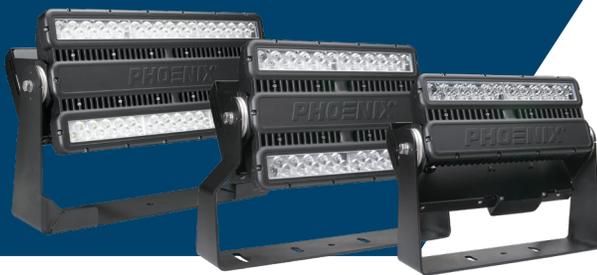# PHOENIX®
DURABILITY X DESIGN™
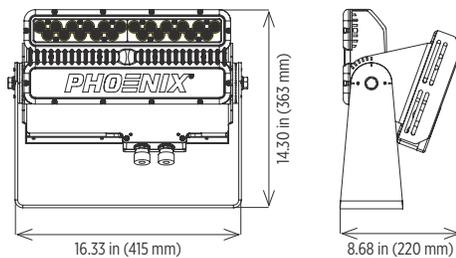
EcoMod® 2 Series
Heavy Duty LED Floodlight

US Design Patent No. US D805,241 S

Introducing the next generation of the proven EcoMod® Series

Expertly engineered with durable, marine grade components and six optic options

Numerous bracket options

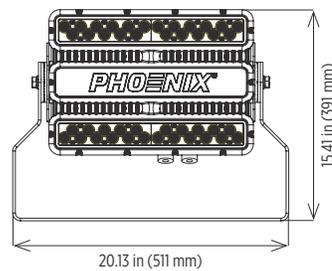LED technology increases efficiency, eliminates maintenance and supports green initiatives
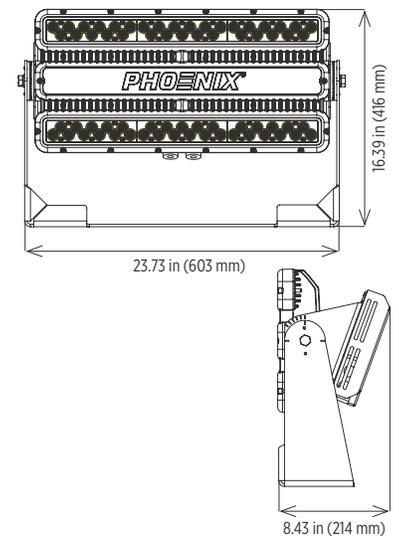
Dimensions

140 Model

14.30 in (363 mm)

16.33 in (415 mm)

8.68 in (220 mm)

280 Model

15.41 in (391 mm)

20.13 in (511 mm)

8.68 in (220 mm)

420 Model

16.39 in (416 mm)

23.73 in (603 mm)

8.43 in (214 mm)

Buy American Act Compliant

This product complies with domestic preference requirements such as BAA or TAA.
For additional information, visit phoenixlighting.com or consult your representative.

EcoMod® 2 Series

Heavy Duty LED Floodlight

Specifications

Construction	Marine grade, powder coated cast aluminum housing Adjustable powder coated steel mounting harp
Finish	Black thermoset powder coat finish
Hardware	Marine grade (316) stainless steel
Lens	Clear, tempered glass
Light source	Up to 125W (140), up to 240W (280), and up to 355W (420) - V2 Up to 14,000 lumens (140), up to 28,000 lumens (280), and up to 42,000 lumens (420) Cool white LEDs - standard Neutral white LEDs (NW) and warm white LEDs (WW) - optional CRI > 70 (CW) Other CCT options available – contact factory 50,000 hour rated life
Power source	120-277V, 50-60Hz; 277-480V, 50-60Hz; replaceable Overload, over-voltage, over-temperature and short-circuit protection 0-10V dimming option (DIM)
Surge protection	4kV line to line; 2kV line to earth
Wiring	Stranded wires 17 gauge, 3 conductor cord - 72 inch (1829 mm) standard (CE and UL approved) Through wire optional (TW) (no cord provided) Standard cord grip 0.37 inch - 0.50 inch (9.5 mm - 12.7 mm)
Ambient operating temperature	-40°C to + 50°C Designed for use in areas allowing air flow
Mounting	360° harp rotation Indexed aiming and lockable in 5° increments Boom mount kit (EM2-BMK)
Vibration	Meets requirements of ANSI C136.31-2010 Up to 6G for 100,000 cycles
EPA (wind load)	140 model - 2.1 sq. ft. (0.2 m^2) 280 model - 2.6 sq. ft. (0.2 m^2) 420 model - 3.3 sq. ft. (0.3 m^2)
Weight	140 model - 23.2 lb (10.5 kg) 280 model - 32.2 lb (14.6 kg) 420 model - 54 lb (24.5 kg)
Safety Cable	Safety cable included
Warranty	5 years

For IES files, see website or contact factory

Compliances

ETL/cETL Certified to:
- UL 1598 Suitable for Wet Locations
- UL 1598A Marine Outside Type (Saltwater)
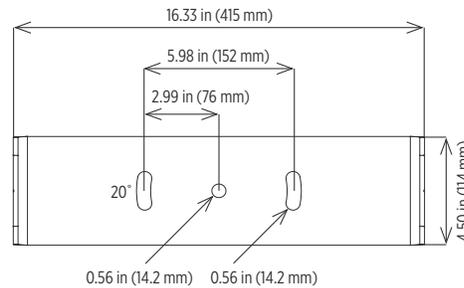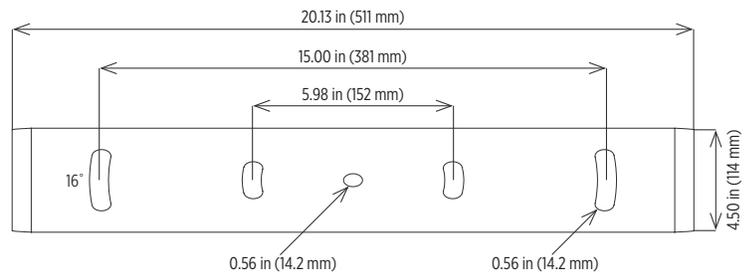- CSA C22.2 No. 250.0 equivalent

CE
IP66
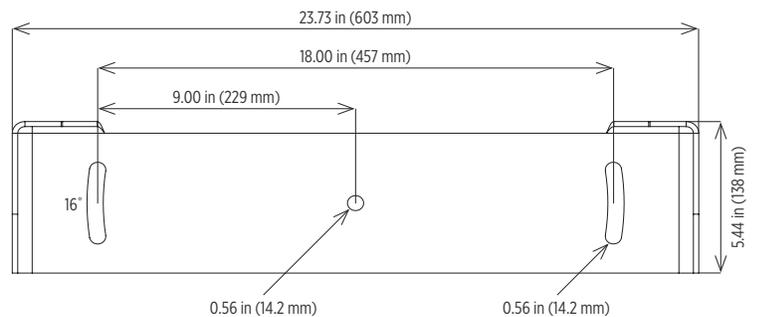ABS
DLC (on select models)
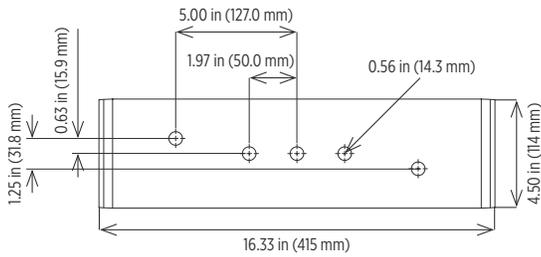
Standard Bracket Dimensions

140 Model

280 Model

420 Model

Alternative Bracket Dimensions
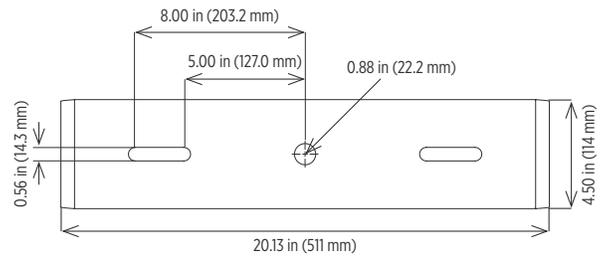
140 Model
Bracket A

140 Model
Bracket B
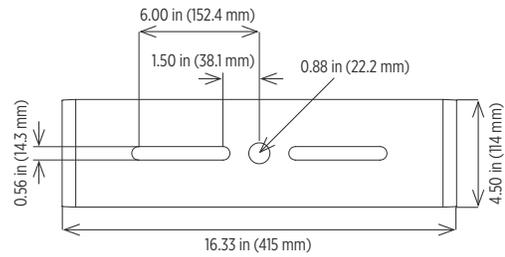
280 Model
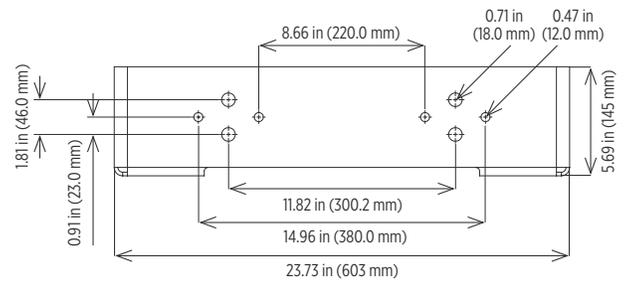Bracket A
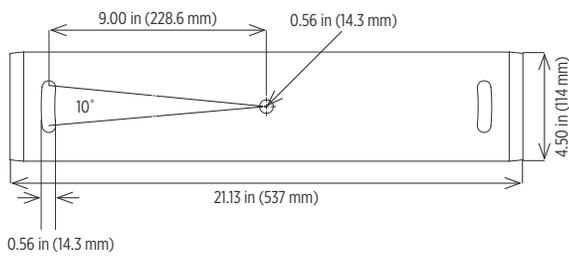
280 Model
Bracket B

280 Model
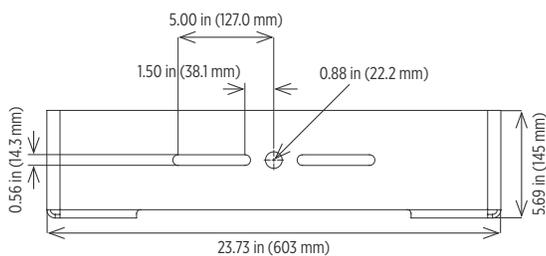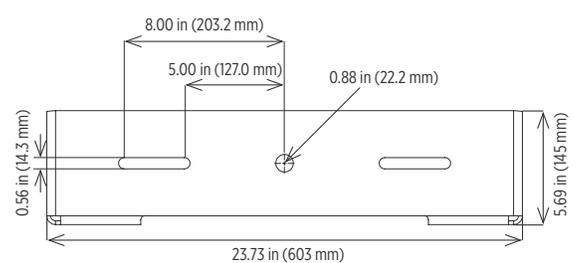Bracket C
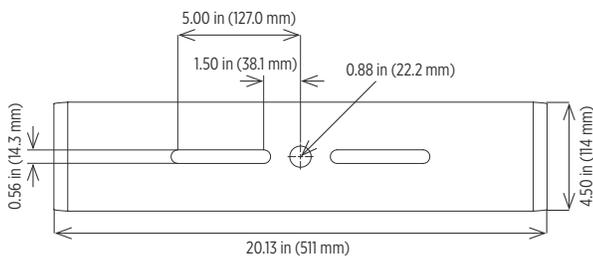
420 Model
Bracket A

420 Model
Bracket B

420 Model
Bracket C

EcoMod® 2 Series

Heavy Duty LED Floodlight

PHOENIX®
DURABILITY **X** DESIGN™

Ordering Information

Example: EM2-280-MF-120-277-V2

Fixture	Model	Optic	Voltage	Options	Alternative Brackets	Generation
EM2	140	WF	120-277	DIM [2]	BRKA	V2
	280	MF	277-480	WW [1,3]	BRKB	
	420	WS		NW [3]	BRKC	
		SP		TW [2]		
		NS		DLC [1]		
		VS				

Wattage

140	up to 125W
280	up to 240W
420	up to 355W

Optic

WF	Wide flood
MF	Medium flood
WS	Wide spot
SP	Spot
NS	Narrow spot
VS	Very narrow spot

Voltage

120-277	120-277V, 50-60Hz
277-480	277-480V, 50-60Hz

Options

DIM [2]	Dimmable (0-10V)
WW [1,3]	Warm white
NW [3]	Neutral white
TW [2]	Through wire
DLC [1]	DLC certified

Alternative Brackets

BRKA	Mounting bracket A
BRKB	Mounting bracket B
BRKC	Mounting bracket C

Generation

V2 [3]	Version 2

Notes

1 Contact factory for availability
2 DIM & TW are not available together
3 Cool white LEDs - standard

Special Projects: We may be able to accommodate your special projects, please don't hesitate to ask about additional options. Minimum order quantities and/or extended lead times will apply. Contact your Phoenix representative with specific inquiries.
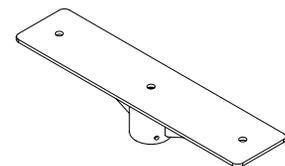
Inrush Current

Model	Voltage	Inrush (i)	Duration
140	120-277	55A	0.9ms
140	277-480	50A	0.5ms
280	120-277	70A	1.2ms
280	277-480	50A	0.92ms
420	120-277	75A	0.7ms
420	277-480	50A	0.5ms

Accessories (order separately)
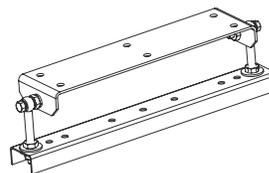
Boom Mount Kit

EM2-BMK (for all fixtures)

2 ¾ inch Tenon Mount

PTM-MC2 (140 & 280 fixtures)
MCPTM (420 fixture)

Cover photo: EcoMod 2 on an STS crane

Product design and specifications are subject to change without notice. The most current version of this specification sheet can be found on our website: www.phoenixlighting.com.