#### ACLAP6Z01

# **APPLICATION FOR CERTIFICATION**

MODEL NO.	FCC ID
NN-P295SF	ACLAP6Z01
NN-H275SF	ACLAP6Z01
NN-H275BF	ACLAP6Z01
NN-H275WF	ACLAP6Z01

# **LIST OF EXHIBITS**

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## ACLAP6Z01 EXHIBIT 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. (For original application, Radiated Emissions)

#### 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 1707 N. Randall Road Elgin, Illinois 60123-7847

#### 5. MANUFACTURER:

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

# 6. MEASUREMENT SITE :( Radiated Emissions)

FCC Registration Number 142171 SIMT EMC LAB 716 Yi Shan Road Shanghai City, 200233 China

MEASUREMENT SITE: (Line Conducted Emissions). FCC Registration Number 767285 Jiangsu TUV Product Service Ltd. 10 Huaxia M. Rd. Wuxi, Jiangsu, 214100 China

#### 7. EQUIPMENT SPECIFICATIONS:

Electrical Power Requirement: <u>120Vac, 60Hz, 12.9A</u> Nominal Operating Frequency: <u>2450 MHz</u>

Maximum RF Energy Generated: 1200 W (IEC 705)

Magnetron Type: 2M261-M32

Feed Type and Location: Through the wave guide on the top of the oven.

Stirrer: Turntable and Mode Stirrer

Cabinet Dimensions: (W) 759 x (H) 418 x (D) 381 (mm)
Oven Cavity Dimensions: (W) 591 x (H) 242 x (D) 367 (mm)
Door Viewing Area Dimensions: (W) 462 x (H) 166 (mm)
Door Seal Type: Slit Choke seal and capacitive seal method

#### 9. DESCRIPTION OF DIFFERENCES

Model No.	NN-P295SF	NN-H275 SF/BF/WF
Input Power	120Vac, 12.9A	120Vac, 12.9A
Output Power	1200W	1200W
Magnetron	2M261-M32	2M261-M32
Brand	Panasonic	Panasonic

#### ACLAP6Z01 EXHIBIT 2

## PHOTOGRAPHS OF EQUIPMENT

EXHIBIT 2-A: FRONT VIEW OF MODEL NN-P295SF

EXHIBIT 2-B: FRONT VIEW OF MODEL NN-P295SF WITH THE DOOR OPENED

EXHIBIT 2-C: LEFT SIDE VIEW OF MODEL NN-P295SF

EXHIBIT 2-C1: LEFT SIDE VIEW OF MODEL NN-P295SF WITH ENCLOSURE REMOVED

EXHIBIT 2-D: RIGHT SIDE VIEW OF MODEL NN-P295SF

EXHIBIT 2-D1: RIGHT SIDE VIEW OF MODEL NN-P295SF WITH ENCLOSURE REMOVED (Original Const.)

EXHIBIT 2-E: REAR VIEW OF MODEL NN-P295SF

EXHIBIT 2-F: TOP VIEW OF MODEL NN-P295SF

EXHIBIT 2-F1: TOP VIEW OF MODEL NN-P295SF WITH ENCLOSURE REMOVED

EXHIBIT 2-G: BOTTOM VIEW OF MODEL NN-P295SF

EXHIBIT 2-G1: BOTTOM VIEW OF MODEL NN-P295SF WITH ENCLOSURE REMOVED

EXHIBIT 2-H: VIEW OF CONTROL CIRCUITRY

EXHIBIT 2-J: VIEW OF INVERTER CIRCUITRY

EXHIBIT 2-K: VIEW OF MAGNETRON TYPE 2M261-M32

EXHIBIT 2-L: VIEW OF POWER LINE FILTER CIRCUITRY (Original Construction)

EXHIBIT 2-L1: VIEW OF POWER LINE FILTER CIRCUITRY (Alternate Construction)

EXHIBIT 2-D1A: RIGHT SIDE VIEW OF MODEL NN-P295SF WITH ENCLOSURE REMOVED (Alternate Const.)

# ACLAP6Z01 EXHIBIT 5A (Original Submission)

## **REPORT OF MEASUREMENTS**

1. MODEL NO.: <u>NN-P295SF</u>

SERIAL NO. PP-003

MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: 2/15/05

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

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

5. DATA SUMMARY:

Safety Check: <0.20 MW/cm2
Radiated Field Strength: (uV/)

Radiated Field Streng	th:	(uV/m @ 300m)	Limit
Fundamental:	2472 MHz	620.00uv/m	N/A
2nd. Harmonic:	4921 MHz	2.60uv/m	35.26
3rd. Harmonic:	7676 MHz	<u>1.93uv/m</u>	"
4th. Harmonic:	9830 MHz	<u>1.51uv/m</u>	"
Spurious:	2580 MHz	0.49uv/m	"
Emission Sideband:	2400 MHz	1.86uv/m	"
Emission Sideband:	2500 MHz	0.64uv/m	"

Greater than 4th. Harmonic not measurable

Maximum Frequency Variation: 2469 to 2473 MHz

(96V ~ 150V/ 1500 ml water load)

Maximum Frequency Variation: 2470 to 2473 MHz

(1500 ml - 300ml water load)

Total Power Input to Oven: 1260 watts
Power Developed in Dummy Load: 995 watts
Supply Voltage: 120 Volts, 60Hz, 10.8A

# ACLAP6Z01 EXHIBIT 5B (New Submission) (Alternate Construction)

## **REPORT OF MEASUREMENTS**

1. MODEL NO.: <u>NN-H275BF</u>

SERIAL NO. PP-001

MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: 2/09/06

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

4. INVESTIGATED FREQUENCY RANGE: 100 MHz to 5th Harmonic

5. DATA SUMMARY:

Safety Check : <0.07 MW/cm2

Radiated Field Strength: (uV/m @ 300m) Limit Fundamental: N/A 2435.65 MHz 348.83uv/m 2nd. Harmonic: 4943.65 MHz 9.67uv/m 35.24 3rd. Harmonic: 7364.72 MHz 24.60uv/m 4th. Harmonic: 9891.78 MHz 11.72uv/m 5th. Harmonic: 12024.17 MHz 18.16uv/m Spurious: 4382.16 MHz 6.85uv/m Spurious: 6476.55 MHz 15.92uv/m Spurious: 8187.14 MHz 19.43uv/m **Emission Sideband:** 2398.63 MHz 11.80uv/m **Emission Sideband:** 2501.00 MHz 2.12uv/m

Greater than 5th. Harmonic not measurable

Maximum Frequency Variation: 2437.6 to 2480.2 MHz

(96V ~ 150V/ 1500 ml water load)

Maximum Frequency Variation: 2435.1 to 2481.7 MHz

(1500 ml - 300ml water load)

Total Power Input to Oven: 1608 watts
Power Developed in Dummy Load: 936.8 watts
Supply Voltage: 120 Volts, 60Hz, 13.4A

# ACLAP6Z01 EXHIBIT 5C (Original Submission)

## **REPORT OF MEASUREMENTS**

1. MODEL NO.: <u>NN-H275BF</u> SAMPLE NO. <u>J50222041</u> MAGNETRON TYPE NO.: <u>2M261-M32</u>

2. MEASUREMENT DATE: 3/04/05

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

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	QP Level	QP Limit	QP Delta
MHz	dBuV	dBuV	dB
11.34	49.58	60.00	10.42
Frequency	AV Level	AV Limit	AV Delta
MHz	dBuV	dBuV	dB
11.41	41.06	50.00	8.94

## Power Line Neutral Side

Frequency	QP Level	QP Limit	QP Delta
MHz	dBuV	dBuV	dB
11.33	51.75	60.00	8.25
12.6	42.35	60.00	17.65
16.35	36.12	60.00	23.88
Frequency	AV Level	AV Limit	AV Delta
MHz	dBuV	dBuV	dB
11.01	41.04	50.00	8.96
12.6	34.40	50.00	15.60
16.35	24.09	50.00	25.91

# ACLAP6Z01 EXHIBIT 5D-1 (New Submission) (Alternate Construction)

# **REPORT OF MEASUREMENTS**

1. MODEL NO.: NN-H275BF SAMPLE NO. 51220051 MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: 12/23/2005

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

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
0.28 0.495 0.755	51.59 48.73 51.26	60.82 56.08 56.00	9.23 7.35 4.74
0.835 0.975	51.17 50.06	56.00 56.00	4.83 5.94
1.18	48.42	56.00	7.58
2.17 14.48	42.62 45.91	56.00 60.00	13.38 14.09
15.28	33.52	60.00	26.48
Frequency	AV Level	AV Limit	AV Delta
MHz	dBuV	dBuV	dB
0.755	37.21	46.00	8.79
0.975	38.33	46.00	7.67

# ACLAP6Z01 EXHIBIT 5D-2 (New Submission) (Alternate Construction)

## **REPORT OF MEASUREMENTS**

1. MODEL NO.: NN-H275BF SAMPLE NO. 51220051 MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: <u>12/23/2005</u>

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 Neutral Side

Frequency	QP Level	QP Limit	QP Delta
MHz	dBuV	dBuV	dB
0.505 0.795 0.905 1.07 11.07 11.49 12.50	47.55 44.70 51.36 45.50 45.30 45.55 48.26	56.00 56.00 56.00 56.00 60.00 60.00	8.45 11.30 4.64 10.50 14.70 14.45 11.74
Frequency	AV Level	AV Limit	AV Delta
MHz	dBuV	dBuV	dB
0.515 0.795 0.895 1.14 11.07 11.49 11.53	34.04 33.58 37.73 36.11 36.11 38.03 37.65	46.00 46.00 46.00 46.00 50.00 50.00	11.96 12.42 8.27 9.89 13.89 11.97 12.35