Table 4.3 Average cooling efficiency for geothermal heat pump shipments, 2008 and 2009

(average energy efficiency ratio)

## **Model Type**

Year	ARI-320	ARI-325/330	ARI-870	Other Non-ARI Rated
2008	13.1	19.5	17.5	13.5
2009	14.6	20.4	18.2	14.3

ARI-320 = Water-Source Heat Pumps.

ARI-325 = Ground Water-Source Heat Pumps.

ARI-330 = Ground Source Closed-Loop Heat Pumps.

ARI-870 = Direct Geoexchange Heat Pumps.

Notes: One ton of capacity is equal to 12,000 Btus per hour.

Efficiency is expressed as blus of output per watthours of input. The greater the EER the more efficient the unit.

**Source:** U.S. Energy Information Administration (EIA), Form EIA-902, "Annual Geothermal Heat Pump Manufacturers Survey."