

FCC CERTIFICATION
On Behalf of
Radio Technology (H.K.) Limited

FM Stereo Transmitter
Model No.: FT-007

FCC ID: YXEFT-007

Prepared for : Radiorock Technology (H.K.) Limited
Address : No. 12, Jiyuan Str., Juzhou 2nd Industrial Zone, Shijie
Town, Dongguan City, Guangdong, China

Prepared by : Accurate Technology Co., Ltd.
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.
Science & Industry Park, Nanshan, Shenzhen, Guangdong
P.R. China

Tel: (0755) 26503290
Fax: (0755) 26503396

Report Number : ATE20102291
Date of Test : November 3-5, 2010
Date of Report : November 8, 2010

TABLE OF CONTENTS

Description

Page

Test Report Certification

1. GENERAL INFORMATION	4
1.1. Description of Device (EUT).....	4
1.2. Description of Test Facility	4
1.3. Measurement Uncertainty	5
2. MEASURING DEVICE AND TEST EQUIPMENT	6
3. SUMMARY OF TEST RESULTS.....	7
4. HARMONICS AND SPURIOUS RADIATED EMISSION FOR FCC PART 15 SECTION 15.239(C)	8
4.1. Block Diagram of Test Setup.....	8
4.2. The Emission Limit for section 15.239(c)	9
4.3. Configuration of EUT on Measurement	9
4.4. Operating Condition of EUT	10
4.5. Test Procedure	10
4.6. The Field Strength of Radiation Emission Measurement Results	11
5. FUNDAMENTAL RADIATED EMISSION FOR FCC PART 15 SECTION 15.239(B)	14
5.1. Block Diagram of Test Setup.....	14
5.2. The Emission Limit For Section 15.239(b)	14
5.3. EUT Configuration on Measurement	15
5.4. Operating Condition of EUT	15
5.5. Test Procedure	15
5.6. The Emission Measurement Result	16
6. OCCUPIED BANDWIDTH FOR FCC PART 15 SECTION 15.239(A)	19
6.1. The Requirement For Section 15.239(a).....	19
6.2. EUT Configuration on Measurement	19
6.3. Operating Condition of EUT	19
6.4. Test Procedure	19
6.5. Test Result	20
7. TUNING RANGE	21
7.1. The Requirement For Section 15.239	21
7.2. EUT Configuration on Measurement	21
7.3. Operating Condition of EUT	21
7.4. Test Procedure	21
7.5. Test Result	22
8. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A) ..	23
8.1. Block Diagram of Test Setup.....	23
8.2. The Emission Limit	23
8.3. Configuration of EUT on Measurement	24
8.4. Operating Condition of EUT	24
8.5. Test Procedure	24
8.6. Power Line Conducted Emission Measurement Results	25

APPENDIX I (TEST CURVES) (11 pages)

Test Report Certification

Applicant : Radiorock Technology (H.K.) Limited
Manufacturer : Radiorock Technology (H.K.) Limited
EUT Description : FM Stereo Transmitter
(A) MODEL NO.: FT-007
(B) SERIAL NO.: N/A
(C) POWER SUPPLY: DC 3-6V ("AA" batteries 2× or adapter input)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.239
ANSI 63.4: 2003

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 : November 3-5, 2010

Prepared by :



(Engineer)

Approved & Authorized Signer :



(Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	FM Stereo Transmitter
Model Number	:	FT-007
Power Supply	:	DC 3-6V ("AA" batteries 2× or adapter input)
Adapter	:	Model: DU35050100C Input: AC 120V/60Hz Output: DC 5.0V/100Ma
Operate Frequency	:	88.3-107.7MHz
Applicant	:	Radirock Technology (H.K.) Limited
Address	:	No. 12, Jiyuan Str., Juzhou 2 nd Industrial Zone, Shijie Town, Dongguan City, Guangdong, China
Manufacturer	:	Radirock Technology (H.K.) Limited
Address	:	No. 12, Jiyuan Str., Juzhou 2 nd Industrial Zone, Shijie Town, Dongguan City, Guangdong, China
Date of sample received	:	October 28, 2010
Date of Test	:	November 3-5, 2010

1.2. 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

1.3.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 until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 9, 2011
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 9, 2011
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 9, 2011
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 9, 2011
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 9, 2011
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 9, 2011
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 9, 2011
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 9, 2011
iPod	Apple	A1136	2Z6500GBSZA	----

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	Compliant
Section 15.239(c) Section 15.209	Harmonics and Spurious Radiated Emission	Compliant
Section 15.239(b)	Fundamental Radiated Emission	Compliant
Section 15.239(a)	Occupied Bandwidth	Compliant
Section 15.239	Tuning Range	Compliant

Remark: “N/A” means “Not applicable”.

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

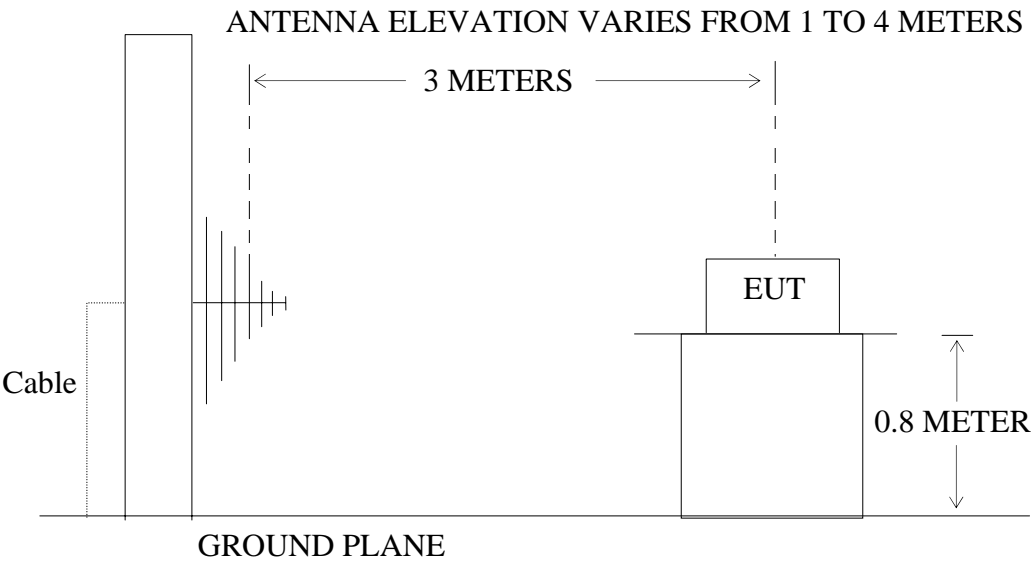
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: FM Stereo Transmitter)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: FM Stereo 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 μ 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 Stereo Transmitter (EUT)

Model Number : FT-007
 Serial Number : N/A
 Manufacturer : Radiorock Technology (H.K.) Limited

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 iPod playing typical audio signal with maximum audio level] measure it. The transmit frequency are 88.3-107.7MHz. We are select 88.3M, 98.0M, 107.7MHz 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: 2003 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:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 88.3MHz	Test Engineer:	Joe

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.(dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	176.5780	8.25	15.76	24.01	43.50	-19.49
Vertical	9.49	15.76	15.76	25.252	43.50	-18.25

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:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 98.0MHz	Test Engineer:	Joe

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.(dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	195.9760	9.19	16.03	25.22	43.50	-18.28
Vertical	195.9760	10.30	16.15	26.45	43.50	-17.05

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:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 107.7MHz	Test Engineer:	Joe

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.(dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dB) QP
Horizontal	215.3720	10.89	16.55	27.44	43.50	-16.06
Vertical	215.3720	13.40	16.55	29.95	43.50	-13.55

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:

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

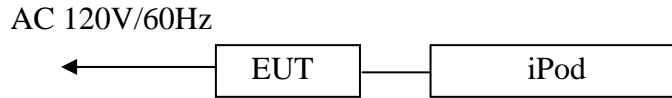
$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
3. The spectral diagrams in appendix I display the measurement of peak values.

5. FUNDAMENTAL RADIATED EMISSION FOR FCC PART 15

SECTION 15.239(B)

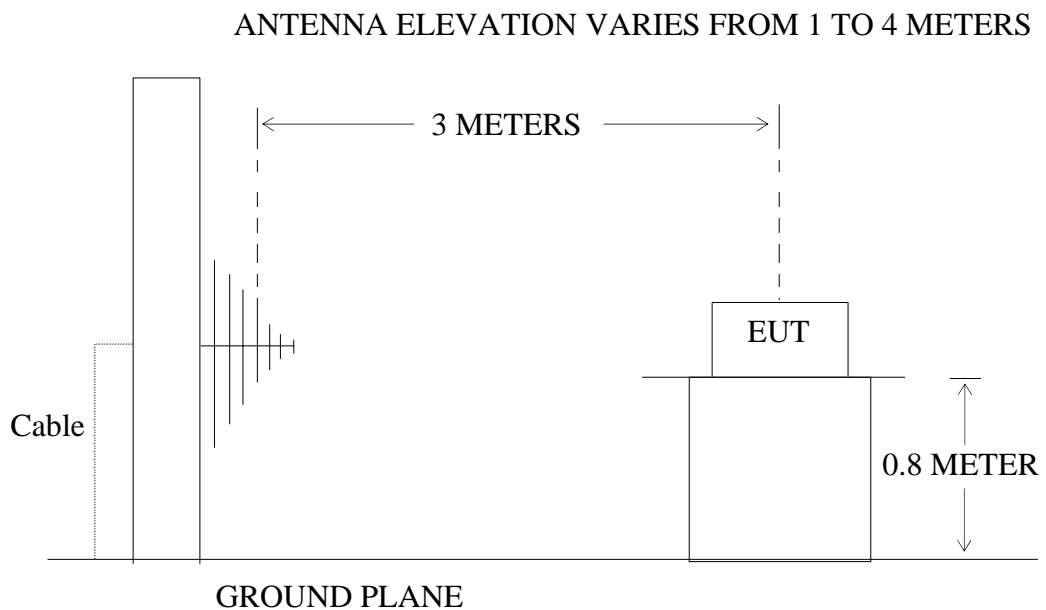
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: FM Stereo Transmitter)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: FM Stereo 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 Stereo Transmitter (EUT)

Model Number : FT-007
Serial Number : N/A
Manufacturer : Radiorock Technology (H.K.) Limited

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 iPod playing typical audio signal with maximum audio level] measure it. The transmit frequency are 88.3-107.7MHz. We are select 88.3M, 98.0M, 107.7MHz 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: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz.

5.6.The Emission Measurement Result

PASS.

Date of Test:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 88.1MHz	Test Engineer:	Joe

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	
88.2860	26.92	29.37	13.76	40.68	43.13	48	68	-7.32	-24.87	Horizontal
88.2860	29.46	31.89	13.72	43.18	45.61	48	68	-4.82	-22.39	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:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 98.0MHz	Test Engineer:	Joe

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	
97.9840	26.50	28.88	14.03	40.53	42.91	48	68	-7.47	-25.09	Horizontal
97.9840	29.54	31.99	13.93	43.47	45.92	48	68	-4.53	-22.08	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:	November 4, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 107.7MHz	Test Engineer:	Joe

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	
107.6810	28.41	30.88	13.74	42.15	44.62	48	68	-5.85	-23.38	Horizontal
107.6810	29.59	32.02	14.21	43.80	46.23	48	68	-4.20	-21.77	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.

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 Stereo Transmitter (EUT)

Model Number : FT-007
 Serial Number : N/A
 Manufacturer : Radiorock Technology (H.K.) Limited

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 iPod playing typical audio signal with maximum audio level] measure it. The transmit frequency are 88.3-107.7MHz. We are select 88.3M, 98.0M, 107.7MHz 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 (the volume control was set to maximum.)
- 6.4.3. Set EMI test receiver Center Frequency = fundamental frequency, RBW= 3kHz, VBW= 10kHz, Span=500kHz.
- 6.4.4. Set EMI test receiver Max hold. Mark peak, -26dB.

6.5. Test Result

The EUT does meet the FCC requirement.

FM Stereo Transmitter

FM 88.3MHz

-26dB bandwidth = 176.0kHz

FM 98.0MHz

-26dB bandwidth = 175.0kHz

FM 107.7MHz

-26dB bandwidth = 175.0kHz

The spectral diagrams are attached 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 Stereo Transmitter (EUT)

Model Number : FT-007
Serial Number : N/A
Manufacturer : Radiorock Technology (H.K.) Limited

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 iPod playing typical audio signal with maximum audio level] measure it. The transmit frequency are 88.3-107.7MHz. We are select 88.3M, 98.0M, 107.7MHz 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=500kHz.

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.

FM Stereo Transmitter

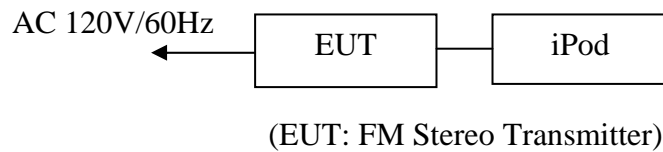
Low Frequency = 88.286MHz	EUT LED display 88.3MHz
Mid Frequency = 97.984MHz	EUT LED display 98.0MHz
High Frequency = 107.681MHz	EUT LED display 107.7MHz

The working frequency rang is from 88.3 to 107.7MHz.

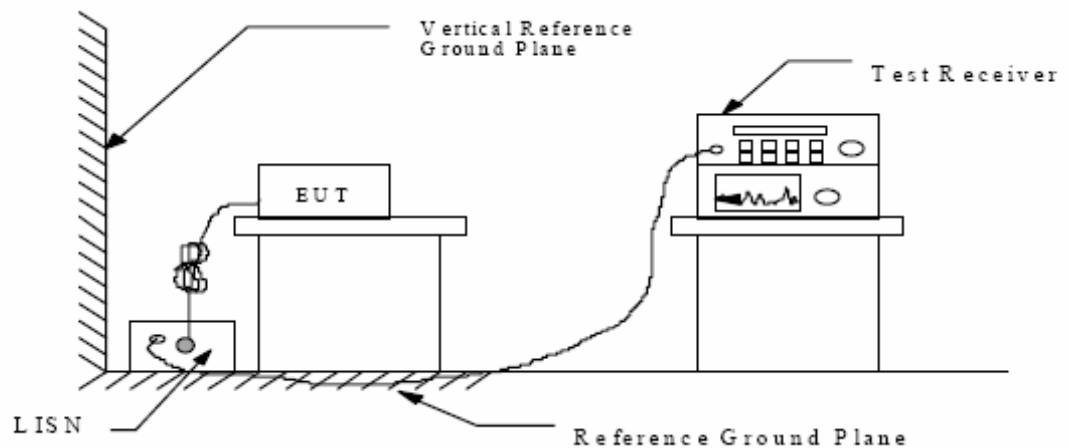
8. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

8.1. Block Diagram of Test Setup

8.1.1. Block diagram of connection between the EUT and simulators



8.1.2. Shielding Room Test Setup Diagram



(EUT: FM Stereo Transmitter)

8.2. The Emission Limit

8.2.1. Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

* Decreases with the logarithm of the frequency.

8.3.Configuration of EUT on Measurement

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

8.3.1.FM Stereo Transmitter (EUT)

Model Number : FT-007
Serial Number : N/A
Manufacturer : Radiorock Technology (H.K.) Limited

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3. Let the EUT work in TX (Channel Middle 98.0MHz) mode measure it.

8.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

8.6. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Date of Test:	November 5, 2010	Temperature:	25°C
EUT:	FM Stereo Transmitter	Humidity:	50%
Model No.:	FT-007	Power Supply:	AC 120V/60Hz
Test Mode:	TX 98.0MHz	Test Engineer:	Joe

Frequency (MHz)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector	Line
*					Neutral
*					Live

* Remark: The spurious emission from the EUT is far below the limit.

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached in appendix I

APPENDIX I (Test Curves)



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: joe #1053

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 88.3MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Horizontal

Power Source: AC 120V/60Hz

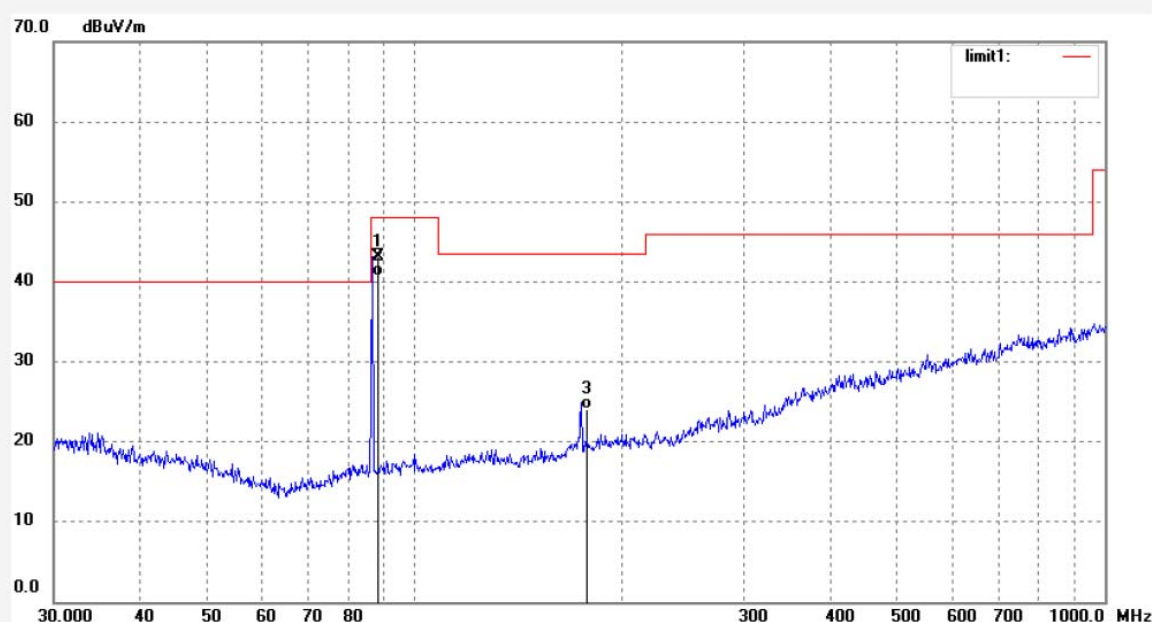
Date: 2010/11/04

Time: 10:49:48

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	88.2860	29.37	13.76	43.13	68.00	-24.87	peak			
2	88.2860	26.92	13.76	40.68	48.00	-7.32	AVG			
3	176.5780	8.25	15.76	24.01	43.50	-19.49	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: joe #1054

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 88.3MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Vertical

Power Source: AC 120V/60Hz

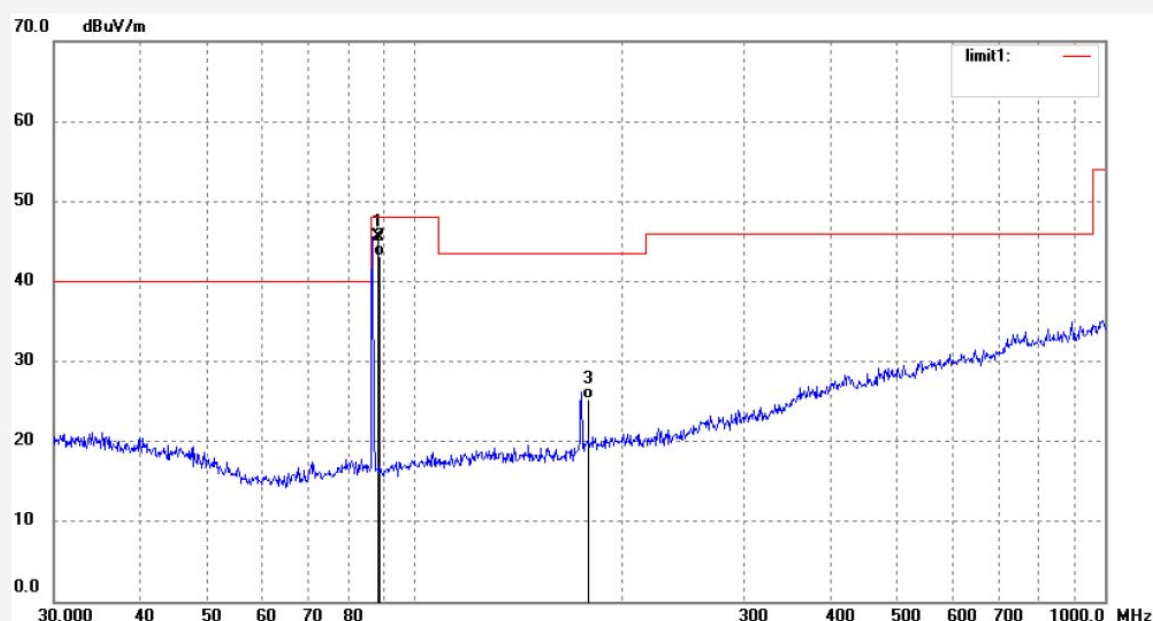
Date: 2010/11/04

Time: 10:53:41

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	88.2860	31.89	13.72	45.61	68.00	-22.39	peak			
2	88.2860	29.46	13.72	43.18	48.00	-4.82	AVG			
3	176.5780	9.49	15.76	25.25	43.50	-18.25	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: joe #1056

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 98.0MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Horizontal

Power Source: AC 120V/60Hz

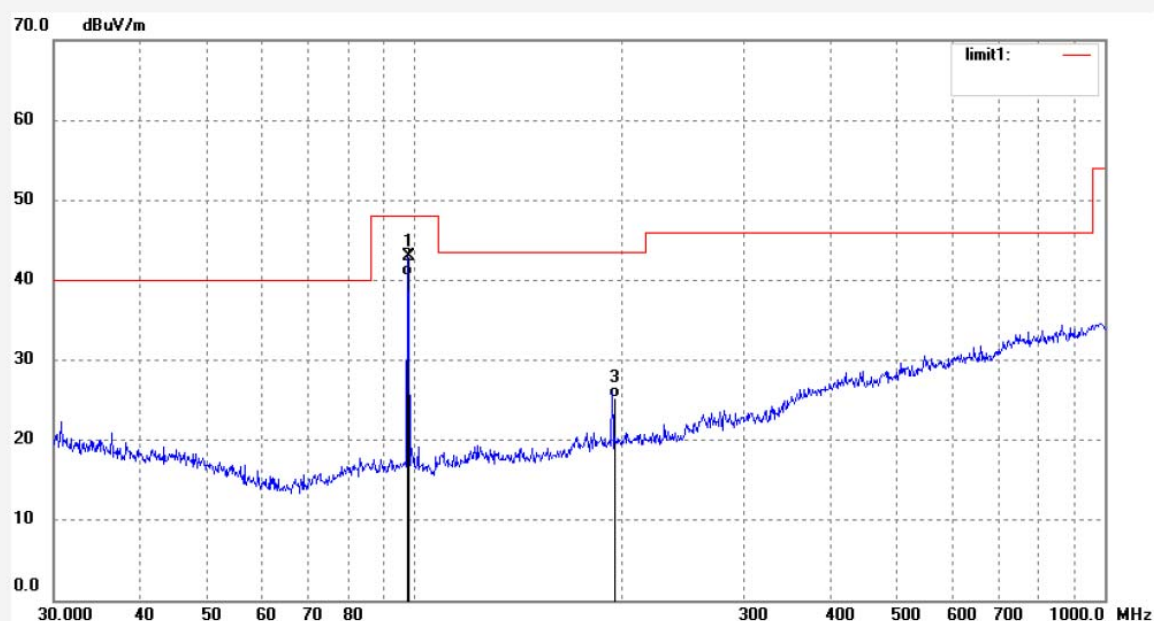
Date: 2010/11/04

Time: 11:02:51

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.9840	28.88	14.03	42.91	68.00	-25.09	peak			
2	97.9840	26.50	14.03	40.53	48.00	-7.47	AVG			
3	195.9760	9.19	16.03	25.22	43.50	-18.28	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: joe #1055

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 98.0MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Vertical

Power Source: AC 120V/60Hz

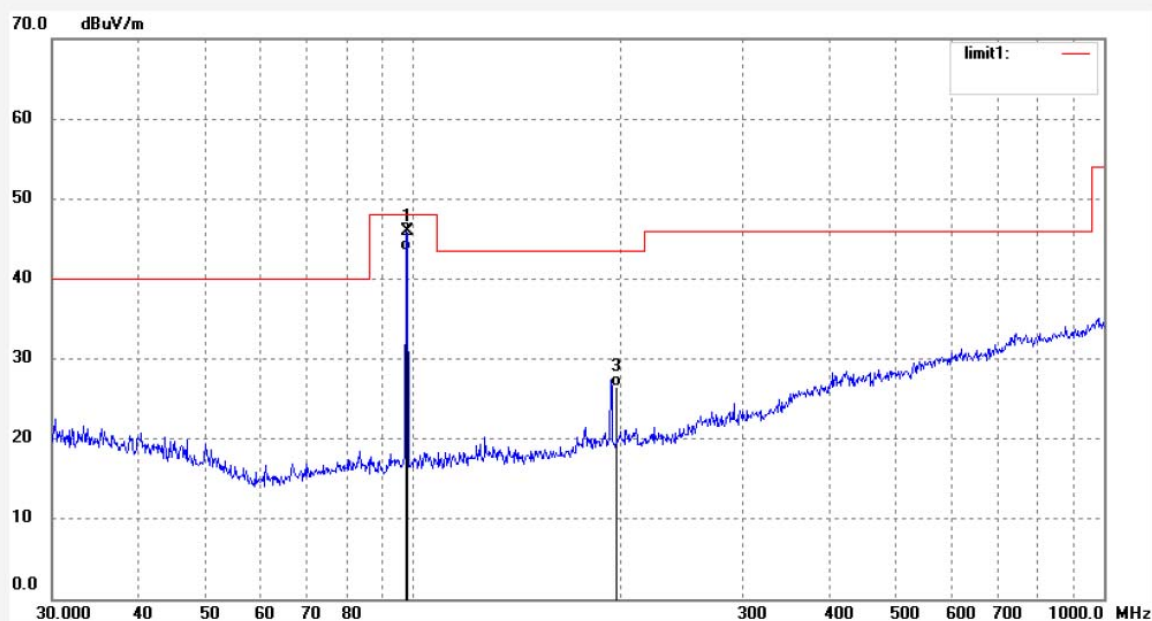
Date: 2010/11/04

Time: 10:58:50

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.9840	31.99	13.93	45.92	68.00	-22.08	peak			
2	97.9840	29.54	13.93	43.47	48.00	-4.53	AVG			
3	195.9760	10.30	16.15	26.45	43.50	-17.05	QP			


ACCURATE TECHNOLOGY CO., LTD.

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

 Site: 966 chamber
 Tel:+86-0755-26503290
 Fax:+86-0755-26503396

Job No.: joe #1057

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 107.7MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Horizontal

Power Source: AC 120V/60Hz

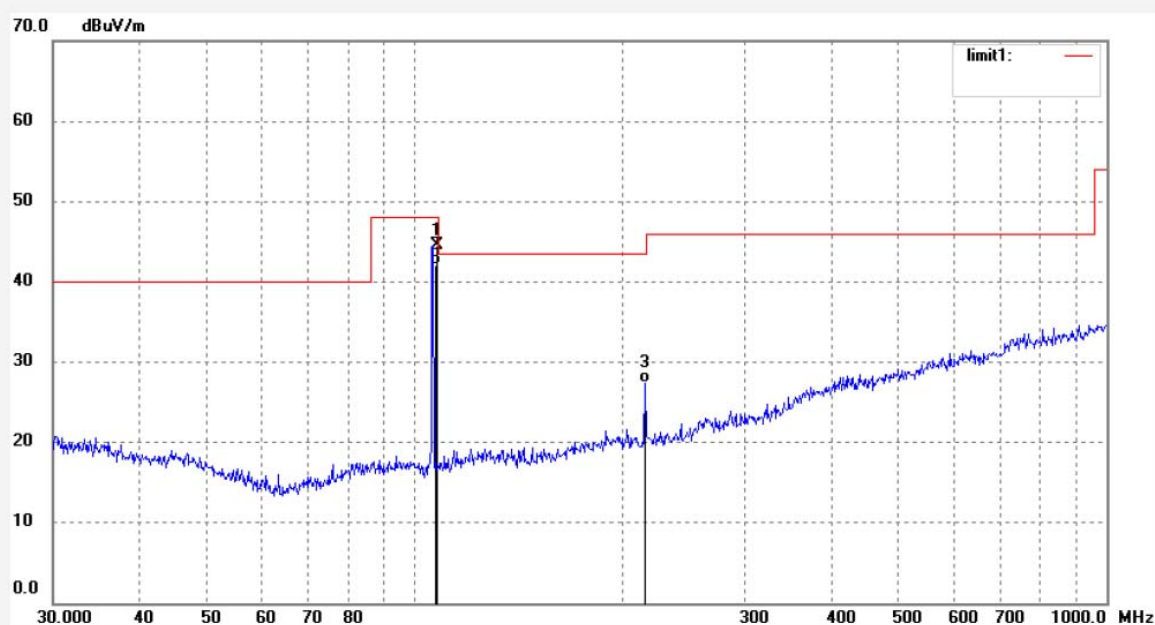
Date: 2010/11/04

Time: 11:08:15

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.6810	30.88	13.74	44.62	68.00	-23.38	peak			
2	107.6810	28.41	13.74	42.15	48.00	-5.85	AVG			
3	215.3720	10.89	16.55	27.44	43.50	-16.06	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: joe #1058

Standard: FCC PART 15 (FMT)

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: FM Stereo Transmitter

Mode: TX 107.7MHz

Model: FT-007

Manufacturer: Radiorock Technology (H.K.) Limited

Polarization: Vertical

Power Source: AC 120V/60Hz

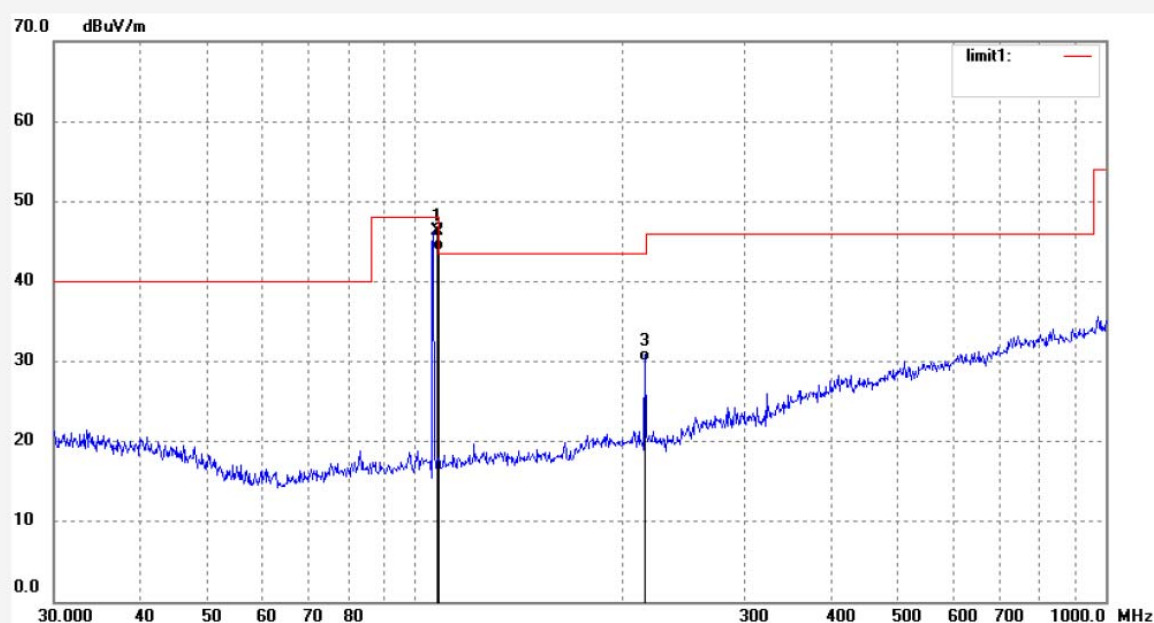
Date: 2010/11/04

Time: 11:12:12

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:102569 Report No.:ATE20102291

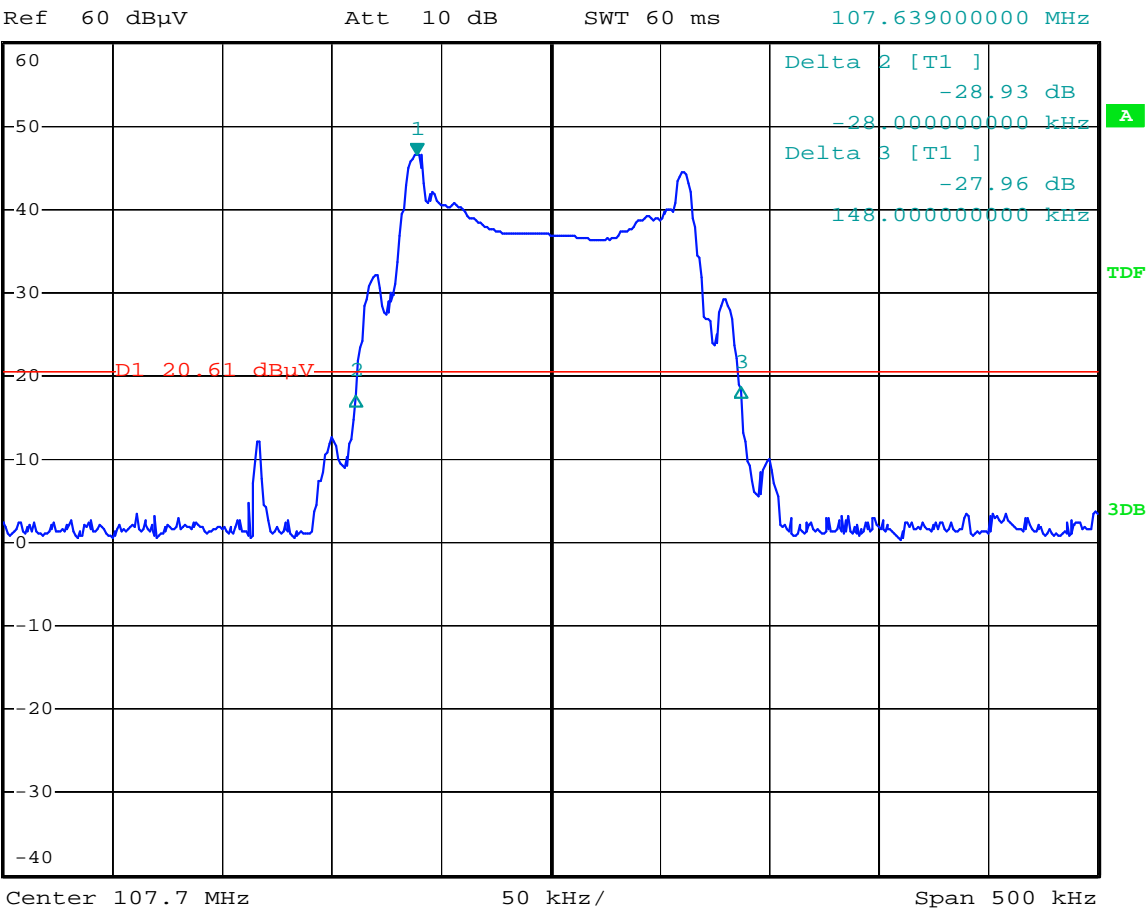


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.6810	32.02	14.21	46.23	68.00	-21.77	peak			
2	107.6810	29.59	14.21	43.80	48.00	-4.20	AVG			
3	215.3720	13.40	16.55	29.95	43.50	-13.55	QP			

TX 88.3MHz



*RBW 3 kHz Marker 1 [T1]
VBW 10 kHz 46.61 dBμV
SWT 60 ms 107.639000000 MHz

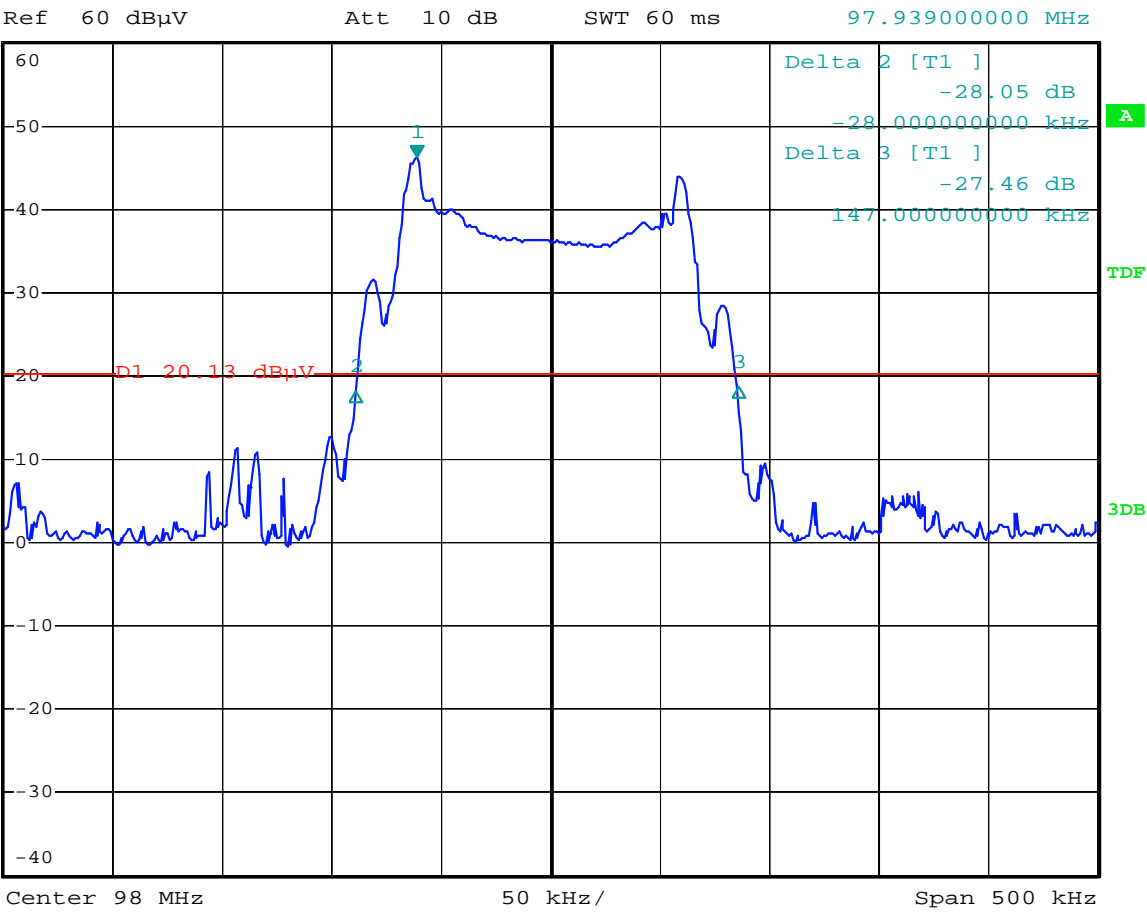


Date: 3.NOV.2010 16:54:35

TX 98.0MHz



*RBW 3 kHz Marker 1 [T1]
VBW 10 kHz 46.13 dBμV
SWT 60 ms 97.939000000 MHz

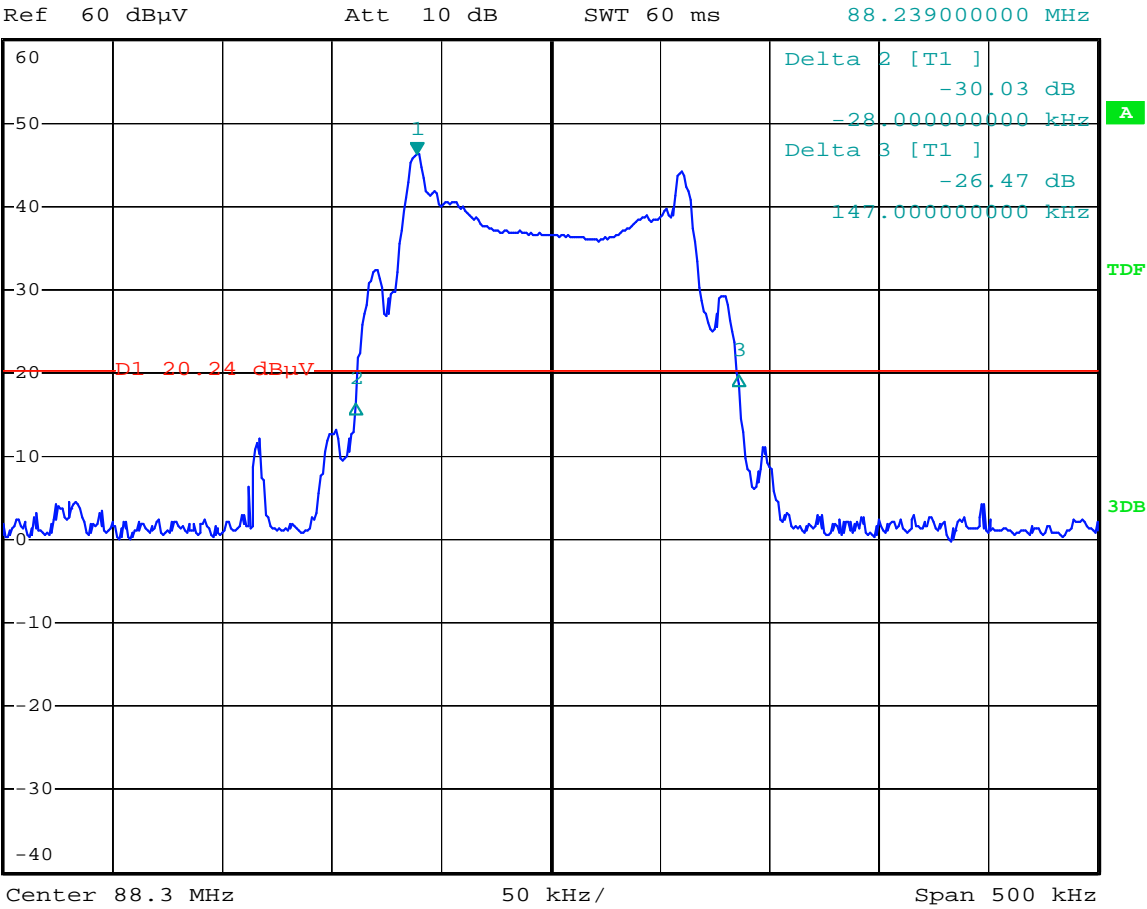


Date: 3.NOV.2010 17:00:16

TX 107.7MHz



*RBW 3 kHz Marker 1 [T1]
VBW 10 kHz 46.24 dBμV
SWT 60 ms 88.239000000 MHz



Date: 3.NOV.2010 17:04:28

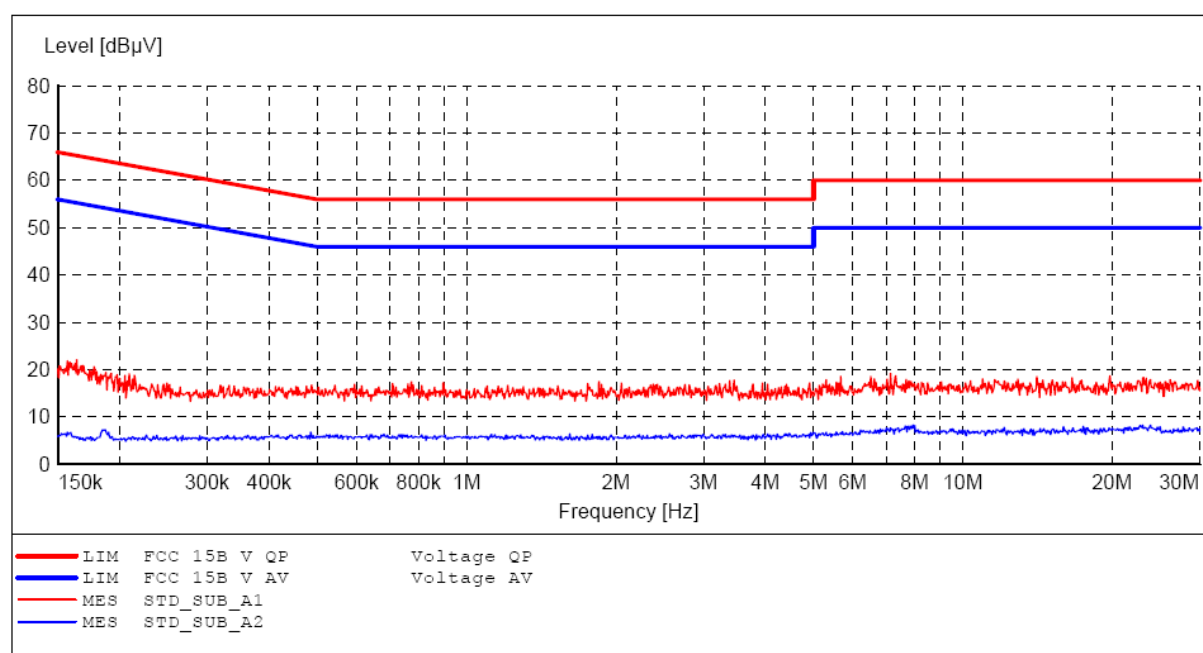
ACCURATE TECHNOLOGY CO.,LTD**CONDUCTED EMISSION STANDARD FCC PART 15 B**

EUT: FM Stereo Transmitter M/N:FT-007
 Manufacturer: Radiorock Technology (H.K.) Limited
 Operating Condition: TX 98.0MHz
 Test Site: 1#Shielding Room
 Operator: Joe
 Test Specification: N 120V/60Hz
 Comment: Sample No.:102569 Report No.:ATE20102291
 Start of Test: 11/5/2010 / 9:21:02AM

SCAN TABLE: "V 150K-30MHz fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008

Short Description: _SUB_STD_VTERM2 1.70
 Average



ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: FM Stereo Transmitter M/N:FT-007
 Manufacturer: Radiorock Technology (H.K.) Limited
 Operating Condition: TX 98.0MHz
 Test Site: 1#Shielding Room
 Operator: Joe
 Test Specification: L 120V/60Hz
 Comment: Sample No.:102569 Report No.:ATE20102291
 Start of Test: 11/5/2010 / 9:29:32AM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008

 Average

