

# 52048-K - Thermocouple Solid Simulator

The Thermocouple Solid Simulator does not measure air temperature, it takes on refrigeration temperature as food does and further supports your food safety program. This unique product is thermocouple based and made of FDA approved material. It simulates food product temperature in changing ambient conditions of any refrigerator, freezer, walk-in or delivery truck. The Thermocouple Solid Simulator is 1.5" x 1.5" (38 mm x 38 mm) in diameter and measures temperatures from -40° to 180°F (-40° to 82°C). Similar to all of our Cooper-Atkins Type K probes, the temperature of the Solid Simulator is displayed immediately when plugged into any Type K Thermocouple Instrument.

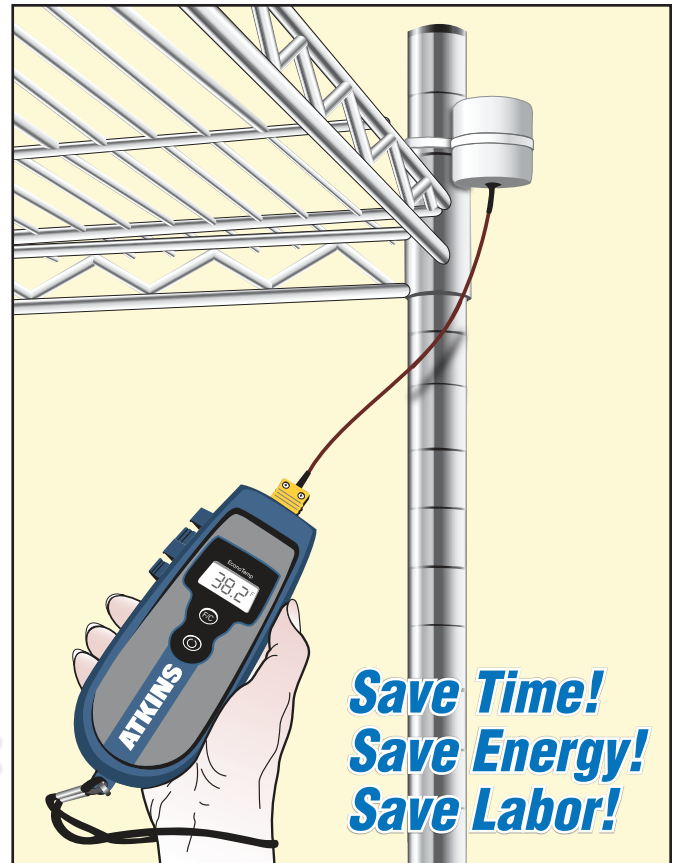


## Specifications

- Temperature Range: -40° to 180°F (-40° to 82°C)
- 1.5" x 1.5" dia. (38 mm x 38 mm dia.)
- FDA approved material
- Cord Length: 6" (152 mm)
- Flexible cable with teflon jacket
- Weight: 2.5 oz. (71 g)
- 12" cable tie included for mounting
- 1 year warranty

## Packaging

- Individual Package Weight: 3 oz.
- Package Dimensions: 6" x 1.5" x 10" (152 x 38 x 254 mm)
- Package Cube: .05
- Units per package (1)

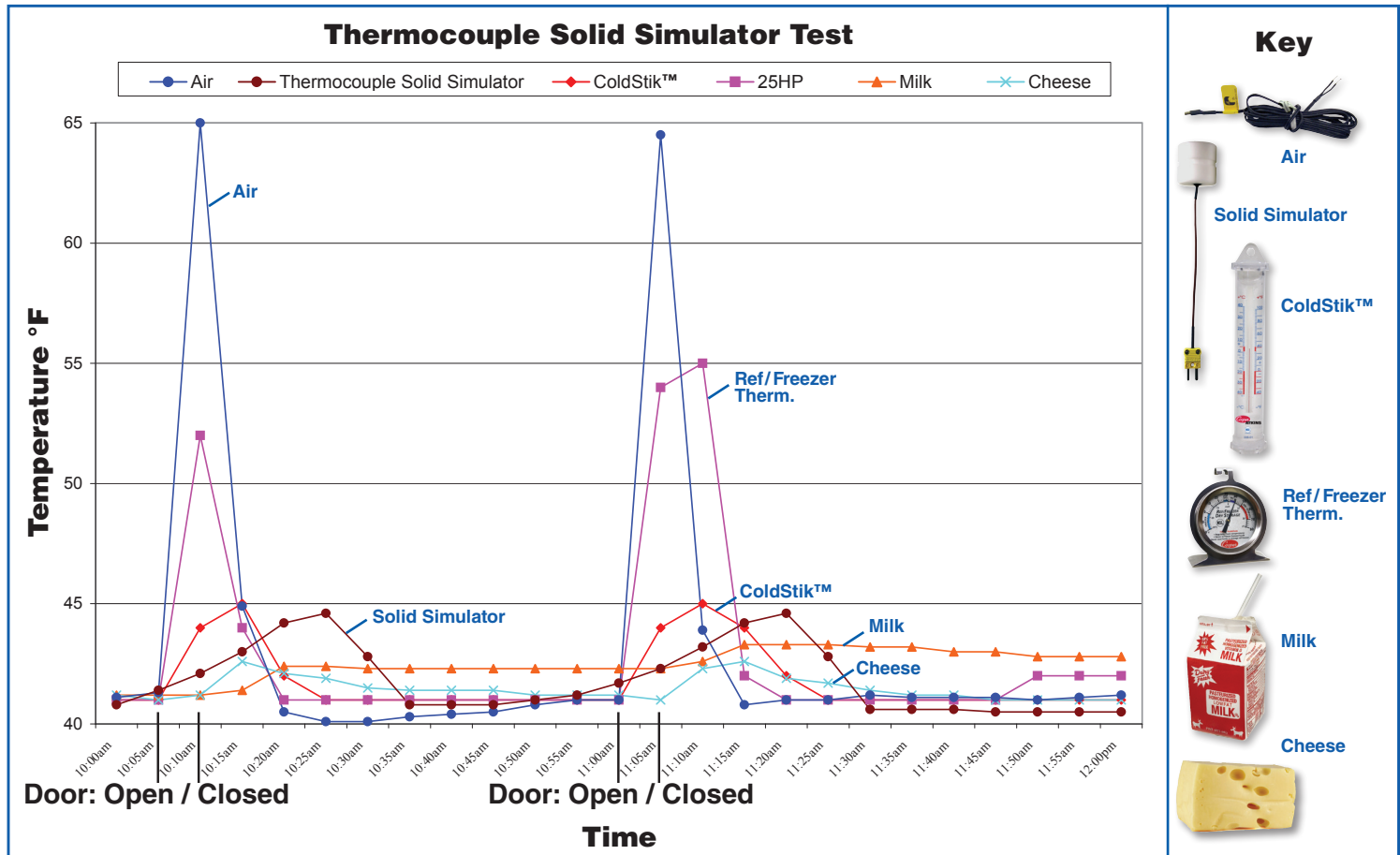


**Measuring Success Since 1885**

Cooper-Atkins Corporation • 800-835-5011 • 860-347-2256 • [www.cooper-atkins.com](http://www.cooper-atkins.com)

# Thermocouple Solid Simulator Test

The Thermocouple Solid Simulator, 336 ColdStik™ Product Simulator, 25HP Refrigerator / Freezer Thermometer, 2033 Air Probe, Carton of Milk (8 oz.) and Block of Cheese (8 oz.) were placed in an environmental chamber and monitored for a two hour time span. Once the thermometers and probes were allowed to be stabilized at 41°F, the chamber door was left open for 5 minutes, then shut for an hour and the process was then repeated. The temperatures were recorded every five minutes. The chart below shows the thermometer temperatures compared the temperatures to the food product in the changing ambient conditions of the chamber.



When the chamber door was left open for 5 minutes, the air temperature rose 20+ degrees, while the Thermocouple Solid Simulator temperature remained stable with the food product.

## Temperature Results:

**Door Open**

Time	Air	Solid Simulator	ColdStik™	25HP	Milk	Cheese
10:00am	41	41	41	41	41	41
10:05am	41	41	41	41	41	41
10:10am	65	42	44	52	41	41
10:15am	45	43	45	44	41	43
10:20am	41	44	42	41	42	42
10:25am	40	45	41	41	42	42
10:30am	40	43	41	41	42	42
10:35am	40	41	41	41	42	41
10:40am	40	41	41	41	42	41
10:45am	41	41	41	41	42	41
10:50am	41	41	41	41	42	41
10:55am	41	41	41	41	42	41

**Door Open**

Time	Air	Solid Simulator	ColdStik™	25HP	Milk	Cheese
11:00am	41	42	41	41	42	41
11:05am	65	42	44	54	42	41
11:10am	44	43	45	55	43	42
11:15am	41	44	44	42	43	43
11:20am	41	45	42	41	43	42
11:25am	41	43	41	41	43	42
11:30am	41	41	41	41	43	41
11:35am	41	41	41	41	43	41
11:40am	41	41	41	41	43	41
11:45am	41	41	41	41	43	41
11:50am	41	41	41	42	43	41
11:55am	41	41	41	42	43	41
12:00pm	41	41	41	42	43	41



**Measuring Success Since 1885**  
Cooper-Atkins Corporation • 800-835-5011 • 860-347-2256 • www.cooper-atkins.com