



# DENALI™ | DE

## 15 WATT, 25 WATT • 120V-277V

The Denali Series™ floodlight is a powerful, yet innovative solid-state lighting fixture designed to deliver higher lumen output and unprecedented color consistency. Incorporating our new 'X' technology, Denali™ Floodlight utilizes Patented "Color Corrected Cold Phosphor" technology to deliver near-perfect natural white light while maintaining 'lifetime' color consistency. It's universal design accommodates a variety of remote and integral driver mounting options.

Visit [www.bklighting.com](http://www.bklighting.com) for ordering logic. Keyword DE-LED

**OPTICS**

- Spot
- Flood
- Wide Flood
- Rectilinear

**CCT**

- 2.7K
- 3K
- 4K

**MATERIAL**

- ALU

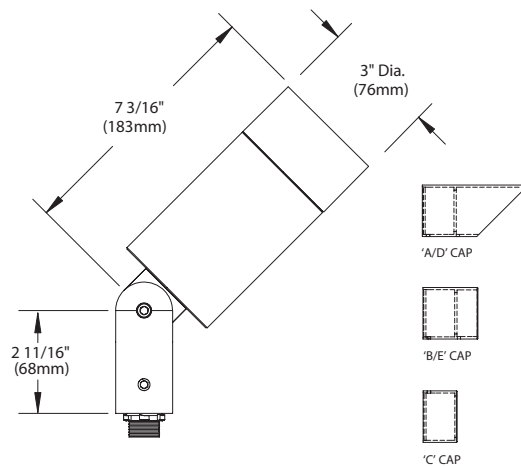
**VOLTAGE**

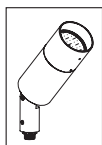
- 120-277V

**Xicato** THE POWER OF LIGHT



Shown with 'C' Cap in Bronze Wrinkle (BZW) finish

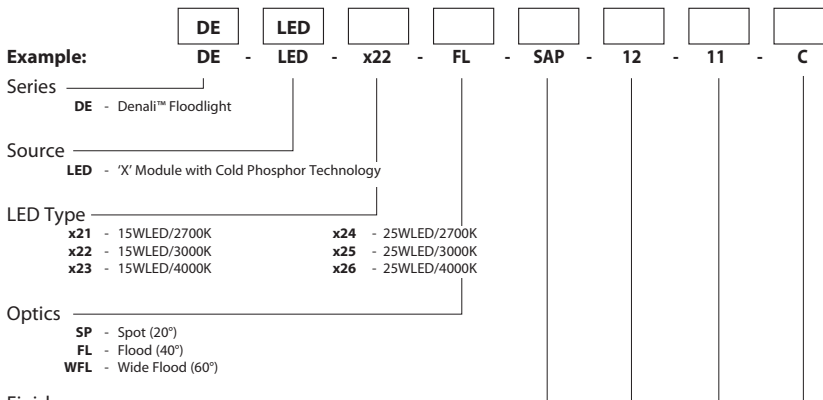




**DENALI™ FLOODLIGHT**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**



**Configure Driver Housing Separately**  
Driver Housing Required

**INTEGRAL DRIVER HOUSINGS:**  
HP2 - HP2 Housing  
PM2 - Universal Power Module 2  
PM2D - Universal Power Module 2 Dual  
PC - Power Canopy  
PPII - Power Pipe II  
TMB - Pole Mount or Tenon Mount

**REMOTE DRIVER HOUSINGS:**  
HP2RM - HP2 Remote Housing  
PM2RM - Universal Power Module 2 Remote  
PM2DRM - Universal Power Module 2 Dual Remote  
RM - Remote Wall Mount  
DRM - Dual Remote Wall Mount

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

ABP	AMG	AQW	BCM	BGE	BPP	CAP	CMG	CRI	CRM	HUG	MDS	NBP	OCP	RMG	SDS	SMG	TXF	WCP	WIR
Antique Brass Powder	Aleutian Mountain Granite	Antique White	Black Chrome	Beige	Brown Patina Powder	Clear Anodized Powder	Cascade Mountain Granite	Cracked Ice	Cream	Hunter Green	Mojave Desert Sandstone	Natural Brass Powder	Old Copper	Rocky Mountain Granite	Sonoran Desert Sandstone	Sierra Mountain Granite	Textured Forest	Weathered Copper	Weathered Iron

Also available in RAL Finishes See submittal SUB-1439-00

Lens Type: 9 - Clear (Standard), 10 - Spread Lens\*, 12 - Soft Focus Lens\*, 13 - Rectilinear Lens\*

Shielding: 11 - Honeycomb Baffle\*  
*\*Accommodates up to 2 Lens/Shielding media*

Cap Style: A - 45°, B - 90°, C - Flush, D - 45° without Weep Hole (Interior Use Only), E - 90° without Weep Hole (Interior Use Only)

**LM79 DATA**

BK No.	CCT (Typ.)	CRI (Ra. Typ.)	Color Consistency	Input Watts (Typ.)
x21	2700K	>80	±40K	15
x22	3000K	>80	±50K	15
x23	4000K	>80	±70K	15
x24	2700K	>80	±40K	25
x25	3000K	>80	±50K	25
x26	4000K	>80	±70K	25

**L70 DATA**

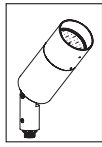
Minimum Rated Life (hrs.) 70% of initial lumens (L70)
50,000
50,000
50,000
50,000
50,000
50,000

**OPTICAL DATA**

Beam Type	Angle
Spot	20°
Flood	40°
Wide Flood	60°

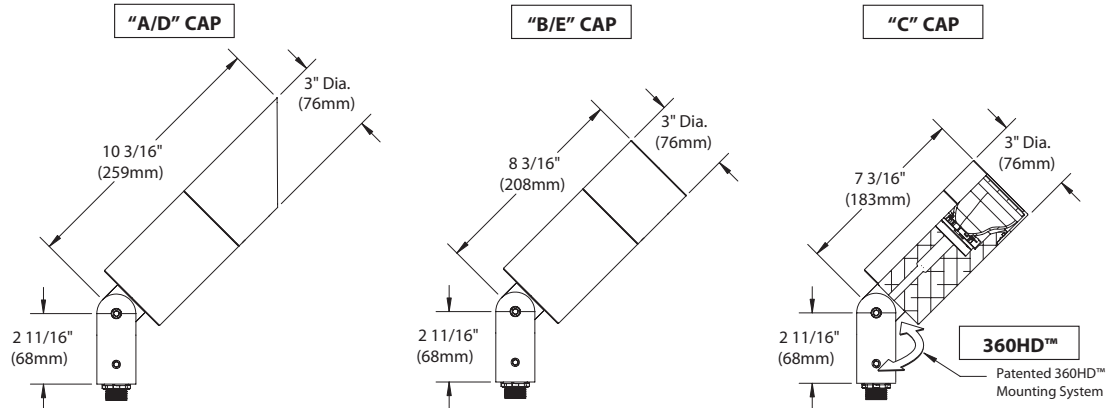
<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 www.bklighting.com • info@bklighting.com	SUBMITTAL DATE 3-12-12	DRAWING NUMBER SUB001113
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**DENALI™ FLOODLIGHT**

PROJECT:	
TYPE:	

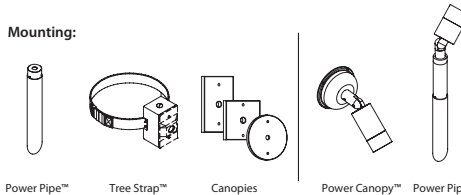


All dimensions indicated on this submittal are nominal.  
Contact Technical Sales if you require more stringent specifications.

**Accessories (Configure separately)**

**Drivers (Configure separately)**

**Mounting:**



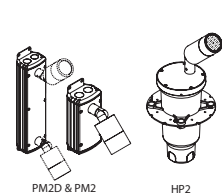
Power Pipe™

Tree Strap™

Canopies

Power Canopy™

Power Pipe™



PM2D & PM2

HP2

TMB

HP2RM

PM2DRM & PM2RM

RM & DRM

**Drivers:**

**SPECIFICATIONS**

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Materials**

Furnished in Copper-Free Aluminum (Type 6061-T6).

**Body**

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

**Knuckle**

Patented 360HD™ Mounting System features a mechanical taper-lock, which allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. 1/2" pipe thread for mounting. Biaxial source control additionally provides 360° horizontal rotation in addition to vertical adjustment. 'Aim-And-Lock' Technology allows precision adjustment without the redundant tightening and loosening of knuckle screw.

**Cap**

Fully machined. Accommodates 2 lens or louver media. Choose from 45° cutoff ('A' or 'D'), 1" deep bezel with 90° cutoff ('B' or 'E') or flush lens ('C') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

**Lens**

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment.

**BKSSL™**

Integrated solid state system with 'x' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance.

LM-80 certified. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

**Color Management**

Corrected cold phosphor technology delivers near-perfect natural white light. Long term phosphor maintenance over product life. Exact color point conformity exceeds ANSI C78.377 standard. Provides uniform beam with no color variation over angle. Module exceeds 80 CRI (RA>80, R9>16).

**Remote Driver**

For use with remote LED driver. See remote driver submittal to determine remote distance and wiring requirements prior to detailing field installation of any remote wiring.

**Optics**

Interchangeable OPTIKIT™ modules permit field changes to optical distribution.

**Wiring**

Teflon™ coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

**Hardware**

Tamper-resistant, stainless steel hardware. 360HD™ hardware is additionally black oxide treated for additional corrosion resistance.

**Finish**

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

**Warranty**

5 year limited warranty.

**Certification and Listing**

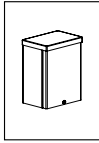
ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE ([www.lightingfacts.com](http://www.lightingfacts.com)). ETL Listed to ANSI/UL Standards 1598, 8750 and Certified to CAN/CSA Standard C22.2 No. 250. RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Additionally suitable for installation within 4' of the ground. IP66 Rated. Made in USA.



\*Teflon is a registered trademark of DuPont Corporation.  
\*Energy Star is a registered trademark of the United States Environmental Protection Agency.

<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 <a href="http://www.bklighting.com">www.bklighting.com</a> • <a href="mailto:info@bklighting.com">info@bklighting.com</a>	SUBMITTAL DATE 3-12-12	DRAWING NUMBER SUB001113
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360HD Patent is covered in whole or in part by U.S. Patent No. 6,161,948



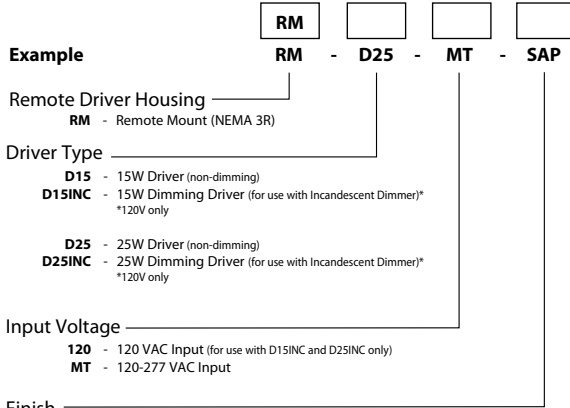
**BKSSL**  
SOLID STATE LIGHTING  
Constant Current Driver



## NEMA 3R Remote Driver Housing

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>LAMP(S):</b>	
<b>NOTES:</b>	

### CATALOG NUMBER LOGIC



### ⚠ REMOTE WIRING

**LED Driver**  
Remote driver installations require inter-connected wiring between the LED and driver (by others). Drivers have specific wiring requirements between these components. Driver manufacturers regularly recommend the following wiring details for such installations:

- Do not exceed 50 foot overall wiring distance using 12 gauge copper wire.

**Failure to comply with specific wiring requirements will void product warranty.**

Standard Finish		
Powder Coat Color	Satin	Wrinkle
Bronze	<b>BZP</b>	<b>BZW</b>
Black	<b>BLP</b>	<b>BLW</b>
White (Gloss)	<b>WHP</b>	<b>WHW</b>
Aluminum	<b>SAP</b>	—
Verde	—	<b>VER</b>

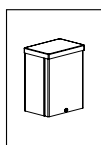
Premium Finish	
<b>ABP</b> Antique Brass Powder	<b>MDS</b> Mojave Desert Sandstone
<b>AMG</b> Aleutian Mountain Granite	<b>NBP</b> Natural Brass Powder
<b>AQW</b> Antique White	<b>OC</b> Old Copper
<b>BCM</b> Black Chrome	<b>RMG</b> Rocky Mountain Granite
<b>BGE</b> Beige	<b>SDS</b> Sonoran Desert Sandstone
<b>BPP</b> Brown Patina Powder	<b>SMG</b> Sierra Mountain Granite
<b>CAP</b> Clear Anodized Powder	<b>TXF</b> Textured Forest
<b>CMG</b> Cascade Mountain Granite	<b>WCP</b> Weathered Copper
<b>CRI</b> Cracked Ice	<b>WIR</b> Weathered Iron
<b>CRM</b> Cream	
<b>HUG</b> Hunter Green	<i>Also available in RAL Finishes See submittal SUB-1439-00</i>

### DRIVER ELECTRICAL DATA

TYPE	AC INPUT RANGE	Frequency Hz	DIMMING	POWER FACTOR	THD	OPER. AMBIENT TEMPERATURE	DIMMER TYPE	DIMMER RANGE
D15	120/208/240/277	50/60	NO	>0.92	≤20%	-30° C ~ 50°C	—	—
D15INC	120	50/60	YES	>0.96	≤20%	-30° C ~ 60°C	Incandescent	10-100%
D25	120/208/240/277	50/60	NO	>0.92	≤20%	-30° C ~ 50°C	—	—
D25INC	120	50/60	YES	>0.96	≤20%	-30° C ~ 60°C	Incandescent	10-100%

<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA	SUBMITTAL DATE	DRAWING NUMBER
	559.438.5800 • FAX 559.438.5900 www.bklighting.com • info@bklighting.com	12-21-12	SUB001124

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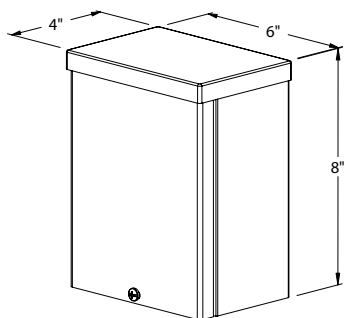
**BKSSL**  
SOLID STATE LIGHTING  
Constant Current Driver



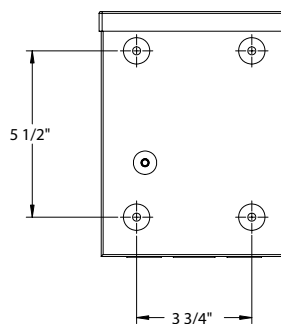
## NEMA 3R Remote Driver Housing

PROJECT:	
TYPE:	

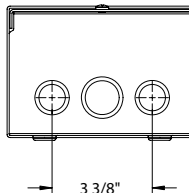
**SIDE VIEW**



**BACK VIEW**



**END VIEW**



### SPECIFICATIONS

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Installation**

Nema 3R, surface mount design. For use with remote fixture (specified separately).

**Housing**

Steel construction with screw cover. Front access for ease of installation and inspection. [2] bottom entry, 3/4" conduit knockouts.

**Wiring / Connectors**

Teflon® coated wire, 18 gauge, 600V, 250°C rated and certified to UL1659 standard. Pre-wired and labeled terminal strip.

**Driver**

[1] 700mA, Class A, constant current driver. 120-277VAC (nominal) primary input voltage. 50/60Hz. >0.90 Power Factor, <15.0A in-rush current, ≤20%THD (nominal at 120VAC full load). Output over-voltage, over-current, and short circuit protection with auto recovery. EMC: FCC47CFR Part 15 Class B compliant.

Dimming driver for use with standard incandescent dimmers. 10-100% range.

**Finish**

StarGuard™, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

**Warranty**

5 year limited warranty.

**Listings**

NEMA 3R Enclosure. ETL Listed to ANSI/UL Standard 50/50E and Certified to CAN/CSA Standard C22.2 No. 94.1/94.2. RoHs compliant. Made in USA.



©Teflon is a registered trademark of DuPont Corporation.

**B-K LIGHTING**

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SUBMITTAL DATE  
12-21-12

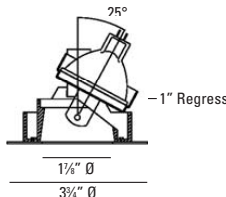
DRAWING NUMBER  
SUB001124

**Sliver** Low Voltage Halogen

Adjustable



7857 7859 7875



For trimless application add 325CCR

**LUMINAIRE INFORMATION**

**APPLICATION:**

Accent luminaire for Residential, Commercial, Retail or Hospitality environments.

**MATERIALS:**

Trim: Die cast aluminum / steel. Torsion spring mounting.  
Lens: Clear.  
7857 - Chrome cone  
7859 - White cone  
7875 - Vertical groove black baffle

**LAMP:** (not included) When using IR lamps, 37W Max.  
(1) 50W max. MR16 GU5.3

**TRANSFORMER:**

Low voltage solid state electronic.  
Note: Due to transformer / dimmer match some dimmers may cause transformer hum. Check with dimmer manufacturer for suitability.

**ADJUSTMENT:**

360° horizontal and 25° vertical tilt.  
40° tilt available, consult factory.

**VOLTAGE:**

Specify 120V or 277V.

**CEILING CUT OUT:**

3 3/8" Ø

**LISTINGS:**

Dry/damp location.



IC/Airtight housing meets Washington state airflow requirement and ASTM E283.

IBEW union made.

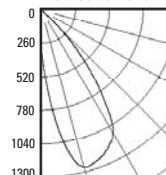
**NOTES:**

- Maximum ceiling thickness 1 inch. Consult factory for other ceiling conditions.
- Maximum 2 lens options (size A).
- Use 325CCR trimless adapter for a smooth flush Sliver installation.



**PHOTOMETRICS:**

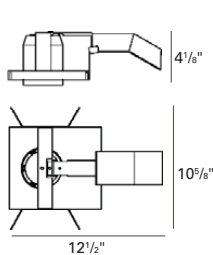
Distribution chart



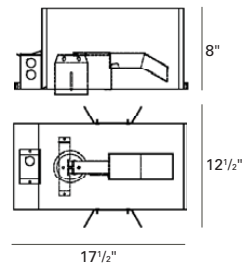
LTL No.: 13826.ies  
50W MR16 GU5.3 40° (tilted 25°)  
Clear lens  
58.8% Efficiency

**HOUSING INFORMATION**

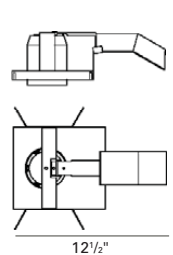
New Construction  
**325NC**



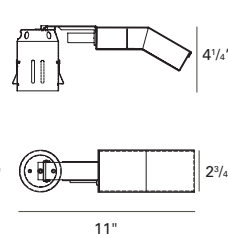
IC/Airtight  
**325IC**



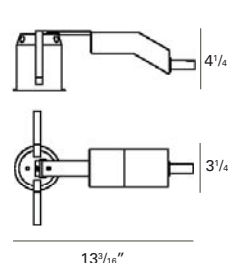
Remote Transformer  
**325RM**



Retrofit  
**325RT-35** (35W max.)



Retrofit  
**325RT-50**



**HOW TO SPECIFY**

Trim	Finish	Housing	Voltage	Accessories
<p>7857 - Chrome Cone 7859 - White Cone 7875 - Vertical Groove Black Baffle Sliver Adjustable, 50W Max. MR16 GU5.3</p>	<p>10 - White 12 - Brushed Stainless Steel 21 - Black 22 - Textured White 28 - Metalized Grey</p>	<p>325NC - New Construction 325IC - IC/Airtight 325RM - Remote Transformer 325RT-35 - Retrofit (35W max.) 325RT-50 - Retrofit</p>	<p>120V 277V</p>	<p>8177A - Hex Cell Louver 9143A - Frosted Lens 9153A - Anti UV Filter 9155A - Linear Spread Lens 9156A - Prismatic Spread Lens 9157A - Solite Lens 9199A - Frosted Borosilicate Lens ER - Emergency Relay 325CCR - Trimless Adapter</p>



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Revised 07/08/2011

**Recessed wall luminaire**

**Housing:** One piece die cast aluminum housing with integral wiring compartment.

**Enclosure:** One piece die cast aluminum faceplate, 1/8" thick, etched tempered glass lens. Faceplate is secured by four (4) flush, socket head, stainless steel, captive screws threaded into stainless steel inserts in the housing casting. Continuous high temperature O-ring gasket for weather tight operation.

**Electrical:** 10.1 W LED luminaire, 11.8 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0 -10V dimming available. The LED and driver are mounted on a removable plate for easy replacement. Standard LED color temperature is 3000K (available in 4000K; add suffix K4). Through Wiring: Maximum four (4) No. 12 AWG conductors (plus ground) suitable for 75°C. Provided with 1/2" NPT threaded conduit entries.

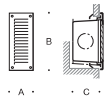
**Note:** Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to [www.bega-us.com](http://www.bega-us.com).

**Finish:** These luminaires are available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

UL listed, suitable for wet locations and for installation within 3 feet of ground. Type non-IC. Protection class: IP65.

**Luminaire Lumens:** 34  
Tested in accordance with LM-79-08

Type:  
BEGA Product #:  
Project:  
Voltage:  
Color:  
Options:  
Modified:



	Lamps	A	B	C
<b>2099LED ADA</b>	10.1 W LED	4 7/8	13	4



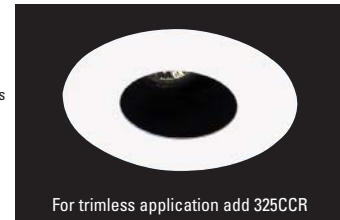
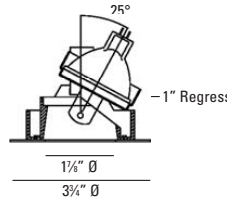
**BEGA-US** 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 [www.bega-us.com](http://www.bega-us.com)  
©copyright BEGA-US 2012 Updated 10/12

**Sliver** Low Voltage Halogen

Adjustable



7857 7859 7875



For trimless application add 325CCR

**LUMINAIRE INFORMATION**

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Accent luminaire for Residential, Commercial, Retail or Hospitality environments.

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Trim: Die cast aluminum / steel. Torsion spring mounting.  
Lens: Clear.  
7857 - Chrome cone  
7859 - White cone  
7875 - Vertical groove black baffle

**LAMP:** (not included) When using IR lamps, 37W Max.  
(1) 50W max. MR16 GU5.3

**TRANSFORMER:**

Low voltage solid state electronic.  
Note: Due to transformer / dimmer match some dimmers may cause transformer hum. Check with dimmer manufacturer for suitability.

**ADJUSTMENT:**

360° horizontal and 25° vertical tilt.  
40° tilt available, consult factory.

**VOLTAGE:**

Specify 120V or 277V.

**CEILING CUT OUT:**

3 3/8" Ø

**LISTINGS:**

Dry/damp location.

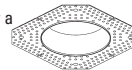


IC/Airtight housing meets Washington state airflow requirement and ASTM E283.

IBEW union made.

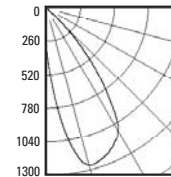
**NOTES:**

- Maximum ceiling thickness 1 inch. Consult factory for other ceiling conditions.
- Maximum 2 lens options (size A).
- Use 325CCR trimless adapter for a smooth flush Sliver installation.



**PHOTOMETRICS:**

Distribution chart



LTL No.: 13826.ies  
50W MR16 GU5.3 40° (tilted 25°)  
Clear lens  
58.8% Efficiency

**HOUSING INFORMATION**

New Construction 325NC	IC/Airtight 325IC	Remote Transformer 325RM	Retrofit 325RT-35 (35W max.)	Retrofit 325RT-50
4 1/8"	8"	4 1/8"	4 1/4"	4 1/4"
10 5/8"	12 1/2"	10 5/8"	2 3/4"	3 1/4"
12 1/2"	17 1/2"	12 1/2"	11"	13 9/16"

**HOW TO SPECIFY**

Trim	Finish	Housing	Voltage	Accessories
<p>7857 - Chrome Cone 7859 - White Cone 7875 - Vertical Groove Black Baffle Sliver Adjustable, 50W Max. MR16 GU5.3</p>	<p>10 - White 12 - Brushed Stainless Steel 21 - Black 22 - Textured White 28 - Metalized Grey</p>	<p>325NC - New Construction 325IC - IC/Airtight 325RM - Remote Transformer 325RT-35 - Retrofit (35W max.) 325RT-50 - Retrofit</p>	<p>120V 277V</p>	<p>8177A - Hex Cell Louver 9143A - Frosted Lens 9153A - Anti UV Filter 9155A - Linear Spread Lens 9156A - Prismatic Spread Lens 9157A - Solite Lens 9199A - Frosted Borosilicate Lens ER - Emergency Relay 325CCR - Trimless Adapter</p>



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8 WATT | **DS** DELTA STAR™

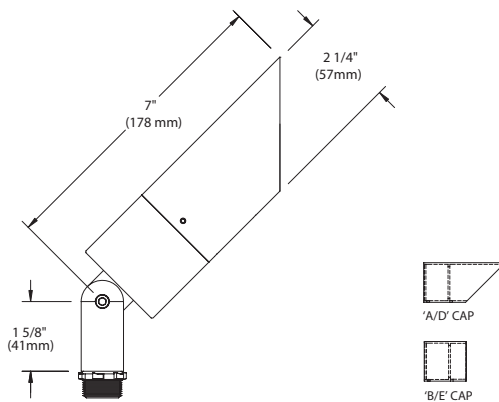
Sustainably manufactured from recycled copper-free aluminum, brass or stainless steel, Delta Star™ accentuates any architectural or landscape element. A one inch 45° or 90° lens cap minimizes glare and reduces aperture brightness. Delta Star™ operates on standard low voltage circuits. **Keyword DS**



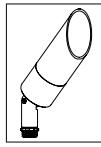
OPTICS



Shown with 'A' Cap  
in Black Wrinkle (BLW) finish



**COMPONENT 2 : ADJUSTABLE LED LIGHT**



**DELTA STAR™**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**

Example:  - **DS** - **LED** - **e22** - **SP** - **A7** - **BZW** - **12** - **11** - **A** - **360SL**

**Material**  
Blank - Aluminum  
B - Brass  
S - Stainless Steel

**Series**  
DS - Delta Star™

**Source**  
LED - 'e' Technology with Integral Driver

**LED Type**  
e36 - 8WLED/2.7K      e23 - 8WLED/4K      e25 - 8WLED/Green      e27 - 8WLED/Amber  
e22 - 8WLED/3K      e24 - 8WLED/Red      e26 - 8WLED/Blue

**Optics\***  
NSP - Narrow Spot (Red Indicator)      MFL - Medium Flood (Yellow Indicator)  
SP - Spot (Green Indicator)      WFL - Wide Flood (Blue Indicator)

**Adjust-e-Lume™ Output Intensity\*\*** (Choose factory setting)  
A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1  
\*\*Please see Adjust-e-Lume™ photometry to determine desired intensity.

**Finish**

Aluminum Finish			Brass Finish		Premium Finish		
Powder Coat Color	Satin	Wrinkle	Machined	MAC	ABP	CMG	RMG
Bronze	BZP	BZW	Polished	POL	AMG	CRI	SDS
Black	BLP	BLW	Mitique™	MIT	AQW	CRM	SMG
White (Gloss)	WHP	WHW	Stainless Finish		BCM	HUG	TXF
Aluminum	SAP	—	Machined	MAC	BGE	MDS	WCP
Verde	—	VER	Polished	POL	BPP	NBP	WIR
			Brushed	BRU <small>Interior use only.</small>	CAP	OCP	<small>Also available in RAL Finishes See submittal SUB-1439-00</small>

**Lens Type**  
12 - Soft Focus Lens      13 - Rectilinear Lens

**Shielding**  
11 - Honeycomb Baffle

**Cap Style**  
A - 45°      B - 90°      D - 45° less Weep Hole (Interior Use Only)      E - 90° less Weep Hole (Interior Use Only)

**Option**  
360SL - 360SL™ Rotational Knuckle Mounting System

**LM79 DATA**

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e36	2700K	8.4	90
e22	3100K	8.4	90
e23	4100K	8.4	75
e24	Red (627nm)	7.9	~
e25	Green (530nm)	8.4	~
e26	Blue (470nm)	8.4	~
e27	Amber (590nm)	7.9	~

**L70 DATA**

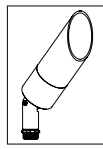
Minimum Rated Life (hrs.) 70% of initial lumens (L70)
50,000
50,000
50,000
50,000
50,000
50,000
50,000

**\*OPTICAL DATA**

Beam Type	Angle	Visual Indicator
Narrow Spot	14°	Red Dot
Spot	18°	Green Dot
Medium Flood	25°	Yellow Dot
Wide Flood	36°	Blue Dot

<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 www.bklighting.com • info@bklighting.com	SUBMITTAL DATE 12-13-11	DRAWING NUMBER SUB000930
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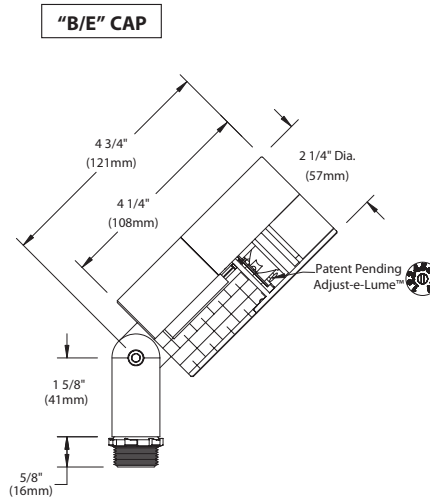
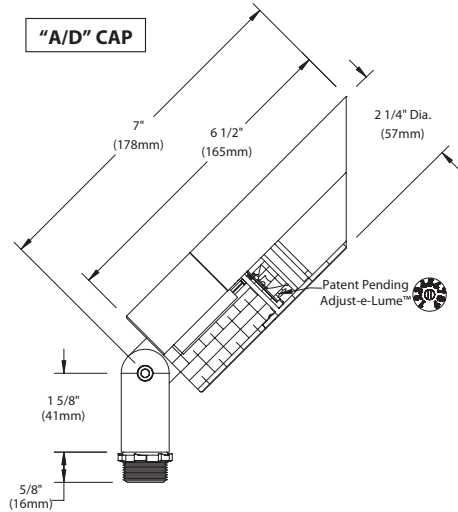


**BKSSL**  
BOLD STATE LIGHTING



**DELTA STAR™**

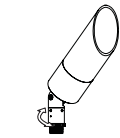
PROJECT:	
TYPE:	



**360 SL™**

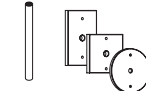
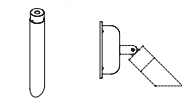
Accessories (Configure separately)

All dimensions indicated on this submittal are nominal. Contact Technical Sales if you require more stringent specifications.



**Horizontal Rotation**  
(Optional 360SL™ Knuckle)

Mounting:



Remote Transformers:



**SPECIFICATIONS**

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Materials**

Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 304).

**Body**

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

**Knuckle**

The LOCK™ (Locking 'O' Ring Compression Knuckle) is comprised of two components. The first is integral to the body and features an interior, machined taper. The second is machined from solid billet and features a second, reverse angle taper. The resultant mechanical taper-lock allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. 1/2" pipe thread for mounting.

Optional 360SL™ additionally provides biaxial source control with 360° horizontal rotation in addition to vertical adjustment.

**Cap**

Fully machined. Accommodates [1] lens or louvre media. Choose from 45° cutoff ('A' or 'D'), or 1° deep bezel with 90° cutoff ('B' or 'E') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

**Lens**

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

**BKSSL™**

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR™ lumen maintenance requirements. LM-80 certified components.

Integral non-dimming driver. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

**Adjust-e-Lume™** (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

**Optics**

Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood = Blue.

**Remote Transformer**

For use with 12VAC BKSSL™ remote transformer.

**Wiring**

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

**Hardware**

Tamper-resistant, stainless steel hardware. LOCK™ aiming screw is additionally black oxide treated for additional corrosion resistance.

**Finish**

StarGuard® (Pat. Pend.), a RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

**Warranty**

5 year limited warranty.

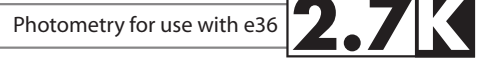
**Certification and Listing**

ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE ([www.lightingfacts.com](http://www.lightingfacts.com)). ETL Listed to ANSI/UL Standard 1838 and UL Standard 8750. Certified to CAN/CSA Standard C22.2 No. 9, CSA TIL B-58B. RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP66 Rated. Made in USA.



\*Teflon is a registered trademark of DuPont Corporation.  
\*Energy Star is a registered trademark of the United States Environmental Protection Agency.

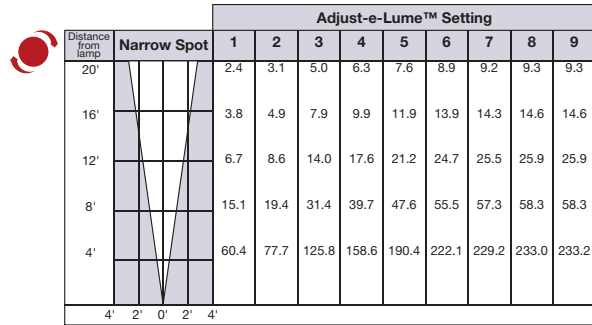
<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 <a href="http://www.bklighting.com">www.bklighting.com</a> • <a href="mailto:info@bklighting.com">info@bklighting.com</a>	SUBMITTAL DATE	DRAWING NUMBER
		12-13-11	SUB000930



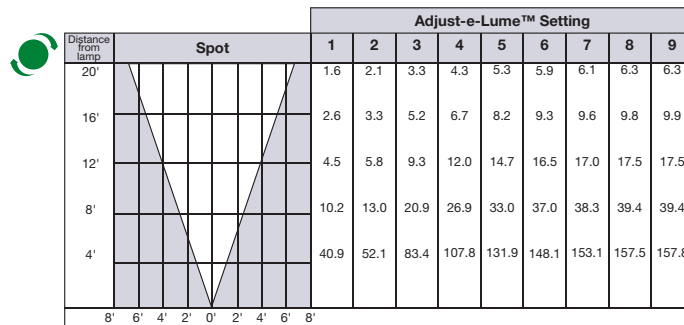
Select OptiKit™ for desired distribution

- **RED** Narrow Spot (NSP)
- **GREEN** Spot (SP)
- **YELLOW** Medium Flood (MFL)
- **BLUE** Wide Flood (WFL)

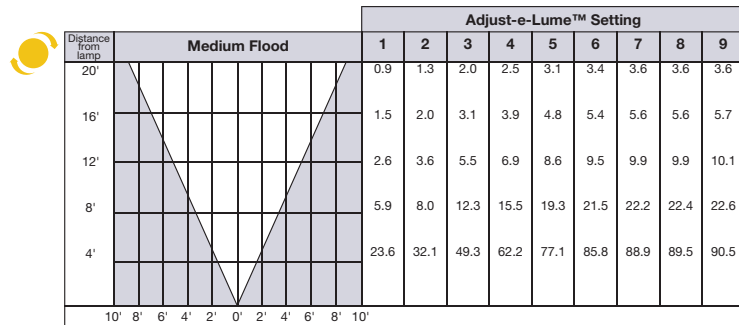
Set adjust-e-lume™ Dial to desired output



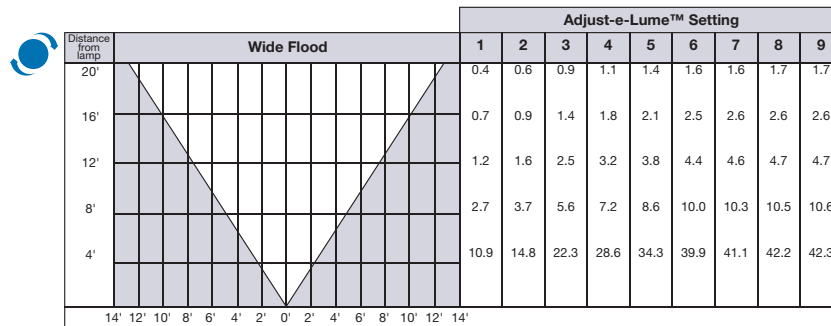
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

**B-K LIGHTING**

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www.bklighting.com • www.adjust-e-lume.com • www.bkssl.com

Delta Star - Spot

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	253
Watts	8.2
Lumens per Watt (Efficacy)	30

Color Accuracy	83
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **3182 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-1JQ2XQ  
Model Number: DS-LED-e22-SP-12  
Type: Other

Delta Star - Spot

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	354
Watts	8.1
Lumens per Watt (Efficacy)	43

Color Accuracy	68
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **4080 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-VD2NJC  
Model Number: DS-LED-e23-SP-12  
Type: Other

Delta Star - N. Spot

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	365
Watts	8.2
Lumens per Watt (Efficacy)	44

Color Accuracy	68
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **4102 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-5Y6SSH  
Model Number: DS-LED-e23-NSP-12  
Type: Other

Delta Star - Rectilinear

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	299
Watts	8.5
Lumens per Watt (Efficacy)	35

Color Accuracy	66
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **4022 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-4DFT4T  
Model Number: DS-LED-e23-MFL-13  
Type: Other

Delta Star - M. Flood

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	346
Watts	8.2
Lumens per Watt (Efficacy)	42

Color Accuracy	68
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **4047 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-KBY3F8  
Model Number: DS-LED-e23-MFL-12  
Type: Other

Delta Star - W. Flood

**lighting facts**<sup>CM</sup>  
A Program of the U.S. DOE

Light Output (Lumens)	345
Watts	8.3
Lumens per Watt (Efficacy)	41

Color Accuracy	67
Color Rendering Index (CRI)	

Light Color  
Correlated Color Temperature (CCT) **3981 (Bright White)**

Warm White | Bright White | Daylight  
2700K | 3000K | 4500K | 6500K

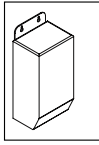
All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: GCXV-XB075X  
Model Number: DS-LED-e23-WFL-12  
Type: Other



**COMPONENT 1 : METAL SHROUD**

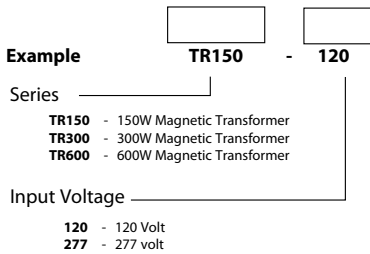


Magnetic Transformer

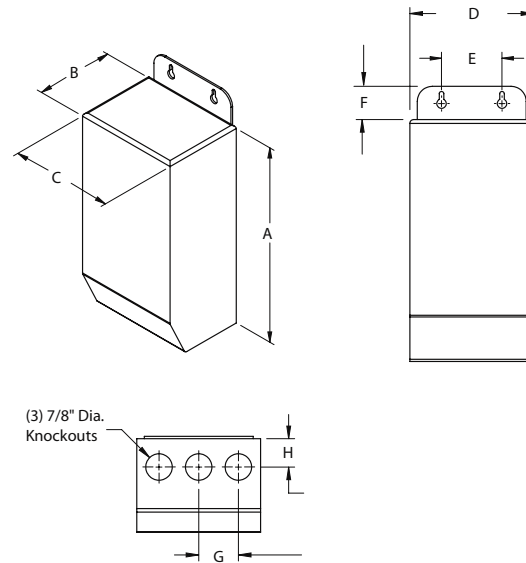
**TR SERIES**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**



**DIMENSIONS**



**TRANSFORMER DATA**

Series	Input Voltage	Max. Load	Weight	Height A	Depth B	C	D	E	F	G	H
TR150	120V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	120V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	120V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"
TR150	277V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	277V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	277V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"

**SPECIFICATIONS**

**Housing**  
Stainless steel, NEMA Outdoor 3R rated enclosure. [3] bottom entry 1/2" knockouts provide access to wiring compartment. Riveted, hinged cover opens vertically from bottom to top for service access.

**Transformer**  
Fully encapsulated, 150VA, 300VA, and 600VA Class B insulated, low voltage magnetic transformer. 120VAC or 277VAC input. 12VAC output (fully loaded). 0.6A (120VAC) or 0.3A (277VAC) maximum no load input current. Manual thermal reset. 25A secondary circuit breaker. Enclosure temperature <65° C when fully loaded (in 40° C ambient).

For use with halogen and **BISS** products. Fully dimmable with halogen loads utilizing magnetic low voltage dimmers.

**Fpr output Wiring**  
See B-K Lighting Low Voltage Design Guide.

**Warranty**  
Limited five year warranty.

**Certification and Listings**  
Nema Type 3R Enclosure. Suitable for indoor and outdoor use. UL Listed to ANSI/UL Standard 1012.



<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 www.bklighting.com • info@bklighting.com	SUBMITTAL DATE 11-15-12	SUBMITTAL NUMBER TR-SERIES
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# Low Voltage Guide

Many B-K LIGHTING fixtures operate on 12 volts. Taking advantage of these energy-saving fixtures requires appropriate care in planning the electrical wiring system. To maintain expected lamp performance, we recommend the following procedures in sizing your low-voltage wiring system.

## SIZING OF LOW VOLTAGE WIRING

1. Locate and plot fixtures on plan. Choose the lighting equipment necessary to create the desired lighting effects. Mark lamp wattage for each fixture location.
2. Identify potential transformer locations. The ideal locations are those which provide for the shortest possible low voltage distances (inconspicuous areas, behind rocks, shrubbery, etc., within the landscape). UPM, Power Pipe™, Power Pipe II™, or, if available, transformers integral in the fixture are good ways to hide the transformer and reduce voltage drop problems.
3. Add the total wattage for the proposed low voltage run. Measure the wire lengths from the transformer to the fixture locations. Find the distance to the "CENTER OF LOAD" of the low voltage run.

$$\text{CENTER OF LOAD} = \frac{\text{Distance from first to last fixture}}{(2) \text{ Two}} + \text{Distance from transformer to first fixture}$$

4. Using the B-K LIGHTING Wire Selection Table, select the wattage column which applies. Look down the column stopping at a distance, in feet, that is equal or greater than the "CENTER OF LOAD" distance. Look across to find the proper wire size for your layout.

*Note: In the event of multiple runs from a given transformer, treat each run separately.*

### 12-VOLT WIRE SELECTION TABLE

WIRE SIZE	TOTAL WATTAGE																
	12	20	24	35	40	50	60	70	80	100	105	120	140	150	160	200	250
12	178	106	89	60	53	42	35	30	26	21	20	17	15	13	—	—	—
10	283	169	141	96	85	67	56	48	42	33	32	28	24	22	19	17	13
8	450	269	225	154	135	107	90	77	67	54	51	45	38	36	31	27	21
6	715	428	357	245	214	171	143	122	107	85	81	71	61	57	49	42	34

### CENTER OF LOAD WIRING DISTANCES IN FEET

The Wire Selection Table provided is based on a maximum allowable voltage drop of 5%. Electrical designs which allow greater than 5% voltage drop, reduce rated light output beyond acceptable levels.

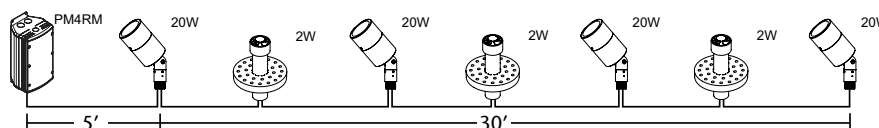
The importance of the proper wire selection is demonstrated below. Both examples have the same total watts and identical overall lengths of wire run, yet require different wire sizes, or multiple wire runs, to operate within the 5% maximum voltage drop B-K LIGHTING criteria.

#### EXAMPLE:

Total wattage:  
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:  
 $\left(\frac{30}{2}\right) + 5' = 20'$

SINGLE WIRE RUN:  
12 gauge

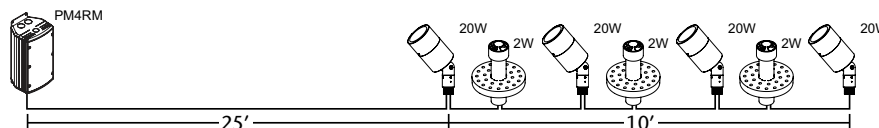


#### EXAMPLE:

Total wattage:  
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:  
 $\left(\frac{10}{2}\right) + 25' = 30'$

SINGLE WIRE RUN:  
10 gauge



## TRANSFORMERS

For areas which are far reaching from fixtures, running 120 volt power to each fixture location with individual transformers, such as TRSS75 or TRSS150, provides an excellent economic solution to voltage drop. These transformers can also be specified in the UPM, Power Pipe™, and Power Pipe II™ transformer housings.

*Note: Installations should be in accordance with the National Electric Code and applicable local codes.*







**SPECIFICATION SHEET**

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

Model: \_\_\_\_\_

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

**MODEL: 2172 - Brass & Copper Series: In-Ground and Well Lights**

**SPECIFICATIONS:**

**HOUSING:**

Injection-molded, glass-reinforced Ryton™ R4 composite for strength & high UV stability – warranted for ten years against corrosion.

**LENS COVER:**

Precision CNC machined solid brass or solid stainless steel fitted to the housing with a silicone o-ring gasket – providing a superior weather-tight seal.

**FINISH:**

Natural Brass, Olde Brass, Natural Copper or Stainless Steel lens cover. Housing available in black only.

**SOCKET/LAMP HOLDER:**

Top grade ceramic socket with nickel contacts, stainless steel springs, & Teflon-jacketed wire leads.

**LENS:**

Clear, tempered, shock & heat-resistant, soda-lime glass lens- crowned (convex) to promote water runoff. Optical effect lenses are available; see accessories column on fixture ordering information chart.

**LAMP TYPE:**

MR-16 Halogen – 50W maximum. LN-20 BAB/FG (20W) Standard.

*(See back page for LED lamp specifications)*

**OPTICS/AIMING:**

Adjustable lamp bracket (not available with LED) provides up to ±25° of tilt as well as 360° rotation of the housing for

precise beam control. Lamp bracket can be locked into place to prevent disrupting lamp position when relamping. Models with housing brackets within the ABS wells provide up to ±45° of tilt in addition to the lamp bracket.

**MOUNTING:**

In-grade. Conduit mount fixtures have two 3/4" NPT inlets on the bottom. Optional concrete mounting kit available; please see accessories column on fixture ordering information chart.

**FASTENERS/INSERTS:**

All fasteners are stainless steel with brass inserts.

**WIRING:**

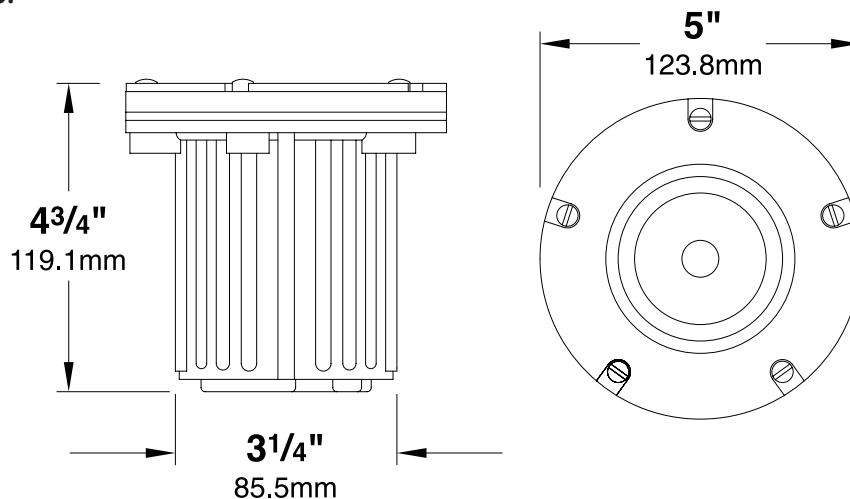
Prewired with a three-foot pigtail of 18-2 direct-burial cable & underground connectors for a secure connection to the supply cable.

**CERTIFICATION:**

UL Listed to U.S. & Canadian safety standards for low voltage landscape luminaires (UL 1838). The maximum wattages allowed by Underwriters Laboratories (UL) for the U.S. & Canadian markets may vary. Maximum wattages specified are Underwriters Laboratories U.S. standard. Please contact Vista for any questions about the maximum wattages allowed by UL Canadian standards.

All Vista luminaires are **MADE IN THE U.S.A.**

**DIMENSIONS:**



*Vista Professional Outdoor Lighting reserves the right to modify the design and/or construction of the fixture shown without further notification.*

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2172 (9/09)



## SPECIFICATION SHEET

### LED LAMP SPECIFICATIONS (if applicable) :

**LAMP TYPE:**

Lumiled Rebel High Output LED with Vista exclusive smart-driver, powered to operate for 50,000 hours.

**OPTICS:**

Integral high-efficiency optics available in spot through flood beam spreads.

**ELECTRICAL:**

Input voltage range 5–15V AC, regulated to achieve uniform illumination throughout the cable run of fixtures. Integral surge & reverse polarity protection.

### FIXTURE ORDERING INFORMATION

**TO ORDER FIXTURE:** Select appropriate choice from each column as in the following example

**EXAMPLE:** GW-2172-CSN-BAB-HL

MOUNTING	CATALOG NO.	FINISH	LAMP	ACCESSORIES
<b>GW-</b> In-grade <b>CM-</b> In-grade conduit mount	<b>2172</b>	<b>BSN</b> - Solid Natural Brass <b>BSO</b> - Olde Brass <b>CSN</b> - Natural Copper <b>SS</b> - Stainless Steel	(Please see lamp order code column on lamp guide, Vista product catalog.)	<b>CBL</b> - Crowned Cool Blue lens <b>CFR</b> - Crowned Frosted lens <b>SL</b> - Flat Spread lens <b>DBL</b> - Flat Dark Blue lens <b>GL</b> - Flat Dark Green lens <b>RL</b> - Flat Red lens <b>YL</b> - Flat Amber lens  <b>HL</b> - Honeycomb louver <b>JBCP-150</b> - Concrete mounting kit

Fixtures shipped with standard lamp, unless otherwise specified.  
 Fixtures shipped with specified mounting hardware.

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**SPECIFICATION SHEET**

Type: \_\_\_\_\_  
Model: \_\_\_\_\_  
Project: \_\_\_\_\_

**ES-150** - *Stainless Steel Transformer*

**SPECIFICATIONS:**

**EXTERIOR CONSTRUCTION:**

20-gauge polished, top-grade domestic, 304 stainless steel.

**FINISH:**

Polished stainless steel with Smudge-Free clear powder-coat. Also, polyester powder-coat finish available in Black, Verde, Architectural Brick, Architectural Bronze, Light Bronze, Dark Bronze, Granite, Pewter, Terra-cotta, Rust, Hunter Green, Mocha, Weathered Bronze, Weathered Iron, and White.

**TRANSFORMER CHARACTERISTICS:**

Available Power Rating: 150 Watts

Primary Voltage: 120 Volts (Also available in 240V, 50 or 60 cycle-Special order only.)

Secondary Voltage: 12 and 15 Volts

Fully grounded and isolated with encapsulated core and coil.

**PRIMARY PROTECTION:**

Auto thermal shut-off.

**SECONDARY PROTECTION:**

Resettable high performance magnetic circuit breaker.

**TERMINALS:**

Extra-large terminal strip for multiple low voltage cable connections as well as extended wire leads for alternative wiring techniques.

Extended wire leads are color coated for easy identification of voltage taps. A separate 120-volt terminal strip for easy hard-wiring and an accessory terminal strip for easy installation of external switching devices also included.

**WIRING:**

6-foot, heavy-gauge, grounded, water-resistant power cord with integrally molded plug.

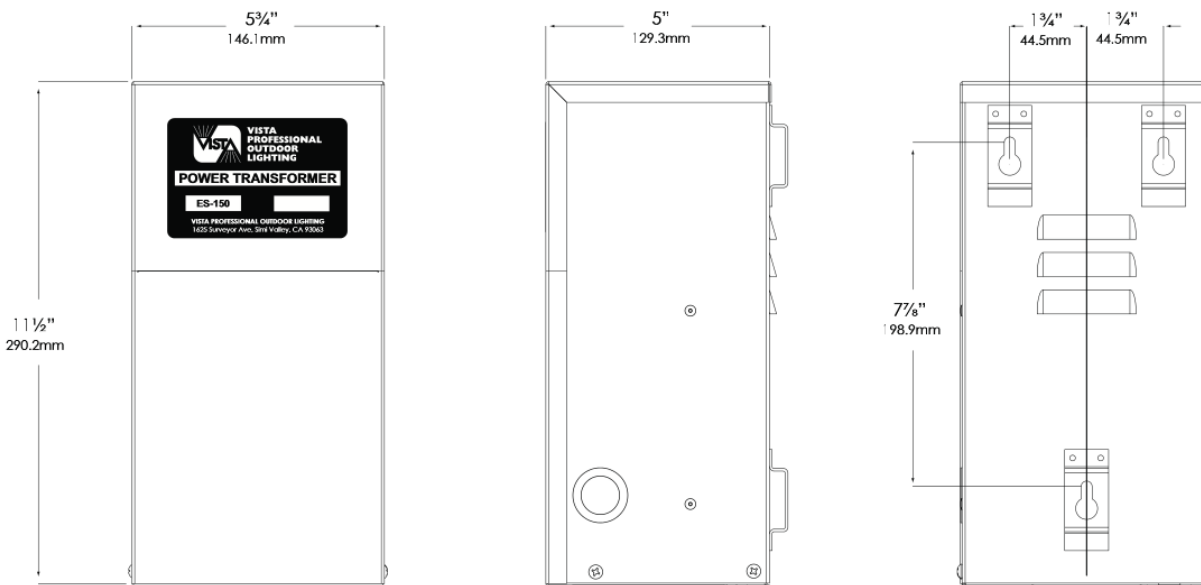
**CERTIFICATION:**

UL Listed to U.S. safety standards for general purpose transformers (UL 1838).

All Vista transformers are **MADE IN THE U.S.A.**



**DIMENSIONS:**



Vista Professional Outdoor Lighting reserves the right to modify the design and/or construction of the transformer shown without further notification.

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**SPECIFICATION SHEET**

**ES-150** - *Stainless Steel Transformer*

**TRANSFORMER ORDERING INFORMATION**

**TO ORDER Transformer:** Select appropriate choice from each column as in the following example

EXAMPLE: ES-150-DT

TRANSFORMER SERIES	TRANSFORMER MODEL	ACCESSORY OPTIONS	FINISH
ES - Energy Smart, Stainless Steel 12V Transformer	150- 150 VA	<p>T- Removable multi-setting mechanical 24-hour timer                      DT- Removable multi-setting digital 7-day timer                      RP- Remote wired photocell with electronic timer</p> <p>(Accessories not required for operation of transformer)</p>	<p>B- Black                      G- Verde                      BR- Architectural Brick                      Z- Architectural Bronze                      GT- Granite                      P- Pewter                      TC- Terracotta                      R- Rust                      HG- Hunter Green                      M- Mocha                      WB- Weathered Bronze                      WI- Weathered Iron                      W- White</p>

**Note:** When a finish is not specified, **ES-150** transformers will be shipped with a clear, polyester, powder-coated finish.

**FEATURES:**

- Stainless steel, custom-designed, weather-tight casing seals components from moisture and debris.
- Vista's *Smudge-Free* clear powder-coat ensures a like-brand-new look for years to come.
- Easy door removal allowing greater access during installation.
- Easy to read instructions mounted inside door.
- Magnetic overload circuit breakers for reliable automatic circuit protection under all conditions. The circuit breaker rocker switch may also be used for manual on/off switching of the unit.
- Over-sized wiring compartment makes cable installation easy.
- ½"-¾" knockouts on each side of enclosure for conduit and accessory mounting
- Adjustable Cable Raceway Feeder easily accommodates multiple wire runs with ½"-¾" conduit knockout.
- Extra-large terminal strip for multiple low voltage cable connections as well as extended wire leads for alternative wiring techniques.
- 6-foot, heavy-gauge, grounded, water-resistant power cord with integrally molded plug.
- 120-volt Accessory receptacle for use with optional available timers.
- Discrete louvered vents in the rear of cabinet maintains a cool operating temperature.
- 120-volt terminal strip for easy hard-wiring.
- Optional photocell is available for use with timers or stand-alone.
- Mounting template included.
- Also available in 240V, 50 or 60 cycle- Special order only, consult factory.

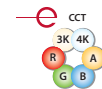
Vista Professional Outdoor Lighting reserves the right to modify the design and/or construction of the transformer shown without further notification.

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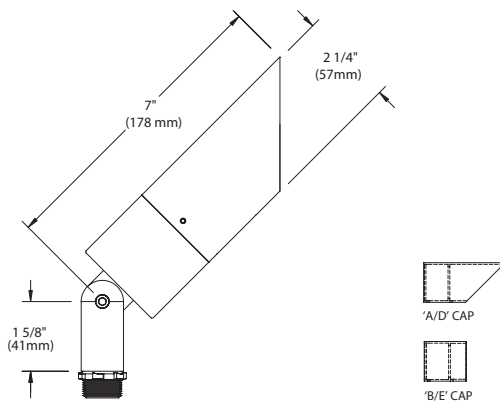
ES-150 (09/11)

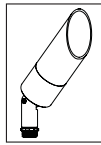
8 WATT | **DS** DELTA STAR™

Sustainably manufactured from recycled copper-free aluminum, brass or stainless steel, Delta Star™ accentuates any architectural or landscape element. A one inch 45° or 90° lens cap minimizes glare and reduces aperture brightness. Delta Star™ operates on standard low voltage circuits. **Keyword DS**



Shown with 'A' Cap  
in Black Wrinkle (BLW) finish





**DELTA STAR™**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**

Example:  - **DS** - **LED** - **e22** - **SP** - **A7** - **BZW** - **12** - **11** - **A** - **360SL**

**Material**  
Blank - Aluminum  
B - Brass  
S - Stainless Steel

**Series**  
DS - Delta Star™

**Source**  
LED - 'e' Technology with Integral Driver

**LED Type**  
e36 - 8WLED/2.7K      e23 - 8WLED/4K      e25 - 8WLED/Green      e27 - 8WLED/Amber  
e22 - 8WLED/3K      e24 - 8WLED/Red      e26 - 8WLED/Blue

**Optics\***  
NSP - Narrow Spot (Red Indicator)      MFL - Medium Flood (Yellow Indicator)  
SP - Spot (Green Indicator)      WFL - Wide Flood (Blue Indicator)

**Adjust-e-Lume™ Output Intensity\*\*** (Choose factory setting)  
A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1  
\*\*Please see Adjust-e-Lume™ photometry to determine desired intensity.

**Finish**

Aluminum Finish			Brass Finish		Premium Finish		
Powder Coat Color	Satin	Wrinkle	Machined	MAC	ABP	CMG	RMG
Bronze	BZP	BZW	Polished	POL	AMG	CRI	SDS
Black	BLP	BLW	Mitique™	MIT	AQW	CRM	SMG
White (Gloss)	WHP	WHW	Stainless Finish		BCM	HUG	TXF
Aluminum	SAP	—	Machined	MAC	BGE	MDS	WCP
Verde	—	VER	Polished	POL	BPP	NBP	WIR
			Brushed	BRU <small>Interior use only.</small>	CAP	OCP	<small>Also available in RAL Finishes See submittal SUB-1439-00</small>

**Lens Type**  
12 - Soft Focus Lens      13 - Rectilinear Lens

**Shielding**  
11 - Honeycomb Baffle

**Cap Style**  
A - 45°      B - 90°      D - 45° less Weep Hole (Interior Use Only)      E - 90° less Weep Hole (Interior Use Only)

**Option**  
360SL - 360SL™ Rotational Knuckle Mounting System

**LM79 DATA**

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e36	2700K	8.4	90
e22	3100K	8.4	90
e23	4100K	8.4	75
e24	Red (627nm)	7.9	~
e25	Green (530nm)	8.4	~
e26	Blue (470nm)	8.4	~
e27	Amber (590nm)	7.9	~

**L70 DATA**

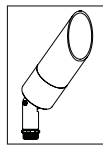
Minimum Rated Life (hrs.) 70% of initial lumens (L70)
50,000
50,000
50,000
50,000
50,000
50,000
50,000

**\*OPTICAL DATA**

Beam Type	Angle	Visual Indicator
Narrow Spot	14°	Red Dot
Spot	18°	Green Dot
Medium Flood	25°	Yellow Dot
Wide Flood	36°	Blue Dot

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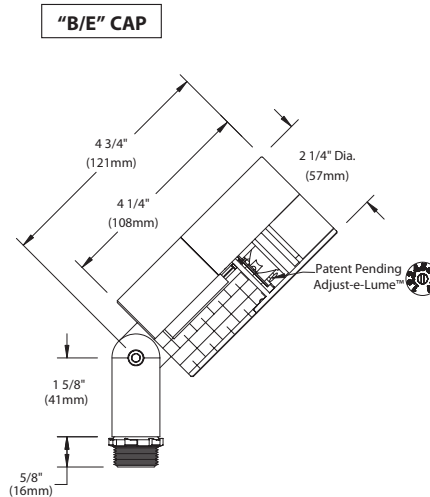
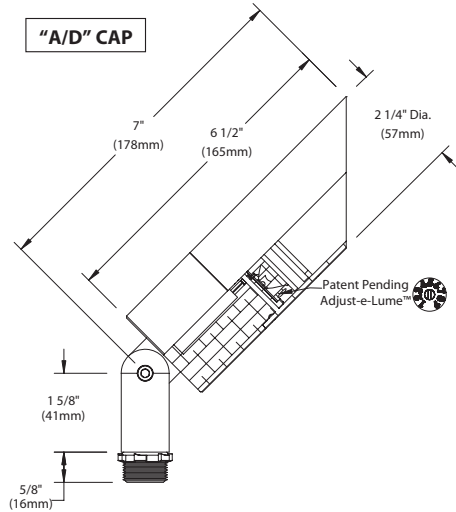


**BKSSL**  
BOLD STATE LIGHTING

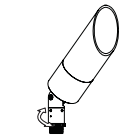


**DELTA STAR™**

PROJECT:	
TYPE:	



**360 SL™**

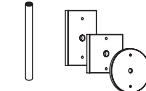
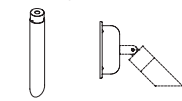


**Horizontal Rotation**  
(Optional 360SL™ Knuckle)

Accessories (Configure separately)

All dimensions indicated on this submittal are nominal.  
Contact Technical Sales if you require more stringent specifications.

**Mounting:**



**Remote Transformers:**



**SPECIFICATIONS**

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Materials**

Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 304).

**Body**

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

**Knuckle**

The LOCK™ (Locking 'O' Ring Compression Knuckle) is comprised of two components. The first is integral to the body and features an interior, machined taper. The second is machined from solid billet and features a second, reverse angle taper. The resultant mechanical taper-lock allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. 1/2" pipe thread for mounting.

Optional 360SL™ additionally provides biaxial source control with 360° horizontal rotation in addition to vertical adjustment.

**Cap**

Fully machined. Accommodates [1] lens or louvre media. Choose from 45° cutoff ('A' or 'D'), or 1° deep bezel with 90° cutoff ('B' or 'E') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

**Lens**

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

**BKSSL™**

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR™ lumen maintenance requirements. LM-80 certified components.

Integral non-dimming driver. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

**Adjust-e-Lume™ (Pat. Pending)**

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

**Optics**

Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood = Blue.

**Remote Transformer**

For use with 12VAC BKSSL™ remote transformer.

**Wiring**

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

**Hardware**

Tamper-resistant, stainless steel hardware. LOCK™ aiming screw is additionally black oxide treated for additional corrosion resistance.

**Finish**

StarGuard® (Pat. Pend.), a RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

**Warranty**

5 year limited warranty.

**Certification and Listing**

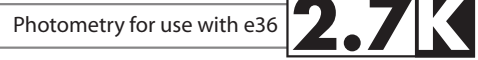
ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE ([www.lightingfacts.com](http://www.lightingfacts.com)). ETL Listed to ANSI/UL Standard 1838 and UL Standard 8750. Certified to CAN/CSA Standard C22.2 No. 9, CSA TIL B-58B. RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP66 Rated. Made in USA.



\*Teflon is a registered trademark of DuPont Corporation.  
\*Energy Star is a registered trademark of the United States Environmental Protection Agency.

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		12-13-11	SUB000930

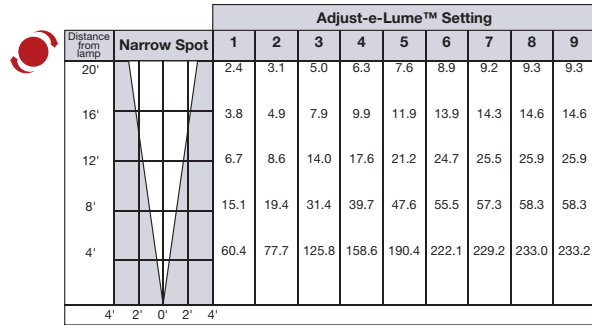




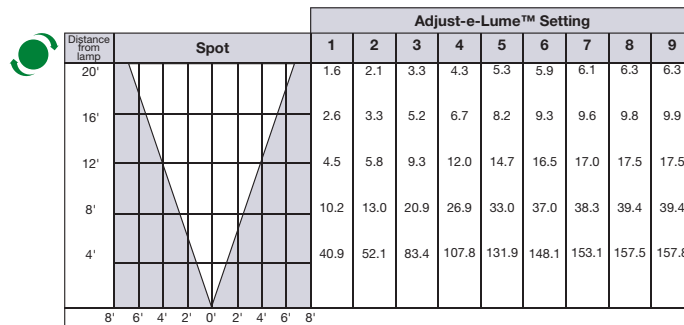
Select OptiKit™ for desired distribution

- **RED** Narrow Spot (NSP)
- **GREEN** Spot (SP)
- **YELLOW** Medium Flood (MFL)
- **BLUE** Wide Flood (WFL)

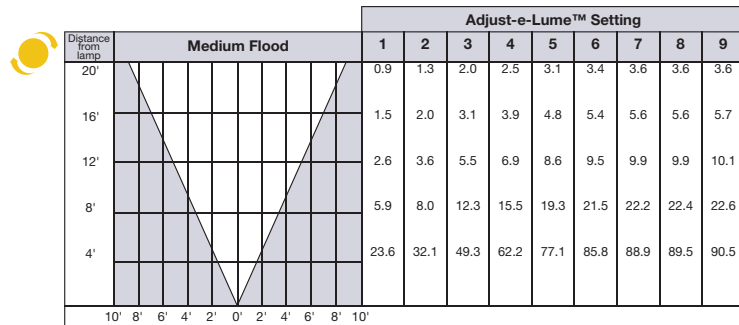
Set adjust-e-lume™ Dial to desired output



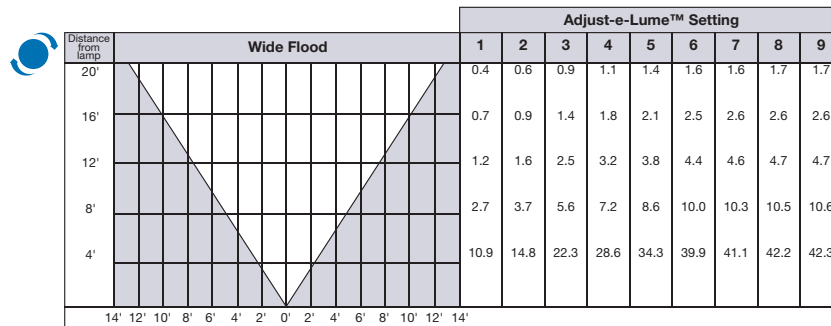
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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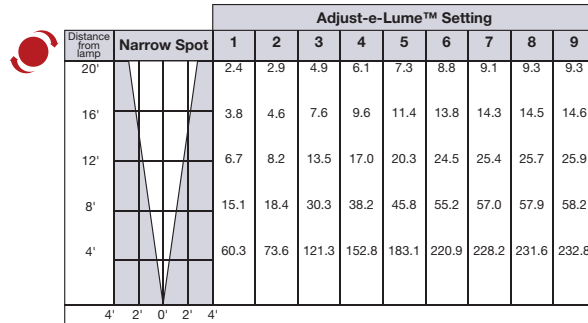
Photometry for use with e22



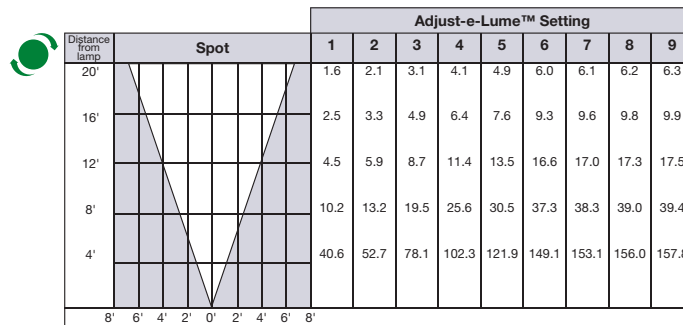
Select OptiKit™ for desired distribution

- **RED** Narrow Spot (NSP)
- **GREEN** Spot (SP)
- **YELLOW** Medium Flood (MFL)
- **BLUE** Wide Flood (WFL)

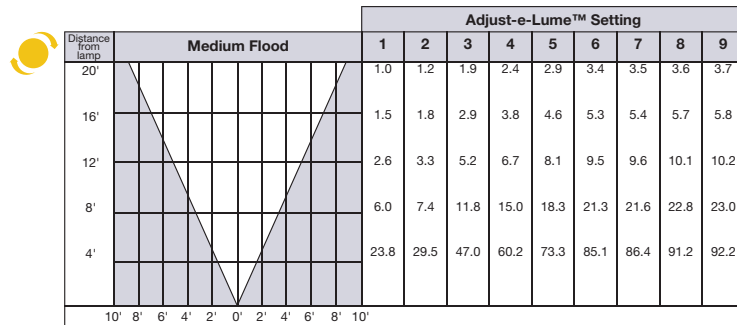
Set adjust-e-lume™ Dial to desired output



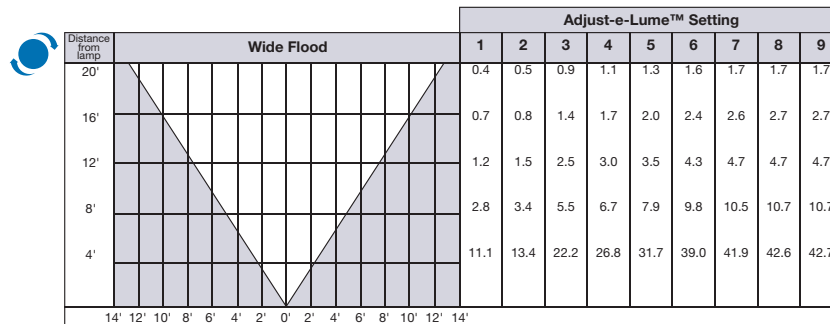
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

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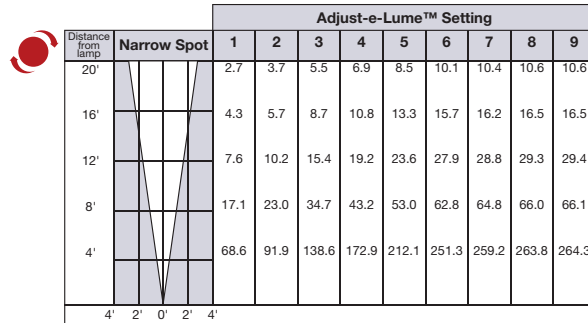
Photometry for use with e23



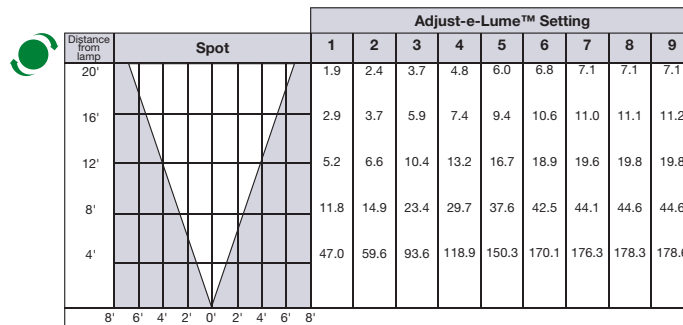
Select OptiKit™ for desired distribution

- **RED** Narrow Spot (NSP)
- **GREEN** Spot (SP)
- **YELLOW** Medium Flood (MFL)
- **BLUE** Wide Flood (WFL)

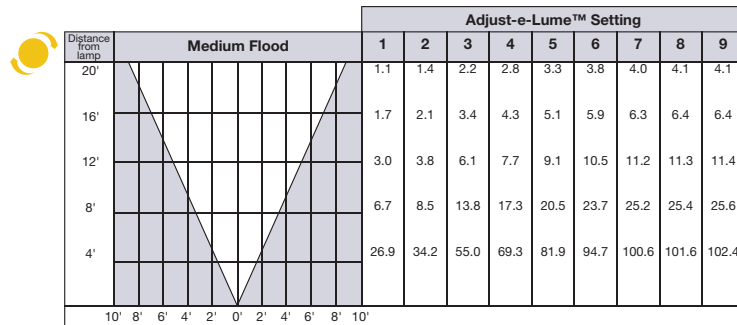
Set adjust-e-lume™ Dial to desired output



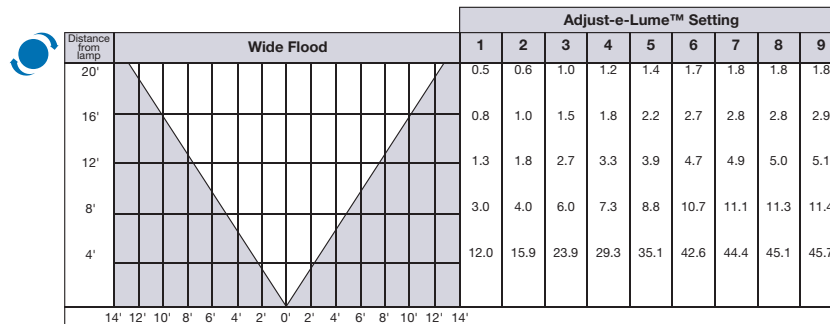
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



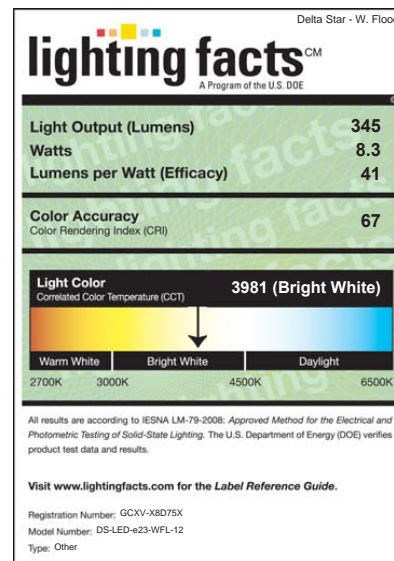
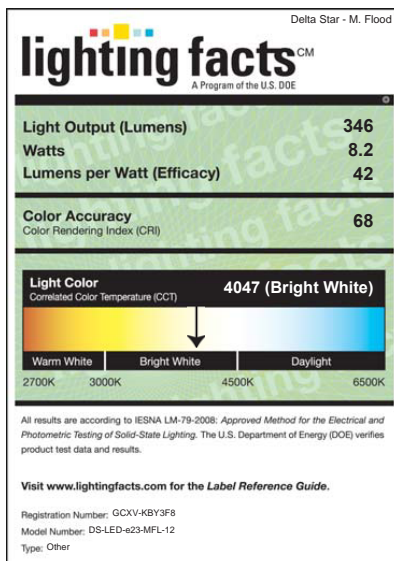
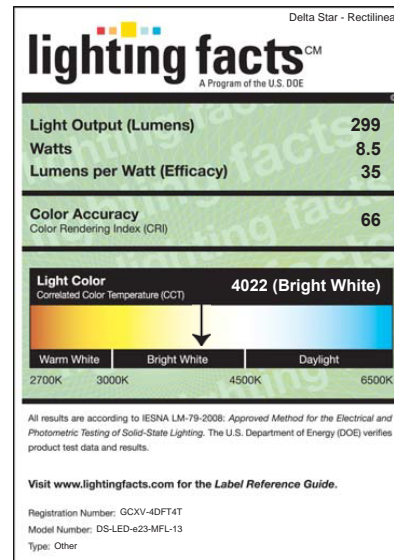
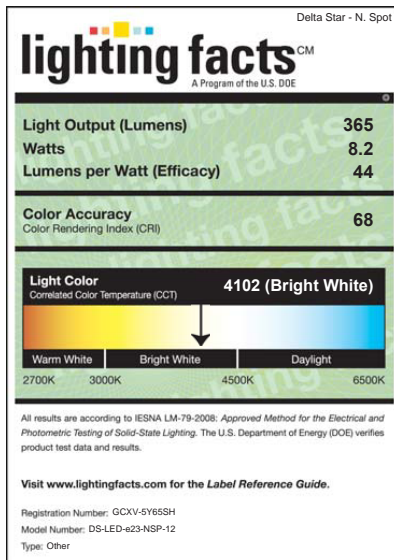
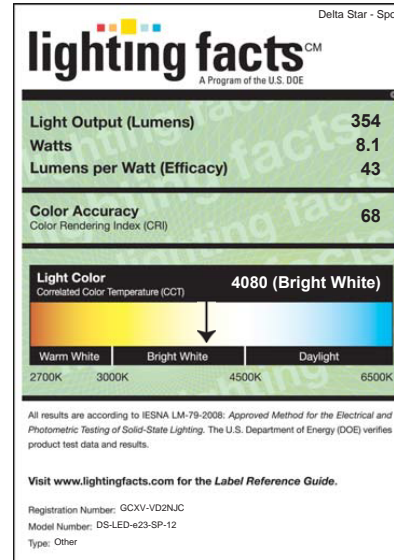
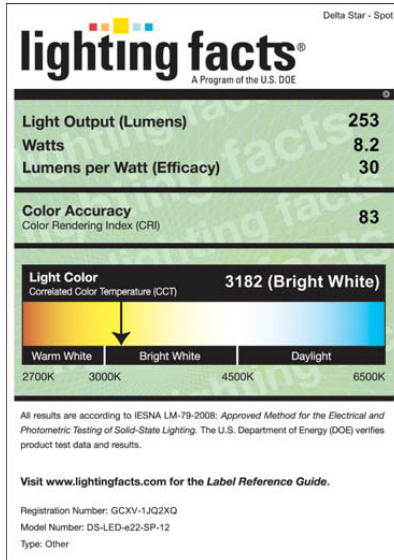
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

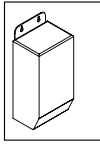


Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

**B-K LIGHTING**

40429 Brickyard Drive • Madera, California 93636 • 559.438.5800  
www.bklighting.com • www.adjust-e-lume.com • www.bkssl.com



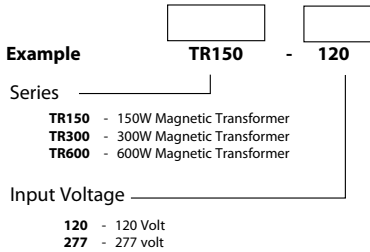


Magnetic Transformer

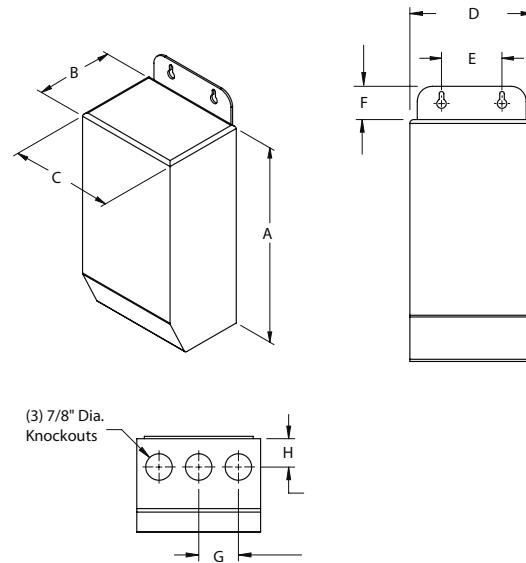
**TR SERIES**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**



**DIMENSIONS**



**TRANSFORMER DATA**

Series	Input Voltage	Max. Load	Weight	Height A	Depth B	C	D	E	F	G	H
TR150	120V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	120V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	120V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"
TR150	277V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	277V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	277V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"

**SPECIFICATIONS**

**Housing**  
Stainless steel, NEMA Outdoor 3R rated enclosure. [3] bottom entry 1/2" knockouts provide access to wiring compartment. Riveted, hinged cover opens vertically from bottom to top for service access.

**Transformer**  
Fully encapsulated, 150VA, 300VA, and 600VA Class B insulated, low voltage magnetic transformer. 120VAC or 277VAC input. 12VAC output (fully loaded). 0.6A (120VAC) or 0.3A (277VAC) maximum no load input current. Manual thermal reset. 25A secondary circuit breaker. Enclosure temperature <65° C when fully loaded (in 40° C ambient).

For use with halogen and **ESSL** products. Fully dimmable with halogen loads utilizing magnetic low voltage dimmers.

**For output Wiring**  
See B-K Lighting Low Voltage Design Guide.

**Warranty**  
Limited five year warranty.

**Certification and Listings**  
Nema Type 3R Enclosure. Suitable for indoor and outdoor use. UL Listed to ANSI/UL Standard 1012.



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# Low Voltage Guide

Many B-K LIGHTING fixtures operate on 12 volts. Taking advantage of these energy-saving fixtures requires appropriate care in planning the electrical wiring system. To maintain expected lamp performance, we recommend the following procedures in sizing your low-voltage wiring system.

## SIZING OF LOW VOLTAGE WIRING

1. Locate and plot fixtures on plan. Choose the lighting equipment necessary to create the desired lighting effects. Mark lamp wattage for each fixture location.
2. Identify potential transformer locations. The ideal locations are those which provide for the shortest possible low voltage distances (inconspicuous areas, behind rocks, shrubbery, etc., within the landscape). UPM, Power Pipe™, Power Pipe II™, or, if available, transformers integral in the fixture are good ways to hide the transformer and reduce voltage drop problems.
3. Add the total wattage for the proposed low voltage run. Measure the wire lengths from the transformer to the fixture locations. Find the distance to the "CENTER OF LOAD" of the low voltage run.

$$\text{CENTER OF LOAD} = \frac{\text{Distance from first to last fixture}}{(2) \text{ Two}} + \text{Distance from transformer to first fixture}$$

4. Using the B-K LIGHTING Wire Selection Table, select the wattage column which applies. Look down the column stopping at a distance, in feet, that is equal or greater than the "CENTER OF LOAD" distance. Look across to find the proper wire size for your layout.

*Note: In the event of multiple runs from a given transformer, treat each run separately.*

### 12-VOLT WIRE SELECTION TABLE

WIRE SIZE	TOTAL WATTAGE																
	12	20	24	35	40	50	60	70	80	100	105	120	140	150	160	200	250
12	178	106	89	60	53	42	35	30	26	21	20	17	15	13	—	—	—
10	283	169	141	96	85	67	56	48	42	33	32	28	24	22	19	17	13
8	450	269	225	154	135	107	90	77	67	54	51	45	38	36	31	27	21
6	715	428	357	245	214	171	143	122	107	85	81	71	61	57	49	42	34

### CENTER OF LOAD WIRING DISTANCES IN FEET

The Wire Selection Table provided is based on a maximum allowable voltage drop of 5%. Electrical designs which allow greater than 5% voltage drop, reduce rated light output beyond acceptable levels.

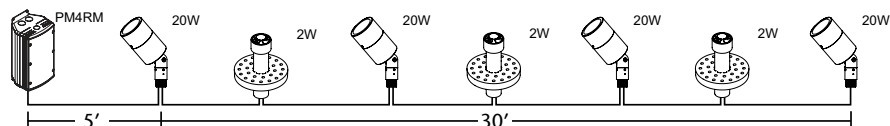
The importance of the proper wire selection is demonstrated below. Both examples have the same total watts and identical overall lengths of wire run, yet require different wire sizes, or multiple wire runs, to operate within the 5% maximum voltage drop B-K LIGHTING criteria.

#### EXAMPLE:

Total wattage:  
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:  
 $\left(\frac{30}{2}\right) + 5' = 20'$

SINGLE WIRE RUN:  
12 gauge

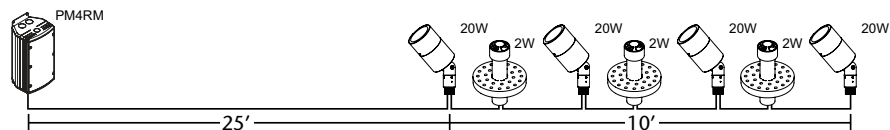


#### EXAMPLE:

Total wattage:  
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:  
 $\left(\frac{10}{2}\right) + 25' = 30'$

SINGLE WIRE RUN:  
10 gauge



## TRANSFORMERS

For areas which are far reaching from fixtures, running 120 volt power to each fixture location with individual transformers, such as TRSS75 or TRSS150, provides an excellent economic solution to voltage drop. These transformers can also be specified in the UPM, Power Pipe™, and Power Pipe II™ transformer housings.

*Note: Installations should be in accordance with the National Electric Code and applicable local codes.*





# DENALI™ | DE

## 15 WATT, 25 WATT • 120V-277V

The Denali Series™ floodlight is a powerful, yet innovative solid-state lighting fixture designed to deliver higher lumen output and unprecedented color consistency. Incorporating our new 'X' technology, Denali™ Floodlight utilizes Patented "Color Corrected Cold Phosphor" technology to deliver near-perfect natural white light while maintaining 'lifetime' color consistency. It's universal design accommodates a variety of remote and integral driver mounting options.

Visit [www.bklighting.com](http://www.bklighting.com) for ordering logic. Keyword DE-LED

**OPTICS**

- Spot
- Flood
- Wide Flood
- Rectilinear

**CCT**

- 2.7K
- 3K
- 4K

**MATERIAL**

- ALU

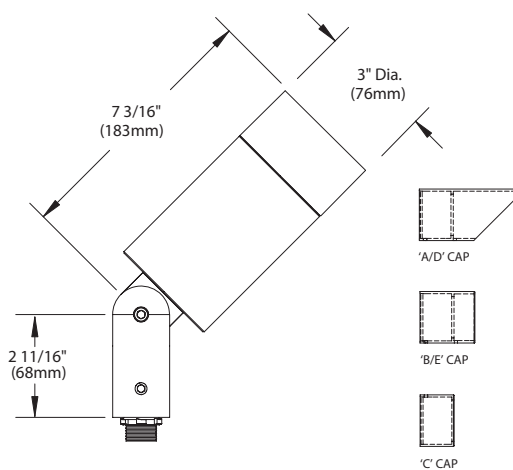
**VOLTAGE**

- 120-277V

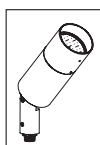
**Xicato**



Shown with 'C' Cap  
in Bronze Wrinkle (BZW) finish



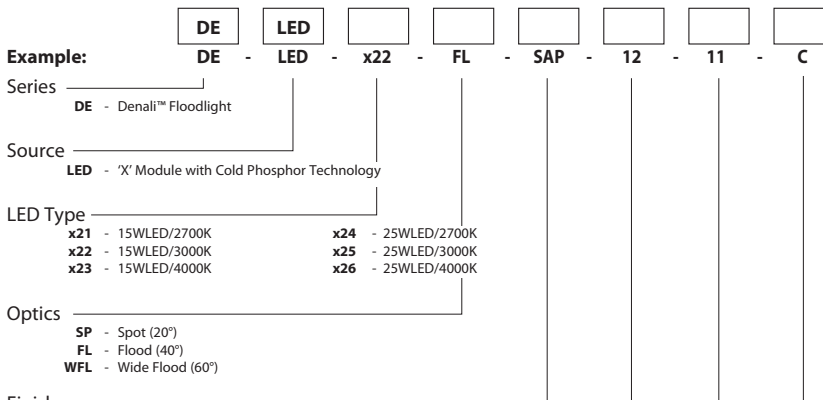




**DENALI™ FLOODLIGHT**

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>SOURCE:</b>	
<b>NOTES:</b>	

**CATALOG NUMBER LOGIC**



**Configure Driver Housing Separately**  
Driver Housing Required

**INTEGRAL DRIVER HOUSINGS:**  
**HP2** - HP2 Housing  
**PM2** - Universal Power Module 2  
**PM2D** - Universal Power Module 2 Dual  
**PC** - Power Canopy  
**PPII** - Power Pipe II  
**TMB** - Pole Mount or Tenon Mount

**REMOTE DRIVER HOUSINGS:**  
**HP2RM** - HP2 Remote Housing  
**PM2RM** - Universal Power Module 2 Remote  
**PM2DRM** - Universal Power Module 2 Dual Remote  
**RM** - Remote Wall Mount  
**DRM** - Dual Remote Wall Mount

Powder Coat Color	Satin	Wrinkle
Bronze	<b>BZP</b>	<b>BZW</b>
Black	<b>BLP</b>	<b>BLW</b>
White (Gloss)	<b>WHP</b>	<b>WHW</b>
Aluminum	<b>SAP</b>	—
Verde	—	<b>VER</b>

ABP	Antique Brass Powder	CMG	Cascade Mountain Granite	RMG	Rocky Mountain Granite
AMG	Aleutian Mountain Granite	CRI	Cracked Ice	SDS	Sonoran Desert Sandstone
AQW	Antique White	CRM	Cream	SMG	Sierra Mountain Granite
BCM	Black Chrome	HUG	Hunter Green	TXF	Textured Forest
BGE	Beige	MDS	Mojave Desert Sandstone	WCP	Weathered Copper
BPP	Brown Patina Powder	NBP	Natural Brass Powder	WIR	Weathered Iron
CAP	Clear Anodized Powder	OCP	Old Copper	<i>Also available in RAL Finishes See submittal SUB-1439-00</i>	

Lens Type: **9** - Clear (Standard), **10** - Spread Lens\*, **12** - Soft Focus Lens\*, **13** - Rectilinear Lens\*

Shielding: **11** - Honeycomb Baffle\*  
*\*Accommodates up to 2 Lens/Shielding media*

Cap Style: **A** - 45°, **B** - 90°, **C** - Flush, **D** - 45° without Weep Hole (Interior Use Only), **E** - 90° without Weep Hole (Interior Use Only)

**LM79 DATA**

BK No.	CCT (Typ.)	CRI (Ra. Typ.)	Color Consistency	Input Watts (Typ.)
x21	2700K	>80	±40K	15
x22	3000K	>80	±50K	15
x23	4000K	>80	±70K	15
x24	2700K	>80	±40K	25
x25	3000K	>80	±50K	25
x26	4000K	>80	±70K	25

**L70 DATA**

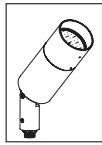
Minimum Rated Life (hrs.) 70% of initial lumens (L70)
50,000
50,000
50,000
50,000
50,000
50,000

**OPTICAL DATA**

Beam Type	Angle
Spot	20°
Flood	40°
Wide Flood	60°

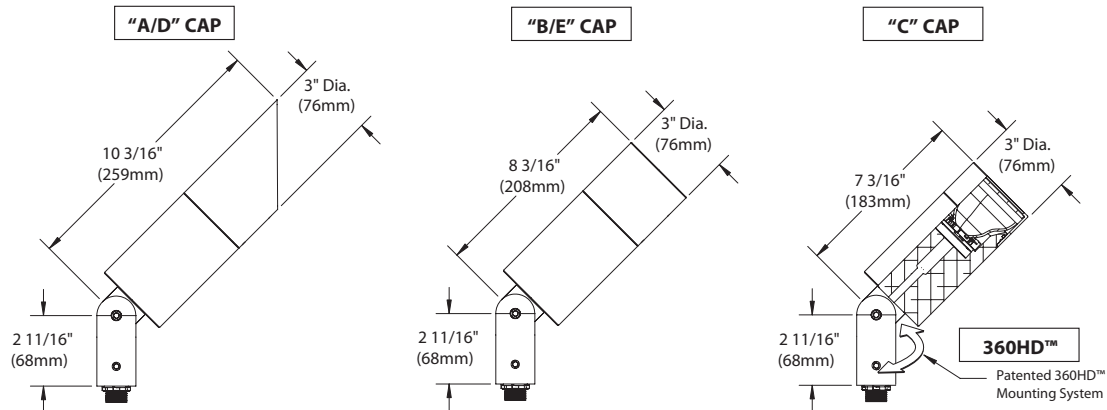
<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA 559.438.5800 • FAX 559.438.5900 www.bklighting.com • info@bklighting.com	SUBMITTAL DATE 3-12-12	DRAWING NUMBER SUB001113
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**DENALI™ FLOODLIGHT**

PROJECT:	
TYPE:	

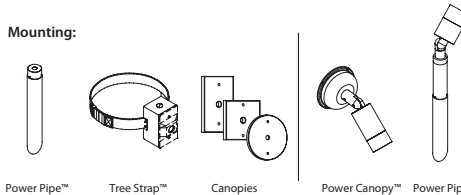


All dimensions indicated on this submittal are nominal.  
Contact Technical Sales if you require more stringent specifications.

**Accessories (Configure separately)**

**Drivers (Configure separately)**

**Mounting:**



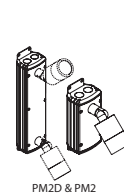
Power Pipe™

Tree Strap™

Canopies

Power Canopy™

Power Pipe™



PM2D & PM2

HP2

TMB

HP2RM

PM2DRM & PM2RM

RM & DRM

**Drivers:**

**SPECIFICATIONS**

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Materials**

Furnished in Copper-Free Aluminum (Type 6061-T6).

**Body**

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

**Knuckle**

Patented 360HD™ Mounting System features a mechanical taper-lock, which allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. 1/2" pipe thread for mounting. Biaxial source control additionally provides 360° horizontal rotation in addition to vertical adjustment. 'Aim-And-Lock' Technology allows precision adjustment without the redundant tightening and loosening of knuckle screw.

**Cap**

Fully machined. Accommodates 2 lens or louver media. Choose from 45° cutoff ('A' or 'D'), 1" deep bezel with 90° cutoff ('B' or 'E') or flush lens ('C') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

**Lens**

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment.

**BKSSL™**

Integrated solid state system with 'x' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance.

LM-80 certified. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

**Color Management**

Corrected cold phosphor technology delivers near-perfect natural white light. Long term phosphor maintenance over product life. Exact color point conformity exceeds ANSI C78.377 standard. Provides uniform beam with no color variation over angle. Module exceeds 80 CRI (RA>80, R9>16).

**Remote Driver**

For use with remote LED driver. See remote driver submittal to determine remote distance and wiring requirements prior to detailing field installation of any remote wiring.

**Optics**

Interchangeable OPTIKIT™ modules permit field changes to optical distribution.

**Wiring**

Teflon™ coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

**Hardware**

Tamper-resistant, stainless steel hardware. 360HD™ hardware is additionally black oxide treated for additional corrosion resistance.

**Finish**

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

**Warranty**

5 year limited warranty.

**Certification and Listing**

ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE ([www.lightingfacts.com](http://www.lightingfacts.com)). ETL Listed to ANSI/UL Standards 1598, 8750 and Certified to CAN/CSA Standard C22.2 No. 250. RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Additionally suitable for installation within 4' of the ground. IP66 Rated. Made in USA.

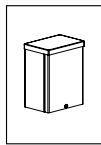


\*Teflon is a registered trademark of DuPont Corporation.  
\*Energy Star is a registered trademark of the United States Environmental Protection Agency.

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360HD Patent is covered in whole or in part by U.S. Patent No. 6,161,948





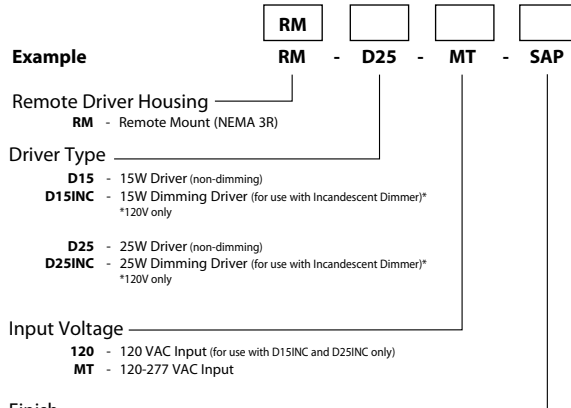
**BKSSL**  
SOLID STATE LIGHTING  
Constant Current Driver



## NEMA 3R Remote Driver Housing

<b>PROJECT:</b>	
<b>TYPE:</b>	
<b>CATALOG NUMBER:</b>	
<b>LAMP(S):</b>	
<b>NOTES:</b>	

### CATALOG NUMBER LOGIC



### ⚠ REMOTE WIRING

#### LED Driver

Remote driver installations require inter-connected wiring between the LED and driver (by others). Drivers have specific wiring requirements between these components. Driver manufacturers regularly recommend the following wiring details for such installations:

- Do not exceed 50 foot overall wiring distance using 12 gauge copper wire.

**Failure to comply with specific wiring requirements will void product warranty.**

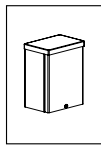
Standard Finish			Premium Finish	
Powder Coat Color	Satin	Wrinkle	ABP	MDS
Bronze	<b>BZP</b>	<b>BZW</b>	Antique Brass Powder	Mojave Desert Sandstone
Black	<b>BLP</b>	<b>BLW</b>	AMG Aleutian Mountain Granite	<b>NBP</b> Natural Brass Powder
White (Gloss)	<b>WHP</b>	<b>WHW</b>	AQW Antique White	<b>OC</b> Old Copper
Aluminum	<b>SAP</b>	—	BCM Black Chrome	<b>RMG</b> Rocky Mountain Granite
Verde	—	<b>VER</b>	BGE Beige	<b>SDS</b> Sonoran Desert Sandstone
			<b>BPP</b> Brown Patina Powder	<b>SMG</b> Sierra Mountain Granite
			<b>CAP</b> Clear Anodized Powder	<b>TXF</b> Textured Forest
			<b>CMG</b> Cascade Mountain Granite	<b>WCP</b> Weathered Copper
			<b>CRI</b> Cracked Ice	<b>WIR</b> Weathered Iron
			<b>CRM</b> Cream	
			<b>HUG</b> Hunter Green	<small>Also available in RAL Finishes See submittal SUB-1439-00</small>

### DRIVER ELECTRICAL DATA

TYPE	AC INPUT RANGE	Frequency Hz	DIMMING	POWER FACTOR	THD	OPER. AMBIENT TEMPERATURE	DIMMER TYPE	DIMMER RANGE
D15	120/208/240/277	50/60	NO	>0.92	≤20%	-30° C ~ 50°C	—	—
D15INC	120	50/60	YES	>0.96	≤20%	-30° C ~ 60°C	Incandescent	10-100%
D25	120/208/240/277	50/60	NO	>0.92	≤20%	-30° C ~ 50°C	—	—
D25INC	120	50/60	YES	>0.96	≤20%	-30° C ~ 60°C	Incandescent	10-100%

<b>B-K LIGHTING</b>	40429 Brickyard Drive • Madera, CA 93636 • USA	SUBMITTAL DATE	DRAWING NUMBER
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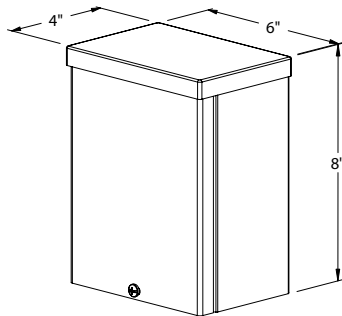
**BKSSL**  
SOLID STATE LIGHTING  
Constant Current Driver



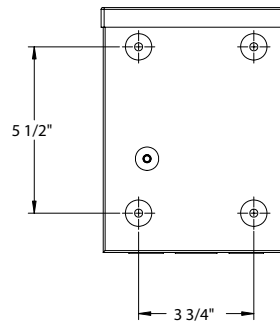
## NEMA 3R Remote Driver Housing

PROJECT:	
TYPE:	

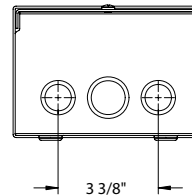
**SIDE VIEW**



**BACK VIEW**



**END VIEW**



### SPECIFICATIONS

**GreenSource Initiative™**

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult [www.bklighting.com/greensource](http://www.bklighting.com/greensource) for program requirements.

**Installation**

Nema 3R, surface mount design. For use with remote fixture (specified separately).

**Housing**

Steel construction with screw cover. Front access for ease of installation and inspection. [2] bottom entry, 3/4" conduit knockouts.

**Wiring / Connectors**

Teflon® coated wire, 18 gauge, 600V, 250°C rated and certified to UL1659 standard. Pre-wired and labeled terminal strip.

**Driver**

[1] 700mA, Class A, constant current driver. 120-277VAC (nominal) primary input voltage. 50/60Hz. >0.90 Power Factor, <15.0A in-rush current, ≤20%THD (nominal at 120VAC full load). Output over-voltage, over-current, and short circuit protection with auto recovery. EMC: FCC47CFR Part 15 Class B compliant.

Dimming driver for use with standard incandescent dimmers. 10-100% range.

**Finish**

StarGuard™, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

**Warranty**

5 year limited warranty.

**Listings**

NEMA 3R Enclosure. ETL Listed to ANSI/UL Standard 50/50E and Certified to CAN/CSA Standard C22.2 No. 94.1/94.2. RoHs compliant. Made in USA.



©Teflon is a registered trademark of DuPont Corporation.

**B-K LIGHTING**

40429 Brickyard Drive • Madera, CA 93636 • USA  
559.438.5800 • FAX 559.438.5900  
[www.bklighting.com](http://www.bklighting.com) • [info@bklighting.com](mailto:info@bklighting.com)

SUBMITTAL DATE  
12-21-12

DRAWING NUMBER  
SUB001124



**electrix**  
ILLUMINATION

PROJECT NAME :

LUMINAIRE TYPE :

## L140W LumiLine | Wet

### Construction:

- Extruded aluminum housing with satin anodized finish
- Low profile design with lengths ranging from 20" to 50"
- Proprietary optics are UV stable and optimized for transmission
- Numerous stainless steel and aluminum mounting solutions

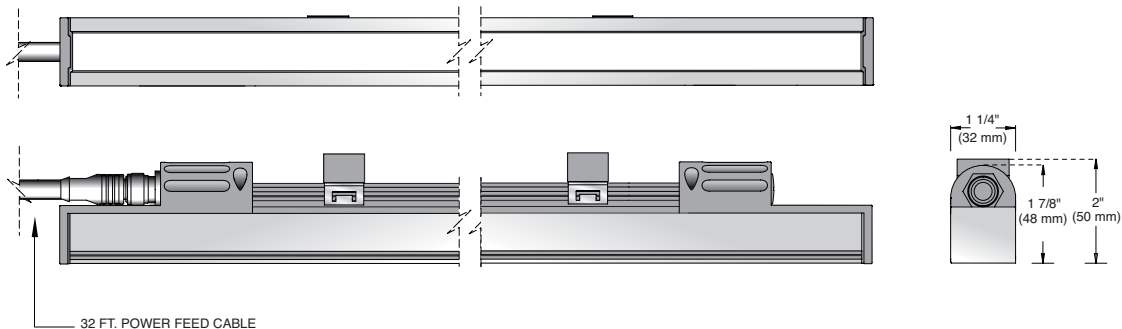
### Electrical:

- Dimmable, high flux LEDs available in either 3000K or 4000K
- Solid state low voltage luminaires powered with 24V DC
- Electronic power supplies can be remotely mounted up to 32' \*\*
- UL listed for wet locations: IP65 rating

### Performance:

- Average rated LED life of 50,000 hours @ 70% lumen output\*
- IES files can be downloaded at [www.electrix.com](http://www.electrix.com)
- All values below are based on initial lumens per foot

Output	Watts/Ft	3000K white	4000K white
Standard	5 watts/ft	258 lumens/ft	308 lumens/ft
High	10 watts/ft	516 lumens/ft	617 lumens/ft



\* To ensure proper performance, ambient temperature around luminaire should not exceed 140F. Architectural details should include ventilation around fixture.  
\*\* If EMI is a consideration, recommended remote driver distance is 15'





**MOUNTING OPTIONS:**

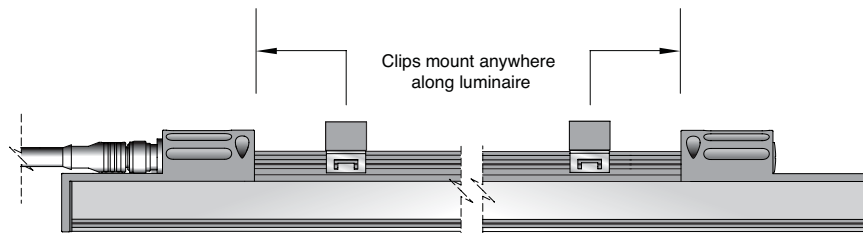
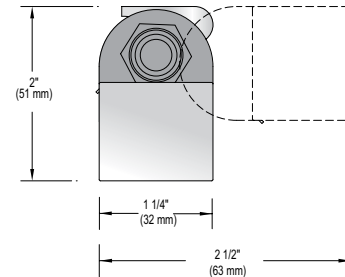
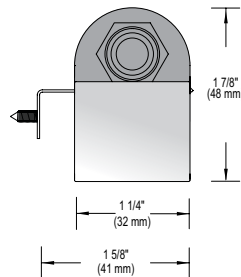
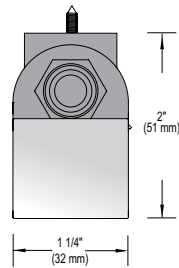
Horizontal  
Mount



Vertical  
Mount



Swivel  
Mount



The L140W series is UL listed for wet locations. The fixture was designed for exterior down light applications with minimal space limits. The L140W is not submersible and should not be mounted in conditions where standing water will collect on the lens.





**PRODUCT INFORMATION:**

<b>L140W</b> PRODUCT	<b>POWER</b>	<b>LENGTH</b>	<b>LED COLOR</b>	<b>OPTIC</b>	<b>MOUNT</b>
	<b>05</b> - 5 watts per linear ft	<b>20</b> - 20 3/4" actual	<b>W3</b> - 3000K White	<b>05</b> - 5 degree	<b>HW</b> - Horizontal Mount Wet
	<b>10</b> - 10 watts per linear ft	<b>30</b> - 30 3/4" actual	<b>W4</b> - 4000K White	<b>60M</b> - 60 degree lens with micro glare control louver	<b>V</b> - Vertical Mount
		<b>40</b> - 40 3/4" actual		<b>60C</b> - 60 degree Clear Lens	<b>S</b> - Swivel
		<b>50</b> - 50 3/4" actual		<b>90F</b> - 90 degree lens with satine diffuser (92% Transm.)	

**POWER CABLE ACCESSORIES:**

**LEADER FEED CABLE:**



**LFC-S32:** 32 ft. primary feed cable with straight connector. One required per LED feed.

**LEADER FEED CABLE:**



**LFC-A32:** 32 ft. primary feed cable with right angle connector.



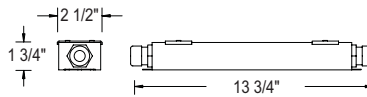


**LED POWER SUPPLIES - WET LOCATION**

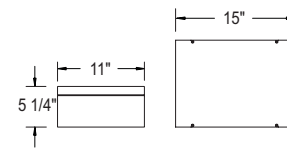
**96W MAX POWER SUPPLY**

- wattage output: 1W (min) to 96W (max)
- input voltage: 120V-277V AC output voltage: 24V DC
- maximum remote driver distance is 32'. \*\*
- dimming driver requires a 0-10V control interface (by others)<sup>1</sup>
- IP65 rating

**MODEL: PS96-W**



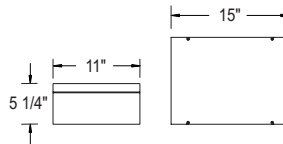
**MODEL: PS96D-W** dimmable



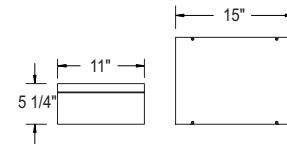
**288W MAX POWER SUPPLY**

- wattage output: three (3) 96W channels
- input voltage: 120V-277V AC output voltage: 24V DC
- maximum remote driver distance is 32'. \*\*
- dimming driver requires a 0-10V control interface (by others)<sup>1</sup>
- IP65 rating

**MODEL: PS288-W**



**MODEL: PS288D-W** dimmable



\*\* The remote mounting distance may be exceeded. However, precaution for site condition of electromagnetic interference (EMI) and voltage drop must be considered.

<sup>1</sup> Contact the factory for dimming wire diagram



## VX200/F22

Box mount, die cast aluminum with built-in junction box and sturdy mounting lugs. Medium base socket, 1/2" or 3/4" NPS hub size and a variety of globes. incandescent lamp A21 for 100 Series, PS25 for 200 Series. Lamp not supplied. CFL: 13 & 22 watt lamp supplied.

Color: Natural

Weight: 4.3 lbs

### Lamp Info

Type: 22W Quad  
Watts: 22W  
Shape/Size: N/A  
Base: N/A  
ANSI: N/A  
Hours: 10,000  
Lamp Lumens: 1,200  
Efficacy: 48 LPW

### Ballast Info

Type: NPF 120V  
120V: 0.45  
208V: 0  
240V: N/A  
277V: N/A  
Input Watts: 25W  
Efficiency: 88%

### Technical Specifications

#### UL Listing:

Suitable for wet locations. Suitable for use in dwellings. Suitable for use with 90°C supply wiring. Complies with UL Standard 1598. For non-hazardous locations where the lamp, socket and wiring require protection from rain, corrosive fumes, non-combustible dusts, moisture, non-explosive vapors and gases. For lamp base up installation only when outdoors.

#### Globes:

Supplied with clear thermal shock resistant soda lime glass unless otherwise stated. Colored and white glass globes available. Unbreakable Permaglobes available in clear and in color.

#### No Guard Supplied:

.

#### Maximum Watts:

300 watts .

#### Colored Globe Maximum Watts:

200 watts .

#### F22:

Compact Fluorescent 22W.

#### Patents:

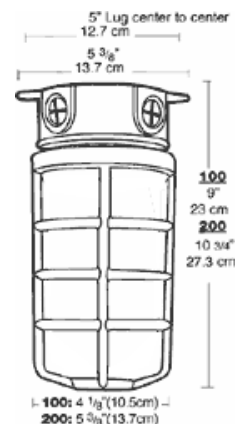
RAB sensor and fixture designs are protected under U.S. and International Intellectual Property laws.

#### Ballast Minimum Starting Temperature:

-20°F.

#### Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.



#### Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

#### Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods--Buy American Act-- Construction Materials (October 2010).

#### Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

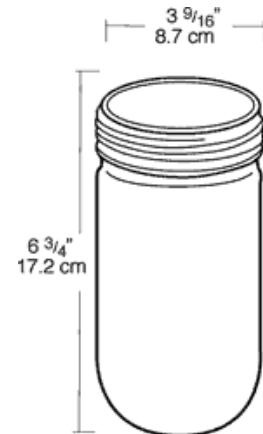


## GL100

Threaded glass globes fit RAB and other standard Vaporproof fixtures and Lawn Lights

Color: Clear

Weight: 1.1 lbs



### Technical Specifications

#### UL Listing:

Suitable for wet locations when used with Vaporproof fixtures. Suitable for dry, damp or wet locations when used as replacement globes for listed fixtures. Fixtures must be installed with lamp base up when outdoors.

#### Glass Globes:

Clear thermal shock resistant soda lime glass standard.

#### Maximum Wattage:

150 watts

#### Patents:

RAB sensor and fixture designs are protected under U.S. and International Intellectual Property laws.

#### Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

#### Trade Agreements Act Compliant:

This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.



## GD100CL

Flat or round bottom wire clamp guard made of No. 8 gauge steel rod welded to a clamping band. Guard is protected from corrosion by a baked silver gray polyester powder finish.

Color: Silver gray

Weight: 0.4 lbs



**100w:** 4" (10.2cm)  
**200w:** 5 3/8" (13.7cm)



**100w**  
7 1/2"  
19 cm  
**200w**  
9"  
22.9 cm

### Technical Specifications

#### UL Listing:

Suitable for wet locations when used with RAB Vapor proof fixtures.

#### Die Cast Guards:

One pieced die cast aluminum. Set screw locks guard in place. Also a wire clamp guard is available.

#### Wire Clamp Guards:

No. 8 gauge steel wire rod welded to clamping band with captive clamping screw.

#### Patents:

RAB sensor and fixture designs are protected under U.S. and International Intellectual Property laws.

#### Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

#### Trade Agreements Act Compliant:

This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

#### GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.