



MR16 ES 5W LED Lamp



A state of the art LED source and advanced driver, control, and thermal components comprise an integrated LED system with superior lifetime performance. Exceptional optics creates enhanced color uniformity and high lumen output, providing the quality and brightness of light produced by conventional light sources.

benefits

Reduced Energy Consumption

Uses up to 90% less power than incandescent bulbs

Long-Lasting

Lasts up to 10 times as long as compact fluorescents (CFLs) and up to 100 times longer than incandescents

Durable

A solid-state device with no moving parts. Contains no fragile filaments or tubes as in incandescent bulbs. The electronic chip is encapsulated in an epoxy substrate, which provides a protective seal against outside or foreign elements. Resistant to heat, cold and shock.

More Efficient

Can generate twice the brightness of light (Lumens) at a fifth the wattage of an incandescent

Customizable





Highly customizable (color, beam spread, base, etc.) to fit all lighting needs

No Heat Build Up

Generates little to no heat during operation. This optimizes energy-efficiency (incandescent bulbs emit up to 98 percent of their energy as heat) and reduces demands on air-conditioning

Mercury Free

No mercury is used in the manufacturing of LEDs

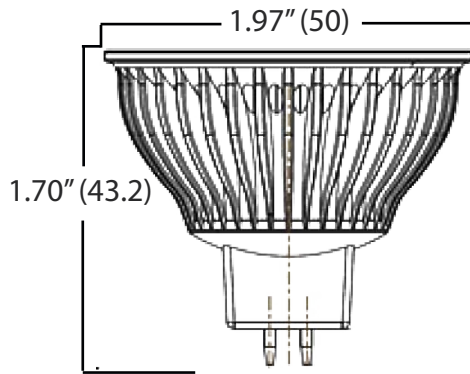
Lamp Features	
Equivalent Source	25W Halogen
Typical Power Consumption	5W
Max. Power Consumption	5W
LED Source	3*1W Cree XPG
Base / Socket	GU5.3
Beam Spread	Narrow Flood, Flood
Operating Temperature	-20°C to +40°C
MOL	1.7" 43.2mm
Voltage	AC 12V
Rated Life	25,000 hours*
Certifications	   

*Energy Star early submission for directional lamps dictates that manufacturers can only claim 25,000 hour life with 3000 hour life test data, 6000 hour LM 80 data and in-situ temperature measurements. Typical lamp life: 40,000 hours.

Specifications	Warm White	Cool White
Color Temperature	2700K 	4500K+
Lumen Output	300 Lm	420 Lm
Efficacy	60 Lm/W	84 Lm/W
Color Rendering Index (CRI)	84	70+

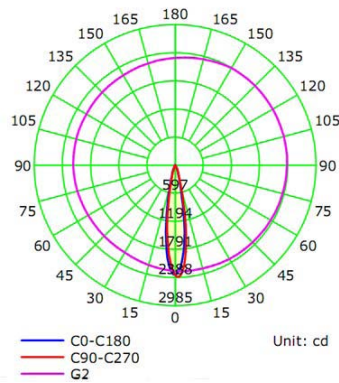
MR16ES 5W LED Lamp

Dimensions (in/mm)

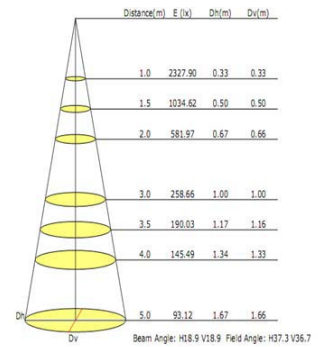


Photometrics

Luminous Intensity Distribution Curve



Illuminance at a Distance



*above data based on 6000K, 25°

Ordering Information

example: NV/MR16ES/3.1/D/W27/FL/53/CG

product

color

beam spread

base

LED source



NV/MR16ES/3.1/D - MR16 3*1W
(Energy Star) Dimmable

W27 - 2700K

NFL - Narrow Flood
FL - Flood

53 - GU5.3

CG - Cree XPG

Beam Spread Key:

VNSP - Very Narrow Spot: <7°
NSP - Narrow Spot: 7°-15°
SP - Spot: 16°-20°
NFL - Narrow Flood: 21°-30°
FL - Flood: 31°-40°
WFL - Wide Flood: 41°-60°
VWFL - Very Wide Flood: 61°+

Color Key:

W27 - 2700K
WW - 3000K
NW - 4000K
C50 - 5000K
CW - 5700K

Product Warranty

Nu Vue warrants this LED lamp will be free from defects in material and workmanship and will operate for a period of 3 years when operated for 10-12 hours a day and is used in accordance with operating guidelines. During the warranty period, if the product fails to perform as described, Nu Vue's entire liability will be limited to the part or repair or replacement of such a defective product. In no event shall Nu Vue be responsible for removal or reinstallation on any product or for the expenses thereof. The above warranty does not apply to, and Nu Vue makes no warranties with respect to products which have been subjected to misuse, neglect, accident, abuse or operated under conditions that deviate from the parameters, established in Nu Vue's applicable specifications; or have been improperly installed, stored, maintained, repaired or altered by anyone other than Nu Vue; or have had their serial numbers or month and year manufacture or shipment removed, defected or altered. This warranty is given only to the original purchaser and may not be assigned or transferred to any other party. It is the purchaser's obligation to retain appropriate documentation that indicates the date of purchase.

Warnings & Cautions:

- Suitable for use in open fixtures
- Not for use with emergency exit fixtures or emergency lights
- Not for use in enclosed fixtures or insulated air-tight (ICAT) recessed down lights
- Turn off power before lamp inspection, installation or removal
- Do not use where exposed to water or weather
- Not for use outside
- Do not open - no serviceable parts inside



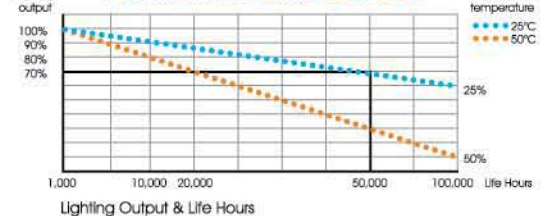
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Your Authorized Nu Vue Lighting Distributor:



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Lumen Maintenance



Transformer Compatibility

Transformer Compatibility List - For Systems WITHOUT a Dimmer

Number of MR16s per Transformer (no dimmer connected)

Brand	Transformer Model	Input Voltage (VAC/Hz)	Power Rating (W)	Type	Number of MR16s per Transformer (no dimmer connected)					
					1	2	3	4	5	6
Advance	71A943	120VAC, 60Hz	75	MT	G	G	G	G	G	G
CHD	HUA1200600X2L	120VAC, 60Hz	60	ET	G	G	G	G	G	G
ELG	250LED100W	120VAC, 60Hz	100	ET	G	G	G	G	G	G
	250LED10W	120VAC, 60Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
	250AT075T	120VAC, 60Hz	75	MT	G	G	G	G	G	G
Hatch	RS12-15M-LED	120VAC, 50-60Hz	15	ET	F	F	G	N/A	N/A	N/A
	PS12-20L	120VAC, 60Hz	20	ET	G	G	G	G	N/A	N/A
	RS12-30M-LED	120VAC, 50-60Hz	30	ET	G	G	G	G	G	G
	RS12-60M	120VAC, 50-60Hz	60	ET	G	G	G	G	G	G
	VS12-60W	120VAC, 50-60Hz	60	ET	G	G	G	G	G	G
	VS12-60W D	120VAC, 50-60Hz	60	ET	G	G	G	G	F	G
	RS12-80M	120VAC, 50-60Hz	80	ET	G	G	G	G	G	G
	RS12-60M-LED	120VAC, 50-60Hz	60	ET	G	G	G	G	G	G
LCI	I60E	230VAC, 50-60Hz	60	ET	G	G	G	G	G	G
Lightech	LET-60 *Not Recommended	120VAC, 50-60Hz	60	ET	F	F	F	F	F	F
	LET-75 *Not Recommended	120VAC, 50-60Hz	75	ET	F	F	F	F	F	F
Ligro	E12SC50SA	230VAC	50	MT	G	G	G	G	G	G
Lumex	MTR50/12EN-61558	220VAC, 50Hz	50	MT	G	G	G	G	G	G
MDL	319-0103	120VAC, 50-60Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
Mirano	BLNET-L50C 50W	220VAC, 50Hz	50	ET	G	G	G	G	G	G
Niko	320-00112	230VAC, 50Hz	105	ET	G	G	G	G	G	G
Nobile	EN-60D *Not Recommended	230VAC, 50-60Hz	60	ET	G	F	F	F	F	F
	EN-60D2 *Not Recommended	230VAC, 50-60Hz	60	ET	F	F	G	F	F	F
	EN-70D *Not Recommended	230VAC, 50-60Hz	70	ET	F	F	F	G	G	G
	EN-80D	230VAC, 50-60Hz	80	ET	G	G	G	G	G	G
	EN-80D2 *Not Recommended	230VAC, 50-60Hz	80	ET	G	G	G	G	F	F
	EN-110D	230VAC, 50-60Hz	110	ET	G	G	G	G	G	G
	EN-110D2 *Not Recommended	230VAC, 50Hz	110	ET	F	F	F	F	F	F
Osram	HTM 150/230-240	230VAC, 50-60Hz	150	ET	G	G	G	G	G	G
Phillips	Primaline 105 230-240	230-240VAC, 50-60Hz	105	ET	G	G	G	G	G	G
	Xtanium 10W Dimmable	220-240VAC, 50-60Hz	10	ET	G	N/A	N/A	N/A	N/A	N/A
Sunrise	H0050-479	120VAC, 50-60Hz	50	MT	G	G	G	G	G	G
Tridonic	Viper 2217604 *Not Recommended	230V-240VAC, 50-60Hz	105	ET	G	F	G	F	G	F
	Viper 22176072 *Not Recommended	230V-240VAC, 50-60Hz	105	ET	G	G	F	F	F	F
VadsBO	SET70RE-1	220-240VAC, 50Hz	70	ET	G	G	G	G	G	G
Vossloh-Schwabe	EST70/12.380	230V-240VAC, 50-60Hz	70	ET	G	G	G	G	G	G
	EST105/12.381	230V-240VAC, 50-60Hz	105	ET	G	G	G	G	G	G
	EST105/12.622	230V-240VAC, 50-60Hz	150	ET	G	G	G	G	G	G
WAC	EN-12100-R-AR	120VAC, 50-60Hz	100	ET	G	G	G	G	G	G
Wang	WH-601E2CA-2L	120VAC, 60Hz	60	ET	G	G	G	G	G	G

*Not recommended for use with dimmer

Symbol / Description

ET: Electronic Transformer MT: Magnetic Transformer N/A: Exceeds Transformer Recommended Power F: Flickers G: Good

Dimmer Compatibility

Transformer and Dimmer Compatibility List - For Systems WITH a Dimmer

Number of MR16s per Transformer on a low voltage Dimmer -
Percent Dimming Range

Brand	Transformer Model	Input Voltage (VAC/Hz)	Power Rating (W)	Type	1	2	3	4	5	6
Advance	71A943	120VAC, 60Hz	75	MT	10-100%	10-100%	10-100%	10-100%	10-100%	10-100%
CHD	HUA1200600K2L	120VAC, 60Hz	60	ET	60-100%	60-100%	60-100%	F	60-100%	60-100%
ELG	250LED100W	120VAC, 60Hz	100	ET	0-100%	0-100%	0-100%	0-100%	0-100%	0-100%
	250LED10W	120VAC, 60Hz	10	ET	0-100%	N/A	N/A	N/A	N/A	N/A
	250AT075T	120VAC, 60Hz	75	MT	10-100%	10-100%	10-100%	10-100%	10-100%	10-100%
Hatch	RS12-15M-LED	120VAC, 50-60Hz	15	ET	0-100%	0-100%	N/A	N/A	N/A	N/A
	PS12-20L	120VAC, 60Hz	20	ET	20-100%	20-100%	20-100%	N/A	N/A	N/A
	RS12-30M-LED	120VAC, 50-60Hz	30	ET	0-100%	0-100%	0-100%	0-100%	N/A	N/A
	RS12-60M	120VAC, 50-60Hz	60	ET	10-100%	10-100%	10-100%	10-100%	10-100%	10-100%
	VS12-60W	120VAC, 50-60Hz	60	ET	20-100%	20-100%	20-100%	20-100%	20-100%	20-100%
	VS12-60W D	120VAC, 50-60Hz	60	ET	30-100%	30-100%	30-100%	30-100%	30-100%	30-100%
	RS12-60M	120VAC, 50-60Hz	80	ET	10-100%	10-100%	10-100%	10-100%	10-100%	10-100%
	RS12-60M-LED	120VAC, 50-60Hz	60	ET	0-100%	0-100%	0-100%	0-100%	0-100%	0-100%
LCI	I60E	120VAC, 50-60Hz	60	ET	F	F	F	F	F	F
Ligtech	LET-60 *Not Recommended	120VAC, 50-60Hz	60	ET	F	F	F	F	F	F
	LET-75 *Not Recommended	120VAC, 50-60Hz	75	ET	F	F	F	F	F	F
Ligro	E12SC50SA	230VAC	50	MT	0-100%	0-100%	0-100%	0-100%	0-100%	0-100%
Lumex	MTR50/12EN-61558	220VAC, 50Hz	50	MT	0-100%	0-100%	0-100%	0-100%	0-100%	0-100%
MDL	319-0103	120VAC, 50-60Hz	10	ET	0-100%	F	F	F	F	F
Mirano	BLNET-L50C50W	220VAC, 50-60Hz	50	ET	0-50%	0-50%	0-50%	0-60%	0-60%	0-60%
Niko	320-00112	230VAC, 50Hz	105	ET	0-60%	0-60%	F	F	F	F
Nobile	EN-600 *Not Recommended	230VAC, 50-60Hz	60	ET	F	F	F	F	F	F
	EN-60D2 *Not Recommended	230VAC, 50-60Hz	60	ET	F	F	F	F	F	F
	EN-70D *Not Recommended	230VAC, 50-60Hz	70	ET	F	F	F	F	F	F
	EN-80D	230VAC, 50-60Hz	80	ET	0-50%	0-50%	0-60%	0-70%	0-70%	0-70%
	EN-80D2 *Not Recommended	230VAC, 50-60Hz	80	ET	F	F	F	F	F	F
	EN-110D	230VAC, 50-60Hz	110	ET	30-70%	30-70%	30-70%	30-70%	30-70%	30-70%
	EN-110D2 *Not Recommended	230VAC, 50-60Hz	110	ET	F	F	F	F	F	F
Osram	HTM 150/230-240	230-240VAC, 50-60Hz	150	ET	30-70%	30-70%	30-70%	30-70%	30-70%	30-70%
Phillips	Primaline 105 230-240	230-240VAC, 50-60Hz	105	ET	0-80%	0-80%	0-80%	F	F	F
	Ntanium 10W Dimmable	220-240VAC, 50-60Hz	105	ET	0-100%	N/A	N/A	N/A	N/A	N/A
Sunrise	H0050-479	120VAC, 50-60Hz	50	MT	20-100%	20-100%	70-100%	70-100%	70-100%	70-100%
Tridonic	Viper 2217604 *Not Recommended	230-240VAC, 50-60Hz	105	ET	F	F	F	F	F	F
	Viper 22176072 *Not Recommended	230-240VAC, 50-60Hz	105	ET	F	F	F	F	F	F
VadsBO	SET70RE-1 *Not Recommended	220-240VAC, 50-60Hz	70	ET	F	F	F	30-70%	30-70%	30-70%
Vossloh	EST70/12 380 *Not Recommended	230-240VAC, 50-60Hz	70	ET	F	F	F	F	F	F
Schwabe	EST105/12 381 *Not Recommended	230-240VAC, 50-60Hz	105	ET	F	F	F	F	F	F
	EST150/12 622 *Not Recommended	230-240VAC, 50-60Hz	150	ET	F	F	F	F	F	F
WAC	EN-12100-R-AR	120VAC, 50-60Hz	100	ET	0-100%	0-100%	0-100%	0-100%	0-100%	0-100%
Wang	WH-601E2CA-2L	120VAC, 60Hz	60	ET	F	F	20-100%	20-100%	20-100%	20-100%

Symbol / Description

ET: Electronic Transformer MT: Magnetic Transformer N/A: Exceeds Transformer Recommended Power F: Flickers

120V magnetic transformers tested using Lutron DVLV-600P dimmers

230V magnetic transformers tested using Lutron NTLV-600-277 dimmers

120V magnetic transformers tested using Lutron SELVB-300P dimmers

230V magnetic transformers tested using Lutron Everfourish EF0700DC dimmers