

DEFINITY™

Infinately Brilliant



INTRODUCING LED LIGHTING **WITHOUT COMPROMISE.**

DEFINITY™

Introducing LED lighting without compromise

Lighting Science Group is proud to unveil a new family of LED lamps that delivers a high level of value and an uncompromising measure of quality. Our Definity™ line of leading-edge LED replacement lamps balances performance and affordability – offering an excellent lumen per watt per dollar ratio. With Definity lamps, there are no sacrifices – brilliantly bright, environmentally friendly, energy efficient and longer life all in one affordable package.

DEFINITY. INFINITELY BRILLIANT.



University of Texas Law School –Austin, Texas.

DEFINITY™ PAR38



DEFINITY™ PAR30



DEFINITY™ PAR20



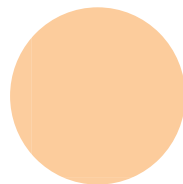
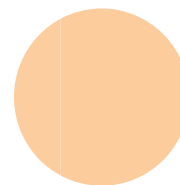
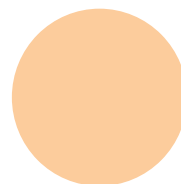
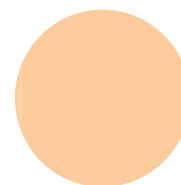
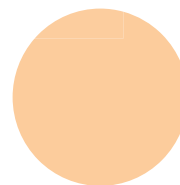
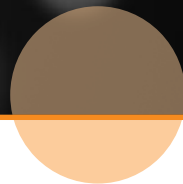
DEFINITY™ G25



DEFINITY™ A19



DEFINITY™ MR16





DEFINITY™ PAR30

DEFINITY™

BRILLIANT DESIGN, DEFINING QUALITY.

The Definity line of LED replacement lamps represents a paradigm shift in lighting technology. By taking a holistic systems approach, each part of the lamp is driven to maximize efficiency and performance. By looking at how each part works within the system, Lighting Science Group (LSG) is able to harmonize the function of the entire system – thereby delivering high performance and efficiency. The Definity line of LED replacement lamps sets a new performance standard of quality in the marketplace and rivals traditional sources in light and performance.

The performance of the new Definity line of Lighting Science LED replacement lamps is validated by an independent testing lab that is approved for LM-79 testing for ENERGY STAR by the United States Department of Energy CALiPER program. Definity lamps go through rigorous binning analysis that is evaluated only at steady state, not just spot measured light, ensuring the color consistency from lamp to lamp.

Definity delivers the complete package in LED lamps:

- High efficacy – 40-50 lumens per watt
- Various beam spreads – 15-40 degrees
- Dimmable – compatible with most dimmers on the market
- Instant on
- Warm, crisp, pleasing light color – CRI 85-87
- Range of color temperatures – 2700K - 5000K
- High lumen output – up to 75W equivalent
- Low wattage – 6-18W
- 5-year limited warranty
- Payback in less than a year – in most instances



DEFINITY™

ENVIRONMENTALLY FRIENDLY...DEFINING GREEN

Definity lamps are the definition of sustainable and responsible lighting. Saving energy saves money and the environment, by producing more light from less energy, Definity lamps reduce the amount of fossil fuel burned to generate power – which means fewer greenhouse gases produced and less mercury pollution created.

Replacing just one 60W halogen lamp in each U.S. household with a Lighting Science DEFINITY PAR30 15W LED lamp would reduce energy consumption by 9.2 billion KWH, which is equivalent to:

- › Eliminating CO₂ emissions from the electricity use of 801,659 homes for one year.
- › Greenhouse gas emissions avoided by recycling 2,224,131 tons of waste instead of sending it to landfills.
- › Carbon sequestered annually by 169,376,155 tree seedlings grown for 10 years.

Source: U.S. EPA Greenhouse Gas Equivalencies Calculator.

LED Lamps Reduce Mercury Pollution

Mercury is a health hazard to humans and animals

27 mg



CFLs release
27 mg of mercury
upon disposal

0 mg



DEFINITY
lamps contain
no mercury

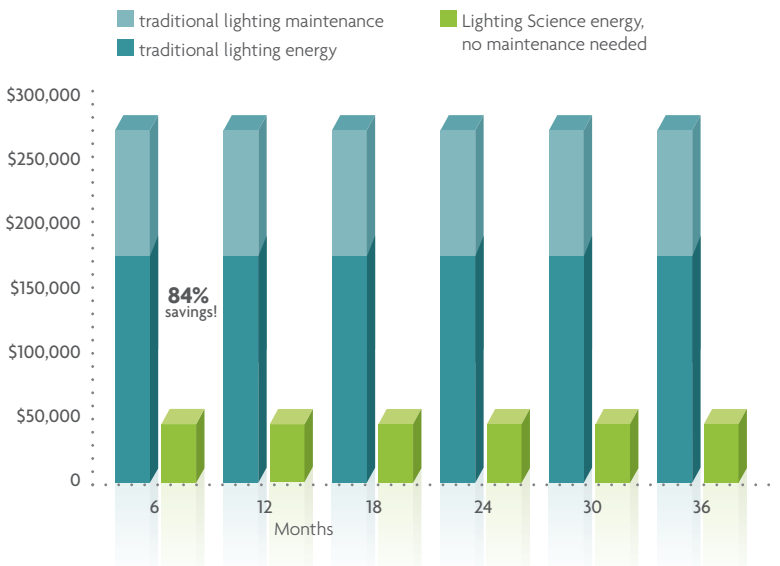
Over a DEFINITY lamp's 50,000-hour life, 8,760 hour/year. CFL contains 4 mg of mercury/lamp and has an 8,000 hour life. 1kWh generates .012 mg of mercury.

DEFINITY™

COMPELLING ECONOMICS....DEFINING ROI

Definity delivers high lumens per watt per dollar in LEDs, meaning that every lamp installed provides excellent lighting performance at the highest efficiency for the lowest cost. In most instances, Definity replacement lamps can pay for themselves in under one year, with savings captured immediately on lower energy consumption and maintenance costs. To put it simply, you can't afford not to replace traditional lighting with Definity lamps.

RETAIL APPLICATION REPLACING PAR30 HALOGEN WITH DEFINITY LED LAMPS



- Assumptions:
1. 24/7 operation
 2. Energy cost \$142/kWh
 3. Labor rate per hour \$26
 4. Lamp life 5.7 years
 5. Indoor with air conditioning
 6. Replacing a halogen 60W PAR30
 7. Based on 4000 lamps

LED EXPERTISE...DEFINING THE MARKET

Lighting Science Group leads the way in the development and manufacture of lighting solutions in various markets. Our people are not bound by traditional ways of thinking, but focus on how to use LED technologies to drive results and deliver lighting solutions. With 34 patents in LED lighting and another 40 pending, Lighting Science Group is at the forefront of setting the standard for emerging lighting technology. As a recognized leader, LSG plays an important role in building, educating and developing this new and exciting LED lighting market.

Welcome to the new definition of the future of light – Definity, uncompromising quality and value.



Lighting Science Group –Satellite Beach, Florida.

DEFINITY™ Lamp Range

						
	PAR38	PAR30	PAR20	A19	G25	MR16**
Comparable* Equivalence	75W halogen	60W halogen	40W halogen	40W incandescent	40W incandescent	20W halogen
Wattage	18	15	8	8	8	6
Voltage	120VAC	120VAC	120VAC	120VAC	120VAC	12VDC
Output (lumens)						
WW	850	725	350	435	450	300
W27	825	700	315	395	405	270
NW	890	769	370	460	475	318
CW	1092	943	508	570	585	424
Center Beam Candle Power (candelas)						
WW	15°/25°/40° 5000/3000/1500	15°/25°/40° 4500/3000/1300	25°/40° 1220/700	–	–	25°/40° 900/600
Efficacy (lm/w)						
WW	47	48	44	54	56	46
W27	46	47	39	49	51	46
NW	49	51	46	58	59	53
CW	61	63	85	71	73	71
Color Temp						
WW	3045K	3045K	3045K	3045K	3045K	3045K
W27	2740K	2740K	2740K	2740K	2740K	2740K
NW	4000K	4000K	4000K	4000K	4000K	4000K
CW	5000K	5000K	5000K	5000K	5000K	5000K
CRI	85	87	85	85	85	85
Rated Life (hours)	50,000	50,000	50,000	50,000	50,000	35,000
Beam Angle	15°, 25°, 40°	15°, 25°, 40°	25°, 40°	–	–	25°, 40°
Warranty	5 years	5 years	5 years	5 years	5 years	3 years
MOL	5.08", 129mm	4.57", 116mm	3.46", 88mm	4.39", 112mm	4.72", 120mm	1.97", 50mm
Rating	cUL, FCC, RoHs	cUL, FCC, RoHs	UL, FCC, RoHs	cUL, FCC, RoHs	cUL, FCC, RoHs	RoHs, ETL
Dimmable***	Yes	Yes	Yes	Yes	Yes	Yes

*Per Energy Star requirements.

**Please see transformer matrix on specification sheet.

***Please see specification sheets or visit www.lsgc.com for dimmer compatibility. WW specifications are nominal values, W27, NW and CW are preliminary.



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