

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.



Fig. 2 Test Setup for Input power

The results of this test are as follows.

Input	Input	Measured	EUT Spec.
Voltage	Current	Input power	Input power
[Vac]	[amps]	[watts]	[watts]
120	12.9	1489	1500

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	Starting	Final	Elapsed	RF Power
of water	Temperature	Temperature	Time	
[ml]	[centigrade]	[centigrade]	[seconds]	[watts]
1000	10	33.7	120	826.9
1000	10	32.3	120	778.1
1000	10	33.1	120	806.0
A	803.7			

Power = (4.187 Joules/Cal) x (Volume in ml) x (Temp. Rise)
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 25xSQRT(power/500)[uV/m] @ 300M limit.