

MILLENIUM STRETCH™

MLHA3 SERIES using Indigo-Clean Technology

PRODUCT FEATURES:

- » Narrow 3" linear surface mount luminaire
- » Provides environmental disinfection and effective, efficient lighting performance via visible LED light
- » Dual-Mode Indigo-Clean Technology is independently tested to kill 94% of SARS CoV-2 and Influenza-A***, in addition to MRSA
- » Single-Mode Indigo-Clean Technology is independently tested to kill harmful bacteria, such as Staph*, including MRSA**
- » Peace of Mind Guarantee® against breakage



Flat End Cap



Rounded End Cap

SPECIFICATIONS

HOUSING: Extruded marine grade aluminum body with die-cast aluminum end caps. Two end cap styles available - Flat and Round. Conduit and Wiremold™ ready knockout visible only from interior of end cap. Closed cell EPDM and silicone gasketing along lens channel and end caps.

OPTIC: Impact-modified diffused acrylic. Lens securely positioned in body channels and endcaps, locked into place with concealed, tamper-resistant Torx® T-20 with center pin fasteners.

ELECTRICAL: (Single- and Dual-Mode ICT) Serviceable mid-power white and 405nm Indigo LED array. Available 3200K, 3700K and 4300K color temperatures with 3-step MacAdam variation allowance. Minimum 80 CRI standard. 120-277VAC and 347VAC electrical input with serviceable high power factor electronic, constant-current drivers (<10% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non-dim-to-dark on Dual-Mode ICT). 165µA maximum source current. **Single-Mode ICT** provides a single, white disinfection operational mode. **Dual-Mode ICT** provides two operational modes based on room occupancy. White Disinfection Mode is a white LED array for ambient lighting plus a simultaneous low-power 405nm LED array for low-level, continuous and safe environmental disinfection. Indigo Disinfection Mode is a higher-level 405nm array for continuous safe environmental disinfection during periods of room vacancy. The operational mode is determined via internal low-voltage device based upon the input signal provided by an external control device/system, such as the IC150 product. Luminaire dimming is overridden in this operational state. Refer to the [Kenall Dual-Mode ICT Control Application Guide](#) for further description.

INSTALLATION: Standard four-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 information, go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty. [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 in compliance with IEC 60598 – ceiling mount. Corner, horizontal wall and pendant mount installation – damp location only. ADA compliant. EPA Est. No. 99283-WI-1. Luminaire tested to an IK10 impact protection rating per IEC 60068-2-75:1997-08.

*per independent lab report #5GS-09516076094. Contact Kenall for a copy of this report.

**Antimicrobial Activity of a Continuous Visible Light Disinfection System by Rutala, et. al, ID Week 2016.

***Refer to www.indigo-clean.com for details.



ORDERING INFORMATION (Ex: MLHA3-48-F-MW-FA-231/55C-37K8-DIM1-DV-PH)

Model	Length	End Cap	Finish	Lens	Lamp Power	Lamp Color	Driver Type	Voltage	Options	Accessories
MLHA3	48			FA			DIM1			
	Length				Lamp Power				Options	
	48	4' Nominal			55C	55W Single-Mode ICT			LEL†	Integral 10W Emergency Battery Backup
					231/55C*	55W Dual-Mode ICT			CDF	Captive Diffuser Fasteners
	End Cap Style				Lamp Color				DL	Damp Location
	F	Flat			32K8	3200K / 80 CRI min.			FS	Single Fuse & Holder
	R	Rounded			37K8	3700K / 80 CRI min.			PH	Phillips Head Fasteners
	Finish				43K8	4300K / 80 CRI min.			PM‡	Pendant Mount (max 3/8" NPT stems, by others; Damp Location rated)
	MW	Matte White			Driver Type				Accessories	
	LG	Light Gray			DIM1	0-10V Dimming to 1% with Dim-to-Dark Capabilities			CMB‡	Corner Mount Bracket (Must be ordered with DL Option)
	MB	Matte Black			Voltage					
	CC	Custom Color (Consult Factory)			DV	120-277 VAC, 50/60Hz				
	Lens Type				347	347 VAC, 60Hz				
	FA	Frosted DR Acrylic								

ACCESSORIES ORDERED SEPARATELY
 IC150 External Room Control System for Dual-Mode ICT Products
 (click here for Specifications)

† 0°C/32°F min ambient temp; n/a with dual-mode ICT or 347V input
 ‡ PM and CMB not available in conjunction
 * n/a with 347V input



MILLENNIUM STRETCH™

MLHA3 SERIES – with Indigo-Clean Technology

PERFORMANCE

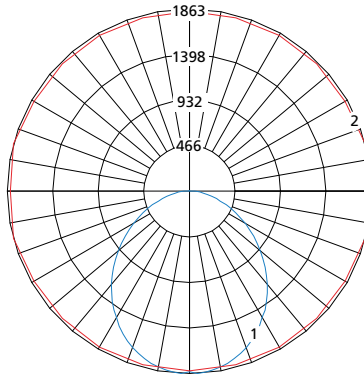
Technology	Length	Lamp Code	Lumen Output by Color (lm) ¹			Efficacy (lm/W)	Power Consumption ²			Estd L70 LED Life (Hrs)
			32K8	37K8	43K8		Occupied (W)	LPD (W)	Unoccupied (W)	
Single-Mode ICT	4'	55C	5,670	5,817	5,877	97 - 100	59	49	n/a	80,000
Dual-Mode ICT	4'	23I/55C	5,670	5,817	5,877	97 - 100	59	49	29	80,000

¹Provided values are applicable to the FA lens Type. Information subject to change without notice. Visit www.kenall.com for IES files and additional information.

²Lighting Power and Energy Calculations:

- Use **Occupied Power** for total electrical load calculations. Use this value to estimate branch circuit lighting loads.
- Use **LPD Power** for lighting power density calculations. Only the power attributed to white light is required per NEMA LSD EB 84-202X. Power used toward germicidal disinfection has been removed for this calculation.
- Use **Unoccupied** and **Occupied Power** for Energy calculations to determine the power consumed over time based on the use of the space.

Model: MLHA3-48-X-MW-FA-55C-37K8-DIM1-DV and MLHA3-48-X-MW-FA-23I/55C-37K8-DIM1-DV

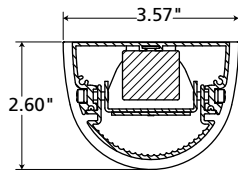


Maximum Candela = 1863 Located At Horizontal Angle = 15, Vertical Angle = 2.5

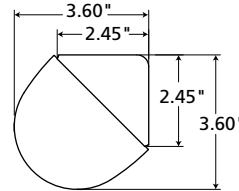
- 1 - Vertical Plane Through Horizontal Angles (15-195) (Through Max. Cd.)
- 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

DIMENSIONAL DATA

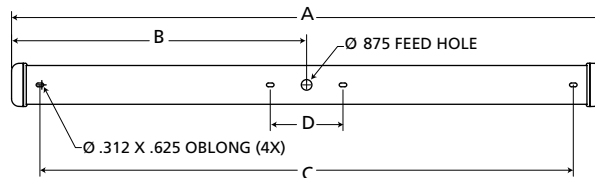
CROSS SECTION/DETAILS



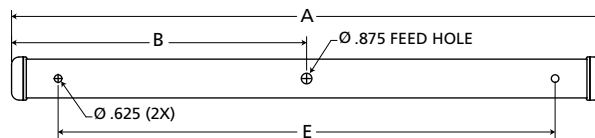
CORNER MOUNT BRACKET (OPTIONAL)



SURFACE MOUNTING HOLES



PM OPTION



Nominal Four Foot Fixture Legend

End Cap	A	B	C	D	E
R	47.528	23.764	44.00	6.00	41.00
F	48.680	24.340	44.00	6.00	41.00

