

Partial FCC Test Report

Report No.: RF180530C08-3

FCC ID: GKR-SHC100

Test Model: QCNFA435

Received Date: May 30, 2018

Test Date: Jul. 09, 2018 ~ Jul. 18, 2018

Issued Date: Jul. 23, 2018

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FCC Registration /
Designation Number: 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF180530C08-3	Original Release	Jul. 23, 2018

1 Certificate of Conformity

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

Brand: Qualcomm Atheros

Test Model: QCNFA435

Sample Status: Production Unit

Applicant: COMPAL ELECTRONICS, INC.

Test Date: Jul. 09, 2018 ~ Jul. 18, 2018

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 RF characteristics under the conditions specified in this report.

Prepared by : Evonne Liu, **Date:** Jul. 23, 2018
Evonne Liu / Specialist

Approved by : Dylan Chiou, **Date:** Jul. 23, 2018
Dylan Chiou / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -13.05 dB at 0.17328 MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.07 dB at 5725 MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	N/A	Refer to Note
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6 dB Bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	N/A	Refer to Note

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
Note: Test items for Radiated Emissions and Conducted Power were performed for this report. For other test data, please refer to BV CPS Report No.: RF141008E03-1 R1 for module (Brand: Qualcomm Atheros, Model: QCNFA435).

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Single Stream 802.11a/b/g/n/ac + BT 4.1 M.2 Type Card
Brand	Qualcomm Atheros
Test Model	QCNA435
Status of EUT	Production Unit
Power Supply Rating	3.3 Vdc (host equipment)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to 150.0 Mbps 802.11ac: up to 433.3 Mbps
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5720 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 1 for 802.11ac (VHT80) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 1 for 802.11ac (VHT80) 5500 ~ 5720 MHz: 12 for 802.11a, 802.11n (HT20) 6 for 802.11n (HT40) 3 for 802.11ac (VHT80) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 1 for 802.11ac (VHT80)
Antenna Type	Refer to Note as below
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

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

Product	Brand	Model
All In One Computer	Compal	SHC-100

2. The EUT provides 1 completed transmitter and 1 receiver.

Modulation Mode	Tx Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

* The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

3. The antenna information is listed as below.

Ant. No.	Ant. Type	Vendor	Part Number	Antenna Gain (dBi)			
				BT/WLAN 2.4GHz	WLAN 5.15~5.35 GHz	WLAN 5.47~5.725 GHz	WLAN 5.725~5.85 GHz
1	PCB	Nienyi	WLAN Main Antenna: NYS3283 (DC330026I0U)	0.75	-0.76	-0.47	0.13
			WLAN Aux Antenna: NYS3284 (DC330026I1U)	0.59	-0.93	-1.01	-1.96
2	Dipole	Nienyi	WLAN Main Antenna: NYS3285+ NYS3281	1.64	0.91	1.42	0.52
			WLAN Aux Antenna: NYS3285+ NYS3282	0.81	-0.78	-0.47	0.44

4. This device has 2 configurations as below.

Mode A: EUT was chosen antenna no. 1 to test.

Mode B: EUT was chosen antenna no. 2 to test.

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

3.2 Description of Test Modes

For 5180 ~ 5240 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

For 5260 ~ 5320 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
58	5290

For 5500 ~ 5700 MHz

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600	144	5720

6 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590	142	5710

3 channels are provided for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	138	5690
122	5610		

For 5745 ~ 5825 MHz:

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

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

2 channels are provided for 802.11n (HT40):

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
155	5775

3.2.1 Test Mode Applicability and Tested Channel Detail

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

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

Radiated Emission Test (Above 1 GHz):

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B	5180-5240	802.11a	36 to 48	36, 44, 48	OFDM	BPSK	6.0
		802.11n (HT20)	36 to 48	36, 44, 48	OFDM	BPSK	6.5
		802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	13.5
		802.11ac (VHT80)	42	42	OFDM	BPSK	29.3
	5260-5320	802.11a	52 to 64	52, 60, 64	OFDM	BPSK	6.0
		802.11n (HT20)	52 to 64	52, 60, 64	OFDM	BPSK	6.5
		802.11n (HT40)	54 to 62	54, 62	OFDM	BPSK	13.5
		802.11ac (VHT80)	58	58	OFDM	BPSK	29.3
	5500-5720	802.11a	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.0
		802.11n (HT20)	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
		802.11n (HT40)	102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
		802.11ac (VHT80)	106 to 138	106, 122, 138	OFDM	BPSK	29.3
	5745-5825	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
		802.11n (HT20)	149 to 165	149, 157, 165	OFDM	BPSK	6.5
		802.11n (HT40)	151 to 159	151, 159	OFDM	BPSK	13.5
		802.11ac (VHT80)	155	155	OFDM	BPSK	29.3

Radiated Emission Test (Below 1 GHz):

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5500-5720	802.11ac (VHT80)	106 to 138	122	OFDM	BPSK	29.3
B	5180-5240	802.11a	36 to 48	36	OFDM	BPSK	6.0

Power Line Conducted Emission Test:

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	5500-5720	802.11ac (VHT80)	106 to 138	122	OFDM	BPSK	29.3
B	5180-5240	802.11a	36 to 48	36	OFDM	BPSK	6.0

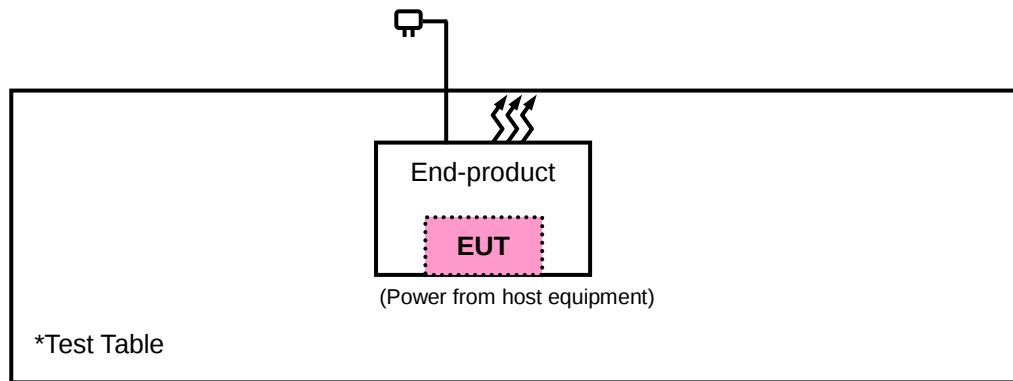
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE $\geq$ 1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Harry Hsueh
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Harry Hsueh
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Jisyong Wang

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)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 644545 D01 Guidance for IEEE 802 11ac v01r02

ANSI C63.10-2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

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

Note:

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

4.1.2 Limits of Unwanted Emission Out of the Restricted Bands

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v02r01		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK:105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK:122.2 (dBμV/m) ^{*4}
	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

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

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

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

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

Note:

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

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

4.1.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 17, 2017	Oct. 16, 2018
Spectrum Analyzer Agilent	N9010A	MY52220207	Dec. 07, 2017	Dec. 06, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	9120D	209	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Fixed Attenuator Mini-Circuits	BW-N4W5+	PAD-ATT4-01	Jan. 29, 2018	Jan. 28, 2019
Loop Antenna	EM-6879	269	Aug. 11, 2017	Aug. 10, 2018
Preamplifier EMCI	EMC001340	980201	Nov. 01, 2017	Oct. 31, 2018
Bluetooth Tester	CBT	100946	Jul. 29, 2016	Jul. 28, 2018
Preamplifier EMCI	EMC 012645	980115	Oct. 20, 2017	Oct. 19, 2018
Preamplifier EMCI	EMC 184045	980116	Oct. 20, 2017	Oct. 19, 2018
Preamplifier EMCI	EMC 330H	980112	Oct. 20, 2017	Oct. 19, 2018
Power Meter Anritsu	ML2495A	1012010	Aug. 15, 2017	Aug. 14, 2018
Power Sensor Anritsu	MA2411B	1315050	Aug. 15, 2017	Aug. 14, 2018
RF Coaxial Cable	8D-FB	Cable-RF3-04	Oct. 19, 2017	Oct. 18, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	230129/4	Oct. 19, 2017	Oct. 18, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	250723/4	Oct. 19, 2017	Oct. 18, 2018
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	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 HwaYa Chamber 10.
3. The horn antenna and preamplifier (model: EMC 184045) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The IC Site Registration No. is IC7450F-10.

4.1.4 Test Procedures

For Radiated Emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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. Both Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.

For Radiated Emission above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

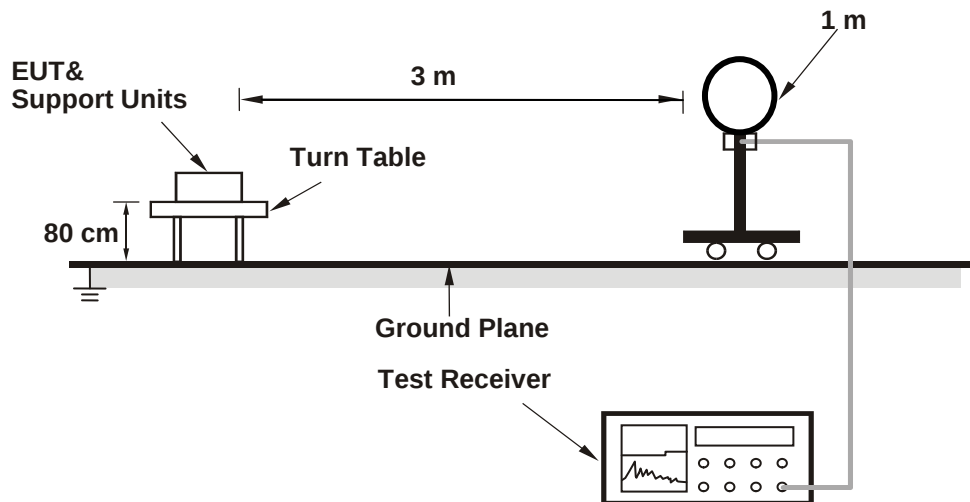
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
(11a: RBW = 1 MHz, VBW = 1 kHz ; 11n (HT20): RBW = 1 MHz, VBW = 1 kHz ;
11n (HT40): RBW = 1 MHz, VBW = 1 kHz ; 11ac (VHT80): RBW = 1 MHz, VBW = 1 kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 Deviation from Test Standard

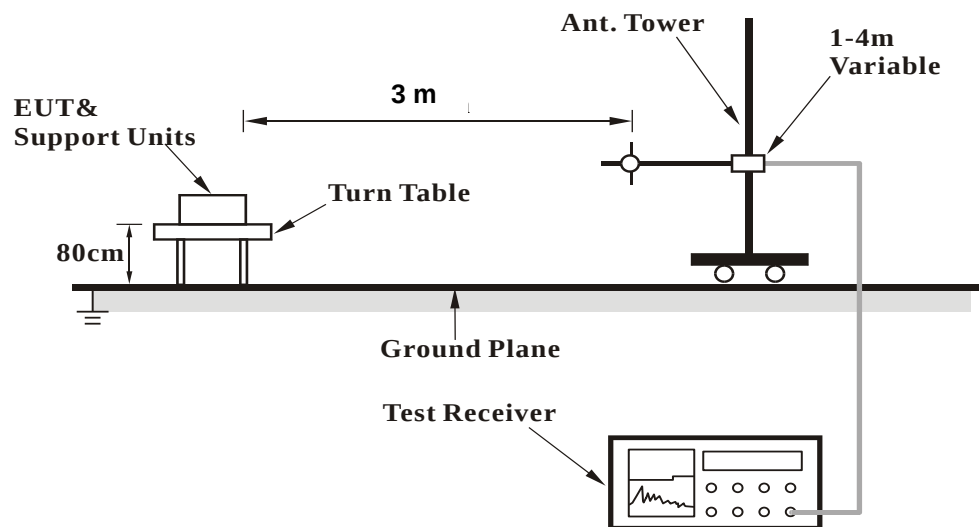
No deviation.

4.1.6 Test Setup

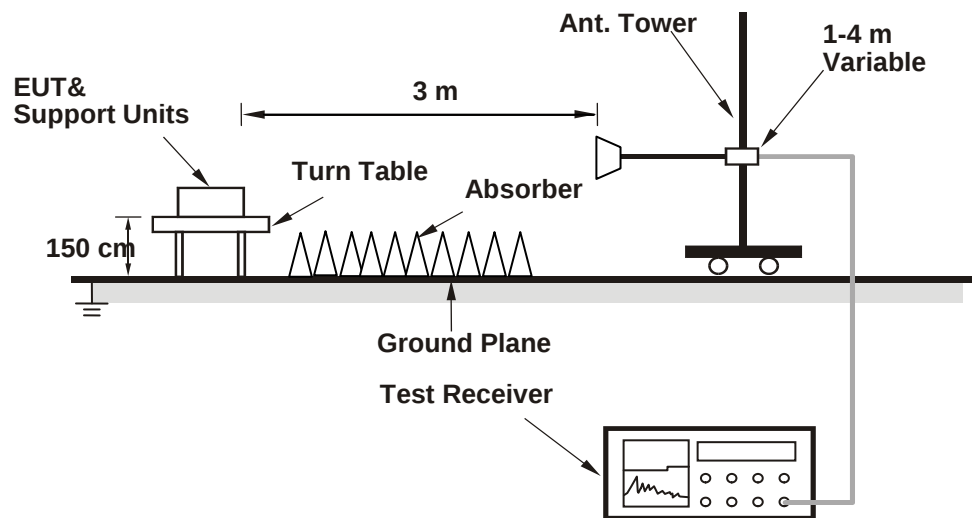
<Radiated Emission below 30 MHz>



<Radiated Emission 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



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

4.1.7 EUT Operating Conditions

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

4.1.8 Test Results

Above 1 GHz Data :

Mode A

802.11a

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.55	61.3	53.05	68.2	-6.9	34.12	8.13	34	100	305	Peak
5180	90.5	82.19			34.15	8.16	34	100	305	Average
5180	97.81	89.5			34.15	8.16	34	100	305	Peak
*10360	52.83	38.53	68.2	-15.37	37.12	12.3	35.12	154	300	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.2	64.7	56.45	68.2	-3.5	34.12	8.13	34	202	200	Peak
5180	97.81	89.5			34.15	8.16	34	202	200	Average
5180	104.49	96.18			34.15	8.16	34	202	200	Peak
*10360	52.8	38.5	68.2	-15.4	37.12	12.3	35.12	112	32	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.9	53.74	45.49	68.2	-14.46	34.12	8.13	34	100	309	Peak
5220	95.65	87.26			34.17	8.22	34	100	309	Average
5220	102.12	93.73			34.17	8.22	34	100	309	Peak
5444.16	53.17	44.38	68.2	-15.03	34.35	8.48	34.04	100	309	Peak
*10440	52.99	38.53	68.2	-15.21	37.16	12.47	35.17	152	205	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.5	59.2	50.95	68.2	-9	34.12	8.13	34	202	200	Peak
5220	100.47	92.08			34.17	8.22	34	202	200	Average
5220	107.59	99.2			34.17	8.22	34	202	200	Peak
5423.04	53.23	44.46	68.2	-14.97	34.33	8.48	34.04	202	200	Peak
*10440	53.58	39.12	68.2	-14.62	37.16	12.47	35.17	154	5	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	96.65	88.21			34.19	8.26	34.01	100	309	Average
5240	103.38	94.94			34.19	8.26	34.01	100	309	Peak
5421.94	53.87	45.1	68.2	-14.33	34.33	8.48	34.04	100	309	Peak
*10480	53.71	39.2	68.2	-14.49	37.19	12.53	35.21	114	32	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	101.47	93.03			34.19	8.26	34.01	202	200	Average
5240	108.27	99.83			34.19	8.26	34.01	202	200	Peak
5417.21	53.08	44.35	68.2	-15.12	34.33	8.44	34.04	202	200	Peak
*10480	53.53	39.02	68.2	-14.67	37.19	12.53	35.21	116	326	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5081	53.79	45.67	68.2	-14.41	34.07	8.03	33.98	158	353	Peak
5260	95.59	87.13			34.21	8.26	34.01	158	353	Average
5260	103.36	94.9			34.21	8.26	34.01	158	353	Peak
*10520	53.5	38.91	68.2	-14.7	37.21	12.61	35.23	163	122	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5143.1	53.55	45.29	68.2	-14.65	34.12	8.13	33.99	145	196	Peak
5260	100.32	91.86			34.21	8.26	34.01	145	196	Average
5260	108.13	99.67			34.21	8.26	34.01	145	196	Peak
*10520	53.94	39.35	68.2	-14.26	37.21	12.61	35.23	185	114	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5135.15	53.04	44.79	68.2	-15.16	34.11	8.13	33.99	146	356	Peak
5300	94.66	86.12			34.24	8.32	34.02	146	356	Average
5300	102.44	93.9			34.24	8.32	34.02	146	356	Peak
5351.65	62.86	54.23	68.2	-5.34	34.28	8.38	34.03	146	356	Peak
10060	53.54	39.9	68.2	-14.66	36.94	11.61	34.91	124	180	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5064.2	53.41	45.31	68.2	-14.79	34.05	8.03	33.98	145	196	Peak
5300	99.42	90.88			34.24	8.32	34.02	145	196	Average
5300	107.84	99.3			34.24	8.32	34.02	145	196	Peak
5351.21	65.89	57.26	68.2	-2.31	34.28	8.38	34.03	145	196	Peak
10060	51.29	37.65	68.2	-16.91	36.94	11.61	34.91	175	164	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	90.36	81.78			34.25	8.35	34.02	158	353	Average
5320	98.89	90.31			34.25	8.35	34.02	158	353	Peak
5360.67	56.32	47.68	68.2	-11.88	34.29	8.38	34.03	158	353	Peak
10640	52.84	38.11	68.2	-15.36	37.31	12.71	35.29	146	304	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	95.73	87.15			34.25	8.35	34.02	145	196	Average
5320	103.7	95.12			34.25	8.35	34.02	145	196	Peak
5359.9	62.62	53.99	68.2	-5.58	34.28	8.38	34.03	145	196	Peak
10640	52.46	37.73	68.2	-15.74	37.31	12.71	35.29	113	142	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5422.32	53.29	44.52	68.2	-14.91	34.33	8.48	34.04	138	4	Peak
*5470.64	55.99	47.16	68.2	-12.21	34.37	8.51	34.05	138	4	Peak
5500	89.86	80.94			34.4	8.57	34.05	138	4	Average
5500	97.1	88.18			34.4	8.57	34.05	138	4	Peak
11000	54.28	39.2	68.2	-13.92	37.6	12.96	35.48	126	354	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458.16	56.74	47.92	68.2	-11.46	34.36	8.51	34.05	284	203	Peak
*5470.8	56.6	47.74	68.2	-11.6	34.37	8.54	34.05	284	203	Peak
5500	96.18	87.26			34.4	8.57	34.05	284	203	Average
5500	103.61	94.69			34.4	8.57	34.05	284	203	Peak
11000	54.54	39.46	68.2	-13.66	37.6	12.96	35.48	128	190	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5427.76	54.32	45.55	68.2	-13.88	34.33	8.48	34.04	136	0	Peak
*5470.96	51.91	43.05	68.2	-16.29	34.37	8.54	34.05	136	0	Peak
5580	94.02	85.03			34.47	8.6	34.08	136	0	Average
5580	102.11	93.12			34.47	8.6	34.08	136	0	Peak
*5725.16	52.44	43.28	68.2	-15.76	34.62	8.65	34.11	136	0	Peak
11600	53.54	38.11	68.2	-14.66	38.04	12.76	35.37	186	238	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5433.52	53.99	45.2	68.2	-14.21	34.35	8.48	34.04	232	201	Peak
*5469.52	54.05	45.22	68.2	-14.15	34.37	8.51	34.05	232	201	Peak
5580	101.86	92.87			34.47	8.6	34.08	232	201	Average
5580	108.97	99.98			34.47	8.6	34.08	232	201	Peak
*5724.6	53.62	44.46	68.2	-14.58	34.62	8.65	34.11	232	201	Peak
11600	54.31	38.88	68.2	-13.89	38.04	12.76	35.37	131	208	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	88.53	79.4			34.59	8.64	34.1	124	6	Average
5700	96.38	87.25			34.59	8.64	34.1	124	6	Peak
*5725.64	54.42	45.26	68.2	-13.78	34.62	8.65	34.11	124	6	Peak
11400	55.14	40.04	68.2	-13.06	37.84	12.67	35.41	162	17	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	95.25	86.12			34.59	8.64	34.1	232	201	Average
5700	103.07	93.94			34.59	8.64	34.1	232	201	Peak
*5725.08	65.88	56.72	68.2	-2.32	34.62	8.65	34.11	232	201	Peak
11400	54.5	39.4	68.2	-13.7	37.84	12.67	35.41	153	76	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5449.52	52.92	44.09	68.2	-15.28	34.36	8.51	34.04	122	6	Peak
*5469.52	52.43	43.6	68.2	-15.77	34.37	8.51	34.05	122	6	Peak
5720	90.61	81.45			34.62	8.65	34.11	122	6	Average
5720	98.55	89.39			34.62	8.65	34.11	122	6	Peak
11440	53.83	38.72	68.2	-14.37	37.86	12.65	35.4	106	47	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5358	53.67	45.04	68.2	-14.53	34.28	8.38	34.03	220	202	Peak
*5469.84	52.46	43.63	68.2	-15.74	34.37	8.51	34.05	220	202	Peak
5720	99.16	90			34.62	8.65	34.11	220	202	Average
5720	106.87	97.71			34.62	8.65	34.11	220	202	Peak
11440	55.59	40.48	68.2	-12.61	37.86	12.65	35.4	173	61	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5720 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	90.84	81.65			34.64	8.66	34.11	120	6	Average
5745	98.97	89.78			34.64	8.66	34.11	120	6	Peak
11490	54.63	39.51	68.2	-13.57	37.89	12.62	35.39	196	147	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	99.72	90.53			34.64	8.66	34.11	226	200	Average
5745	107.91	98.72			34.64	8.66	34.11	226	200	Peak
11490	54.52	39.4	68.2	-13.68	37.89	12.62	35.39	147	343	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5618.125	52.8	43.75	68.2	-15.4	34.52	8.61	34.08	120	6	Peak
5652.775	50.83	41.73	70.25	-19.42	34.56	8.63	34.09	120	6	Peak
5923.675	51.58	42.18	69.18	-17.6	34.83	8.73	34.16	120	6	Peak
*5970.4	53.23	43.78	68.2	-14.97	34.87	8.75	34.17	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5616.55	53.97	44.92	68.2	-14.23	34.52	8.61	34.08	226	200	Peak
5652.775	53.43	44.33	70.25	-16.82	34.56	8.63	34.09	226	200	Peak
5922.625	51.47	42.07	69.96	-18.49	34.83	8.73	34.16	226	200	Peak
*6007.675	53.17	43.66	68.2	-15.03	34.92	8.76	34.17	226	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	90.33	81.1			34.68	8.68	34.13	120	6	Average
5785	98.46	89.23			34.68	8.68	34.13	120	6	Peak
11570	54.99	39.68	68.2	-13.21	38	12.68	35.37	196	313	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	99.89	90.66			34.68	8.68	34.13	226	200	Average
5785	107.8	98.57			34.68	8.68	34.13	226	200	Peak
11570	54.62	39.31	68.2	-13.58	38	12.68	35.37	137	148	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5634.925	53.29	44.22	68.2	-14.91	34.54	8.62	34.09	120	6	Peak
5652.25	51.4	42.31	69.86	-18.46	34.56	8.62	34.09	120	6	Peak
5922.1	51.61	42.21	70.35	-18.74	34.83	8.73	34.16	120	6	Peak
*6022.9	52.93	43.42	68.2	-15.27	34.92	8.77	34.18	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5525.725	53	44.06	68.2	-15.2	34.42	8.58	34.06	226	200	Peak
5651.2	50	40.91	69.09	-19.09	34.56	8.62	34.09	226	200	Peak
5921.575	50.22	40.82	70.73	-20.51	34.83	8.73	34.16	226	200	Peak
*6018.175	52.84	43.33	68.2	-15.36	34.92	8.77	34.18	226	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	90.29	81			34.73	8.69	34.13	120	6	Average
5825	98.35	89.06			34.73	8.69	34.13	120	6	Peak
11650	54.4	38.87	68.2	-13.8	38.09	12.8	35.36	153	293	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	99.3	90.01			34.73	8.69	34.13	226	200	Average
5825	107.36	98.07			34.73	8.69	34.13	226	200	Peak
11650	55.78	40.25	68.2	-12.42	38.09	12.8	35.36	178	111	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5566.675	53.33	44.34	68.2	-14.87	34.47	8.59	34.07	120	6	Peak
5652.25	52.36	43.27	69.86	-17.5	34.56	8.62	34.09	120	6	Peak
5923.15	51.17	41.77	69.57	-18.4	34.83	8.73	34.16	120	6	Peak
*5969.35	53.55	44.1	68.2	-14.65	34.87	8.75	34.17	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5544.625	52.52	43.58	68.2	-15.68	34.43	8.58	34.07	226	200	Peak
5653.3	53.1	44	70.64	-17.54	34.56	8.63	34.09	226	200	Peak
5922.625	52.37	42.97	69.96	-17.59	34.83	8.73	34.16	226	200	Peak
*5985.625	54.21	44.75	68.2	-13.99	34.88	8.75	34.17	226	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11n (HT20)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.35	58.69	50.44	68.2	-9.51	34.12	8.13	34	100	309	Peak
5180	90.14	81.83			34.15	8.16	34	100	309	Average
5180	97.22	88.91			34.15	8.16	34	100	309	Peak
*10360	52.65	38.35	68.2	-15.55	37.12	12.3	35.12	198	8	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5146.85	65	56.75	68.2	-3.2	34.12	8.13	34	202	200	Peak
5180	95.63	87.32			34.15	8.16	34	202	200	Average
5180	102.61	94.3			34.15	8.16	34	202	200	Peak
*10360	52.44	38.14	68.2	-15.76	37.12	12.3	35.12	112	146	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5103.2	54.28	46.12	68.2	-13.92	34.08	8.07	33.99	100	309	Peak
5220	94.78	86.39			34.17	8.22	34	100	309	Average
5220	101.68	93.29			34.17	8.22	34	100	309	Peak
5365.73	53.31	44.67	68.2	-14.89	34.29	8.38	34.03	100	309	Peak
*10440	52.88	38.42	68.2	-15.32	37.16	12.47	35.17	168	222	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.5	60.92	52.67	68.2	-7.28	34.12	8.13	34	202	200	Peak
5220	99.85	91.46			34.17	8.22	34	202	200	Average
5220	106.7	98.31			34.17	8.22	34	202	200	Peak
5402.8	53.54	44.82	68.2	-14.66	34.32	8.44	34.04	202	200	Peak
*10440	53.4	38.94	68.2	-14.8	37.16	12.47	35.17	121	158	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	95.5	87.06			34.19	8.26	34.01	100	309	Average
5240	102.74	94.3			34.19	8.26	34.01	100	309	Peak
5444.71	53.4	44.61	68.2	-14.8	34.35	8.48	34.04	100	309	Peak
*10480	53.66	39.15	68.2	-14.54	37.19	12.53	35.21	119	257	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	100	91.56			34.19	8.26	34.01	202	200	Average
5240	107.83	99.39			34.19	8.26	34.01	202	200	Peak
5399.72	53.56	44.84	68.2	-14.64	34.32	8.44	34.04	202	200	Peak
*10480	53.36	38.85	68.2	-14.84	37.19	12.53	35.21	119	346	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5088.5	53.24	45.08	68.2	-14.96	34.07	8.07	33.98	158	353	Peak
5260	95.68	87.22			34.21	8.26	34.01	158	353	Average
5260	103.06	94.6			34.21	8.26	34.01	158	353	Peak
*10520	52.15	37.56	68.2	-16.05	37.21	12.61	35.23	138	111	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5075.3	53.38	45.26	68.2	-14.82	34.07	8.03	33.98	145	196	Peak
5260	100.59	92.13			34.21	8.26	34.01	145	196	Average
5260	108.95	100.49			34.21	8.26	34.01	145	196	Peak
*10520	52.77	38.18	68.2	-15.43	37.21	12.61	35.23	175	143	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5107.85	53.37	45.17	68.2	-14.83	34.09	8.1	33.99	158	353	Peak
5300	93.68	85.14			34.24	8.32	34.02	158	353	Average
5300	101.04	92.5			34.24	8.32	34.02	158	353	Peak
5350.22	60.85	52.22	68.2	-7.35	34.28	8.38	34.03	158	353	Peak
10600	52.8	38.12	68.2	-15.4	37.28	12.67	35.27	196	340	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5110.55	53.19	44.99	68.2	-15.01	34.09	8.1	33.99	145	196	Peak
5300	98.42	89.88			34.24	8.32	34.02	145	196	Average
5300	106.82	98.28			34.24	8.32	34.02	145	196	Peak
5351.76	65.72	57.09	68.2	-2.48	34.28	8.38	34.03	145	196	Peak
10600	53.14	38.46	68.2	-15.06	37.28	12.67	35.27	186	227	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	89.12	80.54			34.25	8.35	34.02	158	353	Average
5320	97.23	88.65			34.25	8.35	34.02	158	353	Peak
5399.83	54.14	45.42	68.2	-14.06	34.32	8.44	34.04	158	353	Peak
10640	52.65	37.92	68.2	-15.55	37.31	12.71	35.29	108	213	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	93.82	85.24			34.25	8.35	34.02	145	196	Average
5320	101.15	92.57			34.25	8.35	34.02	145	196	Peak
5357.26	61.12	52.49	68.2	-7.08	34.28	8.38	34.03	145	196	Peak
10640	53.27	38.54	68.2	-14.93	37.31	12.71	35.29	158	161	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448.72	54.48	45.65	68.2	-13.72	34.36	8.51	34.04	138	4	Peak
*5470.8	57.83	48.97	68.2	-10.37	34.37	8.54	34.05	138	4	Peak
5500	89.88	80.96			34.4	8.57	34.05	138	4	Average
5500	97.15	88.23			34.4	8.57	34.05	138	4	Peak
11000	52.49	37.41	68.2	-15.71	37.6	12.96	35.48	112	149	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.28	59.07	50.25	68.2	-9.13	34.36	8.51	34.05	284	203	Peak
*5469.84	63.71	54.88	68.2	-4.49	34.37	8.51	34.05	284	203	Peak
5500	96.21	87.29			34.4	8.57	34.05	284	203	Average
5500	103.84	94.92			34.4	8.57	34.05	284	203	Peak
11000	52.88	37.8	68.2	-15.32	37.6	12.96	35.48	151	346	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5429.04	53.59	44.8	68.2	-14.61	34.35	8.48	34.04	136	0	Peak
*5468.72	51.74	42.91	68.2	-16.46	34.37	8.51	34.05	136	0	Peak
5580	93.94	84.95			34.47	8.6	34.08	136	0	Average
5580	102.26	93.27			34.47	8.6	34.08	136	0	Peak
*5725.48	53	43.84	68.2	-15.2	34.62	8.65	34.11	136	0	Peak
11600	53.86	38.43	68.2	-14.34	38.04	12.76	35.37	152	279	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5356.88	53.56	44.93	68.2	-14.64	34.28	8.38	34.03	232	201	Peak
*5470.96	52.46	43.6	68.2	-15.74	34.37	8.54	34.05	232	201	Peak
5580	101.42	92.43			34.47	8.6	34.08	232	201	Average
5580	109.98	100.99			34.47	8.6	34.08	232	201	Peak
*5724.12	52.71	43.55	68.2	-15.49	34.62	8.65	34.11	232	201	Peak
11600	53.61	38.18	68.2	-14.59	38.04	12.76	35.37	179	161	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	88.69	79.56			34.59	8.64	34.1	124	6	Average
5700	96.22	87.09			34.59	8.64	34.1	124	6	Peak
*5724.84	61.36	52.2	68.2	-6.84	34.62	8.65	34.11	124	6	Peak
11400	54.61	39.51	68.2	-13.59	37.84	12.67	35.41	137	281	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	97.1	87.97			34.59	8.64	34.1	232	201	Average
5700	104.26	95.13			34.59	8.64	34.1	232	201	Peak
*5725.16	65.66	56.5	68.2	-2.54	34.62	8.65	34.11	232	201	Peak
11400	53.7	38.6	68.2	-14.5	37.84	12.67	35.41	137	188	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5449.2	53.46	44.63	68.2	-14.74	34.36	8.51	34.04	122	6	Peak
*5470.64	52.23	43.4	68.2	-15.97	34.37	8.51	34.05	122	6	Peak
5720	90.16	81			34.62	8.65	34.11	122	6	Average
5720	98.11	88.95			34.62	8.65	34.11	122	6	Peak
11440	53.52	38.41	68.2	-14.68	37.86	12.65	35.4	121	164	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5440.56	53.16	44.37	68.2	-15.04	34.35	8.48	34.04	220	202	Peak
*5468.4	51.7	42.87	68.2	-16.5	34.37	8.51	34.05	220	202	Peak
5720	98.19	89.03			34.62	8.65	34.11	220	202	Average
5720	106.28	97.12			34.62	8.65	34.11	220	202	Peak
11440	54.06	38.95	68.2	-14.14	37.86	12.65	35.4	168	327	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5720 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	90.48	81.29			34.64	8.66	34.11	120	6	Average
5745	98.53	89.34			34.64	8.66	34.11	120	6	Peak
11490	53.71	38.59	68.2	-14.49	37.89	12.62	35.39	165	246	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	99.52	90.33			34.64	8.66	34.11	226	200	Average
5745	107.76	98.57			34.64	8.66	34.11	226	200	Peak
11490	53.85	38.73	68.2	-14.35	37.89	12.62	35.39	156	224	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5545.15	53.47	44.53	68.2	-14.73	34.43	8.58	34.07	120	6	Peak
5653.3	51.74	42.64	70.64	-18.9	34.56	8.63	34.09	120	6	Peak
5921.575	51.02	41.62	70.73	-19.71	34.83	8.73	34.16	120	6	Peak
*5957.8	53.21	43.76	68.2	-14.99	34.87	8.74	34.16	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5646.475	53.47	44.4	68.2	-14.73	34.54	8.62	34.09	226	200	Peak
5652.775	53.04	43.94	70.25	-17.21	34.56	8.63	34.09	226	200	Peak
5923.675	50.88	41.48	69.18	-18.3	34.83	8.73	34.16	226	200	Peak
*5964.1	52.56	43.12	68.2	-15.64	34.87	8.74	34.17	226	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	90.09	80.86			34.68	8.68	34.13	120	6	Average
5785	98.38	89.15			34.68	8.68	34.13	120	6	Peak
11570	54.75	39.44	68.2	-13.45	38	12.68	35.37	138	216	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	99.85	90.62			34.68	8.68	34.13	221	200	Average
5785	107.7	98.47			34.68	8.68	34.13	221	200	Peak
11570	54.86	39.55	68.2	-13.34	38	12.68	35.37	148	177	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5576.65	53.24	44.24	68.2	-14.96	34.47	8.6	34.07	120	6	Peak
5654.35	52.95	43.86	71.42	-18.47	34.56	8.63	34.1	120	6	Peak
5923.15	50.03	40.63	69.57	-19.54	34.83	8.73	34.16	120	6	Peak
*5987.2	53.33	43.87	68.2	-14.87	34.88	8.75	34.17	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5563	53.35	44.38	68.2	-14.85	34.45	8.59	34.07	221	200	Peak
5651.2	53.17	44.08	69.09	-15.92	34.56	8.62	34.09	221	200	Peak
5922.1	51.03	41.63	70.35	-19.32	34.83	8.73	34.16	221	200	Peak
*5986.675	54.02	44.56	68.2	-14.18	34.88	8.75	34.17	221	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	90.06	80.77			34.73	8.69	34.13	120	6	Average
5825	98.15	88.86			34.73	8.69	34.13	120	6	Peak
11650	53.71	38.18	68.2	-14.49	38.09	12.8	35.36	146	286	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	99.23	89.94			34.73	8.69	34.13	226	200	Average
5825	107.33	98.04			34.73	8.69	34.13	226	200	Peak
11650	53.46	37.93	68.2	-14.74	38.09	12.8	35.36	125	166	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5603.95	52.36	43.33	68.2	-15.84	34.5	8.61	34.08	120	6	Peak
5651.2	51.62	42.53	69.09	-17.47	34.56	8.62	34.09	120	6	Peak
5923.15	50.57	41.17	69.57	-19	34.83	8.73	34.16	120	6	Peak
*5969.875	52.57	43.12	68.2	-15.63	34.87	8.75	34.17	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5594.5	52.61	43.6	68.2	-15.59	34.49	8.6	34.08	226	200	Peak
5652.25	50.65	41.56	69.86	-19.21	34.56	8.62	34.09	226	200	Peak
5923.675	51.31	41.91	69.18	-17.87	34.83	8.73	34.16	226	200	Peak
*5980.9	52.74	43.28	68.2	-15.46	34.88	8.75	34.17	226	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11n (HT40)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.8	56.51	48.26	68.2	-11.69	34.12	8.13	34	100	309	Peak
5190	85.25	76.91			34.15	8.19	34	100	309	Average
5190	92.23	83.89			34.15	8.19	34	100	309	Peak
5426.12	53.22	44.45	68.2	-14.98	34.33	8.48	34.04	100	309	Peak
*10380	53.11	38.76	68.2	-15.09	37.13	12.36	35.14	199	24	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.55	64.08	55.83	68.2	-4.12	34.12	8.13	34	202	200	Peak
5190	90.36	82.02			34.15	8.19	34	202	200	Average
5190	97.59	89.25			34.15	8.19	34	202	200	Peak
5441.19	53.37	44.58	68.2	-14.83	34.35	8.48	34.04	202	200	Peak
*10380	53.81	39.46	68.2	-14.39	37.13	12.36	35.14	113	323	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5190 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.4	56.69	48.44	68.2	-11.51	34.12	8.13	34	100	309	Peak
5230	90.58	82.18			34.19	8.22	34.01	100	309	Average
5230	97.4	89			34.19	8.22	34.01	100	309	Peak
5371.45	53.26	44.59	68.2	-14.94	34.29	8.41	34.03	100	309	Peak
*10460	52.76	38.25	68.2	-15.44	37.17	12.53	35.19	135	190	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.7	61.39	53.14	68.2	-6.81	34.12	8.13	34	202	356	Peak
5230	95.63	87.23			34.19	8.22	34.01	202	356	Average
5230	102.96	94.56			34.19	8.22	34.01	202	356	Peak
5350.55	53.62	44.99	68.2	-14.58	34.28	8.38	34.03	202	356	Peak
*10460	52.99	38.48	68.2	-15.21	37.17	12.53	35.19	147	222	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5230 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5062.25	53.66	45.56	68.2	-14.54	34.05	8.03	33.98	161	355	Peak
5270	89.36	80.87			34.21	8.29	34.01	161	355	Average
5270	97.06	88.57			34.21	8.29	34.01	161	355	Peak
5369.14	54.32	45.65	68.2	-13.88	34.29	8.41	34.03	161	355	Peak
*10540	53.36	38.74	68.2	-14.84	37.23	12.63	35.24	132	251	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5010.95	53.53	45.52	68.2	-14.67	34.01	7.97	33.97	145	196	Peak
5270	94.05	85.56			34.21	8.29	34.01	145	196	Average
5270	102.1	93.61			34.21	8.29	34.01	145	196	Peak
5355.61	55.4	46.77	68.2	-12.8	34.28	8.38	34.03	145	196	Peak
*10540	52.85	38.23	68.2	-15.35	37.23	12.63	35.24	143	180	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5270 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142.05	53.17	44.91	68.2	-15.03	34.12	8.13	33.99	157	353	Peak
5310	85.09	76.54			34.25	8.32	34.02	157	353	Average
5310	92.62	84.07			34.25	8.32	34.02	157	353	Peak
5404.45	53.54	44.82	68.2	-14.66	34.32	8.44	34.04	157	353	Peak
10620	52.65	37.94	68.2	-15.55	37.3	12.69	35.28	139	265	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5058.95	53.22	45.12	68.2	-14.98	34.05	8.03	33.98	145	196	Peak
5310	90.43	81.88			34.25	8.32	34.02	145	196	Average
5310	97.69	89.14			34.25	8.32	34.02	145	196	Peak
5350.66	57.09	48.46	68.2	-11.11	34.28	8.38	34.03	145	196	Peak
10620	52.35	37.64	68.2	-15.85	37.3	12.69	35.28	117	48	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5365.52	53.16	44.52	68.2	-15.04	34.29	8.38	34.03	134	4	Peak
*5469.2	57.28	48.45	68.2	-10.92	34.37	8.51	34.05	134	4	Peak
5510	84.99	76.08			34.4	8.57	34.06	134	4	Average
5510	92.07	83.16			34.4	8.57	34.06	134	4	Peak
*5724.92	53.07	43.91	68.2	-15.13	34.62	8.65	34.11	134	4	Peak
11020	53.04	37.97	68.2	-15.16	37.61	12.94	35.48	163	96	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5456.88	56.42	47.6	68.2	-11.78	34.36	8.51	34.05	282	202	Peak
*5470.16	58.84	50.01	68.2	-9.36	34.37	8.51	34.05	282	202	Peak
5510	91.35	82.44			34.4	8.57	34.06	282	202	Average
5510	98.29	89.38			34.4	8.57	34.06	282	202	Peak
*5724.6	52.65	43.49	68.2	-15.55	34.62	8.65	34.11	282	202	Peak
11020	52.97	37.9	68.2	-15.23	37.61	12.94	35.48	189	272	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5510 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5433.36	53.11	44.32	68.2	-15.09	34.35	8.48	34.04	140	4	Peak
*5469.04	52.87	44.04	68.2	-15.33	34.37	8.51	34.05	140	4	Peak
5550	87.6	78.63			34.45	8.59	34.07	140	4	Average
5550	94.71	85.74			34.45	8.59	34.07	140	4	Peak
*5724.44	52.36	43.2	68.2	-15.84	34.62	8.65	34.11	140	4	Peak
11100	53.59	38.5	68.2	-14.61	37.66	12.89	35.46	183	256	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5449.04	54.18	45.35	68.2	-14.02	34.36	8.51	34.04	233	198	Peak
*5468.24	56.62	47.79	68.2	-11.58	34.37	8.51	34.05	233	198	Peak
5550	95.94	86.97			34.45	8.59	34.07	233	198	Average
5550	102.75	93.78			34.45	8.59	34.07	233	198	Peak
*5725.8	53.23	44.07	68.2	-14.97	34.62	8.65	34.11	233	198	Peak
11100	52.72	37.63	68.2	-15.48	37.66	12.89	35.46	127	149	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5550 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5436.72	53.28	44.49	68.2	-14.92	34.35	8.48	34.04	124	6	Peak
*5470	51.8	42.97	68.2	-16.4	34.37	8.51	34.05	124	6	Peak
5670	87.39	78.29			34.57	8.63	34.1	124	6	Average
5670	94.16	85.06			34.57	8.63	34.1	124	6	Peak
*5725.08	55.72	46.56	68.2	-12.48	34.62	8.65	34.11	124	6	Peak
11340	54.84	39.75	68.2	-13.36	37.8	12.71	35.42	187	225	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5379.92	53.86	45.18	68.2	-14.34	34.31	8.41	34.04	224	201	Peak
*5470.16	52.83	44	68.2	-15.37	34.37	8.51	34.05	224	201	Peak
5670	95.17	86.07			34.57	8.63	34.1	224	201	Average
5670	102.16	93.06			34.57	8.63	34.1	224	201	Peak
*5723.96	62.95	53.79	68.2	-5.25	34.62	8.65	34.11	224	201	Peak
11340	54.57	39.48	68.2	-13.63	37.8	12.71	35.42	128	196	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5670 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 142	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382.48	52.53	43.85	68.2	-15.67	34.31	8.41	34.04	122	6	Peak
*5469.04	52.41	43.58	68.2	-15.79	34.37	8.51	34.05	122	6	Peak
5710	86.21	77.06			34.61	8.65	34.11	122	6	Average
5710	93.84	84.69			34.61	8.65	34.11	122	6	Peak
11420	53.72	38.62	68.2	-14.48	37.85	12.65	35.4	139	59	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434.64	52.95	44.16	68.2	-15.25	34.35	8.48	34.04	214	203	Peak
*5468.88	52.67	43.84	68.2	-15.53	34.37	8.51	34.05	214	203	Peak
5710	94.35	85.2			34.61	8.65	34.11	214	203	Average
5710	101.56	92.41			34.61	8.65	34.11	214	203	Peak
11420	54.14	39.04	68.2	-14.06	37.85	12.65	35.4	155	237	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. 5710 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	87.67	78.46			34.66	8.66	34.11	120	6	Average
5755	95.61	86.4			34.66	8.66	34.11	120	6	Peak
11510	53.88	38.77	68.2	-14.32	37.9	12.6	35.39	168	224	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	97.1	87.89			34.66	8.66	34.11	224	200	Average
5755	104.57	95.36			34.66	8.66	34.11	224	200	Peak
11510	53.53	38.42	68.2	-14.67	37.9	12.6	35.39	143	249	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5648.575	54.55	45.48	68.2	-13.65	34.54	8.62	34.09	120	6	Peak
5654.35	56.65	47.56	71.42	-14.77	34.56	8.63	34.1	120	6	Peak
5923.675	52.38	42.98	69.18	-16.8	34.83	8.73	34.16	120	6	Peak
*5969.35	53.21	43.76	68.2	-14.99	34.87	8.75	34.17	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5647	61.52	52.45	68.2	-6.68	34.54	8.62	34.09	224	200	Peak
5652.25	61.52	52.43	69.86	-8.34	34.56	8.62	34.09	224	200	Peak
5921.575	52.52	43.12	70.73	-18.21	34.83	8.73	34.16	224	200	Peak
*5937.85	53.77	44.37	68.2	-14.43	34.83	8.73	34.16	224	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	86.05	76.81			34.69	8.68	34.13	120	6	Average
5795	93.8	84.56			34.69	8.68	34.13	120	6	Peak
11590	54.07	38.7	68.2	-14.13	38.02	12.72	35.37	142	225	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	96.7	87.46			34.69	8.68	34.13	221	200	Average
5795	104.3	95.06			34.69	8.68	34.13	221	200	Peak
11590	53.77	38.4	68.2	-14.43	38.02	12.72	35.37	172	269	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5637.025	53.98	44.91	68.2	-14.22	34.54	8.62	34.09	120	6	Peak
5651.2	51.26	42.17	69.09	-17.83	34.56	8.62	34.09	120	6	Peak
5922.625	51.09	41.69	69.96	-18.87	34.83	8.73	34.16	120	6	Peak
*5934.7	53.17	43.77	68.2	-15.03	34.83	8.73	34.16	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5603.95	56.1	47.07	68.2	-12.1	34.5	8.61	34.08	221	200	Peak
5652.25	52.68	43.59	69.86	-17.18	34.56	8.62	34.09	221	200	Peak
5922.1	55.4	46	70.35	-14.95	34.83	8.73	34.16	221	200	Peak
*5931.025	54.18	44.78	68.2	-14.02	34.83	8.73	34.16	221	200	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11ac (VHT80)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5145.95	61.3	53.05	68.2	-6.9	34.12	8.13	34	100	309	Peak
5210	84.75	76.39			34.17	8.19	34	100	309	Average
5210	91.55	83.19			34.17	8.19	34	100	309	Peak
5449.88	53.98	45.16	68.2	-14.22	34.36	8.51	34.05	100	309	Peak
*10420	52.7	38.29	68.2	-15.5	37.15	12.42	35.16	165	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142.2	65.16	56.9	68.2	-3.04	34.12	8.13	33.99	202	356	Peak
5210	89.85	81.49			34.17	8.19	34	202	356	Average
5210	96.36	88			34.17	8.19	34	202	356	Peak
5352.31	53.66	45.03	68.2	-14.54	34.28	8.38	34.03	202	356	Peak
*10420	53.01	38.6	68.2	-15.19	37.15	12.42	35.16	115	346	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5210 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5115.05	53.03	44.83	68.2	-15.17	34.09	8.1	33.99	158	356	Peak
5290	81.4	72.87			34.23	8.32	34.02	158	356	Average
5290	89.05	80.52			34.23	8.32	34.02	158	356	Peak
5350.77	54.75	46.12	68.2	-13.45	34.28	8.38	34.03	158	356	Peak
*10580	52.09	37.44	68.2	-16.11	37.27	12.65	35.27	178	232	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5141.45	53.41	45.15	68.2	-14.79	34.12	8.13	33.99	132	199	Peak
5290	86.4	77.87			34.23	8.32	34.02	132	199	Average
5290	94.98	86.45			34.23	8.32	34.02	132	199	Peak
5355.83	58.7	50.07	68.2	-9.5	34.28	8.38	34.03	132	199	Peak
*10580	52.2	37.55	68.2	-16	37.27	12.65	35.27	163	102	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5290 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.12	57.42	48.6	68.2	-10.78	34.36	8.51	34.05	134	4	Peak
*5470.8	57.17	48.31	68.2	-11.03	34.37	8.54	34.05	134	4	Peak
5530	83.95	75.02			34.42	8.58	34.07	134	4	Average
5530	92.22	83.29			34.42	8.58	34.07	134	4	Peak
*5725.72	52.09	42.93	68.2	-16.11	34.62	8.65	34.11	134	4	Peak
11060	53.55	38.47	68.2	-14.65	37.64	12.91	35.47	168	38	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5452.56	61.69	52.87	68.2	-6.51	34.36	8.51	34.05	282	202	Peak
*5470.8	59.63	50.77	68.2	-8.57	34.37	8.54	34.05	282	202	Peak
5530	90.14	81.21			34.42	8.58	34.07	282	202	Average
5530	98.1	89.17			34.42	8.58	34.07	282	202	Peak
*5725.16	52.53	43.37	68.2	-15.67	34.62	8.65	34.11	282	202	Peak
11060	52.81	37.73	68.2	-15.39	37.64	12.91	35.47	173	264	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5530 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454	54.66	45.84	68.2	-13.54	34.36	8.51	34.05	125	4	Peak
*5468.24	55.09	46.26	68.2	-13.11	34.37	8.51	34.05	125	4	Peak
5610	86.65	77.62			34.5	8.61	34.08	125	4	Average
5610	94.67	85.64			34.5	8.61	34.08	125	4	Peak
*5725.64	57.59	48.43	68.2	-10.61	34.62	8.65	34.11	125	4	Peak
11220	54.78	39.69	68.2	-13.42	37.73	12.8	35.44	179	327	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454.16	55.76	46.94	68.2	-12.44	34.36	8.51	34.05	232	201	Peak
*5470.96	57.75	48.89	68.2	-10.45	34.37	8.54	34.05	232	201	Peak
5610	94.35	85.32			34.5	8.61	34.08	232	201	Average
5610	102.51	93.48			34.5	8.61	34.08	232	201	Peak
*5725	67.13	57.97	68.2	-1.07	34.62	8.65	34.11	232	201	Peak
11220	55.14	40.05	68.2	-13.06	37.73	12.8	35.44	124	82	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5610 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 138	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5454.48	53.82	45	68.2	-14.38	34.36	8.51	34.05	122	6	Peak
*5468.08	52.06	43.23	68.2	-16.14	34.37	8.51	34.05	122	6	Peak
5690	83.21	74.08			34.59	8.64	34.1	122	6	Average
5690	90.59	81.46			34.59	8.64	34.1	122	6	Peak
11380	54.61	39.5	68.2	-13.59	37.83	12.69	35.41	193	212	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5451.12	53.54	44.72	68.2	-14.66	34.36	8.51	34.05	231	201	Peak
*5468.88	51.72	42.89	68.2	-16.48	34.37	8.51	34.05	231	201	Peak
5690	90.67	81.54			34.59	8.64	34.1	231	201	Average
5690	98.6	89.47			34.59	8.64	34.1	231	201	Peak
11380	53.69	38.58	68.2	-14.51	37.83	12.69	35.41	186	33	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5690 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	84.17	74.94			34.68	8.67	34.12	120	6	Average
5775	92.3	83.07			34.68	8.67	34.12	120	6	Peak
11550	54.38	39.11	68.2	-13.82	37.97	12.68	35.38	186	311	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	93.2	83.97			34.68	8.67	34.12	223	198	Average
5775	101.03	91.8			34.68	8.67	34.12	223	198	Peak
11550	55.33	40.06	68.2	-12.87	37.97	12.68	35.38	140	272	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5647	57.81	48.74	68.2	-10.39	34.54	8.62	34.09	120	6	Peak
5653.825	61.47	52.38	71.03	-9.56	34.56	8.63	34.1	120	6	Peak
5920	54.77	45.39	71.9	-17.13	34.81	8.73	34.16	120	6	Peak
*5926.3	54.12	44.72	68.2	-14.08	34.83	8.73	34.16	120	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5648.05	65.64	56.57	68.2	-2.56	34.54	8.62	34.09	223	198	Peak
5651.2	66.26	57.17	69.09	-2.83	34.56	8.62	34.09	223	198	Peak
5921.05	64.1	54.72	71.12	-7.02	34.81	8.73	34.16	223	198	Peak
*5926.3	62.87	53.47	68.2	-5.33	34.83	8.73	34.16	223	198	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5775 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

Mode B
802.11a

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.2	60.2	51.95	68.2	-8	34.12	8.13	34	167	120	Peak
5180	91.72	83.41			34.15	8.16	34	167	120	Average
5180	99.58	91.27			34.15	8.16	34	167	120	Peak
*10360	52.62	38.32	68.2	-15.58	37.12	12.3	35.12	196	308	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5140.1	66.96	58.7	68.2	-1.24	34.12	8.13	33.99	138	169	Peak
5180	97.67	89.36			34.15	8.16	34	138	169	Average
5180	105.43	97.12			34.15	8.16	34	138	169	Peak
*10360	53.42	39.12	68.2	-14.78	37.12	12.3	35.12	116	82	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	58.85	50.6	68.2	-9.35	34.12	8.13	34	167	119	Peak
5220	95.53	87.14			34.17	8.22	34	167	119	Average
5220	103.67	95.28			34.17	8.22	34	167	119	Peak
5362.43	53.21	44.57	68.2	-14.99	34.29	8.38	34.03	167	119	Peak
*10440	52.94	38.48	68.2	-15.26	37.16	12.47	35.17	131	217	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.5	62.58	54.33	68.2	-5.62	34.12	8.13	34	128	169	Peak
5220	101.18	92.79			34.17	8.22	34	128	169	Average
5220	109.25	100.86			34.17	8.22	34	128	169	Peak
5355.94	55.07	46.44	68.2	-13.13	34.28	8.38	34.03	128	169	Peak
*10440	52.74	38.28	68.2	-15.46	37.16	12.47	35.17	159	233	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	96.73	88.29			34.19	8.26	34.01	173	154	Average
5240	105.07	96.63			34.19	8.26	34.01	173	154	Peak
5352.09	54.84	46.21	68.2	-13.36	34.28	8.38	34.03	173	154	Peak
*10480	53.43	38.92	68.2	-14.77	37.19	12.53	35.21	161	38	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	101.59	93.15			34.19	8.26	34.01	132	169	Average
5240	109.89	101.45			34.19	8.26	34.01	132	169	Peak
5350.44	56.86	48.23	68.2	-11.34	34.28	8.38	34.03	132	169	Peak
*10480	53.55	39.04	68.2	-14.65	37.19	12.53	35.21	137	245	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5121.95	53.01	44.81	68.2	-15.19	34.09	8.1	33.99	167	121	Peak
5260	95.61	87.15			34.21	8.26	34.01	167	121	Average
5260	103.54	95.08			34.21	8.26	34.01	167	121	Peak
*10520	53.04	38.45	68.2	-15.16	37.21	12.61	35.23	126	204	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5140.25	54.52	46.26	68.2	-13.68	34.12	8.13	33.99	132	168	Peak
5260	101.76	93.3			34.21	8.26	34.01	132	168	Average
5260	109.22	100.76			34.21	8.26	34.01	132	168	Peak
*10520	53.68	39.09	68.2	-14.52	37.21	12.61	35.23	132	214	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5119.55	53.13	44.93	68.2	-15.07	34.09	8.1	33.99	169	119	Peak
5300	95.12	86.58			34.24	8.32	34.02	169	119	Average
5300	103.19	94.65			34.24	8.32	34.02	169	119	Peak
5352.64	58.58	49.95	68.2	-9.62	34.28	8.38	34.03	169	119	Peak
10600	53.69	39.01	68.2	-14.51	37.28	12.67	35.27	169	259	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5145.65	53.36	45.11	68.2	-14.84	34.12	8.13	34	126	168	Peak
5300	100.61	92.07			34.24	8.32	34.02	126	168	Average
5300	108.54	100			34.24	8.32	34.02	126	168	Peak
5350.33	64.85	56.22	68.2	-3.35	34.28	8.38	34.03	126	168	Peak
10600	53.8	39.12	68.2	-14.4	37.28	12.67	35.27	127	88	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5300 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	90.61	82.03			34.25	8.35	34.02	169	119	Average
5320	98.44	89.86			34.25	8.35	34.02	169	119	Peak
5350.22	58.06	49.43	68.2	-10.14	34.28	8.38	34.03	169	119	Peak
10640	54.28	39.55	68.2	-13.92	37.31	12.71	35.29	157	310	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	95.39	86.81			34.25	8.35	34.02	104	192	Average
5320	103.18	94.6			34.25	8.35	34.02	104	192	Peak
5351.1	64.68	56.05	68.2	-3.52	34.28	8.38	34.03	104	192	Peak
10640	53.94	39.21	68.2	-14.26	37.31	12.71	35.29	145	332	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.12	56.74	47.92	68.2	-11.46	34.36	8.51	34.05	200	148	Peak
*5470.16	61.44	52.61	68.2	-6.76	34.37	8.51	34.05	200	148	Peak
5500	91.47	82.55			34.4	8.57	34.05	200	148	Average
5500	98.65	89.73			34.4	8.57	34.05	200	148	Peak
11000	54.86	39.78	68.2	-13.34	37.6	12.96	35.48	159	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.44	59.44	50.62	68.2	-8.76	34.36	8.51	34.05	106	177	Peak
*5469.04	65.11	56.28	68.2	-3.09	34.37	8.51	34.05	106	177	Peak
5500	95.6	86.68			34.4	8.57	34.05	106	177	Average
5500	102.34	93.42			34.4	8.57	34.05	106	177	Peak
11000	55.48	40.4	68.2	-12.72	37.6	12.96	35.48	125	356	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5435.12	53.39	44.6	68.2	-14.81	34.35	8.48	34.04	204	150	Peak
*5470.96	52.54	43.68	68.2	-15.66	34.37	8.54	34.05	204	150	Peak
5580	98.65	89.66			34.47	8.6	34.08	204	150	Average
5580	105.8	96.81			34.47	8.6	34.08	204	150	Peak
*5724.84	52.09	42.93	68.2	-16.11	34.62	8.65	34.11	204	150	Peak
11160	55.47	40.39	68.2	-12.73	37.7	12.83	35.45	158	248	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448.72	53.03	44.2	68.2	-15.17	34.36	8.51	34.04	106	177	Peak
*5468.56	52.15	43.32	68.2	-16.05	34.37	8.51	34.05	106	177	Peak
5580	102.47	93.48			34.47	8.6	34.08	106	177	Average
5580	109.46	100.47			34.47	8.6	34.08	106	177	Peak
*5725.24	53.34	44.18	68.2	-14.86	34.62	8.65	34.11	106	177	Peak
11160	54.37	39.29	68.2	-13.83	37.7	12.83	35.45	134	326	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	91.1	81.97			34.59	8.64	34.1	204	150	Average
5700	98.27	89.14			34.59	8.64	34.1	204	150	Peak
*5725.64	57.88	48.72	68.2	-10.32	34.62	8.65	34.11	204	150	Peak
11400	55.61	40.51	68.2	-12.59	37.84	12.67	35.41	108	104	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	95.41	86.28			34.59	8.64	34.1	100	177	Average
5700	102.01	92.88			34.59	8.64	34.1	100	177	Peak
*5724.92	65.14	55.98	68.2	-3.06	34.62	8.65	34.11	100	177	Peak
11400	54.84	39.74	68.2	-13.36	37.84	12.67	35.41	157	245	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458.32	53.65	44.83	68.2	-14.55	34.36	8.51	34.05	200	148	Peak
*5470.32	52.42	43.59	68.2	-15.78	34.37	8.51	34.05	200	148	Peak
5720	93.32	84.16			34.62	8.65	34.11	200	148	Average
5720	100	90.84			34.62	8.65	34.11	200	148	Peak
11440	55.7	40.59	68.2	-12.5	37.86	12.65	35.4	158	52	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5446.64	54.07	45.24	68.2	-14.13	34.36	8.51	34.04	100	177	Peak
*5469.52	51.88	43.05	68.2	-16.32	34.37	8.51	34.05	100	177	Peak
5720	97.49	88.33			34.62	8.65	34.11	100	177	Average
5720	104.22	95.06			34.62	8.65	34.11	100	177	Peak
11440	55.11	40	68.2	-13.09	37.86	12.65	35.4	154	114	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5720 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	93.64	84.45			34.64	8.66	34.11	189	148	Average
5745	100.88	91.69			34.64	8.66	34.11	189	148	Peak
11490	57.01	41.89	68.2	-11.19	37.89	12.62	35.39	159	326	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	100.85	91.66			34.64	8.66	34.11	100	186	Average
5745	107.13	97.94			34.64	8.66	34.11	100	186	Peak
11490	55.67	40.55	68.2	-12.53	37.89	12.62	35.39	157	155	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5648.575	53.67	44.6	68.2	-14.53	34.54	8.62	34.09	189	148	Peak
5658.55	52.06	42.97	74.53	-22.47	34.56	8.63	34.1	189	148	Peak
5915.275	51.58	42.2	75.4	-23.82	34.81	8.73	34.16	189	148	Peak
*6006.625	53.88	44.37	68.2	-14.32	34.92	8.76	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5641.75	54.12	45.05	68.2	-14.08	34.54	8.62	34.09	100	186	Peak
5653.825	52.75	43.66	71.03	-18.28	34.56	8.63	34.1	100	186	Peak
5917.9	52.68	43.3	73.45	-20.77	34.81	8.73	34.16	100	186	Peak
*5995.075	53.58	44.09	68.2	-14.62	34.9	8.76	34.17	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	93	83.77			34.68	8.68	34.13	189	148	Average
5785	100.12	90.89			34.68	8.68	34.13	189	148	Peak
11570	54.95	39.64	68.2	-13.25	38	12.68	35.37	154	178	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	100.43	91.2			34.68	8.68	34.13	100	186	Average
5785	107.69	98.46			34.68	8.68	34.13	100	186	Peak
11570	55.16	39.85	68.2	-13.04	38	12.68	35.37	125	124	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5638.6	54.32	45.25	68.2	-13.88	34.54	8.62	34.09	189	148	Peak
5655.4	51.07	41.98	72.2	-21.13	34.56	8.63	34.1	189	148	Peak
5914.75	52.52	43.14	75.78	-23.26	34.81	8.73	34.16	189	148	Peak
*5975.65	54.09	44.63	68.2	-14.11	34.88	8.75	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5538.85	53.92	44.98	68.2	-14.28	34.43	8.58	34.07	100	186	Peak
5653.3	51.66	42.56	70.64	-18.98	34.56	8.63	34.09	100	186	Peak
5915.8	53.48	44.1	75.01	-21.53	34.81	8.73	34.16	100	186	Peak
*6003.475	54.25	44.76	68.2	-13.95	34.9	8.76	34.17	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	93.5	84.21			34.73	8.69	34.13	189	148	Average
5825	100.43	91.14			34.73	8.69	34.13	189	148	Peak
11650	54.64	39.11	68.2	-13.56	38.09	12.8	35.36	154	101	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	98.78	89.49			34.73	8.69	34.13	100	186	Average
5825	105.58	96.29			34.73	8.69	34.13	100	186	Peak
11650	55.64	40.11	68.2	-12.56	38.09	12.8	35.36	158	326	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5604.475	53.53	44.5	68.2	-14.67	34.5	8.61	34.08	189	148	Peak
5658.025	51.89	42.8	74.14	-22.25	34.56	8.63	34.1	189	148	Peak
5921.05	51.88	42.5	71.12	-19.24	34.81	8.73	34.16	189	148	Peak
*6010.3	53.8	44.29	68.2	-14.4	34.92	8.76	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5637.55	53.48	44.41	68.2	-14.72	34.54	8.62	34.09	100	186	Peak
5656.975	51.49	42.4	73.36	-21.87	34.56	8.63	34.1	100	186	Peak
5918.95	53.18	43.8	72.68	-19.5	34.81	8.73	34.16	100	186	Peak
*5925.25	54.74	45.34	68.2	-13.46	34.83	8.73	34.16	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11n (HT20)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5145.5	61.23	52.98	68.2	-6.97	34.12	8.13	34	167	120	Peak
5180	92.02	83.71			34.15	8.16	34	167	120	Average
5180	99.66	91.35			34.15	8.16	34	167	120	Peak
*10360	52.65	38.35	68.2	-15.55	37.12	12.3	35.12	130	176	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5140.1	66.01	57.75	68.2	-2.19	34.12	8.13	33.99	138	169	Peak
5180	97.67	89.36			34.15	8.16	34	138	169	Average
5180	105.8	97.49			34.15	8.16	34	138	169	Peak
*10360	52.73	38.43	68.2	-15.47	37.12	12.3	35.12	118	261	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5144.3	56.07	47.82	68.2	-12.13	34.12	8.13	34	167	119	Peak
5220	95.13	86.74			34.17	8.22	34	167	119	Average
5220	103.97	95.58			34.17	8.22	34	167	119	Peak
5435.58	53.2	44.41	68.2	-15	34.35	8.48	34.04	167	119	Peak
*10440	52.79	38.33	68.2	-15.41	37.16	12.47	35.17	190	48	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	60.64	52.39	68.2	-7.56	34.12	8.13	34	128	169	Peak
5220	100.8	92.41			34.17	8.22	34	128	169	Average
5220	108.99	100.6			34.17	8.22	34	128	169	Peak
5365.4	53.83	45.19	68.2	-14.37	34.29	8.38	34.03	128	169	Peak
*10440	52.65	38.19	68.2	-15.55	37.16	12.47	35.17	125	166	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	96.41	87.97			34.19	8.26	34.01	173	154	Average
5240	105.19	96.75			34.19	8.26	34.01	173	154	Peak
5431.29	53.56	44.77	68.2	-14.64	34.35	8.48	34.04	173	154	Peak
*10480	53.53	39.02	68.2	-14.67	37.19	12.53	35.21	136	154	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5240	101.34	92.9			34.19	8.26	34.01	132	169	Average
5240	109.8	101.36			34.19	8.26	34.01	132	169	Peak
5353.96	54.69	46.06	68.2	-13.51	34.28	8.38	34.03	132	169	Peak
*10480	53.15	38.64	68.2	-15.05	37.19	12.53	35.21	126	175	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5124.35	53.39	45.17	68.2	-14.81	34.11	8.1	33.99	167	121	Peak
5260	95.32	86.86			34.21	8.26	34.01	167	121	Average
5260	103.24	94.78			34.21	8.26	34.01	167	121	Peak
*10520	53.04	38.45	68.2	-15.16	37.21	12.61	35.23	147	8	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5123.9	53.5	45.28	68.2	-14.7	34.11	8.1	33.99	132	168	Peak
5260	100.43	91.97			34.21	8.26	34.01	132	168	Average
5260	108.58	100.12			34.21	8.26	34.01	132	168	Peak
*10520	53.68	39.09	68.2	-14.52	37.21	12.61	35.23	157	211	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5100.2	53.6	45.44	68.2	-14.6	34.08	8.07	33.99	169	119	Peak
5300	93.49	84.95			34.24	8.32	34.02	169	119	Average
5300	102	93.46			34.24	8.32	34.02	169	119	Peak
5351.43	57.19	48.56	68.2	-11.01	34.28	8.38	34.03	169	119	Peak
10600	53.69	39.01	68.2	-14.51	37.28	12.67	35.27	195	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5041.7	53.23	45.16	68.2	-14.97	34.04	8	33.97	126	168	Peak
5300	98.76	90.22			34.24	8.32	34.02	126	168	Average
5300	106.78	98.24			34.24	8.32	34.02	126	168	Peak
5350.22	62.73	54.1	68.2	-5.47	34.28	8.38	34.03	126	168	Peak
10600	53.8	39.12	68.2	-14.4	37.28	12.67	35.27	177	159	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5300 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	89.57	80.99			34.25	8.35	34.02	169	119	Average
5320	97.11	88.53			34.25	8.35	34.02	169	119	Peak
5359.24	55.66	47.03	68.2	-12.54	34.28	8.38	34.03	169	119	Peak
10640	54.28	39.55	68.2	-13.92	37.31	12.71	35.29	154	4	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	93.95	85.37			34.25	8.35	34.02	104	192	Average
5320	101.52	92.94			34.25	8.35	34.02	104	192	Peak
5353.41	61.44	52.81	68.2	-6.76	34.28	8.38	34.03	104	192	Peak
10640	53.94	39.21	68.2	-14.26	37.31	12.71	35.29	125	255	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5439.92	54.04	45.25	68.2	-14.16	34.35	8.48	34.04	204	150	Peak
*5468.4	54.76	45.93	68.2	-13.44	34.37	8.51	34.05	204	150	Peak
5500	91.69	82.77			34.4	8.57	34.05	204	150	Average
5500	98.91	89.99			34.4	8.57	34.05	204	150	Peak
11000	55.06	39.98	68.2	-13.14	37.6	12.96	35.48	182	34	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458.16	61.35	52.53	68.2	-6.85	34.36	8.51	34.05	106	177	Peak
*5468.24	60.67	51.84	68.2	-7.53	34.37	8.51	34.05	106	177	Peak
5500	95.78	86.86			34.4	8.57	34.05	106	177	Average
5500	102	93.08			34.4	8.57	34.05	106	177	Peak
11000	54.03	38.95	68.2	-14.17	37.6	12.96	35.48	178	285	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5413.2	53.89	45.16	68.2	-14.31	34.33	8.44	34.04	204	150	Peak
*5468.4	52.19	43.36	68.2	-16.01	34.37	8.51	34.05	204	150	Peak
5580	97.44	88.45			34.47	8.6	34.08	204	150	Average
5580	104.94	95.95			34.47	8.6	34.08	204	150	Peak
*5725.16	52.89	43.73	68.2	-15.31	34.62	8.65	34.11	204	150	Peak
11160	54.98	39.9	68.2	-13.22	37.7	12.83	35.45	105	85	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448.4	53.76	44.93	68.2	-14.44	34.36	8.51	34.04	106	177	Peak
*5468.56	51.72	42.89	68.2	-16.48	34.37	8.51	34.05	106	177	Peak
5580	101.29	92.3			34.47	8.6	34.08	106	177	Average
5580	108.7	99.71			34.47	8.6	34.08	106	177	Peak
*5725.96	52.82	43.66	68.2	-15.38	34.62	8.65	34.11	106	177	Peak
11160	55.15	40.07	68.2	-13.05	37.7	12.83	35.45	155	299	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	92.29	83.16			34.59	8.64	34.1	204	150	Average
5700	99.19	90.06			34.59	8.64	34.1	204	150	Peak
*5724.2	61.68	52.52	68.2	-6.52	34.62	8.65	34.11	204	150	Peak
11400	54.54	39.44	68.2	-13.66	37.84	12.67	35.41	138	8	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5700	96.49	87.36			34.59	8.64	34.1	100	177	Average
5700	103.13	94			34.59	8.64	34.1	100	177	Peak
*5725.96	62.26	53.1	68.2	-5.94	34.62	8.65	34.11	100	177	Peak
11400	55	39.9	68.2	-13.2	37.84	12.67	35.41	105	314	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 144	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5406.96	53.21	44.49	68.2	-14.99	34.32	8.44	34.04	200	148	Peak
*5469.68	52.74	43.91	68.2	-15.46	34.37	8.51	34.05	200	148	Peak
5720	92.58	83.42			34.62	8.65	34.11	200	148	Average
5720	99.86	90.7			34.62	8.65	34.11	200	148	Peak
11440	55.46	40.35	68.2	-12.74	37.86	12.65	35.4	146	6	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5441.68	53.29	44.5	68.2	-14.91	34.35	8.48	34.04	100	177	Peak
*5468.88	52.36	43.53	68.2	-15.84	34.37	8.51	34.05	100	177	Peak
5720	96.46	87.3			34.62	8.65	34.11	100	177	Average
5720	103.42	94.26			34.62	8.65	34.11	100	177	Peak
11440	55.02	39.91	68.2	-13.18	37.86	12.65	35.4	158	55	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5720 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	93.36	84.17			34.64	8.66	34.11	189	148	Average
5745	100.04	90.85			34.64	8.66	34.11	189	148	Peak
11490	56.79	41.67	68.2	-11.41	37.89	12.62	35.39	154	146	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5745	100.02	90.83			34.64	8.66	34.11	100	186	Average
5745	107.19	98			34.64	8.66	34.11	100	186	Peak
11490	55.36	40.24	68.2	-12.84	37.89	12.62	35.39	106	85	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5584	54.29	45.28	68.2	-13.91	34.49	8.6	34.08	189	148	Peak
5656.45	53.74	44.65	72.97	-19.23	34.56	8.63	34.1	189	148	Peak
5919.475	52.83	43.45	72.29	-19.46	34.81	8.73	34.16	189	148	Peak
*5976.7	53.08	43.62	68.2	-15.12	34.88	8.75	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5598.175	54.64	45.63	68.2	-13.56	34.49	8.6	34.08	100	186	Peak
5652.775	54.3	45.2	70.25	-15.95	34.56	8.63	34.09	100	186	Peak
5920	52.28	42.9	71.9	-19.62	34.81	8.73	34.16	100	186	Peak
*6019.75	53.63	44.12	68.2	-14.57	34.92	8.77	34.18	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	93.34	84.11			34.68	8.68	34.13	189	148	Average
5785	100.28	91.05			34.68	8.68	34.13	189	148	Peak
11570	54.62	39.31	68.2	-13.58	38	12.68	35.37	157	8	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5785	100.77	91.54			34.68	8.68	34.13	100	186	Average
5785	107.91	98.68			34.68	8.68	34.13	100	186	Peak
11570	55.14	39.83	68.2	-13.06	38	12.68	35.37	135	156	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5521	53.19	44.26	68.2	-15.01	34.42	8.57	34.06	189	148	Peak
5652.775	51.76	42.66	70.25	-18.49	34.56	8.63	34.09	189	148	Peak
5920	51.99	42.61	71.9	-19.91	34.81	8.73	34.16	189	148	Peak
*6010.825	54.45	44.95	68.2	-13.75	34.92	8.76	34.18	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5613.4	53.17	44.14	68.2	-15.03	34.5	8.61	34.08	100	186	Peak
5654.875	51.53	42.44	71.81	-20.28	34.56	8.63	34.1	100	186	Peak
5922.625	52.18	42.78	69.96	-17.78	34.83	8.73	34.16	100	186	Peak
*6006.1	53.8	44.31	68.2	-14.4	34.9	8.76	34.17	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	93.8	84.51			34.73	8.69	34.13	189	148	Average
5825	100.91	91.62			34.73	8.69	34.13	189	148	Peak
11650	54.25	38.72	68.2	-13.95	38.09	12.8	35.36	138	88	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5825	100.14	90.85			34.73	8.69	34.13	100	186	Average
5825	107.45	98.16			34.73	8.69	34.13	100	186	Peak
11650	55.55	40.02	68.2	-12.65	38.09	12.8	35.36	135	16	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5522.05	53.45	44.52	68.2	-14.75	34.42	8.57	34.06	189	148	Peak
5657.5	51.55	42.46	73.75	-22.2	34.56	8.63	34.1	189	148	Peak
5922.625	52.62	43.22	69.96	-17.34	34.83	8.73	34.16	189	148	Peak
*5987.2	53.5	44.04	68.2	-14.7	34.88	8.75	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5569.825	54.01	45.02	68.2	-14.19	34.47	8.59	34.07	100	186	Peak
5656.975	52.83	43.74	73.36	-20.53	34.56	8.63	34.1	100	186	Peak
5922.1	52.69	43.29	70.35	-17.66	34.83	8.73	34.16	100	186	Peak
*5955.7	53.57	44.12	68.2	-14.63	34.87	8.74	34.16	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11n (HT40)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5142.65	60.6	52.34	68.2	-7.6	34.12	8.13	33.99	167	120	Peak
5190	85.84	77.5			34.15	8.19	34	167	120	Average
5190	93.36	85.02			34.15	8.19	34	167	120	Peak
5377.28	53.88	45.22	68.2	-14.32	34.29	8.41	34.04	167	120	Peak
*10380	52.73	38.38	68.2	-15.47	37.13	12.36	35.14	121	93	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.5	63.81	55.56	68.2	-4.39	34.12	8.13	34	138	169	Peak
5190	91.79	83.45			34.15	8.19	34	138	169	Average
5190	99.31	90.97			34.15	8.19	34	138	169	Peak
5443.94	53.2	44.41	68.2	-15	34.35	8.48	34.04	138	169	Peak
*10380	53.7	39.35	68.2	-14.5	37.13	12.36	35.14	153	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5190 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.8	62.27	54.02	68.2	-5.93	34.12	8.13	34	173	154	Peak
5230	91.71	83.31			34.19	8.22	34.01	173	154	Average
5230	99.72	91.32			34.19	8.22	34.01	173	154	Peak
5361.11	54.31	45.67	68.2	-13.89	34.29	8.38	34.03	173	154	Peak
*10460	52.39	37.88	68.2	-15.81	37.17	12.53	35.19	195	225	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5139.8	66.48	58.22	68.2	-1.72	34.12	8.13	33.99	128	169	Peak
5230	95.79	87.39			34.19	8.22	34.01	128	169	Average
5230	104.14	95.74			34.19	8.22	34.01	128	169	Peak
5354.07	58.91	50.28	68.2	-9.29	34.28	8.38	34.03	128	169	Peak
*10460	53.28	38.77	68.2	-14.92	37.17	12.53	35.19	163	155	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5230 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5024.9	54.81	46.78	68.2	-13.39	34.03	7.97	33.97	169	119	Peak
5270	89.77	81.28			34.21	8.29	34.01	169	119	Average
5270	96	87.51			34.21	8.29	34.01	169	119	Peak
5350.11	54.59	45.96	68.2	-13.61	34.28	8.38	34.03	169	119	Peak
*10540	54.51	39.89	68.2	-13.69	37.23	12.63	35.24	159	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5123.75	53.56	45.34	68.2	-14.64	34.11	8.1	33.99	132	168	Peak
5270	95.66	87.17			34.21	8.29	34.01	132	168	Average
5270	102.96	94.47			34.21	8.29	34.01	132	168	Peak
5350.33	58.44	49.81	68.2	-9.76	34.28	8.38	34.03	132	168	Peak
*10540	53.4	38.78	68.2	-14.8	37.23	12.63	35.24	158	5	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5270 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5124.8	53.38	45.16	68.2	-14.82	34.11	8.1	33.99	169	119	Peak
5310	83.73	75.18			34.25	8.32	34.02	169	119	Average
5310	91.71	83.16			34.25	8.32	34.02	169	119	Peak
5350.88	59.3	50.67	68.2	-8.9	34.28	8.38	34.03	169	119	Peak
10620	53.37	38.66	68.2	-14.83	37.3	12.69	35.28	187	8	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5039	53.11	45.04	68.2	-15.09	34.04	8	33.97	111	192	Peak
5310	88.98	80.43			34.25	8.32	34.02	111	192	Average
5310	97.1	88.55			34.25	8.32	34.02	111	192	Peak
5353.08	58.96	50.33	68.2	-9.24	34.28	8.38	34.03	111	192	Peak
10620	53.33	38.62	68.2	-14.87	37.3	12.69	35.28	155	95	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5310 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458.16	55.48	46.66	68.2	-12.72	34.36	8.51	34.05	204	150	Peak
*5470.16	58.29	49.46	68.2	-9.91	34.37	8.51	34.05	204	150	Peak
5510	87.49	78.58			34.4	8.57	34.06	204	150	Average
5510	94.61	85.7			34.4	8.57	34.06	204	150	Peak
*5726.04	53.33	44.17	68.2	-14.87	34.62	8.65	34.11	204	150	Peak
11020	54.23	39.16	68.2	-13.97	37.61	12.94	35.48	159	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5445.04	57.76	48.94	68.2	-10.44	34.35	8.51	34.04	106	177	Peak
*5470	59.4	50.57	68.2	-8.8	34.37	8.51	34.05	106	177	Peak
5510	91.85	82.94			34.4	8.57	34.06	106	177	Average
5510	98.09	89.18			34.4	8.57	34.06	106	177	Peak
*5724.52	52.48	43.32	68.2	-15.72	34.62	8.65	34.11	106	177	Peak
11020	54.61	39.54	68.2	-13.59	37.61	12.94	35.48	135	326	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5510 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5458	54.52	45.7	68.2	-13.68	34.36	8.51	34.05	188	150	Peak
*5469.68	52.73	43.9	68.2	-15.47	34.37	8.51	34.05	188	150	Peak
5550	91.47	82.5			34.45	8.59	34.07	188	150	Average
5550	98.57	89.6			34.45	8.59	34.07	188	150	Peak
*5725.88	52.44	43.28	68.2	-15.76	34.62	8.65	34.11	188	150	Peak
11100	53.35	38.26	68.2	-14.85	37.66	12.89	35.46	159	295	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.44	55.36	46.54	68.2	-12.84	34.36	8.51	34.05	106	177	Peak
*5468.24	56.4	47.57	68.2	-11.8	34.37	8.51	34.05	106	177	Peak
5550	95.58	86.61			34.45	8.59	34.07	106	177	Average
5550	102.33	93.36			34.45	8.59	34.07	106	177	Peak
*5725.16	53.38	44.22	68.2	-14.82	34.62	8.65	34.11	106	177	Peak
11100	53.68	38.59	68.2	-14.52	37.66	12.89	35.46	157	159	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5550 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5459.76	53.38	44.56	68.2	-14.82	34.36	8.51	34.05	188	150	Peak
*5468.88	53.35	44.52	68.2	-14.85	34.37	8.51	34.05	188	150	Peak
5670	91.88	82.78			34.57	8.63	34.1	188	150	Average
5670	98.78	89.68			34.57	8.63	34.1	188	150	Peak
*5724.04	61.67	52.51	68.2	-6.53	34.62	8.65	34.11	188	150	Peak
11340	55.5	40.41	68.2	-12.7	37.8	12.71	35.42	159	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448.56	55.38	46.55	68.2	-12.82	34.36	8.51	34.04	100	177	Peak
*5468.24	51.94	43.11	68.2	-16.26	34.37	8.51	34.05	100	177	Peak
5670	95.63	86.53			34.57	8.63	34.1	100	177	Average
5670	102.25	93.15			34.57	8.63	34.1	100	177	Peak
*5724.04	64.93	55.77	68.2	-3.27	34.62	8.65	34.11	100	177	Peak
11340	55	39.91	68.2	-13.2	37.8	12.71	35.42	104	12	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5670 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 142	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5358.48	54.03	45.4	68.2	-14.17	34.28	8.38	34.03	200	148	Peak
*5468.4	51.21	42.38	68.2	-16.99	34.37	8.51	34.05	200	148	Peak
5710	89.52	80.37			34.61	8.65	34.11	200	148	Average
5710	96.92	87.77			34.61	8.65	34.11	200	148	Peak
11420	56.88	41.78	68.2	-11.32	37.85	12.65	35.4	158	164	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5434.8	53.76	44.97	68.2	-14.44	34.35	8.48	34.04	100	177	Peak
*5470.64	52.33	43.5	68.2	-15.87	34.37	8.51	34.05	100	177	Peak
5710	93.88	84.73			34.61	8.65	34.11	100	177	Average
5710	100.67	91.52			34.61	8.65	34.11	100	177	Peak
11420	55.29	40.19	68.2	-12.91	37.85	12.65	35.4	154	320	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5710 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	89.8	80.59			34.66	8.66	34.11	189	148	Average
5755	96.93	87.72			34.66	8.66	34.11	189	148	Peak
11510	55.42	40.31	68.2	-12.78	37.9	12.6	35.39	105	346	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5755	96.65	87.44			34.66	8.66	34.11	100	186	Average
5755	103.23	94.02			34.66	8.66	34.11	100	186	Peak
11510	55.42	40.31	68.2	-12.78	37.9	12.6	35.39	135	255	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5635.975	55.2	46.13	68.2	-13	34.54	8.62	34.09	189	148	Peak
5659.6	58.21	49.12	75.3	-17.09	34.56	8.63	34.1	189	148	Peak
5919.475	52.54	43.16	72.29	-19.75	34.81	8.73	34.16	189	148	Peak
*5993.5	53.89	44.4	68.2	-14.31	34.9	8.76	34.17	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5649.1	58.31	49.24	68.2	-9.89	34.54	8.62	34.09	100	186	Peak
5659.6	62.44	53.35	75.3	-12.86	34.56	8.63	34.1	100	186	Peak
5908.975	56.66	47.29	80.06	-23.4	34.81	8.72	34.16	100	186	Peak
*5945.725	55.09	45.66	68.2	-13.11	34.85	8.74	34.16	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	89.74	80.5			34.69	8.68	34.13	189	148	Average
5795	96.19	86.95			34.69	8.68	34.13	189	148	Peak
11590	54.95	39.58	68.2	-13.25	38.02	12.72	35.37	154	322	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5795	96.4	87.16			34.69	8.68	34.13	100	186	Average
5795	103.21	93.97			34.69	8.68	34.13	100	186	Peak
11590	56.22	40.85	68.2	-11.98	38.02	12.72	35.37	200	210	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5575.075	54.93	45.93	68.2	-13.27	34.47	8.6	34.07	189	148	Peak
5655.925	52.77	43.68	72.58	-19.81	34.56	8.63	34.1	189	148	Peak
5917.9	53.12	43.74	73.45	-20.33	34.81	8.73	34.16	189	148	Peak
*5939.95	53.88	44.45	68.2	-14.32	34.85	8.74	34.16	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5636.5	53.39	44.32	68.2	-14.81	34.54	8.62	34.09	100	186	Peak
5656.45	53.64	44.55	72.97	-19.33	34.56	8.63	34.1	100	186	Peak
5914.75	58.09	48.71	75.78	-17.69	34.81	8.73	34.16	100	186	Peak
*5933.125	56.5	47.1	68.2	-11.7	34.83	8.73	34.16	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

802.11ac (VHT80)

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5130.05	59.8	51.58	68.2	-8.4	34.11	8.1	33.99	167	120	Peak
5210	82.29	73.93			34.17	8.19	34	167	120	Average
5210	90.14	81.78			34.17	8.19	34	167	120	Peak
5383.77	54.25	45.57	68.2	-13.95	34.31	8.41	34.04	167	120	Peak
*10420	52.65	38.24	68.2	-15.55	37.15	12.42	35.16	146	274	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.75	64.43	56.18	68.2	-3.77	34.12	8.13	34	132	169	Peak
5210	88.58	80.22			34.17	8.19	34	132	169	Average
5210	98.07	89.71			34.17	8.19	34	132	169	Peak
5352.31	53.58	44.95	68.2	-14.62	34.28	8.38	34.03	132	169	Peak
*10420	52.71	38.3	68.2	-15.49	37.15	12.42	35.16	105	82	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5210 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5038.25	53.95	45.88	68.2	-14.25	34.04	8	33.97	163	120	Peak
5290	82.19	73.66			34.23	8.32	34.02	163	120	Average
5290	90.01	81.48			34.23	8.32	34.02	163	120	Peak
5367.93	55.11	46.44	68.2	-13.09	34.29	8.41	34.03	163	120	Peak
*10580	53.69	39.04	68.2	-14.51	37.27	12.65	35.27	190	326	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5062.1	53.86	45.76	68.2	-14.34	34.05	8.03	33.98	116	169	Peak
5290	87.32	78.79			34.23	8.32	34.02	116	169	Average
5290	95.14	86.61			34.23	8.32	34.02	116	169	Peak
5352.31	59.69	51.06	68.2	-8.51	34.28	8.38	34.03	116	169	Peak
*10580	54.06	39.41	68.2	-14.14	37.27	12.65	35.27	150	41	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5290 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5450.32	59.81	50.99	68.2	-8.39	34.36	8.51	34.05	204	150	Peak
*5470.8	59.67	50.81	68.2	-8.53	34.37	8.54	34.05	204	150	Peak
5530	85.15	76.22			34.42	8.58	34.07	204	150	Average
5530	92.88	83.95			34.42	8.58	34.07	204	150	Peak
*5724.2	52.69	43.53	68.2	-15.51	34.62	8.65	34.11	204	150	Peak
10600	53.44	38.76	68.2	-14.76	37.28	12.67	35.27	159	97	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5452.72	62.79	53.97	68.2	-5.41	34.36	8.51	34.05	100	177	Peak
*5470.64	63.2	54.37	68.2	-5	34.37	8.51	34.05	100	177	Peak
5530	89.99	81.06			34.42	8.58	34.07	100	177	Average
5530	96.78	87.85			34.42	8.58	34.07	100	177	Peak
*5724.6	53.02	43.86	68.2	-15.18	34.62	8.65	34.11	100	177	Peak
10600	53.74	39.06	68.2	-14.46	37.28	12.67	35.27	158	225	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5530 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5438.8	53.8	45.01	68.2	-14.4	34.35	8.48	34.04	204	150	Peak
*5468.72	54.23	45.4	68.2	-13.97	34.37	8.51	34.05	204	150	Peak
5610	89.52	80.49			34.5	8.61	34.08	204	150	Average
5610	96.61	87.58			34.5	8.61	34.08	204	150	Peak
*5725.24	56.27	47.11	68.2	-11.93	34.62	8.65	34.11	204	150	Peak
11220	55.26	40.17	68.2	-12.94	37.73	12.8	35.44	135	9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5432.24	56.13	47.34	68.2	-12.07	34.35	8.48	34.04	100	177	Peak
*5469.84	56.3	47.47	68.2	-11.9	34.37	8.51	34.05	100	177	Peak
5610	93.96	84.93			34.5	8.61	34.08	100	177	Average
5610	100.32	91.29			34.5	8.61	34.08	100	177	Peak
*5725.56	60.31	51.15	68.2	-7.89	34.62	8.65	34.11	100	177	Peak
11220	55	39.91	68.2	-13.2	37.73	12.8	35.44	158	115	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5610 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

EUT Test Condition		Measurement Detail	
Channel	Channel 138	Frequency Range	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5378.48	54.39	45.71	68.2	-13.81	34.31	8.41	34.04	200	148	Peak
*5470.32	52.96	44.13	68.2	-15.24	34.37	8.51	34.05	200	148	Peak
5690	85.55	76.42			34.59	8.64	34.1	200	148	Average
5690	92.08	82.95			34.59	8.64	34.1	200	148	Peak
11380	54.78	39.67	68.2	-13.42	37.83	12.69	35.41	135	247	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5448.24	54.82	45.99	68.2	-13.38	34.36	8.51	34.04	100	177	Peak
*5468.08	52.85	44.02	68.2	-15.35	34.37	8.51	34.05	100	177	Peak
5690	89.74	80.61			34.59	8.64	34.1	100	177	Average
5690	96.09	86.96			34.59	8.64	34.1	100	177	Peak
11380	55.01	39.9	68.2	-13.19	37.83	12.69	35.41	104	24	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5690 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

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

<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	85.26	76.03			34.68	8.67	34.12	189	148	Average
5775	92.2	82.97			34.68	8.67	34.12	189	148	Peak
11550	55.06	39.79	68.2	-13.14	37.97	12.68	35.38	158	58	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	92.55	83.32			34.68	8.67	34.12	100	186	Average
5775	99.85	90.62			34.68	8.67	34.12	100	186	Peak
11550	54.7	39.43	68.2	-13.5	37.97	12.68	35.38	154	326	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5650.15	60.28	51.19	68.31	-8.03	34.56	8.62	34.09	189	148	Peak
5657.5	64.33	55.24	73.75	-9.42	34.56	8.63	34.1	189	148	Peak
5914.75	60.64	51.26	75.78	-15.14	34.81	8.73	34.16	189	148	Peak
*5929.975	59.32	49.92	68.2	-8.88	34.83	8.73	34.16	189	148	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5650.15	65.02	55.93	68.31	-3.29	34.56	8.62	34.09	100	186	Peak
5652.25	66.11	57.02	69.86	-3.75	34.56	8.62	34.09	100	186	Peak
5917.375	65.72	56.34	73.84	-8.12	34.81	8.73	34.16	100	186	Peak
*5927.875	65.16	55.76	68.2	-3.04	34.83	8.73	34.16	100	186	Peak

Remarks:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5775 MHz: Fundamental Frequency
- *: Out of Restricted Band
- The emission levels of other frequencies were very low against the limit

9 kHz ~ 30 MHz Data:

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

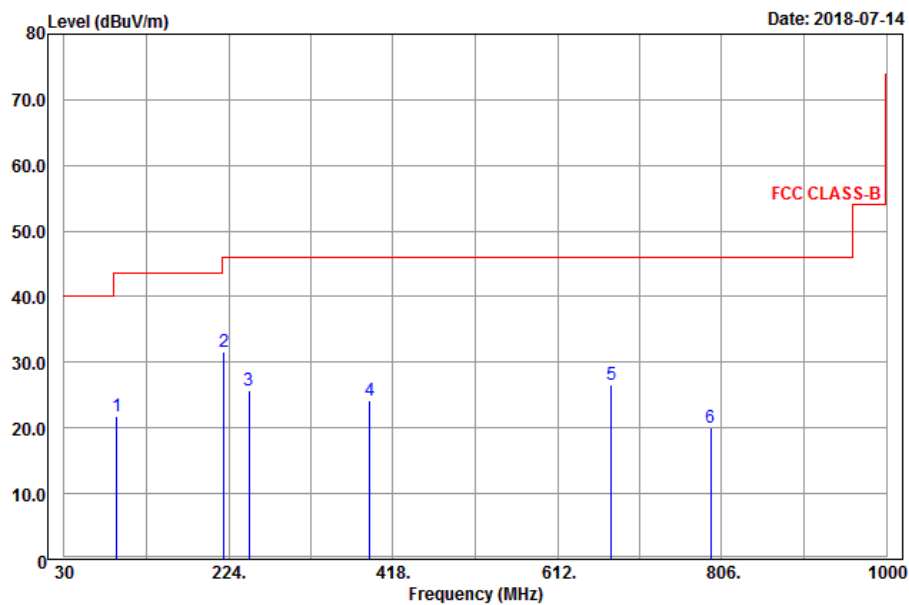
30 MHz ~ 1 GHz Worst-Case Data:

Mode A

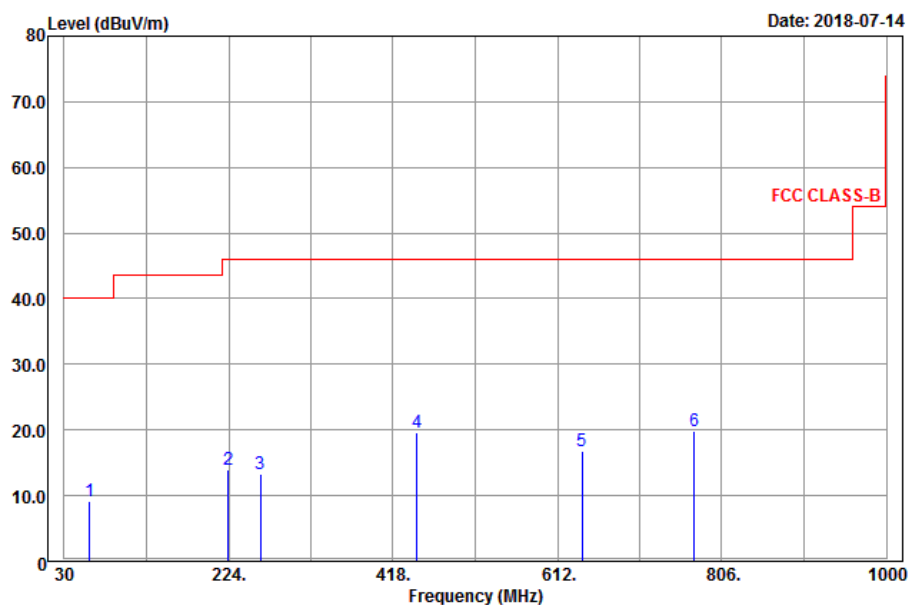
802.11ac (VHT80)

EUT Test Condition		Measurement Detail	
Channel	Channel 122	Frequency Range	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
92.1	21.84	41.63	43.5	-21.66	10.92	1.11	31.82	180	188	Peak
218.73	31.62	50.87	46	-14.38	11.32	1.65	32.22	158	1	Peak
247.89	25.69	43.66	46	-20.31	12.28	1.85	32.1	154	145	Peak
390.3	24.25	39.31	46	-21.75	14.79	2.34	32.19	124	206	Peak
675.9	26.51	36.71	46	-19.49	18.87	3.05	32.12	159	326	Peak
792.8	20.02	28.57	46	-25.98	20.25	3.27	32.07	177	188	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
59.7	9.18	27.14	40	-30.82	13.37	0.9	32.23	159	246	Peak
223.59	14.06	33.1	46	-31.94	11.51	1.65	32.2	140	165	Peak
261.39	13.2	30.85	46	-32.8	12.52	1.94	32.11	150	155	Peak
446.3	19.67	33.82	46	-26.33	15.51	2.49	32.15	124	246	Peak
640.9	16.87	27.73	46	-29.13	18.31	2.99	32.16	187	166	Peak
773.9	19.82	28.58	46	-26.18	20.07	3.27	32.1	198	206	Peak

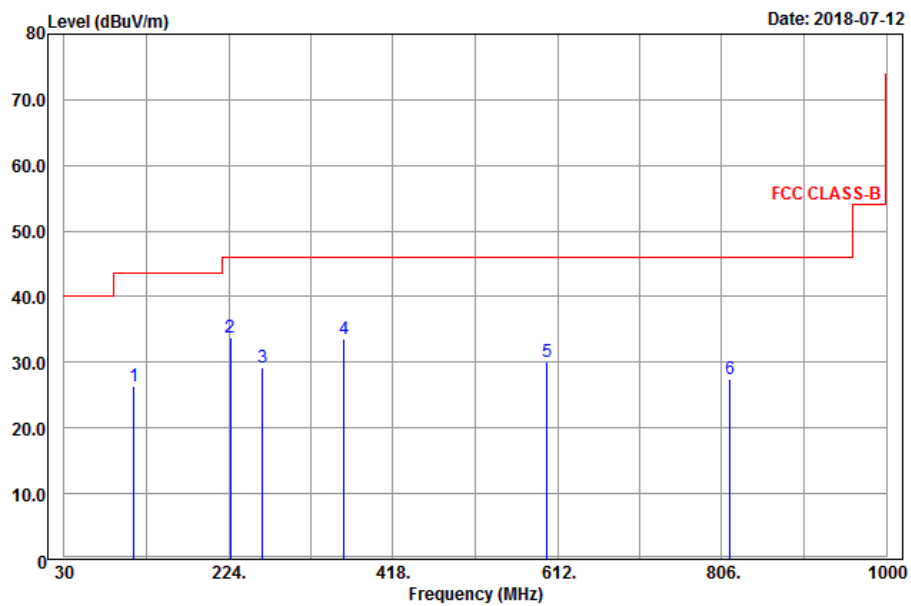
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. The emission levels of other frequencies were very low against the limit

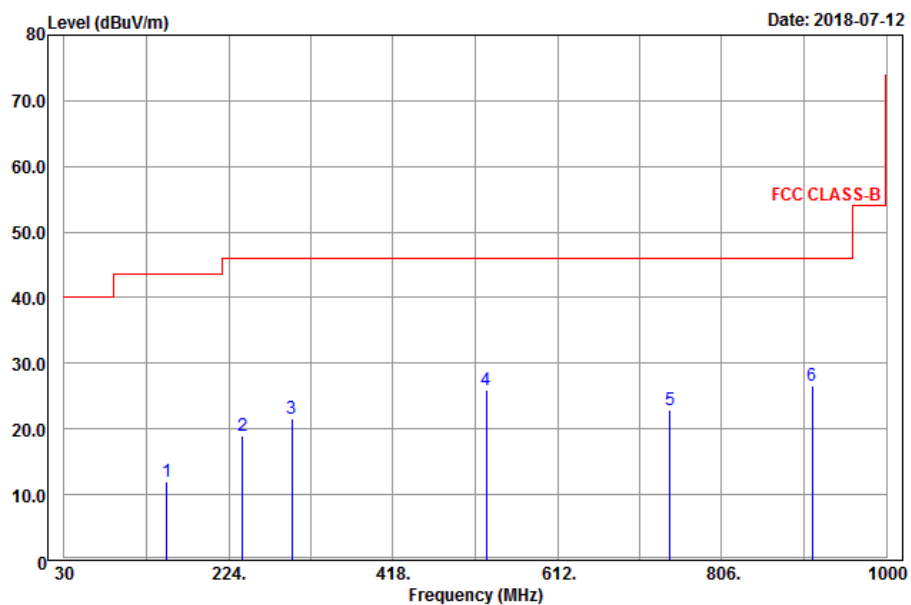
Mode B
802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Harry Hsueh

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
112.62	26.33	45.64	43.5	-17.17	11.66	1.28	32.25	116	165	Peak
226.29	33.74	52.49	46	-12.26	11.59	1.85	32.19	185	205	Peak
264.09	29.25	46.87	46	-16.75	12.55	1.94	32.11	142	2	Peak
360.2	33.51	49	46	-12.49	14.35	2.26	32.1	154	202	Peak
599.6	29.98	41.38	46	-16.02	17.92	2.87	32.19	197	7	Peak
815.9	27.52	35.59	46	-18.48	20.58	3.32	31.97	151	151	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
150.69	12.07	34.41	43.5	-31.43	8.41	1.52	32.27	150	216	Peak
240.06	18.92	37.1	46	-27.08	12.1	1.85	32.13	188	59	Peak
298.38	21.53	38.6	46	-24.47	13.04	2.03	32.14	124	198	Peak
528.2	25.88	38.62	46	-20.12	16.72	2.7	32.16	158	222	Peak
744.5	22.82	31.98	46	-23.18	19.76	3.22	32.14	197	260	Peak
912.5	26.49	32.83	46	-19.51	21.52	3.53	31.39	124	264	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
2. The emission levels of other frequencies were very low against the limit

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

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

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 23, 2017	Nov. 22, 2018
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN/AMN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 26, 2018	Feb. 25, 2019
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 15, 2017	Aug. 14, 2018
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

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

4.2.3 Test Procedures

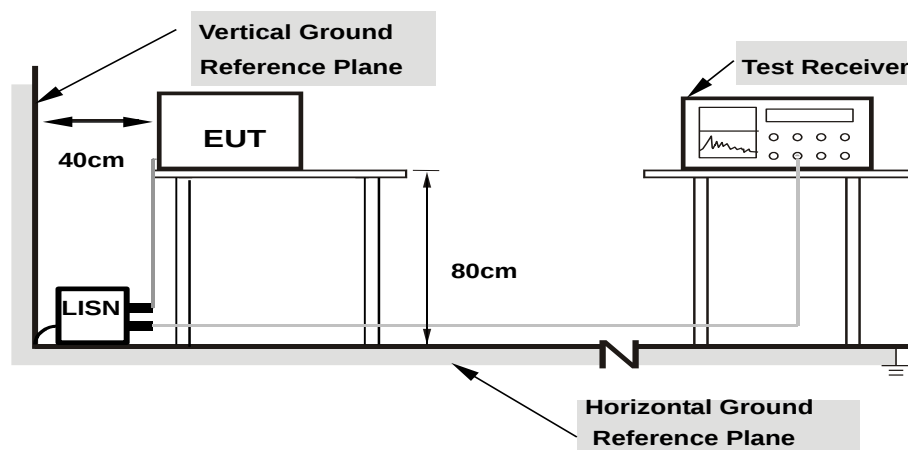
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling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

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz - 30 MHz.

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 cm 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 Condition

Set the EUT under transmission condition continuously at specific channel frequency.

4.2.7 Test Results

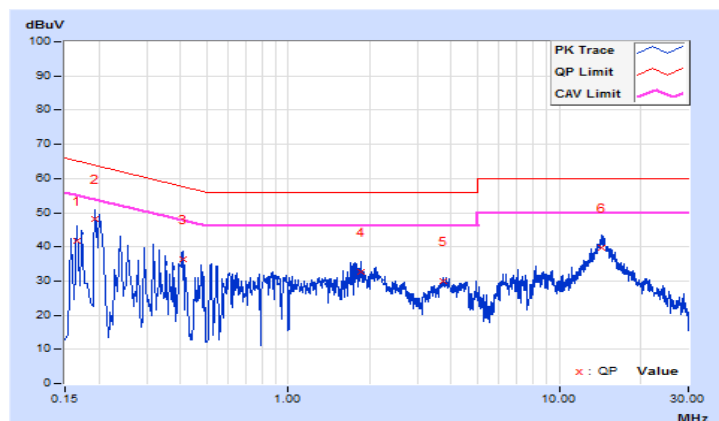
Mode A

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Jisyong Wang	Test Date	2018/7/18

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	0.16569	9.67	32.09	8.83	41.76	18.50	65.17	55.17	-23.41	-36.67
2	0.19305	9.67	38.35	17.74	48.02	27.41	63.90	53.90	-15.88	-26.49
3	0.40800	9.67	26.58	9.67	36.25	19.34	57.69	47.69	-21.44	-28.35
4	1.85867	9.71	23.11	7.23	32.82	16.94	56.00	46.00	-23.18	-29.06
5	3.71201	9.75	20.21	5.40	29.96	15.15	56.00	46.00	-26.04	-30.85
6	14.39804	9.91	29.78	15.39	39.69	25.30	60.00	50.00	-20.31	-24.70

Remarks:

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

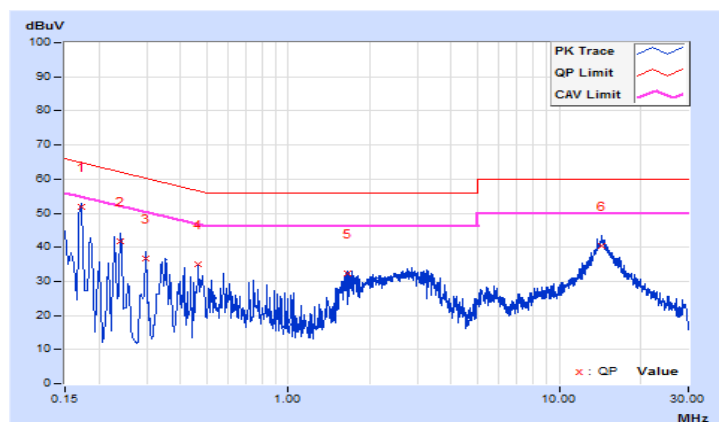


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Jisyong Wang	Test Date	2018/7/18

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	0.17328	9.68	42.07	28.64	51.75	38.32	64.80	54.80	-13.05	-16.48
2	0.23993	9.68	32.07	17.01	41.75	26.69	62.10	52.10	-20.35	-25.41
3	0.29858	9.68	26.99	12.83	36.67	22.51	60.28	50.28	-23.61	-27.77
4	0.46280	9.68	25.30	9.61	34.98	19.29	56.64	46.64	-21.66	-27.35
5	1.65926	9.70	22.58	5.03	32.28	14.73	56.00	46.00	-23.72	-31.27
6	14.30811	9.96	30.55	17.27	40.51	27.23	60.00	50.00	-19.49	-22.77

Remarks:

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



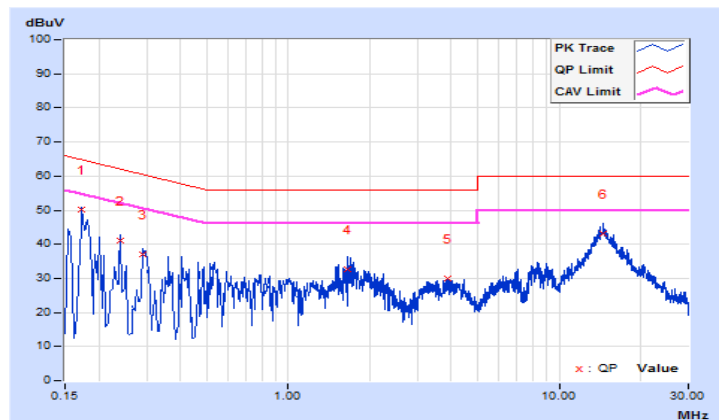
Mode B

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Jisyong Wang	Test Date	2018/7/18

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	0.17328	9.67	40.39	25.43	50.06	35.10	64.80	54.80	-14.74	-19.70
2	0.23993	9.67	31.52	17.80	41.19	27.47	62.10	52.10	-20.91	-24.63
3	0.29043	9.67	27.52	13.63	37.19	23.30	60.51	50.51	-23.32	-27.21
4	1.66317	9.70	23.06	5.83	32.76	15.53	56.00	46.00	-23.24	-30.47
5	3.86059	9.75	20.23	6.43	29.98	16.18	56.00	46.00	-26.02	-29.82
6	14.52316	9.91	33.12	15.88	43.03	25.79	60.00	50.00	-16.97	-24.21

Remarks:

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

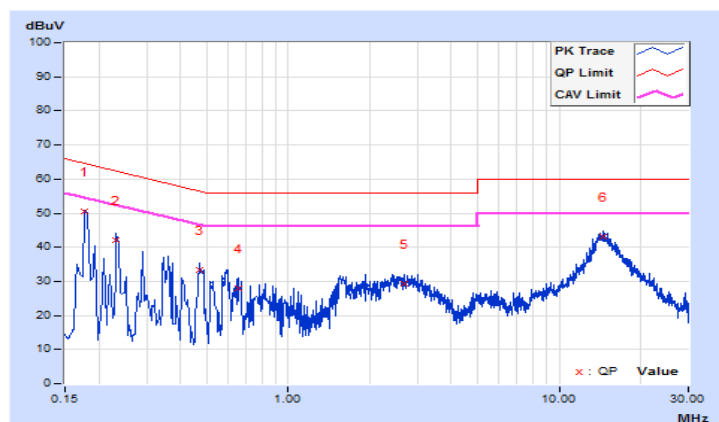


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 65%RH
Tested by	Jisyong Wang	Test Date	2018/7/18

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	0.17744	9.68	40.66	26.96	50.34	36.64	64.60	54.60	-14.26	-17.96
2	0.23216	9.68	32.35	18.72	42.03	28.40	62.37	52.37	-20.34	-23.97
3	0.46915	9.68	23.79	10.91	33.47	20.59	56.53	46.53	-23.06	-25.94
4	0.65439	9.68	18.14	3.61	27.82	13.29	56.00	46.00	-28.18	-32.71
5	2.69152	9.73	19.60	5.42	29.33	15.15	56.00	46.00	-26.67	-30.85
6	14.50752	9.96	33.22	15.92	43.18	25.88	60.00	50.00	-16.82	-24.12

Remarks:

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



4.3 Transmit Power Measurement

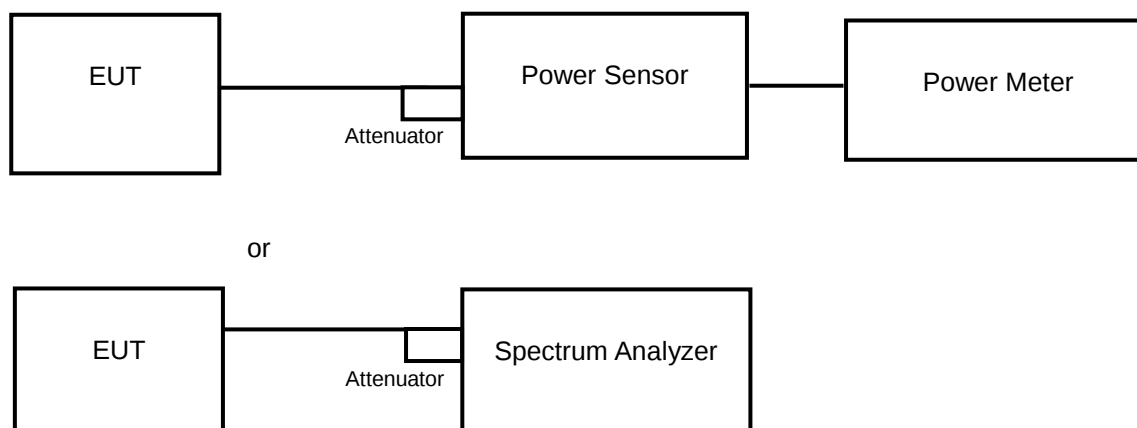
4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

<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

Average Power Measurement

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

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

<802.11ac (VHT80)>

- a. Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99 % occupied bandwidth) of the signal.
- b. Set sweep trigger to "free run".
- c. Set RBW = 1 MHz.
- d. Set VBW $\geq$ 3 MHz
- e. Number of points in sweep $\geq$ 2 Span / RBW.
- f. Sweep time $\leq$ (number of points in sweep) * T
- g. Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
- h. Detector = RMS.
- i. Trace mode = max hold.
- j. Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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 Results

Power Output:

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	13.09	24	Pass
44	5220	17.22	24	Pass
48	5240	17.02	24	Pass
52	5260	17.23	24	Pass
60	5300	17.26	24	Pass
64	5320	14.33	24	Pass
100	5500	12.57	24	Pass
116	5580	16.13	24	Pass
140	5700	12.34	24	Pass
144	5720 (U-NII-2C)	13.80	24	Pass
144	5720 (U-NII-3)	6.76	30	Pass
149	5745	15.89	30	Pass
157	5785	15.56	30	Pass
165	5825	15.12	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	13.52	24	Pass
44	5220	17.28	24	Pass
48	5240	16.98	24	Pass
52	5260	17.03	24	Pass
60	5300	17.01	24	Pass
64	5320	13.23	24	Pass
100	5500	12.67	24	Pass
116	5580	16.34	24	Pass
140	5700	12.73	24	Pass
144	5720 (U-NII-2C)	13.57	24	Pass
144	5720 (U-NII-3)	6.80	30	Pass
149	5745	15.67	30	Pass
157	5785	15.24	30	Pass
165	5825	15.34	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	9.78	24	Pass
46	5230	15.45	24	Pass
54	5270	14.46	24	Pass
62	5310	9.98	24	Pass
102	5510	10.56	24	Pass
110	5550	16.45	24	Pass
134	5670	13.43	24	Pass
142	5710 (U-NII-2C)	13.48	24	Pass
142	5710 (U-NII-3)	1.44	30	Pass
151	5755	15.65	30	Pass
159	5795	15.45	30	Pass

802.11ac (VHT80)

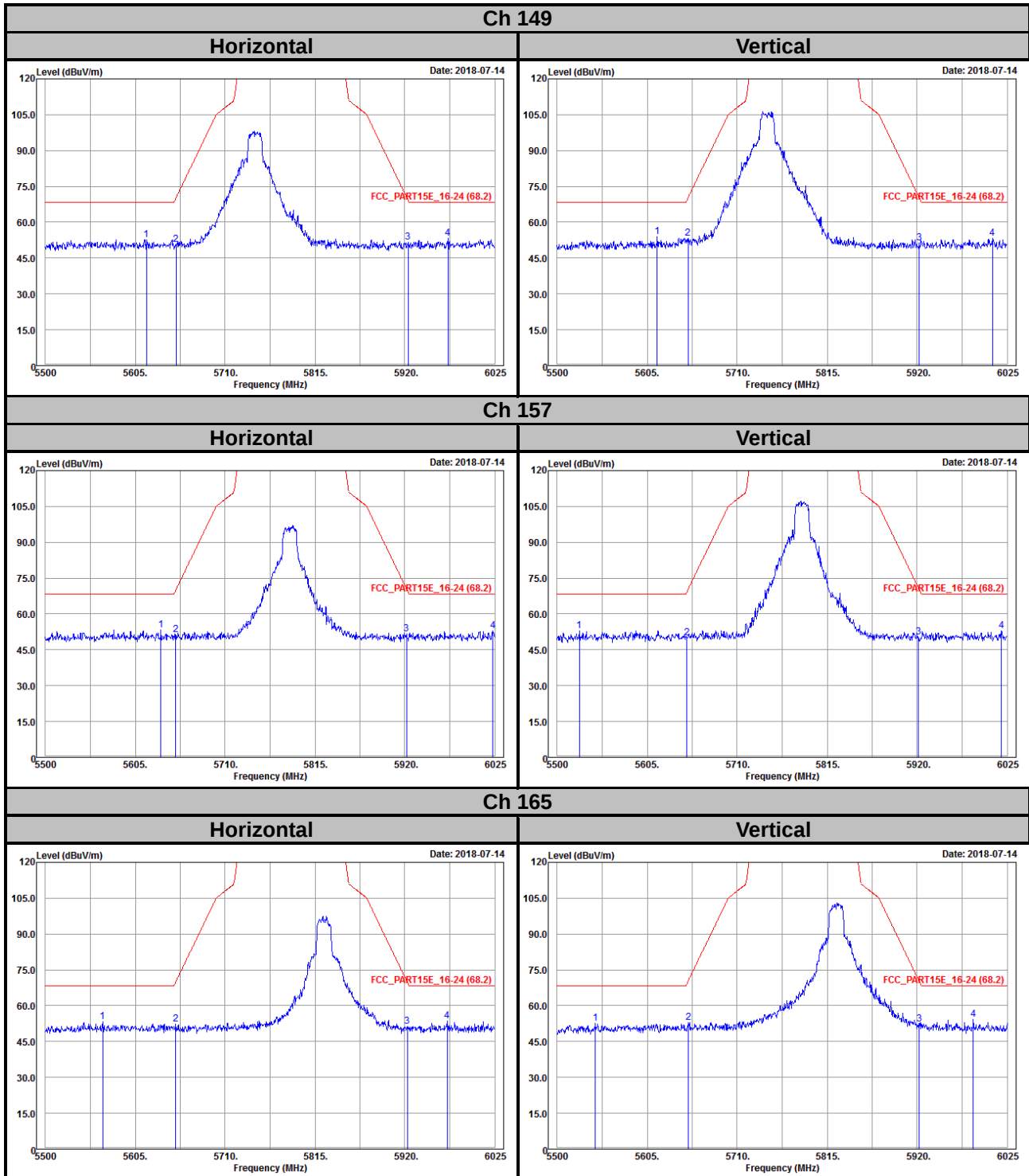
Channel	Frequency (MHz)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	11.72	24	Pass
58	5290	9.89	24	Pass
106	5530	10.11	24	Pass
122	5610	13.89	24	Pass
138	5690 (U-NII-2C)	11.66	24	Pass
138	5690 (U-NII-3)	-4.91	30	Pass
155	5775	14.56	30	Pass

5 Pictures of Test Arrangements

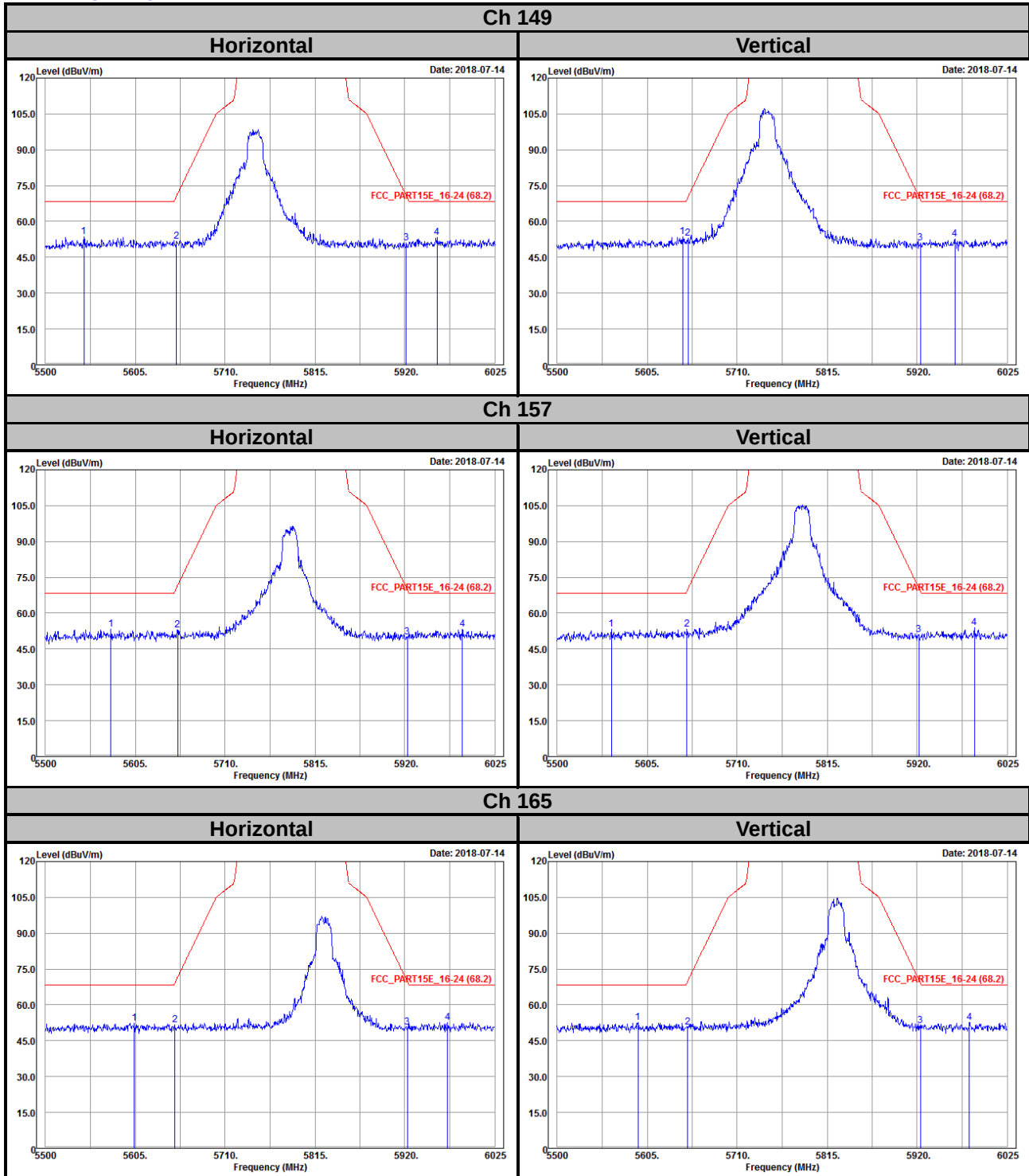
Please refer to the attached file (Test Setup Photo).

Annex A- Radiated Out of Band Emisison (OOBE) Measurement (For U-NII-3 band)

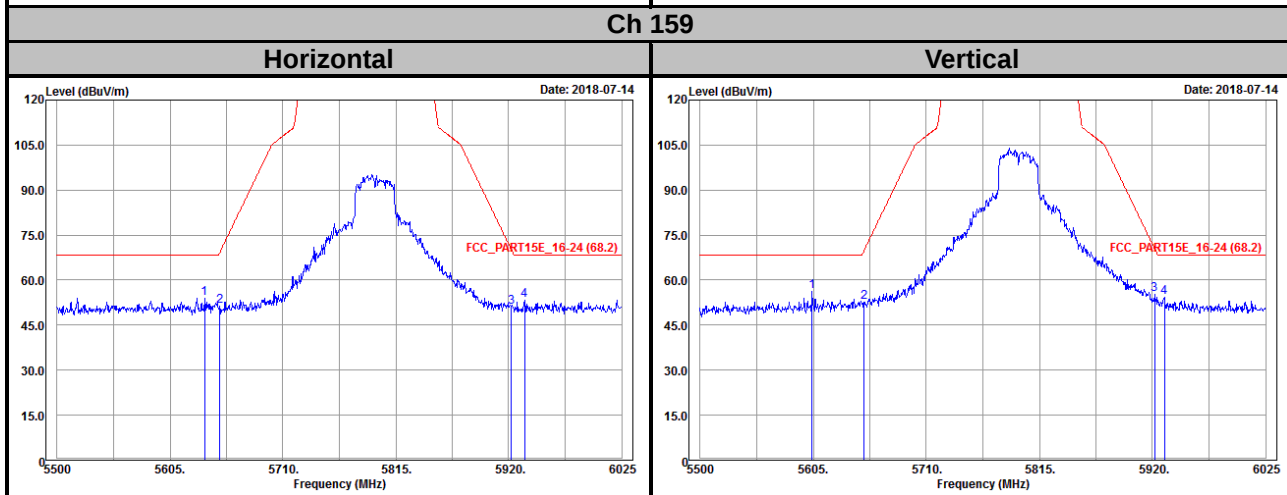
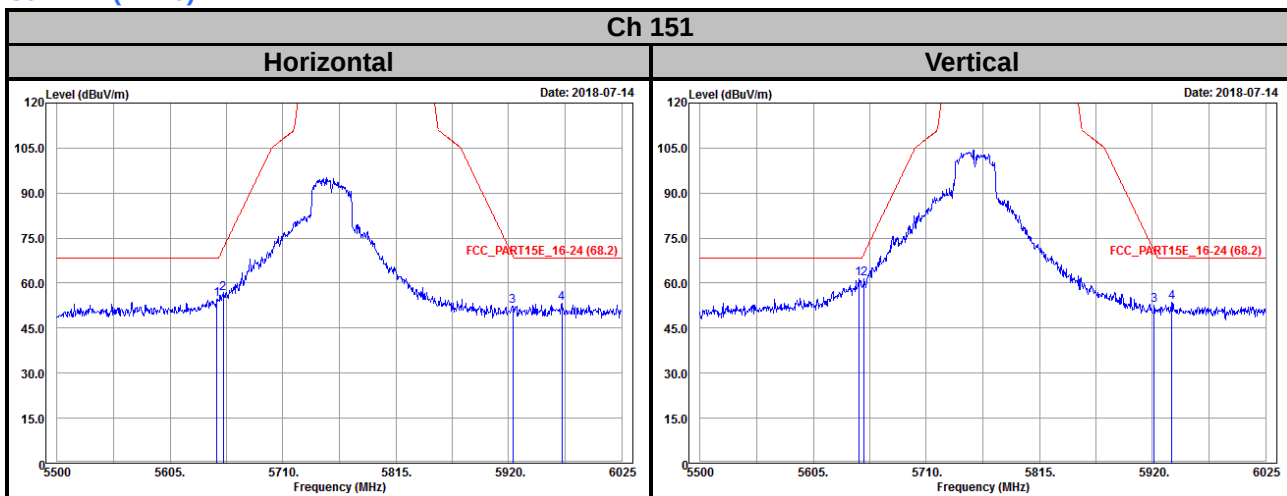
802.11a



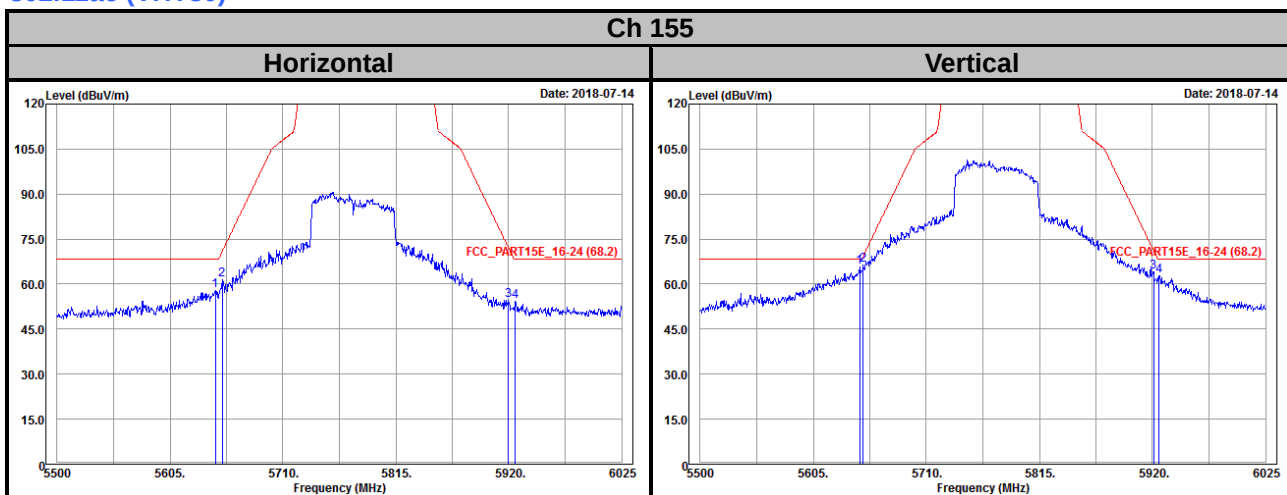
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



Appendix – Information on the Testing Laboratories

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

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

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