

EMPAL-KFS

Multi-Purpose Area Luminaires Kelvin Field Selectable

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.
- Input transient surge protection = 4kV.
- Wireway enclosure is sealed with a water-tight, silicon rubber gasket.
- Power factor > 90.
- Total harmonic distortion < 20%.

OPTICAL SYSTEM

- Polycarbonate lens.
- Field selectable 3500K (warm/neutral white), 4000K (neutral white) and 5000K (cool white) color temperatures*.
- Available models provide from 2,000 to 7,200 nominal lumens and from 125 to 156 lumens per watt (LPW)*.
- Long-life LEDs provide 149,000 hours of operation with at least 70% of initial lumen output (L70)**.
- Standard optic provides and IES roadway type V distribution, or a 7V (vertical) x 7H (horizontal) NEMA floodlight distribution.
- Color rendering index > 80.

* Default kelvin temperature 4000k and highest lumen output.

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

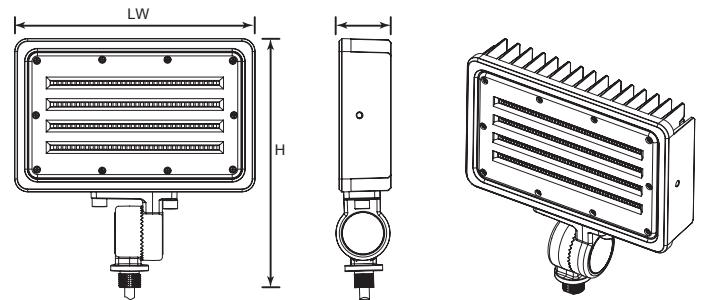
CODE COMPLIANCE

- cULus listed for wet locations.
- DLC premium listed.
- Complies with FCC part 15, class A.
- IP65 rated for ingres protection.
- Lens is IK10 rated for protection from external impacts.
- Salt fog tested for 1,000 hour (ASTM B117). After salt fog testing, paint rated at 7 per ASTM D1654-05 scratch test.

ORDERING INFORMATION

Example: EMPAL-4L-KFS

Model#	Nominal Lumen Output (Selectable)		Kelvin Selectable
EMPAL	2L	2000 Lumens	KFS 3500K/ 4000K/ 5000K
	4L	4000 Lumens	
	7L	7000 Lumens	



Model #	L (in)	W (in)	H (in)	Weight (lbs)
EMPAL-2L-KFS	4.3	1.7	5.8	1
EMPAL-4L-KFS	8.7	1.9	9	4
EMPAL-7L-KFS	8.7	1.9	9	4

WARRANTY

- 5 year warranty on all electronics and housing.



ACCESSORIES (ORDER SEPARATELY)

Mounting Option

MPAL-KFS-YKL = Yoke mount, for 4L & 7L only.
 MPOT17 = Line Voltage Ground Stake.
 CM-R = Round canopy mounting plate,
 suitable to mount 1/2" swivel arm and use with standard 4" round junction box.

EFFECTIVE PROJECTED AREAS (EPA'S)

Model#	KNUCK MOUNT			YOKE MOUNT		
	Front (ft²)	Side (ft²)	Face (ft²)	Front (ft²)	Side (ft²)	Face (ft²)
EMPAL-2L-KFS	0.17	0.07	0.05	-	-	-
EMPAL-4L / 7L-KFS	0.54	0.12	0.11	0.44	0.09	0.12

LUMEN TABLES

Model#	Measurements	EMPAL-2L			EMPAL-4L			EMPAL-7L		
		3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
EMPAL-KFS	Lumens	2002	2179	2085	4436	4696	4526	6601	7170	6884
	Watt	16	15	16	31	30	31	52	49	51
	Efficacy	125	145	132	142	156	145	126	147	134

ELECTRICAL DATA

Model#	CCT	Input Amps (A)								
		EMPAL-2L			EMPAL-4L			EMPAL-7L		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
EMPAL-2L	3500K	0.13	0.07	0.06	0.26	0.13	0.11	0.43	0.22	0.19
	4000K	0.13	0.06	0.05	0.25	0.13	0.11	0.41	0.20	0.18
	5000K	0.13	0.07	0.06	0.26	0.13	0.11	0.43	0.21	0.18

PHOTOMETRICS

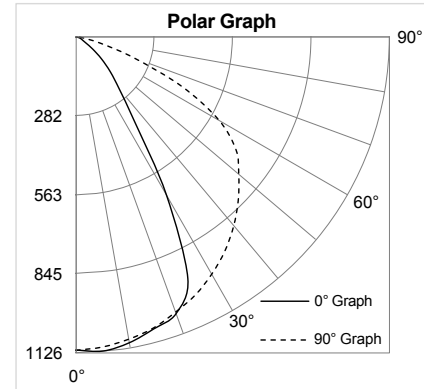
EMPAL-2L-KFS

Luminaire Data

Description	Multi Purpose Area Light 2L - KFS
Total Lumens	2,002
Input Wattage	16
Efficacy (lm/W)	126
Max. Cd.	1131.47 (337.5H, 6V)
IES Classification	Type I
Longitudinal Classification	Very Short

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	438	21.9%
FM 30-60	488	24.4%
FH 60-80	74	3.7%
FVH 80-90	3	0.2%
BL 0-30	434	21.7%
BM 30-60	491	24.5%
BH 60-80	71	3.6%
BVH 80-90	3	0.1%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	2,002	100.0%
BUG Rating	B1-U0-G0	



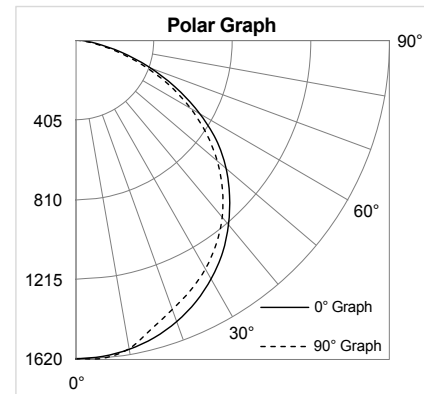
EMPAL-4L-KFS

Luminaire Data

Description	Multi Purpose Area Light 4L - KFS
Total Lumens	4,436
Input Wattage	31
Efficacy (lm/W)	142
Max. Cd.	1625.57 (112.5H, 5V)
IES Classification	Type VS
Longitudinal Classification	Very Short

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	625	14.1%
FM 30-60	1,190	26.8%
FH 60-80	372	8.4%
FVH 80-90	16	0.4%
BL 0-30	629	14.2%
BM 30-60	1,205	27.2%
BH 60-80	383	8.6%
BVH 80-90	16	0.4%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	4,436	99.9%
BUG Rating	B2-U0-G1	



EMPAL-7L-KFS

Luminaire Data

Description	Multi Purpose Area Light 7L - KFS
Total Lumens	6,601
Input Wattage	52
Efficacy (lm/W)	126
Max. Cd.	2750.84 (157.5H, 1V)
IES Classification	Type VS
Longitudinal Classification	Very Short

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	989	15.0%
FM 30-60	1,783	27.0%
FH 60-80	519	7.9%
FVH 80-90	21	0.3%
BL 0-30	987	15.0%
BM 30-60	1,774	26.9%
BH 60-80	510	7.7%
BVH 80-90	19	0.3%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	6,601	100.0%
BUG Rating	B2-U0-G1	

