FCC Test Report

Report No.:	RF160530C24-1
FCC ID:	A8J-ENS620EXT
Test Model:	ENS620EXT
Received Date:	May 30, 2016
Test Date:	Jun. 06 ~ Jul. 11, 2016
Issued Date:	Jul. 20, 2016
Applicant:	EnGenius Technologies
Address:	1580 Scenic Avenue, Costa Mesa, CA92626
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)
Test Location:	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

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Release Control Record

Issue No.	Description	Date Issued
RF160530C24-1	Original release.	Jul. 20, 2016

1 Certificate of Conformity

Product: AC1300 Dual Concurrent Outdoor Access Point

Brand: EnGenius

Test Model: ENS620EXT

Sample Status: Engineering sample

Applicant: EnGenius Technologies

Test Date: Jun. 06 ~ Jul. 11, 2016

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

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

Prepared by : _____ , **Date:** Jul. 20, 2016
Pettie Chen / Senior Specialist

Approved by : _____ , **Date:** Jul. 20, 2016
Ken Liu / Senior Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (SECTION 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -8.65dB at 0.36484MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.7dB at 5642.40, 5928.00MHz.
15.407(a) (1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a) (1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB 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	Antenna connector is RSMA not a standard connector.

*For U-NII-3 band compliance with rule part 15.407(b)(i), the OOBE 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	Expended Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.44 dB
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	AC1300 Dual Concurrent Outdoor Access Point
Brand	EnGenius
Test Model	ENS620EXT
Status of EUT	Engineering sample
Power Supply Rating	24Vdc (POE)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac: up to 867Mbps
Operating Frequency	5180 ~ 5240MHz & 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
Output Power	CDD Mode 5180 ~ 5240MHz: 44.993mW 5745 ~ 5825MHz: 399.999mW Beamforming Mode 5180 ~ 5240MHz: 22.386mW 5745 ~ 5825MHz: 166.164mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	POE
Data Cable Supplied	NA

Note:

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

Modulation Mode	Beamforming Mode	TX Function
802.11a	Not Support	2TX
802.11n (HT20)	Support	2TX
802.11n (HT40)	Support	2TX
802.11ac (VHT20)	Support	2TX
802.11ac (VHT40)	Support	2TX
802.11ac (VHT80)	Support	2TX

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

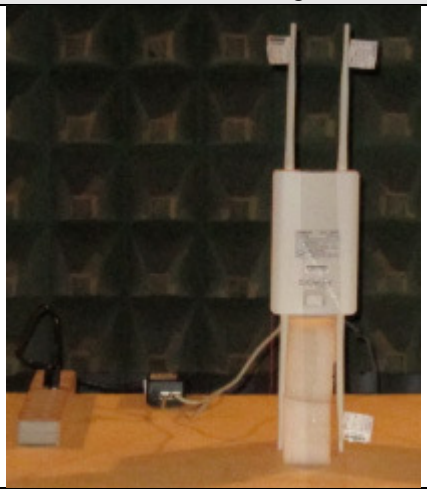
2. The EUT uses the following POE.

PoE	
Brand	EnGenius
Model	EPA2410GP
Input Power	100-240Vac ~ 0.4A,50-60Hz
Output Power	24Vdc, 1A
Power Line	0.55m non-shielded AC power cable without core

3. The following antenna was provided to the EUT.

Ant. Type	Dipole	
Connecter Type	RSMA	
Antenna Gain(dBi)		
2400MHz	2450MHz	2500MHz
5.08	5.13	5.17
5150MHz	5550MHz	5850MHz
5.12	5.09	5.17

4. The EUT will install at outdoor area, the highest antenna gain from the horizon above 30 degrees as below, for more detail information please refer to antenna specification and user manual

Antenna	Antenna gain	Antenna install degree
Dipole	4.45dBi	

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

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

FOR 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

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

Radiated Emission Test (Above 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
CDD Mode							
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (VHT80)		42	42	OFDM	BPSK	58.5
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac (VHT80)		155	155	OFDM	BPSK	58.5
Beamforming Mode							
-	802.11n (HT20)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (VHT80)		42	42	OFDM	BPSK	58.5
-	802.11n (HT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac (VHT80)		155	155	OFDM	BPSK	58.5

Radiated Emission Test (Below 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
CDD Mode							
-	802.11a	5180-5320 5745-5825	36 to 64 149 to 165	36	OFDM	BPSK	6.0

Power Line Conducted Emission Test:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
CDD Mode							
-	802.11a	5180-5320 5745-5825	36 to 64 149 to 165	36	OFDM	BPSK	6.0

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
CDD Mode							
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (VHT80)		42	42	OFDM	BPSK	58.5
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac (VHT80)		155	155	OFDM	BPSK	58.5
Beamforming Mode							
-	802.11n (HT20)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (VHT80)		42	42	OFDM	BPSK	58.5
-	802.11n (HT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac (VHT80)		155	155	OFDM	BPSK	58.5

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	16 deg. C, 70% RH	120Vac, 60Hz	Nick Hsu
RE<1G	16 deg. C, 70% RH	120Vac, 60Hz	Jones Chang
PLC	20 deg. C, 70% RH	120Vac, 60Hz	Jones Chang
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Antony Lee

3.3 Duty Cycle of Test Signal

CDD Mode

Duty cycle of test signal is > 98%, duty factor is not required

Duty cycle of test signal is < 98 %, duty factor is required

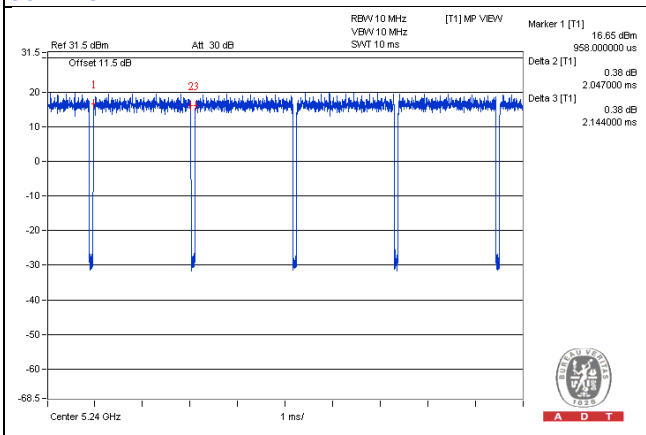
802.11a: Duty cycle = 2.047/2.144 =0.955, Duty factor = 10 * log(1/0.955) = 0.20

802.11n (HT20): Duty cycle = 4.983/5.085 =0.98

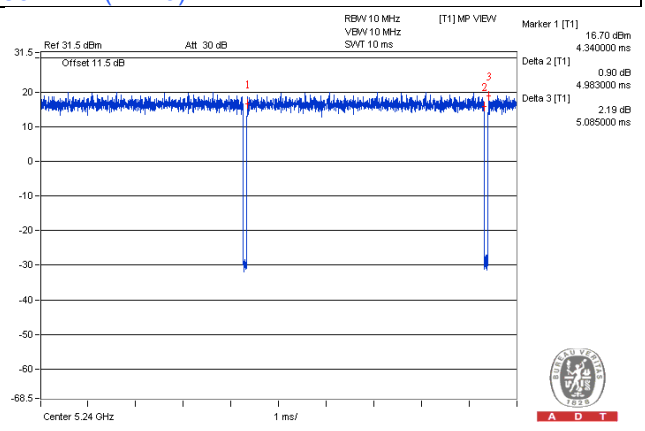
802.11n (HT40): Duty cycle = 2.415/2.520 =0.958, Duty factor = 10 * log(1/0.958) = 0.18

802.11ac (VHT80): Duty cycle = 1.132/1.237 =0.915, Duty factor = 10 * log(1/0.915) = 0.39

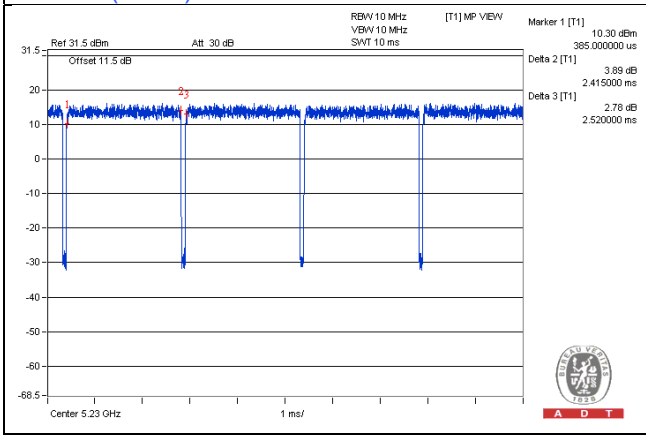
802.11a



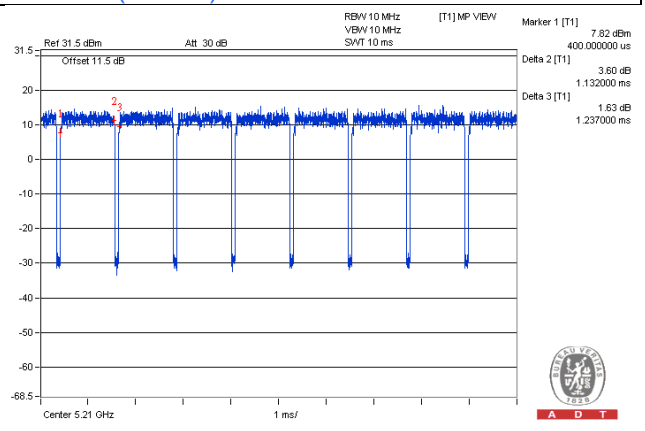
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

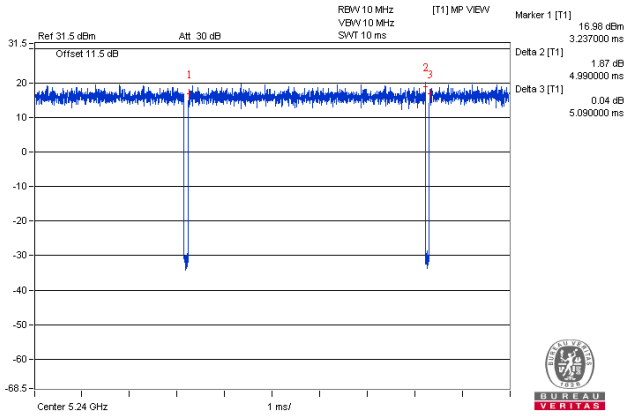


Beamforming Mode

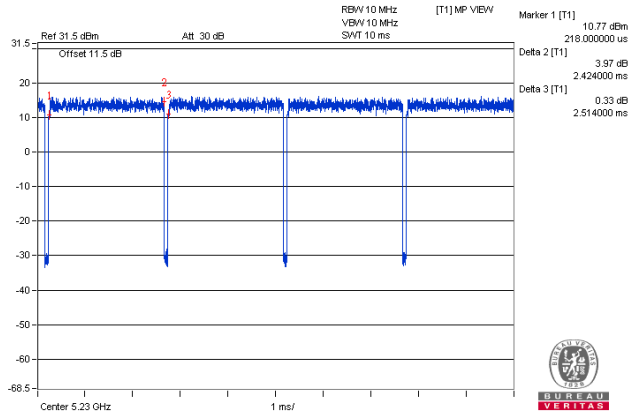
Duty cycle of test signal is > 98%, duty factor is not required
Duty cycle of test signal is < 98 %, duty factor is required

802.11n (HT20): Duty cycle = 4.99/5.09 = 0.98
802.11n (HT40): Duty cycle = 2.424/2.514 = 0.964, Duty factor = 10 * log(1/0.964) = 0.16
802.11ac (VHT80): Duty cycle = 1.127/1.232 =0.915, Duty factor = 10 * log(1/0.915) = 0.41

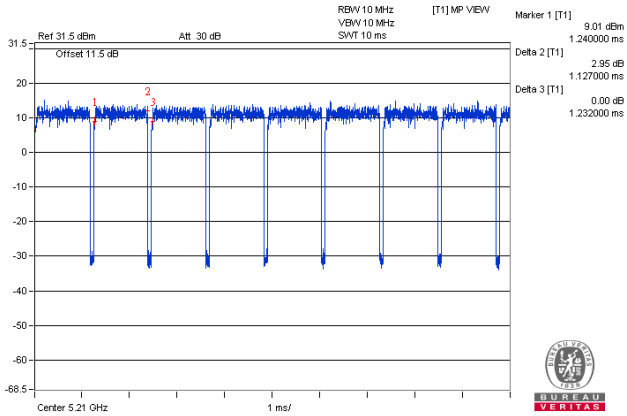
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



3.4 Description of Support Units

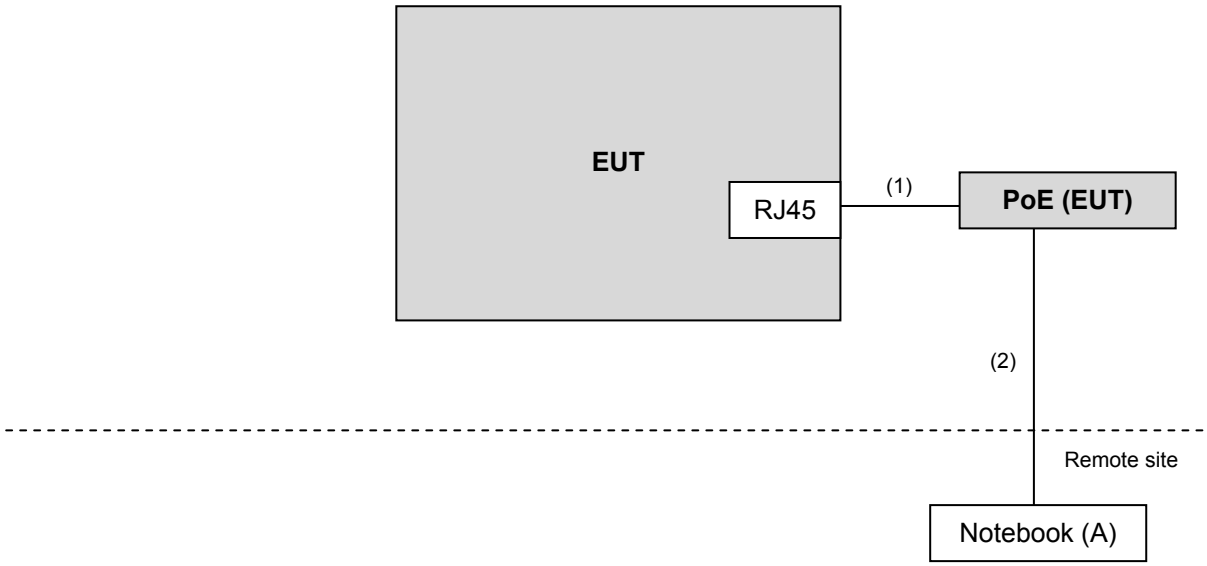
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	D531	CN-0XM006-48643-81 U-2973	QDS-BRCM1020	-

Note:
1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45	1	1.8	N	0	-
2.	RJ45	1	10	N	0	-

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standard

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 Procedure New Rules v01r02
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It 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.

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 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any Condition of modulation.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v01r02	FIELD STRENGTH at 3m	
	PK:74 (dBμV/m)	AV:54 (dBμV/m)
Applicable To	EIRP Limit	Equivalent Field Strength at 3m
15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)(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)	FIELD STRENGTH at 3m / § 15.247(d),	
	PK:74 (dBμV/m)	AV:54 (dBμV/m)

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

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

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

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

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Apr. 18, 2016	Apr. 17, 2017
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Sep. 02, 2015	Sep. 01, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Jan. 07, 2016	Jan. 06, 2017
HORN Antenna SCHWARZBECK	9120D	209	Jan. 20, 2016	Jan. 19, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Jan. 18, 2016	Jan. 17, 2017
Preamplifier Agilent	8447D	2944A10738	Oct.18, 2015	Oct. 17, 2016
Preamplifier Agilent	8449B	3008A01964	Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (214378)	Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 106	Cable-CH3-03 (309224+12738)	Aug. 22, 2015	Aug. 21, 2016
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2015	Oct. 17, 2016
High Speed Peak Power Meter	ML2495A	1232003	Oct. 07, 2015	Oct. 06, 2016
Power Sensor	MA2411B	1207333	Oct. 07, 2015	Oct. 06, 2016
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 08, 2016	Jun. 07, 2017

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 Chamber 3.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

4.1.3 Test Procedure

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

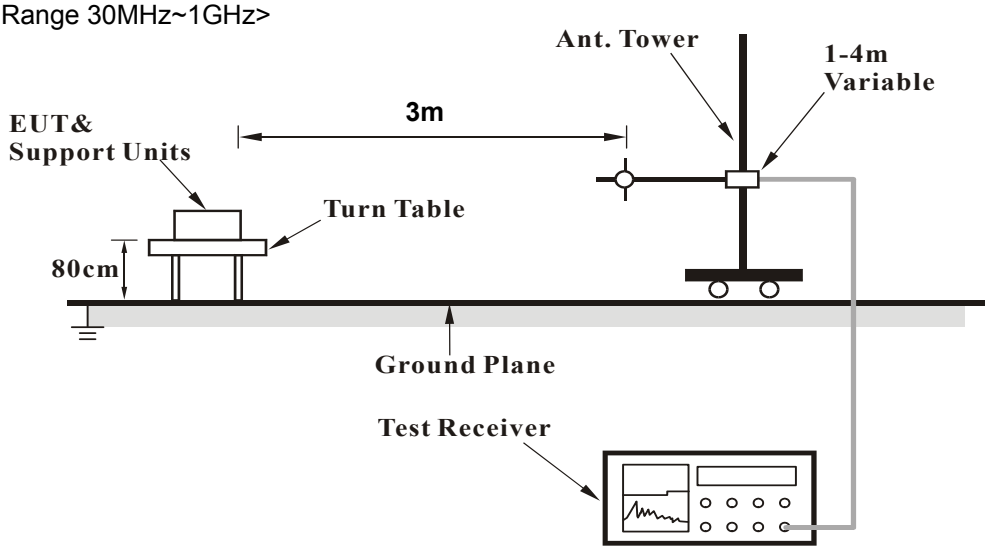
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

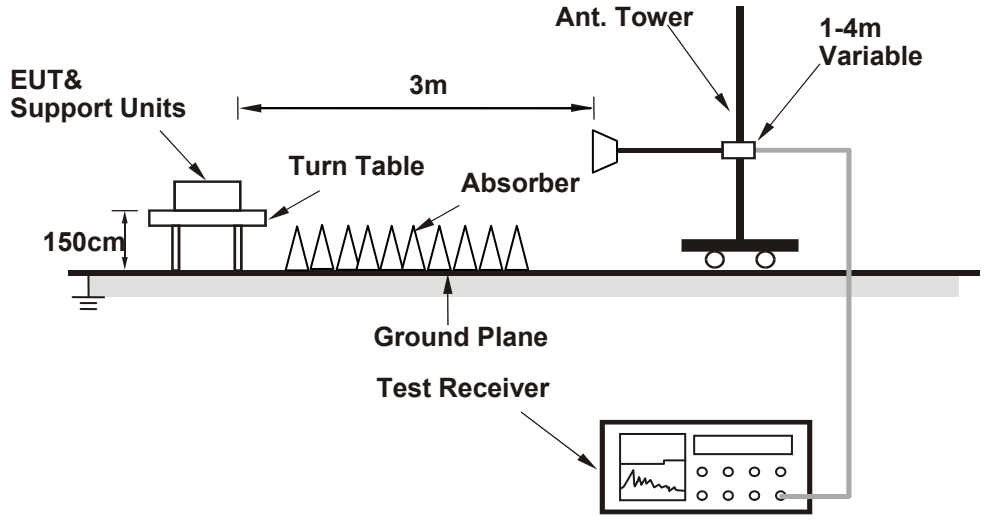
No deviation.

4.1.5 Test Setup

<Frequency Range 30MHz~1GHz>



<Frequency Range above 1GHz>



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

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

ABOVE 1GHz WORST-CASE DATA：

CDD Mode

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.5 PK	74.0	-17.5	1.15 H	164	50.50	6.00
2	5150.00	43.9 AV	54.0	-10.1	1.15 H	164	37.90	6.00
3	*5180.00	101.3 PK			1.01 H	131	61.90	39.40
4	*5180.00	90.3 AV			1.01 H	131	50.90	39.40
5	#6906.00	57.1 PK	68.2	-11.1	1.23 H	4	44.20	12.90
6	#10360.00	58.3 PK	74.0	-15.7	1.12 H	309	40.50	17.80
7	#10360.00	45.4 AV	54.0	-8.6	1.12 H	309	27.60	17.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.9 PK	74.0	-16.1	1.27 V	171	51.90	6.00
2	5150.00	45.6 AV	54.0	-8.4	1.27 V	171	39.60	6.00
3	*5180.00	111.3 PK			1.48 V	162	71.90	39.40
4	*5180.00	100.8 AV			1.48 V	162	61.40	39.40
5	#6906.00	58.7 PK	68.2	-9.5	1.61 V	339	45.80	12.90
6	#10360.00	57.2 PK	74.0	-16.8	1.28 V	252	39.40	17.80
7	#10360.00	44.5 AV	54.0	-9.5	1.28 V	252	26.70	17.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	100.0 PK			1.12 H	132	60.50	39.50
2	*5200.00	89.7 AV			1.12 H	132	50.20	39.50
3	#6933.00	58.2 PK	68.2	-10.0	1.26 H	6	45.10	13.10
4	#10400.00	58.7 PK	74.0	-15.3	1.17 H	87	41.00	17.70
5	#10400.00	46.8 AV	54.0	-7.2	1.17 H	87	29.10	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	111.7 PK			1.50 V	325	72.20	39.50
2	*5200.00	100.9 AV			1.50 V	325	61.40	39.50
3	#6933.00	59.1 PK	68.2	-9.1	1.49 V	338	46.00	13.10
4	#10400.00	59.5 PK	74.0	-14.5	1.30 V	265	41.80	17.70
5	#10400.00	46.4 AV	54.0	-7.6	1.30 V	265	28.70	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.8 PK			1.96 H	176	62.20	39.60
2	*5240.00	92.1 AV			1.96 H	176	52.50	39.60
3	5350.00	57.4 PK	74.0	-16.6	1.67 H	191	50.90	6.50
4	5350.00	45.2 AV	54.0	-8.8	1.67 H	191	38.70	6.50
5	#6986.00	58.0 PK	68.2	-10.2	1.88 H	342	44.50	13.50
6	#10480.00	60.3 PK	74.0	-13.7	1.39 H	246	41.60	18.70
7	#10480.00	47.0 AV	54.0	-7.0	1.39 H	246	28.30	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	111.2 PK			1.51 V	167	71.60	39.60
2	*5240.00	101.2 AV			1.51 V	167	61.60	39.60
3	5350.00	58.5 PK	74.0	-15.5	1.58 V	156	52.00	6.50
4	5350.00	46.4 AV	54.0	-7.6	1.58 V	156	39.90	6.50
5	#6986.00	58.9 PK	68.2	-9.3	1.49 V	342	45.40	13.50
6	#10480.00	59.3 PK	74.0	-14.7	1.38 V	224	40.60	18.70
7	#10480.00	47.0 AV	54.0	-7.0	1.38 V	224	28.30	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5641.60	57.0 PK	68.2	-11.2	1.49 H	282	49.90	7.10
2	*5745.00	106.9 PK			1.49 H	282	66.40	40.50
3	*5745.00	96.4 AV			1.49 H	282	55.90	40.50
4	#5972.80	58.3 PK	68.2	-9.9	1.49 H	282	50.40	7.90
5	11490.00	59.4 PK	74.0	-14.6	1.77 H	276	40.70	18.70
6	11490.00	47.4 AV	54.0	-6.6	1.77 H	276	28.70	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5623.20	58.9 PK	68.2	-9.3	1.51 V	199	51.80	7.10
2	*5745.00	121.0 PK			1.51 V	199	80.50	40.50
3	*5745.00	110.9 AV			1.51 V	199	70.40	40.50
4	#5980.80	60.7 PK	68.2	-7.5	1.51 V	199	52.80	7.90
5	11490.00	59.8 PK	74.0	-14.2	1.77 V	56	41.10	18.70
6	11490.00	47.1 AV	54.0	-6.9	1.77 V	56	28.40	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.80	55.6 PK	68.2	-12.6	1.51 H	2	48.50	7.10
2	*5785.00	107.7 PK			1.51 H	2	67.10	40.60
3	*5785.00	97.2 AV			1.51 H	2	56.60	40.60
4	#5988.00	57.4 PK	68.2	-10.8	1.51 H	2	49.50	7.90
5	11570.00	59.7 PK	74.0	-14.3	1.50 H	293	41.00	18.70
6	11570.00	47.6 AV	54.0	-6.4	1.50 H	293	28.90	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5619.20	58.7 PK	68.2	-9.5	1.49 V	197	51.60	7.10
2	*5785.00	121.9 PK			1.49 V	197	81.30	40.60
3	*5785.00	111.8 AV			1.49 V	197	71.20	40.60
4	#5980.80	61.4 PK	68.2	-6.8	1.49 V	197	53.50	7.90
5	11570.00	59.8 PK	74.0	-14.2	1.31 V	159	41.10	18.70
6	11570.00	46.6 AV	54.0	-7.4	1.31 V	159	27.90	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5620.80	56.2 PK	68.2	-12.0	1.51 H	54	49.10	7.10
2	*5825.00	105.6 PK			1.51 H	54	65.00	40.60
3	*5825.00	96.0 AV			1.51 H	54	55.40	40.60
4	#5992.00	58.0 PK	68.2	-10.2	1.51 H	54	50.10	7.90
5	11650.00	60.9 PK	74.0	-13.1	1.45 H	291	41.70	19.20
6	11650.00	48.8 AV	54.0	-5.2	1.45 H	291	29.60	19.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.00	59.6 PK	68.2	-8.6	1.55 V	196	52.50	7.10
2	*5825.00	123.3 PK			1.55 V	196	82.70	40.60
3	*5825.00	112.9 AV			1.55 V	196	72.30	40.60
4	#5971.20	59.1 PK	68.2	-9.1	1.55 V	196	51.30	7.80
5	11650.00	59.4 PK	74.0	-14.6	1.31 V	105	40.20	19.20
6	11650.00	47.4 AV	54.0	-6.6	1.31 V	105	28.20	19.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.6 PK	74.0	-17.4	1.13 H	147	50.60	6.00
2	5150.00	44.5 AV	54.0	-9.5	1.13 H	147	38.50	6.00
3	*5180.00	101.6 PK			1.02 H	133	62.20	39.40
4	*5180.00	90.9 AV			1.02 H	133	51.50	39.40
5	#6906.00	57.1 PK	68.2	-11.1	1.23 H	8	44.20	12.90
6	#10360.00	58.8 PK	74.0	-15.2	1.16 H	58	41.00	17.80
7	#10360.00	46.6 AV	54.0	-7.4	1.16 H	58	28.80	17.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	1.53 V	157	51.40	6.00
2	5150.00	45.7 AV	54.0	-8.3	1.53 V	157	39.70	6.00
3	*5180.00	111.3 PK			1.48 V	164	71.90	39.40
4	*5180.00	100.9 AV			1.48 V	164	61.50	39.40
5	#6906.00	58.4 PK	68.2	-9.8	1.42 V	337	45.50	12.90
6	#10360.00	59.4 PK	74.0	-14.6	1.38 V	216	41.60	17.80
7	#10360.00	46.5 AV	54.0	-7.5	1.38 V	216	28.70	17.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	102.0 PK			1.08 H	132	62.50	39.50
2	*5200.00	90.9 AV			1.08 H	132	51.40	39.50
3	#6933.00	59.1 PK	68.2	-9.1	1.25 H	6	46.00	13.10
4	#10400.00	59.0 PK	74.0	-15.0	1.55 H	29	41.30	17.70
5	#10400.00	46.8 AV	54.0	-7.2	1.55 H	29	29.10	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	111.8 PK			1.50 V	175	72.30	39.50
2	*5200.00	100.8 AV			1.50 V	175	61.30	39.50
3	#6933.00	59.7 PK	68.2	-8.5	1.49 V	338	46.60	13.10
4	#10400.00	58.4 PK	74.0	-15.6	1.36 V	272	40.70	17.70
5	#10400.00	46.5 AV	54.0	-7.5	1.36 V	272	28.80	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	102.8 PK			1.02 H	131	63.20	39.60
2	*5240.00	92.0 AV			1.02 H	131	52.40	39.60
3	5350.00	57.8 PK	74.0	-16.2	1.09 H	118	51.30	6.50
4	5350.00	45.3 AV	54.0	-8.7	1.09 H	118	38.80	6.50
5	#6986.00	57.5 PK	68.2	-10.7	1.24 H	1	44.00	13.50
6	#10480.00	59.4 PK	74.0	-14.6	1.18 H	76	40.70	18.70
7	#10480.00	47.1 AV	54.0	-6.9	1.18 H	76	28.40	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	111.8 PK			1.50 V	177	72.20	39.60
2	*5240.00	101.7 AV			1.50 V	177	62.10	39.60
3	5350.00	58.7 PK	74.0	-15.3	1.59 V	160	52.20	6.50
4	5350.00	45.3 AV	54.0	-8.7	1.59 V	160	38.80	6.50
5	#6986.00	50.3 PK	68.2	-17.9	1.61 V	345	36.80	13.50
6	#10480.00	59.5 PK	74.0	-14.5	1.22 V	238	40.80	18.70
7	#10480.00	46.7 AV	54.0	-7.3	1.22 V	238	28.00	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.40	56.0 PK	68.2	-12.2	1.49 H	279	48.90	7.10
2	*5745.00	106.2 PK			1.49 H	279	65.70	40.50
3	*5745.00	96.0 AV			1.49 H	279	55.50	40.50
4	#5958.40	56.0 PK	68.2	-12.2	1.49 H	279	48.30	7.70
5	11490.00	59.6 PK	74.0	-14.4	1.31 H	301	40.90	18.70
6	11490.00	47.8 AV	54.0	-6.2	1.31 H	301	29.10	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	58.7 PK	68.2	-9.5	1.49 V	192	51.60	7.10
2	*5745.00	120.3 PK			1.48 V	192	79.80	40.50
3	*5745.00	109.6 AV			1.48 V	192	69.10	40.50
4	#5964.80	59.5 PK	68.2	-8.7	1.49 V	192	51.70	7.80
5	11490.00	59.0 PK	74.0	-15.0	1.62 V	318	40.30	18.70
6	11490.00	46.7 AV	54.0	-7.3	1.62 V	318	28.00	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.40	55.2 PK	68.2	-13.0	1.61 H	319	48.10	7.10
2	*5785.00	107.8 PK			1.61 H	319	67.20	40.60
3	*5785.00	97.7 AV			1.61 H	319	57.10	40.60
4	#5955.20	57.0 PK	68.2	-11.2	1.61 H	319	49.30	7.70
5	11570.00	60.5 PK	74.0	-13.5	1.44 H	295	41.80	18.70
6	11570.00	47.5 AV	54.0	-6.5	1.44 H	295	28.80	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5604.00	56.0 PK	68.2	-12.2	1.45 V	202	48.90	7.10
2	*5785.00	122.0 PK			1.45 V	202	81.40	40.60
3	*5785.00	111.8 AV			1.45 V	202	71.20	40.60
4	#5982.40	58.3 PK	68.2	-9.9	1.45 V	202	50.40	7.90
5	11570.00	59.6 PK	74.0	-14.4	1.38 V	38	40.90	18.70
6	11570.00	46.9 AV	54.0	-7.1	1.38 V	38	28.20	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5622.40	55.9 PK	68.2	-12.3	2.04 H	2	48.80	7.10
2	*5825.00	108.2 PK			2.04 H	2	67.60	40.60
3	*5825.00	97.9 AV			2.04 H	2	57.30	40.60
4	#5977.60	57.9 PK	68.2	-10.3	2.04 H	2	50.00	7.90
5	11650.00	61.2 PK	74.0	-12.8	1.38 H	295	42.00	19.20
6	11650.00	48.5 AV	54.0	-5.5	1.38 H	295	29.30	19.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.60	57.8 PK	68.2	-10.4	1.45 V	198	50.70	7.10
2	*5825.00	122.7 PK			1.45 V	198	82.10	40.60
3	*5825.00	112.7 AV			1.45 V	198	72.10	40.60
4	#5944.80	59.4 PK	68.2	-8.8	1.45 V	198	51.70	7.70
5	11650.00	60.7 PK	74.0	-13.3	1.58 V	76	41.50	19.20
6	11650.00	47.9 AV	54.0	-6.1	1.58 V	76	28.70	19.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	1.71 H	206	51.00	6.00
2	5150.00	44.3 AV	54.0	-9.7	1.71 H	206	38.30	6.00
3	*5190.00	97.7 PK			1.81 H	187	58.30	39.40
4	*5190.00	88.6 AV			1.81 H	187	49.20	39.40
5	#6920.00	60.6 PK	68.2	-7.6	1.90 H	348	47.60	13.00
6	#10380.00	59.4 PK	74.0	-14.6	1.53 H	274	41.70	17.70
7	#10380.00	46.4 AV	54.0	-7.6	1.53 H	274	28.70	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.2 PK	74.0	-14.8	1.61 V	60	53.20	6.00
2	5150.00	46.3 AV	54.0	-7.7	1.61 V	60	40.30	6.00
3	*5190.00	107.9 PK			1.57 V	163	68.50	39.40
4	*5190.00	98.3 AV			1.57 V	163	58.90	39.40
5	#6920.00	58.8 PK	68.2	-9.4	1.67 V	342	45.80	13.00
6	#10380.00	59.3 PK	74.0	-14.7	1.51 V	274	41.60	17.70
7	#10380.00	46.3 AV	54.0	-7.7	1.51 V	274	28.60	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	98.8 PK			1.01 H	137	59.20	39.60
2	*5230.00	89.6 AV			1.01 H	137	50.00	39.60
3	5350.00	57.5 PK	74.0	-16.5	1.11 H	124	51.00	6.50
4	5350.00	45.0 AV	54.0	-9.0	1.11 H	124	38.50	6.50
5	#6973.00	56.8 PK	68.2	-11.4	1.21 H	4	43.30	13.50
6	#10460.00	60.5 PK	74.0	-13.5	1.16 H	106	42.00	18.50
7	#10460.00	47.8 AV	54.0	-6.2	1.16 H	106	29.30	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	108.0 PK			1.53 V	165	68.40	39.60
2	*5230.00	98.6 AV			1.53 V	165	59.00	39.60
3	5350.00	58.4 PK	74.0	-15.6	1.44 V	167	51.90	6.50
4	5350.00	46.3 AV	54.0	-7.7	1.44 V	167	39.80	6.50
5	#6973.00	58.7 PK	68.2	-9.5	1.45 V	341	45.20	13.50
6	#10460.00	59.2 PK	74.0	-14.8	1.35 V	271	40.70	18.50
7	#10460.00	47.2 AV	54.0	-6.8	1.35 V	271	28.70	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.80	54.3 PK	68.2	-13.9	1.47 H	279	47.20	7.10
2	*5755.00	103.7 PK			1.47 H	279	63.10	40.60
3	*5755.00	94.4 AV			1.47 H	279	53.80	40.60
4	#5975.20	56.8 PK	68.2	-11.4	1.79 H	279	48.90	7.90
5	11510.00	59.4 PK	74.0	-14.6	1.57 H	305	40.70	18.70
6	11510.00	47.8 AV	54.0	-6.2	1.57 H	305	29.10	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	60.2 PK	68.2	-8.0	1.90 V	203	53.10	7.10
2	*5755.00	118.4 PK			1.90 V	203	77.80	40.60
3	*5755.00	109.0 AV			1.90 V	203	68.40	40.60
4	#5968.80	59.1 PK	68.2	-9.1	1.90 V	203	51.30	7.80
5	11510.00	58.6 PK	74.0	-15.4	1.34 V	168	39.90	18.70
6	11510.00	46.1 AV	54.0	-7.9	1.34 V	168	27.40	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5620.00	56.4 PK	68.2	-11.8	1.50 H	2	49.30	7.10
2	*5795.00	105.6 PK			1.50 H	2	65.00	40.60
3	*5795.00	96.2 AV			1.50 H	2	55.60	40.60
4	#5952.80	56.6 PK	68.2	-11.6	1.50 H	2	48.90	7.70
5	11590.00	59.5 PK	74.0	-14.5	1.26 H	299	40.70	18.80
6	11590.00	47.6 AV	54.0	-6.4	1.26 H	299	28.80	18.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.20	57.8 PK	68.2	-10.4	1.48 V	201	50.70	7.10
2	*5795.00	119.2 PK			1.48 V	201	78.60	40.60
3	*5795.00	109.4 AV			1.48 V	201	68.80	40.60
4	#5932.00	61.5 PK	68.2	-6.7	1.48 V	201	53.80	7.70
5	11590.00	59.5 PK	74.0	-14.5	1.44 V	310	40.70	18.80
6	11590.00	47.0 AV	54.0	-7.0	1.44 V	310	28.20	18.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.7 PK	74.0	-16.3	1.07 H	360	51.70	6.00
2	5150.00	44.5 AV	54.0	-9.5	1.07 H	360	38.50	6.00
3	*5210.00	95.1 PK			1.00 H	136	55.60	39.50
4	*5210.00	85.5 AV			1.00 H	136	46.00	39.50
5	#6946.00	58.2 PK	68.2	-10.0	1.31 H	8	44.90	13.30
6	#10420.00	59.4 PK	74.0	-14.6	1.07 H	267	41.50	17.90
7	#10420.00	46.8 AV	54.0	-7.2	1.07 H	267	28.90	17.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.54 V	160	53.90	6.00
2	5150.00	47.5 AV	54.0	-6.5	1.54 V	160	41.50	6.00
3	*5210.00	104.8 PK			1.48 V	155	65.30	39.50
4	*5210.00	95.1 AV			1.48 V	155	55.60	39.50
5	#6946.00	59.0 PK	68.2	-9.2	1.55 V	337	45.70	13.30
6	#10420.00	59.4 PK	74.0	-14.6	1.38 V	255	41.50	17.90
7	#10420.00	46.5 AV	54.0	-7.5	1.38 V	255	28.60	17.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	57.8 PK	68.2	-10.4	1.48 H	282	50.70	7.10
2	*5775.00	97.1 PK			1.48 H	282	56.50	40.60
3	*5775.00	87.2 AV			1.48 H	282	46.60	40.60
4	#5971.20	57.9 PK	68.2	-10.3	1.48 H	282	50.10	7.80
5	11550.00	60.0 PK	74.0	-14.0	2.55 H	302	41.40	18.60
6	11550.00	47.8 AV	54.0	-6.2	2.55 H	302	29.20	18.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**#5642.40**	**66.5 PK**	**68.2**	**-1.7**	**1.83 V**	**156**	**59.40**	**7.10**
2	*5775.00	112.6 PK			1.83 V	156	72.00	40.60
3	*5775.00	103.1 AV			1.83 V	156	62.50	40.60
4	#5929.60	64.5 PK	68.2	-3.7	1.83 V	156	56.80	7.70
5	11550.00	58.1 PK	74.0	-15.9	1.83 V	155	39.50	18.60
6	11550.00	47.6 AV	54.0	-6.4	1.83 V	155	29.00	18.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Beamforming Mode

802.11n (HT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.7 PK	74.0	-17.3	1.85 H	167	50.70	6.00
2	5150.00	44.4 AV	54.0	-9.6	1.85 H	167	38.40	6.00
3	*5180.00	103.8 PK			1.96 H	182	64.40	39.40
4	*5180.00	89.2 AV			1.96 H	182	49.80	39.40
5	#10360.00	60.3 PK	74.0	-13.7	1.43 H	118	42.50	17.80
6	#10360.00	47.0 AV	54.0	-7.0	1.43 H	118	29.20	17.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.5 PK	74.0	-15.5	1.16 V	319	52.50	6.00
2	5150.00	46.0 AV	54.0	-8.0	1.16 V	319	40.00	6.00
3	*5180.00	114.3 PK			1.64 V	323	74.90	39.40
4	*5180.00	99.2 AV			1.64 V	323	59.80	39.40
5	#10360.00	59.4 PK	74.0	-14.6	1.29 V	205	41.60	17.80
6	#10360.00	46.7 AV	54.0	-7.3	1.29 V	205	28.90	17.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	104.3 PK			1.70 H	184	64.80	39.50
2	*5200.00	89.3 AV			1.70 H	184	49.80	39.50
3	#10400.00	58.8 PK	74.0	-15.2	1.38 H	154	41.10	17.70
4	#10400.00	46.1 AV	54.0	-7.9	1.38 H	154	28.40	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	114.1 PK			1.36 V	136	74.60	39.50
2	*5200.00	99.7 AV			1.36 V	136	60.20	39.50
3	#10400.00	59.8 PK	74.0	-14.2	1.24 V	86	42.10	17.70
4	#10400.00	46.6 AV	54.0	-7.4	1.24 V	86	28.90	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.8 PK			1.73 H	189	65.20	39.60
2	*5240.00	90.2 AV			1.73 H	189	50.60	39.60
3	5350.00	57.8 PK	74.0	-16.2	1.59 H	175	51.30	6.50
4	5350.00	45.4 AV	54.0	-8.6	1.59 H	175	38.90	6.50
5	#10480.00	60.4 PK	74.0	-13.6	1.47 H	119	41.70	18.70
6	#10480.00	47.5 AV	54.0	-6.5	1.47 H	119	28.80	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	114.3 PK			1.41 V	176	74.70	39.60
2	*5240.00	99.0 AV			1.41 V	176	59.40	39.60
3	5350.00	58.8 PK	74.0	-15.2	1.33 V	183	52.30	6.50
4	5350.00	45.9 AV	54.0	-8.1	1.33 V	183	39.40	6.50
5	#10480.00	59.8 PK	74.0	-14.2	1.31 V	69	41.10	18.70
6	#10480.00	47.7 AV	54.0	-6.3	1.31 V	69	29.00	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.40	56.7 PK	68.2	-11.5	1.40 H	126	49.60	7.10
2	*5745.00	108.4 PK			1.40 H	126	67.90	40.50
3	*5745.00	94.9 AV			1.40 H	126	54.40	40.50
4	#5968.80	57.6 PK	68.2	-10.6	1.40 H	126	49.80	7.80
5	11490.00	59.6 PK	74.0	-14.4	1.25 H	306	40.90	18.70
6	11490.00	47.6 AV	54.0	-6.4	1.25 H	306	28.90	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.20	60.9 PK	68.2	-7.3	1.51 V	192	53.80	7.10
2	*5745.00	120.5 PK			1.51 V	192	80.00	40.50
3	*5745.00	106.1 AV			1.51 V	192	65.60	40.50
4	#5976.00	61.1 PK	68.2	-7.1	1.51 V	192	53.20	7.90
5	11490.00	59.7 PK	74.0	-14.3	1.24 V	97	41.00	18.70
6	11490.00	46.4 AV	54.0	-7.6	1.24 V	97	27.70	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	56.4 PK	68.2	-11.8	1.07 H	123	49.30	7.10
2	*5785.00	107.2 PK			1.07 H	123	66.60	40.60
3	*5785.00	93.8 AV			1.07 H	123	53.20	40.60
4	#5971.20	57.0 PK	68.2	-11.2	1.07 H	123	49.20	7.80
5	11570.00	60.1 PK	74.0	-13.9	1.02 H	294	41.40	18.70
6	11570.00	47.9 AV	54.0	-6.1	1.02 H	294	29.20	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5615.20	59.3 PK	68.2	-8.9	1.49 V	203	52.20	7.10
2	*5785.00	121.8 PK			1.49 V	203	81.20	40.60
3	*5785.00	107.3 AV			1.49 V	203	66.70	40.60
4	#5941.60	60.2 PK	68.2	-8.0	1.49 V	203	52.50	7.70
5	11570.00	59.6 PK	74.0	-14.4	1.24 V	122	40.90	18.70
6	11570.00	46.9 AV	54.0	-7.1	1.24 V	122	28.20	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.80	56.5 PK	68.2	-11.7	1.04 H	126	49.40	7.10
2	*5825.00	109.1 PK			1.04 H	126	68.50	40.60
3	*5825.00	94.9 AV			1.04 H	126	54.30	40.60
4	#5946.40	57.9 PK	68.2	-10.3	1.04 H	126	50.20	7.70
5	11650.00	60.7 PK	74.0	-13.3	1.02 H	291	41.50	19.20
6	11650.00	49.7 AV	54.0	-4.3	1.02 H	291	30.50	19.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.00	58.8 PK	68.2	-9.4	1.52 V	202	51.70	7.10
2	*5825.00	122.9 PK			1.52 V	202	82.30	40.60
3	*5825.00	108.1 AV			1.52 V	202	67.50	40.60
4	#5969.60	60.4 PK	68.2	-7.8	1.52 V	202	52.60	7.80
5	11650.00	59.3 PK	74.0	-14.7	1.41 V	101	40.10	19.20
6	11650.00	46.8 AV	54.0	-7.2	1.41 V	101	27.60	19.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	48.3 PK	74.0	-25.7	1.27 H	270	42.30	6.00
2	5150.00	44.1 AV	54.0	-9.9	1.27 H	270	38.10	6.00
3	*5190.00	99.7 PK			1.38 H	281	60.30	39.40
4	*5190.00	81.4 AV			1.38 H	281	42.00	39.40
5	#10380.00	59.7 PK	74.0	-14.3	1.06 H	137	42.00	17.70
6	#10380.00	46.6 AV	54.0	-7.4	1.06 H	137	28.90	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.1 PK	74.0	-9.9	1.82 V	300	58.10	6.00
2	5150.00	45.7 AV	54.0	-8.3	1.82 V	300	39.70	6.00
3	*5190.00	110.7 PK			1.82 V	314	71.30	39.40
4	*5190.00	97.2 AV			1.82 V	314	57.80	39.40
5	#10380.00	58.9 PK	74.0	-15.1	1.52 V	223	41.20	17.70
6	#10380.00	46.6 AV	54.0	-7.4	1.52 V	223	28.90	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	99.7 PK			1.32 H	267	60.10	39.60
2	*5230.00	85.1 AV			1.32 H	267	45.50	39.60
3	5350.00	57.3 PK	74.0	-16.7	1.23 H	251	50.80	6.50
4	5350.00	45.4 AV	54.0	-8.6	1.23 H	251	38.90	6.50
5	#10460.00	59.7 PK	74.0	-14.3	1.34 H	176	41.20	18.50
6	#10460.00	47.3 AV	54.0	-6.7	1.34 H	176	28.80	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	111.5 PK			1.49 V	325	71.90	39.60
2	*5230.00	97.8 AV			1.49 V	325	58.20	39.60
3	5350.00	57.5 PK	74.0	-16.5	1.37 V	313	51.00	6.50
4	5350.00	45.3 AV	54.0	-8.7	1.37 V	313	38.80	6.50
5	#10460.00	59.2 PK	74.0	-14.8	1.43 V	205	40.70	18.50
6	#10460.00	47.1 AV	54.0	-6.9	1.43 V	205	28.60	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	56.4 PK	68.2	-11.8	1.47 H	110	49.30	7.10
2	*5755.00	103.9 PK			1.47 H	110	63.30	40.60
3	*5755.00	90.9 AV			1.47 H	110	50.30	40.60
4	#5971.20	58.2 PK	68.2	-10.0	1.47 H	110	50.40	7.80
5	11510.00	59.9 PK	74.0	-14.1	1.60 H	318	41.20	18.70
6	11510.00	47.3 AV	54.0	-6.7	1.60 H	318	28.60	18.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.60	59.3 PK	68.2	-8.9	1.51 V	195	52.20	7.10
2	*5755.00	118.4 PK			1.51 V	195	77.80	40.60
3	*5755.00	104.7 AV			1.51 V	195	64.10	40.60
4	#5966.40	59.3 PK	68.2	-8.9	1.51 V	195	51.50	7.80
5	11510.00	58.9 PK	74.0	-15.1	1.35 V	177	40.20	18.70
6	11510.00	46.3 AV	54.0	-7.7	1.35 V	177	27.60	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.40	56.8 PK	68.2	-11.4	2.00 H	333	49.70	7.10
2	*5795.00	106.5 PK			2.00 H	333	65.90	40.60
3	*5795.00	92.4 AV			2.00 H	333	51.80	40.60
4	#5965.60	57.5 PK	68.2	-10.7	2.00 H	333	49.70	7.80
5	11590.00	59.6 PK	74.0	-14.4	2.39 H	288	40.80	18.80
6	11590.00	48.6 AV	54.0	-5.4	2.39 H	288	29.80	18.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.80	59.0 PK	68.2	-9.2	1.48 V	204	51.90	7.10
2	*5795.00	119.0 PK			1.48 V	204	78.40	40.60
3	*5795.00	103.7 AV			1.48 V	204	63.10	40.60
4	#5929.60	63.9 PK	68.2	-4.3	1.48 V	204	56.20	7.70
5	11590.00	59.9 PK	74.0	-14.1	1.32 V	321	41.10	18.80
6	11590.00	46.5 AV	54.0	-7.5	1.32 V	321	27.70	18.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	1.38 H	249	53.50	6.00
2	5150.00	44.1 AV	54.0	-9.9	1.38 H	249	38.10	6.00
3	*5210.00	96.5 PK			1.25 H	268	57.00	39.50
4	*5210.00	83.1 AV			1.25 H	268	43.60	39.50
5	#10420.00	59.1 PK	74.0	-14.9	1.43 H	182	41.20	17.90
6	#10420.00	46.7 AV	54.0	-7.3	1.43 H	182	28.80	17.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	67.0 PK	74.0	-7.0	1.45 V	118	61.00	6.00
2	5150.00	45.6 AV	54.0	-8.4	1.45 V	118	39.60	6.00
3	*5210.00	107.8 PK			1.35 V	131	68.30	39.50
4	*5210.00	86.3 AV			1.35 V	131	46.80	39.50
5	#10420.00	58.9 PK	74.0	-15.1	1.34 V	82	41.00	17.90
6	#10420.00	46.9 AV	54.0	-7.1	1.34 V	82	29.00	17.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	58.0 PK	68.2	-10.2	2.04 H	172	50.90	7.10
2	*5775.00	100.6 PK			2.04 H	172	60.00	40.60
3	*5775.00	86.2 AV			2.04 H	172	45.60	40.60
4	#5928.00	59.6 PK	74.0	-14.4	2.01 H	213	51.90	7.70
5	#5928.00	46.4 AV	54.0	-7.6	2.01 H	213	38.70	7.70
6	#5947.20	59.4 PK	68.2	-8.8	2.04 H	172	51.70	7.70
7	11550.00	59.4 PK	74.0	-14.6	2.00 H	177	40.80	18.60
8	11550.00	46.9 AV	54.0	-7.1	2.00 H	177	28.30	18.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	61.8 PK	68.2	-6.4	1.85 V	118	54.70	7.10
2	*5775.00	115.3 PK			1.85 V	118	74.70	40.60
3	*5775.00	100.8 AV			1.85 V	118	60.20	40.60
4	#5927.20	66.4 PK	68.2	-1.8	1.85 V	118	58.70	7.70
5	#5928.00	67.9 PK	74.0	-6.1	1.86 V	320	60.20	7.70
6	**#5928.00**	**52.3 AV**	**54.0**	**-1.7**	**1.86 V**	**320**	**44.60**	**7.70**
7	11550.00	59.1 PK	74.0	-14.9	1.85 V	306	40.50	18.60
8	11550.00	46.7 AV	54.0	-7.3	1.85 V	306	28.10	18.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Below 1GHz Worst-Case Data: 802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.12	32.3 QP	40.0	-7.7	2.00 H	53	46.90	-14.60
2	88.23	34.4 QP	43.5	-9.1	2.00 H	253	54.20	-19.80
3	134.89	32.3 QP	43.5	-11.2	2.00 H	253	47.40	-15.10
4	249.60	25.6 QP	46.0	-20.4	1.00 H	254	39.80	-14.20
5	533.47	26.8 QP	46.0	-19.2	1.50 H	137	34.50	-7.70
6	836.78	38.8 QP	46.0	-7.2	1.00 H	6	40.30	-1.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	59.31	36.9 QP	40.0	-3.1	1.48 V	15	51.60	-14.70
2	67.36	33.1 QP	40.0	-6.9	1.00 V	357	49.20	-16.10
3	134.89	30.7 QP	43.5	-12.8	1.00 V	166	45.80	-15.10
4	249.60	29.9 QP	46.0	-16.1	1.99 V	309	44.10	-14.20
5	533.47	26.2 QP	46.0	-19.8	1.00 V	106	33.90	-7.70
6	836.78	38.9 QP	46.0	-7.1	1.00 V	22	40.40	-1.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

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

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 16, 2015	Nov. 15, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 26, 2015	Dec. 25, 2016
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2015	Feb. 25, 2016
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 24, 2015	Jul. 23, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

4.2.3 Test Procedure

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

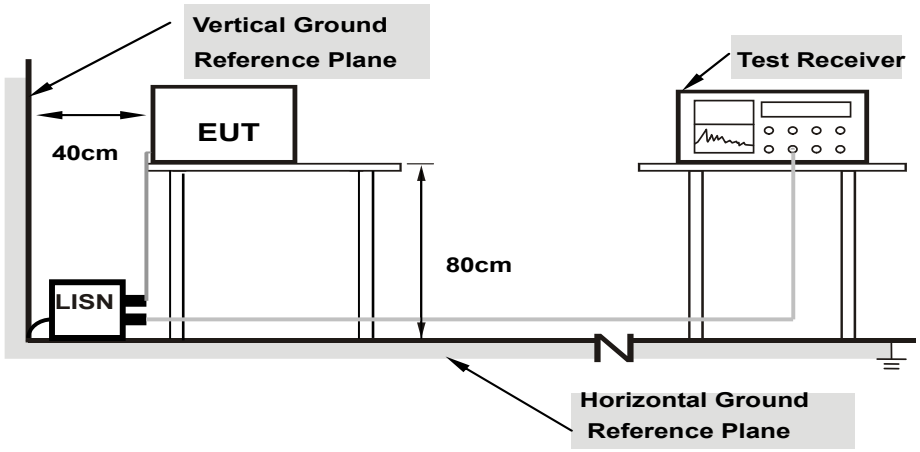
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

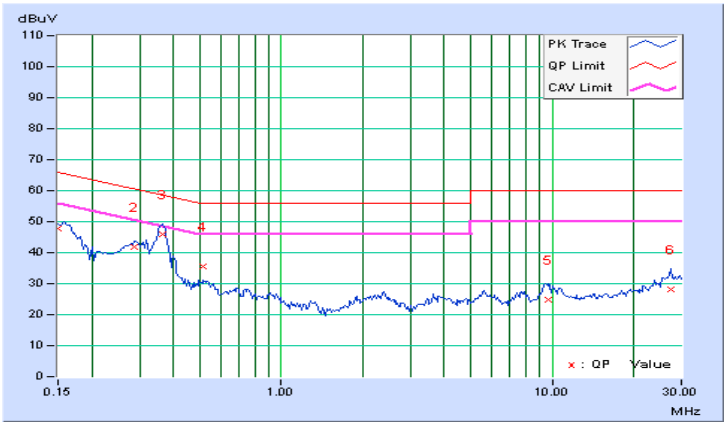
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.12	37.53	25.55	47.65	35.67	66.00	56.00	-18.35	-20.33
2	0.28672	10.17	31.55	24.06	41.72	34.23	60.62	50.62	-18.90	-16.39
3	**0.36484**	**10.18**	**35.91**	**29.79**	**46.09**	**39.97**	**58.62**	**48.62**	**-12.53**	**-8.65**
4	0.51719	10.20	25.39	18.18	35.59	28.38	56.00	46.00	-20.41	-17.62
5	9.63672	10.48	14.40	9.48	24.88	19.96	60.00	50.00	-35.12	-30.04
6	27.60156	10.46	17.68	12.17	28.14	22.63	60.00	50.00	-31.86	-27.37

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.

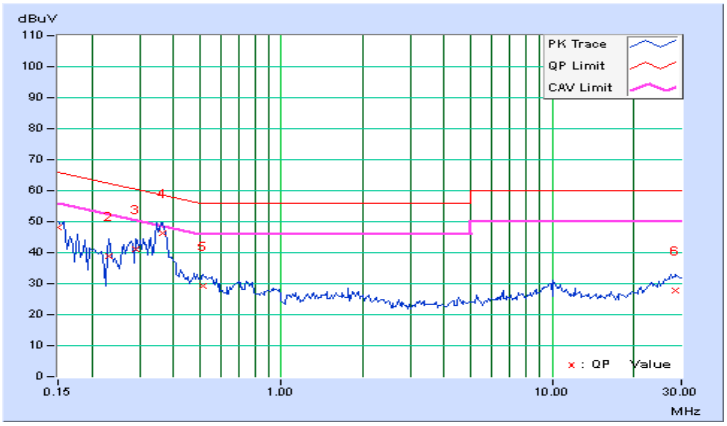


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.13	37.92	25.85	48.05	35.98	66.00	56.00	-17.95	-20.02
2	0.23203	10.16	28.91	17.83	39.07	27.99	62.38	52.38	-23.31	-24.39
3	0.29063	10.17	31.07	24.01	41.24	34.18	60.51	50.51	-19.27	-16.33
4	0.36484	10.18	36.03	29.73	46.21	39.91	58.62	48.62	-12.41	-8.71
5	0.51719	10.19	19.03	13.10	29.22	23.29	56.00	46.00	-26.78	-22.71
6	28.51563	10.58	17.24	11.67	27.82	22.25	60.00	50.00	-32.18	-27.75

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 ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
		Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	---		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	---		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

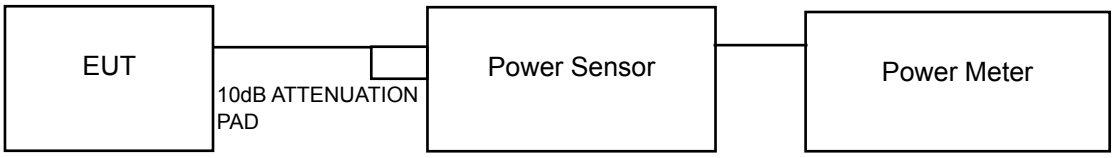
*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

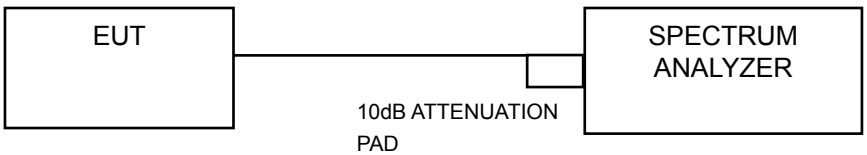
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

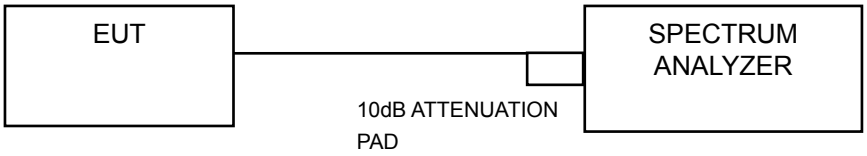
For Power Output Measurement
For 802.11a, 802.11n (HT20), 802.11n (HT40)



For 802.11ac (VHT80)



For 26dB and Occupied Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

For 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.

For 802.11ac (VHT80)

1) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
2) Set sweep trigger to “free run”.
3) Set RBW = 1 MHz.
4) Set VBW ≥ 3 MHz
5) Number of points in sweep ≥ 2 Span / RBW.
6) Sweep time ≤ (number of points in sweep) * T
7) Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
8) Detector = RMS.
9) Trace mode = max hold.
10) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

For 26dB 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%.

For Occupied Bandwidth

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300 kHz RBW and 1MHz VBW. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

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:

CDD Mode

For U-NII-1 Band (Outdoor Access Point)

802.11a

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	12.89	13.44	41.534	16.18	30.00	4.45	20.63	21.00	Pass
40	5200	12.90	12.26	36.325	15.60	30.00	4.45	20.05	21.00	Pass
48	5240	12.99	13.35	41.534	16.18	30.00	4.45	20.63	21.00	Pass

Note:
Gain = 5.17 dBi < 6dBi, so the power limit no need to reduce.
Gain = 4.45dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.07	13.52	42.768	16.31	30.00	4.45	20.76	21.00	Pass
40	5200	13.05	13.31	41.613	16.19	30.00	4.45	20.64	21.00	Pass
48	5240	13.00	13.73	43.558	16.39	30.00	4.45	20.84	21.00	Pass

Note:
Gain = 5.17 dBi < 6dBi, so the power limit no need to reduce.
Gain = 4.45dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.03	13.58	42.894	16.32	30.00	4.45	20.77	21.00	Pass
46	5230	12.97	13.32	41.293	16.16	30.00	4.45	20.61	21.00	Pass

Note:
Gain = 5.17 dBi < 6dBi, so the power limit no need to reduce.
Gain = 4.45dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	13.42	13.62	**44.993**	16.53	30.00	4.45	20.98	21.00	Pass

Note:
Gain = 5.17 dBi < 6dBi, so the power limit no need to reduce.
Gain = 4.45dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

For U-NII-3 Band

802.11a

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.29	21.75	284.210	24.54	30.00	Pass
157	5785	22.37	22.20	338.543	25.30	30.00	Pass
165	5825	22.68	22.05	345.678	25.39	30.00	Pass

802.11n (HT20)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.85	21.81	304.814	24.84	30.00	Pass
157	5785	22.26	22.28	337.311	25.28	30.00	Pass
165	5825	23.06	22.96	**399.999**	26.02	30.00	Pass

802.11n (HT40)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.24	22.33	338.496	25.30	30.00	Pass
159	5795	22.75	22.22	355.090	25.50	30.00	Pass

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	20.08	20.48	213.545	23.29	30.00	Pass

.

Beamforming Mode

For U-NII-1 Band (Outdoor Access Point)

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	10.26	10.55	21.967	13.42	27.82	7.46	20.88	21.00	Pass
40	5200	10.23	10.56	21.920	13.41	27.82	7.46	20.87	21.00	Pass
48	5240	10.28	10.64	22.254	13.47	27.82	7.46	20.93	21.00	Pass

Note:
Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.
Beamforming Gain = 4.45dBi +10 log(2) = 7.46 dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	9.93	10.37	20.729	13.17	27.82	7.46	20.63	21.00	Pass
46	5230	10.23	10.54	21.868	13.40	27.82	7.46	20.86	21.00	Pass

Note:
Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.
Beamforming Gain = 4.45dBi +10 log(2) = 7.46 dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	10.29	10.68	**22.386**	13.50	27.82	7.46	20.96	21.00	Pass

Note:
Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.
Beamforming Gain = 4.45dBi +10 log(2) = 7.46 dBi (above 30 degrees from the horizon),
EIRP = conducted power +(4.45dBi) + array gain = (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

For U-NII-3 Band

802.11n (HT20)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	17.26	17.61	110.888	20.45	27.82	Pass
157	5785	17.88	19.07	142.100	21.53	27.82	Pass
165	5825	18.98	19.40	**166.164**	22.21	27.82	Pass

Note: Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.

802.11n (HT40)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	17.47	18.24	122.528	20.88	27.82	Pass
159	5795	18.60	18.72	146.917	21.67	27.82	Pass

Note: Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	16.27	16.53	87.342	19.41	27.82	Pass

Note: Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power limit shall be reduced to 30-(8.18-6) = 27.82dBm.

26dB Bandwidth:

CDD Mode

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	19.46	19.06	Pass
40	5200	19.43	19.00	Pass
48	5240	19.38	18.78	Pass

802.11n (HT20)

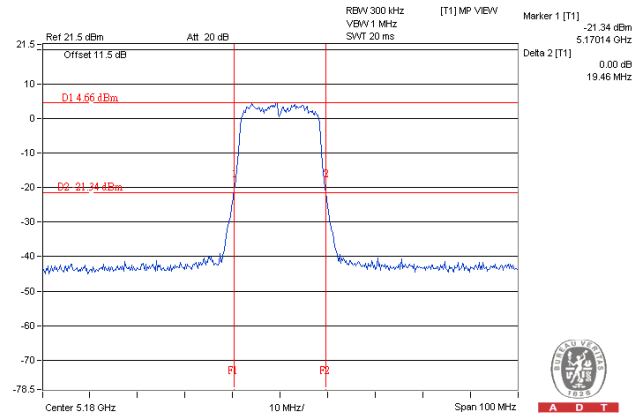
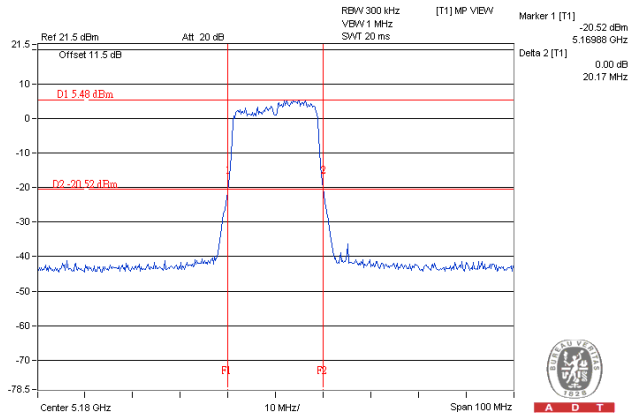
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	20.10	20.17	Pass
40	5200	20.05	19.97	Pass
48	5240	20.13	19.71	Pass

802.11n (HT40)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	40.52	40.45	Pass
46	5230	40.47	40.82	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
42	5210	83.80	83.56	Pass

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n (HT20)
	
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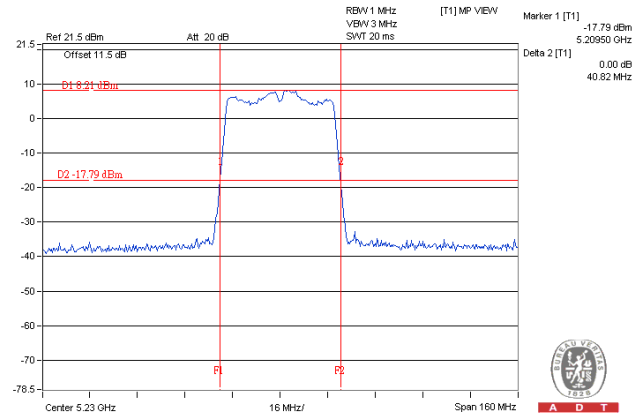
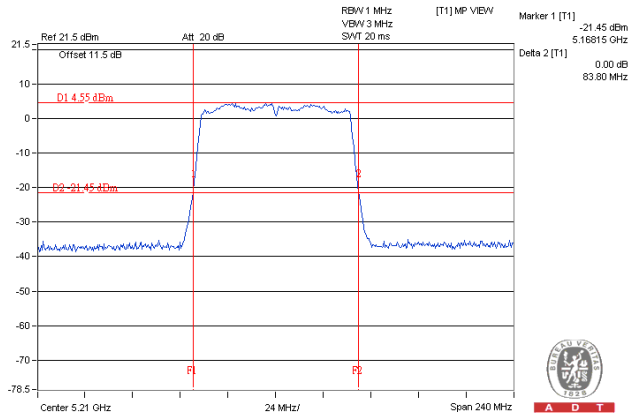
	

Beamforming Mode

802.11n (HT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	20.33	20.26	Pass
40	5200	20.31	20.19	Pass
48	5240	20.21	19.79	Pass

802.11n (HT40)

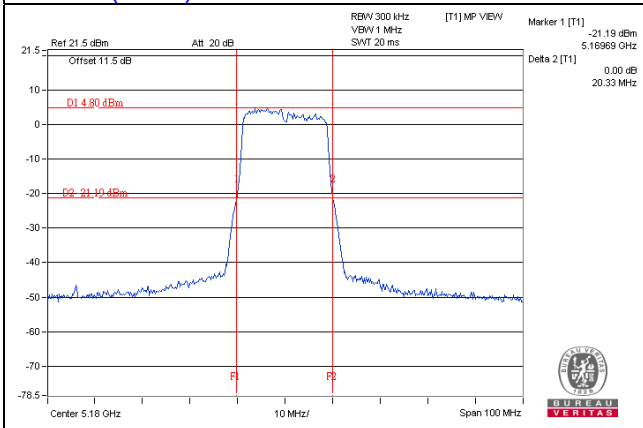
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	40.45	40.41	Pass
46	5230	40.56	40.54	Pass

802.11ac (VHT80)

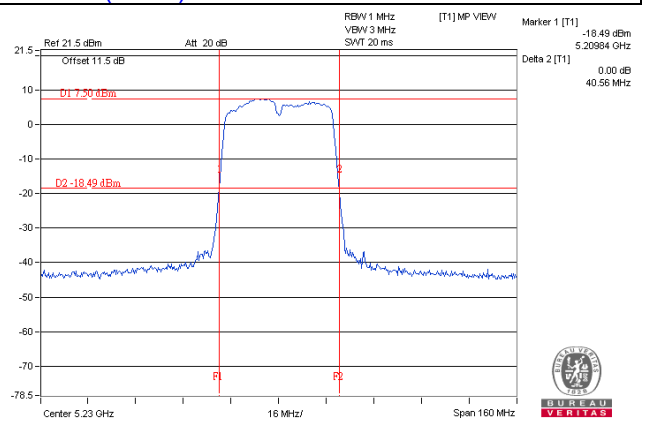
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
42	5210	83.96	83.45	Pass

SPECTRUM PLOT OF WORST VALUE

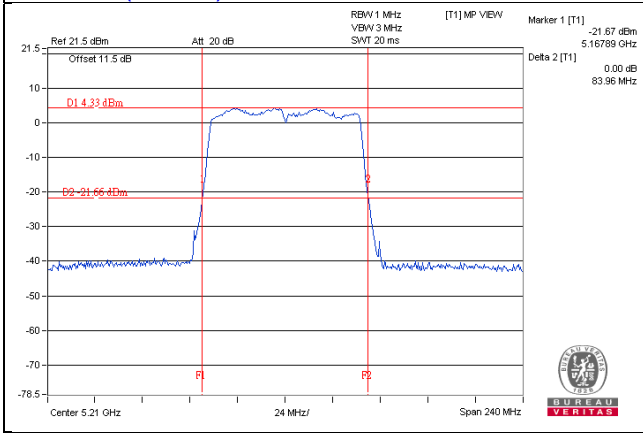
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



Occupied Bandwidth:

CDD Mode

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	16.44	16.44	Pass
40	5200	16.32	16.44	Pass
48	5240	16.32	16.32	Pass
149	5745	17.91	17.04	Pass
157	5785	19.20	22.20	Pass
165	5825	16.68	20.16	Pass

802.11n (HT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	17.64	17.64	Pass
40	5200	17.64	17.52	Pass
48	5240	17.52	17.52	Pass
149	5745	18.24	18.00	Pass
157	5785	17.04	19.08	Pass
165	5825	17.16	18.84	Pass

802.11n (HT40)

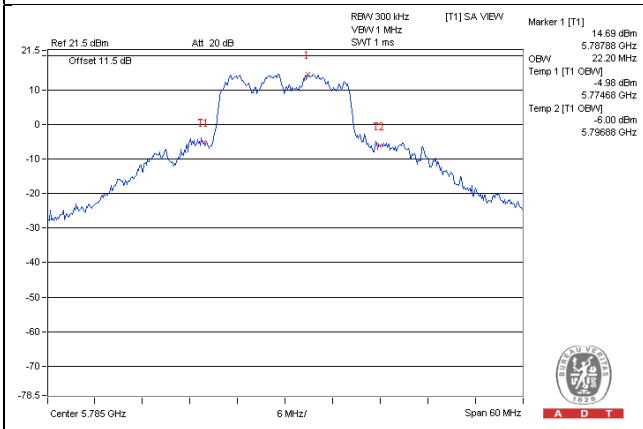
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	36.12	36.12	Pass
46	5230	36.12	36.36	Pass
151	5755	36.60	36.96	Pass
159	5795	37.32	39.12	Pass

802.11ac (VHT80)

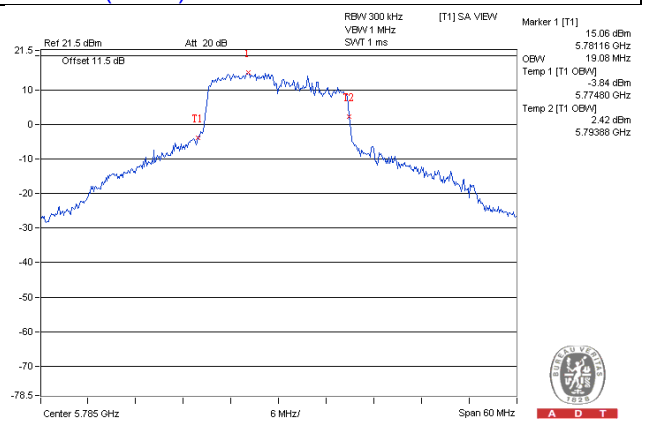
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
42	5210	75.88	75.88	Pass
155	5775	77.28	80.92	Pass

SPECTRUM PLOT OF WORST VALUE

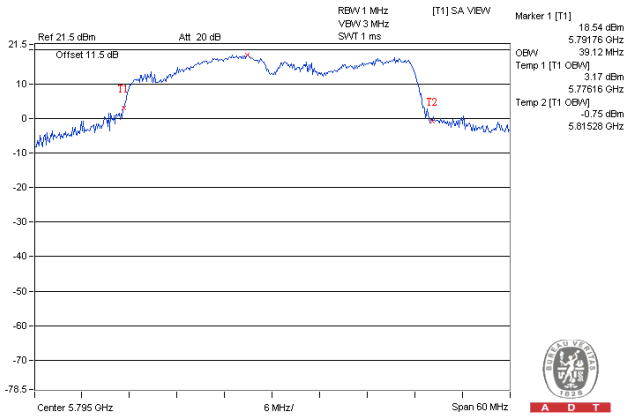
802.11a



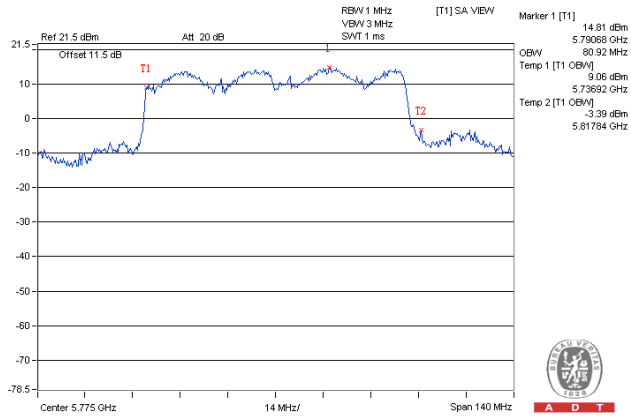
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



Beamforming Mode

802.11n (HT20)

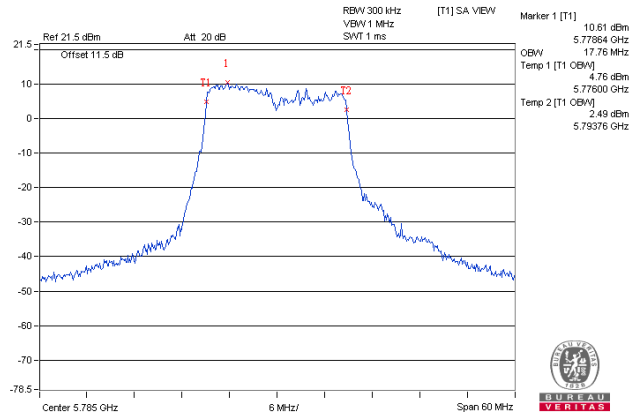
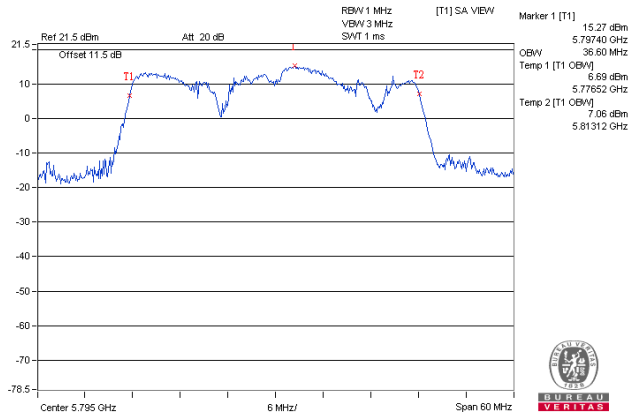
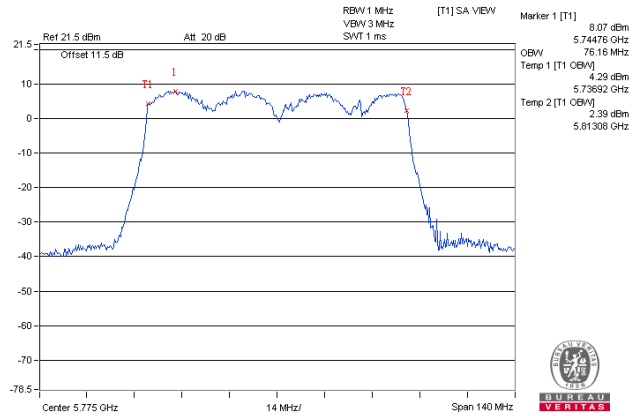
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	17.64	17.64	Pass
40	5200	17.64	17.64	Pass
48	5240	17.52	17.52	Pass
149	5745	17.65	17.73	Pass
157	5785	17.76	16.92	Pass
165	5825	17.52	16.32	Pass

802.11n (HT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	36.00	36.00	Pass
46	5230	36.00	36.24	Pass
151	5755	36.12	35.76	Pass
159	5795	36.00	36.60	Pass

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
42	5210	75.88	75.60	Pass
155	5775	76.16	76.16	Pass

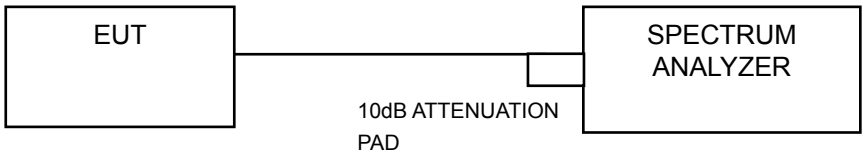
SPECTRUM PLOT OF WORST VALUE	
802.11n (HT20)	802.11n (HT40)
	
802.11ac (VHT80)	
	

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	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
		Mobile and Portable client device	11dBm/ MHz
U-NII-2A	---		11dBm/ MHz
U-NII-2C	---		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedure

For U-NII-1 band:
Using method SA-2 alternative
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 30 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time =20ms.
5) Perform a single sweep.
6) Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:
1. 1Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. 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 Condition

Same as Item 4.3.6.

4.4.7 Test Results

For U-NII-1 Band

CDD Mode

802.11a

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
36	5180	-1.39	1.39	3.23	0.20	3.43	14.82	Pass
40	5200	-0.79	1.07	3.25	0.20	3.45	14.82	Pass
48	5240	-0.02	1.52	3.83	0.20	4.03	14.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-1.44	1.20	3.09	14.82	Pass
40	5200	-0.37	0.93	3.34	14.82	Pass
48	5240	0.08	1.74	4.00	14.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
38	5190	-3.41	-1.66	0.57	0.18	0.75	14.82	Pass
46	5230	-2.82	-1.81	0.73	0.18	0.91	14.82	Pass

NOTE:

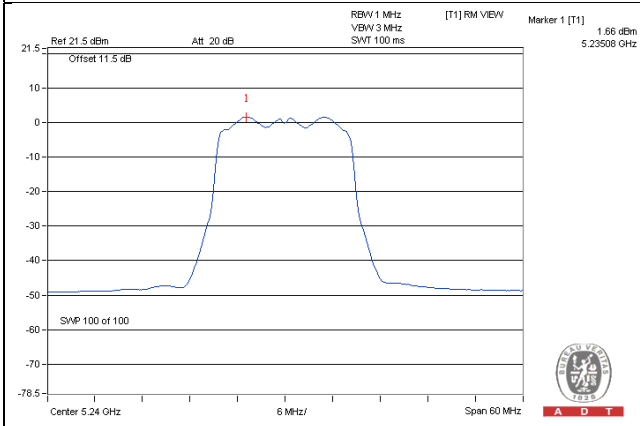
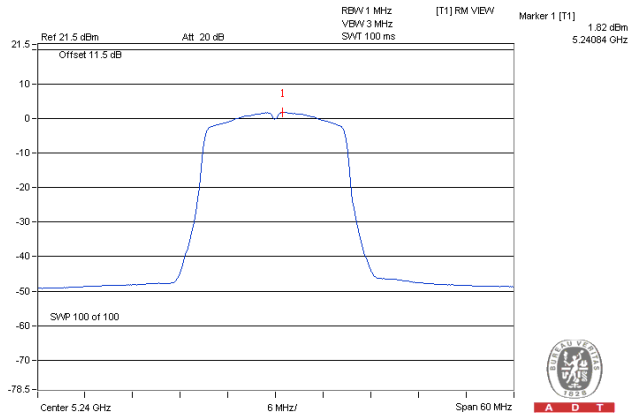
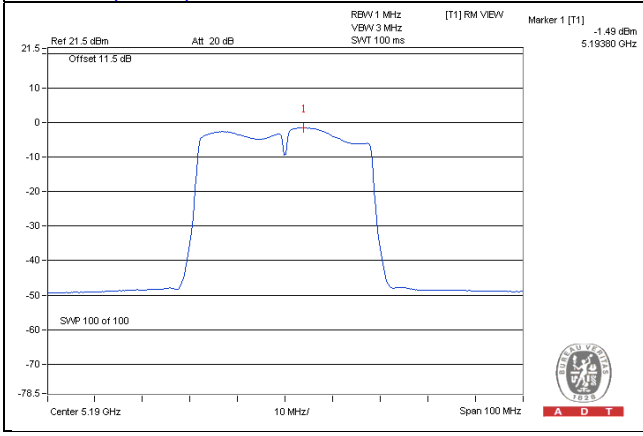
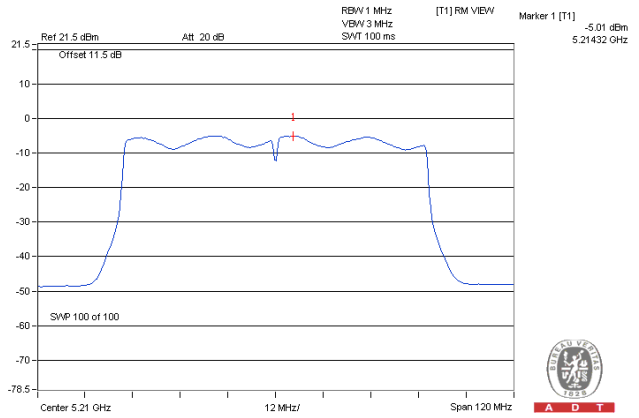
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
42	5210	-6.58	-5.17	-2.81	0.39	-2.42	14.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE	
802.11a / CH 48 / Chain 1	802.11n (HT20) / CH 48 / Chain 1
	
802.11n (HT40) / CH 38 / Chain 1	802.11ac (VHT80) / CH 42 / Chain 1
	

Beamforming Mode

802.11n (HT20)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-1.44	1.65	3.38	14.82	Pass
40	5200	-1.44	1.53	3.30	14.82	Pass
48	5240	-1.01	1.43	3.39	14.82	Pass

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.

802.11n (HT40)

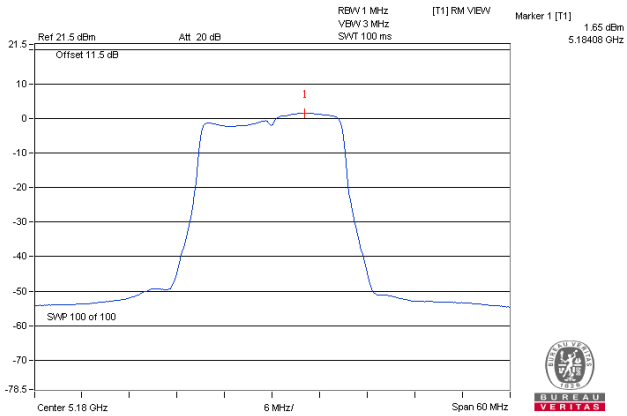
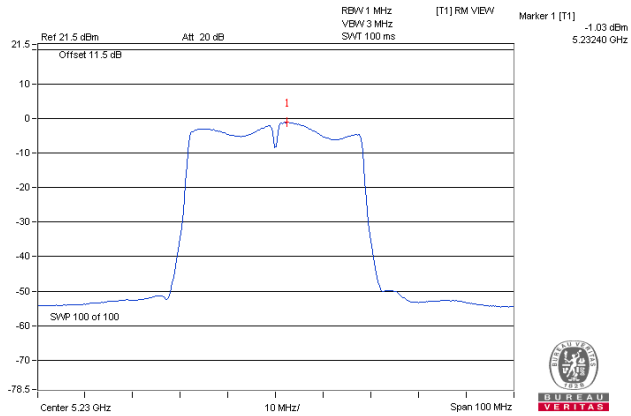
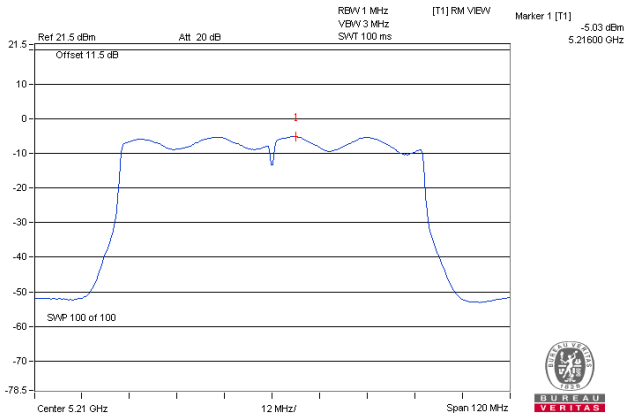
Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
38	5190	-3.92	-1.16	0.69	0.16	0.85	14.82	Pass
46	5230	-4.21	-1.03	0.67	0.16	0.83	14.82	Pass

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
42	5210	-7.88	-5.03	-3.22	0.41	-2.81	14.82	Pass

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 17-(8.18-6) = 14.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE	
802.11n (HT20) / CH 36 / Chain 1	802.11n (HT40) / CH 46 / Chain 1
	
802.11ac (VHT80) / CH 42 / Chain 1	
	

For U-NII-3 Band

CDD Mode

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	149	5745	3.18	5.40	3.01	0.20	8.61	27.82	Pass
	157	5785	4.10	6.32	3.01	0.20	9.53	27.82	Pass
	165	5825	4.02	6.24	3.01	0.20	9.45	27.82	Pass
1	149	5745	1.94	4.16	3.01	0.20	7.37	27.82	Pass
	157	5785	3.04	5.26	3.01	0.20	8.47	27.82	Pass
	165	5825	3.19	5.41	3.01	0.20	8.62	27.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	149	5745	3.10	5.32	3.01	8.33	27.82	Pass
	157	5785	4.08	6.30	3.01	9.31	27.82	Pass
	165	5825	4.01	6.23	3.01	9.24	27.82	Pass
1	149	5745	2.10	4.32	3.01	7.33	27.82	Pass
	157	5785	2.68	4.90	3.01	7.91	27.82	Pass
	165	5825	2.75	4.97	3.01	7.98	27.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.

802.11n (HT40)

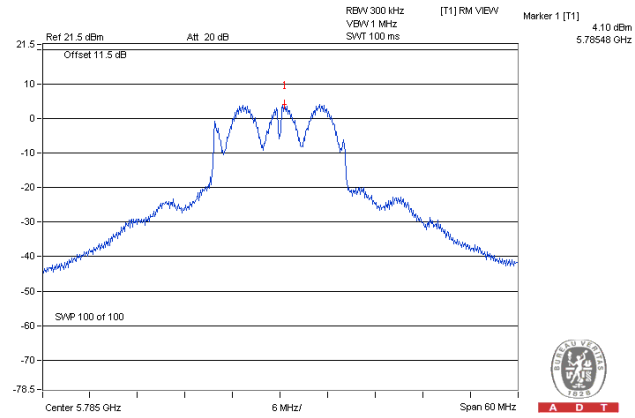
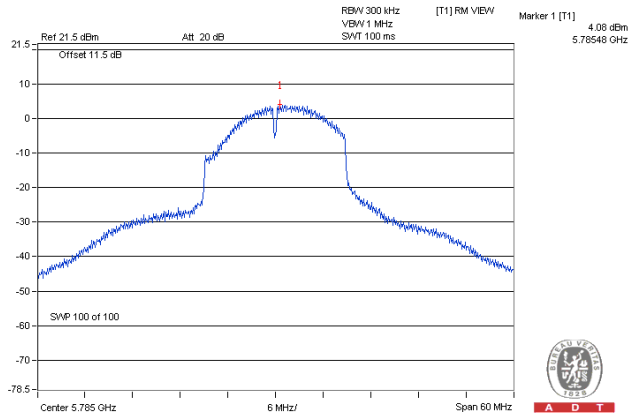
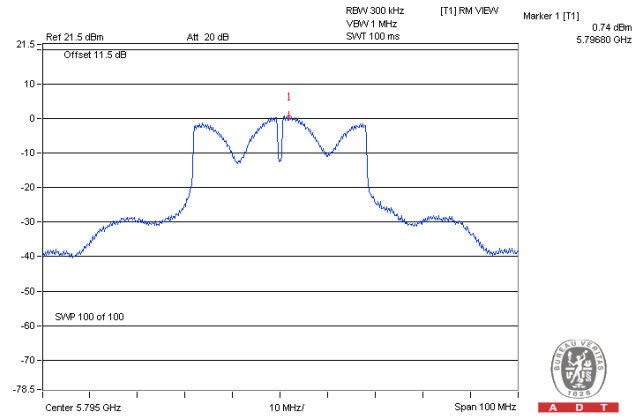
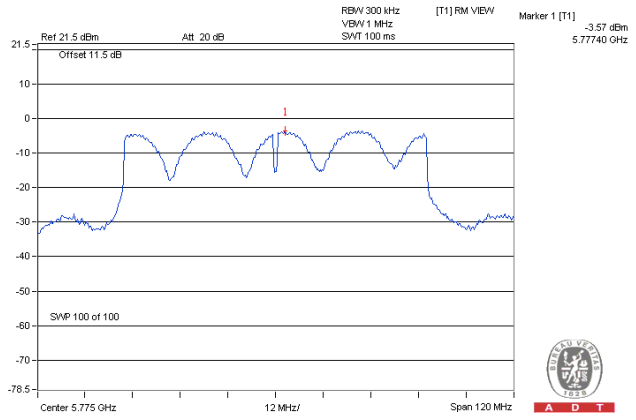
TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	151	5755	0.40	2.62	3.01	0.18	5.81	27.82	Pass
	159	5795	0.74	2.96	3.01	0.18	6.15	27.82	Pass
1	151	5755	-1.13	1.09	3.01	0.18	4.28	27.82	Pass
	159	5795	-0.25	1.97	3.01	0.18	5.16	27.82	Pass

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	155	5775	-3.57	-1.35	3.01	0.39	2.05	27.82	Pass
1	155	5775	-4.38	-2.16	3.01	0.39	1.24	27.82	Pass

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

Beamforming Mode

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	149	5745	-2.24	-0.02	3.01	2.99	27.82	Pass
	157	5785	-1.80	0.42	3.01	3.43	27.82	Pass
	165	5825	-1.17	1.05	3.01	4.06	27.82	Pass
1	149	5745	-1.31	0.91	3.01	3.92	27.82	Pass
	157	5785	-0.04	2.18	3.01	5.19	27.82	Pass
	165	5825	-0.01	2.21	3.01	5.22	27.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.

802.11n (HT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	151	5755	-4.95	-2.73	3.01	0.16	0.44	27.82	Pass
	159	5795	-4.87	-2.65	3.01	0.16	0.52	27.82	Pass
1	151	5755	-4.06	-1.84	3.01	0.16	1.33	27.82	Pass
	159	5795	-3.33	-1.11	3.01	0.16	2.06	27.82	Pass

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

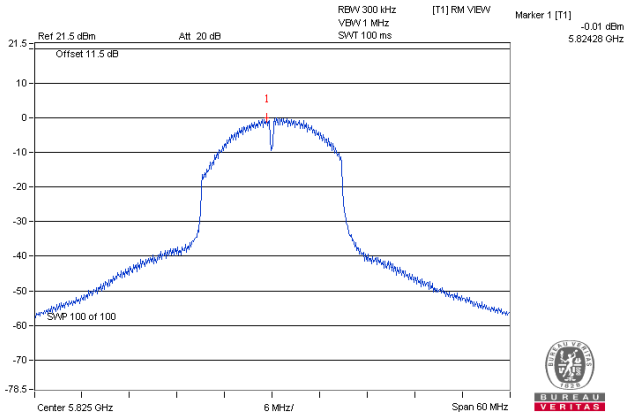
TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	155	5775	-10.86	-8.64	3.01	0.41	-5.22	27.82	Pass
1	155	5775	-9.65	-7.43	3.01	0.41	-4.01	27.82	Pass

NOTE:

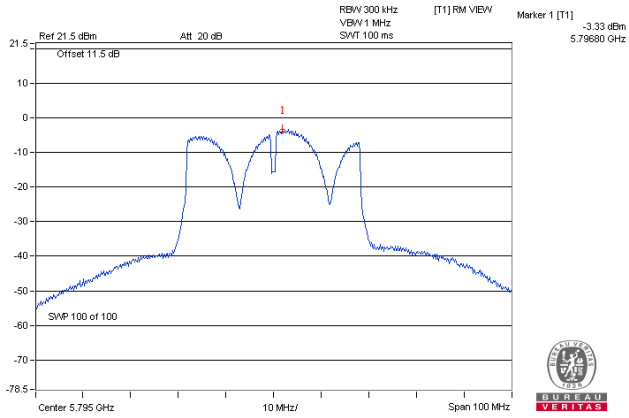
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 5.17+10 log(2) = 8.18dBi > 6dBi, so the power density limit shall be reduced to 30-(8.18-6) = 27.82dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

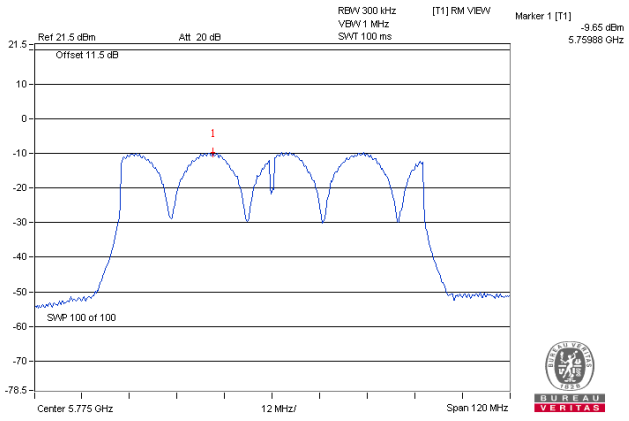
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

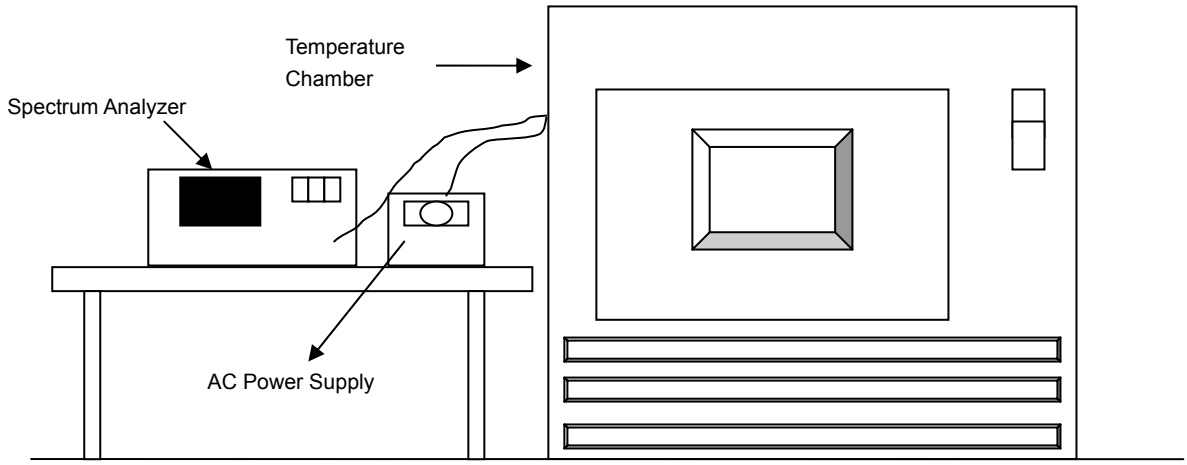


4.5 Frequency Stability

4.5.1 Limits 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 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

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

CDD Mode

802.11a

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)
50	120	5179.9855	-0.00028	5179.9851	-0.00029	5179.9863	-0.00026	5179.9867	-0.00026
40	120	5179.9860	-0.00027	5179.9879	-0.00023	5179.9868	-0.00025	5179.9859	-0.00027
30	120	5179.9983	-0.00003	5179.9990	-0.00002	5179.9991	-0.00002	5179.9987	-0.00003
20	120	5179.9861	-0.00027	5179.9866	-0.00026	5179.9856	-0.00028	5179.9846	-0.00030
10	120	5180.0194	0.00037	5180.0157	0.00030	5180.0192	0.00037	5180.0196	0.00038
0	120	5179.9923	-0.00015	5179.9913	-0.00017	5179.9907	-0.00018	5179.9923	-0.00015
-10	120	5179.9805	-0.00038	5179.9800	-0.00039	5179.9806	-0.00037	5179.9774	-0.00044
-20	120	5179.9930	-0.00014	5179.9962	-0.00007	5179.9958	-0.00008	5179.9929	-0.00014
-30	120	5180.0178	0.00034	5180.0208	0.00040	5180.0195	0.00038	5180.0192	0.00037

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)	Measured Frequency(MHz)	Frequency Drift (%)
20	138	5179.9853	-0.00028	5179.9868	-0.00025	5179.9850	-0.00029	5179.9851	-0.00029
	120	5179.9861	-0.00027	5179.9866	-0.00026	5179.9856	-0.00028	5179.9846	-0.00030
	102	5179.9867	-0.00026	5179.9864	-0.00026	5179.9866	-0.00026	5179.9841	-0.00031

Beamforming Mode

802.11n (HT20)

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
50	120	5179.9769	-0.00045	5179.9760	-0.00046	5179.9757	-0.00047	5179.9789	-0.00041
40	120	5180.0045	0.00009	5180.0085	0.00016	5180.0048	0.00009	5180.0060	0.00012
30	120	5180.0032	0.00006	5180.0017	0.00003	5180.0027	0.00005	5180.0007	0.00001
20	120	5179.9977	-0.00004	5180.0001	0.00000	5179.9995	-0.00001	5179.9996	-0.00001
10	120	5179.9890	-0.00021	5179.9902	-0.00019	5179.9915	-0.00016	5179.9917	-0.00016
0	120	5179.9794	-0.00040	5179.9796	-0.00039	5179.9790	-0.00041	5179.9806	-0.00037
-10	120	5179.9876	-0.00024	5179.9915	-0.00016	5179.9890	-0.00021	5179.9909	-0.00018
-20	120	5179.9868	-0.00025	5179.9897	-0.00020	5179.9857	-0.00028	5179.9855	-0.00028
-30	120	5180.0274	0.00053	5180.0245	0.00047	5180.0276	0.00053	5180.0227	0.00044

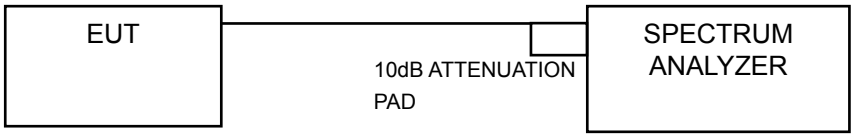
FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	5179.9969	-0.00006	5179.9995	-0.00001	5180.0005	0.00001	5179.9998	0.00000
	120	5179.9977	-0.00004	5180.0001	0.00000	5179.9995	-0.00001	5179.9996	-0.00001
	102	5179.9970	-0.00006	5180.0011	0.00002	5179.9992	-0.00002	5179.9995	-0.00001

4.6 6dB Bandwidth Measurement

4.6.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. 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

CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	15.79	15.76	0.5	Pass
157	5785	12.01	15.80	0.5	Pass
165	5825	12.66	15.16	0.5	Pass

802.11n (HT20)

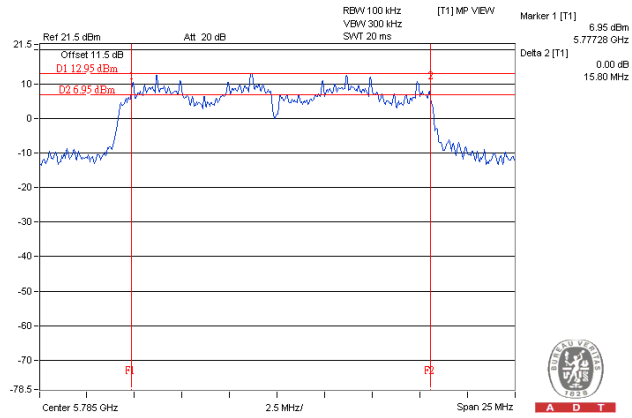
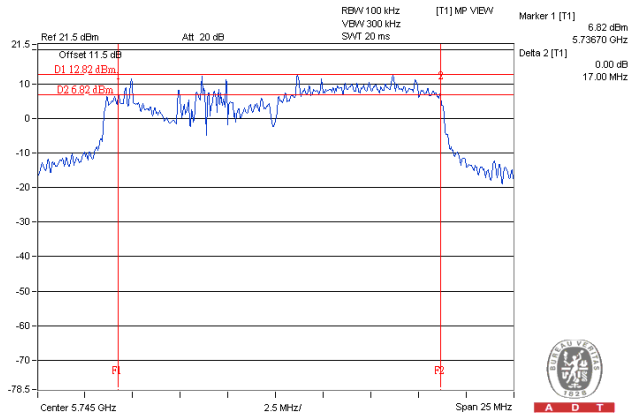
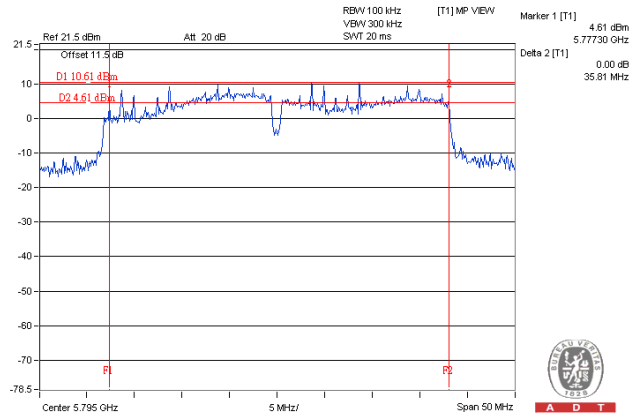
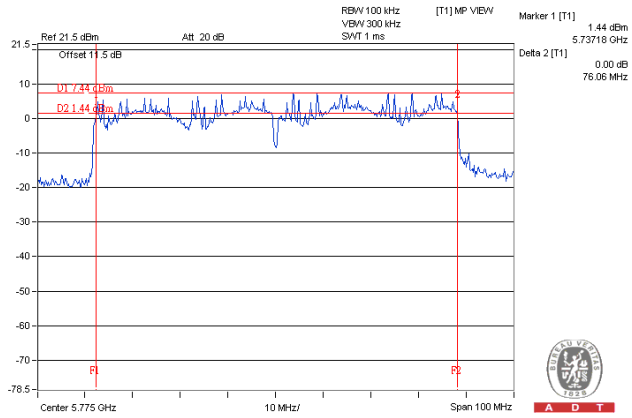
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	17.00	16.39	0.5	Pass
157	5785	11.50	16.37	0.5	Pass
165	5825	12.67	15.71	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	35.13	35.17	0.5	Pass
159	5795	35.15	35.81	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	75.94	76.06	0.5	Pass

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

Beamforming Mode

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	17.24	17.61	0.5	Pass
157	5785	17.38	12.68	0.5	Pass
165	5825	16.37	12.64	0.5	Pass

802.11n (HT40)

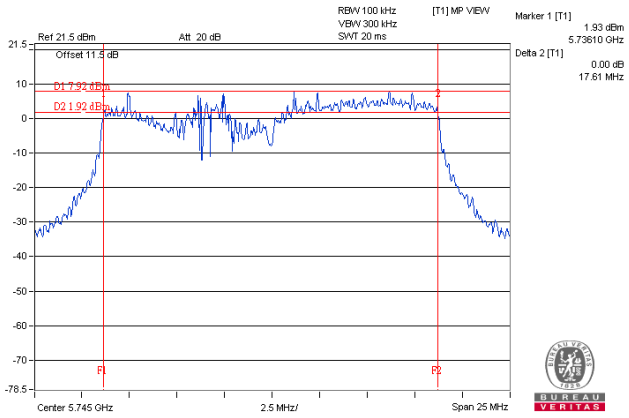
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	35.28	35.26	0.5	Pass
159	5795	35.28	35.45	0.5	Pass

802.11ac (VHT80)

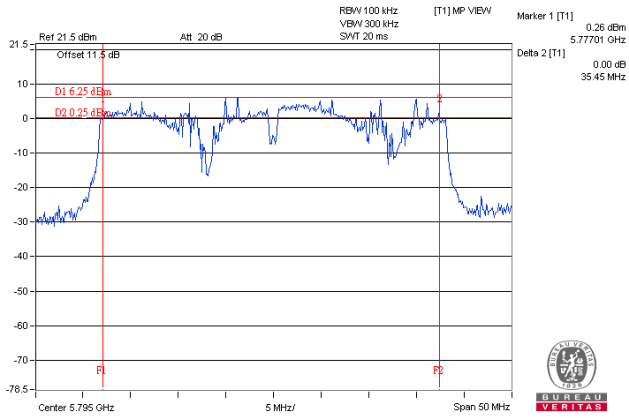
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	75.92	75.92	0.5	Pass

SPECTRUM PLOT OF WORST VALUE

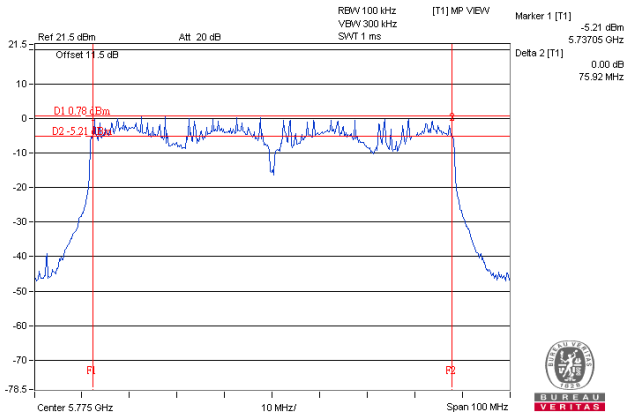
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



5 Pictures of Test Arrangements

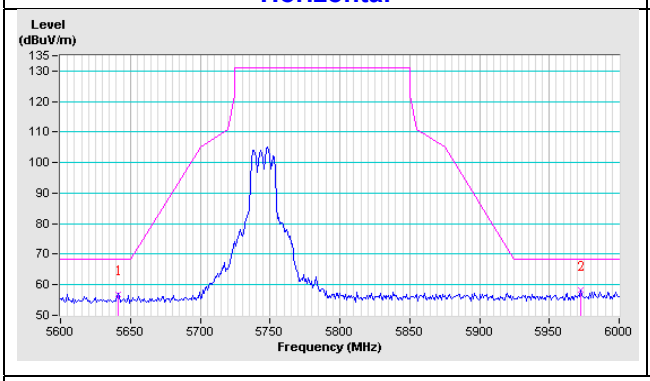
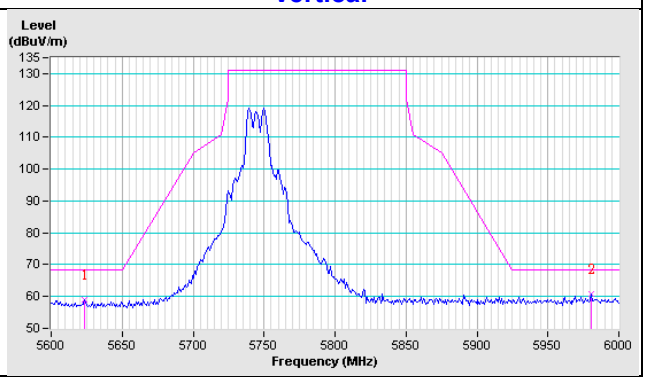
Please refer to the attached file (Test Setup Photo).

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

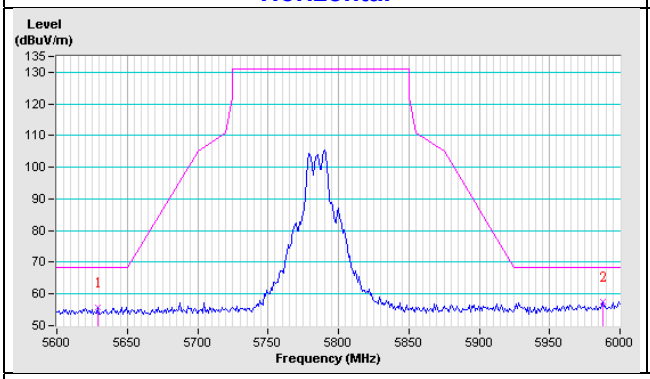
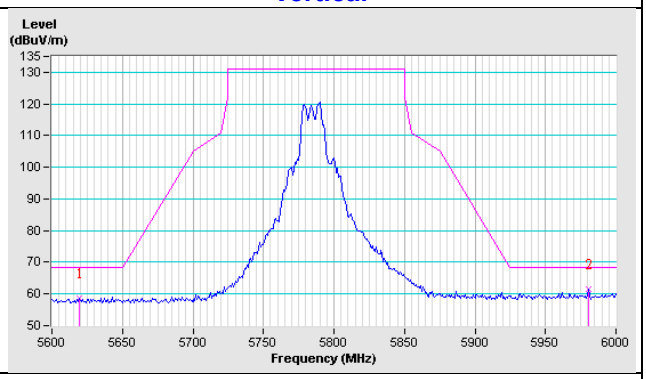
CDD Mode

802.11a

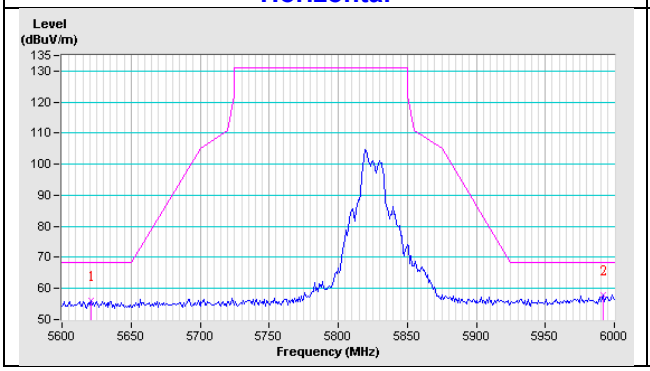
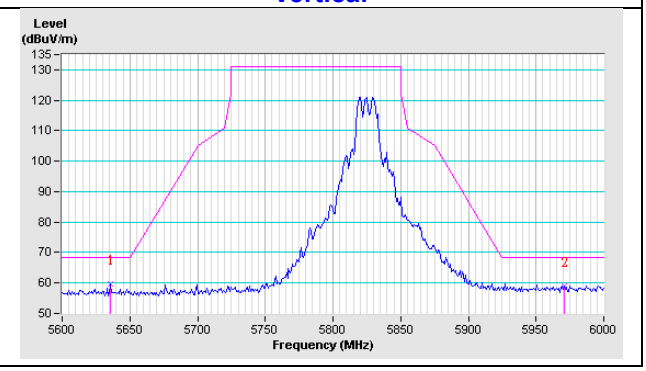
CH149

Horizontal	Vertical
	

CH157

Horizontal	Vertical
	

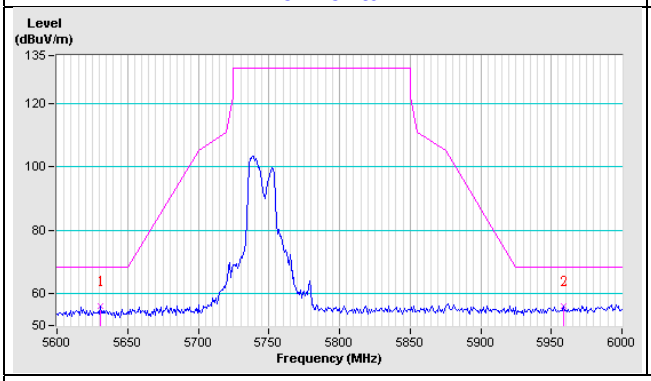
CH165

Horizontal	Vertical
	

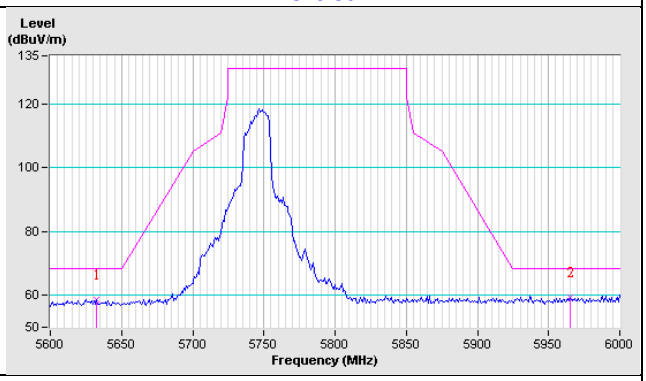
802.11n (HT20)

CH149

Horizontal

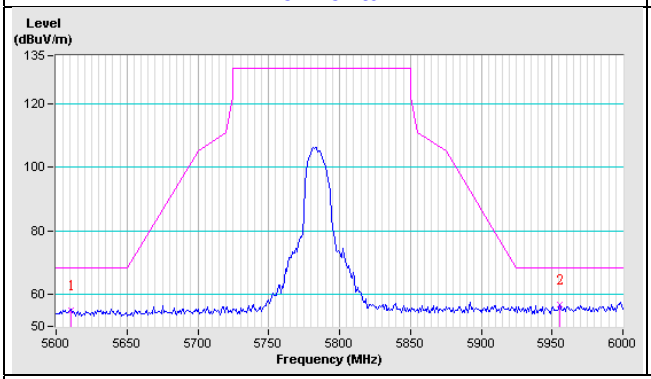


Vertical

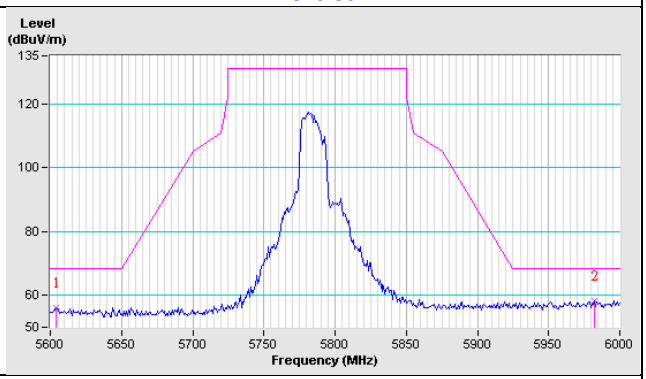


CH157

Horizontal

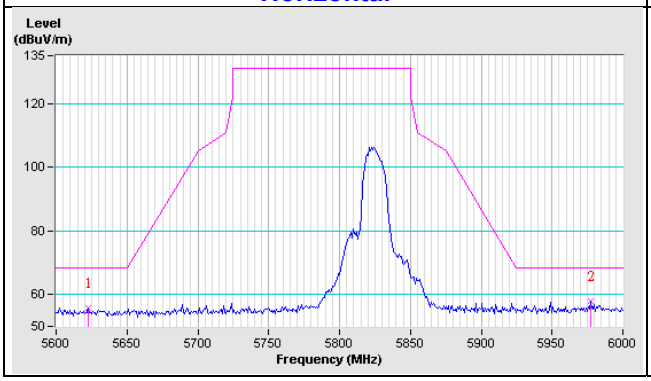


Vertical

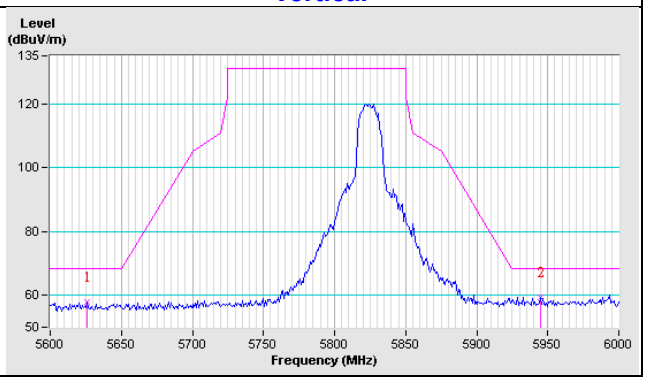


CH165

Horizontal



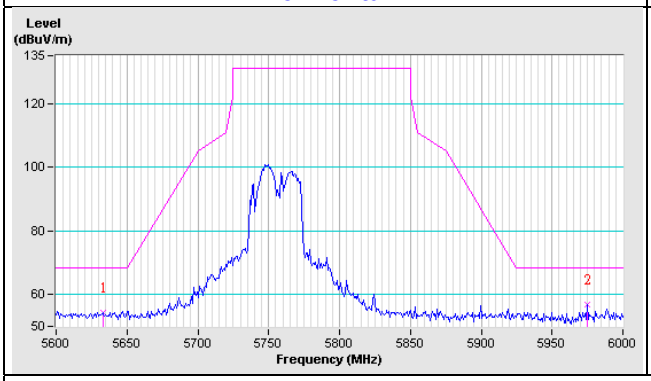
Vertical



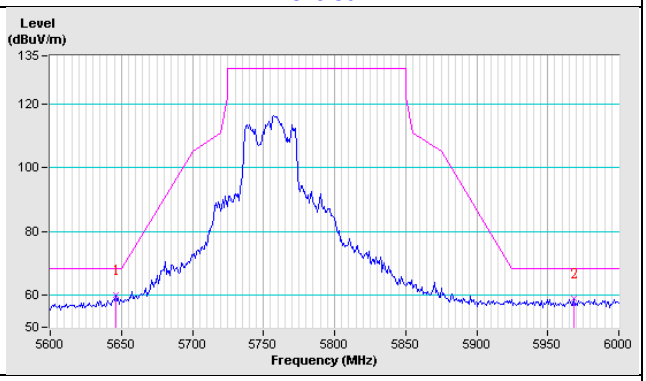
802.11n (HT40)

CH151

Horizontal

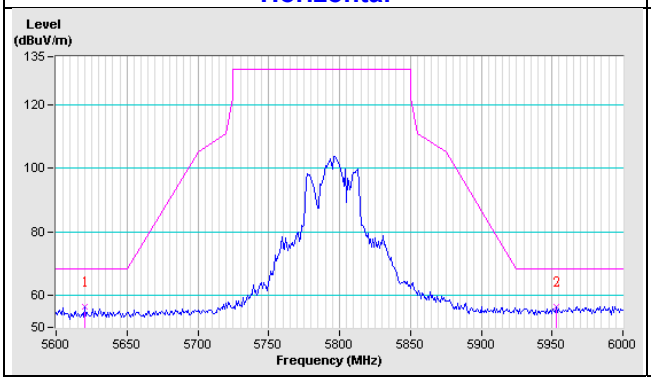


Vertical

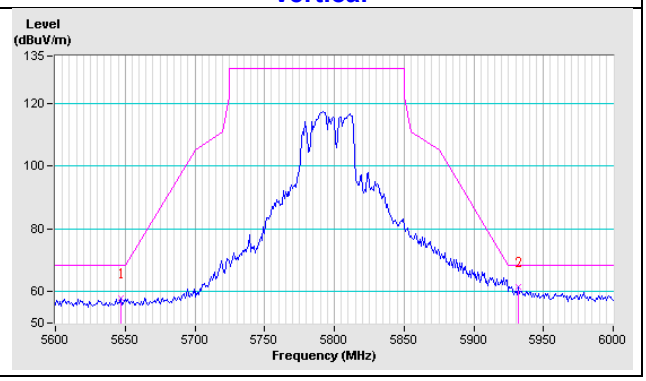


CH159

Horizontal



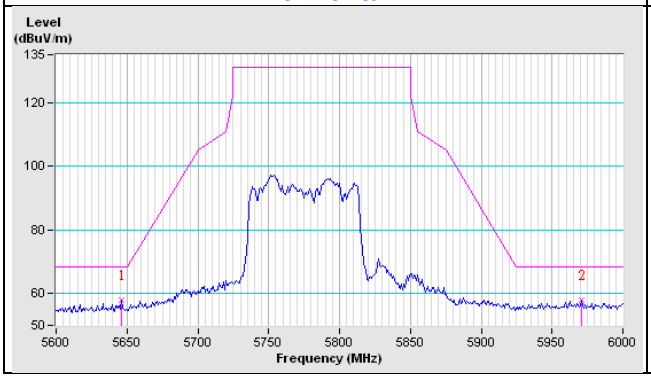
Vertical



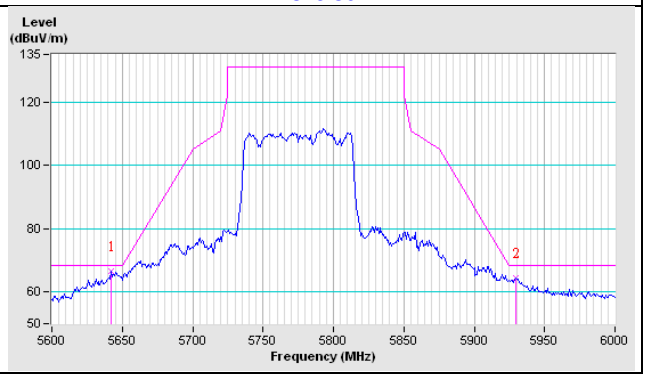
802.11ac (VHT80)

CH155

Horizontal



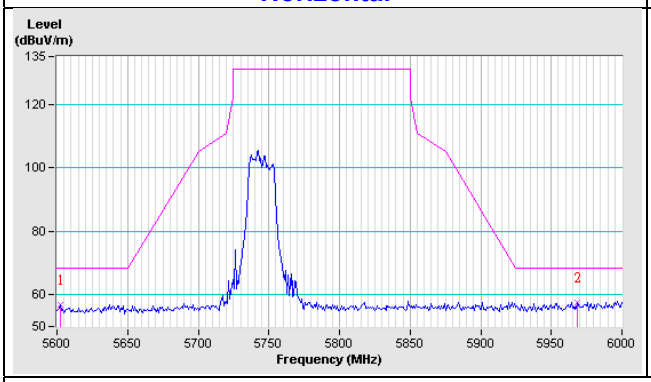
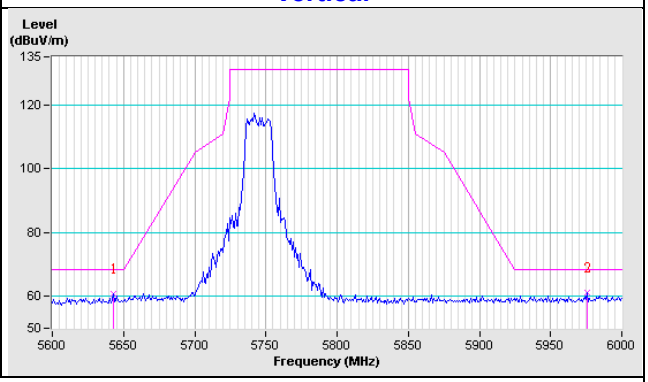
Vertical



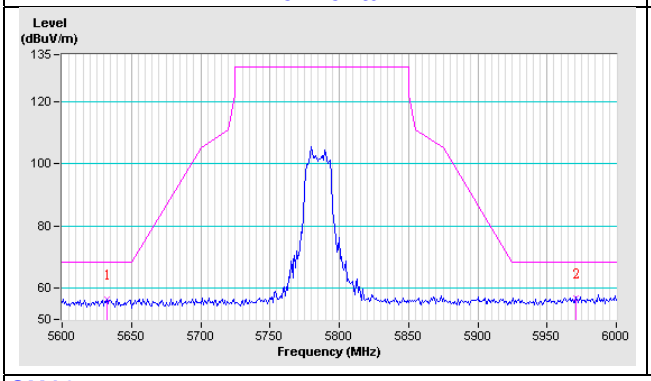
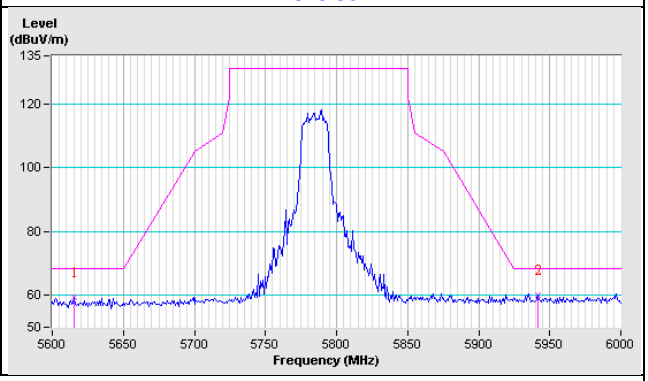
Beamforming Mode

802.11n (HT20)

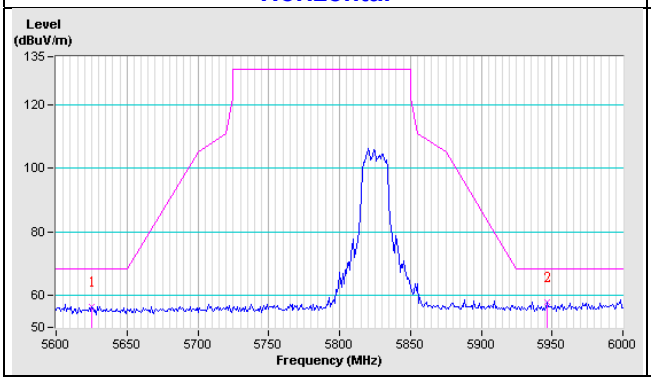
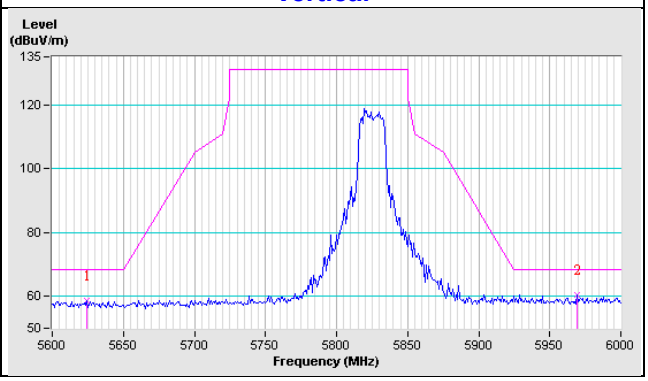
CH149

Horizontal	Vertical
	

CH157

Horizontal	Vertical
	

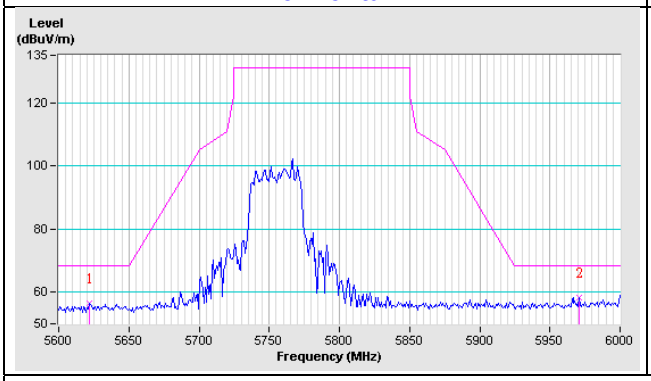
CH165

Horizontal	Vertical
	

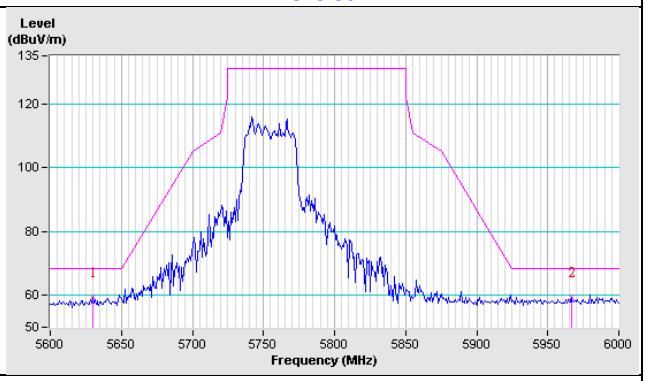
802.11n (HT40)

CH151

Horizontal

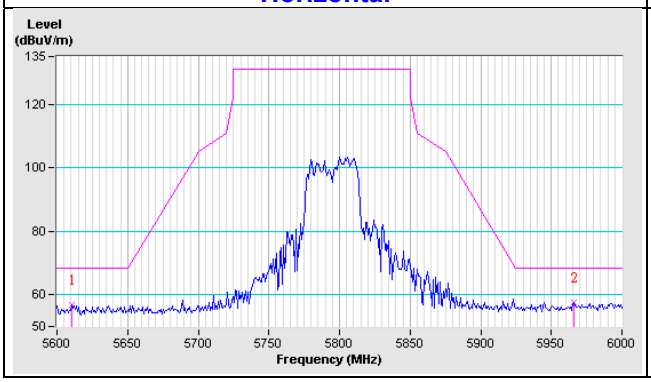


Vertical

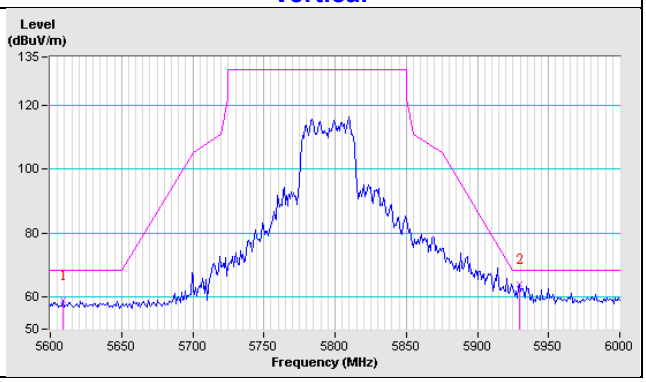


CH159

Horizontal



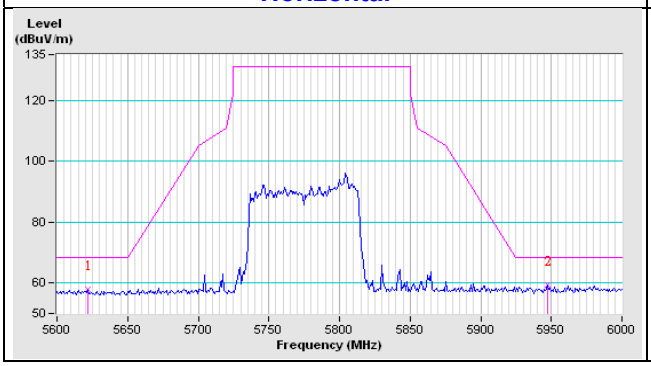
Vertical



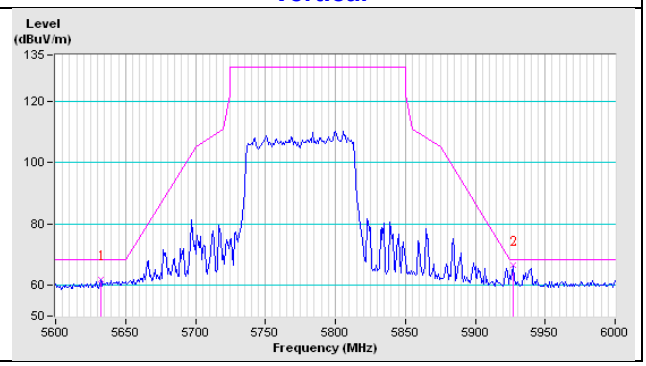
802.11ac (VHT80)

CH155

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 accredited and approved according to ISO/IEC 17025.

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

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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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