Energy Independence & Security Act of 2007 (EISA)

Metal Halide Legislation

September, 2008

COOPER Lighting

EISA Legislation

- **Purpose:** Federal legislation that shifts the United States to energy independence and higher efficiency of lighting products.
- **Lighting Products Affected:** All metal halide fixtures (indoor or outdoor) from 150 Watts to 500 Watts. Non-compliant products can no longer be manufactured after December 31, 2008.
- **Implementation Date:** January 1, 2009 (6 preempted states).
- **Inventory:** Remaining probe start inventory can be sold after January 1, 2009 (manufactured prior to January 1, 2009). Replacement lamps & ballasts for probe start are available and are not affected by legislation.

Efficiency Requirements

EISA Minimum Ballast Efficiency:

Ballast Type	Minimum Ballast Efficiency Rating	Fixture Wattage
Magnetic or Electronic Pulse Start	88%	150W – 500W
Magnetic Probe Start	94%	
Electronic (non-pulse start)	90% 92%	150W – 250W 251W – 500W

(E) Compliant Efficiency Calculation (Example):

Fixture Wattage	Minimum Efficiency	Input Watt Calculation
250 Watts Pulse Start	88%	250 / .88 = 284 (maximum fixture input watts)

Exemptions

Luminaire Exemptions:

Standards do NOT apply to fixtures that:

- **Use regulated lag ballasts**
- **Use electronic ballasts rated for 480 volts**
- **Fixtures that meet ALL of the following criteria (within a single fixture):**
  1. **Are only rated only for 150W lamps; (and)**
  2. **Rated for wet location use as defined by National Electrical Code 2002 Section 410.4(A); (and)**
  3. **Contain a ballast rated to operate at an ambient air temperature above 50° C as specified by UL 1029-2001**

Identification Mark

Federal Trade Commission (FTC) Label Identification:

- Circle E logo is required on product packaging, ballast contained in the fixture and all advertising/marketing materials* (point of purchase merchandising, catalogs, website content, etc.).

- Affected products (150w – 500w) manufactured on/after January 1, 2009 require the identification mark.

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***Refer to the Federal Trade Commission website for details**

Improved Technology

Benefits of Pulse Start Metal Halide:

- 25% to 50% improved lumen output (efficacy)
- Improved illumination levels over life (lumen maintenance)
- Up to 50% longer lamp life
- Half the warm up time (2 minutes)
- Faster restrike (3-4 minutes)
- Colder starting temps (-30° to -40°F/C)

Probe vs. Pulse Start Metal Halide Benefits

Features	Probe MH	Pulse MH
Color	White	Brighter White
Efficacy (Lumens per Watt)	60-85	90-110
Lumen Maintenance	65%	70-75%
Lamp Wattages	175-1000	35-1000
Lamp Life (kHrs)	6-16	6-30

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Probe vs. Pulse Wattage Comparison

Probe Start (Watts)	Lamp Size	Mean Lumens*	Pulse Start Watts	Lamp Size	Mean Lumens (Industry Avg.)*
150	Medium		150	Medium	8000
175	Mogul Medium	9300	175	Mogul	12500
			200	Mogul	13300
250	Mogul	17000	250	Mogul	17000
			320	Mogul	22000
			350	Mogul	29500
400	Mogul	23500	400	Mogul	32500

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***OEM Lamp Information**

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EISA Support

Contact your local Cooper Lighting Agent to receive:

- Preempted state legislation
- Cooper Lighting brand information
- Product specification details
- In-stock guides
- Energy audit information