

EMC TEST REPORT for Intentional Radiator (Wi-Fi Function) No. 140701871SHA-001

Applicant : Hansong(Nanjing) Technology Ltd

8th Kangping Road, Jiangning Economy&Technology

Development Zone, Nanjing, 211106, China

Manufacturer : Hansong(Nanjing) Technology Ltd

8th Kangping Road, Jiangning Economy&Technology

Daniel Those

Development Zone, Nanjing, 211106, China

Product Name : Archt One

Brand Name : Dream Audiolab

Type/Model : Archt One

TEST RESULT : PASS

SUMMARY

The equipment complies with the requirements according to the following standard(s):

47CFR Part 15 (2013): Radio Frequency Devices

ANSI C63.4 (2009): American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

RSS-210 Issue 8 (December 2010): Low-power Licence-exempt Radio communication Devices (All Frequency Bands): Category I Equipment

RSS-Gen Issue 3 (December 2010): General Requirements and Information for the Certification of Radio communication Equipment

Date of issue: Sep 23, 2014

Wade zhang

Prepared by: Reviewed by:

Wade Zhang (*Project Engineer*) Daniel Zhao (*Reviewer*)



Description of Test Facility

Name: Intertek Testing Services Limited Shanghai

Address: Building 86, No. 1198 Qinzhou Rd., North, Shanghai 200233, P.R. China

FCC Registration Number: 236597

IC Assigned Code: 2042B-1

Name of contact: Jonny Jing

Tel: +86 21 61278271 Fax: +86 21 54262353



Content

SUMMARY	
DESCRIPTION OF TEST FACILITY	2
1. GENERAL INFORMATION	4
1.1 Applicant Information	4
1.2 Identification of the EUT	4
1.3 Technical specification	5
1.4 Mode of operation during the test / Test peripherals used	5
2. TEST SPECIFICATION	6
2.1 Instrument list	6
2.2 Test Standard	6
2.3 Test Summary	7
3. MINIMUM 6DB BANDWIDTH	8
3.1 Limit	8
3.2 Test Configuration	8
3.3 Test Procedure and test setup.	
3.4 Test Protocol	9
4. MAXIMUM PEAK OUTPUT POWER	13
4.1 Test limit	13
4.2 Test Configuration	13
4.3 Test procedure and test setup	
4.4 Test protocol	
5. POWER SPECTRUM DENSITY	15
5.1 Test limit	15
5.2 Test Configuration	
5.3 Test procedure and test setup	
5.4 Test Protocol	
6. RADIATED EMISSION	20
6.1 Test limit	20
6.2 Test Configuration	
6.3 Test procedure and test setup	
6.4 Test protocol	
7. EMISSION OUTSIDE THE FREQUENCY BAND	27
7.1 Limit	27
7.2 Test Configuration	
7.3 Test procedure and test setup	
7.4 Test protocol	
8. POWER LINE CONDUCTED EMISSION	
8.1 Limit	
8.2 Test configuration	
8.3 Test procedure and test set up	
8.4 Test protocol	



1. General Information

1.1 Applicant Information

Applicant : Hansong(Nanjing) Technology Ltd

8th Kangping Road, Jiangning Economy&Technology

Development Zone, Nanjing, 211106, China

Name of contact : Anya Sun

Tel: 0086-025-66604242

Fax : 0086-025-66612098

Manufacturer : Hansong(Nanjing) Technology Ltd

8th Kangping Road, Jiangning Economy&Technology

Development Zone, Nanjing, 211106, China

1.2 Identification of the EUT

Equipment : Archt One

Trade name : Dream Audiolab

Type/model : Archt One

FCC ID : XCO-ARCHT1

IC : 7756A-ARCHT1



1.3 Technical specification

Operation Frequency : 2412~2462 MHz

Band

Type of Modulation : CCK,BPSK,QPSK,DSSS,OFDM

EUT Modes of : 802.11b/g

Modulation

Channel Number : 11Channel

Gain of Antenna : 0.8dBi

Description of EUT : The EUT is a wireless device, and its support 802.11b/g mode.

Port identification : power port 1;

Audio In port 1.

Rating: 100-240V~50/60Hz 100W, Class II apparatus

Declared : $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$

Temperature range

Category of EUT : Class B

EUT type : X Table top Floor standing

Sample received date : 2014.07.21

Sample Identification : 0140721-46-001

No

Date of test : 2014.07.21~2014.08.15

1.4 Mode of operation during the test / Test peripherals used

While testing transmitting mode of EUT, the internal modulation and continuously transmission was applied.

The lowest, middle and highest channel were tested as representatives. For 802.11b/g ----- lowest, 2412MHz; middle, 2437MHz; highest, 2462MHz.

The test setting software for 802.11b/g is offered by the manufactory.

The pre-scan for the conducted power with all rates in each modulation and bands was used, and the worst case was found and used in all test cases.

After this pre-scan, we choose the following table of the data rata as the worst case. 802.11b: 1Mbps; 802.11g: 11Mbps;

Test Peripherals:

PC: HP ProBook 6470b



2. Test Specification

2.1 Instrument list

	T			1	
Equipment	Type	Manu.	Internal no.	Cal. Date	Due date
Test Receiver	ESCS 30	R&S	EC 2107	2013-10-21	2014-10-20
Test Receiver	ESIB 26	R&S	EC 3045	2013-10-20	2014-10-19
Test Receiver	ESCI 7	R&S	EC4501	2013-12-25	2014-12-24
Test Receiver	FSP40	R&S	/	2013-10-21	2014-10-20
A.M.N.	ESH2-Z5	R&S	EC 3119	2014-1-9	2015-1-8
Bilog Antenna	CBL 6112D	TESEQ	EC 4206	2014-4-27	2015-4-26
Horn antenna	HF 906	R&S	EC 3049	2014-4-27	2015-4-26
Horn antenna	HAP18-26W		EC 4792-3	2014-4-9	2015-4-8
Pre-amplifier	Tpa0118-40	R&S	EC 4792-2	2014-4-11	2015-4-10
Semi-anechoic chamber	-	Albatross project	EC 3048	2014-5-11	2015-5-10
Therom- Hygrograph	ZJ1-2A	S.M.I.F.	EC 3323	2014-4-14	2015-4-13
Pressure meter	YM3	Shanghai Mengde	EC 3320	2014-6-13	2015-6-12
Multi-meter	179	FLUKE	EC 3226	2013-9-11	2014-9-10
Shielded room	-	Zhongyu	EC 2838	2014-1-12	2015-1-10
High Pass Filter	WHKX 1.0/15G- 10SS	Wainwright	EC4297-1	2014-1-8	2015-1-7
High Pass Filter	WHKX 2.8/18G- 12SS	Wainwright	EC4297-2	2014-1-8	2015-1-7
High Pass Filter	WHKX 7.0/1.8G-8SS	Wainwright	EC4297-3	2014-1-8	2015-1-7
Band Reject Filter	WRCGV 2400/2483- 2390/2493- 35/10SS	Wainwright	EC4297-4	2014-1-8	2015-1-7
Power sensor / Power meter	N1911A/N19 21A	Agilent	EC4318	2014-04-9	2015-04-8

2.2 Test Standard

47CFR Part 15 (2013); ANSI C63.4 (2009); KDB 558074 (V03R02); RSS-210 Issue 8 (December 2010); RSS-Gen Issue 3 (December 2010).



2.3 Test Summary

This report applies to tested sample only. This report shall not be reproduced in part without written approval of Intertek Testing Service Shanghai Limited.

TEST ITEM	FCC REFERANCE	IC REFERANCE	RESULT
Minimum 6dB Bandwidth	15.247(a)(2)	RSS-210 Issue 8 Annex 8	Pass
Maximum peak output power 15.247(b)		RSS-210 Issue 8 Annex 8	Pass
Power spectrum density 15.247(e)		RSS-210 Issue 8 Annex 8	Pass
Radiated emission	Radiated emission 15.205 & 15.209		Pass
Emission outside the frequency band	15.24/(d)		Pass
Power line conducted emission	15.207	RSS-Gen Issue 3 Clause 7.2.4	Pass



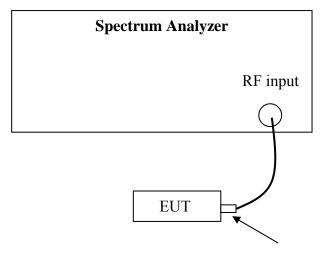
3. Minimum 6dB Bandwidth

Test result: **PASS**

3.1 Limit

For systems using digital modulation techniques that may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz and 5725 - 5850 MHz bands, the minimum 6 dB bandwidth shall be at least 500 kHz.

3.2 Test Configuration

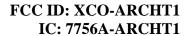


Antenna connector

3.3 Test Procedure and test setup

The minimum 6dB bandwidth per FCC §15.247(a)(2) is measured using the Spectrum Analyzer according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r02" for compliance to FCC 47CFR 15.247 requirements (clause 8.2).

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) \geq 3RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

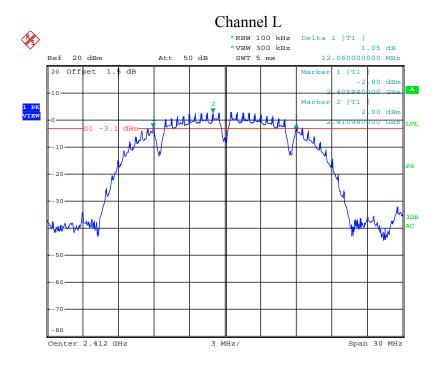




3.4 Test Protocol

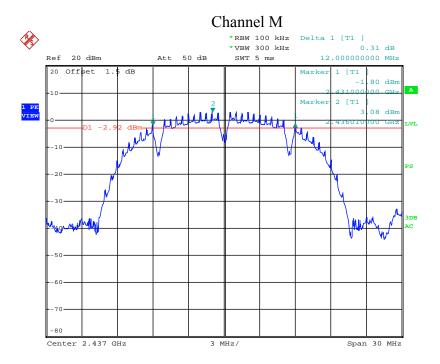
Temperature : 25°C Relative Humidity : 55 %

Mode	СН	Bandwidth (MHz)	Limit (MHz)
	L	12.06	
802.11b	M	12.00	≥0.5
	Н	12.09	

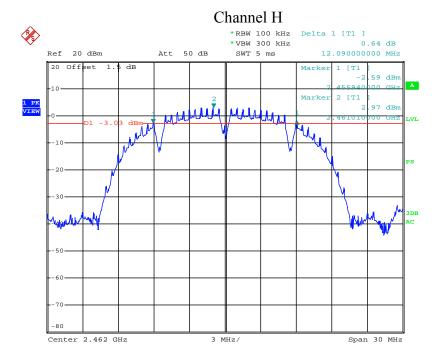


Date: 12.AUG.2014 11:06:47





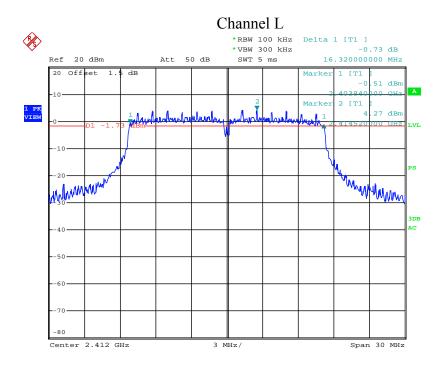
Date: 12.AUG.2014 11:02:53



Date: 12.AUG.2014 11:11:17

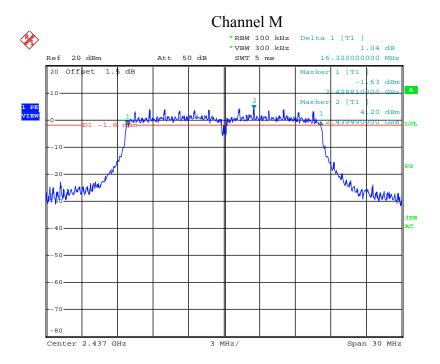


Mode	СН	Bandwidth (MHz)	Limit (MHz)
	L	16.32	
802.11g	M	16.32	≥0.5
	Н	16.32	

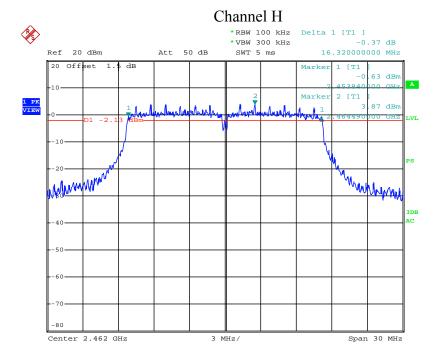


Date: 12.AUG.2014 11:15:07





Date: 12.AUG.2014 11:17:25



Date: 12.AUG.2014 11:20:12



4. Maximum peak output power

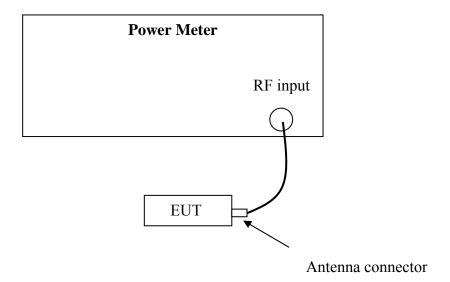
Test result: **PASS**

4.1 Test limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at
least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-
5850 MHz band: 1 watt
For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts
☐ For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and
5725-5850 MHz bands: 1 Watt.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2 Test Configuration



4.3 Test procedure and test setup

The EUT was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r02" for compliance to FCC 47CFR 15.247 requirements (clause 9.1.2).



4.4 Test protocol

Temperature : 25°C Relative Humidity : 55 %

Mode	СН	Conducted Power (dBm)	Limit (dBm)
	L	19.82	
802.11b	M	19.87	≤30
	Н	19.72	
	L	24.87	
802.11g	M	25.08	≤30
	Н	25.19	

The maximum EIRP of the EUT = 25.19dBm + 0.80dBi = 25.99dBm = 397.19mW which is lower than the EIRP limit of RSS-210.



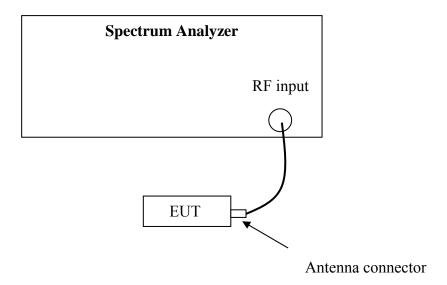
5. Power spectrum density

Test result: **PASS**

5.1 Test limit

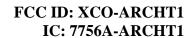
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

5.2 Test Configuration



5.3 Test procedure and test setup

The power output per FCC § 15.247(e) was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r02" (clause 10.2) for compliance to FCC 47CFR 15.247 requirements.



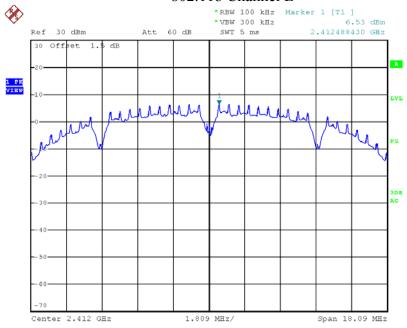


5.4 Test Protocol

Temperature : 25°C Relative Humidity : 55 %

Mode	СН	Spectrum Density (dBm/100kHz)	Limit (dBm/3kHz)
	L	6.53	
802.11b	M	6.51	≤8.00
	Н	6.25	

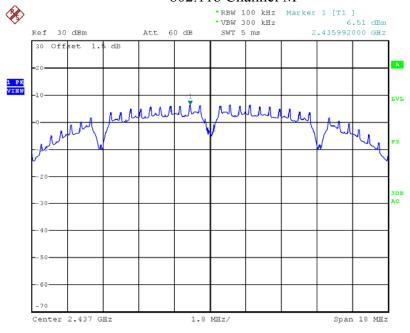
802.11b Channel L



Date: 12.AUG.2014 12:05:00

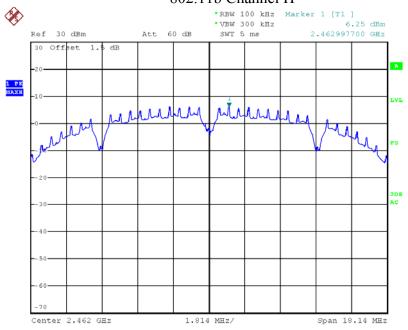


802.11b Channel M



Date: 12.AUG.2014 12:09:09

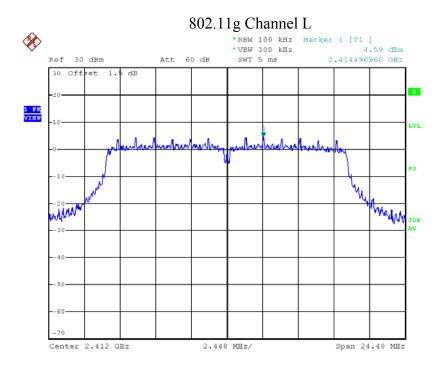
802.11b Channel H



Date: 12.AUG.2014 12:11:45

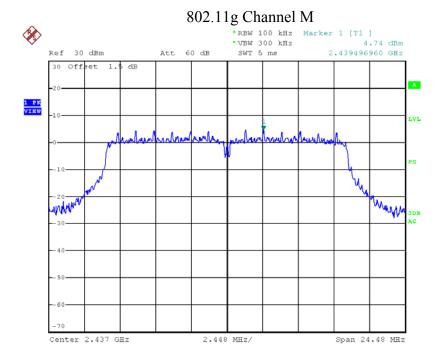


Mode	СН	Spectrum Density (dBm/100kHz)	Limit (dBm/3kHz)
	L	4.59	
802.11g	M	4.74	≤8.00
	Н	4.24	

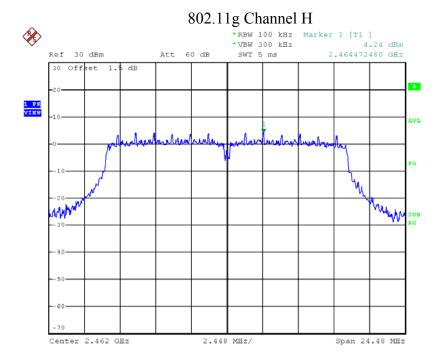


Date: 12.AUG.2014 12:14:07





Date: 12.AUG.2014 12:15:33



Date: 12.AUG.2014 12:17:09



6. Radiated emission

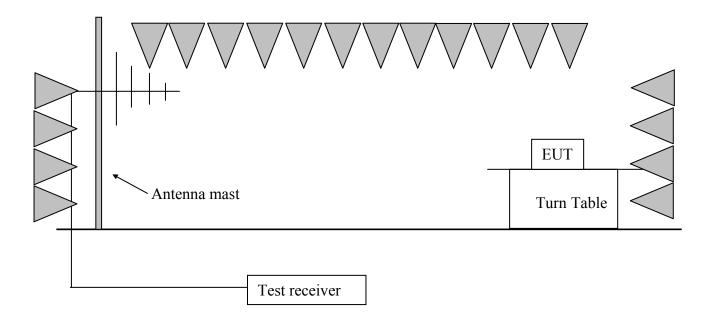
Test result: PASS

6.1 Test limit

The radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) showed as below:

Frequency (MHz)	Field Strength (dBuV/m)	Measurement Distance (m)
30 - 88	40.0	3
88 - 216	43.5	3
216 - 960	46.0	3
Above 960	54.0	3

6.2 Test Configuration





6.3 Test procedure and test setup

The measurement was applied in a semi-anechoic chamber. While testing for spurious emission higher than 1GHz, if applied, the pre-amplifier would be equipped just at the output terminal of the antenna.

The EUT and simulators were placed on a 0.8m high wooden turntable above the horizontal metal ground plane. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mast. The antenna moved up and down between from 1 meter to 4 meters to find out the maximum emission level.

The EUT was tested according to DTS test procedure of KDB558074 D01 DTS "Meas Guidance v03r02" (clause 12) for compliance to FCC 47CFR 15.247 requirements.

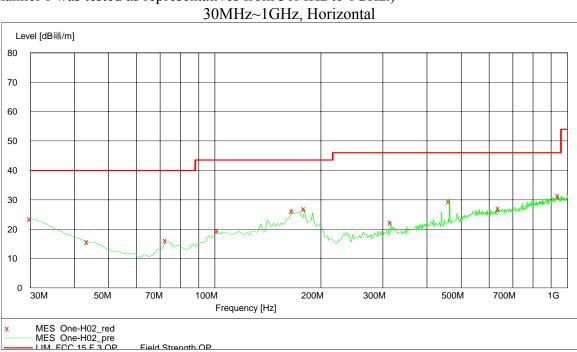


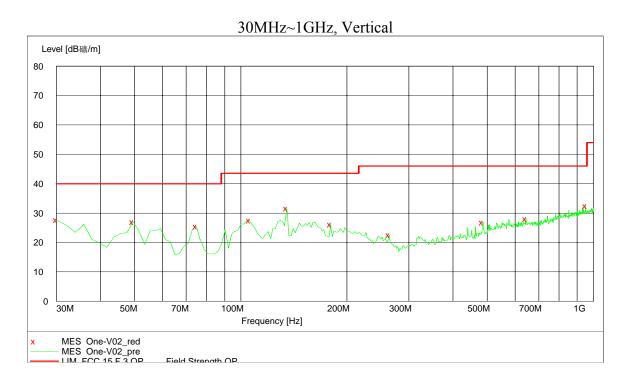
6.4 Test protocol

Temperature : 25°C Relative Humidity : 55 %

Below 1GHz:

(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. The 802.11b channel 1 was tested as representatives from 30MHz to 1GHz.)







Test data:

Polarization	Frequency	Measured level	Limits	Margin	Factor	Detector
1 Olalization	(MHz)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)	(dB)	Detector
	30.00	23.50	40.00	16.50	22.00	PK
	43.61	15.60	40.00	24.40	13.70	PK
	72.77	16.20	40.00	23.80	9.40	PK
	101.92	19.40	43.50	24.10	14.70	PK
Н	166.07	26.30	43.50	17.20	13.30	PK
11	179.68	26.90	43.50	16.60	12.30	PK
	315.75	22.30	46.00	23.70	15.60	PK
	463.49	29.40	46.00	16.60	19.50	PK
	640.38	27.00	46.00	19.00	22.60	PK
	945.57	31.30	46.00	14.70	25.40	PK
	30.00	27.60	40.00	12.40	22.00	PK
	49.44	27.10	40.00	12.90	11.30	PK
	74.71	25.50	40.00	14.50	9.80	PK
	105.81	27.50	43.50	16.00	15.10	PK
V	134.97	31.60	43.50	11.90	15.50	PK
V	179.68	26.10	43.50	17.40	12.30	PK
	263.27	22.60	46.00	23.40	14.40	PK
	484.87	26.90	46.00	19.10	20.10	PK
	644.27	28.00	46.00	18.00	22.60	PK
	951.40	32.40	46.00	13.60	25.40	PK



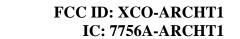
Above 1GHz (From 1GHz to 25GHz):

802.11b:

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark
	2390	64.20	74	-7.80	100	190	9.80	PK
	2390	46.50	54	-7.80	100	190	7.50	AV
Ver/Hor 2412 4824	2412	106.60	-	-7.80	100	190	-	PK
	2412	101.20	-	-7.80	100	190	-	AV
	4924	47.60	74	-2.10	100	190	26.40	PK
	4824	36.50	54	-2.10	100	190	17.50	AV
Note:	2412MHz is fundamental signal.							

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark
	2437	105.20	-	-7.80	100	190	-	PK
	2437	100.50	-	-7.80	100	190	-	AV
Ver/Hor	4874	47.80	74	-2.10	100	190	26.20	PK
Ver/Hor		37.80	54	-2.10	100	190	16.20	AV
	7311	49.10	74	6.50	100	190	24.90	PK
		40.40	54	6.50	100	190	13.60	AV
Note:	2437MHz is fundamental signal.							

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark
	2462	104.90	-	-7.80	100	190	-	PK
	2462	99.60	-	-7.80	100	190	-	AV
	2483.5	61.80	74	-7.50	100	190	12.20	PK
Ver/Hor		45.50	54	-7.50	100	190	8.50	AV
V CI/ FIOI	4924	47.10	74	-2.10	100	190	26.90	PK
		39.60	54	-2.10	100	190	14.40	AV
	7386	48.60	74	6.50	100	190	25.40	PK
	/380	37.90	54	6.50	100	190	16.10	AV
Note:	2462MHz	is fundament	al signal.		·			





802.11g:

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark	
	2200	64.50	74	-7.80	100	190	9.50	PK	
	2390	47.60	54	-7.80	100	190	6.40	AV	
Ver/Hor	2412	104.50	-	-7.80	100	190	-	PK	
V el/Hol		97.70	-	-7.80	100	190	-	AV	
	4824	46.30	74	-2.10	100	190	27.70	PK	
		39.20	54	-2.10	100	190	14.80	AV	
Note:	2412MHz is fundamental signal.								

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark	
	2427	105.50	-	-7.80	100	190	ı	PK	
	2437	98.60	-	-7.80	100	190	-	AV	
Ver/Hor	4874	48.70	74	-2.10	100	190	25.30	PK	
V el/Hol		38.70	54	-2.10	100	190	15.30	AV	
	7311	48.50	74	6.50	100	190	25.50	PK	
		41.60	54	6.50	100	190	12.40	AV	
Note:	2437MHz is fundamental signal.								

Polarity	Frequenc y (MHz)	Measured level (dBuv/m)	Limit (dBuv/m)	Factor (dB)	Antenna (cm)	Turn table (deg)	Margin (dB)	Remark		
	2462	104.80	-	-7.80	100	190	-	PK		
	2462	96.60	-	-7.80	100	190	-	AV		
	2483.5	63.80	74	-7.50	100	190	10.20	PK		
Van/Han		46.50	54	-7.50	100	190	7.50	AV		
Ver/Hor	4924	48.40	74	-2.10	100	190	25.60	PK		
		39.10	54	-2.10	100	190	14.90	AV		
	7386	45.10	74	6.50	100	190	28.90	PK		
		38.60	54	6.50	100	190	15.40	AV		
Note:	2462MHz	2462MHz is fundamental signal.								



Remark:

- 1. Factor = Antenna Factor + Cable Loss (-Amplifier, is employed);
- 2. Measured level = Original Receiver Reading + Correct Factor;
- 3. Margin = limit Measured level;
- 4. If the PK reading is lower than AV limit, the AV testing is omitted.

Example:

Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB, Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV, Then Factor = 30.20 + 2.00 - 32.00 = 0.20dB/m, Measured level = 10dBuV + 0.20dB/m = 10.20dBuV/m, Assuming limit = 54dBuV/m, Measured level = 10.20dBuV/m, Then Margin = 54 - 10.20 = 43.80 dBuV/m.



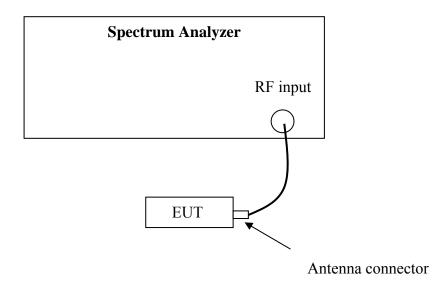
7. Emission outside the frequency Band

Test result: PASS

7.1 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

7.2 Test Configuration



7.3 Test procedure and test setup

The Emission outside the frequency Band per FCC § 15.247(d) is measured using the Spectrum Analyzer with the resolutions bandwidth set at 100kHz, the video bandwidth set at 300kHz, and the SPAN>>RBW.

The EUT was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r02" (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.



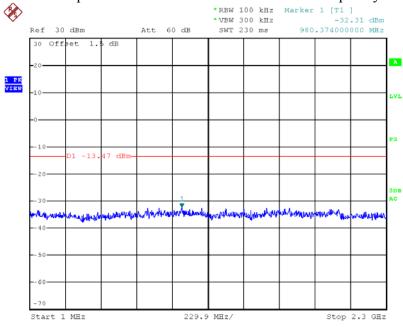
7.4 Test protocol

Temperature : 25°C Relative Humidity : 55 %

802.11b Out-of-Band Emissions:

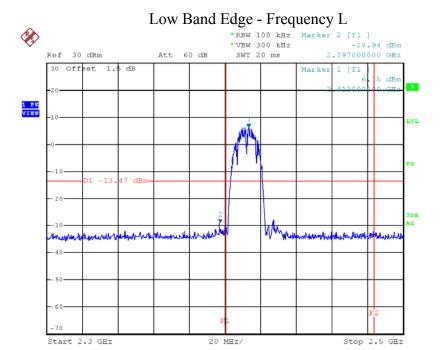
Mode	СН	Result	Limit (dB)
	L	Pass	
802.11b	M	Pass	≥20
	Н	Pass	

Spurious Emission 1MHz \sim 2.3GHz - Frequency L

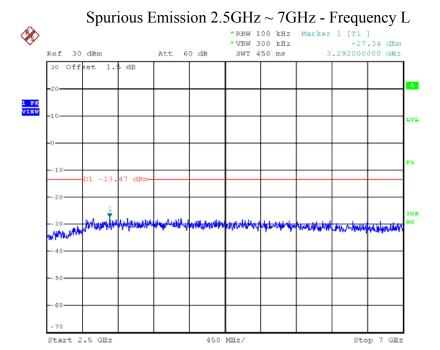


Date: 12.AUG.2014 14:34:58



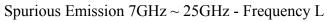


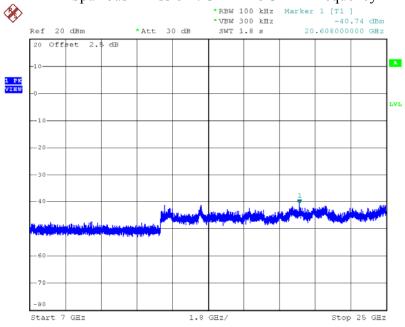
Date: 12.AUG.2014 14:37:06



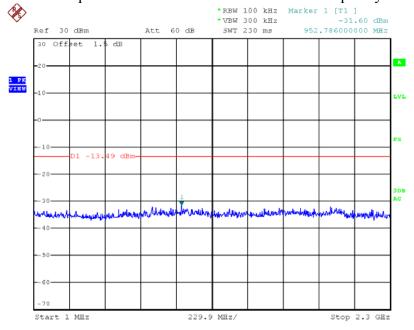
Date: 12.AUG.2014 14:38:13





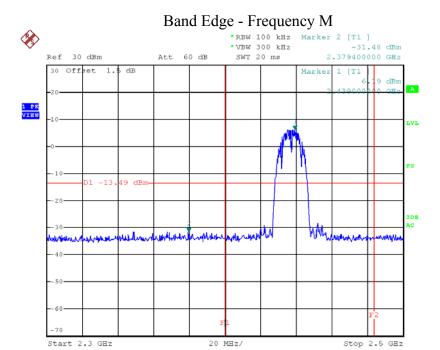


Spurious Emission 1MHz ~ 2.3GHz - Frequency M



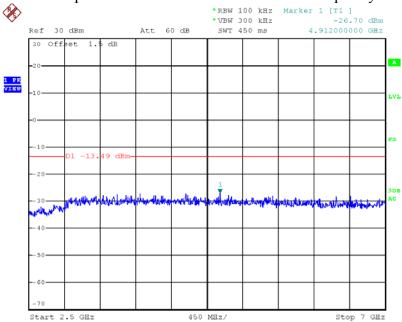
Date: 12.AUG.2014 14:39:34





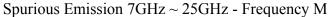
Date: 12.AUG.2014 14:41:14

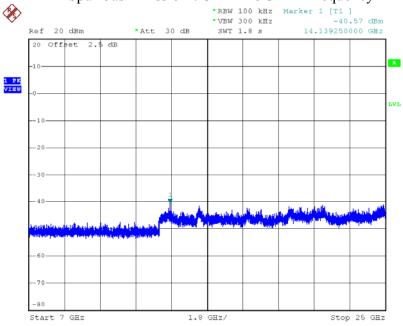
Spurious Emission 2.5GHz ~ 7GHz - Frequency M



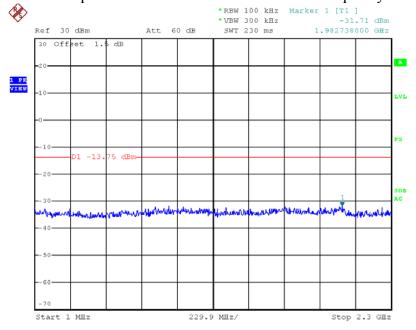
Date: 12.AUG.2014 14:42:06





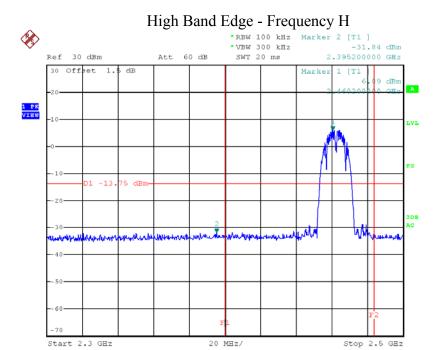


Spurious Emission 1MHz \sim 2.3GHz - Frequency H

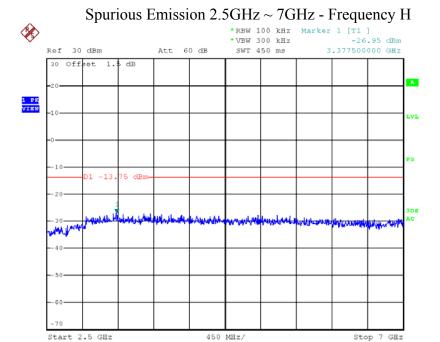


Date: 12.AUG.2014 14:44:10



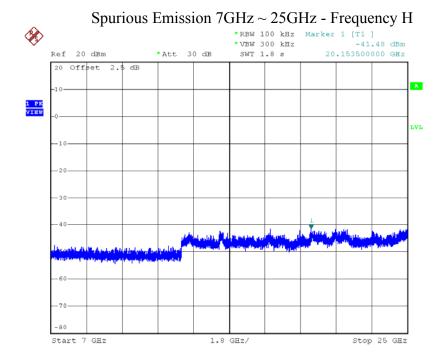


Date: 12.AUG.2014 14:52:36



Date: 12.AUG.2014 14:47:07

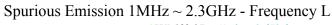


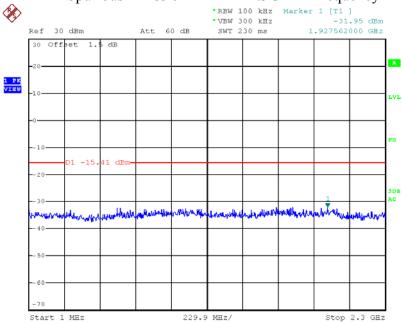


802.11g Out-of-Band Emissions:

Mode	СН	Result	Limit (dB)
	L	Pass	
802.11g	M	Pass	≥20
	Н	Pass	

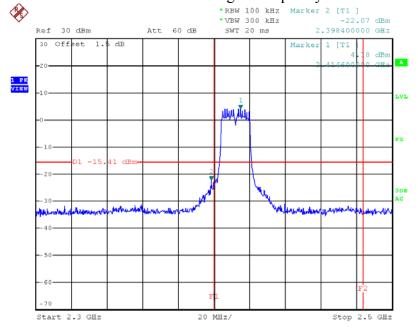






Date: 12.AUG.2014 14:55:16

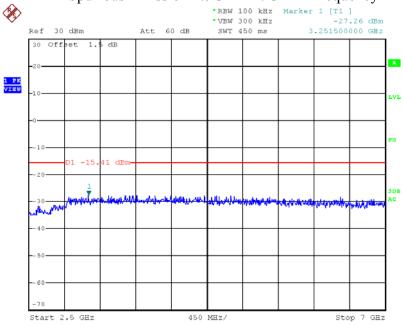
Low Band Edge - Frequency L



Date: 12.AUG.2014 14:57:01

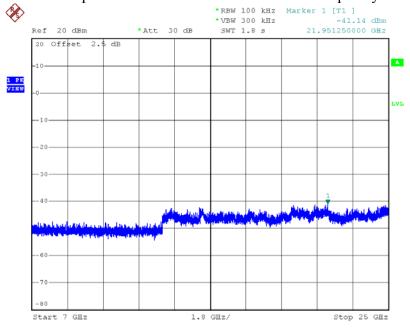




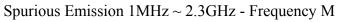


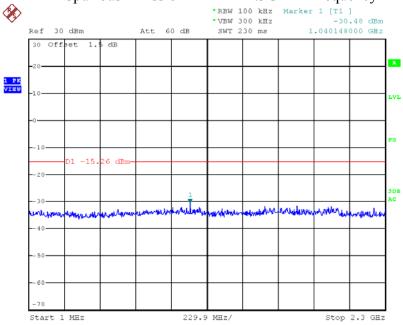
Date: 12.AUG.2014 14:58:04

Spurious Emission 7GHz ~ 25GHz - Frequency L



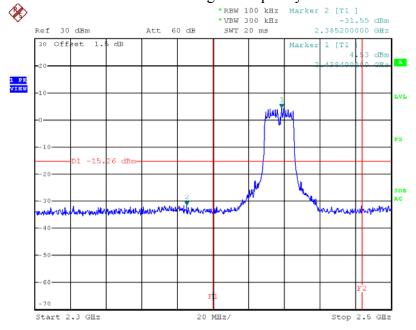






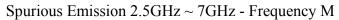
Date: 12.AUG.2014 15:00:26

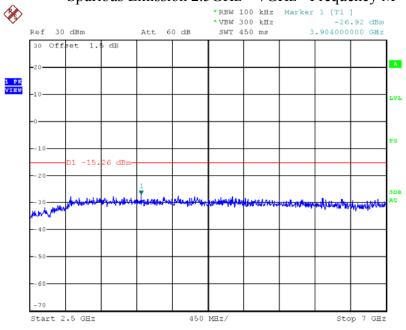
Band Edge - Frequency M



Date: 12.AUG.2014 15:02:29

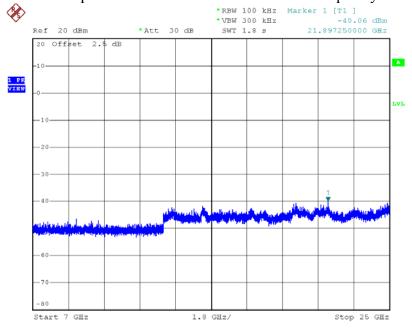




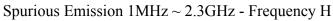


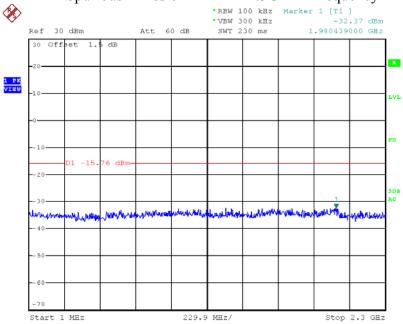
Date: 12.AUG.2014 15:03:53

Spurious Emission 7GHz ~ 25GHz - Frequency M



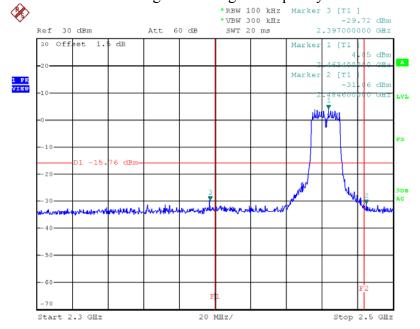






Date: 12.AUG.2014 15:05:49

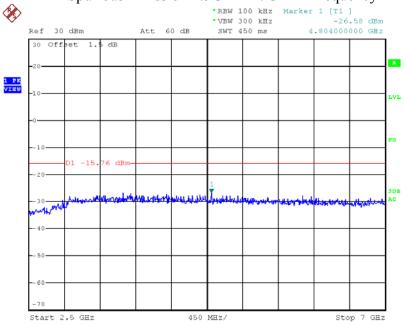
High Band Edge - Frequency H



Date: 12.AUG.2014 15:08:06

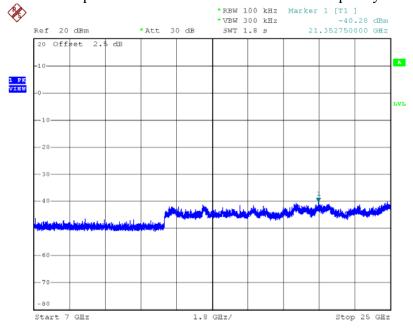






Date: 12.AUG.2014 15:09:32

Spurious Emission 7GHz ~ 25GHz - Frequency H





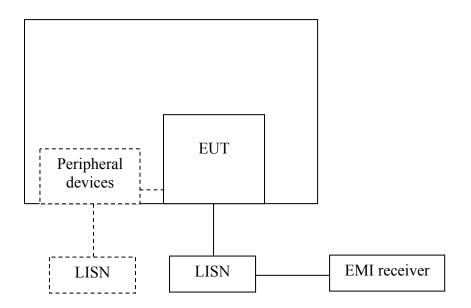
8. Power line conducted emission

Test result: PASS

8.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)				
	QP	AV			
0.15-0.5	66 to 56*	56 to 46 *			
0.5-5	56	46			
5-30	60	50			
* Decreases with the logarithm of the frequency.					

8.2 Test configuration



- ☑ For table top equipment, wooden support is 0.8m height table
- For floor standing equipment, wooden support is 0.1m height rack.



8.3 Test procedure and test set up

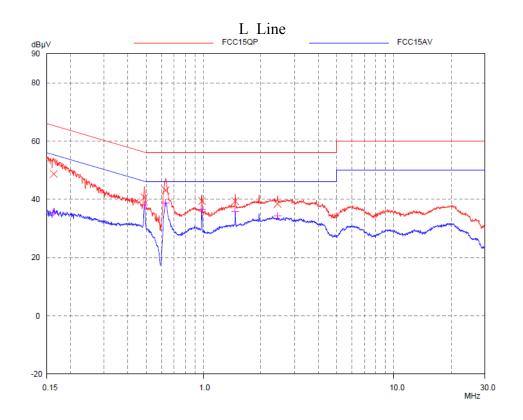
The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a $50\Omega/50uH$ coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a $50\Omega/50uH$ coupling impedance with 50Ω termination.

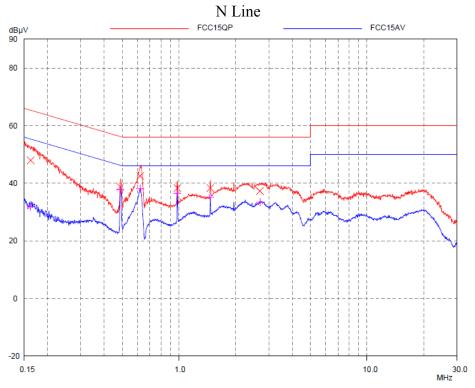
Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4 on conducted measurement. The bandwidth of the test receiver is set at 9 kHz.



8.4 Test protocol

Temperature : 25°C Relative Humidity : 55 %





Page 43 of 44



Test data:

Line	Line Frequency		d Reading uV)	(dB	mit uV)	Margin (dB)	
		QP	AV	QP	AV	QP	AV
	0.163	48.74	35.51	65.30	55.30	16.56	19.79
	0.487	40.71	38.16	56.22	46.22	15.51	8.06
L	0.631	43.10	38.85	56.00	46.00	12.90	7.15
L	0.979	39.39	36.63	56.00	46.00	16.61	9.37
	1.466	39.38	35.82	56.00	46.00	16.62	10.18
	2.443	38.44	34.24	56.00	46.00	17.56	11.76
	0.162	47.97	31.80	65.34	55.34	17.37	23.54
	0.487	38.76	37.81	56.22	46.22	17.46	8.41
N	0.621	42.55	38.04	56.00	46.00	13.45	7.96
IN	0.979	38.32	36.50	56.00	46.00	17.68	9.50
	1.466	38.32	35.28	56.00	46.00	17.68	10.72
	2.689	37.30	33.40	56.00	46.00	18.70	12.60

Remark: Margin (dB) = Limit - Corrected Reading.