

Partial FCC Test Report

Report No.: RF160613C31-3

FCC ID: PPD-QCNFA344AH

Test Model: QCNFA344A

Received Date: May 30, 2016

Test Date: May 30, 2016 ~ Jun. 02, 2016

Issued Date: Jun. 15, 2016

Applicant: Qualcomm Atheros, Inc.

Address: 1700 Technology Dr San Jose, CA 95110

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

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(R.O.C)

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R.O.C



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Release Control Record

Issue No.	Description	Date Issued
RF160613C31-3	Original Release	Jun. 15, 2016

1 Certificate of Conformity

Product: 802.11a/b/g/n/ac + BT 4.1 M.2 2230 Type Card

Brand: Qualcomm Atheros

Test Model: QCNFA344A

Sample Status: Production Unit

Applicant: Qualcomm Atheros, Inc.

Test Date: May 30, 2016 ~ Jun. 02, 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. 15, 2016
Evonne Liu / Specialist

Approved by : Stanley Wu, **Date:** Jun. 15, 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	N/A	Refer to Note
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1 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 Maximum Output Power and Radiated Emissions were performed for this report and the conducted data is referring to module report (Report No.: RF150107E06-1 R1, Issue Date: Mar. 19, 2015).

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	Expended 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	802.11a/b/g/n/ac + BT 4.1 M.2 2230 Type Card
Brand	Qualcomm Atheros
Test Model	QCNFA344A
Status of EUT	Production Unit
Power Supply Rating	3.3 Vdc (host equipment)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to MCS7 802.11ac: up to V9
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 (HT40) 1 for 802.11ac (VHT80) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 1 for 802.11ac (VHT80) 5500 ~ 5700 MHz: 11 for 802.11a, 802.11n (HT20) 5 for 802.11n (HT40) 2 for 802.11ac (VHT80) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 1 for 802.11ac (VHT80)
Output Power	62.88 mW for 5180 ~ 5240 MHz 62.67 mW for 5260 ~ 5320 MHz 62.10 mW for 5500 ~ 5700 MHz 55.469 mW for 5745 ~ 5825 MHz
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

1. The EUT was installed in Portable Computer (Brand: Dell, Model: P56F).
2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

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

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

3. The antenna information is listed as below.

Antenna Type	Manuf.	Part Number	Antenna Gain (dBi)			
			2.4GHz	5.3 GHz	5.6 GHz	5.8 GHz
PIFA	ACON	WLAN Main Antenna: APL6Y-700002 WLAN Aux. Antenna: APL6Y-700002	Main: 1.01 Aux.: -0.07	Main: 2.77 Aux.: 0.97	Main: 1.65 Aux.: 1.72	Main: 1.65 Aux.: 1.72
	TE	WLAN Main Antenna: 1556723-1 WLAN Aux. Antenna: 1556723-1	Main: -2.24 Aux.: -1.97	Main: -0.33 Aux.: -2.98	Main: -3.26 Aux.: -2.22	Main: -2.40 Aux.: -2.22

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

FOR 5260 ~ 5320 MHz

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

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
58	5290

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		

2 channels are provided for 802.11ac (VHT80):

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

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
155	5775

3.2.1 Test Mode Applicability and Tested Channel Detail

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

Where **RE $\geq$ 1G**: Radiated Emission above 1 GHz

RE<1G: Radiated Emission below 1 GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE:

1. “-” means no effect.

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36 to 48	36, 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
-		802.11ac (VHT80)	42	42	OFDM	BPSK	V0
-	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
-		802.11ac (VHT80)	58	58	OFDM	BPSK	V0
-	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
-		802.11ac (VHT80)	106 to 122	106, 122	OFDM	BPSK	V0
-	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
-		802.11ac (VHT80)	155	155	OFDM	BPSK	V0

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)
-	5180-5240	802.11ac (VHT80)	42	42	OFDM	BPSK	V0
-	5260-5320	802.11n (HT40)	54 to 62	62	OFDM	BPSK	MCS0
-	5500-5700	802.11n (HT40)	102 to 134	102	OFDM	BPSK	MCS0
-	5745-5825	802.11a	149 to 165	149	OFDM	BPSK	6.0

Test Condition:

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

3.3 Description of Support Units

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

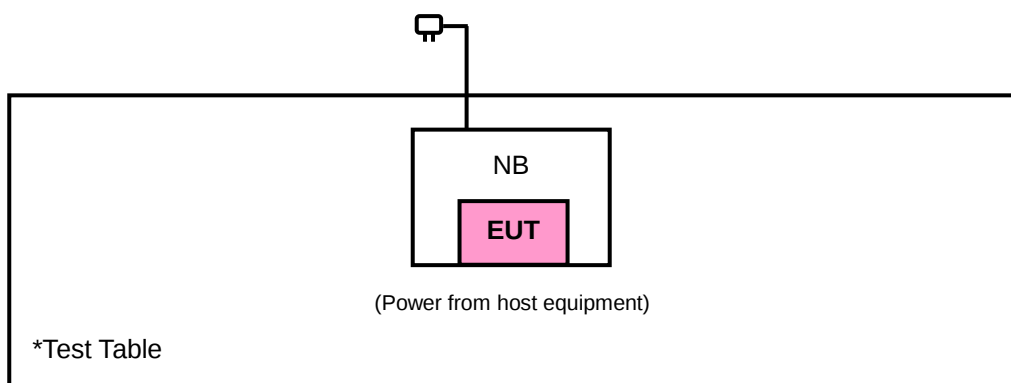
No.	Product	Brand	Model No.	Serial No.	FCC ID
1.	NB	N/A	N/A	N/A	N/A

No.	Signal Cable Description Of The Above Support Units
1.	N/A

Note:

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

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

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

644545 D01 Guidance for IEEE 802 11ac 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:

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

4.1.2 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. 19, 2016	Jan. 18, 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 / 24 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:

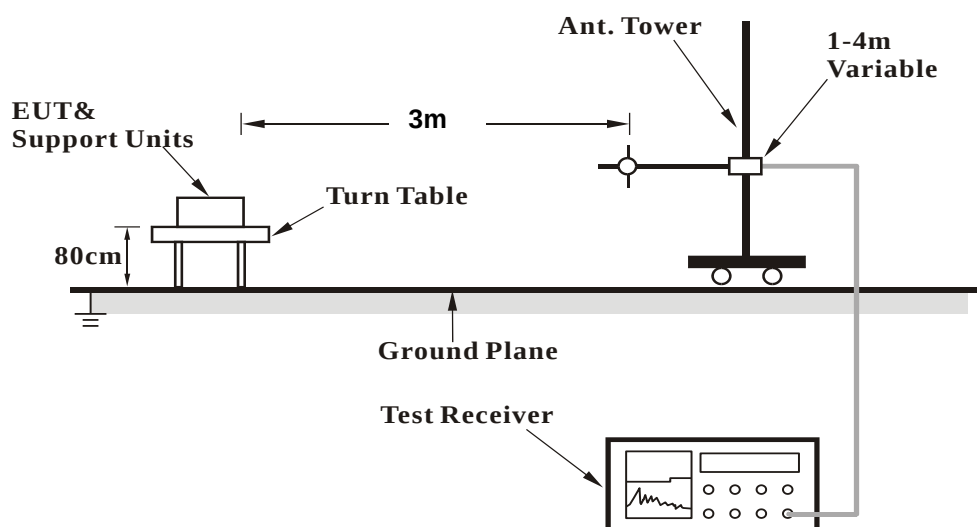
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
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 ≥ 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

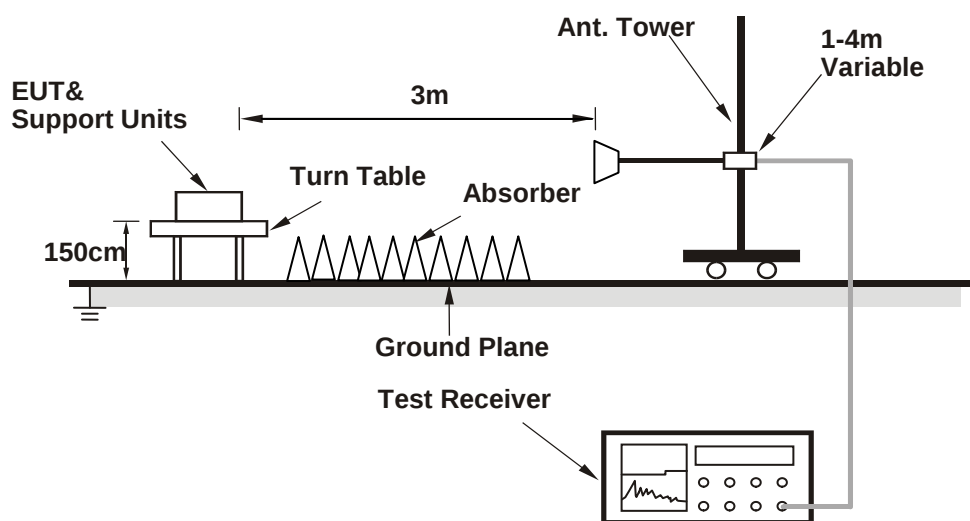
No deviation.

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.

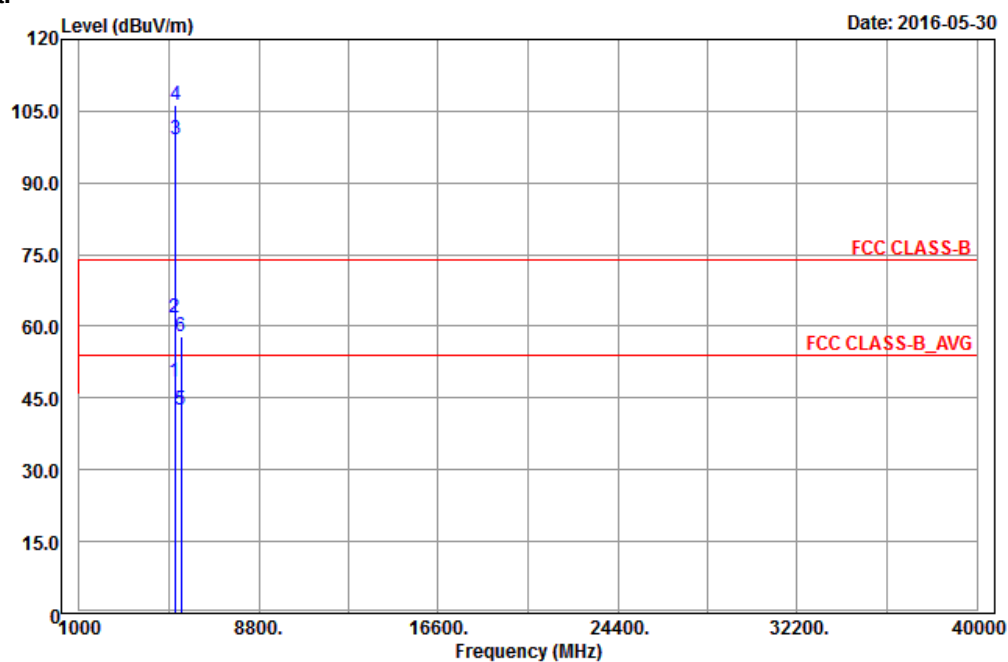
4.1.8 Test Results

Above 1 GHz Data :

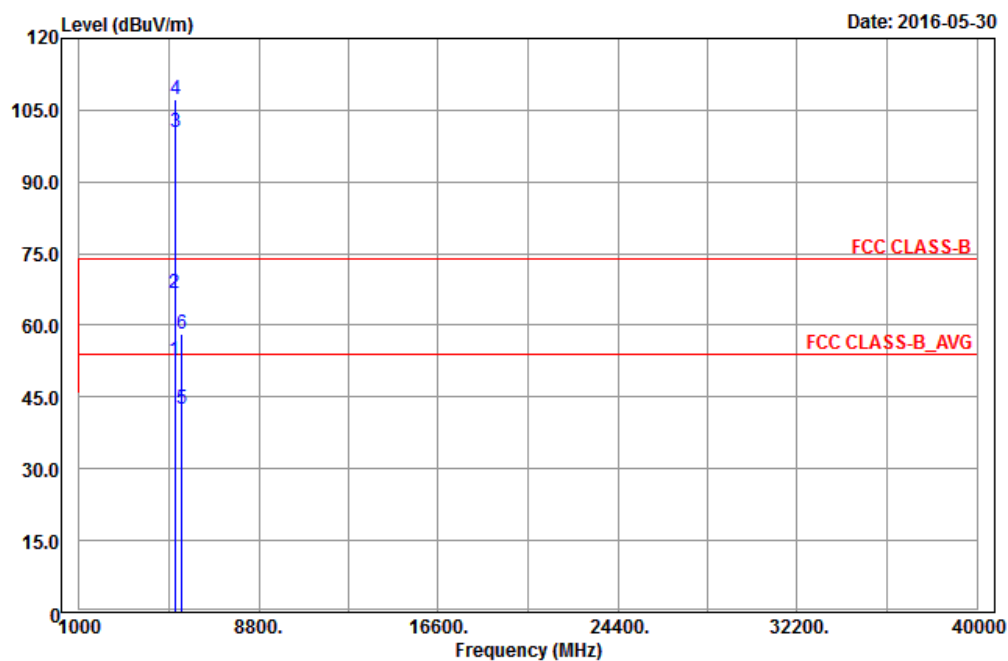
802.11a

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	Karl Lee

Horizontal



Vertical



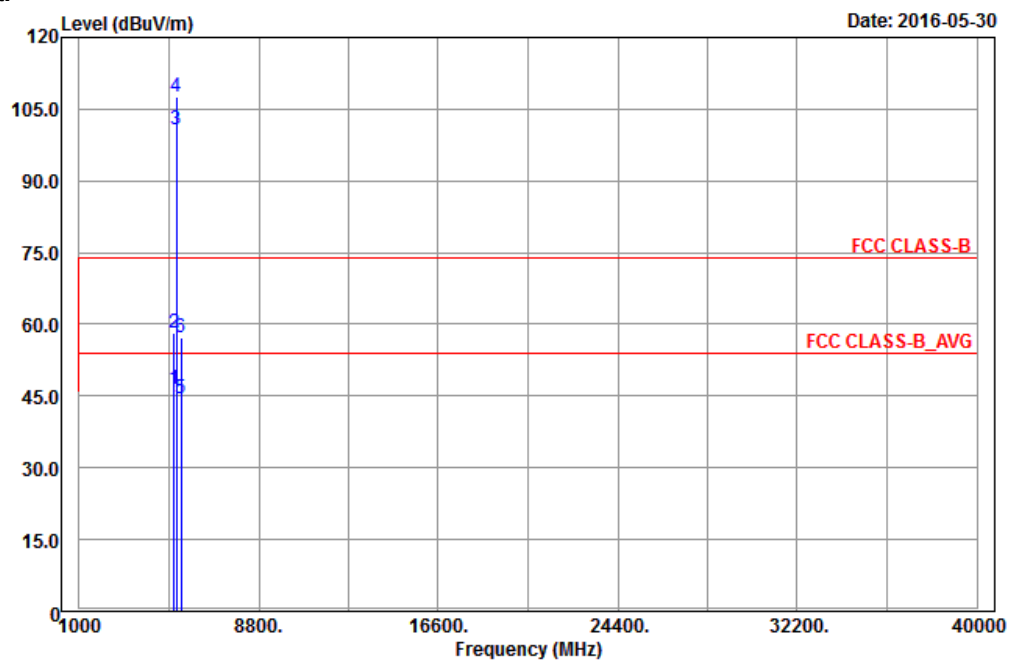
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142	48.27	40.01	54	-5.73	34.12	8.13	33.99	283	359	Average
5142	61.78	53.52	74	-12.22	34.12	8.13	33.99	283	359	Peak
5180	99.22	90.91			34.15	8.16	34	283	359	Average
5180	106.21	97.9			34.15	8.16	34	283	359	Peak
5432	42.63	33.84	54	-11.37	34.35	8.48	34.04	283	359	Average
5432	57.94	49.15	74	-16.06	34.35	8.48	34.04	283	359	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	52.66	44.41	54	-1.34	34.12	8.13	34	100	2	Average
5148	66.76	58.51	74	-7.24	34.12	8.13	34	100	2	Peak
5180	100.47	92.16			34.15	8.16	34	100	2	Average
5180	107.4	99.09			34.15	8.16	34	100	2	Peak
5452	42.58	33.76	54	-11.42	34.36	8.51	34.05	112	2	Average
5452	58.06	49.24	74	-15.94	34.36	8.51	34.05	112	2	Peak

Remarks:

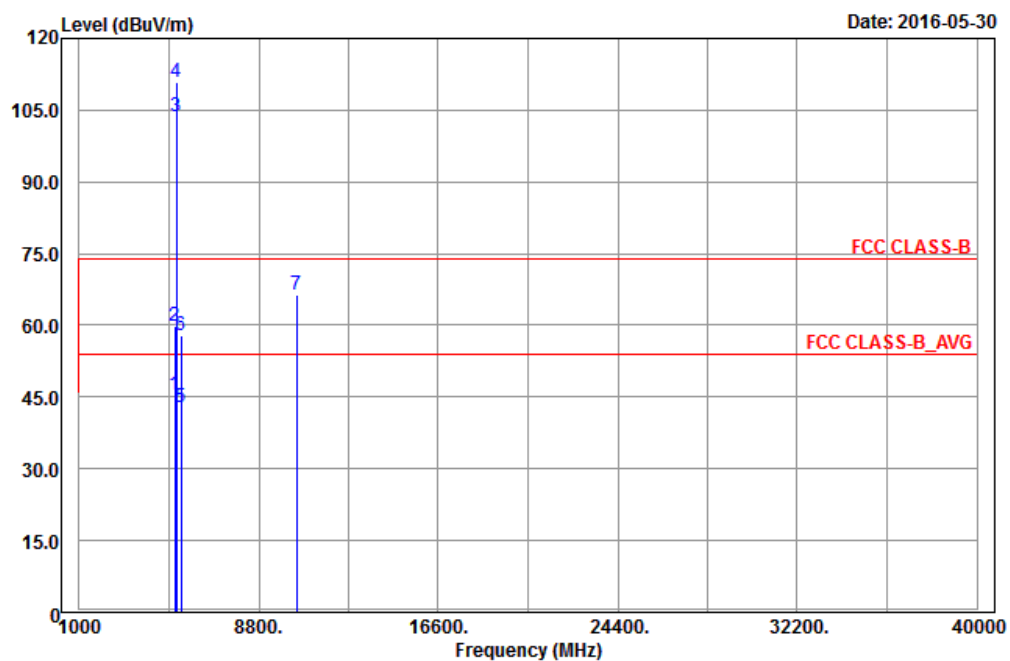
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



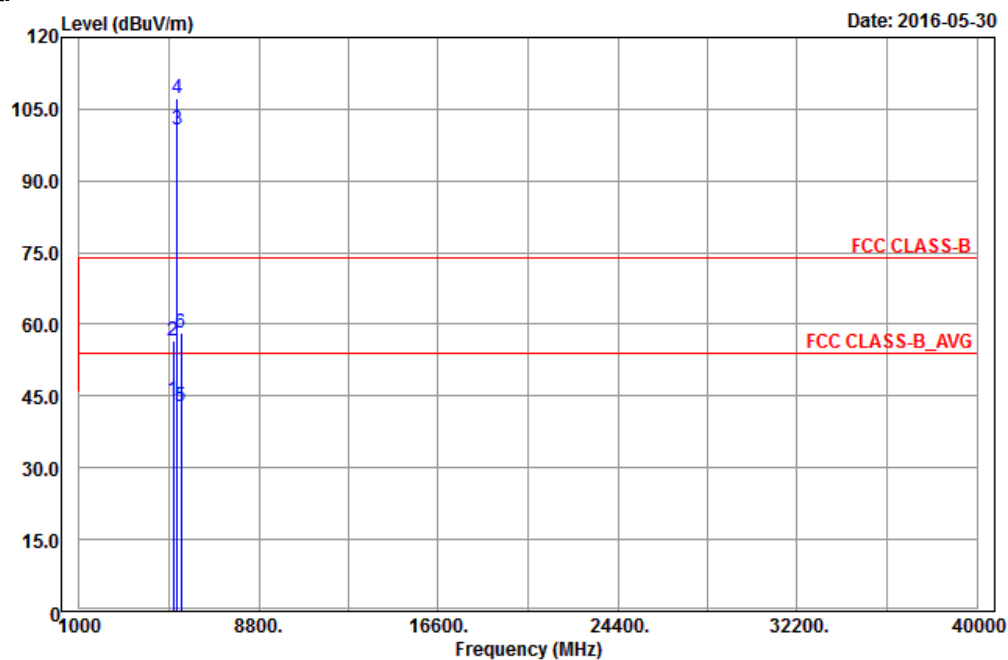
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5104	46.37	38.21	54	-7.63	34.08	8.07	33.99	269	358	Average
5104	58.17	50.01	74	-15.83	34.08	8.07	33.99	269	358	Peak
5220	100.6	92.21			34.17	8.22	34	269	358	Average
5220	107.43	99.04			34.17	8.22	34	269	358	Peak
5418	44.59	35.86	54	-9.41	34.33	8.44	34.04	269	358	Average
5418	57.31	48.58	74	-16.69	34.33	8.44	34.04	269	358	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	45.35	37.1	54	-8.65	34.12	8.13	34	121	2	Average
5150	59.73	51.48	74	-14.27	34.12	8.13	34	121	2	Peak
5220	103.61	95.22			34.17	8.22	34	105	2	Average
5220	110.79	102.4			34.17	8.22	34	105	2	Peak
5440	42.81	34.02	54	-11.19	34.35	8.48	34.04	105	2	Average
5440	57.77	48.98	74	-16.23	34.35	8.48	34.04	105	2	Peak
10440	66.26	51.8	68.2	-1.94	37.16	12.47	35.17	206	312	Peak

Remarks:

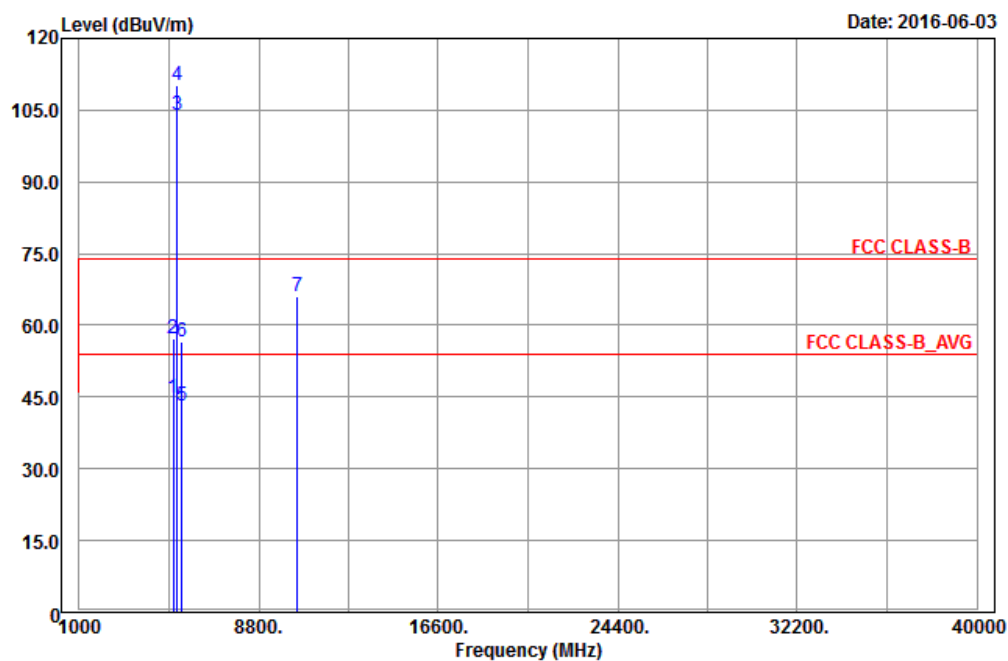
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. 10440 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



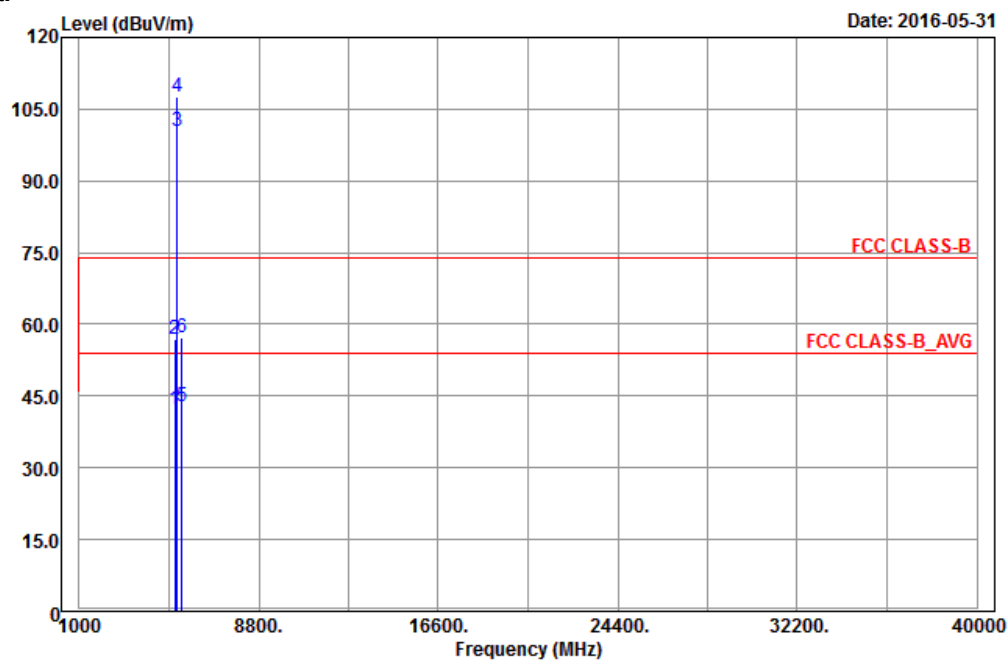
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5088	44.21	36.05	54	-9.79	34.07	8.07	33.98	269	358	Average
5088	56.6	48.44	74	-17.4	34.07	8.07	33.98	269	358	Peak
5240	100.83	92.39			34.19	8.26	34.01	269	358	Average
5240	107.23	98.79			34.19	8.26	34.01	269	358	Peak
5440	42.76	33.97	54	-11.24	34.35	8.48	34.04	269	358	Average
5440	58.22	49.43	74	-15.78	34.35	8.48	34.04	269	358	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
5076	44.81	36.69	54	-9.19	34.07	8.03	33.98	105	2	Average
5076	57.14	49.02	74	-16.86	34.07	8.03	33.98	105	2	Peak
5240	103.83	95.39			34.19	8.26	34.01	105	2	Average
5240	110.08	101.64			34.19	8.26	34.01	105	2	Peak
5454	43.21	34.39	54	-10.79	34.36	8.51	34.05	105	2	Average
5454	56.62	47.8	74	-17.38	34.36	8.51	34.05	105	2	Peak
10480	66	51.49	68.2	-2.2	37.19	12.53	35.21	177	327	Peak

Remarks:

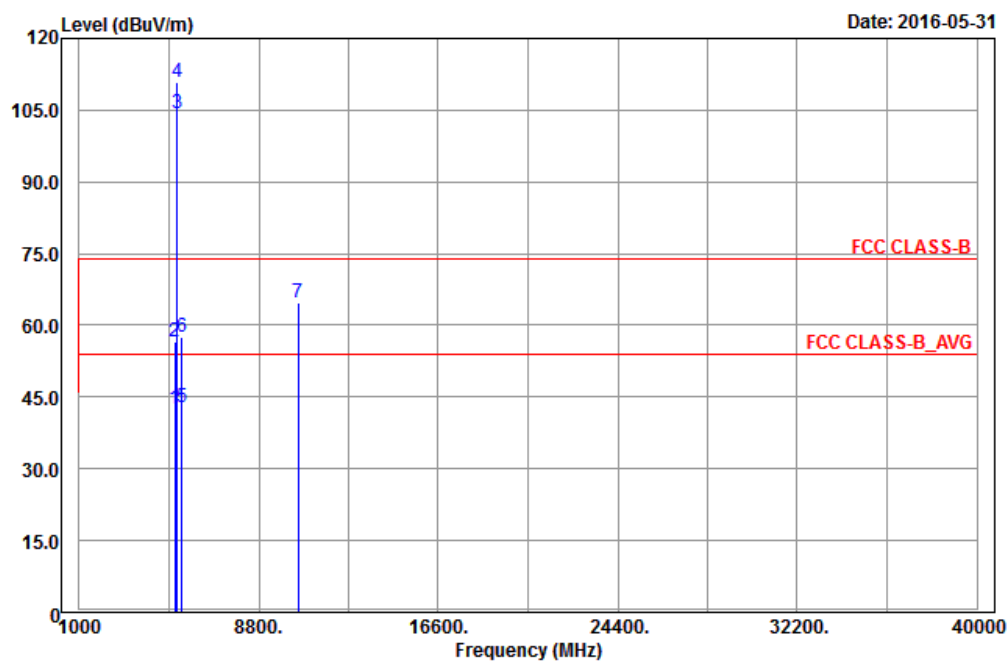
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. 10480 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



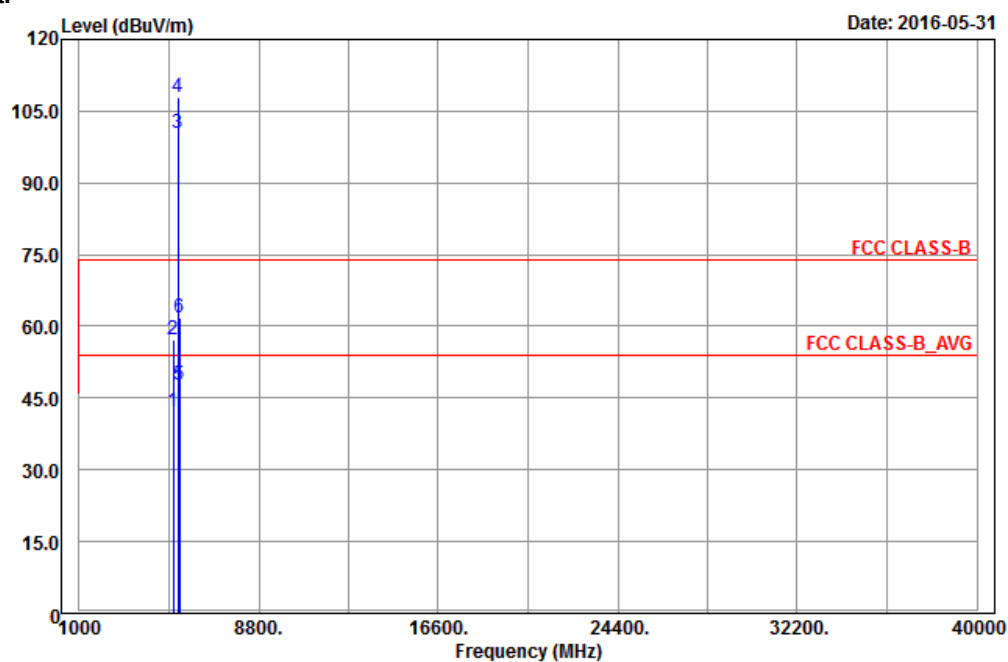
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142	42.29	34.03	54	-11.71	34.12	8.13	33.99	263	357	Average
5142	57.04	48.78	74	-16.96	34.12	8.13	33.99	263	357	Peak
5260	100.43	91.97			34.21	8.26	34.01	263	357	Average
5260	107.54	99.08			34.21	8.26	34.01	263	357	Peak
5458	42.7	33.88	54	-11.3	34.36	8.51	34.05	263	357	Average
5458	57.16	48.34	74	-16.84	34.36	8.51	34.05	263	357	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	42.45	34.2	54	-11.55	34.11	8.13	33.99	104	0	Average
5138	56.56	48.31	74	-17.44	34.11	8.13	33.99	104	0	Peak
5260	104.27	95.81			34.21	8.26	34.01	104	0	Average
5260	110.73	102.27			34.21	8.26	34.01	104	0	Peak
5444	42.83	34.04	54	-11.17	34.35	8.48	34.04	104	0	Average
5444	57.62	48.83	74	-16.38	34.35	8.48	34.04	104	0	Peak
10520	64.76	50.17	68.2	-3.44	37.21	12.61	35.23	100	238	Peak

Remarks:

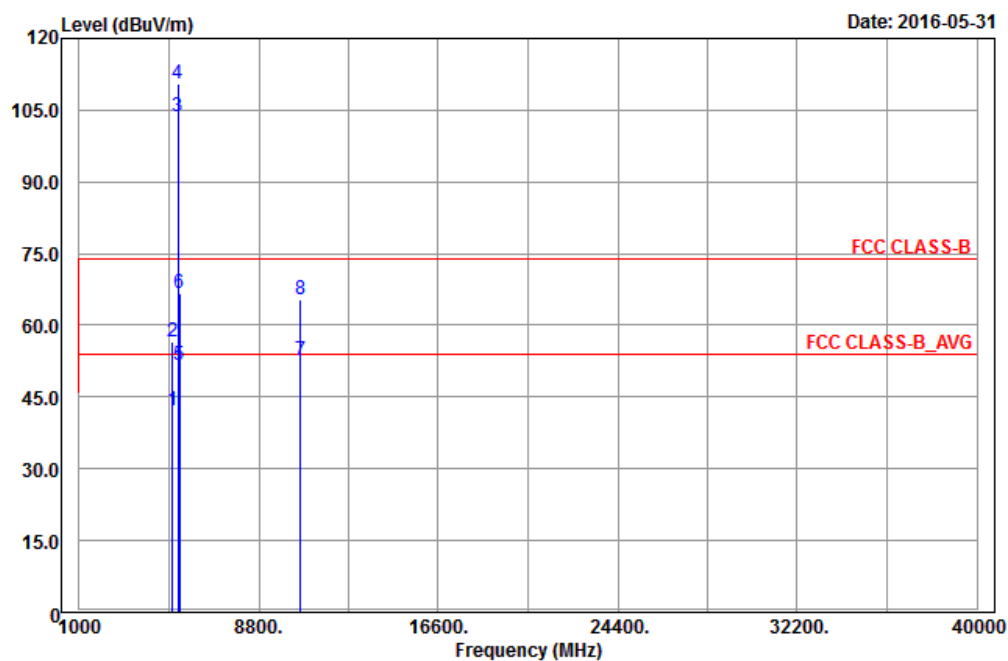
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. 10520 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



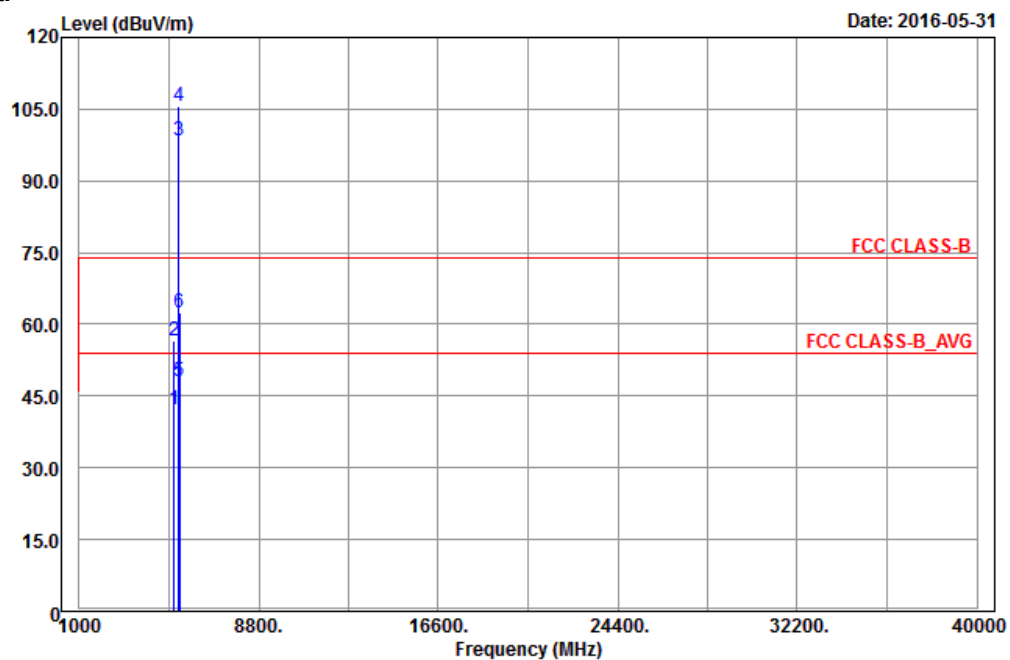
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5100	42.18	34.02	54	-11.82	34.08	8.07	33.99	276	357	Average
5100	57.07	48.91	74	-16.93	34.08	8.07	33.99	276	357	Peak
5300	100.29	91.75			34.24	8.32	34.02	276	357	Average
5300	107.81	99.27			34.24	8.32	34.02	276	357	Peak
5350	47.78	39.15	54	-6.22	34.28	8.38	34.03	276	357	Average
5350	61.87	53.24	74	-12.13	34.28	8.38	34.03	276	357	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)	Preamplifier Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5040	42.24	34.17	54	-11.76	34.04	8	33.97	104	0	Average
5040	56.5	48.43	74	-17.5	34.04	8	33.97	104	0	Peak
5300	103.72	95.18			34.24	8.32	34.02	104	0	Average
5300	110.49	101.95			34.24	8.32	34.02	104	0	Peak
5348	51.56	42.93	54	-2.44	34.28	8.38	34.03	112	14	Average
5348	66.86	58.23	74	-7.14	34.28	8.38	34.03	112	14	Peak
10600	52.57	37.89	54	-1.43	37.28	12.67	35.27	107	310	Average
10600	65.49	50.81	74	-8.51	37.28	12.67	35.27	107	310	Peak

Remarks:

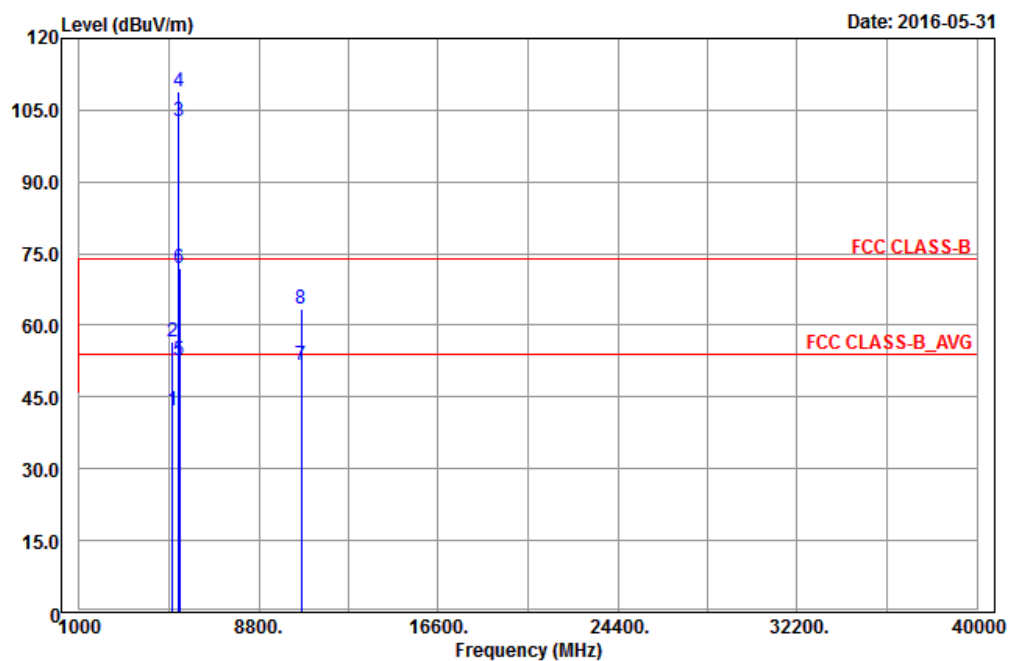
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamplifier Factor
Margin value = Emission level – Limit value
- 5300 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



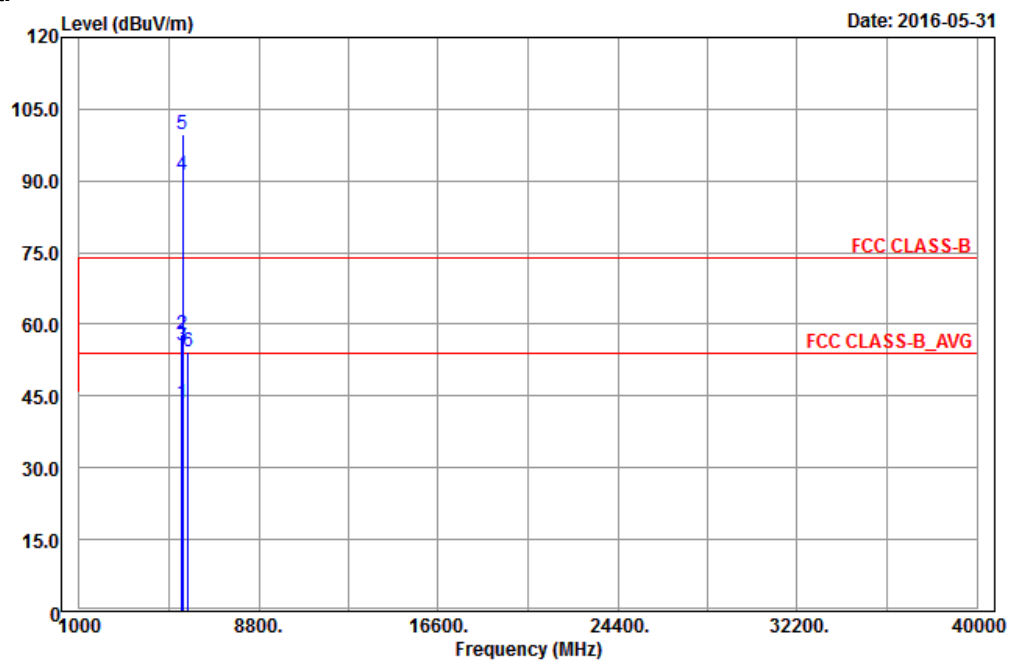
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5106	42.13	33.96	54	-11.87	34.09	8.07	33.99	257	357	Average
5106	56.58	48.41	74	-17.42	34.09	8.07	33.99	257	357	Peak
5320	98.5	89.92			34.25	8.35	34.02	257	357	Average
5320	105.65	97.07			34.25	8.35	34.02	257	357	Peak
5350	47.9	39.27	54	-6.1	34.28	8.38	34.03	257	357	Average
5350	62.45	53.82	74	-11.55	34.28	8.38	34.03	257	357	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
5040	42.04	33.97	54	-11.96	34.04	8	33.97	103	0	Average
5040	56.65	48.58	74	-17.35	34.04	8	33.97	103	0	Peak
5320	102.81	94.23			34.25	8.35	34.02	103	0	Average
5320	108.96	100.38			34.25	8.35	34.02	103	0	Peak
5352	52.8	44.17	54	-1.2	34.28	8.38	34.03	109	2	Average
5352	71.98	63.35	74	-2.02	34.28	8.38	34.03	109	2	Peak
10640	51.72	36.99	54	-2.28	37.31	12.71	35.29	105	300	Average
10640	63.52	48.79	74	-10.48	37.31	12.71	35.29	105	300	Peak

Remarks:

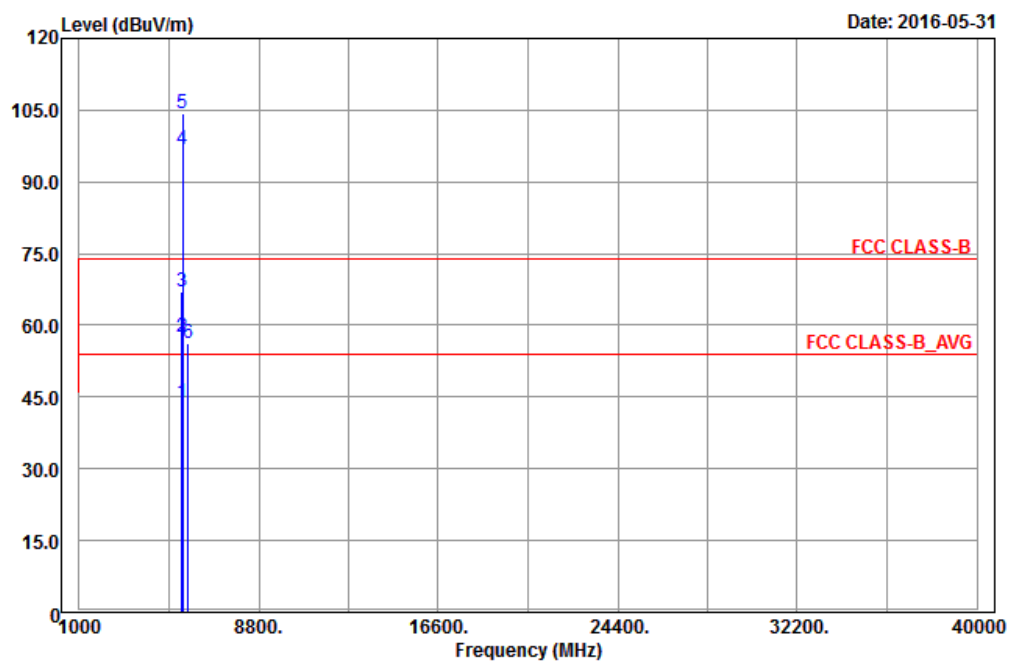
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



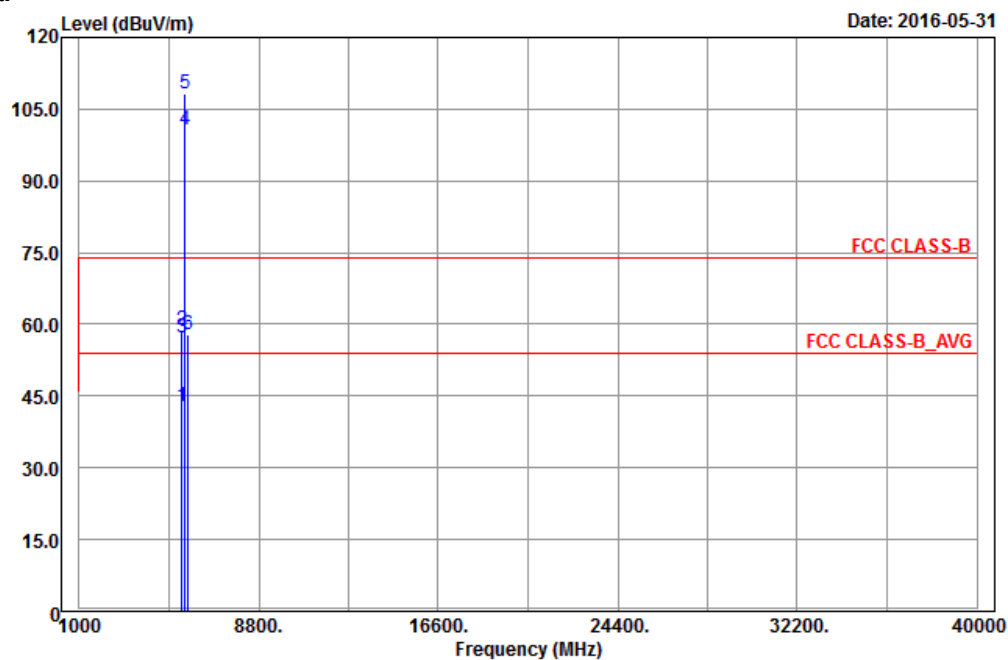
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5456	43.37	34.55	54	-10.63	34.36	8.51	34.05	280	2	Average
5456	57.8	48.98	74	-16.2	34.36	8.51	34.05	280	2	Peak
5470	55.69	46.86	68.2	-12.51	34.37	8.51	34.05	280	2	Peak
5500	91.17	82.25			34.4	8.57	34.05	280	2	Average
5500	99.68	90.76			34.4	8.57	34.05	280	2	Peak
5725	54.42	45.26	68.2	-13.78	34.62	8.65	34.11	280	2	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	43.87	35.05	54	-10.13	34.36	8.51	34.05	106	9	Average
5460	57.6	48.78	74	-16.4	34.36	8.51	34.05	106	9	Peak
5470	66.87	58.04	68.2	-1.33	34.37	8.51	34.05	100	9	Peak
5500	96.64	87.72			34.4	8.57	34.05	106	9	Average
5500	104.38	95.46			34.4	8.57	34.05	106	9	Peak
5725	56.18	47.02	68.2	-12.02	34.62	8.65	34.11	106	9	Peak

Remarks:

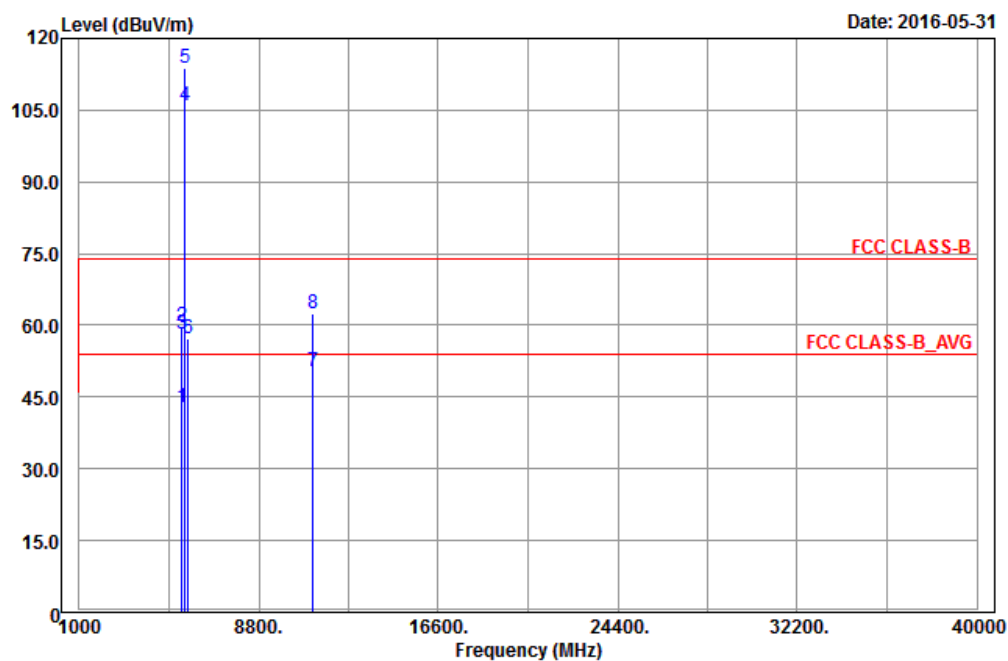
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



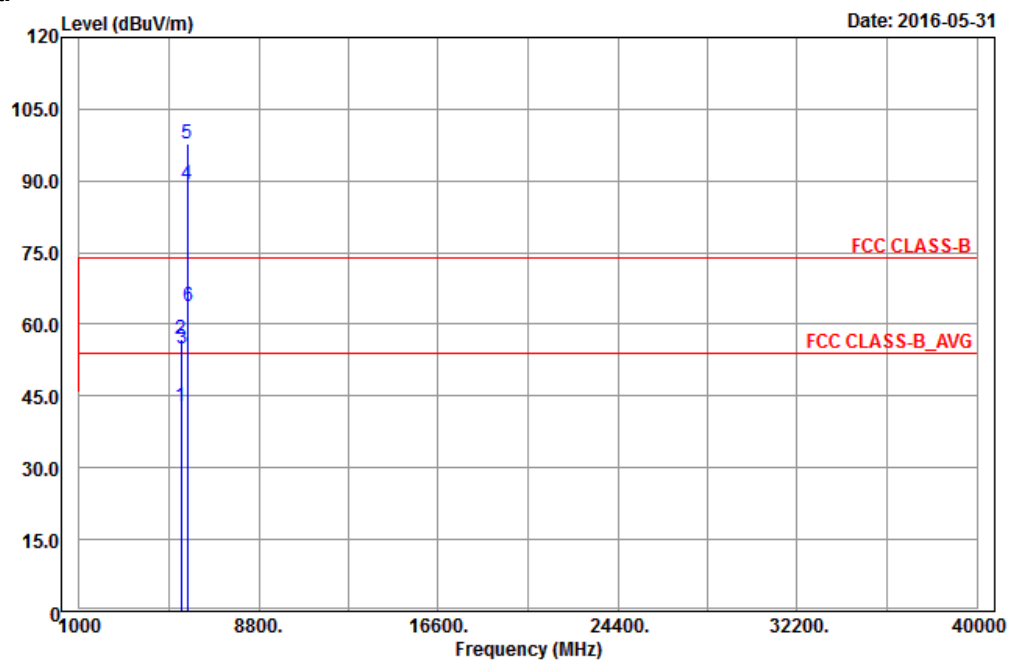
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448	42.82	33.99	54	-11.18	34.36	8.51	34.04	280	2	Average
5448	58.94	50.11	74	-15.06	34.36	8.51	34.04	280	2	Peak
5470	57.31	48.48	68.2	-10.89	34.37	8.51	34.05	280	2	Peak
5580	100.87	91.88			34.47	8.6	34.08	280	2	Average
5580	108.34	99.35			34.47	8.6	34.08	280	2	Peak
5725	57.76	48.6	68.2	-10.44	34.62	8.65	34.11	280	2	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
5452	42.92	34.1	54	-11.08	34.36	8.51	34.05	105	9	Average
5452	59.84	51.02	74	-14.16	34.36	8.51	34.05	105	9	Peak
5470	58.36	49.53	68.2	-9.84	34.37	8.51	34.05	105	9	Peak
5580	105.87	96.88			34.47	8.6	34.08	105	9	Average
5580	113.8	104.81			34.47	8.6	34.08	105	9	Peak
5725	57.33	48.17	68.2	-10.87	34.62	8.65	34.11	105	9	Peak
11160	50.38	35.3	54	-3.62	37.7	12.83	35.45	103	299	Average
11160	62.39	47.31	74	-11.61	37.7	12.83	35.45	103	299	Peak

Remarks:

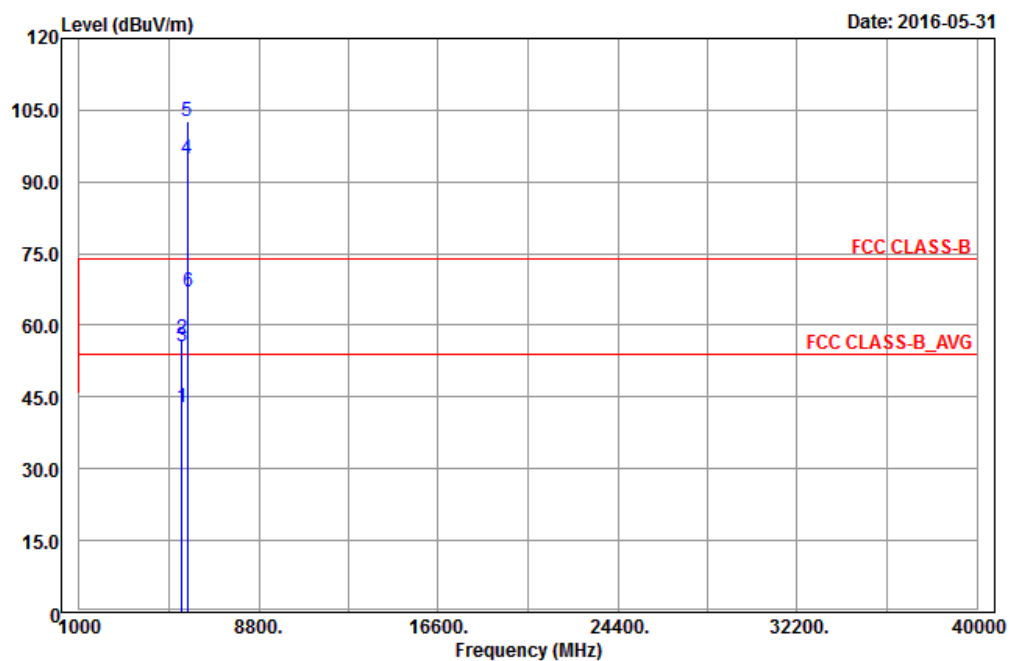
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



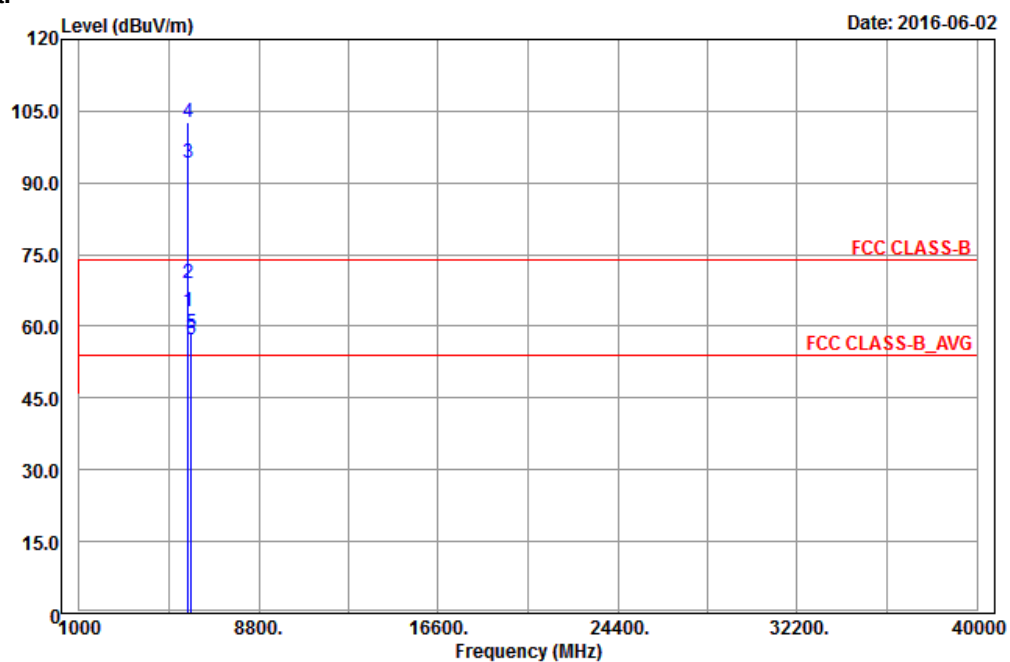
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5436	42.79	34	54	-11.21	34.35	8.48	34.04	280	2	Average
5436	57.05	48.26	74	-16.95	34.35	8.48	34.04	280	2	Peak
5470	55.07	46.24	68.2	-13.13	34.37	8.51	34.05	280	2	Peak
5700	89.23	80.1			34.59	8.64	34.1	280	2	Average
5700	97.87	88.74			34.59	8.64	34.1	280	2	Peak
5725	63.65	54.49	68.2	-4.55	34.62	8.65	34.11	280	2	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	42.79	33.97	54	-11.21	34.36	8.51	34.05	102	9	Average
5454	57.06	48.24	74	-16.94	34.36	8.51	34.05	102	9	Peak
5470	55.45	46.62	68.2	-12.75	34.37	8.51	34.05	102	9	Peak
5700	94.98	85.85			34.59	8.64	34.1	102	9	Average
5700	102.67	93.54			34.59	8.64	34.1	102	9	Peak
5725	66.88	57.72	68.2	-1.32	34.62	8.65	34.11	102	6	Peak

Remarks:

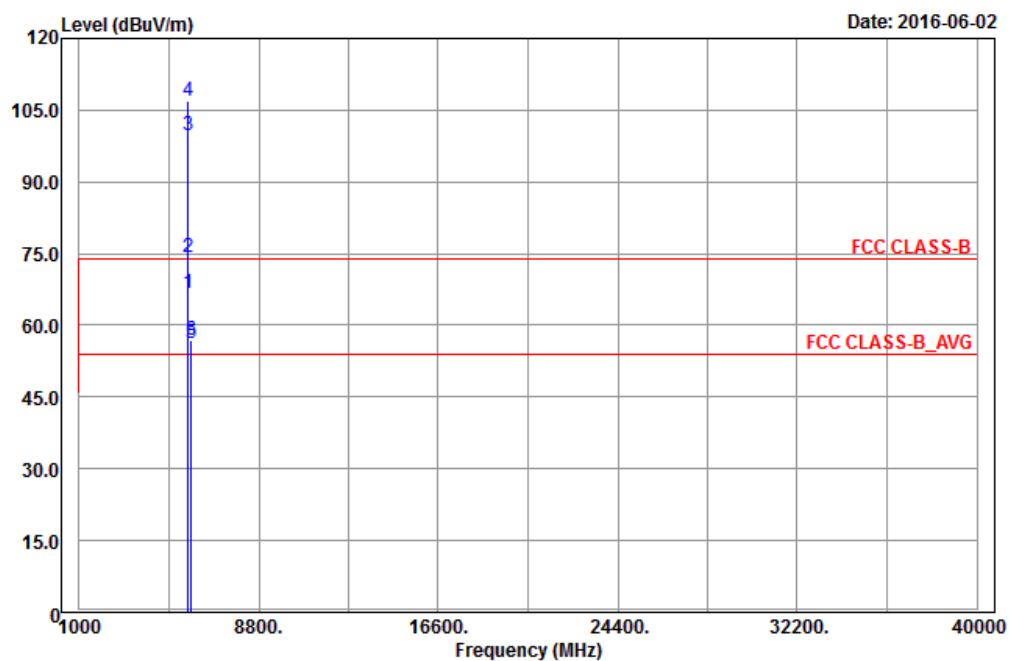
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



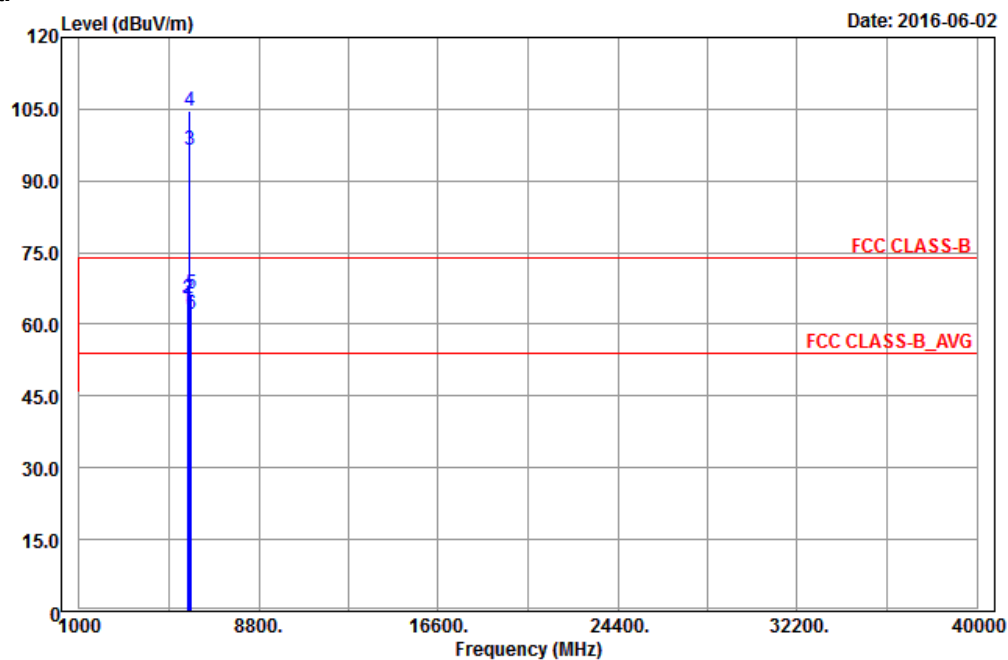
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	63.06	53.91	68.2	-5.14	34.61	8.65	34.11	269	2	Peak
*5722	69.11	59.95	78.2	-9.09	34.62	8.65	34.11	269	2	Peak
5745	94.3	85.11			34.64	8.66	34.11	293	2	Average
5745	102.78	93.59			34.64	8.66	34.11	293	2	Peak
*5856	58.49	49.17	78.2	-19.71	34.76	8.7	34.14	293	2	Peak
*5862	57.11	47.78	68.2	-11.09	34.76	8.71	34.14	293	2	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	66.63	57.48	68.2	-1.57	34.61	8.65	34.11	227	358	Peak
*5724	74.19	65.03	78.2	-4.01	34.62	8.65	34.11	227	358	Peak
5745	99.8	90.61			34.64	8.66	34.11	236	358	Average
5745	107.08	97.89			34.64	8.66	34.11	236	358	Peak
*5854	56.33	47.01	78.2	-21.87	34.76	8.7	34.14	236	358	Peak
*5870	56.78	47.45	68.2	-11.42	34.76	8.71	34.14	236	358	Peak

Remarks:

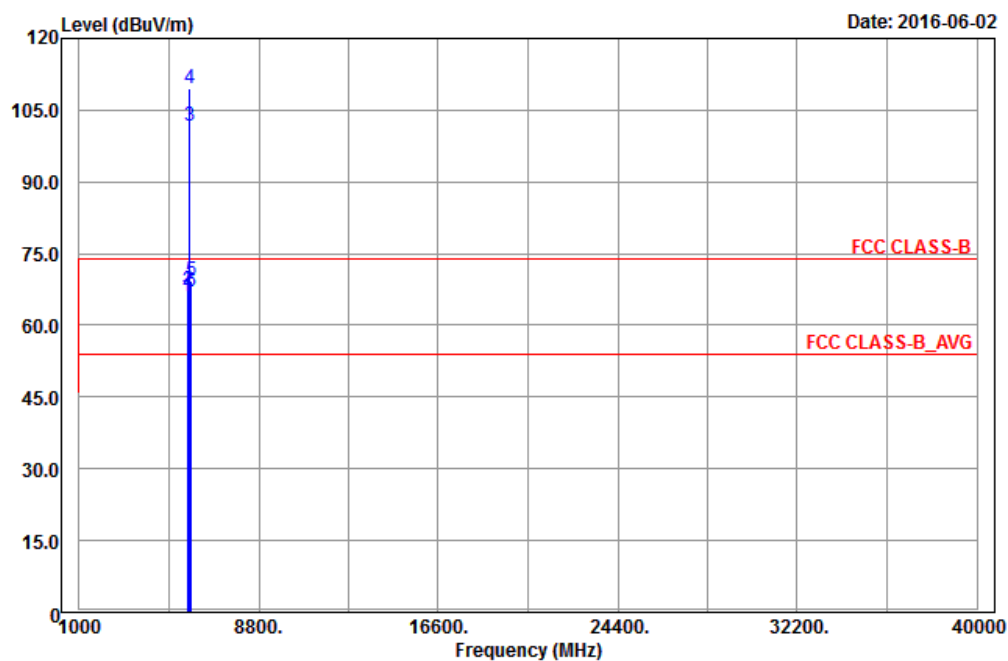
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



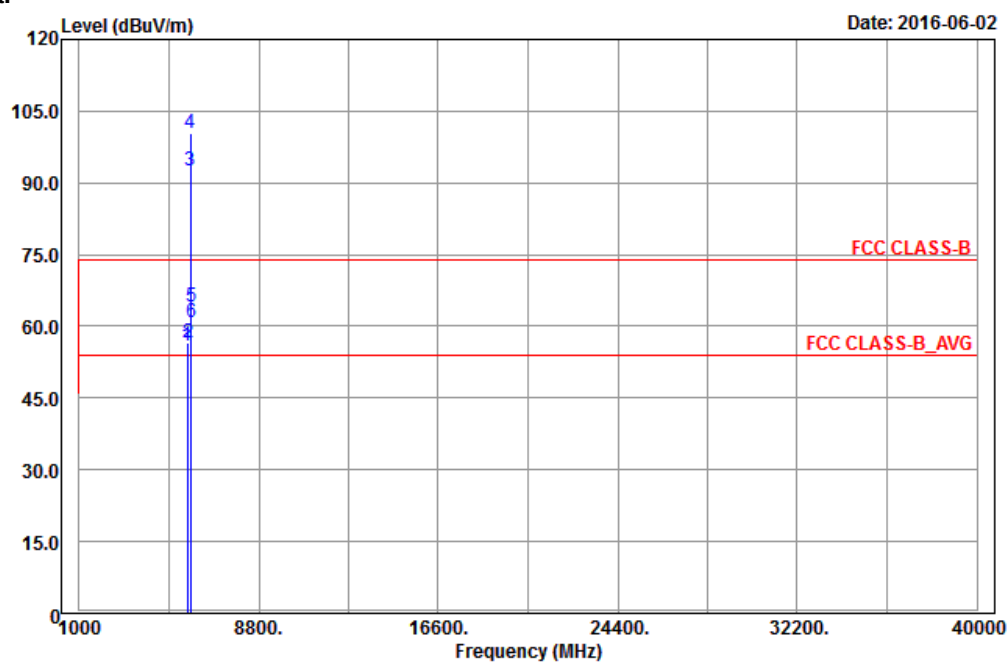
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	63.7	54.55	68.2	-4.5	34.61	8.65	34.11	250	3	Peak
*5722	65.32	56.16	78.2	-12.88	34.62	8.65	34.11	250	3	Peak
5785	96.36	87.13			34.68	8.68	34.13	283	2	Average
5785	104.78	95.55			34.68	8.68	34.13	283	2	Peak
*5852	66.46	57.16	78.2	-11.74	34.74	8.7	34.14	272	3	Peak
*5862	62.26	52.93	68.2	-5.94	34.76	8.71	34.14	272	3	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	66.17	57.02	68.2	-2.03	34.61	8.65	34.11	219	343	Peak
*5724	67.49	58.33	78.2	-10.71	34.62	8.65	34.11	219	343	Peak
5785	101.66	92.43			34.68	8.68	34.13	236	358	Average
5785	109.64	100.41			34.68	8.68	34.13	236	358	Peak
*5852	69.25	59.95	78.2	-8.95	34.74	8.7	34.14	212	358	Peak
*5862	67.18	57.85	68.2	-1.02	34.76	8.71	34.14	212	358	Peak

Remarks:

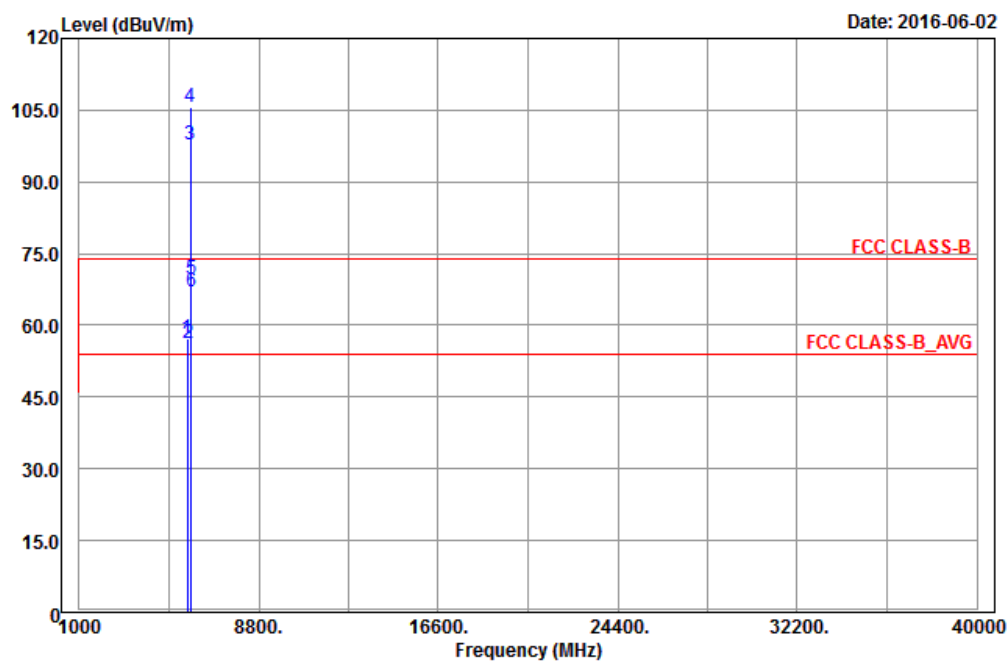
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band

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	Karl Lee

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	55.85	46.7	68.2	-12.35	34.61	8.65	34.11	283	2	Peak
*5722	56.54	47.38	78.2	-21.66	34.62	8.65	34.11	283	2	Peak
5825	92.54	83.25			34.73	8.69	34.13	283	2	Average
5825	100.53	91.24			34.73	8.69	34.13	283	2	Peak
*5852	64.15	54.85	78.2	-14.05	34.74	8.7	34.14	283	2	Peak
*5864	60.81	51.48	68.2	-7.39	34.76	8.71	34.14	283	2	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
*5708	57.15	48	68.2	-11.05	34.61	8.65	34.11	236	358	Peak
*5716	56.38	47.23	78.2	-21.82	34.61	8.65	34.11	236	358	Peak
5825	97.67	88.38			34.73	8.69	34.13	236	358	Average
5825	105.52	96.23			34.73	8.69	34.13	236	358	Peak
*5856	69.77	60.45	78.2	-8.43	34.76	8.7	34.14	230	358	Peak
*5868	67.04	57.71	68.2	-1.16	34.76	8.71	34.14	230	358	Peak

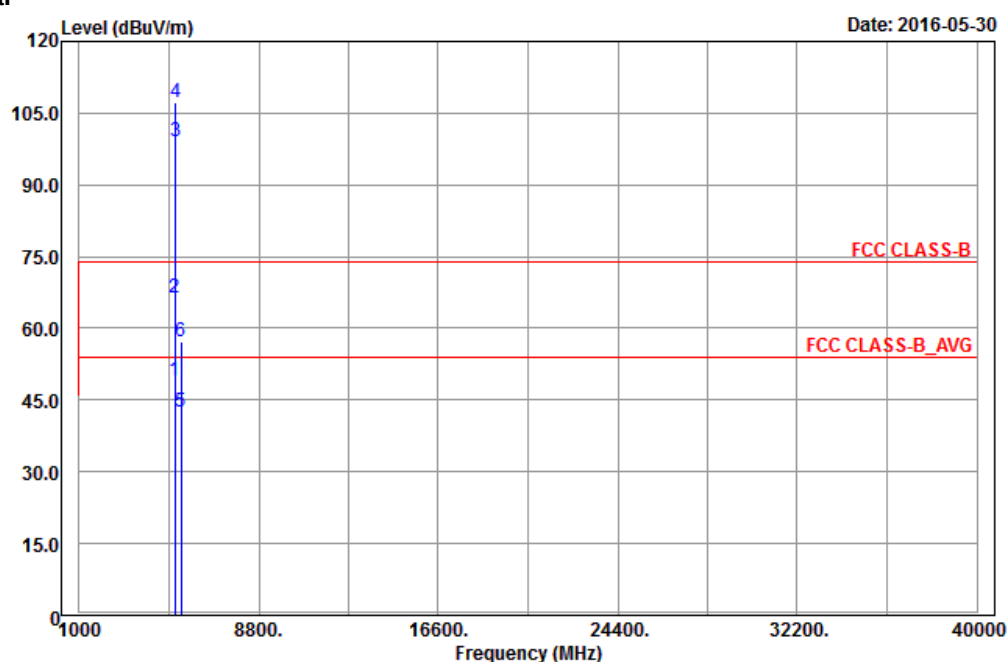
Remarks:

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

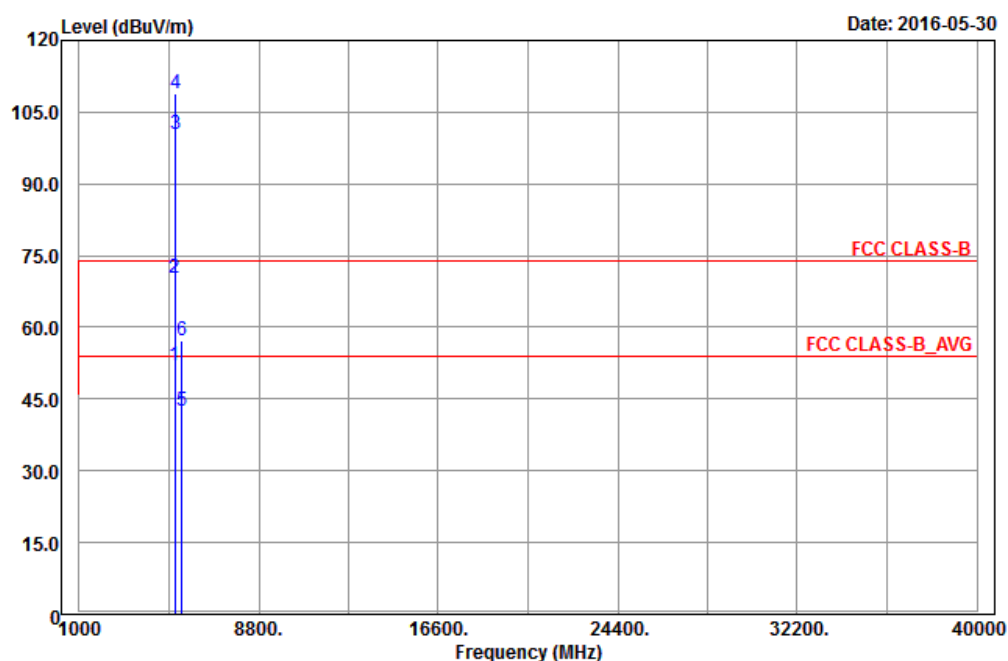
802.11n (HT20)

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	Karl Lee

Horizontal



Vertical



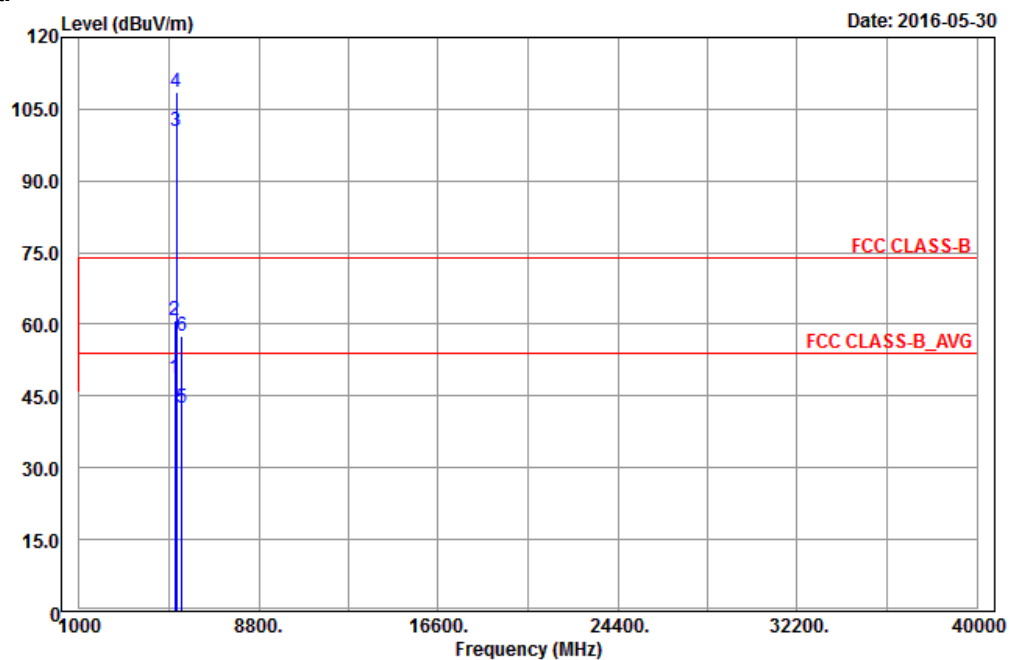
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146	49.09	40.84	54	-4.91	34.12	8.13	34	283	359	Average
5146	66.33	58.08	74	-7.67	34.12	8.13	34	283	359	Peak
5180	98.97	90.66			34.15	8.16	34	283	359	Average
5180	107.38	99.07			34.15	8.16	34	283	359	Peak
5422	42.54	33.77	54	-11.46	34.33	8.48	34.04	283	359	Average
5422	57.22	48.45	74	-16.78	34.33	8.48	34.04	283	359	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	52.06	43.81	54	-1.94	34.12	8.13	34	100	1	Average
5148	70.34	62.09	74	-3.66	34.12	8.13	34	100	1	Peak
5180	100.27	91.96			34.15	8.16	34	100	1	Average
5180	108.98	100.67			34.15	8.16	34	100	1	Peak
5444	42.57	33.78	54	-11.43	34.35	8.48	34.04	100	1	Average
5444	57.27	48.48	74	-16.73	34.35	8.48	34.04	100	1	Peak

Remarks:

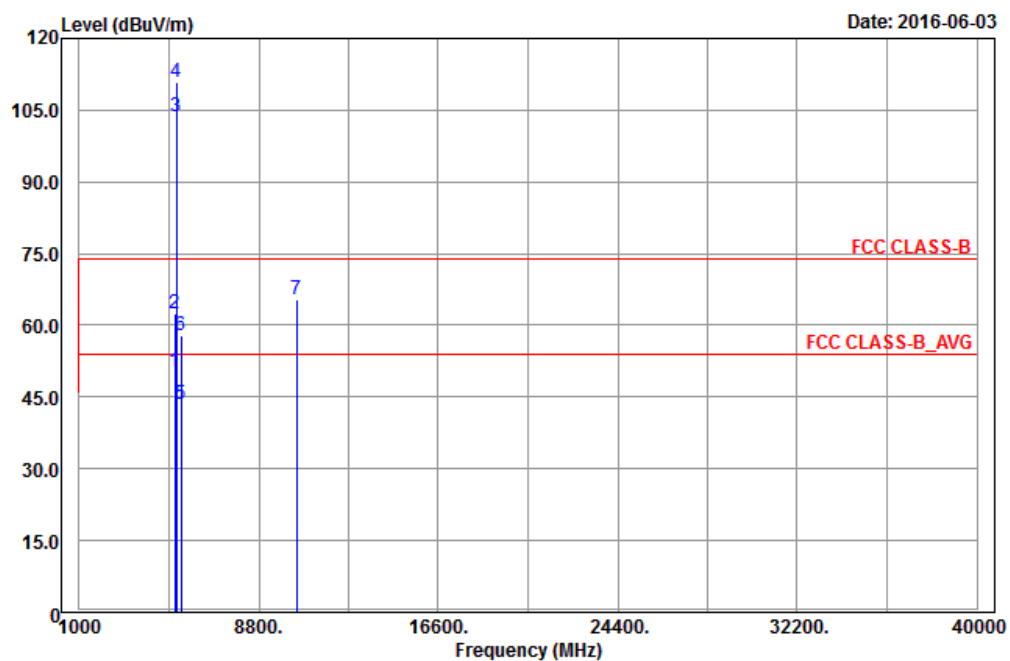
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



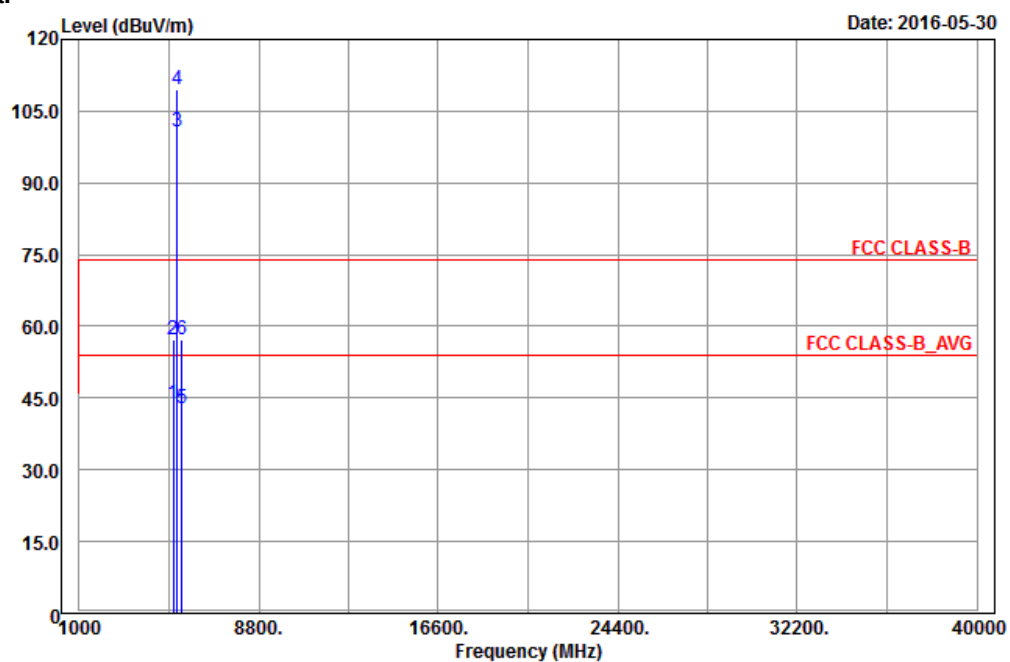
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	48.85	40.6	54	-5.15	34.12	8.13	34	269	358	Average
5150	60.8	52.55	74	-13.2	34.12	8.13	34	269	358	Peak
5220	100.46	92.07			34.17	8.22	34	269	358	Average
5220	108.4	100.01			34.17	8.22	34	269	358	Peak
5454	42.65	33.83	54	-11.35	34.36	8.51	34.05	269	358	Average
5454	57.57	48.75	74	-16.43	34.36	8.51	34.05	269	358	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	50.25	42	54	-3.75	34.12	8.13	34	113	2	Average
5150	62.6	54.35	74	-11.4	34.12	8.13	34	113	2	Peak
5220	103.66	95.27			34.17	8.22	34	105	2	Average
5220	110.98	102.59			34.17	8.22	34	105	2	Peak
5428	43.54	34.77	54	-10.46	34.33	8.48	34.04	105	2	Average
5428	57.92	49.15	74	-16.08	34.33	8.48	34.04	105	2	Peak
10444	65.46	50.99	68.2	-2.74	37.17	12.47	35.17	105	213	Peak

Remarks:

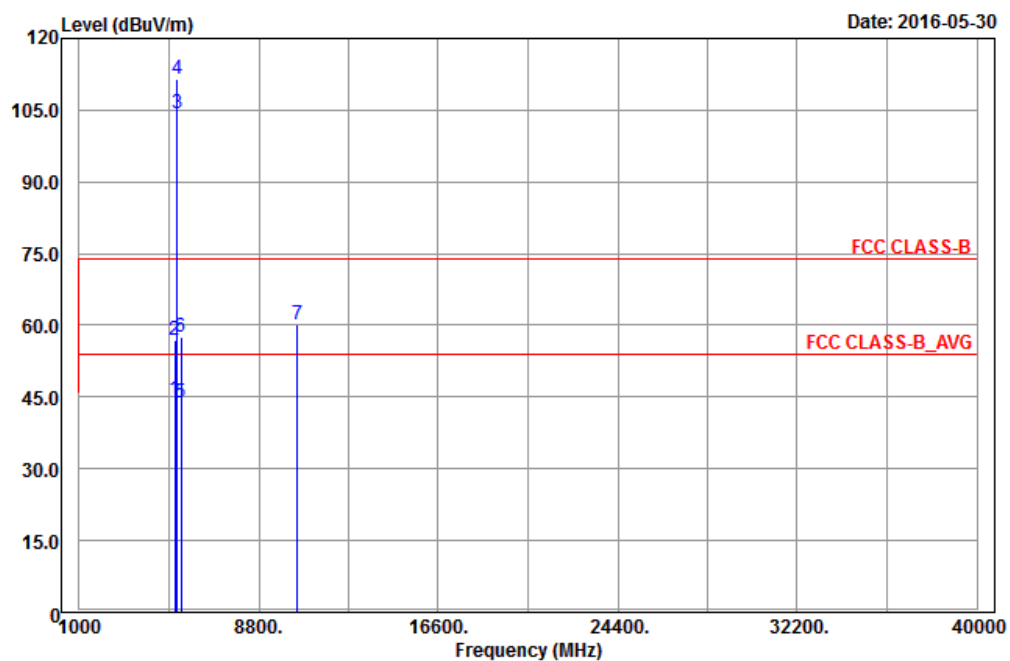
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. 10444 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



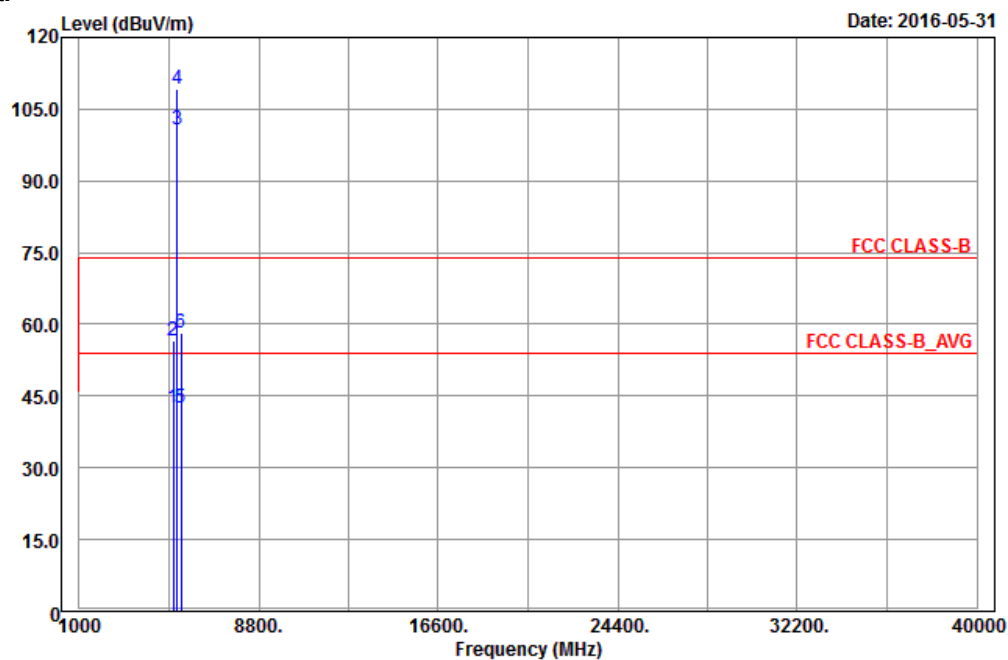
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5076	43.72	35.6	54	-10.28	34.07	8.03	33.98	269	358	Average
5076	57.24	49.12	74	-16.76	34.07	8.03	33.98	269	358	Peak
5240	100.79	92.35			34.19	8.26	34.01	269	358	Average
5240	109.4	100.96			34.19	8.26	34.01	269	358	Peak
5448	42.72	33.89	54	-11.28	34.36	8.51	34.04	269	358	Average
5448	57.29	48.46	74	-16.71	34.36	8.51	34.04	269	358	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
5140	44.44	36.18	54	-9.56	34.12	8.13	33.99	105	2	Average
5140	56.82	48.56	74	-17.18	34.12	8.13	33.99	105	2	Peak
5240	104.18	95.74			34.19	8.26	34.01	105	2	Average
5240	111.36	102.92			34.19	8.26	34.01	105	2	Peak
5424	43.97	35.2	54	-10.03	34.33	8.48	34.04	105	2	Average
5424	57.56	48.79	74	-16.44	34.33	8.48	34.04	105	2	Peak
10480	60.29	45.78	68.2	-7.91	37.19	12.53	35.21	298	328	Peak

Remarks:

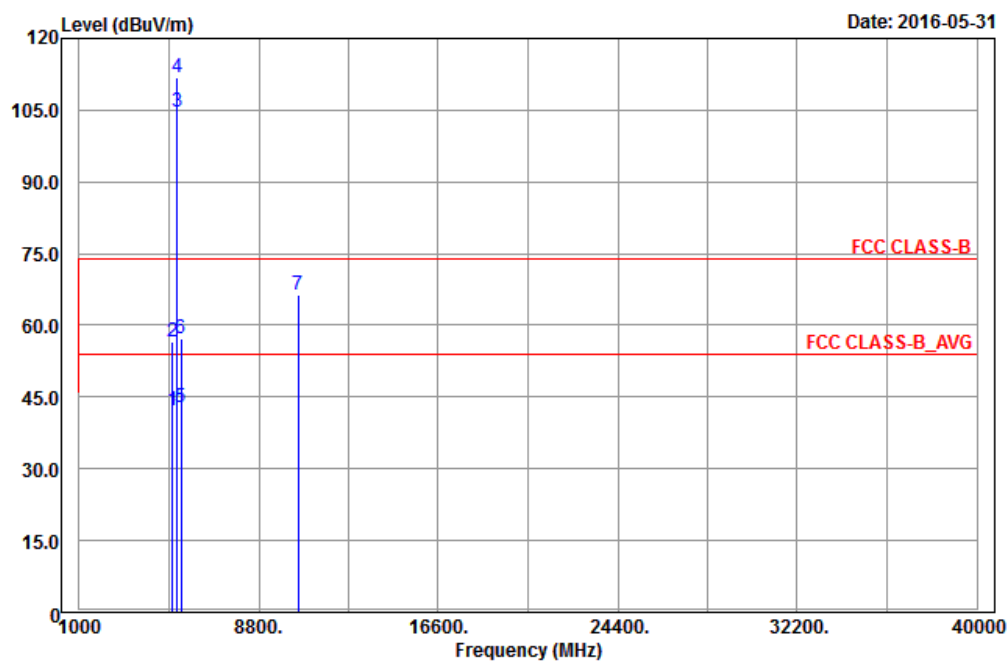
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. 10480 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



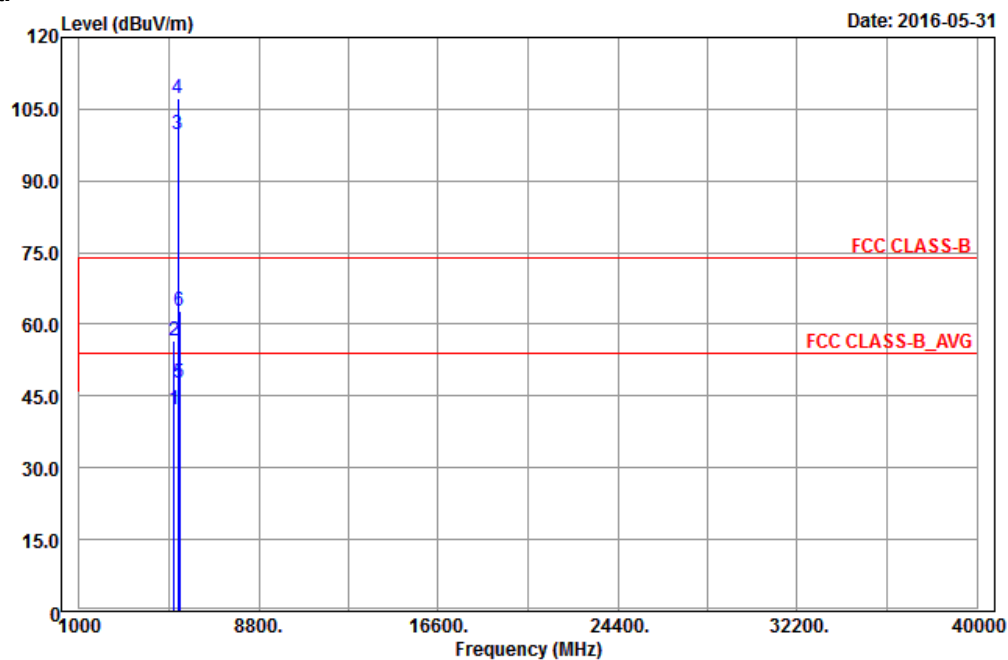
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5098	42.4	34.24	54	-11.6	34.08	8.07	33.99	263	357	Average
5098	56.64	48.48	74	-17.36	34.08	8.07	33.99	263	357	Peak
5260	100.85	92.39			34.21	8.26	34.01	263	357	Average
5260	109.06	100.6			34.21	8.26	34.01	263	357	Peak
5416	42.53	33.8	54	-11.47	34.33	8.44	34.04	263	357	Average
5416	58.32	49.59	74	-15.68	34.33	8.44	34.04	263	357	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
5056	42.2	34.1	54	-11.8	34.05	8.03	33.98	104	0	Average
5056	56.59	48.49	74	-17.41	34.05	8.03	33.98	104	0	Peak
5260	104.52	96.06			34.21	8.26	34.01	104	0	Average
5260	111.95	103.49			34.21	8.26	34.01	104	0	Peak
5414	42.79	34.06	54	-11.21	34.33	8.44	34.04	104	0	Average
5414	57.08	48.35	74	-16.92	34.33	8.44	34.04	104	0	Peak
10520	66.53	51.94	68.2	-1.67	37.21	12.61	35.23	100	238	Peak

Remarks:

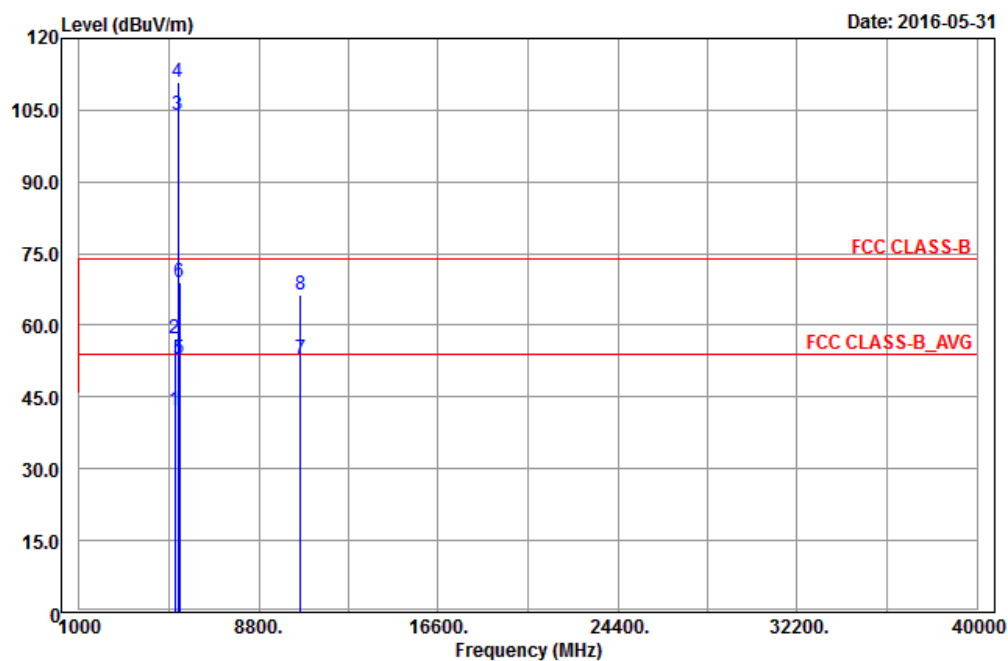
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. 10520 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



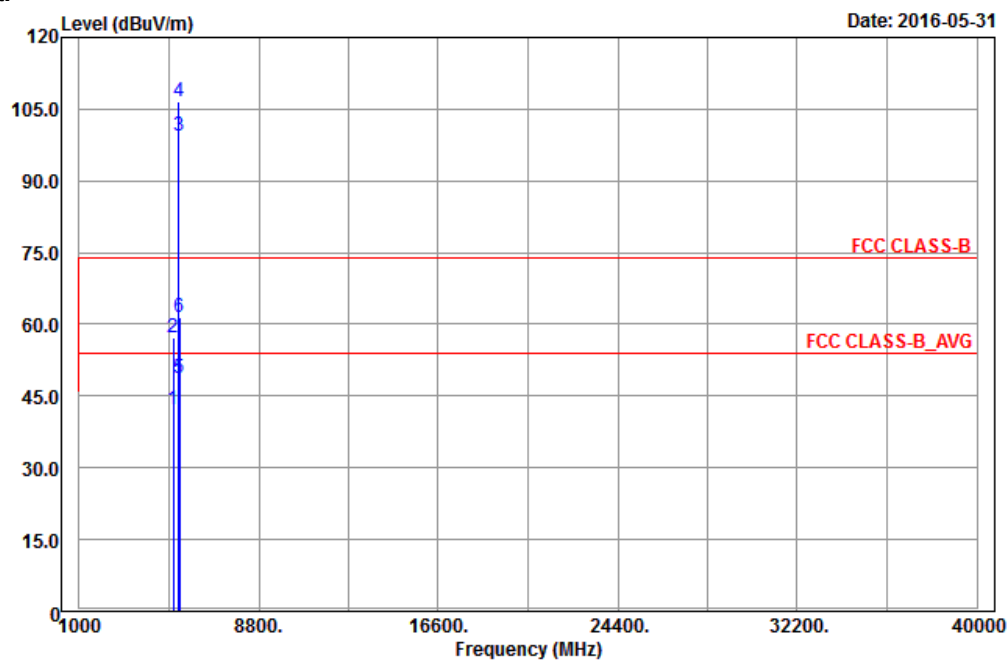
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5108	42.24	34.04	54	-11.76	34.09	8.1	33.99	276	357	Average
5108	56.55	48.35	74	-17.45	34.09	8.1	33.99	276	357	Peak
5300	99.63	91.09			34.24	8.32	34.02	276	357	Average
5300	107.41	98.87			34.24	8.32	34.02	276	357	Peak
5350	47.66	39.03	54	-6.34	34.28	8.38	34.03	276	357	Average
5350	62.66	54.03	74	-11.34	34.28	8.38	34.03	276	357	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	42.29	34.04	54	-11.71	34.11	8.13	33.99	104	0	Average
5138	57.35	49.1	74	-16.65	34.11	8.13	33.99	104	0	Peak
5300	103.92	95.38			34.24	8.32	34.02	104	0	Average
5300	110.94	102.4			34.24	8.32	34.02	104	0	Peak
5350	52.98	44.35	54	-1.02	34.28	8.38	34.03	103	0	Average
5350	68.88	60.25	74	-5.12	34.28	8.38	34.03	103	0	Peak
10600	52.98	38.3	54	-1.02	37.28	12.67	35.27	107	310	Average
10600	66.32	51.64	74	-7.68	37.28	12.67	35.27	107	310	Peak

Remarks:

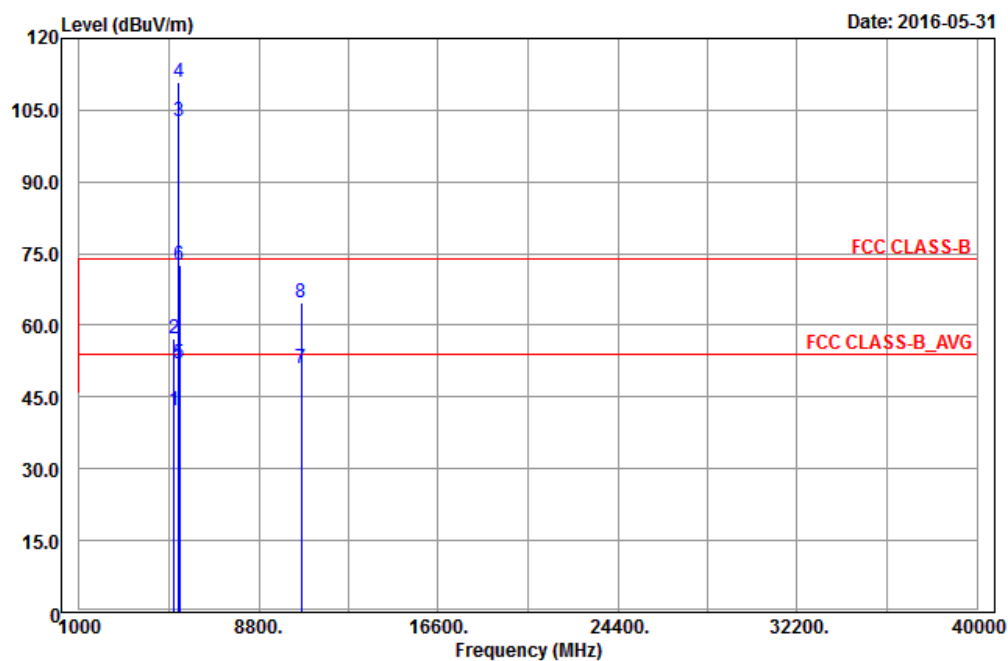
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



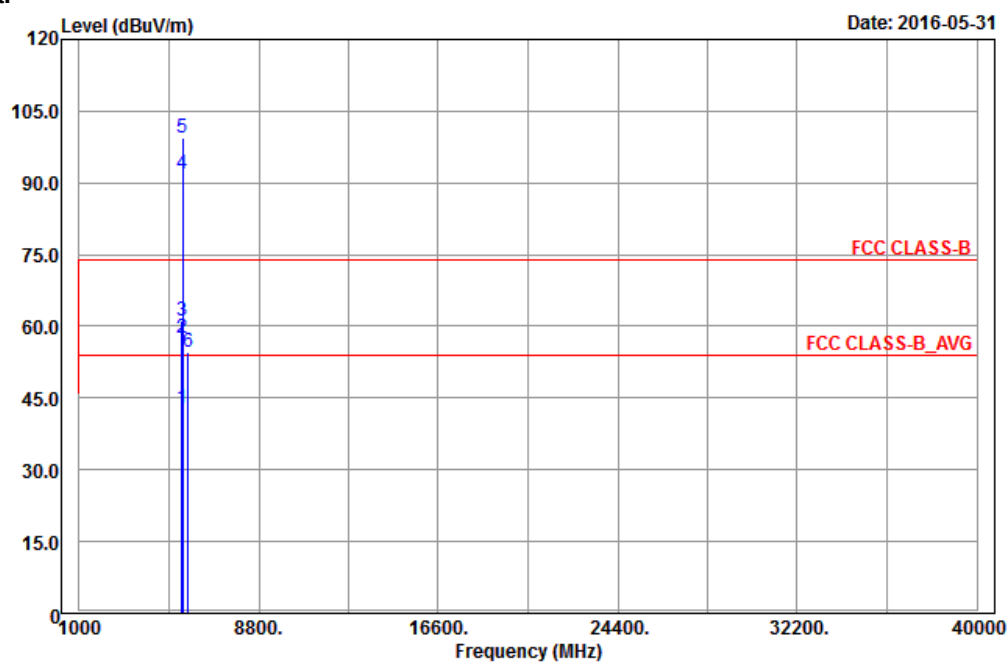
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5078	42.13	34.01	54	-11.87	34.07	8.03	33.98	257	357	Average
5078	57.17	49.05	74	-16.83	34.07	8.03	33.98	257	357	Peak
5320	99.39	90.81			34.25	8.35	34.02	257	357	Average
5320	106.58	98			34.25	8.35	34.02	257	357	Peak
5362	48.78	40.14	54	-5.22	34.29	8.38	34.03	257	357	Average
5362	61.61	52.97	74	-12.39	34.29	8.38	34.03	257	357	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
5124	42.22	34	54	-11.78	34.11	8.1	33.99	103	0	Average
5124	57.1	48.88	74	-16.9	34.11	8.1	33.99	103	0	Peak
5320	102.52	93.94			34.25	8.35	34.02	103	0	Average
5320	110.81	102.23			34.25	8.35	34.02	103	0	Peak
5350	52.02	43.39	54	-1.98	34.28	8.38	34.03	112	0	Average
5350	72.63	64	74	-1.37	34.28	8.38	34.03	112	0	Peak
10640	51.12	36.39	54	-2.88	37.31	12.71	35.29	101	300	Average
10640	64.59	49.86	74	-9.41	37.31	12.71	35.29	101	300	Peak

Remarks:

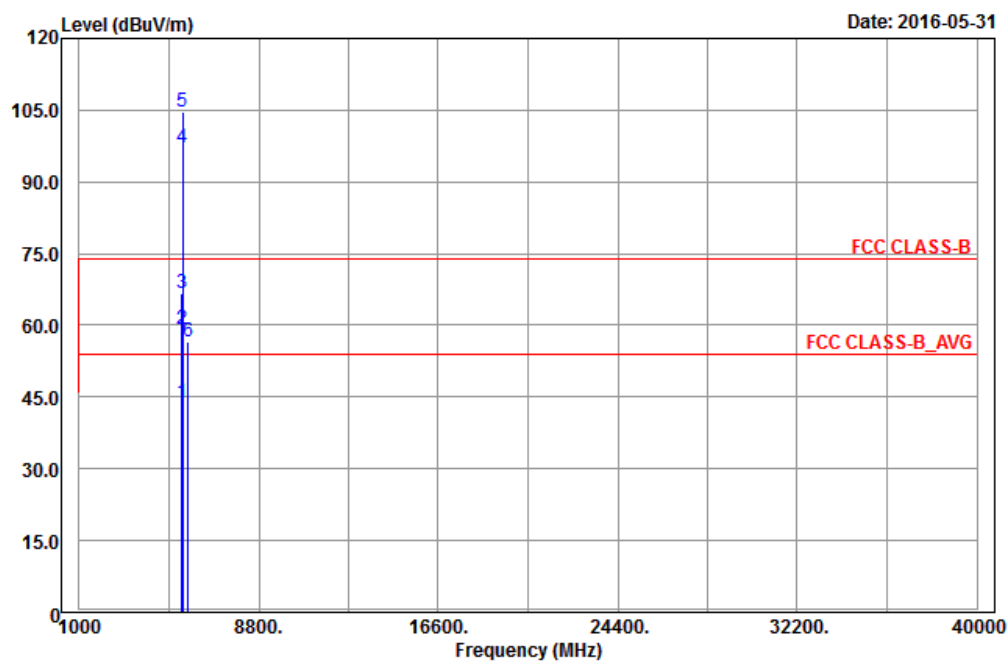
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



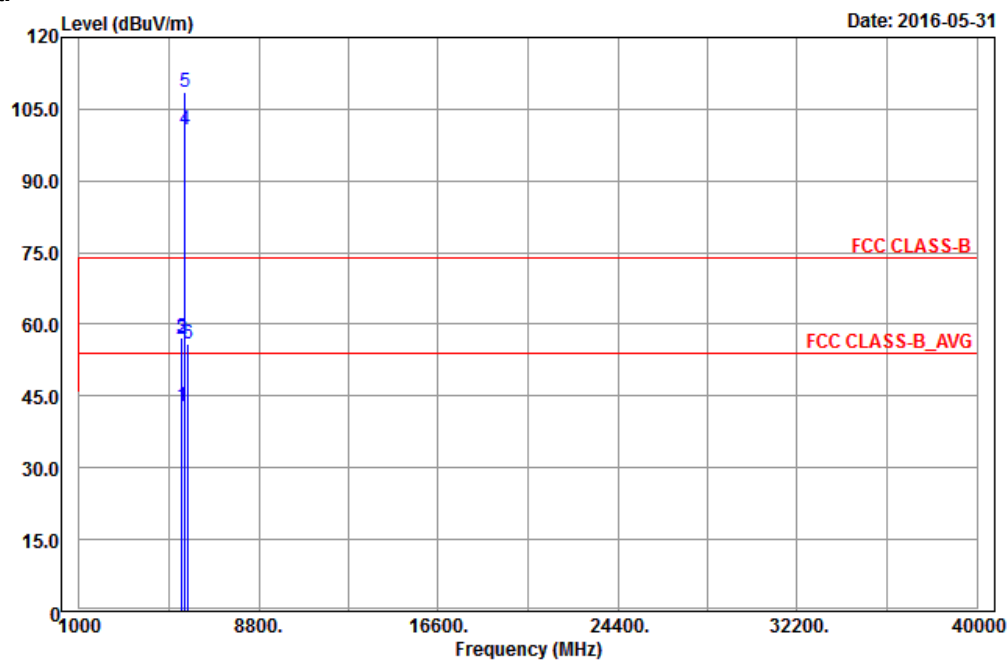
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.82	34	54	-11.18	34.36	8.51	34.05	280	2	Average
5460	57.46	48.64	74	-16.54	34.36	8.51	34.05	280	2	Peak
5470	61.01	52.18	68.2	-7.19	34.37	8.51	34.05	280	2	Peak
5500	91.77	82.85			34.4	8.57	34.05	280	2	Average
5500	99.33	90.41			34.4	8.57	34.05	280	2	Peak
5725	54.74	45.58	68.2	-13.46	34.62	8.65	34.11	280	2	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
5456	43.87	35.05	54	-10.13	34.36	8.51	34.05	106	9	Average
5456	59.3	50.48	74	-14.7	34.36	8.51	34.05	106	9	Peak
5470	66.78	57.95	68.2	-1.42	34.37	8.51	34.05	100	9	Peak
5500	96.97	88.05			34.4	8.57	34.05	106	9	Average
5500	104.53	95.61			34.4	8.57	34.05	106	9	Peak
5725	56.5	47.34	68.2	-11.7	34.62	8.65	34.11	106	9	Peak

Remarks:

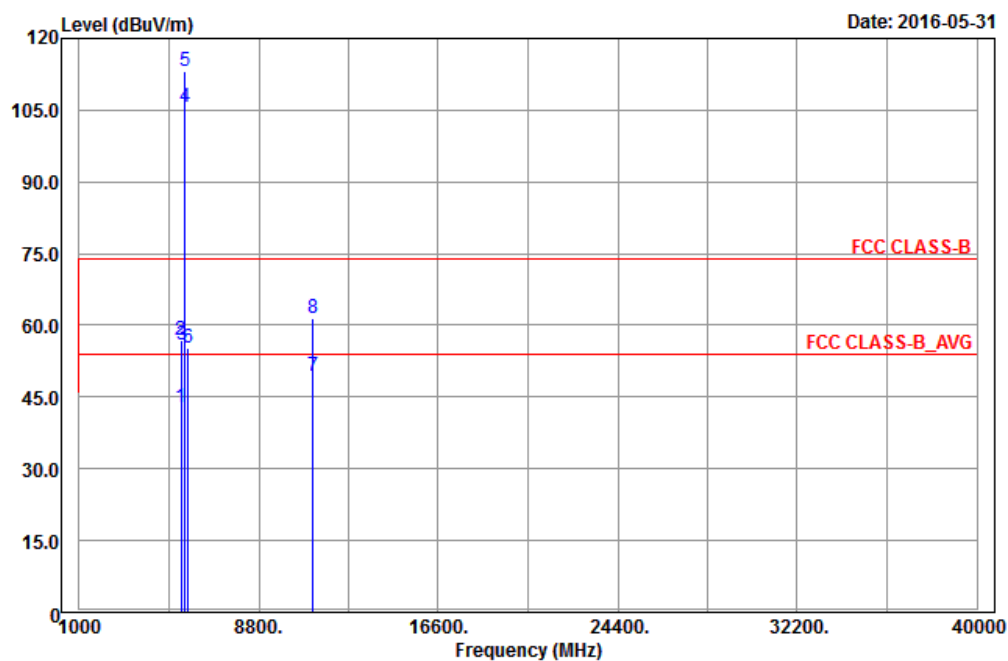
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



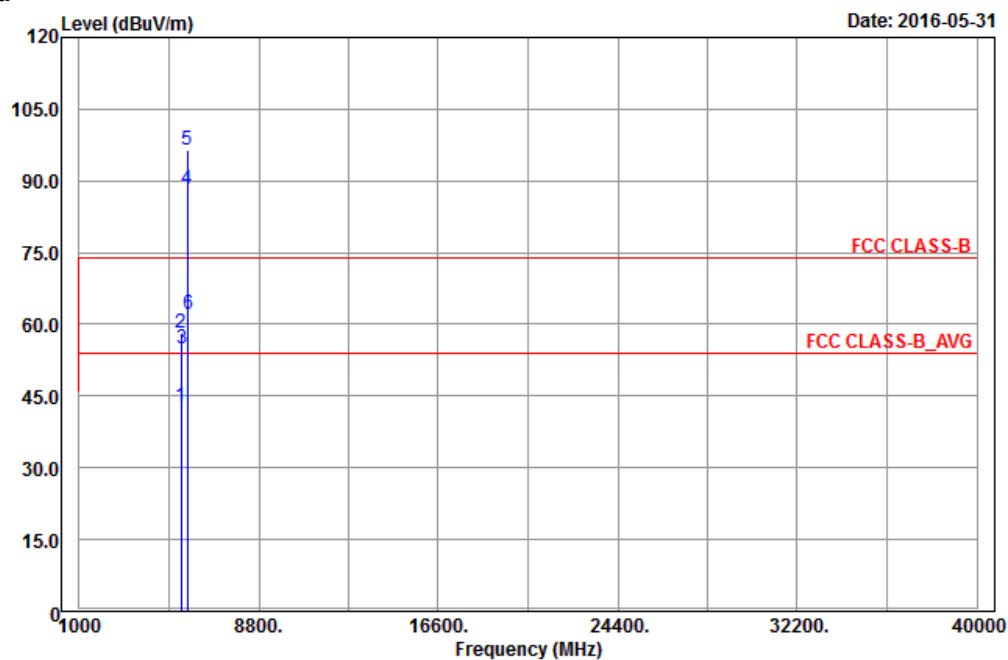
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448	42.81	33.98	54	-11.19	34.36	8.51	34.04	280	2	Average
5448	56.81	47.98	74	-17.19	34.36	8.51	34.04	280	2	Peak
5470	57.08	48.25	68.2	-11.12	34.37	8.51	34.05	280	2	Peak
5580	100.77	91.78			34.47	8.6	34.08	280	2	Average
5580	108.4	99.41			34.47	8.6	34.08	280	2	Peak
5725	56.04	46.88	68.2	-12.16	34.62	8.65	34.11	280	2	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
5440	42.81	34.02	54	-11.19	34.35	8.48	34.04	105	9	Average
5440	56.99	48.2	74	-17.01	34.35	8.48	34.04	105	9	Peak
5470	55.95	47.12	68.2	-12.25	34.37	8.51	34.05	105	9	Peak
5580	105.46	96.47			34.47	8.6	34.08	105	9	Average
5580	113.27	104.28			34.47	8.6	34.08	105	9	Peak
5725	55.39	46.23	68.2	-12.81	34.62	8.65	34.11	105	9	Peak
11160	49.46	34.38	54	-4.54	37.7	12.83	35.45	103	299	Average
11160	61.37	46.29	74	-12.63	37.7	12.83	35.45	103	299	Peak

Remarks:

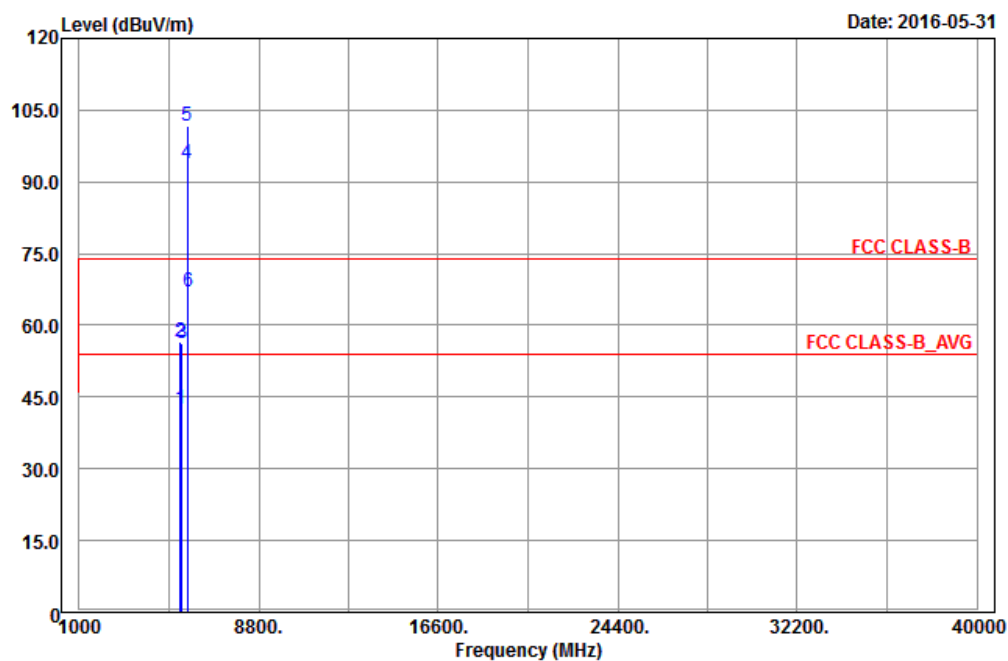
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



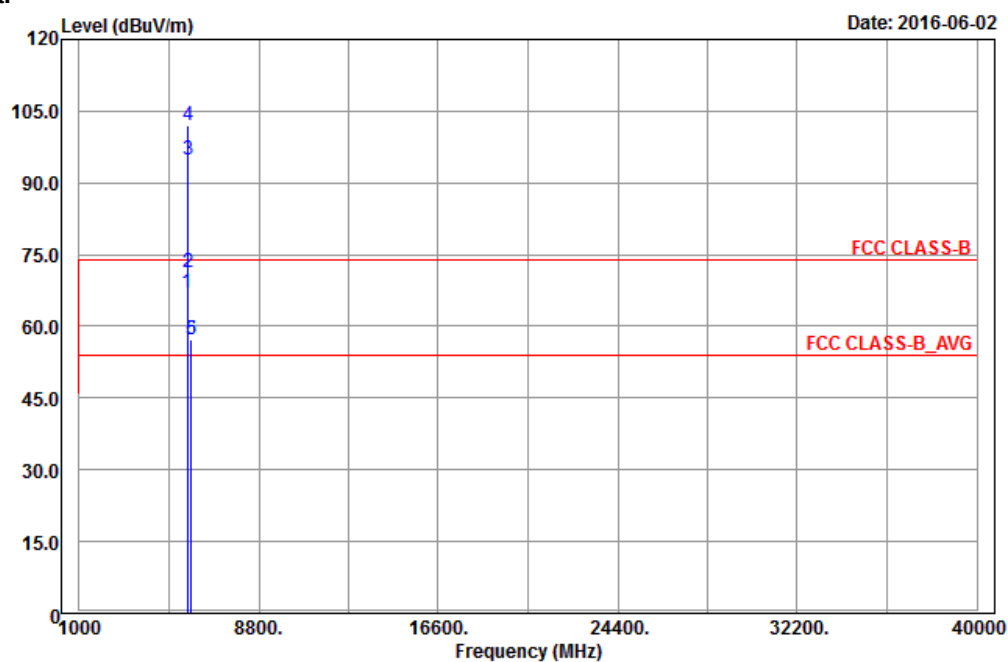
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5442	42.74	33.95	54	-11.26	34.35	8.48	34.04	280	2	Average
5442	58.09	49.3	74	-15.91	34.35	8.48	34.04	280	2	Peak
5470	54.93	46.1	68.2	-13.27	34.37	8.51	34.05	280	2	Peak
5700	88.38	79.25			34.59	8.64	34.1	280	2	Average
5700	96.57	87.44			34.59	8.64	34.1	280	2	Peak
5725	62.27	53.11	68.2	-5.93	34.62	8.65	34.11	280	2	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
5384	42.65	33.97	54	-11.35	34.31	8.41	34.04	103	9	Average
5384	56.46	47.78	74	-17.54	34.31	8.41	34.04	103	9	Peak
5470	56.26	47.43	68.2	-11.94	34.37	8.51	34.05	103	9	Peak
5700	93.73	84.6			34.59	8.64	34.1	103	9	Average
5700	101.55	92.42			34.59	8.64	34.1	103	9	Peak
5725	66.96	57.8	68.2	-1.24	34.62	8.65	34.11	102	7	Peak

Remarks:

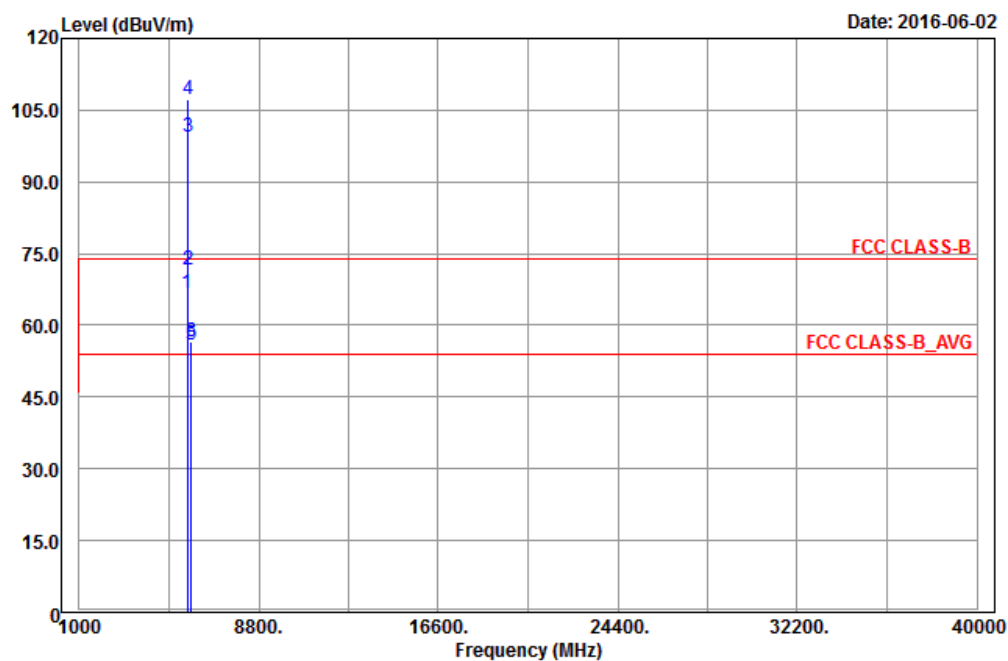
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



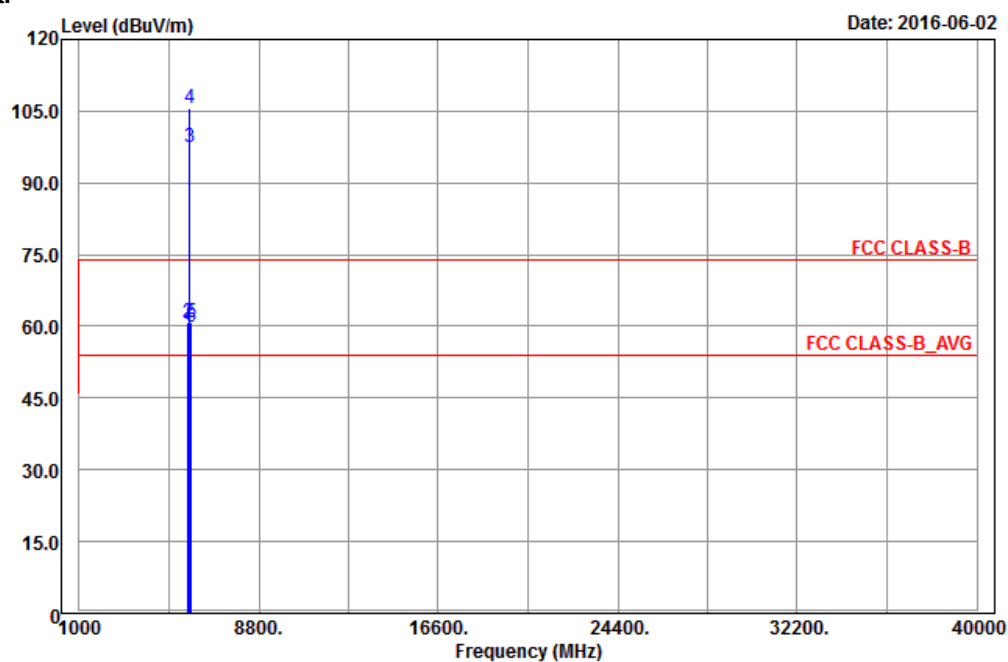
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	67.05	57.9	68.2	-1.15	34.61	8.65	34.11	264	2	Peak
*5720	71.12	61.96	78.2	-7.08	34.62	8.65	34.11	264	2	Peak
5745	94.8	85.61			34.64	8.66	34.11	293	2	Average
5745	102.06	92.87			34.64	8.66	34.11	293	2	Peak
*5858	57.36	48.04	78.2	-20.84	34.76	8.7	34.14	293	2	Peak
*5870	57.26	47.93	68.2	-10.94	34.76	8.71	34.14	293	2	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	66.74	57.59	68.2	-1.46	34.61	8.65	34.11	228	358	Peak
*5724	71.66	62.5	78.2	-6.54	34.62	8.65	34.11	228	358	Peak
5745	99.3	90.11			34.64	8.66	34.11	236	358	Average
5745	107.22	98.03			34.64	8.66	34.11	236	358	Peak
*5854	55.9	46.58	78.2	-22.3	34.76	8.7	34.14	236	358	Peak
*5862	56.69	47.36	68.2	-11.51	34.76	8.71	34.14	236	358	Peak

Remarks:

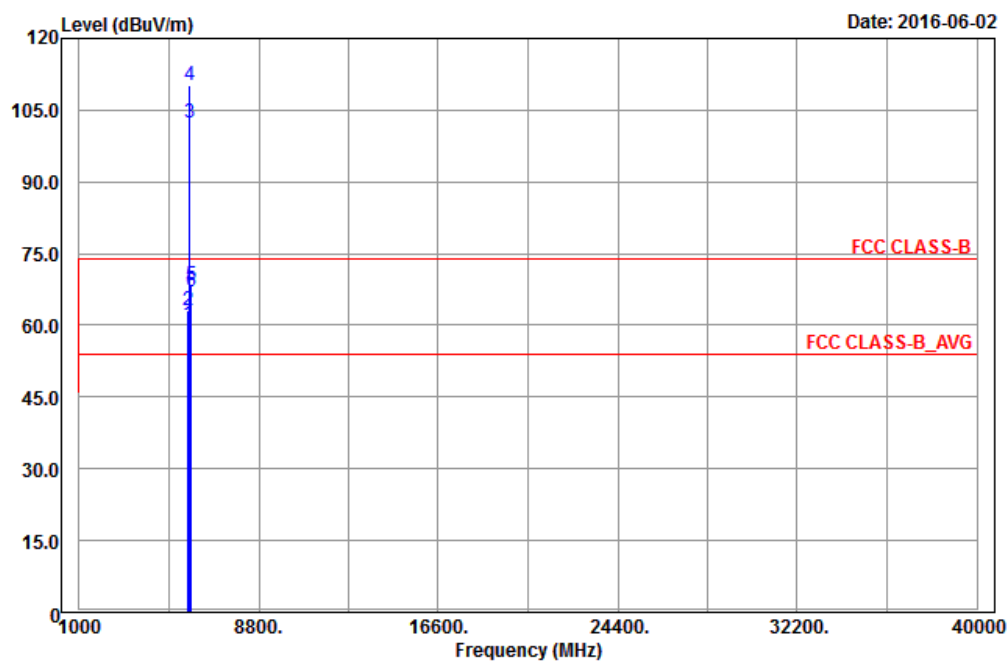
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



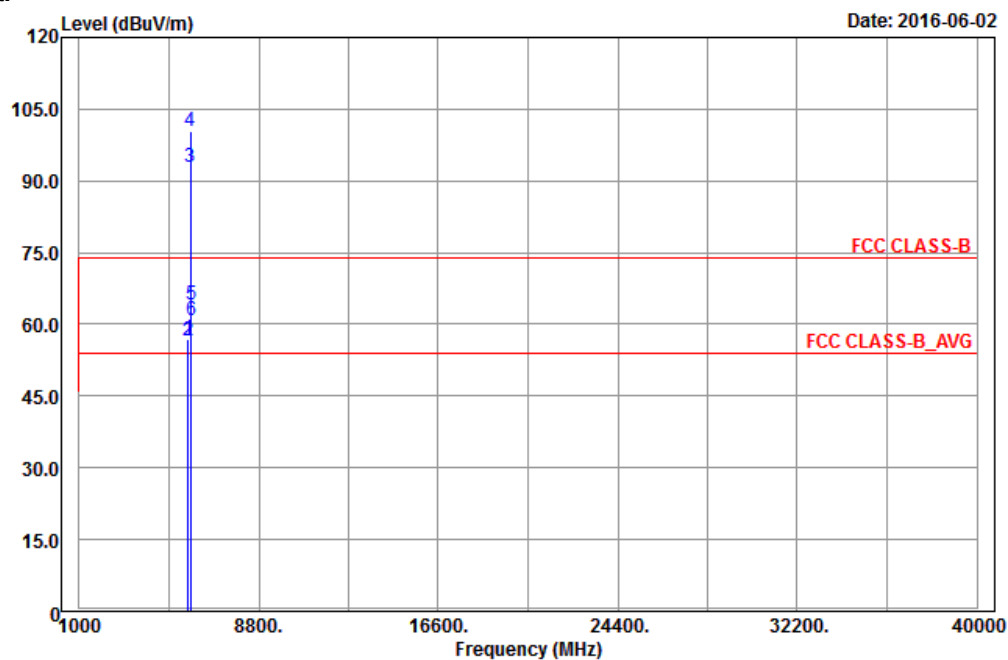
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5714	58.53	49.38	68.2	-9.67	34.61	8.65	34.11	241	2	Peak
*5724	60.88	51.72	78.2	-17.32	34.62	8.65	34.11	241	2	Peak
5785	97.36	88.13			34.68	8.68	34.13	283	2	Average
5785	105.67	96.44			34.68	8.68	34.13	283	2	Peak
*5852	60.71	51.41	78.2	-17.49	34.74	8.7	34.14	268	2	Peak
*5864	59.71	50.38	68.2	-8.49	34.76	8.71	34.14	268	2	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	60.07	50.92	68.2	-8.13	34.61	8.65	34.11	220	243	Peak
*5724	63.18	54.02	78.2	-15.02	34.62	8.65	34.11	220	343	Peak
5785	102.36	93.13			34.68	8.68	34.13	236	358	Average
5785	110.04	100.81			34.68	8.68	34.13	236	358	Peak
*5852	68.47	59.17	78.2	-9.73	34.74	8.7	34.14	230	358	Peak
*5870	67.19	57.86	68.2	-1.01	34.76	8.71	34.14	230	358	Peak

Remarks:

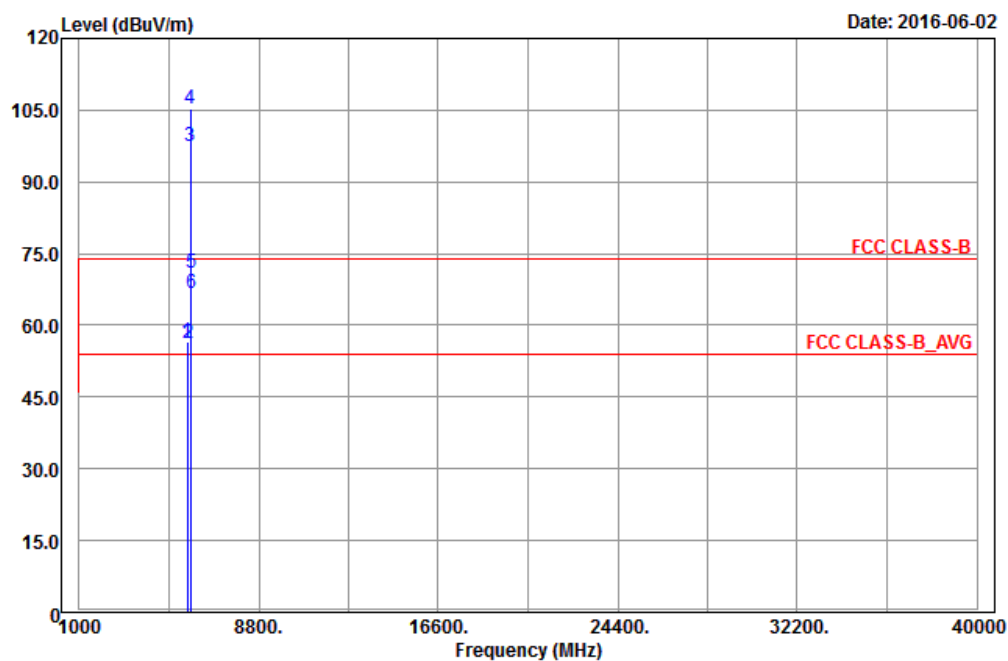
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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	Karl Lee

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	56.94	47.79	68.2	-11.26	34.61	8.65	34.11	283	2	Peak
*5718	56.66	47.5	78.2	-21.54	34.62	8.65	34.11	283	2	Peak
5825	92.87	83.58			34.73	8.69	34.13	283	2	Average
5825	100.26	90.97			34.73	8.69	34.13	283	2	Peak
*5858	64.1	54.78	78.2	-14.1	34.76	8.7	34.14	283	2	Peak
*5862	60.94	51.61	68.2	-7.26	34.76	8.71	34.14	283	2	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	56.7	47.55	68.2	-11.5	34.61	8.65	34.11	236	358	Peak
*5724	56.31	47.15	78.2	-21.89	34.62	8.65	34.11	236	358	Peak
5825	97.53	88.24			34.73	8.69	34.13	236	358	Average
5825	105.21	95.92			34.73	8.69	34.13	236	358	Peak
*5860	70.95	61.63	78.2	-7.25	34.76	8.7	34.14	221	357	Peak
*5868	66.83	57.5	68.2	-1.37	34.76	8.71	34.14	221	357	Peak

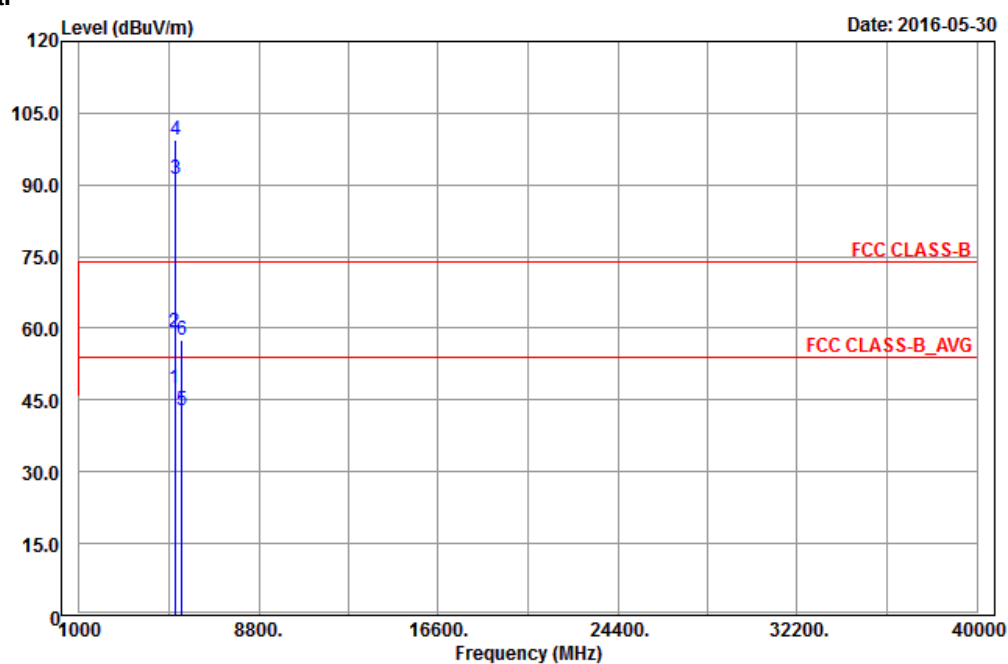
Remarks:

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

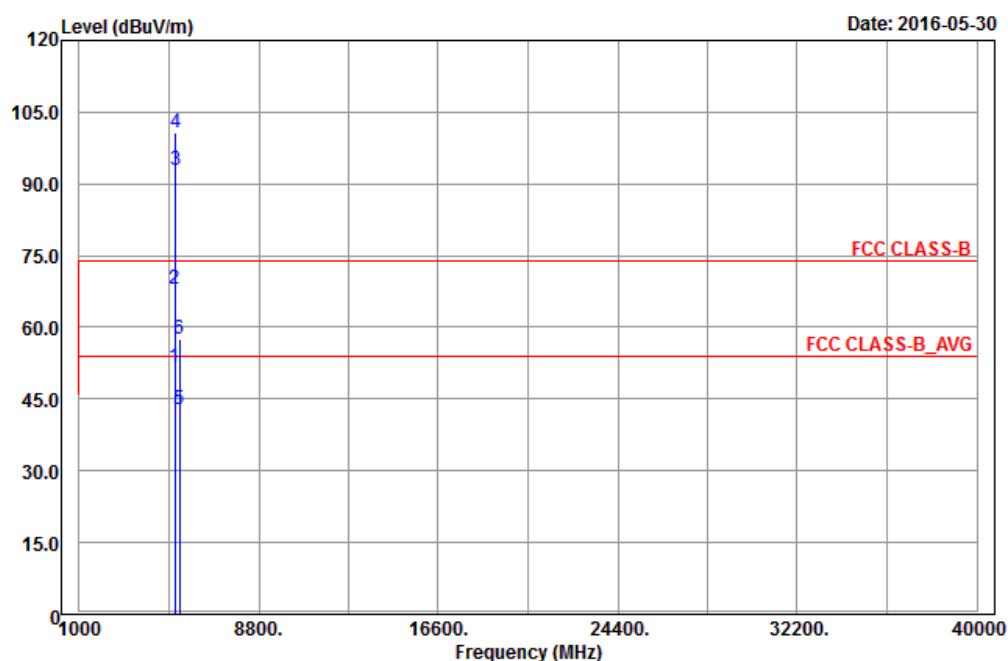
802.11n (HT40)

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	Karl Lee

Horizontal



Vertical



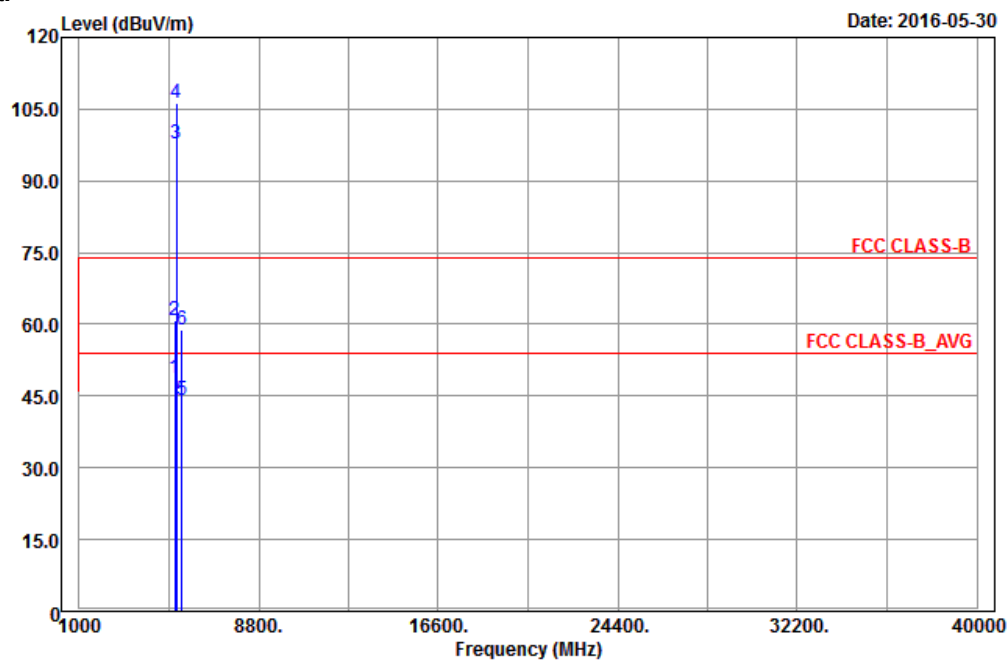
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	47.32	39.07	54	-6.68	34.12	8.13	34	283	359	Average
5150	59.27	51.02	74	-14.73	34.12	8.13	34	283	359	Peak
5190	91.23	82.89			34.15	8.19	34	283	359	Average
5190	99.28	90.94			34.15	8.19	34	283	359	Peak
5444	42.96	34.17	54	-11.04	34.35	8.48	34.04	283	359	Average
5444	57.46	48.67	74	-16.54	34.35	8.48	34.04	283	359	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
5142	51.82	43.56	54	-2.18	34.12	8.13	33.99	106	2	Average
5142	67.94	59.68	74	-6.06	34.12	8.13	33.99	106	2	Peak
5190	92.83	84.49			34.15	8.19	34	100	2	Average
5190	100.59	92.25			34.15	8.19	34	100	2	Peak
5354	42.71	34.08	54	-11.29	34.28	8.38	34.03	100	2	Average
5354	57.52	48.89	74	-16.48	34.28	8.38	34.03	100	2	Peak

Remarks:

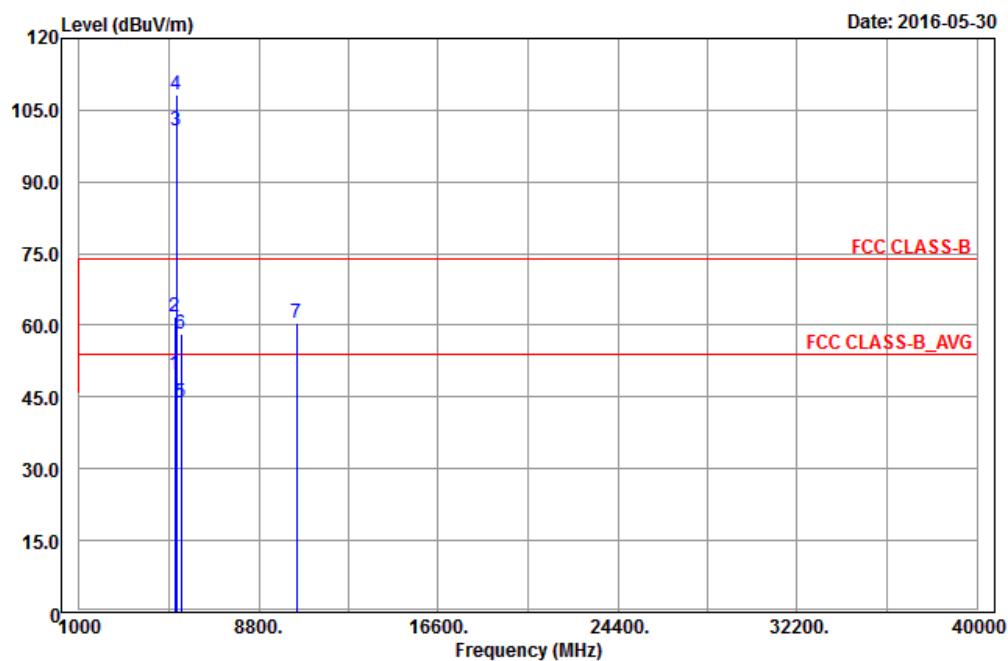
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5190 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



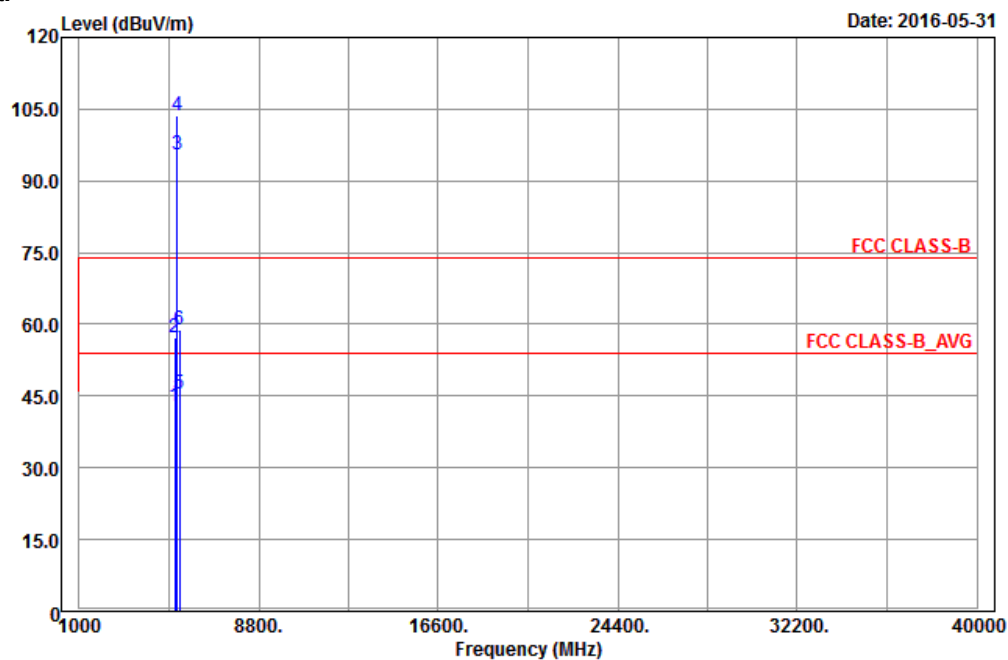
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5144	48.82	40.57	54	-5.18	34.12	8.13	34	269	358	Average
5144	60.85	52.6	74	-13.15	34.12	8.13	34	269	358	Peak
5230	97.9	89.5			34.19	8.22	34.01	269	358	Average
5230	106.13	97.73			34.19	8.22	34.01	269	358	Peak
5452	43.98	35.16	54	-10.02	34.36	8.51	34.05	269	358	Average
5452	58.77	49.95	74	-15.23	34.36	8.51	34.05	269	358	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
5142	49.76	41.5	54	-4.24	34.12	8.13	33.99	109	2	Average
5142	61.85	53.59	74	-12.15	34.12	8.13	33.99	109	2	Peak
5230	100.83	92.43			34.19	8.22	34.01	105	2	Average
5230	108.2	99.8			34.19	8.22	34.01	105	2	Peak
5430	43.95	35.16	54	-10.05	34.35	8.48	34.04	105	2	Average
5430	58.25	49.46	74	-15.75	34.35	8.48	34.04	105	2	Peak
10460	60.41	45.9	68.2	-7.79	37.17	12.53	35.19	217	45	Peak

Remarks:

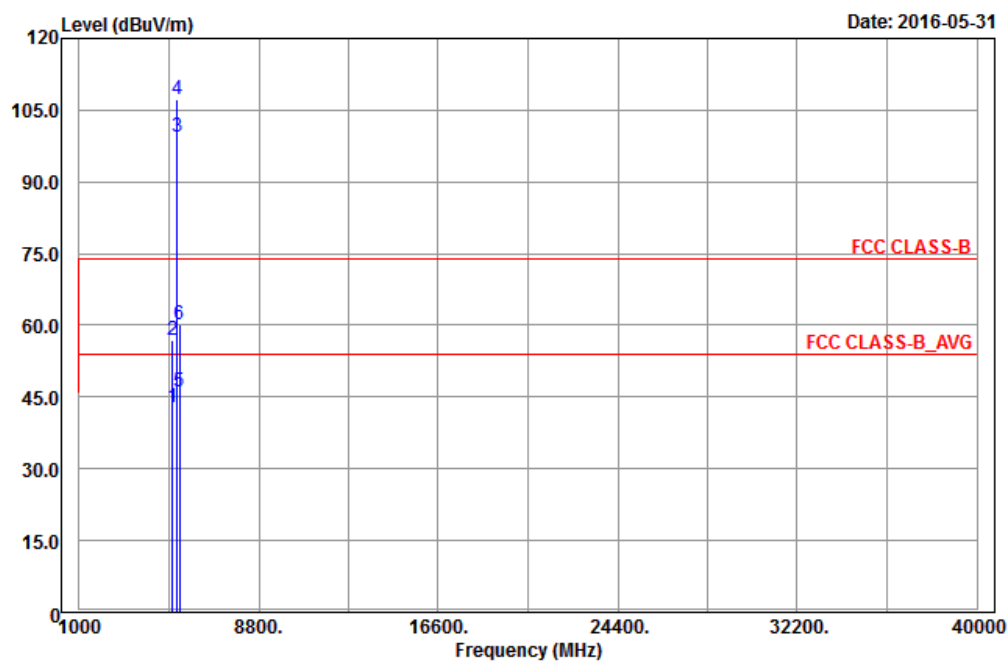
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental Frequency
3. 10460 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



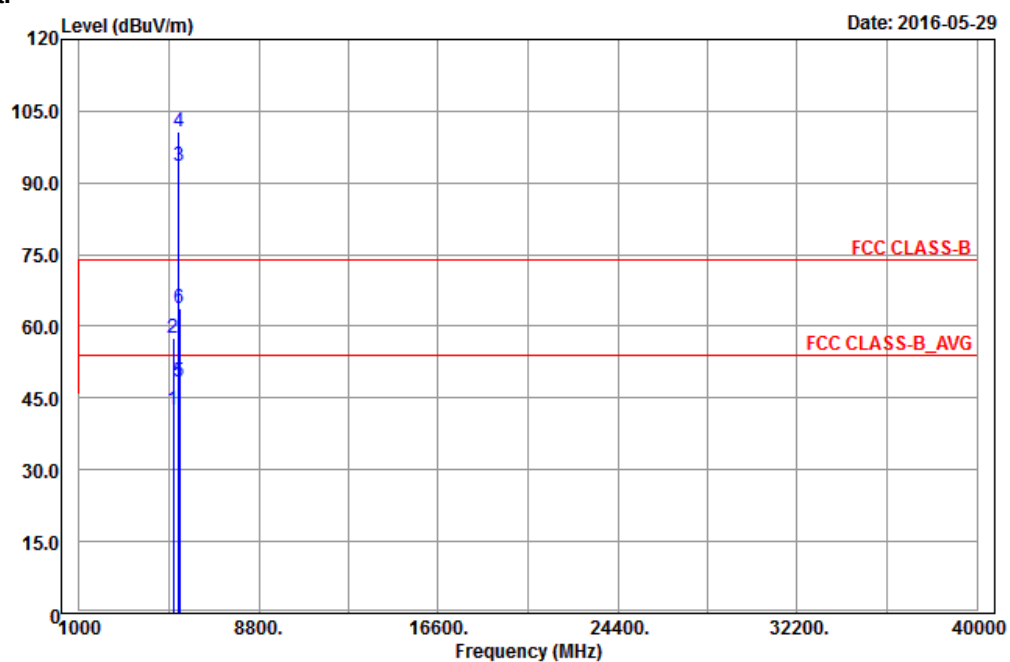
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146	42.72	34.47	54	-11.28	34.12	8.13	34	263	357	Average
5146	57.29	49.04	74	-16.71	34.12	8.13	34	263	357	Peak
5270	95.52	87.03			34.21	8.29	34.01	263	357	Average
5270	103.64	95.15			34.21	8.29	34.01	263	357	Peak
5352	45.36	36.73	54	-8.64	34.28	8.38	34.03	263	357	Average
5352	58.79	50.16	74	-15.21	34.28	8.38	34.03	263	357	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	42.77	34.67	54	-11.23	34.05	8.03	33.98	104	0	Average
5060	56.97	48.87	74	-17.03	34.05	8.03	33.98	104	0	Peak
5270	99.35	90.86			34.21	8.29	34.01	104	0	Average
5270	107.37	98.88			34.21	8.29	34.01	104	0	Peak
5350	46.1	37.47	54	-7.9	34.28	8.38	34.03	104	16	Average
5350	60.32	51.69	74	-13.68	34.28	8.38	34.03	104	16	Peak

Remarks:

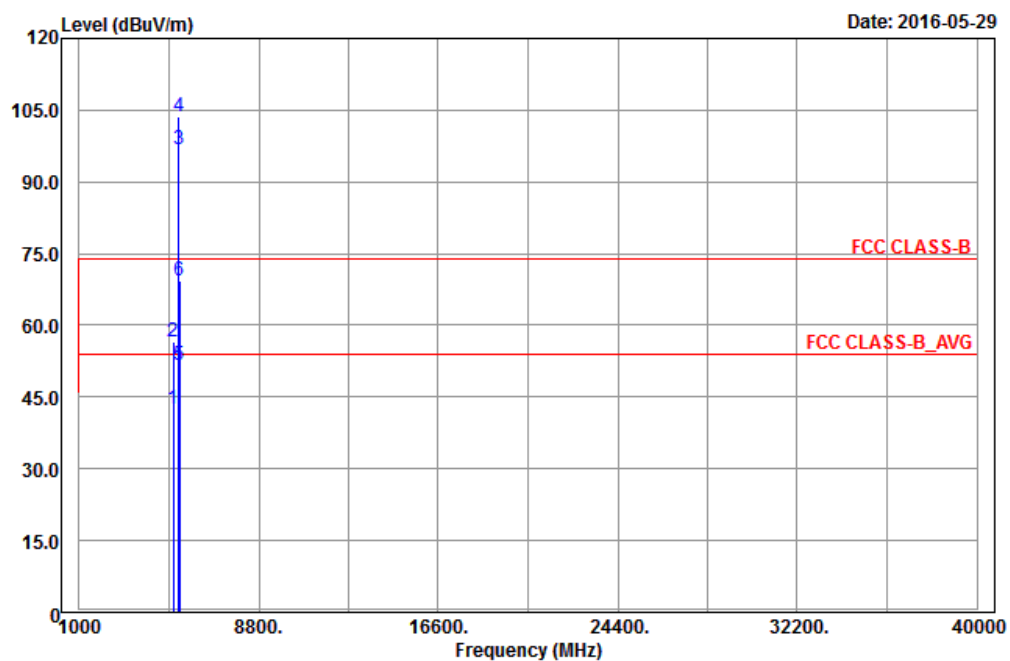
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



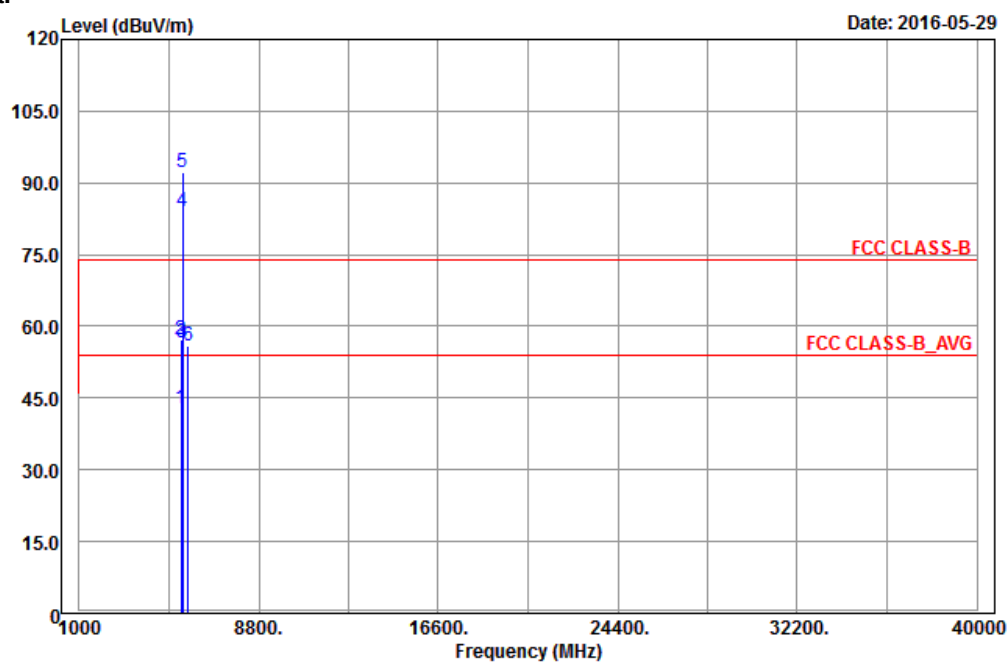
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5072	42.59	34.47	54	-11.41	34.07	8.03	33.98	136	12	Average
5072	57.39	49.27	74	-16.61	34.07	8.03	33.98	136	12	Peak
5310	93.57	85.02			34.25	8.32	34.02	136	12	Average
5310	100.64	92.09			34.25	8.32	34.02	136	12	Peak
5350	48.26	39.63	54	-5.74	34.28	8.38	34.03	134	12	Average
5350	63.69	55.06	74	-10.31	34.28	8.38	34.03	134	12	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
5086	42.58	34.42	54	-11.42	34.07	8.07	33.98	103	0	Average
5086	56.65	48.49	74	-17.35	34.07	8.07	33.98	103	0	Peak
5310	96.87	88.32			34.25	8.32	34.02	103	0	Average
5310	103.59	95.04			34.25	8.32	34.02	103	0	Peak
5350	51.66	43.03	54	-2.34	34.28	8.38	34.03	109	360	Average
5350	69.48	60.85	74	-4.52	34.28	8.38	34.03	109	360	Peak

Remarks:

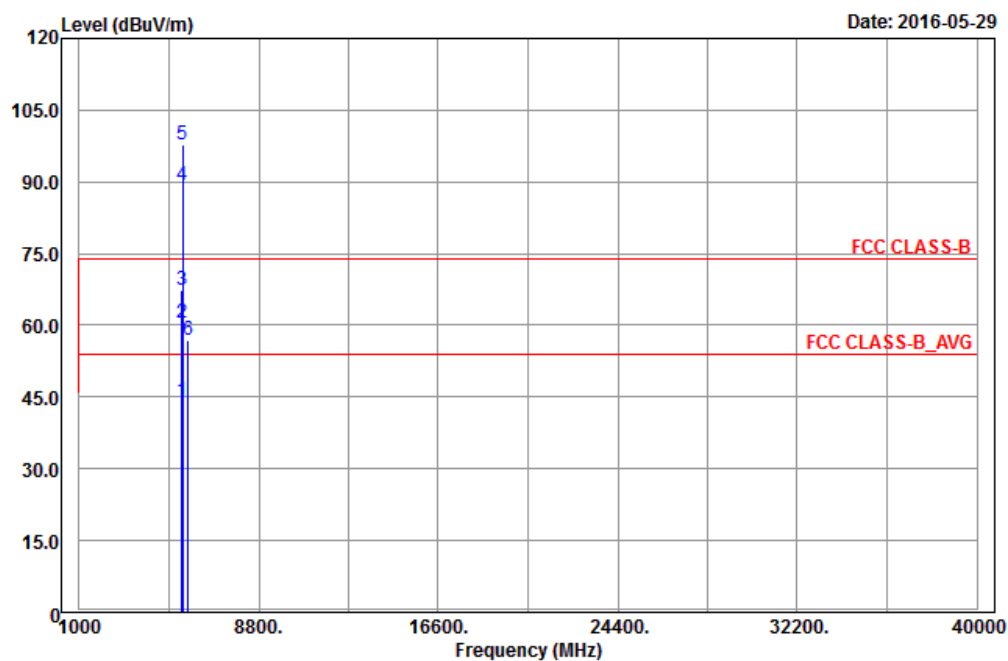
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5310 MHz: Fundamental Frequency

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	Karl Lee

Horizontal



Vertical



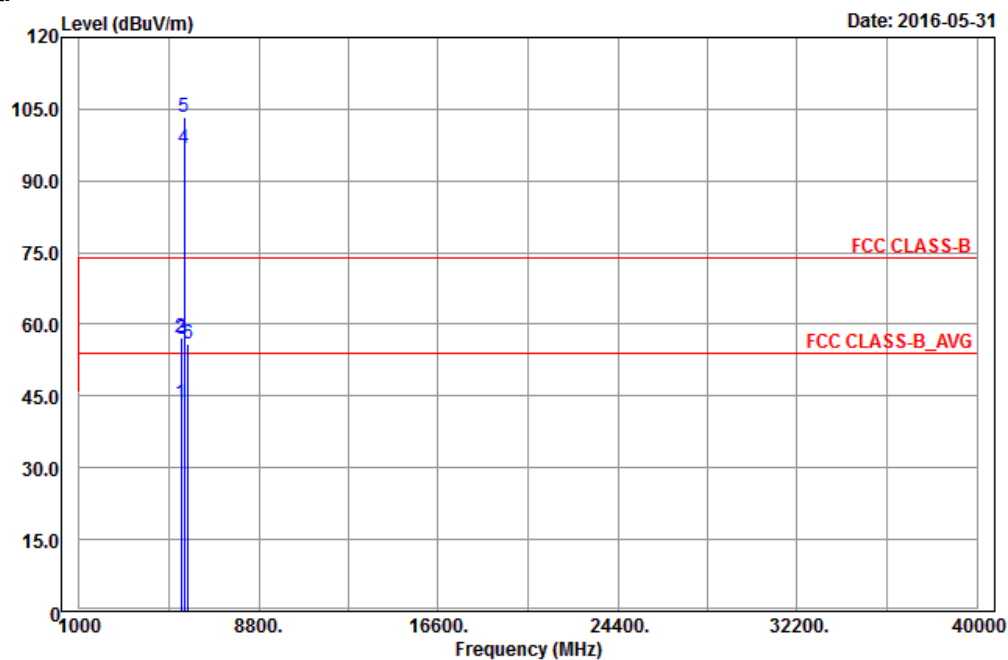
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5422	42.91	34.14	54	-11.09	34.33	8.48	34.04	296	1	Average
5422	57.31	48.54	74	-16.69	34.33	8.48	34.04	296	1	Peak
5470	56.62	47.79	68.2	-11.58	34.37	8.51	34.05	296	1	Peak
5510	84.18	75.27			34.4	8.57	34.06	296	1	Average
5510	92.23	83.32			34.4	8.57	34.06	296	1	Peak
5725	55.8	46.64	68.2	-12.4	34.62	8.65	34.11	296	1	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
5456	44.26	35.44	54	-9.74	34.36	8.51	34.05	106	6	Average
5456	60.61	51.79	74	-13.39	34.36	8.51	34.05	106	6	Peak
5470	67.2	58.37	68.2	-1	34.37	8.51	34.05	106	6	Peak
5510	89.15	80.24			34.4	8.57	34.06	106	6	Average
5510	97.81	88.9			34.4	8.57	34.06	106	6	Peak
5725	57.03	47.87	68.2	-11.17	34.62	8.65	34.11	106	6	Peak

Remarks:

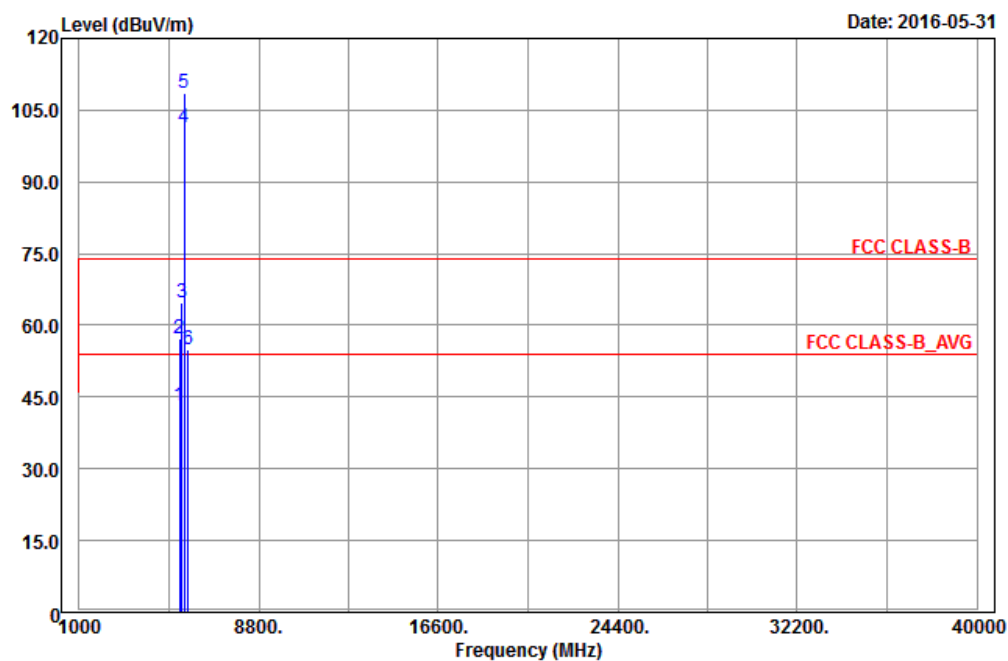
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



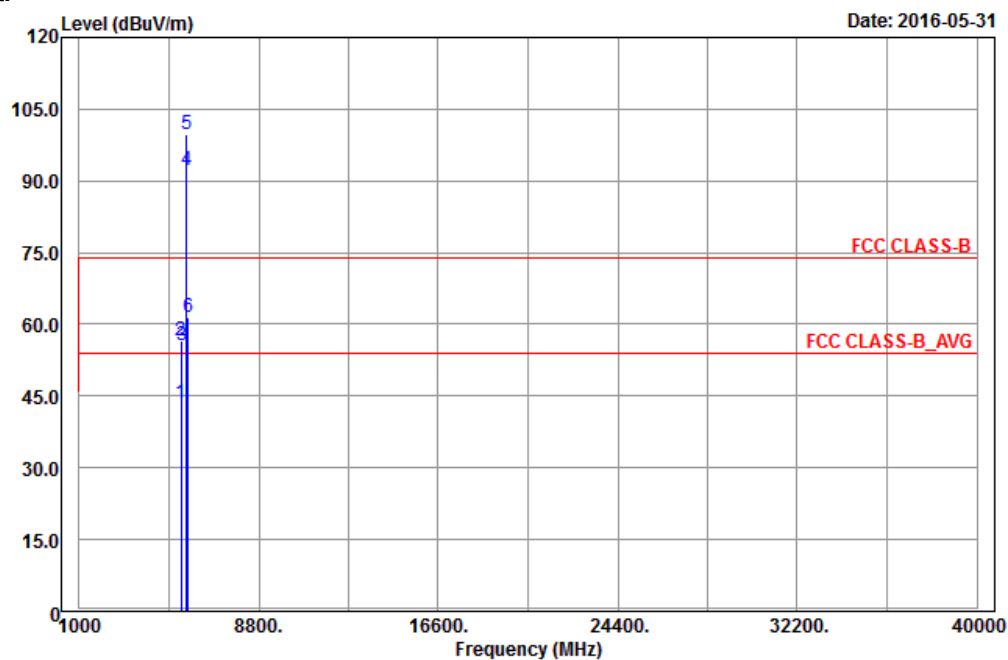
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434	43.4	34.61	54	-10.6	34.35	8.48	34.04	274	2	Average
5434	57.12	48.33	74	-16.88	34.35	8.48	34.04	274	2	Peak
5470	56.96	48.13	68.2	-11.24	34.37	8.51	34.05	274	2	Peak
5550	96.64	87.67			34.45	8.59	34.07	274	2	Average
5550	103.44	94.47			34.45	8.59	34.07	274	2	Peak
5725	55.97	46.81	68.2	-12.23	34.62	8.65	34.11	274	2	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
5354	43.32	34.69	54	-10.68	34.28	8.38	34.03	105	9	Average
5354	57.21	48.58	74	-16.79	34.28	8.38	34.03	105	9	Peak
5470	64.67	55.84	68.2	-3.53	34.37	8.51	34.05	105	9	Peak
5550	101.44	92.47			34.45	8.59	34.07	105	9	Average
5550	108.51	99.54			34.45	8.59	34.07	105	9	Peak
5725	54.92	45.76	68.2	-13.28	34.62	8.65	34.11	105	9	Peak

Remarks:

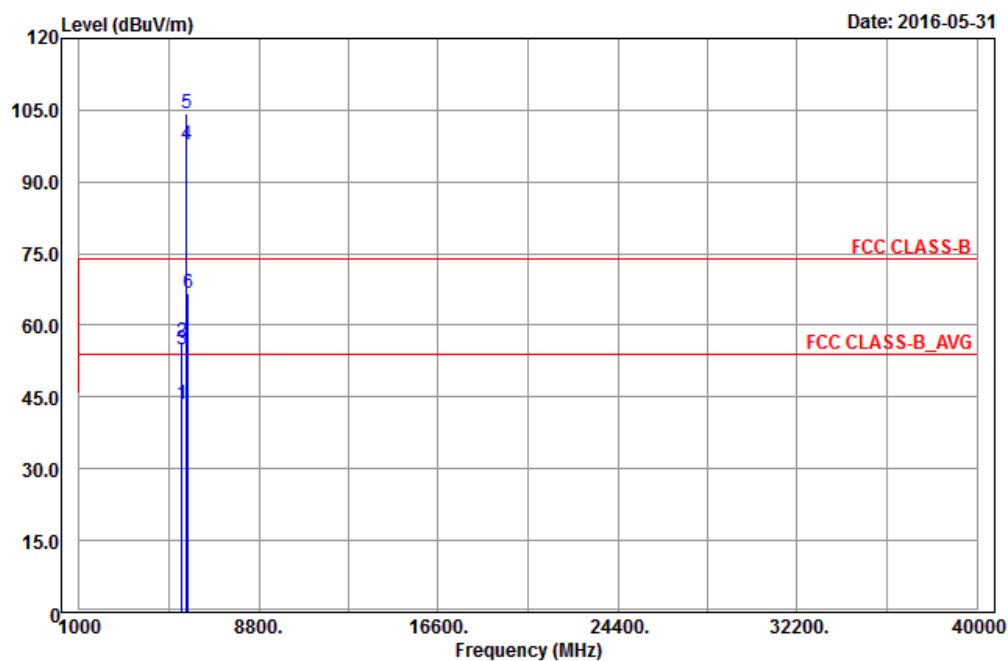
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



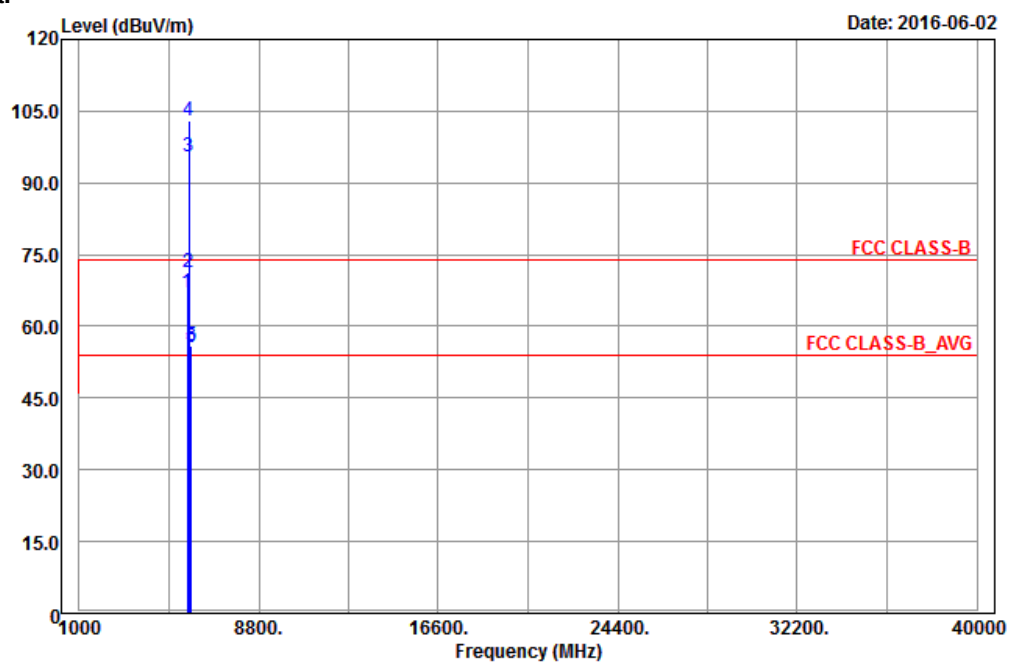
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5440	43.5	34.71	54	-10.5	34.35	8.48	34.04	280	2	Average
5440	56.65	47.86	74	-17.35	34.35	8.48	34.04	280	2	Peak
5470	55.43	46.6	68.2	-12.77	34.37	8.51	34.05	280	2	Peak
5670	92.34	83.24			34.57	8.63	34.1	280	2	Average
5670	99.87	90.77			34.57	8.63	34.1	280	2	Peak
5725	61.41	52.25	68.2	-6.79	34.62	8.65	34.11	282	2	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	43.35	34.53	54	-10.65	34.36	8.51	34.05	103	9	Average
5450	56.63	47.81	74	-17.37	34.36	8.51	34.05	103	9	Peak
5470	55.05	46.22	68.2	-13.15	34.37	8.51	34.05	103	9	Peak
5670	97.7	88.6			34.57	8.63	34.1	103	9	Average
5670	104.2	95.1			34.57	8.63	34.1	103	9	Peak
5725	66.86	57.7	68.2	-1.34	34.62	8.65	34.11	102	6	Peak

Remarks:

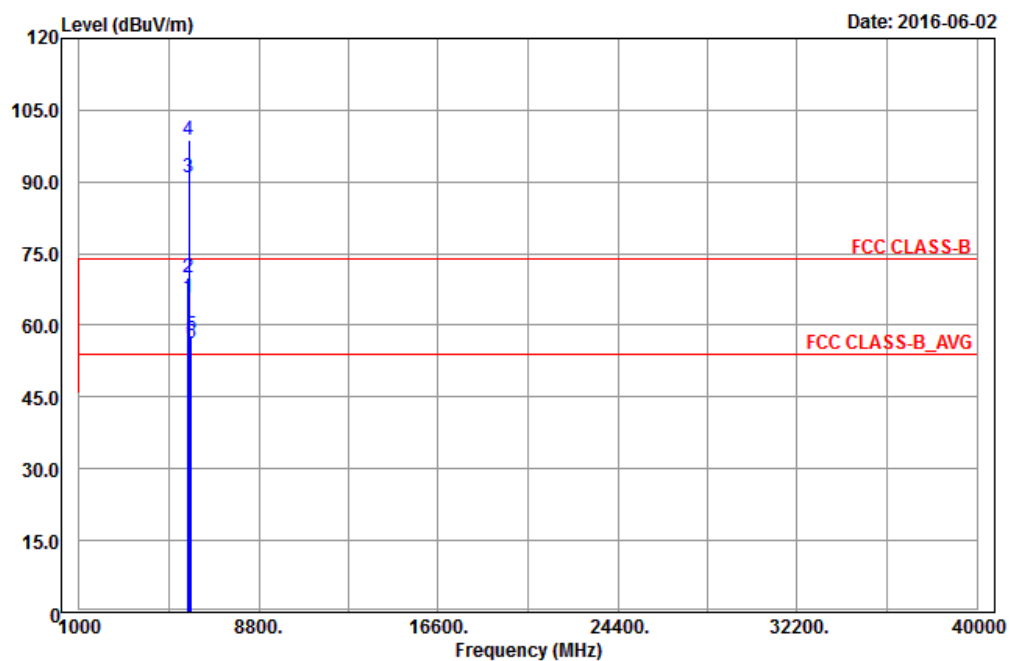
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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	Karl Lee

Horizontal



Vertical



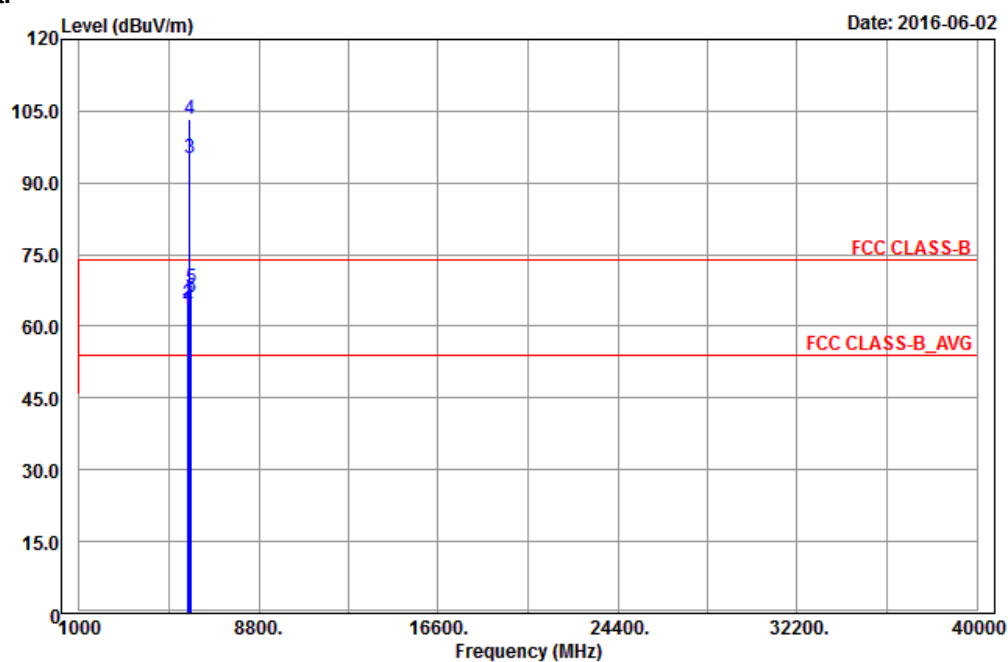
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5712	67.14	57.99	68.2	-1.06	34.61	8.65	34.11	220	358	Peak
*5724	71.33	62.17	78.2	-6.87	34.62	8.65	34.11	220	358	Peak
5755	95.42	86.21			34.66	8.66	34.11	226	358	Average
5755	103.09	93.88			34.66	8.66	34.11	226	358	Peak
*5854	56.05	46.73	78.2	-22.15	34.76	8.7	34.14	226	358	Peak
*5862	55.71	46.38	68.2	-12.49	34.76	8.71	34.14	226	358	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	65.82	56.67	68.2	-2.38	34.61	8.65	34.11	249	2	Peak
*5720	70.02	60.86	78.2	-8.18	34.62	8.65	34.11	249	2	Peak
5755	90.8	81.59			34.66	8.66	34.11	293	2	Average
5755	98.74	89.53			34.66	8.66	34.11	293	2	Peak
*5860	57.8	48.48	78.2	-20.4	34.76	8.7	34.14	293	2	Peak
*5870	56.17	46.84	68.2	-12.03	34.76	8.71	34.14	293	2	Peak

Remarks:

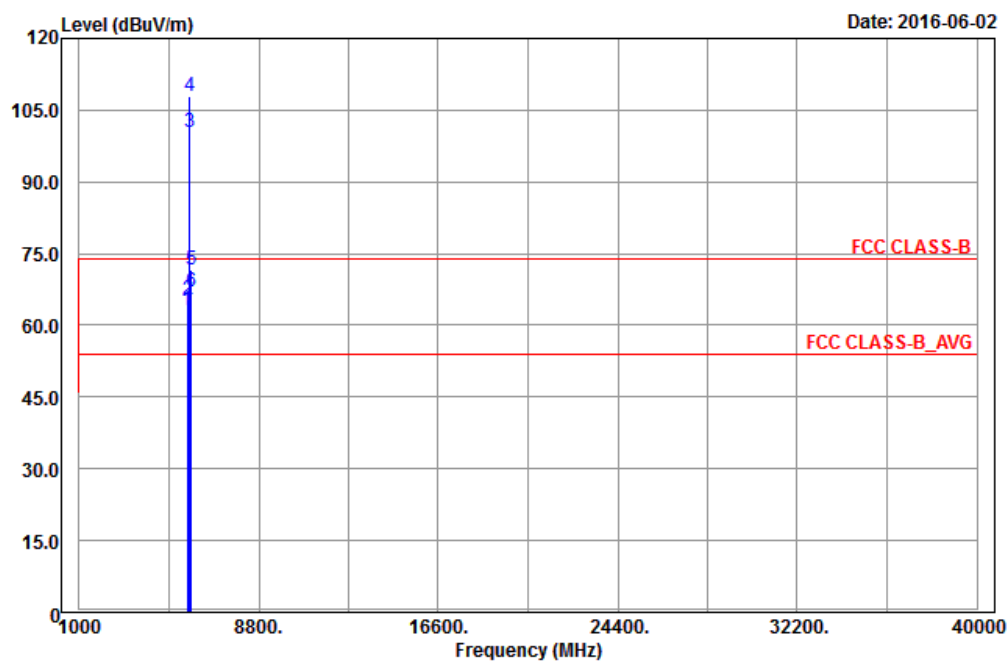
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5755 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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	Karl Lee

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	63.27	54.12	68.2	-4.93	34.61	8.65	34.11	243	2	Peak
*5724	64.81	55.65	78.2	-13.39	34.62	8.65	34.11	243	2	Peak
5795	95.12	85.88			34.69	8.68	34.13	283	2	Average
5795	103.29	94.05			34.69	8.68	34.13	283	2	Peak
*5852	68.04	58.74	78.2	-10.16	34.74	8.7	34.14	259	2	Peak
*5864	65.9	56.57	68.2	-2.3	34.76	8.71	34.14	259	2	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
*5708	62.99	53.84	68.2	-5.21	34.61	8.65	34.11	218	358	Peak
*5716	65.35	56.2	78.2	-12.85	34.61	8.65	34.11	218	358	Peak
5795	100.37	91.13			34.69	8.68	34.13	224	358	Average
5795	108.01	98.77			34.69	8.68	34.13	224	358	Peak
*5856	71.45	62.13	78.2	-6.75	34.76	8.7	34.14	230	358	Peak
*5862	67.13	57.8	68.2	-1.07	34.76	8.71	34.14	230	358	Peak

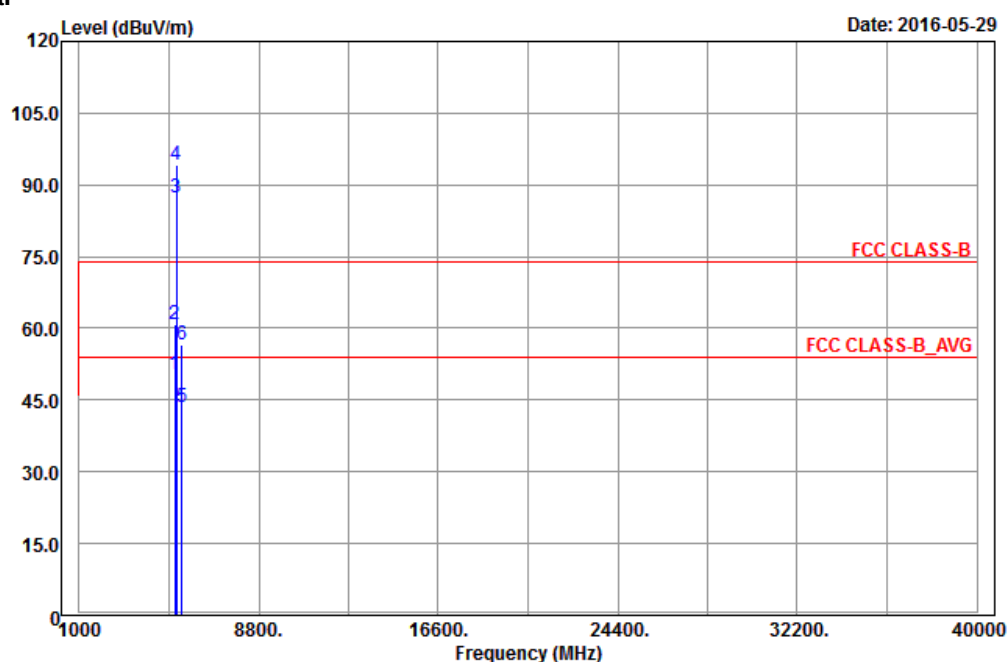
Remarks:

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

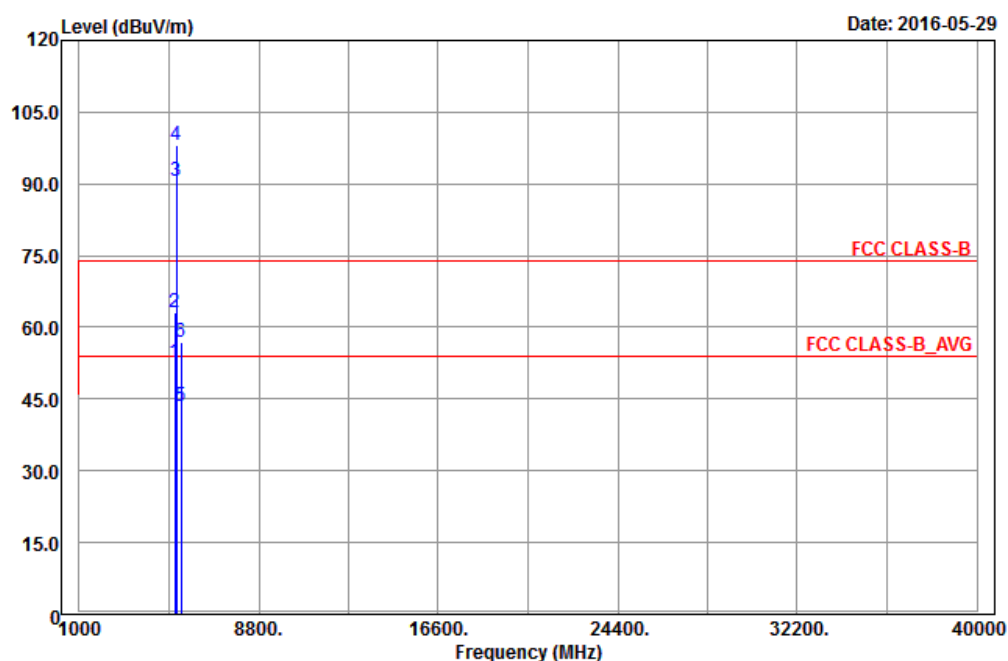
802.11ac (VHT80)

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

Horizontal



Vertical



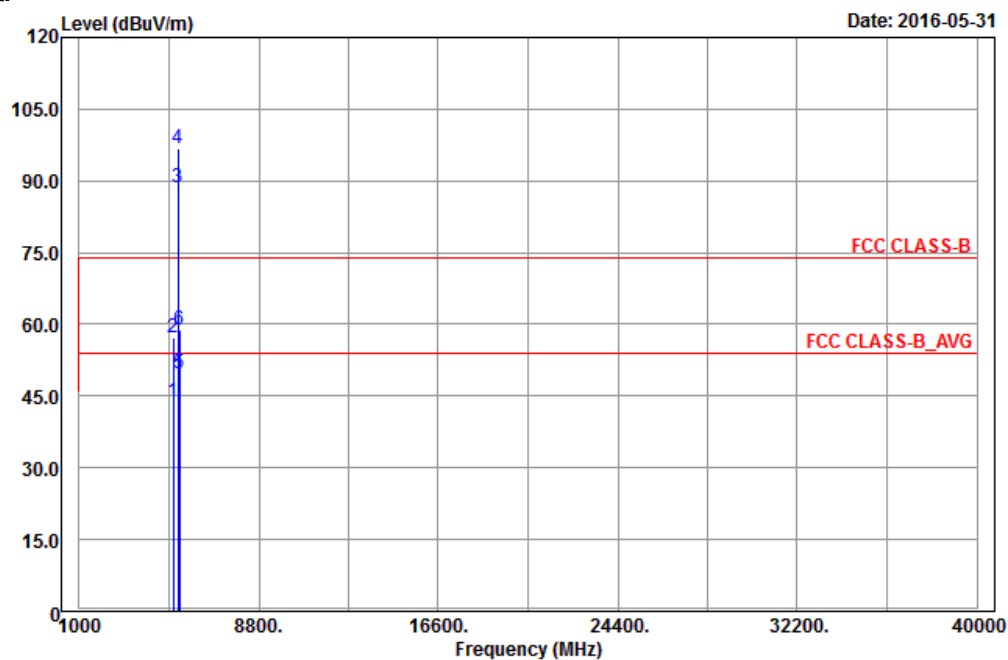
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146	50.45	42.2	54	-3.55	34.12	8.13	34	232	15	Average
5146	60.95	52.7	74	-13.05	34.12	8.13	34	232	15	Peak
5210	87.37	79.01			34.17	8.19	34	255	15	Average
5210	94.09	85.73			34.17	8.19	34	255	15	Peak
5452	43.55	34.73	54	-10.45	34.36	8.51	34.05	255	15	Average
5452	56.57	47.75	74	-17.43	34.36	8.51	34.05	255	15	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)	Preamplifier Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5140	52.75	44.49	54	-1.25	34.12	8.13	33.99	105	360	Average
5140	62.95	54.69	74	-11.05	34.12	8.13	33.99	105	360	Peak
5210	90.5	82.14			34.17	8.19	34	105	0	Average
5210	97.98	89.62			34.17	8.19	34	105	0	Peak
5422	43.59	34.82	54	-10.41	34.33	8.48	34.04	105	0	Average
5422	56.92	48.15	74	-17.08	34.33	8.48	34.04	105	0	Peak

Remarks:

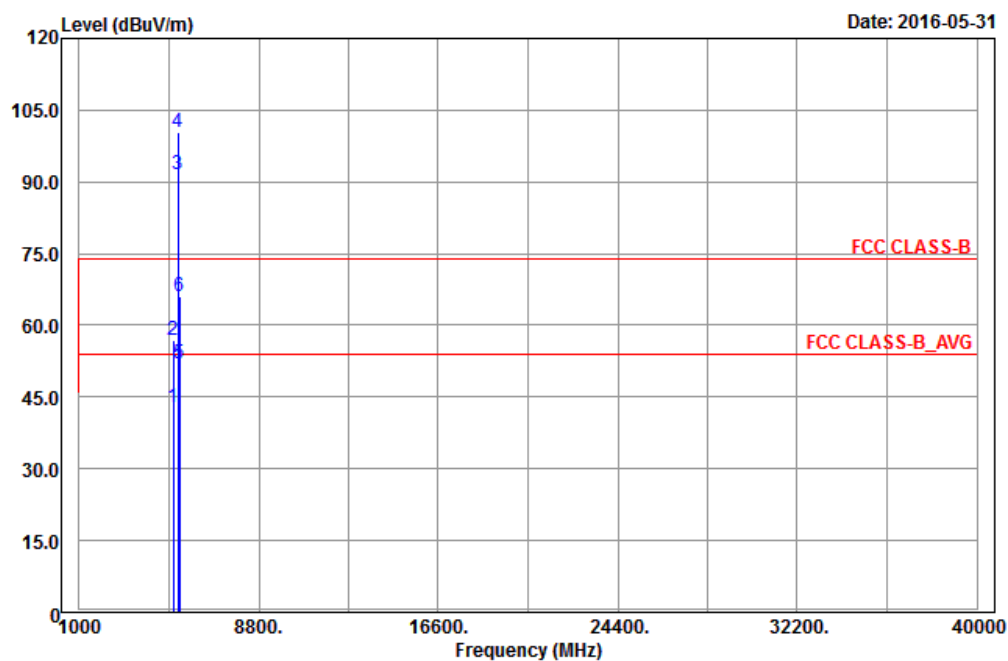
- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5210 MHz: Fundamental Frequency

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

Horizontal



Vertical



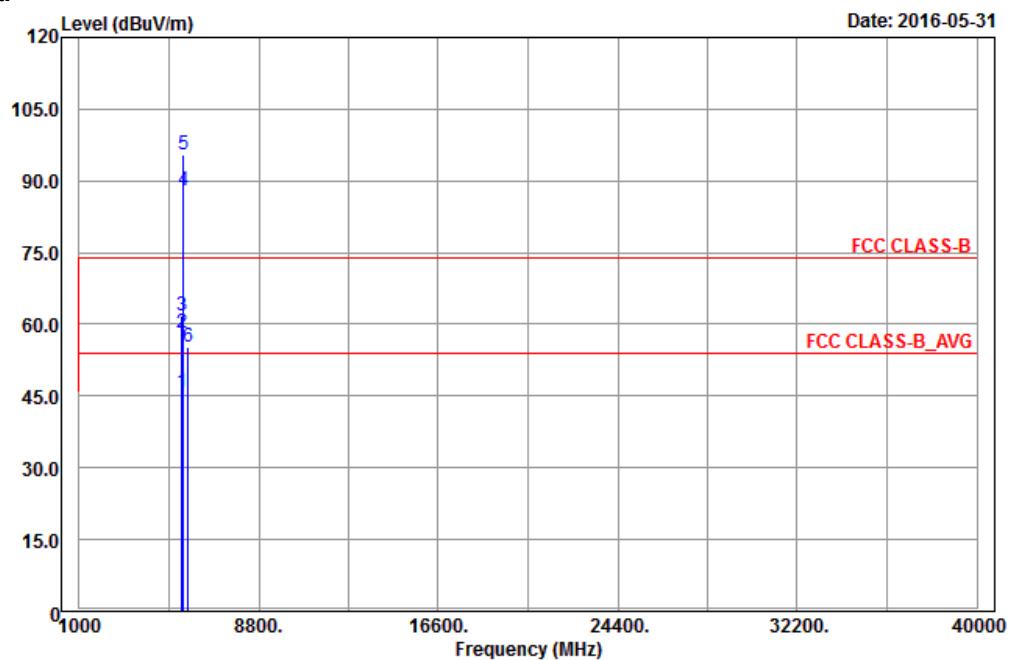
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5074	43.68	35.56	54	-10.32	34.07	8.03	33.98	276	357	Average
5074	57.23	49.11	74	-16.77	34.07	8.03	33.98	276	357	Peak
5290	88.47	79.94			34.23	8.32	34.02	276	357	Average
5290	96.85	88.32			34.23	8.32	34.02	276	357	Peak
5350	49.79	41.16	54	-4.21	34.28	8.38	34.03	276	357	Average
5350	58.72	50.09	74	-15.28	34.28	8.38	34.03	276	357	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
5086	42.93	34.77	54	-11.07	34.07	8.07	33.98	104	0	Average
5086	56.96	48.8	74	-17.04	34.07	8.07	33.98	104	0	Peak
5290	91.6	83.07			34.23	8.32	34.02	104	0	Average
5290	100.44	91.91			34.23	8.32	34.02	104	0	Peak
5350	52.12	43.49	54	-1.88	34.28	8.38	34.03	103	0	Average
5350	65.94	57.31	74	-8.06	34.28	8.38	34.03	103	0	Peak

Remarks:

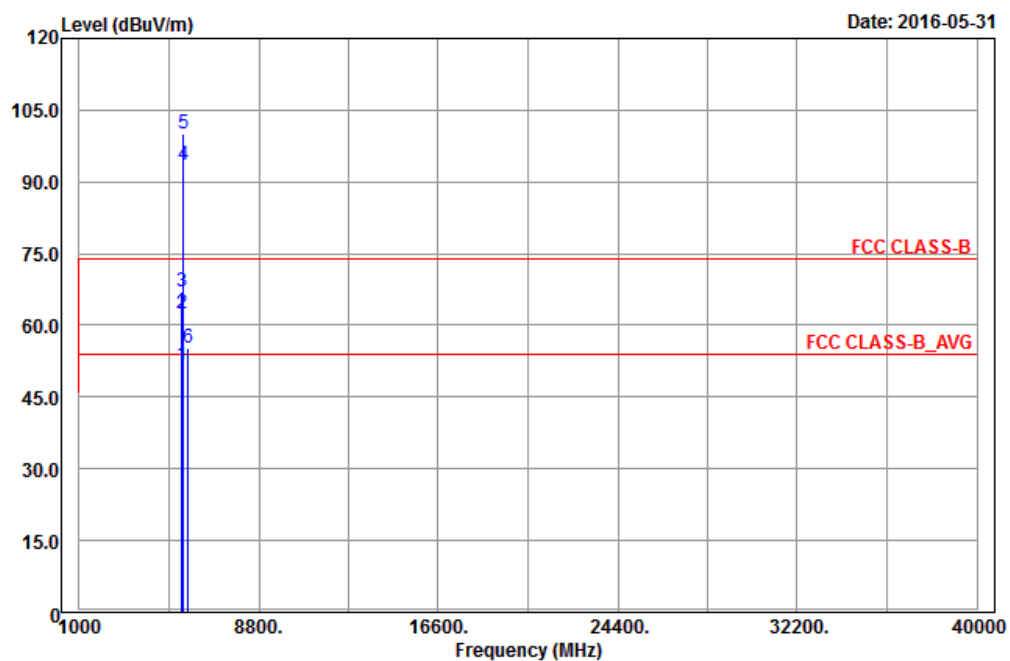
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5290 MHz: Fundamental Frequency

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

Horizontal



Vertical



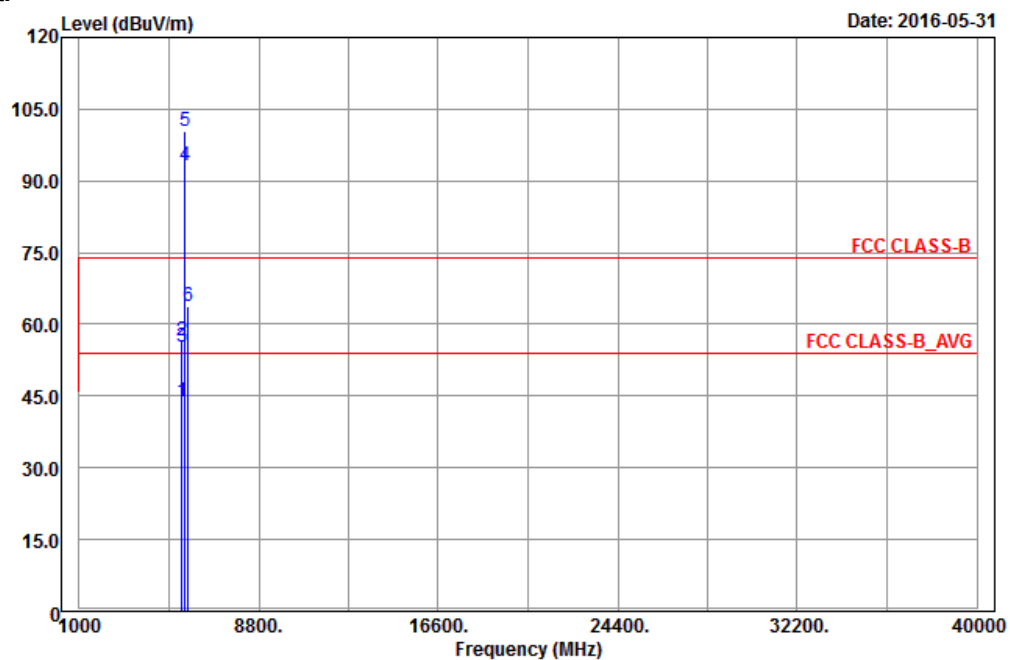
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	45.87	37.05	54	-8.13	34.36	8.51	34.05	276	2	Average
5454	58.1	49.28	74	-15.9	34.36	8.51	34.05	276	2	Peak
5470	61.95	53.12	68.2	-6.25	34.37	8.51	34.05	276	2	Peak
5530	88.1	79.17			34.42	8.58	34.07	276	2	Average
5530	95.59	86.66			34.42	8.58	34.07	276	2	Peak
5725	55.14	45.98	68.2	-13.06	34.62	8.65	34.11	276	2	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	51.57	42.75	54	-2.43	34.36	8.51	34.05	105	9	Average
5460	62.48	53.66	74	-11.52	34.36	8.51	34.05	105	9	Peak
5470	67.04	58.21	68.2	-1.16	34.37	8.51	34.05	105	9	Peak
5530	93.56	84.63			34.42	8.58	34.07	106	9	Average
5530	100.13	91.2			34.42	8.58	34.07	106	9	Peak
5725	55.16	46	68.2	-13.04	34.62	8.65	34.11	106	9	Peak

Remarks:

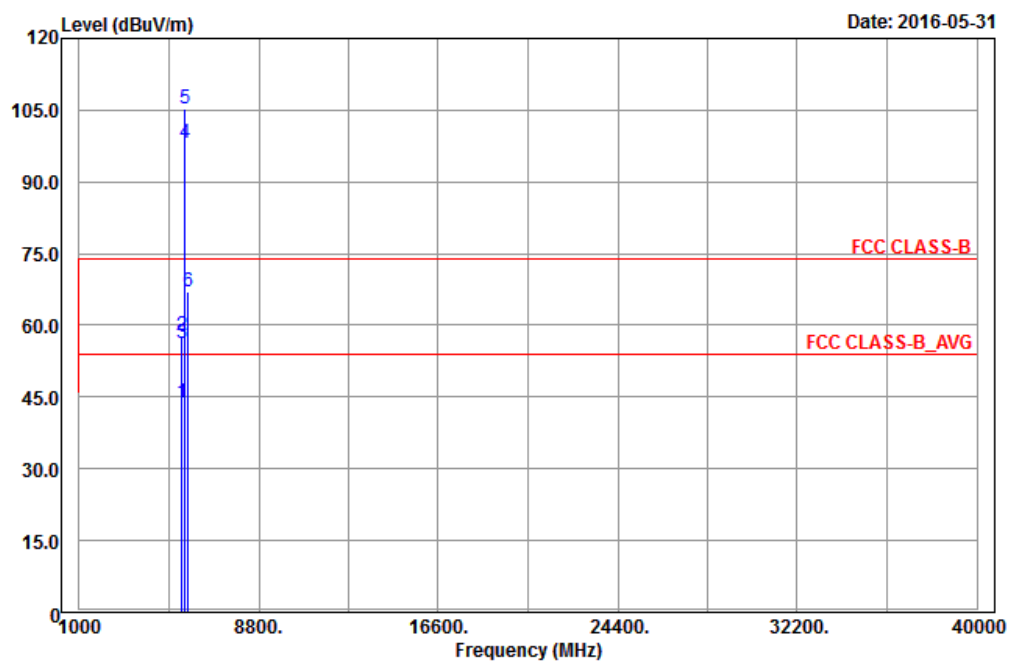
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5530 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

Horizontal



Vertical



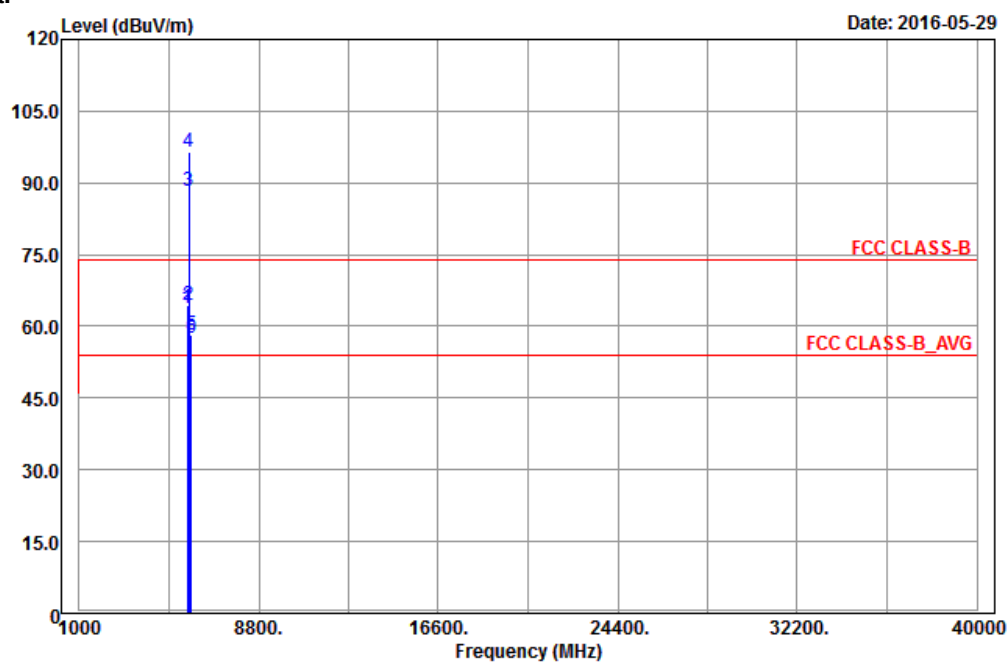
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	43.66	34.84	54	-10.34	34.36	8.51	34.05	280	2	Average
5454	56.69	47.87	74	-17.31	34.36	8.51	34.05	280	2	Peak
5470	55.23	46.4	68.2	-12.97	34.37	8.51	34.05	280	2	Peak
5610	93.11	84.08			34.5	8.61	34.08	280	2	Average
5610	100.26	91.23			34.5	8.61	34.08	280	2	Peak
5725	63.87	54.71	68.2	-4.33	34.62	8.65	34.11	272	2	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
5456	43.72	34.9	54	-10.28	34.36	8.51	34.05	104	9	Average
5456	58.03	49.21	74	-15.97	34.36	8.51	34.05	104	9	Peak
5470	56.28	47.45	68.2	-11.92	34.37	8.51	34.05	104	9	Peak
5610	98.11	89.08			34.5	8.61	34.08	104	9	Average
5610	105.16	96.13			34.5	8.61	34.08	104	9	Peak
5725	67.07	57.91	68.2	-1.13	34.62	8.65	34.11	102	8	Peak

Remarks:

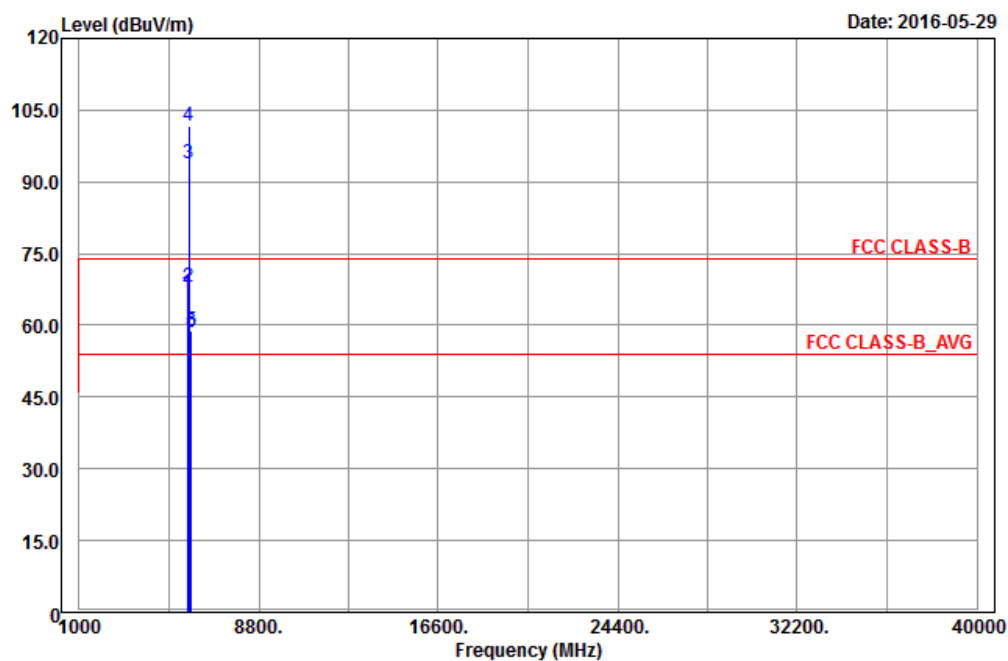
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5610 MHz: Fundamental Frequency
3. 5470 MHz & 5725 MHz: Out of Restricted Band

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

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	63.66	54.51	68.2	-4.54	34.61	8.65	34.11	293	1	Peak
*5720	64.38	55.22	78.2	-13.82	34.62	8.65	34.11	293	1	Peak
5775	88.4	79.17			34.68	8.67	34.12	293	1	Average
5775	96.4	87.17			34.68	8.67	34.12	293	1	Peak
*5856	58.34	49.02	78.2	-19.86	34.76	8.7	34.14	293	1	Peak
*5866	57.49	48.16	68.2	-10.71	34.76	8.71	34.14	293	1	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	66.71	57.56	68.2	-1.49	34.61	8.65	34.11	221	358	Peak
*5720	68.02	58.86	78.2	-10.18	34.62	8.65	34.11	228	358	Peak
5775	93.72	84.49			34.68	8.67	34.12	225	358	Average
5775	101.62	92.39			34.68	8.67	34.12	225	358	Peak
*5854	59	49.68	78.2	-19.2	34.76	8.7	34.14	225	358	Peak
*5862	58.62	49.29	68.2	-9.58	34.76	8.71	34.14	225	358	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band

9 kHz ~ 30 MHz DATA:

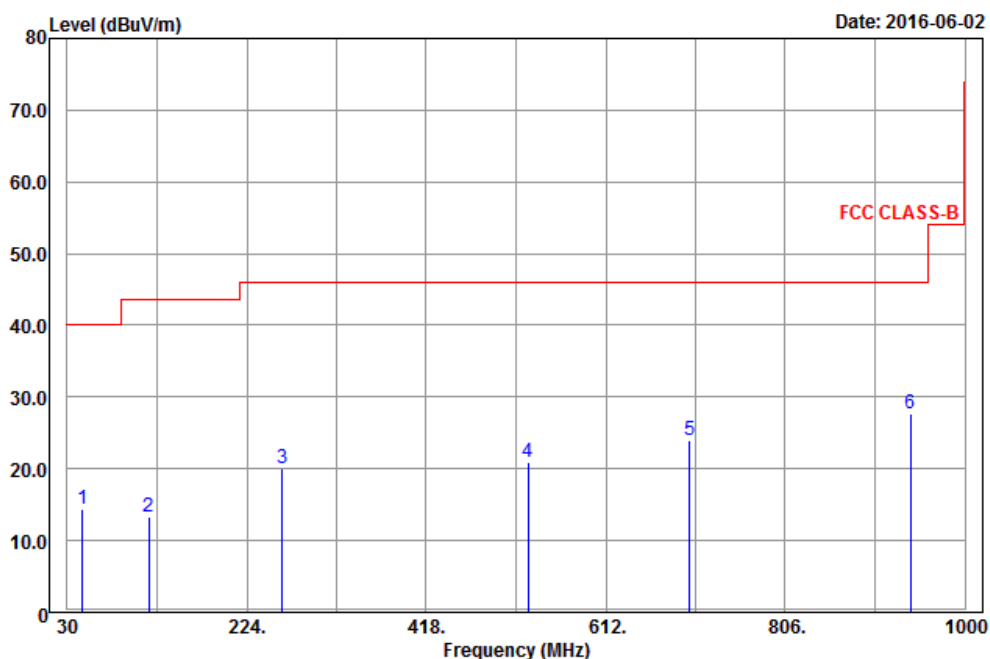
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

30 MHz ~ 1 GHz WORST-CASE DATA:

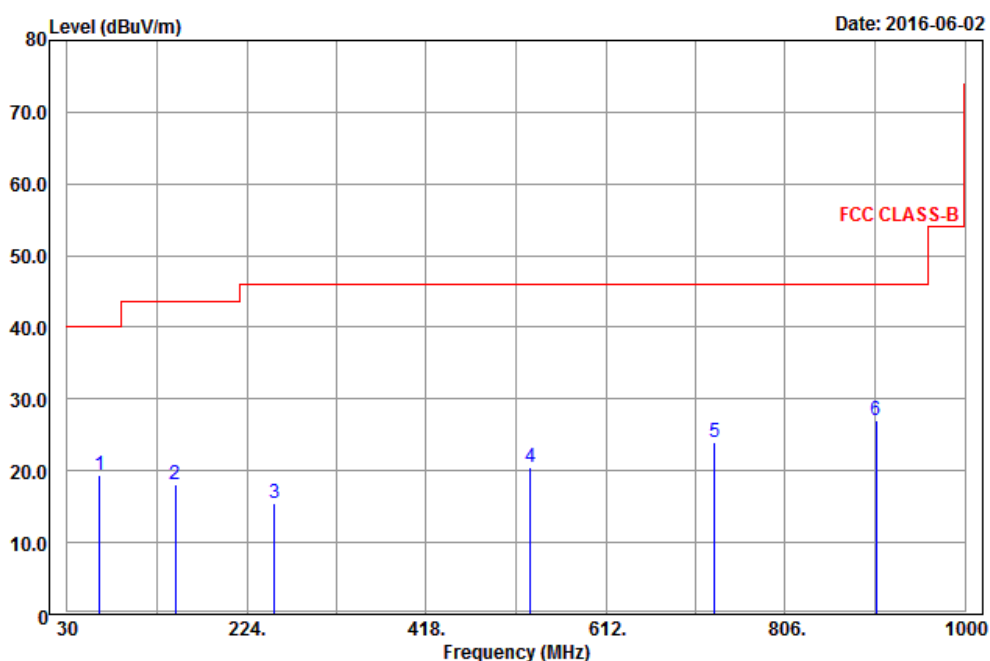
802.11ac (VHT80)

EUT Test Condition		Measurement Detail	
Channel	Channel 42	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
46.47	14.44	36.85	40	-25.56	8.91	0.9	32.22	172	114	Peak
118.29	13.29	35.43	43.5	-30.21	8.83	1.28	32.25	169	135	Peak
262.47	20.12	36.92	46	-25.88	13.37	1.94	32.11	154	112	Peak
528.2	20.91	29.71	46	-25.09	20.66	2.7	32.16	182	110	Peak
702.5	24.03	29.87	46	-21.97	23.14	3.11	32.09	127	143	Peak
941.2	27.74	29.1	46	-18.26	26.2	3.62	31.18	194	136	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
64.83	19.46	43.33	40	-20.54	7.45	0.9	32.22	115	142	Peak
147.18	18.16	38.99	43.5	-25.34	9.92	1.52	32.27	133	192	Peak
253.56	15.37	32.41	46	-30.63	13.12	1.94	32.1	128	176	Peak
531	20.54	29.39	46	-25.46	20.61	2.7	32.16	138	152	Peak
729.8	23.99	29.58	46	-22.01	23.37	3.16	32.12	117	165	Peak
904.1	27.12	29.8	46	-18.88	25.24	3.53	31.45	158	127	Peak

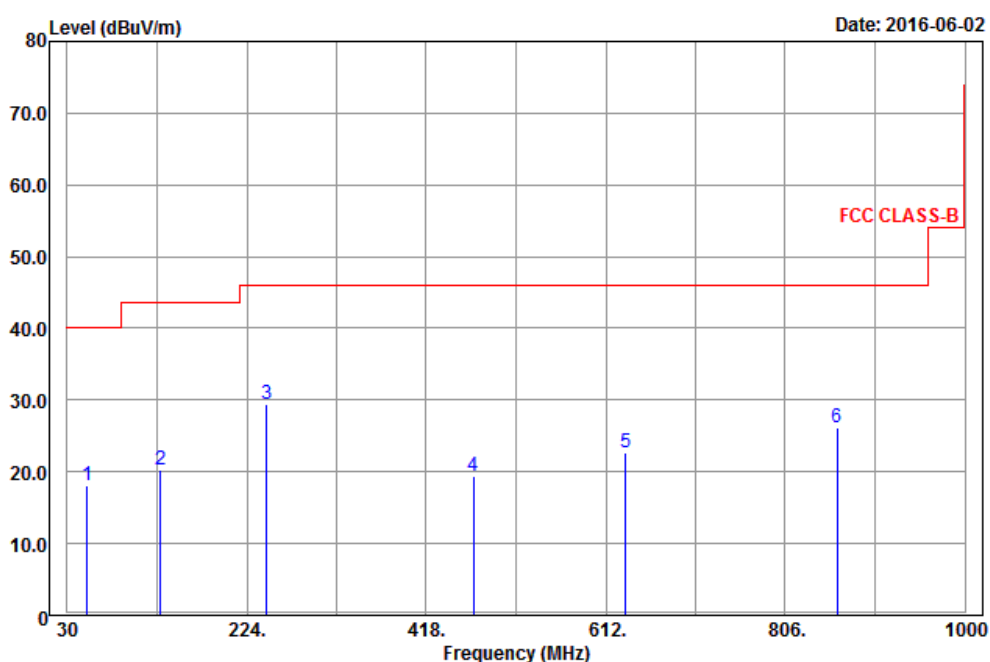
Remarks:

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

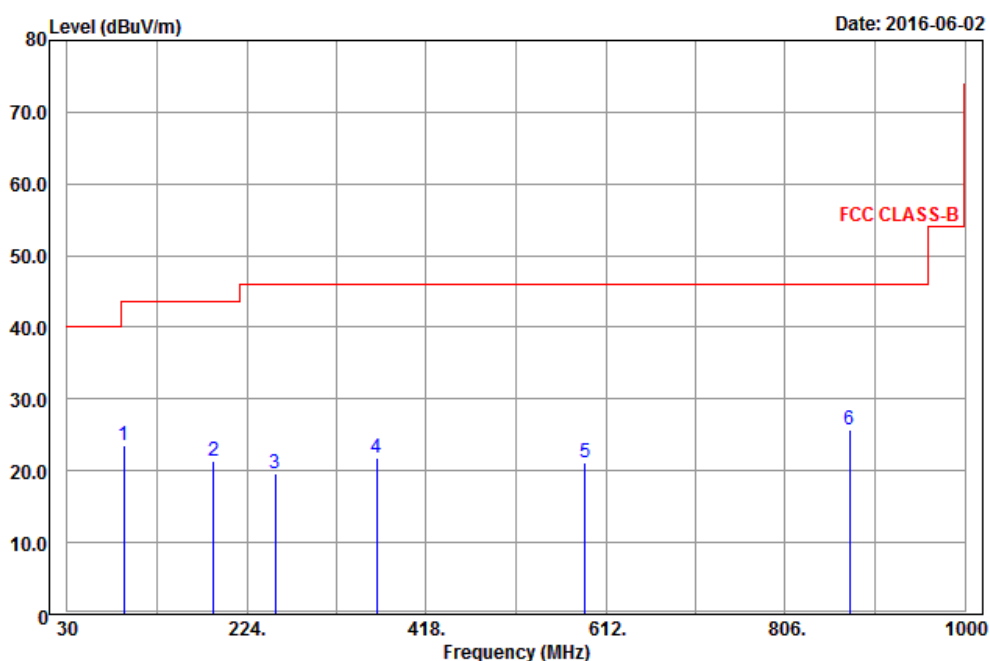
802.11n (HT40)

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
51.87	18.04	41.78	40	-21.96	7.59	0.9	32.23	128	169	Peak
130.71	20.32	41.96	43.5	-23.18	9.21	1.38	32.23	137	143	Peak
245.46	29.53	46.97	46	-16.47	12.83	1.85	32.12	128	150	Peak
469.4	19.39	30.24	46	-26.61	18.72	2.56	32.13	105	187	Peak
633.9	22.59	29.72	46	-23.41	22.1	2.93	32.16	107	159	Peak
862.1	26.15	30.23	46	-19.85	24.2	3.44	31.72	136	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
91.02	23.5	45.18	43.5	-20	8.98	1.11	31.77	135	127	Peak
188.22	21.38	41.62	43.5	-22.12	10.4	1.61	32.25	149	105	Peak
254.91	19.7	36.7	46	-26.3	13.16	1.94	32.1	139	128	Peak
364.4	21.88	35.39	46	-24.12	16.34	2.26	32.11	108	151	Peak
589.8	21.13	29.72	46	-24.87	20.73	2.87	32.19	126	139	Peak
875.4	25.77	29.11	46	-20.23	24.8	3.49	31.63	158	127	Peak

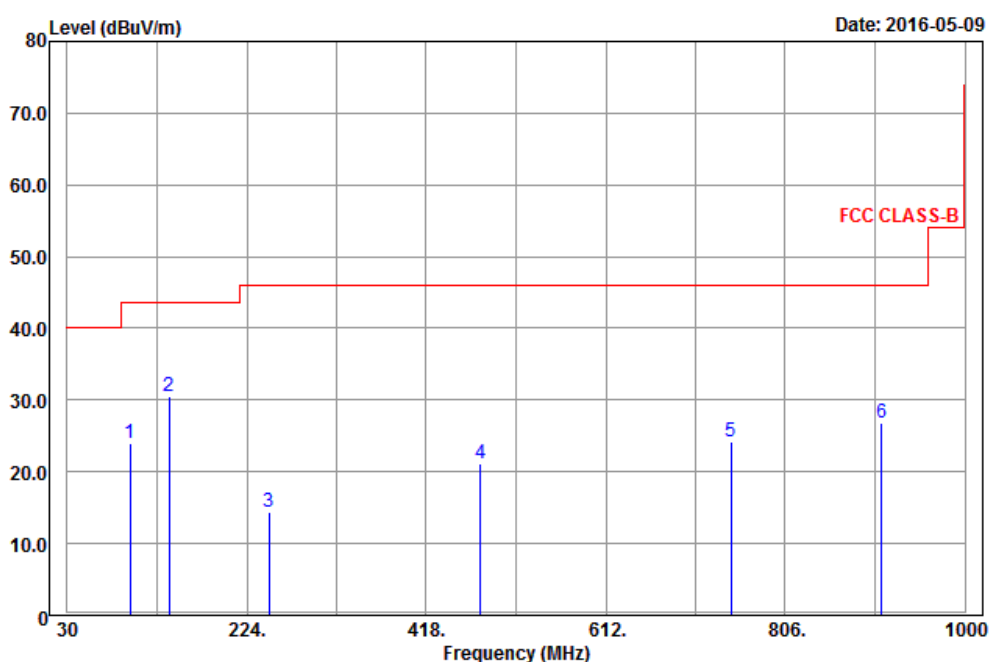
Remarks:

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

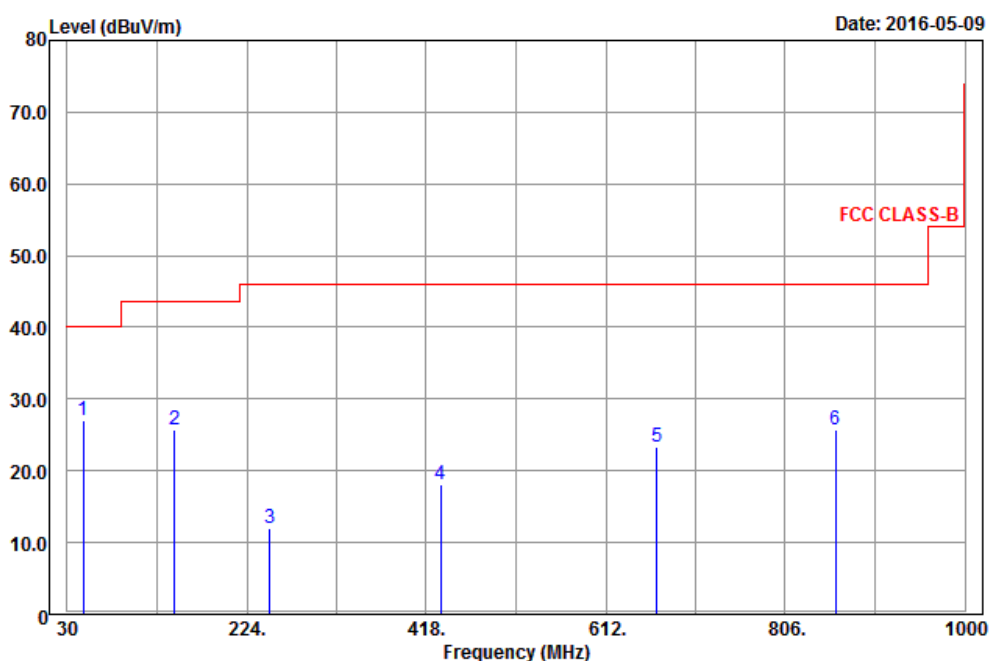
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 102	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
97.77	23.9	45.27	43.5	-19.6	9.5	1.28	32.15	174	154	Peak
140.43	30.61	52.14	43.5	-12.89	9.36	1.38	32.27	139	162	Peak
247.62	14.32	31.7	46	-31.68	12.88	1.85	32.11	165	127	Peak
476.4	21.16	31.82	46	-24.84	18.9	2.56	32.12	108	165	Peak
747.3	24.1	29.79	46	-21.9	23.23	3.22	32.14	139	168	Peak
910.4	26.89	29.28	46	-19.11	25.48	3.53	31.4	144	127	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
47.28	27.01	49.68	40	-12.99	8.65	0.9	32.22	182	106	Peak
145.56	25.64	46.74	43.5	-17.86	9.79	1.38	32.27	174	116	Peak
249.24	11.94	29.25	46	-34.06	12.94	1.85	32.1	157	143	Peak
433.7	18.02	29.89	46	-27.98	17.81	2.49	32.17	194	162	Peak
667.5	23.34	29.45	46	-22.66	22.97	3.05	32.13	137	107	Peak
860.7	25.65	29.74	46	-20.35	24.2	3.44	31.73	158	124	Peak

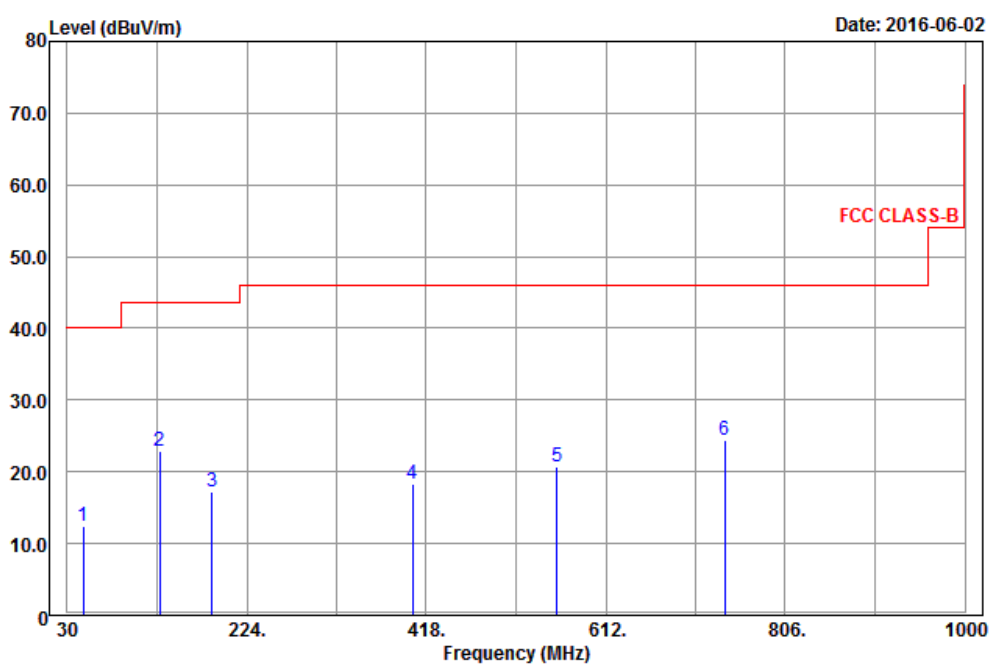
Remarks:

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

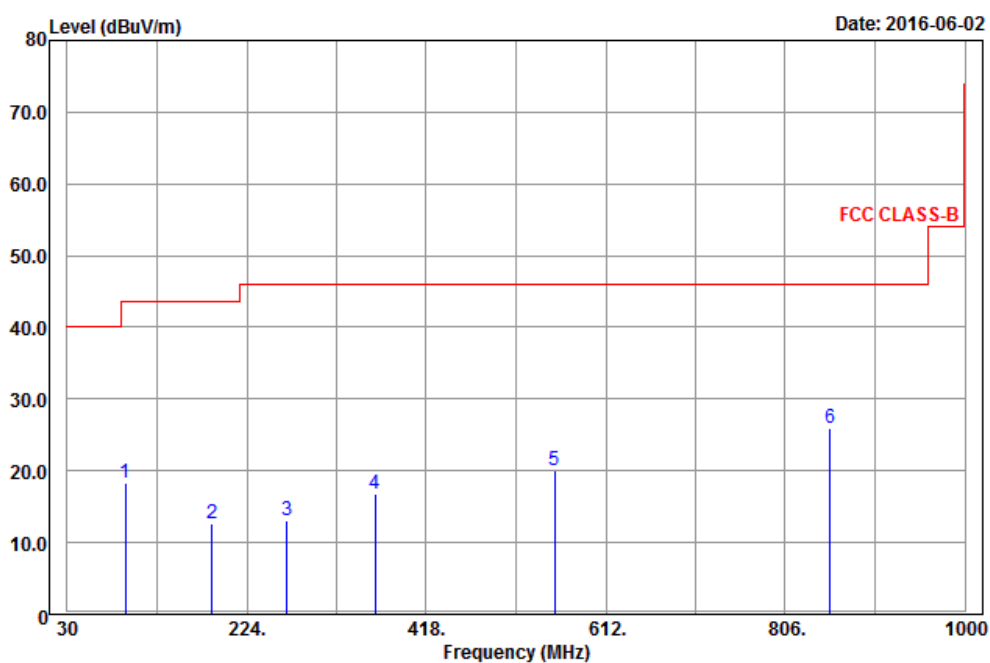
802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 149	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
47.01	12.36	34.94	40	-27.64	8.74	0.9	32.22	186	134	Peak
129.9	22.95	44.6	43.5	-20.55	9.2	1.38	32.23	117	142	Peak
186.06	17.14	37.38	43.5	-26.36	10.4	1.61	32.25	108	164	Peak
403.6	18.28	30.13	46	-27.72	18.03	2.34	32.22	103	124	Peak
559	20.8	30.01	46	-25.2	20.23	2.76	32.2	165	197	Peak
741	24.48	30.19	46	-21.52	23.27	3.16	32.14	133	125	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
93.18	18.28	39.87	43.5	-25.22	9.18	1.11	31.88	133	128	Peak
186.87	12.71	32.95	43.5	-30.79	10.4	1.61	32.25	172	106	Peak
267.06	13.02	29.7	46	-32.98	13.49	1.94	32.11	169	138	Peak
363	16.88	30.38	46	-29.12	16.35	2.26	32.11	107	125	Peak
556.9	20.13	29.32	46	-25.87	20.25	2.76	32.2	139	168	Peak
854.4	25.9	30.22	46	-20.1	24	3.44	31.76	128	145	Peak

Remarks:

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

4.2 Transmit Power Measurement

4.2.1 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 $N_{ANT} \leq 4$;

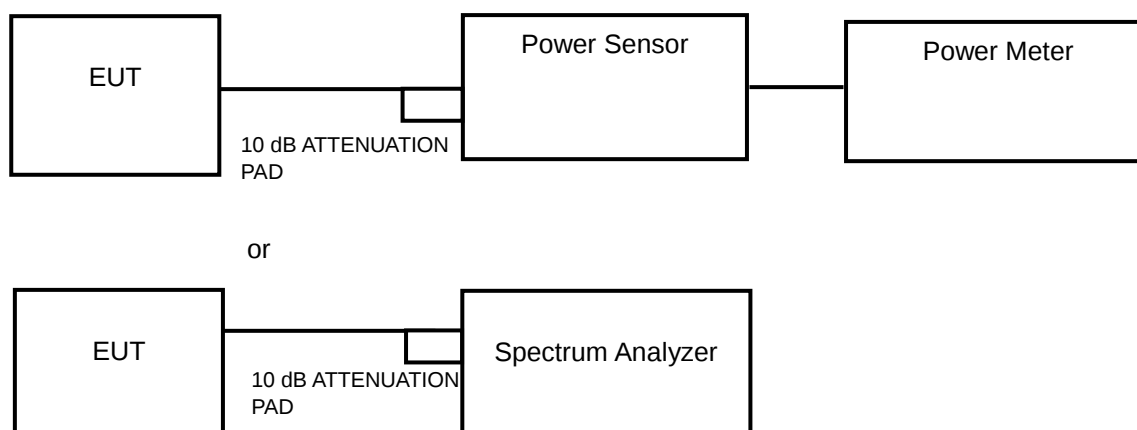
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

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.

4.2.2 Test Setup

<Power Output Measurement>



4.2.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.2.4 Test Procedure

Average Power Measurement

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

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

<802.11ac (VHT80)>

Method SA-1 is used to perform output power measurement, trigger and gating function of spectrum analyzer is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Conditions

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

4.2.7 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	13.31	13.15	42.08	16.24	24	Pass
44	5220	14.99	14.96	62.88	17.99	24	Pass
48	5240	14.95	14.90	62.16	17.94	24	Pass
52	5260	14.95	14.77	61.25	17.87	24	Pass
60	5300	14.78	14.58	58.77	17.69	24	Pass
64	5320	13.87	13.51	46.82	16.70	24	Pass
100	5500	7.57	7.52	11.36	10.56	24	Pass
116	5580	14.68	14.54	57.82	17.62	24	Pass
140	5700	7.05	7.01	10.09	10.04	24	Pass
149	5745	12.56	12.51	35.854	15.55	30	Pass
157	5785	14.12	14.01	50.999	17.08	30	Pass
165	5825	12.15	12.01	32.291	15.09	30	Pass

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	13.31	13.21	42.37	16.27	24	Pass
44	5220	14.98	14.89	62.31	17.95	24	Pass
48	5240	14.95	14.84	61.74	17.91	24	Pass
52	5260	14.99	14.93	62.67	17.97	24	Pass
60	5300	14.98	14.88	62.24	17.94	24	Pass
64	5320	13.44	13.26	43.26	16.36	24	Pass
100	5500	6.71	6.51	9.17	9.62	24	Pass
116	5580	14.97	14.87	62.10	17.93	24	Pass
140	5700	5.49	5.46	7.06	8.49	24	Pass
149	5745	12.21	12.02	32.556	15.13	30	Pass
157	5785	14.47	14.39	55.469	17.44	30	Pass
165	5825	11.56	11.51	28.480	14.55	30	Pass

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	9.58	9.51	18.01	12.56	24	Pass
46	5230	14.39	14.08	53.06	17.25	24	Pass
54	5270	14.34	14.14	53.11	17.25	24	Pass
62	5310	12.15	11.52	30.60	14.86	24	Pass
102	5510	4.14	4.01	5.11	7.09	24	Pass
110	5550	14.39	14.11	53.24	17.26	24	Pass
134	5670	10.42	10.01	21.04	13.23	24	Pass
151	5755	9.89	9.56	18.786	12.74	30	Pass
159	5795	13.74	13.57	46.410	16.67	30	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	5.67	5.45	7.20	8.57	24	Pass
58	5290	8.52	8.47	14.14	11.51	24	Pass
106	5530	6.14	6.01	8.10	9.09	24	Pass
122	5610	12.49	12.15	34.15	15.33	24	Pass
155	5775	7.69	7.58	11.603	10.65	30	Pass

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:

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

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