

**BKSSL**  
SOLID STATE LIGHTING

the power of



# TWIN STAFF STAR™ STYLE B

PROJECT:

TYPE:

CATALOG  
NUMBER:

SOURCE:

NOTES:

## CATALOG NUMBER LOGIC

**Example:** **TF** - **36** - **B** - **LED** - **e23** - **SP** - **A7** - **BZW** - **12** - **11** - **D** - **PP18B**

Series

**TF** - Twin Staff Star™ Pathlight

Stem Length

24", 30", 36", 42", 48", \*54", \*60", \*66", or \*72"  
(Specify in inches) \*For use with Standard Anchor Base Only

Style

**B** - 180° Radius

Source

**LED** - 'e' Technology with Integral Dimming Driver (25W min. load when dimmed)  
Designed for use with remote 12VAC BKSSL® transformers. Requires magnetic Low Voltage dimmer.

LED Type

**e36** - 8WLED/2.7K

**e22** - 8WLED/3K

**e23** - 8WLED/4K

**e27** - 8WLED/Amber

Optics\*

**NSP** - Narrow Spot (Red Indicator)

**SP** - Spot (Green Indicator)

**MFL** - Medium Flood (Yellow 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

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

Lens Type

**12** - Soft Focus Lens

**13** - Rectilinear Lens

Shielding

**11** - Honeycomb Baffle

Cap Style

**A** - 45°

**C** - Flush

**E** - 45° less Weep Hole (Interior Use Only)

**B** - 90°

**D** - 45° less Weep Hole (Interior Use Only)

**F** - 90° cutoff with Flush Lens

Options

**Blank** - Anchor Base (Standard, for use with remote transformer)

**PP18B** - 18" Power Pipe™ stake with 'B' Cap (for use with remote transformer)\*\*

**PP-TRe20** - Power Pipe™ "T" option with 18" stake and TRe20 Electronic Transformer\*\* (105-300 VAC, 50/60 Hz, Non-Dimming)

\*\*For use with up to 48" maximum stem length

**SF** - Stability Flange (for use with Power Pipe™)

## DRIVER DATA

### Input Volts

12VAC/DC 50/60Hz

### InRush Current

<250mA MAX (non-dimmed)

### Dimmable

Magnetic Low Voltage Dimmer

### Operation Ambient Temperature

-10°F-130°F

## 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
e27	Amber (590nm)	7.9	~

## L70 DATA

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

## \*OPTICAL DATA

Beam Type	Angle	e23 CBCP	Visual Indicator
Narrow Spot	14°	3594	Red Dot
Spot	18°	2456	Green Dot
Medium Flood	25°	1335	Yellow Dot
Wide Flood	36°	747	Blue Dot

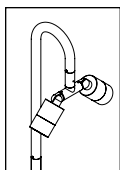
**B-K LIGHTING**

40429 Brickyard Drive • Madera, CA 93636 • USA  
559.438.5800 • FAX 559.438.5900  
www.bklighting.com • info@bklighting.com

SUBMITTAL DATE  
01-26-15

DRAWING NUMBER  
SUB001033

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF B-K LIGHTING, INC. AND ITS RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO REPRODUCE, DISCLOSE ITS CONTENTS, OR TO MANUFACTURE, USE OR SELL ANYTHING IT MAY DESCRIBE. REPRODUCTION, DISCLOSURE OR USE WITHOUT SPECIFIC WRITTEN AUTHORIZATION OF B-K LIGHTING, INC. IS STRICTLY FORBIDDEN.



**BKSSL**  
SOLID STATE LIGHTING

the power of  
with **adjust-e-lume®**  
TECHNOLOGY

# TWIN STAFF STAR™ STYLE B

PROJECT:

TYPE:

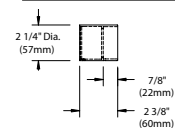
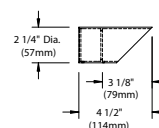
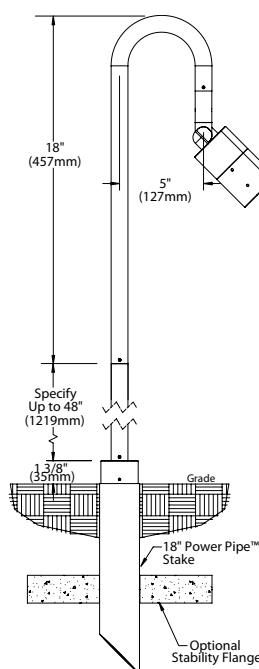
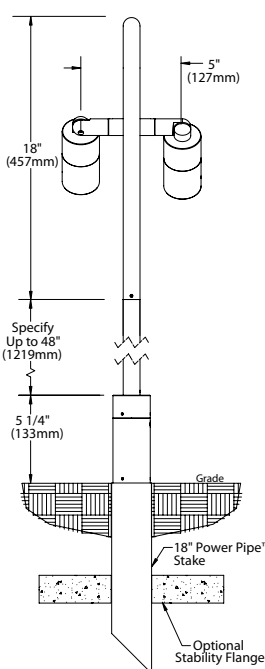
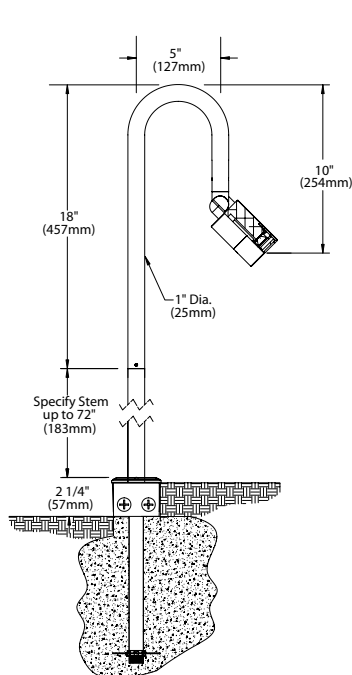
## ANCHOR BASE

## POWER PIPE 'T' (Mounting Option)

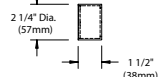
## POWER PIPE™ (Mounting Option)

## "A/D" CAP

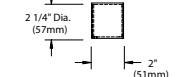
## "B/E" CAP



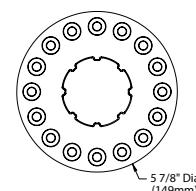
## "C" CAP



## "F" CAP



## STABILITY FLANGE (optional)



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

## SPECIFICATIONS

### GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. 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.

### Style

'B' Style provides single bend 180° radius from fixture to stem. Machined 'T' adapter enables independent fixture adjustment from a single mounting position.

### 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

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. Biaxial source control with 360° horizontal rotation in addition to vertical adjustment.

### Cap

Fully machined. Accommodates [1] lens or louver media. Choose from 45° cutoff ('A' or 'D'), 1" deep bezel with 90° cutoff ('B' or 'E'), flush lens ('C') cap styles, or 1" deep cutoff with flush mounted lens ('F'). Accommodates up to (2) lens or louver media. '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.

### Stem

Fully machined, 1" dia. with internal threads for maximum visual appeal. Available in configurable lengths to 72" maximum overall (with Anchor Base) and 48" maximum overall (with Power Pipe™).

### 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, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <250mA. Conforms to Safety Std. C22.2 No. 250.13-12.

Line dimmable. For use with low voltage dimmer with dedicated neutral conductor. Minimum 25 watt load required for dimming.

### 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 (WFL) = Blue.

### Installation

Available for installation in two distinct mounting conditions:

### Anchor Base (Standard)

Cast aluminum junction box with pass-through cover. 10" galvanized anchor stem for installation into soil or concrete. For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

### Power Pipe™ (Optional)

Provides a clean transition from wiring system to fixture. Schedule 80, 18" PVC housing for direct burial into soil or concrete. Machined 2-1/4" dia. cap for fixture mounting. Stainless steel hardware. Optional 6" diameter, molded stability flange, which simplifies installation and projects into substrate to reinforce housing stability. For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

### Power Pipe™ with Transformer Housing (Optional)

Additionally features integral transformer housing fully machined from copper-free aluminum. High temperature, silicone 'O' Ring provides water-tight seal. Integral, TRe20 electronic transformer. 105-300VAC primary voltage. 50/60Hz. Non Dimming. 20VA maximum load.

### Wiring

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

### Hardware

Tamper-resistant, stainless steel hardware. LOCK™ aiming screw screw 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 Standard 1838 and UL Subject 8750 and Certified to CAN/CSA Standard C22.2 No. 9. 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-K LIGHTING**

40429 Brickyard Drive • Madera, CA 93638 • USA  
559.438.5800 • FAX 559.438.5900  
[www.bklighting.com](http://www.bklighting.com) • [info@bklighting.com](mailto:info@bklighting.com)

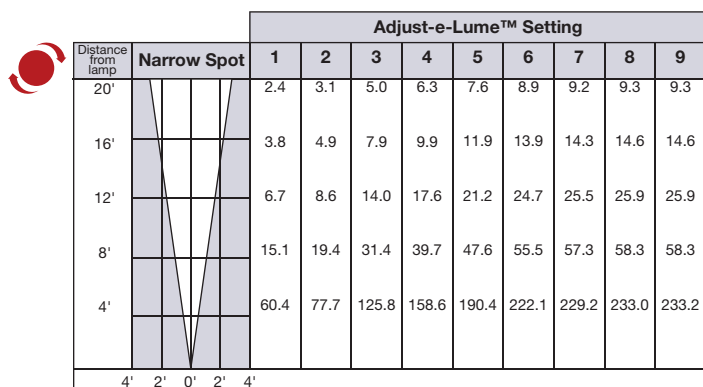
SUBMITTAL DATE  
01-26-15

DRAWING NUMBER  
SUB001033

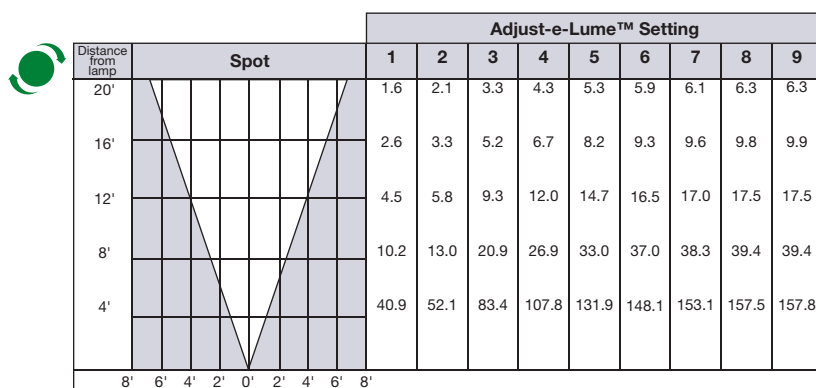
Select OptiKit™ for desired distribution

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

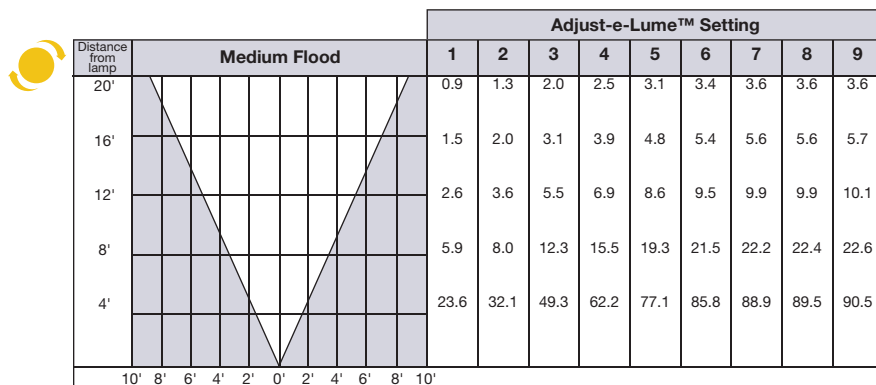
Set adjust-e-lume™ Dial to desired output



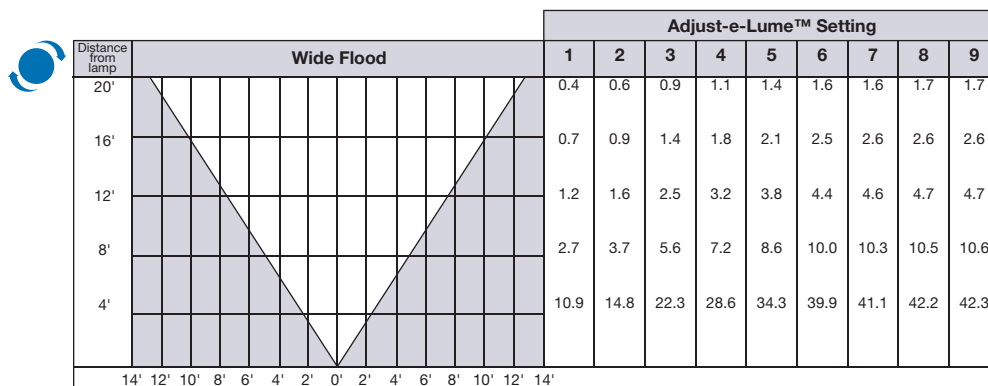
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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







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

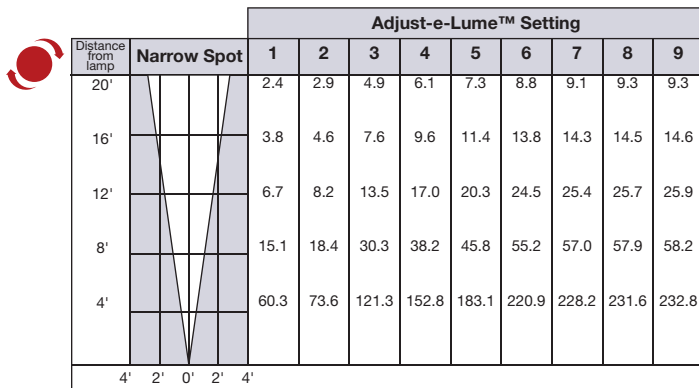


Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

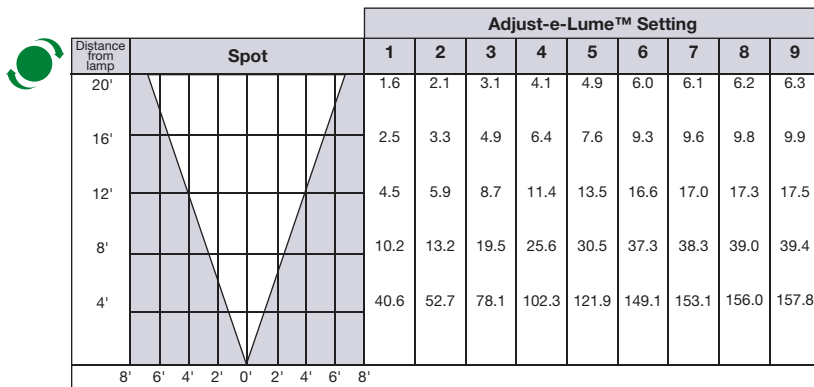
Select OptiKit™ for desired distribution

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

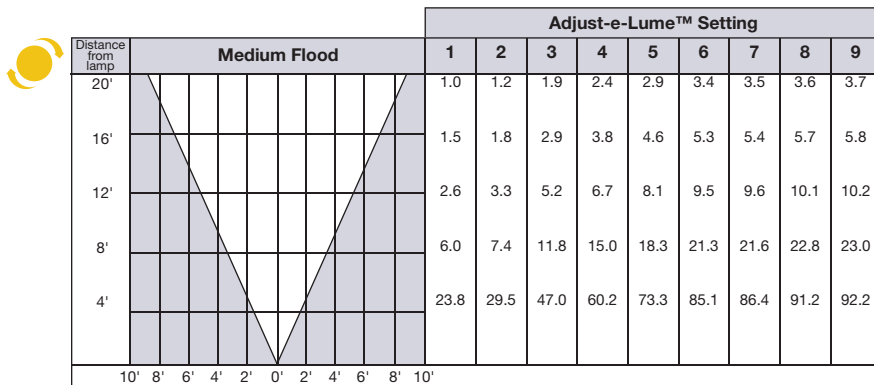
Set adjust-e-lume™ Dial to desired output



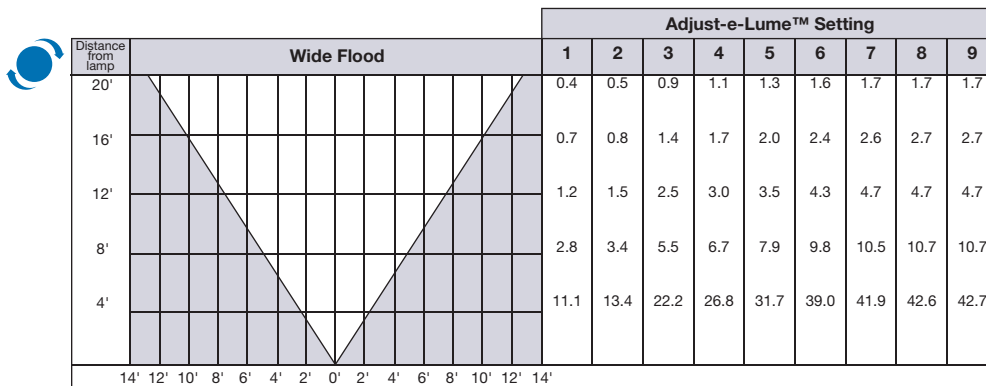
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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







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

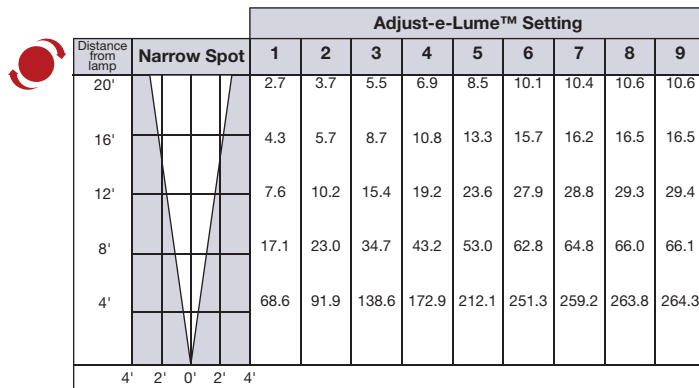


Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

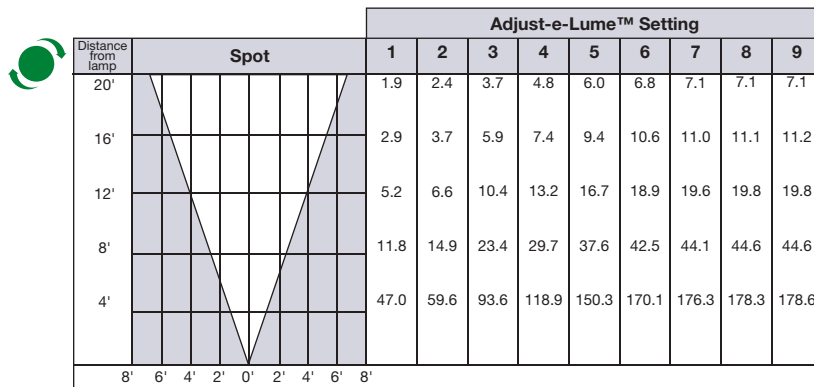
Select OptiKit™ for desired distribution

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

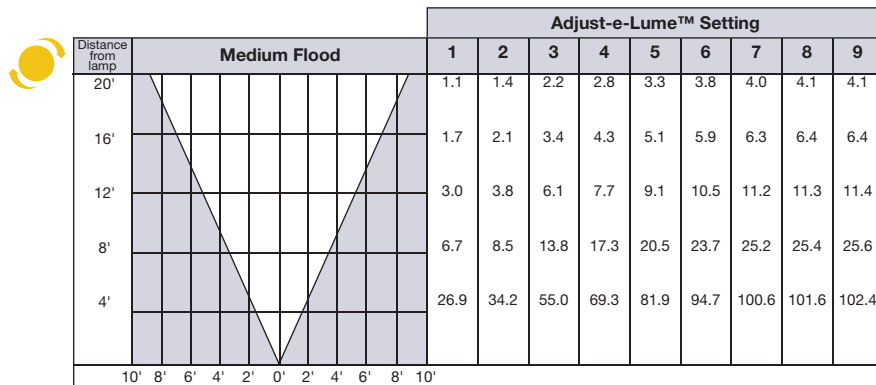
Set adjust-e-lume™ Dial to desired output



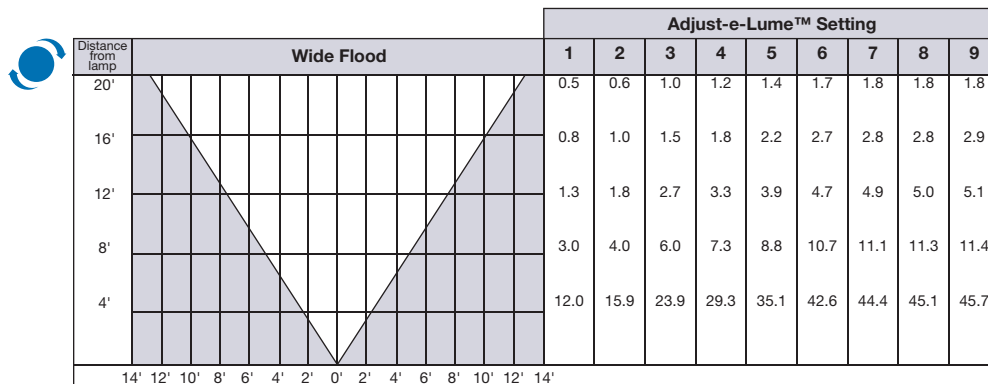
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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



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



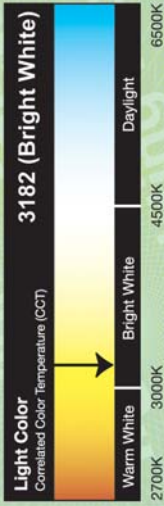
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

# 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)



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-B57DIN

Model Number: TF-LED-e23-SP-12-C

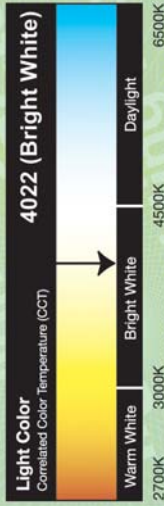
Type: Outdoor path/step/rail light

# 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)



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-G2RQBD

Model Number: TF-LED-e23-MFL-13-C

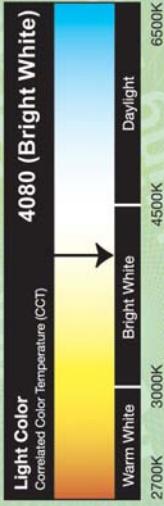
Type: Outdoor path/step/rail light

# 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)



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-TTAKJF

Model Number: TF-LED-e23-SP-12-C

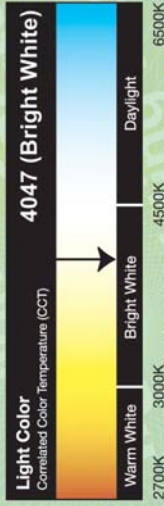
Type: Outdoor path/step/rail light

# 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)



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-VR33Q

Model Number: TF-LED-e23-MFL-12-C

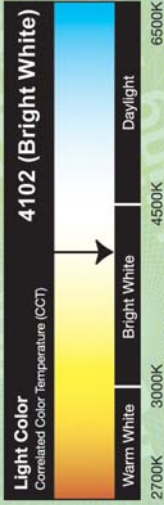
Type: Outdoor path/step/rail light

# 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)



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-1WAZJG

Model Number: TF-LED-e23-NSP-12-C

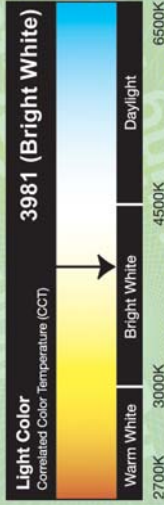
Type: Outdoor path/step/rail light

# 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)



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-LVF2KB

Model Number: TF-LED-e23-WFL-12-C

Type: Outdoor path/step/rail light