

# U306

## UNDERWATER: CHLORINATED WATER & FRESHWATER

In-grade | Submersed under water up to 10' (3m) depth.

- Underwater/Swimming Pool/Natatorium Certified

CSA - CLASS 3425 09 -Submersible

CSA - CLASS 3425 89 -Submersible - Certified to US Standards



### Ordering Information

Clear Form

Date : \_\_\_\_\_ Quantity : \_\_\_\_\_

Project : \_\_\_\_\_ Note : \_\_\_\_\_

Type : \_\_\_\_\_

### Specifications

Luminaire | Example Code: U306-2-W30H-N-C-LM-0-MK1-B-12-S6

Product	Version	CCT & CRI <sup>1</sup>	Beam Angle <sup>2</sup>	Lens	Accessories <sup>3</sup> (optional)	Internal Angle Bracket <sup>4</sup>	Mounting Kit <sup>5</sup> (optional)	Flange & Back Box <sup>6</sup>	Lead Length <sup>7</sup>	Trim Finish
<b>U306</b>										<b>S6</b>
	1 1W 2 2W	<b>W22H</b> 2200K 90+ <b>W27H</b> 2700K 90+ <b>W30H</b> 3000K 90+ <b>W35H</b> 3500K 90+	<b>S</b> spot 12° <b>N</b> narrow flood 30° <b>F</b> flood 45° <b>W</b> wide flood 120°	<b>C</b> clear <b>F</b> frosted	<b>LM</b> louver, matte anodized <b>LB</b> louver, black anodized <b>HM</b> hex louver, matte anodized <b>HB</b> hex louver, black anodized <b>AB</b> angled louver, black anodized <b>SB</b> straight louver, black anodized <b>QB</b> square louver, black anodized <b>RB</b> ring louver, black anodized	<b>0</b> no angle <b>20</b> 20° angle <b>X</b> custom	<b>MK1</b> vertical surface	<b>B</b> back box <b>F</b> flange only	<b>15</b> 15' (4572mm) <b>X</b> custom	<b>Stainless Steel Finish:</b> <b>S6</b> stainless steel 316

### System Components (Ordered Separately)

Pool-certified power supplies : \_\_\_\_\_

\* Consult MP Lighting Website or Factory.

### Order Guide Important Notes

#### Specification

1. Refer to pg.2 - for Colour Consistency details.
2. See Light Distribution section for illustration of different combinations of beam angles and angle bracket.
3. Louvers will be below the lens. Only available when there is no Internal Angle Bracket.
4. Internal angle bracket is factory set, and cannot be field adjusted. 5° increments to maximum of 20° without accessories.

5. Mounting kit is ordered separately. Please consult factory.
6. For components included, refer to Luminaire Construction section. For custom box and flange options, consult MP factory.
7. Custom lengths available by 1" increments.

#### Warranty Notes & Disclaimer

Malfunction and damage to product due to incompatible dimming system or misuse will not be covered under warranty. Consult MP Lighting for recommended drivers. If the fixture has an option to be installed with a dimming control system, consult a dimming system manufacturer with minimum load before installing. MP Lighting reserves the right, at its sole discretion, at any time and without notice, to make design changes to any of our products. Consult MP Lighting website for most updated documentation.

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### Performance

Wattage	Supply Voltage	Power Consumption Budget per fixture (including driver)	LED Output (Source)	Fixture Output (Delivered)
1W	12V	1.3W	110 lm	29-33 lm
2W	12V	2.6W	220 lm	47-53 lm

### Application

Environment	Dry / Damp / Wet/ Underwater Location approved. IP 68.
Mounting	<b>Recessed:</b> Designed to be cast into earth, gravel, or concrete for submersed applications. <b>MK1 mounting kit (optional):</b> Recommended for easy installation on vertical surfaces (e.g. stair risers, walls), and downward-facing surfaces (e.g. ceilings, soffits). See "Mounting Options & Dimensions," or visit <a href="#">MK1</a>

### Electrical

Power Supply	Compatible with remote pool-certified power supplies
Control	On/off control

### Luminaire Construction

LED Light Source	<b>W22H</b> = CCT: 2200K, CRI (Ra): 90+, Colour Consistency: 3SDCM <b>W27H</b> = CCT: 2700K, CRI (Ra): 90+, Colour Consistency: 2SDCM <b>W30H</b> = CCT: 3000K, CRI (Ra): 90+, Colour Consistency: 2SDCM <b>W35H</b> = CCT: 3500K, CRI (Ra): 90+, Colour Consistency: 2SDCM
Weight	2.45 lbs (1.11 kg). Typical stainless steel 316 Insert & Back Box only.
Material	<b>Fixture:</b> Machined stainless steel (316) with tempered glass.
Supplied with	<b>Standard installation housing:</b> Comes with a 304 stainless steel square back box, and brass/stainless steel 316 flange, an integral leveling device, a plastic cap, gel filled wire nuts, and silicone grease. <b>Wire lead:</b> 15' (4572mm) or custom length.
Warranty & LED Life	5 years limited warranty Estimated useful life of LED is 50,000 hours.

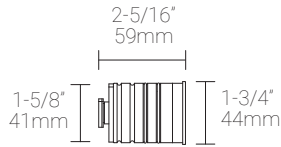
### Ordered Separately

System Components	<b>Power supplies:</b> remote power supply <b>Mounting kits:</b> MK1
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Mounting Options & Dimensions

LED Insert Dimensions

Fixture



Top View



3D View

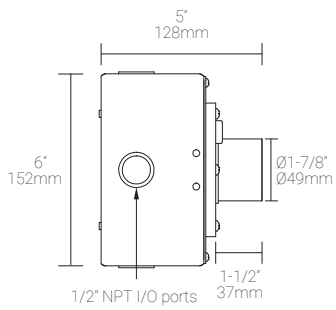


Beam

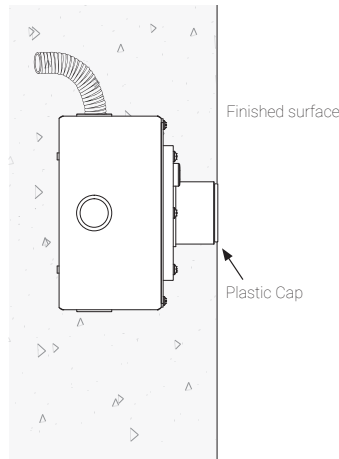


In-ground Installation (shown with MP Lighting Back Box)

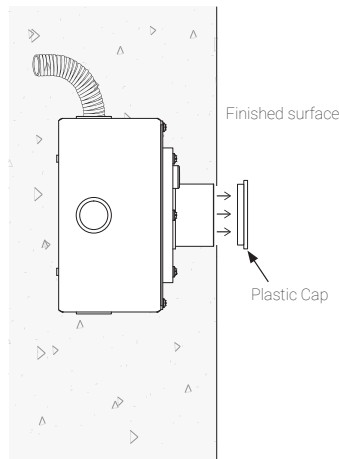
Box with Standard Flange



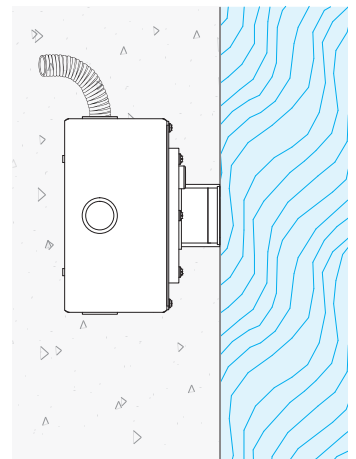
Box with Standard Flange:  
During Concrete Installation



Box with Standard Flange:  
Complete Concrete Installation



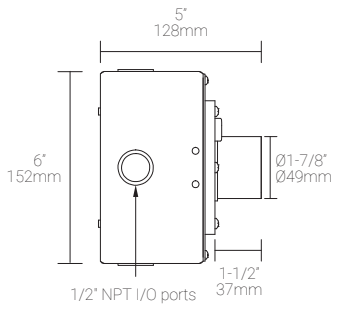
Box with Standard Flange :  
Complete Concrete Installation



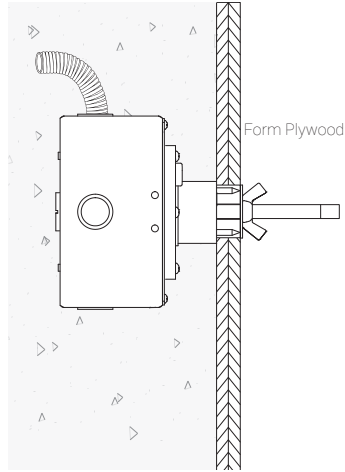
Mounting Kits

MK1: Ceiling, Wall, and Stair Riser Installation (shown with MP Lighting Back Box)

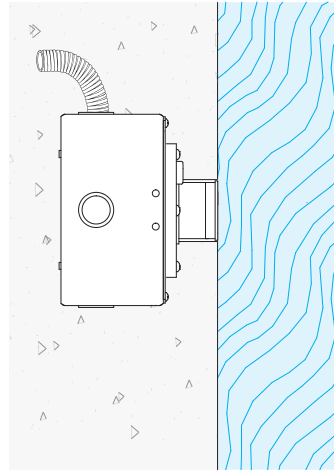
Box with Standard Flange



Box with Standard Flange & MK1:  
During Installation



Box with Standard Flange:  
Complete Installation

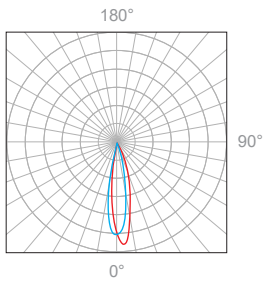


6" (152mm) threaded rod is supplied. Thread size: 3/8"-16

Photometric Report | 1W, 3000K, 90+ CRI

Polar Candela Distribution

Beam Width: 12°



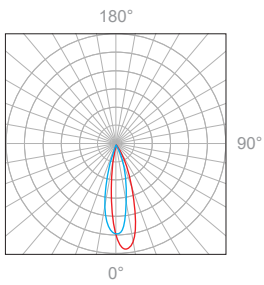
Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	123fc	0.6ft	0.18m	0.5ft	0.15m
3.0ft	0.91m	30fc	1.1ft	0.34m	1.0ft	0.30m
4.5ft	1.37m	13fc	1.7ft	0.52m	1.6ft	0.49m
6.0ft	1.83m	5.7fc	2.3ft	0.70m	2.1ft	0.64m
7.5ft	2.29m	4.7fc	2.9ft	0.88m	2.6ft	0.79m
9.0ft	2.74m	3.1fc	3.4ft	1.04m	3.1ft	0.95m

Delivered Lumen: 33 lm  
 ■ Vertical Beam Spread: 14.0°  
 ■ Horizontal Beam Spread: 14.3°

Polar Candela Distribution

Beam Width: 30°



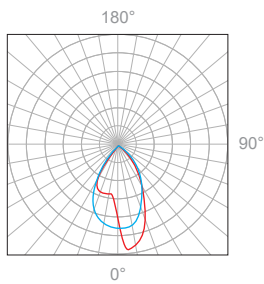
Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	79fc	0.8ft	0.24m	0.6ft	0.18m
3.0ft	0.91m	20fc	1.6ft	0.49m	1.3ft	0.40m
4.5ft	1.37m	8.8fc	2.4ft	0.73m	1.9ft	0.58m
6.0ft	1.83m	5fc	3.2ft	0.98m	2.6ft	0.79m
7.5ft	2.29m	3.1fc	4.0ft	1.22m	3.2ft	0.98m
9.0ft	2.74m	1.9fc	4.8ft	1.46m	3.8ft	1.16m

Delivered Lumen: 33 lm  
 ■ Vertical Beam Spread: 29.9°  
 ■ Horizontal Beam Spread: 24.1°

Polar Candela Distribution

Beam Width: 45°



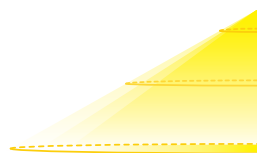
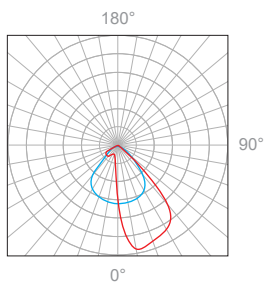
Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	6.07fc	2.3ft	0.70m	1.5ft	0.45m
6.0ft	1.83m	1.52fc	4.7ft	1.43m	3.0ft	0.91m
9.0ft	2.74m	0.67fc	7.0ft	2.13m	4.5ft	1.37m
12.0ft	3.65m	0.38fc	9.3ft	2.83m	5.9ft	1.79m
15.0ft	4.57m	0.24fc	11.7ft	3.56m	7.4ft	2.25m
18.0ft	5.48m	0.17fc	14.0ft	4.26m	8.9ft	2.71m

Delivered Lumen: 41 lm  
 ■ Vertical Beam Spread: 42.5°  
 ■ Horizontal Beam Spread: 27.8°

Polar Candela Distribution

Beam Width: 120°

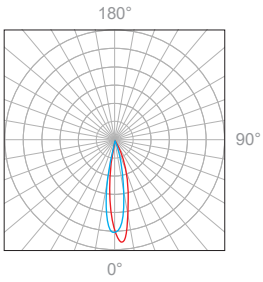


Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	6.6fc	2.7ft	0.82m	1.2ft	0.37m
3.0ft	0.91m	2.7fc	5.4ft	1.65m	2.5ft	0.76m
4.5ft	1.37m	1.3fc	8.0ft	2.40m	3.7ft	1.13m
6.0ft	1.83m	0.73fc	10.7ft	3.26m	4.9ft	1.49m
7.5ft	2.29m	0.47fc	13.4ft	4.08m	6.1ft	1.86m
9.0ft	2.74m	0.32fc	16.1ft	4.91m	7.4ft	2.26m

Delivered Lumen: 29 lm  
 ■ Vertical Beam Spread : 83.6°  
 ■ Horizontal Beam Spread : 44.4°

**Polar Candela Distribution**



**Beam Width: 12°**

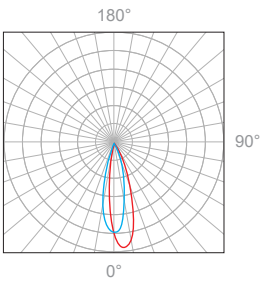


**Illuminance at a Distance**

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	285fc	0.6ft	0.18m	0.5ft	0.15m
3.0ft	0.91m	91fc	1.1ft	0.34m	1.0ft	0.30m
4.5ft	1.37m	32fc	1.7ft	0.52m	1.6ft	0.49m
6.0ft	1.83m	17fc	2.3ft	0.70m	2.1ft	0.64m
7.5ft	2.29m	11fc	2.9ft	0.88m	2.6ft	0.79m
9.0ft	2.74m	7.2fc	3.4ft	1.04m	3.1ft	0.95m

Delivered Lumen: 53 lm  
 ■ Vertical Beam Spread: 14.0°  
 ■ Horizontal Beam Spread: 14.3°

**Polar Candela Distribution**



**Beam Width: 30°**

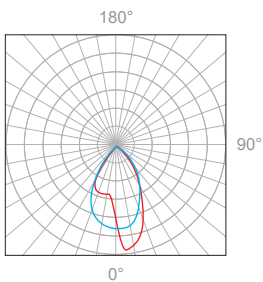


**Illuminance at a Distance**

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	171fc	0.8ft	0.24m	0.6ft	0.18m
3.0ft	0.91m	41fc	1.6ft	0.49m	1.3ft	0.40m
4.5ft	1.37m	18fc	2.4ft	0.73m	1.9ft	0.58m
6.0ft	1.83m	9.4fc	3.2ft	0.98m	2.6ft	0.79m
7.5ft	2.29m	6fc	4.0ft	1.22m	3.2ft	0.98m
9.0ft	2.74m	4.2fc	4.8ft	1.46m	3.8ft	1.16m

Delivered Lumen: 52 lm  
 ■ Vertical Beam Spread: 29.9°  
 ■ Horizontal Beam Spread: 24.1°

**Polar Candela Distribution**



**Beam Width: 45°**

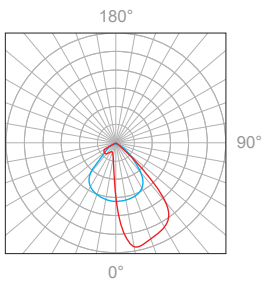


**Illuminance at a Distance**

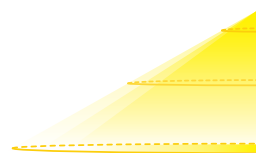
Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	1.11fc	2.3ft	0.70m	1.5ft	0.45m
6.0ft	1.83m	2.77fc	4.7ft	1.43m	3.0ft	0.91m
9.0ft	2.74m	1.23fc	7.1ft	2.16m	4.5ft	1.37m
12.0ft	3.65m	0.69fc	9.5ft	2.89m	6.0ft	1.82m
15.0ft	4.57m	0.44fc	11.8ft	3.59m	7.5ft	2.28m
18.0ft	5.48m	0.31fc	14.2ft	4.32m	9.0ft	2.74m

Delivered Lumen: 73.6 lm  
 ■ Vertical Beam Spread: 43°  
 ■ Horizontal Beam Spread: 28.2°

**Polar Candela Distribution**



**Beam Width: 120°**



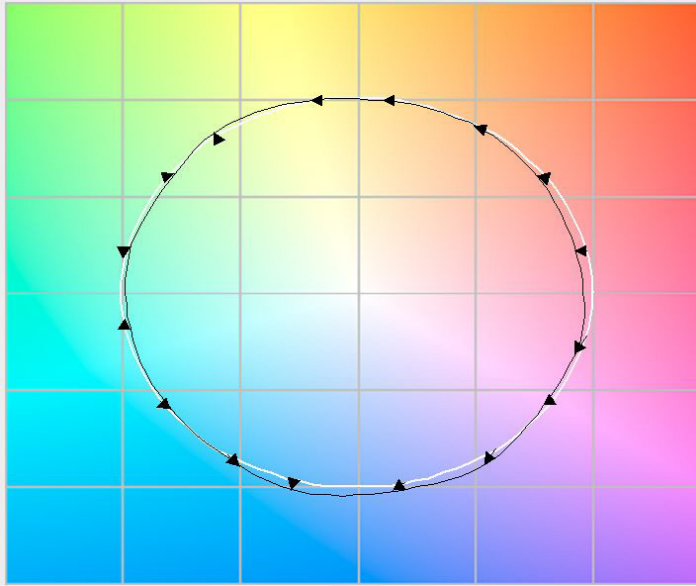
**Illuminance at a Distance**

Distance		Center Beam fc	Beam Width			
1.5ft	0.46m	11fc	2.7ft	0.82m	1.2ft	0.37m
3.0ft	0.91m	4.9fc	5.4ft	1.65m	2.5ft	0.76m
4.5ft	1.37m	2.4fc	8.0ft	2.40m	3.7ft	1.13m
6.0ft	1.83m	1.4fc	10.7ft	3.26m	4.9ft	1.49m
7.5ft	2.29m	0.93fc	13.4ft	4.08m	6.1ft	1.86m
9.0ft	2.74m	0.64fc	16.1ft	4.91m	7.4ft	2.26m

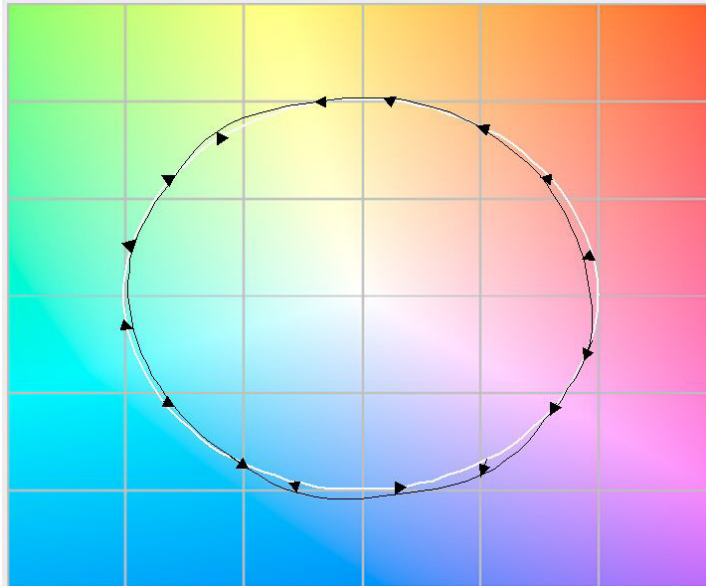
Delivered Lumen: 47 lm  
 ■ Vertical Beam Spread : 83.6°  
 ■ Horizontal Beam Spread : 44.4°

TM30 Report

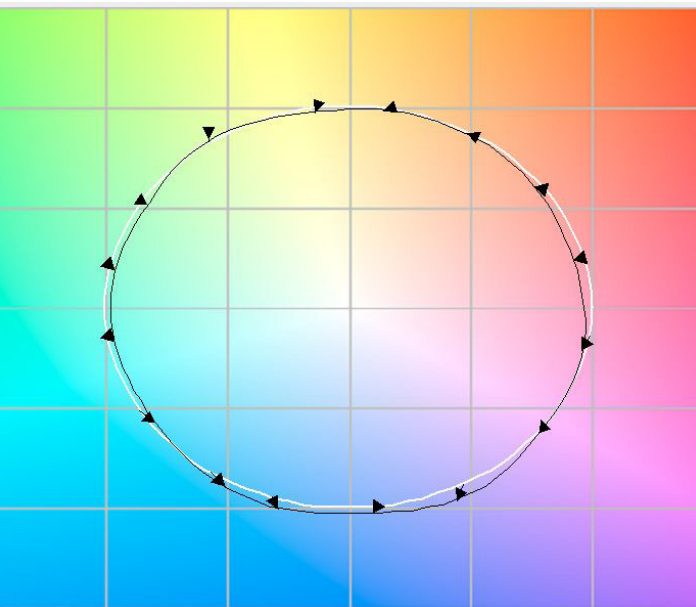
2700K, 90+CRI



3000K, 90+CRI



3500K, 90+CRI



Appendix



S6 stainless steel 316

Accessories



LM louver, matte clear anodized



LB louver, black anodized



HM hex louver, matte clear anodized



HB hex louver, black anodized



AB angled louver, black anodized



SB straight louver, black anodized



QB square louver, black anodized



RB ring louver, black anodized