



MR16 TrackLED™ Spotlight Bulbs, 12-to-24V AC/DC

MR16-42-xxW-001x



42 White LEDs — Uses Only 1.6 Watts — 12-24V AC/DC — GX5.3 Bi-Pin Base

Energy-Efficient Drop-in Replacement of Halogens up to 20 Watts in MR16 Fixtures — Up to 90% Power Savings

FEATURES

- **Warranty:** 3 Years
- **Low Power Consumption:** Less than 2 Watts
- **Wide Voltage Range:** Works on Clean or Noisy 12-to-24V AC or DC Power Supply
- **Easy Installation** in Most MR16 Fixtures with Compatible Bulb Profile and Dimensions
- **Replaces MR16 Halogen Bulbs** up to 20 Watts
- **Long Lifespan:** White LED Lumen Maintenance Is Greater than 70% at 35,000 Hours of Operation (*Rated average life based on engineering testing and probability analysis*)
- **High CRI** Enhances All Colors
- **Wide Ambient Operating Temperature Range:** ~-22°F to ~+122°F [~-30°C to ~+50°C]

BENEFITS

- **Consistent Color/ Even Light Output:** Non-Halation, No Hot Spots — Intensity and Color Remain Stable over LED Lifetime
- **Energy-Efficient:** Saves up to 90% of Energy Costs over Equivalent Incandescents and Halogens
- **Higher Heat Dispersion:** Stays Cooler than Other MR16 Bulbs
- **Solid-State:** Impervious to Electrical and Mechanical Shock, Vibration, Frequent Switching and Environmental Extremes
- **Low Maintenance:** Lowers Costs by Reducing Re-lamp Frequency
- **Environment-Friendly:** No Mercury Content, No Lead
- **No Hazardous Emissions:** No UV or IR Radiation; No RF Interference

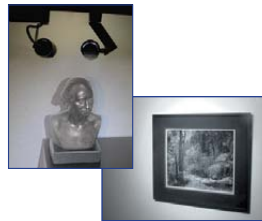
SPECIFICATIONS

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PART NO.	MR16-42-xxW-001x
Input Voltage	12-24V AC/DC [Tested @ 14VAC]
Ambient Operating Temp.	~-22°F to ~+122°F [~-30°C to ~+50°C]
Base	GX5.3 Bi-Pin
Dimensions	L1.92"x D01.96" [L48.7mm x D049.8mm]
Weight	1.34 oz / 38.1g

APPLICATIONS

- Track Lighting / Spot Lighting
- Display / Cabinet / Kiosk Lighting
- Architectural/Landscape Lighting
- Art Gallery and Museum



NOTE: These models are for use with standard ON/OFF switches only, not with a dimmer. Use with any type of dimmer, relay or other current/voltage control circuit device will VOID WARRANTY.



Not Suitable for Use with Dimmers

High-Powered White MR16 TrackLEDs™

These MR16 LED bulbs have two big advantages over other MR16 LED bulbs:

- They are engineered to handle the variations in voltages that may accompany "noisy" or "dirty" AC or DC power supplies, eliminating burnout from incoming voltage that is higher than the bulb's capacity.
- They remove the need to stock a variety of MR16 LED bulbs to coordinate with different voltages that may present with 12V-24V DC/AC power supplies, thus simplifying procurement and reducing inventory.

CUSTOM OPTIONS

[For qualified applications & large-quantity OEM orders]

- Other White Color Temperatures
- Other LED Beam Angles for Different Effects

White LED technology is patent protected in the United States.

LEDtronics white LED products are covered under these patents.

PART NUMBER	INPUT CURRENT	ENERGY USED	EFFICACY	TOTAL LUMENS	MAXIMUM CANDELA	CRI	COLOR TEMPERATURE	EMITTED COLOR	VIEWING ANGLE*
3000K WARM WHITE									
MR16-42-SIW-001N	0.146A	1.5 Watts	73 lm/W	110 lm	309 cd	68	2800K-3200K	Warm White	15°
MR16-42-SIW-001M	0.145A	1.6 Watts	69 lm/W	110 lm	227 cd	66	2800K-3200K	Warm White	34°
5000K TRUE WHITE									
MR16-42-TPW-001N	0.149A	1.5 Watts	81 lm/W	121 lm	314 cd	75	4800K-5200K	True White	23°
MR16-42-TPW-001M	0.162A	1.6 Watts	73 lm/W	117 lm	277 cd	75	4800K-5200K	True White	34°

(*Full Beam Width @ 50% Intensity)

LEDTRONICS®
Creating the Future of Light Since 1983™

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LOG # 189 / Rev 07-2012

Check LEDTRONICS.COM for latest data. Printed material may be outdated.

MR16-42-SIW-001N

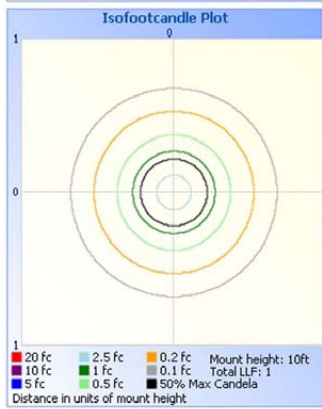
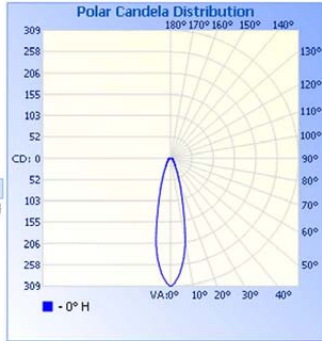
Luminaire Photometric Report

Filename: MR16-42-SIW-001N
 Manufacturer: LEDTRONICS -
 Luminaire: WITH NO LENS, 14VAC, 1.5W
 Luminaire Cat: MR16-42-SIW-001N
 Lamp: LUMEN RATING: 110.1Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 110.1
 Max Candela: 309.0 at Horizontal: 0, Vertical: 0
 Luminous Opening: Point
 Test: 7-30-09

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	63.3%	69.7	54.9	54.9
Beam (50%):	29.8%	32.8	24.9	24.9
Total:	100%	110.1		

Illuminance at a Distance		
Center Beam FC	Beam Width	
1.7ft	111.24 fc	0.7ft
3.3ft	27.81 fc	1.5ft
5.0ft	12.36 fc	2.2ft
6.7ft	6.95 fc	2.9ft
8.3ft	4.45 fc	3.7ft
10.0ft	3.09 fc	4.4ft

■ Beam Spread: 24.9°



MR16-42-TPW-001N

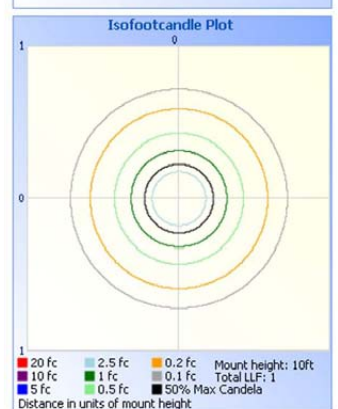
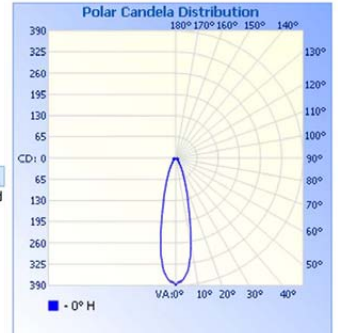
Luminaire Photometric Report

Filename: MR16-42-TPW-001N
 Manufacturer: LEDTRONICS -
 Luminaire: WITH NO LENS, 14VAC, 1.5W
 Luminaire Cat: MR16-42-TPW-001N
 Lamp: LUMEN RATING: 141.1Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 141.1
 Max Candela: 390.0 at Horizontal: 0, Vertical: 0
 Luminous Opening: Point
 Test: 7-1-09

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	68.4%	96.6	56.6	56.6
Beam (50%):	33.3%	47.0	25.8	25.8
Total:	100%	141.1		

Illuminance at a Distance		
Center Beam FC	Beam Width	
1.7ft	140.40 fc	0.8ft
3.3ft	35.10 fc	1.5ft
5.0ft	15.60 fc	2.3ft
6.7ft	8.78 fc	3.0ft
8.3ft	5.62 fc	3.8ft
10.0ft	3.90 fc	4.6ft

■ Beam Spread: 25.8°



MR16-42-SIW-001M

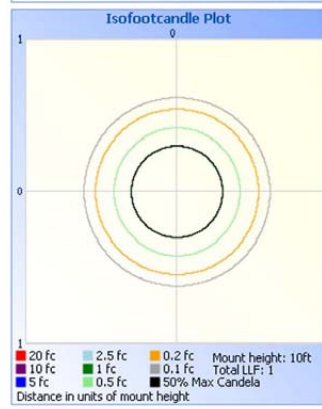
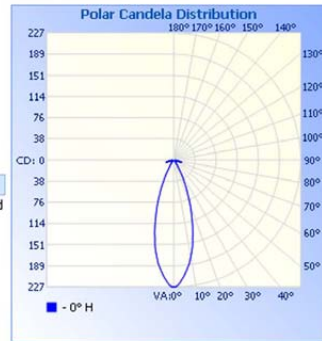
Luminaire Photometric Report

Filename: MR16-42-SIW-001M
 Manufacturer: LEDTRONICS -
 Luminaire: WITH NO LENS, 14VAC, 1.6W
 Luminaire Cat: MR16-42-SIW-001M
 Lamp: LUMEN RATING: 109.9Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 109.9
 Max Candela: 227.0 at Horizontal: 0, Vertical: 0
 Luminous Opening: Point
 Test: 7-29-09

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	69.8%	76.7	59.9	59.9
Beam (50%):	39.3%	43.2	33.7	33.7
Total:	100%	109.9		

Illuminance at a Distance		
Center Beam FC	Beam Width	
1.7ft	81.72 fc	1.0ft
3.3ft	20.43 fc	2.0ft
5.0ft	9.08 fc	3.0ft
6.7ft	5.11 fc	4.0ft
8.3ft	3.27 fc	5.0ft
10.0ft	2.27 fc	6.1ft

■ Beam Spread: 33.7°



MR16-42-TPW-001M

Luminaire Photometric Report

Filename: MR16-42-TPW-001M
 Manufacturer: LEDTRONICS -
 Luminaire: WITH NO LENS, 14VAC, 1.6W
 Luminaire Cat: MR16-42-TPW-001M
 Lamp: LUMEN RATING: 130Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 130
 Max Candela: 333.0 at Horizontal: 0, Vertical: 0
 Luminous Opening: Point
 Test: 7-1-09

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	68.2%	88.7	56	56
Beam (50%):	32.1%	41.7	28.2	28.2
Total:	100%	130.0		

Illuminance at a Distance		
Center Beam FC	Beam Width	
1.7ft	119.88 fc	0.8ft
3.3ft	29.97 fc	1.7ft
5.0ft	13.32 fc	2.5ft
6.7ft	7.49 fc	3.4ft
8.3ft	4.80 fc	4.2ft
10.0ft	3.33 fc	5.0ft

■ Beam Spread: 28.3°

