

LM16 Series

LED MR16 Lamp

Product Description

The Cree LM16 delivers up to 456 lumens while achieving over 65 lumens per watt. The LM16 LED MR16 lamp is available 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

Initial Delivered Lumens: 456 lumens

Input Power: 7 watts

CRI: Minimum 80

CCT: 3000K

Beam Angle: 40°

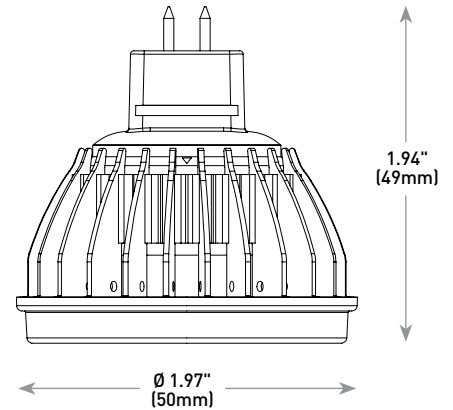
CBCP: 35W equivalent 40° : 802 Cd

Limited Warranty¹: 3 years

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

Dimming: Dimmable to 5% with select dimmers

¹See <http://lighting.cree.com/warranty> for warranty terms



Ordering Information

Example: LM16-35-30K-40D

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



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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 a 40° Wide Flood beam angle
- Lens effectively eliminates surface glare and adds a pleasant touch of soft backlight

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 nominal
- **Input Voltage:** 12Vac
- **Dimming:** Dimmable to 5% with select dimmers. Refer to <https://www.creelink.com/exLink.asp?113877720E27P84I26836092> for additional details

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations; not for use where exposed directly to weather or water
- Designed for use in open air track heads
- Suitable for use in trackheads and recessed cans with restricted airflow (may experience less than nominal performance)
- Not intended for use in totally enclosed fixtures
- Not intended for DC operations
- Not intended for use with emergency exit fixtures or emergency lights

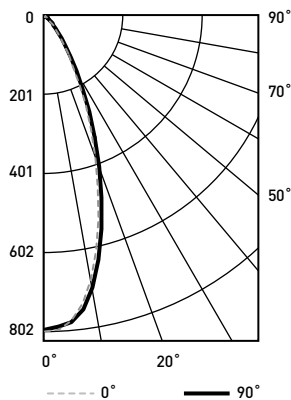
Transformer Compatibility

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

Photometry

LM16-35-30K-40D BASED ON CESTL REPORT TEST #: 12929-T

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



Coefficients Of Utilization - Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	113	110	108	105
2	108	103	99	95
3	102	96	91	87
4	98	90	85	81
5	93	85	79	75
6	89	80	75	70
7	85	76	70	66
8	81	72	67	63
9	78	69	63	60
10	75	66	60	57

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m ²)				
		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	60,802	57,317	57,704
	55°	32,465	28,646	29,362
	65°	25,271	22,031	23,327
	75°	26,980	24,864	26,451
	85°	29,849	18,852	28,278

<http://lighting.cree.com/products/indoor/lamps/lm-series> for detailed photometric data

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	329	N/A	75.2%
0-40	383	N/A	87.5%
0-60	417	N/A	95.4%
0-90	430	N/A	98.4%
0-180	437	N/A	100%