

MRK LED Magnetic Retrofit Kits

| | |
|------------|--|
| Project: | |
| Type: | |
| Catalog #: | |



STANDARD



FEATURES

- Available in 4000k (neutral white) & 5000k (cool white) color temperatures, and in sizes appropriate for retrofit of existing 2' x 2' or 2' x 4' fluorescent luminaires.*
- Long-life LEDs provide at least 70% of initial lumen output (L_{70}) for $\geq 148,000$ hours of operation, and at least 90% of initial lumen output (L_{90}) for $\geq 46,000$ hours of operation.**
- LED chromaticity based on ≤ 5 -step ANSI quadrangles.
- LED color maintenance ≤ 0.002 chromaticity shift ($\Delta u'v'$) over the initial 6,000 of operation.
- Provides a range of 3,567 to 5,249 lumens.
- Universal 120-347 AC voltage (50-60Hz) is standard.
- 0-10vdc dimming drivers, which provide 10% continuous dimming are standard.
- Power factor > 0.90 .
- Total harmonic distortion $< 20\%$.
- Color rendering index (R_a) ≥ 80 . Renders red colors (R_9) ≥ 7 .
- Choice of clear or frosted polycarbonate lenses.
- Easy retrofit installation in existing 2' x 2' and 2' x 4' fluorescent luminaires.
- Bulk packed (carton quantity = 12) for easy unpacking and installation.
- LED strips and drivers include magnets for temporary attachment to luminaires, but both components must be secured with screw-down mounting flanges.

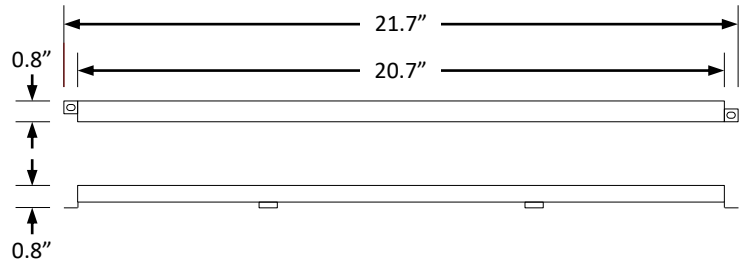
* Contact factory for other color temperatures and lumen packages.
** L70 hours are IES TM-21-11 calculated hours.

WARRANTY & LISTINGS

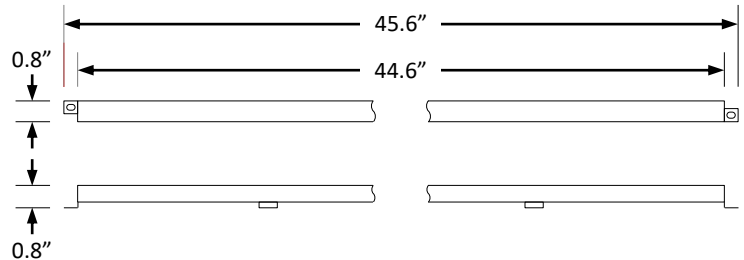
- cULus listed for damp locations in ambient temperatures from -20°C to 40°C (-4°F to 104°F).
- Models with clear lenses are DLC 5.0 premium approved.
- Models with frosted lenses are DLC 5.1 standard approved.
- Low risk of flicker per IEEE1789-2015 at 100% light output.
- Complies with FCC Part 15, class A.
- Complies with IEC61000-4-5, surge immunity protection (1kV).
- 5-year warranty of all electronics and housing.

DIMENSIONS

2-Foot Models



4-Foot Models



ORDERING INFORMATION

Example: MRK-4FT-5L-5K-FL

| Series | Length & Nominal Lumen Output | | Color Temperature | | Lens | |
|--------|-------------------------------|-------------------|-------------------|-------|------|--------------|
| | Length | Lumen Output | Code | Value | Code | Description |
| MRK | 2FT-4L | 2' = 4,000 lumens | 4K | 4000k | CL | Clear lens |
| | 4FT-5L | 4' = 5,000 lumens | 5K | 5000k | FL | Frosted lens |

Phone number 888-953-EXIT (3948)

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ELECTRICAL DATA

| Model | Color Temperature | CRI ¹ | Luminaire Lumens | Luminaire Watts | Lumens/Watt | Input Voltage ² | Input Current (A) | | | Power Factor | THD ³ | L ₇₀ Hours ⁴ |
|------------------|-------------------|------------------|------------------|-----------------|-------------|----------------------------|-------------------|------|------|--------------|------------------|------------------------------------|
| | | | | | | | 120V | 277V | 347V | | | |
| MRK-2FT-4L-4K-CL | 4000k | >80 | 3,973 | 32 | 125 | 120-347 | 0.27 | 0.12 | 0.09 | >0.90 | <20% | 151,000 |
| MRK-2FT-4L-5K-CL | 5000k | >80 | 3,993 | 32 | 126 | 120-347 | 0.27 | 0.12 | 0.09 | >0.90 | <20% | 151,000 |
| MRK-2FT-4L-4K-FL | 4000k | >80 | 3,567 | 32 | 110 | 120-347 | 0.27 | 0.12 | 0.09 | >0.90 | <20% | 148,000 |
| MRK-2FT-4L-5K-FL | 5000k | >80 | 3,572 | 32 | 113 | 120-347 | 0.27 | 0.12 | 0.09 | >0.90 | <20% | 148,000 |
| MRK-4FT-5L-4K-CL | 4000k | >80 | 5,008 | 39 | 128 | 120-347 | 0.33 | 0.14 | 0.11 | >0.90 | <20% | 156,000 |
| MRK-4FT-5L-5K-CL | 5000k | >80 | 5,249 | 39 | 134 | 120-347 | 0.33 | 0.14 | 0.11 | >0.90 | <20% | 156,000 |
| MRK-4FT-5L-4K-FL | 4000k | >80 | 4,673 | 39 | 119 | 120-347 | 0.33 | 0.14 | 0.11 | >0.90 | <20% | 156,000 |
| MRK-4FT-5L-5K-FL | 5000k | >80 | 4,715 | 39 | 120 | 120-347 | 0.33 | 0.14 | 0.11 | >0.90 | <20% | 156,000 |

¹ Color rendering index.

² All 50-60Hz.

³ Total harmonic distortion.

⁴ L₇₀ refers to the number of hours at which lumen output declines to 70% of the initial level. L₇₀ hours are IES TM-21-11 calculated hours.

PHOTOMETRIC DATA

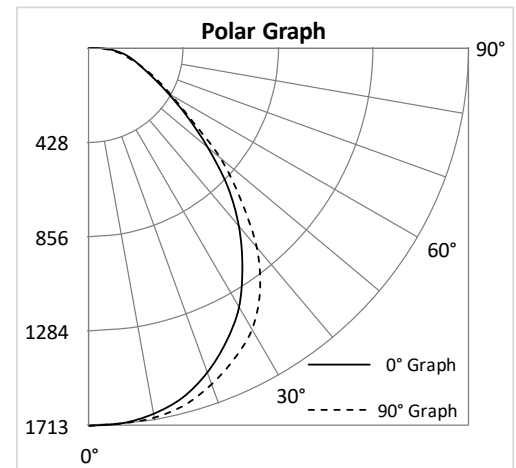
MRK-2FT-4L-4K-CL

Luminaire Data

| | |
|-----------------------------|-------------------------------------------------|
| Description | Magnetic Retrofit Kit - 2FT, 4L, 4K, Clear Lens |
| Total Lumens | 3,973 |
| Input Wattage | 32 |
| Efficacy (lm/W) | 125 |
| Spacing Criterion (0-180°) | 1.2 |
| Spacing Criterion (90-270°) | 1.28 |

Zonal Lumen Summary

| Zone | Lumens | %Fixt |
|---------|--------|--------|
| 0-20° | 632 | 15.9% |
| 0-30° | 1,335 | 33.6% |
| 0-40° | 2,140 | 53.9% |
| 20-50° | 2,237 | 56.3% |
| 40-70° | 1,548 | 39.0% |
| 0-60° | 3,379 | 85.1% |
| 0-80° | 3,878 | 97.6% |
| 0-90° | 3,961 | 99.7% |
| 90-180° | 12 | 0.3% |
| 0-180° | 3,973 | 100.0% |



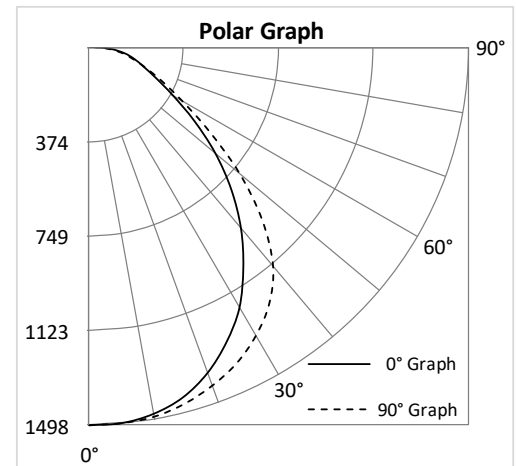
MRK-2FT-4L-4K-FL

Luminaire Data

| | |
|-----------------------------|---------------------------------------------------|
| Description | Magnetic Retrofit Kit - 2FT, 4L, 4K, Frosted Lens |
| Total Lumens | 3,567 |
| Input Wattage | 32 |
| Efficacy (lm/W) | 110 |
| Spacing Criterion (0-180°) | 1.2 |
| Spacing Criterion (90-270°) | 1.32 |

Zonal Lumen Summary

| Zone | Lumens | %Fixt |
|---------|--------|--------|
| 0-20° | 548 | 15.4% |
| 0-30° | 1,156 | 32.4% |
| 0-40° | 1,863 | 52.2% |
| 20-50° | 1,975 | 55.4% |
| 40-70° | 1,437 | 40.3% |
| 0-60° | 3,007 | 84.3% |
| 0-80° | 3,477 | 97.5% |
| 0-90° | 3,554 | 99.6% |
| 90-180° | 13 | 0.4% |
| 0-180° | 3,567 | 100.0% |



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PHOTOMETRIC DATA

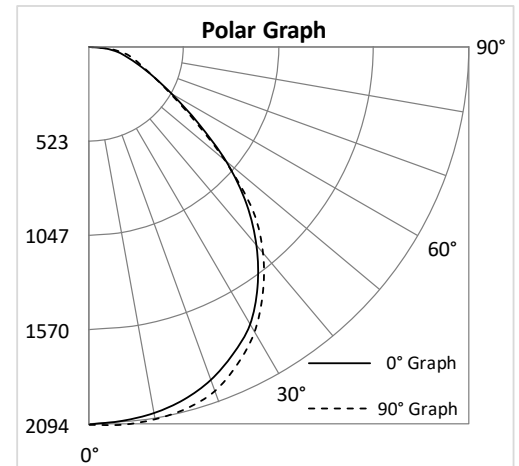
MRK-4FT-5L-4K-CL

Luminaire Data

| | |
|-----------------------------|-------------------------------------------------|
| Description | Magnetic Retrofit Kit - 4FT, 5L, 4K, Clear Lens |
| Total Lumens | 5,008 |
| Input Wattage | 39 |
| Efficacy (lm/W) | 128 |
| Spacing Criterion (0-180°) | 1.26 |
| Spacing Criterion (90-270°) | 1.3 |

Zonal Lumen Summary

| Zone | Lumens | %Fixt |
|---------|--------|--------|
| 0-20° | 777 | 15.5% |
| 0-30° | 1,655 | 33.0% |
| 0-40° | 2,676 | 53.4% |
| 20-50° | 2,841 | 56.7% |
| 40-70° | 1,975 | 39.4% |
| 0-60° | 4,265 | 85.2% |
| 0-80° | 4,890 | 97.6% |
| 0-90° | 4,997 | 99.8% |
| 90-180° | 11 | 0.2% |
| 0-180° | 5,008 | 100.0% |



MRK-4FT-5L-4K-FL

Luminaire Data

| | |
|-----------------------------|---------------------------------------------------|
| Description | Magnetic Retrofit Kit - 4FT, 5L, 4K, Frosted Lens |
| Total Lumens | 4,673 |
| Input Wattage | 39 |
| Efficacy (lm/W) | 119 |
| Spacing Criterion (0-180°) | 1.2 |
| Spacing Criterion (90-270°) | 1.26 |

Zonal Lumen Summary

| Zone | Lumens | %Fixt |
|---------|--------|--------|
| 0-20° | 722 | 15.4% |
| 0-30° | 1,523 | 32.6% |
| 0-40° | 2,450 | 52.4% |
| 20-50° | 2,600 | 55.6% |
| 40-70° | 1,880 | 40.2% |
| 0-60° | 3,954 | 84.6% |
| 0-80° | 4,560 | 97.6% |
| 0-90° | 4,662 | 99.8% |
| 90-180° | 11 | 0.2% |
| 0-180° | 4,673 | 100.0% |

