

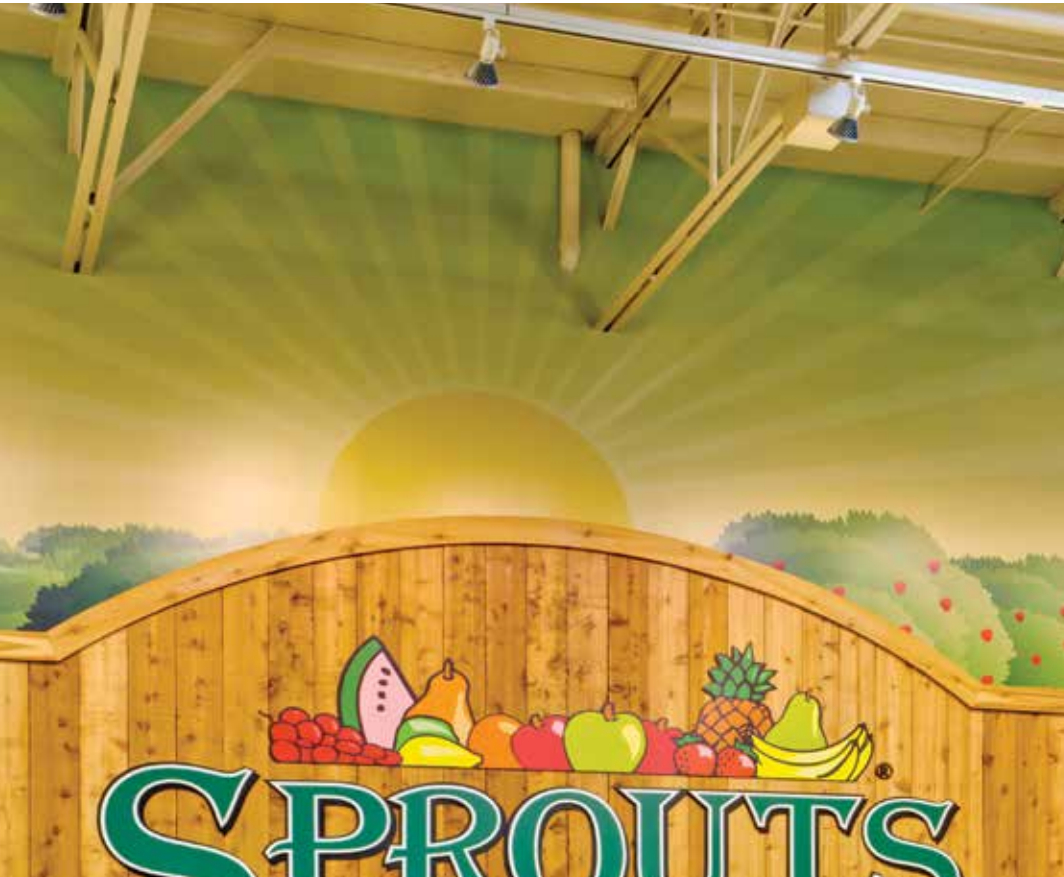
# DEFINITY™

Infinately Brilliant



High Performance  
LED Lighting

  
LightingScience®  
Welcome to the Light Ages™



## Bridging Science with the Architecture of Light

Perhaps no product in the industry better demonstrates “Lighting Science” than the DEFINITY™ LED lamp line. Boasting one of the broadest arrays of ENERGY STAR qualified LED lamps in the industry, the ability to optimize LED performance while never losing sight of providing superior lighting effects is the hallmark of DEFINITY™.

## DEFINITY™ Performance

The performance breakthroughs achieved with the DEFINITY™ Lamp line are a direct result of an LED system design approach encompassing efficient power supplies, unique thermal solutions, top-tier LED technology, leading edge optical control solutions and rigid binning techniques that result in visually pleasing light sources that seamlessly transition into retrofit applications.

### WHY CHOOSE DEFINITY™?

- ENERGY STAR qualified lamps available throughout line to meet utility rebate requirements
- High CBCP performance with a wide selection of beam patterns
- High efficacy – up to 71 lumens per watt
- Various beam spreads – 10 - 40 degrees
- Longer life than traditional lamps
- Dimmable (as noted) – down to as low as 5% and compatible with a wide array of dimmers
- Instant-on with no warm up, unlike CFL
- High color saturation with CRI's up to 85
- Extensive range of color temperatures – 2700K - 5000K
- Incandescent equivalents up to 120W
- High efficiency with input power of 6 - 24W
- 3 - 5 year limited warranty
- RoHS compliant-contains no mercury or lead
- In most instances, payback in less than a year



# The DEFINITY™ Advantage

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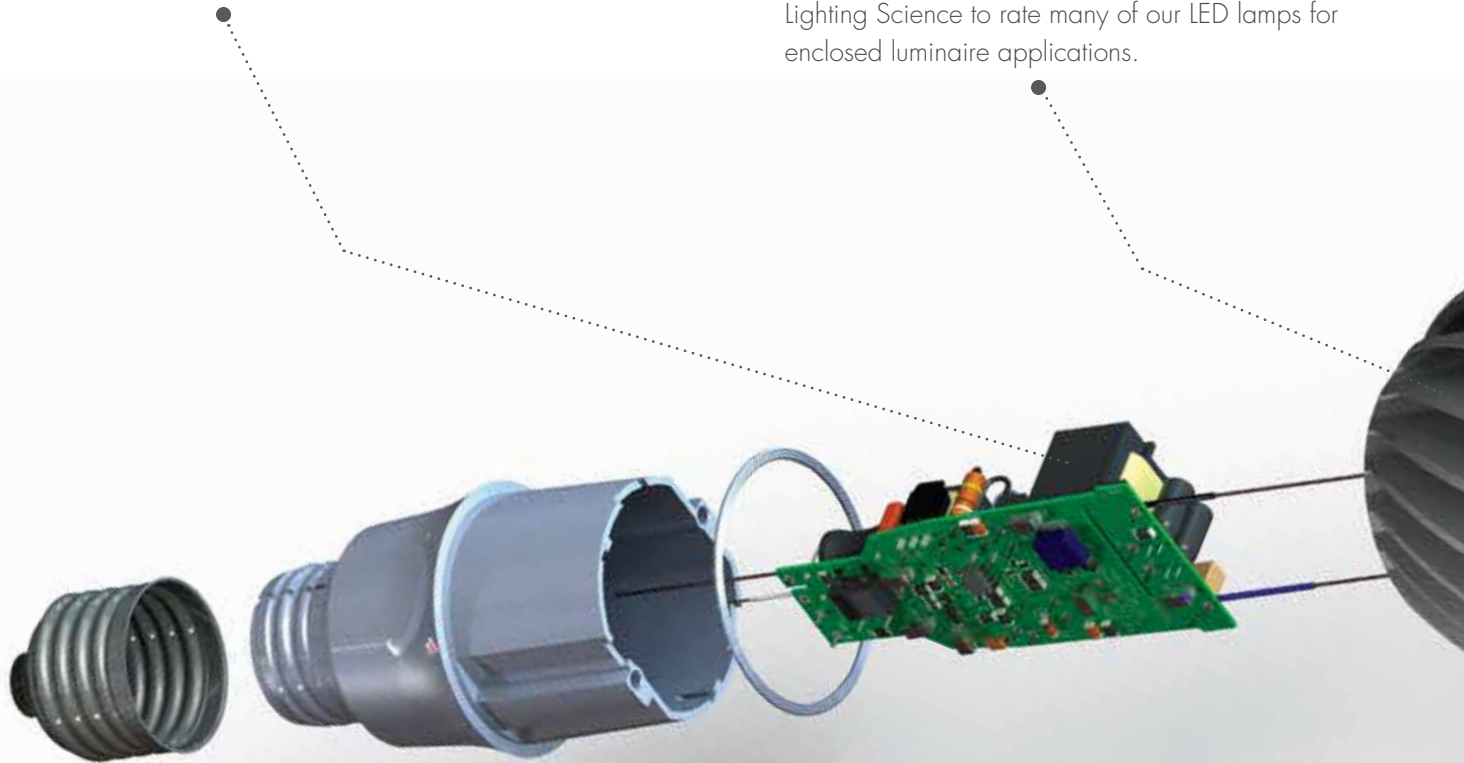
## Full Line Dimmability<sup>1</sup>

World class driver designs provide real time monitoring and adaptability to individual dimmers to ensure high efficiency, flicker free performance down to 5% of rated light output.



## Optimized Thermal Management

The DEFINITY™ high efficiency spiral heatsink design increases surface area and coupled with unique alloys maximizes LED life and improves efficacy. Unlike many LED lamps on the market today, this solution allows Lighting Science to rate many of our LED lamps for enclosed luminaire applications.



## Environmentally Friendly

Unlike CFL's, DEFINITY™ LED lamps contain no mercury or lead and are RoHS compliant. A true green solution from a true green company.



## Superior Lighting Quality

Featuring CRI's up to 85 in 2700-5000 CCT's, DEFINITY™ lamps provide high color saturation to beautifully highlight and render the environments they illuminate. Unlike other sources, DEFINITY™ lamps won't cause discoloration or fading of the objects they illuminate.



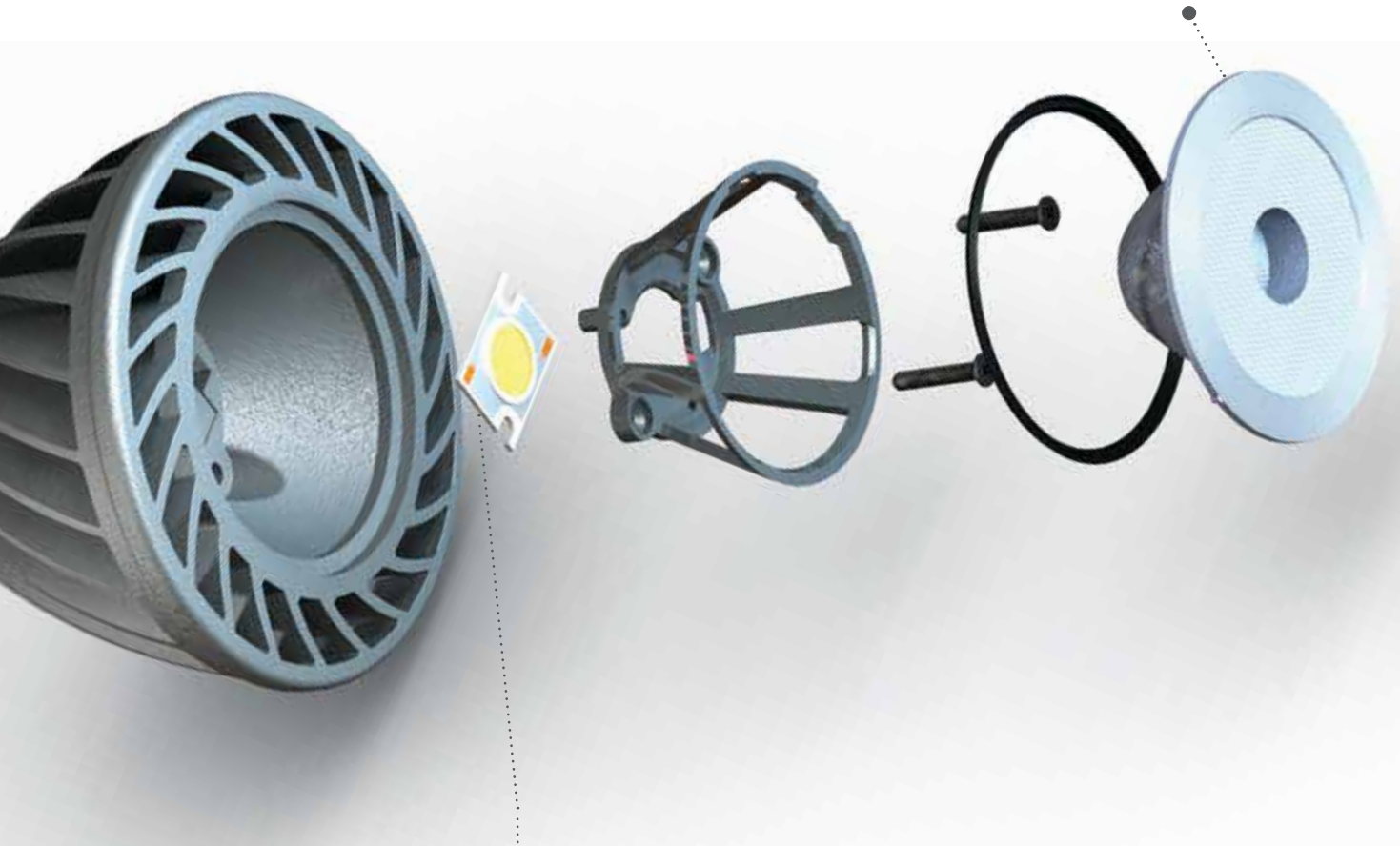
## Sized to Fit

All DEFINITY™ lamps have been sized within ANSI form factors to seamlessly replace their counterparts in retrofit applications. Simply remove, install, save and enjoy.



## Smooth Beam Optical Control

The DEFINITY™ smooth, uniform light distribution originates from LED mixing and design strategies. When combined with high performance optics, they replicate visible incandescent point sources without the pixilation look of many inferior LED lamp designs.



## Color Consistency

DEFINITY™ lamps leverage design and LED binning strategies that result in color consistency that is approximately four times better than allowable ANSI standards to assure high quality color performance without variability in application.

## NAFTA Compliant

DEFINITY™ lamps are fully NAFTA compliant making them eligible for most ARRA projects. Consult specific project requirements as eligibility requirements may vary.



This product qualifies as an originating good under the terms of NAFTA.



## ENERGY STAR Compliance

Most utility rebate programs only allow ENERGY STAR qualified lamps to participate in their programs. Lighting Science Group's leadership in lamp design has quickly allowed us to develop one of the industry's largest collection of ENERGY STAR qualified lamps.

<sup>1</sup>Consult page 29 for a list of tested compatible dimmers.

PAR38 / PAR38 HI-OUTPUT



# DEFINITY™ PAR38 & PAR38 Hi-Output

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- Optional 40°, 25° and 15° beam spreads.
- Suitable for wet locations.
- 18/24 watts – 80% more efficient than comparable 90/120 watt Halogen lamps.
- Maintenance free operation, lasts up to 16 times longer than conventional lighting.
- Centralized optical package provides high quality point source beam versus pixilated designs.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen	PAR38
Maintenance Cost <b>\$15</b>	Annual Savings <sup>2</sup> <b>\$39</b>
Electricity Cost <b>\$30</b>	Electricity Cost <b>\$6</b>

**PAR38 Lifetime Savings: \$677**

Standard Halogen

**Wattage**  
90W

**Lifetime**  
3,000 hrs



Up to **80%** energy savings



PAR38

**Wattage**  
18W

**Lifetime**  
Up to 50,000 hrs

## PAR38

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 38 NW FL 120	18W	40	890	85	1766
DFN 38 WW FL 120	18W	40	850	85	1658
DFN 38 W27 FL 120	18W	40	840	85	1573
DFN 38 CW FL 120	18W	40	1290	67	2030
DFN 38 NW NFL 120	18W	25	950	85	4099
DFN 38 WW NFL 120	18W	25	850	85	3574
DFN 38 W27 NFL 120	18W	25	840	85	3493
DFN 38 CW NFL 120	18W	25	1290	67	4711
DFN 38 NW SP 120	18W	15	950	85	6977
DFN 38 WW SP 120	18W	15	850	85	6194
DFN 38 W27 SP 120	18W	15	840	85	6054
DFN 38 CW SP 120	18W	15	1290	67	8019

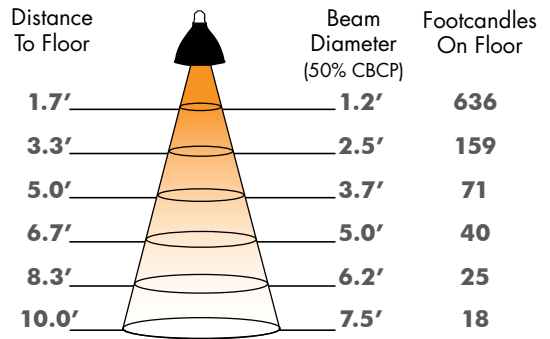
## PAR38 Hi-Output

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 38 NW V2 FL 120	24W	40	1375	85	2500
DFN 38 WW V2 FL 120	24W	40	1300	85	2400
DFN 38 W27 V2 FL 120	24W	40	1250	85	2250
DFN 38 CW V2 FL 120	24W	40	1460	85	2700
DFN 38 NW V2 NFL 120	24W	25	1375	85	5500
DFN 38 WW V2 NFL 120	24W	25	1300	85	5200
DFN 38 W27 V2 NFL 120	24W	25	1250	85	5000
DFN 38 CW V2 NFL 120	24W	25	1460	85	5900
DFN 38 NW V2 SP 120	24W	15	1375	85	9400
DFN 38 WW V2 SP 120	24W	15	1300	85	8900
DFN 38 W27 V2 SP 120	24W	15	1250	85	8500
DFN 38 CW V2 SP 120	24W	15	1460	85	10000

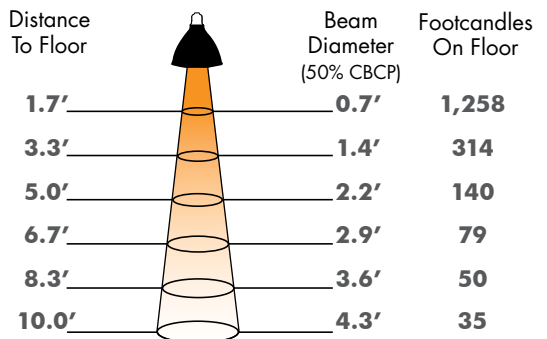
FL: Flood NFL: Narrow Flood SP: Spot NW: Neutral White WW: Warm White W27: Warm White 2700K  
CW: Cool White CBCP: Center Beam Candle Power

## 0° AIMING FOOTCANDLES

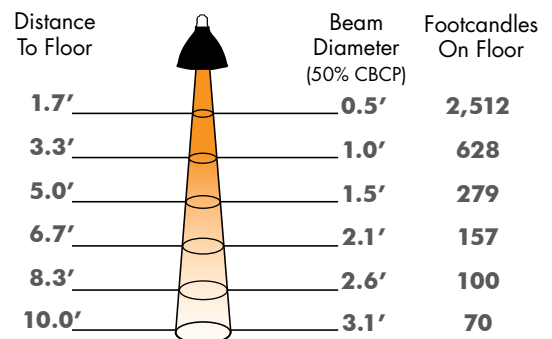
### DFN 38 NW FL 120



### DFN 38 W27 NFL 120



### DFN 38 NW SP 120



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).

<sup>1</sup> See dimmer compatibility chart page 29.

<sup>2</sup> Savings based on 8hrs./day annual hours of operation, \$0.114 average cost per KWH: \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.





<sup>3</sup> 230V utilizes E27 base and not available in HO configurations.

<sup>4</sup> Not available or rated for 230V

 Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 38 WW FL 120 \ \ DFN 38 WW V2 FL 120

Family	Product	Color (CCT)	Light Output	Distribution	Voltage	Base
DFN	Definity	38 PAR38	W27 Warm White 2700K (leave blank for standard)	FL Flood	120 120 Volt	(leave blank for standard E26)
			WV Warm White 3000K V2 High Output	NFL Narrow Flood	230 230 Volt <sup>3</sup>	GU24 <sup>4</sup> GU24
			NW Neutral White 4000K	SP Spot		
			CW Cool White 5000K			
NORTH AMERICAN CERTIFICATIONS		ENVIRONMENT		PAR38 Diameter & MOL		
   				E26 MOL: 5.03in, 128.34mm GU24 MOL: 5.38in, 136.65mm		
				E26 Diameter: 4.72in, 120mm GU24 Diameter: 4.72in, 120mm		

PAR30SN

SHORT NECK



# DEFINITY™ PAR30 Short Neck

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- Optional 40°, 25° and 10° beam spreads.
- Suitable for damp locations.
- 13 watts – 80% more efficient than comparable 65 watt Halogen lamp.
- Maintenance free operation, lasts up to 16 times longer than conventional lighting.
- 50,000 hour rated design life.
- ANSI compliant form factor.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen

PAR30 Short Neck

Maintenance Cost

**\$16**

Electricity Cost

**\$22**

Annual Savings<sup>2</sup>

**\$31**

Electricity Cost

**\$5**

**PAR30SN Lifetime Savings: \$563**

Standard  
Halogen

**Wattage**  
65W

**Lifetime**  
3,000 hrs



Up to **80%** energy savings



PAR30  
Short Neck

**Wattage**  
13W

**Lifetime**  
Up to 50,000 hrs



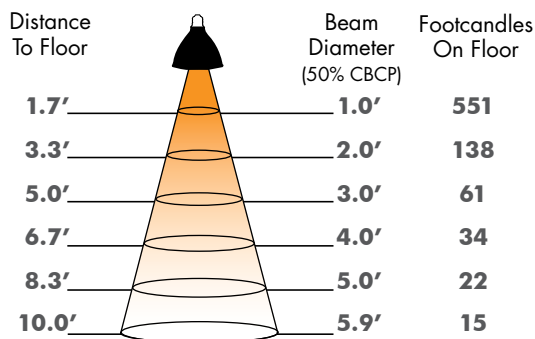
## PAR30 Short Neck

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 30SN NW FL 120	13W	40	775	85	1365
DFN 30SN WW FL 120	13W	40	750	85	1321
DFN 30SN W27 FL 120	13W	40	725	85	1277
DFN 30SN CW FL 120	13W	40	800	85	1410
DFN 30SN NW NFL 120	13W	25	775	85	3222
DFN 30SN WW NFL 120	13W	25	750	85	3118
DFN 30SN W27 NFL 120	13W	25	725	85	3014
DFN 30SN CW NFL 120	13W	25	800	85	3326
DFN 30SN NW NSP 120	13W	10	775	85	4754
DFN 30SN WW NSP 120	13W	10	750	85	4601
DFN 30SN W27 NSP 120	13W	10	725	85	4448
DFN 30SN CW NSP 120	13W	10	800	85	4908

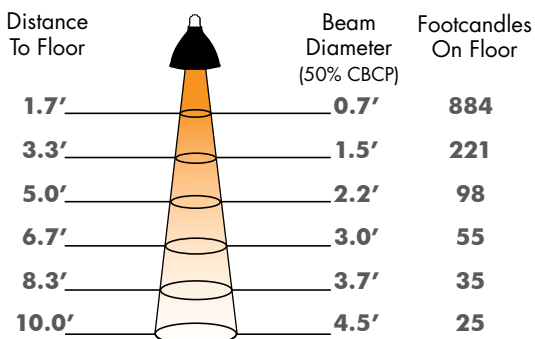
FL: Flood NFL: Narrow Flood NSP: Narrow Spot NW: Neutral White WW: Warm White  
W27: Warm White 2700K CW: Cool White CBCP: Center Beam Candle Power

## 0° AIMING FOOTCANDLES

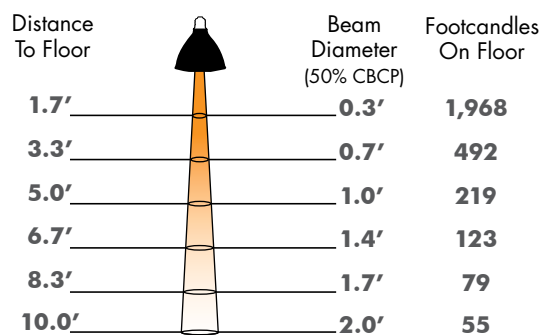
### DFN 30SN WW FL 120



### DFN 30SN WW NFL 120



### DFN 30SN WW NSP 120



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).





<sup>1</sup> See dimmer compatibility chart page 29.

<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

 Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 30SN WW FL 120

Family	Product	Color (CCT)	Distribution	Voltage
DFN Definity	30SN PAR30 Short Neck	W27 Warm White 2700K	FL Flood	120 120 Volt
		WW Warm White 3000K	NFL Narrow Flood	
		NW Neutral White 4000K	NSP Narrow Spot	
		CW Cool White 5000K		
NORTH AMERICAN CERTIFICATIONS		ENVIRONMENT		PAR30 Short Neck Diameter & MOL
  				E26 MOL: 3.51in, 89.26mm
				E26 Diameter: 3.74in, 94.87mm

PAR30 / PAR30 HI-OUTPUT



# DEFINITY™ PAR30 & PAR30 Hi-Output

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- Optional 40°, 25° and 15° beam spreads.
- Suitable for wet locations.
- 15/18 watts – 80% more efficient than comparable 75/90 watt Halogen lamp.
- Maintenance free operation, lasts up to 16 times longer than conventional lighting.
- 50,000 hour rated design life.
- Superior thermal management allows for usage in recessed luminaires.
- Centralized optical package provides high quality point source beam versus pixilated designs.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen	PAR30
Maintenance Cost <b>\$23</b>	Annual Savings <sup>2</sup> <b>\$41</b>
Electricity Cost <b>\$25</b>	Electricity Cost <b>\$5</b>

**PAR30 Lifetime Savings: \$742**

Standard Halogen

**Wattage**  
75W

**Lifetime**  
3,000 hrs



Up to **80%** energy savings



PAR30

**Wattage**  
15W

**Lifetime**  
Up to  
50,000 hrs

## PAR30

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 30 NW FL 120	15W	40	770	85	1476
DFN 30 WW FL 120	15W	40	720	85	1398
DFN 30 W27 FL 120	15W	40	700	85	1297
DFN 30 CW FL 120	15W	40	943	67	1950
DFN 30 NW NFL 120	15W	25	800	85	3216
DFN 30 WW NFL 120	15W	25	725	85	3288
DFN 30 W27 NFL 120	15W	25	700	85	2821
DFN 30 CW NFL 120	15W	25	943	67	4000
DFN 30 NW SP 120	15W	15	800	85	6114
DFN 30 WW SP 120	15W	15	725	85	4101
DFN 30 W27 SP 120	15W	15	710	85	5203
DFN 30 CW SP 120	15W	15	943	67	7600

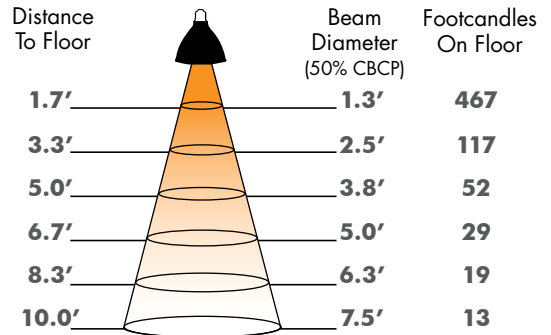
## PAR30 Hi-Output

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 30 NW V2 FL 120	18W	40	1000	85	1800
DFN 30 WW V2 FL 120	18W	40	950	85	1700
DFN 30 W27 V2 FL 120	18W	40	920	85	1600
DFN 30 CW V2 FL 120	18W	40	1060	85	1950
DFN 30 NW V2 NFL 120	18W	25	1000	85	3700
DFN30 WW V2 NFL 120	18W	25	950	85	3500
DFN 30 W27 V2 NFL 120	18W	25	920	85	3450
DFN 30 CW V2 NFL 120	18W	25	1060	85	4000
DFN 30 NW V2 SP 120	18W	15	1000	85	7100
DFN 30 WW V2 SP 120	18W	15	950	85	6800
DFN 30 W27 V2 SP 120	18W	15	920	85	6600
DFN 30 CW V2 SP 120	18W	15	1060	85	7600

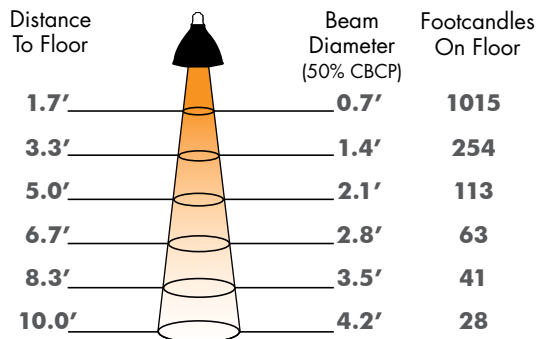
FL: Flood NFL: Narrow Flood SP: Spot NW: Neutral White WW: Warm White  
W27: Warm White 2700K CW: Cool White CBCP: Center Beam Candle Power

## 0° AIMING FOOTCANDLES

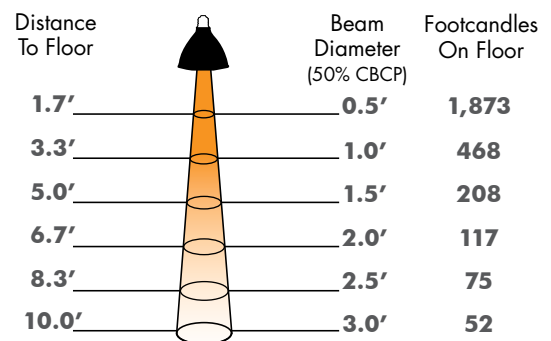
### DFN 30 W27 FL 120



### DFN 30 W27 NFL 120



### DFN 30 W27 SP 120



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<sup>1</sup> See dimmer compatibility chart page 29.

<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per

KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

<sup>3</sup> 230V utilizes E27 base and not available in HO configurations.

<sup>4</sup> Not available or rated for 230V.

Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 30 WW FL 120

Family	Product	Color (CCT)	Light Output	Distribution	Voltage	Base	
DFN	Definity	30 PAR30	W27 Warm White 2700K	(leave blank for standard)	FL Flood	120 120 Volt	(leave blank for standard E26)
			WW Warm White 3000K	V2 High Output	NFL Narrow Flood	230 230 Volt <sup>3</sup>	GU24 <sup>4</sup> GU24
			NW Neutral White 4000K		SP Spot		
			CW Cool White 5000K				
NORTH AMERICAN CERTIFICATIONS	ENVIRONMENT	PAR30 & PAR30 Hi-Output Diameter & MOL					
		E26 MOL: 4.56in, 115.84mm		GU24 MOL: 4.87in, 123.69mm			
		E26 Diameter: 3.779in, 96mm		GU24 Diameter: 3.78in, 96.01mm			



PAR20 / PAR20 HI-OUTPUT



# DEFINITY™ PAR20 & PAR20 Hi-Output

## FEATURES

- Dimmable to 5% of light on most dimmers<sup>1</sup>
- Optional 40° and 25° beam spreads.
- 8 watts – 84% more efficient than comparable 50 watt Halogen lamps.
- Maintenance free operation, lasts up to 16 times longer than conventional lighting.
- 50,000 hour rated design life.
- Centralized optical package provides high quality point source beam versus pixilated designs.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen	PAR20
Maintenance Cost <b>\$15</b>	Annual Savings <sup>2</sup> <b>\$27</b>
Electricity Cost <b>\$17</b>	Electricity Cost <b>\$3</b>

**PAR20 Lifetime Savings: \$489**

Standard Halogen

**Wattage**  
50W

**Lifetime**  
3,000 hrs



Up to **84%** energy savings

PAR20

**Wattage**  
8W

**Lifetime**  
Up to 50,000 hrs



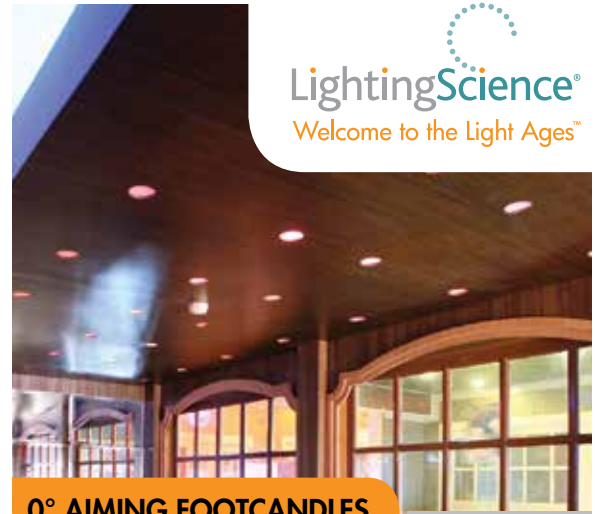
## PAR20 ★

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 20 NW FL 120	8W	40	365	85	714
DFN 20 WW FL 120	8W	40	350	85	650
DFN 20 W27 FL 120	8W	40	310	85	570
DFN 20 CW FL 120	8W	40	420	67	1036
DFN 20 NW NFL 120	8W	25	375	85	1238
DFN 20 WW NFL 120	8W	25	350	85	1120
DFN 20 W27 NFL 120	8W	25	325	85	1175
DFN 20 CW NFL 120	8W	25	420	67	1550

## PAR20 Hi-Output ★

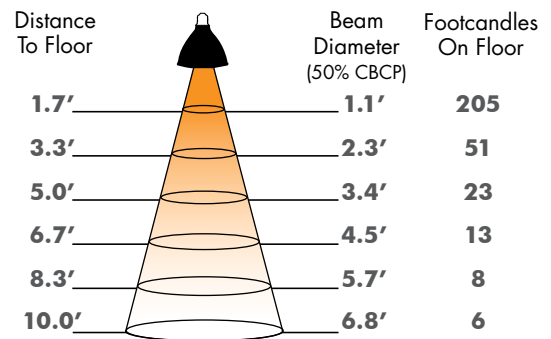
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 20 NW V2 FL 120	8W	40	450	85	900
DFN 20 WW V2 FL 120	8W	40	415	85	860
DFN 20 W27 V2 FL 120	8W	40	370	85	840
DFN 20 CW V2 FL 120	8W	40	480	85	950
DFN 20 NW V2 NFL 120	8W	25	450	85	1450
DFN 20 WW V2 NFL 120	8W	25	380	85	1400
DFN 20 W27 V2 NFL 120	8W	25	370	85	1350
DFN 20 CW V2 NFL 120	8W	25	480	85	1797

FL: Flood NFL: Narrow Flood NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White CBCP: Center Beam Candle Power

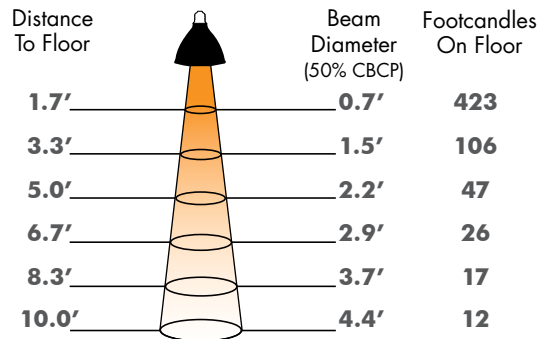


### 0° AIMING FOOTCANDLES

#### DFN 20 W27 FL 120



#### DFN 20 W27 NFL 120



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).

<sup>1</sup> See dimmer compatibility chart page 29.

<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

<sup>3</sup> 230V utilizes E27 base and not available in HO configurations.

<sup>4</sup> Not available or rated for 230V

★ Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 20 WW FL 120

Family	Product	Color (CCT)	Light Output	Distribution	Voltage	Base
DFN Definity	20 PAR20	<b>W27</b> Warm White 2700K	(leave blank for standard)	<b>FL</b> Flood	<b>120</b> 120 Volt	(leave blank for standard E26)
		<b>WW</b> Warm White 3000K	<b>V2</b> High Output	<b>NFL</b> Narrow Flood	<b>230</b> 230 Volt <sup>3</sup>	<b>GU24<sup>4</sup></b> GU24
		<b>NW</b> Neutral White 4000K				
		<b>CW</b> Cool White 5000K				

NORTH AMERICAN CERTIFICATIONS



ENVIRONMENT



PAR20 & PAR20 Hi-Output Diameter & MOL

E26 MOL: 3.4in, 86mm GU24 MOL: 3.69in, 93.72mm

E26 Diameter: 2.6in, 66mm GU24 Diameter: 2.6in, 66mm

GENERAL PURPOSE FLOOD



# DEFINITY™ GENERAL PURPOSE FLOOD

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- Up to 80% more efficient than comparable incandescent lamps.
- Maintenance free operation, lasts up to 25 times longer than conventional lighting.
- 50,000 hour rated design life.
- Optical design achieves smooth beam pattern to achieve a warm room filling glow for general illumination applications.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Incandescent

GP30

Maintenance Cost

**\$19**

Electricity Cost

**\$25**

Annual Savings<sup>2</sup>

**\$37**

Electricity Cost

**\$5**

**GP30 Lifetime Savings: \$667**

Standard Incandescent

**Wattage**  
75W

**Lifetime**  
2,000 hrs



Up to **80%** energy savings



GP30

**Wattage**  
14W

**Lifetime**  
Up to 50,000 hrs

### GP20

Part Number	Wattage	Lumens	CRI
DFN BR20 NW 120	8W	475	80
DFN BR20 WW 120	8W	475	80
DFN BR20 W27 120	8W	465	80
DFN BR20 CW 120	8W	525	67

### GP30

Part Number	Wattage	Lumens	CRI
DFN BR30 NW 120	14W	844	80
DFN BR30 WW 120	14W	815	80
DFN BR30 W27 120	14W	800	80
DFN BR30 CW 120	14W	895	67


### GP40

Part Number	Wattage	Lumens	CRI
DFN BR40 NW 120	18W	1000	80
DFN BR40 WW 120	18W	990	80
DFN BR40 W27 120	18W	875	80
DFN BR40 CW 120	18W	1006	67

NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White



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<sup>1</sup> See dimmer compatibility chart page 29.  
<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

 Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN BR20 WW 120 \ \ DFN BR30 WW 120 \ \ DFN BR40 WW 120

Family	Product	Color (CCT)	Voltage	Base
DFN Definity	<b>BR20</b> GP20	<b>W27</b> Warm White 2700K	<b>120</b> 120 Volt	(leave blank for standard E26)
	<b>BR30</b> GP30	<b>WW</b> Warm White 3000K		<b>GU24</b> GU24
	<b>BR40</b> GP40	<b>NW</b> Neutral White 4000K		
		<b>CW</b> Cool White 5000K		

GP20	GP30	GP40
E26 MOL: 3.99in, 101.45mm	E26 MOL: 5.3in, 135mm	E26 MOL: 6.2in, 157.34mm
E26 Diameter: 2.60in, 66mm	E26 Diameter: 3.78in, 96.01mm	E26 Diameter: 5in, 128mm
GU24 MOL: 4.28in, 108.71mm	GU24 MOL: 5.62in, 142.74mm	GU24 MOL: 6.49in, 164.84mm
GU24 Diameter: 2.60in, 66mm	GU24 Diameter: 3.78in, 96.01mm	GU24 Diameter: 5.04in, 128.01mm

NORTH AMERICAN CERTIFICATIONS



ENVIRONMENT





# DEFINITY™ PAR16 & MR16 GU10

## FEATURES

- 6 watts – up to 80% more efficient than comparable 30 watt halogen lamp.
- Maintenance free operation, lasts up to 11 times longer than conventional lighting.
- 35,000 hour rated design life in open air applications.
- Optional 40° and 25° beam spreads.
- Available from 2700–5000K CCT.

## ANNUAL OVERALL SAVINGS<sup>1</sup>

Standard Halogen	GU10
Maintenance Cost <b>\$13</b>	Annual Savings <sup>1</sup> <b>\$19</b>
Electricity Cost <b>\$10</b>	Electricity Cost <b>\$2</b>

**GU10 Lifetime Savings: \$247**

Standard Halogen

**Wattage**  
30W

**Lifetime**  
3,000 hrs



Up to **80%** energy savings

GU10

**Wattage**  
6W

**Lifetime**  
35,000 hrs





## PAR16<sup>2</sup> \*

Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW FL 120 E26	6W	40	345	85	568
DFN 16 WW FL 120 E26	6W	40	325	83	559
DFN 16 W27 FL 120 E26	6W	40	315	83	487
DFN 16 CW FL 120 E26	6W	40	365	67	860
DFN 16 NW NFL 120 E26	6W	25	345	85	982
DFN 16 WW NFL 120 E26	6W	25	325	85	978
DFN 16 W27 NFL 120 E26	6W	25	315	83	930
DFN 16 CW NFL 120 E26	6W	25	365	67	1516

## MR16 GU10<sup>2</sup> \*

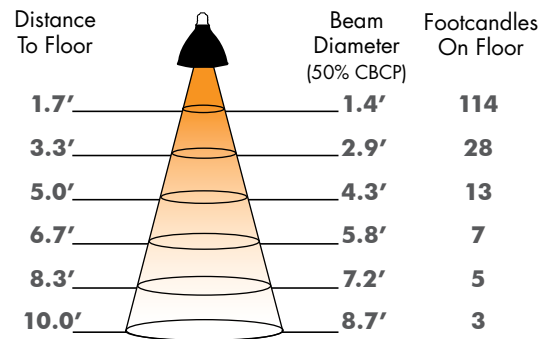
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW FL 120 GU10	6W	40	345	85	470
DFN 16 WW FL 120 GU10	6W	40	325	85	450
DFN 16 W27 FL 120 GU10	6W	40	315	85	435
DFN 16 CW FL 120 GU10	6W	40	365	67	510
DFN 16 NW NFL 120 GU10	6W	25	345	85	1150
DFN 16 WW NFL 120 GU10	6W	25	325	85	1100
DFN 16 W27 NFL 120 GU10	6W	25	315	85	1050
DFN 16 CW NFL 120 GU10	6W	25	365	67	1200

FL: Flood NFL: Narrow Flood NW: Neutral White WW: Warm White W27: Warm White 2700K  
 CW: Cool White CBCP: Center Beam Candle Power



### 0° AIMING FOOTCANDLES

#### DFN MR16 WW FL 120 GU10



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).

<sup>1</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

<sup>2</sup> Three year limited warranty.

<sup>3</sup> Non dimmable.

Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 16 WW FL 120 \ \ DFN 16 WW FL 120 GU10

Family	Product	Color (CCT)	Distribution	Voltage	Base
DFN Definity	16 MR16 GU10 <sup>3</sup>	W27 Warm White 2700K	FL Flood	120 120 Volt	GU10 GU10
	16 PAR16 <sup>3</sup>	WW Warm White 3000K	NFL Narrow Flood		
		NW Neutral White 4000K			
		CW Cool White 5000K			

### NORTH AMERICAN CERTIFICATIONS



### ENVIRONMENT



### PAR16

E26 MOL: 2.372in, 60.26mm

E26 Diameter: 1.969in, 50.26mm

### MR16 GU10

GU10 MOL: 2.22in, 56.50mm

GU10 Diameter: 1.97in, 50.05mm

MR16 HI-OUTPUT



# DEFINITY™ MR16 Hi-Output

## FEATURES

- 8 watts – up to 84% more efficient than comparable Halogen lamp.
- Replaces up to 50W MR16 Halogen lamps.
- Maintenance free operation, lasts up to eight times longer than conventional lighting.
- 25,000 hour rated design life.
- Superior design requires no fans to optimize thermal dissipation.
- Beam distribution of 25°.
- Available from 2700–5000K CCT.
- Over 65 Lumens per watt in 3000 CCT Version
- ANSI compliant form factor.
- Compatible with a wide array of AC, DC and magnetic or electronic transformers.<sup>1</sup>

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen

MR16 HI-OUTPUT

Maintenance Cost

**\$16**

Annual Savings<sup>2</sup>

**\$26**

Electricity Cost

**\$16**

Electricity Cost

**\$2**

**MR16 Hi-Output Lifetime Savings: \$253**

Standard Halogen

**Wattage**  
50W

**Lifetime**  
3,000 hrs



Up to **84%** energy savings

3000K (WW) only



MR16 Hi-Output

**Wattage**  
8W

**Lifetime**  
up to 25,000 hrs

## MR16 Hi-Output<sup>3</sup> ★

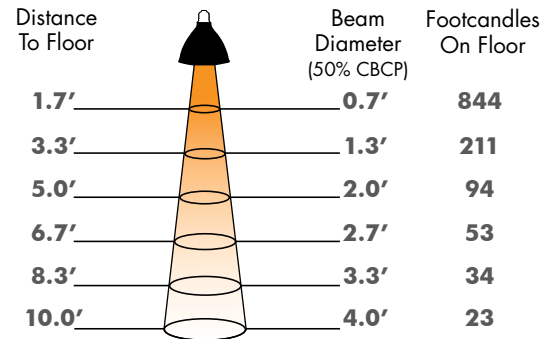
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW V2 FL	8W	40	515	83	1045
DFN 16 WW V2 FL	8W	40	500	83	1000
DFN 16 W27 V2 FL	8W	40	475	83	950
DFN 16 CW V2 FL	8W	40	525	67	1045
DFN 16 NW V2 NFL	8W	25	535	83	2375
DFN 16 WW V2 NFL	8W	25	525	83	2350
DFN 16 W27 V2 NFL	8W	25	500	83	2230
DFN 16 CW V2 NFL	8W	25	550	67	2436

FL: Flood NFL: Narrow Flood NW: Neutral White WW: Warm White W27: Warm White 2700K  
 CW: Cool White CBCP: Center Beam Candle Power



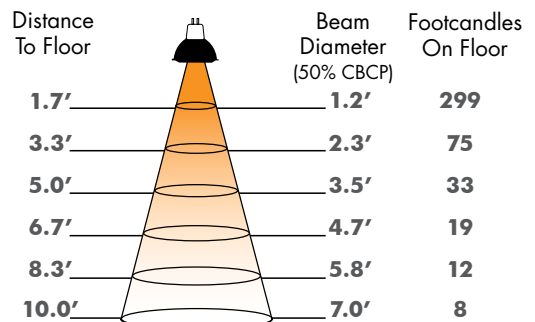
### 0° AIMING FOOTCANDLES

#### DFN 16 WW V2 NFL



### 0° AIMING FOOTCANDLES

#### DFN 16 WW V2 FL



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com). LM79 results based on 12 Volt DC source

<sup>1</sup> See transformer compatibility chart page 30.

<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH.

<sup>3</sup> \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

<sup>4</sup> Not for use in fully sealed or enclosed fixtures.



Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 16 WW V2 NFL

Family	Product	Color (CCT)	Light Output	Distribution
DFN Definity	16 MR16	<b>W27</b> Warm White 2700K	<b>V2</b> High Output	<b>FL</b> Flood
		<b>WW</b> Warm White 3000K		<b>NFL</b> Narrow Flood
		<b>NW</b> Neutral White 4000K		
		<b>CW</b> Cool White 5000K		

NORTH AMERICAN CERTIFICATIONS



ENVIRONMENT



MR16 HI-OUTPUT Diameter & MOL

MOL: 1.904in, 48.36mm

Diameter: 1.97in, 50.04mm

MR16



# DEFINITY™ MR16

## FEATURES

- 6 watts – 70% more efficient than comparable 20 watt Halogen lamp.
- Maintenance free operation, lasts up to 11 times longer than halogen lighting.
- Optional 40° and 25° beam spreads.
- Available from 2700–5000K CCT.
- Compatible with a wide array of AC, DC and magnetic or electronic transformers.<sup>1</sup>

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Halogen	MR16
Maintenance Cost <b>\$16</b>	Annual Savings <sup>2</sup> <b>\$19</b>
Electricity Cost <b>\$7</b>	Electricity Cost <b>\$2</b>

**MR16 Lifetime Savings: \$242**

Standard Halogen

**Wattage**  
20W

**Lifetime**  
3,000 hrs



Up to **70%** energy savings



MR16

**Wattage**  
6W

**Lifetime**  
35,000 hrs

## MR16

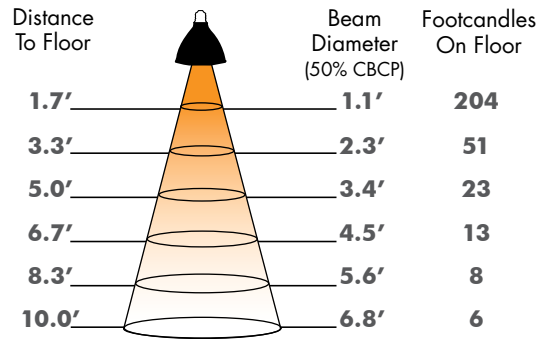
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW FL	6W	40	300	85	568
DFN 16 WW FL	6W	40	260	85	559
DFN 16 W27 FL	6W	40	245	85	487
DFN 16 CW FL	6W	40	424	67	860
DFN 16 NW NFL	6W	25	300	85	982
DFN 16 WW NFL	6W	25	260	85	978
DFN 16 W27 NFL	6W	25	245	85	930
DFN 16 CW NFL	6W	25	424	67	1516

FL: Flood NFL: Narrow Flood NW: Neutral White WW: Warm White W27: Warm White 2700K  
 CW: Cool White CBCP: Center Beam Candle Power

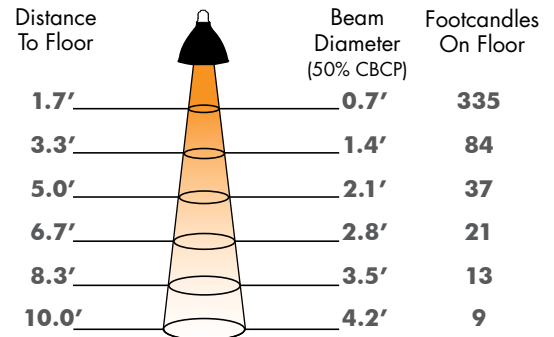


### 0° AIMING FOOTCANDLES


#### DFN 16 NW FL



#### DFN 16 W27 NFL







Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com). LM79 results based on 12 Volt DC source.  
<sup>1</sup> See transformer compatibility chart page 30.  
<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH. \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.

 Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 16 WW FL

Family	Product	Color (CCT)	Distribution
DFN Definity	16 MR16	W27 Warm White 2700K	FL Flood
		WW Warm White 3000K	NFL Narrow Flood
		NW Neutral White 4000K	
		CW Cool White 5000K	

NORTH AMERICAN CERTIFICATIONS    Intertek	ENVIRONMENT  DAMP	MR16 Diameter & MOL
		16 MOL: 1.942in, 49.336mm
		Diameter: 1.97in, 50.052mm

A19



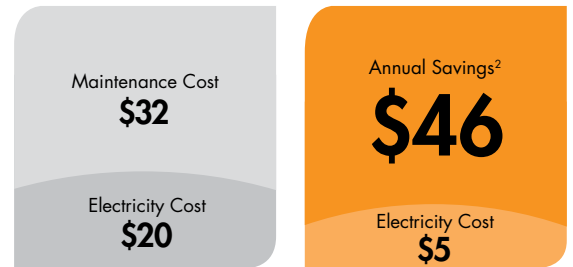
# DEFINITY™ A19

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- ENERGY STAR compliant, Omni-directional design
- 8/12 watts – 80% more efficient than comparable 40/60 watt Incandescent lamps.
- Maintenance free operation, lasts over 50 times longer than conventional lighting.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Incandescent      A19 60WE



**A19 60WE Lifetime Savings: \$815**

Standard Incandescent

**Wattage**  
60W

**Lifetime**  
1,000 hrs



Up to **78%** energy savings



A19 60WE

**Wattage**  
12W

**Lifetime**  
25,000 hrs

## A19

Part Number	Wattage	Lumens	CRI
DFN A19 40WE NW 120	8W	470	82
DFN A19 40WE WW 120	8W	450	82
DFN A19 40WE W27 120	8W	450	82
DFN A19 40WE CW 120	8W	480	82
DFN A19 60WE NW 120	12W	840	82
DFN A19 60WE WW 120	12W	800	82
DFN A19 60WE W27 120	12W	800	82
DFN A19 60WE CW 120	12W	850	82

NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White



Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).

<sup>1</sup> See dimmer compatibility chart page 29.

<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.





<sup>3</sup> Not available or rated for 230V



Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN A19 40WE WW 120

Family	Product	Wattage Equivalency	Light Output	Voltage	Base
DFN Definity	A19 A19	<b>40WE</b> 40W Equivalent	<b>W27</b> Warm White 2700K	<b>120</b> 120 Volt	(leave blank for standard E26)
		<b>60WE</b> 60W Equivalent	<b>WW</b> Warm White 3000K	<b>230</b> 230 Volt	<b>GU24</b> <sup>3</sup> GU24
			<b>NW</b> Neutral White 4000K		
			<b>CW</b> Cool White 5000K		
NORTH AMERICAN CERTIFICATIONS		ENVIRONMENT		A19 Diameter & MOL	
  				E26 MOL: 4.284in, 108.82mm    GU24 MOL: 4.52in, 114.8mm E26 Diameter: 2.22in, 56.33mm    GU24 Diameter: 2.22in, 56.33mm	

DFN19 & DFN25



# DEFINITY™ DFN19 & DFN25

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- 8 watts – up to 84% more efficient than comparable 50 watt Incandescent lamp (G25 version).
- Maintenance free operation, lasts up to 50 times longer than conventional lighting.
- RoHS compliant – contains no mercury or lead.

## ANNUAL OVERALL SAVINGS<sup>2</sup>

Standard Incandescent

DFN25

Maintenance Cost  
**\$35**

Electricity Cost  
**\$16**

Annual Savings<sup>2</sup>  
**\$47**

Electricity Cost  
**\$2**

**DFN25 Lifetime Savings: \$839**

Standard Incandescent

Wattage  
50W

Lifetime  
1,000 hrs



Up to **84%** energy savings



DFN25

Wattage  
8W

Lifetime  
50,000 hrs



## DFN19

Part Number	Wattage	Lumens	CRI
DFN 19 40WE NW 120	6W	470	82
DFN 19 40WE WW 120	6W	450	82
DFN 19 40WE W27 120	6W	450	82
DFN 19 40WE CW 120	6W	480	82

## DFN25

Part Number	Wattage	Lumens	CRI
DFN 25 NW 120	8W	475	85
DFN 25 WW 120	8W	450	85
DFN 25 W27 120	8W	410	85
DFN 25 CW 120	8W	575	67

NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White








  
**LightingScience**<sup>®</sup>  
 Welcome to the Light Ages<sup>™</sup>

Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lsgc.com](http://www.lsgc.com).  
<sup>1</sup> See dimmer compatibility chart page 29.  
<sup>2</sup> Savings based on 8hrs/day annual hours of operation, \$0.114 average cost per KWH, \$40/hr. cost of labor and 15 minutes maintenance time to change lamp.  
<sup>3</sup> 230V utilizes E27 base, otherwise consult factory.  
<sup>4</sup> Not available or rated for 230V

 Visit [www.lsgc.com/energystar](http://www.lsgc.com/energystar) for list of ENERGY STAR qualified lamps.



## ORDERING INFORMATION \ \ DFN 19 40WE WW 120 \ \ DFN 25 WW 120

Family	Product	Wattage Equivalent	Color (CCT)	Voltage	Base
DFN Definity	19 GP19	40WE 40 Watt Equivalent	W27 Warm White 2700K	120 120 Volt	(leave blank for standard E26)
	25 G25	(leave blank for G25)	WW Warm White 3000K	230 230 Volt <sup>3</sup>	GU24 <sup>4</sup> GU24 (DFN25 Only)
			NW Neutral White 4000K		
			CW Cool White 5000K		
NORTH AMERICAN CERTIFICATIONS		ENVIRONMENT		GP19	DFN25
  		 		E26 MOL: 4.39in, 111.60mm	E26 MOL: 4.68in, 118.88mm
		GP19 DFN25		E26 Diameter: 2.31in, 58.60mm	E26 Diameter: 3.15in, 80mm
					GU24 MOL: 4.97in, 126.23mm
					GU24 Diameter: 3.14in, 79.75mm

# DEFINITY™ Lamp Range



PAR38



PAR38 Hi-Output



PAR30



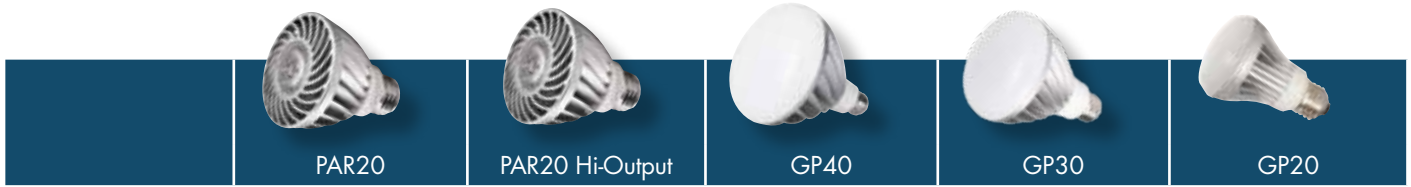
PAR30 Hi-Output



PAR30 Short Neck

Comparable Equivalence	90W halogen			120W halogen			75W halogen			90W halogen			65W halogen							
Wattage	18W			24W			15W			18W			13W							
Voltage	120 VAC <sup>2</sup>			120 VAC			120 VAC <sup>2</sup>			120 VAC			120 VAC							
Beam Angle	40°	25°	15°	40°	25°	15°	40°	25°	15°	40°	25°	15°	40°	25°	10°					
Output (lumens)	<b>W27</b>	840	840	840	<b>W27</b>	1250	1250	1250	<b>W27</b>	700	700	710	<b>W27</b>	920	920	920	<b>W27</b>	725	725	725
	<b>WW</b>	850	850	850	<b>WW</b>	1300	1300	1300	<b>WW</b>	720	725	725	<b>WW</b>	950	950	950	<b>WW</b>	750	750	750
	<b>NW</b>	890	950	950	<b>NW</b>	1375	1375	1375	<b>NW</b>	770	800	800	<b>NW</b>	1000	1000	1000	<b>NW</b>	775	775	775
	<b>CW</b>	1290	1290	1290	<b>CW</b>	1460	1460	1460	<b>CW</b>	943	943	943	<b>CW</b>	1060	1060	1060	<b>CW</b>	800	800	800
Center Beam Candle Power (candelas)		40°	25°	15°		40°	25°	15°		40°	25°	15°		40°	25°	15°		40°	25°	10°
	<b>W27</b>	1573	3493	6054	<b>W27</b>	2250	5000	8500	<b>W27</b>	1297	2821	5203	<b>W27</b>	1600	3450	6600	<b>W27</b>	1277	3014	4448
	<b>WW</b>	1658	3574	6194	<b>WW</b>	2400	5200	8900	<b>WW</b>	1398	3288	4101	<b>WW</b>	1700	3500	6800	<b>WW</b>	1321	3118	4601
	<b>NW</b>	1766	4099	6977	<b>NW</b>	2500	5500	9400	<b>NW</b>	1476	3216	6114	<b>NW</b>	1800	3700	7100	<b>NW</b>	1365	3222	4754
	<b>CW</b>	2030	4711	8019	<b>CW</b>	2700	5900	10000	<b>CW</b>	1950	4000	7600	<b>CW</b>	1950	4000	7600	<b>CW</b>	1410	3326	4908
Efficacy (lm/w)	<b>W27</b>	47			52			47			51			56						
	<b>WW</b>	47			54			48			53			58						
	<b>NW</b>	53			57			53			56			60						
	<b>CW</b>	72			61			63			59			62						
Color Temp	<b>W27</b>	2700K			2700K			2700K			2700K			2700K						
	<b>WW</b>	3000K			3000K			3000K			3000K			3000K						
	<b>NW</b>	4000K			4000K			4000K			4000K			4000K						
	<b>CW</b>	5000K			5000K			5000K			5000K			5000K						
CRI W27/WW/NW/CW	85/85/85/67			85/85/85/85			85/85/85/67			85/85/85/85			85/85/85/67							
Beam Angle	15°, 25°, 40°			15°, 25°, 40°			15°, 25°, 40°			15°, 25°, 40°			10°, 25°, 40°							
Warranty	5 years/25,000 hrs.			5 years/25,000 hrs.			5 years/25,000 hrs.			5 years/25,000 hrs.			5 years/25,000 hrs.							
E26 MOL	5.03in, 128.34mm			5.03in, 128.34mm			4.56in, 115.84mm			4.56in, 115.84mm			3.51in, 89.26mm							
GU24 MOL	5.38in, 136.65mm <sup>3</sup>			5.38in, 136.65mm <sup>3</sup>			4.87in, 123.69mm <sup>3</sup>			4.87in, 123.69mm <sup>3</sup>			E26 Only							
Rating	cUL, FCC, RoHS			cUL, FCC, RoHS			cUL, FCC, RoHS			cUL, FCC, RoHS			cUL, FCC, RoHS							
Dimmable <sup>1</sup>	Yes			Yes			Yes			Yes			Yes							

NFL: Narrow Flood FL: Flood SP: Spot NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White



Comparable Equivalence	50W halogen		50W halogen		90W Incandescent		75W Incandescent		50W Incandescent			
Wattage	8W		8W		18W		14W		8W			
Voltage	120 VAC <sup>2</sup>		120 VAC		120 VAC		120 VAC		120 VAC			
Beam Angle	<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>								
Output (lumens)	<b>W27</b>	310	325	<b>W27</b>	415	370	<b>W27</b>	875	<b>W27</b>	800	<b>W27</b>	465
	<b>WW</b>	350	350	<b>WW</b>	415	380	<b>WW</b>	990	<b>WW</b>	815	<b>WW</b>	475
	<b>NW</b>	365	375	<b>NW</b>	450	450	<b>NW</b>	1000	<b>NW</b>	844	<b>NW</b>	475
	<b>CW</b>	420	420	<b>CW</b>	480	480	<b>CW</b>	1006	<b>CW</b>	895	<b>CW</b>	525
Center Beam Candle Power (candelas)		<b>40°</b>	<b>25°</b>		<b>40°</b>	<b>25°</b>						
	<b>W27</b>	570	1175	<b>W27</b>	840	1350						
	<b>WW</b>	650	1120	<b>WW</b>	860	1400						
	<b>NW</b>	714	1238	<b>NW</b>	900	1450						
	<b>CW</b>	1036	1550	<b>CW</b>	950	1797						
Efficacy (lm/w)	<b>W27</b>	40	41		52			49		57		58
	<b>WW</b>	44	44		53			55		58		59
	<b>NW</b>	46	47		56			56		60		59
	<b>CW</b>	68	68		60			56		64		66
Color Temp	2700K		2700K		2700K		2700K		2700K		2700K	
	3000K		3000K		3000K		3000K		3000K		3000K	
	4000K		4000K		4000K		4000K		4000K		4000K	
	5000K		5000K		5000K		5000K		5000K		5000K	
CRI W27/WW/NW/CW	85/85/85/67		85/85/85/85		80/80/80/67		80/80/80/67		80/80/80/67		80/80/80/67	
Beam Angle	25°, 40°		25°, 40°									
Warranty	5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.	
E26 MOL	3.4in, 86mm		3.4in, 86mm		6.2in, 157.34mm		5.3in, 135mm		3.99in, 101.45mm			
GU24 MOL	3.69in, 93.72mm <sup>3</sup>		3.69in, 93.72mm <sup>3</sup>		6.49in, 164.84mm		5.32in, 142.74mm		E26 Only			
Rating	cUL, FCC, RoHS		cUL, FCC, RoHS		cUL, FCC, RoHS		cUL, FCC, RoHS		cUL, FCC, RoHS		cUL, FCC, RoHS	
Dimmable <sup>1</sup>	Yes		Yes		Yes		Yes		Yes		Yes	

NFL: Narrow Flood FL: Flood SP: Spot NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White

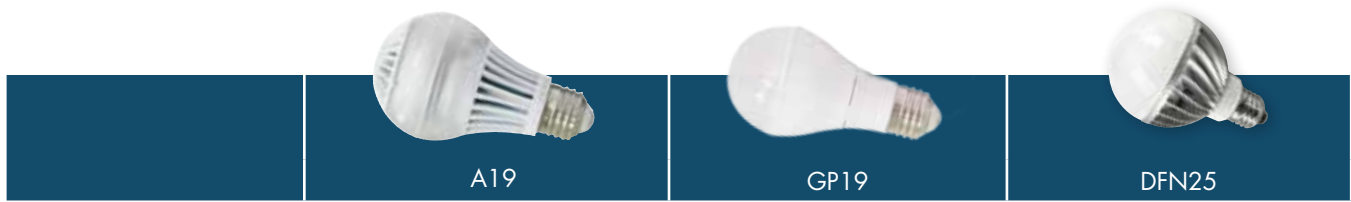
Specifications supplied are nominal. Please refer to the DOE's lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lightages.com](http://www.lightages.com).  
<sup>1</sup> See dimmer compatibility chart page 29.  
<sup>2</sup> 230V Available  
<sup>3</sup> Not available or rated for 230V

# DEFINITY™ Lamp Range



Comparable Equivalence		30W Halogen		30W Halogen		20W Halogen		50W Halogen	
Wattage		6W		6W		6W		8W	
Voltage		120 VAC		120 VAC		12 VDC		12 VDC	
Beam Angle		<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>
Output (lumens)	<b>W27</b>	315	315	315	315	245	245	475	500
	<b>WW</b>	325	325	325	325	260	260	500	525
	<b>NW</b>	345	345	345	345	300	300	515	535
	<b>CW</b>	365	365	365	365	424	424	525	550
Center Beam Candle Power (candelas)		<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>	<b>40°</b>	<b>25°</b>
	<b>W27</b>	435	1050	487	930	487	930	950	2230
	<b>WW</b>	450	1100	559	978	559	978	1000	2323
	<b>NW</b>	470	1150	568	982	568	982	1045	2427
	<b>CW</b>	510	1200	860	1516	860	1516	1045	2536
Efficacy (lm/w)	<b>W27</b>	53		53		41		59 62	
	<b>WW</b>	54		54		43		62 66	
	<b>NW</b>	58		58		49		64 67	
	<b>CW</b>	61		61		71		66 69	
Color Temp	<b>W27</b>	2700K		2700K		2700K		2700K	
	<b>WW</b>	3000K		3000K		3000K		3000K	
	<b>NW</b>	4000K		4000K		4000K		4000K	
	<b>CW</b>	5000K		5000K		5000K		5000K	
CRI W27/WW/NW/CW		83/83/83/67		85/85/85/67		85/85/85/67		83/83/83/67	
Beam Angle		25°, 40°		25°, 40°		25°, 40°		25°, 40°	
Warranty		5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.	
MOL		2.22in, 50.05mm		2.372in, 60.26mm		1.942in, 49.336mm		1.904in, 48.36mm	
Rating		ETL, FCC, RoHS		ETL, FCC, RoHS		ETL, FCC, RoHS		ETL, FCC, RoHS	
Dimmable <sup>1</sup>		No		No		Yes <sup>3</sup>		Yes <sup>3</sup>	

NFL: Narrow Flood FL: Flood SP: Spot NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White



Comparable Equivalence		40/60W Incandescent		40W Incandescent		50W Incandescent	
Wattage		8W / 12W		6W		8W	
Voltage		120 VAC <sup>2</sup>		120 VAC <sup>2</sup>		120 VAC <sup>2</sup>	
Wattage Equivalence		<b>40W(40WE)<sup>2</sup></b>		<b>60W(60WE)<sup>2</sup></b>			
Output (lumens)	<b>W27</b>	450	800	<b>W27</b>	450	<b>W27</b>	410
	<b>WW</b>	450	800	<b>WW</b>	450	<b>WW</b>	450
	<b>NW</b>	470	840	<b>NW</b>	470	<b>NW</b>	475
	<b>CW</b>	480	850	<b>CW</b>	480	<b>CW</b>	575
Efficacy (lm/w)	<b>W27</b>	56	67		75		51
	<b>WW</b>	56	67		75		56
	<b>NW</b>	58	70		78		59
	<b>CW</b>	60	71		80		72
Color Temp	<b>W27</b>	2700K	2700K		2700K		2700K
	<b>WW</b>	3000K	3000K		3000K		3000K
	<b>NW</b>	4000K	4000K		4000K		4000K
	<b>CW</b>	5000K	5000K		5000K		5000K
CRI W27/WW/NW/CW		82/82/82/82	82/82/82/82		82/82/82/82		85/85/85/67
Warranty		5 years/25,000 hrs.	5 years/25,000 hrs.		5 years/25,000 hrs.		5 years/25,000 hrs.
E26 MOL		4.284in, 108.82mm	4.284in, 108.82mm		4.39in, 111.6mm		4.68in, 118.88mm
GU24 MOL		4.52in, 114.80mm	4.52in, 114.80mm		E26 Only		4.97in, 126.23mm
Rating		cUL, FCC, RoHS	cUL, FCC, RoHS		cUL, FCC, RoHS		cUL, FCC, RoHS
Dimmable <sup>1</sup>		Yes	Yes		Yes		Yes

NFL: Narrow Flood FL: Flood SP: Spot NSP: Narrow Spot NW: Neutral White WW: Warm White W27: Warm White 2700K CW: Cool White

Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lightages.com](http://www.lightages.com).  
<sup>1</sup> See dimmer compatibility chart page 29.  
<sup>2</sup> 230V Available  
<sup>3</sup> See transformer compatibility chart page 30.

# Approved Dimmers



## PAR38

**LUTRON DIMMERS:** ADRIANI AY-600; Commercial Systems QSG-6P, LP-RPM-4A-120, QSG-6D, HW/LP-RPM-4U-120; Diva DV-600, DVLV-600; Homeworks HxD-6ND, HW-RPM-4U-120; Interfaces PHPM-WBX w/DVF-103P, PHPM-PA w/QSG-6D; NOVA NLV-600; Panel Module GP (Harrier) card w/GRX-3503, Grafik Eye; Radio Ra RRD-6NA; Stanza SZ-6ND; Lutron HW-RPM-4U-120, LP-RPM-4U-120, S-600PR, DV-600PR, NLV-600, TG-600PR-WH, AY600P, Q600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR, MAELV-600 **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W

## PAR38 Hi-Output

**LUTRON DIMMERS:** Interfaces PHPM-WBX w/DVF-103P; Radio Ra RRD-6NA; Lutron DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR **OTHER DIMMERS:** Leviton 6684



## PAR30

**LUTRON DIMMERS:** ADRIANI AY-600; Commercial Systems QSG-6P, LP-RPM-4A-120, QSG-6D, HW/LP-RPM-4U-120; Diva DV-600, DVLV-600; Homeworks HxD-6ND, HW-RPM-4U-120; Interfaces PHPM-WBX w/DVF-103P, PHPM-PA w/QSG-6D; Lutron HW-RPM-4U-120, LP-RPM-4A-120, S-600PR, DV-600PR, NLV-600, TG-600PR, AY600P, Q600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR, MAELV-600 NOVA NLV-600 Panel Module GP (Harrier) card w/GRX-3503 Stanza SZ-6ND **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W

## PAR30 Hi-Output

**LUTRON DIMMERS:** Interfaces PHPM-WBX w/DVF-103P; Lutron DV-603PG, S-600, S-600P, D-600PH, TG-603PG, DV-600PR-WH **OTHER DIMMERS:** Leviton 6684



## PAR30 Short Neck

**LUTRON DIMMERS:** Interfaces PHPM-WBX w/DVF-103P; Lutron DV-603PG, S-600, S-600P, D-600PH, TG-603PG, DV-600PR **OTHER DIMMERS:** Leviton 6684



## PAR20 & PAR20 Hi-Output

**LUTRON DIMMERS:** ADRIANI AY600, DVWCL-153P; Commercial Systems QSG-6P, LP-RPM-4A-12; Diva DV-600, DVCL-153P; Homeworks HW-RPM-4A-120, HxD-6ND; Interfaces PHPM-WBX; Radio Ra RRD-10ND; Stanza SZ-6ND; Lutron CTCL-153P, TGCL-153P, AYCL-153P, LGCL-153P, SZ-6ND, HxD-6ND, S-600PR, DV-600PR, TG-600PR, AY600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TT-CL100H, TG-603PG, DV-600PR **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## A19 Omni-directional

**LUTRON DIMMERS:** Diva: DVCL-153PD, DVW-603-PGH Skylark: CTCL-153PDH, S-600PR Lumea: LG-103PH, LGCL-153PH Toggle R: TGCL 153PH



## GP40

**LUTRON DIMMERS:** ADRIANI AY-600 Interfaces PHPM-WBX w/DVF-103P; Panel Module Grafik Eye; Radio Ra RRD-6NA; Lutron HW-RPM-4U-120, QSG-6P, LP-RPM-4U-120, S-600PR-WH, DV-600PR-WH, DV-600, DVLV-600, NLV-600, TG-600PR, AY600P, Q600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR, MAELV-600-WH **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## GP30

**LUTRON DIMMERS:** ADRIANI AY-600; Interfaces PHPM-WBX w/DVF-103P; Panel Module Grafik Eye; Radio Ra RRD-6NA; Lutron HW-RPM-4U-120, QSG-6P, LP-RPM-4U-120, S-600PR, DV-600PR-WH, DV-600, DVLV-600, NLV-600, TG-600PR, AY600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TT-300NLH, TG-603PG, DV-600PR, MAELV-600 **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## GP20

**LUTRON DIMMERS:** ADRIANI AY-600; Interfaces PHPM-WBX w/DVF-103P; Panel Module Grafik Eye; Radio Ra RRD-6NA; Lutron HW-RPM-4U-120, QSG-6P, LP-RPM-4U-120, S-600PR-WH, DV-600PR, DV-600, DVLV-600, NLV-600, TG-600PR, AY600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR, MAELV-600 **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## DFN25

**LUTRON DIMMERS:** ADRIANI AY600; Commercial Systems QSG-6P, LP-RPM-4A-120; Diva DV-600, DVCL-153P; Interfaces PHPM-WBX; Homeworks HW-RPM-4A-120, HxD-6ND; Radio Ra RRD-10ND; Stanza SZ-6ND; Lutron S-600PR, DV-600PR, TG-600PR, AY600P, GL600, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TG-603PG, DV-600PR **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## GP19

**LUTRON DIMMERS:** Diva: DVCL-153PD, DVW-603-PGH Skylark: CTCL-153PDH, S-600PR Lumea: LG-103PH, LGCL-153PH Toggle R: TGCL 153PH

## Recommended number of lamps per 600 watt dimmer<sup>1</sup>

While an LED lamp may draw as few as 10 watts continuously, it could have an in-rush current spike (maximum, instantaneous input) which may limit the number of lamps you can install on one dimmer. The following table provides a recommended maximum quantity of DEFINITY lamps that should be used on a typical approved 600W dimmer.  
Ex: Max number of A19 60W lamps, with an 80W in-rush, that can be used on 600W dimmer = 7

DFN LED Lamp	Lamp In-Rush Current Equivalent	Max # of Lamps per 600W Dimmer
A19 40 W	80 W	7
A19 60 W	80 W	7
PAR20	80 W	7
DFN25	80 W	7
PAR30	115 W	5
PAR30SN	80 W	7
PAR38	115 W	5
GP20	80 W	7
GP30	75 W	8
GP40	90 W	6
PAR20 HO	80 W	7
PAR30 HO	125 W	4
PAR38 HO	125 W	4

<sup>1</sup> Dimmer compatibility list indicates those dimmers that have been tested and operate properly under normal conditions. In certain cases, approved dimmers are offered in higher wattage varieties that are also compliant and allow the installation of additional lamps if kept within the maximum inrush current equivalent provided in the table. Each application is unique and various factors such as load, common neutrals or other electrical products on the circuit can, in certain instances, cause variance in system performance. Consult dimming system manufacturer for additional support in operation.

# MR16 & MR16HO Transformer Compatibility

Brand	Model	Input Voltage (VAC/Hz)	Power Rating (W)	Type	Number of MR16s per Transformer					
					1	2	3	4	5	6
Advance	71A9743	120 VAC, 60 Hz	75	MT						
Beal Pritchett (BP)	DINGO60	240V, 50Hz	60	ET						
CHD	HUA1200600X2L	120 VAC, 60 Hz	60	ET						
Crompton	CLED3	230-240 VAC, 50-60 Hz	12	ET		N/A	N/A	N/A	N/A	N/A
ELG	250LED100W	120 VAC, 60 Hz	100	ET						
	250LED10W	120 VAC, 60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
	250AT075T	120 VAC, 60 Hz	75	MT						
EYE LEDS	5011922UC	120 VAC, 60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
EYE LEDS	AZ09	230-240 VAC, 50-60 Hz	12	ET		N/A	N/A	N/A	N/A	N/A
Hatch	RS12-15M-LED	120 VAC, 50-60 Hz	15	ET			N/A	N/A	N/A	N/A
	PS12-20L	120 VAC, 60 Hz	20	ET				N/A	N/A	N/A
	RS12-30M-LED	120 VAC, 50-60 Hz	30	ET					N/A	N/A
	RS12-60M	120 VAC, 50-60 Hz	60	ET						
	VS12-60W	120 VAC, 50-60 Hz	60	ET						
	VS12-60WD	120 VAC, 50-60 Hz	60	ET						
	RS12-80M	120 VAC, 50-60 Hz	80	ET						
	RS12-60M-LED	120 VAC, 50-60 Hz	60	ET						
Hermosa	ET105B60	230V, 50Hz	60	ET						
IST	IDM011152	230-240 VAC, 50-60 Hz	11	ET		N/A	N/A	N/A	N/A	N/A
LCI	i60e	230 VAC, 50-60 Hz	60	ET						
Lightech	LET-60	120 VAC, 50-60 Hz	60	ET						
	LET-75	120 VAC, 50-60 Hz	75	ET						
Ligro	E12SC50SA	230 VAC	50	MT						
Luxalite	GD32LH	220-240 VAC, 50-60 Hz	55	ET						
Lumex	MTR50/12 EN-61558	220VAC, 50 Hz	50	MT						
MDL	319-0103	120 VAC, 50-60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
Mirano	BLNET-L50C 50W	220 VAC, 50-60Hz	50	ET						
Niko	320-00112	230 VAC, 50 Hz	105	ET						
Nobile	EN-80D	230 VAC, 50-60 Hz	80	ET						
	EN-80D2	230 VAC, 50-60 Hz	80	ET						
	EN-110D	230 VAC, 50-60 Hz	110	ET						
	EN-110D2	230 VAC, 50-60 Hz	110	ET						
Osram	ET-REDBACK	230-240 VAC, 50-60 Hz	60	ET						
	HTM 150/230-240	230-240 VAC, 50-60 Hz	150	ET						
Philips	Primaline 105 230-240	230-240 VAC, 50-60 Hz	105	ET						
	Xitanium 10W Dimmable	220-240 VAC, 50-60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
	ET-S60220-240	220-240 VAC, 50-60 Hz	60	ET						
	9137-100-536	220-240 VAC, 50-60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
	9137-100-538	220-240 VAC, 50-60 Hz	30	ET					N/A	N/A
Sunrise	H0050-497	120 VAC, 50-60 Hz	50	MT						
Teca	100D8512S	120VAC, 60 Hz	100	MT						
Tridonic	TM50-2	240VAC, 50-60Hz	50	MT						
	VIPER 22176074	230-240 VAC, 50-60 Hz	105	ET						
	VIPER 22176072	230-240 VAC, 50-60 Hz	105	ET						
	Possum	230-240 VAC, 50-60 Hz	3.45	ET						
VadsBO	SET70RE-1	220-240 VAC, 50 Hz	70	ET						
Vike	VB60PL	230-240 VAC, 50-60 Hz	60	ET						
Vossloh Schwabe	EST 70/12.380	230-240 VAC, 50-60 Hz	70	ET						
	EST 105/12.381	230-240 VAC, 50-60 Hz	105	ET						
	EST 150/12.622	230-240 VAC, 50-60 Hz	150	ET						
WAC	EN-12100-R-AR	120 VAC, 50-60 Hz	100	ET						
Wang	WH-601E2CA-2L	120 VAC, 60 Hz	60	ET						

ET - Electronic Transformer MT - Magnetic Transformer N/A - Exceeds Transformer Recommended Power

 Good  Flickers  MR16HO Good / MR16 Flickers



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