

COMPONENT TEST PROCEDURES

Power Output Check:

NOTE: This is a centigrade/metric method of power testing. Microwave engineering power specifications are established and maintained in production using this method. It is more accurate than the Fahrenheit method.

Test Equipment Needed:

Glass or plastic breaker with 1000 ml. Gradation.
Centigrade thermometer – power test kit M9505

- 1) Plug oven in and verify proper operation.
- 2) Fill the plastic container to the bottom of the 1000 ml. lines with cool tap water.
- 3) Using the centigrade thermometer, measure and record the water temperature.
IMPORTANT: Initial water temperature should be between 17 and 27 degrees Centigrade
- 4) place the container on the center of the oven shelf and heat the water for one minute.

NOTE: Use a watch second hand or a digital watch, not the oven timer.

- 5) Measure and record the temperature of the water after heating the water for one minute.
- 6) Subtract the starting water temperature (Step 3) from the ending water temperature (Step 5) to obtain temperature rise.
- 7) Refer to Temperature Rise Chart Below

NOTE:

Variations of error in the test procedure will cause a variance in the temperature rise indication. Additional power test should be made if the temperature rise appears marginal.

Operating voltages less than 115 volts a-c may cause lower output (temperature rise)

Power output in watts is computed by multiplying the temperature rise (Step 6) by a power factor of 70

TEMPERATURE RISE CHART

| <u>Temperature Rise</u> | <u>Power Output</u> | <u>Temperature Rise</u> | <u>Power Output</u> | <u>Temperature Rise</u> | <u>Power Output</u> |
|-------------------------|---------------------|-------------------------|---------------------|-------------------------|---------------------|
| 4 degrees C | 280 Watts | 13 degrees C | 910 Watts | 22 degrees C | 1540 Watts |
| 5 degrees C | 350 Watts | 14 degrees C | 980 Watts | 23 degrees C | 1619 Watts |
| 6 degrees C | 420 Watts | 15 degrees C | 1050 Watts | 24 degrees C | 1680 Watts |
| 7 degrees C | 490 Watts | 16 degrees C | 1120 Watts | 25 degrees C | 1750 Watts |
| 8 degrees C | 560 Watts | 17 degrees C | 1190 Watts | 26 degrees C | 1820 Watts |
| 9 degrees C | 630 Watts | 18 degrees C | 1260 Watts | 27 degrees C | 1890 Watts |
| 10 degrees C | 700 Watts | 19 degrees C | 1330 Watts | 28 degrees C | 1960 Watts |
| 11 degrees C | 770 Watts | 20 degrees C | 1400 Watts | 29 degrees C | 2030 Watts |
| 12 degrees C | 840 Watts | 21 degrees C | 1470 Watts | 30 degrees C | 2010 Watts |