FCC PART 18
EMI MEASUREMENT AND TEST REPORT

For

Guangdong MD Microwave Oven Manufacturing Co., Ltd

Penglai Road, Beijiao, Shunde, Foshan, Guangdong Province, People's Republic of China

FCC ID: RSFEAG36AMN

December 29, 2005

This Report Concerns:	**Equipment Type:**
☒ Class II permissive change	Microwave cooking appliance

Test Engineer:	William Chan
Report Number:	RSZ05121452
Test Date:	December 29, 2005
Reviewed By:	Chris Zeng
Prepared By:	Bay Area Compliance Lab Corp. (ShenZhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China Tel: +86-755-33320018 Fax: +86-755-33320008

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *Guangdong MD Microwave Oven Manufacturing Co., Ltd*'s model: EG136ABW-P or the "EUT" as referred to in this report is a Microwave cooking appliance which measures approximately 52.0cmL x 42.0cmW x 32.5cmH, rated input voltage: AC 120 V/60 Hz.

The series products, model E(A)M136A##-P/P1; E(A)G136A##-P/P1 (the # should be 0 to 9 or A to Z), we select EG136ABW-P to test. The all model have same circuit diagram, PCB and magnetron.

* *The test data gathered are from production sample, serial number: 000745, provided by the manufacturer, we receive the EUT on 2005-12-14.*

Objective

The following test report is prepared on behalf of *Guangdong MD Microwave Oven Manufacturing Co., Ltd* in accordance with Part 2, Subpart J, and Part 18, Subparts A, B and C of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine compliance with FCC Part 18 limits.

This is the C2PC application of the device. The difference between the original device and the current one is as follows:

	Original Transformer	New Transformer
Manufacture:	Welling	MD
Type:	MD-102AMR-1	MD-111AMR-1

For the changes made to the device, conducted emission testing was performed.

Related Submittal(s)/Grant(s)

This is a C2PC application. The original application was granted on 2005-12-28.

Test Methodology

All measurements contained in this report were conducted with MP-5, FCC Methods of Measurements of Radio Noise Emissions from ISM Equipment, February 1986. All measurement was performed at Bay Area Compliance Laboratory Corporation. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Lab Corp. (ShenZhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China.

Test site at Bay Area Compliance Lab Corp. (ShenZhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Lab Corp. (ShenZhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0). The current scope of accreditations can be found at http://ts.nist.gov/ts/htdocs/210/214/scopes/2007070.htm

External Cable List and Details

Cable Description	Length (M)	From/Port	To
Unshielded Undetachable AC Power Cable	1.0	EUT	AC Power

OPERATING CONDITION/TEST CONFIGURATION

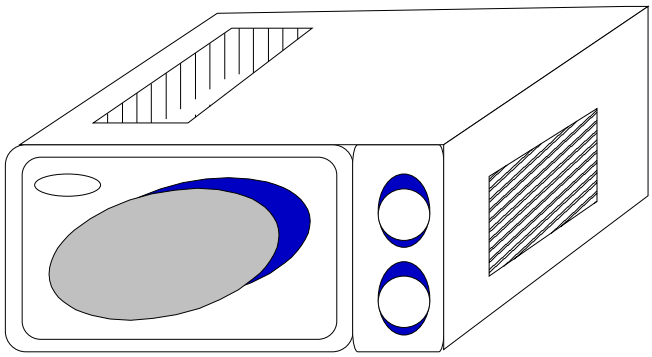
Justification

The EUT was provided for tests as a stand-alone device. It was prepared for testing in accordance with the manufacturer's instructions. The EUT was operated at maximum (continuous) RF output power. The loads consisted of water in a glass beaker in the amounts specified in the test procedure.

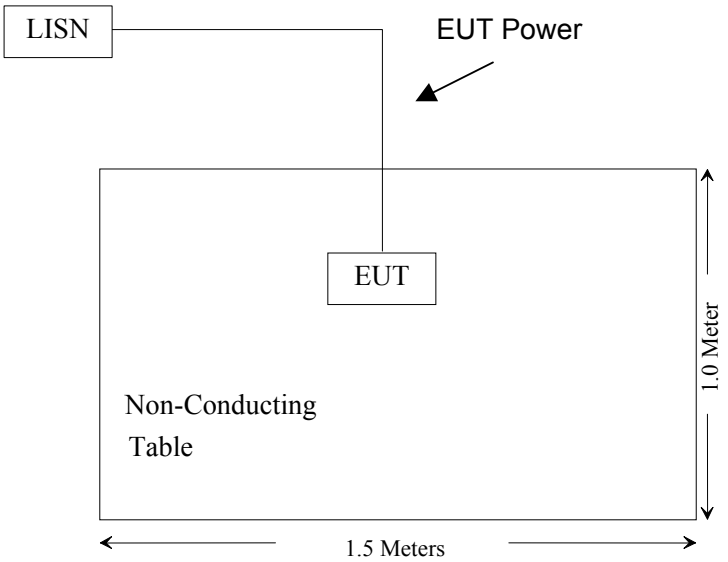
Equipment Modifications

Bay Area Compliance Lab Corp. (ShenZhen) has not done any modification on the EUT.

Configuration of Test Setup



Block Diagram of Test Setup



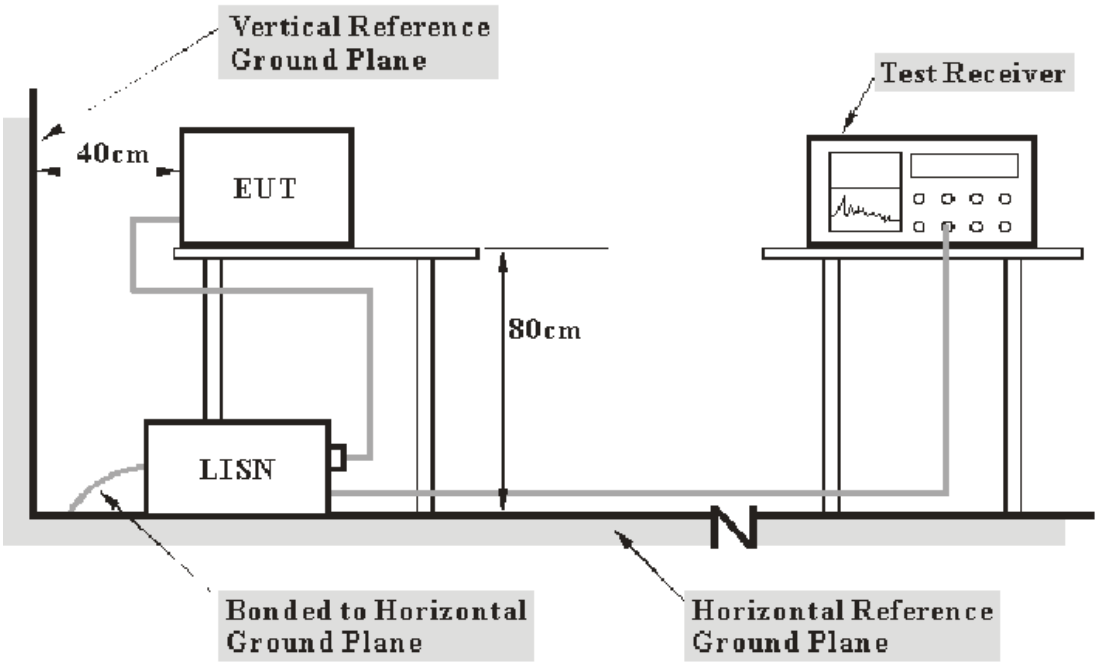
CONDUCTED EMISSION

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ±2.4 dB.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18.

The EUT was connected to a 120 VAC/ 60Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	***IF B/W***
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12008	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCS30	830245/006	2005-1-26	2006-1-26
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2005-2-28	2006-2-28

***** Com-Power's LISN were used as the supporting equipment.
*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the EUT power cord was connected to the outlet of the LISN.

Maximizing procedure were performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC PART 18, with the worst margin reading of:

-10.40 dB at **19.990 MHz** in the **Neutral** conductor mode.

Test Data

Environmental Conditions

Temperature:	25°C
Relative Humidity:	56%
ATM Pressure:	1002mbar

The testing was performed by William Chan on 2005-12-29.

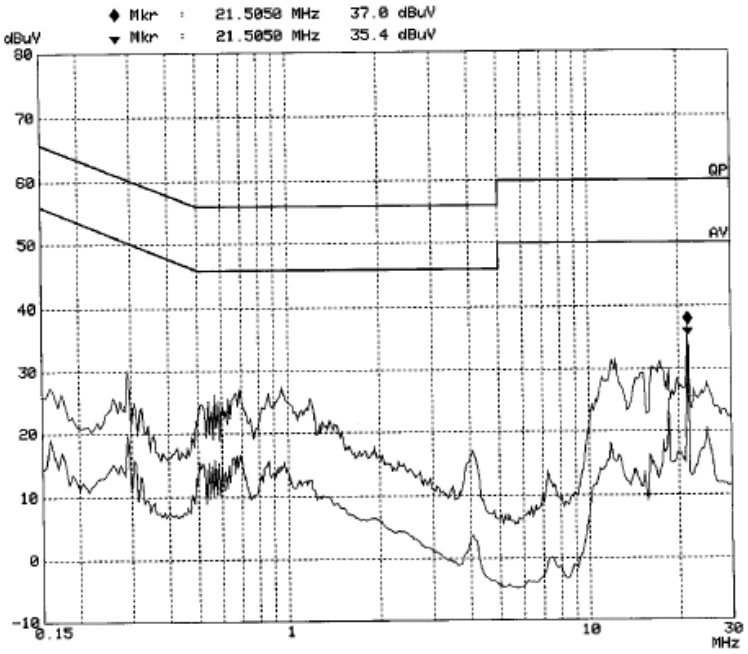
Test Mode: Max Power

LINE CONDUCTED EMISSIONS				FCC PART 18	
Frequency MHz	Amplitude dBμV	Detector QP/AV	Phase Line/Neutral	Limit dBμV	Margin dB
19.990	49.60	QP	Neutral	60.00	-10.40
21.505	35.40	AV	Line	50.00	-14.60
21.505	37.00	QP	Line	60.00	-23.00
18.430	25.10	AV	Line	50.00	-24.90
18.430	24.60	AV	Neutral	50.00	-25.40
12.230	34.50	QP	Neutral	60.00	-25.50
11.865	30.70	QP	Line	60.00	-29.30
0.860	26.40	QP	Line	56.00	-29.60
18.430	30.10	QP	Line	60.00	-29.90
0.290	30.30	QP	Line	60.52	-30.22
1.190	25.60	QP	Neutral	56.00	-30.40
0.860	15.60	AV	Line	46.00	-30.40
18.430	29.40	QP	Neutral	60.00	-30.60
0.290	19.70	AV	Line	50.52	-30.82
11.865	18.10	AV	Line	50.00	-31.90
1.190	13.60	AV	Neutral	46.00	-32.40
0.290	27.70	QP	Neutral	60.52	-32.82
0.290	17.50	AV	Neutral	50.52	-33.02
12.230	16.00	AV	Neutral	50.00	-34.00
19.990	15.20	AV	Neutral	50.00	-34.80
0.160	19.60	AV	Neutral	55.46	-35.86
0.160	19.20	AV	Line	55.46	-36.26
0.160	27.60	QP	Neutral	65.46	-37.86
0.160	27.60	QP	Line	65.46	-37.86

Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

Line:



Neutral: