

FCC PART 15.247

TEST REPORT

For

Lorex Technology Inc

250 Royal Crest Court Markham, Ontario L3R 3S1 Canada

FCC ID: UCZM5410

Report Type: Class II Permissive Change	Product Type: Digital FHSS Device (Monitor Unit)
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Report Number: <u>RSZ150323004-00AA1</u>	
Report Date: <u>2015-04-22</u>	
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Lorex Technology Inc*'s product, model number: *BB2411 and BB2421 (FCC ID: UCZM5410)* (the "EUT") in this report was a monitor unit of Digital FHSS Device, named as *2.4G Baby monitor BB2411 BB2421*, by the applicant, which was measured approximately: 12.1 cm (L) x 6.8 cm (W) x 3.1 cm (H), rated input voltage: 3.7V Li-ion battery or DC 6.0V from adapter.

KINGS Adapter Information:

Model: Y07FF-060-0800U

Input: 100-240V~50/60 Hz 0.25A

Output: DC 6V 800mA

G.Credit Adapter Information:

Model: HX-AD060080-U02

Input: 100-240V~50/60 Hz 0.15A

Output: DC 6V 0.8A

5ESP Adapter Information:

Model: 5E-AD060080-U

Input: 100-240V~50/60 Hz 0.15A

Output: DC 6V 0.8A

Note: the product, series model BB2421, BB2411, BB2411T, LB211, BB2411PK2 and WL2411 are identical schematics, the only difference among them is their model number due to marketing purpose. Model BB2411 and BB2421 were selected for fully testing, which was explained in the attached product similarity declaration letter.

** All measurement and test data in this report was gathered from production sample serial number: 1503203 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2015-03-23.*

Objective

This report is prepared on behalf of *Lorex Technology Inc* 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, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Note: This is the CIIPC application, the details as follow:

1. Adding two adaptors, one brand is **KINGS**, the other one's brand is **G.Credit**.
2. Changing the product name from 2.4G Baby monitor BB2411 to 2.4G Baby monitor BB2411 BB2421.
3. Adding one charger.
4. Changing the model number from "WL2411" to "BB2421, BB2411, BB2411T, LB211, BB2411PK2 and WL2411".

The change made to the device will affect the items of "Conducted Emissions" and "Radiated Emissions", so the part of test date and a part of EUT photos have been updated, and all the other test data and photos were copied from the report RSZ130104002-00 with FCC ID: **UCZM5410**, which was granted on 2013-02-04.

Related Submittal(s)/Grant(s)

Submitted with the baby unit of a system with FCC ID: UCZC5410

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.

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.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode which was selected by manufacturer.

EUT Exercise Software

No exercise software was used.

Equipment Modifications

No modification was made to the EUT tested.

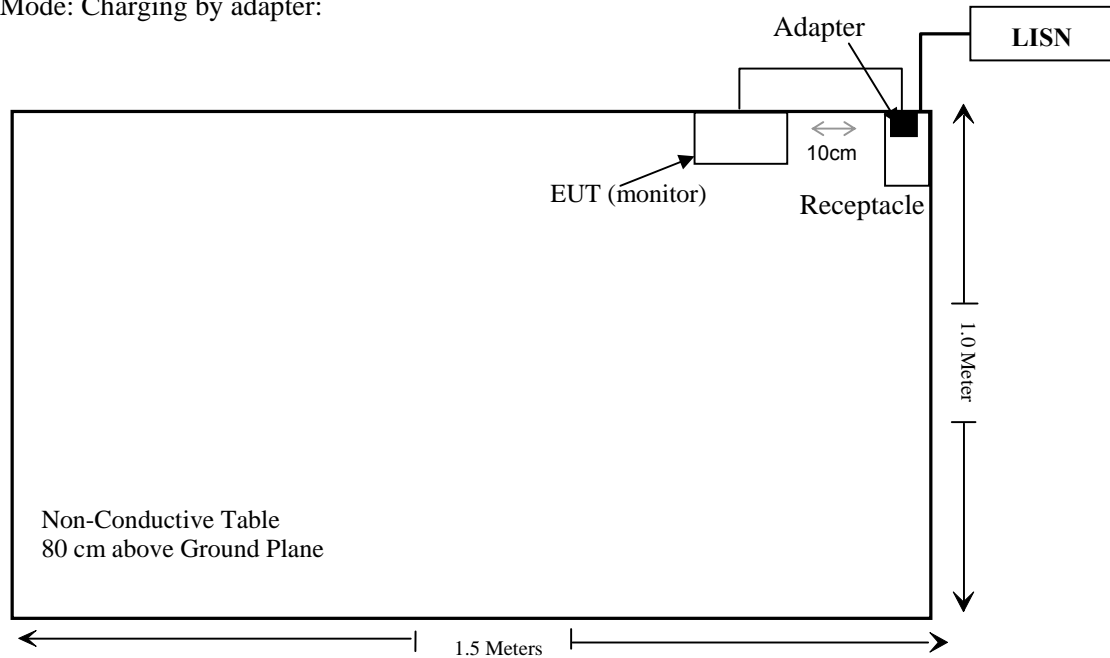
External I/O Cable

Cable Description	Length (m)	From/Port	To
Un-shielding DC Power Cable	1.83	EUT	Receptacle

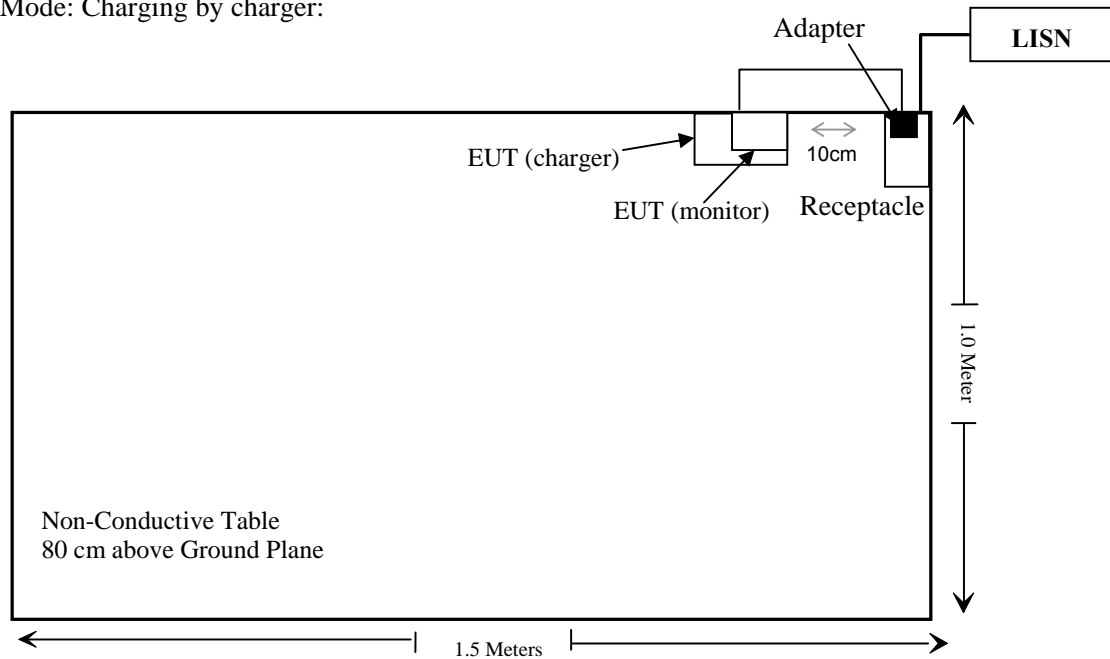
Block Diagram of Test Setup

For Conducted Emission

Test Mode: Charging by adapter:



Test Mode: Charging by charger:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §2.1093	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance*
§15.207 (a)	Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Radiated Emissions	Compliance
§15.247 (a)(1)	20 dB Bandwidth	Compliance*
§15.247(a)(1)	Channel Separation	Compliance*
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	Compliance*
§15.247(a)(1)(iii)	Quantity of hopping channel	Compliance*
§15.247(b)(1)	Peak Output Power Measurement	Compliance*
§15.247(d)	Band Edges	Compliance*

Compliance*: The test data is referred to the original report RSZ130104002-00 with
FCC ID: **UCZM5410**, which was granted on 2013-02-04.

FCC §15.247 (i) & §2.1093 – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 Mobile Portable RF Exposure v05 Appendix A, SAR can be exempted if the output power is less than the SAR exclusion threshold:

For $f = 2450$ MHz the output power is less than 10 mW at distance of 5 mm.

RF Exposure Evaluation

Maximum peak output power at antenna input terminal:

2410.875 MHz: 9.80 dBm = 9.55 mW

The time-based average output power at antenna input terminal = Peak output power *Duty cycle

= $9.55 * 57.14\% = 5.46$ mW

SAR exclusion threshold $10 \text{ mW} > 5.46 \text{ mW}$

So the SAR evaluation is not necessary.

Note: The time-base average output power depends on the duty cycle, and this device's duty cycle is 7.68%. ($T_{\text{on}}=0.8$ ms, $T_{\text{p}}=1.4$ ms)

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

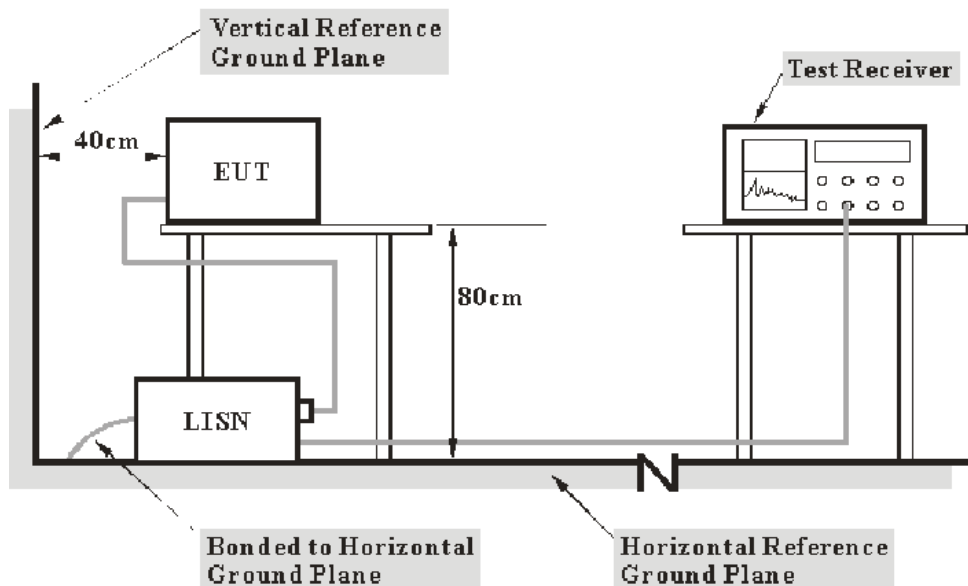
FCC §15.207

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 Laboratory Corp. (Shenzhen) is 2.4 dB (k=2, 95% level of confidence), and the uncertainty will not be taken into consideration for the test data recorded in the report.

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 outlet of 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	2014-06-03	2015-06-03
Rohde & Schwarz	LISN	ESH2-Z5	892107/021	2014-06-09	2015-06-09
Rohde & Schwarz	LISN	ENV216	3560.6650.12-101613-Yb	2014-06-09	2015-06-09
Rohde & Schwarz	Transient Limitor	ESH3Z2	DE25985	2014-05-14	2015-05-14
Rohde & Schwarz	CE Test software	EMC 32	V8.53	NCR	NCR

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI)

Test Results Summary

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

1.3 dB at 0.506350 MHz in the **Line** conducted mode for charging by G.Credit adapter

Test Data

Environmental Conditions

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

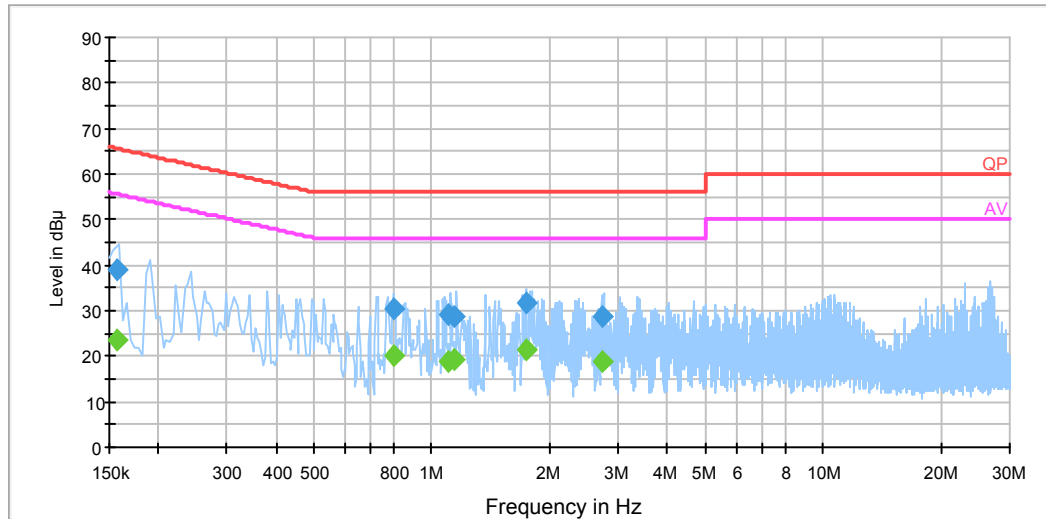
The testing was performed by David Lee on 2015-04-16.

Test Mode: Transmitting

Charging by KINGS adapter:

AC 120 V, 60 Hz, Line:

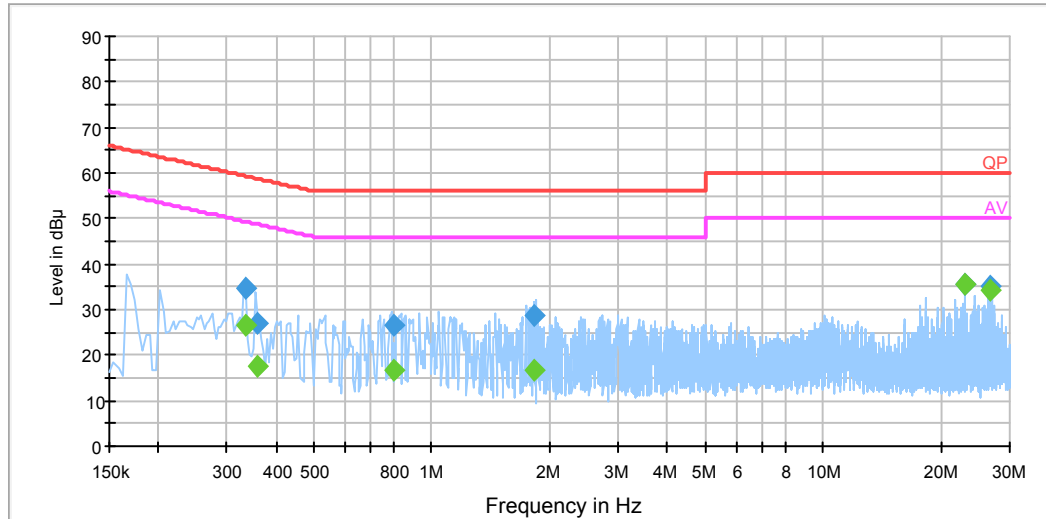
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.157500	39.0	19.2	65.6	26.6	QP
0.157500	23.4	19.2	55.6	32.2	Ave.
0.802030	30.5	19.3	56.0	25.5	QP
0.802030	20.1	19.3	46.0	25.9	Ave.
1.101290	29.3	19.4	56.0	26.7	QP
1.101290	19.1	19.4	46.0	26.9	Ave.
1.144630	28.6	19.4	56.0	27.4	QP
1.144630	19.2	19.4	46.0	26.8	Ave.
1.747810	31.7	19.4	56.0	24.3	QP
1.747810	21.4	19.4	46.0	24.6	Ave.
2.740810	28.9	19.4	56.0	27.1	QP
2.740810	18.8	19.4	46.0	27.2	Ave.

AC 120V, 60 Hz, Neutral:

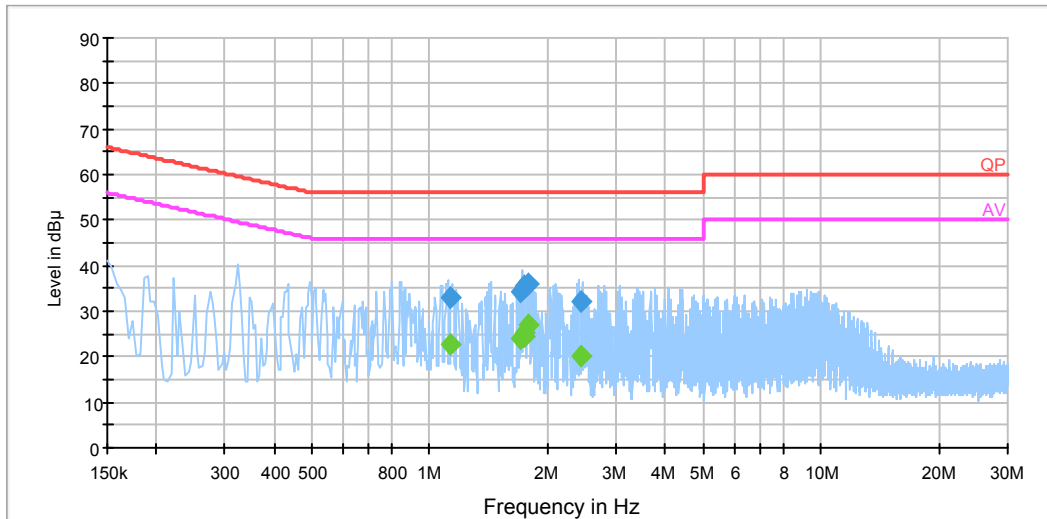
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/QP/Ave.)
0.332990	34.9	19.2	59.4	24.5	QP
0.332990	26.5	19.2	49.4	22.9	Ave.
0.359310	27.1	19.2	58.7	31.6	QP
0.359310	17.8	19.2	48.7	30.9	Ave.
0.798150	26.8	19.3	56.0	29.2	QP
0.798150	16.6	19.3	46.0	29.4	Ave.
1.830190	28.5	19.4	56.0	27.5	QP
1.830190	16.5	19.4	46.0	29.5	Ave.
23.127050	35.5	19.7	60.0	24.5	QP
23.127050	35.4	19.7	50.0	14.6	Ave.
26.607750	35.1	19.8	60.0	24.9	QP
26.607750	34.4	19.8	50.0	15.6	Ave.

Charging by KINGS Charger:**AC 120 V, 60 Hz, Line:**

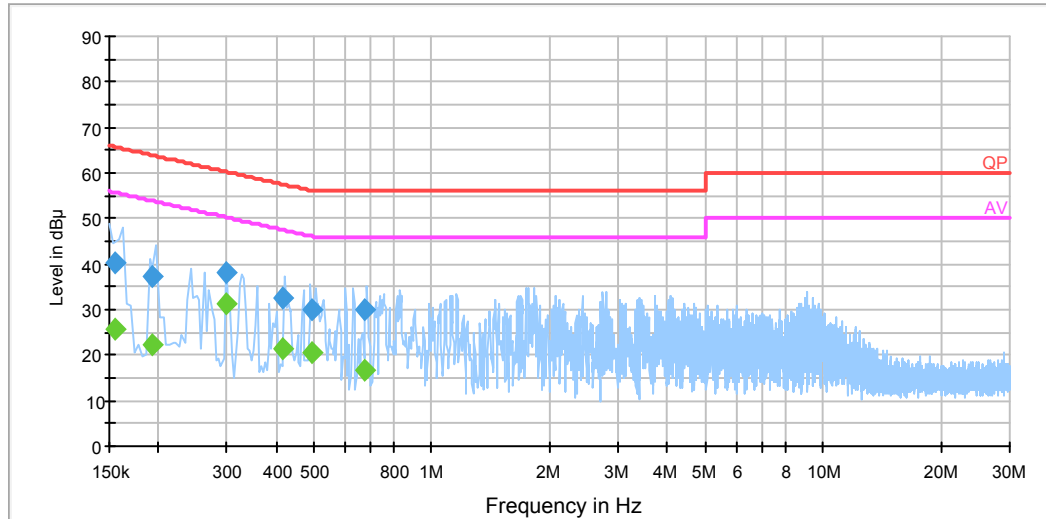
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
1.126650	32.8	19.4	56.0	23.2	QP
1.126650	22.5	19.4	46.0	23.5	Ave.
1.708110	34.2	19.4	56.0	21.8	QP
1.708110	24.1	19.4	46.0	21.9	Ave.
1.736290	35.4	19.4	56.0	20.6	QP
1.736290	25.3	19.4	46.0	20.7	Ave.
1.751810	35.0	19.4	56.0	21.0	QP
1.751810	24.3	19.4	46.0	21.7	Ave.
1.779270	35.8	19.4	56.0	20.2	QP
1.779270	27.1	19.4	46.0	18.9	Ave.
2.433790	32.1	19.4	56.0	23.9	QP
2.433790	20.2	19.4	46.0	25.8	Ave.

AC 120V, 60 Hz, Neutral:

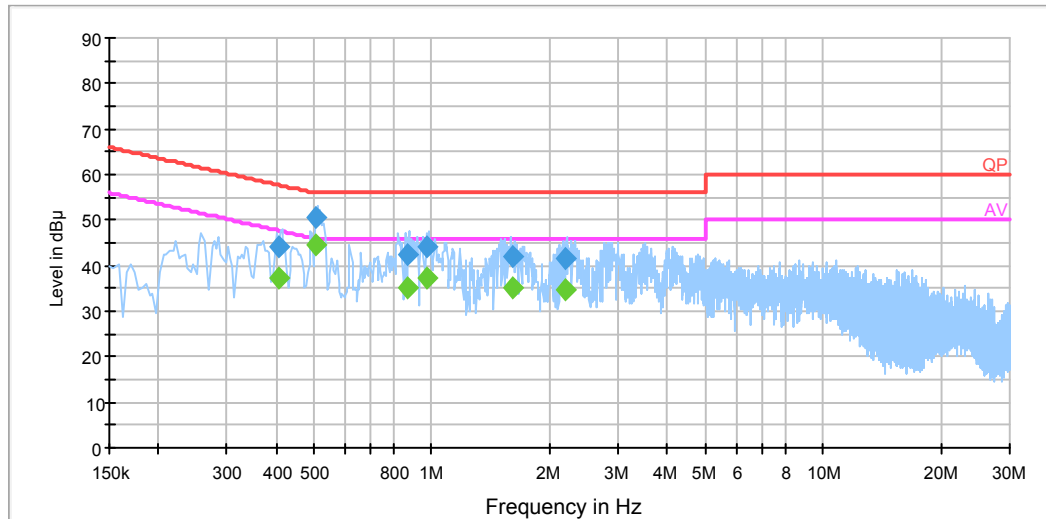
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/QP/Ave.)
0.154500	40.5	19.2	65.8	25.3	QP
0.154500	25.9	19.2	55.8	29.9	Ave.
0.193500	37.3	19.3	63.9	26.6	QP
0.193500	22.4	19.3	53.9	31.5	Ave.
0.297500	38.3	19.2	60.3	22.0	QP
0.297500	31.2	19.2	50.3	19.1	Ave.
0.415670	32.4	19.2	57.5	25.1	QP
0.415670	21.5	19.2	47.5	26.0	Ave.
0.494650	30.1	19.2	56.1	26.0	QP
0.494650	20.5	19.2	46.1	25.6	Ave.
0.671770	30.0	19.3	56.0	26.0	QP
0.671770	16.5	19.3	46.0	29.5	Ave.

Charging by G.Credit adapter:**AC 120 V, 60 Hz, Line:**

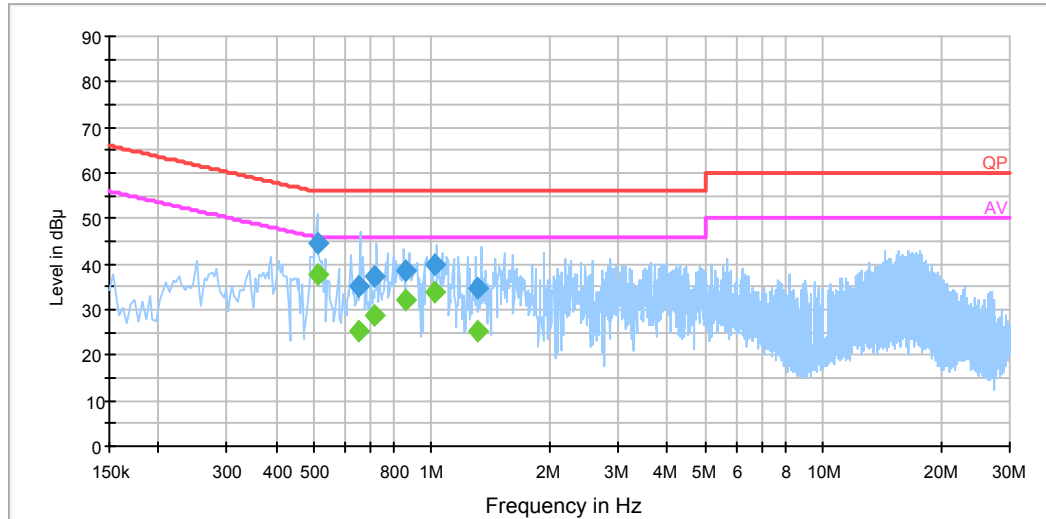
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.407790	44.2	19.2	57.7	13.5	QP
0.407790	37.2	19.2	47.7	10.5	Ave.
0.506350	50.8	19.3	56.0	5.2	QP
0.506350	44.7	19.3	46.0	1.3	Ave.
0.868830	42.4	19.4	56.0	13.6	QP
0.868830	35.0	19.4	46.0	11.0	Ave.
0.971270	44.1	19.4	56.0	11.9	QP
0.971270	37.3	19.4	46.0	8.7	Ave.
1.617910	42.1	19.4	56.0	13.9	QP
1.617910	35.3	19.4	46.0	10.7	Ave.
2.204850	41.8	19.4	56.0	14.2	QP
2.204850	34.9	19.4	46.0	11.1	Ave.

AC 120V, 60 Hz, Neutral:

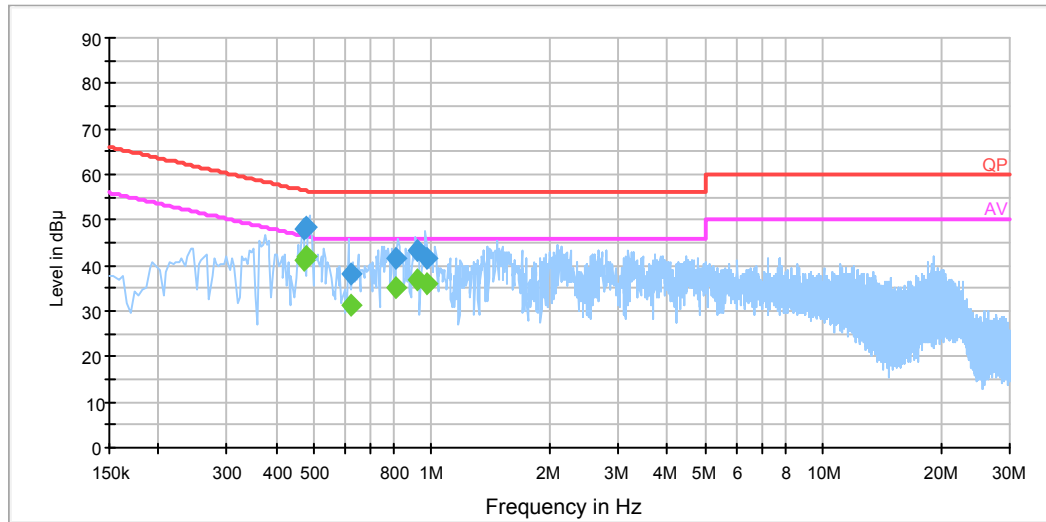
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/QP/Ave.)
0.510350	44.5	19.2	56.0	11.5	QP
0.510350	37.9	19.2	46.0	8.1	Ave.
0.648130	35.0	19.3	56.0	21.0	QP
0.648130	25.5	19.3	46.0	20.5	Ave.
0.711170	37.3	19.3	56.0	18.7	QP
0.711170	28.7	19.3	46.0	17.3	Ave.
0.853250	38.8	19.3	56.0	17.2	QP
0.853250	32.3	19.3	46.0	13.7	Ave.
1.014550	39.8	19.4	56.0	16.2	QP
1.014550	33.8	19.4	46.0	12.2	Ave.
1.317930	34.9	19.4	56.0	21.1	QP
1.317930	25.2	19.4	46.0	20.8	Ave.

Charging by G.Credit Charger:**AC 120 V, 60 Hz, Line:**

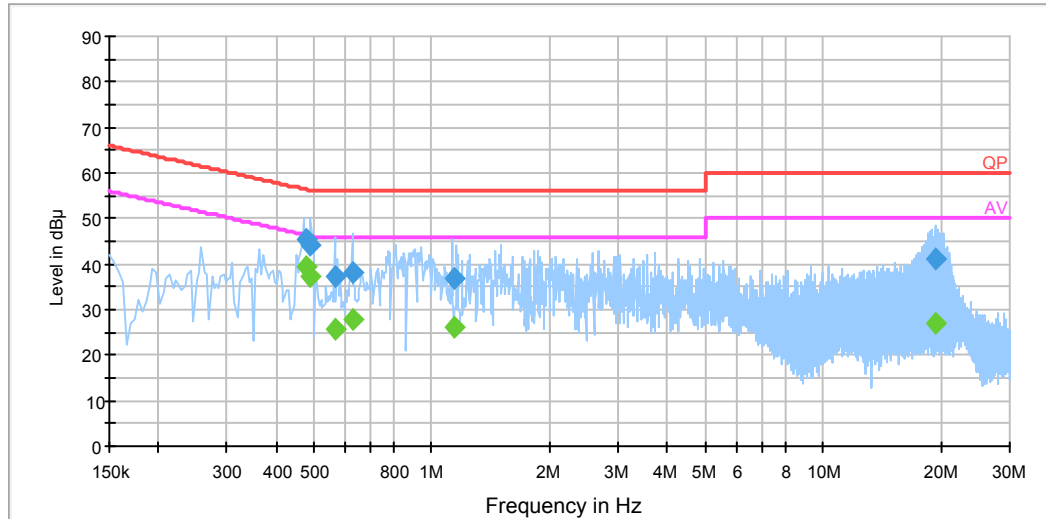
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.472990	47.8	19.3	56.5	8.7	QP
0.472990	41.0	19.3	46.5	5.5	Ave.
0.478710	48.5	19.3	56.4	7.9	QP
0.478710	42.1	19.3	46.4	4.3	Ave.
0.620790	38.1	19.3	56.0	17.9	QP
0.620790	31.2	19.3	46.0	14.8	Ave.
0.809670	41.6	19.3	56.0	14.4	QP
0.809670	35.1	19.3	46.0	10.9	Ave.
0.916350	43.1	19.4	56.0	12.9	QP
0.916350	36.7	19.4	46.0	9.3	Ave.
0.971510	41.7	19.4	56.0	14.3	QP
0.971510	36.1	19.4	46.0	9.9	Ave.

AC 120V, 60 Hz, Neutral:

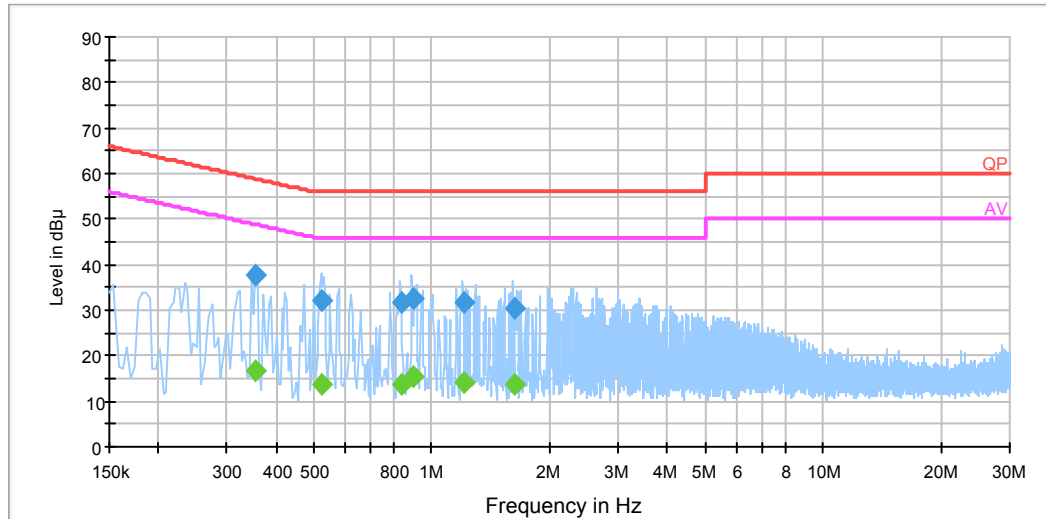
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/QP/Ave.)
0.477050	45.4	19.2	56.4	11.0	QP
0.477050	39.2	19.2	46.4	7.2	Ave.
0.486650	44.1	19.2	56.2	12.1	QP
0.486650	37.5	19.2	46.2	8.7	Ave.
0.569510	37.3	19.3	56.0	18.7	QP
0.569510	25.9	19.3	46.0	20.1	Ave.
0.632610	38.2	19.3	56.0	17.8	QP
0.632610	27.7	19.3	46.0	18.3	Ave.
1.145050	36.9	19.4	56.0	19.1	QP
1.145050	26.3	19.4	46.0	19.7	Ave.
19.494550	41.3	19.6	60.0	18.7	QP
19.494550	26.8	19.6	50.0	23.2	Ave.

Charging by 5ESP Charger:**AC 120 V, 60 Hz, Line:**

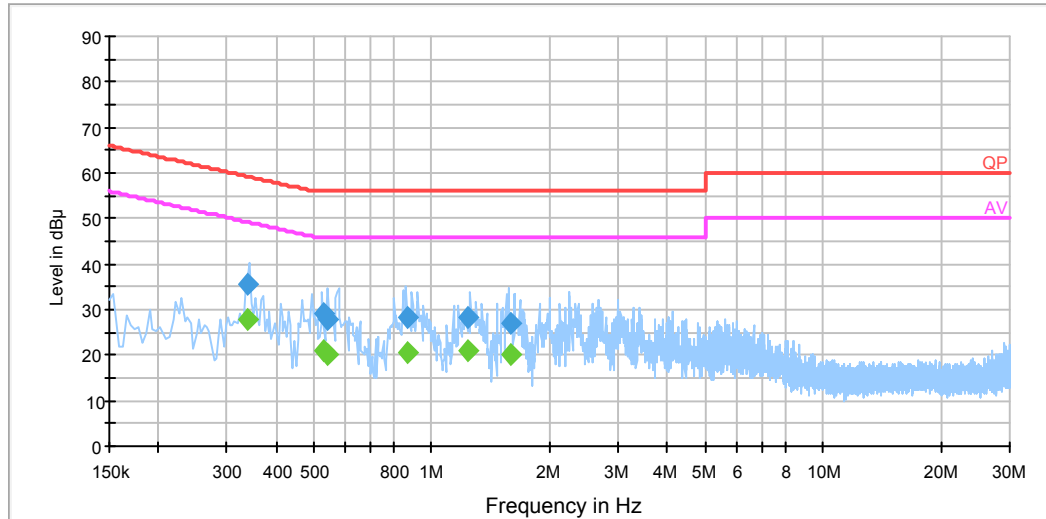
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/Ave./QP)
0.352630	37.8	19.2	58.9	21.1	QP
0.352630	16.9	19.2	48.9	32.0	Ave.
0.526170	32.0	19.3	56.0	24.0	QP
0.526170	13.7	19.3	46.0	32.3	Ave.
0.837550	31.6	19.3	56.0	24.4	QP
0.837550	13.8	19.3	46.0	32.2	Ave.
0.892650	32.4	19.4	56.0	23.6	QP
0.892650	15.5	19.4	46.0	30.5	Ave.
1.211970	31.8	19.4	56.0	24.2	QP
1.211970	14.3	19.4	46.0	31.7	Ave.
1.621730	30.5	19.4	56.0	25.5	QP
1.621730	13.7	19.4	46.0	32.3	Ave.

AC 120V, 60 Hz, Neutral:

EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/QP/Ave.)
0.336870	35.5	19.2	59.3	23.8	QP
0.336870	27.7	19.2	49.3	21.6	Ave.
0.530110	29.2	19.2	56.0	26.8	QP
0.530110	21.1	19.2	46.0	24.9	Ave.
0.541870	27.7	19.2	56.0	28.3	QP
0.541870	20.0	19.2	46.0	26.0	Ave.
0.869070	28.4	19.3	56.0	27.6	QP
0.869070	20.7	19.3	46.0	25.3	Ave.
1.243130	28.1	19.4	56.0	27.9	QP
1.243130	21.2	19.4	46.0	24.8	Ave.
1.590390	27.2	19.4	56.0	28.8	QP
1.590390	20.2	19.4	46.0	25.8	Ave.

Note 1:

For the test data of charging by 5ESP adapter, please refer to the original report RSZ130104002-00 with FCC ID: UCZM5410, which was granted on 2013-02-04.

Note 2:

- 1) Corrected Amplitude = Reading + Correction Factor
- 2) Correction Factor = LISN/ISN VDF (Voltage Division Factor) + Cable Loss + Pulse Limiter Attenuation
The corrected factor has been input into the transducer of the test software.
- 3) Margin = Limit – Corrected Amplitude

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

Applicable Standard

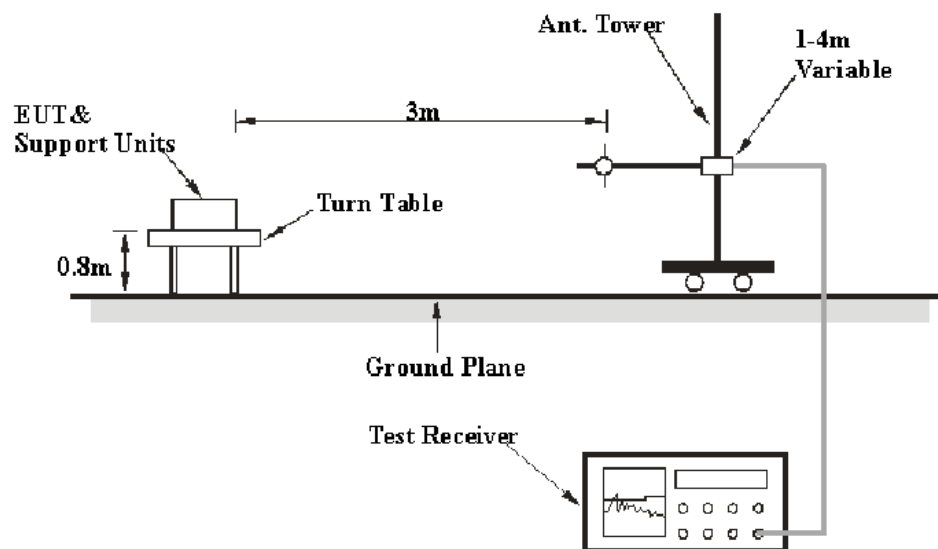
FCC §15.247 (d); §15.209; §15.205;

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 radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is 4.0 dB (k=2, 95% level of confidence), and the uncertainty will not be taken into consideration for the test data recorded in the report.

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 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.

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

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
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

For the radiated emissions test, the adapter was connected to the outlet of the LISN.

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 to 1GHz and peak and Average detection modes for frequencies above 1GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2014-05-06	2015-05-06
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2014-11-03	2015-11-03
Sunol Sciences	Broadband Antenna	JB3	A111513	2014-06-18	2017-06-17
A.H. System	Horn Antenna	SAS-200/571	135	2013-02-11	2016-02-10
Rohde & Schwarz	Signal Analyzer	FSIQ26	837405/023	2014-08-22	2015-08-22
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2014-04-23	2015-04-23
TDK	Chamber	Chamber A	2#	2012-10-15	2015-10-15
TDK	Chamber	Chamber B	1#	2012-07-23	2015-07-22
R&S	Auto test Software	EMC32	V9.10	NCR	NCR

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI)

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 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, the worst margin reading as below:

2.45 dB at **552.0 MHz** in the **Vertical** polarization for charging by KINGS Charger

Test Data

Environmental Conditions

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

The testing was performed by David Lee on 2015-04-16.

Test mode: Transmitting

30 MHz ~ 25 GHz**Charging by KINGS adapter:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15.247	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
336.0	45.00	QP	307	1.1	H	-12.0	33.00	46	13.00
400.0	44.10	QP	78	1.1	H	-10.4	33.70	46	12.30
432.0	41.50	QP	89	1.1	H	-10.0	31.50	46	14.50
576.0	39.68	QP	140	1.1	V	-7.8	31.88	46	14.12
827.8	21.88	QP	310	1.3	H	-4.1	17.78	46	28.22
910.0	21.62	QP	264	2.9	H	-3.1	18.52	46	27.48

Charging by KINGS Charger:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15.247	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
264.1	51.63	QP	180	2.2	H	-13.5	38.13	46	7.87
408.0	47.78	QP	217	1.6	H	-10.0	37.78	46	8.22
456.3	42.40	QP	287	1.2	V	-9.4	33.00	46	13.00
552.0	51.55	QP	162	2.1	V	-8.0	43.55	46	2.45
600.2	51.35	QP	235	1.6	V	-8.4	42.95	46	3.05
888.7	40.95	QP	137	1.9	V	-3.3	37.65	46	8.35

Charging by G.Credit adapter:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15.247	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
46.0	35.51	QP	158	1.4	V	-17.5	18.01	40	21.99
50.5	47.15	QP	59	1.0	V	-19.7	27.45	40	12.55
121.7	35.30	QP	297	1.1	V	-12.9	22.40	43.5	21.10
136.8	37.76	QP	309	1.1	V	-13.1	24.66	43.5	18.84
827.4	22.43	QP	333	1.2	H	-4.1	18.33	46	27.67
900.7	21.59	QP	355	1.5	H	-3.1	18.49	46	27.51

Charging by G.Credit Charger:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15.247	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
41.2	41.79	QP	238	1.8	H	-14.3	27.49	40	12.51
42.2	39.92	QP	356	1.6	H	-15.0	24.92	40	15.08
176.0	44.97	QP	32	2.0	V	-14.9	30.07	43.5	13.43
288.0	46.43	QP	215	1.4	V	-12.6	33.83	46	12.17
432.0	45.41	QP	141	1.4	V	-10.0	35.41	46	10.59
552.1	41.29	QP	171	1.9	V	-8.0	33.29	46	12.71

Charging by 5ESP Charger:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
288.0	45.30	QP	239	1.6	H	-12.6	32.70	46	13.30
336.0	46.28	QP	16	1.7	H	-12.0	34.28	46	11.72
400.0	45.11	QP	24	2.3	V	-10.4	34.71	46	11.29
480.0	43.20	QP	272	1.9	V	-8.6	34.60	46	11.40
576.0	40.62	QP	89	1.3	V	-7.8	32.82	46	13.18
837.0	22.27	QP	315	1.9	V	-4.0	18.27	46	27.73

Note 1:

For the test data of charging by 5ESP adapter please refer to the original report RSZ130104002-00 with FCC ID: **UCZM5410**, which was granted on 2013-02-04.

Note 2: We had tested the above 1GHz radiated emission of the EUT, and the result shows that it will not affect the test data compared with the original device (Model: WL2411, FCC ID: **UCZM5410**). So the above 1GHz test data please refer to the original report RSZ130104002-00 with FCC ID: **UCZM5410**, which was granted on 2013-02-04.

Note 3:

1. Corrected Factor=Antenna factor (RX) +cable loss – amplifier factor
2. Corrected Amplitude = Corrected Factor + Receiver Reading
3. Margin = Limit- Corrected Amplitude

PRODUCT SIMILARITY DECLARATION LETTER

Lorex Technology Inc.
250 Royal Crest Court Markham, Ontario L3R 3S1 Canada
Tel: 905 946 8589 Fax: 905 947 0138

2015-4-14

Product Similarity Declaration

To Whom It May Concern,

We, Lorex Technology Inc. , hereby declare that we have a product named as 2.4G baby monitor BB2411 BB2421, (Model number: BB2411 BB2421) were tested by BACL, meanwhile, for our marketing purpose, we would like to list a series models (BB2421, BB2411, BB2411T, LB211, BB2411PK2, WL2411) on reports and certificate, all the models are identical schematics. Only named differently due to different combination, for details as below:

Model No	Model description
BB2421	1 camera+1 monitor+1 charger
BB2411	1 camera+1 monitor
BB2411T	1 camera+1 monitor+Window Box
LB211	1 camera+1 monitor+Other Gift Box
BB2411PK2	2 camera+1 monitor
WL2411	1 monitor

No other changes are made to them.

We confirm that all information above is true, and we'll be responsible for all the consequences. Please contact me if you have any question.

Signature:

Niles Kanapathipillai

Director Quality Assurance

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