TLC Electrical
LED Light Comparison

ENERGY EFFICIENCY & ENERGY COSTS	Light Emitting Diodes (LED)	Incandescent Light Bulbs	Compact Fluorescents (CFL)
Life Span (average)	50,000 hours	1,200 hours	8,000 hours
Watts of Electricity Used (Equivalent to 60 watt bulb)	6-8 watts	60 watts	13-15 watts
Kilowatts of Electricity used	329 KWh/y	3285 KWh/y	767 KWh/y
Annual Operating Cost	$32.85/year	$328.59/year	$76.65/year
ENVIRONMENTAL IMPACT	**Light Emitting Diodes (LED)**	**Incandescent Light Bulbs**	**Compact Fluorescents (CFL)**
Contains toxic mercury	No	No	Yes
RoHS Compliant	Yes	Yes	No
Carbon Dioxide Emissions	451 pounds/year	4500 pounds/year	1051 pounds/year
LIGHT OUTPUT	**Light Emitting Diodes (LED)**	**Incandescent Light Bulbs**	**Compact Fluorescents (CFL)**
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
IMPORTANT FACTS	**Light Emitting Diodes (LED)**	**Incandescent Light Bulbs**	**Compact Fluorescents (CFL)**
Sensitivity to Low Temperatures	None	Some	Yes may not work below -10 degrees F or over 120 degrees F
Sensitivity to humidity	None	Some	Yes
Turns on instantly	Yes	Yes	No takes time to warm up
On/Off cycling effect	None	Some	Yes CFLs warm slowly and reach full brightness gradually; turning a CFL bulb on & off quickly can drastically reduce its life span
Fragility	Very Durable LEDs can handle jarring & bumping	Not Durable glass or filament breaks easily	Not Durable glass breaks 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 odor