

## THE SEVENTH DAY INITIATIVE COSTS OF LIGHTING COMPARISON CHART

This comparison of similarly-bright lights that can be used in similar applications shows the savings generated by more efficient lighting.

Type of Lamp	Watts	Brightness (lumens) <sup>1</sup>	Color (Kelvins)	Avg. lifetime (hours)	Up-front cost	Operating cost <sup>2</sup> (1 year)	Total cost <sup>2</sup> (7 years)	Total cost <sup>2</sup> (15 years)
<b>STANDARD SCREW-IN LIGHTS ("A type") FOR PENDANTS, FLOOR OR TABLE LAMPS</b>								
Standard incandescent (to be discontinued)	60	800	2700 – 2800	1,000	\$0.75	\$17	\$129	\$276
CFL (compact fluorescent lamp)	13	800	2700 – 6500	8,000	\$3.75	\$4	\$36	\$72
A-Type LED	11	830	2700 – 6500	50,000	\$20	\$3	\$41	\$65
<b>4-FOOT AND RECESSED CEILING LIGHTS</b>								
T12 fluorescent (to be discontinued)	40	2550	2700 – 6500	20,000	\$2.50	\$11	\$80	\$170
T8 fluorescent (with \$15 conversion kit)	32	2500	2700 – 6500	27,500	\$3.00	\$9	\$65	\$138
T5 Fluorescent (with new fixture)	26	2900	2700 – 6500	30,000	\$6.00	\$7	\$56	\$119
T8 Fluorescent: 2x2 recessed (2-lamp)	64	5000	2700 – 6500	20,000	\$125	\$42	\$311	\$664
LED 2x2 recessed	43	4000	3500 – 5000	50,000	\$160	\$22	\$311	\$483
<b>FLOOD LIGHTS FOR RECESSED CANS OR TRACKS</b>								
Halogen PAR 30	40	570	2750	3,750	\$9.00	\$11	\$122	\$255
Fluorescent PAR 30	15	700	2700	8,000	\$8.50	\$4	\$54	\$104
LED PAR 20	9	750	2300 – 4100	37,500	\$21	\$2	\$38	\$58
<b>SPOT LIGHTS FOR TRACKS AND SPECIAL FIXTURES</b>								
Halogen Multifaceted Reflector (MR) 16	35	540	3000	3,000	\$4.00	\$17	\$140	\$300
LED Multifaceted Reflector (MR) 16	10	500	2700 – 4000	37,500	\$25	\$3	\$44	\$66
<b>EXTERIOR LIGHTS</b>								
High Pressure Sodium HID	250	27500	2100	27,000	\$13	\$69	\$494	\$1,057
Mercury Vapor HID	400	23000	3200 – 7000	20,000	\$20	\$110	\$790	\$1,690
Metal Halide HID	330	26400	4000	12,500	\$45	\$91	\$725	\$1,496
Metal Halide HID with fixture	232	19000	4000	15,000	\$630	\$63	\$1,073	\$2,209
LED with fixture	104	8900	4000 – 5000	100,000	\$566	\$28	\$759	\$979

<sup>1</sup> Lamps lose lumens (brightness) over time at different rates. See supporting materials for details.

<sup>2</sup> Based on 50 hrs/week use at current electricity rates, 11¢/kWh. Indiana's electricity rates are projected to rise by 30% over the next decade.

Also not included are rebates. As a result, this table understates the savings generated from more efficient lighting. (See LED Case Study.)

LED = Light-Emitting Diodes. No ballasts, free of mercury. Best designs last 50000 hrs. and have minimum 5-year warranties.

PAR = Parabolic Aluminum Reflector. Available in narrow to wide beam for spots, down lights and floods.

HID = High-Intensity Discharge. Relatively high efficacy and long life but long start-up times.