

PARTIAL FCC TEST REPORT (WLAN)

REPORT NO.: RF120905C13
MODEL NO.: RZ09-0093
FCC ID: OY7-RZ090093
RECEIVED: Sep. 05, 2012
TESTED: Sep. 23 ~ Sep. 25, 2012
ISSUED: Sep. 28, 2012

APPLICANT: RAZER USA LTD.

ADDRESS: 2035 Corte Del Nogal, Suite 101. Carlsbad CA
92011. USA

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

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

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

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



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

TABLE OF CONTENTS

RELEASE CONTROL RECORD.....	3
1. CERTIFICATION	4
2. SUMMARY OF TEST RESULTS	5
2.1 MEASUREMENT UNCERTAINTY.....	5
3. GENERAL INFORMATION.....	6
3.1 GENERAL DESCRIPTION OF EUT	6
3.2 DESCRIPTION OF TEST MODES.....	7
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	8
3.3 DESCRIPTION OF SUPPORT UNITS	9
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST	9
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS	10
4. TEST TYPES AND RESULTS	11
4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT.....	11
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	11
4.1.2 TEST INSTRUMENTS.....	12
4.1.3 TEST PROCEDURES	13
4.1.4 DEVIATION FROM TEST STANDARD	13
4.1.5 TEST SETUP.....	14
4.1.6 EUT OPERATING CONDITIONS	14
4.1.7 TEST RESULTS	15
4.2 CONDUCTED EMISSION MEASUREMENT	35
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT.....	35
4.2.2 TEST INSTRUMENTS.....	35
4.2.3 TEST PROCEDURES	36
4.2.4 DEVIATION FROM TEST STANDARD	36
4.2.5 TEST SETUP.....	37
4.2.6 EUT OPERATING CONDITIONS	37
4.2.7 TEST RESULTS	38
5. PHOTOGRAPHS OF THE TEST CONFIGURATION.....	42
6. INFORMATION ON THE TESTING LABORATORIES	43
7. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	44



A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120905C13	Original release	Sep. 28, 2012



A D T

1. CERTIFICATION

PRODUCT: Gaming Tablet

MODEL NO.: RZ09-0093

BRAND: Razer

APPLICANT: RAZER USA LTD.

TESTED: Sep. 23 ~ Sep. 25, 2012

TEST SAMPLE: Identical Prototype

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

ANSI C63.10-2009

The above equipment (model: RZ09-0093) 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 : Joanna Wang , **DATE** : Sep. 28, 2012
Joanna Wang / Supervisor

APPROVED BY : Gary Chang , **DATE** : Sep. 28, 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 -14.04dB at 0.17734MHz.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.8dB at 2390.00MHz.
15.247(d)	Band Edge Measurement	N/A	Refer to NOTE below.
15.247(a)(2)	6dB bandwidth	N/A	Refer to NOTE below.
15.247(b)	Conducted power	N/A	Refer to NOTE below.
15.247(e)	Power Spectral Density	N/A	Refer to NOTE below.

NOTE: Test items for conducted and radiated emission test were performed for this report. Other testing data please refer to module (Brand: Intel, Model: 2230BNHWW, FCC ID: PD92230BNH) Report No.: R85141.

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	2.44dB
Radiated emissions	30MHz ~ 200MHz	3.34dB
	200MHz ~1000MHz	3.35dB
	1GHz ~ 18GHz	2.26dB
	18GHz ~ 40GHz	1.94dB

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	Gaming Tablet
MODEL NO.	RZ09-0093
POWER SUPPLY	19.0Vdc (Adapter) 7.4Vdc (Li-ion battery)
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 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	2412 ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz)
ANTENNA TYPE	PIFA antenna with 1.28dBi gain
ANTENNA CONNECTOR	NA
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

- The EUT contains following accessories.

AC Adapter	Brand Name	Chicony
	Model Name	A11-065N1A
	Power Rating	I/P: 100-240Vac, 50~60Hz, 1.7A; O/P: 19Vdc, 3.42A
	POWER LINE	AC: 2m non-shielded cable, with one ferrite core DC: 1m non-shielded cable, without ferrite core
Battery	Brand Name	Simplo
	Model Name	RC30-0093
	Power Rating	7.4Vdc, 5600mAh
	Type	Li-ion
Battery (Controller)	Brand Name	Simplo
	Model Name	RC81-0112
	Power Rating	14.8Vdc, 2800mAh
	Type	Li-ion
Controller	Brand Name	Razer
	Model Name	RC81-0109
WLAN+BT Combo Module	Brand Name	Intel
	Model Name	2230BNHMW
	FCC ID	PD92230BNH
	IC	1000M-2230BNH

2. 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)	1TX / 2TX
802.11n (40MHz)	1TX / 2TX

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

3.2 DESCRIPTION OF TEST MODES

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		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE $\geq$ 1G	RE $<$ 1G	PLC	
A	√	√	√	EUT + controller
B	-	√	√	EUT + cradle

Where **RE $\geq$ 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)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2
A	802.11n (40MHz)	3 to 9	3, 6, 9	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)
A, B	802.11g	1 to 11	6	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11g	1 to 11	6	OFDM	BPSK	6.0

TEST CONDITION:

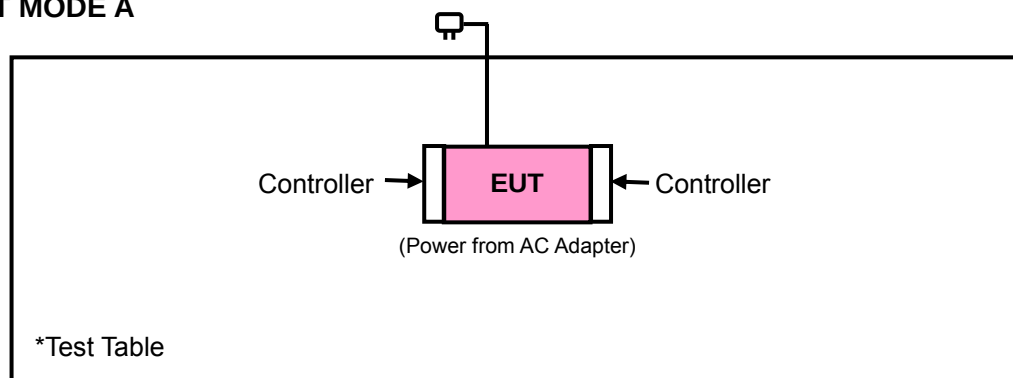
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
PLC	25deg. C, 68%RH	120Vac, 60Hz	Sun Lin

3.3 DESCRIPTION OF SUPPORT UNITS

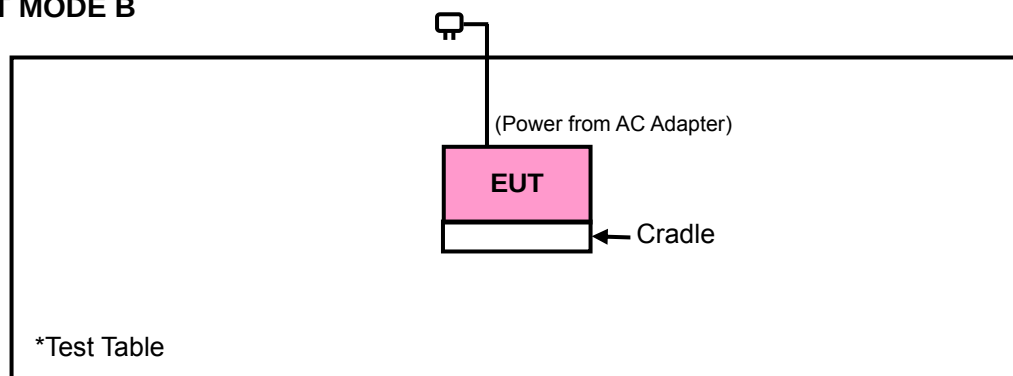
The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



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)

ANSI C63.10-2009

KDB 558074 D01 DTS Meas Guidance v01

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

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

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 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.

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. 06, 2012	Aug. 05, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Feb. 03, 2012	Feb. 02, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	9120D	209	Sep. 03, 2012	Sep. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
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. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6+309224/ 4	Aug. 28, 2012	Aug. 27, 2013
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

- 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. Height of receiving antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to 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.

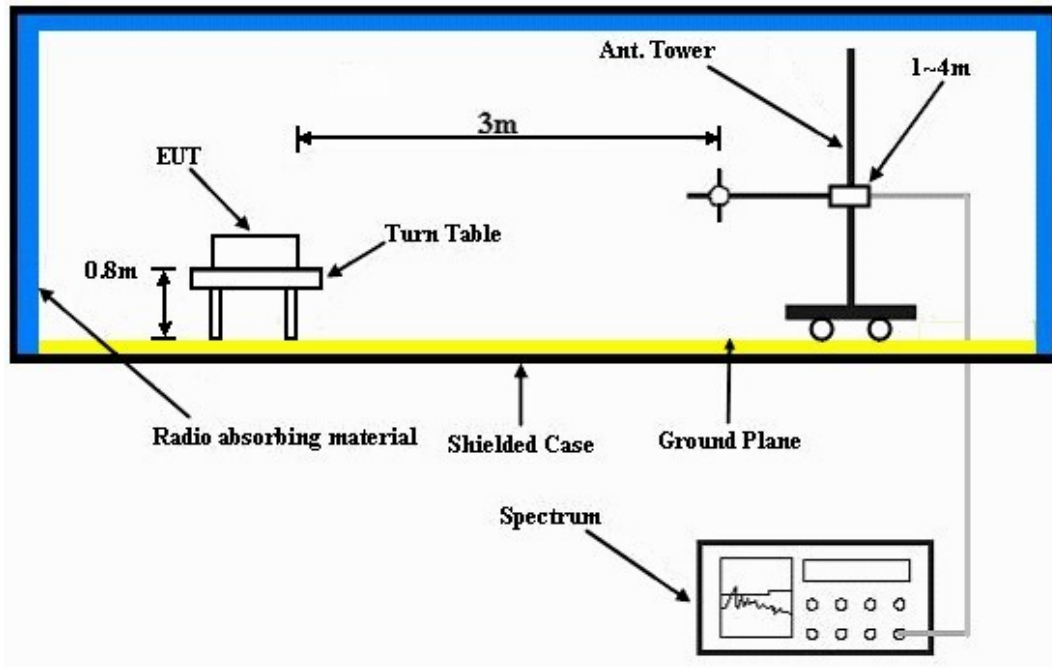
NOTE:

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 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz 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

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

4.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA :

802.11b

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

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	55.6 PK	74.0	-18.4	1.00 H	293	24.80	30.80
2	2390.00	44.6 AV	54.0	-9.4	1.00 H	293	13.80	30.80
3	*2412.00	105.3 PK			1.00 H	292	74.40	30.90
4	*2412.00	101.0 AV			1.00 H	292	70.10	30.90
5	4824.00	47.4 PK	74.0	-26.6	1.00 H	21	10.40	37.00
6	4824.00	34.7 AV	54.0	-19.3	1.00 H	21	-2.30	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	53.8 PK	74.0	-20.2	1.47 V	159	23.00	30.80
2	2390.00	41.8 AV	54.0	-12.2	1.47 V	159	11.00	30.80
3	*2412.00	98.9 PK			1.47 V	159	68.00	30.90
4	*2412.00	95.5 AV			1.47 V	159	64.60	30.90
5	4824.00	47.8 PK	74.0	-26.2	1.00 V	236	10.80	37.00
6	4824.00	34.5 AV	54.0	-19.5	1.00 V	236	-2.50	37.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	108.1 PK			1.23 H	284	77.10	31.00
2	*2437.00	103.5 AV			1.23 H	284	72.50	31.00
3	#3249.00	44.7 PK	88.1	-43.4	1.00 H	26	11.70	33.00
4	#3249.00	32.0 AV	83.5	-51.5	1.00 H	26	-1.00	33.00
5	4874.00	46.6 PK	74.0	-27.4	1.00 H	63	9.50	37.10
6	4874.00	34.2 AV	54.0	-19.8	1.00 H	63	-2.90	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	100.1 PK			1.43 V	156	69.10	31.00
2	*2437.00	95.8 AV			1.43 V	156	64.80	31.00
3	#3249.00	45.4 PK	80.1	-34.7	1.00 V	156	12.40	33.00
4	#3249.00	31.5 AV	75.8	-44.3	1.00 V	156	-1.50	33.00
5	4874.00	47.0 PK	74.0	-27.0	1.00 V	15	9.90	37.10
6	4874.00	34.5 AV	54.0	-19.5	1.00 V	15	-2.60	37.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	107.7 PK			1.22 H	284	76.60	31.10
2	*2462.00	103.1 AV			1.22 H	284	72.00	31.10
3	2483.50	58.3 PK	74.0	-15.7	1.22 H	293	27.10	31.20
4	2483.50	49.0 AV	54.0	-5.0	1.22 H	293	17.80	31.20
5	4924.00	48.0 PK	74.0	-26.0	1.00 H	63	10.80	37.20
6	4924.00	33.9 AV	54.0	-20.1	1.00 H	63	-3.30	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	101.7 PK			1.19 V	162	70.60	31.10
2	*2462.00	97.2 AV			1.19 V	162	66.10	31.10
3	2483.50	55.0 PK	74.0	-19.0	1.19 V	165	23.80	31.20
4	2483.50	45.1 AV	54.0	-8.9	1.19 V	165	13.90	31.20
5	4924.00	46.9 PK	74.0	-27.1	1.00 V	147	9.70	37.20
6	4924.00	34.4 AV	54.0	-19.6	1.00 V	147	-2.80	37.20

REMARKS:

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

802.11g

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

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	70.1 PK	74.0	-3.9	1.24 H	285	39.30	30.80
2	2390.00	50.9 AV	54.0	-3.1	1.24 H	285	20.10	30.80
3	*2412.00	109.5 PK			1.24 H	286	78.60	30.90
4	*2412.00	99.5 AV			1.24 H	286	68.60	30.90
5	4824.00	46.5 PK	74.0	-27.5	1.00 H	125	9.50	37.00
6	4824.00	33.7 AV	54.0	-20.3	1.00 H	125	-3.30	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.4 PK	74.0	-10.6	1.22 V	161	32.60	30.80
2	2390.00	46.7 AV	54.0	-7.3	1.22 V	161	15.90	30.80
3	*2412.00	103.0 PK			1.22 V	161	72.10	30.90
4	*2412.00	93.0 AV			1.22 V	161	62.10	30.90
5	4824.00	46.8 PK	74.0	-27.2	1.00 V	52	9.80	37.00
6	4824.00	33.9 AV	54.0	-20.1	1.00 V	52	-3.10	37.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	111.6 PK			1.22 H	285	80.60	31.00
2	*2437.00	101.9 AV			1.22 H	285	70.90	31.00
3	#3249.00	45.6 PK	91.6	-46.0	1.00 H	13	12.60	33.00
4	#3249.00	31.3 AV	81.9	-50.6	1.00 H	13	-1.70	33.00
5	4874.00	47.2 PK	74.0	-26.8	1.00 H	155	10.10	37.10
6	4874.00	33.7 AV	54.0	-20.3	1.00 H	155	-3.40	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	104.6 PK			1.47 V	161	73.60	31.00
2	*2437.00	94.5 AV			1.47 V	161	63.50	31.00
3	#3249.00	44.7 PK	84.6	-39.9	1.00 V	58	11.70	33.00
4	#3249.00	31.5 AV	74.5	-43.0	1.00 V	58	-1.50	33.00
5	4874.00	46.8 PK	74.0	-27.2	1.00 V	152	9.70	37.10
6	4874.00	33.6 AV	54.0	-20.4	1.00 V	152	-3.50	37.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	109.7 PK			1.19 H	281	78.60	31.10
2	*2462.00	100.0 AV			1.19 H	281	68.90	31.10
3	2483.50	65.8 PK	74.0	-8.2	1.19 H	281	34.60	31.20
4	2483.50	52.8 AV	54.0	-1.2	1.19 H	281	21.60	31.20
5	4924.00	47.0 PK	74.0	-27.0	1.00 H	255	9.80	37.20
6	4924.00	34.3 AV	54.0	-19.7	1.00 H	255	-2.90	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	103.2 PK			1.17 V	168	72.10	31.10
2	*2462.00	93.5 AV			1.17 V	168	62.40	31.10
3	2483.50	60.2 PK	74.0	-13.8	1.17 V	166	29.00	31.20
4	2483.50	47.8 AV	54.0	-6.2	1.17 V	166	16.60	31.20
5	4924.00	47.2 PK	74.0	-26.8	1.00 V	15	10.00	37.20
6	4924.00	34.1 AV	54.0	-19.9	1.00 V	15	-3.10	37.20

REMARKS:

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

802.11n (20MHz): 1TX

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

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	72.4 PK	74.0	-1.6	1.25 H	285	41.60	30.80
2	2390.00	53.2 AV	54.0	-0.8	1.25 H	285	22.40	30.80
3	*2412.00	108.9 PK			1.25 H	293	78.00	30.90
4	*2412.00	98.6 AV			1.25 H	293	67.70	30.90
5	4824.00	46.9 PK	74.0	-27.1	1.00 H	33	9.90	37.00
6	4824.00	34.3 AV	54.0	-19.7	1.00 H	33	-2.70	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.2 PK	74.0	-7.8	1.45 V	163	35.40	30.80
2	2390.00	47.2 AV	54.0	-6.8	1.45 V	163	16.40	30.80
3	*2412.00	101.1 PK			1.45 V	166	70.20	30.90
4	*2412.00	91.3 AV			1.45 V	166	60.40	30.90
5	4824.00	47.8 PK	74.0	-26.2	1.00 V	15	10.80	37.00
6	4824.00	34.3 AV	54.0	-19.7	1.00 V	15	-2.70	37.00

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	111.5 PK			1.21 H	286	80.50	31.00
2	*2437.00	102.0 AV			1.21 H	286	71.00	31.00
3	#3249.00	46.2 PK	91.5	-45.3	1.00 H	25	13.20	33.00
4	#3249.00	32.8 AV	82.0	-49.2	1.00 H	25	-0.20	33.00
5	4874.00	48.2 PK	74.0	-25.8	1.00 H	169	11.10	37.10
6	4874.00	34.5 AV	54.0	-19.5	1.00 H	169	-2.60	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	103.1 PK			1.00 V	164	72.10	31.00
2	*2437.00	94.0 AV			1.00 V	164	63.00	31.00
3	#3249.00	45.3 PK	83.1	-37.8	1.00 V	18	12.30	33.00
4	#3249.00	32.5 AV	74.0	-41.5	1.00 V	18	-0.50	33.00
5	4874.00	47.2 PK	74.0	-26.8	1.00 V	166	10.10	37.10
6	4874.00	34.5 AV	54.0	-19.5	1.00 V	166	-2.60	37.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	108.9 PK			1.22 H	283	77.80	31.10
2	*2462.00	98.5 AV			1.22 H	283	67.40	31.10
3	2483.50	70.4 PK	74.0	-3.6	1.22 H	282	39.20	31.20
4	2483.50	52.4 AV	54.0	-1.6	1.22 H	282	21.20	31.20
5	4924.00	47.5 PK	74.0	-26.5	1.00 H	85	10.30	37.20
6	4924.00	35.3 AV	54.0	-18.7	1.00 H	85	-1.90	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	102.6 PK			1.17 V	165	71.50	31.10
2	*2462.00	92.4 AV			1.17 V	165	61.30	31.10
3	2483.50	61.0 PK	74.0	-13.0	1.17 V	163	29.80	31.20
4	2483.50	48.6 AV	54.0	-5.4	1.17 V	163	17.40	31.20
5	4924.00	47.3 PK	74.0	-26.7	1.00 V	196	10.10	37.20
6	4924.00	36.4 AV	54.0	-17.6	1.00 V	196	-0.80	37.20

REMARKS:

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

802.11n (20MHz): 2TX

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

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	65.2 PK	74.0	-8.8	1.22 H	285	34.40	30.80
2	2390.00	52.6 AV	54.0	-1.4	1.22 H	285	21.80	30.80
3	*2412.00	107.6 PK			1.22 H	285	76.70	30.90
4	*2412.00	95.8 AV			1.22 H	285	64.90	30.90
5	4824.00	46.4 PK	74.0	-27.6	1.00 H	123	9.40	37.00
6	4824.00	34.0 AV	54.0	-20.0	1.00 H	123	-3.00	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	59.0 PK	74.0	-15.0	1.25 V	192	28.20	30.80
2	2390.00	45.6 AV	54.0	-8.4	1.25 V	192	14.80	30.80
3	*2412.00	99.8 PK			1.25 V	192	68.90	30.90
4	*2412.00	88.7 AV			1.25 V	192	57.80	30.90
5	4824.00	46.5 PK	74.0	-27.5	1.00 V	2	9.50	37.00
6	4824.00	34.3 AV	54.0	-19.7	1.00 V	2	-2.70	37.00

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	54.3 PK	74.0	-19.7	1.00 H	26	23.50	30.80
2	2390.00	43.4 AV	54.0	-10.6	1.00 H	26	12.60	30.80
3	*2437.00	108.3 PK			1.00 H	27	77.30	31.00
4	*2437.00	97.4 AV			1.00 H	27	66.40	31.00
5	4874.00	46.5 PK	74.0	-27.5	1.00 H	96	9.40	37.10
6	4874.00	33.9 AV	54.0	-20.1	1.00 H	96	-3.20	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	52.1 PK	74.0	-21.9	1.00 V	33	21.30	30.80
2	2390.00	42.2 AV	54.0	-11.8	1.00 V	33	11.40	30.80
3	*2437.00	100.3 PK			1.02 V	3	69.30	31.00
4	*2437.00	89.5 AV			1.02 V	3	58.50	31.00
5	4874.00	46.4 PK	74.0	-27.6	1.00 V	55	9.30	37.10
6	4874.00	34.2 AV	54.0	-19.8	1.00 V	55	-2.90	37.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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			1.00 H	15	76.30	31.10
2	*2462.00	95.8 AV			1.00 H	15	64.70	31.10
3	2483.50	66.8 PK	74.0	-7.2	1.00 H	15	35.60	31.20
4	2483.50	53.0 AV	54.0	-1.0	1.00 H	15	21.80	31.20
5	4924.00	47.0 PK	74.0	-27.0	1.15 H	2	9.80	37.20
6	4924.00	34.0 AV	54.0	-20.0	1.15 H	2	-3.20	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	99.5 PK			1.00 V	36	68.40	31.10
2	*2462.00	87.9 AV			1.00 V	36	56.80	31.10
3	2483.50	57.9 PK	74.0	-16.1	1.00 V	36	26.70	31.20
4	2483.50	47.1 AV	54.0	-6.9	1.00 V	36	15.90	31.20
5	4924.00	46.8 PK	74.0	-27.2	1.00 V	66	9.60	37.20
6	4924.00	34.6 AV	54.0	-19.4	1.00 V	66	-2.60	37.20

REMARKS:

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

802.11n (40MHz): 1TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	68.4 PK	74.0	-5.6	1.00 H	286	37.60	30.80
2	2390.00	52.8 AV	54.0	-1.2	1.00 H	286	22.00	30.80
3	*2422.00	101.3 PK			1.00 H	286	70.40	30.90
4	*2422.00	90.9 AV			1.00 H	286	60.00	30.90
5	4844.00	47.2 PK	74.0	-26.8	1.00 H	258	10.20	37.00
6	4844.00	34.5 AV	54.0	-19.5	1.00 H	258	-2.50	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.8 PK	74.0	-7.2	1.20 V	161	36.00	30.80
2	2390.00	48.3 AV	54.0	-5.7	1.20 V	161	17.50	30.80
3	*2422.00	95.1 PK			1.20 V	161	64.20	30.90
4	*2422.00	85.0 AV			1.20 V	161	54.10	30.90
5	4844.00	46.5 PK	74.0	-27.5	1.00 V	21	9.50	37.00
6	4844.00	34.8 AV	54.0	-19.2	1.00 V	21	-2.20	37.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	68.8 PK	74.0	-5.2	1.23 H	283	38.00	30.80
2	2390.00	52.8 AV	54.0	-1.2	1.23 H	283	22.00	30.80
3	*2437.00	106.0 PK			1.23 H	284	75.00	31.00
4	*2437.00	96.0 AV			1.23 H	284	65.00	31.00
5	4874.00	46.2 PK	74.0	-27.8	1.00 H	158	9.10	37.10
6	4874.00	34.5 AV	54.0	-19.5	1.00 H	158	-2.60	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.9 PK	74.0	-11.1	1.20 V	161	32.10	30.80
2	2390.00	47.6 AV	54.0	-6.4	1.20 V	161	16.80	30.80
3	*2437.00	98.8 PK			1.21 V	161	67.80	31.00
4	*2437.00	88.5 AV			1.21 V	161	57.50	31.00
5	4874.00	46.9 PK	74.0	-27.1	1.00 V	255	9.80	37.10
6	4874.00	35.3 AV	54.0	-18.7	1.00 V	255	-1.80	37.10

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	*2452.00	102.8 PK			1.18 H	293	71.70	31.10
2	*2452.00	92.8 AV			1.18 H	293	61.70	31.10
3	2483.50	71.8 PK	74.0	-2.2	1.18 H	285	40.60	31.20
4	2483.50	52.5 AV	54.0	-1.5	1.18 H	285	21.30	31.20
5	4904.00	46.6 PK	74.0	-27.4	1.00 H	9	9.40	37.20
6	4904.00	34.0 AV	54.0	-20.0	1.00 H	9	-3.20	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	96.8 PK			1.19 V	161	65.70	31.10
2	*2452.00	86.8 AV			1.19 V	161	55.70	31.10
3	2483.50	60.3 PK	74.0	-13.7	1.19 V	161	29.10	31.20
4	2483.50	48.4 AV	54.0	-5.6	1.19 V	161	17.20	31.20
5	4904.00	44.4 PK	74.0	-29.6	1.00 V	2	7.20	37.20
6	4904.00	34.3 AV	54.0	-19.7	1.00 V	2	-2.90	37.20

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

802.11n (40MHz): 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	63.8 PK	74.0	-10.2	1.02 H	16	33.00	30.80
2	2390.00	52.3 AV	54.0	-1.7	1.02 H	16	21.50	30.80
3	*2422.00	100.1 PK			1.00 H	17	69.20	30.90
4	*2422.00	90.6 AV			1.00 H	17	59.70	30.90
5	4844.00	46.0 PK	74.0	-28.0	1.00 H	58	9.00	37.00
6	4844.00	33.4 AV	54.0	-20.6	1.00 H	58	-3.60	37.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.3 PK	74.0	-15.7	1.00 V	194	27.50	30.80
2	2390.00	45.6 AV	54.0	-8.4	1.00 V	194	14.80	30.80
3	*2422.00	93.8 PK			1.00 V	201	62.90	30.90
4	*2422.00	84.2 AV			1.00 V	201	53.30	30.90
5	4844.00	48.1 PK	74.0	-25.9	1.00 V	231	11.10	37.00
6	4844.00	34.2 AV	54.0	-19.8	1.00 V	231	-2.80	37.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	67.4 PK	74.0	-6.6	1.00 H	18	36.60	30.80
2	2390.00	53.0 AV	54.0	-1.0	1.00 H	18	22.20	30.80
3	*2437.00	105.4 PK			1.00 H	18	74.40	31.00
4	*2437.00	95.2 AV			1.00 H	18	64.20	31.00
5	4874.00	47.0 PK	74.0	-27.0	1.48 H	36	9.90	37.10
6	4874.00	33.8 AV	54.0	-20.2	1.48 H	36	-3.30	37.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	59.1 PK	74.0	-14.9	1.00 V	195	28.30	30.80
2	2390.00	47.7 AV	54.0	-6.3	1.00 V	195	16.90	30.80
3	*2437.00	97.8 PK			1.00 V	199	66.80	31.00
4	*2437.00	87.1 AV			1.00 V	199	56.10	31.00
5	4874.00	47.4 PK	74.0	-26.6	1.00 V	155	10.30	37.10
6	4874.00	34.9 AV	54.0	-19.1	1.00 V	155	-2.20	37.10

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	*2452.00	100.9 PK			1.44 H	17	69.80	31.10
2	*2452.00	91.1 AV			1.44 H	17	60.00	31.10
3	2483.50	63.9 PK	74.0	-10.1	1.44 H	15	32.70	31.20
4	2483.50	52.5 AV	54.0	-1.5	1.44 H	15	21.30	31.20
5	4904.00	47.6 PK	74.0	-26.4	1.00 H	55	10.40	37.20
6	4904.00	34.3 AV	54.0	-19.7	1.00 H	55	-2.90	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	93.1 PK			1.00 V	169	62.00	31.10
2	*2452.00	81.7 AV			1.00 V	169	50.60	31.10
3	2483.50	56.2 PK	74.0	-17.8	1.00 V	168	25.00	31.20
4	2483.50	46.3 AV	54.0	-7.7	1.00 V	168	15.10	31.20
5	4904.00	47.6 PK	74.0	-26.4	1.00 V	59	10.40	37.20
6	4904.00	34.0 AV	54.0	-20.0	1.00 V	59	-3.20	37.20

REMARKS:

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

BELOW 1GHz WORST-CASE DATA : 802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	A		

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	144.40	42.0 QP	43.5	-1.5	2.00 H	291	28.20	13.80
2	278.70	40.8 QP	46.0	-5.2	1.00 H	186	26.70	14.10
3	379.90	38.3 QP	46.0	-7.7	1.00 H	152	21.30	17.00
4	514.00	35.1 QP	46.0	-10.9	1.50 H	152	14.80	20.30
5	543.20	33.6 QP	46.0	-12.4	1.50 H	138	12.70	20.90
6	799.80	36.1 QP	46.0	-9.9	1.00 H	137	10.50	25.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.10	33.7 QP	40.0	-6.3	1.74 V	15	20.10	13.60
2	88.20	34.1 QP	43.5	-9.4	1.24 V	166	25.60	8.50
3	150.40	34.3 QP	43.5	-9.2	1.00 V	204	20.20	14.10
4	261.30	40.5 QP	46.0	-5.5	1.74 V	15	27.00	13.50
5	449.90	42.1 QP	46.0	-3.9	1.00 V	301	23.40	18.70
6	799.80	31.3 QP	46.0	-14.7	1.49 V	281	5.70	25.60

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	B		

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	187.40	33.7 QP	43.5	-9.8	1.50 H	71	21.70	12.00
2	222.40	34.2 QP	46.0	-11.8	1.00 H	61	22.30	11.90
3	298.20	33.3 QP	46.0	-12.7	1.00 H	198	18.40	14.90
4	414.90	32.0 QP	46.0	-14.0	1.99 H	54	14.10	17.90
5	797.90	32.4 QP	46.0	-13.6	1.50 H	271	6.80	25.60
6	840.70	33.6 QP	46.0	-12.4	1.00 H	168	7.50	26.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.10	27.3 QP	40.0	-12.7	1.25 V	183	13.70	13.60
2	187.40	29.3 QP	43.5	-14.2	1.00 V	13	17.30	12.00
3	292.40	31.5 QP	46.0	-14.5	1.50 V	147	16.80	14.70
4	414.90	35.7 QP	46.0	-10.3	1.00 V	13	17.80	17.90
5	582.10	32.7 QP	46.0	-13.3	1.25 V	352	11.00	21.70
6	799.80	32.8 QP	46.0	-13.2	1.75 V	10	7.20	25.60

REMARKS:

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:** 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	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. 02, 2012	Jul. 01, 2013
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

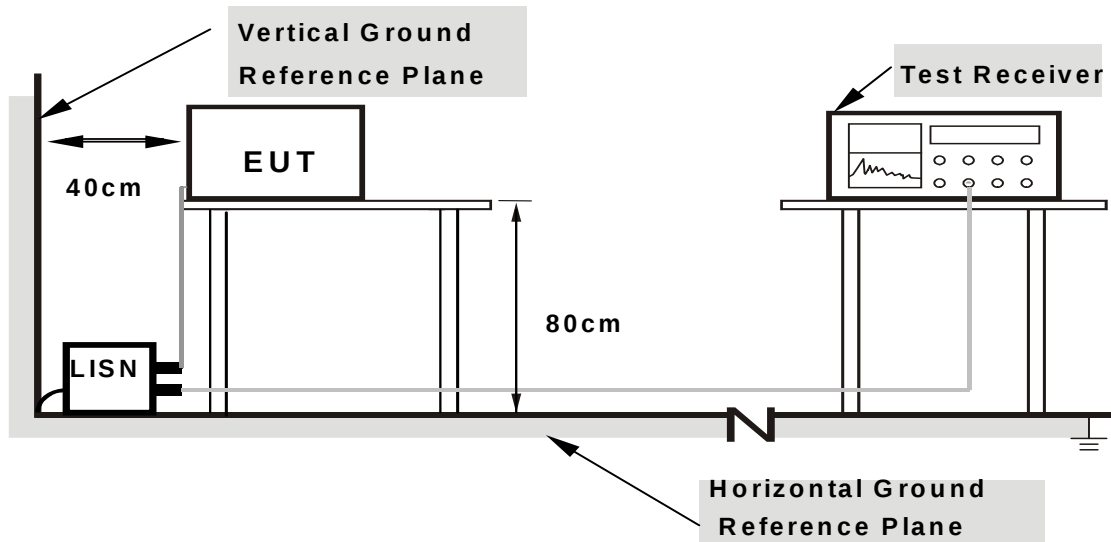
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

NOTE: 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 cm 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

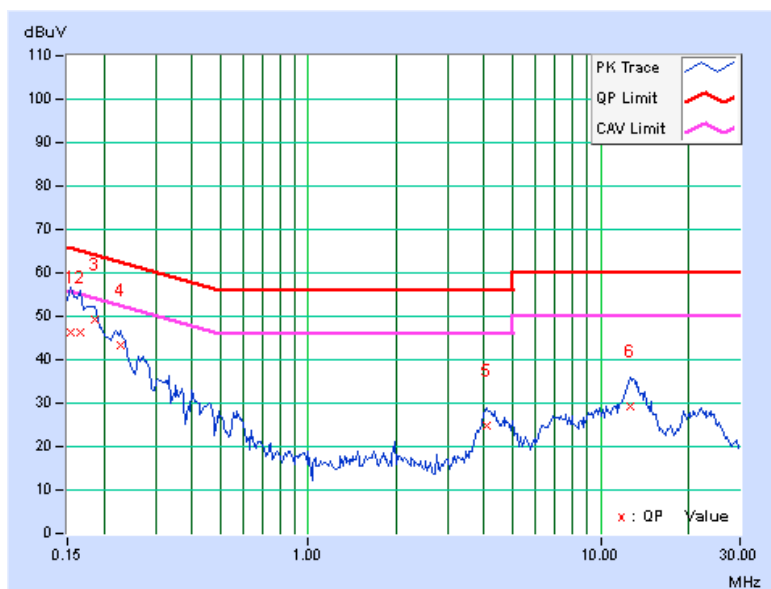
CONDUCTED WORST-CASE DATA : 802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.12	46.24	26.88	46.36	27.00	65.79	55.79	-19.43	-28.79
2	0.16562	0.12	46.35	31.89	46.47	32.01	65.18	55.18	-18.71	-23.17
3	0.18516	0.13	49.22	35.12	49.35	35.25	64.25	54.25	-14.91	-19.01
4	0.22812	0.13	43.30	30.39	43.43	30.52	62.52	52.52	-19.09	-22.00
5	4.09375	0.34	24.33	19.34	24.67	19.68	56.00	46.00	-31.33	-26.32
6	12.57813	0.78	28.63	21.55	29.41	22.33	60.00	50.00	-30.59	-27.67

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.

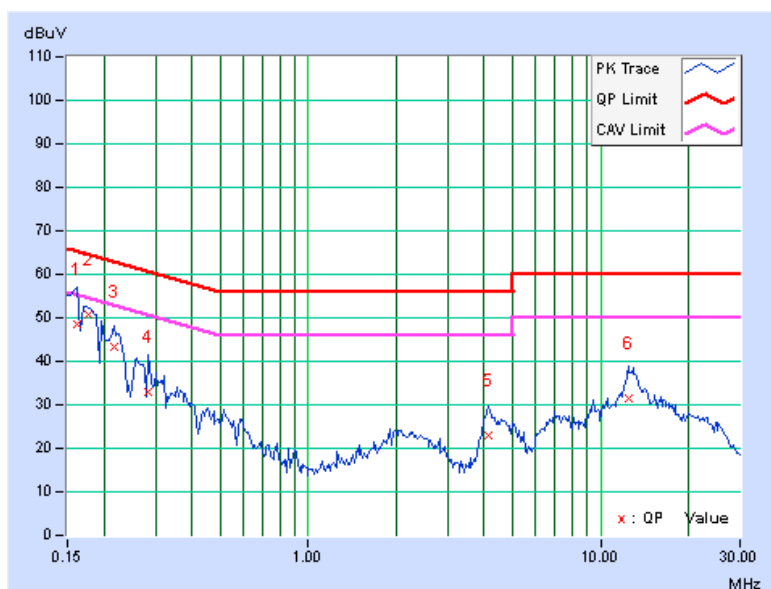


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.13	48.41	20.73	48.54	20.86	65.38	55.38	-16.84	-34.52
2	0.17734	0.13	50.44	37.94	50.57	38.07	64.61	54.61	-14.04	-16.54
3	0.21641	0.14	43.19	28.82	43.33	28.96	62.96	52.96	-19.62	-23.99
4	0.28281	0.14	32.65	29.70	32.79	29.84	60.73	50.73	-27.94	-20.89
5	4.14844	0.36	22.65	17.47	23.01	17.83	56.00	46.00	-32.99	-28.17
6	12.48047	0.68	30.95	25.37	31.63	26.05	60.00	50.00	-28.37	-23.95

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.

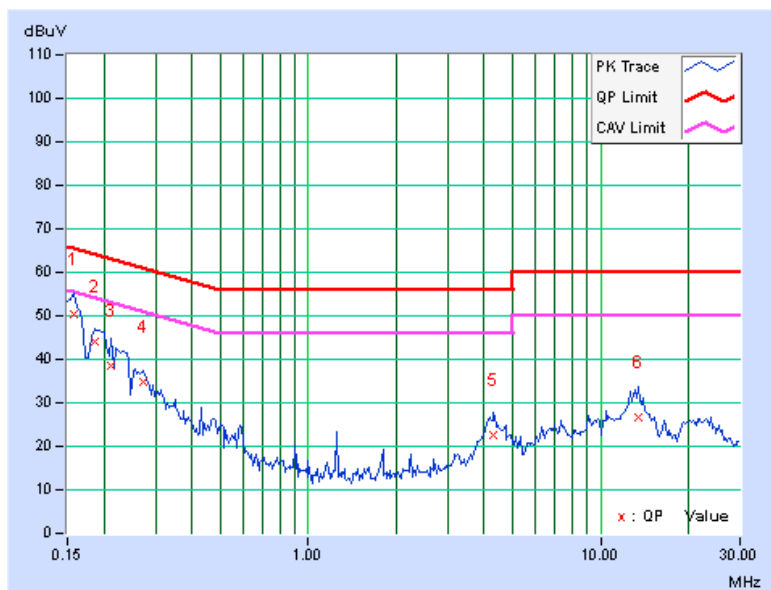


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.12	50.20	36.73	50.32	36.85	65.58	55.58	-15.26	-18.73
2	0.18516	0.13	44.10	26.77	44.23	26.90	64.25	54.25	-20.03	-27.36
3	0.21250	0.13	38.54	21.62	38.67	21.75	63.11	53.11	-24.44	-31.36
4	0.27109	0.13	34.71	20.29	34.84	20.42	61.08	51.08	-26.24	-30.66
5	4.29297	0.35	22.41	17.24	22.76	17.59	56.00	46.00	-33.24	-28.41
6	13.42969	0.82	26.01	19.89	26.83	20.71	60.00	50.00	-33.17	-29.29

REMARKS:

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

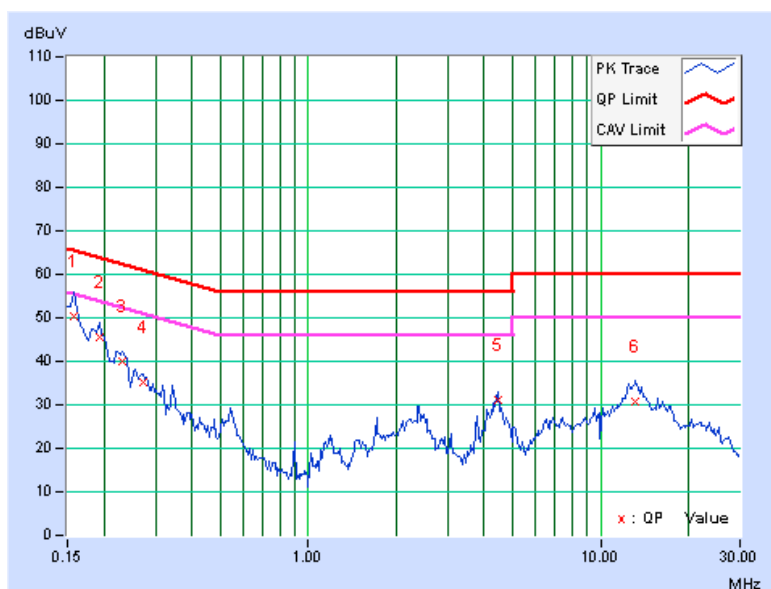


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.13	50.24	36.59	50.37	36.72	65.58	55.58	-15.21	-18.86
2	0.19297	0.14	45.31	31.31	45.45	31.45	63.91	53.91	-18.46	-22.46
3	0.23203	0.14	39.75	25.97	39.89	26.11	62.38	52.38	-22.49	-26.27
4	0.27109	0.14	34.99	20.65	35.13	20.79	61.08	51.08	-25.95	-30.29
5	4.43359	0.37	30.75	15.41	31.12	15.78	56.00	46.00	-24.88	-30.22
6	13.21484	0.71	29.94	24.24	30.65	24.95	60.00	50.00	-29.35	-25.05

REMARKS:

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





A D T

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. INFORMATION ON THE TESTING LABORATORIES

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

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

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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



A D T

7. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---