

APPLICATION FOR CERTIFICATION      ACLAP7F31

MODEL NO.                                      FCC ID

NN-G354MFR                                      ACLAP7F31

LIST OF EXHIBITS

EXHIBIT 1: TECHNICAL REPORT

EXHIBIT 2: PHOTOGRAPHS OF MAGNETRON AND COMPONENTS

EXHIBIT 3: SAMPLES AND LOCATION OF FCC ID LABEL

EXHIBIT 4: SCHEMATIC DIAGRAM

EXHIBIT 5: REPORT OF MEASUREMENTS

EXHIBIT 6: LIST OF MEASURING EQUIPMENT AND CALIBRATION

EXHIBIT 7: OPERATING INSTRUCTIONS

EXHIBIT 8: INSTALLATION INSTRUCTIONS

ACLAP7F31  
EXHIBIT 1-1

TECHNICAL REPORT

1. DESCRIPTION OF MEASUREMENT FACILITY:

The description of the measurement facility is already on file with the FCC laboratory. Please refer to the commission's reference 31010/EQU 4-3-0A.

2. INSTALLATION INSTRUCTIONS:

See EXHIBIT 7.

3. OPERATING INSTRUCTIONS:

See EXHIBIT 8.

4. APPLICANT:

PANASONIC HOME APPLIANCE COMPANY of AMERICA  
MICROWAVE TECHNICAL LAB.,E-Zip E2J-16  
1711 N. Randall Road  
Elgin, Illinois 60123-7847

5. MANUFACTURER:

PANASONIC HOME APPLIANCE MICROWAVE OVEN SHANGHAI COMPANY LTD.(PHAMOS)  
868 Long Dong Road  
Pu Dong, Shanghai 201203 CHINA

6. MEASUREMENT SITE:(Radiated Emissions)

FCC Registration Number 96247  
PANASONIC MAGNETRON LAB.  
PANASONIC INDUSTRIAL COMPANY  
1707 N. Randall Road  
Elgin, Il 60123-7847

MEASUREMENT SITE: (Line Conducted Emissions).

FCC Registration Number 767285  
Jiangsu TUV Product Service Ltd.  
10 Huaxia M. Rd.  
Wuxi, Jiangsu, 214100 China

7. EQUIPMENT IDENTIFICATION

Model No. : NN-G354MFR  
Brand Name : Panasonic  
FCC ID : ACLAP7F31

ACLAP7F31  
EXHIBIT 1A

7. EQUIPMENT SPECIFICATIONS:

Electrical Power Requirement: 120V, 60Hz, 10.5A  
Nominal Operating Frequency: 2450 MHz  
Maximum RF Energy Generated: 800 W (IEC 705)  
Magnetron Type: 2M210-M1  
Feed Type and Location: Through the wave guide on the right sidewall of the oven.  
Stirrer: Turntable Type  
Browning Element: 1100W  
Cabinet Dimensions: (W) 482 x (H) 282 x (D) 354 (mm)  
Oven Cavity Dimensions: (W) 325 x (H) 218 x (D) 330 (mm)  
Door Viewing Area Dimensions: (W) 204 x (H) 102 (mm)  
Door Seal Type: Slit Choke seal and capacitive seal method

8. DESCRIPTION OF DIFFERENCES

Model No.	NN-G354MFR
Input Power	120Vac, 10.5A
Output Power	800W
Magnetron	2M210-M1
Brand	Panasonic

ACLAP7F31  
EXHIBIT 2

PHOTOGRAPHS OF EQUIPMENT

EXHIBIT 2-A: FRONT VIEW OF MODEL NN-G354MFR

EXHIBIT 2-B: FRONT VIEW DOOR OPEN, MODEL NN-G354MFR

EXHIBIT 2-C1: LEFT SIDE VIEW OF MODEL NN-G354MFR

EXHIBIT 2-C2: LEFT SIDE VIEW OF MODEL NN-G354MFR WITH ENCLOSURE REMOVED

EXHIBIT 2-D1: RIGHT SIDE VIEW OF MODEL NN-G354MFR

EXHIBIT 2-D2: RIGHT SIDE VIEW OF MODEL NN-G354MFR WITH ENCLOSURE REMOVED

EXHIBIT 2-E: REAR VIEW OF MODEL NN-G354MFR

EXHIBIT 2-F1: TOP VIEW OF MODEL NN-G354MFR

EXHIBIT 2-F2: TOP VIEW OF MODEL NN-G354MFR WITH ENCLOSURE REMOVED

EXHIBIT 2-G: BOTTOM VIEW OF MODEL NN-G354MFR

EXHIBIT 2-H: VIEW OF MAGNETRON TYPE 2M211

EXHIBIT 2-I: VIEW OF DOOR CHOKE CONSTRUCTION ILLUSTRATING INTEGRAL CHOKE TYPE.

EXHIBIT 2-J: VIEW OF CONTROL CIRCUITRY, MODEL NN-G354MFR

ACLAP7F31  
EXHIBIT 5A

REPORT OF MEASUREMENTS

1. MODEL NO.: NN-G354MFR  
SERIAL NO. PP-5001  
MAGNETRON TYPE NO.: 2M210-M1)

2. MEASUREMENT DATE: 2/15/05

3. LIST OF MEASURING EQUIPMENT AND CALIBRATION DATA:  
REFER TO ATTACHED EXHIBIT 6

4. INVESTIGATED FREQUENCY RANGE: 100Mhz to 4th Harmonic

5. DATA SUMMARY:

Safety Check:	<u>&lt;0.20 MW/cm2</u>		
Radiated Field Strength:	( <u>uV/m @ 300m</u> )		Limit
Fundamental:	<u>2468 MHz</u>	<u>1960.61uv/m</u>	N/A
2nd. Harmonic:	<u>4945 MHz</u>	<u>10.35uv/m</u>	28.53
3rd. Harmonic:	<u>7413 MHz</u>	<u>7.67uv/m</u>	"
4th. Harmonic:	<u>9879 MHz</u>	<u>4.79uv/m</u>	"
Spurious:	<u>2392 Mhz</u>	<u>0.49uv/m</u>	"
Emission Sideband:	<u>2400 MHz</u>	<u>0.23uv/m</u>	"
Emission Sideband:	<u>2500 MHz</u>	<u>0.32uv/m</u>	"

Greater than 4th. Harmonic not measurable

Maximum Frequency Variation: 2465 to 2469 MHz  
(96V ~ 150V/ 1000 ml water load)

Maximum Frequency Variation: 2467 to 2473 MHz  
(1000 ml - 200ml water load)

Total Power Input to Oven: 1350 watts

Power Developed in Dummy Load: 651 watts

Supply Voltage: 120 Volts, 60Hz, 12.1A

ACLAP7F31  
EXHIBIT 5B

REPORT OF MEASUREMENTS

1. MODEL NO.: NN-G354MFR  
SAMPLE NO. J50223071  
MAGNETRON TYPE NO.: 2M210-M1

2. MEASUREMENT DATE: 3/4/05

3. LIST OF MEASURING EQUIPMENT AND CALIBRATION DATA:  
REFER TO ATTACHED EXHIBIT 6B

4. INVESTIGATED FREQUENCY RANGE: 0.15MHz to 30MHz

5. DATA SUMMARY: Selected Peak Readings (Refer to Spectrum Analyzer plot for complete readings).

Power Line High Side

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB
0.515	33.27	56.00	22.73
3.25	36.90	56.00	19.10

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.515	6.20	46.00	39.80
3.25	12.47	46.00	33.53

Power Line Neutral Side

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB
0.195	38.15	63.82	25.67
0.27	34.30	61.12	26.82
0.315	35.07	59.84	24.77
0.395	37.34	57.96	20.62
0.72	35.53	56.00	20.47

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.195	13.13	53.82	40.69
0.27	8.55	51.12	42.57
0.315	9.76	49.84	40.08
0.395	7.73	47.96	40.23

0.72

9.61

46.00

36.39