

ULTRA LED Retrofit MR16 Lamps

Dimmable



LED technology reduces energy and maintenance costs when compared to conventional light sources. Lasting 17 times longer, 6W LED Retrofit MR16 lamps are high-quality replacements for 20W halogen MR16 lamps. They are free of UV and IR radiation minimizing discoloration and fading of materials. These lamps are dimmable down to 10%* and are rated at 35,000 hours life with a correlated color temperature (CCT) of 3000K. They are available with GU5.3 bases and 25° and 36° beam angles.

Key Features & Benefits

- 6W LED lamp designed as high quality replacement of 20W halogen MR16 lamps
- Dimmable 10%–100%*
- 35,000 hours life at 70% lumen maintenance
- Suitable for indoor environments
- Available in 3000K CCT with 87 CRI (2700K targeted for Fall 2010)
- GU5.3 base
- Reduces energy consumption up to 70%
- Lasts 17 times longer than halogen lamps
- No warm-up time, instant-on with full light output and stable color
- 12V AC/DC input voltage
- Mercury free and RoHS compliant
- UV and IR free

* Performance may vary depending on dimmer used in application



This light source meets restrictions on hazardous substances.



Intertek
4001425

Product Offering

Item Number	Ordering Abbreviation	Wattage (W)	Color Temperature	Beam Angle	R9
78634	LED6MR16/DIM/830/NFL25	6	3000K	25°	52
78635	LED6MR16/DIM/830/FL36	6	3000K	36°	38

Application Information

Market Segments

- Art galleries and museums
- Commercial and office space
- Hotels
- Residential
- Restaurants
- Retail sector

Applications

- Accent/display lighting
- Recessed downlighting
- Track lighting

Application Notes

1. Operating temperature range between -40°F and +113°F (-40°C and +45°C)
2. Suitable for use in indoor environments
3. Suitable for damp locations. Use in a UL outdoor approved fixture.
4. Suitable for dimmers or in luminaires controlled by a dimmer
5. Stated performance is based on 12VDC input to the MR16 5.3 base LED lamp. Performance may vary based on transformer used to operate the lamp. 12VAC electronic transformers differ by manufacturer but typically result in nominal lamp performance. 12VAC magnetic transformers will have reduced power to the LED lamp decreasing total lumen output. Please reference compatibility list on pages 3 and 4 for more information.
6. Not intended for use with emergency light fixtures or exit lights
7. Not to be used in enclosed fixtures
8. Not to be used in enclosed insulated ceilings



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	Date

Ordering Information

Item Number	Ordering Abbreviation	Wattage (W)	Base Type	Input Voltage (V)	Average Rated Life (hrs.) ¹	Typical Lumens (lm) ²	CCT ³	CBCP (cd)	Beam Angle	CRI ⁴
78634	LED6MR16/DIM/830/NFL25	6	GU5.3	12	35,000	300	3000K	860	25°	87
78635	LED6MR16/DIM/830/FL36	6	GU5.3	12	35,000	300	3000K	590	36°	87

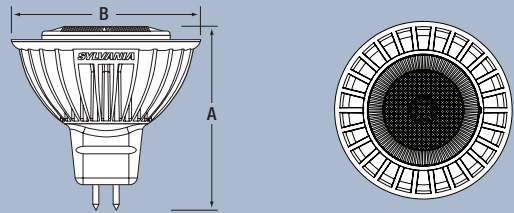
- Hours lifetime with 70% lumen maintenance
- Thermally stable typical lumens (±10%)
- Thermally stable typically CCT (±10%)
- CRI – color rendering index

Ordering Guide

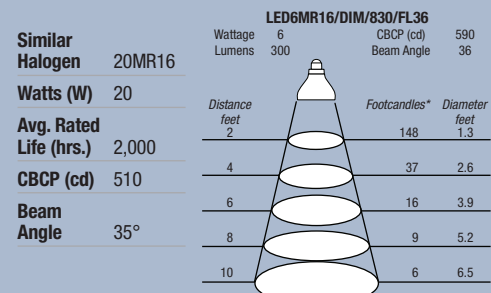
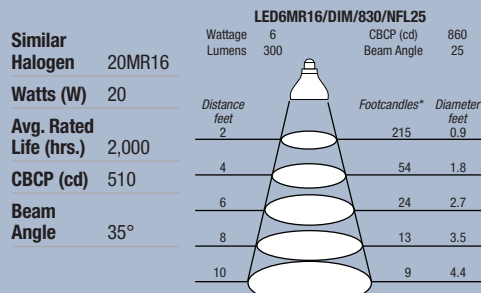
LED	6	MR16	/	DIM	/	830	/	NFL	25
LED Lamps and Retrofits	Wattage 6	Lamp Type: MR16		Dimmable		CRI, CCT: 830: 80+ CRI, 3000K CCT		Beam Type: NFL = Narrow Flood	Beam Angle: 25°

Lamp Dimensions

	(A) MOL (inches)	(B) Diameter (inches)
LED6MR16/DIM	2.0	1.9



Illuminance Cone Diagrams



Energy Savings

Basic Product Description	LED Life (hrs.)	Similar Halogen	Halogen Life (hrs.)	Watts Saved	Energy Savings*	LED Life vs. Halogen Life
LED6MR16/DIM	35,000	20MR16	2,000	14	\$54	17x

*Energy savings over life of lamp calculated at \$0.11/kWh

Transformer and Dimmer Compatibility List – Item Numbers 78634 and 78635

For systems WITHOUT a dimmer

Brand	Input Model	Power Rating Voltage (VAC / Hz)	Wattage (W)	Type	Number of MR16s per Transformer (no dimmer connected)					
					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
	RS12-60M-LED	120 VAC, 50-60 Hz	60	ET	G	G	G	G	G	G
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
	Not recommended									
	LET-75	120 VAC, 50-60 Hz	75	ET	F	F	F	F	F	F
Not recommended										
Ligro	E12SC50SA	230 VAC	50	MT	G	G	G	G	G	G
Lumex	MTR50/12 EN-61558	220 VAC, 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
	Not recommended									
	EN-60D2	230 VAC, 50-60 Hz	60	ET	G	F	G	F	F	G
	Not recommended									
	EN-70D	230 VAC, 50-60 Hz	70	ET	F	F	F	G	G	G
	Not recommended									
	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
Not recommended										
EN-110D	230 VAC, 50-60 Hz	110	ET	G	G	G	G	G	G	
EN-110D2	230 VAC, 50-60 Hz	110	ET	F	F	F	F	F	F	
Not recommended										
OSRAM	HTM 150/230-240	230-240 VAC, 50-60 Hz	150	ET	G	G	G	G	G	G
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
Tridonic	VIPER 22176074	230-240 VAC, 50-60 Hz	105	ET	G	F	G	F	G	F
	Not recommended									
	VIPER 22176072	230-240 VAC, 50-60 Hz	105	ET	G	G	F	F	F	F
Not recommended										
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-601E2CA-2L	120 VAC, 60 Hz	60	ET	G	G	G	G	G	G

Symbol / Description

ET / Electronic Transformer
F / Flickers

MT / Magnetic Transformer
G / Good

N/A / Exceeds Transformer Recommended Power

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	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
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	Not recommended									
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	Not recommended									
	EN-60D2	230 VAC, 50-60 Hz	60	ET	G	F	G	F	F	G
	Not recommended									
	EN-70D	230 VAC, 50-60 Hz	70	ET	F	F	F	G	G	G
	Not recommended									
	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
	Not recommended									
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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
Tridonic	VIPER 22176074	230-240 VAC, 50-60 Hz	105	ET	G	F	G	F	G	F
	Not recommended									
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Vossloh	EST 70/12.380	230-240 VAC, 50-60 Hz	70	ET	G	G	G	G	G	G
Schwabe	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-601E2CA-2L	120 VAC, 60 Hz	60	ET	G	G	G	G	G	G

Symbol / Description

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

120V magnetic transformers tested using Lutron DVLV-600P
 230V magnetic transformers tested using Lutron NTLV-600-277
 120V electronic transformers tested using Lutron SELVB-300P
 230V magnetic transformers tested using Everflourish EF0700DC

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 Specifications subject to change without notice.

SYLVANIA

lighting facts^{CM}

A Program of the U.S. DOE

Light Output (Lumens) 300
 Watts 6
 Lumens per Watt (Efficacy) 50

Color Accuracy
 Color Rendering Index (CRI) 87

Light Color
 Correlated Color Temperature (CCT) 3000 (Bright White)

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: SBZT-CNWKPE
 Model Number: LEDMR16/DIM830/NFL25
 Type: Replacement lamps

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 Fax: 1-800-762-7192

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 Fax: 1-800-762-7192

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