

18.207 Technical Report

- a. Description of measurement facilities sent to FCC Labs August 20, 1993 (Charles Cobb).
- b. See Data Sheets for operating instructions.
- c. See Form 731 for Manufacturer
- d. See Form 731 for FCC ID
- e. Photographs enclosed:
- f. Measurement report enclosed. Frequency range investigated was from 2000 MHz to 10,000 MHz.

Microwave Oven Tests

Model: AEC 2000

Serial Number: Lab # R2671/0500

Tested for: Amana Appliances

Address: 2800 220th Trail

PO Box 8901

Amana, IA 52204-0001

Date: 5/3/00

Tested by: Tom Miller

Power Measurements

E line: 120 V rms: 60 Hz

I line : 16.3 A

P line: 1900 W

P out: 908 W

Operating Instructions

1. Insert 1000 ml load in nalgene plastic beaker into oven.
2. Press numbered pads to enter predetermined times and start unit.
3. To turn oven off;
 - a. Let cooking time expire
 - b. Open door
 - c. Press stop pad

Microwave Oven
Frequency Measurements
Fundamental
Test Procedure MP-5
Magnetron type: Toshiba 2m248K(A)
Oven: AEC 2000

1. Variation with time

Operate unit from room temperature until 20% of water has evaporated.

Load: 1000 ml water

voltage: 120 V

<u>Time (minutes)</u>	<u>Frequency (Mhz)</u>
0	2455
2	2454
4	2454
6	2453
8	2454
10	2454
12	2453
14	2453
16	2452
18	2450
20	2456

2. Variation with line voltage

Load: 1000 ml water with 10 minute warm up

<u>Line (Vrms)</u>	<u>Frequency (Mhz)</u>
96	2465
102	2464
108	2464
114	2464
120	2465
126	2459
132	2455
138	2461
144	2464
150	2465

Radiated Emissions
FCC Data Sheet
HP8572A EMI Receiver

Date: 5-3-00
Model: AEC 2000
Magnetron: 2M248K(A)

FCC ID No: APJ9Q607001
Serial No: Lab # R2671/0500
Measured Oven Output Power: 908 W
Field Intensity Limit (300m): 33.68 μ V/m

Resolution Bandwidth: 3 MHz
Video Bandwidth: 300 Khz
Sweep time: 25ms
Input Attenuation: 10 dB

25 X SQRT(908/500)

Field Intensity Limit (dB μ V/m): 30.54

	Antenna Gain (dB)	HP8449-H02 Pre Amp Gain (dB)	Water Load
2450 MHz:	7.8	-----	700 ml
4900 Mhz:	8.4	36.0	700 ml & 300 ml
7350 Mhz:	9.8	35.8	700 ml & 300 ml
9800 Mhz:	10.0	35.2	700 ml

Maximum Readings for all loads and Positions

Frequency (MHz)	Measurement @3m (dBμV)	Conversion Factor (dB)	Pre Amp Gain (dB)	300m Conv. Factor	Field Intensity (dBμV)
2423	31.94	30.1	---	-40	22.0
2487	31.2	30.3	---	-40	21.5
4295	46.12	34.5	-36.0	-40	4.6
7360	42.93	37.7	-35.8	-40	4.8
9823	39.71	40.0	-35.2	-40	4.5

