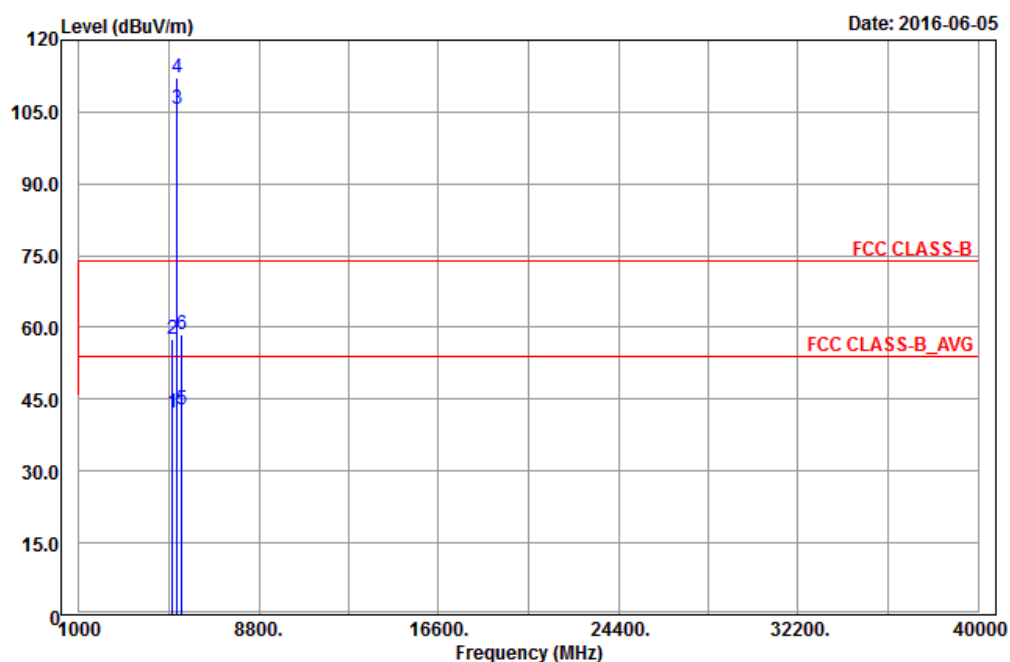
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148	42.14	33.89	54	-11.86	34.12	8.13	34	100	27	Average
5148	56.29	48.04	74	-17.71	34.12	8.13	34	100	27	Peak
5240	100.9	92.46			34.19	8.26	34.01	100	27	Average
5240	107.15	98.71			34.19	8.26	34.01	100	27	Peak
5442	42.62	33.83	54	-11.38	34.35	8.48	34.04	100	27	Average
5442	57.87	49.08	74	-16.13	34.35	8.48	34.04	100	27	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148	42.03	33.78	54	-11.97	34.12	8.13	34	165	140	Average
5148	56.78	48.53	74	-17.22	34.12	8.13	34	165	140	Peak
5240	97.31	88.87			34.19	8.26	34.01	165	140	Average
5240	104.42	95.98			34.19	8.26	34.01	165	140	Peak
5444	42.67	33.88	54	-11.33	34.35	8.48	34.04	165	140	Average
5444	57.5	48.71	74	-16.5	34.35	8.48	34.04	165	140	Peak

Remarks:

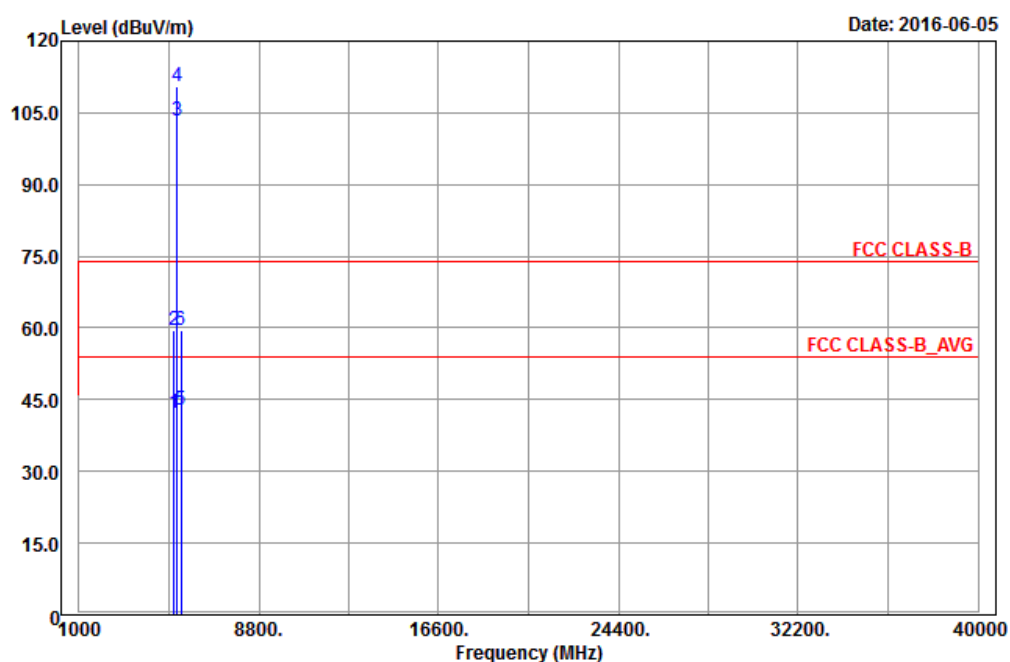
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5240 MHz: Fundamental Frequency

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

Horizontal



Vertical



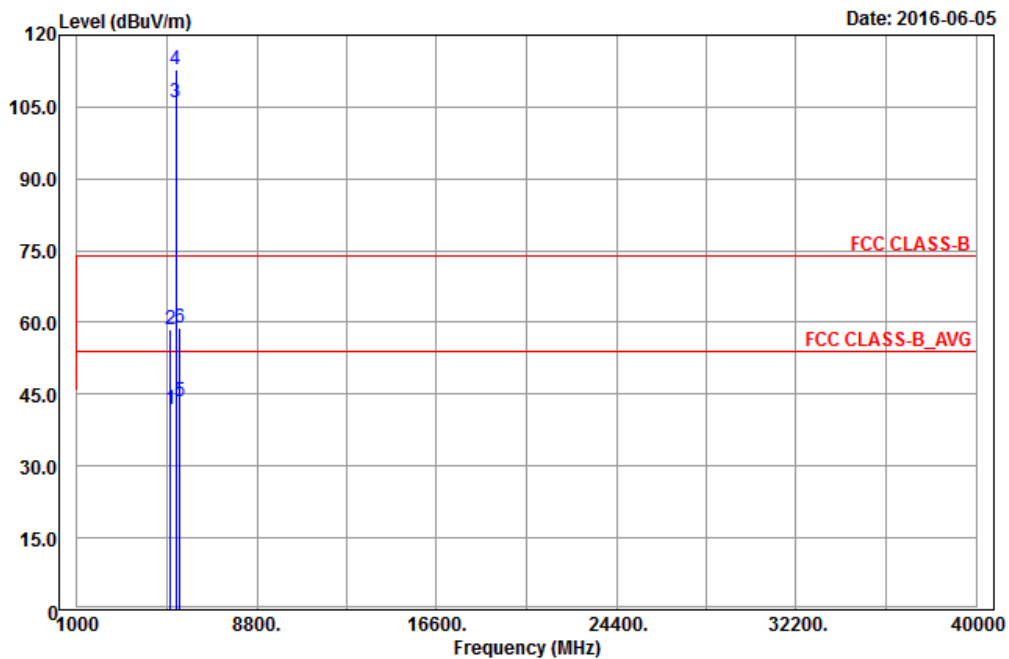
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5068	42.12	34.02	54	-11.88	34.05	8.03	33.98	106	148	Average
5068	57.69	49.59	74	-16.31	34.05	8.03	33.98	106	148	Peak
5260	105.62	97.16			34.21	8.26	34.01	106	148	Average
5260	112.07	103.61			34.21	8.26	34.01	106	148	Peak
5446	42.92	34.09	54	-11.08	34.36	8.51	34.04	106	148	Average
5446	58.67	49.84	74	-15.33	34.36	8.51	34.04	106	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5120	42.12	33.92	54	-11.88	34.09	8.1	33.99	110	83	Average
5120	59.67	51.47	74	-14.33	34.09	8.1	33.99	110	83	Peak
5260	103.17	94.71			34.21	8.26	34.01	110	83	Average
5260	110.37	101.91			34.21	8.26	34.01	110	83	Peak
5434	42.84	34.05	54	-11.16	34.35	8.48	34.04	110	83	Average
5434	59.42	50.63	74	-14.58	34.35	8.48	34.04	110	83	Peak

Remarks:

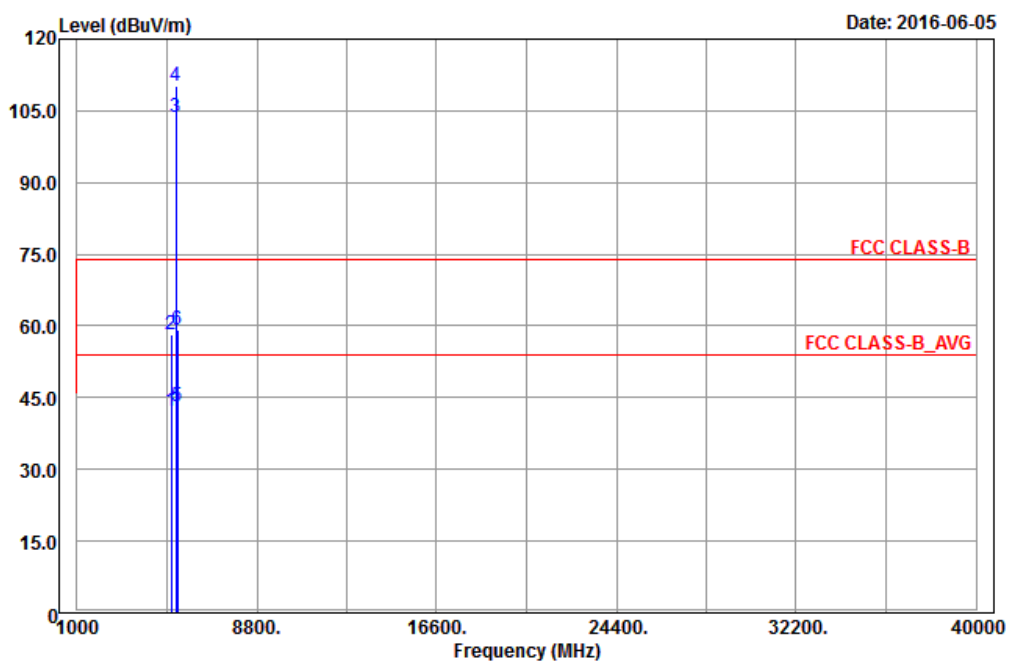
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5260 MHz: Fundamental Frequency

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5046	41.76	33.7	54	-12.24	34.04	8	33.98	106	148	Average
5046	58.4	50.34	74	-15.6	34.04	8	33.98	106	148	Peak
5300	105.84	97.3			34.24	8.32	34.02	106	148	Average
5300	112.67	104.13			34.24	8.32	34.02	106	148	Peak
5444	43.34	34.55	54	-10.66	34.35	8.48	34.04	106	148	Average
5444	58.8	50.01	74	-15.2	34.35	8.48	34.04	106	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5090	42.14	33.97	54	-11.86	34.08	8.07	33.98	110	83	Average
5090	58.13	49.96	74	-15.87	34.08	8.07	33.98	110	83	Peak
5300	103.66	95.12			34.24	8.32	34.02	110	83	Average
5300	110.09	101.55			34.24	8.32	34.02	110	83	Peak
5350	43.06	34.43	54	-10.94	34.28	8.38	34.03	110	83	Average
5350	59.26	50.63	74	-14.74	34.28	8.38	34.03	110	83	Peak

Remarks:

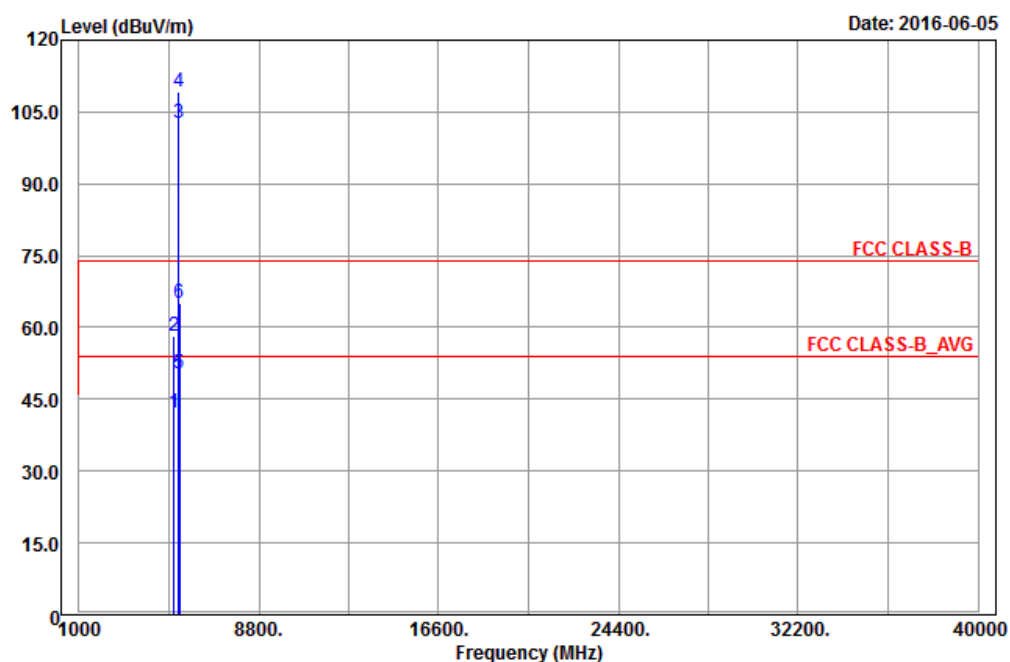
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

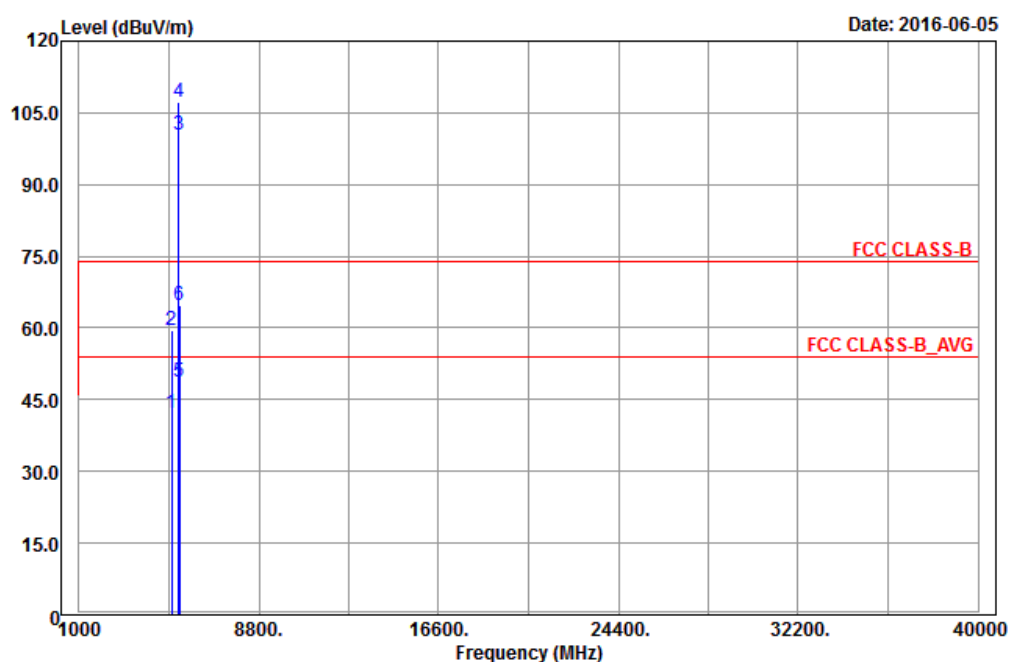
2. 5300 MHz: Fundamental Frequency

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

Horizontal



Vertical



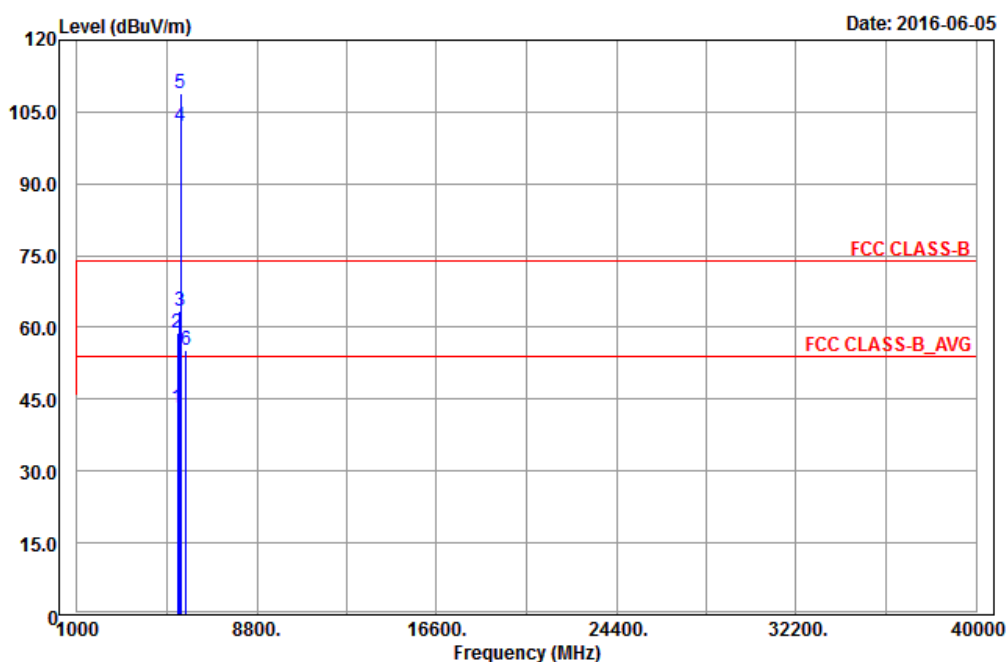
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5106	42.06	33.89	54	-11.94	34.09	8.07	33.99	104	148	Average
5106	58.04	49.87	74	-15.96	34.09	8.07	33.99	104	148	Peak
5320	102.7	94.12			34.25	8.35	34.02	104	148	Average
5320	109.07	100.49			34.25	8.35	34.02	104	148	Peak
5350	50.26	41.63	54	-3.74	34.28	8.38	34.03	226	148	Average
5350	65	56.37	74	-9	34.28	8.38	34.03	226	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5032	42.06	34	54	-11.94	34.03	8	33.97	110	83	Average
5032	59.53	51.47	74	-14.47	34.03	8	33.97	110	83	Peak
5320	100.4	91.82			34.25	8.35	34.02	110	83	Average
5320	107.31	98.73			34.25	8.35	34.02	110	83	Peak
5350	48.66	40.03	54	-5.34	34.28	8.38	34.03	109	83	Average
5350	64.71	56.08	74	-9.29	34.28	8.38	34.03	109	83	Peak

Remarks:

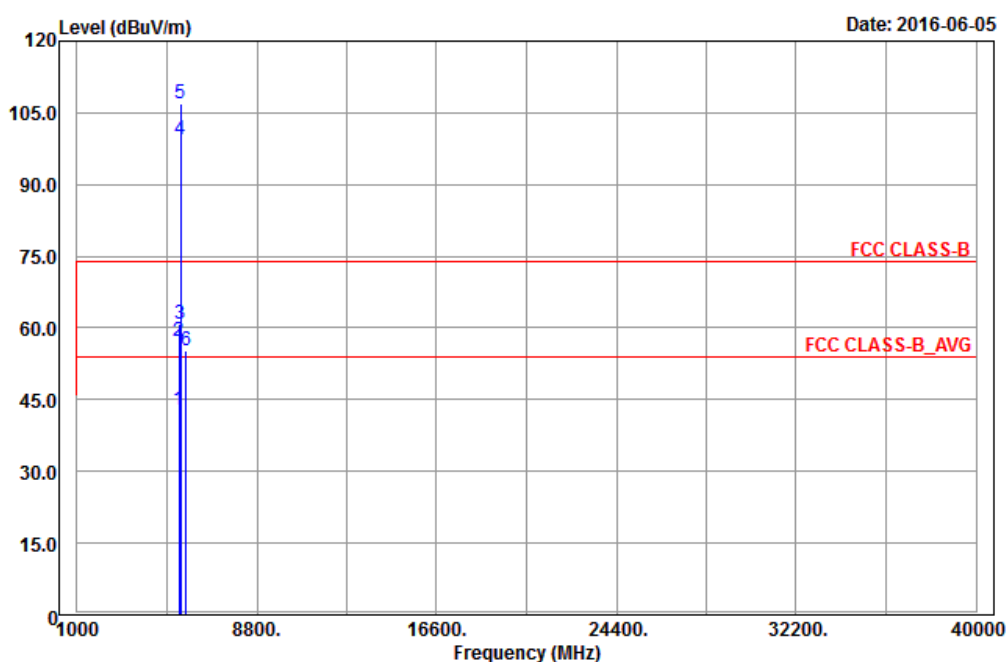
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5320 MHz: Fundamental Frequency

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

Horizontal



Vertical



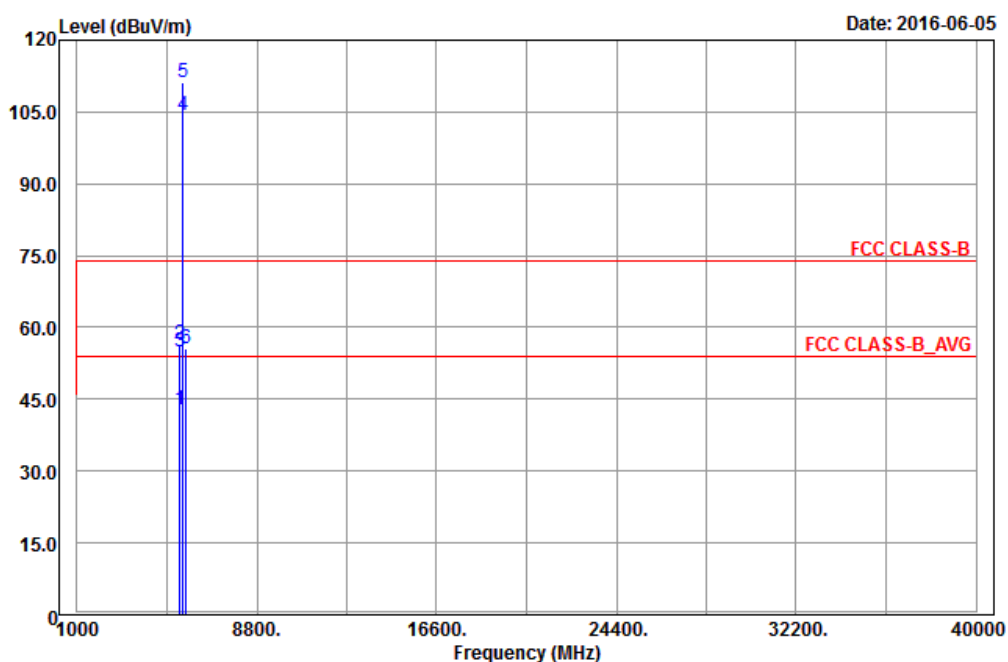
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5350	43.16	34.53	54	-10.84	34.28	8.38	34.03	100	139	Average
5350	58.8	50.17	74	-15.2	34.28	8.38	34.03	100	139	Peak
5470	63.47	54.64	68.2	-4.73	34.37	8.51	34.05	105	139	Peak
5500	101.97	93.05			34.4	8.57	34.05	100	139	Average
5500	108.85	99.93			34.4	8.57	34.05	100	139	Peak
5725	55.4	46.24	68.2	-12.8	34.62	8.65	34.11	100	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5424	42.96	34.19	54	-11.04	34.33	8.48	34.04	105	85	Average
5424	57.12	48.35	74	-16.88	34.33	8.48	34.04	105	85	Peak
5470	60.89	52.06	68.2	-7.31	34.37	8.51	34.05	105	85	Peak
5500	99.32	90.4			34.4	8.57	34.05	105	85	Average
5500	106.94	98.02			34.4	8.57	34.05	105	85	Peak
5725	55.31	46.15	68.2	-12.89	34.62	8.65	34.11	105	85	Peak

Remarks:

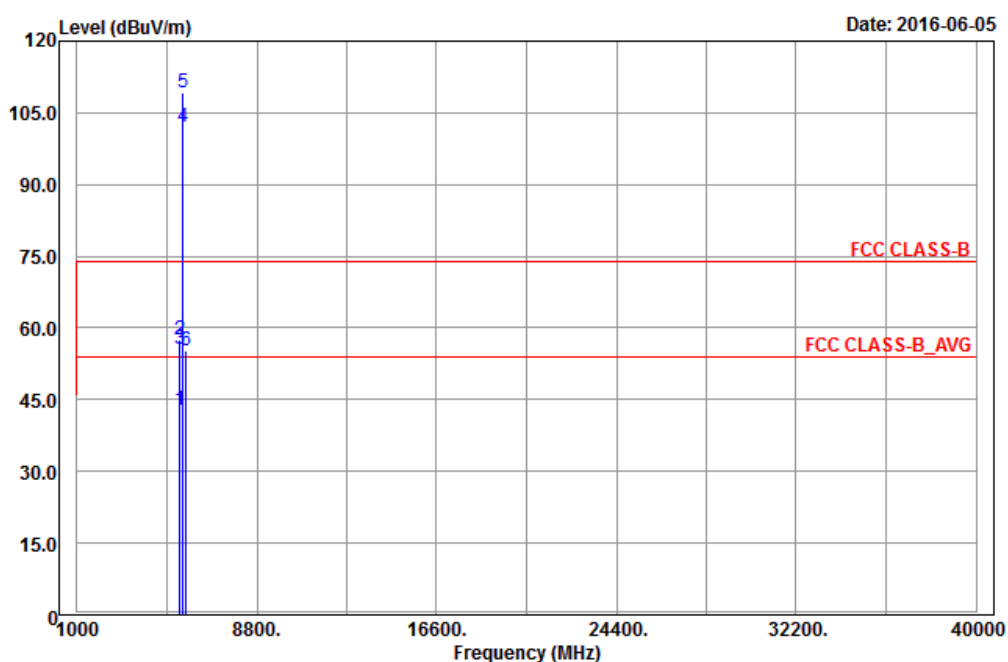
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



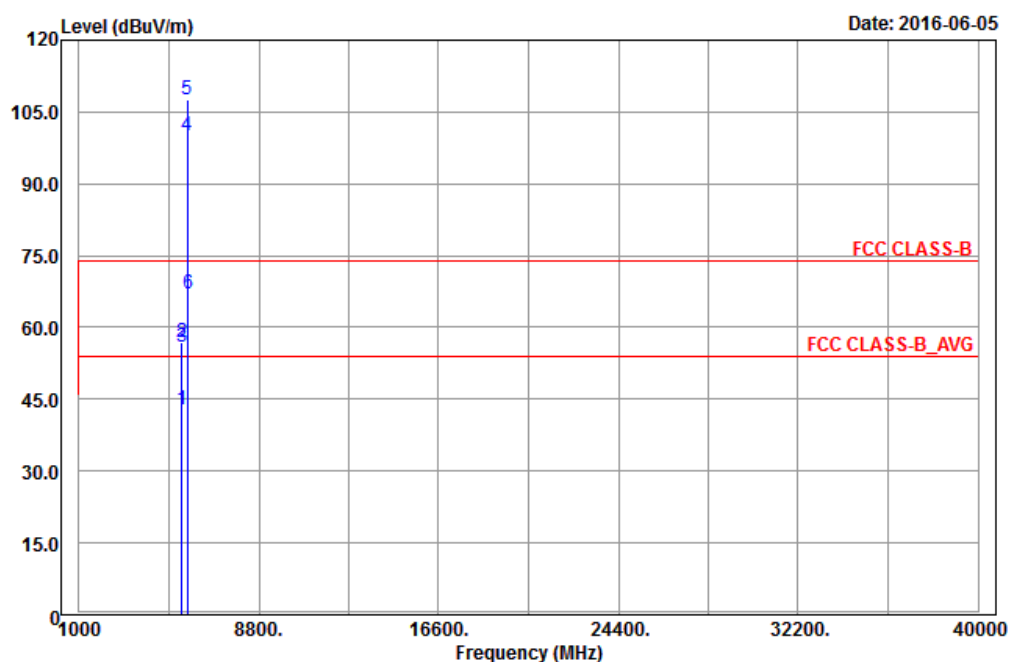
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.82	34	54	-11.18	34.36	8.51	34.05	100	139	Average
5460	56.55	47.73	74	-17.45	34.36	8.51	34.05	100	139	Peak
5470	54.99	46.16	68.2	-13.21	34.37	8.51	34.05	100	139	Peak
5580	104.22	95.23			34.47	8.6	34.08	100	139	Average
5580	111.11	102.12			34.47	8.6	34.08	100	139	Peak
5725	55.43	46.27	68.2	-12.77	34.62	8.65	34.11	100	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5450	42.72	33.9	54	-11.28	34.36	8.51	34.05	105	85	Average
5450	57.7	48.88	74	-16.3	34.36	8.51	34.05	105	85	Peak
5470	55.51	46.68	68.2	-12.69	34.37	8.51	34.05	105	85	Peak
5580	102.07	93.08			34.47	8.6	34.08	105	85	Average
5580	109.09	100.1			34.47	8.6	34.08	105	85	Peak
5725	55.34	46.18	68.2	-12.86	34.62	8.65	34.11	105	85	Peak

Remarks:

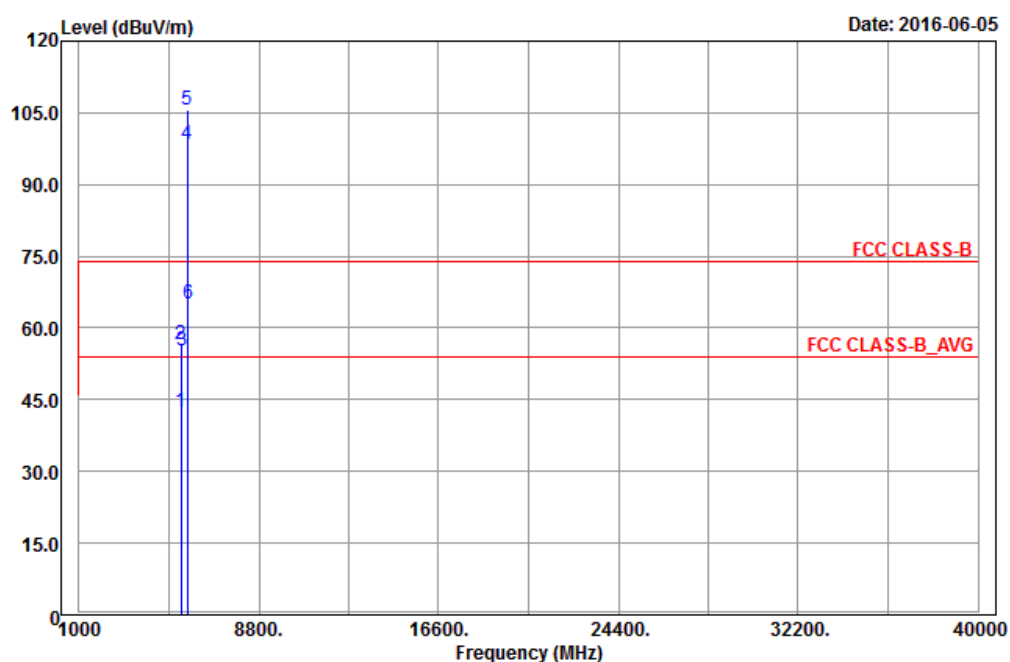
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



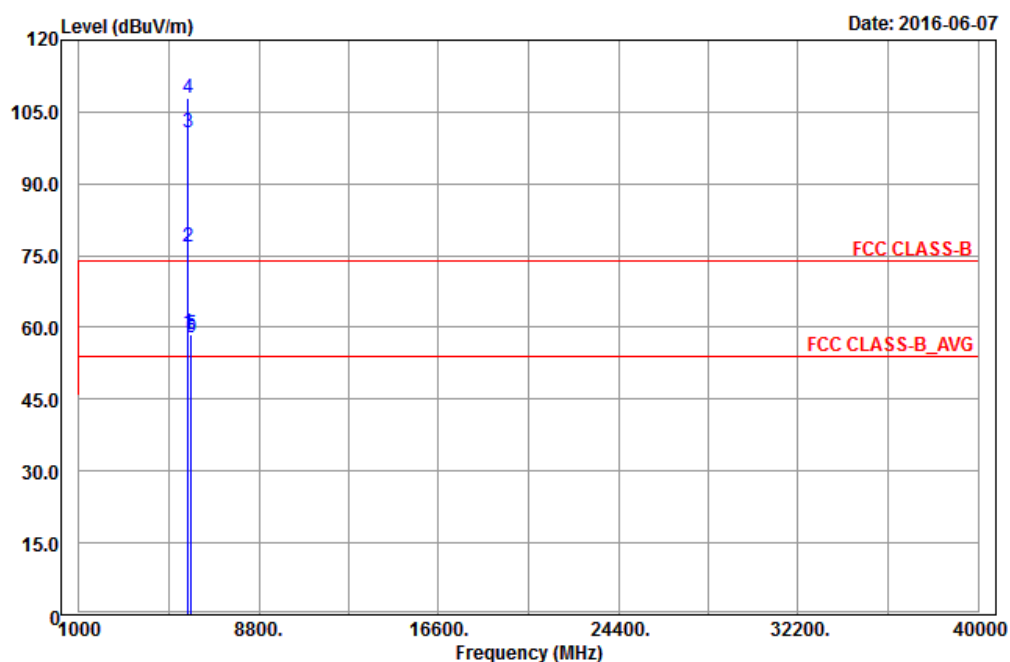
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448	42.83	34	54	-11.17	34.36	8.51	34.04	103	139	Average
5448	57.03	48.2	74	-16.97	34.36	8.51	34.04	103	139	Peak
5470	55.87	47.04	68.2	-12.33	34.37	8.51	34.05	103	139	Peak
5700	100.01	90.88			34.59	8.64	34.1	103	139	Average
5700	107.6	98.47			34.59	8.64	34.1	103	139	Peak
5725	67.06	57.9	68.2	-1.14	34.62	8.65	34.11	113	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5418	42.61	33.88	54	-11.39	34.33	8.44	34.04	101	85	Average
5418	56.45	47.72	74	-17.55	34.33	8.44	34.04	101	85	Peak
5470	55.21	46.38	68.2	-12.99	34.37	8.51	34.05	101	85	Peak
5700	98.4	89.27			34.59	8.64	34.1	101	85	Average
5700	105.67	96.54			34.59	8.64	34.1	101	85	Peak
5725	65.08	55.92	68.2	-3.12	34.62	8.65	34.11	100	85	Peak

Remarks:

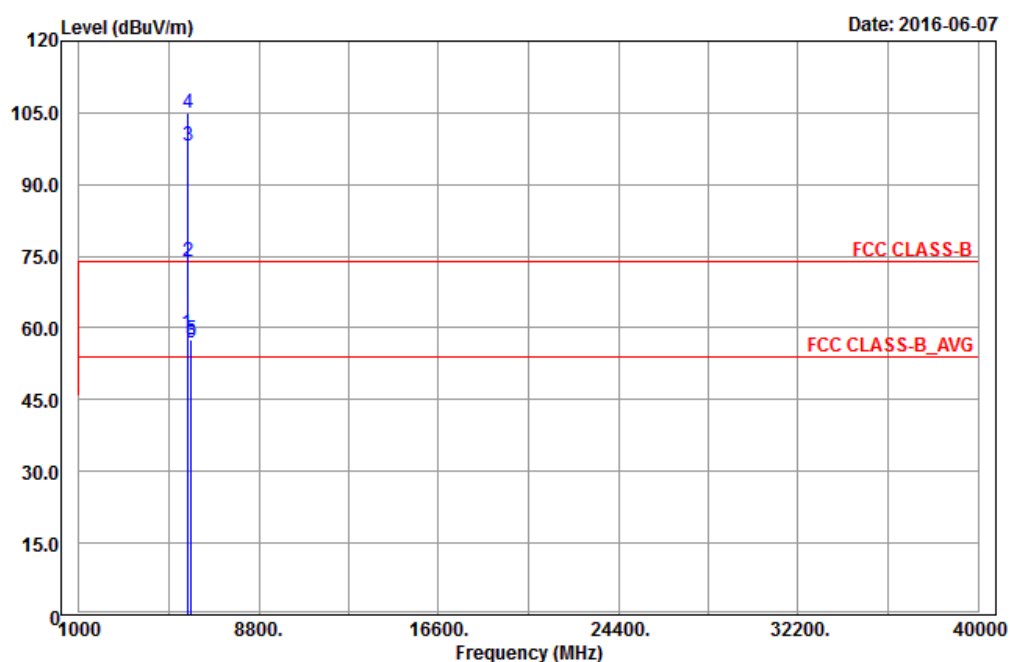
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	58.82	49.67	68.2	-9.38	34.61	8.65	34.11	254	150	Peak
*5722	76.95	67.79	78.2	-1.25	34.62	8.65	34.11	167	150	Peak
5745	100.56	91.37			34.64	8.66	34.11	254	150	Average
5745	107.88	98.69			34.64	8.66	34.11	254	150	Peak
*5860	58.58	49.26	78.2	-19.62	34.76	8.7	34.14	254	150	Peak
*5866	57.91	48.58	68.2	-10.29	34.76	8.71	34.14	254	150	Peak

Antenna Polarity & Test Distance: Vertical at 3 m

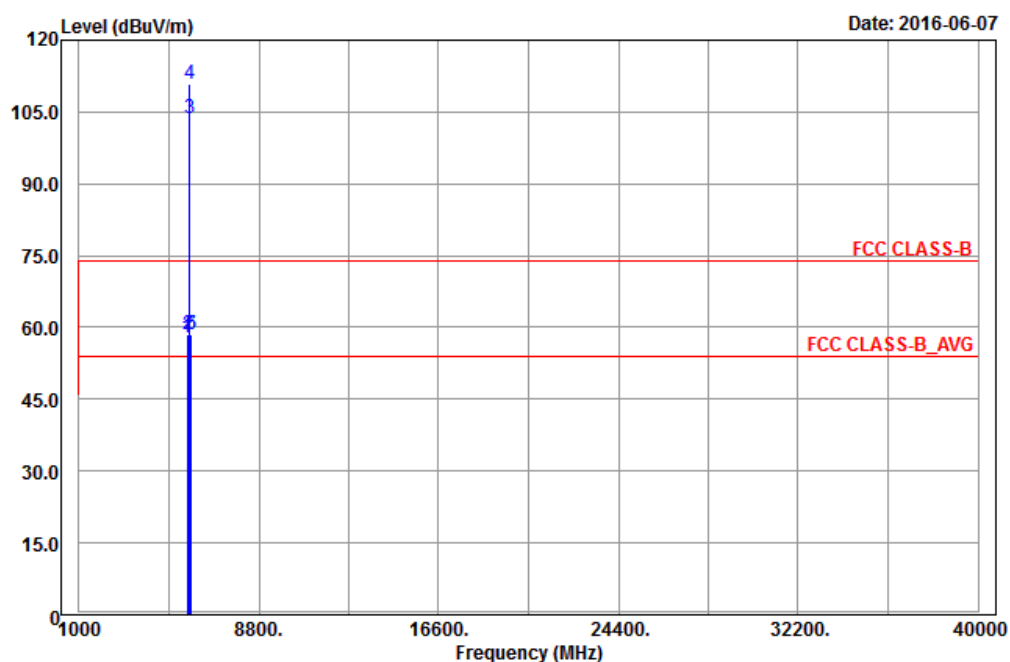
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5706	58.93	49.78	68.2	-9.27	34.61	8.65	34.11	114	86	Peak
*5722	73.76	64.6	78.2	-4.44	34.62	8.65	34.11	229	88	Peak
5745	98.17	88.98			34.64	8.66	34.11	114	86	Average
5745	105.07	95.88			34.64	8.66	34.11	114	86	Peak
*5852	57.43	48.13	78.2	-20.77	34.74	8.7	34.14	114	86	Peak
*5864	56.88	47.55	68.2	-11.32	34.76	8.71	34.14	114	86	Peak

Remarks:

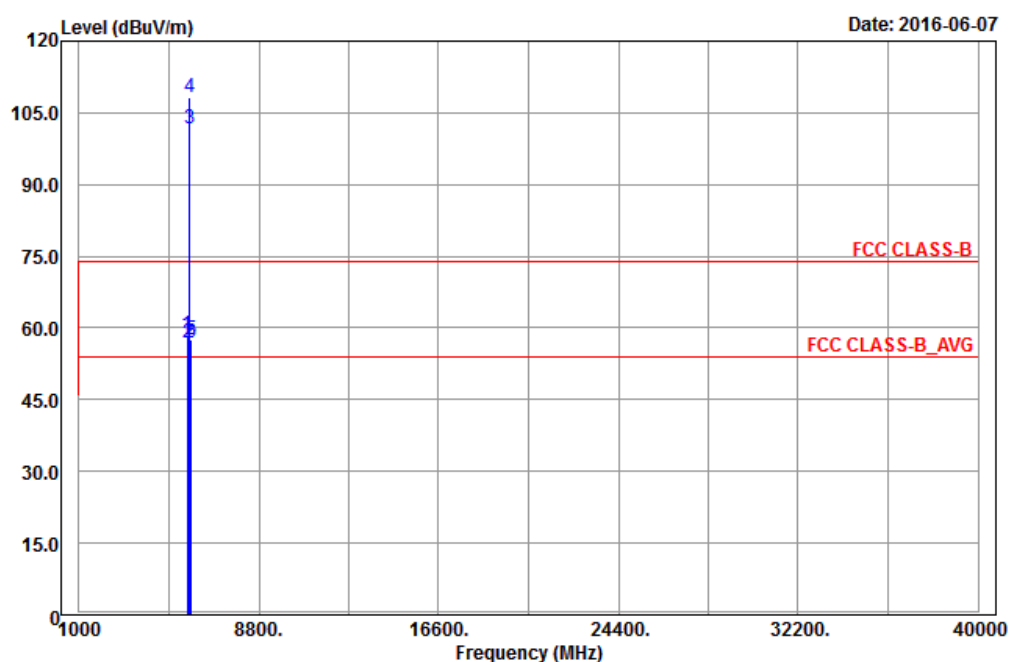
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



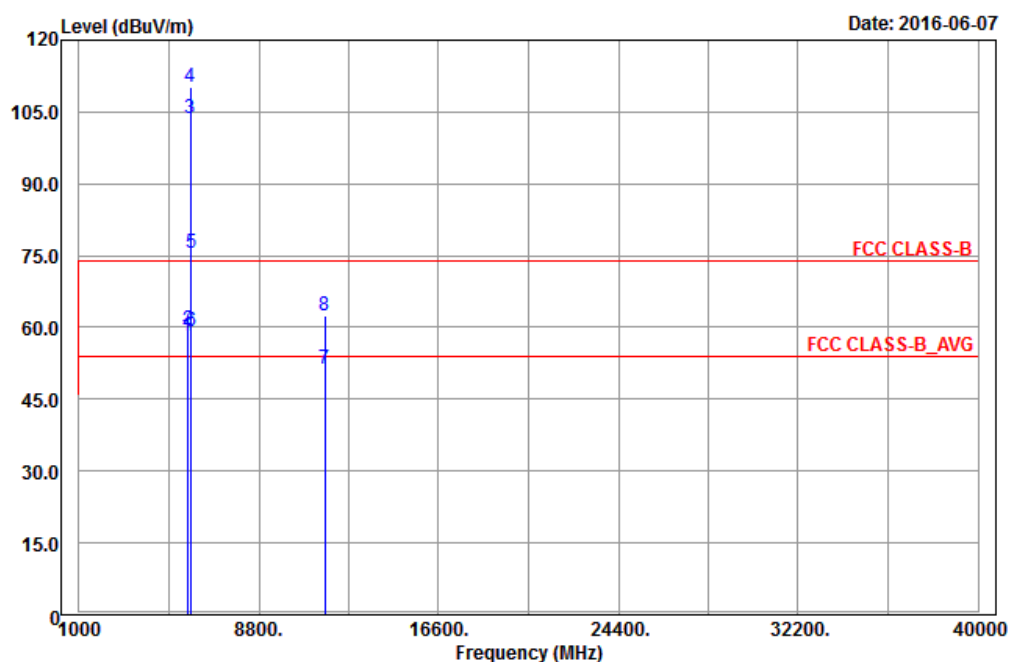
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	57.79	48.64	68.2	-10.41	34.61	8.65	34.11	254	150	Peak
*5718	58.41	49.25	78.2	-19.79	34.62	8.65	34.11	254	150	Peak
5785	103.54	94.31			34.68	8.68	34.13	254	150	Average
5785	110.94	101.71			34.68	8.68	34.13	254	150	Peak
*5858	58.44	49.12	78.2	-19.76	34.76	8.7	34.14	254	150	Peak
*5870	58.39	49.06	68.2	-9.81	34.76	8.71	34.14	254	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	58.5	49.35	68.2	-9.7	34.61	8.65	34.11	114	86	Peak
*5716	57	47.85	78.2	-21.2	34.61	8.65	34.11	114	86	Peak
5785	101.55	92.32			34.68	8.68	34.13	114	86	Average
5785	108.34	99.11			34.68	8.68	34.13	114	86	Peak
*5858	57.47	48.15	78.2	-20.73	34.76	8.7	34.14	114	86	Peak
*5864	57.01	47.68	68.2	-11.19	34.76	8.71	34.14	114	86	Peak

Remarks:

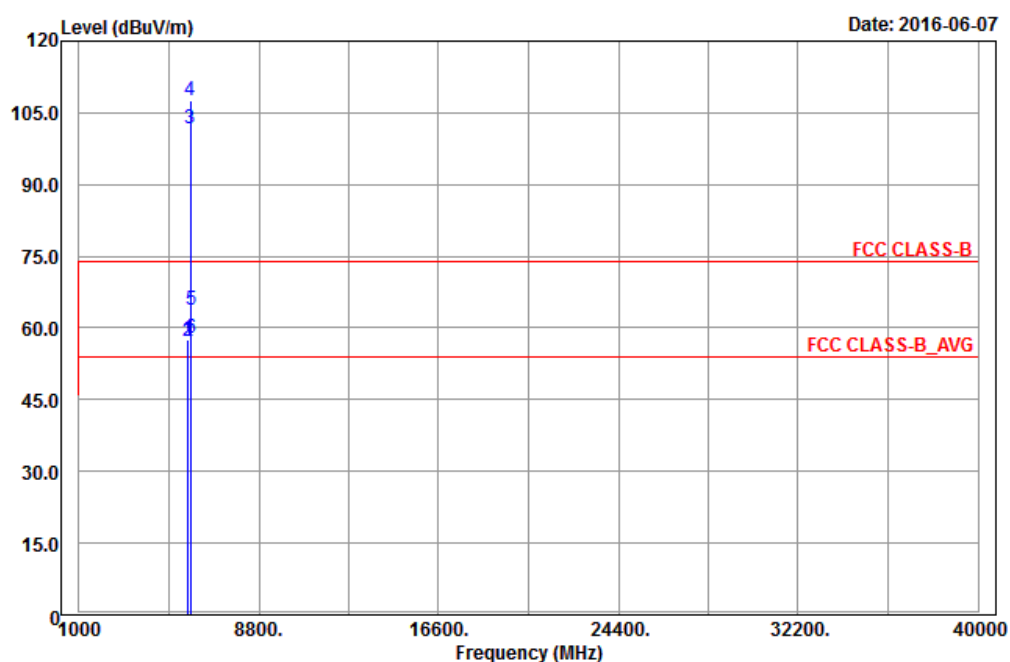
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	58.24	49.09	68.2	-9.96	34.61	8.65	34.11	261	150	Peak
*5722	59.51	50.35	78.2	-18.69	34.62	8.65	34.11	261	150	Peak
5825	103.55	94.26			34.73	8.69	34.13	261	150	Average
5825	110.19	100.9			34.73	8.69	34.13	261	150	Peak
*5852	75.46	66.16	78.2	-2.74	34.74	8.7	34.14	169	143	Peak
*5864	59.21	49.88	68.2	-8.99	34.76	8.71	34.14	261	150	Peak
11650	51.48	35.95	54	-2.52	38.09	12.8	35.36	206	333	Average
11650	62.59	47.06	74	-11.41	38.09	12.8	35.36	206	333	Peak

Antenna Polarity & Test Distance: Vertical at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	57.68	48.53	68.2	-10.52	34.61	8.65	34.11	112	85	Peak
*5718	57.17	48.01	78.2	-21.03	34.62	8.65	34.11	112	85	Peak
5825	101.61	92.32			34.73	8.69	34.13	112	85	Average
5825	107.73	98.44			34.73	8.69	34.13	112	85	Peak
*5854	63.74	54.42	78.2	-14.46	34.76	8.7	34.14	112	85	Peak
*5866	57.95	48.62	68.2	-10.25	34.76	8.71	34.14	112	85	Peak

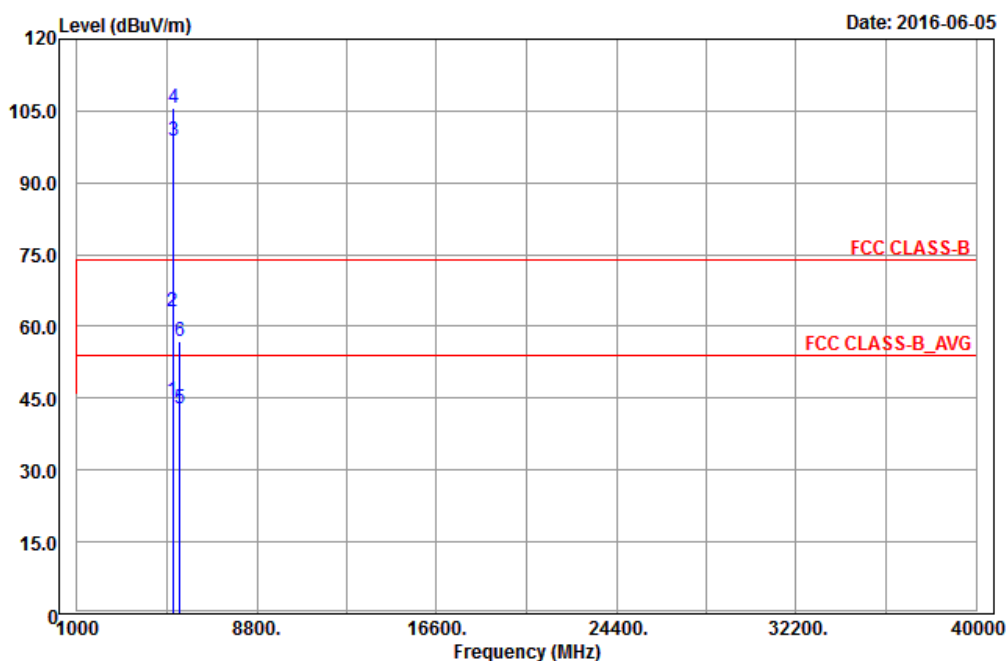
Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band

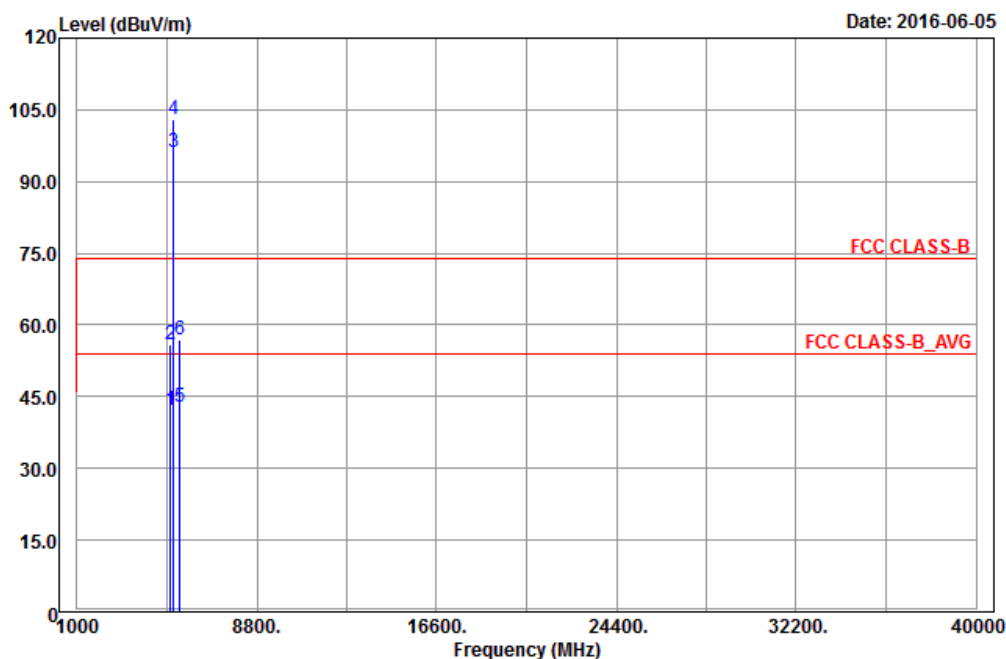
802.11n (HT20)

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

Horizontal



Vertical



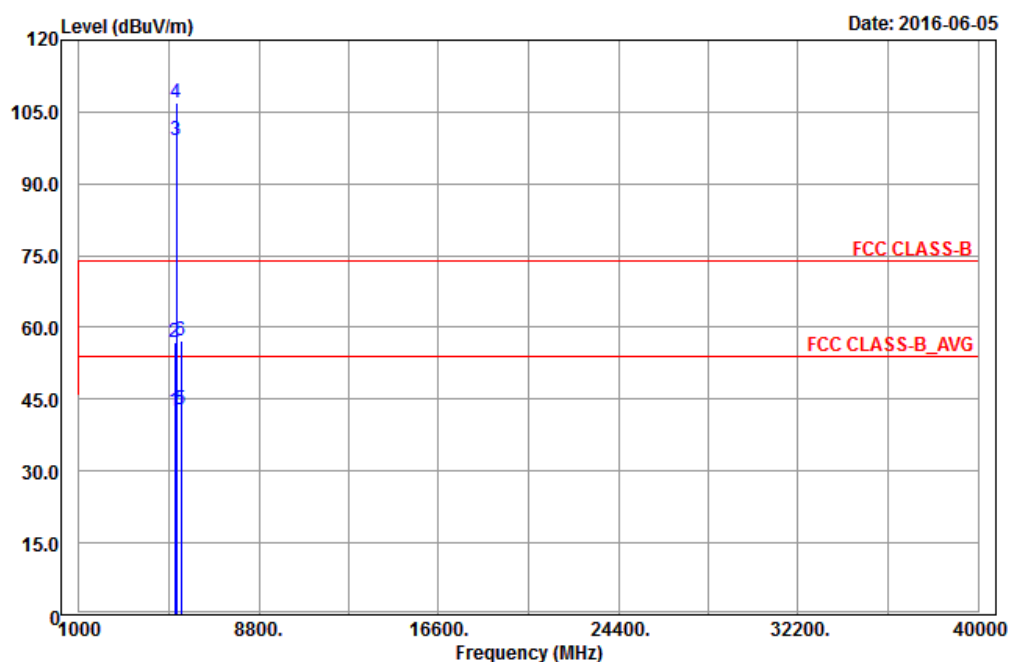
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148	44.44	36.19	54	-9.56	34.12	8.13	34	104	46	Average
5148	62.97	54.72	74	-11.03	34.12	8.13	34	104	46	Peak
5180	98.67	90.36			34.15	8.16	34	102	29	Average
5180	105.65	97.34			34.15	8.16	34	102	29	Peak
5452	42.86	34.04	54	-11.14	34.36	8.51	34.05	102	29	Average
5452	56.77	47.95	74	-17.23	34.36	8.51	34.05	102	29	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5060	42.25	34.15	54	-11.75	34.05	8.03	33.98	120	146	Average
5060	55.85	47.75	74	-18.15	34.05	8.03	33.98	120	146	Peak
5180	96.24	87.93			34.15	8.16	34	120	146	Average
5180	102.99	94.68			34.15	8.16	34	120	146	Peak
5456	42.87	34.05	54	-11.13	34.36	8.51	34.05	120	146	Average
5456	57.03	48.21	74	-16.97	34.36	8.51	34.05	120	146	Peak

Remarks:

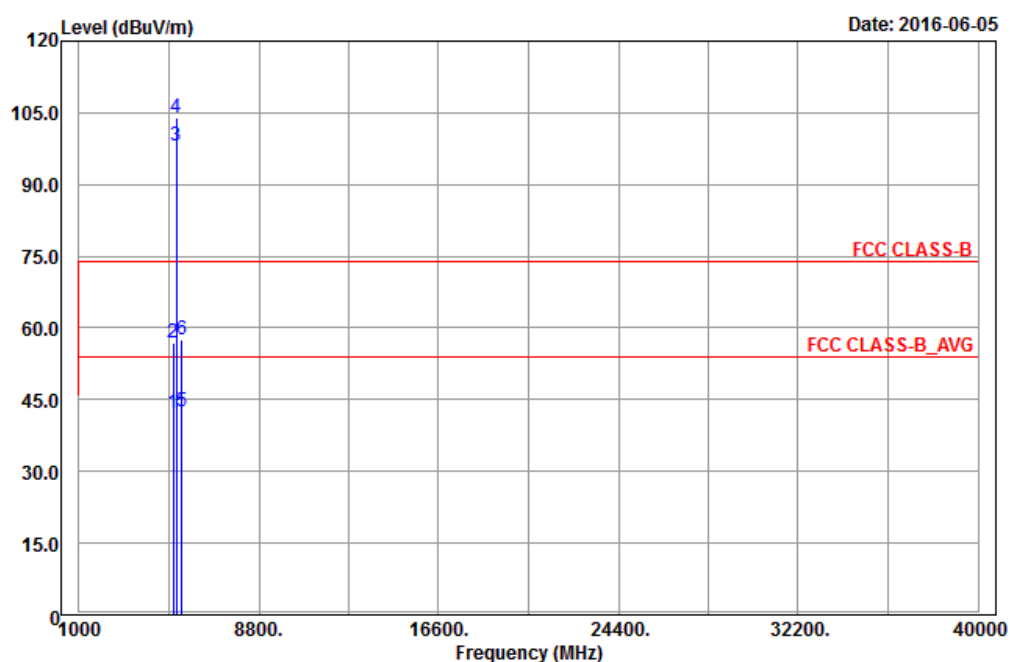
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5180 MHz: Fundamental Frequency

EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Charles Hsiao

Horizontal



Vertical



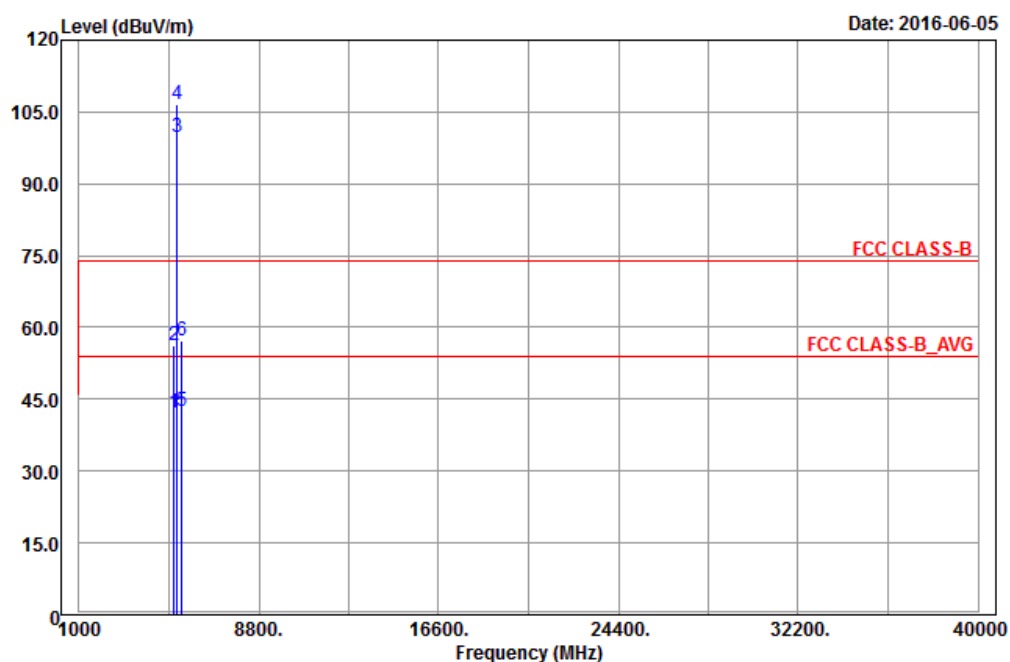
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	42.37	34.12	54	-11.63	34.12	8.13	34	101	27	Average
5150	56.8	48.55	74	-17.2	34.12	8.13	34	101	27	Peak
5220	99.06	90.67			34.17	8.22	34	101	27	Average
5220	106.98	98.59			34.17	8.22	34	101	27	Peak
5414	42.68	33.95	54	-11.32	34.33	8.44	34.04	101	27	Average
5414	57.32	48.59	74	-16.68	34.33	8.44	34.04	101	27	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5088	42.11	33.95	54	-11.89	34.07	8.07	33.98	120	142	Average
5088	56.86	48.7	74	-17.14	34.07	8.07	33.98	120	142	Peak
5220	98.04	89.65			34.17	8.22	34	120	142	Average
5220	104.09	95.7			34.17	8.22	34	120	142	Peak
5452	42.66	33.84	54	-11.34	34.36	8.51	34.05	120	142	Average
5452	57.59	48.77	74	-16.41	34.36	8.51	34.05	120	142	Peak

Remarks:

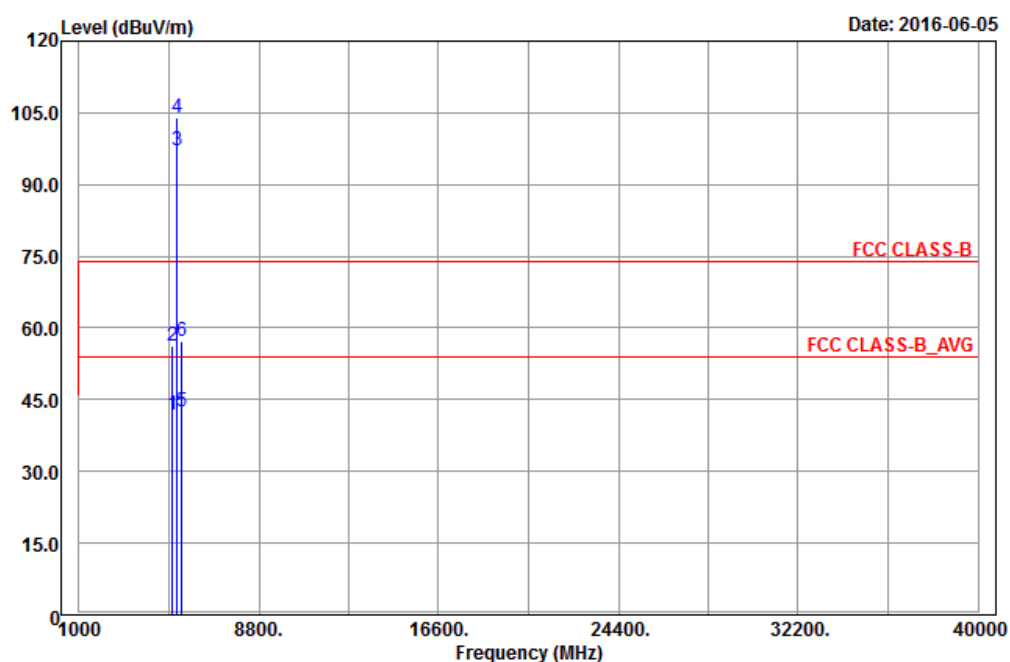
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5220 MHz: Fundamental Frequency

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5134	42.19	33.94	54	-11.81	34.11	8.13	33.99	100	27	Average
5134	56.22	47.97	74	-17.78	34.11	8.13	33.99	100	27	Peak
5240	99.71	91.27			34.19	8.26	34.01	100	27	Average
5240	106.62	98.18			34.19	8.26	34.01	100	27	Peak
5444	42.48	33.69	54	-11.52	34.35	8.48	34.04	100	27	Average
5444	57.38	48.59	74	-16.62	34.35	8.48	34.04	100	27	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5066	41.94	33.84	54	-12.06	34.05	8.03	33.98	165	140	Average
5066	56.32	48.22	74	-17.68	34.05	8.03	33.98	165	140	Peak
5240	97.04	88.6			34.19	8.26	34.01	165	140	Average
5240	103.89	95.45			34.19	8.26	34.01	165	140	Peak
5454	42.63	33.81	54	-11.37	34.36	8.51	34.05	165	140	Average
5454	57.32	48.5	74	-16.68	34.36	8.51	34.05	165	140	Peak

Remarks:

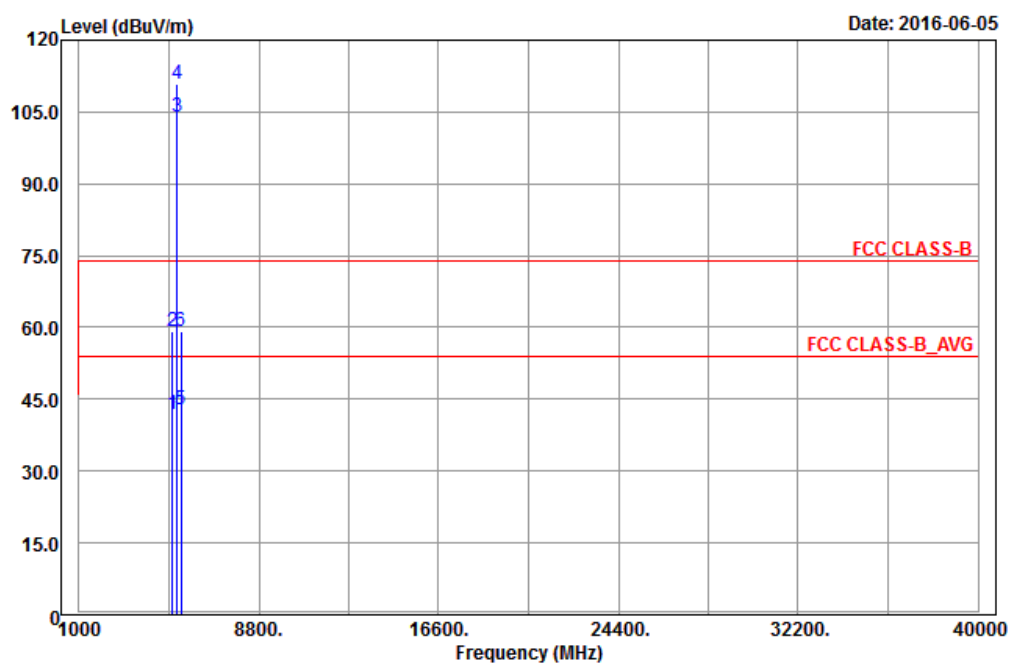
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

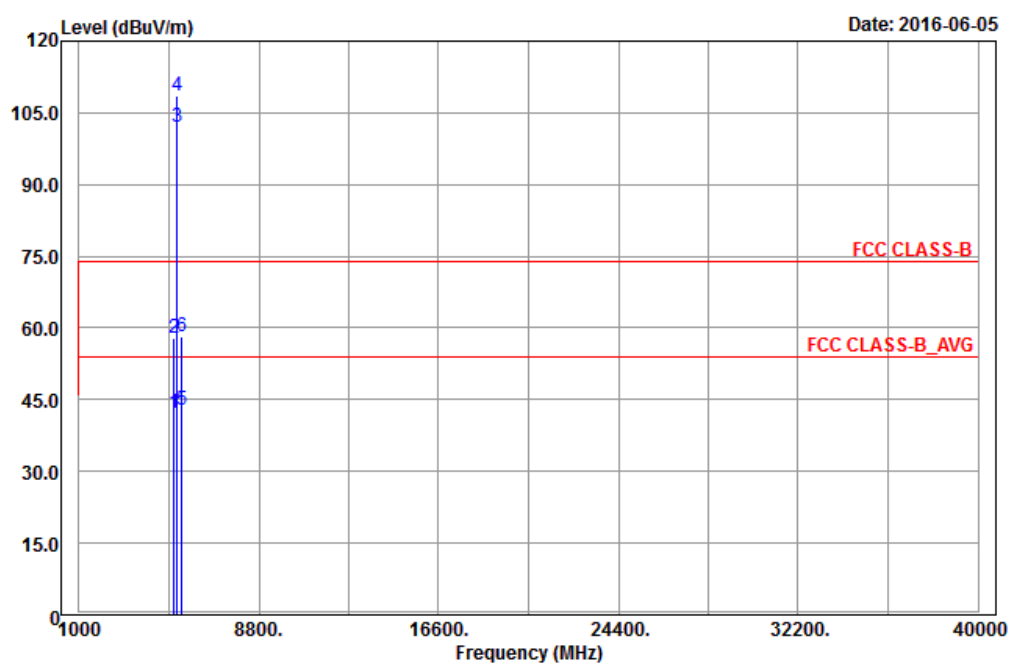
2. 5240 MHz: Fundamental Frequency

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

Horizontal



Vertical



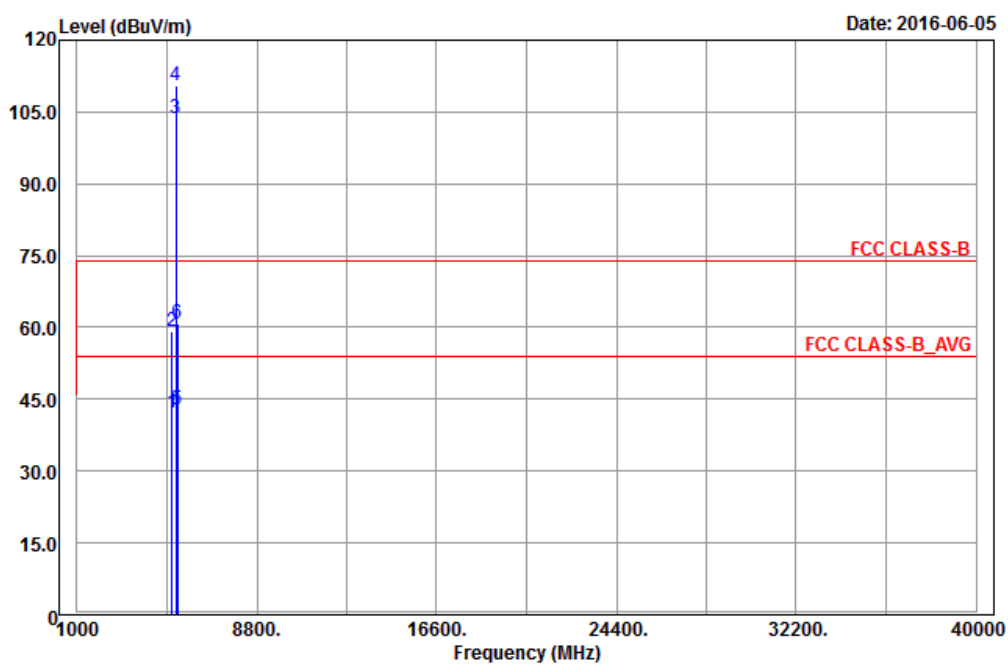
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5056	41.94	33.84	54	-12.06	34.05	8.03	33.98	106	148	Average
5056	59.23	51.13	74	-14.77	34.05	8.03	33.98	106	148	Peak
5260	103.99	95.53			34.21	8.26	34.01	106	148	Average
5260	110.85	102.39			34.21	8.26	34.01	106	148	Peak
5430	42.93	34.14	54	-11.07	34.35	8.48	34.04	106	148	Average
5430	59.19	50.4	74	-14.81	34.35	8.48	34.04	106	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5136	42.19	33.94	54	-11.81	34.11	8.13	33.99	110	83	Average
5136	58	49.75	74	-16	34.11	8.13	33.99	110	83	Peak
5260	101.97	93.51			34.21	8.26	34.01	110	83	Average
5260	108.47	100.01			34.21	8.26	34.01	110	83	Peak
5446	42.82	33.99	54	-11.18	34.36	8.51	34.04	110	83	Average
5446	58.25	49.42	74	-15.75	34.36	8.51	34.04	110	83	Peak

Remarks:

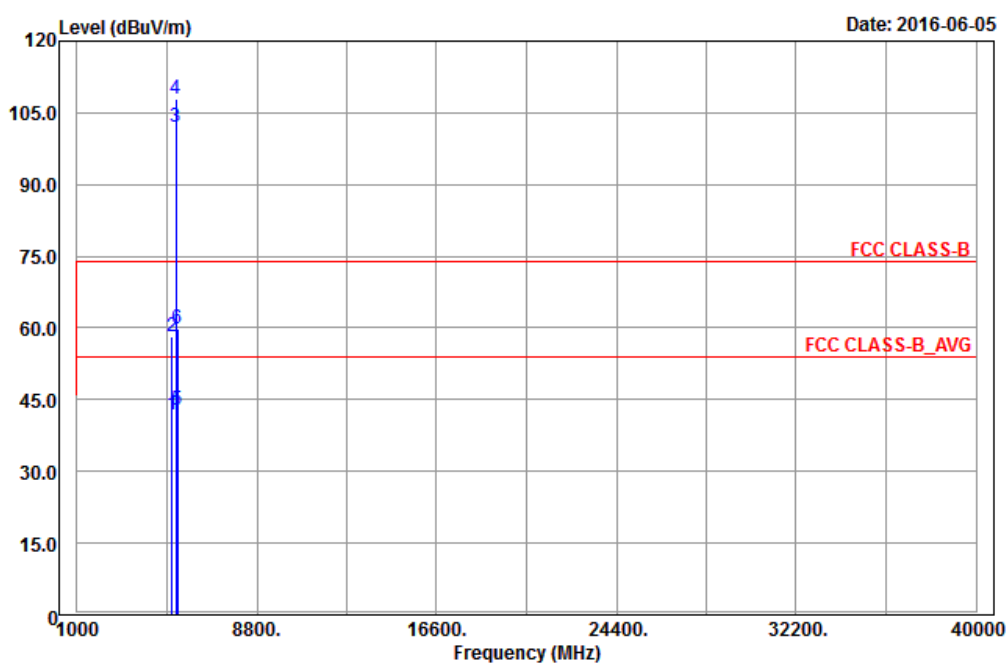
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5260 MHz: Fundamental Frequency

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

Horizontal



Vertical



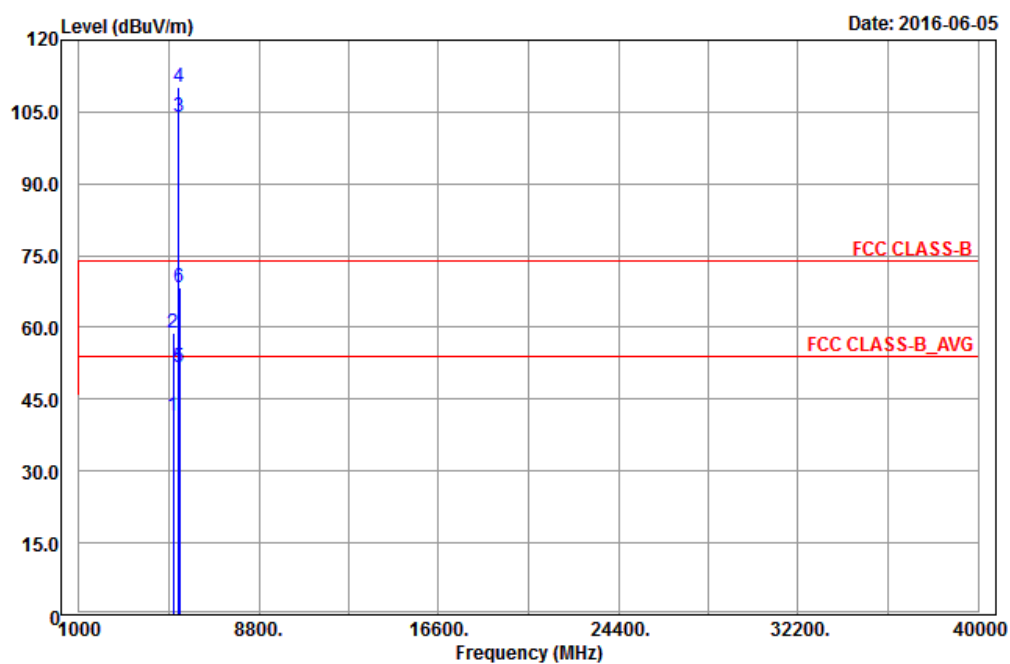
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5110	42.08	33.88	54	-11.92	34.09	8.1	33.99	106	148	Average
5110	59.3	51.1	74	-14.7	34.09	8.1	33.99	106	148	Peak
5300	103.66	95.12			34.24	8.32	34.02	106	148	Average
5300	110.47	101.93			34.24	8.32	34.02	106	148	Peak
5350	42.71	34.08	54	-11.29	34.28	8.38	34.03	106	148	Average
5350	60.85	52.22	74	-13.15	34.28	8.38	34.03	106	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5112	41.83	33.63	54	-12.17	34.09	8.1	33.99	109	83	Average
5112	58.23	50.03	74	-15.77	34.09	8.1	33.99	109	83	Peak
5300	101.92	93.38			34.24	8.32	34.02	109	83	Average
5300	108.06	99.52			34.24	8.32	34.02	109	83	Peak
5350	42.71	34.08	54	-11.29	34.28	8.38	34.03	109	83	Average
5350	59.92	51.29	74	-14.08	34.28	8.38	34.03	109	83	Peak

Remarks:

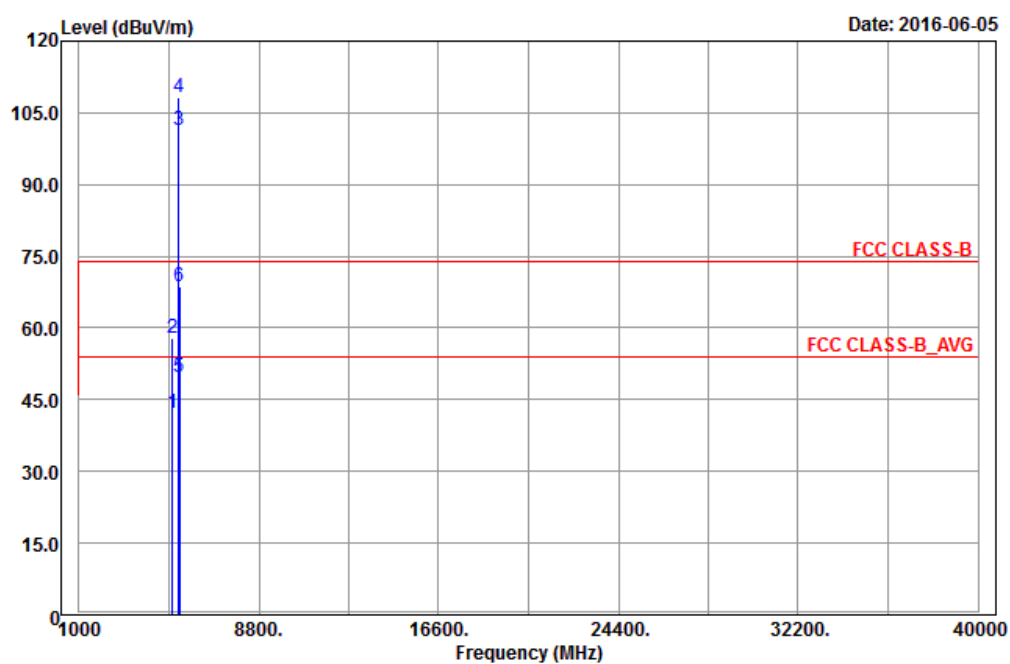
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5300 MHz: Fundamental Frequency

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

Horizontal



Vertical



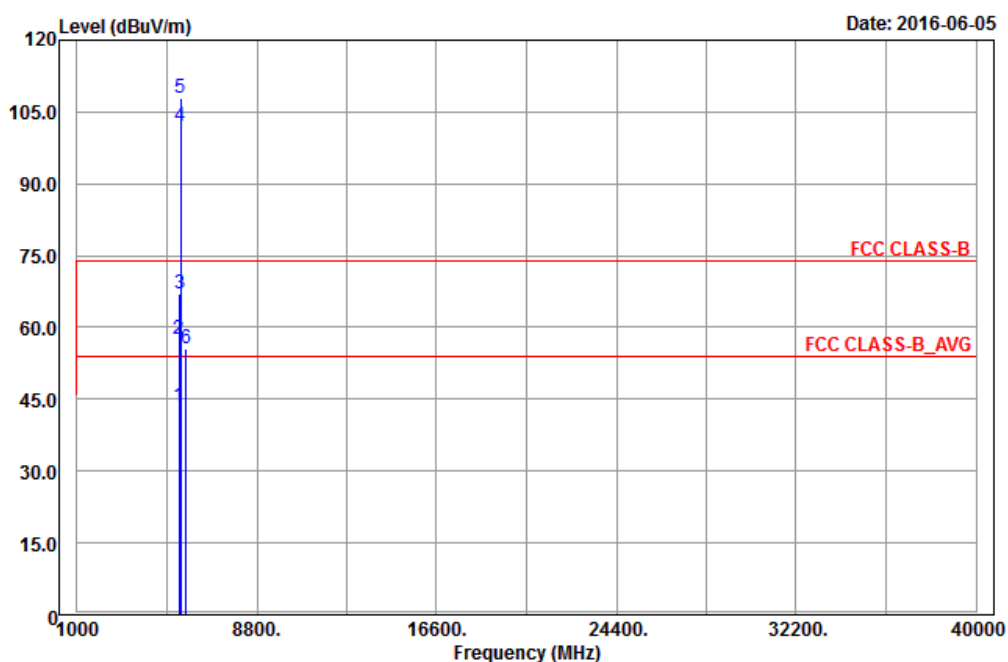
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5092	41.65	33.48	54	-12.35	34.08	8.07	33.98	104	148	Average
5092	58.74	50.57	74	-15.26	34.08	8.07	33.98	104	148	Peak
5320	103.95	95.37			34.25	8.35	34.02	104	148	Average
5320	110.09	101.51			34.25	8.35	34.02	104	148	Peak
5350	51.56	42.93	54	-2.44	34.28	8.38	34.03	234	148	Average
5350	68.4	59.77	74	-5.6	34.28	8.38	34.03	234	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5054	42.09	34.03	54	-11.91	34.04	8	33.98	110	83	Average
5054	57.86	49.8	74	-16.14	34.04	8	33.98	110	83	Peak
5320	101.26	92.68			34.25	8.35	34.02	110	83	Average
5320	108.16	99.58			34.25	8.35	34.02	110	83	Peak
5350	49.56	40.93	54	-4.44	34.28	8.38	34.03	111	83	Average
5350	68.64	60.01	74	-5.36	34.28	8.38	34.03	111	83	Peak

Remarks:

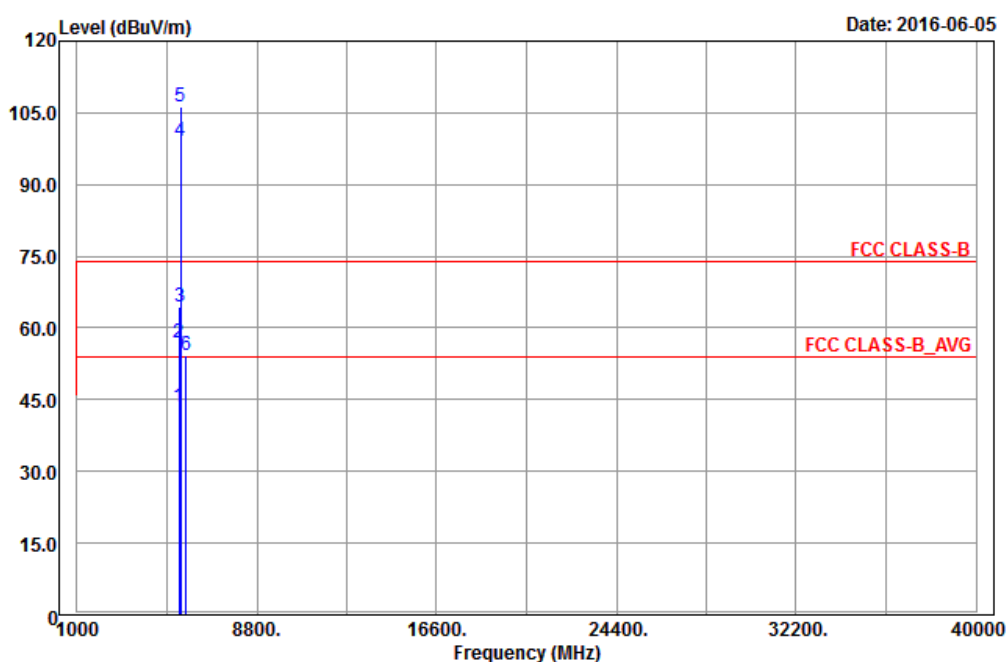
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5320 MHz: Fundamental Frequency

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

Horizontal



Vertical



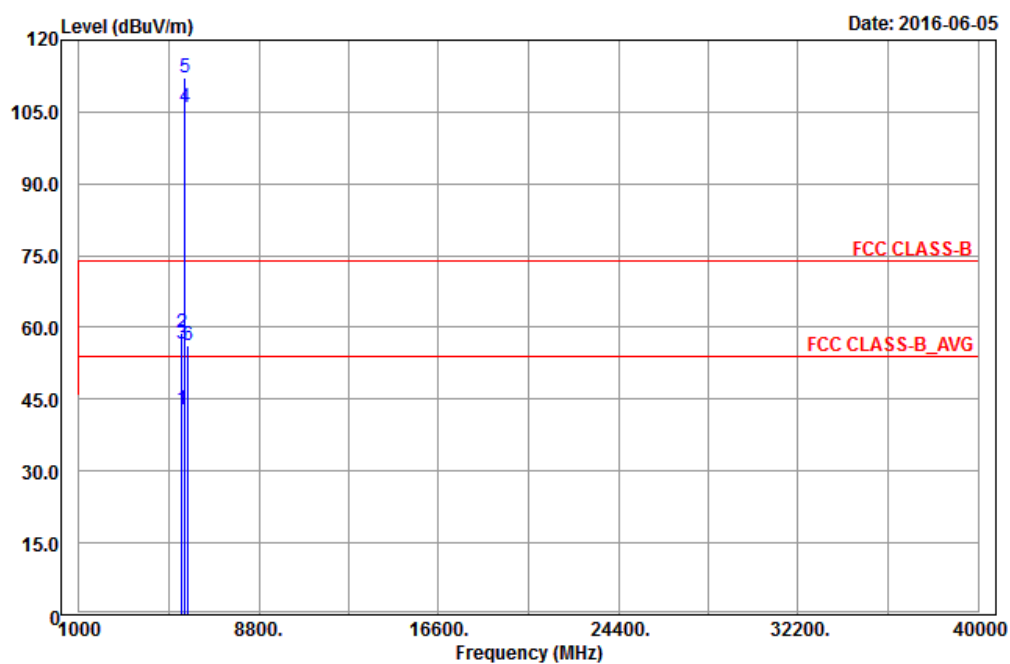
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5432	43.62	34.83	54	-10.38	34.35	8.48	34.04	101	148	Average
5432	57.44	48.65	74	-16.56	34.35	8.48	34.04	101	148	Peak
5470	67.14	58.31	68.2	-1.06	34.37	8.51	34.05	101	148	Peak
5500	101.97	93.05			34.4	8.57	34.05	100	148	Average
5500	108.06	99.14			34.4	8.57	34.05	100	148	Peak
5725	55.63	46.47	68.2	-12.57	34.62	8.65	34.11	100	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5442	43.37	34.58	54	-10.63	34.35	8.48	34.04	105	85	Average
5442	56.74	47.95	74	-17.26	34.35	8.48	34.04	105	85	Peak
5470	64.55	55.72	68.2	-3.65	34.37	8.51	34.05	105	85	Peak
5500	99.02	90.1			34.4	8.57	34.05	105	85	Average
5500	106.19	97.27			34.4	8.57	34.05	105	85	Peak
5725	54.12	44.96	68.2	-14.08	34.62	8.65	34.11	105	85	Peak

Remarks:

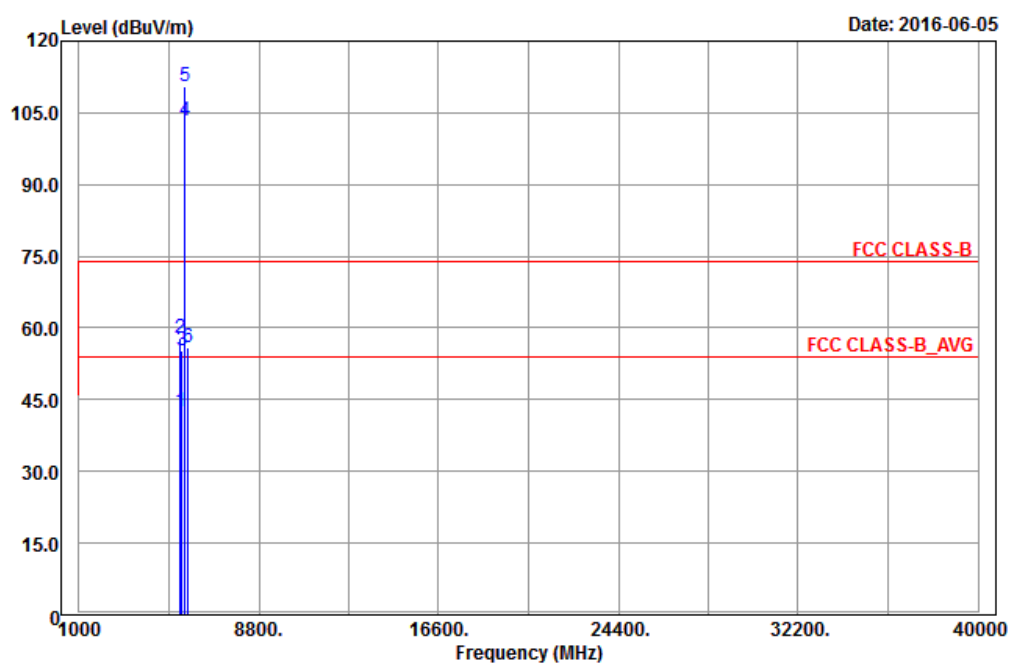
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



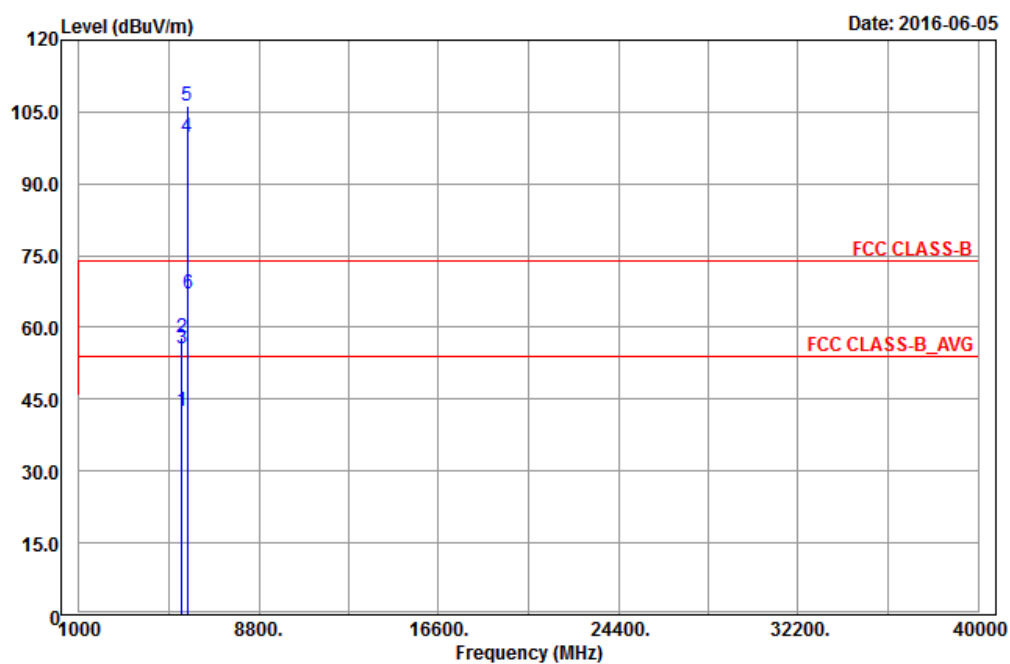
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	42.8	33.98	54	-11.2	34.36	8.51	34.05	100	139	Average
5454	58.7	49.88	74	-15.3	34.36	8.51	34.05	100	139	Peak
5470	56.55	47.72	68.2	-11.65	34.37	8.51	34.05	100	139	Peak
5580	105.87	96.88			34.47	8.6	34.08	100	139	Average
5580	112.12	103.13			34.47	8.6	34.08	100	139	Peak
5725	56.34	47.18	68.2	-11.86	34.62	8.65	34.11	100	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5376	42.54	33.88	54	-11.46	34.29	8.41	34.04	103	85	Average
5376	57.77	49.11	74	-16.23	34.29	8.41	34.04	103	85	Peak
5470	55.4	46.57	68.2	-12.8	34.37	8.51	34.05	103	85	Peak
5580	103.23	94.24			34.47	8.6	34.08	103	85	Average
5580	110.55	101.56			34.47	8.6	34.08	103	85	Peak
5725	55.91	46.75	68.2	-12.29	34.62	8.65	34.11	103	85	Peak

Remarks:

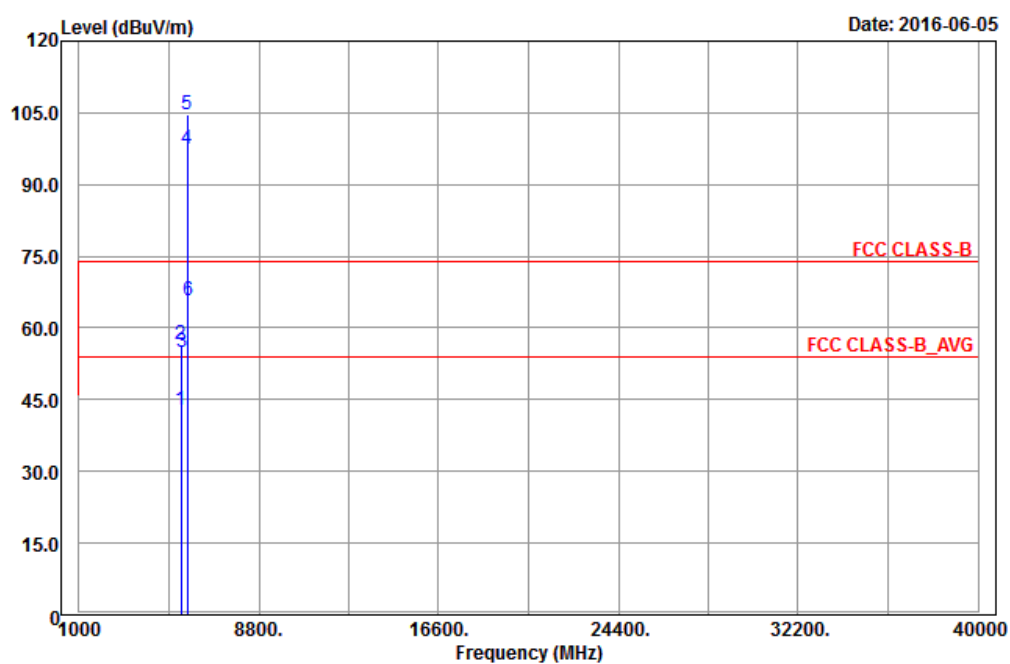
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



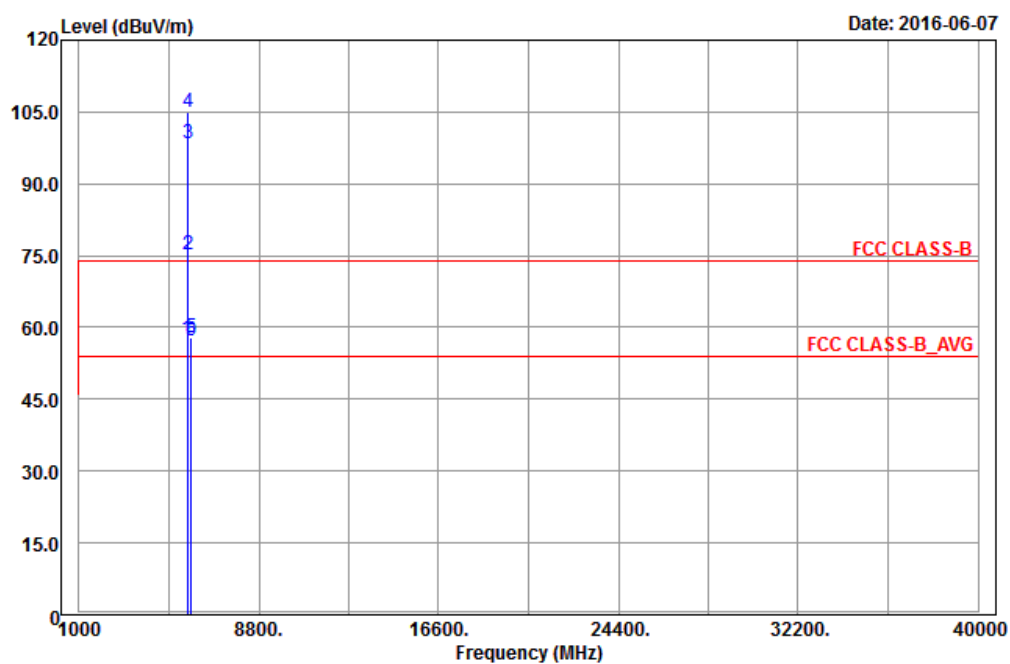
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5452	42.35	33.53	54	-11.65	34.36	8.51	34.05	103	139	Average
5452	58.01	49.19	74	-15.99	34.36	8.51	34.05	103	139	Peak
5470	55.71	46.88	68.2	-12.49	34.37	8.51	34.05	103	139	Peak
5700	99.83	90.7			34.59	8.64	34.1	103	139	Average
5700	106.13	97			34.59	8.64	34.1	103	139	Peak
5725	67.05	57.89	68.2	-1.15	34.62	8.65	34.11	187	145	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5430	42.79	34	54	-11.21	34.35	8.48	34.04	101	85	Average
5430	56.53	47.74	74	-17.47	34.35	8.48	34.04	101	85	Peak
5470	54.94	46.11	68.2	-13.26	34.37	8.51	34.05	101	85	Peak
5700	97.53	88.4			34.59	8.64	34.1	101	85	Average
5700	104.52	95.39			34.59	8.64	34.1	101	85	Peak
5725	65.77	56.61	68.2	-2.43	34.62	8.65	34.11	107	85	Peak

Remarks:

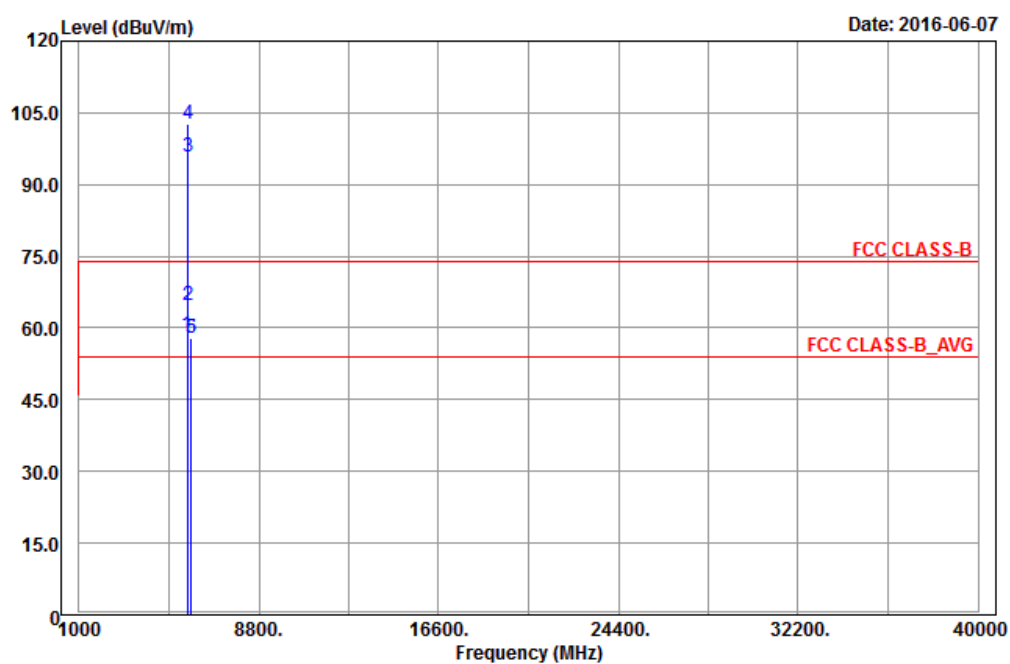
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



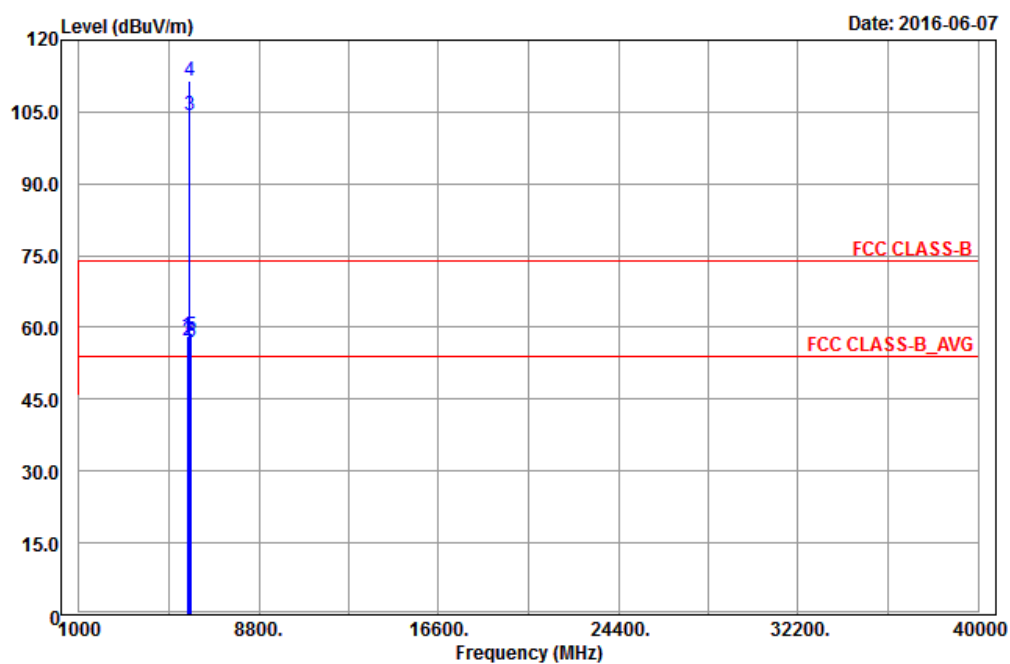
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5708	57.54	48.39	68.2	-10.66	34.61	8.65	34.11	254	150	Peak
*5724	75.2	66.04	78.2	-3	34.62	8.65	34.11	185	150	Peak
5745	98.31	89.12			34.64	8.66	34.11	254	150	Average
5745	105.12	95.93			34.64	8.66	34.11	254	150	Peak
*5854	57.9	48.58	78.2	-20.3	34.76	8.7	34.14	254	150	Peak
*5870	57.07	47.74	68.2	-11.13	34.76	8.71	34.14	254	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	58.39	49.24	68.2	-9.81	34.61	8.65	34.11	114	86	Peak
*5724	64.72	55.56	78.2	-13.48	34.62	8.65	34.11	114	86	Peak
5745	95.83	86.64			34.64	8.66	34.11	114	86	Average
5745	102.74	93.55			34.64	8.66	34.11	114	86	Peak
*5852	57.94	48.64	78.2	-20.26	34.74	8.7	34.14	114	86	Peak
*5862	57.92	48.59	68.2	-10.28	34.76	8.71	34.14	114	86	Peak

Remarks:

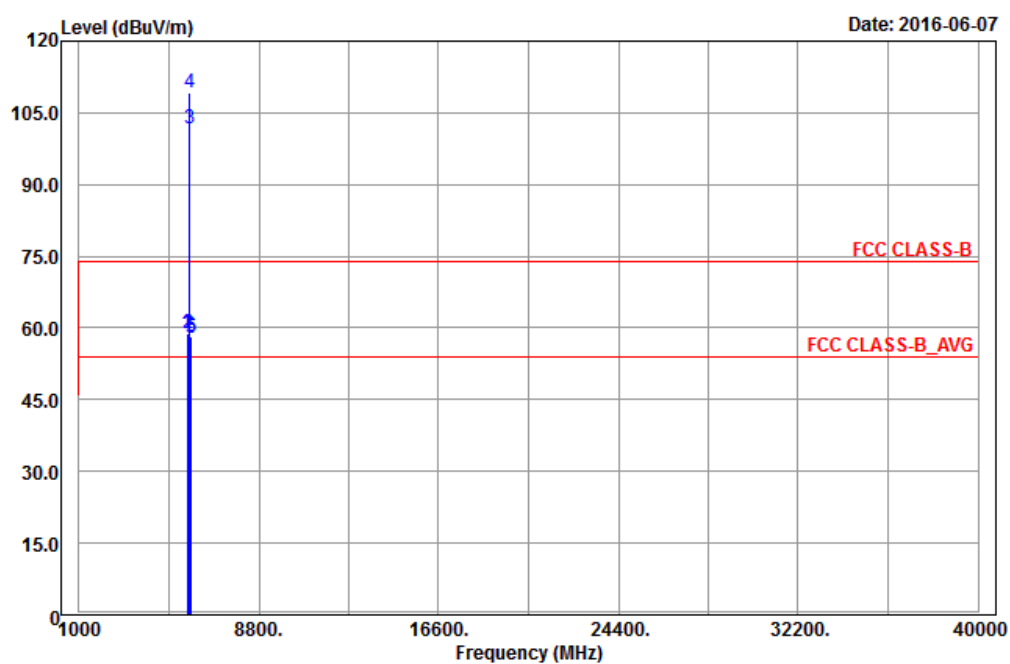
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5745 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

Horizontal



Vertical



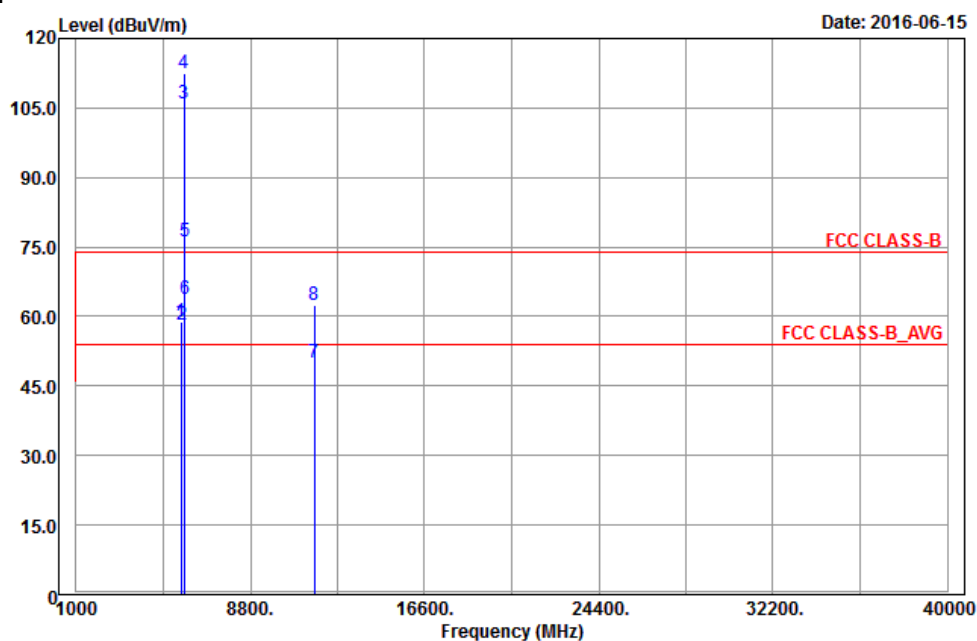
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5708	58.16	49.01	68.2	-10.04	34.61	8.65	34.11	254	150	Peak
*5724	57.23	48.07	78.2	-20.97	34.62	8.65	34.11	254	150	Peak
5785	104.28	95.05			34.68	8.68	34.13	254	150	Average
5785	111.5	102.27			34.68	8.68	34.13	254	150	Peak
*5852	58.28	48.98	78.2	-19.92	34.74	8.7	34.14	254	150	Peak
*5862	56.88	47.55	68.2	-11.32	34.76	8.71	34.14	254	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	58.85	49.7	68.2	-9.35	34.61	8.65	34.11	114	86	Peak
*5716	58.7	49.55	78.2	-19.5	34.61	8.65	34.11	114	86	Peak
5785	101.85	92.62			34.68	8.68	34.13	114	86	Average
5785	109.2	99.97			34.68	8.68	34.13	114	86	Peak
*5854	57.81	48.49	78.2	-20.39	34.76	8.7	34.14	114	86	Peak
*5862	58.05	48.72	68.2	-10.15	34.76	8.71	34.14	114	86	Peak

Remarks:

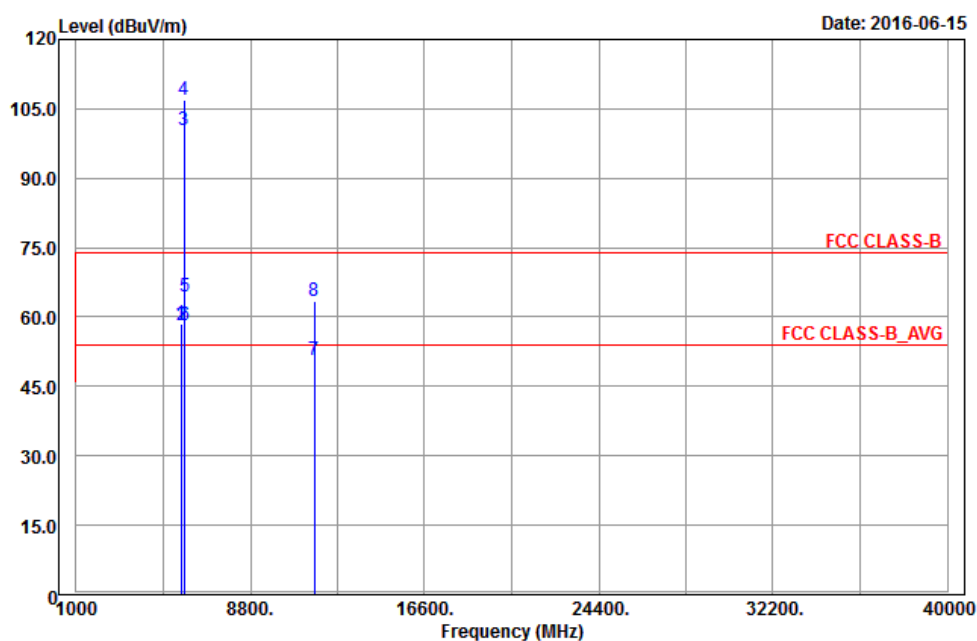
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	58.82	49.67	68.2	-9.38	34.61	8.65	34.11	214	109	Peak
*5718	58.32	49.16	78.2	-19.88	34.62	8.65	34.11	214	109	Peak
5825	105.98	96.69			34.73	8.69	34.13	214	109	Average
5825	112.58	103.29			34.73	8.69	34.13	214	109	Peak
*5852	76.3	67	78.2	-1.9	34.74	8.7	34.14	214	110	Peak
*5862	63.87	54.54	68.2	-4.33	34.76	8.71	34.14	214	110	Peak
11650	50.03	34.5	54	-3.97	38.09	12.8	35.36	100	313	Average
11650	62.49	46.96	74	-11.51	38.09	12.8	35.36	100	313	Peak

Antenna Polarity & Test Distance: Vertical at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5706	58.66	49.51	68.2	-9.54	34.61	8.65	34.11	200	175	Peak
*5724	58.04	48.88	78.2	-20.16	34.62	8.65	34.11	200	175	Peak
5825	100.42	91.13			34.73	8.69	34.13	200	175	Average
5825	107	97.71			34.73	8.69	34.13	200	175	Peak
*5856	64.55	55.23	78.2	-13.65	34.76	8.7	34.14	200	175	Peak
*5868	58.2	48.87	68.2	-10	34.76	8.71	34.14	200	175	Peak
11650	50.71	35.18	54	-3.29	38.09	12.8	35.36	100	143	Average
11650	63.51	47.98	74	-10.49	38.09	12.8	35.36	100	143	Peak

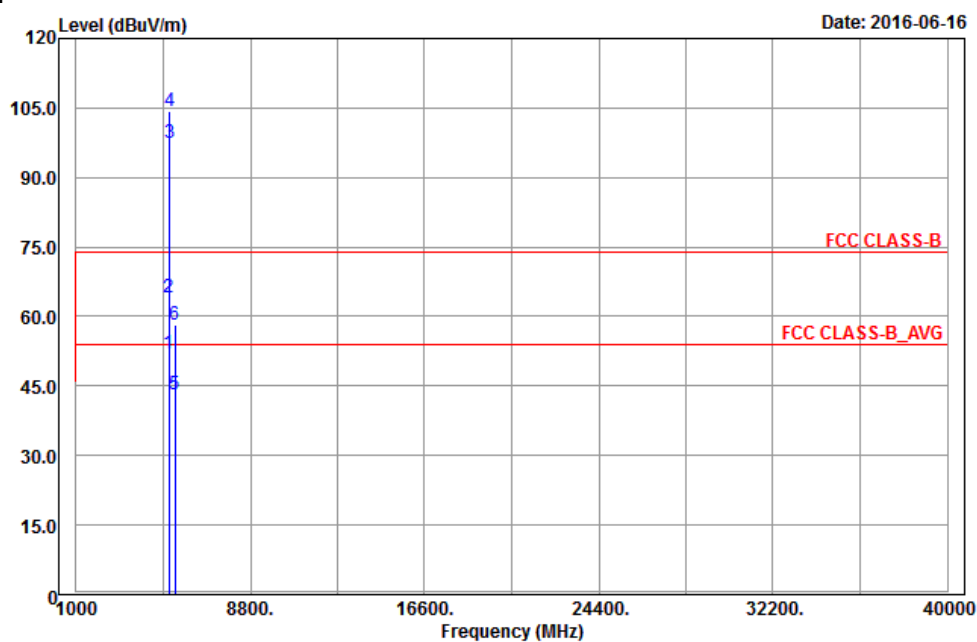
Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band

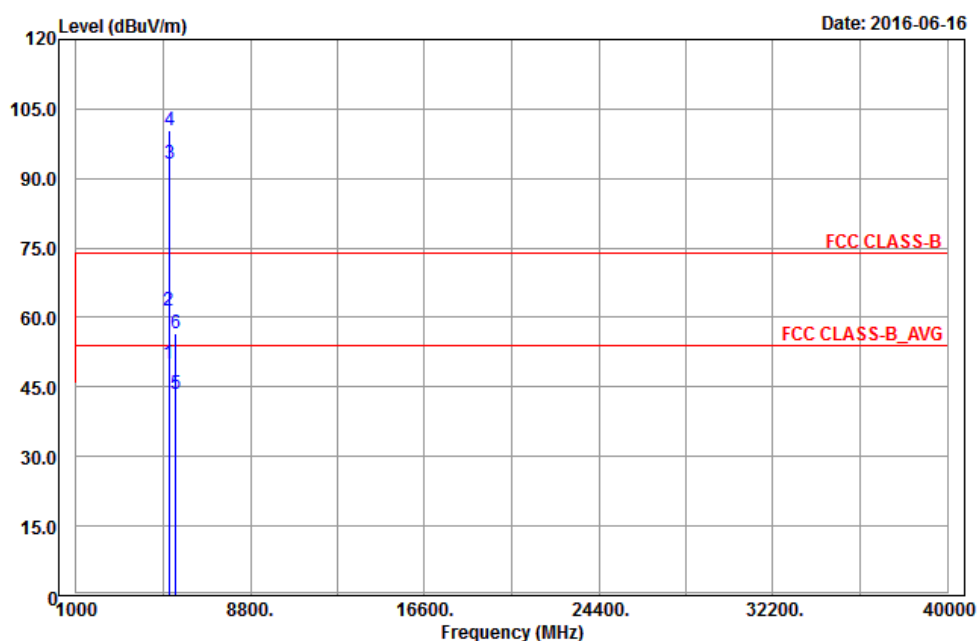
802.11n (HT40)

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

Horizontal



Vertical



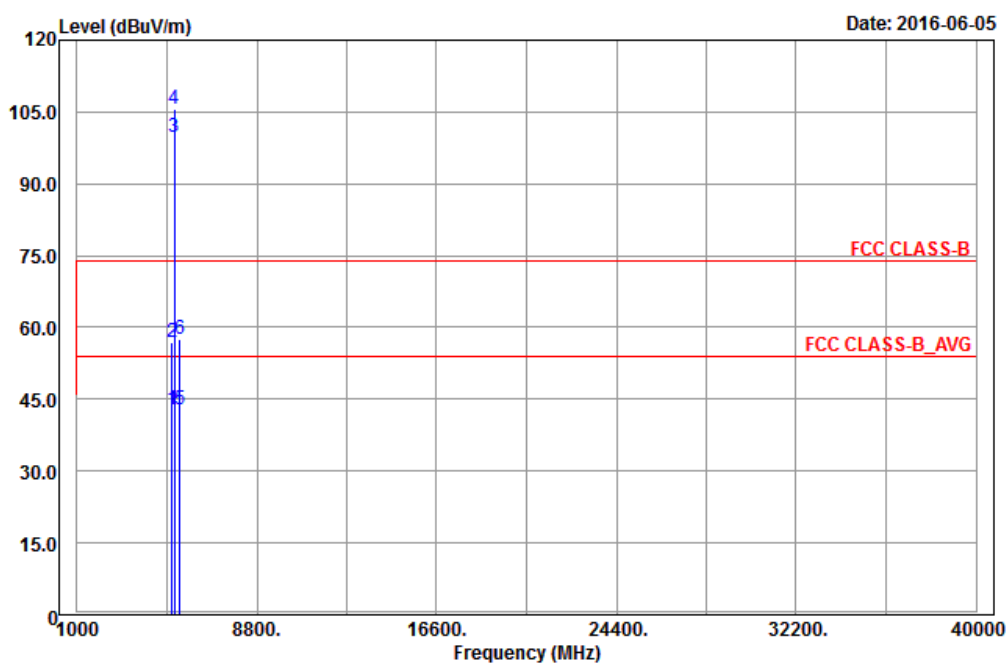
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	52.05	43.8	54	-1.95	34.12	8.13	34	184	105	Average
5150	64.07	55.82	74	-9.93	34.12	8.13	34	184	105	Peak
5190	97.34	89			34.15	8.19	34	244	105	Average
5190	104.24	95.9			34.15	8.19	34	244	105	Peak
5418	43.31	34.58	54	-10.69	34.33	8.44	34.04	244	105	Average
5418	58.22	49.49	74	-15.78	34.33	8.44	34.04	244	105	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146	50.11	41.86	54	-3.89	34.12	8.13	34	143	169	Average
5146	61.32	53.07	74	-12.68	34.12	8.13	34	143	169	Peak
5190	93.29	84.95			34.15	8.19	34	143	169	Average
5190	100.24	91.9			34.15	8.19	34	143	169	Peak
5444	43.34	34.55	54	-10.66	34.35	8.48	34.04	143	169	Average
5444	56.52	47.73	74	-17.48	34.35	8.48	34.04	143	169	Peak

Remarks:

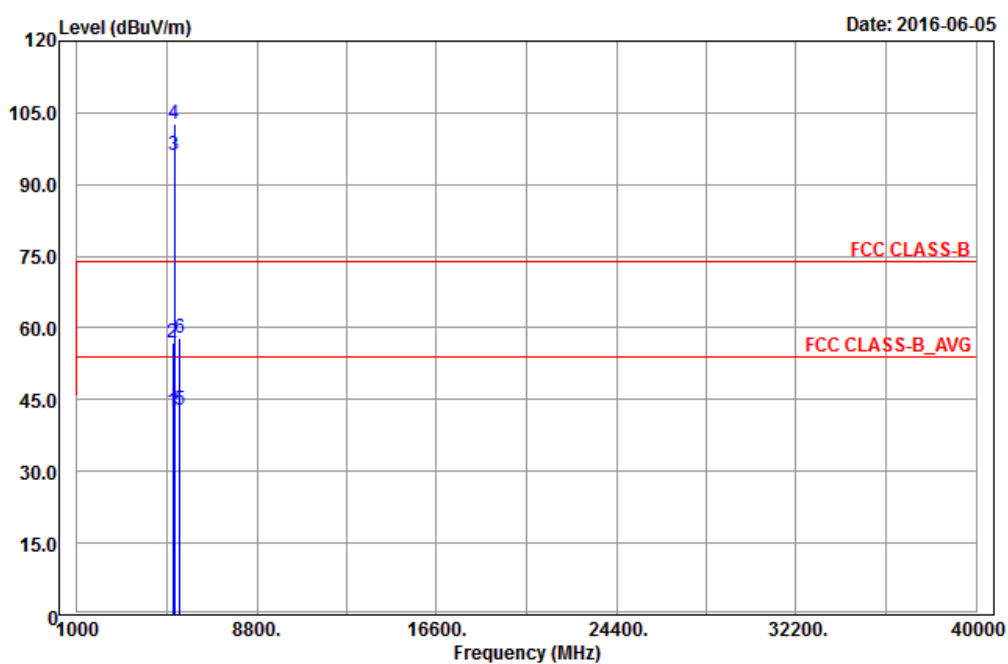
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5190 MHz: Fundamental Frequency

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

Horizontal



Vertical



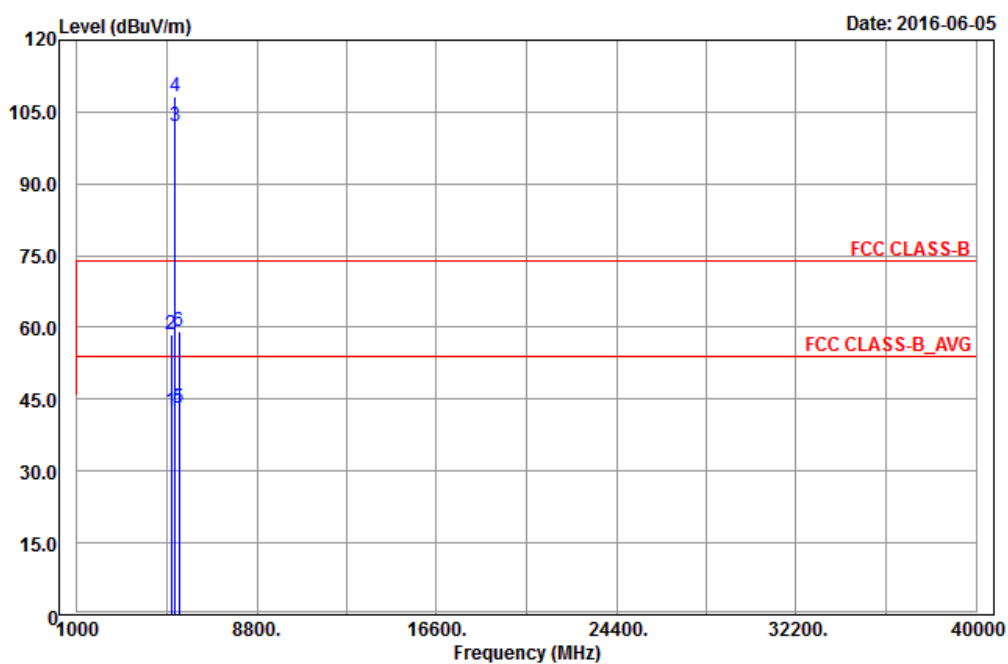
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5120	42.7	34.5	54	-11.3	34.09	8.1	33.99	100	27	Average
5120	57.01	48.81	74	-16.99	34.09	8.1	33.99	100	27	Peak
5230	99.85	91.45			34.19	8.22	34.01	100	27	Average
5230	105.72	97.32			34.19	8.22	34.01	100	27	Peak
5460	42.89	34.07	54	-11.11	34.36	8.51	34.05	100	27	Average
5460	57.44	48.62	74	-16.56	34.36	8.51	34.05	100	27	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5138	42.59	34.34	54	-11.41	34.11	8.13	33.99	165	140	Average
5138	56.97	48.72	74	-17.03	34.11	8.13	33.99	165	140	Peak
5230	96.19	87.79			34.19	8.22	34.01	165	140	Average
5230	102.65	94.25			34.19	8.22	34.01	165	140	Peak
5446	42.94	34.11	54	-11.06	34.36	8.51	34.04	165	140	Average
5446	57.87	49.04	74	-16.13	34.36	8.51	34.04	165	140	Peak

Remarks:

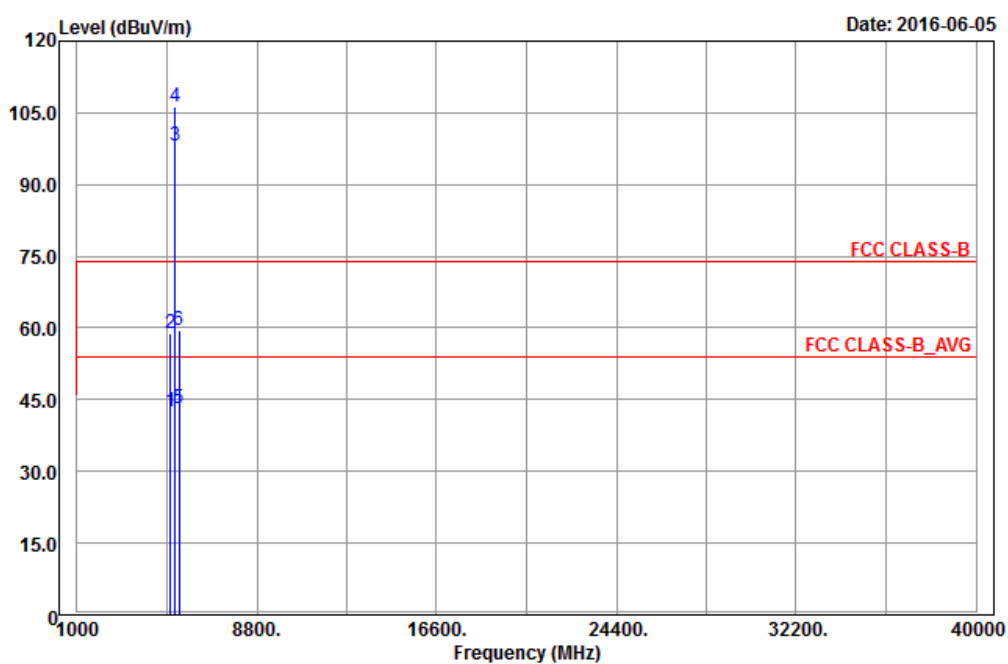
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5230 MHz: Fundamental Frequency

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

Horizontal



Vertical



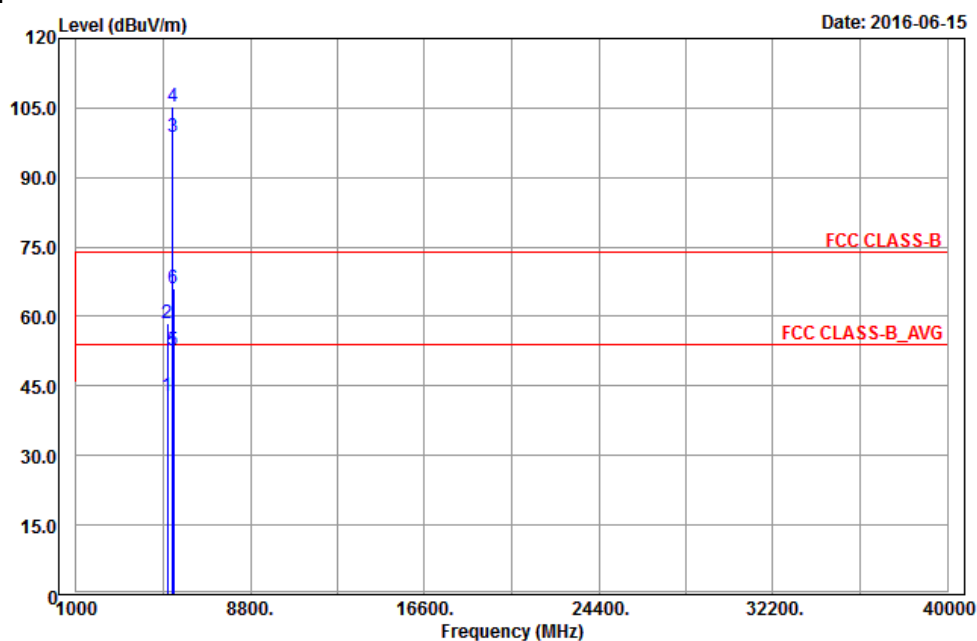
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5102	42.59	34.43	54	-11.41	34.08	8.07	33.99	106	148	Average
5102	58.52	50.36	74	-15.48	34.08	8.07	33.99	106	148	Peak
5270	101.93	93.44			34.21	8.29	34.01	106	148	Average
5270	108.12	99.63			34.21	8.29	34.01	106	148	Peak
5438	43.3	34.51	54	-10.7	34.35	8.48	34.04	106	148	Average
5438	59.06	50.27	74	-14.94	34.35	8.48	34.04	106	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5068	42.57	34.47	54	-11.43	34.05	8.03	33.98	110	83	Average
5068	58.71	50.61	74	-15.29	34.05	8.03	33.98	110	83	Peak
5270	98.25	89.76			34.21	8.29	34.01	110	83	Average
5270	106.19	97.7			34.21	8.29	34.01	110	83	Peak
5434	43.18	34.39	54	-10.82	34.35	8.48	34.04	110	83	Average
5434	59.46	50.67	74	-14.54	34.35	8.48	34.04	110	83	Peak

Remarks:

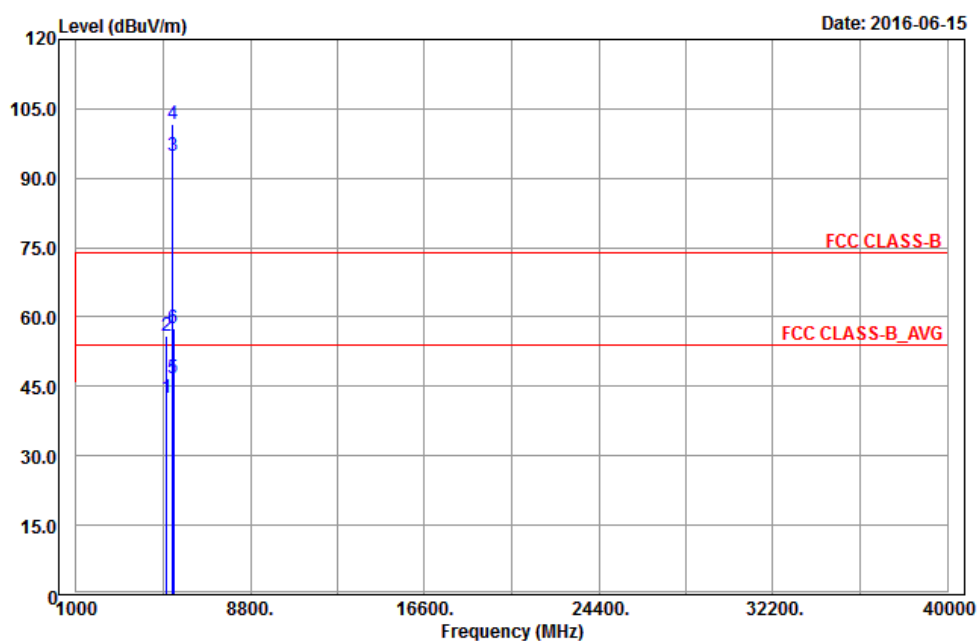
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5270 MHz: Fundamental Frequency

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

Horizontal



Vertical



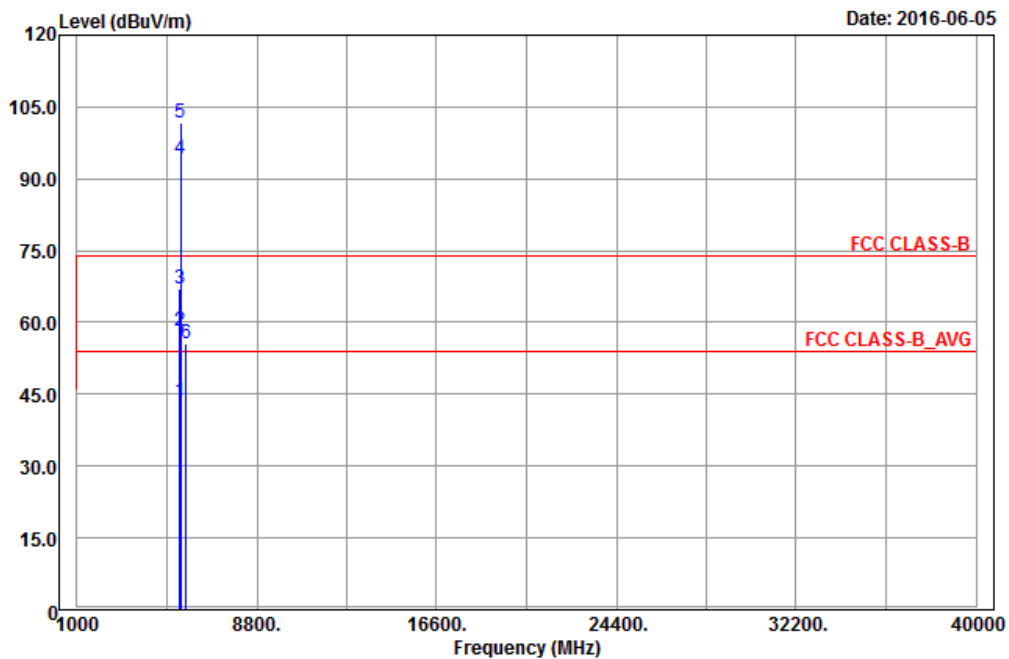
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5090	42.71	34.54	54	-11.29	34.08	8.07	33.98	220	112	Average
5090	58.56	50.39	74	-15.44	34.08	8.07	33.98	220	112	Peak
5310	98.63	90.08			34.25	8.32	34.02	220	112	Average
5310	105.18	96.63			34.25	8.32	34.02	220	112	Peak
5350	52.76	44.13	54	-1.24	34.28	8.38	34.03	266	112	Average
5350	66.08	57.45	74	-7.92	34.28	8.38	34.03	266	112	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5044	42.58	34.52	54	-11.42	34.04	8	33.98	164	188	Average
5044	55.92	47.86	74	-18.08	34.04	8	33.98	164	188	Peak
5310	94.72	86.17			34.25	8.32	34.02	164	188	Average
5310	101.73	93.18			34.25	8.32	34.02	164	188	Peak
5350	46.89	38.26	54	-7.11	34.28	8.38	34.03	164	188	Average
5350	57.44	48.81	74	-16.56	34.28	8.38	34.03	164	188	Peak

Remarks:

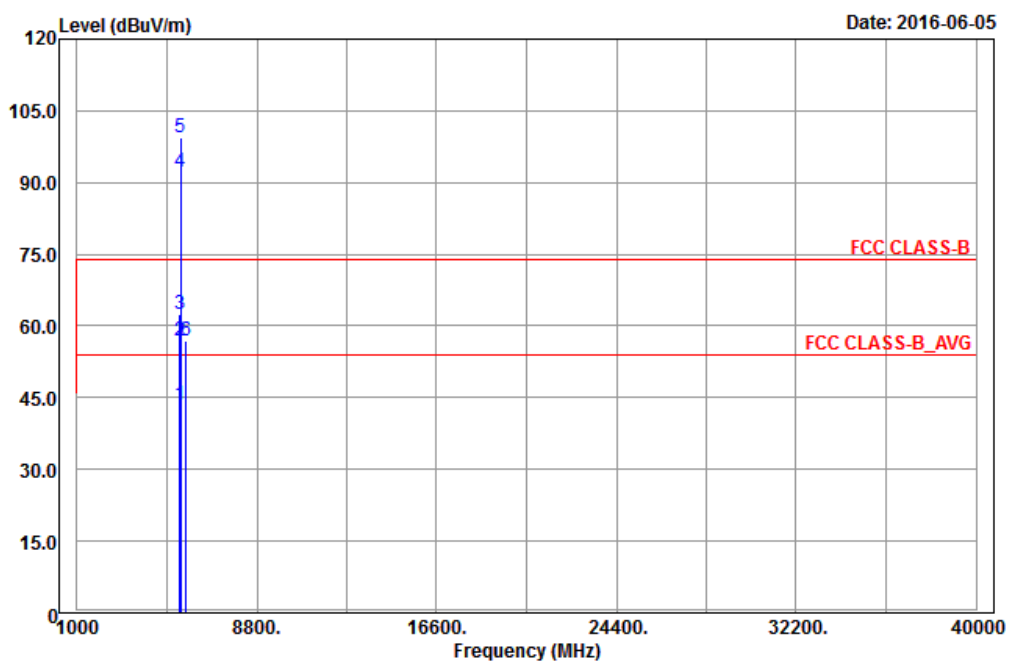
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5310 MHz: Fundamental Frequency

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

Horizontal



Vertical



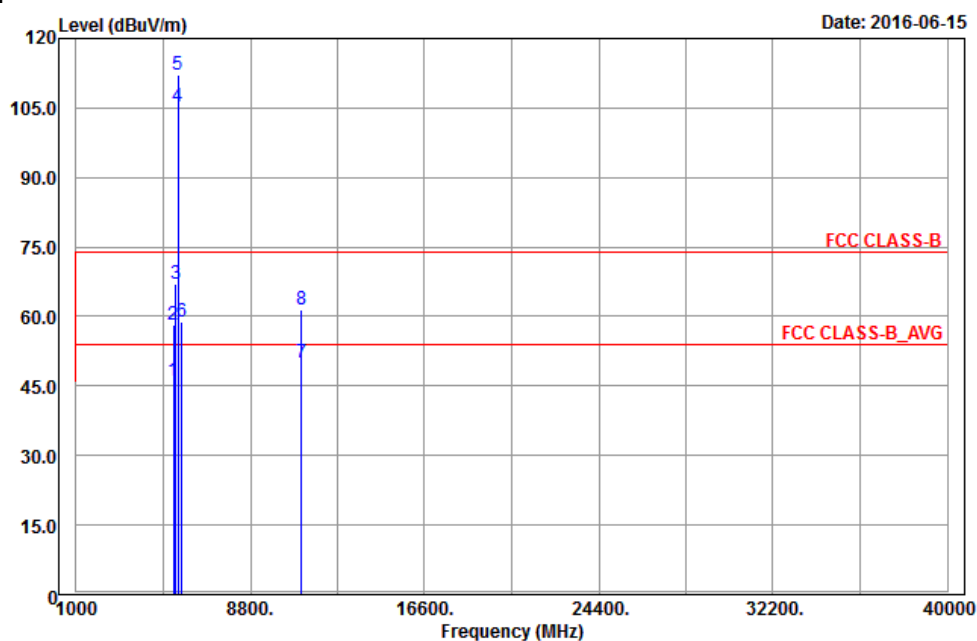
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5452	43.53	34.71	54	-10.47	34.36	8.51	34.05	100	139	Average
5452	58.25	49.43	74	-15.75	34.36	8.51	34.05	100	139	Peak
5470	67	58.17	68.2	-1.2	34.37	8.51	34.05	101	139	Peak
5510	94.32	85.41			34.4	8.57	34.06	100	139	Average
5510	101.78	92.87			34.4	8.57	34.06	100	139	Peak
5725	55.63	46.47	68.2	-12.57	34.62	8.65	34.11	100	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5446	43.42	34.59	54	-10.58	34.36	8.51	34.04	222	85	Average
5446	56.76	47.93	74	-17.24	34.36	8.51	34.04	222	85	Peak
5470	62.59	53.76	68.2	-5.61	34.37	8.51	34.05	222	85	Peak
5510	92.08	83.17			34.4	8.57	34.06	222	85	Average
5510	99.47	90.56			34.4	8.57	34.06	222	85	Peak
5725	56.78	47.62	68.2	-11.42	34.62	8.65	34.11	222	85	Peak

Remarks:

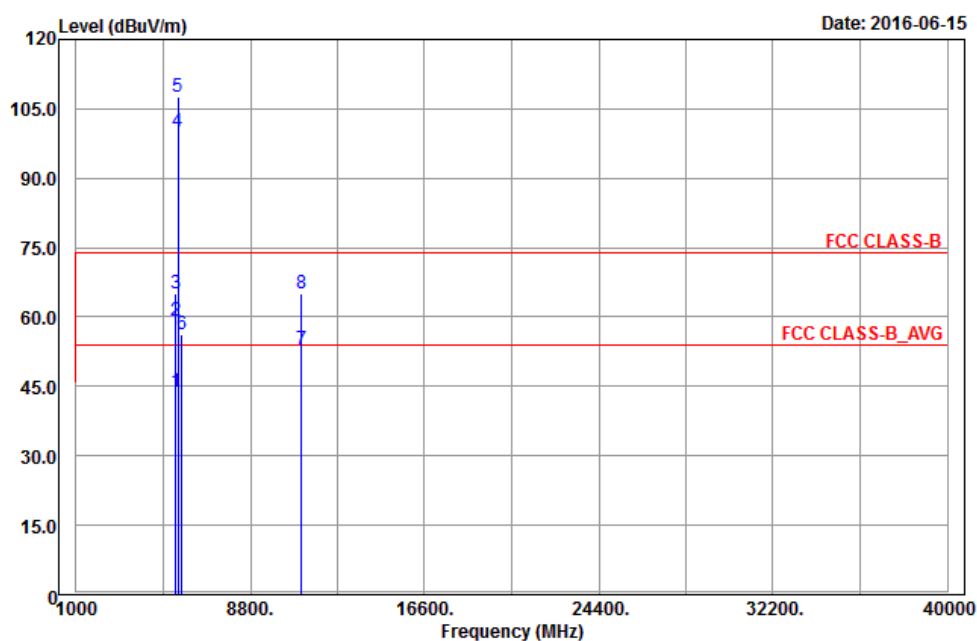
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5510 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m

Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5366	45.97	37.33	54	-8.03	34.29	8.38	34.03	231	131	Average
5366	58.33	49.69	74	-15.67	34.29	8.38	34.03	231	131	Peak
5470	67.11	58.28	68.2	-1.09	34.37	8.51	34.05	231	131	Peak
5550	105.44	96.47			34.45	8.59	34.07	217	110	Average
5550	112.23	103.26			34.45	8.59	34.07	217	110	Peak
5725	58.84	49.68	68.2	-9.36	34.62	8.65	34.11	217	110	Peak
11100	50.09	35	54	-3.91	37.66	12.89	35.46	100	302	Average
11100	61.38	46.29	74	-12.62	37.66	12.89	35.46	100	302	Peak

Antenna Polarity & Test Distance: Vertical at 3 m

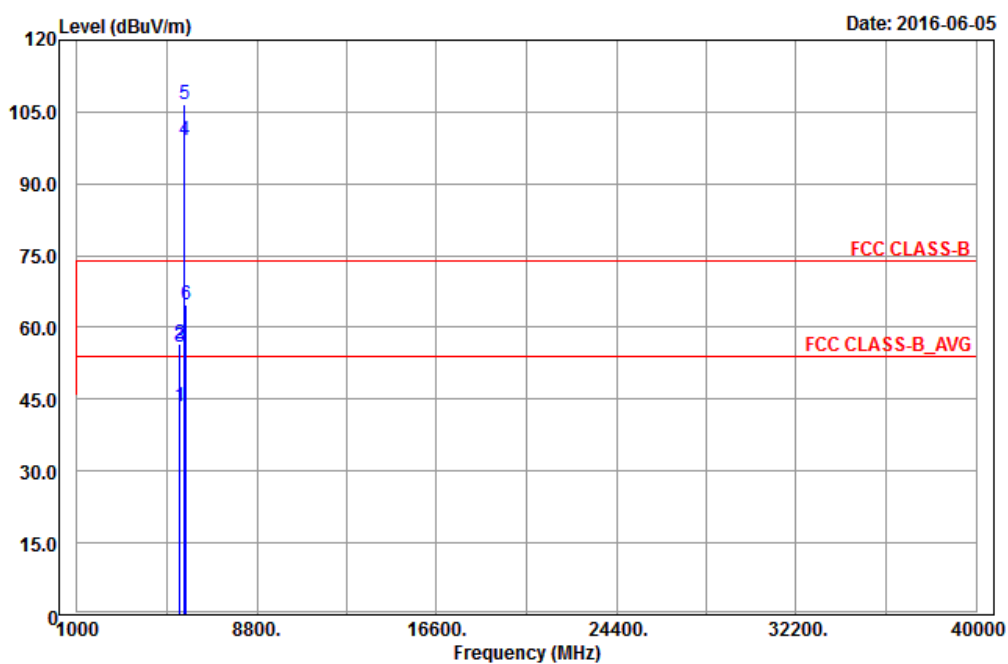
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	43.76	34.94	54	-10.24	34.36	8.51	34.05	207	140	Average
5454	59.19	50.37	74	-14.81	34.36	8.51	34.05	207	140	Peak
5470	64.93	56.1	68.2	-3.27	34.37	8.51	34.05	207	140	Peak
5550	100.14	91.17			34.45	8.59	34.07	230	141	Average
5550	107.67	98.7			34.45	8.59	34.07	230	141	Peak
5725	56.35	47.19	68.2	-11.85	34.62	8.65	34.11	230	141	Peak
11100	52.89	37.8	54	-1.11	37.66	12.89	35.46	116	117	Average
11100	65.17	50.08	74	-8.83	37.66	12.89	35.46	116	117	Peak

Remarks:

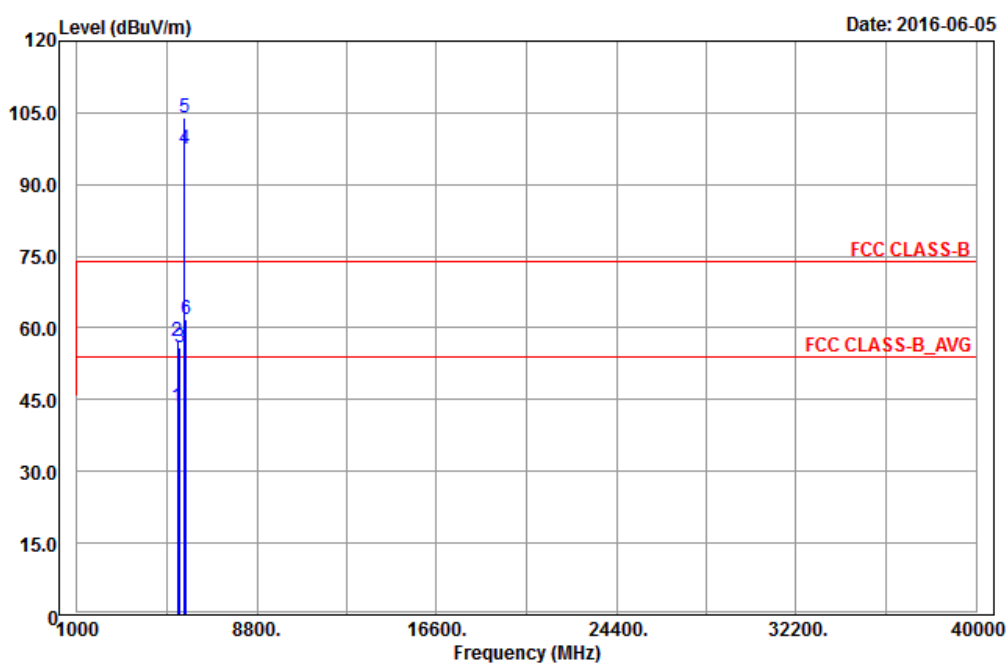
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5550 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



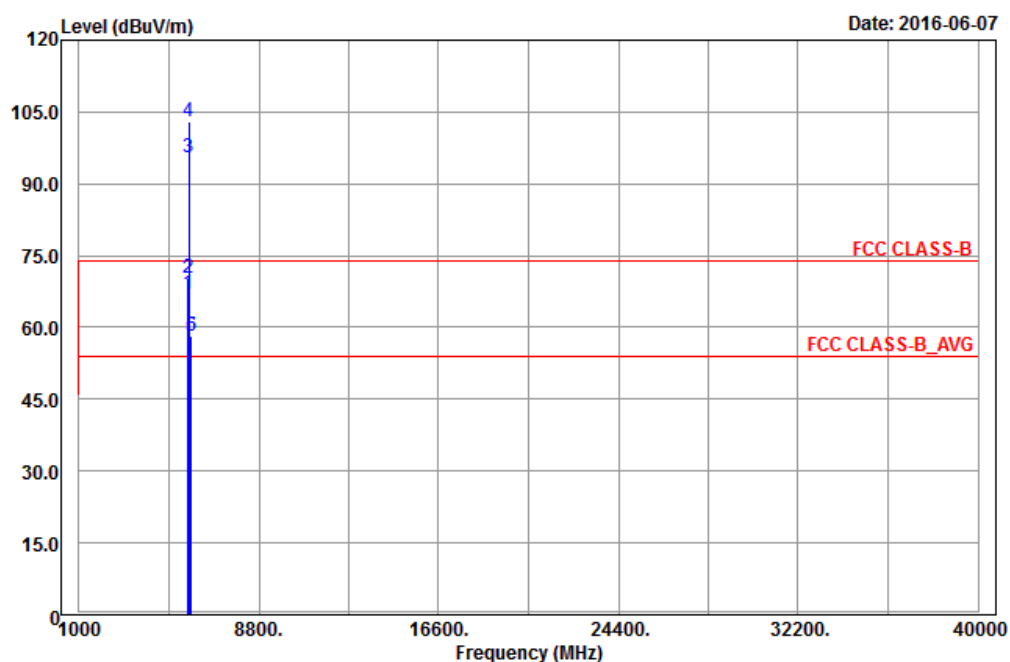
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5444	43.56	34.77	54	-10.44	34.35	8.48	34.04	103	139	Average
5444	56.5	47.71	74	-17.5	34.35	8.48	34.04	103	139	Peak
5470	56.06	47.23	68.2	-12.14	34.37	8.51	34.05	103	139	Peak
5670	99.2	90.1			34.57	8.63	34.1	103	139	Average
5670	106.68	97.58			34.57	8.63	34.1	103	139	Peak
5725	64.74	55.58	68.2	-3.46	34.62	8.65	34.11	169	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5350	43.33	34.7	54	-10.67	34.28	8.38	34.03	222	85	Average
5350	57.33	48.7	74	-16.67	34.28	8.38	34.03	222	85	Peak
5470	56.06	47.23	68.2	-12.14	34.37	8.51	34.05	222	85	Peak
5670	97.59	88.49			34.57	8.63	34.1	222	85	Average
5670	104.12	95.02			34.57	8.63	34.1	222	85	Peak
5725	61.92	52.76	68.2	-6.28	34.62	8.65	34.11	222	85	Peak

Remarks:

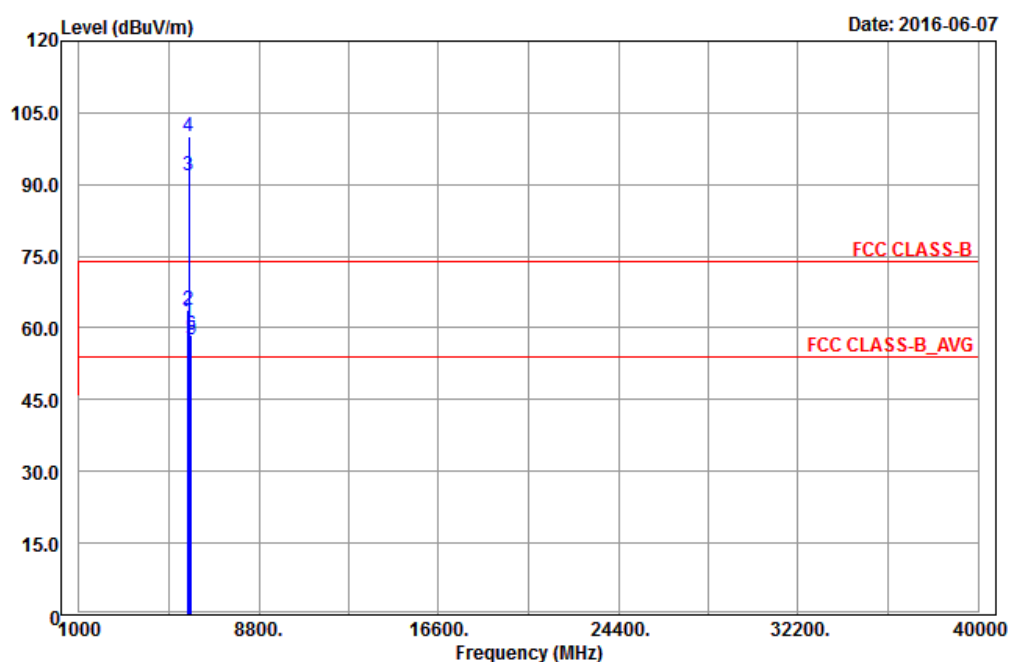
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5670 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



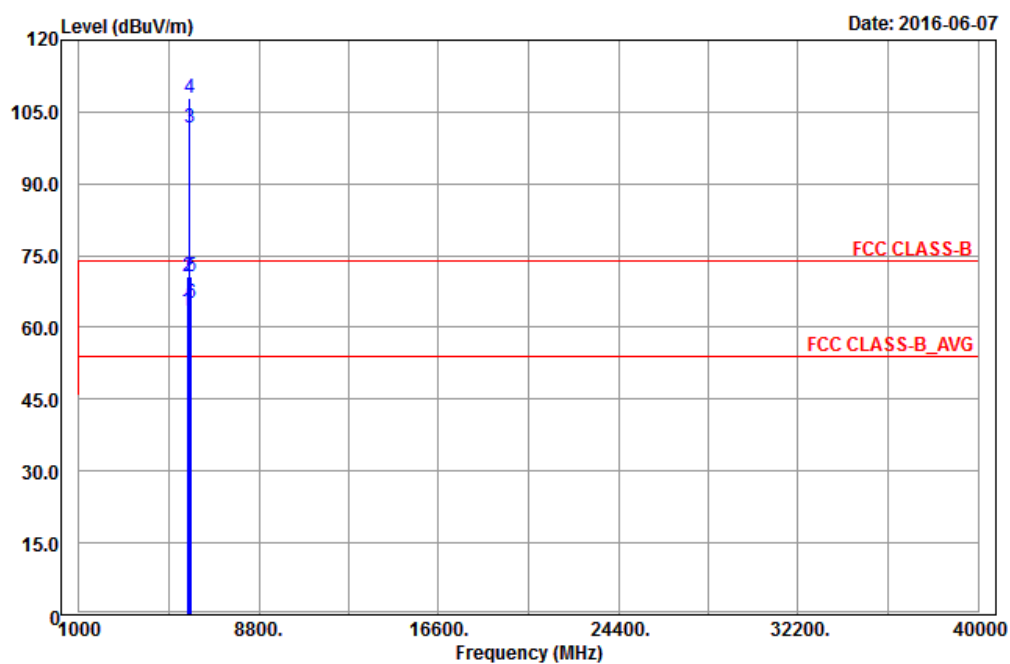
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	67.16	23.9	68.2	-1.04	34.61	8.65	0	241	150	Peak
*5724	70.28	27.01	78.2	-7.92	34.62	8.65	0	185	150	Peak
5755	95.52	52.2			34.66	8.66	0	259	150	Average
5755	102.91	59.59			34.66	8.66	0	259	150	Peak
*5860	58.28	14.82	78.2	-19.92	34.76	8.7	0	259	150	Peak
*5866	58.15	14.68	68.2	-10.05	34.76	8.71	0	259	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	61.63	52.48	68.2	-6.57	34.61	8.65	34.11	114	86	Peak
*5724	63.92	54.76	78.2	-14.28	34.62	8.65	34.11	114	86	Peak
5755	91.87	82.66			34.66	8.66	34.11	114	86	Average
5755	99.94	90.73			34.66	8.66	34.11	114	86	Peak
*5852	57.46	48.16	78.2	-20.74	34.74	8.7	34.14	114	86	Peak
*5864	58.53	49.2	68.2	-9.67	34.76	8.71	34.14	114	86	Peak

Remarks:

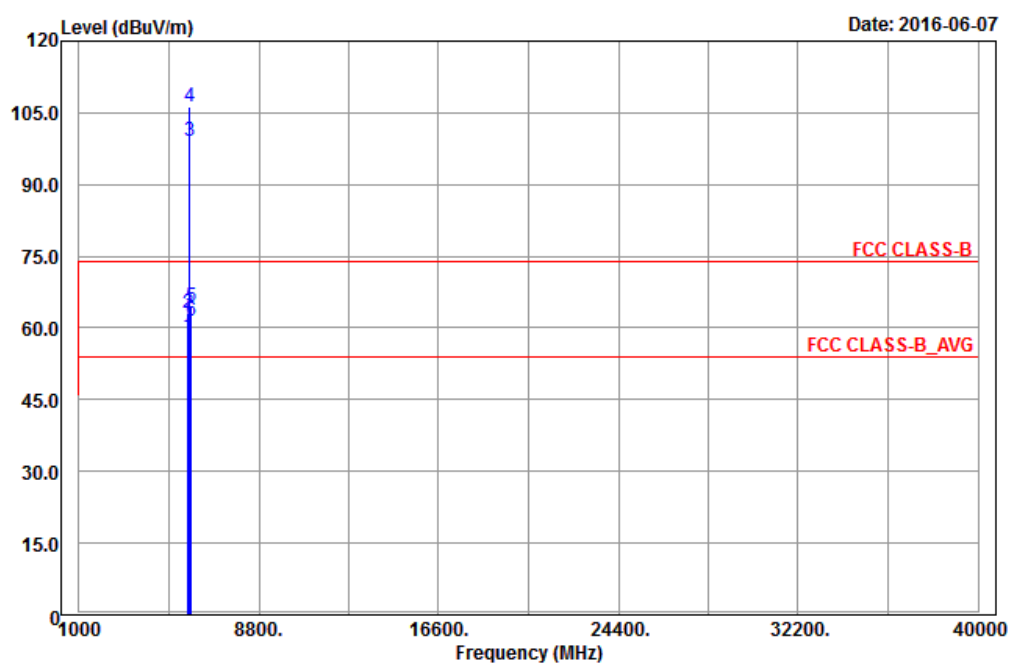
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5755 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	63.35	54.2	68.2	-4.85	34.61	8.65	34.11	186	150	Peak
*5724	70.78	61.62	78.2	-7.42	34.62	8.65	34.11	258	150	Peak
5795	101.64	92.4			34.69	8.68	34.13	254	150	Average
5795	108.05	98.81			34.69	8.68	34.13	254	150	Peak
*5852	70.71	61.41	78.2	-7.49	34.74	8.7	34.14	221	150	Peak
*5862	65	55.67	68.2	-3.2	34.76	8.71	34.14	186	186	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	58.32	49.17	68.2	-9.88	34.61	8.65	34.11	112	85	Peak
*5724	63.01	53.85	78.2	-15.19	34.62	8.65	34.11	112	85	Peak
5795	99.19	89.95			34.69	8.68	34.13	112	85	Average
5795	106.27	97.03			34.69	8.68	34.13	112	85	Peak
*5852	64.48	55.18	78.2	-13.72	34.74	8.7	34.14	112	85	Peak
*5862	61.46	52.13	68.2	-6.74	34.76	8.71	34.14	112	85	Peak

Remarks:

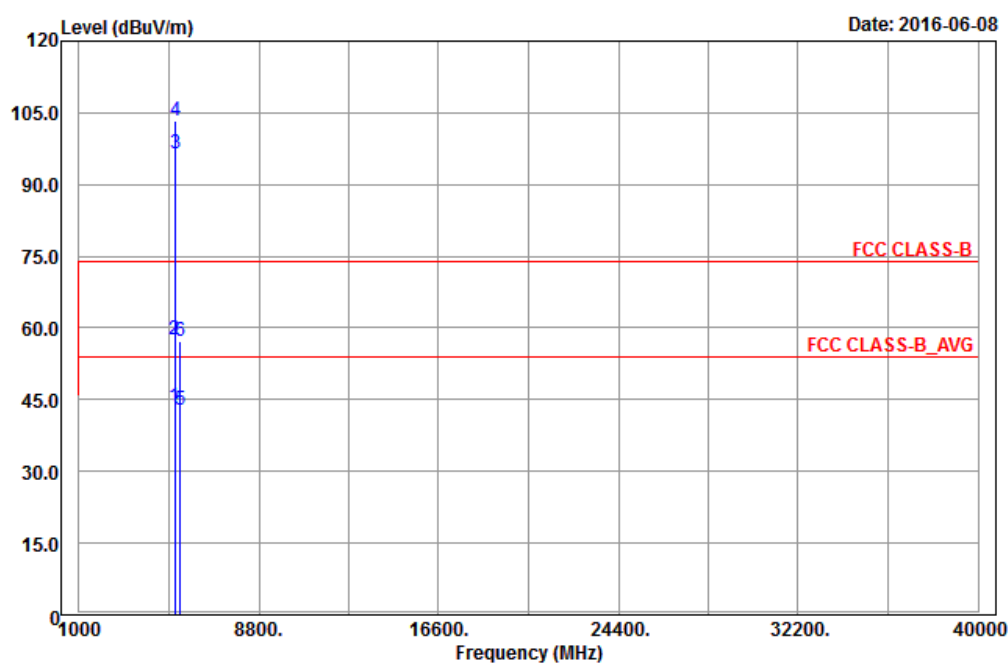
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5795 MHz: Fundamental Frequency
- *: Out of Restricted Band

Mode B

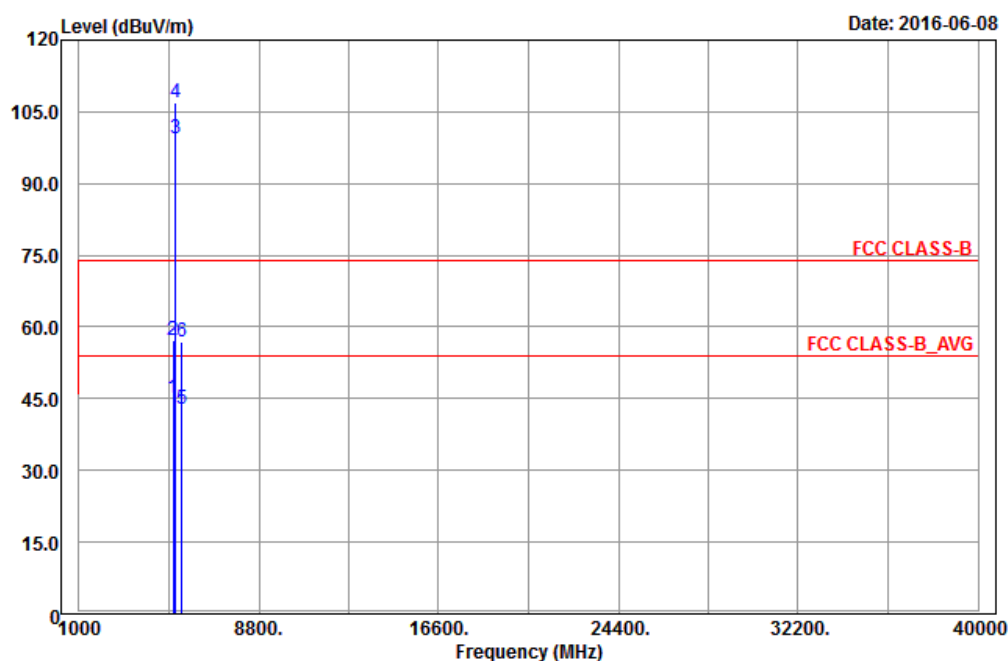
802.11a

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

Horizontal



Vertical



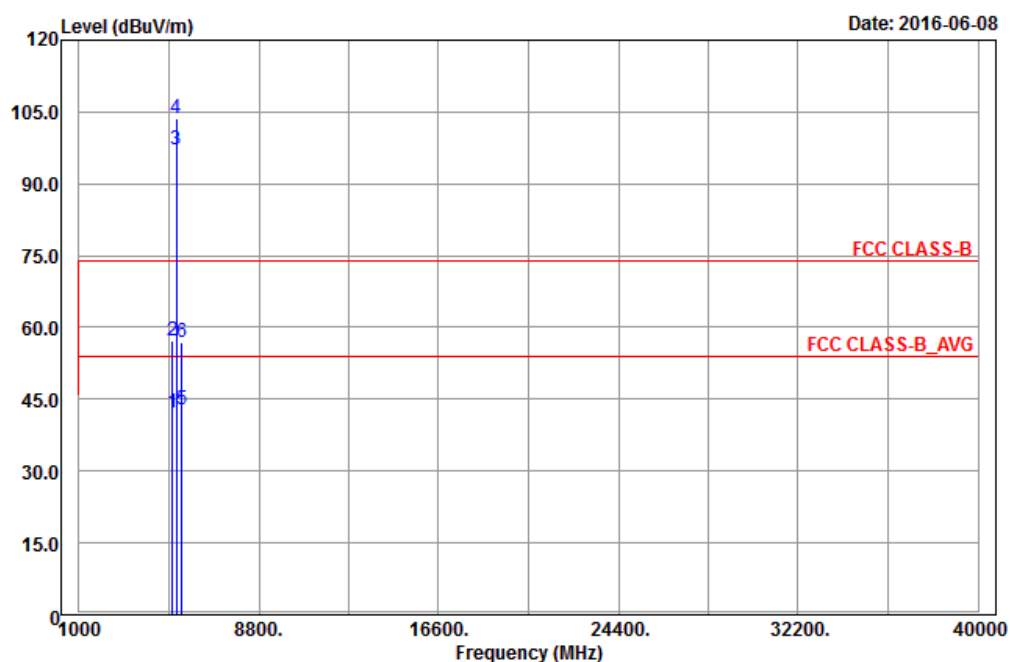
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142	43.45	35.19	54	-10.55	34.12	8.13	33.99	200	274	Average
5142	57.54	49.28	74	-16.46	34.12	8.13	33.99	200	274	Peak
5180	96.31	88			34.15	8.16	34	200	274	Average
5180	103.42	95.11			34.15	8.16	34	200	274	Peak
5408	42.81	34.09	54	-11.19	34.32	8.44	34.04	200	274	Average
5408	57.31	48.59	74	-16.69	34.32	8.44	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5092	45.15	36.98	54	-8.85	34.08	8.07	33.98	100	255	Average
5092	57.32	49.15	74	-16.68	34.08	8.07	33.98	100	255	Peak
5180	99.42	91.11			34.15	8.16	34	100	255	Average
5180	106.78	98.47			34.15	8.16	34	100	255	Peak
5450	42.87	34.05	54	-11.13	34.36	8.51	34.05	100	255	Average
5450	56.87	48.05	74	-17.13	34.36	8.51	34.05	100	255	Peak

Remarks:

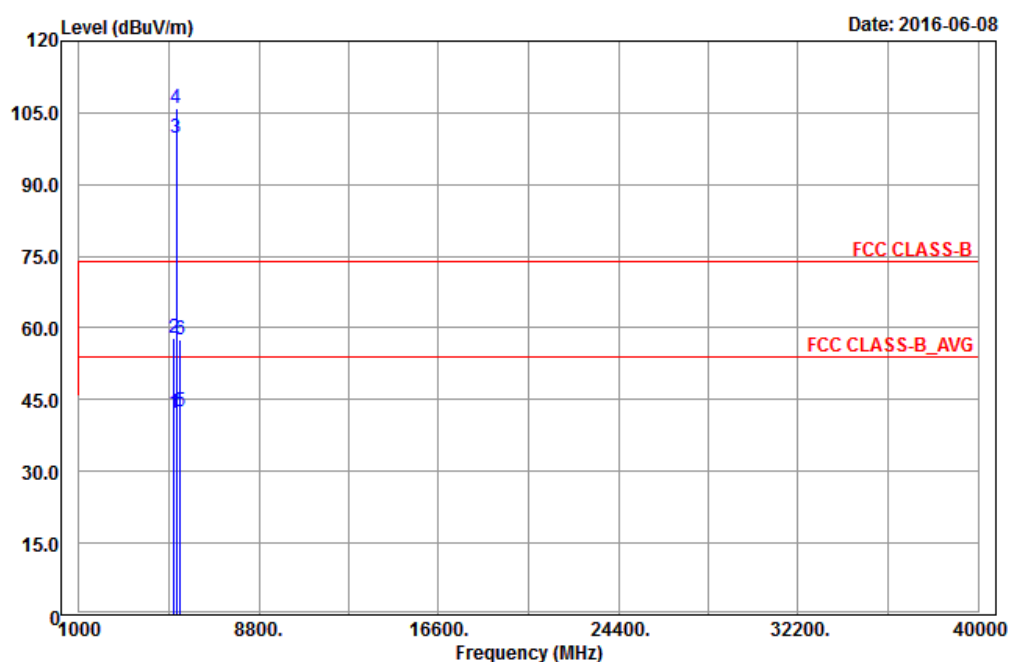
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5180 MHz: Fundamental Frequency

EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Charles Hsiao

Horizontal



Vertical



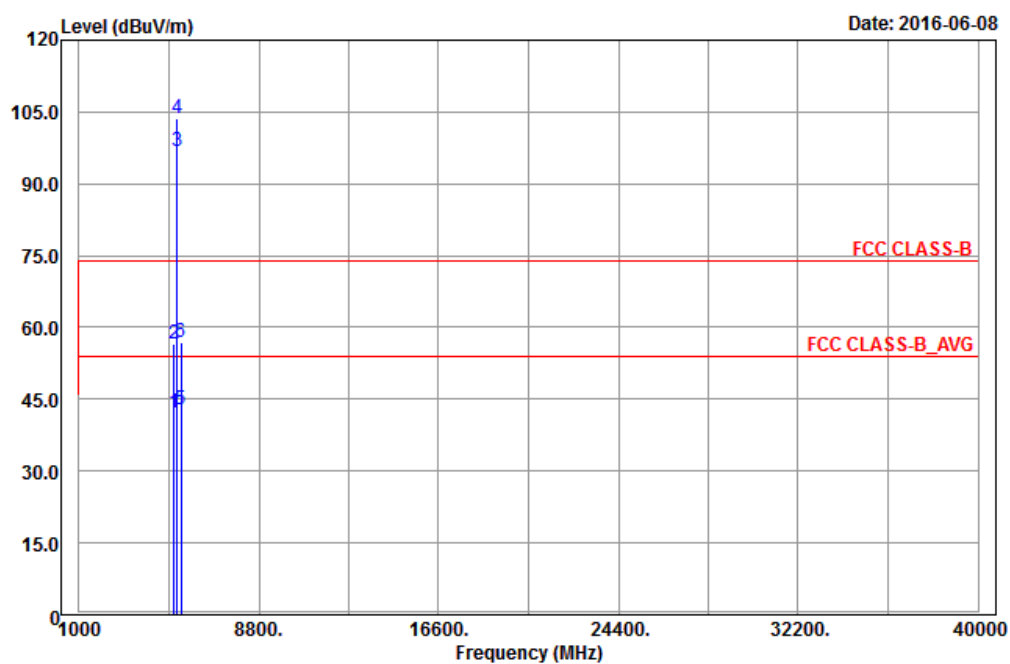
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5068	42.04	33.94	54	-11.96	34.05	8.03	33.98	200	274	Average
5068	57.37	49.27	74	-16.63	34.05	8.03	33.98	200	274	Peak
5220	96.96	88.57			34.17	8.22	34	200	274	Average
5220	103.5	95.11			34.17	8.22	34	200	274	Peak
5444	42.77	33.98	54	-11.23	34.35	8.48	34.04	200	274	Average
5444	56.76	47.97	74	-17.24	34.35	8.48	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5108	42.13	33.93	54	-11.87	34.09	8.1	33.99	100	255	Average
5108	57.95	49.75	74	-16.05	34.09	8.1	33.99	100	255	Peak
5220	99.65	91.26			34.17	8.22	34	100	255	Average
5220	106.04	97.65			34.17	8.22	34	100	255	Peak
5386	42.62	33.94	54	-11.38	34.31	8.41	34.04	100	255	Average
5386	57.45	48.77	74	-16.55	34.31	8.41	34.04	100	255	Peak

Remarks:

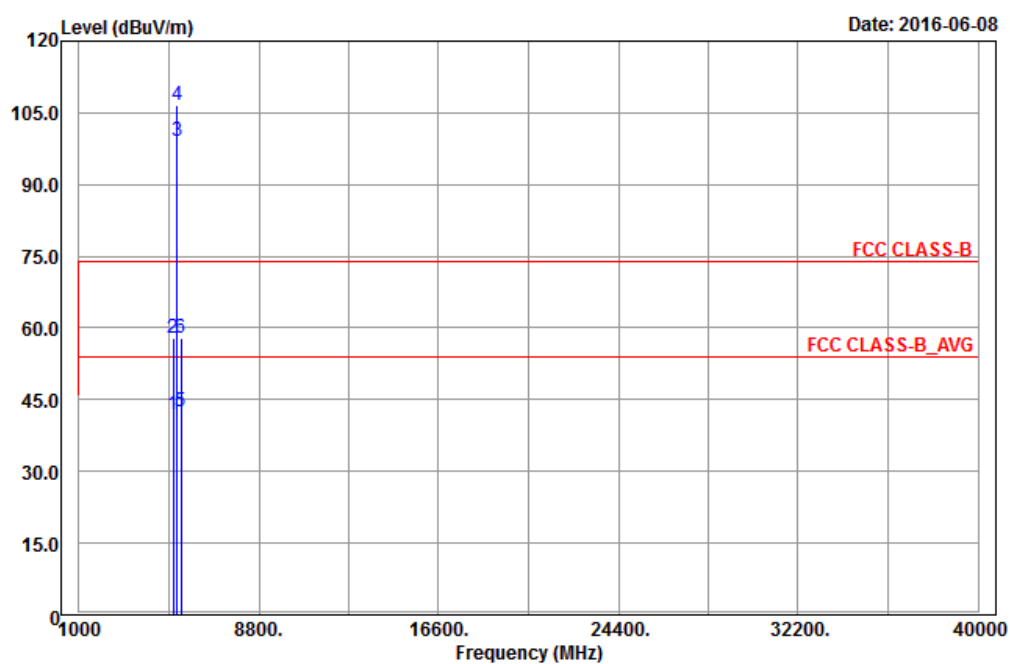
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5220 MHz: Fundamental Frequency

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

Horizontal



Vertical



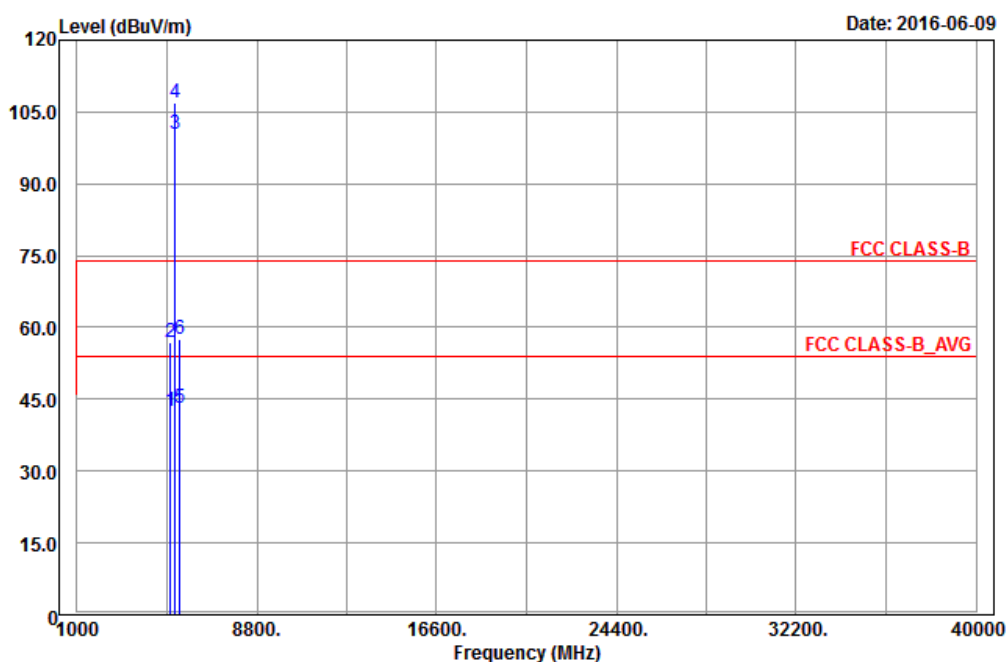
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5136	42.27	34.02	54	-11.73	34.11	8.13	33.99	200	274	Average
5136	56.52	48.27	74	-17.48	34.11	8.13	33.99	200	274	Peak
5240	96.72	88.28			34.19	8.26	34.01	200	274	Average
5240	103.64	95.2			34.19	8.26	34.01	200	274	Peak
5414	42.71	33.98	54	-11.29	34.33	8.44	34.04	200	274	Average
5414	56.77	48.04	74	-17.23	34.33	8.44	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5094	42.01	33.85	54	-11.99	34.08	8.07	33.99	100	255	Average
5094	57.86	49.7	74	-16.14	34.08	8.07	33.99	100	255	Peak
5240	99.13	90.69			34.19	8.26	34.01	100	255	Average
5240	106.56	98.12			34.19	8.26	34.01	100	255	Peak
5430	42.57	33.78	54	-11.43	34.35	8.48	34.04	100	255	Average
5430	57.75	48.96	74	-16.25	34.35	8.48	34.04	100	255	Peak

Remarks:

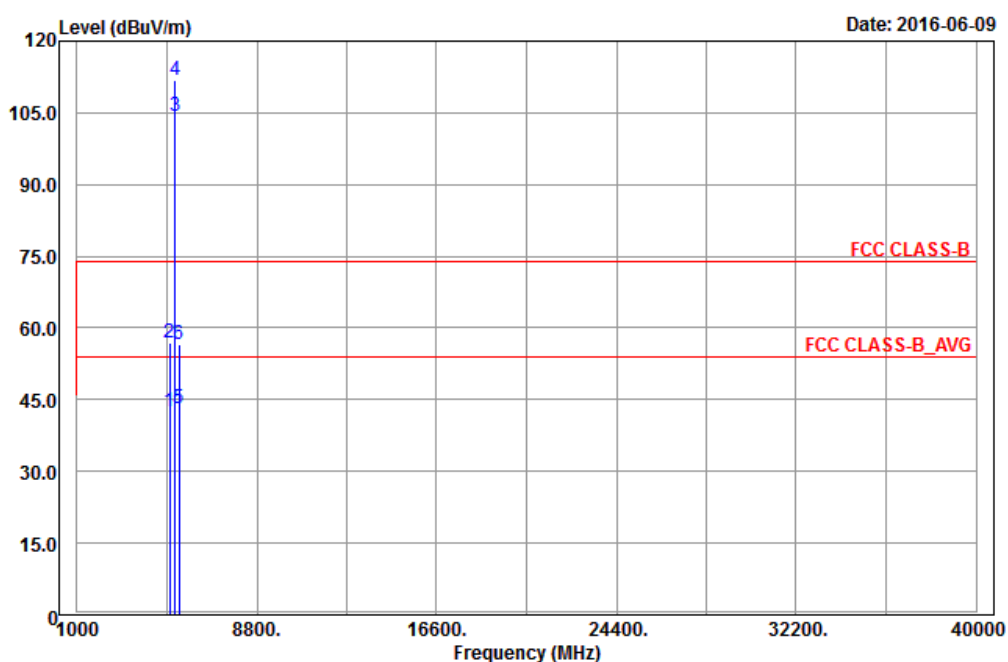
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5240 MHz: Fundamental Frequency

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5056	42.45	34.35	54	-11.55	34.05	8.03	33.98	225	284	Average
5056	57.03	48.93	74	-16.97	34.05	8.03	33.98	225	284	Peak
5260	100.25	91.79			34.21	8.26	34.01	225	284	Average
5260	107.05	98.59			34.21	8.26	34.01	225	284	Peak
5444	43.16	34.37	54	-10.84	34.35	8.48	34.04	225	284	Average
5444	57.59	48.8	74	-16.41	34.35	8.48	34.04	225	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5032	42.53	34.47	54	-11.47	34.03	8	33.97	105	244	Average
5032	57.04	48.98	74	-16.96	34.03	8	33.97	105	244	Peak
5260	104.47	96.01			34.21	8.26	34.01	105	244	Average
5260	111.73	103.27			34.21	8.26	34.01	105	244	Peak
5430	43.26	34.47	54	-10.74	34.35	8.48	34.04	105	244	Average
5430	56.67	47.88	74	-17.33	34.35	8.48	34.04	105	244	Peak

Remarks:

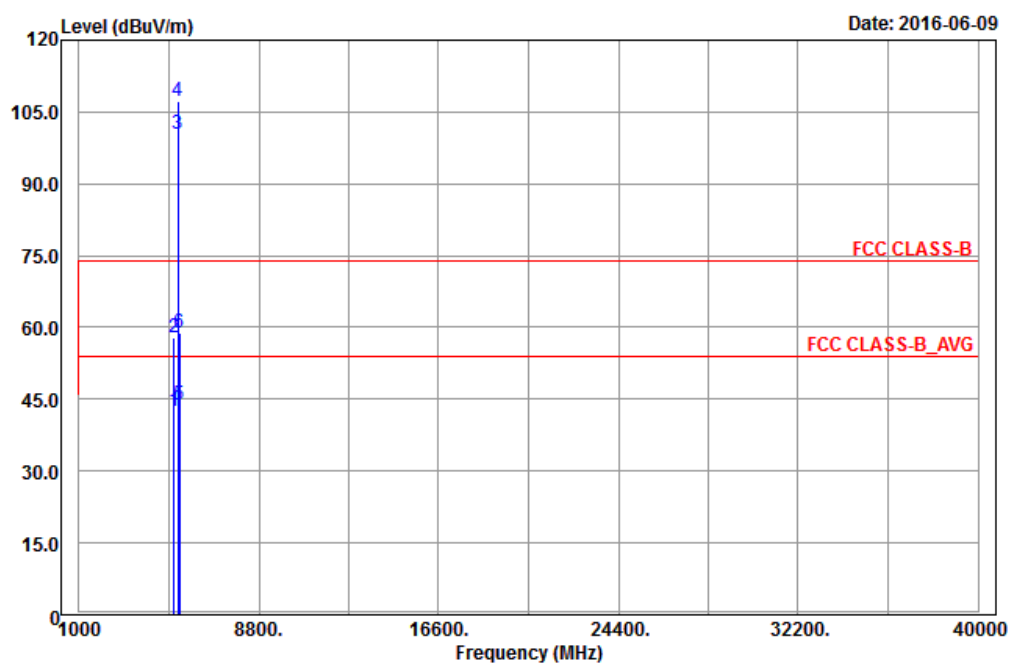
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

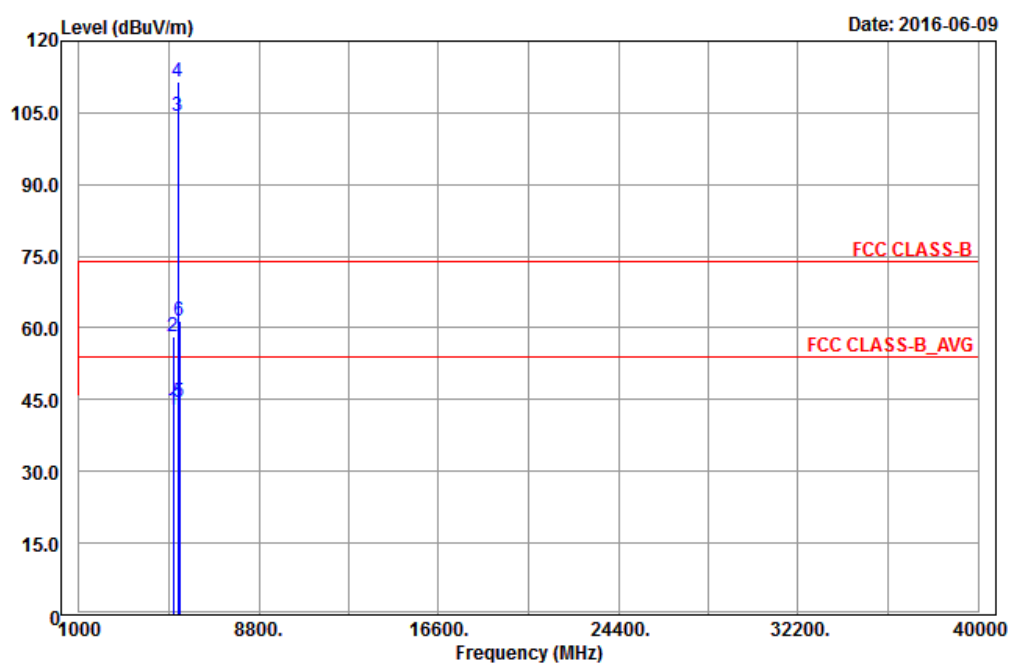
2. 5260 MHz: Fundamental Frequency

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

Horizontal



Vertical



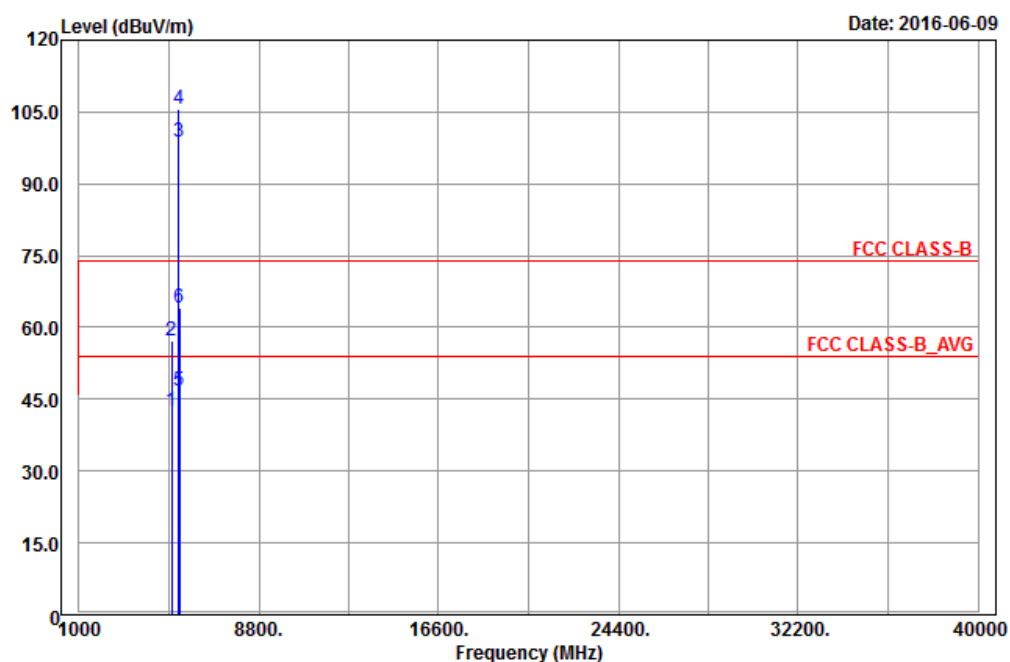
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5132	42.61	34.39	54	-11.39	34.11	8.1	33.99	225	284	Average
5132	57.76	49.54	74	-16.24	34.11	8.1	33.99	225	284	Peak
5300	100.31	91.77			34.24	8.32	34.02	225	284	Average
5300	107.33	98.79			34.24	8.32	34.02	225	284	Peak
5350	43.78	35.15	54	-10.22	34.28	8.38	34.03	225	284	Average
5350	58.9	50.27	74	-15.1	34.28	8.38	34.03	225	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5094	42.7	34.54	54	-11.3	34.08	8.07	33.99	105	244	Average
5094	58.19	50.03	74	-15.81	34.08	8.07	33.99	105	244	Peak
5300	104.16	95.62			34.24	8.32	34.02	105	244	Average
5300	111.37	102.83			34.24	8.32	34.02	105	244	Peak
5350	44.46	35.83	54	-9.54	34.28	8.38	34.03	105	244	Average
5350	61.33	52.7	74	-12.67	34.28	8.38	34.03	105	244	Peak

Remarks:

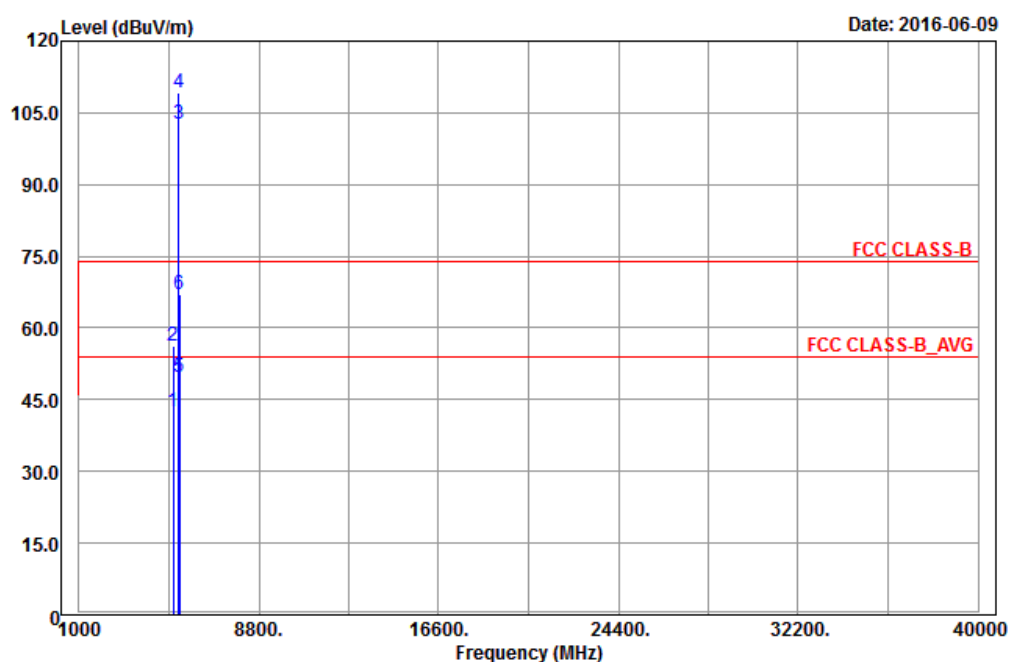
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5300 MHz: Fundamental Frequency

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

Horizontal



Vertical



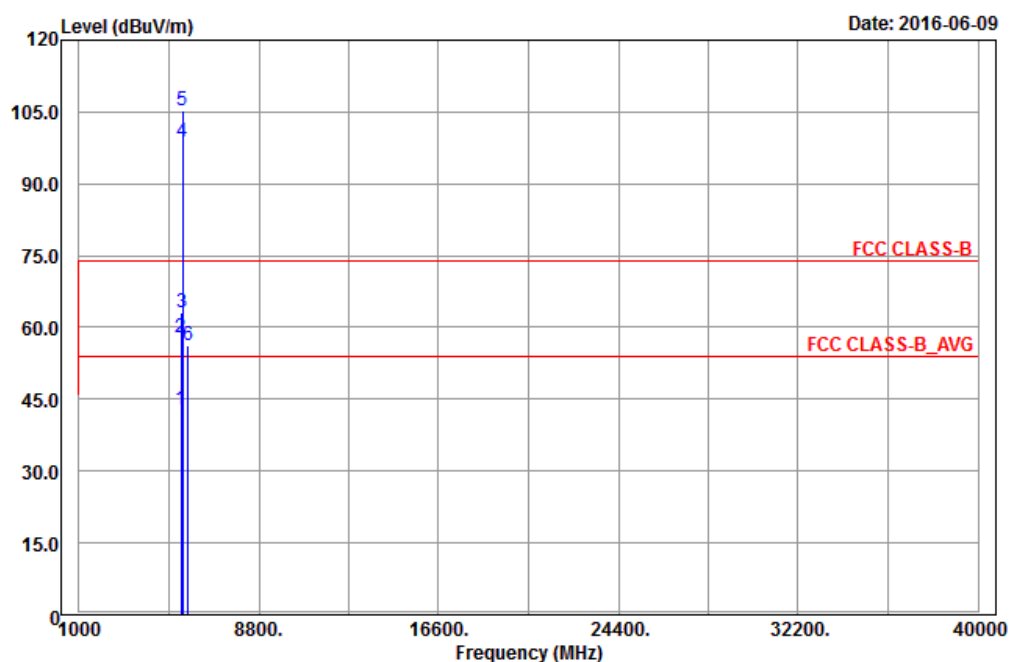
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5026	42.39	34.36	54	-11.61	34.03	7.97	33.97	225	284	Average
5026	57.22	49.19	74	-16.78	34.03	7.97	33.97	225	284	Peak
5320	98.79	90.21			34.25	8.35	34.02	225	284	Average
5320	105.6	97.02			34.25	8.35	34.02	225	284	Peak
5350	46.66	38.03	54	-7.34	34.28	8.38	34.03	226	284	Average
5350	64.18	55.55	74	-9.82	34.28	8.38	34.03	226	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5096	42.51	34.35	54	-11.49	34.08	8.07	33.99	105	244	Average
5096	56.32	48.16	74	-17.68	34.08	8.07	33.99	105	244	Peak
5320	102.75	94.17			34.25	8.35	34.02	105	244	Average
5320	109.11	100.53			34.25	8.35	34.02	105	244	Peak
5350	49.76	41.13	54	-4.24	34.28	8.38	34.03	104	256	Average
5350	67.12	58.49	74	-6.88	34.28	8.38	34.03	104	256	Peak

Remarks:

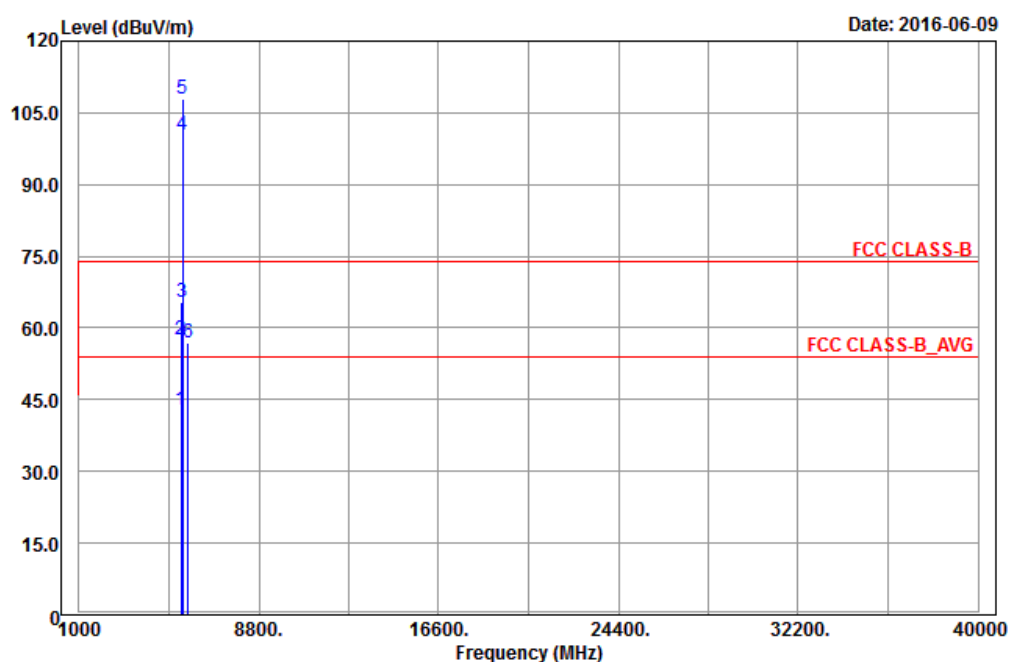
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5320 MHz: Fundamental Frequency

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

Horizontal



Vertical



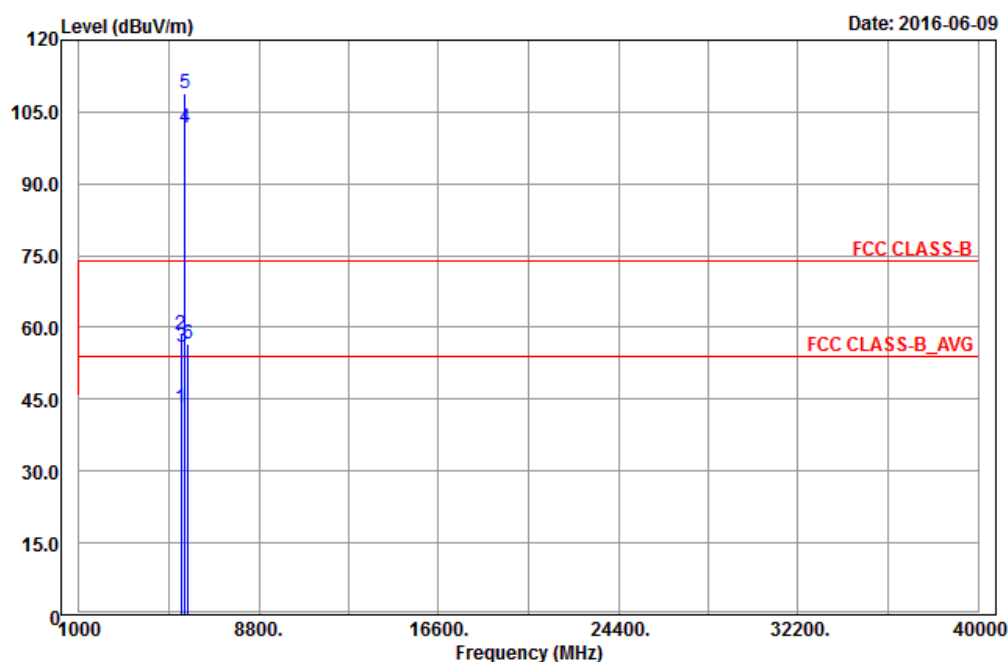
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5442	42.87	34.08	54	-11.13	34.35	8.48	34.04	194	254	Average
5442	57.89	49.1	74	-16.11	34.35	8.48	34.04	194	254	Peak
5470	63	54.17	68.2	-5.2	34.37	8.51	34.05	194	254	Peak
5500	98.87	89.95			34.4	8.57	34.05	194	254	Average
5500	105.14	96.22			34.4	8.57	34.05	194	254	Peak
5725	56.32	47.16	68.2	-11.88	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5424	42.76	33.99	54	-11.24	34.33	8.48	34.04	128	261	Average
5424	57.53	48.76	74	-16.47	34.33	8.48	34.04	128	261	Peak
5470	65.5	56.67	68.2	-2.7	34.37	8.51	34.05	129	261	Peak
5500	100.47	91.55			34.4	8.57	34.05	128	261	Average
5500	107.88	98.96			34.4	8.57	34.05	128	261	Peak
5725	56.81	47.65	68.2	-11.39	34.62	8.65	34.11	128	261	Peak

Remarks:

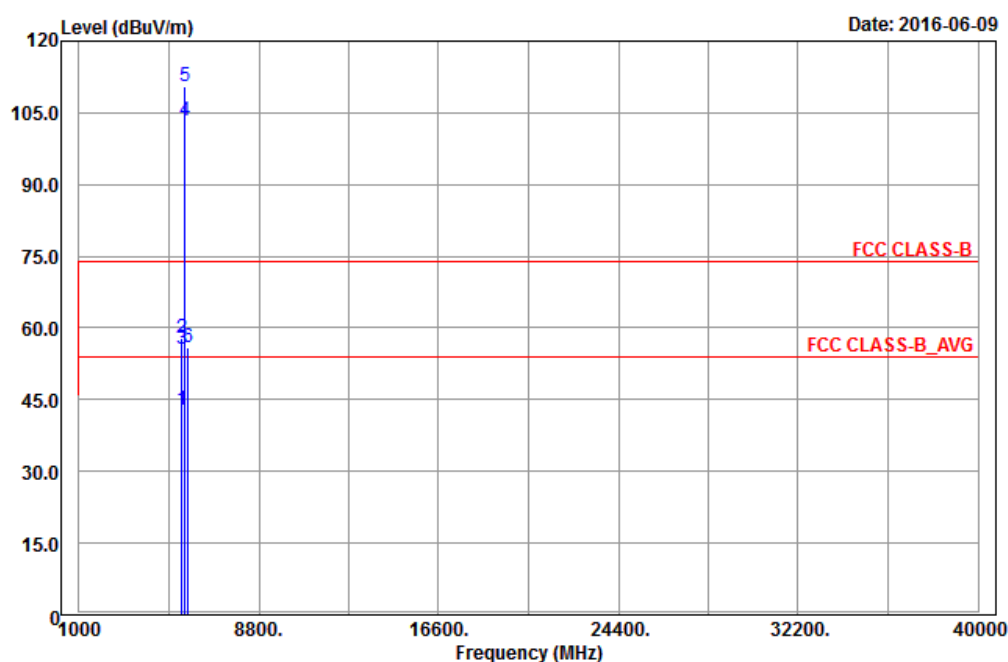
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



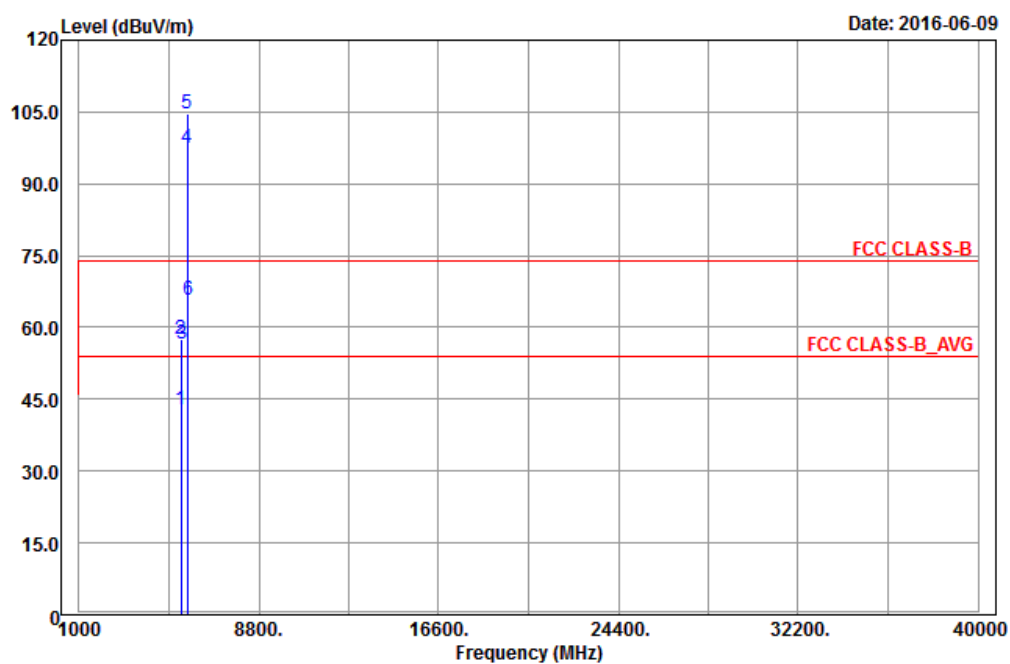
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5412	43.03	34.3	54	-10.97	34.33	8.44	34.04	194	254	Average
5412	58.45	49.72	74	-15.55	34.33	8.44	34.04	194	254	Peak
5470	55.99	47.16	68.2	-12.21	34.37	8.51	34.05	194	254	Peak
5580	101.61	92.62			34.47	8.6	34.08	194	254	Average
5580	108.91	99.92			34.47	8.6	34.08	194	254	Peak
5725	56.64	47.48	68.2	-11.56	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5450	42.81	33.99	54	-11.19	34.36	8.51	34.05	128	261	Average
5450	57.99	49.17	74	-16.01	34.36	8.51	34.05	128	261	Peak
5470	55.58	46.75	68.2	-12.62	34.37	8.51	34.05	128	261	Peak
5580	103.17	94.18			34.47	8.6	34.08	128	261	Average
5580	110.63	101.64			34.47	8.6	34.08	128	261	Peak
5725	55.98	46.82	68.2	-12.22	34.62	8.65	34.11	128	261	Peak

Remarks:

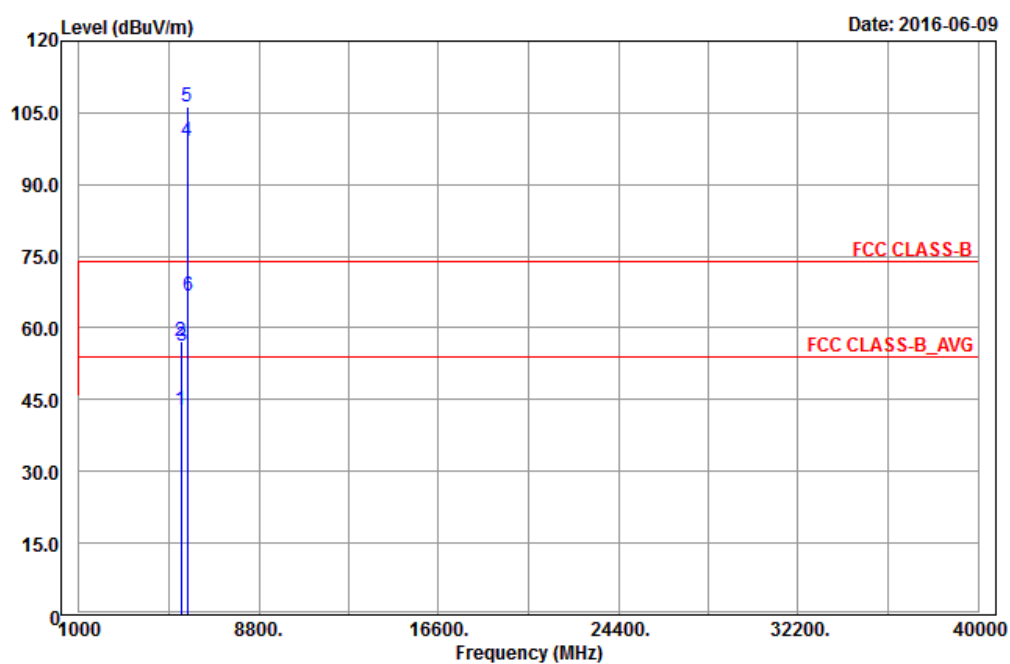
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



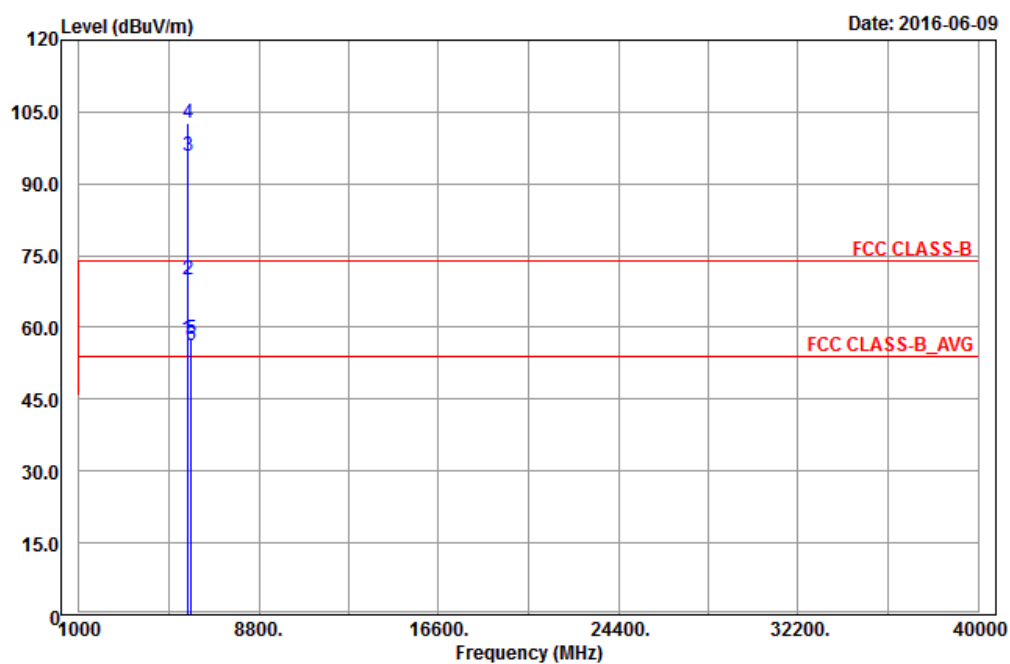
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5414	42.84	34.11	54	-11.16	34.33	8.44	34.04	194	254	Average
5414	57.69	48.96	74	-16.31	34.33	8.44	34.04	194	254	Peak
5470	56.44	47.61	68.2	-11.76	34.37	8.51	34.05	194	254	Peak
5700	97.38	88.25			34.59	8.64	34.1	194	254	Average
5700	104.54	95.41			34.59	8.64	34.1	194	254	Peak
5725	65.73	56.57	68.2	-2.47	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5416	42.72	33.99	54	-11.28	34.33	8.44	34.04	128	261	Average
5416	57.21	48.48	74	-16.79	34.33	8.44	34.04	128	261	Peak
5470	56.15	47.32	68.2	-12.05	34.37	8.51	34.05	128	261	Peak
5700	99.03	89.9			34.59	8.64	34.1	128	261	Average
5700	106.32	97.19			34.59	8.64	34.1	128	261	Peak
5725	66.75	57.59	68.2	-1.45	34.62	8.65	34.11	115	261	Peak

Remarks:

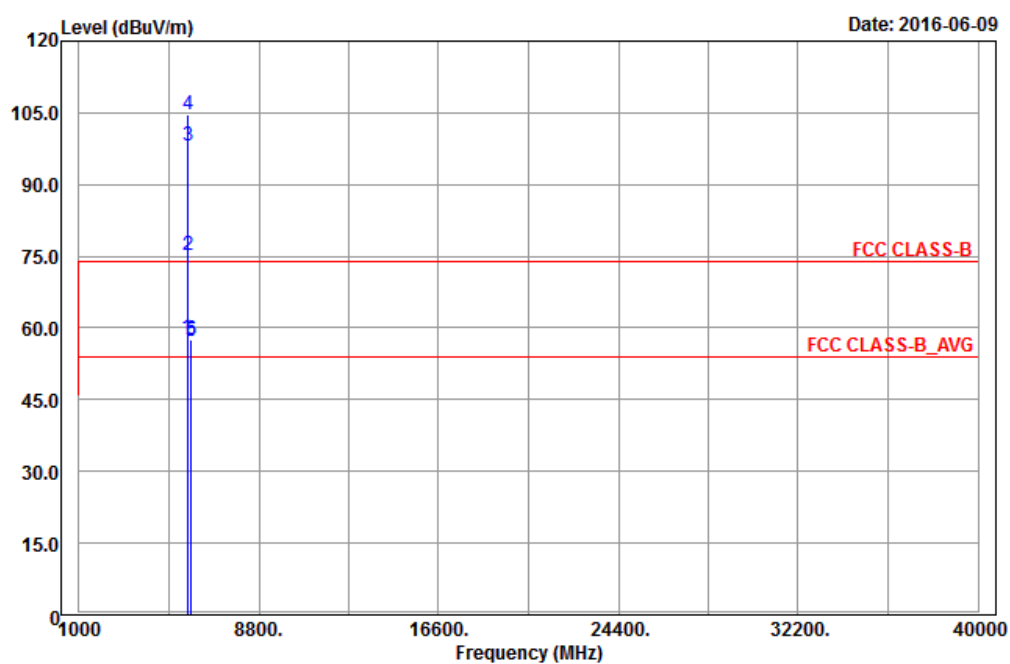
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



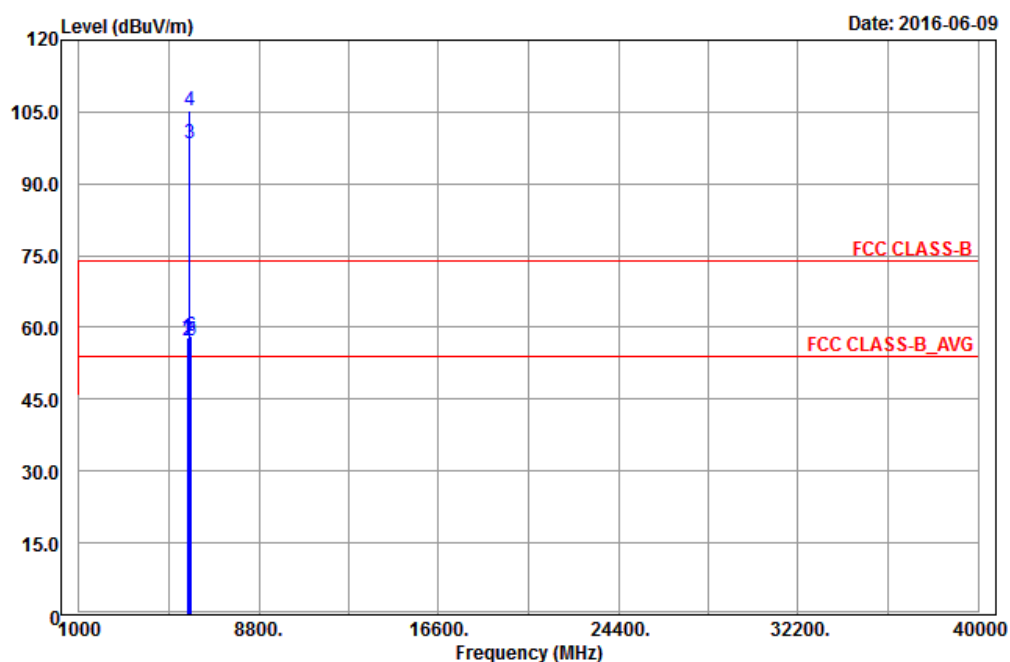
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	57.56	48.41	68.2	-10.64	34.61	8.65	34.11	220	282	Peak
*5724	69.86	60.7	78.2	-8.34	34.62	8.65	34.11	225	288	Peak
5745	95.93	86.74			34.64	8.66	34.11	220	282	Average
5745	102.63	93.44			34.64	8.66	34.11	220	282	Peak
*5852	57.51	48.21	78.2	-20.69	34.74	8.7	34.14	220	282	Peak
*5864	56.3	46.97	68.2	-11.9	34.76	8.71	34.14	220	282	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	57.99	48.84	68.2	-10.21	34.61	8.65	34.11	100	281	Peak
*5722	75.34	66.18	78.2	-2.86	34.62	8.65	34.11	210	229	Peak
5745	97.95	88.76			34.64	8.66	34.11	100	281	Average
5745	104.6	95.41			34.64	8.66	34.11	100	281	Peak
*5860	57.06	47.74	78.2	-21.14	34.76	8.7	34.14	100	281	Peak
*5862	57.62	48.29	68.2	-10.58	34.76	8.71	34.14	100	281	Peak

Remarks:

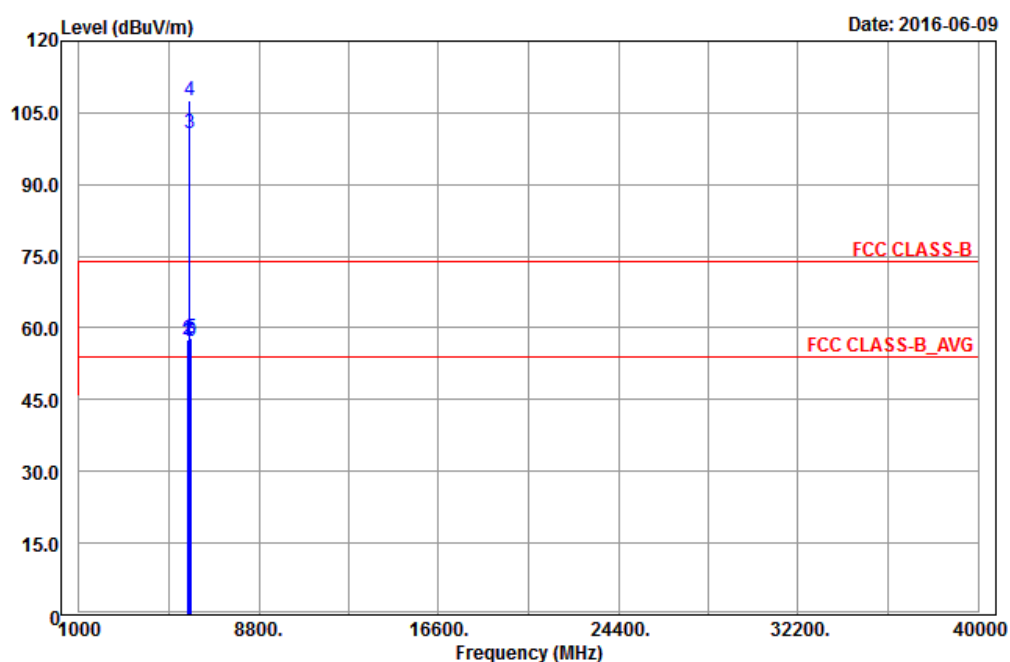
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



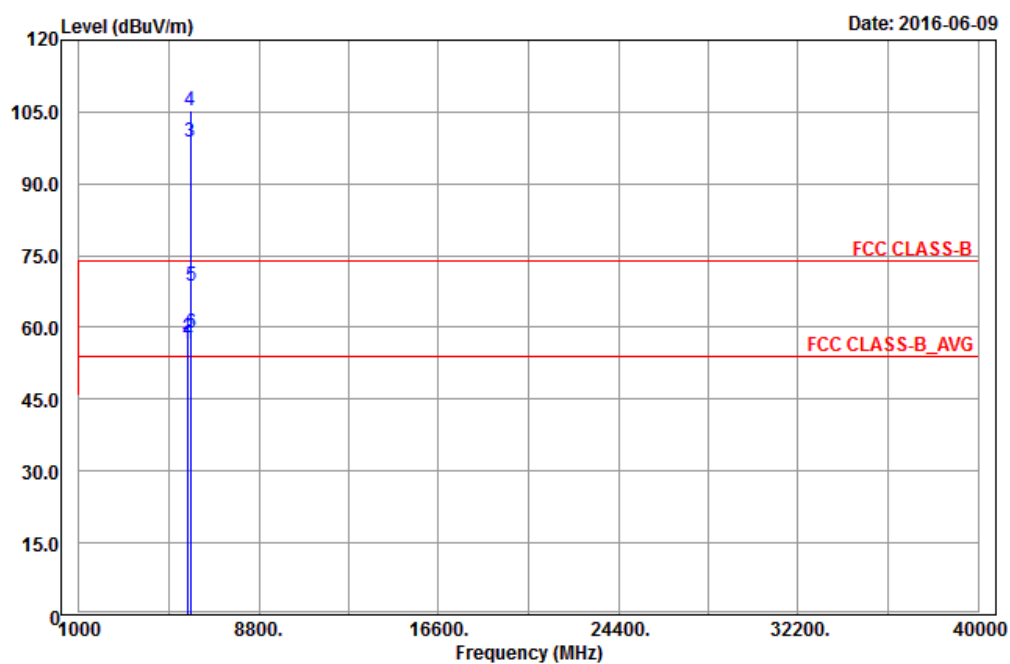
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	57.97	48.82	68.2	-10.23	34.61	8.65	34.11	220	282	Peak
*5722	57.31	48.15	78.2	-20.89	34.62	8.65	34.11	220	282	Peak
5785	98.41	89.18			34.68	8.68	34.13	220	282	Average
5785	105.44	96.21			34.68	8.68	34.13	220	282	Peak
*5852	57.19	47.89	78.2	-21.01	34.74	8.7	34.14	220	282	Peak
*5864	58.09	48.76	68.2	-10.11	34.76	8.71	34.14	220	282	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	57.09	47.94	68.2	-11.11	34.61	8.65	34.11	100	281	Peak
*5716	57.7	48.55	78.2	-20.5	34.61	8.65	34.11	100	281	Peak
5785	100.72	91.49			34.68	8.68	34.13	100	281	Average
5785	107.67	98.44			34.68	8.68	34.13	100	281	Peak
*5858	57.78	48.46	78.2	-20.42	34.76	8.7	34.14	100	281	Peak
*5870	57.36	48.03	68.2	-10.84	34.76	8.71	34.14	100	281	Peak

Remarks:

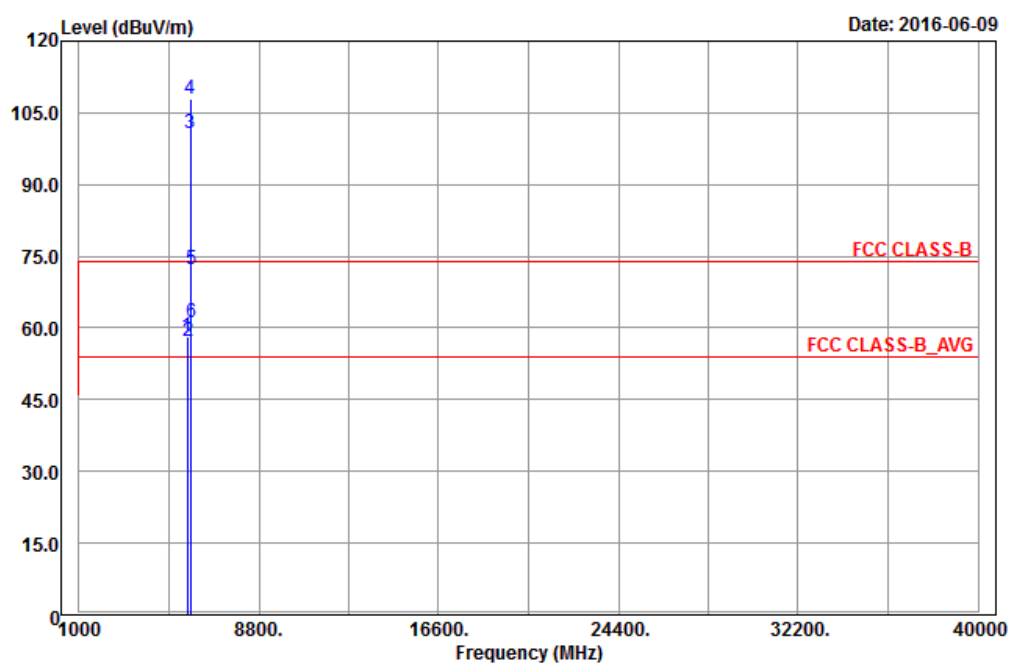
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	56.45	47.3	68.2	-11.75	34.61	8.65	34.11	220	282	Peak
*5720	57.79	48.63	78.2	-20.41	34.62	8.65	34.11	220	282	Peak
5825	98.69	89.4			34.73	8.69	34.13	220	282	Average
5825	105.22	95.93			34.73	8.69	34.13	220	282	Peak
*5852	68.52	59.22	78.2	-9.68	34.74	8.7	34.14	227	282	Peak
*5862	58.8	49.47	68.2	-9.4	34.76	8.71	34.14	220	282	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5706	58.14	48.99	68.2	-10.06	34.61	8.65	34.11	100	281	Peak
*5716	57.17	48.02	78.2	-21.03	34.61	8.65	34.11	100	281	Peak
5825	100.74	91.45			34.73	8.69	34.13	100	281	Average
5825	107.81	98.52			34.73	8.69	34.13	100	281	Peak
*5852	72.28	62.98	78.2	-5.92	34.74	8.7	34.14	100	268	Peak
*5864	61	51.67	68.2	-7.2	34.76	8.71	34.14	100	268	Peak

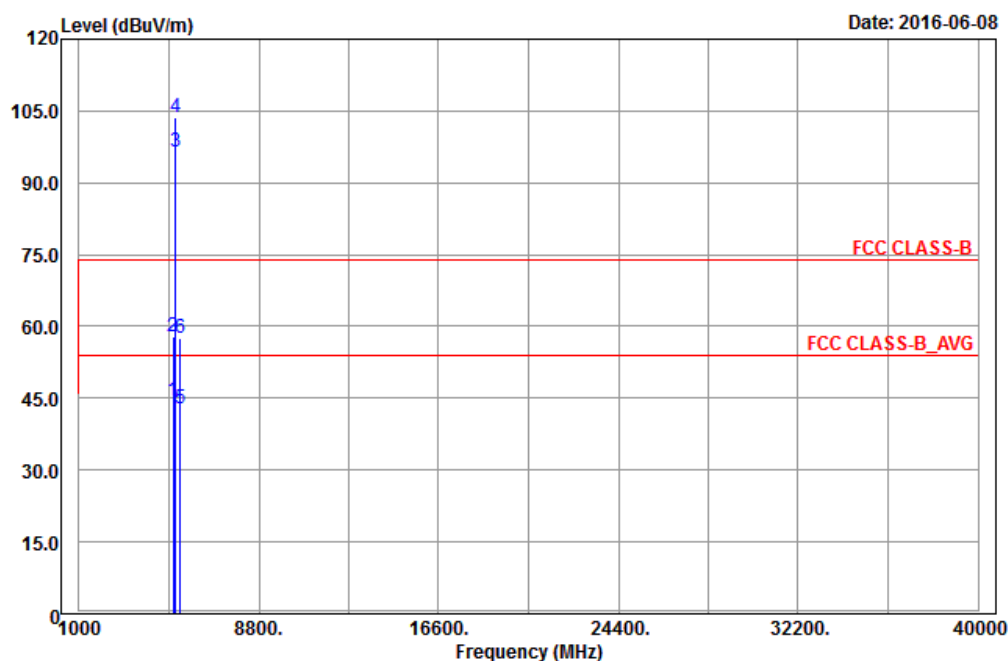
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5825 MHz: Fundamental Frequency
3. *: Out of Restricted Band

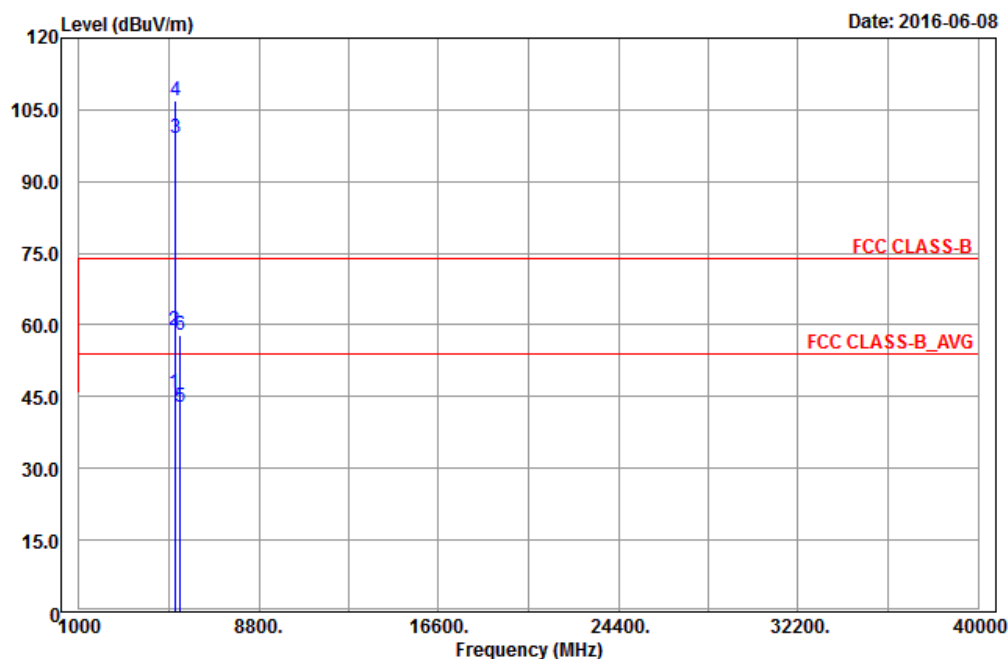
802.11n (HT20)

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

Horizontal



Vertical



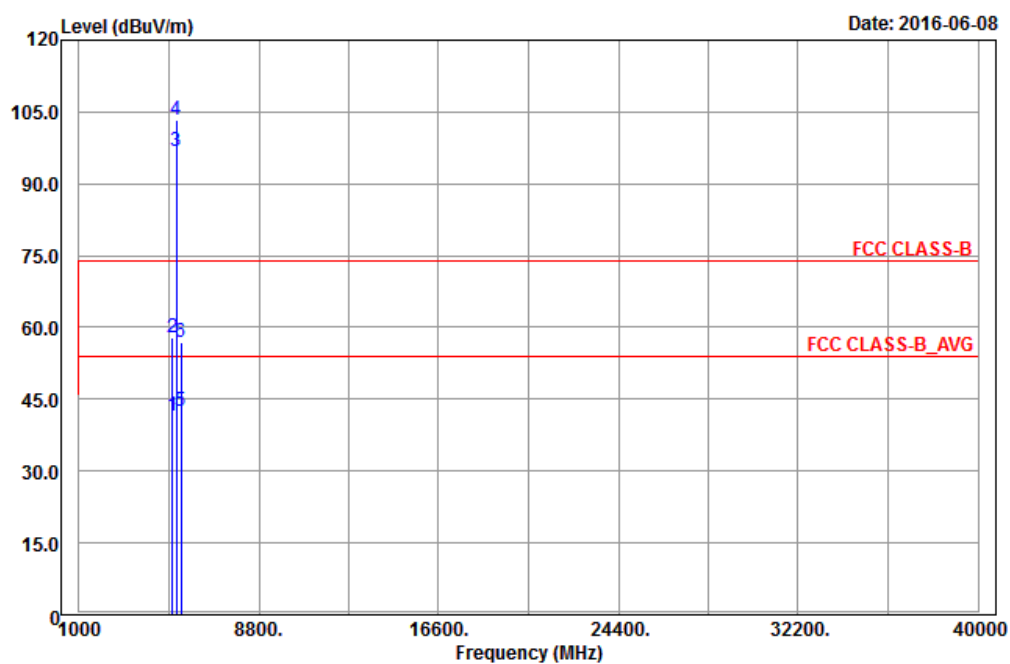
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5086	44.58	36.42	54	-9.42	34.07	8.07	33.98	200	274	Average
5086	57.93	49.77	74	-16.07	34.07	8.07	33.98	200	274	Peak
5180	96.57	88.26			34.15	8.16	34	200	274	Average
5180	103.66	95.35			34.15	8.16	34	200	274	Peak
5388	42.77	34.09	54	-11.23	34.31	8.41	34.04	200	274	Average
5388	57.55	48.87	74	-16.45	34.31	8.41	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.75	37.5	54	-8.25	34.12	8.13	34	100	255	Average
5150	58.72	50.47	74	-15.28	34.12	8.13	34	100	255	Peak
5180	99.09	90.78			34.15	8.16	34	100	255	Average
5180	106.77	98.46			34.15	8.16	34	100	255	Peak
5394	42.78	34.07	54	-11.22	34.31	8.44	34.04	100	255	Average
5394	57.78	49.07	74	-16.22	34.31	8.44	34.04	100	255	Peak

Remarks:

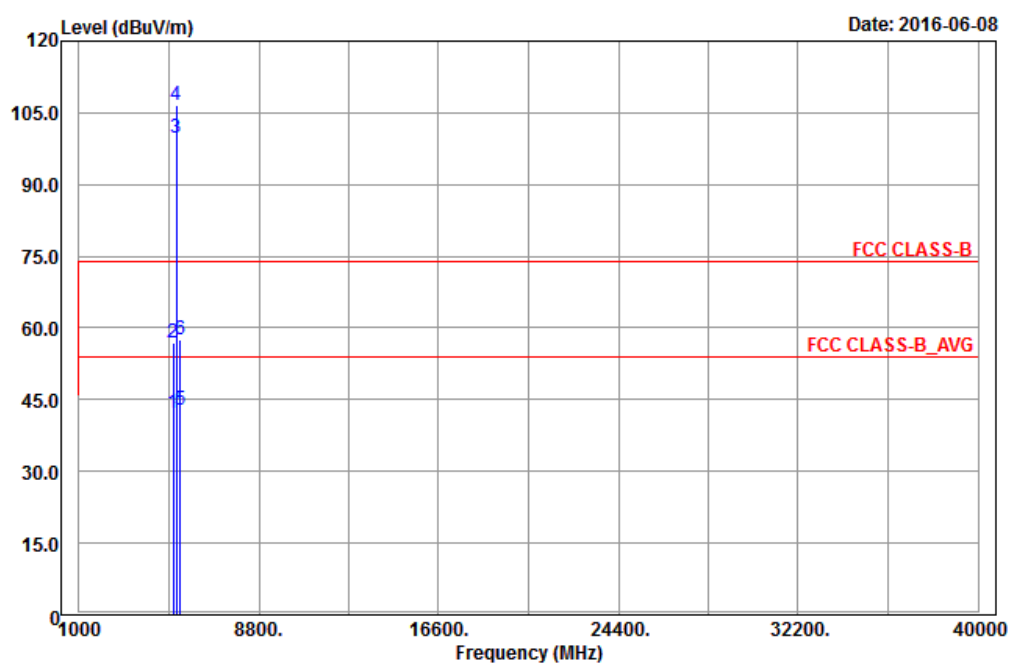
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5180 MHz: Fundamental Frequency

EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Charles Hsiao

Horizontal



Vertical



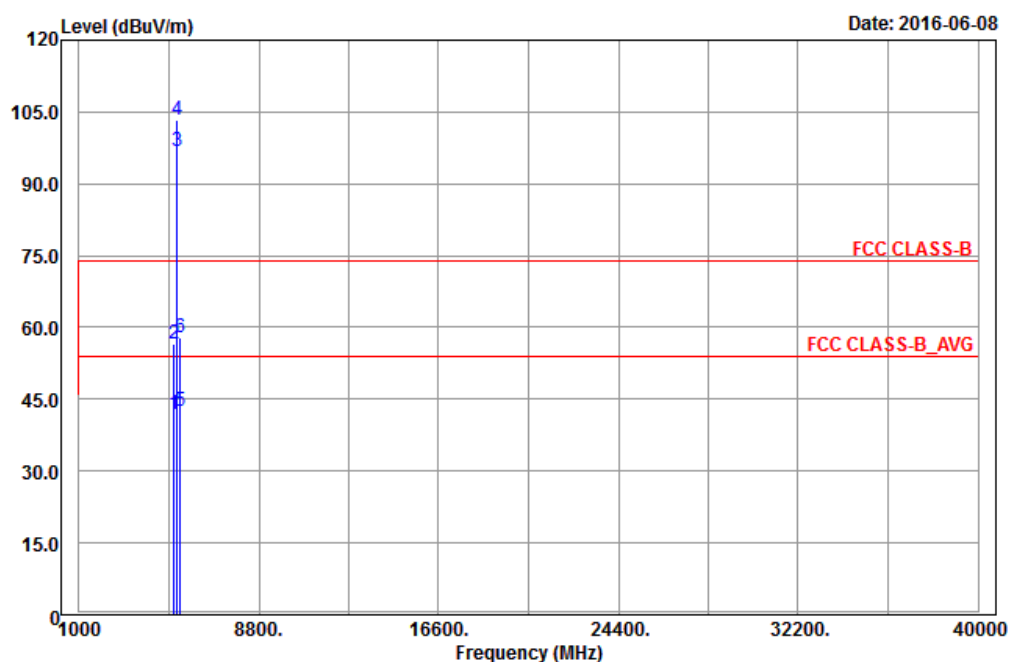
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5046	41.68	33.62	54	-12.32	34.04	8	33.98	200	274	Average
5046	57.74	49.68	74	-16.26	34.04	8	33.98	200	274	Peak
5220	96.76	88.37			34.17	8.22	34	200	274	Average
5220	103.38	94.99			34.17	8.22	34	200	274	Peak
5426	42.64	33.87	54	-11.36	34.33	8.48	34.04	200	274	Average
5426	57.04	48.27	74	-16.96	34.33	8.48	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5074	42.06	33.94	54	-11.94	34.07	8.03	33.98	100	255	Average
5074	56.93	48.81	74	-17.07	34.07	8.03	33.98	100	255	Peak
5220	99.69	91.3			34.17	8.22	34	100	255	Average
5220	106.51	98.12			34.17	8.22	34	100	255	Peak
5378	42.71	34.03	54	-11.29	34.31	8.41	34.04	100	255	Average
5378	57.62	48.94	74	-16.38	34.31	8.41	34.04	100	255	Peak

Remarks:

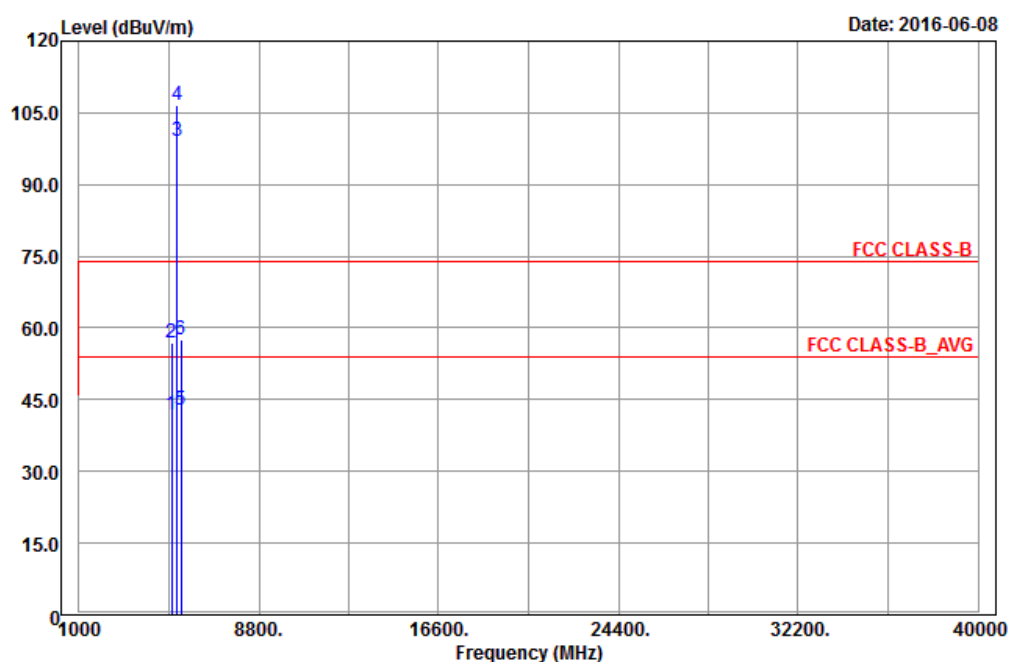
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5220 MHz: Fundamental Frequency

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

Horizontal



Vertical



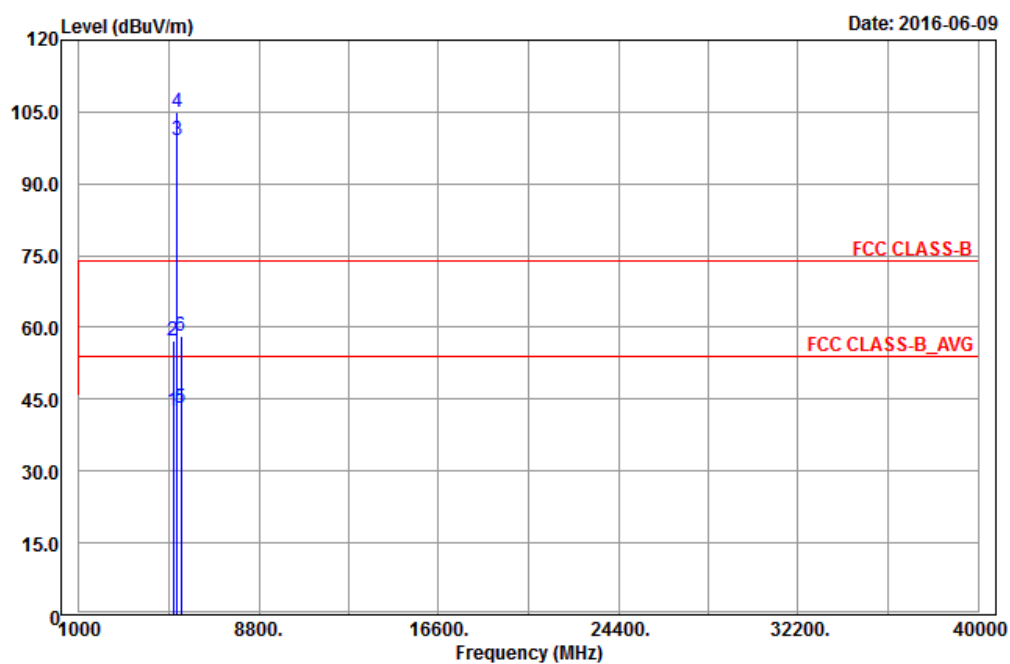
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5106	41.86	33.69	54	-12.14	34.09	8.07	33.99	200	274	Average
5106	56.41	48.24	74	-17.59	34.09	8.07	33.99	200	274	Peak
5240	96.69	88.25			34.19	8.26	34.01	200	274	Average
5240	103.33	94.89			34.19	8.26	34.01	200	274	Peak
5382	42.44	33.76	54	-11.56	34.31	8.41	34.04	200	274	Average
5382	57.83	49.15	74	-16.17	34.31	8.41	34.04	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5004	41.91	33.9	54	-12.09	34.01	7.97	33.97	100	255	Average
5004	57.03	49.02	74	-16.97	34.01	7.97	33.97	100	255	Peak
5240	99.14	90.7			34.19	8.26	34.01	100	255	Average
5240	106.6	98.16			34.19	8.26	34.01	100	255	Peak
5440	42.9	34.11	54	-11.1	34.35	8.48	34.04	100	255	Average
5440	57.6	48.81	74	-16.4	34.35	8.48	34.04	100	255	Peak

Remarks:

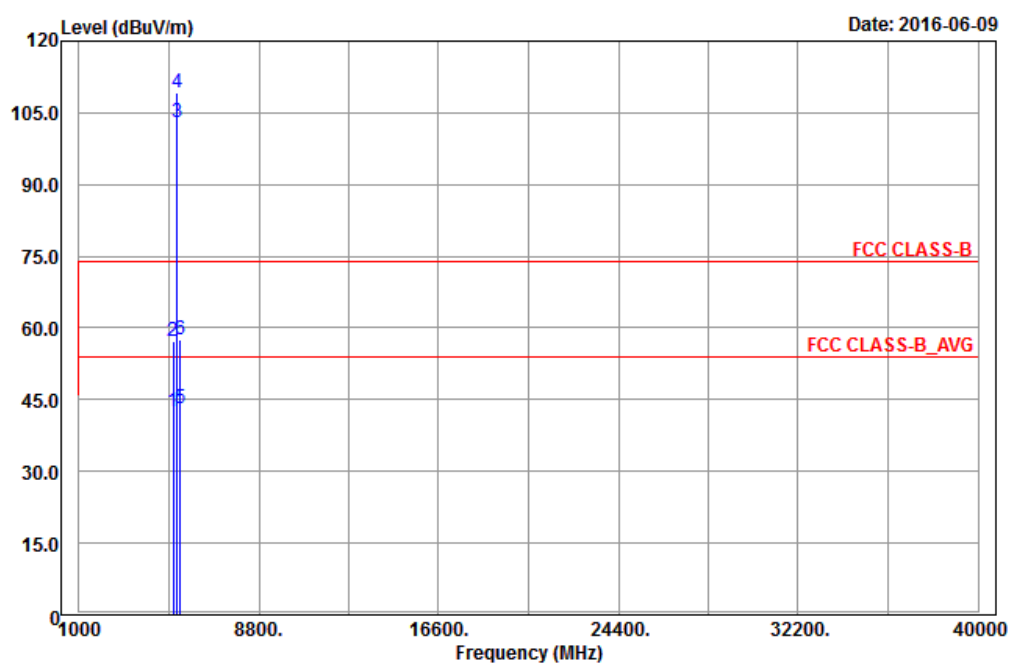
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5240 MHz: Fundamental Frequency

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

Horizontal



Vertical



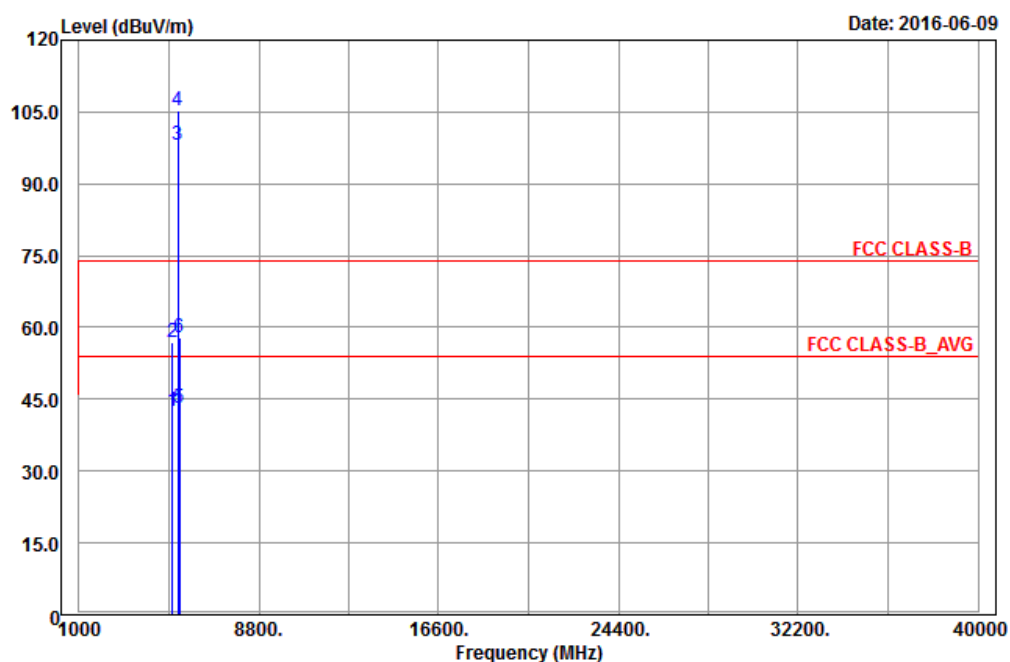
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5092	42.63	34.46	54	-11.37	34.08	8.07	33.98	225	284	Average
5092	57.32	49.15	74	-16.68	34.08	8.07	33.98	225	284	Peak
5260	98.95	90.49			34.21	8.26	34.01	225	284	Average
5260	105	96.54			34.21	8.26	34.01	225	284	Peak
5442	43.24	34.45	54	-10.76	34.35	8.48	34.04	225	284	Average
5442	58.23	49.44	74	-15.77	34.35	8.48	34.04	225	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5092	42.54	34.37	54	-11.46	34.08	8.07	33.98	105	244	Average
5092	57.26	49.09	74	-16.74	34.08	8.07	33.98	105	244	Peak
5260	102.86	94.4			34.21	8.26	34.01	105	244	Average
5260	109.34	100.88			34.21	8.26	34.01	105	244	Peak
5400	43	34.28	54	-11	34.32	8.44	34.04	105	244	Average
5400	57.53	48.81	74	-16.47	34.32	8.44	34.04	105	244	Peak

Remarks:

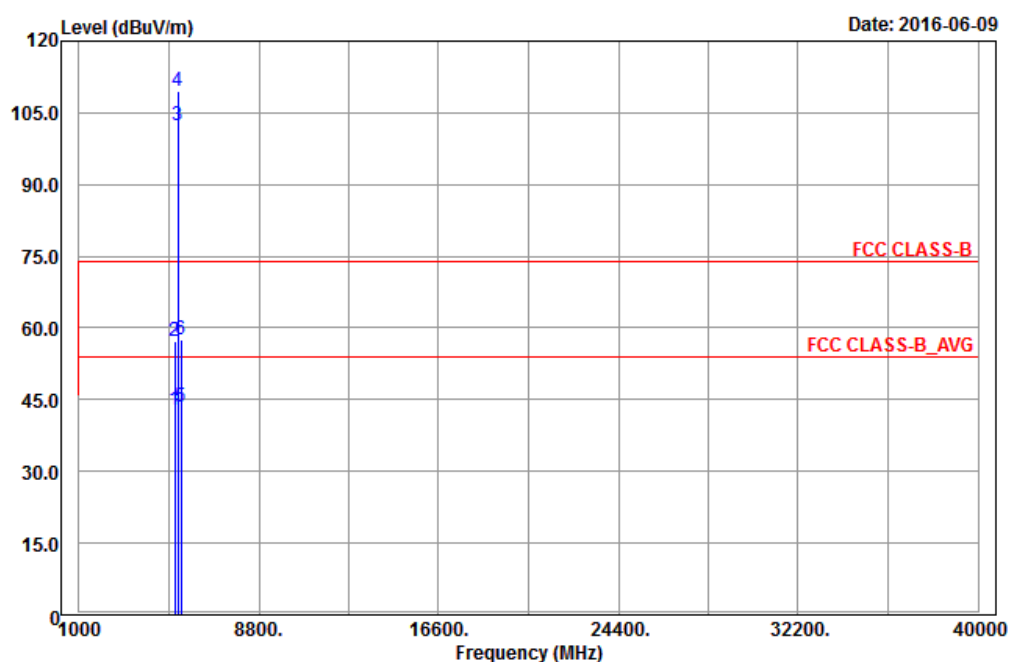
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5260 MHz: Fundamental Frequency

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

Horizontal



Vertical



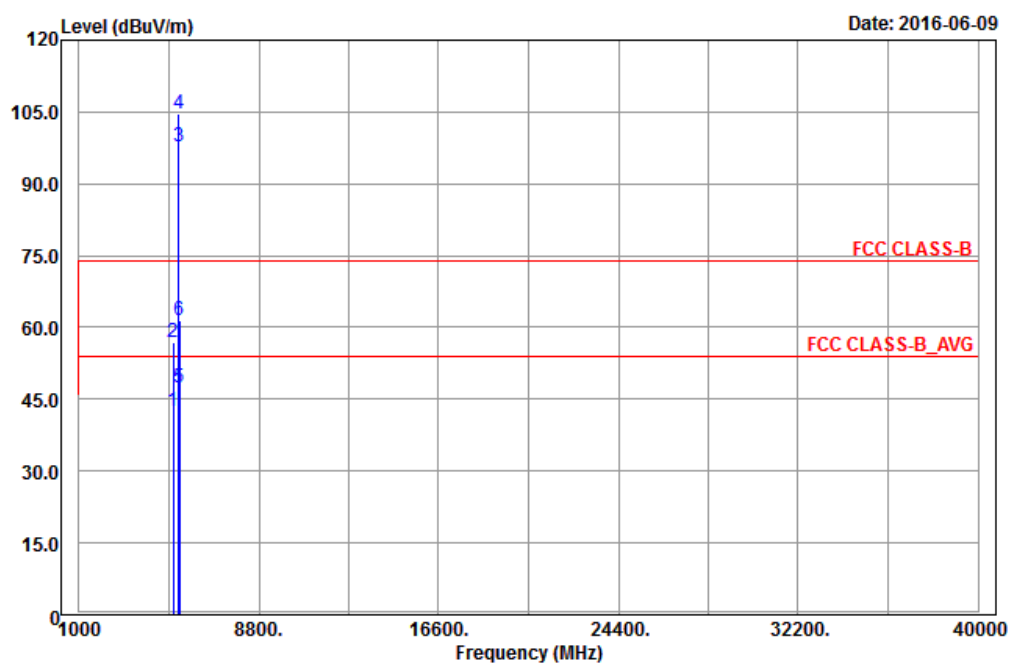
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5064	42.55	34.45	54	-11.45	34.05	8.03	33.98	225	284	Average
5064	56.97	48.87	74	-17.03	34.05	8.03	33.98	225	284	Peak
5300	98.25	89.71			34.24	8.32	34.02	225	284	Average
5300	105.35	96.81			34.24	8.32	34.02	225	284	Peak
5356	43.19	34.56	54	-10.81	34.28	8.38	34.03	225	284	Average
5356	57.98	49.35	74	-16.02	34.28	8.38	34.03	225	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5144	42.73	34.48	54	-11.27	34.12	8.13	34	105	244	Average
5144	57.18	48.93	74	-16.82	34.12	8.13	34	105	244	Peak
5300	102.5	93.96			34.24	8.32	34.02	105	244	Average
5300	109.69	101.15			34.24	8.32	34.02	105	244	Peak
5438	43.37	34.58	54	-10.63	34.35	8.48	34.04	105	244	Average
5438	57.61	48.82	74	-16.39	34.35	8.48	34.04	105	244	Peak

Remarks:

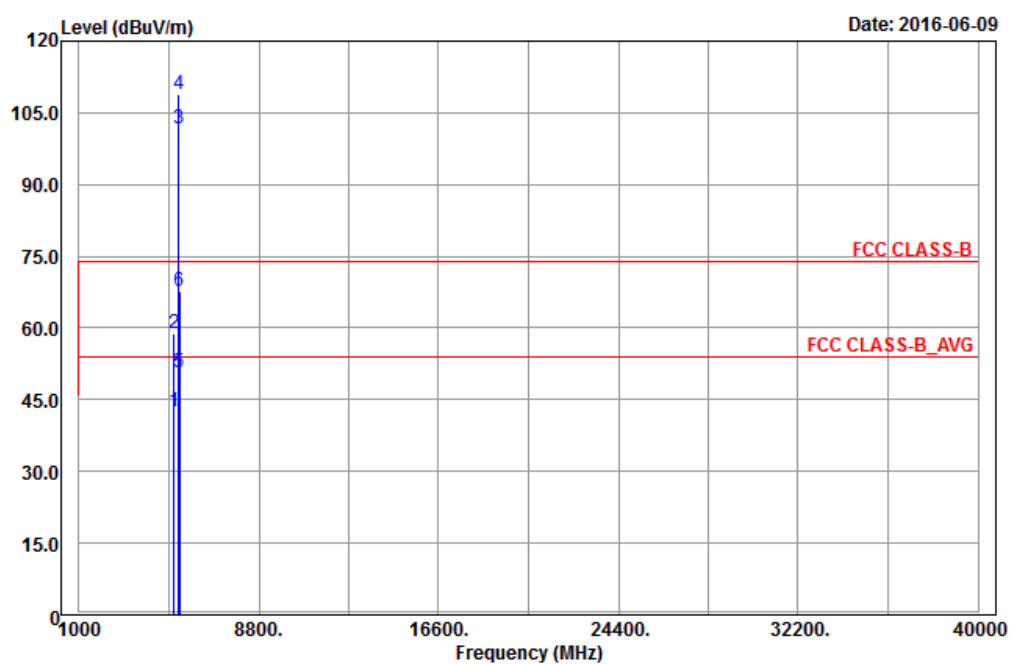
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5300 MHz: Fundamental Frequency

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

Horizontal



Vertical



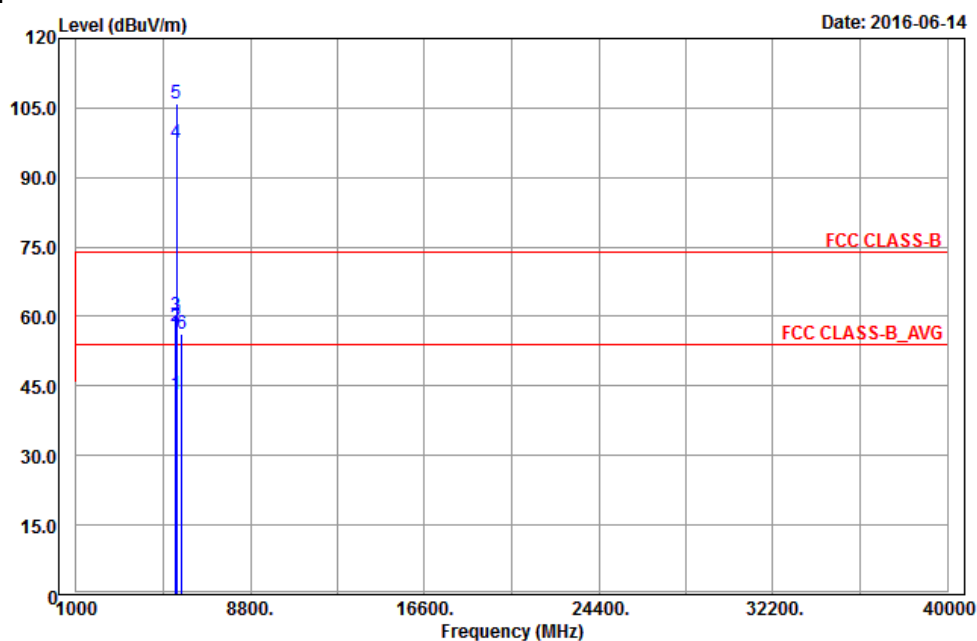
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5074	42.47	34.35	54	-11.53	34.07	8.03	33.98	225	284	Average
5074	56.88	48.76	74	-17.12	34.07	8.03	33.98	225	284	Peak
5320	97.6	89.02			34.25	8.35	34.02	225	284	Average
5320	104.53	95.95			34.25	8.35	34.02	225	284	Peak
5350	47.25	38.62	54	-6.75	34.28	8.38	34.03	235	284	Average
5350	61.43	52.8	74	-12.57	34.28	8.38	34.03	235	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5106	42.61	34.44	54	-11.39	34.09	8.07	33.99	105	244	Average
5106	58.81	50.64	74	-15.19	34.09	8.07	33.99	105	244	Peak
5320	101.59	93.01			34.25	8.35	34.02	105	244	Average
5320	108.79	100.21			34.25	8.35	34.02	105	244	Peak
5350	50.66	42.03	54	-3.34	34.28	8.38	34.03	116	244	Average
5350	67.53	58.9	74	-6.47	34.28	8.38	34.03	116	244	Peak

Remarks:

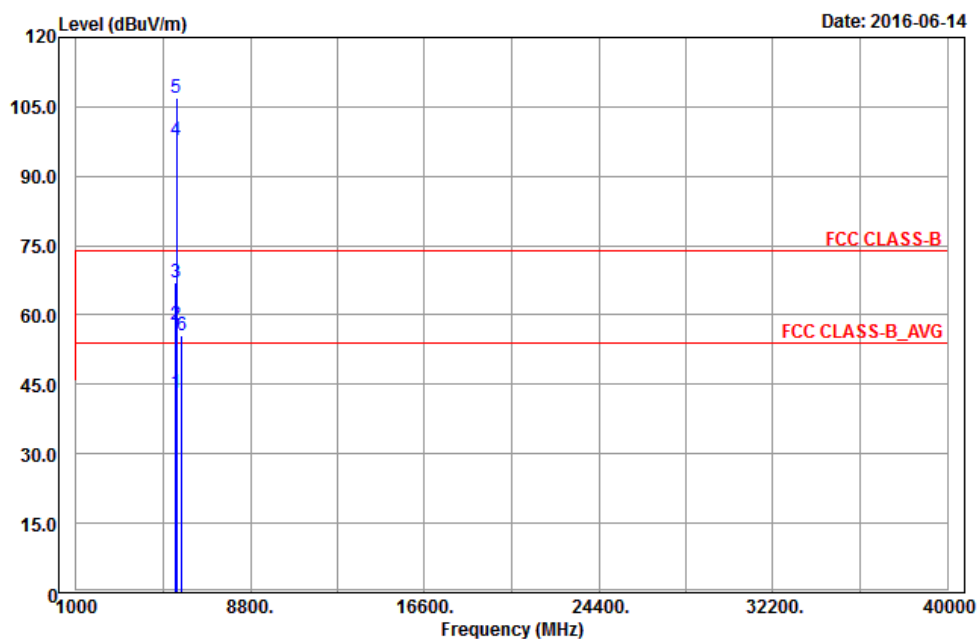
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5320 MHz: Fundamental Frequency

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

Horizontal



Vertical



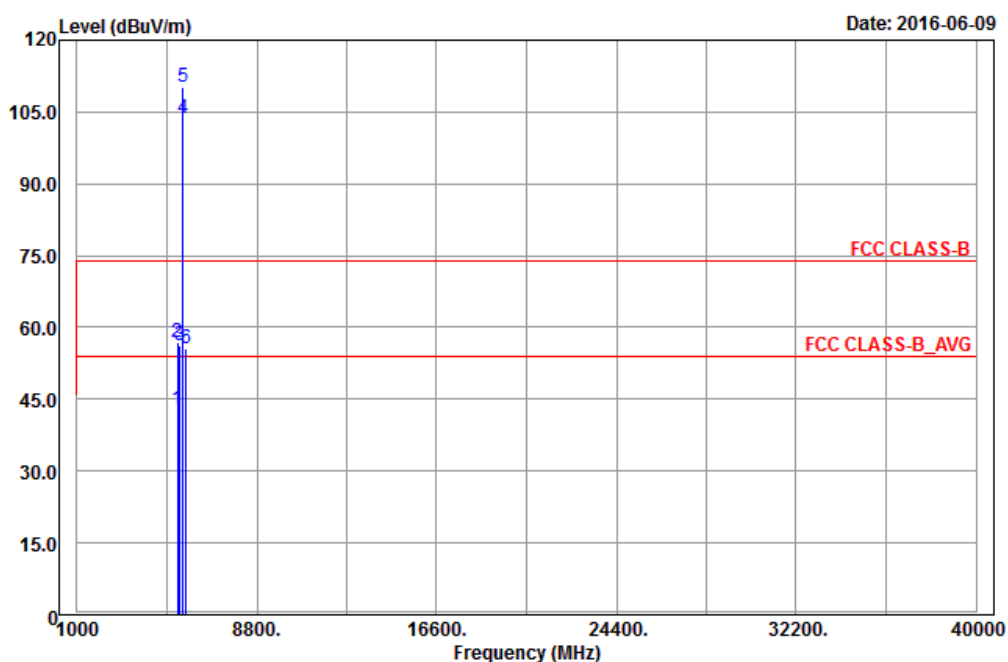
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458	43.21	34.39	54	-10.79	34.36	8.51	34.05	198	10	Average
5458	57.9	49.08	74	-16.1	34.36	8.51	34.05	198	10	Peak
5470	60.21	51.38	68.2	-7.99	34.37	8.51	34.05	198	10	Peak
5500	97.44	88.52			34.4	8.57	34.05	198	10	Average
5500	105.93	97.01			34.4	8.57	34.05	198	10	Peak
5725	56.17	47.01	68.2	-12.03	34.62	8.65	34.11	198	10	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5444	43	34.21	54	-11	34.35	8.48	34.04	210	7	Average
5444	57.77	48.98	74	-16.23	34.35	8.48	34.04	210	7	Peak
5470	67.01	58.18	68.2	-1.19	34.37	8.51	34.05	206	51	Peak
5500	97.88	88.96			34.4	8.57	34.05	210	7	Average
5500	106.91	97.99			34.4	8.57	34.05	210	7	Peak
5725	55.67	46.51	68.2	-12.53	34.62	8.65	34.11	210	7	Peak

Remarks:

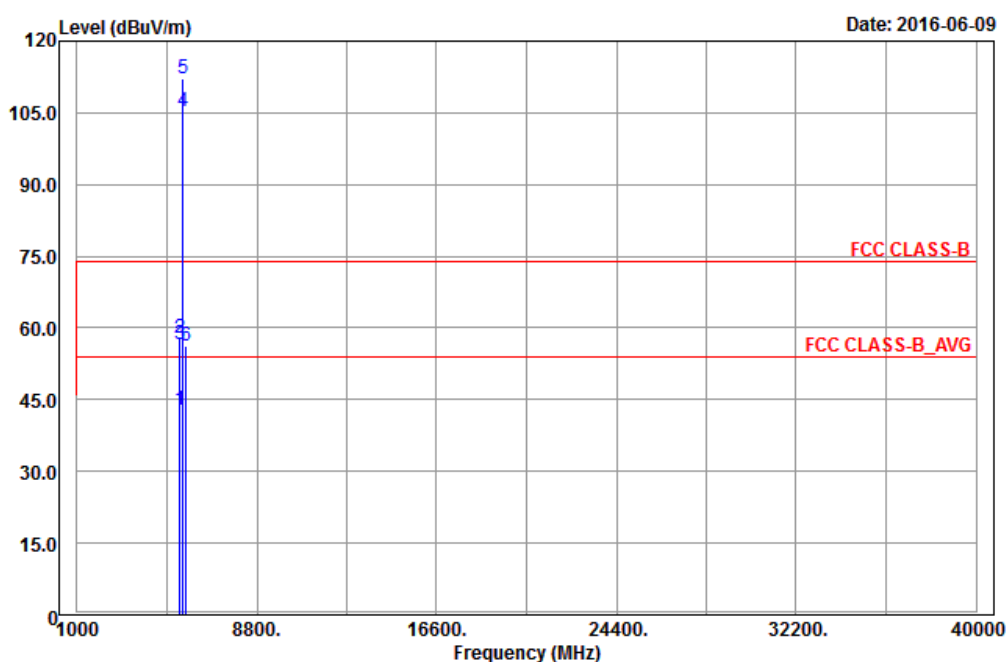
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



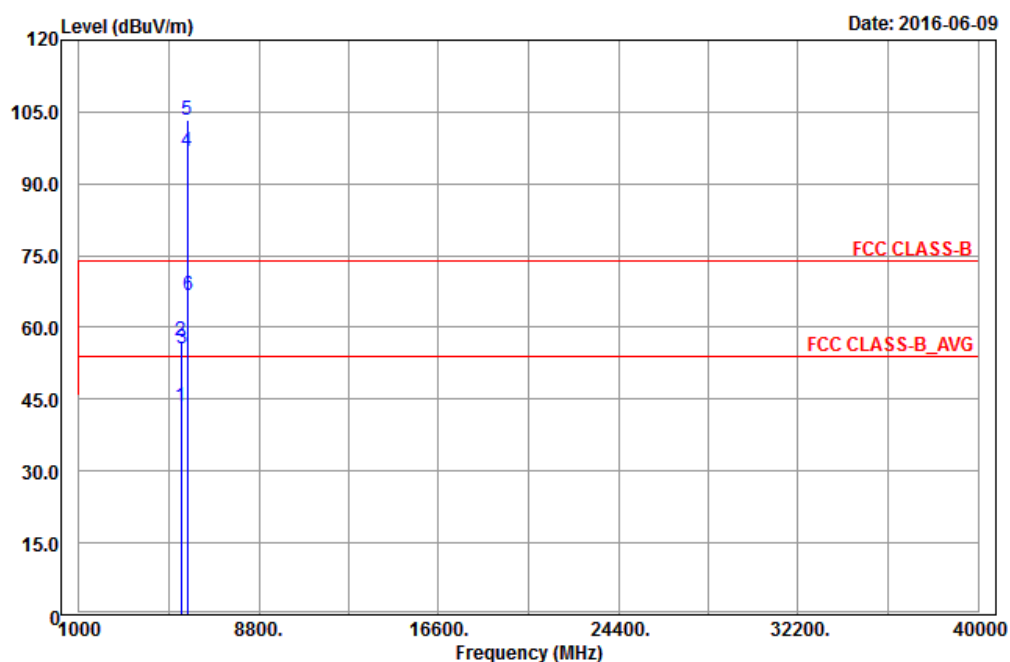
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5362	42.73	34.09	54	-11.27	34.29	8.38	34.03	194	254	Average
5362	57.05	48.41	74	-16.95	34.29	8.38	34.03	194	254	Peak
5470	56.15	47.32	68.2	-12.05	34.37	8.51	34.05	194	254	Peak
5580	103.57	94.58			34.47	8.6	34.08	194	254	Average
5580	110.08	101.09			34.47	8.6	34.08	194	254	Peak
5725	55.75	46.59	68.2	-12.45	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5446	42.7	33.87	54	-11.3	34.36	8.51	34.04	128	261	Average
5446	57.76	48.93	74	-16.24	34.36	8.51	34.04	128	261	Peak
5470	56.55	47.72	68.2	-11.65	34.37	8.51	34.05	128	261	Peak
5580	105.37	96.38			34.47	8.6	34.08	128	261	Average
5580	112.13	103.14			34.47	8.6	34.08	128	261	Peak
5725	56.19	47.03	68.2	-12.01	34.62	8.65	34.11	128	261	Peak

Remarks:

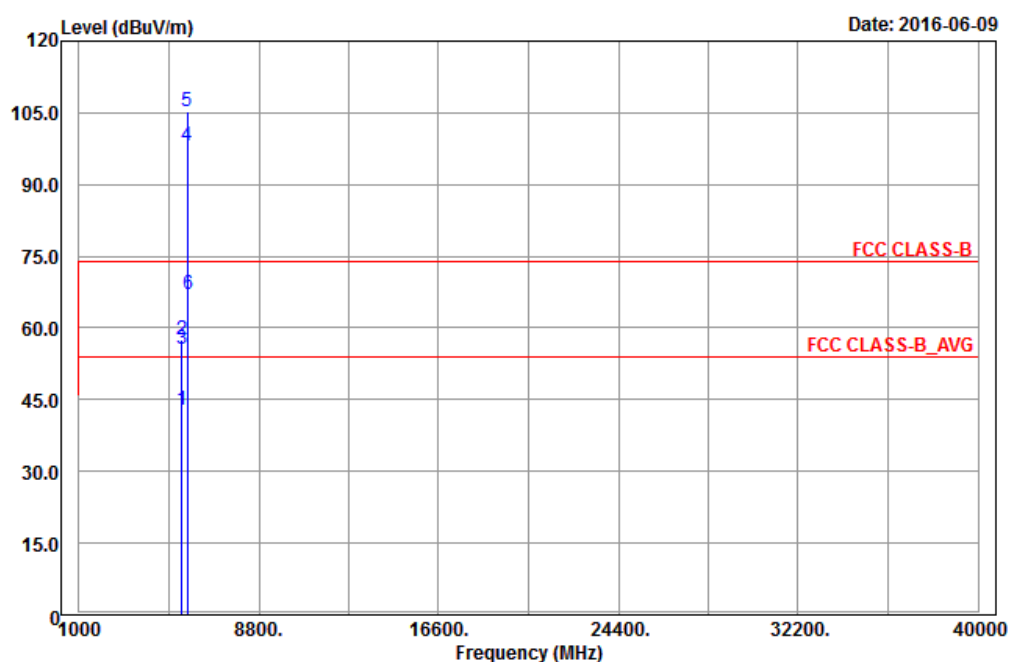
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



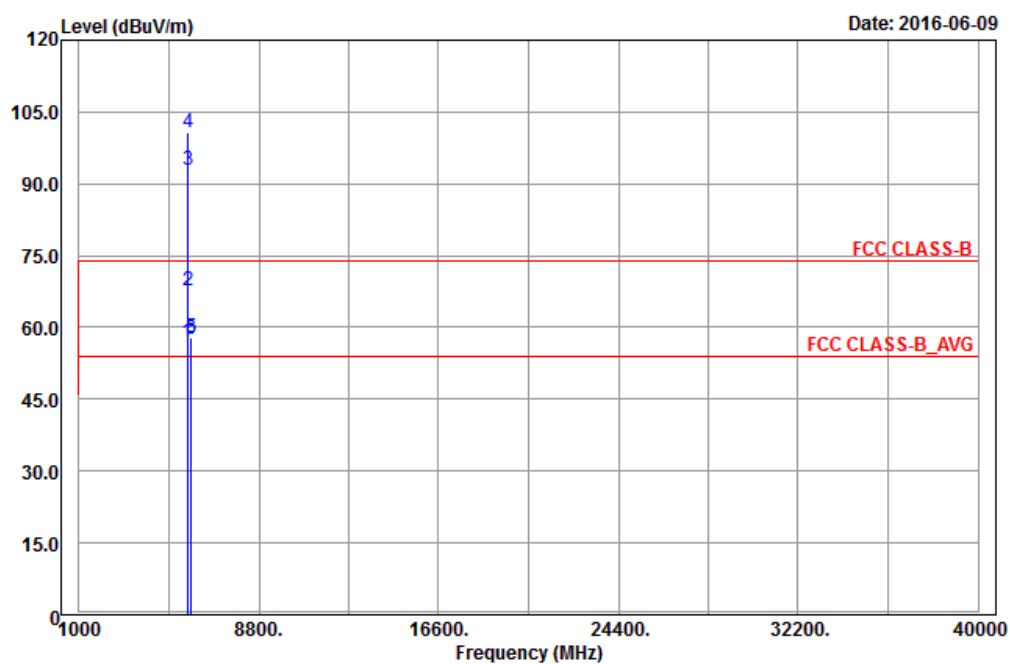
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434	43.57	34.78	54	-10.43	34.35	8.48	34.04	194	254	Average
5434	57.16	48.37	74	-16.84	34.35	8.48	34.04	194	254	Peak
5470	55.61	46.78	68.2	-12.59	34.37	8.51	34.05	194	254	Peak
5700	96.75	87.62			34.59	8.64	34.1	194	254	Average
5700	103.45	94.32			34.59	8.64	34.1	194	254	Peak
5725	66.77	57.61	68.2	-1.43	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.76	33.94	54	-11.24	34.36	8.51	34.05	128	261	Average
5460	57.43	48.61	74	-16.57	34.36	8.51	34.05	128	261	Peak
5470	55.43	46.6	68.2	-12.77	34.37	8.51	34.05	128	261	Peak
5700	98.05	88.92			34.59	8.64	34.1	128	261	Average
5700	105.21	96.08			34.59	8.64	34.1	128	261	Peak
5725	67.14	57.98	68.2	-1.06	34.62	8.65	34.11	101	261	Peak

Remarks:

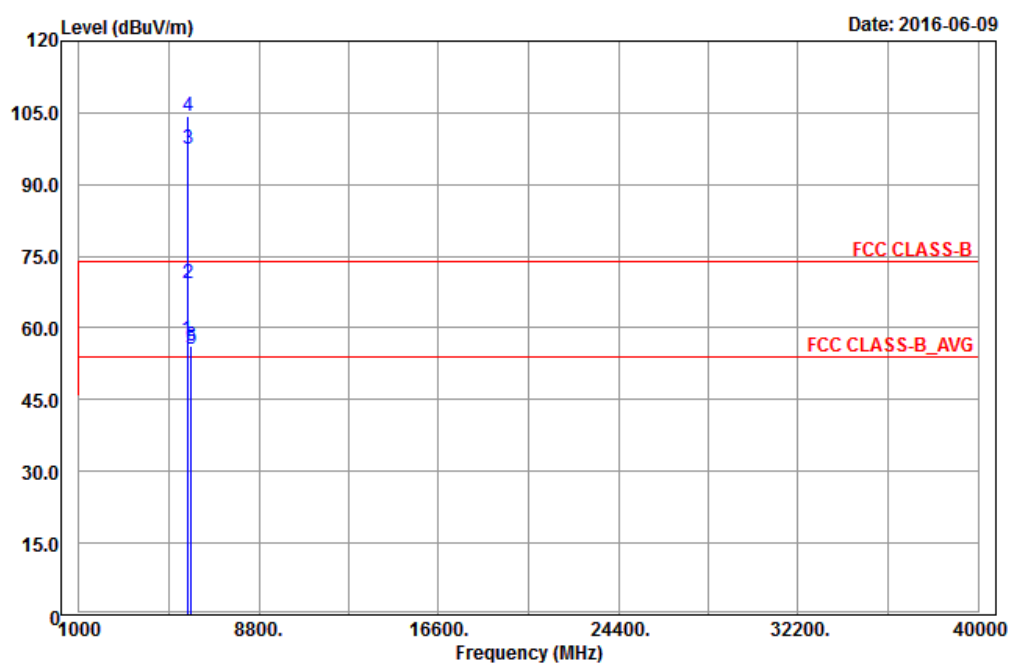
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



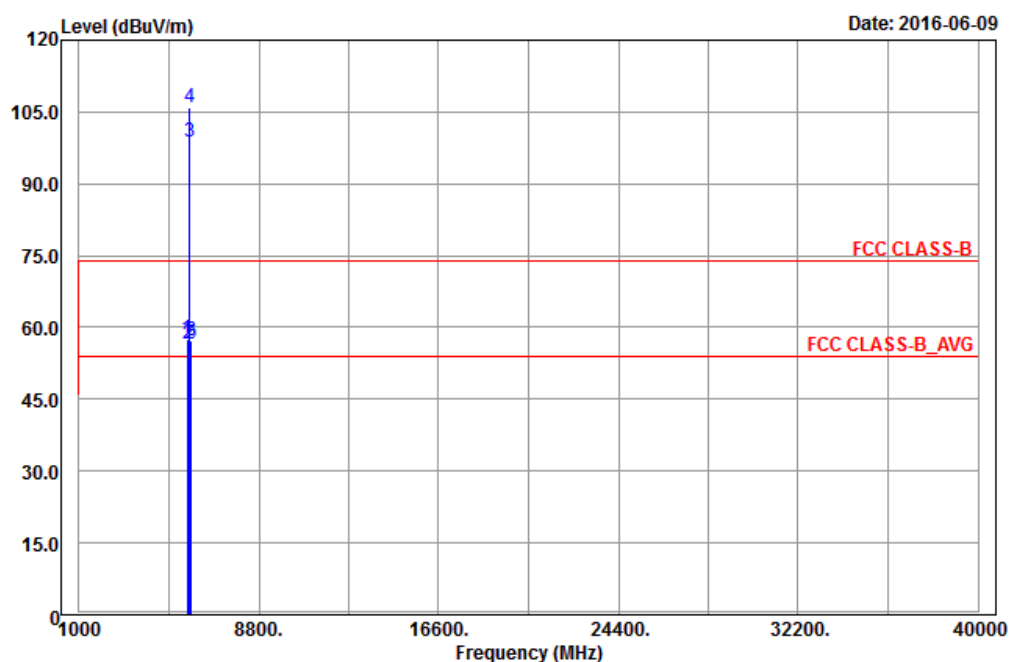
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	56.92	47.77	68.2	-11.28	34.61	8.65	34.11	220	284	Peak
*5724	67.57	58.41	78.2	-10.63	34.62	8.65	34.11	220	284	Peak
5745	92.83	83.64			34.64	8.66	34.11	220	284	Average
5745	100.66	91.47			34.64	8.66	34.11	220	284	Peak
*5860	57.73	48.41	78.2	-20.47	34.76	8.7	34.14	220	284	Peak
*5870	57.54	48.21	68.2	-10.66	34.76	8.71	34.14	220	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	57.64	48.49	68.2	-10.56	34.61	8.65	34.11	209	242	Peak
*5724	69.48	60.32	78.2	-8.72	34.62	8.65	34.11	164	242	Peak
5745	97.44	88.25			34.64	8.66	34.11	209	242	Average
5745	104.25	95.06			34.64	8.66	34.11	209	242	Peak
*5856	55.59	46.27	78.2	-22.61	34.76	8.7	34.14	209	242	Peak
*5862	56.32	46.99	68.2	-11.88	34.76	8.71	34.14	209	242	Peak

Remarks:

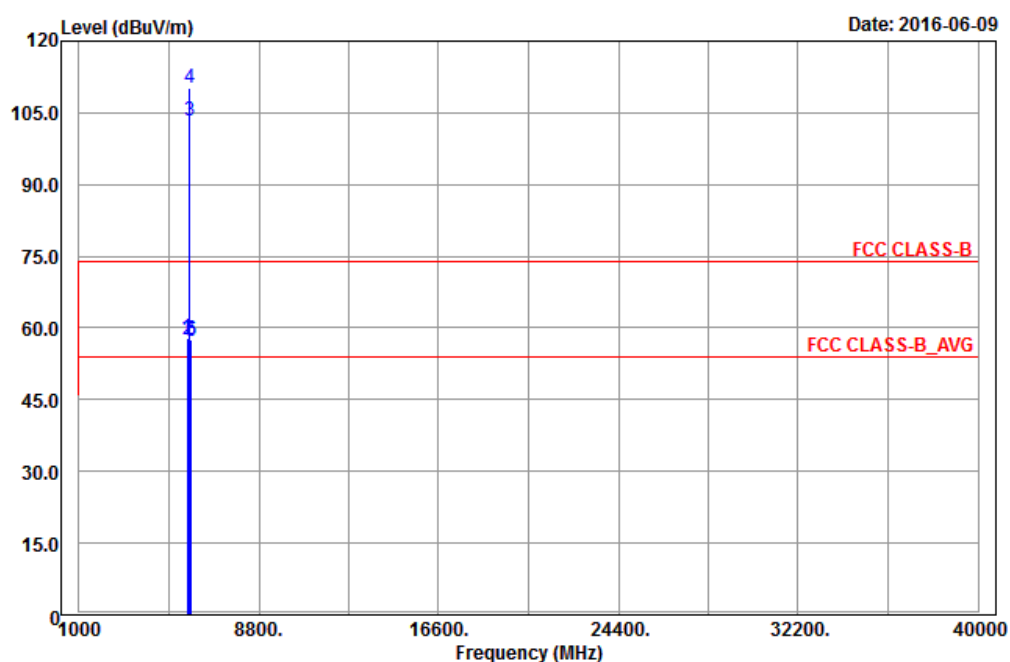
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



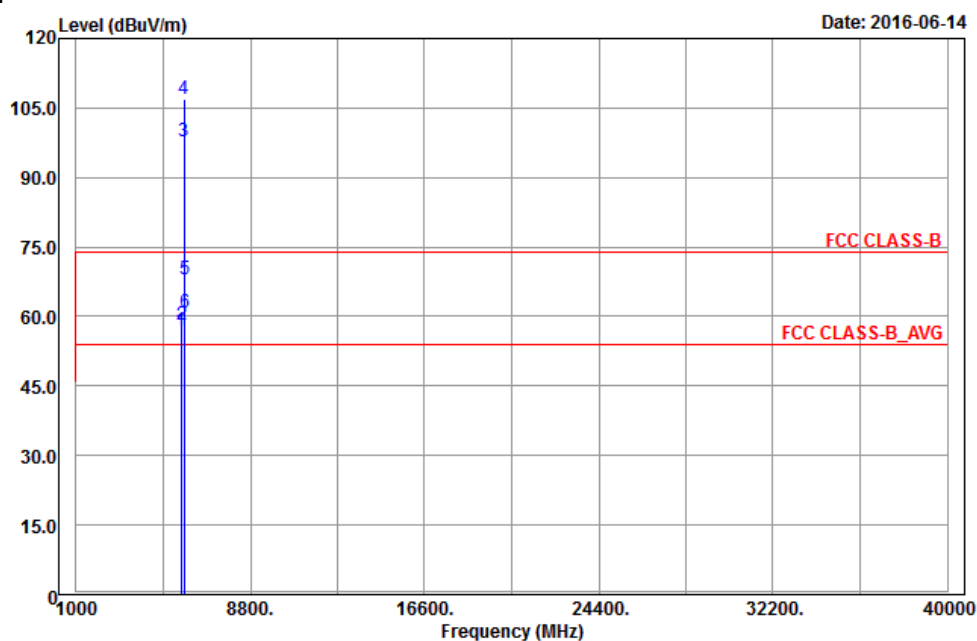
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5708	57.6	48.45	68.2	-10.6	34.61	8.65	34.11	220	284	Peak
*5716	56.5	47.35	78.2	-21.7	34.61	8.65	34.11	220	284	Peak
5785	98.88	89.65			34.68	8.68	34.13	220	284	Average
5785	105.93	96.7			34.68	8.68	34.13	220	284	Peak
*5860	56.41	47.09	78.2	-21.79	34.76	8.7	34.14	220	284	Peak
*5870	57.37	48.04	68.2	-10.83	34.76	8.71	34.14	220	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5706	57.72	48.57	68.2	-10.48	34.61	8.65	34.11	209	251	Peak
*5718	57.5	48.34	78.2	-20.7	34.62	8.65	34.11	209	251	Peak
5785	103.28	94.05			34.68	8.68	34.13	209	251	Average
5785	110.29	101.06			34.68	8.68	34.13	209	251	Peak
*5852	57.1	47.8	78.2	-21.1	34.74	8.7	34.14	209	251	Peak
*5870	57.63	48.3	68.2	-10.57	34.76	8.71	34.14	209	251	Peak

Remarks:

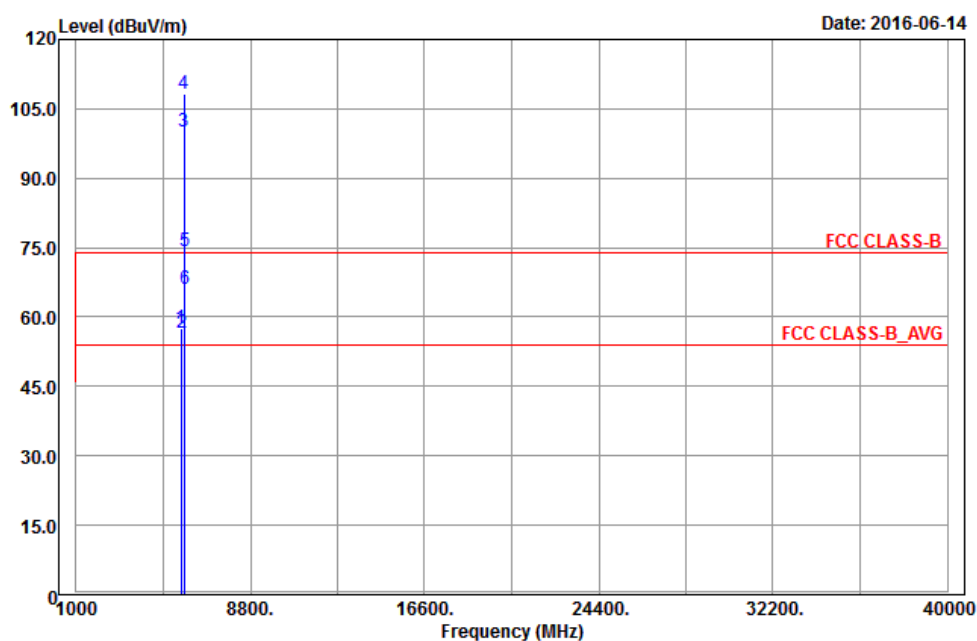
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	56.86	47.71	68.2	-11.34	34.61	8.65	34.11	195	0	Peak
*5718	58.12	48.96	78.2	-20.08	34.62	8.65	34.11	195	0	Peak
5825	97.84	88.55			34.73	8.69	34.13	195	0	Average
5825	106.83	97.54			34.73	8.69	34.13	195	0	Peak
*5852	68.15	58.85	78.2	-10.05	34.74	8.7	34.14	195	0	Peak
*5862	60.69	51.36	68.2	-7.51	34.76	8.71	34.14	195	0	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5706	57.41	48.26	68.2	-10.79	34.61	8.65	34.11	177	357	Peak
*5722	56.51	47.35	78.2	-21.69	34.62	8.65	34.11	177	357	Peak
5825	99.9	90.61			34.73	8.69	34.13	177	357	Average
5825	108.3	99.01			34.73	8.69	34.13	177	357	Peak
*5852	74.12	64.82	78.2	-4.08	34.74	8.7	34.14	192	357	Peak
*5862	66.19	56.86	68.2	-2.01	34.76	8.71	34.14	185	341	Peak

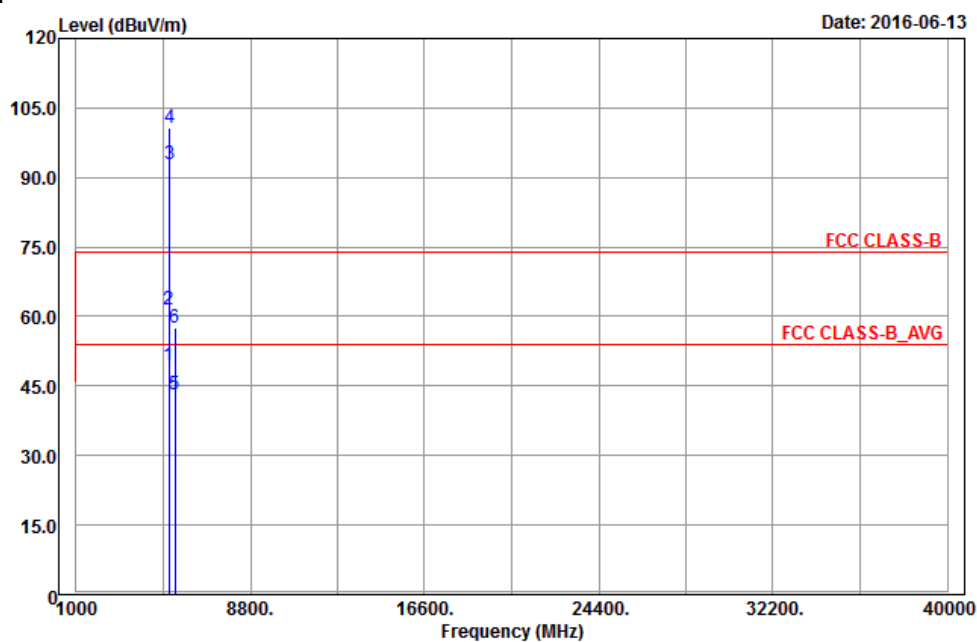
Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band

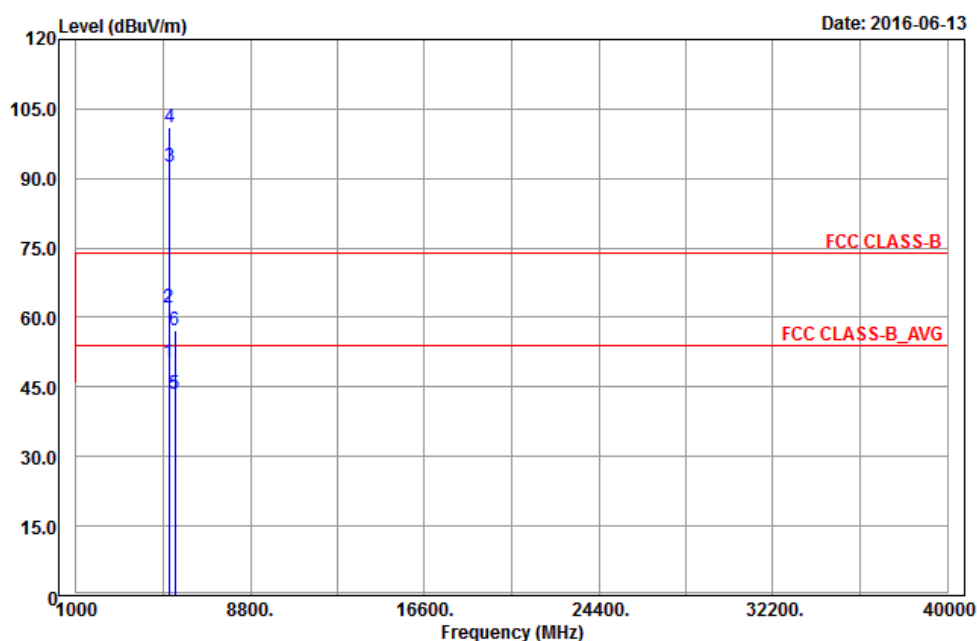
802.11n (HT40)

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

Horizontal



Vertical



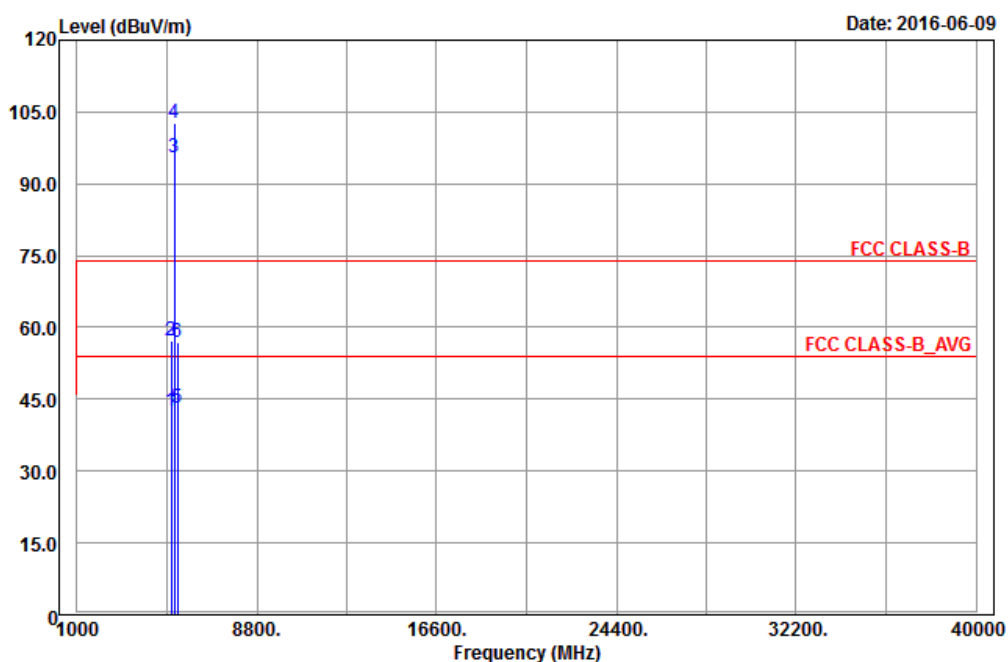
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	49.37	41.12	54	-4.63	34.12	8.13	34	201	7	Average
5150	61.52	53.27	74	-12.48	34.12	8.13	34	201	7	Peak
5190	92.89	84.55			34.15	8.19	34	201	7	Average
5190	100.63	92.29			34.15	8.19	34	201	7	Peak
5442	43.26	34.47	54	-10.74	34.35	8.48	34.04	201	7	Average
5442	57.64	48.85	74	-16.36	34.35	8.48	34.04	201	7	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	50.33	42.08	54	-3.67	34.12	8.13	34	219	9	Average
5150	62.12	53.87	74	-11.88	34.12	8.13	34	219	9	Peak
5190	92.53	84.19			34.15	8.19	34	163	9	Average
5190	101.04	92.7			34.15	8.19	34	163	9	Peak
5424	43.41	34.64	54	-10.59	34.33	8.48	34.04	163	9	Average
5424	57.21	48.44	74	-16.79	34.33	8.48	34.04	163	9	Peak

Remarks:

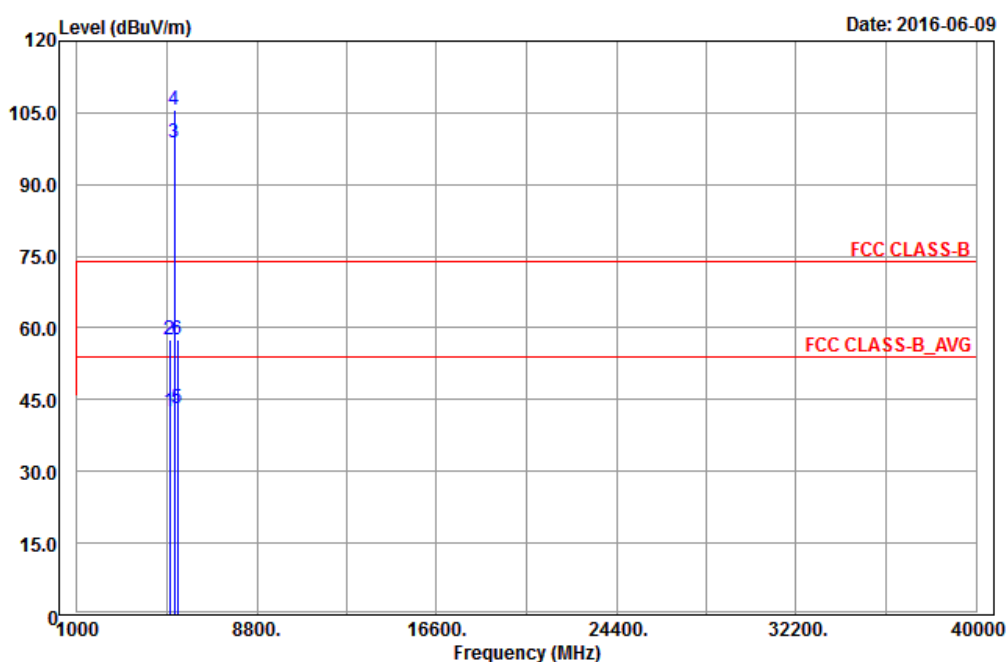
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5190 MHz: Fundamental Frequency

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

Horizontal



Vertical



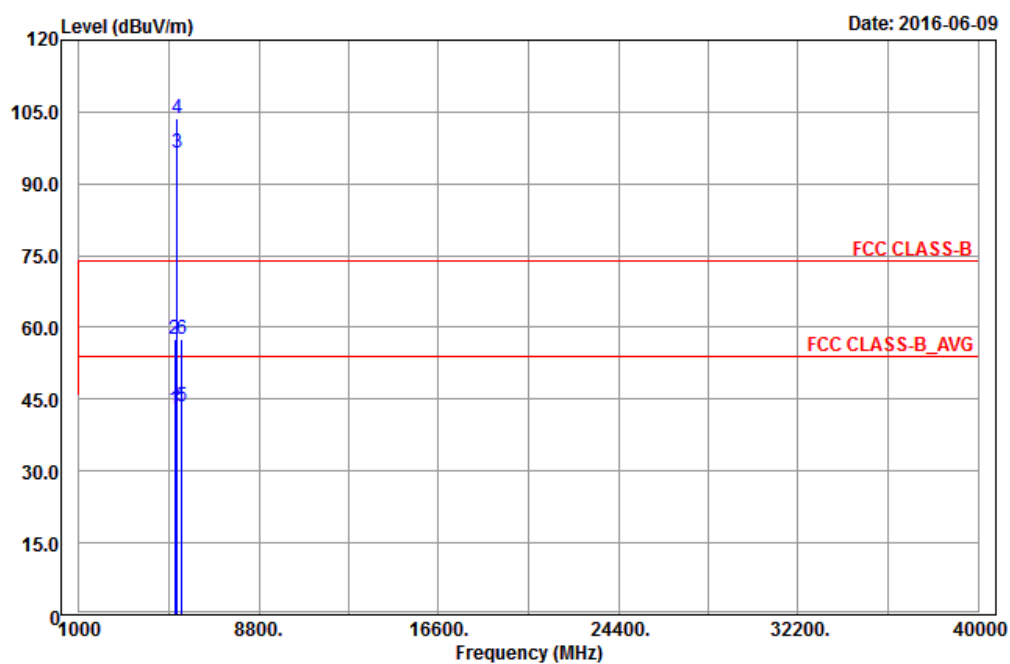
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5070	42.44	34.34	54	-11.56	34.05	8.03	33.98	200	274	Average
5070	57.37	49.27	74	-16.63	34.05	8.03	33.98	200	274	Peak
5230	95.51	87.11			34.19	8.22	34.01	200	274	Average
5230	102.83	94.43			34.19	8.22	34.01	200	274	Peak
5370	43.05	34.38	54	-10.95	34.29	8.41	34.03	200	274	Average
5370	56.93	48.26	74	-17.07	34.29	8.41	34.03	200	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5032	42.43	34.37	54	-11.57	34.03	8	33.97	100	255	Average
5032	57.6	49.54	74	-16.4	34.03	8	33.97	100	255	Peak
5230	98.89	90.49			34.19	8.22	34.01	100	255	Average
5230	105.55	97.15			34.19	8.22	34.01	100	255	Peak
5360	43.02	34.39	54	-10.98	34.28	8.38	34.03	100	255	Average
5360	57.45	48.82	74	-16.55	34.28	8.38	34.03	100	255	Peak

Remarks:

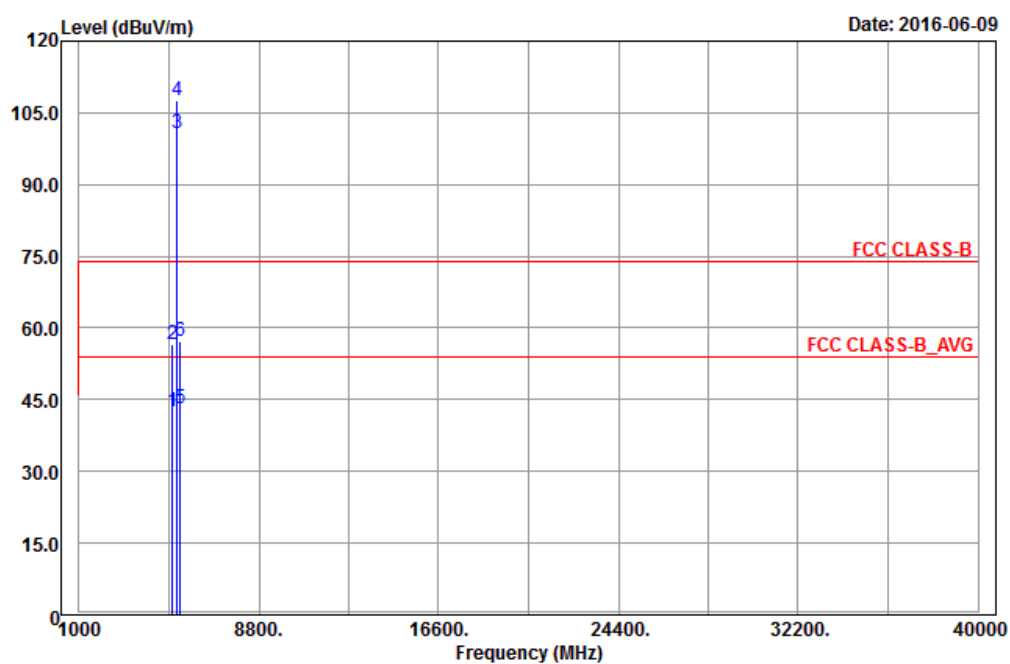
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5230 MHz: Fundamental Frequency

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

Horizontal



Vertical



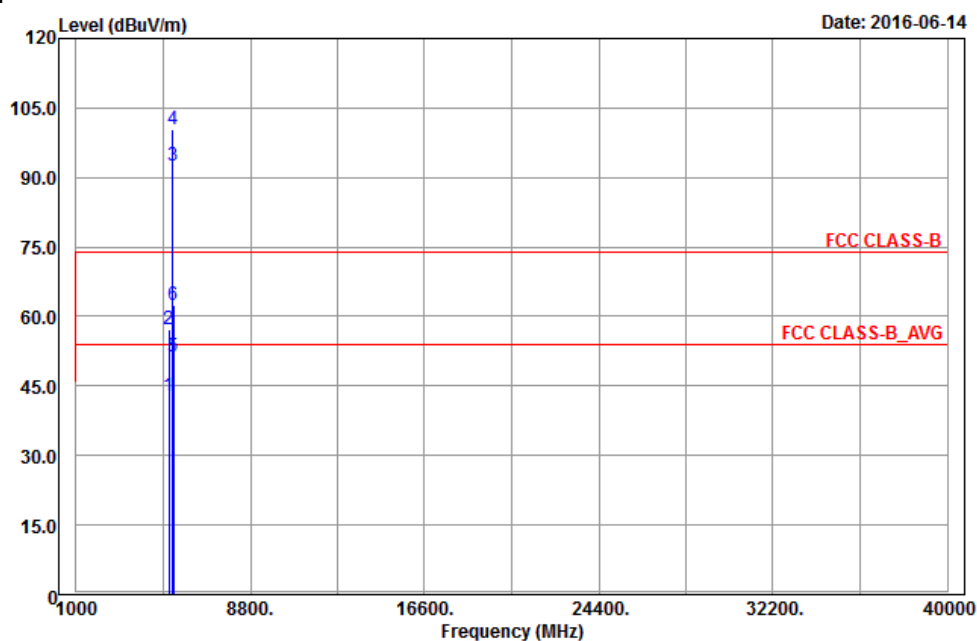
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	42.92	34.67	54	-11.08	34.12	8.13	34	225	284	Average
5150	57.46	49.21	74	-16.54	34.12	8.13	34	225	284	Peak
5270	96.5	88.01			34.21	8.29	34.01	225	284	Average
5270	103.54	95.05			34.21	8.29	34.01	225	284	Peak
5456	43.47	34.65	54	-10.53	34.36	8.51	34.05	225	284	Average
5456	57.51	48.69	74	-16.49	34.36	8.51	34.05	225	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5054	42.6	34.54	54	-11.4	34.04	8	33.98	105	244	Average
5054	56.71	48.65	74	-17.29	34.04	8	33.98	105	244	Peak
5270	100.65	92.16			34.21	8.29	34.01	105	244	Average
5270	107.44	98.95			34.21	8.29	34.01	105	244	Peak
5382	43.32	34.64	54	-10.68	34.31	8.41	34.04	105	244	Average
5382	57.28	48.6	74	-16.72	34.31	8.41	34.04	105	244	Peak

Remarks:

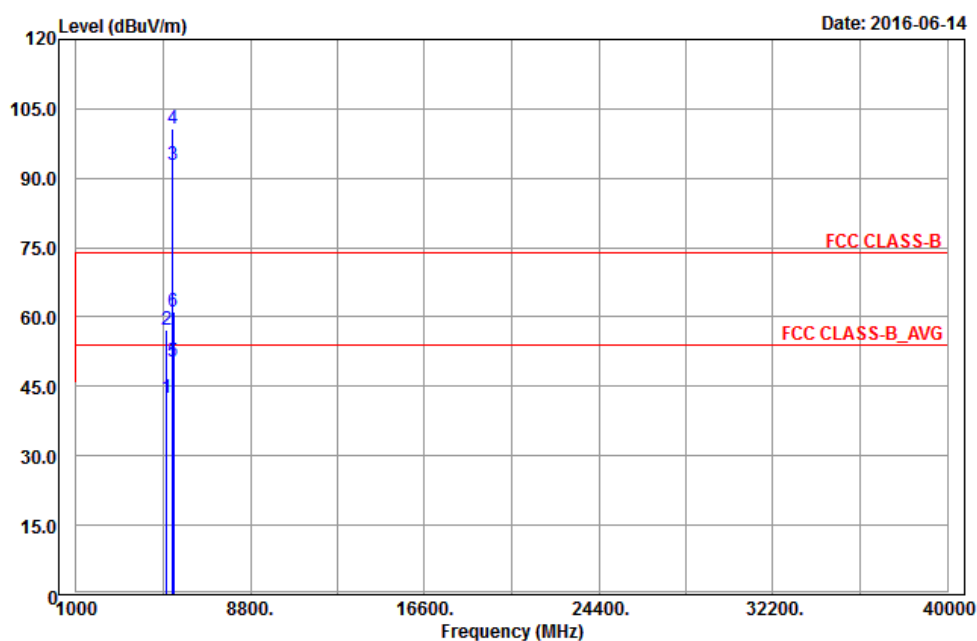
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5270 MHz: Fundamental Frequency

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

Horizontal



Vertical



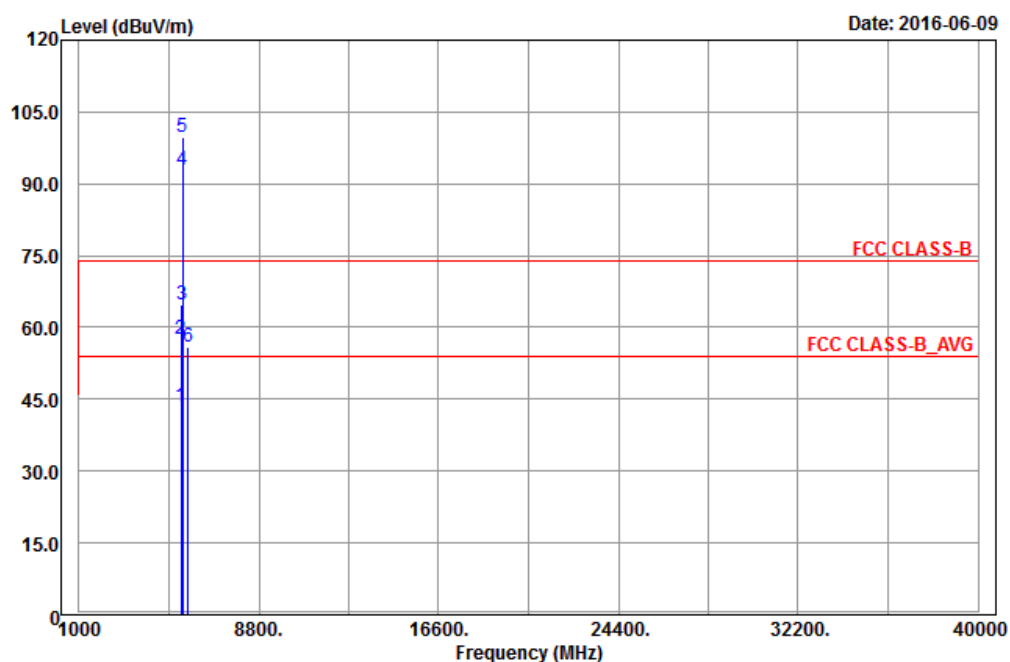
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5138	42.77	34.52	54	-11.23	34.11	8.13	33.99	203	15	Average
5138	57.24	48.99	74	-16.76	34.11	8.13	33.99	203	15	Peak
5310	92.66	84.11			34.25	8.32	34.02	203	15	Average
5310	100.39	91.84			34.25	8.32	34.02	203	15	Peak
5350	51.37	42.74	54	-2.63	34.28	8.38	34.03	197	22	Average
5350	62.34	53.71	74	-11.66	34.28	8.38	34.03	197	22	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5044	42.46	34.4	54	-11.54	34.04	8	33.98	135	6	Average
5044	57.25	49.19	74	-16.75	34.04	8	33.98	135	6	Peak
5310	92.98	84.43			34.25	8.32	34.02	135	6	Average
5310	100.64	92.09			34.25	8.32	34.02	135	6	Peak
5350	50.3	41.67	54	-3.7	34.28	8.38	34.03	211	26	Average
5350	61.07	52.44	74	-12.93	34.28	8.38	34.03	211	26	Peak

Remarks:

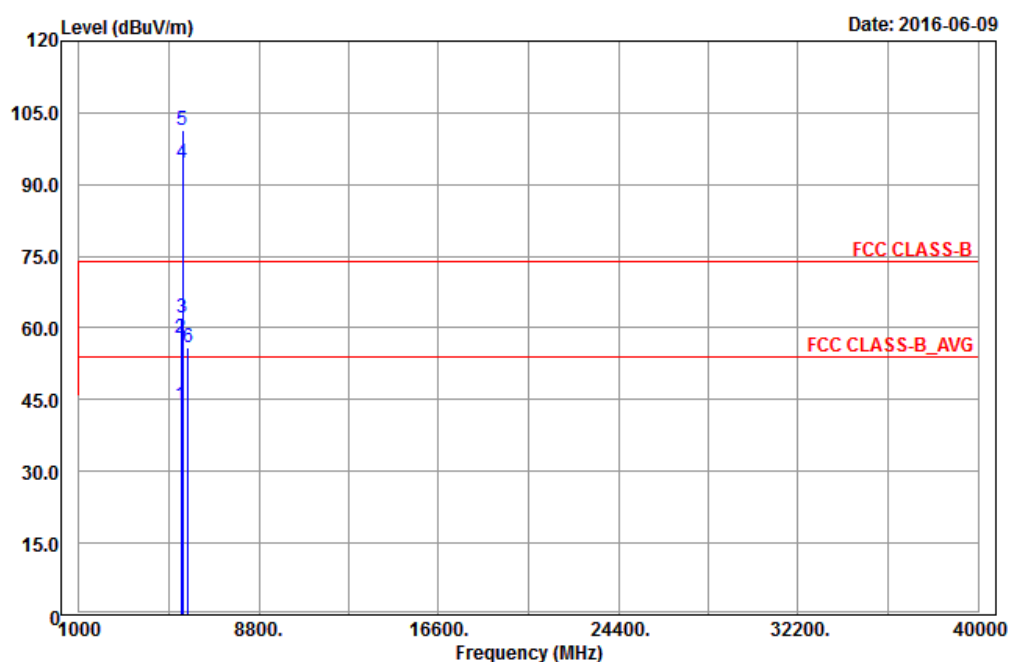
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5310 MHz: Fundamental Frequency

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

Horizontal



Vertical



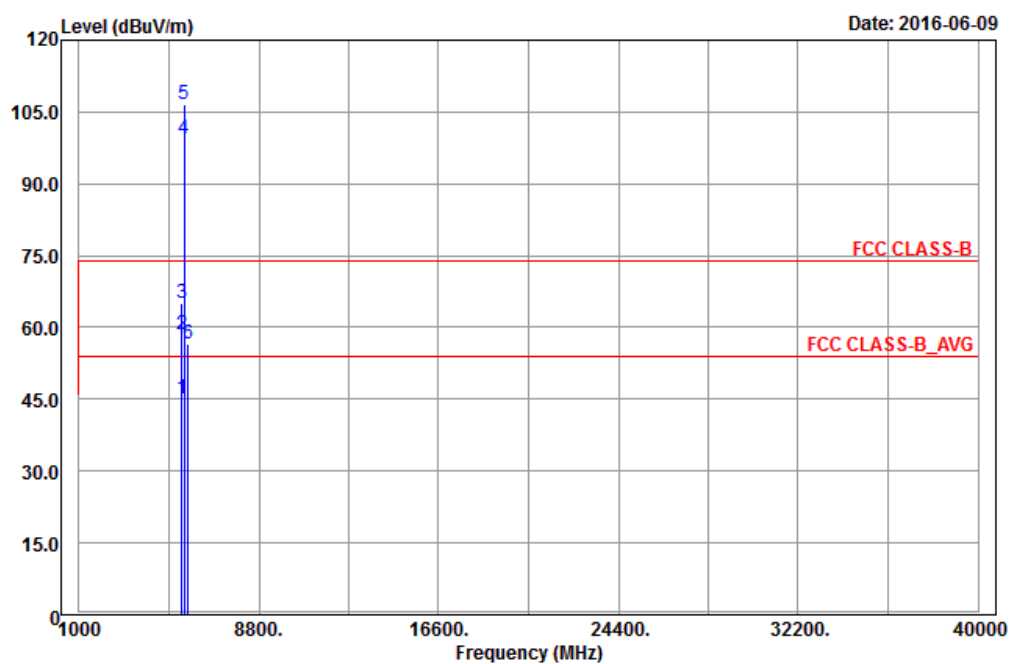
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434	43.59	34.8	54	-10.41	34.35	8.48	34.04	194	254	Average
5434	57.42	48.63	74	-16.58	34.35	8.48	34.04	194	254	Peak
5470	64.58	55.75	68.2	-3.62	34.37	8.51	34.05	213	254	Peak
5510	92.97	84.06			34.4	8.57	34.06	194	254	Average
5510	99.84	90.93			34.4	8.57	34.06	194	254	Peak
5725	55.92	46.76	68.2	-12.28	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5418	43.66	34.93	54	-10.34	34.33	8.44	34.04	128	261	Average
5418	57.76	49.03	74	-16.24	34.33	8.44	34.04	128	261	Peak
5470	61.99	53.16	68.2	-6.21	34.37	8.51	34.05	128	261	Peak
5510	94.47	85.56			34.4	8.57	34.06	128	261	Average
5510	101.36	92.45			34.4	8.57	34.06	128	261	Peak
5725	55.86	46.7	68.2	-12.34	34.62	8.65	34.11	128	261	Peak

Remarks:

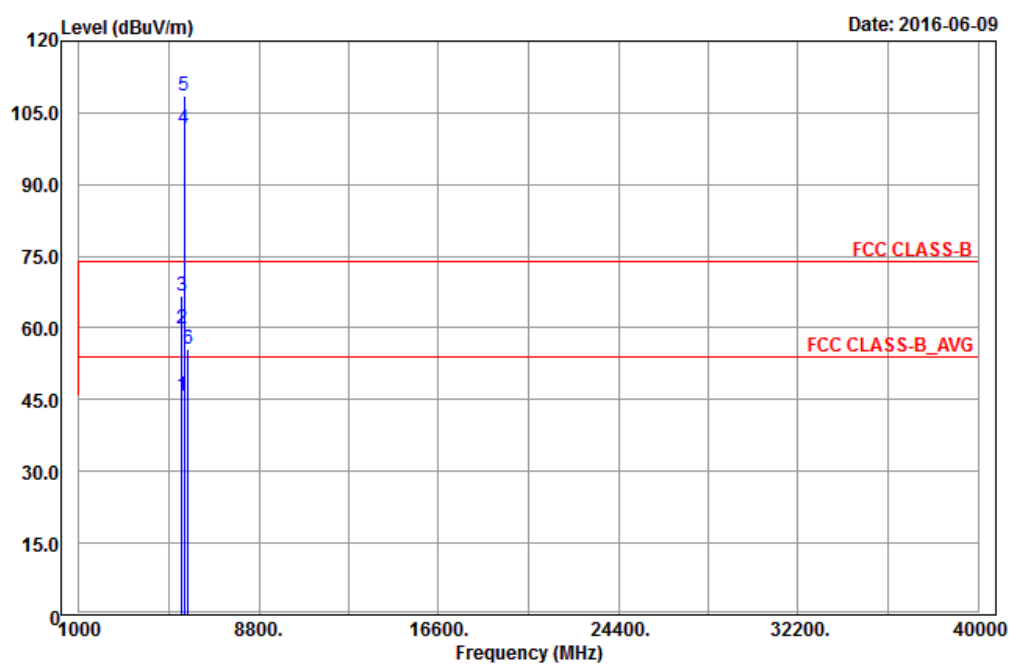
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5510 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



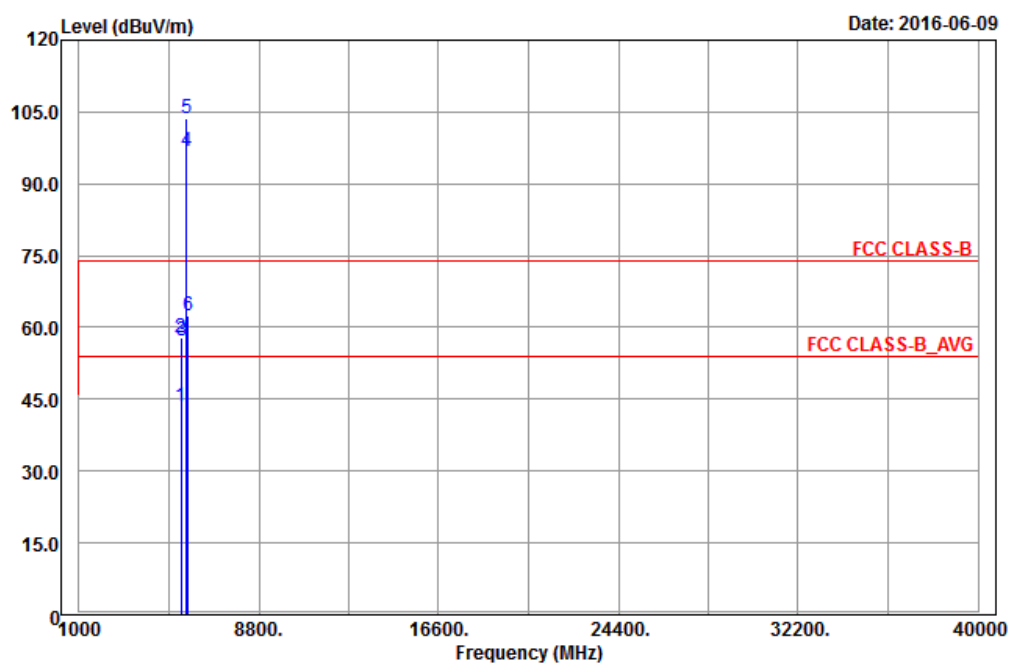
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	45.02	36.2	54	-8.98	34.36	8.51	34.05	194	254	Average
5460	58.43	49.61	74	-15.57	34.36	8.51	34.05	194	254	Peak
5470	64.92	56.09	68.2	-3.28	34.37	8.51	34.05	211	254	Peak
5550	99.46	90.49			34.45	8.59	34.07	194	254	Average
5550	106.58	97.61			34.45	8.59	34.07	194	254	Peak
5725	56.5	47.34	68.2	-11.7	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	45.73	36.91	54	-8.27	34.36	8.51	34.05	213	252	Average
5454	59.74	50.92	74	-14.26	34.36	8.51	34.05	213	252	Peak
5470	66.71	57.88	68.2	-1.49	34.37	8.51	34.05	213	252	Peak
5550	101.75	92.78			34.45	8.59	34.07	128	261	Average
5550	108.65	99.68			34.45	8.59	34.07	128	261	Peak
5725	55.61	46.45	68.2	-12.59	34.62	8.65	34.11	128	261	Peak

Remarks:

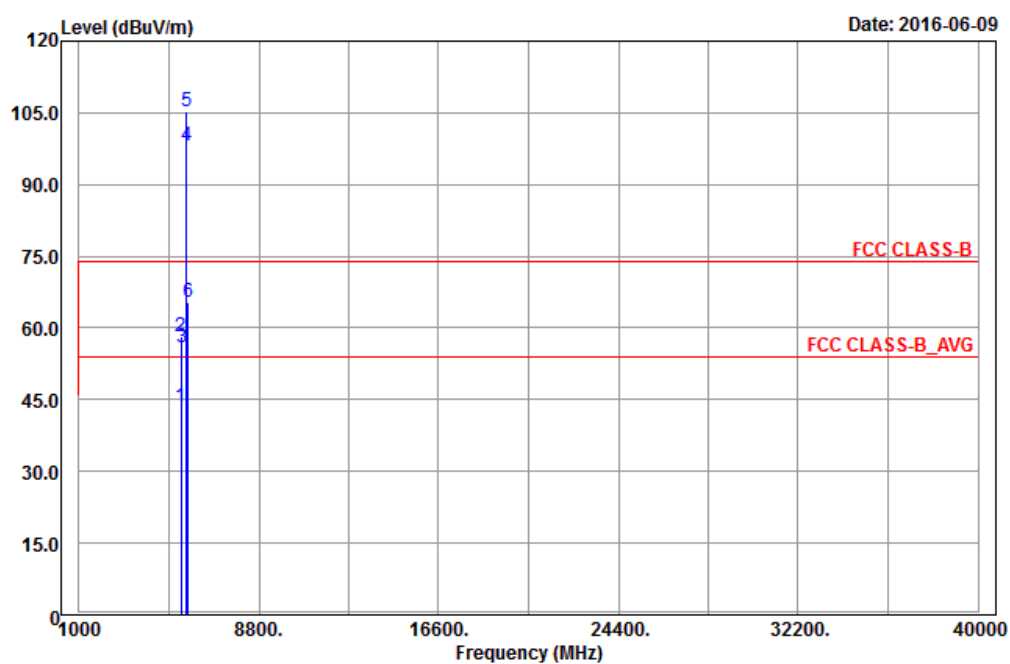
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5550 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



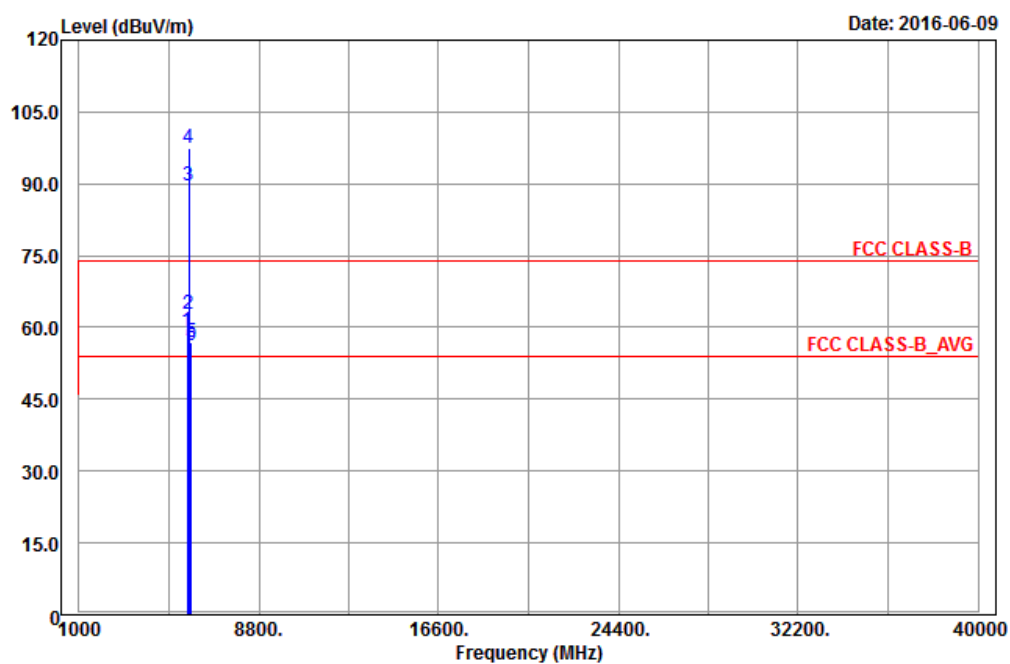
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434	43.5	34.71	54	-10.5	34.35	8.48	34.04	194	254	Average
5434	57.94	49.15	74	-16.06	34.35	8.48	34.04	194	254	Peak
5470	57.15	48.32	68.2	-11.05	34.37	8.51	34.05	194	254	Peak
5670	96.68	87.58			34.57	8.63	34.1	194	254	Average
5670	103.55	94.45			34.57	8.63	34.1	194	254	Peak
5725	62.56	53.4	68.2	-5.64	34.62	8.65	34.11	194	254	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5442	43.39	34.6	54	-10.61	34.35	8.48	34.04	128	261	Average
5442	58.17	49.38	74	-15.83	34.35	8.48	34.04	128	261	Peak
5470	55.9	47.07	68.2	-12.3	34.37	8.51	34.05	128	261	Peak
5670	98.24	89.14			34.57	8.63	34.1	128	261	Average
5670	105.21	96.11			34.57	8.63	34.1	128	261	Peak
5725	65.44	56.28	68.2	-2.76	34.62	8.65	34.11	121	261	Peak

Remarks:

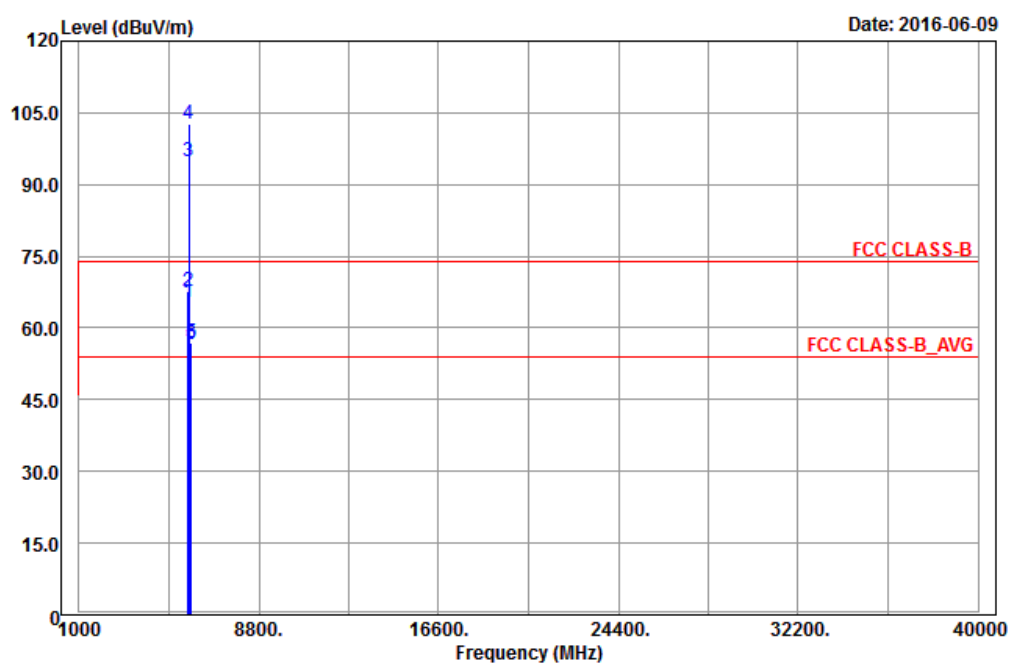
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
2. 5670 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



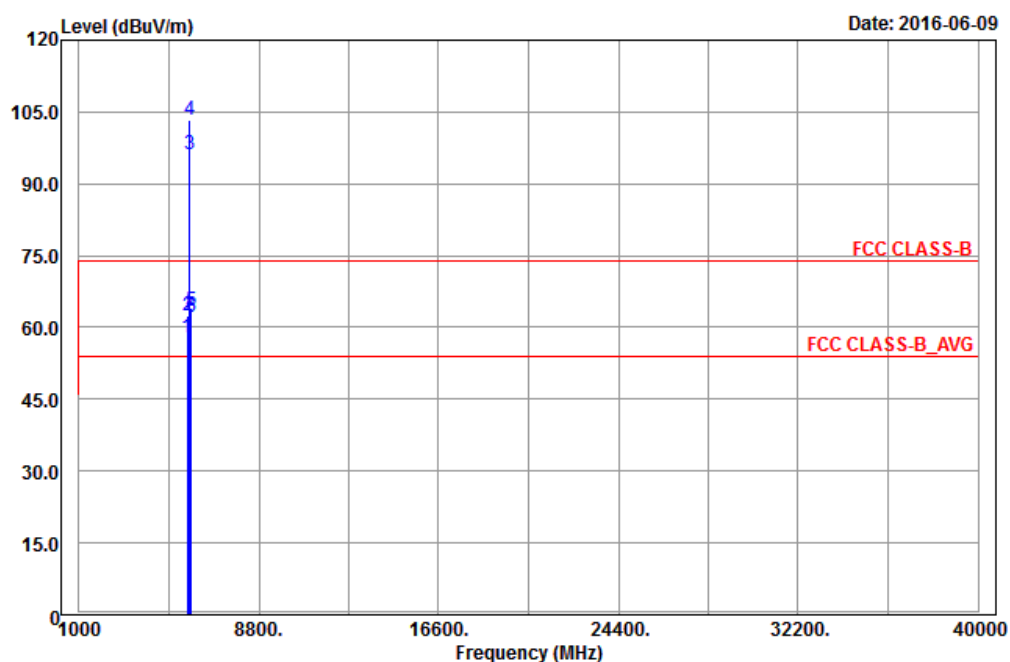
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	59.14	49.99	68.2	-9.06	34.61	8.65	34.11	220	284	Peak
*5722	62.79	53.63	78.2	-15.41	34.62	8.65	34.11	220	284	Peak
5755	89.73	80.52			34.66	8.66	34.11	220	284	Average
5755	97.55	88.34			34.66	8.66	34.11	220	284	Peak
*5858	56.75	47.43	78.2	-21.45	34.76	8.7	34.14	220	284	Peak
*5868	56.4	47.07	68.2	-11.8	34.76	8.71	34.14	220	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	65.54	56.39	68.2	-2.66	34.61	8.65	34.11	210	242	Peak
*5724	67.57	58.41	78.2	-10.63	34.62	8.65	34.11	184	244	Peak
5755	94.83	85.62			34.66	8.66	34.11	209	242	Average
5755	102.75	93.54			34.66	8.66	34.11	209	242	Peak
*5860	56.94	47.62	78.2	-21.26	34.76	8.7	34.14	209	242	Peak
*5870	56.48	47.15	68.2	-11.72	34.76	8.71	34.14	209	242	Peak

Remarks:

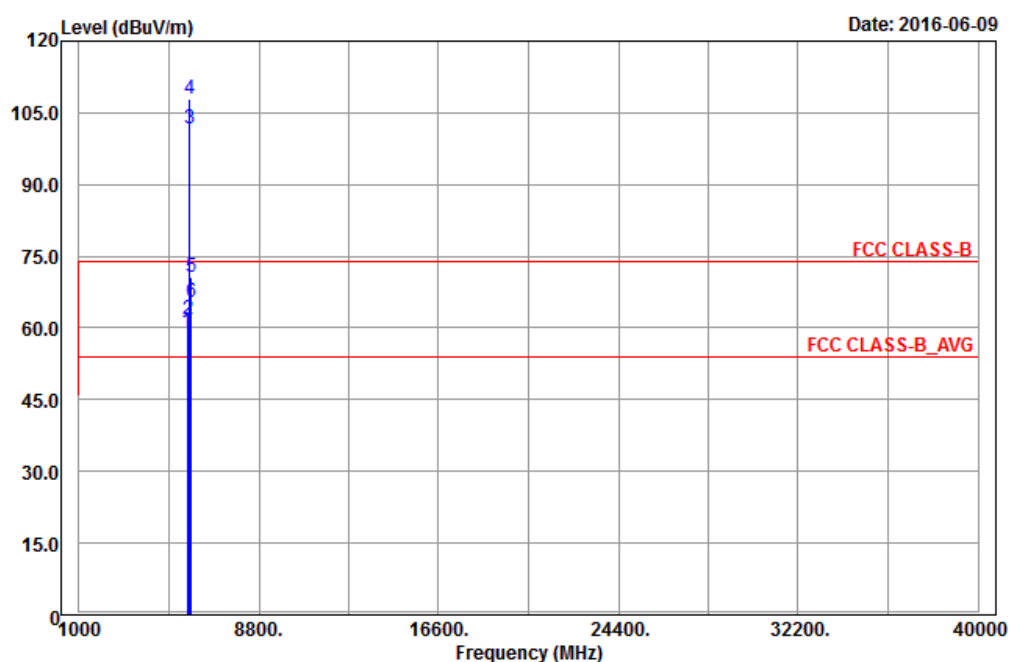
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5755 MHz: Fundamental Frequency
- *: Out of Restricted Band

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

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	57.87	48.72	68.2	-10.33	34.61	8.65	34.11	214	284	Peak
*5724	62.61	53.45	78.2	-15.59	34.62	8.65	34.11	214	284	Peak
5795	96.21	86.97			34.69	8.68	34.13	214	284	Average
5795	103.22	93.98			34.69	8.68	34.13	214	284	Peak
*5852	63.28	53.98	78.2	-14.92	34.74	8.7	34.14	214	284	Peak
*5862	61.96	52.63	68.2	-6.24	34.76	8.71	34.14	214	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5710	59.2	50.05	68.2	-9	34.61	8.65	34.11	206	243	Peak
*5724	61.77	52.61	78.2	-16.43	34.62	8.65	34.11	206	243	Peak
5795	101.54	92.3			34.69	8.68	34.13	206	243	Average
5795	107.98	98.74			34.69	8.68	34.13	206	243	Peak
*5852	70.53	61.23	78.2	-7.67	34.74	8.7	34.14	195	242	Peak
*5866	65.53	56.2	68.2	-2.67	34.76	8.71	34.14	211	243	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value
- 5795 MHz: Fundamental Frequency
- *: Out of Restricted Band

9 kHz ~ 30 MHz DATA:

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

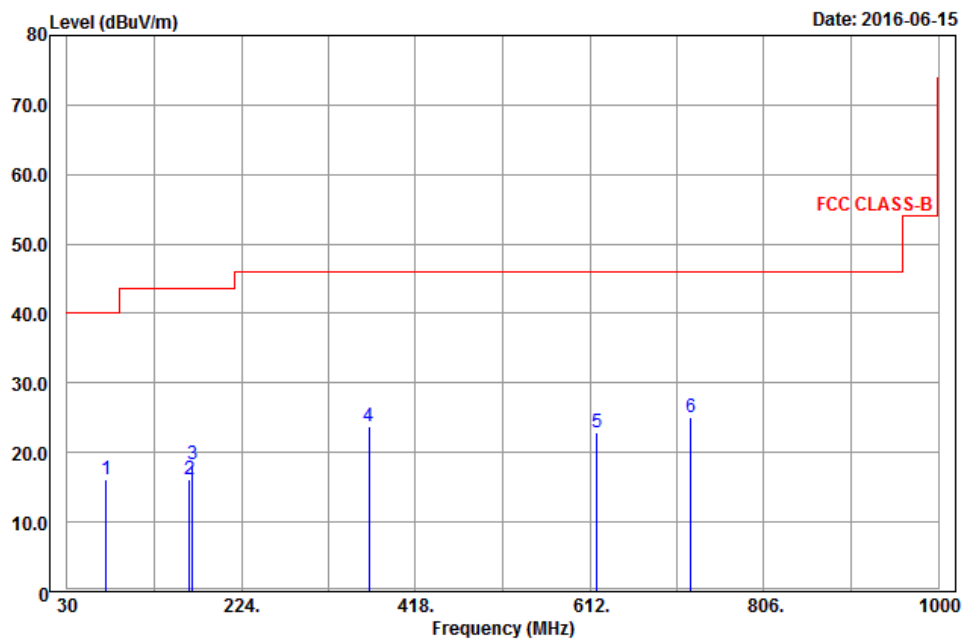
30 MHz ~ 1 GHz WORST-CASE DATA:

Mode A

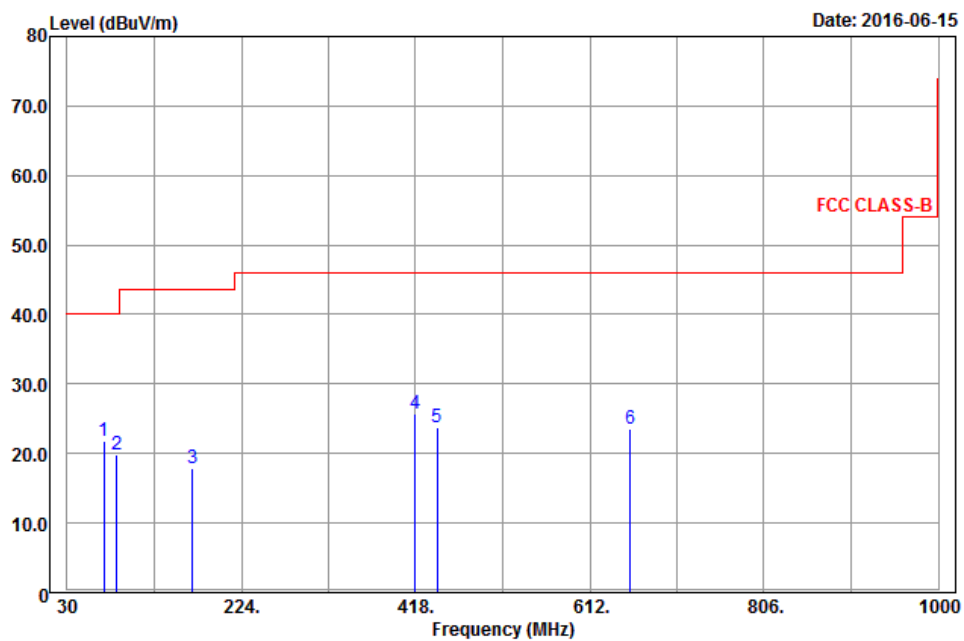
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
73.74	16.05	38.94	40	-23.95	8.22	1.11	32.22	173	17	Peak
166.08	16.24	36.68	43.5	-27.26	10.29	1.52	32.25	166	8	Peak
169.86	18.33	39.05	43.5	-25.17	10	1.52	32.24	104	3	Peak
366.5	23.8	37.33	46	-22.2	16.33	2.26	32.12	136	350	Peak
619.9	22.93	30.22	46	-23.07	21.96	2.93	32.18	121	219	Peak
724.9	25.16	30.72	46	-20.84	23.4	3.16	32.12	125	222	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
70.5	21.85	44.85	40	-18.15	8.11	1.11	32.22	112	111	Peak
85.35	19.84	42.03	40	-20.16	8.66	1.11	31.96	185	355	Peak
169.32	17.9	38.55	43.5	-25.6	10.07	1.52	32.24	107	110	Peak
417.6	25.75	37.73	46	-20.25	17.81	2.41	32.2	178	9	Peak
442.1	23.78	35.53	46	-22.22	17.92	2.49	32.16	144	237	Peak
657	23.62	30.24	46	-22.38	22.53	2.99	32.14	125	255	Peak

Remarks:

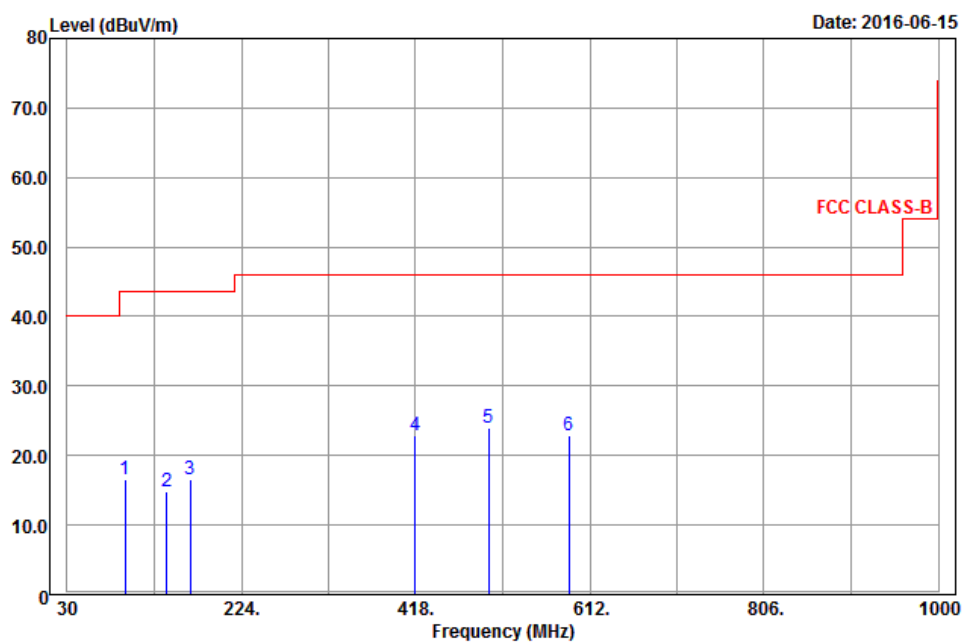
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

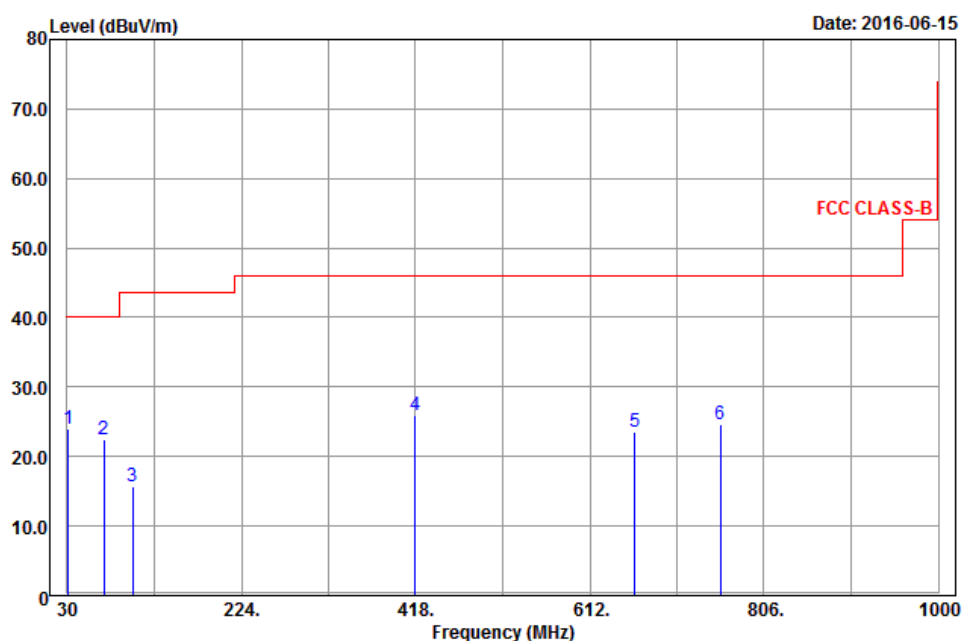
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 62	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
94.53	16.52	38.14	43.5	-26.98	9.26	1.11	31.99	194	199	Peak
140.7	14.82	36.35	43.5	-28.68	9.36	1.38	32.27	160	355	Peak
166.89	16.5	37.01	43.5	-27	10.22	1.52	32.25	150	288	Peak
417.6	22.9	34.88	46	-23.1	17.81	2.41	32.2	180	99	Peak
499.5	24.03	34.5	46	-21.97	19	2.63	32.1	175	275	Peak
589.1	22.89	31.61	46	-23.11	20.6	2.87	32.19	158	91	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
31.62	24.05	39	40	-15.95	16.57	0.74	32.26	132	240	Peak
70.5	22.54	45.54	40	-17.46	8.11	1.11	32.22	170	111	Peak
102.9	15.76	37.13	43.5	-27.74	9.61	1.28	32.26	136	225	Peak
417.6	25.91	37.89	46	-20.09	17.81	2.41	32.2	143	263	Peak
662.6	23.54	29.93	46	-22.46	22.75	2.99	32.13	123	229	Peak
757.8	24.6	30.21	46	-21.4	23.3	3.22	32.13	175	78	Peak

Remarks:

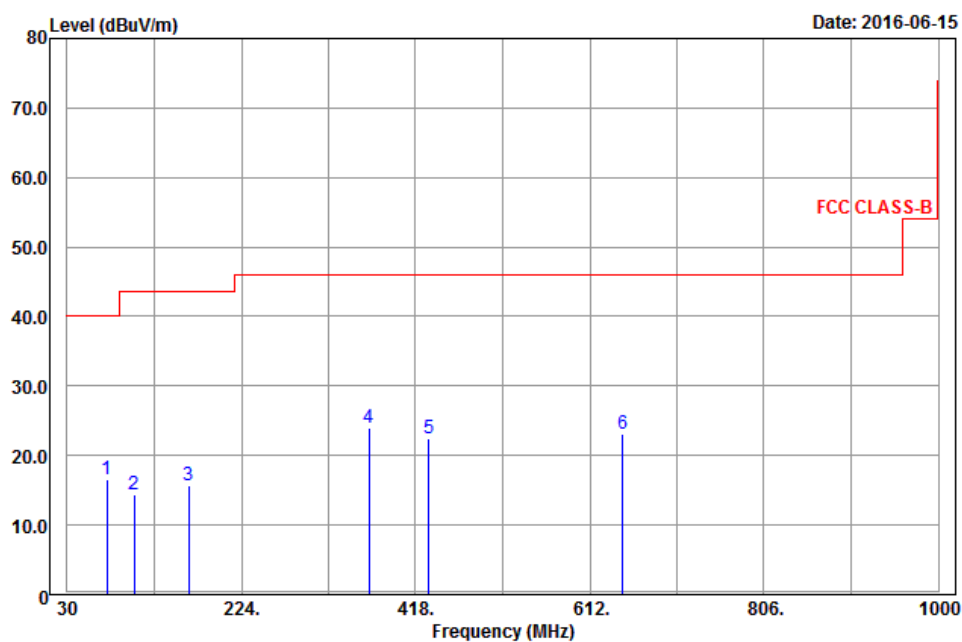
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

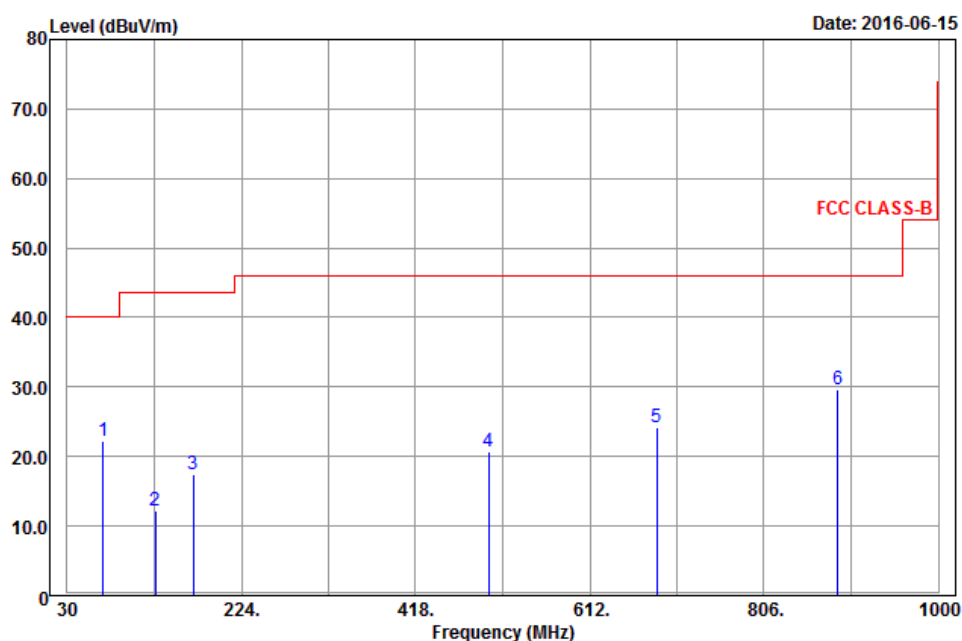
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 110	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.01	16.52	39.41	40	-23.48	8.22	1.11	32.22	174	1	Peak
104.52	14.42	35.84	43.5	-29.08	9.56	1.28	32.26	195	255	Peak
165.54	15.77	36.14	43.5	-27.73	10.36	1.52	32.25	170	145	Peak
366.5	23.9	37.43	46	-22.1	16.33	2.26	32.12	136	36	Peak
433	22.52	34.39	46	-23.48	17.81	2.49	32.17	178	9	Peak
648.6	23.14	30.2	46	-22.86	22.1	2.99	32.15	134	189	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
70.23	22.14	45.14	40	-17.86	8.11	1.11	32.22	170	223	Peak
128.28	12.26	34.01	43.5	-31.24	9.1	1.38	32.23	125	340	Peak
170.4	17.44	38.12	43.5	-26.06	10.04	1.52	32.24	100	150	Peak
499.5	20.74	31.21	46	-25.26	19	2.63	32.1	173	312	Peak
686.4	24.14	29.96	46	-21.86	23.23	3.05	32.1	105	103	Peak
888	29.57	32.72	46	-16.43	24.92	3.49	31.56	200	249	Peak

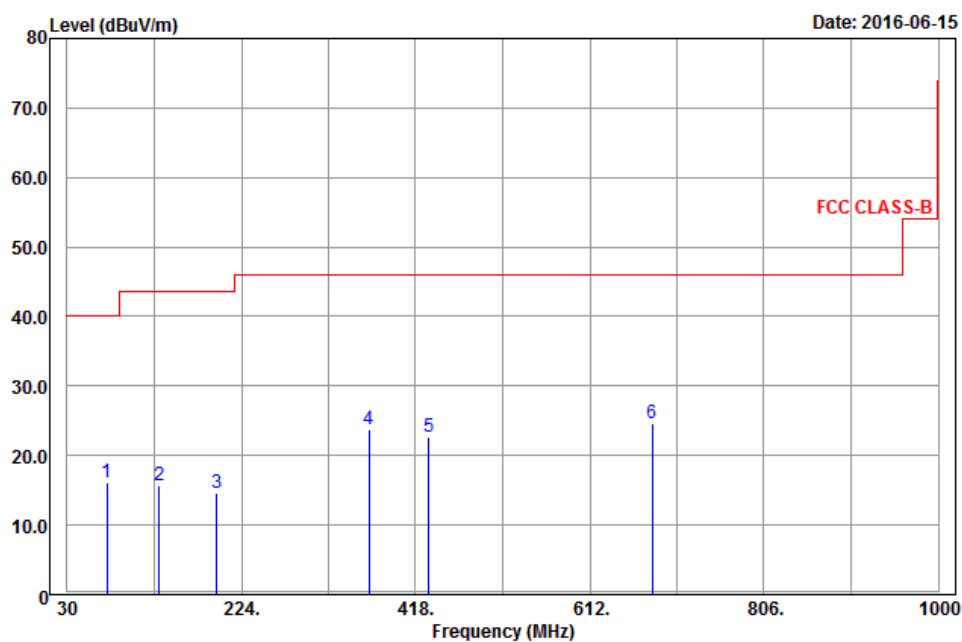
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value

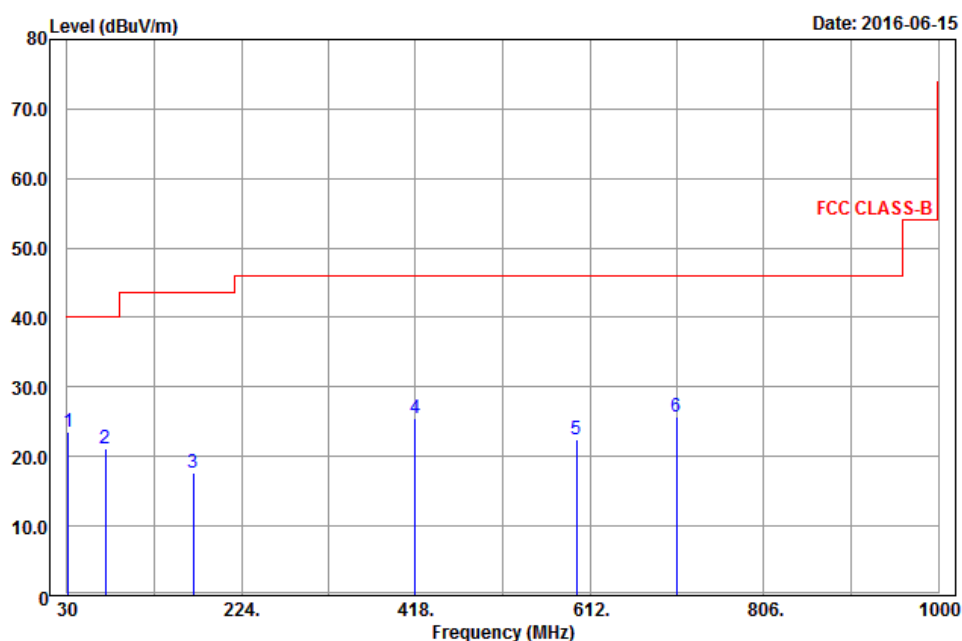
802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 165	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.01	16.13	39.02	40	-23.87	8.22	1.11	32.22	170	134	Peak
132.33	15.71	37.35	43.5	-27.79	9.22	1.38	32.24	132	54	Peak
196.59	14.54	34.48	43.5	-28.96	10.73	1.61	32.28	107	161	Peak
366.5	23.68	37.21	46	-22.32	16.33	2.26	32.12	135	356	Peak
433	22.57	34.44	46	-23.43	17.81	2.49	32.17	180	9	Peak
681.5	24.58	30.33	46	-21.42	23.31	3.05	32.11	105	305	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
31.62	23.63	38.58	40	-16.37	16.57	0.74	32.26	165	257	Peak
72.39	21.14	44.08	40	-18.86	8.17	1.11	32.22	127	139	Peak
170.4	17.75	38.43	43.5	-25.75	10.04	1.52	32.24	177	147	Peak
417.6	25.54	37.52	46	-20.46	17.81	2.41	32.2	188	146	Peak
597.5	22.43	30.77	46	-23.57	20.98	2.87	32.19	157	7	Peak
708.8	25.76	31.56	46	-20.24	23.19	3.11	32.1	101	99	Peak

Remarks:

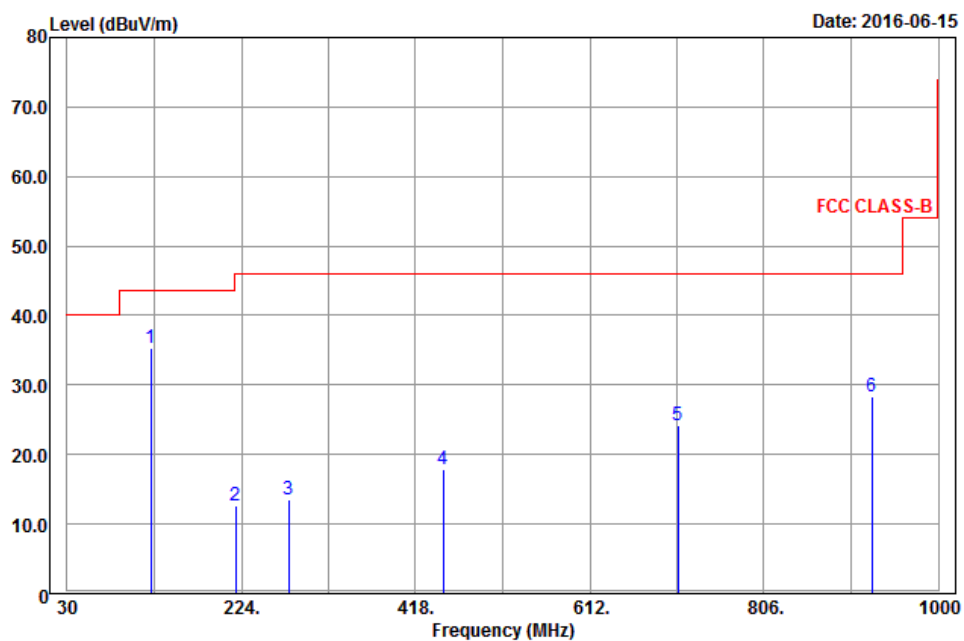
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value

Mode B

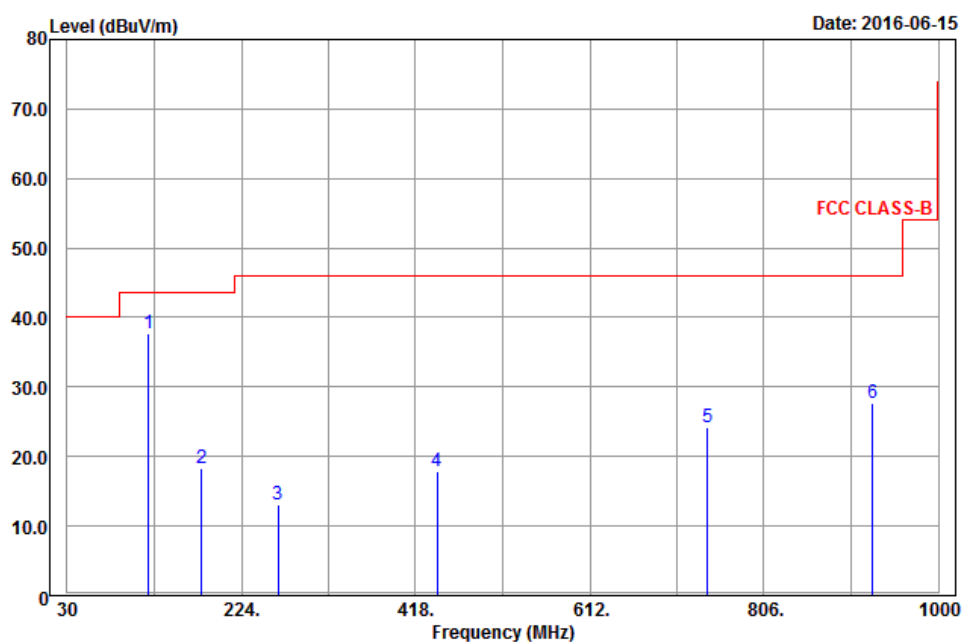
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
122.88	35.31	57.34	43.5	-8.19	8.83	1.38	32.24	158	162	Peak
217.38	12.71	31.71	46	-33.29	11.58	1.65	32.23	114	128	Peak
276.51	13.41	29.88	46	-32.59	13.71	1.94	32.12	176	169	Peak
449.1	17.87	29.53	46	-28.13	18	2.49	32.15	136	129	Peak
710.2	24.28	30.04	46	-21.72	23.23	3.11	32.1	115	129	Peak
925.8	28.29	29.85	46	-17.71	26.2	3.53	31.29	137	144	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
120.45	37.67	59.91	43.5	-5.83	8.73	1.28	32.25	139	155	Peak
179.31	18.36	38.63	43.5	-25.14	10.36	1.61	32.24	123	108	Peak
265.17	12.98	29.7	46	-33.02	13.45	1.94	32.11	186	144	Peak
442.1	17.88	29.63	46	-28.12	17.92	2.49	32.16	122	157	Peak
743.1	24.09	29.8	46	-21.91	23.27	3.16	32.14	169	138	Peak
927.2	27.6	29.06	46	-18.4	26.2	3.62	31.28	108	155	Peak

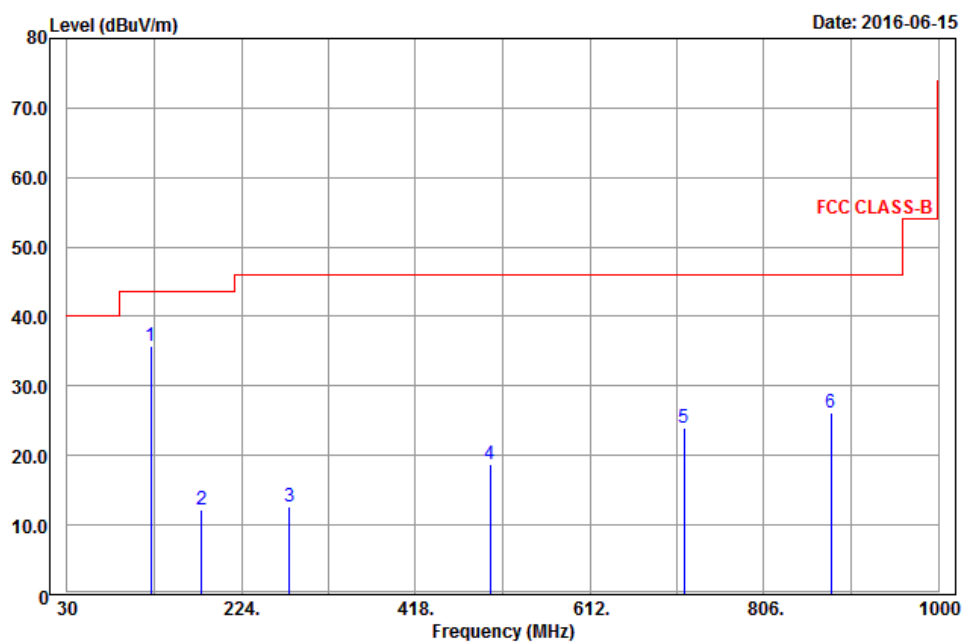
Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value

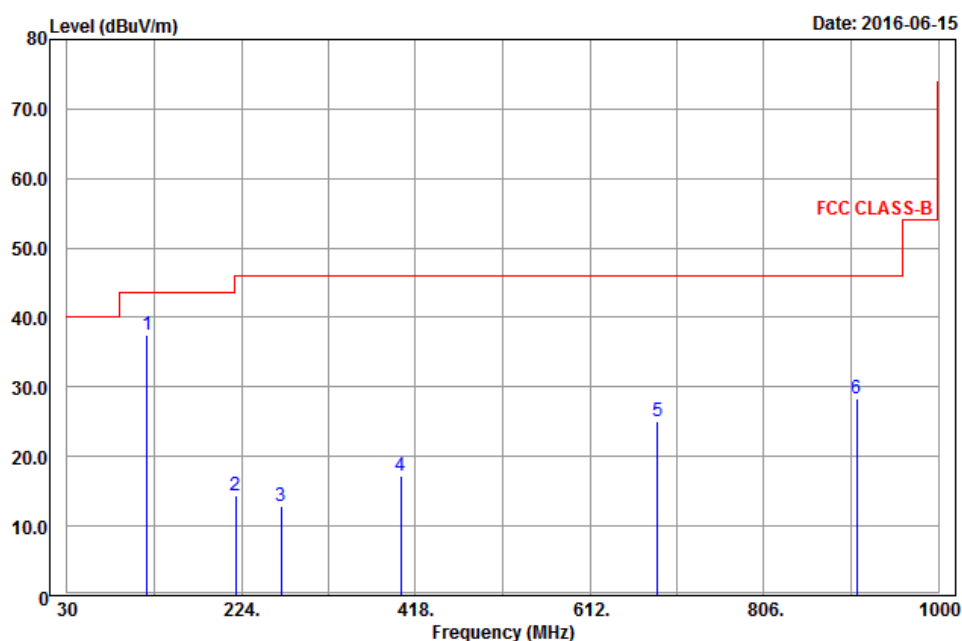
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 62	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
123.15	35.77	57.76	43.5	-7.73	8.87	1.38	32.24	137	144	Peak
180.12	12.24	32.47	43.5	-31.26	10.4	1.61	32.24	165	128	Peak
277.86	12.58	28.95	46	-33.42	13.72	2.03	32.12	112	105	Peak
500.9	18.78	29.06	46	-27.22	19.19	2.63	32.1	162	128	Peak
717.2	24.08	29.77	46	-21.92	23.31	3.11	32.11	191	166	Peak
880.3	26.21	29.48	46	-19.79	24.84	3.49	31.6	107	154	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
119.37	37.56	59.79	43.5	-5.94	8.74	1.28	32.25	138	158	Peak
217.92	14.3	33.24	46	-31.7	11.63	1.65	32.22	164	181	Peak
267.87	12.9	29.53	46	-33.1	13.54	1.94	32.11	136	155	Peak
401.5	17.24	29.06	46	-28.76	18.06	2.34	32.22	114	127	Peak
687.8	25.05	30.87	46	-20.95	23.23	3.05	32.1	139	162	Peak
909.7	28.35	30.75	46	-17.65	25.48	3.53	31.41	108	157	Peak

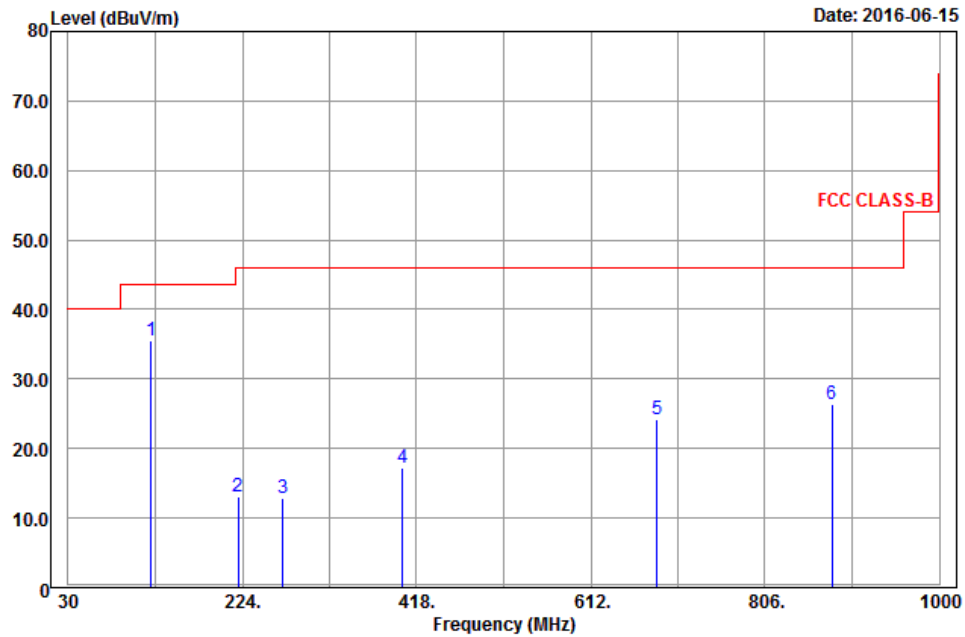
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin Value = Emission Level – Limit value

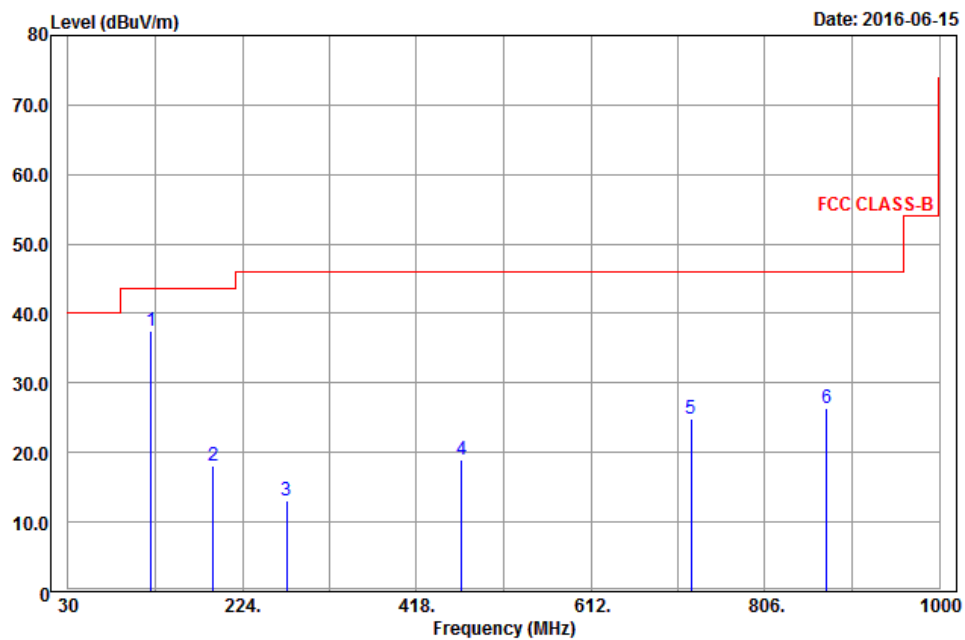
802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 100	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
122.34	35.46	57.49	43.5	-8.04	8.83	1.38	32.24	127	111	Peak
219.27	13.15	32.05	46	-32.85	11.67	1.65	32.22	105	128	Peak
268.95	12.92	29.55	46	-33.08	13.54	1.94	32.11	136	133	Peak
402.2	17.31	29.13	46	-28.69	18.06	2.34	32.22	168	175	Peak
685.7	24.22	30	46	-21.78	23.27	3.05	32.1	139	162	Peak
880.3	26.48	29.75	46	-19.52	24.84	3.49	31.6	123	128	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
122.07	37.39	59.45	43.5	-6.11	8.8	1.38	32.24	110	163	Peak
191.73	17.99	38.18	43.5	-25.51	10.46	1.61	32.26	108	154	Peak
273	13.11	29.62	46	-32.89	13.66	1.94	32.11	192	147	Peak
468	18.94	29.88	46	-27.06	18.63	2.56	32.13	133	152	Peak
723.5	24.82	30.41	46	-21.18	23.36	3.16	32.11	196	137	Peak
874.7	26.41	29.76	46	-19.59	24.8	3.49	31.64	107	146	Peak

Remarks:

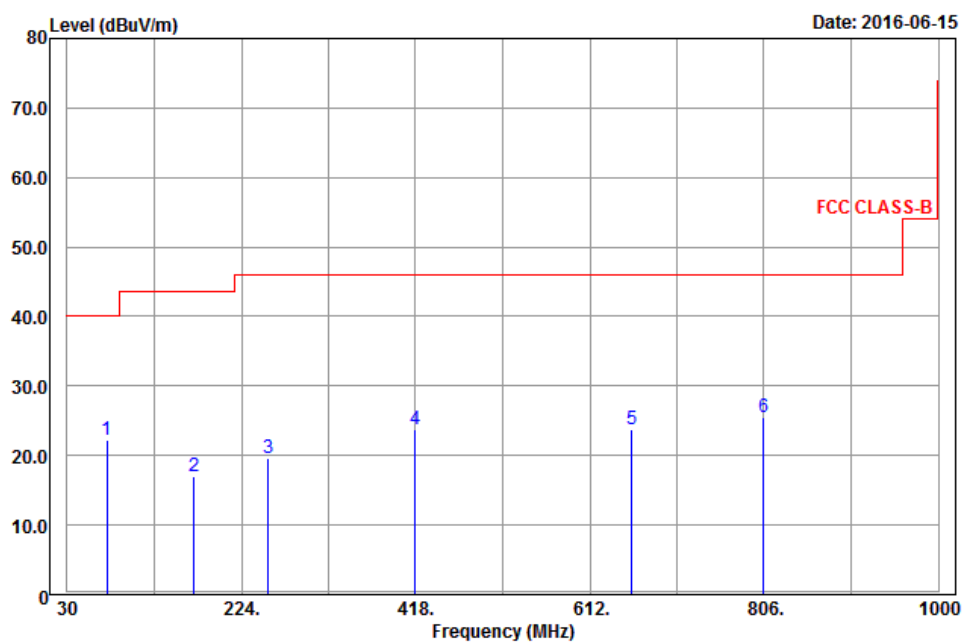
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

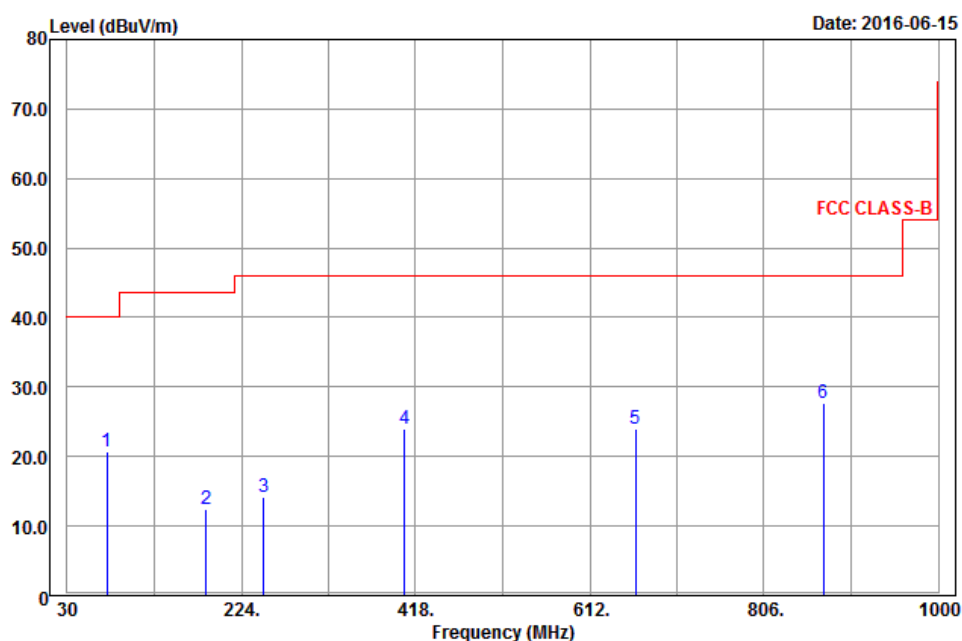
802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 165	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	Charles Hsiao

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.28	22.31	45.19	40	-17.69	8.23	1.11	32.22	139	155	Peak
171.21	16.97	37.65	43.5	-26.53	10.04	1.52	32.24	176	152	Peak
253.56	19.58	36.62	46	-26.42	13.12	1.94	32.1	136	192	Peak
417.6	23.68	35.66	46	-22.32	17.81	2.41	32.2	163	199	Peak
658.4	23.7	30.32	46	-22.3	22.53	2.99	32.14	154	127	Peak
805.4	25.42	29.75	46	-20.58	24.38	3.32	32.03	115	128	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.55	20.63	43.5	40	-19.37	8.24	1.11	32.22	156	122	Peak
184.44	12.44	32.67	43.5	-31.06	10.4	1.61	32.24	128	153	Peak
249.24	14.12	31.43	46	-31.88	12.94	1.85	32.1	169	137	Peak
405.7	23.99	35.88	46	-22.01	17.99	2.34	32.22	158	127	Peak
663.3	23.89	30.28	46	-22.11	22.75	2.99	32.13	139	166	Peak
872.6	27.78	31.19	46	-18.22	24.8	3.44	31.65	120	158	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin Value = Emission Level – Limit value

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Due Date Of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 16, 2015	Nov. 15, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 26, 2015	Dec. 25, 2016
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2016	Feb. 25, 2017
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 24, 2015	Jul. 23, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- Note:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 1.
 3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

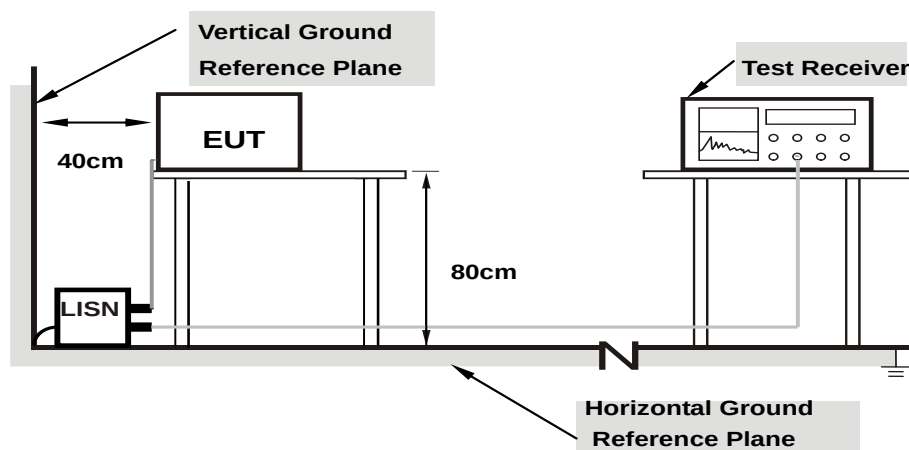
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

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

4.2.7 Test Results

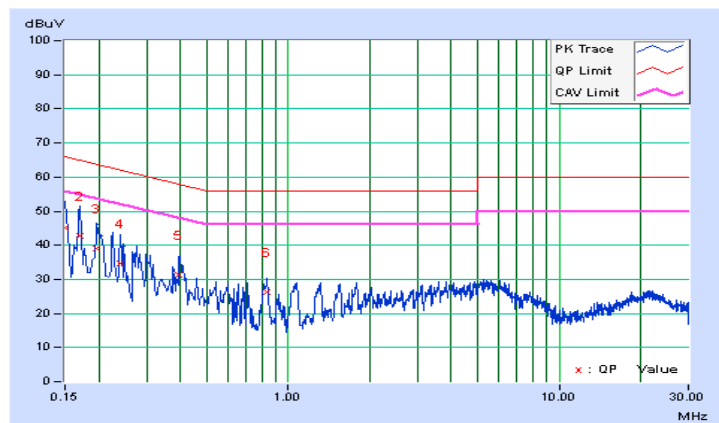
Mode A

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2016/6/9

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	35.02	18.21	45.03	28.22	66.00	56.00	-20.97	-27.78
2	0.16955	10.02	32.73	14.44	42.75	24.46	64.98	54.98	-22.23	-30.52
3	0.19692	10.03	28.94	15.08	38.97	25.11	63.74	53.74	-24.77	-28.63
4	0.23993	10.05	24.78	9.55	34.83	19.60	62.10	52.10	-27.27	-32.50
5	0.39635	10.12	21.24	7.45	31.36	17.57	57.93	47.93	-26.57	-30.36
6	0.83425	10.18	16.05	8.34	26.23	18.52	56.00	46.00	-29.77	-27.48

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

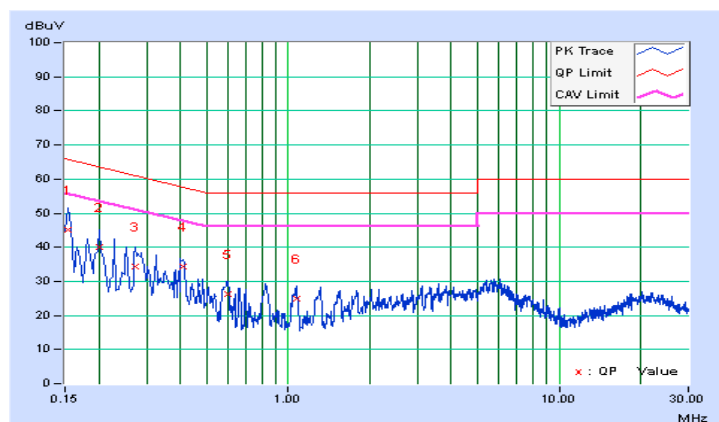


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2016/6/9

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	0.15391	10.03	34.98	17.26	45.01	27.29	65.79	55.79	-20.78	-28.50
2	0.20084	10.04	29.95	18.12	39.99	28.16	63.58	53.58	-23.59	-25.42
3	0.27120	10.07	24.32	9.17	34.39	19.24	61.08	51.08	-26.69	-31.84
4	0.40800	10.13	24.05	13.16	34.18	23.29	57.69	47.69	-23.51	-24.40
5	0.59627	10.16	16.21	8.84	26.37	19.00	56.00	46.00	-29.63	-27.00
6	1.07308	10.22	14.83	7.62	25.05	17.84	56.00	46.00	-30.95	-28.16

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



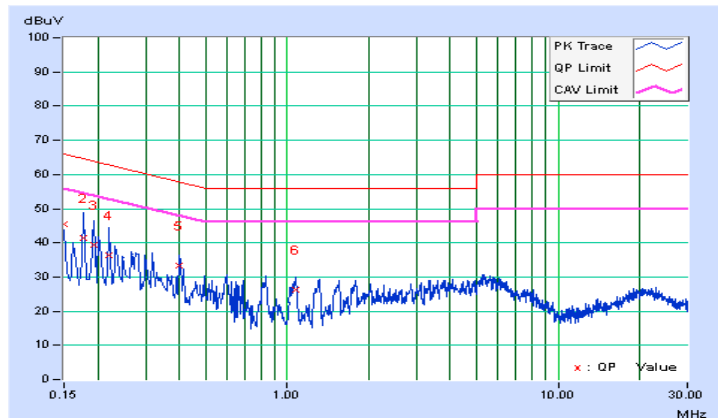
Mode B

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2016/6/10

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	35.38	18.28	45.39	28.29	66.00	56.00	-20.61	-27.71
2	0.17737	10.02	31.36	13.26	41.38	23.28	64.61	54.61	-23.22	-31.32
3	0.19301	10.03	29.30	13.99	39.33	24.02	63.91	53.91	-24.58	-29.89
4	0.22038	10.04	26.39	10.83	36.43	20.87	62.80	52.80	-26.38	-31.94
5	0.40055	10.12	23.27	11.07	33.39	21.19	57.84	47.84	-24.45	-26.65
6	1.07308	10.21	16.04	8.57	26.25	18.78	56.00	46.00	-29.75	-27.22

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

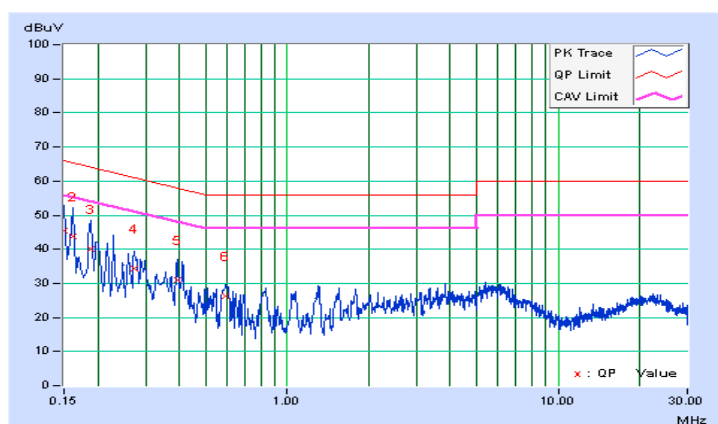


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2016/6/9

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	0.15000	10.03	35.53	18.27	45.56	28.30	66.00	56.00	-20.44	-27.70
2	0.16173	10.03	33.71	15.25	43.74	25.28	65.37	55.37	-21.64	-30.10
3	0.18903	10.04	29.96	12.38	40.00	22.42	64.08	54.08	-24.08	-31.66
4	0.27120	10.07	24.29	9.16	34.36	19.23	61.08	51.08	-26.72	-31.85
5	0.39242	10.13	20.79	7.00	30.92	17.13	58.01	48.01	-27.10	-30.89
6	0.59158	10.16	15.97	8.32	26.13	18.48	56.00	46.00	-29.87	-27.52

Remarks:

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	✓	Mobile and Portable client device	250 mW (24 dBm)
U-NII-2A		✓	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C		✓	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		✓	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

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

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

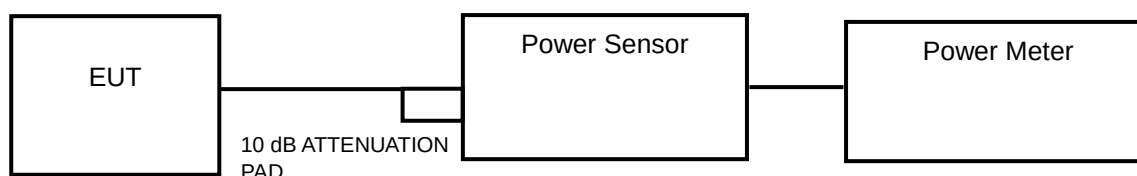
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

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

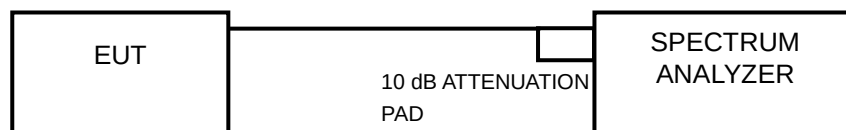
For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

4.3.2 Test Setup

<Power Output Measurement>



<26 dB Bandwidth>



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

Average Power Measurement

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

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

26 dB Bandwidth

- 1) Set RBW = approximately 1 % of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.

Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

Power Output:

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	12.11	10.64	27.84	14.45	24	Pass
44	5220	11.92	10.85	27.72	14.43	24	Pass
48	5240	11.68	11.16	27.78	14.44	24	Pass
52	5260	16.39	16.35	86.70	19.38	24	Pass
60	5300	11.61	11.16	27.55	14.40	24	Pass
64	5320	11.61	11.23	27.76	14.43	24	Pass
100	5500	12.12	10.48	27.46	14.39	24	Pass
116	5580	14.71	14.01	54.76	17.38	24	Pass
140	5700	10.92	9.94	22.22	13.47	24	Pass
149	5745	10.14	8.64	17.64	12.46	30	Pass
157	5785	11.80	11.13	28.11	14.49	30	Pass
165	5825	11.71	11.16	27.89	14.45	30	Pass

Note:

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

Chain 0

1. $11 \text{ dBm} + 10\log(41.11) = 27.14 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(25.40) = 25.05 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(24.92) = 24.97 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(24.83) = 24.95 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(42.45) = 27.28 \text{ dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(24.86) = 24.96 \text{ dBm} > 24 \text{ dBm}$.

Chain 1

1. $11 \text{ dBm} + 10\log(36.97) = 26.68 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(24.23) = 24.84 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(24.75) = 24.94 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(24.29) = 24.85 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(26.27) = 25.19 \text{ dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(24.62) = 24.91 \text{ dBm} > 24 \text{ dBm}$.

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	11.89	10.29	26.14	14.17	24	Pass
44	5220	11.64	10.41	25.58	14.08	24	Pass
48	5240	10.91	10.36	23.20	13.65	24	Pass
52	5260	14.64	14.39	56.59	17.53	24	Pass
60	5300	11.58	10.96	26.86	14.29	24	Pass
64	5320	11.67	11.17	27.78	14.44	24	Pass
100	5500	10.55	9.49	20.24	13.06	24	Pass
116	5580	14.65	14.22	55.60	17.45	24	Pass
140	5700	8.85	8.64	14.99	11.76	24	Pass
149	5745	8.41	7.66	12.77	11.06	30	Pass
157	5785	14.41	13.51	50.04	16.99	30	Pass
165	5825	12.71	12.23	35.37	15.49	30	Pass

Note:

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

Chain 0

1. $11 \text{ dBm} + 10\log(28.99) = 25.62 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(25.81) = 25.12 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(25.49) = 25.06 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(25.87) = 25.13 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(45.18) = 27.55 \text{ dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(25.26) = 25.02 \text{ dBm} > 24 \text{ dBm}$.

Chain 1

1. $11 \text{ dBm} + 10\log(29.31) = 25.67 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(25.45) = 25.06 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(25.83) = 25.12 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(25.14) = 25.00 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(44.18) = 27.45 \text{ dBm} > 24 \text{ dBm}$.
6. $11 \text{ dBm} + 10\log(25.34) = 25.04 \text{ dBm} > 24 \text{ dBm}$.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	9.78	8.51	16.60	12.20	24	Pass
46	5230	13.64	13.24	44.21	16.45	24	Pass
54	5270	9.81	9.01	17.53	12.44	24	Pass
62	5310	9.93	8.89	17.58	12.45	24	Pass
102	5510	6.92	5.69	8.63	9.36	24	Pass
110	5550	15.17	14.23	59.37	17.74	24	Pass
134	5670	12.12	12.01	32.18	15.08	24	Pass
151	5755	7.82	6.76	10.80	10.33	30	Pass
159	5795	12.49	12.17	34.22	15.34	30	Pass

Note:

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

Chain 0

1. $11 \text{ dBm} + 10\log(44.28) = 27.46 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(44.97) = 27.53 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(43.98) = 27.43 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(70.05) = 29.45 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(45.66) = 27.60 \text{ dBm} > 24 \text{ dBm}$.

Chain 1

1. $11 \text{ dBm} + 10\log(43.09) = 27.34 \text{ dBm} > 24 \text{ dBm}$.
2. $11 \text{ dBm} + 10\log(43.90) = 27.42 \text{ dBm} > 24 \text{ dBm}$.
3. $11 \text{ dBm} + 10\log(43.74) = 27.41 \text{ dBm} > 24 \text{ dBm}$.
4. $11 \text{ dBm} + 10\log(44.38) = 27.47 \text{ dBm} > 24 \text{ dBm}$.
5. $11 \text{ dBm} + 10\log(43.94) = 27.43 \text{ dBm} > 24 \text{ dBm}$.

26 dB Bandwidth:

802.11a

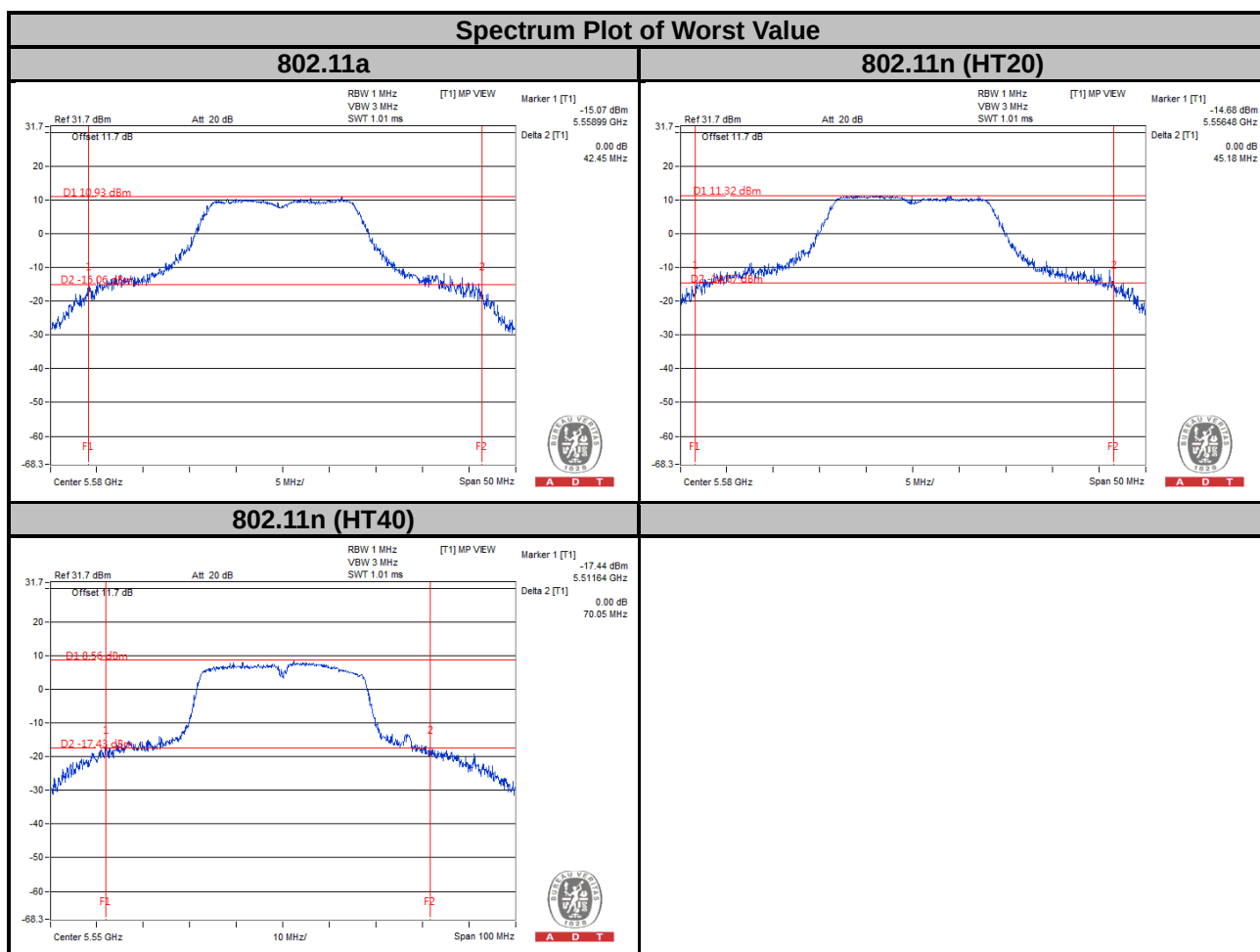
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	25.02	24.12
44	5220	24.96	24.95
48	5240	25.28	25.12
52	5260	41.11	36.97
60	5300	25.40	24.23
64	5320	24.92	24.75
100	5500	24.83	24.29
116	5580	42.45	26.27
140	5700	24.86	24.62

802.11n (HT20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	25.75	24.03
44	5220	24.88	24.99
48	5240	24.71	25.66
52	5260	28.99	29.31
60	5300	25.81	25.45
64	5320	25.49	25.83
100	5500	25.87	25.14
116	5580	45.18	44.18
140	5700	25.26	25.34

802.11n (HT40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	43.89	43.09
46	5230	47.31	43.90
54	5270	44.28	43.09
62	5310	44.97	43.90
102	5510	43.98	43.74
110	5550	70.05	44.38
134	5670	45.66	43.94



5 Pictures of Test Arrangements

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

Appendix – Information on 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 accredited and approved according to ISO/IEC 17025.

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

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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