



# Food Service Technology Center Appliance Test Summary Report

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<b>Manufacturer</b>	Bakers Pride
<b>Model / Serial Number</b>	454BCOER2 / 555041103004
<b>Appliance</b>	Full-Size Convection Oven – Electric

<b>Report Number</b>	501311065
<b>Report Date</b>	September, 2011
<b>Tested By</b>	M. Karsz

## Purpose of Testing

This testing determined the energy input rate, preheat time and energy, idle energy rate and heavy-load cooking-energy efficiency of the oven by applying the ASTM F1496-99 Standard Test Method.

## Energy Input Rate

Test Voltage (V)	208
Rated Energy Input Rate (kW)	10.70
Measured Energy Input Rate (kW)	10.58
Difference (%)	1.2

## Preheat

Final Preheat Temperature (°F)	342
Duration (min)	8.05
Energy Consumption (Wh)	1,362.5
Preheat Rate (°F/min)	33.4

## Idle

Average Cavity Temperature (°F)	349
Idle Energy Rate (kW)	1.46

## Heavy-Load Cooking-Energy Efficiency <sup>a</sup>

Food Product	Russet Potatoes
Oven Temperature (°F)	350
Cook Time (min)	42.62
Cooking Energy Rate (kW)	8.76
Energy to Food (Btu/lb)	209
Energy to Oven (Btu/lb)	293
Cooking-Energy Efficiency (%)	71.5 ± 0.8
Production Capacity (lb/h)	102.2 ± 8.9

<sup>a</sup> based on a minimum of three test replicates.



**Bakers Pride 454BCOER2  
Electric Convection Oven**

Bakers Pride  
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Dallas, TX USA 75226  
[www.bakerspride.com](http://www.bakerspride.com)

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### Heavy-Load Test Data

	Test #1	Test #2	Test #3
<b>Measured Values</b>			
<b>Cook Time (min)</b>	<b>42.94</b>	<b>43.92</b>	<b>41.00</b>
Test Voltage (V)	208	208	207
Electric Energy Consumption (kWh)	6.15	6.38	6.12
Temperature of Uncooked Potatoes (°F)	76.5	75.4	78.1
Temperature of Cooked Potatoes (°F)	205	205	205
Initial Weight of Potatoes (lbs)	72.500	72.505	72.505
Final Weight of Potatoes (lbs)	65.050	64.675	65.060
<b>Calculated Values</b>			
Sensible Heat (Btu)	7,826	7,893	7,729
Latent – Heat of Vaporization (Btu)	7,227	7,595	7,222
Total Energy to Food (Btu)	15,053	15,488	14,951
<b>Energy To Food (Btu/lb)</b>	<b>208</b>	<b>214</b>	<b>206</b>
Total Energy to Oven (Btu)	20,990	21,775	20,888
<b>Energy to Oven (Btu/lb)</b>	<b>290</b>	<b>300</b>	<b>288</b>
<b>Cooking-Energy Efficiency (%)</b>	<b>71.7</b>	<b>71.1</b>	<b>71.6</b>
<b>Cooking Energy Rate (kW)</b>	<b>8.59</b>	<b>8.72</b>	<b>8.96</b>
<b>Production Capacity (lb/h)</b>	<b>101.3</b>	<b>99.1</b>	<b>106.1</b>

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