Char-Broil

TRU-Infrared[™] Technology

Module 5

Performance & Benefits:

In 2011, a highly respected, independent thirdparty testing agency quantitatively proved that Char-Broil TRU-Infrared grills produce juicier food, use less gas, produce more even heat, and cook faster than similar featured competitor grills.





INFRARED IN 15 WORDS OR LESS.

Much Juicier

Uses Less Gas

Even Heat

• Faster Cooking

• Wide Temp Range

• Prevents Flare-ups

Char-Broil wanted to quantitatively PROVE these four items since they are not easily observed by the user

These two benefits are easily observable in side-by-side comparisons



Methodology: Lab Testing

- Testing was performed at a respected, independent 3rd-party testing agency
- Test procedure was as follows: 2" x 2" x 1" pork loin squares at room temperature cooked one at a time at four locations (quadrant centers) on each grill, cooking 4.5 min lid closed after warm up, then opening lid and continuing cooking until 160F internal temp is reached.
- One batch of meat was used to qualify procedure and run a single iteration test on different units.
- Second and third batches of meat were used to perform five replication tests on each unit at each of the four points
- Variations in measured values were found, but trends relating to moisture retention, gas use efficiency, time of cooking, and evenness of cooking were clearly noticeable.



Moisture Retention

 Below is data averaged from tests conducted with two batches of meat and multiple trials. Because variation of results with each piece of meat is so high, the superiority of TRU-Infrared grills are 20% to 50% on any individual test.





Gas Usage

 British Thermal Units (BTUs) do not measure the "power" of a grill, but rather, the amount of energy consumed by that grill (e.g.: how much gas it takes) to heat food. In our tests cooking times were fairly consistent resulting in consistent gas usage readings by grill.





Evenness

 Evenness measurements help us understand if the grill has hot spots or cold spots. We evaluated evenness by measuring variation in cooking time at four points on the cooking grid and averaging the results of two different test batches and multiple trials.







Cooking Time

• Cooking times have been found to be fairly consistent between different batches of meat, so the results below are from one batch with 5 trials averaged.







SUMMARY





Conclusion

- Pork cooked on Char-Broil's TRU-Infrared grills has a 20-50% <u>higher</u> moisture retention range than pork cooked on competitive gas grills.
- TRU-Infrared grills use less gas than competing models with tests showing 44 to 84% less BTUs used in cooking the same meat on TRU-Infrared grills as on competitors.
- Cooking time is 25 to 75% <u>less</u> on TRU-Infrared grills.
- TRU-Infrared grills cook more evenly across the entire grilling surface than competing grills showing 77 to 83% <u>less</u> variation.

Quantitatively tested & proved by a respected independent third-party testing facility in the USA (February 2012)

