

Definity™ MR16 5.3 LED Lamp



Features

Equivalent Source	20W Halogen
L70 lumen depreciation design criteria =	50,000 hours
Early Submission ENERGY STAR Life =	25,000 hours**
Housing	Anodized
Socket	GU 5.3 base
Beam Spread	
Narrow Flood, Flood	25°, 40°
Operating Temp	-20°C to +40°C
MOL	1.97", 50mm
Voltage	12 VDC
Weight	0.11lbs, 0.05kg
Warranty	3 year limited
Certification	



Environment



**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.

***See dimmer compatibility chart page 2.
NOTE: All performance and testing done at 25 °C. U.S. patent pending. Currently, ENERGY STAR is available in MR 16 warm white flood and narrow flood.

MR16 SP003
November 2010

Patented design houses an integrated LED system for optimum lifetime performance. Excellent optics create a uniform beam, delivering lumen output comparable to conventional sources. Free of harmful UV and IR emissions. Available in 25° and 40° beam distribution, in various color temperatures with good color quality.

Benefits

- Reduced energy consumption and operating costs by up to 80%
- Maintenance-free operation - lasts up to 25 times longer than conventional lighting
- Cool beam- No UV or IR, reduces air-conditioning loads
- Unique design with anodized silver housing for cooler operation and extended lamp life
- Environmentally friendly – fully recyclable, no mercury or other hazardous materials
- Dimmable***
- Tested to LM-79-08



Specifications	16 NW FL	16 NW NFL	16 W27 NFL	16 W27 FL	16 WW FL	16 WW NFL
Lamp Wattage	25W	20W	20W	25W	25W	20W
Color Rendering Index (CRI)	88	88	87	85	85	85
Lumen Output	280	275	265	275	300	295
Efficacy	47 (lm/w)	46 (lm/w)	44 (lm/w)	46 (lm/w)	50 (lm/w)	49 (lm/w)
Color Temperature	4000K	4000K	2700K	2700K	3000K	3000K
Power Consumption	6W	6W	6W	6W	6W	6W
CBCP	568	983	915	550	559	977

LSG011



Definity™ MR16 LED Lamp

Ordering Information

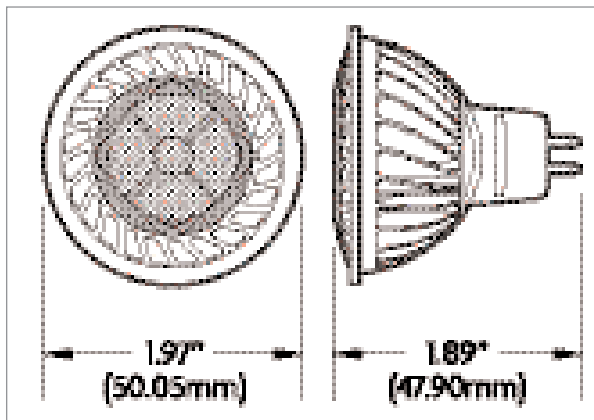
Example: DFN 16 CW FL 12

Product	Color Temperature	Optical Distribution	Voltage
DFN 16 Definity MR16	CW Cool White	FL Flood	12 VDC
	NW Neutral White	NFL Narrow Flood	
	W27 Warm White 2700K		
	WW Warm White		

Dimmer Compatibility

NOTE

The Dimmer Compatibility for the MR16 is based upon the interaction between the low voltage transformer and the low voltage dimmer. Dimmer compatibility is determined by each transformer manufacturer. Please see following page for transformer compatibility.

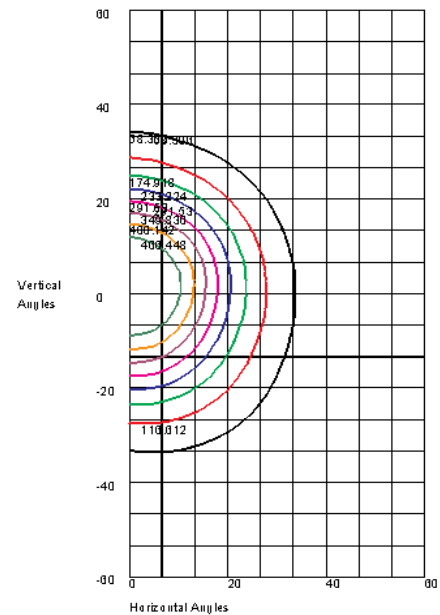


Dimensions shown in inches (mm)

Cautions

- Turn power off before inspection, installation, or removal.
- Risk of Electric Shock – Use in Dry Locations Only. Do not use where directly exposed to water or weather.
- Not for use in completely enclosed recessed fixtures.
- Do not open – no user serviceable parts inside.
- Not for use with AC transformers.
- This device is not intended for use with emergency exit fixtures or emergency exit lights.
- “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 MR16 G25 A19 PAR20 PAR30 PAR38 operate the equipment.”

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 30013745-1 DFN-16-WW-FL (A).IES
ISOCANDELA CURVES



Maximum Candela = 583.00 Located At Horizontal Angle = 0, Vertical Angle = 1
50% Maximum Candela = 291.53
10% Maximum Candela = 110.61
Warm White Illustrated

Lighting Science Group

lighting facts

A Program of the U.S. DOL

Light Output (Lumens) **300**

Watts **6**

Lumens per Watt (Efficacy) **50**

Color Accuracy **85**

Color Rendering Index (CRI)

Light Color **3000 (Bright White)**

Correlated Color Temperature (CCT)

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: 1131N-F-104205
Model Number: DFN-16-WW-FL (based on 12V DC)
Type: Replacement Lamp - Unidirectional (MR16)

LSG011





Definity™ MR16 LED Lamp

Transformer compatibility

Brand	Model	Input Voltage (VAC/Hz)	Power Rating (W)	Transformer Type	Number of MR16s per Transformer					
					1	2	3	4	5	6
Advance	71A9743	120 VAC, 60 Hz	75	MT	G	G	G	G	G	G
CHD	HUA1200600X2L	120 VAC, 60 Hz	60	ET	G	G	G	G	G	G
ELG	250LED100W	120 VAC, 60 Hz	100	ET	G	G	G	G	G	G
	250LED10W	120 VAC, 60 Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
	250AT075T	120 VAC, 60 Hz	75	MT	G	G	G	G	G	G
Hatch	RS12-15M-LED	120 VAC, 50-60 Hz	15	ET	G	G	N/A	N/A	N/A	N/A
	PS12-20L	120 VAC, 60 Hz	20	ET	F	F	G	N/A	N/A	N/A
	RS12-30M-LED	120 VAC, 50-60 Hz	30	ET	G	G	G	G	N/A	N/A
	RS12-60M	120 VAC, 50-60 Hz	60	ET	G	G	G	G	G	G
	VS12-60W	120 VAC, 50-60 Hz	60	ET	G	G	G	G	G	G
	VS12-60WD	120 VAC, 50-60 Hz	60	ET	G	G	G	G	F	G
	RS12-80M	120 VAC, 50-60 Hz	80	ET	G	G	G	G	G	G
	RS-12-15M-LED	120 VAC, 50-60 Hz	15	ET	G	G	N/A	N/A	N/A	N/A
LCI	i60e	230 VAC, 50-60 Hz	60	ET	G	G	G	G	G	G
Lightech	LET-60	120 VAC, 50-60 Hz	60	ET	F	F	F	F	F	F
	LET-75	120 VAC, 50-60 Hz	75	ET	F	F	F	F	F	F
Ligro	E12SC50SA	230 VAC	50	MT	G	G	G	G	G	G
Lumex	MTR50/12 EN-61558	220VAC, 50 Hz	50	MT	G	G	G	G	G	G
MDL	319-0103	120 VAC, 50-60 Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
Mirano	BLNET-L50C 50W	220 VAC, 50-60Hz	50	ET	G	G	G	G	G	G
Niko	320-00112	230 VAC, 50 Hz	105	ET	G	G	G	G	G	G
Nobile	EN-60D	230 VAC, 50-60 Hz	60	ET	G	F	F	F	F	F
	EN-60D2	230 VAC, 50-60 Hz	60	ET	G	F	G	F	F	G
	EN-70D	230 VAC, 50-60 Hz	70	ET	F	F	F	G	G	G
	EN-80D	230 VAC, 50-60 Hz	80	ET	G	G	G	G	G	G
	EN-80D2	230 VAC, 50-60 Hz	80	ET	G	G	G	G	F	F
	EN-110D	230 VAC, 50-60 Hz	110	ET	G	G	G	G	G	G
Osram	HTM 150/230-240	230-240 VAC, 50-60 Hz	150	ET	F	F	F	F	F	F
Philips	Primaline 105 230-240	230-240 VAC, 50-60 Hz	105	ET	G	G	G	G	G	G
	Xitanium 10W Dimmable	220-240 VAC, 50-60 Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
Sunrise	H0050-497	120 VAC, 50-60 Hz	50	MT	G	G	G	G	G	G
Teca	T00D8512S	120 VAC, 60 Hz	100	MT	G	G	G	G	G	G
Tridonic	VIPER 22176074	230-240 VAC, 50-60 Hz	105	ET	G	F	G	F	G	F
	VIPER 22176072	230-240 VAC, 50-60 Hz	105	ET	G	G	F	F	F	F
VadsBO	SET70RE-1	220-240 VAC, 50 Hz	70	ET	G	G	G	G	G	G
Vossloh Schwabe	EST 70/12.380	230-240 VAC, 50-60 Hz	70	ET	G	G	G	G	G	G
	EST 105/12.381	230-240 VAC, 50-60 Hz	105	ET	G	G	G	G	G	G
	EST 150/12.622	230-240 VAC, 50-60 Hz	150	ET	G	G	G	G	G	G
WAC	EN-12100-R-AR	120 VAC, 50-60 Hz	100	ET	G	G	G	G	G	G
Wang	WH-60IE2CA-2L	120 VAC, 60 Hz	60	ET	G	G	G	G	G	G

Et - Electronic Transformer MT - Magnetic Transformer G - Good F - Flickers N/A - Exceeds Transformer Recommended Power

