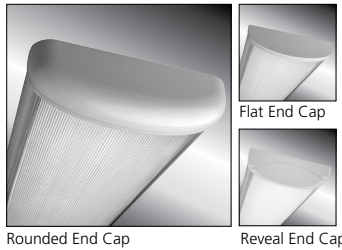


MILLENNIUM STRETCH™

MLHA12 SERIES - TUNABLE WHITE LED

PRODUCT FEATURES:

- » High-output, high CRI LED lamp sources with 2700K-6500K white tuning capability
- » Extruded and die-cast aluminum construction
- » Peace of Mind Guarantee® against breakage



PROJECT INFORMATION

Job Name _____

Fixture Type _____

Catalog Number _____

Approved by _____

SPECIFICATIONS

HOUSING: Marine grade aluminum. Extruded body with die-cast end caps. Housing, with end caps, post assembly TGIC polyester powder coat finished – 5-step pre-treatment. See Ordering Information for available finishes.

END CAPS: Marine grade die-cast aluminum. Three styles available: Flat, Rounded and Reveal. Conduit and "Wiremold™" ready" knockouts visible only from interior of end cap (Flat and Rounded styles only).

OPTIC: UV-stabilized, high-impact extruded pearlescent polycarbonate. Smooth exterior, linear prismatic interior. Nominal thickness .156". Lens securely positioned in body channels and end caps. Lens locked in place with four (4) tamper-resistant stainless steel Torx® T-20 with center pin fasteners and sealed with closed cell gaskets. Full reflector/wire cover with 92% reflectivity.

LED MODULE: Serviceable tunable-white, mid-power LED array provides 2700K through 6500K CCT range with a two-point path. Minimum 82 CRI standard (R9 >20) with optional minimum 90 CRI (R9 >50).

DRIVER: 120-277VAC, 50/60Hz electrical input (PF ≥ 0.9, THD < 20%). Minimum 85% electrical efficiency. Serviceable, constant-current multi-channel programmable driver with dual analog (0-10V) control inputs for intensity and CCT. Optional DALI (Type 8) driver. Logarithmic intensity profile with 0.1-100% range, with dim-to-dark capabilities. Linear profile on CCT adjustment. Refer to charts on page 2 for further details.

INSTALLATION: Standard six-point mounting required for Peace of Mind Guarantee®. Suitable for installation into -30°C to 40°C ambient environments, unless otherwise noted.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric data, please go to www.kenall.com.

WARRANTY: Limited ten (10) year warranty for LED Lamps. Peace of Mind Guarantee against breakage.

LISTINGS: Luminaire is certified to UL Standards by Intertek Testing Laboratory for Wet Location – covered ceiling mount. ETL certified IP64 per IEC 60598. Corner, horizontal wall and pendant mount installation are Damp Location only. ADA compliant. Luminaire tested to an IK10 impact protection rating per IEC 60068-2-75:1997-08.



ORDERING INFORMATION (Ex: MLHA12-48-F-MW-R-PP-90T-27/65K8-ATW-DV-FS)

| Model | Length | End Cap | Finish | Lens | Lamp Power | Lamp Color | Driver Type | Voltage | Options | Accessories |
|---------------|-----------------------------------|---------|--------|-----------|---|------------|-------------|--|---------|-------------|
| MLHA12 | 48 | | | PP | | | | | | |
| | Length | | | | Lamp Power | | | Input Voltage | | |
| | 48 4' | | | | 45T 45W Tunable White | | | DV 120-277 Volts, 50/60Hz | | |
| | End Caps | | | | 67T 67W Tunable White | | | Options | | |
| | F Flat | | | | 90T 90W Tunable White | | | LEL Integral 10W Emergency Battery Backup (45T lamp max, 0°C minimum operating temperature) | | |
| | R Rounded | | | | Lamp Color | | | CDF Captive Diffuser Fasteners | | |
| | RV Reveal | | | | 27/65K8 2700-6500K CCT Range (82 CRI min) | | | DL Damp Location (Interior use NO gasketing) | | |
| | Finish | | | | 27/65K9 2700-6500K CCT Range (92 CRI min) | | | FS Single Fuse & Holder (one per circuit) | | |
| | LG Light Gray | | | | Driver Type | | | PH Phillips Head Fasteners | | |
| | MB Matte Black | | | | ATW Analog (0-10V) Dimming Tunable White Driver | | | PM§ Pendant Mount (Max. 3/8NPT stems by others; damp only) | | |
| | MW Matte White | | | | DTW DALI Tunable White Driver | | | NLW 2700K White LED Night Light (controlled independently of Tunable White driver) | | |
| | CC Custom Color (Consult Factory) | | | | DMX DMX Tunable White Driver (Consult Factory) | | | NLA Amber LED Night Light ((controlled independently of Tunable White driver) | | |
| | Lens Type | | | | | | | Accessories | | |
| | PP Pearlescent Polycarbonate | | | | | | | CMB§ Corner Mount Bracket (Must be ordered with DL Option) | | |

§ PM and CMB not available in conjunction



www.kenall.com | P: 800-4-Kenall | F: 262-891-9700 | 10200 55th Street Kenosha, Wisconsin 53144, USA
 This product is able to comply with the latest domestic preference legislation, such as the Buy American Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details. ©2024 Kenall Mfg. Co.

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MLHA12-TW-042424

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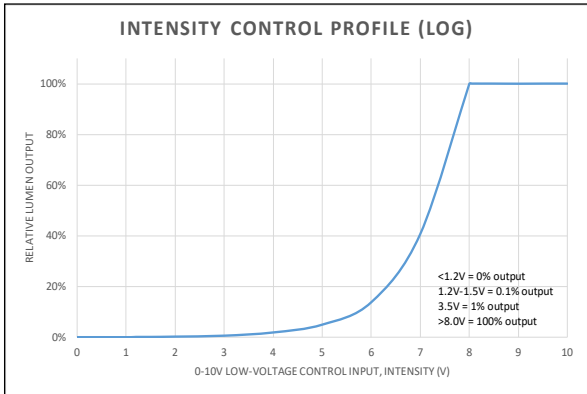
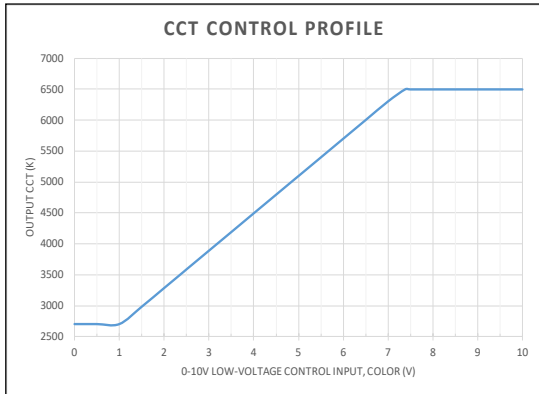
| Lamp Type | Performance at 4000K Tuning | | | Estd. L70 LED Life (Hrs) |
|-------------|-----------------------------|-----------------|-----------------|--------------------------|
| | Lumen Output (lm) | Efficacy (lm/W) | Input Power (W) | |
| 45T-27/65K8 | 5,129 | 111 | 46 | 80,000 |
| 45T-27/65K9 | 4,133 | 90 | 46 | 80,000 |
| 67T-27/65K8 | 7,673 | 113 | 68 | 80,000 |
| 67T-27/65K9 | 6,356 | 93 | 68 | 80,000 |
| 90T-27/65K8 | 9,966 | 108 | 92 | 60,000 |
| 90T-27/65K9 | 8,032 | 87 | 92 | 60,000 |

Information subject to change without notice. Visit www.kenall.com for ies files additional information.

PERFORMANCE SCALING, BY LAMP COLOR

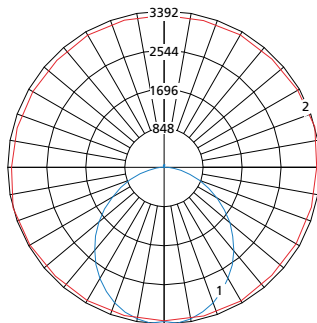
| CCT (K) | 27/65K8 | | | | | 27/65K9 | | | | |
|---------|--------------------|----|----|----|----|--------------------|----|----|----|-----|
| | LUMEN SCALE FACTOR | Ra | R9 | Rf | Rg | LUMEN SCALE FACTOR | Ra | R9 | Rf | Rg |
| 2700 | 0.92 | 83 | 10 | 83 | 97 | 0.95 | 92 | 57 | 89 | 98 |
| 3000 | 0.95 | 84 | 15 | 83 | 98 | 0.97 | 94 | 70 | 91 | 99 |
| 3500 | 0.99 | 86 | 23 | 84 | 98 | 0.99 | 95 | 77 | 92 | 99 |
| 4000 | 1.00 | 86 | 26 | 84 | 98 | 1.00 | 96 | 83 | 92 | 99 |
| 4600 | 1.00 | 86 | 28 | 84 | 98 | 1.00 | 96 | 90 | 92 | 100 |
| 5000 | 1.01 | 86 | 25 | 83 | 98 | 1.01 | 96 | 96 | 91 | 101 |
| 5700 | 0.99 | 85 | 23 | 82 | 98 | 0.99 | 96 | 96 | 91 | 100 |
| 6500 | 0.99 | 84 | 16 | 82 | 96 | 0.99 | 96 | 96 | 90 | 100 |

CCT AND INTENSITY ADJUSTMENT PROFILE - ATW DRIVER TYPE



NOTE: The provided information is the typical expected performance of a single luminaire. Additional luminaires on the same 0-10V line may result in different control profiles. Fine tuning of system performance should be completed after installation is complete. To avoid CCT shift between luminaires, care should be taken to minimize voltage drop on the CCT Control line. It is recommended to limit the load on the CCT control circuit to twenty (20) 45T or ten (10) 67T/90T luminaires or less.

Model: MLHA12-48-F-MW-PP-90T-27/65K8-ATW-DV



Maximum Candela = 3392 Located At Horizontal Angle = 15, Vertical Angle = 5

- 1 - Vertical Plane Through Horizontal Angles (15-195) (Through Max. Cd.)
- 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)



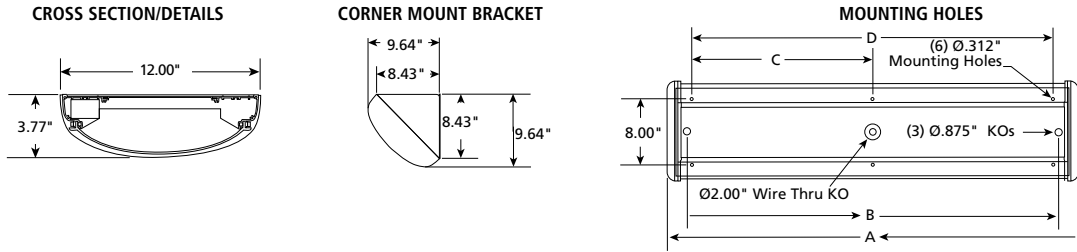
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DIMENSIONAL DATA



Nominal Four Foot Fixture Legend

| End Cap | A | B | C | D |
|---------|-------|-------|-------|-------|
| R | 51.13 | 46.31 | 22.50 | 45.00 |
| F | 49.31 | 46.31 | 22.50 | 45.00 |
| RV | 53.84 | 46.31 | 22.50 | 45.00 |



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