

PANASONIC HOME APPLIANCE COMPANY of AMERICA,  
MICROWAVE TECHNICAL LABORATORY  
5201 Tollview Drive, E- Zip E2J-16  
Rolling Meadows, IL 60008  
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## PHAA

March 16, 2010

Federal Communications Commission  
Equipment Authorization Branch  
7435 Oakland Mills Road  
Columbia, MD 21046

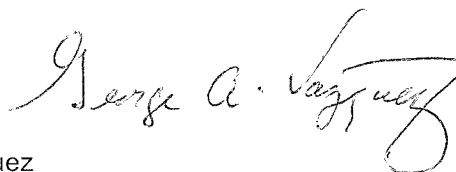
SUBJECT: FILING FOR CERTIFICATION GRANTEE CODE ACL.

We are sending application for models with FCC Identifier ACLAP9Q31. These Microwave Ovens are to be approved under the regulations for part 18.

In the submission you will find exhibits for measurements taken in both Radiated and Line Conducted modes. As permitted by FCC rules, these measurements were taken by a registered lab. The lab has submitted documents which are on file with the FCC. For a quick reference to all of the exhibits submitted, please reference the Application Index and Summary after this cover letter page.

If there are any questions pertaining to this application, please contact me.

Sincerely,



George Vazquez  
Engineer, Codes & Safety

Cc: S. Yamashita

**FCC ID: ACLAP9Q31**  
**APPLICATION INDEX AND SUMMARY**

**APPLICATION FOR CERTIFICATION**

<b>Model No.</b>	<b>Brand Name</b>	<b>FCC ID.</b>
NN-SF550W	Panasonic	ACLAP9Q31
NN-SF550B	Panasonic	ACLAP9Q31
NN-SF550M	Panasonic	ACLAP9Q31

**LIST OF EXHIBITS**

- EXHIBIT A: TECHNICAL REPORT
- EXHIBIT B: PHOTOGRAPHS OF EQUIPMENT
- EXHIBIT C: TEST SETUP PHOTOS
- EXHIBIT D: SCHEMATIC DIAGRAM
- EXHIBIT E: USERS MANUAL
- EXHIBIT F: SAMPLE/LOCATION of FCC ID. LABEL
- EXHIBIT G: TEST REPORT SUMMARY
  - Radiated Emissions
  - Line Conductance
- EXHIBIT H: TEST REPORT

**FCC ID: ACLAP9Q31**

**EXHIBIT A**

**TECHNICAL REPORT**

**1. DESCRIPTION OF MEASUREMENT FACILITY:**

The description of the measurement facility is already on file with FCC. Please refer to the commission's registration number 382179.

**2. USERS MANUAL**

Reference: EXHIBIT E

**3. APPLICANT:**

PANASONIC HOME APPLIANCE COMPANY of AMERICA,  
MICROWAVE TECHNICAL LAB., E-Zip E2J-16  
5201 Tollview Drive  
Rolling Meadows, Illinois 60008

**4. MANUFACTURER:**

Panasonic Home Appliances Microwave Oven Shanghai Co. LTD., (PHAMOS)  
898 Long Dong Road  
Pu Dong, Sanghai 201203 China

**5. MEASUREMENT SITE:**

FCC Registration Number 382179  
Bay Area Compliance Laboratory Corp. (Shenzhen)  
6/F, the 3<sup>rd</sup> Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone  
Shenzhen, Guangdong, China 518038

**6. EQUIPMENT SPECIFICATIONS:**

Electrical Power Requirement: 120Vac, 60Hz, 9.8A  
Nominal Operating Frequency: 2450 MHz  
Maximum RF Energy Generated: 1000 W (IEC 705)  
Magnetron Type: 2M236-M42  
Feed Type and Location: Through the wave guide on the bottom of the oven.  
Stirrer: Bottom Feed Stirrer  
Cabinet Dimensions: (W) 529 x (H) 326 x (D) 430(mm)  
Oven Cavity Dimensions: (W) 354 x (H) 230 x (D) 3338 (mm)  
Door Viewing Area Dimensions: (W) 298 x (H) 147 (mm)  
Door Seal Type: Slit Choke seal and capacitive seal method

**EXHIBIT B**

**PHOTOGRAPHS OF EQUIPMENT**

External Photos: Reference EXHIBIT B  
Internal Photos: Reference EXHIBIT B

**FCC ID: ACLAP8S71**  
**EXHIBIT G**

**TEST REPORT SUMMARY: Radiated Emissions**

1. MODEL NUMBER: NN-SF550W

SERIAL NUMBER: PP5005

MAGNETRON TYPE NO.: 2M236-M42

2. MEASUREMENT DATE:

From: 01/29/2010 to end of testing: 02/08/2010

3. TEST REPORT: Reference EXHIBIT H

4. TEST SETUP PHOTOS: Reference EXHIBIT C

4. INVESTIGATED FREQUENCY RANGE: 30 MHz to 25 GHz

5. TEST DATA SUMMARY: Selected Peak Readings

Safety Check (Radiation Hazard Measurement) :< 0.71 mW/cm<sup>2</sup> @ 5cm.

Radiated Field Strength		Polar (H/V)	Corrected Amplitude dBμV/m	Limit (dBμV/m)	Margin (dB)
Emission Sideband	2395.0 MHz	H	51.55	70.60	19.05
Emission Sideband	2366.5 MHz	V	48.60	" "	22.00
Emission Sideband	2565.5 MHz	V	42.90	" "	27.70
Emission Sideband	2579.5 MHz	H	40.47	" "	30.13
2 <sup>nd</sup> Harmonic	4900 MHz	H	52.70	" "	17.90
2 <sup>nd</sup> Harmonic	4900 MHz	V	50.50	" "	20.10
3 <sup>rd</sup> Harmonic	7350 MHz	H	51.30	" "	19.30
3 <sup>rd</sup> Harmonic	7350 MHz	V	47.10	" "	23.50
4 <sup>th</sup> Harmonic	9800 MHz	H	48.50	" "	22.10
4 <sup>th</sup> Harmonic	9800 MHz	V	47.00	" "	23.60

**Note: The emission level of 5<sup>th</sup> harmonic to 10<sup>th</sup> harmonic 20db lower than limit.**

Minimum/Maximum Frequency Variation: 2464.4 to 2459.8 MHz  
 (96V ~ 150V/ 1000 ml water load)

Minimum/Maximum Frequency Variation: 2464.2 to 2460.6 MHz  
 (1000 ml – 200 ml water load)

Total Power Input to Oven: 1140 watts

Power Developed in Dummy Load: 911.4 watts

Supply Voltage: 120 Volts, 60Hz, 9.5A

**FCC ID: ACLAP9Q31**  
**EXHIBIT G**

**TEST REPORT Summary: Line Conductance**

1. MODEL NUMBER: NN-SF550W

SERIAL NUMBER: PP5005

MAGNETRON TYPE NO.: 2M236-M42

2. MEASUREMENT DATE:

From: 01/29/2010 to end of testing: 02/08/2010

3. TEST REPORT: Reference EXHIBIT H

4. TEST SETUP PHOTOS: Reference EXHIBIT C

4. INVESTIGATED FREQUENCY RANGE: 150 kHz to 30 MHz

5. TEST DATA SUMMARY: Selected Peak Readings

**Power Line Live Side**

Frequency MHz	QP Amplitude dB $\mu$ V	QP Limit dB $\mu$ V	QP Margin dB
0.150	56.75	66.00	9.25
0.240	47.79	62.15	14.36
0.610	42.34	56.00	13.66
1.060	41.16	56.00	14.84
13.080	49.79	60.00	10.21
21.810	39.00	60.00	21.00
Frequency MHz	AV Amplitude dB $\mu$ V	AV Limit dB $\mu$ V	AV Margin dB
0.150	45.28	56.00	10.72
0.240	41.80	52.15	10.35
0.610	32.64	46.00	13.36
1.060	28.73	46.00	17.27
13.080	42.83	50.00	7.17
21.550	30.44	50.00	19.56

**FCC ID: ACLAP9Q31  
EXHIBIT G**

**Power Line Neutral Side**

Frequency MHz	QP Amplitude dB $\mu$ V	QP Limit dB $\mu$ V	QP Margin dB
0.160	57.64	65.56	7.92
0.190	57.15	64.13	6.98
0.280	51.14	60.83	9.69
0.540	48.28	56.00	7.72
12.750	53.42	60.00	6.58
21.650	39.15	60.00	20.85
Frequency MHz	AV Amplitude dB $\mu$ V	AV Limit dB $\mu$ V	AV Margin dB
0.160	40.63	55.56	14.93
0.190	42.10	54.13	12.03
0.280	36.68	50.83	14.15
0.540	32.37	46.00	13.63
12.750	43.98	50.00	6.02
21.560	31.54	50.00	18.46