Partial FCC Test Report

Report No.:	RF160526C28B-1
FCC ID:	PPD-QCNFA324
Test Model:	QCNFA324
Received Date:	Oct. 20, 2017
Test Date:	Nov. 08, 2017 ~ Nov. 21, 2017
Issued Date:	Nov. 24, 2017
Applicant:	Qualcomm Atheros, Inc.
Address:	1700 Technology Drive, San Jose, CA95110
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C)
Test Location (1):	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.
Test Location (2):	No.215, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan, R.O.C
FCC Registration /	788550 / TW0003
Designation Number:	427177 / TW0011

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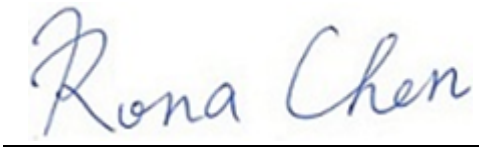
Release Control Record

Issue No.	Description	Date Issued
RF160526C28B-1	Original Release	Nov. 24, 2017

1 Certificate of Conformity

Product:	2x2 802.11A/B/G/N/AC WiFi + Bluetooth Module
Brand:	Qualcomm Atheros
Test Model:	QCNFA324
Sample Status:	Identical Prototype
Applicant:	Qualcomm Atheros, Inc.
Test Date:	Nov. 08, 2017 ~ Nov. 21, 2017
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 :  , **Date:** Nov. 24, 2017

Rona Chen / Specialist

Approved by :  , **Date:** Nov. 24, 2017

Dylan Chiou / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	**Test Item**	**Result**	**Remarks**
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -14.42 dB at 0.39863 MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.00 dB at 5725.08 MHz & 5725.16 MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	N/A	Refer to Note
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6 dB Bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	N/A	Refer to Note

Note: Only test item of Conducted Emission and Radiated Emissions were performed for this report. For other test data, please refer to BV Report No.: RF140808E04 and RF140808E04-1 for WLAN/BT module (Brand: Qualcomm Atheros, Model: QCNFA324)

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) (±)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
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	2x2 802.11A/B/G/N/AC WiFi + Bluetooth Module
Brand	Qualcomm Atheros
Test Model	QCNFA324
Status of EUT	Identical Prototype
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)
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	N/A
Data Cable Supplied	N/A

Note:

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

Item	Brand	Model
Industrial Computer	Dell	N01PC

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

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

* The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for 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	Brand Name	Parts Number	Antenna Gain (dBi)		
			2.4GHz	5.15~5.725GHz	5.725~5.85GHz
Dipole	Laird	WLAN Main Antenna: PDV24515-DE1 WLAN Aux Antenna: PDV24515-DE1	Main: 2.9 Aux: 2.9	Main: 4.0 Aux: 4.0	Main: 3.9 Aux: 3.9
Monopole	Taoglas Antenna Solution Ltd.	WLAN Main Antenna: MA761.B.BICG.014 WLAN Aux Antenna: MA761.B.BICG.014	Main: 2.82 Aux: 2.79	Main: 4.11 Aux: 4.51	Main: 4.11 Aux: 4.51

* The EUT antenna is a specific antenna: Professional installation antenna. It complies with the standard requirement.

4. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter	DELL	DA180PM111	I/P: 100-240 Vac, 50-60 Hz, 2.34 A O/P: 19.5 Vdc, 9.23 A

5. 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), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

For 5260 ~ 5320 MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
58	5290

For 5500 ~ 5700 MHz

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

5 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

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), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
155	5775

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	Dipole Antenna
B	√	√	√	-	Monopole Antenna

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

NOTE:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-plane for Mode A and Z-plan for Mode B.
2. "-"means no effect.

Radiated Emission Test (Above 1 GHz):

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

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B	5180-5240	802.11a	36 to 48	36, 44, 48	OFDM	BPSK	6.0
		802.11ac (VHT20)	36 to 48	36, 44, 48	OFDM	BPSK	MCS0
		802.11ac (VHT40)	38 to 46	38, 46	OFDM	BPSK	MCS0
		802.11ac (VHT80)	42	42	OFDM	BPSK	MCS0
	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	BPSK	6.0
		802.11ac (VHT20)	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
		802.11ac (VHT40)	54 to 62	54, 62	OFDM	BPSK	MCS0
		802.11ac (VHT80)	58	58	OFDM	BPSK	MCS0
	5500-5700	802.11a	100 to 140	100, 116, 140	OFDM	BPSK	6.0
		802.11ac (VHT20)	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
		802.11ac (VHT40)	102 to 134	102, 110, 134	OFDM	BPSK	MCS0
		802.11ac (VHT80)	106 to 122	106, 122	OFDM	BPSK	MCS0
	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
		802.11ac (VHT20)	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
		802.11ac (VHT40)	151 to 159	151, 159	OFDM	BPSK	MCS0
		802.11ac (VHT80)	155	155	OFDM	BPSK	MCS0

Radiated Emission Test (Below 1 GHz):

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

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5500-5700	802.11ac (VHT20)	100 to 140	140	OFDM	BPSK	MCS0
B	5500-5700	802.11ac (VHT20)	100 to 140	140	OFDM	BPSK	MCS0

Power Line Conducted Emission Test:

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

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5500-5700	802.11ac (VHT20)	100 to 140	140	OFDM	BPSK	MCS0
B	5500-5700	802.11ac (VHT20)	100 to 140	140	OFDM	BPSK	MCS0

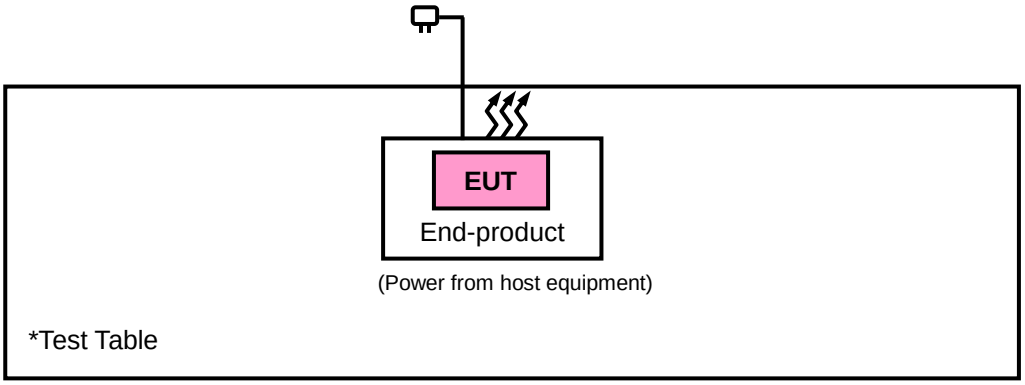
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Karl Lee
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Karl Lee
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Getaz Yang

3.3 Description of Support Units

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

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01r04
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.

Note: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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 v01r04		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	**Applicable To**	**EIRP Limit**	**Equivalent Field Strength at 3 m**
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK:122.2 (dBμV/m) *4
	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

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

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

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

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

Note:

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

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

4.1.3 Test Instruments

Description & Manaufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent Technologies	N9038A	MY52260177	Jul. 05, 2017	Jul. 04, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 13, 2016	Dec. 12, 2017
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 16, 2016	Dec. 15, 2017
HORN Antenna ETS-Lindgren	3117	00143293	Dec. 29, 2016	Dec. 28, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 14, 2016	Dec. 13, 2017
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 17, 2017	Apr. 16, 2018
Bluetooth Tester	CBT	100980	Jun. 28, 2017	Jun. 27, 2019
Loop Antenna	HLA 6121	45745	May 19, 2017	May 18, 2018
Preamplifier Agilent	310N	187226	Jun. 23, 2017	Jun. 22, 2018
Preamplifier Agilent	83017A	MY39501357	Jun. 23, 2017	Jun. 22, 2018
Power Meter Anritsu	ML2495A	1012010	Aug. 15, 2017	Aug. 14, 2018
Power Sensor Anritsu	MA2411B	1315050	Aug. 15, 2017	Aug. 14, 2018
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-400)	Jun. 23, 2017	Jun. 22, 2018
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(RFC-SMS-100-SMS-24)	Jun. 23, 2017	Jun. 22, 2018
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 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:

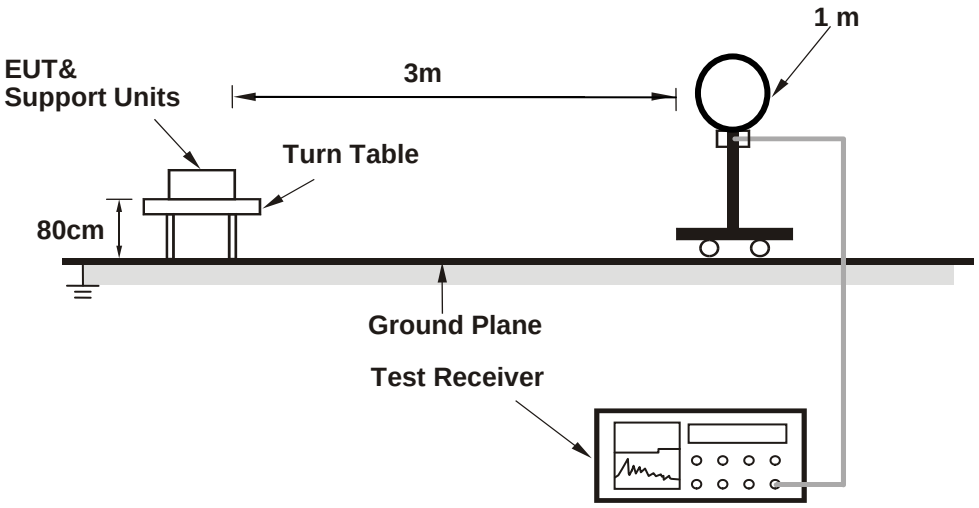
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1/T for Average (Duty cycle < 98 %) detection at frequency above 1 GHz.
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

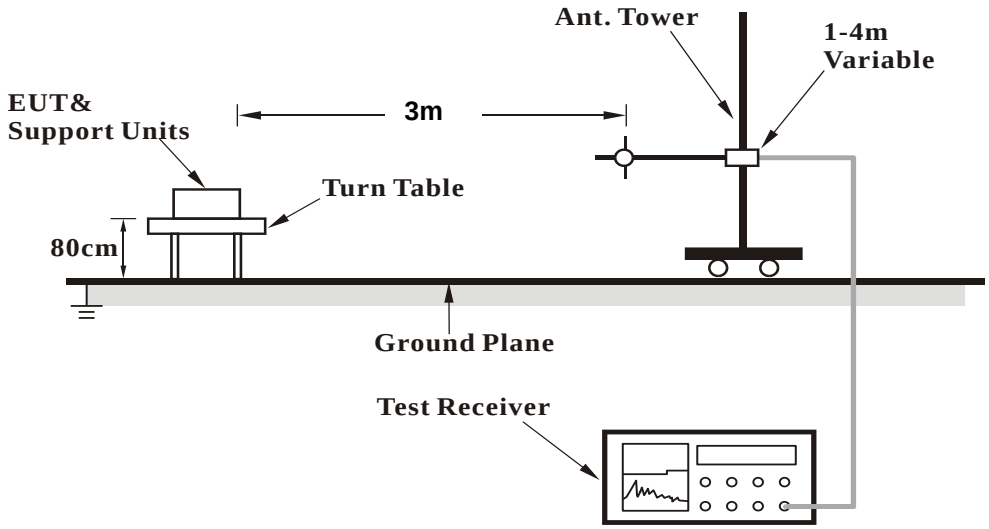
No deviation.

4.1.6 Test Set Up

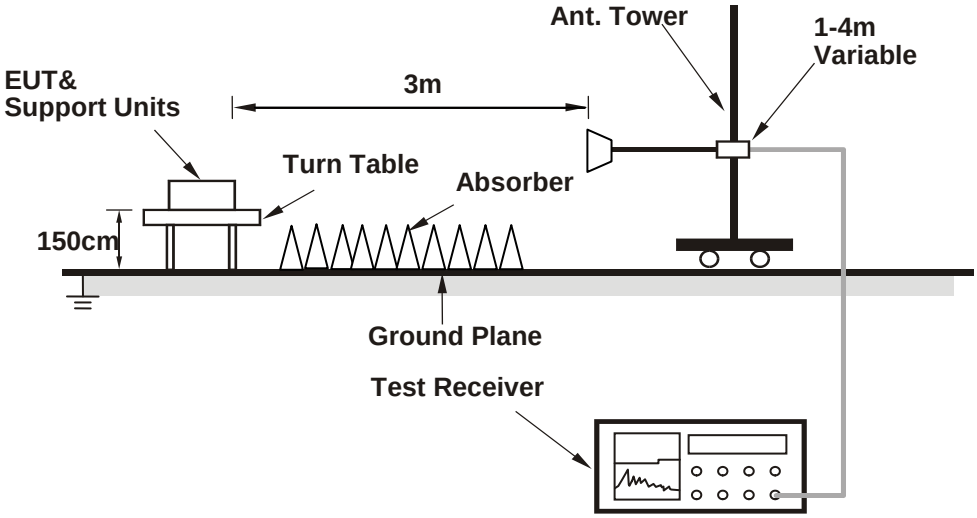
<Radiated emission below 30 MHz>



<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

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

4.1.8 Test Results

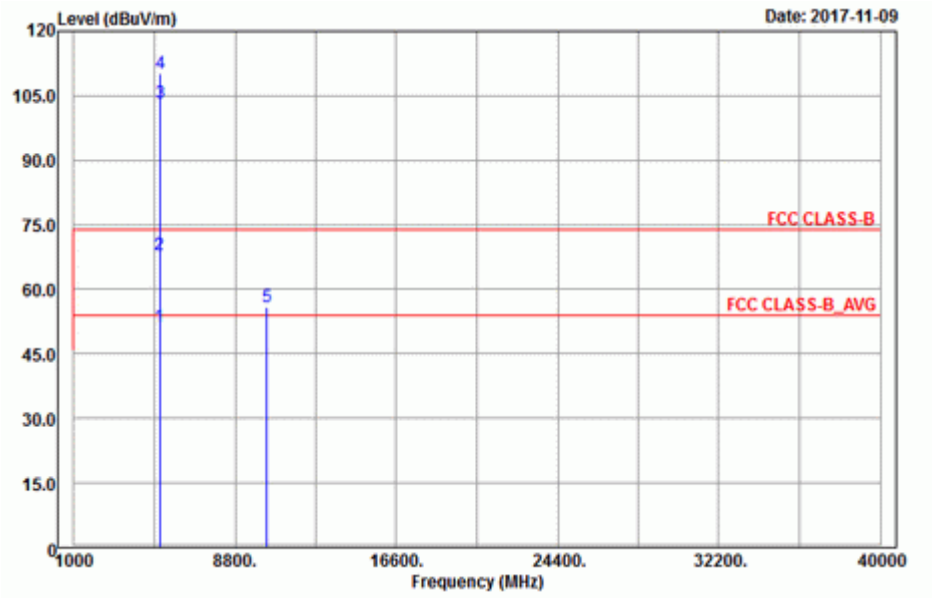
Above 1 GHz Data：

Mode A

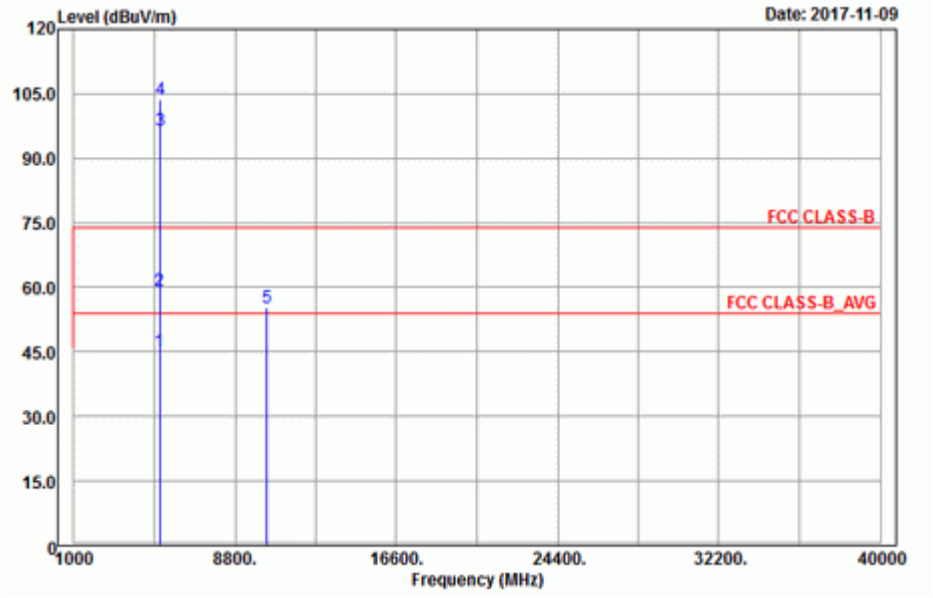
802.11a

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

Horizontal



Vertical



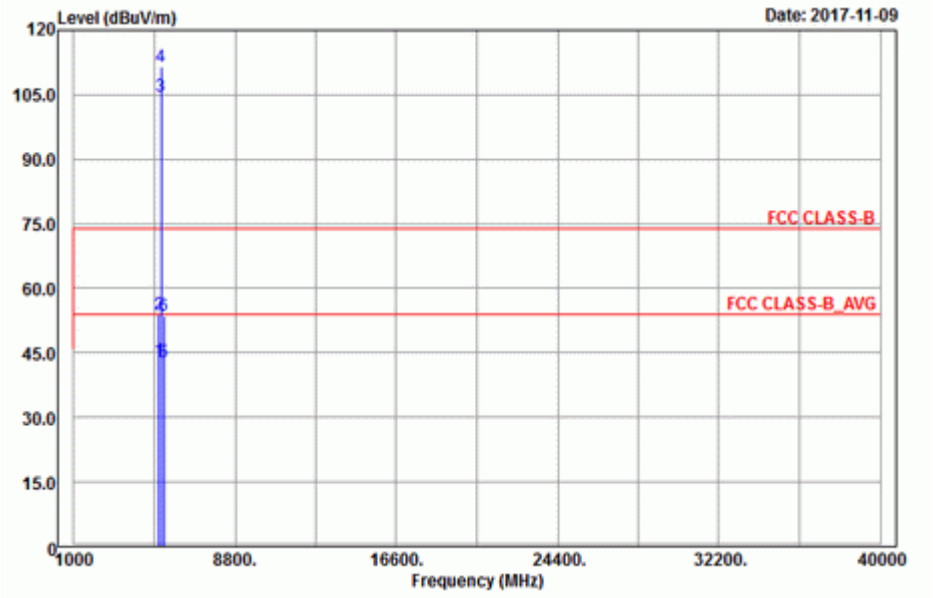
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.85	51.32	43.07	54	-2.68	34.12	8.13	34	186	13	Average
5149.85	67.93	59.68	74	-6.07	34.12	8.13	34	186	13	Peak
5180	103.46	95.15			34.15	8.16	34	194	19	Average
5180	110.22	101.91			34.15	8.16	34	194	19	Peak
*10360	55.82	41.52	68.2	-12.38	37.12	12.3	35.12	199	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
5149.7	45.25	37	54	-8.75	34.12	8.13	34	101	12	Average
5149.7	59.3	51.05	74	-14.7	34.12	8.13	34	101	12	Peak
5180	96.38	88.07			34.15	8.16	34	101	22	Average
5180	103.63	95.32			34.15	8.16	34	101	22	Peak
*10360	55.25	40.95	68.2	-12.95	37.12	12.3	35.12	127	164	Peak

Remarks:

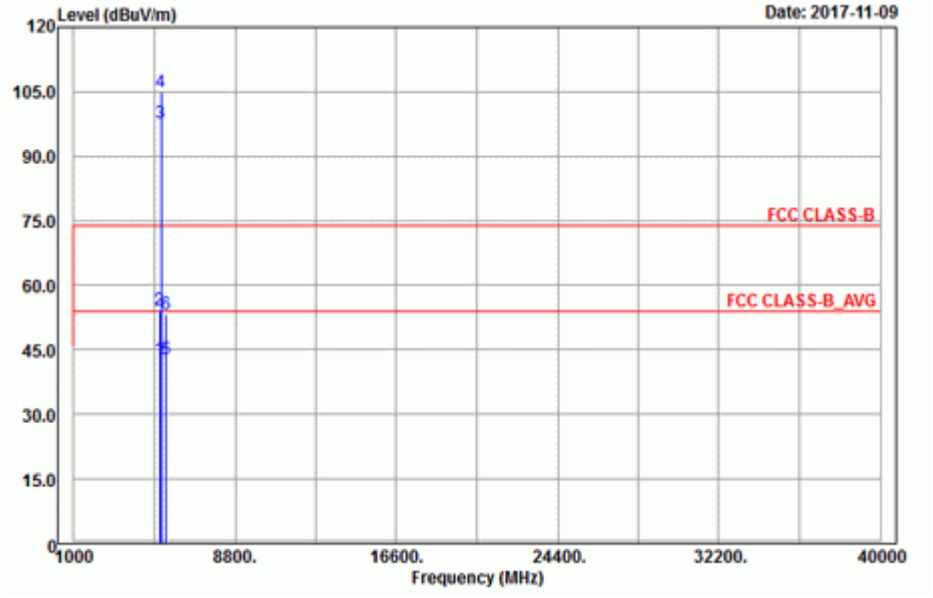
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



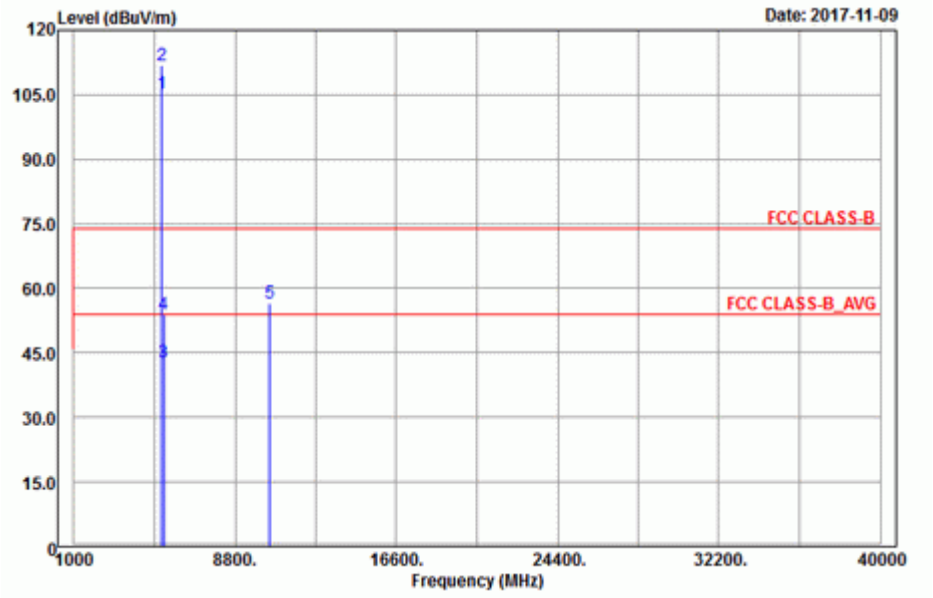
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5134.85	43.11	34.86	54	-10.89	34.11	8.13	33.99	194	19	Average
5134.85	54.04	45.79	74	-19.96	34.11	8.13	33.99	194	19	Peak
5220	104.7	96.31			34.17	8.22	34	194	19	Average
5220	111.64	103.25			34.17	8.22	34	194	19	Peak
5350.22	42.79	34.16	54	-11.21	34.28	8.38	34.03	194	19	Average
5350.22	53.62	44.99	74	-20.38	34.28	8.38	34.03	194	19	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
5140.4	42.7	34.44	54	-11.3	34.12	8.13	33.99	101	22	Average
5140.4	54.28	46.02	74	-19.72	34.12	8.13	33.99	101	22	Peak
5220	97.88	89.49			34.17	8.22	34	101	22	Average
5220	104.93	96.54			34.17	8.22	34	101	22	Peak
5444.38	42.77	33.98	54	-11.23	34.35	8.48	34.04	101	22	Average
5444.38	53.25	44.46	74	-20.75	34.35	8.48	34.04	101	22	Peak

Remarks:

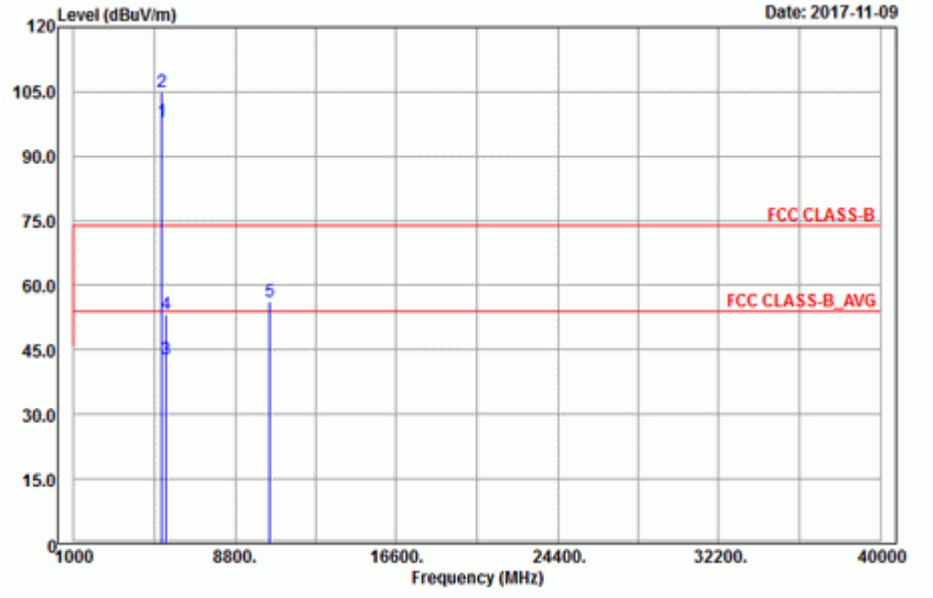
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



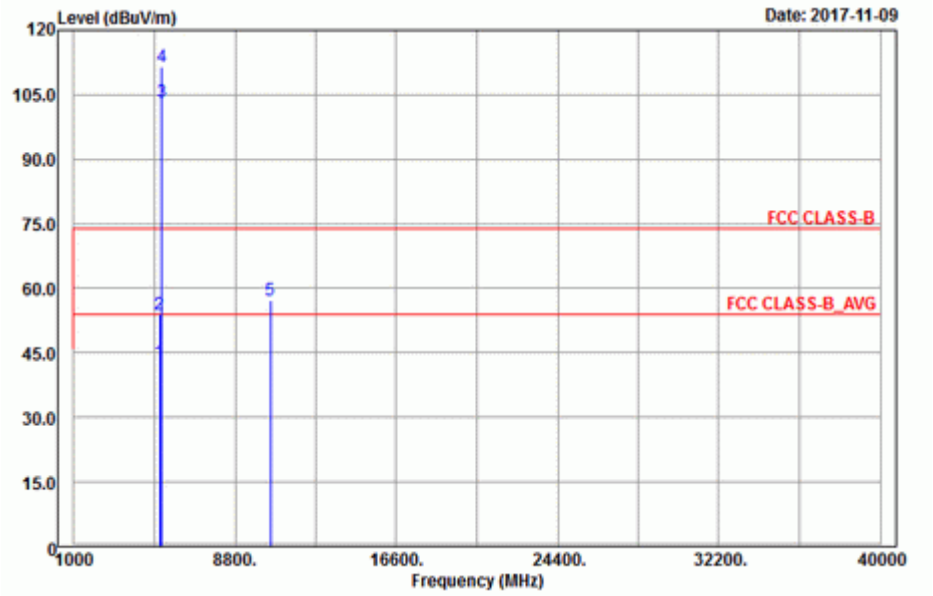
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	105.26	96.82			34.19	8.26	34.01	194	19	Average
5240	111.74	103.3			34.19	8.26	34.01	194	19	Peak
5350.55	42.78	34.15	54	-11.22	34.28	8.38	34.03	194	19	Average
5350.55	54.05	45.42	74	-19.95	34.28	8.38	34.03	194	19	Peak
*10480	56.54	42.03	68.2	-11.66	37.19	12.53	35.21	125	188	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
5240	98.11	89.67			34.19	8.26	34.01	101	22	Average
5240	104.91	96.47			34.19	8.26	34.01	101	22	Peak
5449.77	42.88	34.06	54	-11.12	34.36	8.51	34.05	101	22	Average
5449.77	53.19	44.37	74	-20.81	34.36	8.51	34.05	101	22	Peak
*10480	56.19	41.68	68.2	-12.01	37.19	12.53	35.21	164	139	Peak

Remarks:

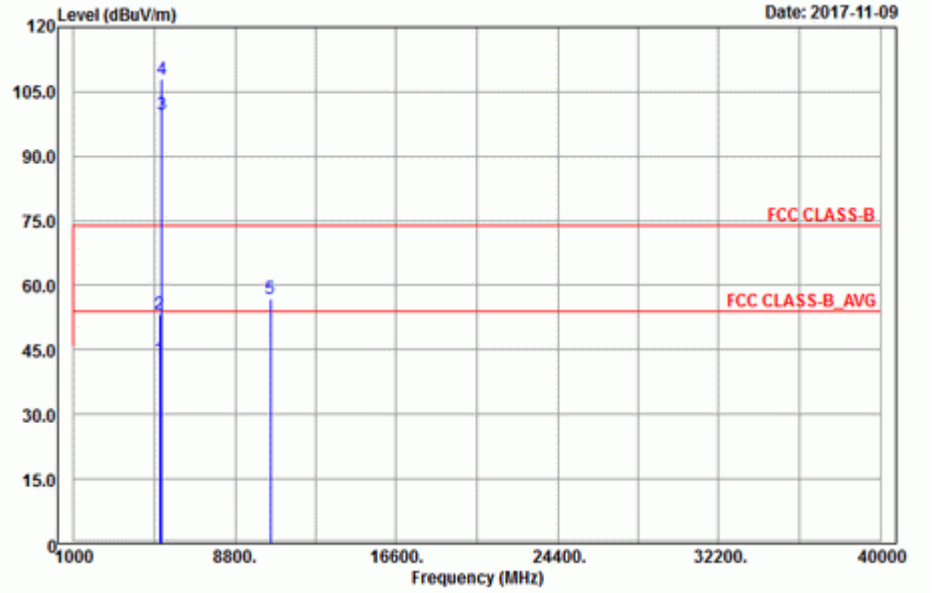
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



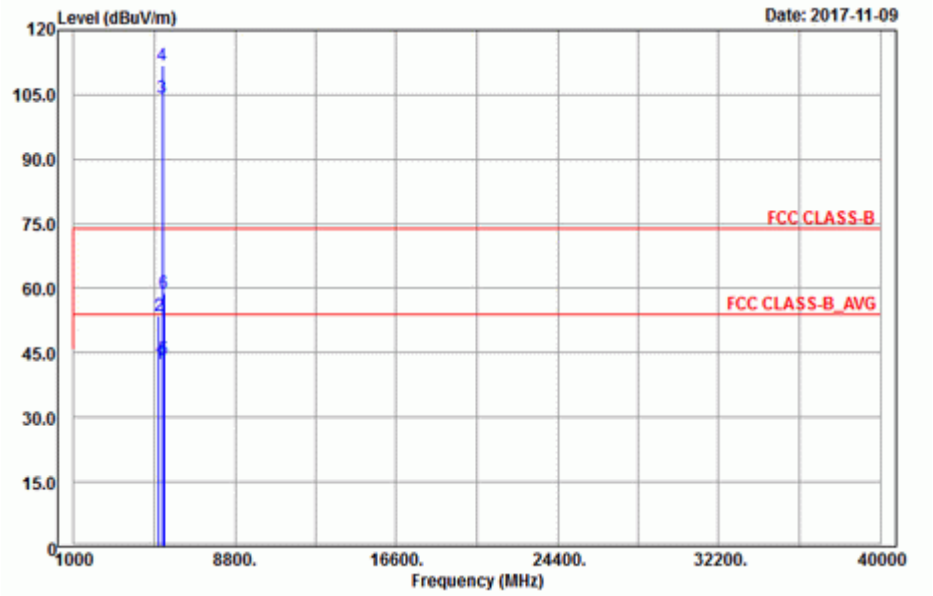
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5137.4	42.9	34.65	54	-11.1	34.11	8.13	33.99	204	123	Average
5137.4	53.98	45.73	74	-20.02	34.11	8.13	33.99	204	123	Peak
5260	103.25	94.79			34.21	8.26	34.01	204	123	Average
5260	111.46	103			34.21	8.26	34.01	204	123	Peak
*10520	57.26	42.67	68.2	-10.94	37.21	12.61	35.23	156	228	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
5138.6	42.87	34.62	54	-11.13	34.11	8.13	33.99	100	106	Average
5138.6	53.37	45.12	74	-20.63	34.11	8.13	33.99	100	106	Peak
5260	99.63	91.17			34.21	8.26	34.01	100	106	Average
5260	107.79	99.33			34.21	8.26	34.01	100	106	Peak
*10520	57.04	42.45	68.2	-11.16	37.21	12.61	35.23	136	127	Peak

Remarks:

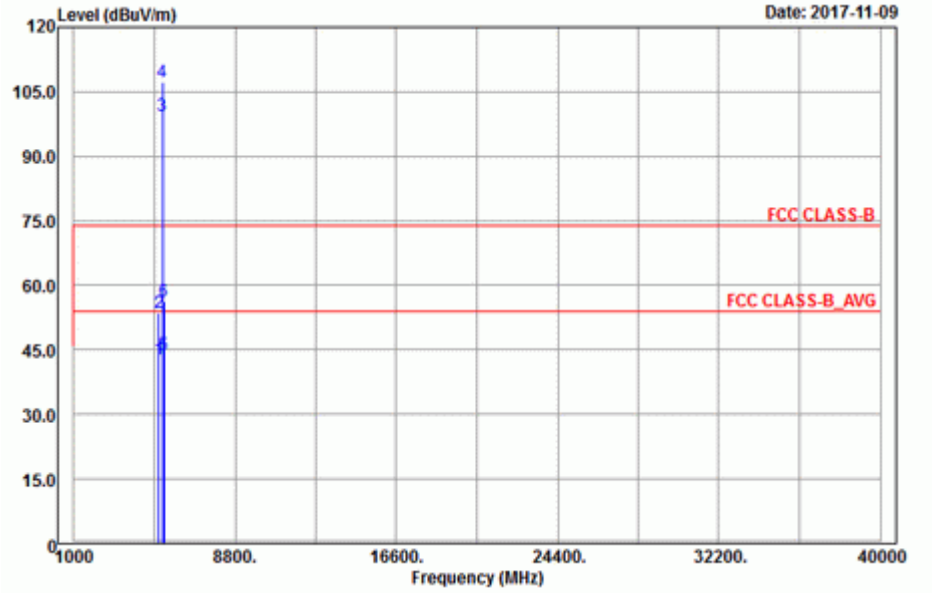
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



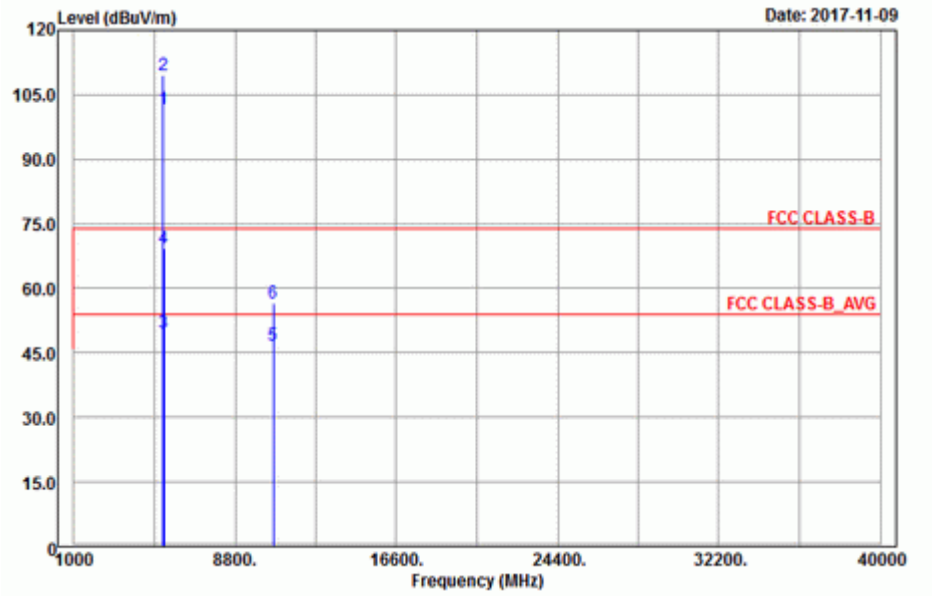
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5110.1	42.65	34.45	54	-11.35	34.09	8.1	33.99	204	103	Average
5110.1	53.76	45.56	74	-20.24	34.09	8.1	33.99	204	103	Peak
5300	104.24	95.7			34.24	8.32	34.02	204	103	Average
5300	111.88	103.34			34.24	8.32	34.02	204	103	Peak
5354.07	43.38	34.75	54	-10.62	34.28	8.38	34.03	204	103	Average
5354.07	58.88	50.25	74	-15.12	34.28	8.38	34.03	204	103	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
5129.6	42.8	34.58	54	-11.2	34.11	8.1	33.99	100	106	Average
5129.6	53.51	45.29	74	-20.49	34.11	8.1	33.99	100	106	Peak
5300	99.52	90.98			34.24	8.32	34.02	100	106	Average
5300	107.33	98.79			34.24	8.32	34.02	100	106	Peak
5350.11	43.75	35.12	54	-10.25	34.28	8.38	34.03	100	106	Average
5350.11	56.4	47.77	74	-17.6	34.28	8.38	34.03	100	106	Peak

Remarks:

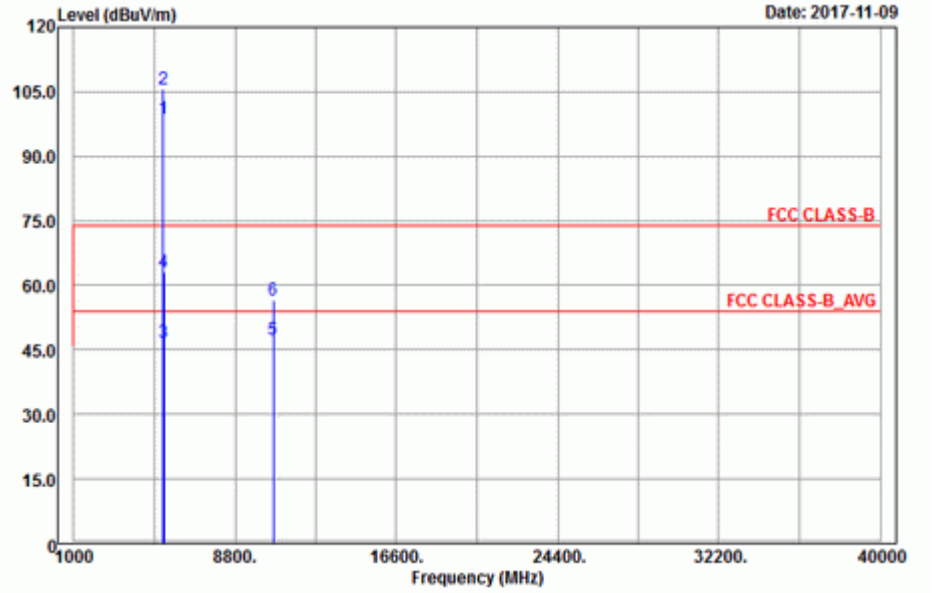
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



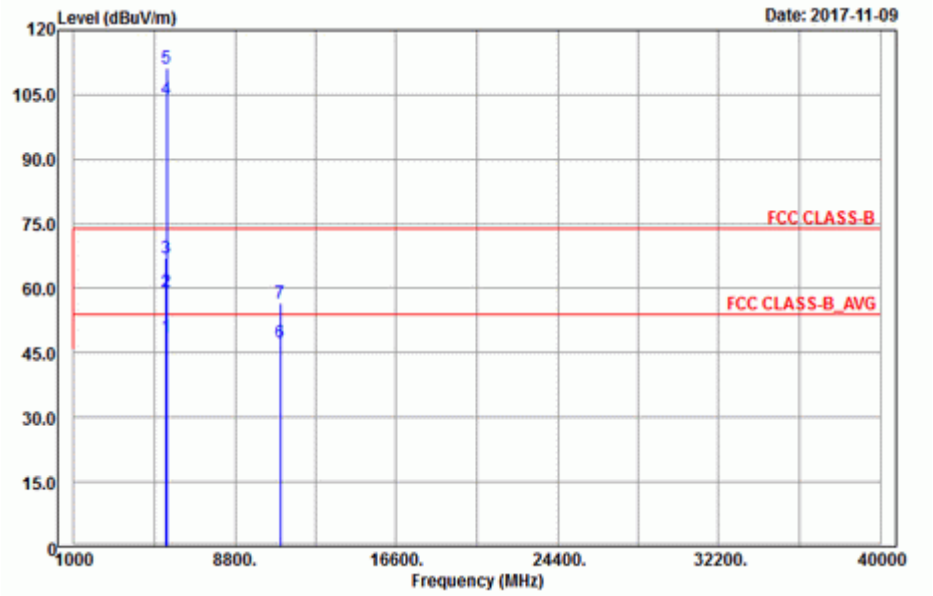
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	101.59	93.01			34.25	8.35	34.02	204	121	Average
5320	109.49	100.91			34.25	8.35	34.02	204	121	Peak
5350.44	49.7	41.07	54	-4.3	34.28	8.38	34.03	203	120	Average
5350.44	69.4	60.77	74	-4.6	34.28	8.38	34.03	203	120	Peak
10640	46.64	31.91	54	-7.36	37.31	12.71	35.29	148	211	Average
10640	56.71	41.98	74	-17.29	37.31	12.71	35.29	148	211	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
5320	98.62	90.04			34.25	8.35	34.02	100	106	Average
5320	105.72	97.14			34.25	8.35	34.02	100	106	Peak
5350.33	46.78	38.15	54	-7.22	34.28	8.38	34.03	100	106	Average
5350.33	63.01	54.38	74	-10.99	34.28	8.38	34.03	100	106	Peak
10640	47.45	32.72	54	-6.55	37.31	12.71	35.29	165	233	Average
10640	56.59	41.86	74	-17.41	37.31	12.71	35.29	165	233	Peak

Remarks:

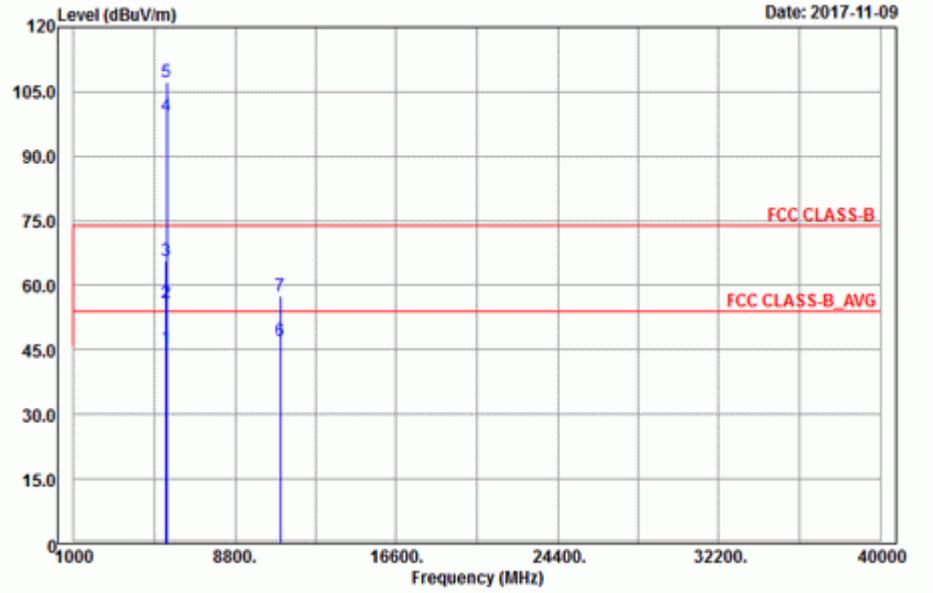
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



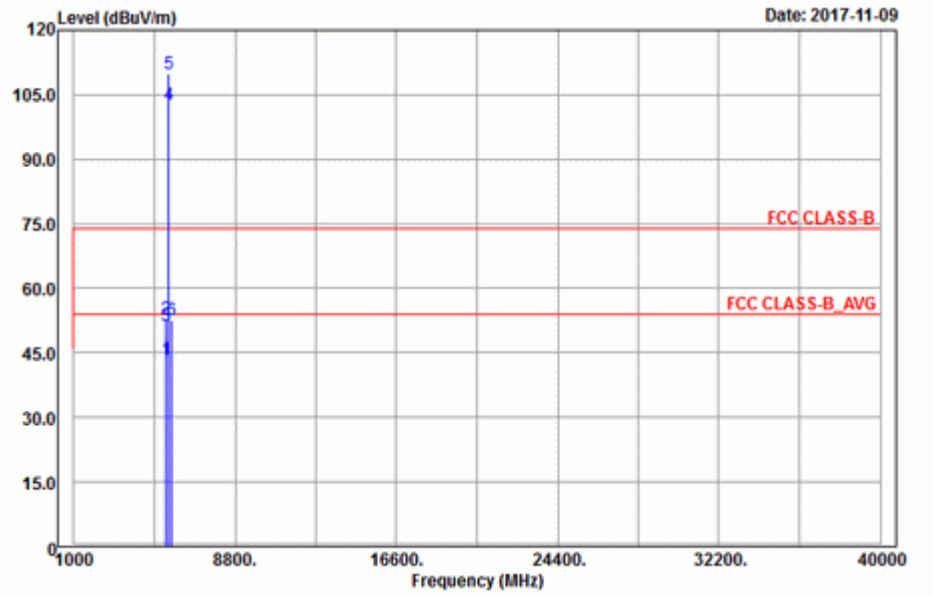
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	48.56	39.74	54	-5.44	34.36	8.51	34.05	199	120	Average
5460	59.34	50.52	74	-14.66	34.36	8.51	34.05	199	120	Peak
*5470.64	67.19	58.36	68.2	-1.01	34.37	8.51	34.05	199	120	Peak
5500	103.85	94.93			34.4	8.57	34.05	206	121	Average
5500	111.18	102.26			34.4	8.57	34.05	206	121	Peak
11000	47.3	32.22	54	-6.7	37.6	12.96	35.48	127	108	Average
11000	56.64	41.56	74	-17.36	37.6	12.96	35.48	127	108	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
5460.08	45.49	36.67	54	-8.51	34.36	8.51	34.05	226	103	Average
5460.08	55.95	47.13	74	-18.05	34.36	8.51	34.05	226	103	Peak
*5470.64	65.58	56.75	68.2	-2.62	34.37	8.51	34.05	226	103	Peak
5500	99.54	90.62			34.4	8.57	34.05	221	113	Average
5500	107.15	98.23			34.4	8.57	34.05	221	113	Peak
11000	47.12	32.04	54	-6.88	37.6	12.96	35.48	153	249	Average
11000	57.55	42.47	74	-16.45	37.6	12.96	35.48	153	249	Peak

Remarks:

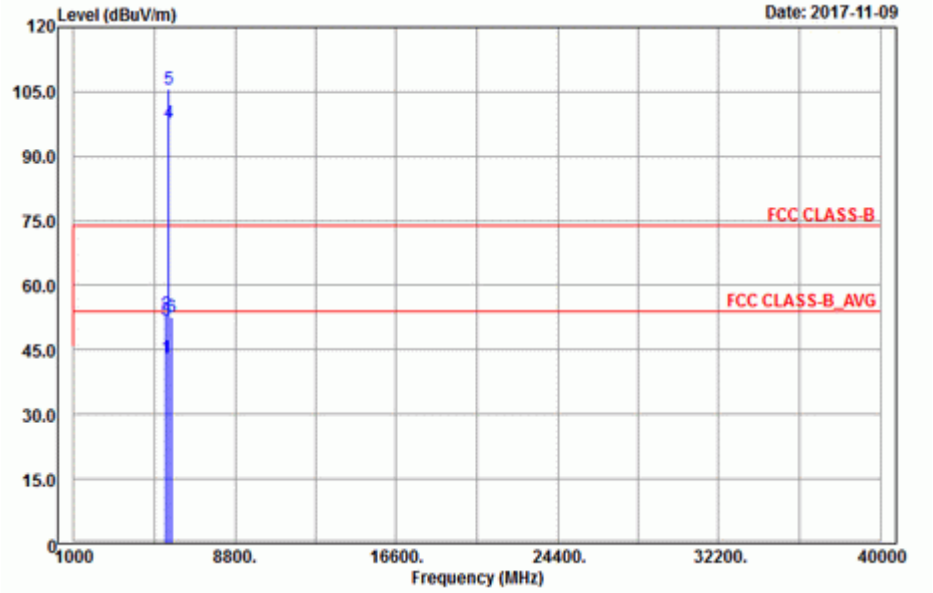
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



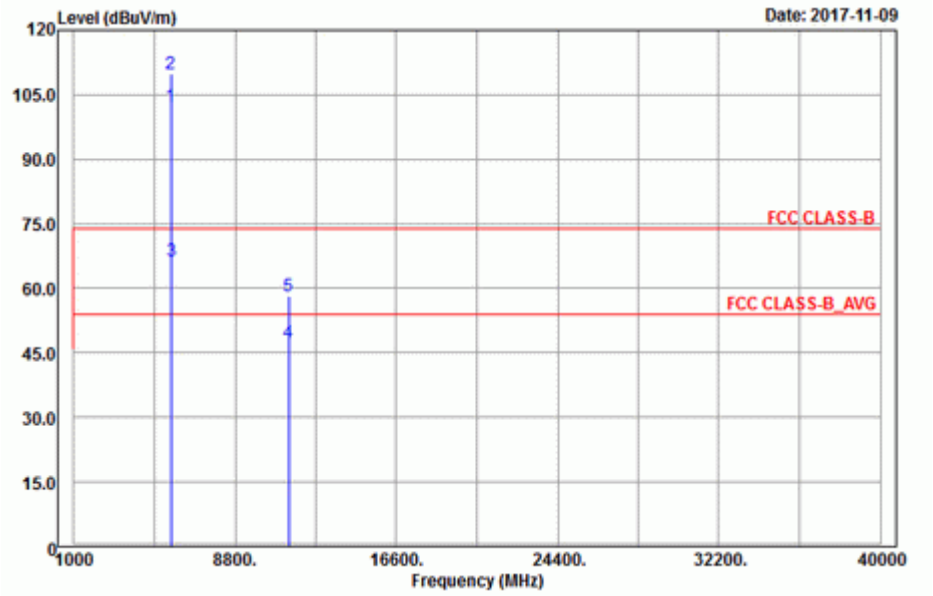
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.6	43.42	34.6	54	-10.58	34.36	8.51	34.05	205	121	Average
5459.6	52.99	44.17	74	-21.01	34.36	8.51	34.05	205	121	Peak
*5470.8	51.48	42.62	68.2	-16.72	34.37	8.54	34.05	205	121	Peak
5580	102.79	93.8			34.47	8.6	34.08	205	121	Average
5580	109.99	101			34.47	8.6	34.08	205	121	Peak
*5724.12	52.66	43.5	68.2	-15.54	34.62	8.65	34.11	205	121	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
5456.56	43.07	34.25	54	-10.93	34.36	8.51	34.05	272	114	Average
5456.56	53.16	44.34	74	-20.84	34.36	8.51	34.05	272	114	Peak
*5469.84	52.13	43.3	68.2	-16.07	34.37	8.51	34.05	272	114	Peak
5580	97.87	88.88			34.47	8.6	34.08	272	114	Average
5580	105.69	96.7			34.47	8.6	34.08	272	114	Peak
*5724.52	52.64	43.48	68.2	-15.56	34.62	8.65	34.11	272	114	Peak

Remarks:

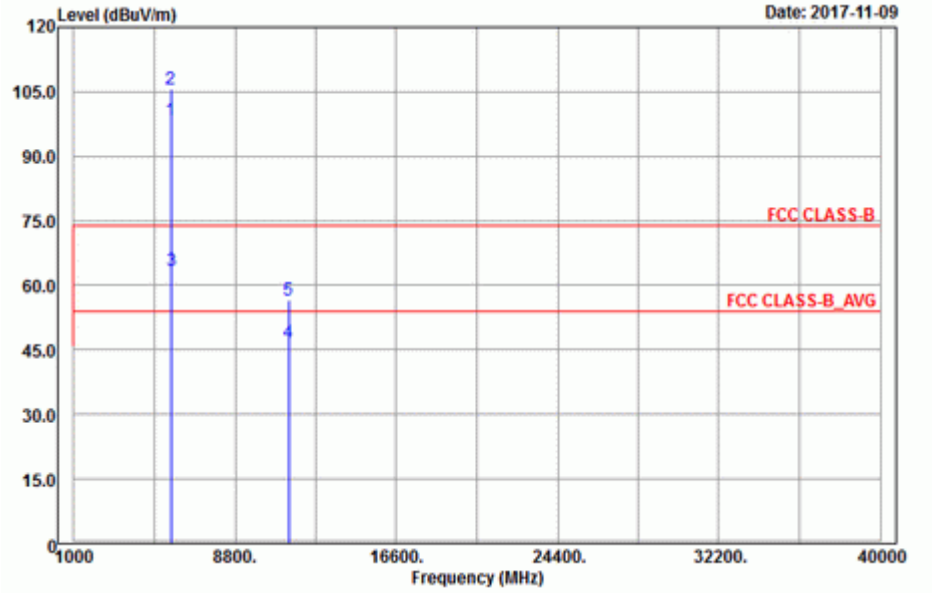
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



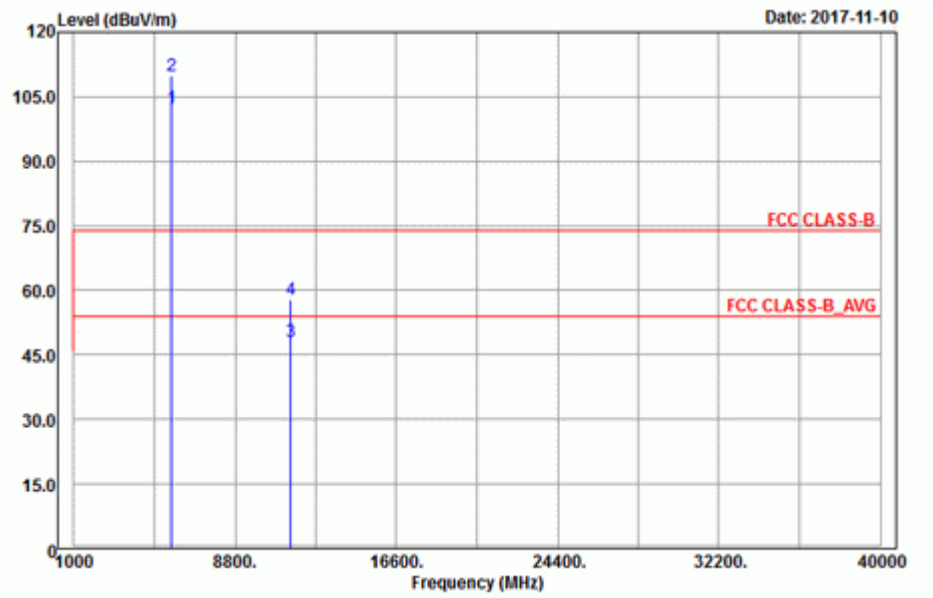
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	102.32	93.19			34.59	8.64	34.1	210	121	Average
5700	109.76	100.63			34.59	8.64	34.1	210	121	Peak
*5724.36	66.24	57.08	68.2	-1.96	34.62	8.65	34.11	169	121	Peak
11400	47.41	32.31	54	-6.59	37.84	12.67	35.41	167	219	Average
11400	58.1	43	74	-15.9	37.84	12.67	35.41	167	219	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
5700	98.41	89.28			34.59	8.64	34.1	275	113	Average
5700	105.74	96.61			34.59	8.64	34.1	275	113	Peak
*5724.76	63.4	54.24	68.2	-4.8	34.62	8.65	34.11	257	124	Peak
11400	46.71	31.61	54	-7.29	37.84	12.67	35.41	192	343	Average
11400	56.66	41.56	74	-17.34	37.84	12.67	35.41	192	343	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. *: 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

<Spurious Emission>
Horizontal



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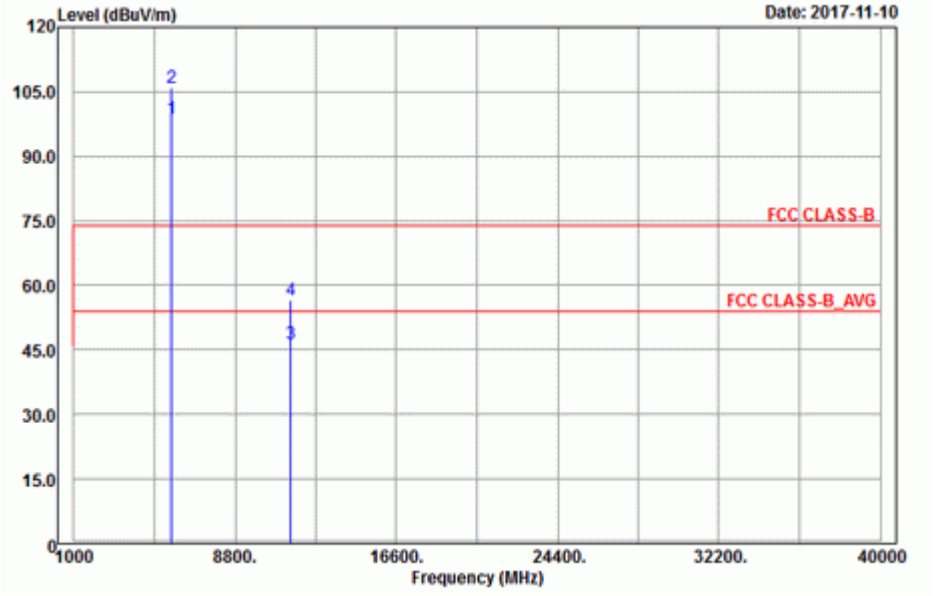
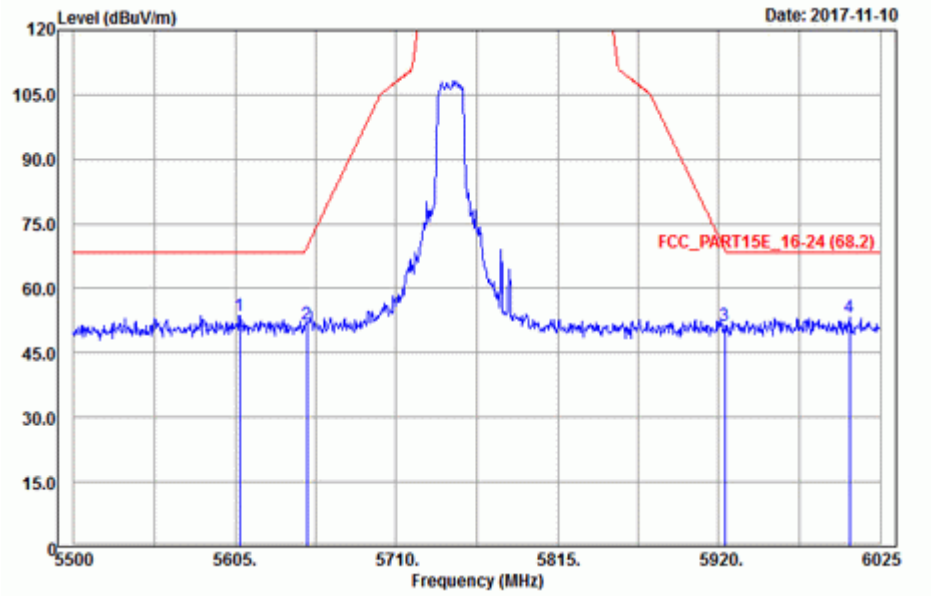
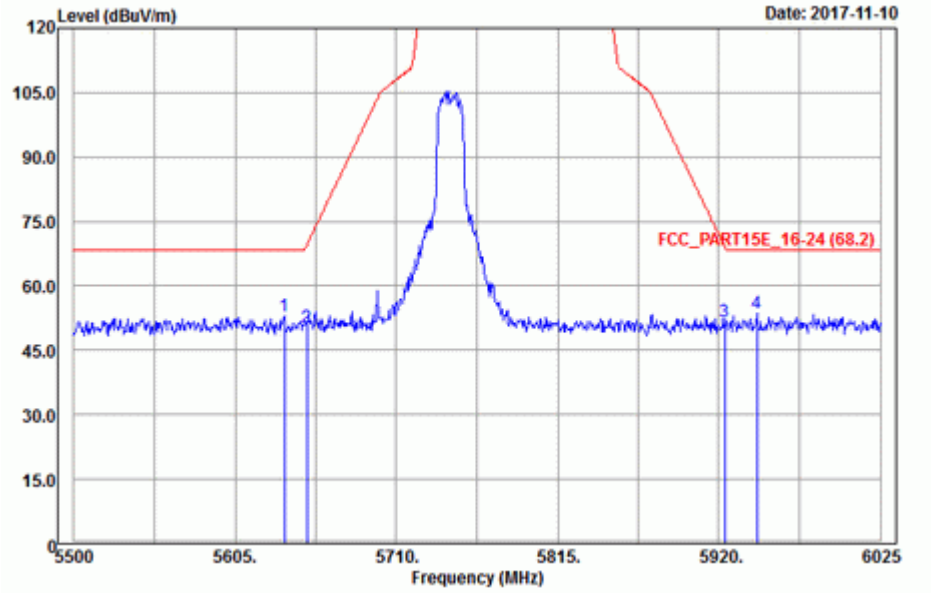


<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5745	102.41	93.22			34.64	8.66	34.11	210	120	Average
5745	109.71	100.52			34.64	8.66	34.11	210	120	Peak
11490	48.17	33.05	54	-5.83	37.89	12.62	35.39	195	102	Average
11490	57.97	42.85	74	-16.03	37.89	12.62	35.39	195	102	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
5745	98.76	89.57			34.64	8.66	34.11	270	112	Average
5745	105.83	96.64			34.64	8.66	34.11	270	112	Peak
11490	46.32	31.2	54	-7.68	37.89	12.62	35.39	162	340	Average
11490	56.46	41.34	74	-17.54	37.89	12.62	35.39	162	340	Peak

<Ouf of Band Emission (OOBE)>

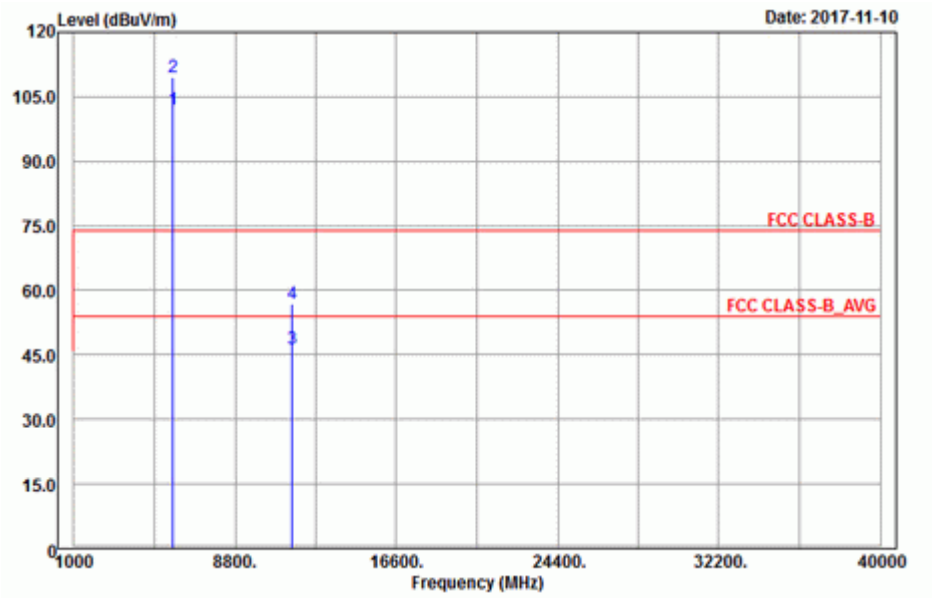
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5608.15	53.71	44.68	68.2	-14.49	34.5	8.61	34.08	210	120	Peak
5651.725	51.74	42.65	69.48	-17.74	34.56	8.62	34.09	210	120	Peak
5923.675	51.28	41.88	69.18	-17.9	34.83	8.73	34.16	210	120	Peak
*6005.05	53.33	43.84	68.2	-14.87	34.9	8.76	34.17	210	120	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
*5637.025	52.84	43.77	68.2	-15.36	34.54	8.62	34.09	270	112	Peak
5651.725	50.43	41.34	69.48	-19.05	34.56	8.62	34.09	270	112	Peak
5923.675	51.54	42.14	69.18	-17.64	34.83	8.73	34.16	270	112	Peak
*5944.675	53.67	44.24	68.2	-14.53	34.85	8.74	34.16	270	112	Peak

Remarks:

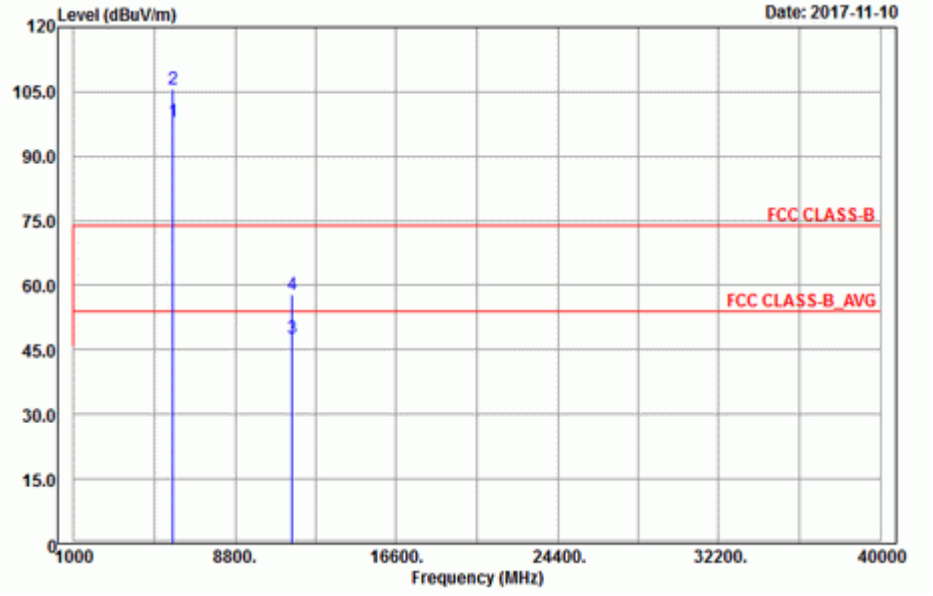
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

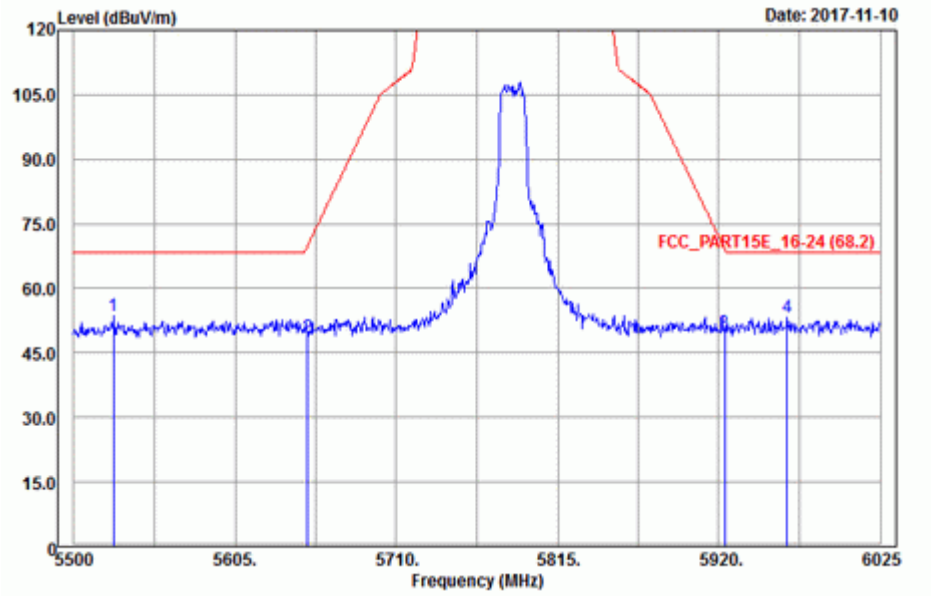
<Spurious Emission>
Horizontal



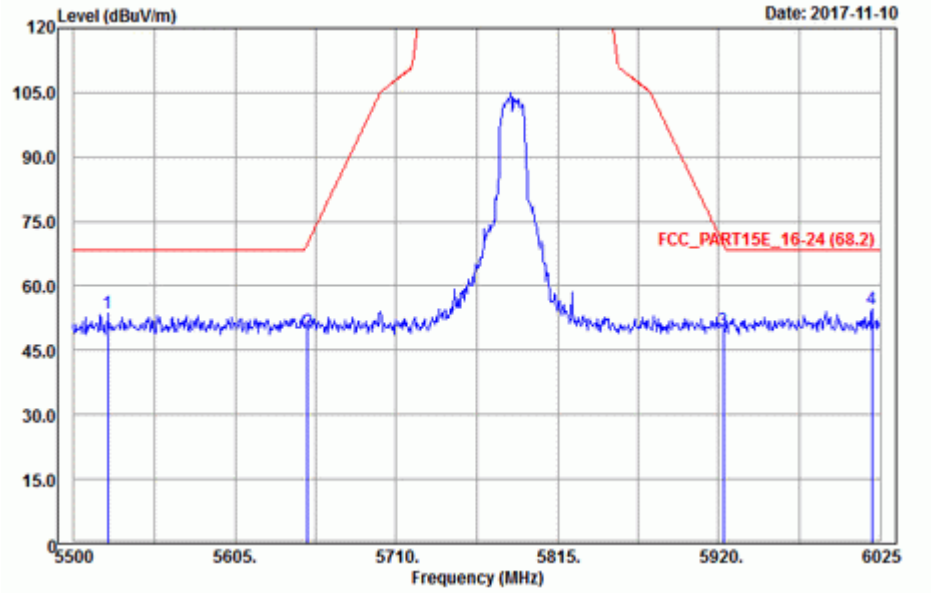
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5785	102.15	92.92			34.68	8.68	34.13	210	120	Average
5785	109.69	100.46			34.68	8.68	34.13	210	120	Peak
11570	46.59	31.28	54	-7.41	38	12.68	35.37	124	46	Average
11570	56.81	41.5	74	-17.19	38	12.68	35.37	124	46	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
5785	98.01	88.78			34.68	8.68	34.13	270	112	Average
5785	105.65	96.42			34.68	8.68	34.13	270	112	Peak
11570	47.62	32.31	54	-6.38	38	12.68	35.37	124	185	Average
11570	57.95	42.64	74	-16.05	38	12.68	35.37	124	185	Peak

<Ouf of Band Emission (OOBE)>

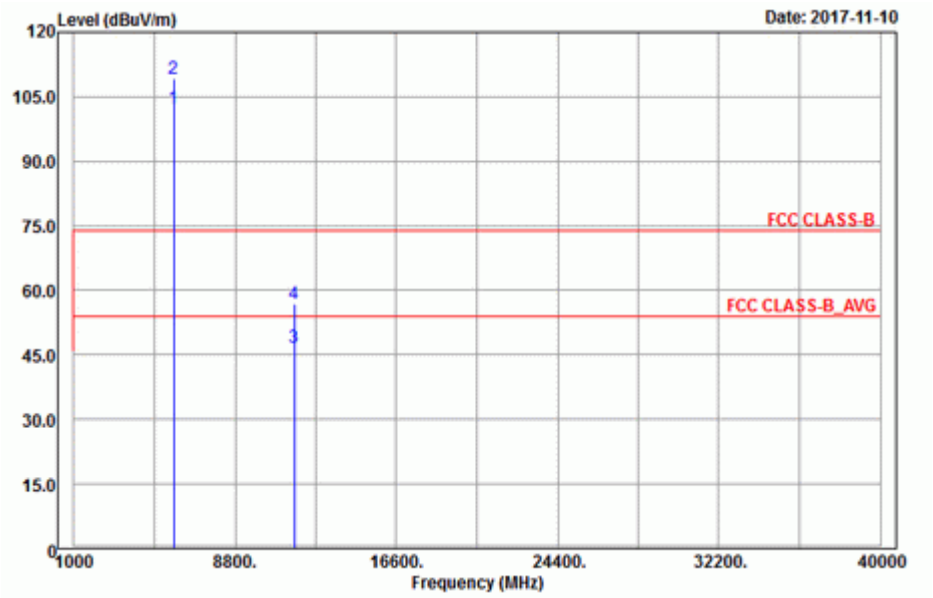
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5525.725	53.74	44.8	68.2	-14.46	34.42	8.58	34.06	210	120	Peak
5652.25	48.73	39.64	69.86	-21.13	34.56	8.62	34.09	210	120	Peak
5923.675	49.66	40.26	69.18	-19.52	34.83	8.73	34.16	210	120	Peak
*5964.625	53.14	43.69	68.2	-15.06	34.87	8.75	34.17	210	120	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
*5522.05	53.77	44.84	68.2	-14.43	34.42	8.57	34.06	270	112	Peak
5652.25	49.37	40.28	69.86	-20.49	34.56	8.62	34.09	270	112	Peak
5923.15	49.55	40.15	69.57	-20.02	34.83	8.73	34.16	270	112	Peak
*6019.75	54.55	45.04	68.2	-13.65	34.92	8.77	34.18	270	112	Peak

Remarks:

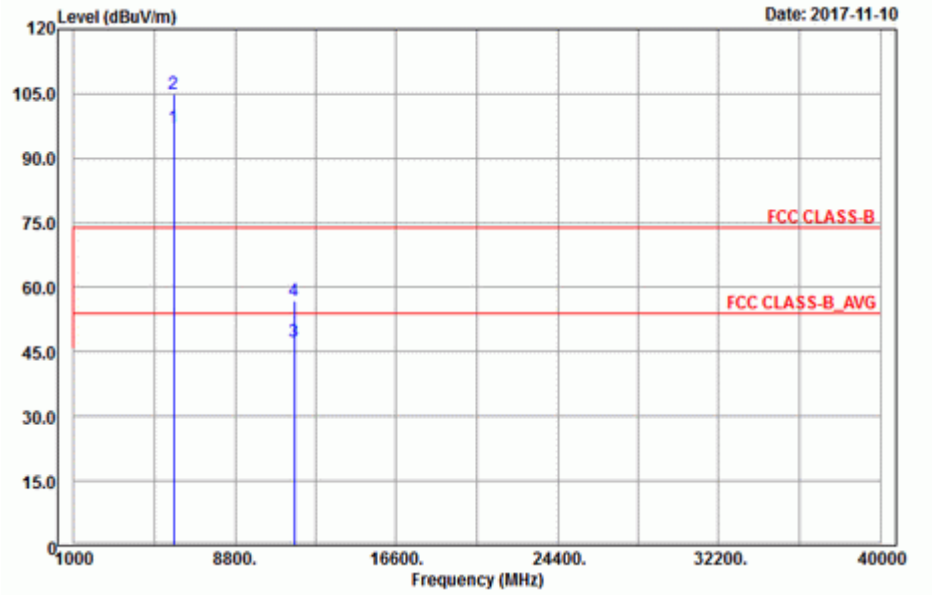
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

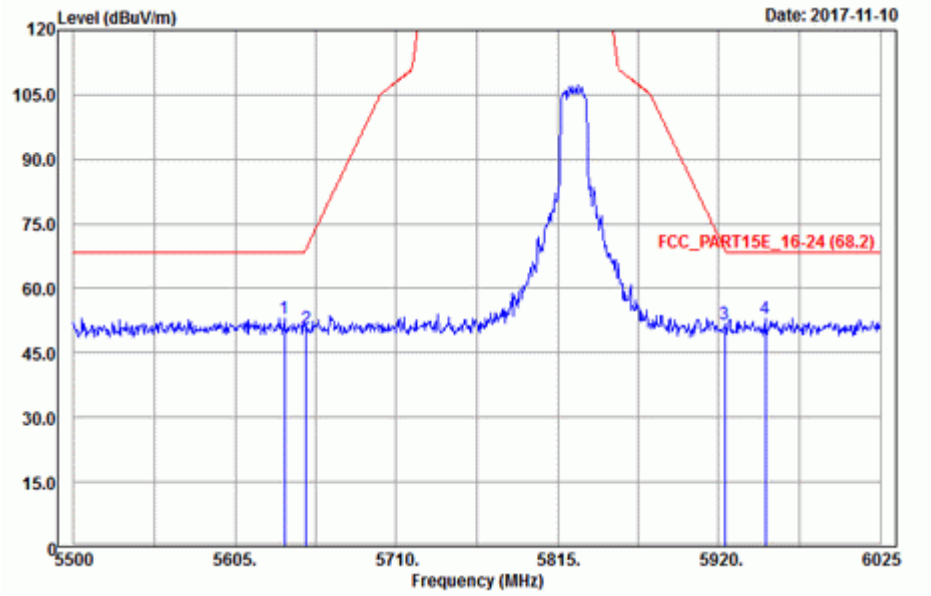
<Spurious Emission>
Horizontal



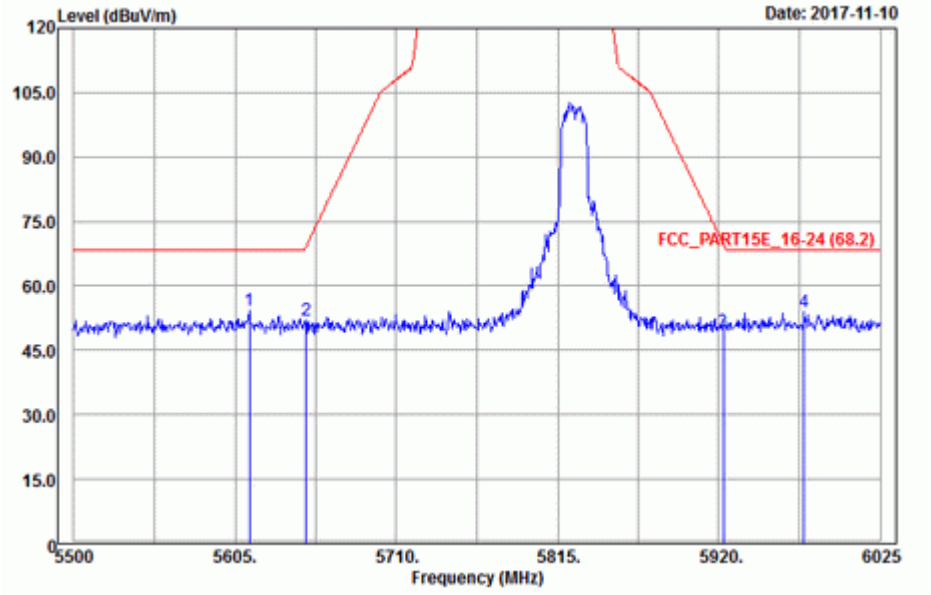
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5825	102.19	92.9			34.73	8.69	34.13	210	120	Average
5825	109.2	99.91			34.73	8.69	34.13	210	120	Peak
11650	46.62	31.09	54	-7.38	38.09	12.8	35.36	199	243	Average
11650	56.8	41.27	74	-17.2	38.09	12.8	35.36	199	243	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
5825	97.17	87.88			34.73	8.69	34.13	270	112	Average
5825	105	95.71			34.73	8.69	34.13	270	112	Peak
11650	47.25	31.72	54	-6.75	38.09	12.8	35.36	124	161	Average
11650	56.78	41.25	74	-17.22	38.09	12.8	35.36	124	161	Peak

<Ouf of Band Emission (OOBE)>

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
*5637.025	53.04	43.97	68.2	-15.16	34.54	8.62	34.09	210	120	Peak
5651.2	50.71	41.62	69.09	-18.38	34.56	8.62	34.09	210	120	Peak
5923.675	51.71	42.31	69.18	-17.47	34.83	8.73	34.16	210	120	Peak
*5950.45	52.98	43.55	68.2	-15.22	34.85	8.74	34.16	210	120	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
*5614.45	54.23	45.2	68.2	-13.97	34.5	8.61	34.08	270	112	Peak
5651.2	51.96	42.87	69.09	-17.13	34.56	8.62	34.09	270	112	Peak
5923.15	49.45	40.05	69.57	-20.12	34.83	8.73	34.16	270	112	Peak
*5975.65	54.07	44.61	68.2	-14.13	34.88	8.75	34.17	270	112	Peak

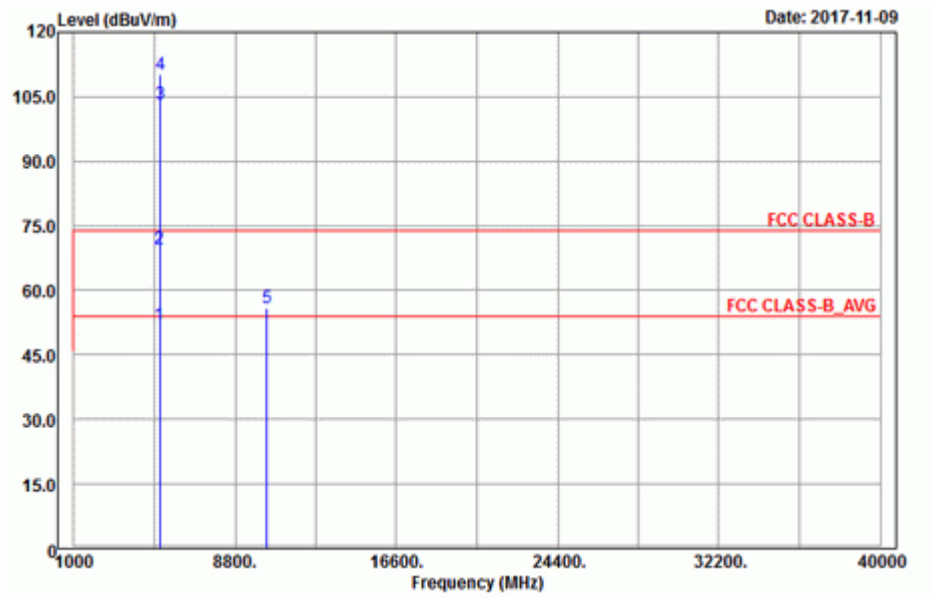
Remarks:

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

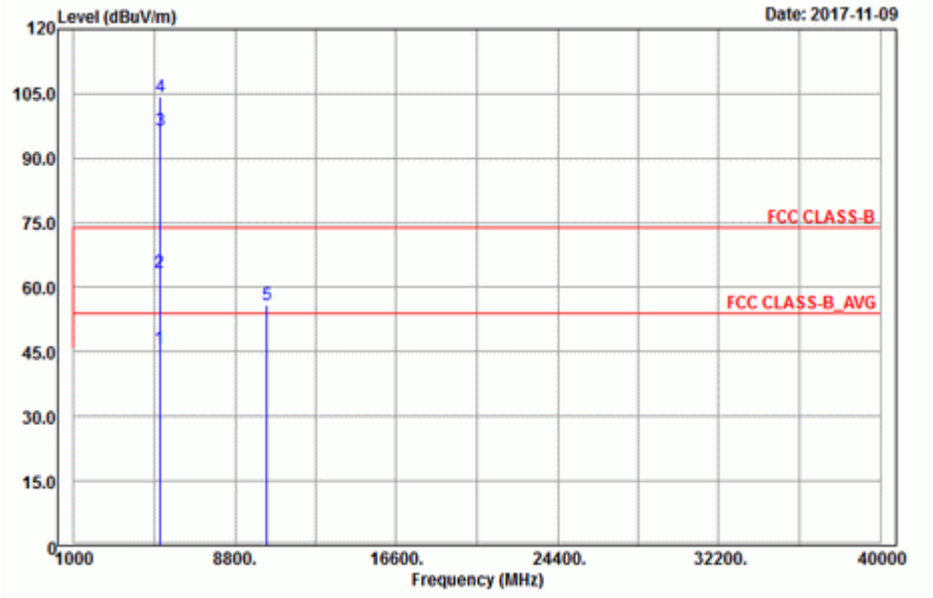
802.11ac (VHT20)

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

Horizontal



Vertical



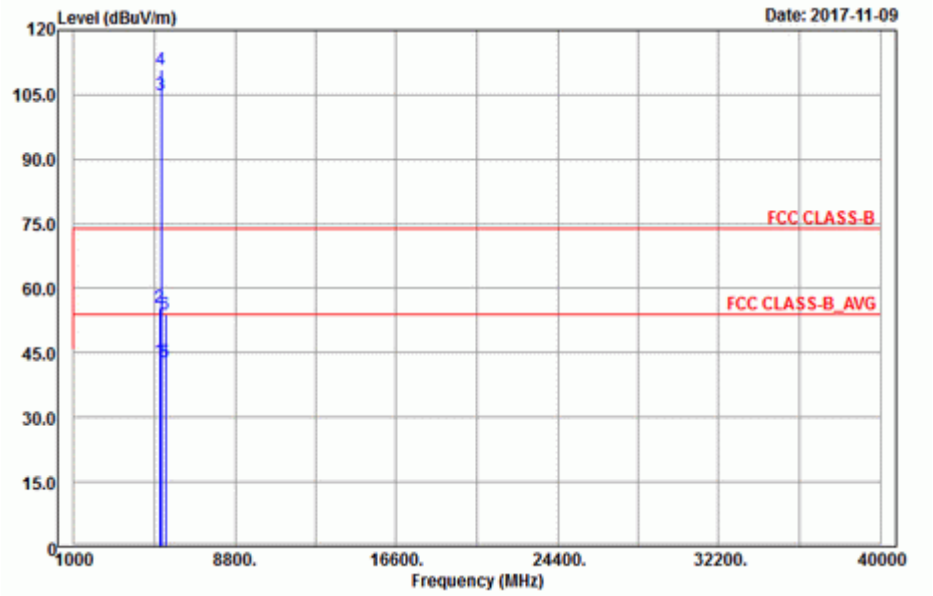
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.4	52.06	43.81	54	-1.94	34.12	8.13	34	194	19	Average
5149.4	69.72	61.47	74	-4.28	34.12	8.13	34	194	19	Peak
5180	103.38	95.07			34.15	8.16	34	194	19	Average
5180	110.06	101.75			34.15	8.16	34	194	19	Peak
*10360	55.89	41.59	68.2	-12.31	37.12	12.3	35.12	165	352	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
5148.35	45.8	37.55	54	-8.2	34.12	8.13	34	127	22	Average
5148.35	63.36	55.11	74	-10.64	34.12	8.13	34	127	22	Peak
5180	96.42	88.11			34.15	8.16	34	101	22	Average
5180	104.43	96.12			34.15	8.16	34	101	22	Peak
*10360	55.82	41.52	68.2	-12.38	37.12	12.3	35.12	137	24	Peak

Remarks:

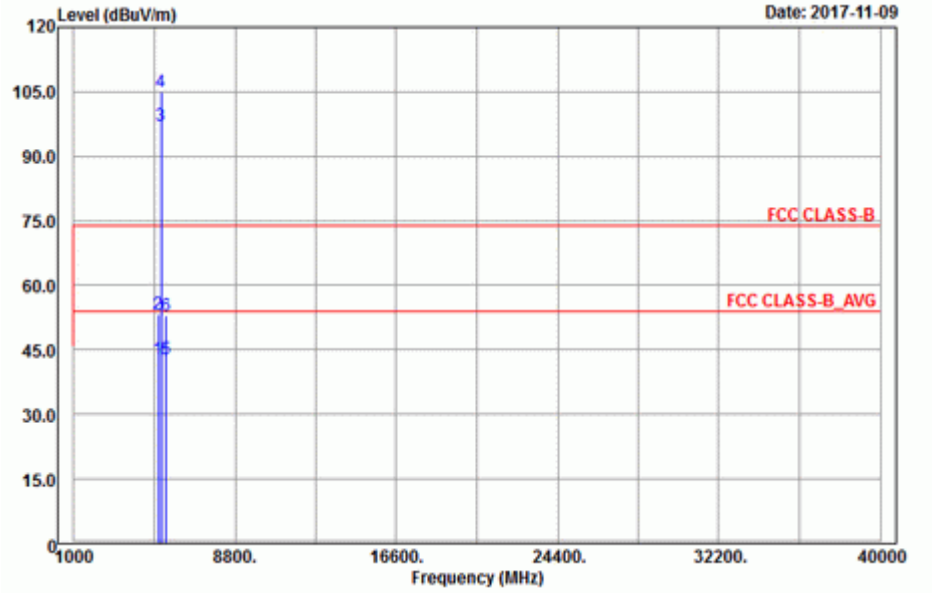
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



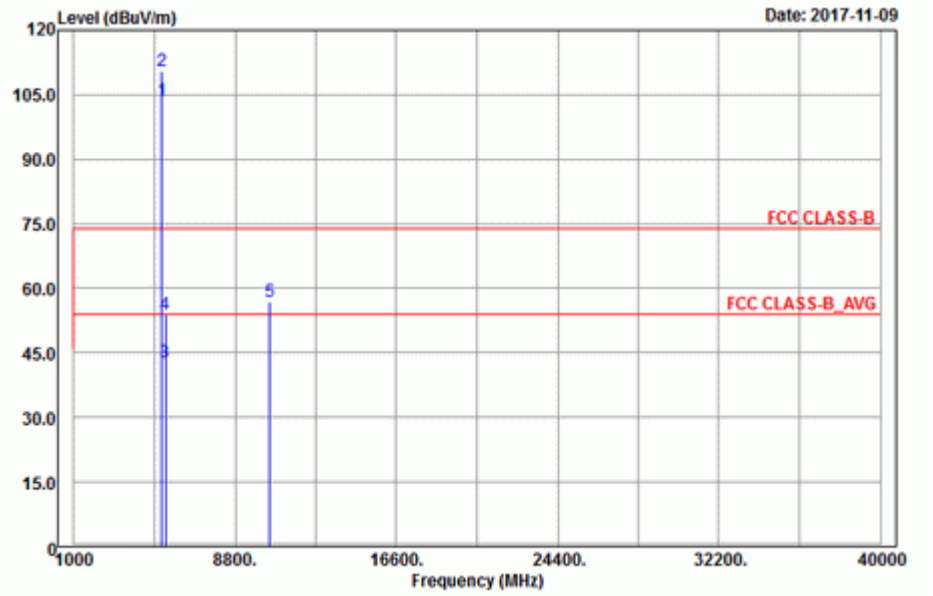
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.15	43.14	34.89	54	-10.86	34.12	8.13	34	194	19	Average
5147.15	55.43	47.18	74	-18.57	34.12	8.13	34	194	19	Peak
5220	104.96	96.57			34.17	8.22	34	194	19	Average
5220	110.76	102.37			34.17	8.22	34	194	19	Peak
5439.76	42.86	34.07	54	-11.14	34.35	8.48	34.04	194	19	Average
5439.76	53.98	45.19	74	-20.02	34.35	8.48	34.04	194	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5090.15	42.73	34.56	54	-11.27	34.08	8.07	33.98	101	22	Average
5090.15	53.43	45.26	74	-20.57	34.08	8.07	33.98	101	22	Peak
5220	97.15	88.76			34.17	8.22	34	101	22	Average
5220	104.92	96.53			34.17	8.22	34	101	22	Peak
5445.7	42.78	33.95	54	-11.22	34.36	8.51	34.04	101	22	Average
5445.7	53.01	44.18	74	-20.99	34.36	8.51	34.04	101	22	Peak

Remarks:

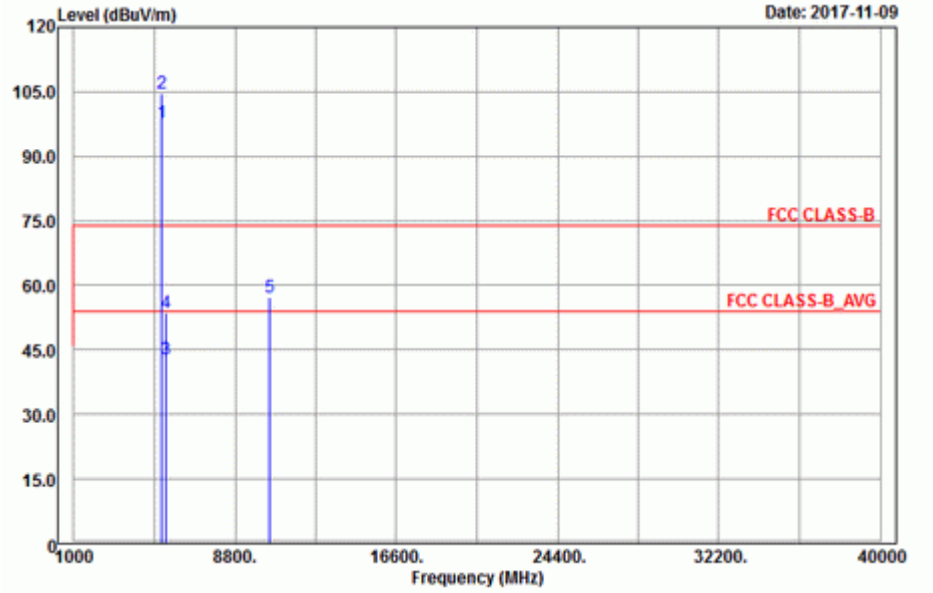
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



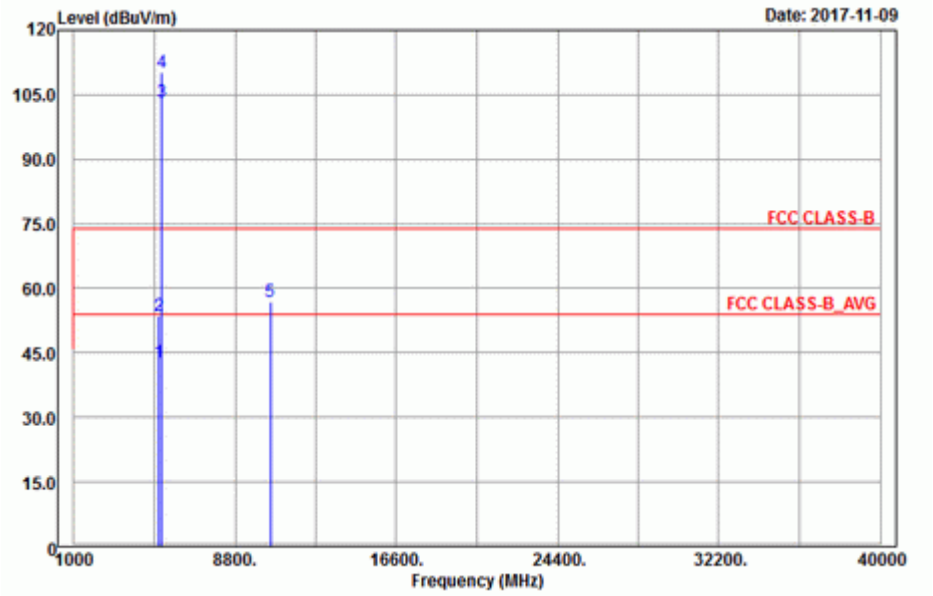
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	103.52	95.08			34.19	8.26	34.01	194	19	Average
5240	110.4	101.96			34.19	8.26	34.01	194	19	Peak
5431.4	42.82	34.03	54	-11.18	34.35	8.48	34.04	194	19	Average
5431.4	53.95	45.16	74	-20.05	34.35	8.48	34.04	194	19	Peak
*10480	56.93	42.42	68.2	-11.27	37.19	12.53	35.21	125	177	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
5240	97.62	89.18			34.19	8.26	34.01	101	22	Average
5240	104.77	96.33			34.19	8.26	34.01	101	22	Peak
5446.14	42.8	33.97	54	-11.2	34.36	8.51	34.04	101	22	Average
5446.14	53.75	44.92	74	-20.25	34.36	8.51	34.04	101	22	Peak
*10480	57.19	42.68	68.2	-11.01	37.19	12.53	35.21	195	256	Peak

Remarks:

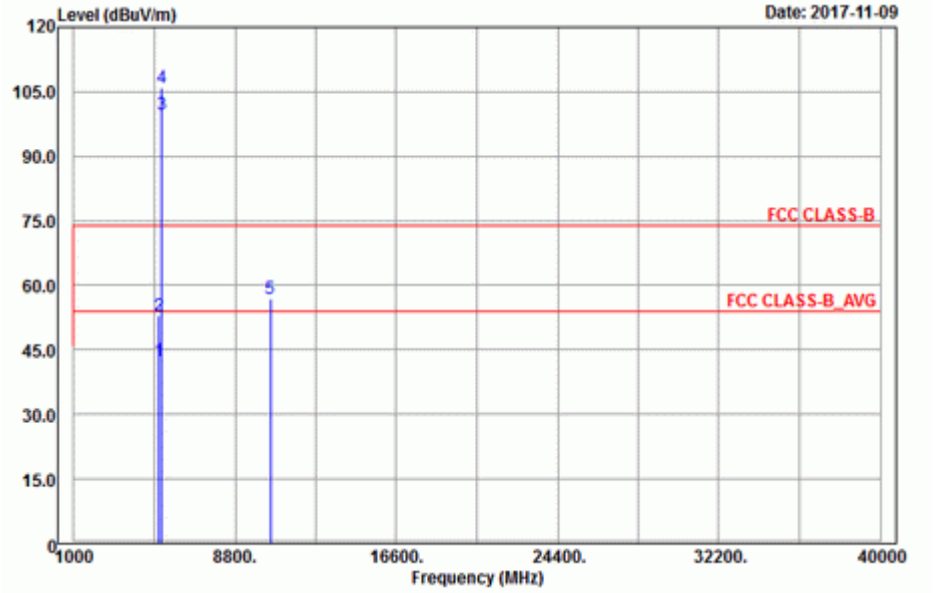
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



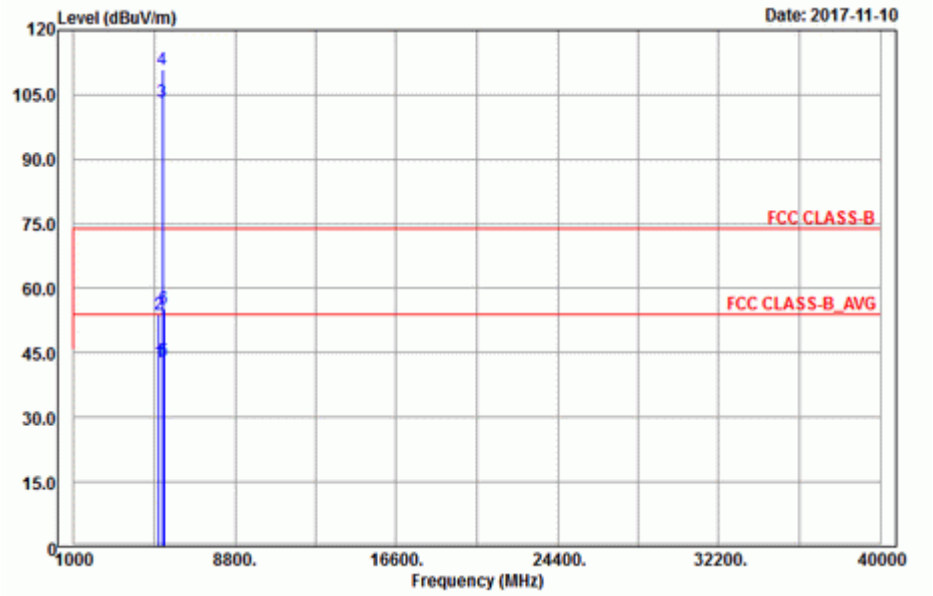
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5132.15	42.85	34.63	54	-11.15	34.11	8.1	33.99	204	123	Average
5132.15	53.75	45.53	74	-20.25	34.11	8.1	33.99	204	123	Peak
5260	103.25	94.79			34.21	8.26	34.01	204	123	Average
5260	110.26	101.8			34.21	8.26	34.01	204	123	Peak
*10520	57.01	42.42	68.2	-11.19	37.21	12.61	35.23	136	321	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
5128.1	42.64	34.42	54	-11.36	34.11	8.1	33.99	100	106	Average
5128.1	53.13	44.91	74	-20.87	34.11	8.1	33.99	100	106	Peak
5260	99.6	91.14			34.21	8.26	34.01	100	106	Average
5260	106.06	97.6			34.21	8.26	34.01	100	106	Peak
*10520	56.74	42.15	68.2	-11.46	37.21	12.61	35.23	154	126	Peak

Remarks:

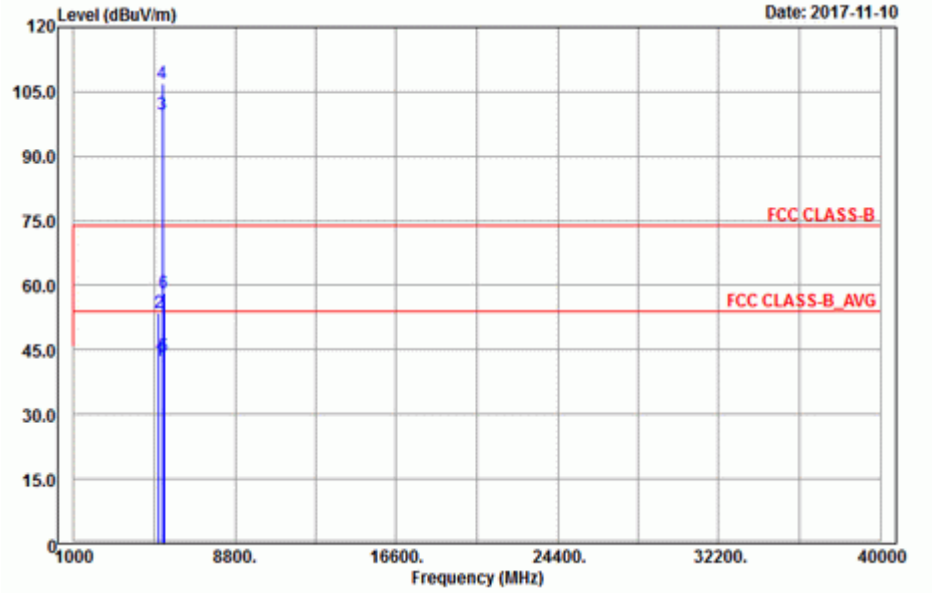
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



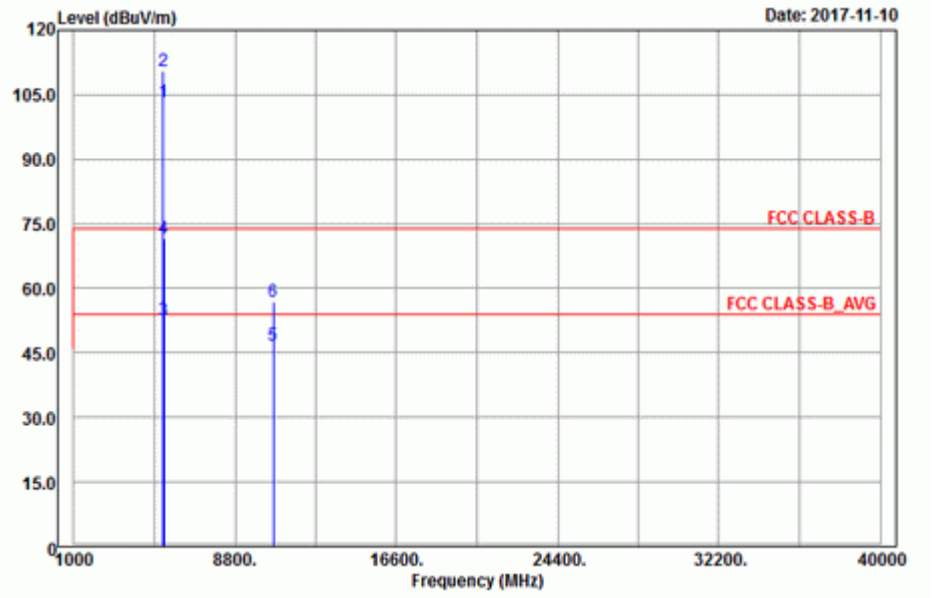
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5126.15	42.76	34.54	54	-11.24	34.11	8.1	33.99	204	103	Average
5126.15	54.02	45.8	74	-19.98	34.11	8.1	33.99	204	103	Peak
5300	103.48	94.94			34.24	8.32	34.02	210	123	Average
5300	110.96	102.42			34.24	8.32	34.02	210	123	Peak
5350.66	43.3	34.67	54	-10.7	34.28	8.38	34.03	204	103	Average
5350.66	55.42	46.79	74	-18.58	34.28	8.38	34.03	204	103	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
5126.45	42.65	34.43	54	-11.35	34.11	8.1	33.99	100	106	Average
5126.45	53.63	45.41	74	-20.37	34.11	8.1	33.99	100	106	Peak
5300	99.74	91.2			34.24	8.32	34.02	100	106	Average
5300	106.84	98.3			34.24	8.32	34.02	100	106	Peak
5350.22	43.44	34.81	54	-10.56	34.28	8.38	34.03	100	106	Average
5350.22	58.17	49.54	74	-15.83	34.28	8.38	34.03	100	106	Peak

Remarks:

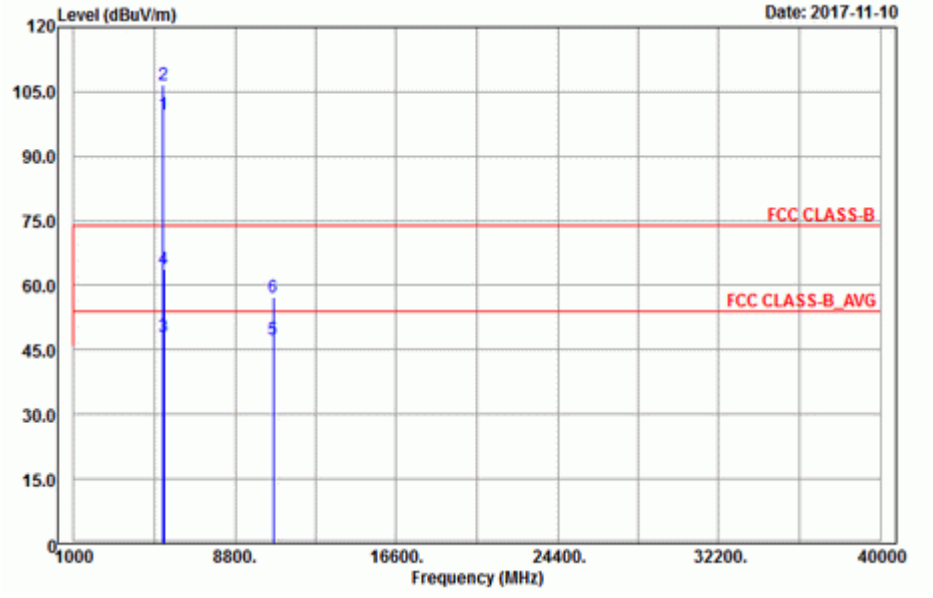
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



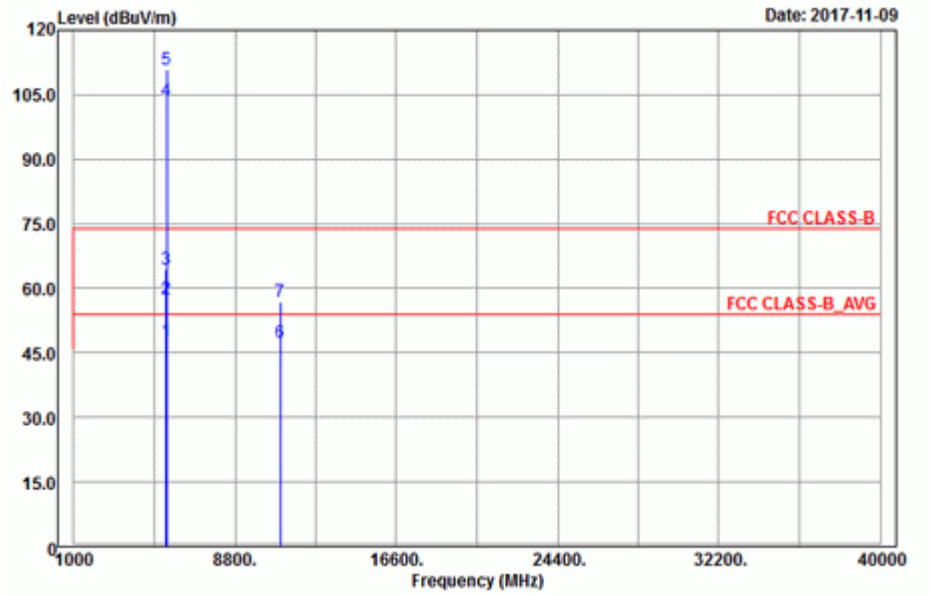
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	103.25	94.67			34.25	8.35	34.02	204	121	Average
5320	110.58	102			34.25	8.35	34.02	204	121	Peak
5350	52.51	43.88	54	-1.49	34.28	8.38	34.03	210	123	Average
5350	71.65	63.02	74	-2.35	34.28	8.38	34.03	210	123	Peak
10640	46.73	32	54	-7.27	37.31	12.71	35.29	158	234	Average
10640	56.85	42.12	74	-17.15	37.31	12.71	35.29	158	234	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
5320	99.63	91.05			34.25	8.35	34.02	100	106	Average
5320	106.65	98.07			34.25	8.35	34.02	100	106	Peak
5350.11	48.06	39.43	54	-5.94	34.28	8.38	34.03	100	106	Average
5350.11	63.61	54.98	74	-10.39	34.28	8.38	34.03	100	106	Peak
10640	47.26	32.53	54	-6.74	37.31	12.71	35.29	133	156	Average
10640	57.28	42.55	74	-16.72	37.31	12.71	35.29	133	156	Peak

Remarks:

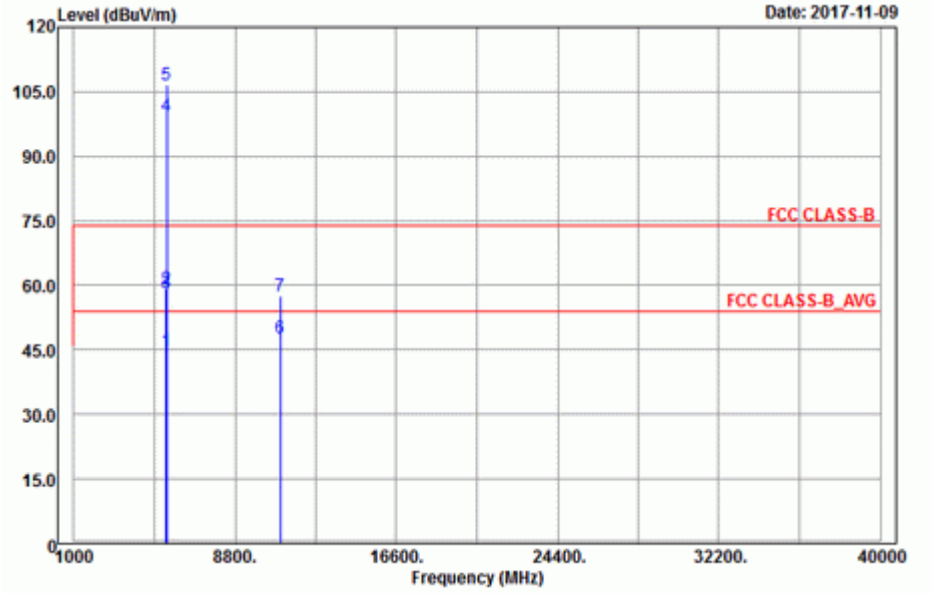
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



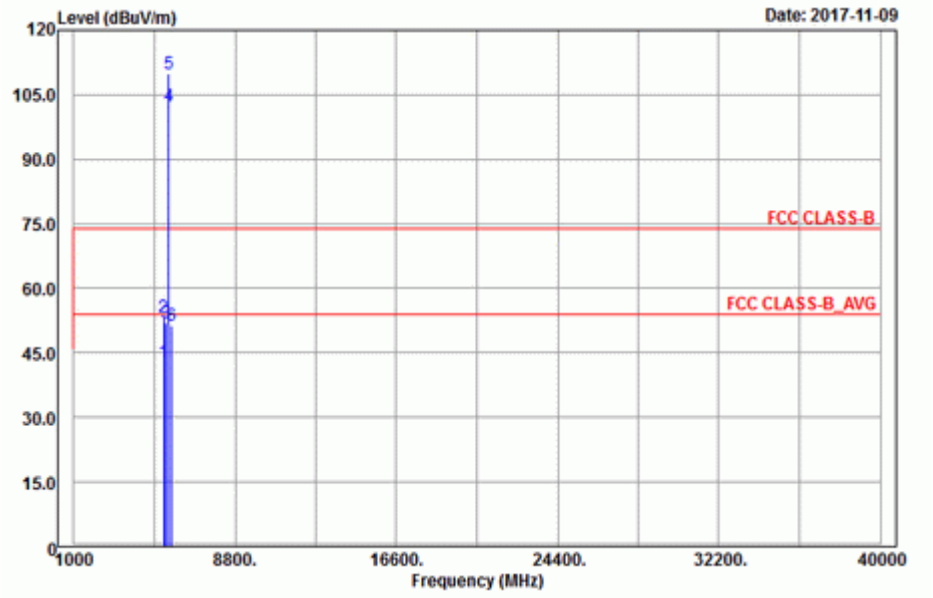
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460.08	47.6	38.78	54	-6.4	34.36	8.51	34.05	189	53	Average
5460.08	57.69	48.87	74	-16.31	34.36	8.51	34.05	189	53	Peak
5468.24	64.5	55.67	68.2	-3.7	34.37	8.51	34.05	189	53	Peak
5500	103.67	94.75			34.4	8.57	34.05	206	121	Average
5500	110.9	101.98			34.4	8.57	34.05	206	121	Peak
11000	47.26	32.18	54	-6.74	37.6	12.96	35.48	145	94	Average
11000	56.74	41.66	74	-17.26	37.6	12.96	35.48	145	94	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
5459.6	44.66	35.84	54	-9.34	34.36	8.51	34.05	206	128	Average
5459.6	59.33	50.51	74	-14.67	34.36	8.51	34.05	206	128	Peak
5468.56	58.3	49.47	68.2	-9.9	34.37	8.51	34.05	206	128	Peak
5500	99.4	90.48			34.4	8.57	34.05	221	113	Average
5500	106.5	97.58			34.4	8.57	34.05	221	113	Peak
11000	47.62	32.54	54	-6.38	37.6	12.96	35.48	163	127	Average
11000	57.44	42.36	74	-16.56	37.6	12.96	35.48	163	127	Peak

Remarks:

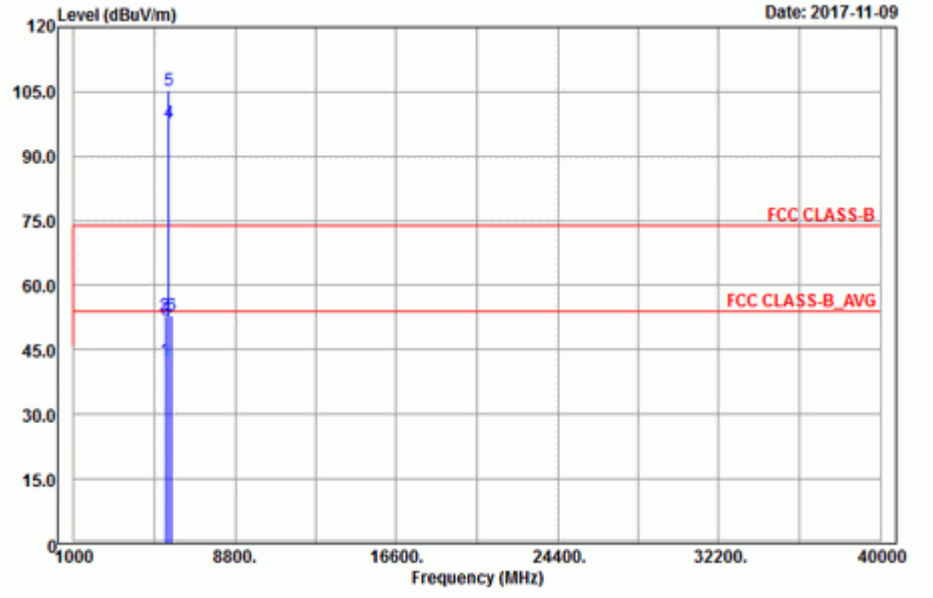
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



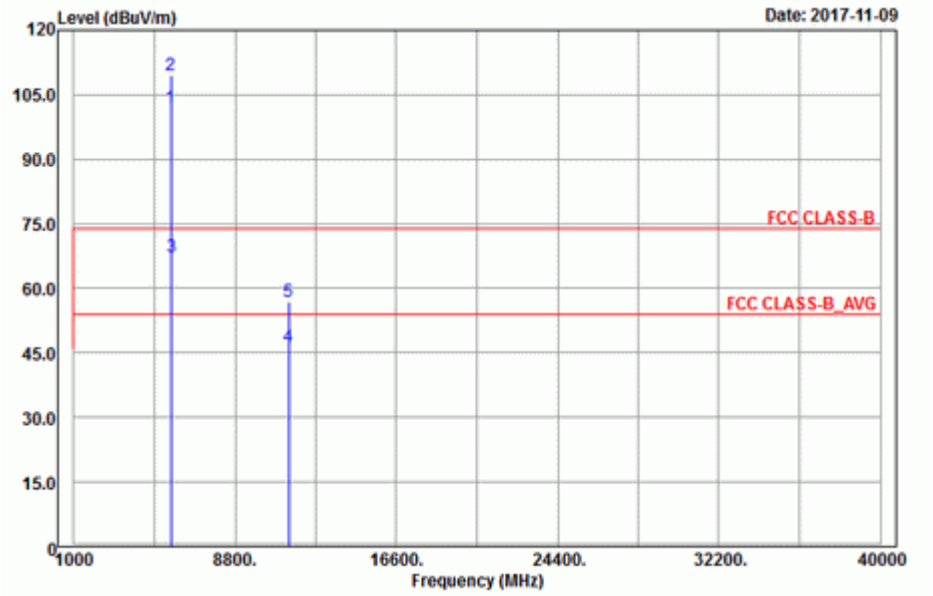
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5374	42.76	34.1	54	-11.24	34.29	8.41	34.04	205	121	Average
5374	53.19	44.53	74	-20.81	34.29	8.41	34.04	205	121	Peak
*5469.36	51.87	43.04	68.2	-16.33	34.37	8.51	34.05	205	121	Peak
5580	102.22	93.23			34.47	8.6	34.08	205	121	Average
5580	109.84	100.85			34.47	8.6	34.08	205	121	Peak
*5725.64	51.41	42.25	68.2	-16.79	34.62	8.65	34.11	205	121	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
5415.6	42.61	33.88	54	-11.39	34.33	8.44	34.04	272	114	Average
5415.6	52.92	44.19	74	-21.08	34.33	8.44	34.04	272	114	Peak
*469.2	51.83	43	68.2	-16.37	34.37	8.51	34.05	272	114	Peak
5580	97.75	88.76			34.47	8.6	34.08	272	114	Average
5580	105.32	96.33			34.47	8.6	34.08	272	114	Peak
*5724.76	52.96	43.8	68.2	-15.24	34.62	8.65	34.11	272	114	Peak

Remarks:

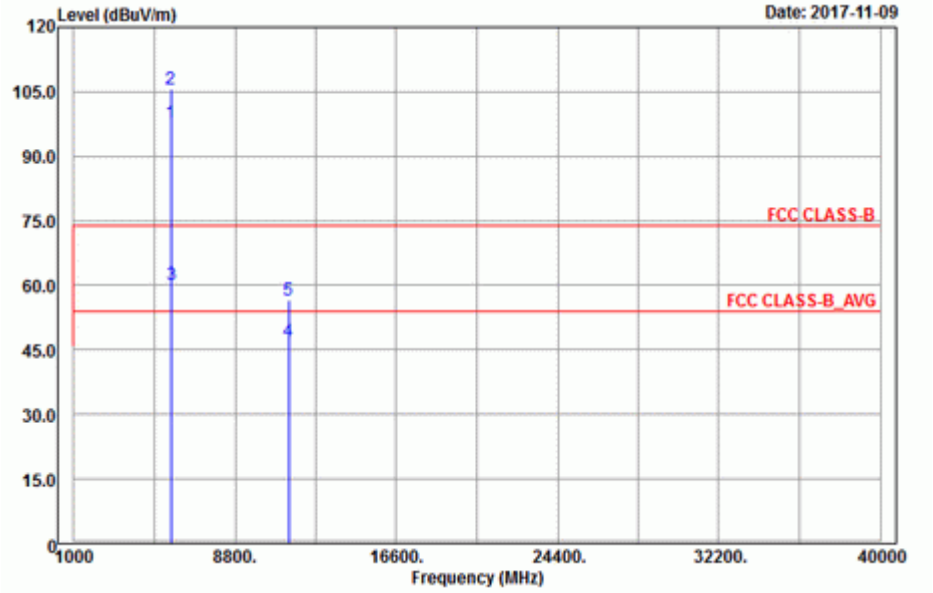
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



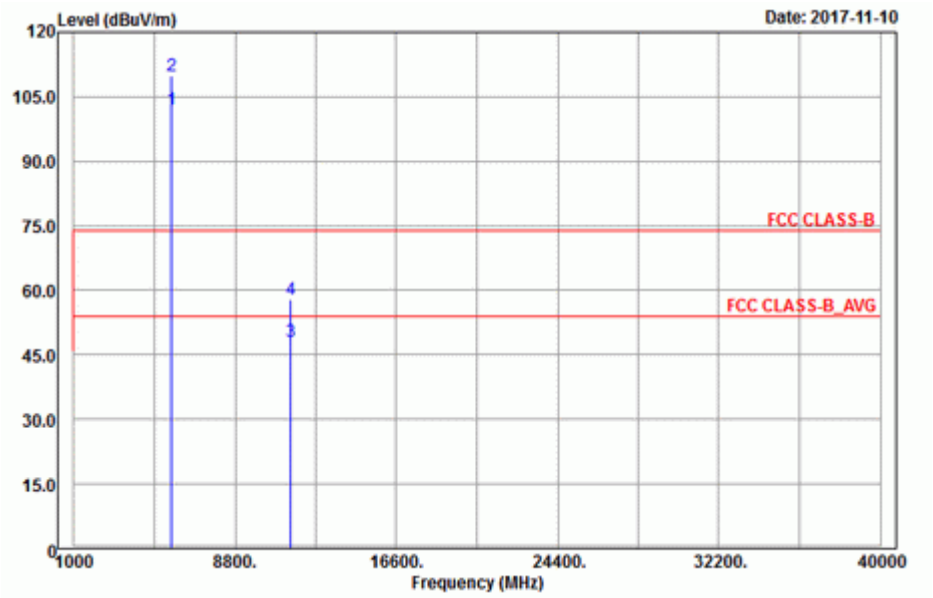
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emission Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5700	102.04	92.91			34.59	8.64	34.1	210	121	Average
5700	109.45	100.32			34.59	8.64	34.1	210	121	Peak
***5725.08**	**67.2**	**58.04**	**68.2**	**-1.00**	**34.62**	**8.65**	**34.11**	**192**	**155**	**Peak**
11400	46.38	31.28	54	-7.62	37.84	12.67	35.41	145	205	Average
11400	56.75	41.65	74	-17.25	37.84	12.67	35.41	145	205	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**
5700	97.8	88.67			34.59	8.64	34.1	275	113	Average
5700	105.71	96.58			34.59	8.64	34.1	275	113	Peak
*5724.28	60.02	50.86	68.2	-8.18	34.62	8.65	34.11	271	113	Peak
11400	47.23	32.13	54	-6.77	37.84	12.67	35.41	124	29	Average
11400	56.49	41.39	74	-17.51	37.84	12.67	35.41	124	29	Peak

Remarks:

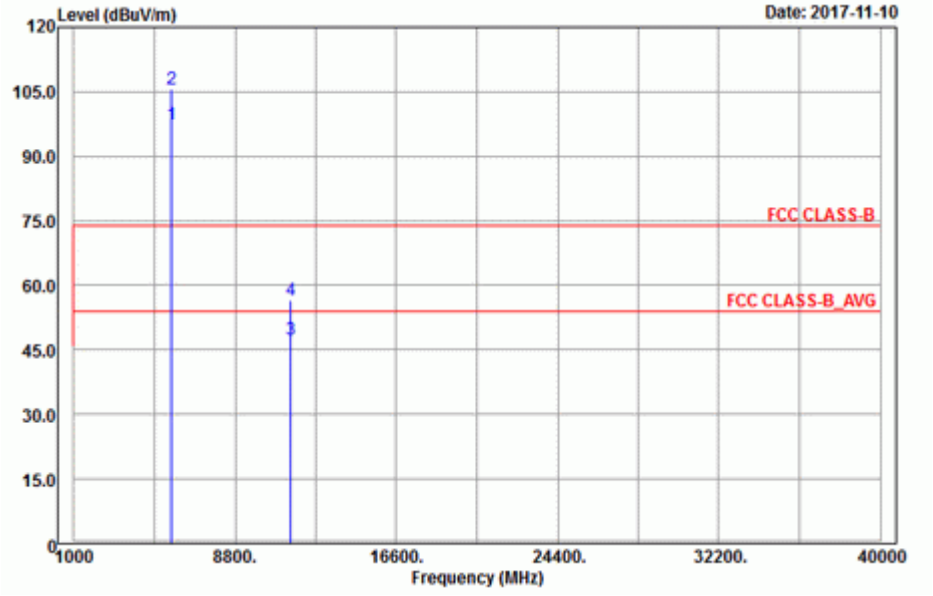
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

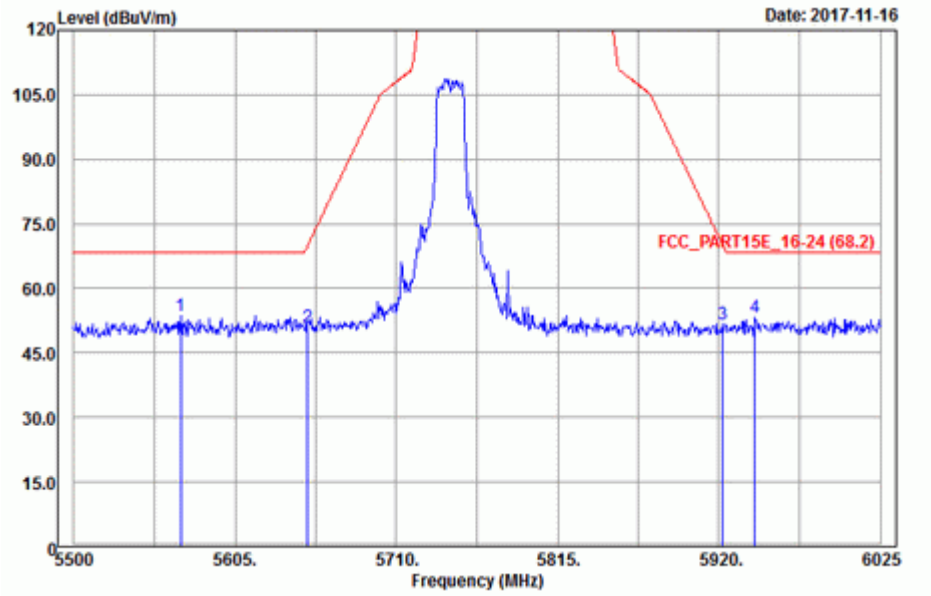
<Spurious Emission>
Horizontal



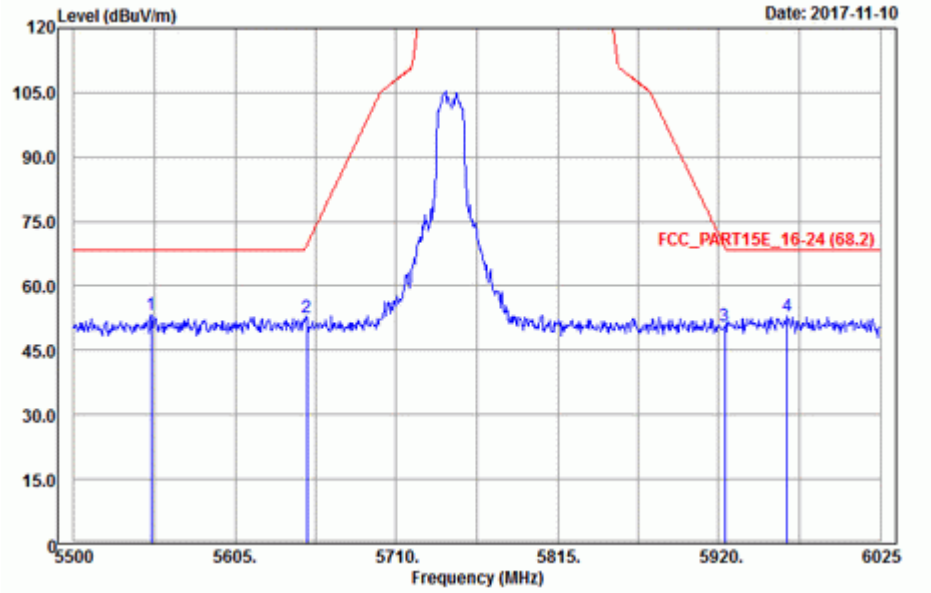
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5745	102.14	92.95			34.64	8.66	34.11	210	120	Average
5745	109.95	100.76			34.64	8.66	34.11	210	120	Peak
11490	47.93	32.81	54	-6.07	37.89	12.62	35.39	127	351	Average
11490	57.83	42.71	74	-16.17	37.89	12.62	35.39	127	351	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
5745	97.44	88.25			34.64	8.66	34.11	270	112	Average
5745	105.63	96.44			34.64	8.66	34.11	270	112	Peak
11490	47.33	32.21	54	-6.67	37.89	12.62	35.39	186	194	Average
11490	56.41	41.29	74	-17.59	37.89	12.62	35.39	186	194	Peak

<Ouf of Band Emission (OOBE)>

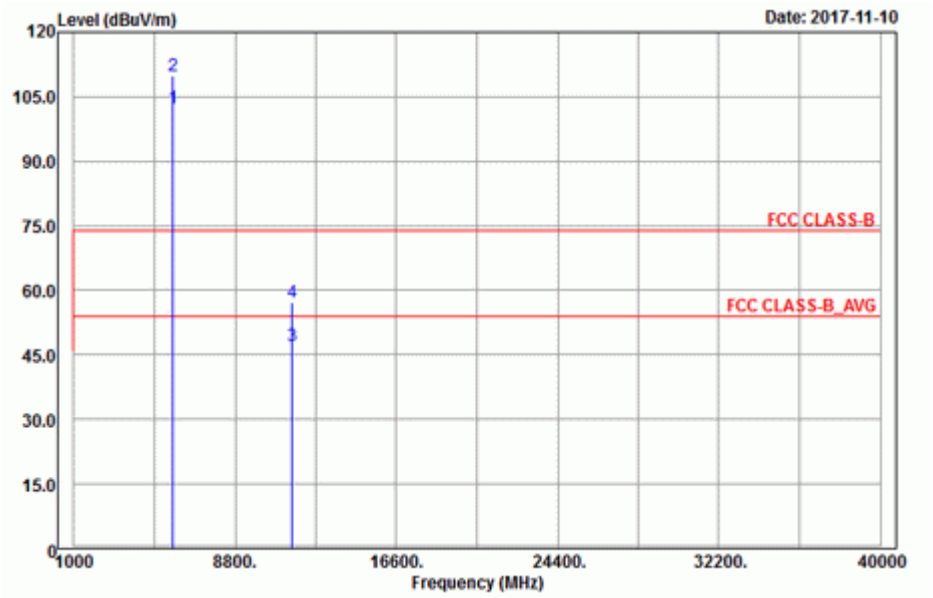
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5569.825	53.7	44.71	68.2	-14.5	34.47	8.59	34.07	210	120	Peak
5652.25	51.06	41.97	69.86	-18.8	34.56	8.62	34.09	210	120	Peak
5922.625	51.56	42.16	69.96	-18.4	34.83	8.73	34.16	210	120	Peak
*5943.625	53.3	43.87	68.2	-14.9	34.85	8.74	34.16	210	120	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
*5550.4	53.37	44.4	68.2	-14.83	34.45	8.59	34.07	270	112	Peak
5651.725	52.7	43.61	69.48	-16.78	34.56	8.62	34.09	270	112	Peak
5923.675	50.59	41.19	69.18	-18.59	34.83	8.73	34.16	270	112	Peak
*5964.625	52.94	43.49	68.2	-15.26	34.87	8.75	34.17	270	112	Peak

Remarks:

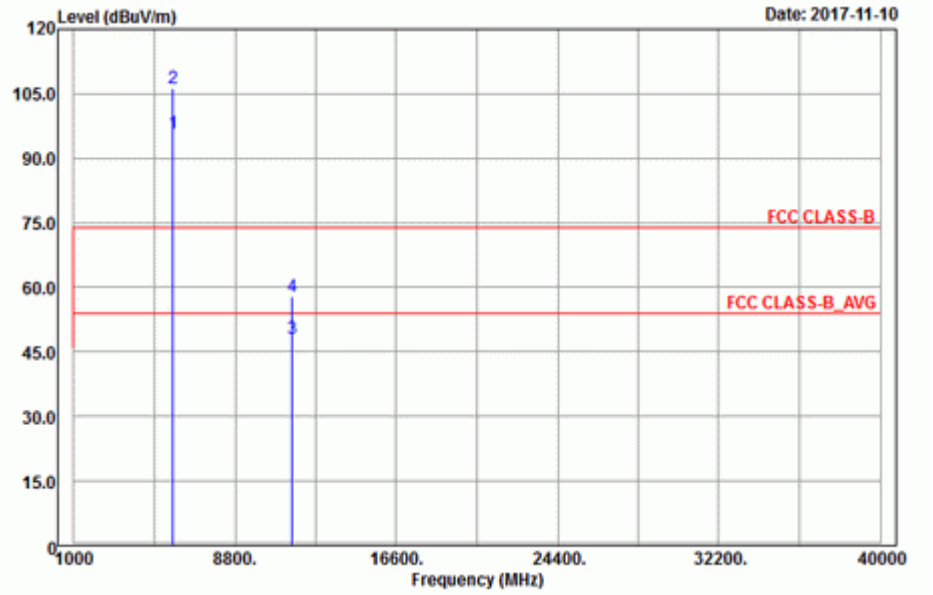
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

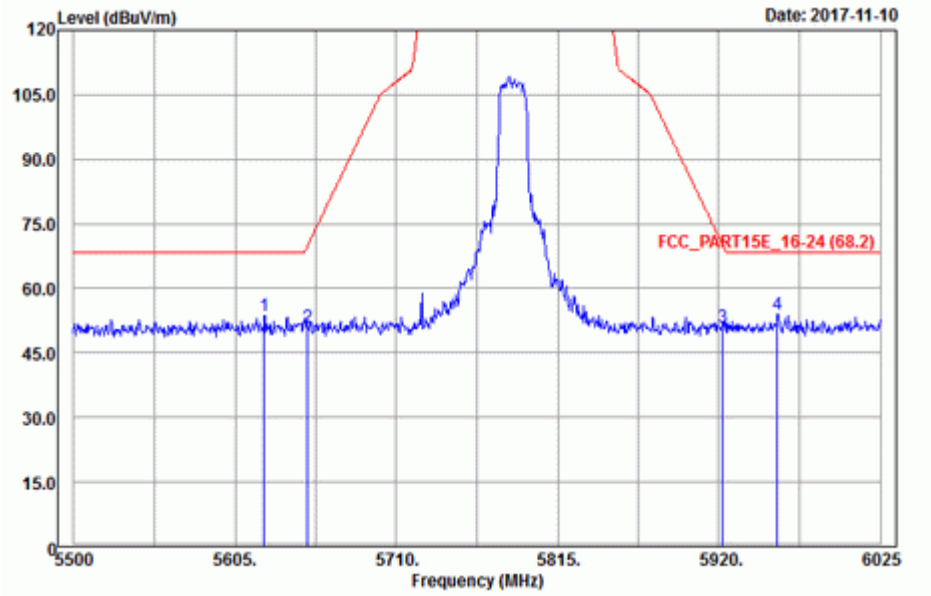
<Spurious Emission>
Horizontal



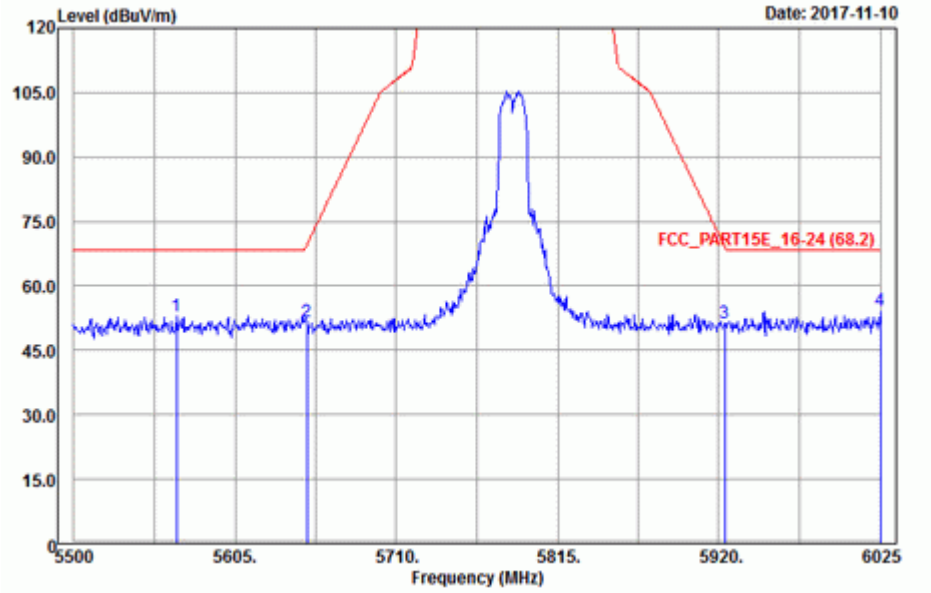
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5785	102.23	93			34.68	8.68	34.13	210	120	Average
5785	110	100.77			34.68	8.68	34.13	210	120	Peak
11570	47.03	31.72	54	-6.97	38	12.68	35.37	196	127	Average
11570	57.12	41.81	74	-16.88	38	12.68	35.37	196	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
5785	95.67	86.44			34.68	8.68	34.13	270	112	Average
5785	106.15	96.92			34.68	8.68	34.13	270	112	Peak
11570	48.13	32.82	54	-5.87	38	12.68	35.37	162	188	Average
11570	57.72	42.41	74	-16.28	38	12.68	35.37	162	188	Peak

<Ouf of Band Emission (OOBE)>

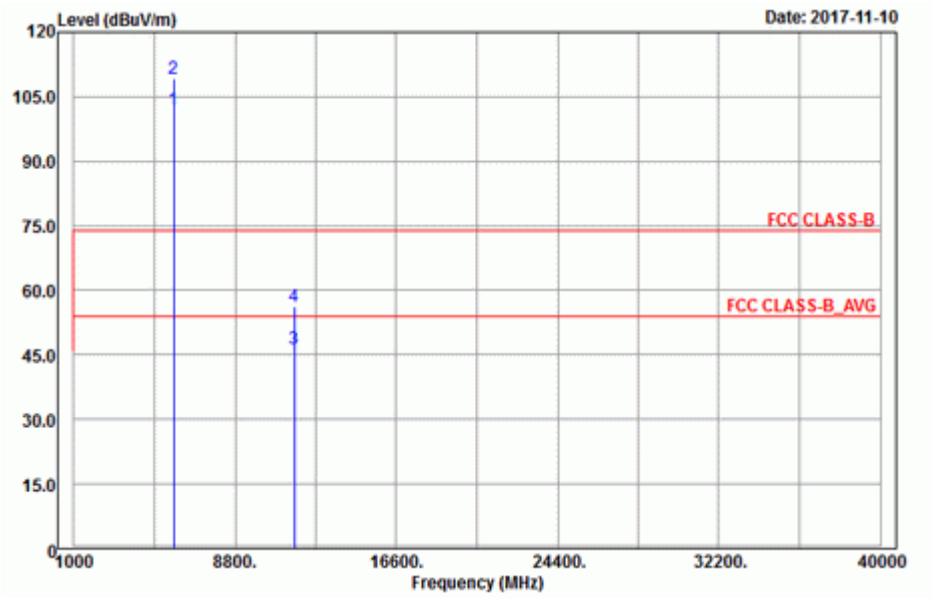
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5623.9	53.48	44.43	68.2	-14.72	34.52	8.61	34.08	210	120	Peak
5652.25	51.15	42.06	69.86	-18.71	34.56	8.62	34.09	210	120	Peak
5922.625	50.94	41.54	69.96	-19.02	34.83	8.73	34.16	210	120	Peak
*5958.325	53.87	44.42	68.2	-14.33	34.87	8.74	34.16	210	120	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
*5566.675	52.97	43.98	68.2	-15.23	34.47	8.59	34.07	270	112	Peak
5651.725	51.6	42.51	69.48	-17.88	34.56	8.62	34.09	270	112	Peak
5923.675	51.19	41.79	69.18	-17.99	34.83	8.73	34.16	270	112	Peak
*6025	54.35	44.83	68.2	-13.85	34.93	8.77	34.18	270	112	Peak

Remarks:

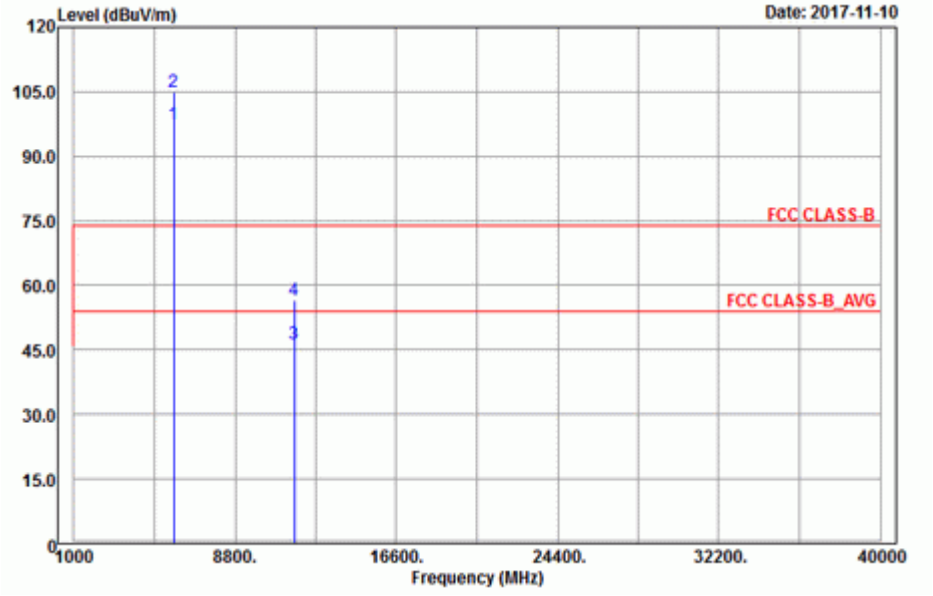
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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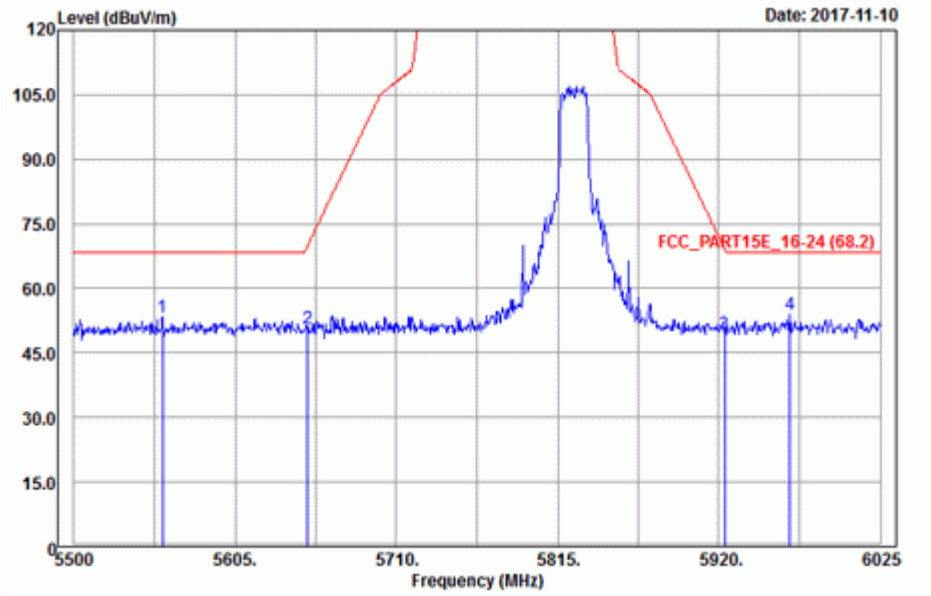
Horizontal



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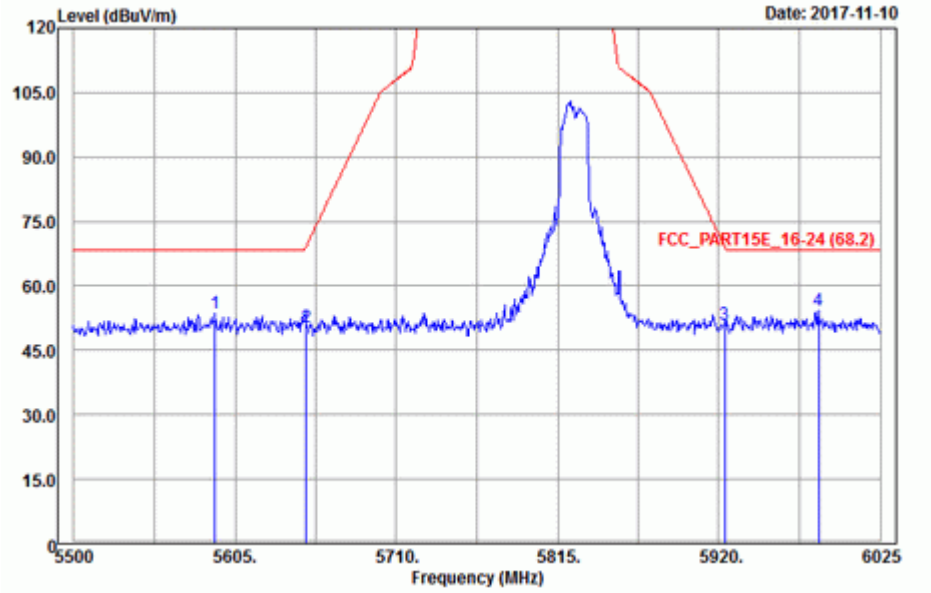


<Spurious Emission>

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
5825	102.12	92.83			34.73	8.69	34.13	210	120	Average
5825	109.34	100.05			34.73	8.69	34.13	210	120	Peak
11650	46.29	30.76	54	-7.71	38.09	12.8	35.36	125	328	Average
11650	56.36	40.83	74	-17.64	38.09	12.8	35.36	125	328	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
5825	97.51	88.22			34.73	8.69	34.13	270	112	Average
5825	104.87	95.58			34.73	8.69	34.13	270	112	Peak
11650	46.37	30.84	54	-7.63	38.09	12.8	35.36	192	245	Average
11650	56.45	40.92	74	-17.55	38.09	12.8	35.36	192	245	Peak

<Ouf of Band Emission (OOBE)>

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
*5557.75	53.41	44.44	68.2	-14.79	34.45	8.59	34.07	210	120	Peak
5652.25	50.57	41.48	69.86	-19.29	34.56	8.62	34.09	210	120	Peak
5923.675	49.25	39.85	69.18	-19.93	34.83	8.73	34.16	210	120	Peak
*5966.2	53.79	44.34	68.2	-14.41	34.87	8.75	34.17	210	120	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
*5591.875	53.49	44.48	68.2	-14.71	34.49	8.6	34.08	270	112	Peak
5651.2	50.21	41.12	69.09	-18.88	34.56	8.62	34.09	270	112	Peak
5923.675	51.16	41.76	69.18	-18.02	34.83	8.73	34.16	270	112	Peak
*5985.1	54.16	44.7	68.2	-14.04	34.88	8.75	34.17	270	112	Peak

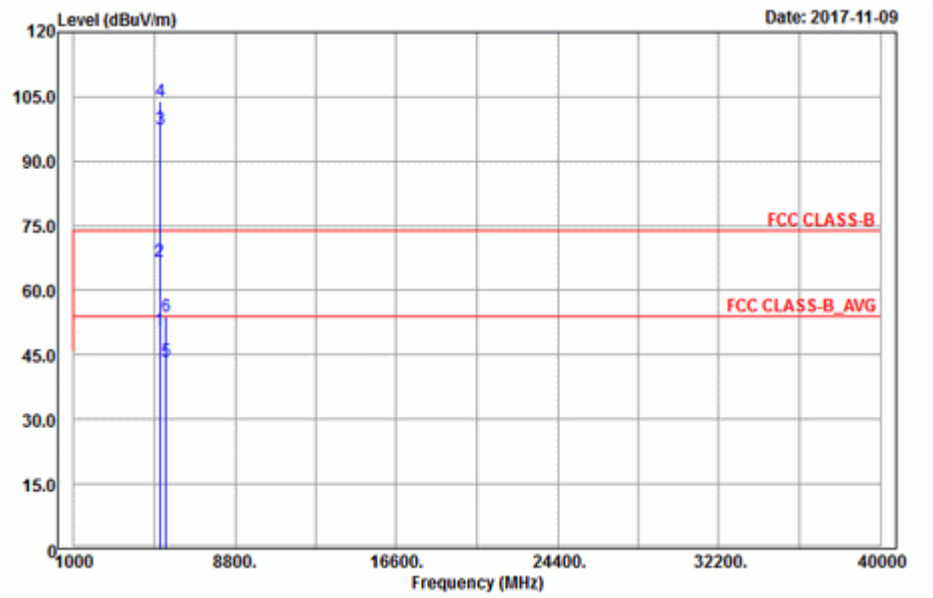
Remarks:

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

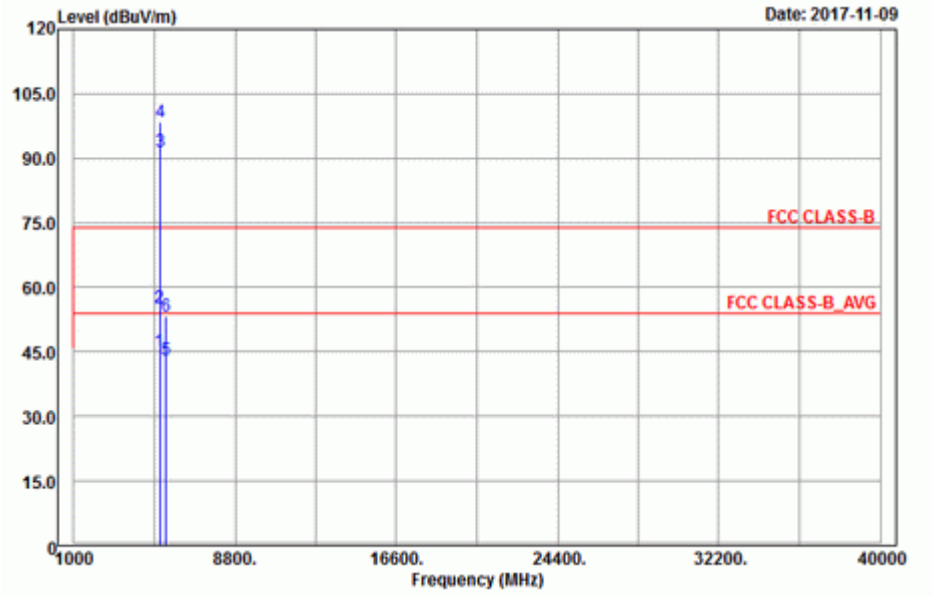
802.11ac (VHT40)

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

Horizontal



Vertical



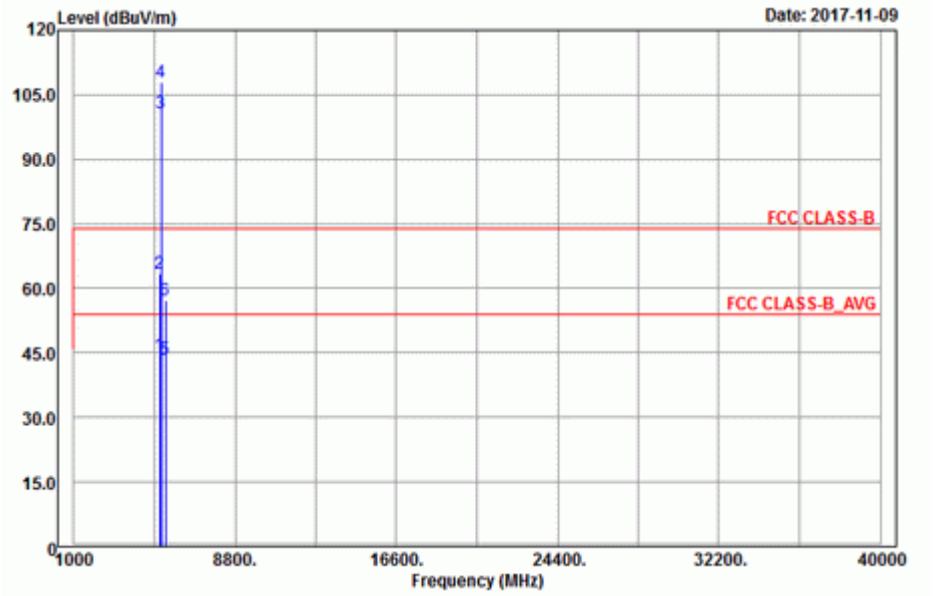
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.6	50.65	42.4	54	-3.35	34.12	8.13	34	195	20	Average
5147.6	66.67	58.42	74	-7.33	34.12	8.13	34	195	20	Peak
5190	97.33	88.99			34.15	8.19	34	194	19	Average
5190	104.08	95.74			34.15	8.19	34	194	19	Peak
5456.37	43.46	34.64	54	-10.54	34.36	8.51	34.05	194	19	Average
5456.37	54.06	45.24	74	-19.94	34.36	8.51	34.05	194	19	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
5149.4	45.19	36.94	54	-8.81	34.12	8.13	34	101	22	Average
5149.4	55.29	47.04	74	-18.71	34.12	8.13	34	101	22	Peak
5190	91.54	83.2			34.15	8.19	34	101	22	Average
5190	98.34	90			34.15	8.19	34	101	22	Peak
5457.03	43.31	34.49	54	-10.69	34.36	8.51	34.05	101	22	Average
5457.03	53.4	44.58	74	-20.6	34.36	8.51	34.05	101	22	Peak

Remarks:

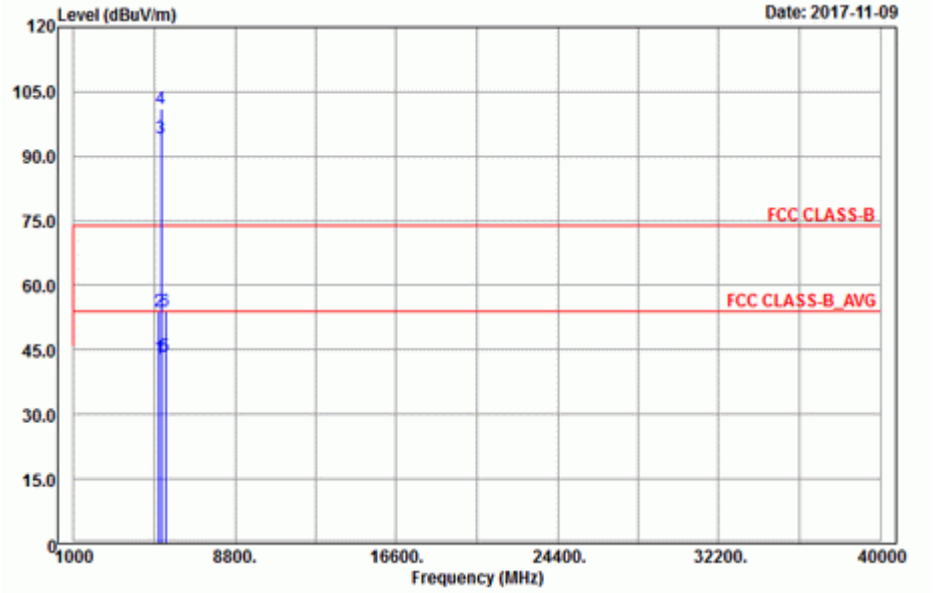
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5190 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



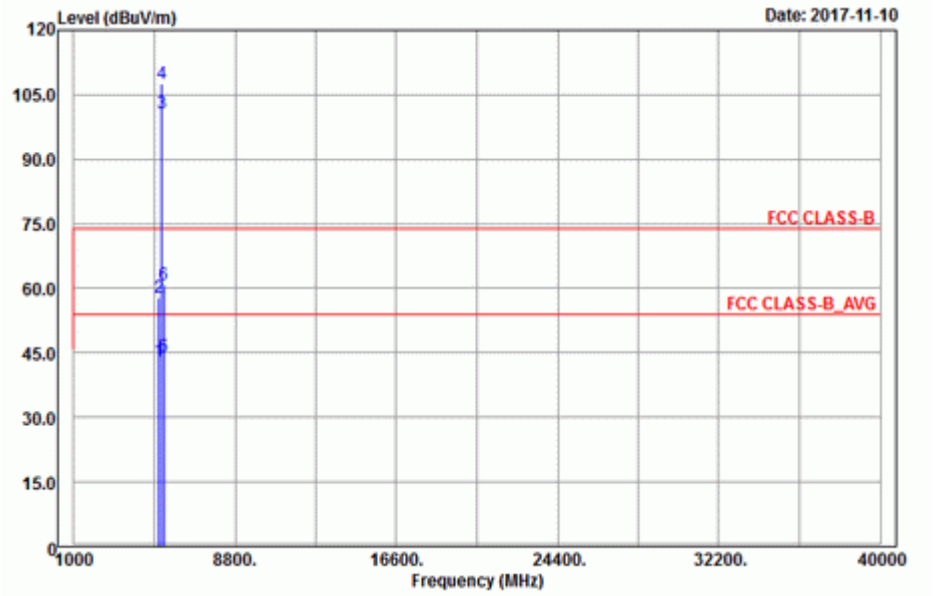
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.4	44.55	36.3	54	-9.45	34.12	8.13	34	194	19	Average
5149.4	63.47	55.22	74	-10.53	34.12	8.13	34	194	19	Peak
5230	100.55	92.15			34.19	8.22	34.01	194	19	Average
5230	107.94	99.54			34.19	8.22	34.01	194	19	Peak
5432.61	43.33	34.54	54	-10.67	34.35	8.48	34.04	194	19	Average
5432.61	57.07	48.28	74	-16.93	34.35	8.48	34.04	194	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5136.5	43.29	35.04	54	-10.71	34.11	8.13	33.99	101	22	Average
5136.5	54.1	45.85	74	-19.9	34.11	8.13	33.99	101	22	Peak
5230	94.14	85.74			34.19	8.22	34.01	101	22	Average
5230	101.14	92.74			34.19	8.22	34.01	101	22	Peak
5440.75	43.41	34.62	54	-10.59	34.35	8.48	34.04	101	22	Average
5440.75	54.01	45.22	74	-19.99	34.35	8.48	34.04	101	22	Peak

Remarks:

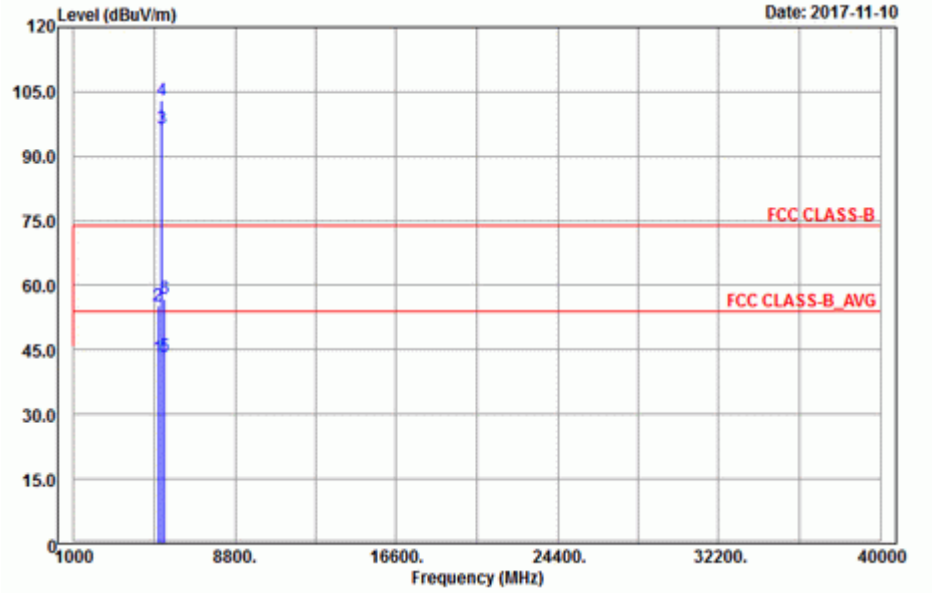
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



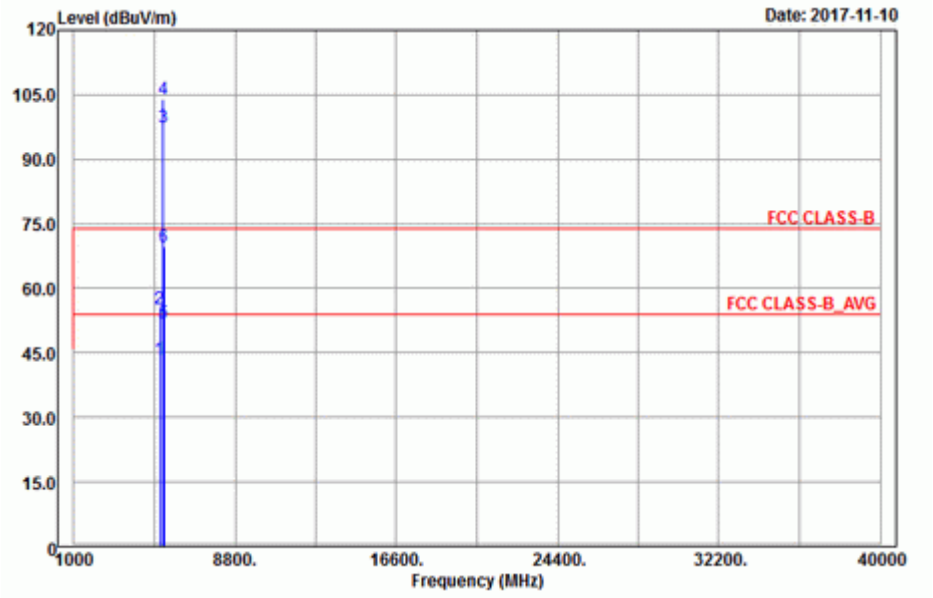
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5127.95	43.3	35.08	54	-10.7	34.11	8.1	33.99	204	123	Average
5127.95	58	49.78	74	-16	34.11	8.1	33.99	204	123	Peak
5270	100.58	92.09			34.21	8.29	34.01	204	123	Average
5270	107.57	99.08			34.21	8.29	34.01	204	123	Peak
5351.32	44.01	35.38	54	-9.99	34.28	8.38	34.03	204	123	Average
5351.32	60.66	52.03	74	-13.34	34.28	8.38	34.03	204	123	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5090.75	43.22	35.05	54	-10.78	34.08	8.07	33.98	100	106	Average
5090.75	55.36	47.19	74	-18.64	34.08	8.07	33.98	100	106	Peak
5270	96.62	88.13			34.21	8.29	34.01	100	106	Average
5270	103.06	94.57			34.21	8.29	34.01	100	106	Peak
5379.81	43.49	34.81	54	-10.51	34.31	8.41	34.04	100	106	Average
5379.81	57.05	48.37	74	-16.95	34.31	8.41	34.04	100	106	Peak

Remarks:

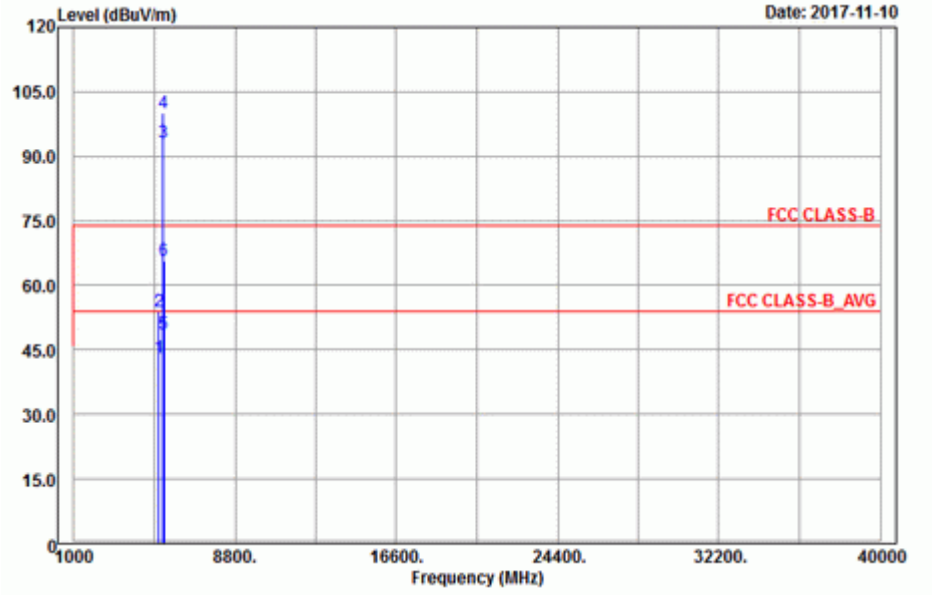
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



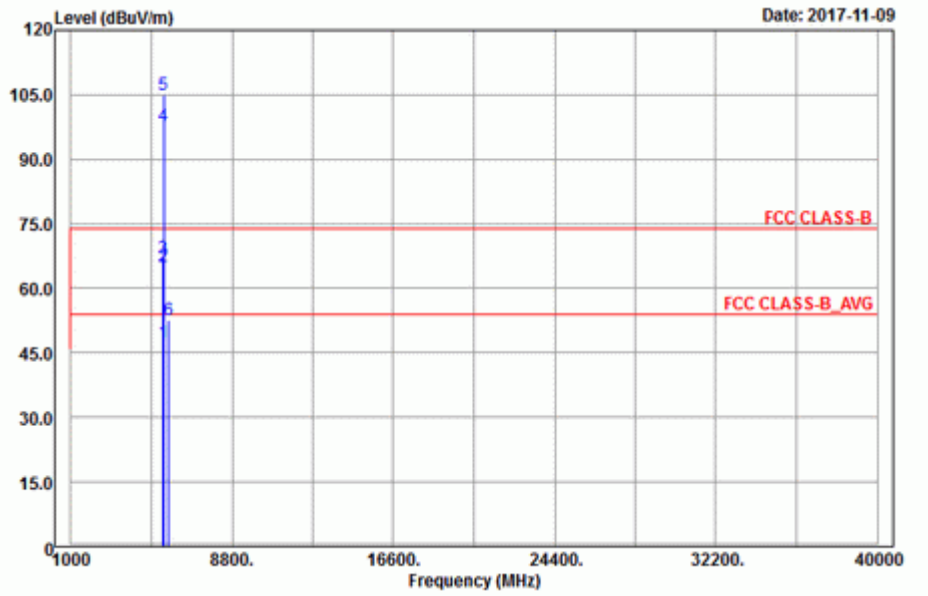
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.7	43.5	35.25	54	-10.5	34.12	8.13	34	204	121	Average
5149.7	55.39	47.14	74	-18.61	34.12	8.13	34	204	121	Peak
5310	97.59	89.04			34.25	8.32	34.02	204	121	Average
5310	104.07	95.52			34.25	8.32	34.02	204	121	Peak
5350	51.98	43.35	54	-2.02	34.28	8.38	34.03	204	122	Average
5350	69.69	61.06	74	-4.31	34.28	8.38	34.03	204	122	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
5111.6	43.21	35.01	54	-10.79	34.09	8.1	33.99	100	106	Average
5111.6	53.85	45.65	74	-20.15	34.09	8.1	33.99	100	106	Peak
5310	93.25	84.7			34.25	8.32	34.02	100	106	Average
5310	100.03	91.48			34.25	8.32	34.02	100	106	Peak
5350	48.56	39.93	54	-5.44	34.28	8.38	34.03	100	106	Average
5350	65.62	56.99	74	-8.38	34.28	8.38	34.03	100	106	Peak

Remarks:

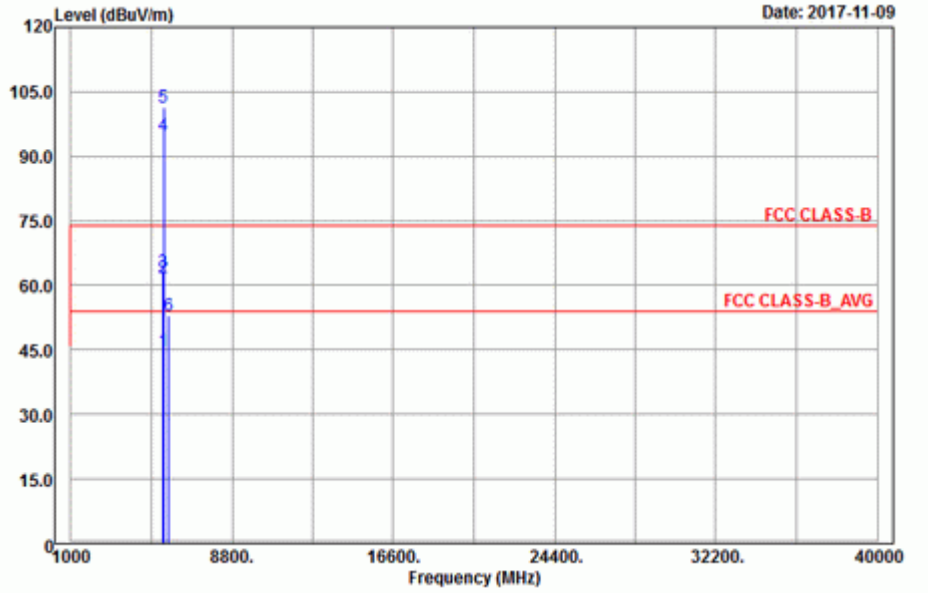
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



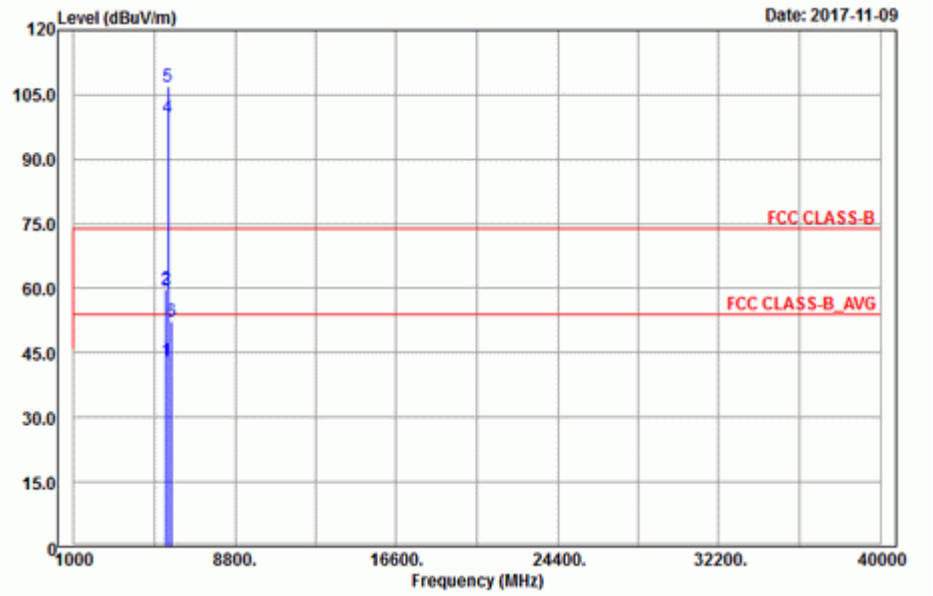
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460.08	47.26	38.44	54	-6.74	34.36	8.51	34.05	192	121	Average
5460.08	65.05	56.23	74	-8.95	34.36	8.51	34.05	192	121	Peak
*5470.96	67.02	58.16	68.2	-1.18	34.37	8.54	34.05	192	121	Peak
5510	97.67	88.76			34.4	8.57	34.06	200	121	Average
5510	105.11	96.2			34.4	8.57	34.06	200	121	Peak
*5724.68	52.49	43.33	68.2	-15.71	34.62	8.65	34.11	200	121	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
5460.08	44.8	35.98	54	-9.2	34.36	8.51	34.05	243	109	Average
5460.08	61.94	53.12	74	-12.06	34.36	8.51	34.05	243	109	Peak
*5470.32	63.02	54.19	68.2	-5.18	34.37	8.51	34.05	243	109	Peak
5510	94.78	85.87			34.4	8.57	34.06	263	113	Average
5510	101.41	92.5			34.4	8.57	34.06	263	113	Peak
*5724.6	53.03	43.87	68.2	-15.17	34.62	8.65	34.11	263	113	Peak

Remarks:

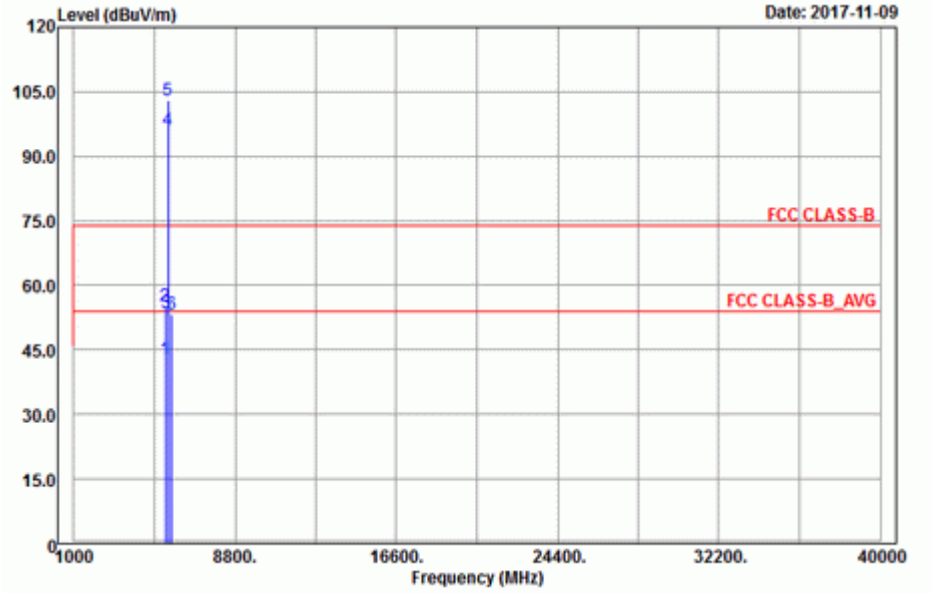
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



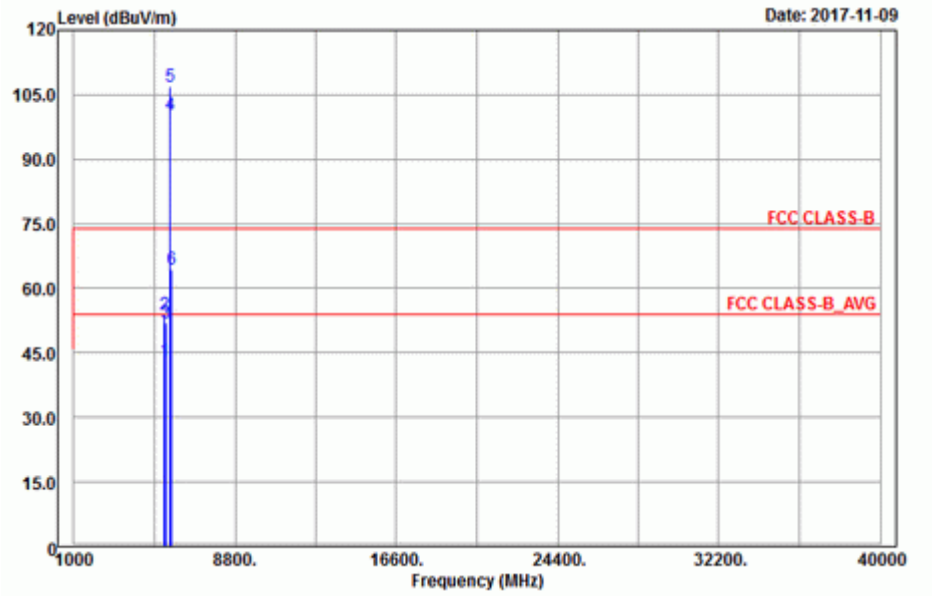
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458.48	43.14	34.32	54	-10.86	34.36	8.51	34.05	239	131	Average
5458.48	59.69	50.87	74	-14.31	34.36	8.51	34.05	239	131	Peak
*5468.4	59.41	50.58	68.2	-8.79	34.37	8.51	34.05	239	131	Peak
5550	99.57	90.6			34.45	8.59	34.07	205	121	Average
5550	106.79	97.82			34.45	8.59	34.07	205	121	Peak
*5725.24	52.37	43.21	68.2	-15.83	34.62	8.65	34.11	205	121	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
5434.32	42.69	33.9	54	-11.31	34.35	8.48	34.04	272	114	Average
5434.32	55.35	46.56	74	-18.65	34.35	8.48	34.04	272	114	Peak
*5468.4	53.59	44.76	68.2	-14.61	34.37	8.51	34.05	272	114	Peak
5550	96.03	87.06			34.45	8.59	34.07	272	114	Average
5550	102.84	93.87			34.45	8.59	34.07	272	114	Peak
*5725.4	53.19	44.03	68.2	-15.01	34.62	8.65	34.11	272	114	Peak

Remarks:

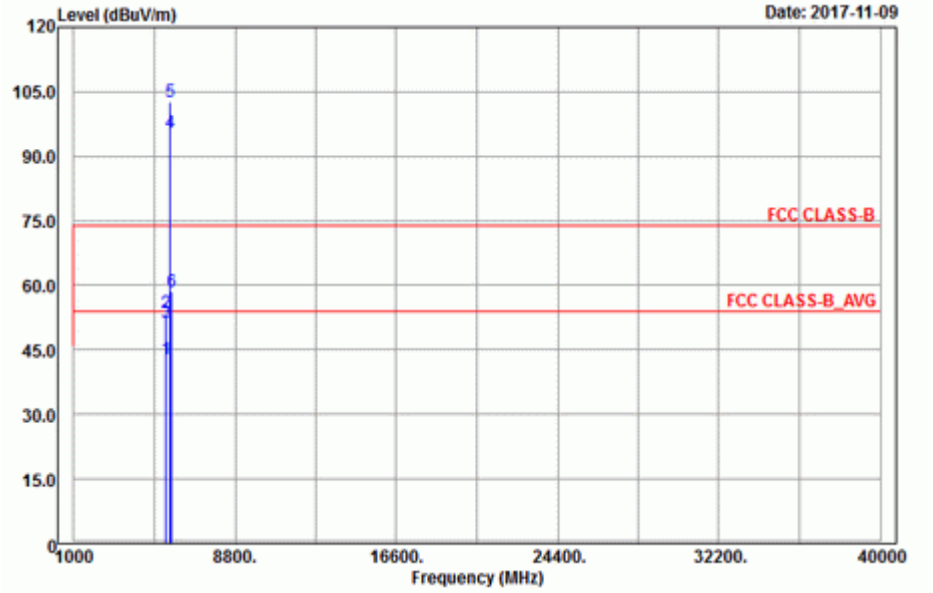
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



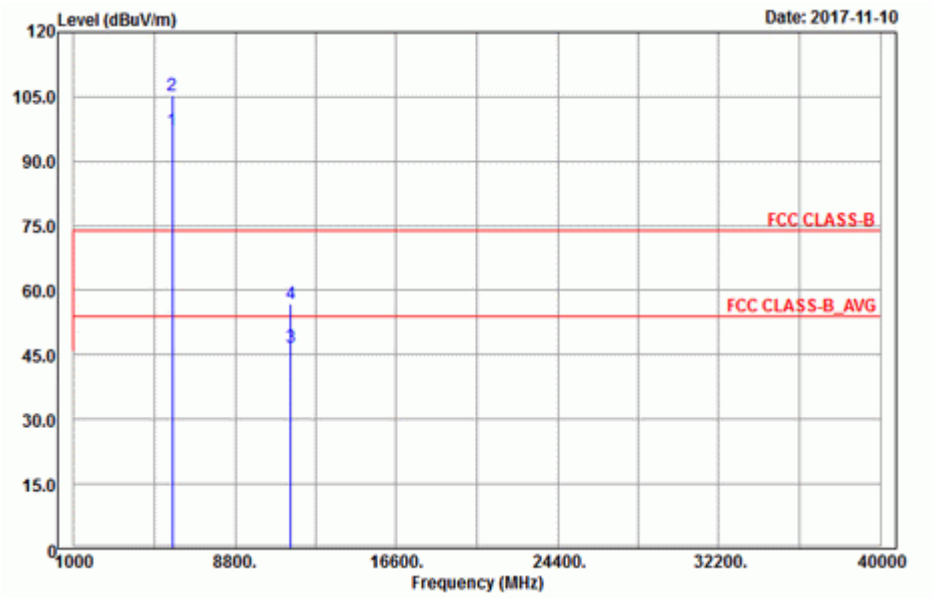
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5394.8	43.03	34.31	54	-10.97	34.32	8.44	34.04	210	120	Average
5394.8	54	45.28	74	-20	34.32	8.44	34.04	210	120	Peak
*5470.16	51.92	43.09	68.2	-16.28	34.37	8.51	34.05	210	120	Peak
5670	100.23	91.13			34.57	8.63	34.1	210	120	Average
5670	106.79	97.69			34.57	8.63	34.1	210	120	Peak
*5725.56	64.33	55.17	68.2	-3.87	34.62	8.65	34.11	159	120	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5442.96	42.99	34.2	54	-11.01	34.35	8.48	34.04	275	113	Average
5442.96	53.52	44.73	74	-20.48	34.35	8.48	34.04	275	113	Peak
*5468.72	51.46	42.63	68.2	-16.74	34.37	8.51	34.05	275	113	Peak
5670	95.52	86.42			34.57	8.63	34.1	275	113	Average
5670	102.8	93.7			34.57	8.63	34.1	275	113	Peak
*5723.96	58.56	49.4	68.2	-9.64	34.62	8.65	34.11	257	68	Peak

Remarks:

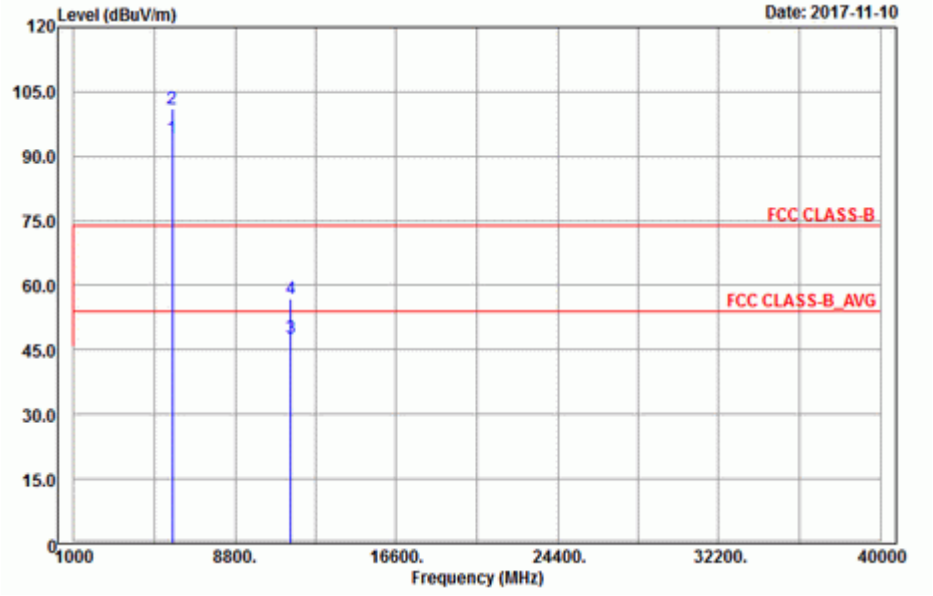
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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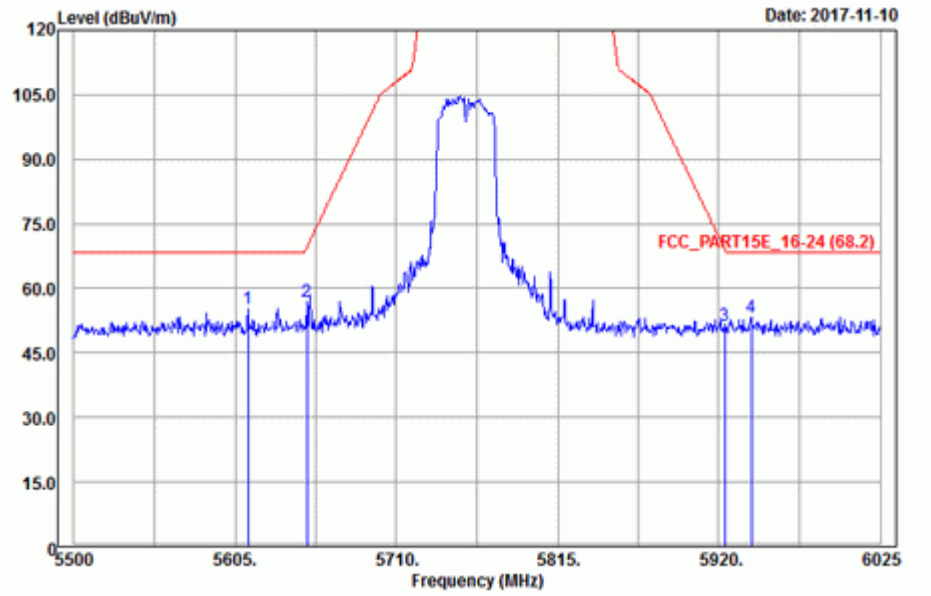
Horizontal



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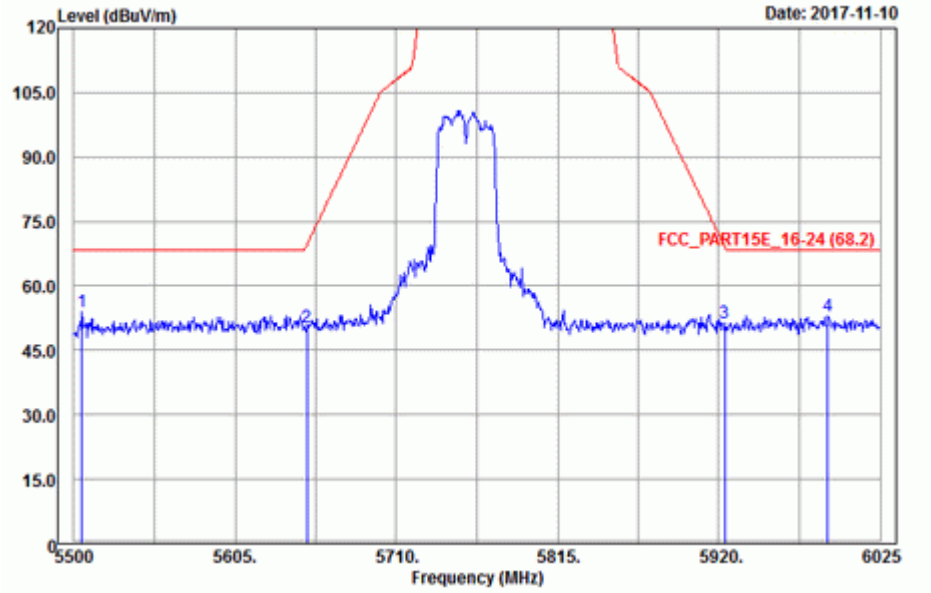


<Spurious Emission>

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
5755	97.25	88.04			34.66	8.66	34.11	210	120	Average
5755	105.14	95.93			34.66	8.66	34.11	210	120	Peak
11510	46.83	31.72	54	-7.17	37.9	12.6	35.39	176	155	Average
11510	57.04	41.93	74	-16.96	37.9	12.6	35.39	176	155	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
5755	94.08	84.87			34.66	8.66	34.11	270	112	Average
5755	101.07	91.86			34.66	8.66	34.11	270	112	Peak
11510	47.65	32.54	54	-6.35	37.9	12.6	35.39	152	217	Average
11510	56.94	41.83	74	-17.06	37.9	12.6	35.39	152	217	Peak

<Ouf of Band Emission (OOBE)>

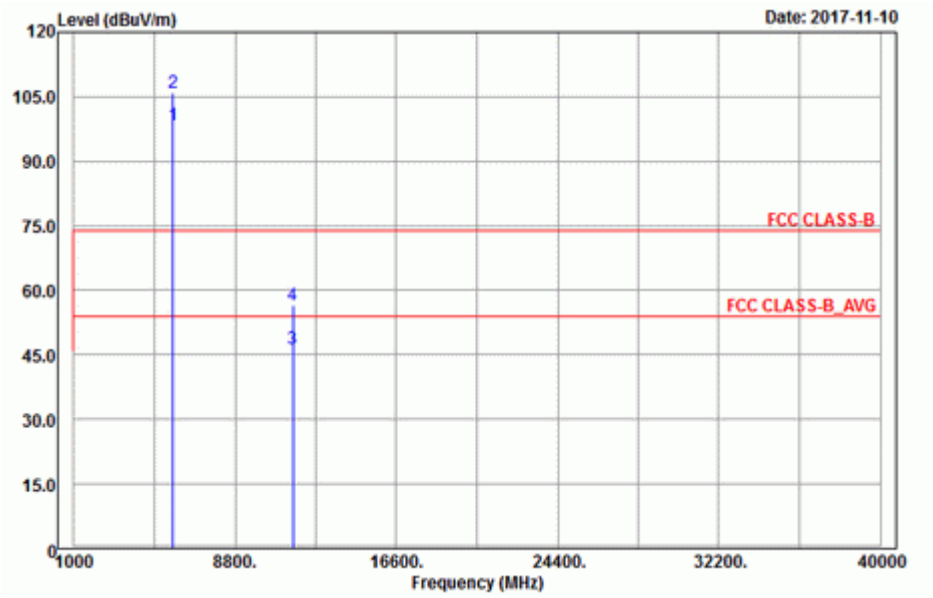
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5613.4	55.28	46.25	68.2	-12.92	34.5	8.61	34.08	210	120	Peak
5651.725	56.81	47.72	69.48	-12.67	34.56	8.62	34.09	210	120	Peak
5923.675	51.45	42.05	69.18	-17.73	34.83	8.73	34.16	210	120	Peak
*5941	53.38	43.95	68.2	-14.82	34.85	8.74	34.16	210	120	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
*5505.25	53.9	44.99	68.2	-14.3	34.4	8.57	34.06	270	112	Peak
5651.725	50.48	41.39	69.48	-19	34.56	8.62	34.09	270	112	Peak
5923.675	51.23	41.83	69.18	-17.95	34.83	8.73	34.16	270	112	Peak
*5990.875	53.07	43.58	68.2	-15.13	34.9	8.76	34.17	270	112	Peak

Remarks:

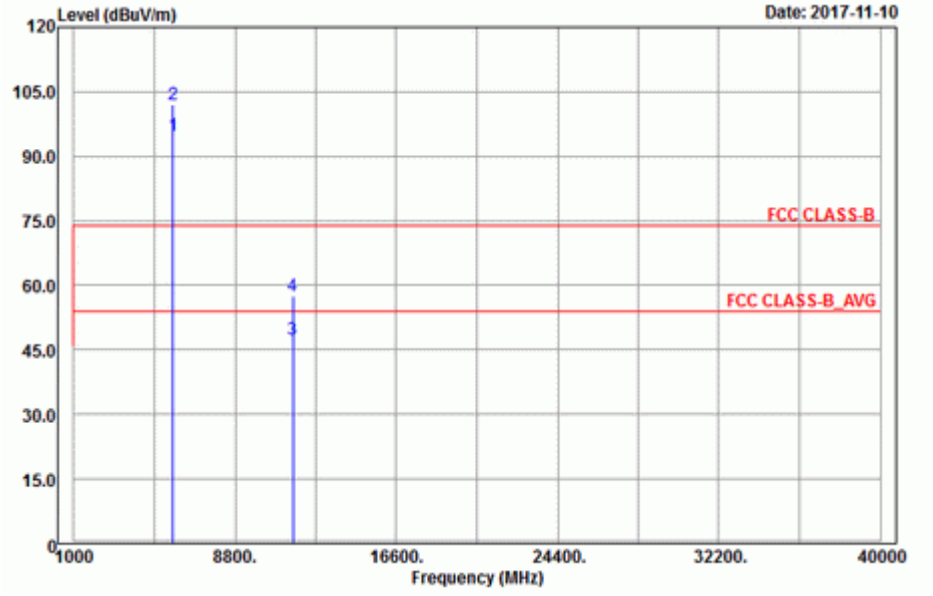
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5755 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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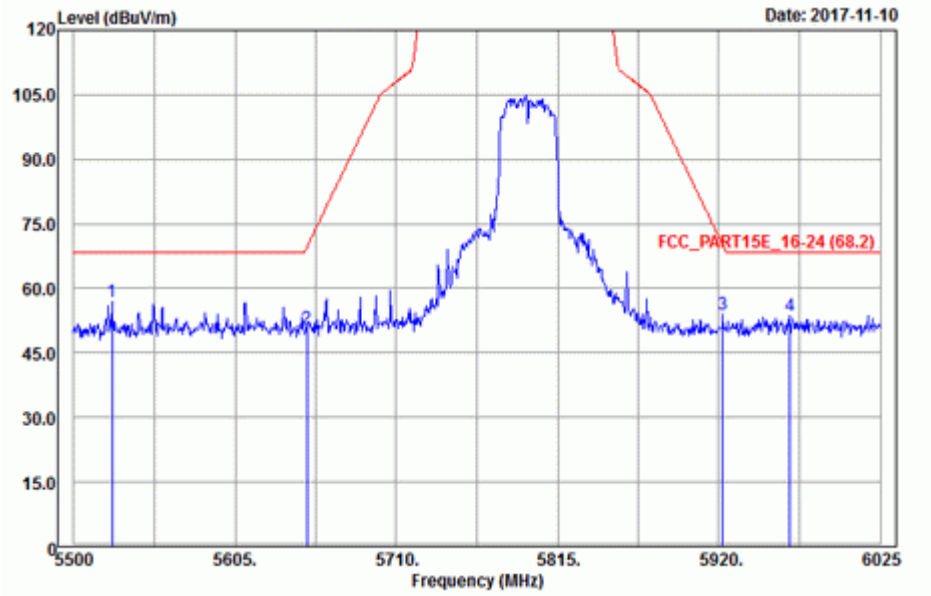
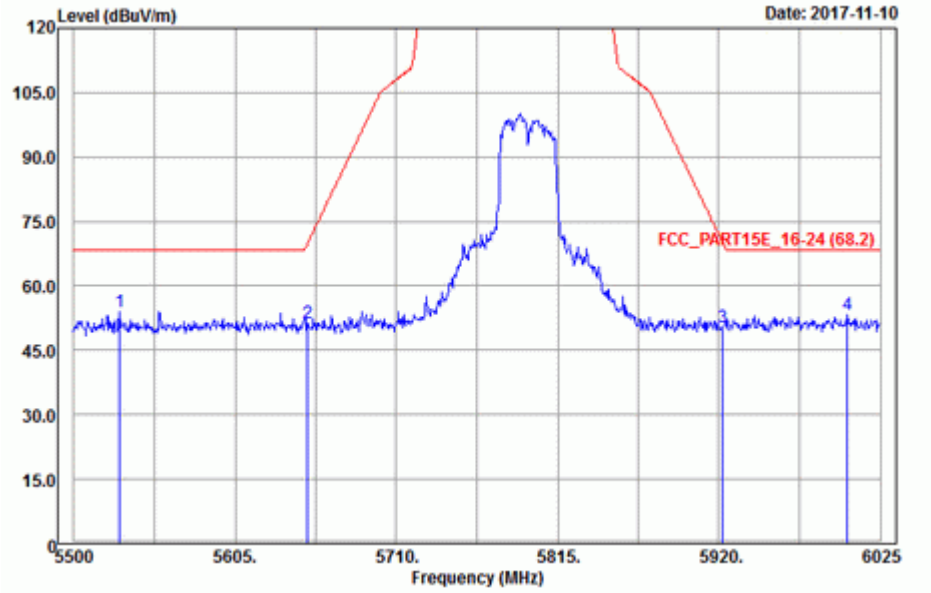
Horizontal



Vertical



<Spurious Emission>

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
5795	98.46	89.22			34.69	8.68	34.13	210	120	Average
5795	105.96	96.72			34.69	8.68	34.13	210	120	Peak
11590	46.43	31.06	54	-7.57	38.02	12.72	35.37	136	104	Average
11590	56.5	41.13	74	-17.5	38.02	12.72	35.37	136	104	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
5795	94.67	85.43			34.69	8.68	34.13	270	112	Average
5795	101.95	92.71			34.69	8.68	34.13	270	112	Peak
11590	47.37	32	54	-6.63	38.02	12.72	35.37	198	62	Average
11590	57.59	42.22	74	-16.41	38.02	12.72	35.37	198	62	Peak

<Ouf of Band Emission (OOBE)>

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
*5524.675	56.8	47.86	68.2	-11.4	34.42	8.58	34.06	210	120	Peak
5651.725	50.52	41.43	69.48	-18.96	34.56	8.62	34.09	210	120	Peak
5922.625	54.11	44.71	69.96	-15.85	34.83	8.73	34.16	210	120	Peak
*5966.2	53.68	44.23	68.2	-14.52	34.87	8.75	34.17	210	120	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
*5529.925	54.06	45.13	68.2	-14.14	34.42	8.58	34.07	270	112	Peak
5652.25	51.2	42.11	69.86	-18.66	34.56	8.62	34.09	270	112	Peak
5922.625	50.37	40.97	69.96	-19.59	34.83	8.73	34.16	270	112	Peak
*6004	53.24	43.75	68.2	-14.96	34.9	8.76	34.17	270	112	Peak

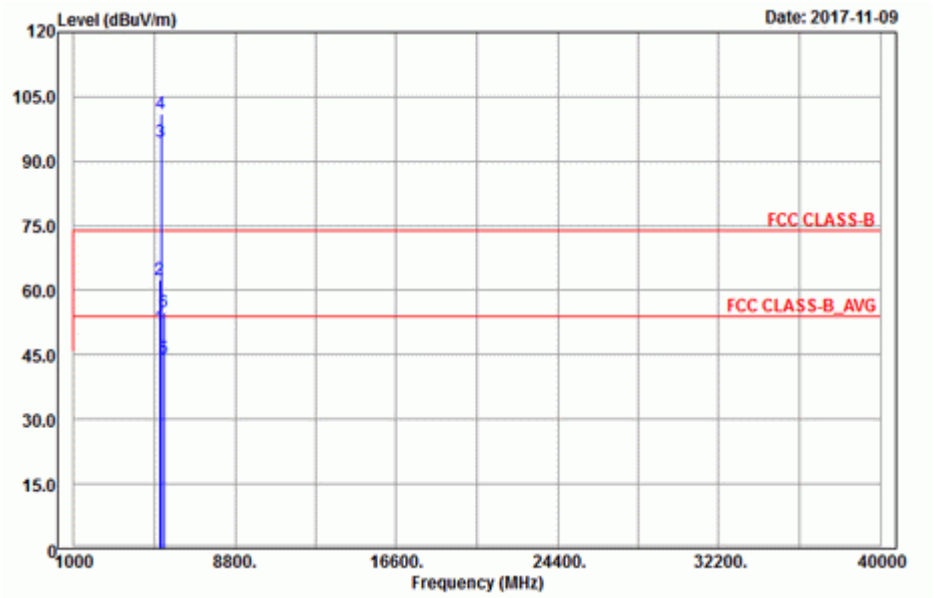
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5795 MHz: Fundamental Frequency
3. *: Out of Restricted Band

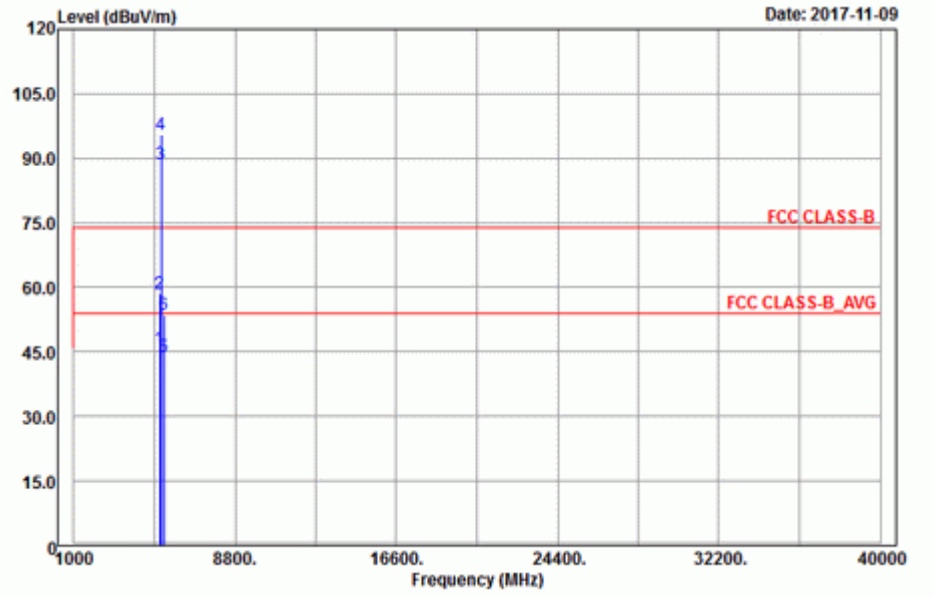
802.11ac (VHT80)

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



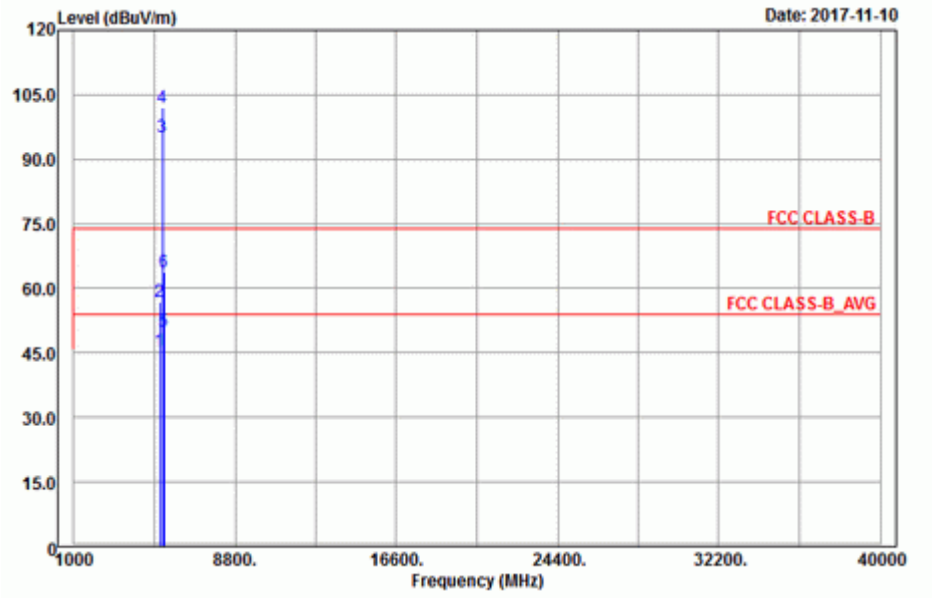
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5145.35	51.46	43.21	54	-2.54	34.12	8.13	34	192	19	Average
5145.35	62.58	54.33	74	-11.42	34.12	8.13	34	192	19	Peak
5210	94.36	86			34.17	8.19	34	194	19	Average
5210	101.06	92.7			34.17	8.19	34	194	19	Peak
5350.55	44.24	35.61	54	-9.76	34.28	8.38	34.03	194	19	Average
5350.55	54.97	46.34	74	-19.03	34.28	8.38	34.03	194	19	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	45.73	37.48	54	-8.27	34.12	8.13	34	101	22	Average
5150	58.44	50.19	74	-15.56	34.12	8.13	34	101	22	Peak
5210	88.53	80.17			34.17	8.19	34	101	22	Average
5210	95.44	87.08			34.17	8.19	34	101	22	Peak
5350	43.67	35.04	54	-10.33	34.28	8.38	34.03	101	22	Average
5350	53.71	45.08	74	-20.29	34.28	8.38	34.03	101	22	Peak

Remarks:

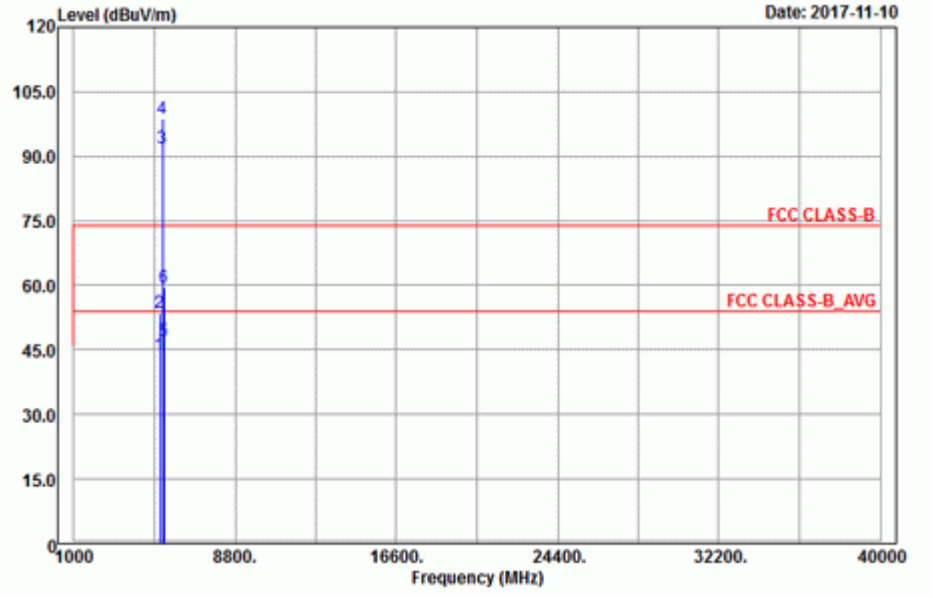
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5210 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



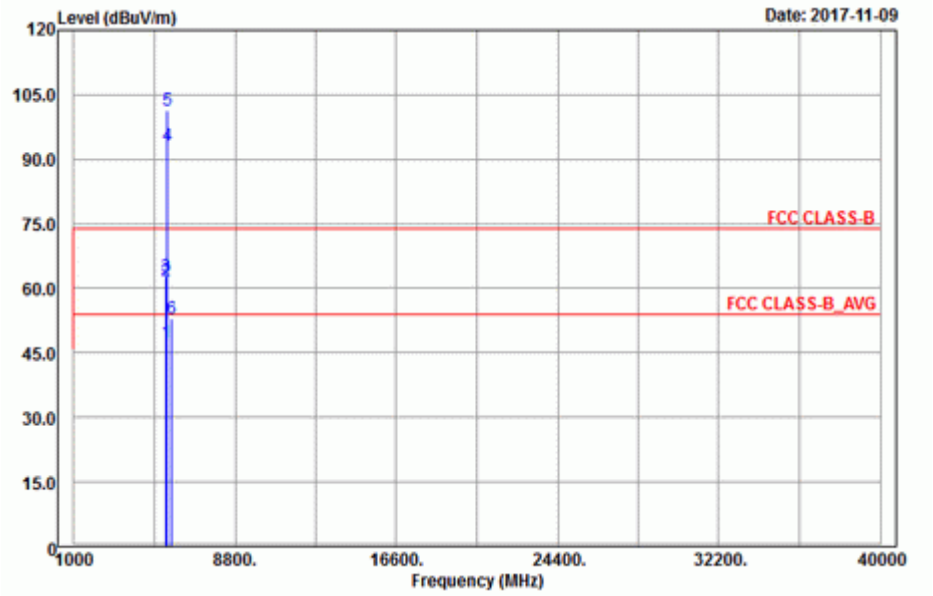
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146.1	45.49	37.24	54	-8.51	34.12	8.13	34	204	123	Average
5146.1	56.78	48.53	74	-17.22	34.12	8.13	34	204	123	Peak
5290	95.29	86.76			34.23	8.32	34.02	204	123	Average
5290	102.13	93.6			34.23	8.32	34.02	204	123	Peak
5353.85	50.03	41.4	54	-3.97	34.28	8.38	34.03	204	125	Average
5353.85	63.84	55.21	74	-10.16	34.28	8.38	34.03	204	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
5146.7	43.93	35.68	54	-10.07	34.12	8.13	34	100	106	Average
5146.7	53.61	45.36	74	-20.39	34.12	8.13	34	100	106	Peak
5290	91.74	83.21			34.23	8.32	34.02	100	106	Average
5290	98.59	90.06			34.23	8.32	34.02	100	106	Peak
5353.3	47.12	38.49	54	-6.88	34.28	8.38	34.03	100	106	Average
5353.3	59.63	51	74	-14.37	34.28	8.38	34.03	100	106	Peak

Remarks:

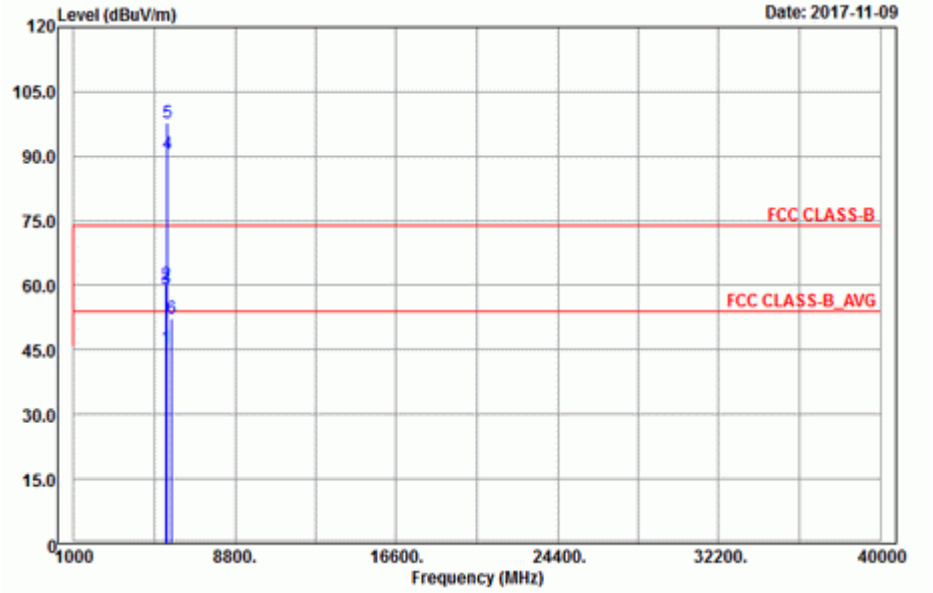
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5290 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



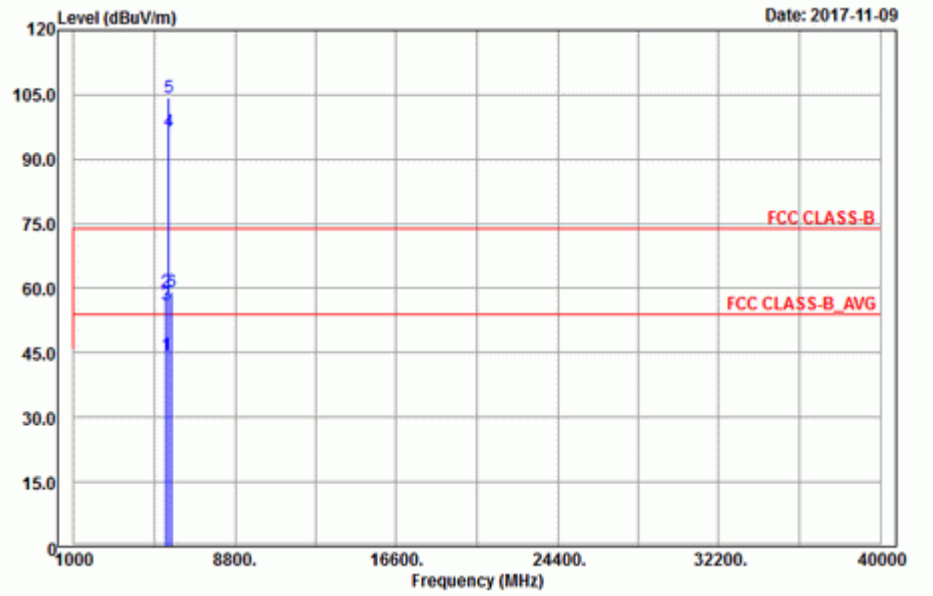
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5457.52	47.53	38.71	54	-6.47	34.36	8.51	34.05	185	129	Average
5457.52	61.83	53.01	74	-12.17	34.36	8.51	34.05	185	129	Peak
*5470.64	62.76	53.93	68.2	-5.44	34.37	8.51	34.05	185	129	Peak
5530	93.12	84.19			34.42	8.58	34.07	196	121	Average
5530	101.25	92.32			34.42	8.58	34.07	196	121	Peak
*5723.96	53.02	43.86	68.2	-15.18	34.62	8.65	34.11	196	121	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
5457.84	45.32	36.5	54	-8.68	34.36	8.51	34.05	232	105	Average
5457.84	60.1	51.28	74	-13.9	34.36	8.51	34.05	232	105	Peak
*5469.36	59.04	50.21	68.2	-9.16	34.37	8.51	34.05	232	105	Peak
5530	90.44	81.51			34.42	8.58	34.07	263	113	Average
5530	97.85	88.92			34.42	8.58	34.07	263	113	Peak
*5725.96	52.33	43.17	68.2	-15.87	34.62	8.65	34.11	263	113	Peak

Remarks:

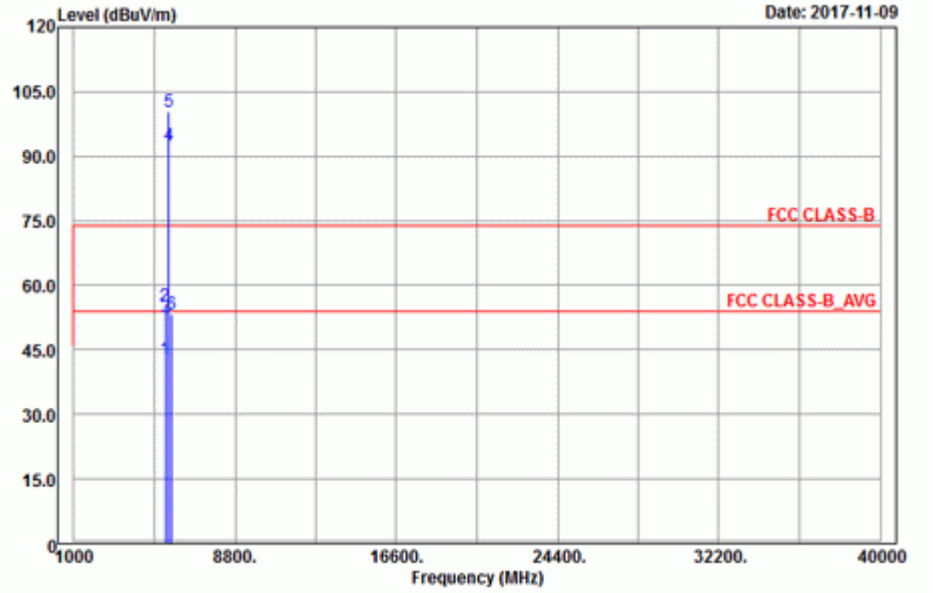
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5530 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



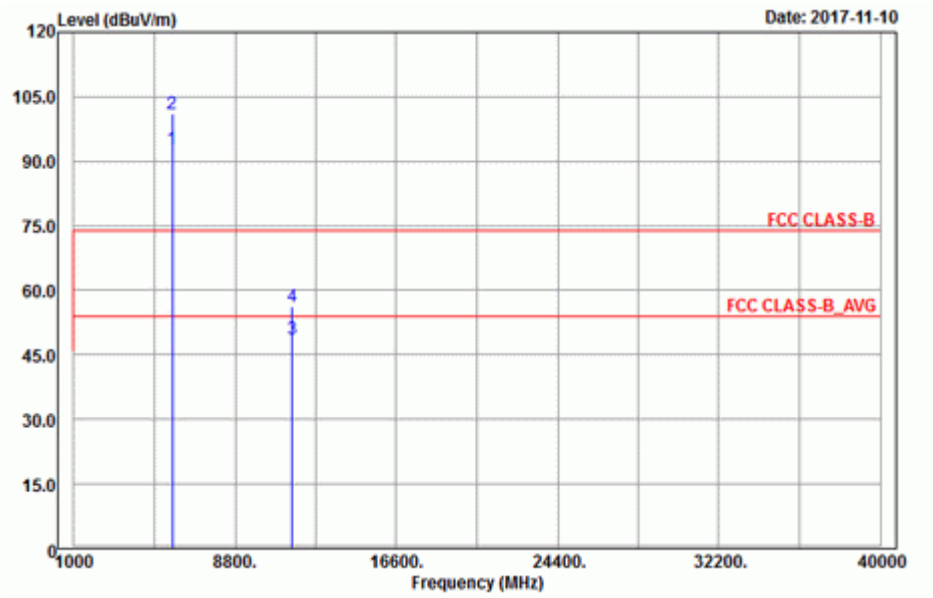
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.92	44.37	35.55	54	-9.63	34.36	8.51	34.05	205	121	Average
5459.92	59.14	50.32	74	-14.86	34.36	8.51	34.05	205	108	Peak
*5469.2	56.29	47.46	68.2	-11.91	34.37	8.51	34.05	205	108	Peak
5610	96.53	87.5			34.5	8.61	34.08	205	121	Average
5610	104.41	95.38			34.5	8.61	34.08	205	121	Peak
*5725.4	59.02	49.86	68.2	-9.18	34.62	8.65	34.11	205	108	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
5409.36	42.99	34.27	54	-11.01	34.32	8.44	34.04	288	115	Average
5409.36	55.24	46.52	74	-18.76	34.32	8.44	34.04	288	115	Peak
*5470.8	52.66	43.8	68.2	-15.54	34.37	8.54	34.05	288	115	Peak
5610	92.54	83.51			34.5	8.61	34.08	288	115	Average
5610	100.32	91.29			34.5	8.61	34.08	288	115	Peak
*5725.8	53.36	44.2	68.2	-14.84	34.62	8.65	34.11	288	115	Peak

Remarks:

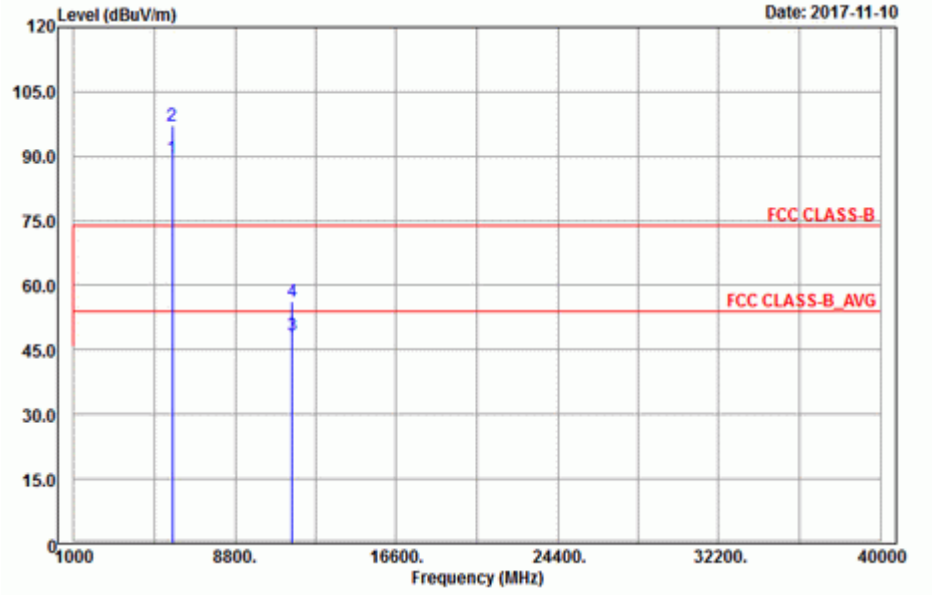
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5610 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

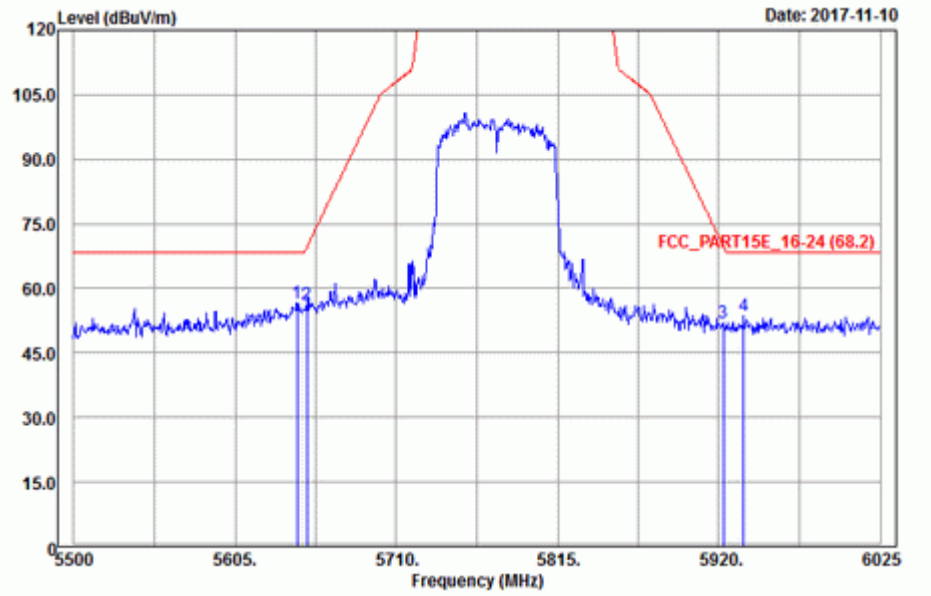
<Spurious Emission>
Horizontal



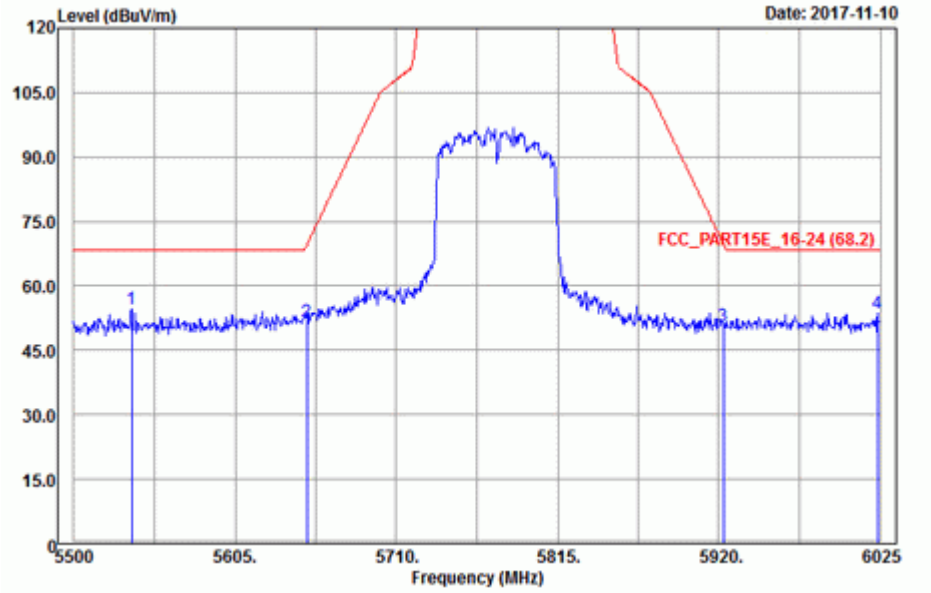
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5775	92.86	83.63			34.68	8.67	34.12	210	120	Average
5775	101.03	91.8			34.68	8.67	34.12	210	120	Peak
11550	48.77	33.5	54	-5.23	37.97	12.68	35.38	139	56	Average
11550	56.11	40.84	74	-17.89	37.97	12.68	35.38	139	56	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
5775	89.46	80.23			34.68	8.67	34.12	270	112	Average
5775	97.11	87.88			34.68	8.67	34.12	270	112	Peak
11550	48.26	32.99	54	-5.74	37.97	12.68	35.38	191	234	Average
11550	56.12	40.85	74	-17.88	37.97	12.68	35.38	191	234	Peak

<Ouf of Band Emission (OOBE)>

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
*5645.425	56.51	47.44	68.2	-11.69	34.54	8.62	34.09	210	120	Peak
5651.725	56.23	47.14	69.48	-13.25	34.56	8.62	34.09	210	120	Peak
5923.15	51.94	42.54	69.57	-17.63	34.83	8.73	34.16	210	120	Peak
*5936.275	53.56	44.16	68.2	-14.64	34.83	8.73	34.16	210	120	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
*5537.8	54.61	45.67	68.2	-13.59	34.43	8.58	34.07	270	112	Peak
5651.725	51.56	42.47	69.48	-17.92	34.56	8.62	34.09	270	112	Peak
5923.15	50.71	41.31	69.57	-18.86	34.83	8.73	34.16	270	112	Peak
*6023.425	53.55	44.04	68.2	-14.65	34.92	8.77	34.18	270	112	Peak

Remarks:

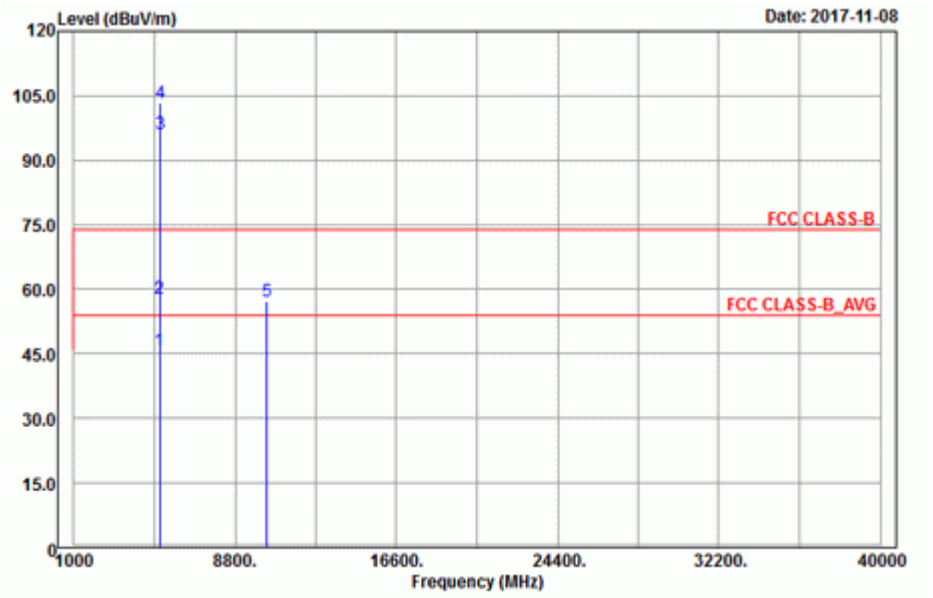
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band

Mode B

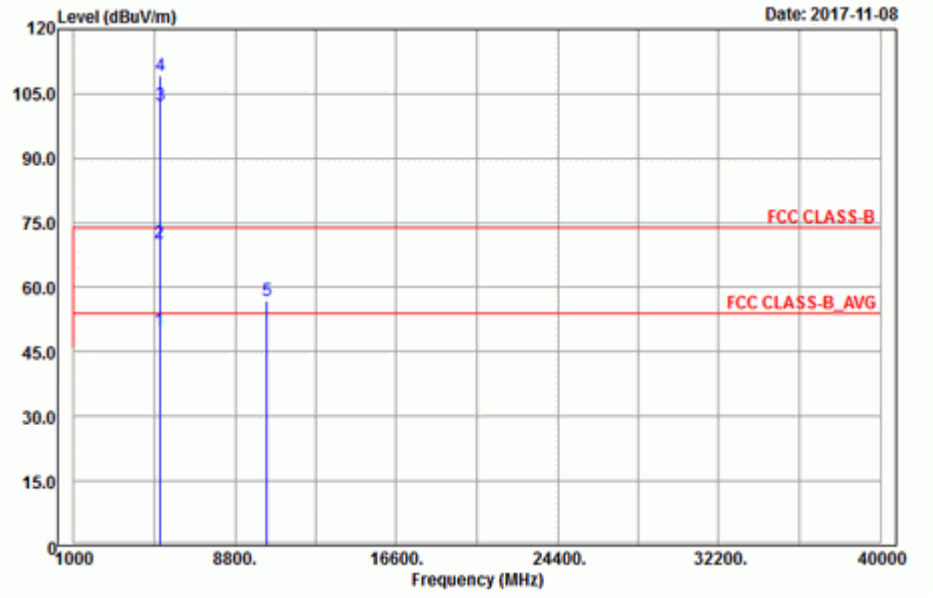
802.11a

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

Horizontal



Vertical



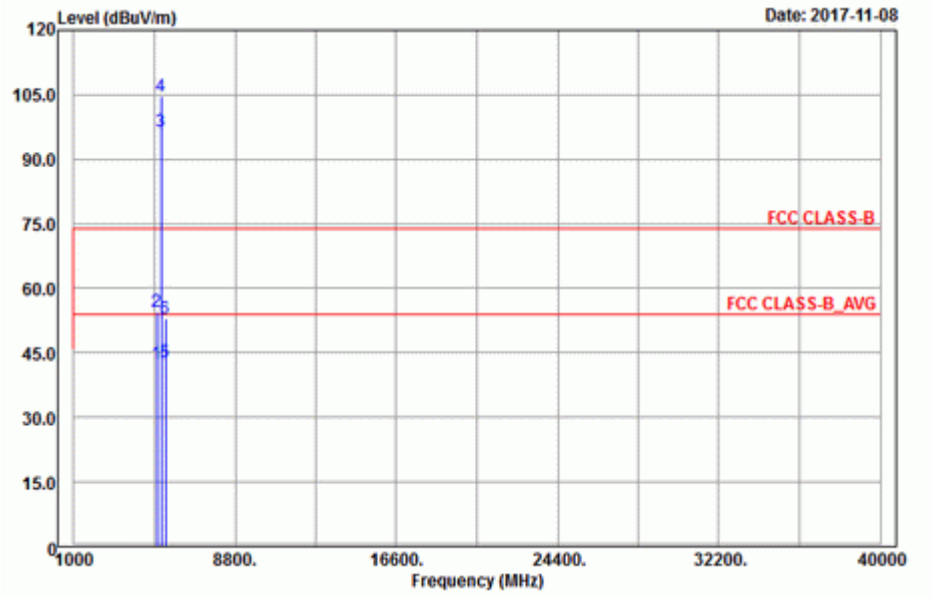
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.55	45.88	37.63	54	-8.12	34.12	8.13	34	139	158	Average
5149.55	57.94	49.69	74	-16.06	34.12	8.13	34	139	158	Peak
5180	96.04	87.73			34.15	8.16	34	151	163	Average
5180	103.35	95.04			34.15	8.16	34	151	163	Peak
10360	57.28	42.98	68.2	-10.92	37.12	12.3	35.12	134	69	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
5148.95	50.08	41.83	54	-3.92	34.12	8.13	34	204	210	Average
5148.95	70.32	62.07	74	-3.68	34.12	8.13	34	204	210	Peak
5180	102.29	93.98			34.15	8.16	34	216	210	Average
5180	109.25	100.94			34.15	8.16	34	216	210	Peak
*10360	56.88	42.58	68.2	-11.32	37.12	12.3	35.12	137	195	Peak

Remarks:

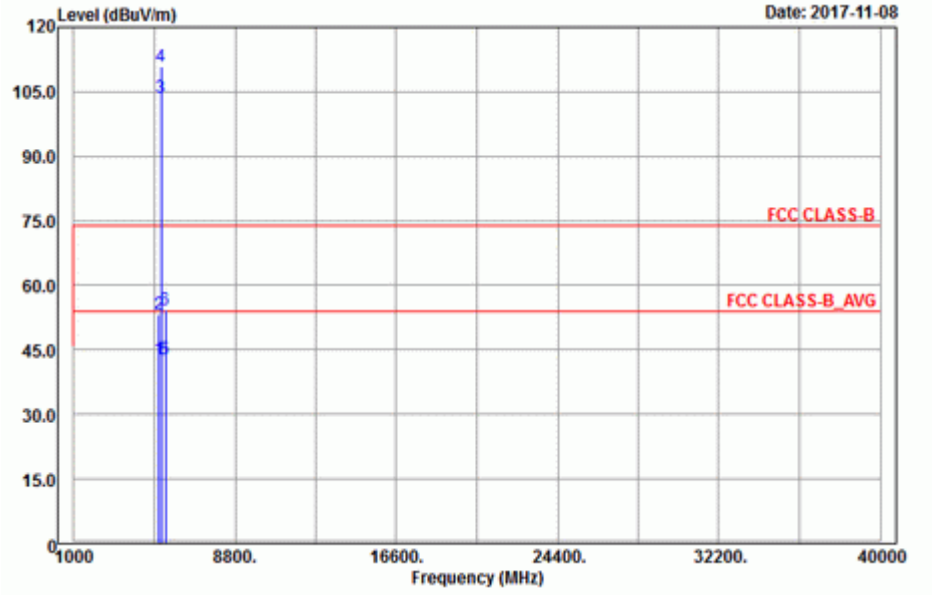
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



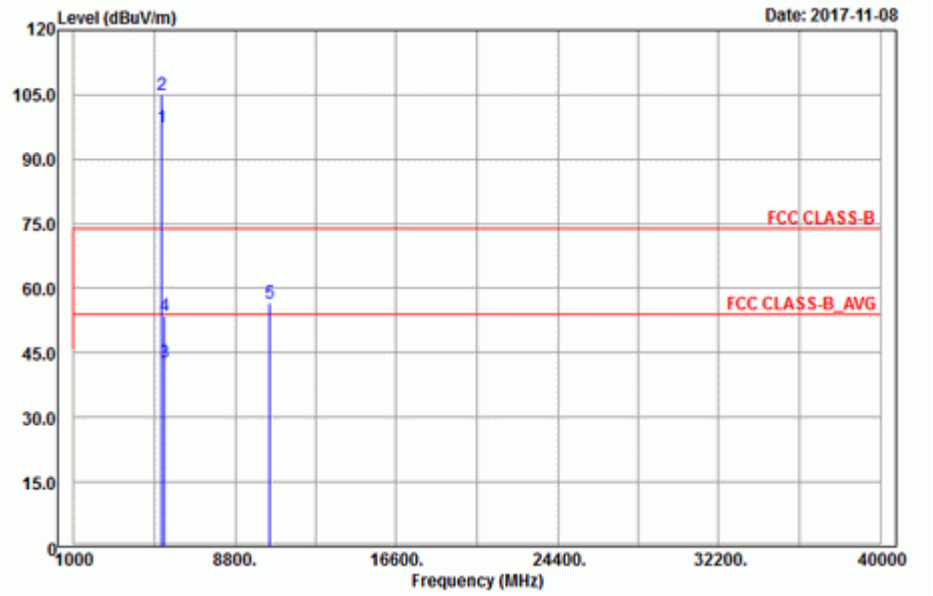
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5024.6	42.65	34.62	54	-11.35	34.03	7.97	33.97	151	163	Average
5024.6	54.46	46.43	74	-19.54	34.03	7.97	33.97	151	163	Peak
5220	96.47	88.08			34.17	8.22	34	151	163	Average
5220	104.78	96.39			34.17	8.22	34	151	163	Peak
5432.94	42.85	34.06	54	-11.15	34.35	8.48	34.04	151	163	Average
5432.94	53.07	44.28	74	-20.93	34.35	8.48	34.04	151	163	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
5133.5	42.96	34.71	54	-11.04	34.11	8.13	33.99	216	210	Average
5133.5	53.45	45.2	74	-20.55	34.11	8.13	33.99	216	210	Peak
5220	103.75	95.36			34.17	8.22	34	216	210	Average
5220	110.81	102.42			34.17	8.22	34	216	210	Peak
5433.16	42.82	34.03	54	-11.18	34.35	8.48	34.04	216	210	Average
5433.16	54.31	45.52	74	-19.69	34.35	8.48	34.04	216	210	Peak

Remarks:

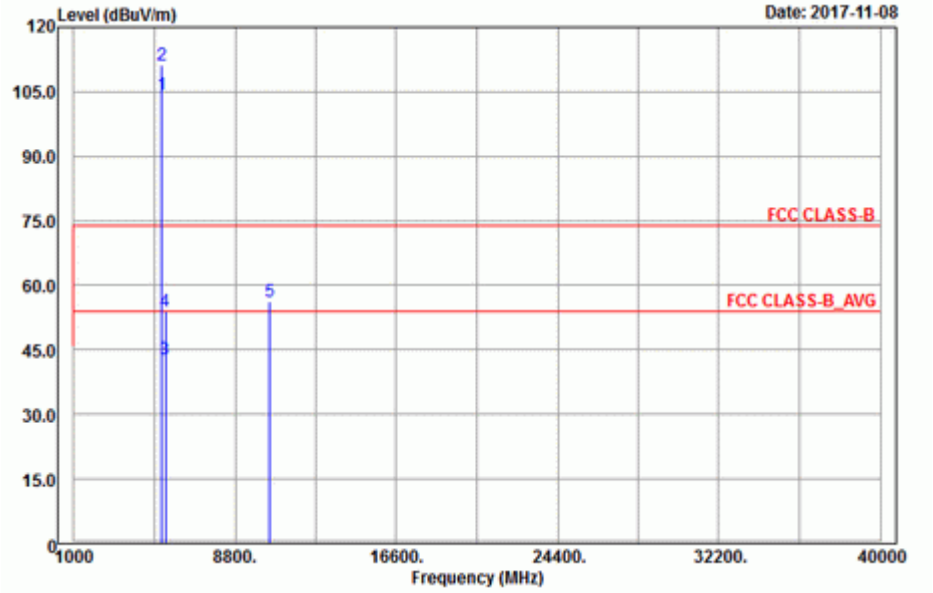
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



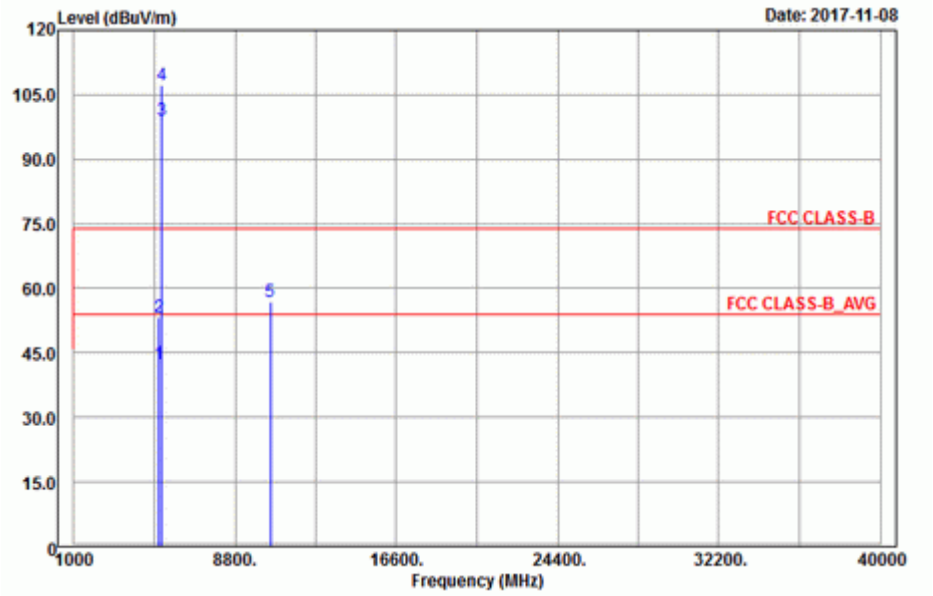
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	97.53	89.09			34.19	8.26	34.01	151	163	Average
5240	104.96	96.52			34.19	8.26	34.01	151	163	Peak
5376.73	42.87	34.21	54	-11.13	34.29	8.41	34.04	151	163	Average
5376.73	53.68	45.02	74	-20.32	34.29	8.41	34.04	151	163	Peak
*10480	56.68	42.17	68.2	-11.52	37.19	12.53	35.21	125	323	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
5240	104.2	95.76			34.19	8.26	34.01	216	210	Average
5240	111.04	102.6			34.19	8.26	34.01	216	210	Peak
5439.76	42.79	34	54	-11.21	34.35	8.48	34.04	216	210	Average
5439.76	53.95	45.16	74	-20.05	34.35	8.48	34.04	216	210	Peak
*10480	56.11	41.6	68.2	-12.09	37.19	12.53	35.21	136	185	Peak

Remarks:

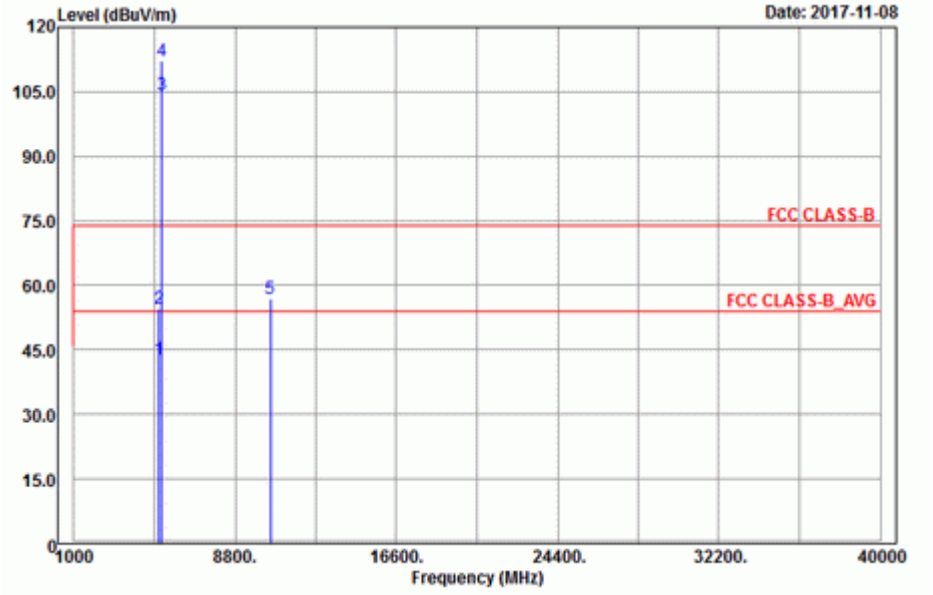
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



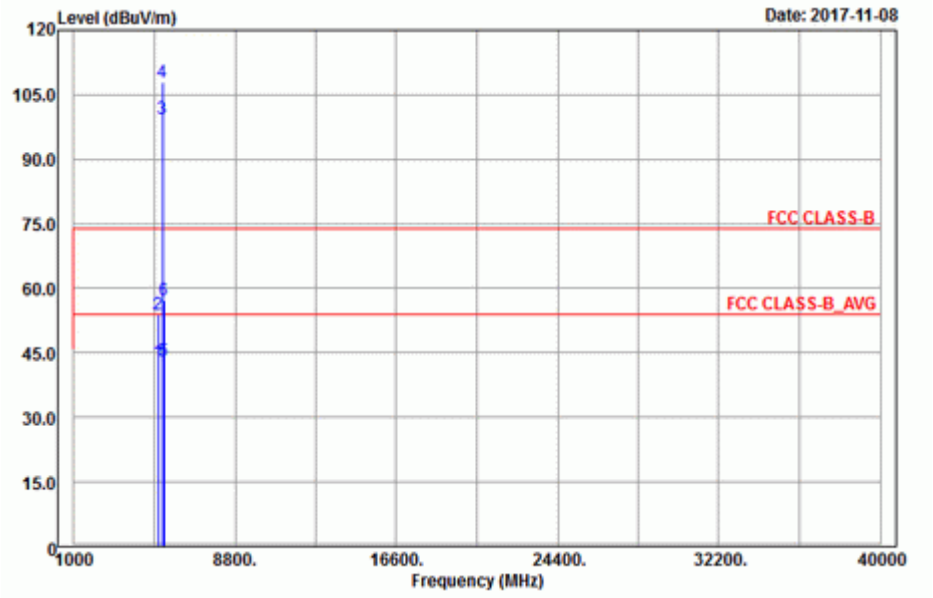
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5113.25	42.62	34.42	54	-11.38	34.09	8.1	33.99	103	150	Average
5113.25	53.32	45.12	74	-20.68	34.09	8.1	33.99	103	150	Peak
5260	99.2	90.74			34.21	8.26	34.01	103	150	Average
5260	107.17	98.71			34.21	8.26	34.01	103	150	Peak
*10520	56.76	42.17	68.2	-11.44	37.21	12.61	35.23	131	28	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
5135.45	42.88	34.63	54	-11.12	34.11	8.13	33.99	240	210	Average
5135.45	54.61	46.36	74	-19.39	34.11	8.13	33.99	240	210	Peak
5260	104.41	95.95			34.21	8.26	34.01	240	210	Average
5260	112.22	103.76			34.21	8.26	34.01	240	210	Peak
*10520	56.85	42.26	68.2	-11.35	37.21	12.61	35.23	158	133	Peak

Remarks:

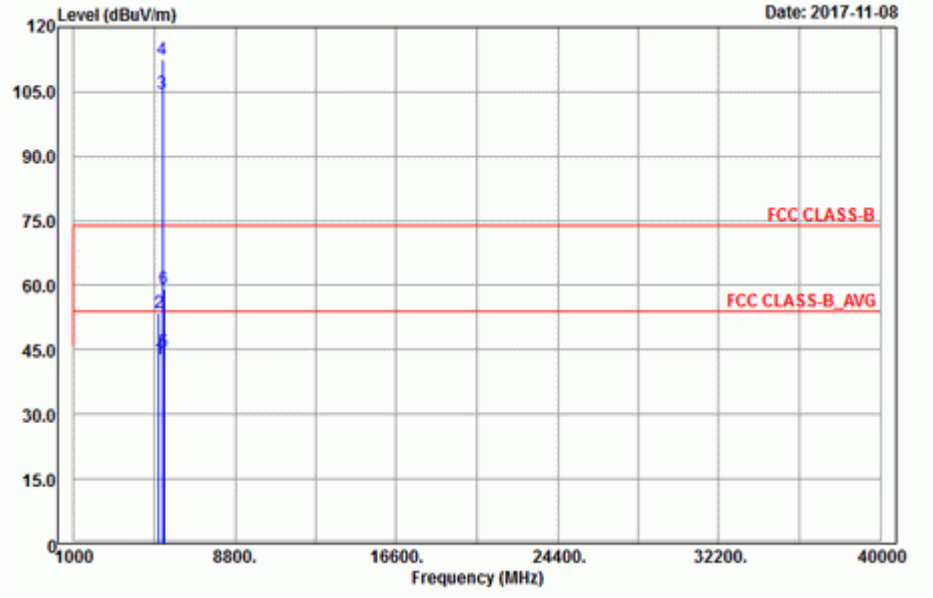
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



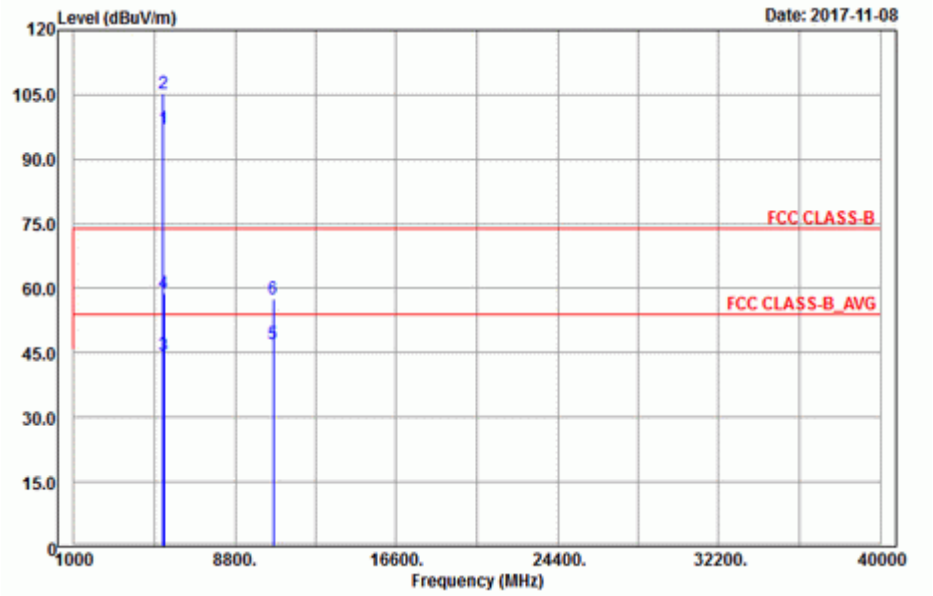
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5099.15	42.69	34.53	54	-11.31	34.08	8.07	33.99	102	150	Average
5099.15	54.05	45.89	74	-19.95	34.08	8.07	33.99	102	150	Peak
5300	99.46	90.92			34.24	8.32	34.02	102	150	Average
5300	107.95	99.41			34.24	8.32	34.02	102	150	Peak
5352.2	43.26	34.63	54	-10.74	34.28	8.38	34.03	102	150	Average
5352.2	57.2	48.57	74	-16.8	34.28	8.38	34.03	102	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5103.95	42.74	34.58	54	-11.26	34.08	8.07	33.99	240	210	Average
5103.95	53.49	45.33	74	-20.51	34.08	8.07	33.99	240	210	Peak
5300	104.63	96.09			34.24	8.32	34.02	240	210	Average
5300	112.47	103.93			34.24	8.32	34.02	240	210	Peak
5350	44.48	35.85	54	-9.52	34.28	8.38	34.03	240	210	Average
5350	59.32	50.69	74	-14.68	34.28	8.38	34.03	240	210	Peak

Remarks:

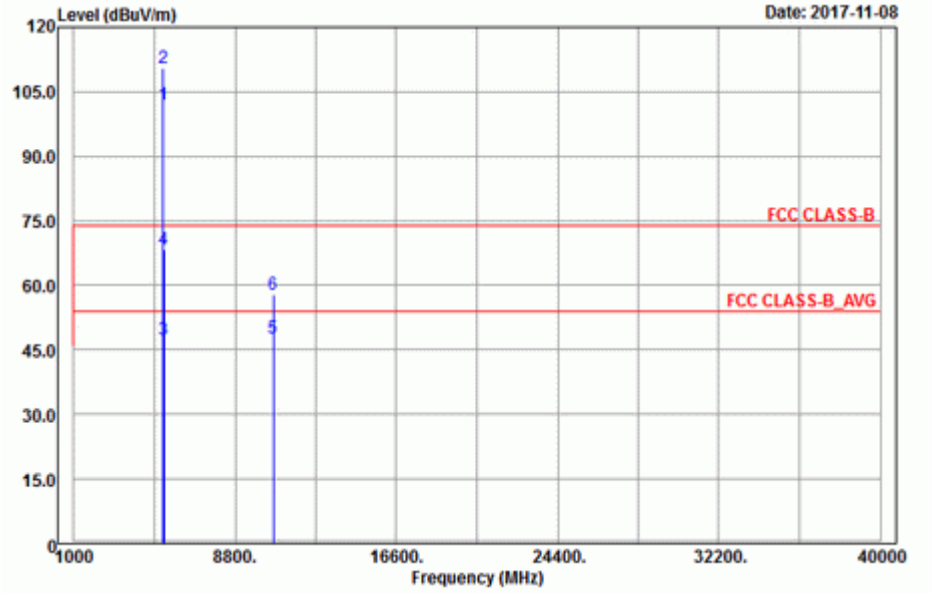
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



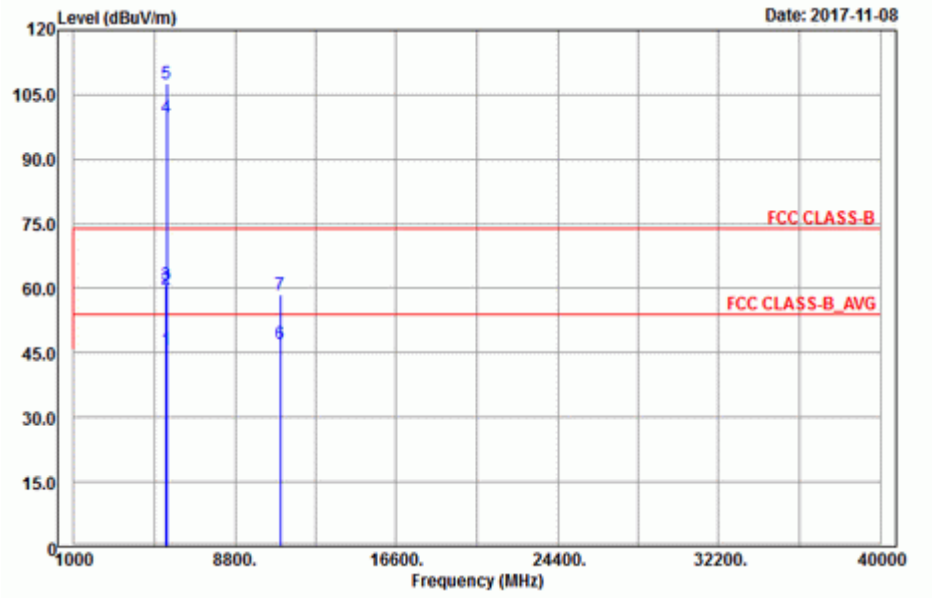
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	97.1	88.52			34.25	8.35	34.02	102	150	Average
5320	105.19	96.61			34.25	8.35	34.02	102	150	Peak
5350	44.49	35.86	54	-9.51	34.28	8.38	34.03	115	150	Average
5350	59.02	50.39	74	-14.98	34.28	8.38	34.03	115	150	Peak
10640	47.22	32.49	54	-6.78	37.31	12.71	35.29	142	261	Average
10640	57.5	42.77	74	-16.5	37.31	12.71	35.29	142	261	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
5320	102.1	93.52			34.25	8.35	34.02	240	210	Average
5320	110.36	101.78			34.25	8.35	34.02	240	210	Peak
5350.11	47.41	38.78	54	-6.59	34.28	8.38	34.03	225	206	Average
5350.11	68.49	59.86	74	-5.51	34.28	8.38	34.03	225	206	Peak
10640	47.63	32.9	54	-6.37	37.31	12.71	35.29	138	224	Average
10640	57.98	43.25	74	-16.02	37.31	12.71	35.29	138	224	Peak

Remarks:

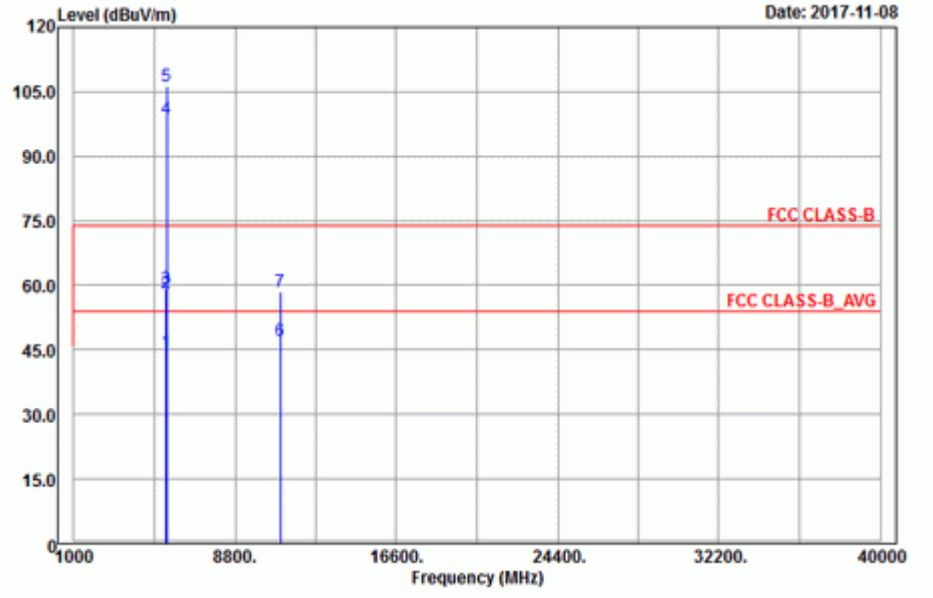
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



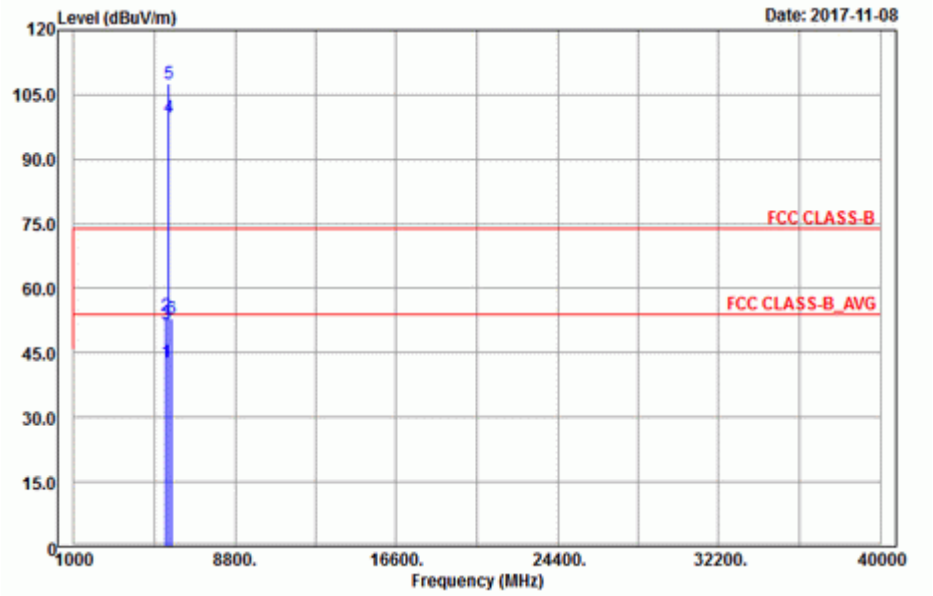
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	45.61	36.79	54	-8.39	34.36	8.51	34.05	308	106	Average
5460	59.73	50.91	74	-14.27	34.36	8.51	34.05	308	106	Peak
*5469.68	60.86	52.03	68.2	-7.34	34.37	8.51	34.05	308	106	Peak
5500	99.62	90.7			34.4	8.57	34.05	308	106	Average
5500	107.51	98.59			34.4	8.57	34.05	308	106	Peak
11000	47.08	32	54	-6.92	37.6	12.96	35.48	117	325	Average
11000	58.45	43.37	74	-15.55	37.6	12.96	35.48	117	325	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	44.6	35.78	54	-9.4	34.36	8.51	34.05	205	105	Average
5460	58.08	49.26	74	-15.92	34.36	8.51	34.05	205	105	Peak
*5470.8	59.16	50.3	68.2	-9.04	34.37	8.54	34.05	205	105	Peak
5500	98.65	89.73			34.4	8.57	34.05	205	105	Average
5500	106.32	97.4			34.4	8.57	34.05	205	105	Peak
11000	47.22	32.14	54	-6.78	37.6	12.96	35.48	110	105	Average
11000	58.39	43.31	74	-15.61	37.6	12.96	35.48	110	105	Peak

Remarks:

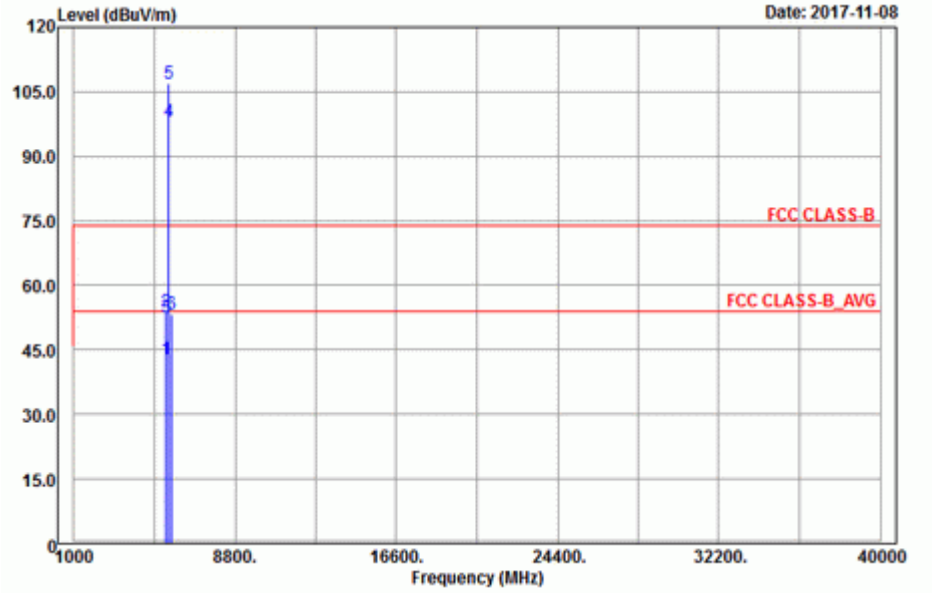
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



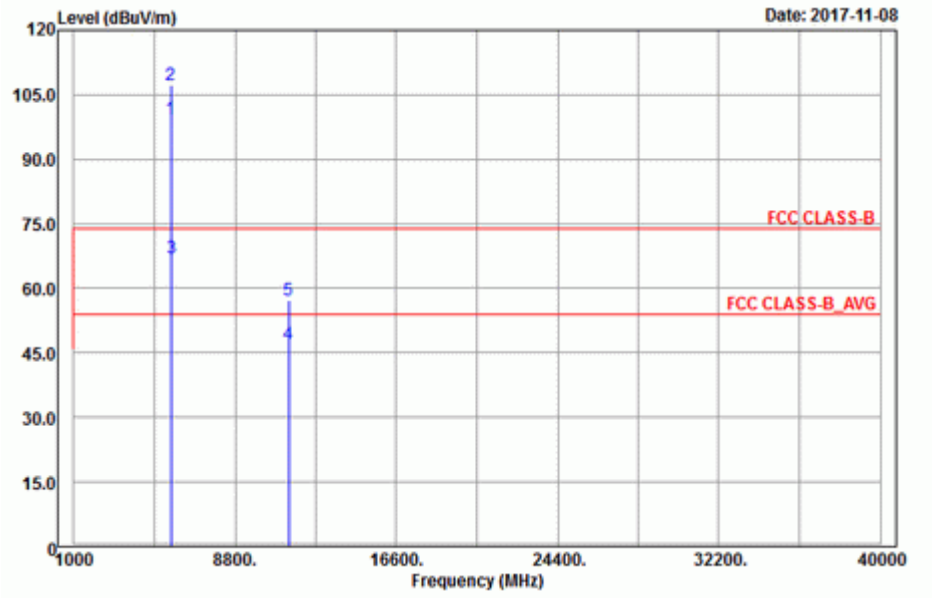
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5452.88	42.98	34.16	54	-11.02	34.36	8.51	34.05	308	106	Average
5452.88	53.47	44.65	74	-20.53	34.36	8.51	34.05	308	106	Peak
*5469.52	51.81	42.98	68.2	-16.39	34.37	8.51	34.05	308	106	Peak
5580	99.74	90.75			34.47	8.6	34.08	308	106	Average
5580	107.68	98.69			34.47	8.6	34.08	308	106	Peak
*5725.72	53.13	43.97	68.2	-15.07	34.62	8.65	34.11	308	106	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
5445.04	42.87	34.05	54	-11.13	34.35	8.51	34.04	205	105	Average
5445.04	53.89	45.07	74	-20.11	34.35	8.51	34.04	205	105	Peak
*5470.32	52.72	43.89	68.2	-15.48	34.37	8.51	34.05	205	105	Peak
5580	98.05	89.06			34.47	8.6	34.08	205	105	Average
5580	106.78	97.79			34.47	8.6	34.08	205	105	Peak
*5724.44	53.15	43.99	68.2	-15.05	34.62	8.65	34.11	205	105	Peak

Remarks:

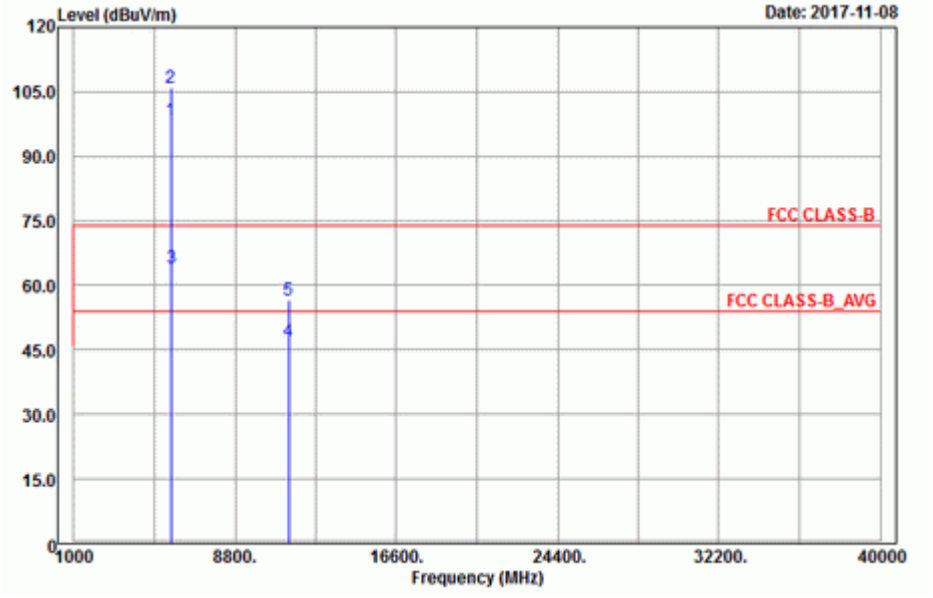
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



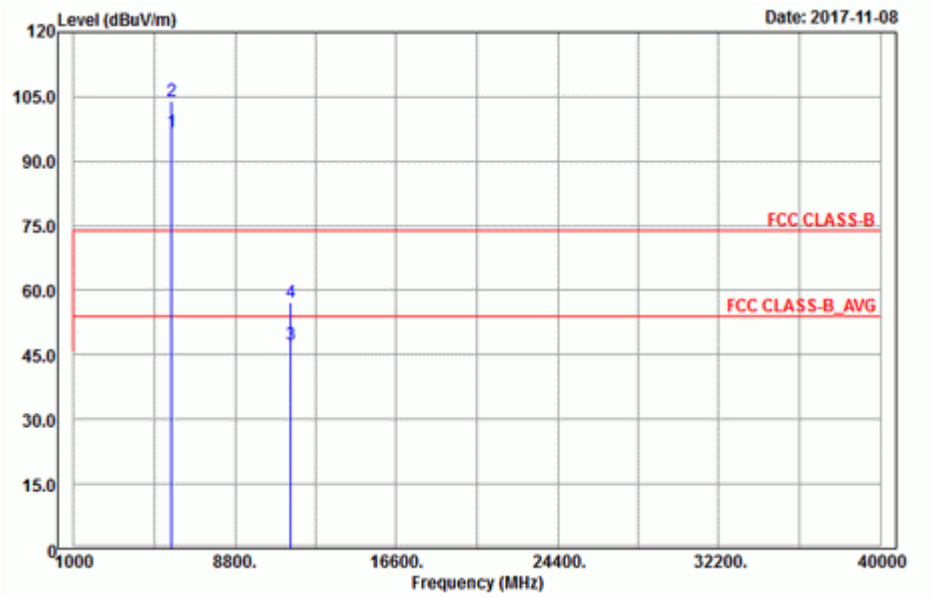
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	99.37	90.24			34.59	8.64	34.1	308	106	Average
5700	107.34	98.21			34.59	8.64	34.1	308	106	Peak
*5724.76	67.03	57.87	68.2	-1.17	34.62	8.65	34.11	286	115	Peak
11400	47.1	32	54	-6.9	37.84	12.67	35.41	107	109	Average
11400	57.11	42.01	74	-16.89	37.84	12.67	35.41	107	109	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
5700	98.43	89.3			34.59	8.64	34.1	205	105	Average
5700	106.1	96.97			34.59	8.64	34.1	205	105	Peak
*5723.96	64.19	55.03	68.2	-4.01	34.62	8.65	34.11	205	105	Peak
11400	47.11	32.01	54	-6.89	37.84	12.67	35.41	119	243	Average
11400	56.42	41.32	74	-17.58	37.84	12.67	35.41	119	243	Peak

Remarks:

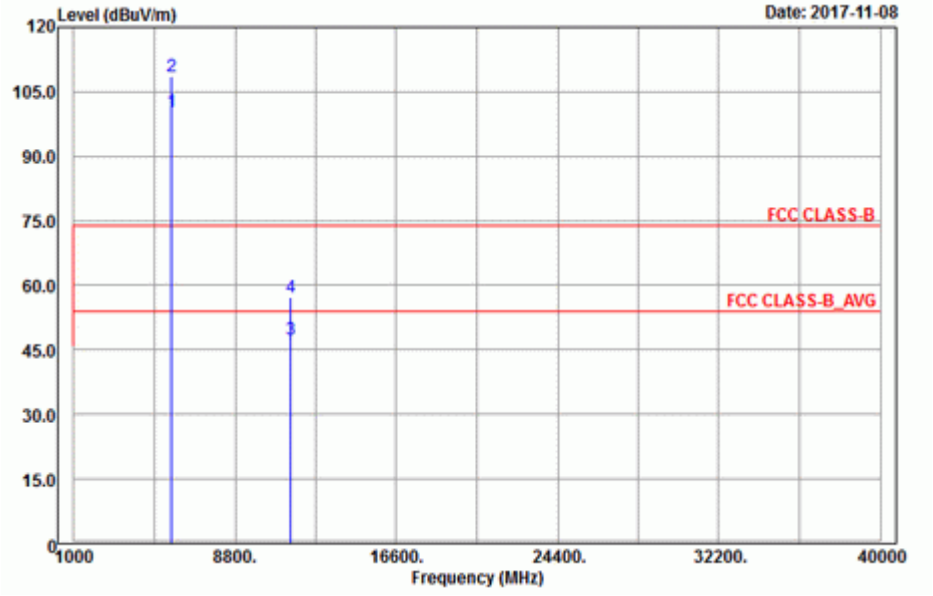
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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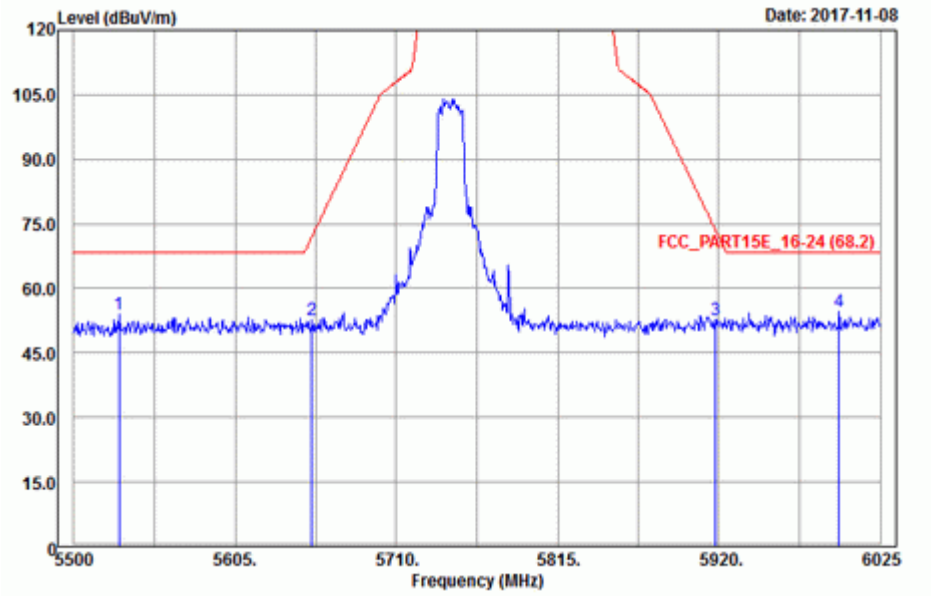
Horizontal



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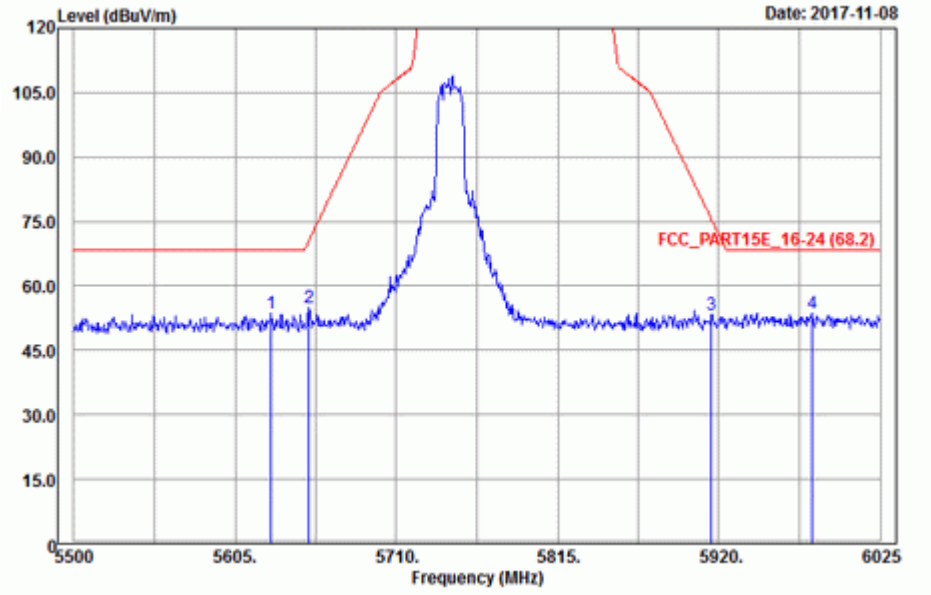


<Spurious Emission>

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
5745	96.63	87.44			34.64	8.66	34.11	200	194	Average
5745	104.07	94.88			34.64	8.66	34.11	200	194	Peak
11490	47.31	32.19	54	-6.69	37.89	12.62	35.39	109	325	Average
11490	57.23	42.11	74	-16.77	37.89	12.62	35.39	109	325	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
5745	100.25	91.06			34.64	8.66	34.11	100	207	Average
5745	108.42	99.23			34.64	8.66	34.11	100	207	Peak
11490	47.37	32.25	54	-6.63	37.89	12.62	35.39	125	158	Average
11490	57.13	42.01	74	-16.87	37.89	12.62	35.39	125	158	Peak

<Ouf of Band Emission (OOBE)>

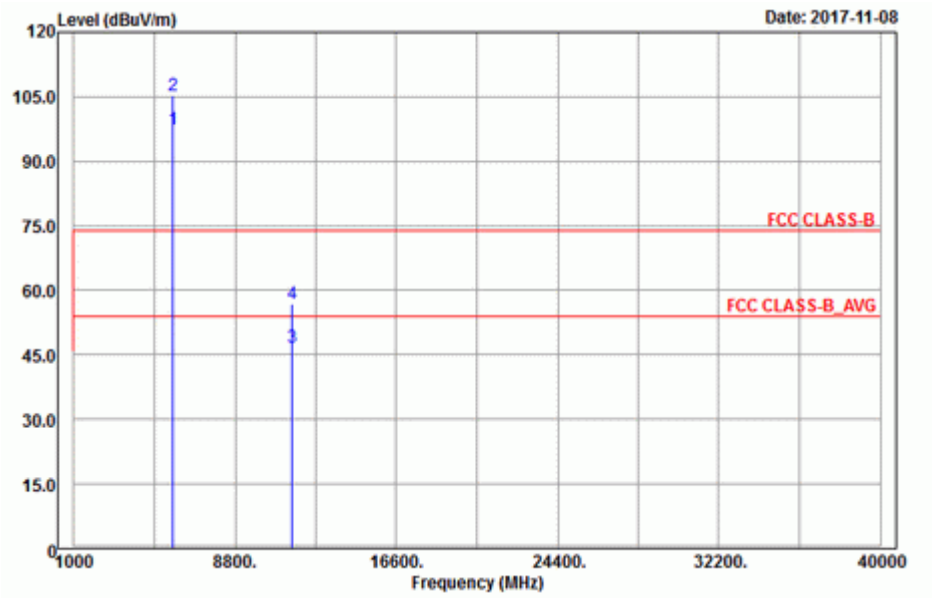
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5529.4	53.94	45.01	68.2	-14.26	34.42	8.58	34.07	200	194	Peak
5654.875	52.72	43.63	71.81	-19.09	34.56	8.63	34.1	200	194	Peak
5917.9	52.62	43.24	73.45	-20.83	34.81	8.73	34.16	200	194	Peak
*5998.225	54.56	45.07	68.2	-13.64	34.9	8.76	34.17	200	194	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
*5628.625	53.69	44.64	68.2	-14.51	34.52	8.62	34.09	100	207	Peak
5653.3	54.99	45.89	70.64	-15.65	34.56	8.63	34.09	100	207	Peak
5915.275	53.45	44.07	75.4	-21.95	34.81	8.73	34.16	100	207	Peak
*5980.9	53.76	44.3	68.2	-14.44	34.88	8.75	34.17	100	207	Peak

Remarks:

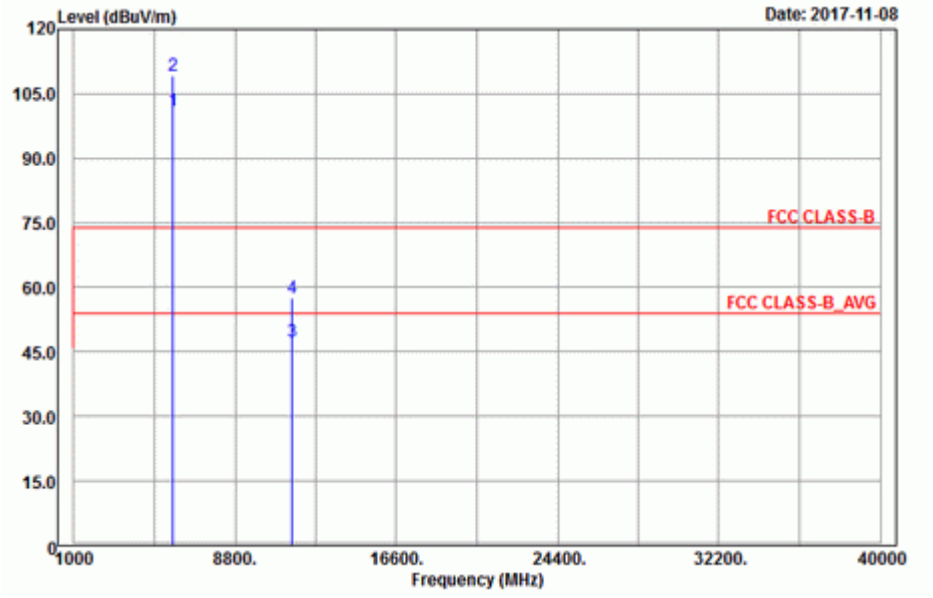
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

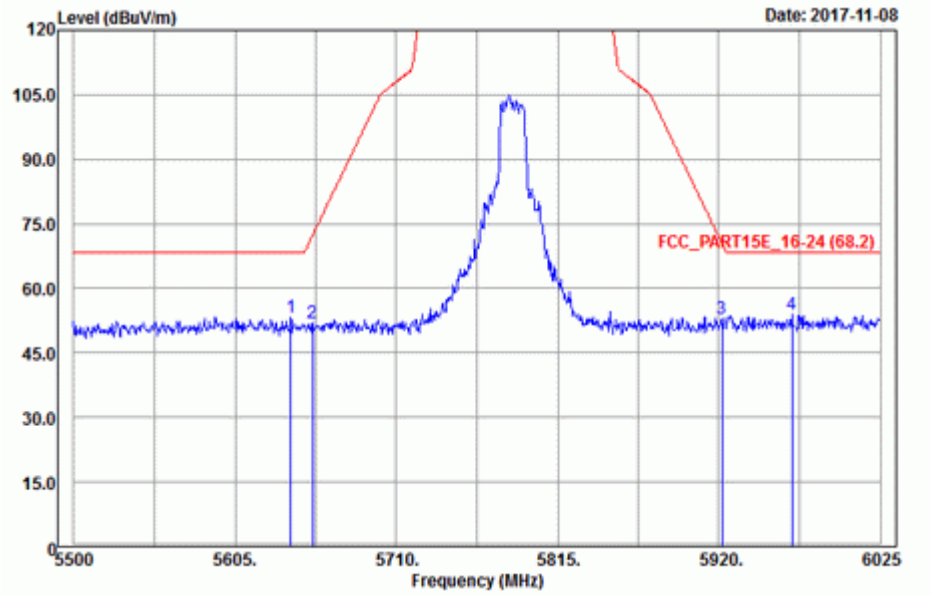
<Spurious Emission>
Horizontal



Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



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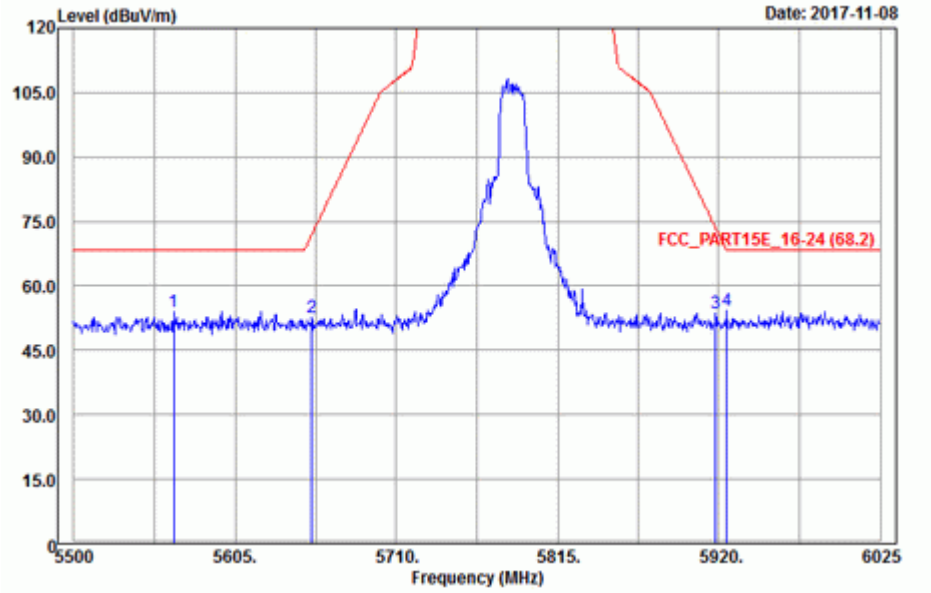


<Spurious Emission>

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
5785	97.47	88.24			34.68	8.68	34.13	200	194	Average
5785	105.29	96.06			34.68	8.68	34.13	200	194	Peak
11570	46.79	31.48	54	-7.21	38	12.68	35.37	159	336	Average
11570	56.98	41.67	74	-17.02	38	12.68	35.37	159	336	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
5785	101.14	91.91			34.68	8.68	34.13	100	207	Average
5785	109.2	99.97			34.68	8.68	34.13	100	207	Peak
11570	47.56	32.25	54	-6.44	38	12.68	35.37	158	8	Average
11570	57.44	42.13	74	-16.56	38	12.68	35.37	158	8	Peak

<Ouf of Band Emission (OOBE)>

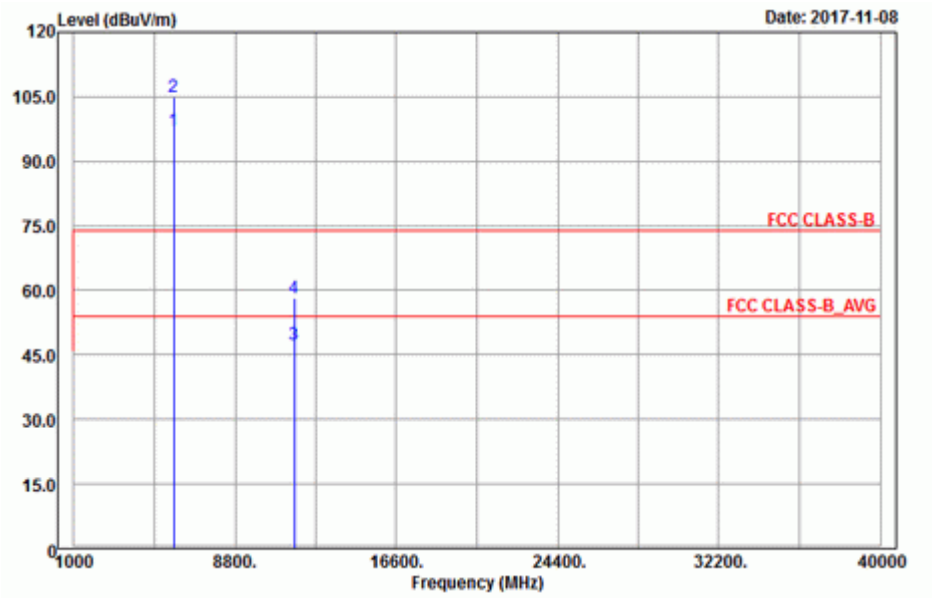
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5641.225	53.33	44.26	68.2	-14.87	34.54	8.62	34.09	200	194	Peak
5655.4	52.04	42.95	72.2	-20.16	34.56	8.63	34.1	200	194	Peak
5922.1	52.92	43.52	70.35	-17.43	34.83	8.73	34.16	200	194	Peak
*5967.775	53.86	44.41	68.2	-14.34	34.87	8.75	34.17	200	194	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
*5565.1	53.93	44.94	68.2	-14.27	34.47	8.59	34.07	100	207	Peak
5654.875	52.58	43.49	71.81	-19.23	34.56	8.63	34.1	100	207	Peak
5917.9	53.47	44.09	73.45	-19.98	34.81	8.73	34.16	100	207	Peak
*5925.25	54.21	44.81	68.2	-13.99	34.83	8.73	34.16	100	207	Peak

Remarks:

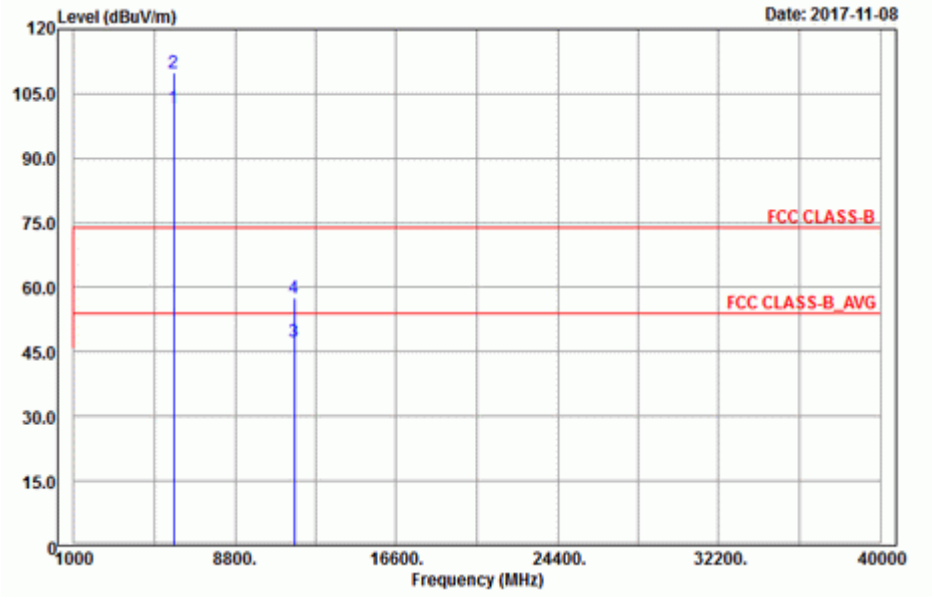
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

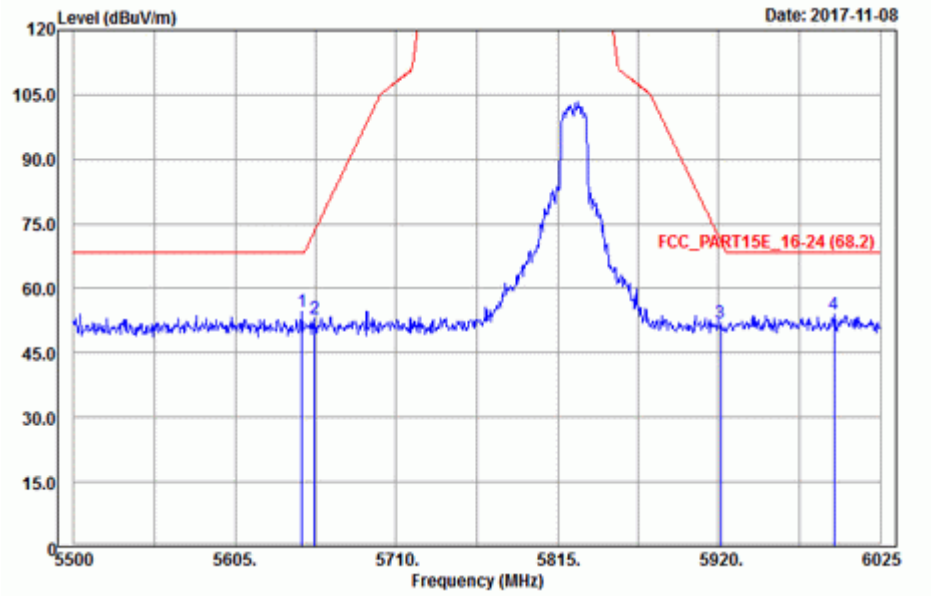
<Spurious Emission>
Horizontal



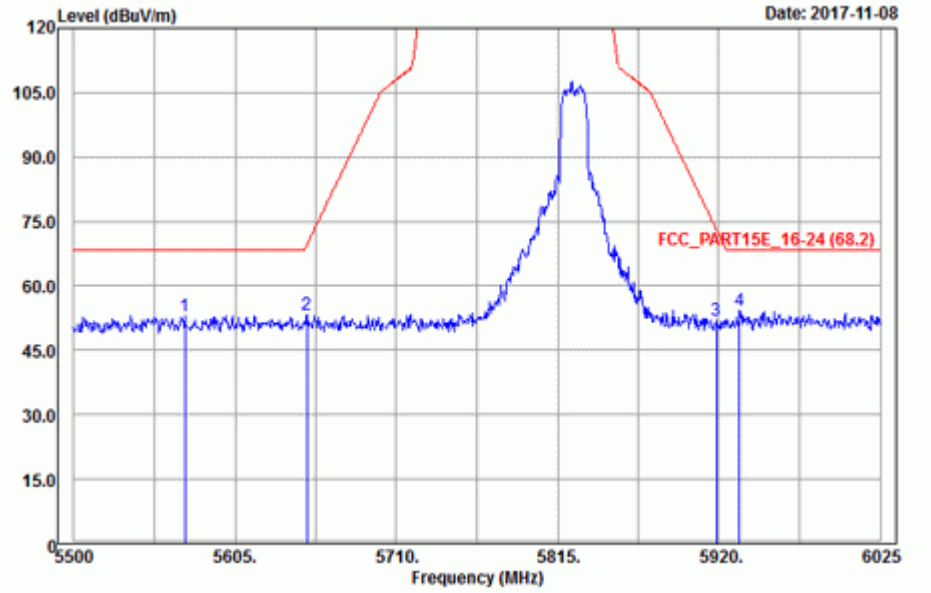
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5825	97.06	87.77			34.73	8.69	34.13	200	194	Average
5825	105	95.71			34.73	8.69	34.13	200	194	Peak
11650	47.53	32	54	-6.47	38.09	12.8	35.36	104	85	Average
11650	58.1	42.57	74	-15.9	38.09	12.8	35.36	104	85	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
5825	101.77	92.48			34.73	8.69	34.13	100	207	Average
5825	109.86	100.57			34.73	8.69	34.13	100	207	Peak
11650	47.48	31.95	54	-6.52	38.09	12.8	35.36	135	314	Average
11650	57.67	42.14	74	-16.33	38.09	12.8	35.36	135	314	Peak

<Ouf of Band Emission (OOBE)>

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
*5648.575	54.62	45.55	68.2	-13.58	34.54	8.62	34.09	200	194	Peak
5656.975	52.82	43.73	73.36	-20.54	34.56	8.63	34.1	200	194	Peak
5921.05	52.13	42.75	71.12	-18.99	34.81	8.73	34.16	200	194	Peak
*5995.075	53.85	44.36	68.2	-14.35	34.9	8.76	34.17	200	194	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
*5572.45	53	44.01	68.2	-15.2	34.47	8.59	34.07	100	207	Peak
5651.725	53.26	44.17	69.48	-16.22	34.56	8.62	34.09	100	207	Peak
5918.425	51.83	42.45	73.07	-21.24	34.81	8.73	34.16	100	207	Peak
*5933.65	54.37	44.97	68.2	-13.83	34.83	8.73	34.16	100	207	Peak

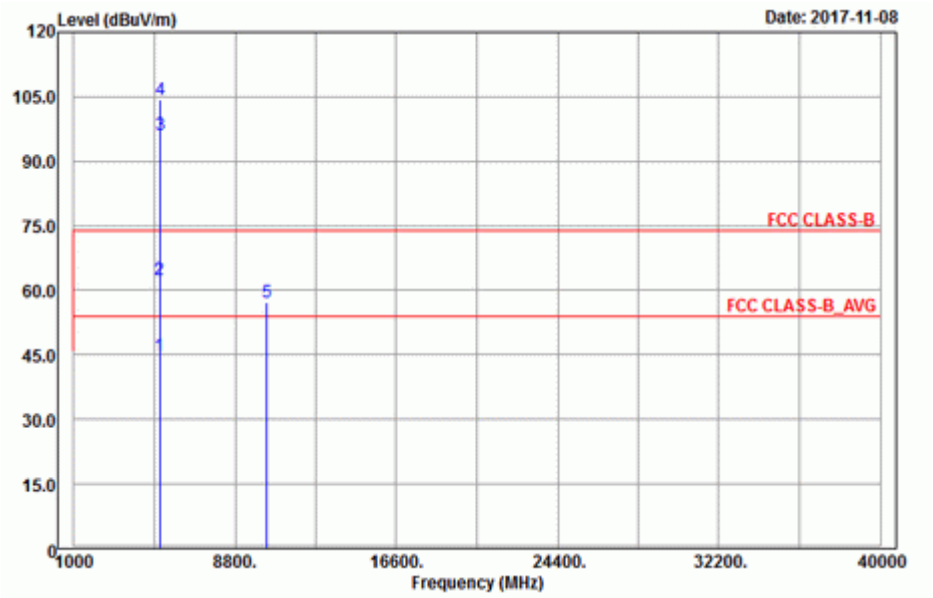
Remarks:

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

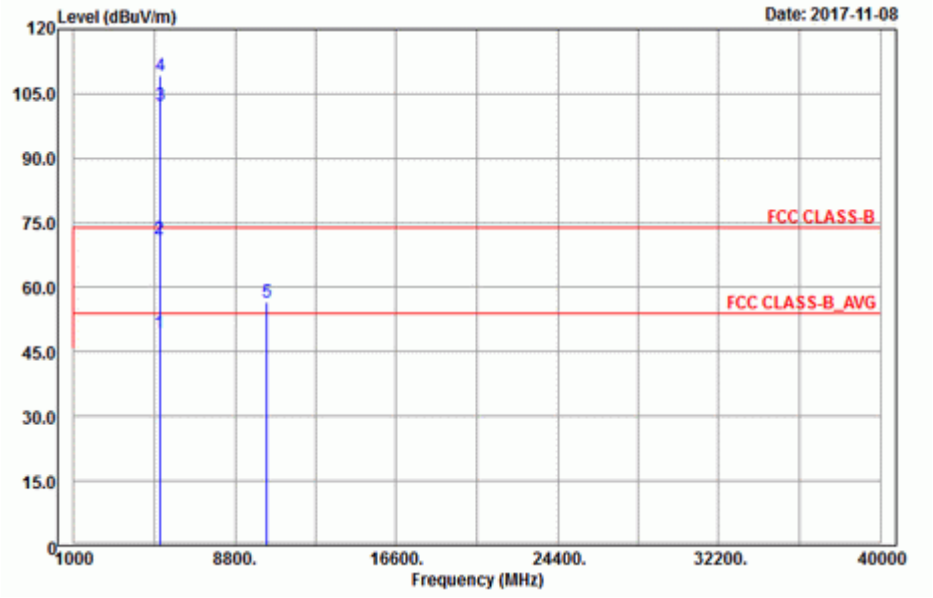
802.11ac (VHT20)

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

Horizontal



Vertical



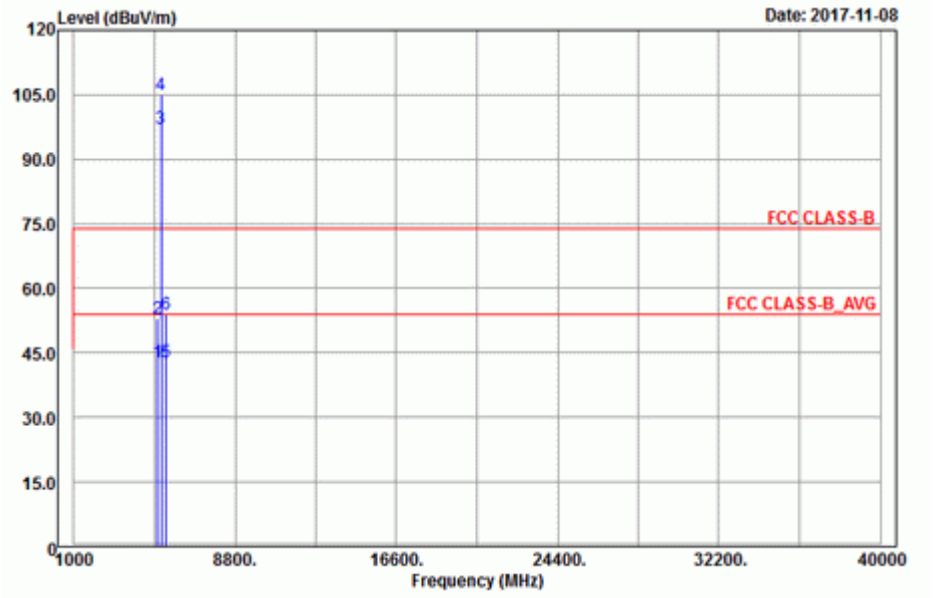
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.7	44.89	36.64	54	-9.11	34.12	8.13	34	139	163	Average
5149.7	62.51	54.26	74	-11.49	34.12	8.13	34	139	163	Peak
5180	96.19	87.88			34.15	8.16	34	151	163	Average
5180	104.46	96.15			34.15	8.16	34	151	163	Peak
*10360	57.36	43.06	68.2	-10.84	37.12	12.3	35.12	164	253	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
5148.65	49.34	41.09	54	-4.66	34.12	8.13	34	195	233	Average
5148.65	71.24	62.99	74	-2.76	34.12	8.13	34	195	233	Peak
5180	102.18	93.87			34.15	8.16	34	216	210	Average
5180	109.24	100.93			34.15	8.16	34	216	210	Peak
*10360	56.62	42.32	68.2	-11.58	37.12	12.3	35.12	125	118	Peak

Remarks:

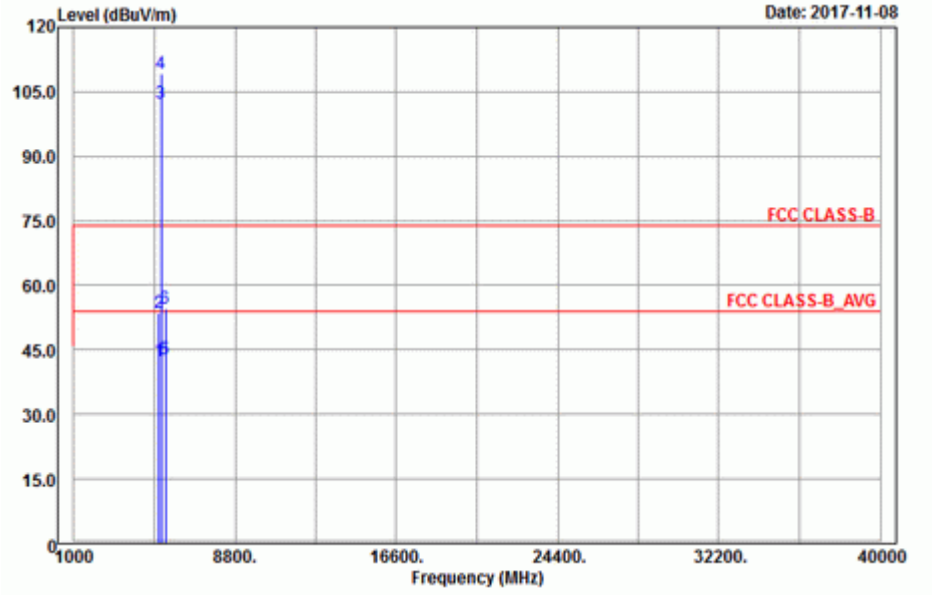
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



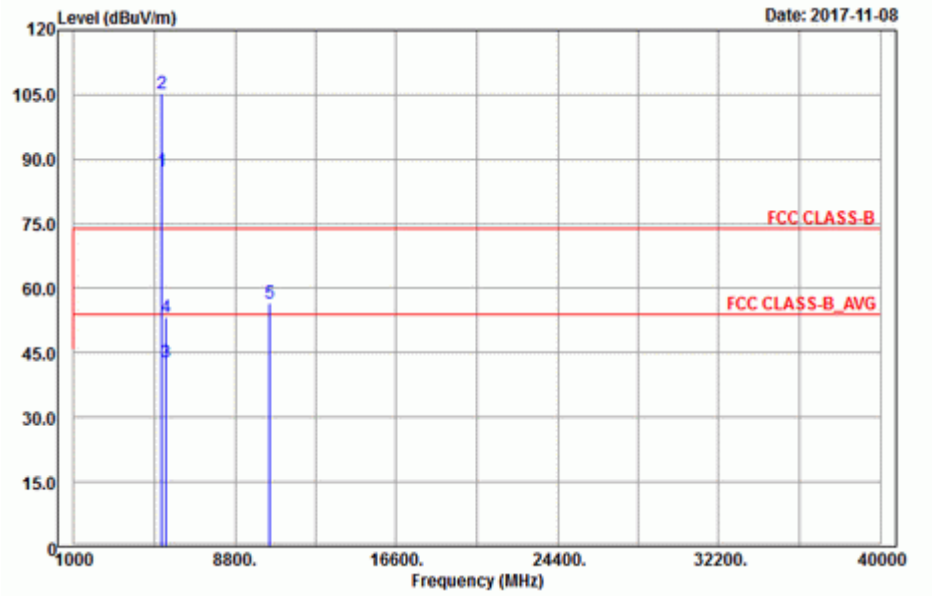
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5052.95	42.73	34.67	54	-11.27	34.04	8	33.98	151	163	Average
5052.95	52.88	44.82	74	-21.12	34.04	8	33.98	151	163	Peak
5220	96.95	88.56			34.17	8.22	34	151	163	Average
5220	104.86	96.47			34.17	8.22	34	151	163	Peak
5443.5	42.78	33.99	54	-11.22	34.35	8.48	34.04	151	163	Average
5443.5	54	45.21	74	-20	34.35	8.48	34.04	151	163	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
5127.95	42.66	34.44	54	-11.34	34.11	8.1	33.99	216	210	Average
5127.95	53.56	45.34	74	-20.44	34.11	8.1	33.99	216	210	Peak
5220	102.5	94.11			34.17	8.22	34	216	210	Average
5220	109.32	100.93			34.17	8.22	34	216	210	Peak
5426.34	42.87	34.1	54	-11.13	34.33	8.48	34.04	216	210	Average
5426.34	54.46	45.69	74	-19.54	34.33	8.48	34.04	216	210	Peak

Remarks:

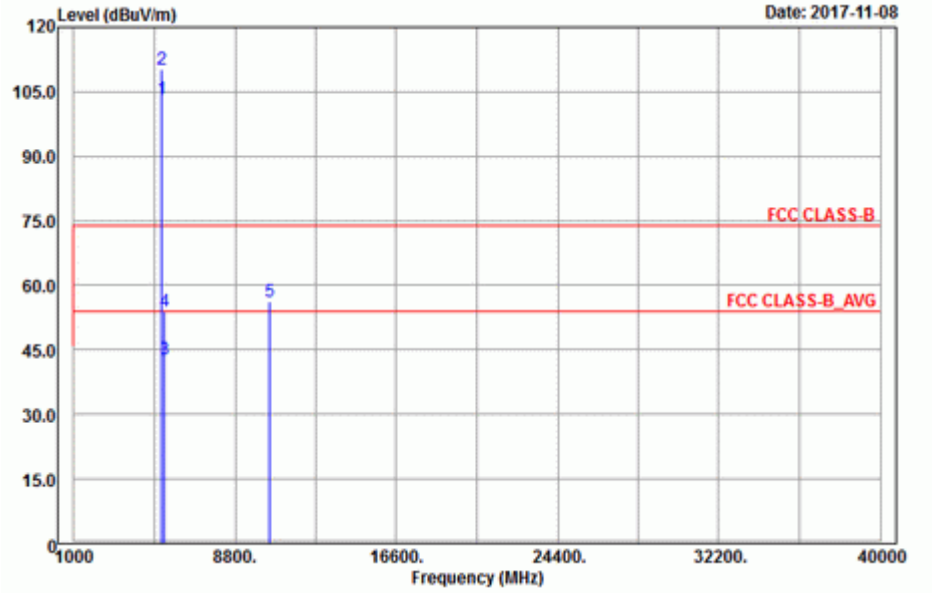
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



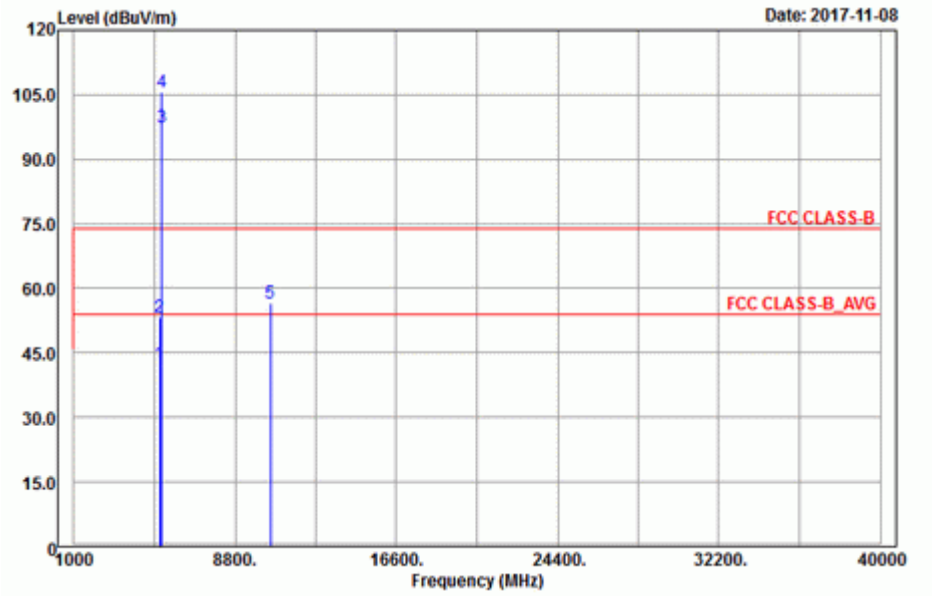
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	87.31	78.87			34.19	8.26	34.01	151	163	Average
5240	105.37	96.93			34.19	8.26	34.01	151	163	Peak
5453.51	42.82	34	54	-11.18	34.36	8.51	34.05	151	163	Average
5453.51	53.43	44.61	74	-20.57	34.36	8.51	34.05	151	163	Peak
*10480	56.68	42.17	68.2	-11.52	37.19	12.53	35.21	195	247	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
5240	103.28	94.84			34.19	8.26	34.01	213	210	Average
5240	110.23	101.79			34.19	8.26	34.01	213	210	Peak
5407.42	42.84	34.12	54	-11.16	34.32	8.44	34.04	213	210	Average
5407.42	53.79	45.07	74	-20.21	34.32	8.44	34.04	213	210	Peak
*10480	56.28	41.77	68.2	-11.92	37.19	12.53	35.21	136	105	Peak

Remarks:

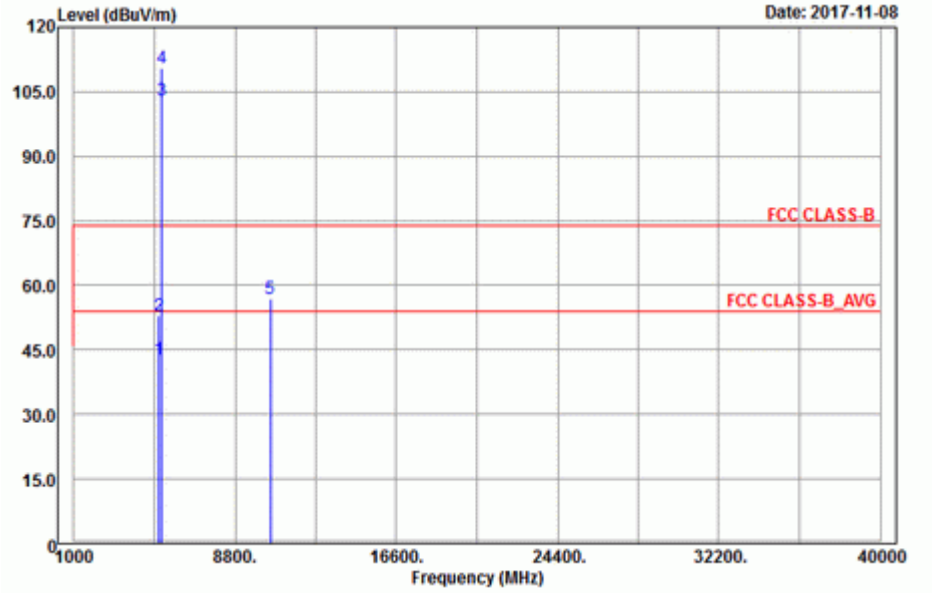
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



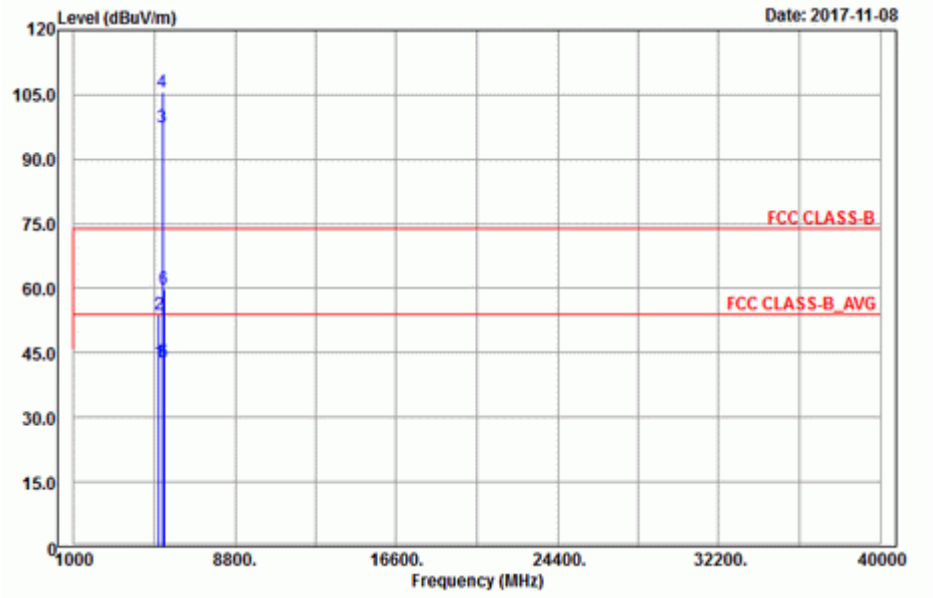
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5143.25	42.62	34.36	54	-11.38	34.12	8.13	33.99	102	150	Average
5143.25	53.24	44.98	74	-20.76	34.12	8.13	33.99	102	150	Peak
5260	97.45	88.99			34.21	8.26	34.01	102	150	Average
5260	105.56	97.1			34.21	8.26	34.01	102	150	Peak
*10520	56.64	42.05	68.2	-11.56	37.21	12.61	35.23	167	341	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5112.8	42.81	34.61	54	-11.19	34.09	8.1	33.99	240	210	Average
5112.8	53.06	44.86	74	-20.94	34.09	8.1	33.99	240	210	Peak
5260	102.87	94.41			34.21	8.26	34.01	240	210	Average
5260	110.6	102.14			34.21	8.26	34.01	240	210	Peak
*10520	57.04	42.45	68.2	-11.16	37.21	12.61	35.23	135	118	Peak

Remarks:

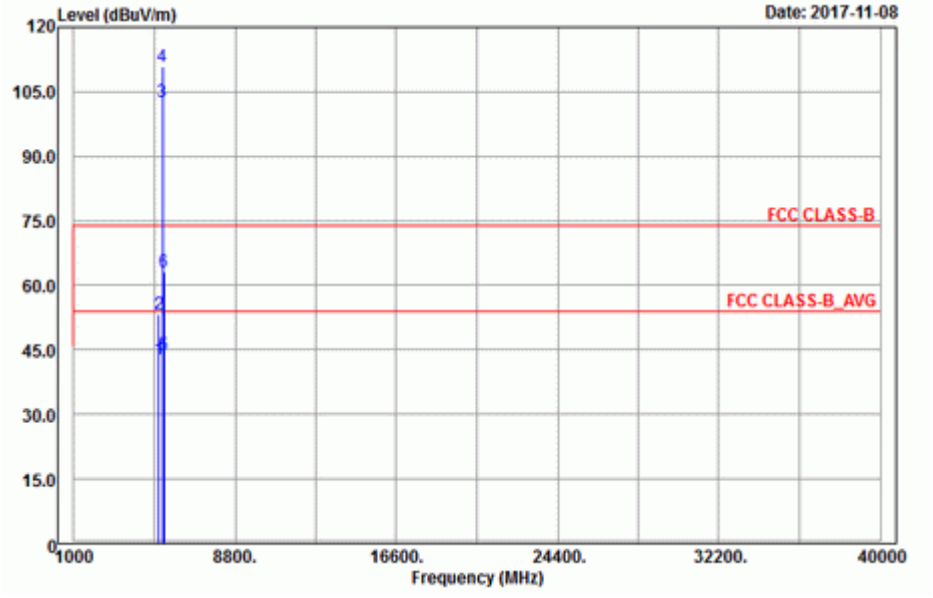
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



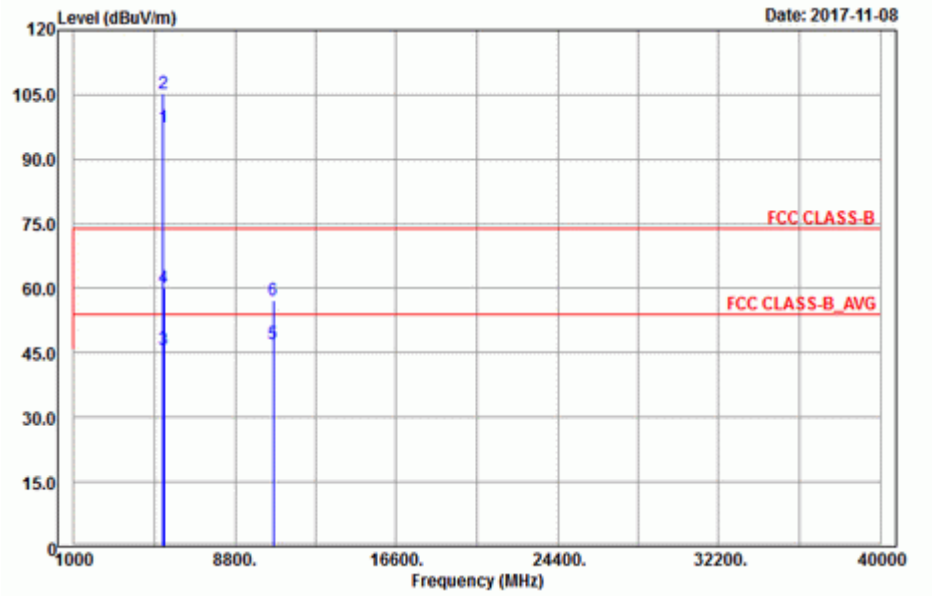
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5123.3	42.7	34.48	54	-11.3	34.11	8.1	33.99	102	150	Average
5123.3	53.85	45.63	74	-20.15	34.11	8.1	33.99	102	150	Peak
5300	97.39	88.85			34.24	8.32	34.02	102	150	Average
5300	105.71	97.17			34.24	8.32	34.02	102	150	Peak
5350	42.99	34.36	54	-11.01	34.28	8.38	34.03	102	150	Average
5350	59.96	51.33	74	-14.04	34.28	8.38	34.03	102	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5114.9	42.82	34.62	54	-11.18	34.09	8.1	33.99	240	210	Average
5114.9	53.39	45.19	74	-20.61	34.09	8.1	33.99	240	210	Peak
5300	102.55	94.01			34.24	8.32	34.02	240	210	Average
5300	110.81	102.27			34.24	8.32	34.02	240	210	Peak
5350.22	43.76	35.13	54	-10.24	34.28	8.38	34.03	240	210	Average
5350.22	63.09	54.46	74	-10.91	34.28	8.38	34.03	240	210	Peak

Remarks:

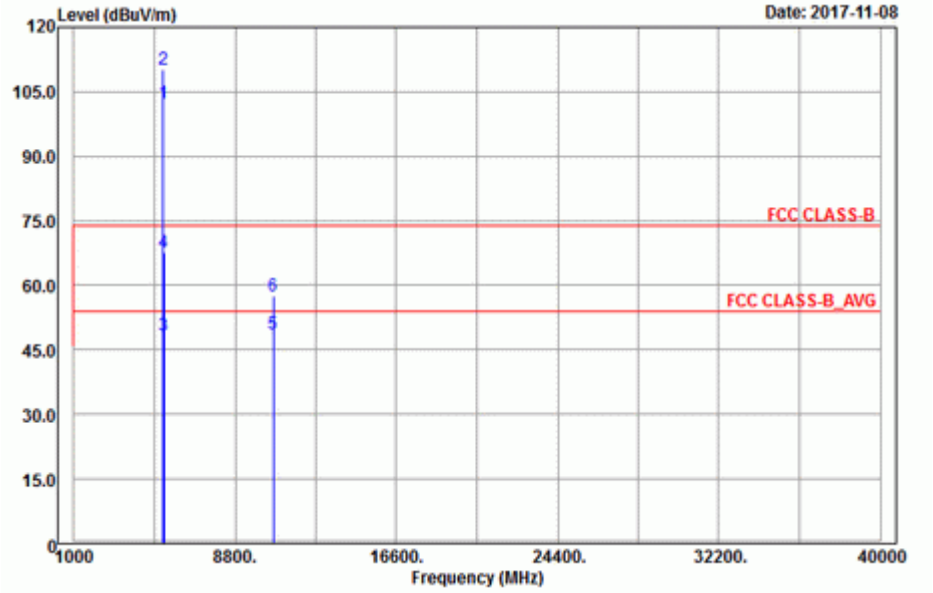
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



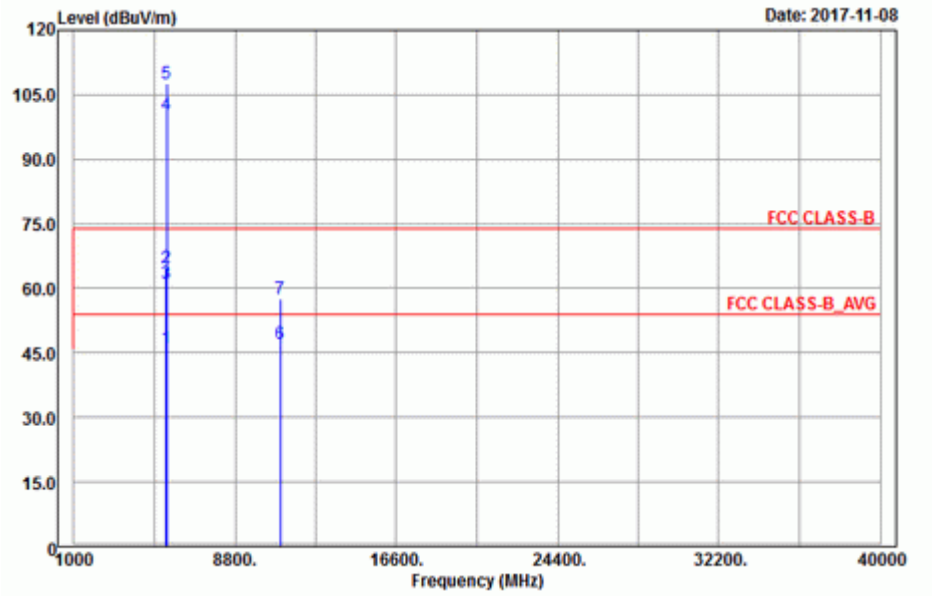
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	97.5	88.92			34.25	8.35	34.02	103	150	Average
5320	105.36	96.78			34.25	8.35	34.02	103	150	Peak
5350	45.62	36.99	54	-8.38	34.28	8.38	34.03	126	141	Average
5350	60.07	51.44	74	-13.93	34.28	8.38	34.03	126	141	Peak
10640	47.12	32.39	54	-6.88	37.31	12.71	35.29	196	172	Average
10640	57.32	42.59	74	-16.68	37.31	12.71	35.29	196	172	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
5320	102.36	93.78			34.25	8.35	34.02	240	210	Average
5320	110.23	101.65			34.25	8.35	34.02	240	210	Peak
5350	48.33	39.7	54	-5.67	34.28	8.38	34.03	236	207	Average
5350	67.8	59.17	74	-6.2	34.28	8.38	34.03	236	207	Peak
10640	48.57	33.84	54	-5.43	37.31	12.71	35.29	127	342	Average
10640	57.69	42.96	74	-16.31	37.31	12.71	35.29	127	342	Peak

Remarks:

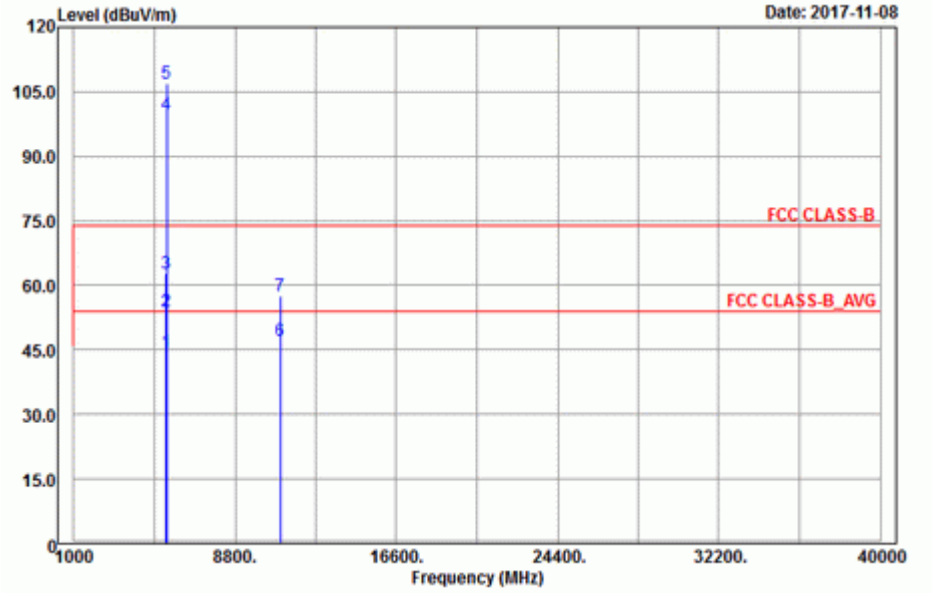
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



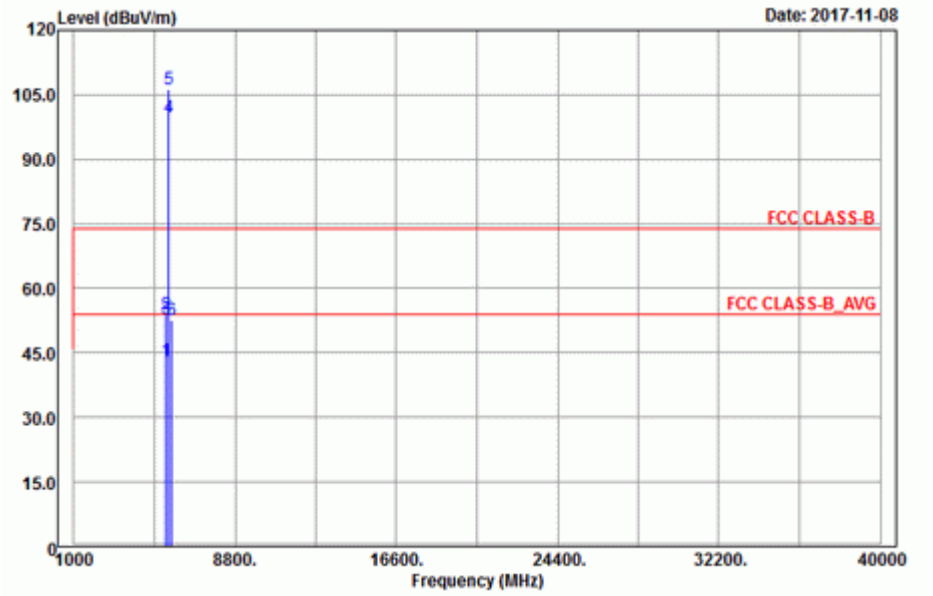
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.6	46.05	37.23	54	-7.95	34.36	8.51	34.05	286	115	Average
5459.6	64.82	56	74	-9.18	34.36	8.51	34.05	286	115	Peak
*5468.08	61.26	52.43	68.2	-6.94	34.37	8.51	34.05	286	115	Peak
5500	100.28	91.36			34.4	8.57	34.05	286	115	Average
5500	107.74	98.82			34.4	8.57	34.05	286	115	Peak
11000	47.11	32.03	54	-6.89	37.6	12.96	35.48	105	96	Average
11000	57.63	42.55	74	-16.37	37.6	12.96	35.48	105	96	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
5457.04	44.41	35.59	54	-9.59	34.36	8.51	34.05	205	105	Average
5457.04	53.87	45.05	74	-20.13	34.36	8.51	34.05	205	105	Peak
*5469.04	62.77	53.94	68.2	-5.43	34.37	8.51	34.05	205	105	Peak
5500	99.65	90.73			34.4	8.57	34.05	205	105	Average
5500	106.9	97.98			34.4	8.57	34.05	205	105	Peak
11000	46.93	31.85	54	-7.07	37.6	12.96	35.48	135	354	Average
11000	57.6	42.52	74	-16.4	37.6	12.96	35.48	135	354	Peak

Remarks:

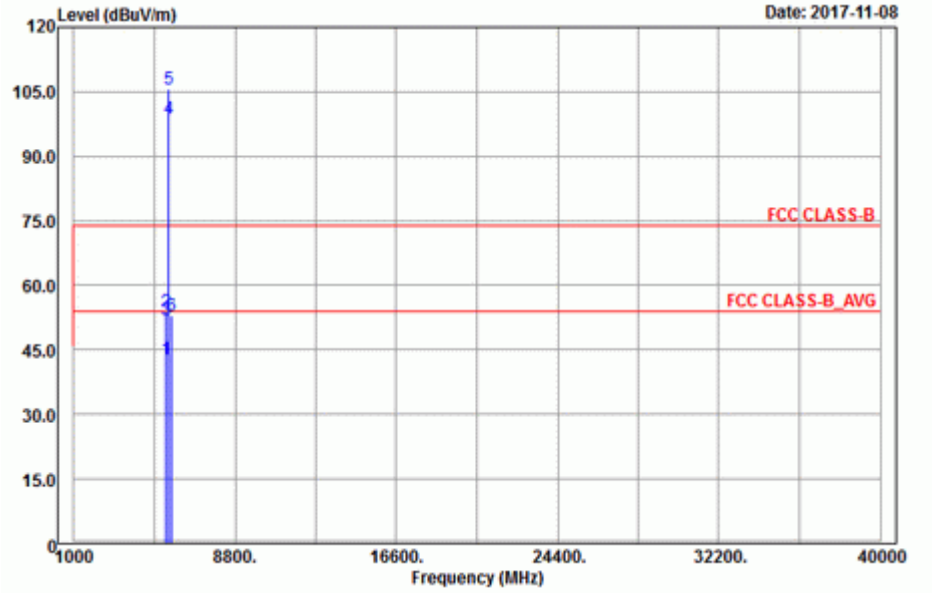
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



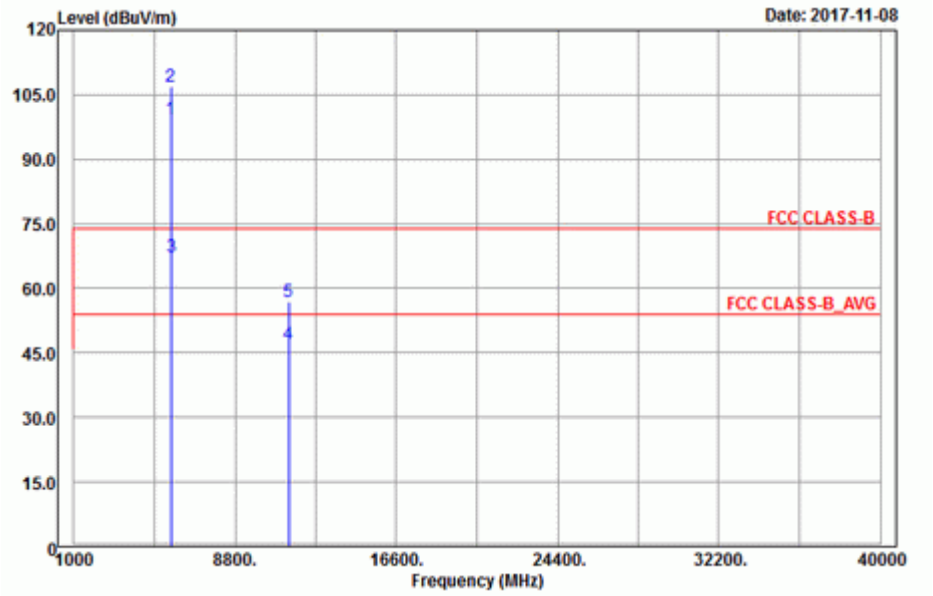
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5446	43.08	34.25	54	-10.92	34.36	8.51	34.04	286	115	Average
5446	53.83	45	74	-20.17	34.36	8.51	34.04	286	115	Peak
*5469.36	53.03	44.2	68.2	-15.17	34.37	8.51	34.05	286	115	Peak
5580	99.74	90.75			34.47	8.6	34.08	286	115	Average
5580	106.23	97.24			34.47	8.6	34.08	286	115	Peak
*5725.56	52.63	43.47	68.2	-15.57	34.62	8.65	34.11	286	115	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	42.99	34.17	54	-11.01	34.36	8.51	34.05	205	105	Average
5460	54.05	45.23	74	-19.95	34.36	8.51	34.05	205	105	Peak
*5468.24	52.05	43.22	68.2	-16.15	34.37	8.51	34.05	205	105	Peak
5580	98.63	89.64			34.47	8.6	34.08	205	105	Average
5580	105.54	96.55			34.47	8.6	34.08	205	105	Peak
*5724.04	52.97	43.81	68.2	-15.23	34.62	8.65	34.11	205	105	Peak

Remarks:

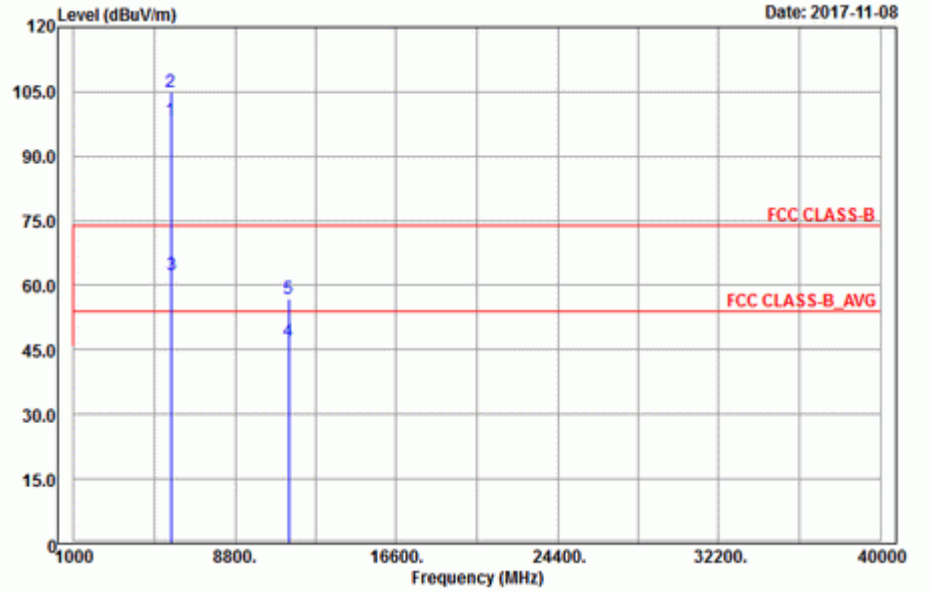
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



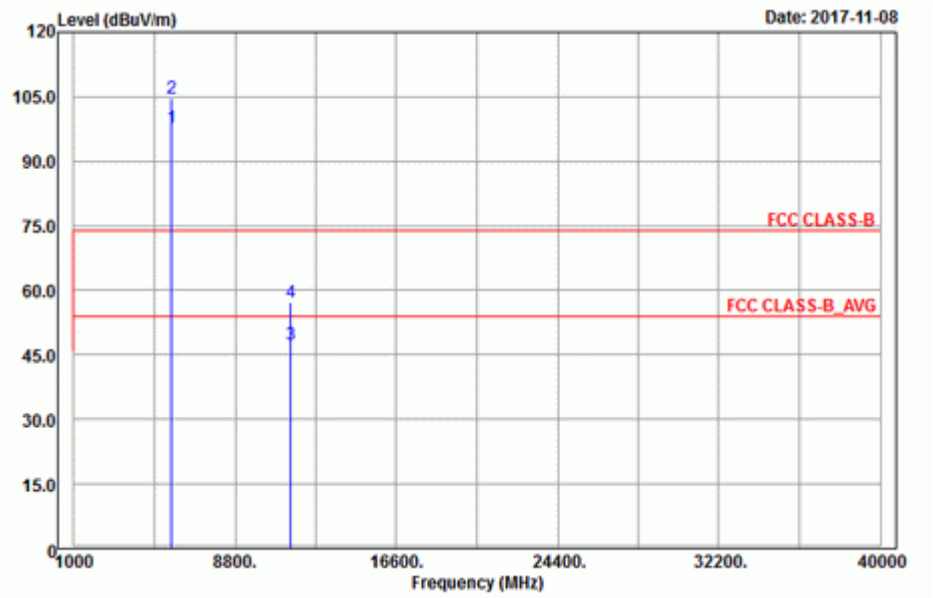
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emission Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5700	99.39	90.26			34.59	8.64	34.1	286	115	Average
5700	106.85	97.72			34.59	8.64	34.1	286	115	Peak
***5725.16**	**67.2**	**58.04**	**68.2**	**-1.00**	**34.62**	**8.65**	**34.11**	**296**	**103**	**Peak**
11400	47.07	31.97	54	-6.93	37.84	12.67	35.41	117	205	Average
11400	56.89	41.79	74	-17.11	37.84	12.67	35.41	117	205	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**
5700	98.36	89.23			34.59	8.64	34.1	205	105	Average
5700	105.11	95.98			34.59	8.64	34.1	205	105	Peak
*5724.04	62.52	53.36	68.2	-5.68	34.62	8.65	34.11	205	105	Peak
11400	47.16	32.06	54	-6.84	37.84	12.67	35.41	135	2	Average
11400	56.75	41.65	74	-17.25	37.84	12.67	35.41	135	2	Peak

Remarks:

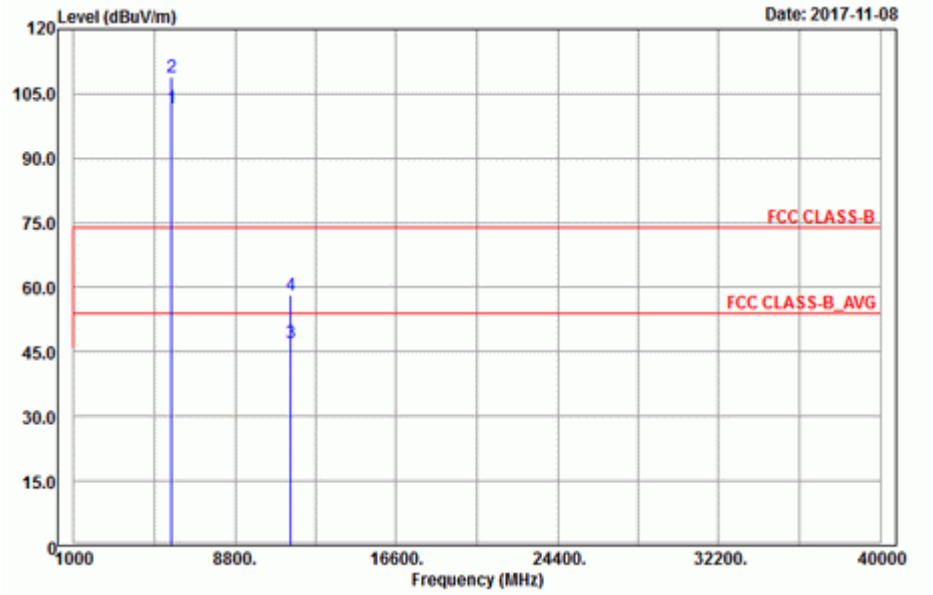
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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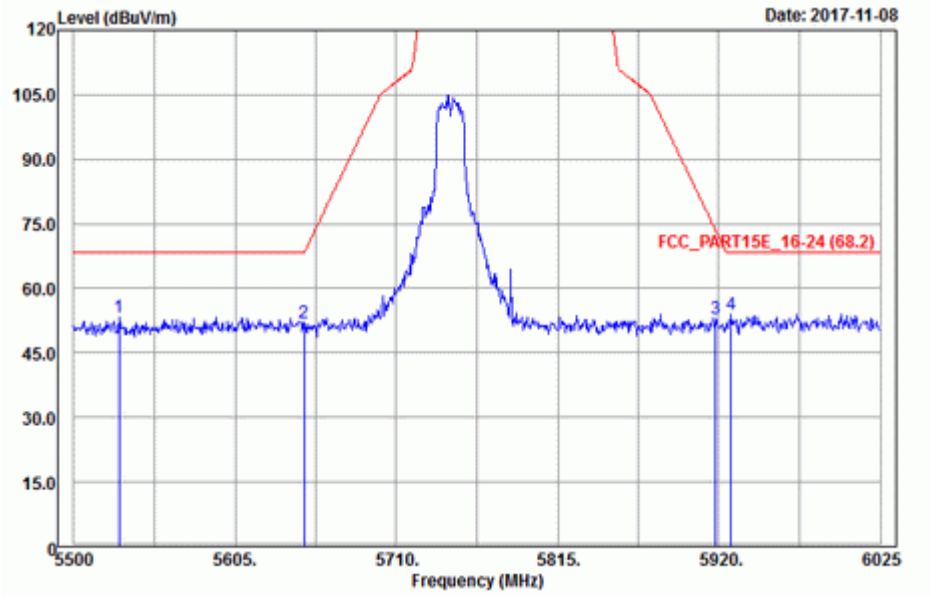
Horizontal



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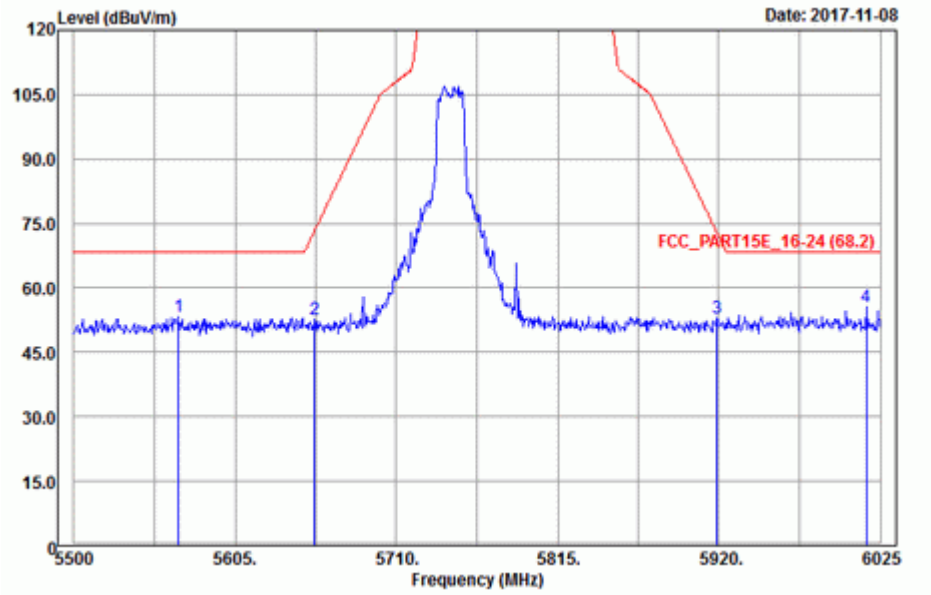


<Spurious Emission>

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
5745	97.82	88.63			34.64	8.66	34.11	200	194	Average
5745	104.73	95.54			34.64	8.66	34.11	200	194	Peak
11490	47.35	32.23	54	-6.65	37.89	12.62	35.39	134	304	Average
11490	57.23	42.11	74	-16.77	37.89	12.62	35.39	134	304	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
5745	101.55	92.36			34.64	8.66	34.11	100	207	Average
5745	108.88	99.69			34.64	8.66	34.11	100	207	Peak
11490	47.08	31.96	54	-6.92	37.89	12.62	35.39	178	225	Average
11490	58.12	43	74	-15.88	37.89	12.62	35.39	178	225	Peak

<Ouf of Band Emission (OOBE)>

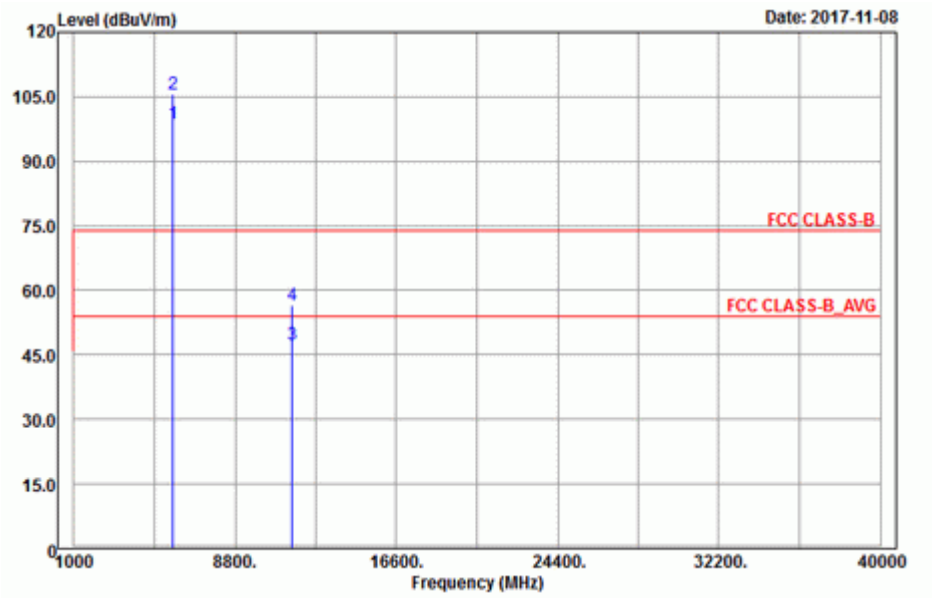
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5529.4	53.27	44.34	68.2	-14.93	34.42	8.58	34.07	200	194	Peak
5650.15	52.13	43.04	68.31	-16.18	34.56	8.62	34.09	200	194	Peak
5917.9	53.06	43.68	73.45	-20.39	34.81	8.73	34.16	200	194	Peak
*5927.875	54.08	44.68	68.2	-14.12	34.83	8.73	34.16	200	194	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
*5568.25	53.31	44.32	68.2	-14.89	34.47	8.59	34.07	100	207	Peak
5656.975	52.53	43.44	73.36	-20.83	34.56	8.63	34.1	100	207	Peak
5918.95	52.82	43.44	72.68	-19.86	34.81	8.73	34.16	100	207	Peak
*6016.075	55.47	45.97	68.2	-12.73	34.92	8.76	34.18	100	207	Peak

Remarks:

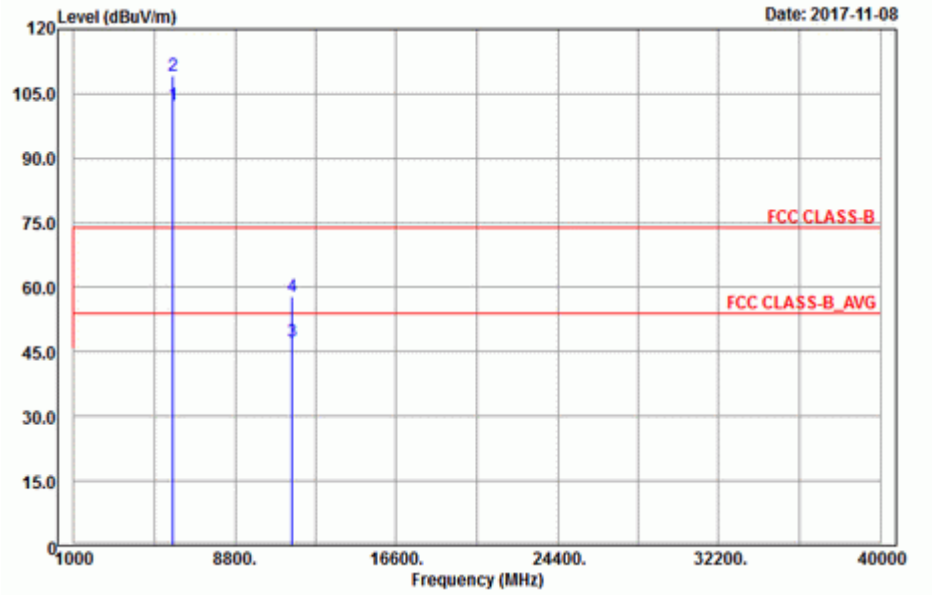
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

<Spurious Emission>
Horizontal



Vertical



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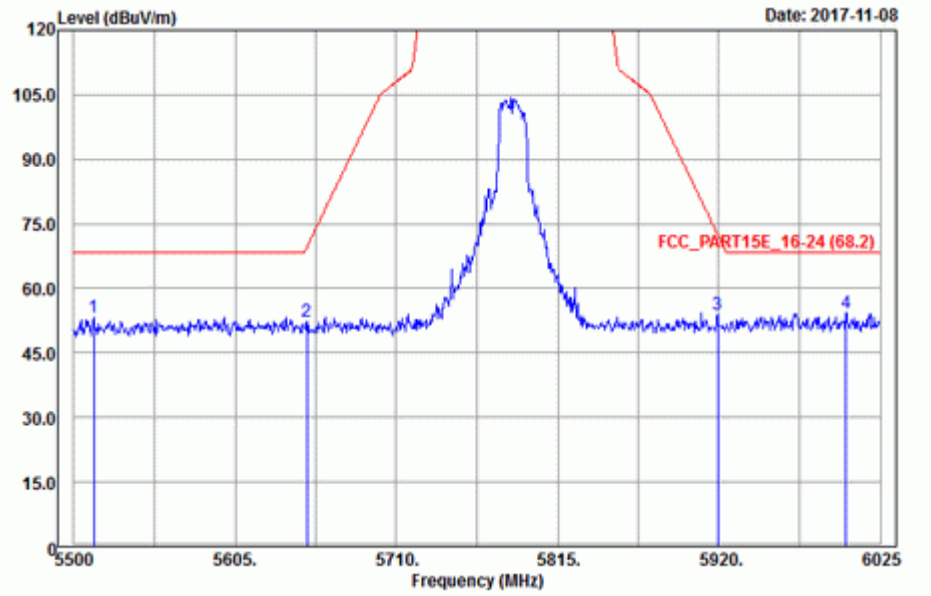
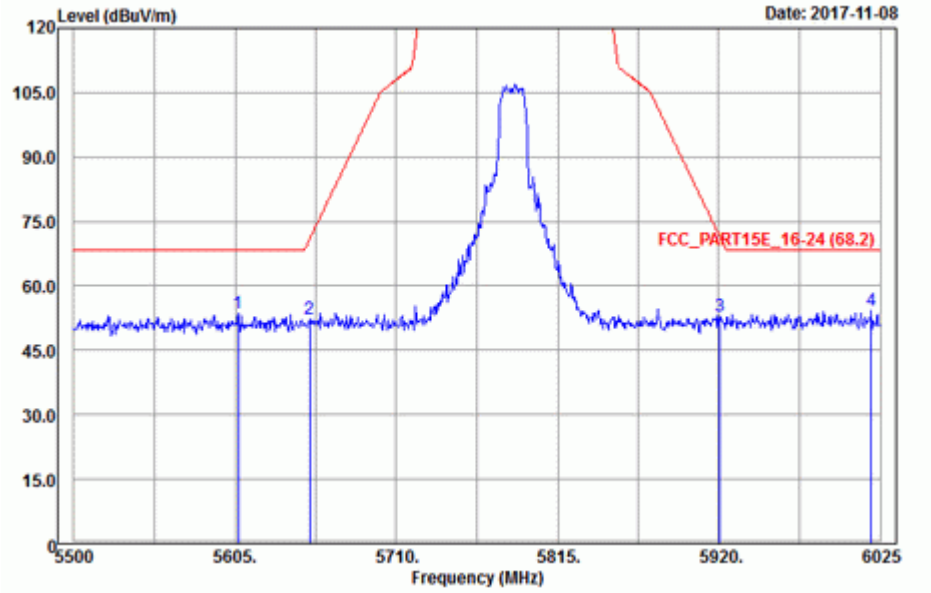
Horizontal



Vertical



<Spurious Emission>

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
5785	98.6	89.37			34.68	8.68	34.13	200	194	Average
5785	105.45	96.22			34.68	8.68	34.13	200	194	Peak
11570	47.44	32.13	54	-6.56	38	12.68	35.37	157	55	Average
11570	56.47	41.16	74	-17.53	38	12.68	35.37	157	55	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
5785	102.29	93.06			34.68	8.68	34.13	100	207	Average
5785	109.07	99.84			34.68	8.68	34.13	100	207	Peak
11570	47.46	32.15	54	-6.54	38	12.68	35.37	137	88	Average
11570	57.96	42.65	74	-16.04	38	12.68	35.37	137	88	Peak

<Ouf of Band Emission (OOBE)>

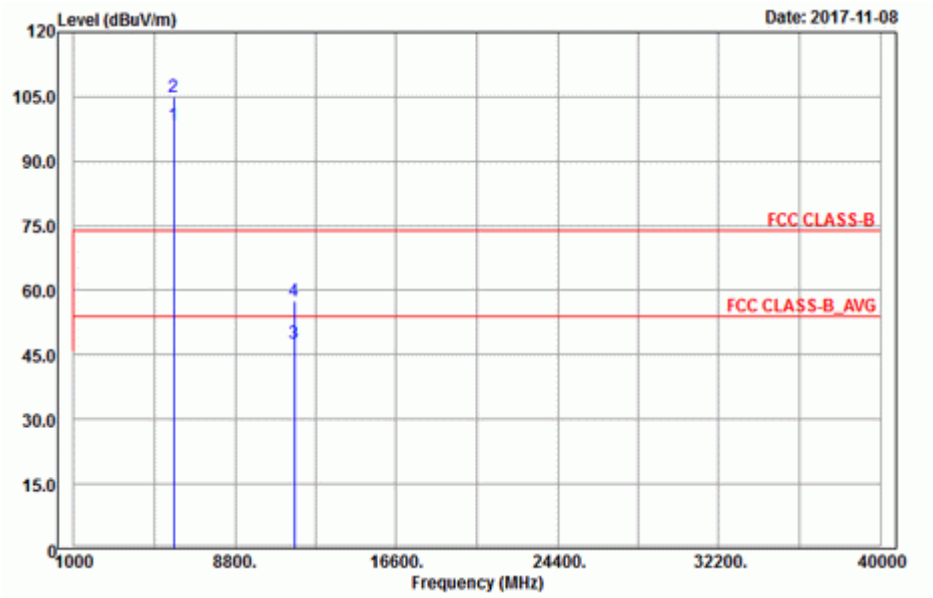
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5513.125	53.41	44.5	68.2	-14.79	34.4	8.57	34.06	200	194	Peak
5651.725	52.41	43.32	69.48	-17.07	34.56	8.62	34.09	200	194	Peak
5919.475	53.89	44.51	72.29	-18.4	34.81	8.73	34.16	200	194	Peak
*6002.95	54.29	44.8	68.2	-13.91	34.9	8.76	34.17	200	194	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
*5607.1	53.49	44.46	68.2	-14.71	34.5	8.61	34.08	100	207	Peak
5653.825	52.4	43.31	71.03	-18.63	34.56	8.63	34.1	100	207	Peak
5920.525	52.98	43.6	71.51	-18.53	34.81	8.73	34.16	100	207	Peak
*6019.225	54.26	44.75	68.2	-13.94	34.92	8.77	34.18	100	207	Peak

Remarks:

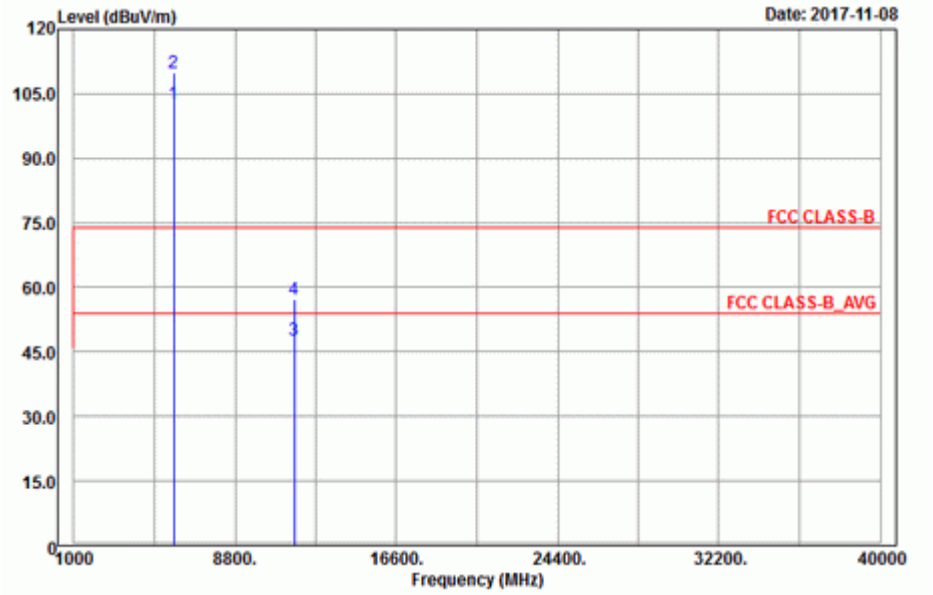
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

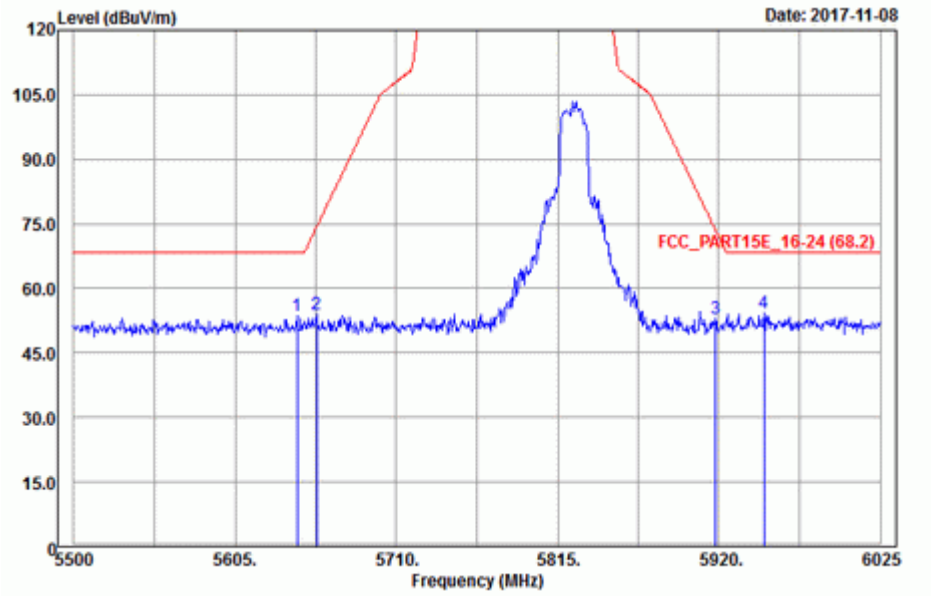
<Spurious Emission>
Horizontal



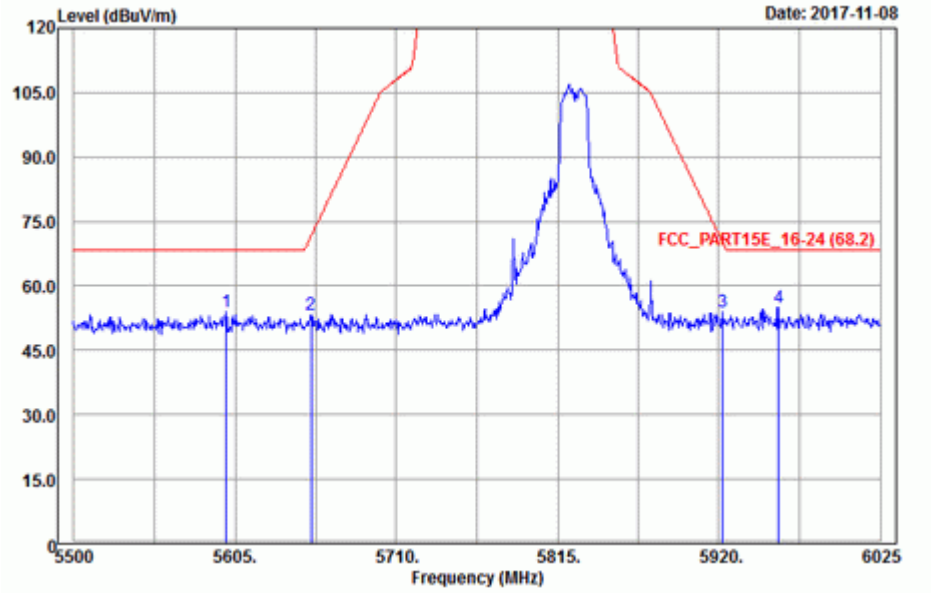
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5825	98.34	89.05			34.73	8.69	34.13	200	194	Average
5825	105.03	95.74			34.73	8.69	34.13	200	194	Peak
11650	47.69	32.16	54	-6.31	38.09	12.8	35.36	157	326	Average
11650	57.47	41.94	74	-16.53	38.09	12.8	35.36	157	326	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
5825	102.52	93.23			34.73	8.69	34.13	100	207	Average
5825	109.81	100.52			34.73	8.69	34.13	100	207	Peak
11650	47.77	32.24	54	-6.23	38.09	12.8	35.36	138	349	Average
11650	57.21	41.68	74	-16.79	38.09	12.8	35.36	138	349	Peak

<Ouf of Band Emission (OOBE)>

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
*5645.425	53.49	44.42	68.2	-14.71	34.54	8.62	34.09	200	194	Peak
5658.025	54.09	45	74.14	-20.05	34.56	8.63	34.1	200	194	Peak
5917.9	52.89	43.51	73.45	-20.56	34.81	8.73	34.16	200	194	Peak
*5949.4	54.19	44.76	68.2	-14.01	34.85	8.74	34.16	200	194	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
*5599.225	53.86	44.84	68.2	-14.34	34.5	8.6	34.08	100	207	Peak
5654.35	53.15	44.06	71.42	-18.27	34.56	8.63	34.1	100	207	Peak
5922.625	53.89	44.49	69.96	-16.07	34.83	8.73	34.16	100	207	Peak
*5958.85	54.93	45.48	68.2	-13.27	34.87	8.74	34.16	100	207	Peak

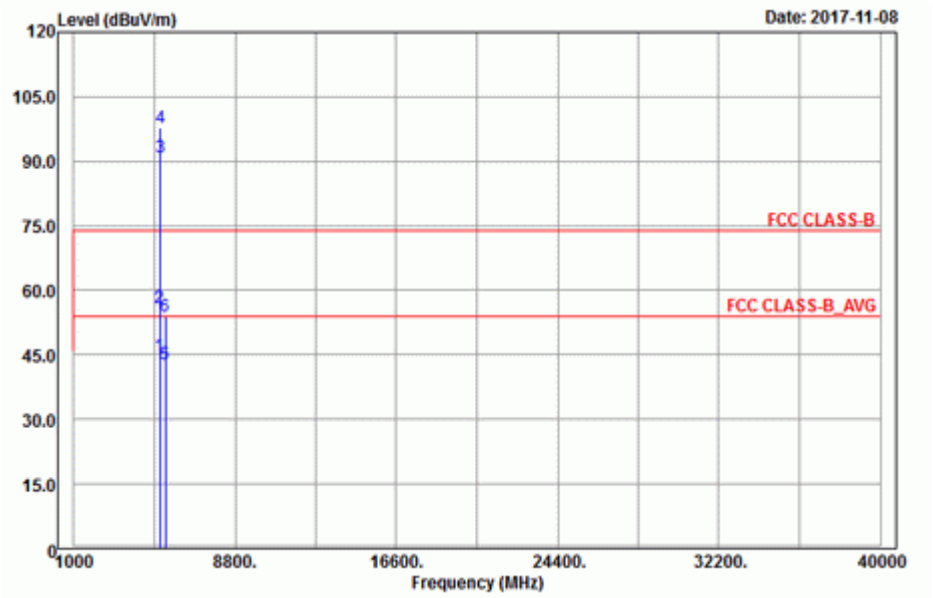
Remarks:

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

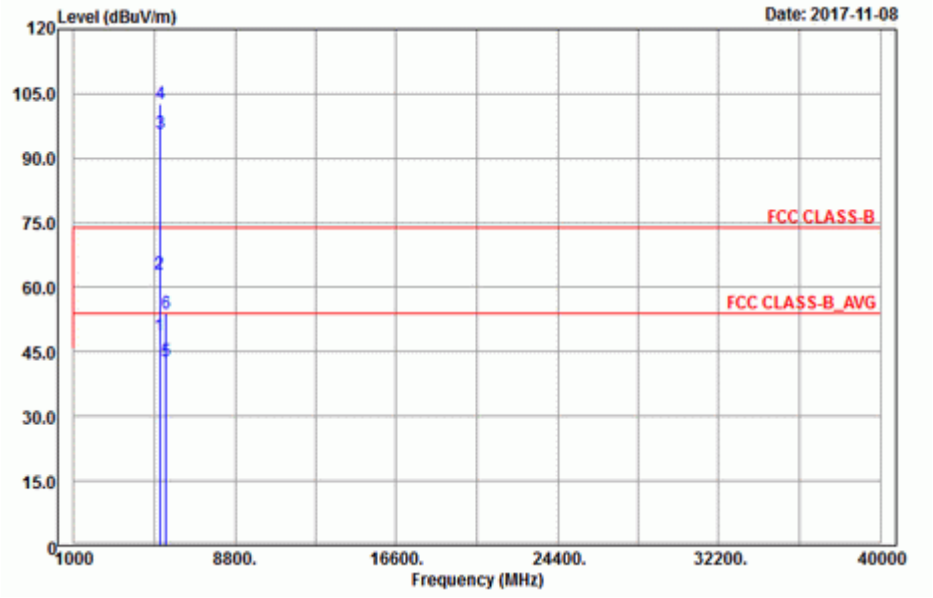
802.11ac (VHT40)

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

Horizontal



Vertical



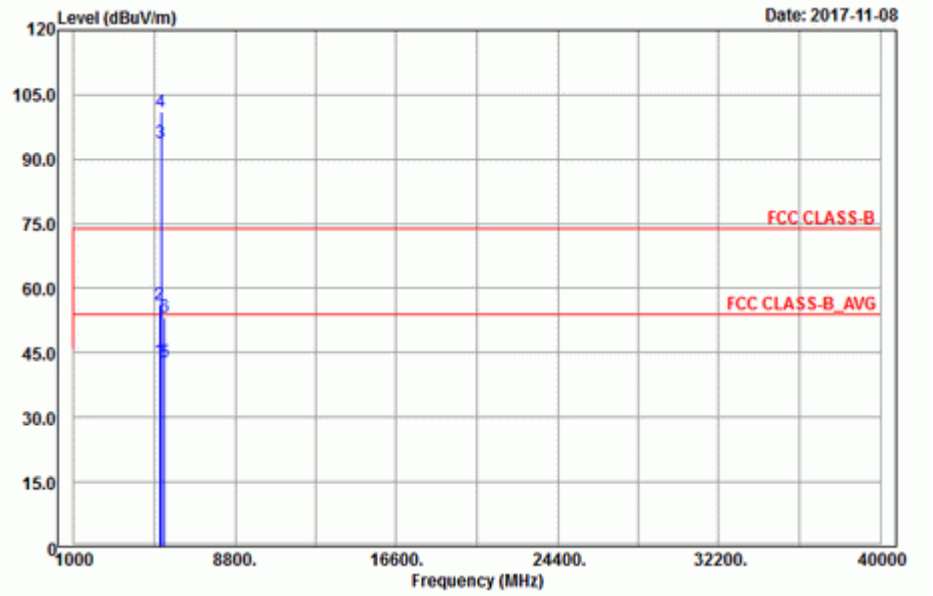
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.7	44.66	36.41	54	-9.34	34.12	8.13	34	151	163	Average
5149.7	55.88	47.63	74	-18.12	34.12	8.13	34	151	163	Peak
5190	90.87	82.53			34.15	8.19	34	151	163	Average
5190	97.86	89.52			34.15	8.19	34	151	163	Peak
5418.2	42.99	34.26	54	-11.01	34.33	8.44	34.04	151	163	Average
5418.2	53.83	45.1	74	-20.17	34.33	8.44	34.04	151	163	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	48.69	40.44	54	-5.31	34.12	8.13	34	231	182	Average
5150	63.02	54.77	74	-10.98	34.12	8.13	34	231	182	Peak
5190	95.86	87.52			34.15	8.19	34	231	210	Average
5190	102.57	94.23			34.15	8.19	34	231	210	Peak
5453.51	42.87	34.05	54	-11.13	34.36	8.51	34.05	231	210	Average
5453.51	54.07	45.25	74	-19.93	34.36	8.51	34.05	231	210	Peak

Remarks:

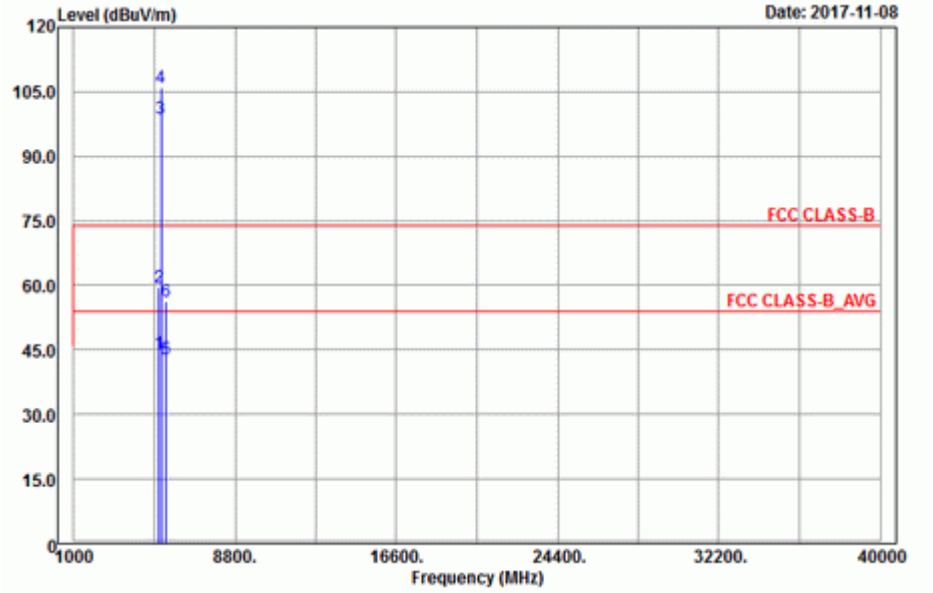
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5190 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



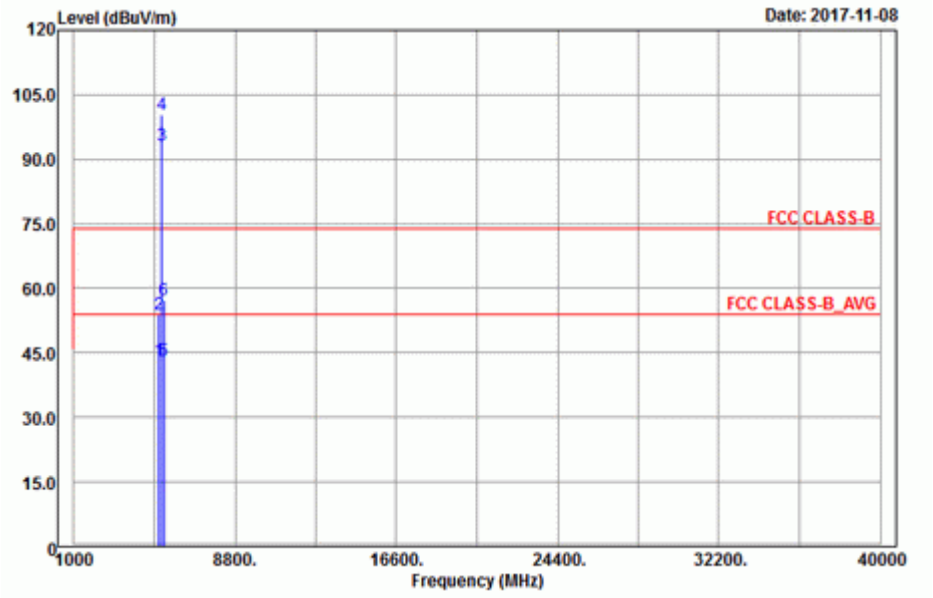
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146.85	43.02	34.77	54	-10.98	34.12	8.13	34	151	163	Average
5146.85	56.35	48.1	74	-17.65	34.12	8.13	34	151	163	Peak
5230	93.98	85.58			34.19	8.22	34.01	151	163	Average
5230	101.13	92.73			34.19	8.22	34.01	151	163	Peak
5400.49	42.82	34.1	54	-11.18	34.32	8.44	34.04	151	163	Average
5400.49	53.34	44.62	74	-20.66	34.32	8.44	34.04	151	163	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
5121.65	44.16	35.96	54	-9.84	34.09	8.1	33.99	216	210	Average
5121.65	59.67	51.47	74	-14.33	34.09	8.1	33.99	216	210	Peak
5230	98.86	90.46			34.19	8.22	34.01	216	210	Average
5230	105.83	97.43			34.19	8.22	34.01	216	210	Peak
5446.36	42.91	34.08	54	-11.09	34.36	8.51	34.04	216	210	Average
5446.36	56.18	47.35	74	-17.82	34.36	8.51	34.04	216	210	Peak

Remarks:

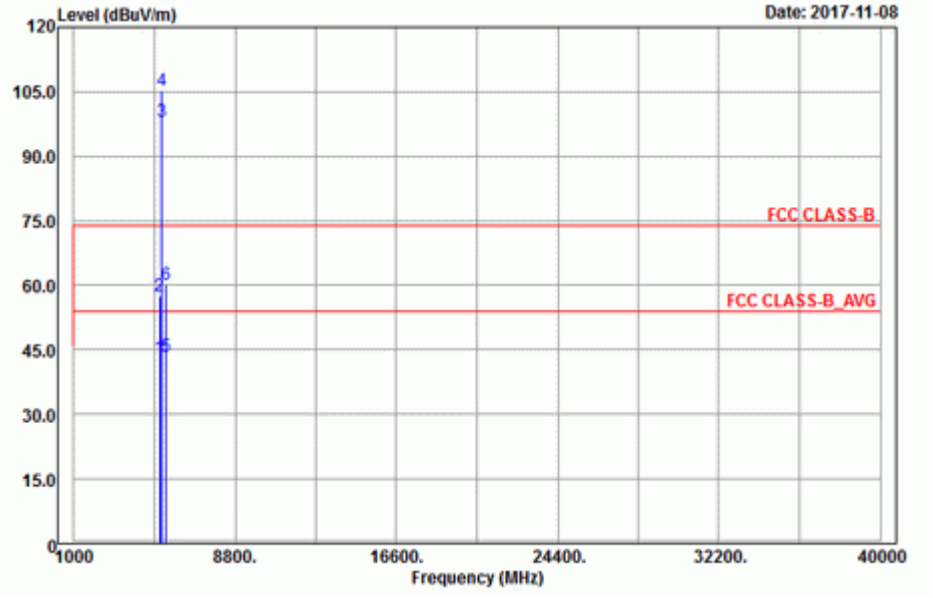
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



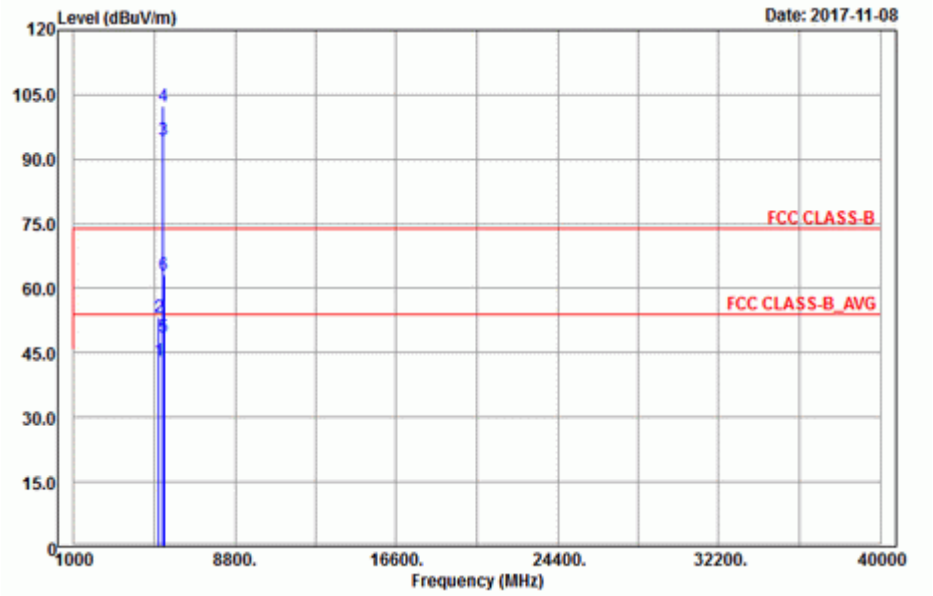
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5103.95	43.11	34.95	54	-10.89	34.08	8.07	33.99	101	150	Average
5103.95	53.89	45.73	74	-20.11	34.08	8.07	33.99	101	150	Peak
5270	93.14	84.65			34.21	8.29	34.01	101	150	Average
5270	100.31	91.82			34.21	8.29	34.01	101	150	Peak
5361.33	43.32	34.68	54	-10.68	34.29	8.38	34.03	101	150	Average
5361.33	57.25	48.61	74	-16.75	34.29	8.38	34.03	101	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.1	43.2	34.95	54	-10.8	34.12	8.13	34	240	210	Average
5149.1	57.58	49.33	74	-16.42	34.12	8.13	34	240	210	Peak
5270	98.13	89.64			34.21	8.29	34.01	240	210	Average
5270	105.32	96.83			34.21	8.29	34.01	240	210	Peak
5459.45	43.43	34.61	54	-10.57	34.36	8.51	34.05	240	210	Average
5459.45	60.12	51.3	74	-13.88	34.36	8.51	34.05	240	210	Peak

Remarks:

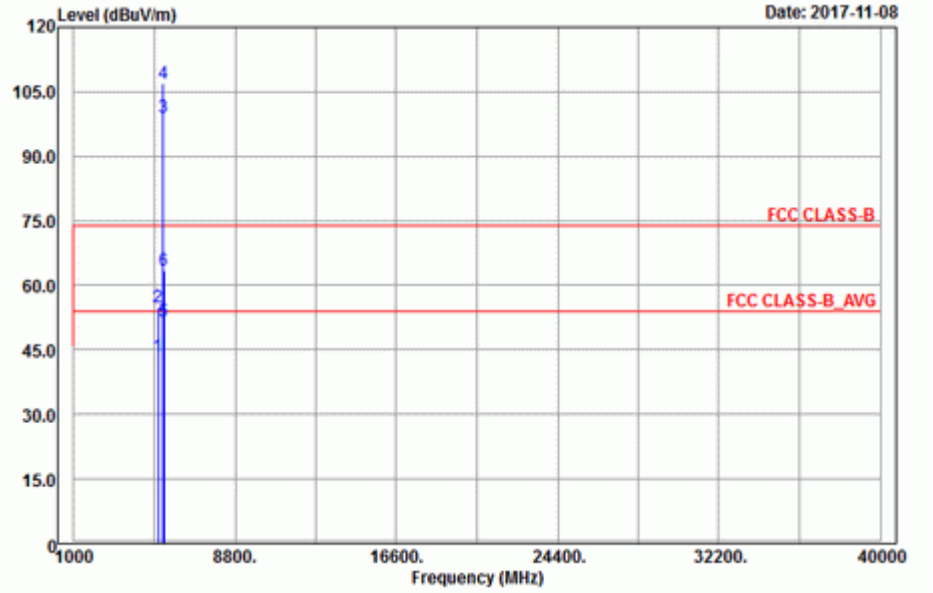
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



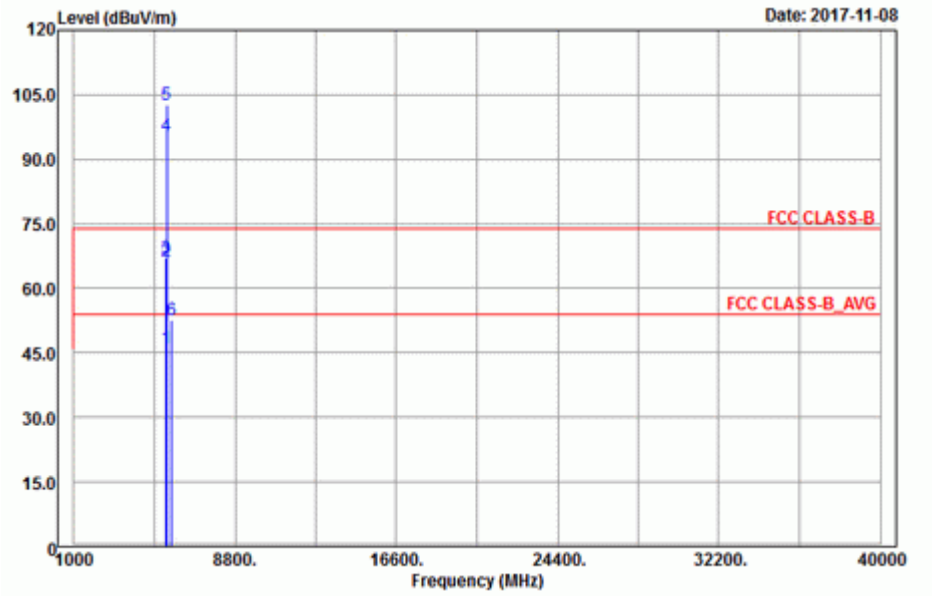
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5134.55	43.17	34.92	54	-10.83	34.11	8.13	33.99	101	150	Average
5134.55	53.33	45.08	74	-20.67	34.11	8.13	33.99	101	150	Peak
5310	94.47	85.92			34.25	8.32	34.02	101	150	Average
5310	102.33	93.78			34.25	8.32	34.02	101	150	Peak
5350	48.56	39.93	54	-5.44	34.28	8.38	34.03	117	126	Average
5350	62.98	54.35	74	-11.02	34.28	8.38	34.03	117	126	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
5082.8	43.38	35.22	54	-10.62	34.07	8.07	33.98	235	210	Average
5082.8	54.81	46.65	74	-19.19	34.07	8.07	33.98	235	210	Peak
5310	99.07	90.52			34.25	8.32	34.02	235	210	Average
5310	106.96	98.41			34.25	8.32	34.02	235	210	Peak
5350.11	51.78	43.15	54	-2.22	34.28	8.38	34.03	226	210	Average
5350.11	63.3	54.67	74	-10.7	34.28	8.38	34.03	226	210	Peak

Remarks:

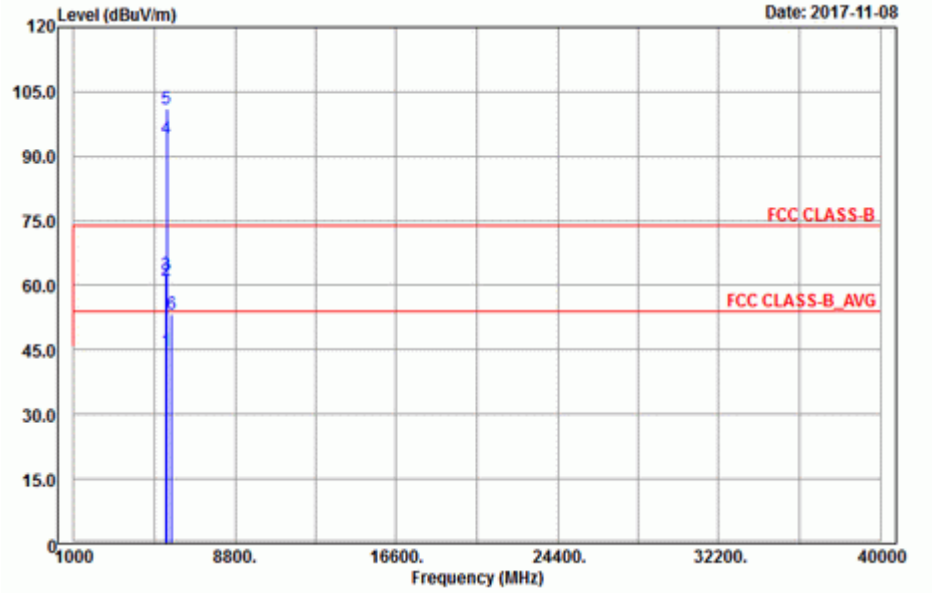
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



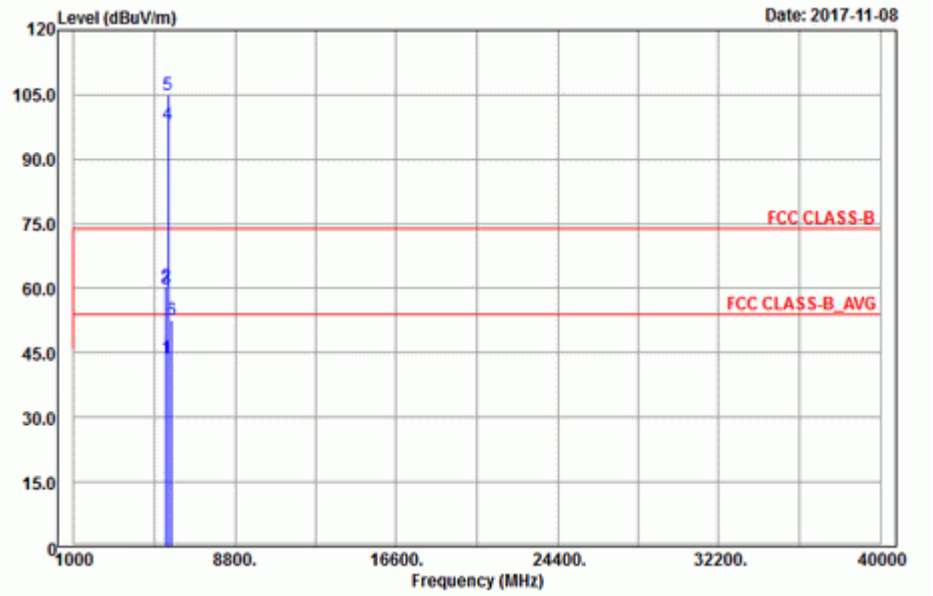
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.76	46.01	37.19	54	-7.99	34.36	8.51	34.05	285	115	Average
5459.76	66.33	57.51	74	-7.67	34.36	8.51	34.05	285	115	Peak
*5469.36	67	58.17	68.2	-1.2	34.37	8.51	34.05	285	115	Peak
5510	95.63	86.72			34.4	8.57	34.06	286	115	Average
5510	102.82	93.91			34.4	8.57	34.06	286	115	Peak
*5725.08	52.79	43.63	68.2	-15.41	34.62	8.65	34.11	286	115	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
5457.2	44.83	36.01	54	-9.17	34.36	8.51	34.05	205	105	Average
5457.2	61.2	52.38	74	-12.8	34.36	8.51	34.05	205	105	Peak
*5469.36	62.5	53.67	68.2	-5.7	34.37	8.51	34.05	205	105	Peak
5510	94.23	85.32			34.4	8.57	34.06	205	105	Average
5510	101.1	92.19			34.4	8.57	34.06	205	105	Peak
*5725.96	53.2	44.04	68.2	-15	34.62	8.65	34.11	205	105	Peak

Remarks:

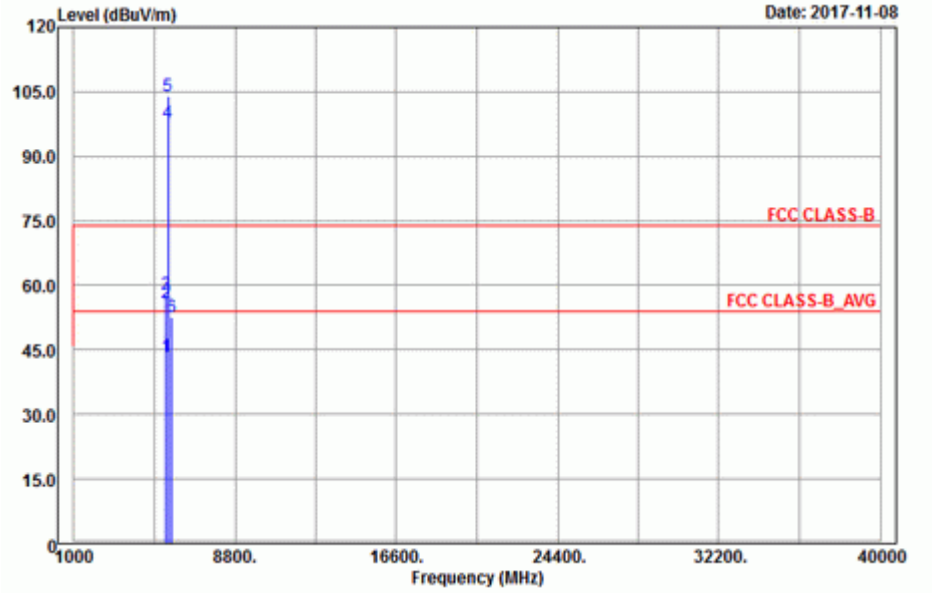
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



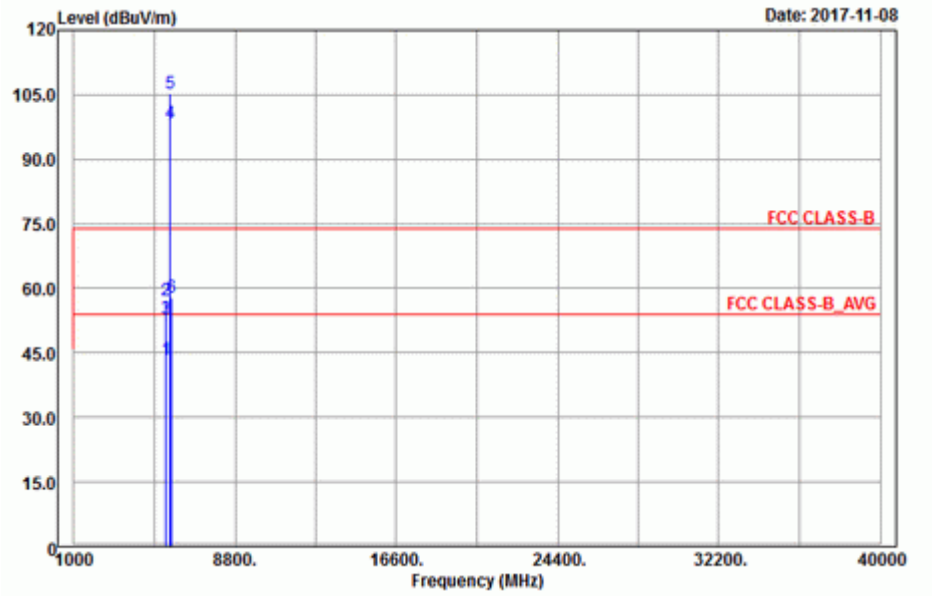
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5445.04	43.66	34.84	54	-10.34	34.35	8.51	34.04	286	115	Average
5445.04	60.59	51.77	74	-13.41	34.35	8.51	34.04	286	115	Peak
*5470	59.82	50.99	68.2	-8.38	34.37	8.51	34.05	286	115	Peak
5550	98.06	89.09			34.45	8.59	34.07	286	115	Average
5550	105	96.03			34.45	8.59	34.07	286	115	Peak
*5724.28	52.54	43.38	68.2	-15.66	34.62	8.65	34.11	286	115	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
5448.56	43.34	34.51	54	-10.66	34.36	8.51	34.04	205	105	Average
5448.56	56.02	47.19	74	-17.98	34.36	8.51	34.04	205	105	Peak
*5470.48	57.79	48.96	68.2	-10.41	34.37	8.51	34.05	205	105	Peak
5550	97.63	88.66			34.45	8.59	34.07	205	105	Average
5550	104.1	95.13			34.45	8.59	34.07	205	105	Peak
*5725.08	52.73	43.57	68.2	-15.47	34.62	8.65	34.11	205	105	Peak

Remarks:

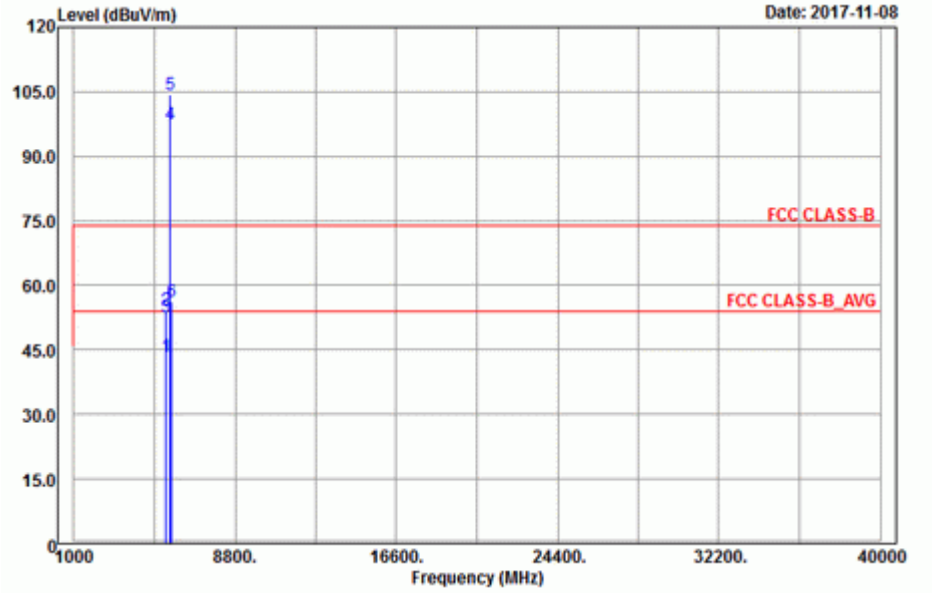
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



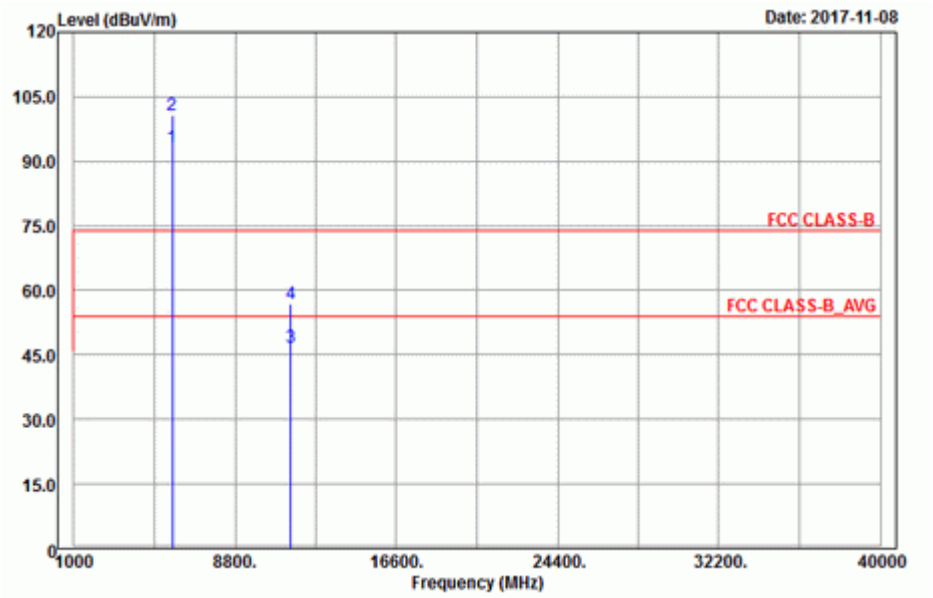
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5447.92	43.4	34.57	54	-10.6	34.36	8.51	34.04	286	115	Average
5447.92	57.29	48.46	74	-16.71	34.36	8.51	34.04	286	115	Peak
*5470.8	52.86	44	68.2	-15.34	34.37	8.54	34.05	286	115	Peak
5670	98.36	89.26			34.57	8.63	34.1	286	115	Average
5670	105.27	96.17			34.57	8.63	34.1	286	115	Peak
*5724.52	57.84	48.68	68.2	-10.36	34.62	8.65	34.11	286	115	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
5451.6	43.33	34.51	54	-10.67	34.36	8.51	34.05	205	105	Average
5451.6	54.32	45.5	74	-19.68	34.36	8.51	34.05	205	105	Peak
*5470.96	52.79	43.93	68.2	-15.41	34.37	8.54	34.05	205	105	Peak
5670	97.43	88.33			34.57	8.63	34.1	205	105	Average
5670	104.29	95.19			34.57	8.63	34.1	205	105	Peak
*5724.68	56.37	47.21	68.2	-11.83	34.62	8.65	34.11	205	105	Peak

Remarks:

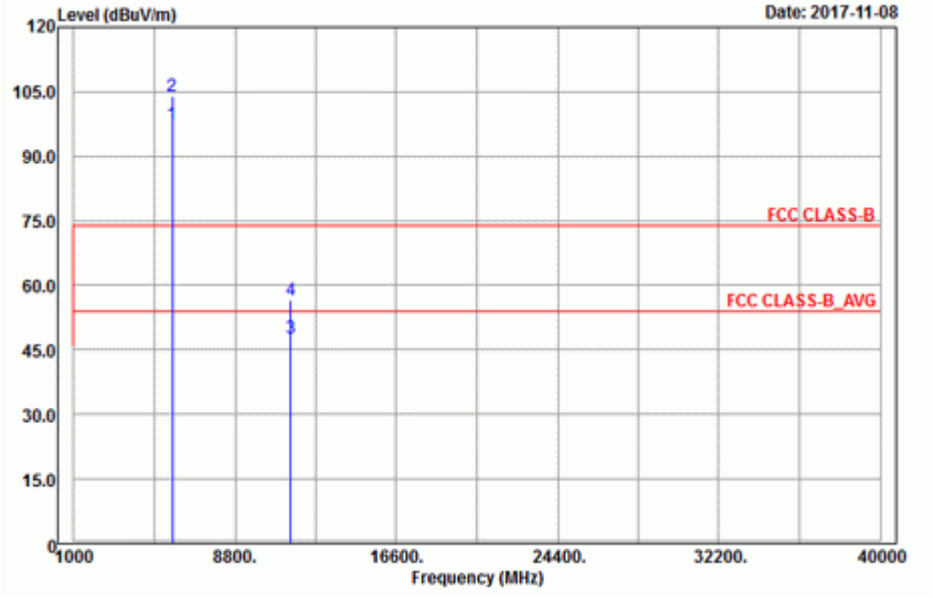
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

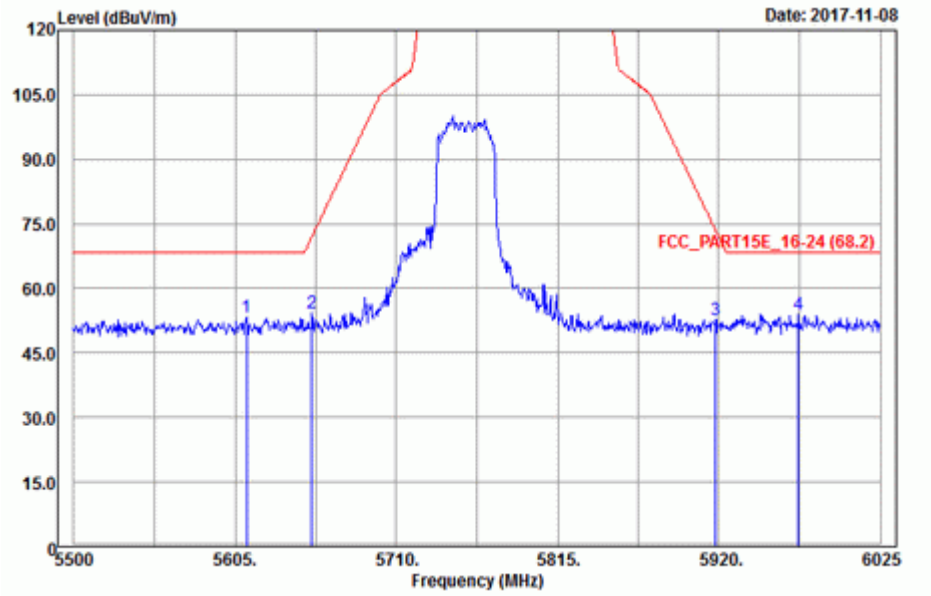
<Spurious Emission>
Horizontal



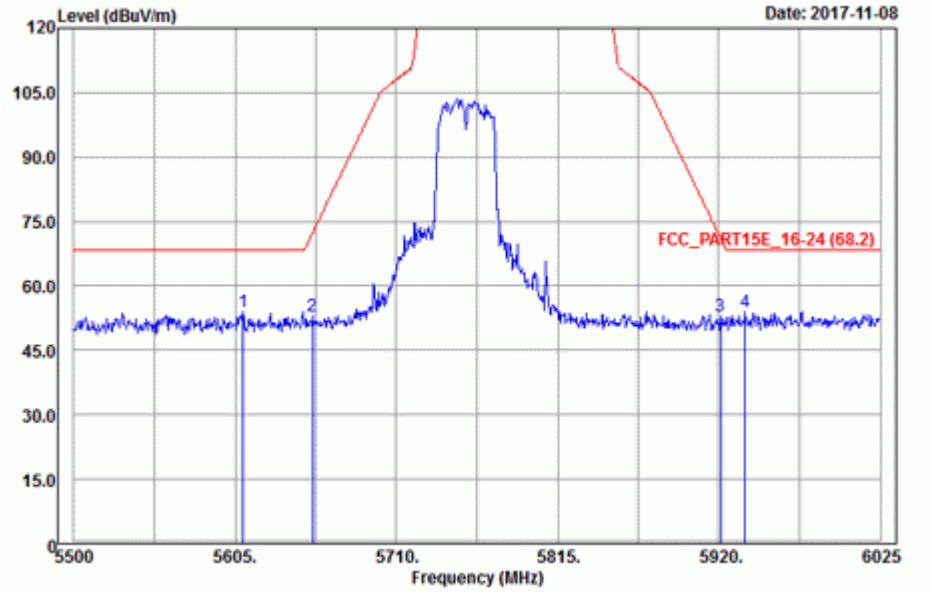
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5755	93.35	84.14			34.66	8.66	34.11	200	194	Average
5755	100.61	91.4			34.66	8.66	34.11	200	194	Peak
11510	46.6	31.49	54	-7.4	37.9	12.6	35.39	124	77	Average
11510	56.77	41.66	74	-17.23	37.9	12.6	35.39	124	77	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
5755	97.43	88.22			34.66	8.66	34.11	100	207	Average
5755	104.02	94.81			34.66	8.66	34.11	100	207	Peak
11510	47.6	32.49	54	-6.4	37.9	12.6	35.39	125	222	Average
11510	56.69	41.58	74	-17.31	37.9	12.6	35.39	125	222	Peak

<Ouf of Band Emission (OOBE)>

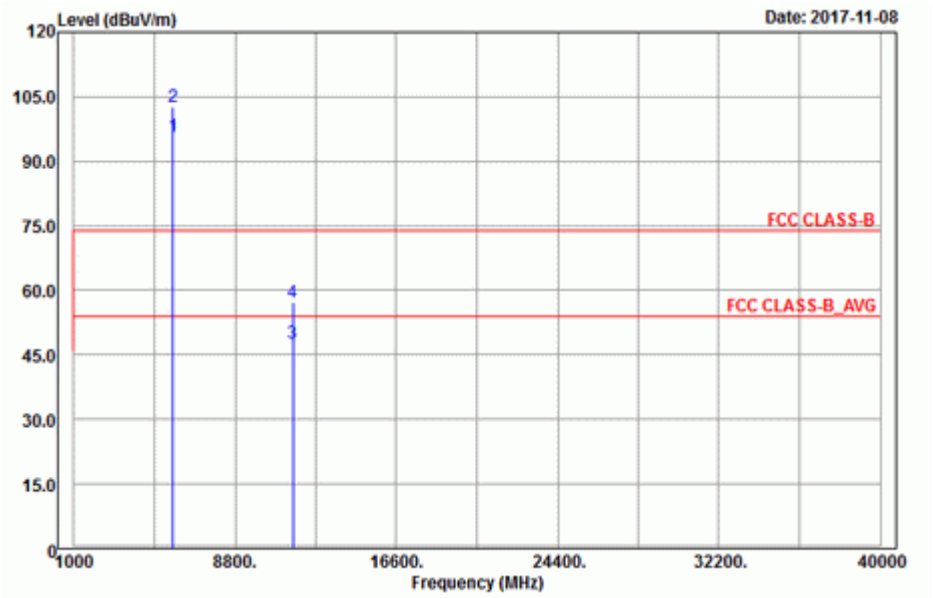
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5612.35	53.21	44.18	68.2	-14.99	34.5	8.61	34.08	200	194	Peak
5654.875	54.2	45.11	71.81	-17.61	34.56	8.63	34.1	200	194	Peak
5917.9	52.61	43.23	73.45	-20.84	34.81	8.73	34.16	200	194	Peak
*5971.975	53.85	44.4	68.2	-14.35	34.87	8.75	34.17	200	194	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
*5610.25	54.01	44.98	68.2	-14.19	34.5	8.61	34.08	100	207	Peak
5655.4	52.83	43.74	72.2	-19.37	34.56	8.63	34.1	100	207	Peak
5921.05	52.83	43.45	71.12	-18.29	34.81	8.73	34.16	100	207	Peak
*5937.325	54.05	44.65	68.2	-14.15	34.83	8.73	34.16	100	207	Peak

Remarks:

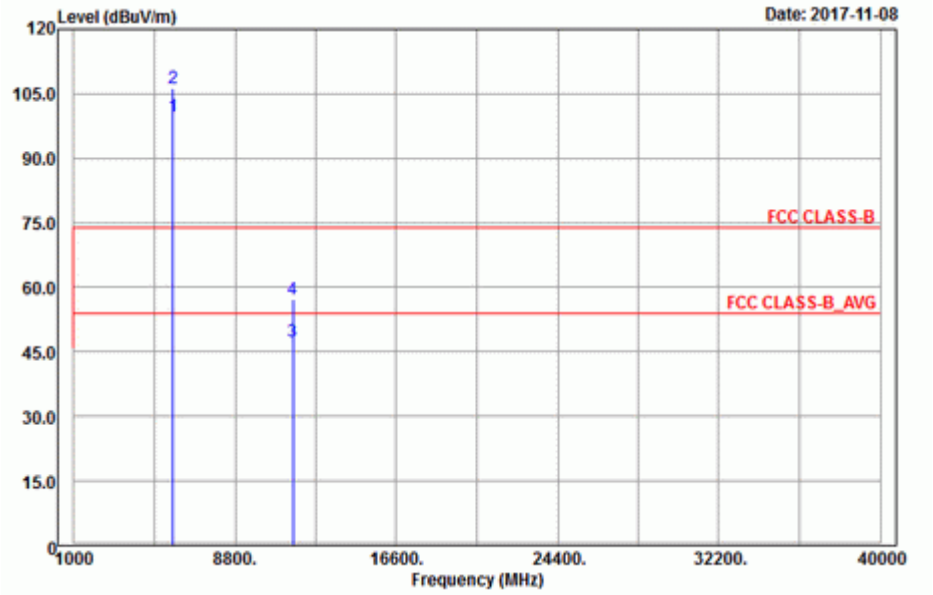
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5755 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

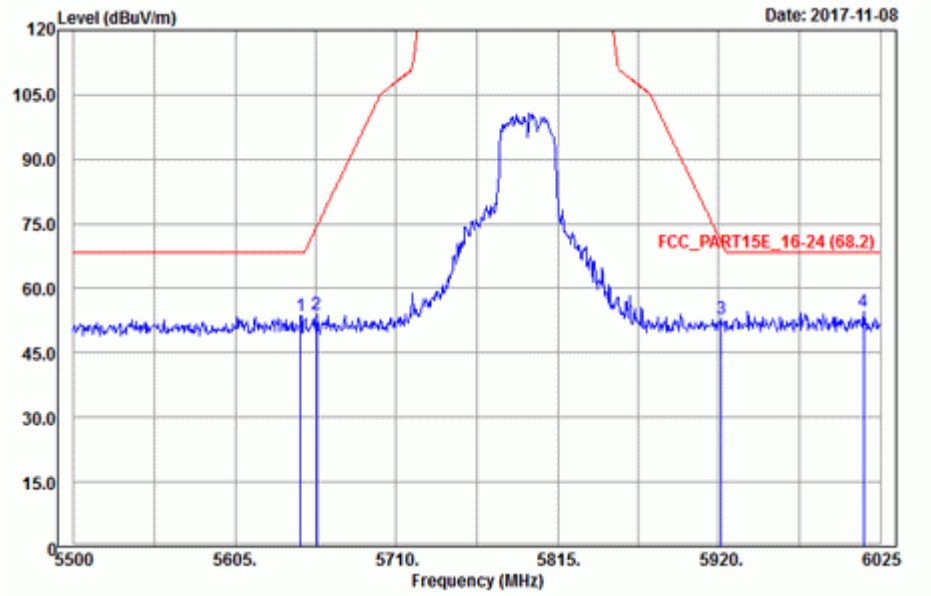
<Spurious Emission>
Horizontal



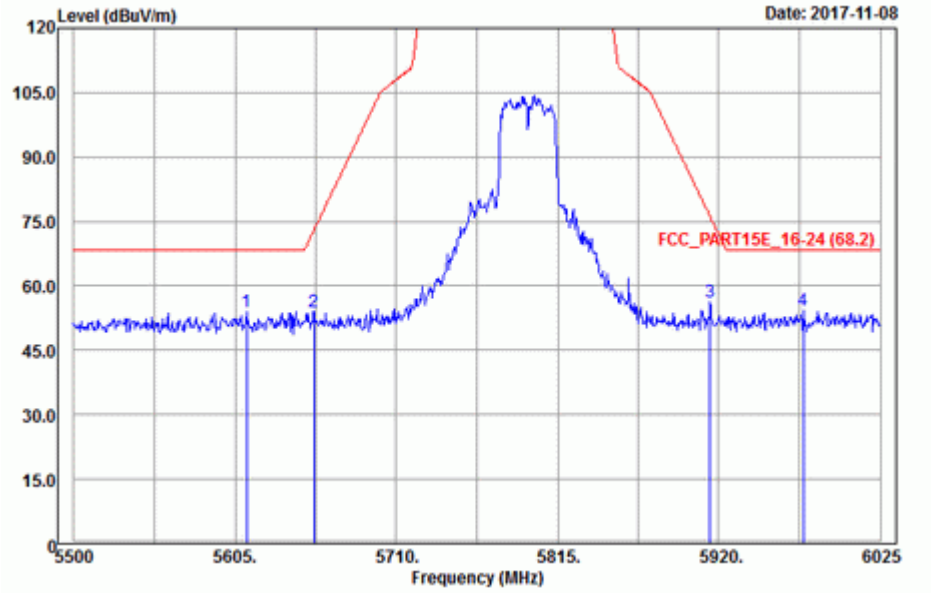
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5795	95.71	86.47			34.69	8.68	34.13	200	194	Average
5795	102.62	93.38			34.69	8.68	34.13	200	194	Peak
11590	47.72	32.35	54	-6.28	38.02	12.72	35.37	142	195	Average
11590	57.23	41.86	74	-16.77	38.02	12.72	35.37	142	195	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
5795	99.63	90.39			34.69	8.68	34.13	100	207	Average
5795	106.21	96.97			34.69	8.68	34.13	100	207	Peak
11590	47.51	32.14	54	-6.49	38.02	12.72	35.37	148	55	Average
11590	57.19	41.82	74	-16.81	38.02	12.72	35.37	148	55	Peak

<Ouf of Band Emission (OOBE)>

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
*5647.525	53.56	44.49	68.2	-14.64	34.54	8.62	34.09	200	194	Peak
5658.025	53.95	44.86	74.14	-20.19	34.56	8.63	34.1	200	194	Peak
5921.575	53.01	43.61	70.73	-17.72	34.83	8.73	34.16	200	194	Peak
*6014.5	54.54	45.04	68.2	-13.66	34.92	8.76	34.18	200	194	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
*5612.35	54.05	45.02	68.2	-14.15	34.5	8.61	34.08	100	207	Peak
5656.45	54.02	44.93	72.97	-18.95	34.56	8.63	34.1	100	207	Peak
5914.225	56.11	46.73	76.17	-20.06	34.81	8.73	34.16	100	207	Peak
*5975.125	54.14	44.68	68.2	-14.06	34.88	8.75	34.17	100	207	Peak

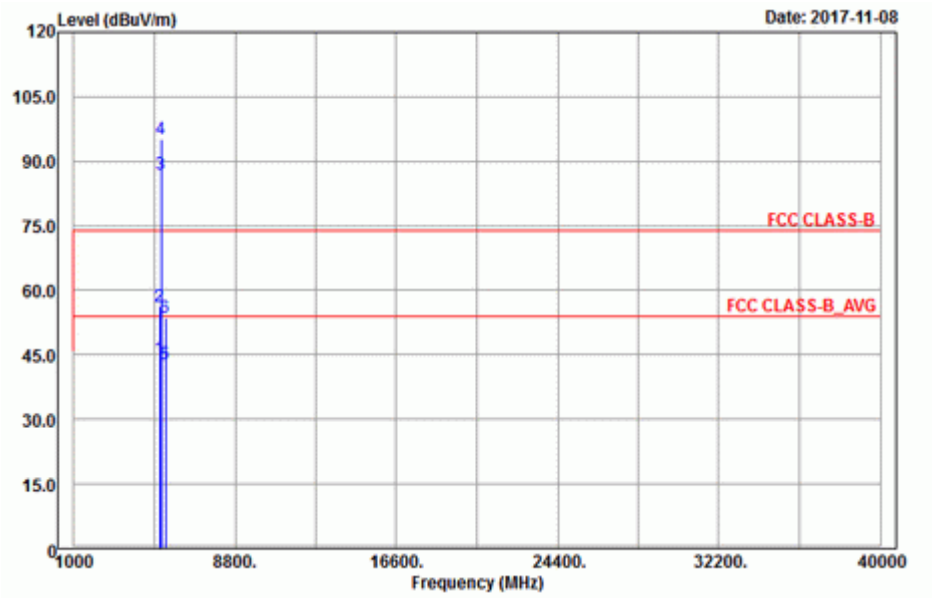
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5795 MHz: Fundamental Frequency
3. *: Out of Restricted Band

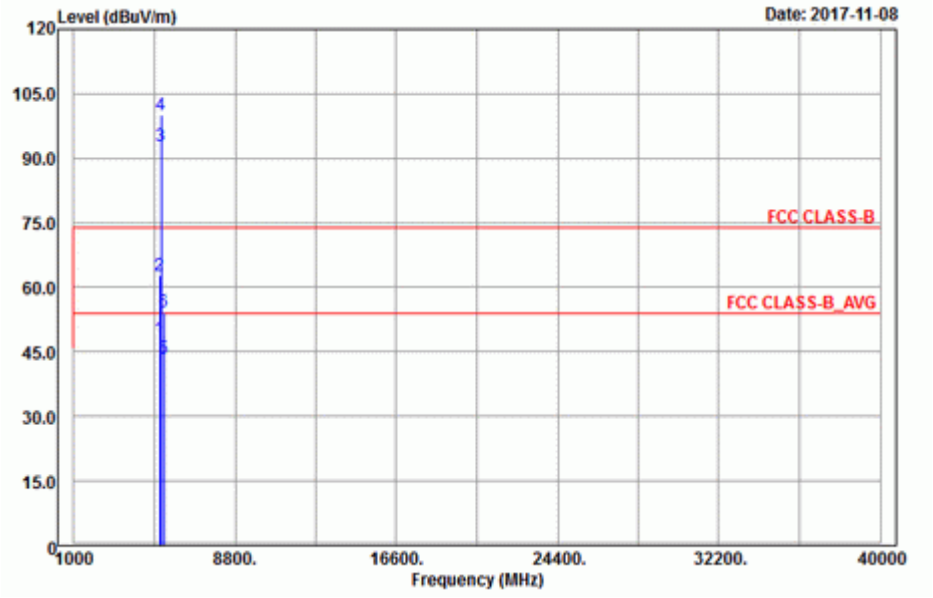
802.11ac (VHT80)

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



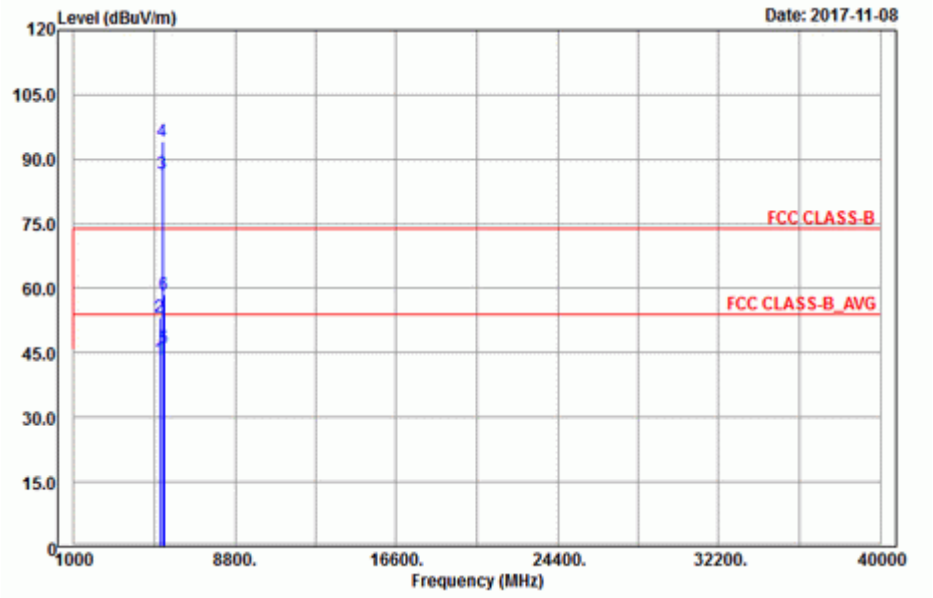
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.85	44.12	35.87	54	-9.88	34.12	8.13	34	151	163	Average
5149.85	56.22	47.97	74	-17.78	34.12	8.13	34	151	163	Peak
5210	86.87	78.51			34.17	8.19	34	151	163	Average
5210	95.24	86.88			34.17	8.19	34	151	163	Peak
5438.22	42.94	34.15	54	-11.06	34.35	8.48	34.04	151	163	Average
5438.22	53.57	44.78	74	-20.43	34.35	8.48	34.04	151	163	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
5149.85	48.07	39.82	54	-5.93	34.12	8.13	34	208	209	Average
5149.85	62.85	54.6	74	-11.15	34.12	8.13	34	208	209	Peak
5210	92.83	84.47			34.17	8.19	34	208	209	Average
5210	100.07	91.71			34.17	8.19	34	208	209	Peak
5369.36	43.45	34.78	54	-10.55	34.29	8.41	34.03	208	209	Average
5369.36	54.33	45.66	74	-19.67	34.29	8.41	34.03	208	209	Peak

Remarks:

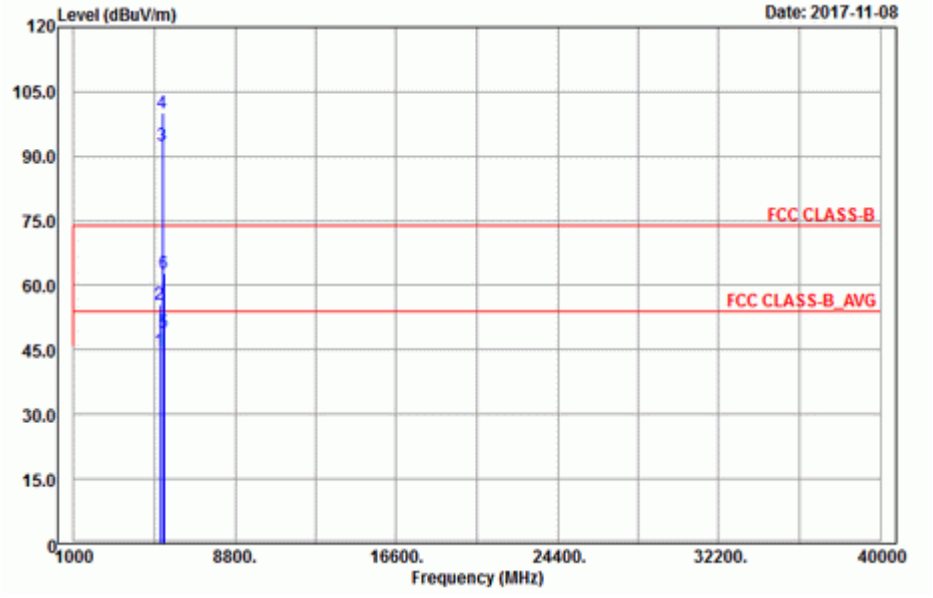
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5210 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



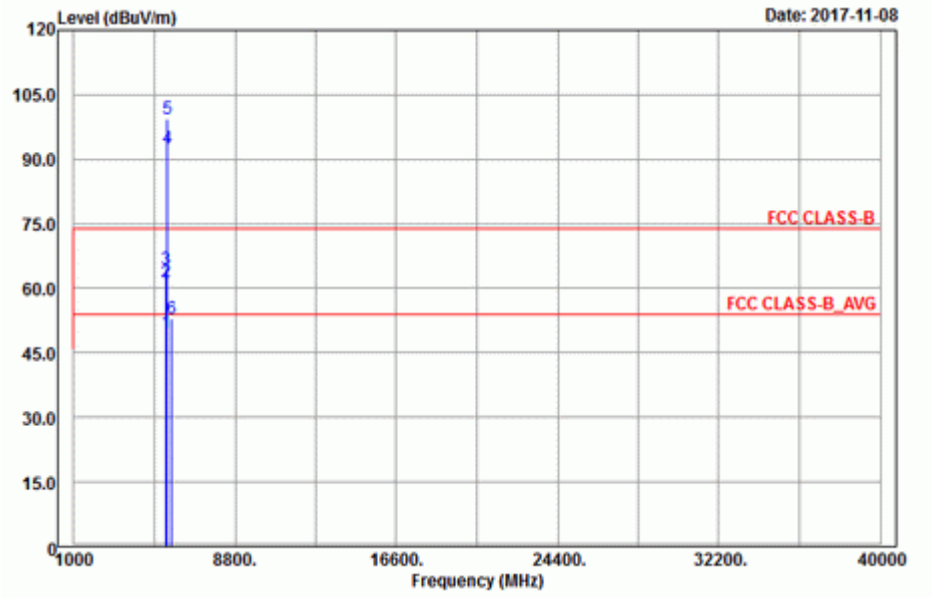
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.75	43.38	35.13	54	-10.62	34.12	8.13	34	102	150	Average
5147.75	53.23	44.98	74	-20.77	34.12	8.13	34	102	150	Peak
5290	86.63	78.1			34.23	8.32	34.02	102	150	Average
5290	94.11	85.58			34.23	8.32	34.02	102	150	Peak
5350.33	46.25	37.62	54	-7.75	34.28	8.38	34.03	126	150	Average
5350.33	58.38	49.75	74	-15.62	34.28	8.38	34.03	126	150	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	44.68	36.43	54	-9.32	34.12	8.13	34	240	210	Average
5150	55.43	47.18	74	-18.57	34.12	8.13	34	233	196	Peak
5290	92.5	83.97			34.23	8.32	34.02	240	210	Average
5290	99.99	91.46			34.23	8.32	34.02	240	210	Peak
5354.4	49.21	40.58	54	-4.79	34.28	8.38	34.03	233	196	Average
5354.4	62.9	54.27	74	-11.1	34.28	8.38	34.03	233	196	Peak

Remarks:

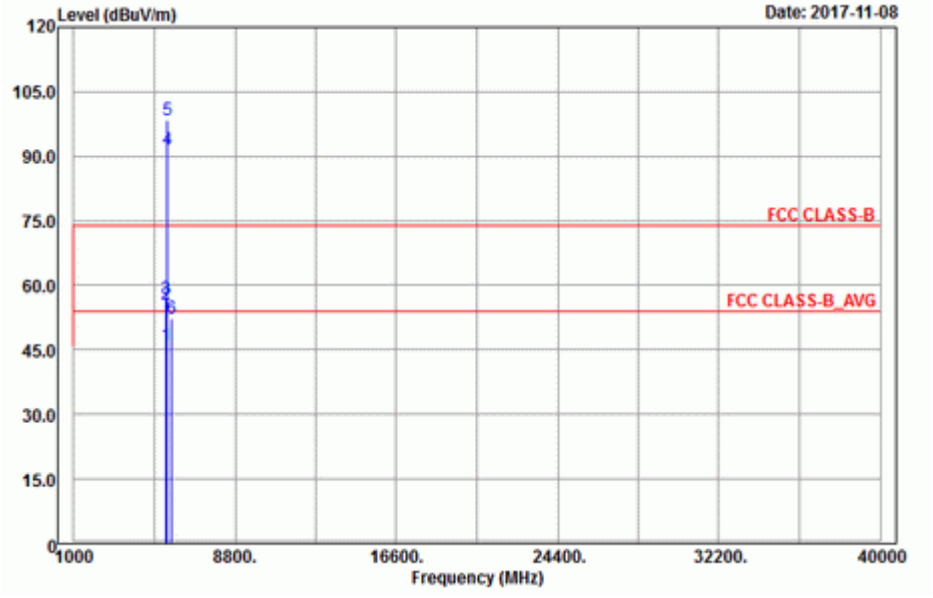
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5290 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



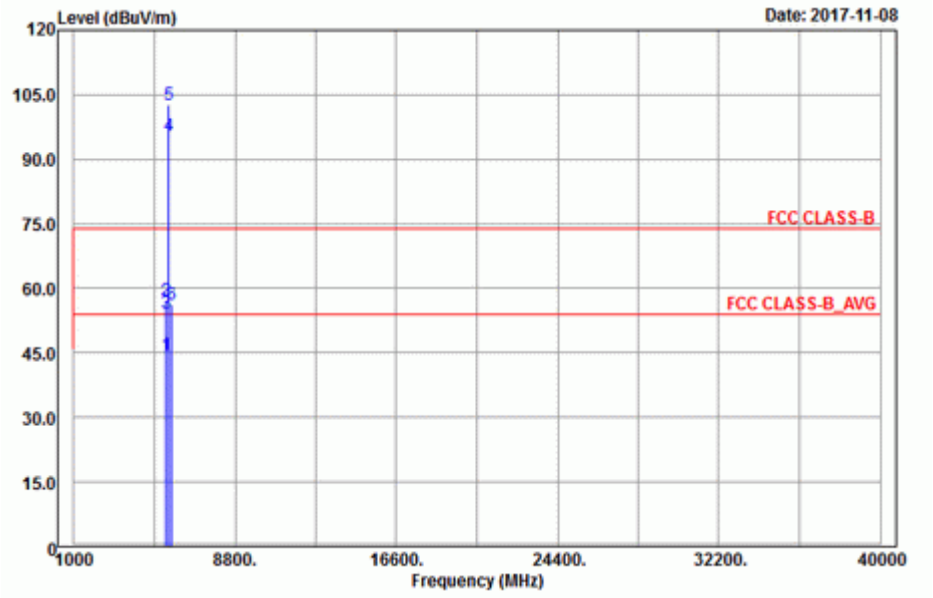
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5457.84	49.59	40.77	54	-4.41	34.36	8.51	34.05	286	105	Average
5457.84	61.54	52.72	74	-12.46	34.36	8.51	34.05	286	105	Peak
*5469.2	64.36	55.53	68.2	-3.84	34.37	8.51	34.05	286	105	Peak
5530	92.52	83.59			34.42	8.58	34.07	286	115	Average
5530	99.36	90.43			34.42	8.58	34.07	286	115	Peak
*5725.88	52.86	43.7	68.2	-15.34	34.62	8.65	34.11	286	105	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5457.68	45.97	37.15	54	-8.03	34.36	8.51	34.05	205	105	Average
5457.68	55.67	46.85	74	-18.33	34.36	8.51	34.05	205	105	Peak
*5469.04	56.93	48.1	68.2	-11.27	34.37	8.51	34.05	205	105	Peak
5530	91.47	82.54			34.42	8.58	34.07	205	105	Average
5530	98.58	89.65			34.42	8.58	34.07	205	105	Peak
*5724.36	52.32	43.16	68.2	-15.88	34.62	8.65	34.11	205	105	Peak

Remarks:

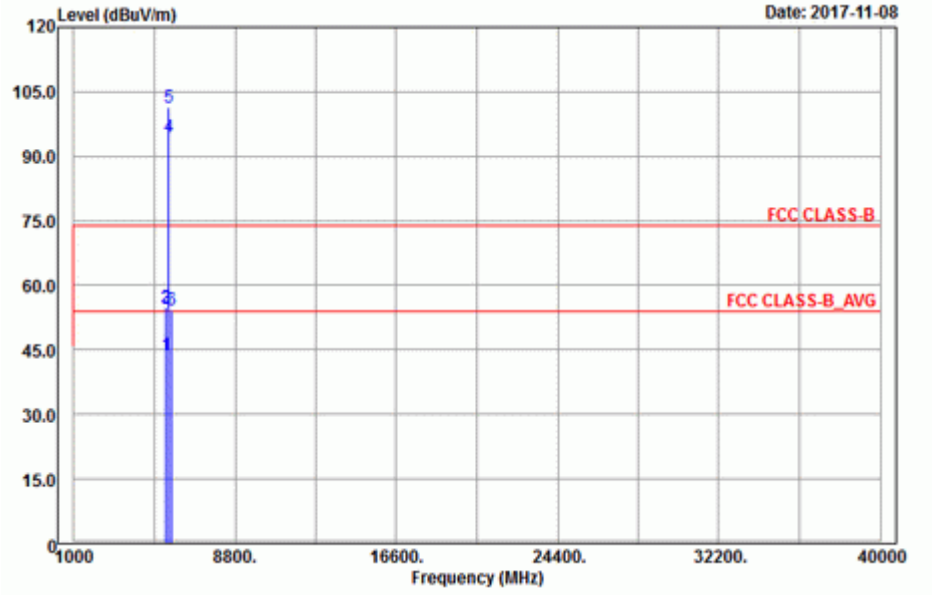
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5530 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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



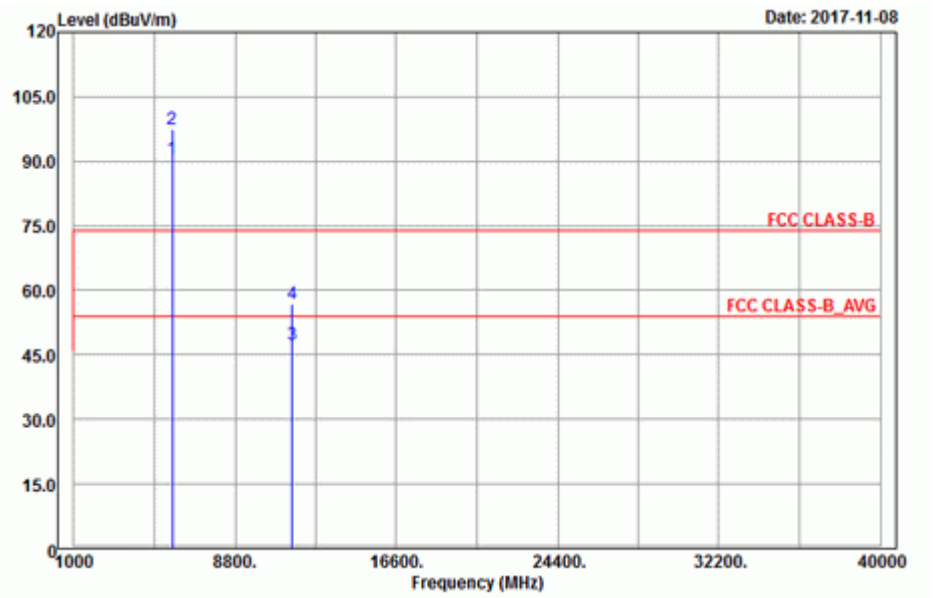
Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.6	44.53	35.71	54	-9.47	34.36	8.51	34.05	286	115	Average
5459.6	57.09	48.27	74	-16.91	34.36	8.51	34.05	286	115	Peak
*5469.2	54.12	45.29	68.2	-14.08	34.37	8.51	34.05	286	115	Peak
5610	95.38	86.35			34.5	8.61	34.08	286	115	Average
5610	102.68	93.65			34.5	8.61	34.08	286	115	Peak
*5725.32	56.14	46.98	68.2	-12.06	34.62	8.65	34.11	286	115	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
5459.6	43.86	35.04	54	-10.14	34.36	8.51	34.05	205	105	Average
5459.6	54.94	46.12	74	-19.06	34.36	8.51	34.05	205	105	Peak
*5470.64	54.52	45.69	68.2	-13.68	34.37	8.51	34.05	205	105	Peak
5610	94.55	85.52			34.5	8.61	34.08	205	105	Average
5610	101.29	92.26			34.5	8.61	34.08	205	105	Peak
*5724.44	54.31	45.15	68.2	-13.89	34.62	8.65	34.11	205	105	Peak

Remarks:

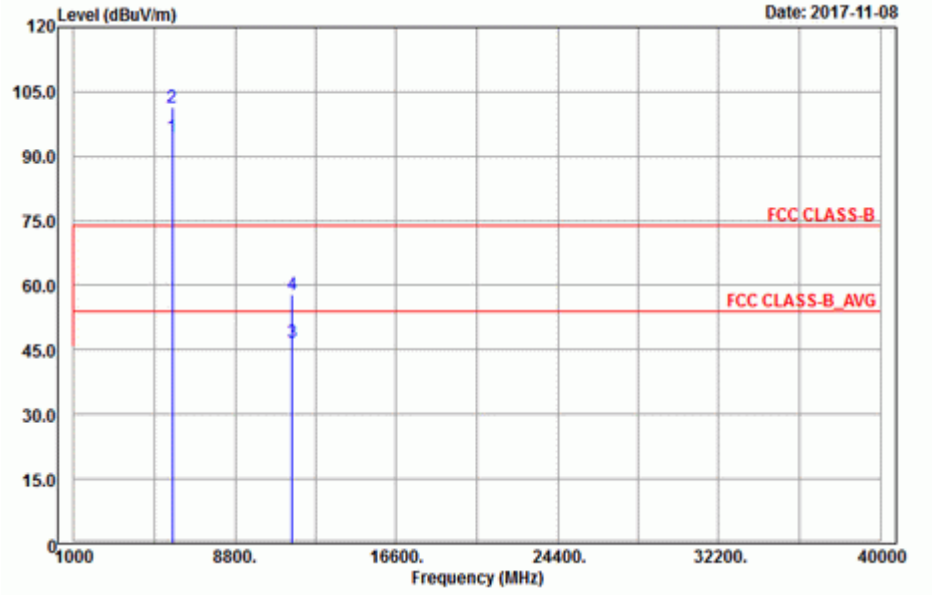
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5610 MHz: Fundamental Frequency
3. *: Out of Restricted Band

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

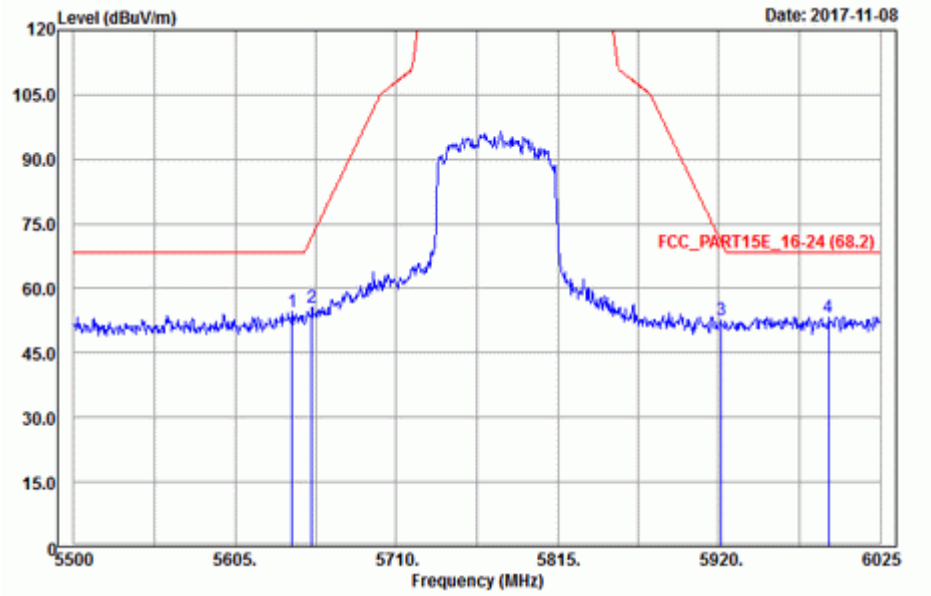
<Spurious Emission>
Horizontal



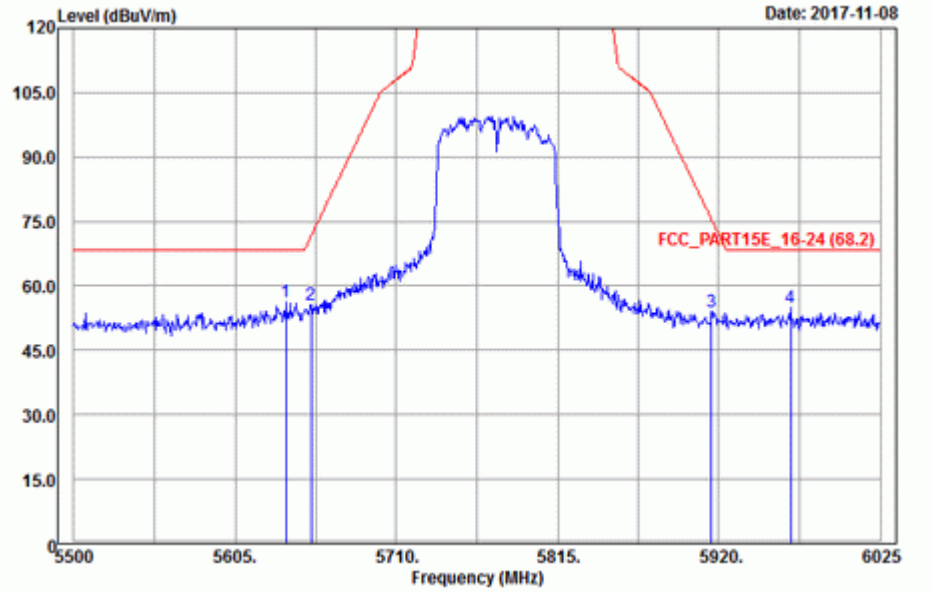
Vertical



<Ouf of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

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
5775	90.44	81.21			34.68	8.67	34.12	200	194	Average
5775	97.36	88.13			34.68	8.67	34.12	200	194	Peak
11550	47.53	32.26	54	-6.47	37.97	12.68	35.38	136	66	Average
11550	56.83	41.56	74	-17.17	37.97	12.68	35.38	136	66	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
5775	94.5	85.27			34.68	8.67	34.12	100	207	Average
5775	101.21	91.98			34.68	8.67	34.12	100	207	Peak
11550	46.76	31.49	54	-7.24	37.97	12.68	35.38	127	177	Average
11550	57.81	42.54	74	-16.19	37.97	12.68	35.38	127	177	Peak

<Ouf of Band Emission (OOBE)>

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
5642.275	54.52	45.45	68.2	-13.68	34.54	8.62	34.09	200	194	Peak
5654.875	55.56	46.47	71.81	-16.25	34.56	8.63	34.1	200	194	Peak
5921.575	52.77	43.37	70.73	-17.96	34.83	8.73	34.16	200	194	Peak
5991.4	53.42	43.93	68.2	-14.78	34.9	8.76	34.17	200	194	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
5638.075	56.08	47.01	68.2	-12.12	34.54	8.62	34.09	100	207	Peak
5654.35	55.63	46.54	71.42	-15.79	34.56	8.63	34.1	100	207	Peak
5915.275	54.07	44.69	75.4	-21.33	34.81	8.73	34.16	100	207	Peak
5966.725	54.86	45.41	68.2	-13.34	34.87	8.75	34.17	100	207	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.

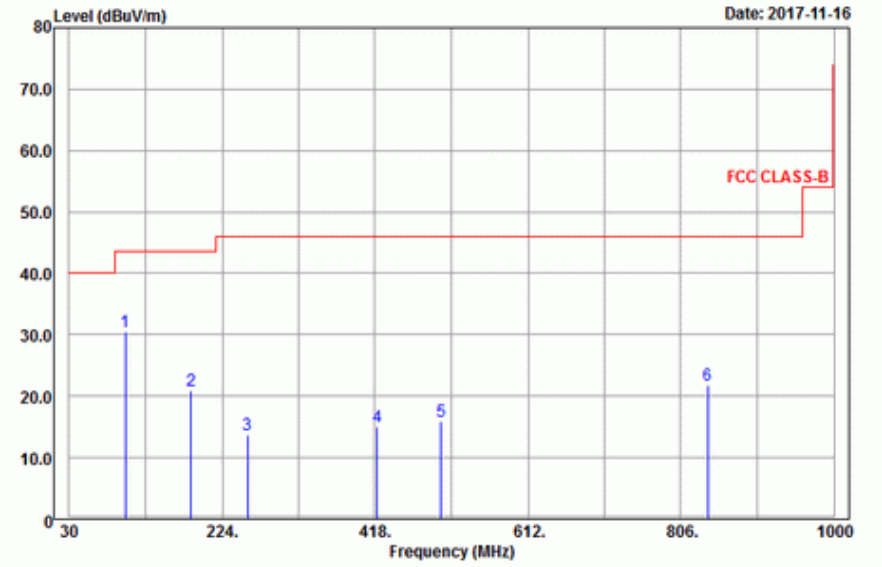
30 MHz ~ 1 GHz Worst-Case Data:

Mode A

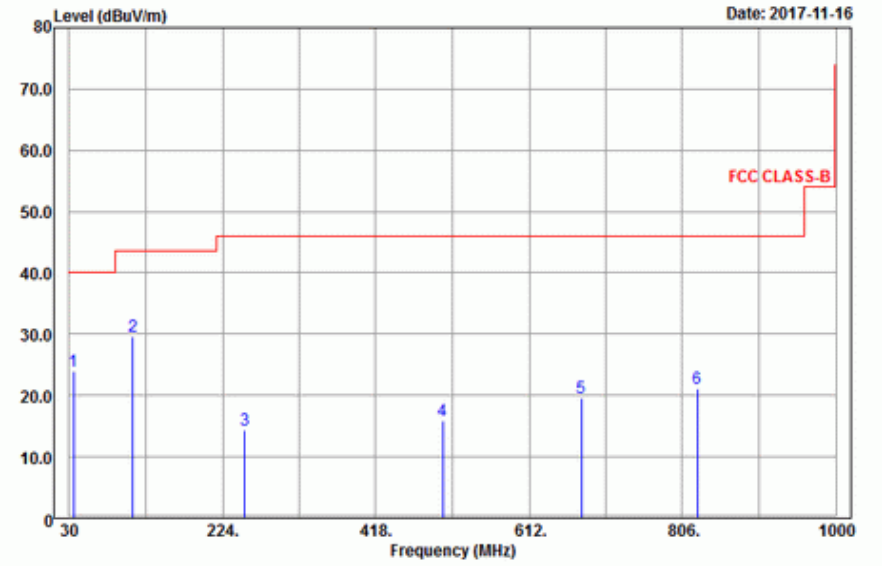
802.11ac (VHT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	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
101.01	30.49	49.16	43.5	-13.01	12.31	1.28	32.26	105	244	Peak
184.44	20.91	41.43	43.5	-22.59	10.11	1.61	32.24	173	165	Peak
256.26	13.75	31.49	46	-32.25	12.42	1.94	32.1	196	125	Peak
421.1	15.08	29.62	46	-30.92	15.24	2.41	32.19	154	168	Peak
501.6	15.99	29.09	46	-30.01	16.37	2.63	32.1	104	174	Peak
840.4	21.83	29.41	46	-24.17	20.89	3.38	31.85	185	236	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
35.13	24.03	43.44	40	-15.97	12.09	0.74	32.24	120	185	Peak
110.46	29.57	48.63	43.5	-13.93	11.91	1.28	32.25	174	34	Peak
252.21	14.37	32.18	46	-31.63	12.35	1.94	32.1	159	156	Peak
503	15.84	28.91	46	-30.16	16.4	2.63	32.1	100	108	Peak
678	19.69	29.85	46	-26.31	18.9	3.05	32.11	174	165	Peak
825	21.13	28.96	46	-24.87	20.71	3.38	31.92	144	135	Peak

Remarks:

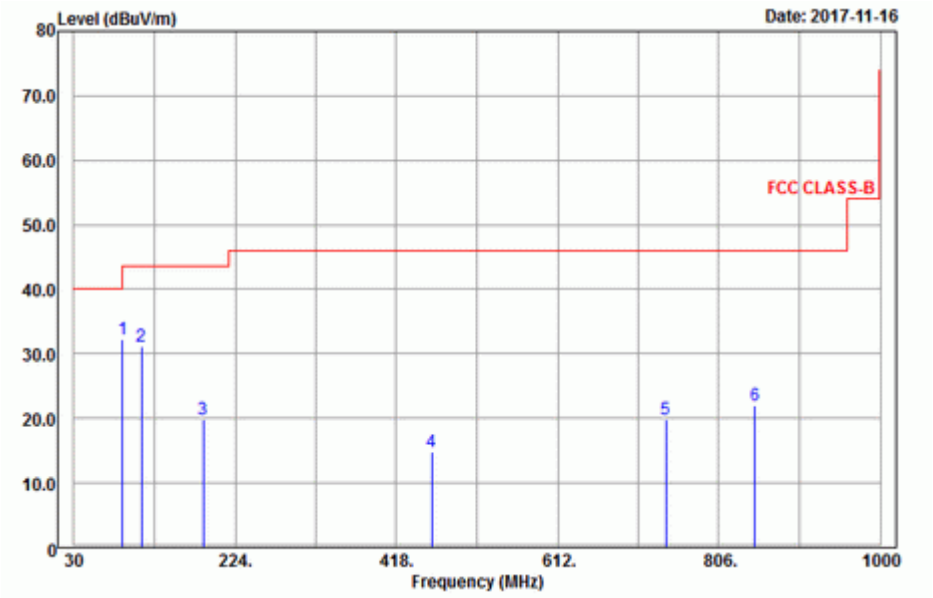
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

Mode B

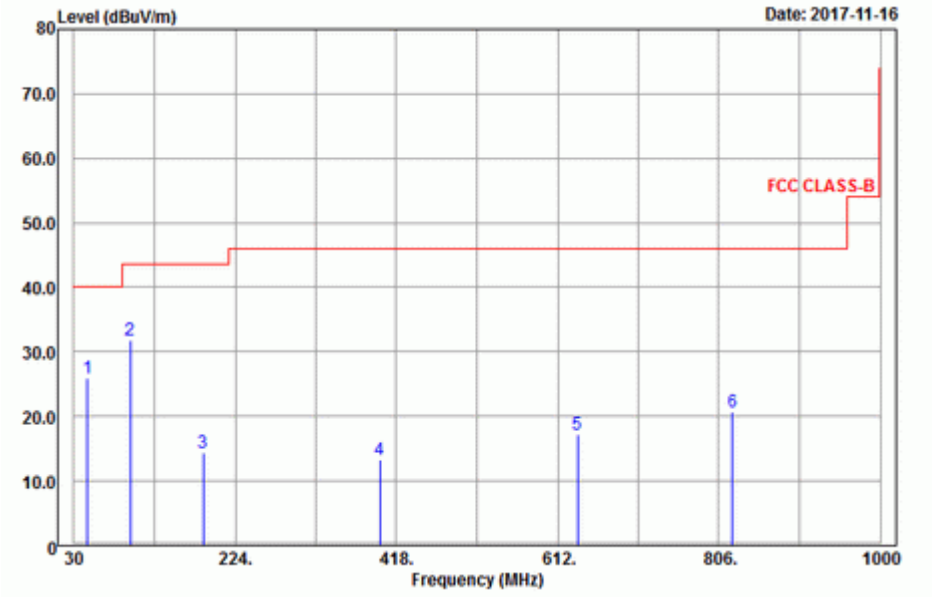
802.11ac (VHT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	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
88.59	32.37	53.12	43.5	-11.13	9.95	1.11	31.81	187	115	Peak
111.27	31.25	50.43	43.5	-12.25	11.79	1.28	32.25	169	321	Peak
185.52	19.85	40.28	43.5	-23.65	10.2	1.61	32.24	135	162	Peak
461	14.88	28.72	46	-31.12	15.73	2.56	32.13	123	145	Peak
742.4	19.76	29.01	46	-26.24	19.73	3.16	32.14	167	190	Peak
849.5	21.96	29.3	46	-24.04	21.02	3.44	31.8	164	240	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
46.2	25.96	42.82	40	-14.04	14.46	0.9	32.22	199	172	Peak
97.5	31.77	50.62	43.5	-11.73	12.02	1.28	32.15	104	102	Peak
185.52	14.37	34.8	43.5	-29.13	10.2	1.61	32.24	135	165	Peak
398	13.21	28.14	46	-32.79	14.95	2.34	32.22	165	126	Peak
636	17.28	28.25	46	-28.72	18.26	2.93	32.16	193	321	Peak
822.2	20.77	28.65	46	-25.23	20.68	3.38	31.94	167	128	Peak

Remarks:

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

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

Note: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Due Date Of Calibration
Test Receiver ROHDE & SCHWARZ	ESCS 30	100288	Aug. 17, 2017	Aug. 16, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN/AMN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 10, 2017	Mar. 09, 2018
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ENV216	101196	Apr. 20, 2017	Apr. 19, 2018
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

4.2.3 Test Procedures

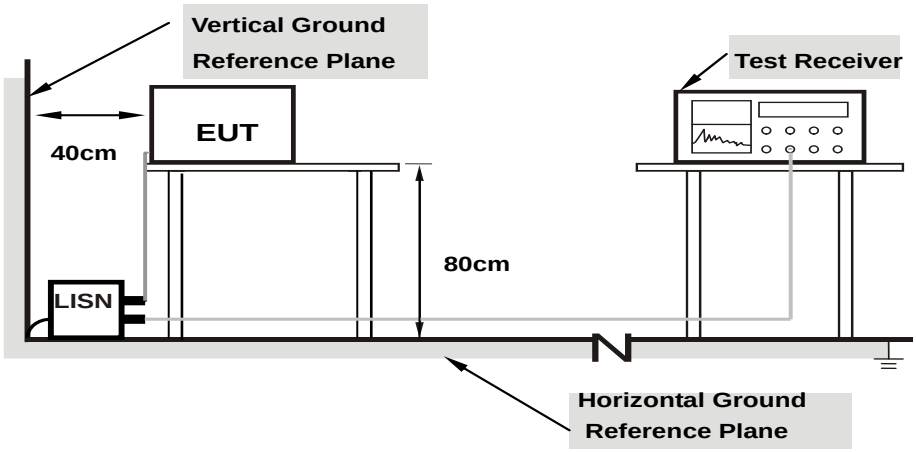
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

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

4.2.7 Test Results

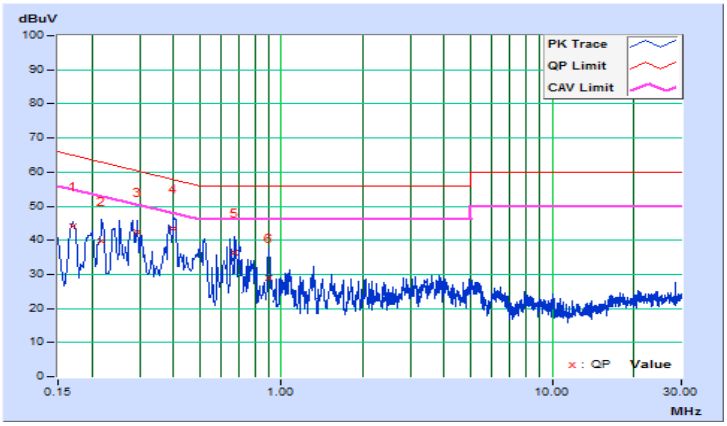
Mode A

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Getaz Yang	Test Date	2017/11/21

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17000	10.39	33.82	16.31	44.21	26.70	64.96	54.96	-20.75	-28.26
2	0.21805	10.40	29.27	16.38	39.67	26.78	62.89	52.89	-23.22	-26.11
3	0.29400	10.40	32.17	19.41	42.57	29.81	60.41	50.41	-17.84	-20.60
4	**0.39863**	**10.41**	**33.05**	**21.38**	**43.46**	**31.79**	**57.88**	**47.88**	**-14.42**	**-16.09**
5	0.67400	10.41	26.12	8.69	36.53	19.10	56.00	46.00	-19.47	-26.90
6	0.89800	10.42	18.46	7.64	28.88	18.06	56.00	46.00	-27.12	-27.94

Remarks:

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

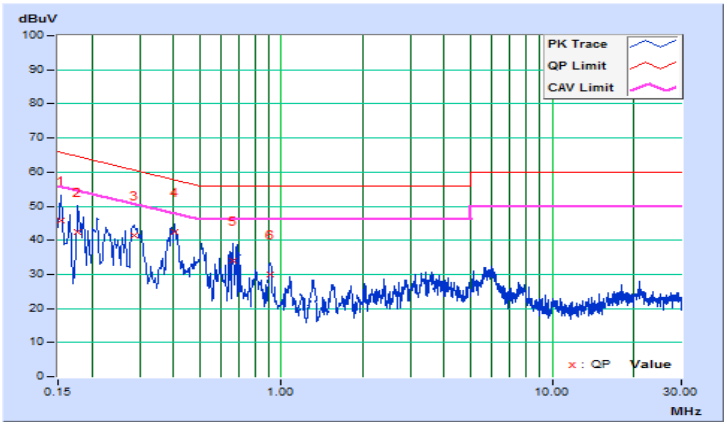


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Getaz Yang	Test Date	2017/11/21

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	10.15	35.79	18.15	45.94	28.30	65.78	55.78	-19.84	-27.48
2	0.17801	10.16	32.27	15.14	42.43	25.30	64.58	54.58	-22.15	-29.28
3	0.28527	10.16	31.18	17.61	41.34	27.77	60.66	50.66	-19.32	-22.89
4	0.40605	10.17	32.26	19.85	42.43	30.02	57.73	47.73	-15.30	-17.71
5	0.66600	10.18	23.78	6.44	33.96	16.62	56.00	46.00	-22.04	-29.38
6	0.90600	10.19	19.74	7.05	29.93	17.24	56.00	46.00	-26.07	-28.76

Remarks:

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



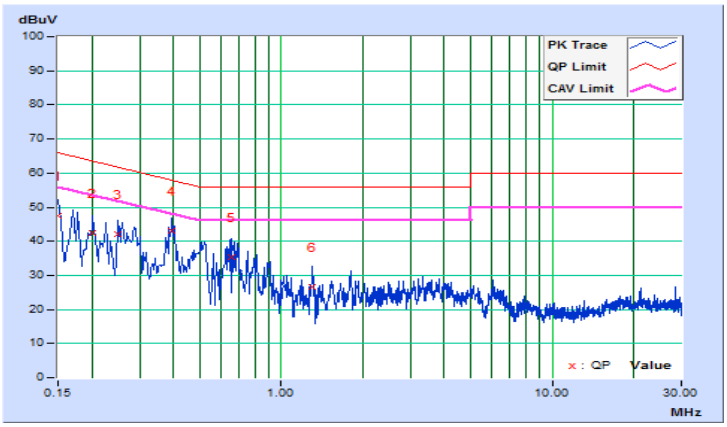
Mode B

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Getaz Yang	Test Date	2017/11/21

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.39	37.02	19.31	47.41	29.70	66.00	56.00	-18.59	-26.30
2	0.20200	10.39	32.01	19.45	42.40	29.84	63.53	53.53	-21.13	-23.69
3	0.25000	10.40	31.65	16.30	42.05	26.70	61.76	51.76	-19.71	-25.06
4	0.39400	10.41	32.52	20.58	42.93	30.99	57.98	47.98	-15.05	-16.99
5	0.65800	10.41	25.00	7.70	35.41	18.11	56.00	46.00	-20.59	-27.89
6	1.30600	10.44	16.06	6.62	26.50	17.06	56.00	46.00	-29.50	-28.94

Remarks:

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

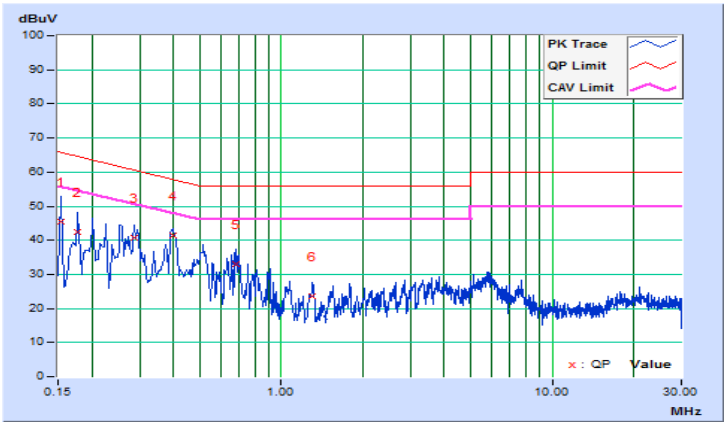


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Getaz Yang	Test Date	2017/11/21

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	10.15	35.43	17.88	45.58	28.03	65.78	55.78	-20.20	-27.75
2	0.17800	10.16	32.14	14.53	42.30	24.69	64.58	54.58	-22.28	-29.89
3	0.28602	10.16	30.53	17.50	40.69	27.66	60.64	50.64	-19.95	-22.98
4	0.39654	10.17	31.30	19.73	41.47	29.90	57.93	47.93	-16.46	-18.03
5	0.67800	10.18	22.94	6.78	33.12	16.96	56.00	46.00	-22.88	-29.04
6	1.30600	10.21	13.51	5.68	23.72	15.89	56.00	46.00	-32.28	-30.11

Remarks:

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



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 FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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