

FCC TEST REPORT (CO-LOCATED)

REPORT NO.: RF130911C29A-1

MODEL NO.: MR18-HW

FCC ID: UDX-60026010

RECEIVED: Sep. 11, 2013

TESTED: Nov. 18 ~ Nov. 22, 2013

ISSUED: Dec. 18, 2013

APPLICANT: Cisco Systems, Inc.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130911C29A-1	Original release	Dec. 18, 2013

1. CERTIFICATION

PRODUCT: Wireless 802.11 abgn AP

MODEL: MR18-HW

BRAND: Cisco

APPLICANT: Cisco Systems, Inc.

TESTED: Nov. 18 ~ Nov. 22, 2013

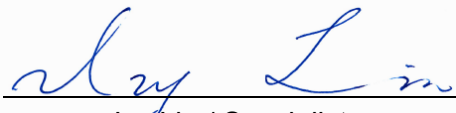
TEST SAMPLE: ENGINEERING SAMPLE

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

FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10-2009

The above equipment (model: MR18-HW) 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 :** Dec. 18, 2013
Ivy Lin / Specialist

APPROVED BY :  , **DATE :** Dec. 18, 2013
Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247) FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207 15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -2.05dB at 27.37109MHz
15.247(d) 15.209 15.407(b/1/2/3) (b)(6)	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.9dB at 10520.00MHz

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 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	Wireless 802.11 abgn AP
MODEL NO.	MR18-HW
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: 11/5.5/2/1Mbps 802.11a/g: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps
OPERATING FREQUENCY	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
OUTPUT POWER	2412 ~ 2462MHz: 830.280mW 5180 ~ 5240MHz: 49.659mW 5260 ~ 5320MHz: 204.944mW 5500 ~ 5700MHz: 206.818mW 5745 ~ 5825MHz: 780.109mW
ANTENNA TYPE	Refer to Note
ANTENNA CONNECTOR	Refer to Note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report to the original BV ADT report no.: RF130911C29-2. The differences compared with original report are adding 5.26 ~ 5.32GHz and 5.50 ~ 5.70GHz band. Therefore, the EUT was re-tested and presented in the report.
2. The EUT incorporates a MIMO function. The EUT provides 2 completed transmitters and 2 receivers.

Radio 1	
MODULATION MODE	TX FUNCTION
802.11b	2TX
802.11g	2TX
802.11n (20MHz) - MCS 8-15	2TX
802.11n (40MHz) - MCS 8-15	2TX

Radio 2	
MODULATION MODE	TX FUNCTION
802.11a	2TX
802.11n (20MHz) - MCS 8-15	2TX
802.11n (40MHz) - MCS 8-15	2TX

Radio 3	
MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11a	1TX
802.11n (20MHz) - MCS 0-7	1TX
802.11n (40MHz) - MCS 0-7	1TX

3. The EUT consumes power from the following adapter (support unit).

Brand	Ruckus
Model	HK-AD-120A100-US
Input Power	100-240Vac, 50/60Hz, 0.4A
Output Power	12Vdc, 1.0A
Power Line	1.8m cable without core attached on adapter

4. The EUT consumes power from the following POE (support unit).

Brand	SONICWALL
Model	PD-6083G300
Input Power	100-250Vac, 50/60Hz, 0.5A
Output Power	48Vdc, 0.35A

5. The EUT uses following antennas.

Radio	Antenna Type	Connector	Gain (dBi)		Remark
1	PIFA	IPEX	4		2.4GHz only
2	PIFA	IPEX	5150~5250MHz	4	5GHz only
			5250~5350MHz	4	
			5470~5725MHz	4	
			5725~5825MHz	6	
3	Printed	IPEX	2		2.4GHz + 5GHz combo

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		

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

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

FOR 5150 ~ 5250MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

FOR 5260 ~ 5320MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

FOR 5500 ~ 5700MHz

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

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

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

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

FOR 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

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	
A	√	√	√	Power from adapter
B	-	√	√	Power from POE

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

NOTE 1: "-" means no effect.

NOTE 2: The EUT had been pre-tested on the positioned of X-plane and Z-plane. The worst case was found when positioned on **Z-plane**.

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A1	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11b	2412~2462	1 to 11	6
A2	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11g	2412~2462	1 to 11	6
A3	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11n (20MHz)	2412~2462	1 to 11	6
A4	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11n (40MHz)	2412~2462	3 to 9	6

**A D T**

EUT CONFIGURE MODE	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A5	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
A6	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11n (20MHz)	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
A7	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11n (40MHz)	5180~5320, 5500~5700, 5745~5825	38 to 46, 54 to 62, 102 to 134, 151 to 159	54
A8	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	36
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
A9	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	157
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52

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	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A1, B1	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11b	2412~2462	1 to 11	6
A2, B2	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	36
A3, B3	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
A4, B4	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	157
A5, B5	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	36
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52

EUT CONFIGURE MODE	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A6, B6	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	157
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52

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	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A1, B1	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11b	2412~2462	1 to 11	6
A2, B2	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	36
A3, B3	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52



A D T

EUT CONFIGURE MODE	RADIO	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL
A4, B4	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	157
A5, B5	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	36
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52
A6, B6	1	802.11b	2412~2462	1 to 11	6
	2	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	157
	3	802.11a	5180~5320, 5500~5700, 5745~5825	36 to 48, 52 to 64, 100 to 140, 149 to 165	52

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
RE<1G	23deg. C, 74%RH	120Vac, 60Hz	Brad Tung
PLC	25deg. C, 68%RH	120Vac, 60Hz	Ted Chang

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	Adapter	Ruckus	HK-AD-120A1 00-US	NA	NA
2	Notebook	DELL	E5420	BPQ7MQ1	FCC DoC Approved
3	POE	SONICWALL	PD-6083G300	NA	NA

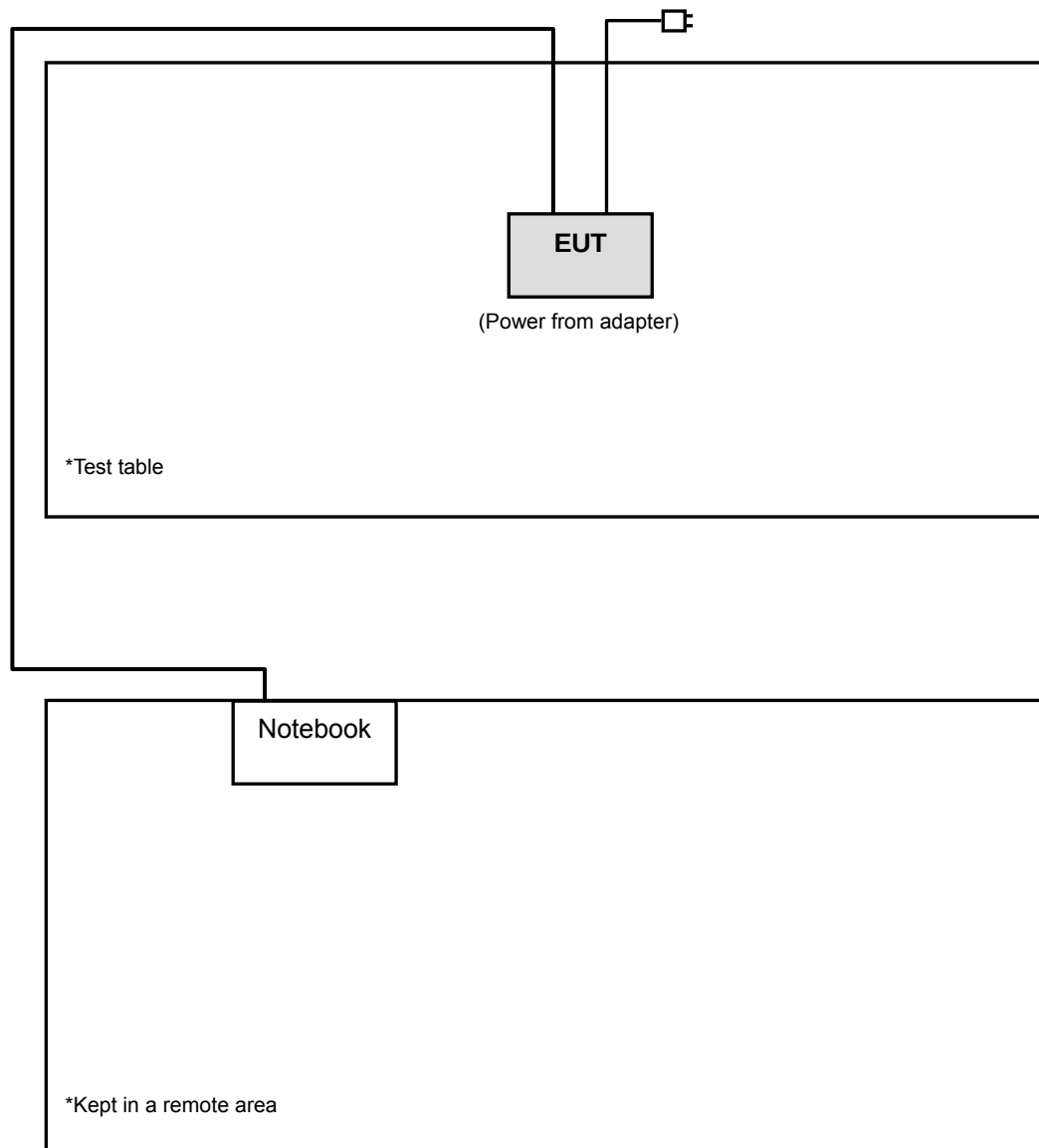
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	10m RJ45 UTP cable
3	10m RJ45 UTP cable

NOTE:

1. All power cords of the above support units are non-shielded (1.8m).
2. Items 2-3 acted as communication partners to transfer data.
3. Items 1 & 3 were provided by the manufacturer.

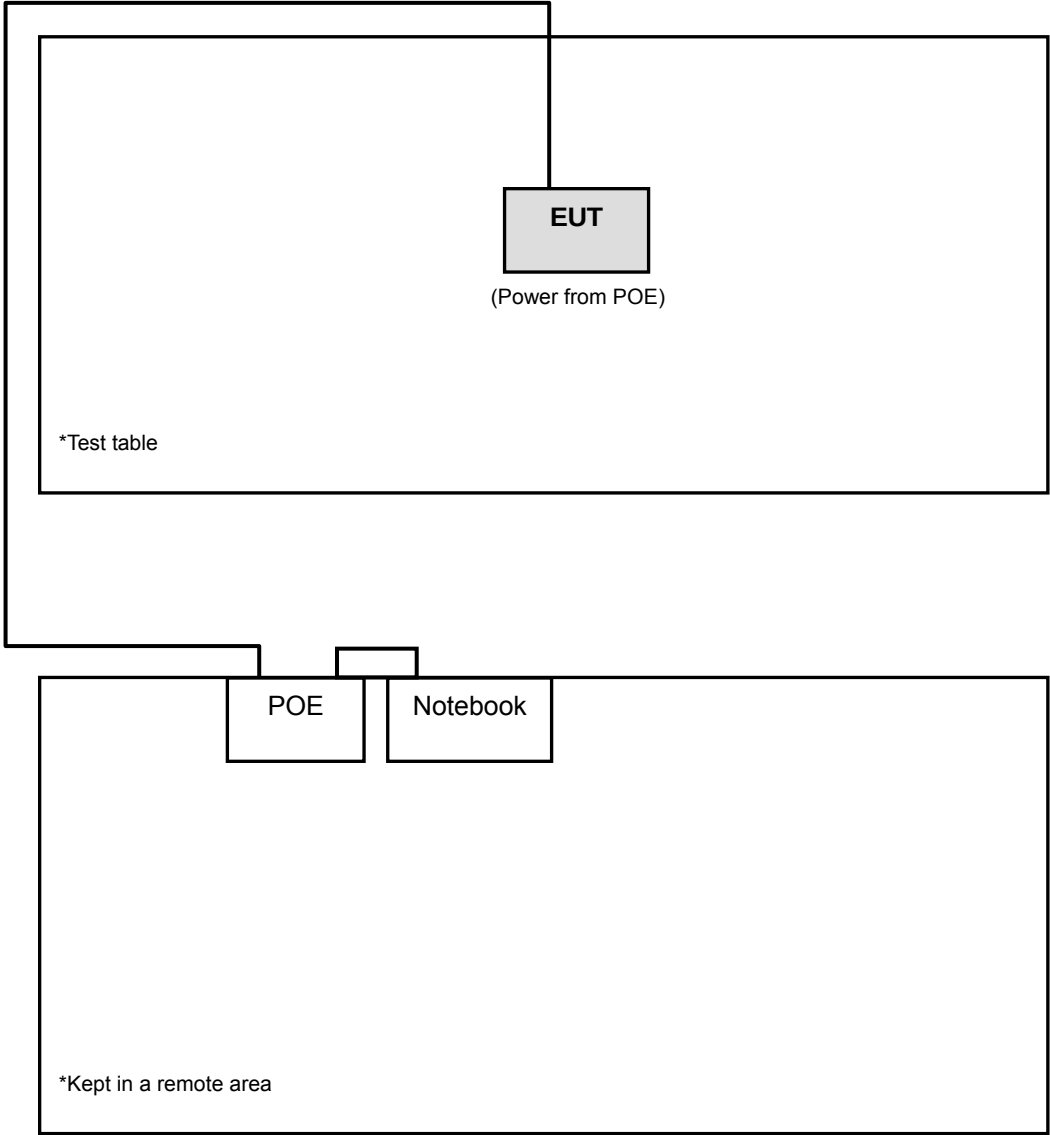
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

Adapter mode





POE mode



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 (Section 15.247)

FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10-2009

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

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTE:

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

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 25, 2012	Dec. 24, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jan. 31, 2013	Jan. 30, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Mar. 20, 2013	Mar. 19, 2014
HORN Antenna SCHWARZBECK	9120D	209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
Preamplifier Agilent	8447D	2944A10633	Oct. 07, 2013	Oct. 06, 2014
Preamplifier Agilent	8449B	3008A01964	Aug. 26, 2013	Aug. 25, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250723/4	Aug. 23, 2013	Aug. 22, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6+309224/4	Aug. 23, 2013	Aug. 22, 2014
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2013	Oct. 17, 2014
High Speed Peak Power Meter	ML2495A	0824011	Jul. 29, 2013	Jul. 28, 2014
Power Sensor	MA2411B	0738171	Jul. 29, 2013	Jul. 28, 2014
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 10, 2013	Jun. 09, 2014

- 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 3.
 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 988962.
 5. The IC Site Registration No. is IC 7450F-3.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

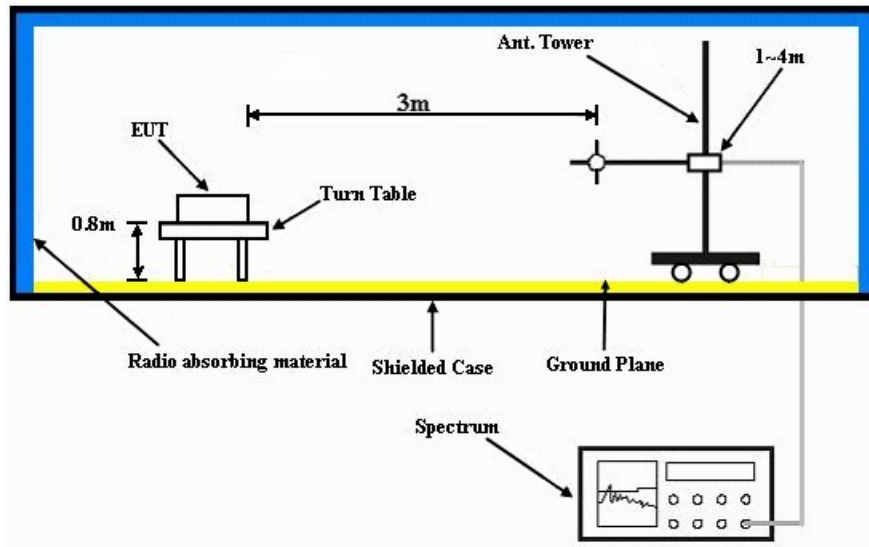
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

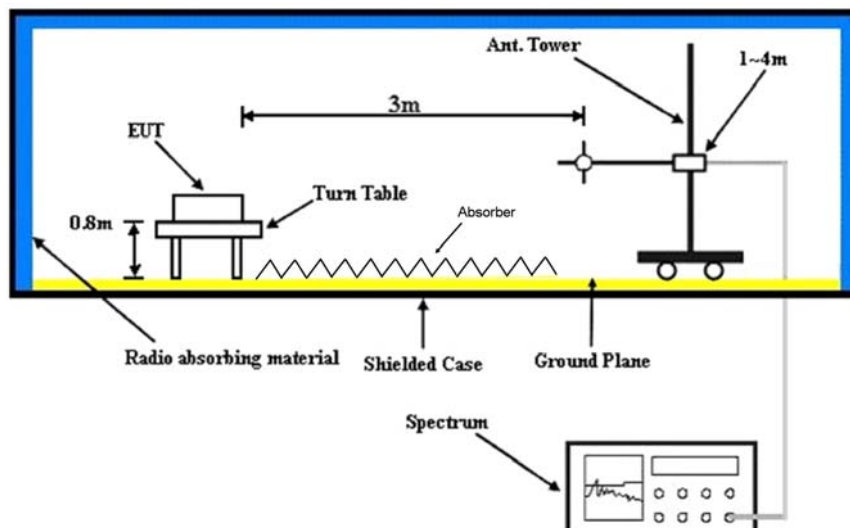
No deviation.

4.1.6 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



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

4.1.7 EUT OPERATING CONDITION

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

4.1.8 TEST RESULTS

Above 1GHz data

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	117.8 PK			1.00 H	124	86.60	31.20
2	*2437.00	114.5 AV			1.00 H	124	83.30	31.20
3	4874.00	51.7 PK	74.0	-22.3	1.02 H	158	47.20	4.50
4	4874.00	45.8 AV	54.0	-8.2	1.02 H	158	41.30	4.50
5	5150.00	57.4 PK	74.0	-16.6	1.25 H	342	52.30	5.10
6	5150.00	49.0 AV	54.0	-5.0	1.25 H	342	43.90	5.10
7	*5260.00	117.9 PK			1.02 H	30	80.00	37.90
8	*5260.00	106.1 AV			1.02 H	30	68.20	37.90
9	#10520.00	65.1 PK	74.0	-8.9	1.20 H	11	47.00	18.10
10	#10520.00	52.7 AV	54.0	-1.3	1.20 H	11	34.60	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A1		

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	114.7 PK			1.12 V	335	83.50	31.20
2	*2437.00	110.7 AV			1.12 V	335	79.50	31.20
3	4874.00	52.7 PK	74.0	-21.3	1.03 V	156	48.20	4.50
4	4874.00	48.8 AV	54.0	-5.2	1.03 V	156	44.30	4.50
5	5150.00	55.7 PK	74.0	-18.3	1.15 V	92	50.60	5.10
6	5150.00	46.0 AV	54.0	-8.0	1.15 V	92	40.90	5.10
7	*5260.00	107.2 PK			1.00 V	62	69.30	37.90
8	*5260.00	97.5 AV			1.00 V	62	59.60	37.90
9	#10520.00	67.0 PK	74.0	-7.0	1.05 V	16	48.90	18.10
10	#10520.00	52.7 AV	54.0	-1.3	1.05 V	16	34.60	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11g CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A2		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	59.9 PK	74.0	-14.1	1.00 H	45	28.90	31.00
2	2390.00	46.3 AV	54.0	-7.7	1.00 H	45	15.30	31.00
3	*2437.00	118.1 PK			1.00 H	46	86.90	31.20
4	*2437.00	114.9 AV			1.00 H	46	83.70	31.20
5	2483.50	69.9 PK	74.0	-4.1	1.51 H	102	38.50	31.40
6	2483.50	48.5 AV	54.0	-5.5	1.51 H	102	17.10	31.40
7	4874.00	51.4 PK	74.0	-22.6	1.45 H	163	46.90	4.50
8	4874.00	38.8 AV	54.0	-15.2	1.45 H	163	34.30	4.50
9	5150.00	57.7 PK	74.0	-16.3	1.23 H	356	52.60	5.10
10	5150.00	49.3 AV	54.0	-4.7	1.23 H	356	44.20	5.10
11	*5260.00	117.1 PK			1.03 H	33	79.20	37.90
12	*5260.00	107.1 AV			1.03 H	33	69.20	37.90
13	#10520.00	66.7 PK	74.0	-7.3	1.00 H	46	48.60	18.10
14	#10520.00	53.1 AV	54.0	-0.9	1.00 H	46	35.00	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11g CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A2		

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	67.1 PK	74.0	-6.9	1.02 V	115	36.10	31.00
2	2390.00	50.2 AV	54.0	-3.8	1.02 V	115	19.20	31.00
3	*2437.00	114.8 PK			1.15 V	193	83.60	31.20
4	*2437.00	111.0 AV			1.15 V	193	79.80	31.20
5	2483.50	72.9 PK	74.0	-1.1	1.02 V	152	41.50	31.40
6	2483.50	50.7 AV	54.0	-3.3	1.02 V	152	19.30	31.40
7	4874.00	57.7 PK	74.0	-16.3	1.05 V	163	53.20	4.50
8	4874.00	43.8 AV	54.0	-10.2	1.05 V	163	39.30	4.50
9	5150.00	56.0 PK	74.0	-18.0	1.02 V	22	50.90	5.10
10	5150.00	45.3 AV	54.0	-8.7	1.02 V	22	40.20	5.10
11	*5260.00	107.2 PK			1.01 V	110	69.30	37.90
12	*5260.00	97.4 AV			1.01 V	110	59.50	37.90
13	#10520.00	66.7 PK	74.0	-7.3	1.04 V	18	48.60	18.10
14	#10520.00	52.6 AV	54.0	-1.4	1.04 V	18	34.50	18.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11n (20MHz) CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A3		

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	60.4 PK	74.0	-13.6	1.05 H	115	29.40	31.00
2	2390.00	46.1 AV	54.0	-7.9	1.05 H	115	15.10	31.00
3	*2437.00	118.1 PK			1.00 H	46	86.90	31.20
4	*2437.00	114.8 AV			1.00 H	46	83.60	31.20
5	2483.50	69.6 PK	74.0	-4.4	1.02 H	119	38.20	31.40
6	2483.50	47.6 AV	54.0	-6.4	1.02 H	119	16.20	31.40
7	4874.00	49.8 PK	74.0	-24.2	1.21 H	181	45.30	4.50
8	4874.00	38.0 AV	54.0	-16.0	1.21 H	181	33.50	4.50
9	5150.00	56.3 PK	74.0	-17.7	1.13 H	80	51.20	5.10
10	5150.00	45.3 AV	54.0	-8.7	1.13 H	80	40.20	5.10
11	*5260.00	107.1 PK			1.00 H	56	69.20	37.90
12	*5260.00	97.2 AV			1.00 H	56	59.30	37.90
13	#10520.00	67.0 PK	74.0	-7.0	1.02 H	332	48.90	18.10
14	#10520.00	52.6 AV	54.0	-1.4	1.02 H	332	34.50	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11n (20MHz) CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A3		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.1 PK	74.0	-7.9	1.00 V	152	35.10	31.00
2	2390.00	49.9 AV	54.0	-4.1	1.00 V	152	18.90	31.00
3	*2437.00	115.4 PK			1.15 V	196	84.20	31.20
4	*2437.00	111.3 AV			1.15 V	196	80.10	31.20
5	2483.50	72.6 PK	74.0	-1.4	1.02 V	115	41.20	31.40
6	2483.50	50.5 AV	54.0	-3.5	1.02 V	115	19.10	31.40
7	4874.00	58.0 PK	74.0	-16.0	1.02 V	118	53.50	4.50
8	4874.00	43.7 AV	54.0	-10.3	1.02 V	118	39.20	4.50
9	5150.00	56.7 PK	74.0	-17.3	1.02 V	325	51.60	5.10
10	5150.00	45.6 AV	54.0	-8.4	1.02 V	325	40.50	5.10
11	*5260.00	107.4 PK			1.02 V	152	69.50	37.90
12	*5260.00	97.1 AV			1.02 V	152	59.20	37.90
13	#10520.00	67.2 PK	74.0	-6.8	1.02 V	199	49.10	18.10
14	#10520.00	52.7 AV	54.0	-1.3	1.02 V	199	34.60	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11n (40MHz) CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A4		

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	59.6 PK	74.0	-14.4	1.00 H	42	28.60	31.00
2	2390.00	47.2 AV	54.0	-6.8	1.00 H	42	16.20	31.00
3	*2437.00	118.5 PK			1.01 H	195	87.30	31.20
4	*2437.00	115.0 AV			1.01 H	195	83.80	31.20
5	2483.50	65.6 PK	74.0	-8.4	1.00 H	151	34.20	31.40
6	2483.50	50.0 AV	54.0	-4.0	1.00 H	151	18.60	31.40
7	4874.00	50.7 PK	74.0	-23.3	1.41 H	205	46.20	4.50
8	4874.00	37.7 AV	54.0	-16.3	1.41 H	205	33.20	4.50
9	5150.00	57.7 PK	74.0	-16.3	1.23 H	345	52.60	5.10
10	5150.00	49.3 AV	54.0	-4.7	1.23 H	345	44.20	5.10
11	*5260.00	117.2 PK			1.06 H	30	79.30	37.90
12	*5260.00	107.2 AV			1.06 H	30	69.30	37.90
13	#10520.00	66.3 PK	74.0	-7.7	1.02 H	46	48.20	18.10
14	#10520.00	52.8 AV	54.0	-1.2	1.02 H	46	34.70	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11n (40MHz) CH 6	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A4		

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	69.1 PK	74.0	-4.9	1.32 V	198	38.10	31.00
2	2390.00	51.1 AV	54.0	-2.9	1.32 V	198	20.10	31.00
3	*2437.00	115.4 PK			1.36 V	167	84.20	31.20
4	*2437.00	111.3 AV			1.36 V	167	80.10	31.20
5	2483.50	71.5 PK	74.0	-2.5	1.84 V	285	40.10	31.40
6	2483.50	52.5 AV	54.0	-1.5	1.84 V	285	21.10	31.40
7	4874.00	51.5 PK	74.0	-22.5	1.50 V	102	47.00	4.50
8	4874.00	40.7 AV	54.0	-13.3	1.50 V	102	36.20	4.50
9	5150.00	56.4 PK	74.0	-17.6	1.13 V	82	51.30	5.10
10	5150.00	45.7 AV	54.0	-8.3	1.13 V	82	40.60	5.10
11	*5260.00	107.5 PK			1.20 V	241	69.60	37.90
12	*5260.00	96.3 AV			1.20 V	241	58.40	37.90
13	#10520.00	66.7 PK	74.0	-7.3	1.05 V	19	48.60	18.10
14	#10520.00	52.7 AV	54.0	-1.3	1.05 V	19	34.60	18.10

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A5		

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	118.1 PK			1.02 H	144	86.90	31.20
2	*2437.00	114.7 AV			1.02 H	144	83.50	31.20
3	4874.00	52.8 PK	74.0	-21.2	1.61 H	151	48.30	4.50
4	4874.00	46.6 AV	54.0	-7.4	1.61 H	151	42.10	4.50
5	5150.00	58.3 PK	74.0	-15.7	1.20 H	320	53.20	5.10
6	5150.00	49.2 AV	54.0	-4.8	1.20 H	320	44.10	5.10
7	*5260.00	117.1 PK			1.12 H	184	79.20	37.90
8	*5260.00	107.1 AV			1.12 H	184	69.20	37.90
9	#10520.00	67.3 PK	74.0	-6.7	1.14 H	195	49.20	18.10
10	#10520.00	53.0 AV	54.0	-1.0	1.14 H	195	34.90	18.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	115.3 PK			1.02 V	195	84.10	31.20
2	*2437.00	111.1 AV			1.02 V	195	79.90	31.20
3	4874.00	55.7 PK	74.0	-18.3	1.02 V	195	51.20	4.50
4	4874.00	49.7 AV	54.0	-4.3	1.02 V	195	45.20	4.50
5	5150.00	55.4 PK	74.0	-18.6	1.16 V	82	50.30	5.10
6	5150.00	46.7 AV	54.0	-7.3	1.16 V	82	41.60	5.10
7	*5260.00	107.2 PK			1.02 V	62	69.30	37.90
8	*5260.00	97.2 AV			1.02 V	62	59.30	37.90
9	#10520.00	67.2 PK	74.0	-6.8	1.36 V	115	49.10	18.10
10	#10520.00	52.7 AV	54.0	-1.3	1.36 V	115	34.60	18.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11n (20MHz) CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A6		

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	118.4 PK			1.12 H	204	87.20	31.20
2	*2437.00	115.4 AV			1.12 H	204	84.20	31.20
3	4874.00	51.7 PK	74.0	-22.3	1.06 H	205	47.20	4.50
4	4874.00	38.7 AV	54.0	-15.3	1.06 H	205	34.20	4.50
5	5150.00	58.3 PK	74.0	-15.7	1.92 H	205	53.20	5.10
6	5150.00	49.2 AV	54.0	-4.8	1.92 H	205	44.10	5.10
7	*5260.00	117.2 PK			1.05 H	287	79.30	37.90
8	*5260.00	107.1 AV			1.05 H	287	69.20	37.90
9	#10520.00	66.4 PK	74.0	-7.6	1.08 H	164	48.30	18.10
10	#10520.00	52.7 AV	54.0	-1.3	1.08 H	164	34.60	18.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	115.5 PK			1.62 V	181	84.30	31.20
2	*2437.00	111.3 AV			1.62 V	181	80.10	31.20
3	4874.00	58.1 PK	74.0	-15.9	1.00 V	184	53.60	4.50
4	4874.00	44.0 AV	54.0	-10.0	1.00 V	184	39.50	4.50
5	5150.00	56.0 PK	74.0	-18.0	1.13 V	82	50.90	5.10
6	5150.00	45.9 AV	54.0	-8.1	1.13 V	82	40.80	5.10
7	*5260.00	107.5 PK			1.51 V	56	69.60	37.90
8	*5260.00	97.2 AV			1.51 V	56	59.30	37.90
9	#10520.00	67.3 PK	74.0	-6.7	1.62 V	155	49.20	18.10
10	#10520.00	52.9 AV	54.0	-1.1	1.62 V	155	34.80	18.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11n (40MHz) CH 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A7		

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	118.4 PK			1.03 H	205	87.20	31.20
2	*2437.00	115.3 AV			1.03 H	205	84.10	31.20
3	4874.00	50.8 PK	74.0	-23.2	1.92 H	188	46.30	4.50
4	4874.00	39.5 AV	54.0	-14.5	1.92 H	188	35.00	4.50
5	5150.00	58.1 PK	74.0	-15.9	1.52 H	341	53.00	5.10
6	5150.00	49.3 AV	54.0	-4.7	1.52 H	341	44.20	5.10
7	*5260.00	117.1 PK			1.62 H	188	79.20	37.90
8	*5260.00	107.2 AV			1.62 H	188	69.30	37.90
9	*5270.00	100.2 PK			1.20 H	155	62.30	37.90
10	*5270.00	90.1 AV			1.20 H	155	52.20	37.90
11	#10520.00	66.7 PK	74.0	-7.3	1.95 H	164	48.60	18.10
12	#10520.00	52.7 AV	54.0	-1.3	1.95 H	164	34.60	18.10
13	#10540.00	59.3 PK	74.0	-14.7	1.99 H	16	41.30	18.00
14	#10540.00	48.5 AV	54.0	-5.5	1.99 H	16	30.50	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11n (40MHz) CH 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A7		

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	115.4 PK			1.92 V	154	84.20	31.20
2	*2437.00	111.5 AV			1.92 V	154	80.30	31.20
3	4874.00	55.5 PK	74.0	-18.5	1.21 V	157	51.00	4.50
4	4874.00	42.1 AV	54.0	-11.9	1.21 V	157	37.60	4.50
5	5150.00	56.3 PK	74.0	-17.7	1.15 V	82	51.20	5.10
6	5150.00	46.3 AV	54.0	-7.7	1.15 V	82	41.20	5.10
7	*5260.00	107.1 PK			1.02 V	302	69.20	37.90
8	*5260.00	97.2 AV			1.02 V	302	59.30	37.90
9	*5270.00	112.1 PK			1.62 V	199	74.20	37.90
10	*5270.00	101.7 AV			1.62 V	199	63.80	37.90
11	#10520.00	67.3 PK	74.0	-6.7	1.95 V	118	49.20	18.10
12	#10520.00	52.7 AV	54.0	-1.3	1.95 V	118	34.60	18.10
13	#10540.00	61.6 PK	74.0	-12.4	1.88 V	209	43.60	18.00
14	#10540.00	48.2 AV	54.0	-5.8	1.88 V	209	30.20	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A8		

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	118.1 PK			1.02 H	151	86.90	31.20
2	*2437.00	115.0 AV			1.02 H	151	83.80	31.20
3	4874.00	52.0 PK	74.0	-22.0	1.02 H	115	47.50	4.50
4	4874.00	46.4 AV	54.0	-7.6	1.02 H	115	41.90	4.50
5	5150.00	60.7 PK	74.0	-13.3	1.10 H	152	55.60	5.10
6	5150.00	47.4 AV	54.0	-6.6	1.10 H	152	42.30	5.10
7	*5180.00	113.6 PK			1.10 H	299	75.90	37.70
8	*5180.00	103.6 AV			1.10 H	299	65.90	37.70
9	*5260.00	95.7 PK			1.02 H	118	57.80	37.90
10	*5260.00	84.2 AV			1.02 H	118	46.30	37.90
11	#6906.00	58.6 PK	74.0	-15.4	1.02 H	199	48.90	9.70
12	#6906.00	51.8 AV	54.0	-2.2	1.02 H	199	42.10	9.70
13	#10360.00	61.1 PK	74.0	-12.9	1.52 H	169	43.60	17.50
14	#10360.00	48.7 AV	54.0	-5.3	1.52 H	169	31.20	17.50
15	#10520.00	60.7 PK	74.0	-13.3	1.05 H	155	42.60	18.10
16	#10520.00	47.8 AV	54.0	-6.2	1.05 H	155	29.70	18.10
17	#15065.00	71.0 PK	74.0	-3.0	1.02 H	322	49.50	21.50
18	#15065.00	52.8 AV	54.0	-1.2	1.02 H	322	31.30	21.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A8		

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	115.4 PK			1.95 V	102	84.20	31.20
2	*2437.00	111.4 AV			1.95 V	102	80.20	31.20
3	4874.00	54.3 PK	74.0	-19.7	1.02 V	192	49.80	4.50
4	4874.00	49.7 AV	54.0	-4.3	1.02 V	192	45.20	4.50
5	5150.00	62.0 PK	74.0	-12.0	1.41 V	206	56.90	5.10
6	5150.00	47.7 AV	54.0	-6.3	1.41 V	206	42.60	5.10
7	*5180.00	112.2 PK			1.05 V	110	74.50	37.70
8	*5180.00	101.9 AV			1.05 V	110	64.20	37.70
9	*5260.00	116.4 PK			1.02 V	66	78.50	37.90
10	*5260.00	105.1 AV			1.02 V	66	67.20	37.90
11	#6906.00	58.0 PK	74.0	-16.0	1.03 V	230	48.30	9.70
12	#6906.00	52.6 AV	54.0	-1.4	1.03 V	230	42.90	9.70
13	#10360.00	60.4 PK	74.0	-13.6	1.74 V	248	42.90	17.50
14	#10360.00	48.0 AV	54.0	-6.0	1.74 V	248	30.50	17.50
15	#10520.00	62.7 PK	74.0	-11.3	1.22 V	52	44.60	18.10
16	#10520.00	49.7 AV	54.0	-4.3	1.22 V	52	31.60	18.10
17	#15065.00	70.1 PK	74.0	-3.9	2.10 V	115	48.60	21.50
18	#15065.00	52.9 AV	54.0	-1.1	2.10 V	115	31.40	21.50

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A9		

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	118.1 PK			1.51 H	92	86.90	31.20
2	*2437.00	114.6 AV			1.51 H	92	83.40	31.20
3	4874.00	52.3 PK	74.0	-21.7	1.05 H	188	47.80	4.50
4	4874.00	46.6 AV	54.0	-7.4	1.05 H	188	42.10	4.50
5	5150.00	59.0 PK	74.0	-15.0	1.02 H	185	53.90	5.10
6	5150.00	47.7 AV	54.0	-6.3	1.02 H	185	42.60	5.10
7	*5260.00	95.7 PK			1.02 H	336	57.80	37.90
8	*5260.00	81.4 AV			1.02 H	336	43.50	37.90
9	*5785.00	116.9 PK			1.51 H	152	78.30	38.60
10	*5785.00	106.9 AV			1.51 H	152	68.30	38.60
11	#10520.00	61.0 PK	74.0	-13.0	1.00 H	155	42.90	18.10
12	#10520.00	48.6 AV	54.0	-5.4	1.00 H	155	30.50	18.10
13	11570.00	66.2 PK	74.0	-7.8	1.84 H	115	47.20	19.00
14	11570.00	52.8 AV	54.0	-1.2	1.84 H	115	33.80	19.00

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang
TEST MODE	A9		

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	115.4 PK			1.62 V	182	84.20	31.20
2	*2437.00	111.3 AV			1.62 V	182	80.10	31.20
3	4874.00	55.7 PK	74.0	-18.3	1.62 V	82	51.20	4.50
4	4874.00	50.7 AV	54.0	-3.3	1.62 V	82	46.20	4.50
5	5150.00	59.3 PK	74.0	-14.7	1.01 V	105	54.20	5.10
6	5150.00	48.3 AV	54.0	-5.7	1.01 V	105	43.20	5.10
7	*5260.00	116.0 PK			1.10 V	301	78.10	37.90
8	*5260.00	105.2 AV			1.10 V	301	67.30	37.90
9	*5785.00	112.9 PK			1.08 V	44	74.30	38.60
10	*5785.00	103.8 AV			1.08 V	44	65.20	38.60
11	#10520.00	62.4 PK	74.0	-11.6	1.62 V	48	44.30	18.10
12	#10520.00	50.2 AV	54.0	-3.8	1.62 V	48	32.10	18.10
13	11570.00	65.2 PK	74.0	-8.8	1.00 V	152	46.20	19.00
14	11570.00	52.5 AV	54.0	-1.5	1.00 V	152	33.50	19.00

REMARKS:

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

Below 1GHz data

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
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	57.07	27.4 QP	40.0	-12.6	1.50 H	334	42.20	-14.80
2	152.15	23.6 QP	43.5	-19.9	1.25 H	195	37.20	-13.60
3	268.57	28.3 QP	46.0	-17.7	1.00 H	108	41.70	-13.40
4	375.29	26.3 QP	46.0	-19.7	1.25 H	88	37.30	-11.00
5	600.38	36.8 QP	46.0	-9.2	2.00 H	116	43.20	-6.40
6	625.60	38.0 QP	46.0	-8.0	1.00 H	132	43.70	-5.70
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	53.18	28.0 QP	40.0	-12.0	1.25 V	292	41.90	-13.90
2	152.15	30.3 QP	43.5	-13.2	1.00 V	123	43.90	-13.60
3	375.29	28.8 QP	46.0	-17.2	2.00 V	217	39.80	-11.00
4	600.38	37.9 QP	46.0	-8.1	1.50 V	255	44.30	-6.40
5	625.60	39.9 QP	46.0	-6.1	1.25 V	243	45.60	-5.70
6	875.91	33.8 QP	46.0	-12.2	1.00 V	169	35.30	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
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	57.07	26.2 QP	40.0	-13.8	1.50 H	10	41.00	-14.80
2	152.15	22.8 QP	43.5	-20.7	2.00 H	216	36.40	-13.60
3	268.57	26.6 QP	46.0	-19.4	1.00 H	94	40.00	-13.40
4	375.29	28.0 QP	46.0	-18.0	2.00 H	108	39.00	-11.00
5	600.38	39.8 QP	46.0	-6.2	1.00 H	99	46.20	-6.40
6	625.60	38.0 QP	46.0	-8.0	1.25 H	211	43.70	-5.70
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	57.07	26.6 QP	40.0	-13.4	1.00 V	228	41.40	-14.80
2	375.29	27.6 QP	46.0	-18.4	2.00 V	226	38.60	-11.00
3	600.38	37.4 QP	46.0	-8.6	2.00 V	274	43.80	-6.40
4	625.60	39.6 QP	46.0	-6.4	1.50 V	256	45.30	-5.70
5	749.79	30.9 QP	46.0	-15.1	1.00 V	118	34.40	-3.50
6	875.91	34.8 QP	46.0	-11.2	1.00 V	168	36.30	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	A3		

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	57.07	28.8 QP	40.0	-11.2	1.50 H	14	43.60	-14.80
2	148.26	22.8 QP	43.5	-20.7	2.00 H	207	37.10	-14.30
3	375.29	23.3 QP	46.0	-22.7	2.00 H	100	34.30	-11.00
4	600.38	34.8 QP	46.0	-11.2	1.00 H	96	41.20	-6.40
5	625.60	38.0 QP	46.0	-8.0	1.00 H	213	43.70	-5.70
6	751.73	32.2 QP	46.0	-13.8	1.50 H	102	35.60	-3.40
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	51.24	26.3 QP	40.0	-13.7	1.50 V	11	40.50	-14.20
2	375.29	28.1 QP	46.0	-17.9	1.00 V	232	39.10	-11.00
3	600.38	39.4 QP	46.0	-6.6	1.00 V	265	45.80	-6.40
4	625.60	39.9 QP	46.0	-6.1	1.00 V	249	45.60	-5.70
5	749.79	29.7 QP	46.0	-16.3	1.25 V	121	33.20	-3.50
6	875.91	35.4 QP	46.0	-10.6	2.00 V	152	36.90	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	A4		

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	57.07	26.3 QP	40.0	-13.7	2.00 H	274	41.10	-14.80
2	148.26	23.4 QP	43.5	-20.1	2.00 H	225	37.70	-14.30
3	268.57	22.4 QP	46.0	-23.6	1.00 H	97	35.80	-13.40
4	375.29	23.8 QP	46.0	-22.2	1.25 H	108	34.80	-11.00
5	600.38	35.3 QP	46.0	-10.7	1.00 H	112	41.70	-6.40
6	625.60	37.6 QP	46.0	-8.4	1.00 H	133	43.30	-5.70
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	57.07	26.4 QP	40.0	-13.6	1.25 V	165	41.20	-14.80
2	375.29	25.9 QP	46.0	-20.1	1.25 V	182	36.90	-11.00
3	600.38	36.1 QP	46.0	-9.9	1.00 V	279	42.50	-6.40
4	625.60	39.6 QP	46.0	-6.4	1.50 V	249	45.30	-5.70
5	749.79	29.6 QP	46.0	-16.4	1.00 V	121	33.10	-3.50
6	875.91	35.5 QP	46.0	-10.5	1.00 V	163	37.00	-1.50

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)
– Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	A5		

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	57.07	28.4 QP	40.0	-11.6	1.00 H	328	43.20	-14.80
2	152.15	23.1 QP	43.5	-20.4	2.00 H	198	36.70	-13.60
3	268.57	24.3 QP	46.0	-21.7	1.00 H	93	37.70	-13.40
4	375.29	25.3 QP	46.0	-20.7	1.50 H	130	36.30	-11.00
5	600.38	35.1 QP	46.0	-10.9	1.50 H	102	41.50	-6.40
6	625.60	37.2 QP	46.0	-8.8	1.00 H	132	42.90	-5.70
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	53.18	26.6 QP	40.0	-13.4	2.00 V	325	40.50	-13.90
2	375.29	27.3 QP	46.0	-18.7	1.25 V	207	38.30	-11.00
3	600.38	37.1 QP	46.0	-8.9	1.00 V	271	43.50	-6.40
4	625.60	39.5 QP	46.0	-6.5	1.25 V	246	45.20	-5.70
5	749.79	30.4 QP	46.0	-15.6	1.00 V	88	33.90	-3.50
6	875.91	34.7 QP	46.0	-11.3	1.00 V	168	36.20	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	A6		

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	57.07	27.0 QP	40.0	-13.0	1.25 H	309	41.80	-14.80
2	148.26	23.1 QP	43.5	-20.4	1.50 H	213	37.40	-14.30
3	268.57	21.9 QP	46.0	-24.1	1.00 H	83	35.30	-13.40
4	600.38	34.3 QP	46.0	-11.7	2.00 H	112	40.70	-6.40
5	625.60	38.0 QP	46.0	-8.0	1.00 H	213	43.70	-5.70
6	875.91	31.5 QP	46.0	-14.5	1.00 H	291	33.00	-1.50
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	57.07	26.8 QP	40.0	-13.2	1.25 V	271	41.60	-14.80
2	375.29	28.2 QP	46.0	-17.8	1.50 V	248	39.20	-11.00
3	600.38	36.2 QP	46.0	-9.8	1.50 V	271	42.60	-6.40
4	625.60	39.7 QP	46.0	-6.3	1.25 V	255	45.40	-5.70
5	749.79	30.3 QP	46.0	-15.7	1.00 V	88	33.80	-3.50
6	875.91	35.0 QP	46.0	-11.0	1.00 V	156	36.50	-1.50

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)
– Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
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	57.07	30.1 QP	40.0	-9.9	2.00 H	358	44.90	-14.80
2	142.44	22.3 QP	43.5	-21.2	2.00 H	229	36.60	-14.30
3	278.27	23.3 QP	46.0	-22.7	1.25 H	106	36.20	-12.90
4	600.38	32.3 QP	46.0	-13.7	1.00 H	209	38.70	-6.40
5	625.60	38.9 QP	46.0	-7.1	1.00 H	215	44.60	-5.70
6	875.91	34.1 QP	46.0	-11.9	1.00 H	148	35.60	-1.50
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	45.42	29.6 QP	40.0	-10.4	1.00 V	10	43.60	-14.00
2	59.01	32.0 QP	40.0	-8.0	1.25 V	11	46.80	-14.80
3	437.38	25.3 QP	46.0	-20.7	1.50 V	11	34.90	-9.60
4	600.38	33.1 QP	46.0	-12.9	1.25 V	78	39.50	-6.40
5	625.60	35.4 QP	46.0	-10.6	1.00 V	40	41.10	-5.70
6	875.91	37.3 QP	46.0	-8.7	2.00 V	151	38.80	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
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	57.07	29.6 QP	40.0	-10.4	2.00 H	9	44.40	-14.80
2	280.21	25.5 QP	46.0	-20.5	1.00 H	193	38.30	-12.80
3	551.87	27.9 QP	46.0	-18.1	2.00 H	356	35.50	-7.60
4	600.38	33.0 QP	46.0	-13.0	1.00 H	217	39.40	-6.40
5	625.60	38.5 QP	46.0	-7.5	1.25 H	217	44.20	-5.70
6	875.91	33.6 QP	46.0	-12.4	1.00 H	290	35.10	-1.50
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	45.42	30.2 QP	40.0	-9.8	1.25 V	282	44.20	-14.00
2	59.01	32.7 QP	40.0	-7.3	1.00 V	309	47.50	-14.80
3	375.29	24.1 QP	46.0	-21.9	1.25 V	277	35.10	-11.00
4	600.38	31.7 QP	46.0	-14.3	1.00 V	292	38.10	-6.40
5	625.60	34.9 QP	46.0	-11.1	1.50 V	14	40.60	-5.70
6	875.91	30.8 QP	46.0	-15.2	1.50 V	295	32.30	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	B3		

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	57.07	28.0 QP	40.0	-12.0	1.50 H	243	42.80	-14.80
2	286.03	22.3 QP	46.0	-23.7	2.00 H	10	35.20	-12.90
3	458.73	25.3 QP	46.0	-20.7	2.00 H	175	34.50	-9.20
4	600.38	31.5 QP	46.0	-14.5	1.00 H	359	37.90	-6.40
5	625.60	31.7 QP	46.0	-14.3	1.00 H	336	37.40	-5.70
6	875.91	30.8 QP	46.0	-15.2	1.00 H	317	32.30	-1.50
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	41.54	28.0 QP	40.0	-12.0	1.50 V	329	43.00	-15.00
2	59.01	32.2 QP	40.0	-7.8	1.00 V	298	47.00	-14.80
3	375.29	25.6 QP	46.0	-20.4	1.00 V	285	36.60	-11.00
4	600.38	32.8 QP	46.0	-13.2	1.25 V	277	39.20	-6.40
5	625.60	34.5 QP	46.0	-11.5	2.00 V	271	40.20	-5.70
6	875.91	30.0 QP	46.0	-16.0	1.00 V	289	31.50	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	B4		

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	57.07	30.2 QP	40.0	-9.8	1.00 H	337	45.00	-14.80
2	150.20	22.7 QP	43.5	-20.8	2.00 H	258	36.70	-14.00
3	266.63	22.0 QP	46.0	-24.0	1.00 H	110	35.60	-13.60
4	375.29	23.5 QP	46.0	-22.5	2.00 H	233	34.50	-11.00
5	600.38	35.2 QP	46.0	-10.8	1.00 H	132	41.60	-6.40
6	625.60	38.7 QP	46.0	-7.3	1.25 H	208	44.40	-5.70
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	45.42	29.6 QP	40.0	-10.4	1.50 V	340	43.60	-14.00
2	59.01	32.2 QP	40.0	-7.8	2.00 V	327	47.00	-14.80
3	375.29	27.0 QP	46.0	-19.0	1.25 V	205	38.00	-11.00
4	600.38	35.7 QP	46.0	-10.3	1.00 V	268	42.10	-6.40
5	625.60	36.9 QP	46.0	-9.1	1.00 V	250	42.60	-5.70
6	875.91	37.1 QP	46.0	-8.9	1.00 V	149	38.60	-1.50

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)
– Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	B5		

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	57.07	26.2 QP	40.0	-13.8	2.00 H	282	41.00	-14.80
2	161.85	20.8 QP	43.5	-22.7	2.00 H	327	34.40	-13.60
3	375.29	23.2 QP	46.0	-22.8	1.00 H	287	34.20	-11.00
4	600.38	26.6 QP	46.0	-19.4	1.00 H	10	33.00	-6.40
5	625.60	32.0 QP	46.0	-14.0	1.50 H	285	37.70	-5.70
6	875.91	34.2 QP	46.0	-11.8	1.00 H	281	35.70	-1.50
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	45.42	30.6 QP	40.0	-9.4	1.25 V	324	44.60	-14.00
2	59.01	32.0 QP	40.0	-8.0	1.50 V	353	46.80	-14.80
3	559.63	28.2 QP	46.0	-17.8	1.25 V	52	35.80	-7.60
4	600.38	35.5 QP	46.0	-10.5	1.00 V	256	41.90	-6.40
5	625.60	36.7 QP	46.0	-9.3	1.00 V	248	42.40	-5.70
6	875.91	36.0 QP	46.0	-10.0	1.00 V	237	37.50	-1.50

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)
– Pre-Amplifier 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	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 74%RH	TESTED BY	Brad Tung
TEST MODE	B6		

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	57.07	27.2 QP	40.0	-12.8	1.50 H	243	42.00	-14.80
2	152.15	19.4 QP	43.5	-24.1	1.00 H	68	33.00	-13.60
3	280.21	23.0 QP	46.0	-23.0	1.00 H	9	35.80	-12.80
4	480.07	30.4 QP	46.0	-15.6	2.00 H	275	39.30	-8.90
5	600.38	32.3 QP	46.0	-13.7	2.00 H	146	38.70	-6.40
6	625.60	30.4 QP	46.0	-15.6	1.00 H	111	36.10	-5.70
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	45.42	29.5 QP	40.0	-10.5	1.25 V	8	43.50	-14.00
2	59.01	31.5 QP	40.0	-8.5	1.00 V	19	46.30	-14.80
3	390.81	24.4 QP	46.0	-21.6	1.00 V	245	35.20	-10.80
4	553.81	26.2 QP	46.0	-19.8	1.00 V	336	33.70	-7.50
5	625.60	34.9 QP	46.0	-11.1	1.25 V	8	40.60	-5.70
6	875.91	30.9 QP	46.0	-15.1	1.50 V	20	32.40	-1.50

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)
– Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 17, 2013	Nov. 16, 2014
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 28, 2012	Dec. 27, 2013
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 21, 2012	Dec. 20, 2013
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 17, 2013	Jul. 16, 2014
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

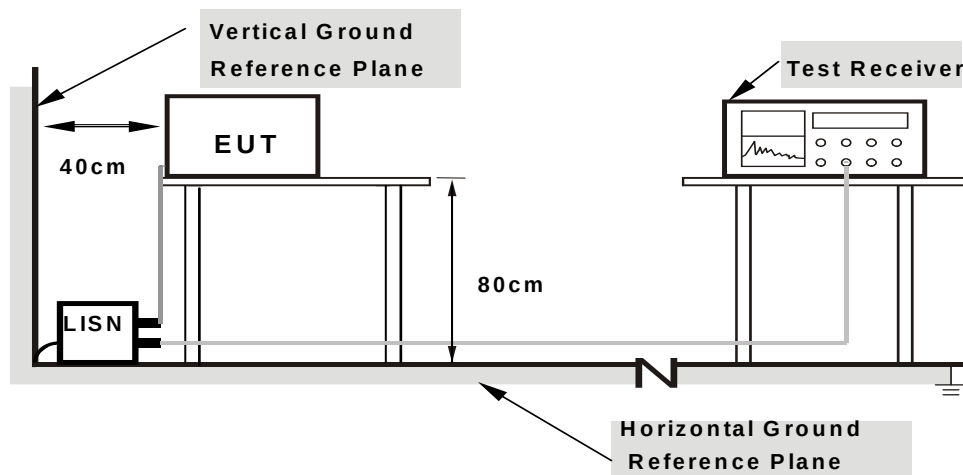
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 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

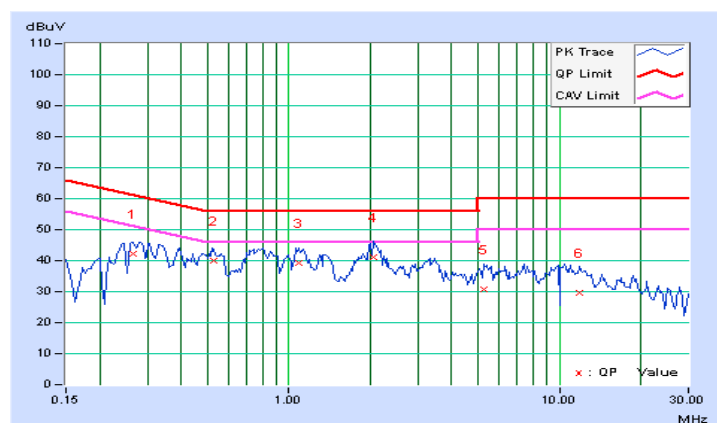
CONDUCTED WORST-CASE DATA :

CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26712	0.21	41.94	27.35	42.15	27.56	61.21	51.21	-19.06	-23.65
2	0.52589	0.23	39.75	31.22	39.98	31.45	56.00	46.00	-16.02	-14.55
3	1.08203	0.29	38.91	26.69	39.20	26.98	56.00	46.00	-16.80	-19.02
4	2.05078	0.32	40.62	30.00	40.94	30.32	56.00	46.00	-15.06	-15.68
5	5.27344	0.42	30.14	16.45	30.56	16.87	60.00	50.00	-29.44	-33.13
6	11.80859	0.53	29.24	17.35	29.77	17.88	60.00	50.00	-30.23	-32.12

REMARKS:

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

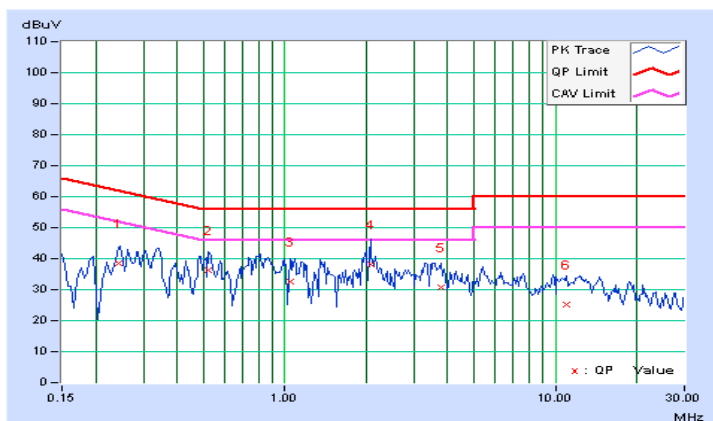


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.24375	0.21	38.41	26.76	38.62	26.97	61.97	51.97	-23.35	-25.00
2	0.52109	0.27	36.08	24.27	36.35	24.54	56.00	46.00	-19.65	-21.46
3	1.04688	0.26	32.46	20.97	32.72	21.23	56.00	46.00	-23.28	-24.77
4	2.07031	0.32	37.89	24.49	38.21	24.81	56.00	46.00	-17.79	-21.19
5	3.76953	0.44	30.17	15.21	30.61	15.65	56.00	46.00	-25.39	-30.35
6	10.96484	0.59	24.56	13.89	25.15	14.48	60.00	50.00	-34.85	-35.52

REMARKS:

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

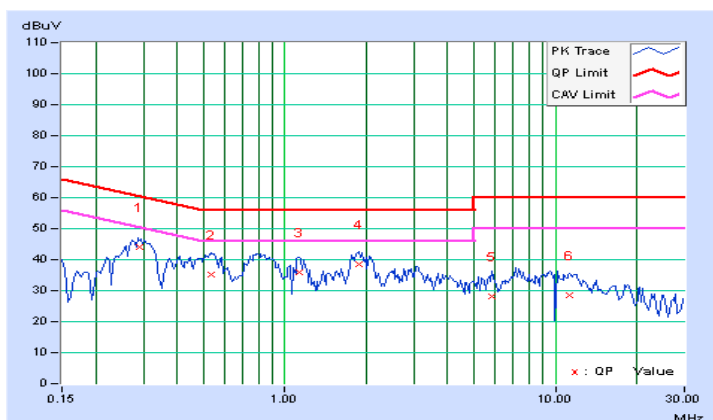


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29063	0.21	43.89	32.19	44.10	32.40	60.51	50.51	-16.41	-18.11
2	0.53281	0.24	34.95	22.01	35.19	22.25	56.00	46.00	-20.81	-23.75
3	1.12891	0.29	35.47	24.19	35.76	24.48	56.00	46.00	-20.24	-21.52
4	1.87891	0.32	38.10	27.91	38.42	28.23	56.00	46.00	-17.58	-17.77
5	5.85547	0.43	27.72	15.21	28.15	15.64	60.00	50.00	-31.85	-34.36
6	11.26563	0.52	27.84	16.14	28.36	16.66	60.00	50.00	-31.64	-33.34

REMARKS:

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

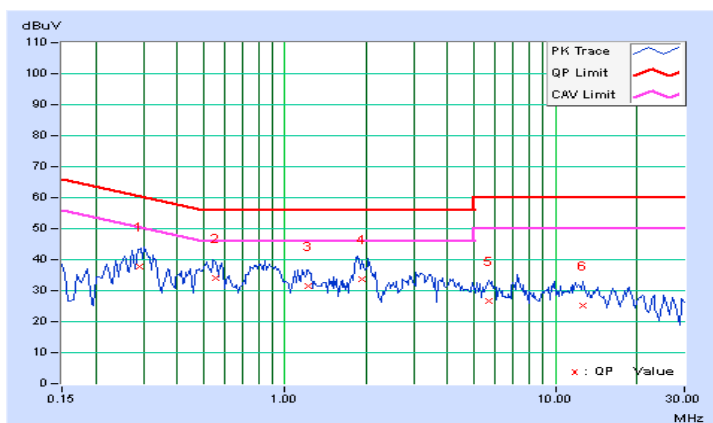


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29063	0.23	37.69	25.63	37.92	25.86	60.51	50.51	-22.59	-24.65
2	0.55234	0.27	33.71	21.75	33.98	22.02	56.00	46.00	-22.02	-23.98
3	1.21875	0.27	31.35	19.82	31.62	20.09	56.00	46.00	-24.38	-25.91
4	1.93359	0.32	33.31	20.77	33.63	21.09	56.00	46.00	-22.37	-24.91
5	5.65625	0.48	26.26	12.43	26.74	12.91	60.00	50.00	-33.26	-37.09
6	12.57422	0.63	24.43	12.94	25.06	13.57	60.00	50.00	-34.94	-36.43

REMARKS:

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

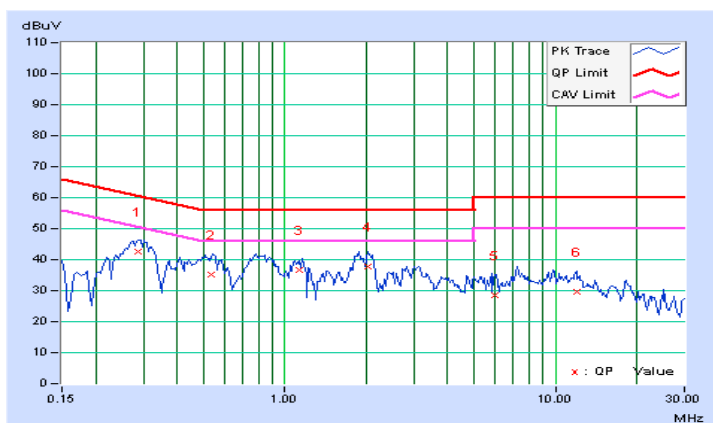


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A3

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.28672	0.21	42.43	29.19	42.64	29.40	60.62	50.62	-17.98	-21.22
2	0.53281	0.24	34.89	22.03	35.13	22.27	56.00	46.00	-20.87	-23.73
3	1.13672	0.29	36.42	25.25	36.71	25.54	56.00	46.00	-19.29	-20.46
4	2.02734	0.32	37.43	27.17	37.75	27.49	56.00	46.00	-18.25	-18.51
5	5.98047	0.43	28.27	14.86	28.70	15.29	60.00	50.00	-31.30	-34.71
6	12.00000	0.54	29.00	16.31	29.54	16.85	60.00	50.00	-30.46	-33.15

REMARKS:

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

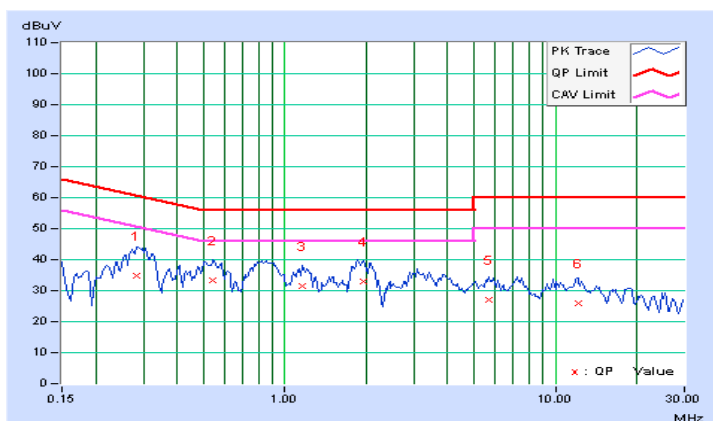


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A3

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.28281	0.22	34.51	19.94	34.73	20.16	60.73	50.73	-26.00	-30.57
2	0.54063	0.27	32.92	20.52	33.19	20.79	56.00	46.00	-22.81	-25.21
3	1.16016	0.27	31.35	19.32	31.62	19.59	56.00	46.00	-24.38	-26.41
4	1.95313	0.32	32.81	20.53	33.13	20.85	56.00	46.00	-22.87	-25.15
5	5.65625	0.48	26.50	13.31	26.98	13.79	60.00	50.00	-33.02	-36.21
6	12.11328	0.62	25.28	13.71	25.90	14.33	60.00	50.00	-34.10	-35.67

REMARKS:

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

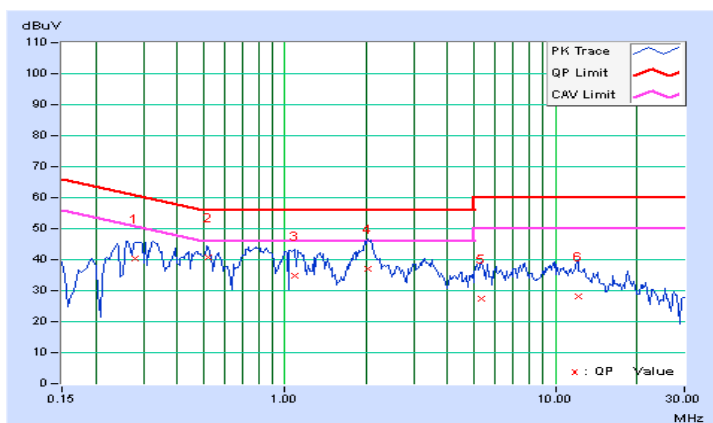


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A4

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.27891	0.21	40.20	24.76	40.41	24.97	60.85	50.85	-20.44	-25.88
2	0.52109	0.23	40.57	27.46	40.80	27.69	56.00	46.00	-15.20	-18.31
3	1.08203	0.29	34.68	24.25	34.97	24.54	56.00	46.00	-21.03	-21.46
4	2.01953	0.32	36.82	26.65	37.14	26.97	56.00	46.00	-18.86	-19.03
5	5.33594	0.42	27.06	14.17	27.48	14.59	60.00	50.00	-32.52	-35.41
6	12.10156	0.54	27.71	15.66	28.25	16.20	60.00	50.00	-31.75	-33.80

REMARKS:

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

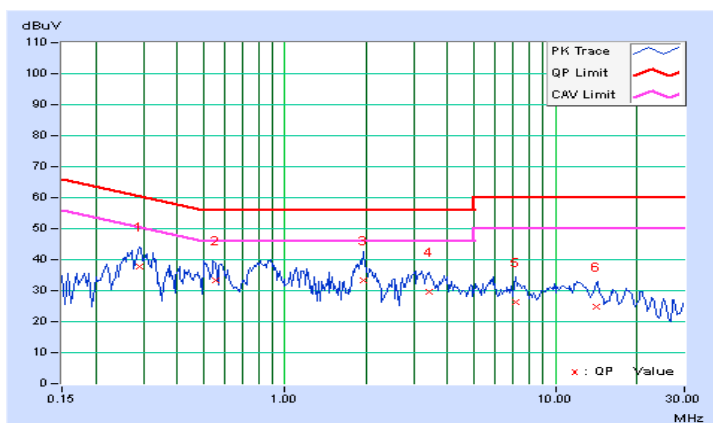


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A4

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29063	0.23	37.43	24.77	37.66	25.00	60.51	50.51	-22.85	-25.51
2	0.55234	0.27	32.98	20.96	33.25	21.23	56.00	46.00	-22.75	-24.77
3	1.94141	0.32	33.18	20.21	33.50	20.53	56.00	46.00	-22.50	-25.47
4	3.40625	0.41	29.21	16.16	29.62	16.57	56.00	46.00	-26.38	-29.43
5	7.11328	0.51	25.88	12.12	26.39	12.63	60.00	50.00	-33.61	-37.37
6	14.14453	0.67	23.96	11.04	24.63	11.71	60.00	50.00	-35.37	-38.29

REMARKS:

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

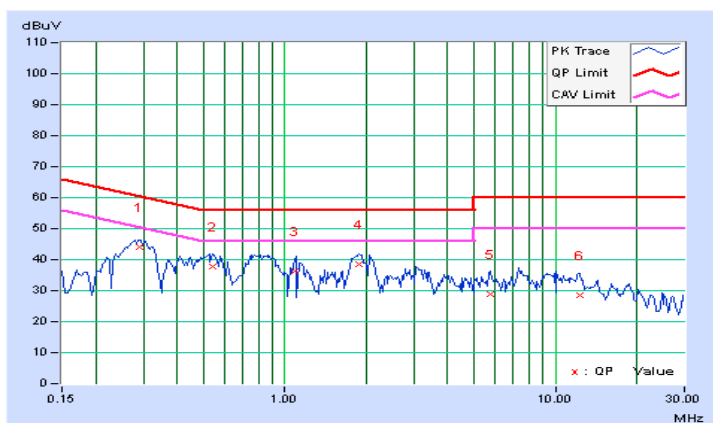


CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A5

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29063	0.21	43.97	32.17	44.18	32.38	60.51	50.51	-16.33	-18.13
2	0.54063	0.24	37.66	27.28	37.90	27.52	56.00	46.00	-18.10	-18.48
3	1.08203	0.29	36.10	25.00	36.39	25.29	56.00	46.00	-19.61	-20.71
4	1.87500	0.32	38.14	27.77	38.46	28.09	56.00	46.00	-17.54	-17.91
5	5.76172	0.43	28.54	14.77	28.97	15.20	60.00	50.00	-31.03	-34.80
6	12.33203	0.55	27.92	16.08	28.47	16.63	60.00	50.00	-31.53	-33.37

REMARKS:

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

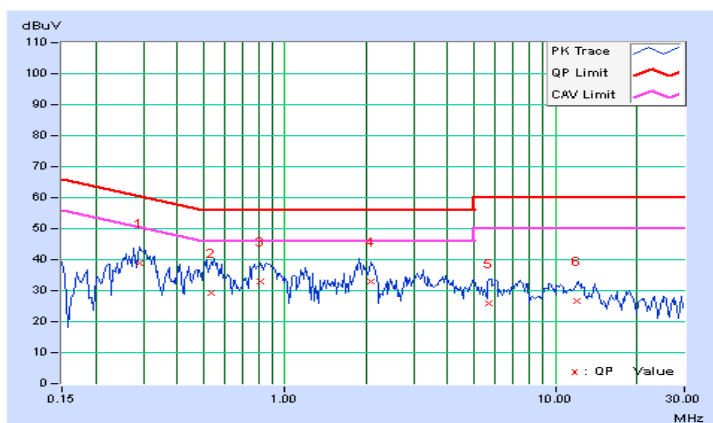


CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A5

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29063	0.23	38.51	26.03	38.74	26.26	60.51	50.51	-21.77	-24.25
2	0.53281	0.27	29.14	15.95	29.41	16.22	56.00	46.00	-26.59	-29.78
3	0.81406	0.26	32.79	22.02	33.05	22.28	56.00	46.00	-22.95	-23.72
4	2.07031	0.32	32.56	21.01	32.88	21.33	56.00	46.00	-23.12	-24.67
5	5.67578	0.48	25.42	12.71	25.90	13.19	60.00	50.00	-34.10	-36.81
6	11.96875	0.62	26.10	14.27	26.72	14.89	60.00	50.00	-33.28	-35.11

REMARKS:

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

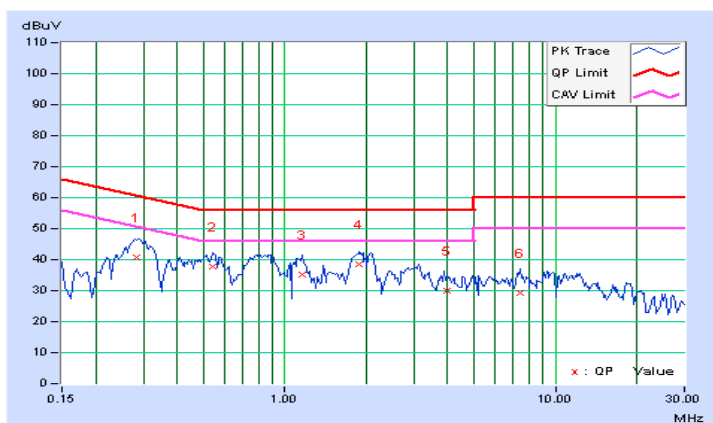


CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	A6

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.28281	0.21	40.66	26.28	40.87	26.49	60.73	50.73	-19.86	-24.24
2	0.54063	0.24	37.72	27.28	37.96	27.52	56.00	46.00	-18.04	-18.48
3	1.15625	0.29	34.96	24.16	35.25	24.45	56.00	46.00	-20.75	-21.55
4	1.87891	0.32	38.08	28.01	38.40	28.33	56.00	46.00	-17.60	-17.67
5	3.95703	0.40	29.63	18.89	30.03	19.29	56.00	46.00	-25.97	-26.71
6	7.40625	0.45	28.91	16.97	29.36	17.42	60.00	50.00	-30.64	-32.58

REMARKS:

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

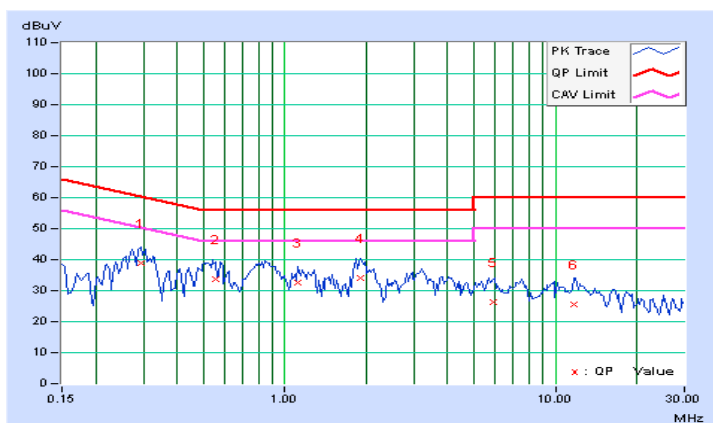


CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	A6

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29453	0.23	38.69	26.57	38.92	26.80	60.40	50.40	-21.48	-23.60
2	0.55234	0.27	33.26	21.02	33.53	21.29	56.00	46.00	-22.47	-24.71
3	1.11328	0.27	32.50	21.53	32.77	21.80	56.00	46.00	-23.23	-24.20
4	1.91016	0.31	33.65	20.93	33.96	21.24	56.00	46.00	-22.04	-24.76
5	5.90625	0.49	25.86	12.91	26.35	13.40	60.00	50.00	-33.65	-36.60
6	11.74219	0.61	25.09	14.06	25.70	14.67	60.00	50.00	-34.30	-35.33

REMARKS:

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

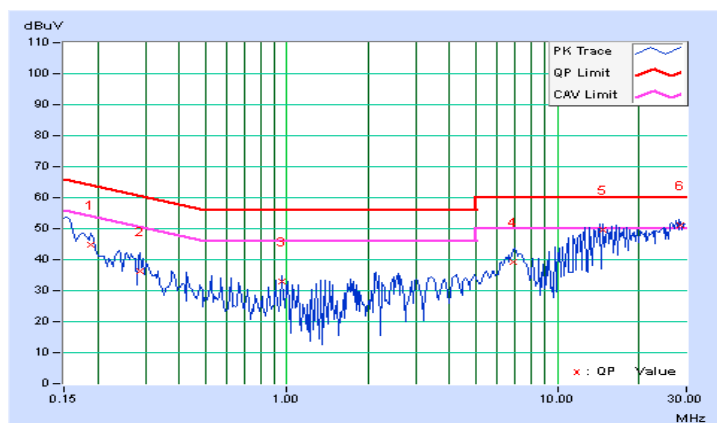


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	0.20	44.80	35.89	45.00	36.09	64.08	54.08	-19.08	-17.99
2	0.28672	0.21	36.11	31.72	36.32	31.93	60.62	50.62	-24.30	-18.69
3	0.95469	0.28	32.67	30.85	32.95	31.13	56.00	46.00	-23.05	-14.87
4	6.87500	0.44	38.83	36.00	39.27	36.44	60.00	50.00	-20.73	-13.56
5	14.75391	0.60	49.10	45.86	49.70	46.46	60.00	50.00	-10.30	-3.54
6	28.55469	0.63	50.53	46.03	51.16	46.66	60.00	50.00	-8.84	-3.34

REMARKS:

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

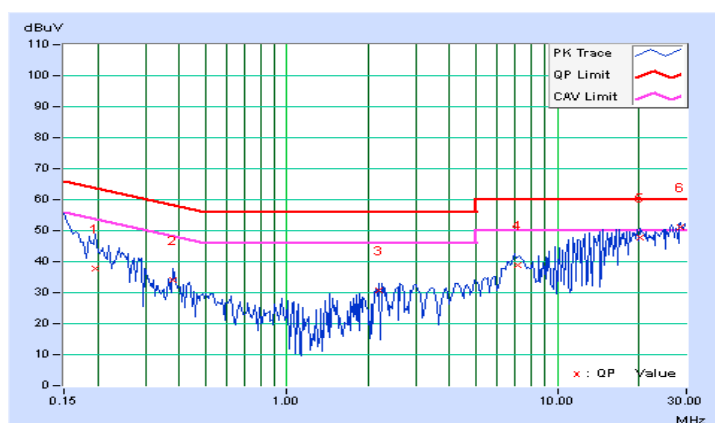


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11b CH 6	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B1

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.19	37.71	26.93	37.90	27.12	63.74	53.74	-25.84	-26.62
2	0.38047	0.26	33.97	31.33	34.23	31.59	58.27	48.27	-24.04	-16.68
3	2.19922	0.33	30.25	29.21	30.58	29.54	56.00	46.00	-25.42	-16.46
4	7.12500	0.51	38.53	36.38	39.04	36.89	60.00	50.00	-20.96	-13.11
5	20.22656	0.82	46.92	45.38	47.74	46.20	60.00	50.00	-12.26	-3.80
6	28.55469	0.72	50.33	46.49	51.05	47.21	60.00	50.00	-8.95	-2.79

REMARKS:

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

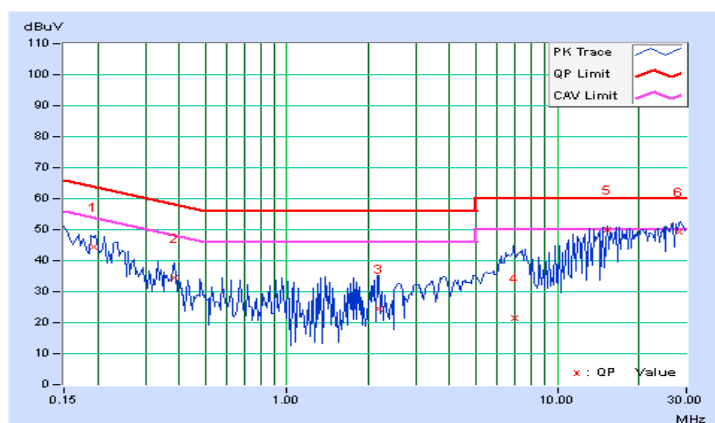


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19297	0.20	44.13	35.31	44.33	35.51	63.91	53.91	-19.58	-18.40
2	0.38438	0.22	34.24	31.27	34.46	31.49	58.18	48.18	-23.73	-16.70
3	2.20313	0.33	24.28	20.98	24.61	21.31	56.00	46.00	-31.39	-24.69
4	6.99609	0.44	20.95	14.23	21.39	14.67	60.00	50.00	-38.61	-35.33
5	15.23047	0.62	49.34	47.00	49.96	47.62	60.00	50.00	-10.04	-2.38
6	28.08203	0.63	48.58	45.91	49.21	46.54	60.00	50.00	-10.79	-3.46

REMARKS:

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

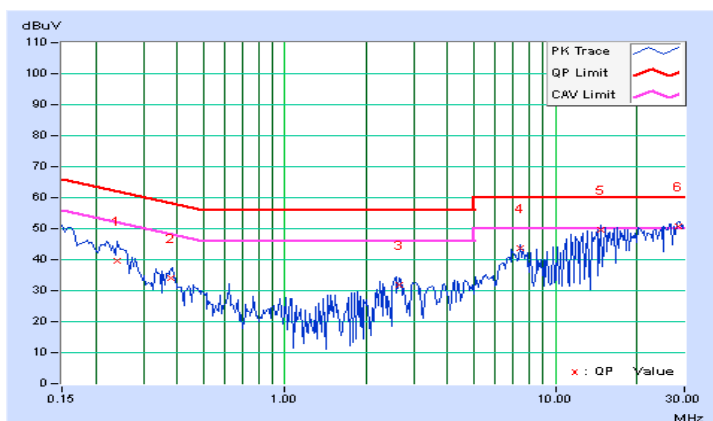


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 36	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B2

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.23984	0.21	39.26	30.07	39.47	30.28	62.10	52.10	-22.64	-21.83
2	0.38047	0.26	33.68	31.17	33.94	31.43	58.27	48.27	-24.33	-16.84
3	2.63672	0.36	31.57	30.85	31.93	31.21	56.00	46.00	-24.07	-14.79
4	7.37891	0.52	43.19	40.74	43.71	41.26	60.00	50.00	-16.29	-8.74
5	14.75391	0.69	48.82	46.45	49.51	47.14	60.00	50.00	-10.49	-2.86
6	28.55469	0.72	50.05	46.76	50.77	47.48	60.00	50.00	-9.23	-2.52

REMARKS:

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

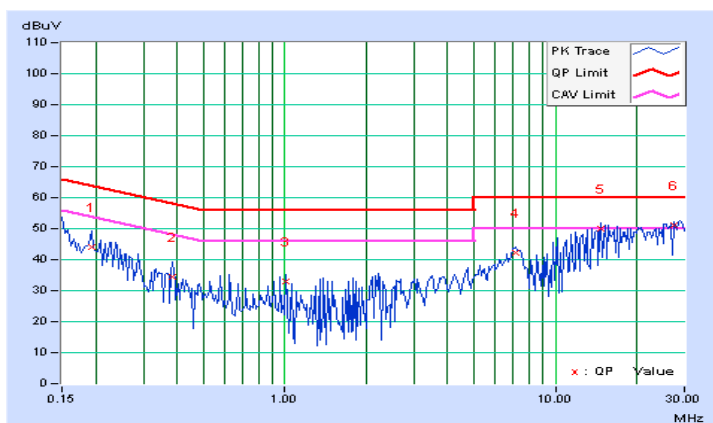


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B3

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19297	0.20	43.76	35.17	43.96	35.37	63.91	53.91	-19.95	-18.54
2	0.38438	0.22	34.16	31.39	34.38	31.61	58.18	48.18	-23.81	-16.58
3	1.00781	0.29	32.56	30.86	32.85	31.15	56.00	46.00	-23.15	-14.85
4	7.11328	0.45	41.76	40.49	42.21	40.94	60.00	50.00	-17.79	-9.06
5	14.75391	0.60	49.24	46.35	49.84	46.95	60.00	50.00	-10.16	-3.05
6	27.37109	0.65	50.58	47.14	51.23	47.79	60.00	50.00	-8.77	-2.21

REMARKS:

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

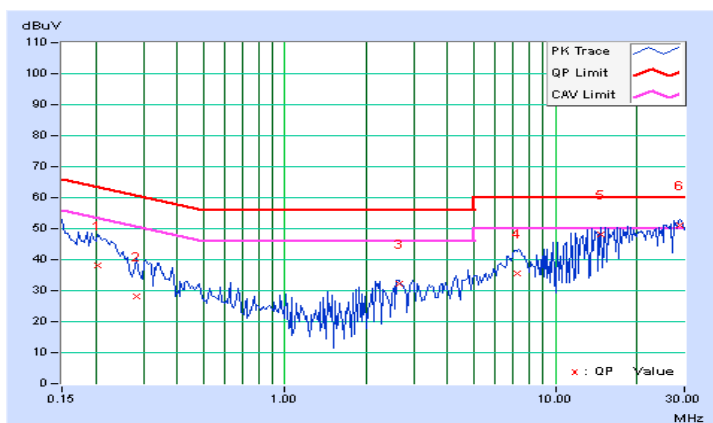


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B3

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20469	0.19	37.90	11.21	38.09	11.40	63.42	53.42	-25.33	-42.02
2	0.28281	0.22	28.09	18.50	28.31	18.72	60.73	50.73	-32.42	-32.01
3	2.64453	0.36	31.97	31.25	32.33	31.61	56.00	46.00	-23.67	-14.39
4	7.25781	0.52	35.11	28.05	35.63	28.57	60.00	50.00	-24.37	-21.43
5	14.75781	0.69	47.60	45.24	48.29	45.93	60.00	50.00	-11.71	-4.07
6	29.03516	0.71	50.52	47.04	51.23	47.75	60.00	50.00	-8.77	-2.25

REMARKS:

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

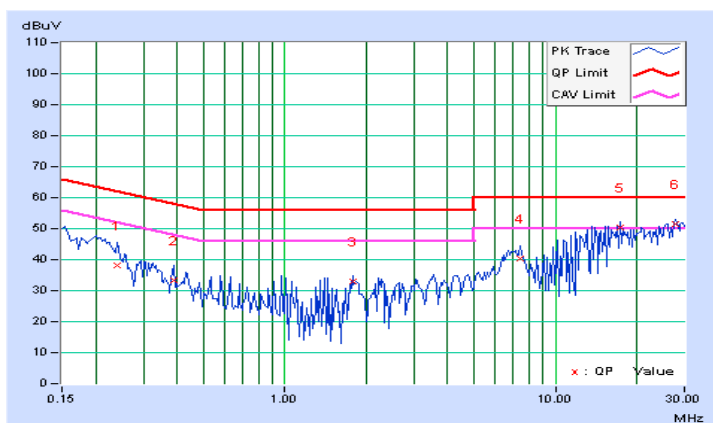


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B4

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.23984	0.20	37.95	31.85	38.15	32.05	62.10	52.10	-23.95	-20.05
2	0.38828	0.22	33.28	30.85	33.50	31.07	58.10	48.10	-24.60	-17.03
3	1.78516	0.31	32.78	31.86	33.09	32.17	56.00	46.00	-22.91	-13.83
4	7.37891	0.45	40.04	36.94	40.49	37.39	60.00	50.00	-19.51	-12.61
5	17.37500	0.67	49.63	46.78	50.30	47.45	60.00	50.00	-9.70	-2.55
6	27.84766	0.64	50.89	46.40	51.53	47.04	60.00	50.00	-8.47	-2.96

REMARKS:

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

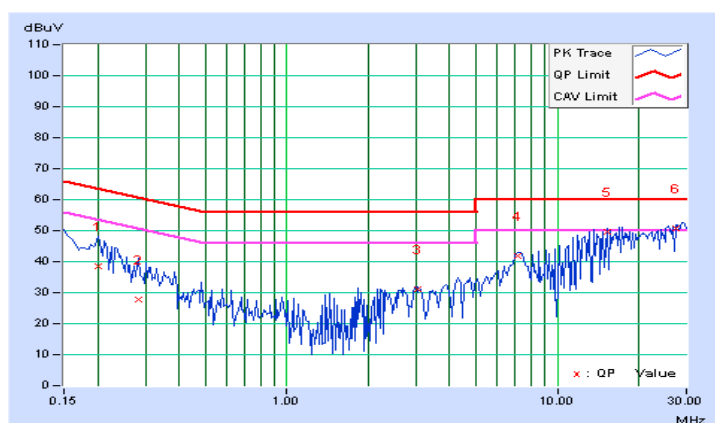


CHANNEL	802.11b CH 6 + 802.11a CH 52 + 802.11a CH 157	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B4

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.19	38.37	16.80	38.56	16.99	63.58	53.58	-25.02	-36.59
2	0.28281	0.22	27.53	17.67	27.75	17.89	60.73	50.73	-32.98	-32.84
3	3.03125	0.39	30.83	28.89	31.22	29.28	56.00	46.00	-24.78	-16.72
4	7.12500	0.51	41.22	40.05	41.73	40.56	60.00	50.00	-18.27	-9.44
5	15.23047	0.70	48.84	46.43	49.54	47.13	60.00	50.00	-10.46	-2.87
6	27.37109	0.74	50.16	47.21	50.90	47.95	60.00	50.00	-9.10	-2.05

REMARKS:

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

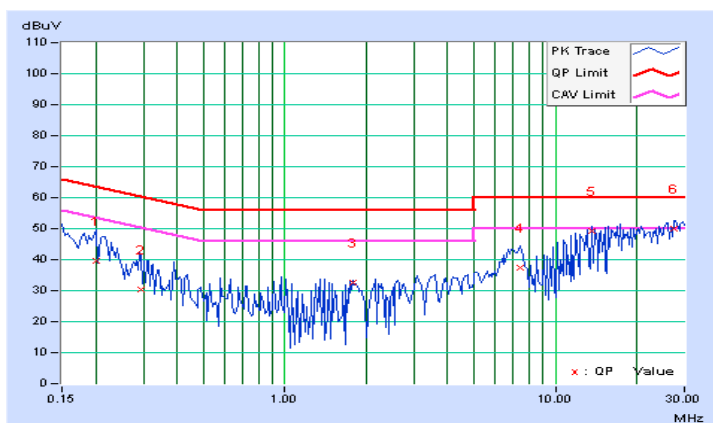


CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B5

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.20	39.52	19.70	39.72	19.90	63.58	53.58	-23.86	-33.68
2	0.29453	0.21	30.22	25.83	30.43	26.04	60.40	50.40	-29.97	-24.36
3	1.78516	0.31	32.20	30.29	32.51	30.60	56.00	46.00	-23.49	-15.40
4	7.38281	0.45	37.04	33.09	37.49	33.54	60.00	50.00	-22.51	-16.46
5	13.56641	0.58	48.55	45.15	49.13	45.73	60.00	50.00	-10.87	-4.27
6	27.37109	0.65	49.53	45.31	50.18	45.96	60.00	50.00	-9.82	-4.04

REMARKS:

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

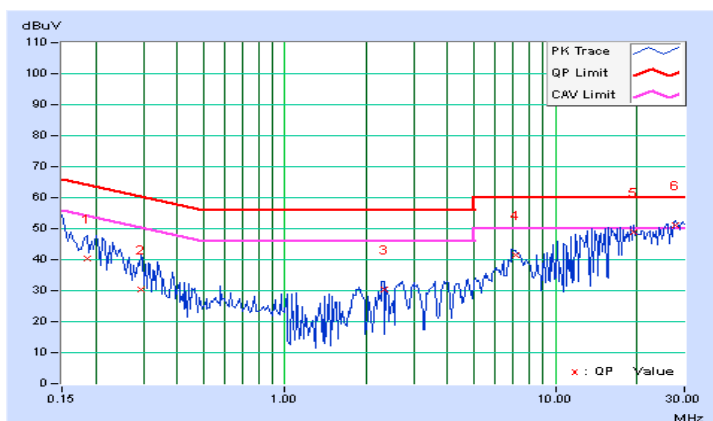


CHANNEL	802.11b CH 6 + 802.11a CH 36 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B5

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18516	0.19	40.16	17.22	40.35	17.41	64.25	54.25	-23.90	-36.84
2	0.29453	0.23	30.30	21.82	30.53	22.05	60.40	50.40	-29.87	-28.35
3	2.32031	0.34	30.20	29.69	30.54	30.03	56.00	46.00	-25.46	-15.97
4	7.14844	0.51	40.88	40.09	41.39	40.60	60.00	50.00	-18.61	-9.40
5	19.51563	0.81	47.99	45.56	48.80	46.37	60.00	50.00	-11.20	-3.63
6	27.84766	0.73	50.35	46.95	51.08	47.68	60.00	50.00	-8.92	-2.32

REMARKS:

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

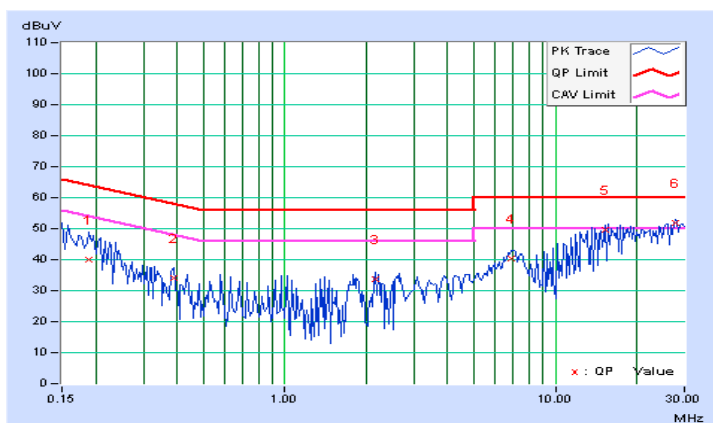


CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 1	TEST MODE	B6

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	0.20	39.91	30.82	40.11	31.02	64.08	54.08	-23.97	-23.06
2	0.38828	0.22	33.88	31.91	34.10	32.13	58.10	48.10	-24.00	-15.97
3	2.17578	0.33	33.39	31.74	33.72	32.07	56.00	46.00	-22.28	-13.93
4	6.91016	0.44	39.84	37.55	40.28	37.99	60.00	50.00	-19.72	-12.01
5	15.23047	0.62	49.00	46.29	49.62	46.91	60.00	50.00	-10.38	-3.09
6	27.84766	0.64	51.11	46.54	51.75	47.18	60.00	50.00	-8.25	-2.82

REMARKS:

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

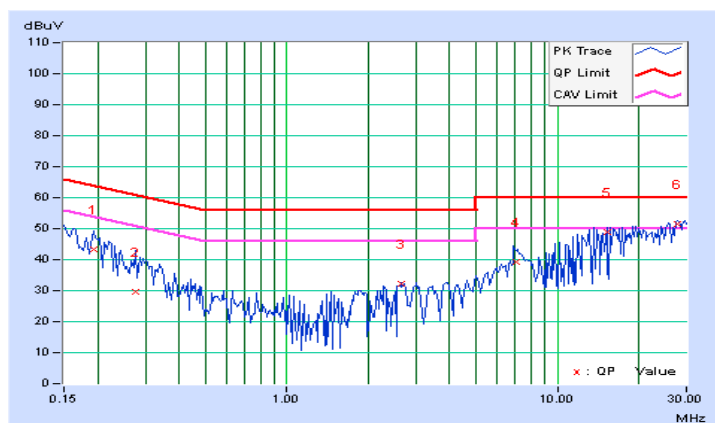


CHANNEL	802.11b CH 6 + 802.11a CH 157 + 802.11a CH 52	6dB BANDWIDTH	9kHz
PHASE	Line 2	TEST MODE	B6

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19297	0.19	43.06	32.86	43.25	33.05	63.91	53.91	-20.66	-20.86
2	0.27500	0.22	29.30	6.30	29.52	6.52	60.97	50.97	-31.45	-44.45
3	2.65625	0.36	31.78	30.94	32.14	31.30	56.00	46.00	-23.86	-14.70
4	7.00391	0.51	38.92	35.73	39.43	36.24	60.00	50.00	-20.57	-13.76
5	15.23438	0.70	48.35	45.99	49.05	46.69	60.00	50.00	-10.95	-3.31
6	27.84766	0.73	50.84	46.26	51.57	46.99	60.00	50.00	-8.43	-3.01

REMARKS:

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



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. INFORMATION ON THE TESTING LABORATORIES

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

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

Linko EMC/RF Lab:

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

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

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

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