

APPLICATION CERTIFICATION FCC Part 15B  
On Behalf of  
Mizco International Inc.

FM Transmitter  
Model No.: MP-FMXL

FCC ID: RZOMP-FMXL

Prepared for : Mizco International Inc.  
Address : 80 Essex Avenue East Avenel New Jersey 07001 United States

Prepared by : ACCURATE TECHNOLOGY CO. LTD  
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.  
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Report Number : ATE20130042  
Date of Test : January 12-19, 2013  
Date of Report : January 19, 2013

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## Test Report Certification

Applicant : Mizco International Inc.  
Manufacturer : DAZA Electronics Company  
EUT Description : FM Transmitter  
(A) MODEL NO.: MP-FMXL  
(B) SERIAL NO.: N/A  
(C) POWER SUPPLY: DC 3-3.7V(Power by iPod's Battery) or DC 12V  
(Power by Battery)

Measurement Procedure Used:

### **FCC Rules and Regulations Part 15 Subpart B ANSI C63.4: 2009**

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : January 12-19, 2013

Prepared by : Apple Lv  
(Apple Lv, Engineer)

Approved & Authorized Signer : Sean Liu  
(Sean Liu, Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

EUT : FM Transmitter

Model Number : MP-FMXL

Power Supply : DC 3-3.7V(Power by iPod's Battery) or DC 12V (Power by Battery)

Highest operation frequency of the Charging mode : N/A

Applicant : Mizco International Inc.

Address : 80 Essex Avenue East Avenel New Jersey 07001 United States

Manufacturer : DAZA Electronics Company

Address : Bldg. G, Xinmusheng Low Carbon Industrial Park, No. 6 Xinmu Road, Pinghu, Longgang District, Shenzhen ,China

Date of sample received : January 8, 2013

Date of Test : January 12-19, 2013

## 1.2. Accessory and Auxiliary Equipment

iPod : Manufacturer: Apple  
Model No.: A1199  
S/N: 7M6369W3VQ5

### 1.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC  
The Registration Number is 752051

Listed by Industry Canada  
The Registration Number is 5077A-2

Accredited by China National Accreditation Committee  
for Laboratories  
The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD

Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.  
Science & Industry Park, Nanshan, Shenzhen, Guangdong  
P.R. China

### 1.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2  
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2  
(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2  
(Above 1GHz)

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated date	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 12, 2013	Jan. 11, 2014
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 12, 2013	Jan. 11, 2014
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 12, 2013	Jan. 11, 2014
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 12, 2013	Jan. 11, 2014
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Feb. 6, 2013	Feb. 5, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Feb. 6, 2013	Feb. 5, 2014
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2013	Jan. 11, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2013	Jan. 11, 2014
Battery	CSB	F2	HR1234W	--	--

### 3. OPERATION OF EUT DURING TESTING

#### 3.1. Operating Mode

The modes are used: 1) Charging

When product is charging, the FM transmit function could not to transmit

#### 3.2. Configuration and peripherals



(EUT: FM Transmitter)

#### 4. TEST PROCEDURES AND RESULTS

<b>FCC Rules</b>	<b>Description of Test</b>	<b>Result</b>
Section 15.107	Conducted Emission Test	N/A
Section 15.109	Radiated Emission Test	Compliant



## 5. RADIATED EMISSION FOR FCC PART 15 SECTION 15.109(A)

### 5.1. Block Diagram of Test Setup

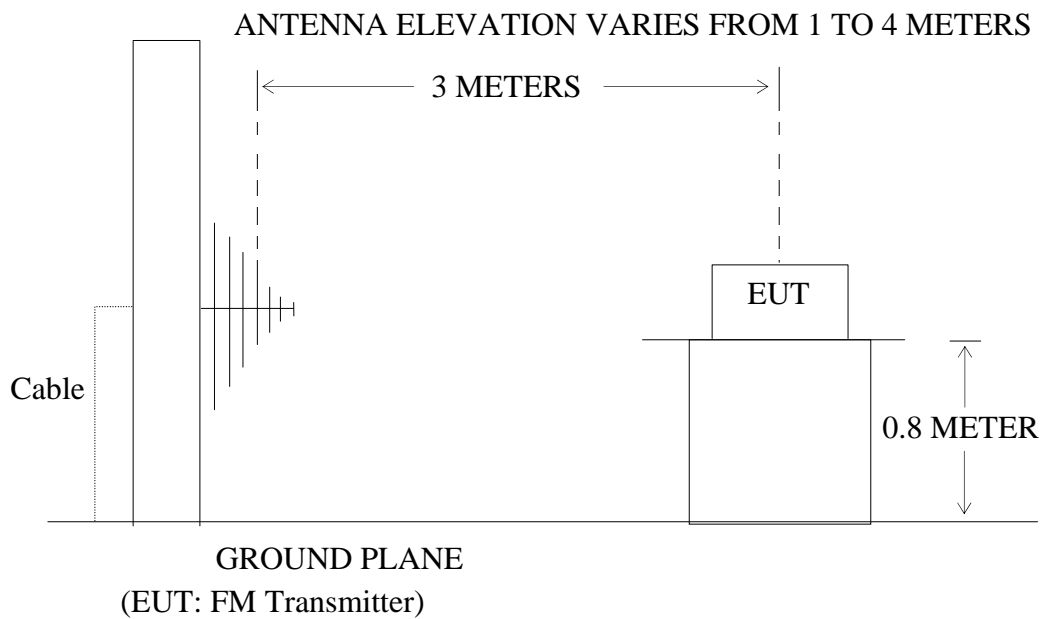
#### 5.1.1. Block diagram of connection between the EUT and simulators

##### 5.1.1.1. For Charging



(EUT: FM Transmitter)

#### 5.1.2. Semi-Anechoic Chamber Test Setup Diagram



## 5.2.The Emission Limit For Section 15.109 (a)

### 5.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

Frequency (MHz)	Limit	
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dB $\mu$ V/m)
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

## 5.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 5.3.1.FM Transmitter (EUT)

Model Number : MP-FMXL  
 Serial Number : N/A  
 Manufacturer : DAZA Electronics Company

## 5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3. Let the EUT work in (Charging) mode measure it.

## 5.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz and 1MHz in above 1000MHz.

The frequency range from 30MHz to 1000MHz is checked.

The highest frequency of the internal sources of the EUT is less than 108MHz;  
The measurement shall only be made up to 1GHz.

### 5.6.The Emission Measurement Result

**PASS.**

Date of Test:	January 15, 2013	Temperature:	25°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	MP-FMXL	Power Supply:	DC 12V
Test Mode:	Charging	Test Engineer:	PEI

Frequency: 30-1000MHz								
Polarization								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	71.4539	14.25	10.99	25.24	40.00	-14.76	QP
	2	164.3129	6.01	12.15	18.16	43.50	-25.34	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	72.2111	4.22	11.03	15.25	40.00	-24.75	QP
	2	163.7366	2.43	12.14	14.57	43.50	-28.93	QP

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams are attached as below display the measurement of peak values.



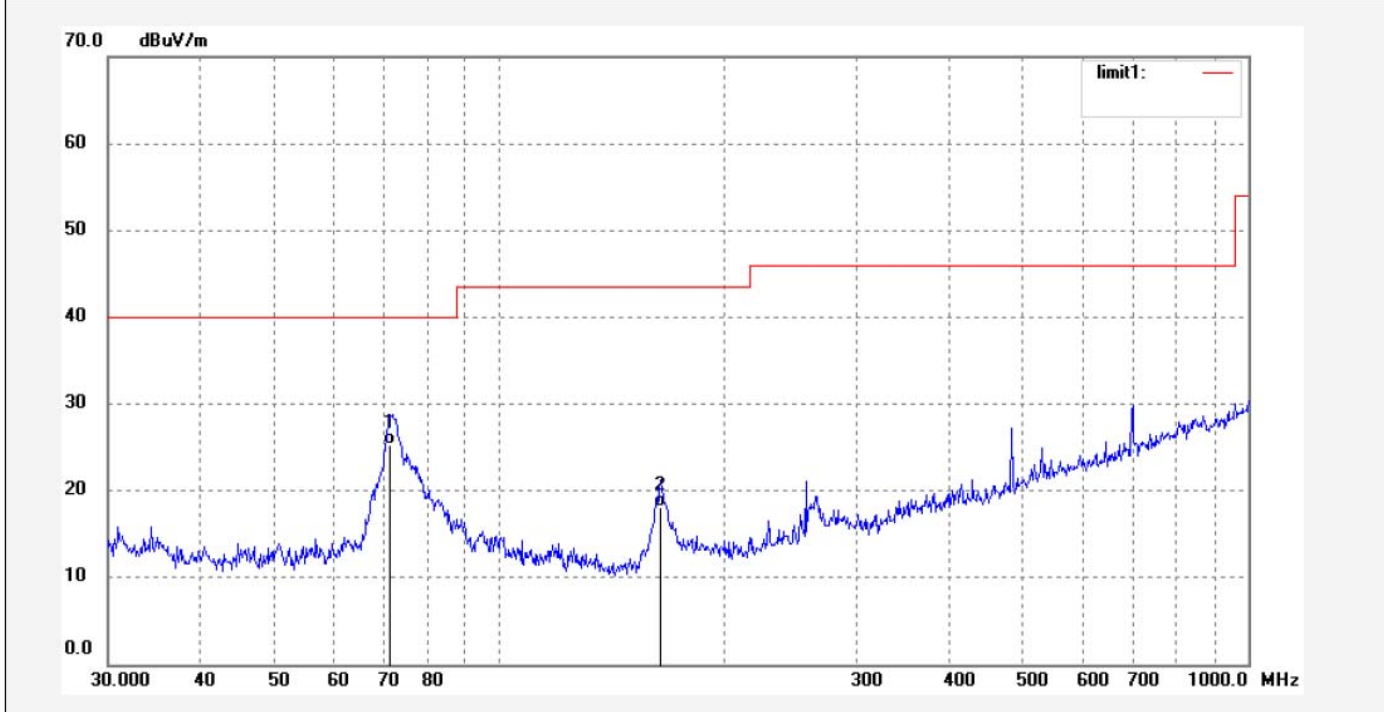
**ACCURATE TECHNOLOGY CO., LTD.**

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: star #3553	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/26/32
EUT: FM Transmitter	Engineer Signature:
Mode: Charging	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130042



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	71.4539	14.25	10.99	25.24	40.00	-14.76	QP			
2	164.3129	6.01	12.15	18.16	43.50	-25.34	QP			



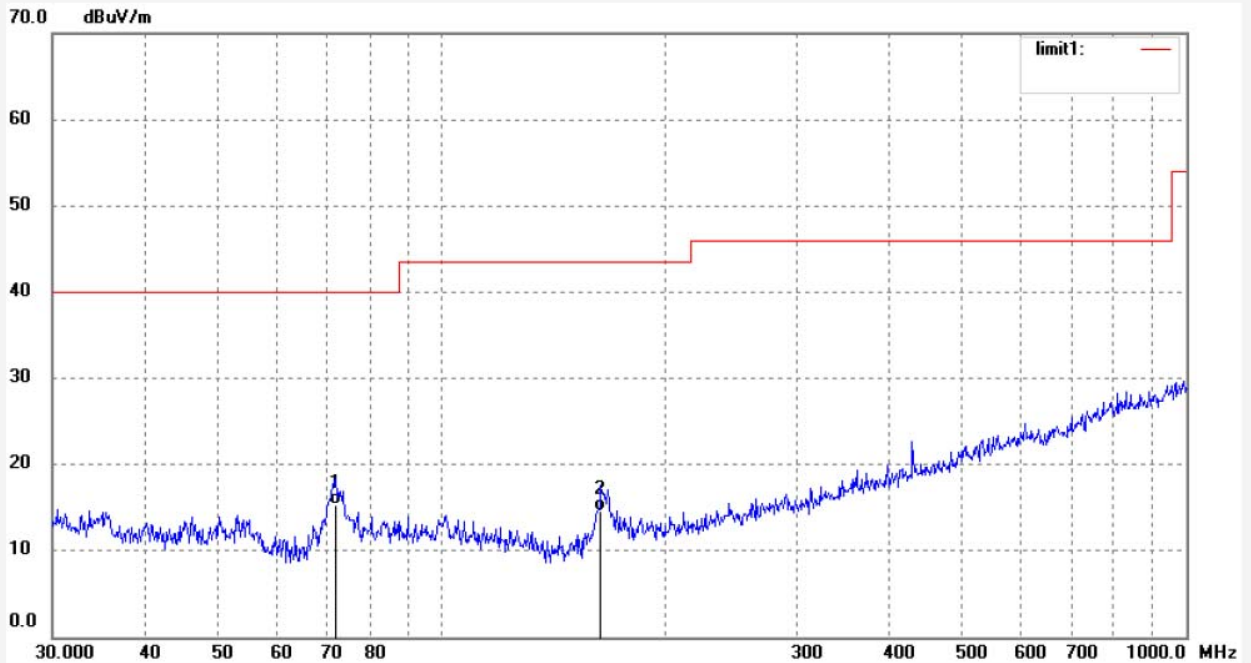
**ACCURATE TECHNOLOGY CO., LTD.**

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
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Job No.: star #3552	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/22/34
EUT: FM Transmitter	Engineer Signature:
Mode: Charging	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130042



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	72.2111	4.22	11.03	15.25	40.00	-24.75	QP			
2	163.7366	2.43	12.14	14.57	43.50	-28.93	QP			