

APPLICATION FOR CERTIFICATION

MODEL FAMILY ACLAP7D01

<u>MODEL NO.</u>	<u>FCC ID</u>
NN-T695SF	ACLAP7D01
NN-T685SF	ACLAP7D01
NN-T675SF	ACLAP7D01
NN-T665SF	ACLAP7D01
NN-T664SFR	ACLAP7D01
NN-H665BF/WF	ACLAP7D01
NN-S655BF/WF	ACLAP7D01
NN-T655SF	ACLAP7D01
NN-H645BF/WF	ACLAP7D01
NN-S645BF/MF/WF	ACLAP7D01
NN-H635BF/WF	ACLAP7D01
NN-S635BF/WF	ACLAP7D01
NN-H624BFR/WFR	ACLAP7D01
NN-S505BF/WF	ACLAP7D01
NN-H504BFR/WFR	ACLAP7D01

LIST OF EXHIBITS

EXHIBIT 1A : TECHNICAL REPORT (Radiated Emissions)

EXHIBIT 1B : TECHNICAL REPORT (Line Conducted Emissions)

EXHIBIT 2 : PHOTOGRAPHS OF MAGNETRON AND COMPONENTS

EXHIBIT 3 : SAMPLE AND LOCATION OF FCC ID LABEL

EXHIBIT 4 : SCHEMATIC DIAGRAMS

EXHIBIT 5A : REPORT OF MEASUREMENTS (Radiated Emissions)

EXHIBIT 5B : REPORT OF MEASUREMENTS (Line Conducted Emissions)

EXHIBIT 6A : LIST OF MEASURING EQUIPMENT AND CALIBRATION (Radiated Emissions)

EXHIBIT 6B : LIST OF MEASURING EQUIPMENT AND CALIBRATION (Line Conducted Emissions)

EXHIBIT 7 : OPERATING INSTRUCTIONS

EXHIBIT 8 : INSTALLATION INSTRUCTIONS

ACLAP7D01
EXHIBIT 1-1

TECHNICAL REPORT

1. DESCRIPTION OF MEASUREMENT FACILITY, (Radiated Emissions):

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:

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

5. MANUFACTURER:

PANASONIC HOME APPLIANCES, MICROWAVE OVEN CO. 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

ACLAP7D01
EXHIBIT 1-2

7. EQUIPMENT IDENTIFICATION:

Model No. : NN-T695SF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-T675SF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-T664SFR
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-S655BF/NN-S655WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-H645BF, NN-H645WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-H635BF, NN-H635WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-H624BFR, NN-H624WFR
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-H504BFR, NN-H504WFR
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-T685SF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-T665SF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-H665BF/NN-H665WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-T655SF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-S645BF, NN-S645MF, NN-S645WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-S635BF, NN-S635WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

Model No. : NN-S505BF, NN-S505WF
Brand Name : Panasonic
FCC ID : ACLAP7D01

ACLAP7D01
EXHIBIT 1-3

7. EQUIPMENT SPECIFICATIONS:

Electrical Power Requirement: 120V, 60Hz, 12.7A
 Nominal Operating Frequency: 2450 MHz
 Maximum RF Energy Generated: 1300 W (IEC 705)
 Magnetron Type: 2M261-M32
 Feed Type and Location: Through the wave guide on the right sidewall of the oven.
 Stirrer: Turntable Type
 Cabinet Dimensions: (W) 518 x (H) 301 x (D) 404 (mm)
 Oven Cavity Dimensions: (W) 375 x (H) 225 x (D) 386 (mm)
 Door Viewing Area Dimensions: (W) 296 x (H) 153 (mm)
 Door Seal Type: Slit Choke seal and capacitive seal method

8. DESCRIPTION OF DIFFERENCES

Model No.	NN-T695SF	NN-T685SF	NN-T675SF	NN-T665SF	NN-T664SFR	NN-H665 BF/WF
Input Power	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A
Output Power	1300W	1300W	1300W	1300W	1300W	1200W
Magnetron	2M261-M32	2M261-M32	2M261-M32	2M261-M32	2M261-M32	2M261-M32
Brand	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic

Model No.	NN-S655 BF/WF	NN-T655SF	NN-H645 BF/WF	NN-S645 BF/MF/WF	NN-H635 BF/WF	NN-S635 BF/WF
Input Power	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A
Output Power	1300W	1300W	1300W	1300W	1300W	1300W
Magnetron	2M261-M32	2M261-M32	2M261-M32	2M261-M32	2M261-M32	2M261-M32
Brand	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic

Model No.	NN-H624 BFR/WFR	NN-S505 BF/WF	NN-H504 BFR/WFR
Input Power	120Vac, 12.7A	120Vac, 12.7A	120Vac, 12.7A
Output Power	1250W	1200W	1200W
Magnetron	2M261-M32	2M261-M32	2M261-M32
Brand	Panasonic	Panasonic	Panasonic

ACLAP7D01
EXHIBIT 2

PHOTOGRAPHS OF EQUIPMENT

EXHIBIT 2-A: FRONT VIEW OF MODEL NN-H665WF

EXHIBIT 2-B: FRONT VIEW DOOR OPEN, MODEL NN-H665WF

EXHIBIT 2-C1: LEFT SIDE VIEW OF MODEL NN-H665WF

EXHIBIT 2-C2: LEFT SIDE VIEW OF MODEL NN-H665WF WITH ENCLOSURE REMOVED

EXHIBIT 2-D1: RIGHT SIDE VIEW OF MODEL NN-H665WF

EXHIBIT 2-D2: RIGHT SIDE VIEW OF MODEL NN-H665WF WITH ENCLOSURE REMOVED

EXHIBIT 2-E: REAR VIEW OF MODEL NN-H665WF

EXHIBIT 2-F1: TOP VIEW OF MODEL NN-H665WF

EXHIBIT 2-F1: TOP VIEW OF MODEL NN-H665WF WITH ENCLOSURE REMOVED

EXHIBIT 2-G: BOTTOM VIEW OF MODEL NN-H665WF

EXHIBIT 2-H: VIEW OF CONTROL CIRCUITRY

EXHIBIT 2-I: VIEW OF POWER LINE FILTER CIRCUITRY

EXHIBIT 2-J: VIEW OF INVERTER POWER SUPPLY

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

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

ACLAP7D01
EXHIBIT 5A

REPORT OF MEASUREMENTS (RADIATED EMISSIONS)

1. MODEL NO.: NN-H665WF
SERIAL NO. PP-5001
MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: 10/22/04

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

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

5. DATA SUMMARY:

Safety Check :	<u><0.24 mW/cm²</u>		
Radiated Field Strength:	(<u>uV/m @ 300m</u>)		Limit
Fundamental:	<u>2472 MHz</u>	<u>492.48uv/m</u>	N/A
2nd. Harmonic:	<u>4903 MHz</u>	<u>14.62uv/m</u>	36.72
3rd. Harmonic:	<u>7352 MHz</u>	<u>3.05uv/m</u>	"
4th. Harmonic:	<u>9865 MHz</u>	<u>3.02uv/m</u>	"
Spurious:	<u>2381 Mhz</u>	<u>0.49uv/m</u>	"
Emission Sideband:	<u>2400 MHz</u>	<u>0.59uv/m</u>	"
Emission Sideband:	<u>2500 MHz</u>	<u>0.64uv/m</u>	"

Greater than 4th. Harmonic not measurable

Maximum Frequency Variation: 2463 to 2464 MHz
(96V ~ 150V/ 1500 ml water load)

Maximum Frequency Variation: 2459 to 2464 MHz
(1500 ml - 300ml water load)

Total Power Input to Oven: 2000 watts

Power Developed in Dummy Load: 1079 watts

Supply Voltage: 120 Volts, 60Hz, 16.8A

ACLAP7D01
EXHIBIT 5B

REPORT OF MEASUREMENTS (LINE CONDUCTED EMISSIONS)

1. MODEL NO. : NN-H665WF
SAMPLE NO. : S41105021
MAGNETRON TYPE NO.: 2M261-M32

2. MEASUREMENT DATE: 11/09/04

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
0.215	57.22	63.01	5.79
18.3	50.02	60.00	9.98
Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.215	40.47	53.01	12.54
18.3	39.73	50.00	10.27

Power Line Neutral Side

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB
0.15	59.38	66.00	6.62
0.235	55.79	62.27	6.48
17.85	46.70	60.00	13.30
Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.235	39.60	52.27	12.67
18.07	41.97	50.00	8.03