



# FCC TEST REPORT (15.407)

**REPORT NO.:** RF130414C02-1

**MODEL NO.:** BJNGA-FB0002, JG653A

**FCC ID:** O9C-BJNGAFB0002

**RECEIVED:** Apr. 12, 2013

**TESTED:** Apr. 12 ~ May 06, 2013

**ISSUED:** Jun. 03, 2013

**APPLICANT:** Hewlett Packard Company

**ADDRESS:** 153 Taylor Street Littleton Massachusetts, United States 01460-1407

**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

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

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



# TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	4
1. CERTIFICATION.....	5
2. SUMMARY OF TEST RESULTS .....	6
2.1 MEASUREMENT UNCERTAINTY .....	6
3. GENERAL INFORMATION.....	7
3.1 GENERAL DESCRIPTION OF EUT .....	7
3.2 DESCRIPTION OF TEST MODES.....	9
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	10
3.3 DUTY CYCLE OF TEST SIGNAL.....	13
3.4 DESCRIPTION OF SUPPORT UNITS .....	14
3.4.1 CONFIGURATION OF SYSTEM UNDER TEST .....	14
3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS .....	19
4. TEST TYPES AND RESULTS .....	20
4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT .....	20
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT.....	20
4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS .....	20
4.1.3 TEST INSTRUMENTS.....	21
4.1.4 TEST PROCEDURES .....	22
4.1.5 DEVIATION FROM TEST STANDARD .....	22
4.1.6 TEST SETUP.....	23
4.1.7 EUT OPERATING CONDITION .....	23
4.1.8 TEST RESULTS .....	24
4.2 CONDUCTED EMISSION MEASUREMENT .....	82
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	82
4.2.2 TEST INSTRUMENTS.....	82
4.2.3 TEST PROCEDURES .....	83
4.2.4 DEVIATION FROM TEST STANDARD .....	83
4.2.5 TEST SETUP.....	83
4.2.6 EUT OPERATING CONDITIONS .....	83
4.2.7 TEST RESULTS .....	84
4.3 PEAK TRANSMIT POWER MEASUREMENT .....	100
4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT .....	100
4.3.2 TEST SETUP.....	100
4.3.3 TEST INSTRUMENTS.....	101
4.3.4 TEST PROCEDURE.....	101
4.3.5 DEVIATION FROM TEST STANDARD .....	101
4.3.6 EUT OPERATING CONDITIONS .....	101
4.3.7 TEST RESULTS .....	102
4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT .....	112
4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT .....	112
4.4.2 TEST SETUP.....	112
4.4.3 TEST INSTRUMENTS.....	112
4.4.4 TEST PROCEDURES .....	112
4.4.5 DEVIATION FROM TEST STANDARD .....	112
4.4.6 EUT OPERATING CONDITIONS .....	113
4.4.7 TEST RESULTS .....	114
4.5 PEAK POWER EXCURSION MEASUREMENT .....	120



4.5.1	LIMITS OF PEAK POWER EXCURSION MEASUREMENT .....	120
4.5.2	TEST SETUP .....	120
4.5.3	TEST INSTRUMENTS.....	120
4.5.4	TEST PROCEDURE.....	120
4.5.5	DEVIATION FROM TEST STANDARD .....	120
4.5.6	EUT OPERATING CONDITIONS .....	120
4.5.7	TEST RESULTS .....	121
4.6	FREQUENCY STABILITY .....	127
4.6.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT.....	127
4.6.2	TEST SETUP.....	127
4.6.3	TEST INSTRUMENTS.....	127
4.6.4	TEST PROCEDURE.....	128
4.6.5	DEVIATION FROM TEST STANDARD .....	128
4.6.6	EUT OPERATING CONDITION .....	128
4.6.7	TEST RESULTS .....	129
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION .....	131
6.	INFORMATION ON THE TESTING LABORATORIES.....	132
7.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB .....	133



A D T

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130414C02-1	Original release	Jun. 03, 2013



## 1. CERTIFICATION

**PRODUCT:** HP 425 Wireless 802.11n (AM) AP

**MODEL:** BJNGA-FB0002, JG653A

**BRAND:** HP

**APPLICANT:** Hewlett Packard Company

**TESTED:** Apr. 12 ~ May 06, 2013

**TEST SAMPLE:** ENGINEERING SAMPLE

**STANDARDS:** FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10-2009

The above equipment (model: BJNGA-FB0002) 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 :** Ivy Lin , **DATE :** Jun. 03, 2013  
Ivy Lin / Specialist

**APPROVED BY :** Ken Liu , **DATE :** Jun. 03, 2013  
Ken Liu / Senior Manager

## 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -1.04dB at 0.49454MHz.
15.407(b)(1/2/3) (b)(6)	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5350.00MHz.
15.407(a)(1/2)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a)(1/2)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	<b>Omni directional antenna:</b> Antenna connector is RP-SMA Type. <b>PIFA antenna:</b> Antenna connector is U.FL compatible Type. (The device is professionally installed)

### 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	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.19 dB
	200MHz ~1000MHz	3.21 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>EUT</b>	HP 425 Wireless 802.11n (AM) AP
<b>MODEL NO.</b>	BJNGA-FB0002, JG653A
<b>POWER SUPPLY</b>	48Vdc (Adapter) 55Vdc (POE)
<b>MODULATION TYPE</b>	64QAM, 16QAM, QPSK, BPSK
<b>MODULATION TECHNOLOGY</b>	OFDM
<b>TRANSFER RATE</b>	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
<b>OPERATING FREQUENCY</b>	5180 ~ 5240MHz, 5260 ~ 5320MHz & 5500 ~ 5700MHz
<b>NUMBER OF CHANNEL</b>	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz)
<b>OUTPUT POWER</b>	<b>External antenna:</b> 48.256mW for 5180 ~ 5240MHz 213.241mW for 5260 ~ 5320MHz 194.103mW for 5500 ~ 5700MHz <b>Internal antenna:</b> 43.464mW for 5180 ~ 5240MHz 98.252mW for 5260 ~ 5320MHz 109.541mW for 5500 ~ 5700MHz
<b>ANTENNA TYPE</b>	Refer to Note as below
<b>ANTENNA CONNECTOR</b>	Refer to Note as below
<b>DATA CABLE</b>	NA
<b>I/O PORTS</b>	Refer to user's manual
<b>ACCESSORY DEVICES</b>	Adapter

**NOTE:**

1. The models as below are electrically identical, different models are for marketing purpose.

BRAND NAME	MODEL NO.
HP	BJNGA-FB0002
	JG653A

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

MODULATION MODE	TX FUNCTION
802.11b	2TX
802.11g	2TX
802.11a	2TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX

3. The following antennas are provided to this EUT:

NO.	ANTENNA TYPE	ANTENNA CONNECTOR	ANTENNA GAIN (dBi)	
			2.4GHz	5.0GHz
1	Omni directional antenna (External)	RP-SMA	2.5	5.9
2	PIFA antenna (Internal)	U.FL compatible	4.0	5.0

4. The EUT consumes power from the following adapter and POE.

ADAPTER	
<b>BRAND:</b>	DVE
<b>MODEL:</b>	DSA-42D-48 2
<b>INPUT:</b>	100-240Vac, 50/60Hz, 1.2A
<b>OUTPUT:</b>	+48Vdc, 0.63A
<b>POWER LINE:</b>	DC 1.5m power cable w/o core attached on adapter AC 1.80m non-shielded cable without core

POE	
<b>BRAND:</b>	PowerDsine™
<b>MODEL:</b>	9001G-40/SP
<b>INPUT:</b>	100-240Vac, 50-60Hz, 1.5A
<b>OUTPUT:</b>	55Vdc, 0.73A

\*POE is support unit only.

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



### 3.2 DESCRIPTION OF TEST MODES

#### FOR 5180 ~ 5240MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

#### FOR 5260 ~ 5320MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

#### FOR 5500 ~ 5700MHz

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

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 (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

### 3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION	
	RE $\geq$ 1G	RE<1G	PLC	APCM	Antenna	Power source
A1	√	√	√	√	External antenna	Adapter
A2	-	√	√	-		POE
B1	√	√	√	√	Internal antenna	Adapter
B2	-	√	√	-		POE

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

**NOTE:**

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

**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)
A1, B1	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
A1, B1	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
A1, B1	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		102 to 134	102, 110, 134	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)
A1, A2	802.11n (20MHz)	5180-5320	36 to 64	60	OFDM	BPSK	7.2
B1, B2	802.11a	5180-5320	36 to 64	60	OFDM	BPSK	6.0
A1, A2	802.11n (20MHz)	5500-5700	100 to 140	116	OFDM	BPSK	7.2
B1, B2	802.11a	5500-5700	100 to 140	100	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)
A1, A2	802.11n (20MHz)	5180-5320	36 to 64	60	OFDM	BPSK	7.2
B1, B2	802.11a	5180-5320	36 to 64	60	OFDM	BPSK	6.0
A1, A2	802.11n (20MHz)	5500-5700	100 to 140	116	OFDM	BPSK	7.2
B1, B2	802.11a	5500-5700	100 to 140	100	OFDM	BPSK	6.0

**ANTENNA PORT CONDUCTED MEASUREMENT:**

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, B1	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
A1, B1	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
A1, B1	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0



A D T

**TEST CONDITION:**

APPLICABLE TO	TEST MODE	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	A1	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang, Chris Lin
	B1	25deg. C, 71%RH, 25deg. C, 65%RH	120Vac, 60Hz	Martin Lee, Ted Chang
RE $<$ 1G	A1	25deg. C, 65%RH	120Vac, 60Hz	Chris Lin
	A2	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
	B1	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
	B2	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
PLC	A1	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
	A2	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
	B1	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
	B2	24deg. C, 64%RH	120Vac, 60Hz	Ted Chang , Match Tsui
APCM	A1, B1	25deg. C, 60%RH	120Vac, 60Hz	Frank Liu

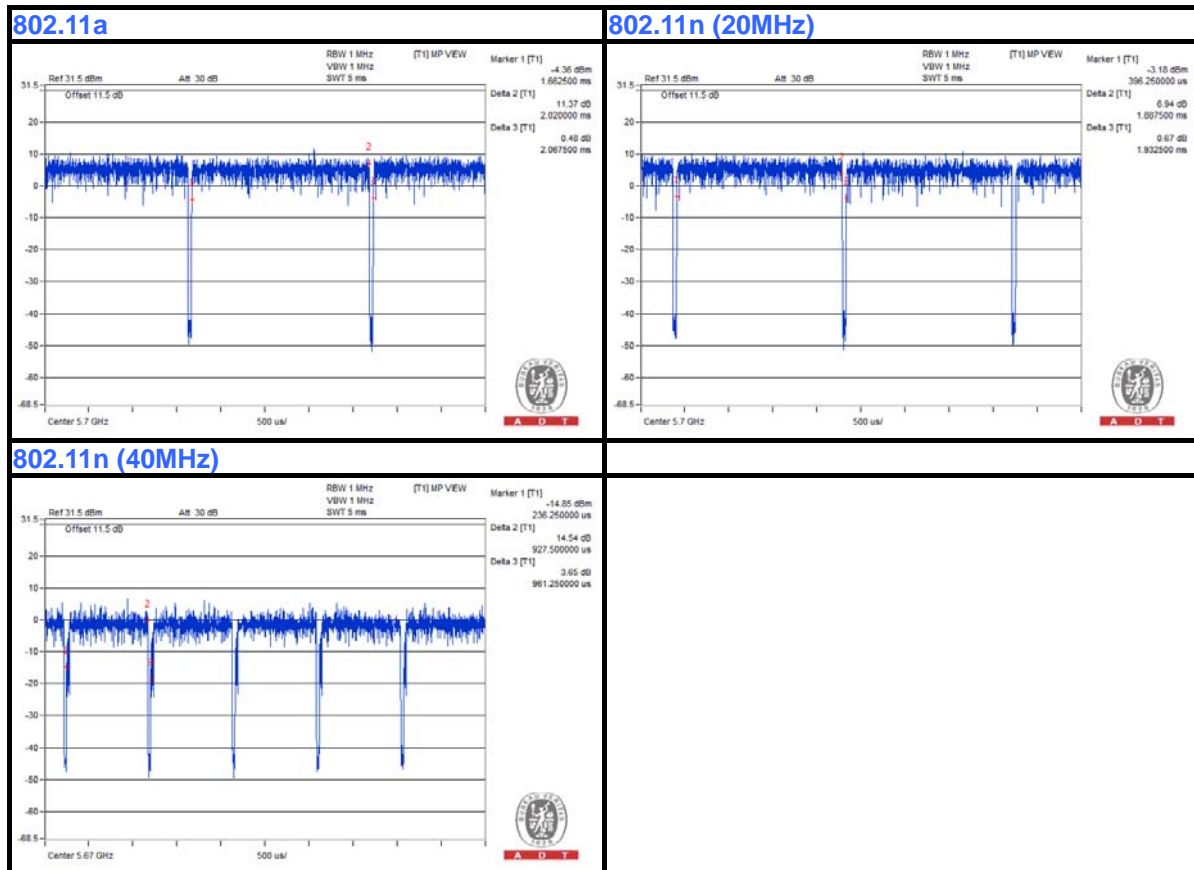
### 3.3 DUTY CYCLE OF TEST SIGNAL

If duty cycle is < 98%, duty factor shall be considered.

**802.11a:** Duty cycle =  $2.0200/2.0675 = 0.977$ , Duty factor =  $10 * \log(1/0.977) = 0.10$

**802.11n (20MHz):** Duty cycle =  $1.8875/1.9325 = 0.977$ , Duty factor =  $10 * \log(1/0.977) = 0.10$

**802.11n (40MHz):** Duty cycle =  $927.5000/961.2500 = 0.965$ , Duty factor =  $10 * \log(1/0.965) = 0.15$



### 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5410	1HC2XM1	FCC DoC Approved

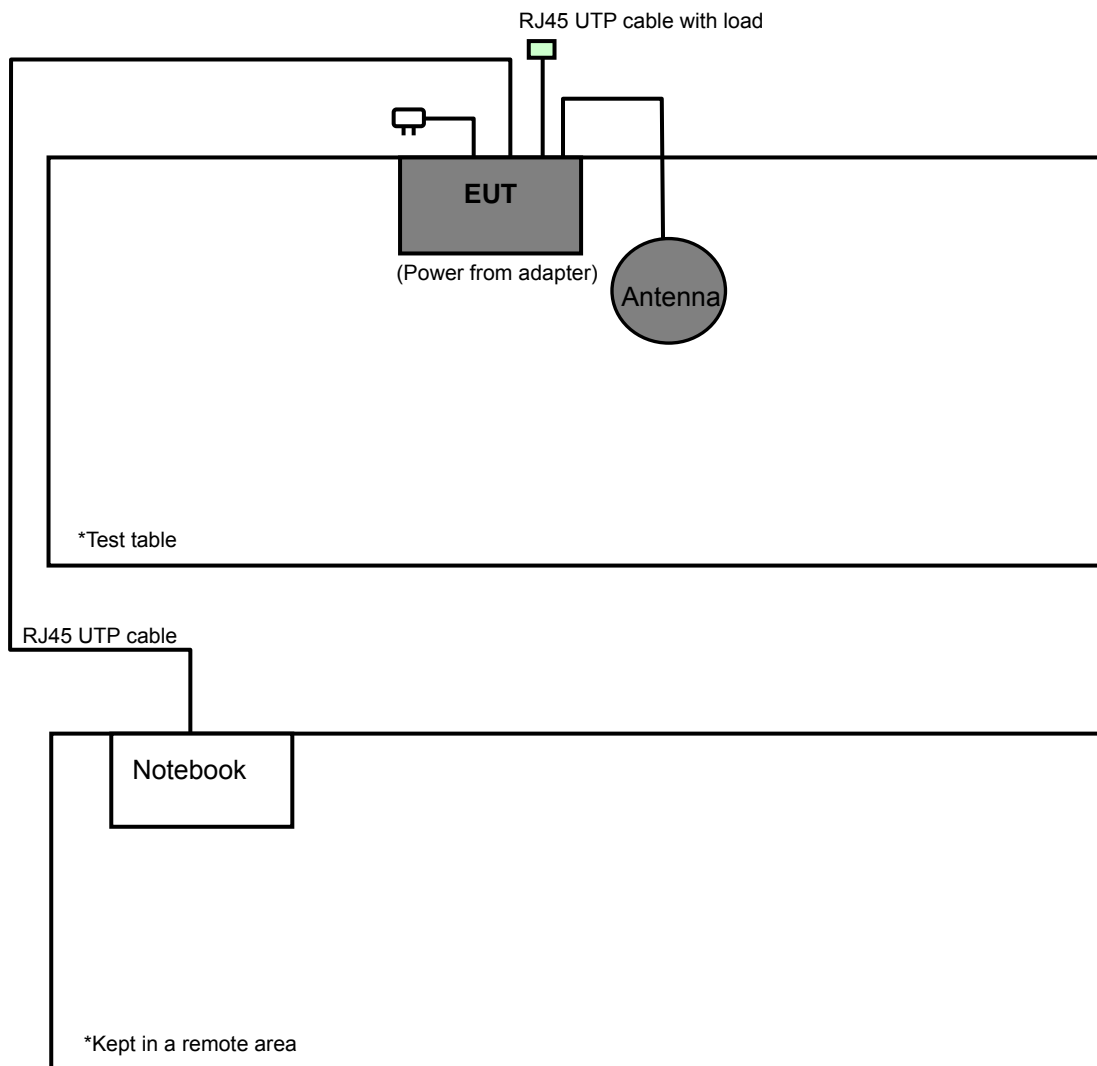
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m non-shielded RJ45 cable without core

**NOTE:**

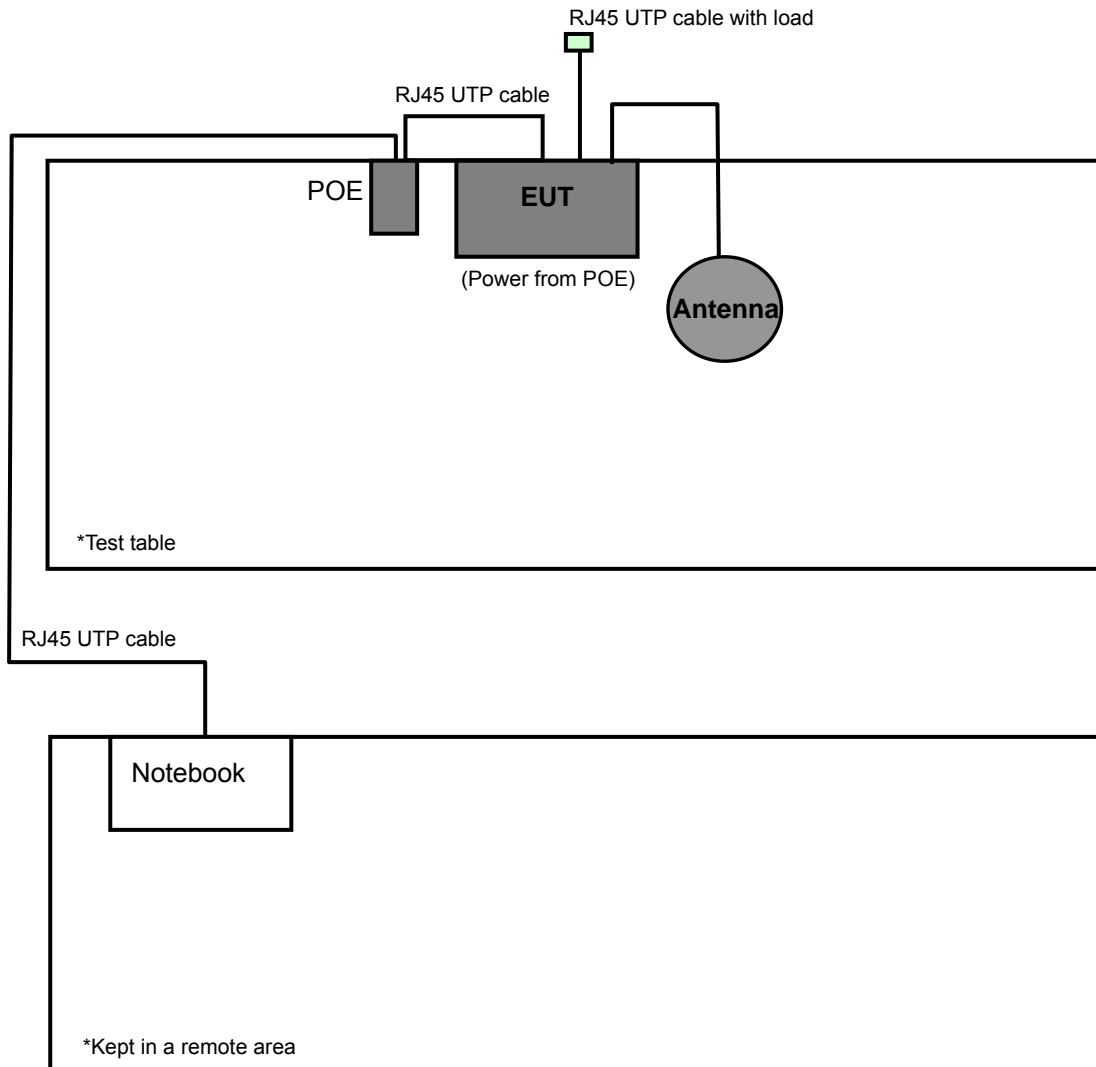
1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 as a communication partner to transfer data.

### 3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

#### Test Mode A1

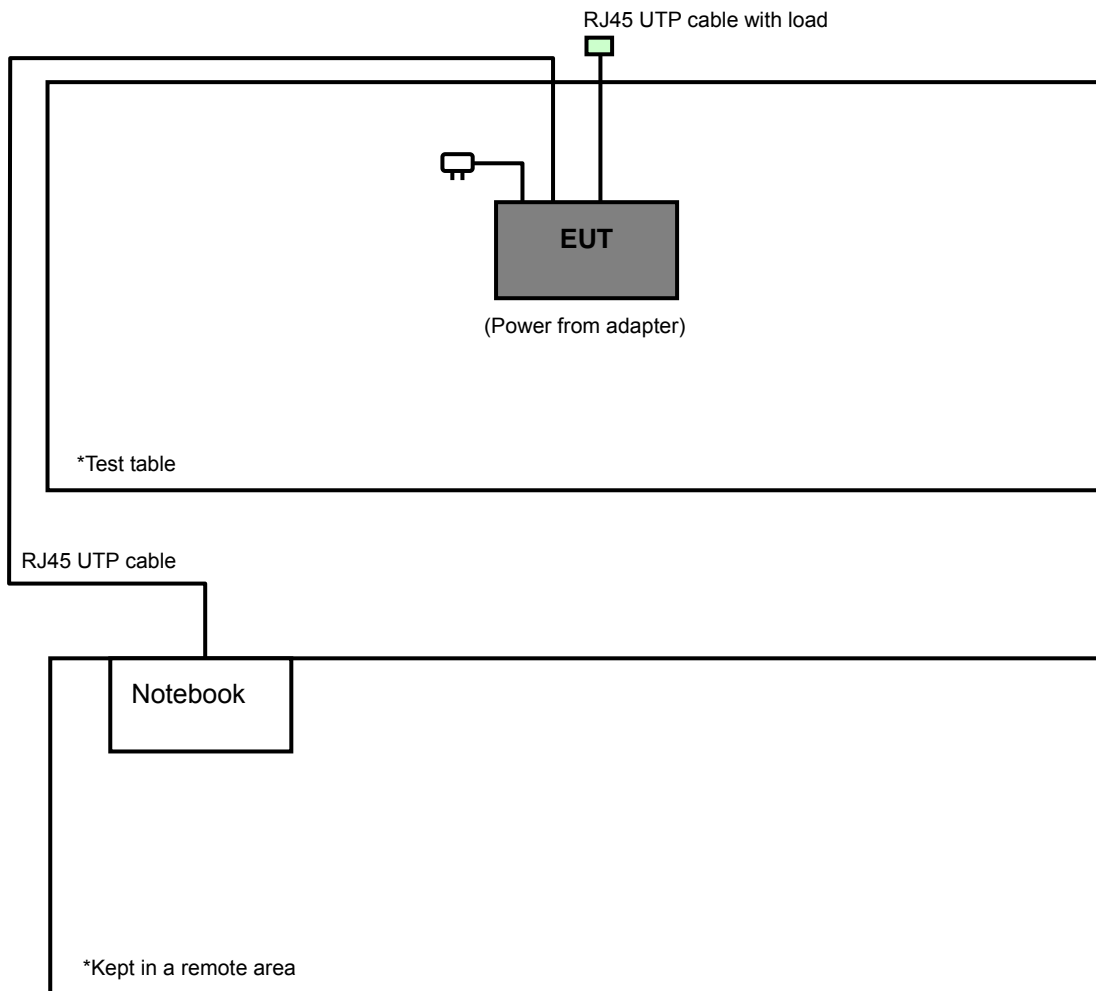


### Test Mode A2



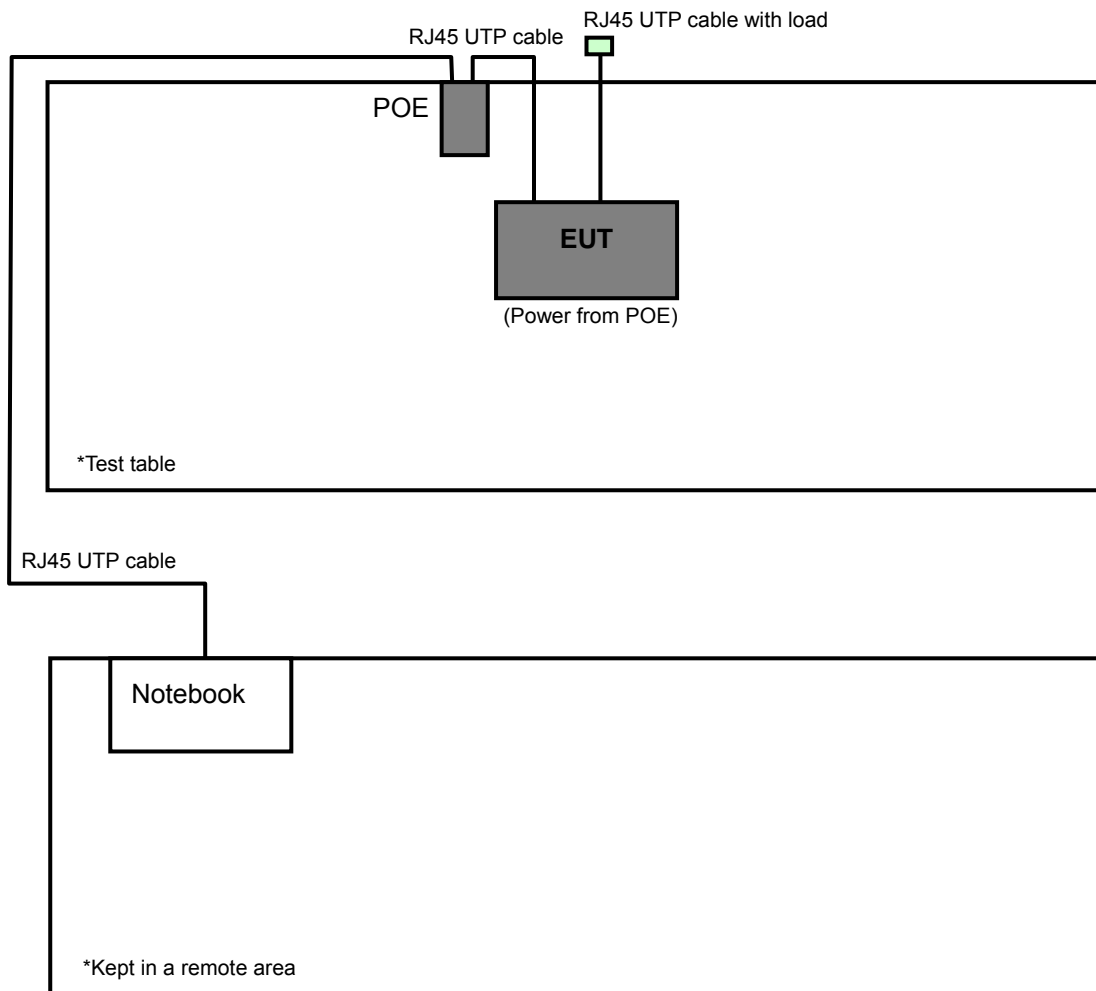


### Test Mode B1





## Test Mode B2



### 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 D01 General UNII Test Procedures v01 r02**

**662911 D01 Multiple Transmitter Output v01 r02**

**ANSI C63.10-2009**

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

**NOTE:** The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

## 4. TEST TYPES AND RESULTS

### 4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

#### 4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

**NOTE:**

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

#### 4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
√	FIELD STRENGTH AT 3m (dBμV/m)	
	PK	AV
	74	54
	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)
	PK	PK
	-27	68.3

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

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



#### 4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Aug. 21, 2012	Aug. 20, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSU 43	100115	Oct. 25, 2012	Oct. 24, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Mar. 25, 2013	Mar. 24, 2014
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Dec. 22, 2012	Dec. 21, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Preamplifier Agilent	8449B	3008A01961	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10738	Oct. 23, 2012	Oct. 22, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Aug. 28, 2012	Aug. 27, 2013
Software BV ADT	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table BV ADT	TT100.	TT93021704	NA	NA
Turn Table Controller BV ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013
High Speed Peak Power Meter	ML2495A	0824012	Aug. 22, 2012	Aug. 21, 2013
Power Sensor	MA2411B	0738171	Jul. 30, 2012	Jul. 29, 2013
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 13, 2012	Jun. 12, 2013

- 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 4.
  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 460141.
  5. The IC Site Registration No. is IC7450F-4.

#### 4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. 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 antenna is a broadband antenna, and its height 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

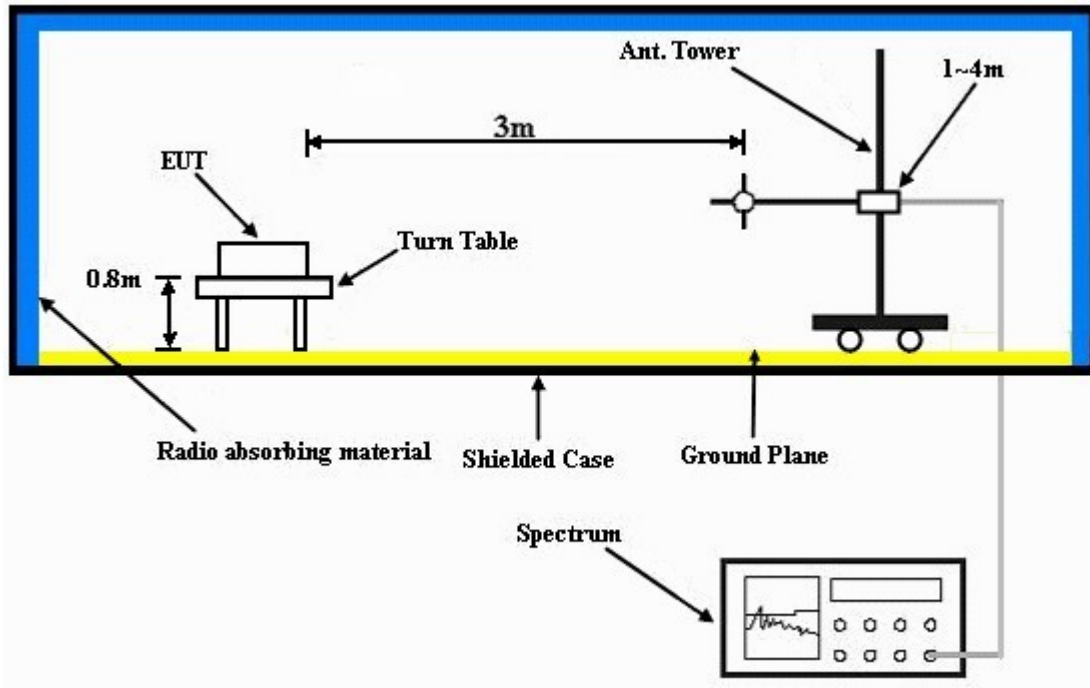
**NOTE:**

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

#### 4.1.5 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.1.6 TEST SETUP



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

#### 4.1.7 EUT OPERATING CONDITION

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

#### 4.1.8 TEST RESULTS

##### ABOVE 1GHz DATA :

##### 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	54.7 PK	74.0	-19.3	1.05 H	52	15.50	39.20
2	5150.00	42.3 AV	54.0	-11.7	1.05 H	52	3.10	39.20
3	*5180.00	97.3 PK			1.08 H	62	58.10	39.20
4	*5180.00	86.6 AV			1.08 H	62	47.40	39.20
5	#10360.00	57.7 PK	74.0	-16.3	1.04 H	328	6.90	50.80
6	#10360.00	44.5 AV	54.0	-9.5	1.04 H	328	-6.30	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5080.00	55.6 PK	74.0	-18.4	1.00 V	186	16.50	39.10
2	5080.00	46.2 AV	54.0	-7.8	1.00 V	186	7.10	39.10
3	5150.00	55.7 PK	74.0	-18.3	1.00 V	175	16.50	39.20
4	5150.00	41.7 AV	54.0	-12.3	1.00 V	175	2.50	39.20
5	*5180.00	105.1 PK			1.00 V	185	65.90	39.20
6	*5180.00	94.8 AV			1.00 V	185	55.60	39.20
7	#10360.00	63.7 PK	74.0	-10.3	1.03 V	224	12.90	50.80
8	#10360.00	46.6 AV	54.0	-7.4	1.03 V	224	-4.20	50.80

##### REMARKS:

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





A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	96.8 PK			1.00 H	60	57.60	39.20
2	*5200.00	86.6 AV			1.00 H	60	47.40	39.20
3	#10400.00	58.6 PK	74.0	-15.4	1.63 H	154	7.80	50.80
4	#10400.00	44.8 AV	54.0	-9.2	1.63 H	154	-6.00	50.80
5	15600.00	61.0 PK	74.0	-13.0	1.63 H	136	9.30	51.70
6	15600.00	46.1 AV	54.0	-7.9	1.63 H	136	-5.60	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	104.6 PK			1.00 V	186	65.40	39.20
2	*5200.00	94.9 AV			1.00 V	186	55.70	39.20
3	#10400.00	62.4 PK	74.0	-11.6	1.17 V	247	11.60	50.80
4	#10400.00	47.7 AV	54.0	-6.3	1.17 V	247	-3.10	50.80
5	15600.00	65.0 PK	74.0	-9.0	1.23 V	169	13.30	51.70
6	15600.00	49.1 AV	54.0	-4.9	1.23 V	169	-2.60	51.70

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	96.4 PK			1.06 H	61	57.10	39.30
2	*5240.00	85.9 AV			1.06 H	61	46.60	39.30
3	5350.00	55.8 PK	74.0	-18.2	1.03 H	56	16.40	39.40
4	5350.00	43.3 AV	54.0	-10.7	1.03 H	56	3.90	39.40
5	#10480.00	58.3 PK	74.0	-15.7	1.43 H	178	7.20	51.10
6	#10480.00	44.6 AV	54.0	-9.4	1.43 H	178	-6.50	51.10
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	104.3 PK			1.41 V	339	65.00	39.30
2	*5240.00	94.3 AV			1.41 V	339	55.00	39.30
3	5350.00	56.8 PK	74.0	-17.2	1.35 V	329	17.40	39.40
4	5350.00	45.4 AV	54.0	-8.6	1.35 V	329	6.00	39.40
5	#10480.00	63.3 PK	74.0	-10.7	1.42 V	165	12.20	51.10
6	#10480.00	48.3 AV	54.0	-5.7	1.42 V	165	-2.80	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	54.5 PK	74.0	-19.5	1.20 H	250	15.30	39.20
2	5150.00	42.1 AV	54.0	-11.9	1.20 H	250	2.90	39.20
3	*5260.00	103.0 PK			1.00 H	263	63.70	39.30
4	*5260.00	92.9 AV			1.00 H	263	53.60	39.30
5	#10520.00	60.2 PK	74.0	-13.8	1.29 H	41	9.00	51.20
6	#10520.00	46.3 AV	54.0	-7.7	1.29 H	41	-4.90	51.20

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	5150.00	55.0 PK	74.0	-19.0	1.20 V	63	15.80	39.20
2	5150.00	43.5 AV	54.0	-10.5	1.20 V	63	4.30	39.20
3	*5260.00	110.8 PK			1.07 V	353	71.50	39.30
4	*5260.00	101.7 AV			1.07 V	353	62.40	39.30
5	#10520.00	58.9 PK	74.0	-15.1	1.33 V	147	7.70	51.20
6	#10520.00	44.8 AV	54.0	-9.2	1.33 V	147	-6.40	51.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	102.8 PK			1.08 H	263	63.40	39.40
2	*5300.00	93.0 AV			1.08 H	263	53.60	39.40
3	#10060.00	54.8 PK	74.0	-19.2	1.19 H	48	5.10	49.70
4	#10060.00	42.2 AV	54.0	-11.8	1.19 H	48	-7.50	49.70
5	15900.00	56.8 PK	74.0	-17.2	1.28 H	65	5.70	51.10
6	15900.00	44.2 AV	54.0	-9.8	1.28 H	65	-6.90	51.10
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	*5300.00	111.5 PK			1.25 V	344	72.10	39.40
2	*5300.00	101.6 AV			1.25 V	344	62.20	39.40
3	#10060.00	57.6 PK	74.0	-16.4	1.52 V	136	7.90	49.70
4	#10060.00	43.8 AV	54.0	-10.2	1.52 V	136	-5.90	49.70
5	15900.00	58.2 PK	74.0	-15.8	1.23 V	147	7.10	51.10
6	15900.00	45.2 AV	54.0	-8.8	1.23 V	147	-5.90	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	101.9 PK			1.01 H	56	62.50	39.40
2	*5320.00	91.6 AV			1.01 H	56	52.20	39.40
3	5350.00	56.0 PK	74.0	-18.0	1.15 H	85	16.60	39.40
4	5350.00	43.3 AV	54.0	-10.7	1.15 H	85	3.90	39.40
5	10640.00	58.4 PK	74.0	-15.6	1.36 H	55	6.90	51.50
6	10640.00	45.8 AV	54.0	-8.2	1.36 H	55	-5.70	51.50

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	*5320.00	111.8 PK			1.02 V	111	72.40	39.40
2	*5320.00	101.6 AV			1.02 V	111	62.20	39.40
3	5350.00	65.0 PK	74.0	-9.0	1.00 V	113	25.60	39.40
4	5350.00	47.4 AV	54.0	-6.6	1.00 V	113	8.00	39.40
5	10640.00	60.9 PK	74.0	-13.1	1.25 V	96	9.40	51.50
6	10640.00	46.9 AV	54.0	-7.1	1.25 V	96	-4.60	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	54.2 PK	74.0	-19.8	1.20 H	68	14.60	39.60
2	5460.00	43.0 AV	54.0	-11.0	1.20 H	68	3.40	39.60
3	#5470.00	58.9 PK	74.0	-15.1	1.00 H	61	19.30	39.60
4	#5470.00	44.3 AV	54.0	-9.7	1.00 H	61	4.70	39.60
5	*5500.00	103.4 PK			1.00 H	63	63.70	39.70
6	*5500.00	93.5 AV			1.00 H	63	53.80	39.70
7	11000.00	61.0 PK	74.0	-13.0	1.56 H	123	7.80	53.20
8	11000.00	47.2 AV	54.0	-6.8	1.56 H	123	-6.00	53.20
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	5460.00	57.5 PK	74.0	-16.5	1.30 V	360	17.90	39.60
2	5460.00	44.6 AV	54.0	-9.4	1.30 V	360	5.00	39.60
3	#5470.00	67.5 PK	74.0	-6.5	1.24 V	354	27.90	39.60
4	#5470.00	47.1 AV	54.0	-6.9	1.24 V	354	7.50	39.60
5	*5500.00	112.7 PK			1.22 V	352	73.00	39.70
6	*5500.00	102.3 AV			1.22 V	352	62.60	39.70
7	11000.00	62.6 PK	74.0	-11.4	1.38 V	46	9.40	53.20
8	11000.00	48.7 AV	54.0	-5.3	1.38 V	46	-4.50	53.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	102.4 PK			1.00 H	60	62.60	39.80
2	*5580.00	92.4 AV			1.00 H	60	52.60	39.80
3	11160.00	60.0 PK	74.0	-14.0	1.36 H	148	7.10	52.90
4	11160.00	46.7 AV	54.0	-7.3	1.36 H	148	-6.20	52.90
5	#16740.00	61.4 PK	74.0	-12.6	1.33 H	185	6.80	54.60
6	#16740.00	48.0 AV	54.0	-6.0	1.33 H	185	-6.60	54.60
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	*5580.00	111.9 PK			1.17 V	76	72.10	39.80
2	*5580.00	102.3 AV			1.17 V	76	62.50	39.80
3	11160.00	62.6 PK	74.0	-11.4	1.53 V	68	9.70	52.90
4	11160.00	48.7 AV	54.0	-5.3	1.53 V	68	-4.20	52.90
5	#16740.00	61.3 PK	74.0	-12.7	1.36 V	85	6.70	54.60
6	#16740.00	49.1 AV	54.0	-4.9	1.36 V	85	-5.50	54.60

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	100.9 PK			1.18 H	104	60.80	40.10
2	*5700.00	91.0 AV			1.18 H	104	50.90	40.10
3	#5725.00	59.4 PK	74.0	-14.6	1.28 H	126	19.30	40.10
4	#5725.00	44.2 AV	54.0	-9.8	1.28 H	126	4.10	40.10
5	11400.00	60.2 PK	74.0	-13.8	1.23 H	147	7.40	52.80
6	11400.00	47.2 AV	54.0	-6.8	1.23 H	147	-5.60	52.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.6 PK			1.00 V	16	70.50	40.10
2	*5700.00	100.9 AV			1.00 V	16	60.80	40.10
3	#5725.00	68.0 PK	74.0	-6.0	1.00 V	340	27.90	40.10
4	#5725.00	50.6 AV	54.0	-3.4	1.00 V	340	10.50	40.10
5	11400.00	62.2 PK	74.0	-11.8	1.59 V	163	9.40	52.80
6	11400.00	48.6 AV	54.0	-5.4	1.59 V	163	-4.20	52.80

**REMARKS:**

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





A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	1124.00	52.1 PK	74.0	-21.9	1.16 H	11	24.10	28.00
2	1124.00	48.5 AV	54.0	-5.5	1.16 H	11	20.50	28.00
3	5150.00	56.6 PK	74.0	-17.4	1.13 H	49	17.40	39.20
4	5150.00	41.3 AV	54.0	-12.7	1.13 H	49	2.10	39.20
5	*5180.00	105.4 PK			1.13 H	49	66.20	39.20
6	*5180.00	96.5 AV			1.13 H	49	57.30	39.20
7	#10360.00	56.5 PK	74.0	-17.5	1.22 H	45	5.70	50.80
8	#10360.00	43.6 AV	54.0	-10.4	1.22 H	45	-7.20	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	1124.00	50.0 PK	74.0	-24.0	1.07 V	292	22.00	28.00
2	1124.00	44.9 AV	54.0	-9.1	1.07 V	292	16.90	28.00
3	5150.00	59.2 PK	74.0	-14.8	1.08 V	7	20.00	39.20
4	5150.00	42.8 AV	54.0	-11.2	1.08 V	7	3.60	39.20
5	*5180.00	106.4 PK			1.08 V	7	67.20	39.20
6	*5180.00	96.3 AV			1.08 V	7	57.10	39.20
7	#10360.00	57.8 PK	74.0	-16.2	1.24 V	45	7.00	50.80
8	#10360.00	43.7 AV	54.0	-10.3	1.24 V	45	-7.10	50.80

**REMARKS:**

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	105.2 PK			1.12 H	50	66.00	39.20
2	*5200.00	96.2 AV			1.12 H	50	57.00	39.20
3	#10400.00	57.2 PK	74.0	-16.8	1.14 H	63	6.40	50.80
4	#10400.00	44.1 AV	54.0	-9.9	1.14 H	63	-6.70	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	106.1 PK			1.09 V	4	66.90	39.20
2	*5200.00	96.0 AV			1.09 V	4	56.80	39.20
3	#10400.00	57.2 PK	74.0	-16.8	1.45 V	0	6.40	50.80
4	#10400.00	44.1 AV	54.0	-9.9	1.45 V	0	-6.70	50.80

**REMARKS:**

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.7 PK			1.27 H	331	65.40	39.30
2	*5240.00	94.9 AV			1.27 H	331	55.60	39.30
3	5350.00	51.0 PK	74.0	-23.0	1.27 H	331	11.60	39.40
4	5350.00	40.4 AV	54.0	-13.6	1.27 H	331	1.00	39.40
5	#10480.00	57.8 PK	74.0	-16.2	1.52 H	65	6.70	51.10
6	#10480.00	44.3 AV	54.0	-9.7	1.52 H	65	-6.80	51.10

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	107.1 PK			1.05 V	8	67.80	39.30
2	*5240.00	97.6 AV			1.05 V	8	58.30	39.30
3	5350.00	51.2 PK	74.0	-22.8	1.05 V	8	11.80	39.40
4	5350.00	41.2 AV	54.0	-12.8	1.05 V	8	1.80	39.40
5	#10480.00	58.3 PK	74.0	-15.7	1.55 V	321	7.20	51.10
6	#10480.00	44.9 AV	54.0	-9.1	1.55 V	321	-6.20	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	54.1 PK	74.0	-19.9	1.02 H	326	14.90	39.20
2	5150.00	42.8 AV	54.0	-11.2	1.02 H	326	3.60	39.20
3	*5260.00	110.5 PK			1.02 H	326	71.20	39.30
4	*5260.00	100.0 AV			1.02 H	326	60.70	39.30
5	#10520.00	56.9 PK	74.0	-17.1	1.33 H	65	5.70	51.20
6	#10520.00	44.9 AV	54.0	-9.1	1.33 H	65	-6.30	51.20
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	5150.00	55.2 PK	74.0	-18.8	1.06 V	8	16.00	39.20
2	5150.00	44.0 AV	54.0	-10.0	1.06 V	8	4.80	39.20
3	*5260.00	113.6 PK			1.06 V	8	74.30	39.30
4	*5260.00	103.6 AV			1.06 V	8	64.30	39.30
5	#10520.00	58.4 PK	74.0	-15.6	1.24 V	44	7.20	51.20
6	#10520.00	45.3 AV	54.0	-8.7	1.24 V	44	-5.90	51.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	110.3 PK			1.05 H	325	70.90	39.40
2	*5300.00	99.8 AV			1.05 H	325	60.40	39.40
3	10600.00	56.6 PK	74.0	-17.4	1.48 H	88	5.10	51.50
4	10600.00	43.5 AV	54.0	-10.5	1.48 H	88	-8.00	51.50
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	*5300.00	113.3 PK			1.10 V	12	73.90	39.40
2	*5300.00	103.2 AV			1.10 V	12	63.80	39.40
3	10600.00	57.7 PK	74.0	-16.3	1.22 V	254	6.20	51.50
4	10600.00	44.4 AV	54.0	-9.6	1.22 V	254	-7.10	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	109.6 PK			1.02 H	360	70.20	39.40
2	*5320.00	99.3 AV			1.02 H	360	59.90	39.40
3	5350.00	65.1 PK	74.0	-8.9	1.02 H	360	25.70	39.40
4	5350.00	47.1 AV	54.0	-6.9	1.02 H	360	7.70	39.40
5	10640.00	58.4 PK	74.0	-15.6	1.85 H	45	6.90	51.50
6	10640.00	45.2 AV	54.0	-8.8	1.85 H	45	-6.30	51.50

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	*5320.00	112.7 PK			1.03 V	19	73.30	39.40
2	*5320.00	103.0 AV			1.03 V	19	63.60	39.40
3	5350.00	66.9 PK	74.0	-7.1	1.03 V	19	27.50	39.40
4	5350.00	49.9 AV	54.0	-4.1	1.03 V	19	10.50	39.40
5	10640.00	58.6 PK	74.0	-15.4	1.25 V	45	7.10	51.50
6	10640.00	45.3 AV	54.0	-8.7	1.25 V	45	-6.20	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	59.5 PK	74.0	-14.5	1.00 H	345	19.90	39.60
2	5460.00	43.1 AV	54.0	-10.9	1.00 H	345	3.50	39.60
3	#5470.00	59.9 PK	74.0	-14.1	1.00 H	345	20.30	39.60
4	#5470.00	47.0 AV	54.0	-7.0	1.00 H	345	7.40	39.60
5	*5500.00	109.9 PK			1.00 H	345	70.20	39.70
6	*5500.00	99.9 AV			1.00 H	345	60.20	39.70
7	11000.00	57.2 PK	74.0	-16.8	1.00 H	254	4.00	53.20
8	11000.00	44.7 AV	54.0	-9.3	1.00 H	254	-8.50	53.20
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	5460.00	61.3 PK	74.0	-12.7	1.00 V	20	21.70	39.60
2	5460.00	44.0 AV	54.0	-10.0	1.00 V	20	4.40	39.60
3	#5470.00	63.7 PK	74.0	-10.3	1.00 V	20	24.10	39.60
4	#5470.00	48.6 AV	54.0	-5.4	1.00 V	20	9.00	39.60
5	*5500.00	111.2 PK			1.00 V	20	71.50	39.70
6	*5500.00	101.6 AV			1.00 V	20	61.90	39.70
7	11000.00	57.4 PK	74.0	-16.6	1.32 V	222	4.20	53.20
8	11000.00	44.7 AV	54.0	-9.3	1.32 V	222	-8.50	53.20

**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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	109.7 PK			1.00 H	347	69.90	39.80
2	*5580.00	99.7 AV			1.00 H	347	59.90	39.80
3	11160.00	57.5 PK	74.0	-16.5	1.63 H	236	4.60	52.90
4	11160.00	45.0 AV	54.0	-9.0	1.63 H	236	-7.90	52.90
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	*5580.00	111.0 PK			1.00 V	27	71.20	39.80
2	*5580.00	101.4 AV			1.00 V	27	61.60	39.80
3	11160.00	57.7 PK	74.0	-16.3	1.52 V	22	4.80	52.90
4	11160.00	44.5 AV	54.0	-9.5	1.52 V	22	-8.40	52.90

**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.





EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	110.6 PK			1.04 H	346	70.50	40.10
2	*5700.00	100.9 AV			1.04 H	346	60.80	40.10
3	#5725.00	69.3 PK	74.0	-4.7	1.04 H	346	29.20	40.10
4	#5725.00	51.0 AV	54.0	-3.0	1.04 H	346	10.90	40.10
5	11400.00	58.9 PK	74.0	-15.1	1.48 H	9	6.10	52.80
6	11400.00	45.9 AV	54.0	-8.1	1.48 H	9	-6.90	52.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.6 PK			1.17 V	14	70.50	40.10
2	*5700.00	101.2 AV			1.17 V	14	61.10	40.10
3	#5725.00	64.6 PK	74.0	-9.4	1.17 V	14	24.50	40.10
4	#5725.00	50.7 AV	54.0	-3.3	1.17 V	14	10.60	40.10
5	11400.00	58.2 PK	74.0	-15.8	1.55 V	25	5.40	52.80
6	11400.00	45.6 AV	54.0	-8.4	1.55 V	25	-7.20	52.80

**REMARKS:**

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



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	55.4 PK	74.0	-18.6	1.00 H	54	16.20	39.20
2	5150.00	42.2 AV	54.0	-11.8	1.00 H	54	3.00	39.20
3	*5180.00	97.4 PK			1.09 H	62	58.20	39.20
4	*5180.00	86.9 AV			1.09 H	62	47.70	39.20
5	#10360.00	57.8 PK	74.0	-16.2	1.46 H	172	7.00	50.80
6	#10360.00	44.5 AV	54.0	-9.5	1.46 H	172	-6.30	50.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.7 PK	74.0	-18.3	1.08 V	299	16.50	39.20
2	5150.00	41.3 AV	54.0	-12.7	1.08 V	299	2.10	39.20
3	*5180.00	104.6 PK			1.00 V	348	65.40	39.20
4	*5180.00	94.9 AV			1.00 V	348	55.70	39.20
5	#10360.00	63.3 PK	74.0	-10.7	1.36 V	158	12.50	50.80
6	#10360.00	47.9 AV	54.0	-6.1	1.36 V	158	-2.90	50.80

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	97.1 PK			1.00 H	263	57.90	39.20
2	*5200.00	87.0 AV			1.00 H	263	47.80	39.20
3	#10400.00	57.8 PK	74.0	-16.2	1.12 H	135	7.00	50.80
4	#10400.00	44.6 AV	54.0	-9.4	1.12 H	135	-6.20	50.80
5	15600.00	63.8 PK	74.0	-10.2	1.33 H	190	12.10	51.70
6	15600.00	46.5 AV	54.0	-7.5	1.33 H	190	-5.20	51.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	104.0 PK			1.00 V	337	64.80	39.20
2	*5200.00	94.3 AV			1.00 V	337	55.10	39.20
3	#10400.00	64.6 PK	74.0	-9.4	1.03 V	87	13.80	50.80
4	#10400.00	48.7 AV	54.0	-5.3	1.03 V	87	-2.10	50.80
5	15600.00	63.4 PK	74.0	-10.6	1.43 V	149	11.70	51.70
6	15600.00	48.9 AV	54.0	-5.1	1.43 V	149	-2.80	51.70

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	95.5 PK			1.08 H	262	56.20	39.30
2	*5240.00	84.9 AV			1.08 H	262	45.60	39.30
3	5350.00	56.4 PK	74.0	-17.6	1.00 H	246	17.00	39.40
4	5350.00	42.5 AV	54.0	-11.5	1.00 H	246	3.10	39.40
5	#10480.00	58.9 PK	74.0	-15.1	1.04 H	320	7.80	51.10
6	#10480.00	45.2 AV	54.0	-8.8	1.04 H	320	-5.90	51.10

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	104.9 PK			1.00 V	197	65.60	39.30
2	*5240.00	94.5 AV			1.00 V	197	55.20	39.30
3	5350.00	56.4 PK	74.0	-17.6	1.00 V	158	17.00	39.40
4	5350.00	43.6 AV	54.0	-10.4	1.00 V	158	4.20	39.40
5	#10480.00	64.7 PK	74.0	-9.3	1.52 V	179	13.60	51.10
6	#10480.00	49.2 AV	54.0	-4.8	1.52 V	179	-1.90	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	55.9 PK	74.0	-18.1	1.24 H	35	16.70	39.20
2	5150.00	42.1 AV	54.0	-11.9	1.24 H	35	2.90	39.20
3	*5260.00	102.8 PK			1.48 H	63	63.50	39.30
4	*5260.00	93.0 AV			1.48 H	63	53.70	39.30
5	#10520.00	58.7 PK	74.0	-15.3	1.33 H	147	7.50	51.20
6	#10520.00	44.8 AV	54.0	-9.2	1.33 H	147	-6.40	51.20

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	5150.00	55.8 PK	74.0	-18.2	1.11 V	352	16.60	39.20
2	5150.00	45.2 AV	54.0	-8.8	1.11 V	352	6.00	39.20
3	*5260.00	111.1 PK			1.00 V	325	71.80	39.30
4	*5260.00	101.8 AV			1.00 V	325	62.50	39.30
5	#10520.00	60.3 PK	74.0	-13.7	1.39 V	55	9.10	51.20
6	#10520.00	46.3 AV	54.0	-7.7	1.39 V	55	-4.90	51.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	104.6 PK			1.09 H	262	65.20	39.40
2	*5300.00	93.6 AV			1.09 H	262	54.20	39.40
3	10600.00	58.3 PK	74.0	-15.7	1.32 H	57	6.80	51.50
4	10600.00	45.0 AV	54.0	-9.0	1.32 H	57	-6.50	51.50
5	15900.00	57.7 PK	74.0	-16.3	1.62 H	84	6.60	51.10
6	15900.00	45.1 AV	54.0	-8.9	1.62 H	84	-6.00	51.10

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	*5300.00	112.2 PK			1.16 V	193	72.80	39.40
2	*5300.00	102.3 AV			1.16 V	193	62.90	39.40
3	10600.00	60.7 PK	74.0	-13.3	1.63 V	124	9.20	51.50
4	10600.00	47.1 AV	54.0	-6.9	1.63 V	124	-4.40	51.50
5	15900.00	59.0 PK	74.0	-15.0	1.26 V	34	7.90	51.10
6	15900.00	45.5 AV	54.0	-8.5	1.26 V	34	-5.60	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	101.4 PK			1.01 H	54	62.00	39.40
2	*5320.00	91.4 AV			1.01 H	54	52.00	39.40
3	5350.00	56.3 PK	74.0	-17.7	1.62 H	147	16.90	39.40
4	5350.00	44.6 AV	54.0	-9.4	1.62 H	147	5.20	39.40
5	10640.00	59.4 PK	74.0	-14.6	1.18 H	62	7.90	51.50
6	10640.00	45.3 AV	54.0	-8.7	1.18 H	62	-6.20	51.50

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	*5320.00	110.7 PK			1.26 V	350	71.30	39.40
2	*5320.00	101.5 AV			1.26 V	350	62.10	39.40
3	5350.00	67.8 PK	74.0	-6.2	1.35 V	352	28.40	39.40
4	5350.00	50.2 AV	54.0	-3.8	1.35 V	352	10.80	39.40
5	10640.00	60.8 PK	74.0	-13.2	1.52 V	163	9.30	51.50
6	10640.00	46.8 AV	54.0	-7.2	1.52 V	163	-4.70	51.50

**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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	54.5 PK	74.0	-19.5	1.12 H	231	14.90	39.60
2	5460.00	42.9 AV	54.0	-11.1	1.12 H	231	3.30	39.60
3	#5470.00	59.3 PK	74.0	-14.7	1.12 H	231	19.70	39.60
4	#5470.00	45.4 AV	54.0	-8.6	1.12 H	231	5.80	39.60
5	*5500.00	103.9 PK			1.01 H	61	64.20	39.70
6	*5500.00	94.3 AV			1.01 H	61	54.60	39.70
7	11000.00	60.3 PK	74.0	-13.7	1.52 H	139	7.10	53.20
8	11000.00	47.2 AV	54.0	-6.8	1.52 H	139	-6.00	53.20
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	5460.00	61.8 PK	74.0	-12.2	1.66 V	347	22.20	39.60
2	5460.00	44.9 AV	54.0	-9.1	1.66 V	347	5.30	39.60
3	#5470.00	69.4 PK	74.0	-4.6	1.66 V	347	29.80	39.60
4	#5470.00	50.3 AV	54.0	-3.7	1.66 V	347	10.70	39.60
5	*5500.00	112.9 PK			1.62 V	353	73.20	39.70
6	*5500.00	103.2 AV			1.62 V	353	63.50	39.70
7	11000.00	63.0 PK	74.0	-11.0	1.52 V	136	9.80	53.20
8	11000.00	48.8 AV	54.0	-5.2	1.52 V	136	-4.40	53.20

**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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	102.5 PK			1.01 H	259	62.70	39.80
2	*5580.00	93.2 AV			1.01 H	259	53.40	39.80
3	11160.00	62.4 PK	74.0	-11.6	1.26 H	54	9.50	52.90
4	11160.00	48.7 AV	54.0	-5.3	1.26 H	54	-4.20	52.90
5	#16740.00	61.1 PK	74.0	-12.9	1.25 H	63	6.50	54.60
6	#16740.00	48.8 AV	54.0	-5.2	1.25 H	63	-5.80	54.60

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	*5580.00	111.5 PK			1.50 V	0	71.70	39.80
2	*5580.00	101.7 AV			1.50 V	0	61.90	39.80
3	11160.00	58.8 PK	74.0	-15.2	1.48 V	62	5.90	52.90
4	11160.00	48.4 AV	54.0	-5.6	1.48 V	62	-4.50	52.90
5	#16740.00	61.3 PK	74.0	-12.7	1.58 V	62	6.70	54.60
6	#16740.00	47.2 AV	54.0	-6.8	1.58 V	62	-7.40	54.60

**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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	102.3 PK			1.00 H	256	62.20	40.10
2	*5700.00	91.3 AV			1.00 H	256	51.20	40.10
3	#5725.00	61.8 PK	74.0	-12.2	1.31 H	110	21.70	40.10
4	#5725.00	45.0 AV	54.0	-9.0	1.31 H	110	4.90	40.10
5	11400.00	59.8 PK	74.0	-14.2	1.52 H	139	7.00	52.80
6	11400.00	46.0 AV	54.0	-8.0	1.52 H	139	-6.80	52.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	111.6 PK			1.58 V	338	71.50	40.10
2	*5700.00	101.2 AV			1.58 V	338	61.10	40.10
3	#5725.00	70.2 PK	74.0	-3.8	1.75 V	327	30.10	40.10
4	#5725.00	50.3 AV	54.0	-3.7	1.75 V	327	10.20	40.10
5	11400.00	62.2 PK	74.0	-11.8	1.52 V	214	9.40	52.80
6	11400.00	48.2 AV	54.0	-5.8	1.52 V	214	-4.60	52.80

**REMARKS:**

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	61.2 PK	74.0	-12.8	1.01 H	230	22.00	39.20
2	5150.00	42.5 AV	54.0	-11.5	1.01 H	230	3.30	39.20
3	*5180.00	107.7 PK			1.01 H	230	68.50	39.20
4	*5180.00	97.6 AV			1.01 H	230	58.40	39.20
5	#10360.00	57.9 PK	74.0	-16.1	1.20 H	214	7.10	50.80
6	#10360.00	44.2 AV	54.0	-9.8	1.20 H	214	-6.60	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.8 PK	74.0	-18.2	1.01 V	251	16.60	39.20
2	5150.00	40.1 AV	54.0	-13.9	1.01 V	251	0.90	39.20
3	*5180.00	106.7 PK			1.01 V	254	67.50	39.20
4	*5180.00	96.5 AV			1.01 V	254	57.30	39.20
5	#10360.00	56.9 PK	74.0	-17.1	1.14 V	254	6.10	50.80
6	#10360.00	43.8 AV	54.0	-10.2	1.14 V	254	-7.00	50.80

**REMARKS:**

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	107.5 PK			1.02 H	236	68.30	39.20
2	*5200.00	97.6 AV			1.02 H	236	58.40	39.20
3	#10400.00	58.3 PK	74.0	-15.7	1.47 H	75	7.50	50.80
4	#10400.00	44.3 AV	54.0	-9.7	1.47 H	75	-6.50	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	106.0 PK			1.16 V	199	66.80	39.20
2	*5200.00	95.3 AV			1.16 V	199	56.10	39.20
3	#10400.00	57.0 PK	74.0	-17.0	1.65 V	66	6.20	50.80
4	#10400.00	43.7 AV	54.0	-10.3	1.65 V	66	-7.10	50.80

**REMARKS:**

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	107.7 PK			1.01 H	229	68.40	39.30
2	*5240.00	97.1 AV			1.01 H	229	57.80	39.30
3	5350.00	51.5 PK	74.0	-22.5	1.01 H	229	12.10	39.40
4	5350.00	41.2 AV	54.0	-12.8	1.01 H	229	1.80	39.40
5	#10480.00	57.5 PK	74.0	-16.5	1.20 H	222	6.40	51.10
6	#10480.00	44.2 AV	54.0	-9.8	1.20 H	222	-6.90	51.10
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	107.4 PK			1.14 V	197	68.10	39.30
2	*5240.00	96.2 AV			1.14 V	197	56.90	39.30
3	5350.00	52.1 PK	74.0	-21.9	1.14 V	197	12.70	39.40
4	5350.00	41.8 AV	54.0	-12.2	1.14 V	197	2.40	39.40
5	#10480.00	56.5 PK	74.0	-17.5	1.45 V	66	5.40	51.10
6	#10480.00	43.9 AV	54.0	-10.1	1.45 V	66	-7.20	51.10

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	54.8 PK	74.0	-19.2	1.05 H	332	15.60	39.20
2	5150.00	43.6 AV	54.0	-10.4	1.05 H	332	4.40	39.20
3	*5260.00	110.8 PK			1.05 H	332	71.50	39.30
4	*5260.00	100.2 AV			1.05 H	332	60.90	39.30
5	#10520.00	57.4 PK	74.0	-16.6	1.77 H	8	6.20	51.20
6	#10520.00	44.3 AV	54.0	-9.7	1.77 H	8	-6.90	51.20

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	5150.00	55.8 PK	74.0	-18.2	1.15 V	178	16.60	39.20
2	5150.00	44.6 AV	54.0	-9.4	1.15 V	178	5.40	39.20
3	*5260.00	113.4 PK			1.15 V	178	74.10	39.30
4	*5260.00	102.8 AV			1.15 V	178	63.50	39.30
5	#10520.00	57.7 PK	74.0	-16.3	1.55 V	65	6.50	51.20
6	#10520.00	44.4 AV	54.0	-9.6	1.55 V	65	-6.80	51.20

**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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	110.4 PK			1.12 H	25	71.00	39.40
2	*5300.00	100.0 AV			1.12 H	25	60.60	39.40
3	10600.00	58.2 PK	74.0	-15.8	1.45 H	52	6.70	51.50
4	10600.00	45.2 AV	54.0	-8.8	1.45 H	52	-6.30	51.50
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	*5300.00	119.5 PK			1.12 V	22	80.10	39.40
2	*5300.00	109.4 AV			1.12 V	22	70.00	39.40
3	10600.00	57.9 PK	74.0	-16.1	1.25 V	56	6.40	51.50
4	10600.00	44.8 AV	54.0	-9.2	1.25 V	56	-6.70	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	108.1 PK			1.03 H	360	68.70	39.40
2	*5320.00	98.7 AV			1.03 H	360	59.30	39.40
3	5350.00	63.5 PK	74.0	-10.5	1.03 H	360	24.10	39.40
4	5350.00	47.8 AV	54.0	-6.2	1.03 H	360	8.40	39.40
5	10640.00	57.6 PK	74.0	-16.4	1.45 H	333	6.10	51.50
6	10640.00	44.6 AV	54.0	-9.4	1.45 H	333	-6.90	51.50

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	*5320.00	112.0 PK			1.05 V	354	72.60	39.40
2	*5320.00	101.8 AV			1.05 V	354	62.40	39.40
3	5350.00	67.7 PK	74.0	-6.3	1.05 V	354	28.30	39.40
4	5350.00	49.6 AV	54.0	-4.4	1.05 V	354	10.20	39.40
5	10640.00	57.3 PK	74.0	-16.7	1.45 V	222	5.80	51.50
6	10640.00	44.3 AV	54.0	-9.7	1.45 V	222	-7.20	51.50

**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.





EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	60.3 PK	74.0	-13.7	1.00 H	330	20.70	39.60
2	5460.00	44.2 AV	54.0	-9.8	1.00 H	330	4.60	39.60
3	#5470.00	60.5 PK	74.0	-13.5	1.00 H	330	20.90	39.60
4	#5470.00	47.7 AV	54.0	-6.3	1.00 H	330	8.10	39.60
5	*5500.00	110.2 PK			1.00 H	330	70.50	39.70
6	*5500.00	100.2 AV			1.00 H	330	60.50	39.70
7	11000.00	59.2 PK	74.0	-14.8	1.02 H	325	6.00	53.20
8	11000.00	45.4 AV	54.0	-8.6	1.02 H	325	-7.80	53.20
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	5460.00	60.8 PK	74.0	-13.2	1.08 V	193	21.20	39.60
2	5460.00	43.0 AV	54.0	-11.0	1.08 V	193	3.40	39.60
3	#5470.00	64.7 PK	74.0	-9.3	1.08 V	193	25.10	39.60
4	#5470.00	49.5 AV	54.0	-4.5	1.08 V	193	9.90	39.60
5	*5500.00	111.0 PK			1.08 V	193	71.30	39.70
6	*5500.00	100.7 AV			1.08 V	193	61.00	39.70
7	11000.00	58.5 PK	74.0	-15.5	1.55 V	251	5.30	53.20
8	11000.00	45.2 AV	54.0	-8.8	1.55 V	251	-8.00	53.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	109.7 PK			1.00 H	350	69.90	39.80
2	*5580.00	99.8 AV			1.00 H	350	60.00	39.80
3	11160.00	58.7 PK	74.0	-15.3	1.36 H	6	5.80	52.90
4	11160.00	45.6 AV	54.0	-8.4	1.36 H	6	-7.30	52.90
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	*5580.00	111.1 PK			1.00 V	26	71.30	39.80
2	*5580.00	101.6 AV			1.00 V	26	61.80	39.80
3	11160.00	58.7 PK	74.0	-15.3	1.47 V	78	5.80	52.90
4	11160.00	45.8 AV	54.0	-8.2	1.47 V	78	-7.10	52.90

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 71%RH	TESTED BY	Martin Lee
TEST MODE	B1		

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	109.8 PK			1.05 H	346	69.70	40.10
2	*5700.00	99.5 AV			1.05 H	346	59.40	40.10
3	#5725.00	67.5 PK	74.0	-6.5	1.05 H	346	27.40	40.10
4	#5725.00	50.0 AV	54.0	-4.0	1.05 H	346	9.90	40.10
5	11400.00	57.9 PK	74.0	-16.1	1.36 H	66	5.10	52.80
6	11400.00	45.3 AV	54.0	-8.7	1.36 H	66	-7.50	52.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.8 PK			1.16 V	18	69.70	40.10
2	*5700.00	99.9 AV			1.16 V	18	59.80	40.10
3	#5725.00	67.7 PK	74.0	-6.3	1.16 V	18	27.60	40.10
4	#5725.00	50.8 AV	54.0	-3.2	1.16 V	18	10.70	40.10
5	11400.00	58.8 PK	74.0	-15.2	1.22 V	25	6.00	52.80
6	11400.00	46.0 AV	54.0	-8.0	1.22 V	25	-6.80	52.80

**REMARKS:**

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

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	55.5 PK	74.0	-18.5	1.00 H	64	16.30	39.20
2	5150.00	43.3 AV	54.0	-10.7	1.00 H	64	4.10	39.20
3	*5190.00	96.7 PK			1.00 H	264	57.50	39.20
4	*5190.00	86.3 AV			1.00 H	264	47.10	39.20
5	#10380.00	58.6 PK	74.0	-15.4	1.44 H	214	7.80	50.80
6	#10380.00	44.6 AV	54.0	-9.4	1.44 H	214	-6.20	50.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.6 PK	74.0	-11.4	1.00 V	175	23.40	39.20
2	5150.00	49.9 AV	54.0	-4.1	1.00 V	175	10.70	39.20
3	*5190.00	104.5 PK			1.00 V	341	65.30	39.20
4	*5190.00	95.1 AV			1.00 V	341	55.90	39.20
5	#10380.00	60.2 PK	74.0	-13.8	1.00 V	14	9.40	50.80
6	#10380.00	47.6 AV	54.0	-6.4	1.00 V	14	-3.20	50.80

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	95.0 PK			1.00 H	265	55.70	39.30
2	*5230.00	85.5 AV			1.00 H	265	46.20	39.30
3	5350.00	56.1 PK	74.0	-17.9	1.00 H	42	16.70	39.40
4	5350.00	43.3 AV	54.0	-10.7	1.00 H	42	3.90	39.40
5	#10460.00	59.7 PK	74.0	-14.3	1.42 H	241	8.70	51.00
6	#10460.00	45.1 AV	54.0	-8.9	1.42 H	241	-5.90	51.00
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	105.0 PK			1.52 V	338	65.70	39.30
2	*5230.00	95.3 AV			1.52 V	338	56.00	39.30
3	5350.00	57.1 PK	74.0	-16.9	1.00 V	112	17.70	39.40
4	5350.00	43.7 AV	54.0	-10.3	1.00 V	112	4.30	39.40
5	#10460.00	63.7 PK	74.0	-10.3	1.55 V	154	12.70	51.00
6	#10460.00	48.3 AV	54.0	-5.7	1.55 V	154	-2.70	51.00

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	54.3 PK	74.0	-19.7	1.00 H	250	15.10	39.20
2	5150.00	42.1 AV	54.0	-11.9	1.00 H	250	2.90	39.20
3	*5270.00	102.1 PK			1.00 H	264	62.80	39.30
4	*5270.00	92.3 AV			1.00 H	264	53.00	39.30
5	#10540.00	58.0 PK	74.0	-16.0	1.52 H	136	6.70	51.30
6	#10540.00	44.6 AV	54.0	-9.4	1.52 H	136	-6.70	51.30

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	55.9 PK	74.0	-18.1	1.24 V	332	16.70	39.20
2	5150.00	46.6 AV	54.0	-7.4	1.24 V	332	7.40	39.20
3	*5270.00	112.3 PK			1.07 V	195	73.00	39.30
4	*5270.00	102.0 AV			1.07 V	195	62.70	39.30
5	#10540.00	60.3 PK	74.0	-13.7	1.26 V	35	9.00	51.30
6	#10540.00	46.7 AV	54.0	-7.3	1.26 V	35	-4.60	51.30

**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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	97.9 PK			1.08 H	263	58.50	39.40
2	*5310.00	87.3 AV			1.08 H	263	47.90	39.40
3	5350.00	55.7 PK	74.0	-18.3	1.17 H	277	16.30	39.40
4	5350.00	42.8 AV	54.0	-11.2	1.17 H	277	3.40	39.40
5	10620.00	59.2 PK	74.0	-14.8	1.52 H	147	7.70	51.50
6	10620.00	44.6 AV	54.0	-9.4	1.52 H	147	-6.90	51.50

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	*5310.00	106.2 PK			1.48 V	339	66.80	39.40
2	*5310.00	96.3 AV			1.48 V	339	56.90	39.40
3	5350.00	66.9 PK	74.0	-7.1	1.56 V	338	27.50	39.40
4	5350.00	51.0 AV	54.0	-3.0	1.56 V	338	11.60	39.40
5	10620.00	60.7 PK	74.0	-13.3	1.29 V	314	9.20	51.50
6	10620.00	46.8 AV	54.0	-7.2	1.29 V	314	-4.70	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	56.9 PK	74.0	-17.1	1.00 H	61	17.30	39.60
2	5460.00	43.7 AV	54.0	-10.3	1.00 H	61	4.10	39.60
3	#5470.00	59.6 PK	74.0	-14.4	1.00 H	61	20.00	39.60
4	#5470.00	45.4 AV	54.0	-8.6	1.00 H	61	5.80	39.60
5	*5510.00	97.8 PK			1.00 H	62	58.10	39.70
6	*5510.00	88.8 AV			1.00 H	62	49.10	39.70
7	11020.00	60.2 PK	74.0	-13.8	1.09 H	55	7.00	53.20
8	11020.00	46.9 AV	54.0	-7.1	1.09 H	55	-6.30	53.20
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	5460.00	63.0 PK	74.0	-11.0	1.19 V	169	23.40	39.60
2	5460.00	44.0 AV	54.0	-10.0	1.19 V	169	4.40	39.60
3	#5470.00	67.3 PK	74.0	-6.7	1.19 V	169	27.70	39.60
4	#5470.00	50.8 AV	54.0	-3.2	1.19 V	169	11.20	39.60
5	*5510.00	106.0 PK			1.18 V	74	66.30	39.70
6	*5510.00	96.6 AV			1.18 V	74	56.90	39.70
7	11020.00	62.2 PK	74.0	-11.8	1.56 V	123	9.00	53.20
8	11020.00	49.0 AV	54.0	-5.0	1.56 V	123	-4.20	53.20

**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.





A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	102.8 PK			1.00 H	64	63.00	39.80
2	*5550.00	93.0 AV			1.00 H	64	53.20	39.80
3	11100.00	60.8 PK	74.0	-13.2	1.15 H	26	7.90	52.90
4	11100.00	46.8 AV	54.0	-7.2	1.15 H	26	-6.10	52.90
5	#16650.00	61.1 PK	74.0	-12.9	1.53 H	124	6.60	54.50
6	#16650.00	47.4 AV	54.0	-6.6	1.53 H	124	-7.10	54.50

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	*5550.00	110.8 PK			1.00 V	338	71.00	39.80
2	*5550.00	101.3 AV			1.00 V	338	61.50	39.80
3	11100.00	62.7 PK	74.0	-11.3	1.32 V	218	9.80	52.90
4	11100.00	48.7 AV	54.0	-5.3	1.32 V	218	-4.20	52.90
5	#16650.00	61.0 PK	74.0	-13.0	1.32 V	148	6.50	54.50
6	#16650.00	48.6 AV	54.0	-5.4	1.32 V	148	-5.90	54.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	97.6 PK			1.00 H	256	57.60	40.00
2	*5670.00	87.9 AV			1.00 H	256	47.90	40.00
3	#5725.00	56.2 PK	74.0	-17.8	1.10 H	285	16.10	40.10
4	#5725.00	44.0 AV	54.0	-10.0	1.10 H	285	3.90	40.10
5	11340.00	59.9 PK	74.0	-14.1	1.35 H	127	7.00	52.90
6	11340.00	46.7 AV	54.0	-7.3	1.35 H	127	-6.20	52.90
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	*5670.00	108.0 PK			1.00 V	22	68.00	40.00
2	*5670.00	98.8 AV			1.00 V	22	58.80	40.00
3	#5725.00	67.4 PK	74.0	-6.6	1.00 V	20	27.30	40.10
4	#5725.00	50.9 AV	54.0	-3.1	1.00 V	20	10.80	40.10
5	11340.00	62.6 PK	74.0	-11.4	1.25 V	63	9.70	52.90
6	11340.00	47.7 AV	54.0	-6.3	1.25 V	63	-5.20	52.90

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	1125.00	57.7 PK	74.0	-16.3	1.15 H	156	29.70	28.00
2	1125.00	51.6 AV	54.0	-2.4	1.15 H	156	23.60	28.00
3	5150.00	61.2 PK	74.0	-12.8	1.00 H	138	22.00	39.20
4	5150.00	47.2 AV	54.0	-6.8	1.00 H	138	8.00	39.20
5	*5190.00	104.1 PK			1.06 H	222	64.90	39.20
6	*5190.00	93.4 AV			1.06 H	222	54.20	39.20
7	#10380.00	58.6 PK	74.0	-15.4	1.00 H	142	7.80	50.80
8	#10380.00	44.3 AV	54.0	-9.7	1.00 H	142	-6.50	50.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	1012.00	51.6 PK	74.0	-22.4	1.00 V	140	24.00	27.60
2	1012.00	47.1 AV	54.0	-6.9	1.00 V	140	19.50	27.60
3	5150.00	65.7 PK	74.0	-8.3	1.00 V	183	26.50	39.20
4	5150.00	49.7 AV	54.0	-4.3	1.00 V	183	10.50	39.20
5	*5190.00	104.8 PK			1.00 V	175	65.60	39.20
6	*5190.00	93.7 AV			1.00 V	175	54.50	39.20
7	#10380.00	60.9 PK	74.0	-13.1	1.04 V	185	10.10	50.80
8	#10380.00	48.4 AV	54.0	-5.6	1.04 V	185	-2.40	50.80

**REMARKS:**

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	101.7 PK			1.00 H	142	62.40	39.30
2	*5230.00	91.6 AV			1.00 H	142	52.30	39.30
3	5350.00	56.6 PK	74.0	-17.4	1.00 H	132	17.20	39.40
4	5350.00	43.6 AV	54.0	-10.4	1.00 H	132	4.20	39.40
5	#10460.00	58.5 PK	74.0	-15.5	1.03 H	125	7.50	51.00
6	#10460.00	45.3 AV	54.0	-8.7	1.03 H	125	-5.70	51.00
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	103.8 PK			1.00 V	174	64.50	39.30
2	*5230.00	92.9 AV			1.00 V	174	53.60	39.30
3	5350.00	57.4 PK	74.0	-16.6	1.00 V	164	18.00	39.40
4	5350.00	43.7 AV	54.0	-10.3	1.00 V	164	4.30	39.40
5	#10460.00	61.2 PK	74.0	-12.8	1.04 V	321	10.20	51.00
6	#10460.00	48.8 AV	54.0	-5.2	1.04 V	321	-2.20	51.00

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	55.4 PK	74.0	-18.6	1.04 H	100	16.20	39.20
2	5150.00	43.0 AV	54.0	-11.0	1.04 H	100	3.80	39.20
3	*5270.00	107.3 PK			1.00 H	148	68.00	39.30
4	*5270.00	96.3 AV			1.00 H	148	57.00	39.30
5	#10540.00	59.3 PK	74.0	-14.7	1.40 H	322	8.00	51.30
6	#10540.00	45.1 AV	54.0	-8.9	1.40 H	322	-6.20	51.30
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	56.2 PK	74.0	-17.8	1.00 V	189	17.00	39.20
2	5150.00	43.1 AV	54.0	-10.9	1.00 V	189	3.90	39.20
3	*5270.00	107.9 PK			1.07 V	195	68.60	39.30
4	*5270.00	97.8 AV			1.07 V	195	58.50	39.30
5	#10540.00	61.3 PK	74.0	-12.7	1.01 V	64	10.00	51.30
6	#10540.00	47.2 AV	54.0	-6.8	1.01 V	64	-4.10	51.30

**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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	105.6 PK			1.02 H	231	66.20	39.40
2	*5310.00	95.5 AV			1.02 H	231	56.10	39.40
3	5350.00	72.5 PK	74.0	-1.5	1.00 H	231	33.10	39.40
4	5350.00	52.1 AV	54.0	-1.9	1.00 H	231	12.70	39.40
5	10620.00	59.9 PK	74.0	-14.1	1.04 H	280	8.40	51.50
6	10620.00	45.6 AV	54.0	-8.4	1.04 H	280	-5.90	51.50
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	*5310.00	106.2 PK			1.07 V	205	66.80	39.40
2	*5310.00	95.3 AV			1.07 V	205	55.90	39.40
3	5350.00	71.7 PK	74.0	-2.3	1.06 V	199	32.30	39.40
4	<b>5350.00</b>	<b>53.0 AV</b>	<b>54.0</b>	<b>-1.0</b>	<b>1.06 V</b>	<b>199</b>	<b>13.60</b>	<b>39.40</b>
5	10620.00	64.0 PK	74.0	-10.0	1.07 V	301	12.50	51.50
6	10620.00	49.6 AV	54.0	-4.4	1.07 V	301	-1.90	51.50

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	60.4 PK	74.0	-13.6	1.00 H	20	20.80	39.60
2	5460.00	44.4 AV	54.0	-9.6	1.00 H	20	4.80	39.60
3	#5470.00	66.8 PK	74.0	-7.2	1.00 H	20	27.20	39.60
4	#5470.00	51.0 AV	54.0	-3.0	1.00 H	20	11.40	39.60
5	*5510.00	107.9 PK			1.00 H	37	68.20	39.70
6	*5510.00	97.6 AV			1.00 H	37	57.90	39.70
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	66.1 PK	74.0	-7.9	1.00 V	43	26.50	39.60
2	5460.00	50.5 AV	54.0	-3.5	1.00 V	43	10.90	39.60
3	#5470.00	65.0 PK	74.0	-9.0	1.00 V	62	25.40	39.60
4	#5470.00	49.0 AV	54.0	-5.0	1.00 V	62	9.40	39.60
5	*5510.00	106.0 PK			1.25 V	62	66.30	39.70
6	*5510.00	95.7 AV			1.25 V	62	56.00	39.70
7	11020.00	63.3 PK	74.0	-10.7	1.14 V	231	10.10	53.20
8	11020.00	49.5 AV	54.0	-4.5	1.14 V	231	-3.70	53.20

**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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	111.5 PK			1.00 H	38	71.70	39.80
2	*5550.00	101.4 AV			1.00 H	38	61.60	39.80
3	11100.00	63.6 PK	74.0	-10.4	1.34 H	142	10.70	52.90
4	11100.00	50.3 AV	54.0	-3.7	1.34 H	142	-2.60	52.90
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	*5550.00	109.7 PK			1.12 V	63	69.90	39.80
2	*5550.00	99.3 AV			1.12 V	63	59.50	39.80
3	11100.00	60.9 PK	74.0	-13.1	1.52 V	227	8.00	52.90
4	11100.00	47.3 AV	54.0	-6.7	1.52 V	227	-5.60	52.90

**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.





EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	107.8 PK			1.08 H	43	67.80	40.00
2	*5670.00	97.9 AV			1.08 H	43	57.90	40.00
3	#5725.00	64.4 PK	74.0	-9.6	1.00 H	41	24.30	40.10
4	#5725.00	50.5 AV	54.0	-3.5	1.00 H	41	10.40	40.10
5	11340.00	66.3 PK	74.0	-7.7	1.43 H	189	13.40	52.90
6	11340.00	50.2 AV	54.0	-3.8	1.43 H	189	-2.70	52.90
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	*5670.00	107.9 PK			1.00 V	13	67.90	40.00
2	*5670.00	98.7 AV			1.00 V	13	58.70	40.00
3	#5725.00	64.5 PK	74.0	-9.5	1.00 V	345	24.40	40.10
4	#5725.00	50.1 AV	54.0	-3.9	1.00 V	345	10.00	40.10
5	11340.00	60.5 PK	74.0	-13.5	1.21 V	169	7.60	52.90
6	11340.00	47.2 AV	54.0	-6.8	1.21 V	169	-5.70	52.90

**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.

**BELOW 1GHz WORST-CASE DATA :**

**802.11n (20MHz)**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	97.81	34.1 QP	43.5	-9.4	1.99 H	319	25.10	9.00
2	212.30	38.7 QP	43.5	-4.8	1.24 H	210	27.60	11.10
3	297.68	34.2 QP	46.0	-11.8	1.00 H	302	19.70	14.50
4	499.48	35.7 QP	46.0	-10.3	1.49 H	244	16.20	19.50
5	676.05	32.5 QP	46.0	-13.5	1.00 H	227	10.00	22.50
6	788.60	35.7 QP	46.0	-10.3	1.99 H	320	11.30	24.40

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	36.38	35.4 QP	40.0	-4.6	1.00 V	223	22.70	12.70
2	204.54	33.6 QP	43.5	-9.9	1.00 V	249	22.90	10.70
3	299.62	33.9 QP	46.0	-12.1	1.24 V	216	19.30	14.60
4	563.51	33.5 QP	46.0	-12.5	1.49 V	255	12.70	20.80
5	788.60	34.6 QP	46.0	-11.4	1.49 V	223	10.20	24.40
6	875.91	34.8 QP	46.0	-11.2	1.00 V	293	9.20	25.60

**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



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	A1		

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	35.72	36.6 QP	40.0	-3.4	1.00 H	328	24.00	12.60
2	204.54	32.6 QP	43.5	-10.9	1.00 H	235	21.90	10.70
3	291.85	33.3 QP	46.0	-12.7	1.25 H	233	19.00	14.30
4	400.52	29.3 QP	46.0	-16.7	1.25 H	265	12.20	17.10
5	563.51	32.4 QP	46.0	-13.6	1.49 H	260	11.60	20.80
6	788.60	34.9 QP	46.0	-11.1	1.49 H	256	10.50	24.40

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	35.72	36.4 QP	40.0	-3.6	1.00 V	257	23.80	12.60
2	86.17	32.3 QP	40.0	-7.7	1.49 V	9	23.60	8.70
3	210.36	33.9 QP	43.5	-9.6	1.00 V	55	22.90	11.00
4	291.85	33.7 QP	46.0	-12.3	1.24 V	216	19.40	14.30
5	563.51	32.4 QP	46.0	-13.6	1.49 V	262	11.60	20.80
6	788.60	35.1 QP	46.0	-10.9	1.49 V	226	10.70	24.40

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



802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A2		

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	74.53	21.7 QP	40.0	-18.3	1.00 H	293	10.60	11.10
2	214.24	31.8 QP	43.5	-11.7	1.00 H	260	20.60	11.20
3	375.29	24.0 QP	46.0	-22.0	1.24 H	221	7.50	16.50
4	499.48	24.4 QP	46.0	-21.6	1.24 H	250	4.90	19.50
5	600.38	26.0 QP	46.0	-20.0	1.24 H	106	4.50	21.50
6	788.60	30.0 QP	46.0	-16.0	1.00 H	301	5.60	24.40
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	31.84	30.6 QP	40.0	-9.4	1.24 V	4	18.20	12.40
2	156.03	27.6 QP	43.5	-15.9	1.00 V	40	13.80	13.80
3	214.24	27.4 QP	43.5	-16.1	1.50 V	131	16.20	11.20
4	336.48	27.8 QP	46.0	-18.2	1.24 V	271	12.30	15.50
5	450.97	27.3 QP	46.0	-18.7	1.99 V	249	9.00	18.30
6	563.51	33.9 QP	46.0	-12.1	1.00 V	10	13.10	20.80

REMARKS:

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



## 802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A2		

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	214.24	32.6 QP	43.5	-10.9	1.24 H	68	21.40	11.20
2	299.62	26.5 QP	46.0	-19.5	1.99 H	248	11.90	14.60
3	375.29	24.0 QP	46.0	-22.0	1.00 H	209	7.50	16.50
4	499.48	26.7 QP	46.0	-19.3	1.24 H	237	7.20	19.50
5	625.60	27.9 QP	46.0	-18.1	1.24 H	227	6.00	21.90
6	788.60	30.8 QP	46.0	-15.2	1.50 H	305	6.40	24.40

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	60.95	32.1 QP	40.0	-7.9	1.50 V	5	18.80	13.30
2	150.20	27.2 QP	43.5	-16.3	1.00 V	60	13.30	13.90
3	336.48	26.5 QP	46.0	-19.5	1.24 V	240	11.00	15.50
4	450.97	26.9 QP	46.0	-19.1	1.00 V	257	8.60	18.30
5	563.51	33.7 QP	46.0	-12.3	1.99 V	16	12.90	20.80
6	701.28	26.7 QP	46.0	-19.3	1.24 V	203	3.80	22.90

## 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



A D T

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin
TEST MODE	B1		

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	62.89	27.3 QP	40.0	-12.7	1.00 H	122	14.20	13.10
2	165.73	28.4 QP	43.5	-15.1	1.00 H	11	14.90	13.50
3	336.48	27.9 QP	46.0	-18.1	2.00 H	178	12.40	15.50
4	499.48	34.5 QP	46.0	-11.5	1.24 H	220	15.00	19.50
5	563.51	35.7 QP	46.0	-10.3	1.00 H	356	14.90	20.80
6	788.60	36.1 QP	46.0	-9.9	1.49 H	19	11.70	24.40
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	165.73	28.5 QP	43.5	-15.0	1.00 V	14	15.00	13.50
2	336.48	26.4 QP	46.0	-19.6	1.50 V	350	10.90	15.50
3	499.48	35.9 QP	46.0	-10.1	1.00 V	217	16.40	19.50
4	563.51	36.5 QP	46.0	-9.5	1.00 V	2	15.70	20.80
5	676.05	30.6 QP	46.0	-15.4	1.50 V	175	8.10	22.50
6	788.60	35.6 QP	46.0	-10.4	1.50 V	16	11.20	24.40

**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



802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B1		

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	165.73	34.7 QP	43.5	-8.8	2.00 H	109	21.20	13.50
2	239.46	31.6 QP	46.0	-14.4	1.25 H	78	19.30	12.30
3	336.48	30.5 QP	46.0	-15.5	1.00 H	102	15.00	15.50
4	499.48	36.0 QP	46.0	-10.0	2.00 H	232	16.50	19.50
5	625.60	34.9 QP	46.0	-11.1	1.25 H	357	13.00	21.90
6	788.60	33.7 QP	46.0	-12.3	1.00 H	235	9.30	24.40
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	35.72	28.1 QP	40.0	-11.9	1.00 V	217	15.50	12.60
2	165.73	27.9 QP	43.5	-15.6	1.00 V	33	14.40	13.50
3	336.48	26.5 QP	46.0	-19.5	1.49 V	348	11.00	15.50
4	499.48	35.2 QP	46.0	-10.8	1.00 V	283	15.70	19.50
5	563.51	36.1 QP	46.0	-9.9	1.00 V	4	15.30	20.80
6	788.60	35.8 QP	46.0	-10.2	1.49 V	10	11.40	24.40

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



802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B2		

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	111.40	26.5 QP	43.5	-17.0	1.00 H	288	16.00	10.50
2	198.71	33.2 QP	43.5	-10.3	1.99 H	72	22.50	10.70
3	289.91	28.1 QP	46.0	-17.9	1.99 H	232	13.90	14.20
4	400.52	27.9 QP	46.0	-18.1	1.00 H	6	10.80	17.10
5	625.60	31.1 QP	46.0	-14.9	1.50 H	6	9.20	21.90
6	676.05	35.3 QP	46.0	-10.7	1.24 H	6	12.80	22.50
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	33.78	30.9 QP	40.0	-9.1	1.00 V	348	18.40	12.50
2	60.95	32.7 QP	40.0	-7.3	1.00 V	40	19.40	13.30
3	111.40	30.1 QP	43.5	-13.4	1.50 V	292	19.60	10.50
4	198.71	32.0 QP	43.5	-11.5	1.99 V	315	21.30	10.70
5	375.29	22.6 QP	46.0	-23.4	1.00 V	184	6.10	16.50
6	563.51	36.5 QP	46.0	-9.5	1.24 V	0	15.70	20.80

REMARKS:

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





A D T

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	B2		

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	111.40	26.1 QP	43.5	-17.4	1.50 H	304	15.60	10.50
2	198.71	32.2 QP	43.5	-11.3	1.24 H	113	21.50	10.70
3	299.62	26.8 QP	46.0	-19.2	1.00 H	237	12.20	14.60
4	400.52	27.3 QP	46.0	-18.7	1.99 H	2	10.20	17.10
5	676.05	35.3 QP	46.0	-10.7	1.00 H	10	12.80	22.50
6	788.60	32.9 QP	46.0	-13.1	1.00 H	220	8.50	24.40
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	33.78	33.0 QP	40.0	-7.0	1.00 V	58	20.50	12.50
2	60.95	34.1 QP	40.0	-5.9	1.50 V	6	20.80	13.30
3	173.49	30.1 QP	43.5	-13.4	1.24 V	302	17.00	13.10
4	499.48	28.4 QP	46.0	-17.6	1.24 V	11	8.90	19.50
5	563.51	36.6 QP	46.0	-9.4	1.00 V	6	15.80	20.80
6	676.05	27.6 QP	46.0	-18.4	1.00 V	48	5.10	22.50

REMARKS:

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

## 4.2 CONDUCTED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	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.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 16, 2012	Nov. 15, 2013
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 28, 2012	Dec. 27, 2013
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 02, 2012	Jul. 01, 2013
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 04, 2013	Feb. 03, 2014
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

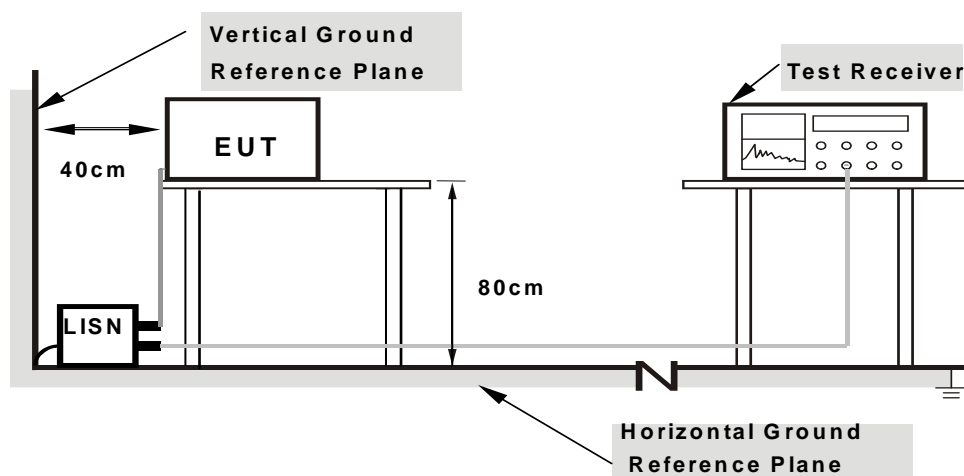
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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:** All modes of operation were investigated and the worst-case emissions are reported.

#### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.2.5 TEST SETUP



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

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

#### 4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

## 4.2.7 TEST RESULTS

### CONDUCTED WORST-CASE DATA :

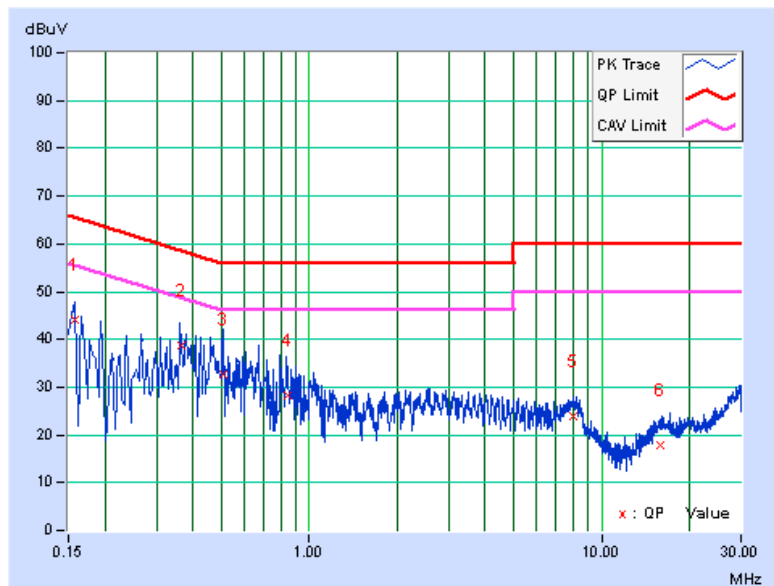
#### 802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 60	TEST MODE	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15719	0.15	43.90	28.86	44.05	29.01	65.61	55.61	-21.57	-26.61
2	0.36505	0.19	38.65	31.12	38.84	31.31	58.61	48.61	-19.77	-17.30
3	0.50507	0.21	32.60	21.47	32.81	21.68	56.00	46.00	-23.19	-24.32
4	0.83986	0.22	27.93	16.39	28.15	16.61	56.00	46.00	-27.85	-29.39
5	7.96997	0.59	23.23	17.21	23.82	17.80	60.00	50.00	-36.18	-32.20
6	15.83692	1.04	16.93	11.68	17.97	12.72	60.00	50.00	-42.03	-37.28

### 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.





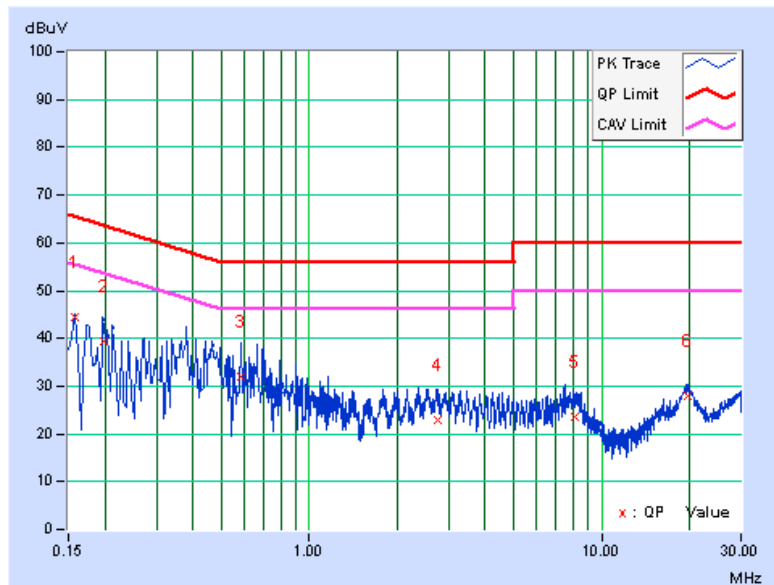
A D T

<b>PHASE</b>	Line 2	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 60	<b>TEST MODE</b>	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15719	0.20	44.21	28.70	44.41	28.90	65.61	55.61	-21.21	-26.72
2	0.19717	0.20	39.30	22.04	39.50	22.24	63.73	53.73	-24.23	-31.49
3	0.58230	0.26	31.62	17.78	31.88	18.04	56.00	46.00	-24.12	-27.96
4	2.74162	0.35	22.71	17.55	23.06	17.90	56.00	46.00	-32.94	-28.10
5	8.07166	0.56	23.01	17.29	23.57	17.85	60.00	50.00	-36.43	-32.15
6	19.61007	0.97	27.01	18.86	27.98	19.83	60.00	50.00	-32.02	-30.17

**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.





A D T

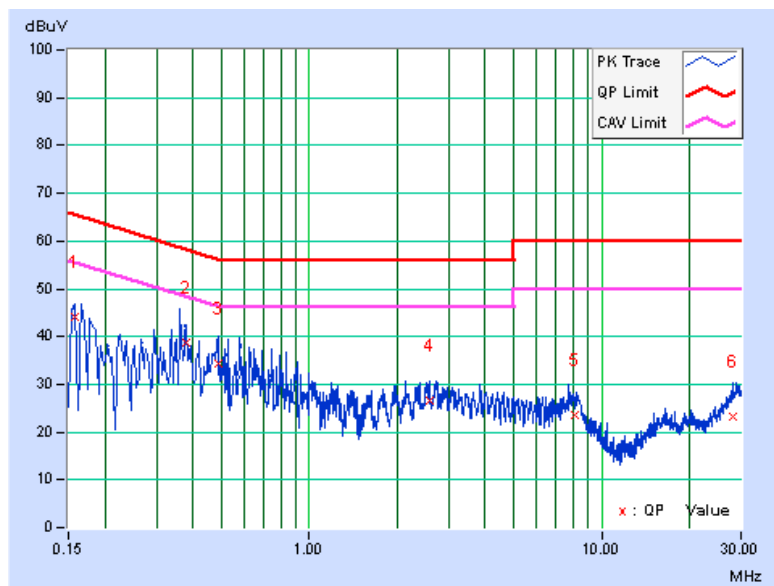
802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 116	TEST MODE	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15719	0.15	43.90	28.62	44.05	28.77	65.61	55.61	-21.57	-26.85
2	0.37700	0.19	38.41	31.49	38.60	31.68	58.35	48.35	-19.74	-16.66
3	0.48678	0.20	34.31	26.26	34.51	26.46	56.22	46.22	-21.71	-19.76
4	2.57362	0.29	26.28	20.07	26.57	20.36	56.00	46.00	-29.43	-25.64
5	8.06775	0.59	22.93	17.15	23.52	17.74	60.00	50.00	-36.48	-32.26
6	27.98920	1.52	21.62	16.25	23.14	17.77	60.00	50.00	-36.86	-32.23

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.





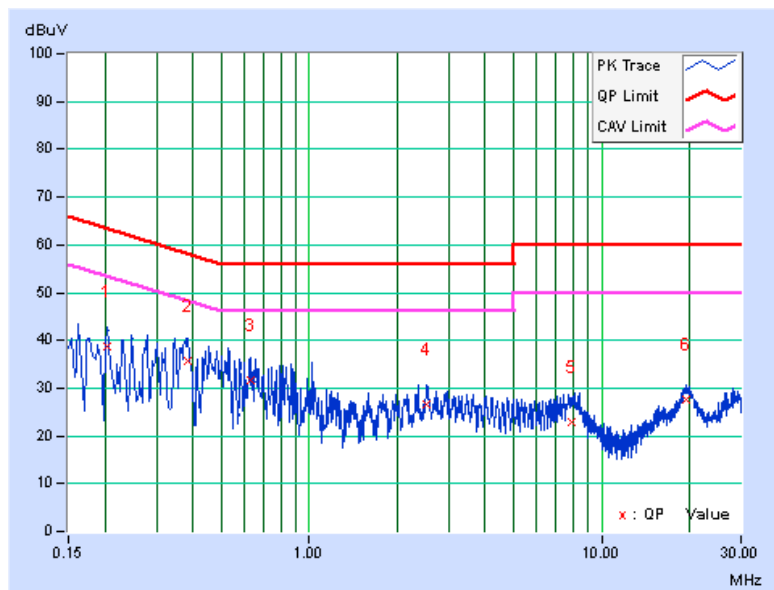
A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	Channel 116	TEST MODE	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20243	0.20	38.67	22.88	38.87	23.08	63.51	53.51	-24.64	-30.43
2	0.38460	0.26	35.31	28.57	35.57	28.83	58.18	48.18	-22.61	-19.35
3	0.62689	0.26	31.23	20.39	31.49	20.65	56.00	46.00	-24.51	-25.35
4	2.50669	0.34	26.42	20.13	26.76	20.47	56.00	46.00	-29.24	-25.53
5	7.85661	0.55	22.32	16.59	22.87	17.14	60.00	50.00	-37.13	-32.86
6	19.37156	0.96	26.53	18.18	27.49	19.14	60.00	50.00	-32.51	-30.86

**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.





A D T

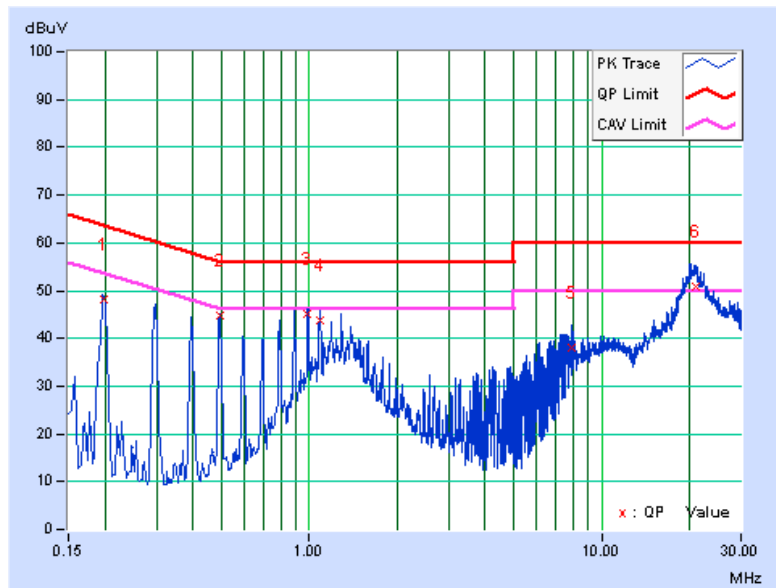
802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 60	TEST MODE	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19717	0.15	47.85	46.10	48.00	46.25	63.73	53.73	-15.73	-7.48
2	0.49324	0.20	44.49	44.25	44.69	44.45	56.11	46.11	-11.42	-1.66
3	0.98891	0.23	45.02	44.29	45.25	44.52	56.00	46.00	-10.75	-1.48
4	1.09231	0.23	43.55	39.23	43.78	39.46	56.00	46.00	-12.22	-6.54
5	7.89180	0.58	37.50	26.40	38.08	26.98	60.00	50.00	-21.92	-23.02
6	20.91601	1.32	49.38	43.88	50.70	45.20	60.00	50.00	-9.30	-4.80

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.



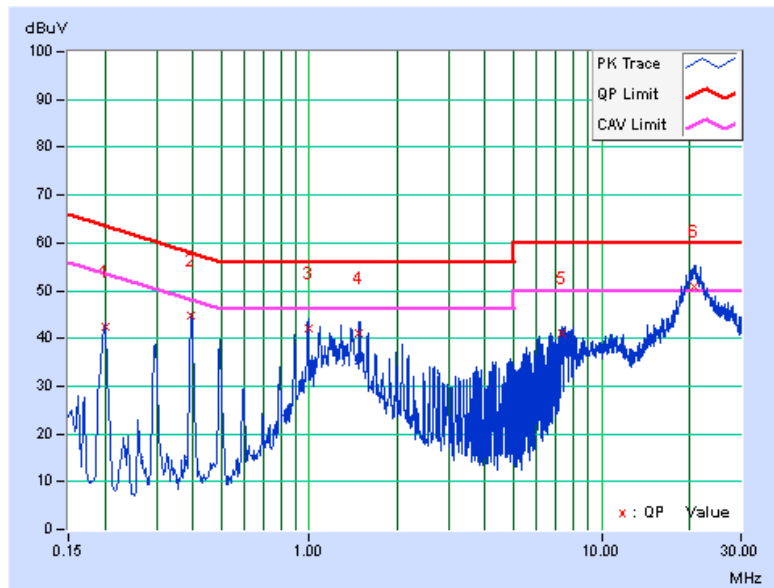


<b>PHASE</b>	Line 2	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 60	<b>TEST MODE</b>	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20084	0.20	42.24	37.19	42.44	37.39	63.58	53.58	-21.14	-16.19
2	0.39635	0.26	44.40	44.29	44.66	44.55	57.93	47.93	-13.27	-3.38
3	0.99065	0.27	41.95	41.02	42.22	41.29	56.00	46.00	-13.78	-4.71
4	1.47940	0.29	40.64	36.02	40.93	36.31	56.00	46.00	-15.07	-9.69
5	7.31312	0.53	40.39	31.55	40.92	32.08	60.00	50.00	-19.08	-17.92
6	20.74006	1.00	49.69	44.38	50.69	45.38	60.00	50.00	-9.31	-4.62

**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.



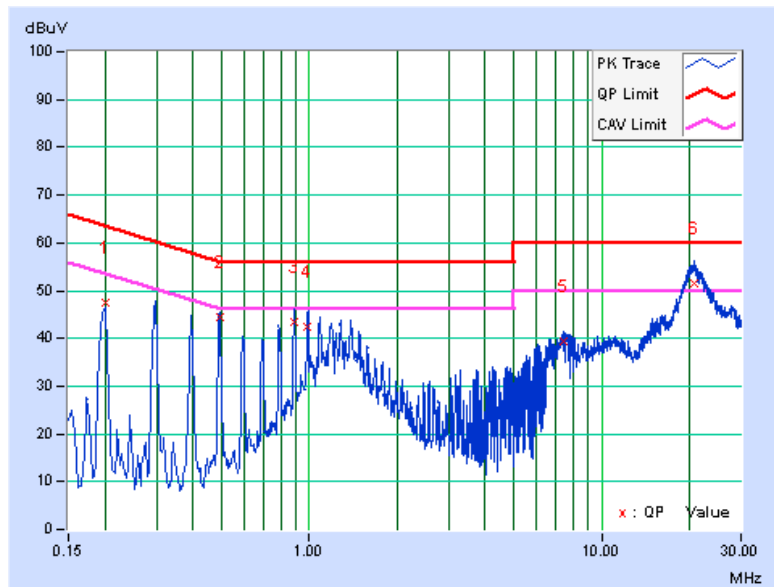
802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 116	TEST MODE	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20031	0.15	47.24	44.72	47.39	44.87	63.60	53.60	-16.21	-8.73
2	0.49324	0.20	44.32	43.80	44.52	44.00	56.11	46.11	-11.59	-2.11
3	0.88508	0.22	43.05	38.58	43.27	38.80	56.00	46.00	-12.73	-7.20
4	0.98371	0.23	42.08	36.47	42.31	36.70	56.00	46.00	-13.69	-9.30
5	7.42267	0.56	38.80	30.24	39.36	30.80	60.00	50.00	-20.64	-19.20
6	20.74788	1.31	50.08	44.68	51.39	45.99	60.00	50.00	-8.61	-4.01

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.





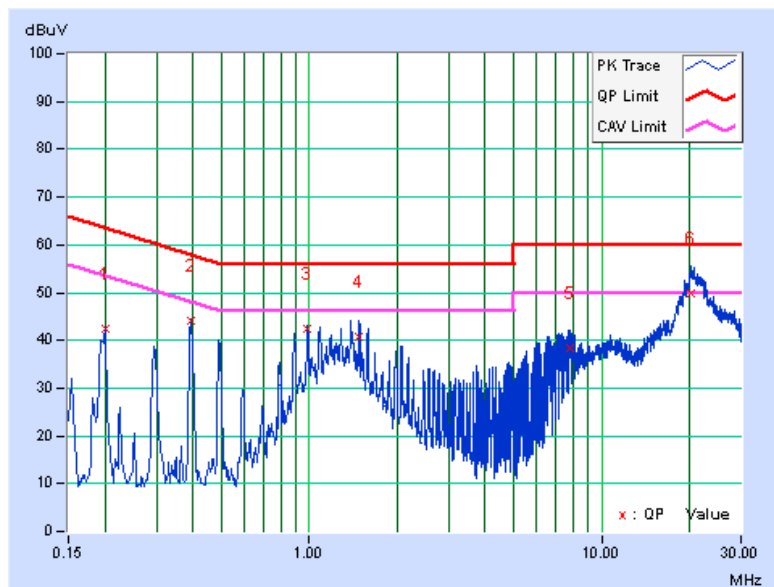
A D T

<b>PHASE</b>	Line 2	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 116	<b>TEST MODE</b>	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20084	0.20	42.21	37.14	42.41	37.34	63.58	53.58	-21.17	-16.24
2	0.39426	0.26	43.82	43.76	44.08	44.02	57.97	47.97	-13.90	-3.96
3	0.98674	0.27	42.12	39.67	42.39	39.94	56.00	46.00	-13.61	-6.06
4	1.47940	0.29	40.60	35.85	40.89	36.14	56.00	46.00	-15.11	-9.86
5	7.76668	0.55	37.79	31.24	38.34	31.79	60.00	50.00	-21.66	-18.21
6	20.30605	0.99	48.86	43.45	49.85	44.44	60.00	50.00	-10.15	-5.56

**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.



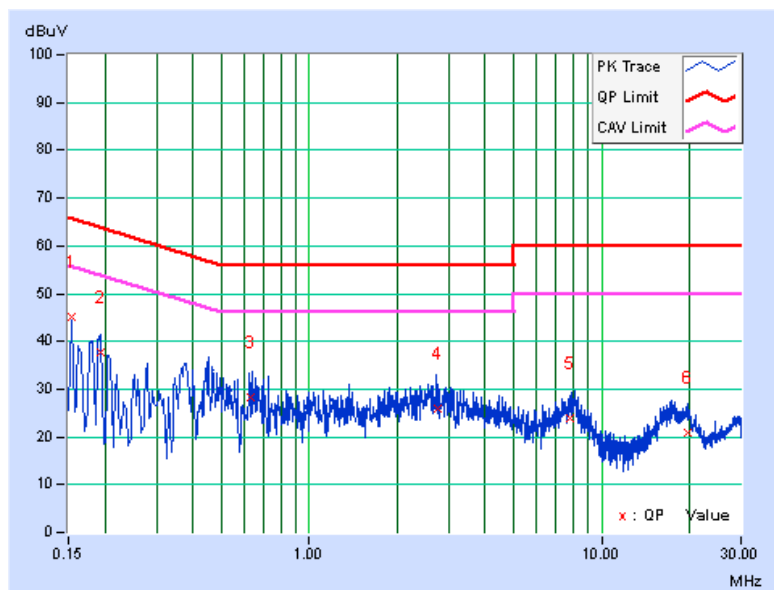
802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 60	TEST MODE	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.15	45.02	28.88	45.17	29.03	65.79	55.79	-20.62	-26.76
2	0.19255	0.15	37.58	20.50	37.73	20.65	63.93	53.93	-26.20	-33.28
3	0.62702	0.21	28.18	15.99	28.39	16.20	56.00	46.00	-27.61	-29.80
4	2.73842	0.30	25.51	17.89	25.81	18.19	56.00	46.00	-30.19	-27.81
5	7.77841	0.58	23.24	16.79	23.82	17.37	60.00	50.00	-36.18	-32.63
6	19.64526	1.27	19.65	12.48	20.92	13.75	60.00	50.00	-39.08	-36.25

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.





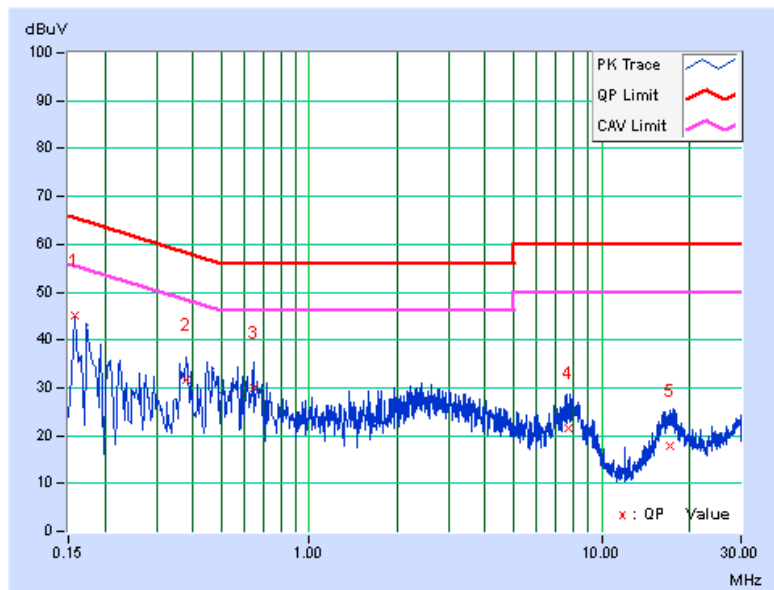
A D T

<b>PHASE</b>	Line 2	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 60	<b>TEST MODE</b>	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15719	0.20	44.97	26.92	45.17	27.12	65.61	55.61	-20.45	-28.50
2	0.37700	0.25	31.54	24.63	31.79	24.88	58.35	48.35	-26.55	-23.46
3	0.64362	0.26	29.66	16.91	29.92	17.17	56.00	46.00	-26.08	-28.83
4	7.68848	0.55	20.88	13.61	21.43	14.16	60.00	50.00	-38.57	-35.84
5	17.16241	0.88	16.90	10.67	17.78	11.55	60.00	50.00	-42.22	-38.45

**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.





A D T

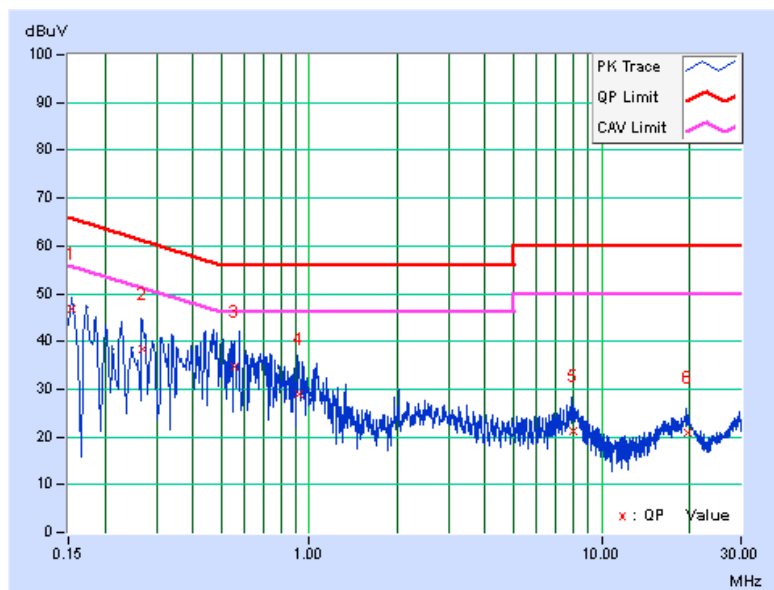
802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 100	TEST MODE	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.15	46.64	32.24	46.79	32.39	65.79	55.79	-19.00	-23.40
2	0.26765	0.17	38.28	20.64	38.45	20.81	61.19	51.19	-22.74	-30.38
3	0.55241	0.21	34.48	19.30	34.69	19.51	56.00	46.00	-21.31	-26.49
4	0.91858	0.23	28.68	15.59	28.91	15.82	56.00	46.00	-27.09	-30.18
5	7.97000	0.59	20.66	14.88	21.25	15.47	60.00	50.00	-38.75	-34.53
6	19.64917	1.27	19.47	11.92	20.74	13.19	60.00	50.00	-39.26	-36.81

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.

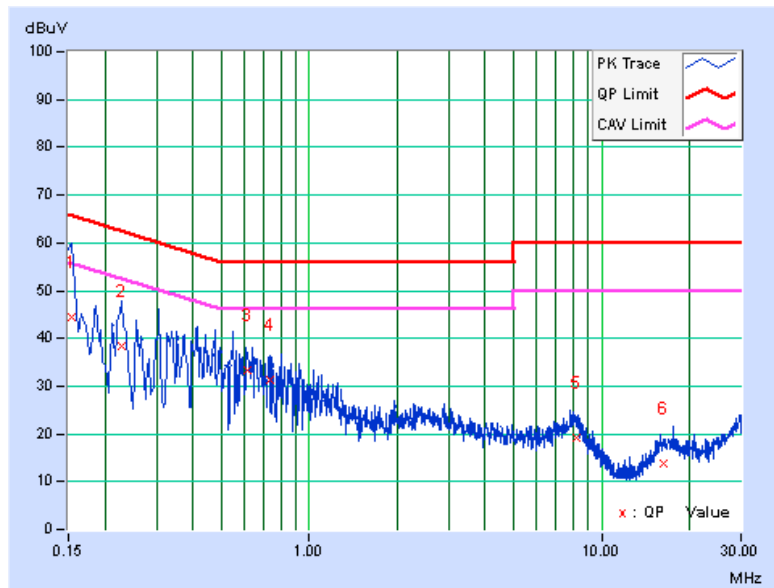


PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	Channel 100	TEST MODE	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.20	44.37	32.01	44.57	32.21	65.79	55.79	-21.22	-23.58
2	0.22672	0.21	38.02	23.82	38.23	24.03	62.57	52.57	-24.34	-28.54
3	0.61381	0.26	33.06	17.92	33.32	18.18	56.00	46.00	-22.68	-27.82
4	0.73233	0.27	30.91	14.43	31.18	14.70	56.00	46.00	-24.82	-31.30
5	8.16159	0.56	18.64	13.00	19.20	13.56	60.00	50.00	-40.80	-36.44
6	16.37291	0.85	12.80	7.60	13.65	8.45	60.00	50.00	-46.35	-41.55

**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.



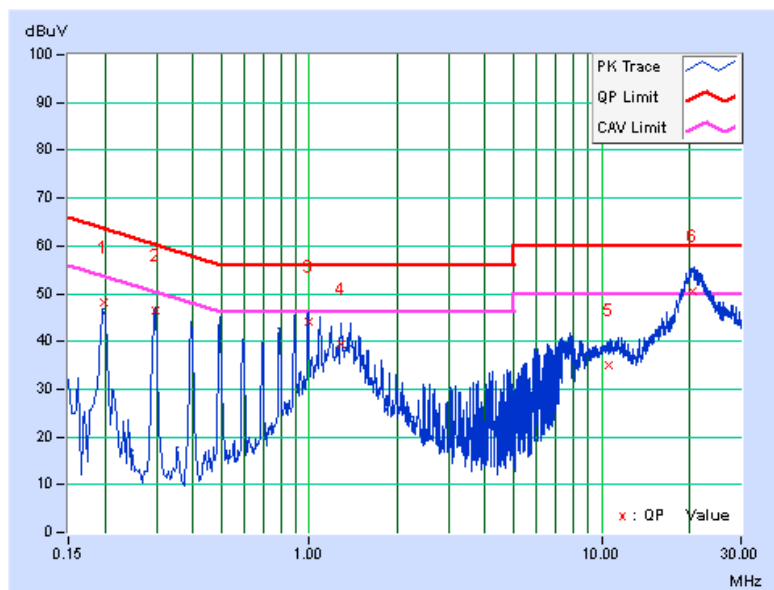
802.11a

<b>PHASE</b>	Line 1	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 60	<b>TEST MODE</b>	B2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19717	0.15	48.02	46.00	48.17	46.15	63.73	53.73	-15.56	-7.58
2	0.29662	0.17	46.43	46.02	46.60	46.19	60.34	50.34	-13.73	-4.14
3	0.99065	0.23	44.03	42.27	44.26	42.50	56.00	46.00	-11.74	-3.50
4	1.27689	0.24	39.19	32.93	39.43	33.17	56.00	46.00	-16.57	-12.83
5	10.52323	0.72	34.16	28.79	34.88	29.51	60.00	50.00	-25.12	-20.49
6	20.45072	1.30	49.31	44.01	50.61	45.31	60.00	50.00	-9.39	-4.69

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.



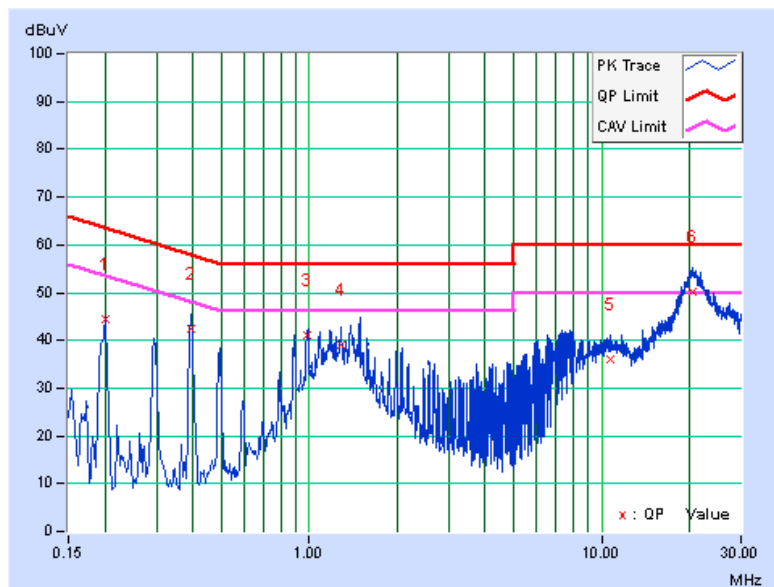


PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	Channel 60	TEST MODE	B2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19978	0.20	44.10	39.39	44.30	39.59	63.62	53.62	-19.32	-14.03
2	0.39219	0.26	42.21	41.39	42.47	41.65	58.02	48.02	-15.55	-6.37
3	0.98930	0.27	40.94	39.73	41.21	40.00	56.00	46.00	-14.79	-6.00
4	1.28026	0.28	38.86	33.60	39.14	33.88	56.00	46.00	-16.86	-12.12
5	10.66790	0.65	35.39	29.85	36.04	30.50	60.00	50.00	-23.96	-19.50
6	20.37643	0.99	49.16	43.72	50.15	44.71	60.00	50.00	-9.85	-5.29

**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.





A D T

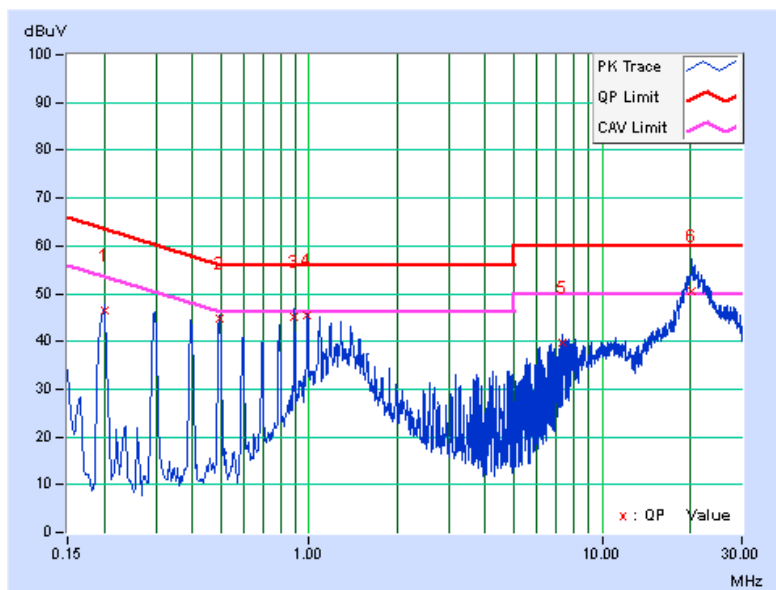
802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 100	TEST MODE	B2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20084	0.15	46.48	43.77	46.63	43.92	63.58	53.58	-16.95	-9.66
2	<b>0.49454</b>	<b>0.20</b>	<b>45.67</b>	<b>44.85</b>	<b>45.87</b>	<b>45.05</b>	<b>56.09</b>	<b>46.09</b>	<b>-10.22</b>	<b>-1.04</b>
3	0.89290	0.22	44.98	43.68	45.20	43.90	56.00	46.00	-10.80	-2.10
4	0.98891	0.23	45.13	44.42	45.36	44.65	56.00	46.00	-10.64	-1.35
5	7.32094	0.55	39.03	30.64	39.58	31.19	60.00	50.00	-20.42	-18.81
6	20.35297	1.30	49.32	43.93	50.62	45.23	60.00	50.00	-9.38	-4.77

REMARKS:

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

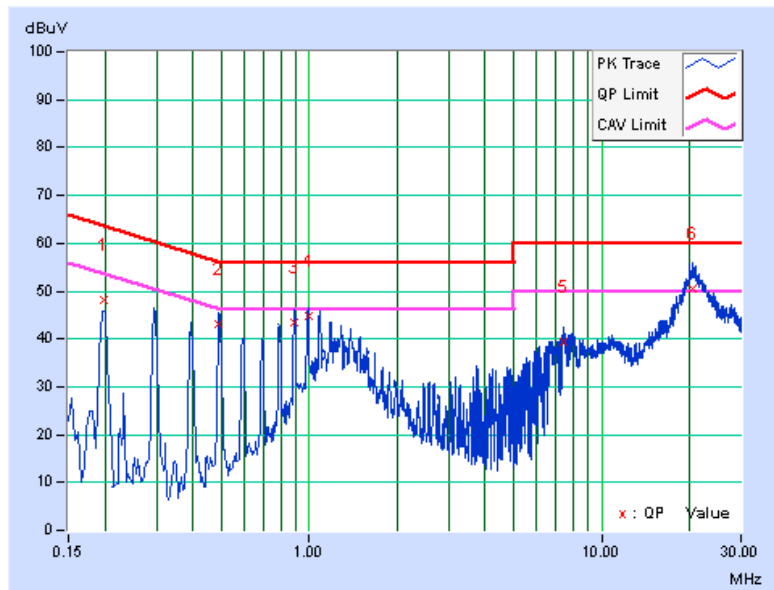


<b>PHASE</b>	Line 2	<b>6dB BANDWIDTH</b>	9kHz
<b>CHANNEL</b>	Channel 100	<b>TEST MODE</b>	B2

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	0.19717	0.20	47.91	46.18	48.11	46.38	63.73
2	0.49064	0.26	42.80	40.96	43.06	41.22	56.16	46.16	-13.10	-4.94
3	0.88531	0.27	43.30	38.82	43.57	39.09	56.00	46.00	-12.43	-6.91
4	0.99413	0.27	44.60	39.80	44.87	40.07	56.00	46.00	-11.13	-5.93
5	7.41478	0.54	38.81	30.43	39.35	30.97	60.00	50.00	-20.65	-19.03
6	20.59930	1.00	49.34	43.95	50.34	44.95	60.00	50.00	-9.66	-5.05

**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 PEAK TRANSMIT POWER MEASUREMENT

#### 4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB

**NOTE:** Where B is the 26dB emission bandwidth in MHz.

Per KDB 662911 D01 Multiple Transmitter Output v01r02 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

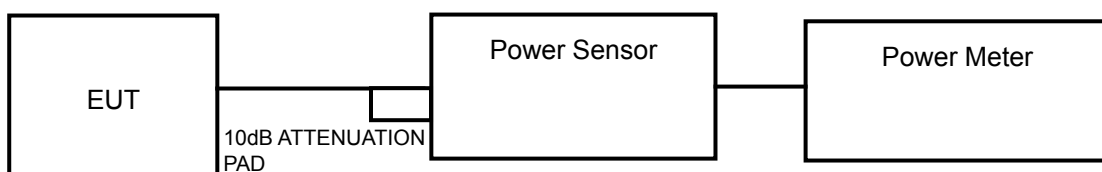
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;

Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

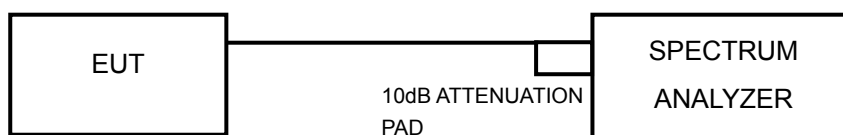
For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

#### 4.3.2 TEST SETUP

##### FOR POWER OUTPUT MEASUREMENT



##### FOR 26dB BANDWIDTH



### 4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 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.

#### FOR 26dB BANDWIDTH

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

### 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 specific channel frequencies individually.

### 4.3.7 TEST RESULTS

#### POWER OUTPUT:

#### TEST MODE A1

#### 802.11a

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	10.86	10.31	22.930	13.60	17	PASS
40	5200	11.31	11.28	26.949	14.31	17	PASS
48	5240	10.77	12.03	27.899	14.46	17	PASS
52	5260	16.37	17.77	103.192	20.14	24	PASS
60	5300	16.23	17.93	104.063	20.17	24	PASS
64	5320	16.38	17.97	106.112	20.26	24	PASS
100	5500	17.34	17.84	115.014	20.61	24	PASS
116	5580	17.81	17.43	115.730	20.63	24	PASS
140	5700	17.03	17.29	104.046	20.17	24	PASS

#### 802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.78	11.91	30.590	14.86	17	PASS
40	5200	11.80	11.83	30.377	14.83	17	PASS
48	5240	11.26	12.10	29.584	14.71	17	PASS
52	5260	17.21	18.54	124.052	20.94	24	PASS
60	5300	17.06	18.69	124.777	20.96	24	PASS
64	5320	17.05	18.09	115.116	20.61	24	PASS
100	5500	17.51	17.84	117.178	20.69	24	PASS
116	5580	18.07	18.06	128.094	21.08	24	PASS
140	5700	17.23	17.54	109.599	20.40	24	PASS



A D T

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	13.97	13.54	47.540	16.77	17	PASS
46	5230	14.49	13.04	<b>48.256</b>	16.84	17	PASS
54	5270	20.85	19.62	<b>213.241</b>	23.29	24	PASS
62	5310	15.09	14.21	58.648	17.68	24	PASS
102	5510	15.94	15.15	71.998	18.57	24	PASS
110	5550	19.88	19.86	<b>194.103</b>	22.88	24	PASS
134	5670	17.26	17.30	106.914	20.29	24	PASS

**TEST MODE B1****802.11a**

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.33	9.64	22.787	13.58	17	PASS
40	5200	11.00	9.46	21.420	13.31	17	PASS
48	5240	12.03	10.00	25.959	14.14	17	PASS
52	5260	17.58	15.53	93.007	19.69	24	PASS
60	5300	17.72	15.82	97.350	19.88	24	PASS
64	5320	17.06	15.30	84.700	19.28	24	PASS
100	5500	17.45	17.32	<b>109.541</b>	20.40	24	PASS
116	5580	16.55	17.79	105.303	20.22	24	PASS
140	5700	15.99	15.99	79.438	19.00	24	PASS

**802.11n (20MHz)**

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	12.44	10.76	29.451	14.69	17	PASS
40	5200	11.80	10.58	26.565	14.24	17	PASS
48	5240	12.02	10.12	26.202	14.18	17	PASS
52	5260	17.54	15.46	91.910	19.63	24	PASS
60	5300	17.51	15.92	95.448	19.80	24	PASS
64	5320	16.73	14.55	75.608	18.79	24	PASS
100	5500	17.24	17.18	105.206	20.22	24	PASS
116	5580	16.63	17.62	103.836	20.16	24	PASS
140	5700	14.59	14.58	57.482	17.60	24	PASS





A D T

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	14.04	12.58	<b>43.464</b>	16.38	17	PASS
46	5230	13.60	11.34	36.523	15.63	17	PASS
54	5270	17.76	15.86	<b>98.252</b>	19.92	24	PASS
62	5310	16.65	13.88	70.672	18.49	24	PASS
102	5510	12.73	12.78	37.717	15.77	24	PASS
110	5550	17.50	16.98	106.122	20.26	24	PASS
134	5670	14.27	13.99	51.791	17.14	24	PASS



A D T

**26dB BANDWIDTH:**

**TEST MODE A1**

**802.11a**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	21.18	21.28	PASS
40	5200	20.75	21.04	PASS
48	5240	21.25	20.41	PASS
52	5260	21.43	20.58	PASS
60	5300	21.09	21.03	PASS
64	5320	20.69	19.97	PASS
100	5500	21.21	20.32	PASS
116	5580	21.39	20.20	PASS
140	5700	21.01	20.56	PASS

**802.11n (20MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	21.69	22.47	PASS
40	5200	22.21	21.73	PASS
48	5240	21.34	21.44	PASS
52	5260	21.60	21.19	PASS
60	5300	21.78	21.91	PASS
64	5320	21.71	21.31	PASS
100	5500	21.89	21.54	PASS
116	5580	22.14	21.70	PASS
140	5700	21.94	21.24	PASS



A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
38	5190	52.44	52.17	PASS
46	5230	52.49	52.69	PASS
54	5270	53.31	85.00	PASS
62	5310	51.93	51.06	PASS
102	5510	52.14	51.38	PASS
110	5550	54.50	62.53	PASS
134	5670	52.33	53.81	PASS



**TEST MODE B1**

**802.11a**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	24.85	23.80	PASS
40	5200	25.80	23.64	PASS
48	5240	25.04	23.70	PASS
52	5260	36.50	27.79	PASS
60	5300	35.07	29.62	PASS
64	5320	31.64	24.36	PASS
100	5500	26.02	31.76	PASS
116	5580	25.05	29.36	PASS
140	5700	24.89	24.46	PASS

**802.11n (20MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	25.09	25.09	PASS
40	5200	25.77	25.10	PASS
48	5240	25.72	25.17	PASS
52	5260	39.78	31.79	PASS
60	5300	41.09	35.82	PASS
64	5320	28.60	26.66	PASS
100	5500	26.11	30.56	PASS
116	5580	25.51	33.22	PASS
140	5700	25.38	25.06	PASS



A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
38	5190	69.29	54.12	PASS
46	5230	56.06	52.11	PASS
54	5270	92.66	83.13	PASS
62	5310	80.66	52.78	PASS
102	5510	55.13	56.09	PASS
110	5550	55.23	78.26	PASS
134	5670	55.57	53.02	PASS

## EUT MAXIMUM CONDUCTED POWER

### TEST MODE A1

#### 802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	106.112	20.26
5470~5725	115.730	20.63

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

#### 802.11n (20MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	124.777	20.96
5470~5725	128.094	21.08

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

#### 802.11n (40MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	213.241	23.29
5470~5725	194.103	22.88

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

**TEST MODE B1**

**802.11a**

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	97.350	19.88
5470~5725	109.541	20.40

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

**802.11n (20MHz)**

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	95.448	19.80
5470~5725	105.206	20.22

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

**802.11n (40MHz)**

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	98.252	19.92
5470~5725	106.122	20.26

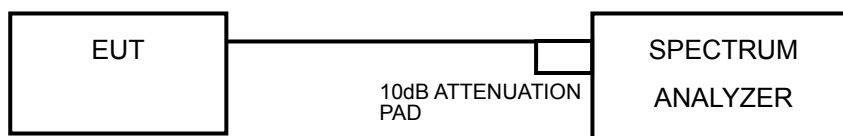
**NOTE:** Manufacturer provides Transmit Power Control description to meet this requirement.

## 4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

### 4.4.2 TEST SETUP



### 4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

### 4.4.4 TEST PROCEDURES

#### 802.11a & 802.11n (20MHz)

Using method SA-2 alternative

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 KHz, Set VBW  $\geq$  1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = 0.3 second.
- 5) Perform a single sweep.
- 6) Record the max value and add 10 log (1/duty cycle)



#### 802.11n (40MHz)

Using method SA-2 alternative

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 KHz, Set VBW  $\geq$  1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = 0.6 second.
- 5) Perform a single sweep.
- 6) Record the max value and add 10 log (1/duty cycle)

#### 4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.



### 4.4.7 TEST RESULTS

#### TEST MODE A1

##### 802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-2.89	-2.55	0.29	0.10	0.39	1.09	PASS
40	5200	-2.88	-2.43	0.36	0.10	0.46	1.09	PASS
48	5240	-3.83	-2.91	-0.34	0.10	-0.24	1.09	PASS
52	5260	2.91	4.48	6.78	0.10	6.88	8.09	PASS
60	5300	2.51	4.72	6.76	0.10	6.86	8.09	PASS
64	5320	3.06	4.62	6.92	0.10	7.02	8.09	PASS
100	5500	3.00	4.11	6.60	0.10	6.70	8.09	PASS
116	5580	3.20	3.03	6.13	0.10	6.23	8.09	PASS
140	5700	3.07	3.51	6.31	0.10	6.41	8.09	PASS

**NOTE:**

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5180~5240MHz:**  
Directional gain =  $5.9\text{dBi} + 10\log(2) = 8.91\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $4-(8.91-6) = 1.09\text{dBm}$ .  
**For 5260~5700MHz:**  
Directional gain =  $5.9\text{dBi} + 10\log(2) = 8.91\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $11-(8.91-6) = 8.09\text{dBm}$ .
- Refer to section 3.3 for duty cycle spectrum plot.

**802.11n (20MHz)**

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-3.01	-2.19	0.43	0.10	0.53	1.09	PASS
40	5200	-2.82	-2.63	0.29	0.10	0.39	1.09	PASS
48	5240	-3.76	-2.96	-0.33	0.10	-0.23	1.09	PASS
52	5260	3.57	4.66	7.16	0.10	7.26	8.09	PASS
60	5300	3.39	5.12	7.35	0.10	7.45	8.09	PASS
64	5320	3.17	4.60	6.95	0.10	7.05	8.09	PASS
100	5500	3.10	4.19	6.69	0.10	6.79	8.09	PASS
116	5580	3.92	3.76	6.85	0.10	6.95	8.09	PASS
140	5700	3.23	3.53	6.39	0.10	6.49	8.09	PASS

**NOTE:**

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5180~5240MHz:**  
Directional gain =  $5.9\text{dBi} + 10\log(2) = 8.91\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $4-(8.91-6) = 1.09\text{dBm}$ .  
**For 5260~5700MHz:**  
Directional gain =  $5.9\text{dBi} + 10\log(2) = 8.91\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $11-(8.91-6) = 8.09\text{dBm}$ .
- Refer to section 3.3 for duty cycle spectrum plot.

**802.11n (40MHz)**

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
38	5190	-3.25	-2.32	0.25	0.15	0.40	1.09	PASS
46	5230	-3.86	-2.50	-0.12	0.15	0.03	1.09	PASS
54	5270	2.28	3.82	6.13	0.15	6.28	8.09	PASS
62	5310	-2.60	-0.50	1.59	0.15	1.74	8.09	PASS
102	5510	-2.28	-1.06	1.38	0.15	1.53	8.09	PASS
110	5550	1.89	2.93	5.45	0.15	5.60	8.09	PASS
134	5670	0.19	0.81	3.52	0.15	3.67	8.09	PASS

**NOTE:**

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5180~5240MHz:**  
Directional gain = 5.9dBi + 10log(2) = 8.91dBi > 6dBi , so the power density limit shall be reduced to 4-(8.91-6) = 1.09dBm.  
**For 5260~5700MHz:**  
Directional gain = 5.9dBi + 10log(2) = 8.91dBi > 6dBi , so the power density limit shall be reduced to 11-(8.91-6) = 8.09dBm.
- Refer to section 3.3 for duty cycle spectrum plot.

## TEST MODE B1

### 802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-1.18	-2.81	1.09	0.10	1.19	1.99	PASS
40	5200	-1.55	-2.72	0.91	0.10	1.01	1.99	PASS
48	5240	-1.29	-2.68	1.08	0.10	1.18	1.99	PASS
52	5260	4.25	2.85	6.62	0.10	6.72	8.99	PASS
60	5300	4.87	3.74	7.35	0.10	7.45	8.99	PASS
64	5320	4.37	2.69	6.62	0.10	6.72	8.99	PASS
100	5500	4.98	4.69	7.85	0.10	7.95	8.99	PASS
116	5580	4.02	4.92	7.50	0.10	7.60	8.99	PASS
140	5700	4.03	3.43	6.75	0.10	6.85	8.99	PASS

#### NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5180~5240MHz:**  
 Directional gain = 5.0dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.  
**For 5260~5700MHz:**  
 Directional gain = 5.0dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
- Refer to section 3.3 for duty cycle spectrum plot.

**802.11n (20MHz)**

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-0.69	-1.65	1.87	0.10	1.97	1.99	PASS
40	5200	-0.77	-2.22	1.58	0.10	1.68	1.99	PASS
48	5240	-1.15	-2.25	1.35	0.10	1.45	1.99	PASS
52	5260	4.48	3.01	6.82	0.10	6.92	8.99	PASS
60	5300	4.64	3.55	7.14	0.10	7.24	8.99	PASS
64	5320	4.01	1.79	6.05	0.10	6.15	8.99	PASS
100	5500	4.33	4.38	7.37	0.10	7.47	8.99	PASS
116	5580	3.56	5.41	7.59	0.10	7.69	8.99	PASS
140	5700	2.17	1.94	5.07	0.10	5.17	8.99	PASS

**NOTE:**

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5180~5240MHz:**  
Directional gain =  $5.0\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $4-(8.01-6) = 1.99\text{dBm}$ .  
**For 5260~5700MHz:**  
Directional gain =  $5.0\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $11-(8.01-6) = 8.99\text{dBm}$ .
- Refer to section 3.3 for duty cycle spectrum plot.

**802.11n (40MHz)**

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
38	5190	-1.26	-2.49	1.18	0.15	1.33	1.99	PASS
46	5230	-1.79	-4.20	0.18	0.15	0.33	1.99	PASS
54	5270	1.15	0.28	3.75	0.15	3.90	8.99	PASS
62	5310	0.04	-2.24	2.06	0.15	2.21	8.99	PASS
102	5510	-3.33	-3.18	-0.24	0.15	-0.09	8.99	PASS
110	5550	1.50	1.36	4.44	0.15	4.59	8.99	PASS
134	5670	-2.08	-1.95	1.00	0.15	1.15	8.99	PASS

**NOTE:**

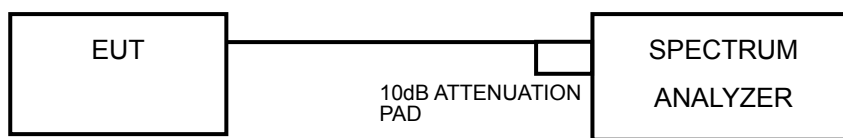
- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For 5190~5230MHz:**  
Directional gain = 5.0dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.  
**For 5270~5670MHz:**  
Directional gain = 5.0dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
- Refer to section 3.3 for duty cycle spectrum plot.

## 4.5 PEAK POWER EXCURSION MEASUREMENT

### 4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB.

### 4.5.2 TEST SETUP



### 4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

### 4.5.4 TEST PROCEDURE

- 1) Set RBW = 1 MHz, VBW  $\geq$  3 MHz, Detector = peak.
- 2) Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
- 3) Use the peak search function to find the peak of the spectrum.
- 4) Measure the PPSD.
- 5) Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

### 4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

### 4.5.6 EUT OPERATING CONDITIONS

Same as 4.2.6

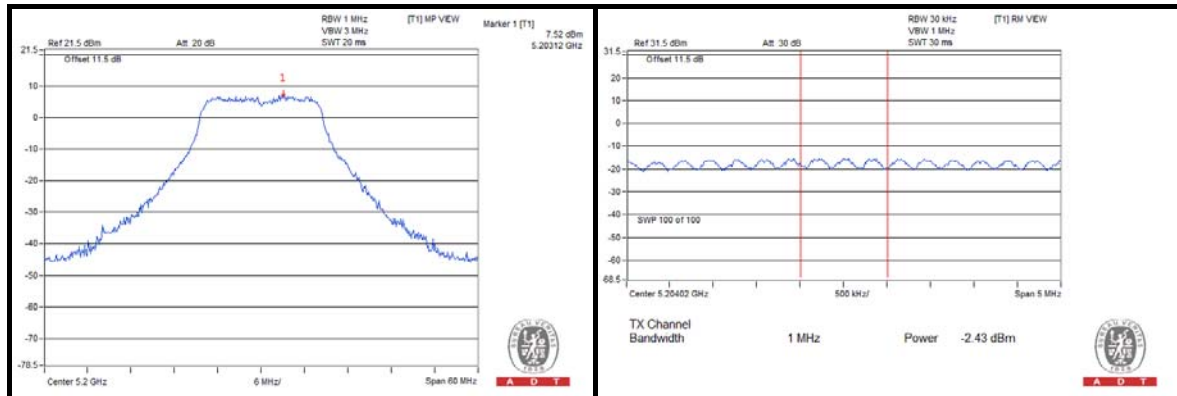


### 4.5.7 TEST RESULTS

#### TEST MODE A1

#### 802.11a

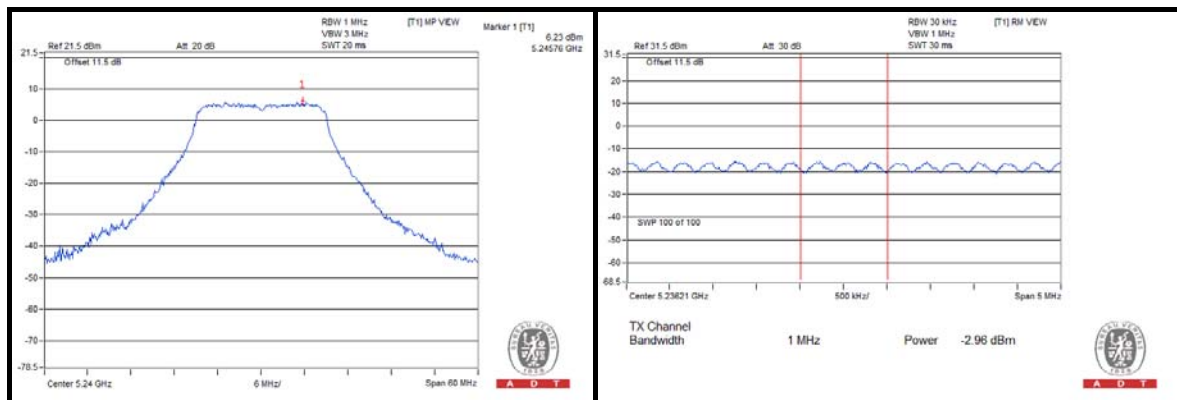
CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	5.27	6.77	-2.89	-2.55	-2.79	-2.45	8.06	9.22	13	PASS
40	5200	5.56	7.52	-2.88	-2.43	-2.78	-2.33	8.34	9.85	13	PASS
48	5240	5.19	6.87	-3.83	-2.91	-3.73	-2.81	8.92	9.68	13	PASS
52	5260	11.19	13.87	2.91	4.48	3.01	4.58	8.18	9.29	13	PASS
60	5300	11.41	14.32	2.51	4.72	2.61	4.82	8.80	9.50	13	PASS
64	5320	11.50	13.58	3.06	4.62	3.16	4.72	8.34	8.86	13	PASS
100	5500	12.01	13.28	3.00	4.11	3.10	4.21	8.91	9.07	13	PASS
116	5580	11.48	12.36	3.20	3.03	3.30	3.13	8.18	9.23	13	PASS
140	5700	11.26	12.63	3.07	3.51	3.17	3.61	8.09	9.02	13	PASS





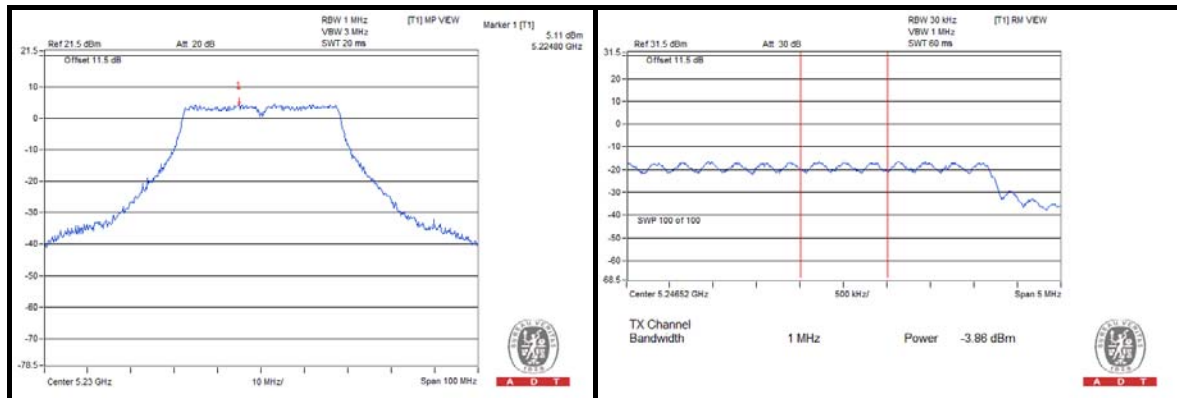
802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	5.56	6.53	-3.01	-2.19	-2.91	-2.09	8.47	8.62	13	PASS
40	5200	5.76	5.92	-2.82	-2.63	-2.72	-2.53	8.48	8.45	13	PASS
48	5240	5.34	6.23	-3.76	-2.96	-3.66	-2.86	9.00	9.09	13	PASS
52	5260	12.05	12.99	3.57	4.66	3.67	4.76	8.38	8.23	13	PASS
60	5300	11.94	13.79	3.39	5.12	3.49	5.22	8.45	8.57	13	PASS
64	5320	11.40	12.93	3.17	4.60	3.27	4.7	8.13	8.23	13	PASS
100	5500	12.21	12.27	3.10	4.19	3.20	4.29	9.01	7.98	13	PASS
116	5580	12.26	11.74	3.92	3.76	4.02	3.86	8.24	7.88	13	PASS
140	5700	12.21	12.07	3.23	3.53	3.33	3.63	8.88	8.44	13	PASS



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
38	5190	5.11	6.17	-3.25	-2.32	-3.10	-2.17	8.21	8.34	13	PASS
46	5230	5.11	6.30	-3.86	-2.50	-3.71	-2.35	8.82	8.65	13	PASS
54	5270	11.19	12.05	2.28	3.82	2.43	3.97	8.76	8.08	13	PASS
62	5310	5.93	8.13	-2.60	-0.50	-2.45	-0.35	8.38	8.48	13	PASS
102	5510	6.37	7.56	-2.28	-1.06	-2.13	-0.91	8.50	8.47	13	PASS
110	5550	10.82	10.72	1.89	2.93	2.04	3.08	8.78	7.64	13	PASS
134	5670	9.01	9.24	0.19	0.81	0.34	0.96	8.67	8.28	13	PASS



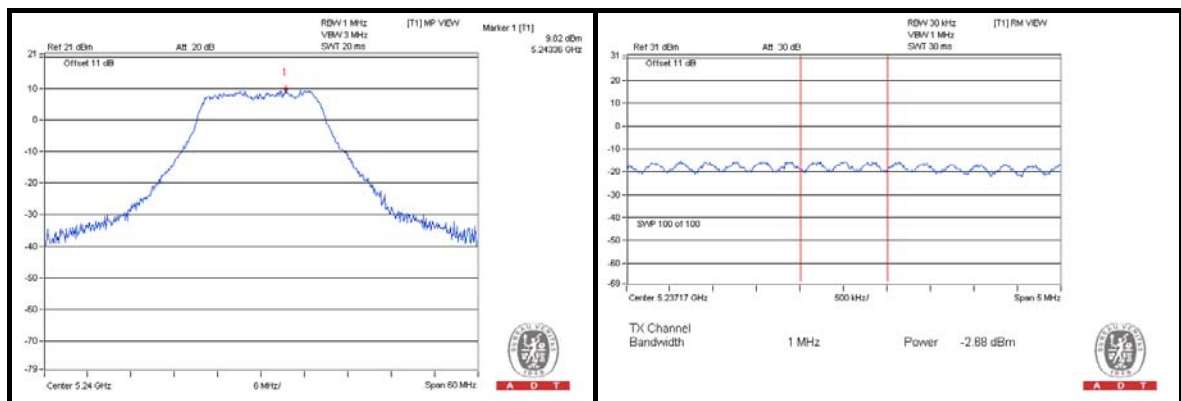


A D T

**TEST MODE B1**

**802.11a**

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	9.50	8.81	-1.18	-2.81	-1.08	-2.71	10.58	11.52	13	PASS
40	5200	9.31	9.73	-1.55	-2.72	-1.45	-2.62	10.76	12.35	13	PASS
48	5240	9.69	9.82	-1.29	-2.68	-1.19	-2.58	10.88	12.40	13	PASS
52	5260	15.24	14.49	4.25	2.85	4.35	2.95	10.89	11.54	13	PASS
60	5300	15.63	15.22	4.87	3.74	4.97	3.84	10.66	11.38	13	PASS
64	5320	15.25	14.80	4.37	2.69	4.47	2.79	10.78	12.01	13	PASS
100	5500	15.59	16.99	4.98	4.69	5.08	4.79	10.51	12.20	13	PASS
116	5580	15.21	16.99	4.02	4.92	4.12	5.02	11.09	11.97	13	PASS
140	5700	14.84	15.75	4.03	3.43	4.13	3.53	10.71	12.22	13	PASS

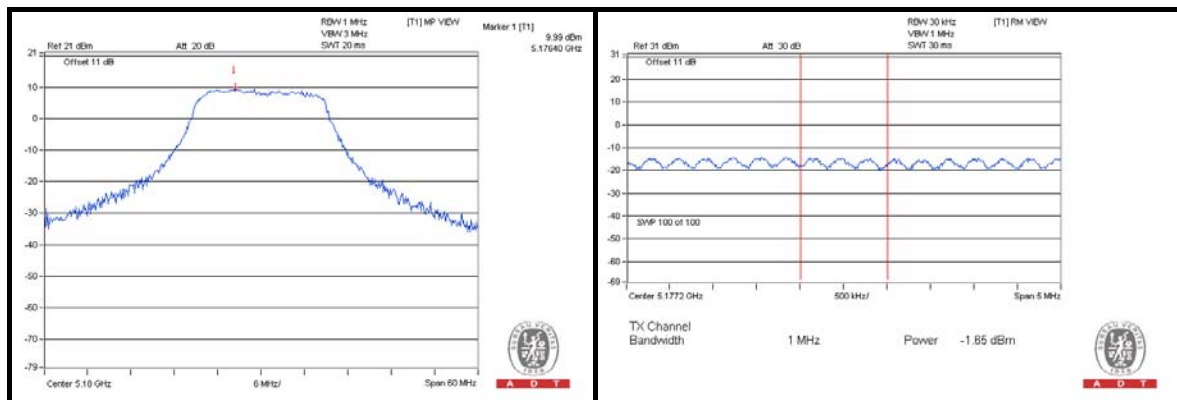




A D T

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	10.86	9.99	0.09	-1.65	0.19	-1.55	10.67	11.54	13	PASS
40	5200	10.83	8.77	-0.77	-2.22	-0.67	-2.12	11.50	10.89	13	PASS
48	5240	9.93	9.15	-1.15	-2.25	-1.05	-2.15	10.98	11.30	13	PASS
52	5260	15.59	13.77	4.48	3.01	4.58	3.11	11.01	10.66	13	PASS
60	5300	15.55	13.99	4.64	3.55	4.74	3.65	10.81	10.34	13	PASS
64	5320	14.88	12.68	4.01	1.79	4.11	1.89	10.77	10.79	13	PASS
100	5500	15.31	15.43	4.33	4.38	4.43	4.48	10.88	10.95	13	PASS
116	5580	14.79	15.92	3.56	5.41	3.66	5.51	11.13	10.41	13	PASS
140	5700	13.05	13.47	2.17	1.94	2.27	2.04	10.78	11.43	13	PASS

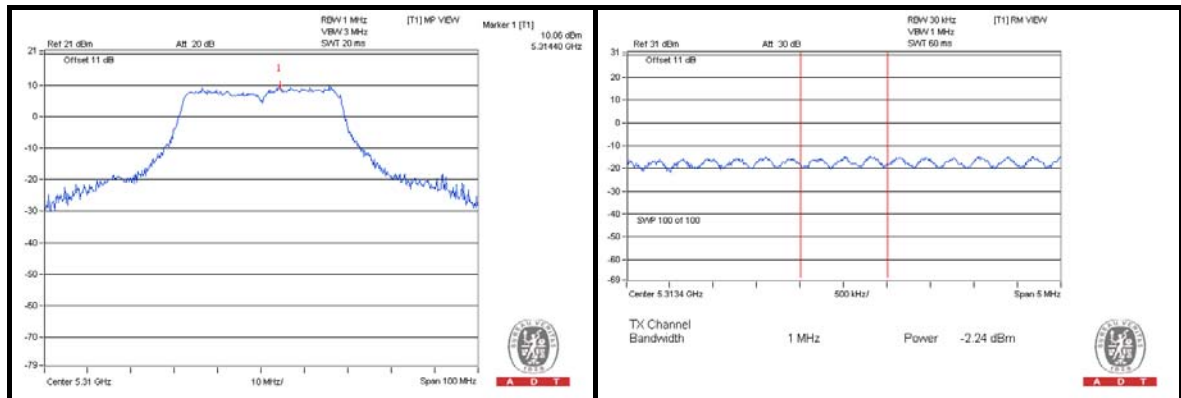




A D T

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
38	5190	9.97	8.49	-1.26	-2.49	-1.11	-2.34	11.08	10.83	13	PASS
46	5230	9.70	7.38	-1.79	-4.20	-1.64	-4.05	11.34	11.43	13	PASS
54	5270	12.51	10.99	1.15	0.28	1.30	0.43	11.21	10.56	13	PASS
62	5310	11.33	10.06	0.04	-2.24	0.19	-2.09	11.14	12.15	13	PASS
102	5510	7.76	8.35	-3.33	-3.18	-3.18	-3.03	10.94	11.38	13	PASS
110	5550	12.42	12.57	1.50	1.36	1.65	1.51	10.77	11.06	13	PASS
134	5670	9.66	9.41	-2.08	-1.95	-1.93	-1.8	11.59	11.21	13	PASS

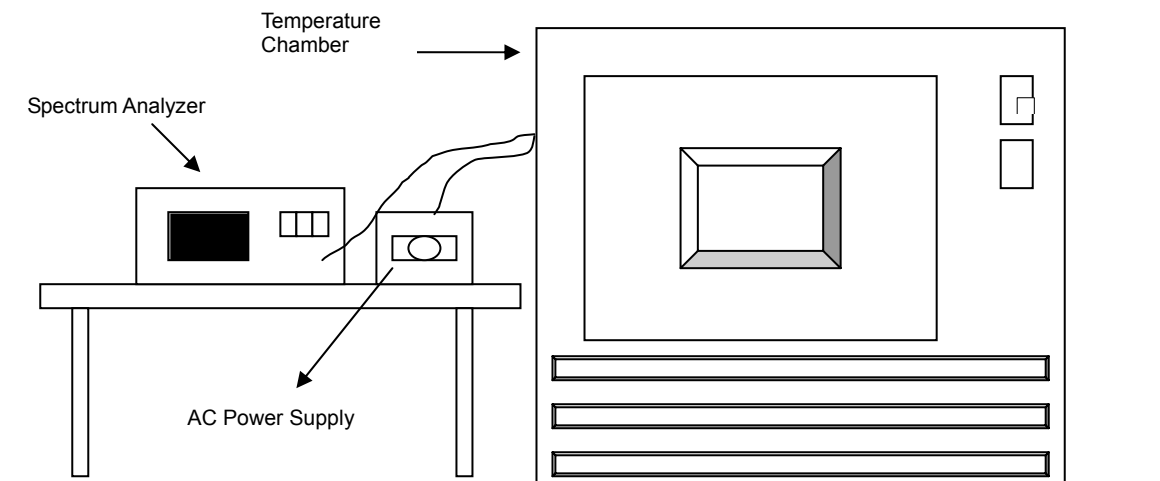


## 4.6 FREQUENCY STABILITY

### 4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

### 4.6.2 TEST SETUP



### 4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

#### 4.6.4 TEST PROCEDURE

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

#### 4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.6.6 EUT OPERATING CONDITION

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



#### 4.6.7 TEST RESULTS

##### TEST MODE A1

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
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 (%)
60	120	5180.0146	0.00028	5180.0073	0.00014	5180.0210	0.00041	5180.0057	0.00011
50	120	5180.0115	0.00022	5180.0077	0.00015	5180.0065	0.00013	5180.0074	0.00014
40	120	5180.0148	0.00029	5180.0191	0.00037	5180.0207	0.00040	5180.0147	0.00028
30	120	5180.0156	0.00030	5180.0132	0.00025	5180.0106	0.00020	5180.0169	0.00033
20	120	5180.0226	0.00044	5180.0244	0.00047	5180.0222	0.00043	5180.0195	0.00038
10	120	5180.0119	0.00023	5180.0154	0.00030	5180.0133	0.00026	5180.0072	0.00014
0	120	5179.9850	-0.00029	5179.9766	-0.00045	5179.9846	-0.00030	5179.9859	-0.00027
-10	120	5180.0136	0.00026	5180.0131	0.00025	5180.0181	0.00035	5180.0181	0.00035
-20	120	5180.0090	0.00017	5180.0108	0.00021	5180.0128	0.00025	5180.0074	0.00014
-30	120	5179.9888	-0.00022	5179.9928	-0.00014	5179.9941	-0.00011	5179.9941	-0.00011

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5180MHz									
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	5180.0226	0.00044	5180.0252	0.00049	5180.0225	0.00043	5180.0201	0.00039
	120	5180.0226	0.00044	5180.0244	0.00047	5180.0222	0.00043	5180.0195	0.00038
	102	5180.0229	0.00044	5180.0253	0.00049	5180.0212	0.00041	5180.0204	0.00039



**TEST MODE B1**

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
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 (%)
60	120	5180.0117	0.00023	5180.0184	0.00036	5180.0076	0.00015	5180.0168	0.00032
50	120	5180.0161	0.00031	5180.0186	0.00036	5180.0235	0.00045	5180.0183	0.00035
40	120	5180.0280	0.00054	5180.0281	0.00054	5180.0234	0.00045	5180.0216	0.00042
30	120	5179.9947	-0.00010	5179.9883	-0.00023	5179.9898	-0.00020	5179.9899	-0.00019
20	120	5179.9897	-0.00020	5179.9874	-0.00024	5179.9892	-0.00021	5179.9928	-0.00014
10	120	5179.9968	-0.00006	5179.994	-0.00012	5179.9982	-0.00003	5179.9982	-0.00003
0	120	5180.0200	0.00039	5180.0156	0.00030	5180.0174	0.00034	5180.0146	0.00028
-10	120	5180.0146	0.00028	5180.0182	0.00035	5180.0190	0.00037	5180.0232	0.00045
-20	120	5180.0060	0.00012	5180.0036	0.00007	5179.9995	-0.00001	5180.0086	0.00017
-30	120	5180.0057	0.00011	5180.0035	0.00007	5180.0090	0.00017	5180.0049	0.00009

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5180MHz									
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	5179.9889	-0.00021	5179.9874	-0.00024	5179.9888	-0.00022	5179.9926	-0.00014
	120	5179.9897	-0.00020	5179.9874	-0.00024	5179.9892	-0.00021	5179.9928	-0.00014
	102	5179.9897	-0.00020	5179.988	-0.00023	5179.9880	-0.00023	5179.9914	-0.00017



A D T

## 5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



## 6. INFORMATION ON THE TESTING LABORATORIES

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

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

**Linko EMC/RF Lab:**  
Tel: 886-2-26052180  
Fax: 886-2-26051924

**Hsin Chu EMC/RF Lab:**  
Tel: 886-3-5935343  
Fax: 886-3-5935342

**Hwa Ya EMC/RF/Safety Telecom Lab:**  
Tel: 886-3-3183232  
Fax: 886-3-3270892

**Email:** [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)  
**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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



A D T

## **7. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No modifications were made to the EUT by the lab during the test.

**---END---**