

LM16

LED MR16 Lamp

Product Description

The Cree LM16 delivers up to 620 lumens while achieving over 68 lumens per watt. The LM16 LED MR16 lamp is available in a variety of beam angles with a color temperature of 3000K. Designed to halogen MR16 lamp standards, the LM16 LED lamp imitates the size, appearance and lumen performance of halogen lamps. This lamp saves 80 percent of annual energy savings and is suitable for open track fixtures and non-IC rated downlights. It is capable of dimming down to 5 percent and is perfect for down lighting, track and accent lighting use in both commercial and retail applications.

Performance Summary

Delivered Light Output: 464 lumens (35W eq); 620 lumens (50W eq)

Input Power: 7 watts (35W eq); 9 watts (50W eq)

CRI: 83

CCT: 3000K

Beam Angle: 17°, 25° and 40°

BCBP: 35W eq 17°: 2862, 35W eq 25°: 1995, 35W eq 40°: 728
50W eq 17°: 4152, 50W eq 25°: 2650, 50W eq 40°: 1057

Warranty: 3 year limited warranty†

Lifetime: Designed to last 25,000 hours in open track fixtures and non-IC downlights

Dimming: 5%*

Ordering Information

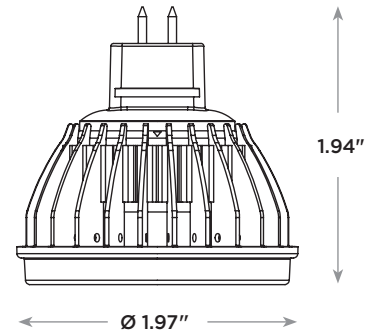
Example: LM16-50-30K-25D

LM16		30K		
Product	Watt Equivalent	CCT	Beam Angle	Base
LM16	35 35W 50 50W	30K 3000 Kelvin	17D 17° Spot 25D 25° Flood 40D 40° Wide Flood	Blank GU5.3 Base

*See compatible dimming controls page.

† See www.cree.com/lighting for warranty terms.

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Rev. Date 01/04/2013



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Product Specifications

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing with lens protects LEDs and optical system.
- Fanless housing design and smart thermal circuit design with embedded intelligent software properly monitors the operating temperature range.
- Housing is ANSI form factor compliant for halogen lamps.

OPTICAL SYSTEM

- Single LED source.
- Proprietary in-house designed lens is available in three beam angles of 17° Spot, 25° Flood and 40° Wide Flood.
- Lens effectively eliminates surface glare and adds a pleasant touch of soft backlight.

ELECTRICAL SYSTEM

- **Power Factor** > 0.9 nominal
- **Input Voltage:** 12Vac
- **Dimming:** 5%; see dimmer compatibility page

REGULATORY & VOLUNTARY QUALIFICATIONS

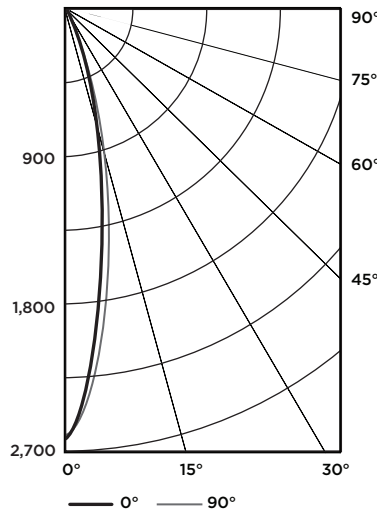
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Transformer Compatibility

TRANSFORMER (Connected with one lamp)	LM16 50W EQ	LM16 35W EQ
Ambiance Lighting 9454-12	No Flicker	No Flicker
BEI B0344F-4 REV.5	No Flicker	No Flicker
Con-Tech LA2075N	No Flicker	No Flicker
Con-Tech LVT-300	No Flicker	No Flicker
DS&L WH-601E2N	No Flicker	No Flicker
Eurofase 0086	No Flicker	No Flicker
Fulham PET-120-12-60	No Flicker	No Flicker
Hatch IS12-75	No Flicker	No Flicker
Hatch RS12-60M	No Flicker	No Flicker
Hatch RS12-80M	No Flicker	No Flicker
Hatch RS12-300	No Flicker	No Flicker
Hopear LT-60S	No Flicker	No Flicker
Juno TL601E-75	No Flicker	No Flicker
Juno TL601E-60	No Flicker	No Flicker
Lightech LET 60	No Flicker	No Flicker
Lightech LET 60-LW	No Flicker	No Flicker
Lightech LET 75	No Flicker	No Flicker
Lightech LET 105	No Flicker	No Flicker
Linogene WH601E6A3	No Flicker	No Flicker
MDL 316-0003	No Flicker	No Flicker
Sea Gull 96223S-15	No Flicker	No Flicker
Sebco EE052	No Flicker	Not Compatible
Symban SY-75	No Flicker	Not Compatible

Photometry

LM16-50-30K-25D BASED ON CESTL-2012-0075



Intensity (Candlepower) Summary

Angle	Mean CP
0°	2650
5°	2265
15°	735
25°	191
35°	54
45°	15
55°	9
65°	6
75°	5
85°	4
90°	3

Zonal Lumen Summary

Zone	Lumens	% Lamp
0-30	493	86%
0-40	535	93%
0-60	560	97%
0-90	600	3%

Reference www.cree.com/lighting for detailed photometric data.

Illuminance at a Distance

	Center Beam fc	Beam Width
2.0 ft	642.7 fc	0.8 ft
4.0 ft	160.7 fc	1.5 ft
6.0 ft	71.4 fc	2.3 ft
8.0 ft	40.2 fc	3.1 ft
10.0 ft	25.7 fc	3.8 ft

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Transformer & Dimmer Compatibility for LM16 Lamp*

Number of allowable connected lamps and dimming range, for 50W eq lamps only.

DIMMER/SERIES	MODEL NUMBER	BEI B0344F-4 REV.5	Con-Tech LA2075N	Con-Tech LVT-300	Fulham PET-120-12-60	Hatch RS12-60M	Hatch RS12-300	Juno TL601E-75	Lighttech LET 60	Lighttech LET 60-LW	Lighttech LET 75	Sea Gull 96223S-15
Cooper	DI06P	Not compatible										
Cooper	DE06P		84% to 4%							1 or 3 lamps only, Dimming 87% to 7%		
Cooper	SI06P											
Cooper	9531				3 lamps only, Dimming 75% to 1%					3 lamps only, Dimming 63% to 0%		
Leviton	IPE04-1LZ					1, 2 or 3 lamps, Dimming 98% to 9%			1, 2 or 3 lamps, Dimming 97% to 8%		1, 2 or 3 lamps, Dimming 98% to 8%	
Lutron	NLV-600	94% to 1%										
Lutron	NTELV-600					1, 2 or 3 lamps, Dimming 89% to 3%			1, 2 or 3 lamps, Dimming 92% to 2%		1 or 3 lamps only, Dimming 89% to 1%	
Lutron	RRD-6NA		1, 2 or 3 lamps, Dimming 88% to 0%		1, 2 or 3 lamps, Dimming 91% to 0%		1 lamp only, Dimming 100% to 0%	1 lamp only, Dimming 90% to 0%	1 lamp only, Dimming 90% to 0%			2 lamps only, Dimming 86% to 0%
Lutron Grafik Eye GRX-3104-T	ELVI-1000					87% to 0%			85% to 0%		83% to 0%	
Lutron Grafik Eye GRX-3104-T	PHPM-PA-120								2 or 3 lamps, Dimming 94% to 0%		2 or 3 lamps, Dimming 93% to 0%	
Wattstopper	SDMLV-603			93% to 1%								

*The presence of a dimmer on this chart is not a guarantee or warranty of the compatibility of the LM16 in any particular installation. The absence of a dimmer from this chart does not necessarily imply incompatibility. Please reference the dimmer manufacturer's instructions for installation and further product information.

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