

INFO DOCUMENT Y - LIGHTING

1 - LIGHT BULB COMPARISONS

### Equivalent Wattages and Light Output of Incandescent, CFL, and LED Bulbs

Light Output	LEDs	CFLs	Incandescents
Lumens	Watts	Watts	Watts
450	4-5	8-12	40
750-900	6-8	13-18	60
1100-1300	9-13	18-22	75-100
1600-1800	16-20	23-30	100
2600-2800	25-28	30-55	150

### Comparing the Features of Incandescent, CFL, and LED Light Bulbs

	LEDs	CFLs	Incandescents
Frequent On/Off Cycling	no effect	shortens lifespan	yes
Turns on instantly	yes	slight delay with some CFLs	yes
Durability	durable	fragile	fragile
Heat Emitted	low (3 btu's/hr)	medium (15 btu's/hr)	high (85 btu's/hr)
Sensitivity to high temperature	some	yes	no
Sensitivity to low temperature	no	yes	no
Sensitivity to humidity	no	yes	some
Hazardous Materials	none	5 mg mercury/bulb	none
Replacement frequency (over 25k hours)	1	2.5	20+