

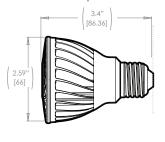
# FEATURES<sup>1</sup>

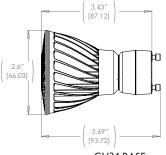
Equivalent Source						
Standard	Up to 50W Halogen					
L70 lumen depreciation						
design criteria =	50,000 hours					
Early Submission						
ENERGY STAR Life =	25,000 hours <sup>2</sup>					
Housing	Aluminum					
Socket	E26/GU24					
Beam Spread	25°, 40°					
Narrow Flood, Flood						
Operating Temperature	-20°C to +40°C					
E26 MOL	3.4 in, 86mm					
GU24 MOL <sup>5</sup>	3.69 in 93.72mm					
Voltage	120VAC & 230VAC <sup>4</sup>					
Weight	.33lbs., 150g					
Power Factor	120: ≥.90 230: ≥.70					
Warranty	5 year limited					

# PAR20 & PAR20 Hi-Output

### **BENEFITS**

- Dimmable to 5% of light on most dimmers<sup>3</sup>
- Two unique beam distributions for application flexibility.
- Suitable for damp locations.
- 8 Watts 84% more efficient than comparable 50 Watt Halogen lamps or incandescent lamps.
- Maintenance free operation, lasts up to 16 times longer than incandescent lighting.
- Superior thermal management allows for product usage in recessed luminaires.
- Centralized optical package provides high quality point source beam versus pixilated designs.
- RoHS compliant contains no mercury or lead.





E26 BASE

**GU24 BASE** 

Specifications supplied are nominal. Please refer to the DOE's Lighting Facts Tolerance Guidelines.

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Early Submission ENERGY STAR Life = 25,000 hours (L70 lumen depreciation design criteria = 50,000 hours.) For directional lamps, Energy Star early submission dictates that manufacturers can only claim 25,000 hour life with 3000 hour actual life test data, 6,000 hour LM80 data and in-situ temperature measurements. Once a product has been fully qualified, manufacturers may increase the lifetime of a product by demonstrating full compliance with the ENERGY STAR criteria at the new lifetime with Lumen Maintenance at the minimum required test period. Refer to Energy Star website.

See dimmer compatibility chart page on next page.

230V available in non high output version only and utilizes E27 base.

GU24 – Pending UL. Not available or rated for 230V



### ORDERING INFORMATION \\ DFN 20 WW FL 120

			* *								
Family	Product	Color	(CCT)	Light Output		Distribution		Voltage		Base	
<b>DFN</b> Definity	<b>20</b> PAR20	W27	Warm White 2700K	(leave blank for standard)		NFL 25° Narrow Floor		<b>120</b> 120 Volt		(leave blank for E26 base)	
		WW	Warm White 3000K	V2	High Output	FL	40° Flood	230	230 Volt <sup>4</sup>	GU24	GU24
		NW	Neutral White 4000K								
		CW	Cool White 5000K								
CERTIFICATIONS NORTH AMERICA		EN	VIRONMENT								
ROHS CUL US	FC		DAMP								



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# PAR20 & PAR20 Hi-Output

**LUTRON DIMMERS: ADRIANI AY600;** Commecrical 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 SZ-6ND, HxD-6ND, S-600PR-WH, DV-600PR-WH, TG-600PR-WH, AY600P, 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,

# Recommended number of lamps per 600 watt dimmer<sup>3</sup>

6684, 6631, IPI06-1LX Legrand DrRD4W

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				
PAR20	80 W	7				
PAR20 HO	80 W	7				

### PAR<sub>2</sub>0

Part Number	Base Type	Watts	Beam Angle <sup>1</sup>	Lumens	Voltage	Efficacy	CRI	СВСР	ENERGY STAR <sup>2, 4</sup>
DFN 20 NW NFL 120	E26/GU24	8W	25	375	120	47	85	1238	√
DFN 20 WW NFL 120	E26/GU24	8W	25	350	120	44	85	1120	√
DFN 20 W27 NFL 120	E26/GU24	8W	25	325	120	41	85	1175	√
DFN 20 CW NFL 120	E26/GU24	8W	25	420	120	68	67	1797	
DFN 20 NW FL 120	E26/GU24	8W	40	365	120	46	85	714	
DFN 20 WW FL 120	E26/GU24	8W	40	350	120	44	85	650	√
DFN 20 W27 FL 120	E26/GU24	8W	40	310	120	40	85	570	
DFN 20 CW FL 120	E26/GU24	8W	40	420	120	68	67	1036	

# PAR20 Hi-Output

Part Number	Base Type	Watts	Beam Angle <sup>1</sup>	Lumens	Voltage	Efficacy	CRI	CBCP	Life
DFN 20 NW V2 NFL 120	E26/GU24	8W	25	450	120	56	85	1450	50,000
DFN 20 WW V2 NFL 120	E26/GU24	8W	25	425	120	53	85	1400	50,000
DFN 20 W27 V2 NFL 120	E26/GU24	8W	25	415	120	52	85	1350	50,000
DFN 20 CW V2 NFL 120	E26/GU24	8W	25	480	120	60	67	1550	50,000
DFN 20 NW V2 FL 120	E26/GU24	8W	40	450	120	56	85	900	50,000
DFN 20 WW V2 FL 120	E26/GU24	8W	40	425	120	53	85	860	50,000
DFN 20 W27 V2 FL 120	E26/GU24	8W	40	415	120	52	85	840	50,000
DFN 20 CW V2 FL 120	E26/GU24	8W	40	480	120	60	67	950	50,000

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

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DOE's Lighting Facts Tolerance Guidelines.

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2 Early Submission ENERGY STAR Life = 25,000 hours (L70)

lumen depreciation design criteria = 50,000 hours.) For directional lamps, Energy Star early submission dictates that manufacturers can only claim 25,000 hour life with 3000 hour actual life test data, 6,000 hour LM80 data and in-situ temperature measurements. Once a product has been fully qualified, manufacturers may increase the lifetime of a product by demonstrating full compliance with the ENERGY STAR criteria at the new lifetime with

with the ENEKGY STAR criteria at the new lifetime with Lumen Maintenance at the minimum required test period. Refer to Energy Star website.

3 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 insure cursent equivalent provided. 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.

### **Cautions**

- Turn power off before inspection, installation, or removal
- Risk of Electric Shock Do not use where directly exposed to water or weather.
- For use in recessed fixtures.
- Suitable for damp locations.
- Do not open no user serviceable parts inside.
- North America use on 120VAC, 50 60 Hz circuits.
- This device is not intended for use with emergency exit fixtures or emergency exit lights.
- Added weight of the device may cause instability of a free-standing portable luminaire.
- This device complies with Part 15 of the FCC rules and has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.



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<sup>&</sup>lt;sup>4</sup> Energy Star certification applies to E26 base only, GU24 base certification is still in progress.