# APPLICATION FOR CERTIFICATION On Behalf of Xinbao Electrical Equipments Co., Ltd.

Microwave Oven

Model Number: XB2316T/XB2616T

Prepared for: Xinbao Electrical Equipments Co., Ltd.

Zhenghe South Road, Leliu Town, Shunde District,

Foshan City, Guangdong, China.

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

No. 6 Ke Feng Rd., 52 Block,

Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F06050

Date of Test : Oct. 26~Nov. 17, 2005

Date of Report : Feb. 27, 2006

# TABLE OF CONTENTS

Description Page					
T	est R	eport Certification			
1.	GI	ENERAL INFORMATION	1-1		
	1.1.	Description of Device (EUT)			
	1.2.	Test Facility			
	1.3.	Measurement Uncertainty			
2.	PC	OWER LINE CONDUCTED EMISSION TEST	2-1		
	2.1.	Test Equipment	2-1		
	2.2.	Block Diagram of Test Setup			
	2.3.	Power Line Conducted Emission Test Limit			
	2.4.	Configuration of EUT on Test	2-2		
	2.5.	Operating Condition of EUT			
	2.6.	Test Procedure			
	2.7.	Power Line Conducted Emission Test Results	2-3		
3.	$\mathbf{R}^{A}$	ADIATED EMISSION TEST (-)	3-1		
	3.1.	Test Equipment	3-1		
	3.2.	Block Diagram of Test Setup	3-1		
	3.3.	Radiated Emission Limit			
	3.4.	EUT Configuration on Test			
	3.5.	Operating Condition of EUT			
	3.6.	Test Procedure			
_	3.7.	Radiated Emission Test Result			
4.	RA	ADIATED EMISSION TEST (二)			
	4.1.	Test Equipment			
	4.2.	Anechoic Chamber Test Site Setup Diagram			
	4.3.	Radiation Limit			
	4.4.	EUT Configuration and Test Procedure			
_	4.5.	Radiated RFI Emission Noise Measurement Results			
5.		ENERAL INPUT / OUTPUT POWER AND FREQUENCY			
	5.1.	Test Equipments			
	5.2.	Input Power			
	5.3.	Output Power			
	5.4. 5.5.	Output Frequency Stability			
_		Output Frequency Stability			
6.		IOTOGRAPH			
	6.1.	Photos of Power Line Conducted Emission Test			
	6.2.	Photo of Radiated Emission Test	6-3		

#### TEST REPORT CERTIFICATION

Applicant : Xinbao Electrical Equipments Co., Ltd.

Manufacturer : Xinbao Electrical Equipments Co., Ltd.

EUT Description : Microwave Oven

(A) MODEL NO. : XB2316T/XB2616T

(B) SERIAL NO. : N/A

(C) POWER SUPPLY: AC 120V/60Hz

Test Procedure Used:

FCC Rules and Regulations CFR Title 47 Part 18 Subpart C and FCC/OST MP-5 (February 1986)

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 18 Subpart C limits for both radiation and conduction emissions.

The measurement results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits. Audix Technology (Shenzhen) Co., Ltd. recommends that this data can be submitted for FCC certification purposes if a 6dB margin below FCC limits is obtained. 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.

#### Tested performance

- 1) General input, output power and frequency.
- 2) Radiation emissions(30MHz to 1GHz) in 3 meters anechoic chamber. Radiation emissions(1GHz to 10GHz) in 3 meters anechoic chamber.

Date of Test:	Oct. 26~Nov. 17, 2005
Prepared by :	Susan Liu / Assistant
Reviewer:	Ken Lu / Deputy Manager
Approved & Authorized Signer :	4UDIX 作業件故(策明)有限会司 Audix Technology (Shenzhen) Co., Ltd. EMC 年円報告専用章 Stamp only for EMC Dept. Report Signature: デルーの3-10

Smart Tsai / Vice General Manager

# 1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description : Microwave Oven

Model Number : XB2316T/XB2616T

Applicant : Xinbao Electrical Equipments Co., Ltd.

Zhenghe South Road, Leliu Town, Shunde District,

Foshan City, Guangdong, China.

Manufacturer : Xinbao Electrical Equipments Co., Ltd.

Zhenghe South Road, Leliu Town, Shunde District,

Foshan City, Guangdong, China.

Power Cord : Unshielded, Undetachable 1.0m

Date of Test : Oct. 26~Nov. 17, 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.

: No. 6, Ke Feng Rd., 52 Block,

Site Location

Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

# 1.3. Measurement 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	

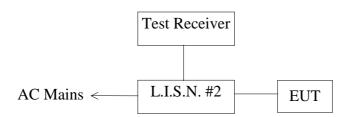
# 2. POWER LINE CONDUCTED EMISSION TEST

# 2.1. Test Equipment

The following test equipments are used during the power line conducted emission test:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
						Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	May 16, 05	1 Year
2.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May 16, 05	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 1	June 23, 05	1 Year
4.	RF Cable	MIYAZAKI	5D-2W	LISN Cable 1#	Feb.16, 06	1/2 Year
5.	Coaxial Switch	Anritsu	MP59B	M55367	Feb.16, 06	1/2 Year
6.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100340	Feb.16, 06	1/2 Year

# 2.2. Block Diagram of Test Setup



(EUT: Microwave Oven)

#### 2.3. Power Line Conducted Emission Test Limit

	Maximum RF Line Voltage				
Frequency	Quasi-Peak Level	Average Level			
	dB(µV)	dB(µV)			
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*			
500kHz ~ 5MHz	56	46			
5MHz ~ 30MHz	60	50			

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

# 2.4. Configuration of EUT on Test

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

#### 2.4.1. Microwave Oven (EUT)

Model Number : XB2316T/XB2616T

Serial Number : N/A

Manufacturer : Xinbao Electrical Equipments Co., Ltd.

#### 2.5. Operating Condition of EUT

- 2.5.1. Setup the EUT and simulator as shown on Section 2.2.
- 2.5.2. Turn on the power of all equipment.
- 2.5.3. Let the EUT work in test mode (Full Load) and test it.

#### 2.6. Test Procedure

The EUT is connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission levels. 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 Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

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

The test result are reported on Section 2.7, all the scanning waveforms for Conducted Emission Test are attached in Appendix I.

# 2.7. Power Line Conducted Emission Test Results **PASS.**

The frequency range from 150kHz to 30 MHz is investigated. All emissions not reported below are too low against the prescribed limits.

Date of Test:

Oct. 26, 2005

Temperature:

23°C

EUT:

Microwave Oven

Humidity:

54%

Model No.:

XB2316T

Test Mode:

Full Load

Test Engineer:

Qiyuang

Frequency	Reading (dBμV)				Limit	
1	V	A	VI	3	(dBµV)	
(MHz)	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.166	43.12	*	42.33	*	65.14	55.14
0.621	32.92	*	N/A	N/A	56.00	46.00
0.627	N/A	N/A	42.33	*	65.11	55.11
0.753	38.07	*	N/A	N/A	56.00	46.00
0.834	N/A	N/A	32.58	*	56.00	46.00
1.140	32.56	*	17.48	*	56.00	46.00
2.194	N/A	N/A	38.89	*	56.00	46.00
2.291	24.73	*	N/A	N/A	56.00	46.00
26.000	24.98	*	N/A	N/A	60.00	50.00
26.158	N/A	N/A	24.83	*	60.00	50.00

Remark: 1) If the data table appeared symbol of "N/A" means the value was too low to be measured.

2) If the data table appeared symbol of "\*" means the Q.P. value is under the limit for average, so, the average value had been omitted.

Reviewer: Ser Viant

Date of Test:

Nov. 08, 2005

Temperature:

23°C

EUT:

Microwave Oven

Humidity:

54%

Model No.:

XB2616T

Test Mode:

Full Load

Test Engineer:

Qiyuang

Frequency		Reading (dBμV)				Limit	
1	V	A	VB		(dBµV)		
(MHz)	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	
0.150	N/A	N/A	45.24	*	66.00	56.00	
0.171	42.86	*	N/A	N/A	64.91	54.91	
0.637	N/A	N/A	33.41	*	56.00	46.00	
0.751	35.86	*	N/A	N/A	56.00	46.00	
0.767	N/A	N/A	40.36	*	56.00	46.00	
0.914	30.34	*	N/A	N/A	56.00	46.00	
2.210	39.36	*	N/A	N/A	56.00	46.00	
2.350	N/A	N/A	31.58	*	56.0	46.00	
12.990	N/A	N/A	21.54	*	60.00	50.00	
19.950	27.21	*	N/A	N/A	60.00	50.00	
21.830	N/A	N/A	29.71	*	60.00	50.00	
26.000	29.70	*	N/A	N/A	60.00	50.00	

Remark: 1) If the data table appeared symbol of "N/A" means the value was too low to be measured.

2) If the data table appeared symbol of "\*" means the Q.P. value is under the limit for average, so, the average value had been omitted.

Reviewer: Sero Viant

# 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 16, 05	1 Year
1.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 16, 05	1 Year
2.	Amplifier	HP	8447D	2944A07794	Sep.14, 05	1/2 Year
3.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 11, 06	1 Year
4.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.1	Jan. 28, 06	1/2 Year
5.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Jan. 28, 06	1/2 Year
6.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Jan. 28, 06	1/2 Year
7.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Jan. 28, 06	1/2 Year
8.	Coaxial Switch	Anritsu	MP59B	M73989	Jan. 28, 06	1/2 Year
9.	Spectrum	Agilent	E4407B	MY41440292	May 16, 05	1 Year
10.	Amp	HP	8449B	3008A00863	May 16, 05	1 Year
11.	Antenna	EMCO	3115	9607-4877	Jun. 05, 05	1.5 Year

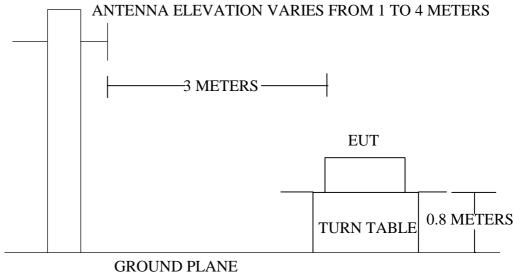
# 3.2. Block Diagram of Test Setup

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

(EUT: Microwave Oven)

#### 3.2.2. In Anechoic Chamber

#### ANTENNA TOWER



#### 3.3. Radiated Emission Limit

FREQUENCY	DISTANCE	FIELD STRENGTHS LIM	
MHz	Meters	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

Remark: (1) Emission level (dB) $\mu$ V = 20 log Emission level  $\mu$ V/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 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. Microwave Oven (EUT)

Model Number : XB2316T/XB2616T

Serial Number : N/A

Manufacturer : Xinbao Electrical Equipments Co., Ltd.

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 1.2.

# 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 mode (Full Load) and test it.

#### 3.6. Test Procedure

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. Power on the PC and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. 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 are set on test.

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

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

The test mode (Full Load) is tested in Anechoic Chamber, and all the scanning waveforms are attached in Appendix II.

#### 3.7. Radiated Emission Test Result

#### PASS.

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

Date of Test:	Nov. 16, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2316T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: Center

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Horizontal	Horizontal	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
36.790	16.63	1.03	13.14	30.80	-9.20	40.00
56.190	6.31	1.58	18.08	25.98	-14.02	40.00
101.780	11.29	2.05	9.93	23.27	-20.23	43.50
162.890	11.53	2.86	24.03	38.42	-5.08	43.50
230.790	10.77	3.36	13.75	27.88	-18.12	46.00
310.330	13.53	3.93	5.68	23.14	-22.86	46.00

Remark: 1. All readings are Quasi-Peak values.

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 162.890MHz with corrected signal level of  $38.42 dB\mu V/m$  (Limit is  $43.50.00 dB\mu V/m$ ) when the antenna was at horizontal polarization and at 1.58m high and the turn table was at  $270^{\circ}$  .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: Ser Viant

Date of Test:	Nov. 16, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2316T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: Center

Frequency	Antenna	Cable	Meter Reading	Emission Level	Over	Limits
	Factor	Loss	Vertical	Vertical	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
54.250	6.50	1.56	10.70	18.75	-21.25	40.00
85.290	6.84	2.00	7.88	16.72	-23.28	40.00
155.130	9.59	2.58	19.74	31.91	-11.59	43.50
187.140	7.77	3.07	20.56	31.40	-12.10	43.50
237.580	11.37	3.48	11.68	26.53	-19.47	46.00
349.130	13.99	4.30	4.61	22.90	-23.10	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 155.130MHz with corrected signal level of 31.91dB $\mu$ V/m (Limit is 43.50dB $\mu$ V/m) when the antenna was at vertical polarization and at 1.38m high and the turn table was at 260°.
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: See Viant

Date of Test:	Nov. 16, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2316T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: RF

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Horizontal	Horizontal	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
33.880	18.88	1.24	7.64	27.76	-12.24	40.00
85.290	8.54	2.00	12.34	22.88	-17.12	40.00
145.430	11.58	2.49	13.73	27.80	-15.70	43.50
162.890	11.53	2.86	22.99	27.38	-6.12	43.50
169.680	10.98	2.86	22.96	36.80	-6.70	43.50
193.930	9.35	3.10	18.03	30.48	-13.02	43.50
230.790	10.77	3.36	14.21	28.34	-17.66	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 162.890MHz with corrected signal level of  $27.38dB\mu V/m$  (Limit is  $43.50.00dB\mu V/m$ ) when the antenna was at horizontal polarization and at 1.58m high and the turn table was at  $163\,^\circ$  .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: Sein Viant

Date of Test:	Nov. 16, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2316T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: RF

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Vertical	Vertical	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
54.250	6.50	1.56	12.27	20.33	-19.67	40.00
155.130	9.59	2.58	17.71	29.88	-13.62	43.50
193.930	8.43	3.10	20.31	31.84	-11.66	43.50
318.090	13.05	4.07	9.25	26.37	-19.63	46.00
556.710	19.66	5.62	8.24	33.52	-12.48	46.00
728.400	21.14	6.51	9.02	36.68	-9.32	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 728.400MHz with corrected signal level of  $36.68dB\mu V/m$  (Limit is  $46.00dB\mu V/m$ ) when the antenna was at vertical polarization and at 2.38m high and the turn table was at  $160^{\circ}$ .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: Secolian

Date of Test:	Nov. 17, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2616T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: Center

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Horizontal	Horizontal	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
177.440	10.16	2.94	25.62	38.72	-4.78	43.50
334.580	14.96	4.16	19.50	38.62	-7.38	46.00
446.130	16.66	4.96	19.49	41.10	-4.90	46.00
654.680	19.86	6.21	14.96	41.02	-4.98	46.00
706.090	20.56	6.38	14.02	40.97	-5.04	46.00
887.480	22.05	7.42	12.04	41.51	-4.49	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 887.480MHz with corrected signal level of  $41.51dB\mu V/m$  (Limit is  $46.00dB\mu V/m$ ) when the antenna was at horizontal polarization and at 1.98m high and the turn table was at  $250^{\circ}$  .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: See Viant

Date of Test:	Nov. 17, 2005	Temperature	:	23.8℃
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2616T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: Center

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Vertical	Vertical	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
101.780	9.51	2.05	12.72	24.28	-19.22	43.50
443.220	16.32	4.73	20.85	41.90	-4.10	46.00
589.690	19.00	5.85	15.03	39.89	-6.11	46.00
703.180	20.71	6.42	11.96	39.09	-6.91	46.00
749.740	21.22	6.46	11.97	39.66	-6.34	46.00
853.530	22.12	7.15	7.79	37.07	-8.93	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 443.220MHz with corrected signal level of 41.90dB $\mu V/m$  (Limit is 46.00dB $\mu V/m$ ) when the antenna was at vertical polarization and at 1.2m high and the turn table was at 25  $^{\circ}$  .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: Secolians

Date of Test:	Nov. 17, 2005	Temperature	:	23.8°C
EUT :	Microwave Oven	Humidity	:	62%
Model No. :	XB2616T	Test Mode	:	Full Load
Test Engineer:	Thomax	Memo	:	Load Location: RF

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Horizontal	Horizontal	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
169.680	10.98	2.86	20.24	34.08	-9.42	43.50
249.220	12.32	3.59	16.34	32.25	-13.75	46.00
428.670	16.65	4.85	19.51	41.00	-5.00	46.00
511.120	17.95	5.27	12.94	36.16	-9.84	46.00
652.740	20.02	6.08	14.74	40.85	-5.15	46.00
856.440	22.18	7.19	11.96	41.33	-4.67	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 856.440MHz with corrected signal level of  $41.33 dB\mu V/m$  (Limit is  $46.00 dB\mu V/m$ ) when the antenna was at horizontal polarization and at 2.1m high and the turn table was at  $298^{\circ}$  .
- 4. 0  $\,^\circ\,$  was the table front facing the antenna. Degree is calculated from 0  $\,^\circ\,$  clockwise facing the antenna.

Reviewer: Ser l'ans

Date of Test:	Nov. 17 2005	Temperature :	:	23.8°C
EUT :	Microwave Oven	Humidity :	: -	62%
Model No. :	XB2616T	Test Mode :	: _	Full Load
Test Engineer:	Thomax	Memo :	:	Load Location: RF

Frequency	Antenna	Cable	Meter Reading	<b>Emission Level</b>	Over	Limits
	Factor	Loss	Vertical	Vertical	Limits	
MHz	dB/m	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
87.230	7.43	1.99	14.02	23.44	-16.56	40.00
429.640	16.13	4.81	20.41	41.35	-4.65	46.00
654.680	19.38	6.21	14.95	40.54	-5.46	46.00
817.640	22.07	6.88	10.74	39.70	-6.30	46.00
837.040	21.92	6.92	10.81	39.64	-6.36	46.00
854.500	22.19	7.19	10.47	39.85	-6.15	46.00

- 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
- 3. The worst emission was detected at 429.640MHz with corrected signal level of  $41.35 dB\mu V/m$  (Limit is  $46.00 dB\mu V/m$ ) when the antenna was at vertical polarization and at 1.1 m high and the turn table was at  $35\,^\circ$  .
- 4. 0  $\,^{\circ}$  was the table front facing the antenna. Degree is calculated from 0  $\,^{\circ}$  clockwise facing the antenna.

Reviewer: Sero L'any

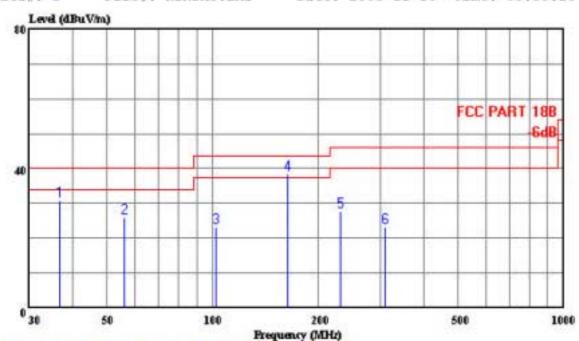


(SHENZHEN) CO., LTD. Fax:

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

Fax: 0755-26632877

Data#: 2 File#: XINBAO.EMI Date: 2005-11-16 Time: 00:59:28



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

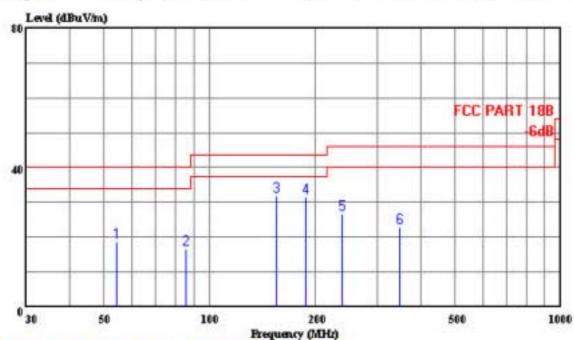
Comment : Temp:23.8°C Humi:628
Memo : LOAD LOCATION:CENTER
: H:1.58m Deg:270'

	Freq	Level	Over Limit		Read Level		Probe Factor
-	MHZ	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1 2 3 4 ! 5	36.790 56.190 101.780 162.890 230.790 310.330	25.98 23.27 38.42 27.88	-20.23	43.50 43.50 46.00	13.14 18.08 9.93 24.03 13.75 5.68		6.31 11.29 11.53 10.77



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

Data#: 4 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:00:01



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

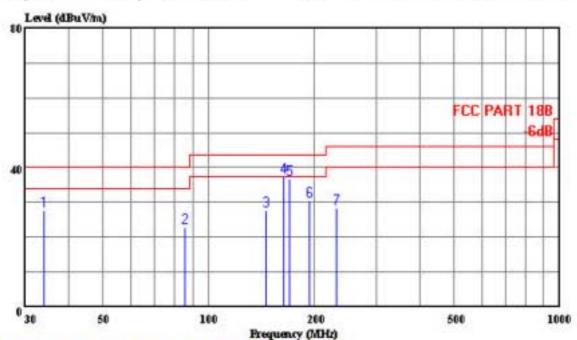
Comment : Temp:23.8°C Humi:628
Memo : LOAD LOCATION:CENTER
: H:1.38m Deg:260'

	Freq	Level	Over Limit		Read Level		Probe Factor
	MHZ	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	54.250	18.75	-21.25	40.00	10.70	1.56	6.50
2	85.290	16.72	-23.28	40.00	7.88	2.00	6.84
3	155.130	31.91	-11.59	43.50	19.74	2.58	9.59
4	187.140	31.40	-12.10	43.50	20.56	3.07	7.77
5	237.580	26.53	-19.47	46.00	11.68	3.48	11.37
6	349.130	22.90	-23.10	46.00	4.61	4.30	13.99



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

Data#: 8 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:06:25



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8°C Humi:62% Memo : LOAD LOCATION:RF

: H:1.58m Deg:163'

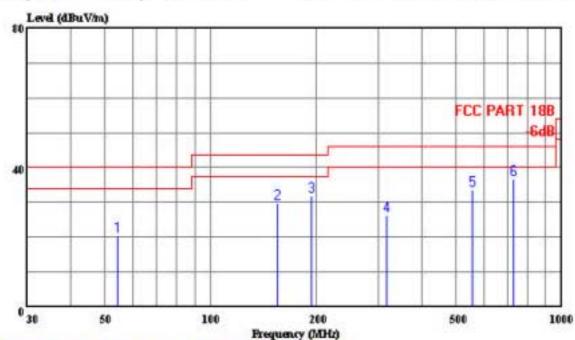
	Freq	Level	Over Limit		Read Level		Probe Factor
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	33.880	27.76	-12.24	40.00	7.64	1.24	18.88
2	85.290	22.88	-17.12	40.00	12.34	2.00	8.54
3	145.430	27.80	-15.70	43.50	13.73	2.49	11.58
4	162.890	37.38	-6.12	43.50	22.99	2.86	11.53
5	169.680	36.80	-6.70	43.50	22.96	2.86	10.98
6	193.930	30.48	-13.02	43.50	18.03	3.10	9.35
7	230.790	28.34	-17.66	46.00	14.21	3.36	10.77



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

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

Data#: 6 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:03:40



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8°C Humi:62% Memo : LOAD LOCATION:RF

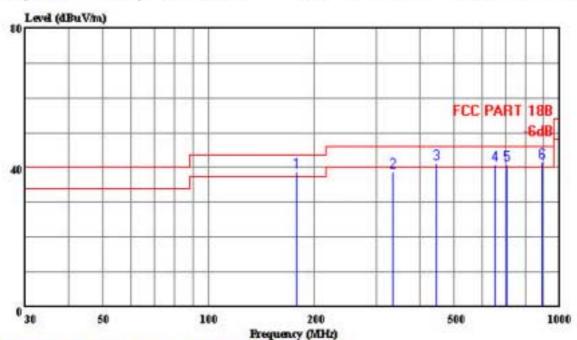
: H:2.38m Deg:160'

	Freq	Level	Over Limit				Probe Factor
	MHZ	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	54.250	20.33	-19.67	40.00	12.27	1.56	6.50
2	155.130	29.88	-13.62	43.50	17.71	2.58	9.59
3	193.930	31.84	-11.66	43.50	20.31	3.10	8.43
4	318.090	26.37	-19.63	46.00	9.25	4.07	13.05
5	556.710 728.400		-12.48 -9.32		8.24 9.02	5.62 6.51	



Tel: 0755-26639495~7 (SHENZHEN) CO., LTD. Fax: 0755-26632877

Data#: 32 File#: XINBAO.EMI Date: 2005-11-17 Time: 01:45:21



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

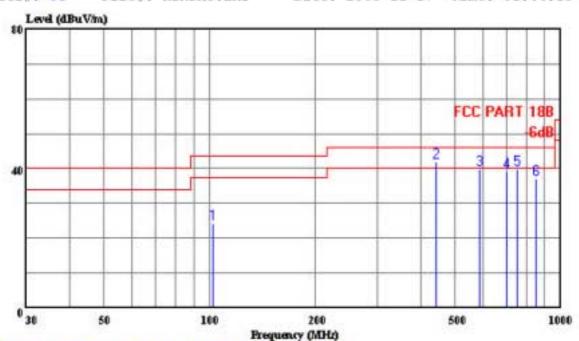
Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:CENTER

		Freq	Level	Over Limit		Read Level	Cable Loss	Probe Factor
	Ť	MHz	$\overline{\text{dBuV/m}}$	dB	$\overline{\text{dBuV/m}}$	dBuV	dB	dB
1 2	1	177.440 334.580	38.72	-4.78 -7.38	43.50 46.00	25.62 19.50	2.94	10.16
3	1	446.130 654.680	41.10	-4.90 -4.98	46.00	19.49	4.96	16.66
5	1	706.090 887.480	40.97 41.51	-5.04 -4.49	46.00 46.00	14.02	6.38 7.42	20.56



Tel: 0755-26639495~7 (SHENZHEN) CO., LTD. Fax: 0755-26632877

Data#: 31 File#: XINBAO.EMI Date: 2005-11-17 Time: 01:44:15



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

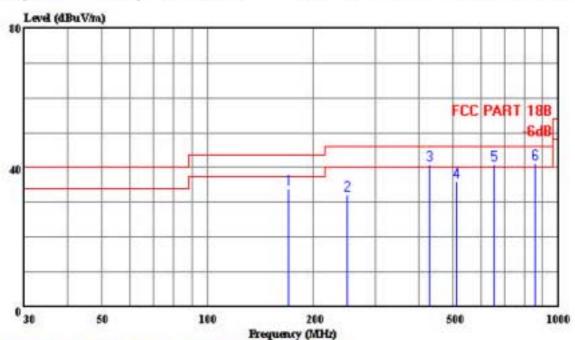
Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:CENTER

		Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor
	Ť	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB	dB
1 2 3 4 5 6	1	101.780 443.220 589.690 703.180 749.740 853.530	24.28 41.90 39.89 39.09 39.66 37.07	-19.22 -4.10 -6.11 -6.91 -6.34	46.00 46.00	12.72 20.85 15.03 11.96 11.97 7.79	2.05 4.73 5.85 6.42 6.46 7.15	19.00 20.71 21.22



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

Data#: 29 File#: XINBAO.EMI Date: 2005-11-17 Time: 01:41:50



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

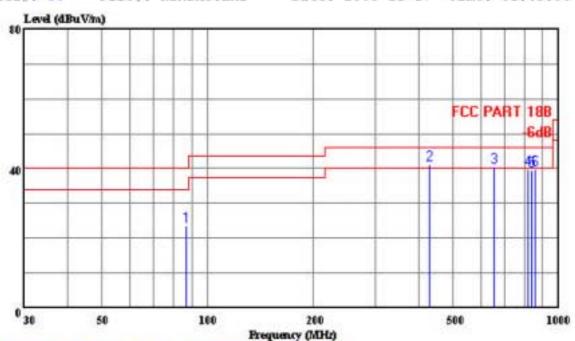
Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:RF

		Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor
	Ť	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB	dB
1		169.680	34.08	-9.42	43.50	20.24	2.86	10.98
2		249.220	32.25	-13.75	46.00	16.34	3.59	12.32
3	1	428.670	41.00	-5.00	46.00	19.51	4.85	16.65
4		511.120	36.16	-9.84	46.00	12.94	5.27	17.95
5	1	652.740	40.85	-5.15	46.00	14.74	6.08	20.02
6	1	856.440	41.33	-4.67	46.00	11.96	7.19	22.18



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

Data#: 30 File#: XINBAO.EMI Date: 2005-11-17 Time: 01:43:06



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:RF

		Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor
	-	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB	dB
1 2 3 4	!	87.230 429.640 654.680 817.640	23.44 41.35 40.54 39.70	-16.56 -4.65 -5.46 -6.30	46.00 46.00	14.02 20.41 14.95 10.74	1.99 4.81 6.21 6.88	
5		837.040 854.500	39.64 39.85	-6.36 -6.15	46.00 46.00	10.81	6.92 7.19	21.92

# 4. RADIATED EMISSION TEST (二)

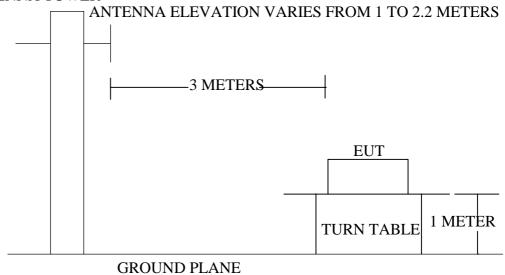
# 4.1. Test Equipment

The following test equipments are used during the at radiation emission tests:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
						Interval
12.	EMI Spectrum	HP	85422E	3625A00181	May 16, 05	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 16, 05	1 Year
13.	Amplifier	HP	8447D	2944A07794	Sep.14, 05	1/2 Year
14.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 11, 06	1 Year
15.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.1	Jan. 28, 06	1/2 Year
16.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Jan. 28, 06	1/2 Year
17.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Jan. 28, 06	1/2 Year
18.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Jan. 28, 06	1/2 Year
19.	Coaxial Switch	Anritsu	MP59B	M73989	Jan. 28, 06	1/2 Year
20.	Spectrum	Agilent	E4407B	MY41440292	May 16, 05	1 Year
21.	Amp	HP	8449B	3008A00863	May 16, 05	1 Year
22.	Antenna	EMCO	3115	9607-4877	Jun. 05, 05	1.5 Year

# 4.2. Anechoic Chamber Test Site Setup Diagram





#### 4.3. Radiation Limit

The radiation limits of the microwave oven is complied with FCC CFR Title 47 Part 18 Subpart C & MP-5. The limits is calculated as below. Calculated formula:

Limit =  $25 * \sqrt{Power/500} = uV/m (@ 300m)$ 

E (300m) = k \* E (3m)

XB2316T: Power output = 700 (W)

Limit =  $25 * \sqrt{700/500} = 29.50 \text{ uV/m} (@ 300\text{m})$ 

29.50 = 0.00628655685 \* E (3m)

E (3m) limit = 4692.54 uV/m = 73.43 dBuV/m

XB2616T: Power output = 927.5 (W)

Limit =  $25 * \sqrt{927.5/500} = 34.03 \text{ uV/m} (@ 300\text{m})$ 

34.03 = 0.00628655685 \* E (3m)

E (3m) limit = 5413.14 uV/m = 74.67 dBuV/m

# 4.4. EUT Configuration and Test Procedure

The EUT are placed on a turn table which is 1 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 meter to 2.2 meters to find out the maximum emission level. Broadband antenna (calibrated Bi-log antenna) and horn antenna are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, the relative positions of beaker in microwave oven according to FCC MP-5 (1986) on radiated measurement.

#### Measured condition is listed as below:

Frequency range	Bandwidth	Detector Mode
(GHz)	(kHz)	
0.03 - 1	120	Quasi-Peak
1 - 10	1000	Average

## 4.5. Radiated RFI Emission Noise Measurement Results

#### PASS.

The frequency spectrum from 30MHz to the highest detectable emission frequency is investigated. All the emissions not reported below are too low against the FCC Part 18 Subpart C limit.

Date of test: Nov. 17, 2005 Temperature:  $25 \,^{\circ}\text{C}$ 

Model Number: XB2316T Humidity: 54 %

Output Power: 700 W Test Engineer: Seco

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
1104.	Factor	Factor	Loss	Location	2044	reading	Horizontal	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	RF	700	51.03	44.04	73.43
1521.900	34.89	27.06	1.53	RF	700	49.71	43.41	73.43
1744.600	34.80	28.30	1.88	RF	700	44.52	39.90	73.43
1873.800	34.75	29.03	1.91	RF	700	43.84	40.03	73.43
2482.400	34.80	30.76	2.93	RF	700	55.99	54.88	73.43
3243.900	35.00	32.57	3.86	RF	700	54.73	56.16	73.43
4324.300	34.96	34.23	5.48	RF	700	57.32	62.07	73.43
4927.400	35.08	35.13	6.38	RF	700	55.15	61.58	73.43
6936.400	35.49	37.19	8.72	RF	700	49.19	59.61	73.43
7361.200	35.64	37.95	9.05	RF	700	46.02	57.38	73.43
8704.000	35.80	39.27	10.20	RF	700	44.24	57.92	73.43
1309.400	35.20	26.60	1.59	Center	700	54.31	47.29	73.43
1542.300	34.88	27.18	1.67	Center	700	47.48	41.44	73.43
1703.800	34.82	28.08	1.67	Center	700	45.08	40.01	73.43
1861.900	34.76	28.97	1.89	Center	700	44.57	40.67	73.43
2222.300	34.74	30.18	2.64	Center	700	47.75	45.83	73.43
2482.400	34.80	30.76	2.93	Center	700	50.17	49.06	73.43
3602.800	34.98	33.34	4.40	Center	700	54.41	57.18	73.43
4324.300	34.96	34.23	5.48	Center	700	56.34	61.09	73.43
4934.800	35.08	35.14	6.39	Center	700	58.60	65.05	73.43
6832.000	35.47	37.05	8.58	Center	700	47.77	57.94	73.43
9424.000	35.80	40.22	10.92	Center	700	43.92	59.26	73.43

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
1104.	Factor	Factor	Loss	Location	Loud	rteading	Vertical	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	RF	700	55.93	48.94	73.43
1703.800	34.82	28.08	1.67	RF	700	48.25	43.18	73.43
1848.300	34.76	28.89	1.77	RF	700	49.51	45.41	73.43
2327.700	34.76	30.41	2.76	RF	700	49.97	48.38	73.43
2540.200	34.82	30.91	3.00	RF	700	43.75	42.84	73.43
3288.300	35.00	32.66	3.93	RF	700	54.28	55.87	73.43
4339.100	34.97	34.23	5.50	RF	700	53.93	58.70	73.43
4934.800	35.08	35.14	6.39	RF	700	58.90	65.35	73.43
6814.000	35.46	37.03	8.56	RF	700	49.48	59.61	73.43
7397.200	35.66	38.01	9.08	RF	700	48.99	60.42	73.43
8693.200	35.80	39.25	10.19	RF	700	44.83	58.48	73.43
1306.000	35.21	26.59	1.64	Center	700	55.66	48.68	73.43
1702.100	34.82	28.06	1.65	Center	700	47.79	42.68	73.43
1895.900	34.74	29.16	1.88	Center	700	45.18	41.47	73.43
2269.900	34.75	30.29	2.70	Center	700	49.44	47.67	73.43
2467.100	34.79	30.72	2.91	Center	700	59.41	58.25	73.43
4083.800	34.92	34.28	5.12	Center	700	53.39	57.88	73.43
4298.400	34.96	34.24	5.44	Center	700	55.42	60.15	73.43
4934.800	35.08	35.14	6.39	Center	700	58.51	64.96	73.43
6839.200	35.47	37.06	8.59	Center	700	47.05	57.24	73.43
7397.200	35.66	38.01	9.08	Center	700	45.67	57.10	73.43
9485.200	35.80	40.28	10.98	Center	700	43.75	59.21	73.43
1346.800	35.15	26.65	1.60	Center	700	52.47	45.58	73.43
1516.800	34.89	27.03	1.61	Center	700	44.48	38.23	73.43
1739.500	34.81	28.28	1.85	Center	700	45.40	40.72	73.43
1856.800	34.76	28.94	1.83	Center	700	45.64	41.65	73.43
2305.600		30.37	2.74	Center	700	46.31	44.65	73.43
2477.300	34.79	30.74	2.92	Center	700	59.61	58.48	73.43
3292.000	35.00	32.67	3.93	Center	700	57.02	58.62	73.43
4298.400	34.96	34.24	5.44	Center	700	57.24	61.97	73.43
4945.900	35.09	35.17	6.42	Center	700	59.40	65.90	73.43
6821.200	35.46	37.04	8.57	Center	700	48.45	58.60	73.43
7404.400	35.66	38.02	9.08	Center	700	50.55	61.99	73.43
8693.200	35.80	39.25	10.19	Center	700	45.93	59.58	73.43
1340.000	35.16	26.64	1.61	Center	700	53.96	47.06	73.43
1521.900	34.89	27.06	1.53	Center	700	47.25	40.95	73.43
1731.000	34.81	28.23	1.72	Center	700	43.43	38.57	73.43
2247.800	34.75	30.24	2.67	Center	700	46.94	45.10	73.43
2417.800	34.78	30.61	2.86	Center	700	53.17	51.86	73.43
2473.900	34.79	30.74	2.92	Center	700	53.05	51.91	73.43
4328.000	34.97	34.23	5.49	Center	700	54.45	59.20	73.43
4934.800	35.08	35.14	6.39	Center	700	55.43	61.88	73.43
7379.200	35.65	37.98	9.07	Center	700	49.16	60.56	73.43
9251.200	35.80	40.04	10.75	Center	700	43.70	58.69	73.43

Date of test: Nov. 05, 2005 Temperature: 25 °C

Model Number: XB2316T Humidity: 54 %

Output Power: 700 W Test Engineer: Seco

Б	D A	A 4	C 11	т 1	т 1	D 1'	г ' ' т 1	11 14
Freq.	Pre-Amp	Antenna	Cables		Load	Reading	Emission Level	
	Factor	Factor	Loss	Location			Horizontal	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	Center	300	48.66	41.67	73.43
1448.800	34.98	26.82	1.68	Center	300	48.35	41.86	73.43
1703.800	34.82	28.08	1.67	Center	300	45.32	40.25	73.43
1848.300	34.76	28.89	1.77	Center	300	43.57	39.47	73.43
2358.300	34.77	30.48	2.79	Center	300	50.28	48.78	73.43
2609.900	34.85	31.10	3.07	Center	300	44.29	43.61	73.43
4298.400	34.96	34.24	5.44	Center	300	54.71	59.44	73.43
4945.900	35.09	35.17	6.42	Center	300	53.07	59.57	73.43
7408.000	35.66	38.03	9.09	Center	300	43.09	54.55	73.43
8034.400	35.80	38.43	9.52	Center	300	43.84	55.99	73.43
9474.400	35.80	40.27	10.97	Center	300	43.23	58.67	73.43
1302.600	35.22	26.58	1.64	RF	300	47.20	40.20	73.43
1520.200	34.89	27.05	1.56	RF	300	48.22	41.93	73.43
2286.900	34.76	30.32	2.71	RF	300	48.97	47.25	73.43
2490.900	34.80	30.78	2.94	RF	300	44.80	43.73	73.43
4287.300	34.96	34.24	5.42	RF	300	54.73	59.43	73.43
4934.800	35.08	35.14	6.39	RF	300	56.67	63.12	73.43
7386.400	35.65	37.99	9.07	RF	300	47.43	58.83	73.43
8675.200	35.80	39.22	10.17	RF	300	43.85	57.44	73.43

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
1	Factor	Factor	Loss	Location			Vertical	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1309.400	35.20	26.60	1.59	Center	300	45.80	38.78	73.43
1482.800	34.93	26.88	1.59	Center	300	46.58	40.12	73.43
1666.400	34.83	27.87	1.54	Center	300	45.03	39.61	73.43
1734.400	34.81	28.25	1.77	Center	300	44.83	40.05	73.43
2222.300	34.74	30.18	2.64	Center	300	44.36	42.44	73.43
2572.500	34.83	31.00	3.03	Center	300	42.35	41.55	73.43
4287.300	34.96	34.24	5.42	Center	300	56.84	61.54	73.43
4934.800	35.08	35.14	6.39	Center	300	56.81	63.26	73.43
5896.800	35.20	36.69	7.39	Center	300	50.14	59.02	73.43
6734.800	35.45	36.91	8.45	Center	300	45.07	54.99	73.43
8682.400	35.80	39.24	10.18	Center	300	43.96	57.58	73.43
1341.700	35.16	26.64	1.61	RF	300	51.03	44.13	73.43
1525.300	34.89	27.08	1.56	RF	300	46.19	39.94	73.43
1673.200	34.83	27.91	1.44	RF	300	45.83	40.35	73.43
1873.800	34.75	29.03	1.91	RF	300	43.73	39.92	73.43
2224.000	34.74	30.19	2.65	RF	300	46.24	44.33	73.43
2541.900	34.82	30.92	3.00	RF	300	45.28	44.38	73.43
4265.100	34.95	34.25	5.39	RF	300	55.10	59.79	73.43
4916.300	35.08	35.11	6.36	RF	300	55.32	61.71	73.43
6918.400	35.48	37.17	8.69	RF	300	47.30	57.68	73.43
7379.200	35.65	37.98	9.07	RF	300	48.87	60.27	73.43
9611.200	35.74	40.32	11.11	RF	300	44.29	59.98	73.43

Date of test: Nov. 05, 2005 Temperature: 25 °C

Model Number: XB2616T Humidity: 54 %

Output Power: 927.5W Test Engineer: Seco

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
	Factor	Factor	Loss	Location		C	Horizontal	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	Center	300	48.66	41.67	74.67
1448.800	34.98	26.82	1.68	Center	300	48.35	41.86	74.67
1703.800	34.82	28.08	1.67	Center	300	45.32	40.25	74.67
1848.300	34.76	28.89	1.77	Center	300	43.57	39.47	74.67
2358.300	34.77	30.48	2.79	Center	300	50.28	48.78	74.67
2609.900	34.85	31.10	3.07	Center	300	44.29	43.61	74.67
4298.400	34.96	34.24	5.44	Center	300	54.71	59.44	74.67
4945.900	35.09	35.17	6.42	Center	300	53.07	59.57	74.67
7408.000	35.66	38.03	9.09	Center	300	43.09	54.55	74.67
8034.400	35.80	38.43	9.52	Center	300	43.84	55.99	74.67
9474.400	35.80	40.27	10.97	Center	300	43.23	58.67	74.67
1302.600	35.22	26.58	1.64	RF	300	47.20	40.20	74.67
1520.200	34.89	27.05	1.56	RF	300	48.22	41.93	74.67
2286.900	34.76	30.32	2.71	RF	300	48.97	47.25	74.67
2490.900	34.80	30.78	2.94	RF	300	44.80	43.73	74.67
4287.300	34.96	34.24	5.42	RF	300	54.73	59.43	74.67
4934.800	35.08	35.14	6.39	RF	300	56.67	63.12	74.67
7386.400	35.65	37.99	9.07	RF	300	47.43	58.83	74.67
8675.200	35.80	39.22	10.17	RF	300	43.85	57.44	74.67

D	D	A 4	C-1-1	T 1	T 1	D 1'	D!	1::4
Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
	Factor	Factor	Loss	Location		(15. 75)	Vertical	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1309.400	35.20	26.60	1.59	Center	300	45.80	38.78	74.67
1482.800	34.93	26.88	1.59	Center	300	46.58	40.12	74.67
1666.400	34.83	27.87	1.54	Center	300	45.03	39.61	74.67
1734.400	34.81	28.25	1.77	Center	300	44.83	40.05	74.67
2222.300	34.74	30.18	2.64	Center	300	44.36	42.44	74.67
2572.500	34.83	31.00	3.03	Center	300	42.35	41.55	74.67
4287.300	34.96	34.24	5.42	Center	300	56.84	61.54	74.67
4934.800	35.08	35.14	6.39	Center	300	56.81	63.26	74.67
5896.800	35.20	36.69	7.39	Center	300	50.14	59.02	74.67
6734.800	35.45	36.91	8.45	Center	300	45.07	54.99	74.67
8682.400	35.80	39.24	10.18	Center	300	43.96	57.58	74.67
1341.700	35.16	26.64	1.61	RF	300	51.03	44.13	74.67
1525.300	34.89	27.08	1.56	RF	300	46.19	39.94	74.67
1673.200	34.83	27.91	1.44	RF	300	45.83	40.35	74.67
1873.800	34.75	29.03	1.91	RF	300	43.73	39.92	74.67
2224.000	34.74	30.19	2.65	RF	300	46.24	44.33	74.67
2541.900	34.82	30.92	3.00	RF	300	45.28	44.38	74.67
4265.100	34.95	34.25	5.39	RF	300	55.10	59.79	74.67
4916.300	35.08	35.11	6.36	RF	300	55.32	61.71	74.67
6918.400	35.48	37.17	8.69	RF	300	47.30	57.68	74.67
7379.200	35.65	37.98	9.07	RF	300	48.87	60.27	74.67
9611.200	35.74	40.32	11.11	RF	300	44.29	59.98	74.67

Date of test: Nov. 05, 2005 Temperature: 25 °C

Model Number: XB2616T Humidity: 60 %

Output Power: 927.5W Test Engineer: Seco

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
1	Factor	Factor	Loss	Location			Horizontal	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	RF	700	51.03	44.04	74.67
1521.900	34.89	27.06	1.53	RF	700	49.71	43.41	74.67
1744.600	34.80	28.30	1.88	RF	700	44.52	39.90	74.67
1873.800	34.75	29.03	1.91	RF	700	43.84	40.03	74.67
2482.400	34.80	30.76	2.93	RF	700	55.99	54.88	74.67
3243.900	35.00	32.57	3.86	RF	700	54.73	56.16	74.67
4324.300	34.96	34.23	5.48	RF	700	57.32	62.07	74.67
4927.400	35.08	35.13	6.38	RF	700	55.15	61.58	74.67
6936.400	35.49	37.19	8.72	RF	700	49.19	59.61	74.67
7361.200	35.64	37.95	9.05	RF	700	46.02	57.38	74.67
8704.000	35.80	39.27	10.20	RF	700	44.24	57.92	74.67
1309.400	35.20	26.60	1.59	Center	700	54.31	47.29	74.67
1542.300	34.88	27.18	1.67	Center	700	47.48	41.44	74.67
1703.800	34.82	28.08	1.67	Center	700	45.08	40.01	74.67
1861.900	34.76	28.97	1.89	Center	700	44.57	40.67	74.67
2222.300	34.74	30.18	2.64	Center	700	47.75	45.83	74.67
2482.400	34.80	30.76	2.93	Center	700	50.17	49.06	74.67
3602.800	34.98	33.34	4.40	Center	700	54.41	57.18	74.67
4324.300	34.96	34.23	5.48	Center	700	56.34	61.09	74.67
4934.800	35.08	35.14	6.39	Center	700	58.60	65.05	74.67
6832.000	35.47	37.05	8.58	Center	700	47.77	57.94	74.67
9424.000	35.80	40.22	10.92	Center	700	43.92	59.26	74.67

Remark: The reading are Average detector above 1 GHz.

Freq.	Pre-Amp	Antenna	Cables	Load	Load	Reading	Emission Level	limits
	Factor	Factor	Loss	Location			Vertical	3m
(MHz)	(dBuV)	(dBuV)	(dBuV)		(ml)	(dBuV)	(dBuV/m)	(dBuV/m)
1304.300	35.21	26.59	1.64	RF	700	55.93	48.94	74.67
1703.800	34.82	28.08	1.67	RF	700	48.25	43.18	74.67
1848.300	34.76	28.89	1.77	RF	700	49.51	45.41	74.67
2327.700	34.76	30.41	2.76	RF	700	49.97	48.38	74.67
2540.200	34.82	30.91	3.00	RF	700	43.75	42.84	74.67
3288.300	35.00	32.66	3.93	RF	700	54.28	55.87	74.67
4339.100	34.97	34.23	5.50	RF	700	53.93	58.70	74.67

4934.800 35.08 35.14 6.39 RF 700 58.90 65.	25 74.67
	.35 74.67
6814.000 35.46 37.03 8.56 RF 700 49.48 59.	.61 74.67
	.42 74.67
8693.200 35.80 39.25 10.19 RF 700 44.83 58.	.48 74.67
1306.000 35.21 26.59 1.64 Center 700 55.66 48.	.68 74.67
1702.100 34.82 28.06 1.65 Center 700 47.79 42.	.68 74.67
1895.900 34.74 29.16 1.88 Center 700 45.18 41.	.47 74.67
2269.900 34.75 30.29 2.70 Center 700 49.44 47.	.67 74.67
2467.100 34.79 30.72 2.91 Center 700 59.41 58.	.25 74.67
4083.800 34.92 34.28 5.12 Center 700 53.39 57.	.88 74.67
4298.400 34.96 34.24 5.44 Center 700 55.42 60.	.15 74.67
4934.800 35.08 35.14 6.39 Center 700 58.51 64.	.96 74.67
6839.200 35.47 37.06 8.59 Center 700 47.05 57.	.24 74.67
7397.200 35.66 38.01 9.08 Center 700 45.67 57.	.10 74.67
9485.200 35.80 40.28 10.98 Center 700 43.75 59.	.21 74.67
1346.800 35.15 26.65 1.60 Center 700 52.47 45.	.58 74.67
1516.800 34.89 27.03 1.61 Center 700 44.48 38.	.23 74.67
1739.500 34.81 28.28 1.85 Center 700 45.40 40.	.72 74.67
1856.800 34.76 28.94 1.83 Center 700 45.64 41.	.65 74.67
2305.600 34.76 30.37 2.74 Center 700 46.31 44.	.65 74.67
2477.300 34.79 30.74 2.92 Center 700 59.61 58.	.48 74.67
3292.000 35.00 32.67 3.93 Center 700 57.02 58.	.62 74.67
4298.400 34.96 34.24 5.44 Center 700 57.24 61.	.97 74.67
4945.900 35.09 35.17 6.42 Center 700 59.40 65.	.90 74.67
6821.200 35.46 37.04 8.57 Center 700 48.45 58.	.60 74.67
7404.400 35.66 38.02 9.08 Center 700 50.55 61.	.99 74.67
8693.200 35.80 39.25 10.19 Center 700 45.93 59.	.58 74.67
1340.000 35.16 26.64 1.61 Center 700 53.96 47.	.06 74.67
1521.900 34.89 27.06 1.53 Center 700 47.25 40.	.95 74.67
1731.000 34.81 28.23 1.72 Center 700 43.43 38.	.57 74.67
2247.800 34.75 30.24 2.67 Center 700 46.94 45.	.10 74.67
2417.800 34.78 30.61 2.86 Center 700 53.17 51.	.86 74.67
2473.900 34.79 30.74 2.92 Center 700 53.05 51.	.91 74.67
4328.000 34.97 34.23 5.49 Center 700 54.45 59.	.20 74.67
4934.800 35.08 35.14 6.39 Center 700 55.43 61.	.88 74.67
7379.200 35.65 37.98 9.07 Center 700 49.16 60.	.56 74.67
9251.200 35.80 40.04 10.75 Center 700 43.70 58.	.69 74.67

Remark: The reading are Average detector above 1 GHz.

## 5. GENERAL INPUT / OUTPUT POWER AND FREQUENCY

## 5.1. Test Equipments

The following test equipments are used during the general input / output power and frequency measurement:

Item	Equipment	Manufacture	Model No.	Serial No.	Last Cal.	Cal.
		r				Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 16, 05	1 Year
2.	Amp	HP	8449B	3008A00863	May 16, 05	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jun. 05, 05	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex 104	-	May 16, 05	1 Year
1.	Power meter	HP	436A	2016A07891	May 16, 05	1 Year
2.	Power Sensor	Agilent	8482B	My41090514	May 16, 05	1Year

### 5.2. Input Power

#### 5.2.1. EUT Configuration and Procedure

Input power is measured using a Power Analyzer. A 1000ml water load is placed in the center of the oven, which is operated at full output power.

	Manufactu	ırer's Rating			
EUT Model No.	Voltage Current Input Power		Current	Input Power	
	(V)	(A)	(W)	(A)	(W)
XB2316T	119.94	10.48	1256.9	9.42	1130
XB2616T	119.94	12.35	1481.0	11.5	1380

## 5.3. Output Power

#### 5.3.1. EUT Configuration and Procedure

The Calorimetric Method is to determine maximum output power. A 1000ml water load is placed in the center of the oven, which is operated at maximum power. A mercury thermometer is used to measure temperature rising.

#### 5.3.2. Test Results

	Test Sample	Temp (start)	Temp (final)	Temp Elapsed	
		(Degree C)	(Degree C)	(Seconds)	
	XB2316T	23.5	43.5	120	
ſ	XB2616T	23.5	50.0	120	

Power (W) = 
$$\frac{4.2 \text{ (joules/cal)x (Volume in ml)x (Temprising)}}{\text{Time in seconds}}$$

$$XB2316T: \text{Power (W)} = \frac{4.2*1000*20}{120S} = 700.0 \text{ (W)}$$

$$XB2616T: \text{Power (W)} = \frac{4.2*1000*26.5}{120S} = 927.5 \text{ (W)}$$

## 5.4. Output Frequency

#### 5.4.1. EUT Configuration and Procedure

The fundamental frequency was measured using a Hewlett Packard Spectrum Analyzer and Horn Antenna.

#### 5.4.2. Test Results

Test Sample	Measured Frequency (MHz)	Manufacturer's Rated Freq. (MHz)
XB2316T	2466.3	2450
XB2616T	2465.0	2450

## 5.5. Output Frequency Stability

#### 5.5.1. EUT Configuration and Procedure

The HP Spectrum Analyzer is tuned to the maximum amplitude at the oven operating frequency. During the test, the Spectrum Analyzer is used to measurement operating frequency and record the maximum and minimum frequency.

#### 5.5.2. Test Results

Frequency variation with time

Test Sample	Load		Maximum Frequency		Minimum	
					Freque	ency
	Start	End	Measured	Limits	Measured	Limits
	(ml)	(ml)	(MHz)	(MHz)	(MHz)	(MHz)
XB2316T	1000	200	2468.0	2500	2435.8	2400
XB2616T	1000	200	2467.3	2500	2460.5	2400

Frequency variation with line voltage

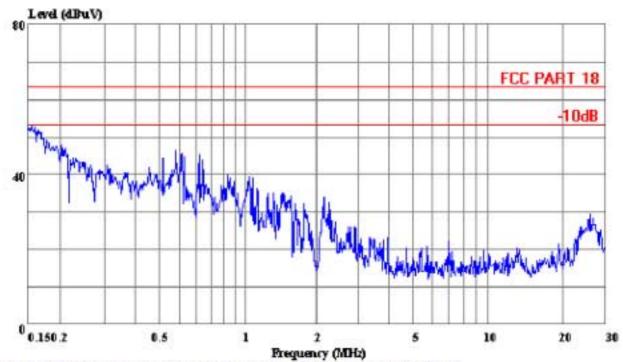
Test Sample	Voltage	Frequency		Voltage	Freque	ency
		Measured Limits			Measured	Limits
	(V)	(MHz)	(MHz)	(V)	(MHz)	(MHz)
XB2316T	150	2472.3	2500	96	2470.3	2400
XB2616T	150	2466.8	2500	96	2473.3	2400

# **APPENDIX I**



(SHENZHEN) CO., LTD.

Date: 2005-10-26 Time: 22:12:47 Data#: 3 File#: Xinbao..EMI



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix NO.1 CONDUCTION)

Ref Trace: Trace:

Condition: FCC PART 18 VA KNW-407

: Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

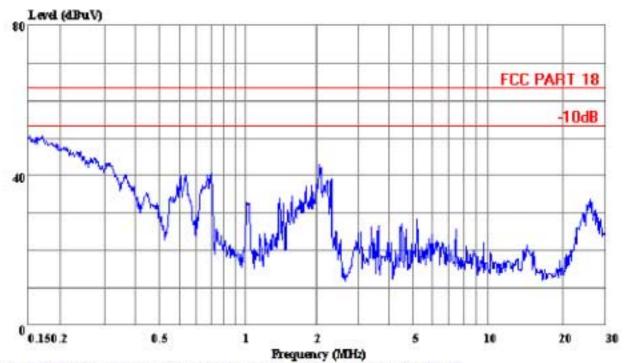
Test Engineer: Qiyuang Comment : Temp:23' Humi:54%

Memo



(SHENZHEN) CO., LTD.

Data#: 1 Date: 2005-10-26 Time: 22:06:11 File#: Xinbao..EMI



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix NO.1 CONDUCTION)

Ref Trace: Trace:

Condition: FCC PART 18 VB KNW-407

: Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

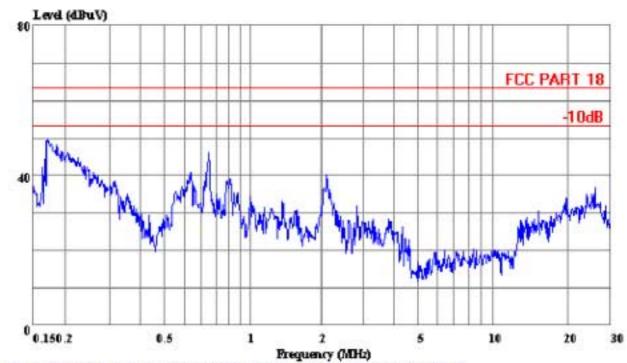
Test Engineer: Qiyuang Comment : Temp:23' Humi:54%

Memo



(SHENZHEN) CO., LTD.

Data#: 11 File#: Xinbao..EMI Date: 2005-11-08 Time: 18:09:23



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix NO.1 CONDUCTION)

Trace: Ref Trace:

Condition: FCC PART 18 VA KNW-407

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: SAM

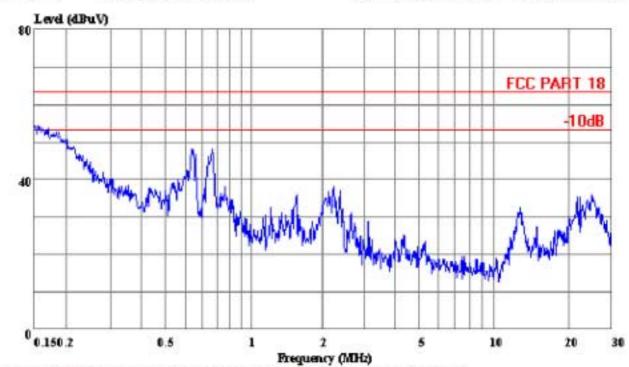
Comment : Temp:23' Humi:54%

Memo :



(SHENZHEN) CO., LTD.

Data#: 9 File#: Xinbao..EMI Date: 2005-11-08 Time: 18:07:21



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix NO.1 CONDUCTION)

Trace: Ref Trace:

Condition: FCC PART 18 VB KNW-407

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: SAM

Comment : Temp:23' Humi:54%

Memo :

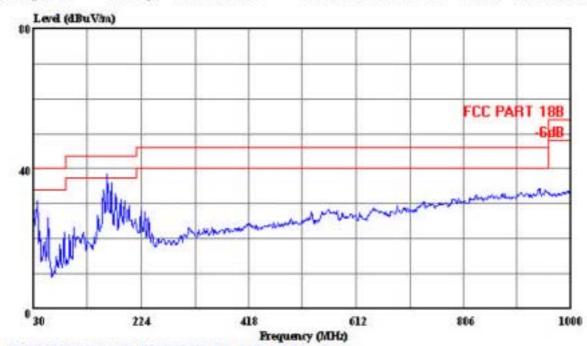
## **APPENDIX II**



(SHENZHEN) CO., LTD. Fax: 075

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

Data#: 1 File#: XINBAO.EMI Date: 2005-11-16 Time: 00:58:46



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:CENTER

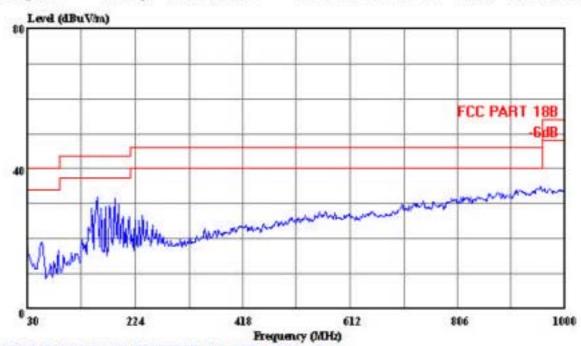


SHENZHEN) CO LTD FAX:

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

Fax: 0755-26632877

Data#: 3 File#: XINBAO.EMI Date: 2005-11-16 Time: 00:59:40



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:CENTER

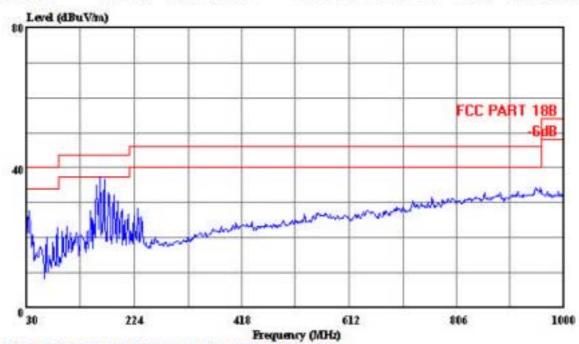


(SHENZHEN) CO., LTD.

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

Fax: 0755-26632877

Data#: 7 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:06:05



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62%

Memo : LOAD LOCATION:RF

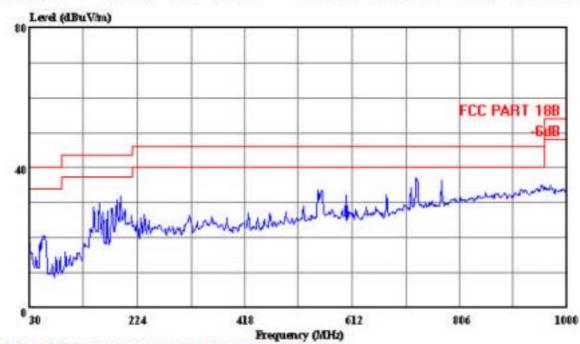


SHENZHEN) CO LTD FAX:

Shenzhen Science & Ind. Park

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

Data#: 5 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:02:58



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

M/N : XB2316T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62%

Memo : LOAD LOCATION:RF

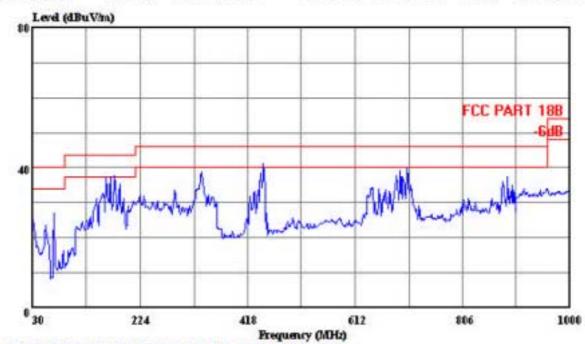


(SHENZHEN) CO., LTD.

Shenzhen Science & Ind. Park

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

Data#: 25 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:16:12



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62% Memo : LOAD LOCATION:CENTER

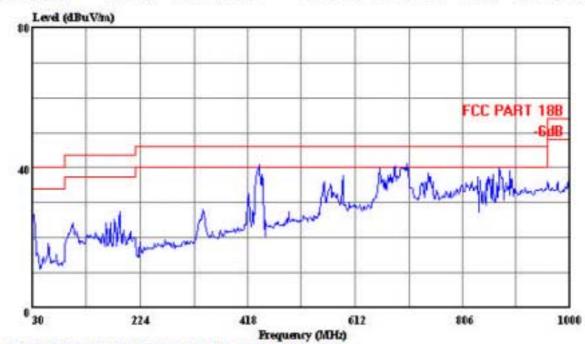


Tel: 0755-26639495-7

Fax: 0755-26632877

Shenzhen Science & Ind. Park

Data#: 26 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:19:16



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

Ref Trace: Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

EUT : Microwave Oven

: XB2616T M/N OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62% : LOAD LOCATION: CENTER Memo

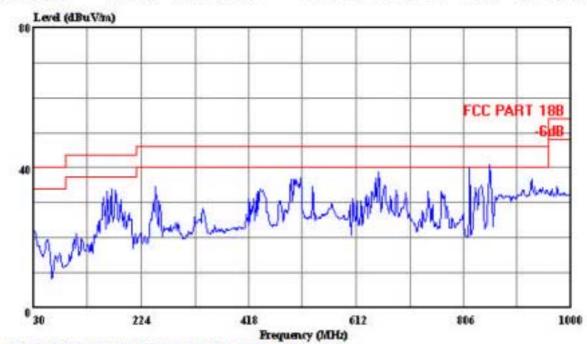
Shenzhen Science & Ind. Park



Tel: 0755-26639495~7

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

Data#: 28 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:25:45



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

Trace: Ref Trace:

Condition: FCC PART 18B 3m 2598FACTOR HORIZONTAL

EUT : Microwave Oven

M/N : XB2616T OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62%

Memo : LOAD LOCATION:RF

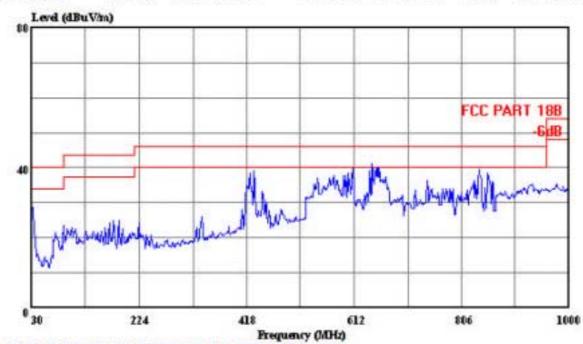
Shenzhen Science & Ind. Park



Tel: 0755-26639495-7

Fax: 0755-26632877

Data#: 27 File#: XINBAO.EMI Date: 2005-11-16 Time: 01:23:24



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

Ref Trace: Trace:

Condition: FCC PART 18B 3m 2598FACTOR VERTICAL

: Microwave Oven EUT

: XB2616T M/N OP Condition : FULL LOAD Test Spec : AC 120V/60Hz

Test Engineer: THOMAX

Comment : Temp:23.8'C Humi:62%

: LOAD LOCATION: RF Memo