Lab Code: 200707-0

FCC PART 15B, CLASS B

MEASUREMENT AND TEST REPORT

For

Bess Mobile HK, Limited

Unit 21 15/F Tuen Mun Central Square, 22 Hoi Wing Road,

Tuen Mun, New Territories, Hong Kong, China

FCC ID: ZE6M900T

Report Type:	**Product Type:**
Original Report	Mobile Phone

Test Engineer:	Brown Lu
Report Number:	RSZ120118001-00A
Report Date:	2012-02-27
Reviewed By:	Merry Zhao EMC 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

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Bess Mobile HK, Limited*'s product, model number: *M900T (FCC ID: ZE6M900T)* (the "EUT") in this report was a *Mobile Phone*, which was measured approximately: 20.0 cm (W) x 15.3 cm (D) x 1.4 cm (H), rated input voltage: DC 3.7V battery or DC 5.0V from adapter for charging. The highest frequency generated in the device is 104 MHz.

Adapter Information: Adaptador CA/CC
Modelo: M900T
Entrada: 100-240Vac. 50/60 Hz. 0.15A
Salida: 5.0V_{DC} 500mA

** All measurement and test data in this report was gathered from production sample serial number: 1201053 (Assigned by BACL, Shenzhen). The EUT was received on 2012-01-18.*

Objective

This report is prepared on behalf of *Bess Mobile HK, Limited* 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 EUT with FCC Part 15 Class B.

Related Submittal(s)/Grant(s)

FCC Part 15.247 DSS and 22H&24E PCE submissions with FCC ID: ZE6M900T.

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 typical mode which is provided by manufacture.

EUT Exercise Software

Winthraw.exercise software was provided by BACL

Equipment Modifications

No modification was made to the EUT tested.

Local Support Equipment List and Details

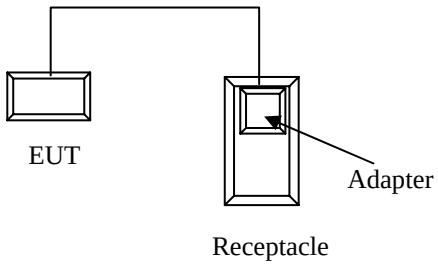
Manufacturer	Description	Model	Serial Number
DELL	Host PC	DCSCSF	127BP2X
IBM	LCD monitor	6737-66N	23-P3242
DELL	Mouse	MOC5UO	G1B0096D
DELL	Keyboard	L100	CNORH656658907BL04TY
SAST	Modem	AEM-2100	0293

External I/O Cable

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

Configuration of Test Setup

For charging mode:



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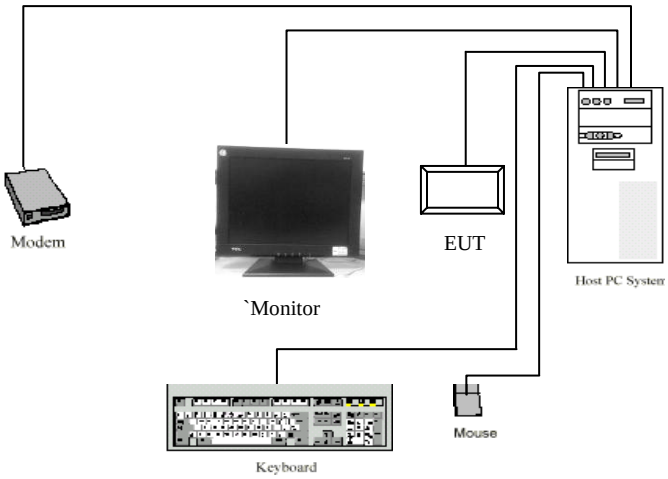
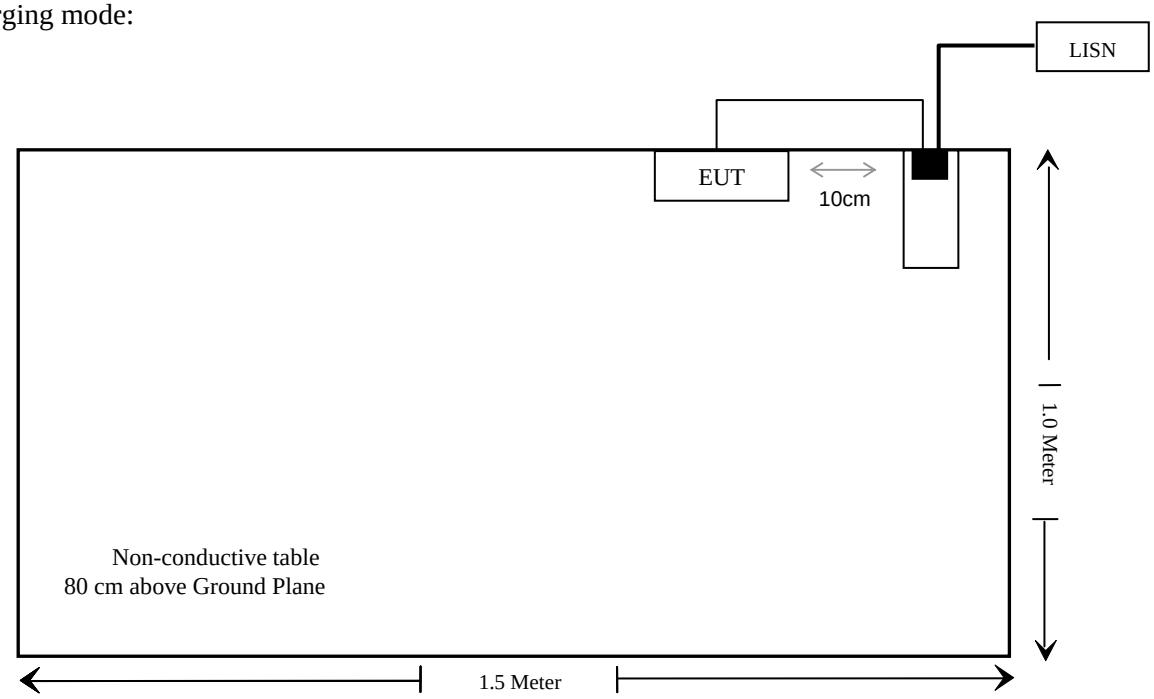


Block Diagram of Test Setup

For charging mode:



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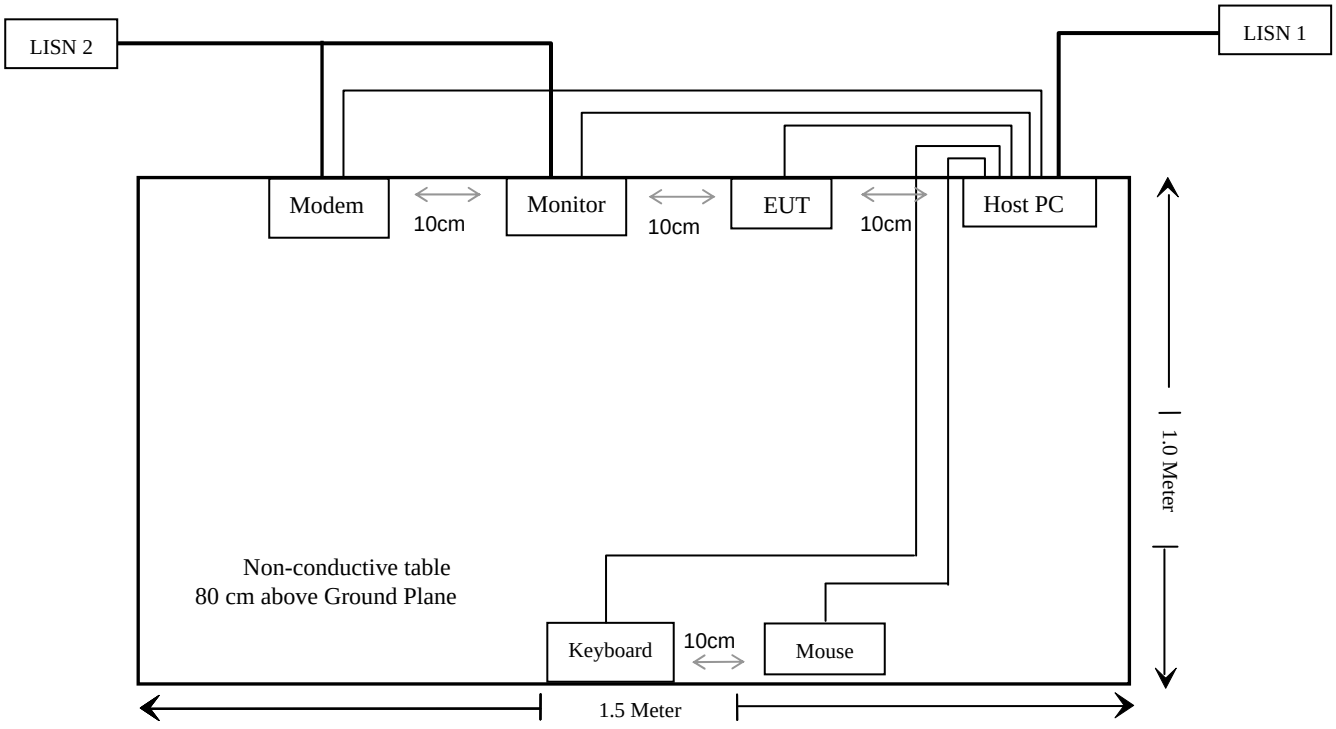


SUMMARY OF TEST RESULTS

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

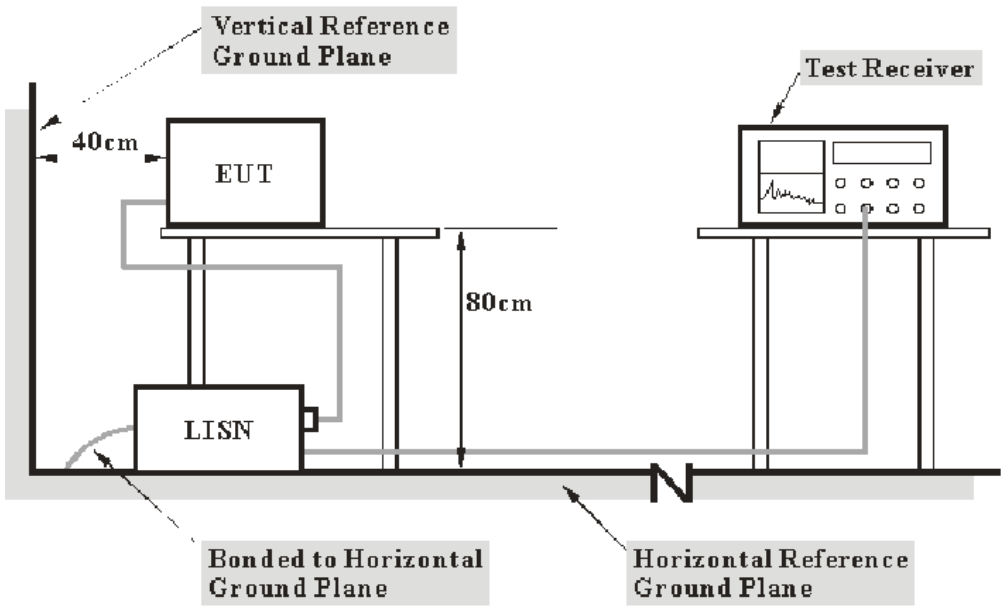
FCC §15.107 – AC LINE CONDUCTED EMISSIONS

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 setup of EUT is according with per ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.107 Class B limits.

The spacing between the peripherals was 10 cm.

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 Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	830245/006	2011-03-03	2012-03-02
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2011-03-09	2012-03-08
Rohde & Schwarz	Pulse limiter	ESH3Z2	DE25985	2011-07-08	2012-07-07

*** 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 Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN for charging mode; the host PC was connected to the outlet of the first LISN for downloading mode.

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 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:

10.72 dB at **9.265 MHz** in the **Neutral** conducted for downloading mode

Test Data

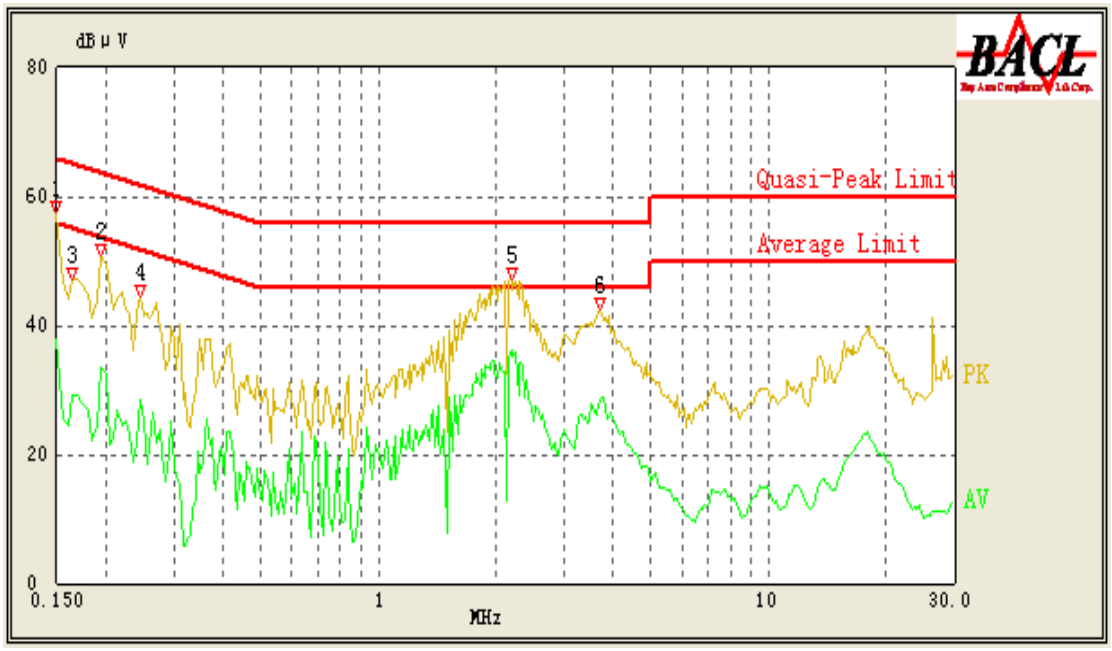
Environmental Conditions

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

The testing was performed by Brown Lu on 2012-01-29.

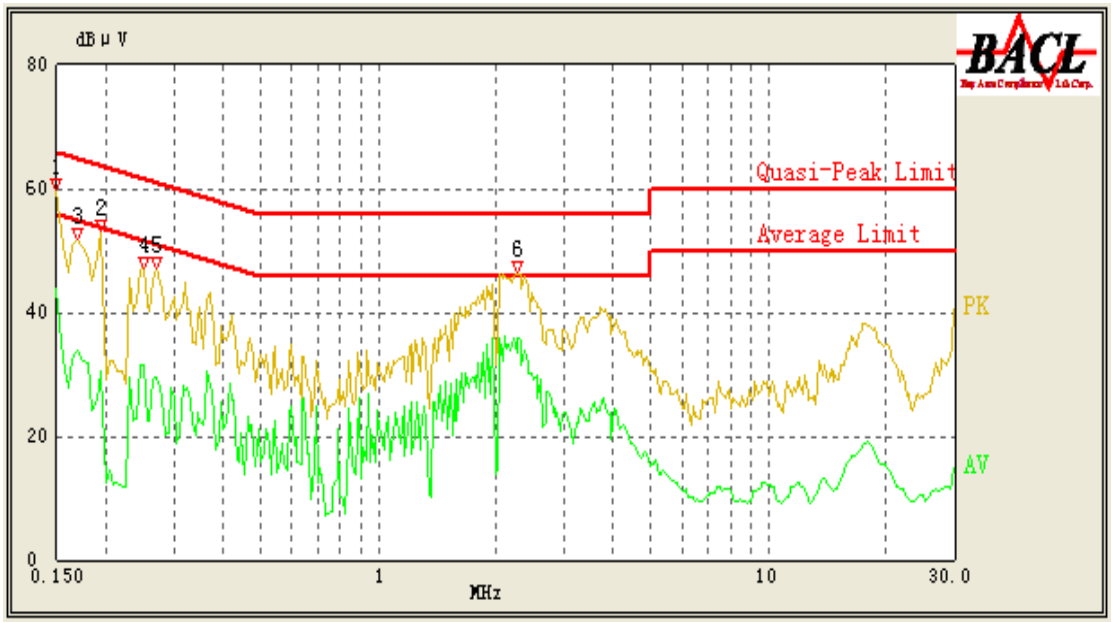
Test Mode: Charging

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/QP/Ave.)
0.150	50.03	10.10	66.00	15.97	QP
0.165	28.93	10.10	55.57	26.64	Ave.
0.245	40.37	10.10	63.29	22.92	QP
0.245	28.44	10.10	53.29	24.85	Ave.
2.205	42.05	10.10	56.00	13.95	QP
3.710	28.38	10.10	46.00	17.62	Ave.
2.205	36.12	10.10	46.00	9.88	Ave.
0.150	37.68	10.10	56.00	18.32	Ave.
0.195	46.2	10.10	64.71	18.51	QP
3.715	36.86	10.10	56.00	19.14	QP
0.195	33.48	10.10	54.71	21.23	Ave.
0.165	42.22	10.10	65.57	23.35	QP

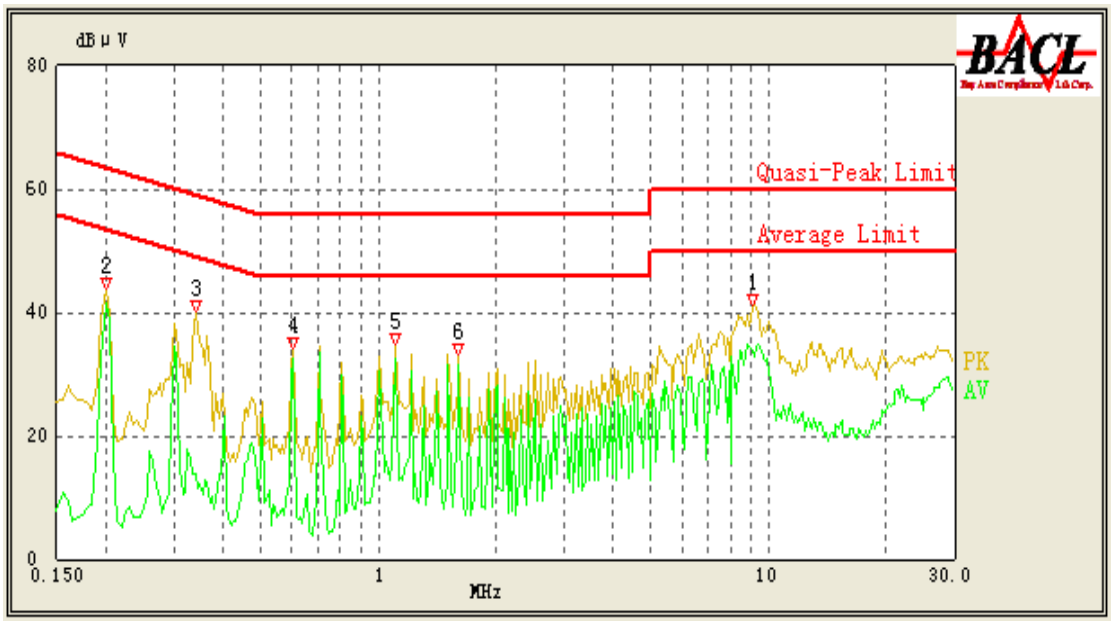
AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/QP/Ave.)
0.150	43.77	10.10	56.00	12.23	Ave.
2.265	33.3	10.10	46.00	12.70	Ave.
0.150	51.54	10.10	66.00	14.46	QP
0.195	46.77	10.10	64.71	17.94	QP
2.265	37.96	10.10	56.00	18.04	QP
0.250	31.36	10.10	53.14	21.78	Ave.
0.170	33.64	10.10	55.43	21.79	Ave.
0.170	42.41	10.10	65.43	23.02	QP
0.270	29.43	10.10	52.57	23.14	Ave.
0.195	30.28	10.10	54.71	24.43	Ave.
0.270	36.39	10.10	62.57	26.18	QP
0.250	36.50	10.10	63.14	26.64	QP

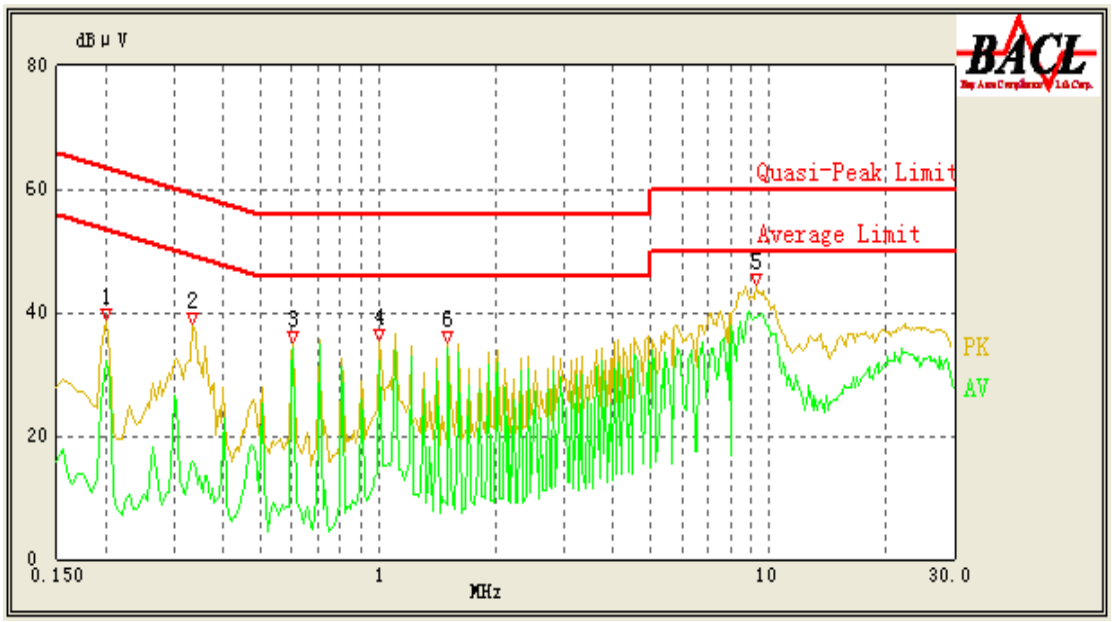
Test Mode: Downloading

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/QP/Ave.)
0.200	41.38	10.10	54.57	13.19	Ave.
0.605	32.56	10.10	46.00	13.44	Ave.
1.105	32.48	10.10	46.00	13.52	Ave.
1.610	31.55	10.10	46.00	14.45	Ave.
9.160	32.87	10.10	50.00	17.13	Ave.
0.200	41.96	10.10	64.57	22.61	QP
1.105	33.20	10.10	56.00	22.80	QP
9.155	36.64	10.10	60.00	23.36	QP
0.605	32.62	10.10	56.00	23.38	QP
1.610	32.31	10.10	56.00	23.69	QP
0.340	26.68	10.10	60.57	33.89	QP
0.340	13.70	10.10	50.57	36.87	Ave.

AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/QP/Ave.)
9.265	39.28	10.10	50.00	10.72	Ave.
1.510	34.30	10.10	46.00	11.70	Ave.
0.605	34.13	10.10	46.00	11.87	Ave.
1.005	32.27	10.10	46.00	13.73	Ave.
9.260	40.78	10.10	60.00	19.22	QP
0.605	35.11	10.10	56.00	20.89	QP
1.510	35.03	10.10	56.00	20.97	QP
1.005	33.74	10.10	56.00	22.26	QP
0.200	32.23	10.10	54.57	22.34	Ave.
0.200	35.15	10.10	64.57	29.42	QP
0.335	26.86	10.10	60.71	33.85	QP
0.335	15.81	10.10	50.71	34.90	Ave.

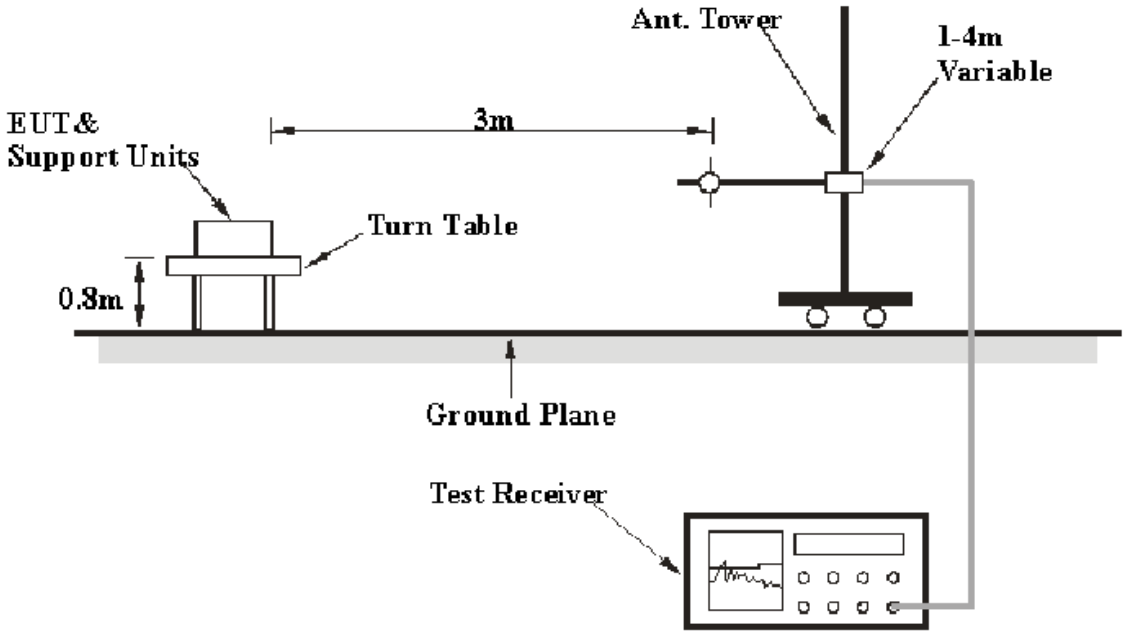
FCC §15.109 - RADIATED EMISSIONS

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 best estimate of the uncertainty of a 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 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***	***IF B/W***	***Detection***
30 MHz-1 GHz	100 kHz	300 kHz	120 kHz	Quasi-peak

Test Procedure

During the radiated emissions test, the host PC, monitor and modem were connected to AC floor outlet.

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

All 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	HP8447E	1937A01046	2011-08-02	2012-08-02
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2011-07-05	2012-07-04

*** 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 Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Loss + 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:

3.9 dB at **239.973000 MHz** in the **Horizontal** polarization

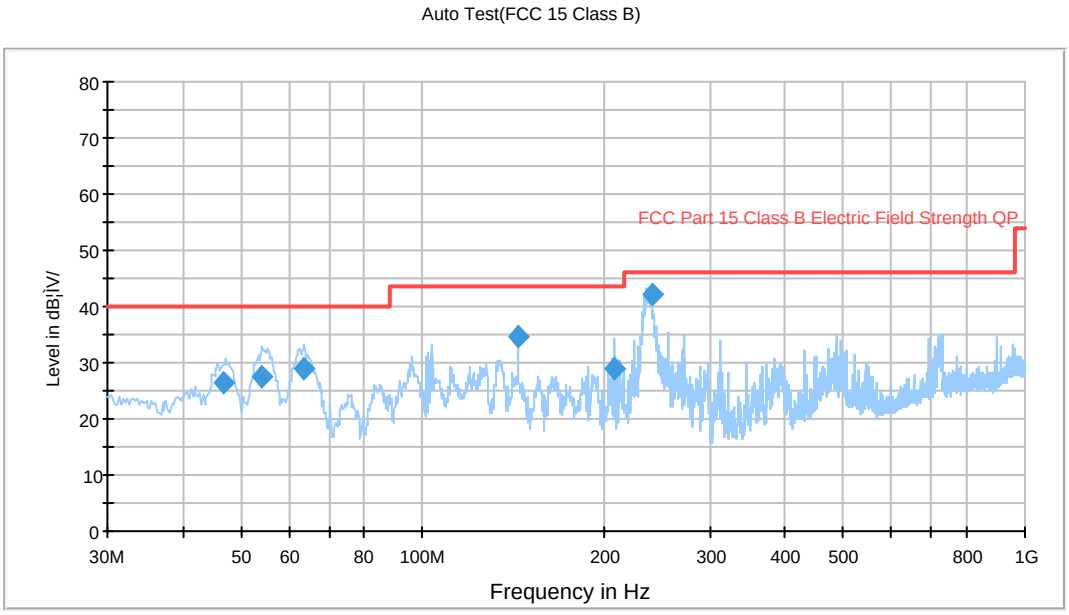
Test Data

Environmental Conditions

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

The testing was performed by Brown Lu on 2012-01-30.

Test Mode: Downloading



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Test Antenna		Turntable Position (degree)	Correction Factor (dB)	Limit (dBµV/m)	Margin (dB)
		Height (cm)	Polarity (H/V)				
239.973000	42.1	158.0	H	279.0	-13.7	46.0	3.9*
143.995750	34.6	189.0	H	77.0	-13.5	43.5	8.9
63.402500	28.8	306.0	H	312.0	-18.5	40.0	11.2
53.921500	27.6	104.0	V	256.0	-17.9	40.0	12.4
46.860000	26.6	104.0	V	269.0	-15.9	40.0	13.4
208.003250	29.0	221.0	H	329.0	-14.2	43.5	14.5

**Within measurement uncertainty*

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