



FCC TEST REPORT (15.247)

REPORT NO.: RF120614C11G
MODEL NO.: RSVLC-1103
FCC ID: B94RSVLC1103
RECEIVED: Mar. 11, 2014
TESTED: May 31 ~ Jun. 04, 2014
ISSUED: Jun. 04, 2014

APPLICANT: Hewlett-Packard Company

ADDRESS: 8000 Foothills Blvd. Mail Stop 5603 Roseville,
CA95747

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

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

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

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



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

TABLE OF CONTENTS

RELEASE CONTROL RECORD.....	4
1. CERTIFICATION.....	5
2. SUMMARY OF TEST RESULTS	6
2.1 MEASUREMENT UNCERTAINTY.....	6
3. GENERAL INFORMATION.....	7
3.1 GENERAL DESCRIPTION OF EUT.....	7
3.2 DESCRIPTION OF TEST MODES.....	9
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	11
3.3 DESCRIPTION OF SUPPORT UNITS.....	13
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST.....	13
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS.....	14
4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND).....	15
4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT	15
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT.....	15
4.1.2 TEST INSTRUMENTS.....	16
4.1.3 TEST PROCEDURES	17
4.1.4 DEVIATION FROM TEST STANDARD	17
4.1.5 TEST SETUP.....	18
4.1.6 EUT OPERATING CONDITIONS	18
4.1.7 TEST RESULTS	19
4.2 CONDUCTED EMISSION MEASUREMENT	21
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	21
4.2.2 TEST INSTRUMENTS.....	21
4.2.3 TEST PROCEDURES	22
4.2.4 DEVIATION FROM TEST STANDARD	22
4.2.5 TEST SETUP.....	22
4.2.6 EUT OPERATING CONDITIONS	22
4.2.7 TEST RESULTS	23
5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND).....	27
5.1 RADIATED EMISSION MEASUREMENT	27
5.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT	27
5.1.2 TEST INSTRUMENTS.....	28
5.1.3 TEST PROCEDURES	28
5.1.4 DEVIATION FROM TEST STANDARD	28
5.1.5 TEST SETUP.....	28
5.1.6 EUT OPERATING CONDITIONS	28
5.1.7 TEST RESULTS	29
5.2 CONDUCTED EMISSION MEASUREMENT	31
5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	31



A D T

5.2.2	T EST INSTRUMENTS	31
5.2.3	TEST PROCEDURES	31
5.2.4	DEVIATION FROM TEST STANDARD	31
5.2.5	TEST SETUP	31
5.2.6	EUT OPERATING CONDITIONS	31
5.2.7	TEST RESULTS	32
6.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	36
7.	INFORMATION ON THE TESTING LABORATORIES	37
8.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	38



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120614C11G	Original release	Jun. 04, 2014



1. CERTIFICATION

PRODUCT: HP M220 802.11n AM Access Point (refer to item 3.1 for more detail)
MODEL NO.: RSVLC-1103
BRAND: HP
APPLICANT: Hewlett-Packard Company
TESTED: May 31 ~ Jun. 04, 2014
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 15, Subpart C (Section 15.247)**
ANSI C63.10-2009

This report is issued as a supplementary report of **RF120614C11**. This report shall be used combined together with its original report.

PREPARED BY : Maggie Wu , **DATE** : Jun. 04, 2014
Maggie Wu / Specialist

APPROVED BY : Ken Liu , **DATE** : Jun. 04, 2014
Ken Liu / Senior Manager

NOTE: Test items for conducted emission test and radiated emission below 1GHz test were performed for this addendum. Other testing data refer to original report.

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -10.04dB at 0.17344MHz.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.8dB at 47.10MHz.
15.247(d)	Band Edge Measurement	PASS	Refer to NOTE below
15.247(a)(2)	6dB bandwidth	PASS	Refer to NOTE below
15.247(b)	Conducted power	PASS	Refer to NOTE below
15.247(e)	Power Spectral Density	PASS	Refer to NOTE below
15.203	Antenna Requirement	PASS	Antenna connector is I-PEX not a standard connector.

NOTE: Test items for conducted emission test and radiated emission below 1GHz test were performed for this addendum. Other testing data refer to original report.

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	HP M220 802.11n AM Access Point (refer to note as below)
MODEL NO.	RSVLC-1103
POWER SUPPLY	12Vdc (Adapter) 48Vdc (POE)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5745 ~ 5825MHz
NUMBER OF CHANNEL	2.4GHz: 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) 5.0GHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	512.3mW for 2412 ~ 2462MHz 314.1mW for 5745 ~ 5825MHz
ANTENNA TYPE	2.4GHz: PCB antenna with 4dBi gain 5.0GHz: PCB antenna with 5dBi gain
ANTENNA CONNECTOR	I-PEX
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Adapter

NOTE:

1. This is a supplementary report of RF120614C11. This report shall be combined together with its original report.
2. This report is prepared for FCC class II permissive change. The differences compared with the original report are adding product names and changing the SW operation interface. Tests item for conducted emission test and radiated emission below 1GHz test had been re-tested and presented in this report.
3. The product names listed as below are identical to each other except their product name due to marketing purpose. (New product names are marked in boldface.)

Brand	Model	Product name
HP	RSVLC-1103	HP M220 802.11n AM Access Point
		HP M220 802.11n WW Access Point
		HP M210 802.11n AM Access Point
		HP M210 802.11n WW Access Point

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

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

5. The EUT were powered by the following adapter & POE:

ADAPTER	
BRAND:	DELTA ELECTRONICS, INC.
MODEL:	EADP-15DC A
INPUT:	100-240Vac, 0.4A, 50/60Hz LPS
OUTPUT:	12Vdc, 1.25A
POWER LINE:	1.8m non-shielded cable without core

POE	
BRAND:	PowerDsine
MODEL:	PD-3501G/AC
INPUT:	100-240Vac, 0.5A, 50/60Hz
OUTPUT:	48Vdc, 0.35A
POWER LINE:	1.9m non-shielded cable without core

* POE is provided as support units only.

6. The EUT had been pre-tested on the positioned of each 3 modes. The worst case was found when positioned on mode 2

TEST MODE	POSITIONED
MODE 1	Horizontal (desk top) mounting
MODE 2	Vertical (wall) mounting
MODE 3	Inverted horizontal (ceiling) mounting

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

3.2 DESCRIPTION OF TEST MODES

FOR 2.4GHz:

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

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

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 5.0GHz (5745 ~ 5825MHz):

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz



POWER SETTING

802.11b		802.11g	
CHANNEL	POWER SETTING (txpwr1 -o -q)	CHANNEL	POWER SETTING (txpwr1 -o -q)
1	67	1	55
6	67	6	66
11	67	11	55

802.11n (20MHz)		802.11n (40MHz)	
CHANNEL	POWER SETTING (txpwr1 -o -q)	CHANNEL	POWER SETTING (txpwr1 -o -q)
1	50	3	34
6	66	6	50
11	50	9	33

802.11a		802.11n (20MHz)	
CHANNEL	POWER SETTING (txpwr1 -o -q)	CHANNEL	POWER SETTING (txpwr1 -o -q)
149	56	149	54
157	54	157	54
165	54	165	54

802.11n (40MHz)	
CHANNEL	POWER SETTING (txpwr1 -o -q)
151	58
159	58

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE<1G	PLC	
A	√	√	Power from Adapter
B	√	√	Power from POE

Where **RE<1G**: Radiated Emission below 1GHz **PLC**: Power Line Conducted Emission

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane (Vertical (wall) mounting)**.

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A & B	802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A & B	802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 68%RH 25deg. C, 65%RH	120Vac, 60Hz 48Vdc	Sun Lin
PLC	25deg. C, 68%RH	120Vac, 60Hz 48Vdc	Sun Lin

FOR 5.0GHz (5745 ~ 5825MHz):

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE<1G	PLC	
A	√	√	Power from Adapter
B	√	√	Power from POE

Where **RE<1G**: Radiated Emission below 1GHz **PLC**: Power Line Conducted Emission

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane (Vertical (wall) mounting)**.

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A & B	802.11a	149 to 165	149	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A & B	802.11a	149 to 165	149	OFDM	BPSK	6.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 68%RH 25deg. C, 65%RH	120Vac, 60Hz 48Vdc	Sun Lin
PLC	25deg. C, 68%RH	120Vac, 60Hz 48Vdc	Sun Lin

3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5410	1HC2XM1	FCC DoC Approved
2	POE	PowerDsine	PD-3501G/AC	NA	NA

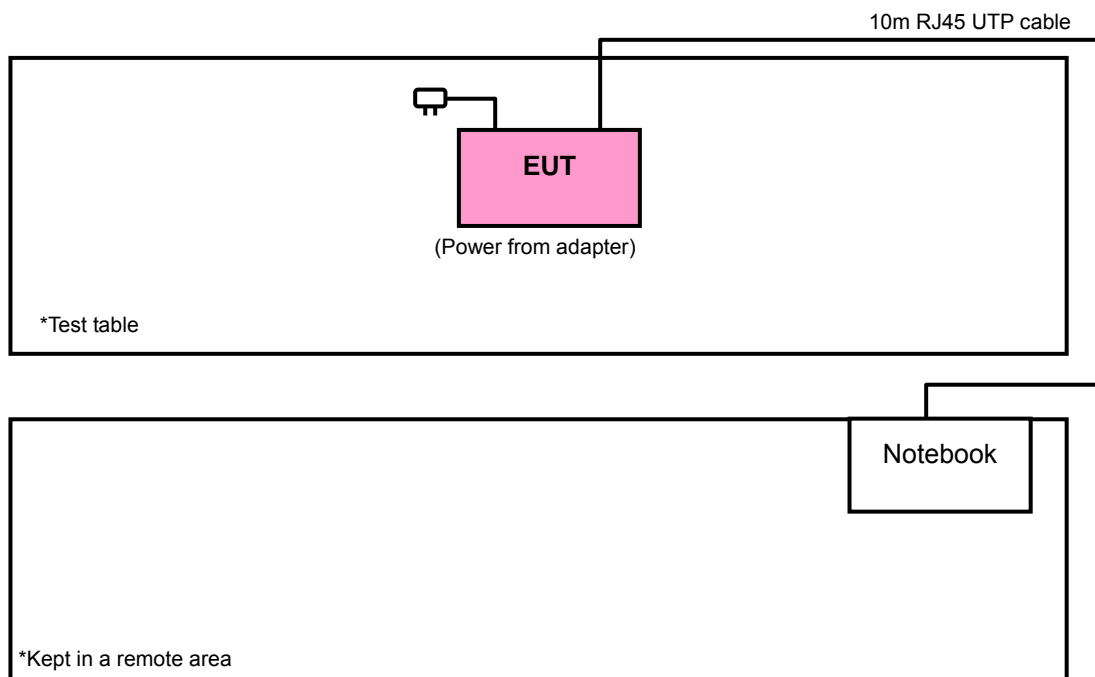
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m RJ45 cable without core
2	0.8m RJ45 cable without core

NOTE:

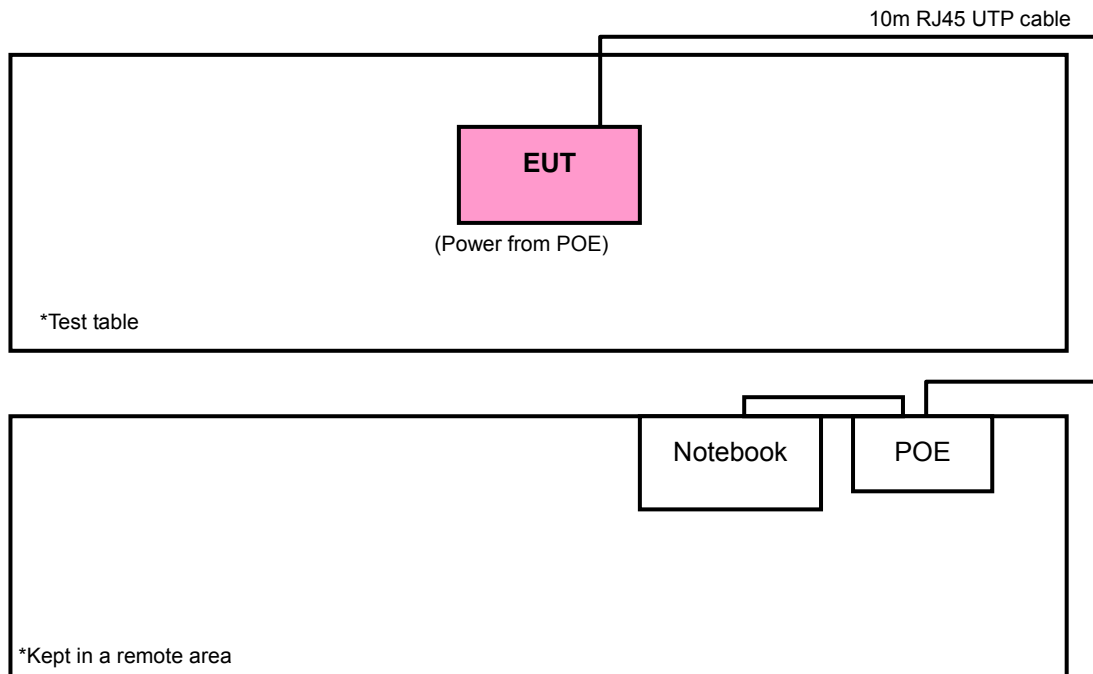
1. All power cords of the above support units are non shielded (1.8m).
2. Items 1-2 acted as communication partners to transfer data.
3. Item 2 was provided by the manufacturer.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)

ANSI C63.10-2009

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

4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTE:

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Feb. 25, 2014	Feb. 24, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
Preamplifier Agilent	8449B	3008A01911	Aug. 22, 2013	Aug. 21, 2014
Preamplifier Agilent	8447D	2944A10638	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	248780/4 309222/4 274092/4	Aug. 26, 2013	Aug. 25, 2014
RF signal cable Worken	5D-FB	Cable-HYCH9-01	Aug. 11, 2013	Aug. 10, 2014
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA	NA
High Speed Peak Power Meter	ML2495A	0824011	Jul. 29, 2013	Jul. 28, 2014
Power Sensor	MA2411B	0738171	Jul. 29, 2013	Jul. 28, 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 9.
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 215374.
5. The IC Site Registration No. is IC 7450F-9.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

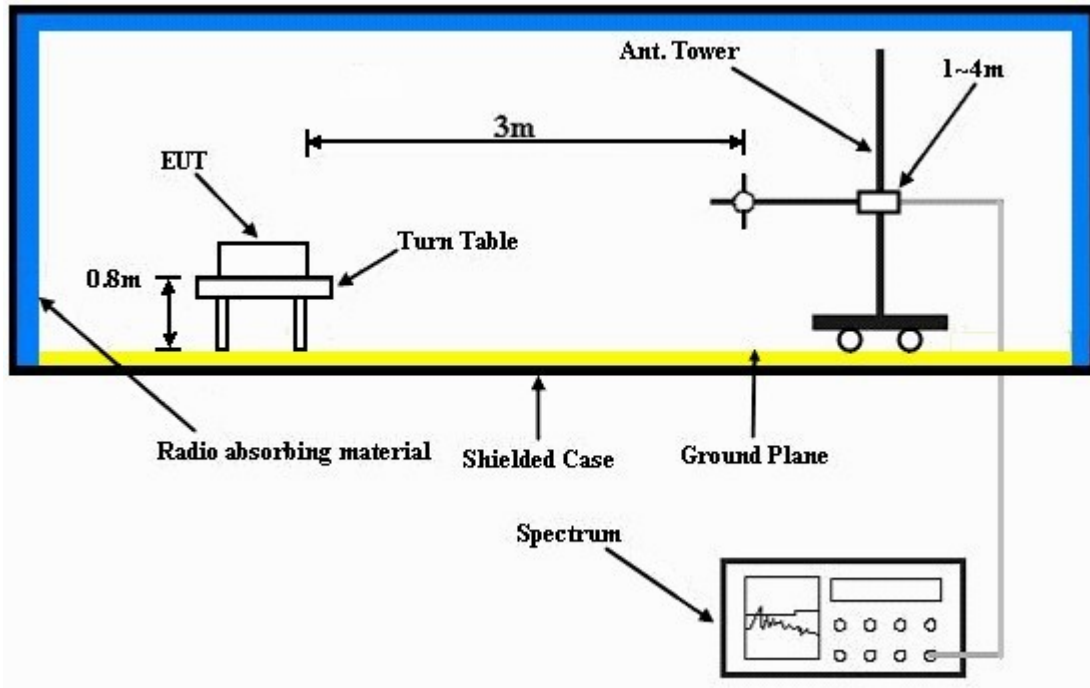
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 100kHz and video bandwidth is 300kHz for Peak detection at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



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

4.1.6 EUT OPERATING CONDITIONS

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

4.1.7 TEST RESULTS

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Sun Lin
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	98.40	33.4 QP	43.5	-10.1	2.00 H	96	52.30	-18.90
2	210.32	34.6 QP	43.5	-8.9	1.25 H	84	50.70	-16.10
3	281.83	31.8 QP	46.0	-14.2	1.25 H	222	44.40	-12.60
4	499.46	31.6 QP	46.0	-14.4	1.25 H	53	40.00	-8.40
5	532.10	30.1 QP	46.0	-15.9	1.25 H	29	38.00	-7.90
6	797.92	35.8 QP	46.0	-10.2	1.25 H	352	38.60	-2.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	43.99	31.8 QP	40.0	-8.2	1.00 V	268	46.30	-14.50
2	98.40	31.7 QP	43.5	-11.8	1.24 V	273	50.60	-18.90
3	208.77	33.5 QP	43.5	-10.0	1.24 V	170	49.70	-16.20
4	317.58	32.4 QP	46.0	-13.6	1.49 V	48	44.10	-11.70
5	375.10	29.5 QP	46.0	-16.5	1.24 V	16	40.10	-10.60
6	875.64	34.9 QP	46.0	-11.1	1.00 V	16	36.50	-1.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– 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	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Sun Lin
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	98.40	35.3 QP	43.5	-8.2	2.00 H	92	54.20	-18.90
2	160.58	32.1 QP	43.5	-11.4	2.00 H	244	45.80	-13.70
3	210.32	37.6 QP	43.5	-5.9	1.01 H	266	53.70	-16.10
4	281.83	32.7 QP	46.0	-13.3	1.26 H	264	45.30	-12.60
5	326.91	31.9 QP	46.0	-14.1	1.01 H	235	43.50	-11.60
6	499.46	32.1 QP	46.0	-13.9	1.50 H	230	40.50	-8.40
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	47.10	37.5 QP	40.0	-2.5	1.00 V	85	51.60	-14.10
2	98.40	34.0 QP	43.5	-9.5	1.24 V	205	52.90	-18.90
3	204.10	34.2 QP	43.5	-9.3	1.00 V	130	50.70	-16.50
4	249.18	30.6 QP	46.0	-15.4	1.24 V	193	44.80	-14.20
5	336.23	29.5 QP	46.0	-16.5	1.24 V	197	40.90	-11.40
6	452.82	30.6 QP	46.0	-15.4	1.00 V	113	39.40	-8.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – 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	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-0 1	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 08, 2013	Jul. 07, 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

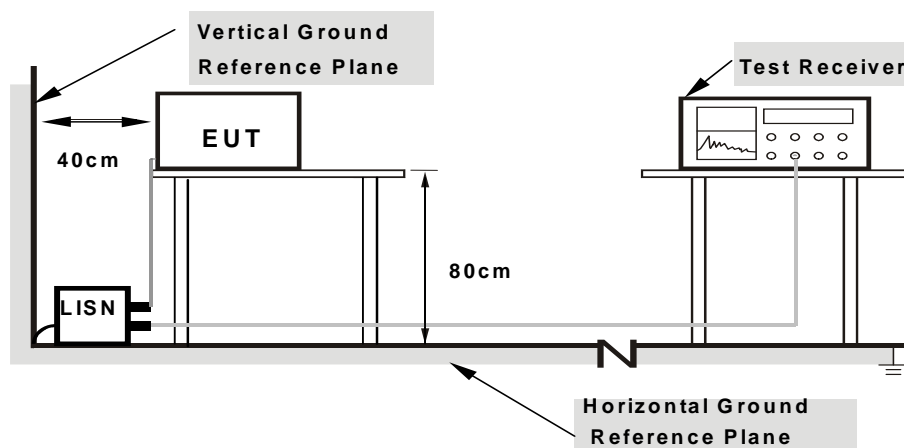
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



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

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

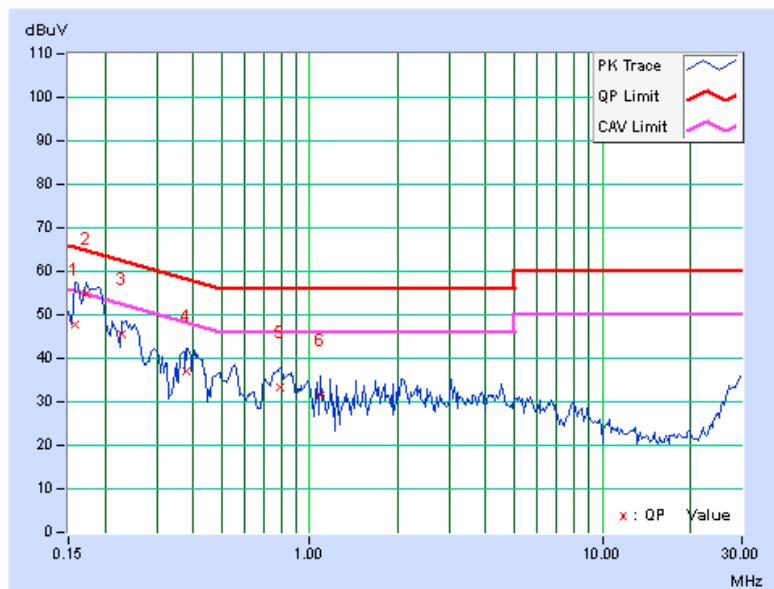
CONDUCTED WORST-CASE DATA: 802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15781	0.27	47.55	31.82	47.82	32.09	65.58
2	0.17344	0.27	54.48	43.15	54.75	43.42	64.79	54.79	-10.04	-11.37
3	0.22812	0.28	45.26	31.08	45.54	31.36	62.52	52.52	-16.98	-21.16
4	0.38047	0.30	36.56	24.80	36.86	25.10	58.27	48.27	-21.41	-23.17
5	0.79453	0.33	32.91	21.21	33.24	21.54	56.00	46.00	-22.76	-24.46
6	1.08984	0.34	30.99	21.94	31.33	22.28	56.00	46.00	-24.67	-23.72

REMARKS:

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

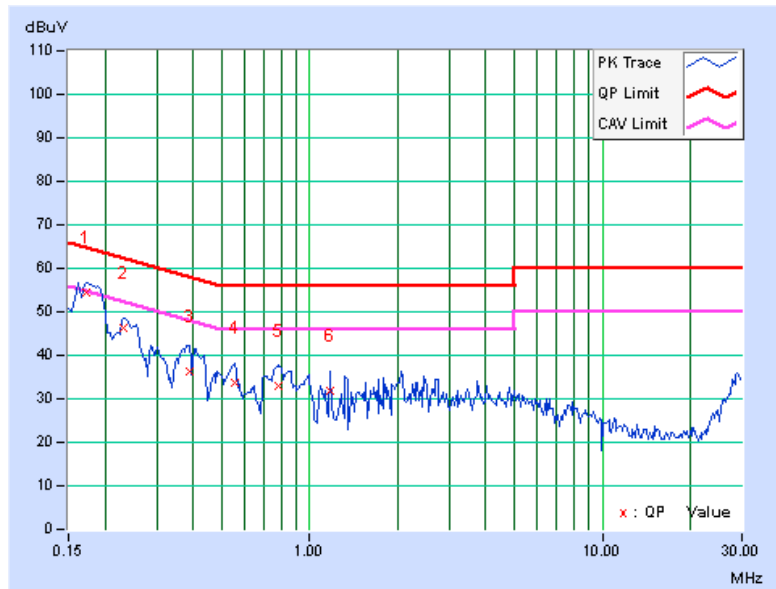


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.17344	0.27	54.32	42.97	54.59	43.24	64.79
2	0.23203	0.28	46.01	33.96	46.29	34.24	62.38	52.38	-16.08	-18.13
3	0.38828	0.30	36.10	23.75	36.40	24.05	58.10	48.10	-21.70	-24.05
4	0.55234	0.31	33.46	23.21	33.77	23.52	56.00	46.00	-22.23	-22.48
5	0.78672	0.33	32.69	21.73	33.02	22.06	56.00	46.00	-22.98	-23.94
6	1.17188	0.35	31.50	20.77	31.85	21.12	56.00	46.00	-24.15	-24.88

REMARKS:

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

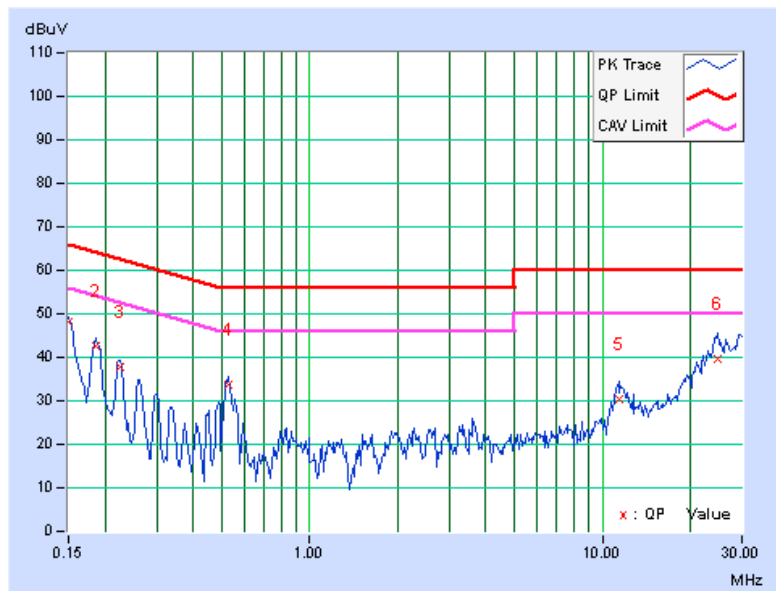


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	0.26	47.74	38.28	48.00	38.54	66.00
2	0.18516	0.28	42.47	33.03	42.75	33.31	64.25	54.25	-21.51	-20.95
3	0.22422	0.28	37.50	27.34	37.78	27.62	62.66	52.66	-24.88	-25.04
4	0.52500	0.31	33.54	31.99	33.85	32.30	56.00	46.00	-22.15	-13.70
5	11.35156	0.51	29.97	24.37	30.48	24.88	60.00	50.00	-29.52	-25.12
6	24.72266	0.54	38.97	33.57	39.51	34.11	60.00	50.00	-20.49	-15.89

REMARKS:

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

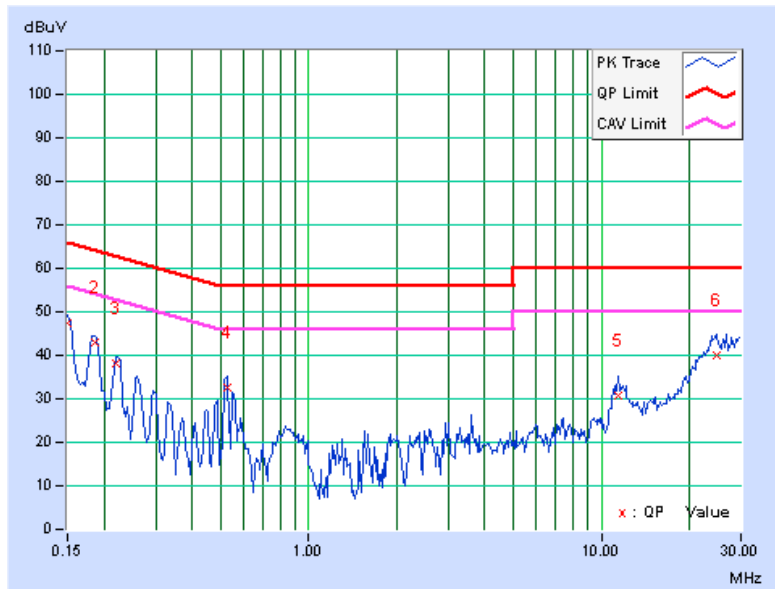


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	0.26	47.32	37.82	47.58	38.08	66.00
2	0.18516	0.28	42.77	33.47	43.05	33.75	64.25	54.25	-21.21	-20.51
3	0.22031	0.28	37.97	27.53	38.25	27.81	62.81	52.81	-24.56	-25.00
4	0.52500	0.31	32.17	25.26	32.48	25.57	56.00	46.00	-23.52	-20.43
5	11.42578	0.53	30.07	24.47	30.60	25.00	60.00	50.00	-29.40	-25.00
6	24.89063	0.57	39.34	33.66	39.91	34.23	60.00	50.00	-20.09	-15.77

REMARKS:

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



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

5.1 RADIATED EMISSION MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

5.1.2 TEST INSTRUMENTS

Same as item 4.1.2.

5.1.3 TEST PROCEDURES

Same as item 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as item 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

5.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Sun Lin
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	98.40	33.8 QP	43.5	-9.7	2.00 H	76	52.70	-18.90
2	207.21	32.2 QP	43.5	-11.3	2.00 H	112	48.60	-16.40
3	320.69	25.1 QP	46.0	-20.9	2.00 H	78	36.70	-11.60
4	421.73	26.8 QP	46.0	-19.2	2.00 H	141	36.40	-9.60
5	532.10	28.5 QP	46.0	-17.5	1.50 H	16	36.40	-7.90
6	797.92	35.8 QP	46.0	-10.2	1.50 H	16	38.60	-2.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	43.99	32.8 QP	40.0	-7.2	1.00 V	30	47.30	-14.50
2	85.96	31.2 QP	40.0	-8.8	1.00 V	207	50.90	-19.70
3	191.67	31.4 QP	43.5	-12.1	1.00 V	105	47.50	-16.10
4	216.54	31.9 QP	46.0	-14.1	1.00 V	319	48.10	-16.20
5	320.69	31.2 QP	46.0	-14.8	1.50 V	75	42.80	-11.60
6	375.10	30.0 QP	46.0	-16.0	1.24 V	25	40.60	-10.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– 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	Channel 149	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Sun Lin
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	98.40	35.7 QP	43.5	-7.8	2.00 H	269	54.60	-18.90
2	155.91	33.4 QP	43.5	-10.1	1.51 H	267	46.90	-13.50
3	210.32	36.5 QP	43.5	-7.0	1.25 H	274	52.60	-16.10
4	281.83	31.9 QP	46.0	-14.1	1.25 H	251	44.50	-12.60
5	320.69	31.5 QP	46.0	-14.5	1.00 H	237	43.10	-11.60
6	499.46	32.5 QP	46.0	-13.5	1.51 H	223	40.90	-8.40
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	47.10	38.2 QP	40.0	-1.8	1.24 V	12	52.30	-14.10
2	98.40	33.4 QP	43.5	-10.1	1.24 V	232	52.30	-18.90
3	205.66	32.6 QP	43.5	-10.9	1.00 V	91	49.00	-16.40
4	249.18	29.9 QP	46.0	-16.1	1.24 V	199	44.10	-14.20
5	320.69	31.4 QP	46.0	-14.6	1.24 V	154	43.00	-11.60
6	452.82	30.4 QP	46.0	-15.6	1.00 V	92	39.20	-8.80

REMARKS:

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

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (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.

5.2.2 TEST INSTRUMENTS

Same as item 4.2.2.

5.2.3 TEST PROCEDURES

Same as item 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as item 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.7 TEST RESULTS

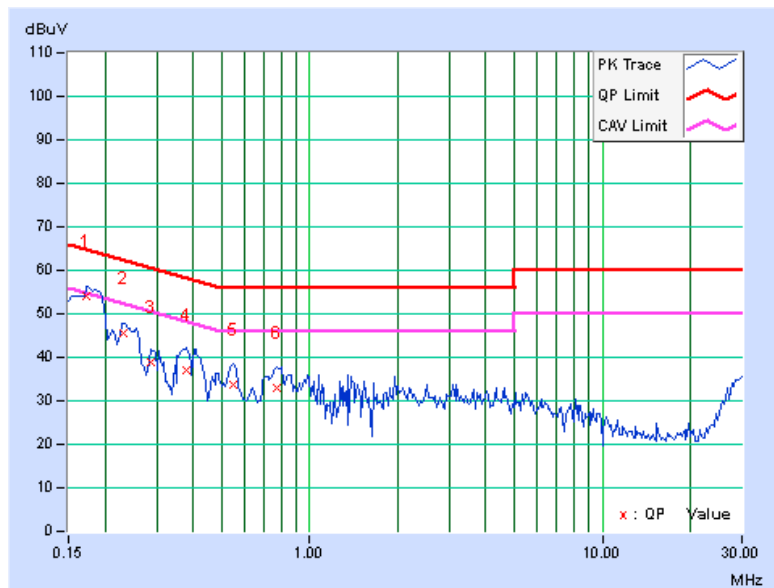
CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.17344	0.27	53.67	42.30	53.94	42.57	64.79
2	0.23203	0.28	45.30	33.39	45.58	33.67	62.38	52.38	-16.79	-18.70
3	0.28672	0.29	38.51	25.69	38.80	25.98	60.62	50.62	-21.82	-24.64
4	0.38047	0.30	36.72	25.06	37.02	25.36	58.27	48.27	-21.25	-22.91
5	0.54844	0.31	33.52	23.71	33.83	24.02	56.00	46.00	-22.17	-21.98
6	0.77109	0.32	32.46	21.22	32.78	21.54	56.00	46.00	-23.22	-24.46

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

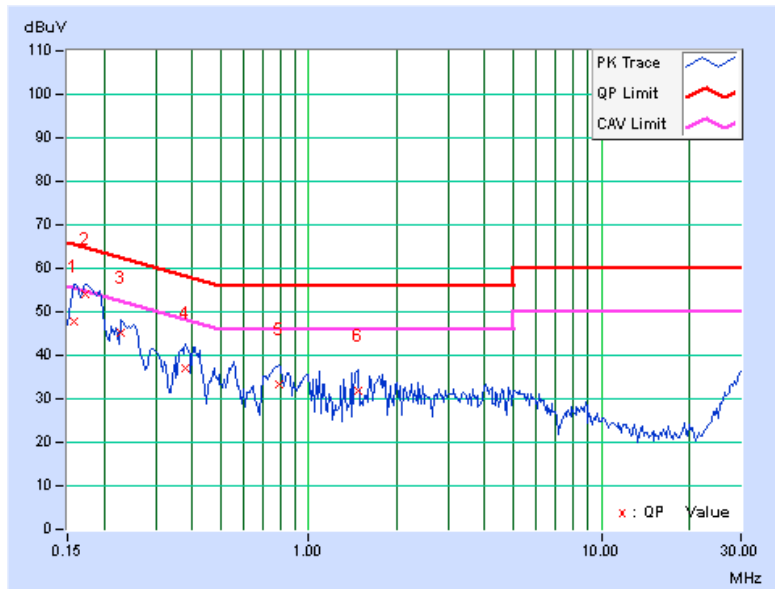


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15781	0.27	47.45	32.34	47.72	32.61	65.58
2	0.17344	0.27	53.83	42.38	54.10	42.65	64.79	54.79	-10.69	-12.14
3	0.22812	0.28	44.78	30.32	45.06	30.60	62.52	52.52	-17.46	-21.92
4	0.38047	0.30	36.88	24.88	37.18	25.18	58.27	48.27	-21.09	-23.09
5	0.79063	0.33	33.12	21.27	33.45	21.60	56.00	46.00	-22.55	-24.40
6	1.46875	0.35	31.59	21.00	31.94	21.35	56.00	46.00	-24.06	-24.65

REMARKS:

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

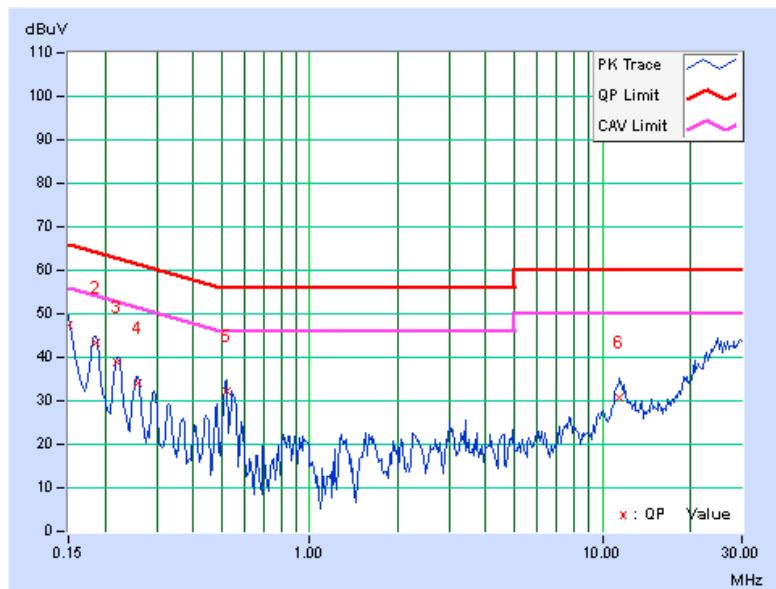


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	0.26	47.16	37.90	47.42	38.16	66.00
2	0.18516	0.28	43.13	33.92	43.41	34.20	64.25	54.25	-20.85	-20.06
3	0.22031	0.28	38.46	28.51	38.74	28.79	62.81	52.81	-24.07	-24.02
4	0.25938	0.29	33.90	23.17	34.19	23.46	61.45	51.45	-27.27	-28.00
5	0.52109	0.31	32.01	27.43	32.32	27.74	56.00	46.00	-23.68	-18.26
6	11.48438	0.51	30.27	24.77	30.78	25.28	60.00	50.00	-29.22	-24.72

REMARKS:

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

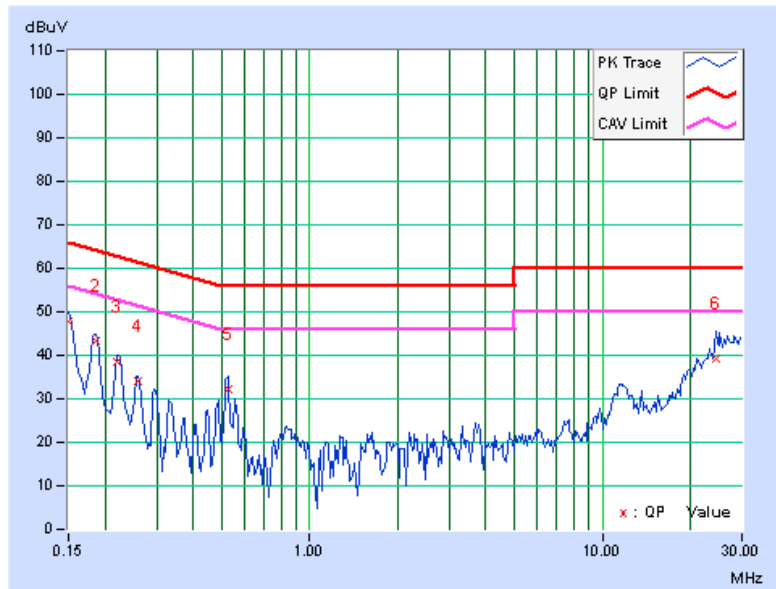


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	0.26	47.58	37.68	47.84	37.94	66.00
2	0.18516	0.28	43.15	33.86	43.43	34.14	64.25	54.25	-20.83	-20.12
3	0.22031	0.28	38.38	28.25	38.66	28.53	62.81	52.81	-24.15	-24.28
4	0.25938	0.29	33.82	23.45	34.11	23.74	61.45	51.45	-27.35	-27.72
5	0.52500	0.31	31.82	24.86	32.13	25.17	56.00	46.00	-23.87	-20.83
6	24.58984	0.57	38.87	33.31	39.44	33.88	60.00	50.00	-20.56	-16.12

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



6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



7. INFORMATION ON THE TESTING LABORATORIES

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

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

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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

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

---END---