

ENERGY STAR Draft Version 3.1 Room Air Conditioners CEER Level Translation for all Product Classes

As of June 1, 2014 the U.S. Department of Energy (DOE) is requiring the use of the combined energy efficiency ratio (CEER) to demonstrate compliance with the minimum federal efficiency standards. To minimize manufacturer burden associated with labeling products with two different efficiency metrics, EPA is proposing to update the ENERGY STAR efficiency criteria to harmonize with DOE. In support of the Draft Version 3.1 ENERGY STAR Room Air Conditioner specification, EPA performed the following analysis which translates the current energy efficiency ratio (EER) criteria into equivalent CEER criteria. EPA utilized the same translation methodology that was published during the most recent room AC rulemaking and documented in *Room Air Conditioners CEER Standard Level Calculations for All Product Classes*.

PRODUCT CLASS	BASE FUNCTIONALITY	DOE Representative Capacity (Btu/hr)	ENERGY STAR V3.0 EER	Representative Active Power Level (W)	Standby Power Level (W)(DOE)	ENERGY STAR V3.1 CEER ¹ proposed
	Without Reverse Cycle, With Louvered Sides					
1	< 6,000 BTU	5000	11.2	446	1.4	11.0
2	6,000-7,999 BTU	6000	11.2	536	1.4	11.0
3	8,000-13,999 BTU	10000	11.3	885	1.4	11.2
4	14,000-19,999 BTU	18000	11.2	1607	1.4	11.1
5A	20,000 - 27,999 BTU	24000	9.8	2449	1.4	9.8
5B	>28,000	28000	9.8	2857	1.4	9.8
	Without Reverse Cycle, Without Louvered Sides					
6	< 6,000 BTU	5000	10.4	481	1.4	10.2
7	6,000-7,999 BTU	6000	10.4	577	1.4	10.2
8A	8,000-10,999 BTU	8000	9.8	816	1.4	9.7
8B	11,000-13,999 BTU	12000	9.8	1224	1.4	9.7
9	14,000-19,999 BTU	14000	9.8	1429	1.4	9.7
10	> 20,000 BTU	20000	9.8	2041	1.4	9.8
	With Reverse Cycle					
11	With Louvers, < 20,000 BTU	12000	10.4	1154	1.4	10.3
12	Without Louvers, < 14,000 BTU	10000	9.8	1020	1.4	9.7
13	With Louvers, > 20,000 BTU	24000	9.8	2449	1.4	9.8
14	Without Louvers, > 14,000 BTU	14000	9.2	1522	1.4	9.1
	Casement					
15	Casement Only	10000	10	1000	1.4	9.9
16	Casement Slider	10000	10.9	917	1.4	10.8

1: CEER = (Capacity × Active Mode Hours) / (Active Power × Active Mode Hours + Standby Mode Hours × Standby Power)

NOTE: Active Mode Hours = 750 Hours, Standby Mode Hours = 5115 Hours