

FCC Test Report

Report No.: RF130923D14B-1

FCC ID: 2AA69002

Test Model: DC-NU2-UMPC

Received Date: Jan. 05, 2015

Test Date: Jan. 10 ~ Feb. 04, 2015

Issued Date: Feb. 09, 2015

Applicant: Capsule Technologie SAS

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Table of Contents

Release Control Record	4
1 Certificate of Conformity	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Modification Record	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Description of Test Modes	8
3.2.1 Test Mode Applicability and Tested Channel Detail	9
3.3 Duty Cycle of Test Signal	11
3.4 Description of Support Units	12
3.4.1 Configuration of System under Test	12
3.5 General Description of Applied Standards	13
4 Test Types and Results	14
4.1 Radiated Emission and Bandedge Measurement	14
4.1.1 Limits of Radiated Emission and Bandedge Measurement	14
4.1.2 Test Instruments	15
4.1.3 Test Procedures	16
4.1.4 Deviation from Test Standard	16
4.1.5 Test Set Up	17
4.1.6 EUT Operating Conditions	17
4.1.7 Test Results	18
4.2 Conducted Emission Measurement	52
4.2.1 Limits of Conducted Emission Measurement	52
4.2.2 Test Instruments	52
4.2.3 Test Procedures	53
4.2.4 Deviation from Test Standard	53
4.2.5 Test Setup	53
4.2.6 EUT Operating Conditions	53
4.2.7 Test Results	54
4.3 Transmit Power Measurement	56
4.3.1 Limits of Transmit Power Measurement	56
4.3.2 Test Setup	56
4.3.3 Test Instruments	56
4.3.4 Test Procedure	56
4.3.5 Deviation from Test Standard	56
4.3.6 EUT Operating Conditions	56
4.3.7 Test Result	57
4.4 Peak Power Spectral Density Measurement	63
4.4.1 Limits of Peak Power Spectral Density Measurement	63
4.4.2 Test Setup	63
4.4.3 Test Instruments	63
4.4.4 Test Procedures	63
4.4.5 Deviation from Test Standard	64
4.4.6 EUT Operating Conditions	64
4.4.7 Test Results	65
4.5 Frequency Stability	69
4.5.1 Limits of Frequency Stability Measurement	69
4.5.2 Test Setup	69
4.5.3 Test Instruments	69
4.5.4 Test Procedure	69
4.5.5 Deviation from Test Standard	69
4.5.6 EUT Operating Condition	69

4.5.7 Test Results	70
4.6 6dB Bandwidth Measurement.....	71
4.6.1 Limits of 6dB Bandwidth Measurement.....	71
4.6.2 Test Setup.....	71
4.6.3 Test Instruments	71
4.6.4 Test Procedure	71
4.6.5 Deviation from Test Standard	71
4.6.6 EUT Operating Condition	71
4.6.7 Test Results	72
5 Pictures of Test Arrangements.....	74
Appendix – Information on the Testing Laboratories	75



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Release Control Record

Issue No.	Description	Date Issued
RF130923D14B-1	Original release	Feb. 09, 2015

1 Certificate of Conformity

Product: SmartLinx Neuron 2

Brand: Capsule

Test Model: DC-NU2-UMPC

Sample Status: MASS-PRODUCTION

Applicant: Capsule Technologie SAS

Test Date: Dec. 27, 2014 ~ Jan. 19, 2015

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10:2009

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:** Feb. 09, 2015
Pettie Chen / Senior Specialist

Approved by :  , **Date:** Feb. 09, 2015
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 -2.63dB at 0.37600MHz.
15.407(b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -2.8dB at 96.07MHz.
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	No antenna connector is used.

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	3.63 dB
	200MHz ~ 1000MHz	3.64 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	SmartLinx Neuron 2
Brand	Capsule
Test Model	DC-NU2-UMPC
Status of EUT	MASS-PRODUCTION
Power Supply Rating	20Vdc (Adapter)
Modulation Type	64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300Mbps
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz & 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (HT20) 3 for 802.11n (HT40) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40)
Output Power	5180 ~ 5240MHz: 34.198mW 5260 ~ 5320MHz: 35.400mW 5500 ~ 5700MHz: 33.651mW 5745 ~ 5825MHz: 33.884mW
Antenna Type	PCB antenna with 2dBi gain
Antenna Connector	NA
Accessory Device	Refer to Note for more details
Data Cable Supplied	Adapter

Note:

- The EUT provides 2 completed transmitter and 2 receivers.

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX

- The EUT uses following adapter.

Brand	fsp
Model	FSP065-DCCM1
Input Power	100-240Vac/ 2.0-1.0A/50-60 Hz
Output Power	20.0Vdc/ 3.25A MAX
Power Line	AC: 1.5m cable without core DC: 1.2m cable with one core

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

FOR 5260 ~ 5320MHz

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

FOR 5500 ~ 5700MHz

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

Channel	Frequency	Channel	Frequency
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	134	5670 MHz
110	5550 MHz		

FOR 5745 ~ 5825MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

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 & Bandedge Measurement
RE<1G: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission
APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.

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)
-	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	7.2
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	15.0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
-	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
-	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0
-	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	7.2
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	15.0

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)
-	802.11a	5180-5240	36 to 48	52	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		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)
-	802.11a	5180-5240	36 to 48	52	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		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)
-	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	7.2
-	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	15.0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
-	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
-	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0
-	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	7.2
-	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	15.0

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 60%RH	120Vac, 60Hz	Tank Chang
RE<1G	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang
PLC	18deg. C, 70%RH	120Vac, 60Hz	Alan Wu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Frank Liu

3.3 Duty Cycle of Test Signal

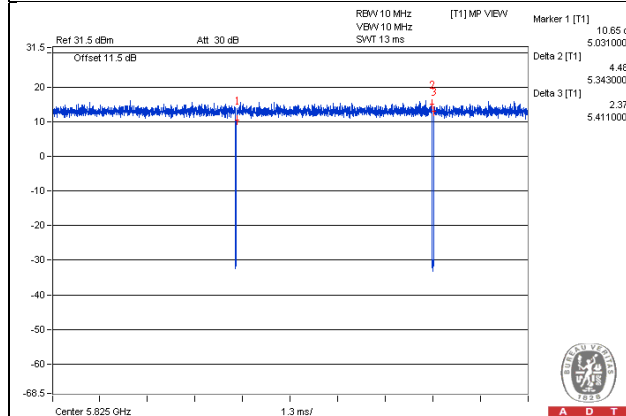
Duty cycle of test signal is > 98%, duty factor is not required.

802.11a: Duty cycle = $5.343/5.411 = 0.987$

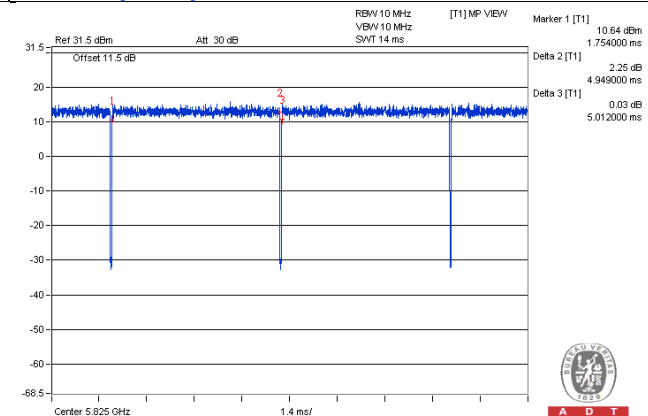
802.11n (HT20): Duty cycle = $4.949/5.012 = 0.987$

802.11n (HT40): Duty cycle = $2.398/2.441 = 0.982$

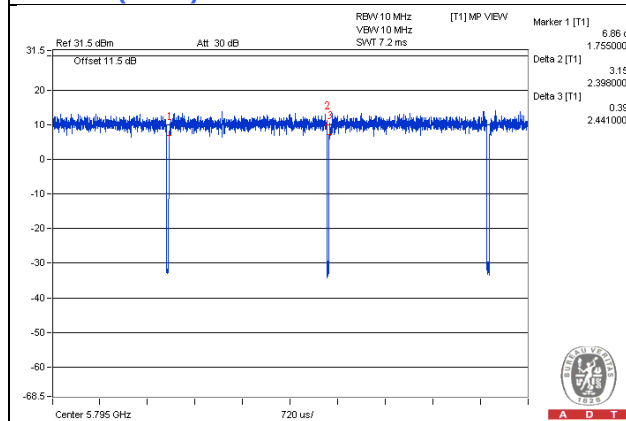
802.11a



802.11n (HT20)



802.11n (HT40)



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.	USB Flash Drive	Transcend	V85	538455 4489	-	-
B.	USB Flash Drive	Transcend	V85	538455 4490	-	-
C.	USB Flash Drive	Transcend	V85	569992-8209	-	-
D.	Keyboard	DELL	KB4021	CN-05V23T-71581-1A K-01RU-A01	FCC DoC Approved	-
E.	Mouse	DELL	MS111-L	CN-09RRC7-48729-39 B-02LR	FCC DoC Approved	-
F.	Load	NA	NA	NA	NA	-

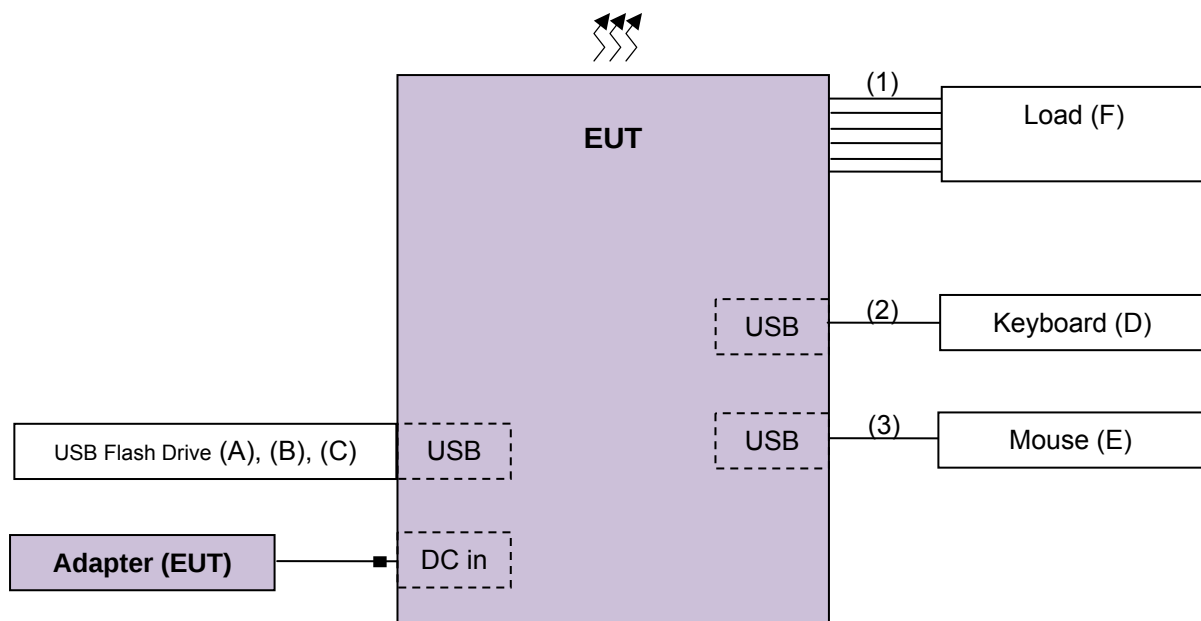
Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45 cable	6	1.8	N	0	-
2.	USB cable	1	1.8	Y	0	-
3.	USB cable	1	1.8	Y	0	-

Note: The core(s) is(are) originally attached to the cable(s).

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

ANSI C63.10-2009

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

NOTE:

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 Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK:74 (dBuV/m)	AV:54 (dBuV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBuV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK:-27 (dBm/MHz) ^{*1} PK:-17 (dBm/MHz) ^{*2}	PK: 68.2(dBuV/m) ^{*1} PK:78.2 (dBuV/m) ^{*2}

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

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Due Date Of Calibration
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Dec. 01, 2014	Nov. 30, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Feb. 25, 2014	Feb. 24, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Aug. 27, 2014	Aug. 26, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8449B	3008A01911	Aug. 09, 2014	Aug. 08, 2015
Preamplifier Agilent	8447D	2944A10638	Aug. 09, 2014	Aug. 08, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	248780/4 309222/4 274092/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable Worken	8D-FB	Cable-CH9-01	Aug. 11, 2014	Aug. 10, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA	NA
High Speed Peak Power Meter	ML2495A	0824011	Jul. 26, 2014	Jul. 25, 2015
Power Sensor	MA2411B	0738171	Jul. 26, 2014	Jul. 25, 2015
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 09, 2014	Jun. 08, 2015

- 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 9.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 215374.
5. The IC Site Registration No. is IC 7450F-9.

4.1.3 Test Procedures

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

Note:

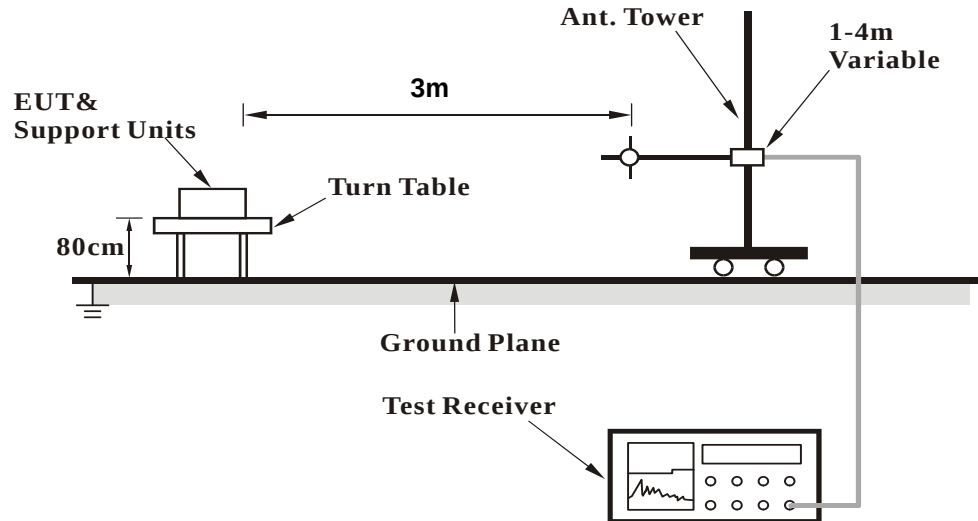
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

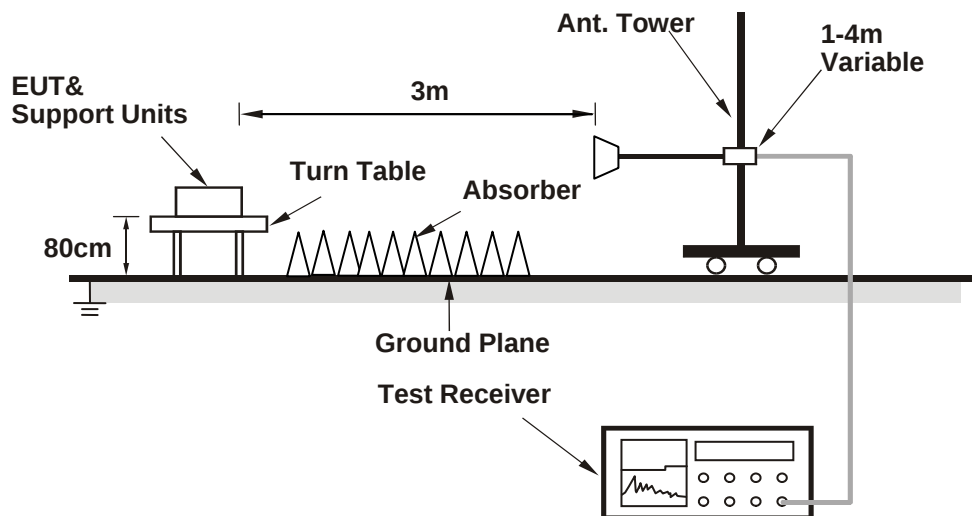
No deviation.

4.1.5 Test Set Up

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.6 EUT Operating Conditions

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

4.1.7 Test Results

ABOVE 1GHz DATA

802.11a

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

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	61.4 PK	74.0	-12.6	1.08 H	290	59.40	2.00
2	5150.00	44.8 AV	54.0	-9.2	1.08 H	290	42.80	2.00
3	*5180.00	102.6 PK			1.08 H	290	62.60	40.00
4	*5180.00	91.8 AV			1.08 H	290	51.80	40.00
5	#10360.00	61.0 PK	74.0	-13.0	1.02 H	64	46.00	15.00
6	#10360.00	48.6 AV	54.0	-5.4	1.02 H	64	33.60	15.00
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	1.00 V	269	55.90	2.00
2	5150.00	44.8 AV	54.0	-9.2	1.00 V	269	42.80	2.00
3	*5180.00	96.7 PK			1.00 V	269	56.70	40.00
4	*5180.00	86.2 AV			1.00 V	269	46.20	40.00
5	#10360.00	60.2 PK	74.0	-13.8	1.08 V	94	45.20	15.00
6	#10360.00	47.2 AV	54.0	-6.8	1.08 V	94	32.20	15.00

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	101.8 PK			1.02 H	333	61.70	40.10
2	*5200.00	91.0 AV			1.02 H	333	50.90	40.10
3	#10400.00	62.0 PK	74.0	-12.0	1.02 H	69	47.00	15.00
4	#10400.00	48.6 AV	54.0	-5.4	1.02 H	69	33.60	15.00
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	97.1 PK			1.00 V	270	57.00	40.10
2	*5200.00	86.1 AV			1.00 V	270	46.00	40.10
3	#10400.00	61.0 PK	74.0	-13.0	1.02 V	64	46.00	15.00
4	#10400.00	47.5 AV	54.0	-6.5	1.02 V	64	32.50	15.00

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	101.6 PK			1.00 H	334	61.50	40.10
2	*5240.00	91.1 AV			1.00 H	334	51.00	40.10
3	5350.00	47.4 PK	74.0	-26.6	1.00 H	334	45.40	2.00
4	5350.00	43.9 AV	54.0	-10.1	1.00 H	334	41.90	2.00
5	#10480.00	61.1 PK	74.0	-12.9	1.02 H	64	46.00	15.10
6	#10480.00	47.6 AV	54.0	-6.4	1.02 H	64	32.50	15.10
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	96.7 PK			1.00 V	271	56.60	40.10
2	*5240.00	86.2 AV			1.00 V	271	46.10	40.10
3	5350.00	57.2 PK	74.0	-16.8	1.00 V	271	55.20	2.00
4	5350.00	43.8 AV	54.0	-10.2	1.00 V	271	41.80	2.00
5	#10480.00	60.6 PK	74.0	-13.4	1.02 V	58	45.50	15.10
6	#10480.00	47.6 AV	54.0	-6.4	1.02 V	58	32.50	15.10

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 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	57.6 PK	74.0	-16.4	1.00 H	332	55.60	2.00
2	5150.00	43.5 AV	54.0	-10.5	1.00 H	332	41.50	2.00
3	*5260.00	101.2 PK			1.00 H	332	61.10	40.10
4	*5260.00	90.4 AV			1.00 H	332	50.30	40.10
5	#10520.00	60.5 PK	74.0	-13.5	1.10 H	64	45.20	15.30
6	#10520.00	48.6 AV	54.0	-5.4	1.10 H	64	33.30	15.30
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	57.6 PK	74.0	-16.4	1.02 V	163	55.60	2.00
2	5150.00	43.5 AV	54.0	-10.5	1.02 V	163	41.50	2.00
3	*5260.00	95.6 PK			1.00 V	276	55.50	40.10
4	*5260.00	85.2 AV			1.00 V	276	45.10	40.10
5	#10520.00	61.3 PK	74.0	-12.7	1.54 V	158	46.00	15.30
6	#10520.00	47.9 AV	54.0	-6.1	1.54 V	158	32.60	15.30

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 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5300.00	102.1 PK			1.00 H	334	62.00	40.10
2	*5300.00	91.4 AV			1.00 H	334	51.30	40.10
3	10600.00	61.2 PK	74.0	-12.8	1.54 H	65	45.00	16.20
4	10600.00	49.4 AV	54.0	-4.6	1.54 H	65	33.20	16.20
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	*5300.00	95.5 PK			1.00 V	291	55.40	40.10
2	*5300.00	84.8 AV			1.00 V	291	44.70	40.10
3	10600.00	55.5 PK	74.0	-18.5	1.05 V	24	39.30	16.20
4	10600.00	32.2 AV	54.0	-21.8	1.05 V	24	16.00	16.20

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.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5320.00	101.2 PK			1.00 H	333	61.00	40.20
2	*5320.00	90.5 AV			1.00 H	333	50.30	40.20
3	5350.00	58.2 PK	74.0	-15.8	1.00 H	333	56.20	2.00
4	5350.00	44.0 AV	54.0	-10.0	1.00 H	333	42.00	2.00
5	10640.00	62.0 PK	74.0	-12.0	1.02 H	64	45.70	16.30
6	10640.00	49.8 AV	54.0	-4.2	1.02 H	64	33.50	16.30
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	*5320.00	97.1 PK			1.18 V	282	56.90	40.20
2	*5320.00	86.2 AV			1.18 V	282	46.00	40.20
3	5350.00	57.6 PK	74.0	-16.4	1.18 V	282	55.60	2.00
4	5350.00	44.0 AV	54.0	-10.0	1.18 V	282	42.00	2.00
5	10640.00	62.3 PK	74.0	-11.7	1.00 V	64	46.00	16.30
6	10640.00	49.5 AV	54.0	-4.5	1.00 V	64	33.20	16.30

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.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5460.00	58.1 PK	74.0	-15.9	1.00 H	210	56.00	2.10
2	5460.00	44.0 AV	54.0	-10.0	1.00 H	210	41.90	2.10
3	#5470.00	59.0 PK	74.0	-15.0	1.00 H	210	56.80	2.20
4	#5470.00	44.4 AV	54.0	-9.6	1.00 H	210	42.20	2.20
5	*5500.00	97.9 PK			1.00 H	210	57.60	40.30
6	*5500.00	87.4 AV			1.00 H	210	47.10	40.30
7	11000.00	63.4 PK	74.0	-10.6	1.25 H	69	45.70	17.70
8	11000.00	49.9 AV	54.0	-4.1	1.25 H	69	32.20	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	5460.00	57.1 PK	74.0	-16.9	1.55 V	275	55.00	2.10
2	5460.00	43.6 AV	54.0	-10.4	1.55 V	275	41.50	2.10
3	#5470.00	57.5 PK	74.0	-16.5	1.55 V	275	55.30	2.20
4	#5470.00	44.8 AV	54.0	-9.2	1.55 V	275	42.60	2.20
5	*5500.00	97.4 PK			1.55 V	275	57.10	40.30
6	*5500.00	86.7 AV			1.55 V	275	46.40	40.30
7	11000.00	63.0 PK	74.0	-11.0	1.02 V	9	45.30	17.70
8	11000.00	48.7 AV	54.0	-5.3	1.02 V	9	31.00	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 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5580.00	99.3 PK			1.02 H	332	58.80	40.50
2	*5580.00	88.8 AV			1.02 H	332	48.30	40.50
3	11160.00	63.0 PK	74.0	-11.0	1.02 H	66	46.60	16.40
4	11160.00	49.6 AV	54.0	-4.4	1.02 H	66	33.20	16.40
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	*5580.00	98.0 PK			1.24 V	277	57.50	40.50
2	*5580.00	87.6 AV			1.24 V	277	47.10	40.50
3	11160.00	62.4 PK	74.0	-11.6	1.02 V	5	46.00	16.40
4	11160.00	48.9 AV	54.0	-5.1	1.02 V	5	32.50	16.40

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.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5700.00	100.2 PK			1.00 H	328	59.40	40.80
2	*5700.00	89.2 AV			1.00 H	328	48.40	40.80
3	#5725.00	65.4 PK	74.0	-8.6	1.26 H	328	62.80	2.60
4	#5725.00	48.0 AV	54.0	-6.0	1.26 H	328	45.40	2.60
5	11400.00	62.7 PK	74.0	-11.3	1.02 H	64	46.50	16.20
6	11400.00	48.8 AV	54.0	-5.2	1.02 H	64	32.60	16.20
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	*5700.00	99.2 PK			1.20 V	278	58.40	40.80
2	*5700.00	88.4 AV			1.20 V	278	47.60	40.80
3	#5725.00	65.7 PK	74.0	-8.3	1.20 V	278	63.10	2.60
4	#5725.00	47.6 AV	54.0	-6.4	1.20 V	278	45.00	2.60
5	11400.00	61.5 PK	74.0	-12.5	1.02 V	84	45.30	16.20
6	11400.00	48.4 AV	54.0	-5.6	1.02 V	84	32.20	16.20

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.

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

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	#5714.90	63.7 PK	74.0	-10.3	1.00 H	330	61.10	2.60
2	#5714.90	46.6 AV	54.0	-7.4	1.00 H	330	44.00	2.60
3	#5722.90	72.3 PK	78.2	-5.9	1.00 H	330	69.70	2.60
4	#5725.00	53.8 PK	78.2	-24.4	1.00 H	330	51.20	2.60
5	*5745.00	98.6 PK			1.00 H	330	57.60	41.00
6	*5745.00	88.2 AV			1.00 H	330	47.20	41.00
7	11490.00	61.9 PK	74.0	-12.1	1.02 H	64	46.00	15.90
8	11490.00	49.4 AV	54.0	-4.6	1.02 H	64	33.50	15.90
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	#5714.90	62.9 PK	74.0	-11.1	1.00 V	279	60.30	2.60
2	#5714.90	45.9 AV	54.0	-8.1	1.00 V	279	43.30	2.60
3	#5722.90	71.2 PK	78.2	-7.0	1.00 V	279	68.60	2.60
4	#5725.00	51.6 PK	78.2	-26.6	1.00 V	279	49.00	2.60
5	*5745.00	97.5 PK			1.00 V	279	56.50	41.00
6	*5745.00	87.3 AV			1.00 V	279	46.30	41.00
7	11490.00	61.4 PK	74.0	-12.6	1.02 V	64	45.50	15.90
8	11490.00	47.2 AV	54.0	-6.8	1.02 V	64	31.30	15.90

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

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	*5785.00	98.2 PK			1.00 H	329	57.10	41.10
2	*5785.00	87.4 AV			1.00 H	329	46.30	41.10
3	11570.00	62.1 PK	74.0	-11.9	1.00 H	94	46.50	15.60
4	11570.00	48.2 AV	54.0	-5.8	1.00 H	94	32.60	15.60
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	*5785.00	98.4 PK			1.00 V	280	57.30	41.10
2	*5785.00	88.0 AV			1.00 V	280	46.90	41.10
3	11570.00	61.2 PK	74.0	-12.8	1.02 V	34	45.60	15.60
4	11570.00	48.1 AV	54.0	-5.9	1.02 V	34	32.50	15.60

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.

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

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	*5825.00	98.6 PK			1.00 H	330	57.50	41.10
2	*5825.00	88.4 AV			1.00 H	330	47.30	41.10
3	#5850.00	53.7 PK	78.2	-24.5	1.00 H	330	50.70	3.00
4	#5852.10	68.1 PK	78.2	-10.1	1.00 H	330	65.10	3.00
5	#5860.10	63.9 PK	74.0	-10.1	1.00 H	330	60.90	3.00
6	#5860.10	46.2 AV	54.0	-7.8	1.00 H	330	43.20	3.00
7	11650.00	61.3 PK	74.0	-12.7	1.05 H	84	45.70	15.60
8	11650.00	48.8 AV	54.0	-5.2	1.05 H	84	33.20	15.60
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	*5825.00	98.6 PK			1.26 V	280	57.50	41.10
2	*5825.00	88.0 AV			1.26 V	280	46.90	41.10
3	#5850.00	51.6 PK	78.2	-26.6	1.26 V	280	48.60	3.00
4	#5852.10	68.4 PK	78.2	-9.8	1.26 V	280	65.40	3.00
5	#5860.10	63.5 PK	74.0	-10.5	1.26 V	280	60.50	3.00
6	#5860.10	46.4 AV	54.0	-7.6	1.26 V	280	43.40	3.00
7	11650.00	61.3 PK	74.0	-12.7	1.02 V	64	45.70	15.60
8	11650.00	48.8 AV	54.0	-5.2	1.02 V	64	33.20	15.60

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.

802.11n (20MHz)

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

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	57.6 PK	74.0	-16.4	1.00 H	212	55.60	2.00
2	5150.00	44.1 AV	54.0	-9.9	1.00 H	212	42.10	2.00
3	*5180.00	97.3 PK			1.00 H	348	57.30	40.00
4	*5180.00	87.4 AV			1.00 H	348	47.40	40.00
5	#10360.00	62.5 PK	74.0	-11.5	1.00 H	100	47.50	15.00
6	#10360.00	49.0 AV	54.0	-5.0	1.00 H	100	34.00	15.00
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	58.0 PK	74.0	-16.0	1.00 V	160	56.00	2.00
2	5150.00	44.5 AV	54.0	-9.5	1.00 V	160	42.50	2.00
3	*5180.00	94.6 PK			1.02 V	322	54.60	40.00
4	*5180.00	84.3 AV			1.02 V	322	44.30	40.00
5	#10360.00	62.2 PK	74.0	-11.8	1.00 V	36	47.20	15.00
6	#10360.00	48.8 AV	54.0	-5.2	1.00 V	36	33.80	15.00

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	95.9 PK			1.00 H	346	55.80	40.10
2	*5200.00	86.6 AV			1.00 H	346	46.50	40.10
3	#10400.00	59.7 PK	74.0	-14.3	1.00 H	62	44.70	15.00
4	#10400.00	46.4 AV	54.0	-7.6	1.00 H	62	31.40	15.00
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	93.8 PK			1.01 V	322	53.70	40.10
2	*5200.00	83.8 AV			1.01 V	322	43.70	40.10
3	#10400.00	60.0 PK	74.0	-14.0	1.00 V	199	45.00	15.00
4	#10400.00	46.4 AV	54.0	-7.6	1.00 V	199	31.40	15.00

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	94.8 PK			1.00 H	344	54.70	40.10
2	*5240.00	84.9 AV			1.00 H	344	44.80	40.10
3	5350.00	58.4 PK	74.0	-15.6	1.00 H	303	56.40	2.00
4	5350.00	44.1 AV	54.0	-9.9	1.00 H	303	42.10	2.00
5	#10480.00	61.8 PK	74.0	-12.2	1.00 H	236	46.70	15.10
6	#10480.00	48.1 AV	54.0	-5.9	1.00 H	236	33.00	15.10
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	93.1 PK			1.00 V	291	53.00	40.10
2	*5240.00	82.5 AV			1.00 V	291	42.40	40.10
3	5350.00	58.3 PK	74.0	-15.7	1.00 V	53	56.30	2.00
4	5350.00	44.2 AV	54.0	-9.8	1.00 V	53	42.20	2.00
5	#10480.00	62.0 PK	74.0	-12.0	1.00 V	123	46.90	15.10
6	#10480.00	48.0 AV	54.0	-6.0	1.00 V	123	32.90	15.10

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 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	57.3 PK	74.0	-16.7	1.00 H	19	55.30	2.00
2	5150.00	44.0 AV	54.0	-10.0	1.00 H	19	42.00	2.00
3	*5260.00	95.3 PK			1.00 H	343	55.20	40.10
4	*5260.00	85.6 AV			1.00 H	343	45.50	40.10
5	#10520.00	61.1 PK	74.0	-12.9	1.00 H	106	45.80	15.30
6	#10520.00	48.0 AV	54.0	-6.0	1.00 H	106	32.70	15.30
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	57.5 PK	74.0	-16.5	1.00 V	29	55.50	2.00
2	5150.00	43.9 AV	54.0	-10.1	1.00 V	29	41.90	2.00
3	*5260.00	93.1 PK			1.00 V	320	53.00	40.10
4	*5260.00	83.3 AV			1.00 V	320	43.20	40.10
5	#10520.00	62.6 PK	74.0	-11.4	1.00 V	236	47.30	15.30
6	#10520.00	48.0 AV	54.0	-6.0	1.00 V	236	32.70	15.30

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 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5300.00	95.1 PK			1.03 H	265	55.00	40.10
2	*5300.00	84.8 AV			1.03 H	265	44.70	40.10
3	10600.00	63.5 PK	74.0	-10.5	1.00 H	326	47.30	16.20
4	10600.00	50.1 AV	54.0	-3.9	1.00 H	326	33.90	16.20
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	*5300.00	93.0 PK			1.00 V	291	52.90	40.10
2	*5300.00	82.6 AV			1.00 V	291	42.50	40.10
3	10600.00	63.2 PK	74.0	-10.8	1.00 V	29	47.00	16.20
4	10600.00	50.0 AV	54.0	-4.0	1.00 V	29	33.80	16.20

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.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5320.00	95.7 PK			1.11 H	130	55.50	40.20
2	*5320.00	85.6 AV			1.11 H	130	45.40	40.20
3	5350.00	58.4 PK	74.0	-15.6	1.00 H	333	56.40	2.00
4	5350.00	44.0 AV	54.0	-10.0	1.00 H	333	42.00	2.00
5	10640.00	62.8 PK	74.0	-11.2	1.00 H	62	46.50	16.30
6	10640.00	49.4 AV	54.0	-4.6	1.00 H	62	33.10	16.30
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	*5320.00	93.2 PK			1.00 V	283	53.00	40.20
2	*5320.00	83.0 AV			1.00 V	283	42.80	40.20
3	5350.00	57.6 PK	74.0	-16.4	1.00 V	159	55.60	2.00
4	5350.00	44.0 AV	54.0	-10.0	1.00 V	159	42.00	2.00
5	10640.00	63.1 PK	74.0	-10.9	1.00 V	156	46.80	16.30
6	10640.00	49.7 AV	54.0	-4.3	1.00 V	156	33.40	16.30

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.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5460.00	57.3 PK	74.0	-16.7	1.00 H	333	55.20	2.10
2	5460.00	44.1 AV	54.0	-9.9	1.00 H	333	42.00	2.10
3	#5470.00	57.6 PK	74.0	-16.4	1.00 H	106	55.40	2.20
4	#5470.00	44.1 AV	54.0	-9.9	1.00 H	106	41.90	2.20
5	*5500.00	95.8 PK			1.00 H	315	55.50	40.30
6	*5500.00	85.4 AV			1.00 H	315	45.10	40.30
7	11000.00	63.6 PK	74.0	-10.4	1.00 H	109	45.90	17.70
8	11000.00	50.3 AV	54.0	-3.7	1.00 H	109	32.60	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	5460.00	57.7 PK	74.0	-16.3	1.00 V	69	55.60	2.10
2	5460.00	44.1 AV	54.0	-9.9	1.00 V	69	42.00	2.10
3	#5470.00	57.6 PK	74.0	-16.4	1.00 V	331	55.40	2.20
4	#5470.00	44.5 AV	54.0	-9.5	1.00 V	331	42.30	2.20
5	*5500.00	93.1 PK			1.44 V	289	52.80	40.30
6	*5500.00	82.7 AV			1.44 V	289	42.40	40.30
7	11000.00	63.6 PK	74.0	-10.4	1.00 V	99	45.90	17.70
8	11000.00	50.3 AV	54.0	-3.7	1.00 V	99	32.60	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 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5580.00	95.2 PK			1.00 H	312	54.70	40.50
2	*5580.00	85.4 AV			1.00 H	312	44.90	40.50
3	11160.00	62.6 PK	74.0	-11.4	1.00 H	65	46.20	16.40
4	11160.00	49.0 AV	54.0	-5.0	1.00 H	65	32.60	16.40
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	*5580.00	92.8 PK			1.02 V	286	52.30	40.50
2	*5580.00	82.7 AV			1.02 V	286	42.20	40.50
3	11160.00	62.7 PK	74.0	-11.3	1.00 V	105	46.30	16.40
4	11160.00	49.2 AV	54.0	-4.8	1.00 V	105	32.80	16.40

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.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5700.00	95.0 PK			1.00 H	332	54.20	40.80
2	*5700.00	84.7 AV			1.00 H	332	43.90	40.80
3	#5725.00	58.3 PK	74.0	-15.7	1.00 H	332	55.70	2.60
4	#5725.00	44.8 AV	54.0	-9.2	1.00 H	332	42.20	2.60
5	11400.00	61.5 PK	74.0	-12.5	1.02 H	34	45.30	16.20
6	11400.00	48.8 AV	54.0	-5.2	1.02 H	34	32.60	16.20
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	*5700.00	94.4 PK			1.08 V	291	53.60	40.80
2	*5700.00	83.1 AV			1.08 V	291	42.30	40.80
3	#5725.00	57.6 PK	74.0	-16.4	1.02 V	34	55.00	2.60
4	#5725.00	44.1 AV	54.0	-9.9	1.02 V	34	41.50	2.60
5	11400.00	61.4 PK	74.0	-12.6	1.01 V	64	45.20	16.20
6	11400.00	48.4 AV	54.0	-5.6	1.01 V	64	32.20	16.20

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.

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

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	#5714.90	58.2 PK	74.0	-15.8	1.02 H	108	55.60	2.60
2	#5714.90	44.7 AV	54.0	-9.3	1.02 H	108	42.10	2.60
3	#5722.90	67.7 PK	78.2	-10.5	1.02 H	108	65.10	2.60
4	#5725.00	48.9 PK	78.2	-29.3	1.02 H	108	46.30	2.60
5	*5745.00	96.8 PK			1.02 H	108	55.80	41.00
6	*5745.00	85.3 AV			1.02 H	108	44.30	41.00
7	11490.00	61.9 PK	74.0	-12.1	1.02 H	34	46.00	15.90
8	11490.00	48.5 AV	54.0	-5.5	1.02 H	34	32.60	15.90
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	#5714.90	59.3 PK	74.0	-14.7	1.04 V	278	56.70	2.60
2	#5714.90	44.7 AV	54.0	-9.3	1.04 V	278	42.10	2.60
3	#5722.90	60.6 PK	78.2	-17.6	1.04 V	278	58.00	2.60
4	#5725.00	45.9 PK	78.2	-32.3	1.04 V	278	43.30	2.60
5	*5745.00	94.0 PK			1.04 V	278	53.00	41.00
6	*5745.00	82.7 AV			1.04 V	278	41.70	41.00
7	11490.00	61.1 PK	74.0	-12.9	1.01 V	21	45.20	15.90
8	11490.00	48.1 AV	54.0	-5.9	1.01 V	21	32.20	15.90

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

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	*5785.00	93.1 PK			1.00 H	70	52.00	41.10
2	*5785.00	82.8 AV			1.00 H	70	41.70	41.10
3	11570.00	60.9 PK	74.0	-13.1	1.02 H	64	45.30	15.60
4	11570.00	47.8 AV	54.0	-6.2	1.02 H	64	32.20	15.60
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	*5785.00	93.6 PK			1.06 V	280	52.50	41.10
2	*5785.00	82.7 AV			1.06 V	280	41.60	41.10
3	11570.00	60.9 PK	74.0	-13.1	1.41 V	51	45.30	15.60
4	11570.00	47.8 AV	54.0	-6.2	1.41 V	51	32.20	15.60

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.

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

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	*5825.00	94.1 PK			1.07 H	72	53.00	41.10
2	*5825.00	83.7 AV			1.07 H	72	42.60	41.10
3	#5850.00	44.3 PK	78.2	-33.9	1.07 H	72	41.30	3.00
4	#5852.10	59.0 PK	78.2	-19.2	1.07 H	72	56.00	3.00
5	#5860.10	58.8 PK	74.0	-15.2	1.07 H	72	55.80	3.00
6	#5860.10	44.8 AV	54.0	-9.2	1.07 H	72	41.80	3.00
7	11650.00	62.8 PK	74.0	-11.2	1.00 H	65	47.20	15.60
8	11650.00	48.0 AV	54.0	-6.0	1.00 H	65	32.40	15.60
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	*5825.00	93.8 PK			1.33 V	280	52.70	41.10
2	*5825.00	83.4 AV			1.33 V	280	42.30	41.10
3	#5850.00	44.2 PK	78.2	-34.0	1.33 V	280	41.20	3.00
4	#5852.40	58.7 PK	78.2	-19.5	1.33 V	280	55.70	3.00
5	#5860.10	58.5 PK	74.0	-15.5	1.33 V	280	55.50	3.00
6	#5860.10	45.1 AV	54.0	-8.9	1.33 V	280	42.10	3.00
7	11650.00	60.1 PK	74.0	-13.9	1.23 V	332	44.50	15.60
8	11650.00	46.9 AV	54.0	-7.1	1.23 V	332	31.30	15.60

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.

802.11n (40MHz)

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

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	59.0 PK	74.0	-15.0	1.00 H	341	57.00	2.00
2	5150.00	44.6 AV	54.0	-9.4	1.00 H	341	42.60	2.00
3	*5190.00	93.6 PK			1.00 H	341	53.60	40.00
4	*5190.00	83.0 AV			1.00 H	341	43.00	40.00
5	#10380.00	61.6 PK	74.0	-12.4	1.23 H	66	46.60	15.00
6	#10380.00	47.6 AV	54.0	-6.4	1.23 H	66	32.60	15.00
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	56.7 PK	74.0	-17.3	1.00 V	275	54.70	2.00
2	5150.00	43.2 AV	54.0	-10.8	1.00 V	275	41.20	2.00
3	*5190.00	90.7 PK			1.00 V	275	50.70	40.00
4	*5190.00	80.3 AV			1.00 V	275	40.30	40.00
5	#10380.00	60.2 PK	74.0	-13.8	1.02 V	34	45.20	15.00
6	#10380.00	46.3 AV	54.0	-7.7	1.02 V	34	31.30	15.00

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	93.4 PK			1.00 H	337	53.30	40.10
2	*5230.00	82.6 AV			1.00 H	337	42.50	40.10
3	5350.00	57.6 PK	74.0	-16.4	1.00 H	337	55.60	2.00
4	5350.00	44.5 AV	54.0	-9.5	1.00 H	337	42.50	2.00
5	#10460.00	61.5 PK	74.0	-12.5	1.04 H	84	46.50	15.00
6	#10460.00	48.2 AV	54.0	-5.8	1.04 H	84	33.20	15.00
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	100.0 PK			1.00 V	320	59.90	40.10
2	*5230.00	89.3 AV			1.00 V	320	49.20	40.10
3	5350.00	56.3 PK	74.0	-17.7	1.00 V	320	54.30	2.00
4	5350.00	43.3 AV	54.0	-10.7	1.00 V	320	41.30	2.00
5	#10460.00	60.2 PK	74.0	-13.8	1.04 V	88	45.20	15.00
6	#10460.00	46.2 AV	54.0	-7.8	1.04 V	88	31.20	15.00

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 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	57.6 PK	74.0	-16.4	1.02 H	64	55.60	2.00
2	5150.00	44.2 AV	54.0	-9.8	1.02 H	64	42.20	2.00
3	*5270.00	93.2 PK			1.00 H	339	53.10	40.10
4	*5270.00	83.2 AV			1.00 H	339	43.10	40.10
5	#10540.00	60.9 PK	74.0	-13.1	1.52 H	66	45.30	15.60
6	#10540.00	48.2 AV	54.0	-5.8	1.52 H	66	32.60	15.60
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	5150.00	56.3 PK	74.0	-17.7	1.00 V	292	54.30	2.00
2	5150.00	43.2 AV	54.0	-10.8	1.00 V	292	41.20	2.00
3	*5270.00	89.4 PK			1.00 V	292	49.30	40.10
4	*5270.00	79.1 AV			1.00 V	292	39.00	40.10
5	#10540.00	60.8 PK	74.0	-13.2	1.02 V	34	45.20	15.60
6	#10540.00	48.1 AV	54.0	-5.9	1.02 V	34	32.50	15.60

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.

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5310.00	92.5 PK			1.00 H	132	52.40	40.10
2	*5310.00	81.5 AV			1.00 H	132	41.40	40.10
3	5350.00	57.6 PK	74.0	-16.4	1.02 H	63	55.60	2.00
4	5350.00	45.5 AV	54.0	-8.5	1.02 H	63	43.50	2.00
5	10620.00	61.1 PK	74.0	-12.9	1.02 H	64	44.90	16.20
6	10620.00	48.4 AV	54.0	-5.6	1.02 H	64	32.20	16.20
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	*5310.00	90.3 PK			1.00 V	293	50.20	40.10
2	*5310.00	80.1 AV			1.00 V	293	40.00	40.10
3	5350.00	56.6 PK	74.0	-17.4	1.02 V	34	54.60	2.00
4	5350.00	43.2 AV	54.0	-10.8	1.02 V	34	41.20	2.00
5	10620.00	62.2 PK	74.0	-11.8	1.02 V	66	46.00	16.20
6	10620.00	47.6 AV	54.0	-6.4	1.02 V	66	31.40	16.20

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.

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5460.00	57.8 PK	74.0	-16.2	1.00 H	316	55.70	2.10
2	5460.00	44.1 AV	54.0	-9.9	1.00 H	316	42.00	2.10
3	#5470.00	59.1 PK	74.0	-14.9	1.00 H	316	56.90	2.20
4	#5470.00	44.9 AV	54.0	-9.1	1.00 H	316	42.70	2.20
5	*5510.00	92.8 PK			1.00 H	316	52.50	40.30
6	*5510.00	82.8 AV			1.00 H	316	42.50	40.30
7	11020.00	64.3 PK	74.0	-9.7	1.05 H	84	46.90	17.40
8	11020.00	50.6 AV	54.0	-3.4	1.05 H	84	33.20	17.40
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	5460.00	56.7 PK	74.0	-17.3	1.00 V	273	54.60	2.10
2	5460.00	43.4 AV	54.0	-10.6	1.00 V	273	41.30	2.10
3	#5470.00	57.9 PK	74.0	-16.1	1.00 V	273	55.70	2.20
4	#5470.00	44.9 AV	54.0	-9.1	1.00 V	273	42.70	2.20
5	*5510.00	99.2 PK			1.00 V	273	58.90	40.30
6	*5510.00	88.6 AV			1.00 V	273	48.30	40.30
7	11020.00	63.1 PK	74.0	-10.9	1.45 V	95	45.70	17.40
8	11020.00	49.6 AV	54.0	-4.4	1.45 V	95	32.20	17.40

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 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5550.00	91.8 PK			1.01 H	320	51.40	40.40
2	*5550.00	81.1 AV			1.01 H	320	40.70	40.40
3	11100.00	63.6 PK	74.0	-10.4	1.05 H	64	47.00	16.60
4	11100.00	49.1 AV	54.0	-4.9	1.05 H	64	32.50	16.60
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	*5550.00	88.8 PK			1.25 V	273	48.40	40.40
2	*5550.00	78.5 AV			1.25 V	273	38.10	40.40
3	11100.00	61.8 PK	74.0	-12.2	1.51 V	22	45.20	16.60
4	11100.00	47.8 AV	54.0	-6.2	1.51 V	22	31.20	16.60

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.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5670.00	92.7 PK			1.00 H	334	52.00	40.70
2	*5670.00	81.8 AV			1.00 H	334	41.10	40.70
3	#5725.00	58.5 PK	74.0	-15.5	1.00 H	333	55.90	2.60
4	#5725.00	44.8 AV	54.0	-9.2	1.00 H	333	42.20	2.60
5	11340.00	63.0 PK	74.0	-11.0	1.54 H	87	46.50	16.50
6	11340.00	49.0 AV	54.0	-5.0	1.54 H	87	32.50	16.50
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	*5670.00	90.3 PK			1.19 V	287	49.60	40.70
2	*5670.00	79.7 AV			1.19 V	287	39.00	40.70
3	#5725.00	58.1 PK	74.0	-15.9	1.19 V	287	55.50	2.60
4	#5725.00	44.6 AV	54.0	-9.4	1.19 V	287	42.00	2.60
5	11340.00	60.2 PK	74.0	-13.8	1.44 V	85	43.70	16.50
6	11340.00	47.8 AV	54.0	-6.2	1.44 V	85	31.30	16.50

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5714.90	60.1 PK	74.0	-13.9	1.00 H	113	57.50	2.60
2	#5714.90	46.1 AV	54.0	-7.9	1.00 H	113	43.50	2.60
3	#5722.90	64.0 PK	78.2	-14.2	1.00 H	111	61.40	2.60
4	#5725.00	49.5 PK	78.2	-28.7	1.00 H	111	46.90	2.60
5	*5755.00	91.7 PK			1.00 H	111	50.70	41.00
6	*5755.00	81.4 AV			1.00 H	111	40.40	41.00
7	11510.00	61.7 PK	74.0	-12.3	1.02 H	66	46.00	15.70
8	11510.00	48.3 AV	54.0	-5.7	1.02 H	66	32.60	15.70
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	#5714.90	59.7 PK	74.0	-14.3	1.17 V	282	57.10	2.60
2	#5714.90	46.0 AV	54.0	-8.0	1.17 V	282	43.40	2.60
3	#5722.90	62.5 PK	78.2	-15.7	1.17 V	281	59.90	2.60
4	#5725.00	45.3 PK	78.2	-32.9	1.17 V	281	42.70	2.60
5	*5755.00	92.2 PK			1.17 V	281	51.20	41.00
6	*5755.00	81.5 AV			1.17 V	281	40.50	41.00
7	11510.00	62.2 PK	74.0	-11.8	1.05 V	34	46.50	15.70
8	11510.00	48.3 AV	54.0	-5.7	1.05 V	34	32.60	15.70

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)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5795.00	92.1 PK			1.00 H	114	51.00	41.10
2	*5795.00	81.7 AV			1.00 H	114	40.60	41.10
3	#5850.00	47.6 PK	78.2	-30.6	1.00 H	114	44.60	3.00
4	#5852.10	59.0 PK	78.2	-19.2	1.00 H	114	56.00	3.00
5	#5860.10	59.1 PK	74.0	-14.9	1.00 H	114	56.10	3.00
6	#5860.10	45.3 AV	54.0	-8.7	1.00 H	114	42.30	3.00
7	11590.00	62.2 PK	74.0	-11.8	1.41 H	99	46.60	15.60
8	11590.00	48.1 AV	54.0	-5.9	1.41 H	99	32.50	15.60
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	*5795.00	91.8 PK			1.02 V	280	50.70	41.10
2	*5795.00	80.9 AV			1.02 V	280	39.80	41.10
3	#5850.00	45.0 PK	78.2	-33.2	1.02 V	280	42.00	3.00
4	#5852.10	59.1 PK	78.2	-19.1	1.02 V	280	56.10	3.00
5	#5860.10	58.9 PK	74.0	-15.1	1.02 V	280	55.90	3.00
6	#5860.10	45.5 AV	54.0	-8.5	1.02 V	280	42.50	3.00
7	11590.00	61.2 PK	74.0	-12.8	1.02 V	154	45.60	15.60
8	11590.00	46.9 AV	54.0	-7.1	1.02 V	154	31.30	15.60

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 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 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	96.07	40.7 QP	43.5	-2.8	1.00 H	288	60.00	-19.30
2	143.87	38.1 QP	43.5	-5.4	1.24 H	314	52.50	-14.40
3	291.48	42.9 QP	46.0	-3.1	1.99 H	25	55.60	-12.70
4	323.81	39.4 QP	46.0	-6.6	1.49 H	176	51.20	-11.80
5	787.72	41.5 QP	46.0	-4.5	1.00 H	154	44.30	-2.80
6	912.84	39.8 QP	46.0	-6.2	1.49 H	145	40.70	-0.90
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	44.06	34.2 QP	40.0	-5.8	1.99 V	126	48.80	-14.60
2	96.07	34.7 QP	43.5	-8.8	1.00 V	241	54.00	-19.30
3	291.48	37.4 QP	46.0	-8.6	1.49 V	144	50.10	-12.70
4	461.58	36.7 QP	46.0	-9.3	1.24 V	100	45.80	-9.10
5	720.25	36.3 QP	46.0	-9.7	1.24 V	299	40.80	-4.50
6	841.13	42.9 QP	46.0	-3.1	1.00 V	187	45.20	-2.30

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.	Date Of Calibration	Due Date Of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100612	Sep. 30, 2014	Sep. 29, 2015
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 26, 2014	Dec. 25, 2015
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 13, 2014	Feb. 12, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 21, 2014	Jul. 20, 2015
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

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

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

4.2.3 Test Procedures

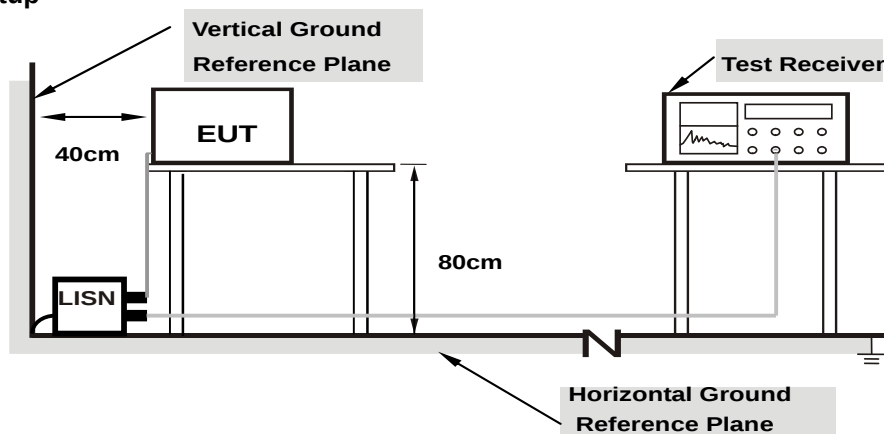
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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.

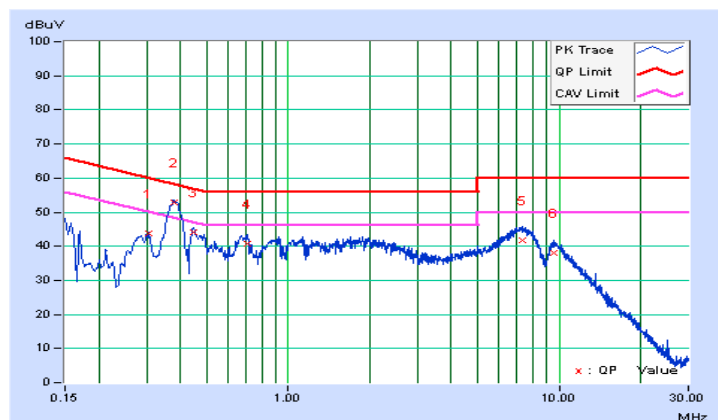
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.30615	0.08	43.67	33.59	43.75	33.67	60.07	50.07	-16.33	-16.41
2	0.37700	0.08	52.94	45.41	53.02	45.49	58.35	48.35	-5.33	-2.86
3	0.44716	0.08	43.86	36.01	43.94	36.09	56.93	46.93	-12.99	-10.84
4	0.70522	0.10	40.55	30.79	40.65	30.89	56.00	46.00	-15.35	-15.11
5	7.28184	0.38	41.52	36.41	41.90	36.79	60.00	50.00	-18.10	-13.21
6	9.57310	0.49	37.42	32.59	37.91	33.08	60.00	50.00	-22.09	-16.92

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.

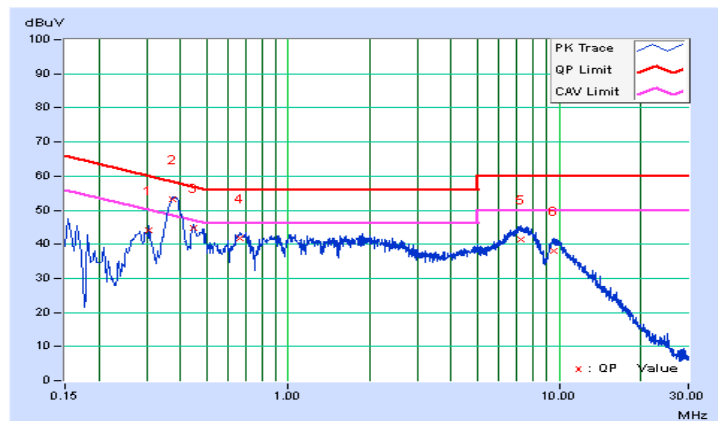


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.30640	0.06	44.10	33.82	44.16	33.88	60.07	50.07	-15.91	-16.19
2	0.37600	0.07	53.19	45.67	53.26	45.74	58.37	48.37	-5.11	-2.63
3	0.44624	0.07	44.77	37.14	44.84	37.21	56.94	46.94	-12.10	-9.73
4	0.66605	0.08	41.80	34.64	41.88	34.72	56.00	46.00	-14.12	-11.28
5	7.18409	0.33	41.10	35.82	41.43	36.15	60.00	50.00	-18.57	-13.85
6	9.50272	0.42	37.49	32.52	37.91	32.94	60.00	50.00	-22.09	-17.06

REMARKS:

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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

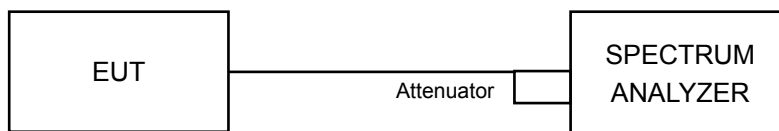
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

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

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

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

4.3.2 Test Setup



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

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.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

POWER OUTPUT:

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	32.211	15.08	24	Pass
40	5200	33.884	15.30	24	Pass
48	5240	34.198	15.34	24	Pass
52	5260	35.400	15.49	24	Pass
60	5300	32.885	15.17	24	Pass
64	5320	32.659	15.14	24	Pass
100	5500	31.842	15.03	24	Pass
116	5580	33.651	15.27	24	Pass
140	5700	32.434	15.11	24	Pass
149	5745	32.509	15.12	30	Pass
157	5785	31.915	15.04	30	Pass
165	5825	33.884	15.30	30	Pass

NOTE:

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

1. $11\text{dBm} + 10\log(36.18) = 26.58\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(36.32) = 26.60\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(37.19) = 26.70\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(35.43) = 26.49\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(37.79) = 26.77\text{ dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(41.61) = 27.19\text{ dBm} > 24\text{dBm}$.

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.05	10.04	20.209	13.06	24	Pass
40	5200	10.08	10.14	20.514	13.12	24	Pass
48	5240	9.96	10.27	20.549	13.13	24	Pass
52	5260	10.05	10.37	21.005	13.22	24	Pass
60	5300	10.18	10.22	20.943	13.21	24	Pass
64	5320	10.43	10.27	21.682	13.36	24	Pass
100	5500	11.37	10.25	24.302	13.86	24	Pass
116	5580	10.18	10.08	20.609	13.14	24	Pass
140	5700	9.81	10.32	20.337	13.08	24	Pass
149	5745	9.36	11.19	21.782	13.38	30	Pass
157	5785	9.80	11.87	24.932	13.97	30	Pass
165	5825	9.39	11.12	21.632	13.35	30	Pass

NOTE:

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

Chain 0

1. $11\text{dBm} + 10\log(26.18) = 25.18\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(25.41) = 25.05\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(25.47) = 25.06\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(25.48) = 25.06\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(25.97) = 25.14\text{ dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(25.47) = 25.06\text{ dBm} > 24\text{dBm}$.

Chain 1

1. $11\text{dBm} + 10\log(25.10) = 25.00\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(25.34) = 25.04\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(25.58) = 25.08\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(25.50) = 25.07\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(25.52) = 25.07\text{ dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(27.19) = 25.34\text{ dBm} > 24\text{dBm}$.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	10.14	10.02	20.374	13.09	24	Pass
46	5230	10.03	10.30	20.784	13.18	24	Pass
54	5270	9.72	10.38	20.290	13.07	24	Pass
62	5310	10.36	10.51	22.110	13.45	24	Pass
102	5510	10.13	10.40	21.269	13.28	24	Pass
110	5550	9.97	10.13	20.235	13.06	24	Pass
134	5670	10.09	10.62	21.744	13.37	24	Pass
151	5755	9.18	11.27	21.676	13.36	30	Pass
159	5795	9.37	10.74	20.508	13.12	30	Pass

NOTE:

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

Chain 0

1. $11\text{dBm} + 10\log(44.67) = 27.50\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(44.92) = 27.52\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(44.93) = 27.53\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(45.16) = 27.55\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(44.83) = 27.52\text{ dBm} > 24\text{dBm}$.

Chain 1

1. $11\text{dBm} + 10\log(44.14) = 27.45\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(45.14) = 27.55\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(44.75) = 27.51\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(44.62) = 27.50\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(45.78) = 27.61\text{ dBm} > 24\text{dBm}$.

26dB BANDWIDTH:

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	Pass / Fail
36	5180	36.84	Pass
40	5200	33.72	Pass
48	5240	35.92	Pass
52	5260	36.18	Pass
60	5300	36.32	Pass
64	5320	37.19	Pass
100	5500	35.43	Pass
116	5580	37.79	Pass
140	5700	41.61	Pass

802.11n (HT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	25.05	25.02	Pass
40	5200	25.34	24.98	Pass
48	5240	24.98	25.11	Pass
52	5260	26.18	25.10	Pass
60	5300	25.41	25.34	Pass
64	5320	25.47	25.58	Pass
100	5500	25.48	25.50	Pass
116	5580	25.97	25.52	Pass
140	5700	25.47	27.19	Pass

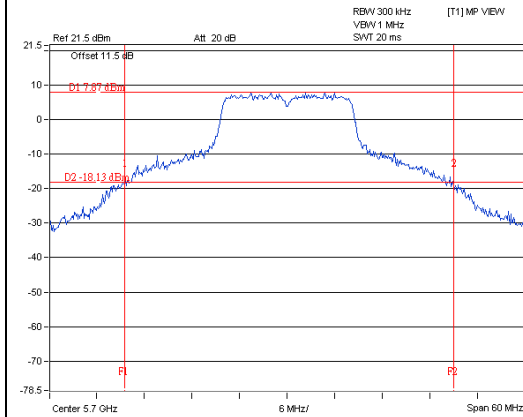
802.11n (HT40)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	44.74	44.51	Pass
46	5230	45.61	44.61	Pass
54	5270	44.67	44.14	Pass
62	5310	44.92	45.14	Pass
102	5510	44.93	44.75	Pass
110	5550	45.16	44.62	Pass
134	5670	44.83	45.78	Pass

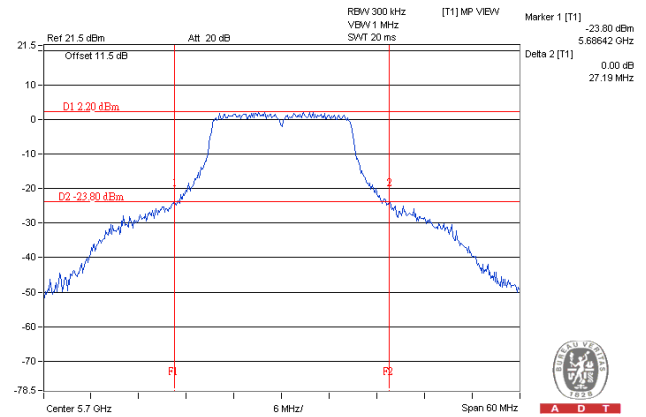
Spectrum Plot of Worst Value

802.11a

802.11n (HT20)

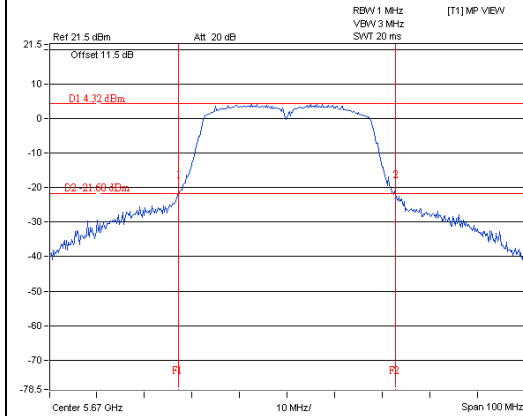


A D T



A D T

802.11n (HT40)



A D T

EUT MAXIMUM CONDUCTED POWER

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	35.400	15.49
5470~5725	33.651	15.27

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	21.682	13.36
5470~5725	24.302	13.86

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	22.110	13.45
5470~5725	21.744	13.37

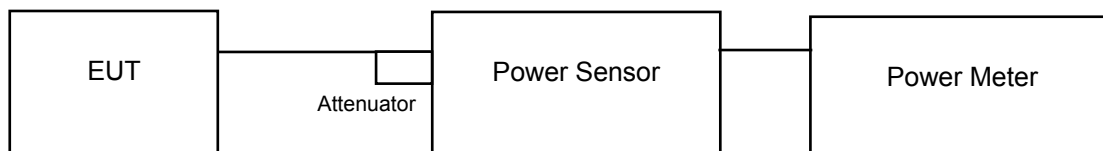
NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

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 Procedures

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

Using method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 30 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Set Channel power measure = 1MHz
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 500 kHz, Set VBW $\geq$ 3 RBW, Detector = RMS
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add 10 log (1/duty cycle)
- 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 = $10\log(500 \text{ kHz}/300\text{kHz})$

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results

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

802.11a

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	3.12	11	Pass
40	5200	3.26	11	Pass
48	5240	3.43	11	Pass
52	5260	3.53	11	Pass
60	5300	3.58	11	Pass
64	5320	3.15	11	Pass
100	5500	3.20	11	Pass
116	5580	3.04	11	Pass
140	5700	3.18	11	Pass

802.11n (HT20)

Channel	Frequency (MHz)	PSD (dBm)		Total Power Density (dBm)	Maximum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-2.37	-2.12	0.77	11	Pass
40	5200	-2.39	-2.31	0.66	11	Pass
48	5240	-2.64	-2.89	0.25	11	Pass
52	5260	-2.08	-3.28	0.37	11	Pass
60	5300	-2.40	-2.86	0.39	11	Pass
64	5320	-2.08	-2.42	0.76	11	Pass
100	5500	-2.19	-2.46	0.69	11	Pass
116	5580	-2.12	-2.26	0.82	11	Pass
140	5700	-2.83	-2.03	0.60	11	Pass

*Directional gain = $2\text{dBi} + 10\log(2) = 5.01\text{dBi} < 6\text{dBi}$, so the power density limit is not reduced.

802.11n (HT40)

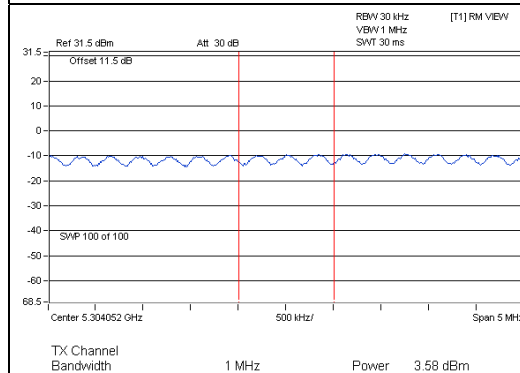
Channel	Frequency (MHz)	PSD (dBm)		Total Power Density (dBm)	Maximum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
38	5190	-5.05	-5.14	-2.08	11	Pass
46	5230	-5.25	-5.55	-2.39	11	Pass
54	5270	-5.51	-5.59	-2.54	11	Pass
62	5310	-5.55	-5.33	-2.43	11	Pass
102	5510	-5.09	-4.90	-1.98	11	Pass
110	5550	-5.10	-4.90	-1.99	11	Pass
134	5670	-5.44	-5.80	-2.61	11	Pass

*Directional gain = $2dBi + 10\log(2) = 5.01dBi < 6dBi$, so the power density limit is not reduced.

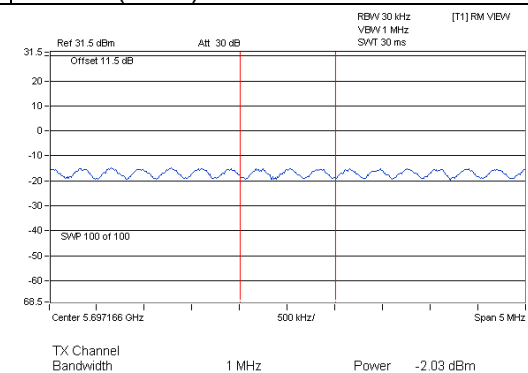
Spectrum Plot of Worst Value

802.11a

802.11n (HT20)

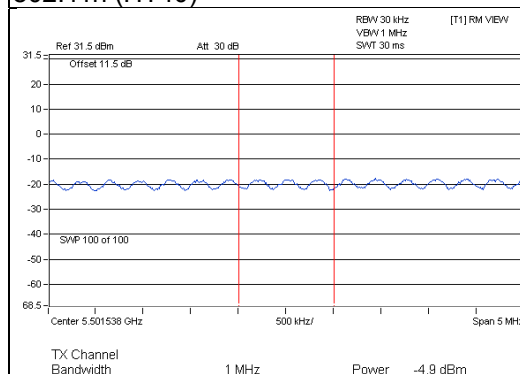


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802.11n (HT40)



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For U-NII-3 Band

802.11a

Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
149	5745	-6.02	-3.80	30	Pass
157	5785	-11.38	-9.16	30	Pass
165	5825	-11.37	-9.15	30	Pass

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	-12.17	-9.95	3.01	-6.94	30	Pass
	157	5785	-11.64	-9.42	3.01	-6.41	30	Pass
	165	5825	-11.91	-9.69	3.01	-6.68	30	Pass
1	149	5745	-12.20	-9.98	3.01	-6.97	30	Pass
	157	5785	-11.51	-9.29	3.01	-6.28	30	Pass
	165	5825	-11.01	-8.79	3.01	-5.78	30	Pass

*Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power density limit is not reduced.

802.11n (HT40)

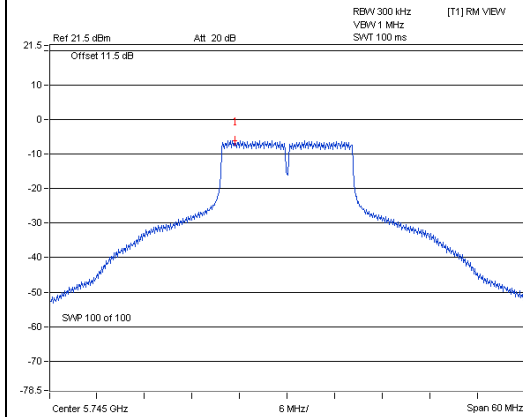
TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	151	5755	-15.09	-12.87	3.01	-9.86	30	Pass
	159	5795	-14.78	-12.56	3.01	-9.55	30	Pass
1	151	5755	-15.25	-13.03	3.01	-10.02	30	Pass
	159	5795	-14.48	-12.26	3.01	-9.25	30	Pass

*Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power density limit is not reduced.

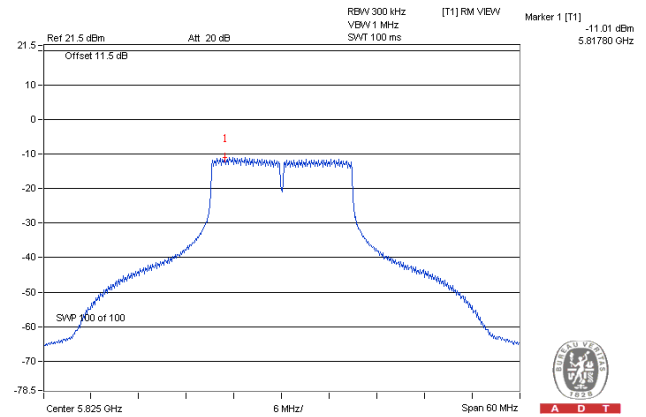
Spectrum Plot of Worst Value

802.11a

802.11n (HT20)

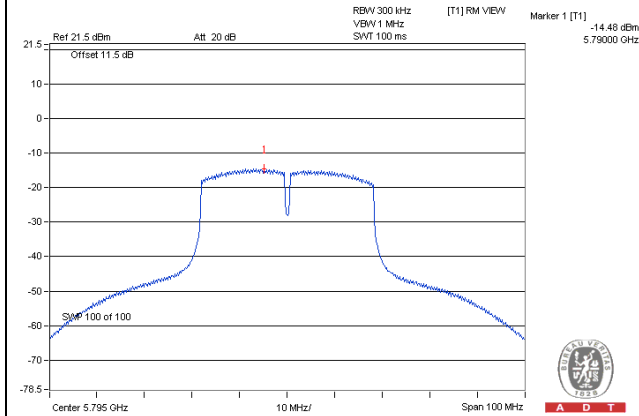


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802.11n (HT40)



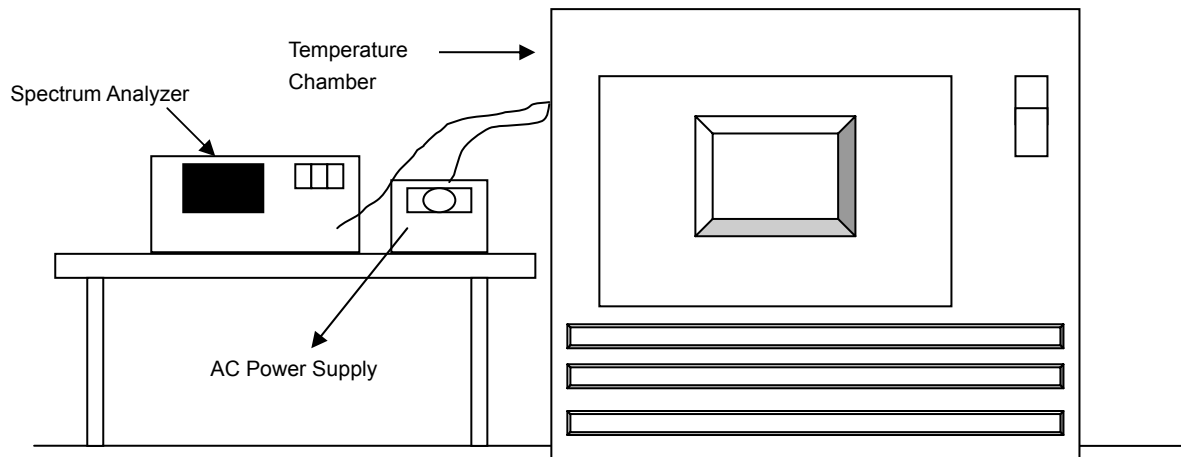
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4.5 Frequency Stability

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

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 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

Frequency Stability Versus Temp.									
Operating Frequency: 5320MHz									
Temp. (°C)	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	5320.0220	0.00041	5320.0241	0.00045	5320.0231	0.00043	5320.0195	0.00037
40	120	5320.0068	0.00013	5320.0096	0.00018	5320.0115	0.00022	5320.0068	0.00013
30	120	5319.9863	-0.00026	5319.9864	-0.00026	5319.9884	-0.00022	5319.9876	-0.00023
20	120	5319.9840	-0.00030	5319.9814	-0.00035	5319.9842	-0.00030	5319.9823	-0.00033
10	120	5319.9954	-0.00009	5319.9997	-0.00001	5320.0001	0.00000	5319.9996	-0.00001
0	120	5320.0127	0.00024	5320.0115	0.00022	5320.0116	0.00022	5320.0112	0.00021
-10	120	5320.0084	0.00016	5320.0102	0.00019	5320.0091	0.00017	5320.0110	0.00021
-20	120	5320.0098	0.00018	5320.0117	0.00022	5320.0101	0.00019	5320.0105	0.00020
-30	120	5319.9816	-0.00035	5319.9826	-0.00033	5319.9824	-0.00033	5319.9841	-0.00030

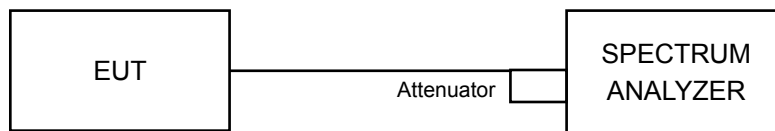
Frequency Stability Versus Temp.									
Operating Frequency: 5320MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	5319.9835	-0.00031	5319.9823	-0.00033	5319.9835	-0.00031	5319.9817	-0.00034
	120	5319.9840	-0.00030	5319.9814	-0.00035	5319.9842	-0.00030	5319.9823	-0.00033
	102	5319.9837	-0.00031	5319.9813	-0.00035	5319.9834	-0.00031	5319.9829	-0.00032

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

MEASUREMENT PROCEDURE REF

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.40	0.5	Pass
157	5785	16.43	0.5	Pass
165	5825	16.42	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	17.67	17.60	0.5	Pass
157	5785	17.64	17.64	0.5	Pass
165	5825	17.61	17.64	0.5	Pass

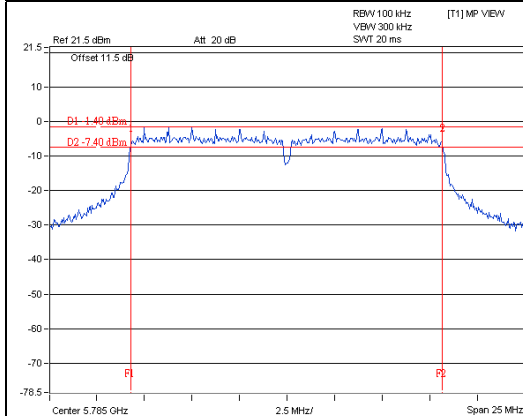
802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	35.30	35.30	0.5	Pass
159	5795	35.33	33.96	0.5	Pass

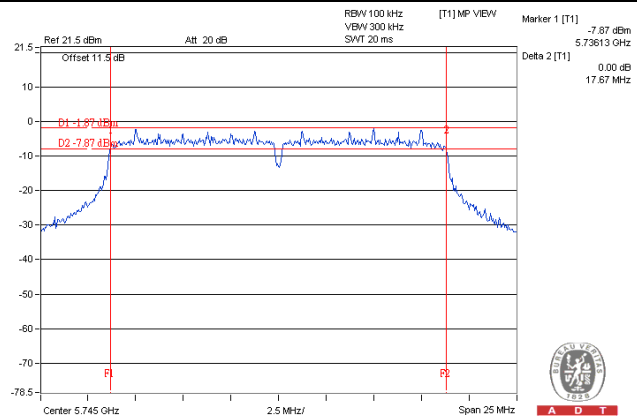
Spectrum Plot of Worst Value

802.11a

802.11n (HT20)

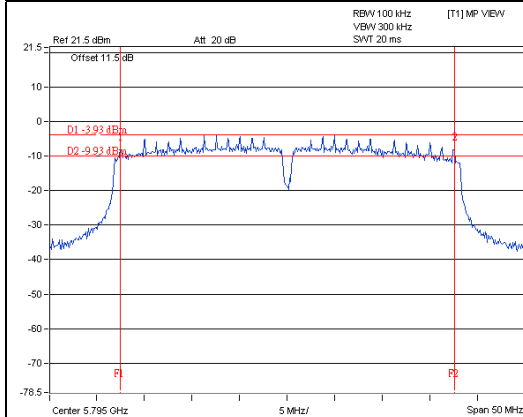


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802.11n (HT40)



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5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

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

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

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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