

DELTA STAR™

GET A QUOTE >

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

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

GET A QUOTE >

Material

Blank - Aluminum
B - Brass
S - Stainless Steel

Series

DS - Delta Star™

Source

LED - 'e' Technology with Integral Dimming Driver (25W min. load when dimmed)
 *Requires magnetic Low Voltage dimmer

LED Type

e36 - 8WLED/2.7K **e23** - 8WLED/4K
e22 - 8WLED/3K **e27** - 8WLED/Amber

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.

Aluminum Finish			Brass Finish		Premium Finish		
Powder Coat Color	Satin	Wrinkle	Machined	MAC	ABP Antique Brass Powder	CMG Cascade Mountain Granite	RMG Rocky Mountain Granite
Bronze	BZP	BZW	Polished	POL	AMG Aleutian Mountain Granite	CRI Cracked Ice	SDS Sonoran Desert Sandstone
Black	BLP	BLW	Mitique™	MIT	AQW Antique White	CRM Cream	SMG Sierra Mountain Granite
White (Gloss)	WHP	WHW	Stainless Finish		BCM Black Chrome	HUG Hunter Green	TXF Textured Forest
Aluminum	SAP	—	Machined	MAC	BGE Beige	MDS Mojave Desert Sandstone	WCP Weathered Copper
Verde	—	VER	Polished	POL	BPP Brown Patina Powder	NBP Natural Brass Powder	WIR Weathered Iron
			Brushed	BRU <small>Interior use only.</small>	CAP Clear Anodized Powder	OCP Old Copper	<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

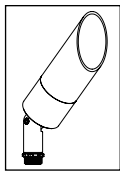
360SL - 360SL™ Rotational Knuckle Mounting System

DRIVER DATA	Input Volts	InRush Current	Dimmable	Operation Ambient Temperature
	12VAC/DC 50/60Hz	<1A (non-dimmed)	Magnetic Low Voltage Dimmer	-10°F-130°F

LM79 DATA				L70 DATA		*OPTICAL DATA		
BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L70)		Beam Type	Angle	Visual Indicator
e36	2700K	8.4	90	50,000		Narrow Spot	14°	Red Dot
e22	3100K	8.4	90	50,000		Spot	18°	Green Dot
e23	4100K	8.4	75	50,000		Medium Flood	25°	Yellow Dot
e27	Amber (590nm)	7.9	~	50,000		Wide Flood	36°	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	DRAWING NUMBER
		1-8-14	SUB000930

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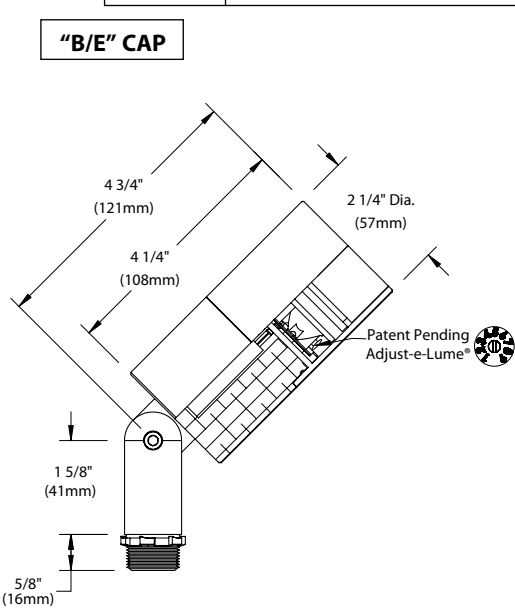
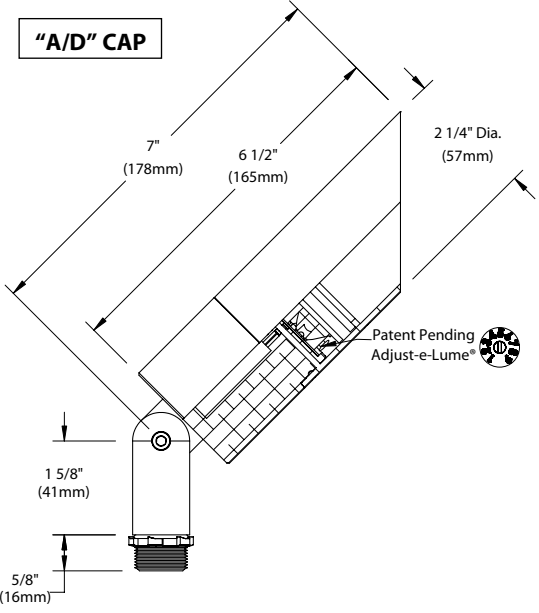


BKSSL
SOLID STATE LIGHTING

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

DELTA STAR™

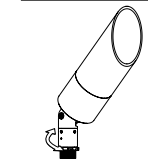
PROJECT:	
TYPE:	



360 SL™

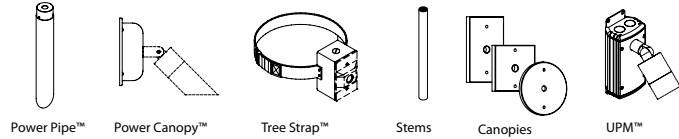
Accessories (Configure separately)

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

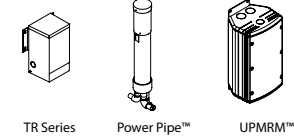


Horizontal Rotation
(Optional 360SL™ Knuckle)

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 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 louver 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, 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 <1A (non-dimming). 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.

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®, 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. 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). 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.

Select OptiKit™ for desired distribution

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

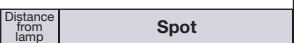
Set adjust-e-lume™ Dial to desired output



 **Narrow Spot**


Distance from lamp	Narrow Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		2.4	3.1	5.0	6.3	7.6	8.9	9.2	9.3	9.3
16'		3.8	4.9	7.9	9.9	11.9	13.9	14.3	14.6	14.6
12'		6.7	8.6	14.0	17.6	21.2	24.7	25.5	25.9	25.9
8'		15.1	19.4	31.4	39.7	47.6	55.5	57.3	58.3	58.3
4'		60.4	77.7	125.8	158.6	190.4	222.1	229.2	233.0	233.2
	4' 2' 0' 2' 4'									

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

 **Spot**


Distance from lamp	Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.6	2.1	3.3	4.3	5.3	5.9	6.1	6.3	6.3
16'		2.6	3.3	5.2	6.7	8.2	9.3	9.6	9.8	9.9
12'		4.5	5.8	9.3	12.0	14.7	16.5	17.0	17.5	17.5
8'		10.2	13.0	20.9	26.9	33.0	37.0	38.3	39.4	39.4
4'		40.9	52.1	83.4	107.8	131.9	148.1	153.1	157.5	157.8
	8' 6' 4' 2' 0' 2' 4' 6' 8'									

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

 **Medium Flood**

Distance from lamp	Medium Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.9	1.3	2.0	2.5	3.1	3.4	3.6	3.6	3.6
16'		1.5	2.0	3.1	3.9	4.8	5.4	5.6	5.6	5.7
12'		2.6	3.6	5.5	6.9	8.6	9.5	9.9	9.9	10.1
8'		5.9	8.0	12.3	15.5	19.3	21.5	22.2	22.4	22.6
4'		23.6	32.1	49.3	62.2	77.1	85.8	88.9	89.5	90.5
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'									





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

 **Wide Flood**

Distance from lamp	Wide Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.4	0.6	0.9	1.1	1.4	1.6	1.6	1.7	1.7
16'		0.7	0.9	1.4	1.8	2.1	2.5	2.6	2.6	2.6
12'		1.2	1.6	2.5	3.2	3.8	4.4	4.6	4.7	4.7
8'		2.7	3.7	5.6	7.2	8.6	10.0	10.3	10.5	10.6
4'		10.9	14.8	22.3	28.6	34.3	39.9	41.1	42.2	42.3
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'									

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



Distance from lamp	Narrow Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		2.4	2.9	4.9	6.1	7.3	8.8	9.1	9.3	9.3
16'		3.8	4.6	7.6	9.6	11.4	13.8	14.3	14.5	14.6
12'		6.7	8.2	13.5	17.0	20.3	24.5	25.4	25.7	25.9
8'		15.1	18.4	30.3	38.2	45.8	55.2	57.0	57.9	58.2
4'		60.3	73.6	121.3	152.8	183.1	220.9	228.2	231.6	232.8
	4' 2' 0' 2' 4'									

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

Distance from lamp	Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.6	2.1	3.1	4.1	4.9	6.0	6.1	6.2	6.3
16'		2.5	3.3	4.9	6.4	7.6	9.3	9.6	9.8	9.9
12'		4.5	5.9	8.7	11.4	13.5	16.6	17.0	17.3	17.5
8'		10.2	13.2	19.5	25.6	30.5	37.3	38.3	39.0	39.4
4'		40.6	52.7	78.1	102.3	121.9	149.1	153.1	156.0	157.8
	8' 6' 4' 2' 0' 2' 4' 6' 8'									

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





Distance from lamp	Medium Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.0	1.2	1.9	2.4	2.9	3.4	3.5	3.6	3.7
16'		1.5	1.8	2.9	3.8	4.6	5.3	5.4	5.7	5.8
12'		2.6	3.3	5.2	6.7	8.1	9.5	9.6	10.1	10.2
8'		6.0	7.4	11.8	15.0	18.3	21.3	21.6	22.8	23.0
4'		23.8	29.5	47.0	60.2	73.3	85.1	86.4	91.2	92.2
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'									

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

Distance from lamp	Wide Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.4	0.5	0.9	1.1	1.3	1.6	1.7	1.7	1.7
16'		0.7	0.8	1.4	1.7	2.0	2.4	2.6	2.7	2.7
12'		1.2	1.5	2.5	3.0	3.5	4.3	4.7	4.7	4.7
8'		2.8	3.4	5.5	6.7	7.9	9.8	10.5	10.7	10.7
4'		11.1	13.4	22.2	26.8	31.7	39.0	41.9	42.6	42.7
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'									






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








Distance from lamp	Narrow Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		2.7	3.7	5.5	6.9	8.5	10.1	10.4	10.6	10.6
16'		4.3	5.7	8.7	10.8	13.3	15.7	16.2	16.5	16.5
12'		7.6	10.2	15.4	19.2	23.6	27.9	28.8	29.3	29.4
8'		17.1	23.0	34.7	43.2	53.0	62.8	64.8	66.0	66.1
4'		68.6	91.9	138.6	172.9	212.1	251.3	259.2	263.8	264.3
	4' 2' 0' 2' 4'									






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

Distance from lamp	Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.9	2.4	3.7	4.8	6.0	6.8	7.1	7.1	7.1
16'		2.9	3.7	5.9	7.4	9.4	10.6	11.0	11.1	11.2
12'		5.2	6.6	10.4	13.2	16.7	18.9	19.6	19.8	19.8
8'		11.8	14.9	23.4	29.7	37.6	42.5	44.1	44.6	44.6
4'		47.0	59.6	93.6	118.9	150.3	170.1	176.3	178.3	178.6
	8' 6' 4' 2' 0' 2' 4' 6' 8'									

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


Distance from lamp	Medium Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.1	1.4	2.2	2.8	3.3	3.8	4.0	4.1	4.1
16'		1.7	2.1	3.4	4.3	5.1	5.9	6.3	6.4	6.4
12'		3.0	3.8	6.1	7.7	9.1	10.5	11.2	11.3	11.4
8'		6.7	8.5	13.8	17.3	20.5	23.7	25.2	25.4	25.6
4'		26.9	34.2	55.0	69.3	81.9	94.7	100.6	101.6	102.4
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'									

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

Distance from lamp	Wide Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.5	0.6	1.0	1.2	1.4	1.7	1.8	1.8	1.8
16'		0.8	1.0	1.5	1.8	2.2	2.7	2.8	2.8	2.9
12'		1.3	1.8	2.7	3.3	3.9	4.7	4.9	5.0	5.1
8'		3.0	4.0	6.0	7.3	8.8	10.7	11.1	11.3	11.4
4'		12.0	15.9	23.9	29.3	35.1	42.6	44.4	45.1	45.7
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'									

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

Delta Star - Spot




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 for the *Label Reference Guide*.

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

Delta Star - Spot




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 for the *Label Reference Guide*.

Registration Number: GCXV-VD2NUJ
Model Number: DS-LED-e23-SP-12
Type: Other

Delta Star - N. Spot




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 for the *Label Reference Guide*.

Registration Number: GCXV-SY65SH
Model Number: DS-LED-e23-NSP-12
Type: Other

Delta Star - Rectilinear




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 for the *Label Reference Guide*.

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

Delta Star - M. Flood




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 for the *Label Reference Guide*.

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

Delta Star - W. Flood




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 for the *Label Reference Guide*.

Registration Number: GCXV-X8D75X
Model Number: DS-LED-e23-WFL-12
Type: Other