

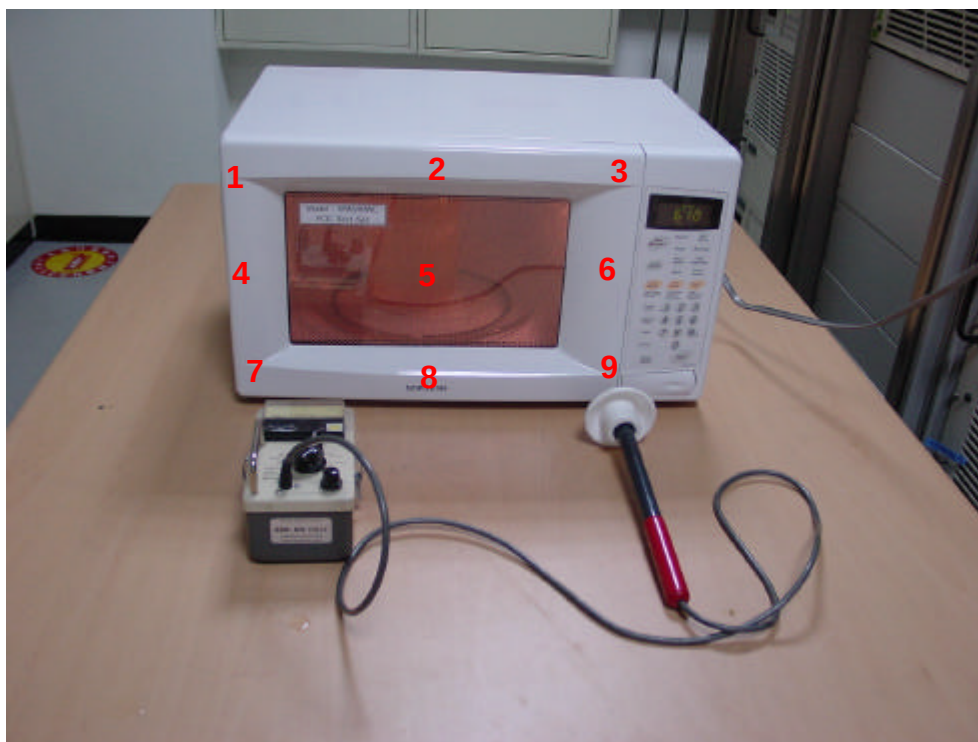
4. Radio Noise Emission Measurement Procedures/Results

4.1 Radiation Hazard Measurement

A 700-ml water load was placed in the center of the oven.

The power setting was set to maximum power.

While the oven was operating, the Microwave Survey Meter probe was moved slowly around the door seams to check for leakage.



The results of this test are as follows.

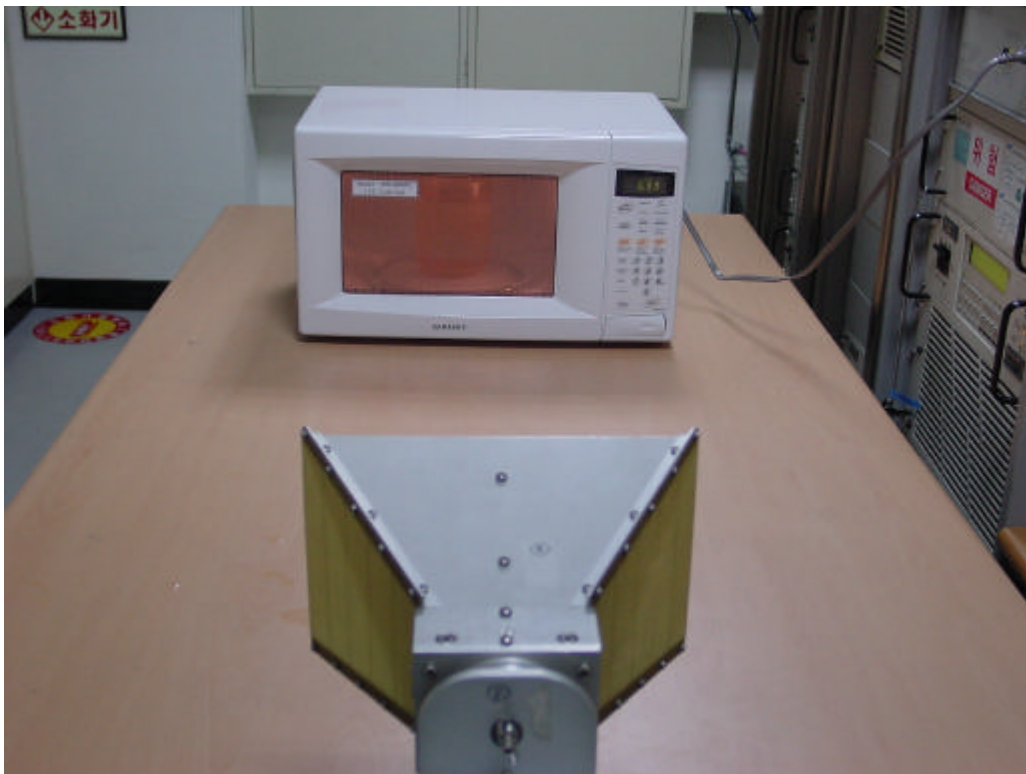
Probe Location	Maximum Leakage [mW/Cm2]	Limit [mW/Cm2]
3	0.05	1.0
5	0.05	1.0
7	0.10	1.0
All others	0.05	1.0

4.2 Input Power Measurement

Input power and current were measured using a Power Analyzer.

A 700ml water load was placed in the center of the oven and the oven set to maximum power. A 700 ml water load was chosen for its compatibility.

Manufacturers to determine their input ratings commonly use this procedure.



The results of this test are as follows.

Input Voltage [Vac]	Input Current [amps]	Measured Input power [watts]	EUT Spec. Input power [watts]
120	12.3	1430	1450

Based on the measured input power, the EUT was found to be operating within the intended specifications.

4.3 RF Output Power Measurement

The Caloric Method was used to determine maximum output power. The initial temperature of a 1000-ml water load was measured. The water load was placed in the center of the oven. The oven was operated at maximum output power for 120 seconds. Then the temperature of the water re-measured.



Fig.3 Test Setup for RF output power

Quantity of water [ml]	Starting Temperature [centigrade]	Final Temperature [centigrade]	Elapsed Time [seconds]	RF Power [watts]
1000	10	32.4	120	781.6
1000	10	32.3	120	778.1
1000	10	32.2	120	774.6
Average RF Power of 3 Trials				778.1

$$\text{Power} = \frac{(4.187 \text{ Joules/Cal}) \times (\text{Volume in ml}) \times (\text{Temp. Rise})}{\text{Time in seconds}}$$

The measured output was found to be **ABOVE 500Watts**. Therefore, in accordance with section 18.305 of Subpart C, the measured out-of-band emissions were compared to the $25\sqrt{\text{power}/500} [\mu\text{V/m}]$ @ 300M limit.