

REPORT OF MEASUREMENTS (MICROWAVE OVEN TEST DATA)

FCC ID : AEZM413 MODEL : EM-J8200T DATE : Nov. 17, 2001
 NOMINAL FREQUENCY : 2.450 M Hz. TESTED BY : T.SUGIOKA
T. Sugioka

DESCRIPTION : (Unit Dimension : cm)

Cabinet Dimension : 59.5 by 45.2 by 36.2 Door Dimension : 47.4 by 32.5
 Oven Cavity Dimension : 41.5 by 40.4 by 29.7 Door Viewing area : 36.4 by 21.3
 Feed Type and Location : Waveguide, located right side Stirrer : Rotating tray
 (incl. Rotating tray)

Door seal Type : Choke Seal Magnetron Type : Sanyo, 2M-248H
 Others : N/A

TEST EQUIPMENT USED :

1. Antenna (Horn Antenna)

	<u>Frequency Range</u>	<u>Correction Factor</u>
AILTECH 91888-2	1.0 - 2.0 G Hz	21.5 - 22 dB
AILTECH 91889-2	2.0 - 3.6 G Hz	20.5 - 21 dB
AILTECH 94613-1	3.6 - 7.6 G Hz	37 dB
AILTECH 91891-2	7.3 - 10.0 G Hz	39.8 dB

Other Correction Factor

(a) Cable loss

<u>Frequency (M Hz)</u>	<u>Cable loss (dB)</u>
2.400	1.1
2.500	1.1
4.900	1.6
7.350	2.2
9.800	2.7

(b) Loss of Band Rejection Filter

<u>Frequency Range (G Hz)</u>	<u>Filter loss (dB)</u>
2.0 - 3.6	3.0

2. Field Strength Meter

AILTECH NM-67 (SER 0241-03088)

Last calibrated date : December 04, 2000

Setting : Bandwidth ----- 1 MHz

Function ----- Field Intensity (average value detector)

3. When measuring sidebands close to the fundamental, band reject filter Model 6N45-2450/60 (SER FK837-1) was employed.

REPORT OF MEASUREMENT (MICROWAVE OVEN TEST DATA SHEET B)

FCC ID : AEZM413 MODEL : EM-J8200T DATE : Nov. 19,2001
 Nominal Frequency : 2,450 MHz TESTED BY : T.SUGIOKA

DATA SUMMARY (FCC MEASUREMENT PROCEDURE MP-5)

CALCULATION : $E<300m> = K * 10^{((A+B+C+D+E)/20)}$

SAFETY CHECK (at 5 cm) Load : 275 ml/center 0.19 mW/sq.cm
 FUNDAMENTAL Load : 1,000 ml/center 2,450 MHz

LIMIT = $25 * \sqrt{\text{power}/500}$: 37.1 uV/m

* Note : Location of load for the oven provided with the rotating tray is :
 Contiguous with the shelf circumference.

RADIATION FIELD STRENGTH (uV/m at 300 m)

Load	Location of Load	Emission Frequency (MHz)	Meter Reading (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Filter Loss (dB)	Calcu. Factor (dB)	The Value of K (E<300m>=K*E<3m>)	Max. Field Strength (uV/m at 300m)	Limit (uV/m at 300m)
2nd Harmonic	Center	4,232	10.0	37.0	1.6	—	5	0.0096	4.6	37.1
2nd Harmonic	* Right/Front Corner	4,231	11.0	37.0	1.6	—	5	0.0096	5.2	37.1
2nd Harmonic	Center	4,924	13.0	37.0	1.6	—	5	0.0100	6.8	37.1
2nd Harmonic	* Right/Front Corner	4,924	13.0	37.0	1.6	—	5	0.0100	6.8	37.1
3rd Harmonic	Center	6,793	10.0	39.8	2.2	—	5	0.0100	7.1	37.1
3rd Harmonic	* Right/Front Corner	6,803	10.0	39.8	2.2	—	5	0.0100	7.1	37.1
3rd Harmonic	Center	7,287	14.0	39.8	2.2	—	5	0.0100	11.2	37.1
3rd Harmonic	* Right/Front Corner	7,263	12.0	39.8	2.2	—	5	0.0100	8.9	37.1
4th Harmonic	Center	8,932	23.0	39.8	2.7	—	5	0.0100	33.5	37.1
Spurious	Center	2,398	34.0	20.8	1.1	3	5	0.0061	9.5	37.1
Emission Sideband 2,400 MHz	Center	2,400	33.0	20.8	1.1	3	5	0.0061	8.5	37.1
Emission Sideband 2,500 MHz	Center	2,500	16.0	20.8	1.1	3	5	0.0064	1.3	37.1

Maximum Frequency Variation 1,000 ml load 2,461 to 2,465 M Hz.
 Total Power Input to Oven 1,480 Watts
 Power Development in dummy load (Thermal Method) 1,100 Watts (IEC705 Test Procedure)
 Supply Voltage AC 120 V 60 Hz

1830 MHz - 2745 MHz 2.6230 * 10⁽⁻³⁾ * frequency : GHz) -0.0002
 2745 MHz - 3660 MHz 2.1858 * 10⁽⁻³⁾ * frequency : GHz) +0.0010
 3660 MHz - 4575 MHz 1.0929 * 10⁽⁻³⁾ * frequency : GHz) +0.0050
 4575 MHz and above 4575 MHz and above 0.0100

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Note : In order to convert the measured field strength at 3meters to the field at 300 meters, comply with FCC/OST MP-5 Appendix C "4.6.1 Computations to determine compliance". A calculation factor of 5 dB, this figure is fixed by SANYO, is introduced for adjusting a tolerance in measurement.
A calculation factor of 5 dB should be added to "METER READING" as shown in SAMPLE CALCULATION below.

SAMPLE CALUCULATION

(1) 4th Harmonic with 700 ml/Center load

$$\begin{aligned}\text{Field Strength at 300 m} &= 0.0100 \times 10^{(23.0 + 39.8 + 2.7 + 5) \div 20} \\ &= 33.5 \quad \text{uV/m}\end{aligned}$$

(2) Emission sideband 2.400 M Hz.. 700 ml/Center load

$$\begin{aligned}\text{Field Strength at 300 m} &= 0.0061 \times 10^{(33.0 + 20.8 + 1.1 + 3 + 5) \div 20} \\ &= 8.5 \quad \text{uV/m}\end{aligned}$$

REPORT OF MEASUREMENT (MICROWAVE OVEN TEST DATA)

· Measurement of Frequency VS Line Voltage Stability ·

FCC ID : AEZM413 Model : EM-J8200T Date : Nov. 17, 2001Nominal Frequency : 2.450 MHzTested by : T.SUGIOKA
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Line Voltage Variation [Volt]	Frequency [GHz]	Deviation for ISM Frequency [MHz]	Limit [MHz]
96 (- 20%)	2.467	+17	± 50
120 (± 0%)	2.465	+15	± 50
150 (+ 25%)	2.468	+18	± 50

[Environment]

Temperature : 26.0 °CHumidity : 54.0 %

[Sample Calculation]

Frequency : 2.468 GHz

Deviation for ISM Frequencies Calculated as follows.

$$\underline{2.4680} - 2.4500 = \underline{+0.0180} \text{ [GHz]} = \underline{+18.0} \text{ [MHz]}$$

[Summary of Test Results]

Above data shows that the test device do / do not complies with the requirements.