

**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT**

OF

LED TV

**Model No.: ELSFWC321, SE32HYT, LE-32GY15T, LE-32GY15T1,
LE-32GY15-T3, SE32FYT, ELEFJ322S, EW32XXXXXXXXXX,
DWM32XXXXXXXXXX, SEXXXXXXXXXXX, ELXXXXXXXXXX,
LE32GXXXXXXXXXX, LE-32GXXXXXXXXXX**
(where X would be any Arabic number or English letter or blank)

FCC ID: 2ACWISE32HYT

Trademark: THTF, Fluid, Westinghouse, Seiki, Element

Report No.: KAD150706027E

Issue Date: August 11, 2015

Prepared for

**Shenyang Tongfang Multimedia Technology Co., Limited
No.10 Nanping East Road HunNan New District Shenyang, LiaoNing
Province P.R .China**

Prepared by

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DONGGUAN EMTEK CO., LTD.**

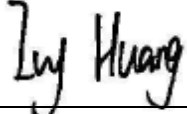
VERIFICATION OF COMPLIANCE

Applicant:	Shenyang Tongfang Multimedia Technology Co., Limited No.10 Nanping East Road Hunnan New District Shenyang, Liaoning Province P.R .China
Manufacturer:	Shenyang Tongfang Multimedia Technology Co., Limited No.10 Nanping East Road Hunnan New District Shenyang, Liaoning Province P.R .China
Product Description:	LED TV
Model Number:	ELSFWC321, SE32HYT, LE-32GY15T, LE-32GY15T1, LE-32GY15-T3, SE32FYT, ELEFJ322S, EW32XXXXXXXXXX, DWM32XXXXXXXXXX, SEXXXXXXXXXXX, ELXXXXXXXXXX, LE32GXXXXXXXXXX, LE-32GXXXXXXXXXX (where X would be any Arabic number or English letter or blank)


We hereby certify that:

The above equipment was tested by DONGGUAN EMTEK CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.247(2014).

Date of Test : July 06, 2015 to August 11, 2015

Prepared by : 
Ivy Huang/Editor

Reviewer : 
Hong Yang/Supervisor

Approved & Authorized Signer : 
Sam Lv/Manager

Modified Information

Version	Summary	Revision Date	Report No.
Ver.1.0	Original Report	/	KAD150603010E
Ver.1.0	Changed the LED panel.	2015-08-11	KAD150706027E

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APPENDIX I (PHOTOS OF EUT)(4 PAGES)

1. General Information

1.1 Product Description

Characteristics	Description
Product Name	LED TV
Model number	SE32HYT
Power Supply	AC 100V-240V, 50/60Hz, 60W
Modulation	802.11b: DSSS(DBPSK/DQPSK/CCK) 802.11g/n: OFDM(BPSK/QPSK/16QAM/64QAM)
Operating Frequency Range	2412-2462MHz for 802.11b/g/n(HT20) 2422-2452MHz for 802.11n(HT40)
Number of Channels	11 for 20MHz bandwidth; 7 for 40MHz bandwidth
Transmit Power Max	802.11b: 14.72dBm 802.11g: 13.42dBm 802.11n(HT20): 12.69dBm 802.11n(HT40): 11.56dBm
Antenna Type	Internal antenna
Antenna Gain	2.0dBi

Note: for more details, please refer to the User's manual of the EUT.

2. System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. Emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013.

2.4 Configuration of Tested System

Fig. 2-1 Configuration of Tested System

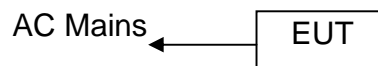


Table 2-1 Equipment Used in Tested System

Item	Equipment	Trademark	Model No.	FCC ID	Note
1.	LED TV	Seiki	SE32HYT	2ACWISE32HYT	EUT

Note:

- (1) Unless otherwise denoted as EUT in 『Remark』 column, device(s) used in tested system is a support equipment.

3. Description of Test Modes

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11b: 1 Mbps; 802.11g: 6 Mbps; 802.11n (HT20) : MCS0; 802.11n (HT40) : MCS8) were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list for 802.11 b/g/n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447		

Frequency and Channel list for 802.11 n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	8	2447
4	2427	6	2437	9	2452
		7	2442		

Test Frequency and Channel for 802.11 b/g/n (HT20):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	6	2437	11	2462

Test Frequency and channel for 802.11 n (HT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	6	2437	9	2452

4. Summary of Test Results

FCC Rules	Description Of Test	Result
§15.207	AC Power Conducted Emission	Pass
§15.247(d), §15.209	Radiated Emission	Pass

5. Test Facility

Site Description

EMC Lab : Accredited by FCC, June 18, 2014
The Certificate Number is 247565

Accredited by Industry Canada, February 19, 2014
The Certificate Number is 9444A

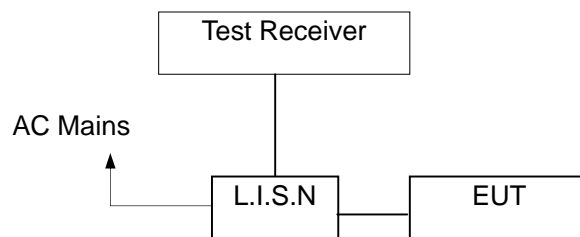
Name of Firm : DONGGUAN EMTEK CO., LTD.
Site Location : No.281, Guantai Road, Nancheng District,
Dongguan, Guangdong, China

6. Conducted Emissions Test

6.1 Measurement Procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

6.2 Test SET-UP (Block Diagram of Configuration)



6.3 Measurement Equipment Used

Conducted Emission Test Site					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	Last Cal.	Due date
Test Receiver	Rohde & Schwarz	ESCS30	100018	03/16/2015	03/15/2016
L.I.S.N	Rohde & Schwarz	ENV216	100017	03/16/2015	03/15/2016
RF Switching Unit	CDS	RSU-M2	38401	03/16/2015	03/15/2016
Coaxial Cable	CDS	79254	46107086	03/16/2015	03/15/2016

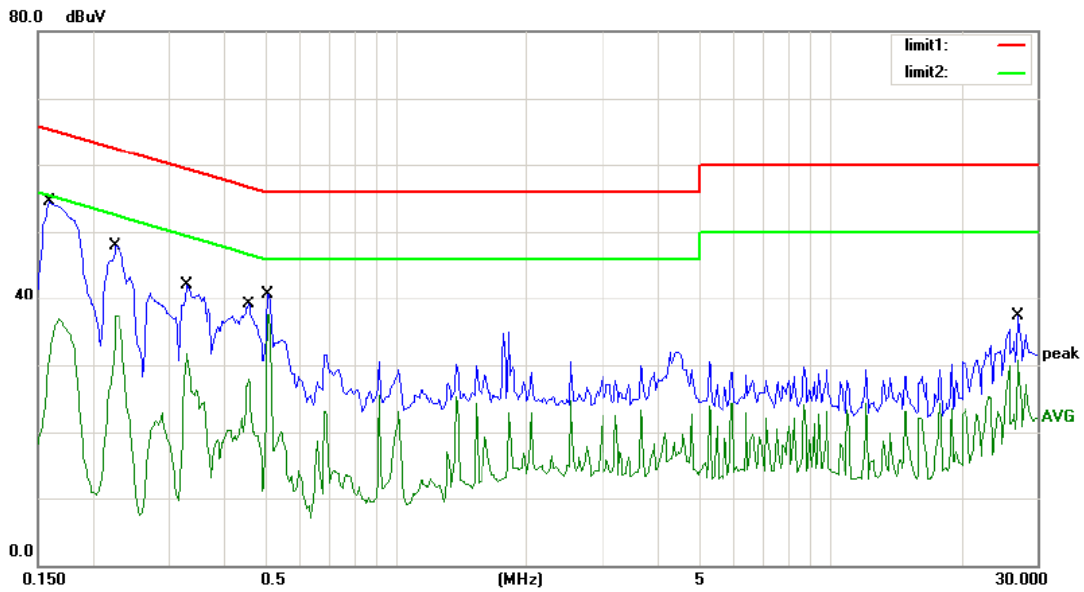
6.4 Conducted Emission Limit

Conducted Emission Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	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.

6.5 Measurement Result

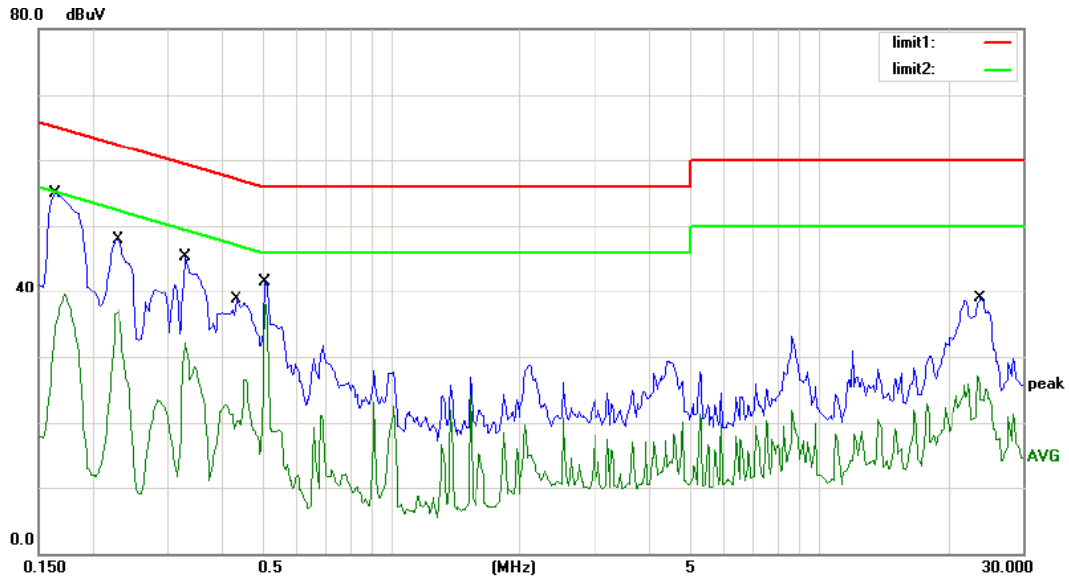
Please refer to the following pages.



Site site #1	Phase: L1	Temperature: 24
Limit: (CE)FCC PART 15 class B_QP	Power: AC 120V/60Hz	Humidity: 55 %
Mode: TX2412MHZ		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1590	51.14	0.00	51.14	65.52	-14.38	QP	
2		0.1590	36.95	0.00	36.95	55.52	-18.57	AVG	
3		0.2265	44.74	0.00	44.74	62.58	-17.84	QP	
4		0.2265	37.27	0.00	37.27	52.58	-15.31	AVG	
5		0.3300	39.64	0.00	39.64	59.45	-19.81	QP	
6		0.3300	31.75	0.00	31.75	49.45	-17.70	AVG	
7		0.4605	36.57	0.00	36.57	56.68	-20.11	QP	
8		0.4605	27.96	0.00	27.96	46.68	-18.72	AVG	
9		0.5100	37.15	0.00	37.15	56.00	-18.85	QP	
10	*	0.5100	37.50	0.00	37.50	46.00	-8.50	AVG	
11		27.0500	34.51	0.00	34.51	60.00	-25.49	QP	
12		27.0500	30.76	0.00	30.76	50.00	-19.24	AVG	

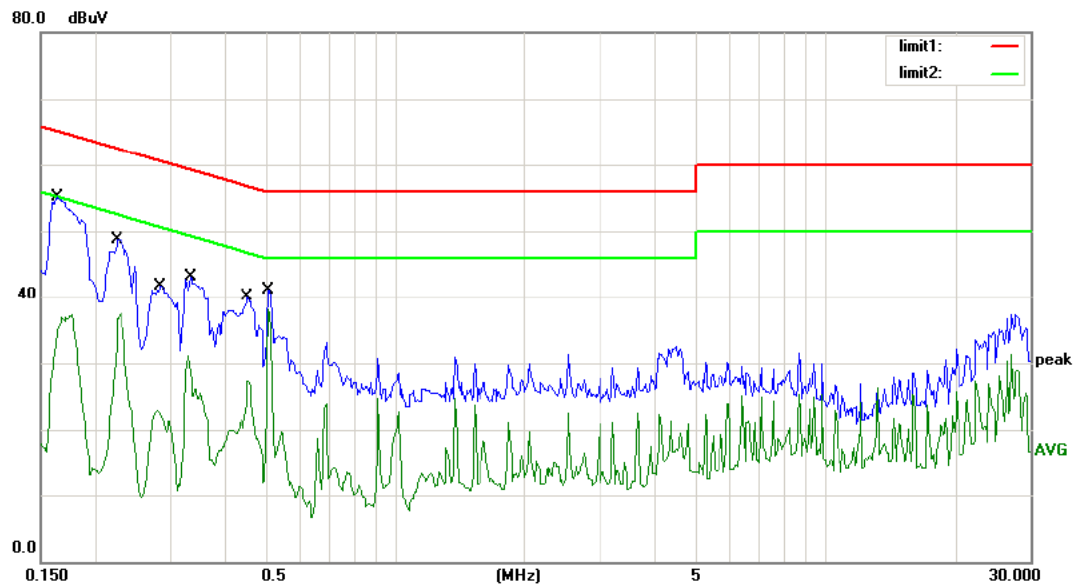
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver.



Site site #1 Phase: **N** Temperature: 24
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX2412MHZ
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1635	51.74	0.00	51.74	65.28	-13.54	QP	
2		0.1635	39.43	0.00	39.43	55.28	-15.85	AVG	
3		0.2310	44.25	0.00	44.25	62.41	-18.16	QP	
4		0.2310	37.04	0.00	37.04	52.41	-15.37	AVG	
5		0.3300	42.57	0.00	42.57	59.45	-16.88	QP	
6		0.3300	32.12	0.00	32.12	49.45	-17.33	AVG	
7		0.4334	36.14	0.00	36.14	57.19	-21.05	QP	
8		0.4334	26.52	0.00	26.52	47.19	-20.67	AVG	
9		0.5100	38.47	0.00	38.47	56.00	-17.53	QP	
10	*	0.5100	37.88	0.00	37.88	46.00	-8.12	AVG	
11		23.9750	35.48	0.00	35.48	60.00	-24.52	QP	
12		23.9750	27.16	0.00	27.16	50.00	-22.84	AVG	

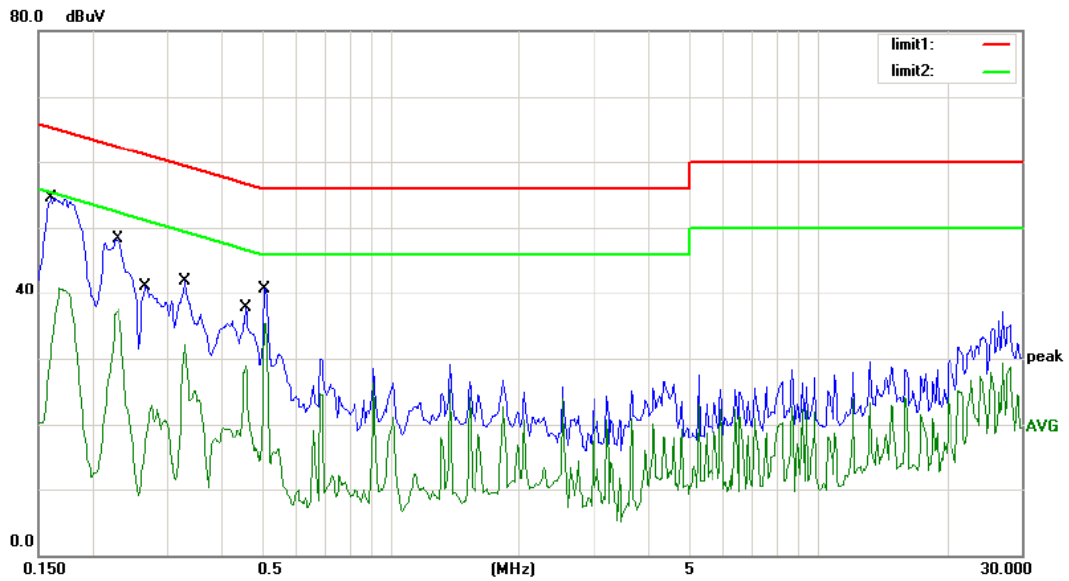
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver.



Site site #1 Phase: **L1** Temperature: 24
 Limit: (CE)FCC PART 15 class B_QP Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX2412MHZ
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1635	52.74	0.00	52.74	65.28	-12.54	QP	
2		0.1635	37.16	0.00	37.16	55.28	-18.12	AVG	
3		0.2265	45.61	0.00	45.61	62.58	-16.97	QP	
4		0.2265	37.52	0.00	37.52	52.58	-15.06	AVG	
5		0.2850	38.45	0.00	38.45	60.67	-22.22	QP	
6		0.2850	22.81	0.00	22.81	50.67	-27.86	AVG	
7		0.3345	40.68	0.00	40.68	59.34	-18.66	QP	
8		0.3345	31.03	0.00	31.03	49.34	-18.31	AVG	
9		0.4560	37.84	0.00	37.84	56.77	-18.93	QP	
10		0.4560	27.38	0.00	27.38	46.77	-19.39	AVG	
11		0.5100	40.70	0.00	40.70	56.00	-15.30	QP	
12	*	0.5100	38.05	0.00	38.05	46.00	-7.95	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver.



Site site #1 Phase: **N** Temperature: 24
 Limit: (CE)FCC PART 15 class B_QP Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX2412MHZ
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1607	51.74	0.00	51.74	65.43	-13.69	QP	
2		0.1607	40.82	0.00	40.82	55.43	-14.61	AVG	
3		0.2310	45.68	0.00	45.68	62.41	-16.73	QP	
4		0.2310	37.54	0.00	37.54	52.41	-14.87	AVG	
5		0.2670	39.67	0.00	39.67	61.21	-21.54	QP	
6		0.2670	27.31	0.00	27.31	51.21	-23.90	AVG	
7		0.3300	39.74	0.00	39.74	59.45	-19.71	QP	
8		0.3300	32.13	0.00	32.13	49.45	-17.32	AVG	
9		0.4605	34.81	0.00	34.81	56.68	-21.87	QP	
10		0.4605	28.80	0.00	28.80	46.68	-17.88	AVG	
11		0.5100	39.84	0.00	39.84	56.00	-16.16	QP	
12	*	0.5100	35.28	0.00	35.28	46.00	-10.72	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver.

7. Radiated Emission Test

7.1 Measurement Procedure

1. Below 1000MHz, The EUT was placed on a turn table which is 0.8m above ground plane, And above 1000MHz, The EUT was placed on a styrofoam table which is 1.5m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured was complete.

When spectrum scanned from 30MHz to 1GHz setting resolution bandwidth 120KHz and video bandwidth 300KHz:

EMI Test Receiver	Setting
Attenuation	Auto
RB	120KHz
VB	300KHz
Detector	QP
Trace	Max hold

When spectrum scanned above 1GHz setting resolution bandwidth 1MHz, video bandwidth 3MHz:

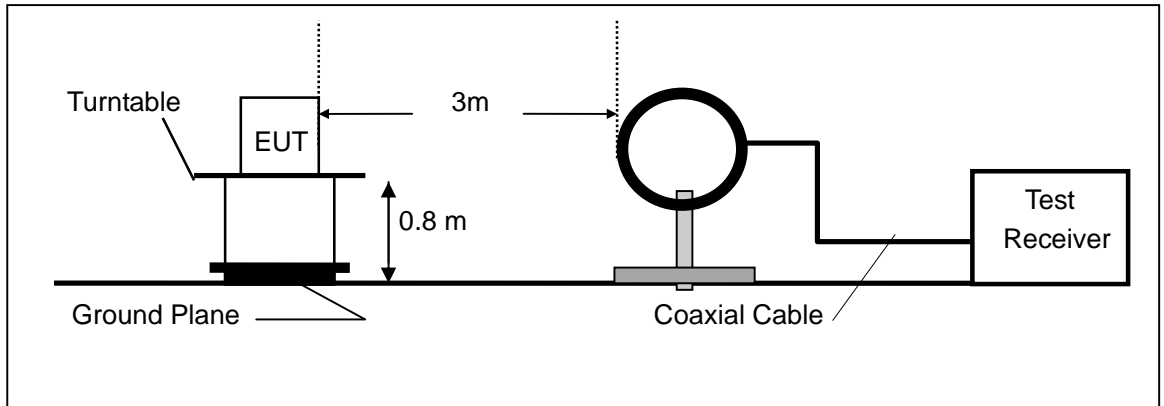
EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	3MHz
Detector	Peak
Trace	Max hold

When spectrum scanned above 1GHz setting resolution bandwidth 1MHz, video bandwidth 10Hz:

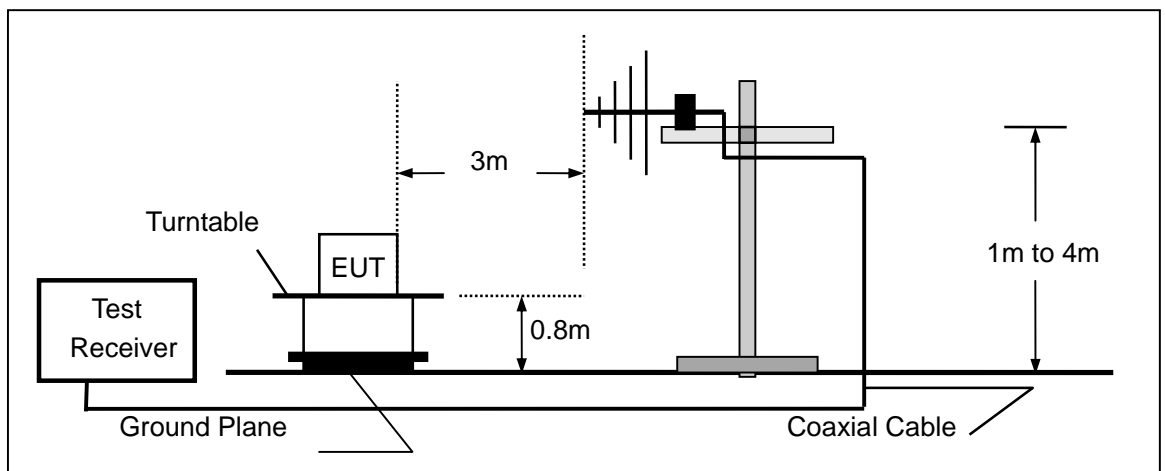
EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	10Hz
Detector	AVG
Trace	Max hold

7.2 Test SET-UP (Block Diagram of Configuration)

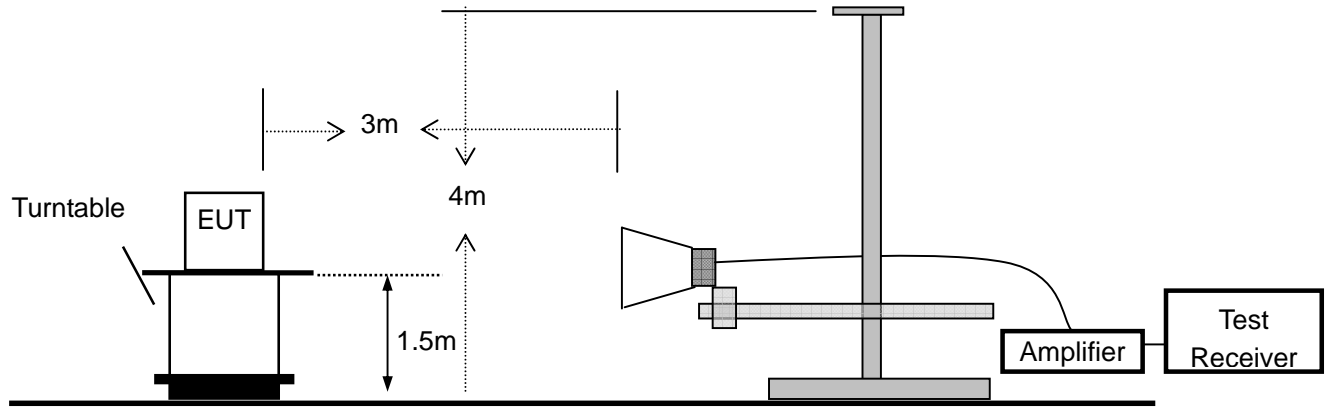
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



7.3 Measurement Equipment Used

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	1166.5950.03	03/16/2015	1 Year
2.	Bilog Antenna	Schwarzbeck	VULB9163	000141	03/16/2015	1 Year
3.	Power Amplifier	CDS	RSU-M352	818	03/16/2015	1 Year
4.	Power Amplifier	HP	8447F	OPT H64	03/16/2015	1 Year
5.	Color Monitor	SUNSPO	SP-140A	N/A	03/16/2015	1 Year
6.	Single Line Filter	JIANLI	XL-3	N/A	03/16/2015	1 Year
7.	Single Phase Power Line Filter	JIANLI	DL-2X100B	N/A	03/16/2015	1 Year
8.	3 Phase Power Line Filter	JIANLI	DL-4X100B	N/A	03/16/2015	1 Year
9.	DC Power Filter	JIANLI	DL-2X50B	N/A	03/16/2015	1 Year
10.	Cable	Schwarzbeck	PLF-100	549489	03/16/2015	1 Year
11.	Cable	Rosenberger	CIL02	A0783566	03/16/2015	1 Year
12.	Cable	Rosenberger	RG 233/U	525178	03/16/2015	1 Year
13.	Signal Analyzer	Rohde & Schwarz	FSV30	103040	12/29/2014	1 Year
14.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1272	12/29/2014	1 Year
15.	Power Amplifier	LUNAR EM	LNA1G18-40	J10100000081	12/29/2014	1 Year
16.	Cable	H+S	CBL-26	N/A	12/29/2014	1 Year
17.	Cable	H+S	CBL-26	N/A	12/29/2014	1 Year
18.	Cable	H+S	CBL-26	N/A	12/29/2014	1 Year

7.4 Radiated Emission Limit

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Frequencies (MHz)	Field Strength (micorvolts/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

15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

Remark 1. Emission level in dBuV/m=20 log (uV/m)

- :
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
 3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of § 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

7.5 Measurement Result

Below 30MHz:

All the modulation modes were tested the data of the test mode are recorded in the following pages.

Operation Mode:	TX Mode	Test Date :	July 22, 2015
Frequency Range:	9KHz~30MHz	Temperature :	28°C
Test Result:	PASS	Humidity :	60 %
Measured Distance:	3m	Test By:	WOLF

Freq. (MHz)	Ant.Pol. H/V	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)
--	--	--	--	--

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

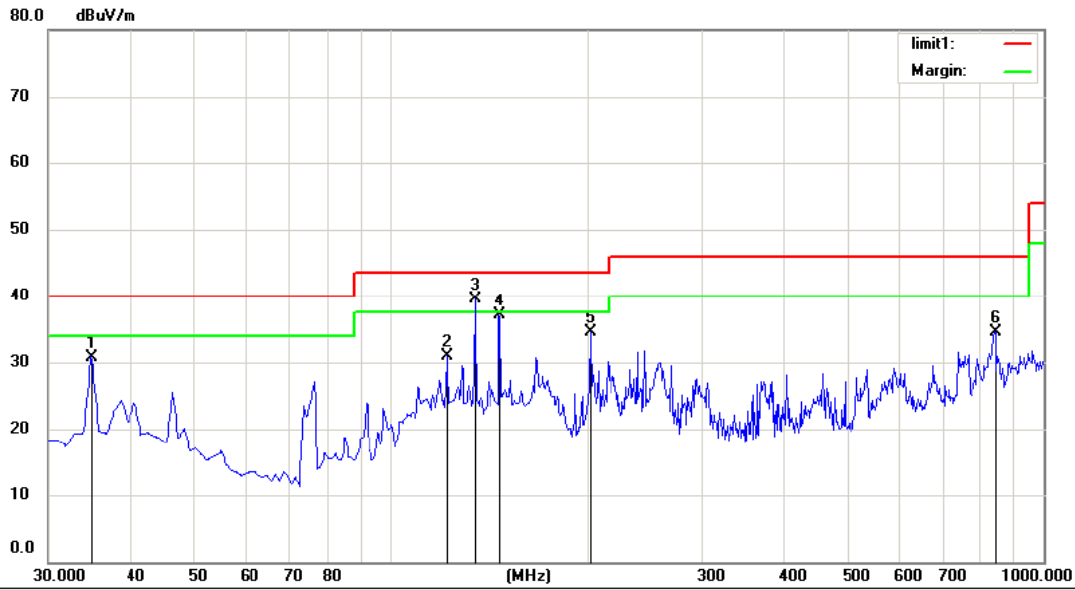
Distance extrapolation factor = $40 \log(\text{Specific distance} / \text{test distance})$ (dB);

Limit line = Specific limits(dBuV) + distance extrapolation factor.

Below 1000MHz:

All the modulation modes were tested the data of the worst mode (TX 802.11b) are recorded in the following pages and the others modulation methods do not exceed the limits.

Please refer to the following test plots:

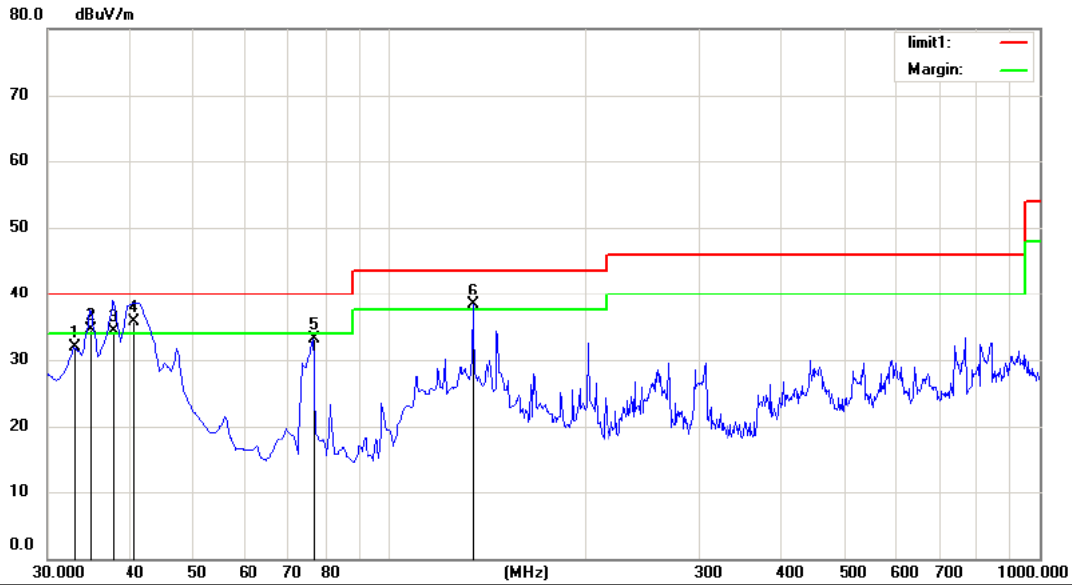


Site Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2412MHZ
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		34.8500	44.99	-14.19	30.80	40.00	-9.20	QP		
2		122.1500	47.67	-16.72	30.95	43.50	-12.55	QP		
3	*	134.7600	55.95	-16.49	39.46	43.50	-4.04	QP		
4		147.3700	54.62	-17.56	37.06	43.50	-6.44	QP		
5		202.6600	52.10	-17.54	34.56	43.50	-8.94	QP		
6		844.8000	39.11	-4.60	34.51	46.00	-11.49	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

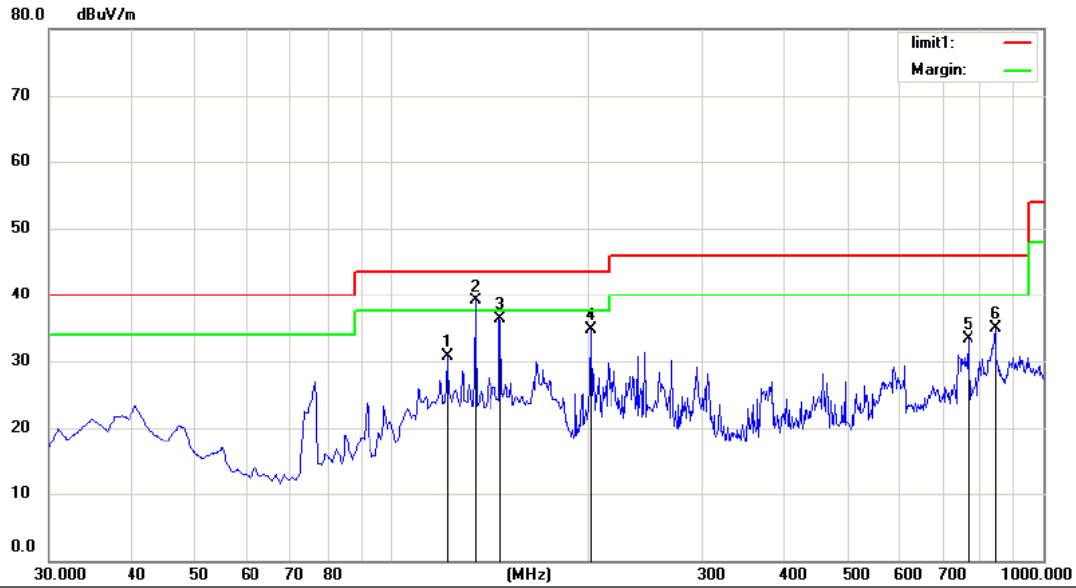


Site: Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2412MHZ
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		32.9100	46.31	-14.46	31.85	40.00	-8.15	QP		
2	!	34.8500	48.77	-14.19	34.58	40.00	-5.42	QP		
3	!	37.7600	48.10	-13.84	34.26	40.00	-5.74	QP		
4	*	40.7016	49.30	-13.63	35.67	40.00	-4.33	QP		
5		76.5600	55.68	-22.66	33.02	40.00	-6.98	QP		
6	!	134.7600	54.77	-16.49	38.28	43.50	-5.22	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

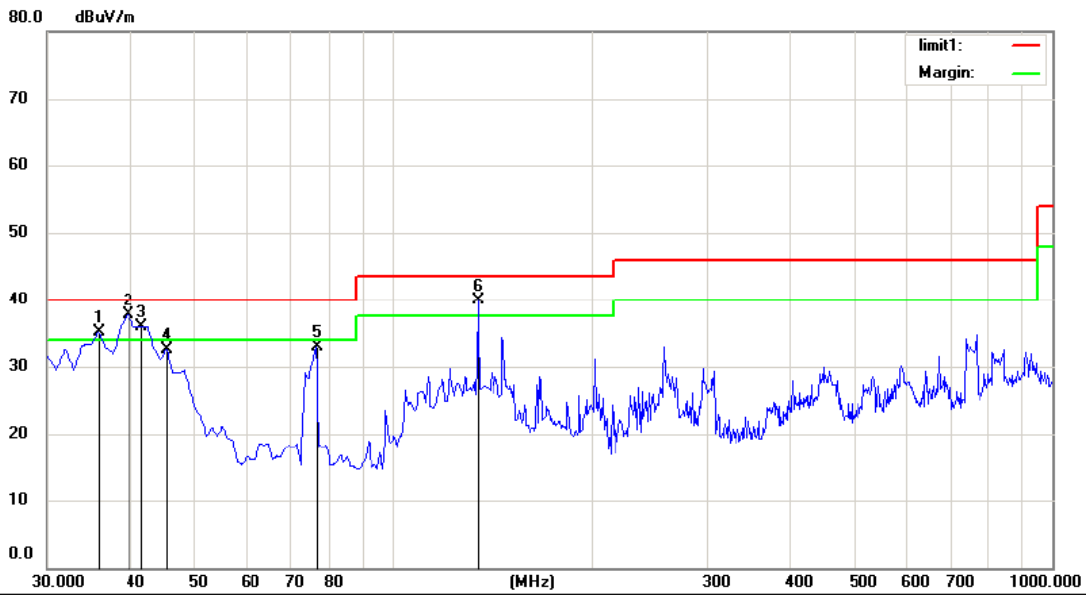


Site Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2437MHZ
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		122.1500	47.47	-16.72	30.75	43.50	-12.75	QP		
2	*	134.7600	55.54	-16.49	39.05	43.50	-4.45	QP		
3		147.3700	53.94	-17.56	36.38	43.50	-7.12	QP		
4		202.6600	52.26	-17.54	34.72	43.50	-8.78	QP		
5		767.2000	38.93	-5.70	33.23	46.00	-12.77	QP		
6		845.7700	39.57	-4.59	34.98	46.00	-11.02	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

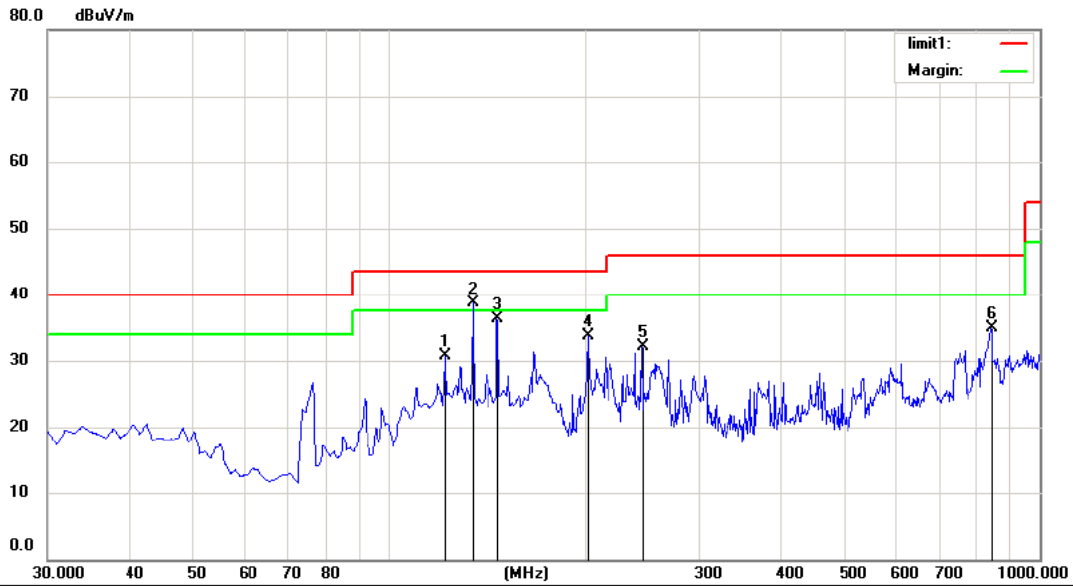


Site Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2437MHZ
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1	!	35.8200	49.15	-14.08	35.07	40.00	-4.93	QP		
2	*	39.7000	51.40	-13.71	37.69	40.00	-2.31	QP		
3	!	41.7130	49.48	-13.57	35.91	40.00	-4.09	QP		
4		45.5200	46.29	-13.76	32.53	40.00	-7.47	QP		
5		76.5600	55.54	-22.66	32.88	40.00	-7.12	QP		
6	!	134.7600	56.41	-16.49	39.92	43.50	-3.58	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

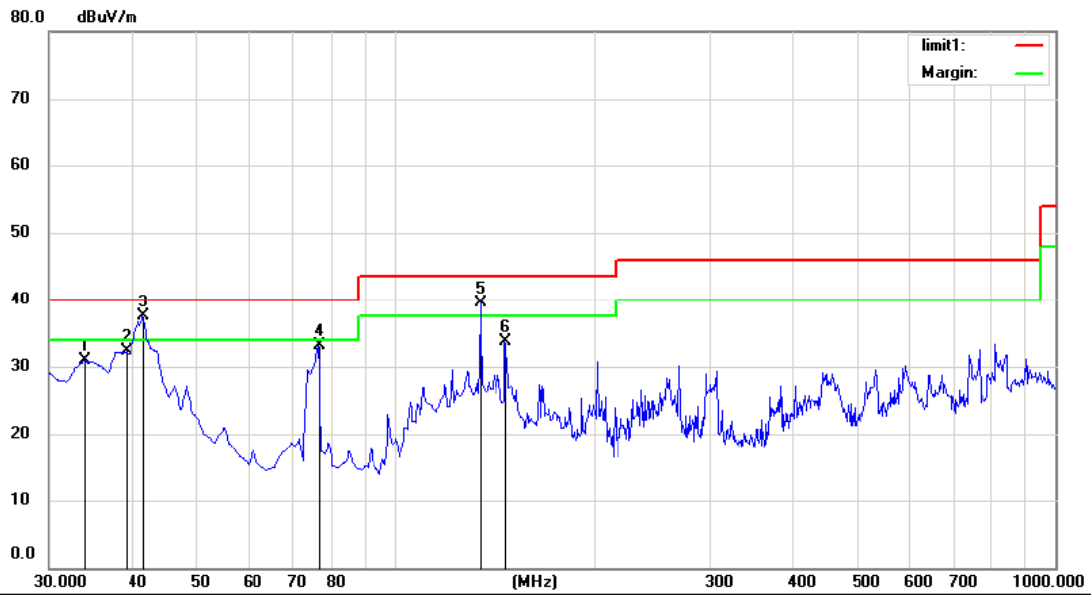


Site Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2462MHZ
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		122.1500	47.50	-16.72	30.78	43.50	-12.72	QP		
2	*	134.7600	55.13	-16.49	38.64	43.50	-4.86	QP		
3		147.3700	53.84	-17.56	36.28	43.50	-7.22	QP		
4		202.6600	51.28	-17.54	33.74	43.50	-9.76	QP		
5		245.3400	47.64	-15.60	32.04	46.00	-13.96	QP		
6		844.8000	39.59	-4.60	34.99	46.00	-11.01	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

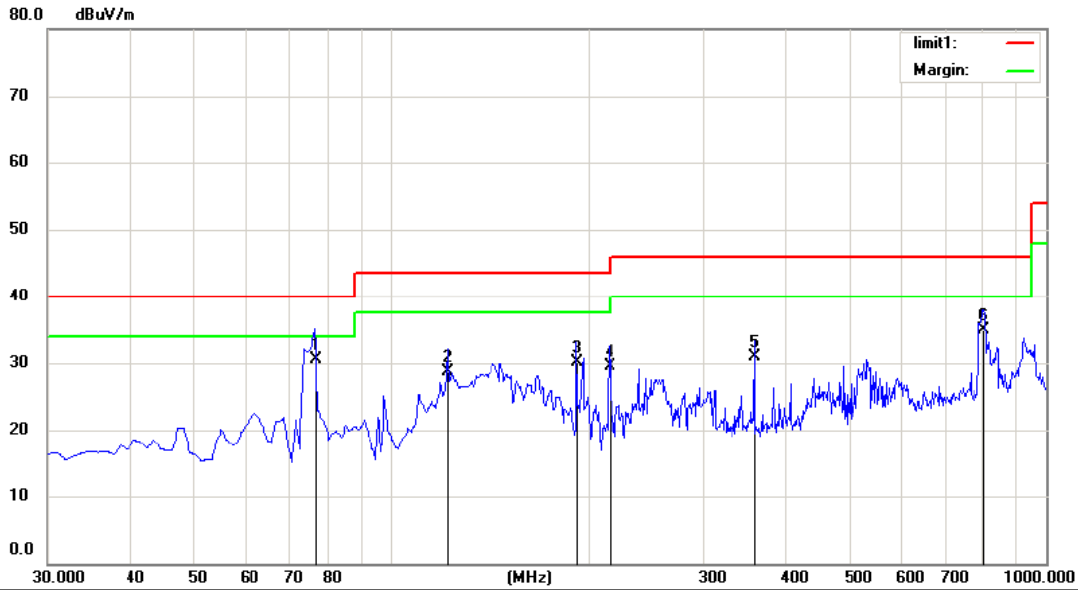


Site Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 120V/60Hz Humidity: 55 %
 Mode: TX 2462MHZ
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		33.9173	45.13	-14.30	30.83	40.00	-9.17	QP		
2		39.2991	46.01	-13.74	32.27	40.00	-7.73	QP		
3	*	41.6400	51.03	-13.58	37.45	40.00	-2.55	QP		
4		76.5600	55.84	-22.66	33.18	40.00	-6.82	QP		
5	!	134.7600	55.95	-16.49	39.46	43.50	-4.04	QP		
6		147.3700	51.29	-17.56	33.73	43.50	-9.77	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack

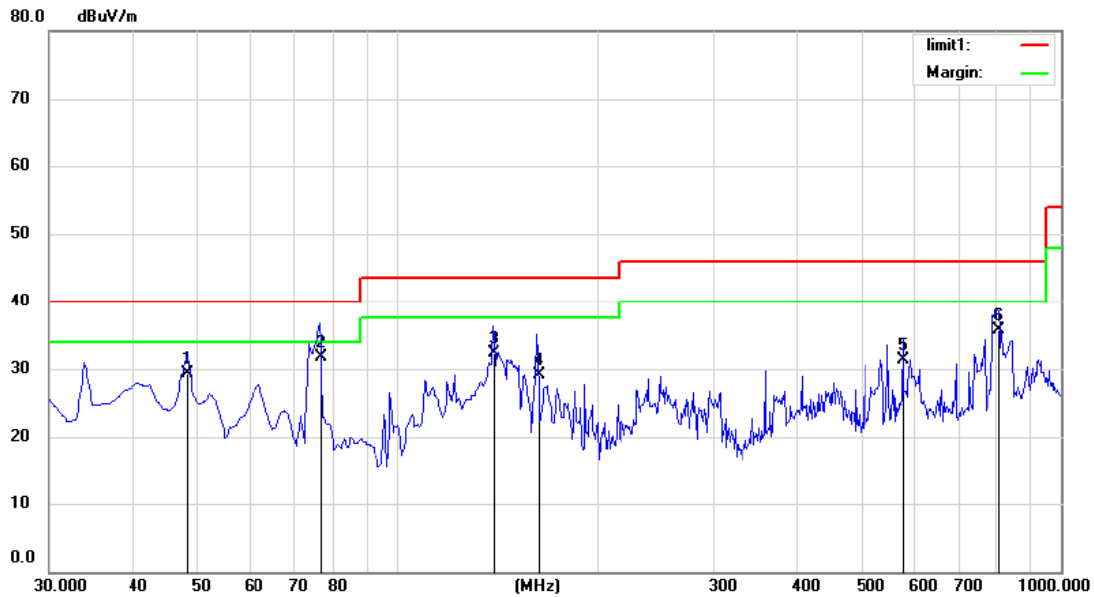


Site Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2412
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	76.5600	53.26	-22.66	30.60	40.00	-9.40	QP			
2		122.1500	45.35	-16.72	28.63	43.50	-14.87	QP			
3		191.9900	48.17	-18.14	30.03	43.50	-13.47	QP			
4		215.2700	45.92	-16.46	29.46	43.50	-14.04	QP			
5		359.8000	43.64	-12.71	30.93	46.00	-15.07	QP			
6		802.1200	40.03	-5.06	34.97	46.00	-11.03	QP			

*:Maximum data x:Over limit !:over margin

Operator: Jack

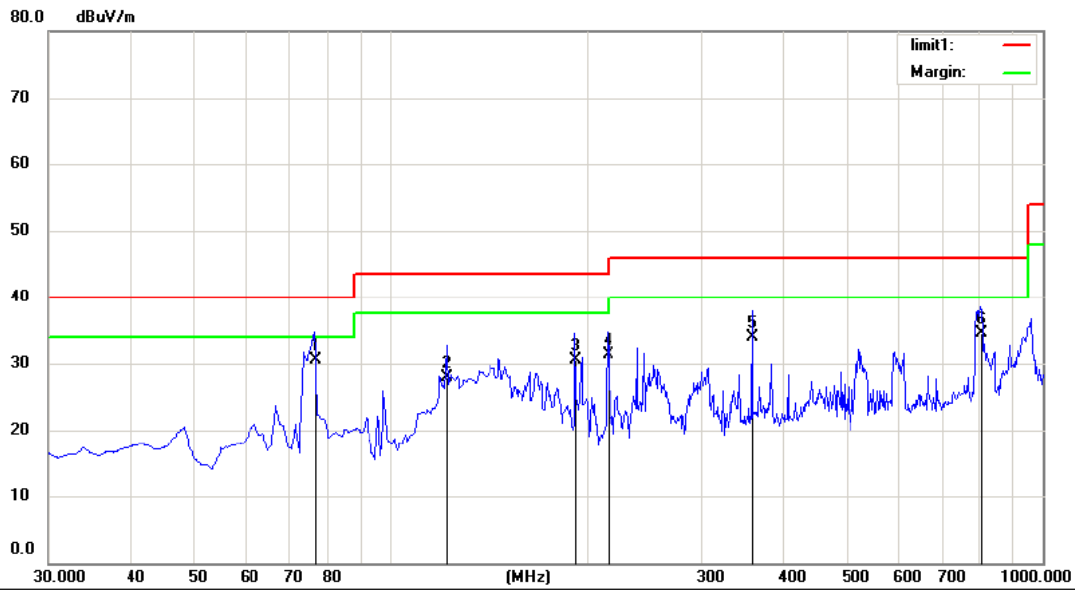


Site: Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2412
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		48.4300	44.07	-14.74	29.33	40.00	-10.67			QP
2	*	76.5600	54.32	-22.66	31.66	40.00	-8.34			QP
3		139.6100	49.26	-17.00	32.26	43.50	-11.24			QP
4		163.1818	47.55	-18.41	29.14	43.50	-14.36			QP
5		579.0200	40.05	-8.70	31.35	46.00	-14.65			QP
6		805.0300	40.67	-4.95	35.72	46.00	-10.28			QP

*:Maximum data x:Over limit !:over margin

Operator: Jack



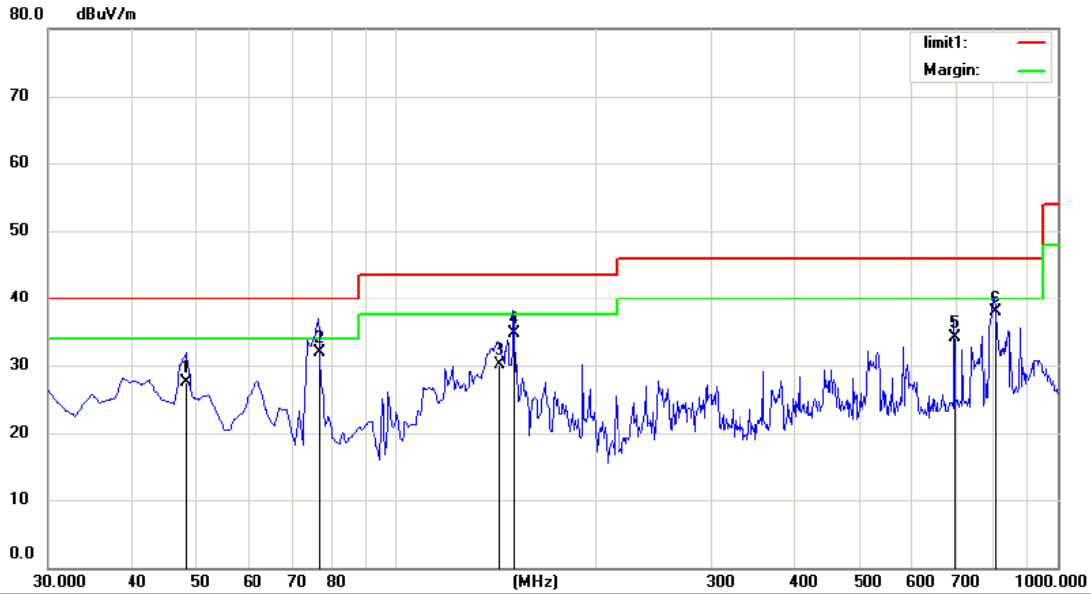
Site Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2437

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1	*	76.5600	53.26	-22.66	30.60	40.00	-9.40			QP	
2		122.1500	44.64	-16.72	27.92	43.50	-15.58			QP	
3		191.9900	48.69	-18.14	30.55	43.50	-12.95			QP	
4		215.2700	47.67	-16.46	31.21	43.50	-12.29			QP	
5		359.8000	46.52	-12.71	33.81	46.00	-12.19			QP	
6		806.9700	39.34	-4.89	34.45	46.00	-11.55			QP	

*:Maximum data x:Over limit !:over margin

Operator: Jack

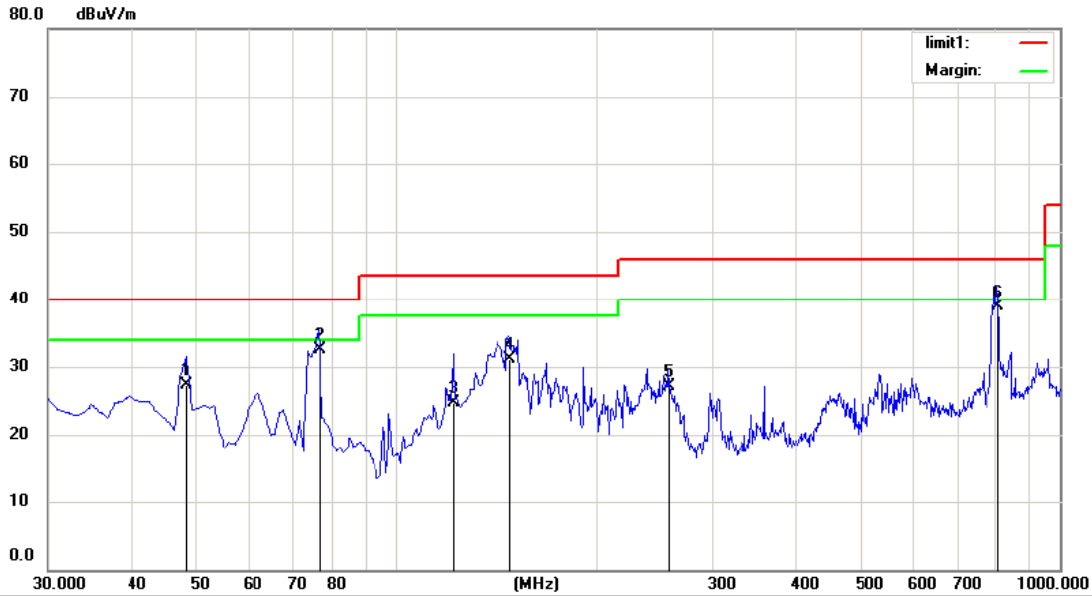


Site: Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2437
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		48.4300	42.26	-14.74	27.52	40.00	-12.48			QP
2	*	76.5600	54.65	-22.66	31.99	40.00	-8.01			QP
3		143.4900	47.30	-17.29	30.01	43.50	-13.49			QP
4		151.2500	52.54	-17.85	34.69	43.50	-8.81			QP
5		699.3000	41.44	-7.27	34.17	46.00	-11.83			QP
6		806.0000	42.76	-4.92	37.84	46.00	-8.16			QP

*:Maximum data x:Over limit !:over margin

Operator: Jack

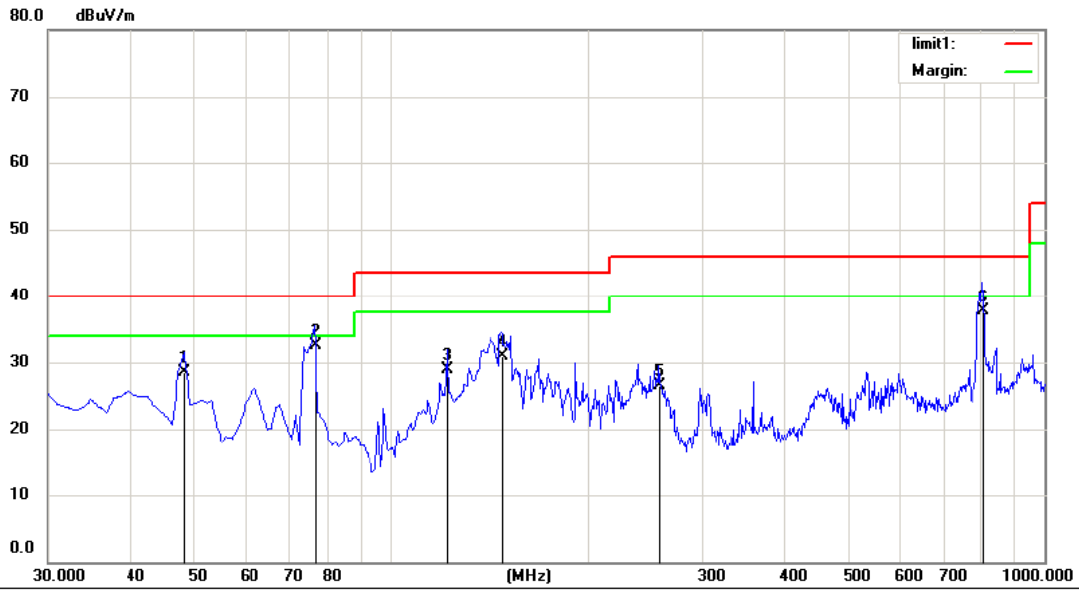


Site: Chamber #1 Polarization: **Horizontal** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2462
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		48.4300	42.12	-14.74	27.38	40.00	-12.62	QP		
2		76.5600	55.20	-22.66	32.54	40.00	-7.46	QP		
3		121.5486	41.54	-16.78	24.76	43.50	-18.74	QP		
4		148.3400	48.64	-17.63	31.01	43.50	-12.49	QP		
5		257.9500	42.50	-15.48	27.02	46.00	-18.98	QP		
6	*	806.0000	43.87	-4.92	38.95	46.00	-7.05	QP		

*:Maximum data x:Over limit !:over margin

Operator: Jack



Site Chamber #1 Polarization: **Vertical** Temperature: 24
 Limit: (RE)FCC PART 15 class B 3m Power: AC 240V/50Hz Humidity: 55 %
 Mode: TX 2462
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		48.4300	43.21	-14.74	28.47	40.00	-11.53	QP			
2	*	76.5600	55.26	-22.66	32.60	40.00	-7.40	QP			
3		122.1500	45.58	-16.72	28.86	43.50	-14.64	QP			
4		148.3400	48.54	-17.63	30.91	43.50	-12.59	QP			
5		257.9500	41.95	-15.48	26.47	46.00	-19.53	QP			
6		806.0000	42.70	-4.92	37.78	46.00	-8.22	QP			

*:Maximum data x:Over limit !:over margin

Operator: Jack

Above 1GHz:

Operation Mode: 802.11b Lowest Test Date : July 22, 2015
 Test Voltage: AC 120V/60Hz Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	66.03	46.05	74	54	-7.97	-7.95
7236	V	65.37	45.15	74	54	-8.63	-8.85
9648	V	64.57	44.35	74	54	-9.43	-9.65
12060	V	63.59	43.75	74	54	-10.41	-10.25
14472	V	62.53	42.42	74	54	-11.47	-11.58
16884	V	61.57	41.87	74	54	-12.43	-12.13
4824	H	65.44	45.22	74	54	-8.56	-8.78
7236	H	64.72	44.24	74	54	-9.28	-9.76
9648	H	63.28	43.58	74	54	-10.72	-10.42
12060	H	62.49	42.91	74	54	-11.51	-11.09
14472	H	61.24	41.67	74	54	-12.76	-12.33
16884	H	60.38	40.32	74	54	-13.62	-13.68

Operation Mode: 802.11b Middle Test Date : July 22, 2015
 Test Voltage: AC 120V/60Hz Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	66.09	45.31	74	54	-7.91	-8.69
7236	V	65.21	43.68	74	54	-8.79	-10.32
9648	V	64.95	42.7	74	54	-9.05	-11.3
12060	V	62.19	41.52	74	54	-11.81	-12.48
14472	V	59.28	40.53	74	54	-14.72	-13.47
16884	V	58.08	38.06	74	54	-15.92	-15.94
4824	H	64.93	45.74	74	54	-9.07	-8.26
7236	H	63.17	43.14	74	54	-10.83	-10.86
9648	H	61.34	42.86	74	54	-12.66	-11.14
12060	H	60.02	41.23	74	54	-13.98	-12.77
14472	H	59.28	39.65	74	54	-14.72	-14.35
16884	H	58.65	38.95	74	54	-15.35	-15.05

Operation Mode: 802.11b Highest

Test Date : July 22, 2015

Test Voltage: AC 120V/60Hz

Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	65.39	46.66	74	54	-8.61	-7.34
7236	V	64.21	45.28	74	54	-9.79	-8.72
9648	V	63.57	44.67	74	54	-10.43	-9.33
12060	V	62.58	43.52	74	54	-11.42	-10.48
14472	V	61.47	42.74	74	54	-12.53	-11.26
16884	V	60.38	41.37	74	54	-13.62	-12.63
4824	H	65.2	46.13	74	54	-8.8	-7.87
7236	H	64.58	45.21	74	54	-9.42	-8.79
9648	H	63.87	44.28	74	54	-10.13	-9.72
12060	H	62.95	43.95	74	54	-11.05	-10.05
14472	H	61.43	42.86	74	54	-12.57	-11.14
16884	H	60.83	41.49	74	54	-13.17	-12.51

Operation Mode: 802.11b Lowest

Test Date : July 22, 2015

Test Voltage: AC 240V/50Hz

Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	65.09	46.88	74	54	-8.91	-7.12
7236	V	64.71	45.14	74	54	-9.29	-8.86
9648	V	63.28	44.37	74	54	-10.72	-9.63
12060	V	62.57	43.25	74	54	-11.43	-10.75
14472	V	61.54	42.57	74	54	-12.46	-11.43
16884	V	60.39	41.87	74	54	-13.61	-12.13
4824	H	66.98	45.29	74	54	-7.02	-8.71
7236	H	65.27	44.54	74	54	-8.73	-9.46
9648	H	64.39	43.28	74	54	-9.61	-10.72
12060	H	63.57	42.67	74	54	-10.43	-11.33
14472	H	62.48	41.57	74	54	-11.52	-12.43
16884	H	61.37	40.29	74	54	-12.63	-13.71

Operation Mode: 802.11b Middle
Test Voltage: AC 240V/50Hz

Test Date : July 22, 2015
Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	64.19	45.12	74	54	-9.81	-8.88
7236	V	63.25	44.57	74	54	-10.75	-9.43
9648	V	62.45	43.65	74	54	-11.55	-10.35
12060	V	61.58	42.85	74	54	-12.42	-11.15
14472	V	60.39	41.96	74	54	-13.61	-12.04
16884	V	59.48	40.87	74	54	-14.52	-13.13
4824	H	65.24	45.06	74	54	-8.76	-8.94
7236	H	64.27	44.64	74	54	-9.73	-9.36
9648	H	63.95	43.71	74	54	-10.05	-10.29
12060	H	62.53	42.92	74	54	-11.47	-11.08
14472	H	61.49	41.65	74	54	-12.51	-12.35
16884	H	60.89	40.82	74	54	-13.11	-13.18

Operation Mode: 802.11b Highest
Test Voltage: AC 240V/50Hz

Test Date : July 22, 2015
Test by: Andy

Freq. (MHz)	Ant. Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
4824	V	64.26	45.81	74	54	-9.74	-8.19
7236	V	63.84	44.54	74	54	-10.16	-9.46
9648	V	62.36	43.83	74	54	-11.64	-10.17
12060	V	61.94	42.91	74	54	-12.06	-11.09
14472	V	60.59	41.37	74	54	-13.41	-12.63
16884	V	59.85	40.65	74	54	-14.15	-13.35
4824	H	65.36	46.77	74	54	-8.64	-7.23
7236	H	64.25	45.24	74	54	-9.75	-8.76
9648	H	63.46	44.34	74	54	-10.54	-9.66
12060	H	62.19	43.67	74	54	-11.81	-10.33
14472	H	61.93	42.58	74	54	-12.07	-11.42
16884	H	60.79	41.37	74	54	-13.21	-12.63

All emissions not reported were more than 20dB below the specified limit or in the noise floor.

No others harmonics emissions are higher than 20 dB below the limits of 47 CFR Part 15.247.

- Note:**
- (1) All Readings are Peak Value and AV.
 - (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 - (3) Data of measurement within this frequency range shown “ – ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

APPENDIX I (PHOTOS OF EUT)







