

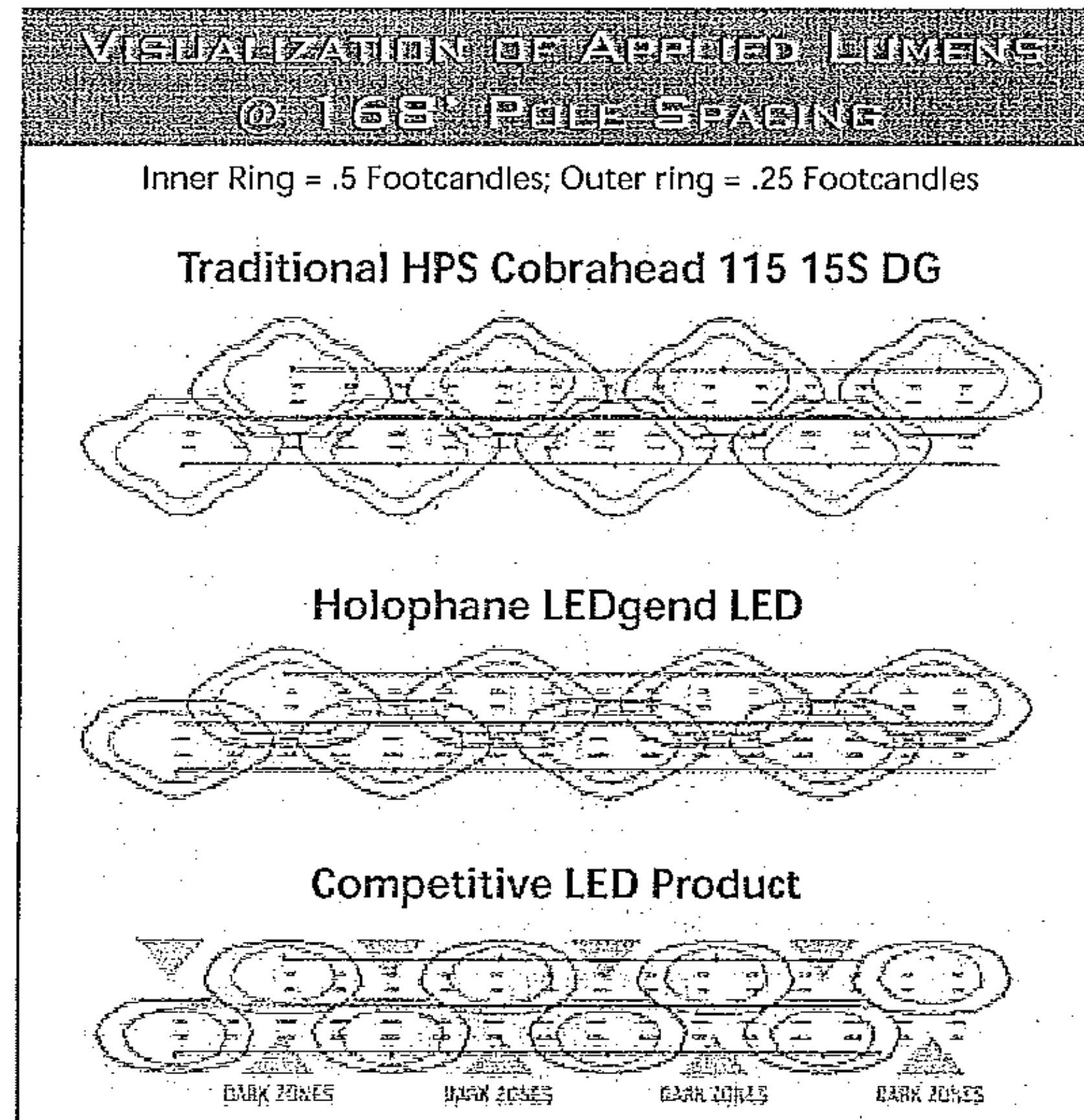
APPLICATION EFFICACY

A major benefit of the LEDgend luminaire is directing the distribution precisely on task. The benefit to the customer is that poles may be spaced further apart, improving visibility, minimizing light trespass, improving visual comfort, with less consumed wattage as compared to traditional sources and competitive LED products.

A major component to evaluating LED sourced luminaires is applied lumens. This is a metric that defines how well a luminaire distributes the lighting in the intended space while meeting the uniformity and veiling luminance (glare) requirements per industry standards for roadway lighting.

The example on the right illustrates applied lumens comparing an existing HPS cobrahead and competing LED roadway luminaire to the LEDgend luminaire.

Application: Three lanes each direction with thirty five foot poles mounted in staggered configuration with luminaire placed at edge of pavement. This simulation is a replacement of existing 150 HPS luminaires originally designed to meet 1 footcandle maintained with a 3.0:1 Avg/Min uniformity ratio.



SYSTEM COMPARISON:

Luminaire Performance	150 HPS Ovale Cobrahead	LEDgend	LED Competitor
	115-15S-DG	LEDG120L3	Type 3
Pole Spacing	168	168	168
Average Footcandles	1.00	1.00	0.75 ¹
Avg/Min	2.33:1	2.86:1	2.14:1
Max/Min	5.09:1	4.60:1	5.14:1
Power (Watts)	186	129	157
Energy Savings	Baseline	31%	16%

¹ To meet 1.0 average footcandle, 3.0:1 Avg/Min uniformity, poles for LED Competitor would need to be spaced 125 foot staggered grid.

LEDgend meets existing maintained light levels with 31% energy savings over existing HPS Cobraheads.

As compared to a typical LED competitor, the LEDgend provides 25% more light on the roadway while consuming 22% less energy