

Partial FCC Test Report

Report No.: RF150724C30-3

FCC ID: PPD-QCNFA344AH

Test Model: QCNFA344A

Received Date: Jul. 24, 2015

Test Date: Aug. 04, 2015 ~ Aug. 13, 2015

Issued Date: Sep. 30, 2015

Applicant: Qualcomm Atheros, Inc.

Address: 1700 Technology Drive, San Jose, CA 95110

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

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

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

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



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Release Control Record

Issue No.	Description	Date Issued
RF150724C30-3	Original Release	Sep. 30, 2015

1 Certificate of Conformity

Product: Module

Brand: Qualcomm

Test Model: QCNFA344A

Sample Status: Identical Prototype

Applicant: Qualcomm Atheros, Inc.

Test Date: Aug. 04, 2015 ~ Aug. 13, 2015

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:

Sep. 30, 2015

Ivonne Wu / Supervisor

Approved by :



Date:

Sep. 30, 2015

Kay Wu / Supervisor

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 -19.74dB at 13.36328MHz.
15.407(b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.03dB at 5470.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6dB bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	PASS	No antenna connector is used.

NOTE: Only test item of Max. Average Transmit Power, AC Power Conducted Emission, and Radiated Emissions tests were performed for this report. Other test data please refer to module report no.: RF150107E06F-1.

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) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.44 dB
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	2.0153 dB
	200MHz ~1000MHz	2.0224 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	1.0121 dB
	18GHz ~ 40GHz	1.1508 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Module
Brand	Qualcomm
Test Model	QCNFA344A
Status of EUT	Identical Prototype
Power Supply Rating	19.5Vdc (adapter) 11.1Vdc (Li-ion battery)
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/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to V9
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 2 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz)
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

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

Modulation Mode	Tx Function
802.11a	1TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX
802.11ac (80MHz)	2TX

2. The EUT is allocated in specific End-product. Please refer to below table for the details.

Host Type	Host Brand	Host Model
Portable Computer	DELL	P68G

3. The antenna information is listed as below.

Antenna Type	Manufacturer	Parts Number	Antenna Gain (dBi)	
			2.4GHz	5GHz
PIFA	Yageo Corporation	Main Antenna: ANTA0DQ10382WLAN1 (DQ610382W00) Aux. Antenna: ANTA0DQ10382WLAN1 (DQ610382W00)	Main: -0.89 Aux.: 0.51	Main: 2.13 Aux.: 1.42

4. The host (P68G) contains following accessory devices.

Product	Brand	Model	Description
Adapter	DELL	LA65NS2-01	I/P: 100-240Vac, 50/60Hz, 1.6A O/P: 19.5Vdc, 3.34A 1.8m non-shielded cable w/o core
Battery	DELL	D2VF9	11.1Vdc, 43Wh
WLAN Module	Qualcomm Atheros	QCNFA344A	--

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 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

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

2 channels are provided for 802.11n (40MHz):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

Channel	Frequency
42	5210MHz

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

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

2 channels are provided for 802.11n (40MHz):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

Channel	Frequency
58	5290MHz

FOR 5500 ~ 5700MHz

11 channels are provided for 802.11a, 802.11n (20MHz):

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

5 channels are provided for 802.11n (40MHz):

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

2 channels are provided for 802.11ac (80MHz):

Channel	Frequency	Channel	Frequency
106	5530MHz	122	5610 MHz

FOR 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (20MHz):

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

2 channels are provided for 802.11n (40MHz):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (80MHz):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

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

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

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Radiated Emission Test (Above 1GHz):

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		106 to 122	106, 122	OFDM	BPSK	V0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

Radiated Emission Test (Below 1GHz):

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11ac (80MHz)	5180-5240	42	42	OFDM	BPSK	V0
-	802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	MCS0
-	802.11a	5500-5700	100 to 140	100	OFDM	BPSK	6.0
-	802.11n (20MHz)	5745-5825	149 to 165	149	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	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5500-5700	100 to 140	100	OFDM	BPSK	6.0

Antenna Port Conducted Measurement:

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		106 to 122	106, 122	OFDM	BPSK	V0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
-	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

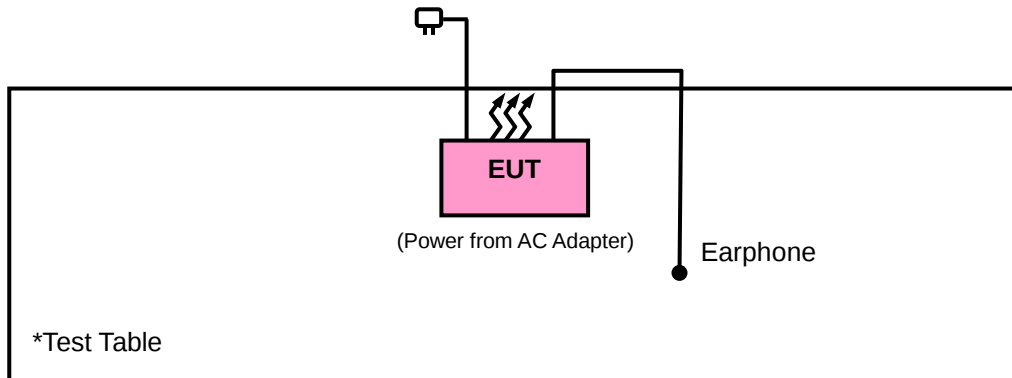
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Karl Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Karl Lee
PLC	25deg. C, 65%RH	120Vac, 60Hz	Toby Tian
APCM	25deg. C, 65%RH	19.5Vdc	Howard Kao

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 v01

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 20dB below the highest level of the desired power:

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

NOTE:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- For frequencies above 1000MHz, 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 20dB 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 v01	Field Strength AT 3m	
	PK:74 (dBμV/m)	AV:54 (dBμV/m)
Applicable To	EIRP Limit	Equivalent Field Strength At 3m
15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK:-27 (dBm/MHz) ^{*1} PK:-17 (dBm/MHz) ^{*2}	PK: 68.2(dBμV/m) ^{*1} PK:78.2 (dBμV/m) ^{*2}

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

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

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

4.1.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Spectrum Analyzer Agilent Technologies	N9038A	MY52260177	May 19, 2015	May 18, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 10, 2014	Dec. 09, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 04, 2015	Feb. 04, 2016
HORN Antenna ETS-Lindgren	3117	00143293	Jan. 05, 2015	Jan. 04, 2016
Bluetooth Tester	CBT	100980	Apr. 27, 2015	Apr. 26, 2017
Agilent Communications Tester-Wireless	8960 Series 10	MY53201073	Jul. 03, 2015	Jul. 02, 2017
Preamplifier Agilent	310N	187226	Jun. 29, 2015	Jun. 28, 2016
Preamplifier Agilent	83017A	MY39501357	Jun. 29, 2015	Jun. 28, 2016
Power Meter Anritsu	ML2495A	1232002	Sep. 17, 2014	Sep. 16, 2015
Power Sensor Anritsu	MA2411B	1207325	Sep. 17, 2014	Sep. 16, 2015
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(R FC-SMS-100-SM S-120+RFC-SMS -100-SMS-400)	Jun. 27, 2015	Jun. 26, 2016
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(R FC-SMS-100-SM S-24)	Jun. 27, 2015	Jun. 26, 2016
Software BV ADT	E3 8.130425b	NA	NA	NA
Antenna Tower MF	NA	NA	NA	NA
Turn Table MF	NA	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA

- Note: 1. The calibration interval of the above test instruments is 12 / 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HsinTien Chamber 1.
3. The horn antenna and preamplifier (model: 83017A) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 149147.
5. The IC Site Registration No. is IC7450I-1.

4.1.4 Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) 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 detect 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:

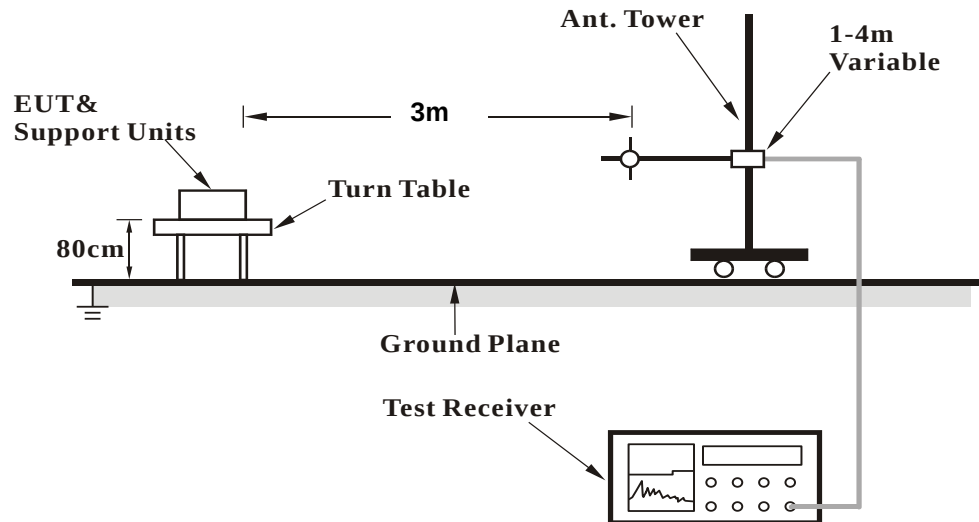
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.5 Deviation from Test Standard

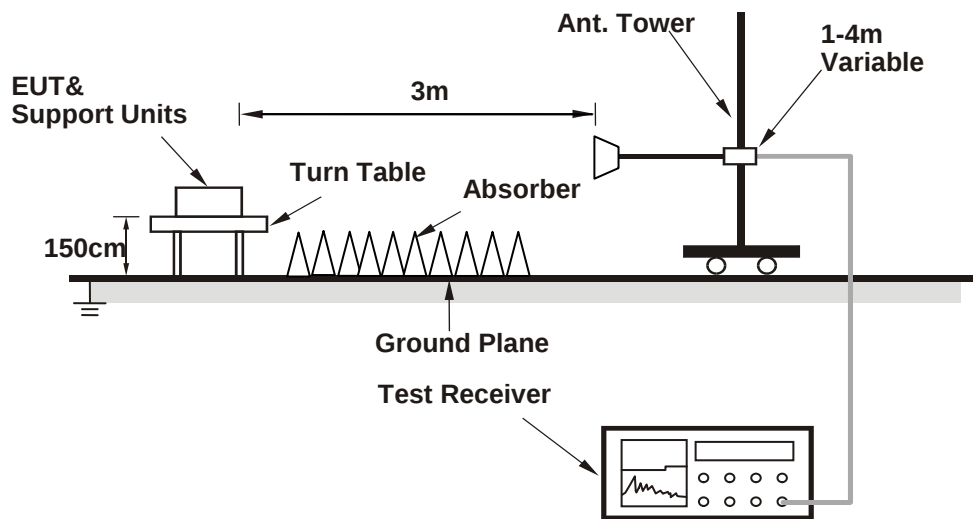
No deviation.

4.1.6 Test Set Up

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.7 EUT Operating Conditions

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

4.1.8 Test Results

ABOVE 1GHz DATA :

<1TX >

802.11a

Chain A

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	44.55	36.3	54	-9.45	34.12	8.13	34	161	255	Average
5146	57.74	49.49	74	-16.26	34.12	8.13	34	161	255	Peak
5180	92.71	84.4			34.15	8.16	34	161	255	Average
5180	100.99	92.68			34.15	8.16	34	161	255	Peak
5442	43.12	34.33	54	-10.88	34.35	8.48	34.04	161	255	Average
5442	57.46	48.67	74	-16.54	34.35	8.48	34.04	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	46.65	38.4	54	-7.35	34.12	8.13	34	111	359	Average
5148	61.23	52.98	74	-12.77	34.12	8.13	34	111	359	Peak
5180	97.75	89.44			34.15	8.16	34	111	359	Average
5180	105.98	97.67			34.15	8.16	34	111	359	Peak
5372	42.81	34.14	54	-11.19	34.29	8.41	34.03	111	359	Average
5372	56.79	48.12	74	-17.21	34.29	8.41	34.03	111	359	Peak
10360	51.9	37.6	77.75	-25.85	37.12	12.3	35.12	126	310	Average
10360	60.06	45.76	85.98	-25.92	37.12	12.3	35.12	126	310	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180MHz: Fundamental frequency.
- 10360MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	42.7	34.48	54	-11.3	34.11	8.1	33.99	161	255	Average
5128	58.26	50.04	74	-15.74	34.11	8.1	33.99	161	255	Peak
5220	91.9	83.51			34.17	8.22	34	161	255	Average
5220	100.24	91.85			34.17	8.22	34	161	255	Peak
5372	42.81	34.14	54	-11.19	34.29	8.41	34.03	161	255	Average
5372	58.03	49.36	74	-15.97	34.29	8.41	34.03	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5090	42.55	34.38	54	-11.45	34.08	8.07	33.98	111	359	Average
5090	56.7	48.53	74	-17.3	34.08	8.07	33.98	111	359	Peak
5220	96.8	88.41			34.17	8.22	34	111	359	Average
5220	105.21	96.82			34.17	8.22	34	111	359	Peak
5398	42.96	34.24	54	-11.04	34.32	8.44	34.04	111	359	Average
5398	57.58	48.86	74	-16.42	34.32	8.44	34.04	111	359	Peak
10440	50.46	36	76.8	-26.34	37.16	12.47	35.17	141	311	Average
10440	60.42	45.96	85.21	-24.79	37.16	12.47	35.17	141	311	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220MHz: Fundamental frequency.
- 10440MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5102	42.75	34.59	54	-11.25	34.08	8.07	33.99	161	255	Average
5102	56.28	48.12	74	-17.72	34.08	8.07	33.99	161	255	Peak
5240	92.34	83.9			34.19	8.26	34.01	161	255	Average
5240	100.47	92.03			34.19	8.26	34.01	161	255	Peak
5350	42.86	34.23	54	-11.14	34.28	8.38	34.03	161	255	Average
5350	57.72	49.09	74	-16.28	34.28	8.38	34.03	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5102	42.75	34.59	54	-11.25	34.08	8.07	33.99	103	336	Average
5102	56.92	48.76	74	-17.08	34.08	8.07	33.99	103	336	Peak
5240	97.14	88.7			34.19	8.26	34.01	103	336	Average
5240	105.21	96.77			34.19	8.26	34.01	103	336	Peak
5350	42.96	34.33	54	-11.04	34.28	8.38	34.03	103	336	Average
5350	57.41	48.78	74	-16.59	34.28	8.38	34.03	103	336	Peak
10480	51.71	37.2	77.14	-25.43	37.19	12.53	35.21	100	64	Average
10480	62.32	47.81	85.21	-22.89	37.19	12.53	35.21	100	64	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5054	42.7	34.64	54	-11.3	34.04	8	33.98	116	126	Average
5054	57.02	48.96	74	-16.98	34.04	8	33.98	116	126	Peak
5260	91.87	83.41			34.21	8.26	34.01	116	126	Average
5260	100.17	91.71			34.21	8.26	34.01	116	126	Peak
5438	43.02	34.23	54	-10.98	34.35	8.48	34.04	116	126	Average
5438	57.5	48.71	74	-16.5	34.35	8.48	34.04	116	126	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	42.9	34.68	54	-11.1	34.11	8.1	33.99	100	124	Average
5128	56.85	48.63	74	-17.15	34.11	8.1	33.99	100	124	Peak
5260	96.77	88.31			34.21	8.26	34.01	100	124	Average
5260	105.27	96.81			34.21	8.26	34.01	100	124	Peak
5434	43.12	34.33	54	-10.88	34.35	8.48	34.04	100	124	Average
5434	58.03	49.24	74	-15.97	34.35	8.48	34.04	100	124	Peak
10520	50.8	36.21	76.77	-25.97	37.21	12.61	35.23	100	185	Average
10520	60.1	45.51	85.27	-25.17	37.21	12.61	35.23	100	185	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.
- 10520MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5136	42.64	34.39	54	-11.36	34.11	8.13	33.99	100	124	Average
5136	57.39	49.14	74	-16.61	34.11	8.13	33.99	100	124	Peak
5300	92.36	83.82			34.24	8.32	34.02	100	124	Average
5300	100.54	92			34.24	8.32	34.02	100	124	Peak
5416	43.38	34.65	54	-10.62	34.33	8.44	34.04	100	124	Average
5416	57.05	48.32	74	-16.95	34.33	8.44	34.04	100	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5134	42.84	34.59	54	-11.16	34.11	8.13	33.99	101	150	Average
5134	56.73	48.48	74	-17.27	34.11	8.13	33.99	101	150	Peak
5300	97.66	89.12			34.24	8.32	34.02	101	150	Average
5300	105.95	97.41			34.24	8.32	34.02	101	150	Peak
5350	43.76	35.13	54	-10.24	34.28	8.38	34.03	101	150	Average
5350	57.99	49.36	74	-16.01	34.28	8.38	34.03	101	150	Peak
10600	51.78	37.1	54	-2.22	37.28	12.67	35.27	125	65	Average
10600	61.41	46.73	74	-12.59	37.28	12.67	35.27	125	65	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5022	42.55	34.52	54	-11.45	34.03	7.97	33.97	107	129	Average
5022	57.44	49.41	74	-16.56	34.03	7.97	33.97	107	129	Peak
5320	92.3	83.72			34.25	8.35	34.02	107	129	Average
5320	100.58	92			34.25	8.35	34.02	107	129	Peak
5350	45.36	36.73	54	-8.64	34.28	8.38	34.03	107	129	Average
5350	63.06	54.43	74	-10.94	34.28	8.38	34.03	107	129	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5134	42.84	34.59	54	-11.16	34.11	8.13	33.99	101	150	Average
5134	57.24	48.99	74	-16.76	34.11	8.13	33.99	101	150	Peak
5320	97.6	89.02			34.25	8.35	34.02	101	150	Average
5320	105.57	96.99			34.25	8.35	34.02	101	150	Peak
5350	48.26	39.63	54	-5.74	34.28	8.38	34.03	101	150	Average
5350	66.46	57.83	74	-7.54	34.28	8.38	34.03	101	150	Peak
10640	51.02	36.29	54	-2.98	37.31	12.71	35.29	132	64	Average
10640	62.19	47.46	74	-11.81	37.31	12.71	35.29	132	64	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	43.75	34.93	54	-10.25	34.36	8.51	34.05	101	128	Average
5460	58.81	49.99	74	-15.19	34.36	8.51	34.05	101	128	Peak
5470	59.62	50.79	68.2	-8.58	34.37	8.51	34.05	101	128	Peak
5500	92.98	84.06			34.4	8.57	34.05	101	128	Average
5500	100.62	91.7			34.4	8.57	34.05	101	128	Peak
5725	57.15	47.99	68.2	-11.05	34.62	8.65	34.11	101	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	44.84	36.02	54	-9.16	34.36	8.51	34.05	201	356	Average
5460	63.33	54.51	74	-10.67	34.36	8.51	34.05	201	356	Peak
5470	67.17	58.34	68.2	-1.03	34.37	8.51	34.05	201	356	Peak
5500	97.11	88.19			34.4	8.57	34.05	201	356	Average
5500	105.61	96.69			34.4	8.57	34.05	201	356	Peak
5725	58.45	49.29	68.2	-9.75	34.62	8.65	34.11	201	356	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5376	42.95	34.29	54	-11.05	34.29	8.41	34.04	100	128	Average
5376	57.66	49	74	-16.34	34.29	8.41	34.04	100	128	Peak
5470	57.89	49.06	68.2	-10.31	34.37	8.51	34.05	100	128	Peak
5580	93.1	84.11			34.47	8.6	34.08	100	128	Average
5580	100.78	91.79			34.47	8.6	34.08	100	128	Peak
5725	56.45	47.29	68.2	-11.75	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5430	43.01	34.22	54	-10.99	34.35	8.48	34.04	205	356	Average
5430	57.52	48.73	74	-16.48	34.35	8.48	34.04	205	356	Peak
5470	56.55	47.72	68.2	-11.65	34.37	8.51	34.05	205	356	Peak
5580	96.76	87.77			34.47	8.6	34.08	205	356	Average
5580	105.22	96.23			34.47	8.6	34.08	205	356	Peak
5725	56.51	47.35	68.2	-11.69	34.62	8.65	34.11	205	356	Peak
11160	51.74	36.66	54	-2.26	37.7	12.83	35.45	114	175	Average
11160	62.93	47.85	74	-11.07	37.7	12.83	35.45	114	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5382	42.81	34.13	54	-11.19	34.31	8.41	34.04	101	135	Average
5382	57.13	48.45	74	-16.87	34.31	8.41	34.04	101	135	Peak
5470	55.18	46.35	68.2	-13.02	34.37	8.51	34.05	101	135	Peak
5700	90.09	80.96			34.59	8.64	34.1	101	135	Average
5700	98.19	89.06			34.59	8.64	34.1	101	135	Peak
5725	56.99	47.83	68.2	-11.21	34.62	8.65	34.11	101	135	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5404	42.82	34.1	54	-11.18	34.32	8.44	34.04	142	162	Average
5404	57.09	48.37	74	-16.91	34.32	8.44	34.04	142	162	Peak
5470	56.33	47.5	68.2	-11.87	34.37	8.51	34.05	142	162	Peak
5700	95.72	86.59			34.59	8.64	34.1	142	162	Average
5700	103.8	94.67			34.59	8.64	34.1	142	162	Peak
5725	66.94	57.78	68.2	-1.26	34.62	8.65	34.11	142	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

Chain B

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5708	56.84	47.69	68.2	-11.36	34.61	8.65	34.11	304	315	Peak
*5724	64.62	55.46	78.2	-13.58	34.62	8.65	34.11	304	315	Peak
5745	87.8	78.61			34.64	8.66	34.11	304	315	Average
5745	96.11	86.92			34.64	8.66	34.11	304	315	Peak
*5852	57.47	48.17	78.2	-20.73	34.74	8.7	34.14	304	315	Peak
*5866	57.89	48.56	68.2	-10.31	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5706	66.48	57.33	68.2	-1.72	34.61	8.65	34.11	100	163	Peak
*5724	71.75	62.59	78.2	-6.45	34.62	8.65	34.11	100	163	Peak
5745	97	87.81			34.64	8.66	34.11	100	163	Average
5745	104.56	95.37			34.64	8.66	34.11	100	163	Peak
*5860	56.93	47.61	78.2	-21.27	34.76	8.7	34.14	100	163	Peak
*5862	57.39	48.06	68.2	-10.81	34.76	8.71	34.14	100	163	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	56.86	47.71	68.2	-11.34	34.61	8.65	34.11	304	315	Peak
*5720	57.48	48.32	78.2	-20.72	34.62	8.65	34.11	304	315	Peak
5785	88.56	79.33			34.68	8.68	34.13	304	315	Average
5785	96.25	87.02			34.68	8.68	34.13	304	315	Peak
*5852	57.92	48.62	78.2	-20.28	34.74	8.7	34.14	304	315	Peak
*5870	57.29	47.96	68.2	-10.91	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5708	57.39	48.24	68.2	-10.81	34.61	8.65	34.11	100	162	Peak
*5716	56.96	47.81	78.2	-21.24	34.61	8.65	34.11	100	162	Peak
5785	96.6	87.37			34.68	8.68	34.13	100	162	Average
5785	104.99	95.76			34.68	8.68	34.13	100	162	Peak
*5854	57.11	47.79	78.2	-21.09	34.76	8.7	34.14	100	162	Peak
*5862	56.49	47.16	68.2	-11.71	34.76	8.71	34.14	100	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5706	57.2	48.05	68.2	-11	34.61	8.65	34.11	304	315	Peak
*5720	57.43	48.27	78.2	-20.77	34.62	8.65	34.11	304	315	Peak
5825	88.62	79.33			34.73	8.69	34.13	304	315	Average
5825	96.37	87.08			34.73	8.69	34.13	304	315	Peak
*5856	57.85	48.53	78.2	-20.35	34.76	8.7	34.14	304	315	Peak
*5866	57.8	48.47	68.2	-10.4	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5706	58.12	48.97	68.2	-10.08	34.61	8.65	34.11	138	162	Peak
*5724	56.62	47.46	78.2	-21.58	34.62	8.65	34.11	138	162	Peak
5825	95.92	86.63			34.73	8.69	34.13	138	162	Average
5825	104.31	95.02			34.73	8.69	34.13	138	162	Peak
*5860	68.88	59.56	78.2	-9.32	34.76	8.7	34.14	138	162	Peak
*5862	64.66	55.33	68.2	-3.54	34.76	8.71	34.14	138	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- *: Out of restricted band

802.11n (20MHz)

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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5034	44.43	36.37	54	-9.57	34.03	8	33.97	161	255	Average
5034	57.19	49.13	74	-16.81	34.03	8	33.97	161	255	Peak
5180	91.91	83.6			34.15	8.16	34	161	255	Average
5180	100.12	91.81			34.15	8.16	34	161	255	Peak
5424	43.01	34.24	54	-10.99	34.33	8.48	34.04	161	255	Average
5424	57.75	48.98	74	-16.25	34.33	8.48	34.04	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	47.25	39	54	-6.75	34.12	8.13	34	111	359	Average
5148	64.75	56.5	74	-9.25	34.12	8.13	34	111	359	Peak
5180	97.11	88.8			34.15	8.16	34	111	359	Average
5180	105.22	96.91			34.15	8.16	34	111	359	Peak
5416	42.98	34.25	54	-11.02	34.33	8.44	34.04	111	359	Average
5416	57.08	48.35	74	-16.92	34.33	8.44	34.04	111	359	Peak
10360	51.2	36.9	77.11	-25.91	37.12	12.3	35.12	126	310	Average
10360	60.27	45.97	85.22	-24.95	37.12	12.3	35.12	126	310	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180MHz: Fundamental frequency.
- 10360MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5084	42.83	34.67	54	-11.17	34.07	8.07	33.98	161	255	Average
5084	57.48	49.32	74	-16.52	34.07	8.07	33.98	161	255	Peak
5220	91.9	83.51			34.17	8.22	34	161	255	Average
5220	100.13	91.74			34.17	8.22	34	161	255	Peak
5436	43.02	34.23	54	-10.98	34.35	8.48	34.04	161	255	Average
5436	57.61	48.82	74	-16.39	34.35	8.48	34.04	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5116	42.79	34.59	54	-11.21	34.09	8.1	33.99	111	359	Average
5116	56.8	48.6	74	-17.2	34.09	8.1	33.99	111	359	Peak
5220	96.9	88.51			34.17	8.22	34	111	359	Average
5220	105.08	96.69			34.17	8.22	34	111	359	Peak
5448	43.07	34.24	54	-10.93	34.36	8.51	34.04	111	359	Average
5448	57.45	48.62	74	-16.55	34.36	8.51	34.04	111	359	Peak
10440	50.46	36	76.9	-26.44	37.16	12.47	35.17	141	311	Average
10440	60.73	46.27	85.08	-24.35	37.16	12.47	35.17	141	311	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220MHz: Fundamental frequency.
- 10440MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5040	42.64	34.57	54	-11.36	34.04	8	33.97	161	255	Average
5040	57.61	49.54	74	-16.39	34.04	8	33.97	161	255	Peak
5240	92.44	84			34.19	8.26	34.01	161	255	Average
5240	100.53	92.09			34.19	8.26	34.01	161	255	Peak
5366	42.87	34.23	54	-11.13	34.29	8.38	34.03	161	255	Average
5366	58.95	50.31	74	-15.05	34.29	8.38	34.03	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5074	42.7	34.58	54	-11.3	34.07	8.03	33.98	103	336	Average
5074	57.43	49.31	74	-16.57	34.07	8.03	33.98	103	336	Peak
5240	97.54	89.1			34.19	8.26	34.01	103	336	Average
5240	105.82	97.38			34.19	8.26	34.01	103	336	Peak
5456	42.97	34.15	54	-11.03	34.36	8.51	34.05	103	336	Average
5456	57.65	48.83	74	-16.35	34.36	8.51	34.05	103	336	Peak
10480	50.71	36.2	77.54	-26.83	37.19	12.53	35.21	129	64	Average
10480	60.59	46.08	85.82	-25.23	37.19	12.53	35.21	129	64	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5068	42.89	34.79	54	-11.11	34.05	8.03	33.98	116	126	Average
5068	57.15	49.05	74	-16.85	34.05	8.03	33.98	116	126	Peak
5260	92.57	84.11			34.21	8.26	34.01	116	126	Average
5260	100.55	92.09			34.21	8.26	34.01	116	126	Peak
5366	42.83	34.19	54	-11.17	34.29	8.38	34.03	116	126	Average
5366	57.18	48.54	74	-16.82	34.29	8.38	34.03	116	126	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5066	42.69	34.59	54	-11.31	34.05	8.03	33.98	100	124	Average
5066	57.16	49.06	74	-16.84	34.05	8.03	33.98	100	124	Peak
5260	97.67	89.21			34.21	8.26	34.01	100	124	Average
5260	105.66	97.2			34.21	8.26	34.01	100	124	Peak
5434	43.05	34.26	54	-10.95	34.35	8.48	34.04	100	124	Average
5434	58	49.21	74	-16	34.35	8.48	34.04	100	124	Peak
10520	50.5	35.91	77.67	-27.17	37.21	12.61	35.23	103	185	Average
10520	60.35	45.76	85.66	-25.31	37.21	12.61	35.23	103	185	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.
- 10520MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5084	42.73	34.57	54	-11.27	34.07	8.07	33.98	100	124	Average
5084	57.89	49.73	74	-16.11	34.07	8.07	33.98	100	124	Peak
5300	92.16	83.62			34.24	8.32	34.02	100	124	Average
5300	100.54	92			34.24	8.32	34.02	100	124	Peak
5412	43.28	34.55	54	-10.72	34.33	8.44	34.04	100	124	Average
5412	57.07	48.34	74	-16.93	34.33	8.44	34.04	100	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5070	42.79	34.69	54	-11.21	34.05	8.03	33.98	101	150	Average
5070	57.42	49.32	74	-16.58	34.05	8.03	33.98	101	150	Peak
5300	97.46	88.92			34.24	8.32	34.02	101	150	Average
5300	105.71	97.17			34.24	8.32	34.02	101	150	Peak
5376	44.01	35.35	54	-9.99	34.29	8.41	34.04	101	150	Average
5376	56.99	48.33	74	-17.01	34.29	8.41	34.04	101	150	Peak
10600	51.18	36.5	54	-2.82	37.28	12.67	35.27	125	65	Average
10600	60.54	45.86	74	-13.46	37.28	12.67	35.27	125	65	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5146	42.75	34.5	54	-11.25	34.12	8.13	34	114	128	Average
5146	57.91	49.66	74	-16.09	34.12	8.13	34	114	128	Peak
5320	92.6	84.02			34.25	8.35	34.02	114	128	Average
5320	100.78	92.2			34.25	8.35	34.02	114	128	Peak
5446	45.97	37.14	54	-8.03	34.36	8.51	34.04	114	128	Average
5446	57.68	48.85	74	-16.32	34.36	8.51	34.04	114	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5098	42.75	34.59	54	-11.25	34.08	8.07	33.99	108	150	Average
5098	56.66	48.5	74	-17.34	34.08	8.07	33.99	108	150	Peak
5320	97.5	88.92			34.25	8.35	34.02	108	150	Average
5320	105.3	96.72			34.25	8.35	34.02	108	150	Peak
5350	48.46	39.83	54	-5.54	34.28	8.38	34.03	108	150	Average
5350	64.62	55.99	74	-9.38	34.28	8.38	34.03	108	150	Peak
10640	50.42	35.69	54	-3.58	37.31	12.71	35.29	132	64	Average
10640	60.2	45.47	74	-13.8	37.31	12.71	35.29	132	64	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5432	43.48	34.69	54	-10.52	34.35	8.48	34.04	101	128	Average
5432	57.66	48.87	74	-16.34	34.35	8.48	34.04	101	128	Peak
5470	59.94	51.11	68.2	-8.26	34.37	8.51	34.05	101	128	Peak
5500	92.61	83.69			34.4	8.57	34.05	101	128	Average
5500	100.68	91.76			34.4	8.57	34.05	101	128	Peak
5725	56.74	47.58	68.2	-11.46	34.62	8.65	34.11	101	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5456	44.6	35.78	54	-9.4	34.36	8.51	34.05	201	356	Average
5456	58.43	49.61	74	-15.57	34.36	8.51	34.05	201	356	Peak
5470	67.04	58.21	68.2	-1.16	34.37	8.51	34.05	201	356	Peak
5500	98.4	89.48			34.4	8.57	34.05	201	356	Average
5500	105.96	97.04			34.4	8.57	34.05	201	356	Peak
5725	56.85	47.69	68.2	-11.35	34.62	8.65	34.11	201	356	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5444	43.04	34.25	54	-10.96	34.35	8.48	34.04	100	128	Average
5444	58.43	49.64	74	-15.57	34.35	8.48	34.04	100	128	Peak
5470	56.88	48.05	68.2	-11.32	34.37	8.51	34.05	100	128	Peak
5580	91.67	82.68			34.47	8.6	34.08	100	128	Average
5580	100.01	91.02			34.47	8.6	34.08	100	128	Peak
5725	57.13	47.97	68.2	-11.07	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5424	44.98	36.21	54	-9.02	34.33	8.48	34.04	205	356	Average
5424	57.79	49.02	74	-16.21	34.33	8.48	34.04	205	356	Peak
5470	56.95	48.12	68.2	-11.25	34.37	8.51	34.05	205	356	Peak
5580	97.22	88.23			34.47	8.6	34.08	205	356	Average
5580	105.08	96.09			34.47	8.6	34.08	205	356	Peak
5725	57.31	48.15	68.2	-10.89	34.62	8.65	34.11	205	356	Peak
11160	51.13	36.05	54	-2.87	37.7	12.83	35.45	114	175	Average
11160	62.98	47.9	74	-11.02	37.7	12.83	35.45	114	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5442	43.06	34.27	54	-10.94	34.35	8.48	34.04	101	135	Average
5442	57.48	48.69	74	-16.52	34.35	8.48	34.04	101	135	Peak
5470	57.4	48.57	68.2	-10.8	34.37	8.51	34.05	101	135	Peak
5700	90.89	81.76			34.59	8.64	34.1	101	135	Average
5700	98.5	89.37			34.59	8.64	34.1	101	135	Peak
5725	56.63	47.47	68.2	-11.57	34.62	8.65	34.11	101	135	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5402	42.83	34.11	54	-11.17	34.32	8.44	34.04	142	162	Average
5402	59.5	50.78	74	-14.5	34.32	8.44	34.04	142	162	Peak
5470	58.73	49.9	68.2	-9.47	34.37	8.51	34.05	142	162	Peak
5700	95.46	86.33			34.59	8.64	34.1	142	162	Average
5700	103.56	94.43			34.59	8.64	34.1	142	162	Peak
5725	66.4	57.24	68.2	-1.8	34.62	8.65	34.11	142	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

Chain B

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5708	56.73	47.58	68.2	-11.47	34.61	8.65	34.11	304	315	Peak
*5724	64.02	54.86	78.2	-14.18	34.62	8.65	34.11	304	315	Peak
5745	88.5	79.31			34.64	8.66	34.11	304	315	Average
5745	96.57	87.38			34.64	8.66	34.11	304	315	Peak
*5852	57.71	48.41	78.2	-20.49	34.74	8.7	34.14	304	315	Peak
*5870	57.45	48.12	68.2	-10.75	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5712	67.05	57.9	68.2	-1.15	34.61	8.65	34.11	100	163	Peak
*5718	71.72	62.56	78.2	-6.48	34.62	8.65	34.11	100	163	Peak
5745	95.8	86.61			34.64	8.66	34.11	100	163	Average
5745	104.11	94.92			34.64	8.66	34.11	100	163	Peak
*5858	59.36	50.04	78.2	-18.84	34.76	8.7	34.14	100	163	Peak
*5870	56.32	46.99	68.2	-11.88	34.76	8.71	34.14	100	163	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5712	57.41	48.26	68.2	-10.79	34.61	8.65	34.11	304	315	Peak
*5718	56.81	47.65	78.2	-21.39	34.62	8.65	34.11	304	315	Peak
5785	88.36	79.13			34.68	8.68	34.13	304	315	Average
5785	96.8	87.57			34.68	8.68	34.13	304	315	Peak
*5858	57.1	47.78	78.2	-21.1	34.76	8.7	34.14	304	315	Peak
*5864	56.47	47.14	68.2	-11.73	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	56.64	47.49	68.2	-11.56	34.61	8.65	34.11	100	162	Peak
*5724	57.25	48.09	78.2	-20.95	34.62	8.65	34.11	100	162	Peak
5785	96.06	86.83			34.68	8.68	34.13	100	162	Average
5785	104.21	94.98			34.68	8.68	34.13	100	162	Peak
*5860	57.87	48.55	78.2	-20.33	34.76	8.7	34.14	100	162	Peak
*5862	57.47	48.14	68.2	-10.73	34.76	8.71	34.14	100	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	56.7	47.55	68.2	-11.5	34.61	8.65	34.11	304	315	Peak
*5720	56.66	47.5	78.2	-21.54	34.62	8.65	34.11	304	315	Peak
5825	88.52	79.23			34.73	8.69	34.13	304	315	Average
5825	96.66	87.37			34.73	8.69	34.13	304	315	Peak
*5860	58.21	48.89	78.2	-19.99	34.76	8.7	34.14	304	315	Peak
*5864	58.89	49.56	68.2	-9.31	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5708	57.06	47.91	68.2	-11.14	34.61	8.65	34.11	138	162	Peak
*5718	56.74	47.58	78.2	-21.46	34.62	8.65	34.11	138	162	Peak
5825	96.32	87.03			34.73	8.69	34.13	138	162	Average
5825	104.14	94.85			34.73	8.69	34.13	138	162	Peak
*5852	69.31	60.01	78.2	-8.89	34.74	8.7	34.14	138	162	Peak
*5864	64.66	55.33	68.2	-3.54	34.76	8.71	34.14	138	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- *: Out of restricted band

802.11n (40MHz)

Chain A

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5076	45.4	37.28	54	-8.6	34.07	8.03	33.98	161	254	Average
5076	57.93	49.81	74	-16.07	34.07	8.03	33.98	161	254	Peak
5190	89.14	80.8			34.15	8.19	34	161	254	Average
5190	96.71	88.37			34.15	8.19	34	161	254	Peak
5450	43.57	34.75	54	-10.43	34.36	8.51	34.05	161	254	Average
5450	57.42	48.6	74	-16.58	34.36	8.51	34.05	161	254	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	48.25	40	54	-5.75	34.12	8.13	34	111	360	Average
5150	62.02	53.77	74	-11.98	34.12	8.13	34	111	360	Peak
5190	92.84	84.5			34.15	8.19	34	111	360	Average
5190	101.04	92.7			34.15	8.19	34	111	360	Peak
5364	43.27	34.63	54	-10.73	34.29	8.38	34.03	111	360	Average
5364	57.71	49.07	74	-16.29	34.29	8.38	34.03	111	360	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5120	43.19	34.99	54	-10.81	34.09	8.1	33.99	161	255	Average
5120	56.85	48.65	74	-17.15	34.09	8.1	33.99	161	255	Peak
5230	91.51	83.11			34.19	8.22	34.01	161	255	Average
5230	99.43	91.03			34.19	8.22	34.01	161	255	Peak
5434	43.52	34.73	54	-10.48	34.35	8.48	34.04	161	255	Average
5434	57.75	48.96	74	-16.25	34.35	8.48	34.04	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5048	43.44	35.38	54	-10.56	34.04	8	33.98	110	360	Average
5048	57.59	49.53	74	-16.41	34.04	8	33.98	110	360	Peak
5230	96.81	88.41			34.19	8.22	34.01	110	360	Average
5230	104.69	96.29			34.19	8.22	34.01	110	360	Peak
5430	43.47	34.68	54	-10.53	34.35	8.48	34.04	110	360	Average
5430	57.29	48.5	74	-16.71	34.35	8.48	34.04	110	360	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5230MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5068	43.34	35.24	54	-10.66	34.05	8.03	33.98	116	126	Average
5068	57.41	49.31	74	-16.59	34.05	8.03	33.98	116	126	Peak
5270	91.55	83.06			34.21	8.29	34.01	116	126	Average
5270	99.81	91.32			34.21	8.29	34.01	116	126	Peak
5444	43.37	34.58	54	-10.63	34.35	8.48	34.04	116	126	Average
5444	58.05	49.26	74	-15.95	34.35	8.48	34.04	116	126	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5064	43.1	35	54	-10.9	34.05	8.03	33.98	100	124	Average
5064	58.74	50.64	74	-15.26	34.05	8.03	33.98	100	124	Peak
5270	97.1	88.61			34.21	8.29	34.01	100	124	Average
5270	104.94	96.45			34.21	8.29	34.01	100	124	Peak
5428	43.81	35.04	54	-10.19	34.33	8.48	34.04	100	124	Average
5428	58.22	49.45	74	-15.78	34.33	8.48	34.04	100	124	Peak
10540	50.19	35.57	77.1	-26.91	37.23	12.63	35.24	176	353	Average
10540	60.32	45.7	84.94	-24.62	37.23	12.63	35.24	176	353	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5270MHz: Fundamental frequency.
- 10540MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5028	42.99	34.96	54	-11.01	34.03	7.97	33.97	114	128	Average
5028	57.69	49.66	74	-16.31	34.03	7.97	33.97	114	128	Peak
5310	91.67	83.12			34.25	8.32	34.02	114	128	Average
5310	99.85	91.3			34.25	8.32	34.02	114	128	Peak
5350	48.16	39.53	54	-5.84	34.28	8.38	34.03	114	128	Average
5350	64.28	55.65	74	-9.72	34.28	8.38	34.03	114	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5076	43.1	34.98	54	-10.9	34.07	8.03	33.98	108	150	Average
5076	57.72	49.6	74	-16.28	34.07	8.03	33.98	108	150	Peak
5310	96.48	87.93			34.25	8.32	34.02	108	150	Average
5310	104.94	96.39			34.25	8.32	34.02	108	150	Peak
5358	52.09	43.46	54	-1.91	34.28	8.38	34.03	108	150	Average
5358	67.85	59.22	74	-6.15	34.28	8.38	34.03	108	150	Peak
10620	50.36	35.65	54	-3.64	37.3	12.69	35.28	176	353	Average
10620	60.16	45.45	74	-13.84	37.3	12.69	35.28	176	353	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5450	43.54	34.72	54	-10.46	34.36	8.51	34.05	101	128	Average
5450	57.36	48.54	74	-16.64	34.36	8.51	34.05	101	128	Peak
5470	57.54	48.71	68.2	-10.66	34.37	8.51	34.05	101	128	Peak
5510	89.3	80.39			34.4	8.57	34.06	101	128	Average
5510	96.99	88.08			34.4	8.57	34.06	101	128	Peak
5725	57.42	48.26	68.2	-10.78	34.62	8.65	34.11	101	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5412	43.69	34.96	54	-10.31	34.33	8.44	34.04	201	356	Average
5412	57.45	48.72	74	-16.55	34.33	8.44	34.04	201	356	Peak
5470	66.23	57.4	68.2	-1.97	34.37	8.51	34.05	201	356	Peak
5510	93.56	84.65			34.4	8.57	34.06	201	356	Average
5510	101.25	92.34			34.4	8.57	34.06	201	356	Peak
5725	58.19	49.03	68.2	-10.01	34.62	8.65	34.11	201	356	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5510MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	43.51	34.69	54	-10.49	34.36	8.51	34.05	100	128	Average
5460	58.16	49.34	74	-15.84	34.36	8.51	34.05	100	128	Peak
5470	57.28	48.45	68.2	-10.92	34.37	8.51	34.05	100	128	Peak
5550	91.26	82.29			34.45	8.59	34.07	100	128	Average
5550	99.75	90.78			34.45	8.59	34.07	100	128	Peak
5725	56.93	47.77	68.2	-11.27	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5440	43.78	34.99	54	-10.22	34.35	8.48	34.04	205	356	Average
5440	59.64	50.85	74	-14.36	34.35	8.48	34.04	205	356	Peak
5470	57.1	48.27	68.2	-11.1	34.37	8.51	34.05	205	356	Peak
5550	96.04	87.07			34.45	8.59	34.07	205	356	Average
5550	104.31	95.34			34.45	8.59	34.07	205	356	Peak
5725	57.33	48.17	68.2	-10.87	34.62	8.65	34.11	205	356	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5550MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5350	43.26	34.63	54	-10.74	34.28	8.38	34.03	101	135	Average
5350	58	49.37	74	-16	34.28	8.38	34.03	101	135	Peak
5470	56.87	48.04	68.2	-11.33	34.37	8.51	34.05	101	135	Peak
5670	91.02	81.92			34.57	8.63	34.1	101	135	Average
5670	99.08	89.98			34.57	8.63	34.1	101	135	Peak
5725	57.08	47.92	68.2	-11.12	34.62	8.65	34.11	101	135	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.5	34.67	54	-10.5	34.36	8.51	34.04	142	162	Average
5448	57.48	48.65	74	-16.52	34.36	8.51	34.04	142	162	Peak
5470	55.77	46.94	68.2	-12.43	34.37	8.51	34.05	142	162	Peak
5670	96.28	87.18			34.57	8.63	34.1	142	162	Average
5670	104.47	95.37			34.57	8.63	34.1	142	162	Peak
5725	64.64	55.48	68.2	-3.56	34.62	8.65	34.11	142	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5670MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

Chain B

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	57.14	47.99	68.2	-11.06	34.61	8.65	34.11	304	315	Peak
*5724	62.21	53.05	78.2	-15.99	34.62	8.65	34.11	304	315	Peak
5755	85.82	76.61			34.66	8.66	34.11	304	315	Average
5755	94.07	84.86			34.66	8.66	34.11	304	315	Peak
*5856	57.27	47.95	78.2	-20.93	34.76	8.7	34.14	304	315	Peak
*5866	57.94	48.61	68.2	-10.26	34.76	8.71	34.14	304	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	66.8	57.65	68.2	-1.4	34.61	8.65	34.11	100	163	Peak
*5724	69.1	59.94	78.2	-9.1	34.62	8.65	34.11	100	163	Peak
5755	94.92	85.71			34.66	8.66	34.11	100	163	Average
5755	102.98	93.77			34.66	8.66	34.11	100	163	Peak
*5860	59.78	50.46	78.2	-18.42	34.76	8.7	34.14	100	163	Peak
*5864	57.97	48.64	68.2	-10.23	34.76	8.71	34.14	100	163	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5706	56.81	47.66	68.2	-11.39	34.61	8.65	34.11	320	314	Peak
*5724	56.65	47.49	78.2	-21.55	34.62	8.65	34.11	320	314	Peak
5795	87.67	78.43			34.69	8.68	34.13	320	314	Average
5795	95.3	86.06			34.69	8.68	34.13	320	314	Peak
*5854	57.79	48.47	78.2	-20.41	34.76	8.7	34.14	320	314	Peak
*5862	58.09	48.76	68.2	-10.11	34.76	8.71	34.14	320	314	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	56.71	47.56	68.2	-11.49	34.61	8.65	34.11	146	162	Peak
*5722	56.84	47.68	78.2	-21.36	34.62	8.65	34.11	146	162	Peak
5795	95.87	86.63			34.69	8.68	34.13	146	162	Average
5795	103.7	94.46			34.69	8.68	34.13	146	162	Peak
*5852	58.48	49.18	78.2	-19.72	34.74	8.7	34.14	146	162	Peak
*5870	57.96	48.63	68.2	-10.24	34.76	8.71	34.14	146	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795MHz: Fundamental frequency.
- *: Out of restricted band

802.11ac (80MHz)

Chain A

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 42	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5146	50.24	41.99	54	-3.76	34.12	8.13	34	161	255	Average
5146	60.75	52.5	74	-13.25	34.12	8.13	34	161	255	Peak
5210	88.17	79.81			34.17	8.19	34	161	255	Average
5210	95.7	87.34			34.17	8.19	34	161	255	Peak
5418	43.78	35.05	54	-10.22	34.33	8.44	34.04	161	255	Average
5418	57.64	48.91	74	-16.36	34.33	8.44	34.04	161	255	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	51.95	43.7	54	-2.05	34.12	8.13	34	110	359	Average
5150	62.56	54.31	74	-11.44	34.12	8.13	34	110	359	Peak
5210	92.87	84.51			34.17	8.19	34	110	359	Average
5210	100.74	92.38			34.17	8.19	34	110	359	Peak
5410	43.76	35.04	54	-10.24	34.32	8.44	34.04	110	359	Average
5410	58.18	49.46	74	-15.82	34.32	8.44	34.04	110	359	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 58	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5048	44.54	36.48	54	-9.46	34.04	8	33.98	100	124	Average
5048	56.75	48.69	74	-17.25	34.04	8	33.98	100	124	Peak
5290	89.13	80.6			34.23	8.32	34.02	100	124	Average
5290	97.16	88.63			34.23	8.32	34.02	100	124	Peak
5364	44.64	36	54	-9.36	34.29	8.38	34.03	100	124	Average
5364	57.67	49.03	74	-16.33	34.29	8.38	34.03	100	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5124	43.58	35.36	54	-10.42	34.11	8.1	33.99	101	332	Average
5124	57.84	49.62	74	-16.16	34.11	8.1	33.99	101	332	Peak
5290	93.72	85.19			34.23	8.32	34.02	101	332	Average
5290	102.12	93.59			34.23	8.32	34.02	101	332	Peak
5352	47.38	38.75	54	-6.62	34.28	8.38	34.03	101	332	Average
5352	59.8	51.17	74	-14.2	34.28	8.38	34.03	101	332	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 106	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	48	39.18	54	-6	34.36	8.51	34.05	101	128	Average
5456	59.67	50.85	74	-14.33	34.36	8.51	34.05	101	128	Peak
5470	59.82	50.99	68.2	-8.38	34.37	8.51	34.05	101	128	Peak
5530	90.05	81.12			34.42	8.58	34.07	101	128	Average
5530	97.93	89			34.42	8.58	34.07	101	128	Peak
5725	56.74	47.58	68.2	-11.46	34.62	8.65	34.11	101	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	48.88	40.06	54	-5.12	34.36	8.51	34.05	209	356	Average
5460	60.35	51.53	74	-13.65	34.36	8.51	34.05	209	356	Peak
5470	63.35	54.52	68.2	-4.85	34.37	8.51	34.05	209	356	Peak
5530	94.76	85.83			34.42	8.58	34.07	209	356	Average
5530	102.63	93.7			34.42	8.58	34.07	209	356	Peak
5725	56.16	47	68.2	-12.04	34.62	8.65	34.11	209	356	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5530MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 122	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5436	44.62	35.83	54	-9.38	34.35	8.48	34.04	100	128	Average
5436	57.82	49.03	74	-16.18	34.35	8.48	34.04	100	128	Peak
5470	58.09	49.26	68.2	-10.11	34.37	8.51	34.05	100	128	Peak
5610	90.82	81.79			34.5	8.61	34.08	100	128	Average
5610	99.11	90.08			34.5	8.61	34.08	100	128	Peak
5725	57.45	48.29	68.2	-10.75	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5454	48.41	39.59	54	-5.59	34.36	8.51	34.05	243	26	Average
5454	58.47	49.65	74	-15.53	34.36	8.51	34.05	243	26	Peak
5470	58.21	49.38	68.2	-9.99	34.37	8.51	34.05	243	26	Peak
5610	95.87	86.84			34.5	8.61	34.08	243	26	Average
5610	104.09	95.06			34.5	8.61	34.08	243	26	Peak
5725	65.32	56.16	68.2	-2.88	34.62	8.65	34.11	243	26	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5610MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

Chain B

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 155	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	61.21	52.06	68.2	-6.99	34.61	8.65	34.11	311	315	Peak
*5724	62.22	53.06	78.2	-15.98	34.62	8.65	34.11	311	315	Peak
5775	86.95	77.72			34.68	8.67	34.12	311	315	Average
5775	94.88	85.65			34.68	8.67	34.12	311	315	Peak
*5852	57.38	48.08	78.2	-20.82	34.74	8.7	34.14	311	315	Peak
*5864	56.97	47.64	68.2	-11.23	34.76	8.71	34.14	311	315	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	66.58	57.43	68.2	-1.62	34.61	8.65	34.11	140	162	Peak
*5722	70.64	61.48	78.2	-7.56	34.62	8.65	34.11	140	162	Peak
5775	94.65	85.42			34.68	8.67	34.12	140	162	Average
5775	102.98	93.75			34.68	8.67	34.12	140	162	Peak
*5852	58.63	49.33	78.2	-19.57	34.74	8.7	34.14	140	162	Peak
*5864	57.67	48.34	68.2	-10.53	34.76	8.71	34.14	140	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5775MHz: Fundamental frequency.
- *: Out of restricted band

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802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5116	46.19	37.99	54	-7.81	34.09	8.1	33.99	150	123	Average
5116	57.83	49.63	74	-16.17	34.09	8.1	33.99	150	123	Peak
5180	98.21	89.9			34.15	8.16	34	150	123	Average
5180	106.44	98.13			34.15	8.16	34	150	123	Peak
5442	42.92	34.13	54	-11.08	34.35	8.48	34.04	150	123	Average
5442	57.24	48.45	74	-16.76	34.35	8.48	34.04	150	123	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	50.05	41.79	54	-3.95	34.12	8.13	33.99	103	143	Average
5140	60.97	52.71	74	-13.03	34.12	8.13	33.99	103	143	Peak
5180	103.11	94.8			34.15	8.16	34	102	144	Average
5180	110.17	101.86			34.15	8.16	34	102	144	Peak
5440	43.32	34.53	54	-10.68	34.35	8.48	34.04	102	144	Average
5440	57.61	48.82	74	-16.39	34.35	8.48	34.04	102	144	Peak
10360	53.2	38.9	83.11	-29.91	37.12	12.3	35.12	150	313	Average
10360	63.7	49.4	90.17	-26.47	37.12	12.3	35.12	150	313	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180MHz: Fundamental frequency.
- 10360MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	42.69	34.49	54	-11.31	34.09	8.1	33.99	117	124	Average
5114	57.41	49.21	74	-16.59	34.09	8.1	33.99	117	124	Peak
5220	98.8	90.41			34.17	8.22	34	117	124	Average
5220	106.29	97.9			34.17	8.22	34	117	124	Peak
5360	42.66	34.03	54	-11.34	34.28	8.38	34.03	117	124	Average
5360	56.96	48.33	74	-17.04	34.28	8.38	34.03	117	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.04	34.79	54	-10.96	34.11	8.13	33.99	102	144	Average
5134	57.32	49.07	74	-16.68	34.11	8.13	33.99	102	144	Peak
5220	102.6	94.21			34.17	8.22	34	102	144	Average
5220	110.82	102.43			34.17	8.22	34	102	144	Peak
5460	43.17	34.35	54	-10.83	34.36	8.51	34.05	102	144	Average
5460	57.28	48.46	74	-16.72	34.36	8.51	34.05	102	144	Peak
10440	52.96	38.5	54	-1.04	37.16	12.47	35.17	100	187	Average
10440	62.74	48.28	74	-11.26	37.16	12.47	35.17	100	187	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5102	42.75	34.59	54	-11.25	34.08	8.07	33.99	117	124	Average
5102	57.21	49.05	74	-16.79	34.08	8.07	33.99	117	124	Peak
5240	98.04	89.6			34.19	8.26	34.01	117	124	Average
5240	106.37	97.93			34.19	8.26	34.01	117	124	Peak
5378	42.92	34.24	54	-11.08	34.31	8.41	34.04	117	124	Average
5378	57.23	48.55	74	-16.77	34.31	8.41	34.04	117	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	42.85	34.6	54	-11.15	34.12	8.13	34	102	144	Average
5150	57.34	49.09	74	-16.66	34.12	8.13	34	102	144	Peak
5240	102.74	94.3			34.19	8.26	34.01	102	144	Average
5240	110.04	101.6			34.19	8.26	34.01	102	144	Peak
5450	42.97	34.15	54	-11.03	34.36	8.51	34.05	102	144	Average
5450	57.42	48.6	74	-16.58	34.36	8.51	34.05	102	144	Peak
10480	54.07	39.56	82.74	-28.67	37.19	12.53	35.21	121	67	Average
10480	64.5	49.99	90.04	-25.54	37.19	12.53	35.21	121	67	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240MHz: Fundamental frequency.
- 10480MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5138	42.74	34.49	54	-11.26	34.11	8.13	33.99	238	122	Average
5138	58.55	50.3	74	-15.45	34.11	8.13	33.99	238	122	Peak
5260	98.47	90.01			34.21	8.26	34.01	238	122	Average
5260	105.91	97.45			34.21	8.26	34.01	238	122	Peak
5428	42.91	34.14	54	-11.09	34.33	8.48	34.04	238	122	Average
5428	59.77	51	74	-14.23	34.33	8.48	34.04	238	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5038	42.54	34.47	54	-11.46	34.04	8	33.97	102	144	Average
5038	59.78	51.71	74	-14.22	34.04	8	33.97	102	144	Peak
5260	102.57	94.11			34.21	8.26	34.01	102	144	Average
5260	110.59	102.13			34.21	8.26	34.01	102	144	Peak
5456	42.97	34.15	54	-11.03	34.36	8.51	34.05	102	144	Average
5456	60.56	51.74	74	-13.44	34.36	8.51	34.05	102	144	Peak
10520	53.58	38.99	82.57	-28.99	37.21	12.61	35.23	107	67	Average
10520	64.8	50.21	90.59	-25.79	37.21	12.61	35.23	107	67	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.
- 10520MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	42.5	34.47	54	-11.5	34.03	7.97	33.97	224	122	Average
5024	59.63	51.6	74	-14.37	34.03	7.97	33.97	224	122	Peak
5300	97.06	88.52			34.24	8.32	34.02	224	122	Average
5300	105.98	97.44			34.24	8.32	34.02	224	122	Peak
5350	42.96	34.33	54	-11.04	34.28	8.38	34.03	224	122	Average
5350	60.08	51.45	74	-13.92	34.28	8.38	34.03	224	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5130	42.7	34.48	54	-11.3	34.11	8.1	33.99	100	144	Average
5130	61.07	52.85	74	-12.93	34.11	8.1	33.99	100	144	Peak
5300	102.76	94.22			34.24	8.32	34.02	100	144	Average
5300	109.94	101.4			34.24	8.32	34.02	100	144	Peak
5356	44.16	35.53	54	-9.84	34.28	8.38	34.03	100	144	Average
5356	60.68	52.05	74	-13.32	34.28	8.38	34.03	100	144	Peak
10600	51.91	37.23	54	-2.09	37.28	12.67	35.27	113	314	Average
10600	62.27	47.59	74	-11.73	37.28	12.67	35.27	113	314	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5096	42.55	34.39	54	-11.45	34.08	8.07	33.99	224	122	Average
5096	59.38	51.22	74	-14.62	34.08	8.07	33.99	224	122	Peak
5320	98.5	89.92			34.25	8.35	34.02	224	122	Average
5320	105.98	97.4			34.25	8.35	34.02	224	122	Peak
5418	44.18	35.45	54	-9.82	34.33	8.44	34.04	224	122	Average
5418	59.28	50.55	74	-14.72	34.33	8.44	34.04	224	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5120	42.79	34.59	54	-11.21	34.09	8.1	33.99	100	144	Average
5120	59.28	51.08	74	-14.72	34.09	8.1	33.99	100	144	Peak
5320	102	93.42			34.25	8.35	34.02	100	144	Average
5320	110.25	101.67			34.25	8.35	34.02	100	144	Peak
5350	48.76	40.13	54	-5.24	34.28	8.38	34.03	106	144	Average
5350	67.66	59.03	74	-6.34	34.28	8.38	34.03	106	144	Peak
10640	51.52	36.79	54	-2.48	37.31	12.71	35.29	136	314	Average
10640	62.62	47.89	74	-11.38	37.31	12.71	35.29	136	314	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5372	43.01	34.34	54	-10.99	34.29	8.41	34.03	100	128	Average
5372	59.53	50.86	74	-14.47	34.29	8.41	34.03	100	128	Peak
5470	58.45	49.62	68.2	-9.75	34.37	8.51	34.05	100	128	Peak
5500	92.67	83.75			34.4	8.57	34.05	100	128	Average
5500	100.6	91.68			34.4	8.57	34.05	100	128	Peak
5725	58.05	48.89	68.2	-10.15	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5408	44.16	35.44	54	-9.84	34.32	8.44	34.04	223	339	Average
5408	59.69	50.97	74	-14.31	34.32	8.44	34.04	223	339	Peak
5470	67.18	58.35	68.2	-1.02	34.37	8.51	34.05	223	339	Peak
5500	97.57	88.65			34.4	8.57	34.05	224	339	Average
5500	105.78	96.86			34.4	8.57	34.05	224	339	Peak
5725	58.65	49.49	68.2	-9.55	34.62	8.65	34.11	224	339	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5446	42.97	34.14	54	-11.03	34.36	8.51	34.04	112	127	Average
5446	59.15	50.32	74	-14.85	34.36	8.51	34.04	112	127	Peak
5470	58.37	49.54	68.2	-9.83	34.37	8.51	34.05	112	127	Peak
5580	97.07	88.08			34.47	8.6	34.08	112	127	Average
5580	105.25	96.26			34.47	8.6	34.08	112	127	Peak
5725	58.7	49.54	68.2	-9.5	34.62	8.65	34.11	112	127	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5358	43.06	34.43	54	-10.94	34.28	8.38	34.03	237	342	Average
5358	59.29	50.66	74	-14.71	34.28	8.38	34.03	237	342	Peak
5470	57.77	48.94	68.2	-10.43	34.37	8.51	34.05	237	342	Peak
5580	102.67	93.68			34.47	8.6	34.08	237	342	Average
5580	110.96	101.97			34.47	8.6	34.08	237	342	Peak
5725	58.18	49.02	68.2	-10.02	34.62	8.65	34.11	237	342	Peak
11160	50.58	35.5	54	-3.42	37.7	12.83	35.45	210	69	Average
11160	60.51	45.43	74	-13.49	37.7	12.83	35.45	210	69	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5392	42.92	34.24	54	-11.08	34.31	8.41	34.04	102	124	Average
5392	59.7	51.02	74	-14.3	34.31	8.41	34.04	102	124	Peak
5470	58.16	49.33	68.2	-10.04	34.37	8.51	34.05	102	124	Peak
5700	92.83	83.7			34.59	8.64	34.1	102	124	Average
5700	100.37	91.24			34.59	8.64	34.1	102	124	Peak
5725	58.72	49.56	68.2	-9.48	34.62	8.65	34.11	102	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5416	42.98	34.25	54	-11.02	34.33	8.44	34.04	211	341	Average
5416	59.47	50.74	74	-14.53	34.33	8.44	34.04	211	341	Peak
5470	58.78	49.95	68.2	-9.42	34.37	8.51	34.05	211	341	Peak
5700	97.73	88.6			34.59	8.64	34.1	211	341	Average
5700	105.15	96.02			34.59	8.64	34.1	211	341	Peak
5725	67.15	57.99	68.2	-1.05	34.62	8.65	34.11	228	341	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	59.72	50.57	68.2	-8.48	34.61	8.65	34.11	174	118	Peak
*5724	63.47	54.31	78.2	-14.73	34.62	8.65	34.11	174	118	Peak
5745	96.71	87.52			34.64	8.66	34.11	174	118	Average
5745	104.83	95.64			34.64	8.66	34.11	174	118	Peak
*5858	57.53	48.21	78.2	-20.67	34.76	8.7	34.14	174	118	Peak
*5862	56.78	47.45	68.2	-11.42	34.76	8.71	34.14	174	118	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	66.78	57.63	68.2	-1.42	34.61	8.65	34.11	112	152	Peak
*5724	72.44	63.28	78.2	-5.76	34.62	8.65	34.11	113	151	Peak
5745	101.87	92.68			34.64	8.66	34.11	112	154	Average
5745	109.79	100.6			34.64	8.66	34.11	112	154	Peak
*5854	57.56	48.24	78.2	-20.64	34.76	8.7	34.14	112	154	Peak
*5866	57.72	48.39	68.2	-10.48	34.76	8.71	34.14	112	154	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- *: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5712	56.49	47.34	68.2	-11.71	34.61	8.65	34.11	132	118	Peak
*5722	57.44	48.28	78.2	-20.76	34.62	8.65	34.11	132	118	Peak
5785	97.41	88.18			34.68	8.68	34.13	132	118	Average
5785	105.61	96.38			34.68	8.68	34.13	132	118	Peak
*5854	57.34	48.02	78.2	-20.86	34.76	8.7	34.14	132	118	Peak
*5862	57.56	48.23	68.2	-10.64	34.76	8.71	34.14	132	118	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5712	57.83	48.68	68.2	-10.37	34.61	8.65	34.11	118	154	Peak
*5720	57.07	47.91	78.2	-21.13	34.62	8.65	34.11	118	154	Peak
5785	102.96	93.73			34.68	8.68	34.13	118	154	Average
5785	110.24	101.01			34.68	8.68	34.13	118	154	Peak
*5860	57.7	48.38	74	-16.3	34.76	8.7	34.14	118	154	Peak
*5870	56.79	47.46	74	-17.21	34.76	8.71	34.14	118	154	Peak
11570	48.74	33.43	78.2	-29.46	38	12.68	35.37	184	313	Average
11570	58.83	43.52	68.2	-9.37	38	12.68	35.37	184	313	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	56.8	47.65	68.2	-11.4	34.61	8.65	34.11	192	120	Peak
*5720	58.12	48.96	78.2	-20.08	34.62	8.65	34.11	192	120	Peak
5825	96.92	87.63			34.73	8.69	34.13	192	120	Average
5825	104.72	95.43			34.73	8.69	34.13	192	120	Peak
*5860	57.49	48.17	78.2	-20.71	34.76	8.7	34.14	192	120	Peak
*5870	57.2	47.87	68.2	-11	34.76	8.71	34.14	192	120	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5712	57.09	47.94	68.2	-11.11	34.61	8.65	34.11	117	151	Peak
*5720	56.76	47.6	78.2	-21.44	34.62	8.65	34.11	117	151	Peak
5825	101.52	92.23			34.73	8.69	34.13	117	151	Average
5825	109.71	100.42			34.73	8.69	34.13	117	151	Peak
*5856	71.17	61.85	78.2	-7.03	34.76	8.7	34.14	116	151	Peak
*5866	66.86	57.53	68.2	-1.34	34.76	8.71	34.14	117	150	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- *: Out of restricted band

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5142	46.75	38.49	54	-7.25	34.12	8.13	33.99	150	123	Average
5142	58.23	49.97	74	-15.77	34.12	8.13	33.99	150	123	Peak
5190	94.84	86.5			34.15	8.19	34	150	123	Average
5190	102.6	94.26			34.15	8.19	34	150	123	Peak
5398	43.26	34.54	54	-10.74	34.32	8.44	34.04	150	123	Average
5398	57.16	48.44	74	-16.84	34.32	8.44	34.04	150	123	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.95	42.7	54	-3.05	34.12	8.13	34	102	145	Average
5150	65.65	57.4	74	-8.35	34.12	8.13	34	102	145	Peak
5190	98.44	90.1			34.15	8.19	34	103	144	Average
5190	106.89	98.55			34.15	8.19	34	103	144	Peak
5438	43.32	34.53	54	-10.68	34.35	8.48	34.04	103	144	Average
5438	57.87	49.08	74	-16.13	34.35	8.48	34.04	103	144	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.19	34.99	54	-10.81	34.09	8.1	33.99	104	124	Average
5110	57.38	49.18	74	-16.62	34.09	8.1	33.99	104	124	Peak
5230	95.61	87.21			34.19	8.22	34.01	104	124	Average
5230	103.53	95.13			34.19	8.22	34.01	104	124	Peak
5402	43.56	34.84	54	-10.44	34.32	8.44	34.04	104	124	Average
5402	57.55	48.83	74	-16.45	34.32	8.44	34.04	104	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.75	35.5	54	-10.25	34.12	8.13	34	102	144	Average
5150	57.71	49.46	74	-16.29	34.12	8.13	34	102	144	Peak
5230	99.91	91.51			34.19	8.22	34.01	102	144	Average
5230	107.07	98.67			34.19	8.22	34.01	102	144	Peak
5442	43.32	34.53	54	-10.68	34.35	8.48	34.04	102	144	Average
5442	57.16	48.37	74	-16.84	34.35	8.48	34.04	102	144	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5230MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5096	42.75	34.59	54	-11.25	34.08	8.07	33.99	224	122	Average
5096	59.65	51.49	74	-14.35	34.08	8.07	33.99	224	122	Peak
5270	95.8	87.31			34.21	8.29	34.01	224	122	Average
5270	103.62	95.13			34.21	8.29	34.01	224	122	Peak
5428	43.41	34.64	54	-10.59	34.33	8.48	34.04	224	122	Average
5428	59.06	50.29	74	-14.94	34.33	8.48	34.04	224	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.14	34.89	54	-10.86	34.11	8.13	33.99	108	144	Average
5138	59.14	50.89	74	-14.86	34.11	8.13	33.99	108	144	Peak
5270	99.6	91.11			34.21	8.29	34.01	108	144	Average
5270	107.49	99			34.21	8.29	34.01	108	144	Peak
5364	43.57	34.93	54	-10.43	34.29	8.38	34.03	108	144	Average
5364	59.99	51.35	74	-14.01	34.29	8.38	34.03	108	144	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.2	34.98	54	-10.8	34.11	8.1	33.99	224	122	Average
5132	59.28	51.06	74	-14.72	34.11	8.1	33.99	224	122	Peak
5310	95.07	86.52			34.25	8.32	34.02	224	122	Average
5310	102.94	94.39			34.25	8.32	34.02	224	122	Peak
5354	45.36	36.73	54	-8.64	34.28	8.38	34.03	224	122	Average
5354	60.95	52.32	74	-13.05	34.28	8.38	34.03	224	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5066	43.09	34.99	54	-10.91	34.05	8.03	33.98	100	144	Average
5066	59.27	51.17	74	-14.73	34.05	8.03	33.98	100	144	Peak
5310	99.77	91.22			34.25	8.32	34.02	100	144	Average
5310	106.98	98.43			34.25	8.32	34.02	100	144	Peak
5350	50.16	41.53	54	-3.84	34.28	8.38	34.03	114	144	Average
5350	67.52	58.89	74	-6.48	34.28	8.38	34.03	114	144	Peak

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5458	43.92	35.1	54	-10.08	34.36	8.51	34.05	100	128	Average
5458	58.44	49.62	74	-15.56	34.36	8.51	34.05	100	128	Peak
5470	59.5	50.67	68.2	-8.7	34.37	8.51	34.05	100	128	Peak
5510	94.4	85.49			34.4	8.57	34.06	100	128	Average
5510	102.11	93.2			34.4	8.57	34.06	100	128	Peak
5725	56.98	47.82	68.2	-11.22	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	47.08	38.26	54	-6.92	34.36	8.51	34.05	242	338	Average
5458	63.41	54.59	74	-10.59	34.36	8.51	34.05	242	338	Peak
5470	63.09	54.26	68.2	-5.11	34.37	8.51	34.05	242	338	Peak
5510	99.98	91.07			34.4	8.57	34.06	240	338	Average
5510	107.6	98.69			34.4	8.57	34.06	240	338	Peak
5725	55.62	46.46	68.2	-12.58	34.62	8.65	34.11	240	338	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5510MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5450	43.54	34.72	54	-10.46	34.36	8.51	34.05	100	128	Average
5450	58.8	49.98	74	-15.2	34.36	8.51	34.05	100	128	Peak
5470	55.33	46.5	68.2	-12.87	34.37	8.51	34.05	100	128	Peak
5550	94.49	85.52			34.45	8.59	34.07	100	128	Average
5550	102.04	93.07			34.45	8.59	34.07	100	128	Peak
5725	56.45	47.29	68.2	-11.75	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5444	44.01	35.22	54	-9.99	34.35	8.48	34.04	237	338	Average
5444	61.62	52.83	74	-12.38	34.35	8.48	34.04	237	338	Peak
5470	59.97	51.14	68.2	-8.23	34.37	8.51	34.05	237	338	Peak
5550	99.69	90.72			34.45	8.59	34.07	237	338	Average
5550	107.78	98.81			34.45	8.59	34.07	237	338	Peak
5725	59.98	50.82	68.2	-8.22	34.62	8.65	34.11	237	338	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5550MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5454	43.36	34.54	54	-10.64	34.36	8.51	34.05	195	120	Average
5454	57.57	48.75	74	-16.43	34.36	8.51	34.05	195	120	Peak
5470	57.15	48.32	68.2	-11.05	34.37	8.51	34.05	195	120	Peak
5670	94.62	85.52			34.57	8.63	34.1	195	120	Average
5670	102.71	93.61			34.57	8.63	34.1	195	120	Peak
5725	56.87	47.71	68.2	-11.33	34.62	8.65	34.11	195	120	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5454	43.44	34.62	54	-10.56	34.36	8.51	34.05	232	334	Average
5454	57.11	48.29	74	-16.89	34.36	8.51	34.05	232	334	Peak
5470	55.53	46.7	68.2	-12.67	34.37	8.51	34.05	232	334	Peak
5670	99.67	90.57			34.57	8.63	34.1	232	334	Average
5670	107.65	98.55			34.57	8.63	34.1	232	334	Peak
5725	63.46	54.3	68.2	-4.74	34.62	8.65	34.11	232	330	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5670MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	57.37	48.22	68.2	-10.83	34.61	8.65	34.11	174	118	Peak
*5724	58.69	49.53	78.2	-19.51	34.62	8.65	34.11	174	118	Peak
5755	88.18	78.97			34.66	8.66	34.11	174	118	Average
5755	96.19	86.98			34.66	8.66	34.11	174	118	Peak
*5852	57.11	47.81	78.2	-21.09	34.74	8.7	34.14	174	118	Peak
*5864	57.9	48.57	68.2	-10.3	34.76	8.71	34.14	174	118	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	65.25	56.1	68.2	-2.95	34.61	8.65	34.11	120	207	Peak
*5724	68.3	59.14	78.2	-9.9	34.62	8.65	34.11	120	207	Peak
5755	92.98	83.77			34.66	8.66	34.11	112	154	Average
5755	100.19	90.98			34.66	8.66	34.11	112	154	Peak
*5860	56.93	47.61	78.2	-21.27	34.76	8.7	34.14	112	154	Peak
*5868	56.8	47.47	68.2	-11.4	34.76	8.71	34.14	112	154	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- *: Out of restricted band



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5708	57.14	47.99	68.2	-11.06	34.61	8.65	34.11	132	118	Peak
*5722	56.77	47.61	78.2	-21.43	34.62	8.65	34.11	132	118	Peak
5795	94.67	85.43			34.69	8.68	34.13	132	118	Average
5795	101.37	92.13			34.69	8.68	34.13	132	118	Peak
*5854	57.12	47.8	78.2	-21.08	34.76	8.7	34.14	132	118	Peak
*5866	57.54	48.21	68.2	-10.66	34.76	8.71	34.14	132	118	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	57.09	47.94	68.2	-11.11	34.61	8.65	34.11	118	154	Peak
*5716	62.92	53.77	78.2	-15.28	34.61	8.65	34.11	120	154	Peak
5795	98.57	89.33			34.69	8.68	34.13	118	154	Average
5795	106.56	97.32			34.69	8.68	34.13	118	154	Peak
*5858	67.3	57.98	78.2	-10.9	34.76	8.7	34.14	116	150	Peak
*5866	64.94	55.61	68.2	-3.26	34.76	8.71	34.14	116	150	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795MHz: Fundamental frequency.
- *: Out of restricted band

802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 42	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	47.84	39.59	54	-6.16	34.11	8.13	33.99	117	124	Average
5136	58.66	50.41	74	-15.34	34.11	8.13	33.99	117	124	Peak
5210	90.37	82.01			34.17	8.19	34	117	124	Average
5210	98.81	90.45			34.17	8.19	34	117	124	Peak
5420	43.51	34.74	54	-10.49	34.33	8.48	34.04	117	124	Average
5420	57.77	49	74	-16.23	34.33	8.48	34.04	117	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	52.95	44.7	54	-1.05	34.12	8.13	34	119	144	Average
5146	61.82	53.57	74	-12.18	34.12	8.13	34	119	144	Peak
5210	94.87	86.51			34.17	8.19	34	102	144	Average
5210	102.88	94.52			34.17	8.19	34	102	144	Peak
5460	43.57	34.75	54	-10.43	34.36	8.51	34.05	102	144	Average
5460	57.12	48.3	74	-16.88	34.36	8.51	34.05	102	144	Peak

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 58	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.79	35.59	54	-10.21	34.09	8.1	33.99	224	122	Average
5110	60.28	52.08	74	-13.72	34.09	8.1	33.99	224	122	Peak
5290	90.44	81.91			34.23	8.32	34.02	224	122	Average
5290	98.23	89.7			34.23	8.32	34.02	224	122	Peak
5366	45.57	36.93	54	-8.43	34.29	8.38	34.03	224	122	Average
5366	60.38	51.74	74	-13.62	34.29	8.38	34.03	224	122	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	43.64	35.39	54	-10.36	34.11	8.13	33.99	100	144	Average
5134	59.16	50.91	74	-14.84	34.11	8.13	33.99	100	144	Peak
5290	94.94	86.41			34.23	8.32	34.02	100	144	Average
5290	102.48	93.95			34.23	8.32	34.02	100	144	Peak
5352	51.26	42.63	54	-2.74	34.28	8.38	34.03	106	149	Average
5352	63.84	55.21	74	-10.16	34.28	8.38	34.03	106	149	Peak

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 106	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	45.71	36.89	54	-8.29	34.36	8.51	34.05	100	128	Average
5460	57.63	48.81	74	-16.37	34.36	8.51	34.05	100	128	Peak
5470	58.25	49.42	68.2	-9.95	34.37	8.51	34.05	100	128	Peak
5530	88.53	79.6			34.42	8.58	34.07	100	128	Average
5530	96.09	87.16			34.42	8.58	34.07	100	128	Peak
5725	56.93	47.77	68.2	-11.27	34.62	8.65	34.11	100	128	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	51.79	42.97	54	-2.21	34.36	8.51	34.05	240	338	Average
5452	62.98	54.16	74	-11.02	34.36	8.51	34.05	240	338	Peak
5470	66.85	58.02	68.2	-1.35	34.37	8.51	34.05	234	338	Peak
5530	92.59	83.66			34.42	8.58	34.07	240	338	Average
5530	100.62	91.69			34.42	8.58	34.07	240	338	Peak
5725	55.76	46.6	68.2	-12.44	34.62	8.65	34.11	240	338	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5530MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 122	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	45.45	36.63	54	-8.55	34.36	8.51	34.05	195	124	Average
5456	58.33	49.51	74	-15.67	34.36	8.51	34.05	195	124	Peak
5470	57.82	48.99	68.2	-10.38	34.37	8.51	34.05	195	124	Peak
5610	93.43	84.4			34.5	8.61	34.08	195	124	Average
5610	101.39	92.36			34.5	8.61	34.08	195	124	Peak
5725	59.55	50.39	68.2	-8.65	34.62	8.65	34.11	195	124	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	46.77	37.95	54	-7.23	34.36	8.51	34.05	232	334	Average
5458	59	50.18	74	-15	34.36	8.51	34.05	232	334	Peak
5470	59.93	51.1	68.2	-8.27	34.37	8.51	34.05	232	334	Peak
5610	98.4	89.37			34.5	8.61	34.08	232	334	Average
5610	106.54	97.51			34.5	8.61	34.08	232	334	Peak
5725	66.89	57.73	68.2	-1.31	34.62	8.65	34.11	228	336	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5610MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 155	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5710	58.55	49.4	68.2	-9.65	34.61	8.65	34.11	132	118	Peak
*5724	61.38	52.22	78.2	-16.82	34.62	8.65	34.11	132	118	Peak
5775	86.75	77.52			34.68	8.67	34.12	132	118	Average
5775	94.03	84.8			34.68	8.67	34.12	132	118	Peak
*5860	58.47	49.15	78.2	-19.73	34.76	8.7	34.14	132	118	Peak
*5862	57.68	48.35	68.2	-10.52	34.76	8.71	34.14	132	118	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
*5714	67.12	57.97	68.2	-1.08	34.61	8.65	34.11	120	154	Peak
*5720	67.61	58.45	78.2	-10.59	34.62	8.65	34.11	120	154	Peak
5775	92.45	83.22			34.68	8.67	34.12	118	154	Average
5775	99.37	90.14			34.68	8.67	34.12	118	154	Peak
*5856	58.5	49.18	78.2	-19.7	34.76	8.7	34.14	118	154	Peak
*5862	57.51	48.18	68.2	-10.69	34.76	8.71	34.14	118	154	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5775MHz: Fundamental frequency.
- *: Out of restricted band

9kHz ~ 30MHz DATA:

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

30MHz ~ 1GHz WORST-CASE DATA:

802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 42	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
133.14	21.06	42.69	43.5	-22.44	9.23	1.38	32.24	168	292	Peak
194.16	26.11	46.2	43.5	-17.39	10.57	1.61	32.27	162	335	Peak
257.88	32.82	49.73	46	-13.18	13.25	1.94	32.1	112	34	Peak
598.2	36.85	45.19	46	-9.15	20.98	2.87	32.19	171	237	Peak
853	33.09	37.63	46	-12.91	23.8	3.44	31.78	133	303	Peak
998.6	43.02	43.56	54	-10.98	26.04	3.72	30.3	151	141	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
48.36	21.89	44.9	40	-18.11	8.31	0.9	32.22	158	238	Peak
193.08	24.24	44.39	43.5	-19.26	10.51	1.61	32.27	156	225	Peak
258.69	31.29	48.2	46	-14.71	13.25	1.94	32.1	101	304	Peak
360.2	35.24	48.72	46	-10.76	16.36	2.26	32.1	182	47	Peak
596.8	38.57	46.91	46	-7.43	20.98	2.87	32.19	181	334	Peak
997.9	42.73	43.29	54	-11.27	26.04	3.72	30.32	198	78	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
145.29	22.14	43.3	43.5	-21.36	9.73	1.38	32.27	123	331	Peak
192.54	27.13	47.28	43.5	-16.37	10.51	1.61	32.27	157	26	Peak
258.15	31.5	48.41	46	-14.5	13.25	1.94	32.1	134	156	Peak
449.8	30.74	42.4	46	-15.26	18	2.49	32.15	111	293	Peak
598.9	34.37	42.59	46	-11.63	21.1	2.87	32.19	154	181	Peak
799.8	29.86	34	46	-16.14	24.6	3.32	32.06	104	274	Peak

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
48.36	21.16	44.17	40	-18.84	8.31	0.9	32.22	154	161	Peak
147.45	21.61	42.44	43.5	-21.89	9.92	1.52	32.27	199	279	Peak
257.88	30.84	47.75	46	-15.16	13.25	1.94	32.1	176	97	Peak
360.2	34.7	48.18	46	-11.3	16.36	2.26	32.1	122	170	Peak
598.2	36.47	44.81	46	-9.53	20.98	2.87	32.19	164	316	Peak
999.3	44.79	45.27	54	-9.21	26.1	3.72	30.3	173	164	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
92.1	18.32	39.97	43.5	-25.18	9.06	1.11	31.82	178	258	Peak
192.54	26.24	46.39	43.5	-17.26	10.51	1.61	32.27	185	119	Peak
256.8	32.1	49.05	46	-13.9	13.21	1.94	32.1	174	301	Peak
384.7	31.63	44.42	46	-14.37	17.05	2.34	32.18	123	176	Peak
597.5	32.87	41.21	46	-13.13	20.98	2.87	32.19	106	247	Peak
904.8	35.16	37.84	46	-10.84	25.24	3.53	31.45	153	115	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
83.73	20.08	42.44	40	-19.92	8.59	1.11	32.06	117	9	Peak
192.81	24.43	44.58	43.5	-19.07	10.51	1.61	32.27	192	261	Peak
256.53	30.84	47.79	46	-15.16	13.21	1.94	32.1	102	163	Peak
360.2	35.19	48.67	46	-10.81	16.36	2.26	32.1	118	82	Peak
598.2	36.7	45.04	46	-9.3	20.98	2.87	32.19	107	334	Peak
998.6	43.78	44.32	54	-10.22	26.04	3.72	30.3	184	193	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
90.48	18.08	39.74	43.5	-25.42	8.94	1.11	31.71	159	142	Peak
194.16	25.27	45.36	43.5	-18.23	10.57	1.61	32.27	123	96	Peak
257.88	31.89	48.8	46	-14.11	13.25	1.94	32.1	161	283	Peak
384.7	32.59	45.38	46	-13.41	17.05	2.34	32.18	123	176	Peak
598.2	28.48	36.82	46	-17.52	20.98	2.87	32.19	154	81	Peak
797	31.6	35.92	46	-14.4	24.42	3.32	32.06	109	156	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
90.48	20.21	41.87	43.5	-23.29	8.94	1.11	31.71	158	58	Peak
193.08	23.01	43.16	43.5	-20.49	10.51	1.61	32.27	187	156	Peak
256.8	31.51	48.46	46	-14.49	13.21	1.94	32.1	175	336	Peak
360.2	34.79	48.27	46	-11.21	16.36	2.26	32.1	116	224	Peak
596.8	33.49	41.83	46	-12.51	20.98	2.87	32.19	178	132	Peak
1000	41.34	41.8	54	-12.66	26.1	3.72	30.28	152	353	Peak

REMARKS: 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 0.50MHz.

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	Apr. 27, 2015	Apr. 26, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Dec. 26, 2014	Dec. 25, 2015
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2014	Dec. 29, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 21, 2015	Jul. 20, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- Note:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

4.2.3 Test Procedures

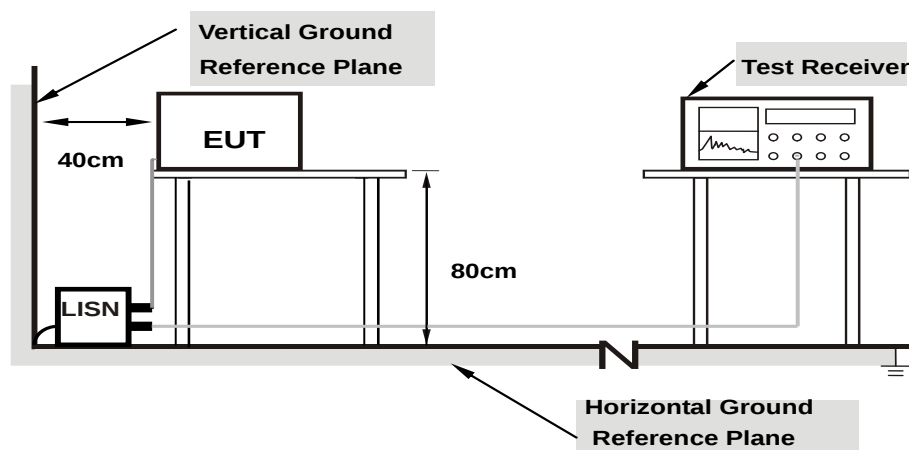
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) 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

Same as 4.1.6.

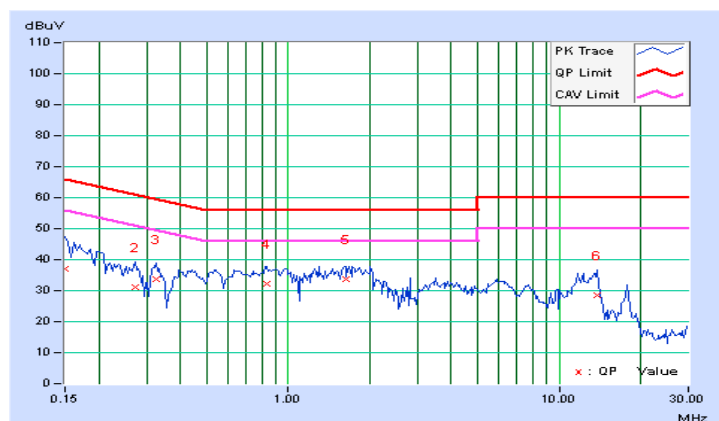
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function	Quasi-Peak (QP) / Average (AV)
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2015/8/4

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	0.16	36.78	10.14	36.94	10.30	66.00	56.00	-29.06	-45.70
2	0.27109	0.17	30.81	14.60	30.98	14.77	61.08	51.08	-30.10	-36.31
3	0.32578	0.18	33.49	20.30	33.67	20.48	59.56	49.56	-25.89	-29.08
4	0.82969	0.22	32.18	24.80	32.40	25.02	56.00	46.00	-23.60	-20.98
5	1.62500	0.26	33.44	24.29	33.70	24.55	56.00	46.00	-22.30	-21.45
6	13.87109	0.51	28.16	22.39	28.67	22.90	60.00	50.00	-31.33	-27.10

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

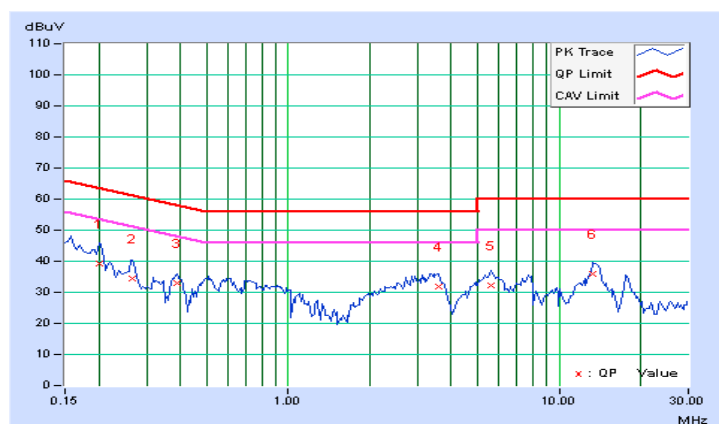


Frequency Range	150kHz ~ 30MHz	Detector Function	Quasi-Peak (QP) / Average (AV)
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Toby Tian	Test Date	2015/8/4
Test Mode	Mode 1		

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	0.20078	0.18	39.05	29.13	39.23	29.31	63.58	53.58	-24.35	-24.27
2	0.26719	0.19	34.13	24.53	34.32	24.72	61.20	51.20	-26.89	-26.49
3	0.38828	0.20	32.91	23.74	33.11	23.94	58.10	48.10	-24.99	-24.16
4	3.59766	0.36	31.42	24.44	31.78	24.80	56.00	46.00	-24.22	-21.20
5	5.63281	0.42	31.67	25.51	32.09	25.93	60.00	50.00	-27.91	-24.07
6	13.36328	0.61	35.27	29.65	35.88	30.26	60.00	50.00	-24.12	-19.74

Remarks:

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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

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

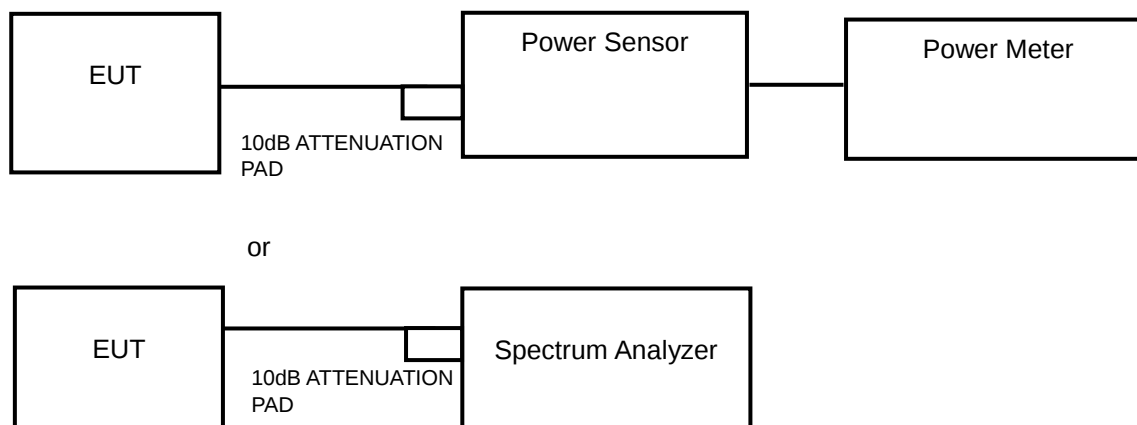
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

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

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

4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

FOR AVERAGE POWER MEASUREMENT

<802.11a, 802.11n (20MHz), 802.11n (40MHz)>

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

<802.11ac (80MHz)>

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

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

POWER OUTPUT:

<1TX>

Chain A

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	19.50	12.90	24	Pass
44	5220	19.10	12.81	24	Pass
48	5240	19.41	12.88	24	Pass
52	5260	19.63	12.93	24	Pass
60	5300	18.84	12.75	24	Pass
64	5320	18.28	12.62	24	Pass
100	5500	18.66	12.71	24	Pass
116	5580	19.77	12.96	24	Pass
140	5700	12.39	10.93	24	Pass

802.11n (20MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	17.86	12.52	24	Pass
44	5220	18.88	12.76	24	Pass
48	5240	19.10	12.81	24	Pass
52	5260	18.66	12.71	24	Pass
60	5300	19.54	12.91	24	Pass
64	5320	18.24	12.61	24	Pass
100	5500	19.54	12.91	24	Pass
116	5580	17.86	12.52	24	Pass
140	5700	11.99	10.79	24	Pass

802.11n (40MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	8.38	9.23	24	Pass
46	5230	15.96	12.03	24	Pass
54	5270	16.94	12.29	24	Pass
62	5310	15.14	11.80	24	Pass
102	5510	8.22	9.15	24	Pass
110	5550	17.62	12.46	24	Pass
134	5670	16.37	12.14	24	Pass

802.11ac (80MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	6.78	8.31	24	Pass
58	5290	9.73	9.88	24	Pass
106	5530	9.82	9.92	24	Pass
122	5610	17.42	12.41	24	Pass

<1TX>

Chain B

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
149	5745	19.68	12.94	30	Pass
157	5785	19.72	12.95	30	Pass
165	5825	18.54	12.68	30	Pass

802.11n (20MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
149	5745	19.86	12.98	30	Pass
157	5785	18.49	12.67	30	Pass
165	5825	17.82	12.51	30	Pass

802.11n (40MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
151	5755	8.61	9.35	30	Pass
159	5795	17.02	12.31	30	Pass

802.11ac (80MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
155	5775	6.14	7.88	30	Pass

<2TX>

802.11n (20MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	13.21	11.67	35.63	15.52	24	Pass
44	5220	13.32	11.42	35.35	15.48	24	Pass
48	5240	13.66	11.47	37.26	15.71	24	Pass
52	5260	13.90	11.08	37.37	15.73	24	Pass
60	5300	13.61	11.15	35.99	15.56	24	Pass
64	5320	13.34	11.44	35.51	15.50	24	Pass
100	5500	7.14	7.49	10.79	10.33	24	Pass
116	5580	13.58	11.61	37.29	15.72	24	Pass
140	5700	7.01	6.35	9.34	9.70	24	Pass
149	5745	13.35	12.22	38.300	15.83	30	Pass
157	5785	13.51	12.15	38.845	15.89	30	Pass
165	5825	13.35	11.30	35.117	15.46	30	Pass

802.11n (40MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	10.27	8.51	17.74	12.49	24	Pass
46	5230	13.13	11.14	33.56	15.26	24	Pass
54	5270	13.56	11.01	35.32	15.48	24	Pass
62	5310	12.62	9.97	28.21	14.50	24	Pass
102	5510	9.99	8.87	17.69	12.48	24	Pass
110	5550	13.04	11.20	33.32	15.23	24	Pass
134	5670	12.78	11.45	32.93	15.18	24	Pass
151	5755	8.23	8.01	12.977	11.13	30	Pass
159	5795	9.24	8.83	16.033	12.05	30	Pass

802.11ac (80MHz)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	6.24	5.46	7.72	8.88	24	Pass
58	5290	9.93	7.88	15.98	12.04	24	Pass
106	5530	7.66	7.95	12.07	10.82	24	Pass
122	5610	7.95	10.82	18.31	12.63	24	Pass
155	5775	8.51	7.24	12.392	10.93	30	Pass

5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

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

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

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab/Telecom Lab

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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