

# FCC TEST REPORT (15.407)

**REPORT NO.:** RF120720C10L-1

MODEL NO.: WS-AP3715i

FCC ID: QXO-AP3715I

**RECEIVED:** Sep. 27, 2013

**TESTED:** Oct. 07, 2013

**ISSUED:** Oct. 08, 2013

APPLICANT: Enterasys Networks, Inc.

ADDRESS: 9 Northeastern Blvd. Salem, NH 03079

**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.

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# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120720C10L-1	Original release	Oct. 08, 2013



# 1. CERTIFICATION

PRODUCT: Wireless 802.11abgn Access Point

MODEL: WS-AP3715i

**BRAND**: Enterasys

**APPLICANT:** Enterasys Networks, Inc.

**TESTED:** Oct. 07, 2013

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10-2009

This report is issued as a supplementary report of **RF120720C10F-1** for adding antenna. This report shall be used combining with its original report.

PREPARED BY

, DA

Oct. 08, 2013

**APPROVED BY** 

. DATE

Oct 08 2013

Ken Liu / Senior Manager

**NOTE:** The radiated emission test was performed for the addendum. Refer to original report for the other test data.



# 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)						
STANDARD SECTION	TEST TYPE	RESULT	REMARK			
15.407(b)(6)	AC Power Conducted Emission	NA	Refer to Note			
15.407(b/1/2/3) (b)(6)	Spurious Emissions	PASS	Meet the requirement of limit.  Minimum passing margin is  -6.8dB at 5150.00MHz.			
15.407(a/1/2)	Peak Transmit Power	NA	Refer to Note			
15.407(a)(6)	Peak Power Excursion	NA	Refer to Note			
15.407(a/1/2)	Peak Power Spectral Density	NA	Refer to Note			
15.407(g)	Frequency Stability	NA	Refer to Note			
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.			

**NOTE:** The radiated emission test was performed for the addendum. Refer to original report for the other test data.

#### 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
	30MHz ~ 200MHz	2.93 dB
Radiated emissions	200MHz ~1000MHz	2.95 dB
Radiated efflissions	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 802.11abgn Access Point
MODEL NO.	WS-AP3715i
POWER SUPPLY	5Vdc (host equipment)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps
TRANSFER RATE	802.11n: up to 450.0Mbps
OPERATING FREQUENCY	5180.0 ~ 5240.0MHz
NUMBER OF CHANNEL	4 for 802.11a, 802.11n (20MHz)
NOMBER OF CHANNEE	2 for 802.11n (40MHz)
OUTPUT POWER	26.36mW
ANTENNA TYPE	Refer to Note as below
ANTENNA CONNECTOR	Refer to Note as below
DATA CABLE	N/A
I/O PORTS	N/A
ACCESSORY DEVICES	N/A

#### NOTE:

- 1. This is a supplementary report of RF120720C10F-1. This report shall be combined together with its original report.
- 2. This report is prepared for FCC class II permissive change. Difference compared with the original report is adding antenna. Therefore, the EUT with new antenna re-tested radiated emission and presented in the test report.
- 3. The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11b	3TX
802.11g	3TX
802.11a	1TX/ 3TX
802.11n (20MHz)	3TX
802.11n (40MHz)	3TX

4. The following antenna type is provided to the EUT.

ANTENNA TYPE	ANTENNA	ANTENNA	GAIN (dBi)
ANTENNA TIPE	CONNECTOR	2.4GHz BAND	5GHz BAND
PIFA	IPEX	5	6

5. 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

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190MHz	46	5230MHz



#### 3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE	APPLICABLE TO	DESCRIPTION
MODE	RE≥1G	DESCRIPTION
А	<b>√</b>	PIFA antenna: 3TX
В	<b>√</b>	PIFA antenna: 1TX

Where

RE≥1G: Radiated Emission above 1GHz

#### NOTE:

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-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	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX Function
Α	802.11a	36 to 48	36	OFDM	BPSK	6.0	3TX
В	802.11a	36 to 48	36	OFDM	BPSK	6.0	1TX
Α	802.11n (20MHz)	36 to 48	36	OFDM	BPSK	7.2	3TX
Α	802.11n (40MHz)	38 to 46	46	OFDM	BPSK	15.0	3TX

#### **TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY	
RE≥1G	24deg. C, 66%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.

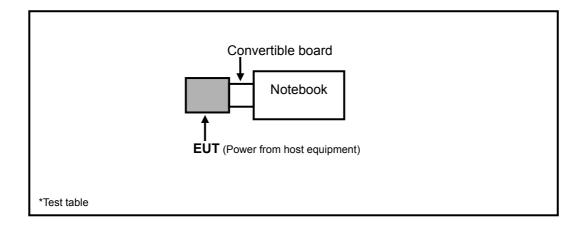
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5420	33MLMQ1	NA
2	CONVERTIBLE BOARD	NA	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA

#### NOTE:

- 1. All power cords of the above support units are non shielded (1.8m).
- 2. Item 2 was provided by the manufacturer and used to control EUT transmit at specific channel.

#### 3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



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#### 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 E (15.407)
789033 D01 General UNII Test Procedures v01 r03
662911 D01 Multiple Transmitter Output v01 r02
ANSI C63.10-2009

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



# 4. TEST TYPES AND RESULTS

#### 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	FIELD STRENGTH AT 3m (dBμV/m)				
$\checkmark$	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:

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

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#### 4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 16, 2012	Nov. 15, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jan. 28, 2013	Jan. 27, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Mar. 22, 2013	Mar. 21, 2014
HORN Antenna SCHWARZBECK	BBHA 9120 D	209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
Preamplifier Agilent	8449B	3008A01911	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10638	Oct. 25, 2012	Oct. 24, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309222/4 248780/4 274392/4	Aug. 22, 2013	Aug. 21, 2014
RF signal cable Worken	8D-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
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013

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

- 2. The test was performed in HwaYa Chamber 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.
- 4. The IC Site Registration No. is IC 7450F-9.



#### 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 camber. 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 1kHz(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

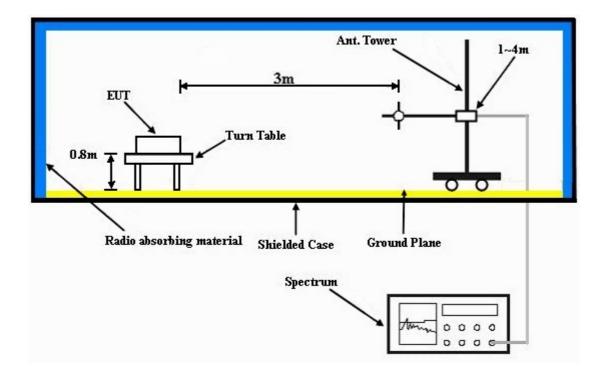
No deviation.

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#### 4.1.6 TEST SETUP



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

#### 4.1.7 EUT OPERATING CONDITION

- a. Plugged the EUT into notebook via external board and placed them on the testing table.
- b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.



#### 4.1.8 TEST RESULTS

#### **Above 1GHz data**

802.11a: 3TX

EUT TEST CONDITION		MEASUREMENT DETAIL				
CHANNEL Channel 36		FREQUENCY RANGE	1 ~ 40GHz			
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)			
ENVIRONMENTAL CONDITIONS	24deg. C, 66%RH	TESTED BY	Ted Chang			
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	5150.00	58.1 PK	74.0	-15.9	1.00 H	254	53.70	4.40
2	5150.00	46.5 AV	54.0	-7.5	1.00 H	254	42.10	4.40
3	*5180.00	94.0 PK			1.00 H	161	52.50	41.50
4	*5180.00	83.2 AV			1.00 H	161	41.70	41.50
5	#10360.00	57.1 PK	74.0	-16.9	1.22 H	328	45.60	11.50
6	#10360.00	43.1 AV	54.0	-10.9	1.22 H	328	31.60	11.50
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.2 PK	74.0	-15.8	1.04 V	108	53.80	4.40
2	5150.00	46.0 AV	54.0	-8.0	1.04 V	108	41.60	4.40
3	*5180.00	101.3 PK			1.26 V	143	59.80	41.50
4	*5180.00	90.7 AV			1.26 V	143	49.20	41.50
5	#10360.00	57.4 PK	74.0	-16.6	1.00 V	62	45.90	11.50
6	#10360.00	43.1 AV	54.0	-10.9	1.00 V	62	31.60	11.50

#### **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.
- 6. "#":The radiated frequency is out the restricted band.

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#### 802.11a: 1TX

<b>EUT TEST CONDITION</b>		MEASUREMENT DETAIL			
CHANNEL Channel 36		FREQUENCY RANGE	1 ~ 40GHz		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)		
ENVIRONMENTAL CONDITIONS	24deg. C, 66%RH	TESTED BY	Ted Chang		
TEST MODE	В				

	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	5150.00	58.2 PK	74.0	-15.8	1.20 H	337	53.80	4.40
2	5150.00	46.0 AV	54.0	-8.0	1.20 H	337	41.60	4.40
3	*5180.00	98.8 PK			1.00 H	234	57.30	41.50
4	*5180.00	88.2 AV			1.00 H	234	46.70	41.50
5	#10360.00	58.5 PK	74.0	-15.5	1.00 H	47	47.00	11.50
6	#10360.00	44.1 AV	54.0	-9.9	1.00 H	47	32.60	11.50
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.4 PK	74.0	-15.6	1.00 V	223	54.00	4.40
2	5150.00	47.2 AV	54.0	-6.8	1.00 V	223	42.80	4.40
3	*5180.00	106.2 PK			1.01 V	172	64.70	41.50
	3100.00	100.211						
4	*5180.00	95.0 AV			1.01 V	172	53.50	41.50
4 5			74.0	-16.8	1.01 V 1.08 V	172 133	53.50 45.70	41.50 11.50

#### **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.
- 6. "#":The radiated frequency is out the restricted band.

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#### 802.11n (20MHz)

<b>EUT TEST CONDITION</b>		MEASUREMENT DETAIL				
CHANNEL Channel 36		FREQUENCY RANGE	1 ~ 40GHz			
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)			
ENVIRONMENTAL CONDITIONS	24deg. C, 66%RH	TESTED BY	Ted Chang			
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	5150.00	51.0 PK	74.0	-23.0	1.00 H	233	46.60	4.40
2	5150.00	46.2 AV	54.0	-7.8	1.00 H	233	41.80	4.40
3	*5180.00	94.5 PK			1.00 H	230	53.00	41.50
4	*5180.00	84.7 AV			1.00 H	230	43.20	41.50
5	#10360.00	57.2 PK	74.0	-16.8	1.26 H	204	45.70	11.50
6	#10360.00	43.9 AV	54.0	-10.1	1.26 H	204	32.40	11.50
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.0 PK	74.0	-16.0	1.03 V	253	53.60	4.40
2	5150.00	45.6 AV	54.0	-8.4	1.03 V	253	41.20	4.40
3	*5180.00	102.3 PK			1.13 V	143	60.80	41.50
4	*5180.00	92.2 AV			1.13 V	143	50.70	41.50
5	#10360.00	58.1 PK	74.0	-15.9	1.54 V	197	46.60	11.50
6	#10360.00	44.1 AV	54.0	-9.9	1.54 V	197	32.60	11.50

#### **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.
- 6. "#":The radiated frequency is out the restricted band.



#### 802.11n (40MHz)

<b>EUT TEST CONDITION</b>		MEASUREMENT DETAIL		
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz		Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	24deg. C, 66%RH	TESTED BY	Ted Chang	
TEST MODE	А			

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	*5230.00	102.7 PK			1.00 H	230	61.10	41.60	
2	*5230.00	93.2 AV			1.00 H	230	51.60	41.60	
3	5350.00	51.4 PK	74.0	-22.6	1.05 H	174	46.80	4.60	
4	5350.00	37.0 AV	54.0	-17.0	1.05 H	174	32.40	4.60	
5	#10460.00	58.2 PK	74.0	-15.8	1.00 H	41	46.30	11.90	
6	#10460.00	44.4 AV	54.0	-9.6	1.00 H	41	32.50	11.90	
	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	*5230.00	100.8 PK			1.00 V	214	59.20	41.60	
2	*5230.00	90.8 AV			1.00 V	214	49.20	41.60	
3	5350.00	58.4 PK	74.0	-15.6	1.05 V	286	53.80	4.60	
4	5350.00	46.2 AV	54.0	-7.8	1.05 V	286	41.60	4.60	
5	#10460.00	57.9 PK	74.0	-16.1	1.06 V	241	46.00	11.90	
6	#10460.00	44.4 AV	54.0	-9.6	1.06 V	241	32.50	11.90	

# **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 the restricted band.

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5.	PHOTOGRAPHS OF THE TEST CONFIGURATION	
Ple	ease 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:

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Web Site: <a href="mailto:www.bureauveritas-adt.com">www.bureauveritas-adt.com</a>

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

ENGINEERING CHANGES TO THE EUT BY THE LAB
No modifications were made to the EUT by the lab during the test.
END

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