

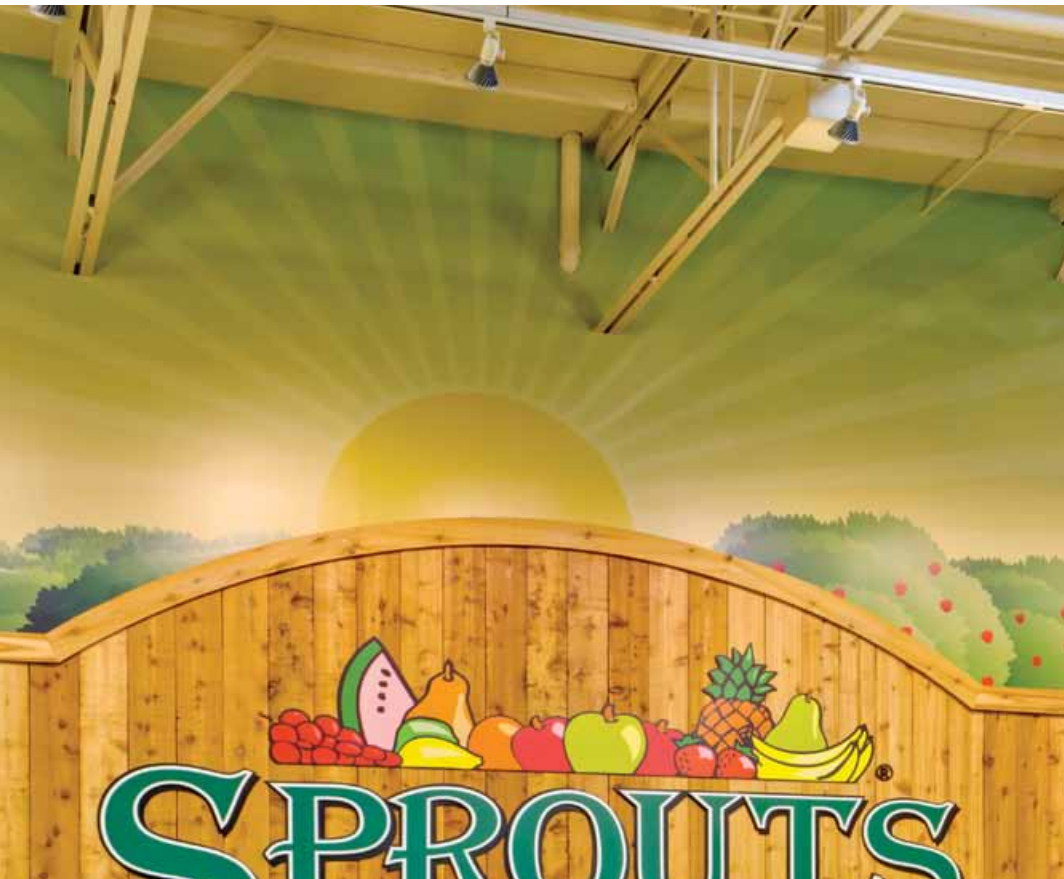
# DEFINITY™

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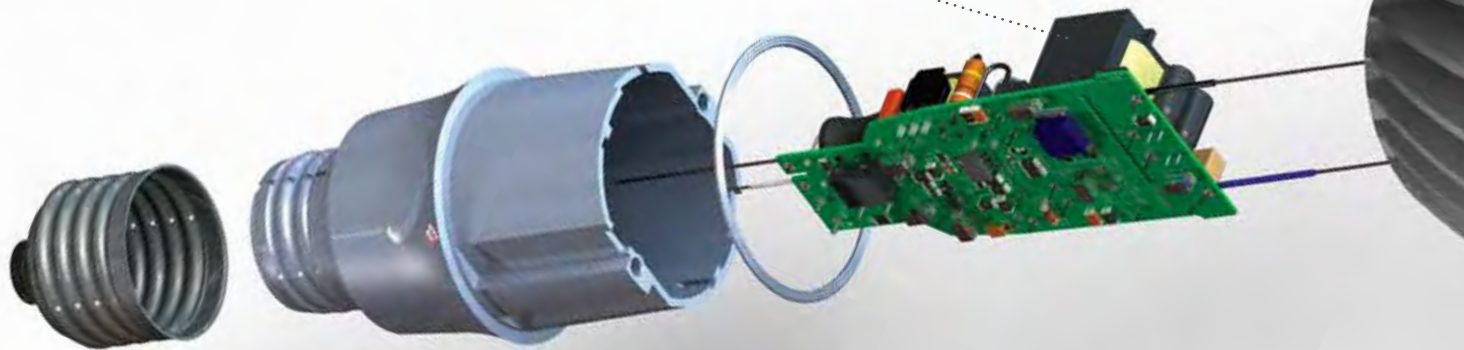
## Full Line Dimmability<sup>1</sup>

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 heat-sink 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.



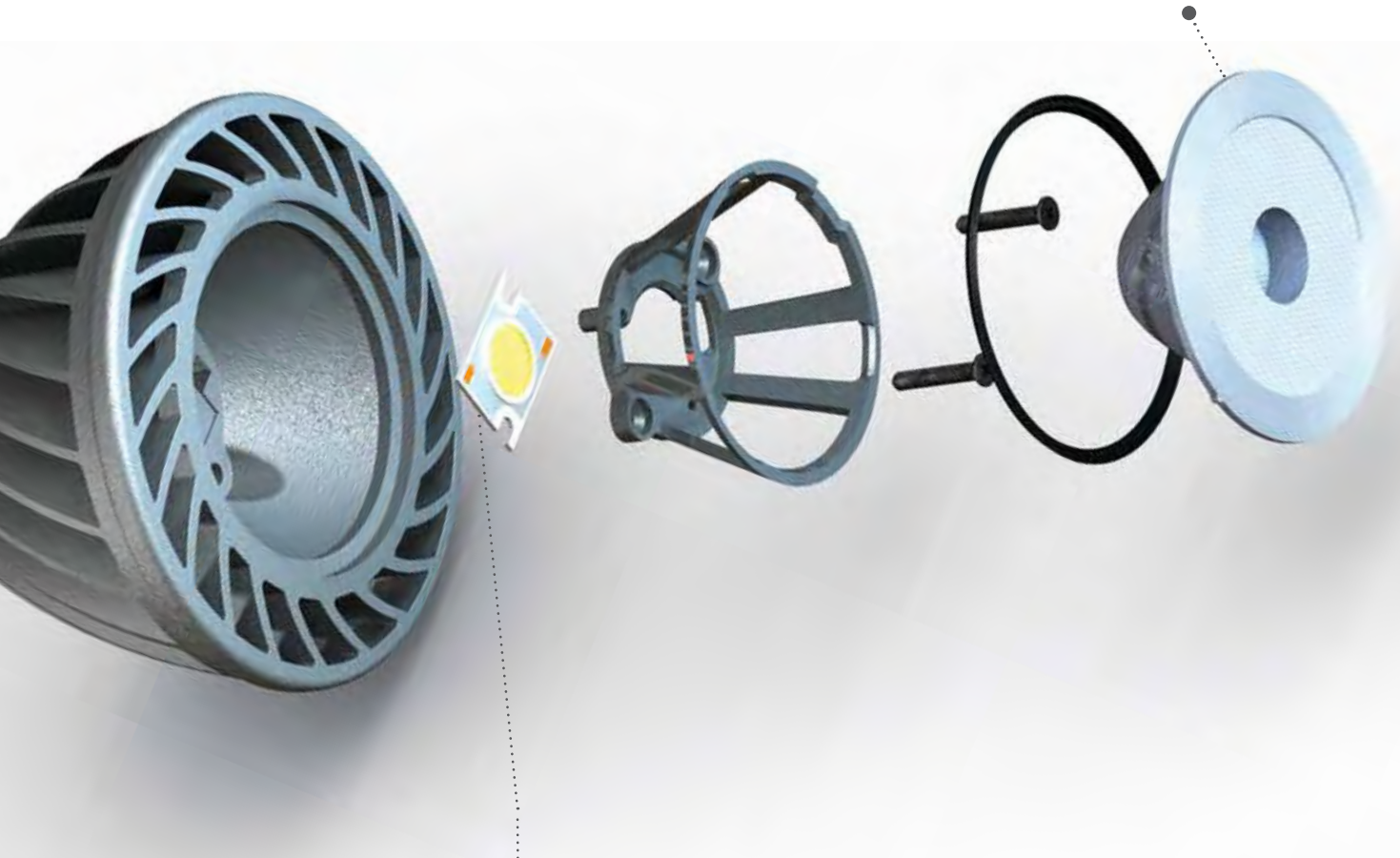
## Sized to Fit

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.



## 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

\$15

Electricity Cost

\$30

Annual Savings<sup>2</sup>

\$39

Electricity Cost

\$6

**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

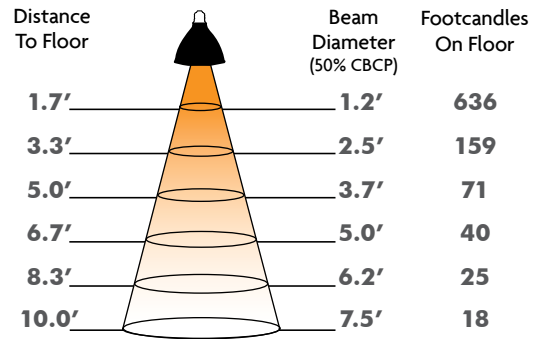
## PAR38 Hi-Output

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

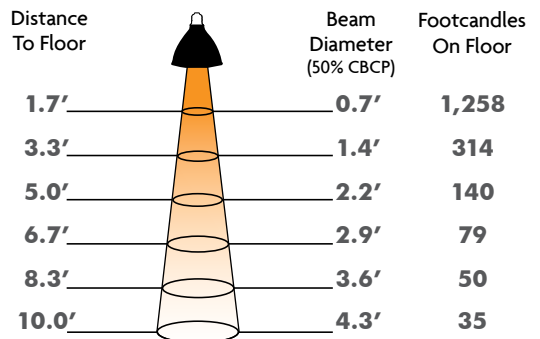
FL: Flood NFL: Narrow Flood SP: Spot NW: Neutral White WW: Warm White W27: Warm White 2700K  
CW: Cool White CBCP: Center Beam Candle Power

## 0° AIMING FOOTCANDLES

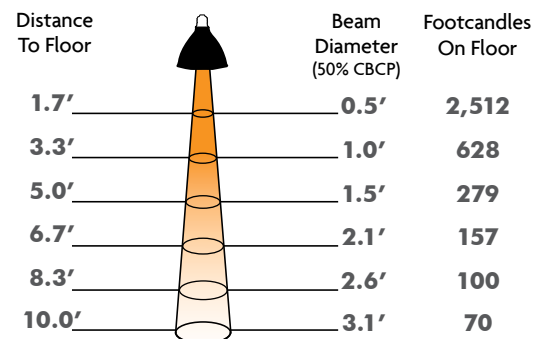
### DFN 38 NW FL 120




### 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)
		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	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 <b>\$16</b>	Annual Savings <sup>2</sup> <b>\$31</b>
Electricity Cost <b>\$22</b>	Electricity Cost <b>\$5</b>
<b>PAR30SN Lifetime Savings: \$563</b>	

Standard  
Halogen

Wattage  
65W

Lifetime  
3,000 hrs



Up to **80%** energy savings

PAR30  
Short Neck

Wattage  
13W

Lifetime  
Up to 50,000 hrs





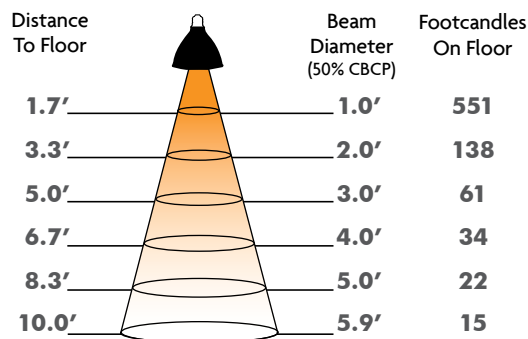
## PAR30 Short Neck ★

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

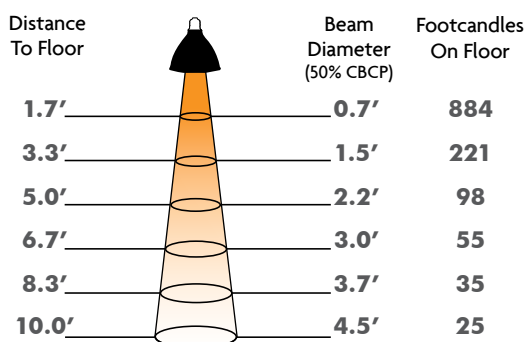
FL: Flood NFL: Narrow Flood NSP: Narrow Spot NW: Neutral White WW: Warm White  
W27: Warm White 2700K CW: Cool White CBCP: Center Beam Candle Power

## 0° AIMING FOOTCANDLES

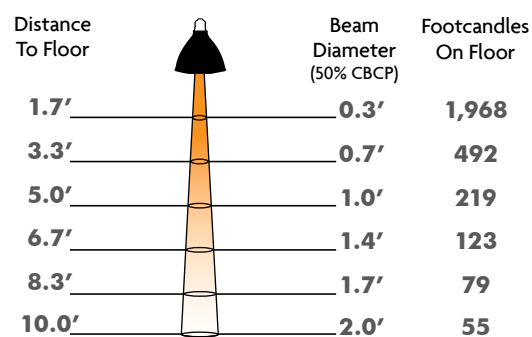
### DFN 30SN WW FL 120



### DFN 30SN WW NFL 120



### DFN 30SN WW NSP 120



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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 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

\$23

Electricity Cost

\$25

Annual Savings<sup>2</sup>

\$41

Electricity Cost

\$5

**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

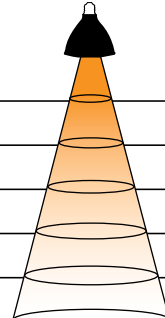
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 30 NW V2 FL 120	18W	40	1000	85	1800
DFN 30 WW V2 FL 120	18W	40	950	85	1700
DFN 30 W27 V2 FL 120	18W	40	920	85	1600
DFN 30 CW V2 FL 120	18W	40	1060	85	1950
DFN 30 NW V2 NFL 120	18W	25	1000	85	3700
DFN30 WW V2 NFL 120	18W	25	950	85	3500
DFN 30 W27 V2 NFL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

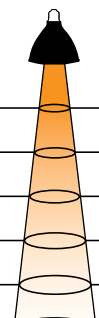
### DFN 30 W27 FL 120

Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	1.3'	467
3.3'	2.5'	117
5.0'	3.8'	52
6.7'	5.0'	29
8.3'	6.3'	19
10.0'	7.5'	13



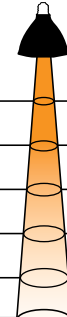
### DFN 30 W27 NFL 120

Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	0.7'	1015
3.3'	1.4'	254
5.0'	2.1'	113
6.7'	2.8'	63
8.3'	3.5'	41
10.0'	4.2'	28



### DFN 30 W27 SP 120

Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	0.5'	1,873
3.3'	1.0'	468
5.0'	1.5'	208
6.7'	2.0'	117
8.3'	2.5'	75
10.0'	3.0'	52




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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



## 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

\$15

Electricity Cost

\$17

Annual Savings<sup>2</sup>

\$27

Electricity Cost

\$3

**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	425	85	860
DFN 20 W27 V2 FL 120	8W	40	415	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	425	85	1400
DFN 20 W27 V2 NFL 120	8W	25	415	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

Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	1.1'	205
3.3'	2.3'	51
5.0'	3.4'	23
6.7'	4.5'	13
8.3'	5.7'	8
10.0'	6.8'	6

#### DFN 20 W27 NFL 120





Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	0.7'	423
3.3'	1.5'	106
5.0'	2.2'	47
6.7'	2.9'	26
8.3'	3.7'	17
10.0'	4.4'	12

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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 20 WW FL 120

Family	Product	Color (CCT)	Light Output	Distribution	Voltage	Base
DFN Definity	20 PAR20	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				
		CW 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

BR20 / BR30 / BR40



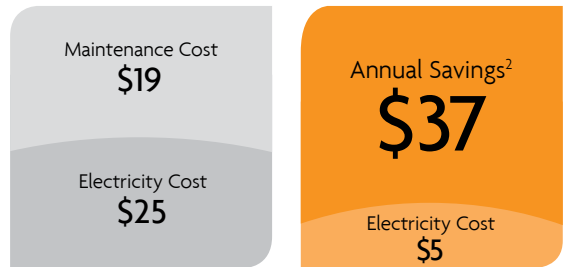
# DEFINITY™ BR20, BR30 & BR40

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- Up to 80% more efficient than comparable BR 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      BR30



**BR30 Lifetime Savings: \$667**

**Standard Incandescent**

Wattage  
75W

Lifetime  
2,000 hrs



Up to **80%** energy savings



**BR30**

Wattage  
15W

Lifetime  
Up to 50,000 hrs

## BR20

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

## BR30

Part Number	Wattage	Lumens	CRI
DFN BR30 NW 120	15W	844	80
DFN BR30 WW 120	15W	800	80
DFN BR30 W27 120	15W	725	80
DFN BR30 CW 120	15W	895	67


## BR40

Part Number	Wattage	Lumens	CRI
DFN BR40 NW 120	18W	950	80
DFN BR40 WW 120	18W	900	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



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 BR20 WW 120 \ \ DFN BR30 WW 120 \ \ DFN BR40 WW 120

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

BR20	BR30	BR40
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



PAR16 & MR16 GU10



## 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

\$13

Annual Savings<sup>1</sup>

\$19

Electricity Cost

\$10

Electricity Cost

\$2

**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	85	559
DFN 16 W27 FL 120 E26	6W	40	315	85	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	85	930
DFN 16 CW NFL 120 E26	6W	25	365	67	1516

## MR16 GU10<sup>2</sup> ⬤

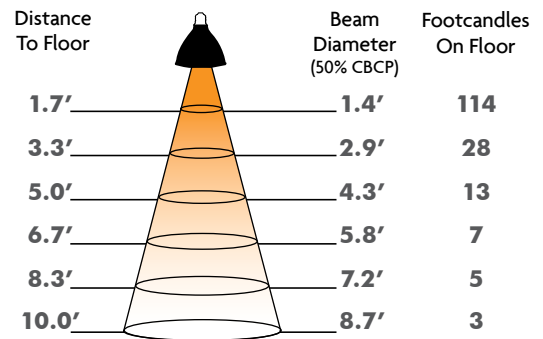
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW FL 120 GU10	6W	40	345	85	470
DFN 16 WW FL 120 GU10	6W	40	325	85	450
DFN 16 W27 FL 120 GU10	6W	40	315	85	435
DFN 16 CW FL 120 GU10	6W	40	365	67	510
DFN 16 NW NFL 120 GU10	6W	25	345	85	1150
DFN 16 WW NFL 120 GU10	6W	25	325	85	1100
DFN 16 W27 NFL 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 MRI16 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 MRI16 GU10 <sup>3</sup>	W27 Warm White 2700K	FL Flood	120 120 Volt	GU10 GU10
	16 PAR16 <sup>2</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**

Electricity Cost  
**\$16**

Annual Savings<sup>2</sup>  
**\$26**

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 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

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

Distance To Floor	Beam Diameter (50% CBCP)	Footcandles On Floor
1.7'	0.7'	844
3.3'	1.3'	211
5.0'	2.0'	94
6.7'	2.7'	53
8.3'	3.3'	34
10.0'	4.0'	23

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.

<sup>3</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	W27 Warm White 2700K	V2 High Output	NFL Narrow Flood
		WW Warm White 3000K		
		NW Neutral White 4000K		
		CW 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  
**\$16**

Electricity Cost  
**\$7**

Annual Savings<sup>2</sup>  
**\$19**

Electricity Cost  
**\$2**

**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

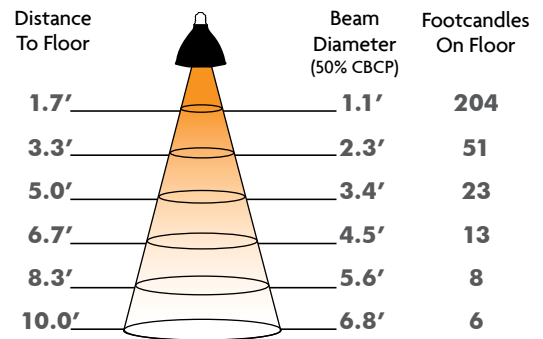
Part Number	Wattage	Beam Angle	Lumens	CRI	CBCP
DFN 16 NW FL	6W	40	295	85	568
DFN 16 WW FL	6W	40	260	85	559
DFN 16 W27 FL	6W	40	245	85	487
DFN 16 CW FL	6W	40	424	67	860
DFN 16 NW NFL	6W	25	295	85	982
DFN 16 WW NFL	6W	25	260	85	978
DFN 16 W27 NFL	6W	25	245	85	930
DFN 16 CW NFL	6W	25	424	67	1516

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

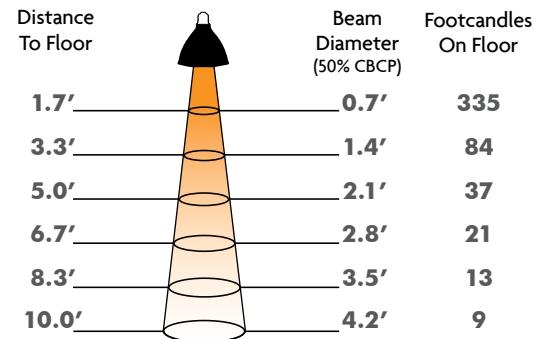


### 0° AIMING FOOTCANDLES

#### 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



ENVIRONMENT



MR16 Diameter & MOL

16 MOL: 1.942in, 49.336mm

Diameter: 1.97in, 50.052mm

A19



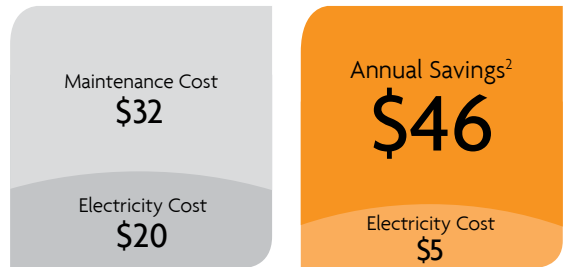
# DEFINITY™ A19

## FEATURES

- Dimmable to 5% of light on most dimmers.<sup>1</sup>
- ENERGY STAR compliant, Omni-directional design
- 8.5/13.5 watts – 78% 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 V2



**A19 V2 Lifetime Savings: \$815**

**Standard Incandescent**

Wattage  
60W

Lifetime  
1,000 hrs



Up to **78%** energy savings



**A19 V2**

Wattage  
13.5W

Lifetime  
50,000 hrs


## A19

Part Number	Wattage	Lumens	CRI
DFN A19 NW V1 120	8.5W	475	85
DFN A19 WW V1 120	8.5W	450	85
DFN A19 W27 V1 120	8.5W	450	85
DFN A19 CW V1 120	8.5W	505	85
DFN A19 NW V2 120	13.5W	850	85
DFN A19 WW V2 120	13.5W	800	85
DFN A19 W27 V2 120	13.5W	800	85
DFN A19 CW V2 120	13.5W	900	85

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> 230V available in V1 (40W equivalent)  
<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 A19 WW V2 120

Family	Product	Color (CCT)	Light Output	Voltage	Base
DFN Definity	A19 A19	W27 Warm White 2700K	V1 40W Equivalent <sup>3</sup>	120 120 Volt	(leave blank for standard E26)
		WW Warm White 3000K	V2 60W Equivalent	230 230 Volt <sup>3</sup>	GU24 <sup>4</sup> GU24
		NW Neutral White 4000K			
		CW 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



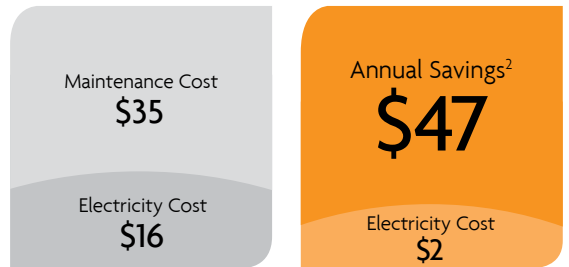
# DEFINITY™ DFN19 & DFN25

## 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



**DFN25 Lifetime Savings: \$839**

### Standard Incandescent

Wattage  
50W

Lifetime  
1,000 hrs



Up to **84%** energy savings



### DFN25

Wattage  
8W

Lifetime  
50,000 hrs



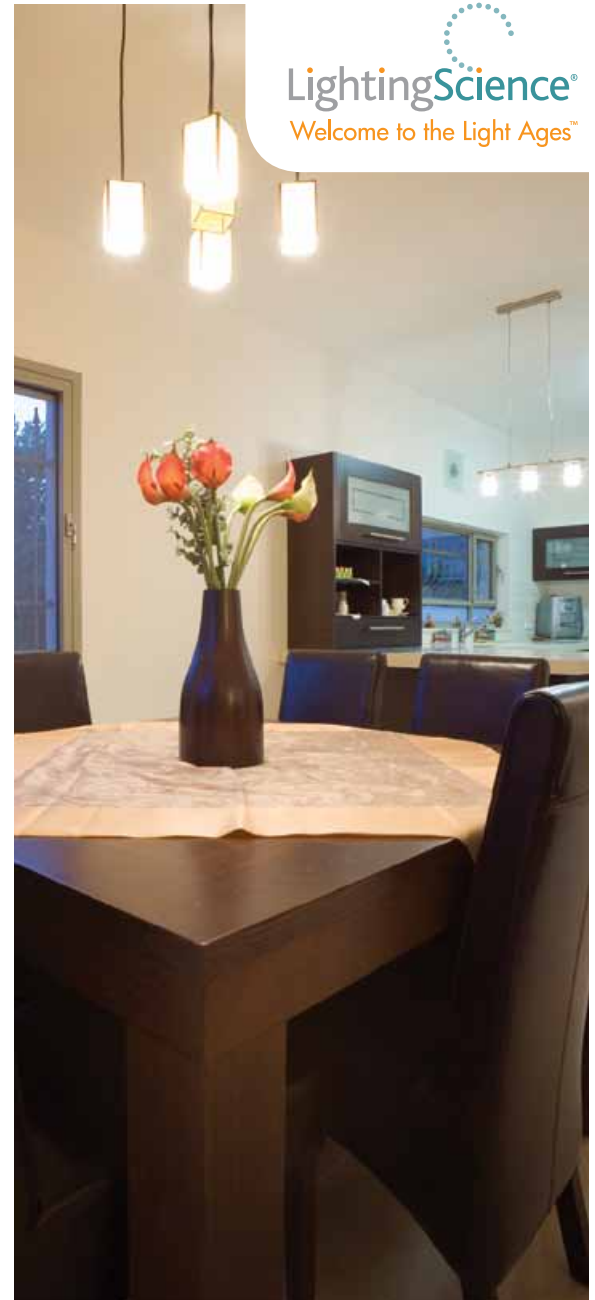
## DFN19

Part Number	Wattage	Lumens	CRI
DFN 19 NW 120	8W	450	85
DFN 19 WW 120	8W	425	85
DFN 19 W27 120	8W	395	85
DFN 19 CW 120	8W	570	67

## 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 WW 120 \ \ DFN 25 WW 120

Family	Product	Color (CCT)	Voltage	Base
DFN Definity	19 19	W27 Warm White 2700K	120 120 Volt	(leave blank for standard E26)
	25 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		DFN19	DFN25
			E26 MOL: 4.39in, 111.60mm	E26 MOL: 4.68in, 118.88mm
	DFN19	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



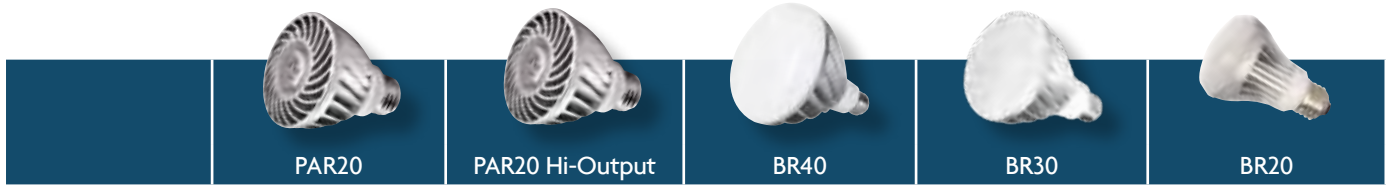
PAR30 Hi-Output



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)	W27	840	840	840	W27	1250	1250	1250	W27	700	700	710	W27	920	920	920	W27	725	725	725
	WW	850	850	850	WW	1300	1300	1300	WW	720	725	725	WW	950	950	950	WW	750	750	750
	NW	890	950	950	NW	1375	1375	1375	NW	770	800	800	NW	1000	1000	1000	NW	775	775	775
	CW	1290	1290	1290	CW	1460	1460	1460	CW	943	943	943	CW	1060	1060	1060	CW	800	800	800
Center Beam Candle Power (candelas)	40°	25°	15°	40°	25°	15°	40°	25°	15°	40°	25°	15°	40°	25°	15°	40°	25°	10°		
	W27	1573	3493	6054	W27	2250	5000	8500	W27	1297	2821	5203	W27	1600	3450	6600	W27	1277	3014	4448
	WW	1658	3574	6194	WW	2400	5200	8900	WW	1398	3288	4101	WW	1700	3500	6800	WW	1321	3118	4601
	NW	1766	4099	6977	NW	2500	5500	9400	NW	1476	3216	6114	NW	1800	3700	7100	NW	1365	3222	4754
	CW	2030	4711	8019	CW	2700	5900	10000	CW	1950	4000	7600	CW	1950	4000	7600	CW	1410	3326	4908
Efficacy (lm/w)	W27	47			52			47			51			56						
	WW	47			54			48			53			58						
	NW	53			57			53			56			60						
	CW	72			61			63			59			62						
Color Temp	W27	2700K			2700K			2700K			2700K			2700K						
	WW	3000K			3000K			3000K			3000K			3000K						
	NW	4000K			4000K			4000K			4000K			4000K						
	CW	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		15W		8W			
Voltage	120 VAC <sup>2</sup>		120 VAC		120 VAC		120 VAC		120 VAC			
Beam Angle	40°	25°	40°	25°								
Output (lumens)	W27	310	325	W27	415	415	W27	875	W27	725	W27	465
	WW	350	350	WW	425	425	WW	900	WW	800	WW	475
	NW	365	375	NW	450	450	NW	950	NW	844	NW	475
	CW	420	420	CW	480	480	CW	1006	CW	895	CW	525
Center Beam	40°	25°	40°	25°								
Candle Power (candelas)	W27	570	1175	W27	840	1350						
	WW	650	1120	WW	860	1400						
	NW	714	1238	NW	900	1450						
	CW	1036	1550	CW	950	1797						
Efficacy (lm/w)	W27	40	41	52	49	48	58					
	WW	44	44	53	50	53	59					
	NW	46	47	56	53	56	59					
	CW	68	68	60	56	60	66					
Color Temp	2700K		2700K		2700K		2700K		2700K			
	3000K		3000K		3000K		3000K		3000K			
	4000K		4000K		4000K		4000K		4000K			
	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			
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.			
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			
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

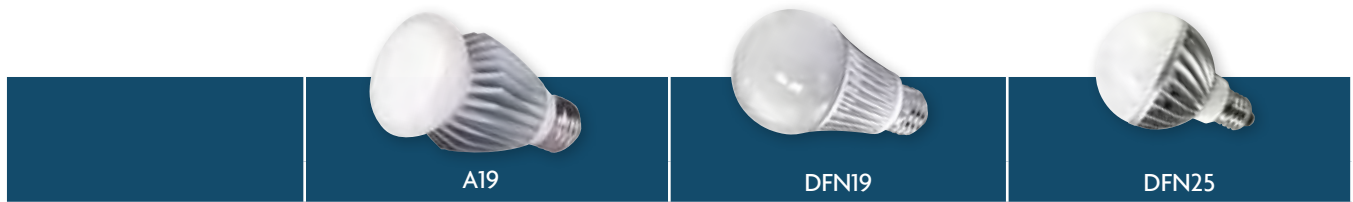
Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines. As a part of a continuous improvement program, specifications can be subject to change and are updated regularly at [www.lightages.com](http://www.lightages.com).  
<sup>1</sup> See dimmer compatibility 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		40° 25°	40° 25°	40° 25°	40° 25°
Output (lumens)	W27	315 315	315 315	245 245	475 475
	WW	325 325	325 325	260 260	500 500
	NW	345 345	345 345	295 295	515 515
	CW	365 365	365 365	424 424	525 525
Center Beam Candle Power (candelas)	W27	435 1050	487 930	487 930	950 2230
	WW	450 1100	559 978	559 978	1000 2323
	NW	470 1150	568 982	568 982	1045 2427
	CW	510 1200	860 1516	860 1516	1045 2536
Efficacy (lm/w)	W27	53	53	41	59
	WW	54	54	43	63
	NW	58	58	49	64
	CW	61	61	71	66
Color Temp	W27	2700K	2700K	2700K	2700K
	WW	3000K	3000K	3000K	3000K
	NW	4000K	4000K	4000K	4000K
	CW	5000K	5000K	5000K	5000K
CRI W27/WW/NW/CW		85/85/85/67	85/85/85/67	85/85/85/67	83/83/83/67
Beam Angle		25°, 40°	25°, 40°	25°, 40°	25°
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		8.5W / 13.5W		8W		8W		
Voltage		120 VAC		120 VAC <sup>2</sup>		120 VAC <sup>2</sup>		
Wattage Equivalence		40W(V1) <sup>2</sup>		60W(V2)				
Output (lumens)	W27	450	800	W27	395	W27	410	
	WW	450	800	WW	425	WW	450	
	NW	475	850	NW	450	NW	475	
	CW	505	900	CW	570	CW	575	
Efficacy (lm/w)	W27	53	59		49		51	
	WW	53	59		53		56	
	NW	56	63		56		59	
	CW	59	67		71		72	
Color Temp	W27	2700K	2700K		2700K		2700K	
	WW	3000K	3000K		3000K		3000K	
	NW	4000K	4000K		4000K		4000K	
	CW	5000K	5000K		5000K		5000K	
CRI W27/WW/NW/CW	85/85/85/85		85/85/85/85		85/85/85/67		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, TT-300NLH, 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:** ADRIANI AY600; Commercial Systems QSG-6P, LP-RPM-4A-120; Diva DV-600, DVCL-153P; Interfaces PHPM-WBX, PHPM-WBX w/DVF-103P; Homeworks HW-RPM-4A-120, HxD-6ND; Panel Module CTCL-153P, TTCL-100D, Grafik Eye; Radio Ra RRD-10ND, RRD-6NA; Stanza SZ-6ND; Lutron RRD-10ND, SZ-6ND, HW-RPM-4A-120, HxD-6ND, S-600PR-WH, DV-600PR-WH, TG-600PR-WH, Q600P, GL600, CN-600PHW, DV-603PG, S-600, S-600P, LG-600P, D-600PH, TT-300NLH, TG-603PG, DV-600PR-WH **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W



## BR40

**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

<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.



## BR30

**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



## BR20

**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



## DFN19

**LUTRON DIMMERS:** 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, TT-300NLH, TT-CL100H, TG-603PG, DV-600PR-WH **OTHER DIMMERS:** Ace 34050, 3027596 Leviton 6633-PL, 6684, 6631, IPI06-1LX Legrand DrRD4W

## 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
BR20	80 W	7
BR30	75 W	8
BR40	90 W	6
PAR20 HO	80 W	7
PAR30 HO	125 W	4
PAR38 HO	125 W	4

# 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 LEADS	5011922UC	120 VAC, 60 Hz	10	ET		N/A	N/A	N/A	N/A	N/A
EYE LEADS	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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