



BRANDON[®]

I N D U S T R I E S

HIGH INTENSITY DISCHARGE LIGHTING

(HID) lamps (light bulbs) are arc type light sources originally developed for outdoor and industrial applications. Their relatively long life reduces maintenance costs and their high efficacy minimizes energy usage, thereby lowering the overall operating cost of an HID light source. HID lamps are best for applications where they are on for eight to ten hour intervals and are not switched on and off intermittently.

Rated Lamp Life

Lamp maintenance depends in large part on the rated lamp life (how long the lamp will last before it must be replaced). Lamp life is expressed in hours and is based on laboratory testing.

Typical ratings are as follows:

Incandescent - 750 - 1,000 hours

Metal Halide - 10,000 hours

High Pressure Sodium - 24,000 hours

Efficacy

The efficiency of a lamp depends on its efficacy. Efficacy relates to the amount of light produced (lumens) to the amount of electricity used (watts). The higher the lumens per watt (LPW), the higher the efficacy. In other words, it is better to get the amount of light you want by using less electricity.

Typical lamp efficacies are as follows:

Incandescent - 20 LPW

Metal Halide - 90 LPW

High Pressure Sodium - 120 LPW

Color Rendering

The ability to see colors properly is a key aspect of light quality. Light sources vary in their ability to accurately reflect true colors. The Color Rendering Index (CRI) is a scale of 0 to 100 and is used to compare the effect of a light source on the color appearance of its surroundings. The higher the CRI, the truer the appearance of colors under that light source. The lower the CRI, the more difficult it is to distinguish one color from another. A rating of 100 would be closest to natural light while a rating of zero would be like watching a black & white television.

Typical CRI ratings are as follows:

Incandescent - 100 CRI

Metal Halide - 65-70 CRI

High Pressure Sodium - 22 CRI

Auxiliary equipment such as ballasts, starters, capacitors, and pulse rated sockets are required for proper operation of HID lamps. Ballasts must match the specific type and wattage of the lamp and are available in a variety of voltages.

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Maximum Wattage for Globes

Model #	Incandescent	High Pressure Sodium	Metal Halide
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-26	400	250	* 250
-26A	250	150	* 175
-27	500	250	* 250
-27A	250	150	* 175
-29	500	250	* 250
-29A	250	150	* 175

