

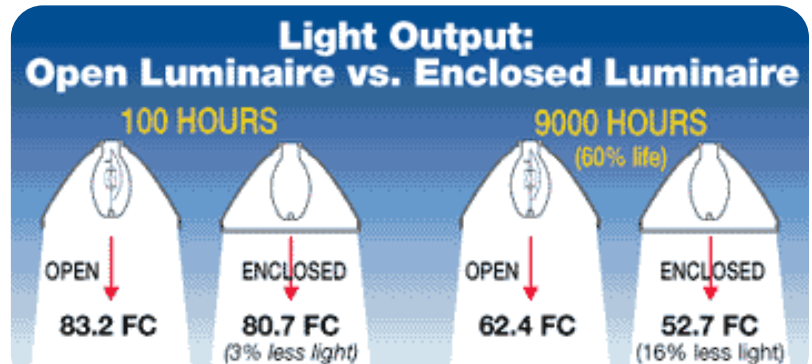
Venture's Technical Information

Light Outputs



Open or Enclosed

All ratings based on the use of a 9000 lumen rated 100 watt metal halide, vertically oriented lamp in a commercially available 8" aperture, black baffled downlight.



Light Output

The lumen output values at specific hours of lamp life can be measured and plotted. This lumen maintenance (or lumen depreciation) curve contains important data for lighting designers. Though initial lumen ratings at 100 hours are frequently the basis for comparing light sources, mean lumens, determined at 40% of rated lamp life, are the most important. Mean lumen ratings are based on the lamps operating at 10 hours per start (except where noted). Lamp lumens are measured on a reference ballast in the designed operating position at the rated lamp wattage.

Lumen maintenance curves represent the lamp manufacturer's estimate of the best lamp lumen output plotted over time. Typically, each group of lamps tested will display a range or scatter of lumen maintenance values at each interval measured. Therefore, individual lamps may vary from published mean lumen ratings.

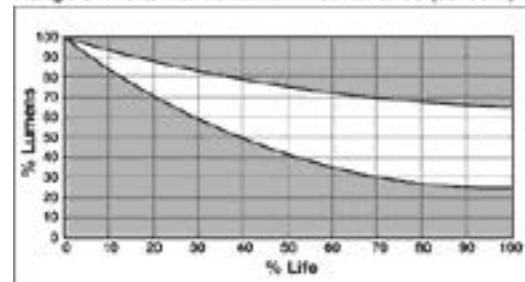


Many factors affect the performance of metal halide lamps over time. Most of these factors (see table) are controllable in the design of the lighting system. Incorporating as many of the optimized conditions as possible will deliver the best performance from any given metal halide lighting system. More light reducing conditions present in the design of the lighting system create a gap between published "optimized" ratings and actual lighting system performance.

For example, Venture's Uni-Form® pulse start lamp operated on a low current crest factor Single Voltage Hybrid or HX magnetic ballast, and other optimized conditions,

can be expected to deliver mean lumens approaching 80%. In contrast, a standard metal halide system operating under light-reducing conditions may deliver only 50% lumen maintenance. Venture Lighting publishes "optimized mean lumens."

Range of Metal Halide Lumen Maintenance (50-80%)



Even within the Uni-Form pulse start system, you can expect a range of lumen maintenance from 70% to 80%. (see chart below) Performance will vary depending on the number of light-reducing conditions present. By selecting a Uni-Form pulse start lamp, a low current crest factor Single Voltage Hybrid or HX magnetic ballast, and optimizing the system conditions, significant improvements in lighting system performance can be achieved.

Uni-Form® Pulse Start Lumen Maintenance

