

FCC CERTIFICATION  
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

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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 C Section 15.239  
ANSI 63.4: 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 C Section 15.239 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  
(Engineer)

Approved & Authorized Signer : Genulo  
(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)

Operate Frequency : 88.1-107.9MHz (step 0.2MHz)

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. SUMMARY OF TEST RESULTS

<b>FCC Rules</b>	<b>Description of Test</b>	<b>Result</b>
Section 15.207	Conducted Emission	N/A
Section 15.239(c) Section 15.209	Harmonics and Spurious Radiated Emission and Band Edge	Compliant
Section 15.239(b)	Fundamental Radiated Emission	Compliant
Section 15.239(a)	Occupied Bandwidth	Compliant
Section 15.239	Tuning Range	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: "N/A" means "Not applicable".

## 4. HARMONICS AND SPURIOUS RADIATED EMISSION AND BAND EDGE FOR FCC PART 15 SECTION 15.239(C)

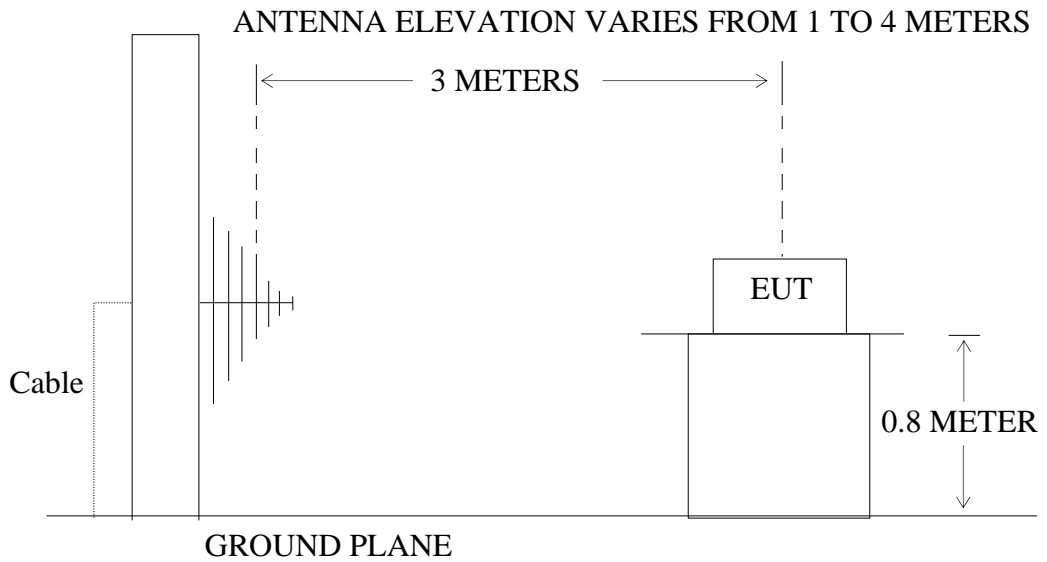
### 4.1. Block Diagram of Test Setup

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



(EUT: FM Transmitter)

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



(EUT: FM Transmitter)



## 4.2.The Emission Limit for section 15.239(c)

4.2.1. The field strength of any emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed the general radiated emission limits in Section 15.209.

### Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit,		The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
	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	

## 4.3.Configuration of EUT on Measurement

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

### 4.3.1.FM Transmitter (EUT)

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

#### 4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes [Connect EUT use Auxiliary Equipment (iPod) playing typical audio signal with a 2.5 kHz tone at a level 16 dB higher than that required to produce a frequency deviation of 75 kHz] and measure it. The transmit frequency are 88.1-107.9MHz. We select 88.1M, 98.1M, 107.9MHz TX frequency to transmit.

#### 4.5. 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.

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

The final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

## 4.6. The Field Strength of Radiation Emission Measurement Results

### PASS.

The frequency range 30MHz to 1000MHz is investigated.

Date of Test:	January 15, 2013	Temperature:	25°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	MP-FMXL	Power Supply:	DC 3.7V
Test Mode:	TX 88.1MHz (Connect to iPod)	Test Engineer:	Bob

#### Harmonics and Spurious radiation emission

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	176.2000	25.32	12.98	38.30	43.50	-5.20
Vertical	176.2000	18.72	12.98	31.70	43.50	-11.80

#### Band edge

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	87.2031	-4.88	13.70	8.82	40.00	-31.18
Horizontal	88.0000	19.22	13.74	32.96	40.00	-7.04
Horizontal	88.2000	20.96	13.75	34.71	43.50	-8.79
Horizontal	88.8472	-4.73	13.79	9.06	43.50	-34.44
Vertical	87.5134	-2.99	13.71	10.72	40.00	-29.28
Vertical	88.0000	11.93	13.74	25.67	40.00	-14.33
Vertical	88.2000	12.35	13.75	26.40	43.50	-17.10
Vertical	88.7338	-3.83	13.75	9.95	43.50	-33.55

#### 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:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$
 Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	January 15, 2013	Temperature:	25°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	MP-FMXL	Power Supply:	DC 3.7V
Test Mode:	TX 98.1MHz (Connect to iPod)	Test Engineer:	Bob

### Harmonics and Spurious radiation emission

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	196.2000	22.16	14.03	36.19	43.50	-7.31
Vertical	196.2000	11.95	14.03	25.98	43.50	-17.52

### Band edge

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	97.0000	-4.25	14.37	10.12	43.50	-33.38
Horizontal	98.0000	19.25	14.51	33.76	43.50	-9.74
Horizontal	98.2000	19.43	14.54	33.97	43.50	-9.53
Horizontal	99.0635	-4.63	14.65	10.02	43.50	-33.48
Vertical	97.2211	-4.28	14.41	10.13	43.50	-33.37
Vertical	98.0000	11.02	14.51	25.53	43.50	-17.97
Vertical	98.2000	11.63	14.54	26.17	43.50	-17.33
Vertical	97.7844	-4.12	14.62	10.50	43.50	-33.00

### 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 in appendix I display the measurement of peak values.

Date of Test:	January 15, 2013	Temperature:	25°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	MP-FMXL	Power Supply:	DC 3.7V
Test Mode:	TX 107.9MHz (Connect to iPod)	Test Engineer:	Bob

### Harmonics and Spurious radiation emission

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	215.8000	16.90	14.56	31.46	43.50	-12.04
Vertical	215.8000	7.26	14.56	21.82	43.50	-21.68

### Band edge

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.( dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	107.1153	-3.99	13.94	9.95	43.50	-33.55
Horizontal	107.8000	22.68	13.95	36.63	43.50	-6.87
Horizontal	108.0050	22.46	13.95	36.41	43.50	-7.09
Horizontal	108.6085	-4.15	13.96	9.81	43.50	-33.69
Vertical	107.0515	0.25	13.94	14.19	43.50	-29.31
Vertical	107.8000	16.87	13.95	30.82	43.50	-12.68
Vertical	108.0050	16.55	13.95	30.50	43.50	-13.00
Vertical	108.8506	-4.88	13.95	9.07	43.50	-34.43

### Note:

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

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

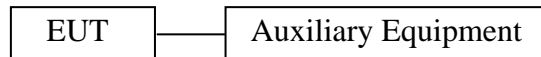
$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
- The spectral diagrams in appendix I display the measurement of peak values.

## 5. FUNDAMENTAL RADIATED EMISSION FOR FCC PART 15

### SECTION 15.239(B)

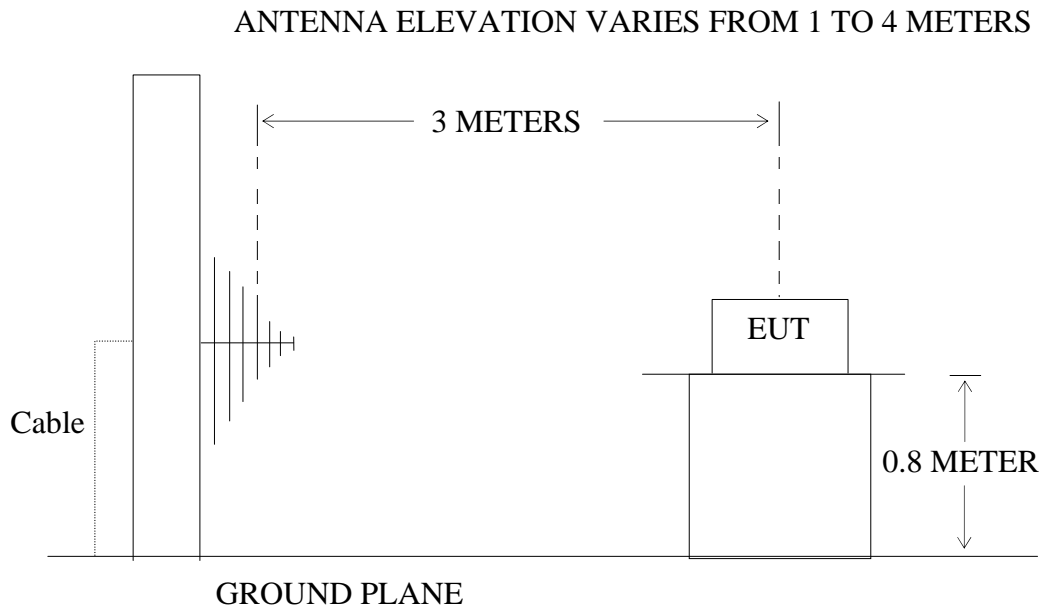
#### 5.1. Block Diagram of Test Setup

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



(EUT: FM Transmitter)

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



(EUT: FM Transmitter)

#### 5.2. The Emission Limit For Section 15.239(b)

5.2.1. The field strength of any emission within the permitted 200kHz band shall not exceed 250microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in section 15.35 for limiting peak emissions apply.

### 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 TX modes [Connect EUT use Auxiliary Equipment (iPod) playing typical audio signal with a 2.5 kHz tone at a level 16 dB higher than that required to produce a frequency deviation of 75 kHz] and measure it. The transmit frequency are 88.1-107.9MHz. We select 88.1M, 98.1M, 107.9MHz TX frequency to transmit.

### 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 300kHz.

## 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 3.7V
Test Mode:	TX 88.1MHz (Connect to iPod)	Test Engineer:	Bob

### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor (dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin (dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
88.1000	25.01	28.28	13.75	38.76	42.03	48.00	68.00	-9.24	-5.97	Horizontal
88.1000	18.56	22.44	13.75	32.31	36.19	48.00	68.00	-15.69	-31.81	Vertical

Note:

- Measurement was performed with modulated signal with average detector and peak detector.
- 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:  

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

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
- The spectral diagrams in appendix I display the measurement of peak values.



Date of Test:	January 15, 2013	Temperature:	25°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	MP-FMXL	Power Supply:	DC 3.7V
Test Mode:	TX 98.1MHz (Connect to iPod)	Test Engineer:	Bob

### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor (dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin (dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
98.1000	22.00	25.55	14.52	36.52	40.07	48.00	68.00	-11.48	-27.93	Horizontal
98.1000	13.05	15.80	14.52	27.57	30.32	48.00	68.00	-20.43	-37.68	Vertical

Note:

- Measurement was performed with modulated signal with average detector and peak detector.
- 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:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$
Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
- The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	<u>January 15, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>FM Transmitter</u>	Humidity:	<u>50%</u>
Model No.:	<u>MP-FMXL</u>	Power Supply:	<u>DC 3.7V</u>
Test Mode:	<u>TX 107.9MHz (Connect to iPod)</u>	Test Engineer:	<u>Bob</u>

### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor (dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin (dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
107.9000	22.52	26.25	13.95	36.47	40.20	48.00	68.00	-11.53	-27.80	Horizontal
107.9000	14.03	17.52	13.95	27.98	31.47	48.00	68.00	-20.02	-36.53	Vertical

Note:

- Measurement was performed with modulated signal with average detector and peak detector.
- 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:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$
Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
- The spectral diagrams in appendix I display the measurement of peak values.

## **6. OCCUPIED BANDWIDTH FOR FCC PART 15 SECTION**

### **15.239(A)**

#### **6.1.The Requirement For Section 15.239(a)**

6.1.1. Emission from the device shall be confined within a band 200kHz wide centered on the operating frequency. The 200kHz band shall lie wholly within the frequency range of 88-108MHz.

#### **6.2.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.

##### **6.2.1.FM Transmitter (EUT)**

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

### 6.3. Operating Condition of EUT

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

6.3.2. Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes [Connect EUT use Auxiliary Equipment (iPod) playing typical audio signal with a 2.5 kHz tone at a level 16 dB higher than that required to produce a frequency deviation of 75 kHz] measure it. The transmit frequency are 88.1-107.9MHz. We are select 88.1M, 98.1M, 107.9MHz TX frequency to transmit.

### 6.4. Test Procedure

6.4.1. The EUT was placed on a turn table which is 0.8m above ground plane.

6.4.2. Set EUT as normal operation. Playing typical audio signal with a 2.5 kHz tone at a level 16 dB higher than that required to produce a frequency deviation of 75 kHz

6.4.3. Set EMI test receiver Center Frequency = fundamental frequency, RBW= 3kHz, VBW= 10kHz, Span=300kHz.

6.4.4. Set EMI test receiver Max hold. Mark peak, -26dB.

## 6.5. Test Result

**The EUT does meet the FCC requirement.**

Connect to iPod

<b>Frequency (MHz)</b>	<b>Occupied Bandwidth (kHz)</b>
88.1	96.6
98.1	96.6
107.9	96.6

The spectral diagrams in appendix I.

## 7. TUNING RANGE

### 7.1.The Requirement For Section 15.239

88-108MHz

### 7.2.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.

#### 7.2.1. FM Transmitter (EUT)

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

### 7.3.Operating Condition of EUT

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

7.3.2.Turn on the power of all equipment.

7.3.3. Let the EUT work in TX modes [Connect EUT use Auxiliary Equipment (iPod) playing typical audio signal with a 2.5 kHz tone at a level 16 dB higher than that required to produce a frequency deviation of 75 kHz] measure it. The transmit frequency are 88.1-107.9MHz. We are select 88.1M, 98.1M, 107.9MHz TX frequency to transmit.

### 7.4.Test Procedure

7.4.1.The EUT was placed on a turn table which is 0.8m above ground plane.

7.4.2.Set the EUT working on the working frequency.

7.4.3. Set EMI test receiver center frequency = working frequency, RBW=3kHz, VBW= 10kHz, Span=300kHz.

7.4.4.Measuring the working frequency.

7.4.5.The working frequency should be inside 88-108MHz.

## 7.5. Test Result

**The EUT does meet the FCC requirement.**

Connect to iPod

<b>Display of the EUT LED (MHz)</b>	<b>Display of the EMI test receiver (MHz)</b>
88.1	88.1264
98.1	98.7113
107.9	107.9045

The working frequency rang is from 88.1 to 107.9MHz.

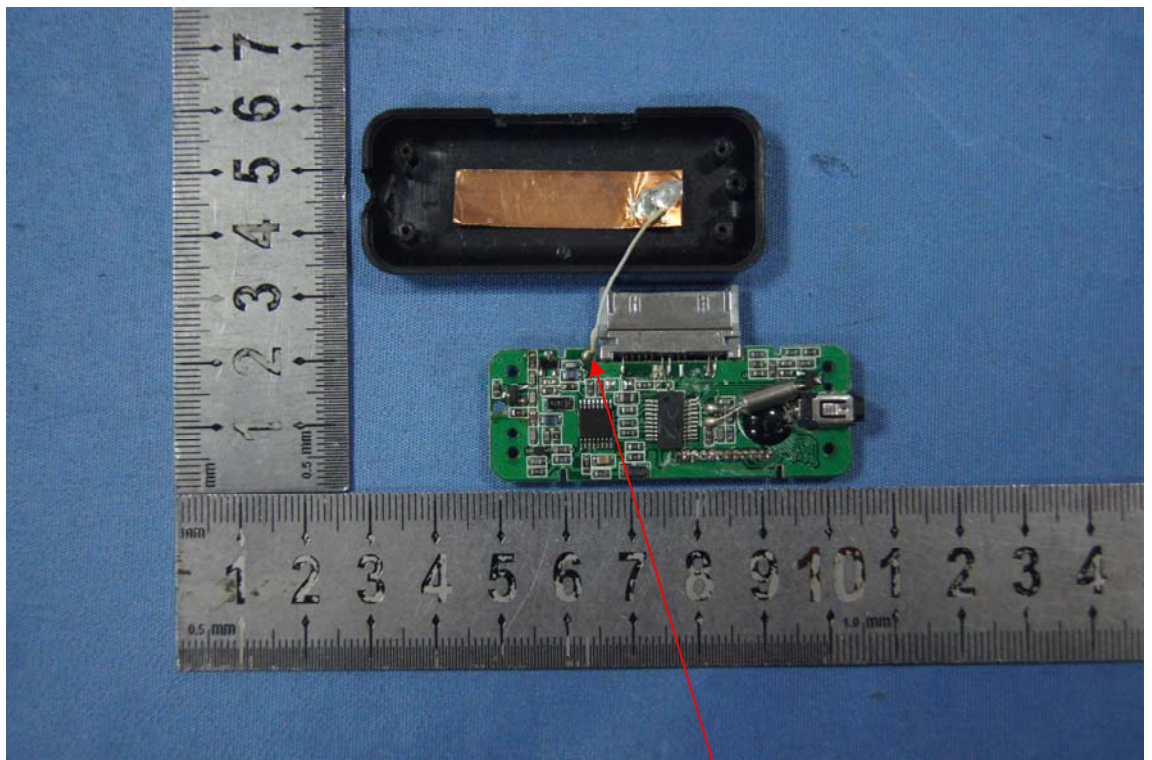
## 8. ANTENNA REQUIREMENT

### 8.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### 8.2.Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement.



Antenna



# APPENDIX I (Test Curves)



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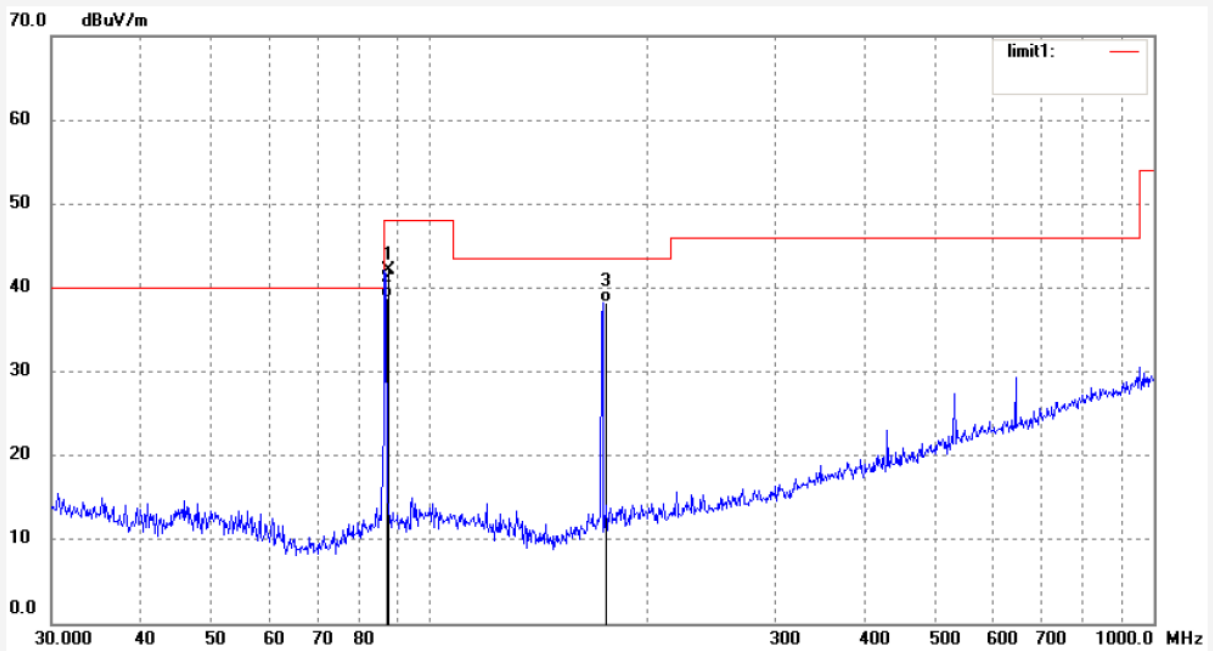
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3554  
Standard: FCC PART 15 (FMT)  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 88.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Horizontal  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 9/29/20  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	88.1000	28.28	13.75	42.03	68.00	-25.97	peak			
2	88.1000	25.01	13.75	38.76	48.00	-9.24	AVG			
3	176.2000	25.32	12.98	38.30	43.50	-5.20	QP			



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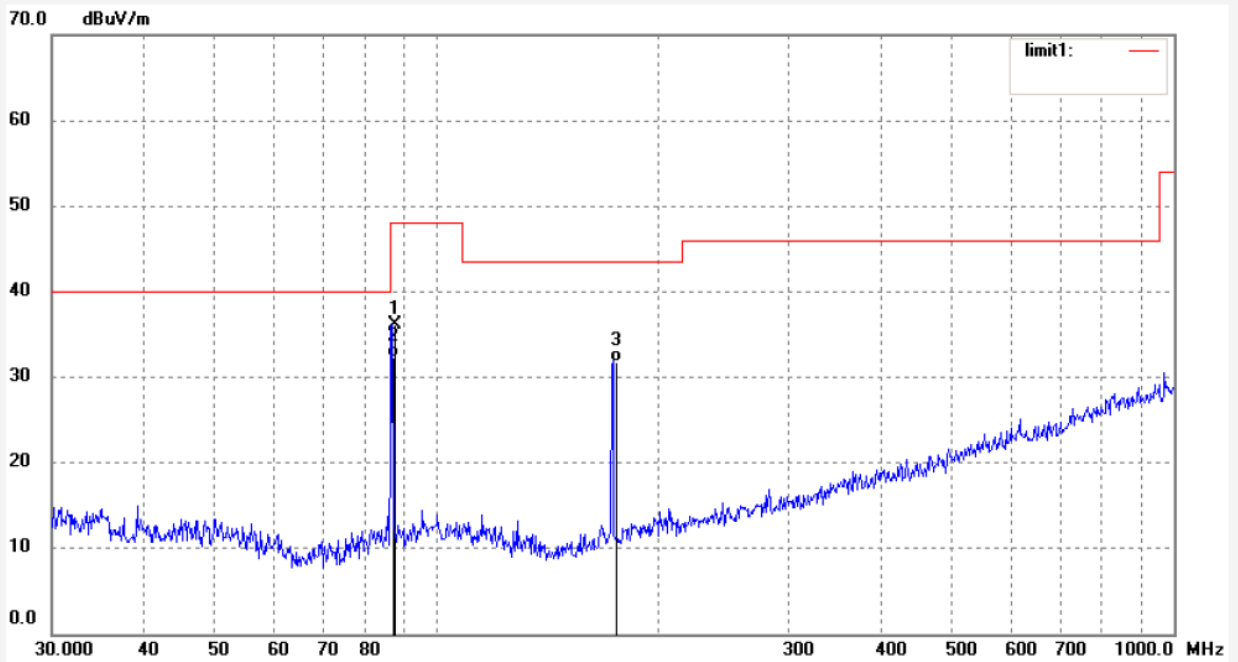
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3555  
Standard: FCC PART 15 (FMT)  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 88.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Vertical  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 9/33/30  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	88.1000	22.44	13.75	36.19	68.00	-31.81	peak			
2	88.1000	18.56	13.75	32.31	48.00	-15.69	AVG			
3	176.2000	18.72	12.98	31.70	43.50	-11.80	QP			



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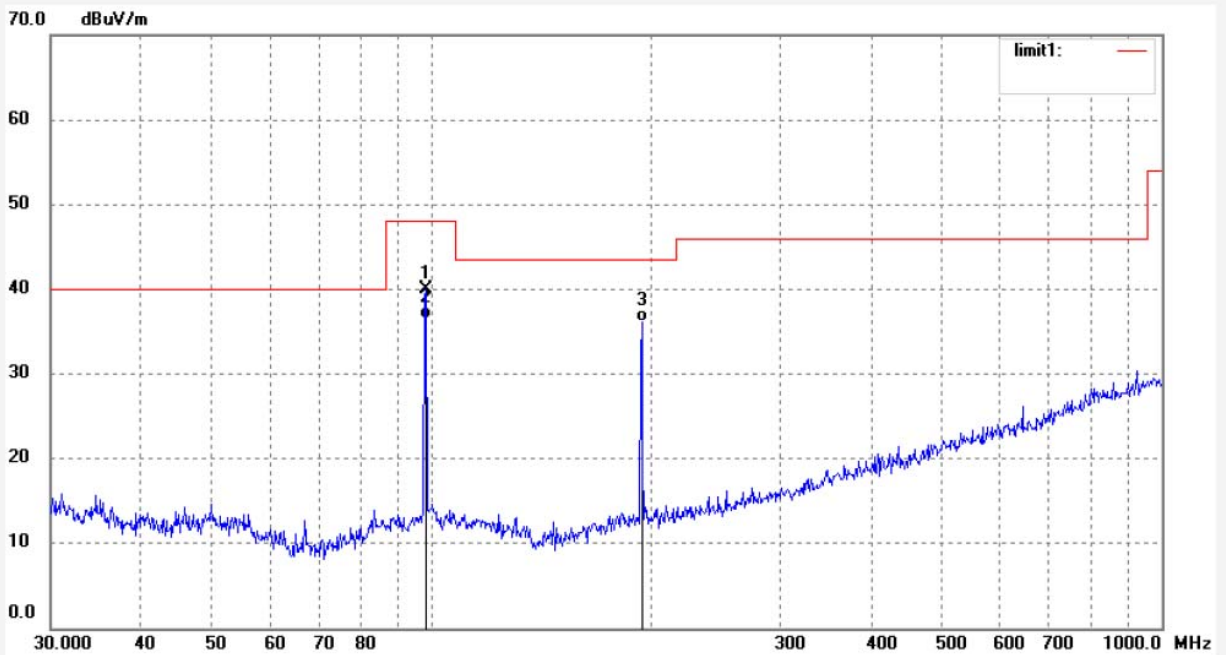
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3557  
Standard: FCC PART 15 (FMT)  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 98.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Horizontal  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 9/40/59  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	98.1000	25.55	14.52	40.07	68.00	-27.93	peak			
2	98.1000	22.00	14.52	36.52	48.00	-11.48	AVG			
3	196.2000	22.16	14.03	36.19	43.50	-7.31	QP			



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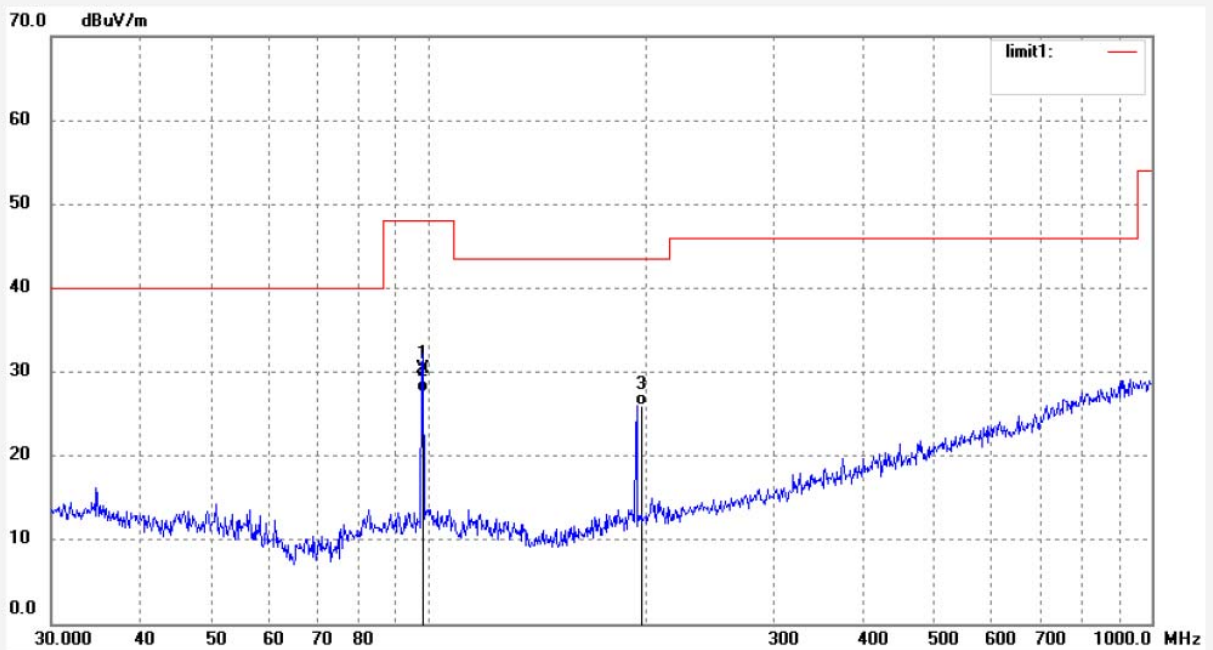
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3556  
Standard: FCC PART 15 (FMT)  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 98.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Vertical  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 9/36/14  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	98.1000	15.80	14.52	30.32	68.00	-37.68	peak			
2	98.1000	13.05	14.52	27.57	48.00	-20.43	AVG			
3	196.2000	11.95	14.03	25.98	43.50	-17.52	QP			



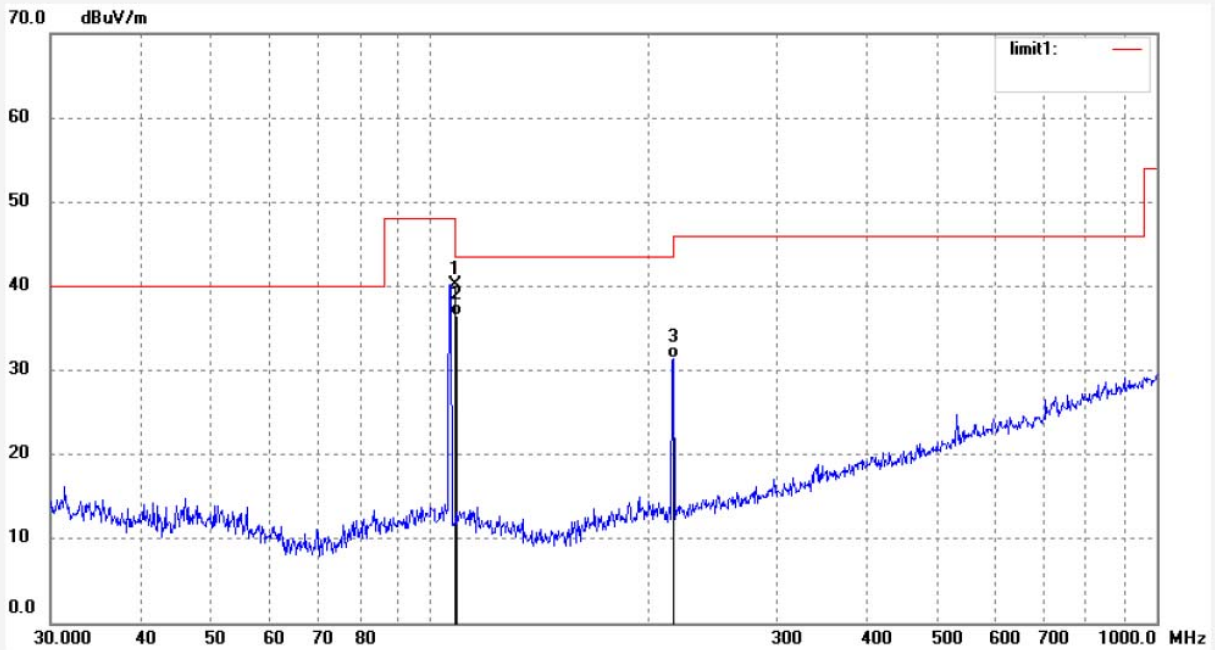
**ACCURATE TECHNOLOGY CO., LTD.**

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

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

Job No.: STAR #3558 Standard: FCC PART 15 (FMT) Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: FM Transmitter Mode: FM 107.9MHz Model: MP-FMXL Manufacturer: DAZA	Polarization: Horizontal Power Source: Power by ipod Date: 13/01/15/ Time: 9/43/12 Engineer Signature: Distance: 3m
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Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.9000	26.25	13.95	40.20	68.00	-27.80	peak			
2	107.9000	22.52	13.95	36.47	48.00	-11.53	AVG			
3	215.8000	16.90	14.56	31.46	43.50	-12.04	QP			



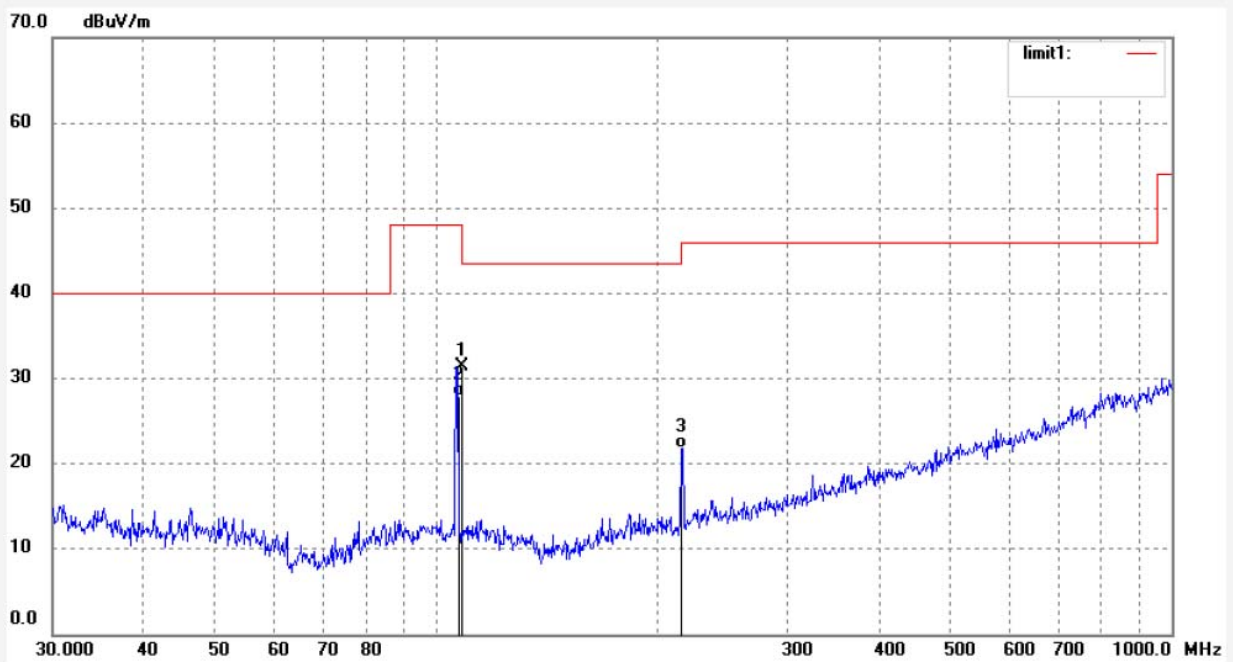
**ACCURATE TECHNOLOGY CO., LTD.**

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

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

Job No.: STAR #3559	Polarization: Vertical
Standard: FCC PART 15 (FMT)	Power Source: Power by ipod
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/48/10
EUT: FM Transmitter	Engineer Signature:
Mode: FM 107.9MHz	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.9000	17.52	13.95	31.47	68.00	-36.53	peak			
2	107.9000	14.03	13.95	27.98	48.00	-20.02	AVG			
3	215.8000	7.26	14.56	21.82	43.50	-21.68	QP			



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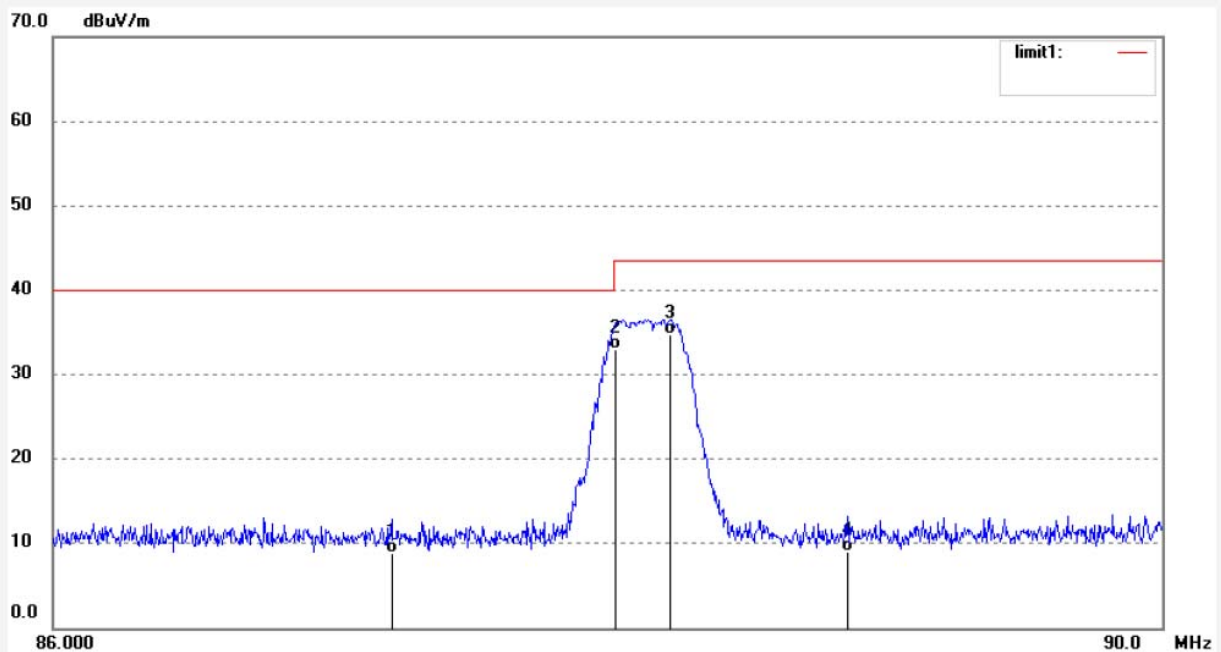
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3562  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 88.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Horizontal  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 9/54/02  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	87.2031	-4.88	13.70	8.82	40.00	-31.18	QP			
2	88.0000	19.22	13.74	32.96	40.00	-7.04	QP			
3	88.2000	20.96	13.75	34.71	43.50	-8.79	QP			
4	88.8472	-4.73	13.79	9.06	43.50	-34.44	QP			





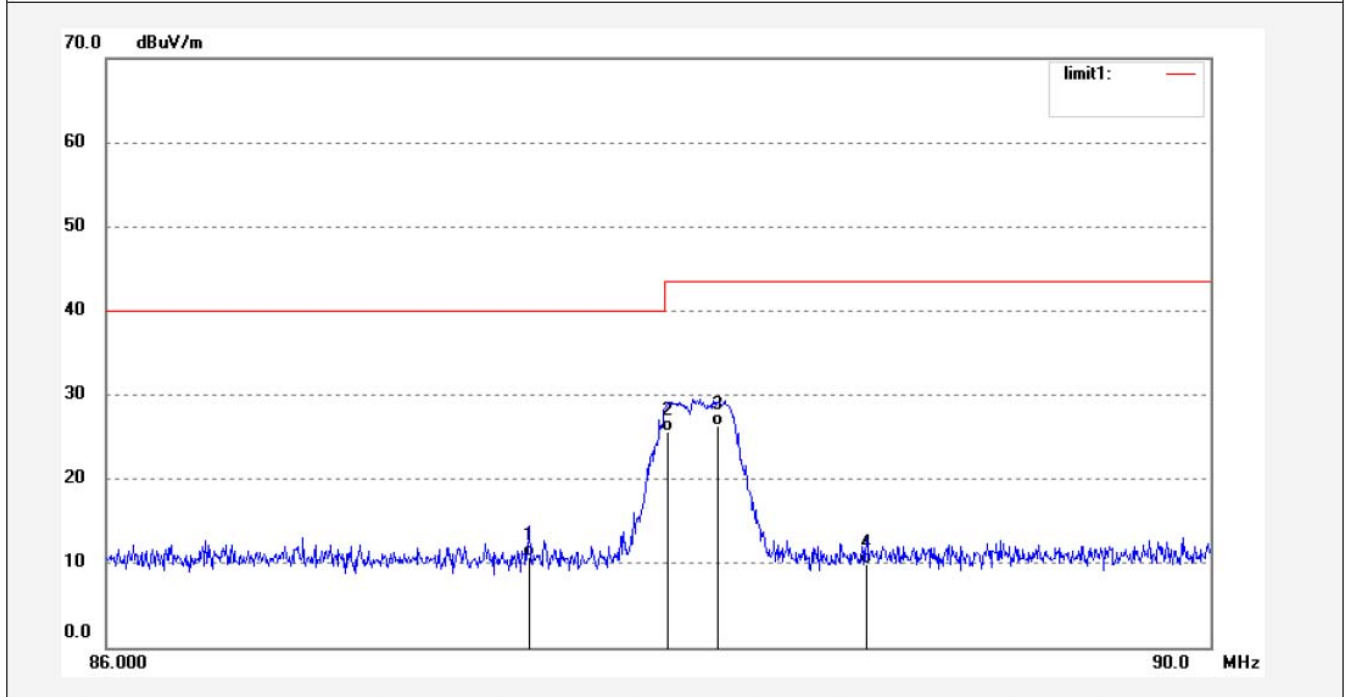
**ACCURATE TECHNOLOGY CO., LTD.**

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

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

Job No.: STAR #3563	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: Power by ipod
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/58/17
EUT: FM Transmitter	Engineer Signature:
Mode: FM 88.1MHz	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	87.5134	-2.99	13.71	10.72	40.00	-29.28	QP			
2	88.0000	11.93	13.74	25.67	40.00	-14.33	QP			
3	88.2000	12.65	13.75	26.40	43.50	-17.10	QP			
4	88.7338	-3.83	13.78	9.95	43.50	-33.55	QP			



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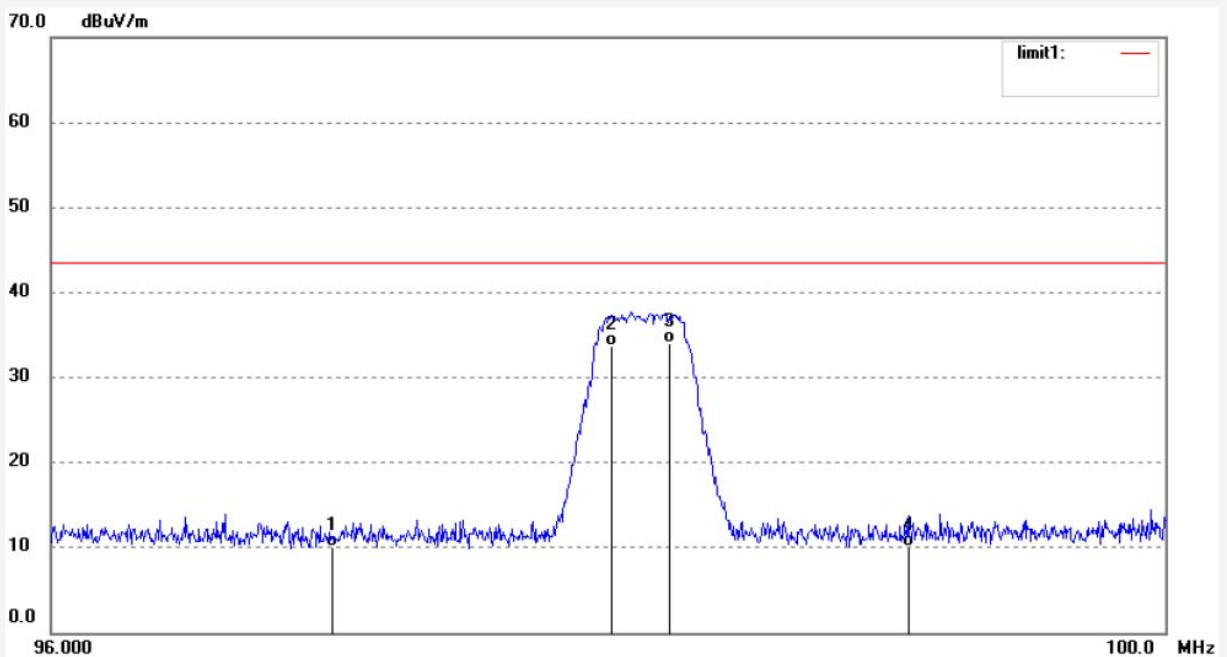
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3565  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 98.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Horizontal  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 10/06/35  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.0000	-4.25	14.37	10.12	43.50	-33.38	QP			
2	98.0000	19.25	14.51	33.76	43.50	-9.74	QP			
3	98.2000	19.43	14.54	33.97	43.50	-9.53	QP			
4	99.0635	-4.63	14.65	10.02	43.50	-33.48	QP			



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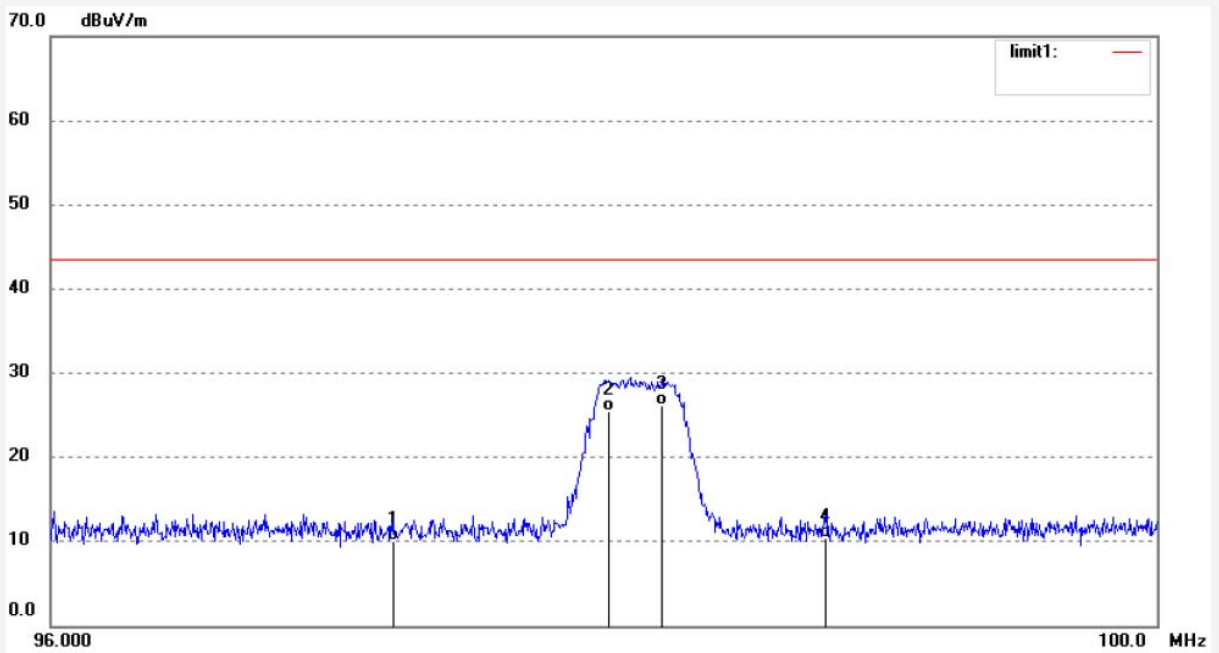
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #3564  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: FM Transmitter  
Mode: FM 98.1MHz  
Model: MP-FMXL  
Manufacturer: DAZA

Polarization: Vertical  
Power Source: Power by ipod  
Date: 13/01/15/  
Time: 10/02/57  
Engineer Signature:  
Distance: 3m

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.2211	-4.28	14.41	10.13	43.50	-33.37	QP			
2	98.0000	11.02	14.51	25.53	43.50	-17.97	QP			
3	98.2000	11.63	14.54	26.17	43.50	-17.33	QP			
4	98.7844	-4.12	14.62	10.50	43.50	-33.00	QP			



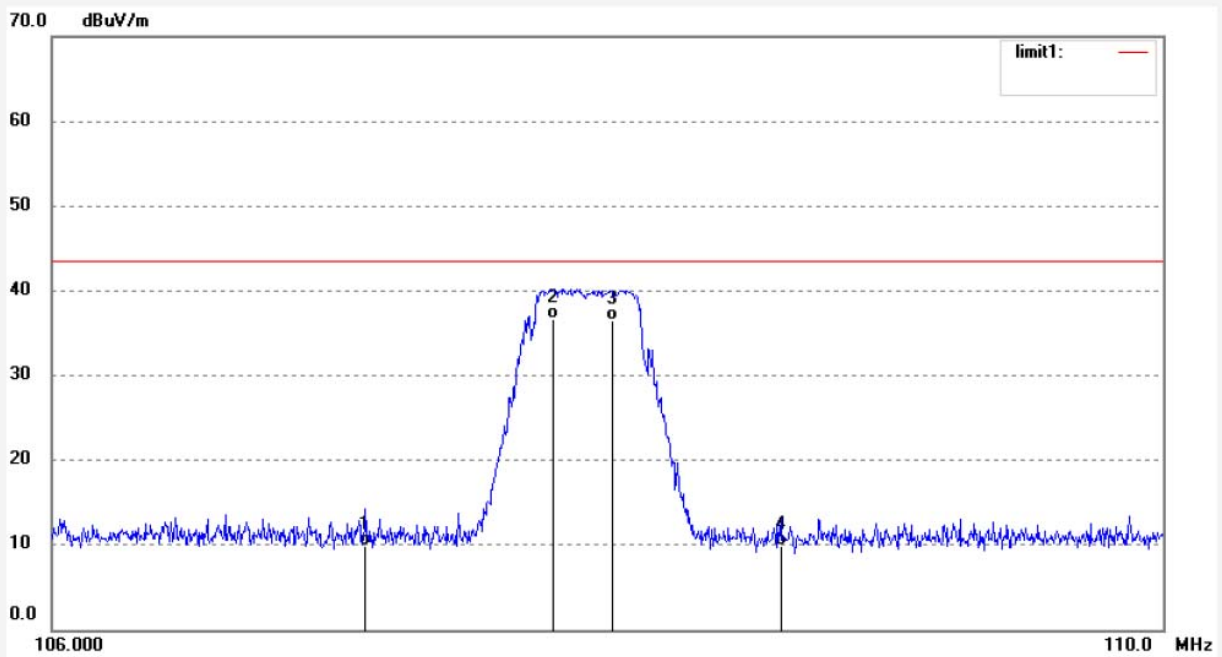
**ACCURATE TECHNOLOGY CO., LTD.**

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

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

Job No.: STAR #3561	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: Power by ipod
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/51/58
EUT: FM Transmitter	Engineer Signature:
Mode: FM 107.9MHz	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130041



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.1153	-3.99	13.94	9.95	43.50	-33.55	QP			
2	107.8000	22.68	13.95	36.63	43.50	-6.87	QP			
3	108.0050	22.46	13.95	36.41	43.50	-7.09	QP			
4	108.6085	-4.15	13.96	9.81	43.50	-33.69	QP			



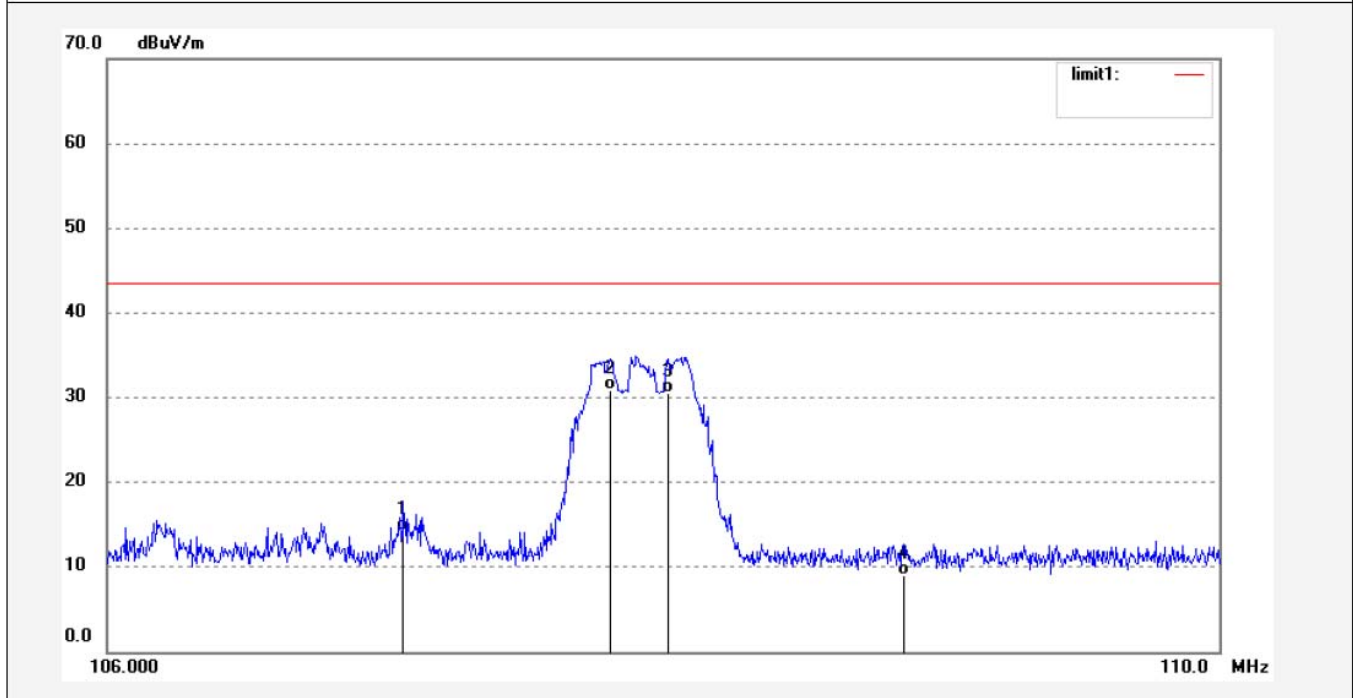
**ACCURATE TECHNOLOGY CO., LTD.**

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

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

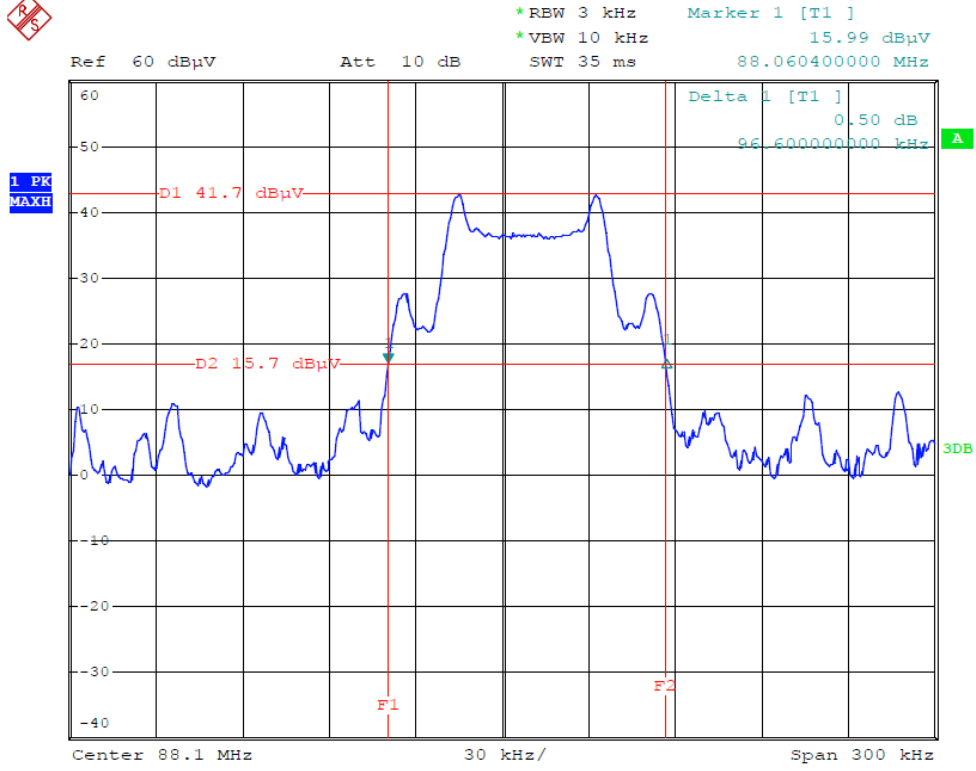
Job No.: STAR #3560	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: Power by ipod
Test item: Radiation Test	Date: 13/01/15/
Temp.( C)/Hum.(%) 26 C / 55 %	Time: 9/49/36
EUT: FM Transmitter	Engineer Signature:
Mode: FM 107.9MHz	Distance: 3m
Model: MP-FMXL	
Manufacturer: DAZA	

Note: Report No.:ATE20130041

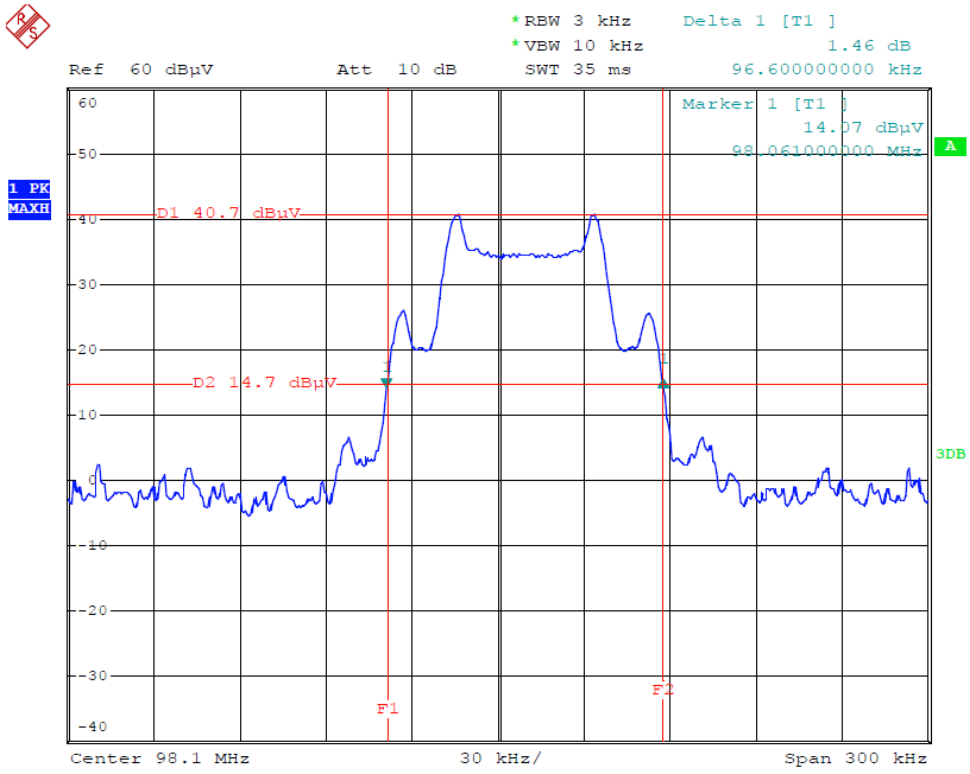


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.0515	0.25	13.94	14.19	43.50	-29.31	QP			
2	107.8000	16.87	13.95	30.82	43.50	-12.68	QP			
3	108.0050	16.55	13.95	30.50	43.50	-13.00	QP			
4	108.8506	-4.88	13.95	9.07	43.50	-34.43	QP			

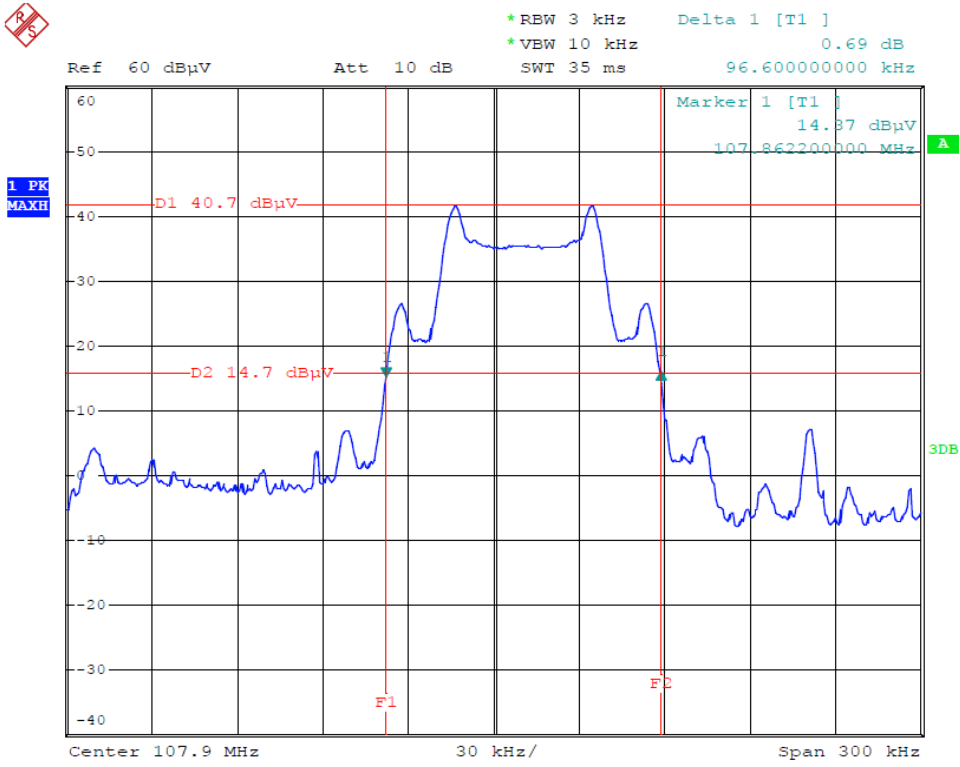
### Connect to iPod



Date: 19.JAN.2013 09:28:17



Date: 19.JAN.2013 09:21:28



Date: 19.JAN.2013 09:10:37