

FCC TEST REPORT (15.247)

REPORT NO.: RF120423C07A

MODEL NO.: HiveAP 141, HiveAP 121

FCC ID: WBV-HIVEAP1X1

RECEIVED: Jun. 08, 2012

TESTED: Jun. 11 ~ Jun. 26, 2012

ISSUED: Jun. 27, 2012

APPLICANT: Aerohive Networks, Inc.

ADDRESS: 330 Gibraltar Drive, Sunnyvale, CA 94089

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.

Report No.: RF120423C07A 1 of 88 Report Format Version 5.0.0 Reference No.: 120608C02



TABLE OF CONTENTS

RELEA	ASE CONTROL RECORD	3
1.	CERTIFICATION	
2.	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	
3.	GENERAL INFORMATION	6
3.1	GENERAL DESCRIPTION OF EUT	6
3.2	DESCRIPTION OF TEST MODES	
3.2.1	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	9
3.3	DESCRIPTION OF SUPPORT UNITS	
3.3.1	CONFIGURATION OF SYSTEM UNDER TEST	13
3.4	GENERAL DESCRIPTION OF APPLIED STANDARDS	
4.	TEST TYPES AND RESULTS (FOR 2.4GHz BAND)	15
4.1	RADIATED EMISSION AND BANDEDGE MEASUREMENT	
4.1.1	LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	
4.1.2	TEST INSTRUMENTS	
4.1.3	TEST PROCEDURES	
4.1.4	DEVIATION FROM TEST STANDARD	
4.1.5	TEST SETUP	18
4.1.6	EUT OPERATING CONDITIONS	18
4.1.7	TEST RESULTS	
4.2	CONDUCTED EMISSION MEASUREMENT	
4.2.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	
4.2.2	TEST INSTRUMENTS	
	TEST PROCEDURES	
	DEVIATION FROM TEST STANDARD	
	TEST SETUP	
4.2.6	EUT OPERATING CONDITIONS	42
4.2.7	TEST RESULTS	
5.	TEST TYPES AND RESULTS (FOR 5.0GHz BAND)	
5.1	RADIATED EMISSION MEASUREMENT	
5.1.1	LIMITS OF RADIATED EMISSION MEASUREMENT	
5.1.2	TEST INSTRUMENTS	
	TEST PROCEDURES	
	DEVIATION FROM TEST STANDARD	
	TEST SETUP	
	EUT OPERATING CONDITIONS	
	TEST RESULTS	
5.1.7	CONDUCTED EMISSION MEASUREMENT	
5.2.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	
	T EST INSTRUMENTS	
_	TEST PROCEDURES	
	DEVIATION FROM TEST STANDARD	
	TEST SETUP	
5.2.6	EUT OPERATING CONDITIONS	77
	TEST RESULTS	
5.2. <i>1</i> 6.	PHOTOGRAPHS OF THE TEST CONFIGURATION	
7.	INFORMATION ON THE TESTING LABORATORIES	
7. 8.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGE	
0.	TO THE EUT BY THE LAB	
	IU IIIE EUI DI INE LAD	00



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120423C07A	Original release	Jun. 27, 2012

Report No.: RF120423C07A 3 of 88 Report Format Version 5.0.0 Reference No.: 120608C02



1. CERTIFICATION

PRODUCT: AP Router

MODEL NO.: HiveAP 141, HiveAP 121

BRAND: Aerohive

APPLICANT: Aerohive Networks, Inc.

TESTED: Jun. 11 ~ Jun. 26, 2012

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10-2009

The above equipment (model: HiveAP 141, HiveAP 121) has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : DATE: Jun. 27, 2012

Pettie Chen / Specialist

APPROVED BY : DATE: Jun. 27, 2012

Gary Chang / Technical Manager



2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)				
STANDARD SECTION	TEST TYPE	RESULT	REMARK	
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -7.88dB at 10.18359MHz.	
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.1dB at 2390.00MHz.	

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
	30MHz ~ 200MHz	3.19 dB
Radiated emissions	200MHz ~1000MHz	3.21 dB
Radiated emissions	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

EUT	AP Router
MODEL NO.	HiveAP 141, HiveAP 121 (Refer to NOTE for the more details)
POWER SUPPLY	12Vdc (Adapter) 48Vdc (PoE)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	2.4GHz : 2412 ~ 2462MHz 5.0GHz : 5745 ~ 5825MHz
NUMBER OF CHANNEL	2.4GHz: 11 for 802.11b, 802.11g, 802.11n (20MHz) 5.0GHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	534.6mW for 2412 ~ 2462MHz 487.1mW for 5745 ~ 5825MHz
ANTENNA TYPE	Refer to Note
ANTENNA CONNECTOR	Refer to Note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Adapter

NOTE:

- 1. This report is prepared for FCC class II permissive change. The differences compared with original report are changing the following items:
 - ♦ Add Ceiling Mount and Surface Mount mode.
 - ♦ Add aluminum foil on shield case.

After pretesting, the surface mount mode was the worst for final test. So we re-test conducted emission and radiated emission tests.

2. The following models are provided to this EUT.

Brand	Model	Description
Aerohive	HiveAP 141	dipole antenna
Aeronive	HiveAP 121	PCB dipole antenna



3. The frequency bands used in this EUT are listed as follows:

Frequency Band (MHz)	2412~2462	5180~5240	5745~5825
802.11b	\checkmark		
802.11g	\checkmark		
802.11a		\checkmark	\checkmark
802.11n (20MHz)	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
802.11n (40MHz)		V	V

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

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11n (20MHz)	2TX

MODULATION MODE	TX FUNCTION
802.11a	1TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX

5. The following antennas for the EUT.

	Antenna Type	Antenna	Antenna Gain	
		Connector	2.4GHz Band	5GHz Band
HiveAP 141 (external antenna)	dipole antenna	R-SMA	4dBi	3dBi
HiveAP 121 (internal antenna)	PCB dipole antenna	UFL	3dBi	6dBi

6. The EUT consumes power from the following adapter and PoE.

ADAPTER	
BRAND:	Channel Well Technology
MODEL:	CAP018121 US 18.0W
INPUT:	100-240V~47-63Hz 0.6A
OUTPUT:	12.0V / 1.5A
POWER LINE:	1.50m non-shielded cable without core

PoE (Support unit only)		
BRAND:	CISCO	
MODEL:	DPSN-35FBA	
INPUT:	100-240Vac ~ 0.8A, 50/60Hz	
OUTPUT:	48V, 0.55A	

7. 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 2.4GHz:

11 channels are provided for 802.11b, 802.11g and 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1 2412MHz		7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		

FOR 5.0GHz (5745 ~ 5825MHz):

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
151	5755MHz	159	5795MHz	



3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

EUT CONFIGURE		APPLICABLE TO			DESCRIPTION		
MODE	RE≥1G	RE<1G	PLC	Model	Power		
A1	V	V	V	Libra AD 444	Power from adapter		
A2	-	$\sqrt{}$	V	HiveAP 141	Power from PoE		
B1	V	$\sqrt{}$	V	Librar A.D. 404	Power from adapter		
B2	-	V	V	HiveAP 121	Power from PoE		

Where

RE≥1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

NOTE: "-"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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, B1	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A1, B1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, A2, B1, B2	802.11g	1 to 7	6	OFDM	BPSK	6.0

Report No.: RF120423C07A Reference No.: 120608C02



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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, A2, B1, B2	802.11g	1 to 7	6	OFDM	BPSK	6.0

TEST CONDITION:

APPLICABLE TO ENVIRONMENTAL CONDITIONS		INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Alan Wu
RE<1G	24deg. C, 65%RH	120Vac, 60Hz	Chris Lin
PLC	22deg. C, 66%RH	120Vac, 60Hz	Ben Huang

Report No.: RF120423C07A 10 of 88 Reference No.: 120608C02



FOR 5.0GHz (5745 ~ 5825MHz):

EUT CONFIGURE		APPLICABLE TO		DESC	RIPTION
MODE	RE≥1G	RE<1G	PLC	Model	Power
A1	V	V	V	Libra AD 444	Power from adapter
A2	-	√	√	HiveAP 141	Power from PoE
B1	V	V	V	Libra AD 404	Power from adapter
B2	-	V	V	HiveAP 121	Power from PoE

Where

RE≥1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

NOTE: "-"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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, B1	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

RADIATED EMISSION TEST (BELOW 1GHz):

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

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

	EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
I	A1, A2, B1, B2	802.11n (20MHz)	149 to 165	157	OFDM	BPSK	7.2

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1, A2, B1, B2	802.11n (20MHz)	149 to 165	157	OFDM	BPSK	7.2

Report No.: RF120423C07A 11 of 88 Reference No.: 120608C02



TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Alan Wu
RE<1G	24deg. C, 65%RH	120Vac, 60Hz	Chris Lin
PLC	22deg. C, 66%RH	120Vac, 60Hz	Ben Huang

3.3 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	D531	CN-0XM006-48643- 81U-2610	QDS-BRCM1020
2	USB Flash Drive	Transcend	V85	538455 4488	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS						
1	10m RJ45 UTP cable						
2	NA						

NOTE:

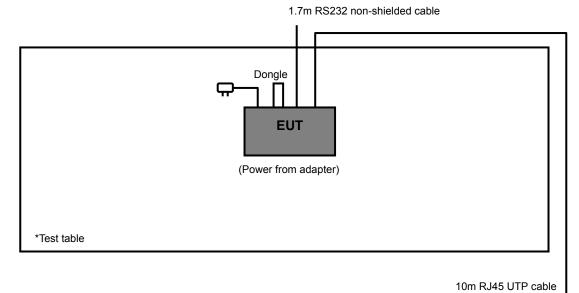
- 1. All power cords of the above support units are non shielded (1.8m).
- 2. Item 1 acted as communication partner to transfer data.

Report No.: RF120423C07A Reference No.: 120608C02



3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode A1, B1



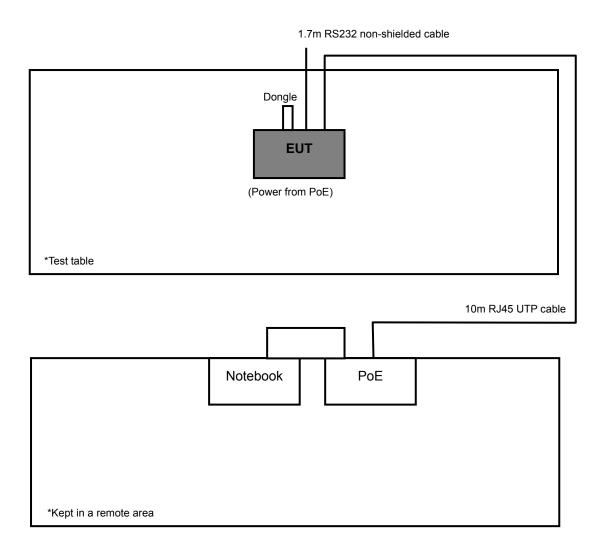
Notebook

Report No.: RF120423C07A Reference No.: 120608C02

*Kept in a remote area



Test Mode A2, B2



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247) 558074 D01 DTS Meas Guidance v01

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 (FOR 2.4GHz BAND)

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTE:

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

Report No.: RF120423C07A Reference No.: 120608C02



4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	Aug. 02, 2011	Aug. 01, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Jul. 21, 2011	Jul. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	9120D	209	Aug. 25, 2011	Aug. 24, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 20, 2011	Jul. 19, 2012
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8447D	2944A10633	Oct. 29, 2011	Oct. 28, 2012
Preamplifier Agilent	8449B	3008A01964	Oct. 29, 2011	Oct. 28, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250723/4	Aug. 30, 2011	Aug. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6+309224/4	Aug. 30, 2011	Aug. 29, 2012
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100	TT93021703	NA	NA
Turn Table Controller ADT.	SC100	SC93021703	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 29, 2011	Oct. 28, 2012

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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 3. The test was performed in HwaYa Chamber 3.
- 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 5. The FCC Site Registration No. is 988962.
- 6. The IC Site Registration No. is IC 7450F-3.



4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE

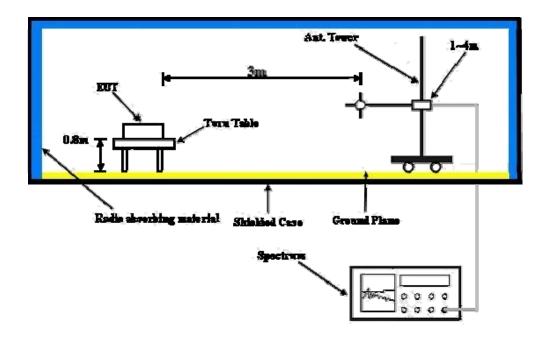
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 100kHz and video bandwidth is 300kHz for Peak detection at frequency above 1GHz.
- 3. The 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.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation



4.1.5 TEST SETUP



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

4.1.6 EUT OPERATING CONDITIONS

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



4.1.7 TEST RESULTS

ABOVE 1GHz DATA: 802.11b

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2386.00	58.5 PK	74.0	-15.5	1.24 H	176	26.60	31.90		
2	2386.00	47.1 AV	54.0	-6.9	1.24 H	176	15.20	31.90		
3	*2412.00	100.0 PK			1.00 H	148	68.00	32.00		
4	*2412.00	96.1 AV			1.00 H	148	64.10	32.00		
5	4824.00	54.4 PK	74.0	-19.6	1.08 H	160	16.00	38.40		
6	4824.00	50.5 AV	54.0	-3.5	1.08 H	160	12.10	38.40		
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	2386.00	62.0 PK	74.0	-12.0	1.00 V	73	30.10	31.90		
2	2386.00	52.4 AV	54.0	-1.6	1.00 V	73	20.50	31.90		
3	*2412.00	110.2 PK			1.05 V	96	78.20	32.00		
4	*2412.00	106.4 AV			1.05 V	96	74.40	32.00		
5	4824.00	52.0 PK	74.0	-22.0	1.00 V	354	13.60	38.40		
6	4824.00	47.1 AV	54.0	-6.9	1.00 V	354	8.70	38.40		

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2437.00	100.3 PK			1.00 H	176	68.20	32.10	
2	*2437.00	95.9 AV			1.00 H	176	63.80	32.10	
3	4874.00	52.5 PK	74.0	-21.5	1.00 H	191	14.10	38.40	
4	4874.00	48.1 AV	54.0	-5.9	1.00 H	191	9.70	38.40	
5	7311.00	55.8 PK	74.0	-18.2	1.00 H	351	11.50	44.30	
6	7311.00	46.2 AV	54.0	-7.8	1.00 H	351	1.90	44.30	
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2437.00	110.3 PK			1.00 V	88	78.20	32.10	
2	*2437.00	106.0 AV			1.00 V	88	73.90	32.10	
3	4874.00	51.0 PK	74.0	-23.0	1.00 V	355	12.60	38.40	
4	4874.00	45.2 AV	54.0	-8.8	1.00 V	355	6.80	38.40	
	4874.00 7311.00	45.2 AV 56.8 PK	54.0 74.0	-8.8 -17.2	1.00 V 1.00 V	355 9	6.80 12.50	38.40 44.30	

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2462.00	99.0 PK			1.00 H	179	66.80	32.20
2	*2462.00	95.1 AV			1.00 H	179	62.90	32.20
3	2483.50	58.4 PK	74.0	-15.6	1.00 H	179	26.10	32.30
4	2483.50	45.7 AV	54.0	-8.3	1.00 H	179	13.40	32.30
5	4924.00	51.3 PK	74.0	-22.7	1.00 H	192	12.90	38.40
6	4924.00	45.8 AV	54.0	-8.2	1.00 H	192	7.40	38.40
7	7386.00	57.2 PK	74.0	-16.8	1.02 H	6	12.60	44.60
8	7386.00	47.9 AV	54.0	-6.1	1.02 H	6	3.30	44.60
		ANTENNA	POLARITY	Y & TEST DI	STANCE: V	ERTICAL A	T 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	*2462.00	109.2 PK			1.03 V	140	77.00	32.20
2	*2462.00	105.3 AV			1.03 V	140	73.10	32.20
3	2483.50	60.8 PK	74.0	-13.2	1.00 V	115	28.50	32.30
4	2483.50	49.7 AV	54.0	-4.3	1.00 V	115	17.40	32.30
5	4924.00	49.7 PK	74.0	-24.3	1.00 V	358	11.30	38.40
6	4924.00	43.1 AV	54.0	-10.9	1.00 V	358	4.70	38.40
7	7386.00	57.1 PK	74.0	-16.9	1.00 V	359	12.50	44.60

- 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 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2386.00	58.6 PK	74.0	-15.4	1.22 H	48	26.70	31.90	
2	2386.00	46.6 AV	54.0	-7.4	1.22 H	48	14.70	31.90	
3	*2412.00	103.8 PK			1.21 H	44	71.80	32.00	
4	*2412.00	99.9 AV			1.21 H	44	67.90	32.00	
5	4824.00	54.0 PK	74.0	-20.0	1.04 H	154	15.60	38.40	
6	4824.00	50.4 AV	54.0	-3.6	1.04 H	154	12.00	38.40	
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M		
	(dBuV/m) HEIGHT (m) (dBuV)								
NO.	FREQ. (MHz)			MARGIN (dB)	7	.,			
NO.	FREQ. (MHz) 2386.00	LEVEL		MARGIN (dB) -13.0	7	ANGLE		FACTOR	
	` ,	LEVEL (dBuV/m)	(dBuV/m)	` ,	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)	
1	2386.00	LEVEL (dBuV/m) 61.0 PK	(dBuV/m) 74.0	-13.0	HEIGHT (m) 1.26 V	ANGLE (Degree)	(dBuV) 29.10	FACTOR (dB/m) 31.90	
1 2	2386.00 2386.00	LEVEL (dBuV/m) 61.0 PK 49.8 AV	(dBuV/m) 74.0	-13.0	1.26 V 1.26 V	ANGLE (Degree) 199 199	(dBuV) 29.10 17.90	FACTOR (dB/m) 31.90 31.90	
1 2 3	2386.00 2386.00 *2412.00	LEVEL (dBuV/m) 61.0 PK 49.8 AV 106.2 PK	(dBuV/m) 74.0	-13.0	1.26 V 1.26 V 1.00 V	ANGLE (Degree) 199 199 226	(dBuV) 29.10 17.90 74.20	FACTOR (dB/m) 31.90 31.90 32.00	

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2437.00	104.5 PK			1.43 H	38	72.40	32.10
2	*2437.00	100.5 AV			1.43 H	38	68.40	32.10
3	4874.00	54.7 PK	74.0	-19.3	1.16 H	54	16.30	38.40
4	4874.00	51.4 AV	54.0	-2.6	1.16 H	54	13.00	38.40
5	7311.00	58.9 PK	74.0	-15.1	1.00 H	196	14.60	44.30
6	7311.00	51.6 AV	54.0	-2.4	1.00 H	196	7.30	44.30
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	O. FREQ. (MHz) LEVEL LIMIT MARGIN (dB) ANTENNA ANGLE RAW VALUE FACTOR							CORRECTION
		(dBuV/m)	(aBuv/m)		HEIGHT (m)	(Degree)	(dBuV)	(dB/m)
1	*2437.00	(dBuV/m) 108.5 PK	(aBuv/m)		1.26 V	(Degree)	(dBuV) 76.40	
1 2	*2437.00 *2437.00		(dBuV/m)		` ,	, , ,	` ′	(dB/m)
-		108.5 PK	74.0	-25.0	1.26 V	205	76.40	(dB/m) 32.10
2	*2437.00	108.5 PK 104.6 AV	, ,	-25.0 -13.8	1.26 V 1.26 V	205 205	76.40 72.50	(dB/m) 32.10 32.10
2	*2437.00 4874.00	108.5 PK 104.6 AV 49.0 PK	74.0		1.26 V 1.26 V 1.00 V	205 205 280	76.40 72.50 10.60	(dB/m) 32.10 32.10 38.40

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2462.00	105.0 PK			1.40 H	35	72.80	32.20		
2	*2462.00	101.2 AV			1.40 H	35	69.00	32.20		
3	2483.50	57.9 PK	74.0	-16.1	1.32 H	39	25.60	32.30		
4	2483.50	47.0 AV	54.0	-7.0	1.32 H	39	14.70	32.30		
5	4924.00	53.3 PK	74.0	-20.7	1.03 H	335	14.90	38.40		
6	4924.00	49.7 AV	54.0	-4.3	1.03 H	335	11.30	38.40		
7	7386.00	59.6 PK	74.0	-14.4	1.00 H	188	15.00	44.60		
8	7386.00	52.3 AV	54.0	-1.7	1.00 H	188	7.70	44.60		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.		EMISSION	LIMIT			TABLE		CORRECTION		
	FREQ. (MHz)	LEVEL (dBuV/m)	(dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	*2462.00			MARGIN (dB)						
1 2	` ,	(dBuV/m)		MARGIN (dB)	HEIGHT (m)	(Degree)	(dBuV)	(dB/m)		
<u> </u>	*2462.00	(dBuV/m) 107.6 PK		-13.1	HEIGHT (m) 1.04 V	(Degree)	(dBuV) 75.40	(dB/m) 32.20		
2	*2462.00 *2462.00	(dBuV/m) 107.6 PK 103.6 AV	(dBuV/m)		1.04 V 1.04 V	(Degree) 2 2	(dBuV) 75.40 71.40	(dB/m) 32.20 32.20		
2	*2462.00 *2462.00 2483.50	(dBuV/m) 107.6 PK 103.6 AV 60.9 PK	(dBuV/m)	-13.1	1.04 V 1.04 V 1.00 V	(Degree) 2 2 333	(dBuV) 75.40 71.40 28.60	(dB/m) 32.20 32.20 32.30		
3 4	*2462.00 *2462.00 2483.50 2483.50	(dBuV/m) 107.6 PK 103.6 AV 60.9 PK 50.0 AV	(dBuV/m) 74.0 54.0	-13.1 -4.0	1.04 V 1.04 V 1.00 V 1.00 V	(Degree) 2 2 333 333	(dBuV) 75.40 71.40 28.60 17.70	(dB/m) 32.20 32.20 32.30 32.30		
2 3 4 5	*2462.00 *2462.00 2483.50 2483.50 4924.00	(dBuV/m) 107.6 PK 103.6 AV 60.9 PK 50.0 AV 47.9 PK	74.0 54.0 74.0	-13.1 -4.0 -26.1	1.04 V 1.04 V 1.00 V 1.00 V 1.00 V	(Degree) 2 2 333 333 8	75.40 71.40 28.60 17.70 9.50	(dB/m) 32.20 32.20 32.30 32.30 38.40		

- 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.



802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	2390.00	62.2 PK	74.0	-11.8	1.00 H	326	30.20	32.00
2	2390.00	46.8 AV	54.0	-7.2	1.00 H	326	14.80	32.00
3	*2412.00	102.6 PK			1.00 H	327	70.60	32.00
4	*2412.00	90.0 AV			1.00 H	327	58.00	32.00
5	4824.00	51.3 PK	74.0	-22.7	1.15 H	147	12.90	38.40
6	4824.00	38.0 AV	54.0	-16.0	1.15 H	147	-0.40	38.40
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	2390.00	70.3 PK	74.0	-3.7	1.11 V	348	38.30	32.00
2	2390.00	52.9 AV	54.0	-1.1	1.11 V	348	20.90	32.00
3	*2412.00	112.2 PK			1.00 V	96	80.20	32.00
4	*2412.00	99.2 AV			1.00 V	96	67.20	32.00
5	4824.00	48.9 PK	74.0	-25.1	1.00 V	26	10.50	38.40
6	4824.00	35.5 AV	54.0	-18.5	1.00 V	26	-2.90	38.40

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA I	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2437.00	104.3 PK			1.03 H	15	72.20	32.10
2	*2437.00	91.4 AV			1.03 H	15	59.30	32.10
3	4874.00	53.6 PK	74.0	-20.4	1.10 H	148	15.20	38.40
4	4874.00	39.3 AV	54.0	-14.7	1.10 H	148	0.90	38.40
5	7311.00	61.4 PK	74.0	-12.6	1.00 H	27	17.10	44.30
6	7311.00	46.3 AV	54.0	-7.7	1.00 H	27	2.00	44.30
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2437.00	114.2 PK			1.23 V	129	82.10	32.10
2	*2437.00	101.8 AV			1.23 V	129	69.70	32.10
3	4874.00	52.4 PK	74.0	-21.6	1.15 V	152	14.00	38.40
4	4874.00	38.5 AV	54.0	-15.5	1.15 V	152	0.10	38.40
5	7311.00	60.4 PK	74.0	-13.6	1.00 V	21	16.10	44.30
6	7311.00	45.8 AV	54.0	-8.2	1.00 V	21	1.50	44.30

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2462.00	102.6 PK			1.00 H	206	70.40	32.20	
2	*2462.00	90.1 AV			1.00 H	206	57.90	32.20	
3	2483.50	61.5 PK	74.0	-12.5	1.00 H	178	29.20	32.30	
4	2483.50	45.8 AV	54.0	-8.2	1.00 H	178	13.50	32.30	
5	4924.00	48.9 PK	74.0	-25.1	1.00 H	56	10.50	38.40	
6	4924.00	35.3 AV	54.0	-18.7	1.00 H	56	-3.10	38.40	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
		ANTENNA	• =,	0, 120 : 21	OTANOL: V		1 0 111		
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)	
NO .	FREQ. (MHz) *2462.00	EMISSION LEVEL	LIMIT		ANTENNA	TABLE ANGLE	RAW VALUE	FACTOR	
	, ,	EMISSION LEVEL (dBuV/m)	LIMIT		ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)	
1	*2462.00	EMISSION LEVEL (dBuV/m) 112.7 PK	LIMIT		ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m) 32.20	
1 2	*2462.00 *2462.00	EMISSION LEVEL (dBuV/m) 112.7 PK 100.0 AV	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.02 V 1.02 V	TABLE ANGLE (Degree) 140 140	RAW VALUE (dBuV) 80.50 67.80	FACTOR (dB/m) 32.20 32.20	
1 2 3	*2462.00 *2462.00 2483.50	EMISSION LEVEL (dBuV/m) 112.7 PK 100.0 AV 71.8 PK	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.02 V 1.02 V 1.00 V	TABLE ANGLE (Degree) 140 140 89	RAW VALUE (dBuV) 80.50 67.80 39.50	FACTOR (dB/m) 32.20 32.20 32.30	

- 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 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2390.00	63.7 PK	74.0	-10.3	1.00 H	47	31.70	32.00		
2	2390.00	48.3 AV	54.0	-5.7	1.00 H	47	16.30	32.00		
3	*2412.00	105.2 PK			1.20 H	40	73.20	32.00		
4	*2412.00	93.3 AV			1.20 H	40	61.30	32.00		
5	4824.00	49.4 PK	74.0	-24.6	1.14 H	142	11.00	38.40		
6	4824.00	36.0 AV	54.0	-18.0	1.14 H	142	-2.40	38.40		
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
	O. FREQ. (MHz) EMISSION LIMIT (dBuV/m) MARGIN (dB) HEIGHT (m) TABLE RAW VALUE (dBuV) FACTOR									
NO.	FREQ. (MHz)			MARGIN (dB)	7			CORRECTION FACTOR (dB/m)		
NO .	FREQ. (MHz) 2390.00	LEVEL		MARGIN (dB)	7	ANGLE		FACTOR		
	` ,	LEVEL (dBuV/m)	(dBuV/m)	` ,	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	2390.00	LEVEL (dBuV/m) 68.8 PK	(dBuV/m) 74.0	-5.2	HEIGHT (m)	ANGLE (Degree)	(dBuV) 36.80	FACTOR (dB/m) 32.00		
1 2	2390.00 2390.00	LEVEL (dBuV/m) 68.8 PK 52.0 AV	(dBuV/m) 74.0	-5.2	1.00 V 1.00 V	ANGLE (Degree) 192	(dBuV) 36.80 20.00	FACTOR (dB/m) 32.00 32.00		
1 2 3	2390.00 2390.00 *2412.00	LEVEL (dBuV/m) 68.8 PK 52.0 AV 108.5 PK	(dBuV/m) 74.0	-5.2	1.00 V 1.00 V 1.00 V	ANGLE (Degree) 192 192	(dBuV) 36.80 20.00 76.50	FACTOR (dB/m) 32.00 32.00 32.00		

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

		ANTENNA	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	*2437.00	108.7 PK			1.42 H	35	76.60	32.10			
2	*2437.00	96.1 AV			1.42 H	35	64.00	32.10			
3	4874.00	51.3 PK	74.0	-22.7	1.15 H	140	12.90	38.40			
4	4874.00	38.0 AV	54.0	-16.0	1.15 H	140	-0.40	38.40			
5	7311.00	61.4 PK	74.0	-12.6	1.00 H	8	17.10	44.30			
6	7311.00	46.8 AV	54.0	-7.2	1.00 H	8	2.50	44.30			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
		AIT LEITINA	NI OLAINII	I & ILOI DI	STANCE. V	LIVITICAL A	I S IVI				
NO.	FREQ. (MHz)	EMISSION	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
NO.	FREQ. (MHz) *2437.00	EMISSION LEVEL	LIMIT		ANTENNA	TABLE ANGLE	RAW VALUE	FACTOR			
	` '	EMISSION LEVEL (dBuV/m)	LIMIT		ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)			
1	*2437.00	EMISSION LEVEL (dBuV/m)	LIMIT		ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m) 32.10			
1 2	*2437.00 *2437.00	EMISSION LEVEL (dBuV/m) 111.4 PK 98.7 AV	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.00 V 1.00 V	TABLE ANGLE (Degree) 192	RAW VALUE (dBuV) 79.30 66.60	FACTOR (dB/m) 32.10 32.10			
1 2 3	*2437.00 *2437.00 4874.00	EMISSION LEVEL (dBuV/m) 111.4 PK 98.7 AV 50.4 PK	LIMIT (dBuV/m)	MARGIN (dB) -23.6	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.13 V	TABLE ANGLE (Degree) 192 192 150	RAW VALUE (dBuV) 79.30 66.60 12.00	FACTOR (dB/m) 32.10 32.10 38.40			

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2462.00	107.4 PK			1.41 H	36	75.20	32.20		
2	*2462.00	94.7 AV			1.41 H	36	62.50	32.20		
3	2483.50	66.7 PK	74.0	-7.3	1.36 H	41	34.40	32.30		
4	2483.50	49.4 AV	54.0	-4.6	1.36 H	41	17.10	32.30		
5	4924.00	48.2 PK	74.0	-25.8	1.00 H	20	9.80	38.40		
6	4924.00	35.9 AV	54.0	-18.1	1.00 H	20	-2.50	38.40		
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
	O. FREQ. (MHz) EMISSION LEVEL LIMIT (dBuV/m) MARGIN (dB) ANTENNA HEIGHT (m) TABLE ANGLE RAW VALUE (dBuV) FACTOR									
NO.	FREQ. (MHz)			MARGIN (dB)	7	.,		CORRECTION FACTOR (dB/m)		
NO .	FREQ. (MHz) *2462.00	LEVEL		MARGIN (dB)	7	ANGLE		FACTOR		
	` ,	LEVEL (dBuV/m)		MARGIN (dB)	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	*2462.00	LEVEL (dBuV/m) 109.3 PK		MARGIN (dB)	HEIGHT (m)	ANGLE (Degree)	(dBuV) 77.10	FACTOR (dB/m) 32.20		
1 2	*2462.00 *2462.00	LEVEL (dBuV/m) 109.3 PK 96.7 AV	(dBuV/m)		1.00 V 1.00 V	ANGLE (Degree) 225 225	(dBuV) 77.10 64.50	FACTOR (dB/m) 32.20 32.20		
1 2 3	*2462.00 *2462.00 2483.50	LEVEL (dBuV/m) 109.3 PK 96.7 AV 69.8 PK	(dBuV/m)	-4.2	1.00 V 1.00 V 1.00 V	ANGLE (Degree) 225 225 336	(dBuV) 77.10 64.50 37.50	FACTOR (dB/m) 32.20 32.20 32.30		

- 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.



802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	2288.00	56.7 PK	74.0	-17.3	1.41 H	145	25.20	31.50
2	2288.00	47.3 AV	54.0	-6.7	1.41 H	145	15.80	31.50
3	2390.00	59.4 PK	74.0	-14.6	1.05 H	7	27.40	32.00
4	2390.00	46.0 AV	54.0	-8.0	1.05 H	7	14.00	32.00
5	*2412.00	101.1 PK			1.00 H	328	69.10	32.00
6	*2412.00	89.0 AV			1.00 H	328	57.00	32.00
7	4824.00	47.9 PK	74.0	-26.1	1.00 H	34	9.50	38.40
8	4824.00	35.0 AV	54.0	-19.0	1.00 H	34	-3.40	38.40
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	2288.00	58.9 PK	74.0	-15.1	1.47 V	171	27.40	31.50
2	2288.00	49.4 AV	54.0	-4.6	1.47 V	171	17.90	31.50
3	2390.00	69.1 PK	74.0	-4.9	1.06 V	113	37.10	32.00
4	2390.00	51.4 AV	54.0	-2.6	1.06 V	113	19.40	32.00
5	*2412.00	110.8 PK			1.06 V	127	78.80	32.00
6	*2412.00	98.3 AV			1.06 V	127	66.30	32.00
7	4824.00	46.3 PK	74.0	-27.7	1.00 V	26	7.90	38.40
8	4824.00	33.7 AV	54.0	-20.3	1.00 V	26	-4.70	38.40

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2288.00	57.3 PK	74.0	-16.7	1.40 H	152	25.80	31.50		
2	2288.00	48.0 AV	54.0	-6.0	1.40 H	152	16.50	31.50		
3	*2437.00	101.8 PK			1.00 H	327	69.70	32.10		
4	*2437.00	90.2 AV			1.00 H	327	58.10	32.10		
5	4874.00	49.3 PK	74.0	-24.7	1.00 H	74	10.90	38.40		
6	4874.00	36.6 AV	54.0	-17.4	1.00 H	74	-1.80	38.40		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		ANTENNA	A POLARII	Y & TEST DI	STANCE: V	ERTICAL A	1 3 M			
NO.	FREQ. (MHz)	EMISSION	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
NO .	FREQ. (MHz) 2288.00	EMISSION LEVEL	LIMIT		ANTENNA	TABLE ANGLE	RAW VALUE	FACTOR		
	` ,	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)		
1	2288.00	EMISSION LEVEL (dBuV/m) 60.0 PK	LIMIT (dBuV/m)	MARGIN (dB) -14.0	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m) 31.50		
1 2	2288.00 2288.00	EMISSION LEVEL (dBuV/m) 60.0 PK 51.5 AV	LIMIT (dBuV/m)	MARGIN (dB) -14.0	ANTENNA HEIGHT (m) 1.52 V 1.52 V	TABLE ANGLE (Degree) 174	RAW VALUE (dBuV) 28.50 20.00	FACTOR (dB/m) 31.50 31.50		
1 2 3	2288.00 2288.00 *2437.00	EMISSION LEVEL (dBuV/m) 60.0 PK 51.5 AV 113.2 PK	LIMIT (dBuV/m)	MARGIN (dB) -14.0	ANTENNA HEIGHT (m) 1.52 V 1.52 V 1.27 V	TABLE ANGLE (Degree) 174 174 123	RAW VALUE (dBuV) 28.50 20.00 81.10	FACTOR (dB/m) 31.50 31.50 32.10		

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2288.00	58.4 PK	74.0	-15.6	1.20 H	159	26.90	31.50		
2	2288.00	48.8 AV	54.0	-5.2	1.20 H	159	17.30	31.50		
3	*2462.00	101.4 PK			1.00 H	148	69.20	32.20		
4	*2462.00	89.0 AV			1.00 H	148	56.80	32.20		
5	2483.50	61.1 PK	74.0	-12.9	1.00 H	149	28.80	32.30		
6	2483.50	45.9 AV	54.0	-8.1	1.00 H	149	13.60	32.30		
7	4924.00	49.0 PK	74.0	-25.0	1.00 H	62	10.60	38.40		
8	4924.00	35.5 AV	54.0	-18.5	1.00 H	62	-2.90	38.40		
		ANTENNA	POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	(MIL)	EMISSION				TABLE		CORRECTION		
	FREQ. (MHz)	LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	2288.00			MARGIN (dB) -13.6				FACTOR		
1 2	, ,	(dBuV/m)	(dBuV/m)	, ,	HEIGHT (m)	(Degree)	(dBuV)	FACTOR (dB/m)		
<u> </u>	2288.00	(dBuV/m) 60.4 PK	(dBuV/m) 74.0	-13.6	HEIGHT (m) 1.22 V	(Degree)	(dBuV) 28.90	FACTOR (dB/m) 31.50		
2	2288.00 2288.00	(dBuV/m) 60.4 PK 50.8 AV	(dBuV/m) 74.0	-13.6	1.22 V 1.22 V	(Degree) 11 11	(dBuV) 28.90 19.30	FACTOR (dB/m) 31.50 31.50		
2	2288.00 2288.00 *2462.00	(dBuV/m) 60.4 PK 50.8 AV 112.6 PK	(dBuV/m) 74.0	-13.6	1.22 V 1.22 V 1.00 V	(Degree) 11 11 78	(dBuV) 28.90 19.30 80.40	FACTOR (dB/m) 31.50 31.50 32.20		
3 4	2288.00 2288.00 *2462.00 *2462.00	(dBuV/m) 60.4 PK 50.8 AV 112.6 PK 100.1 AV	(dBuV/m) 74.0 54.0	-13.6 -3.2	1.22 V 1.22 V 1.00 V 1.00 V	(Degree) 11 11 78 78	(dBuV) 28.90 19.30 80.40 67.90	FACTOR (dB/m) 31.50 31.50 32.20 32.20		
2 3 4 5	2288.00 2288.00 *2462.00 *2462.00 2483.50	(dBuV/m) 60.4 PK 50.8 AV 112.6 PK 100.1 AV 66.9 PK	(dBuV/m) 74.0 54.0 74.0	-13.6 -3.2 -7.1	1.22 V 1.22 V 1.00 V 1.00 V 1.00 V	(Degree) 11 11 78 78 340	(dBuV) 28.90 19.30 80.40 67.90 34.60	FACTOR (dB/m) 31.50 31.50 32.20 32.20 32.30		

- 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 1	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	2390.00	65.6 PK	74.0	-8.4	1.44 H	55	33.60	32.00	
2	2390.00	48.8 AV	54.0	-5.2	1.44 H	55	16.80	32.00	
3	*2412.00	107.2 PK			1.41 H	57	75.20	32.00	
4	*2412.00	95.1 AV			1.41 H	57	63.10	32.00	
5	4824.00	47.3 PK	74.0	-26.7	1.00 H	24	8.90	38.40	
6	4824.00	34.7 AV	54.0	-19.3	1.00 H	24	-3.70	38.40	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	/ & TEST DI	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE	CORRECTION FACTOR (dB/m)	
NO .	FREQ. (MHz)	EMISSION LEVEL	LIMIT		ANTENNA	TABLE ANGLE	RAW VALUE	FACTOR	
	, ,	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)	
1	2390.00	EMISSION LEVEL (dBuV/m) 65.6 PK	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m) 32.00	
1 2	2390.00 2390.00	EMISSION LEVEL (dBuV/m) 65.6 PK 48.1 AV	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.04 V 1.04 V	TABLE ANGLE (Degree) 193 193	RAW VALUE (dBuV) 33.60 16.10	FACTOR (dB/m) 32.00 32.00	
1 2 3	2390.00 2390.00 *2412.00	EMISSION LEVEL (dBuV/m) 65.6 PK 48.1 AV 106.5 PK	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.04 V 1.04 V 1.07 V	TABLE ANGLE (Degree) 193 193	RAW VALUE (dBuV) 33.60 16.10 74.50	FACTOR (dB/m) 32.00 32.00 32.00	

- 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 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2437.00	109.9 PK			1.40 H	59	77.80	32.10	
2	*2437.00	97.7 AV			1.40 H	59	65.60	32.10	
3	4874.00	49.0 PK	74.0	-25.0	1.00 H	25	10.60	38.40	
4	4874.00	36.1 AV	54.0	-17.9	1.00 H	25	-2.30	38.40	
5	7311.00	60.5 PK	74.0	-13.5	1.00 H	79	16.20	44.30	
6	7311.00	45.4 AV	54.0	-8.6	1.00 H	79	1.10	44.30	
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2437.00	107.5 PK			1.27 V	193	75.40	32.10	
2	*2437.00	95.2 AV			1.27 V	193	63.10	32.10	
3	4874.00	47.0 PK	74.0	-27.0	1.00 V	52	8.60	38.40	
4	4874.00	34.7 AV	54.0	-19.3	1.00 V	52	-3.70	38.40	
5	7311.00	58.5 PK	74.0	-15.5	1.00 V	91	14.20	44.30	
6	7311.00	43.9 AV	54.0	-10.1	1.00 V	91	-0.40	44.30	

- 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 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*2462.00	109.1 PK			1.38 H	57	76.90	32.20	
2	*2462.00	97.0 AV			1.38 H	57	64.80	32.20	
3	2483.50	62.4 PK	74.0	-11.6	1.00 H	320	30.10	32.30	
4	2483.50	47.3 AV	54.0	-6.7	1.00 H	320	15.00	32.30	
5	4924.00	48.0 PK	74.0	-26.0	1.00 H	44	9.60	38.40	
6	4924.00	35.1 AV	54.0	-18.9	1.00 H	44	-3.30	38.40	
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.		EMISSION	LIBAIT			TABLE		CORRECTION	
1.0.	FREQ. (MHz)	LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)	
1	*2462.00			MARGIN (dB)					
		(dBuV/m)		MARGIN (dB)	HEIGHT (m)	(Degree)	(dBuV)	(dB/m)	
1	*2462.00	(dBuV/m) 108.7 PK		-12.4	HEIGHT (m) 1.05 V	(Degree)	(dBuV) 76.50	(dB/m) 32.20	
1 2	*2462.00 *2462.00	(dBuV/m) 108.7 PK 96.4 AV	(dBuV/m)		1.05 V 1.05 V	(Degree) 3 3	(dBuV) 76.50 64.20	(dB/m) 32.20 32.20	
1 2 3	*2462.00 *2462.00 2483.50	(dBuV/m) 108.7 PK 96.4 AV 61.6 PK	(dBuV/m)	-12.4	1.05 V 1.05 V 1.00 V	(Degree) 3 3 13	(dBuV) 76.50 64.20 29.30	(dB/m) 32.20 32.20 32.30	

- 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.



BELOW 1GHz WORST-CASE DATA: 802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	NNEL Channel 6		Below 1000MHz		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anderson Hong		
TEST MODE	A1				

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	208.77	37.6 QP	43.5	-5.9	1.00 H	246	26.30	11.30
2	249.60	31.9 QP	46.0	-14.1	1.24 H	180	18.90	13.00
3	374.04	34.9 QP	46.0	-11.1	1.00 H	204	18.00	16.90
4	574.30	32.8 QP	46.0	-13.2	1.24 H	111	11.20	21.60
5	700.68	34.0 QP	46.0	-12.0	1.00 H	180	11.00	23.00
6	961.21	39.1 QP	54.0	-14.9	1.50 H	322	11.70	27.40
		ANTENNA	N POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	35.73	35.3 QP	40.0	-4.7	1.99 V	10	22.30	13.00
2	199.05	30.6 QP	43.5	-12.9	1.00 V	160	19.50	11.10
3	374.04	35.6 QP	46.0	-10.4	1.24 V	151	18.70	16.90
4	500.42	33.8 QP	46.0	-12.2	1.00 V	256	13.80	20.00
5	624.85	32.4 QP	46.0	-13.6	1.00 V	257	10.10	22.30
6	961.21	38.1 QP	54.0	-15.9	1.24 V	241	10.70	27.40

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	Channel 6		Below 1000MHz		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anderson Hong		
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	107.67	31.5 QP	43.5	-12.0	1.75 H	273	21.10	10.40			
2	274.88	32.6 QP	46.0	-13.4	1.00 H	121	18.60	14.00			
3	405.15	32.4 QP	46.0	-13.6	2.00 H	178	14.70	17.70			
4	550.97	32.7 QP	46.0	-13.3	1.25 H	207	11.70	21.00			
5	675.40	30.5 QP	46.0	-15.5	1.00 H	152	7.70	22.80			
6	799.84	31.7 QP	46.0	-14.3	1.50 H	17	6.10	25.60			
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	39.62	33.1 QP	40.0	-6.9	1.25 V	12	19.50	13.60			
2	70.73	30.7 QP	40.0	-9.3	1.00 V	176	18.60	12.10			
3	107.67	29.2 QP	43.5	-14.3	1.25 V	58	18.80	10.40			
4	329.32	31.0 QP	46.0	-15.0	1.25 V	213	15.30	15.70			
		22.2.2.	40.0	40.0	4.00.17	407	40.00	04.00			
5	574.30	32.2 QP	46.0	-13.8	1.00 V	187	10.60	21.60			

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	NNEL Channel 6		Below 1000MHz		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anderson Hong		
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	125.17	35.4 QP	43.5	-8.1	1.50 H	88	23.10	12.30		
2	249.60	36.0 QP	46.0	-10.0	1.00 H	77	23.00	13.00		
3	374.04	42.1 QP	46.0	-3.9	1.00 H	120	25.20	16.90		
4	624.85	42.7 QP	46.0	-3.3	1.25 H	126	20.40	22.30		
5	751.23	32.9 QP	46.0	-13.1	1.00 H	125	8.50	24.40		
6	875.67	38.1 QP	46.0	-7.9	1.50 H	124	11.60	26.50		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		ANIENNA	A POLARII	r & lESI DI	STANCE: V	<u>ERTICAL A</u>	1 3 M			
NO.	FREQ. (MHz)	EMISSION	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
NO .	FREQ. (MHz) 33.79	EMISSION LEVEL	LIMIT		ANTENNA	TABLE ANGLE	RAW VALUE	FACTOR		
		EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)		
1	33.79	EMISSION LEVEL (dBuV/m) 36.4 QP	LIMIT (dBuV/m)	MARGIN (dB) -3.6	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m) 12.70		
1 2	33.79 125.17	EMISSION LEVEL (dBuV/m) 36.4 QP 32.8 QP	LIMIT (dBuV/m) 40.0 43.5	-3.6 -10.7	ANTENNA HEIGHT (m) 1.25 V 1.00 V	TABLE ANGLE (Degree) 61 264	RAW VALUE (dBuV) 23.70 20.50	FACTOR (dB/m) 12.70 12.30		
1 2 3	33.79 125.17 249.60	EMISSION LEVEL (dBuV/m) 36.4 QP 32.8 QP 31.0 QP	LIMIT (dBuV/m) 40.0 43.5 46.0	-3.6 -10.7 -15.0	ANTENNA HEIGHT (m) 1.25 V 1.00 V 1.99 V	TABLE ANGLE (Degree) 61 264 147	RAW VALUE (dBuV) 23.70 20.50 18.00	FACTOR (dB/m) 12.70 12.30 13.00		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anderson Hong		
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	125.17	37.4 QP	43.5	-6.1	1.50 H	91	25.10	12.30			
2	249.60	32.8 QP	46.0	-13.2	1.00 H	246	19.80	13.00			
3	374.04	34.5 QP	46.0	-11.5	1.00 H	113	17.60	16.90			
4	625.01	42.8 QP	46.0	-3.2	1.24 H	162	20.40	22.40			
5	751.23	39.7 QP	46.0	-6.3	1.00 H	148	15.30	24.40			
6	875.67	37.8 QP	46.0	-8.2	1.50 H	199	11.30	26.50			
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	64.90	34.1 QP	40.0	-5.9	1.00 V	10	21.20	12.90			
2	125.17	37.0 QP	43.5	-6.5	1.00 V	59	24.70	12.30			
3	374.04	37.3 QP	46.0	-8.7	1.00 V	178	20.40	16.90			
4	624.85	39.3 QP	46.0	-6.7	1.00 V	297	17.00	22.30			
	751.23	33.9 QP	46.0	-12.1	1.74 V	177	9.50	24.40			
5	731.23	33.3 QI	40.0	-12.1	1.7 T V	1,7,	0.00	24.40			

- 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 (dBµV)
	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.	ODEL NO. SERIAL NO.		DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 23, 2011	Nov. 22, 2012
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 07, 2011	Jul. 06, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 07, 2012	Feb. 06, 2013
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

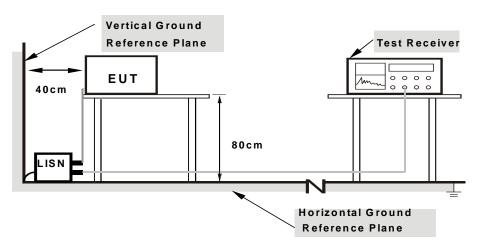
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



4.2.7 TEST RESULTS

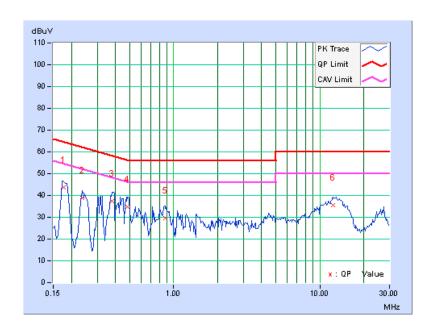
CONDUCTED WORST-CASE DATA: 802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

Na	Freq. Corr.		Freq. Corr. Reading Value			Emission Level		Limit		Margin	
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.17734	0.19	43.45	28.31	43.64	28.50	64.61	54.61	-20.97	-26.11	
2	0.23594	0.22	38.72	23.00	38.94	23.22	62.24	52.24	-23.30	-29.02	
3	0.38047	0.17	37.32	24.09	37.49	24.26	58.27	48.27	-20.78	-24.01	
4	0.48203	0.17	34.74	20.58	34.91	20.75	56.30	46.30	-21.40	-25.56	
5	0.87266	0.20	29.37	16.51	29.57	16.71	56.00	46.00	-26.43	-29.29	
6	12.36719	0.64	34.89	26.47	35.53	27.11	60.00	50.00	-24.47	-22.89	

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.

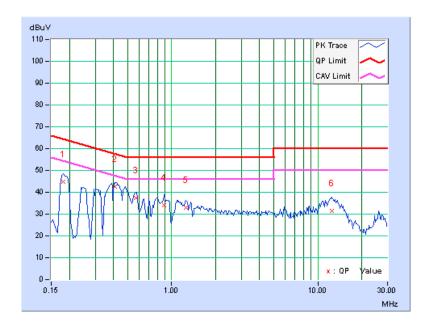




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

No Fre	Freq.	Freq. Corr. Factor		Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)		
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.18125	0.28	44.41	33.05	44.69	33.33	64.43	54.43	-19.74	-21.10	
2	0.41172	0.25	42.24	31.67	42.49	31.92	57.61	47.61	-15.12	-15.69	
3	0.57188	0.26	37.21	24.70	37.47	24.96	56.00	46.00	-18.53	-21.04	
4	0.88438	0.29	33.83	24.15	34.12	24.44	56.00	46.00	-21.88	-21.56	
5	1.25000	0.31	32.59	21.95	32.90	22.26	56.00	46.00	-23.10	-23.74	
6	12.41016	0.73	30.79	22.62	31.52	23.35	60.00	50.00	-28.48	-26.65	

- 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.

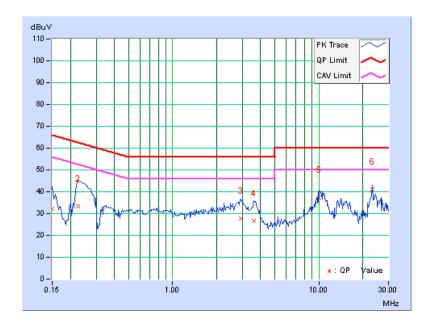




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

No	Freq.	Freq. Corr. Factor		Reading Value		Emission Level		Limit		Margin	
NO		1 actor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.15000	0.11	32.08	21.09	32.19	21.20	66.00	56.00	-33.81	-34.80	
2	0.22422	0.13	33.38	16.55	33.51	16.68	62.66	52.66	-29.15	-35.98	
3	2.93359	0.28	27.49	20.64	27.77	20.92	56.00	46.00	-28.23	-25.08	
4	3.59375	0.32	26.28	18.85	26.60	19.17	56.00	46.00	-29.40	-26.83	
5	10.12109	0.65	36.63	34.03	37.28	34.68	60.00	50.00	-22.72	-15.32	
6	23.12891	1.32	39.97	38.01	41.29	39.33	60.00	50.00	-18.71	-10.67	

- 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.

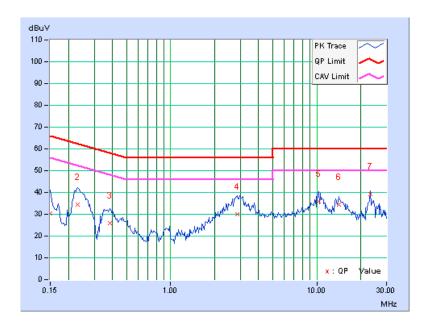




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

Na	Freq.	Corr.	Reading Value			Emission Level		nit	Margin	
No		Factor		[dB (uV)]		[dB (uV)]		(uV)]	(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	30.30	20.85	30.42	20.97	66.00	56.00	-35.58	-35.03
2	0.23203	0.14	34.38	21.82	34.52	21.96	62.38	52.38	-27.86	-30.42
3	0.38438	0.15	25.92	18.89	26.07	19.04	58.18	48.18	-32.12	-29.15
4	2.85547	0.28	29.62	22.17	29.90	22.45	56.00	46.00	-26.10	-23.55
5	10.36719	0.60	35.36	33.43	35.96	34.03	60.00	50.00	-24.04	-15.97
6	14.21094	0.75	33.79	31.06	34.54	31.81	60.00	50.00	-25.46	-18.19
7	23.12891	1.08	38.28	36.24	39.36	37.32	60.00	50.00	-20.64	-12.68

- 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.

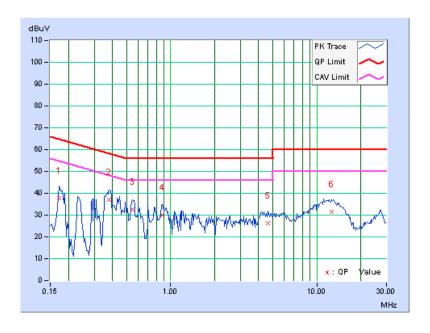




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B1		

No Fre	Freq.	Freq. Corr. Factor		Reading Value			Emission Level		Limit		Margin	
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)		
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.		
1	0.17344	0.18	37.48	21.73	37.66	21.91	64.79	54.79	-27.13	-32.88		
2	0.38047	0.17	37.00	24.11	37.17	24.28	58.27	48.27	-21.10	-23.99		
3	0.54844	0.17	32.48	18.19	32.65	18.36	56.00	46.00	-23.35	-27.64		
4	0.87656	0.20	29.70	17.17	29.90	17.37	56.00	46.00	-26.10	-28.63		
5	4.64063	0.36	26.07	18.40	26.43	18.76	56.00	46.00	-29.57	-27.24		
6	12.67969	0.65	30.92	23.29	31.57	23.94	60.00	50.00	-28.43	-26.06		

- 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.

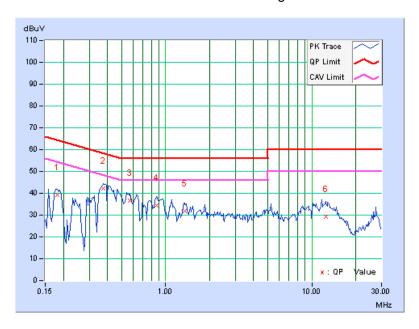




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B1		

No	No Freq. Corr. Factor		Reading Value		Emission Level		Limit		Margin	
NO			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18125	0.28	38.81	30.43	39.09	30.71	64.43	54.43	-25.34	-23.72
2	0.37656	0.26	41.84	31.56	42.10	31.82	58.35	48.35	-16.26	-16.54
3	0.57188	0.26	36.54	24.02	36.80	24.28	56.00	46.00	-19.20	-21.72
4	0.86094	0.29	34.09	22.05	34.38	22.34	56.00	46.00	-21.62	-23.66
5	1.34766	0.31	31.38	19.22	31.69	19.53	56.00	46.00	-24.31	-26.47
6	12.49609	0.73	28.59	21.43	29.32	22.16	60.00	50.00	-30.68	-27.84

- 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.

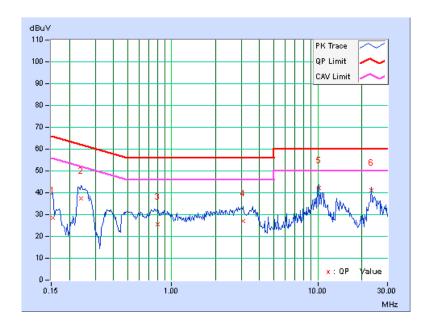




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B2		

No	Freq.	Freq. Corr. Factor		Reading Value		_	Emission Level		nit	Margin	
		1 actor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.15391	0.12	28.46	21.18	28.58	21.30	65.79	55.79	-37.21	-34.49	
2	0.23984	0.13	37.36	23.87	37.49	24.00	62.10	52.10	-24.61	-28.10	
3	0.79844	0.17	25.47	17.20	25.64	17.37	56.00	46.00	-30.36	-28.63	
4	3.08594	0.29	26.58	19.96	26.87	20.25	56.00	46.00	-29.13	-25.75	
5	10.17578	0.65	41.48	41.07	42.13	41.72	60.00	50.00	-17.87	-8.28	
6	23.12891	1.32	39.91	37.97	41.23	39.29	60.00	50.00	-18.77	-10.71	

- 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.

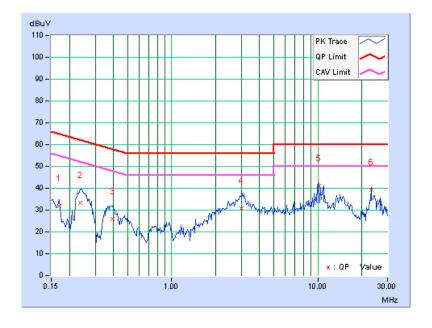




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B2		

Na	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.13	31.63	18.41	31.76	18.54	64.98	54.98	-33.22	-36.44
2	0.23594	0.14	33.27	21.70	33.41	21.84	62.24	52.24	-28.83	-30.40
3	0.39609	0.15	25.73	18.38	25.88	18.53	57.93	47.93	-32.06	-29.41
4	3.01172	0.29	30.37	22.57	30.66	22.86	56.00	46.00	-25.34	-23.14
5	10.17578	0.60	40.69	40.40	41.29	41.00	60.00	50.00	-18.71	-9.00
6	23.12891	1.08	38.08	36.12	39.16	37.20	60.00	50.00	-20.84	-12.80

- 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.





5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND)

5.1 RADIATED EMISSION MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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



5.1.2 TEST INSTRUMENTS

Same as item 4.1.2.

5.1.3 TEST PROCEDURES

Same as item 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as item 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



5.1.7 TEST RESULTS

ABOVE 1GHz DATA: 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION	LIMIT	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5725.00	73.1 PK	81.0	-7.9	1.00 H	29	33.60	39.50	
2	#5725.00	60.7 AV	68.6	-7.9	1.00 H	29	21.20	39.50	
3	*5745.00	101.0 PK			1.02 H	17	61.40	39.60	
4	*5745.00	88.6 AV			1.02 H	17	49.00	39.60	
5	11490.00	60.3 PK	74.0	-13.7	1.31 H	89	8.60	51.70	
6	11490.00	46.0 AV	54.0	-8.0	1.31 H	89	-5.70	51.70	
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	#5725.00	85.3 PK	93.4	-8.1	1.09 V	12	45.80	39.50	
2	#5725.00	72.9 AV	81.0	-8.1	1.09 V	12	33.40	39.50	
3	*5745.00	113.4 PK			1.09 V	10	73.80	39.60	
4	*5745.00	101.0 AV			1.09 V	10	61.40	39.60	
	_	_							
5	11490.00	59.4 PK	74.0	-14.6	1.27 V	42	7.70	51.70	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	5000.00	57.0 PK	74.0	-17.0	1.00 H	324	18.70	38.30		
2	5000.00	47.4 AV	54.0	-6.6	1.00 H	324	9.10	38.30		
3	*5785.00	99.5 PK			1.02 H	32	59.80	39.70		
4	*5785.00	87.7 AV			1.02 H	32	48.00	39.70		
5	11570.00	60.5 PK	74.0	-13.5	1.33 H	50	8.90	51.60		
6	11570.00	46.0 AV	54.0	-8.0	1.33 H	50	-5.60	51.60		
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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	5000.00	59.0 PK	74.0	-15.0	1.00 V	332	20.70	38.30		
2	5000.00	49.5 AV	54.0	-4.5	1.00 V	332	11.20	38.30		
3	*5785.00	112.3 PK			1.43 V	8	72.60	39.70		
4	*5785.00	99.9 AV			1.43 V	8	60.20	39.70		
5	11570.00	59.5 PK	74.0	-14.5	1.41 V	33	7.90	51.60		
6	11570.00	45.0 AV	54.0	-9.0	1.41 V	33	-6.60	51.60		

- 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 limit value is defined as per 15.247.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*5825.00	99.7 PK			1.00 H	5	60.00	39.70		
2	*5825.00	87.8 AV			1.00 H	5	48.10	39.70		
3	#5850.00	59.8 PK	79.7	-19.9	1.00 H	44	20.00	39.80		
4	#5850.00	47.9 AV	67.8	-19.9	1.00 H	44	8.10	39.80		
5	11650.00	60.8 PK	74.0	-13.2	1.48 H	151	9.20	51.60		
6	11650.00	46.0 AV	54.0	-8.0	1.48 H	151	-5.60	51.60		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	*5825.00	111.8 PK			1.09 V	152	72.10	39.70		
2	*5825.00	99.2 AV			1.09 V	152	59.50	39.70		
3	#5850.00	71.5 PK	91.8	-20.3	1.00 V	152	31.70	39.80		
4	#5850.00	58.9 AV	79.2	-20.3	1.00 V	152	19.10	39.80		
5	11650.00	59.8 PK	74.0	-14.2	1.36 V	102	8.20	51.60		
6	11650.00	45.4 AV	54.0	-8.6	1.36 V	102	-6.20	51.60		

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	#5725.00	78.0 PK	88.2	-10.2	1.08 H	8	38.50	39.50		
2	#5725.00	65.3 AV	75.5	-10.2	1.08 H	8	25.80	39.50		
3	*5745.00	108.2 PK			1.10 H	290	68.60	39.60		
4	*5745.00	95.5 AV			1.10 H	290	55.90	39.60		
5	11490.00	62.2 PK	74.0	-11.8	1.39 H	72	10.50	51.70		
6	11490.00	48.9 AV	54.0	-5.1	1.39 H	72	-2.80	51.70		
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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)		
		(abaviii)				(Degree)		(GD/III)		
1	#5725.00	87.1 PK	99.7	-12.6	1.00 V	36	47.60	39.50		
1	#5725.00 #5725.00	,	99.7 87.2	-12.6 -12.6	1.00 V 1.00 V	, ,	47.60 35.10	, ,		
<u> </u>		87.1 PK				36		39.50		
2	#5725.00	87.1 PK 74.6 AV			1.00 V	36 36	35.10	39.50 39.50		
2	#5725.00 *5745.00	87.1 PK 74.6 AV 119.7 PK			1.00 V 1.00 V	36 36 35	35.10 80.10	39.50 39.50 39.60		

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*5785.00	106.8 PK			1.09 H	292	67.10	39.70	
2	*5785.00	94.1 AV			1.09 H	292	54.40	39.70	
3	7713.00	54.7 PK	74.0	-19.3	1.00 H	58	9.50	45.20	
4	7713.00	41.7 AV	54.0	-12.3	1.00 H	58	-3.50	45.20	
5	11570.00	61.4 PK	74.0	-12.6	1.40 H	69	9.80	51.60	
6	11570.00	47.7 AV	54.0	-6.3	1.40 H	69	-3.90	51.60	
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5785.00	117.9 PK			1.00 V	352	78.20	39.70	
2	*5785.00	104.5 AV			1.00 V	352	64.80	39.70	
3	7713.00	55.1 PK	74.0	-18.9	1.00 V	89	9.90	45.20	
4	7713.00	42.8 AV	54.0	-11.2	1.00 V	89	-2.40	45.20	
5	11570.00	60.5 PK	74.0	-13.5	1.49 V	56	8.90	51.60	
6	11570.00	46.4 AV	54.0	-7.6	1.49 V	56	-5.20	51.60	

- 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 limit value is defined as per 15.247.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	*5825.00	105.1 PK			1.29 H	291	65.40	39.70	
2	*5825.00	92.2 AV			1.29 H	291	52.50	39.70	
3	#5850.00	66.1 PK	85.1	-19.0	1.18 H	49	26.30	39.80	
4	#5850.00	53.2 AV	72.2	-19.0	1.18 H	49	13.40	39.80	
5	11650.00	61.8 PK	74.0	-12.2	1.39 H	56	10.20	51.60	
6	11650.00	47.4 AV	54.0	-6.6	1.39 H	56	-4.20	51.60	
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5825.00	118.6 PK			1.00 V	345	78.90	39.70	
2	*5825.00	105.4 AV			1.00 V	345	65.70	39.70	
3	#5850.00	77.1 PK	98.6	-21.5	1.00 V	346	37.30	39.80	
4	#5850.00	63.9 AV	85.4	-21.5	1.00 V	346	24.10	39.80	
5	11650.00	60.8 PK	74.0	-13.2	1.45 V	50	9.20	51.60	
								51.60	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	5400.00	57.7 PK	74.0	-16.3	1.00 H	15	18.80	38.90
2	5400.00	47.3 AV	54.0	-6.7	1.00 H	15	8.40	38.90
3	#5725.00	72.4 PK	84.5	-12.1	1.32 H	328	32.90	39.50
4	#5725.00	60.2 AV	72.3	-12.1	1.32 H	328	20.70	39.50
5	*5745.00	104.5 PK			1.47 H	313	64.90	39.60
6	*5745.00	92.3 AV			1.47 H	313	52.70	39.60
7	11490.00	60.5 PK	74.0	-13.5	1.15 H	59	8.80	51.70
8	11490.00	46.1 AV	54.0	-7.9	1.15 H	59	-5.60	51.70
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	5400.00	59.8 PK	74.0	-14.2	1.00 V	5	20.90	38.90
2	5400.00	49.4 AV	54.0	-4.6	1.00 V	5	10.50	38.90
3	#5725.00	82.6 PK	95.2	-12.6	1.18 V	27	43.10	39.50
4	#5725.00	71.0 AV	83.6	-12.6	1.18 V	27	31.50	39.50
5	*5745.00	115.2 PK			1.01 V	10	75.60	39.60
6	*5745.00	103.6 AV			1.01 V	10	64.00	39.60
7	11490.00	59.6 PK	74.0	-14.4	1.17 V	34	7.90	51.70
8	11490.00	45.6 AV	54.0	-8.4	1.17 V	34	-6.10	51.70

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	5400.00	57.7 PK	74.0	-16.3	1.00 H	19	18.80	38.90	
2	5400.00	47.6 AV	54.0	-6.4	1.00 H	19	8.70	38.90	
3	*5785.00	103.6 PK			1.54 H	318	63.90	39.70	
4	*5785.00	91.4 AV			1.54 H	318	51.70	39.70	
5	11570.00	59.0 PK	74.0	-15.0	1.52 H	65	7.40	51.60	
6	11570.00	46.8 AV	54.0	-7.2	1.52 H	65	-4.80	51.60	
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	5400.00	59.8 PK	74.0	-14.2	1.00 V	6	20.90	38.90	
2	5400.00	49.7 AV	54.0	-4.3	1.00 V	6	10.80	38.90	
3	*5785.00	115.3 PK			1.00 V	13	75.60	39.70	
4	*5785.00	103.5 AV			1.00 V	13	63.80	39.70	
5	11570.00	58.0 PK	74.0	-16.0	1.23 V	45	6.40	51.60	
6		_	·			45	-6.30	51.60	

- 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 limit value is defined as per 15.247.



EUT TEST CONDITION		MEASUREMENT DETAIL				
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz			
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)			
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu			
TEST MODE	A1					

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	5400.00	58.4 PK	74.0	-15.6	1.00 H	165	19.50	38.90
2	5400.00	49.3 AV	54.0	-4.7	1.00 H	165	10.40	38.90
3	*5825.00	103.1 PK			1.00 H	240	63.40	39.70
4	*5825.00	91.3 AV			1.00 H	240	51.60	39.70
5	#5850.00	63.3 PK	83.1	-19.8	1.00 H	252	23.50	39.80
6	#5850.00	51.5 AV	71.3	-19.8	1.00 H	252	11.70	39.80
7	11650.00	58.4 PK	74.0	-15.6	1.19 H	38	6.80	51.60
8	11650.00	46.7 AV	54.0	-7.3	1.19 H	38	-4.90	51.60
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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	5400.00	61.3 PK	74.0	-12.7	1.00 V	153	22.40	38.90
2	5400.00	52.1 AV	54.0	-1.9	1.00 V	153	13.20	38.90
3	*5825.00	114.9 PK			1.00 V	142	75.20	39.70
4	*5825.00	103.0 AV			1.00 V	142	63.30	39.70
5	#5850.00	73.5 PK	94.9	-21.4	1.15 V	12	33.70	39.80
6	#5850.00	61.6 AV	83.0	-21.4	1.15 V	12	21.80	39.80
7	11650.00	57.7 PK	74.0	-16.3	1.45 V	42	6.10	51.60
8	11650.00	45.2 AV	54.0	-8.8	1.45 V	42	-6.40	51.60

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL				
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz			
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)			
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu			
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	5360.00	58.6 PK	74.0	-15.4	1.00 H	328	19.80	38.80	
2	5360.00	48.6 AV	54.0	-5.4	1.00 H	328	9.80	38.80	
3	5400.00	57.4 PK	74.0	-16.6	1.00 H	320	18.50	38.90	
4	5400.00	47.4 AV	54.0	-6.6	1.00 H	320	8.50	38.90	
5	#5725.00	71.7 PK	88.7	-17.0	1.08 H	289	32.20	39.50	
6	#5725.00	58.9 AV	75.9	-17.0	1.08 H	289	19.40	39.50	
7	*5745.00	108.7 PK			1.04 H	345	69.10	39.60	
8	*5745.00	95.9 AV			1.04 H	345	56.30	39.60	
9	11490.00	61.6 PK	74.0	-12.4	1.32 H	25	9.90	51.70	
10	11490.00	48.6 AV	54.0	-5.4	1.32 H	25	-3.10	51.70	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

	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	5360.00	60.5 PK	74.0	-13.5	1.08 V	21	21.70	38.80	
2	5360.00	51.6 AV	54.0	-2.4	1.08 V	21	12.80	38.80	
3	5400.00	59.5 PK	74.0	-14.5	1.07 V	5	20.60	38.90	
4	5400.00	49.7 AV	54.0	-4.3	1.07 V	5	10.80	38.90	
5	#5725.00	81.6 PK	99.5	-17.9	1.00 V	6	42.10	39.50	
6	#5725.00	68.8 AV	86.7	-17.9	1.00 V	6	29.30	39.50	
7	*5745.00	119.5 PK			1.00 V	351	79.90	39.60	
8	*5745.00	106.7 AV			1.00 V	351	67.10	39.60	
9	11490.00	61.5 PK	74.0	-12.5	1.35 V	29	9.80	51.70	
10	11490.00	47.9 AV	54.0	-6.1	1.35 V	29	-3.80	51.70	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	5360.00	58.9 PK	74.0	-15.1	1.00 H	328	20.10	38.80
2	5360.00	48.0 AV	54.0	-6.0	1.00 H	328	9.20	38.80
3	5400.00	57.7 PK	74.0	-16.3	1.00 H	324	18.80	38.90
4	5400.00	47.0 AV	54.0	-7.0	1.00 H	324	8.10	38.90
5	*5785.00	110.3 PK			1.04 H	344	70.60	39.70
6	*5785.00	97.0 AV			1.04 H	344	57.30	39.70
7	11570.00	61.9 PK	74.0	-12.1	1.23 H	52	10.30	51.60
8	11570.00	48.8 AV	54.0	-5.2	1.23 H	52	-2.80	51.60
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	5360.00	61.3 PK	74.0	-12.7	1.08 V	21	22.50	38.80
2	5360.00	51.4 AV	54.0	-2.6	1.08 V	21	12.60	38.80
3	5400.00	60.4 PK	74.0	-13.6	1.07 V	5	21.50	38.90
4	5400.00	49.5 AV	54.0	-4.5	1.07 V	5	10.60	38.90
5	*5785.00	119.7 PK			1.00 V	353	80.00	39.70
6	*5785.00	106.6 AV			1.00 V	353	66.90	39.70
7	11570.00	60.0 PK	74.0	-14.0	1.25 V	32	8.40	51.60
8	11570.00	47.6 AV	54.0	-6.4	1.25 V	32	-4.00	51.60

- 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 limit value is defined as per 15.247.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS 24deg. C, 65%RH		TESTED BY	Alan Wu	
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	5360.00	59.3 PK	74.0	-14.7	1.00 H	328	20.50	38.80	
2	5360.00	47.6 AV	54.0	-6.4	1.00 H	328	8.80	38.80	
3	5400.00	58.2 PK	74.0	-15.8	1.00 H	316	19.30	38.90	
4	5400.00	46.3 AV	54.0	-7.7	1.00 H	316	7.40	38.90	
5	*5825.00	109.5 PK			1.02 H	343	69.80	39.70	
6	*5825.00	96.4 AV			1.02 H	343	56.70	39.70	
7	#5850.00	66.8 PK	89.5	-22.7	1.00 H	346	27.00	39.80	
8	#5850.00	53.7 AV	76.4	-22.7	1.00 H	346	13.90	39.80	
9	11650.00	60.7 PK	74.0	-13.3	1.31 H	16	9.10	51.60	
10	11650.00	48.2 AV	54.0	-5.8	1.31 H	16	-3.40	51.60	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

	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	5360.00	61.9 PK	74.0	-12.1	1.08 V	21	23.10	38.80	
2	5360.00	51.8 AV	54.0	-2.2	1.08 V	21	13.00	38.80	
3	5400.00	60.0 PK	74.0	-14.0	1.07 V	5	21.10	38.90	
4	5400.00	49.9 AV	54.0	-4.1	1.07 V	5	11.00	38.90	
5	*5825.00	119.0 PK			1.00 V	19	79.30	39.70	
6	*5825.00	106.4 AV			1.00 V	19	66.70	39.70	
7	#5850.00	75.8 PK	99.0	-23.2	1.00 V	353	36.00	39.80	
8	#5850.00	63.2 AV	86.4	-23.2	1.00 V	353	23.40	39.80	
9	11650.00	59.8 PK	74.0	-14.2	1.30 V	30	8.20	51.60	
10	11650.00	47.5 AV	54.0	-6.5	1.30 V	30	-4.10	51.60	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
FNVIRONMENTAL		TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	5400.00	57.1 PK	74.0	-16.9	1.00 H	9	18.20	38.90
2	5400.00	48.0 AV	54.0	-6.0	1.00 H	9	9.10	38.90
3	#5725.00	71.4 PK	80.8	-9.4	1.44 H	311	31.90	39.50
4	#5725.00	61.6 AV	71.0	-9.4	1.44 H	311	22.10	39.50
5	*5755.00	100.8 PK			1.71 H	313	61.20	39.60
6	*5755.00	91.0 AV			1.71 H	313	51.40	39.60
7	11510.00	62.2 PK	74.0	-11.8	1.00 H	44	10.50	51.70
8	11510.00	48.2 AV	54.0	-5.8	1.00 H	44	-3.50	51.70
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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	5400.00	59.2 PK	74.0	-14.8	1.00 V	3	20.30	38.90
2	5400.00	50.0 AV	54.0	-4.0	1.00 V	3	11.10	38.90
3	#5725.00	81.2 PK	91.2	-10.0	1.00 V	123	41.70	39.50
4	#5725.00	71.4 AV	81.4	-10.0	1.00 V	123	31.90	39.50
5	*5755.00	111.2 PK			1.00 V	12	71.60	39.60
6	*5755.00	101.4 AV			1.00 V	12	61.80	39.60
7	11510.00	61.1 PK	74.0	-12.9	1.00 V	41	9.40	51.70
8	11510.00	47.5 AV	54.0	-6.5	1.00 V	41	-4.20	51.70

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	A1			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	5400.00	57.4 PK	74.0	-16.6	1.00 H	6	18.50	38.90
2	5400.00	48.2 AV	54.0	-5.8	1.00 H	6	9.30	38.90
3	*5795.00	100.3 PK			1.00 H	315	60.60	39.70
4	*5795.00	90.5 AV			1.00 H	315	50.80	39.70
5	#5850.00	56.8 PK	80.3	-23.5	1.00 H	249	17.00	39.80
6	#5850.00	47.0 AV	70.5	-23.5	1.00 H	249	7.20	39.80
7	11590.00	62.0 PK	74.0	-12.0	1.00 H	59	10.50	51.50
8	11590.00	48.1 AV	54.0	-5.9	1.00 H	59	-3.40	51.50
		ANTENNA	A POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	5400.00	59.5 PK	74.0	-14.5	1.00 V	2	20.60	38.90
2	5400.00	50.2 AV	54.0	-3.8	1.00 V	2	11.30	38.90
3	*5795.00	110.9 PK			1.00 V	8	71.20	39.70
4	*5795.00	101.3 AV			1.00 V	8	61.60	39.70
5	#5850.00	67.0 PK	90.9	-23.9	1.00 V	146	27.20	39.80
6	#5850.00	57.4 AV	81.3	-23.9	1.00 V	146	17.60	39.80
7	11590.00	61.0 PK	74.0	-13.0	1.00 V	51	9.50	51.50
8	11590.00	47.4 AV	54.0	-6.6	1.00 V	51	-4.10	51.50

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS 24deg. C, 65%RH		TESTED BY	Alan Wu	
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	5360.00	58.2 PK	74.0	-15.8	1.00 H	328	19.40	38.80		
2	5360.00	48.7 AV	54.0	-5.3	1.00 H	328	9.90	38.80		
3	5400.00	57.0 PK	74.0	-17.0	1.00 H	317	18.10	38.90		
4	5400.00	47.5 AV	54.0	-6.5	1.00 H	317	8.60	38.90		
5	#5725.00	72.4 PK	85.4	-13.0	1.00 H	296	32.90	39.50		
6	#5725.00	61.9 AV	74.9	-13.0	1.00 H	296	22.40	39.50		
7	*5755.00	105.4 PK			1.02 H	347	65.80	39.60		
8	*5755.00	94.9 AV			1.02 H	347	55.30	39.60		
9	11510.00	62.6 PK	74.0	-11.4	1.00 H	53	10.90	51.70		
10	11510.00	48.6 AV	54.0	-5.4	1.00 H	53	-3.10	51.70		

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

	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	5360.00	60.0 PK	74.0	-14.0	1.08 V	21	21.20	38.80	
2	5360.00	51.2 AV	54.0	-2.8	1.08 V	21	12.40	38.80	
3	5400.00	59.0 PK	74.0	-15.0	1.07 V	5	20.10	38.90	
4	5400.00	49.3 AV	54.0	-4.7	1.07 V	5	10.40	38.90	
5	#5725.00	80.8 PK	94.7	-13.9	1.00 V	5	41.30	39.50	
6	#5725.00	70.3 AV	84.2	-13.9	1.00 V	5	30.80	39.50	
7	*5755.00	114.7 PK			1.00 V	359	75.10	39.60	
8	*5755.00	104.2 AV			1.00 V	359	64.60	39.60	
9	11510.00	61.5 PK	74.0	-12.5	1.00 V	46	9.80	51.70	
10	11510.00	47.9 AV	54.0	-6.1	1.00 V	46	-3.80	51.70	

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
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	5360.00	59.0 PK	74.0	-15.0	1.00 H	328	20.20	38.80		
2	5360.00	48.1 AV	54.0	-5.9	1.00 H	328	9.30	38.80		
3	5400.00	58.0 PK	74.0	-16.0	1.00 H	325	19.10	38.90		
4	5400.00	46.9 AV	54.0	-7.1	1.00 H	325	8.00	38.90		
5	*5795.00	104.5 PK			1.02 H	345	64.80	39.70		
6	*5795.00	94.4 AV			1.02 H	345	54.70	39.70		
7	#5850.00	56.6 PK	84.5	-27.9	1.00 H	286	16.80	39.80		
8	#5850.00	46.5 AV	74.4	-27.9	1.00 H	286	6.70	39.80		
9	11590.00	62.7 PK	74.0	-11.3	1.00 H	38	11.20	51.50		
10	11590.00	49.0 AV	54.0	-5.0	1.00 H	38	-2.50	51.50		

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu	
TEST MODE	B1			

	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	5360.00	61.5 PK	74.0	-12.5	1.08 V	21	22.70	38.80		
2	5360.00	51.1 AV	54.0	-2.9	1.08 V	21	12.30	38.80		
3	5400.00	60.6 PK	74.0	-13.4	1.07 V	5	21.70	38.90		
4	5400.00	49.2 AV	54.0	-4.8	1.07 V	5	10.30	38.90		
5	*5795.00	114.0 PK			1.00 V	21	74.30	39.70		
6	*5795.00	104.1 AV			1.00 V	21	64.40	39.70		
7	#5850.00	65.2 PK	94.0	-28.8	1.00 V	1	25.40	39.80		
8	#5850.00	55.3 AV	84.1	-28.8	1.00 V	1	15.50	39.80		
9	11590.00	61.6 PK	74.0	-12.4	1.00 V	72	10.10	51.50		
10	11590.00	48.0 AV	54.0	-6.0	1.00 V	72	-3.50	51.50		

- 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 limit value is defined as per 15.247.
- 7. "#":The radiated frequency is out the restricted band.



BELOW 1GHz WORST-CASE DATA: 802.11n(20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Wu	
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	199.05	35.3 QP	43.5	-8.2	1.24 H	148	24.20	11.10	
2	214.61	34.5 QP	43.5	-9.0	1.00 H	168	22.90	11.60	
3	374.04	33.4 QP	46.0	-12.6	1.00 H	14	16.50	16.90	
4	424.59	32.0 QP	46.0	-14.0	1.99 H	138	13.90	18.10	
5	624.85	30.7 QP	46.0	-15.3	1.24 H	6	8.40	22.30	
6	961.21	39.1 QP	54.0	-14.9	1.24 H	295	11.70	27.40	
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 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	37.68	29.6 QP	40.0	-10.4	1.00 V	291	16.30	13.30	
2	208.77	30.0 QP	43.5	-13.5	1.00 V	182	18.70	11.30	
3	374.04	35.0 QP	46.0	-11.0	1.24 V	206	18.10	16.90	
4	500.42	35.1 QP	46.0	-10.9	1.00 V	139	15.10	20.00	
5	624.85	31.5 QP	46.0	-14.5	1.50 V	246	9.20	22.30	
6	961.21	38.2 QP	54.0	-15.8	1.24 V	290	10.80	27.40	

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Wu	
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	107.67	31.7 QP	43.5	-11.8	1.50 H	250	21.30	10.40	
2	249.60	29.7 QP	46.0	-16.3	1.00 H	76	16.70	13.00	
3	414.87	29.4 QP	46.0	-16.6	1.50 H	169	11.50	17.90	
4	550.97	31.3 QP	46.0	-14.7	1.24 H	209	10.30	21.00	
5	675.40	31.3 QP	46.0	-14.7	1.00 H	148	8.50	22.80	
6	799.84	31.3 QP	46.0	-14.7	1.50 H	7	5.70	25.60	
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	31.88	34.5 QP	40.0	-5.5	1.00 V	294	22.50	12.00	
2	70.73	30.7 QP	40.0	-9.3	1.50 V	185	18.60	12.10	
3	107.67	29.5 QP	43.5	-14.0	1.00 V	51	19.10	10.40	
4	399.31	30.6 QP	46.0	-15.4	1.25 V	69	13.10	17.50	
5	500.42	33.2 QP	46.0	-12.8	1.50 V	193	13.20	20.00	
6	799.84	31.0 QP	46.0	-15.0	1.00 V	110	5.40	25.60	

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Wu	
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	125.17	32.2 QP	43.5	-11.3	1.50 H	261	19.90	12.30	
2	249.60	33.9 QP	46.0	-12.1	1.00 H	219	20.90	13.00	
3	374.04	39.7 QP	46.0	-6.3	1.00 H	143	22.80	16.90	
4	405.15	33.0 QP	46.0	-13.0	1.00 H	12	15.30	17.70	
5	624.85	42.5 QP	46.0	-3.5	1.25 H	352	20.20	22.30	
6	961.21	41.2 QP	54.0	-12.8	1.25 H	294	13.80	27.40	
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	103.78	30.0 QP	43.5	-13.5	1.25 V	187	20.10	9.90	
2	374.04	40.6 QP	46.0	-5.4	1.00 V	240	23.70	16.90	
3	624.85	37.7 QP	46.0	-8.3	1.00 V	263	15.40	22.30	
4	751.23	33.8 QP	46.0	-12.2	1.25 V	227	9.40	24.40	
5	899.00	37.6 QP	46.0	-8.4	1.50 V	91	10.80	26.80	
6	961.21	43.9 QP	54.0	-10.1	1.00 V	285	16.50	27.40	

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Wu	
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	125.17	37.7 QP	43.5	-5.8	1.49 H	253	25.40	12.30		
2	249.60	32.0 QP	46.0	-14.0	1.00 H	227	19.00	13.00		
3	374.04	34.7 QP	46.0	-11.3	1.00 H	118	17.80	16.90		
4	625.01	42.9 QP	46.0	-3.1	1.21 H	149	20.50	22.40		
5	751.23	38.1 QP	46.0	-7.9	1.00 H	163	13.70	24.40		
6	875.67	37.5 QP	46.0	-8.5	1.49 H	142	11.00	26.50		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
	(dBuV/m) HEIGHT (m) (dBuV)									
NO.	FREQ. (MHz)			MARGIN (dB)						
NO.	FREQ. (MHz) 64.90	LEVEL		MARGIN (dB) -7.0		ANGLE		FACTOR		
	` ,	LEVEL (dBuV/m)	(dBuV/m)	` ′	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	64.90	LEVEL (dBuV/m) 33.0 QP	(dBuV/m) 40.0	-7.0	HEIGHT (m) 1.00 V	ANGLE (Degree)	(dBuV)	FACTOR (dB/m) 12.90		
1 2	64.90 125.17	LEVEL (dBuV/m) 33.0 QP 36.2 QP	(dBuV/m) 40.0 43.5	-7.0 -7.3	1.00 V 1.25 V	ANGLE (Degree) 1 59	(dBuV) 20.10 23.90	FACTOR (dB/m) 12.90 12.30		
1 2 3	64.90 125.17 374.04	LEVEL (dBuV/m) 33.0 QP 36.2 QP 37.0 QP	(dBuV/m) 40.0 43.5 46.0	-7.0 -7.3 -9.0	1.00 V 1.25 V 1.00 V	ANGLE (Degree) 1 59 174	(dBuV) 20.10 23.90 20.10	FACTOR (dB/m) 12.90 12.30 16.90		

- 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.



5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED	LIMIT (dBµV)
	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.

5.2.2 T EST INSTRUMENTS

Same as item 4.2.2.

5.2.3 TEST PROCEDURES

Same as item 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as item 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



5.2.7 TEST RESULTS

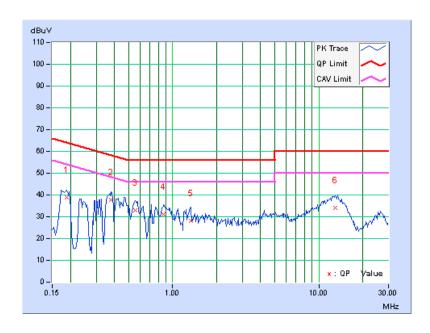
CONDUCTED WORST-CASE DATA: 802.11n(20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

No	Freq.	Corr. Factor	Reading Value		Levei		Limit		Mar	gin
NO		racioi	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	0.21	38.77	23.54	38.98	23.75	64.08	54.08	-25.10	-30.33
2	0.38047	0.17	37.73	24.47	37.90	24.64	58.27	48.27	-20.37	-23.63
3	0.55625	0.17	32.68	19.40	32.85	19.57	56.00	46.00	-23.15	-26.43
4	0.86875	0.20	30.92	16.63	31.12	16.83	56.00	46.00	-24.88	-29.17
5	1.32813	0.22	27.98	15.18	28.20	15.40	56.00	46.00	-27.80	-30.60
6	13.01563	0.66	33.36	25.65	34.02	26.31	60.00	50.00	-25.98	-23.69

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.

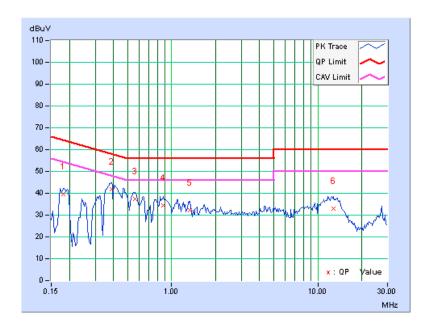




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

Na	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No	Factor		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18125	0.28	39.34	30.24	39.62	30.52	64.43	54.43	-24.81	-23.91
2	0.38828	0.25	41.55	27.13	41.80	27.38	58.10	48.10	-16.30	-20.72
3	0.56406	0.26	37.27	25.24	37.53	25.50	56.00	46.00	-18.47	-20.50
4	0.87656	0.29	34.19	23.91	34.48	24.20	56.00	46.00	-21.52	-21.80
5	1.33594	0.31	31.78	20.86	32.09	21.17	56.00	46.00	-23.91	-24.83
6	12.86328	0.75	32.12	24.09	32.87	24.84	60.00	50.00	-27.13	-25.16

- 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.

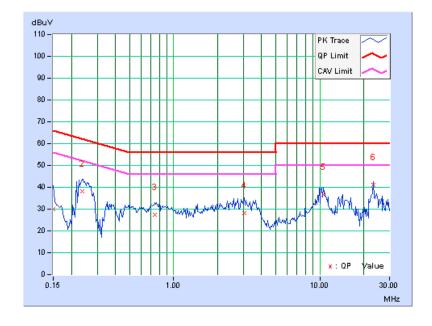




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

Na	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin		
No		Factor		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.15000	0.11	29.81	20.22	29.92	20.33	66.00	56.00	-36.08	-35.67	
2	0.23594	0.13	38.01	23.99	38.14	24.12	62.24	52.24	-24.10	-28.12	
3	0.74375	0.16	27.10	20.01	27.26	20.17	56.00	46.00	-28.74	-25.83	
4	3.05078	0.28	28.01	20.89	28.29	21.17	56.00	46.00	-27.71	-24.83	
5	10.61328	0.67	36.14	34.14	36.81	34.81	60.00	50.00	-23.19	-15.19	
6	23.12891	1.32	39.76	37.74	41.08	39.06	60.00	50.00	-18.92	-10.94	

- 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.

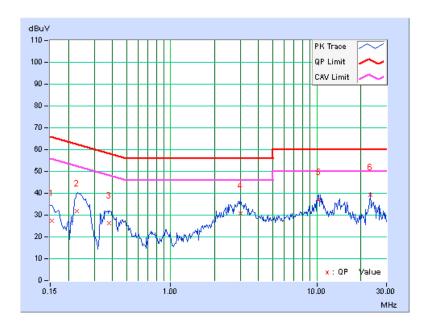




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

No Freq.		Corr. Factor	Readin	g Value		ssion vel	Lir	nit	Mar	gin
No		ractor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.13	27.26	21.94	27.39	22.07	65.79	55.79	-38.40	-33.72
2	0.22812	0.14	31.79	18.41	31.93	18.55	62.52	52.52	-30.59	-33.97
3	0.38047	0.15	26.18	19.43	26.33	19.58	58.27	48.27	-31.94	-28.69
4	3.02344	0.29	30.38	22.66	30.67	22.95	56.00	46.00	-25.33	-23.05
5	10.36328	0.60	36.33	35.00	36.93	35.60	60.00	50.00	-23.07	-14.40
6	23.12891	1.08	38.18	36.12	39.26	37.20	60.00	50.00	-20.74	-12.80

- 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.

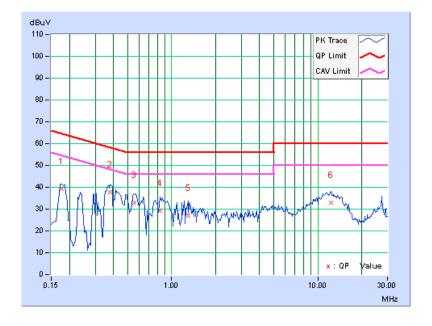




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B1		

Na	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No	Factor		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17734	0.19	39.20	25.91	39.39	26.10	64.61	54.61	-25.22	-28.51
2	0.38047	0.17	37.44	24.33	37.61	24.50	58.27	48.27	-20.66	-23.77
3	0.55625	0.17	32.96	18.04	33.13	18.21	56.00	46.00	-22.87	-27.79
4	0.83359	0.20	29.10	13.98	29.30	14.18	56.00	46.00	-26.70	-31.82
5	1.29688	0.22	26.68	15.58	26.90	15.80	56.00	46.00	-29.10	-30.20
6	12.25391	0.64	32.45	24.85	33.09	25.49	60.00	50.00	-26.91	-24.51

- 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.

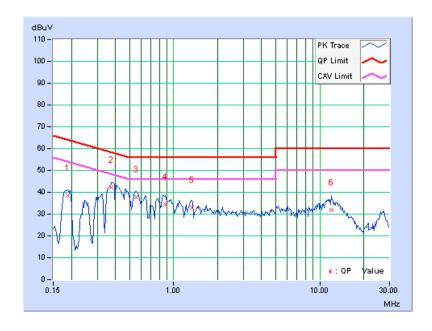




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B1		

Na	Frea	Corr.	Readin	g Value		ssion vel	Lir	nit	Mar	gin
No	Factor		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	0.29	38.22	28.82	38.51	29.11	64.08	54.08	-25.56	-24.96
2	0.37656	0.26	41.88	31.62	42.14	31.88	58.35	48.35	-16.22	-16.48
3	0.55625	0.26	37.35	25.64	37.61	25.90	56.00	46.00	-18.39	-20.10
4	0.87656	0.29	34.07	23.91	34.36	24.20	56.00	46.00	-21.64	-21.80
5	1.33203	0.31	32.78	21.00	33.09	21.31	56.00	46.00	-22.91	-24.69
6	11.97266	0.72	31.27	23.56	31.99	24.28	60.00	50.00	-28.01	-25.72

- 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.

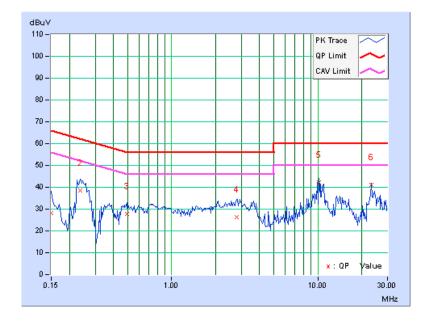




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B2		

Na	Freq. Corr. Factor	Reading Value		Emission Level		Limit		Margin		
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.11	28.21	19.90	28.32	20.01	66.00	56.00	-37.68	-35.99
2	0.23594	0.13	38.50	25.85	38.63	25.98	62.24	52.24	-23.61	-26.26
3	0.49375	0.14	27.60	21.55	27.74	21.69	56.10	46.10	-28.37	-24.42
4	2.78125	0.27	26.18	20.03	26.45	20.30	56.00	46.00	-29.55	-25.70
5	10.18359	0.65	41.68	41.47	42.33	42.12	60.00	50.00	-17.67	-7.88
6	23.12891	1.32	39.74	37.85	41.06	39.17	60.00	50.00	-18.94	-10.83

- 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.

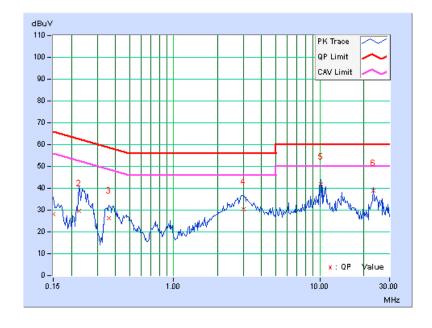




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B2		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	27.87	21.07	27.99	21.19	66.00	56.00	-38.01	-34.81
2	0.22422	0.14	29.63	15.87	29.77	16.01	62.66	52.66	-32.89	-36.65
3	0.36094	0.15	26.03	18.78	26.18	18.93	58.71	48.71	-32.53	-29.78
4	3.02734	0.29	30.26	22.96	30.55	23.25	56.00	46.00	-25.45	-22.75
5	10.18359	0.60	41.08	40.92	41.68	41.52	60.00	50.00	-18.32	-8.48
6	23.12891	1.08	37.92	36.00	39.00	37.08	60.00	50.00	-21.00	-12.92

- 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.





	782B
6. PHOTOGRAPHS OF THE TEST CONFIGURATION	
Please refer to the attached file (Test Setup Photo).	



7. 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 Hsin Chu EMC/RF Lab

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26051924 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

Web Site: www.adt.com.tw

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



8. 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---