Lab Code: 200707-0

FCC PART 15 CLASS B

TEST REPORT

For

ITALCOM GROUP

1728 Coral Way, Coral Gables, Miami, Florida, United States

FCC ID: YPVITALCOMGIOX2

Report Type:	Product Type:
Original Report	Mobile Phone

Test Engineer:	Brown Lu
Report Number:	RSZ120604002-00A
Report Date:	2012-07-23
Reviewed By:	Sula Huang RF Engineer
Test Laboratory:	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

TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *ITALCOM GROUP*'s product, model number: *Gio+x2 (FCC ID: YPVITALCOMGIOX2)* or the "EUT" in this report was a *Mobile Phone*, which was measured approximately: 10.7 cm (L) x 6.1 cm (W) x 1.2 cm (H), rated input voltage: DC 3.7 V Li-ion battery or DC 5 V charging from adapter. The highest operating frequency is 104 MHz.

Adapter information
MODELO: gio+x2
ENTRADA: 100-240 V_{CA} 50/60 Hz 0.15A
SALIDA: $5V_{CC}$ 500 mA

** All measurement and test data in this report was gathered from production sample serial number: 1206004 (Assigned by BACL, Shenzhen). The EUT was received on 2012-06-04.*

Objective

This test report is prepared on behalf of *ITALCOM GROUP* in accordance with Part 2-Subpart J, Part 15-Subparts A and B of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine the compliance of the EUT with FCC Part 15 B.

Related Submittal(s)/Grant(s)

Part 22H/24E PCE and Part 15.247 DSS submissions with FCC ID: YPVITALCOMGIOX2

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

The system was configured for testing in a manufacturer testing fashion.

EUT Exercise Software

“winthrax” exercise software was used for downloading test mode.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

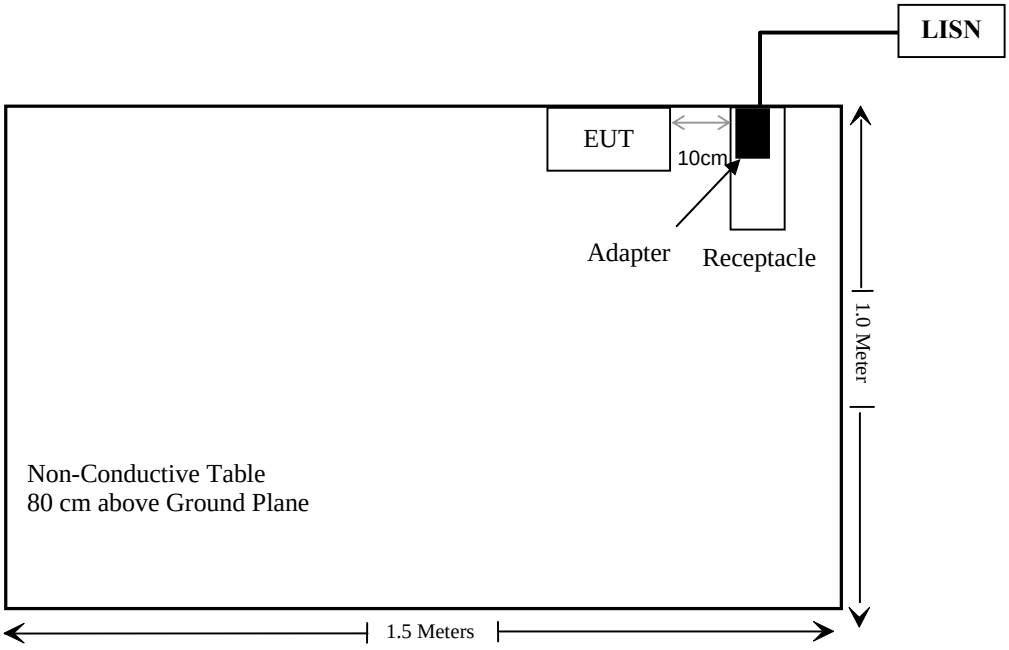
Manufacturer	Description	Model	Serial Number
DELL	PC	VOSTRO 220S	127BP2X
DELL	Keyboard	L100	CNORH656658907BL05DC
DELL	Mouse	MOC5UO	G1900NKD
DELL	LCD Monitor	E178WFPC	CN-OWY564-64180-7C4-2SQH
SAST	Modem	AEM-2100	0293

External I/O Cable

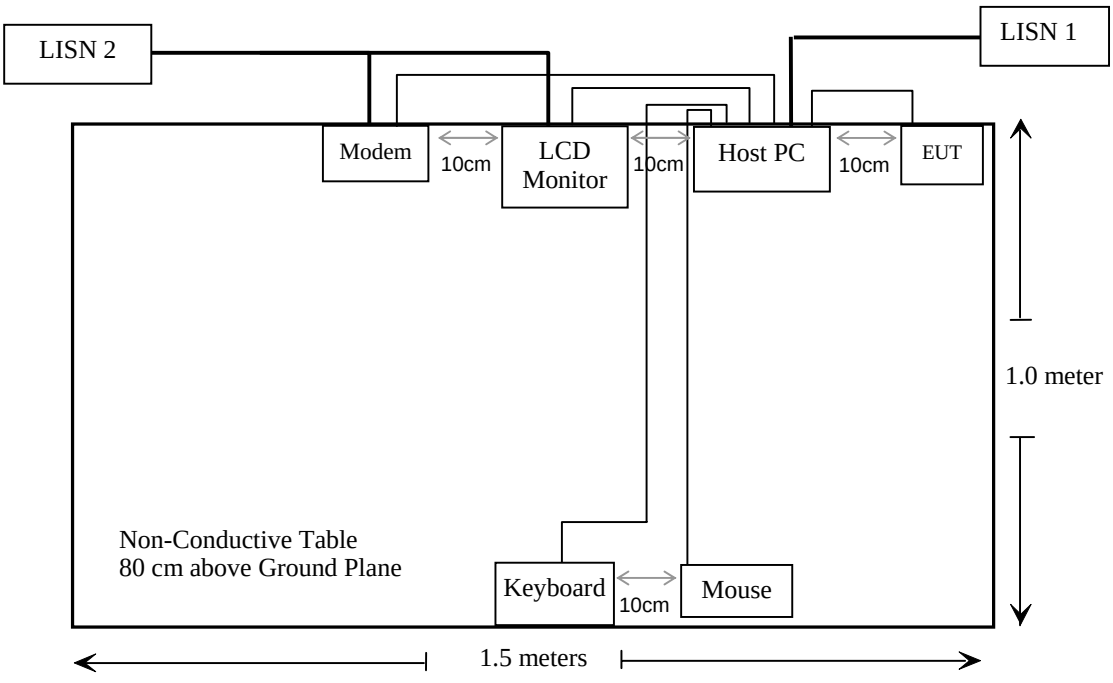
Cable Description	Length (m)	From/Port	To
Shielded Detachable USB Cable	1.5	Host PC	Mouse
Shielded Detachable Serial Cable	1.5	Host PC	Modem
Shielded Detachable K/B Cable	1.5	Host PC	Keyboard
Shielded Detachable VGA Cable	1.8	Host PC	LCD Monitor
Unshielded Detachable USB Cable	1.0	EUT	Host PC

Block Diagram of Test Setup

Charging Mode



Downloading mode:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliance
§15.109	Radiated Spurious Emissions	Compliance

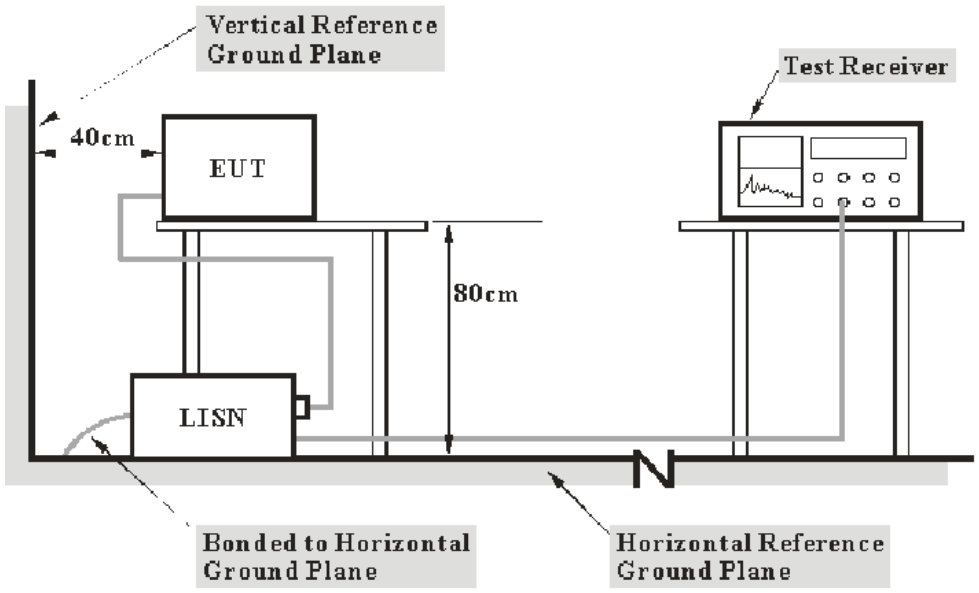
FCC §15.107 – AC LINE CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on CISPR 16-4-2, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is 2.4 dB.(k=2, 95% level of confidence)

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 measurement procedure is according with ANSI C63.4-2009. The related limits were specified in FCC Part 15.107 Class B.

For charging mode, the adapter was connected to a 120 VAC/60 Hz power source.

For downloading mode, the host PC 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 adaptor or host PC was conncected to the outlet of the first LISN, and the other relevant equipments were connected to the second 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	2011-11-17	2012-11-16
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12208	N/A	N/A
Rohde & Schwarz	Pulse limiter	ESH3Z2	DE25985	2011-07-08	2012-07-07
BACL	CE Test software	BACL-CE	V1.0	N/A	N/A

*** Statement of Traceability:** Bay Area Compliance Laboratory Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.107, with the worst margin reading of:

8.99 dB at **4.090 MHz** in the **Line** conducted mode for charging mode

Test Data

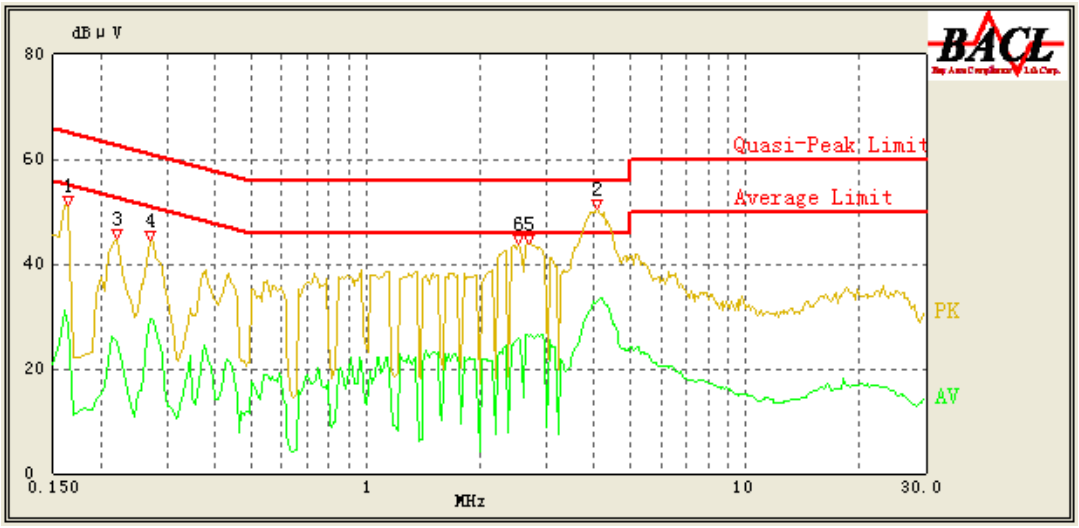
Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Brown Lu on 2012-06-25.

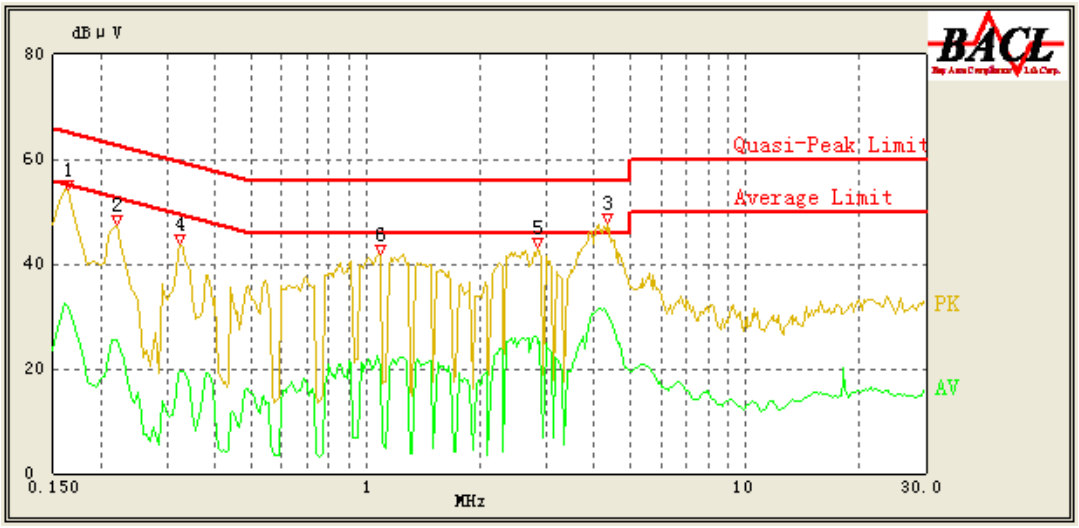
EUT Operation Mode: Charging

AC 120 V, 60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
4.090	47.01	9.97	56.00	8.99	QP
4.090	32.77	9.97	46.00	13.23	Ave.
0.165	48.61	9.67	65.57	16.96	QP
2.700	37.83	9.93	56.00	18.17	QP
2.540	37.57	9.92	56.00	18.43	QP
2.700	26.30	9.93	46.00	19.70	Ave.
2.535	25.77	9.92	46.00	20.23	Ave.
0.270	29.47	9.66	52.57	23.10	Ave.
0.270	38.81	9.66	62.57	23.76	QP
0.220	39.47	9.67	64.00	24.53	QP
0.165	28.52	9.67	55.57	27.05	Ave.
0.220	25.15	9.67	54.00	28.85	Ave.

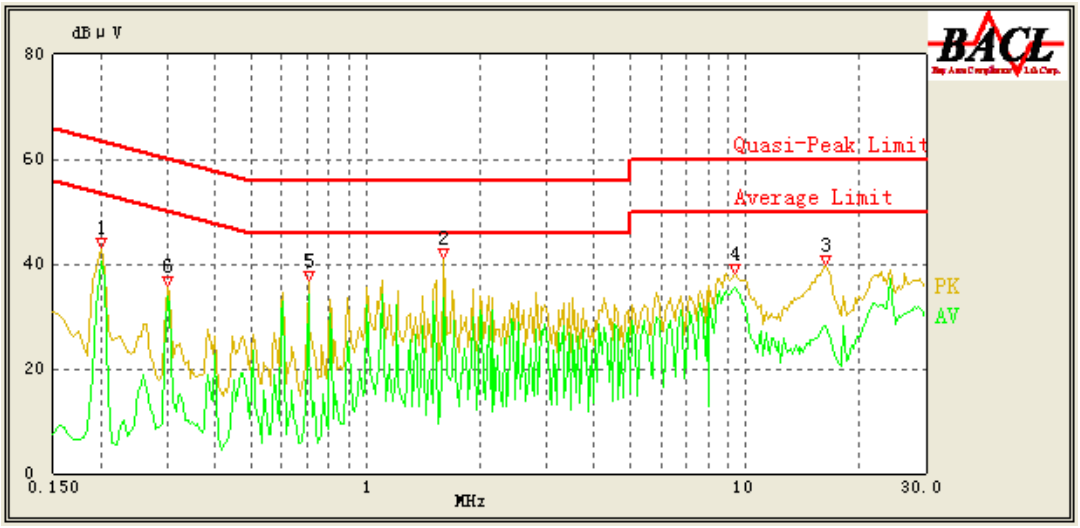
AC 120V, 60 Hz, Neutral:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
4.360	42.84	9.97	56.00	13.16	QP
4.355	30.54	9.97	46.00	15.46	Ave.
0.165	49.28	9.64	65.57	16.29	QP
2.845	36.37	9.93	56.00	19.63	QP
1.090	36.10	9.87	56.00	19.90	QP
2.845	24.96	9.93	46.00	21.04	Ave.
0.325	39.81	9.65	61.00	21.19	QP
0.220	41.68	9.64	64.00	22.32	QP
0.165	31.86	9.64	55.57	23.71	Ave.
1.080	21.36	9.87	46.00	24.64	Ave.
0.220	25.48	9.64	54.00	28.52	Ave.
0.325	19.36	9.65	51.00	31.64	Ave.

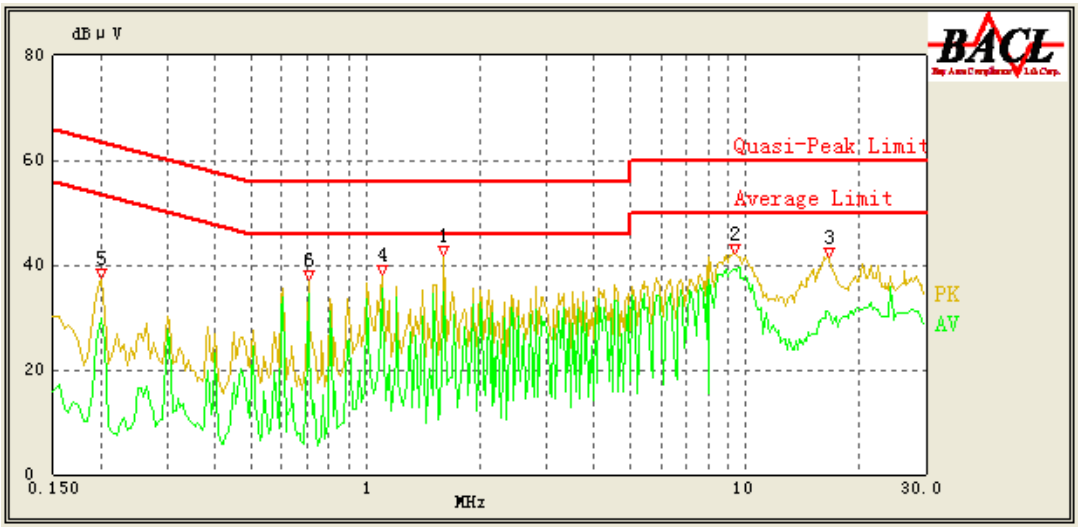
EUT Operation Mode: Downloading (data transmits with Computer)

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.705	34.18	9.76	46.00	11.82	Ave.
1.610	33.50	9.89	46.00	12.50	Ave.
0.200	40.35	9.67	54.57	14.22	Ave.
9.355	35.62	10.25	50.00	14.38	Ave.
0.300	33.89	9.66	51.71	17.82	Ave.
1.610	37.29	9.89	56.00	18.71	QP
0.705	35.25	9.76	56.00	20.75	QP
16.195	28.27	11.50	50.00	21.73	Ave.
0.200	41.19	9.67	64.57	23.38	QP
16.305	36.38	11.53	60.00	23.62	QP
9.355	35.90	10.25	60.00	24.10	QP
0.300	34.44	9.66	61.71	27.27	QP

AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
1.105	35.65	9.87	46.00	10.35	Ave.
1.610	35.00	9.89	46.00	11.00	Ave.
9.455	38.94	10.26	50.00	11.06	Ave.
0.705	34.51	9.76	46.00	11.49	Ave.
1.610	37.99	9.89	56.00	18.01	QP
16.595	30.72	11.50	50.00	19.28	Ave.
1.105	35.66	9.87	56.00	20.34	QP
9.355	39.48	10.25	60.00	20.52	QP
0.705	34.97	9.76	56.00	21.03	QP
16.590	36.21	11.49	60.00	23.79	QP
0.200	29.67	9.64	54.57	24.90	Ave.
0.200	35.01	9.64	64.57	29.56	QP

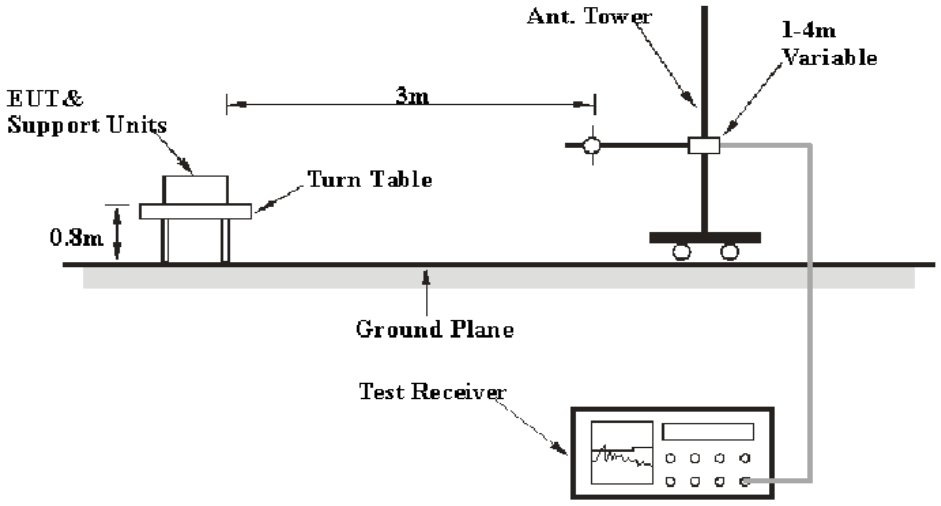
FCC §15.109 - RADIATED SPURIOUS EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR 16-4-2, the Treatment of Uncertainty in EMC Measurements, the estimation of the uncertainty of radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is 4.0 dB. (k=2, 95% level of confidence)

EUT Setup



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15.109 Class B limits.

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

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver Setup

The system was investigated from 30 MHz to 1000 MHz.

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

Frequency	***RB/W***	***VB/W***	***Detection***
30 MHz-1 GHz	100 kHz	300 kHz	Quasi-peak

Test Procedure

For the radiated emissions test, the host PC and relevant equipments were connected to AC floor outlet for downloading mode.

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

All the data was recorded in the Quasi-peak detection mode from 30 MHz to 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2011-11-24	2012-11-23
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2011-11-17	2012-11-16
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2012-11-27
R&S	Auto test Software	EMC32	V6.30	N/A	N/A

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

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:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

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

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the data in the following table, the EUT complied with the FCC §15.109 Class B, with the worst margin reading of:

1.9 dB at **335.999250 MHz** in the **Horizontal** polarization

Test Data

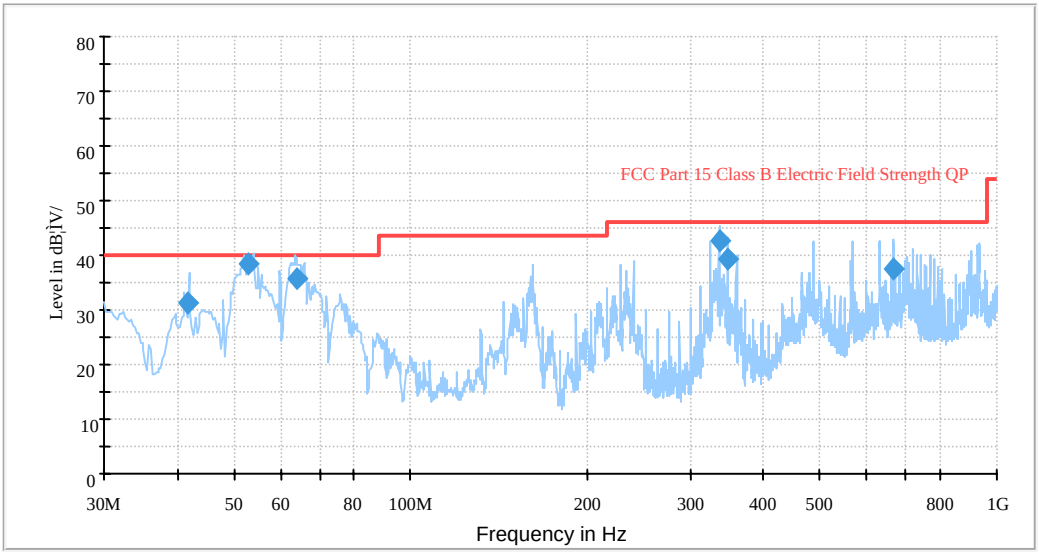
Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Brown Lu on 2012-06-25.

EUT Operation Mode: Downloading (data transmits with Computer)

Auto Test (FCC part 15 Class B)



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna		Turntable Position (degree)	Correction Factor (dB)	Limit (dBµV/m)	Margin (dB)
		Height (cm)	Polarity (H/V)				
335.999250	44.1	104.0	H	131.0	-11.4	46.0	1.9*
52.894750	38.0	104.0	V	129.0	-17.7	40.0	2.0*
63.901250	35.9	102.0	V	0.0	-18.5	40.0	4.1
348.003500	39.3	140.0	H	129.0	-11.1	46.0	6.7
666.403500	37.7	205.0	V	270.0	-4.2	46.0	8.3
41.595000	30.1	138.0	V	96.0	-13.1	40.0	9.9

**within measurement uncertainty*

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