APPLICATION FOR CERTIFICATION
On Behalf of
AN Yang Industrial (H.K.) Limited

Probe Temp

Model Number: AN-2419

Prepared for : AN Yang Industrial (H.K.) Limited
RM608 Prosper Comm Bldg, 9 Yin Chong Street,
Mong KOK, Kowloon, Hong Kong

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-F05110
Date of Test	:	Apr.10~18, 2005
Date of Report	:	Apr.22, 2005

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Description Page

TEST REPORT DECLARATION

Applicant : AN Yang Industrial (H.K.) Limited

Manufacturer : AN Yang Electric Products FTY Ltd.

EUT Description : Probe Temp

(A) MODEL NO. : AN-2419
(B) SERIAL NO. : F2005042201
(C) POWER SUPPLY : Battery DC 3V

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Apr. 2004.

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 : Apr.10~18, 2005

Prepared by :

Susan Liu / Assistant

Reviewer :

Lake Wang / Supervisor

AUDIX 信華科技(深圳)有限公司 Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: Ken Lu

Approved & Authorized Signer : Ken Lu / Assistant Manager

Name of the Representative of the Responsible Party : _____

Signature : _____

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Probe Temp
Model Number	:	AN-2419
Applicant	:	AN Yang Industrial (H.K.) Limited RM608 Prosper Comm Bldg, 9 Yin Chong Street, Mong KOK, Kowloon, Hong Kong
Manufacturer	:	AN Yang Electric Products FTY Ltd. Dong Bao Industrial Park, Wang Fon Sajin County Shen Zhen
Date of Test	:	Apr.10~18, 2005

1.2. Test Facility

Site Description

3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Aug. 15, 2003
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Mar. 15, 2004
EMC Lab.	:	Certificated by DATech, German Registration Number: DAT-P-091/99-01 Feb. 02, 2004 Certificated by NVLAP, USA NVLAP Code: 200372-0 Mar. 31, 2004 Certificated by Nemko, Norway Aut. No.: ELA135 April. 22, 2004 Certificated by Industry Canada Registration Number: IC 5183 Jul. 28, 2004
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

1.3. Test Uncertainty

No.	Item	Uncertainty	Remark
1.	Uncertainty for Conducted Emission Test	1.22dB	
2.	Uncertainty for Radiated Emission Test	3.14dB	3m Chamber
3.	Uncertainty for Radiated Emission Test	3.18dB	10m Chamber
4.	Uncertainty for Power Clamp Test	1.38dB	

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

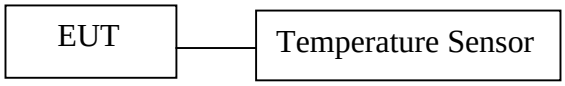
The following test equipments are used during the radiated emission Test：

3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Spectrum	HP	85422E	3625A00181	May 24,04	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 24,04	1 Year
3.	Amplifier	HP	8447D	2944A07794	Mar.15, 05	1/2 Year
4.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 12, 05	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	Jan.30, 05	1/2 Year
8.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Jan.30, 05	1/2 Year
9.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Jan.30, 05	1/2 Year
10.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Jan.30, 05	1/2 Year
11.	Coaxial Switch	Anritsu	MP59B	M73989	Nov 26, 04	1/2 Year

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators

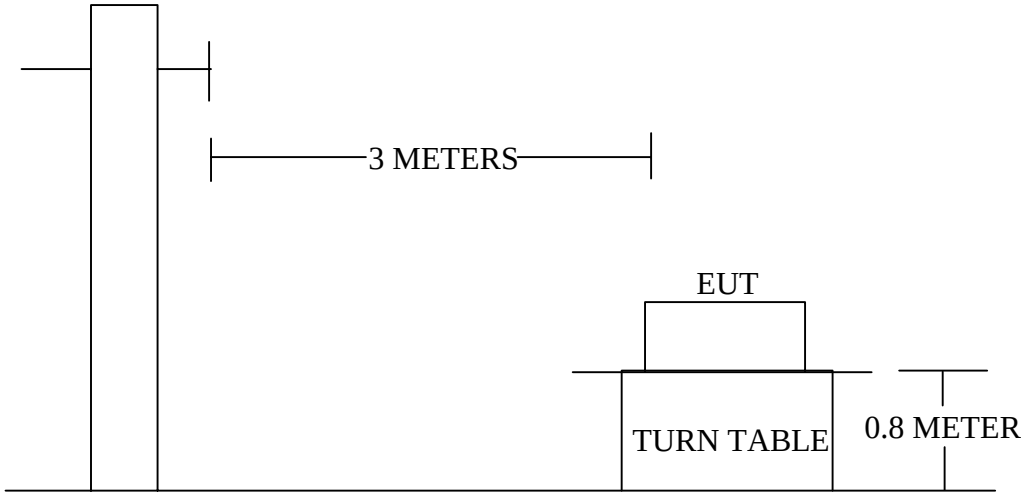


(EUT: Probe Temp)

3.2.2. Anechoic Chamber Setup Diagram

ANTENNA TOWER

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



GROUND PLANE

3.3. Radiated Emission Limit (FCC Part 15.231)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/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
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	
314.98 Fundamental	3	75.6 dB(μV)/m (Fundamental) 46 dB(μV)/m (Spurious)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/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. Probe Temp (EUT)

Model Number	:	AN-2419
Serial Number	:	F2005042201
Manufacturer	:	AN Yang Electric Products FTY 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 (ON) 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 (ON) 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	:	Apr.10, 2005	Temperature	:	24℃
EUT	:	Probe Temp	Humidity	:	54%
Model No.	:	AN-2419	Test Mode	:	ON
Test Engineer:		Seco			

Frequency	Antenna Factor	Cable Loss	Meter Reading Horizontal	Emission Level Horizontal	Over Limits dBμV/m	Limits
MHz	dB/m	dB	dBμV	dBμV/m		dBμV/m
314.980	13.77	4.07	41.55	59.38	-16.22	75.60
629.96	19.77	6.04	14.96	40.78	-5.22	46.00

Remark: 1. All readings are Average 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.

Date of Test	:	Apr.10, 2005	Temperature	:	24℃
EUT	:	Probe Temp	Humidity	:	54%
Model No.	:	AN-2419	Test Mode	:	ON
Test Engineer:		Seco			

Frequency	Antenna Factor	Cable Loss	Meter Reading Vertical	Emission Level Vertical	Over Limits dBμV/m	Limits
MHz	dB/m	dB	dBμV	dBμV/m		dBμV/m
314.890	13.05	4.05	35.79	52.89	-22.71	75.60
629.960	19.67	6.07	18.28	44.02	-1.98	46.00

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: Lake Wang

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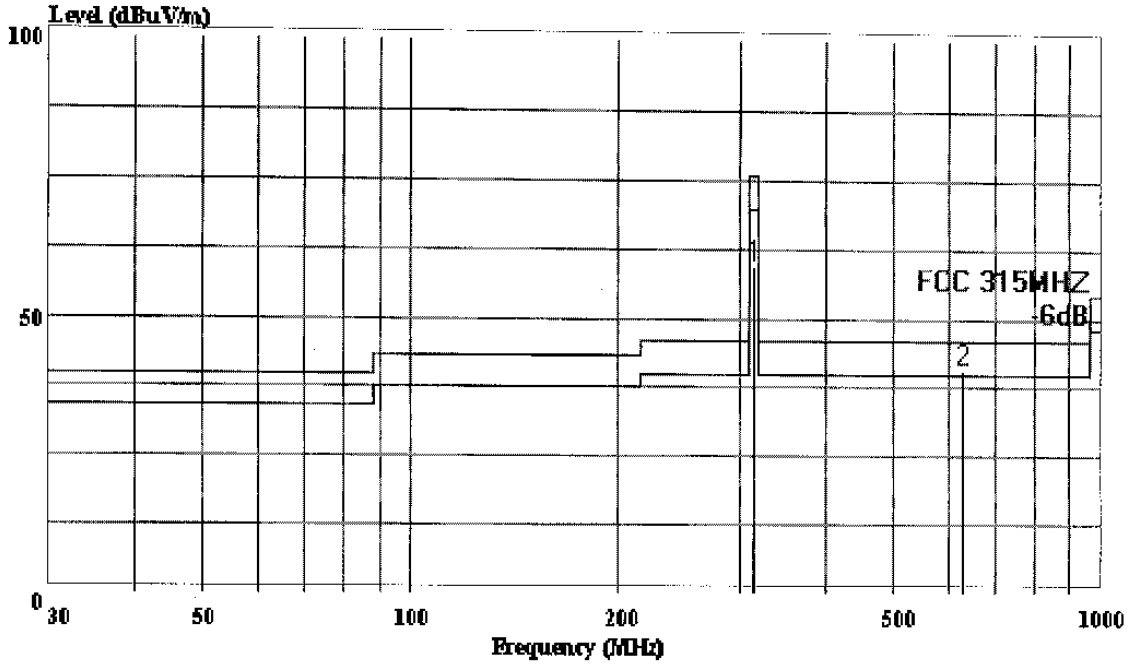
Data#: 68 File#: ANYANG.EMI Date: 2005-04-10 Time: 11:23:24



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

Trace: Ref Trace:

Condition: FCC 315MHZ 3m 2598FACTOR HORIZONTAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Engineer : Seco
Test Mode: On
Memo : Temp:24'C Humi:54%
: AntPos:1.2m TablePos:0'

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	314.980	59.38	-16.22	75.60	41.55	13.77	4.07
2 !	629.960	40.78	-5.22	46.00	14.96	19.77	6.04

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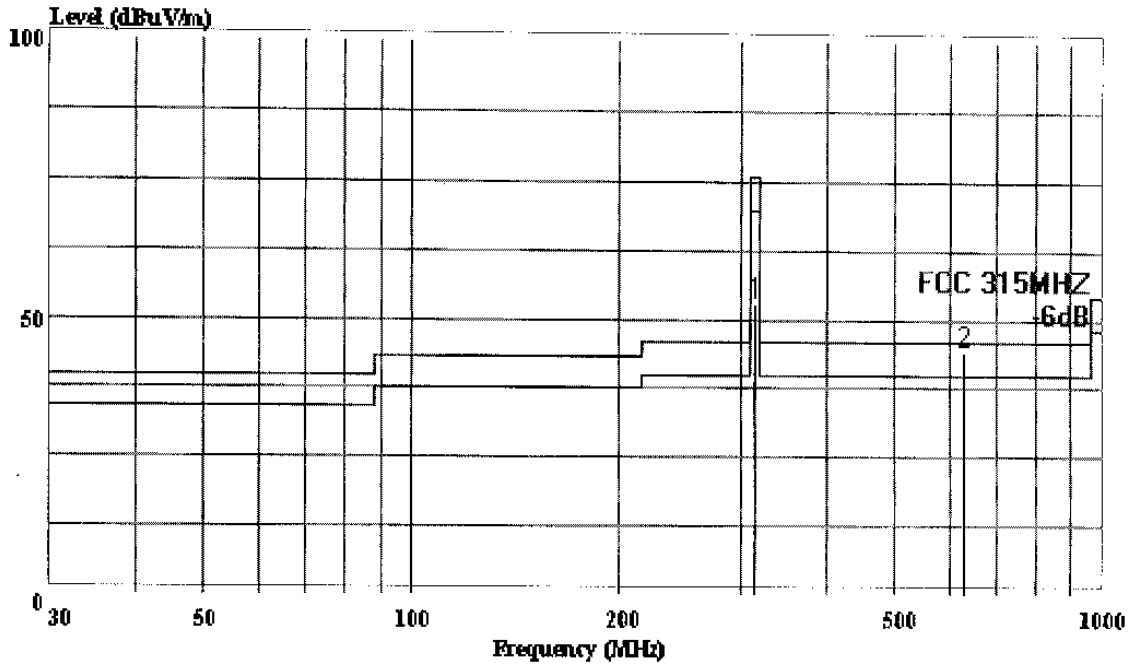

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: FCC 315MHZ 3m 2598FACTOR VERTICAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Engineer : Seco
Test Mode: On
Memo : Temp:24'C Humi:54%
: AntPos:1.0m TablePos:0'

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	314.980	52.89	-22.71	75.60	35.79	13.05	4.05
2 !	629.960	44.02	-1.98	46.00	18.28	19.67	6.07

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	May 24, 04	1 Y
2.	Antenna	EMCO	3115	9607-4877	Jun 15, 04	1.5 Y

4.2. Test Standard

The test completeness FCC 15C (231).

4.3. Bandwidth Limit: (0.0025*315MHz=787KHz)

315.240-314.720=520KHz<787KHz

The minimum 26dB bandwidth shall be at least 10KHz.

4.4. Test Procedure

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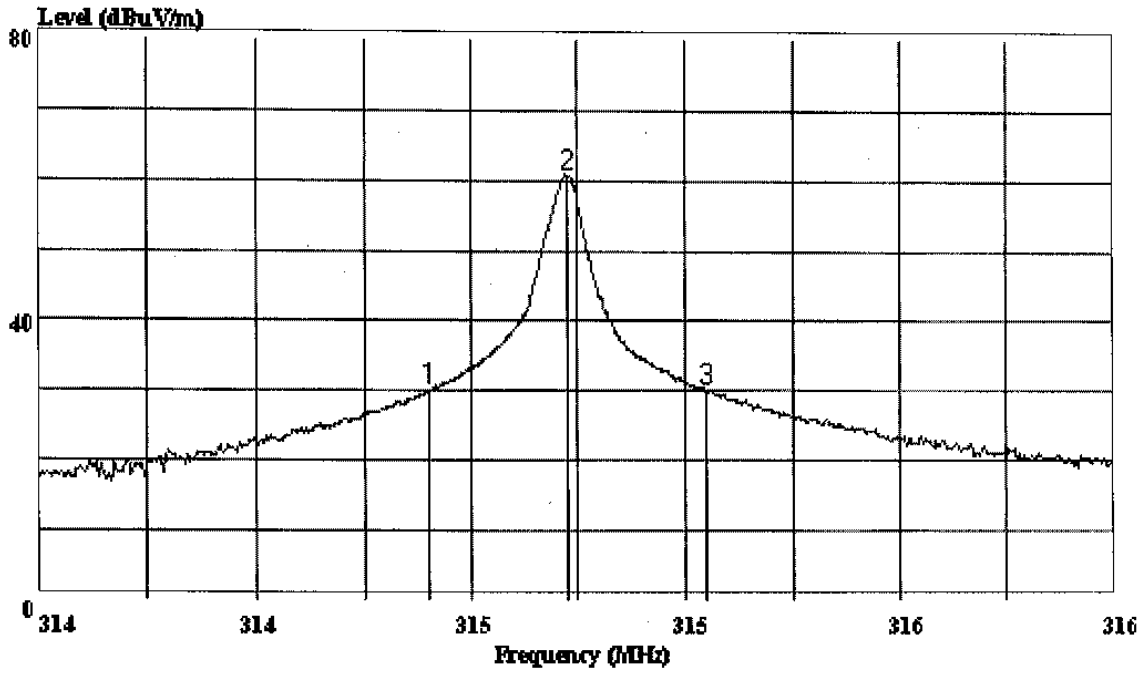

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: 3m 2598FACTOR HORIZONTAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Engineer : Seco
Test Mode: On
Memo : Temp:24'C Humi:54%

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	314.720	30.06	------	------	39.75	13.67	4.10
2	314.980	60.76	------	------	70.44	13.68	4.10
3	315.240	29.98	------	------	39.64	13.70	4.09

APPENDIX I

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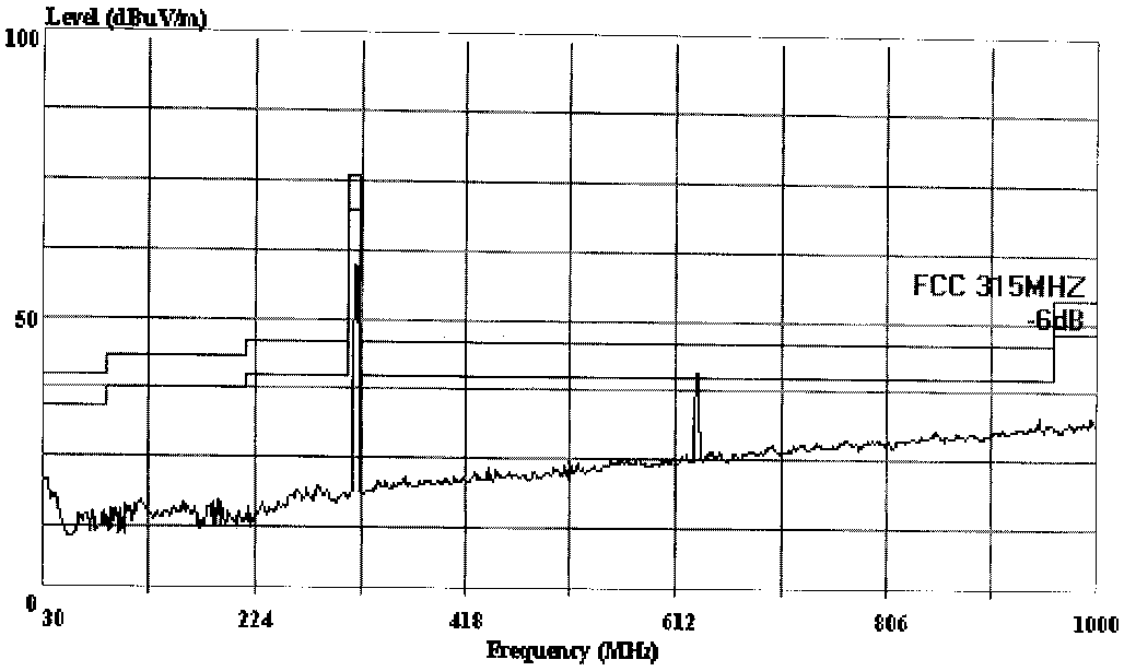

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EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Engineer : Seco
Test Mode: On
Memo : Temp:24'C Humi:54%

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
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Fax: 0755-26632877

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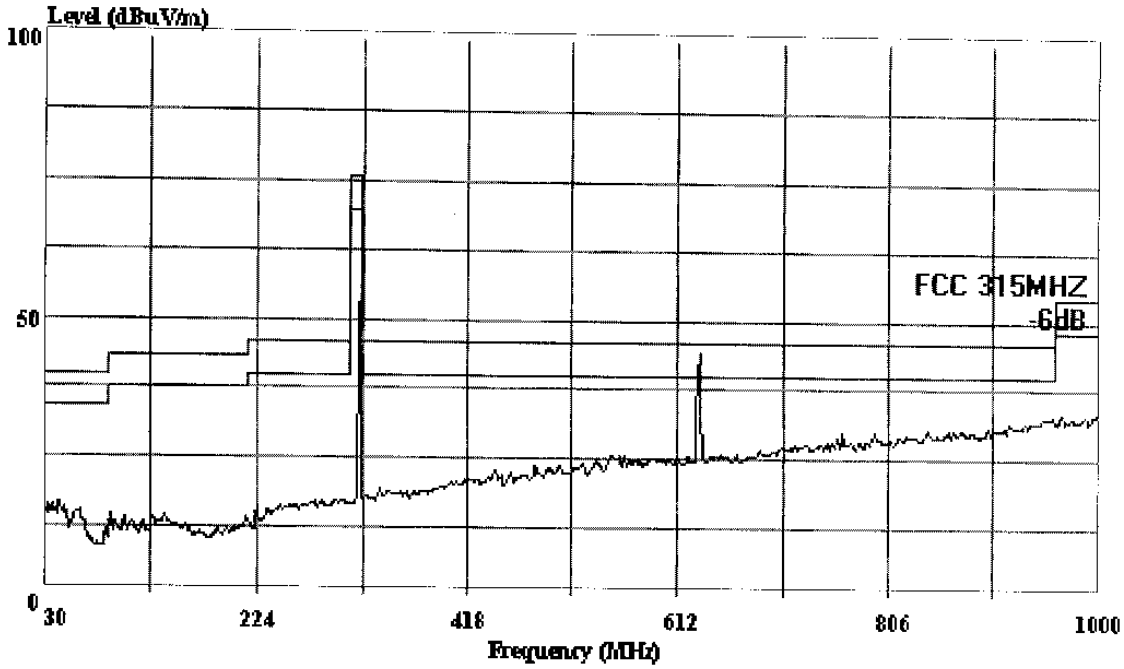

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: FCC 315MHZ 3m 2598FACTOR VERTICAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Engineer : Seco
Test Mode: On
Memo : Temp:24'C Humi:54%

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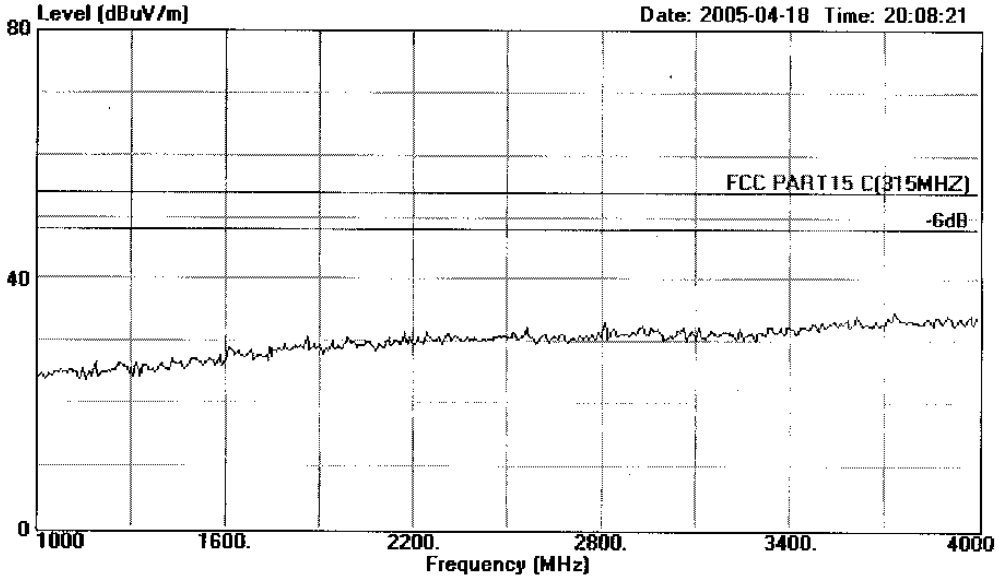

Site : 1# Chamber
Condition : FCC PART15 C(315MHZ) 3m 3115FACTOR HORIZONTAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Test Mode : On
Memo : Temp:24'C Humi:54%

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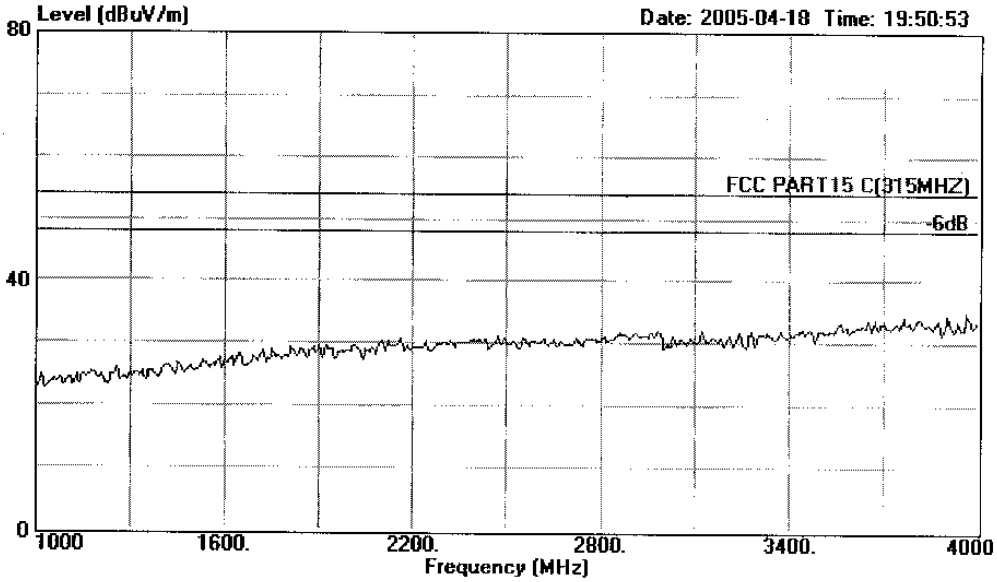

Site : 1# Chamber
Condition : FCC PART15 C(315MHZ) 3m 3115FACTOR VERTICAL
EUT : PROBE TEMP
M/N : AN-2419
Power : Battery DC3V
Test Mode : On
Memo : Temp:24'C Humi:54%