

Partial FCC RF Test Report

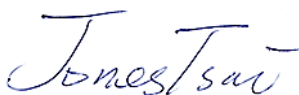
APPLICANT : AzureWave Technologies, Inc.
EQUIPMENT : IEEE 802.11 a/b/g/n Wireless LAN and
Bluetooth Combo LGA Module
BRAND NAME : AzureWave
MODEL NAME : AW-AM691NF
FCC ID : TLZ-AM691NF
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

This is a partial report which is included the peak output power measurement, radiated band edges and spurious emission measurement test item. The product was received on Oct. 25, 2013 and testing was completed on Dec. 05, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : TLZ-AM691NF

Page Number : 1 of 22

Report Issued Date : Dec. 13, 2013

Report Version : Rev. 01



TABLE OF CONTENTS

REVISION HISTORY 3

SUMMARY OF TEST RESULT 4

1 GENERAL DESCRIPTION..... 5

 1.1 Applicant 5

 1.2 Manufacturer..... 5

 1.3 Feature of Equipment Under Test 5

 1.4 Product Specification of Equipment Under Test..... 5

 1.5 Modification of EUT 6

 1.6 Testing Site..... 6

 1.7 Applied Standards 6

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST..... 7

 2.1 Descriptions of Test Mode 7

 2.2 Test Mode..... 7

 2.3 Connection Diagram of Test System..... 8

 2.4 EUT Operation Test Setup 8

3 TEST RESULT 9

 3.1 Peak Output Power Measurement 9

 3.2 Radiated Band Edges and Spurious Emission Measurement 11

 3.3 Antenna Requirements 20

4 LIST OF MEASURING EQUIPMENT..... 21

5 UNCERTAINTY OF EVALUATION..... 22

APPENDIX A. SETUP PHOTOGRAPHS



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR3O2524B	Rev. 01	Initial issue of report	Dec. 13, 2013



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(b)(1)	RSS-210 A8.1(b)	Peak Output Power	≤ 30dBm	Pass	-
3.2	15.247(d)	RSS-210 A8.5	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 11.56 dB at 46.470 MHz
3.3	15.203 & 15.247(b)	RSS-210 A8.4	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

AzureWave Technologies, Inc.
8 F., No. 94, Baozhong Rd., Xindian, Taipei, Taiwan 231

1.2 Manufacturer

AzureWave Technologies, Inc.
8 F., No. 94, Baozhong Rd., Xindian, Taipei, Taiwan 231

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	IEEE 802.11 a/b/g/n Wireless LAN and Bluetooth Combo LGA Module
Brand Name	AzureWave
Model Name	AW-AM691NF
FCC ID	TLZ-AM691NF
Sample 1	EUT with JTIE Antenna
Sample 2	EUT with WNC Antenna
Installed in Tablet	Brand Name: lenovo Model Name: 20337xxxxxx; 80DExxxxxx; Lenovo Miix 2 10 tabletxxxxxx; 20359xxxxxx; 80DVxxxxxx; Lenovo Miix 2 10xxxxxx(x=0-9, A-Z or blank)
EUT supports Radios application	WLAN 11a/b/g/n (HT20/HT40) Bluetooth 2.1 + EDR Bluetooth 4.0 + LE
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx/Rx Frequency Range	2402 MHz ~ 2480 MHz
Number of Channels	40
Carrier Frequency of Each Channel	40 Channel(37 hopping + 3 advertising channel)
Maximum Output Power to Antenna	8.41 dBm (0.0069 W)
Type of Modulation	Bluetooth 4.0 - LE : GFSK

Antenna Information		
Manufacturer	JTIE	
Antenna Type	Main: PIFA Antenna	Aux.: PIFA Antenna
Peak gain	WLAN (2.4GHz) : 2.70 dBi WLAN (5GHz): 3.16 dBi	Bluetooth : -0.90 dBi WLAN (2.4GHz) : -0.90 dBi WLAN (5GHz) : 1.85 dB
Manufacturer	WNC	
Antenna Type	Main: PIFA Antenna	Aux.: PIFA Antenna
Peak gain	WLAN (2.4GHz) : 0.47 dBi WLAN (5GHz) : 0.81 dBi	Bluetooth : -1.27 dBi WLAN (2.4GHz) : -1.27 dBi WLAN (5GHz) : 1.09 dBi

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-3273456 / FAX: +886-3-3284978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	TH02-HY	03CH07-HY	722060/4086B-1

Note: The test site complies with ANSI C63.4 2003 requirement.

1.7 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01
- ANSI C63.4-2003

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Descriptions of Test Mode

The RF output power was recorded in the following table:

Channel	Frequency	Bluetooth 4.0 – LE RF Output Power	
		Data Rate / Modulation	
		GFSK	
		1Mbps	
Ch00	2402MHz	7.52 dBm	
Ch19	2440MHz	7.99 dBm	
Ch39	2480MHz	8.41 dBm	

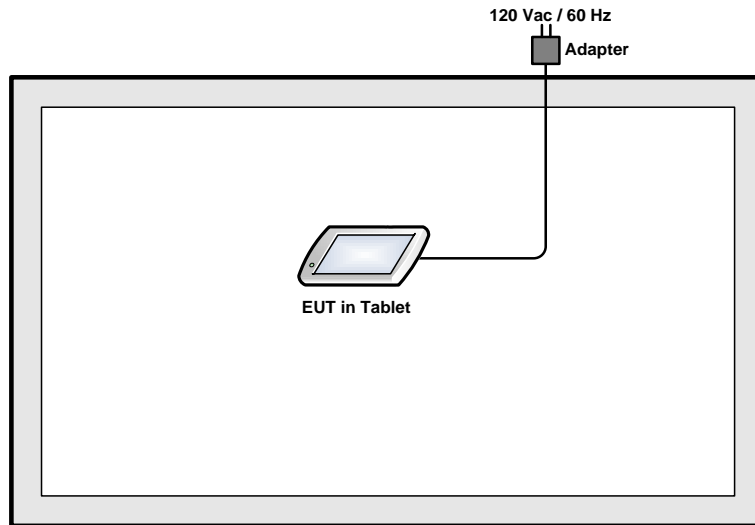
The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration (X plane as worst plane) from all possible combinations.

2.2 Test Mode

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases	
Test Item	Data Rate / Modulation
	Bluetooth 4.0 – LE / GFSK
Radiated TCs	Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps
	Mode 2: Bluetooth Tx CH19_2440 MHz_1Mbps
	Mode 3: Bluetooth Tx CH39_2480 MHz_1Mbps
Remark: For Radiated TCs, The tests were performed with Sample 1.	

2.3 Connection Diagram of Test System



2.4 EUT Operation Test Setup

For Bluetooth function, programmed RF utility, "Command" installed in the Tablet make the EUT provides functions like channel selection and power level for continuous transmitting and receiving signals.

3 Test Result

3.1 Peak Output Power Measurement

3.1.1 Limit of Peak Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

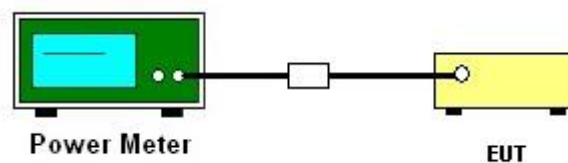
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r01.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup





3.1.5 Test Result of Peak Output Power

Test Mode :	Bluetooth 4.0 - LE	Temperature :	22~25°C
Test Engineer :	Book Lin	Relative Humidity :	51~55%

Channel	Frequency (MHz)	RF Power (dBm)		
		GFSK	Max. Limits (dBm)	Pass/Fail
		1 Mbps		
00	2402	7.52	30.00	Pass
19	2440	7.99	30.00	Pass
39	2480	8.41	30.00	Pass



3.2 Radiated Band Edges and Spurious Emission Measurement

3.2.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (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

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.



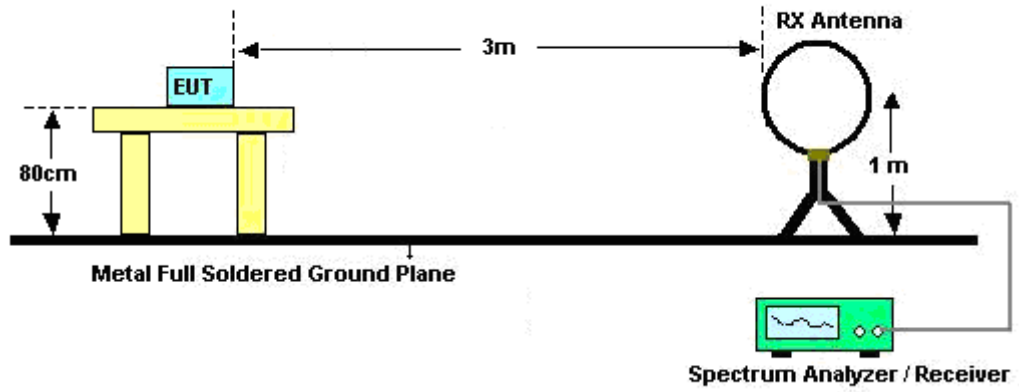
3.2.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

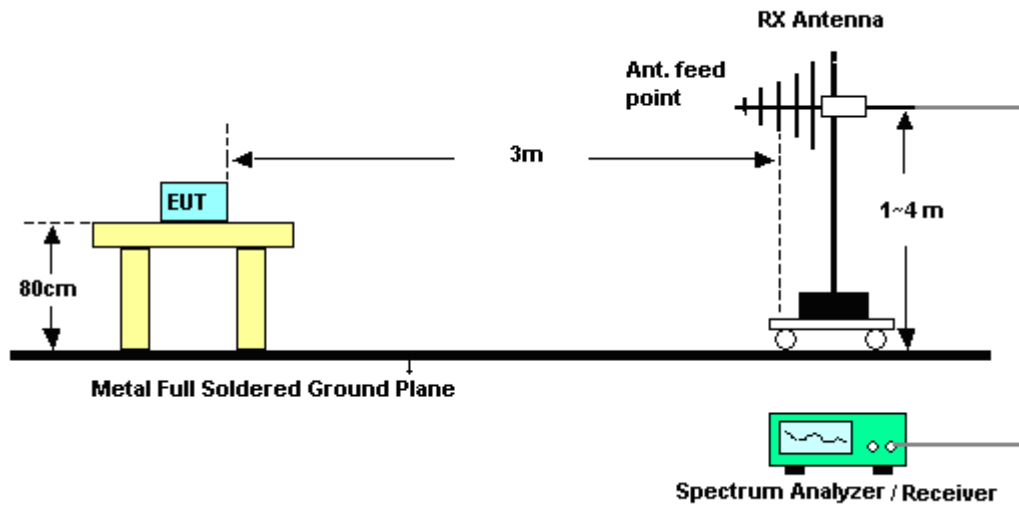
Band	Duty Cycle(%)	T(μs)	1/T(kHz)	VBW Setting
Bluetooth 4.0 - LE	62.42	392	2.551	3kHz

3.2.4 Test Setup

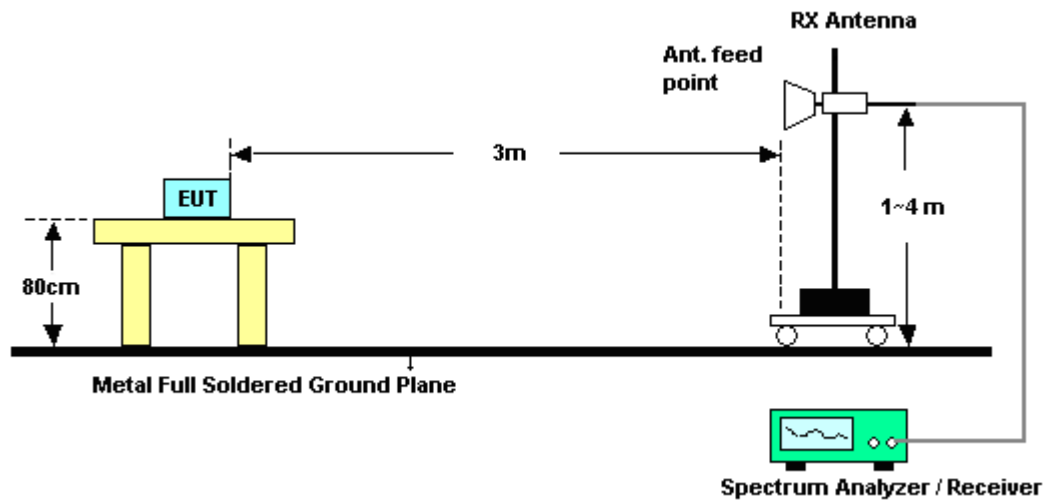
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.2.6 Test Result of Radiated Spurious at Band Edges

Test Mode :	Mode 1	Temperature :	22~25°C
Test Channel :	00	Relative Humidity :	51~54%
		Test Engineer :	Eric Shih

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dB μ V / m)	Over Limit (dB)	Limit Line (dB μ V / m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2359.23	51.1	-22.9	74	46.21	32.26	6.88	34.25	117	335	Peak
2389.47	37.46	-16.54	54	32.52	32.3	6.91	34.27	117	335	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dB μ V / m)	Over Limit (dB)	Limit Line (dB μ V / m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2338.08	45.95	-28.05	74	41.09	32.24	6.84	34.22	142	358	Peak
2336.46	34.41	-19.59	54	29.55	32.24	6.84	34.22	142	358	Average

Test Mode :	Mode 3	Temperature :	22~25°C
Test Channel :	39	Relative Humidity :	51~54%
		Test Engineer :	Eric Shih

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dB μ V / m)	Over Limit (dB)	Limit Line (dB μ V / m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.19	50.01	-23.99	74	45	32.38	7.06	34.43	113	317	Peak
2483.71	39.03	-14.97	54	34.02	32.38	7.06	34.43	113	317	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dB μ V / m)	Over Limit (dB)	Limit Line (dB μ V / m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.8	47.21	-26.79	74	42.2	32.38	7.06	34.43	146	70	Peak
2483.92	35.41	-18.59	54	30.4	32.38	7.06	34.43	146	70	Average

3.2.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Note: Pre-scanned all test modes and only choose the worst case mode recorded in the test report for radiated spurious emission below 1GHz.

Test Mode :	Mode 1	Temperature :	22~25°C
Test Channel :	00	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2402	106.02	-	-	101.11	32.3	6.91	34.3	117	335	Average
2402	107.01	-	-	102.1	32.3	6.91	34.3	117	335	Peak
4803	41.4	-32.6	74	57.63	33.98	8.75	58.96	100	0	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	Mode 1	Temperature :	22~25°C
Test Channel :	00	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2402	97.56	-	-	92.65	32.3	6.91	34.3	142	358	Average
2402	98.49	-	-	93.58	32.3	6.91	34.3	142	358	Peak
4803	41.33	-32.67	74	57.56	33.98	8.75	58.96	100	0	Peak

Note: Other harmonics are lower than background noise.



Test Mode :	Mode 2	Temperature :	22~25°C
Test Channel :	19	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	1. 2440 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2440	104.1	-	-	99.11	32.35	6.99	34.35	178	344	Average
2440	105.03	-	-	100.04	32.35	6.99	34.35	178	344	Peak
4881	40.61	-33.39	74	56.64	33.95	8.85	58.83	100	0	Peak
7320	42.63	-31.37	74	53.93	35.53	10.91	57.74	100	0	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	Mode 2	Temperature :	22~25°C
Test Channel :	19	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	1. 2440 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2440	97.11	-	-	92.12	32.35	6.99	34.35	176	13	Average
2440	98.09	-	-	93.1	32.35	6.99	34.35	176	13	Peak
4881	42.45	-31.55	74	58.48	33.95	8.85	58.83	100	0	Peak
7320	43.58	-30.42	74	54.88	35.53	10.91	57.74	100	0	Peak

Note: Other harmonics are lower than background noise.



Test Mode :	Mode 3	Temperature :	22~25°C
Test Channel :	39	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
46.47	28.44	-11.56	40	49.17	9.8	0.67	31.2	117	20	Peak
120.45	23.33	-20.17	43.5	41.93	11.4	1.1	31.1	-	-	Peak
285.42	22.97	-23.03	46	39.36	12.95	1.66	31	-	-	Peak
671	23.36	-22.64	46	30.53	20.41	2.88	30.46	-	-	Peak
738.2	25.59	-20.41	46	30.8	22.16	3.03	30.4	-	-	Peak
900.6	29.36	-16.64	46	33.09	23.23	3.34	30.3	-	-	Peak
2480	105.22	-	-	100.21	32.38	7.06	34.43	113	317	Average
2480	106.19	-	-	101.18	32.38	7.06	34.43	113	317	Peak
4959	40.74	-33.26	74	56.57	33.91	8.92	58.66	100	0	Peak
7440	41.11	-32.89	74	52.41	35.51	11.04	57.85	100	0	Peak

Note: Other harmonics are lower than background noise.



Test Mode :	Mode 3	Temperature :	22~25°C
Test Channel :	39	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
53.22	25.19	-14.81	40	48.47	7.2	0.72	31.2	172	86	Peak
78.06	21.46	-18.54	40	44.86	6.93	0.87	31.2	-	-	Peak
296.22	21.76	-24.24	46	37.9	13.16	1.74	31.04	-	-	Peak
505.1	20.88	-25.12	46	30.99	18.05	2.46	30.62	-	-	Peak
743.8	24.64	-21.36	46	29.83	22.16	3.05	30.4	-	-	Peak
925.1	28.3	-17.7	46	31.1	24.15	3.4	30.35	-	-	Peak
2480	96.72	-	-	91.71	32.38	7.06	34.43	146	70	Average
2480	97.72	-	-	92.71	32.38	7.06	34.43	146	70	Peak
4959	41.09	-32.91	74	56.92	33.91	8.92	58.66	100	0	Peak
7440	40.17	-33.83	74	51.47	35.51	11.04	57.85	100	0	Peak

Note: Other harmonics are lower than background noise.



3.3 Antenna Requirements

3.3.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 07, 2013	Dec. 05, 2013	Jun. 06, 2014	Conducted (TH02-HY)
Power Meter	Agilent	E4416A	GB412923 44	300MHz~40GHz	Feb. 05, 2013	Dec. 05, 2013	Feb. 04, 2014	Conducted (TH02-HY)
Power Sensor	Agilent	E9327A	US404415 48	300MHz~40GHz	Feb. 05, 2013	Dec. 05, 2013	Feb. 04, 2014	Conducted (TH02-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Sep. 06, 2013	Nov. 28, 2013	Sep. 05, 2014	Radiation (03CH07-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz~30GHz	Nov. 20, 2013	Nov. 28, 2013	Nov. 19, 2014	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	860004/00 01	9kHz~30MHz	Jul. 03, 2012	Nov. 28, 2013	Jul. 03, 2014	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Nov. 28, 2013	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Nov. 28, 2013	Aug. 21, 2014	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 251	15GHz- 40GHz	Oct. 03, 2013	Nov. 28, 2013	Oct. 02, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	30MHz~1GHz	Feb. 26, 2013	Nov. 28, 2013	Feb. 25, 2014	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A019 17	1GHz~26.5GHz	Aug. 12, 2013	Nov. 28, 2013	Aug. 11, 2014	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	159088	DC~18G High Gain	Feb. 27, 2013	Nov. 28, 2013	Feb. 26, 2014	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Nov. 28, 2013	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	ChainTek 3000	N/A	N/A	N/A	Nov. 28, 2013	N/A	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
---	------

