

FCC PART 15.247

TEST REPORT

For

Victory Concept Industries Ltd

4/F., CAC Tower, 165 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong

FCC ID: OJ7APS-JESS001

Report Type: Class II Permissive Change	Product Type: AQ SmartSpeaker Wireless Speaker
Test Engineer: Tiger Ye <i>Tiger Ye</i>	
Report Number: RSZ121120003-00A1	
Report Date: 2012-11-28	
Reviewed By: RF Leader <i>Alvin Huang</i>	
Prepared By: Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn	

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* This report may contain data that are not covered by the NVLAP accreditation and shall be marked with an asterisk "★"

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Victory Concept Industries Ltd.* 's product, model number: *APMS001 (FCC ID: OJ7APS-JESS001)* or the "EUT" in this report was a *AQ SmartSpeaker Wireless Speaker*, which was measured approximately: 24 cm (L) x 15 cm (W) x 11.5 cm (H), rated input voltage: DC 12V form adapter.

Adapter information: switching power supply

Model: CPS036A120300

Input: AC 100-240V, 50/60Hz, 1.0A

Output: DC 12V, 3.0A

**All measurement and test data in this report was gathered from production sample serial number: 1211109 (Assigned by BACL, Shenzhen). The EUT supplied by applicant was received on 2012-11-20.*

Objective

This report is prepared on behalf of *Victory Concept Industries Ltd* in accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Note: This is a class II permissive change basing on the original report RSZ111013003-00 with ID: OJ7APS-JESS001, the changes between the original device and the current one as below:

1. Changing the model number, the original is AQWS001, and the new is APMS001
2. Changing the product name, the original is AQ Smart Speaker with Apple AirPlay, and the new is AQ SmartSpeaker Wireless Speaker
3. Changing the appearance of color (the back cabinet changes to black color).
4. Changing the place of antenna
5. Removed the lithium battery inside (no lithium battery and the IC for charging inside the product but operated by AC-DC adaptor only).

For the changes above, we just performed the AC Line Conducted Emissions and radiated emission, all the other test data can be referred to original report RSZ111013003-00 with ID: OJ7APS-JESS001 which was granted on 2011-11-30.

Related Submittal(s)/Grant(s)

The related grant had been submitted with FCC ID: OJ7APS-JESS001 on 2011-11-30

Test Methodology

All measurements contained in this report were conducted with 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.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

The uncertainty of any RF tests which use conducted method measurement is ± 0.96 dB, the uncertainty of any radiation on emissions measurement is ± 4.0 dB

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For 802.11b and 802.11g mode, 11 channels are provided to testing.

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

EUT for 802.11b 802.11g mode were tested with Channel 1/6/11

When EUT working normally, 802.11b & 802.11 g mode can transmit at antenna 0(Chain 0) and antenna 1 (Chain 1) individually. And the two RF ports of the circuit are the same; we select antenna 0 port to test.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations.

EUT Exercise Software

Test software provided by client

The test was performed under:

802.11b: Data rate: 1 Mbps.

802.11g: Data rate: 6 Mbps.

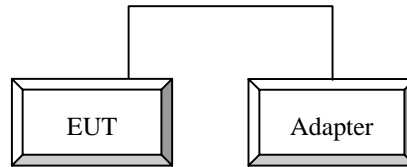
Equipment Modifications

No modification was made to the unit tested.

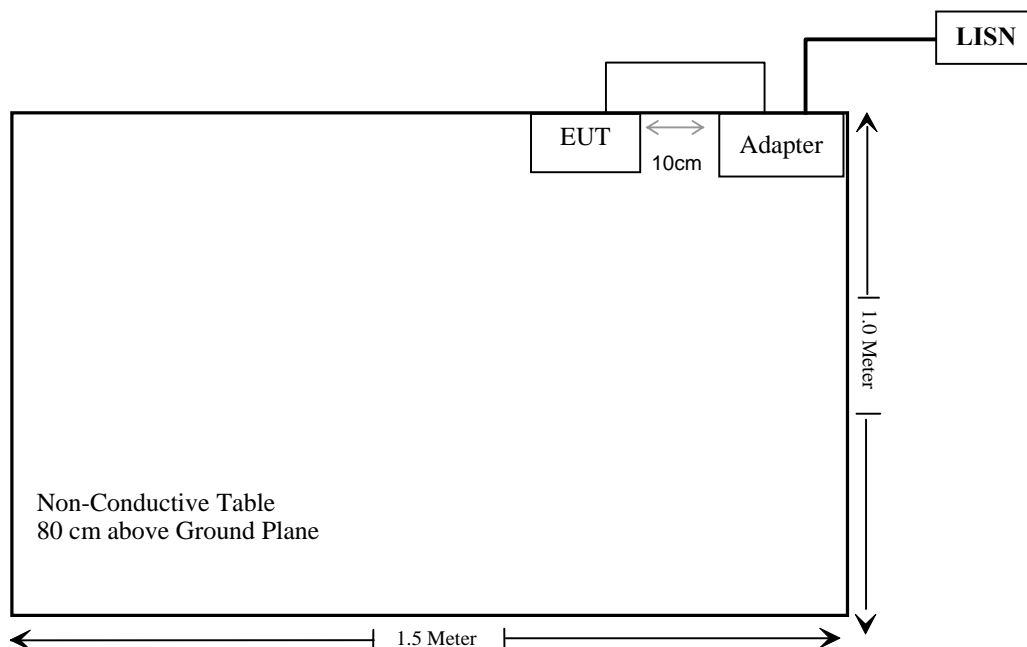
External I/O Cable

Cable Description	Length (m)	From Port	To
Unshielding Detachable DC Cable	1.2	EUT	Adapter

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §2.1091	Maximum Permissible exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.247(d)	Spurious Emissions at Antenna Port	Compliance*
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance*
§15.247(b)	Maximum Peak Output Power	Compliance*
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance*
§15.247(e)	Power Spectral Density	Compliance*

Compliance*: Please refer to original report RSZ111013003-00 with FCC ID: OJ7APS-JESS001 which was granted on 2011-11-30.

FCC §15.247 (i) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to FCC 15.247(i) and subpart §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz;

* = Plane-wave equivalent power density;

MPE Calculation

Predication of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where: S = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm²)	MPE Limit (mW/cm²)
		(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2462	0	1	14.90	30.90	20	0.006	1.0
802.11g	2462	0	1	12.72	18.71	20	0.004	1.0

Result: The device meets FCC MPE limit at 20 cm distance.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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 provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

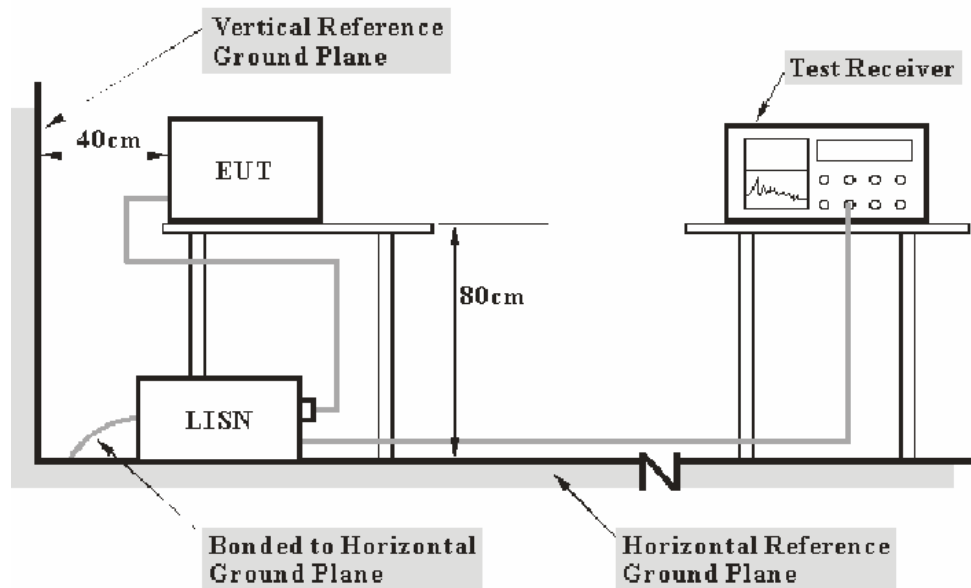
Antenna Connector Construction

The EUT used two PCB antennas (however, only one antenna will be used when transmitting data), connected into main board with I-PEX port, which in accordance to section 15.203, the maximum gain is 0 dBi, please refer to the internal photos.

Result: Compliance.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS**Applicable Standard**

FCC§15.207

EUT Setup

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

The setup of EUT is according with per ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	100176	2011-11-24	2012-11-23
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2012-08-22	2013-08-21
Rohde & Schwarz	Attenuator	ESH3Z2	DE25985	2012-07-08	2013-07-07
BACL	CE Test software	BACL-CE	V1.0	-	-

* **Statement of Traceability:** Bay Area Compliance Laboratory Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Institute of Metrology (NIM)

Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN/ISN VDF (Voltage Division Factor), Cable Loss and Pulse Limiter Attenuation. The basic equation is as follows:

$$\text{Correction Factor} = \text{LISN VDF} + \text{Cable Loss} + \text{Pulse Limiter Attenuation}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, with the worst margin reading of:

14.98 dB at 0.155 MHz in the **Neutral** conducted mode

Test Data

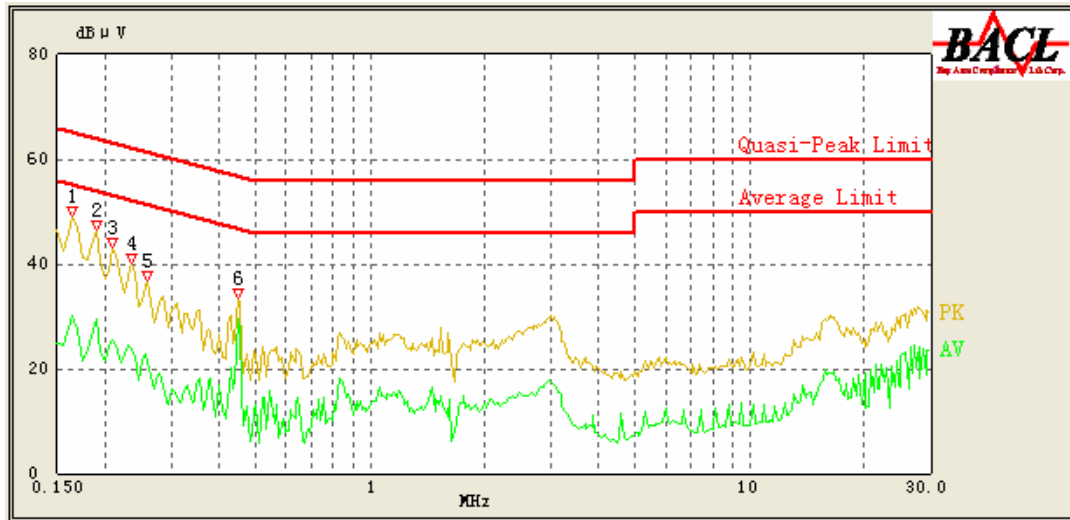
Environmental Conditions

Temperature:	25 °C
Relative Humidity:	48 %
ATM Pressure:	100.0 kPa

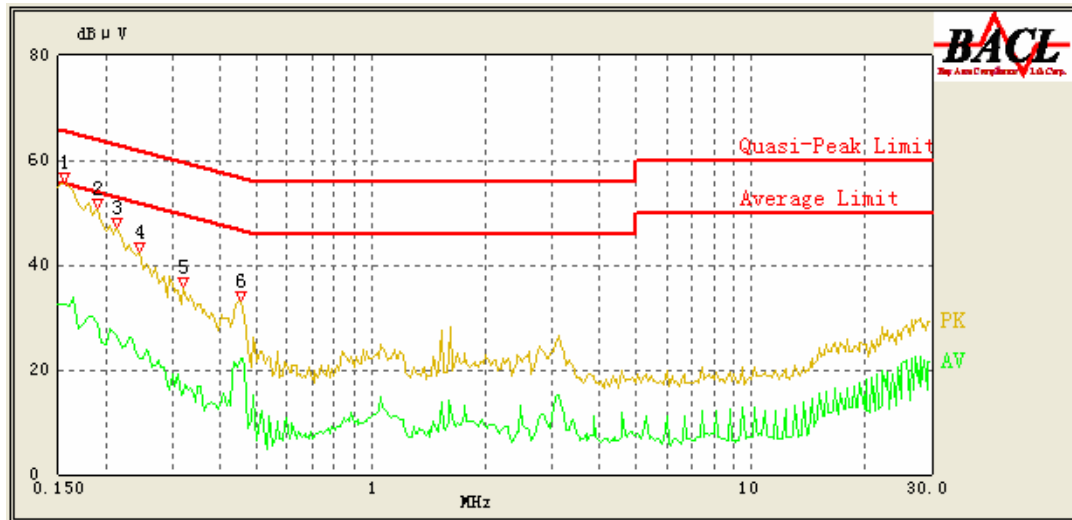
The testing was performed by Tiger Ye on 2012-11-21.

Test Mode: Transmitting

120 V, 60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.165	48.13	10.27	65.57	17.44	QP
0.450	29.48	10.26	47.43	17.95	Ave.
0.190	45.20	10.27	64.86	19.66	QP
0.210	40.49	10.27	64.29	23.80	QP
0.190	29.61	10.27	54.86	25.25	Ave.
0.165	30.11	10.27	55.57	25.46	Ave.
0.450	31.95	10.26	57.43	25.48	QP
0.235	35.97	10.26	63.57	27.60	QP
0.260	34.53	10.26	62.86	28.33	QP
0.210	25.44	10.27	54.29	28.85	Ave.
0.235	23.84	10.26	53.57	29.73	Ave.
0.260	21.39	10.26	52.86	31.47	Ave.

120V, 60 Hz, Neutral:

Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.155	50.88	10.24	65.86	14.98	QP
0.190	46.29	10.24	64.86	18.57	QP
0.215	41.55	10.24	64.14	22.59	QP
0.155	32.65	10.24	55.86	23.21	Ave.
0.455	22.25	10.25	47.29	25.04	Ave.
0.190	28.95	10.24	54.86	25.91	Ave.
0.245	37.16	10.25	63.29	26.13	QP
0.215	26.63	10.24	54.14	27.51	Ave.
0.455	29.29	10.25	57.29	28.00	QP
0.245	22.04	10.25	53.29	31.25	Ave.
0.320	28.00	10.25	61.14	33.14	QP
0.320	15.58	10.25	51.14	35.56	Ave.

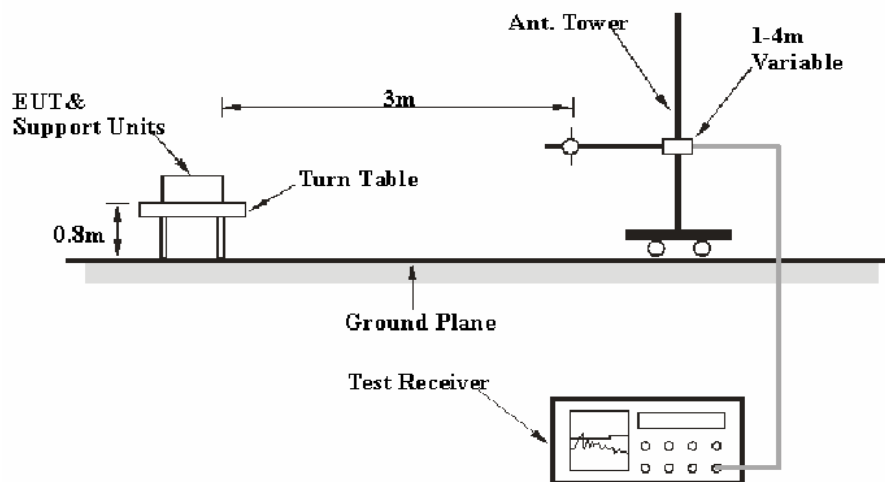
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

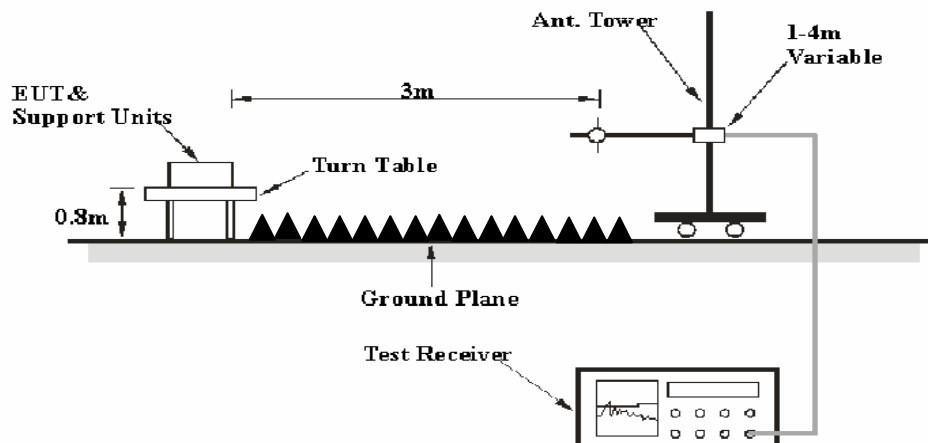
FCC §15.247 (d); §15.209; §15.205;

EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30MHz – 1000 MHz	100 kHz	300 kHz	120kHz	QP
1000 MHz – 25 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01057	2012-11-24	2013-11-23
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2012-08-08	2013-08-07
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2012-11-27
Mini-Circuits	Amplifier	ZVA-213+	N/A	2012-11-24	2013-11-23
Sunol Sciences	Horn Antenna	DRH-118	A052304	2011-12-01	2012-11-30
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2012-11-24	2013-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratory Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Institute of Metrology (NIM)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247, with the worst margin reading of:

8.91 dB at 422.6MHz in the Vertical polarization

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Tiger Ye on 2012-11-26.

Test Mode: Transmitting

30MHz ~25GHz:

802.11b Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBuV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBuV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412.0	95.05	PK	63	1.1	H	6.13	101.18	/	/
2412.0	92.83	Ave.	63	1.1	H	6.13	98.96	/	/
2412.0	94.33	PK	225	1.2	V	6.13	100.46	/	/
2412.0	88.34	Ave.	225	1.2	V	6.13	94.47	/	/
447.6	46.40	QP	133	1.2	V	-11.2	35.20	46	10.80
422.6	46.40	QP	125	1.1	V	-11.3	35.10	46	10.90
4824.0	21.35	Ave.	16	1.1	V	12.4	33.75	54	20.25
7236.0	16.24	Ave.	85	1.3	H	16.62	32.86	54	21.14
4824.0	39.88	PK	16	1.1	V	12.4	52.28	74	21.72
7236.0	34.64	PK	85	1.3	H	16.62	51.26	74	22.74
2496.2	17.51	Ave.	41	1.2	V	6.81	24.32	54	29.68
2332.1	18.47	Ave.	33	1.3	V	5.48	23.95	54	30.05
2383.5	17.04	Ave.	125	1.3	H	6.13	23.17	54	30.83
2496.2	35.84	PK	41	1.2	V	6.81	42.65	74	31.35
2332.1	36.55	PK	33	1.3	V	5.48	42.03	74	31.97
2383.5	35.21	PK	125	1.3	H	6.13	41.34	74	32.66
Middle Channel (2437 MHz)									
2437.0	95.47	PK	107	1.2	H	6.13	101.60	/	/
2437.0	79.41	Ave.	107	1.2	H	6.13	85.54	/	/
2437.0	91.82	PK	92	1.3	V	6.13	97.95	/	/
2437.0	75.63	Ave.	92	1.3	V	6.13	81.76	/	/
447.6	47.93	QP	336	1.2	V	-11.2	36.73	46	9.27
422.6	46.42	QP	90	1.1	V	-11.3	35.12	46	10.88
4874.0	24.17	Ave.	122	1.3	H	12.46	36.63	54	17.37
7311.0	17.48	Ave.	89	1.2	H	16.49	33.97	54	20.03
4874.0	40.61	PK	122	1.3	H	12.46	53.07	74	20.93
7311.0	34.11	PK	89	1.2	H	16.49	50.60	74	23.40
2493.7	17.28	Ave.	140	1.2	V	6.81	24.09	54	29.91
2332.8	18.03	Ave.	124	1.3	V	5.48	23.51	54	30.49
2385.5	16.68	Ave.	282	1.3	H	6.13	22.81	54	31.19
2493.7	35.56	PK	140	1.2	V	6.81	42.37	74	31.63
2332.8	35.99	PK	124	1.3	V	5.48	41.47	74	32.53
2385.5	35.01	PK	282	1.3	H	6.13	41.14	74	32.86

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBuV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBuV/m)	Margin (dB)
High Channel (2462 MHz)									
2462.0	96.38	PK	247	1.3	H	7.21	103.59	/	/
2462.0	94.43	Ave.	247	1.3	H	7.21	101.64	/	/
2462.0	95.78	PK	95	1.1	V	6.81	102.59	/	/
2462.0	89.37	Ave.	95	1.1	V	6.81	96.18	/	/
422.6	48.25	QP	334	1.2	V	-11.3	36.95	46	9.05
447.6	47.62	QP	1	1.2	V	-11.2	36.42	46	9.58
4924.0	23.06	Ave.	151	1.2	H	12.5	35.56	54	18.44
7386.0	17.93	Ave.	29	1.1	H	15.91	33.84	54	20.16
4924.0	41.21	PK	151	1.2	H	12.5	53.71	74	20.29
7386.0	36.47	PK	29	1.1	H	15.91	52.38	74	21.62
2493.7	19.00	Ave.	152	1.2	V	6.81	25.81	54	28.19
2332.8	20.23	Ave.	220	1.3	V	5.48	25.71	54	28.29
2385.5	18.63	Ave.	342	1.3	H	6.13	24.76	54	29.24
2493.7	37.35	PK	152	1.2	V	6.81	44.16	74	29.84
2332.8	38.16	PK	220	1.3	V	5.48	43.64	74	30.36
2385.5	36.85	PK	342	1.3	H	6.13	42.98	74	31.02

802.11g Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBuV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBuV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412.0	91.97	PK	77	1.1	H	6.13	98.10	/	/
2412.0	91.01	Ave.	77	1.1	H	6.13	97.14	/	/
2412.0	92.83	PK	221	1.2	V	6.13	98.96	/	/
2412.0	87.29	Ave.	221	1.2	V	6.13	93.42	/	/
447.6	47.24	QP	154	1.2	V	-11.2	36.04	46	9.96
422.6	45.26	QP	176	2.0	V	-11.3	33.96	46	12.04
4824.0	19.65	Ave.	146	1.1	V	12.4	32.05	54	21.95
7236.0	14.64	Ave.	64	1.3	H	16.62	31.26	54	22.74
4824.0	38.78	PK	146	1.1	V	12.4	51.18	74	22.82
7236.0	32.68	PK	64	1.3	H	16.62	49.30	74	24.70
2332.1	17.36	Ave.	316	1.3	V	5.48	22.84	54	31.16
2496.2	15.71	Ave.	46	1.2	V	6.81	22.52	54	31.48
2383.5	15.85	Ave.	184	1.3	H	6.13	21.98	54	32.02
2496.2	34.39	PK	46	1.2	V	6.81	41.20	74	32.80
2332.1	34.86	PK	316	1.3	V	5.48	40.34	74	33.66
2383.5	33.34	PK	184	1.3	H	6.13	39.47	74	34.53
Middle Channel (2437 MHz)									
2437.0	92.82	PK	194	1.2	H	6.13	98.95	/	/
2437.0	78.34	Ave.	194	1.2	H	6.13	84.47	/	/
2437.0	91.00	PK	226	1.3	V	6.13	97.13	/	/
2437.0	74.92	Ave.	226	1.3	V	6.13	81.05	/	/
447.6	46.88	QP	264	1.2	V	-11.2	35.68	46	10.32
422.6	45.28	QP	343	1.5	V	-11.3	33.98	46	12.02
4874.0	23.31	Ave.	273	1.3	H	12.46	35.77	54	18.23
7311.0	16.88	Ave.	125	1.2	H	16.49	33.37	54	20.63
4874.0	39.97	PK	273	1.3	H	12.46	52.43	74	21.57
7311.0	33.87	PK	125	1.2	H	16.49	50.36	74	23.64
2493.7	16.75	Ave.	344	1.2	V	6.81	23.56	54	30.44
2332.8	16.89	Ave.	212	1.3	V	5.48	22.37	54	31.63
2385.5	15.80	Ave.	13	1.3	H	6.13	21.93	54	32.07
2493.7	34.97	PK	344	1.2	V	6.81	41.78	74	32.22
2385.5	34.42	PK	13	1.3	H	6.13	40.55	74	33.45
2332.8	35.06	PK	212	1.3	V	5.48	40.54	74	33.46

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBuV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBuV/m)	Margin (dB)
High Channel (2462 MHz)									
2462.0	92.00	PK	188	1.3	H	7.21	99.21	/	/
2462.0	91.35	Ave.	188	1.3	H	7.21	98.56	/	/
2462.0	92.97	PK	309	1.1	V	6.81	99.78	/	/
2462.0	89.79	Ave.	309	1.1	V	6.81	96.60	/	/
422.6	48.39	QP	174	1.9	V	-11.3	37.09	46	8.91
447.6	47.87	QP	260	1.2	V	-11.2	36.67	46	9.33
4924.0	23.51	Ave.	245	1.2	H	12.5	36.01	54	17.99
4924.0	41.54	PK	245	1.2	H	12.5	54.04	74	19.96
7386.0	17.87	Ave.	165	1.1	H	15.91	33.78	54	20.22
7386.0	37.06	PK	165	1.1	H	15.91	52.97	74	21.03
2493.7	19.65	Ave.	16	1.2	V	6.81	26.46	54	27.54
2332.8	20.50	Ave.	140	1.3	V	5.48	25.98	54	28.02
2385.5	18.97	Ave.	259	1.3	H	6.13	25.10	54	28.90
2493.7	37.68	PK	16	1.2	V	6.81	44.49	74	29.51
2332.8	38.50	PK	140	1.3	V	5.48	43.98	74	30.02
2385.5	37.56	PK	259	1.3	H	6.13	43.69	74	30.31

***** END OF REPORT *****