

AREA LIGHTING GUIDE: REPLACING EXISTING 400W SYSTEMS

Venture Lighting International, a leading manufacturer of metal halide lighting systems, now offers the RIO (Retrofit Integrated Optics) System as the most eco-friendly and cost-effective lighting solution for area lighting applications. For parking lot lighting, the most common area lighting application, the standard configuration is twin horizontal 400W luminaires on alternating parking rows at a distance of 120 feet. Typically, pole heights range from 25 to 35 feet, and the distance between fixtures along the driving lanes will vary from 125 to 175 feet, depending on the pole height and desired light levels.

Benefits

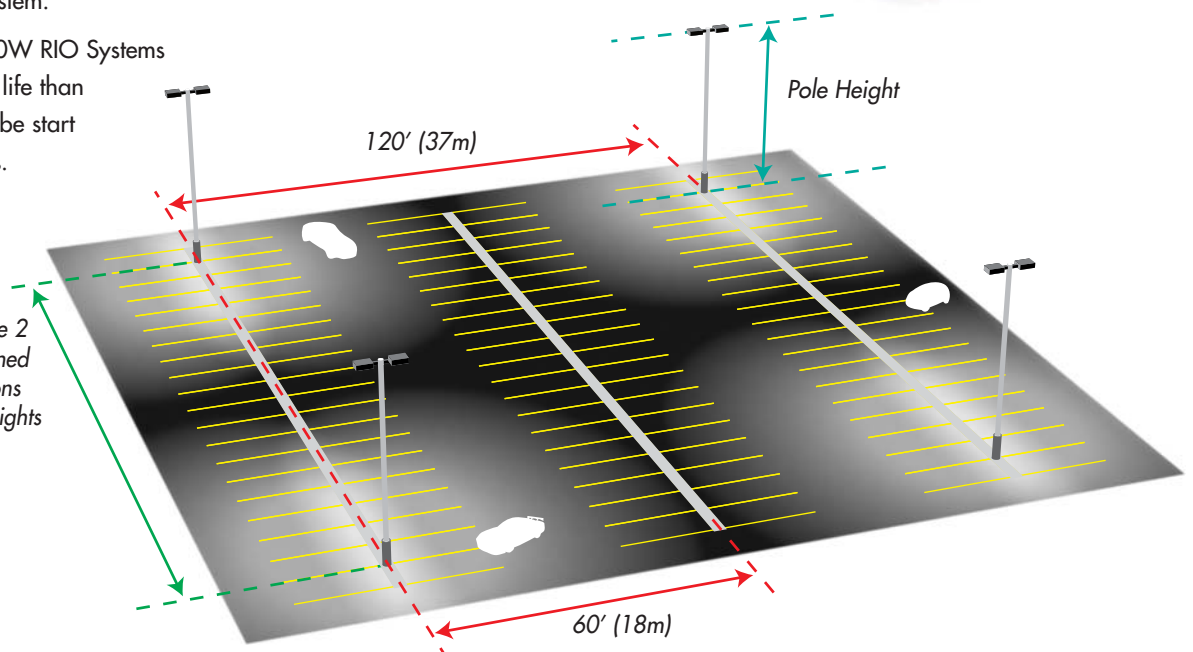
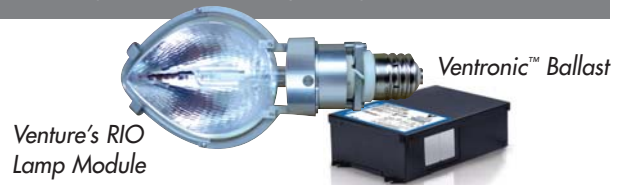
By providing a variety of wattage options to retrofit existing area lighting with Venture's RIO System, end users experience significant savings with increased light levels and decreased energy consumption.

- The 95% efficient optic provides quick, simple installation with no tools required.
- The 140W RIO produces twice the minimum maintained footcandles compared to a standard 400W probe start metal halide system.
- The 210W RIO produces 2 times to 3 times the minimum maintained footcandles compared to a standard 400W probe start metal halide system.
- Both 140W and 210W RIO Systems provide 50% longer life than standard 400W probe start metal halide systems.

Area Lighting Factor Comparisons

Shoebox Type III	400W MH	140W RIO	210W RIO
Lamp Lumens	36,000	16,500	24,150
System wattage	458	153	238
Average Footcandles	1.03	1.34	1.96
Min. Maintained Fc	0.32	0.71	1.04
UNIFORMITY			
Average/Minimum	3.2	1.9	1.9
Maximum/Minimum	9	4	4
Rated lamp life (hrs)	20,000	30,000	30,000
Annual Electrical Savings / Fixture	\$0	\$134	\$96

Notes: 35' pole height with poles spaced 160' apart
Electrical savings based on 4380 operating hours at \$0.10/kWh

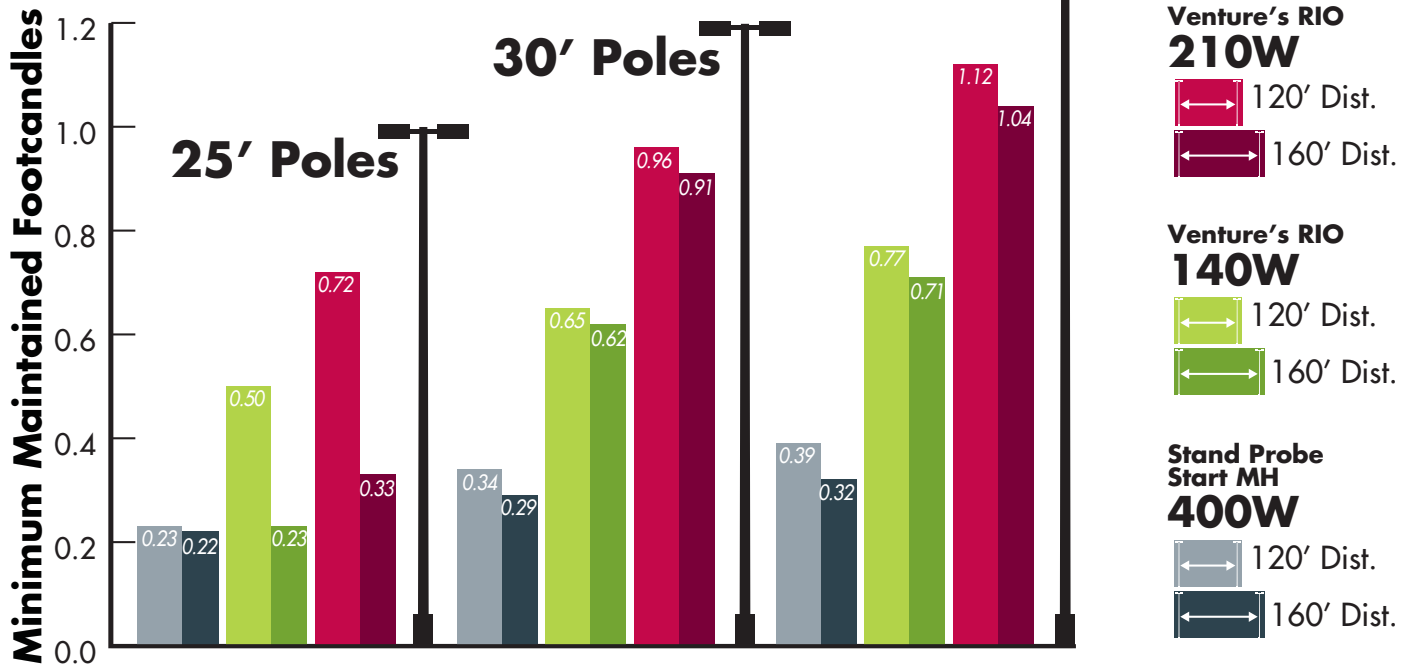


See the chart on page 2 for minimum maintained footcandle comparisons with different pole heights and spacings.



Quick Estimator Chart

Use the chart below to determine the light level increase available with the RIO System.



Note: 120' Fixed Pole Spacing in One Direction; RIO = 0.90 LLD; Probe Start MH: After 5-Years 0.45 LLD; 0.80 LLD; 0.36 LLF

Installation Example



Venture's RIO office parking lot installation in Glasgow, Scotland provided an annual energy savings of 134 system watts and \$94 per fixture.

**Based on 12 hrs/day @ \$0.16/kWh*

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