FCC TEST REPORT (15.247)

REPORT NO.:	RF120423C07
MODEL NO.:	HiveAP 141, HiveAP 121
FCC ID:	WBV-HIVEAP1X1
RECEIVED:	Apr. 23, 2012
TESTED:	May 03 ~ May 17, 2012
ISSUED:	May 22, 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.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120423C07	Original release	May 22, 2012

1. CERTIFICATION

PRODUCT:	AP Router
MODEL NO.:	HiveAP 141, HiveAP 121
BRAND:	Aerohive
APPLICANT:	Aerohive Networks, Inc.
TESTED:	May 03 ~ May 17, 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 :** May 22, 2012
Pettie Chen / Specialist

APPROVED BY : _____ , **DATE :** May 22, 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 -4.13dB at 0.15000MHz.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.1dB at 374.04, 2288, 2390, 2483.5, 4874MHz.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connectors are RSMA (For HiveAP 141) and UFL (HiveAP 121) not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

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. The following models are provided to this EUT.

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

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

Frequency Band (MHz)	2412~2462	5180~5240	5745~5825
802.11b	√		
802.11g	√		
802.11a		√	√
802.11n (20MHz)	√	√	√
802.11n (40MHz)		√	√

3. 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

4. The following antennas for the EUT.

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

5. 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

6. 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 MODE	APPLICABLE TO				DESCRIPTION	
	RE≥1G	RE<1G	PLC	APCM	Model	Power
A1	√	√	√	√	HiveAP 141	Power from adapter
A2	-	√	√	-		Power from PoE
B1	√	√	√	-	HiveAP 121	Power from adapter
B2	-	√	√	-		Power from PoE

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

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

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

BANDEDGE MEASUREMENT:

☒ 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, 11	DSSS	DBPSK	1.0
A1, B1	802.11g	1 to 11	1, 11	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	7.2

ANTENNA PORT CONDUCTED MEASUREMENT:

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

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

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A1	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A1	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 65%RH	120Vac, 60Hz	Brad Wu
RE<1G	24deg. C, 65%RH	120Vac, 60Hz	Alan Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	Haru Yang
APCM	24deg. C, 65%RH	120Vac, 60Hz	Alan Wu

FOR 5.0GHz (5745 ~ 5825MHz):

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION	
	RE≥1G	RE<1G	PLC	APCM	Model	Power
A1	√	√	√	-	HiveAP 141	Power from adapter
A2	-	√	√	-		Power from PoE
B1	√	√	√	√	HiveAP 121	Power from adapter
B2	-	√	√	-		Power from PoE

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

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)
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

BANDEDGE MEASUREMENT:

☒ 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, 165	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)	149 to 165	149, 165	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B1	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
B1	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
B1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 65%RH	120Vac, 60Hz	Brad Wu
RE<1G	24deg. C, 65%RH	120Vac, 60Hz	Alan Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	Haru Yang
APCM	24deg. C, 65%RH	120Vac, 60Hz	Alan Wu

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

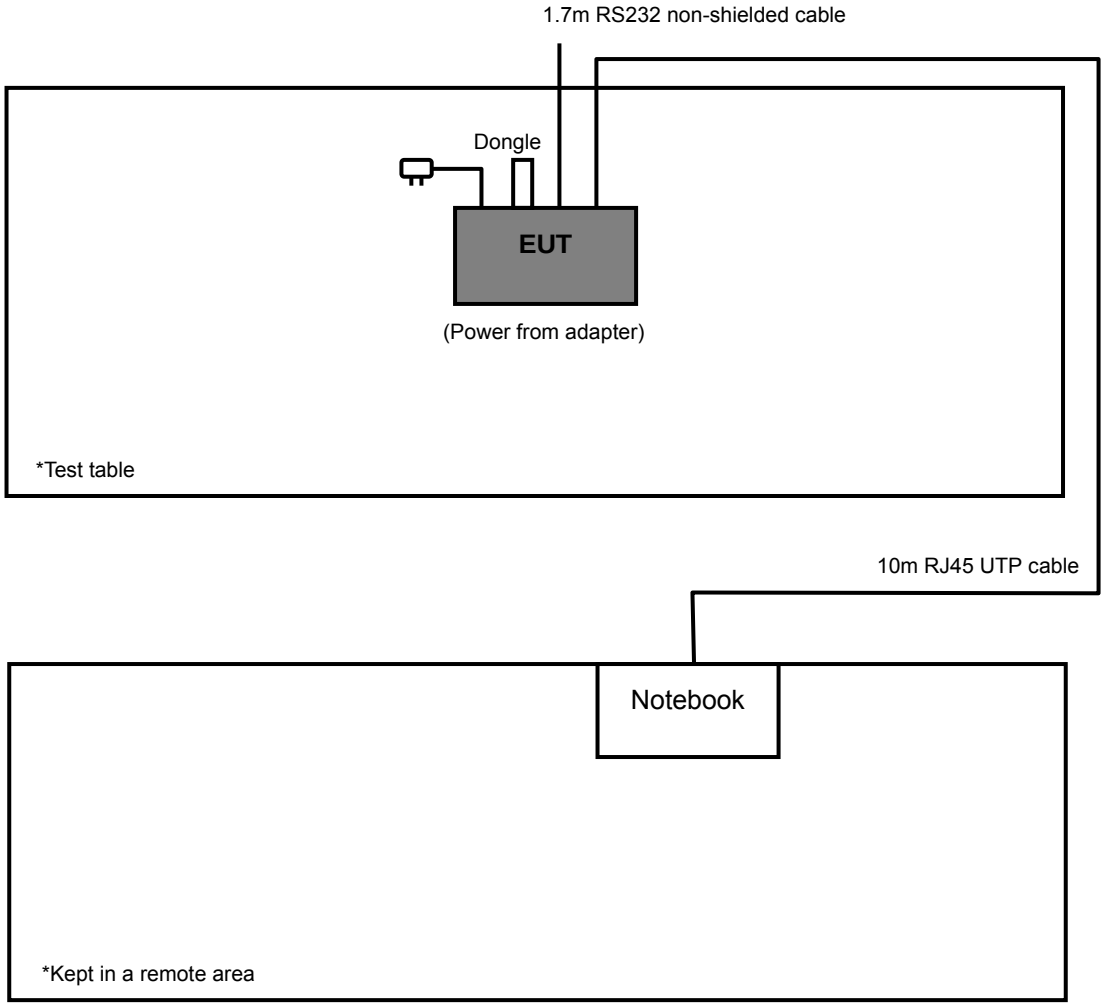
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m RJ45 UTP cable
2	NA

NOTE:

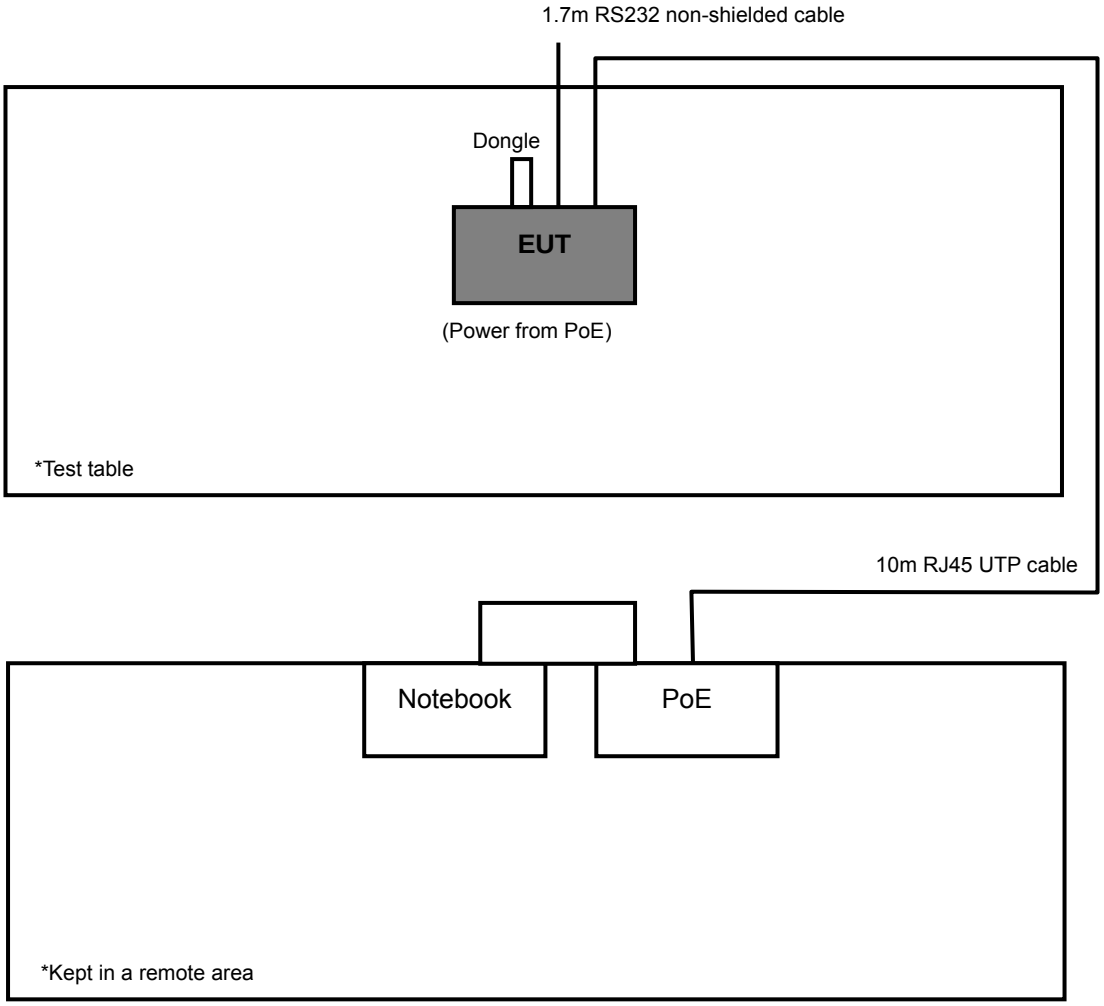
1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 acted as communication partner to transfer data.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode A1, B1



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)
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.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Jan. 03, 2012	Jan. 02, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jan. 30, 2012	Jan. 29, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 05, 2012	Jan. 04, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 20, 2011	Jul. 19, 2012
Preamplifier Agilent	8449B	3008A01961	Oct. 29, 2011	Oct. 28, 2012
Preamplifier Agilent	8447D	2944A10738	Oct. 29, 2011	Oct. 28, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Nov. 03, 2011	Nov. 02, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Nov. 03, 2011	Nov. 02, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Nov. 03, 2011	Nov. 02, 2012
Software ADT	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT	TT100.	TT93021704	NA	NA
Turn Table Controller ADT	SC100.	SC93021704	NA	NA
High Speed Peak Power Meter	ML2495A	0842014	Apr. 28, 2012	Apr. 27, 2013
Power Sensor	MA2411B	0738404	Apr. 28, 2012	Apr. 27, 2013

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

2. The test was performed in HwaYa Chamber 4.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 460141.

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

4.1.3 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.

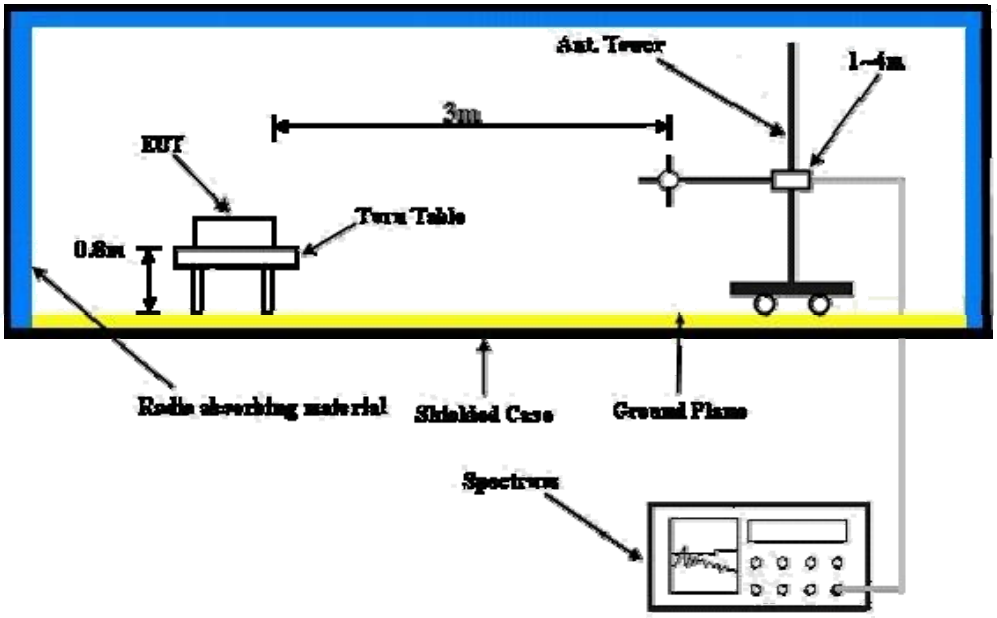
NOTE:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	58.0 PK	74.0	-16.0	1.05 H	218	26.10	31.90
2	2386.00	45.8 AV	54.0	-8.2	1.05 H	218	13.90	31.90
3	*2412.00	100.8 PK			1.05 H	218	68.80	32.00
4	*2412.00	96.9 AV			1.05 H	218	64.90	32.00
5	4824.00	48.5 PK	74.0	-25.5	1.05 H	202	10.10	38.40
6	4824.00	43.2 AV	54.0	-10.8	1.05 H	202	4.80	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	60.0 PK	74.0	-14.0	1.16 V	171	28.10	31.90
2	2386.00	50.4 AV	54.0	-3.6	1.16 V	171	18.50	31.90
3	*2412.00	109.8 PK			1.10 V	150	77.80	32.00
4	*2412.00	106.0 AV			1.10 V	150	74.00	32.00
5	4824.00	53.8 PK	74.0	-20.2	1.28 V	265	15.40	38.40
6	4824.00	50.7 AV	54.0	-3.3	1.28 V	265	12.30	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	101.4 PK			1.08 H	219	69.30	32.10
2	*2437.00	97.5 AV			1.08 H	219	65.40	32.10
3	4874.00	50.6 PK	74.0	-23.4	1.05 H	119	12.20	38.40
4	4874.00	46.1 AV	54.0	-7.9	1.05 H	119	7.70	38.40
5	7311.00	54.9 PK	74.0	-19.1	1.61 H	240	10.60	44.30
6	7311.00	45.4 AV	54.0	-8.6	1.61 H	240	1.10	44.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	110.5 PK			1.11 V	148	78.40	32.10
2	*2437.00	106.6 AV			1.11 V	148	74.50	32.10
3	4874.00	53.1 PK	74.0	-20.9	1.25 V	269	14.70	38.40
4	4874.00	49.8 AV	54.0	-4.2	1.25 V	269	11.40	38.40
5	7311.00	56.2 PK	74.0	-17.8	1.61 V	280	11.90	44.30
6	7311.00	48.1 AV	54.0	-5.9	1.61 V	280	3.80	44.30

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	100.4 PK			1.06 H	220	68.20	32.20
2	*2462.00	96.5 AV			1.06 H	220	64.30	32.20
3	2483.50	57.2 PK	74.0	-16.8	1.06 H	220	24.90	32.30
4	2483.50	45.6 AV	54.0	-8.4	1.06 H	220	13.30	32.30
5	4924.00	48.2 PK	74.0	-25.8	1.08 H	192	9.80	38.40
6	4924.00	42.8 AV	54.0	-11.2	1.08 H	192	4.40	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.5 PK			1.14 V	164	77.30	32.20
2	*2462.00	105.8 AV			1.14 V	164	73.60	32.20
3	2483.50	59.1 PK	74.0	-14.9	1.14 V	164	26.80	32.30
4	2483.50	49.7 AV	54.0	-4.3	1.14 V	164	17.40	32.30
5	4924.00	53.6 PK	74.0	-20.4	1.24 V	266	15.20	38.40
6	4924.00	50.4 AV	54.0	-3.6	1.24 V	266	12.00	38.40

REMARKS:

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

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)
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	2390.00	62.4 PK	74.0	-11.6	1.05 H	142	30.40	32.00
2	2390.00	46.2 AV	54.0	-7.8	1.05 H	142	14.20	32.00
3	*2412.00	101.6 PK			1.05 H	142	69.60	32.00
4	*2412.00	89.2 AV			1.05 H	142	57.20	32.00
5	4824.00	47.3 PK	74.0	-26.7	1.05 H	112	8.90	38.40
6	4824.00	35.2 AV	54.0	-18.8	1.05 H	112	-3.20	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	70.2 PK	74.0	-3.8	1.16 V	210	38.20	32.00
2	2390.00	52.8 AV	54.0	-1.2	1.16 V	210	20.80	32.00
3	*2412.00	111.8 PK			1.16 V	195	79.80	32.00
4	*2412.00	99.5 AV			1.16 V	195	67.50	32.00
5	4824.00	47.8 PK	74.0	-26.2	1.06 V	112	9.40	38.40
6	4824.00	35.6 AV	54.0	-18.4	1.06 V	112	-2.80	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	2390.00	57.9 PK	74.0	-16.1	1.04 H	140	25.90	32.00
2	2390.00	46.8 AV	54.0	-7.2	1.04 H	140	14.80	32.00
3	*2437.00	103.9 PK			1.04 H	140	71.80	32.10
4	*2437.00	91.4 AV			1.04 H	140	59.30	32.10
5	2483.50	61.2 PK	74.0	-12.8	1.04 H	140	28.90	32.30
6	2483.50	46.9 AV	54.0	-7.1	1.04 H	140	14.60	32.30
7	4874.00	48.2 PK	74.0	-25.8	1.06 H	75	9.80	38.40
8	4874.00	36.1 AV	54.0	-17.9	1.06 H	75	-2.30	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.5 PK	74.0	-11.5	1.16 V	166	30.50	32.00
2	2390.00	50.4 AV	54.0	-3.6	1.16 V	166	18.40	32.00
3	*2437.00	113.8 PK			1.16 V	166	81.70	32.10
4	*2437.00	101.9 AV			1.16 V	166	69.80	32.10
5	2483.50	61.2 PK	74.0	-12.8	1.16 V	166	28.90	32.30
6	2483.50	50.5 AV	54.0	-3.5	1.16 V	166	18.20	32.30
7	4874.00	48.6 PK	74.0	-25.4	1.04 V	125	10.20	38.40
8	4874.00	36.5 AV	54.0	-17.5	1.04 V	125	-1.90	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	101.9 PK			1.08 H	144	69.70	32.20
2	*2462.00	89.5 AV			1.08 H	144	57.30	32.20
3	2483.50	62.8 PK	74.0	-11.2	1.08 H	144	30.50	32.30
4	2483.50	46.5 AV	54.0	-7.5	1.08 H	144	14.20	32.30
5	4924.00	47.6 PK	74.0	-26.4	1.09 H	121	9.20	38.40
6	4924.00	35.4 AV	54.0	-18.6	1.09 H	121	-3.00	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	112.0 PK			1.15 V	185	79.80	32.20
2	*2462.00	100.0 AV			1.15 V	185	67.80	32.20
3	2483.50	72.8 PK	74.0	-1.2	1.15 V	183	40.50	32.30
4	**2483.50**	**52.9 AV**	**54.0**	**-1.1**	**1.15 V**	**183**	**20.60**	**32.30**
5	4924.00	48.2 PK	74.0	-25.8	1.06 V	125	9.80	38.40
6	4924.00	36.1 AV	54.0	-17.9	1.06 V	125	-2.30	38.40

REMARKS:

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

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)
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	2390.00	64.2 PK	74.0	-9.8	1.10 H	29	32.20	32.00
2	2390.00	47.8 AV	54.0	-6.2	1.10 H	29	15.80	32.00
3	*2412.00	99.6 PK			1.10 H	29	67.60	32.00
4	*2412.00	88.1 AV			1.10 H	29	56.10	32.00
5	4824.00	48.1 PK	74.0	-25.9	1.03 H	22	9.70	38.40
6	4824.00	36.2 AV	54.0	-17.8	1.03 H	22	-2.20	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.4 PK	74.0	-2.6	1.13 V	2	39.40	32.00
2	**2390.00**	**52.9 AV**	**54.0**	**-1.1**	**1.13 V**	**2**	**20.90**	**32.00**
3	*2412.00	109.8 PK			1.13 V	22	77.80	32.00
4	*2412.00	98.4 AV			1.13 V	22	66.40	32.00
5	4824.00	48.4 PK	74.0	-25.6	1.06 V	115	10.00	38.40
6	4824.00	36.5 AV	54.0	-17.5	1.06 V	115	-1.90	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	60.1 PK	74.0	-13.9	1.12 H	329	28.60	31.50
2	2288.00	48.7 AV	54.0	-5.3	1.12 H	329	17.20	31.50
3	*2437.00	101.4 PK			1.09 H	31	69.30	32.10
4	*2437.00	89.8 AV			1.09 H	31	57.70	32.10
5	4874.00	47.8 PK	74.0	-26.2	1.06 H	45	9.40	38.40
6	4874.00	36.0 AV	54.0	-18.0	1.06 H	45	-2.40	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2288.00	62.7 PK	74.0	-11.3	1.21 V	15	31.20	31.50
2	**2288.00**	**52.9 AV**	**54.0**	**-1.1**	**1.21 V**	**15**	**21.40**	**31.50**
3	*2437.00	111.8 PK			1.12 V	329	79.70	32.10
4	*2437.00	100.1 AV			1.12 V	329	68.00	32.10
5	4874.00	48.1 PK	74.0	-25.9	1.02 V	113	9.70	38.40
6	4874.00	36.2 AV	54.0	-17.8	1.02 V	113	-2.20	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	101.2 PK			1.10 H	34	69.00	32.20
2	*2462.00	89.6 AV			1.10 H	34	57.40	32.20
3	2483.50	60.4 PK	74.0	-13.6	1.10 H	34	28.10	32.30
4	2483.50	47.1 AV	54.0	-6.9	1.10 H	34	14.80	32.30
5	4924.00	48.4 PK	74.0	-25.6	1.05 H	123	10.00	38.40
6	4924.00	36.5 AV	54.0	-17.5	1.05 H	123	-1.90	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	111.5 PK			1.12 V	1	79.30	32.20
2	*2462.00	99.8 AV			1.12 V	1	67.60	32.20
3	2483.50	69.2 PK	74.0	-4.8	1.07 V	20	36.90	32.30
4	**2483.50**	**52.9 AV**	**54.0**	**-1.1**	**1.07 V**	**20**	**20.60**	**32.30**
5	4924.00	48.8 PK	74.0	-25.2	1.09 V	55	10.40	38.40
6	4924.00	36.9 AV	54.0	-17.1	1.09 V	55	-1.50	38.40

REMARKS:

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

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)
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	60.9 PK	74.0	-13.1	1.08 H	1	29.00	31.90
2	2386.00	50.1 AV	54.0	-3.9	1.08 H	1	18.20	31.90
3	*2412.00	108.1 PK			1.08 H	1	76.10	32.00
4	*2412.00	104.4 AV			1.08 H	1	72.40	32.00
5	4824.00	49.6 PK	74.0	-24.4	1.04 H	206	11.20	38.40
6	4824.00	43.1 AV	54.0	-10.9	1.04 H	206	4.70	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	59.7 PK	74.0	-14.3	1.36 V	15	27.80	31.90
2	2386.00	49.4 AV	54.0	-4.6	1.36 V	15	17.50	31.90
3	*2412.00	107.2 PK			1.36 V	15	75.20	32.00
4	*2412.00	103.6 AV			1.36 V	15	71.60	32.00
5	4824.00	55.3 PK	74.0	-18.7	1.30 V	287	16.90	38.40
6	4824.00	52.6 AV	54.0	-1.4	1.30 V	287	14.20	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	108.6 PK			1.08 H	1	76.50	32.10
2	*2437.00	104.9 AV			1.08 H	1	72.80	32.10
3	4874.00	49.4 PK	74.0	-24.6	1.16 H	159	11.00	38.40
4	4874.00	44.1 AV	54.0	-9.9	1.16 H	159	5.70	38.40
5	7311.00	54.1 PK	74.0	-19.9	1.48 H	35	9.80	44.30
6	7311.00	45.2 AV	54.0	-8.8	1.48 H	35	0.90	44.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.5 PK			1.38 V	352	75.40	32.10
2	*2437.00	103.8 AV			1.38 V	352	71.70	32.10
3	4874.00	55.8 PK	74.0	-18.2	1.27 V	293	17.40	38.40
4	**4874.00**	**52.9 AV**	**54.0**	**-1.1**	**1.27 V**	**293**	**14.50**	**38.40**
5	7311.00	54.4 PK	74.0	-19.6	1.41 V	286	10.10	44.30
6	7311.00	44.5 AV	54.0	-9.5	1.41 V	286	0.20	44.30

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	108.2 PK			1.07 H	2	76.00	32.20
2	*2462.00	104.6 AV			1.07 H	2	72.40	32.20
3	2483.50	60.5 PK	74.0	-13.5	1.07 H	2	28.20	32.30
4	2483.50	50.8 AV	54.0	-3.2	1.07 H	2	18.50	32.30
5	4924.00	49.8 PK	74.0	-24.2	1.10 H	162	11.40	38.40
6	4924.00	44.5 AV	54.0	-9.5	1.10 H	162	6.10	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	107.1 PK			1.35 V	18	74.90	32.20
2	*2462.00	103.4 AV			1.35 V	18	71.20	32.20
3	2483.50	59.2 PK	74.0	-14.8	1.35 V	18	26.90	32.30
4	2483.50	49.1 AV	54.0	-4.9	1.35 V	18	16.80	32.30
5	4924.00	55.7 PK	74.0	-18.3	1.27 V	278	17.30	38.40
6	4924.00	52.8 AV	54.0	-1.2	1.27 V	278	14.40	38.40

REMARKS:

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

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)
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	69.2 PK	74.0	-4.8	1.08 H	39	37.20	32.00
2	2390.00	52.8 AV	54.0	-1.2	1.08 H	39	20.80	32.00
3	*2412.00	109.6 PK			1.08 H	39	77.60	32.00
4	*2412.00	97.2 AV			1.08 H	39	65.20	32.00
5	4824.00	46.5 PK	74.0	-27.5	1.05 H	113	8.10	38.40
6	4824.00	34.3 AV	54.0	-19.7	1.05 H	113	-4.10	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	68.6 PK	74.0	-5.4	1.68 V	342	36.60	32.00
2	2390.00	52.4 AV	54.0	-1.6	1.68 V	342	20.40	32.00
3	*2412.00	108.9 PK			1.68 V	342	76.90	32.00
4	*2412.00	96.6 AV			1.68 V	342	64.60	32.00
5	4824.00	46.2 PK	74.0	-27.8	1.09 V	125	7.80	38.40
6	4824.00	34.0 AV	54.0	-20.0	1.09 V	125	-4.40	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	57.6 PK	74.0	-16.4	1.08 H	36	25.60	32.00
2	2390.00	46.6 AV	54.0	-7.4	1.08 H	36	14.60	32.00
3	*2437.00	111.5 PK			1.08 H	36	79.40	32.10
4	*2437.00	99.1 AV			1.08 H	36	67.00	32.10
5	2483.50	60.8 PK	74.0	-13.2	1.08 H	36	28.50	32.30
6	2483.50	46.6 AV	54.0	-7.4	1.08 H	36	14.30	32.30
7	4874.00	48.1 PK	74.0	-25.9	1.05 H	112	9.70	38.40
8	4874.00	36.2 AV	54.0	-17.8	1.05 H	112	-2.20	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.1 PK	74.0	-16.9	1.65 V	346	25.10	32.00
2	2390.00	46.2 AV	54.0	-7.8	1.65 V	346	14.20	32.00
3	*2437.00	110.7 PK			1.65 V	346	78.60	32.10
4	*2437.00	98.4 AV			1.65 V	346	66.30	32.10
5	2483.50	60.3 PK	74.0	-13.7	1.65 V	346	28.00	32.30
6	2483.50	46.4 AV	54.0	-7.6	1.65 V	346	14.10	32.30
7	4874.00	47.5 PK	74.0	-26.5	1.05 V	114	9.10	38.40
8	4874.00	35.8 AV	54.0	-18.2	1.05 V	114	-2.60	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	110.0 PK			1.09 H	2	77.80	32.20
2	*2462.00	97.8 AV			1.09 H	2	65.60	32.20
3	2483.50	72.8 PK	74.0	-1.2	1.06 H	2	40.50	32.30
4	**2483.50**	**52.9 AV**	**54.0**	**-1.1**	**1.06 H**	**2**	**20.60**	**32.30**
5	4924.00	46.8 PK	74.0	-27.2	1.03 H	216	8.40	38.40
6	4924.00	34.5 AV	54.0	-19.5	1.03 H	216	-3.90	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.1 PK			1.65 V	338	76.90	32.20
2	*2462.00	96.8 AV			1.65 V	338	64.60	32.20
3	2483.50	72.1 PK	74.0	-1.9	1.65 V	338	39.80	32.30
4	2483.50	52.4 AV	54.0	-1.6	1.65 V	338	20.10	32.30
5	4924.00	46.5 PK	74.0	-27.5	1.03 V	112	8.10	38.40
6	4924.00	34.2 AV	54.0	-19.8	1.03 V	112	-4.20	38.40

REMARKS:

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

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)
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	69.7 PK	74.0	-4.3	1.09 H	173	37.70	32.00
2	2390.00	51.7 AV	54.0	-2.3	1.09 H	173	19.70	32.00
3	*2412.00	109.2 PK			1.08 H	161	77.20	32.00
4	*2412.00	97.4 AV			1.08 H	161	65.40	32.00
5	4824.00	45.9 PK	74.0	-28.1	1.00 H	135	7.50	38.40
6	4824.00	33.1 AV	54.0	-20.9	1.00 H	135	-5.30	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.8 PK	74.0	-11.2	1.70 V	214	30.80	32.00
2	2390.00	48.8 AV	54.0	-5.2	1.70 V	214	16.80	32.00
3	*2412.00	103.5 PK			1.00 V	92	71.50	32.00
4	*2412.00	91.7 AV			1.00 V	92	59.70	32.00
5	4824.00	46.4 PK	74.0	-27.6	1.00 V	53	8.00	38.40
6	4824.00	34.4 AV	54.0	-19.6	1.00 V	53	-4.00	38.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	112.4 PK			1.32 H	146	80.30	32.10
2	*2437.00	100.1 AV			1.32 H	146	68.00	32.10
3	4874.00	53.0 PK	74.0	-21.0	1.54 H	188	14.60	38.40
4	4874.00	38.2 AV	54.0	-15.8	1.54 H	188	-0.20	38.40
5	7311.00	55.4 PK	74.0	-18.6	1.50 H	139	11.10	44.30
6	7311.00	41.3 AV	54.0	-12.7	1.50 H	139	-3.00	44.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	108.6 PK			1.62 V	188	76.50	32.10
2	*2437.00	96.2 AV			1.62 V	188	64.10	32.10
3	4874.00	54.0 PK	74.0	-20.0	1.45 V	288	15.60	38.40
4	4874.00	39.3 AV	54.0	-14.7	1.45 V	288	0.90	38.40
5	7311.00	56.8 PK	74.0	-17.2	1.47 V	293	12.50	44.30
6	7311.00	42.1 AV	54.0	-11.9	1.47 V	293	-2.20	44.30

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
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	112.2 PK			1.29 H	138	80.00	32.20
2	*2462.00	100.2 AV			1.29 H	138	68.00	32.20
3	2483.50	68.8 PK	74.0	-5.2	1.29 H	136	36.50	32.30
4	2483.50	52.7 AV	54.0	-1.3	1.29 H	136	20.40	32.30
5	4924.00	46.3 PK	74.0	-27.7	1.00 H	44	7.90	38.40
6	4924.00	32.8 AV	54.0	-21.2	1.00 H	44	-5.60	38.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.9 PK			1.03 V	188	73.70	32.20
2	*2462.00	94.0 AV			1.03 V	188	61.80	32.20
3	2483.50	63.5 PK	74.0	-10.5	1.00 V	96	31.20	32.30
4	2483.50	48.9 AV	54.0	-5.1	1.00 V	96	16.60	32.30
5	4924.00	47.9 PK	74.0	-26.1	1.00 V	344	9.50	38.40
6	4924.00	33.0 AV	54.0	-21.0	1.00 V	344	-5.40	38.40

REMARKS:

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

BELOW 1GHz WORST-CASE DATA：802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	125.17	35.8 QP	43.5	-7.7	1.50 H	113	23.20	12.60
2	374.96	44.8 QP	46.0	-1.2	1.00 H	68	27.10	17.70
3	422.65	38.3 QP	46.0	-7.7	1.25 H	307	19.30	19.00
4	624.85	38.5 QP	46.0	-7.5	1.25 H	202	14.80	23.70
5	751.23	35.6 QP	46.0	-10.4	1.00 H	159	9.80	25.80
6	875.67	39.0 QP	46.0	-7.0	1.00 H	341	10.80	28.20
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	51.29	31.3 QP	40.0	-8.7	1.00 V	76	17.20	14.10
2	64.90	32.7 QP	40.0	-7.3	1.00 V	286	19.70	13.00
3	374.04	38.6 QP	46.0	-7.4	1.25 V	139	20.90	17.70
4	624.85	38.5 QP	46.0	-7.5	1.00 V	67	14.80	23.70
5	751.23	34.9 QP	46.0	-11.1	1.25 V	169	9.10	25.80
6	875.67	37.4 QP	46.0	-8.6	1.25 V	242	9.20	28.20

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	64.90	26.7 QP	40.0	-13.3	1.50 H	83	13.70	13.00
2	125.17	36.5 QP	43.5	-7.0	2.00 H	287	23.90	12.60
3	374.04	42.4 QP	46.0	-3.6	1.00 H	72	24.70	17.70
4	624.85	42.6 QP	46.0	-3.4	1.25 H	167	18.90	23.70
5	751.23	39.9 QP	46.0	-6.1	1.00 H	167	14.10	25.80
6	875.67	38.4 QP	46.0	-7.6	1.00 H	155	10.20	28.20
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	64.90	35.3 QP	40.0	-4.7	1.00 V	40	22.30	13.00
2	125.17	32.4 QP	43.5	-11.1	1.00 V	106	19.80	12.60
3	374.04	36.3 QP	46.0	-9.7	1.50 V	246	18.60	17.70
4	624.85	40.8 QP	46.0	-5.2	1.00 V	295	17.10	23.70
5	751.23	35.3 QP	46.0	-10.7	1.25 V	205	9.50	25.80
6	875.67	36.6 QP	46.0	-9.4	1.25 V	131	8.40	28.20

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	124.98	26.9 QP	43.5	-16.6	2.00 H	285	14.30	12.60
2	198.71	31.2 QP	43.5	-12.3	1.00 H	107	19.60	11.60
3	375.29	32.9 QP	46.0	-13.1	1.00 H	85	15.10	17.80
4	499.48	34.4 QP	46.0	-11.6	1.50 H	241	13.30	21.10
5	600.38	34.0 QP	46.0	-12.0	1.50 H	207	10.50	23.50
6	701.28	32.1 QP	46.0	-13.9	1.00 H	164	7.70	24.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	55.13	29.3 QP	40.0	-10.7	1.00 V	4	15.40	13.90
2	249.17	24.6 QP	46.0	-21.4	2.00 V	266	11.00	13.60
3	394.70	30.9 QP	46.0	-15.1	1.50 V	347	12.60	18.30
4	499.48	30.1 QP	46.0	-15.9	1.00 V	45	9.00	21.10
5	575.15	32.4 QP	46.0	-13.6	1.00 V	243	9.50	22.90
6	600.38	32.5 QP	46.0	-13.5	1.00 V	93	9.00	23.50

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	130.80	29.3 QP	43.5	-14.2	1.00 H	254	16.20	13.10
2	249.17	28.8 QP	46.0	-17.2	1.00 H	250	15.20	13.60
3	369.47	31.7 QP	46.0	-14.3	1.50 H	63	14.10	17.60
4	499.48	30.9 QP	46.0	-15.1	1.00 H	129	9.80	21.10
5	600.38	31.7 QP	46.0	-14.3	1.50 H	232	8.20	23.50
6	800.24	33.4 QP	46.0	-12.6	1.00 H	63	6.30	27.10
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	74.53	32.7 QP	40.0	-7.3	1.00 V	3	21.30	11.40
2	128.86	28.7 QP	43.5	-14.8	1.00 V	105	15.80	12.90
3	375.29	27.2 QP	46.0	-18.8	2.00 V	145	9.40	17.80
4	499.48	31.8 QP	46.0	-14.2	1.00 V	214	10.70	21.10
5	575.15	33.2 QP	46.0	-12.8	1.00 V	250	10.30	22.90
6	600.38	31.2 QP	46.0	-14.8	1.50 V	115	7.70	23.50

REMARKS:

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (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.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 19, 2011	Nov. 18, 2012
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 22, 2011	Dec. 21, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2011	Dec. 29, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 07, 2011	Jul. 06, 2012
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 2.

3. The VCCI Site Registration No. is C-2047.

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.

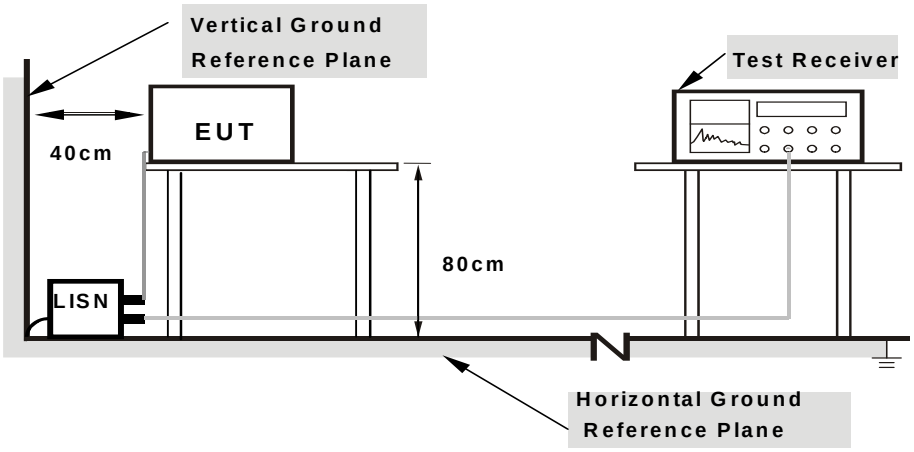
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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 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.

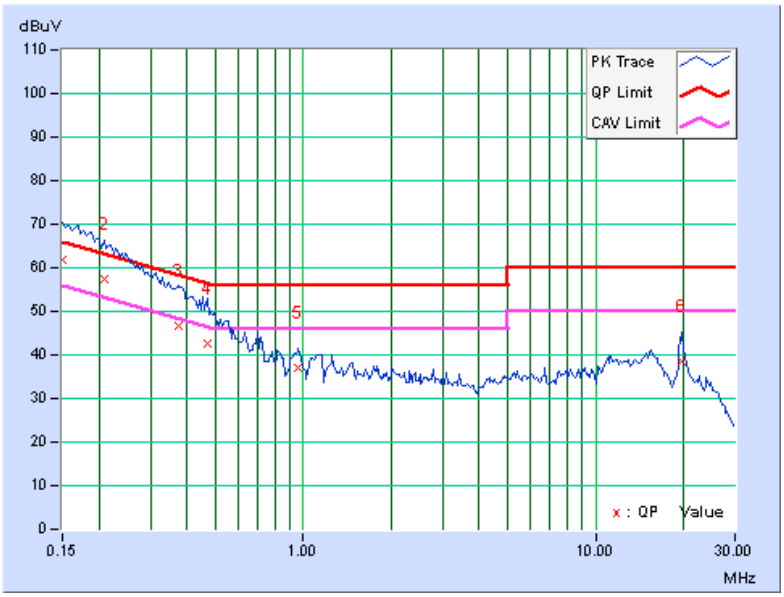
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA：802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

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**	**0.17**	**61.70**	**31.32**	**61.87**	**31.49**	**66.00**	**56.00**	**-4.13**	**-24.51**
2	0.20859	0.17	57.42	27.06	57.59	27.23	63.26	53.26	-5.67	-26.03
3	0.37656	0.20	46.38	33.43	46.58	33.63	58.35	48.35	-11.78	-14.73
4	0.47031	0.20	42.33	30.21	42.53	30.41	56.51	46.51	-13.97	-16.09
5	0.96250	0.23	36.93	25.65	37.16	25.88	56.00	46.00	-18.84	-20.12
6	19.63281	0.72	37.86	29.98	38.58	30.70	60.00	50.00	-21.42	-19.30

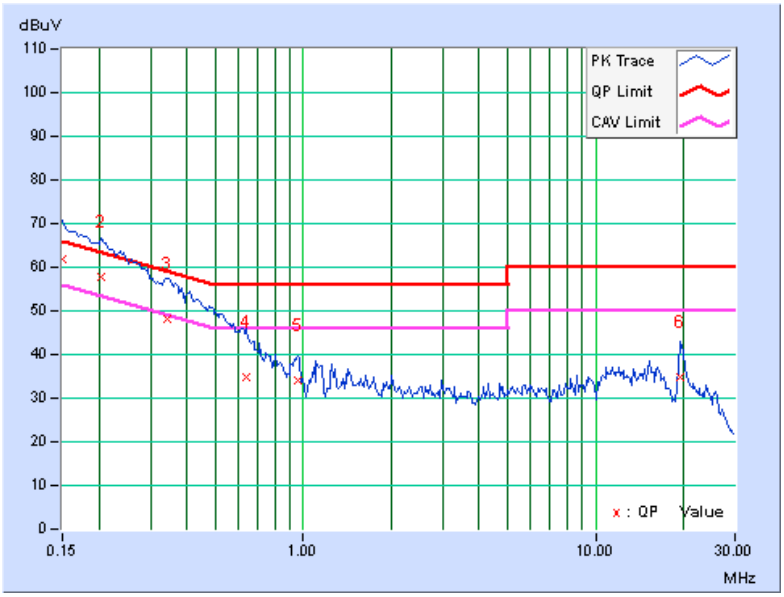
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

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	0.17	61.64	31.26	61.81	31.43	66.00	56.00	-4.19	-24.57
2	0.20469	0.15	57.72	27.30	57.87	27.45	63.42	53.42	-5.55	-25.97
3	0.34141	0.17	48.10	20.48	48.27	20.65	59.17	49.17	-10.90	-28.52
4	0.63828	0.18	34.61	20.19	34.79	20.37	56.00	46.00	-21.21	-25.63
5	0.96250	0.19	33.90	21.94	34.09	22.13	56.00	46.00	-21.91	-23.87
6	19.55078	0.81	34.16	25.24	34.97	26.05	60.00	50.00	-25.03	-23.95

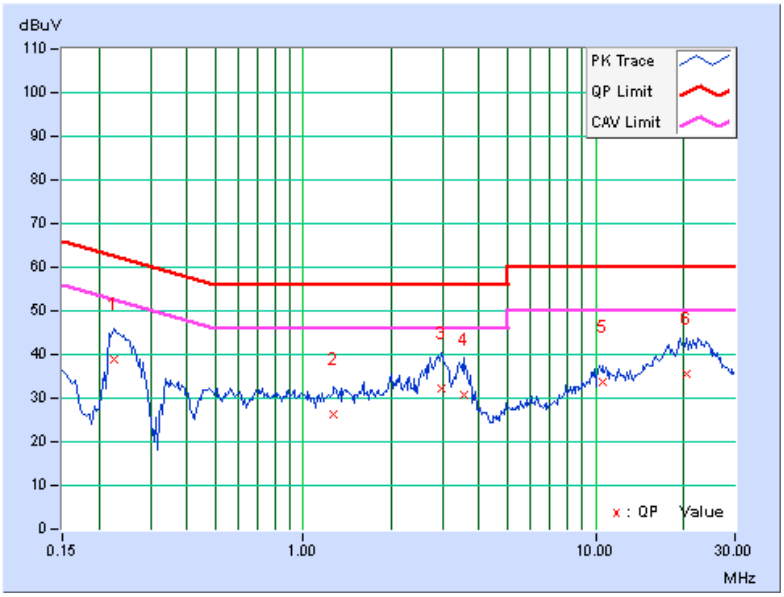
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

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	0.22422	0.15	38.73	21.38	38.88	21.53	62.66	52.66	-23.78	-31.13
2	1.26953	0.21	26.04	19.02	26.25	19.23	56.00	46.00	-29.75	-26.77
3	2.96484	0.30	31.80	23.68	32.10	23.98	56.00	46.00	-23.90	-22.02
4	3.53125	0.32	30.58	21.69	30.90	22.01	56.00	46.00	-25.10	-23.99
5	10.61328	0.44	33.19	28.71	33.63	29.15	60.00	50.00	-26.37	-20.85
6	20.44922	0.63	35.07	29.80	35.70	30.43	60.00	50.00	-24.30	-19.57

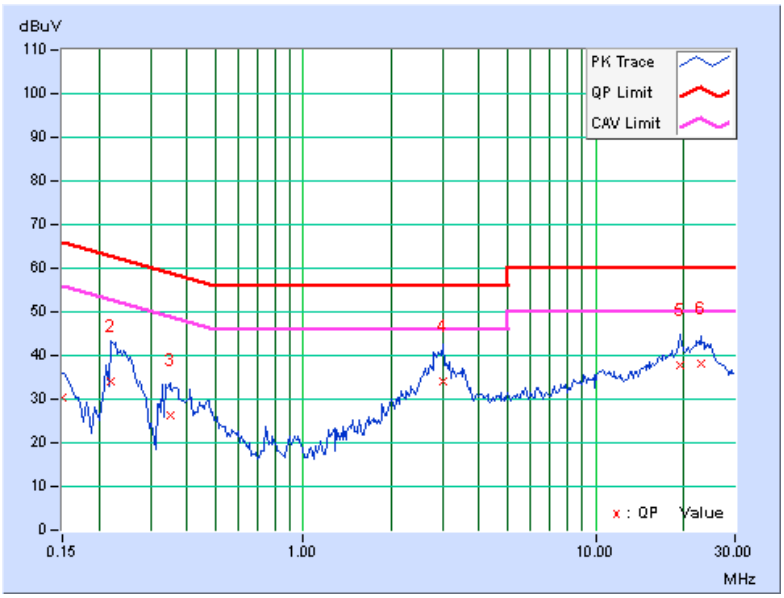
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

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	0.13	30.28	12.52	30.41	12.65	66.00	56.00	-35.59	-43.35
2	0.22031	0.14	34.10	17.50	34.24	17.64	62.81	52.81	-28.57	-35.17
3	0.34922	0.15	26.09	16.28	26.24	16.43	58.98	48.98	-32.74	-32.55
4	3.00391	0.31	33.64	25.29	33.95	25.60	56.00	46.00	-22.05	-20.40
5	19.52734	0.71	37.18	31.85	37.89	32.56	60.00	50.00	-22.11	-17.44
6	22.96094	0.67	37.53	32.48	38.20	33.15	60.00	50.00	-21.80	-16.85

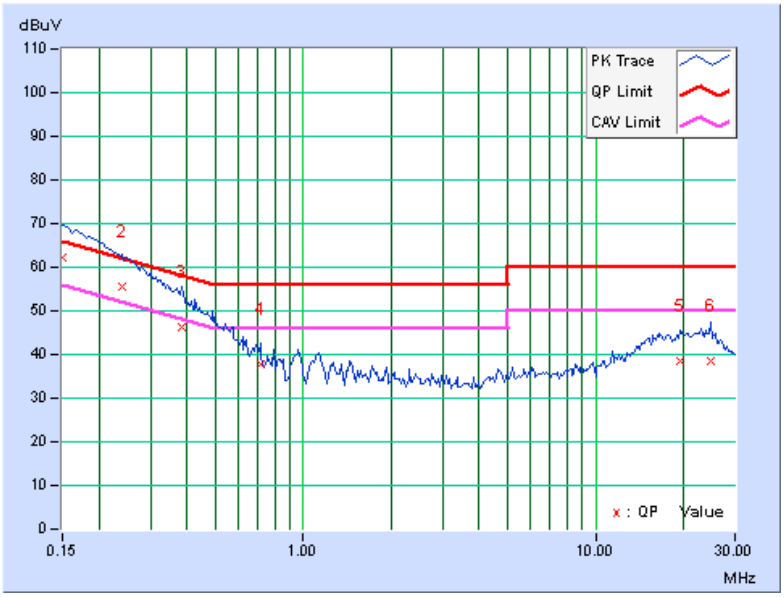
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B1		

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	0.17	62.02	31.50	62.19	31.67	66.00	56.00	-3.81	-24.33
2	0.23984	0.18	55.31	30.32	55.49	30.50	62.10	52.10	-6.62	-21.61
3	0.38438	0.20	46.18	30.74	46.38	30.94	58.18	48.18	-11.81	-17.25
4	0.71250	0.22	37.64	26.36	37.86	26.58	56.00	46.00	-18.14	-19.42
5	19.51172	0.72	37.81	29.62	38.53	30.34	60.00	50.00	-21.47	-19.66
6	24.81250	0.69	38.01	30.11	38.70	30.80	60.00	50.00	-21.30	-19.20

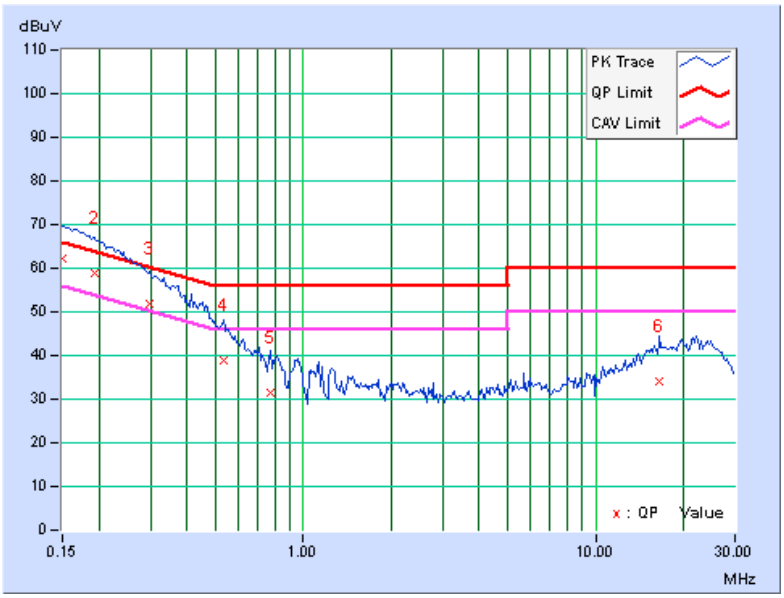
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B1		

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	0.17	61.94	31.48	62.11	31.65	66.00	56.00	-3.89	-24.35
2	0.19297	0.15	58.86	32.57	59.01	32.72	63.91	53.91	-4.89	-21.18
3	0.29844	0.16	51.56	27.66	51.72	27.82	60.29	50.29	-8.56	-22.46
4	0.53281	0.18	38.59	22.68	38.77	22.86	56.00	46.00	-17.23	-23.14
5	0.77109	0.19	31.34	19.39	31.53	19.58	56.00	46.00	-24.47	-26.42
6	16.54688	0.73	33.22	24.54	33.95	25.27	60.00	50.00	-26.05	-24.73

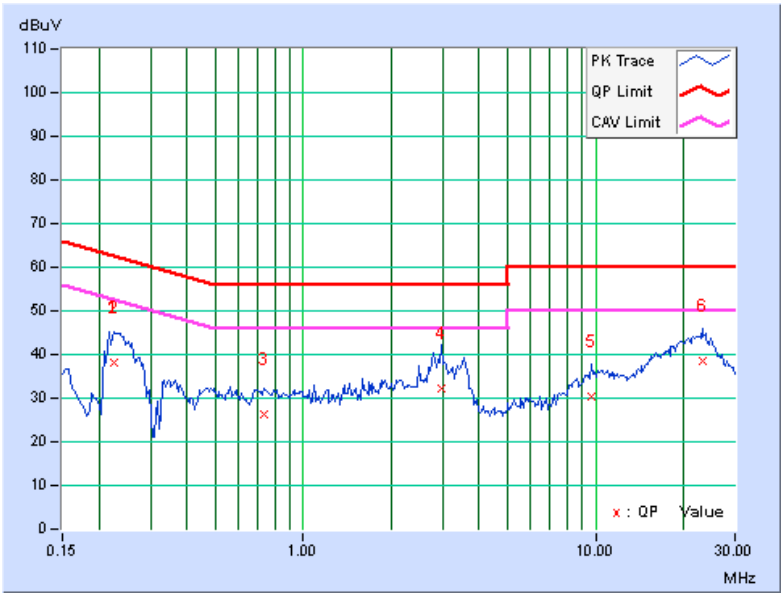
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	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	0.22422	0.15	37.92	20.56	38.07	20.71	62.66	52.66	-24.59	-31.95
2	0.22422	0.15	37.90	20.50	38.05	20.65	62.66	52.66	-24.61	-32.01
3	0.73594	0.18	26.10	18.87	26.28	19.05	56.00	46.00	-29.72	-26.95
4	2.96094	0.30	31.76	23.66	32.06	23.96	56.00	46.00	-23.94	-22.04
5	9.70703	0.43	30.09	24.80	30.52	25.23	60.00	50.00	-29.48	-24.77
6	23.12109	0.60	37.76	32.51	38.36	33.11	60.00	50.00	-21.64	-16.89

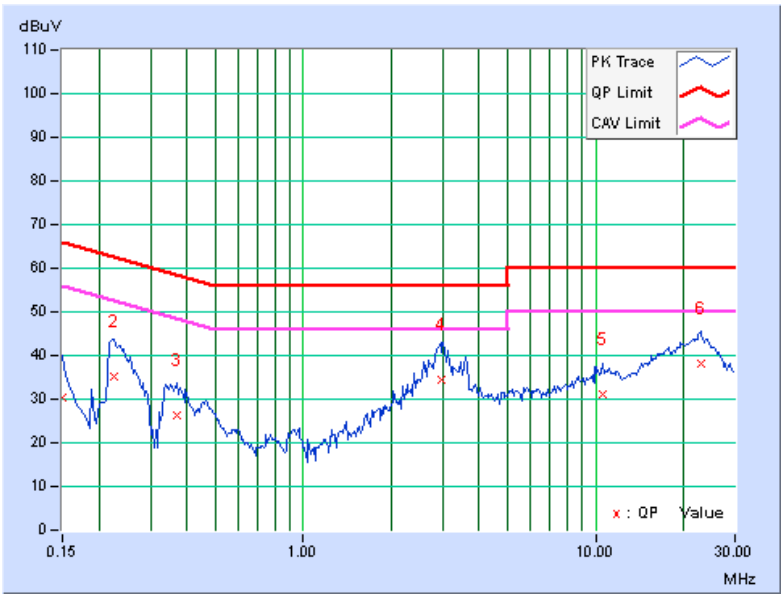
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. 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	0.13	30.34	13.34	30.47	13.47	66.00	56.00	-35.53	-42.53
2	0.22422	0.14	35.05	19.53	35.19	19.67	62.66	52.66	-27.47	-32.99
3	0.36875	0.16	26.28	18.14	26.44	18.30	58.53	48.53	-32.09	-30.23
4	2.95313	0.30	34.12	25.62	34.42	25.92	56.00	46.00	-21.58	-20.08
5	10.56641	0.49	30.77	25.58	31.26	26.07	60.00	50.00	-28.74	-23.93
6	22.83984	0.67	37.66	32.49	38.33	33.16	60.00	50.00	-21.67	-16.84

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

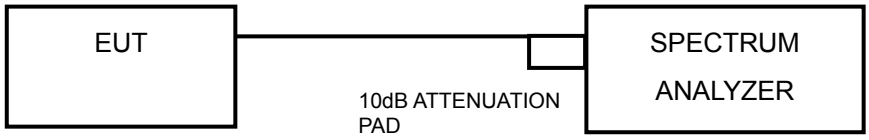


4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST SETUP



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.3.4 TEST PROCEDURE

a. Set resolution bandwidth (RBW) = approximately 1% of the emission bandwidth
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	10.29	0.5	PASS
6	2437	10.28	0.5	PASS
11	2462	10.29	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.56	0.5	PASS
6	2437	16.52	0.5	PASS
11	2462	16.47	0.5	PASS

802.11n (20MHz)

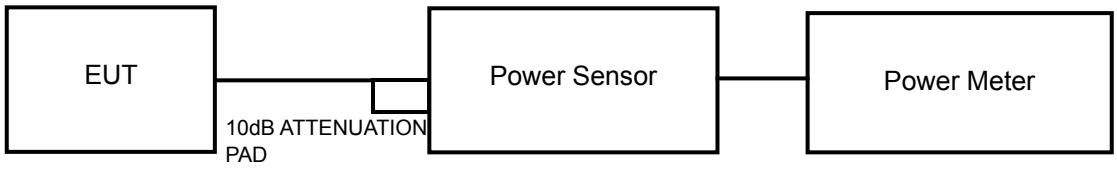
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	17.75	17.82	0.5	PASS
6	2437	17.67	17.74	0.5	PASS
11	2462	17.52	17.75	0.5	PASS

4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the peak power level.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

4.4.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	133.7	21.26	30	PASS
6	2437	136.1	21.34	30	PASS
11	2462	105.7	20.24	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	449.8	26.53	30	PASS
6	2437	534.6	27.28	30	PASS
11	2462	485.3	26.86	30	PASS

802.11n (20MHz)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	21.57	21.62	288.8	24.61	29	PASS
6	2437	23.49	23.52	448.3	26.52	29	PASS
11	2462	23.06	23.24	413.2	26.16	29	PASS

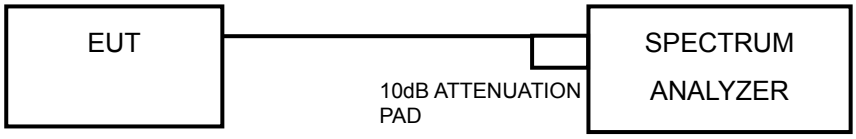
NOTE: Directional gain = 4dBi + 10log(2) = 7dBi > 6dBi , so the conducted power limit shall be reduced to 30-(7-6) = 29dBm.

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

a. Set the RBW = 100 kHz, VBW =300 kHz, Detector = peak.
b. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
c. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
d. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(3 kHz/100kHz)

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

4.5.7 TEST RESULTS

802.11b

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	9.14	-6.09	8	PASS
6	2437	9.33	-5.9	8	PASS
11	2462	7.88	-7.35	8	PASS

802.11g

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	5.55	-9.68	8	PASS
6	2437	6.47	-8.76	8	PASS
11	2462	5.94	-9.29	8	PASS

802.11n (20MHz)

TX chain	Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
0	1	2412	1.06	-14.17	3.01	-11.16	7	PASS
	6	2437	2.99	-12.24	3.01	-9.23	7	PASS
	11	2462	2.70	-12.53	3.01	-9.52	7	PASS
1	1	2412	1.32	-13.91	3.01	-10.90	7	PASS
	6	2437	3.13	-12.10	3.01	-9.09	7	PASS
	11	2462	2.98	-12.25	3.01	-9.24	7	PASS

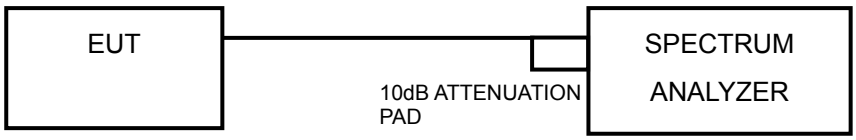
NOTE: Directional gain = 4dBi + 10log(2) = 7dBi > 6dBi , so the power density limit shall be reduced to 8-(7-6) = 7dBm.

4.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW ≥ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Set span to encompass the spectrum to be examined.
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

Same as Item 4.3.6

4.6.7 TEST RESULTS

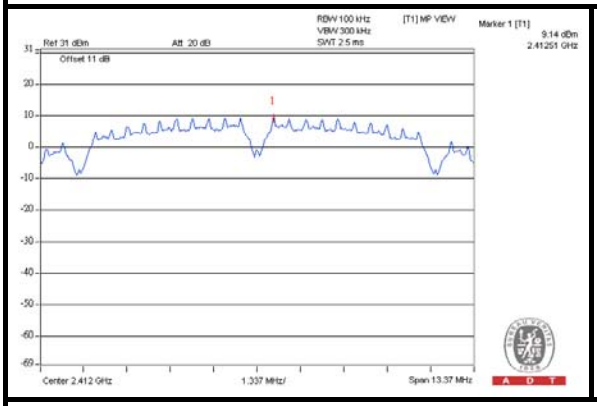
The conducted emission test is performed on each TX port of operating mode without summing or adding 10log (N) since the limit is relative emission limit. Only worst data of each operating mode is presented.

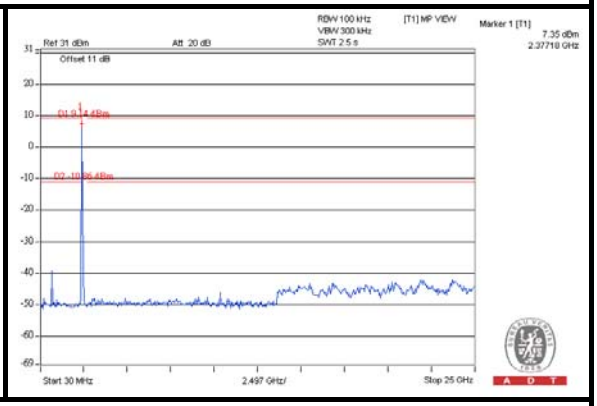
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

4.6.8 TEST RESULTS

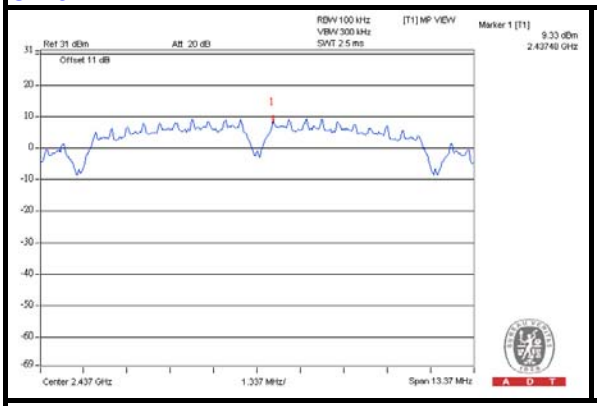
802.11b

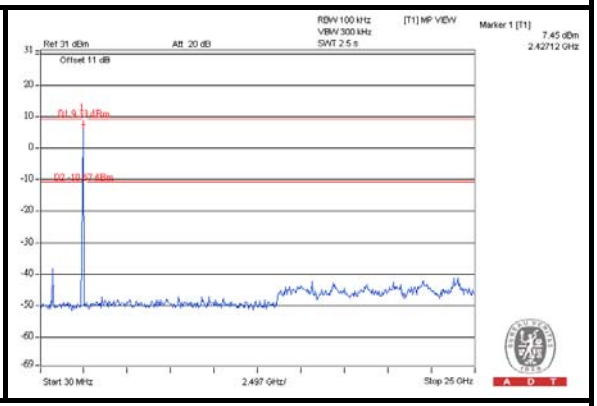
CH 1



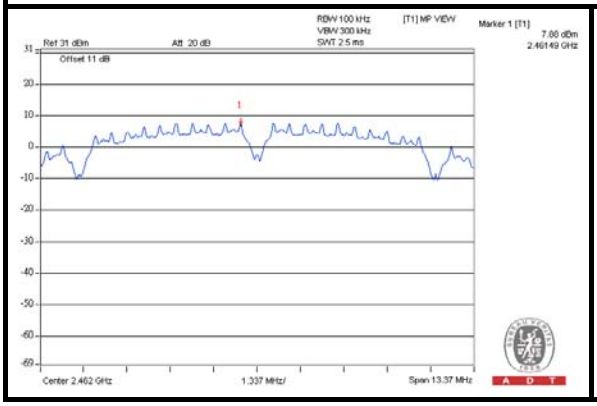


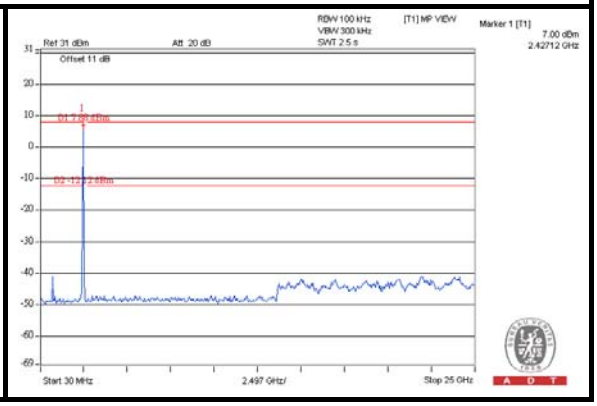
CH 6





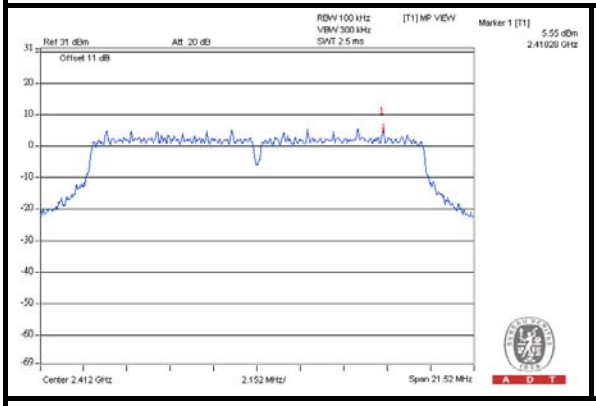
CH 11

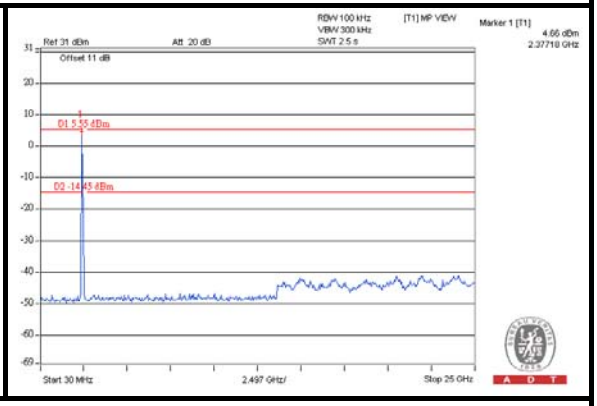




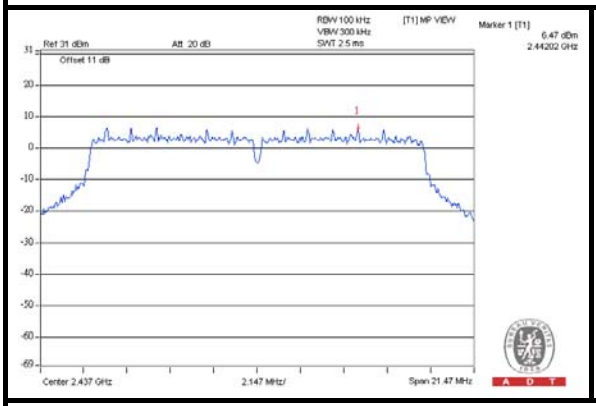
802.11g

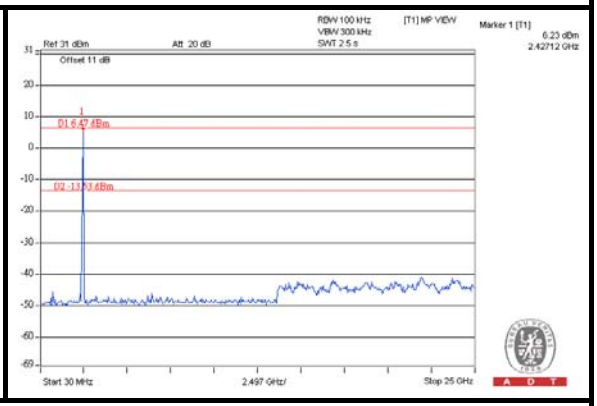
CH 1



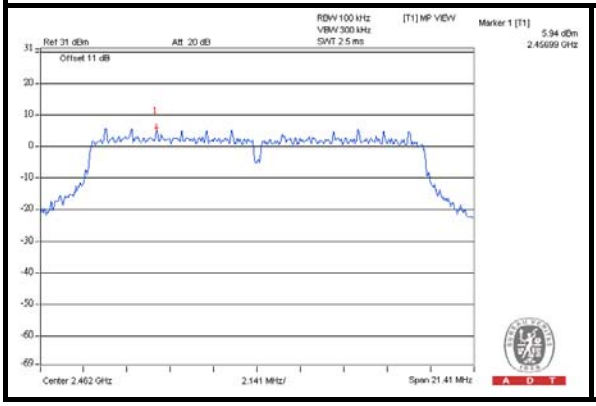


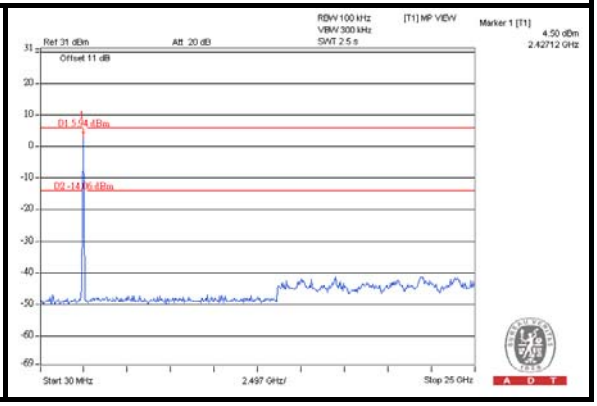
CH 6





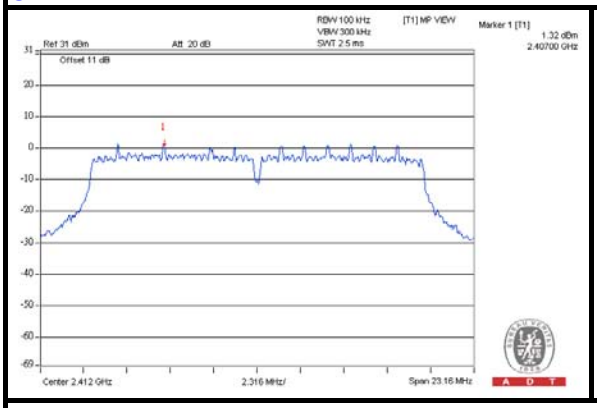
CH 11

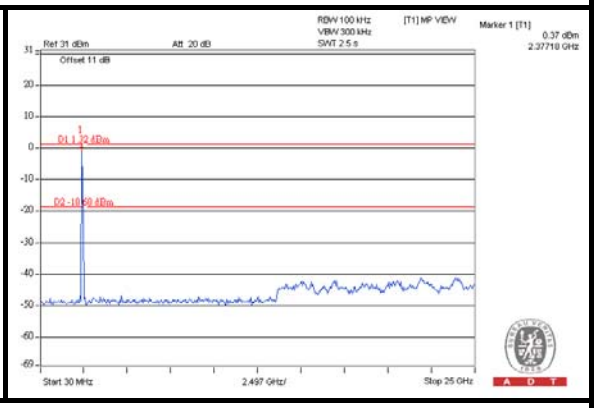




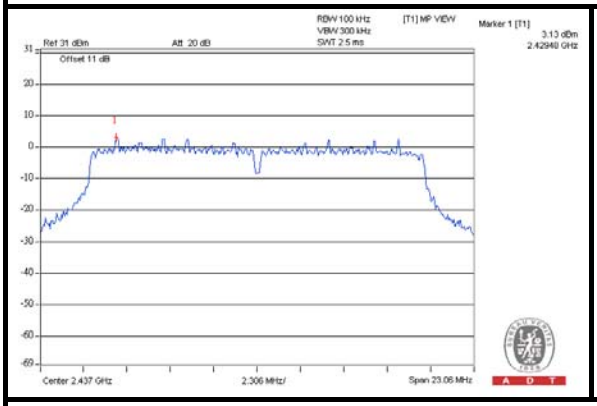
802.11n (20MHz)

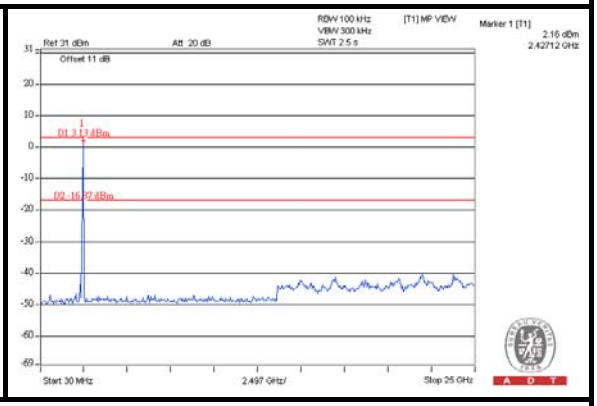
CH 1



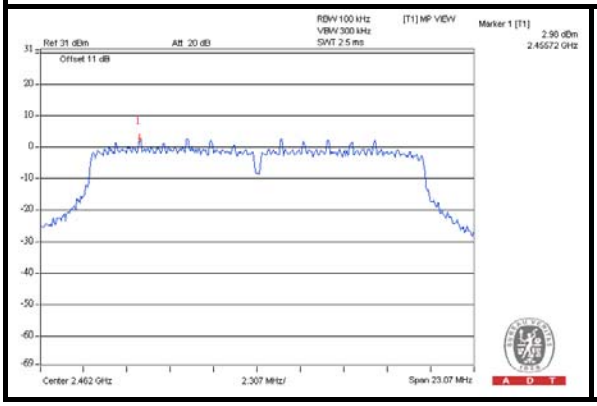


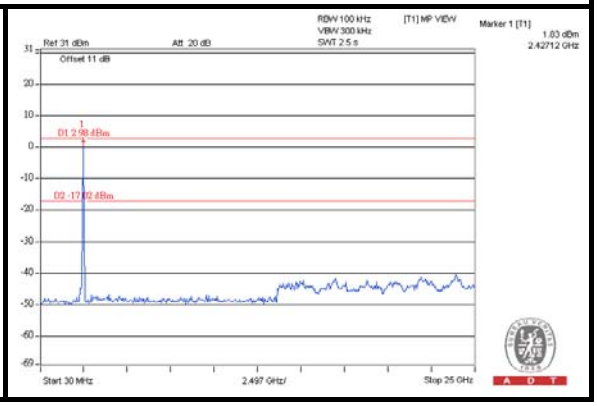
CH 6





CH 11





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)
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	#5725.00	69.8 PK	80.4	-10.6	1.07 H	176	30.30	39.50
2	#5725.00	58.2 AV	68.8	-10.6	1.07 H	176	18.70	39.50
3	*5745.00	100.4 PK			1.07 H	176	60.80	39.60
4	*5745.00	88.8 AV			1.07 H	176	49.20	39.60
5	11490.00	60.3 PK	74.0	-13.7	1.05 H	110	8.60	51.70
6	11490.00	47.8 AV	54.0	-6.2	1.05 H	110	-3.90	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	79.6 PK	90.2	-10.6	1.21 V	9	40.10	39.50
2	#5725.00	67.9 AV	78.5	-10.6	1.21 V	9	28.40	39.50
3	*5745.00	110.2 PK			1.21 V	9	70.60	39.60
4	*5745.00	98.5 AV			1.21 V	9	58.90	39.60
5	11490.00	62.9 PK	74.0	-11.1	1.18 V	82	11.20	51.70
6	11490.00	49.2 AV	54.0	-4.8	1.18 V	82	-2.50	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	*5785.00	100.1 PK			1.09 H	172	60.40	39.70
2	*5785.00	88.5 AV			1.09 H	172	48.80	39.70
3	11570.00	60.1 PK	74.0	-13.9	1.04 H	109	8.50	51.60
4	11570.00	47.6 AV	54.0	-6.4	1.04 H	109	-4.00	51.60
5	#17355.00	64.6 PK	80.1	-15.5	1.08 H	116	9.20	55.40
6	#17355.00	50.8 AV	68.5	-17.7	1.08 H	116	-4.60	55.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	109.8 PK			1.20 V	11	70.10	39.70
2	*5785.00	98.2 AV			1.20 V	11	58.50	39.70
3	11570.00	61.2 PK	74.0	-12.8	1.09 V	113	9.60	51.60
4	11570.00	48.6 AV	54.0	-5.4	1.09 V	113	-3.00	51.60
5	#17355.00	64.8 PK	89.8	-25.0	1.09 V	176	9.40	55.40
6	#17355.00	50.9 AV	78.2	-27.3	1.09 V	176	-4.50	55.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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			1.10 H	175	60.00	39.70
2	*5825.00	88.1 AV			1.10 H	175	48.40	39.70
3	#5850.00	59.5 PK	79.7	-20.2	1.10 H	175	19.70	39.80
4	#5850.00	47.9 AV	68.1	-20.2	1.10 H	175	8.10	39.80
5	11650.00	61.3 PK	74.0	-12.7	1.05 H	113	9.70	51.60
6	11650.00	48.6 AV	54.0	-5.4	1.05 H	113	-3.00	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	109.4 PK			1.21 V	15	69.70	39.70
2	*5825.00	97.8 AV			1.21 V	15	58.10	39.70
3	#5850.00	69.2 PK	89.4	-20.2	1.21 V	15	29.40	39.80
4	#5850.00	57.6 AV	77.8	-20.2	1.21 V	15	17.80	39.80
5	11650.00	61.5 PK	74.0	-12.5	1.10 V	139	9.90	51.60
6	11650.00	48.8 AV	54.0	-5.2	1.10 V	139	-2.80	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	74.7 PK	87.2	-12.5	1.40 H	116	35.20	39.50
2	#5725.00	62.4 AV	74.9	-12.5	1.40 H	116	22.90	39.50
3	*5745.00	107.2 PK			1.40 H	114	67.60	39.60
4	*5745.00	94.9 AV			1.40 H	114	55.30	39.60
5	11490.00	59.2 PK	74.0	-14.8	1.00 H	121	7.50	51.70
6	11490.00	46.1 AV	54.0	-7.9	1.00 H	121	-5.60	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	70.9 PK	82.2	-11.3	1.00 V	203	31.40	39.50
2	#5725.00	58.9 AV	70.2	-11.3	1.00 V	203	19.40	39.50
3	*5745.00	102.2 PK			1.00 V	203	62.60	39.60
4	*5745.00	90.2 AV			1.00 V	203	50.60	39.60
5	11490.00	60.2 PK	74.0	-13.8	1.00 V	11	8.50	51.70
6	11490.00	47.4 AV	54.0	-6.6	1.00 V	11	-4.30	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	5000.00	55.7 PK	74.0	-18.3	1.00 H	334	17.40	38.30
2	5000.00	43.1 AV	54.0	-10.9	1.00 H	334	4.80	38.30
3	*5785.00	106.5 PK			1.66 H	236	66.80	39.70
4	*5785.00	94.2 AV			1.66 H	236	54.50	39.70
5	11570.00	59.4 PK	74.0	-14.6	1.45 H	20	7.80	51.60
6	11570.00	46.6 AV	54.0	-7.4	1.45 H	20	-5.00	51.60
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	5000.00	54.2 PK	74.0	-19.8	1.00 V	243	15.90	38.30
2	5000.00	42.4 AV	54.0	-11.6	1.00 V	243	4.10	38.30
3	*5785.00	101.5 PK			1.09 V	203	61.80	39.70
4	*5785.00	89.2 AV			1.09 V	203	49.50	39.70
5	11570.00	58.3 PK	74.0	-15.7	1.54 V	40	6.70	51.60
6	11570.00	45.2 AV	54.0	-8.8	1.54 V	40	-6.40	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	106.9 PK			1.60 H	250	67.20	39.70
2	*5825.00	94.7 AV			1.60 H	250	55.00	39.70
3	#5850.00	66.8 PK	86.9	-20.1	1.63 H	236	27.00	39.80
4	#5850.00	54.6 AV	74.7	-20.1	1.63 H	236	14.80	39.80
5	11650.00	58.9 PK	74.0	-15.1	1.00 H	140	7.30	51.60
6	11650.00	45.7 AV	54.0	-8.3	1.00 H	140	-5.90	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	99.6 PK			1.00 V	315	59.90	39.70
2	*5825.00	87.2 AV			1.00 V	315	47.50	39.70
3	#5850.00	58.1 PK	79.6	-21.5	1.00 V	313	18.30	39.80
4	#5850.00	45.7 AV	67.2	-21.5	1.00 V	313	5.90	39.80
5	11650.00	57.7 PK	74.0	-16.3	1.04 V	200	6.10	51.60
6	11650.00	44.2 AV	54.0	-9.8	1.04 V	200	-7.40	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	#5725.00	72.6 PK	80.0	-7.4	1.00 H	14	33.10	39.50
2	#5725.00	60.8 AV	68.2	-7.4	1.00 H	14	21.30	39.50
3	*5745.00	100.0 PK			1.00 H	14	60.40	39.60
4	*5745.00	88.2 AV			1.00 H	14	48.60	39.60
5	11490.00	62.5 PK	74.0	-11.5	1.08 H	113	10.80	51.70
6	11490.00	48.3 AV	54.0	-5.7	1.08 H	113	-3.40	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	83.0 PK	90.4	-7.4	1.32 V	13	43.50	39.50
2	#5725.00	71.4 AV	78.8	-7.4	1.32 V	13	31.90	39.50
3	*5745.00	110.4 PK			1.32 V	13	70.80	39.60
4	*5745.00	98.8 AV			1.32 V	13	59.20	39.60
5	11490.00	62.8 PK	74.0	-11.2	1.24 V	190	11.10	51.70
6	11490.00	48.5 AV	54.0	-5.5	1.24 V	190	-3.20	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	*5785.00	99.6 PK			1.01 H	16	59.90	39.70
2	*5785.00	87.8 AV			1.01 H	16	48.10	39.70
3	11570.00	63.5 PK	74.0	-10.5	1.08 H	115	11.90	51.60
4	11570.00	49.2 AV	54.0	-4.8	1.08 H	115	-2.40	51.60
5	#17355.00	64.4 PK	79.6	-15.2	1.10 H	109	9.00	55.40
6	#17355.00	50.6 AV	67.8	-17.2	1.10 H	109	-4.80	55.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	110.1 PK			1.30 V	15	70.40	39.70
2	*5785.00	98.5 AV			1.30 V	15	58.80	39.70
3	11570.00	63.9 PK	74.0	-10.1	1.38 V	183	12.30	51.60
4	11570.00	49.7 AV	54.0	-4.3	1.38 V	183	-1.90	51.60
5	#17355.00	64.7 PK	90.1	-25.4	1.08 V	169	9.30	55.40
6	#17355.00	50.8 AV	78.5	-27.7	1.08 V	169	-4.60	55.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	99.2 PK			1.00 H	19	59.50	39.70
2	*5825.00	87.4 AV			1.00 H	19	47.70	39.70
3	#5850.00	62.1 PK	79.2	-17.1	1.00 H	19	22.30	39.80
4	#5850.00	50.3 AV	67.4	-17.1	1.00 H	19	10.50	39.80
5	11650.00	63.0 PK	74.0	-11.0	1.09 H	116	11.40	51.60
6	11650.00	48.5 AV	54.0	-5.5	1.09 H	116	-3.10	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	109.6 PK			1.29 V	16	69.90	39.70
2	*5825.00	98.1 AV			1.29 V	16	58.40	39.70
3	#5850.00	72.5 PK	89.6	-17.1	1.29 V	16	32.70	39.80
4	#5850.00	61.0 AV	78.1	-17.1	1.29 V	16	21.20	39.80
5	11650.00	63.2 PK	74.0	-10.8	1.20 V	184	11.60	51.60
6	11650.00	48.8 AV	54.0	-5.2	1.20 V	184	-2.80	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	77.7 PK	88.5	-10.8	1.42 H	113	38.20	39.50
2	#5725.00	65.7 AV	76.5	-10.8	1.42 H	113	26.20	39.50
3	*5745.00	108.5 PK			1.39 H	112	68.90	39.60
4	*5745.00	96.5 AV			1.39 H	112	56.90	39.60
5	11490.00	60.9 PK	74.0	-13.1	1.45 H	4	9.20	51.70
6	11490.00	48.1 AV	54.0	-5.9	1.45 H	4	-3.60	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	71.9 PK	83.4	-11.5	1.05 V	200	32.40	39.50
2	#5725.00	59.9 AV	71.4	-11.5	1.05 V	200	20.40	39.50
3	*5745.00	103.4 PK			1.02 V	203	63.80	39.60
4	*5745.00	91.4 AV			1.02 V	203	51.80	39.60
5	11490.00	59.9 PK	74.0	-14.1	1.54 V	340	8.20	51.70
6	11490.00	46.9 AV	54.0	-7.1	1.54 V	340	-4.80	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	5000.00	51.5 PK	74.0	-22.5	1.00 H	330	13.20	38.30
2	5000.00	43.2 AV	54.0	-10.8	1.00 H	330	4.90	38.30
3	*5785.00	109.6 PK			1.59 H	113	69.90	39.70
4	*5785.00	97.3 AV			1.59 H	113	57.60	39.70
5	11570.00	60.3 PK	74.0	-13.7	1.42 H	341	8.70	51.60
6	11570.00	47.3 AV	54.0	-6.7	1.42 H	341	-4.30	51.60
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	5000.00	50.6 PK	74.0	-23.4	1.00 V	3	12.30	38.30
2	5000.00	42.5 AV	54.0	-11.5	1.00 V	3	4.20	38.30
3	*5785.00	103.9 PK			1.74 V	204	64.20	39.70
4	*5785.00	91.7 AV			1.74 V	204	52.00	39.70
5	11570.00	59.3 PK	74.0	-14.7	1.24 V	14	7.70	51.60
6	11570.00	46.9 AV	54.0	-7.1	1.24 V	14	-4.70	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	110.2 PK			1.60 H	118	70.50	39.70
2	*5825.00	98.3 AV			1.60 H	118	58.60	39.70
3	#5850.00	73.8 PK	90.2	-16.4	1.64 H	237	34.00	39.80
4	#5850.00	61.9 AV	78.3	-16.4	1.64 H	237	22.10	39.80
5	11650.00	60.5 PK	74.0	-13.5	1.45 H	343	8.90	51.60
6	11650.00	46.8 AV	54.0	-7.2	1.45 H	343	-4.80	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	103.3 PK			1.38 V	81	63.60	39.70
2	*5825.00	91.6 AV			1.38 V	81	51.90	39.70
3	#5850.00	66.2 PK	83.3	-17.1	1.35 V	90	26.40	39.80
4	#5850.00	54.5 AV	71.6	-17.1	1.35 V	90	14.70	39.80
5	11650.00	59.5 PK	74.0	-14.5	1.54 V	34	7.90	51.60
6	11650.00	45.4 AV	54.0	-8.6	1.54 V	34	-6.20	51.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	#5725.00	68.0 PK	76.2	-8.2	1.02 H	18	28.50	39.50
2	#5725.00	56.2 AV	64.4	-8.2	1.02 H	18	16.70	39.50
3	*5755.00	96.2 PK			1.02 H	18	56.60	39.60
4	*5755.00	84.4 AV			1.02 H	18	44.80	39.60
5	11510.00	62.8 PK	74.0	-11.2	1.15 H	224	11.10	51.70
6	11510.00	48.5 AV	54.0	-5.5	1.15 H	224	-3.20	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	78.4 PK	86.6	-8.2	1.20 V	16	38.90	39.50
2	#5725.00	66.9 AV	75.1	-8.2	1.20 V	16	27.40	39.50
3	*5755.00	106.6 PK			1.20 V	16	67.00	39.60
4	*5755.00	95.1 AV			1.20 V	16	55.50	39.60
5	11510.00	63.1 PK	74.0	-10.9	1.08 V	112	11.40	51.70
6	11510.00	48.8 AV	54.0	-5.2	1.08 V	112	-2.90	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	*5795.00	96.5 PK			1.00 H	19	56.80	39.70
2	*5795.00	84.7 AV			1.00 H	19	45.00	39.70
3	#5850.00	58.2 PK	76.5	-18.3	1.00 H	19	18.40	39.80
4	#5850.00	46.4 AV	64.7	-18.3	1.00 H	19	6.60	39.80
5	11590.00	63.1 PK	74.0	-10.9	1.14 H	123	11.60	51.50
6	11590.00	48.8 AV	54.0	-5.2	1.14 H	123	-2.70	51.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	106.8 PK			1.18 V	19	67.10	39.70
2	*5795.00	95.4 AV			1.18 V	19	55.70	39.70
3	#5850.00	68.5 PK	86.8	-18.3	1.18 V	19	28.70	39.80
4	#5850.00	57.1 AV	75.4	-18.3	1.18 V	19	17.30	39.80
5	11590.00	63.4 PK	74.0	-10.6	1.05 V	112	11.90	51.50
6	11590.00	49.0 AV	54.0	-5.0	1.05 V	112	-2.50	51.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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)
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	77.4 PK	84.7	-7.3	1.41 H	112	37.90	39.50
2	#5725.00	64.8 AV	72.1	-7.3	1.41 H	112	25.30	39.50
3	*5755.00	104.7 PK			1.40 H	113	65.10	39.60
4	*5755.00	92.1 AV			1.40 H	113	52.50	39.60
5	11510.00	60.6 PK	74.0	-13.4	1.48 H	21	8.90	51.70
6	11510.00	46.9 AV	54.0	-7.1	1.48 H	21	-4.80	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	70.2 PK	78.7	-8.5	1.50 V	205	30.70	39.50
2	#5725.00	58.4 AV	66.9	-8.5	1.50 V	205	18.90	39.50
3	*5755.00	98.7 PK			1.56 V	202	59.10	39.60
4	*5755.00	86.9 AV			1.56 V	202	47.30	39.60
5	11510.00	59.6 PK	74.0	-14.4	1.30 V	112	7.90	51.70
6	11510.00	45.5 AV	54.0	-8.5	1.30 V	112	-6.20	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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)
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	*5795.00	105.0 PK			1.85 H	258	65.30	39.70
2	*5795.00	93.1 AV			1.85 H	258	53.40	39.70
3	#5850.00	76.7 PK	85.0	-8.3	1.83 H	139	36.90	39.80
4	#5850.00	64.8 AV	73.1	-8.3	1.83 H	139	25.00	39.80
5	11590.00	60.8 PK	74.0	-13.2	1.70 H	85	9.30	51.50
6	11590.00	47.2 AV	54.0	-6.8	1.70 H	85	-4.30	51.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	99.6 PK			1.87 V	202	59.90	39.70
2	*5795.00	87.4 AV			1.87 V	202	47.70	39.70
3	#5850.00	70.1 PK	79.6	-9.5	1.80 V	210	30.30	39.80
4	#5850.00	57.9 AV	67.4	-9.5	1.80 V	210	18.10	39.80
5	11590.00	59.8 PK	74.0	-14.2	1.35 V	358	8.30	51.50
6	11590.00	45.9 AV	54.0	-8.1	1.35 V	358	-5.60	51.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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
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	125.17	34.4 QP	43.5	-9.1	1.50 H	109	21.80	12.60
2	249.60	33.5 QP	46.0	-12.5	2.00 H	61	19.90	13.60
3	360.43	36.2 QP	46.0	-9.8	1.75 H	52	18.90	17.30
4	**374.04**	**44.9 QP**	**46.0**	**-1.1**	**1.00 H**	**52**	**27.20**	**17.70**
5	624.85	37.1 QP	46.0	-8.9	1.25 H	197	13.40	23.70
6	875.67	39.5 QP	46.0	-6.5	1.00 H	148	11.30	28.20
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	70.73	29.5 QP	40.0	-10.5	1.50 V	270	17.30	12.20
2	125.17	31.6 QP	43.5	-11.9	1.75 V	116	19.00	12.60
3	360.43	29.1 QP	46.0	-16.9	2.00 V	139	11.80	17.30
4	374.04	39.0 QP	46.0	-7.0	1.00 V	155	21.30	17.70
5	624.85	38.3 QP	46.0	-7.7	1.00 V	58	14.60	23.70
6	875.67	37.9 QP	46.0	-8.1	1.25 V	240	9.70	28.20

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	111.56	28.1 QP	43.5	-15.4	2.00 H	117	17.00	11.10
2	125.17	36.1 QP	43.5	-7.4	1.75 H	134	23.50	12.60
3	374.04	41.6 QP	46.0	-4.4	1.00 H	52	23.90	17.70
4	624.85	42.1 QP	46.0	-3.9	1.25 H	57	18.40	23.70
5	751.23	39.1 QP	46.0	-6.9	1.00 H	170	13.30	25.80
6	799.84	35.3 QP	46.0	-10.7	1.75 H	76	8.20	27.10
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	64.90	36.2 QP	40.0	-3.8	1.00 V	55	23.20	13.00
2	125.17	32.3 QP	43.5	-11.2	1.25 V	101	19.70	12.60
3	374.04	36.5 QP	46.0	-9.5	1.50 V	249	18.80	17.70
4	444.03	30.1 QP	46.0	-15.9	2.00 V	296	10.50	19.60
5	624.85	41.9 QP	46.0	-4.1	1.00 V	296	18.20	23.70
6	751.23	34.7 QP	46.0	-11.3	1.50 V	69	8.90	25.80

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	198.71	31.0 QP	43.5	-12.5	1.00 H	117	19.40	11.60
2	394.70	32.4 QP	46.0	-13.6	1.00 H	216	14.10	18.30
3	499.48	34.1 QP	46.0	-11.9	1.50 H	226	13.00	21.10
4	575.15	34.1 QP	46.0	-11.9	1.50 H	16	11.20	22.90
5	600.38	34.4 QP	46.0	-11.6	1.50 H	222	10.90	23.50
6	825.46	32.1 QP	46.0	-13.9	1.00 H	163	4.70	27.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	55.13	28.8 QP	40.0	-11.2	1.00 V	32	14.90	13.90
2	299.62	25.1 QP	46.0	-20.9	2.00 V	306	9.40	15.70
3	375.29	29.3 QP	46.0	-16.7	1.50 V	206	11.50	17.80
4	499.48	30.4 QP	46.0	-15.6	1.00 V	230	9.30	21.10
5	575.15	32.2 QP	46.0	-13.8	1.00 V	237	9.30	22.90
6	600.38	31.6 QP	46.0	-14.4	1.50 V	192	8.10	23.50

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
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	130.80	29.3 QP	43.5	-14.2	1.50 H	253	16.20	13.10
2	375.29	33.7 QP	46.0	-12.3	1.00 H	72	15.90	17.80
3	499.48	30.1 QP	46.0	-15.9	1.50 H	133	9.00	21.10
4	600.38	31.5 QP	46.0	-14.5	1.00 H	221	8.00	23.50
5	726.50	30.3 QP	46.0	-15.7	2.00 H	167	5.20	25.10
6	800.24	32.6 QP	46.0	-13.4	1.00 H	89	5.50	27.10
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	70.65	32.2 QP	40.0	-7.8	2.00 V	344	20.00	12.20
2	375.29	27.0 QP	46.0	-19.0	1.00 V	149	9.20	17.80
3	499.48	32.3 QP	46.0	-13.7	1.00 V	235	11.20	21.10
4	575.15	34.0 QP	46.0	-12.0	1.50 V	241	11.10	22.90
5	600.38	30.5 QP	46.0	-15.5	1.00 V	120	7.00	23.50
6	701.28	28.7 QP	46.0	-17.3	1.00 V	109	4.30	24.40

REMARKS:

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

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

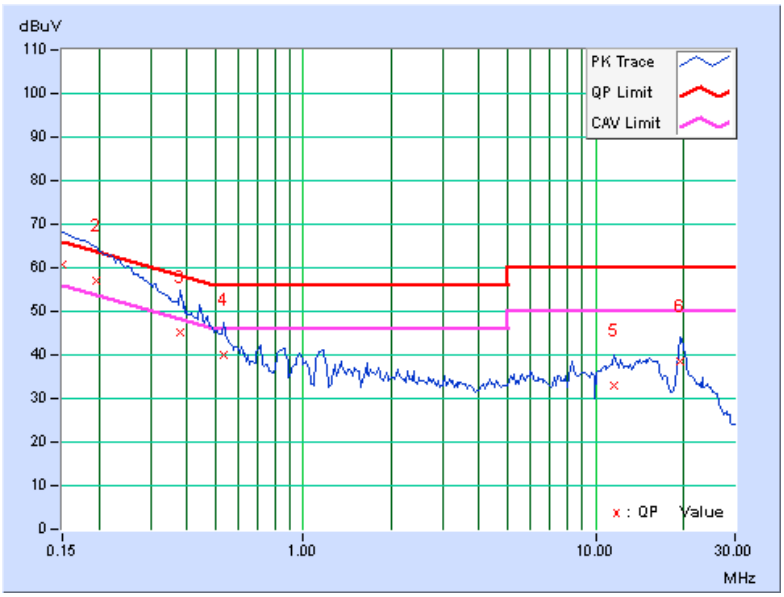
5.2.7 TEST RESULTS

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

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

No	Freq.	Corr. Factor	Reading Value		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	0.17	60.67	30.40	60.84	30.57	66.00	56.00	-5.16	-25.43
2	0.19687	0.17	56.98	29.13	57.15	29.30	63.74	53.74	-6.59	-24.44
3	0.38047	0.20	45.13	34.50	45.33	34.70	58.27	48.27	-12.94	-13.57
4	0.53281	0.21	39.88	28.69	40.09	28.90	56.00	46.00	-15.91	-17.10
5	11.59766	0.52	32.39	24.45	32.91	24.97	60.00	50.00	-27.09	-25.03
6	19.56641	0.72	37.68	29.78	38.40	30.50	60.00	50.00	-21.60	-19.50

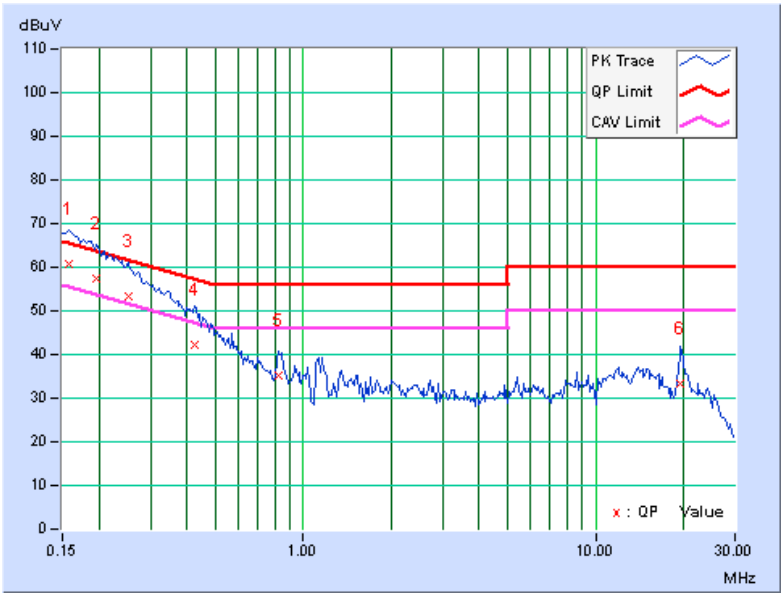
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

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	0.15781	0.17	60.44	30.11	60.61	30.28	65.58	55.58	-4.97	-25.30
2	0.19687	0.15	57.32	29.07	57.47	29.22	63.74	53.74	-6.27	-24.52
3	0.25156	0.16	53.10	26.81	53.26	26.97	61.71	51.71	-8.45	-24.74
4	0.42344	0.18	42.07	27.89	42.25	28.07	57.38	47.38	-15.13	-19.31
5	0.82578	0.19	35.12	23.82	35.31	24.01	56.00	46.00	-20.69	-21.99
6	19.41797	0.81	32.62	23.49	33.43	24.30	60.00	50.00	-26.57	-25.70

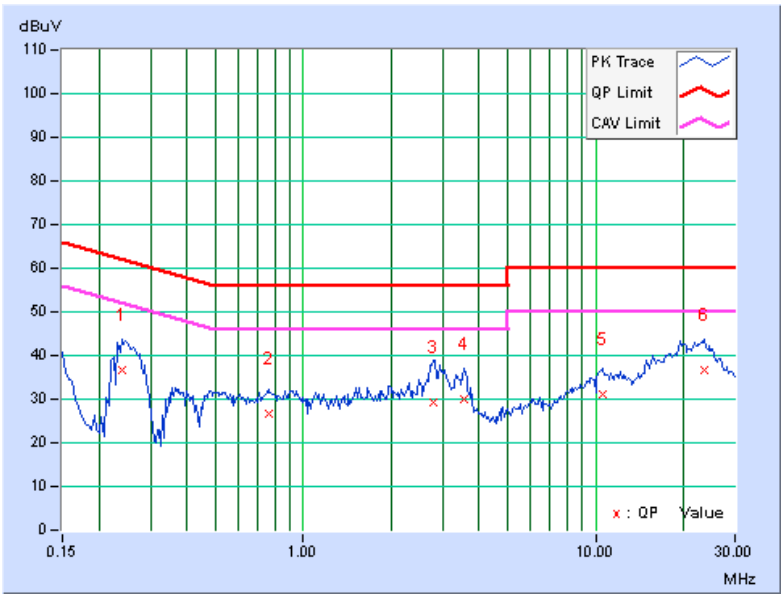
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

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	0.23984	0.15	36.69	22.92	36.84	23.07	62.10	52.10	-25.26	-29.03
2	0.75938	0.18	26.52	19.39	26.70	19.57	56.00	46.00	-29.30	-26.43
3	2.77344	0.29	29.03	21.97	29.32	22.26	56.00	46.00	-26.68	-23.74
4	3.52734	0.32	29.86	21.45	30.18	21.77	56.00	46.00	-25.82	-24.23
5	10.52734	0.44	30.77	25.48	31.21	25.92	60.00	50.00	-28.79	-24.08
6	23.58203	0.59	36.05	30.80	36.64	31.39	60.00	50.00	-23.36	-18.61

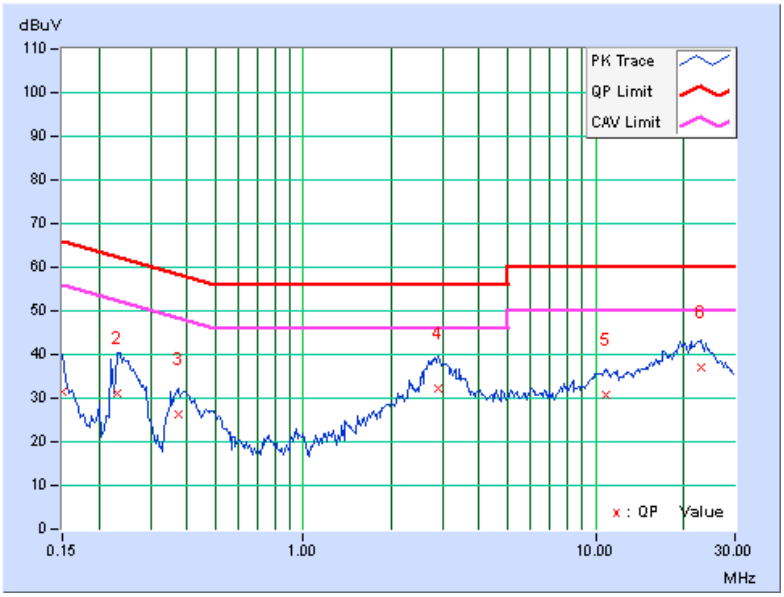
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

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	0.13	31.42	16.05	31.55	16.18	66.00	56.00	-34.45	-39.82
2	0.23203	0.14	31.12	16.56	31.26	16.70	62.38	52.38	-31.11	-35.67
3	0.37266	0.16	25.99	18.21	26.15	18.37	58.44	48.44	-32.29	-30.07
4	2.90234	0.30	31.95	24.54	32.25	24.84	56.00	46.00	-23.75	-21.16
5	10.79297	0.50	30.15	24.86	30.65	25.36	60.00	50.00	-29.35	-24.64
6	22.95313	0.67	36.19	31.04	36.86	31.71	60.00	50.00	-23.14	-18.29

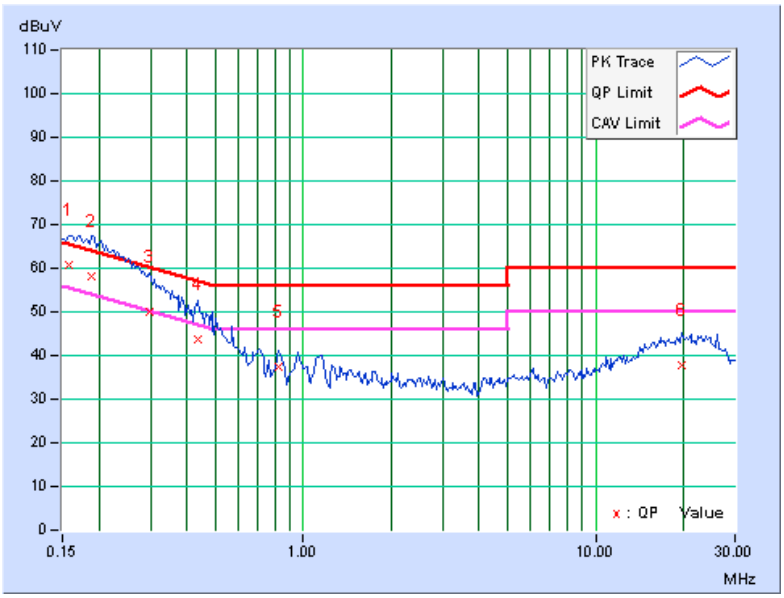
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B1		

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	0.15781	0.17	60.52	30.03	60.69	30.20	65.58	55.58	-4.89	-25.38
2	0.18906	0.17	58.15	32.95	58.32	33.12	64.08	54.08	-5.76	-20.96
3	0.29844	0.18	49.91	29.60	50.09	29.78	60.29	50.29	-10.19	-20.50
4	0.43516	0.20	43.38	32.69	43.58	32.89	57.15	47.15	-13.57	-14.26
5	0.82578	0.22	37.05	26.44	37.27	26.66	56.00	46.00	-18.73	-19.34
6	19.67188	0.72	37.03	29.05	37.75	29.77	60.00	50.00	-22.25	-20.23

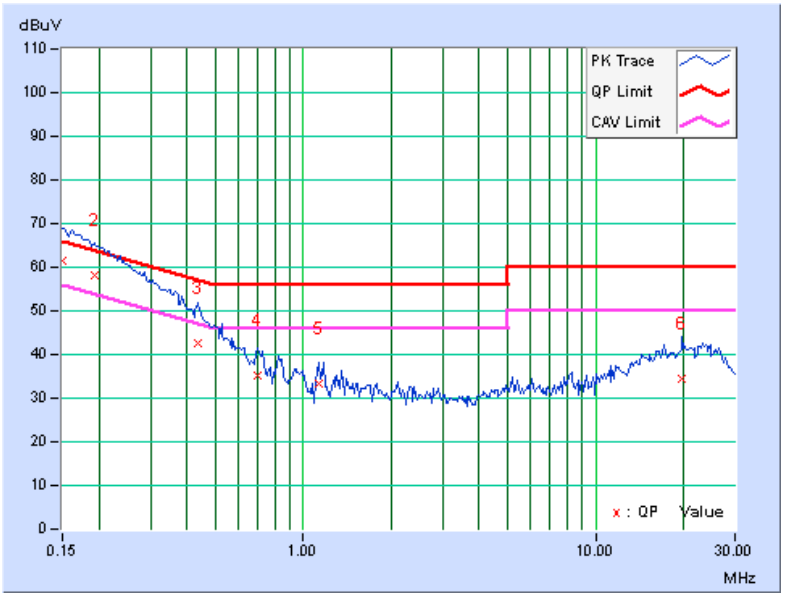
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B1		

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	0.17	61.28	30.94	61.45	31.11	66.00	56.00	-4.55	-24.89
2	0.19297	0.15	57.96	31.52	58.11	31.67	63.91	53.91	-5.79	-22.23
3	0.43516	0.18	42.42	28.82	42.60	29.00	57.15	47.15	-14.55	-18.15
4	0.70078	0.19	35.04	24.31	35.23	24.50	56.00	46.00	-20.77	-21.50
5	1.13672	0.20	33.11	22.61	33.31	22.81	56.00	46.00	-22.69	-23.19
6	19.84375	0.82	33.51	24.37	34.33	25.19	60.00	50.00	-25.67	-24.81

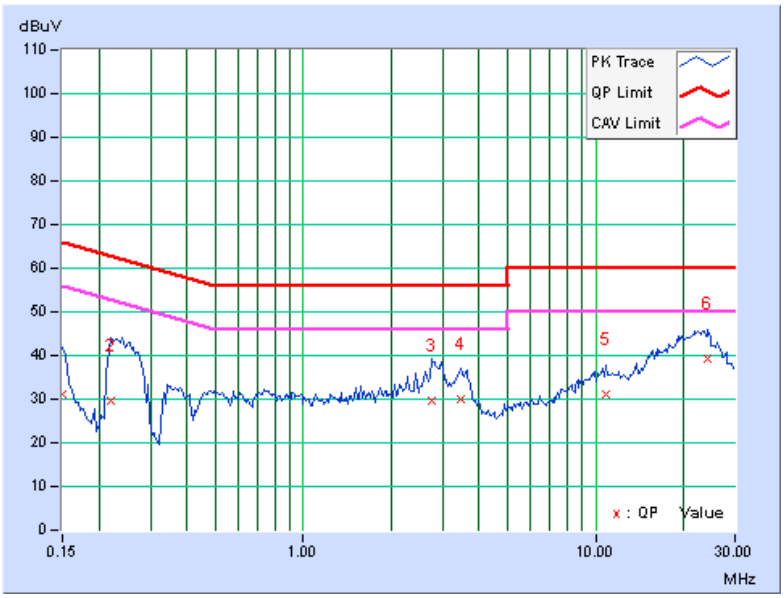
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Line 1	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	0.15	31.04	13.76	31.19	13.91	66.00	56.00	-34.81	-42.09
2	0.22031	0.15	29.36	12.67	29.51	12.82	62.81	52.81	-33.30	-39.99
3	2.75000	0.29	29.45	21.91	29.74	22.20	56.00	46.00	-26.26	-23.80
4	3.45313	0.32	29.79	22.04	30.11	22.36	56.00	46.00	-25.89	-23.64
5	10.83984	0.45	30.71	25.52	31.16	25.97	60.00	50.00	-28.84	-24.03
6	24.28125	0.59	38.50	33.06	39.09	33.65	60.00	50.00	-20.91	-16.35

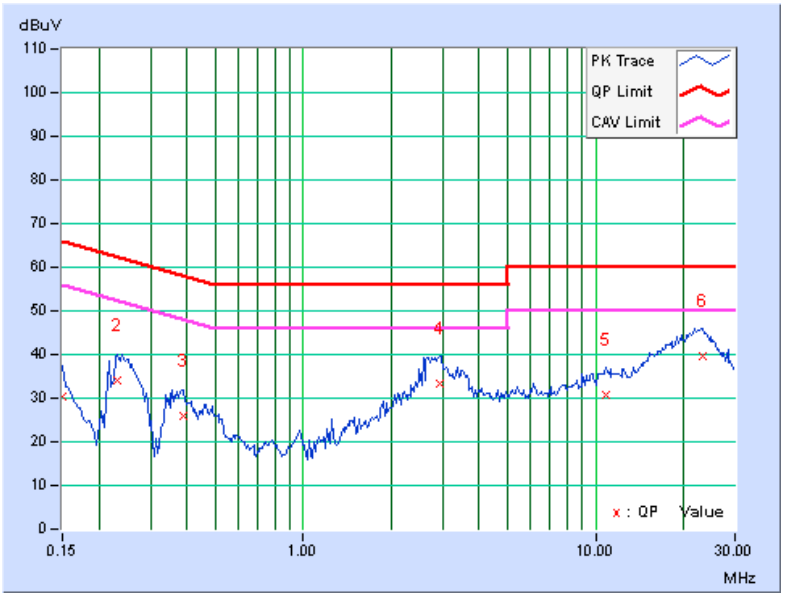
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. 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	0.13	30.12	13.76	30.25	13.89	66.00	56.00	-35.75	-42.11
2	0.23203	0.14	33.97	21.36	34.11	21.50	62.38	52.38	-28.26	-30.87
3	0.38828	0.16	25.77	18.05	25.93	18.21	58.10	48.10	-32.17	-29.89
4	2.94531	0.30	33.10	25.12	33.40	25.42	56.00	46.00	-22.60	-20.58
5	10.90234	0.50	30.35	25.00	30.85	25.50	60.00	50.00	-29.15	-24.50
6	23.19531	0.67	38.80	33.53	39.47	34.20	60.00	50.00	-20.53	-15.80

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

5.3.2 TEST SETUP

Same as item 4.3.2.

5.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.3.4 TEST PROCEDURE

Same as item 4.3.4.

5.3.5 DEVIATION FROM TEST STANDARD

No deviation.

5.3.6 EUT OPERATING CONDITIONS

Same as item 4.3.6.

5.3.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.64	0.5	PASS
157	5785	16.63	0.5	PASS
165	5825	16.60	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	17.79	17.94	0.5	PASS
157	5785	17.81	17.91	0.5	PASS
165	5825	17.87	17.82	0.5	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
151	5755	37.20	37.34	0.5	PASS
159	5795	36.95	37.33	0.5	PASS

5.4 CONDUCTED OUTPUT POWER

5.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 5725 –5850 MHz bands: 1 Watt (30dBm)

5.4.2 TEST SETUP

Same as Item 4.4.2.

5.4.3 INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.4.4 TEST PROCEDURES

Same as Item 4.4.4.

5.4.5 DEVIATION FROM TEST STANDARD

No deviation.

5.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

5.4.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
149	5745	325.1	25.12	30	PASS
157	5785	317.0	25.01	30	PASS
165	5825	310.5	24.92	30	PASS

802.11n (20MHz)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	24.18	23.44	482.6	26.84	27	PASS
157	5785	24.09	23.63	**487.1**	26.88	27	PASS
165	5825	23.90	23.81	485.9	26.87	27	PASS

NOTE: Directional gain = 6dBi + 10log(2) = 9dBi > 6dBi , so the conducted power limit shall be reduced to 30-(9-6) = 27dBm.

802.11n (40MHz)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
151	5755	24.05	23.60	483.2	26.84	27	PASS
159	5795	23.95	23.72	483.8	26.85	27	PASS

NOTE: Directional gain = 6dBi + 10log(2) = 9dBi > 6dBi , so the conducted power limit shall be reduced to 30-(9-6) = 27dBm.

5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST SETUP

Same as item 4.5.2.

5.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.5.4 TEST PROCEDURE.

Same as item 4.5.4.

5.5.5 DEVIATION FROM TEST STANDARD

No deviation.

5.5.6 EUT OPERATING CONDITION

Same as item 4.3.6.

5.5.7 TEST RESULTS

802.11a

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
149	5745	7.65	-7.58	8	PASS
157	5785	7.66	-7.57	8	PASS
165	5825	7.53	-7.70	8	PASS

802.11n (20MHz)

TX chain	Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
0	149	5745	4.81	-10.42	3.01	-7.41	5	PASS
	157	5785	4.88	-10.35	3.01	-7.34	5	PASS
	165	5825	4.66	-10.57	3.01	-7.56	5	PASS
1	149	5745	3.73	-11.50	3.01	-8.49	5	PASS
	157	5785	3.99	-11.24	3.01	-8.23	5	PASS
	165	5825	4.06	-11.17	3.01	-8.16	5	PASS

NOTE: Directional gain = 6dBi + 10log(2) = 9dBi > 6dBi , so the power density limit shall be reduced to 8-(9-6) = 5dBm.

802.11n (40MHz)

TX chain	Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
0	151	5755	2.44	-12.79	3.01	-9.78	5	PASS
	159	5795	2.57	-12.66	3.01	-9.65	5	PASS
1	151	5755	2.20	-13.03	3.01	-10.02	5	PASS
	159	5795	2.49	-12.74	3.01	-9.73	5	PASS

NOTE: Directional gain = 6dBi + 10log(2) = 9dBi > 6dBi , so the power density limit shall be reduced to 8-(9-6) = 5dBm.

5.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

5.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

5.6.2 TEST SETUP

Same as Item 4.6.2

5.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.6.4 TEST PROCEDURE

Same as Item 4.6.4

5.6.5 DEVIATION FROM TEST STANDARD

No deviation.

5.6.6 EUT OPERATING CONDITION

Same as Item 4.3.6

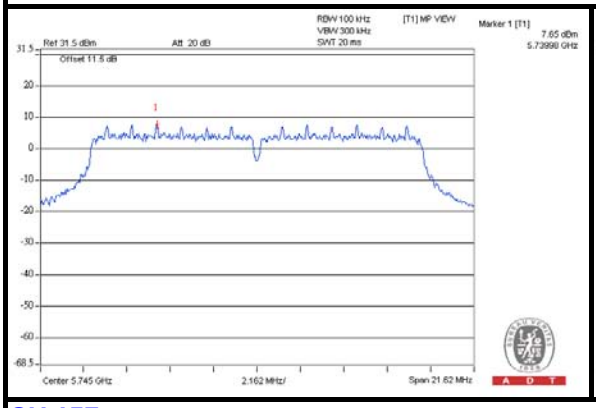
5.6.7 TEST RESULTS

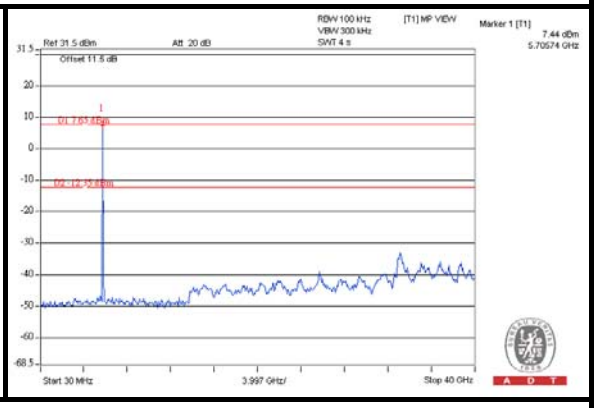
The conducted emission test is performed on each TX port of operating mode without summing or adding 10log (N) since the limit is relative emission limit. Only worst data of each operating mode is presented.

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

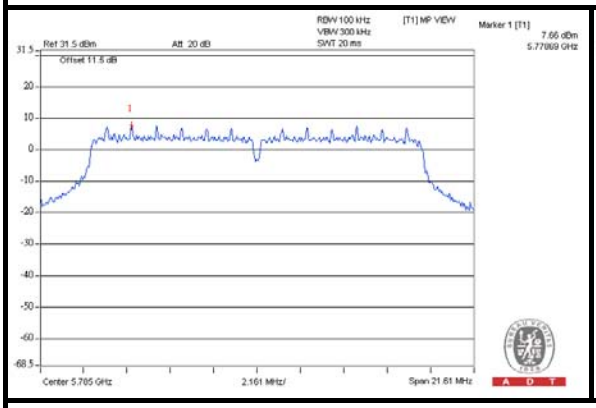
802.11a

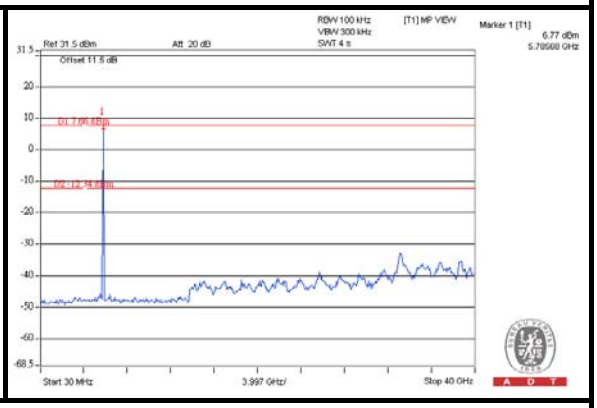
CH 149



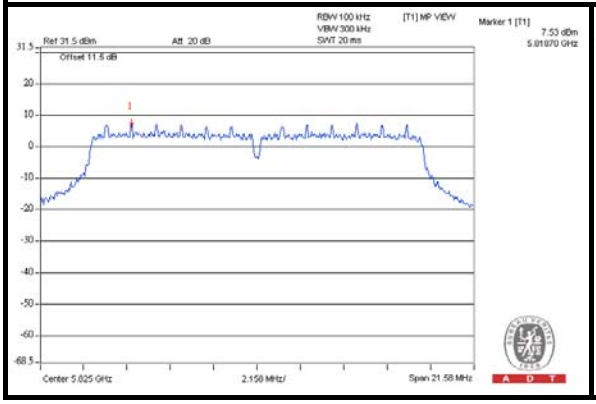


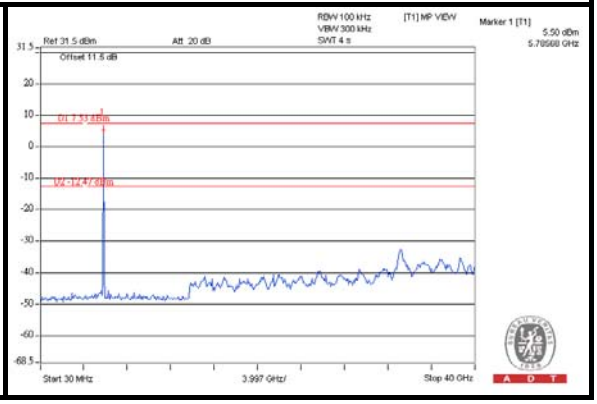
CH 157





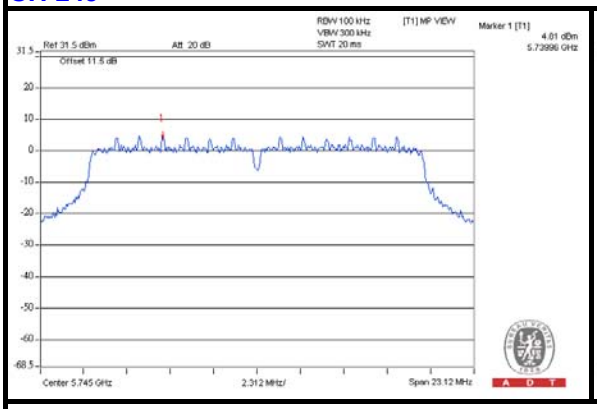
CH 165

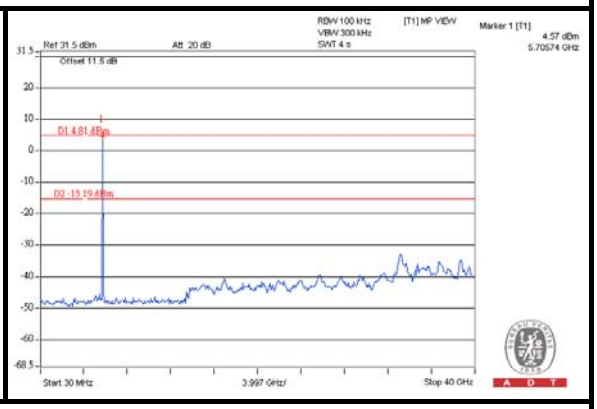




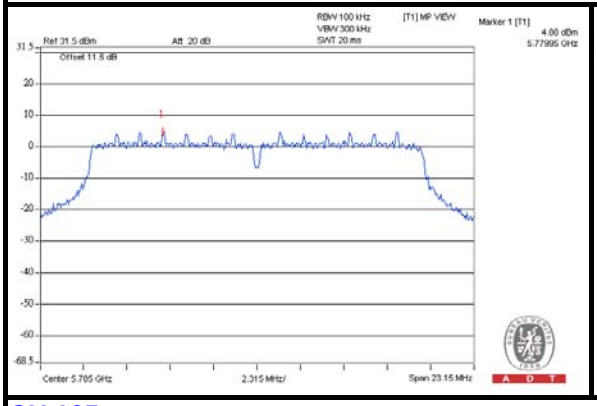
802.11n (20MHz)

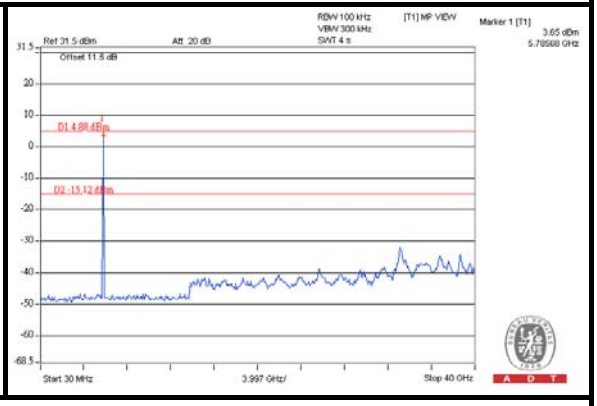
CH 149



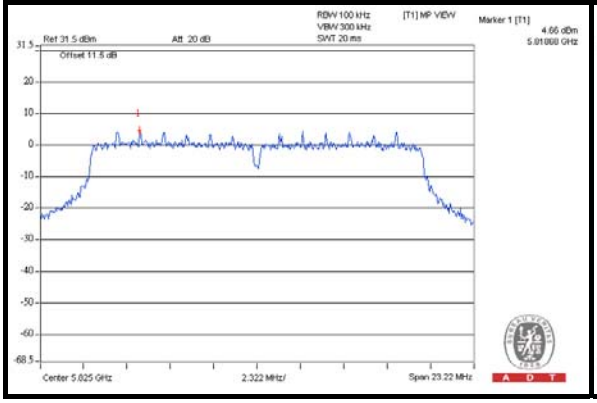


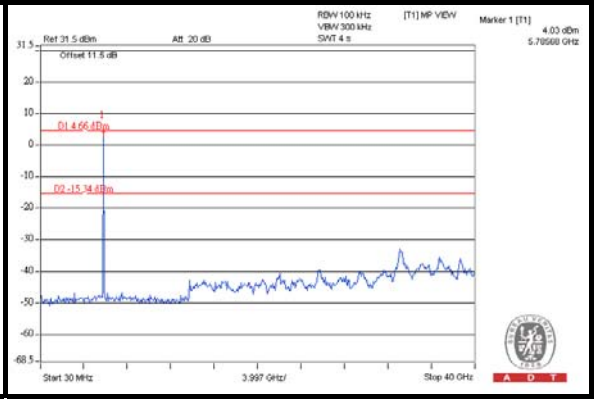
CH 157





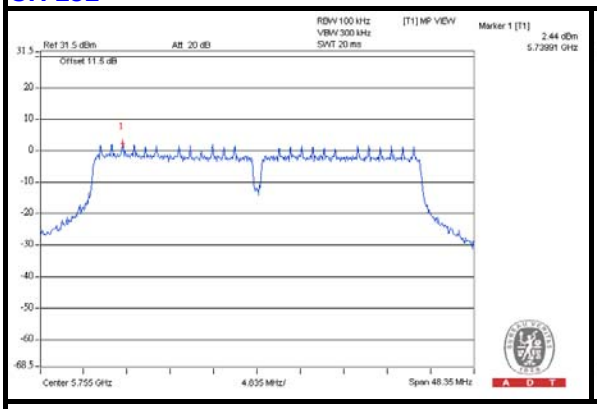
CH 165

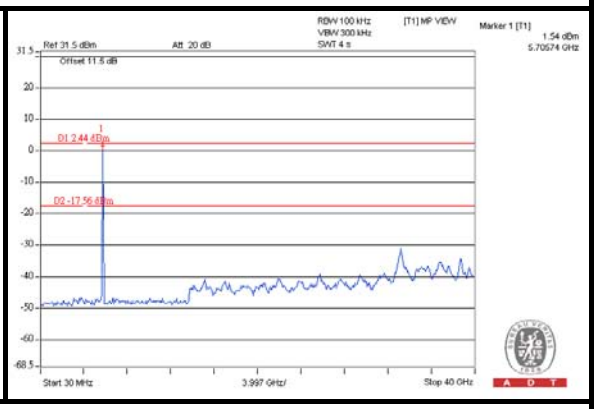




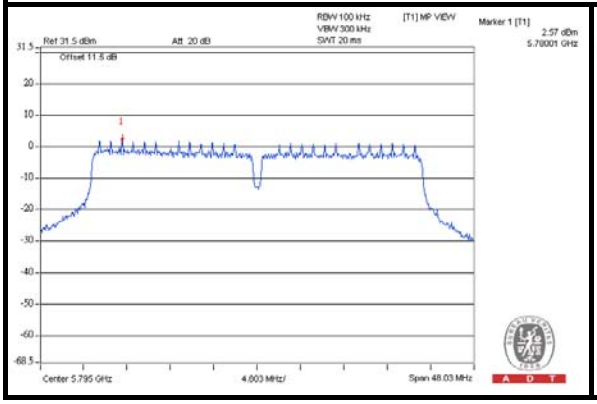
802.11n (40MHz)

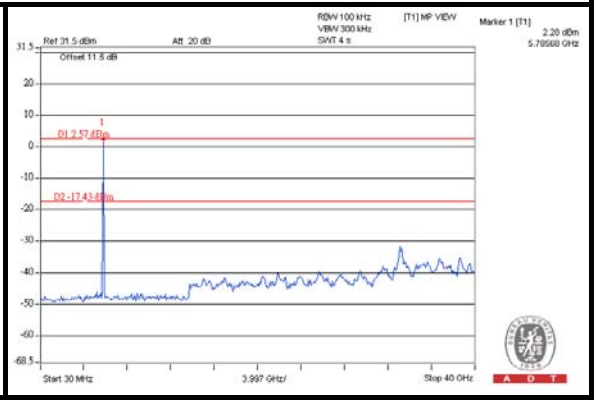
CH 151





CH 159





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.

Copies of accreditation and authorization certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5.phtml. 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.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---