

APPLICATION FOR CERTIFICATION

On Behalf of

Action Technology (Shenzhen) Co., Ltd.

Cigarette adaptor with Built-IN FM Modulator

Model Number: FM-401

Prepared for : Action Technology (Shenzhen) Co., Ltd.
Baosheng Industrial Building, Laodong Cun,
Xixiang, Bao'an District, Shenzhen

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
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Tel: (0755) 26639496

Report Number : ACS-F04003
Date of Test : Dec.29, 2003
Date of Report : Jan.08, 2004

TABLE OF CONTENTS

Description	Page
Test Report Declaration	
1. GENERAL INFORMATION	1-1
1.1. Description of Device (EUT)	1-1
1.2. Tested Supporting System Details	1-1
1.3. Test Facility	1-2
1.4. Test Uncertainty	1-2
2. POWER LINE CONDUCTED EMISSION TEST	2-1
3. RADIATED EMISSION TEST	3-1
3.1. Test Equipment	3-1
3.2. Block Diagram of Test Setup	3-1
3.3. Radiated Emission Limit	3-2
3.4. EUT Configuration on Test	3-3
3.5. Operating Condition of EUT	3-3
3.6. Test Procedure	3-3
3.7. Radiated Emission Test Results	3-4
4. BANDWIDTH TEST	4-1
4.1. Test Equipment	4-1
4.2. Test Standard	4-1
4.3. Bandwidth Limit	4-1
4.4. Test Procedure	4-1
5. PHOTOGRAPH	5-1
5.1. Photos of Radiated Emission Test (In Anechoic Chamber)	5-1
5.2. Photo of Bandwidth Test	5-3

APPENDIX I

(9 pages)

TEST REPORT DECLARATION

Applicant : Action Technology (Shenzhen) Co., Ltd.
Manufacturer : Action Technology (Shenzhen) Co., Ltd.
EUT Description : Cigarette adaptor with Built-IN FM Modulator
(A) MODEL NO. : FM-401
(B) SERIAL NO. : F2004010801
(C) Power Supply : DC 12V

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Aug, 2003.

The device described above is tested by Audix Technology (Shenzhen) 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 limits for radiated and conducted emissions. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Dec.29, 2003

Prepared by : Elsa Wu
Elsa Wu / Assistant

Reviewer : Lake Wang
Lake Wang / Supervisor

Reviewer :



Approved & Authorized Signer :

Name of the Representative of the Responsible Party : _____

Signature : _____

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Cigarette adaptor with Built-IN FM Modulator
Model Number	:	FM-401
Applicant	:	Action Technology (Shenzhen) Co., Ltd. Baosheng Industrial Building, Laodong Cun, Xixiang, Bao'an District, Shenzhen
Manufacturer	:	Action Technology (Shenzhen) Co., Ltd. Baosheng Industrial Building, Laodong Cun, Xixiang, Bao'an District, Shenzhen
Data Cable	:	Unshielded, Detachable, 1.5m
Power Cord	:	Unshielded, Detachable, 0.5m
Date of Test	:	Dec.29, 2003

1.2. Tested Supporting System Details

Battery	:	Manufacturer: Panasonic Model Number: LC-X1228CH
Recorder	:	Manufacturer: LG Model Number: AHA-RX11

1.3. Test Facility

Site Description

3m Anechoic Chamber : Certificated by FCC, USA
Aug. 22, 2003

EMC Lab. : Certificated by DATech, German
Feb. 22, 2003

Certificated by NVLAP, USA
NVLAP Code: 200372-0
Mar. 31, 2003

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

Site Location : No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

1.4. Test Uncertainty

Conducted Emission Uncertainty = $\pm 2.66\text{dB}$

Radiated Emission Uncertainty = $\pm 4.26\text{dB}$

2. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (f) of FCC Part 15 section 15.107, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

3. RADIATED EMISSION TEST

3.1. Test Equipment

The following test equipments are used during the radiated emission Test :

3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Spectrum	HP	85422E	3625A00181	May.31, 03	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May.31, 03	1 Year
3.	Amplifier	HP	8447D	2944A07794	Sep.18, 03	1/2 Year
4.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 14, 03	1 Year
5.	PC	N/A	586ATX3	N/A	N/A	N/A
6.	Printer	HP	Laserjet6P	SGCF019673	N/A	N/A
7.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.1	Aug.02, 03	1/2 Year
8.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Aug.02, 03	1/2 Year
9.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Aug.02, 03	1/2 Year
10.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Aug. 02, 03	1/2 Year
11.	Coaxial Switch	Anritsu	MP59B	M73989	Nov.28, 03	1/2 Year

3.2. Block Diagram of Test Setup

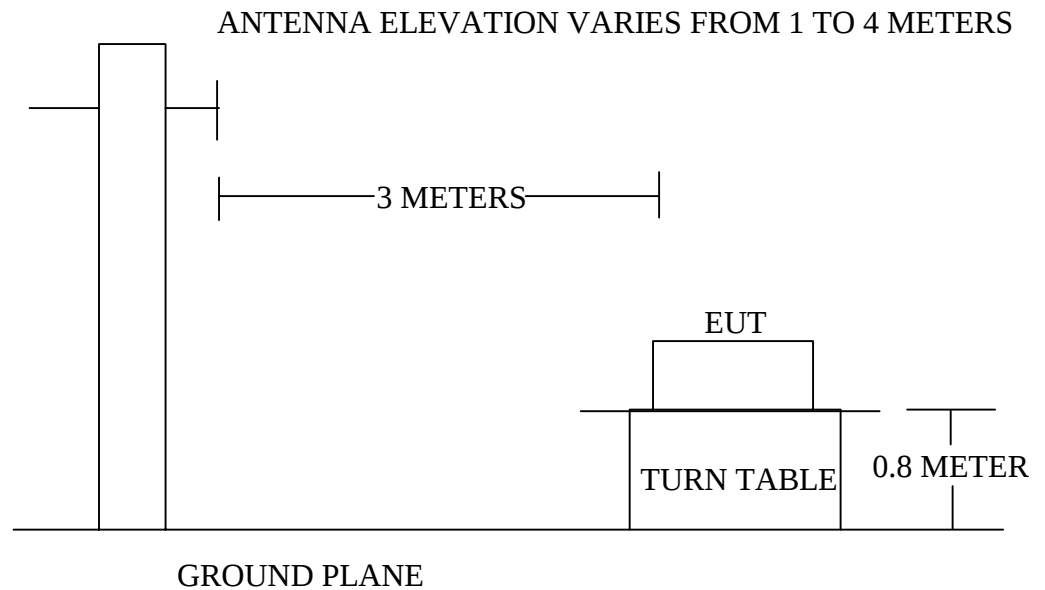
3.2.1. Block Diagram of connection between EUT and simulators



(EUT: Cigarette adaptor with Built-IN FM Modulator)

3.2.2. Anechoic Chamber Setup Diagram

ANTENNA TOWER



3.3. Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Fundamental (88.1/88.3/88.5/88.7)	3	48.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

- Remark :
- (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V}/\text{m}$
 - (2) The smaller limit shall apply at the cross point between two frequency bands.
 - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.4. EUT Configuration on Test

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

3.4.1. Cigarette adaptor with Built-IN FM Modulator (EUT)

Model Number	:	FM-401
Serial Number	:	F2004010801
Manufacturer	:	Action Technology (Shenzhen) Co., Ltd.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT as shown in Section 3.2..

3.5.2. Let the EUT work in test modes (CH 88.1MHz/CH 88.3MHz/CH 88.5MHz/CH 88.7MHz) and test it.

3.6. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 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 polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2001 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120KHz.

The frequency range from 30MHz to 1000MHz and above 1000MHz are checked.

The test modes (CH 88.1MHz/CH 88.3MHz/CH 88.5MHz/CH 88.7MHz) is tested in Anechoic Chamber and all the scanning waveforms are attached in Appendix I.

3.7. Radiated Emission Test Results

PASS.

The frequency range from 30MHz to 1000MHz is investigated.
Please see the following pages.

Date of Test :	Dec.29, 2003	Temperature :	25°C
EUT :	Cigarette adaptor with Built-IN FM Modulator	Humidity :	48%
Model No. :	FM-401	Test Mode :	CH 88.1MHz
Test Engineer:	Pebble		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
88.100	10.16	1.88	32.20	42.36	-5.64	48.00	Average
128.940	15.00	2.30	16.24	31.24	-12.26	43.50	QP
167.740	13.55	2.70	12.40	25.96	-17.54	43.50	QP
266.680	16.39	3.46	22.19	38.58	-7.42	46.00	QP
528.580	23.88	5.94	6.19	30.08	-15.92	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
65.890	11.23	1.59	19.92	31.15	-8.85	40.00	QP
88.100	10.18	1.88	32.50	42.68	-5.32	48.00	Average
196.840	12.54	2.94	10.63	23.17	-20.33	43.50	QP
242.430	15.91	3.29	13.10	29.00	-17.00	46.00	QP
266.680	17.10	3.46	12.63	29.73	-16.27	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Reviewer:

Choke Wang

Date of Test :	Dec.29, 2003	Temperature :	25°C
EUT :	Cigarette adaptor with Built-IN FM Modulator	Humidity :	48%
Model No. :	FM-401	Test Mode :	CH 88.3MHz
Test Engineer:	Pebble		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
88.300	10.16	1.88	34.50	44.66	-3.34	48.00	Average
266.680	16.39	3.46	21.89	38.28	-7.72	46.00	QP
353.980	19.85	4.22	13.68	33.53	-12.47	46.00	QP
531.490	23.95	6.00	7.29	31.24	-14.76	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
53.280	8.34	1.44	13.03	21.38	-18.62	40.00	QP
88.300	10.18	1.88	34.20	44.38	-3.62	48.00	Average
266.680	17.10	3.46	14.09	31.19	-14.81	46.00	QP
353.980	19.00	4.22	7.39	26.40	-19.60	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Reviewer: Cake Wang

Date of Test :	Dec.29, 2003	Temperature :	25°C
EUT :	Cigarette adaptor with Built-IN FM Modulator	Humidity :	48%
Model No. :	FM-401	Test Mode :	CH 88.5Hz
Test Engineer:	Pebble		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
56.190	5.84	1.44	23.23	29.08	-10.92	40.00	QP
88.500	10.13	1.88	32.50	42.63	-5.37	48.00	Average
266.680	16.39	3.46	24.76	41.15	-4.85	46.00	QP
353.980	19.85	4.22	14.66	34.51	-11.49	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
88.500	10.21	1.88	31.70	41.91	-6.09	48.00	Average
266.680	17.10	3.46	15.51	32.61	-13.39	46.00	QP
356.890	19.00	4.22	8.24	27.24	-18.76	46.00	QP
581.930	25.25	6.23	11.44	36.68	-9.32	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Reviewer: Cake Wang

Date of Test :	Dec.29, 2003	Temperature :	25°C
EUT :	Cigarette adaptor with Built-IN FM Modulator	Humidity :	48%
Model No. :	FM-401	Test Mode :	CH 88.7Hz
Test Engineer:	Pebble		

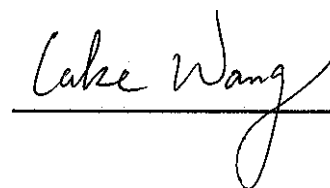
Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
88.700	10.09	1.89	33.20	43.29	-4.71	48.00	Average
128.940	15.00	2.30	17.54	32.54	-10.96	43.50	QP
266.680	16.39	3.46	21.11	37.50	-8.50	46.00	QP
356.890	19.80	4.22	10.58	30.38	-15.62	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
67.830	11.84	1.61	12.51	24.35	-15.65	40.00	QP
88.700	10.23	1.89	32.30	42.53	-5.47	48.00	Average
256.980	16.70	3.44	16.60	33.30	-12.70	46.00	QP
266.680	17.15	3.49	15.10	32.24	-13.76	46.00	QP
295.780	17.34	3.76	16.31	33.65	-12.35	46.00	QP
356.890	18.99	4.21	9.57	28.56	-17.44	46.00	QP

Remark: 1. All readings are Average and QP values.
2. Emission Level = Antenna Factor + Meter Reading+Cable Loss
3.The bandwidth of the RBW is set at 120KHz and VBW is set at 300KHz.

Reviewer:





AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

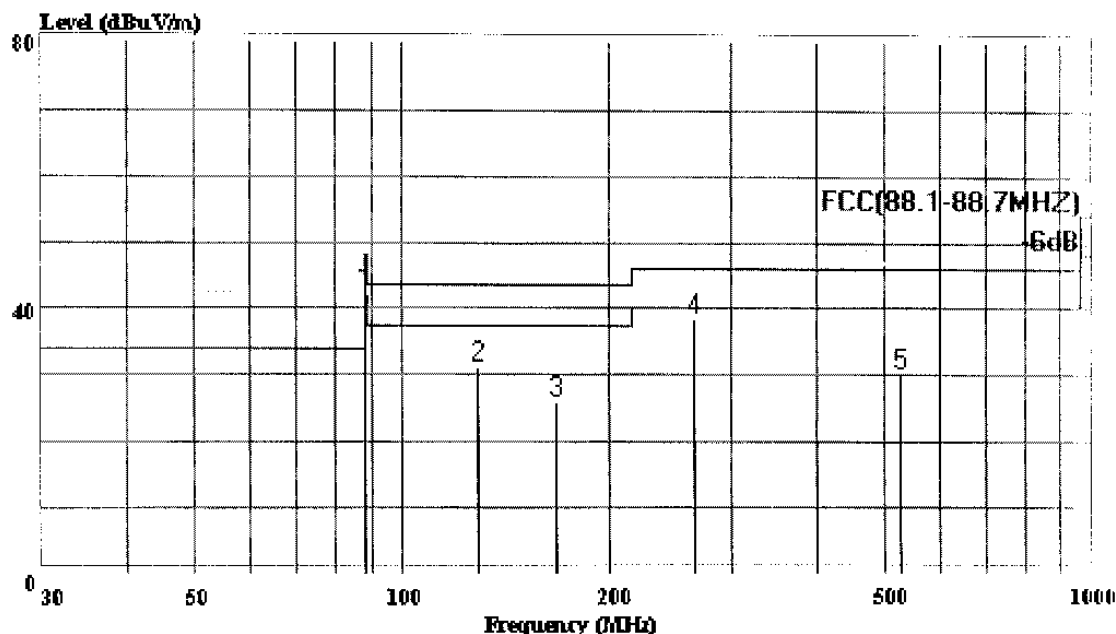
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

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AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.1MHz

Power : DC 12V

Comment : H:3.56m Deg:126'

Page: 1

	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	dBuV/m	Limit	Level	Loss	Factor	Remark
				dB	dBuV	dB	dB	
1	88.100	42.36	48.00	-5.64	32.20	1.88	10.16	Average
2	128.940	31.24	43.50	-12.26	16.24	2.30	15.00	OP
3	167.740	25.96	43.50	-17.54	12.40	2.70	13.55	OP
4	266.680	38.58	46.00	-7.42	22.19	3.46	16.39	OP
5	528.580	30.08	46.00	-15.92	6.19	5.94	23.88	QP

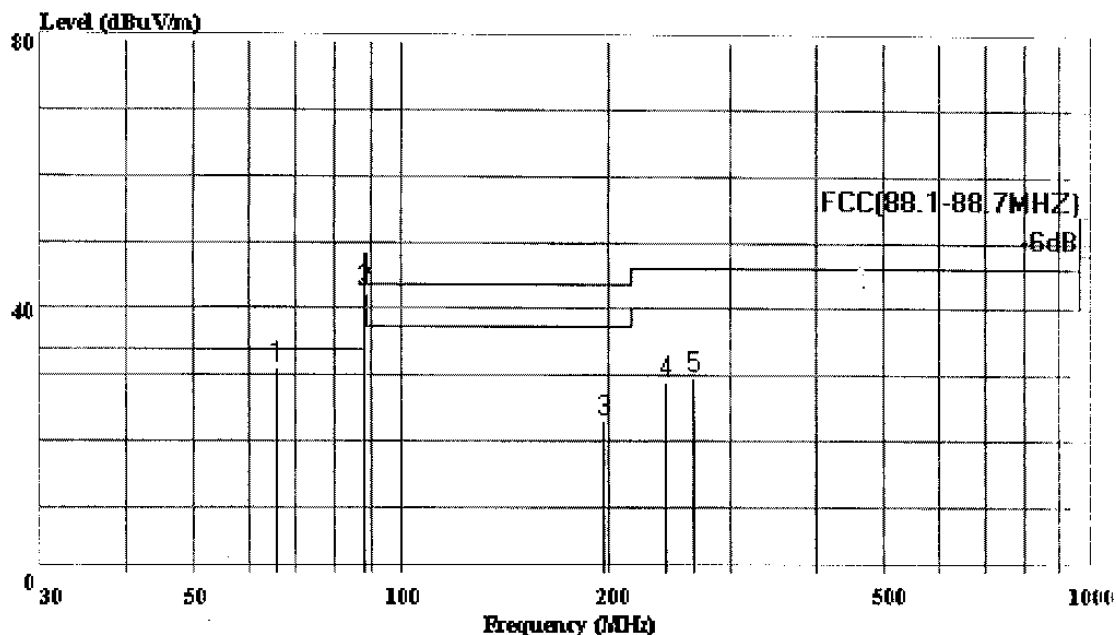


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Tel: 0755-26639495~7
Fax: 0755-26632877

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AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.1MHz

Power : DC 12V

Comment : H:3.78m Deg:320'

Page: 1

	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	dBuV/m	Limit	Level	Loss	Factor	Remark
				dB	dBuV	dB	dB	
1	65.890	31.15	40.00	-8.85	19.92	1.59	11.23	OP
2	88.100	42.68	48.00	-5.32	32.50	1.88	10.18	Average
3	196.840	23.17	43.50	-20.33	10.63	2.94	12.54	OP
4	242.430	29.00	46.00	-17.00	13.10	3.29	15.91	OP
5	266.680	29.73	46.00	-16.27	12.63	3.46	17.10	QP



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

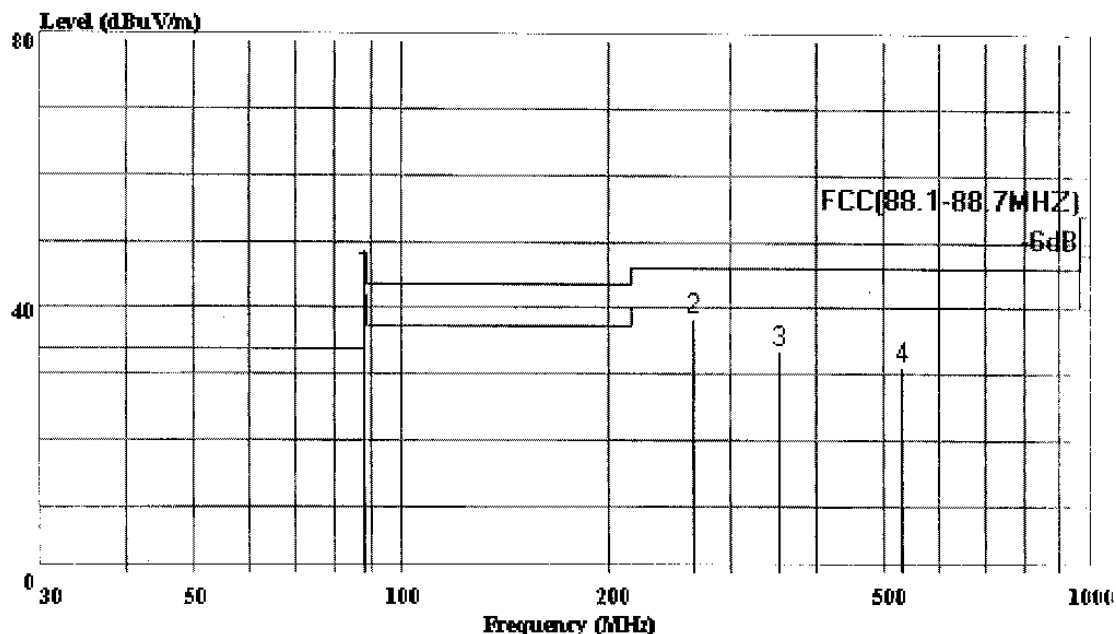
Shenzhen Science & Ind. Park

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Date: 2003-12-29 Time: 11:45:19



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25°C Humi:48%

Test Mode: CH 88.3MHz

Power : DC 12V

Comment : H:3.88m Deg:315°

Page: 1

		Limit	Over	Read	Cable			
Freq	Level	Line	Limit	Level	Loss	Factor	Remark	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB		
1 !	88.300	44.66	48.00	-3.34	34.50	1.88	10.16	Average
2	266.680	38.28	46.00	-7.72	21.89	3.46	16.39	OP
3	353.980	33.53	46.00	-12.47	13.68	4.22	19.85	OP
4	531.490	31.24	46.00	-14.76	7.29	6.00	23.95	QP



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Shenzhen Science & Ind. Park

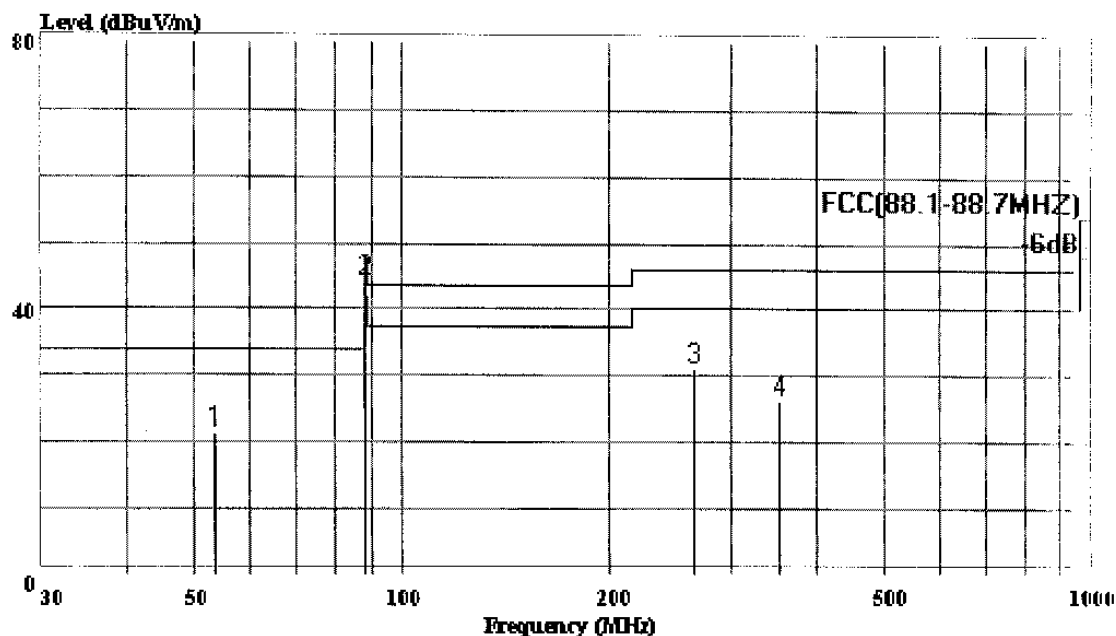
Tel: 0755-26639495~7

Fax: 0755-26632877

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File#: ACTION TECHNOLOGY.EMT

Date: 2003-12-29 Time: 11:50:40



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer:: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.3MHz

Power : DC 12V

Comment : H:3.6m Deg:120'

Page: 1

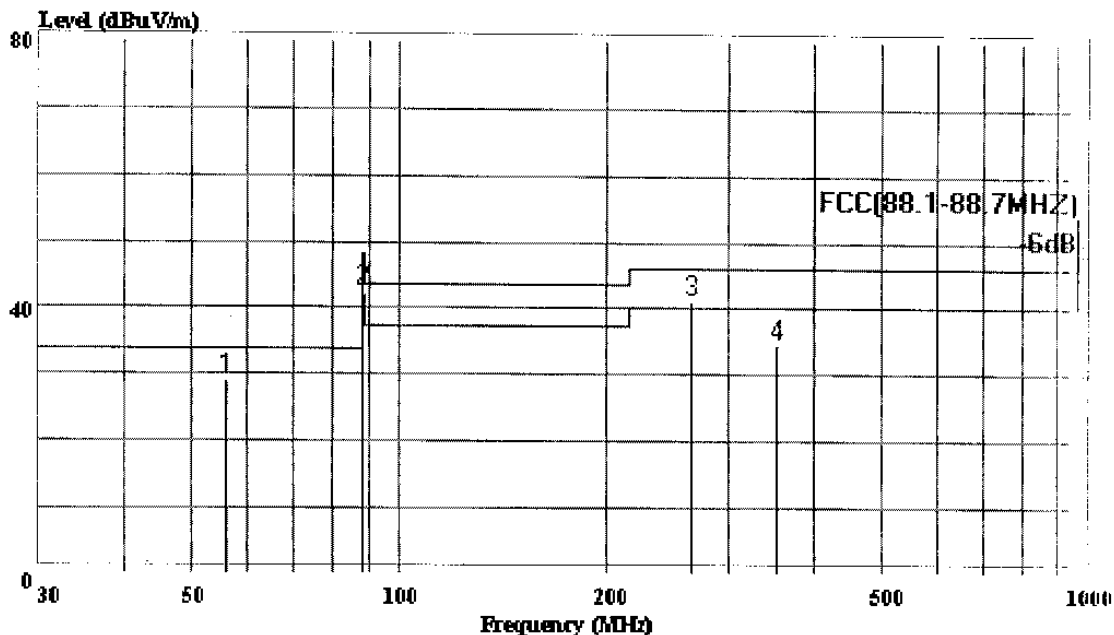
	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Remark
			dBuV/m	dB	dBuV	dB	dB	
1	53.280	21.38	40.00	-18.62	13.03	1.44	8.34	OP
2	88.300	44.38	48.00	-3.62	34.20	1.88	10.18	Average
3	266.680	31.19	46.00	-14.81	14.09	3.46	17.10	OP
4	353.980	26.40	46.00	-19.60	7.39	4.22	19.00	QP



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Data#: 12 File#: ACTION TECHNOLOGY.EMI

Date: 2003-12-29 Time: 12:03:04



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL
EUT : Cigarette adaptor with Built-IN
: FM Modulator
M/N : FM-401
Engineer:: Pebble
Memo : Temp:25'C Humi:48%
Test Mode: CH 88.5MHz
Power : DC 12V
Comment : H:3.6m Deg:110'

Page: 1

			Limit	Over	Read	Cable		
	Freq	Level	Line	Limit	Level	Loss	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	
1	56.190	29.08	40.00	-10.92	23.23	1.44	5.84	OP
2 !	88.500	42.63	48.00	-5.37	32.50	1.88	10.13	Average
3 !	266.680	41.15	46.00	-4.85	24.76	3.46	16.39	OP
4	353.980	34.51	46.00	-11.49	14.66	4.22	19.85	QP



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

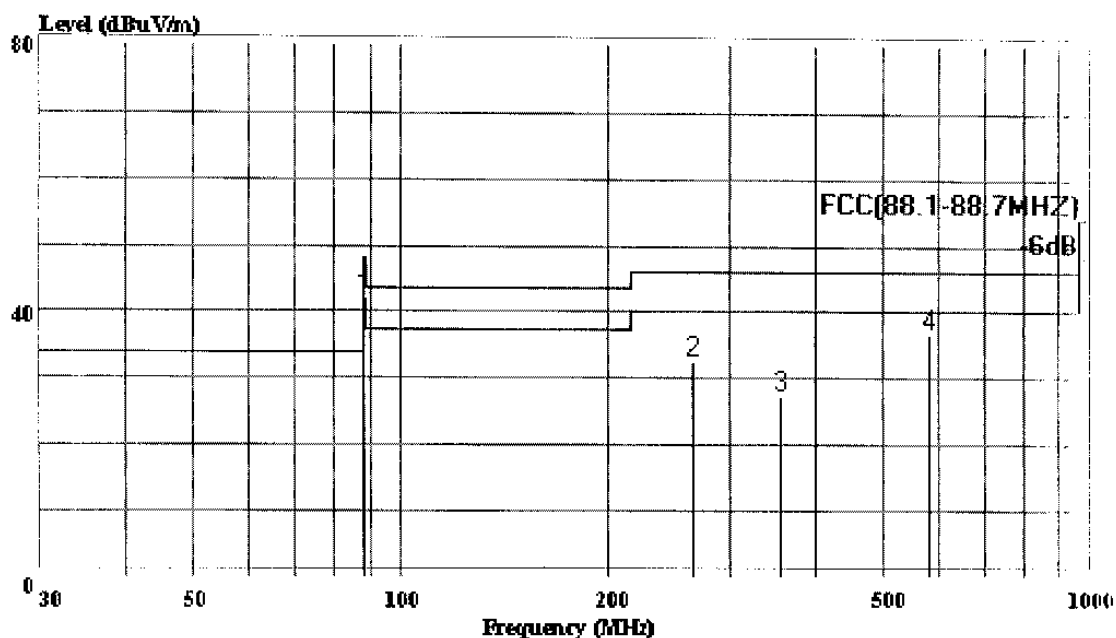
Shenzhen Science & Ind. Park

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Fax: 0755-26632877

Data#: 10 File#: ACTION TECHNOLOGY.FMT

Date: 2003-12-29 Time: 11:56:41



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.5MHz

Power : DC 12V

Comment : H:3.89m Deg:320'

Page: 1

	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Remark
						dB	dB	
1	88.500	41.91	48.00	-6.09	31.70	1.88	10.21	Average
2	266.680	32.61	46.00	-13.39	15.51	3.46	17.10	OP
3	356.890	27.24	46.00	-18.76	8.24	4.22	19.00	OP
4	581.930	36.68	46.00	-9.32	11.44	6.23	25.25	QP



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

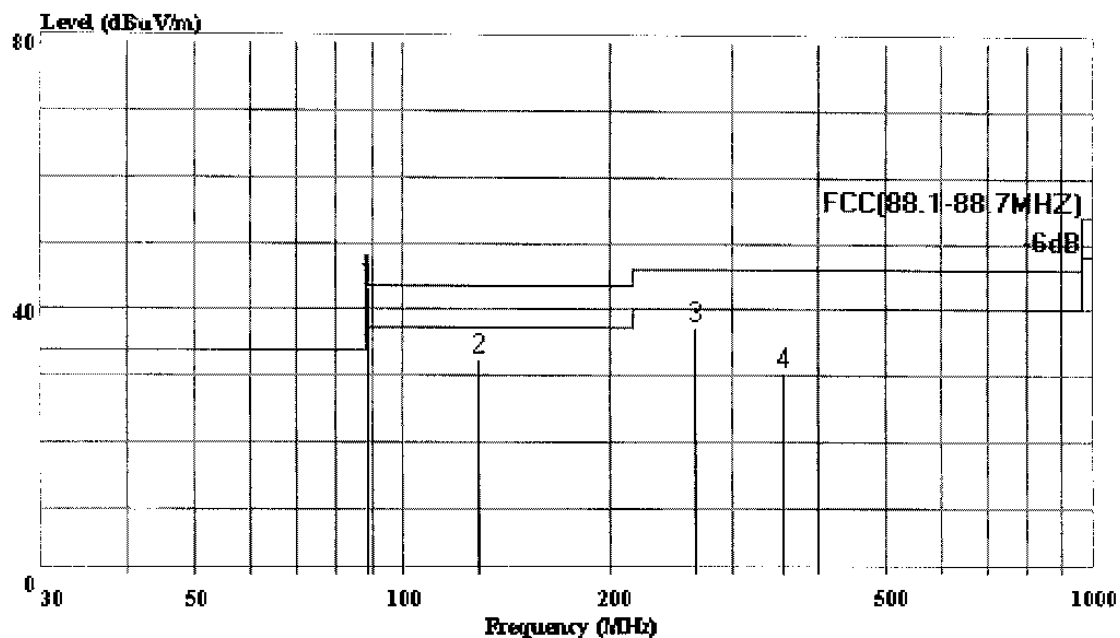
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 14 File#: ACTION TECHNOLOGY.EMI

Date: 2003-12-29 Time: 12:08:49



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer:: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.7MHz

Power : DC 12V

Comment : H:3.9m Deg:310'

Page: 1

	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Remark
			dBuV/m	dB	dBuV	dB	dB	
1 !	88.700	43.29	48.00	-4.71	33.20	1.89	10.09	Average
2	128.940	32.54	43.50	-10.96	17.54	2.30	15.00	OP
3	266.680	37.50	46.00	-8.50	21.11	3.46	16.39	OP
4	356.890	30.38	46.00	-15.62	10.58	4.22	19.80	QP



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

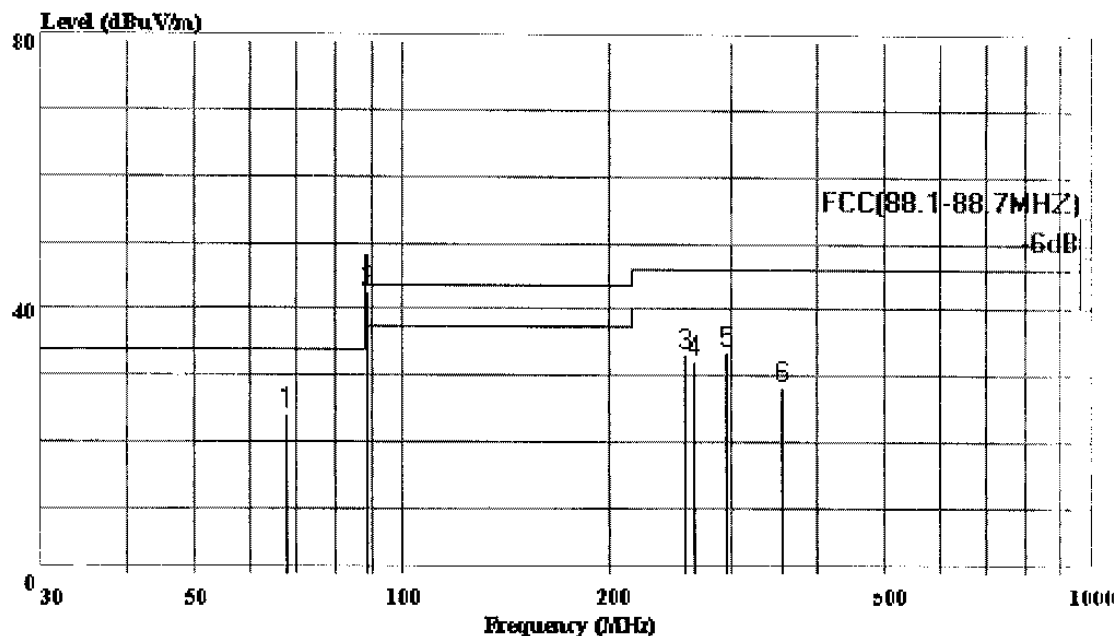
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 16 File#: ACTION TECHNOLOGY.EMI

Date: 2003-12-29 Time: 12:17:54



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.7MHz

Power : DC 12V

Comment : H:3.58m Deg:106'

Page: 1

	Freq	Level	Limit	Over	Read	Cable		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Remark
			dBuV/m	dB	dBuV	dB	dB	
1	67.830	24.35	40.00	-15.65	12.51	1.61	11.84	OP
2	88.700	42.53	48.00	-5.47	32.30	1.89	10.23	Average
3	256.980	33.30	46.00	-12.70	16.60	3.44	16.70	OP
4	266.680	32.24	46.00	-13.76	15.10	3.49	17.15	OP
5	295.780	33.65	46.00	-12.35	16.31	3.76	17.34	OP
6	356.890	28.56	46.00	-17.44	9.57	4.21	18.99	QP

4. BANDWIDTH TEST

4.1. Test Equipment

The following test equipments are used during the bandwidth test:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	Jun 22, 03	1 Y
2.	Antenna	EMCO	3115	9607-4877	Dec 02, 02	1.5 Y
3.	Print				N/A	N/A

4.2. Test Standard

The test completeness FCC 15C (239).

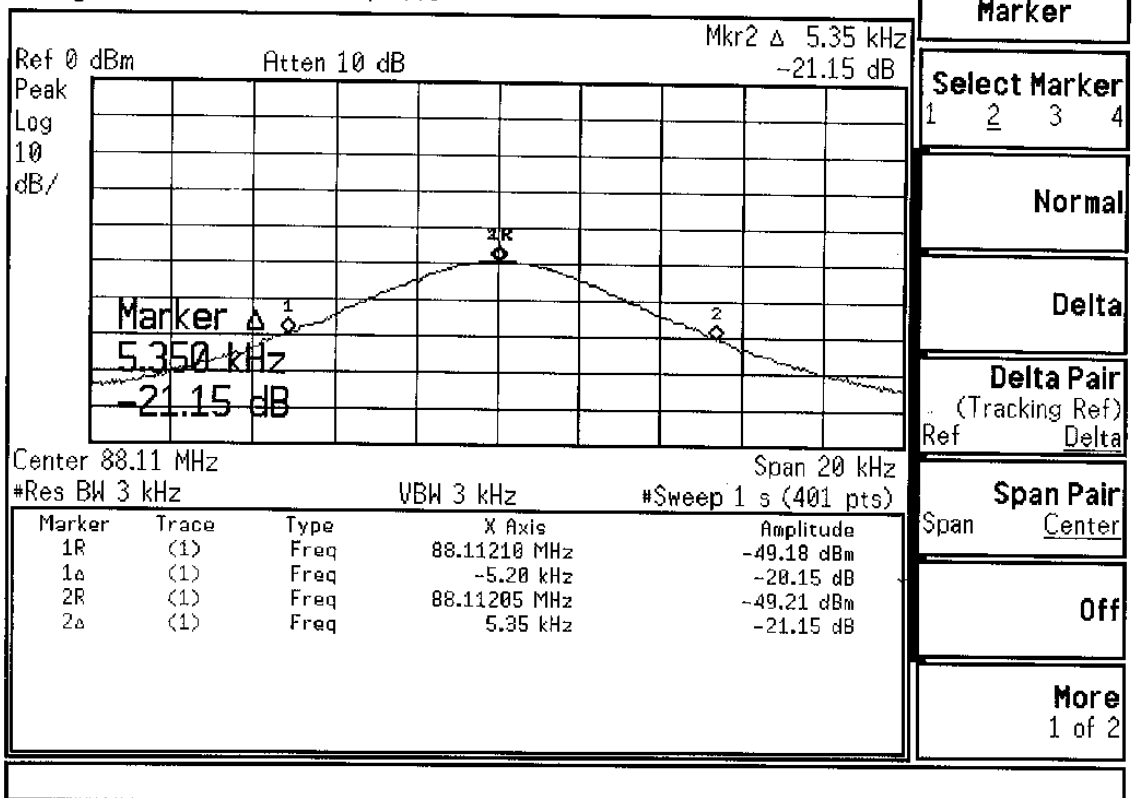
4.3. Bandwidth Limit

200KHz wide centered on the operation frequency.

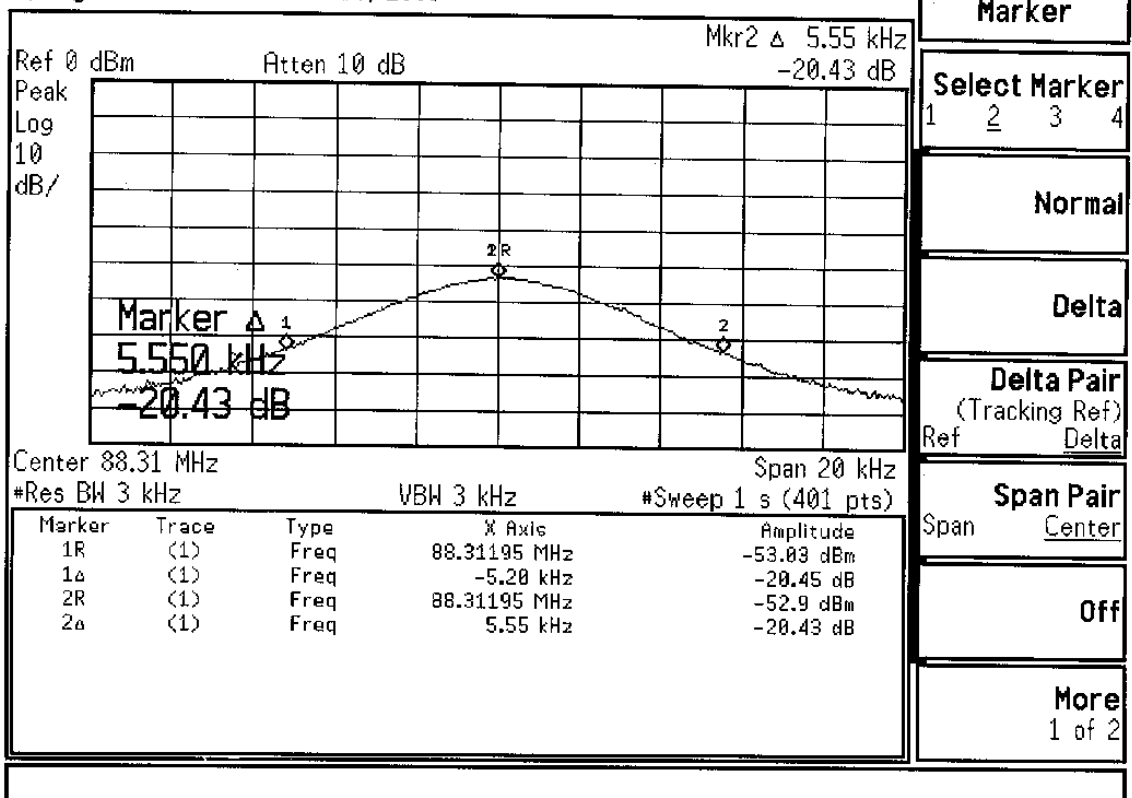
4.4. Test Procedure

PASS.

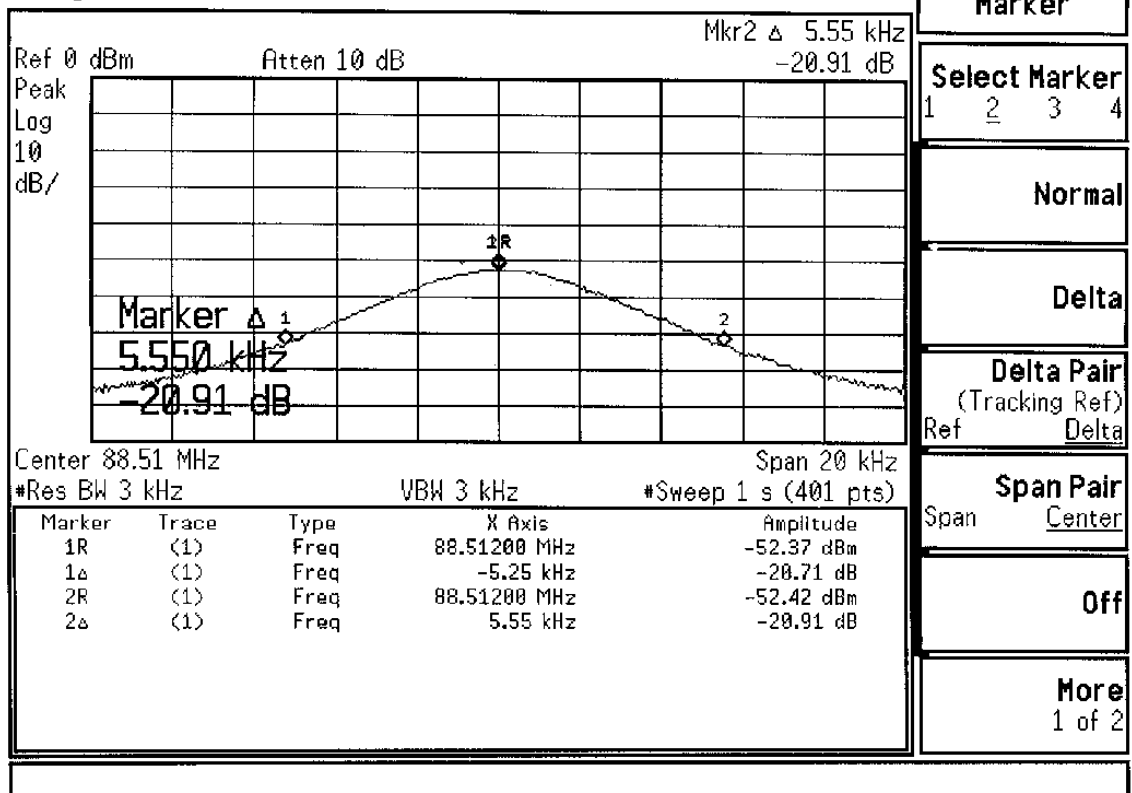
* Agilent 20:19:42 Dec 30, 2003



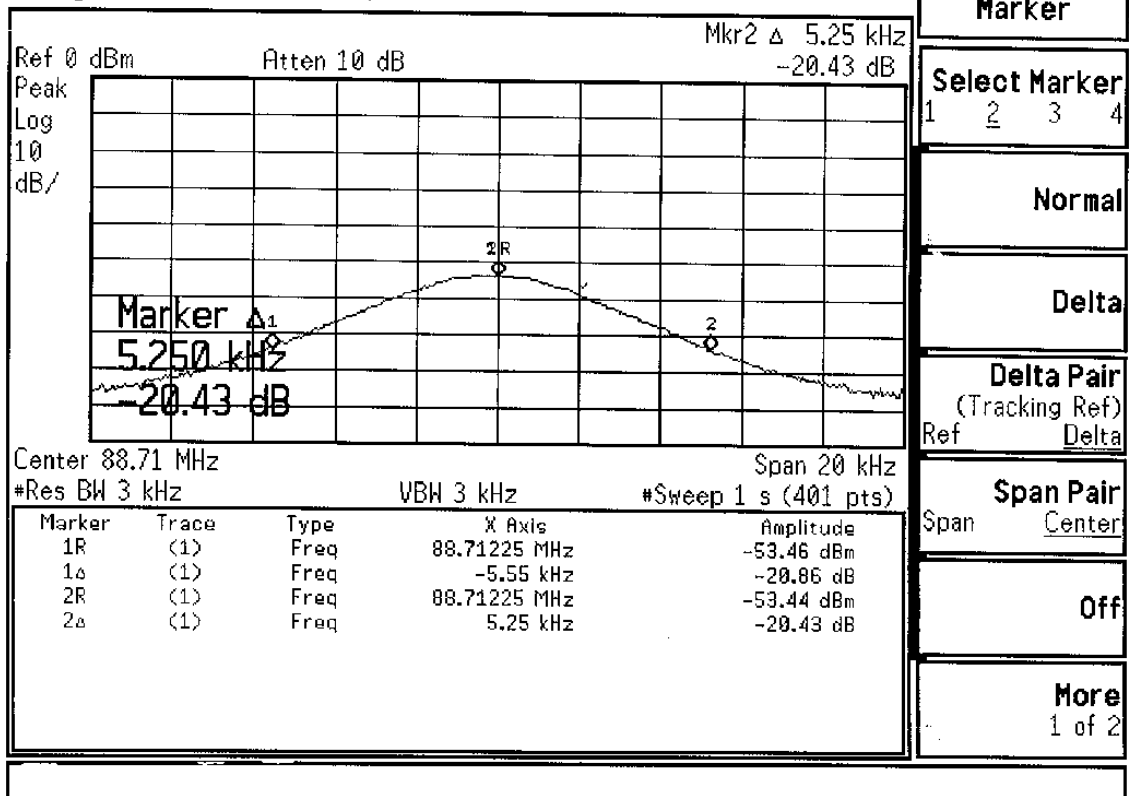
* Agilent 21:08:00 Dec 30, 2003



* Agilent 21:11:35 Dec 30, 2003



* Agilent 21:15:25 Dec 30, 2003



APPENDIX I



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

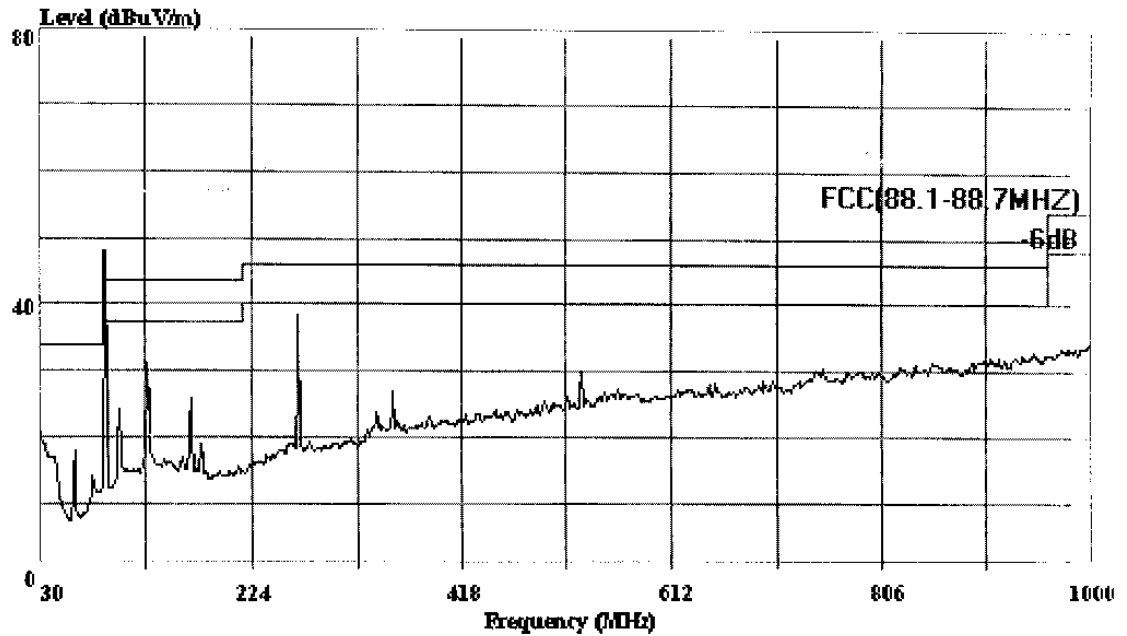
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 3 File#: ACTION TECHNOLOGY.EMT

Date: 2003-12-29 Time: 11:36:40



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer:: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.1MHz

Power : DC 12V

Comment :



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Shenzhen Science & Ind. Park

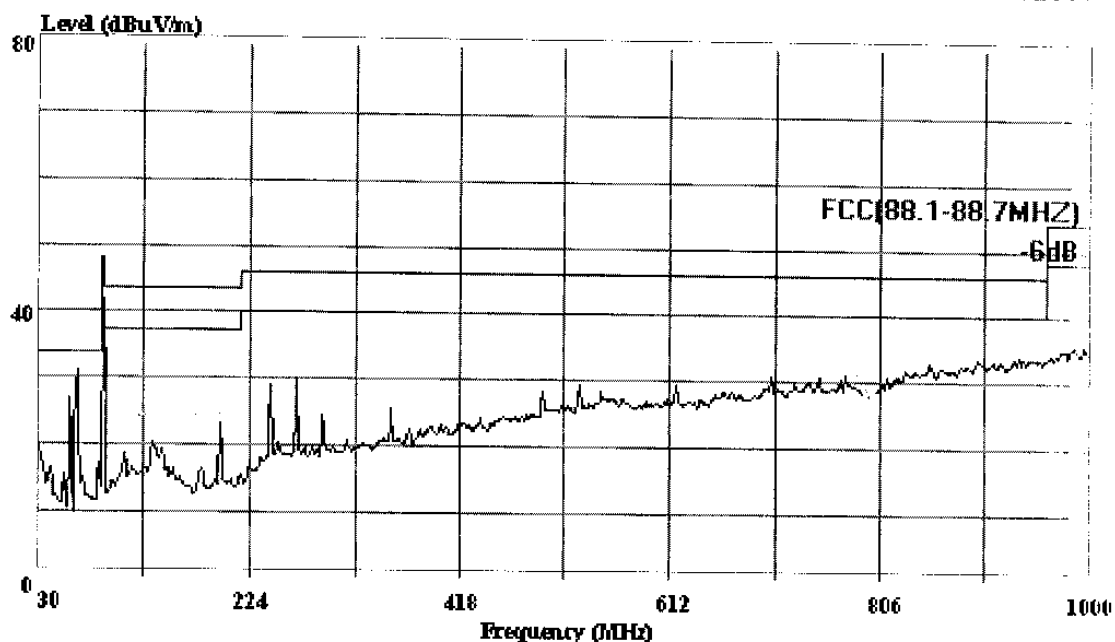
Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 1

File#: ACTION TECHNOLOGY.FMI

Date: 2003-12-29 Time: 11:28:59



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHZ) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25°C Humi:48%

Test Mode: CH 88.1MHz

Power : DC 12V

Comment :



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

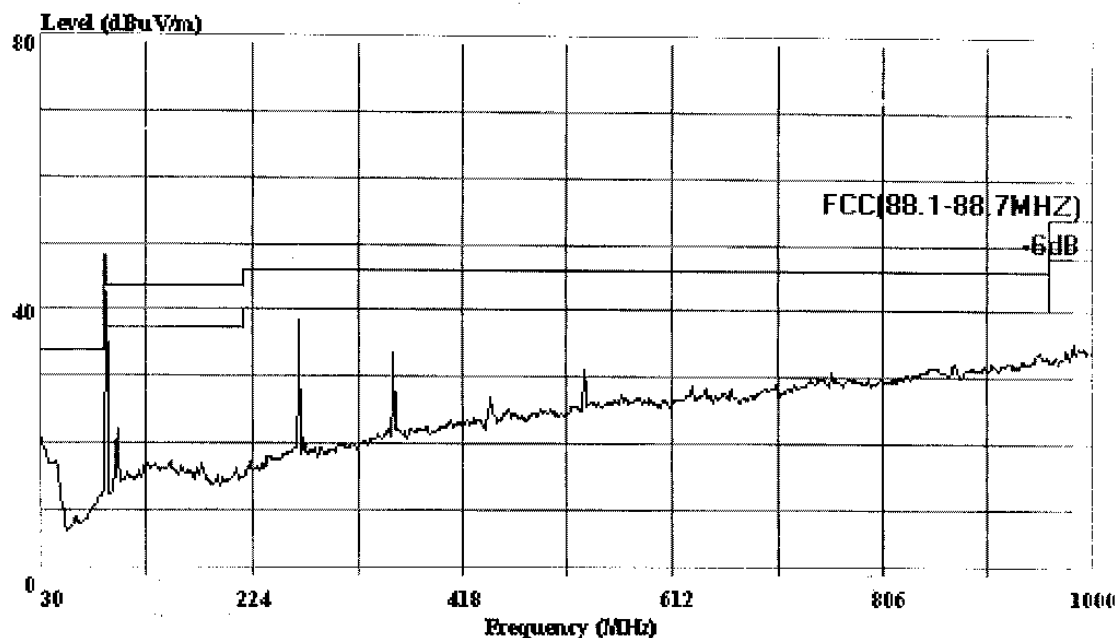
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 5 File#: ACTION TECHNOLOGY.FMI

Date: 2003-12-29 Time: 11:42:23



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer:: Pebble

Memo : Temp:25°C Humi:48%

Test Mode: CH 88.3MHz

Power : DC 12V

Comment :



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

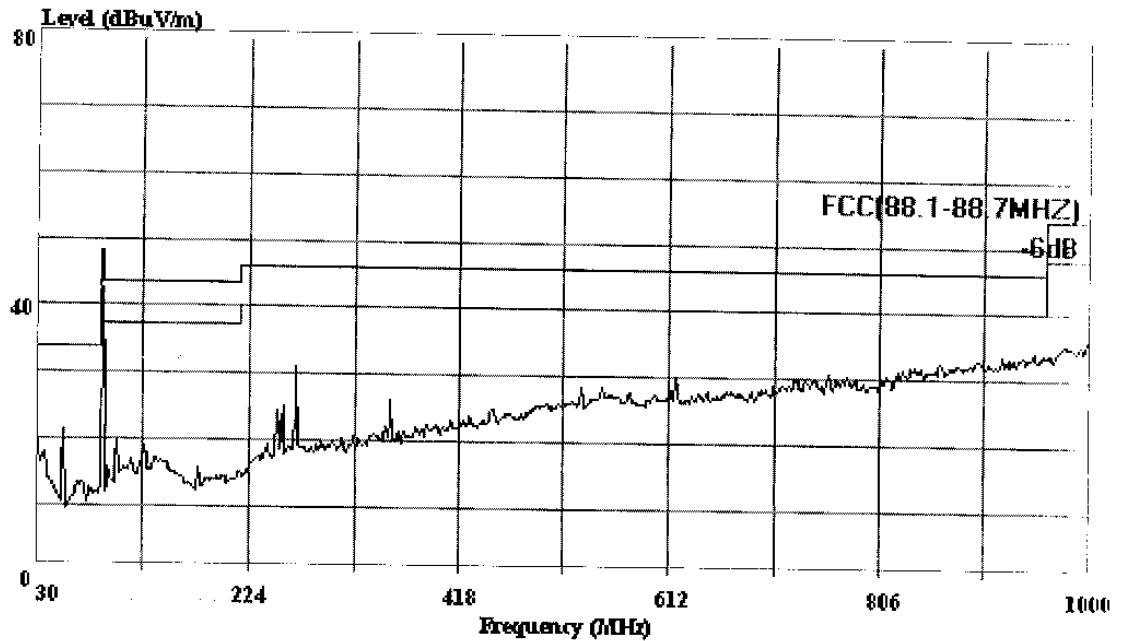
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 7 File#: ACTION TECHNOLOGY.EMT

Date: 2003-12-29 Time: 11:49:51



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

RUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.3MHz

Power : DC 12V

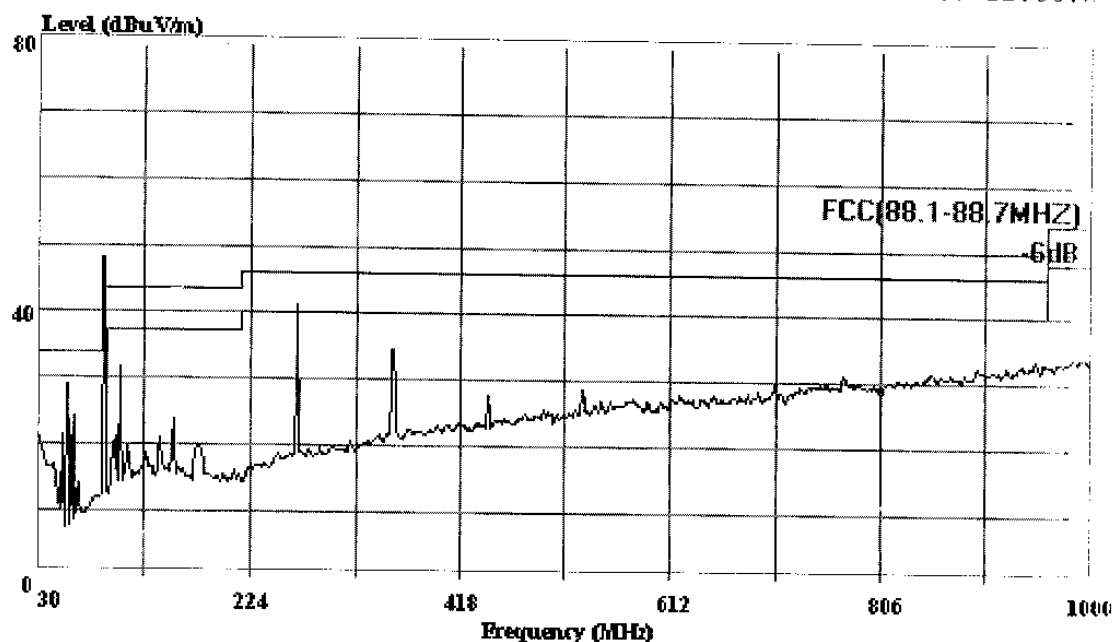
Comment :



Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 11 File#: ACTION TECHNOLOGY.EMT

Date: 2003-12-29 Time: 12:00:21



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.5MHz

Power : DC 12V

Comment :



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

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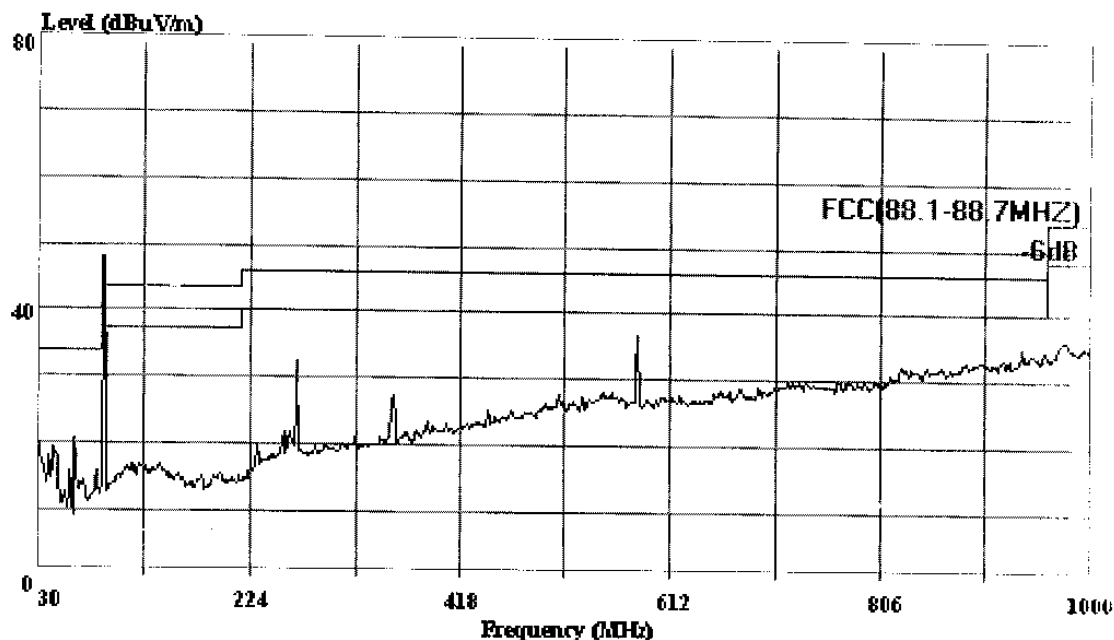
Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 9

File#: ACTION TECHNOLOGY.FMI

Date: 2003-12-29 Time: 11:53:48



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.5MHz

Power : DC 12V

Comment :



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

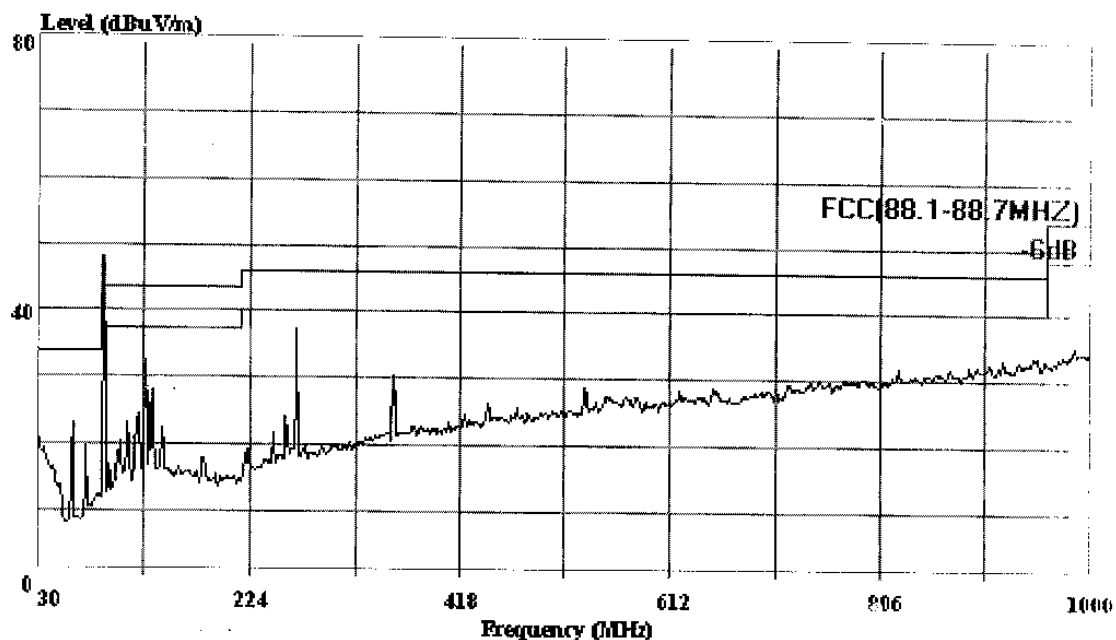
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 13 File#: ACTION TECHNOLOGY.EMT

Date: 2003-12-29 Time: 12:05:01



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHZ) 3m 2598FACTOR HORIZONTAL

EUT : Cigarette adaptor with Built-IN

: FM Modulator

M/N : FM-401

Engineer: Pebble

Memo : Temp:25'C Humi:48%

Test Mode: CH 88.7MHz

Power : DC 12V

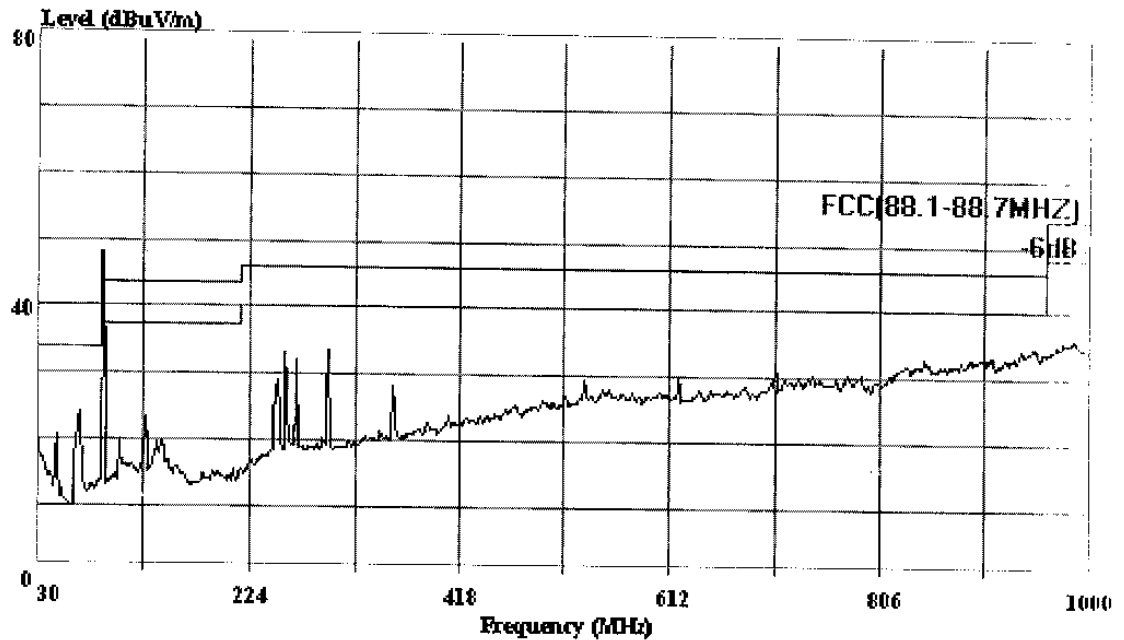
Comment :

AUDIX®
 AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Shenzhen Science & Ind. Park
 Tel: 0755-26639495~7
 Fax: 0755-26632877

Data#: 15 File#: ACTION TECHNOLOGY.EMI

Date: 2003-12-29 Time: 12:10:43



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC(88.1-88.7MHz) 3m 2598FACTOR VERTICAL
 EUT : Cigarette adaptor with Built-IN
 : FM Modulator
 M/N : FM-401
 Engineer: Pebble
 Memo : Temp:25'C Humi:48%
 Test Mode: CH 88.7MHz
 Power : DC 12V
 Comment :