

## WHY LED?

Light emitting diodes (LEDs) have been used for years, primarily in the electronics industry for circuit board mounted indicator lights. Recently, technological advances have expanded the use of LEDs into a variety of fields within the transportation, residential and commercial sectors.

LEDs provide increased brightness, reduced maintenance and offer an energy efficiency operating standard superior to incandescent and halogen lighting products. LEDs are also the lighting option with the lowest environmental impact.

## WHY CRS LED?

CRS Electronics has been building high quality LED lighting solutions for close to 10 years. With our engineering expertise we have developed and supplied LED solutions for more than 50 leading companies. Applications include aviation, architectural, retail signage and display, automotive, theatrical, home décor, underwater, navigation and many more. CRS MR16 replacements provide a stable light output, have a life expectancy of 50,000 hours and have features not offered by other LED light engines, such as dimming capability, transformer independence and automatic temperature sensing circuitry to protect the LEDs.



## BENEFITS OF CRS ELECTRONICS LED MR16 TECHNOLOGY

- LONG LIFE 50,000+ HOURS OF OPERATION
- REDUCE ELECTRICITY USE BY MORE THAN 75%
- LOWER MAINTENANCE COSTS
- VIBRATION RESISTANT SOLID-STATE ELECTRONICS
- LOW HEAT GENERATION
- ELIMINATES HEAT DAMAGE TO FIXTURES & SOCKETS
- VARIETY OF COLOR TEMPERATURES AVAILABLE
- ASSEMBLED IN NORTH AMERICA 🍁

The largest interior LED residential retrofit in North America was completed by CRS at the Palace Pier Condominiums in 2008

- **CRS LED REDUCED LIGHTING ELECTRICITY CONSUMPTION BY 75%**
- **PALACE PIER WILL ENJOY NET SAVINGS OF \$180,000 OVER 5 YEARS**
- **TOTAL CAPITAL COSTS WILL BE RECOVERED IN LESS THAN ONE YEAR**

## WHO IS CRS?

CRS knows LEDs. Our innovations include high lumen output, dimmability, transformer independence and intelligent circuit board controls. Other LED manufacturers outsource to design and production facilities overseas; CRS designs and builds your LED solution in our facility in Welland, Ontario, Canada where we can promptly service all your LED needs.

**Contact us to learn how you can save electricity, money and the environment with LEDs.**

## MR16 REPLACEMENT HIGH OUTPUT SPOT & FLOOD - 7 LED

### FEATURES

- Direct MR16 LED replacement
- Operates at 12VAC
- No heat or UV in the beam
- Dimmable with some dimmers
- Works with most magnetic and electronic transformers
- Automatic temperature sensing circuitry
- Eliminates heat damage to fixtures and sockets
- Lead, mercury, and arsenic free

### SAVINGS

- Energy reductions of 75%
- Savings of \$175.00 per lamp (based on \$0.10/KWh and typical halogen consumption and maintenance costs)

### GUARANTEE

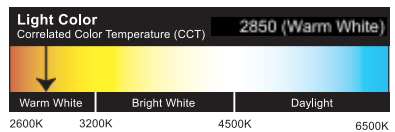
- No maintenance for 3 years when operating 24 hrs a day 7 days a week, or 5 years at 12 hrs per day

### Lighting Facts™

LED Product

<b>Light Output (Lumens)</b>	300
<b>Watts</b>	6
<b>Lumens per Watt (Efficacy)</b>	50

<b>Color Accuracy</b> Color Rendering Index (CRI)	92
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Visit [www.lighting-facts.com](http://www.lighting-facts.com) for the Label Reference Guide.

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

LTL Number: 15464

Prepared For: CRS Electronics

Catalog Number: MR16 LED Replacement Lamp Narrow Beam Sample B

Luminaire: Aluminum heatsink housing, clear patterned plastic lens.

Lamp: One MR16 LED replacement lamp with 7 white LEDs

Power Factor: 0.657

Luminaire Efficacy: 50.6 Lumens/Watt

### PART NUMBER: 10-407-07

Beam angle: 20 degrees

CBCP: 1700

Lumens: 300

CCT: 2850+/-75k (Warm)

CRI: 92

### PART NUMBER: 10-407-09

Beam angle: 26 degrees

CBCP: 1200

Lumens: 300

CCT: 2850+/-75k (Warm)

CRI: 92

### PART NUMBER: 10-407-10

Beam angle: 38 degrees

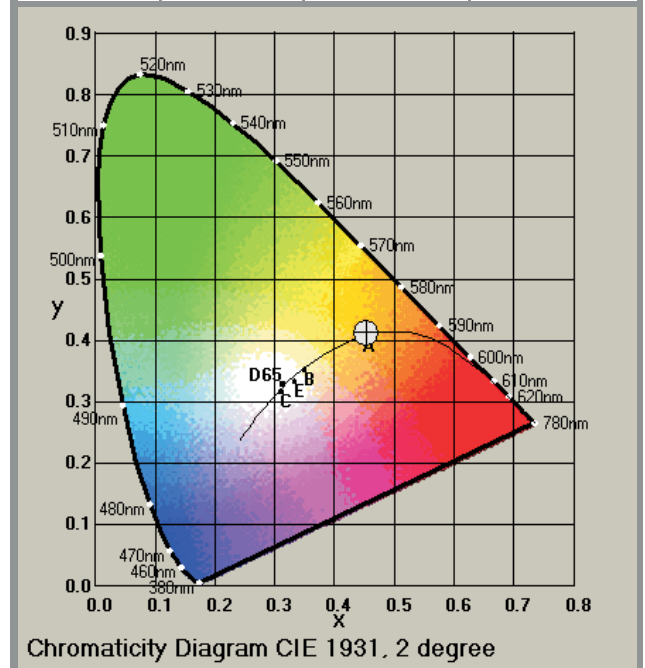
CBCP: 500

Lumens: 300

CCT: 2850+/-75k (Warm)

CRI: 92

Lamp Arc Voltage	Lamp Current	Lamp Watts	Frequency
12.0VAC	0.7572A	5.990W	60.0 Hz
Radiant Flux mW	Luminous Flux lumen	Corr.Color Temperature K	Color Rend. Index Ra
1098.952	302.852	2826	92.9
Chroma x	Chroma y	Chroma u	Chroma v
0.4526	0.4134	0.2566	0.3516



TESTING WAS PERFORMED IN ACCORDANCE WITH IES LM-79-08.

CRS Electronics reserves the right to change specifications without notice.