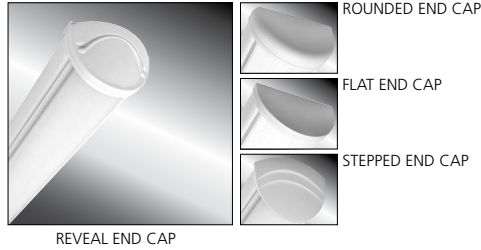


MILLENIUM STRETCH™

MLHA5 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. Four styles available: Flat, Rounded, Reveal and Stepped. Conduit and "Wiremold™ ready" knockout visible only from interior of end cap (For 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® 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. Linear intensity and CCT adjustment profiles with 1-100% range and dim-to-dark capabilities on intensity. Optional DALI (Type 8) driver with 1-100% range and dim-to-dark intensity dimming with linear intensity and CCT adjustment profiles.

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 data, please go to www.kenall.com.

WARRANTY: Limited ten (10) year warranty for LED Lamps.

LISTINGS: Luminaire is certified to UL Standards by Intertek Testing Laboratory for Wet Location – covered ceiling mount. Corner, horizontal wall, vertical wall and pendant mount installation – damp location only. ETL certified IP64 in compliance with IEC 60598 – ceiling mount. ADA compliant.



ORDERING INFORMATION (Ex: MLHA5-48-R-MW-PP-45T-27/65K8-ATW-DV-FS)

Model	Length	End Cap	Finish	Lens	Lamp Power	Lamp Color	Driver Type	Voltage	Options	Accessories
MLHA5	48			PP	45T					
	Length 48 4'			Lens Type PP Pearlescent Polycarbonate				Input Voltage DV 120-277 Volts, 50/60Hz		
	End Caps F Flat R Rounded RV Reveal SP Stepped			Lamp Power 45T 45W Tunable White				Options LEL Integral 8.4W Emergency Battery Backup (0°C minimum operating temperature) CDF Captive Diffuser Fasteners DL Damp Location FS Single Fuse & Holder PH Phillips Head Fasteners PM§ Pendant Mount (stems by others; damp only)		
	Finish LG Light Gray MB Matte Black MW Matte White CC Custom Color (Consult Factory)			Lamp Color 27/65K8 2700-6500K CCT Range (82 CRI min) 27/65K9 2700-6500K CCT Range (92 CRI min)				Accessories CMB§ Corner Mount Bracket (Must be ordered with DL Option) 9500 Torx® Screwdriver D-0552 Torx® Driver Bit (Required for CMB Option)		
				Driver Type ATW Analog (0-10V) Dimming Tunable White Driver DTW DALI Tunable White Driver						

§ PM and CMB not available in conjunction



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA

This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. 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. ©2019 Kenall Mfg. Co.

A brand of **legrand**

MILLENNIUM STRETCH™

MLHA5 SERIES - TUNABLE WHITE LED

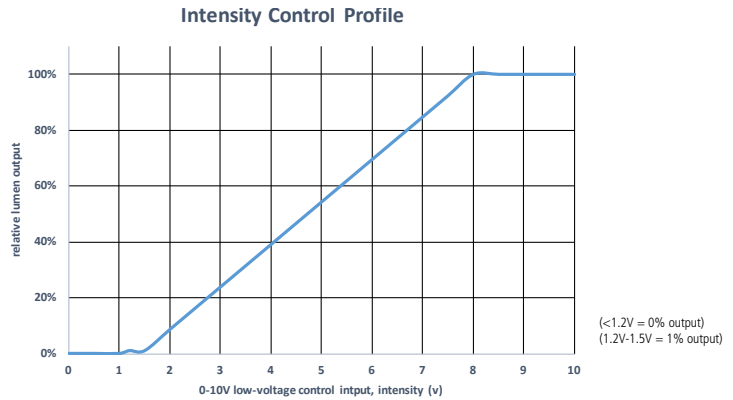
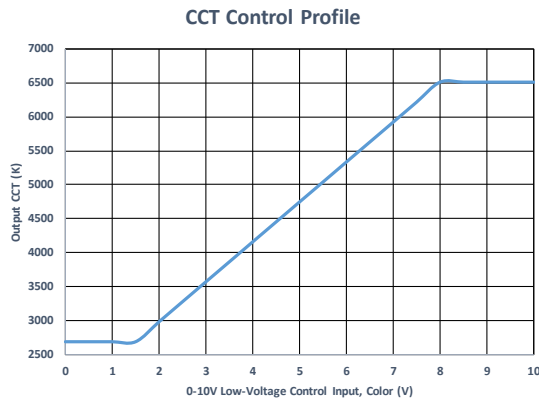
Lamp Type	Performance at 4000K Tuning			
	Lumen Output (lm)	Efficacy (lm/W)	Input Power (W)	Estd. L70 LED Life (Hrs)
45T-27/65K8	4,808	105	46	80,000
45T-27/65K9	3,875	84	46	80,000

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

PERFORMANCE SCALING, BY LAMP COLOR

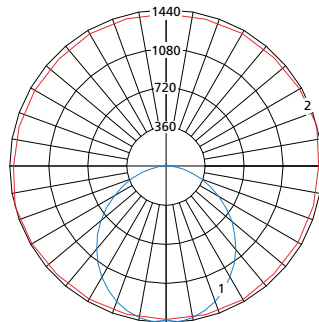
CCT (K)	27/65K8					27/65K9				
	LUMEN SCALE FACTOR	Ra	R9	Rf	Rg	LUMEN SCALE FACTOR	Ra	R9	Rf	Rg
2700	0.97	83	10	83	97	0.98	92	57	89	98
3000	0.98	84	15	83	98	0.99	94	70	91	99
3500	0.99	86	23	84	98	0.99	95	77	92	99
4000	1.00	86	26	84	98	1.00	96	83	92	99
4600	1.01	86	28	84	98	1.01	96	90	92	100
5000	1.01	86	25	83	98	1.03	96	96	91	101
5700	1.02	85	23	82	98	1.02	96	96	91	100
6500	1.04	84	16	82	96	1.02	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: MLHA5-48-F-MW-PP-45T-27/65K8-ATW-DV



Maximum Candela = 1440 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.)



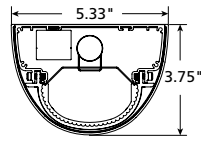
www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA

This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. 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. ©2019 Kenall Mfg. Co.

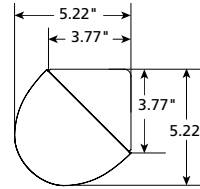
A brand of Legrand

MILLENIUM STRETCH™
MLHA5 SERIES - TUNABLE WHITE LED
DIMENSIONAL DATA

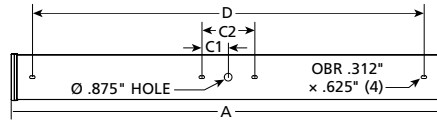
CROSS SECTION/DETAILS



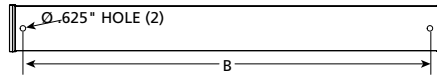
CORNER MOUNT BRACKET



SURFACE MOUNTING HOLES



PM OPTION



Nominal Four Foot Fixture Legend					
End Cap	A	B	C1	C2	D
R	50.52	46.25	3.00	6.00	44.48
F	49.31	46.25	3.00	6.00	44.48
SP	52.13	46.25	3.00	6.00	44.48
RV	51.67	46.25	3.00	6.00	44.48



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA

A brand of **legrand**

This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. 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. ©2019 Kenall Mfg. Co.