

MPAL

Multi-Purpose Area Luminaires Lumen & Kelvin Field Selectable



Project:	
Type:	
Catalog #:	

STANDARDS



HOUSING

- Premium powder-coat, die cast aluminum, dark bronze housing.

ELECTRICAL

- Operating temperature (ambient): -40°C to 50°C (-40°F to 122°F).
- Universal 120-277V AC voltage (50-60Hz) is standard.
- 0-10VDC dimming drivers are standard.
- Integrated photocell is standard. Photocell can be enabled or disabled by switch.
- Incoming AC power cord = 3'. Incoming dimming cord = 3'.
- Watertight, compression-type electrical connectors.
- Input transient surge protection = 6kV.
- Power factor > 0.9.
- Total harmonic distortion < 20%.

OPTICAL SYSTEM

- Polycarbonate lens.
- Field selectable 3500K (warm/neutral white), 4000K (neutral white) and 5000K (cool white) color temperatures*.
- MPAL-863L-3CCT Tri-lumen selectable provide a range of 3,406 to 7,589 nominal lumens*.
- MPAL-16129L-3CCT Tri-lumen selectable provide a range of 8,421 to 15,775 nominal lumens*.
- Long-life LEDs provide 167,000 hours of operation with at least 70% of initial lumen output (L70), and 51,000 hours with at least 90% of initial lumen output (L90)**.
- LED color maintenance < -0.0012 chromaticity shift ($\Delta u'v'$) over the initial 6,000 hours of operation.
- Color rendering index > 80.

* Default kelvin temperature 4000k, highest lumen output.

**L70 & L90 hours are IES TM-21-11 calculated hours.



MOUNTING

- Knuckle mounting is standard.
- Optional Yoke Mounting kit.
- Optional Arm Mounting kit.*
- Optional Slip-fitter Mounting kit.*

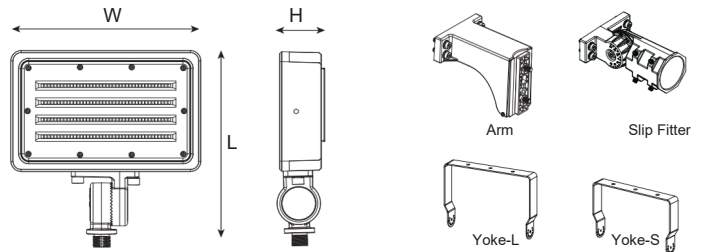
*Only for MPAL-16129L-3CCT, need to be used match with ZZ-MPAL-MT-ADPT.

CODE COMPLIANCE

- cULus listed for wet locations.
- DLC premium listed.
- Complies with FCC part 15, class A.
- IP65 rated for ingress protection.
- IK08 rated for impact protection.

WARRANTY

- 5 year warranty on all electronics and housing.



Model #	L (in)	W (in)	H (in)	Weight (lbs)
MPAL-863L-3CCT	9.02	8.7	2.17	5.2
MPAL-16129L-3CCT	10.16	10.12	2.2	5.54

ORDERING INFORMATION

Example: MPAL-863L-3CCT

* Mounting hardware sold separately. Pole tenons and tenon adapters available.
See all mounting accessories on page 2.

Series	Nominal Lumen Output (Selectable)		Kelvin Selectable
MPAL	863L	8,000 / 6,000 / 3,000 Lumens	3CCT 3500K/ 4000K/ 5000K
	16129L	16,000 / 12,000 / 9,000 Lumens	

ACCESSORIES (ORDER SEPARATELY)

Mounting Option

ZZ-MPAL-MT-ADPT	=	MPALDSRto MPAL Mounting Adapter for Arm and Slip Fitter
MPAL-YK-16129L	=	Yoke Mount for MPAL 16L, Bronze
MPALDSR-ARM	=	Arm Mount (2-3/8" pole or pole tenon, round and square poles)
MPALDSR-SF	=	Slip Fitter (2-3/8" pole or pole tenon)

COMPATIBLE DIMMERS AND CONTROLS

Manufacturer	Model Number	Dimmer Range	Load Switching Capacity
Best Lighting	DWS-010V-T	10%-100%	600W
Best Lighting	DWS-010V-D	10%-100%	600W
Leviton	IP710-LFZ	10%-100%	1200W
Lutron	DVSTV	10%-100%	450W

EFFECTIVE PROJECTED AREAS (EPA'S)

Series	WITHOUT MOUNT			ARM MOUNT			ARM A MOUNT			SLIP FITTER MOUNT			KNUCKLE MOUNT			YOKE MOUNT		
	Front (ft ²)	Side (ft ²)	Face (ft ²)	Front (ft ²)	Side (ft ²)	Face (ft ²)	Front (ft ²)	Side (ft ²)	Face (ft ²)	Front (ft ²)	Side (ft ²)	Face (ft ²)	Front (ft ²)	Side (ft ²)	Face (ft ²)	Front (ft ²)	Side (ft ²)	Face (ft ²)
MPAL-863L-3CCT	0.34	0.08	0.12	0.56	0.29	0.18	0.58	0.39	0.38	0.58	0.23	0.18	0.41	0.13	0.13	0.43	0.09	0.13
MPAL-16129L-3CCT	0.46	0.09	0.14	0.51	0.31	0.20	0.71	0.40	0.44	0.71	0.25	0.21	0.54	0.17	0.15	0.59	0.11	0.15

LUMEN TABLES

Series	Measurements	8L			6L			3L		
		3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
MPAL-863L-3CCT	Lumens	7,355	7,589	7,289	5,543	5,672	5,545	3,406	3,430	3,436
	Watt	49.5	47.93	49.33	36.28	35.43	36.24	21.98	21.56	21.94
	Efficacy	148.59	158.34	147.76	152.78	160.09	153.01	154.96	159.09	156.61

Series	Measurements	16L			12L			9L		
		3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
MPAL-16129L-3CCT	Lumens	14,766	15,775	14,881	11,099	11,738	11,408	8,421	8,782	8,664
	Watt	99.72	97.21	101.44	71.19	69.77	72.42	51.97	51.12	52.53
	Efficacy	148.07	162.28	146.70	155.91	168.24	157.53	162.04	171.79	164.93

ELECTRICAL DATA

Series	CCT	Input Amps (A)								
		8L			6L			3L		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
MPAL-863L-3CCT	3500K	0.41	0.21	0.18	0.30	0.15	0.13	0.18	0.09	0.08
	4000K	0.40	0.20	0.17	0.30	0.15	0.13	0.18	0.09	0.08
	5000K	0.41	0.21	0.18	0.30	0.15	0.13	0.18	0.09	0.08

Series	CCT	Input Amps (A)								
		16L			12L			9L		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
MPAL-16129L-3CCT	3500K	0.83	0.42	0.36	0.59	0.30	0.26	0.43	0.22	0.19
	4000K	0.81	0.41	0.35	0.58	0.29	0.25	0.43	0.21	0.18
	5000K	0.85	0.42	0.37	0.60	0.30	0.26	0.44	0.22	0.19

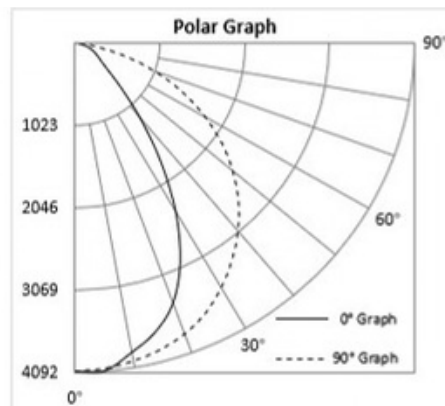
PHOTOMETRICS

MPAL-863L-3CCT

Luminaire Data	
Description	CCT, Lumen, and Dist Selectable Area Light
Total Lumens	7,589
Input Wattage	48
Efficacy (lm/W)	158
Max. Cd.	4097.7 (360H, 4V)
IES Classification	Type I
Longitudinal Classification	Very Short

Photometrics calculated at 4000k CCT
and highest power setting.

Luminaire Classification Systems (LCS)			
LCS Zone		Lumens	%Lum
FL	0-30	1,510	19.9%
FM	30-60	1,945	25.6%
FH	60-90	394	5.2%
FVH	90-90	25	0.3%
BL	0-30	1,468	19.3%
BM	30-60	1,848	24.3%
BH	60-90	378	5.0%
BVH	90-90	22	0.3%
UL	90-100	0	0.0%
UH	100-180	0	0.0%
Total		7,589	100.0%
BUG Rating		B3-U0-G1	



MPAL-16129L-3CCT

Luminaire Data	
Description	CCT, Lumen, and Dist Selectable Area Light
Total Lumens	15,775
Input Wattage	97
Efficacy (lm/W)	162
Max. Cd.	8635.5 (180H, 11V)
IES Classification	N.A.
Longitudinal Classification	N.A.

Photometrics calculated at 4000k CCT
and highest power setting.

Luminaire Classification Systems (LCS)			
LCS Zone		Lumens	%Lum
FL	0-30	3,108	19.7%
FM	30-60	3,804	24.1%
FH	60-90	589	3.7%
FVH	90-90	32	0.2%
BL	0-30	3,359	21.3%
BM	30-60	4,195	26.6%
BH	60-90	654	4.1%
BVH	90-90	33	0.2%
UL	90-100	0	0.0%
UH	100-180	0	0.0%
Total		15,775	100.0%
BUG Rating		B4-U0-G2	

