

# EISA and Philips Lighting

**Energy Independence and Security Act (EISA) mandate:** Effective Jan 1, 2009, metal halide lamp luminaires manufactured to operate with 150W to < 500W lamps must contain a **pulse start metal halide** ballast that is a minimum 88% efficient (magnetic or electronic) or an electronic (non pulse-start) ballast that is 90% efficient if ≤250W or ≥92% if >250W.

Whatever Metal Halide Pulse Start,  
choose **Ceramic\*** Metal Halide Pulse Start.

The best replacement for MH 175W is: **CDM 150/U/PS/4K ED23 1/2**

CDM 150W ED 23-1/2 vs. MH PS 175W	
Feature	Benefit
Better mean lumens: 9100 vs. 8775	~5% more light over life
25W lower wattage	\$10/lamp/year savings**
Twice the life 24,000 hrs vs. 10,000 hrs.	Lower maintenance costs
MasterColor Product	Lowest color variation
>50% reduction in Mercury	Sustainable installation

\* Ceramic refers to the discharge tube material as we have it now in all CDM lamps. This material makes it possible to have efficient lamps with excellent color properties and excellent maintained lumen values. CDM technology is a Philips invention













\*\* With 4000 hrs/year and a rate of \$0.10/kWh

## EISA Compliant Pulse Start lamp option overview

There is a Ceramic alternative for the majority of applications. Compared to Quartz lamps, Ceramic lamps have:

- Longer life
- Better maintained lumens
- Contain half the amount of mercury

EISA at the **greenest way!**

Probe Start			Compliant PS options				Benefits
Lamp	Approx Mean Lumens <sup>1</sup>	Rated Avg Life <sup>2</sup>	Lamp	Burn position	Approx Mean Lumens <sup>1</sup>	Rated Avg Life <sup>2</sup>	
MH175/U	8775	10000	<b>CDM/PS/150</b>	<b>U</b>	<b>9100</b>	<b>24000</b>	  
			MH/PS/175	BU	11200	15000	
			MH/PS/175	HOR	8960	11500	
MH250/U	13500	10000	<b>CDM/PS/250</b>	<b>V</b>	<b>18000</b>	<b>24000</b>	 
			MH/PS/250	BU	16625	15000	
			MH/PS/250	U	14000	12000	
MH400/U	24000	20000	<b>CDM/PS/320</b>	<b>V</b>	<b>23000</b>	<b>24000</b>	 
			<b>CDM/PS/400</b>	<b>V</b>	<b>28800</b>	<b>24000</b>	 
			MH/PS/320	U	21000	20000	
			MH/PS/400	BU	29820	20000	
			MH/PS/400	U	25760	20000	

Burning positions
U: Universal
V: Vertical base-up and base down
BU: Vertical base up only
Hor: Horizontal +/- 15 degrees only

<sup>1</sup> Approximate lumen output at 40% of lamps rated average life.

<sup>2</sup> Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hrs per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average.

