

Compact Fluorescent Lamps

Compact Fluorescent Lamps

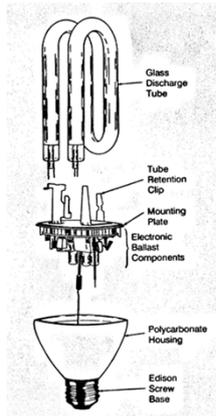
- Come in two varieties
 - Screw Base (Ballast built into the lamp)
 - Known as SCFL or “those corkscrew lamps”
 - Plug in CFL
 - Ballast is remotely mounted
 - Also called “PL Lamps”

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Compact Fluorescent Lamps

- Basically a linear tube bent into a more compact shape.
- Very efficient light source
- Long life if started infrequently (>10,000 hrs)
- Contain mercury
- Are slow to get to full brightness
- Require a ballast



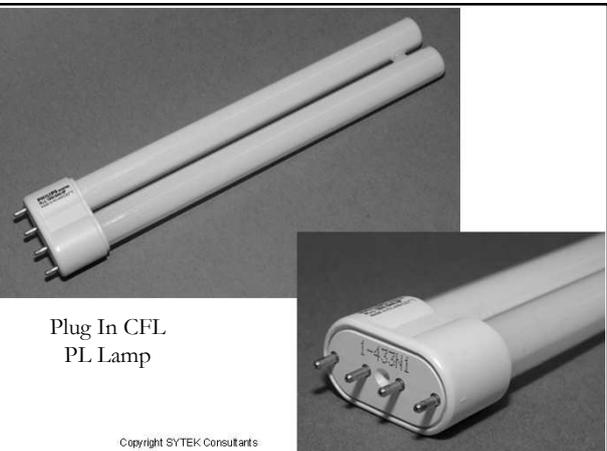
Screw Base CFL



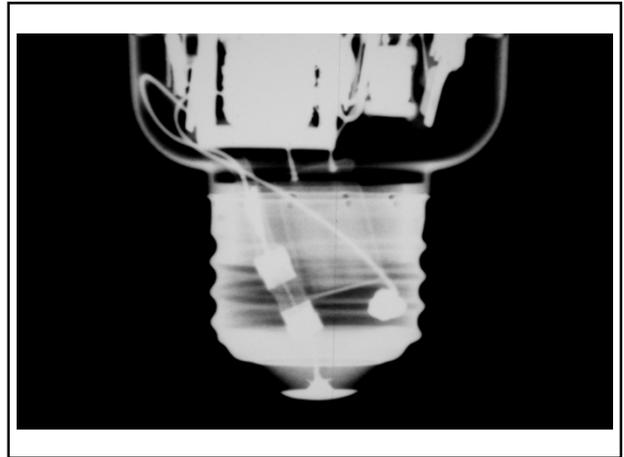
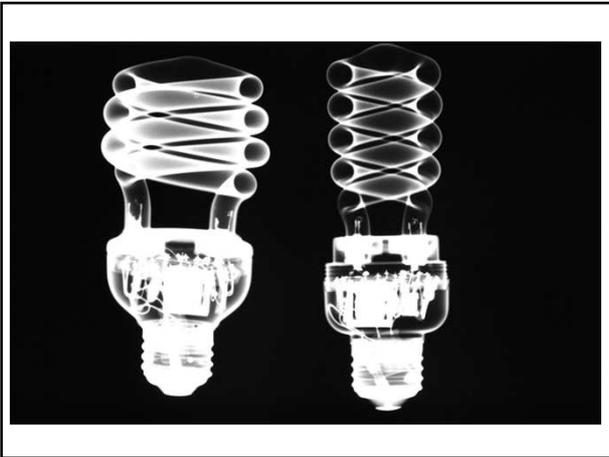
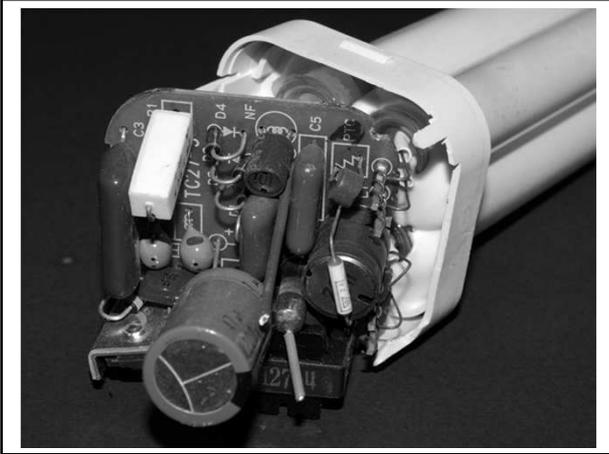
Plug in CFL



Plug In CFL PL Lamp



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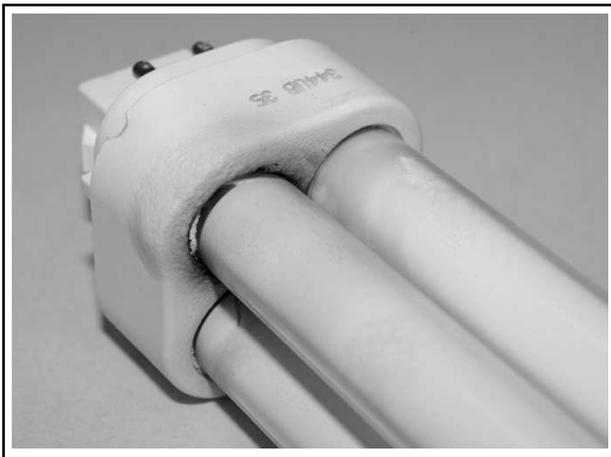


Lamp End of Life Overheating



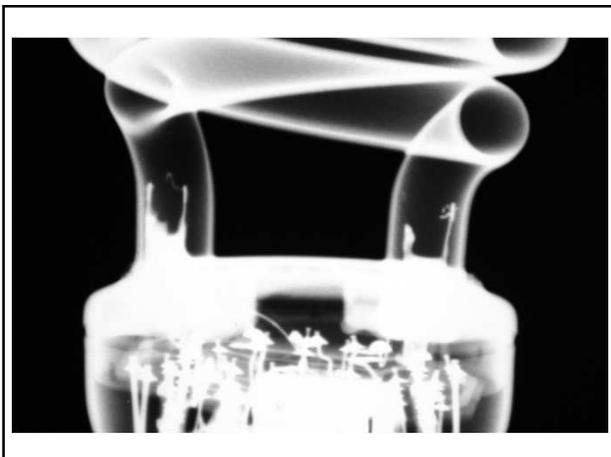


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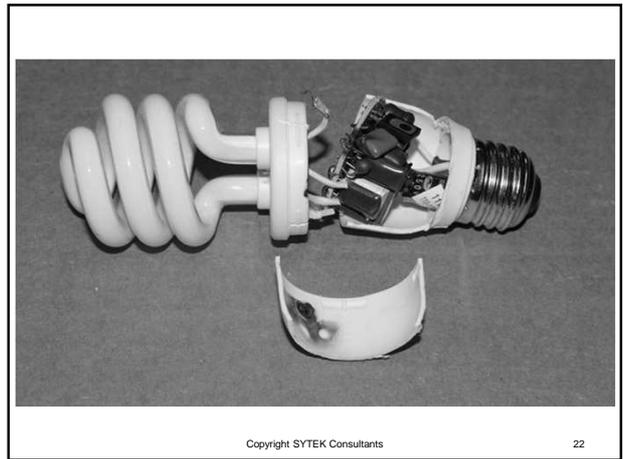
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External Fire Heat

- Most ballast bodies are highly flame retardant.
- Glass and ballast separate from screw base during fire exposure if ceiling mounted.
- Glass can melt or fracture from external fire exposure.

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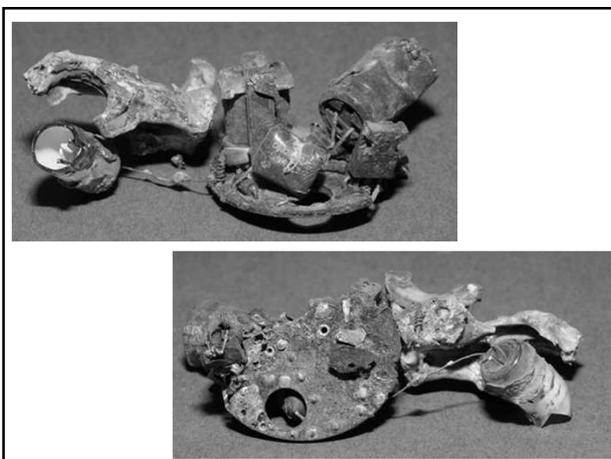
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External Fire Damage



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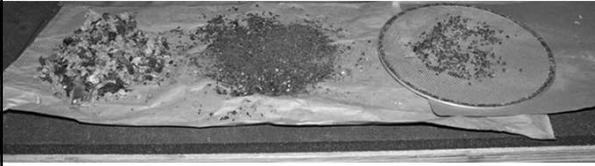


External Fire Damage



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Look for Small Parts



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Fire Tests



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Fire Tests



Solid State Lighting - LEDs

- LEDs will replace:
 - Incandescent Lamps
 - CFL Lamps
 - Linear Fluorescent Lamps
 - HID Lamps
 - Neon Lighting

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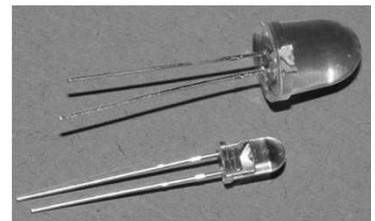
LED Lighting

- LEDs need proper:
 - Current
 - Voltage
 - Cooling
- LEDs are:
 - Efficient
 - Long lasting
 - Cost effective

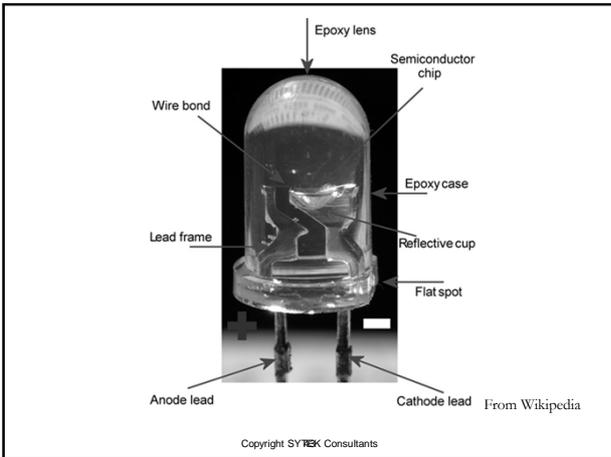
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LEDs



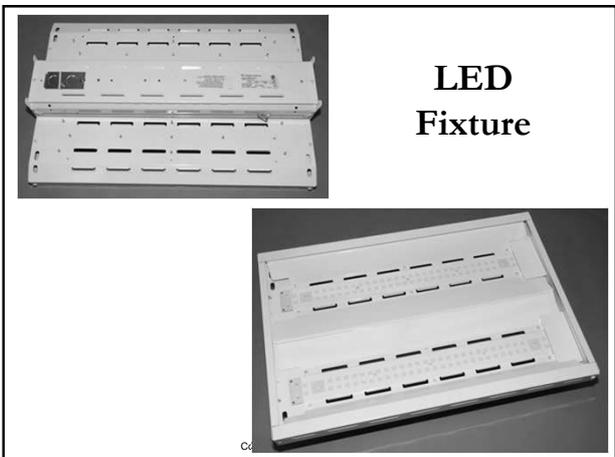
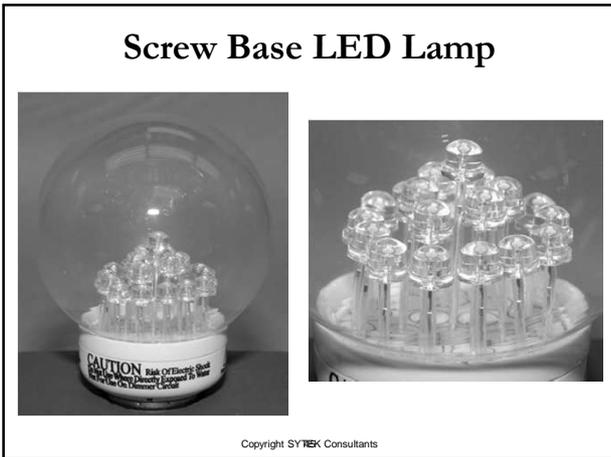
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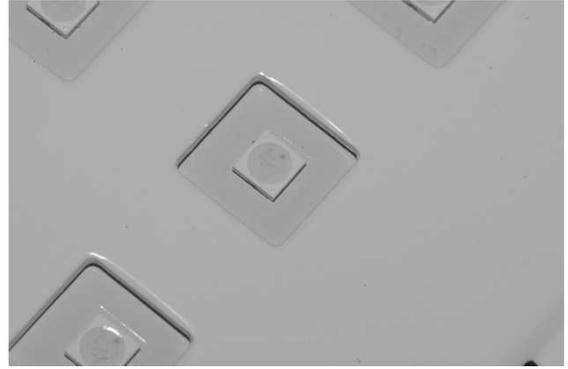
LED Lighting

Screw Base Lamps and Dedicated Fixtures

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LED Fixture



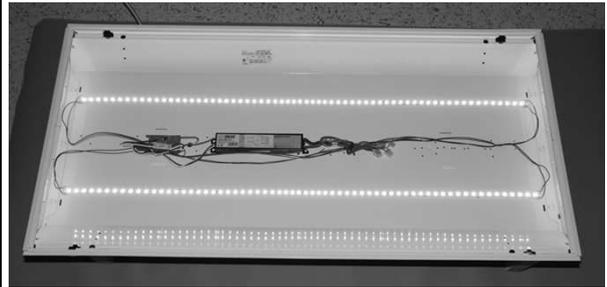
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LED Troffer



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LED Troffer



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LED Driver



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LED Strip



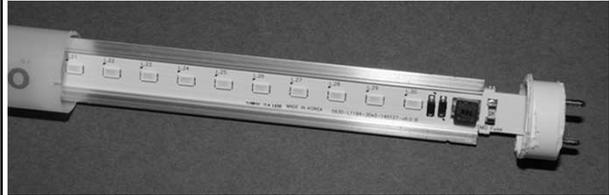
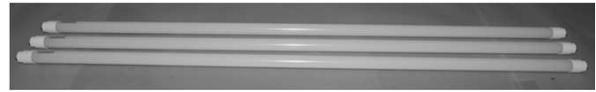
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LED Fixture



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T8 LED Substitutions



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Recalls Already



The screenshot shows a recall page for Cree LED T8 lamps. The title is "Cree Recalls LED T8 Lamps Due to Burn Hazard". The recall number is 24-028. The hazard is described as "Electrical arcing may cause the lamp to overheat and melt, posing a burn hazard". The remedy is to "Replace the recalled lamp with a non-recalled lamp". The consumer contact information is provided: "Call customer service toll-free at (888) 688-7883 from 9 a.m. to 5 p.m. CT Monday through Friday, email at [email address] or go to [website] for more information." The page also includes a "Recall Details" section and a "Toll-Free Consumer Hotline" number: 800-448-2727 (TTY: 301-595-2956).

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LED Fire History?
Yet to be Determined!

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