



# What you need to know about EISA Compliant Options

There are 3 types of light sources that comply with energy efficiency standards set by EISA: Halogen, Compact Fluorescent and LED. The following chart illustrates the specifications of each EISA compliant option and how they compare to a **standard halogen 90W PAR38**.

	Halogen	High Efficiency (HE) Halogen	Compact Fluorescent	LED
Reference Model:	H90PAR38FL	H70PAR38FL/HE	CF23PAR38WW	LED20PAR38WW/FL/D
<b>ENERGY USED</b>	<b>90W</b>	<b>70W</b> 22% less energy used	<b>23W</b> 74% less energy used	<b>20W</b> 78% less energy used
<b>BRIGHTNESS</b> (LUMENS)	<b>1270 lm</b>	<b>1300 lm</b> 2% higher lumen output	<b>1200 lm</b> 6% lower lumen output	<b>1200 lm</b> 6% lower lumen output
<b>LIGHT INTENSITY</b> (CANDELA)	<b>3200</b>	<b>3200</b> Same	<b>390</b> 88% less	<b>2575</b> 20% less
<b>LIFE</b> (3 hour/day)	<b>2500 hrs</b> (2.3 years)	<b>1500 hrs</b> (1.4 years) 40% shorter lamp life	<b>8000 hrs</b> (7.3 years) 3.2x longer lamp life	<b>25,000 hrs</b> (22.8 years) 10x longer lamp life
<b>RETAIL PRICE</b> (per bulb)	<b>\$6.00</b>	<b>\$8.00</b> 1.3x more	<b>\$11.00</b> 1.8x more	<b>\$65.00</b> 10.8x more
<b>OPERATING COST</b> (3 hours/day at \$0.11/kWh)	<b>\$10.84/yr</b>	<b>\$8.43/yr</b> Save \$2.41/yr	<b>\$2.77/yr</b> Save \$8.07/yr	<b>\$2.41/yr</b> Save \$8.43/yr
<b>TOTAL COST OF OPERATION &amp; LAMPS</b> (Over 20 years)	<b>\$270.80</b> Total Cost of Operation & Lamps (including replacements)	<b>\$288.60</b> Total Cost of Operation & Lamps (including replacements) Net Increase: \$17.80	<b>\$88.40</b> Total Cost of Operation & Lamps (including replacements) Net Savings: \$182.40	<b>\$113.20</b> Total Cost of Operation & Lamps (including replacements) Net Savings: \$157.60
<b>FULLY DIMMABLE</b>	<b>YES</b>	<b>YES</b> Same	<b>NO</b> Not Dimmable (Dimmable options available but dimming is limited)	<b>YES</b> Only dims down to 10-20%
<b>COLOR TEMPERATURE</b> (CCT)	<b>3000K</b>	<b>3000K</b> Same	<b>3000K</b> Same and additional options available	<b>3000K</b> Same and additional options available
<b>COLOR RENDERING</b> (CRI)	<b>100</b>	<b>100</b> Same	<b>82</b> 20% lower	<b>82</b> 20% lower