



lenexa bentonville dallas houston kansas city las vegas
los angeles new york philadelphia phoenix tampa

May 29, 2015

Douglas Brown
464 S Farmer Ave,
Suite 101,
Tempe, AZ 85281

RE: PCDS Gymnasium
Project No. 1450000082

Dear Doug:

Light readings were taken from the PCDS Aquatic Center's existing signage; this signage is very similar to the Gymnasium signage. Aquatic Center signage is installed 3' lower than the Gymnasium signage therefore the below values are the worst case and these values would be much less if it was taken from the future Gymnasium, signage.

Light levels are as indicated below:

At ground level

.9 fc @ 1' from wall
.42fc @ 2'
.17fc @ 3'
.15fc @ 4'
.12fc @ 5'
.06fc @ 10'
.02fc @ 20'

At +7' above ground (directly in front of the sign)

.24 fc @ 5' from wall

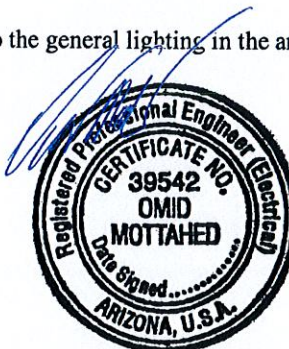
These values are very low and their contribution to the general lighting in the area seems to be negligible.

Please contact me if you have any questions.

Sincerely,

Henderson Engineers, Inc.

Omid Mottahed P. E.
Vice President



Expires: 9/30/2015

May 29 2015

Submitted by Arizona Lighting Sales, Inc.

Arizona Lighting Sales, Inc

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM ADDITION
Architect: ARCHITEKTON

Catalog Number:
DS-LED-E23-SP-A9-ADVISE STD
COLOR-13-B-360SL
Notes:

Type:

L

AZ14-43338



DELTA STAR™

PROJECT: _____

TYPE: _____

CATALOG NUMBER: _____

SOURCE: _____

NOTES: _____

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 Dimming Driver (25W min. load when dimmed)
**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 - ADVISE STD COLOR

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 <i>Interior use only.</i>	CAP	OCF	

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: 12VAC/DC 50/60-Hz InRush Current: < 1A (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	Visual Indicator
Narrow Spot	14°	Red Dot
Spot	18°	Green Dot
Medium Flood	25°	Yellow Dot
Wide Flood	36°	Blue Dot

B-K LIGHTING

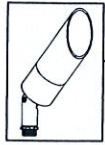
40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5800
www.bklighting.com • info@bklighting.com

SUBMITTAL DATE
1-8-14

DRAWING NUMBER
SUB000930

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Submitted by Arizona Lighting Sales, Inc.		Catalog Number: DS-LED-E23-SP-A9-ADVISE STD COLOR-13-B-360SL	Type: L
Arizona Lighting Sales, Inc	Job Name: PHOENIX COUNTRY DAY SCHOOL - GYM ADDITION Architect: ARCHITEKTON	Notes:	AZ14-43338



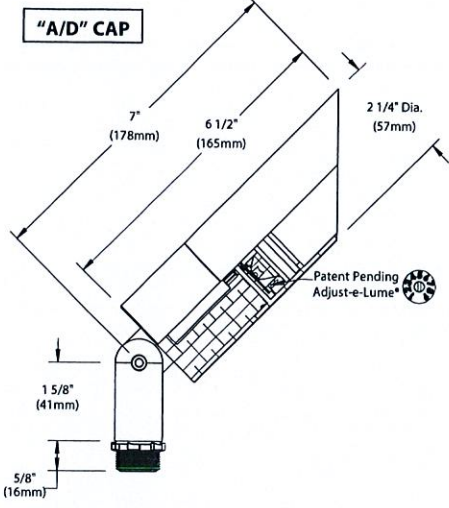
BKSSL
BROAD KINETIC SOLID STATE LIGHTING

the power of dimming adjust e-lume TECHNOLOGY

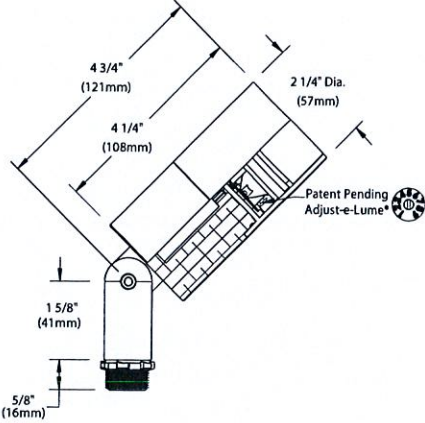
DELTA STAR™

PROJECT:	
TYPE:	

"A/D" CAP



"B/E" CAP



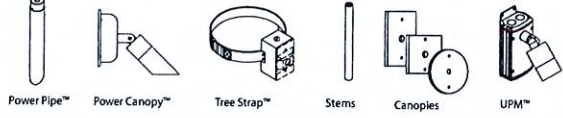
360 SL™



Horizontal Rotation
(Optional 360SL™ Knuckle)

Accessories (Configure separately)

Mounting:



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

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 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.

B-K LIGHTING

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**Arizona
Lighting
Sales, Inc**

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM
ADDITION
Architect: ARCHITEKTON

Catalog Number:
DS-LED-E23-SP-A9-ADVISE STD
COLOR-13-B-360SL
Notes:

Type:

L

AZ14-43338

adjust-e-lume™
TECHNOLOGY

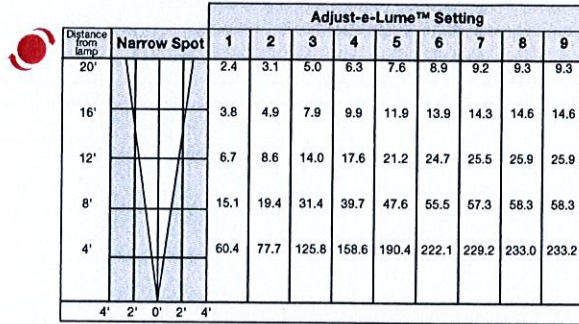
Photometry for use with e36

2.7K

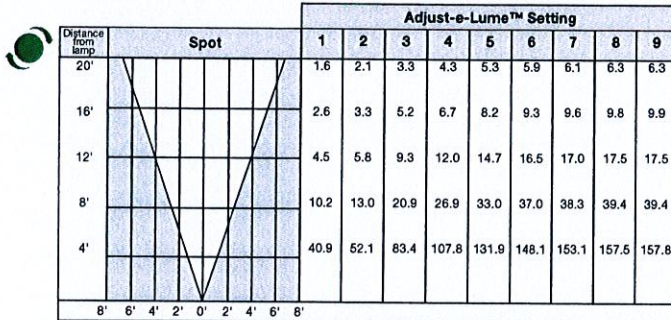
Select OptiKit™ for desired distribution

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

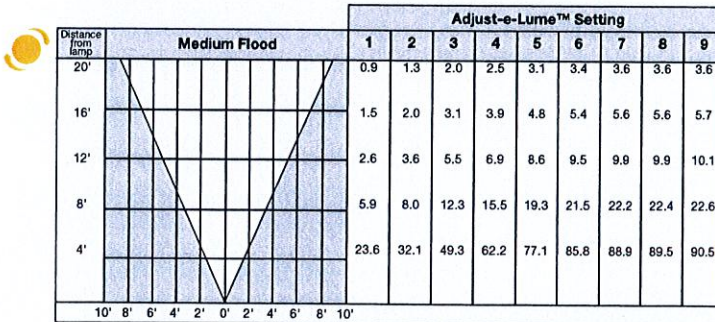
Set adjust-e-lume™ Dial to desired output



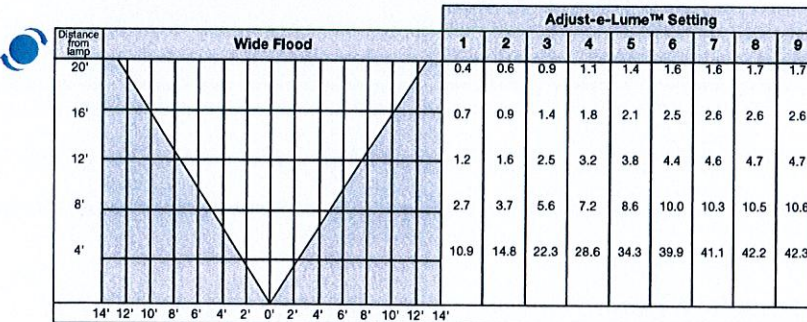
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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

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PHOENIX COUNTRY DAY SCHOOL - GYM
ADDITION
Architect: ARCHITEKTON

Catalog Number:
DS-LED-E23-SP-A9-ADVISE STD
COLOR-13-B-360SL
Notes:

Type:

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AZ14-43338

adjust-e-lume
TECHNOLOGY

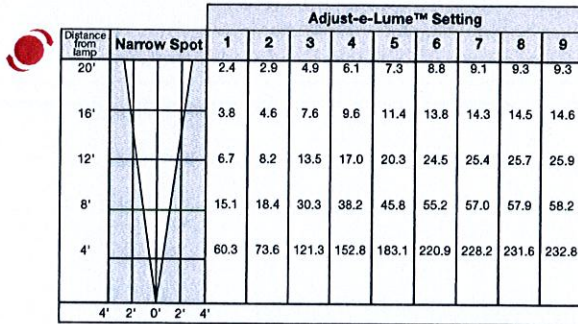
Photometry for use with e22



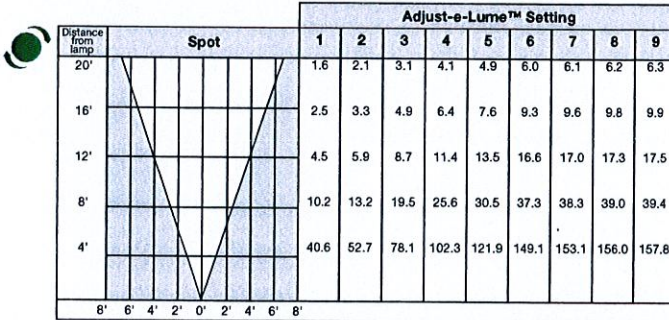
Select OptiKit™ for desired distribution

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

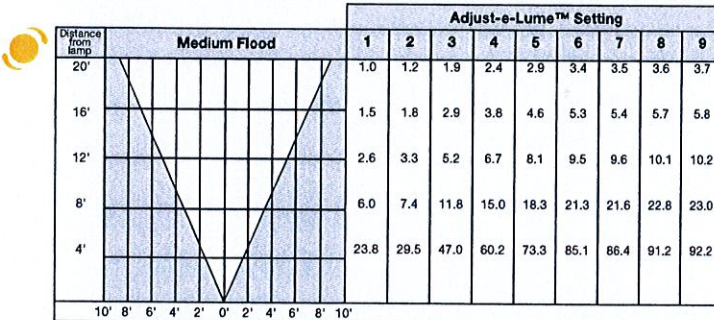
Set adjust-e-lume™ Dial to desired output



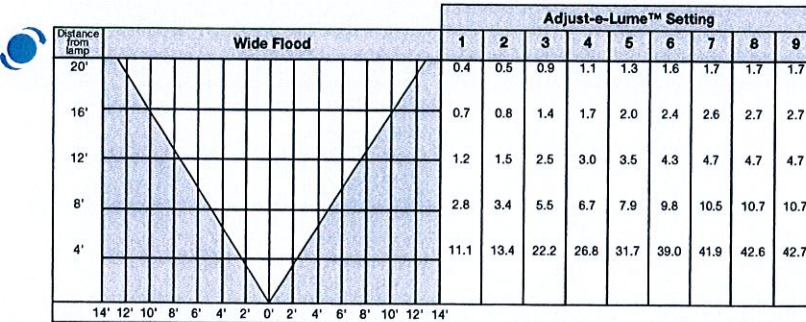
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Arizona Lighting Sales, Inc

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM
ADDITION
Architect: ARCHITEKTON

Catalog Number:
DS-LED-E23-SP-A9-ADVISE STD
COLOR-13-B-360SL
Notes:

Type:

L

AZ14-43338

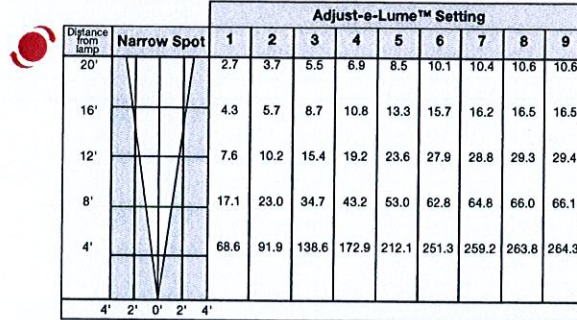
adjust-e-lume
TECHNOLOGY

Photometry for use with e23 **4K**

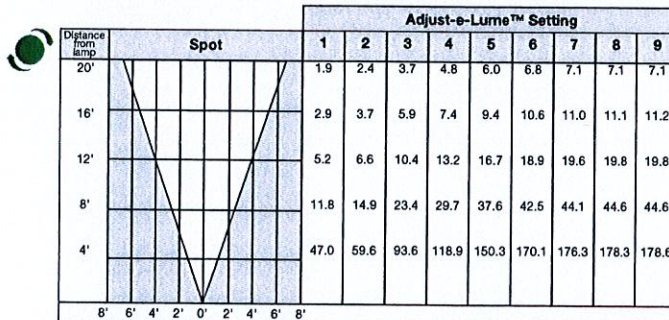
Select OptiKit™ for desired distribution

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

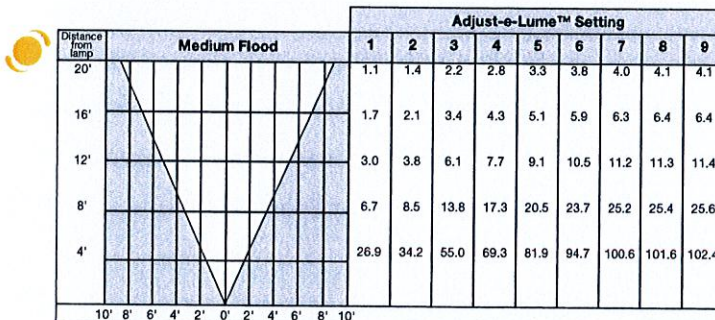
Set adjust-e-lume™ Dial to desired output



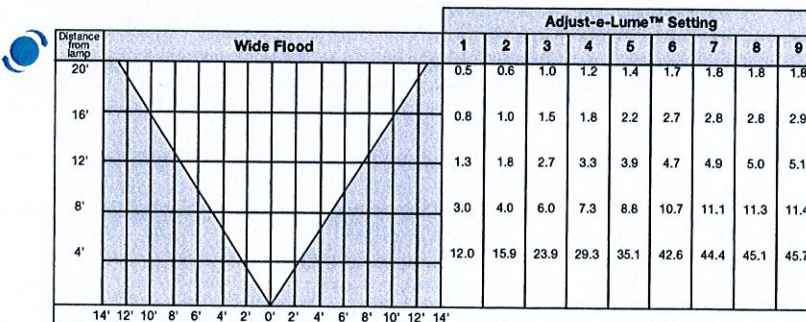
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Arizona Lighting Sales, Inc

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM ADDITION
Architect: ARCHITEKTON

Catalog Number:
DS-LED-E23-SP-A9-ADVISE STD
COLOR-13-B-360SL


Notes:

Type:

L

AZ14-43338


Delta Star - Spot



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

Color Accuracy Color Rendering Index (CRI)	83
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Light Color
Correlated Color Temperature (CCT): **3182 (Bright White)**




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-1J07XQ
Model Number: DS-LED-e23-SP-12
Type: Other


Delta Star - Spot



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

Color Accuracy Color Rendering Index (CRI)	68
--	-----------

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




2700K 3000K 4500K 6500K

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Visit www.lightingfacts.com for the Label Reference Guide.

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

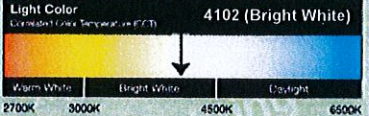
Delta Star - N. Spot



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

Color Accuracy Color Rendering Index (CRI)	68
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Light Color
Correlated Color Temperature (CCT): **4102 (Bright White)**




2700K 3000K 4500K 6500K

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Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: GCXV-6Y65SH
Model Number: DS-LED-e23-NSP-12
Type: Other

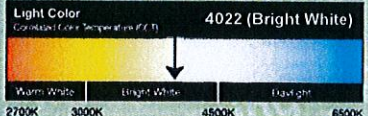
Delta Star - Rectilinear



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

Color Accuracy Color Rendering Index (CRI)	66
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Light Color
Correlated Color Temperature (CCT): **4022 (Bright White)**




2700K 3000K 4500K 6500K

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Visit www.lightingfacts.com for the Label Reference Guide.

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

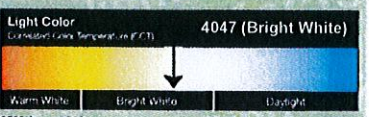
Delta Star - M. Flood



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

Color Accuracy Color Rendering Index (CRI)	68
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Light Color
Correlated Color Temperature (CCT): **4047 (Bright White)**




2700K 3000K 4500K 6500K

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Visit www.lightingfacts.com for the Label Reference Guide.

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

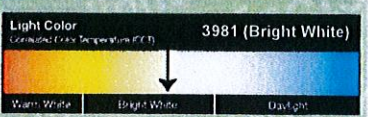
Delta Star - W. Flood



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

Color Accuracy Color Rendering Index (CRI)	67
--	-----------

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



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

Submitted by Arizona Lighting Sales, Inc.

Arizona Lighting Sales, Inc

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM ADDITION
Architect: ARCHITEKTON

Catalog Number:
PP-S-18-T-TRE20-B-COLOR-120-S

Notes:

Type:

L

AZ14-43338

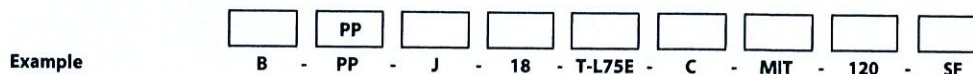


Specify Fixture Separately

POWER PIPE™ SYSTEM

PROJECT:	
TYPE:	
CATALOG NUMBER:	
LAMP(S):	
NOTES:	

CATALOG NUMBER LOGIC



Material

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

Series

PP - Power Pipe™ System

Type

- S** - Stake
- J - Junction Box
- A** - Adjustable 18" Stem* (requires 18" Power Pipe)
*Not available with Transformer Housing

Power Pipe Length

- 12 - 12" Power Pipe Length
- 18** - 18" Power Pipe Length

Transformer Housing

- Blank - Less Transformer
- T-L75E - Transformer housing with 75VA Electronic Transformer
- T-TRE20** - Transformer housing with Tre20 Electronic Transformer* (105-300 VAC, 50/60 Hz, Non-Dimming, For use with fixtures)
*Not available with Adjustable Stem (Type 'A')

Cap Style

- Blank - Less Cap (Adjustable Stem only)
- B** - Single Hole Cap
- C - Solid Cap

Finish

Aluminum Finish			Brass		Premium Finish		
Powder Coat Color	Satin	Wrinkle	Machined	MAC	ABP	CMG	RMG
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		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	OCF Old Copper	<small>Also available in RAL Finishes See submittal SUB-1439-00</small>

Input Voltage

- Blank - Less Transformer or For use with Tre20 Electronic Transformer (105-300 VAC, 50/60 Hz, Non-Dimming)
- 120** - 120 VAC Input (For use with L75E)
- 230 - 230 VAC Input (Non-Dimming, For use with L75E)
- 277 - 277 VAC Input (Non-Dimming, For use with L75E)

Options

- SF - Stability Flange

S - CAN'T VERIFY PLEASE ADVISE

B-K LIGHTING

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SUBMITTAL DATE
8-15-13

DRAWING NUMBER
SUB-1104-07

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Submitted by Arizona Lighting Sales, Inc.

Arizona Lighting Sales, Inc

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM ADDITION
Architect: ARCHITEKTON

Catalog Number:
PP-S-18-T-TRE20-B-COLOR-120-S

Notes:

Type:

L

AZ14-43338

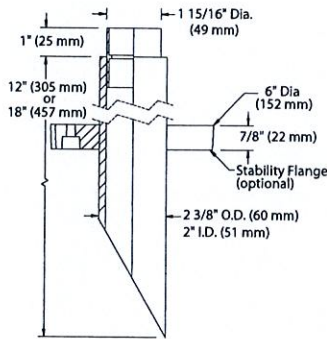


Specify Fixture Separately

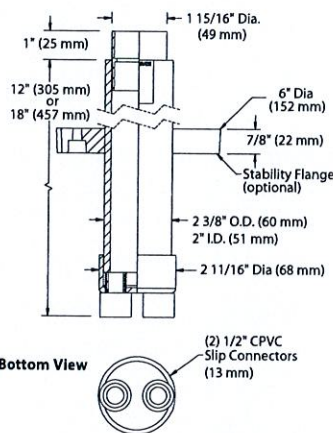
POWER PIPE™ SYSTEM

PROJECT:	
TYPE:	

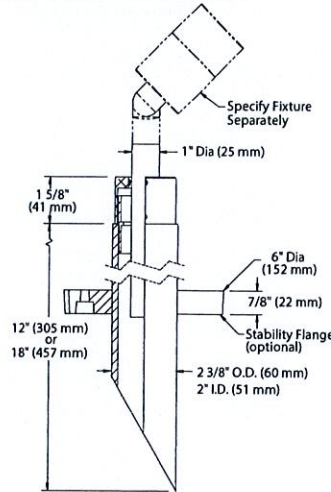
STAKE (S)



JUNCTION (J)

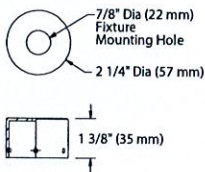


ADJUSTABLE STEM (A)

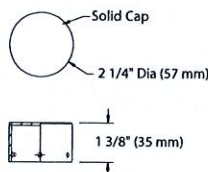


CAP STYLES

'B' Cap (Single Hole)

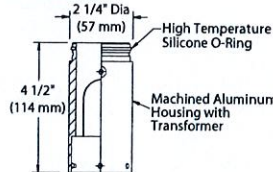


'C' Cap (Solid Cap)



TRANSFORMER

Transformer with Housing



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 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.

Installation

Provides a clean, architectural transition from wiring system to fixture. 2" Schedule 80 PVC pipe. For direct burial into soil or concrete. Available in 12" and 18" lengths. Available in three installation types:

Stake (Type S)

60° angled bottom designed for use with conduit or direct burial low voltage cable.

Junction Box (Type J)

Includes [2] 1/2" PVC slip connectors for branch circuit wiring.

Adjustable Stem (Type A18)

18" field adjustable stem accommodates future landscape growth. Unused stem length remains hidden inside housing. Delrin bushing and stainless steel set screws lock mounting height.

Stability Flange

Optional 6" diameter, molded stability flange simplifies installation and projects into substrate to simplify installation and reinforce housing stability.

Cap Style

Machined from copper-free aluminum or machined brass. Choose from Solid ('C'), or Single Hole ('B') cap styles.

Transformer Housing

Fully machined from copper-free aluminum, solid machined brass or stainless steel. Stainless steel hardware. High temperature, silicone 'O' Ring provides watertight seal.

Electronic Transformer

For use with halogen lamps. 120V, 230V, and 277V primary voltage. 120V is fully dimmable (40W minimum load). 50/60Hz. 11.6V secondary voltage. 10 watt minimum load (Halogen) non-dimmed. 75 watt maximum load. >0.93 Power Factor. <20% THD. Operating frequency >10kHz. Soft start circuitry to extend lamp life.

Tre20 Electronic Transformer

For use with solid state 12V systems. 105-300VAC primary voltage. 50/60Hz. Non Dimming. 20VA maximum load.

Wiring

Teflon® coated wire, 18AWG, 600V, 250° C rated and certified to UL 1659 standard. Adjustable stem mount additionally includes 24" or 36" 12/2 direct burial low voltage cable.

Hardware

Tamper resistant, stainless steel hardware.

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

ETL listed. 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 • info@bklighting.com

SUBMITTAL DATE

8-15-13

DRAWING NUMBER

SUB-1104-07

Submitted by Arizona Lighting Sales, Inc.

**Arizona
Lighting
Sales, Inc**

Job Name:
PHOENIX COUNTRY DAY SCHOOL - GYM
ADDITION
Architect: ARCHITEKTON

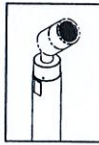
Catalog Number:
PP-S-18-T-TRE20-B-COLOR-120-S

Notes:

Type:

L

AZ14-43338



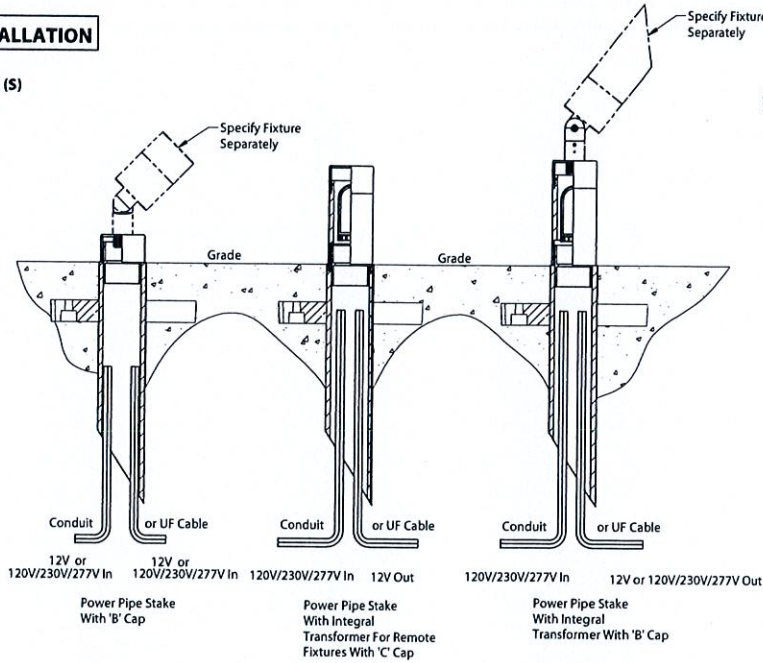
Specify Fixture Separately

POWER PIPE™ SYSTEM

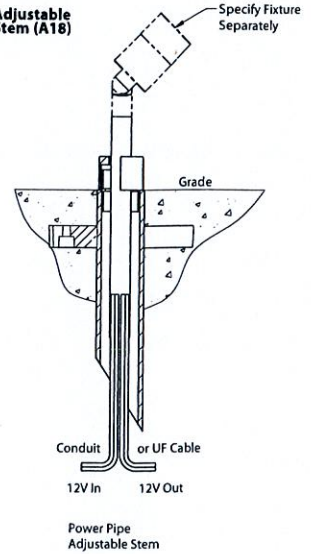
PROJECT:	
TYPE:	

INSTALLATION

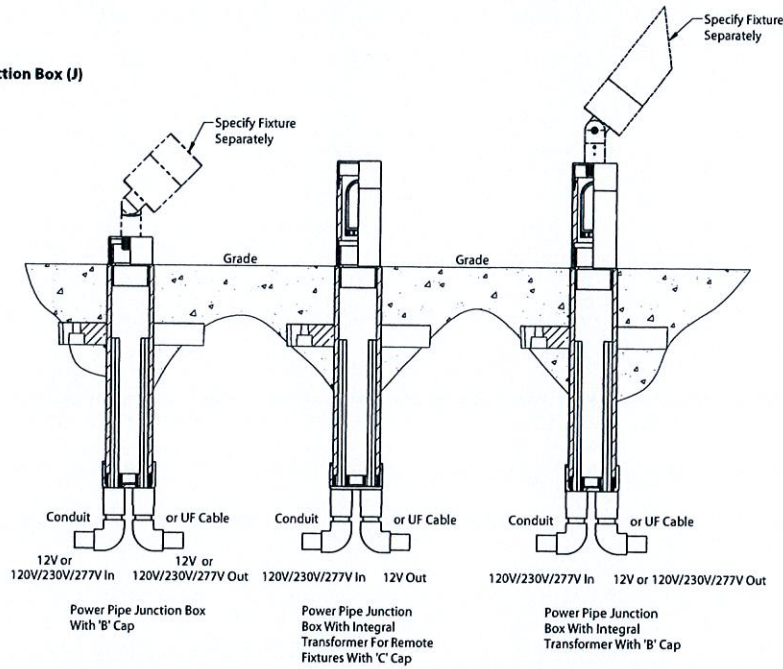
Stake (S)



Adjustable Stem (A18)



Junction Box (J)

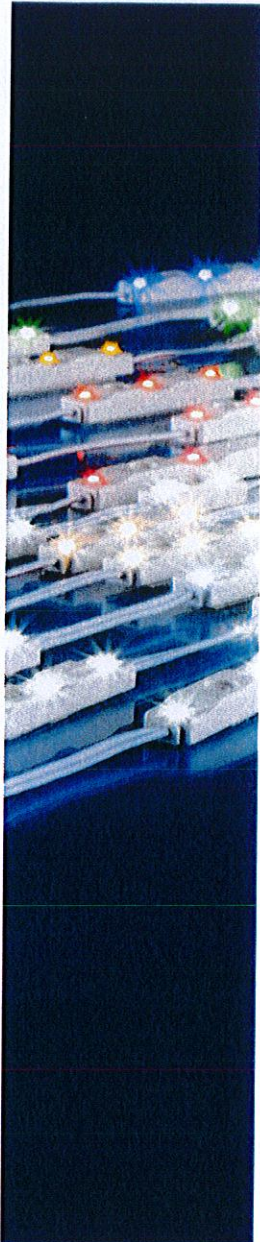


B-K LIGHTING

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www.bklighting.com • info@bklighting.com

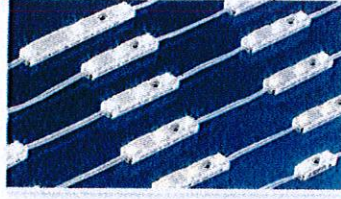
SUBMITTAL DATE
8-15-13

DRAWING NUMBER
SUB-1104-07



VL Plus2 Whites

Everyday standard face lit solutions



- VL Plus2 is 25% brighter than VL Plus
- **NEW** VL Plus2 HB Short is 28% brighter than VL Plus2 Short
- Short available in 5 shades of white
- Constant Current Technology
- UL and cUL Recognized, CE, CSA Certified
- RoHS and REACH compliant

Specifications

Dimensions L x W x H	Long	88 mm x 13 mm x 9 mm
	Short	60 mm x 13 mm x 9 mm
	Mini	34 mm x 11 mm x 9 mm
Viewing angle		120°
LEDs per module	Long/Short	3
	Mini	2
Modules per meter	Long	6,5
	Short	8
	Mini	13
Operating temperature		-40°C to +70°C
Protection class		IP66
Power per module	Long/Short	0,54 W
	Mini	0,42 W
Efficacy	Long/Short	93 lm/W
	HB Short	119 lm/W
	Mini	60 lm/W
Power supply		ScanLED 12 VDC
Fastening		Peel-n-stick and mechanical
Packaging	5 trays per carton	
	Long	50 modules per tray
	Short	75 modules per tray
	Mini	100 modules per tray

Item description	Part number	Lumens per module (nominal)
White Long (6500 K)	701269-6WLA2-MB	50
White Long (6500 K)	701269-WML-MB	40
White Short (7200 K)	701269-7WSA2-MB	50
White Short (6500 K)	701269-6WSA2-MB	50
White Short (5000 K)	701269-5WSA2-MB	50
White Short (4000 K)	701269-4WSA2-MB	50
White Short (3000 K)	701269-3WSA2-MB	50
White HB Short (6500 K)	701269-6WHA1-MB	64
White Mini (6500 K)	701269-6WMA2-MB	25



464 S FALCON DR. 2816 101
 Tempe AZ, 85281
 T 480.894.4837
 F 480.894.4838
 www.architekton.com

ARCHITEKTON

PHOENIX COUNTRY DAY SCHOOL
 - GYM ADDITION -

Phoenix Country Day School
 3801 E. Stanford Drive
 Paradise Valley, AZ 85253

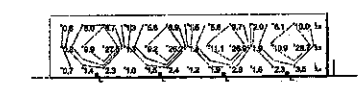
No.	Description	Date

Luminaire Schedule							
Symbol	Qty	Label	Description	Lum. Lumens	LLF	No. Lamps	Lumens/Lamp
○	37	F	LF6CFH132EB/BCFH1	1864	0.730	1	2400
▬	73	K	BRA-TDEC-T8-4-HRW-FC	2114	0.650	1	2600
○	6	N	1059-XX-NS-G-30	5204	0.650	1	N.A.
○	36	P	301-10LED2741-120/12-BZ	183	0.850	1	N.A.
○	10	H	LNC2-12LU-3K-3	1822	0.850	1	N.A.
○	6	J	LTV81FF-VWV-36L3K	2572	0.850	1	N.A.
○	4	Q	BA88	1253	0.650	1	N.A.
○	4	L	DS-LED-E23-SP-A4-XXX-13-B-360S	236	0.650	3	N.A.

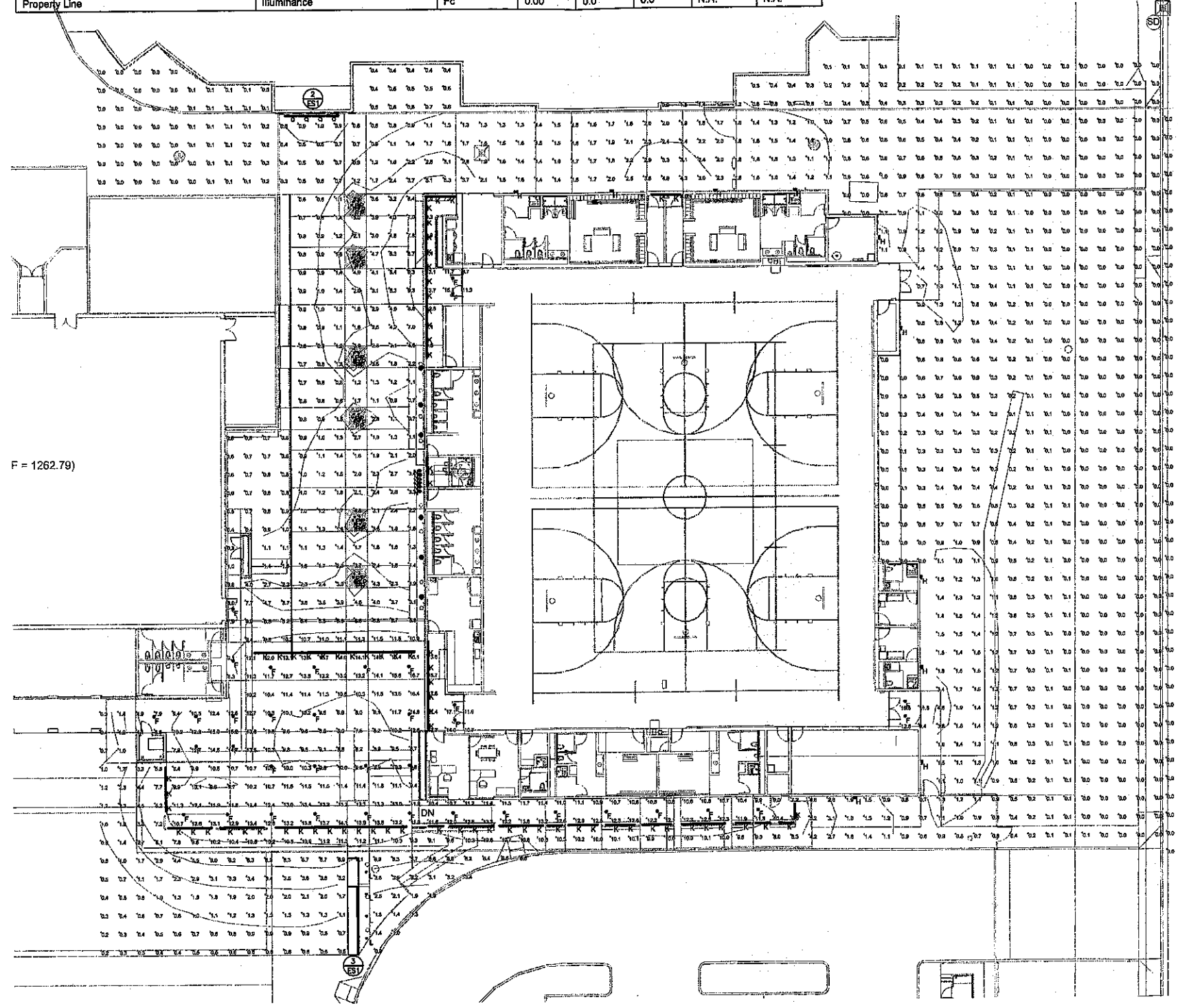
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Exterior	Illuminance	Fc	2.78	17.8	0.0	N.A.	N.A.
Monument Sign	Illuminance	Fc	6.48	28.7	0.7	9.23	41.00
Feature Wall	Illuminance	Fc	1.82	5.7	0.2	9.10	28.50
Property Line	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.

musical
donor

2 FEATURE WALL PHOTOMETRY
 SCALE: 1/8"=1'-0"



3 MONUMENT SIGN PHOTOMETRY
 SCALE: 1/16"=1'-0"



1 ELECTRICAL SITE PHOTOMETRY
 SCALE: 1/16"=1'-0"

HENDERSON ENGINEERS
 5243 NORTH 16TH STREET, SUITE 400
 PHOENIX, AZ 85016
 TEL 480.334.5200 FAX 480.334.5201
 www.hen-eng.com
 145000087
 AZ CONTRACT NUMBER: 104700
 DATES: 05/20/13

ELECTRICAL SITE
 PHOTOMETRY
ES-1

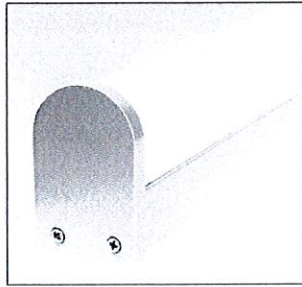
CHAD M. MOTWANI



www.birchwoodlighting.com

BRANDI
Wet Location Luminaire
TS/TSHO/TB

Surface Mount



Compact yet thoroughly robust, BRANDI is designed for architectural applications which demand a performance-driven Wet-Location luminaire that can keep the toughest elements out, but hold the most sophisticated style in.

BRANDI's 2 1/2" mounting profile and concealed weather-sealing feature, comprise a luminaire designed to withstand wet outdoor conditions while still blending into the surrounding architecture with ease. Various mounting orientations make installations in hard-to-reach areas less harrowing and allow light delivered almost anywhere: outdoor entrances, under walkways, pergolas or within structural eaves.

18 gauge steel housing, machined end caps, extruded acrylic and polycarbonate lenses and interior gasketing make BRANDI the perfect choice under the most demanding weather conditions.

UL and c-UL listed for wet locations. Made in the USA

FIXTURE SPECIFICATIONS

Lamping
Available with single T5, T5HO or T8 standard linear fluorescent lamps. Integral electronic ballast standard. Dimming and emergency battery options available. Consult factory for ballast availability and specifications.

Construction
18 gauge steel housing. Machined end-caps. High-impact extruded acrylic and polycarbonate lenses. Concealed weather-seal gasketing. Feed points accept 1/2" trade size threaded wet location conduit fittings.

Fixture Length
Fixtures are available in nominal lengths of 2, 3, and 4 feet. Continuous row mounting available. Specify (JR) Joiner band when ordering. See options for details.

Finishes
(RW) White and (AS) Silver powder coat finishes available. Custom finishes available - consult factory.

Lens Options
(FW) Frosted White, (FC) Frosted Clear or (CL) Clear acrylic lenses. (PW) Polycarbonate White and (PC) Polycarbonate Clear. Other custom lens options are available, consult factory.

Mounting
(SM) Surface Mount may be mounted on ceiling or wall in vertical or horizontal orientation.

Custom and Mods
We proudly specialize in manufacturing custom and modified luminaires and have the ability to modify most of our standard fixtures. Please contact factory with any inquiries.

Birchwood Lighting • 1302 East Hunter Avenue • Santa Ana, CA 92705 • 714.550.7118 fax 714.550.7151

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www.birchwoodlighting.com

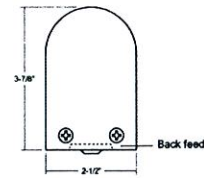
BRANDI
Wet Location Luminaire
TS/TSHO/TB

Surface Mount

SPECIFICATION CODE

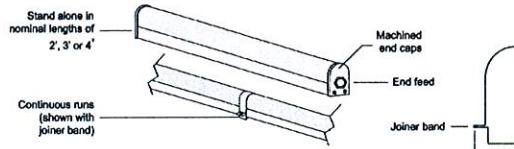
Lamp Type	Model	Nominal Length	Finish	Feed Point*	Lens	Voltage	Ballast	Option
T5	T5DC	2-2'	Powder Coat RW - White AS - Silver	BK - Flg on Back	FC - Frosted Clear PW - Frosted White CL - Clear	120	EB - Electronic (standard)	
T5HO		2-3'		1END - Flg on 1 End of Fixture/Run Only	PW - Polycarbonate White PC - Polycarbonate Clear	277	Dimming	
T8		4-4'	CR - Continuous Run	2END - Flg on Both Ends of Fixture/Run			ES - EcoSystem EBH - EcoSystem H-Series	

Dimensions



Nominal Length	Actual Length
2	23 3/4" 23 3/4" 23"
3	35 1/2" 35 1/2" 37"
4	46 3/4" 46 3/4" 48"

NOTES
1 specify length in nominal feet, or
2 contact factory for custom finish
3 specify ballast with or without
4 4' fixture only
5 each end feed adds 0.5' to overall
6 not available in 4' length



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714.550.7118 fax 714.550.7151

111

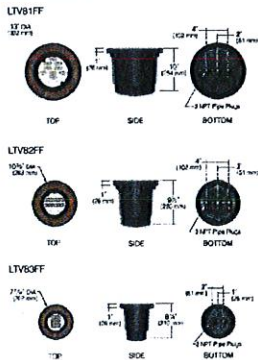


Type:
Job:
Fixture Catalog number:

Ordering Example: LTVB1FF/SP/36L/UV/SRHL/RCA81

Specifications

Four Box rough-in housings ships separately and as a quick-ship if requested.



LIGHT DISTRIBUTIONS:
LTVB1FF, LTVB2FF, LTVB3FF



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Lightvault® LTV8FF
Flat Frame
1/15/14 • LTV8FF_spec.pdf

Optional Features:

Approvals:

CAUTION: Fixtures must be used at 120V.
Opening in component module may void warranty.

Date:
Page: 1 of 3

HOUSING: Pour Box rough-in housing for installation below grade. High temperature UV resistant thermal plastic, 3/8" minimum wall, black. Includes a splice box with milled plastic splice cover and silicone gasket. Three 1" NPT in bottom for through wiring on LTVB1 and LTVB2. Two 1" NPT in bottom for through wiring on LTVB3. 107 cu. in. splice area for LTVB1. 52 cu. in. splice area for LTVB2. 24 cu. in. splice area for LTVB3. Housing, supplied with protective aluminum debris shield mask with orientation label for proper installation alignment for clean and easy installation in concrete pad or soil. Ships separately and as a quick-ship if requested.

COMPONENT MODULE: One-piece impregnated cast bronze, fully sealed component module secured to the face trims from the underside. A high temperature, IP67 sealed cable extends from the component module to the splice box inside the housing. The fully assembled component module is secured to the housing with (4) 1/2-20 tamper-resistant high grade stainless steel fasteners.

FACE TRIM: One-piece cast bronze lens ring fastened to the component module from the underside shall provide a flat surface.

OPTICAL MODULES: Spot (SP), Narrow Flood (NF), and Wall Wash (WW) optical modules are adjustable up to 15° utilizing a Bluetooth enabled motor assembly.

BLUETOOTH: Integral Bluetooth module used to adjust optics and dim fixture to desired setting when paired with KIM LTVB Remote App via cellular/tablet device. Fully qualified Bluetooth 1.1, 1.2, 2.0, 2.1, Bluetooth v2.0+EDR compatible with Android devices running Android Gingerbread API level 9 or forward, Bluetooth 4.0 LE compatible with iOS devices - iPhone 4S and later, 5th generation iPod touch, the iPad Mini and the 3rd generation and later of the full size iPad with iOS 5 or later. Bluetooth Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the internet at Apple App Store or Google Play.

LENS: Clear 3/8" thick tempered glass lens and silicone gasket is retained securely within the component module.

OPTIONS: Slip Resistant Lens (SR), Hex Cell Louver (HL), Prismatic Lens (PL), Rebar Cage Anchor (RCA). See page 3 for details.

ELECTRICAL EQUIPMENT: All electronic components are UL and CSA recognized and mounted directly to the component module for maximum heat dissipation and modularity. Driver is IP67 with -30°C minimum temperature rating.

DRIVE-OVER DURABILITY: When installed in concrete, fixture will withstand drive-over by vehicles weighing up to 10,000 lb.

CERTIFICATION: (UL1598, UL8750).

U.S. Patents Pending.

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Type:
Job:



Standard Features

COMPONENT MODULE:

Lens Ring	Optical Module	Source	Color Temperature	Voltage	Rated System Watts	Absolute Lumens	Center Beam Candle Power*	Beam Angle†
LTVB1FF	SP	36L	3K 4K 6K	UV	41W	2447 3067 3136	29459 36773 41827	12°
LTVB1FF	NF	36L	3K 4K 6K	UV	4-0V	2164 2718 2737	2422 3022 3048	54°
LTVB1FF	WW	36L	3K 4K 6K	UV	4-0V	2572 3206 3521	4188 5220 5736	60°
LTVB2FF	SP	18L	3K 4K 6K	UV	23W	1297 1647 1722	16787 20282 22859	12°
LTVB2FF	NF	18L	3K 4K 6K	UV	23W	1046 1406 1465	1272 1687 1758	52°
LTVB2FF	WW	18L	3K 4K 6K	UV	20W	1081 1385 1544	2336 2992 3336	58°
LTVB3FF	SP	12L	3K 4K 6K	UV	14W	833 1008 1096	10750 13008 14144	12°
LTVB3FF	NF	12L	3K 4K 6K	UV	14W	706 885 929	863 1082 1136	52°
LTVB3FF	WW	12L	3K 4K 6K	UV	14W	804 1031 1149	1664 2134 2378	60°

KEY: FF = Flat Frame; SP = Spot; NF = Narrow Flood; WW = Wall Wash; UV = Universal Voltage; 36L = 36 LEDs; 18L = 18 LEDs; 12L = 12 LEDs
3K = 3000K to 3175K; 4K = 3800K to 4000K; 6K = 4600K to 5600K; UV = Universal Voltage; shall range from 120V-277V with a 10% tolerance.
* The SP and NF are based on Candela output unit straight up. The WW is for highest candle angle

Spectroradiometric	3K	4K	5K
Correlated Color Temp. CCT (K)	2800K to 3175K	3800K to 4000K	4600K to 5600K
Color Rendering Index (CRI)	>80	>80	>70
Power Factor	>90	>90	>90

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