LIGHT EMITTING DESIGNS

ArmorLux™ Series ALX340

CORROSIVE AREA APPLICATION LED LUMINAIRE



ArmorLux™ Series ALX340 Corrosive Area LED Luminaire



Product Information

Introducing the ArmorLux™ Series – Built for the Toughest Environments

Built from premium, chemical-resistant materials ArmorLux™ luminaires are designed to thrive where others fail. Tested against saltwater and full spectrum of aggressive agents, ArmorLux™ maintains mechanical integrity and optical clarity after prolonged exposure.

- **Marine & Ship Yards**
- **Desalination Plants**
- **Wastewater Treatment Plants**
- **Cement & Chemical Plants**
- **Offshore Oil & Gas**
- **Refineries**
- **Gas-to-Liquid (GTL) Plants**
- **Indoor Swimming Pools**

All fixtures meet IP69K and IP68 ratings, ensuring full protection of components against corrosive elements. Whether facing harsh chemicals or continuous exposure to saltwater, these luminaires deliver long-lasting illumination without degradation, minimizing maintenance and maximizing uptime while ensuring operational continuity in the harshest conditions.

US and international patents pending

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Advantages

- ArmorLux™ Series ALX340 is industries first true corrosion resistant LED luminaire
- Available in 50 ~ 100 Watt configurations
- Ultra-bright, industry leading high efficacy up to 244 lm / W
- IP69K-rated (water / vapor / dust) tight & high pressure washable up to 1450PSI (100 bar)
- Hazardous location rated with an operational temperature range of -40 ~ +50°C (-40 ~ +122°F)
- Advanced thermal technology enables low LED junction temperatures (Tj) for maintenance free long life
- Built from premium, chemical-resistant materials with sloped curvature & smooth surface design preventing food residue and bacteria build up
- IK10 rated impact-resistant, chemically inert lens cover designed to resist micro-cracking under thermal cycling
- Dual layer space age coating for unmatched corrosive resistance in acidic environments
- Corrosion resistant housing with weld-free seams, eliminating external fasteners and crevices preventing corrosion weak spots
- Titanium rated high efficiency fully sealed LED driver for unmatched reliability
- L70 ≥ 150,000 hours with an exceptional 7-year limited warranty
- Designed and engineered in the USA

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Fixture Specification

Electrical

Input Voltage:	100~277VAC 47~63Hz Optional 200~480VAC
Operational Temp (Ta):	-40° ~ 50°C / -40° ~ 122°F
T4A Temp Code (Ta) Range:	-40° ~ 50°C / -40° ~ 122°F
T5 Temp Code (Ta) Range:	-40° ~ 45°C / -40° ~ 113°F
Transient Surge Protection:	10kV / 5kA (L-L, L-G)
THD:	<20%
Power Factor (PF):	>0.90
LED Driver:	Titanium rated, 98% efficient, MIL Grade components sealed & potted Enabling long life and reliability
Accelerated Life Testing (ALT):	>11years @ 24/7 usage
MTBF:	>1.4 million hours (Telcordia SR-332)

Construction

Housing:	Stainless steel SUS-316L
Surface Finish:	Proprietary dual layer surface Coating for unmatched corrosive Resistance in acidic environments
Lens Cover:	Proprietary custom formulated Chemically inert polymer Material with 4H hard UV coating
Vibration:	5G @ 30-150Hz for 750,000 cycles IEC 60068-2-6 luminaire only
Shock:	50G half-sine for 3 cycles IEC 60068-2-27 luminaire only
IP Rating:	IP69K Water, vapor & dust tight High pressure washable Up to 1450PSI / 100 bar
Thermal Cycling:	High temperature wash downs 3500 cycles @194°F / 90°C

Safety Certifications & Ratings

7 Years Warranty · IK10 Impact Resistance · IP69K Wet Location · Pressure Washable · Food Processing · Corrosive Area

CI D2 · CII D1 · CII D2 · CIII · IEC · IECEx · Ex · Zone 1,21 · Zone 1,22

Light Engine

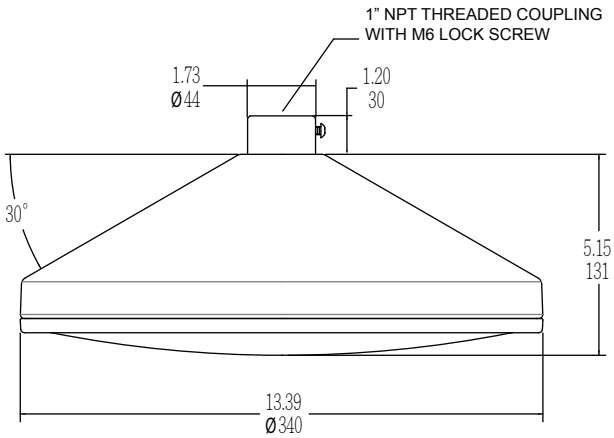
L70 Rating:	>150K hours @ Ta 25°C
CCT:	3000K / 4000K / 5000K
CRI:	70 / 80
LED Brand & Size:	Lumileds HL2X high performance Saphire based 3535 CSP die

Lighting Controls

Dimming Type:	0-10VDC 0VDC=10% / 10VDC=100%

Mechanical

Weight:	NW = 7.5kg / 16.5lbs GW = 9.0kg / 20lbs
Packaging Size:	36 x 36 x 20 cm 14.2” x 14.2” x 8.25”
Standard Mounting:	1” NPT pendant mount
Power Cord:	10ft / 3m 14 AWG 3C PTFE / Teflon wires



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Mounting Options



Pendant Mounting System - PDS



SWL - Swivel Mounting System

Ordering Information

ALX34	Wattage	Voltage	–	Optics	Pitch	–	CCT	Driver & Control	–	Mounting *
	050 = 50W 075 = 75W 100 = 100W	UV = 100-277VAC HV = 200-480VAC		R5 = Type V Round S5 = Type V Square F5 = Type V Frosted	S = Short M = Medium L = Long		30 = 3000K 40 = 4000K 50 = 5000K	ND = Non-Dimmable DM = Dimmable SC = Smart Control		PDS = Pendant Mount SWL = Swivel Mount

* PDS is the standard mounting system with 1” NPT threaded coupling.

Example

Part Number	Part Description
ALX34100UV-R5M-50DM-PDS	LED Corrosive Area Light / 100 Watt / 100-277VAC / Type V Round Medium / 5000K Cool White / Dimmable / Pandant Mount

Confugure Your Lighting Solutions With Our Product Selector

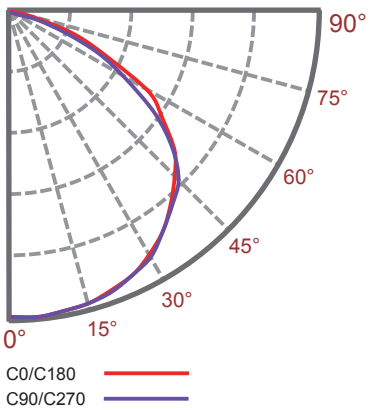
Select wattage, optics, color temperature, controls, mounting configuration to meet your application specifications

Product Selector

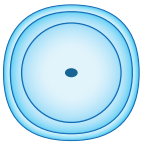
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Photometric Specification

Type V Round Medium - R5M / symmetric for low-mid-high bay & wide flood applications

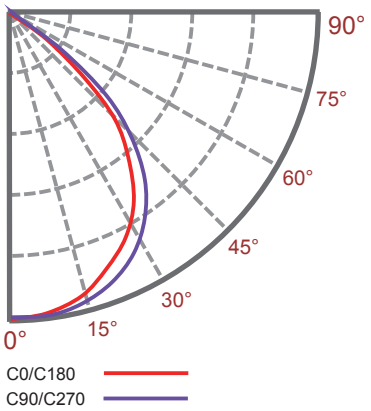


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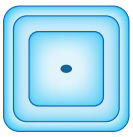


Watts	Lumens*	Efficacy *	LED mA	L70 Rating
50 W	12,200 lm	244 lm / W	128@150mA	>150K hours
75 W	17,325 lm	231 lm / W	128@220mA	>140K hours
100 W	21,800 lm	218 lm / W	128@285mA	>125K hours

Type V Square Medium - S5M / symmetric for high-bay, aisle, flood applications

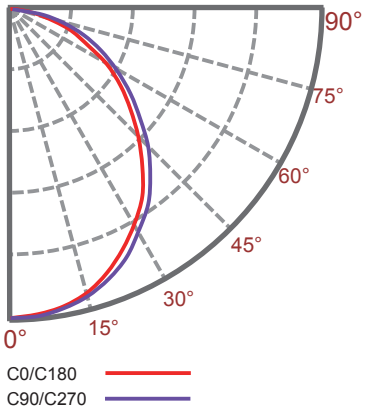


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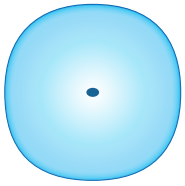


Watts	Lumens*	Efficacy *	LED mA	L70 Rating
50 W	11,950 lm	239 lm / W	128@150mA	>145K hours
75 W	17,025 lm	227 lm / W	128@220mA	>135K hours
100 W	21,300 lm	213 lm / W	128@285mA	>120K hours

Type V Round Frosted Long - F5L / symmetric opaque for ultra uniform & low glare applications



Optic



Watts	Lumens*	Efficacy *	LED mA	L70 Rating
50 W	10,950 lm	219 lm / W	128@150mA	>150K hours
75 W	15,600 lm	208 lm / W	128@220mA	>140K hours
100 W	19,700 lm	197 lm / W	128@285mA	>125K hours

* Test data @ Ta: 25°C. All lumen values have ±7% tolerance