FCC CFR47 PART 18 SUBPART C

ISM EQUIPMENT

TEST REPORT

FOR

MICROWAVE OVEN

Model: P110N28(X)-(Y) (Testing case: P110N28AP-SL)

Magnetron Model: Galanz, M24FC-610A

Brand Name: Galanz

Test Report No.: 10CA11231-01

FCC ID: UHW11028001

Prepared for

GUANGDONG GALANZ ENTERPRISE (GROUP)CO.,LTD.

25 RONGGUI NAN ROAD, RONGGUI SHUNDE, GUANGDONG

P.R.C.528305

ACCORDING TO

FCC PART 18 INDUSTRIAL, SCIENTIFIC AND MEDICAL EQUIPMENT

&

FCC/0ST MP-5(1986) FCC METHODS OF MEASUREMENTS OF RADIO NOISE EMISSION FROM INDUSTRIAL, SCIENTIFIC AND MEDICAL EQUIPMENT

| Prepared By: Bossco He | | |
|--|--------------|--|
| Reviewed By: Yanhan Lu | | |
| QC Manager: Valley.Wang | | |
| The Contract of the Contract o | | |
| Test Report Released By | _11/23/2010_ | |
| Name | Date | |

List Attached Files

| Exhibit Type | File Description | File Name |
|------------------------------|--------------------------------|-------------------------------|
| | | UHW11028001 |
| Test report | Test report | -Test report .pdf |
| | | UHW11028001 |
| Operation Description | Operational Description | -Operational description .pdf |
| | | UHW11028001 |
| External Photos | External Photos | -External photos .pdf |
| | | UHW11028001 |
| Internal Photos | Internal Photos | -Internal photos .pdf |
| | | UHW11028001 |
| Block Diagram | Block Diagram | -Block diagram .pdf |
| | | UHW11028001 |
| Schematics Diagram | Schematics Diagram | -Schematics .pdf |
| | | UHW11028001 |
| ID Label/ Location | ID Label/ Location | -label & location .pdf |
| | | UHW11028001 |
| User Manual | User Manual | -User manual .pdf |
| | | UHW11028001 |
| Test setup Photos | Test setup Photos | -Test setup photos .pdf |
| | | UHW11028001 |
| Part List | Part List | - Part list .pdf |

Test Location

Tests performed at Galanz in a certified Ansi Semi-Anechoic Chamber and Shielded Room.

Test Site Location EMC Laboratory Guangdong Galanz Enterprises Co., Ltd 25 South Ronggui Rd., Shunde, Foshan, Guangdong, China.

Tel: 86-757-23612785 Fax: 86-757-23612537

In compliance with the site registration requirements of section 2.948 of the FCC rules to perform EMI measurements for the general public.

FCC Registration Number: 580210

Table of Contents

| GOVERNMENT DISCLAIMER NOTICE | 4 |
|---|----|
| REPRODUCTION CAUSE | 4 |
| OPINIONS AND INTERPRETATIONS | 4 |
| STATEMENT OF MEASUREMENT UNCERTAINTY | 4 |
| ADMINISTRATIVE DATA | 5 |
| EUT DESCRIPTION | 5 |
| TYPE OF DERIVER | 6 |
| TEST SUMMARY | 7 |
| LORD FOR MWO | 8 |
| EQUIPMENT MODIFICATION | 8 |
| EUT SAMPLE PHOTOS FOR MODEL | 9 |
| TEST SYSTEM DETAILS | 14 |
| CONFIGURATION OF TESTED SYSTEM | 15 |
| ATTACHMENT 1- RADIATION HAZARD TEST | 16 |
| ATTACHMENT 2-INPUT POWER MEASUREMENT | 19 |
| ATTACHMENT 3-RF OUTPUT POWER MEASUREMENT | 22 |
| ATTACHMENT 4- OPERATING FREQUENCY MEASUREMENT | 25 |
| ATTACHMENT 5-CONDUCTED EMISSION TEST RESULTS | 28 |
| ATTACHMENT 6-RADIATED EMISSION TEST RESULTS | 33 |

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Opinions and Interpretations

This test report relates to the above mentioned equipment under test (EUT). Without permission of EMC Laboratory of Guangdong Galanz Enterprises Co., Ltd, this report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark on this or similar products. The manufacturer has sole responsibility of continued compliance of the device.

Statement of Measurement Uncertainty

The data and results referenced in the document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

Administrative Data

Test Sample Microwave oven
Model Numbers P110N28(X)-(Y)
Model Tested P110N28AP-SL

Brand Name Galanz

Date Tested Nov 19, 2010—Nov 22, 2010

Applicant Guangdong Galanz Enterprises Co., Ltd.

25 ronggui nan Rd., Shunde, Foshan, Guangdong, China

Telephone 86-757-23612785 **Fax** 86-757-23612537

Manufacturer Guangdong Galanz Enterprises Co., Ltd.

25 ronggui nan Rd., Shunde, Foshan, Guangdong, China

EUT DESCRIPTION

Guangdong Galanz Enterprises Co., Ltd. Model tested P110N28AP-SL (Refer to the EUT in this report) is a Microwave Oven.

Specifications:

| Power consumption | 120Vac 60Hz, 1600W(Microwave) |
|---------------------------|------------------------------------|
| Output | 1100W |
| Operation frequency | 2450Hz |
| Magnetron brand | Galanz |
| Magnetron number | M24FC-610A |
| Outside dimensions(HxWxD) | $11.8 \times 21.3 \times 15.8$ in. |
| Cavity dimensions(HxWxD) | $8.7 \times 13.9 \times 14.1$ in. |
| Capacity | 1.0 cu.ft |
| Cooking uniformity | Turntable System |
| Net weight | Approx. 35.3 lb. |

Type of Deriver

P110N28(X)-(Y)model designations:

P: With Microwave functions only.

110: denote the output power is1100W

N28: denote different capacity in 28 liters.

Variable (X) may be

L,P,J,SL,SP,SJ,TL,TJ,AL,AP,AJ,ASL,ASP,ATL,ATP,EL,EP,EJ,ESL,ESP,ESJ,ET L,ETP,ETJ,ML,MP,MJ,MSL,MSP,MSJ,MTL,MTP,MTJ,ALH,APH

"L" and "J" is pull-out type door, P is push-button type door. When there is no letter before "L","P" and "J", denotes mechanical control model; When there is "A", "E" or "M" denote the electrical control model. "S" denotes stainless steel cavity; "T" denotes the gray cavity; When there is neither "S" nor "T" before "L", "P" or "J", denotes the epoxy painted cavity, "H" means with the humidity sensor

Variable (Y) may compose by one to five characters from A to Z and/or numbers from 0 to 9. It represents the differences of the appearance.

Test Summary

The Electromagnetic Compatibility Requirements on model tested P110N28AP-SL for this test is stated below. All results listed in this report relate exclusively to this above mentioned model as the Equipment under Test. This report confers no approval or endorsement upon any other component, host or sub-system used in the test set-up

| | Emission Tests | | | | |
|--|---------------------------------|--------------|---------------|--------------|--|
| Specifications | Description | Test results | Test point | Remark | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | Radiation Hazard Measurement | Passed | Enclosure | Attachment 1 | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | Input Power Measurement | Passed | AC Input Port | Attachment 2 | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | RF Output Power Measurement | Passed | EUT | Attachment 3 | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | Operating Frequency Measurement | Passed | EUT | Attachment 4 | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | Conducted Emission | Passed | AC Input Port | Attachment 5 | |
| FCC Part 18:2004 FCC/OST MP-5:1986 ANSI C63.4:2003 | Radiated Emission | Passed | Enclosure | Attachment 6 | |

Load for Microwave Ovens

For all measurements the energy developed by the oven was absorbed by a dummy load consisting of a quantity of tap water in a beaker. If the oven was provided with a shelf or other utensil support, this support was in its initial normal position. For ovens rated at 1000 watts or less power output, the beaker contained quantities of water as listed in the following subparagraphs, for ovens rated at more than 1000 watts output, each quantity was increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts, additional beakers were used if necessary

- Load for power output measurement: 1000 milliliters of water in the beaker located in the center of the oven.
- Load for frequency measurement: 1000 milliliters of water in the beaker located in the center of the oven.
- load for measurement of radiation on second and third harmonic: Two loads, one of 700 and the other of 300 milliliters, of water are used, Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.
- Load for all other measurements: 700 milliliters of water, with the beaker located in the center of the ovens

Equipment Modification

Any modifications installed previous to testing by Guangdong Galanz Enterprises Co., Ltd will be incorporated in each production model sold or leased in United States

EUT Sample Photos for model



Front and top view

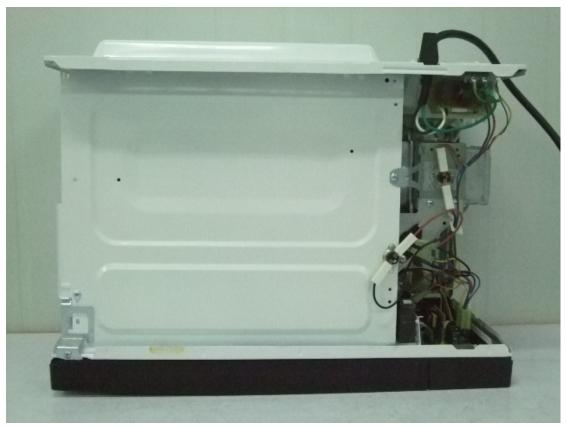




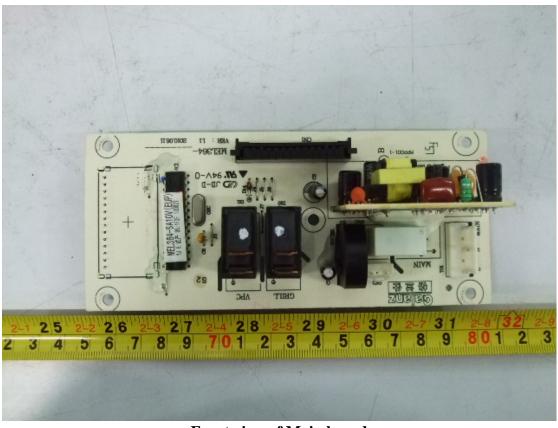
Rear View of EUT



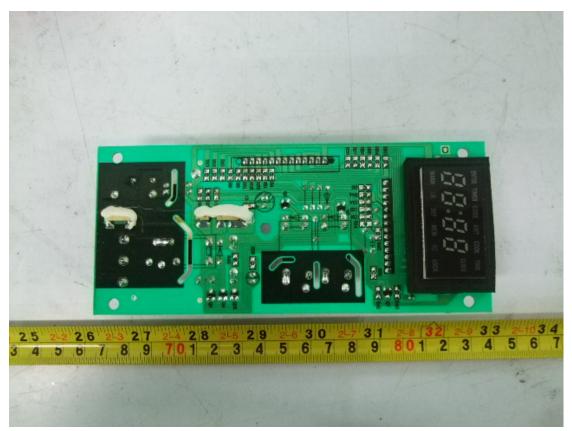
Uncovered View from right side



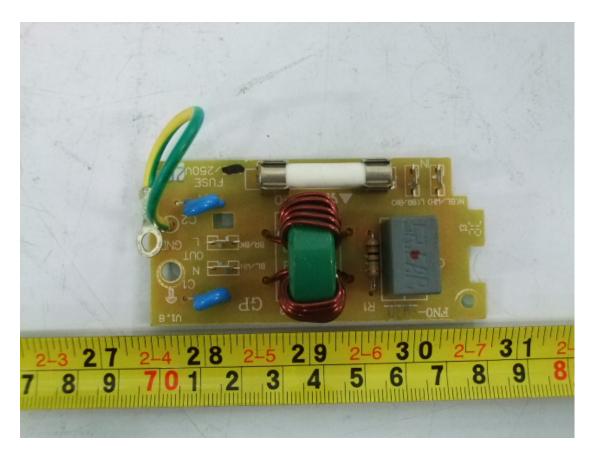
Uncovered View from top side



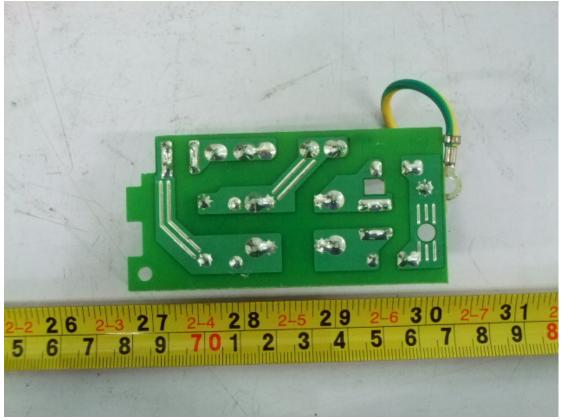
Front view of Main board



Back view of Main board



Front View of AC power filter board



Back of View AC power filter board

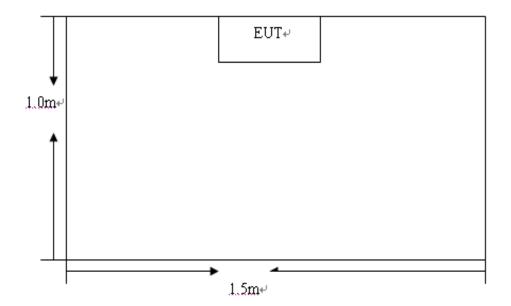


View of Magnetron

Test System Details

| EUT | | | | | |
|---------------|---------------------------------|------------|------------------|----------|---------|
| Model Numbers | P110N2 | 28(X)-(Y) | | | |
| Model tested | P110N2 | 8AP-SL | | | |
| Description | Microw | ave Oven | | | |
| Manufacturer | Guango | dong Galai | nz Enterprises C | Co., Ltd | |
| | • | Suppo | ort Equipment | | |
| | | | N/A | | |
| | | Cabl | le Description | | |
| Description | From To Length Shielded Ferrite | | | | Ferrite |
| | | | Meters | Y/N | Y/N |
| Power cord | EUT | Plug | 1.05 | N | N |

Configuration of Tested System



ATTACHMENT 1-RADIATION HAZARD TEST

| Client: Guangdong Galanz Enterprises Co Ltd | | Test Standard: FCC Part 18 | |
|--|---|--|--|
| Model Numbers: P1 | 110N28(X)-(Y) | Product: Microwave Oven | |
| Model Tested: P110 | N28AP-SL | EUT Designation: Home or Office | |
| Temperature: 23℃ | | Humidity: 46%RH | |
| ATM Pressure: 101 | kPa | Grounding: Through AC power cord | |
| Tested By: Bossco H | Ie | Date of Test: Nov 21,2010 | |
| Test Reference | | FCC/OST MP-5:1986 | |
| Test Procedure | The EUT was set up according to the FCC MP-5 and FCC Part 18 for Radiation Hazard Measurement. The measurement was using a microwave leakage meter to measure the Radiation leakage in the as-received condition with the oven door closed. A 1000ml water load in a beaker was located in the center of the oven and the Microwave oven was set to maximum power. While the oven operating, the microwave meter will check the leakage and then record the maximum leakage | | |
| Tested Range | N/A | | |
| Test Voltage | 120VAC/60Hz | | |
| Results | There was no microwave leakage exceeding a power level of 0.13mW/cm ² observed at any point 5cm or more from the external surface of the oven. | | |
| | A maximum of 1.0 mW/cm ² is allowed in accordance with the applicable FCC standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed. | | |
| | The test results relate only to the equipment under test provided by client. | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel | | |
| M. Uncertainty | 0.01 mW/cm ² | | |

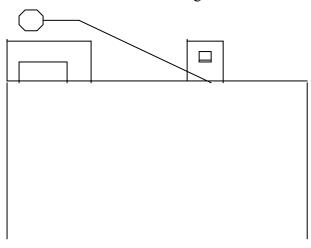
Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|----------------|--------------|-----------|------------|------------|------------|
| Equipment | | | | | |
| Field Monitor | ETS | AR FM5004 | A0304252 | 2009-01-21 | 2011-01-20 |
| Electric Field | ETS | AR FP6001 | A0304302 | 2009-01-21 | 2011-01-20 |
| probe | | | | | |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.

Radiation Hazard Test Set-up

Microwave Leakage Tester





Radiation Hazard Test Setup

ATTACHMENT 2-INPUT POWER MEASUREMENT

| Client: Guangdong Galanz Enterprises Co Ltd | | Test Standard: FCC Part 18 | |
|--|---|--|--|
| Model Numbers: P | 110N28(X)-(Y) | Product: Microwave Oven | |
| Model Tested: P110 | N28AP-SL | EUT Designation: Home or Office | |
| Temperature: 23℃ | | Humidity: 46%RH | |
| ATM Pressure: 101 | kPa | Grounding: Through AC power cord | |
| Tested By: Bossco I | ossco He Date of Test: Nov 21,2010 | | |
| Test Reference | ANSI C63.4: 2003 , FC | C/OST MP-5:1986 | |
| Test Procedure | The EUT was set up according to the FCC MP-5 and 18 for input power measurement, The input power and current was measured using a power analyzer. A 1000ml water load in a beaker was located in the center of the oven and the Microwave oven was set to maximum power, while the oven is operating, use a voltmeter and an ampere-meter to test the AC input voltage and current. | | |
| Tested Range | N/A | | |
| Test Voltage | 120VAC/60Hz | | |
| Results | Based on the measured input power, the EUT was found to be operating within the intended specifications The test results relate only to the equipment under test provided by client | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel | | |
| M. Uncertainty | ±5W | | |

Test Data

| Input Voltage | Input Current | Measured Input | Rated input |
|---------------|---------------|----------------|---------------|
| Vac/Hz | amps | power(watt) | power(watt) |
| 120V/60Hz | 13.53 | 1624 | 1600 |

Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|-----------------------------------|--------------|----------|------------|------------|------------|
| equipment | | | | | |
| Power frequency test system | Ainuo | AN8716PX | 058704273 | 2010-07-06 | 2011-07-06 |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.



Input Power Test Setup

ATTACHMENT 3-RF OUTPUT POWER MEASUREMENT

| Client: Guangdong Galanz Enterprises Co Ltd Model Numbers: P110N28(X)-(Y) | | Test Standard: FCC Part 18 | |
|--|---|--|--|
| | | Product: Microwave Oven | |
| Model Tested: P11 | 0N28AP-SL | EUT Designation: Home or Office | |
| Temperature: 23℃ | , | Humidity: 46%RH | |
| ATM Pressure: 10 | 1kPa | Grounding: Through AC power cord | |
| Tested By: Bossco | Не | Date of Test: Nov 21,2010 | |
| Test Reference | ANSI C63.4: 2003 , FC | C/OST MP-5:1986 | |
| Test Procedure | The EUT was set up according to the FCC MP-5 and 18 for RF power measurement, The Caloric method was used to determine maximum RF output power. 1) A 1000ml water load in a beaker is located in the center of the oven. 2) Measure and record the initial temperature of the 1000ml water load. 3) Start and keep the oven operating at maximum output power for 120 seconds. 4) At the end of the 120 seconds, measure and record the final temperature of the 1000ml water load. 5) Calculate the RF output power RF Output Power (W) = 4.2 x 1000 x (Final Temp – Initial Temp) / 120 | | |
| Tested Range | N/A | | |
| Test Voltage | 120VAC/60Hz | | |
| Results | RF output power =913.5W The test results relate only to the equipment under test provided by client | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel. | | |
| M. Uncertainty | ±0.3℃ | | |

Test Data

| Quality | of | Starting | Final | Elapsed time | RF output |
|-----------|----|-----------------|-----------------|--------------|-------------|
| water(ml) | | temperature(°C) | temperature(°C) | (seconds) | power(watt) |
| 1000 | | 18.0 | 44.1 | 120 | 913.5 |
| | | | | | |

Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|---------------------|--------------|----------|------------|------------|------------|
| equipment | | | | | |
| Data Acquisition | TES | TES-1310 | 021108782 | 2010-04-04 | 2011-04-04 |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.



RF Output Power Test Set-up

ATTACHMENT 4-OPERATING FREQUENCY MEASUREMENT

| Client: Guangdong Galanz Enterprises Co Ltd | | Test Standard: FCC Part 18 | |
|--|---|----------------------------------|--|
| Model Numbers: P | 110N28(X)-(Y) | Product: Microwave Oven | |
| Model Tested: P110 |)N28AP-SL | EUT Designation: Home or Office | |
| Temperature: 23℃ | | Humidity: 45%RH | |
| ATM Pressure: 100 |).9kPa | Grounding: Through AC power cord | |
| Tested By: Bossco I | He | Date of Test: Nov 22,2010 | |
| Test Reference | ANSI C63.4: 2003 , FC | C/OST MP-5:1986 | |
| Test Procedure | The EUT was set up according to the FCC MP-5 and 18 for Operating Frequency measurement 1) The Variation of frequency with time The operating frequency was measured using a spectrum analyzer, starting with EUT at room temperature, a 1000ml water load in a breaker was located in the center of the oven, set a spectrum analyzer with antenna at 3 meters distance from the oven and oven was operated at maximum output power, The fundamental operating frequency was monitored until the water load was reduced to 20 percent of the original load. 2) The variation of frequency with Line Voltage. The operating frequency was measured using a spectrum analyzer. The EUT was operated/ warmed by at least 10 minutes of use with a 1000ml water load at room temperature at the beginning of the test. Then the operating frequency was monitored as the input voltage was | | |
| Tested Range | varied between 80 and 125 percent of the nominal rating 2450±50MHz | | |
| Test Voltage | 120VAC/60Hz | | |
| Results | Refer to following pages for details of the variation in operating frequency with time & line voltage measurement | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel. | | |
| M. Uncertainty | Freq. ± 10kHz | | |

Test data

Variation in Operating Frequency with Time

| Minimum Frequency(MHz) | Maximum Frequency(MHz) | |
|------------------------|------------------------|--|
| 2412.8 | 2479.0 | |

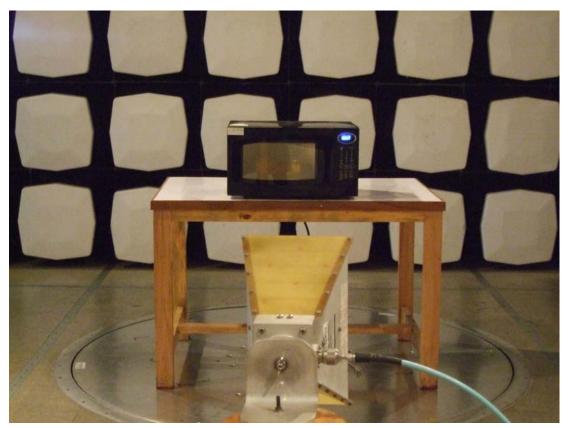
Variation in Operating Frequency with Line Voltage

| Minimum Frequency(MHz) | Maximum Frequency(MHz) | | | |
|--|------------------------|--|--|--|
| 2406.2 | 2481.2 | | | |
| Note: Line voltage varied from 96Vac to 150Vac | | | | |

Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|----------------------|--------------|-------|------------|------------|------------|
| equipment | | | | | |
| Horn Antenna | ETS | 3115 | 6587 | 2010-08-02 | 2012-08-02 |
| Spectrum Analyzer | R&S | FSP30 | 100755 | 2010-11-09 | 2011-11-09 |
| 3m Anechoic chamber | ETS | N/A | N/A | 2009-05-23 | 2011-05-23 |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.



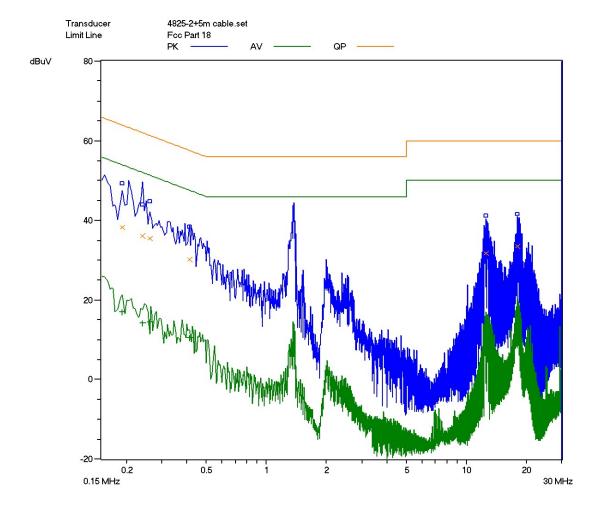
Operating Frequency Test Set-up

ATTACHMENT 5-CONDUCTED EMISSION TEST RESULTS

| Client: Guangdong Co Ltd | Galanz Enterprises | Test Standard: FCC Part 18 | | |
|-----------------------------|--|--|--|--|
| Model Numbers: P | 110N28(X)-(Y) | Product: Microwave Oven | | |
| Model Tested: P110 | N28AP-SL | EUT Designation: Home or Office | | |
| Temperature: 24℃ | | Humidity: 45%RH | | |
| ATM Pressure: 100 | .9kPa | Grounding: Through AC power cord | | |
| Tested By: Bossco I | He | Date of Test: Nov 21,2010 | | |
| Test Reference | ANSI C63.4: 2003 , FCC/OST MP-5:1986 | | | |
| Test Procedure | The EUT was set up according to the guideline of ANSI C63.4:2003 & FCC MP-5 for conducted emission, The measurement was using a AMN on each line and an EMI receiver peak scan was made at the frequency measurement range, the six highest significant peak were then marked and these signals were then quasi peaked and averaged. The frequency range investigated was from 150kHz to 30MHz | | | |
| Tested Range | 150kHz to 30MHz | | | |
| Test Voltage | 120VAC/60Hz | | | |
| Results | The EUT meets the requirements of test reference for conducted Emission on line N by $14.3 dB\mu V$ of Quasi-peak detector and by 29.7 $dB\mu V$ of Average detector. | | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel. | | | |
| M. Uncertainty | ±2.5dB | | | |

CE L 11/21/10 8:38:14 AM

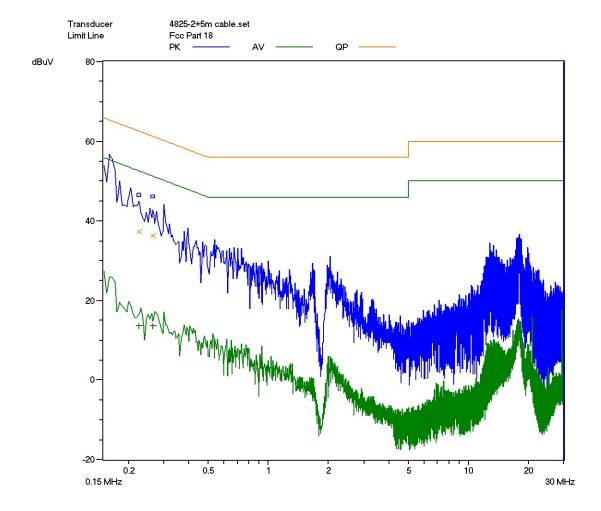
| Type EUT / Ser.No. Manufacturer Condition Operator | | Microwave Oven P110N28AP-SL Galanz Full Power Of Microwave Mode Bossco |
|---|-----|---|
| Frequency Rang Start Frequency Stop Frequency Step Frequency Attenuator Detector IF Bandwidth Measure Time Detector IF Bandwidth Measure Time Sub Ranges | ` ' | Range 1 150 kHz 30 MHz 5 kHz Auto AV CISPR 9 kHz 10 ms QP 9 kHz 1 s |



Line L Conducted Emission Graph

CE N 11/21/10 8:44:03 AM

| Туре | | Microwave Oven | | |
|-----------------|---------|------------------------------|--|--|
| EUT / Ser.No. | | P110N28AP-SL | | |
| Manufacturer | | Galanz | | |
| Condition | | Full Power Of Microwave Mode | | |
| Operator | | Bossco | | |
| | | | | |
| Frequency Rang | e(s) | Range 1 | | |
| Start Frequency | | 150 kHz | | |
| Stop Frequency | | 30 MHz | | |
| Step Frequency | | 5 kHz | | |
| Attenuator | | Auto | | |
| Detector | (Pre) | AV CISPR | | |
| IF Bandwidth | (Pre) | 9 kHz | | |
| Measure Time | (Pre) | 10 ms | | |
| Detector | (Final) | QP | | |
| IF Bandwidth | (Final) | 9 kHz | | |
| Measure Time | (Final) | 1 s | | |
| Sub Ranges | (Final) | 20 | | |
| | | | | |



Line N Conducted Emission Graph

Test Data

| Lina | Frequency | Corrected | Corrected | QP limit | AV limit |
|------|-----------|-------------|-------------|----------|----------|
| Line | (MHz) | Reading(QP) | Reading(AV) | dB uV | dB uV |
| L | 0.1542 | 43.3 | 22.4 | 65.8 | 55.8 |
| L | 1.3692 | 32.5 | 6.4 | 56.0 | 46.0 |
| L | 18.0580 | 33.5 | 15.7 | 60.0 | 50.0 |
| N | 0.1610 | 51.1 | 25.7 | 65.4 | 55.4 |
| N | 0.3004 | 36.6 | 12.8 | 56.0 | 46.0 |
| N | 18.0304 | 26.6 | 11.6 | 60.0 | 50.0 |

Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|-------------------|--------------|---------|------------|------------|------------|
| equipment | | | | | |
| EMI Receiver | SCHAFFNER | SMR4503 | 44 | 2010-07-08 | 2011-07-08 |
| LISN | ETS | 4825/2 | 1161 | 2010-07-08 | 2011-07-08 |
| Shielding Room | ETS | N/A | N/A | 2010-05-18 | 2011-05-18 |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.



Conducted Emission Test Set-up

ATTACHMENT 6-RADIATED EMISSION TEST RESULTS

| Client: Guangdong | Galanz Enterprises | Test Standard: FCC Part 18 | |
|-----------------------------|--|--|--|
| Co Ltd | | | |
| Model Numbers: P1 | 110N28(X)-(Y) | Product: Microwave Oven | |
| Model Tested: P110 | N28AP-SL | EUT Designation: Home or Office | |
| Temperature: 24℃ | | Humidity: 48%RH | |
| ATM Pressure: 100 | .9kPa | Grounding: Through AC power cord | |
| Tested By: Bossco H | Ie | Date of Test: Nov 22,2010 | |
| Test Reference | ANSI C63.4: 2003, FC | C/OST MP-5:1986 | |
| Test Procedure | ANSI C63.4: 2003, FCC/OST MP-5:1986 The EUT was set up according to the guidelines of ANSI C63.4: 2003 & FCC MP- 5 for radiated emissions. Microwave oven was placed on a 1m*1.5m nonconductive table. The top of the table is 0.8 m above the ground. The table is placed on a flush mounted metal turntable. An EMI receiver peak scan was made at the frequency measurement range (pre- scan) in an Anechoic chamber. Signal discrimination was then performed and the significant peaks marked. All data was recorded in Quasi-peak detection mode from 30 MHz to 1GHz and average detector mode above 1GHz. The following data lists the significant emission frequencies, measured levels, correction factors (including cable and antenna correction factors), and the corrected readings against the limits. Explanation of the Correction Factor are given as follows: FS= RA + AF + CF - AG Where: FS = Field Strength RA = Receiver Amplitude AF = Antenna Factor CF = Cable Attenuation Factor | | |
| Tested Range | 30MHz to 24.5GHz | | |
| Test Voltage | 120VAC/60Hz | viscoments of test reference for Dedicted and in | |
| Results | The EUT meets the requirements of test reference for Radiated emission on Horizontal polarization by 18.6dBuV/m of quasi-peak detector at 281.9060MHz | | |
| Changes or Modifications | There were no modifications installed by Galanz test personnel. | | |
| M. Uncertainty | ±3.2dB | | |

Test Data

| 30MHz-1GHz | | | | | | | | |
|--------------------|----------------------------------|---|------------------|--------------------------------|--|--|--|--|
| Frequency (MHz) | Antenna Polarization (V/H) | 3 Meters Corrected QP reading (dBµV/m) | Delta QP (dB) | 3 Meters Limits (dBµV/m) | | | | |
| 104.1420 | V | 37.8 | 32.8 | 70.6 | | | | |
| 132.2940 | V | 40.6 | 30.0 | 70.6 | | | | |
| 284.7360 | V | 48.7 | 21.9 | 70.6 | | | | |
| 61.5520 | Н | 30.2 | 40.4 | 70.6 | | | | |
| 254.9360 | Н | 43.5 | 27.1 | 70.6 | | | | |
| 281.9060 | Н | 52.0 | 18.6 | 70.6 | | | | |

Note: All readings are quasi-peak unless stated otherwise, using a bandwidth of 120kHz.

| 1GHz-25GHz | | | | | | | | |
|------------|--------------|--------------|----------|---------------|--|--|--|--|
| Frequency | Antenna | 3 Meters | Delta AV | 3 Meters | | | | |
| (GHz) | Polarization | Corrected AV | (dB) | Limits | | | | |
| | (V/H) | reading | | $(dB\mu V/m)$ | | | | |
| | | (dBµV/m) | | | | | | |
| 2.20194 | V | 26.52 | 44.08 | 70.6 | | | | |
| 4.93676 | V | 41.47 | 29.13 | 70.6 | | | | |
| 7.96074 | V | 42.15 | 28.45 | 70.6 | | | | |
| 2.22106 | Н | 28.72 | 41.88 | 70.6 | | | | |
| 4.87398 | Н | 32.19 | 38.41 | 70.6 | | | | |
| 8.63634 | Н | 41.60 | 29.00 | 70.6 | | | | |

Comment: None

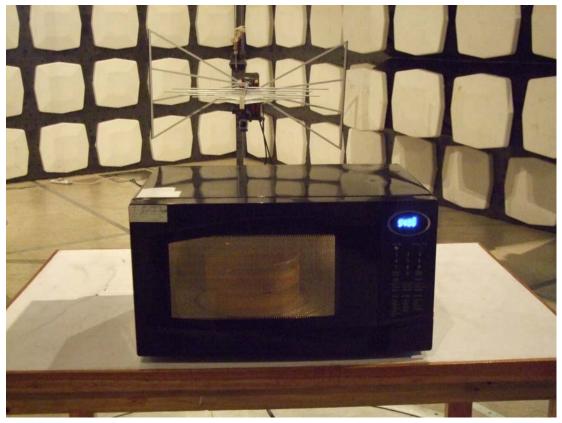
Note: All reading are average unless stated otherwise, using PK detector

RBW=1MHz,VBW=10Hz

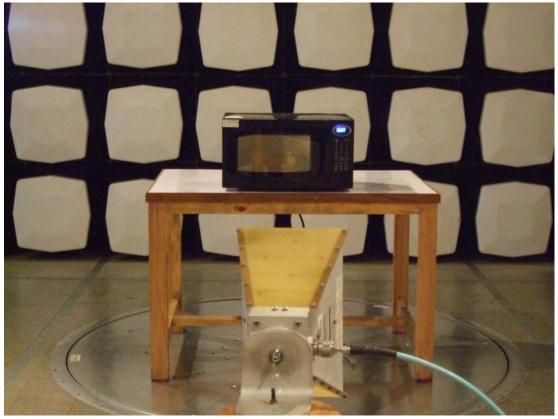
Test Equipment List

| Test | Manufacturer | Model | Serial No. | Last Cal. | Cal. Due |
|----------------------|--------------|----------|------------|------------|------------|
| equipment | | | | | |
| Broadband Antenna | ETS | 3142C | 00042672 | 2010-09-26 | 2012-09-26 |
| Horn Antenna | ETS | 3115 | 6587 | 2010-08-02 | 2012-08-02 |
| Band-pass Filter | Micro-Tronic | BRM50702 | S/N-030 | 2010-11-09 | 2011-11-30 |
| EMI Receiver | SCHAFFNER | SMR4503 | 44 | 2010-07-08 | 2011-07-08 |
| Spectrum Analyzer | R&S | FSP30 | 100755 | 2010-11-09 | 2011-11-09 |
| 3m Anechoic chamber | ETS | N/A | N/A | 2009-05-23 | 2011-05-23 |

Note: All testing were performed using internationally recognized standard. All test instruments were calibrated and traceable to the National Institute of Standards and Technology.



Radiated Emission Test Setup (30-1000MHz)



Radiated Emission Test Setup (1-25GHz)

The End