FCC CERTIFICATION
On Behalf of
Lifestyle Entertainment Group, Inc.

FM Transmitter
Model No.: FM2400

FCC ID: TVMFM69TX

Prepared for	:	Lifestyle Entertainment Group, Inc.
Address	:	2918 Cantos De Los Ciervos San Clemente , California 92673 USA
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	:	ATE20052344
Date of Test	:	December 22, 2005
Date of Report	:	December 28, 2005

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Test Report Certification

Applicant	:	Lifestyle Entertainment Group, Inc.
Manufacturer	:	Dongguan City Chanping Taixing Hardware Craft Co., Ltd.
EUT Description	:	FM Transmitter
		(A) MODEL NO.: FM2400
		(B) SERIAL NO.: N/A
		(C) POWER SUPPLY: DC 9V (4×AA Batteries Or AC-DC Adaptor)

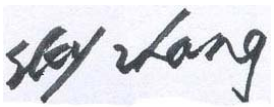
Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.207, 15.239: 2004
& ANSI C63.4: 2003

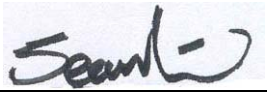
The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section15.239 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY 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 : December 22, 2005

Prepared by : 

(Engineer)

Reviewer : 

(Quality Manager)

Approved & Authorized Signer : 

(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	FM Transmitter
Model Number	:	FM2400
Power Supply	:	DC 9V Power by 4×AA Batteries Or AC-DC Adaptor AC-DC Adaptor: Model: AU28-090-008T Input: AC120V/60Hz Output: DC 9V, 80mA Listed by UL/CUL: E144687 2H63
Channel	:	Channel A: 107.7MHz, Channel B: 107.3MHz, Channel C: 106.9MHz,
Applicant	:	Lifestyle Entertainment Group, Inc.
Address	:	2918 Cantos De Los Ciervos San Clemente , California 92673 USA
Manufacturer	:	Dongguan City Chanping Taixing Hardware Craft Co.,Ltd.
Address	:	Baihuali Industry District, Chanping Town, Dongguan city Guangdong Province, China
Date of sample received	:	December 17, 2005
Date of Test	:	December 22, 2005

1.2.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen, May 10, 2004 Accredited by FCC, May 10, 2004 The Certificate Registration Number is 253065 Accredited by Industry Canada, May 18, 2004 The Certificate Registration Number is IC 5077
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 Uncertainty = ±2.66dB

Radiated Emission Uncertainty = ±4.26dB

2. MEASURING DEVICE AND TEST EQUIPMENT

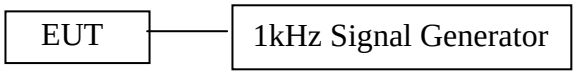
Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	12.16.2006
EMI Test Receiver	Rohde&Schwarz	ESI26	838786/013	12.16.2006
Bilog Antenna	Chase	CBL6112B	2591	12.16.2006
Horn Antenna	Rohde&Schwarz	HF906	100013	12.16.2006
Spectrum Analyzer	Anritsu	MS2651B	6200238856	12.16.2006
Pre-Amplifier	Agilent	8447D	2944A10619	12.16.2006
L.I.S.N.	Rohde&Schwarz	ESH3-Z5	100305	12.16.2006
L.I.S.N.	Rohde&Schwarz	ESH3-Z5	100310	12.16.2006
Signal Generator	GW	GAG-810	0913317	12.16.2006

3. CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

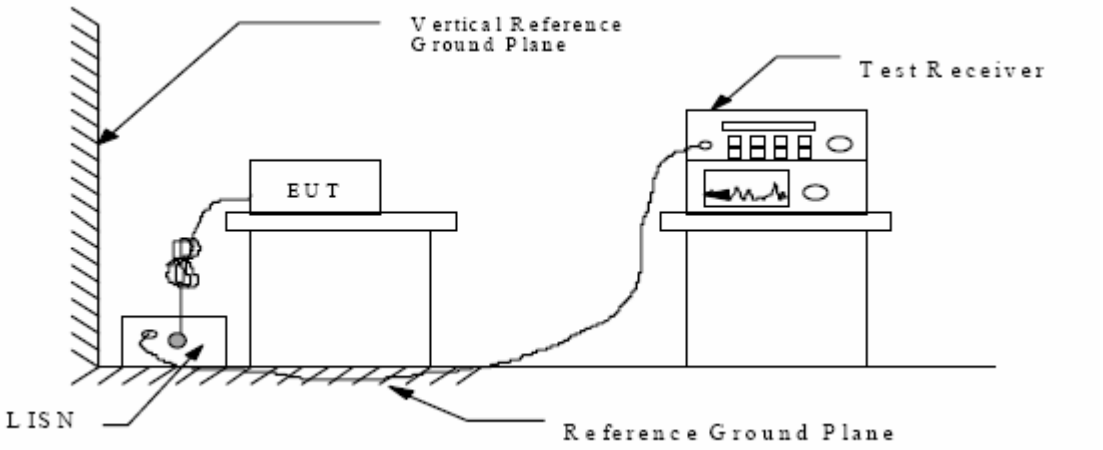
3.1.Block Diagram of Test Setup

3.1.1.Block diagram of connection between the EUT and simulators



(EUT: FM Transmitter)

3.1.2. Shielding Room Test Setup Diagram



(EUT: FM Transmitter)

3.2.The Emission Limit For Section 15.207(a)

6.2.1 Radiation Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

* Decreases with the logarithm of the frequency.

3.3.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.

3.3.1. FM Transmitter (EUT)

Model Number	:	FM2400
Serial Number	:	N/A
Manufacturer	:	Dongguan City Chanping Taixing Hardware Craft Co.,Ltd

3.4.Operating Condition of EUT

3.4.1.Setup the EUT and simulator as shown as Section 6.1.

3.4.2.Turn on the power of all equipment.

3.4.3. Let the EUT work in TX modes (On with 1kHz signal) measure it.

3.5.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.

All the scanning waveforms are attached in Appendix I.

3.6. Power Line Conducted Emission Measurement Results

PASS.

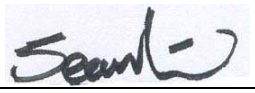
The frequency range from 150kHz to 30MHz is checked.

Date of Test:	December 22, 2005	Temperature:	22°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	FM2400	Power Supply:	AC 120V/60Hz
Test Mode:	TX	Test Engineer:	Andy

Test Line	Frequency MHz	Emission Level(dBμV) QP	AV	Limits(dBμV) QP	AV	Margin(dBμV) QP	AV
Va	-	-	-	-	-	-	-
Vb	-	-	-	-	-	-	-

Remark "- " means that the emission level is too low to be measured.

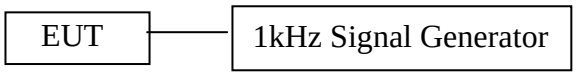
The spectral diagrams in appendix I display the measurement of un-weighted peak values.

Reviewer **:** 

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

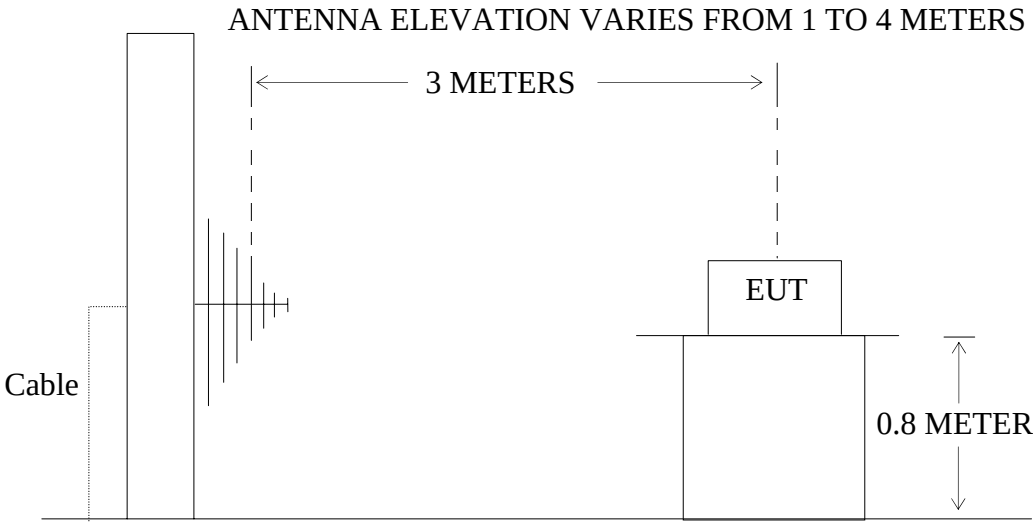
4.1.Block Diagram of Test Setup

4.1.1.Block diagram of connection between the EUT and simulators



(EUT: FM Transmitter)

4.1.2.Anechoic Chamber Test Setup Diagram



(EUT: FM Transmitter)

4.2.The Emission Limit for section 15.239(c)

3.2.1 The field strength of any emissions radiated on any frequency outside of the specified 200kHz 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,		
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBμV/m)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those
30 - 88	100	40	
88 - 216	150	43.5	

216 - 960	200	46	frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
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 : FM2400
Serial Number : N/A
Manufacturer : Dongguan City Chanping Taixing Hardware Craft Co.,Ltd

4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 3.1.

4.4.2.Turn on the power of all equipment.

Let the EUT work in TX modes (On with 1kHz signal) measure it. The transmit frequency are 107.7M, 107.3M, 106.9MHz.We are select 107.7M, 106.9MHz TX frequency to transmitted.

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 (R&S ESI26) is set at 120KHz in 30-1000MHz; Set at 1MHz in above 1000MHz.
The frequency range from 30MHz to 1100MHz is checked.
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.

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

The frequency range 30MHz to 1100MHz is investigated.

Date of Test:	December 22, 2005	Temperature:	22°C
EUT:	Transmitter	Humidity:	50%
Model No.:	FM2400	Power Supply:	AC 120V/60Hz
Test Mode:	TX 107.7MHz	Test Engineer:	Andy

Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.(dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dBμV/m) QP
Horizontal	215.430	60.1	-23.3	36.8	43.5	6.7
Horizontal	323.145	54.7	-18.6	36.1	46	9.9
Horizontal	430.860	53.7	-16.1	37.6	46	8.4
Horizontal	538.575	49.0	-14.7	34.3	46	11.7
Horizontal	646.290	46.2	-14.0	32.2	46	13.8
Horizontal	754.005	50.6	-12.7	37.9	46	8.1
Horizontal	861.720	52.6	-12.1	40.5	46	5.5
Horizontal	969.435	56.0	-11.5	44.5	54	9.5
Horizontal	1077.150	48.7	-8.5	40.2	54	13.8
Vertical	215.430	61.5	-23.3	38.2	43.5	5.3
Vertical	323.145	56.6	-18.6	38.0	46	8.0
Vertical	430.860	58.5	-16.1	42.4	46	3.6
Vertical	538.575	47.0	-14.7	32.3	46	13.7
Vertical	646.290	54.2	-14.0	40.2	46	5.8
Vertical	754.005	53.2	-12.7	40.5	46	5.5
Vertical	861.720	48.8	-12.1	36.7	46	9.3
Vertical	969.435	48.0	-11.5	36.5	54	17.5
Vertical	1077.150	46.3	-8.5	37.8	54	16.2

Date of Test:	December 22, 2005	Temperature:	22°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	FM2400	Power Supply:	AC 120V/60Hz
Test Mode:	TX 106.9MHz	Test Engineer:	Andy

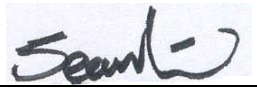
Polarization	Frequency (MHz)	Reading(dBμV/m) QP	Factor Corr.(dB)	Result(dBμV/m) QP	Limits(dBμV/m) QP	Margin(dBμV/m) QP
Horizontal	213.804	60.8	-23.3	37.5	43.5	6.0
Horizontal	320.706	55.0	-18.6	36.4	46	9.6
Horizontal	427.608	55.6	-16.0	39.6	46	6.4
Horizontal	534.510	49.1	-14.7	34.4	46	11.6
Horizontal	641.412	45.2	-14.0	31.2	46	14.8
Horizontal	748.314	53.0	-12.8	40.2	46	5.8
Horizontal	855.216	51.3	-12.2	39.1	46	6.9
Horizontal	962.118	56.5	-11.5	45.0	54	9.0
Horizontal	1069.020	45.5	-8.2	37.3	54	16.7
Vertical	213.804	63.5	23.3	40.2	43.5	3.3
Vertical	320.706	56.2	-18.6	37.6	46	8.4
Vertical	427.608	58.2	-16.0	42.2	46	3.8
Vertical	534.510	46.8	-14.7	32.1	46	13.9
Vertical	641.412	56.2	-14.0	42.2	46	3.8
Vertical	748.314	55.3	-12.8	42.5	46	3.5
Vertical	855.216	46.8	-12.2	34.6	46	11.4
Vertical	962.118	44.3	-11.5	32.8	54	21.2
Vertical	1069.020	45.8	-8.2	37.6	54	16.4

The spectral diagrams in appendix I display the measurement of un-weighted peak values.

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:

Result = Reading + Corrected Factor

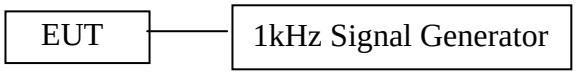
Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

Reviewer **:** 

5. FUNDAMENTAL RADIATED EMISSION FOR FCC PART 15 SECTION 15.239(B)

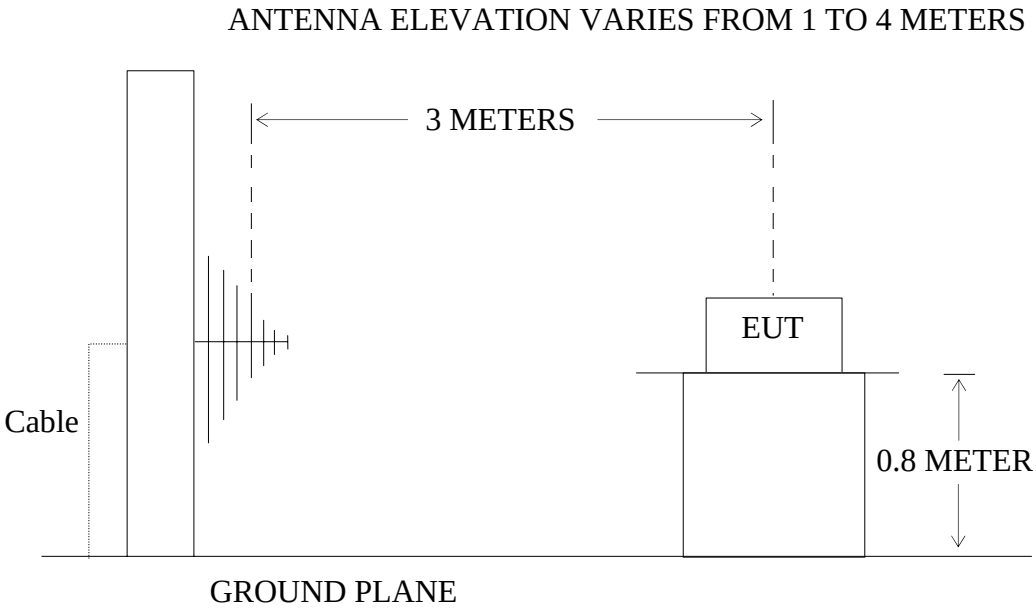
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators



(EUT: FM Transmitter)

5.1.2.Anechoic Chamber Test Setup Diagram



(EUT: FM Transmitter)

5.2.The Emission Limit For Section 15.239(b)

4.2.1 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	:	FM2400
Serial Number	:	N/A
Manufacturer	:	Dongguan City Chanping Taixing Hardware Craft Co.,Ltd

5.4.Operating Condition of EUT

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

5.4.2.Turn on the power of all equipment.

Let the EUT work in TX modes (On with 1kHz signal) measure it. The transmit frequency are 107.7M, 107.3M, 106.9MHz.We are select 107.7M, 106.9MHz TX frequency to transmitted.

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.

5.6. The Emission Measurement Result

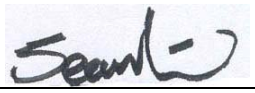
PASS.

Date of Test:	December 22, 2005	Temperature:	22°C
EUT:	FM Transmitter	Humidity:	50%
Model No.:	FM2400	Power Supply:	AC 120V/60Hz
Test Mode:	TX	Test Engineer:	Andy

Fundamental Radiated Emissions

Test conditions		Fundamental Frequency	
		107.715MHz	
T_{nom}(22°C)	Unit	(dBμV/m)/ (μ V/m) AV	(dBμV/m)/(μ V/m) PEAK
	Horizontal	43.2/145	52.8/437
	Vertical	45.9/197	55.6/603
limit		48/250	68/2500
Note: Measurement was performed with modulated signal with average detector and peak detector.			

Test conditions		Fundamental Frequency	
		106.902MHz	
T_{nom}(22°C)	Unit	(dBμV/m)/ (μ V/m) AV	(dBμV/m)/(μ V/m) PEAK
	Horizontal	43.2/145	52.9/442
	Vertical	46.0/200	55.7/610
limit		48/250	68/2500
Note: Measurement was performed with modulated signal with average detector and peak detector.			

Reviewer **:** 

6. OCCUPIED BANDWIDTH FOR FCC PART 15 SECTION 15.239(A)

6.1. The Requirement For Section 15.239(a)

5.1.1. 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	:	FM2400
Serial Number	:	N/A
Manufacturer	:	Dongguan City Chanping Taixing Hardware Craft Co., Ltd

6.3. Operating Condition of EUT

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

6.3.2. Turn on the power of all equipment.

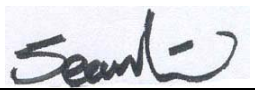
Let the EUT work in TX modes (On with 1kHz signal) measure it. The transmit frequency are 107.7M, 107.3M, 106.9MHz.We are select 107.7M, 106.9MHz TX frequency to transmitted.

6.4. Test Procedure

The zero level was set without modulation. A small sample of the transmitter output was fed into the spectrum analyzer and above photo was taken. The vertical scale is set to 10dB per division; the horizontal scale is set to 20kHz per division.

6.5. Test Result

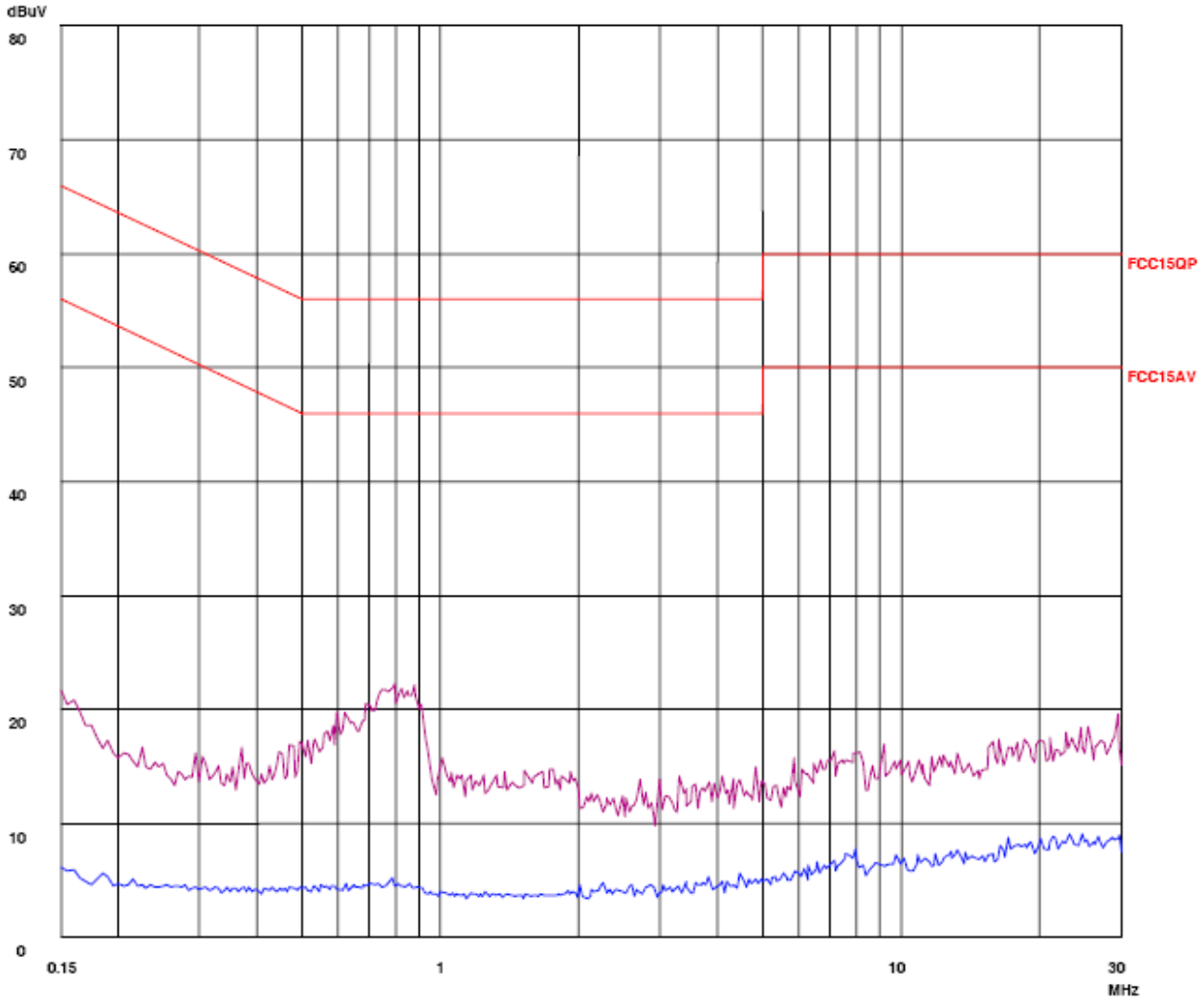
The EUT does meet the FCC requirement.

Reviewer **:** 

APPENDIX I
(Test Curves)

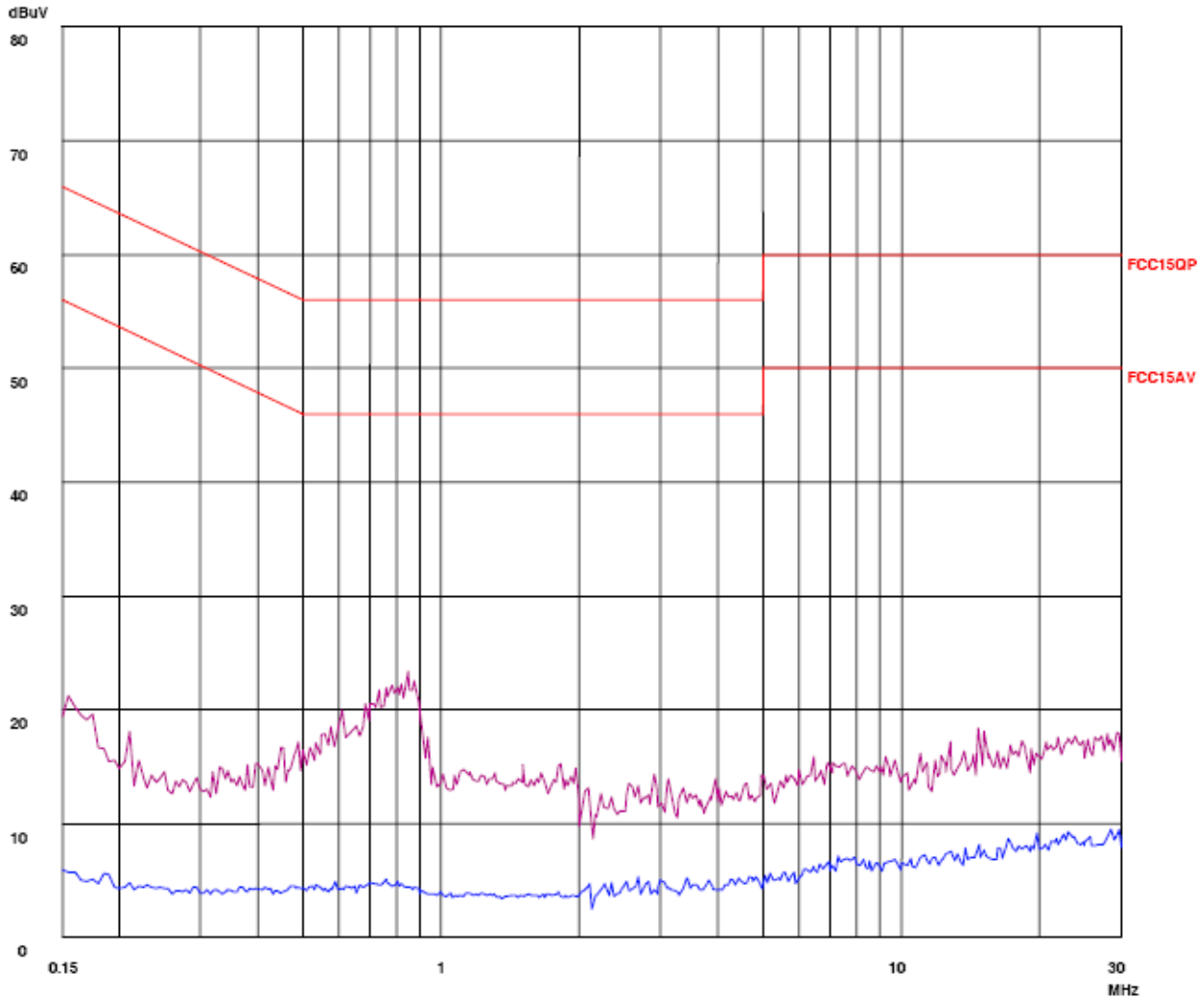
CONDUCTION EMISSION STANDARD FCC PART15B

EUT:	FM TRANSMITTER M/N:FM2400
Manuf:	LIFESTYLE ENTERTAINMENT
Op Cond:	TX
Operator:	Andy.tan
Test Spec:	Va 120V/60Hz
Comment:	Tem22'C Humi50%



CONDUCTION EMISSION STANDARD FCC PART15B

EUT:	FM TRANSMITTER M/N:FM2400
Manuf:	LIFESTYLE ENTERTAINMENT
Op Cond:	TX
Operator:	Andy.tan
Test Spec:	Vb 120V/60Hz
Comment:	Tem22'C Humi50%



Radiated Disturbance

FCC part15

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EUT: FM Transmitter                M/N:FM2400
Manufacturer:         Lifestyle Entertainment Group,Inc.
Operating Condition: TX 107.7MHz(Channel A)
Test Site:           ATC EMC Lab. SAC
Operator:            Andy
Test Specification:  Horizontal
Comment:             AC 120V/60Hz
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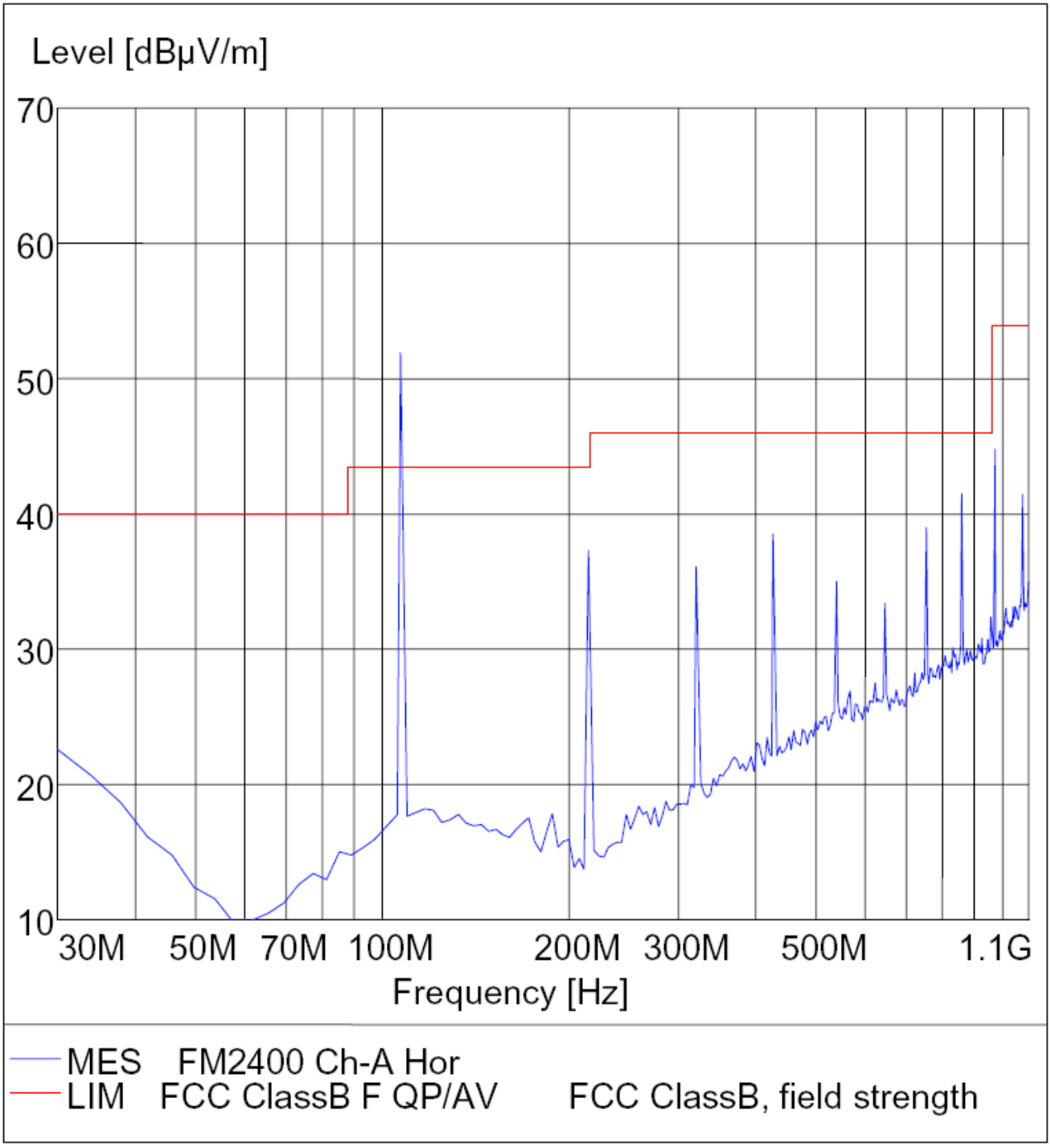

Radiated Disturbance

FCC part15

```
EUT: FM Transmitter                M/N:FM2400
Manufacturer:         Lifestyle Entertainment Group,Inc.
Operating Condition: TX 107.7MHz(Channel A)
Test Site:           ATC EMC Lab. SAC
Operator:            Andy
Test Specification:  Vertical
Comment:             AC 120V/60Hz
 :
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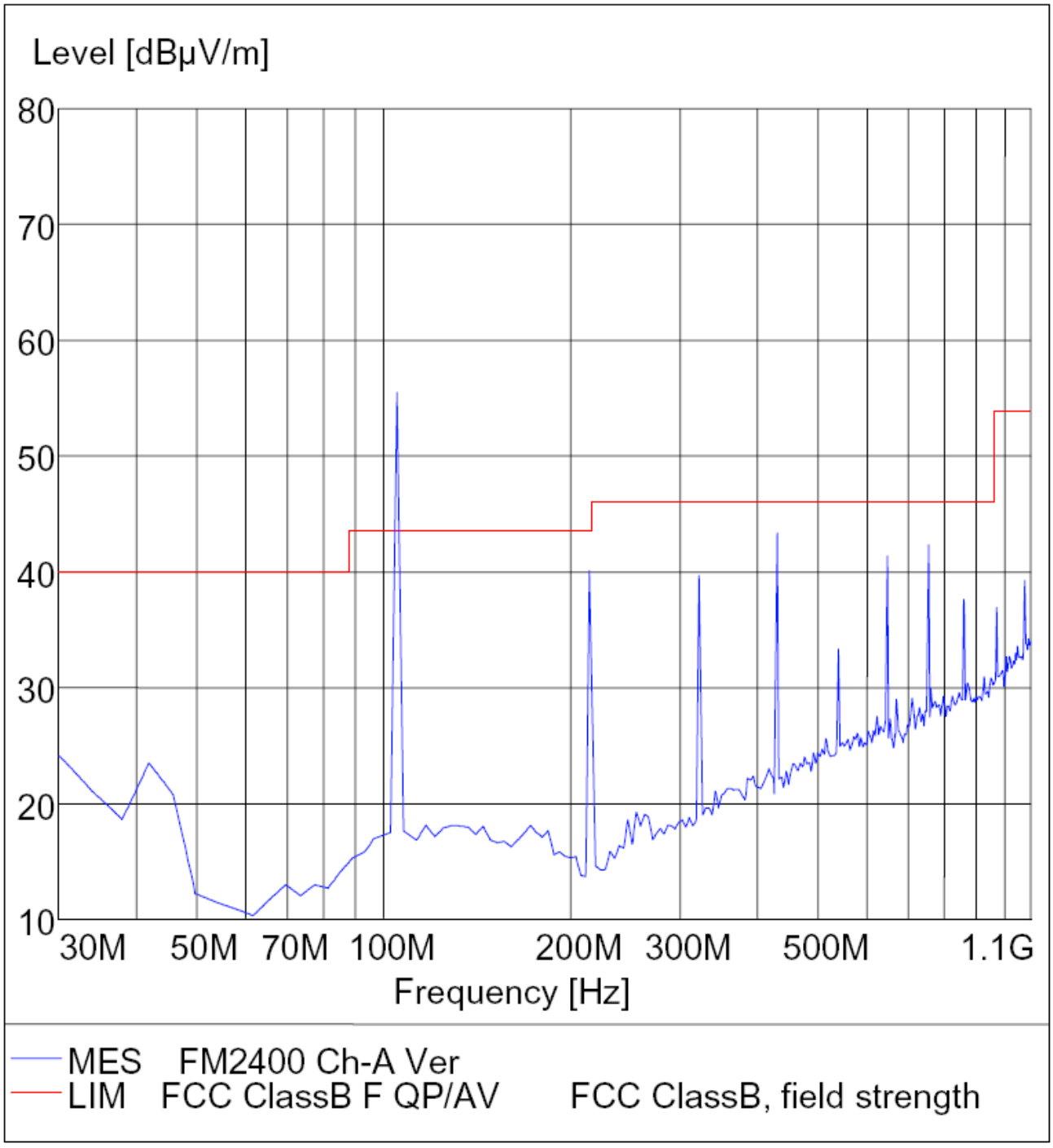

Radiated Disturbance

FCC part15

```
EUT: FM Transmitter                M/N:FM2400
Manufacturer:         Lifestyle Entertainment Group,Inc.
Operating Condition: TX 106.9MHz(Channel C)
Test Site:           ATC EMC Lab. SAC
Operator:            Andy
Test Specification:  Horizontal
Comment:             AC 120V/60Hz
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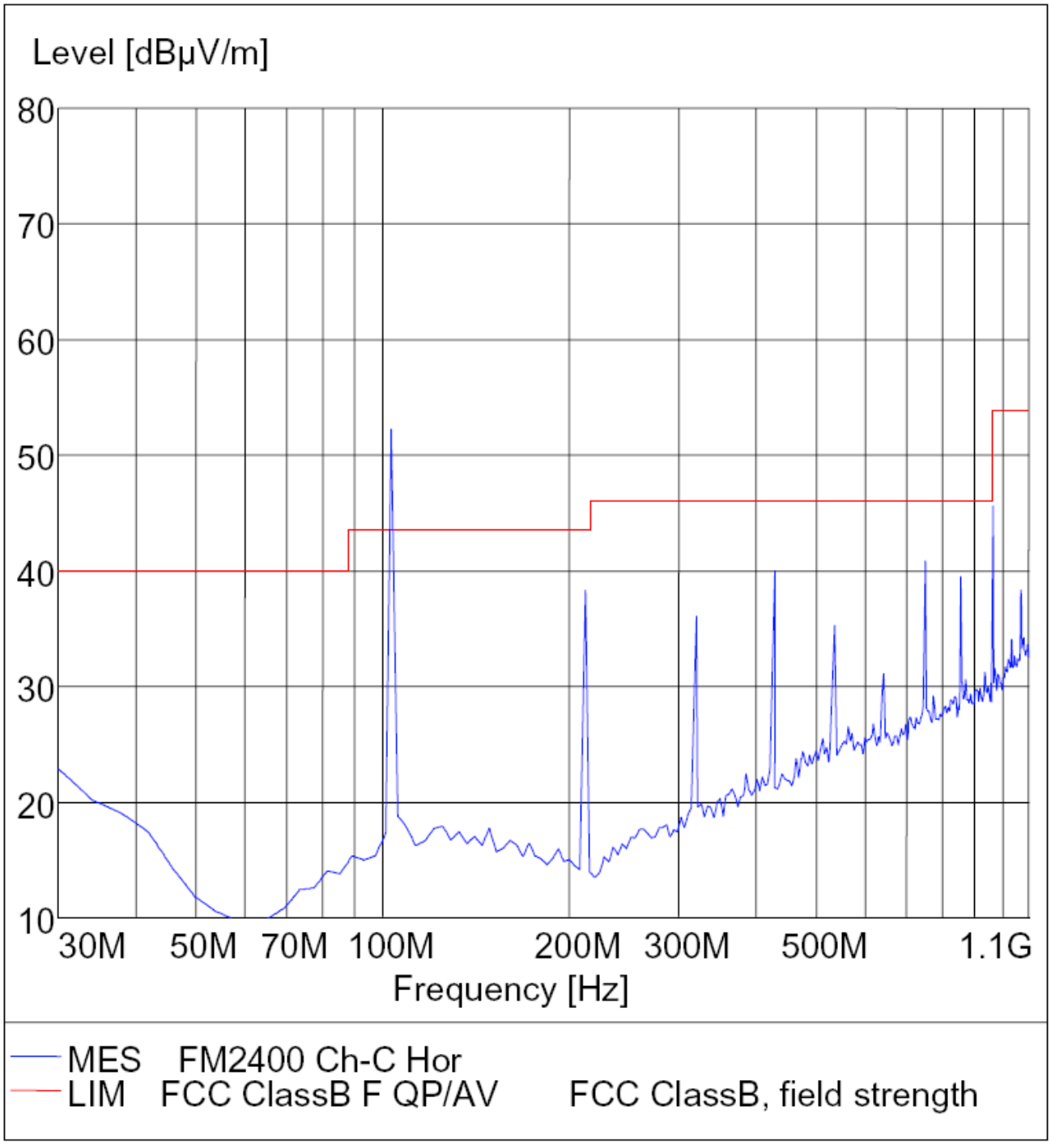

Radiated Disturbance

FCC part15

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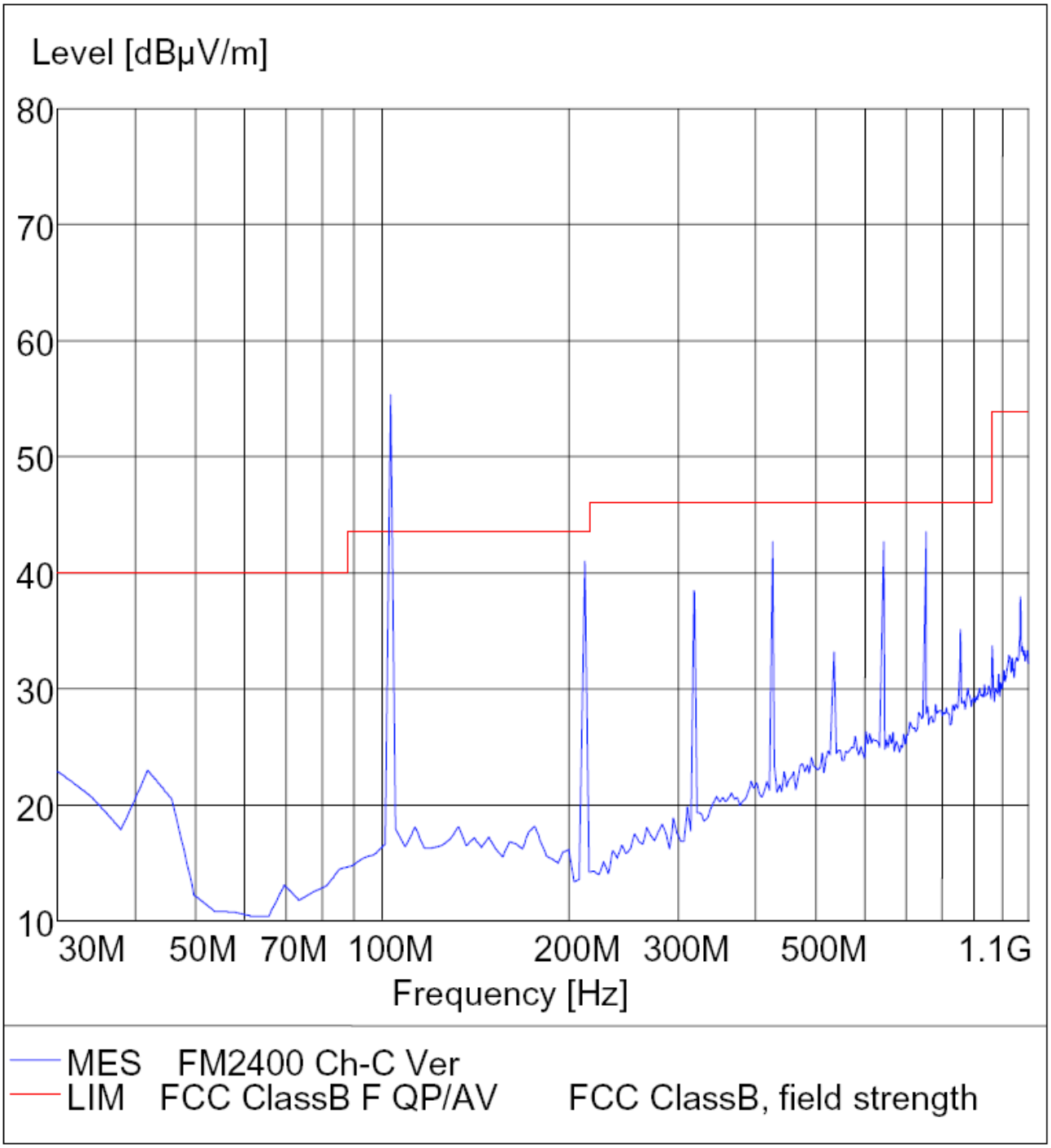
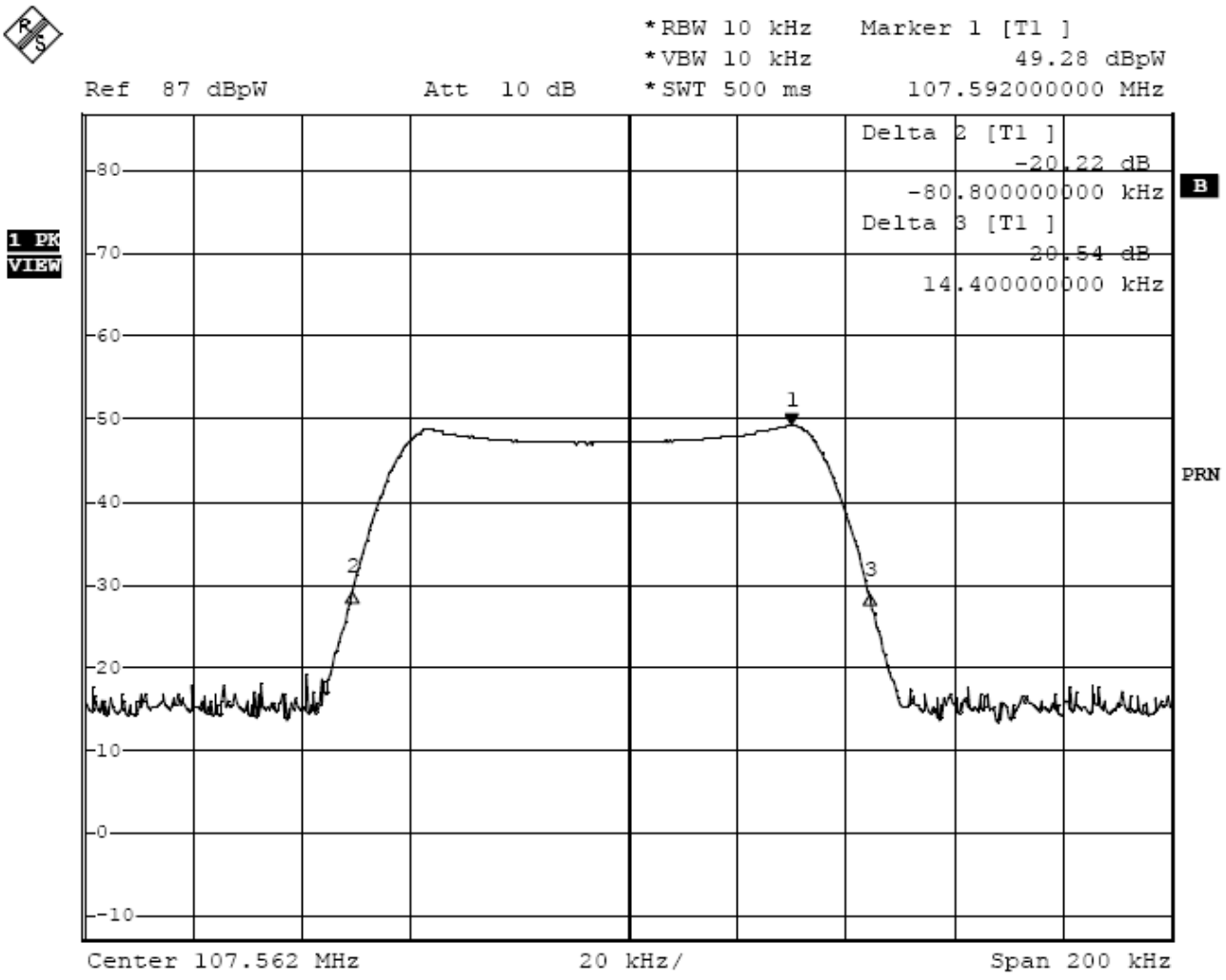
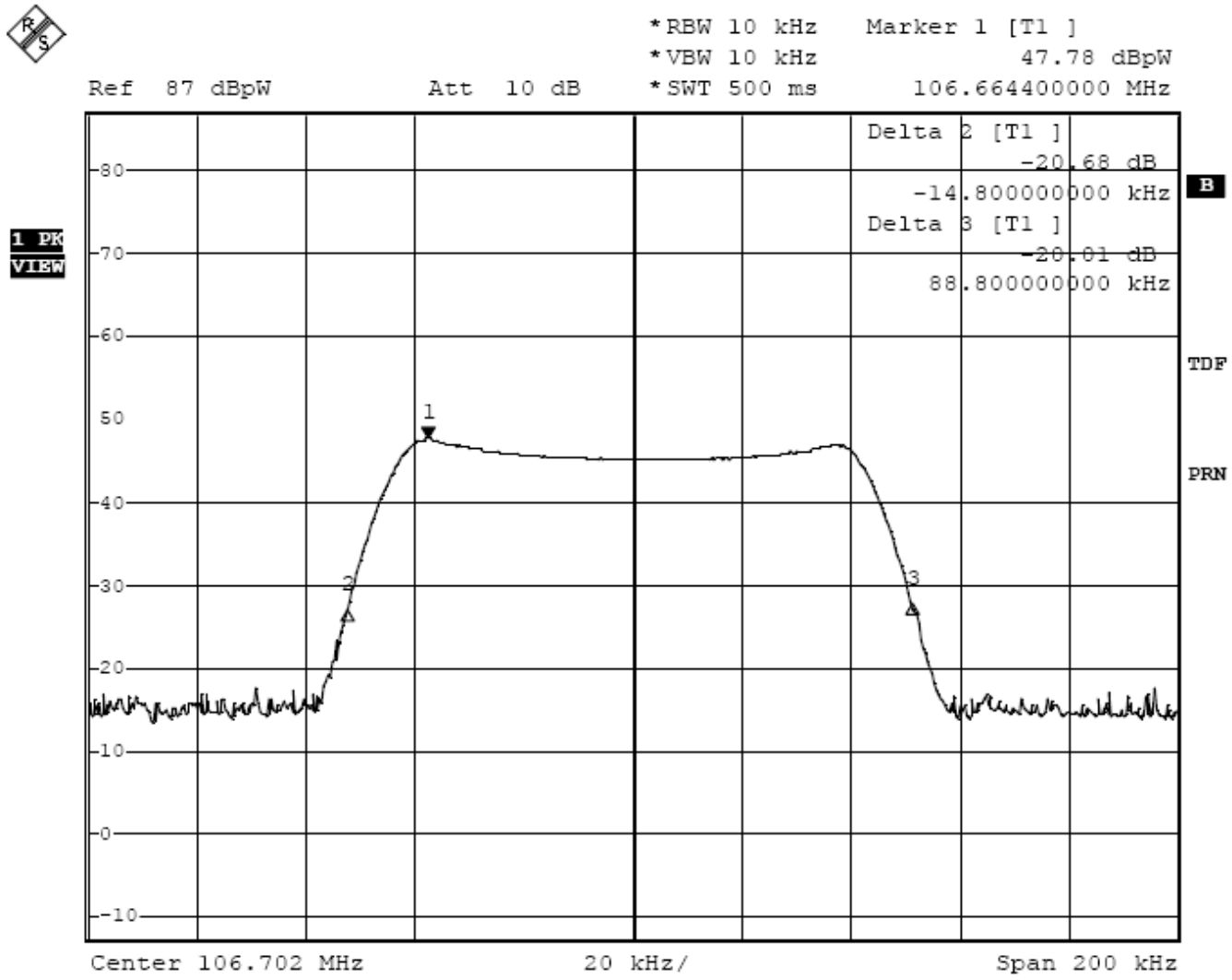
EUT: FM Transmitter                M/N:FM2400
Manufacturer:         Lifestyle Entertainment Group,Inc.
Operating Condition: TX 106.9MHz(Channel C)
Test Site:           ATC EMC Lab. SAC
Operator:            Andy
Test Specification:  Vertical
Comment:             AC 120V/60Hz
 :
```




*RBW 10 kHz
*VBW 10 kHz
*SWT 500 ms
Marker 1 [T1]
49.28 dBpW
107.592000000 MHz
Ref 87 dBpW
Att 10 dB
Delta 2 [T1]
-20.22 dB
-80.800000000 kHz
Delta 3 [T1]
20.54 dB
14.400000000 kHz
1 PK
VIEW
B
PRN
80
70
60
50
40
30
20
10
0
-10
Center 107.562 MHz
20 kHz/
Span 200 kHz


*RBW 10 kHz
*VBW 10 kHz
*SWT 500 ms
Marker 1 [T1]
47.78 dBpW
106.664400000 MHz
Ref 87 dBpW
Att 10 dB
Delta 2 [T1]
-20.68 dB
-14.800000000 kHz
Delta 3 [T1]
-20.01 dB
88.800000000 kHz
1 PK
VIEW
B
TDF
PRN
80
70
60
50
40
30
20
10
0
-10
Center 106.702 MHz
20 kHz/
Span 200 kHz