

FCC Test Report

Report No.: RF170719C43-4

FCC ID: ASU-SUR2000

Test Model: SUR-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
(Refer to item 3.1 for more details)

Series Model: REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
(Refer to item 3.1 for more details)

Received Date: Jun. 01, 2017

Test Date: Jun. 01, 2017 ~ Aug. 22, 2017

Issued Date: Sep. 04, 2017

Applicant: Savant Systems LLC

Address: 45 Perseverance Way Hyannis MA, 02601 USA

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

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(R.O.C)

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



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Release Control Record

Issue No.	Description	Date Issued
RF170719C43-4	Original Release	Sep. 04, 2017

1 Certificate of Conformity

Product: Savant WIFI Touch Remote

Brand: Savant

Test Model: SUR-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
(Refer to item 3.1 for more details)

Series Model: REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
(Refer to item 3.1 for more details)

Sample Status: Identical Prototype

Applicant: Savant Systems LLC

Test Date: Jun. 01, 2017 ~ Aug. 22, 2017

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

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

Prepared by :

Gina Liu

Date: Sep. 04, 2017

Gina Liu / Specialist

Approved by :

David Huang

Date: Sep. 04, 2017

David Huang / 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 -10.78 dB at 0.57796 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 -0.65 dB at 5724.36 MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.

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	Savant WIFI Touch Remote
Brand	Savant
Test Model	SUR-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
Series Model	REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank) REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank)
Model Difference	SUR-2000XXX (X can be 0-9, a-z, A-Z, -, or blank) - Model Number REM-2000XXX (X can be 0-9, a-z, A-Z, -, or blank) - Sell SKU Domestic REM-2000IXXX (X can be 0-9, a-z, A-Z, -, or blank) - Sell SKU International
Status of EUT	Identical Prototype
Power Supply Rating	5.0 Vdc (adapter) 3.7 Vdc (Li-ion battery)
Modulation Type	64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to MCS7
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5700 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5500 ~ 5700 MHz: 11 for 802.11a, 802.11n (HT20) 5 for 802.11n (HT40) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40)
Output Power	27.416 mW for 5180 ~ 5240 MHz 29.309 mW for 5260 ~ 5320 MHz 28.708 mW for 5500 ~ 5700 MHz 36.898 mW for 5745 ~ 5825 MHz
Antenna Type	PIFA antenna with 0.15 dBi gain (5180 ~ 5240 MHz) PIFA antenna with 0.15 dBi gain (5260 ~ 5320 MHz) PIFA antenna with 1.42 dBi gain (5500 ~ 5700 MHz) PIFA antenna with 0.9 dBi gain (5745 ~ 5825 MHz)
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

Note:

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

Modulation Mode	Tx Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX

2. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter	Dee Van Electronics Co., Ltd	DSA-10PFL-05 FUS 050200	I/P: 90-264 Vac, 47-63 Hz, 0.3 A O/P: 5 Vdc, 2 A
Battery	GETAC	GETAC	3.7 Vdc, 2200 mAh
Ducking	SAVANT	QCA6234	--
WLAN Chip	Qualcomm Atheros	QCA6234	--

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

3.2 Description of Test Modes

For 5180 ~ 5240 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

For 5260 ~ 5320 MHz

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

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

2 channels are provided for 802.11n (HT40):

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

For 5500 ~ 5700 MHz

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

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

5 channels are provided for 802.11n (HT40):

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

For 5745 ~ 5825 MHz:

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

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

2 channels are provided for 802.11n (HT40):

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

3.2.1 Test Mode Applicability and Tested Channel Detail

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

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

RE<1G: Radiated Emission below 1 GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note:

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

Radiated Emission Test (Above 1 GHz):

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

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

Radiated Emission Test (Below 1 GHz):

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

EUT Configure Mode	Frequency Band (MHz)	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11n (HT40)	38 to 46	38	OFDM	BPSK	MCS0
-	5260-5320	802.11n (HT40)	54 to 62	62	OFDM	BPSK	MCS0
-	5500-5700	802.11a	100 to 140	140	OFDM	BPSK	6.0
-	5745-5825	802.11a	149 to 165	157	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)
-	5500-5700	802.11a	100 to 140	140	OFDM	BPSK	6.0

Antenna Port Conducted Measurement:

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

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

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Getaz Yang
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Getaz Yang
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Han Wu
APCM	25 deg. C, 65 % RH	3.7 Vdc	Carlos Chen

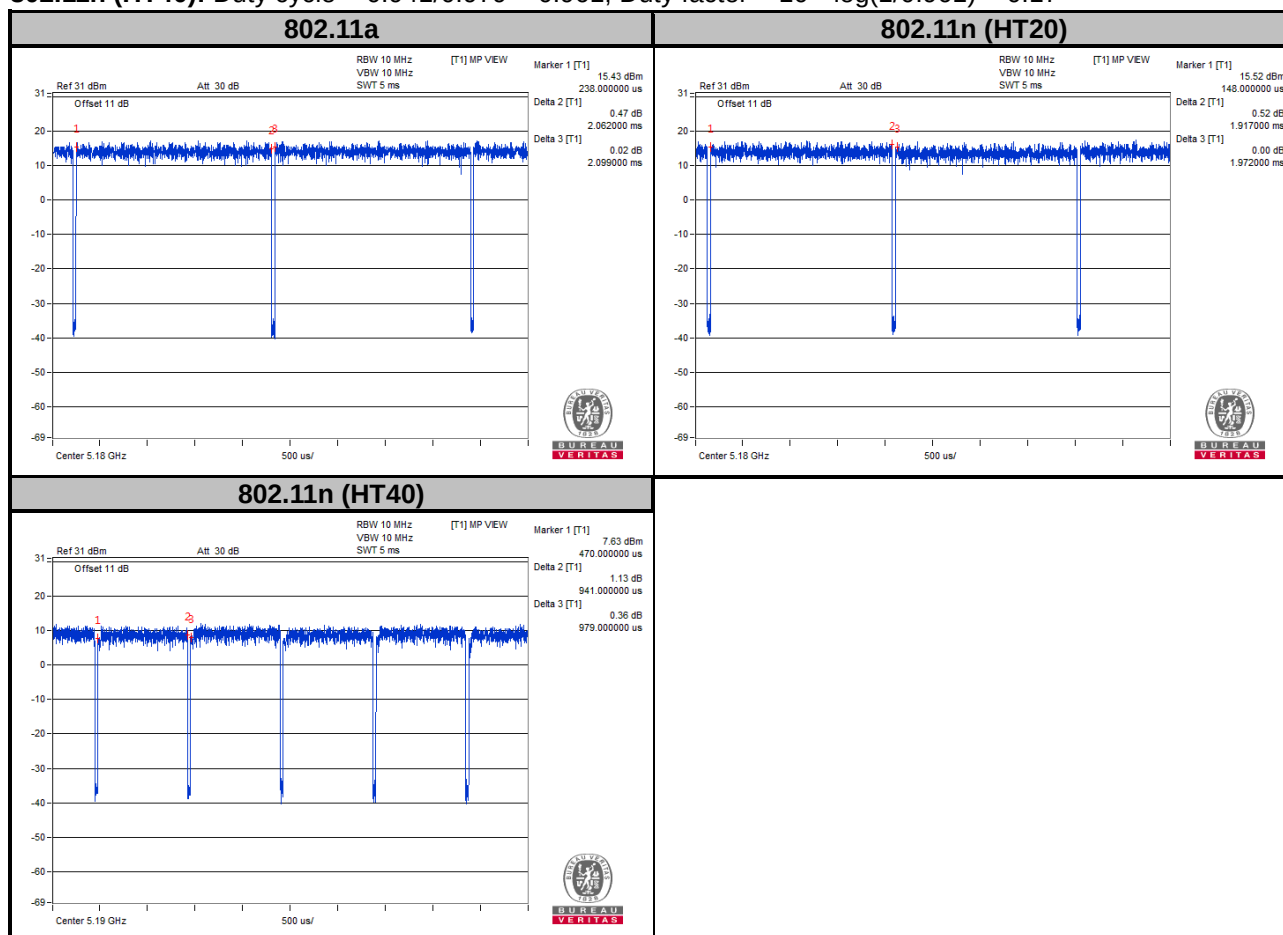
3.3 Duty Cycle of Test Signal

MODULATION TYPE: BPSK

802.11a: Duty cycle of test signal is > 98 %, duty factor is not required.

802.11n (HT20): Duty cycle = $1.917/1.972 = 0.972$, Duty factor = $10 * \log(1/0.972) = 0.12$

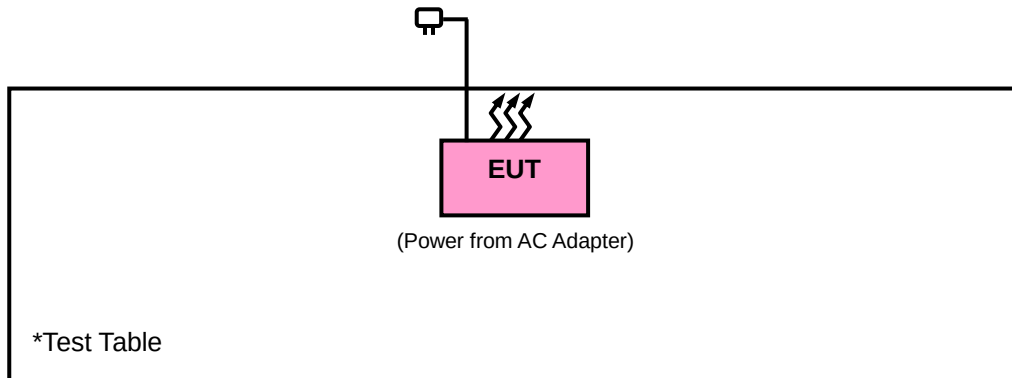
802.11n (HT40): Duty cycle = $0.941/0.979 = 0.961$, Duty factor = $10 * \log(1/0.961) = 0.17$



3.4 Description of Support Units

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

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01r04

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

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

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

Note:

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

4.1.2 Limits of Unwanted Emission Out of the Restricted Bands

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v01r04		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK:105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK:122.2 (dBμV/m) ^{*4}
	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

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

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

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

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

Note:

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

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

4.1.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Feb. 17, 2017	Feb. 16, 2018
Spectrum Analyzer Agilent	N9010A	MY52220314	Dec. 16, 2016	Dec. 15, 2017
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 13, 2016	Dec. 12, 2017
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 26, 2016	Dec. 27, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 12, 2016	Dec. 13, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 14, 2016	Dec. 13, 2017
Loop Antenna	HLA 6121	45745	May 19, 2017	May 18, 2018
Bluetooth Tester	CBT	100980	Jun. 28, 2017	Jun. 27, 2019
Preamplifier EMCI	EMC 012645	980115	Oct. 21, 2016	Oct. 20, 2017
Preamplifier EMCI	EMC 184045	980116	Oct. 21, 2016	Oct. 20, 2017
Preamplifier EMCI	EMC 330H	980112	Oct. 21, 2016	Oct. 20, 2017
Power Meter Anritsu	ML2495A	1232002	Sep. 08, 2016	Sep. 07, 2017
Power Sensor Anritsu	MA2411B	1207325	Sep. 08, 2016	Sep. 07, 2017
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 21, 2016	Oct. 20, 2017
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 21, 2016	Oct. 20, 2017
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Oct. 21, 2016	Oct. 20, 2017
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
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 02, 2016	Sep. 01, 2017
DC Power Supply Topward	33010D	807748	Oct. 25, 2016	Oct. 24, 2018
Digital Multimeter Fluke	87-III	70360742	Jun. 30, 2017	Jun. 29, 2018

- 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

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

Note:

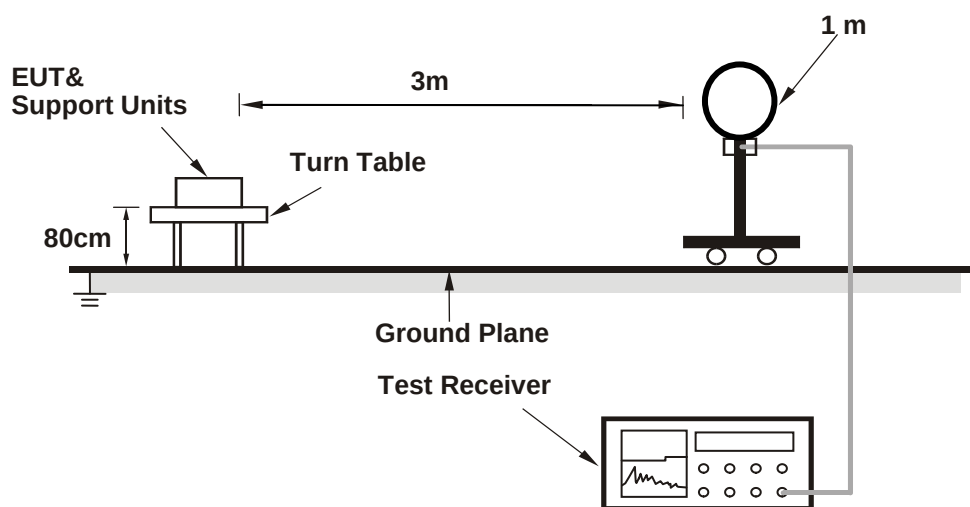
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1/T for Average (Duty cycle < 98 %) detection at frequency above 1 GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 Deviation from Test Standard

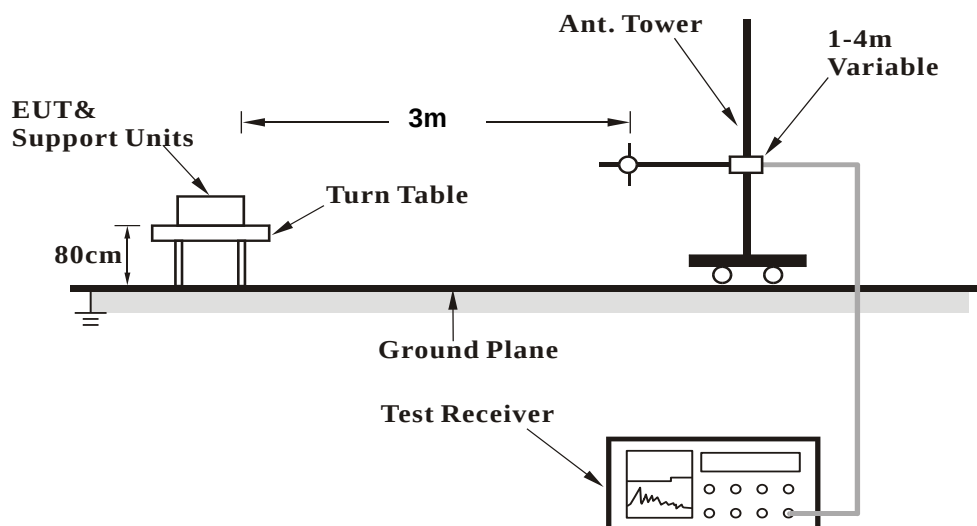
No deviation.

4.1.6 Test Set Up

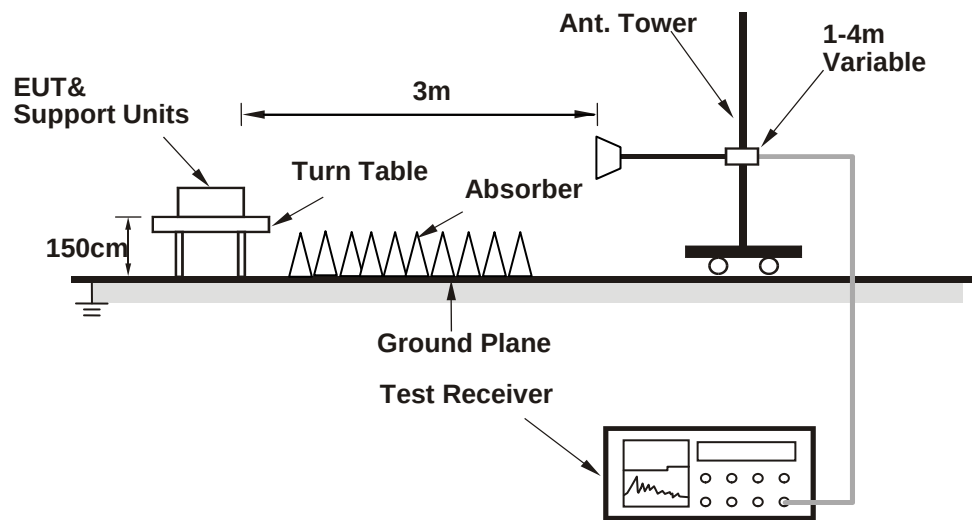
<Radiated emission below 30MHz>



<Frequency Range below 1 GHz>



<Frequency Range above 1 GHz>



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

4.1.7 EUT Operating Conditions

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

4.1.8 Test Results

Above 1 GHz Data :

802.11a

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5147.6	51.42	51.08	74	-22.58	31.32	6.34	37.32	180	140	Peak
5148.05	42.31	41.97	54	-11.69	31.32	6.34	37.32	180	140	Average
5180	95.43	95.05			31.35	6.37	37.34	180	140	Average
5180	105.14	104.76			31.35	6.37	37.34	180	140	Peak
*10360	54.38	57.43	68.2	-13.82	39.19	10.21	52.45	132	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
5147.6	51.4	51.06	74	-22.6	31.32	6.34	37.32	190	227	Peak
5147.9	41.66	41.32	54	-12.34	31.32	6.34	37.32	190	227	Average
5180	94.36	93.98			31.35	6.37	37.34	190	227	Average
5180	103	102.62			31.35	6.37	37.34	190	227	Peak
*10360	54.41	57.15	68.2	-13.79	39.19	10.21	52.14	215	147	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5130.5	51.56	51.23	74	-22.44	31.31	6.32	37.3	186	142	Peak
5147.9	41.4	41.06	54	-12.6	31.32	6.34	37.32	186	142	Average
5220	96.35	95.94			31.37	6.4	37.36	186	142	Average
5220	105.63	105.22			31.37	6.4	37.36	186	142	Peak
5381.79	53.04	52.24	74	-20.96	31.51	6.47	37.18	186	142	Peak
5382.01	45.43	44.63	54	-8.57	31.51	6.47	37.18	186	142	Average
*10440	54.22	57.24	68.2	-13.98	39.29	10.21	52.52	227	314	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5118.05	51.15	50.83	74	-22.85	31.29	6.31	37.28	198	230	Peak
5147.9	40.79	40.45	54	-13.21	31.32	6.34	37.32	198	230	Average
5220	95.52	95.11			31.37	6.4	37.36	198	230	Average
5220	103.75	103.34			31.37	6.4	37.36	198	230	Peak
5382.01	43.33	42.53	54	-10.67	31.51	6.47	37.18	198	230	Average
5439.76	52.85	51.93	74	-21.15	31.55	6.5	37.13	198	230	Peak
*10440	54.03	57.01	68.2	-14.17	39.29	10.21	52.48	135	43	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5043.95	51.45	51.21	74	-22.55	31.24	6.25	37.25	180	141	Peak
5122.1	40.92	40.62	54	-13.08	31.29	6.31	37.3	180	141	Average
5240	96.67	96.18			31.39	6.42	37.32	180	141	Average
5240	105.35	104.86			31.39	6.42	37.32	180	141	Peak
5355.72	53.75	52.98	74	-20.25	31.48	6.47	37.18	180	141	Peak
5356.05	47.49	46.72	54	-6.51	31.48	6.47	37.18	180	141	Average
*10480	54.31	57.38	68.2	-13.89	39.37	10.22	52.66	207	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
5043.95	40.35	40.11	54	-13.65	31.24	6.25	37.25	202	233	Average
5130.65	51.12	50.79	74	-22.88	31.31	6.32	37.3	202	233	Peak
5240	95.01	94.52			31.39	6.42	37.32	202	233	Average
5240	103.85	103.36			31.39	6.42	37.32	202	233	Peak
5355.94	45.19	44.42	54	-8.81	31.48	6.47	37.18	202	233	Average
5379.7	53.27	52.47	74	-20.73	31.51	6.47	37.18	202	233	Peak
*10480	54.3	57.42	68.2	-13.9	39.37	10.22	52.71	218	115	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.05	41.63	41.29	54	-12.37	31.32	6.34	37.32	184	140	Average
5148.2	51.97	51.63	74	-22.03	31.32	6.34	37.32	184	140	Peak
5260	95.96	95.39			31.41	6.43	37.27	184	140	Average
5260	105.24	104.67			31.41	6.43	37.27	184	140	Peak
5382.01	44.05	43.25	54	-9.95	31.51	6.47	37.18	184	140	Average
5382.12	52.79	51.99	74	-21.21	31.51	6.47	37.18	184	140	Peak
10520	53.17	56.2	74	-20.83	39.43	10.27	52.73	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
5025.8	51.38	51.16	74	-22.62	31.23	6.23	37.24	206	224	Peak
5096	40.09	39.8	54	-13.91	31.28	6.29	37.28	206	224	Average
5260	94.62	94.05			31.41	6.43	37.27	206	224	Average
5260	103.71	103.14			31.41	6.43	37.27	206	224	Peak
5382.01	42.35	41.55	54	-11.65	31.51	6.47	37.18	206	224	Average
5447.46	51.36	50.43	74	-22.64	31.56	6.5	37.13	206	224	Peak
10520	54.17	57.3	74	-19.83	39.43	10.27	52.83	164	38	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5130.65	51.56	51.23	74	-22.44	31.31	6.32	37.3	182	132	Peak
5147.9	42	41.66	54	-12	31.32	6.34	37.32	182	132	Average
5300	97.19	96.48			31.44	6.46	37.19	182	132	Average
5300	106.16	105.45			31.44	6.46	37.19	182	132	Peak
5382.01	44.04	43.24	54	-9.96	31.51	6.47	37.18	182	132	Average
5439.76	52.2	51.28	74	-21.8	31.55	6.5	37.13	182	132	Peak
10600	44.34	47.45	54	-9.66	39.57	10.43	53.11	172	194	Average
10600	52.34	55.45	74	-21.66	39.57	10.43	53.11	172	194	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5053.7	51.38	51.14	74	-22.62	31.24	6.25	37.25	194	220	Peak
5148.05	40.92	40.58	54	-13.08	31.32	6.34	37.32	194	220	Average
5300	94.99	94.28			31.44	6.46	37.19	194	220	Average
5300	104.03	103.32			31.44	6.46	37.19	194	220	Peak
5381.68	52.61	51.81	74	-21.39	31.51	6.47	37.18	194	220	Peak
5382.01	44.04	43.24	54	-9.96	31.51	6.47	37.18	194	220	Average
10600	44.53	46.94	54	-9.47	39.57	10.43	52.41	141	56	Average
10600	53.6	56.01	74	-20.4	39.57	10.43	52.41	141	56	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5320	97.08	96.36			31.45	6.46	37.19	188	139	Average
5320	106.16	105.44			31.45	6.46	37.19	188	139	Peak
5382.01	44.29	43.49	54	-9.71	31.51	6.47	37.18	188	139	Average
5433.93	52.46	51.55	74	-21.54	31.55	6.49	37.13	188	139	Peak
10640	44.59	47.68	54	-9.41	39.62	10.36	53.07	169	210	Average
10640	52.88	55.97	74	-21.12	39.62	10.36	53.07	169	210	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	96	95.28			31.45	6.46	37.19	193	222	Average
5320	104.91	104.19			31.45	6.46	37.19	193	222	Peak
5382.01	44	43.2	54	-10	31.51	6.47	37.18	193	222	Average
5382.34	52.86	52.06	74	-21.14	31.51	6.47	37.18	193	222	Peak
10640	45.58	47.87	54	-8.42	39.62	10.36	52.27	123	341	Average
10640	54.15	56.44	74	-19.85	39.62	10.36	52.27	123	341	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382.16	42.18	41.38	54	-11.82	31.51	6.47	37.18	200	145	Average
5459.76	52.12	51.13	74	-21.88	31.56	6.51	37.08	200	145	Peak
*5470.8	66.16	65.15	68.2	-2.04	31.57	6.52	37.08	200	145	Peak
5500	99.17	98.06			31.6	6.54	37.03	200	145	Average
5500	108.8	107.69			31.6	6.54	37.03	200	145	Peak
*5724.04	51.73	50.44	68.2	-16.47	31.96	6.76	37.43	200	145	Peak
11000	46.44	48.87	54	-7.56	40.2	10.4	53.03	164	245	Average
11000	55.78	58.21	74	-18.22	40.2	10.4	53.03	164	245	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.77	40.97	54	-12.23	31.51	6.47	37.18	196	218	Average
5434.32	52.47	51.56	74	-21.53	31.55	6.49	37.13	196	218	Peak
*5470.64	64.64	63.63	68.2	-3.56	31.57	6.52	37.08	196	218	Peak
5500	97.7	96.59			31.6	6.54	37.03	196	218	Average
5500	106.52	105.41			31.6	6.54	37.03	196	218	Peak
*5725.16	50.61	11.89	68.2	-17.59	31.96	6.76	0	196	218	Peak
11000	45.27	48.12	54	-8.73	40.2	10.4	53.45	125	78	Average
11000	54.52	57.37	74	-19.48	40.2	10.4	53.45	125	78	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5381.84	52.12	51.32	54	-1.88	31.51	6.47	37.18	200	152	Peak
5382	42.19	41.39	74	-31.81	31.51	6.47	37.18	200	152	Average
*5468.24	50.66	49.65	68.2	-17.54	31.57	6.52	37.08	200	152	Peak
5580	100.25	99.05			31.71	6.65	37.16	200	152	Average
5580	108.99	107.79			31.71	6.65	37.16	200	152	Peak
*5724.28	50.32	49.03	68.2	-17.88	31.96	6.76	37.43	200	152	Peak
11600	46.36	48.94	54	-7.64	39.71	10.79	53.08	176	320	Average
11600	54.33	56.91	74	-19.67	39.71	10.79	53.08	176	320	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.46	40.66	54	-12.54	31.51	6.47	37.18	192	220	Average
5440.72	51.79	50.87	74	-22.21	31.55	6.5	37.13	192	220	Peak
*5468.4	49.59	48.58	68.2	-18.61	31.57	6.52	37.08	192	220	Peak
5580	97.44	96.24			31.71	6.65	37.16	192	220	Average
5580	106.2	105			31.71	6.65	37.16	192	220	Peak
*5725	51.04	49.75	68.2	-17.16	31.96	6.76	37.43	192	220	Peak
11600	45.84	48.75	54	-8.16	39.71	10.79	53.41	124	84	Average
11600	53.69	56.6	74	-20.31	39.71	10.79	53.41	124	84	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382.16	44.18	43.38	54	-9.82	31.51	6.47	37.18	198	142	Average
5440.24	52.67	51.75	74	-21.33	31.55	6.5	37.13	198	142	Peak
*5468.08	50.04	49.03	68.2	-18.16	31.57	6.52	37.08	198	142	Peak
5700	95.08	93.85			31.9	6.73	37.4	198	142	Average
5700	105.95	104.72			31.9	6.73	37.4	198	142	Peak
*5724.36	67.55	66.26	68.2	-0.65	31.96	6.76	37.43	198	142	Peak
11400	46.06	48.33	54	-7.94	39.96	10.47	52.7	151	244	Average
11400	58.59	60.86	74	-15.41	39.96	10.47	52.7	151	244	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382.16	43.36	42.56	54	-10.64	31.51	6.47	37.18	190	212	Average
5386.8	52.45	51.65	74	-21.55	31.51	6.47	37.18	190	212	Peak
*5470.96	50.1	49.09	68.2	-18.1	31.57	6.52	37.08	190	212	Peak
5700	92.61	91.38			31.9	6.73	37.4	190	212	Average
5700	102.11	100.88			31.9	6.73	37.4	190	212	Peak
*5724.36	64.83	63.54	68.2	-3.37	31.96	6.76	37.43	190	212	Peak
11400	46.13	47.83	54	-7.87	39.96	10.47	52.13	134	39	Average
11400	58	59.7	74	-16	39.96	10.47	52.13	134	39	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

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	Getaz Yang

<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
5635.975	52.28	51.18	68.2	-15.92	31.82	6.56	37.28	179	143	Peak
5653.075	51.55	50.36	70.49	-18.94	31.85	6.62	37.28	179	143	Peak
5745	97.52	96.22			31.99	6.78	37.47	179	143	Average
5745	105.97	104.67			31.99	6.78	37.47	179	143	Peak
5921.925	50.3	48.5	70.47	-20.17	32.29	7.01	37.5	179	143	Peak
5969.9	53.18	51.27	68.2	-15.02	32.34	7.08	37.51	179	143	Peak
11490	51.29	53.5	54	-2.71	39.91	10.66	52.78	162	124	Average
11490	62.17	64.38	74	-11.83	39.91	10.66	52.78	162	124	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5622.2	52.5	51.37	68.2	-15.7	31.79	6.56	37.22	176	194	Peak
5652.125	51.73	50.54	69.78	-18.05	31.85	6.62	37.28	176	194	Peak
5745	93.12	91.85			31.99	6.75	37.47	176	194	Average
5745	102.21	100.94			31.99	6.75	37.47	176	194	Peak
5921.925	49.93	48.13	70.47	-20.54	32.29	7.01	37.5	176	194	Peak
6001.25	52.19	50.16	68.2	-16.01	32.4	7.14	37.51	176	194	Peak
11490	45.46	47.72	54	-8.54	39.91	10.66	52.83	168	227	Average
11490	57.58	59.84	74	-16.42	39.91	10.66	52.83	168	227	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	52.28	51.18	68.2	-15.92	31.82	6.56	37.28	179	143	Peak
5653.075	51.55	50.36	70.49	-18.94	31.85	6.62	37.28	179	143	Peak
5921.925	50.3	48.5	70.47	-20.17	32.29	7.01	37.5	179	143	Peak
5969.9	53.18	51.27	68.2	-15.02	32.34	7.08	37.51	179	143	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5622.2	52.5	51.37	68.2	-15.7	31.79	6.56	37.22	176	194	Peak
5652.125	51.73	50.54	69.78	-18.05	31.85	6.62	37.28	176	194	Peak
5921.925	49.93	48.13	70.47	-20.54	32.29	7.01	37.5	176	194	Peak
6001.25	52.19	50.16	68.2	-16.01	32.4	7.14	37.51	176	194	Peak

Remarks:

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

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	Getaz Yang

<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
5627.425	51.47	50.34	68.2	-16.73	31.79	6.56	37.22	179	141	Peak
5653.075	48.83	47.64	70.49	-21.66	31.85	6.62	37.28	179	141	Peak
5785	97.69	96.37			32.04	6.82	37.54	179	141	Average
5785	106.81	105.49			32.04	6.82	37.54	179	141	Peak
5922.4	49.56	47.76	70.12	-20.56	32.29	7.01	37.5	179	141	Peak
5977.025	52.64	50.7	68.2	-15.56	32.37	7.08	37.51	179	141	Peak
11570	51.37	53.84	54	-2.63	39.78	10.76	53.01	189	124	Average
11570	61.11	63.58	74	-12.89	39.78	10.76	53.01	189	124	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5630.275	51.25	50.18	68.2	-16.95	31.79	6.56	37.28	173	206	Peak
5652.6	49.4	48.21	70.13	-20.73	31.85	6.62	37.28	173	206	Peak
5785	94.43	93.11			32.04	6.82	37.54	173	206	Average
5785	103.54	102.22			32.04	6.82	37.54	173	206	Peak
5920.5	47.94	46.17	71.52	-23.58	32.26	7.01	37.5	173	206	Peak
5951.375	51.82	49.92	68.2	-16.38	32.32	7.08	37.5	173	206	Peak
11570	46.21	49	54	-7.79	39.78	10.76	53.33	208	229	Average
11570	56.09	58.88	74	-17.91	39.78	10.76	53.33	208	229	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
5627.425	51.47	50.34	68.2	-16.73	31.79	6.56	37.22	179	141	Peak
5653.075	48.83	47.64	70.49	-21.66	31.85	6.62	37.28	179	141	Peak
5922.4	49.56	47.76	70.12	-20.56	32.29	7.01	37.5	179	141	Peak
5977.025	52.64	50.7	68.2	-15.56	32.37	7.08	37.51	179	141	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5630.275	51.25	50.18	68.2	-16.95	31.79	6.56	37.28	173	206	Peak
5652.6	49.4	48.21	70.13	-20.73	31.85	6.62	37.28	173	206	Peak
5920.5	47.94	46.17	71.52	-23.58	32.26	7.01	37.5	173	206	Peak
5951.375	51.82	49.92	68.2	-16.38	32.32	7.08	37.5	173	206	Peak

Remarks:

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

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	Getaz Yang

<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
5616.025	50.87	49.74	68.2	-17.33	31.79	6.56	37.22	184	141	Peak
5653.55	52.17	50.98	70.84	-18.67	31.85	6.62	37.28	184	141	Peak
5825	96.2	94.73			32.12	6.88	37.53	184	141	Average
5825	105.21	103.74			32.12	6.88	37.53	184	141	Peak
5921.45	49.31	47.54	70.82	-21.51	32.26	7.01	37.5	184	141	Peak
5961.825	52.19	50.28	68.2	-16.01	32.34	7.08	37.51	184	141	Peak
11650	50.68	53.37	54	-3.32	39.65	10.8	53.14	182	123	Average
11650	59.13	61.82	74	-14.87	39.65	10.8	53.14	182	123	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5620.775	51.95	50.82	68.2	-16.25	31.79	6.56	37.22	166	206	Peak
5652.6	48.2	47.01	70.13	-21.93	31.85	6.62	37.28	166	206	Peak
5825	92.16	90.69			32.12	6.88	37.53	166	206	Average
5825	100.93	99.46			32.12	6.88	37.53	166	206	Peak
5922.875	50.19	48.39	69.77	-19.58	32.29	7.01	37.5	166	206	Peak
5927.15	52.37	50.57	68.2	-15.83	32.29	7.01	37.5	166	206	Peak
11650	44.7	47.6	54	-9.3	39.65	10.8	53.35	176	224	Average
11650	56.06	58.96	74	-17.94	39.65	10.8	53.35	176	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
5616.025	50.87	49.74	68.2	-17.33	31.79	6.56	37.22	184	141	Peak
5653.55	52.17	50.98	70.84	-18.67	31.85	6.62	37.28	184	141	Peak
5921.45	49.31	47.54	70.82	-21.51	32.26	7.01	37.5	184	141	Peak
5961.825	52.19	50.28	68.2	-16.01	32.34	7.08	37.51	184	141	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5620.775	51.95	50.82	68.2	-16.25	31.79	6.56	37.22	166	206	Peak
5652.6	48.2	47.01	70.13	-21.93	31.85	6.62	37.28	166	206	Peak
5922.875	50.19	48.39	69.77	-19.58	32.29	7.01	37.5	166	206	Peak
5927.15	52.37	50.57	68.2	-15.83	32.29	7.01	37.5	166	206	Peak

Remarks:

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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	52.04	51.7	74	-21.96	31.32	6.34	37.32	187	134	Peak
5148.05	42.51	42.17	54	-11.49	31.32	6.34	37.32	187	134	Average
5180	96.05	95.67			31.35	6.37	37.34	187	134	Average
5180	105.29	104.91			31.35	6.37	37.34	187	134	Peak
*10360	55.36	58.41	68.2	-12.84	39.19	10.21	52.45	224	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
5147.9	42.2	41.86	54	-11.8	31.32	6.34	37.32	194	227	Average
5149.85	53.2	52.86	74	-20.8	31.32	6.34	37.32	194	227	Peak
5180	95.5	95.12			31.35	6.37	37.34	194	227	Average
5180	103.88	103.5			31.35	6.37	37.34	194	227	Peak
*10360	55.89	58.63	68.2	-12.31	39.19	10.21	52.14	138	249	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.78	41.44	54	-12.22	31.32	6.34	37.32	184	135	Average
5148.05	51.56	51.22	74	-22.44	31.32	6.34	37.32	184	135	Peak
5220	96.37	95.96			31.37	6.4	37.36	184	135	Average
5220	105.38	104.97			31.37	6.4	37.36	184	135	Peak
5382.01	45.73	44.93	54	-8.27	31.51	6.47	37.18	184	135	Average
5382.23	52.66	51.86	74	-21.34	31.51	6.47	37.18	184	135	Peak
*10440	54.25	57.27	68.2	-13.95	39.29	10.21	52.52	165	83	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5100.65	51.2	50.91	74	-22.8	31.28	6.29	37.28	192	227	Peak
5147.9	41.14	40.8	54	-12.86	31.32	6.34	37.32	192	227	Average
5220	95.17	94.76			31.37	6.4	37.36	192	227	Average
5220	103.93	103.52			31.37	6.4	37.36	192	227	Peak
5382.01	44.63	43.83	54	-9.37	31.51	6.47	37.18	192	227	Average
5439.87	52.67	51.75	74	-21.33	31.55	6.5	37.13	192	227	Peak
*10440	54.4	57.38	68.2	-13.8	39.29	10.21	52.48	141	208	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5105.3	51.24	50.94	74	-22.76	31.28	6.3	37.28	182	140	Peak
5148.05	41.64	41.3	54	-12.36	31.32	6.34	37.32	182	140	Average
5240	96.17	95.68			31.39	6.42	37.32	182	140	Average
5240	105.23	104.74			31.39	6.42	37.32	182	140	Peak
5381.79	53.79	52.99	74	-20.21	31.51	6.47	37.18	182	140	Peak
5382.01	45.51	44.71	54	-8.49	31.51	6.47	37.18	182	140	Average
*10480	53.93	57	68.2	-14.27	39.37	10.22	52.66	187	358	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.05	41.3	40.96	54	-12.7	31.32	6.34	37.32	201	222	Average
5150	51.18	50.84	74	-22.82	31.32	6.34	37.32	201	222	Peak
5240	94.7	94.21			31.39	6.42	37.32	201	222	Average
5240	103.65	103.16			31.39	6.42	37.32	201	222	Peak
5381.68	53.66	52.86	74	-20.34	31.51	6.47	37.18	201	222	Peak
5382.01	44.66	43.86	54	-9.34	31.51	6.47	37.18	201	222	Average
*10480	54.35	57.47	68.2	-13.85	39.37	10.22	52.71	232	168	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.96	41.62	54	-12.04	31.32	6.34	37.32	188	144	Average
5148.2	51.59	51.25	74	-22.41	31.32	6.34	37.32	188	144	Peak
5260	96.4	95.83			31.41	6.43	37.27	188	144	Average
5260	104.91	104.34			31.41	6.43	37.27	188	144	Peak
5382.01	43.9	43.1	54	-10.1	31.51	6.47	37.18	188	144	Average
5443.28	52.67	51.75	74	-21.33	31.55	6.5	37.13	188	144	Peak
10520	53.84	56.87	74	-20.16	39.43	10.27	52.73	174	194	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5148.05	41.19	40.85	54	-12.81	31.32	6.34	37.32	191	217	Average
5148.2	51.52	51.18	74	-22.48	31.32	6.34	37.32	191	217	Peak
5260	94.52	93.95			31.41	6.43	37.27	191	217	Average
5260	103.24	102.67			31.41	6.43	37.27	191	217	Peak
5382.01	43.94	43.14	54	-10.06	31.51	6.47	37.18	191	217	Average
5382.12	51.96	51.16	74	-22.04	31.51	6.47	37.18	191	217	Peak
10520	53.12	56.25	74	-20.88	39.43	10.27	52.83	154	33	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.67	41.33	54	-12.33	31.32	6.34	37.32	181	138	Average
5147.9	51.51	51.17	74	-22.49	31.32	6.34	37.32	181	138	Peak
5300	95.63	94.92			31.44	6.46	37.19	181	138	Average
5300	104.7	103.99			31.44	6.46	37.19	181	138	Peak
5381.79	52.11	51.31	74	-21.89	31.51	6.47	37.18	181	138	Peak
5381.9	43.72	42.92	54	-10.28	31.51	6.47	37.18	181	138	Average
10600	44.36	47.47	54	-9.64	39.57	10.43	53.11	179	191	Average
10600	54.52	57.63	74	-19.48	39.57	10.43	53.11	179	191	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5018.75	51.88	51.69	74	-22.12	31.21	6.22	37.24	203	224	Peak
5147.9	41.15	40.81	54	-12.85	31.32	6.34	37.32	203	224	Average
5300	94.93	94.22			31.44	6.46	37.19	203	224	Average
5300	103.64	102.93			31.44	6.46	37.19	203	224	Peak
5382.01	43.86	43.06	54	-10.14	31.51	6.47	37.18	203	224	Average
5460	51.99	51	74	-22.01	31.56	6.51	37.08	203	224	Peak
10600	45.13	47.54	54	-8.87	39.57	10.43	52.41	132	41	Average
10600	54.54	56.95	74	-19.46	39.57	10.43	52.41	132	41	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	96.93	96.21			31.45	6.46	37.19	185	135	Average
5320	105.94	105.22			31.45	6.46	37.19	185	135	Peak
5362.98	53.84	53.06	74	-20.16	31.49	6.47	37.18	185	135	Peak
5382.12	45.57	44.77	54	-8.43	31.51	6.47	37.18	185	135	Average
10640	44.15	47.24	54	-9.85	39.62	10.36	53.07	184	241	Average
10640	53.75	56.84	74	-20.25	39.62	10.36	53.07	184	241	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	94.88	94.16			31.45	6.46	37.19	189	220	Average
5320	104.22	103.5			31.45	6.46	37.19	189	220	Peak
5381.9	43.4	42.6	54	-10.6	31.51	6.47	37.18	189	220	Average
5408.19	52.9	52.08	74	-21.1	31.52	6.48	37.18	189	220	Peak
10640	45.26	47.55	54	-8.74	39.62	10.36	52.27	121	39	Average
10640	53.37	55.66	74	-20.63	39.62	10.36	52.27	121	39	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.35	41.55	54	-11.65	31.51	6.47	37.18	183	145	Average
5442.32	52.07	51.15	74	-21.93	31.55	6.5	37.13	183	145	Peak
*5470.48	58.58	57.57	68.2	-9.62	31.57	6.52	37.08	183	145	Peak
5500	97.69	96.58			31.6	6.54	37.03	183	145	Average
5500	107.3	106.19			31.6	6.54	37.03	183	145	Peak
*5724.68	51.06	49.77	68.2	-17.14	31.96	6.76	37.43	183	145	Peak
11000	46.42	48.85	54	-7.58	40.2	10.4	53.03	174	284	Average
11000	55.61	58.04	74	-18.39	40.2	10.4	53.03	174	284	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.42	41.62	54	-11.58	31.51	6.47	37.18	177	214	Average
5382.32	52.74	51.94	74	-21.26	31.51	6.47	37.18	177	214	Peak
*5470.8	56.93	55.92	68.2	-11.27	31.57	6.52	37.08	177	214	Peak
5500	97.19	96.08			31.6	6.54	37.03	177	214	Average
5500	106.54	105.43			31.6	6.54	37.03	177	214	Peak
*5725.24	50.19	48.9	68.2	-18.01	31.96	6.76	37.43	177	214	Peak
11000	45.57	48.42	54	-8.43	40.2	10.4	53.45	121	45	Average
11000	55.57	58.42	74	-18.43	40.2	10.4	53.45	121	45	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.52	41.72	54	-11.48	31.51	6.47	37.18	173	153	Average
5408.08	52.54	51.72	74	-21.46	31.52	6.48	37.18	173	153	Peak
*5470.8	51.58	50.57	68.2	-16.62	31.57	6.52	37.08	173	153	Peak
5580	97.41	96.21			31.71	6.65	37.16	173	153	Average
5580	107.71	106.51			31.71	6.65	37.16	173	153	Peak
*5723.96	50.95	49.66	68.2	-17.25	31.96	6.76	37.43	173	153	Peak
11600	46.4	48.98	54	-7.6	39.71	10.79	53.08	174	265	Average
11600	54.23	56.81	74	-19.77	39.71	10.79	53.08	174	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
5382	41.69	40.89	54	-12.31	31.51	6.47	37.18	175	212	Average
5450.16	51.44	50.45	74	-22.56	31.56	6.51	37.08	175	212	Peak
*5469.52	50.07	49.06	68.2	-18.13	31.57	6.52	37.08	175	212	Peak
5580	96.09	94.89			31.71	6.65	37.16	175	212	Average
5580	105.49	104.29			31.71	6.65	37.16	175	212	Peak
*5724.2	50.35	49.06	68.2	-17.85	31.96	6.76	37.43	175	212	Peak
11600	45.8	48.71	54	-8.2	39.71	10.79	53.41	124	84	Average
11600	54.32	57.23	74	-19.68	39.71	10.79	53.41	124	84	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5381.84	52.43	51.63	54	-1.57	31.51	6.47	37.18	192	143	Peak
5382.16	42.55	41.75	74	-31.45	31.51	6.47	37.18	192	143	Average
*5469.2	49.88	48.87	68.2	-18.32	31.57	6.52	37.08	192	143	Peak
5700	95.59	94.36			31.9	6.73	37.4	192	143	Average
5700	104.78	103.55			31.9	6.73	37.4	192	143	Peak
*5724.28	67.54	66.25	68.2	-0.66	31.96	6.76	37.43	192	143	Peak
11400	46.72	48.99	54	-7.28	39.96	10.47	52.7	177	244	Average
11400	56.3	58.57	74	-17.7	39.96	10.47	52.7	177	244	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.1	41.3	54	-11.9	31.51	6.47	37.18	172	213	Average
5460.08	52	51.01	74	-22	31.56	6.51	37.08	172	213	Peak
*5470.48	49.77	48.76	68.2	-18.43	31.57	6.52	37.08	172	213	Peak
5700	94	92.77			31.9	6.73	37.4	172	213	Average
5700	103.08	101.85			31.9	6.73	37.4	172	213	Peak
*5724.28	67.28	65.99	68.2	-0.92	31.96	6.76	37.43	172	213	Peak
11400	46.07	47.77	54	-7.93	39.96	10.47	52.13	123	55	Average
11400	55.26	56.96	74	-18.74	39.96	10.47	52.13	123	55	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

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	Getaz Yang

<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
5631.225	50.84	49.77	68.2	-17.36	31.79	6.56	37.28	180	140	Peak
5652.125	49.87	48.68	69.78	-19.91	31.85	6.62	37.28	180	140	Peak
5745	94.41	93.14			31.99	6.75	37.47	180	140	Average
5745	104.1	102.83			31.99	6.75	37.47	180	140	Peak
5922.4	49.75	47.95	70.12	-20.37	32.29	7.01	37.5	180	140	Peak
5981.775	52.13	50.19	68.2	-16.07	32.37	7.08	37.51	180	140	Peak
11490	48.99	51.2	54	-5.01	39.91	10.66	52.78	205	126	Average
11490	61.31	63.52	74	-12.69	39.91	10.66	52.78	205	126	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5639.775	50.21	49.11	68.2	-17.99	31.82	6.56	37.28	176	194	Peak
5651.65	48.01	46.82	69.43	-21.42	31.85	6.62	37.28	176	194	Peak
5745	90.74	89.47			31.99	6.75	37.47	176	194	Average
5745	100.07	98.8			31.99	6.75	37.47	176	194	Peak
5922.875	50.02	48.22	69.77	-19.75	32.29	7.01	37.5	176	194	Peak
5932.85	52.26	50.46	68.2	-15.94	32.29	7.01	37.5	176	194	Peak
11490	44.87	47.13	54	-9.13	39.91	10.66	52.83	157	230	Average
11490	57.1	59.36	74	-16.9	39.91	10.66	52.83	157	230	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
5631.225	50.84	49.77	68.2	-17.36	31.79	6.56	37.28	180	140	Peak
5652.125	49.87	48.68	69.78	-19.91	31.85	6.62	37.28	180	140	Peak
5922.4	49.75	47.95	70.12	-20.37	32.29	7.01	37.5	180	140	Peak
5981.775	52.13	50.19	68.2	-16.07	32.37	7.08	37.51	180	140	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5639.775	50.21	49.11	68.2	-17.99	31.82	6.56	37.28	176	194	Peak
5651.65	48.01	46.82	69.43	-21.42	31.85	6.62	37.28	176	194	Peak
5922.875	50.02	48.22	69.77	-19.75	32.29	7.01	37.5	176	194	Peak
5932.85	52.26	50.46	68.2	-15.94	32.29	7.01	37.5	176	194	Peak

Remarks:

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

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	Getaz Yang

<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
5564.25	53.03	51.98	68.2	-15.17	31.68	6.49	37.12	173	140	Peak
5651.65	50.27	49.08	69.43	-19.16	31.85	6.62	37.28	173	140	Peak
5785	94.75	93.43			32.04	6.82	37.54	173	140	Average
5785	103.95	102.63			32.04	6.82	37.54	173	140	Peak
5912.425	52.24	50.47	77.48	-25.24	32.26	7.01	37.5	173	140	Peak
6014.075	51.95	49.86	68.2	-16.25	32.45	7.14	37.5	173	140	Peak
11570	46.59	49.06	54	-7.41	39.78	10.76	53.01	149	124	Average
11570	58.82	61.29	74	-15.18	39.78	10.76	53.01	149	124	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5616.975	50.67	49.54	68.2	-17.53	31.79	6.56	37.22	268	210	Peak
5663.525	51.38	50.25	78.24	-26.86	31.85	6.62	37.34	268	210	Peak
5785	93.02	91.7			32.04	6.82	37.54	268	210	Average
5785	102.11	100.79			32.04	6.82	37.54	268	210	Peak
5920.975	51.25	49.48	71.17	-19.92	32.26	7.01	37.5	268	210	Peak
5947.575	52.38	50.48	68.2	-15.82	32.32	7.08	37.5	268	210	Peak
11570	44.27	47.06	54	-9.73	39.78	10.76	53.33	129	225	Average
11570	56.69	59.48	74	-17.31	39.78	10.76	53.33	129	225	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
5564.25	53.03	51.98	68.2	-15.17	31.68	6.49	37.12	173	140	Peak
5651.65	50.27	49.08	69.43	-19.16	31.85	6.62	37.28	173	140	Peak
5912.425	52.24	50.47	77.48	-25.24	32.26	7.01	37.5	173	140	Peak
6014.075	51.95	49.86	68.2	-16.25	32.45	7.14	37.5	173	140	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5616.975	50.67	49.54	68.2	-17.53	31.79	6.56	37.22	268	210	Peak
5663.525	51.38	50.25	78.24	-26.86	31.85	6.62	37.34	268	210	Peak
5920.975	51.25	49.48	71.17	-19.92	32.26	7.01	37.5	268	210	Peak
5947.575	52.38	50.48	68.2	-15.82	32.32	7.08	37.5	268	210	Peak

Remarks:

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

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	Getaz Yang

<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
5627.9	51.02	49.89	68.2	-17.18	31.79	6.56	37.22	167	136	Peak
5656.4	49.99	48.86	72.95	-22.96	31.85	6.62	37.34	167	136	Peak
5825	93.33	91.86			32.12	6.88	37.53	167	136	Average
5825	102.77	101.3			32.12	6.88	37.53	167	136	Peak
5921.925	51.27	49.47	70.47	-19.2	32.29	7.01	37.5	167	136	Peak
5953.275	52.01	50.11	68.2	-16.19	32.32	7.08	37.5	167	136	Peak
11650	46.53	49.22	54	-7.47	39.65	10.8	53.14	229	128	Average
11650	58.31	61	74	-15.69	39.65	10.8	53.14	229	128	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5608.9	51.39	50.28	68.2	-16.81	31.77	6.56	37.22	310	197	Peak
5653.075	50.06	48.87	70.49	-20.43	31.85	6.62	37.28	310	197	Peak
5825	91.03	89.56			32.12	6.88	37.53	310	197	Average
5825	100.24	98.77			32.12	6.88	37.53	310	197	Peak
5922.875	50.8	49	69.77	-18.97	32.29	7.01	37.5	310	197	Peak
5945.675	51.64	49.74	68.2	-16.56	32.32	7.08	37.5	310	197	Peak
11650	44.23	47.13	54	-9.77	39.65	10.8	53.35	116	258	Average
11650	55.92	58.82	74	-18.08	39.65	10.8	53.35	116	258	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
5627.9	51.02	49.89	68.2	-17.18	31.79	6.56	37.22	167	136	Peak
5656.4	49.99	48.86	72.95	-22.96	31.85	6.62	37.34	167	136	Peak
5921.925	51.27	49.47	70.47	-19.2	32.29	7.01	37.5	167	136	Peak
5953.275	52.01	50.11	68.2	-16.19	32.32	7.08	37.5	167	136	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5608.9	51.39	50.28	68.2	-16.81	31.77	6.56	37.22	310	197	Peak
5653.075	50.06	48.87	70.49	-20.43	31.85	6.62	37.28	310	197	Peak
5922.875	50.8	49	69.77	-18.97	32.29	7.01	37.5	310	197	Peak
5945.675	51.64	49.74	68.2	-16.56	32.32	7.08	37.5	310	197	Peak

Remarks:

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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5149.85	58.88	58.54	74	-15.12	31.32	6.34	37.32	183	140	Peak
5150	47.58	47.24	54	-6.42	31.32	6.34	37.32	183	140	Average
5190	91.18	90.79			31.35	6.38	37.34	183	140	Average
5190	101.06	100.67			31.35	6.38	37.34	183	140	Peak
5355.94	52.76	51.99	74	-21.24	31.48	6.47	37.18	183	140	Peak
5356.05	45.07	44.3	54	-8.93	31.48	6.47	37.18	183	140	Average
*10380	54.8	57.83	68.2	-13.4	39.21	10.21	52.45	229	173	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	58.83	58.49	74	-15.17	31.32	6.34	37.32	184	222	Peak
5150	48	47.66	54	-6	31.32	6.34	37.32	184	222	Average
5190	91.51	91.12			31.35	6.38	37.34	184	222	Average
5190	100.85	100.46			31.35	6.38	37.34	184	222	Peak
5356.05	45.68	44.91	54	-8.32	31.48	6.47	37.18	184	222	Average
5356.49	52.85	52.08	74	-21.15	31.48	6.47	37.18	184	222	Peak
*10380	55.35	58.18	68.2	-12.85	39.21	10.21	52.25	214	8	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5144.45	50.79	50.46	74	-23.21	31.32	6.33	37.32	176	138	Peak
5148.05	41.26	40.92	54	-12.74	31.32	6.34	37.32	176	138	Average
5230	91.54	91.06			31.39	6.41	37.32	176	138	Average
5230	101.75	101.27			31.39	6.41	37.32	176	138	Peak
5382.01	43.32	42.52	54	-10.68	31.51	6.47	37.18	176	138	Average
5407.42	52.11	51.29	74	-21.89	31.52	6.48	37.18	176	138	Peak
*10460	54.67	57.72	68.2	-13.53	39.32	10.22	52.59	241	117	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5105.9	51.73	51.42	74	-22.27	31.29	6.3	37.28	186	227	Peak
5148.05	41.58	41.24	54	-12.42	31.32	6.34	37.32	186	227	Average
5230	91.36	90.88			31.39	6.41	37.32	186	227	Average
5230	101.16	100.68			31.39	6.41	37.32	186	227	Peak
5382.01	44.31	43.51	54	-9.69	31.51	6.47	37.18	186	227	Average
5447.68	52.75	51.82	74	-21.25	31.56	6.5	37.13	186	227	Peak
*10460	54.81	57.87	68.2	-13.39	39.32	10.22	52.6	117	63	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5132.3	51.4	51.07	74	-22.6	31.31	6.32	37.3	185	140	Peak
5147.9	42.31	41.97	54	-11.69	31.32	6.34	37.32	185	140	Average
5270	92.03	91.45			31.41	6.44	37.27	185	140	Average
5270	100.75	100.17			31.41	6.44	37.27	185	140	Peak
5382.12	44.64	43.84	54	-9.36	31.51	6.47	37.18	185	140	Average
5459.67	52.68	51.69	74	-21.32	31.56	6.51	37.08	185	140	Peak
10540	53.71	56.8	74	-20.29	39.46	10.31	52.86	174	223	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	41.65	41.31	54	-12.35	31.32	6.34	37.32	181	215	Average
5147.9	51.52	51.18	74	-22.48	31.32	6.34	37.32	181	215	Peak
5270	89.88	89.3			31.41	6.44	37.27	181	215	Average
5270	98.9	98.32			31.41	6.44	37.27	181	215	Peak
5382.12	44.61	43.81	54	-9.39	31.51	6.47	37.18	181	215	Average
5382.23	52.33	51.53	74	-21.67	31.51	6.47	37.18	181	215	Peak
10540	52.9	55.82	74	-21.1	39.46	10.31	52.69	112	41	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read 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	51.85	51.51	74	-22.15	31.32	6.34	37.32	180	135	Peak
5148.05	42.25	41.91	54	-11.75	31.32	6.34	37.32	180	135	Average
5310	92.51	91.79			31.45	6.46	37.19	180	135	Average
5310	101.3	100.58			31.45	6.46	37.19	180	135	Peak
5350	46.98	46.21	54	-7.02	31.48	6.47	37.18	180	135	Average
5351.1	56.87	56.1	74	-17.13	31.48	6.47	37.18	180	135	Peak
10620	44.74	47.85	54	-9.26	39.59	10.39	53.09	175	256	Average
10620	54.62	57.73	74	-19.38	39.59	10.39	53.09	175	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
5122.55	50.65	50.33	74	-23.35	31.31	6.31	37.3	186	214	Peak
5148.05	41.86	41.52	54	-12.14	31.32	6.34	37.32	186	214	Average
5310	90.69	89.97			31.45	6.46	37.19	186	214	Average
5310	100.4	99.68			31.45	6.46	37.19	186	214	Peak
5350	45.92	45.15	54	-8.08	31.48	6.47	37.18	186	214	Average
5350.22	56.13	55.36	74	-17.87	31.48	6.47	37.18	186	214	Peak
10620	45.59	47.95	54	-8.41	39.59	10.39	52.34	131	48	Average
10620	54.49	56.85	74	-19.51	39.59	10.39	52.34	131	48	Peak

Remarks:

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

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

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5381.84	42.9	42.1	54	-11.1	31.51	6.47	37.18	183	146	Average
5460.08	52.75	51.76	74	-21.25	31.56	6.51	37.08	183	146	Peak
*5470.64	63.27	62.26	68.2	-4.93	31.57	6.52	37.08	183	146	Peak
5510	92.41	91.32			31.6	6.55	37.06	183	146	Average
5510	102.27	101.18			31.6	6.55	37.06	183	146	Peak
*5724.84	50.78	49.49	68.2	-17.42	31.96	6.76	37.43	183	146	Peak
11020	45.6	47.95	54	-8.4	40.19	10.41	52.95	174	250	Average
11020	55.69	58.04	74	-18.31	40.19	10.41	52.95	174	250	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.39	41.59	54	-11.61	31.51	6.47	37.18	169	215	Average
5460.08	53.38	52.39	74	-20.62	31.56	6.51	37.08	169	215	Peak
*5470.8	60.94	59.93	68.2	-7.26	31.57	6.52	37.08	169	215	Peak
5510	91.97	90.88			31.6	6.55	37.06	169	215	Average
5510	101.45	100.36			31.6	6.55	37.06	169	215	Peak
*5725.56	50.58	49.29	68.2	-17.62	31.96	6.76	37.43	169	215	Peak
11020	45.85	48.74	54	-8.15	40.19	10.41	53.49	124	84	Average
11020	55.81	58.7	74	-18.19	40.19	10.41	53.49	124	84	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5382	42.19	41.39	54	-11.81	31.51	6.47	37.18	181	144	Average
5434.8	51.75	50.84	74	-22.25	31.55	6.49	37.13	181	144	Peak
*5470.96	49.93	48.92	68.2	-18.27	31.57	6.52	37.08	181	144	Peak
5550	93.17	91.97			31.68	6.61	37.09	181	144	Average
5550	103.31	102.11			31.68	6.61	37.09	181	144	Peak
*5726.04	50.57	49.28	68.2	-17.63	31.96	6.76	37.43	181	144	Peak
11100	46.76	48.86	54	-7.24	40.14	10.47	52.71	177	215	Average
11100	56.16	58.26	74	-17.84	40.14	10.47	52.71	177	215	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5354.96	51.59	50.82	54	-2.41	31.48	6.47	37.18	176	211	Peak
5382	41.78	40.98	74	-32.22	31.51	6.47	37.18	176	211	Average
*5469.36	50.65	49.64	68.2	-17.55	31.57	6.52	37.08	176	211	Peak
5550	93.2	92			31.68	6.61	37.09	176	211	Average
5550	102.6	101.4			31.68	6.61	37.09	176	211	Peak
*5725.64	50.9	49.61	68.2	-17.3	31.96	6.76	37.43	176	211	Peak
11100	45.75	48.75	54	-8.25	40.14	10.47	53.61	121	33	Average
11100	54.67	57.67	74	-19.33	40.14	10.47	53.61	121	33	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

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	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5381.84	51.25	50.45	54	-2.75	31.51	6.47	37.18	184	147	Peak
5382	41.69	40.89	74	-32.31	31.51	6.47	37.18	184	147	Average
*5470.48	50.41	49.4	68.2	-17.79	31.57	6.52	37.08	184	147	Peak
5670	91.66	90.4			31.88	6.72	37.34	184	147	Average
5670	101.43	100.17			31.88	6.72	37.34	184	147	Peak
*5724.28	51.47	50.18	68.2	-16.73	31.96	6.76	37.43	184	147	Peak
11340	46.77	48.97	54	-7.23	40	10.52	52.72	184	265	Average
11340	56	58.2	74	-18	40	10.52	52.72	184	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
5382	41.66	40.86	54	-12.34	31.51	6.47	37.18	159	212	Average
5382.16	51.78	50.98	74	-22.22	31.51	6.47	37.18	159	212	Peak
*5469.68	50.21	49.2	68.2	-17.99	31.57	6.52	37.08	159	212	Peak
5670	89.75	88.49			31.88	6.72	37.34	159	212	Average
5670	99.42	98.16			31.88	6.72	37.34	159	212	Peak
*5724.44	52	50.71	68.2	-16.2	31.96	6.76	37.43	159	212	Peak
11340	45.75	47.74	54	-8.25	40	10.52	52.51	126	78	Average
11340	55.4	57.39	74	-18.6	40	10.52	52.51	126	78	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

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	Getaz Yang

<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
5637.4	51.45	50.35	68.2	-16.75	31.82	6.56	37.28	183	140	Peak
5656.875	50.45	49.32	73.31	-22.86	31.85	6.62	37.34	183	140	Peak
5755	90.13	88.84			32.01	6.75	37.47	183	140	Average
5755	99.53	98.24			32.01	6.75	37.47	183	140	Peak
5922.4	49.96	48.16	70.12	-20.16	32.29	7.01	37.5	183	140	Peak
5976.55	51.14	49.2	68.2	-17.06	32.37	7.08	37.51	183	140	Peak
11510	45.1	47.32	54	-8.9	39.9	10.69	52.81	208	69	Average
11510	56.84	59.06	74	-17.16	39.9	10.69	52.81	208	69	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5580.875	52.36	51.32	68.2	-15.84	31.71	6.49	37.16	307	194	Peak
5660.2	50.88	49.75	75.77	-24.89	31.85	6.62	37.34	307	194	Peak
5755	87.04	85.75			32.01	6.75	37.47	307	194	Average
5755	96.96	95.67			32.01	6.75	37.47	307	194	Peak
5914.8	51.6	49.83	75.72	-24.12	32.26	7.01	37.5	307	194	Peak
5952.8	51.85	49.95	68.2	-16.35	32.32	7.08	37.5	307	194	Peak
11510	44.65	47.13	54	-9.35	39.9	10.69	53.07	134	319	Average
11510	56.51	58.99	74	-17.49	39.9	10.69	53.07	134	319	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
5637.4	51.45	50.35	68.2	-16.75	31.82	6.56	37.28	183	140	Peak
5656.875	50.45	49.32	73.31	-22.86	31.85	6.62	37.34	183	140	Peak
5922.4	49.96	48.16	70.12	-20.16	32.29	7.01	37.5	183	140	Peak
5976.55	51.14	49.2	68.2	-17.06	32.37	7.08	37.51	183	140	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5580.875	52.36	51.32	68.2	-15.84	31.71	6.49	37.16	307	194	Peak
5660.2	50.88	49.75	75.77	-24.89	31.85	6.62	37.34	307	194	Peak
5914.8	51.6	49.83	75.72	-24.12	32.26	7.01	37.5	307	194	Peak
5952.8	51.85	49.95	68.2	-16.35	32.32	7.08	37.5	307	194	Peak

Remarks:

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

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	Getaz Yang

<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
5633.6	50.59	49.49	68.2	-17.61	31.82	6.56	37.28	174	147	Peak
5652.6	50.08	48.89	70.13	-20.05	31.85	6.62	37.28	174	147	Peak
5795	88.28	86.93			32.07	6.82	37.54	174	147	Average
5795	98.24	96.89			32.07	6.82	37.54	174	147	Peak
5916.225	50.7	48.93	74.67	-23.97	32.26	7.01	37.5	174	147	Peak
5958.025	51.77	49.85	68.2	-16.43	32.34	7.08	37.5	174	147	Peak
11590	44.99	47.48	54	-9.01	39.74	10.78	53.01	197	342	Average
11590	56.22	58.71	74	-17.78	39.74	10.78	53.01	197	342	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5635.5	51.42	50.32	68.2	-16.78	31.82	6.56	37.28	302	200	Peak
5653.075	51.4	50.21	70.49	-19.09	31.85	6.62	37.28	302	200	Peak
5795	86.14	84.79			32.07	6.82	37.54	302	200	Average
5795	96.23	94.88			32.07	6.82	37.54	302	200	Peak
5924.3	50.91	49.11	68.72	-17.81	32.29	7.01	37.5	302	200	Peak
5937.6	51.15	49.35	68.2	-17.05	32.29	7.01	37.5	302	200	Peak
11590	44.46	47.27	54	-9.54	39.74	10.78	53.33	113	127	Average
11590	56	58.81	74	-18	39.74	10.78	53.33	113	127	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
5633.6	50.59	12.21	68.2	-17.61	31.82	6.56	0	174	147	Peak
5652.6	50.08	11.61	70.13	-20.05	31.85	6.62	0	174	147	Peak
5916.225	50.7	11.43	74.67	-23.97	32.26	7.01	0	174	147	Peak
5958.025	51.77	12.35	68.2	-16.43	32.34	7.08	0	174	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
5635.5	51.42	50.32	68.2	-16.78	31.82	6.56	37.28	302	200	Peak
5653.075	51.4	50.21	70.49	-19.09	31.85	6.62	37.28	302	200	Peak
5924.3	50.91	49.11	68.72	-17.81	32.29	7.01	37.5	302	200	Peak
5937.6	51.15	49.35	68.2	-17.05	32.29	7.01	37.5	302	200	Peak

Remarks:

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

9 kHz ~ 30 MHz DATA:

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

30 MHz ~ 1 GHz WORST-CASE DATA:

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 140	Frequency Range	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	Detector Function	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	Tested By	Getaz Yang

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.62	29.69	51.15	40	-10.31	9.57	0.65	31.68	100	122	Peak
148.34	35.53	53.54	43.5	-7.97	12.64	0.97	31.62	114	298	Peak
247.28	42.9	61.98	46	-3.1	11.36	1.46	31.9	106	308	QP
324.88	41.79	58.33	46	-4.21	13.54	1.77	31.85	100	114	QP
418	39.48	53.68	46	-6.52	15.7	2.14	32.04	103	111	Peak
792.42	30.43	36.08	46	-15.57	22.12	3.64	31.41	131	260	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
74.62	34.66	56.12	40	-5.34	9.57	0.65	31.68	112	147	QP
148.34	37.75	55.76	43.5	-5.75	12.64	0.97	31.62	126	338	Peak
247.28	40.93	60.01	46	-5.07	11.36	1.46	31.9	137	117	Peak
398.6	44.42	59.14	46	-1.58	15.31	2.09	32.12	129	13	Peak
593.57	42.94	52.79	46	-3.06	19.46	2.87	32.18	138	74	Peak
864.2	31.22	36.21	46	-14.78	23.05	3.9	31.94	119	237	Peak

Remarks:

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

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

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

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 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. 21, 2016	Nov. 20, 2017
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 22, 2016	Dec. 21, 2017
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 10, 2017	Mar. 09, 2018
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 15, 2017	Aug. 14, 2018
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 1.

3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

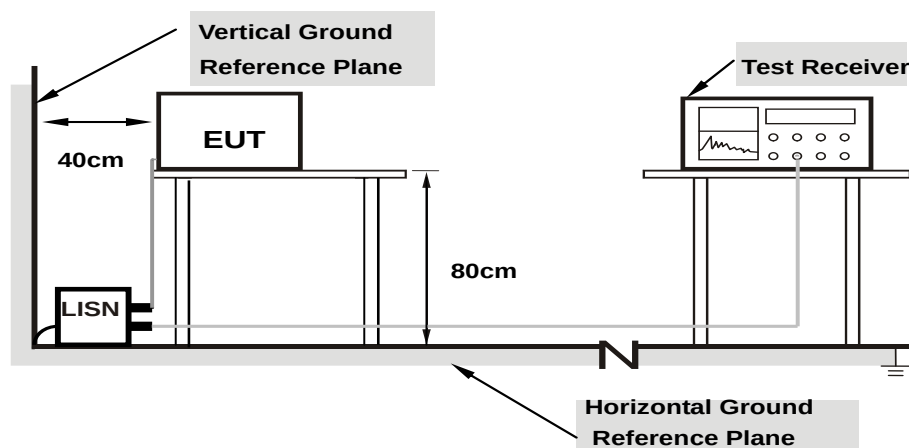
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

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

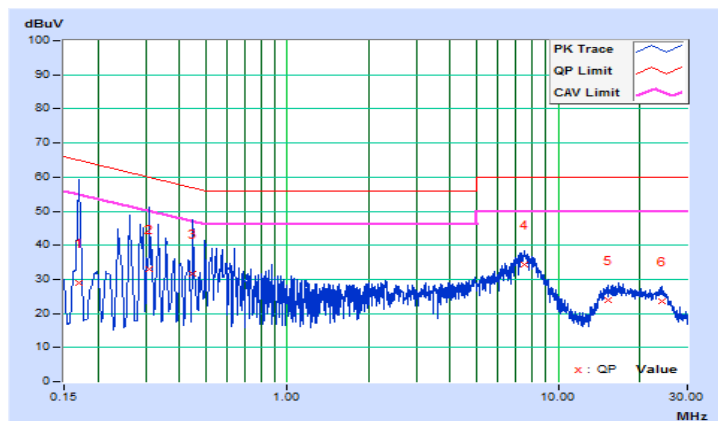
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	26°C, 72%RH
Tested by	Han Wu	Test Date	2017/8/22

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17000	10.35	18.70	4.73	29.05	15.08	64.96	54.96	-35.91	-39.88
2	0.31000	10.39	22.57	10.05	32.96	20.44	59.97	49.97	-27.01	-29.53
3	0.44999	10.40	21.36	10.48	31.76	20.88	56.88	46.88	-25.12	-26.00
4	7.54200	10.72	23.74	10.48	34.46	21.20	60.00	50.00	-25.54	-28.80
5	15.25000	11.10	12.96	2.53	24.06	13.63	60.00	50.00	-35.94	-36.37
6	24.20200	11.48	12.02	2.42	23.50	13.90	60.00	50.00	-36.50	-36.10

Remarks:

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

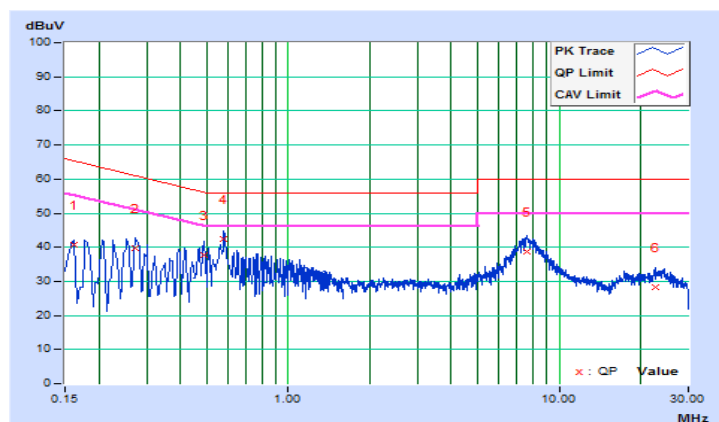


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Han Wu	Test Date	2017/8/25

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	0.16148	10.11	30.54	19.75	40.65	29.86	65.39	55.39	-24.74	-25.53
2	0.27400	10.15	29.46	18.56	39.61	28.71	61.00	51.00	-21.39	-22.29
3	0.49000	10.16	27.43	17.33	37.59	27.49	56.17	46.17	-18.58	-18.68
4	0.57796	10.16	32.14	25.06	42.30	35.22	56.00	46.00	-13.70	-10.78
5	7.56200	10.46	28.39	19.84	38.85	30.30	60.00	50.00	-21.15	-19.70
6	22.58600	11.02	17.39	10.66	28.41	21.68	60.00	50.00	-31.59	-28.32

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

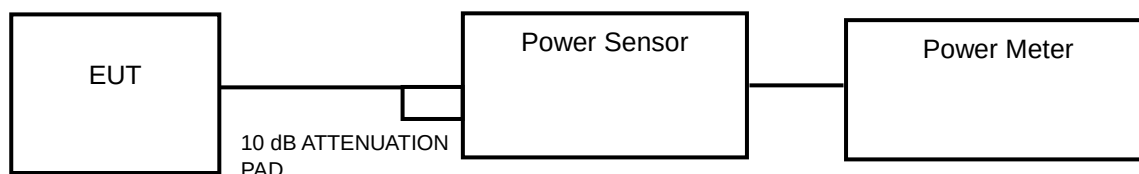
4.3.1 Limits of Transmit Power Measurement

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)

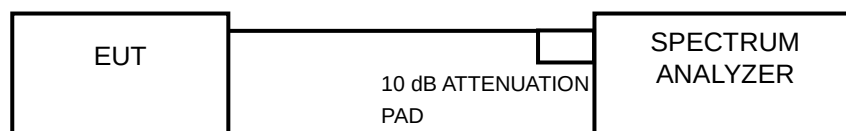
*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

<Power Output Measurement>



<26 dB Bandwidth>



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

Average Power Measurement

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

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

26 dB Bandwidth

- 1) Set RBW = approximately 1 % of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

Power Output:

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	25.293	14.03	24	Pass
44	5220	26.002	14.15	24	Pass
48	5240	23.823	13.77	24	Pass
52	5260	26.363	14.21	24	Pass
60	5300	29.309	14.67	24	Pass
64	5320	29.107	14.64	24	Pass
100	5500	27.416	14.38	24	Pass
116	5580	28.708	14.58	24	Pass
140	5700	22.336	13.49	24	Pass
149	5745	31.842	15.03	30	Pass
157	5785	36.898	15.67	30	Pass
165	5825	35.645	15.52	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log (30.85) = 25.89\text{dBm} > 24 \text{ dBm}.$
2. $11 \text{ dBm} + 10\log (38.67) = 26.87\text{dBm} > 24 \text{ dBm}.$
3. $11 \text{ dBm} + 10\log (40.22) = 27.04\text{dBm} > 24 \text{ dBm}.$
4. $11 \text{ dBm} + 10\log (37.24) = 26.71\text{dBm} > 24 \text{ dBm}.$
5. $11 \text{ dBm} + 10\log (35.72) = 26.53\text{dBm} > 24 \text{ dBm}.$
6. $11 \text{ dBm} + 10\log (27.78) = 25.44\text{dBm} > 24 \text{ dBm}.$

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	26.73	14.27	24	Pass
44	5220	27.227	14.35	24	Pass
48	5240	27.416	14.38	24	Pass
52	5260	27.29	14.36	24	Pass
60	5300	28.642	14.57	24	Pass
64	5320	28.51	14.55	24	Pass
100	5500	26.977	14.31	24	Pass
116	5580	26.73	14.27	24	Pass
140	5700	23.768	13.76	24	Pass
149	5745	30.409	14.83	30	Pass
157	5785	30.13	14.79	30	Pass
165	5825	29.242	14.66	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log (27.76) = 25.43\text{dBm} > 24 \text{ dBm}.$
2. $11 \text{ dBm} + 10\log (35.02) = 26.44\text{dBm} > 24 \text{ dBm}.$
3. $11 \text{ dBm} + 10\log (35.71) = 26.53\text{dBm} > 24 \text{ dBm}.$
4. $11 \text{ dBm} + 10\log (33.05) = 26.19\text{dBm} > 24 \text{ dBm}.$
5. $11 \text{ dBm} + 10\log (33.19) = 26.21\text{dBm} > 24 \text{ dBm}.$
6. $11 \text{ dBm} + 10\log (28.63) = 25.57\text{dBm} > 24 \text{ dBm}.$

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	13.366	11.26	24	Pass
46	5230	13.122	11.18	24	Pass
54	5270	13.677	11.36	24	Pass
62	5310	16.181	12.09	24	Pass
102	5510	14.06	11.48	24	Pass
110	5550	15.776	11.98	24	Pass
134	5670	14.622	11.65	24	Pass
151	5755	14.859	11.72	30	Pass
159	5795	15.885	12.01	30	Pass

Note:

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

1. $11 \text{ dBm} + 10\log (42.82) = 27.32\text{dBm} > 24 \text{ dBm}.$
2. $11 \text{ dBm} + 10\log (47.62) = 27.78\text{dBm} > 24 \text{ dBm}.$
3. $11 \text{ dBm} + 10\log (42.99) = 27.33\text{dBm} > 24 \text{ dBm}.$
4. $11 \text{ dBm} + 10\log (43.19) = 27.35\text{dBm} > 24 \text{ dBm}.$
5. $11 \text{ dBm} + 10\log (43.45) = 27.38\text{dBm} > 24 \text{ dBm}.$

26 dB Bandwidth:
802.11a

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	25.26
44	5220	28.14
48	5240	24.37
52	5260	30.85
60	5300	38.67
64	5320	40.22
100	5500	37.24
116	5580	35.72
140	5700	27.78

802.11n (HT20)

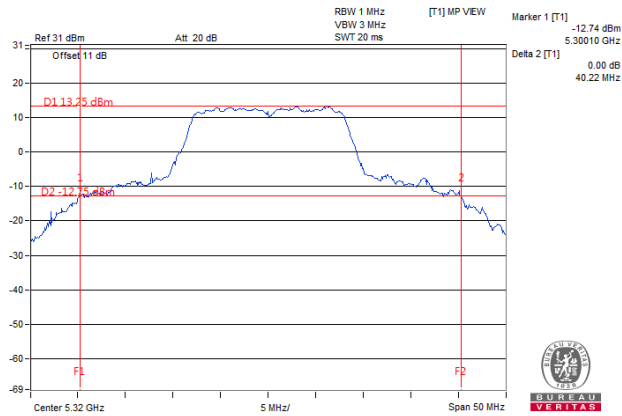
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	28.86
44	5220	27.73
48	5240	27.61
52	5260	27.76
60	5300	35.02
64	5320	35.71
100	5500	33.05
116	5580	33.19
140	5700	28.63

802.11n (HT40)

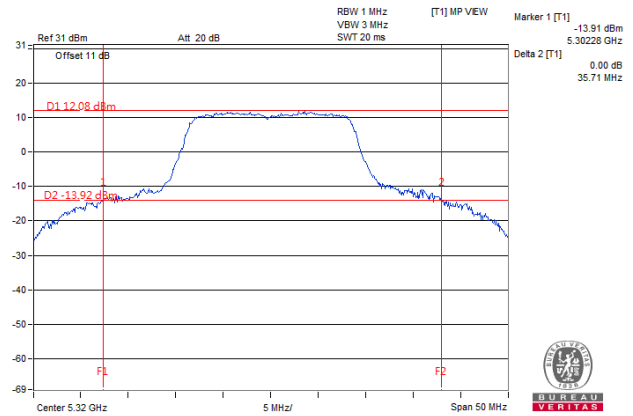
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
38	5190	43.49
46	5230	43.86
54	5270	42.82
62	5310	47.62
102	5510	42.99
110	5550	43.19
134	5670	43.45

Spectrum Plot of Worst Value

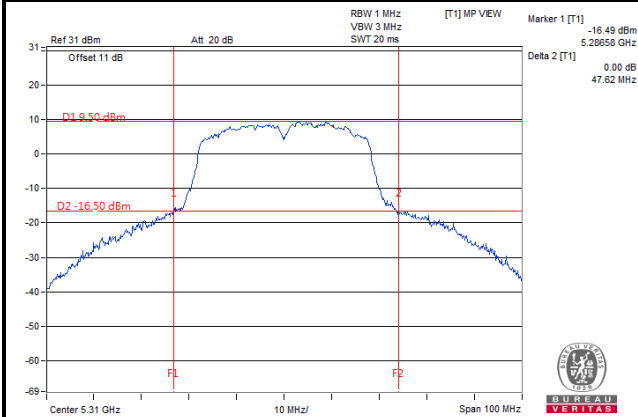
802.11a



802.11n (HT20)



802.11n (HT40)



Occupied Bandwidth

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
36	5180	16.77	Pass
44	5220	16.77	Pass
48	5240	16.73	Pass
52	5260	16.87	Pass
60	5300	17.45	Pass
64	5320	17.69	Pass
100	5500	17.01	Pass
116	5580	17.06	Pass
140	5700	16.82	Pass

802.11n (HT20)

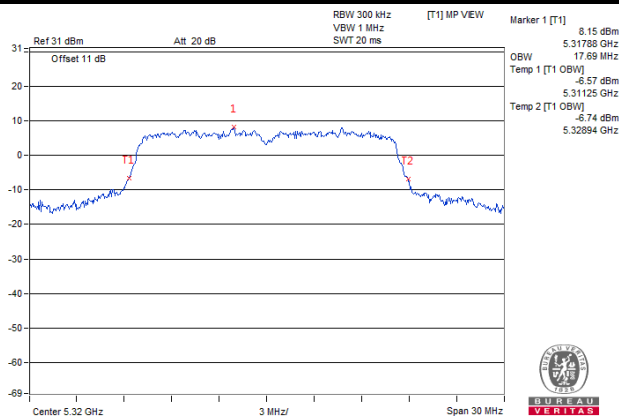
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
36	5180	17.83	Pass
44	5220	17.83	Pass
48	5240	17.83	Pass
52	5260	17.83	Pass
60	5300	18.02	Pass
64	5320	18.12	Pass
100	5500	17.88	Pass
116	5580	17.88	Pass
140	5700	17.83	Pass

802.11n (HT40)

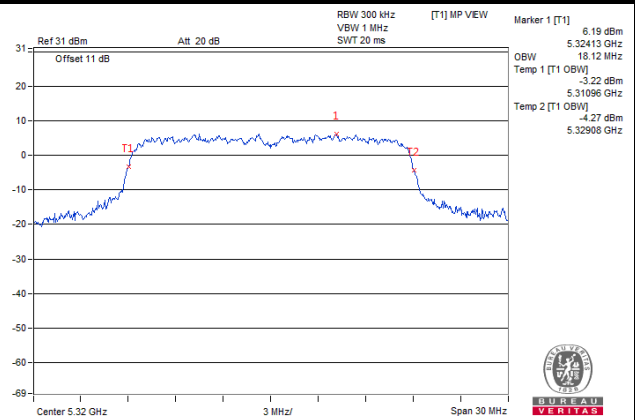
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
38	5190	36.02	Pass
46	5230	36.02	Pass
54	5270	35.89	Pass
62	5310	36.28	Pass
102	5510	36.02	Pass
110	5550	36.02	Pass
134	5670	36.02	Pass

Spectrum Plot of Worst Value

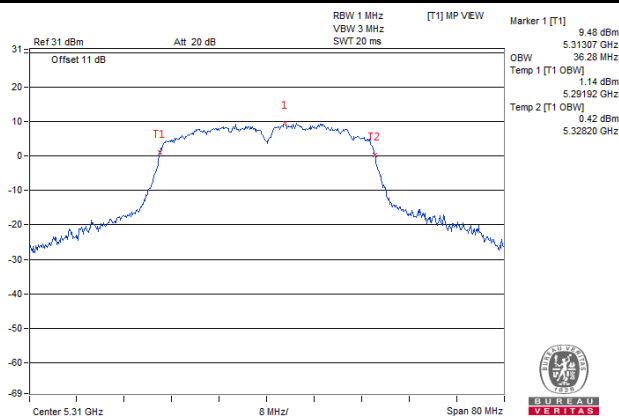
802.11a



802.11n (HT20)



802.11n (HT40)



Occupied Bandwidth

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
149	5745	17.40	Pass
157	5785	20.20	Pass
165	5825	20.85	Pass

802.11n (HT20)

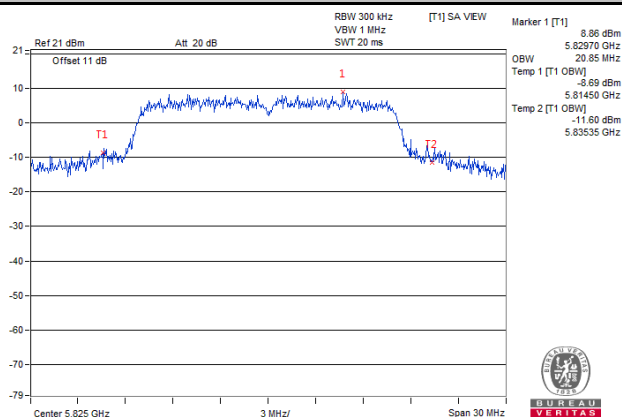
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
149	5745	17.93	Pass
157	5785	18.00	Pass
165	5825	17.95	Pass

802.11n (HT40)

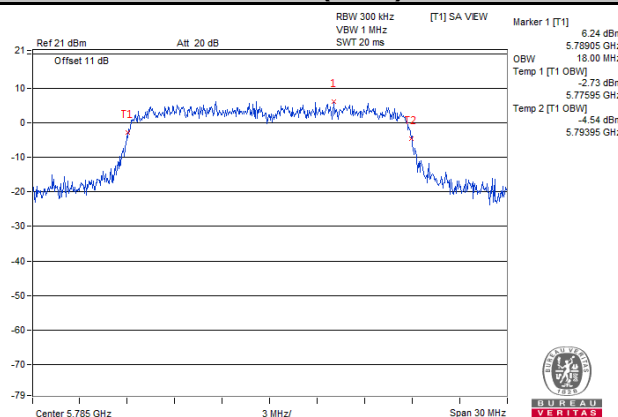
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Pass / Fail
151	5755	35.89	Pass
159	5795	35.83	Pass

Spectrum Plot of Worst Value

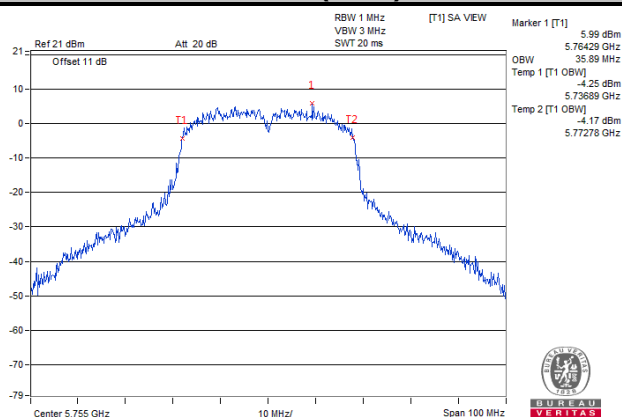
802.11a



802.11n (HT20)



802.11n (HT40)

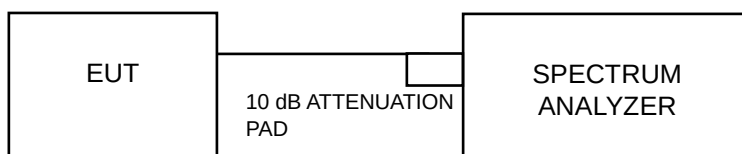


4.4 Peak Power Spectral Density Measurement

4.4.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17 dBm/MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11 dBm/MHz
U-NII-2A	√		11 dBm/MHz
U-NII-2C	√		11 dBm/MHz
U-NII-3	√		30 dBm/500 kHz

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.4.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW $\geq$ 3 RBW, Detector = RMS
3. Sweep time = auto, trigger set to "free run".
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

※For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 500 kHz, Set VBW $\geq$ 3 RBW, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
4. Sweep time = auto, trigger set to "free run".
5. Trace average at least 100 traces in power averaging mode.
6. Record the max value and add 10 log (1/duty cycle)

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

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

4.4.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

Channel	Frequency (MHz)	PSD (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
36	5180	1.76	11	Pass
44	5220	2.08	11	Pass
48	5240	2.19	11	Pass
52	5260	3.15	11	Pass
60	5300	4.05	11	Pass
64	5320	4.19	11	Pass
100	5500	4.33	11	Pass
116	5580	4.46	11	Pass
140	5700	2.48	11	Pass

802.11n (HT20)

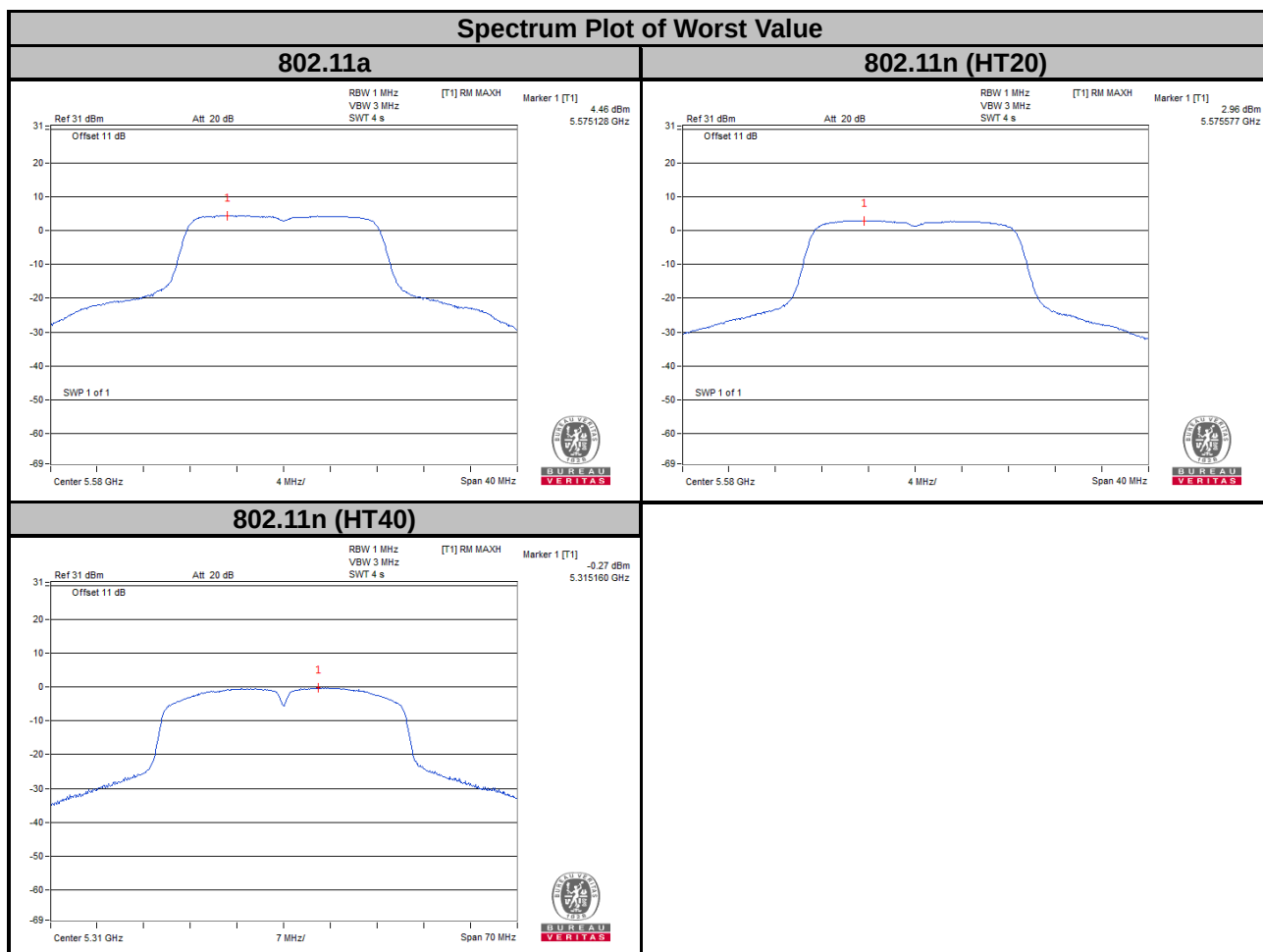
Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
36	5180	1.13	0.12	1.25	11	Pass
44	5220	1.24	0.12	1.36	11	Pass
48	5240	1.48	0.12	1.60	11	Pass
52	5260	2.10	0.12	2.22	11	Pass
60	5300	2.65	0.12	2.77	11	Pass
64	5320	2.91	0.12	3.03	11	Pass
100	5500	2.92	0.12	3.04	11	Pass
116	5580	2.96	0.12	3.08	11	Pass
140	5700	2.04	0.12	2.16	11	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
38	5190	-3.35	0.17	-3.18	11	Pass
46	5230	-2.92	0.17	-2.75	11	Pass
54	5270	-3.52	0.17	-3.35	11	Pass
62	5310	-0.27	0.17	-0.10	11	Pass
102	5510	-2.45	0.17	-2.28	11	Pass
110	5550	-1.51	0.17	-1.34	11	Pass
134	5670	-1.96	0.17	-1.79	11	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.



For U-NII-3 Band

802.11a

Channel	Frequency (MHz)	PSD (dBm/MHz)	Limit (dBm/500 kHz)	Pass / Fail
149	5745	1.60	30	Pass
157	5785	2.32	30	Pass
165	5825	2.57	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/500 kHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
149	5745	0.18	0.12	0.30	30	Pass
157	5785	0.32	0.12	0.44	30	Pass
165	5825	0.55	0.12	0.67	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

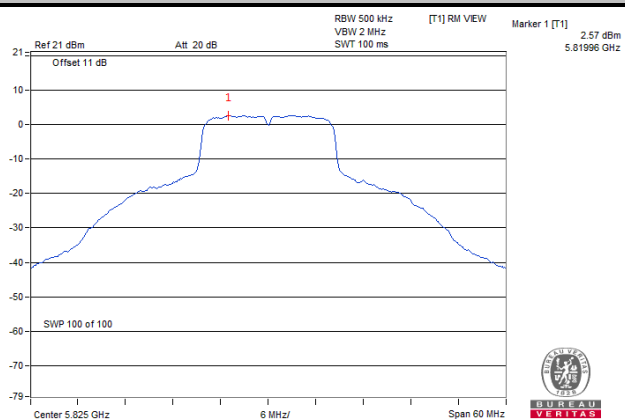
802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/500 kHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
151	5755	-5.86	0.17	-5.69	30	Pass
159	5795	-4.94	0.17	-4.77	30	Pass

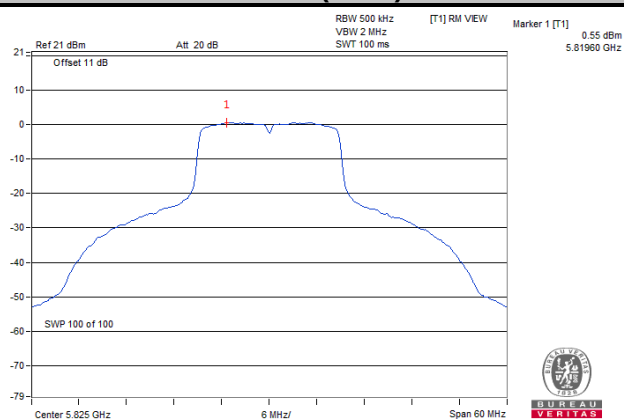
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

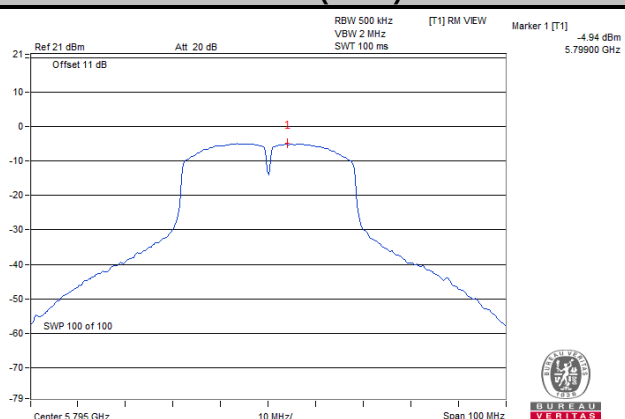
802.11a



802.11n (HT20)



802.11n (HT40)

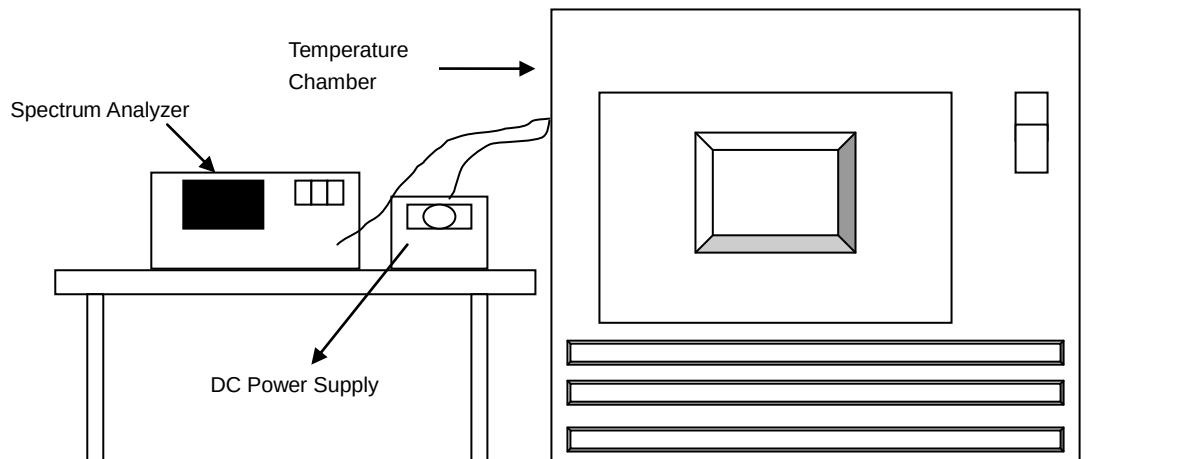


4.5 Frequency Stability

4.5.1 Limit of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation.

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.5.4 Test Procedure

- To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
- The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.5.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
50	3.7	5179.9785	-4.15000	5179.981	-3.67000	5179.9796	-3.94000	5179.9787	-4.11000
40	3.7	5180.0168	3.24000	5180.0163	3.15000	5180.0187	3.61000	5180.0188	3.63000
30	3.7	5179.9965	-0.68000	5179.9969	-0.60000	5179.994	-1.16000	5179.9988	-0.23000
20	3.7	5180.0217	4.19000	5180.0207	4.00000	5180.0201	3.88000	5180.019	3.67000
10	3.7	5179.9821	-3.46000	5179.9836	-3.17000	5179.9831	-3.26000	5179.9814	-3.59000
0	3.7	5179.976	-4.63000	5179.9753	-4.77000	5179.9752	-4.79000	5179.9767	-4.50000
-10	3.7	5180.0222	4.29000	5180.0212	4.09000	5180.0246	4.75000	5180.0245	4.73000
-20	3.7	5179.9864	-2.63000	5179.9852	-2.86000	5179.9836	-3.17000	5179.9855	-2.80000
-30	3.7	5179.9737	-5.08000	5179.9754	-4.75000	5179.9742	-4.98000	5179.9751	-4.81000

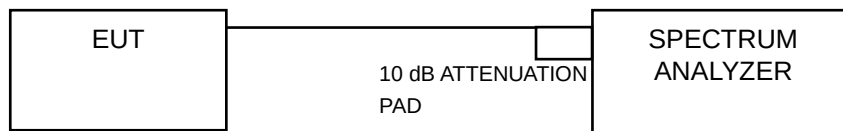
Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	4.255	5180.022	4.25000	5180.0203	3.92000	5180.0203	3.92000	5180.0182	3.51000
	3.7	5180.0217	4.19000	5180.0207	4.00000	5180.0201	3.88000	5180.019	3.67000
	3.145	5180.0225	4.34000	5180.0206	3.98000	5180.0201	3.88000	5180.0186	3.59000

4.6 6 dB Bandwidth Measurement

4.6.1 Limits of 6 dB Bandwidth Measurement

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

- Set resolution bandwidth (RBW) = 100 kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.55	0.5	Pass
157	5785	15.57	0.5	Pass
165	5825	15.18	0.5	Pass

802.11n (HT20)

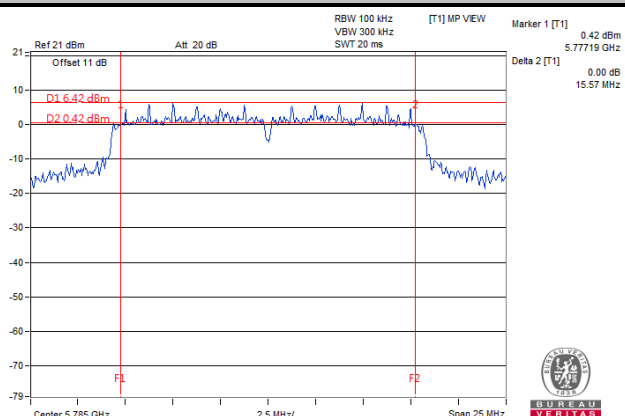
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.83	0.5	Pass
157	5785	16.82	0.5	Pass
165	5825	16.82	0.5	Pass

802.11n (HT40)

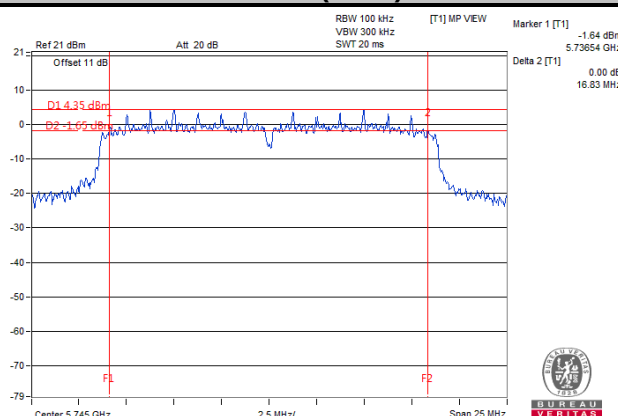
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	33.90	0.5	Pass
159	5795	32.66	0.5	Pass

Spectrum Plot of Worst Value

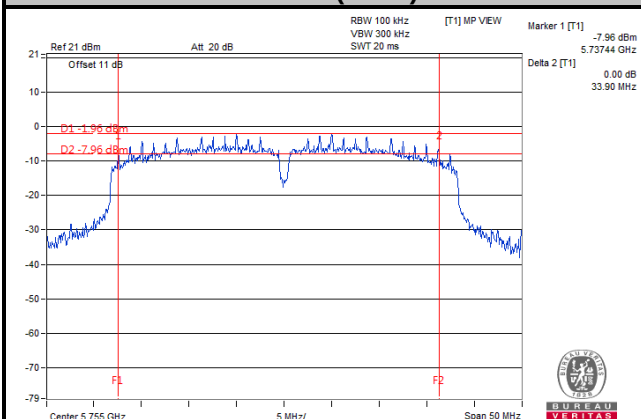
802.11a



802.11n (HT20)



802.11n (HT40)

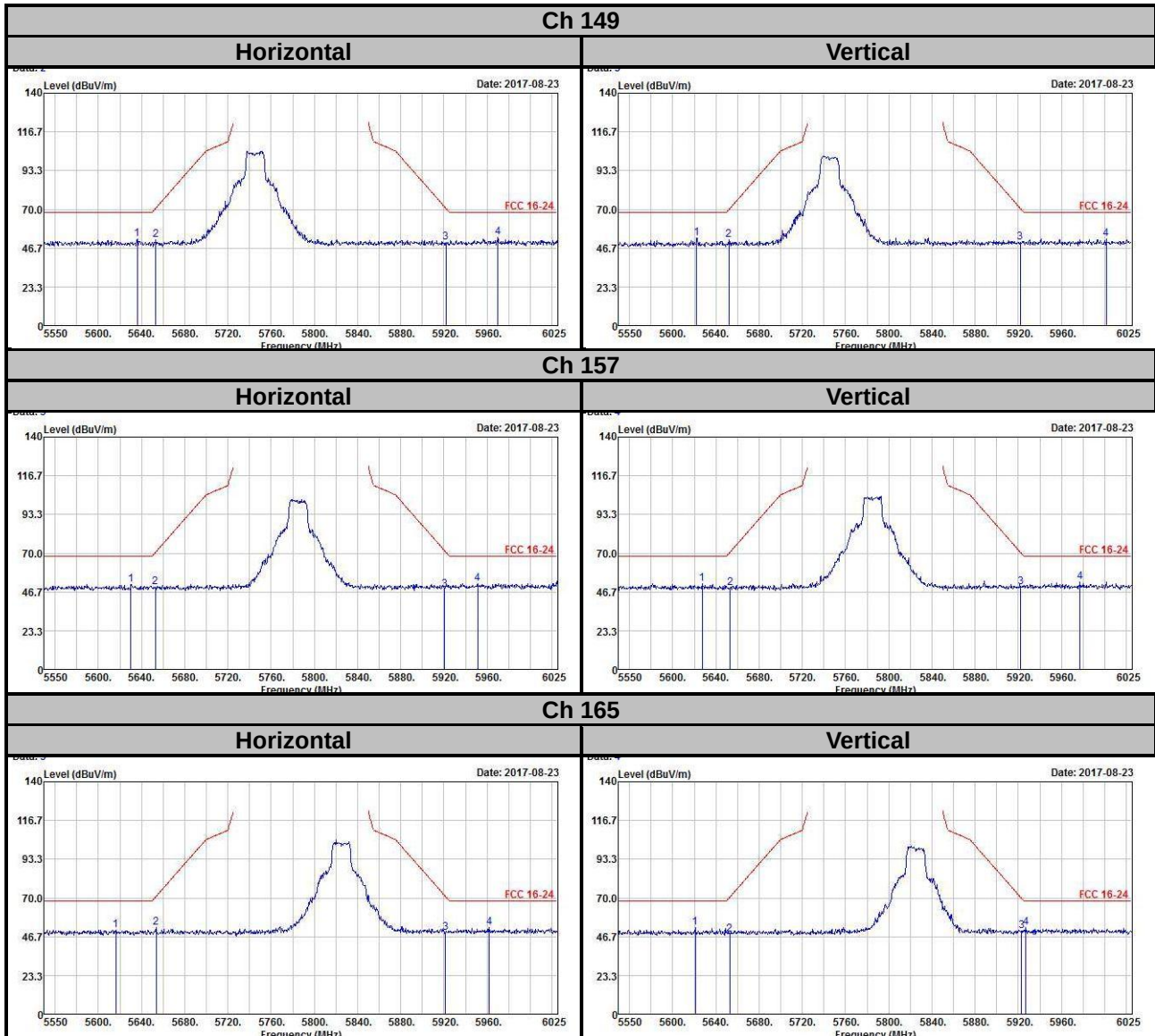


5 Pictures of Test Arrangements

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

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

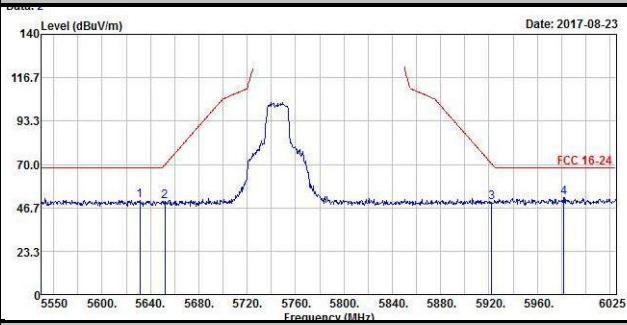
802.11a



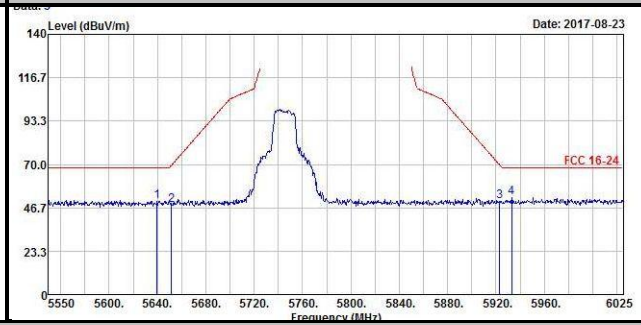
802.11n (HT20)

Ch 149

Horizontal

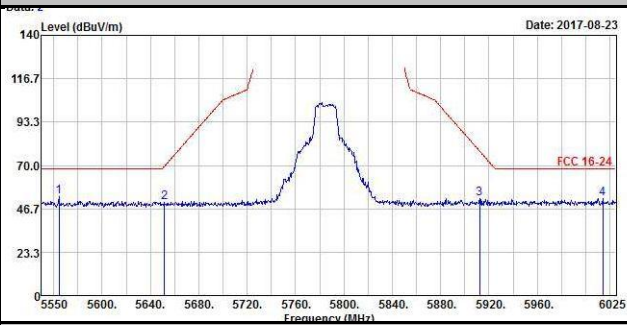


Vertical

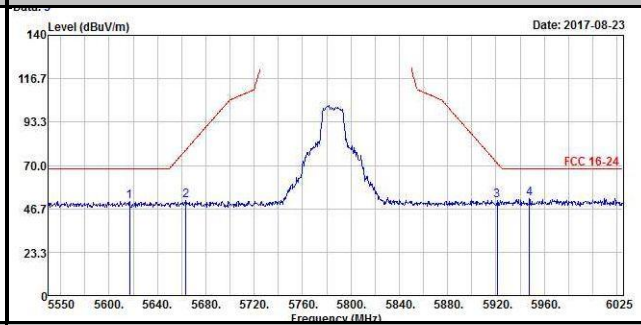


Ch 157

Horizontal

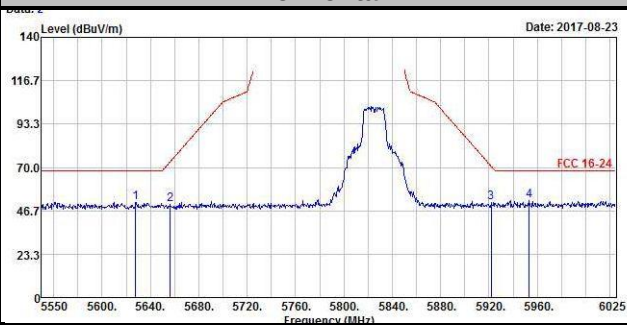


Vertical

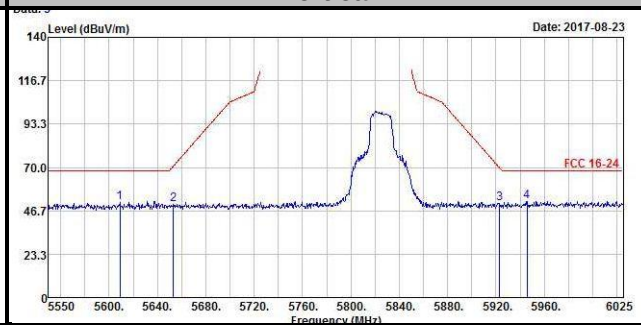


Ch 165

Horizontal



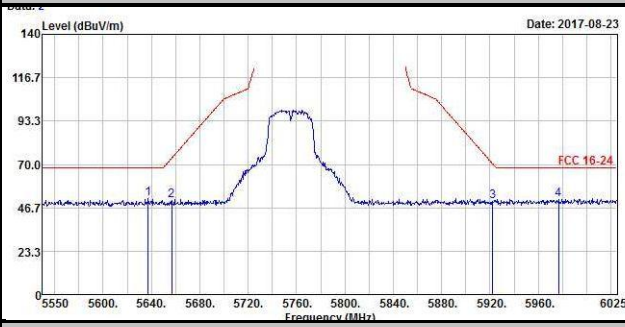
Vertical



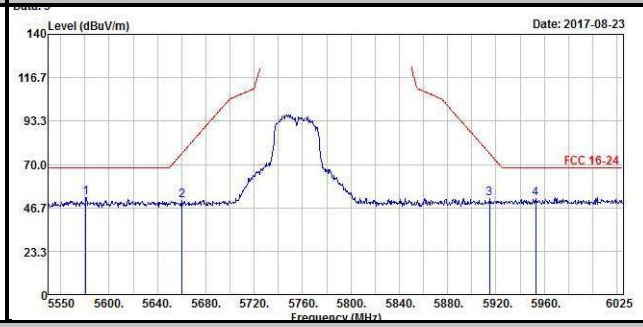
802.11n (HT40)

Ch 151

Horizontal

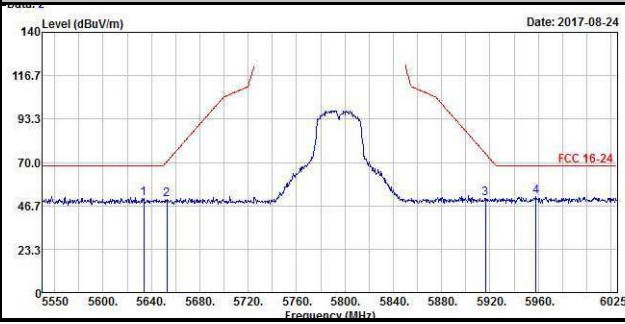


Vertical

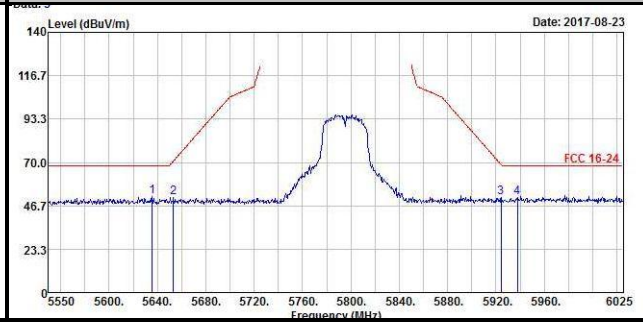


Ch 159

Horizontal



Vertical



Appendix – Information on the Testing Laboratories

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

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

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Web Site: www.bureauveritas-adt.com

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

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