

# ZDL16-I

(includes former ZXL16i-CM & ZXL16i-CM-NF models)

DOWNLIGHT | ZD16 Series | 2.25" dia.  
5-10W (400-1000lm) | 120V-277V | HK LED, RGBW



Line Voltage Downlight - Standard: ZDL16-IR1SB-ABL



Line Voltage Downlight - Finned: ZDL16-IR1FB-AAC

## FEATURES

- Compact 2.25" round, integrated LED, line-voltage downlight for architectural outdoor applications.
- 5W, 7W, 10W integrated HK LED delivering 400-1000 lumens. 2200-4000K CCT, including specialty RGBW option.
- Wet Location Listed, IP65 Standard.
- Machined from solid aircraft-grade (6061-T6), corrosion-resistant aluminum, then anodized and powder coated to create a highly durable, marine-grade finish. Also available in solid brass or stainless steel.
- Modular component design with configurable optical beam angles and accessory lenses.
- Includes CM5 5" canopy plate. Adjustable angled, long, and short glare shields, along with additional canopy and surface mount options, are available.
- Every fixture tested end of line for water tightness and light quality.

## SPECIFICATIONS

<p><b>Materials</b> Solid billet 6061-T6 corrosion resistant aluminum with 304 stainless steel hardware.</p> <p><b>Finish</b> Aluminum materials are first anodized and then powder coated for a robust, marine-grade finish. Stainless steel and brass models are provided with brushed surface.</p> <p><b>Hood and Glare Shield</b> Non-weeping Hood Styles. Set screw or threaded Angled, Short, or Long Glare Shields. (See page 4 for details)</p>	<p><b>Voltage</b> 120V-277V AC.</p> <p><b>Wattage</b> 5, 7, or 10W HK LED delivers 400-1000 lumens.</p> <p><b>Light Engine</b> CRI 90 Standard. Available in CRI 80 or CRI 95 upon request. Standard CCT options are 2700K, 3000K, 3500K, 4000K. Specialty 2200K, 2400K, 2500K, and RGBW options available. Consult factory for specialty LED specification details.</p> <p><b>Driver/Dimming</b> Onboard, Integrated LED Driver Phase Control @120V, 0V-10V @120V-277V, DALI or DMX control available, consult factory for details.</p>	<p><b>Optics</b> Narrow (20°), Medium (33°), Wide (44°), and Extra Wide (57°) beam spread options available. Accepts up to 3 optical accessories (hexcel louver, optical lenses, dichroic color filters, etc.) Secured in place with metal snap ring.</p> <p><b>Mounting</b> Includes CM5 5" Round Canopy Plate and (2X) 8-32 UNC machine screws to attach to a standard 30 or 3R recessed back box (provided by others).</p> <p><b>Listings</b> ETL Listed for Wet Location, IP65 Standard. RoHS Compliant.</p>
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## ORDERING GUIDE

EXAMPLE: ZDL16-IR1FB-ABL-120V05W-22N-GSA-LVR-CM5-ABL

MODEL	PHYSICAL OPTIONS				MATERIAL / FINISH		POWER		LIGHT				
<b>ZDL16</b>	<b>IR1</b>												
ZD16 Series 2.25" Downlight Integrated HK LED	IR1 Line Voltage, Round Light Integrated Driver				ABL Aluminum Black								
		<b>STYLE</b>	<b>HOOD</b>			<b>VOLTAGE</b>	<b>WATTAGE</b>			<b>CCT</b>	<b>OPTICS</b>		
		S Standard	B B Style: No Weep Holes		ABR Aluminum Bronze	120V 120V (Phase Control)	05W 5 Watt (400lm)			22 2200K	N	Narrow (20°)	
		F Finned	C C Style: Threaded, Weeping		AWH Aluminum White	UNIV 120V-277V (0V-10V)	07W 7 Watt (700lm)			24 2400K	M	Medium (33°)	
					AAC Aluminum Anodized Clear <sup>1</sup>		10W 10 Watt (1000lm)			25 2500K	W	Wide (44°)	
					NBR Natural Brass <sup>1</sup>		SPW Specialty <sup>2</sup>			27 2700K	E	Extra Wide (57°)	
					NCU Natural Copper <sup>1</sup>					30 3000K	CC	Custom Optic	
					NSS Natural Stainless Steel <sup>1</sup>					35 3500K			
					CCC Custom Finish <sup>1</sup>					40 4000K			
										RG RGBW <sup>2</sup>			

<sup>1</sup> For premium materials, please consult the factory for current lead times and pricing. A minimum order quantity of 10 units is required.

<sup>2</sup> For Specialty RG (RGBW LED), select SPW (Specialty) for Wattage. Consult factory for LED technical details before Specification or Order.

<sup>3</sup> Mounts to 3R & 3O style junction boxes

## OPTIONAL INSTALLED ACCESSORIES

### GLARE SHIELD

GSA	B Glare Shield Angled
GSL	B Glare Shield Long
GSS	B Glare Shield Short
CGSA	C Glare Shield Angled
CGSL	C Glare Shield Long
CGSS	C Glare Shield Short

### OPTIC

LVR	Hexcel Louver
OSL	Overall Spread Lens
LSL	Linear Spread Lens
SOL	Solite Soft Focus
DCF	Dichroic Filter

### MOUNTING (Most common listed, see Page 4 for additional options)

<b>CANOPY MOUNT</b>	
CM5-XXX	5" Round Canopy Plate (Included) <sup>3</sup>
<b>SURFACE MOUNT</b>	
CB5.5-XXX	5.5" Round Surface Box

- Consult Accessory Spec Sheet for desired option code.
- XXX represents color option.

## ADDITIONAL ACCESSORIES (Not installed at time of order)

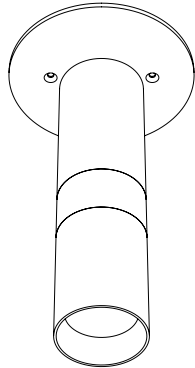
### GLARE SHIELD ACCESSORIES

GSL-16-XXX	B Glare Shield Long
GSA-16-XXX	B Glare Shield Angled
GSS-16-XXX	B Glare Shield Short
CGSL-16-XXX	C Glare Shield Long
CGSA-16-XXX	C Glare Shield Angled
CGSS-16-XXX	C Glare Shield Short

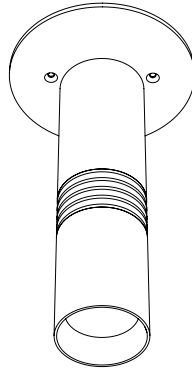
### OPTIC ACCESSORIES

LVR-16	Hexcel Louver
OSL-16	Overall Spread Lens
LSL-16	Linear Spread Lens
SOL-16	Solite Soft Focus
DCF-16	Dichroic Filter
OPK-16	Optic Kit - Narrow, Medium, Wide, Extra Wide

**PRODUCT DRAWINGS**

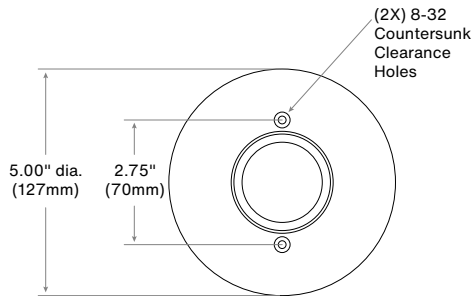
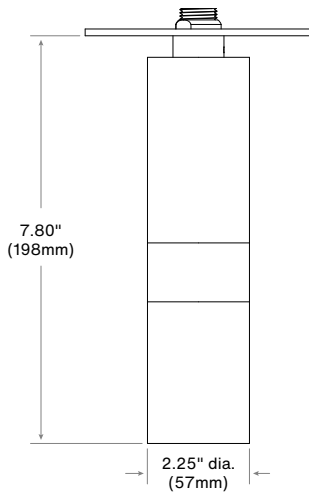


**ZDL16-IR1SB**  
Standard

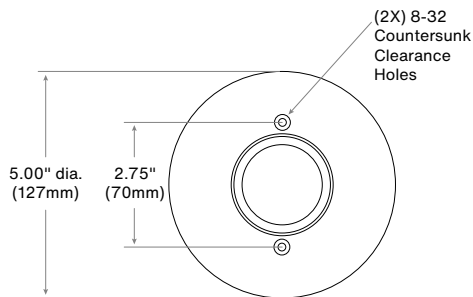
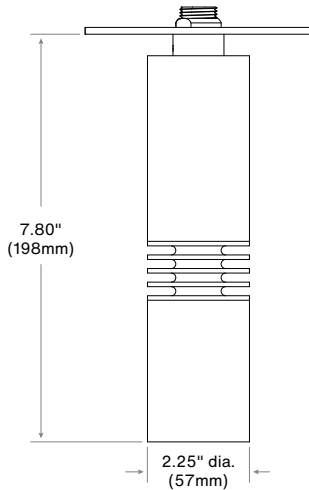


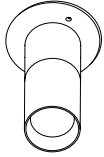
**ZDL16-IR1FB**  
Finned

**ZDL16-IR1SB**



**ZDL16-IR1FB**



**OPTIONS & ACCESSORIES**
**HOOD OPTIONS**

**B HOOD**

Regressed lens for glare control. Suggested for downlighting and interior applications.


**C HOOD**

Designed for permanent use with a glare shield and innovative drainage design for water and debris. The machined threads enable ongoing glare shield adjustment, without impact to the paint surface.

**OPTIONAL GLARE SHIELD**

For use with B Hood, fastened with Set Screw

For use with C Hood fastened with Locking Ring



GSA (angle)



GSL (long)



GSS (short)



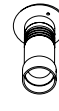
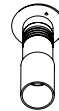
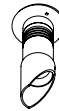
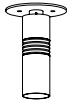
CGSA (angle)



CGSL (long)



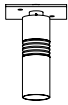
CGSS (short)


**INCLUDED MOUNTING ACCESSORIES**
**Canopy Mount:**


Fixture On CM5



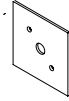
CM5

**OPTIONAL MOUNTING ACCESSORIES**
**Canopy Mount:**


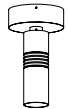
Fixture On CM3



CM1



CM3

**Surface Mount Box:**


Fixture On CB5.5



CMLJ



CB3.5



CB4.0



CB4.0-SQ



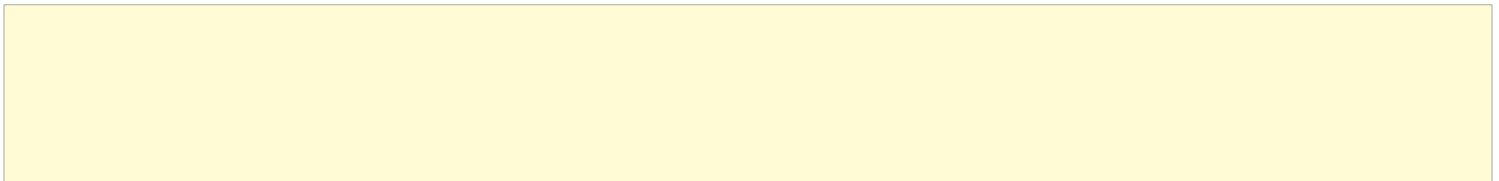
CB5.1



CB5.5



CB5.5-K/O

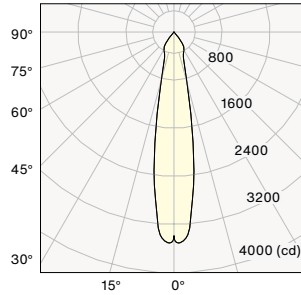
**Notes:**


## PHOTOMETRY & ENERGY DATA

### ZDL16-I (Narrow)

Input Power	9.5W
Color Temperature (CCT)	3000K
Color Rendering Index (Ra)	83
Beam Angle	20.5°
Max. Candlepower	3507cd
Delivered Lumens	864lm
Efficacy	91lm/W

Polar Graph - Intensity



Cone of Light - Illuminance

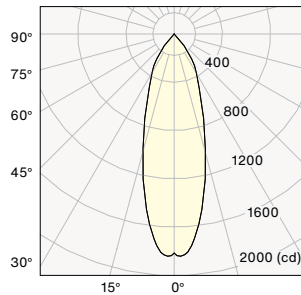
Center Beam (fc)	Beam Diameter	Distance
877	0.7'	2.0'
219	1.4'	4.0'
97	2.2'	6.0'
55	2.9'	8.0'
35	3.6'	10.0'

1/2 Beam Angle: 20.5°

### ZDL16-I (Medium)

Input Power	9.5W
Color Temperature (CCT)	3000K
Color Rendering Index (Ra)	83
Beam Angle	32.5°
Max. Candlepower	1842cd
Delivered Lumens	863lm
Efficacy	91lm/W

Polar Graph - Intensity



Cone of Light - Illuminance

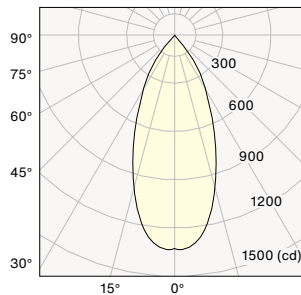
Center Beam (fc)	Beam Diameter	Distance
460	1.2'	2.0'
115	2.3'	4.0'
51	3.5'	6.0'
29	4.6'	8.0'
18	5.8'	10.0'

1/2 Beam Angle: 32.5°

### ZDL16-I (Wide)

Input Power	9.5W
Color Temperature (CCT)	3000K
Color Rendering Index (Ra)	83
Beam Angle	44.1°
Max. Candlepower	1332cd
Delivered Lumens	850lm
Efficacy	89lm/W

Polar Graph - Intensity



Cone of Light - Illuminance

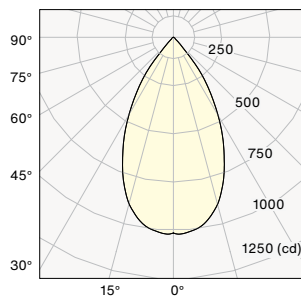
Center Beam (fc)	Beam Diameter	Distance
333	1.6'	2.0'
83	3.2'	4.0'
37	4.9'	6.0'
21	6.5'	8.0'
13	8.1'	10.0'

1/2 Beam Angle: 44.1°

### ZDL16-I (Extra Wide)

Input Power	9.5W
Color Temperature (CCT)	3000K
Color Rendering Index (Ra)	83
Beam Angle	56.9°
Max. Candlepower	1019cd
Delivered Lumens	876lm
Efficacy	92lm/W

Polar Graph - Intensity



Cone of Light - Illuminance

Center Beam (fc)	Beam Diameter	Distance
255	2.3'	2.0'
64	4.6'	4.0'
28	6.9'	6.0'
16	9.2'	8.0'
10	11.5'	10.0'

1/2 Beam Angle: 56.9°

### WATTAGE MULTIPLIER

Wattage	Multiplier
5 Watt	0.45
7 Watt	0.80
10 Watt	1.14

### CCT MULTIPLIER

Color Temp.	Multiplier
2700k	0.97
3000k	1.00
4000k	1.05