



FCC PART 15.247

TEST REPORT

For

Mobi Technologies Inc.

5913 Blackwelder Street, Culver City, CA 90232, USA

FCC ID: Y4N70295T

Report Type: Class II Permissive Change	Product Type: MobiCam Clear & Secure Digital Audio/Video Monitor
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Report Number: RSZ140821006-00A1TX	
Report Date: 2014-11-21	
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Note: This test report is prepared for the customer shown above and for the equipment 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 *Mobi Technologies Inc.*'s product, model number: 70295T (FCC ID: Y4N70295T) (the "EUT") in this report is baby unit of *MobiCam Clear & Secure Digital Audio/Video Monitor*, which was measured approximately: 9.5 cm (L) x 7.5 cm (W) x 2.7 cm (H), rated with input voltage: DC 6V charging from adapter.

Adapter Information:

Model: S04-003-0060-00400 SWP-24911-00

Input: 100-240V~50/60Hz, 0.1A

Output: DC 6V, 0.4A

** All measurement and test data in this report was gathered from production sample serial number: 1408154 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2014-08-21.*

Objective

This report is prepared on behalf of *Mobi Technologies 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.

This is a CIIPC application of the device based on the original report RSZ111214001- 00. The differences between the original device and the current one are as follows:

- (1) Adding a power supply for the device, and adapter information for details as below:

Adapter Information:

Model: S04-003-0060-00400 SWP-24911-00

Input: 100-240V~50/60Hz, 0.1A

Output: DC 6V, 0.4A

- (2) Other non-critical circuit subtle changes.

Based on above difference listed, the modifications will affect the section“ § 15.207 (a) Conducted Emissions” and “ § 15.205, §15.209, §15.247(d) Radiated Emissions”, so these related items were performed, and the other test data please referred to the original report SZ111214001-00, issued on 2012-04-13, and also we updated the EUT photos and Test Setup photos in this report.

Related Submittal(s)/Grant(s)

Submitted with the monitor unit of a system with FCC ID:Y4N70294R.

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.

Measurement uncertainty with RF radiated emission is 5.91 dB for 30MHz-1GHz.and 4.92 dB for above 1GHz, 1.95dB for conducted measurement.

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 provided by manufacturer.

EUT Exercise Software

No exercise software was used.

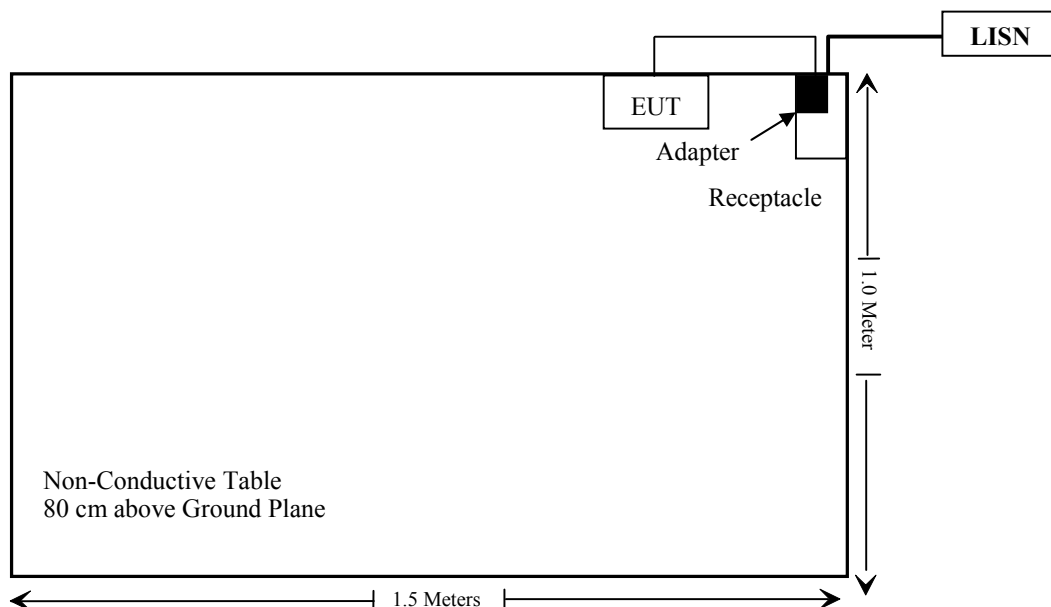
Equipment Modifications

No modification was made to the EUT tested.

External I/O Cable

Cable Description	Length (m)	From/Port	To
Un-shielding Undetachable DC Power Cable	1.8	Adapter	EUT

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §1.1307 (b)(1), §2.1091	Maximum Permissible Exposure (MPE)	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*: Please referred to FCC ID: Y4N70295T granted on 2012-04-14, report No.: RSZ111214001-00, which was tested by Brown Lu.

Compliance**: The output power was verified and consistent with the original output power level.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207

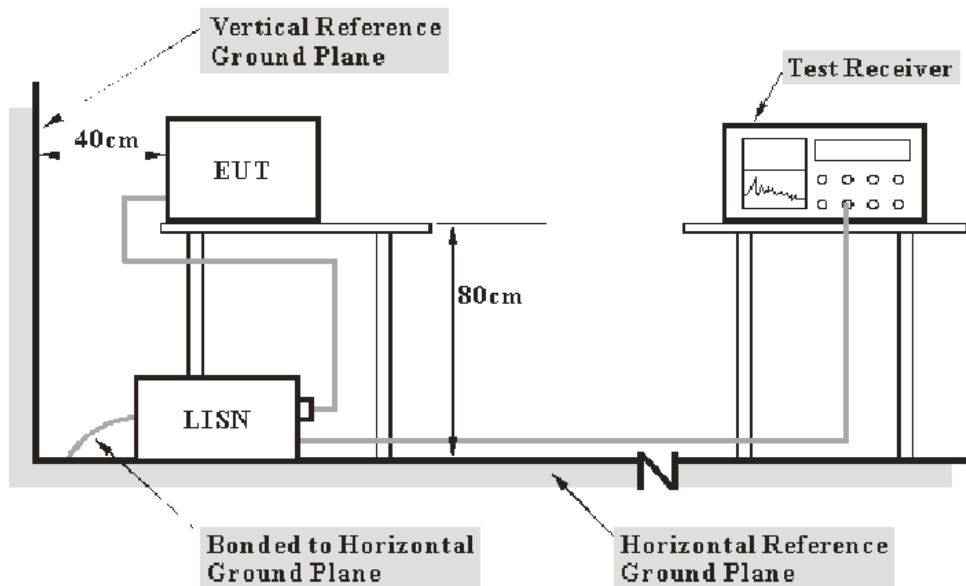
Measurement Uncertainty

Input quantities to be considered for conducted disturbance measurements may be receiver reading, attenuation of the connection between AMN/ISN and receiver, AMN/ISN voltage division factor, AMN/ISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expanded combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report

Port	Measurement uncertainty
AC Mains	3.26 dB (k=2, 95% level of confidence)
CAT 3	3.70 dB (k=2, 95% level of confidence)
CAT 5	3.86 dB (k=2, 95% level of confidence)
CAT 6	4.64 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 15.207 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	ENV216	3560.6650.12-101613-Yb	2014-06-09	2015-06-09
Rohde & Schwarz	Transient Limitor	ESH3Z2	DE25985	2014-05-14	2015-05-14
BACL	CE Test software	BACL-CE	V9.10	--	--

* **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:

9.7 dB at 0.309290 MHz in the Neutral conducted mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level compliance with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

In BACL., $U_{(Lm)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data

Environmental Conditions

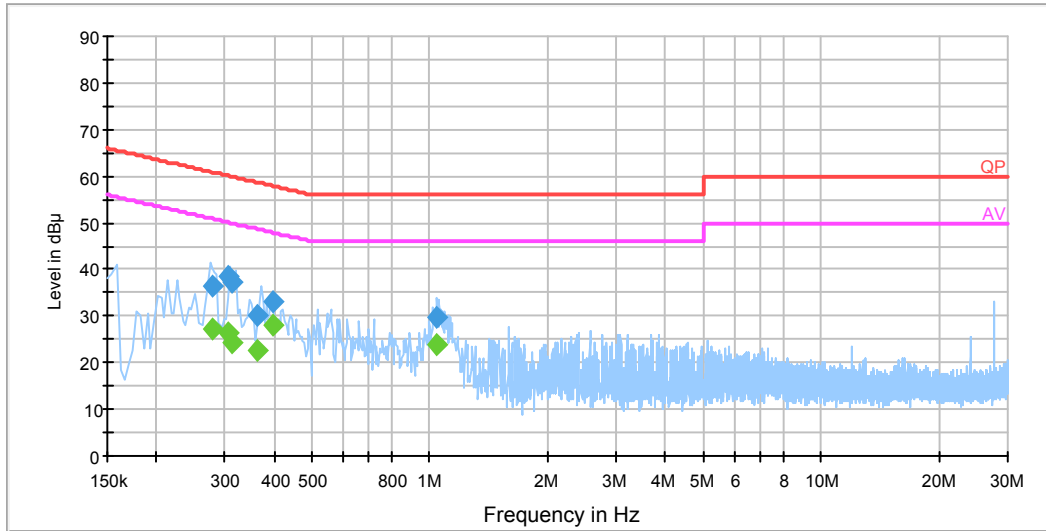
Temperature:	25°C
Relative Humidity:	48 %
ATM Pressure:	101.0 kPa

The testing was performed by Candy Li on 2014-08-23.

Test Mode: Transmitting

AC 120 V, 60 Hz, Line:

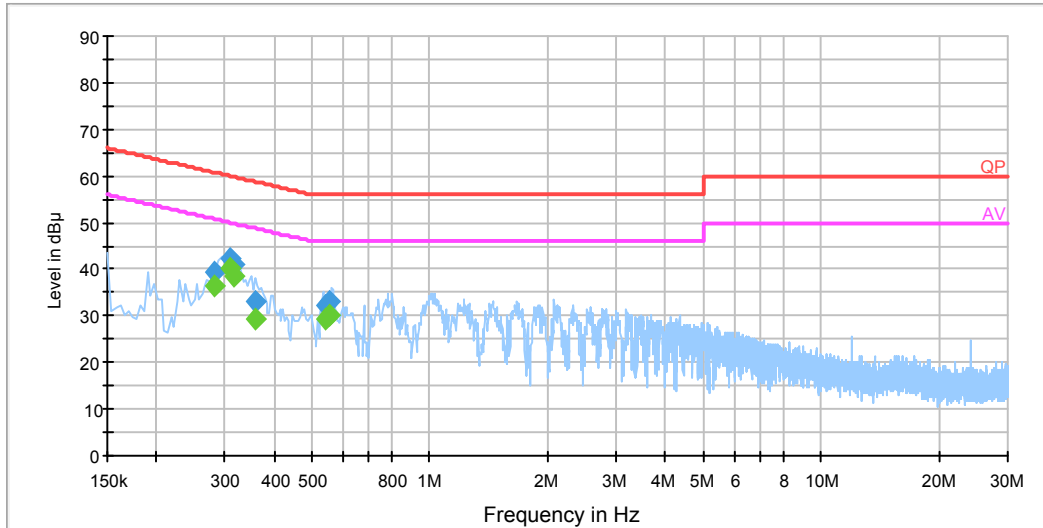
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/QP/Ave.)
0.278501	36.3	19.5	60.9	24.6	QP
0.278501	27.1	19.5	50.9	23.8	Ave.
0.305350	38.5	19.4	60.1	21.6	QP
0.305350	26.2	19.4	50.1	23.9	Ave.
0.313230	37.2	19.4	59.9	22.7	QP
0.313230	24.3	19.4	49.9	25.6	Ave.
0.364450	30.0	19.5	58.6	28.6	QP
0.364450	22.6	19.5	48.6	26.0	Ave.
0.396090	32.9	19.5	57.9	25.0	QP
0.396090	28.1	19.5	47.9	19.8	Ave.
1.046310	29.8	19.5	56.0	26.2	QP
1.046310	23.9	19.5	46.0	22.1	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.)
0.282500	39.3	19.5	60.7	21.4	QP
0.282500	36.3	19.5	50.7	14.4	Ave.
0.309290	42.4	19.5	60.0	17.6	QP
0.309290	40.3	19.5	50.0	9.7	Ave.
0.317230	40.9	19.5	59.8	18.9	QP
0.317230	38.6	19.5	49.8	11.2	Ave.
0.360630	33.2	19.5	58.7	25.5	QP
0.360630	29.3	19.5	48.7	19.4	Ave.
0.541990	32.4	19.6	56.0	23.6	QP
0.541990	29.4	19.6	46.0	16.6	Ave.
0.557570	33.1	19.6	56.0	22.9	QP
0.557570	30.1	19.6	46.0	15.9	Ave.

Note:

- 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

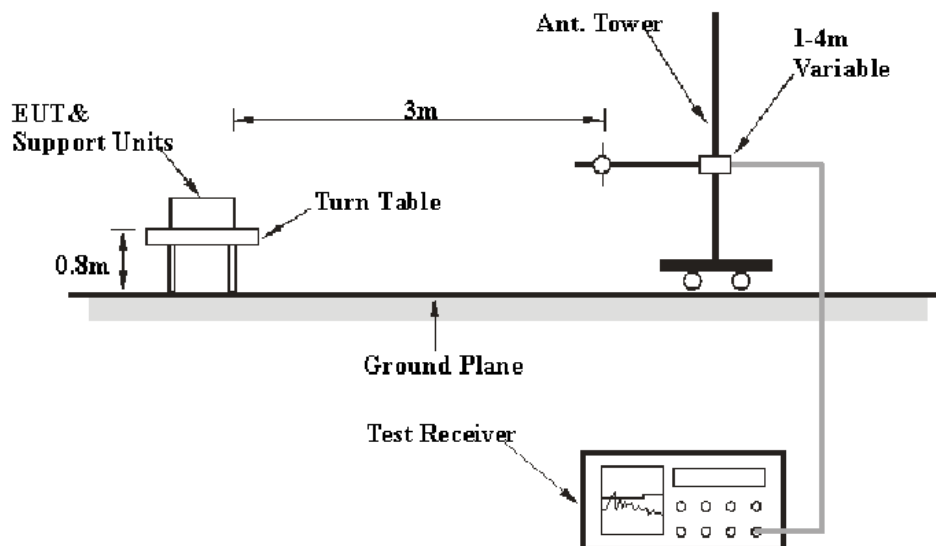
FCC §15.247 (d); §15.209; §15.205;

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 16-4-2:2011, the expanded combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Shenzhen) is 5.91 dB for 30MHz-1GHz and 4.92 dB for above 1GHz. 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 AC floor outlet.

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	101122	2014-09-25	2015-09-25
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2014-11-27
Mini	Amplifier	ZVA-183-S+	5969001149	2014-04-23	2015-04-23
A.H. System	Horn Antenna	SAS-200/571	135	2012-02-11	2015-02-10
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2013-11-12	2014-11-12
the electro-Mechanics Co.	Horn Antenna	3116	9510-2270	2013-10-14	2016-10-13
TDK	Chamber	Chamber A	2#	2012-10-15	2015-10-15
TDK	Chamber	Chamber B	1#	2012-07-23	2015-07-23
R&S	Auto test Software	EMC32	V9.10	--	--
Quinstar	Amplifier	QLW-18405536-50	15964001001	N/A	N/A

* **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:

1.70 dB at 2484.36 MHz in the Horizontal polarization

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level compliance with the limit if

$$L_m + U_{(L_m)} \leq L_{lim} + U_{cispr}$$

In BACL., $U_{(L_m)}$ is less than $+U_{cispr}$, if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data

Environmental Conditions

Temperature:	25°C
Relative Humidity:	48 %
ATM Pressure:	101.0kPa

The testing was performed by Candy Li on 2014-10-08.

Test mode: Transmitting

30 MHz -25 GHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
Low Channel (2410.875MHz)									
263.96	52.95	QP	60	1.2	H	-13.5	39.45	46.0	6.55
2410.875	103.20	PK	66	1.3	H	6.13	109.33	/	/
2410.875	76.34	Ave.	66	1.3	H	6.13	82.47	/	/
2410.875	97.88	PK	14	2.5	V	6.13	104.01	/	/
2410.875	73.09	Ave.	14	2.5	V	6.13	79.22	/	/
2390.00	62.25	PK	138	1.5	H	5.48	67.73	74	6.27
2390.00	29.98	Ave.	138	1.5	H	5.48	35.46	54	18.54
2483.77	56.93	PK	154	1.6	H	7.21	64.14	74	9.86
2483.77	26.02	Ave.	154	1.6	H	7.21	33.23	54	20.77
4821.75	52.65	PK	335	1.0	H	12.44	65.09	74	8.91
4821.75	25.52	Ave.	335	1.0	H	12.44	37.96	54	16.04
7232.63	37.00	PK	184	2.4	H	17.06	54.06	74	19.94
7232.63	22.99	Ave.	184	2.4	H	17.06	40.05	54	13.95
9643.50	35.89	PK	288	1.5	V	19.28	55.17	74	18.83
9643.50	20.24	Ave.	288	1.5	V	19.28	39.52	54	14.48

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
Middle Channel (2437.875 MHz)									
263.96	52.42	QP	140	1.2	H	-13.5	38.92	46.0	7.08
2437.875	104.46	PK	130	1.3	H	6.13	110.59	/	/
2437.875	77.40	Ave.	130	1.3	H	6.13	83.53	/	/
2437.875	98.64	PK	98	1.6	V	6.13	104.77	/	/
2437.875	73.65	Ave.	98	1.6	V	6.13	79.78	/	/
2382.65	58.97	PK	113	1.0	H	5.48	64.45	74	9.55
2382.65	29.95	Ave.	113	1.0	H	5.48	35.43	54	18.57
2484.19	57.09	PK	57	1.3	H	7.21	64.30	74	9.70
2484.19	28.08	Ave.	57	1.3	H	7.21	35.29	54	18.71
4875.75	51.45	PK	262	2.2	H	12.4	63.85	74	10.15
4875.75	25.55	Ave.	262	2.2	H	12.4	37.95	54	16.05
7313.63	36.36	PK	27	2.0	V	16.49	52.85	74	21.15
7313.63	22.93	Ave.	27	2.0	V	16.49	39.42	54	14.58
9751.50	36.74	PK	0	1.1	H	19.4	56.14	74	17.86
9751.50	19.27	Ave.	0	1.1	H	19.4	38.67	54	15.33

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
High Channel (2471.625 MHz)									
263.96	51.86	QP	140	1.2	H	-13.5	38.36	46.0	7.62
2471.625	106.04	PK	319	1.5	H	7.21	113.25	/	/
2471.625	80.43	Ave.	319	1.5	H	7.21	87.64	/	/
2471.625	97.58	PK	122	2.5	V	7.21	104.79	/	/
2471.625	70.34	Ave.	122	2.5	V	7.21	77.55	/	/
2376.05	65.18	PK	195	1.1	H	5.48	70.66	74	3.34
2376.05	36.54	Ave.	195	1.1	H	5.48	42.02	54	11.98
2484.36	65.09	PK	72	1.4	H	7.21	72.30	74	1.70
2484.36	31.02	Ave.	72	1.4	H	7.21	38.23	54	15.77
4943.25	55.02	PK	154	1.6	H	12.46	67.48	74	6.52
4943.25	26.04	Ave.	154	1.6	H	12.46	38.50	54	15.50
7414.88	40.61	PK	109	1.1	V	15.91	56.52	74	17.48
7414.88	23.78	Ave.	109	1.1	V	15.91	39.69	54	14.31
9886.50	39.69	PK	318	2.0	H	19.39	59.08	74	14.92
9886.50	20.83	Ave.	318	2.0	H	19.39	40.22	54	13.78

Note:

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

FCC §15.247(a) (1)-CHANNEL SEPARATION

Applicable Standard

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10

* **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.

Test Procedure

1. Set the EUT in Operating mode, RBW of spectrum Bandwidth was set at 100 kHz, VBW \geq 3RBW, maxhold the channel.
2. Set the adjacent channel of the EUT maxhold another trace
3. Measure the channel separation.

Test Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §15.247(a) (1) – 20 dB BANDWIDTH

Applicable Standard

Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125mW.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10

* **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.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

Test Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §15.247(a) (1) (iii)-QUANTITY OF HOPPING CHANNEL**Applicable Standard**

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10

* **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.

Test Procedure

1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
2. Set the EUT in hopping mode from first channel to last.
3. By using the Max-Hold function record the Quantity of the channel.

Test Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §15.247(a) (1) (iii) -TIME OF OCCUPANCY (DWELL TIME)**Applicable Standard**

Frequency hopping systems in the 2400-2483.5 MHz shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10

* **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.

Test Procedure

The EUT was worked in channel hopping; Spectrum SPAN was set as 0. Sweep was set as 0.4 X channel no. (s), the quantity of pulse was get from single sweep. In addition, the time of single pulses was tested.

Dwell Time= Time slot length * hope rate/ number of hopping channels * hopping NO.*0.4 s

Test Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

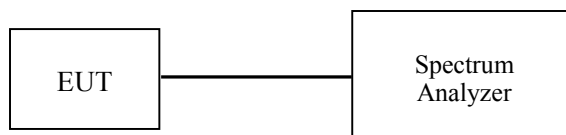
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10

* **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.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3. Add a correction factor to the display.



Test Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §15.247(d) - BAND EDGES

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Put it on the rotated table and turn on the EUT and make it operate in operating mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
4. Repeat above procedures until all measured frequencies were complete.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2013-11-12	2014-11-12

* **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 Data

Test data is referred to model number 70295T (FCC ID: Y4N70295T), report No.: RSZ111214001-00, issued on 2012-04-13, which was tested by Bay Area Compliance Laboratories Corp. (Shenzhen).

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