

Appendix B Draft CEESM Commercial Unitary Air-conditioning and Heat Pumps Specification

CEE periodically revises its specifications. See www.cee1.org or www.ceeforum.org for the most recent version. For Terms and Conditions of these specifications, see www.cee1.org/terms-and-conditions.

Initiative participants have the option to promote the full-load metric, the part-load metric, or both metrics in this specification as the basis for their participation in the CEESM High Efficiency Commercial Unitary Air-conditioning and Heat Pump Initiative. This applies to all specifications in the Initiative. Refer to the [Initiative](#) for more information on the metrics.

Unitary Air-conditioner Specification

Draft revisions highlighted in bold text with yellow background.

Effective upon approval by the CEE Board of Directors

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	CEE Advanced Tier*	Test Procedure
Air Conditioners, Air Cooled (Cooling Mode)	<65,000 Btu/h	All	Split System	15 ¹ SEER 12.5 EER	16 SEER 13 EER	18 SEER 13 EER	AHRI 210/240
			Single Package	15 SEER 12 EER	16 SEER 12 EER	17 SEER 12.5 EER	
	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.2 EER 14 IEER	12.2 EER 15.4 IEER	12.6 EER 18 IEER	AHRI 340/360
			All Other	12 EER 13.8 IEER	12EER 15.2 IEER	12.4 EER 17.8 IEER	
	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.2 EER 13.2 IEER	12.2 EER 14.2 IEER	12.2 EER 17 IEER	
			All Other	12 EER 13 IEER	12 EER 14 IEER	12 EER 16.8 IEER	
	≥240,000 Btu/h and <760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.5 EER 12.3 IEER	10.8 EER 13.2 IEER	10.8 EER 14.5 IEER	
			All Other	10.3 EER 12.1 IEER	10.5 EER 13 IEER	10.6 EER 14.3 IEER	
	≥760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	9.9 EER 11.6 IEER	10.4 EER 12.3 IEER	N/A	
			All Other	9.7 EER 11.4 IEER	10.2 EER 12.1 IEER	N/A	

¹ With the exception of the Advanced Tier for single package air conditioners, levels for equipment <65,000 Btu/h align with corresponding tiers in the CEE High Efficiency Residential Central Air Conditioners and Air Source Heat Pumps Specification.

Air Conditioners, Water Cooled	<65,000 Btu/h	All	Split System and Single Package	14 EER	N/A	N/A	AHRI 210/240	
	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	14 EER 15.3 IEER	N/A	N/A	AHRI 340/360	
		All Other	Split System and Single Package	13.8 EER 15.1 IEER	N/A	N/A		
	≥135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	14 EER 14.8 IEER	N/A	N/A		
		All Other	Split System and Single Package	13.8 EER 14.6 IEER	N/A	N/A		
	Air Conditioners, Evaporatively Cooled	<65,000 Btu/h	All	Split System and Single Package	14 EER	N/A		N/A
≥65,000 Btu/h and <135,000 Btu/h		Electric Resistance (or None)	Split System and Single Package	14 EER 15.3 IEER	N/A	N/A		AHRI 340/360
		All Other	Split System and Single Package	13.8 EER 15.1 IEER	N/A	N/A		
≥135,000 Btu/h		Electric Resistance (or None)	Split System and Single Package	13.5 EER 14.3 IEER	N/A	N/A		
		All Other	Split System and Single Package	13.3 EER 14.1 IEER	N/A	N/A		

SEER—Seasonal Energy Efficiency Ratio

EER—Energy Efficiency Ratio

IEER—Integrated Energy Efficiency Ratio

*The Advanced Tier should not be considered a level of performance that is currently being met by several manufacturers in all nominal sizes. Instead, the Advanced Tier is an aspirational level that acknowledges and provides recognition for manufacturers who have developed the most efficient systems available in the market today. The tier is intended to identify a top performing product line(s) or a major category within a given product line, and to encourage additional availability in the future. Such products may not yet be broadly available in the market or cost-effective in portions of the country or in some applications.

Draft Revisions

Unitary Heat Pump Specification

Draft revisions highlighted with bold text and yellow background.

Effective upon approval by the CEE Board of Directors

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	Test Procedure
Air Cooled (Cooling Mode)	<65,000 Btu/h	All	Split System	15 SEER 12.5 EER	16 SEER 13 EER	AHRI 210/240
			Single Package	15 SEER 12 EER	16 SEER 12 EER	
	≥65,000 and	Electric Resistance (or None)	Split System and Single Package	11.8 EER 13.6 IEER	N/A	AHRI 340/360

	<135,000 Btu/h	All Other	Split System and Single Package	11.6 EER 13.4 IEER	N/A	
	≥135,000 and <240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.9 EER 12.8 IEER	N/A	
		All Other	Split System and Single Package	10.7 EER 12.6 IEER	N/A	
	≥240,000 and <760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.3 EER 11.8 IEER	N/A	
		All Other	Split System and Single Package	10.1 EER 11.6 IEER	N/A	
Air Cooled, (Heating Mode)	<65,000 Btu/h	-	Split System	8.5 HSPF	9 HSPF	AHRI 210/240
		-	Single Package	8.2 HSPF	8.2 HSPF	
	≥65,000 and <135,000 Btu/h	-	47°F db/43°F wb Outdoor Air	3.4 COP	N/A	AHRI 340/360
		-	17°F db/15°F wb Outdoor Air	2.4 COP	N/A	
	≥135,000 Btu/h	-	47°F db/43°F wb Outdoor Air	3.3 COP	N/A	
		-	17°F db/15°F wb Outdoor Air	2.1 COP	N/A	
Water Source (Cooling Mode)	<135,000 Btu/h	All	86° Entering Water	14 EER	N/A	ISO-13256-1
Water Source (Heating Mode)	<135,000 Btu/h	-	68° Entering Water	4.6 COP	N/A	ISO-13256-1

SEER—Seasonal Energy Efficiency Ratio
EER—Energy Efficiency Ratio
HSPF— Heating Seasonal Performance Factor
wb—Wet Bulb

IEER—Integrated Energy Efficiency Ratio
COP—Coefficient of Performance
db—Dry Bulb