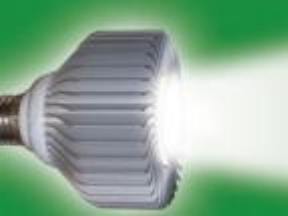







Comparison Chart
LED Lights vs. Incandescent Light Bulbs vs. CFLs




Energy Efficiency & Energy Costs

<p align="center">Energy Efficiency & Energy Costs</p>	 <p align="center">Light Emitting Diodes (LEDs)</p>	 <p align="center">Incandescent Light Bulbs</p>	 <p align="center">Compact Fluorescents (CFLs)</p>
<p align="center">Life Span (average)</p>	<p align="center">50,000 hours</p>	<p align="center">1,200 hours</p>	<p align="center">8,000 hours</p>
<p align="center">Watts of electricity used (equivalent to 60 watt bulb).</p> <p>LEDs use less power (watts) per unit of light generated (lumens). LEDs help reduce greenhouse gas emissions from power plants and lower electric bills</p>	<p align="center">6 - 8 watts</p>	<p align="center">60 watts</p>	<p align="center">13-15 watts</p>
<p align="center">Kilo-watts of Electricity used (30 Incandescent Bulbs per year equivalent)</p>	<p align="center">329 KWh/yr.</p>	<p align="center">3285 KWh/yr.</p>	<p align="center">767 KWh/yr.</p>
<p align="center">Annual Operating Cost (30 Incandescent Bulbs per year equivalent)</p>	<p align="center">Rs 4204.80/year</p>	<p align="center">Rs 42059.52/year</p>	<p align="center">Rs 9811.20/year</p>

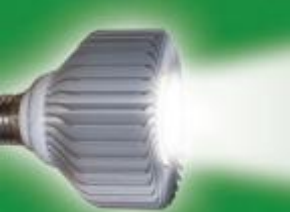


Environmental Impact

Environmental Impact	 Light Emitting Diodes (LEDs)	 Incandescent Light Bulbs	 Compact Fluorescents (CFLs)
Contains the TOXIC Mercury	<p style="text-align: center;">No</p>	<p style="text-align: center;">No</p>	<p style="text-align: center;">Yes - Mercury is very toxic to your health and the environment</p>
RoHS Compliant	<p style="text-align: center;">Yes</p>	<p style="text-align: center;">Yes</p>	<p style="text-align: center;">No - contains 1mg-5mg of Mercury and is a major risk to the environment</p>
Carbon Dioxide Emissions (30 bulbs per year) Lower energy consumption decreases: CO2 emissions, sulfur oxide, and high-level nuclear waste.	<p style="text-align: center;">451 pounds/year</p>	<p style="text-align: center;">4500 pounds/year</p>	<p style="text-align: center;">1051 pounds/year</p>

Important Facts

<p style="text-align: center;"><u>Important Facts</u></p>	 <p style="text-align: center;">Light Emitting Diodes (LEDs)</p>	 <p style="text-align: center;">Incandescent Light Bulbs</p>	 <p style="text-align: center;">Compact Fluorescents (CFLs)</p>
Sensitivity to low temperatures	None	Some	Yes - may not work under negative 10 degrees Fahrenheit or over 120 degrees Fahrenheit
Sensitive to humidity	No	Some	Yes
On/off Cycling Switching a CFL on/off quickly, in a closet for instance, may decrease the lifespan of the bulb.	No Effect	Some	Yes - can reduce lifespan drastically
Turns on instantly	Yes	Yes	No - takes time to warm up
Durability	Very Durable - LEDs can handle jarring and bumping	Not Very Durable - glass or filament can break easily	Not Very Durable - glass can break easily
Heat Emitted	3.4 btu's/hour	85 btu's/hour	30 btu's/hour
Failure Modes	Not typical	Some	Yes - may catch on fire, smoke, or emit an odor

Light Output

<u>Light Output</u>			
	Light Emitting Diodes (LEDs)	Incandescent Light Bulbs	Compact Fluorescents (CFLs)
Lumens	Watts	Watts	Watts
450	4-5	40	9-13
800	6-8	60	13-15
1,100	9-13	75	18-25
1,600	16-20	100	23-30
2,600	25-28	150	30-55