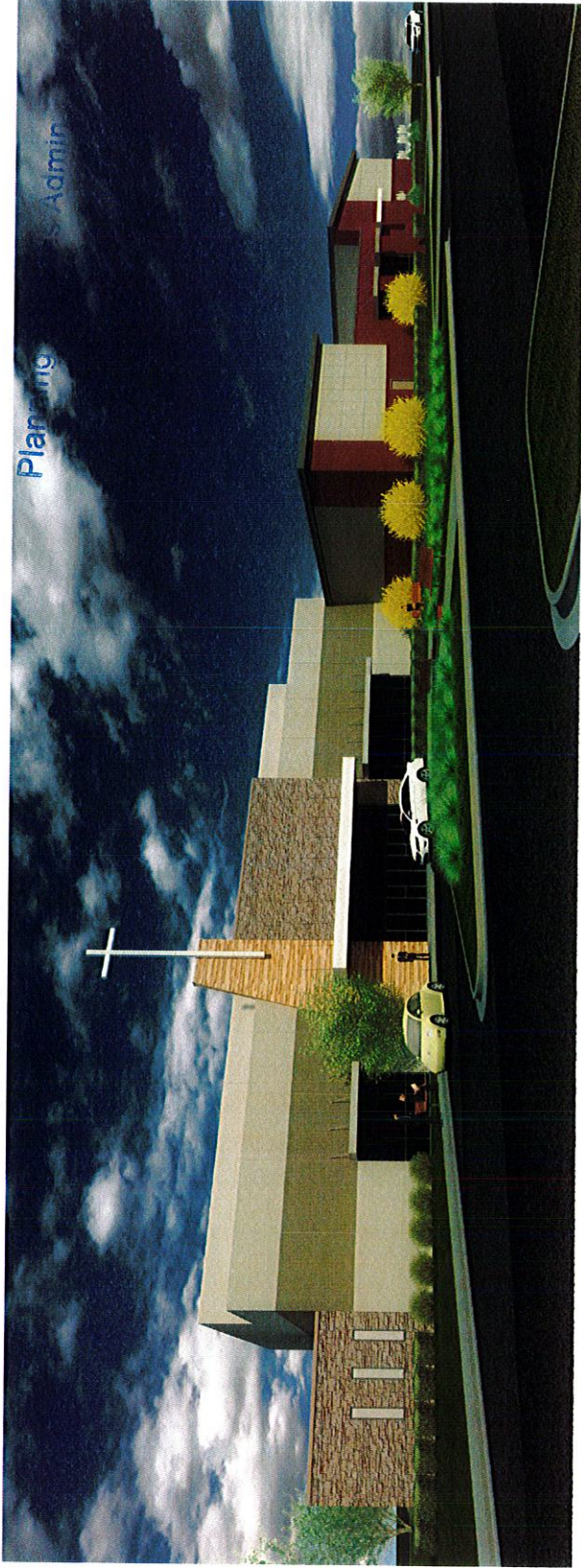
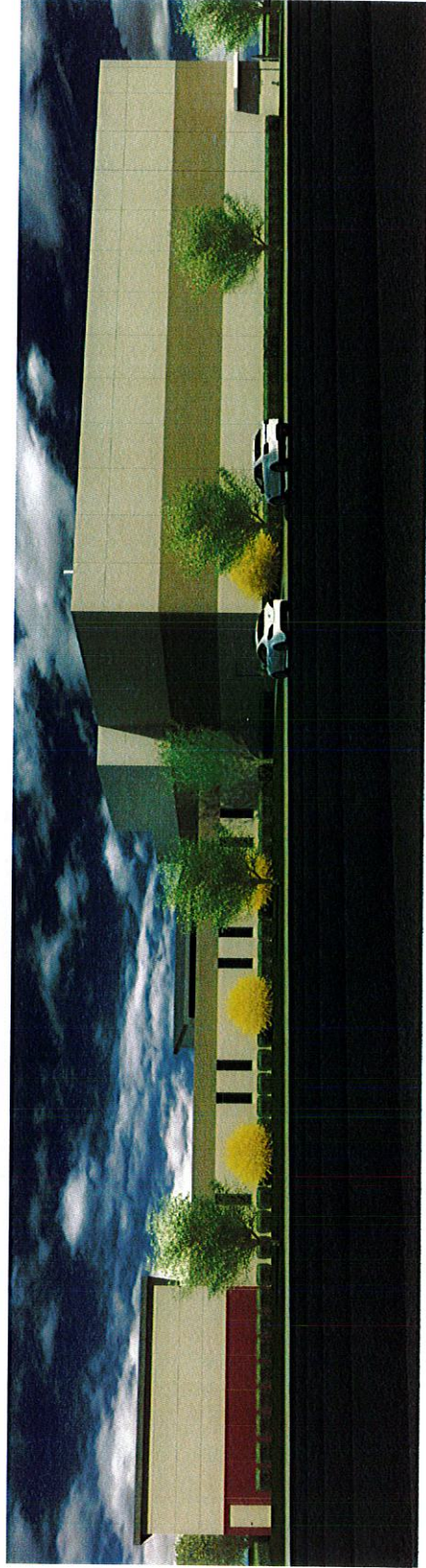


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Phone: 816.234.1100 Fax: 816.234.1101
www.mantelteter.com

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The Summit
VIEW HIGH DRIVE & CHIPMAN ROAD
Lee's Summit, Missouri

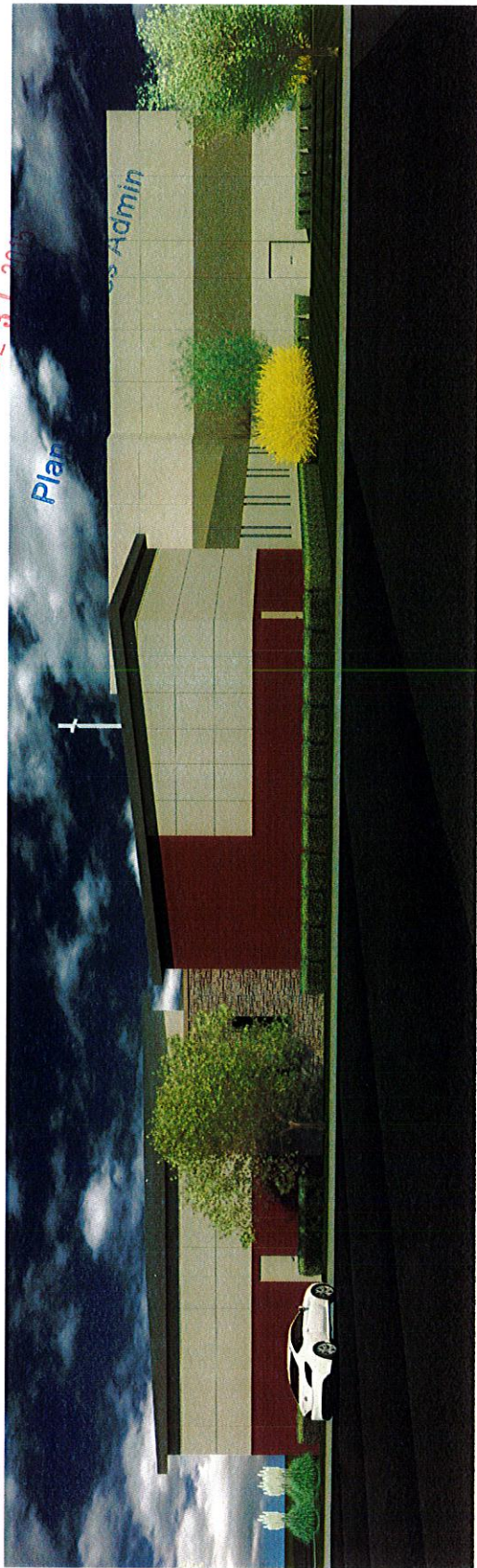
PROJECT # 08-545
ISSUE DATE: 07/31/2015
DRAWN BY: Author
CHECKED BY: Checker
REVISIONS:
1
2
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5

SHEET No.
A3
EXTERIOR RENDERINGS

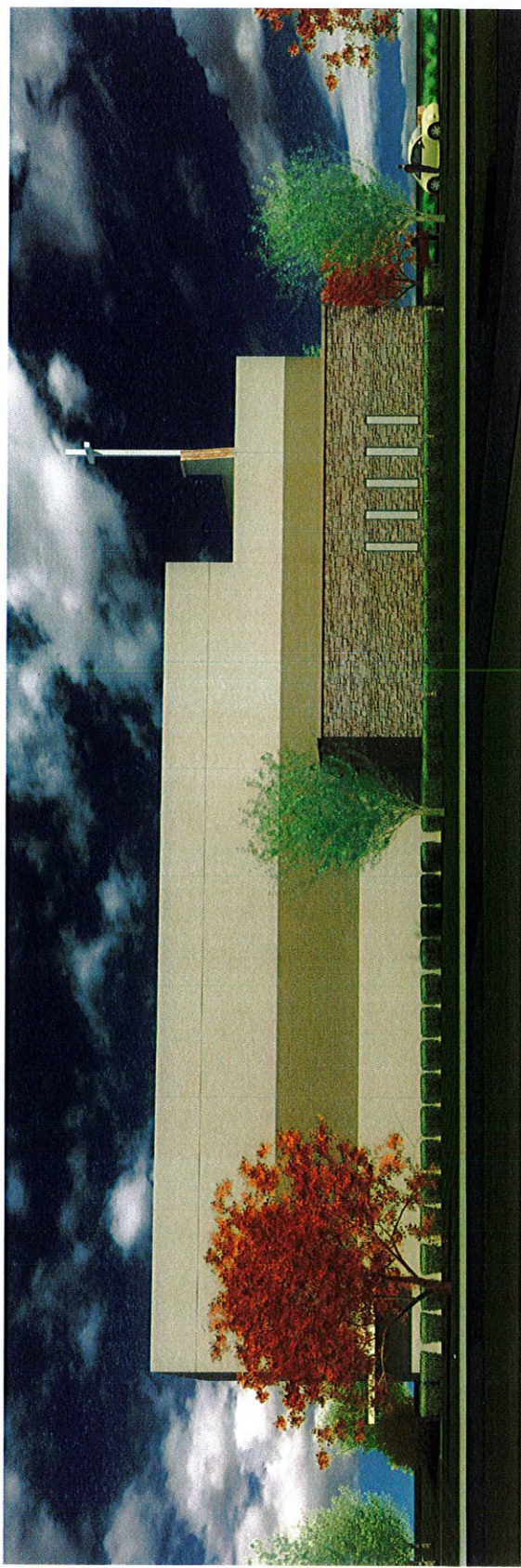
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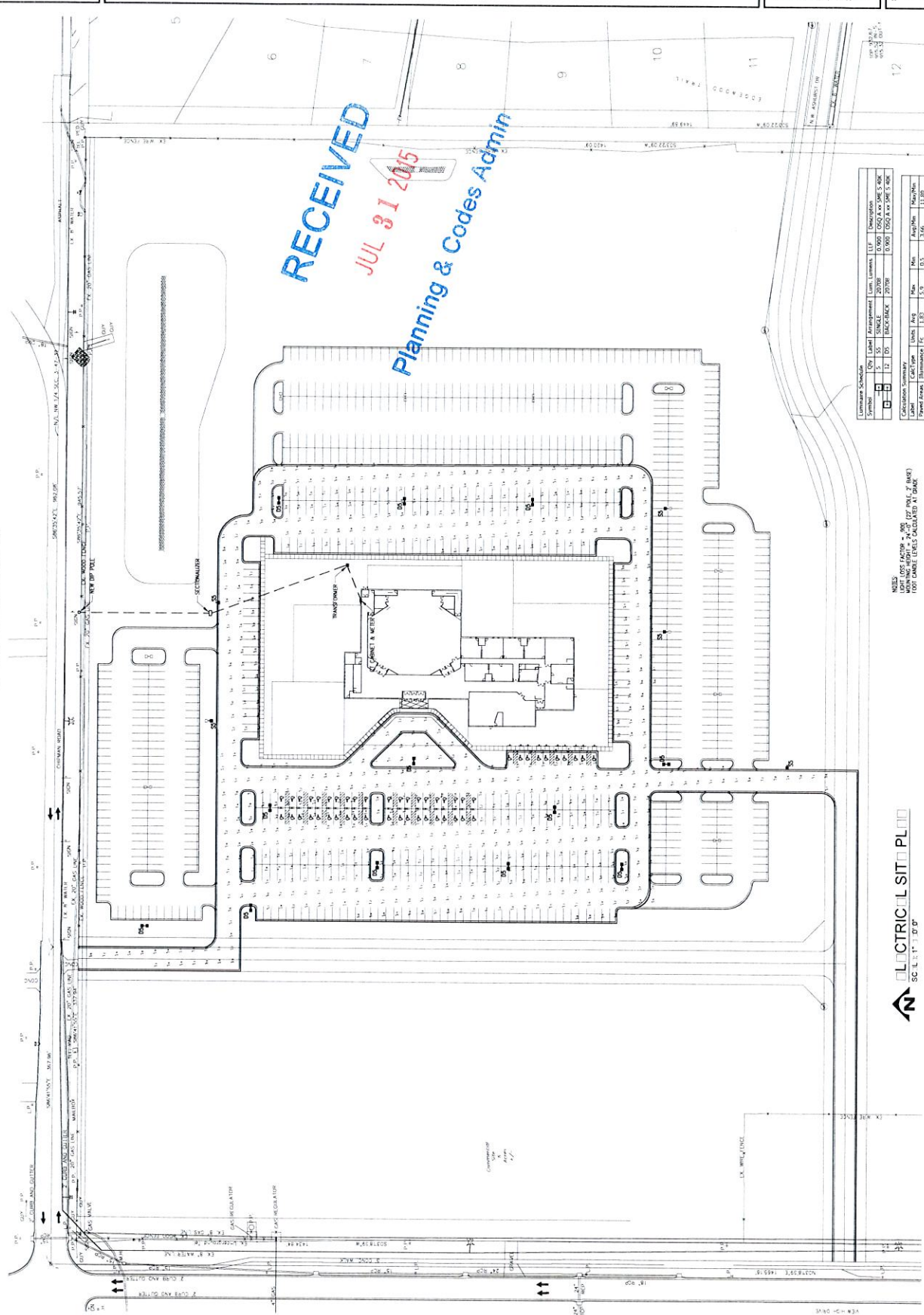
A New Worship Facility for:
The Summit
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Lee's Summit, Missouri

PROJECT #: 08-546
ISSUE DATE: 07/31/2015
DRAWN BY: Author
CHECKED BY: CRORR
REVISIONS:
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SHEET No.
A4
EXTERIOR RENDERINGS

- 2015-117 -

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JUL 31 2015
Planning & Codes Admin

LIMITS SCHEDULE			
SYMBOL	Label	Quantity	Description
1	12" WATER	10,000	10,000' x 12" WATER
2	12" GAS	10,000	10,000' x 12" GAS
3	12" SANITARY	10,000	10,000' x 12" SANITARY

CALCULATED QUANTITIES			
Label	Units	Qty	Price
12" WATER	Linear Feet	10,000	1.00
12" GAS	Linear Feet	10,000	1.00
12" SANITARY	Linear Feet	10,000	1.00

NOTES:
1. SEE SHEET 1 FOR SITE PLAN.
2. SEE SHEET 2 FOR UTILITY PLAN.
3. SEE SHEET 3 FOR EROSION CONTROL PLAN.

ELDECONE, INC.
12000 N.W. 10th St.
Miami, FL 33150
Tel: 305.444.1234
Fax: 305.444.1235
www.eldecone.com

ELDECONE
ELECTRICAL DESIGN & CONSTRUCTION
6200 N.W. Kelly Drive, Suite 100
Miami, FL 33150

The Summit
A New Worship Facility for
Lees Summit, Missouri
Address

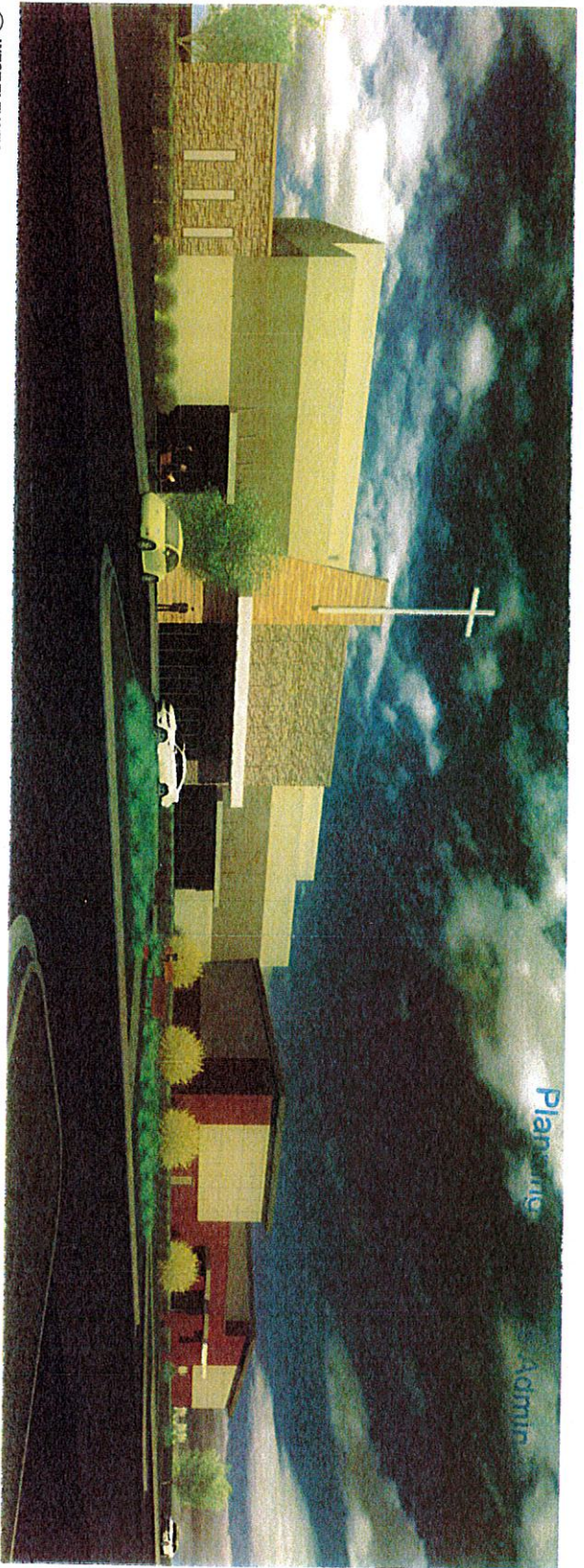
PROJECT NO.	0-31-201
ISSUED DATE	0-31-201
DATE	0-31-201
BY	ELDECONE
CHK'D	ELDECONE
DATE	0-31-201
BY	ELDECONE
CHK'D	ELDECONE
DATE	0-31-201

ES1
SHEET NO.
ELECTRICAL SITE PLAN

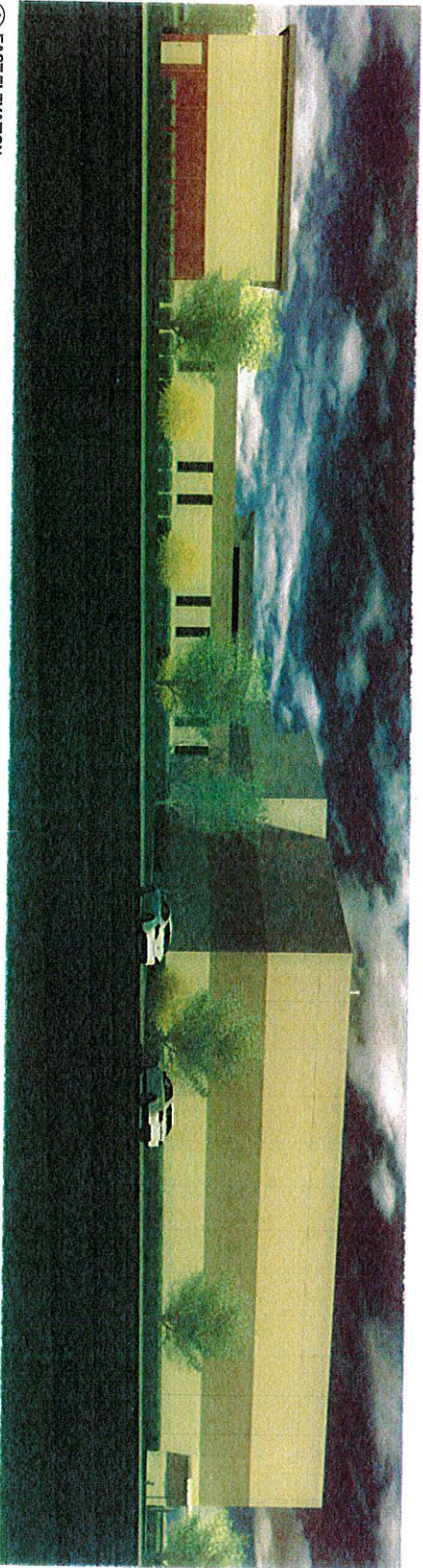
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A New Worship Facility for:
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Lee's Summit, Missouri

PROJECT:	20-05
ISSUED BY:	02/10/15
DRAWN BY:	Author
CHECKED BY:	Director
REVISIONS:	
1.	
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SHEET No.
A3
EXTENSION RENDERINGS

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Plan

Admin

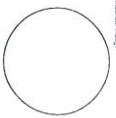
1 SOUTH ELEVATION
A4 N15



2 NORTH ELEVATION
A4 N15



CONSULTING AND DESIGN



GOVERNMENT OF TEXAS
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713.865.1234
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Lee's Summit, Missouri

PROJECT # 08-545
ISSUE DATE 07/21/2015
DRAWN BY J. AUBREY
CHECKED BY J. AUBREY
REVISIONS:
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SHEET No. **A4**
EXTERIOR RENDERINGS

- 2015-117 -

SUBMITTAL

**LEE'S SUMMIT
UNITED METHODIST
CHURCH
SITE LIGHTING**

LIGHT FIXTURES

-2015-117-

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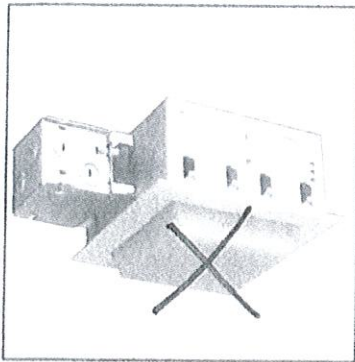
FIXTURE SCHEDULE

THE SUMMIT

Lee's Summit United Methodist Church

September 1st, 2015

- A. 2X4, DIRECT/INDIRECT, 3 LAMP, LAY-IN FIXTURE
- AE. SAME AS "A" WITH EMERGENCY BALLAST
- B. 2X4, ACRYLIC LENS, 3 LAMP, 2 BALLAST, LAY-IN FIXTURE
- C. SAME AS "B" WITH SINGLE BALLAST
- D. 1X4, 2 LAMP, STRIP FIXTURE, WITH WIRE GUARD
- E. SAME AS "C" WITH FLANGE KIT
- F. 2X2, ACRYLIC LENS, 2 LAMP, LAY-IN FIXTURE, WITH FLANGE KIT
- G. RECESSED FLUORESCENT CAN LIGHT, 32 WATT CFL
- GE. SAME AS "G" WITH EMERGENCY BALLAST
- H. RECESSED FLUORESCENT CAN LIGHT, 42 WATT CFL
- HE. SAME AS "H" WITH EMERGENCY BALLAST
- I. RECESSED, DIMMABLE, LED CAN LIGHT
- J. PENDANT FIXTURE, DIMMABLE LED, 100 WATT, DMX CONTROL, SRS SPECIFIED
- K. INCANDESCENT, DIMMABLE, CYLINDER
- L. 4 LAMP, FLUORESCENT, INDUSTRIAL STYLE, 2 BALLAST FIXTURE
- M. FLUORESCENT LAMPED CYLINDER, (2) 42 WATT CFL
- ME. SAME AS "M" WITH EMERGENCY BALLAST
- N. DECORATIVE, DIMMABLE, PENDANT FIXTURE (TBD)
- O. NOT USED
- P. UNDER CANOPY MOUNTED DOWN LIGHT
- Q. EXTERIOR CROSS UP-LIGHT
- R. UNDER CABINET FLUORESCENT FIXTURE
- S. BOLLARD, LED
- T. DECORATIVE WALL MOUNTED UP-DOWN LIGHT
- U. EGRESS DOOR SECURITY LIGHT WITH EGRESS EMERGENCY LIGHT
- V. WALL MOUNTED UP-LIGHT
- W. SECURITY WALL PACK
- X. EXIT SIGN WITH BATTERY BACK-UP
- Y. TWIN HEAD EMERGENCY LIGHT
- Y1. TWIN HEAD EMERGENCY LIGHT, HIGH CAPACITY
- Z. EXTERIOR EMERGENCY EGRESS LIGHT FIXTURE
- S5. SINGLE HEAD PARKING LOT POLE LIGHT (see ES1 for pole light heights)
- D5. TWIN HEAD PARKING LOT POLE LIGHT (see ES1 for pole light heights)



8" Lensed Square CFL Downlights **LFFQSQ-H9-18EB,** **LFFQSQ-H9-26EB**

Two 18W Quad Tube 4-Pin Lamps
Two 26W Quad Tube 4-Pin Lamps
120V, 208V, 240V, 277V, or 347V

APPLICATIONS:

The LFFQSQ offers an 8" square aperture lensed, compact fluorescent downlight solution with your choice of trim and lens options. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality spaces where a lensed fixture is required.

HOUSING:

22-gauge cold rolled steel platform with white baked enamel finish. Prewired J-box with snap-on cover for easy below ceiling access. 347V available.

REFLECTOR:

Diecast aluminum trim with matte white finish. Prismatic glass lens, drop opal glass lens, or prismatic Lexan® lens. Optional with Alzak upper reflector.

BALLAST:

One (1) 18W or 26W compact fluorescent Class 'P' electronic ballast. HPF and EOL protection standard. Accessible from below ceiling.

LAMP:

Two (2) 18W quad tube (G24q-2 base), or two (2) 26W quad tube (G24q-3 base) 4-pin compact fluorescent lamps. Lamps furnished by others or as option below.

SOCKET:

Two (2) injection molded sockets.

INSTALLATION:

Supplied with slip strap (B7) bar hangers for use on joists up to 24" O.C.

LABELS:

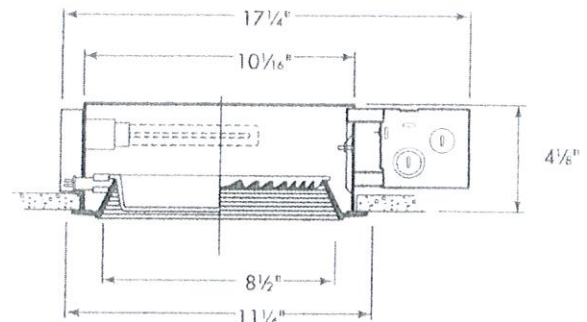
UL listed or UL/CSA listed with CDN option for damp locations

Approved for through wiring

Non-type I.C. Wet location listed when used with lens and under a covered ceiling.

LAMP INCLUDED OPTION:

Specify lamp type Q4 (Quad 4-pin) and temperature as shown below.



FLAT LENS
NO DROP LENS

CATALOG NUMBER:

EXAMPLE: LFFQSQ-H9 18EBDM 9SRDOP LP18Q430K

HOUSINGS	HOUSING OPTIONS	TRIMS	TRIM OPTIONS	ACCESSORIES	LAMP ACCESSORIES
<input type="checkbox"/> LFFQSQ-H9-18EB 8" lensed square CFL downlight, (2) 18W Quad tube, multi-volt electronic ballast <input checked="" type="checkbox"/> LFFQSQ-H9-26EB 8" lensed square CFL downlight, (2) 26W Quad tube, multi-volt electronic ballast	<input type="checkbox"/> CDN Canadian electrical code compliant ballast disconnect <input type="checkbox"/> CDN 347V³ Canadian electrical code compliant ballast disconnect <input type="checkbox"/> DM Electronic Analog Dimming Ballast to 3%, 4-wire, 0-10V (120-277V) <input type="checkbox"/> EMR^{1,2} Emergency battery pack with remote test switch and indicator light. Above ceiling access required. <input type="checkbox"/> FSDFA Fuse kit installed at factory <input type="checkbox"/> RIF¹ Radio interference filter (single circuit) <input type="checkbox"/> ECDM Lutron EcoSystem or 3-wire line voltage dimming ballast (120-277V). Dims to 5%.	<input checked="" type="checkbox"/> 9FLXPR Prismatic Lexan lens <input type="checkbox"/> 9SRFR Regressed black steps with fresnel glass lens <input type="checkbox"/> 9SRTPR Regressed black steps with tempered prismatic glass lens <input type="checkbox"/> 9FPR Prismatic glass lens <input type="checkbox"/> 9FDOP Drop opal glass lens <input type="checkbox"/> 9FFR Fresnel glass lens	<input checked="" type="checkbox"/> TLG Trim lens gasket (factory installed) <input type="checkbox"/> TPS Tamper resistant (factory installed) <input type="checkbox"/> TRG Trim ring gasket (factory installed)	<input type="checkbox"/> FSDFI Fuse kit for field installation <input type="checkbox"/> PKT261 T-bar adaptor for B7 bar hangers	<input type="checkbox"/> LP 26Q4 35K -wattage= 18 or 26 -type Q4 (Quad 4-pin) -temp= 27K, 30K, 35K, 41K (Kelvin) Requires two lamps.

¹RIF and EM options not offered in combination

²CP not offered in combination with RIF1 or EM

³Dimming option not available for 347V



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LFR-CFL-009

PHOTOMETRIC DATA LifeFrame™ - 8" Lensed Square CFL Downlights

LFFQSQ-H9-18EB, LFFQSQ-H9-26EB

BALLAST DATA

	18W Quad			26W Quad		
	120V	277V	347V	120V	277V	347V
Total System Watts	38W	38W	36W	57W	57W	58W
Input Current (Amps)	0.32	0.14	0.11	0.48	0.21	0.17
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	1	>98%	>98%	1
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

LAMP DATA

	18W Quad	26W Quad
Rated Watts	1250	1800
Rated Lumens	69	69
Efficacy (LPW)	10,000 hours	10,000 hours
Rated Life	82	82
CRI	0° F	0° F
Min. Starting Temp.		

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average 0°	Average 45°	Average 90°
45°	5674	6652	7433
55°	3675	4624	4189
65°	2628	2842	3045
75°	2540	2751	2818
85°	2340	2208	2215

LFFQSQ-H9-26EB 9FPR

Lamp: Two 26W Quads

Spacing Criteria:

0° = 1.3

90° = 1.2

Efficiency: 26.1%

AVERAGE INITIAL FOOTCANDLES

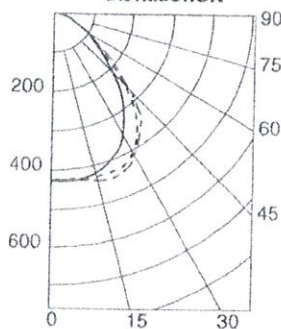
Multiple Units (Square Array)

Ceiling 80% Wall 50% Floor 20%

26W Quads

SPACING	RCR1	RCR3	RCR7
4.0	32	25	17
5.0	20	16	11
6.0	14	11	8
7.0	10	8	5
8.0	8	6	4

CANDLEPOWER DISTRIBUTION



CANDLEPOWER SUMMARY

Angle	0°	45°	90°
0	431	431	431
5	436	436	433
15	423	436	444
25	380	424	435
35	303	357	371
45	186	218	245
55	98	123	112
65	52	56	60
75	31	33	34
85	9	9	9

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance														
	80%			70%			50%			30%			10%		
	20% Effective Floor Cavity Reflectance														
	% Wall Reflectance														
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
1	29	28	27	26	28	28	27	26	26	26	25	25	24	23	
2	27	25	24	23	27	25	24	23	24	23	22	22	22	21	
3	25	23	21	20	25	23	21	20	22	21	20	20	19	18	
4	24	21	19	18	23	21	19	18	20	19	17	20	18	17	
5	22	19	17	16	21	19	17	16	18	17	16	18	17	15	
6	20	17	16	14	20	17	15	14	17	15	14	16	15	14	
7	19	16	14	13	19	16	14	12	15	14	12	15	13	12	
8	18	15	13	11	17	14	12	11	14	12	11	14	12	11	
9	16	13	11	10	16	13	11	10	13	11	10	13	11	10	
10	15	12	10	09	15	12	10	09	12	10	09	11	10	09	

LFFQSQ-H9-26EB 9FPR

Test No. B2378B

NOTES

Refer to www.prescolite.com for additional photometric tests (IES Files).



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ILUMINARC®

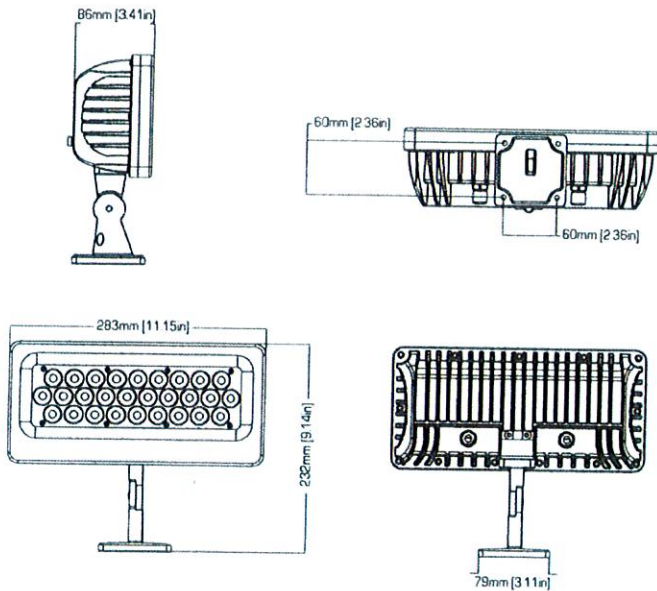
ILUMIPANEL 28 IP OPTIC 30 RGB

Item Number: 01620438

Client: _____

Project: LEE's Summit Umc

Date: _____ Type: Q



LIGHT SOURCE & OPTICAL SPECIFICATIONS

Light Source: 28 LEDs (10 red, 9 green, 9 blue) 1 W (350 mA)
Light Source Lifespan: 50,000 hours based on LED manufacturer's specifications
Installed Optics: 30°
Beam Angle: 27°
Field Angle: 53°
Lumens: 719
Base Illuminance: 98 lux @ 5 m
Efficacy: 21.1 lm/W
Color Temperature Presets: N/A
Minimum Distance to Illuminated Surface: 4 in (92 mm)

CONSTRUCTION & PHYSICAL SPECIFICATIONS

Length: 11.1 in (283 mm)
Width: 3.4 in (87 mm)
Height: 9.3 in (235 mm)
Weight: 6.5 lb (3 kg)
Color: Off white
Ingress Protection Rating: IP67
Housing Material: Cast aluminum
Lens Cover: Impact resistant glass
Installation Orientation: Any

CONTROL SPECIFICATIONS

Control Protocol: USITT DMX-512a
Control Channels: 1, 3, 4 or 7
Operating Modes: Selectable personalities
Solid (1-channel): dimmer
Arc 1 (3-channel): red, green, blue
Arc 1+D (4-channel): dimmer, red, green, blue
Arc Full (7-channel): dimmer, red, green, blue, color macros, strobe, dimming speed
Stand Alone Control: N/A
Remote Addresser: Ilumicode
Data Connection: 9.8 ft (3 m) Waterproof cable

ELECTRICAL SYSTEM SPECIFICATIONS

Input Voltage: 100 to 240 VAC, 50/60 Hz (auto-ranging)
Power and Current: 37.8 W, 0.5 A @ 120 V
36 W, 0.4 A @ 230 V
Power Supply: Electronic internal
Dimmer: Electronic
Power Linking: N/A
Power Connection: 9.8 ft (3 m) Waterproof cable

THERMAL SPECIFICATIONS

Cooling: Convection
Startup Temperature Range: -4 °F to 113 °F (-20 to 45) °C
Operating Temperature Range: -40 °F to 113 °F (-40 to 45) °C
Storage Temperature Range: -40 °F to 167 °F (-40 to 75) °C

REGULATORY & VOLUNTARY QUALIFICATION

Certification Listings: MET, CE
Environment: Wet location, IP67
Warranty: 36 month manufacturer's limited warranty (for covered regions only)

Product
Web Page



WWW.ILUMINARC.COM - INFO@ILUMINARC.COM

Iluminarc reserves the right to make improvements to this product and its specifications at any time without notice.

ILUMINARC
5200 NW 108th Ave.
Sunrise, FL 33351
+1.954.923.3680

ILUMINARC®

ILUMIPANEL 28 IP OPTIC 30 RGB

Item Number: 01620438

Client: _____

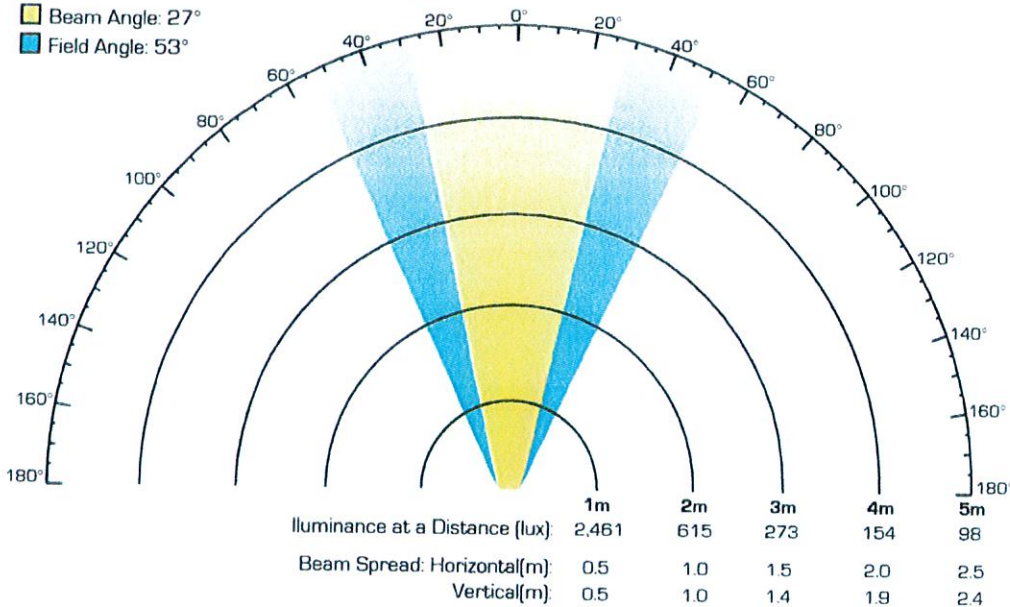
Project: LBE's SUMMIT UMC

Date: _____ Type: Q

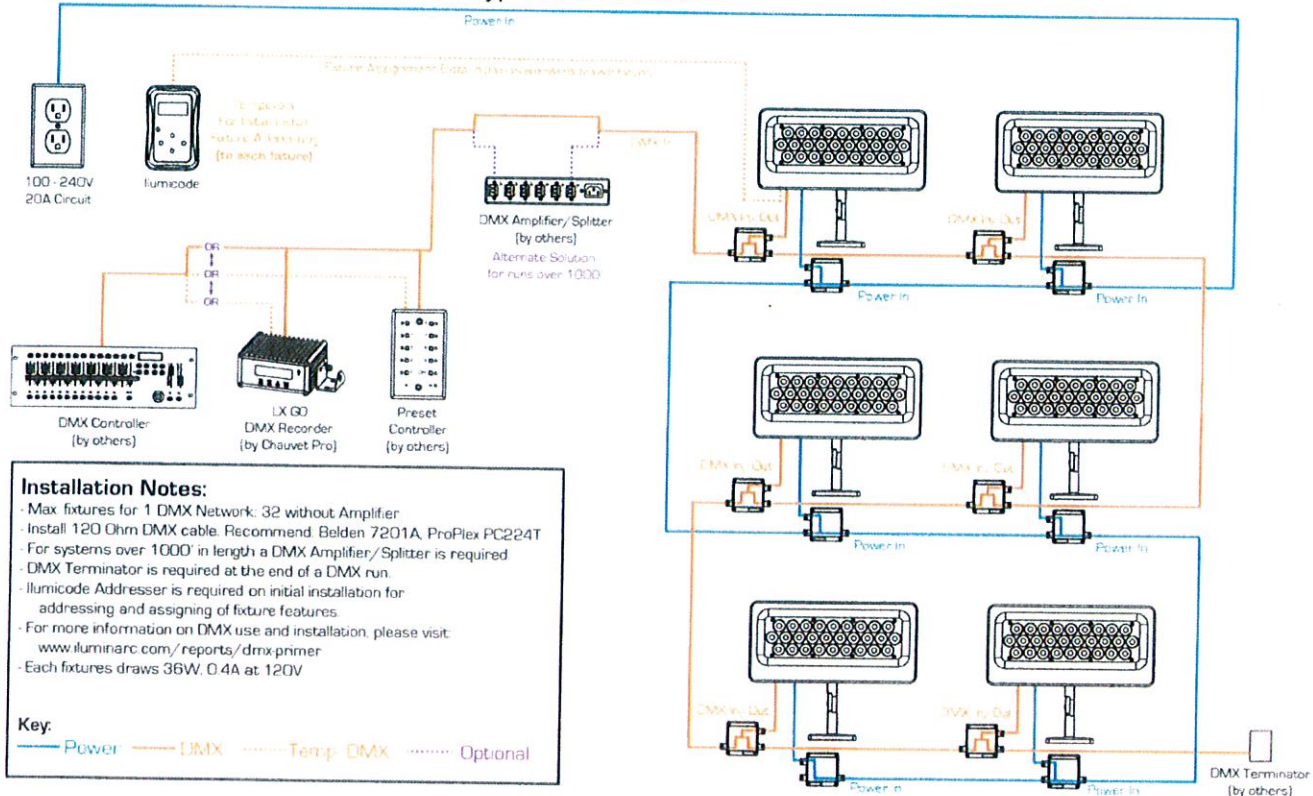
Illumipanel 28 IP Optic 30 RGB

■ Beam Angle: 27°

■ Field Angle: 53°



Illumipanel 28 IP Optic 30 RGB Typical Installation



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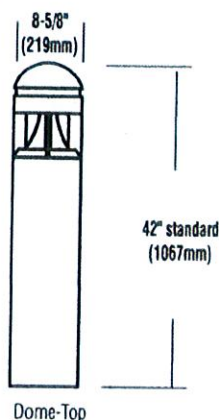
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LED BOLLARD LIGHT (XBVRD)

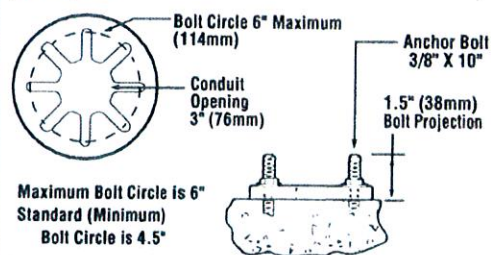


DIMENSIONS



BASE DETAIL

Note: Base plate dimensions may change without notice. Do not use for setting anchor bolts. Consult factory for base plate templates.



SHIPPING WEIGHTS - LED Bollard

Catalog #	Est. Weight (kg/lbs.)	Length (mm/in.)	Width (mm/in.)	Height (mm/in.)
XBVRF	25/56	1318/51.875	311/12.25	251/9.875
XBVRD	25/56	1318/51.875	311/12.25	251/9.875
Anchor Bolts (3/8" x 10")	1/set			1/2

LIGHT OUTPUT - XBVR

Description	# of LEDs	Output Lumens	Watts
Cool White XBVR ID	24	1338	38
Neutral White XBVR ID	24	1224	38
Warm White XBVR ID	24	856	38

U.S. and international patents pending

EXPECTED LIFE - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

LEDS - An array of 24 select high-brightness LEDs in Cool White (5000K), Warm White (3500K) or Neutral White (4000K) color temperature, 69 CRI (nominal)

REFLECTOR/DISTRIBUTION - Indirect. Photometric data is tested in accordance to IESNA Procedures.

HOUSING - Crown: Virtually tamper-proof concealed stainless steel fasteners in the cast aluminum crown assembly.

Lower Housing: One-piece, .322 inch seamless, extruded aluminum. Various heights are available in 6" increments starting at a minimum of 30" (maximum height is 60"). Lower housing attaches to cast aluminum base plate with four stainless steel roll pins.

OPTIONAL ROUGHNECK REINFORCEMENT - .375" thick zinc plated, steel base plate with welded U shaped reinforcement. 3/8" diameter 302 stainless steel roll pins with 10,000 lb. shear load.

LENS/GASKET - One-piece, clear acrylic lens enclosure fully gasketed at top and bottom edge.

ANCHOR BOLTS - Requires four heavy-duty 3/8" x 10" galvanized steel anchor bolts.

ELECTRICAL - Universal voltage power supply (120-277 VAC, 50/60 Hz). 347-480V also available - 400mA is standard. Surge protector meets IEEE C62.41.2-2002, Scenario 1 Location Category C.

DRIVER - State-of-the-art driver technology designed specifically LSI LED light sources provides unsurpassed system efficiency. Driver complies with IEC and FCC standards.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F).

FINISH - Each fixture is finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white, graphite, satin verde green and metallic silver.

DECAL STRIPING - Color-coordinated decal is available in 9 standard decal colors or by custom order from a selection of hundreds. Decal is guaranteed for five years against peeling, cracking, or fading.

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS - Application layouts are available upon request. Contact LSI Applications Group at lighting.apps@lsi-industries.com.

LISTING - Listed to U.S. and Canadian safety standards. Suitable for wet locations. DLC - not all possible distributions are DLC approved. Please refer to LSI or DLC web site for specific listings.

Also available in traditional light sources

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Intertek
Suitable for wet locations



S

LED BOLLARD LIGHT (XBVRD)

Crossover
LED LIGHTING TECHNOLOGY

PRODUCT ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XBVRF ID LED 24 400 CW UE BRZ 45**

Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temp	Line Voltage	Finish	Options
XBVRF Flat-Top XBVRD Round-Top	ID - Indirect	LED - Light Emitting Diode	24	400	CW - Cool White NW - Neutral White WW - Warm White	UE - Universal Electronic (120-277V 50/60Hz) 347 - 347 volt 480 - 480 volt	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF - Buff WHT - White GPT - Graphite SVG - Satin Verde Green MSV - Metallic Silver	H - XX (Specify Height) ¹ PCI120 - Button-type Photocell PCI208, 240,277 - Button-type Photocell PCI347 - Button-type Photocell GFR - GFI Duplex Receptacle LAB - Less Anchor Bolts RN - Roughneck Heavy Duty Mounting Plate

1 - Taller or shorter heights available in 6" increments. Minimum height is 30". Maximum height is 60".

ACCESSORY ORDERING INFORMATION (Accessories are field installed)	
Description	Order Number
ABKIT - Anchor Bolt Kit (BVR) 3/8" x 10" - Galvanized	285560
HSS - Round House Side Shield	122510

FINISH
TBD

Color Decals
45 - Light Gold
20 - Charcoal Metallic
55 - Black
94 - Blue Black
59 - Dark Green
51 - Dark Red
21 - Tomato Red
50 - White
700 - Aztec Silver Metallic

Submitted by Shaw Supply Company



Job Name:

LEE'S SUMMIT UMC

Catalog Number:

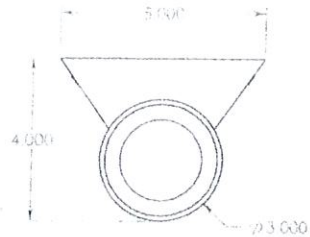
WS80508-8

Type:

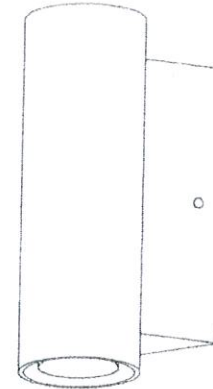
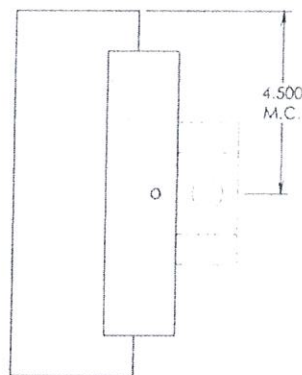
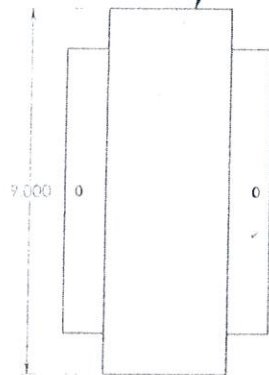
T

Notes:

SHAW14-1366



Aluminum Body



Quote No.:	104188		
Job Name:			
Item No.:	WS80508-8	Rev.:	1
Type:	3000 K	Qty:	
Lamping:	LED, 1000K Narrow Beam (Up / Down)		
Ballast:	120/277v Dimming Driver 0-10v		
Finish:	Standard Powder Coat		
Date:	6/23/2014		
Notes:	Suitable for Dry Locations		

Mounting: Fixture is supplied with hardware for attachment to a 4 inch octagonal junction box (provided by others).

ARCHITECTURAL
LIGHTING

111 STRAWCUTTER ROAD, DERRY, MA 01562
P: 724.539.7670
F: 724.539.7746
WWW.CAMMANLIGHTING.COM

APPROVAL:

(TBD)

WET

LED lighting
DECO digital™
 lighting systems
D444-LED
 POWERED BY Medium Trapezoidal Cutoff Wallpack
NICHIA
 Transforming tomorrow's lighting....today!



Job Information

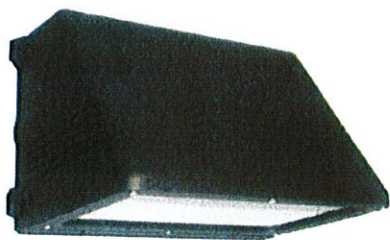
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Catalog #:

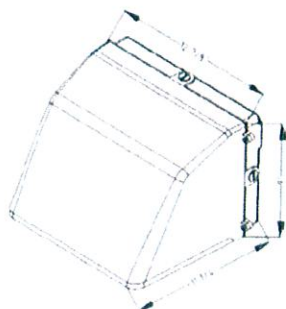
Project: LDE's SUMMIT UMC

Comments:

Prepared by: ELDECOM INC.



Dimensions



Description

The D444-LED medium trapezoidal cutoff wall pack offers a sleek design and cutoff performance with a wide range of uses. It delivers the lighting needed for the exteriors of retail buildings, businesses, walkways, underpasses or door entrances.

Features

- Heavy duty two piece, die-cast aluminum housing aluminum reflector
- Silicone gasketing provides protection against moisture
- Mounts directly to 3.5" octagon, or 4" square outlet box
- .5" NPS tapped holes provided in three locations for surface conduit entry for optional photocell control
- Dark bronze powder coated finish for impact, corrosion and UV resistance
- Integral cast-in aluminum hinges
- Clear tempered glass lens is thermal and shock resistant
- UL 1598 listed for wet locations
- Can be used as an uplight for wall washing applications
- Dark Sky friendly
- Standard color is bronze; also available in black and white. Contact factory for custom finishes.
- CRI: 80+
- 10 Year Limited Warranty

LED Lighting

DECO™

LIGHTING

ORDERING INFORMATION:

Example: (D444-LED-20-50-UNV-BZ-PC)

Series	Wattage/Lumens	Voltage	Color Temp.	Finish	Options
D444-LED Medium Trapezoidal Cutoff Wall Pack	20 - 20W/2540 ^{1,2} 30 - 30W/3810 ^{1,2} 40 - 40W/5080 ^{1,2} 60 - 60W/7620 ^{1,2}	UNV 122-277V 347 - 347V 480 - 480V (Step-Down Transformer used for 480V Divider)	41 - 4100K 50 - 5000K ^{1,2}	BZ - Bronze ¹ BL - Black WH - White CU - Custom	WDF - Wired Double Fuse WSF - Wired Single Fuse PC - Photocell EMB - Integral Emergency Backup

Standard color for this fixture
 Contact factory for custom finishes
 Initial lumens delivered
 Standard Color temperature
 DLC Listed

FINISH
TBD

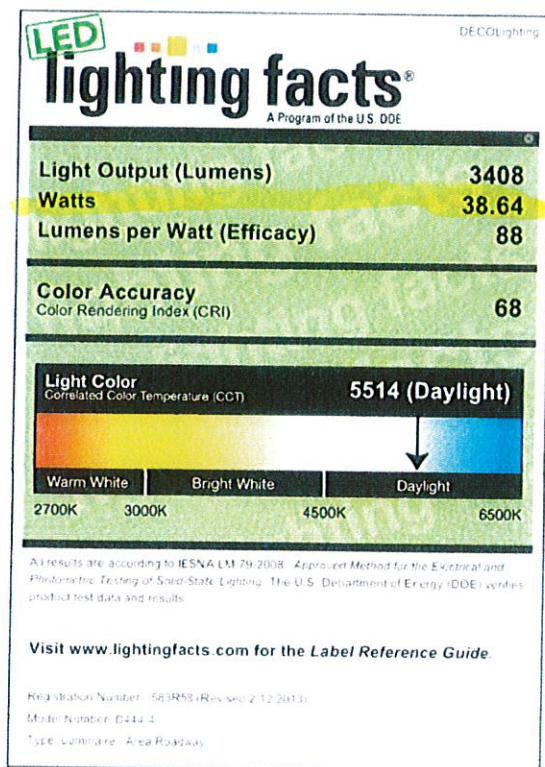


LED lighting
DECO digital™
 lighting systems
D444-LED
 Medium Trapezoidal Cutoff Wallpack

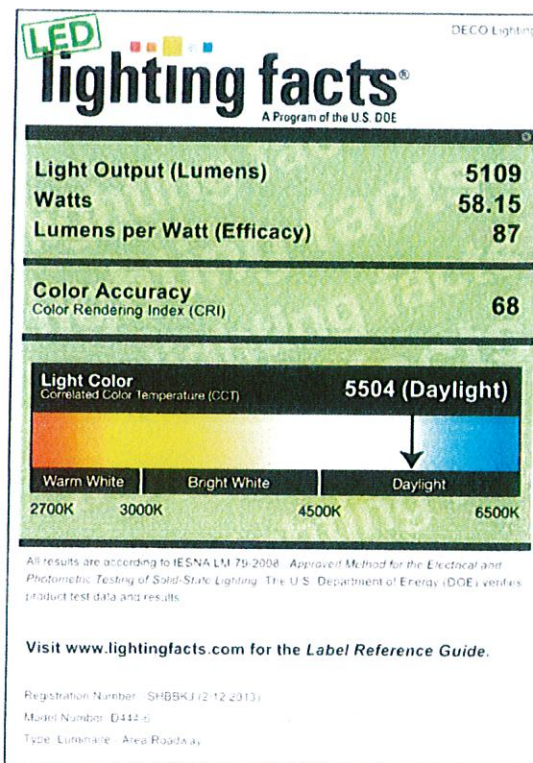
Transforming tomorrow's lighting....today!

Job Information	
Type:	U
Catalog #:	
Project:	LEE'S SUMMIT UMC
Comments:	
Prepared by:	ELDECON INC.

Lighting Facts



40W LED



60W LED

LED Lighting

DECO™

LIGHTING



Job Name:

33202.023

V

LEE'S SUMMIT UMC

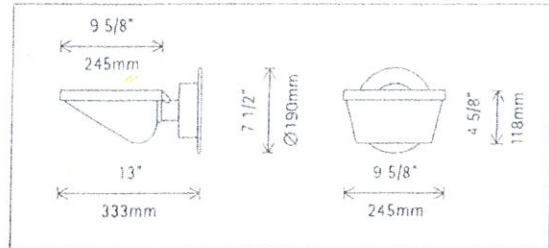
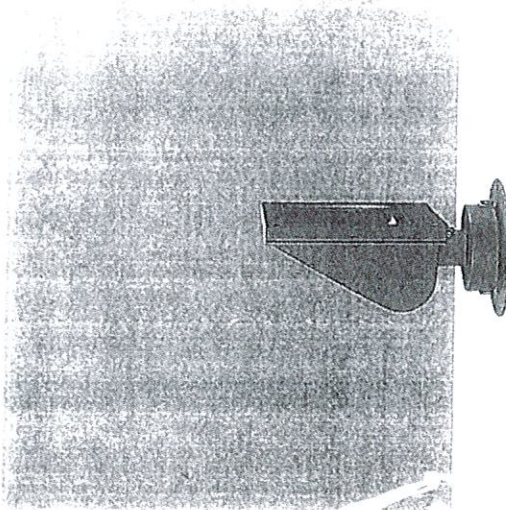
Notes: **PART NUMBER TO BE VERIFIED**

SHAW14-1366

ERCO

Lightscoop Ceiling washlights

with mounting plate and LED

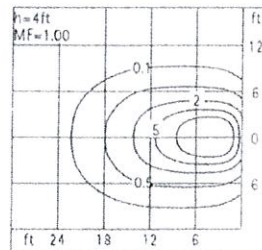
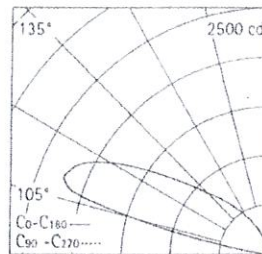


33202.023 Graphit m
LED 24W 2280lm 3000K warm white
Version 2
Spherolite lens, deep beam

Product description

Housing: corrosion-resistant, cast aluminum, No-rinse surface treatment. Double powder-coated. Optimized surface for reduced accumulation of dirt. Luminaire rotatable through 240°. Mounting plate: corrosion-resistant aluminum.
Electronic control gear: 120V/277V, 60Hz, 2 cable entries. Through-wiring possible. 3-pole terminal block.
LED module: high-power LEDs on metal-core PCB, SDCM<2, CRI>90, L80/B10 50000h. Collimating lens made of optical polymer.
Screw-fastened cover frame with safety glass: corrosion-resistant cast aluminum, double powder-coated.
Suitable for wet location (IP65): dust-proof and water jet-proof.
Weight 8.38lbs / 3.80kg
Maximum wind load area 0.75ft²

FIXTURE COLOR
TBD



ERCO Lighting Inc.
160 Raritan Center Parkway
Suite 10
Edison, NJ 08837
USA
Tel: +1 732 225 8856
Fax: +1 732 225 8857
info.us@erco.com

Technical region: 120V/277V, 60Hz
We reserve the right to make technical
and design changes.
Edition: 04.03.2014
Current version under
www.erco.com/33202.023

W



LED lighting
D420-LED
 Large Trapezoidal
 Cutoff Wallpack

Transforming tomorrow's lighting....today!

Job Information	
Type:	W
Catalog #:	
Project:	LEE'S SUMMIT UMC
Comments:	
Prepared by:	ELDECON INC.

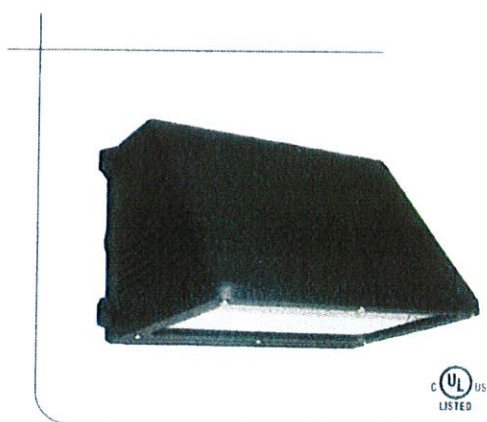


LED Lighting

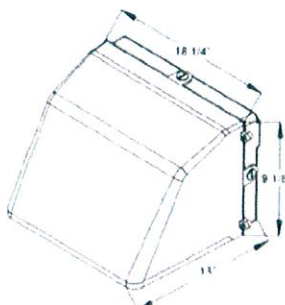
D E C O

TM

L I G H T I N G



Dimensions



Description

The D420-LED large full cutoff wall pack offers a sleek design and cutoff performance with a wide range of uses. It delivers the lighting needed for the exteriors of retail buildings, businesses, walkways, underpasses or entrance doors.

Features

- Heavy duty two piece, die cast aluminum housing
- aluminum reflector
- Silicone gasketing provides protection against moisture
- Mounts directly to 3.5" octagon, or 4" square outlet box
- .5" NPS tapped holes provided in three locations for surface conduit entry for optional photo control
- Dark bronze powder coated finish for impact, corrosion and UV resistance
- Integral cast-in aluminum hinges
- Clear tempered glass lens is thermal and shock resistant
- UL 1598 listed for wet locations
- Can be used as an uplight for wall washing applications
- Dark Sky friendly
- Approx. Weight: 16 lbs
- Standard color is bronze; also available in black and white. Contact factory for custom finishes.
- CRI: 80+
- 10 Year Limited Warranty

W



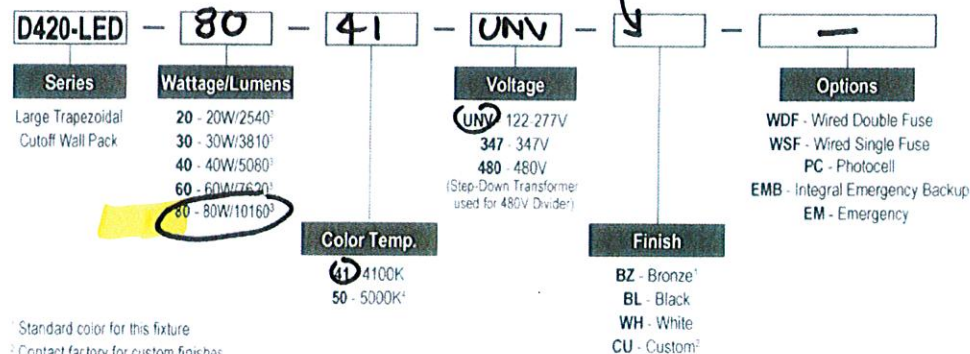
LED lighting D420-LED Large Trapezoidal Cutoff Wallpack

Transforming tomorrow's lighting....today!

Job Information	
Type:	W
Catalog #:	
Project:	LEE'S SUMMIT UMC
Comments:	
Prepared by:	ELDE CON INC.

ORDERING INFORMATION:

Example: (D420-LED-60-50-UNV-BZ-PC)



¹ Standard color for this fixture
² Contact factory for custom finishes
³ Initial lumens delivered
⁴ Standard Color temperature

LED Lighting
DECOTM
LIGHTING

Rev Date: 9/5/14 #3



Z

PG

Indoor/Outdoor Emergency Lighting Unit**FEATURES****Application**

The PG is an indoor/outdoor, die-cast architectural emergency unit. It is a wet location listed, emergency luminaire with high-output LED technology that provides path of egress illumination for mounting over entrance/exit ways and perimeter walkways. Spectron® self-testing/self-diagnostic electronics are included standard. A battery heater for cold temperature operation is available as an option.

Construction

Housing and mounting plate are constructed of 0.125" die-cast aluminum and 0.125" closed-cell, medium density, neoprene gasket. The acrylic lens allows 92% light transmission. The reflector is electro-polished aluminum with 95% reflectance. Housing finish is powder coated electro-deposition paint available in four colors: dark bronze, white, platinum silver and black.

Installation

Universal housing knockouts for mounting to standard 31/2" and 4" octagon and 4" square electrical boxes. A 1/2" - 1/4 NPT threaded conduit opening is provided at the top of the housing and sealed with a closure plug. The back plate mounts to the wall surface using installer supplied hardware. The housing "snaps" to the back plate by a "pin and socket" arrangement, and is secured with two Fillister head screws. AC Lockout feature prevents battery discharge prior to initial unit power-up saving installation time.

Lamps

Four high-output, long life LED lamps arranged in redundant pairs.

Compliances

UL 924 Listed (emergency models only)
UL Wet Location Listed
NFPA 101 Life Safety Code
NFPA 70 National Electrical Code
OSHA
U.S. Patent No. D627,916.

Warranty

Three-years full for unit, electronics and battery.

ORDERING GUIDE

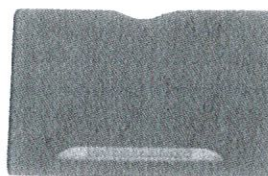
PG	W	-	HTR
Series	Finish		Options
	W White Z Dark Bronze P Platinum Silver B Black		HTR Battery Heater (Add Suffix to Model)

(TBD)

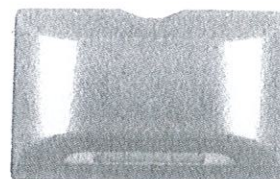
Catalog Number	PG - (TBD) - HTR	Type	Z
Comments			



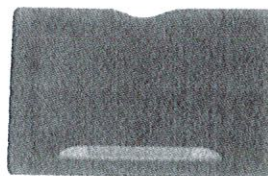
White



Dark Bronze

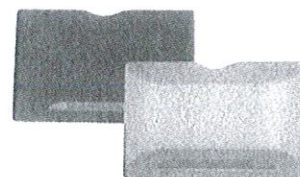


Platinum Silver



Black

Reference "Remote Heads and Fixtures" specification sheet for information on matching PG remote



PGR Remote LED



Hubbell Lighting, Inc.



PG

Indoor/Outdoor Emergency Lighting Unit

PG-(TBR) - 1-1TR

SPECIFICATIONS

Electronics

Upon failure of the normal utility power, a solid-state transfer switch automatically activates the emergency lamp. Upon resumption of the normal utility power, the battery is disconnected from the load and recharged through a solid-state charging unit. A low voltage battery disconnect feature protects the battery from severe damage during prolonged power failures. Spectron® self-testing/self-diagnostic circuitry provides automatic system testing on a monthly and semi-annual basis. Manual testing is available at any time using the push-to-test button: push once for a 60-second system test; push twice for a 90-minute system test.

Number of Lamps: Four high output LEDs

Lamp Configuration: Two sets of 2 LEDs provide illumination. In the unlikely event that any single LED should fail the remaining LEDs will continue to function.

Lamp Type: Solid state high output LEDs

Lamp Color: Cool White, 6350K

Total Lamp Output: 405 Lumens

Input: 120/277VAC, 60 Hz

Battery Charger: Temperature compensating, constant current

Transfer: Solid state

Functional Circuitry: AC lockout, transformer isolation, transient surge protection, low voltage battery disconnect, brownout detection, time delay retransfer

Battery Recharge Cycle: per UL time standards

Test Means: Integral test switch

Battery: Sealed, maintenance-free Nickel-Cadmium

Operating Temperature Range for Models without Heater:

0°C to 50°C (32°F to 122°F)

Operating Temperature Range for Models with Heater:

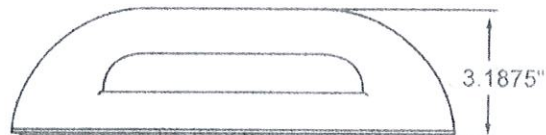
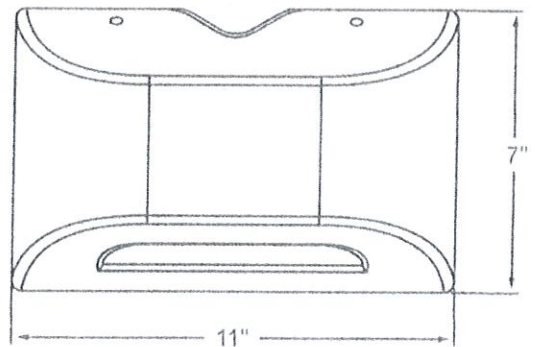
-30°C to 50°C (-22°F to 122°F)

Power Consumption

Models Without Heater		Models With Heater	
120VAC	2.78 watts	120VAC	15.2 watts
277VAC	2.88 watts	277VAC	15.7 watts

Power factor, average: 0.8 (lagging)

DIMENSIONS



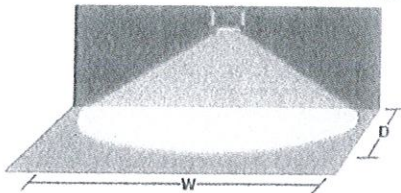
ILLUMINATION PATTERN

SINGLE UNIT COVERAGE

Mounting Height: 9'

Outdoor Reflectance: 0/30/10

Indoor Reflectance: 80/50/20



	Indoor	Outdoor
1 FC Average (W x D)	33' X 10'	27' X 10'
1 FC Minimum (W x D)	10' X 10'	9' X 10'

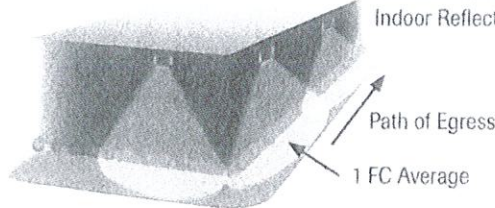
MULTIPLE UNIT SPACING

Mounting Height: 9'

Illuminated Path Depth: 6'

Outdoor Reflectance: 30/10

Indoor Reflectance: 80/50/20



	Indoor	Outdoor
1 FC Average	44'	33'
1 FC Minimum	16'	15'

Dual-Lite • www.dual-lite.com

A Hubbell Lighting, Inc. brand with representatives' offices in principal cities throughout North America.

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Hubbell Lighting, Inc.

0603387 F 05/11

OSQ Series

LED Area/Flood Luminaire – Large

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. 'S' Input power designator is a suitable upgrade for HID applications up to 750 Watts

Applications: Parking lots, walkways, campuses, auto dealerships, office complexes, and internal roadways.

Performance Summary

Utilizes BetaLED® Technology

NanoOptic® Precision Delivery Grid™ optic

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K)

CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

Accessories

Field-Installed

Backlight Shield

OSQ-BLSLF – Front facing optics

OSQ-BLSLR – Rotated optics

SEE DWG ESI FOR OVERALL MOUNTING HEIGHTS

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately

Example: Mount: OSQ-AA SV + Luminaire: OSQ-A NM 2ME S 40K-UL SV

Mount (Luminaire must be ordered separately)

OSQ:

OSQ-AA Adjustable Arm

OSQ-DA Direct Arm

Color Options:

SV Silver

BK Black

BZ Bronze

PB Platinum Bronze

WH White

Luminaire (Mount must be ordered separately)

OSQ	A	NM			S						
Product	Version	Mounting	Optic		Input Power Designator	CCT	—	Voltage	Color Options	Options	
OSQ	A	NM No Mount	2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium 5ME* Type V Medium 5SH Type V Short	15D 15° Flood 25D 25° Flood 40D 40° Flood 60D 60° Flood	S 223W	30K 3000K 40K 4000K 57K 5700K	~ US Canada	UL Universal 120-277V UH Universal 347-480V	SV Silver BK Black BZ Bronze PB Platinum Bronze WH White	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed wattage of specified input power designator F Fuse - When code dictates fusing, use time delay fuse ML Multi-Level - Refer to ML spec sheet for details - High: 100%, Low: 30% - Intended for downlight applications at 0° tilt	Q9 Field Adjustable Output - Refer to Field Adjustable Output spec sheet for details R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others RL Rotate Left - LED and optic are rotated to the left RR Rotate Right - LED and optic are rotated to the right

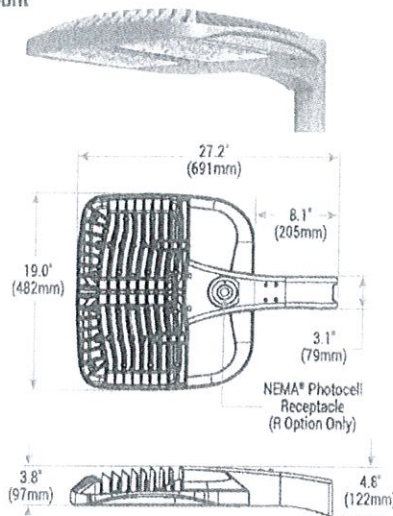
* See www.cree.com/lighting/products/warranty for warranty terms

* Available with Backlight Shield when ordered with field-installed accessory (see table above)

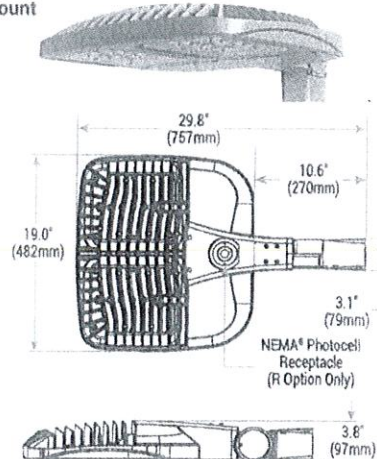
TBD

TYPE S5 & D5

DA Mount



AA Mount



US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Rev. Date: V3 08/22/2014

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

OSQ Series – Large

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high performance heat sink
- Convenient interlocking mounting method on direct arm mount. Mounting adapter is rugged die cast aluminum and mounts to 3-6" (76-152mm) square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers
- Mounting for the adjustable arm mount adapter is rugged die cast aluminum and mounts to 2" (51mm) IP, 2.375" (60mm) O.D. tenon
- Adjustable arm mount can be adjusted 180° in 2.5° increments
- Designed for uplight and downlight applications
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, white, and platinum bronze are available
- Weight: 28.5 lbs. (13kg)

ELECTRICAL SYSTEM

- Input Voltage: 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- Power Factor: > 0.9 at full load
- Total Harmonic Distortion: < 20% at full load
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without R option
- Consult factory for CE Certified products
- Pending certification to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- DLC qualified when ordered with 30K (5ME, 5SH optics), 40K (2ME, 3ME, 4ME, 5ME, 5SH optics), or 57K (2ME, 3ME, 4ME, 5ME, 5SH optics). Please refer to <http://www.designlights.org/QPL> for most current information

Electrical Data*							
Input Power Designator	System Watts 120 480V	Total Current					
		120V	208V	240V	277V	347V	480V
S	223	1.94	1.13	0.99	0.85	0.65	0.47

Recommended Cree® Outdoor Luminaire Lumen Maintenance Factors (LMF) ¹						
Ambient	Input Power Designator	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	S	1.04	0.99	0.94	0.88	0.84
10°C (50°F)	S	1.03	0.98	0.93	0.88	0.83
15°C (59°F)	S	1.02	0.97	0.92	0.87	0.83
20°C (68°F)	S	1.01	0.96	0.91	0.86	0.82
25°C (77°F)	S	1.00	0.95	0.90	0.85	0.81

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6x) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6x) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

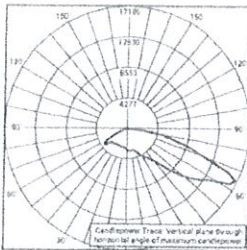


OSQ Series – Large

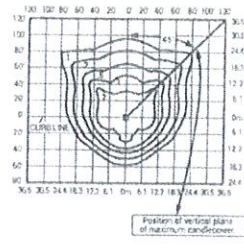
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: <http://www.cree.com/lighting>

4ME



RESTL Test Report #: PL03402-001
OSQ A ** 4ME S 40K-UL
Initial Delivered Lumens: 20,830



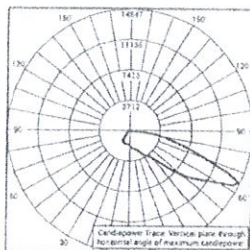
OSQ A ** 4ME S 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 21,253
Initial FC at grade

Type IV Medium Distribution

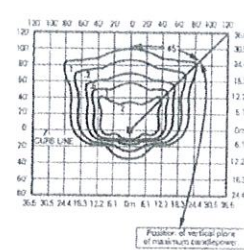
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
S	17,811	B3-U0-G3	21,253	B3-U0-G3	22,705	B3-U0-G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens.

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt.



RESTL Test Report #: PL03642-002
OSQ A ** 4ME J 40K-UL w/OSQ BLSMF
Initial Delivered Lumens: 13,547



OSQ A ** 4ME S 40K-UL w/OSQ BLSMF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 18,154
Initial FC at grade

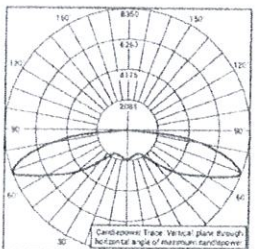
Type IV Medium w/BLS Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
S	15,213	B2-U0-G3	18,154	B2-U0-G3	19,394	B2-U0-G3

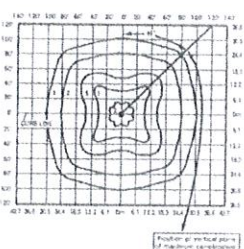
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens.

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt.

5ME



RESTL Test Report #: PL03456-001
OSQ A ** 5ME S 40K-UL
Initial Delivered Lumens: 20,709



OSQ A ** 5ME S 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 20,536
Initial FC at grade

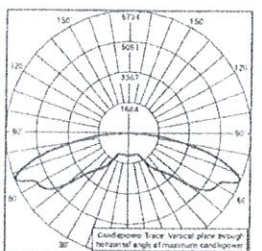
Type V Medium Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
S	17,345	B4-U0-G5	20,536	B5-U0-G5	20,841	B5-U0-G5

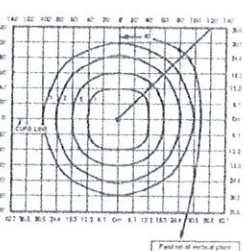
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens.

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt.

5SH



RESTL Test Report #: PL03501-001
OSQ A ** 5SH S 40K-UL
Initial Delivered Lumens: 21,066



OSQ A ** 5SH S 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 20,982
Initial FC at grade

Type V Short Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
S	17,722	B4-U0-G4	20,582	B5-U0-G4	21,294	B5-U0-G4









* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens.







** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt.



OSQ Series – Large

Luminaire EPA

Fixed Arm Mount – OSQ-DA Weight: 28.5 lbs. (13kg)							
Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 180°	4 @ 90°
							
0.80	1.61	1.26	2.06	1.68	3.33	4.66	2.52

Adjustable Arm Mount – OSQ-AA Weight: 28.5 lbs. (13kg)							
Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 180°	4 @ 90°
Tenon Configuration (0°-80° Tilt); If used with Cree tenons, please add tenon EPA with Luminaire EPA							
							
PB-1A*, PT-1; PW-1A3**	PB-2A*, PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-2A*, PD-2A4(90); PT-2(90)	PB-3A*, PD-3A4(90); PT-3(90)	PB-3A*, PT-3(120)	PB-3A*, PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375; PD-4A4(90); PT-4(90)
0° Tilt							
0.80	1.61	1.26	2.06	1.68	3.33	4.66	2.52
10° Tilt							
0.81	1.61	1.62	2.42	2.32	4.40	6.08	3.24
20° Tilt							
1.24	1.61	2.04	2.84	3.13	5.68	7.80	4.08
30° Tilt							
1.64	1.64	2.44	3.24	3.97	6.88	9.40	4.88
45° Tilt							
2.20	2.20	3.00	3.80	5.07	8.55	11.64	6.00
60° Tilt							
2.63	2.63	3.43	4.23	5.73	9.84	13.36	6.86
70° Tilt							
2.82	2.82	3.62	4.42	5.73	10.41	14.12	7.24
80° Tilt							
2.93	2.93	3.73	4.53	5.73	10.74	14.56	7.46
Tenon Configuration (90° Tilt); If used with Cree tenons, please add tenon EPA with Luminaire EPA							
PB-1A*, PT-1; PW-1A3**	PB-2A*, PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-2A*	PB-3A*	PB-3A*, PT-3(120)	PB-3A*, PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375
90° Tilt							
2.95	2.95	4.84	6.52	5.73	10.81	14.64	11.19

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
 ** Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")



OSQ Series – Medium

Tenon EPA

Tenon	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25

Tenons and Brackets (must specify color)

Square Internal Mount Vertical Tenons (Steel)
 - Mounts to 3-6" (76-152mm) square aluminum or steel poles
 PB-1A* - Single PB-4A*(90) - 90° Quad
 PB-2A* - 180° Twin PB-4A*(180) - 180° Quad
 PB-3A* - 180° Triple

Square Internal Mount Horizontal Tenons (Aluminum)
 - Mounts to 4" (102mm) square aluminum or steel poles
 PD-2A4(90) - 90° Twin PD-3A4(90) - 90° Triple
 PD-2A4(180) - 180° Twin PD-4A4(90) - 90° Quad

Wall Mount Brackets
 - Mounts to wall, roof or side of wood pole
 WM-2 - Horizontal WM-4 - L-Shape

Round Internal Mount Vertical Tenons (Steel)

- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons
 PB-2R2.375 - Twin PB-4R2.375 - Quad
 PB-3R2.375 - Triple

Round External Mount Horizontal Tenons (Aluminum)

- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons
 - Mounts to square pole with PB-1A* tenon
 PT-1 - Single PT-3(90) - 90° Triple
 PT-2(90) - 90° Twin PT-4(90) - 90° Quad
 PT-2(180) - 180° Twin

Mid-Pole Bracket

- Mounts to square pole
 PW-1A3** - Single PW-2A3** - Double

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
 ** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")