

GENERAL NOTES

- IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE DESIGNER.
- ALL SHRUBS PLANTING AREAS TO BE COVERED WITH 4" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY LANDSCAPE DESIGNER AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE OBTAINED FROM SAWMILL OR LUMBERING OPERATIONS. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED.
- AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
- FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE DESIGNER BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODEN STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND MULCH BED LINES SHALL BE MARKED BY A HIGHLY VISIBLE PAINT LINE WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTING OPERATIONS. LANDSCAPE DESIGNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE.
- NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
- ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
- PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY OWNER.
- ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE DESIGNER. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE DESIGNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK.
- PEAT MOSS TO BE USED ON PROJECT SHALL BE A DOMESTIC OR IMPORTED MATERIAL, CHOCOLATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED VEGETABLE MATERIAL. PEAT MOSS TO ALSO BE MILDLY ACIDIC IN CHARACTER AND SHALL MEET APPROVAL OF LANDSCAPE DESIGNER.
- LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT THE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED.
- ALL LANDSCAPING PLANTINGS TO BE MAINTAINED FOR 1 YEAR FOLLOWING TURNOVER. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATION, MULCHING, MOVING AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT OF PLANTINGS. NOTE: AT END OF MAINTENANCE PERIOD, CONTRACTOR TO REMOVE GUYING AND STAKING FROM TREES.
- CONTRACTOR TO SUBMIT UNIT PRICES ON EVERY TYPE OF WORK AS REQUESTED BY LANDSCAPE DESIGNER.
- BACKFILL FOR TREE AND SHRUB PLANTING SHALL BE 75% APPROVED TOPSOIL AND 25% APPROVED PEAT MOSS. TOP LAYER OF BACKFILL SHALL BE 100% EXISTING TOPSOIL. A 5-10-5 ANALYSIS SLOW RELEASE FERTILIZER SHALL BE INCORPORATED INTO BACKFILL AT APPROVED RATES.
- PROVIDE MINIMUM 4" PLANTING SOIL IN ALL GROUND COVER AND FLOWER AREAS WITH MIXTURE COMPRISING OF ONE PART COMMERCIAL GRADE "POTTING SOIL", 5 PARTS TOPSOIL AND 4 PARTS PEAT MOSS. A FULL 4" LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX.
- PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY.
- PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM DISEASE OR HAZARDOUS INSECTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL.

LANDSCAPE RECOMMENDATIONS (ORDINANCE #06-49)

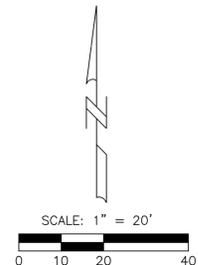
REQUIREMENT:	REQUIRED:	PROVIDED:
SECTION 16.06.050-01: MINIMUM ONSITE REQUIREMENTS		
- 10 CANOPY TREES PER ACRE x 1.17 ACRES = 11.7 REQUIRED	- 12 TREES	- 12 TREES
- 10 UNDERSTORY TREES PER ACRE x 1.17 ACRES = 11.7 REQUIRED	- 12 TREES	- 12 TREES
- 25 SHRUBS PER ACRE x 1.17 ACRES = 30 SHRUBS REQUIRED	- 30 SHRUBS	- 30 SHRUBS
SECTION 16.06.050, B. ROAD FRONTAGE STANDARDS		
- 1 CANOPY TREE PER 40 LF. ALONG R.O.W. 156LF/40 = 4 REQUIRED	- 5 TREES	- 5 TREES
		- 74 SHRUBS
SECTION 16.06.070: PARKING AREA LANDSCAPING		
- 25 TO 49 SPACES REQUIRES 7.5% OF PARKED AREA TO BE LANDSCAPED.	- 347 SF.	- 369 SF.
SECTION 16.06.070, A2-a: PARKING LOT ISLANDS		
- 1 TREE PER ISLAND	- 3 TREES	- 3 TREES
- 4 SHRUBS ISLAND	- 12 SHRUBS	- 12 SHRUBS
SECTION 16.06.070, B.2: PERIMETER PARKING LOT LANDSCAPING		
- 1 TREE PER 30 LF.	- 6 TREES	- 6 TREES
- 180 LF / 30 = 6 REQUIRED		
- 1 SHRUB PER 3 LF.	- 34 SHRUBS	- 49 SHRUBS
- 180 LF / 3 = 34 REQUIRED		
OPEN SPACE	20%	30%

PLANT SCHEDULE

PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ROOT CONDITION	ON CENTER	SPECIAL INSTRUCTIONS
CANOPY DECIDUOUS TREES							
A/O	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2"	3	X		SEE PLAN
Cf	CARPINUS BETULUS 'FRANS FONTAINE'	FRANS FONTAINE HORNBEAM	2 1/2"	6	X		SEE PLAN
Zs	ZELKOVA SERRATA	JAPANESE ZELKOVA	2 1/2"	3	X		SEE PLAN
ORNAMENTAL UNDERSTORY TREES							
Ag	ACER GINNALA 'FLAME'	AMUR MAPLE	2"	11	X		SEE PLAN
AgA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2"	6	X		SEE PLAN MULTI BRANCH
DECIDUOUS SHRUBS							
PFM	POTENTILLA FRUTICOSA 'MCKAY'S WHITE'	MCKAY'S WHITE POTENTILLA	#2	31		X	SEE PLAN MIN 18"
Sb	SPIRAEA X BUMALDA 'ANTHONY WATERER'	ANTHONY WATERER SPIREA	#3	35		X	SEE PLAN MIN 18"
EVERGREEN SHRUBS							
Bm	BUXUS MICROPHYLLA	LITTLELEAF BOXWOOD	#1	28		X	SEE PLAN MIN. 36"
Jc	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	18"	24		X	SEE PLAN MIN 18"
IgS	ILEX GLABRA 'SHAMROCK'	INKBERRY	#3	15		X	SEE PLAN MIN 18"
EVERGREEN TREES							
ToH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	#6	7		X	SEE PLAN MIN 6"

LANDSCAPE NOTES

- REFER TO SHEET C102 FOR AREAS OF SEED AND MULCH. SOD TO BE USED AS AN ALTERNATE.
- ALL TREES TO BE A MINIMUM OF 10' AWAY FROM ALL STORM SEWER, UNLESS OTHERWISE APPROVED BY WESTFIELD.



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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying / Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE	BY	PROJECT NO.	DATE	BY	REVISION
PRE-FILE MEETING	12/23/2013	WJ3.0559	W13.0559	12/23/2013	WJ3.0559	
SUBMITTED FOR REVIEW	01/29/2014	WJ3.0559	W13.0559	01/29/2014	WJ3.0559	



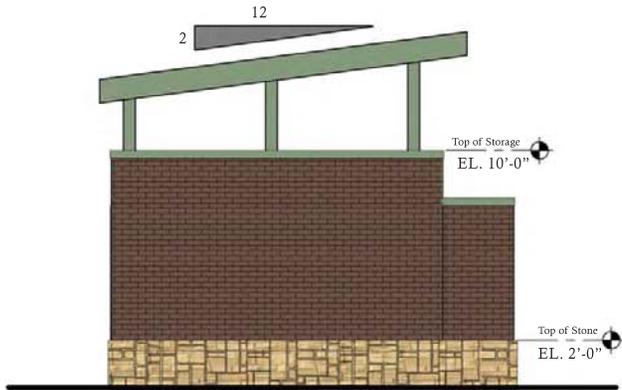
ROBERT A. MEZOWSKI L.A. 80050308

PREPARED FOR:
AT BRIDGEWATER
Section M4, Lot 2 of Bridgewater Center located at 3334 East 146th Street, Westfield, IN 46033
LANDSCAPE PLAN
Part of the S/W of Section 17, Township 18 North, Range 4 East, Washington Township, Hamilton County, Indiana

SHEET NO.
L100
PROJECT NO.
W13.0559

LOCATION: H:\2013\W130559\Engineering\Design\Concept\W130559-L101.dwg
DATE/TIME: March 06, 2014 12:46pm
PLOT/DWG: schabrb

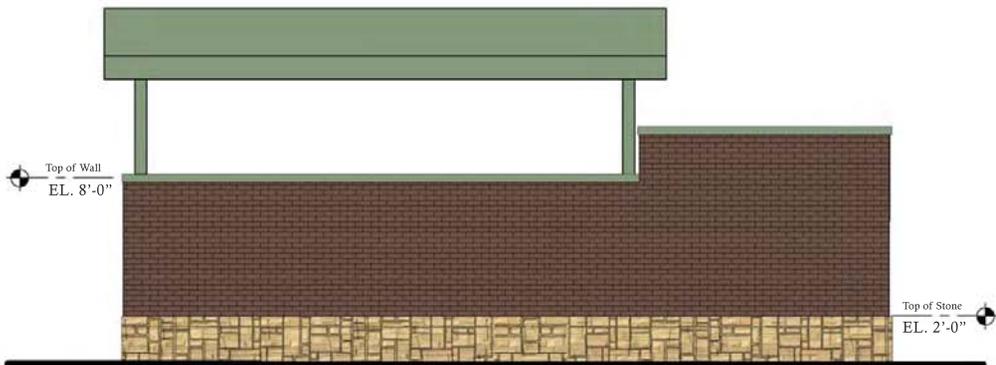
Dumpster Elevations



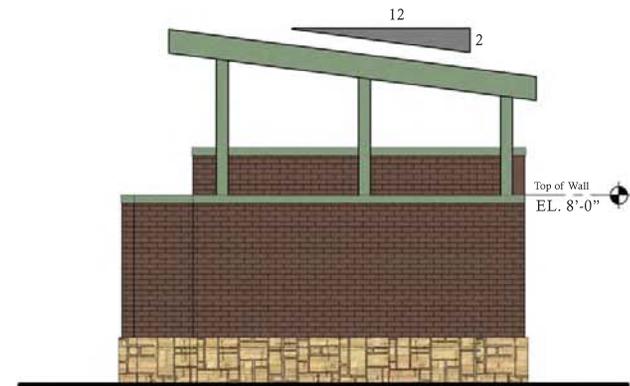
North Elevation



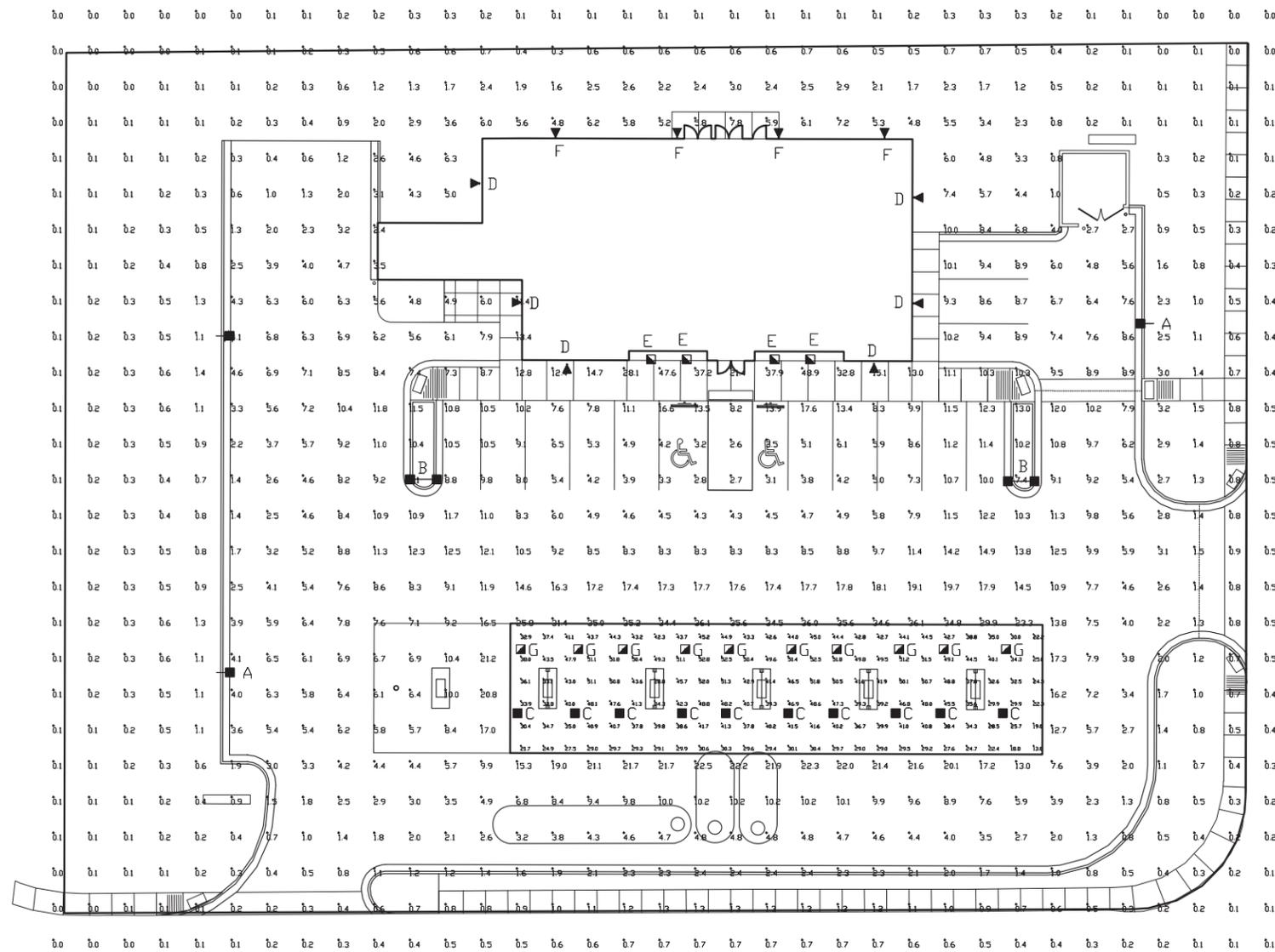
East Elevation



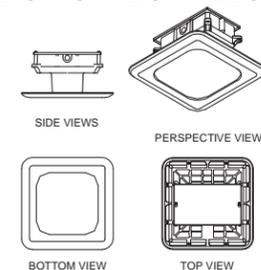
West Elevation



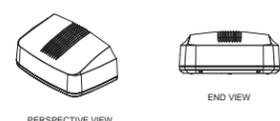
South Elevation



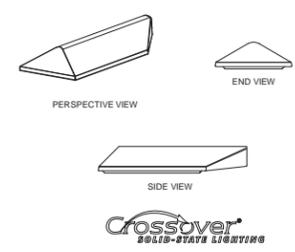
CRUS-SC-LED LED CANOPY LIGHT - LEGACY



XPWS3 LED Crossover Wall Mount Light



XAMU LED Crossover Area Light



XSL2-S-50 LED Crossover Soffit



Symbol	Qty	Label	Arrangement	Description	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	3	A	SINGLE	XAMU-FT-LED-128-HD-CW-UE-HSS-18'POLE+2'BASE	1.000	N.A.	12527	179
	2	B	D180*	XAMU-5-LED-128-HD-CW-UE-D180-18'POLE+2'BASE	1.000	N.A.	29576	350
	10	C	SINGLE	CRUS-SC-LED-LW-CW-UE	1.000	N.A.	10871	87.9
	6	D	SINGLE	XPWS3-FT-LED-48-450-CW-UE-12'MH	1.000	N.A.	6159	72
	4	E	SINGLE	XSL2-S-LED-50-HD-CW-10'MH	1.000	N.A.	8347	86.2
	4	F	SINGLE	XPWS3-WT-LED-28-350-CW-UE	1.000	N.A.	2978	34
	10	G	SINGLE	CRUS-SC-LED-SS-CW-UE	1.000	N.A.	13554	114

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CANDPY	Illuminance	Fc	4.93	48.9	0.0	N.A.	N.A.
INSIDE CURB	Illuminance	Fc	39.35	52.8	13.8	2.85	3.83

Footcandle levels taken at grade.

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

Total Project Watts
Total Watts = 41688

Lighting Proposal LD-119971-4
RICKERS
146th & CAREY RD
WESTFIELD, IN
DATE: 07-14 REV: 03-14 SHEET 1 OF 1
SCALE: 1"=16'

LED CANOPY LIGHT - LEGACY™ (CRU)



LED lighting facts
A Program of the U.S. DOE

Crossover LED Lighting

Light Output (Lumens)	16997
Watts	148.9
Lumens per Watt (Efficacy)	114

Color Accuracy Color Rendering Index (CRI)	74
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Light Color
Correlated Color Temperature (CCT)

5037 (Daylight)

2700K 3000K 4500K 6500K

Warm White Bright White Daylight

Warranty** Yes

All results, except LED Lumen Maintenance, 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.

** See www.lightingfacts.com/products for details.

Registration Number: KGGN-NZWH08 (6/12/2013)
Model Number: CRU SC LED HO CW UE
Type: Canopy light

US & Int'l. patents pending.

SMARTTEC™ ENERGY SAVING FEATURES

THERMAL CONTROL - LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceeds rated temperature.

HOUSING - Low profile, durable die-cast, aluminum construction, providing a reliable weather-tight seal.

LEDS - Features an array of select, mid-power, high brightness, high efficiency LED chips; 5300°K color temperature, 70 CRI (nominal).

DRIVE CURRENT - Choice of Low Wattage (LW), Mid Wattage (MW), Super Saver (SS), High Output (HO), or Very High Output (VHO).

OPTICS / DISTRIBUTION - Symmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution of light to vertical and horizontal surfaces.

OPTICAL UNIT - Features an ultra-slim 3/4" profile die cast housing, with a flat glass lens. Unit is water-resistant, sealed to an IP67 rating. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.

PRESSURE STABILIZING VENT - Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

HAZARDOUS LOCATION - Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 only when properly installed per LSI installation instructions.

DRIVER - State-of-the-art driver technology superior energy-efficiency and optimum light output. LSI driver components are fully encased in potting for IP65 moisture resistance. Complies with IEC and FCC standards. Surge protected at 10KV.

DRIVER HOUSING - Die cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.

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

ELECTRICAL - Universal voltage power supply, 120-277 VAC, 50/60 HZ input. LSI drivers feature two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C.

FINISH - Standard color is white and is finished with LSI's DuraGrip polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.

INSTALLATION - One person installation. No additional sealant required. Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit. Retro panels are available for existing Encores (see back page) as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

SHIPPING WEIGHT - 25 pounds (single pack), 50 pounds (double pack).

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

WARRANTY - Limited 5-year warranty.

LISTING - UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.

PHOTOMETRICS - Applications layouts are available upon request. Contact LSI Petroleum Lighting or petroleum.apps@lsi-industries.com

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



Class 1, Division 2 – Standard on HO, SS, MW & LW only

T5 Temperature Classification – The surface temperature of this product will not rise above 100°C., within a 40°C ambient.

Gas Groups A,B,C, and D – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

LED CANOPY LIGHT - LEGACY™ (CRU)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **CRU SC LED SS CW UE WHT**

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRU	SC - Standard Symmetric	LED	LW - Low Watt MW - Mid Wattage SS - Super Saver HO - High Output VHO - Very High Output	CW - Cool White	UE - Universal Voltage (120-277V) 347-347V ¹	WHT - White BRZ - Bronze BLK - Black	2L - Bi-Level Switching ²

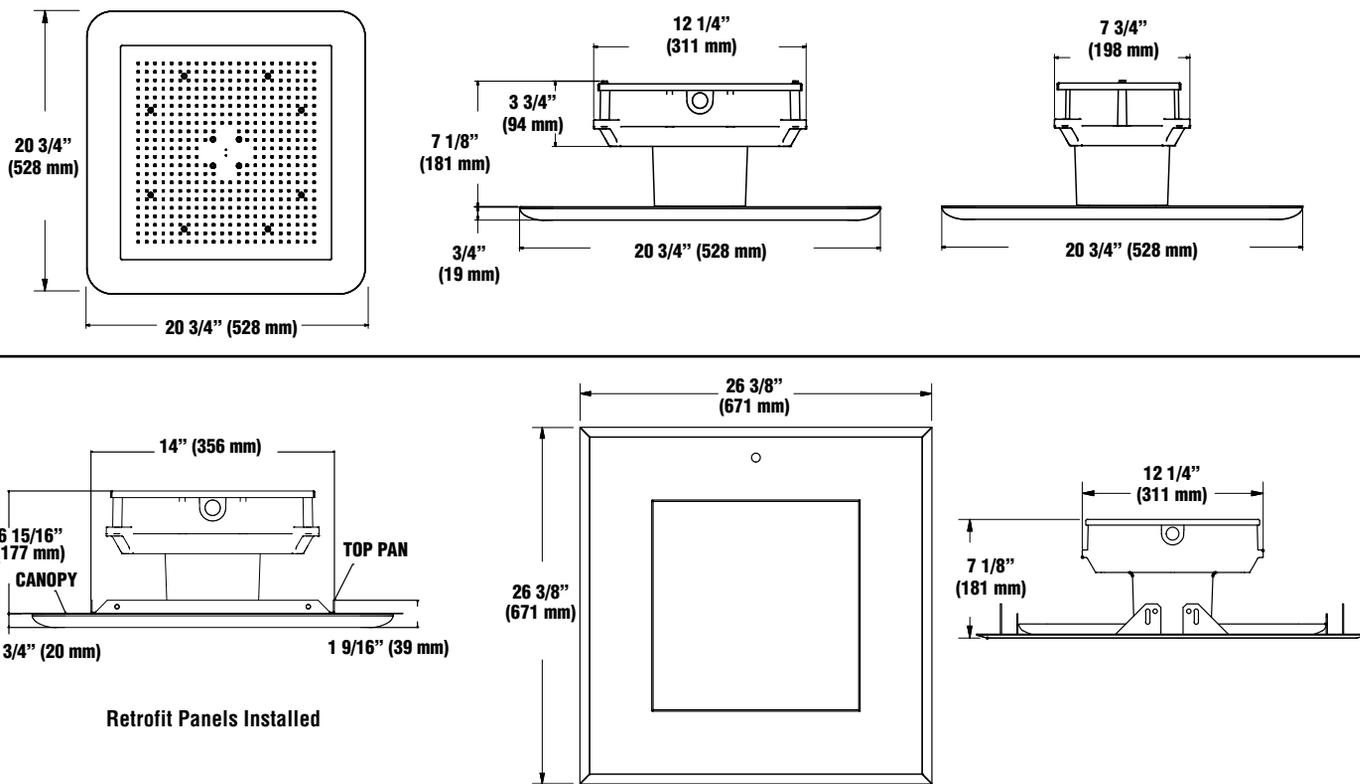
FOOTNOTES:

1- 347V only available in HO drive current.
2- Bi-Level available on "HO" drive current only.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	Order Number
Retrofit Panels - EC / ECTA / SCF to CRU, for 16" Deck Panel	525946	Kit - Hole Plugs and Silicone (enough for 25 retrofits) ¹	1320540
Retrofit Panels - ECTA / SCF to CRU, for 12" Deck Panel	530281	CRU FKL - Flange Kit ²	537530WHT
Retrofit 2x2 Cover Panel Blank (no holes)	357282	1- Consists of (25) 7/8" hole plugs and (1) 10.3 oz tube of RTV	
Retrofit RIC Cover Panel Blank (no holes)	354702	2- Flange Kit used to mount CRU in double deck applications	

DIMENSIONS



CRU FKL (for double deck applications)

LIGHT OUTPUT - CRU

	Lumens	Watts	LPW	
Cool White	LW - Low Watt	8,438	76	111
	MW - Mid Watt	11,656	103	113
	SS - Super Saver	13,638	129	106
	HO - High Output	17,001	149	114
	VHO - Very High Output	20,997	192	109

LED AREA LIGHTS - AEROMAX™ MEDIUM (XAMU)



US patent 7828456, 7952293, 8002428 and CAN 2693131 & 2701653 and US & Int'l. patents pending

SMARTTEC™ THERMAL CONTROL - Sensors in both optical unit and driver enclosure reduce drive current when ambient temperatures exceed 50°C. Current is lowered in imperceptible 5% increments every 5 minutes until safe operating temperature is reached.

ENERGY SAVING CONTROL OPTIONS – DIM – 0-10 volt dimming enabled with controls by others. BLS – Bi-level switching responds to external line voltage signal from separate controller or sensor (by others), with low light level decreased to 30% maximum drive current.

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 - Select high-brightness LEDs in Cool White (5000°K nominal) or Neutral White (4000°K nominal) color temperature. 70 CRI (nominal).

DISTRIBUTION/PERFORMANCE - Types 3, FT and 5. Exceptional uniformity creates bright environment at lower light levels. Improved backlight cutoff minimizes light trespass.

HOUSING - One-piece, die-formed aluminum. Weather-tight housing contains factory prewired driver and field connections. Extruded one-piece EPDM gasketed wiring access door (with safety lanyard) is located underneath and utilizes tool-less thumbscrew fastener.

OPTICAL UNIT - Clear tempered optical grade flat glass lens sealed to aluminum optics housing creates an IP67 rated, sealed optical unit. Optical unit is recessed into housing cavity and sealed to the housing with extruded one-piece EPDM gasket. Pressure stabilizing breather allows super-tight IP67 protection while preventing temperature cycling from building up internal pressures and vacuums that can stress optical unit seals and components. Optical unit lanyard serves dual purposes of safety and provides positive ground between unit and housing.

MOUNTING - Tapered rear design allows fixtures to be mounted in a quad pattern without the need for extension arms. Use with 3" reduced drilling pattern on round and square poles. A round pole plate (X4RPP, X5RPP) is required for mounting to round poles. Wall mount available by ordering wall mounting bracket (BKS-XBO-WM-* -CLR). See Accessory Ordering Information chart for all brackets.

ELECTRICAL - A terminal block for attachment of incoming primary wiring is supplied. Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input), and 347-480 VAC. Optional twistlock photocell receptacle is available. Photocell must be ordered separately. Fixture Watts: SS - 139, HO - 176 nominal.

DRIVER - Available in SS (Super Saver) and HO (High Output) drive currents (Drive currents are factory programmed). State-of-the-art driver technology designed specifically for LSI LED light sources provides unsurpassed system efficiency. Components are fully encased in potting material for IP65 moisture resistance. Driver complies with IEC and FCC standards. Driver and key electronic components can easily be accessed.

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

FINISH - Fixtures are 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.

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

SHIPPING WEIGHT (in carton) - 39 lbs. / 17.7 Kg

LISTING - ETL listed to U.S. and International safety standards. Suitable for wet locations.

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens) 14091
Watts 135.5
Lumens per Watt (Efficacy) 104

Color Accuracy
Color Rendering Index (CRI) 72

Light Color
Correlated Color Temperature (CCT) 5477 (Daylight)

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

Warranty** Yes

All results, except LED Lumen Maintenance, 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.

** See www.lightingfacts.com/products for details.

Registration Number: KGGN-QMKWZ6 (3/11/2013)
Model Number: XAMU FT LED 128 SS CW UE
Type: Outdoor area/roadway fixture

LIGHT OUTPUT - XAMU					
		# of LEDs	Lumens (Nominal)		
			Type 3	Type FT	Type 5
Cool White	SS	128	13500	14100	12100
	HO	128	16500	17300	14800
Neutral White	SS	128	12400	13200	11200
	HO	128	15000	15800	12500

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



Suitable for wet locations



IP65 / IP67



Fixtures comply with ANSI C136.31-2001 American National Standard for Roadway Lighting Equipment - Luminaire Vibration 3G requirements.

LED AREA LIGHTS - AEROMAX™ MEDIUM (XAMU)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XAMU FT LED 128 HO CW UE WHT PCR**

Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Controls	Sensor/Options
XAMU	3 - Type 3 5 - Type 5 FT - Type FT	LED	128	SS - Super Saver HO - High Output	CW - Cool White NW - Neutral White	UE - Universal Voltage (120-277) 347-480 - Universal Voltage (347-480V)	BLK - Black BRZ - Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	Virtinet Wireless Network (requires a Ventura controller/Mailbu link - see Virticus catalog page.) (blank) - None VCM - Standard (revenue grade) VCMB - Basic VCMH - Standard (Host) VCMBH - Basic (Host) DIM - 0-10 volt dimming (required for satellite fixtures) Stand-Alone Control (blank) - None DIM ¹ - 0-10V Dimming (from external signal) BLS ¹ - Bi-level Switching (from external signal)	Sensor ES ² - External Sensor Options PCR - Photoelectric Control Receptacle ³

LUMINAIRE EPA CHART - XAMU

	Single	1.4
	D180°	2.8
	D90°	2.4
	T90°	4.0
	TN120°	4.0
	Q90°	4.7

Note: House Side Shield adds to fixture EPA. Consult Factory.

ACCESSORY ORDERING INFORMATION

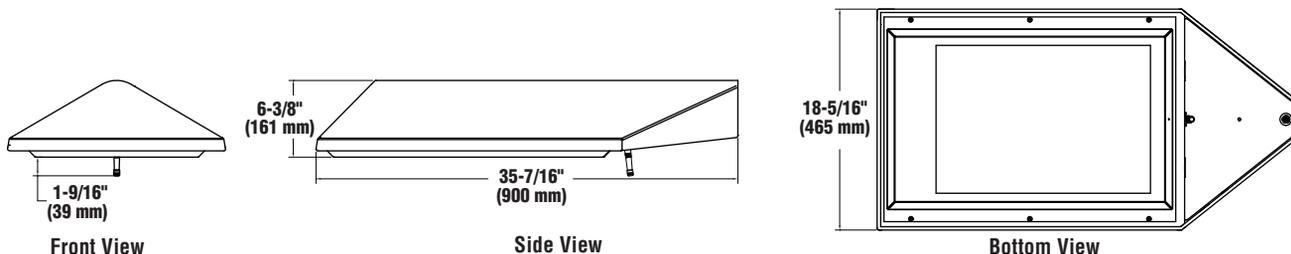
(Accessories are field installed)

Description	Order Number	Description	Order Number
BKA-XBO-EC-6-CLR 6" Extension Arm	382136CLR	DFK208, 240 Double Fusing (208V, 240V)	DFK208, 240 ⁶
BKS-XBO-WM-* - CLR Wall Mounting Bracket	382132CLR	DFK480 Double Fusing (480V)	DFK480 ⁶
XAMU-3/FT-HSS House Side Shield (Black only)	524670BLK ⁴	FK347 Single Fusing (347V)	FK347 ⁶
X4RPP Round Pole Plate for 4" Poles	379967CLR	ROSB120 - WL Remote Box with 120V Occupancy Sensor	C/F ⁷
X5RPP Round Pole Plate for 5" Poles	379968CLR	ROSB277 - WL Remote Box with 277V Occupancy Sensor	C/F ⁷
PC120 Photocell for use with PCR option (120V)	122514 ⁵	RPSB120 - Wet Location Remote Box with 120V External Photocell	C/F ⁷
PC208-277 Photocell for use with PCR option (208V, 240V, 277V)	122515 ⁵	RPSB208-277 - Wet Location Remote Box with 208-277V External Photocell	C/F ⁷
PC347 Photocell for use with PCR option (347V)	159516 ⁵	PMOS120 - 120V Pole-Mount Occupancy Sensor	C/F ⁸
PC480 Photocell for use with PCR option (480V)	122518 ⁵	PMOS277 - 277V Pole-Mount Occupancy Sensor	C/F ⁸
FK120 Single Fusing (120V)	FK120 ⁶		
FK277 Single Fusing (277V)	FK277 ⁶		

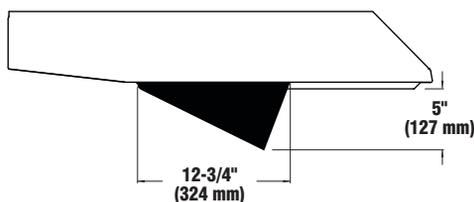
FOOTNOTES:

- DIM and BLS cannot be ordered together.
- Do not specify for satellite units.
- Photocell must be ordered separately. See Accessories.
- House Side Shield adds to fixture EPA. Consult factory.
- Factory installed PCR or VCMPCR option required. See Options.
- Fusing must be located in the hand hole of pole.
- Includes VCM. To be used in conjunction with VCM option in fixture. Consult factory.
- To be used in conjunction with any of the VCM control modules and ES sensor option in fixture. Consult factory.

DIMENSIONS (shown with VCM/VCMEs option)



XAMU HSS - House Side Shield



LED PATRIOT® WALL SCNCE (XPWS3)



US patent 7828456, 8002428 and CAN 2736757 & 2736757 and MX patent 29631 and ISRL 49679 and AUS 2008312668 and US & Int'l. patents pending

SMARTTEC™ ENERGY SAVING FEATURES:

THERMAL CONTROL - Sensors in both optical and driver enclosure reduce driver current when ambient temperatures exceed 50°C. Current is lowered in imperceptible 5% increments every 5 minutes until safe operating temperature is reached.

OPTIONAL INTEGRAL MOTION SENSOR - Passive infrared motion sensor activates switching of luminaire light levels. High level light is activated when passersby enter target zone and increased to full bright in 1-2 seconds. Low light level (30% of maximum drive current) is activated when target zone is absent of motion activity for 5 minutes and is gradually ramped down (10 seconds) to low level. Sensor detection range 110° horizontal x 93° vertical x 10 meters maximum distance.

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 - Available with 28 or 48 select high-brightness LEDs in Cool White (5300°K nominal) or Neutral White (4200°K nominal) color temperature, 70 CRI (nominal).

OPTICS/DISTRIBUTIONS - Ultra-high efficiency reflectors provide three distributions. Choose from Wide Throw (WT), Forward Throw (FT) or Wall Wash (WW).

HOUSING - One-piece die-cast aluminum housing is smoothly contoured rectangular shape. Mounting hardware is stainless steel or electro-zinc plated steel. Housing and optical unit are sealed with extruded silicone gasket; supply conductors with molded EPDM bushing.

OPTICAL UNIT - Clear tempered optical-grade flat glass lens sealed to the aluminum optic housing creates an IP65 rated unit. Pressure stabilizing breather allows super-tight protection while preventing cycling from building up internal pressures and vacuums that can stress optical unit seals.

WALL MOUNTING - Galvanized-steel universal wall mounting plate easily mounts directly to 4" octagonal or square junction box. EPDM gasket is supplied to be installed between mounting plate and junction box, sealing junction box from entrance of water. Universal plate permits fixture to be mounted in uplighting (indoor only) or downlighting position.

POLE MOUNTING - XPMA (for square) or XPMAR (for round) allows mounting to poles in single and D180 configurations. Use with 3" reduced drilling pattern.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input) or 347-480VAC.

DRIVER - Available in 350mA and 450mA drive currents (Drive currents are factory programmed). Components are fully encased in potting material for IP65 moisture resistance. Driver complies with IEC and FCC standards. Driver can be easily accessed and removed.

EMERGENCY OPTIONS - Integral emergency battery-back-up options are available. BB option operates in 0°C to 60°C ambient temperature and CWBB operates in -20°C to 60°C ambient temperature. When primary AC power failure occurs, both options operate 10 LEDs for minimum of 90 minutes.

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

FINISH - LSI's DuraGrip® polyester powder coat finishing process withstands extreme weather changes without cracking or peeling. Guaranteed for five full years.

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

SHIPPING WEIGHT (in carton) - 30 lbs./13.6Kg

LISTING - ETL listed to ANSI/UL1598, UL8750 and other U.S. and international safety standards. Suitable for wet locations in downlight position. Optional Class 1 Division 2 (groups A, B, C & D) hazardous location rating is available. (Select HL option)

Crossover LED Lighting

lighting facts®

A Program of the U.S. DOE

Light Output (Lumens)	4020
Watts	53
Lumens per Watt (Efficacy)	76

Color Accuracy Color Rendering Index (CRI)	67
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Light Color Correlated Color Temperature (CCT)	5320 (Daylight)
Warm White 2700K	Bright White 3000K
4500K	Daylight 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: KGGN-V1H7ZA
Model Number: XPWS3 FT LED 48 350 CW UE
Type: Outdoor wall pack

LIGHT OUTPUT - XPWS3						
		Distribution/Lumens (Nominal)				
Milliamps	# of LEDs	Type FT	Type WT	Type WW	Watts	
Cool White 450 mA	350 mA	28	3100	3000	3200	34
		48	5100	5100	5200	55
	350 mA	28	3700	3600	3800	44
		48	6200	6100	6300	72
Neutral White 450 mA	350 mA	28	2900	2900	3100	34
		48	4900	4800	4900	55
	350 mA	28	3500	3500	3700	44
		48	5800	5700	5800	72

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



IP65



ARRA
Funding Compliant

DESIGNLIGHTS
CONSORTIUM

Suitable for wet locations (downlight only)



Project Name _____ Fixture Type _____

Catalog # _____

06/20/13

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LSI INDUSTRIES INC.

LED PATRIOT® WALL SCNCE (XPWS3)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XPWS3 FT LED 48 450 CW UE WHT BB**

Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Options
XPWS3 - LED Patriot Wall Sconce	WT - Wide Throw FT - Forward Throw WW - Wall Wash	LED	28 48	350 - 350mA 450 - 450mA	CW - Cool White NW - Neutral White	UE - Universal Voltage (120-277) 347-480	BLK - Black BRZ - Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	BB - Battery Back-up ¹ CWBB - Cold Weather Battery Back-up ¹ IMS - Integral Motion Sensor EMR2 - Two Emergency 12V Circuit Provisions with (2) 35 Watt Halogen Lamps ² PCI 120 - Button Type Photocell PCI 208 - Button Type Photocell PCI 240 - Button Type Photocell PCI 277 - Button Type Photocell PCI 347 - Button Type Photocell HL - Class1, Division2, Hazardous Location Rating. ETL listed to UL844 ³ XPMA - Pole Mounting Adaptor w/fixture backplate for use with square poles ⁴ XPMAR4 - Pole Mounting Adaptor w/fixture backplate for use with 4" O.D. round poles ⁴ XPMAR5 - Pole Mounting Adaptor w/fixture backplate for use with 5" O.D. round poles ⁴

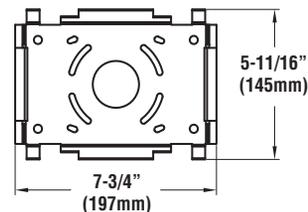
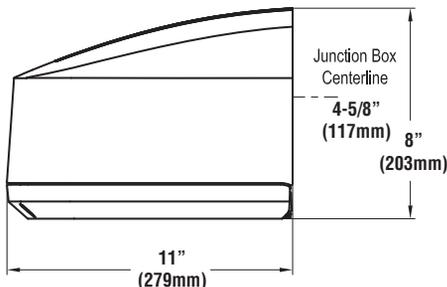
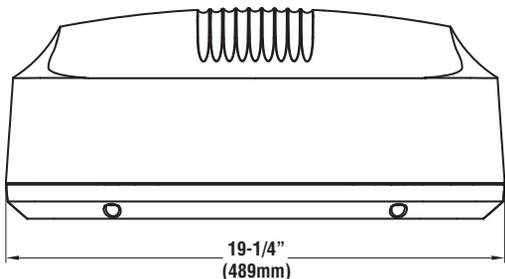
ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number
XPWS3 Polycarbonate Shield	244657
XPWS3 SW BLK - Surface Wiring Box (Available in black only)	356915BLK

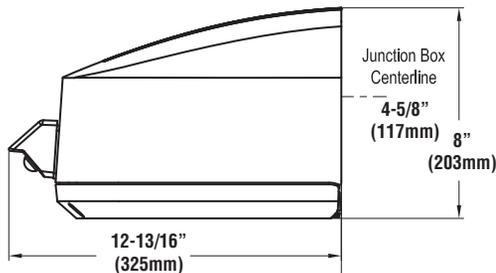
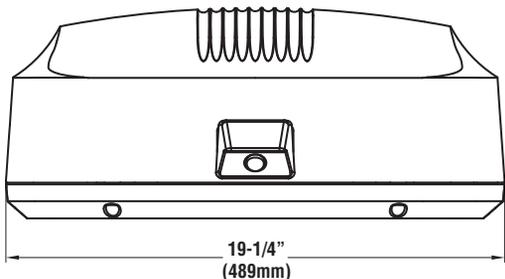
FOOTNOTES:

- 1 - Available with UE voltage only.
- 2 - Utilizes GZ4 sockets. 12 volt separate circuits required. Not available with battery back-up, photocell option, HL, XPMA or XPMAR options.
- 3 - Not available with battery backup, photocell or EMR2 option.
- 4 - Not available with EMR2 option. Designed with 3" reduced drilling pattern. For S or D180 mounting configuration only.

DIMENSIONS



Universal Mounting Plate



Shown with IMS Option

LED SOFFIT LIGHT (XSL2)



US patents D574994 & D595896 & 7828456 and US & Int'l. 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 - Select high-brightness LEDs. Cool White 5000°K color temperature, 69 CRI (nominal).

DISTRIBUTION/PERFORMANCE - Type S (Symmetric) or 5A (Type 5). Excellent uniformity with Bug rating of BU-UO-G1. Optional diffused lens available to reduce visibility of diodes

HOUSING/OPTICAL UNIT - Housing is die-formed aluminum with a gasketed clear tempered glass lens providing a water-resistant seal. Weather-tight aluminum enclosure contains factory prewired driver to ensure no water entry. Sealed optical unit containing LEDs rated IP67.

MOUNTING - Direct mounts with screws through the trim frame (standard). Optional channel bar kit available to suspend assembly from ceiling joists. 12" clearance required for ease of installation.

ELECTRICAL - Universal frequency power supply (50/60 Hz). Supply voltage must be specified for pre-wired thermal protectors.

DRIVER - State-of-the-art driver technology designed specifically for LSI LED light sources provides unsurpassed system efficiency. Driver will operate with input of 120/208/240/277V (50/60 Hz). Components are fully encased in potting material for moisture resistance. 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 color is white.

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 damp locations.

Crossover® LED Lighting

lighting facts

A Program of the U.S. DOE

Light Output (Lumens)	4957
Watts	62.2
Lumens per Watt (Efficacy)	79

Color Accuracy Color Rendering Index (CRI)	69
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Light Color
Correlated Color Temperature (CCT)

5100 (Daylight)

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results. Products qualified under the DOE ENERGY STAR® program have the ENERGY STAR mark on this label.

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

Registration Number: KGGN-EDE2GE
Model Number: XSL2-S-LED-50-CW-UE
Type: Surface and pendant-mounted downlights

This "Lighting Facts Label" represents LSI's commitment, through participation in the Department of Energy's SSL Quality Advocates program, to accurately report performance criteria of our LED fixtures. **This label represents a single test of a single fixture. Input power below represents rated values for the family.** Color temperature and lumen output for each variation of this Crossover® fixture can be found in the ordering information below as well as at www.lightingfacts.com.

LIGHT OUTPUT - XSL2		
Distribution	Lumens (Nominal)	Watts
Type S	5000	60
Type 5A	6959	86

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



IP67



ARRA
Funding Compliant

Suitable for damp locations

DESIGNLIGHTS
CONSORTIUM

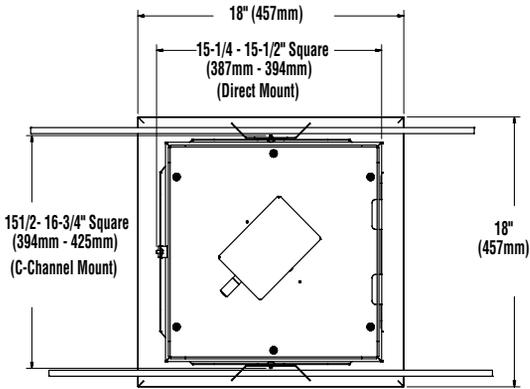
LED SOFFIT LIGHT (XSL2)

PRODUCT ORDERING INFORMATION

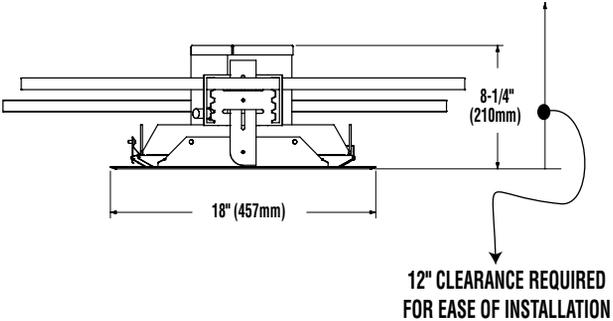
TYPICAL ORDER EXAMPLE: **XSL2 S LED 50 SS CW 120 WHT CMT**

Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Options
XSL2 - Soffit Light	S - Symmetric 5A - Type 5	LED	50	HO - High Output SS - Super Saver	CW - Cool White (5000° K nom.)	120 208 240 277 347	WHT - White	CMT - Channel Bar Mounting Kit DM - Direct Mount DFL - Diffused Lens

DIMENSIONS

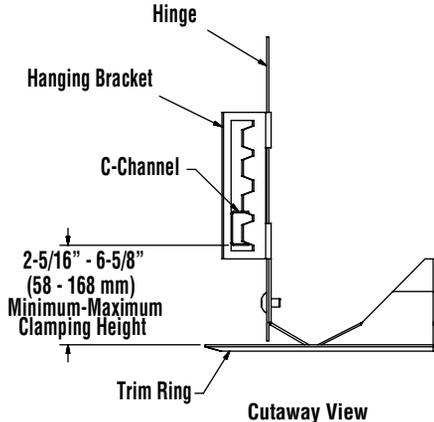


TOP VIEW



SIDE VIEW
(Channel Mount Shown)

SHIPPING WEIGHT - 14 lbs. (6.4kg)



Cutaway View

Ricker's Gas Station & Convenience Store
146th Street and Carey Road

Operations Narrative

Trash Pick-up: a commercial refuse collector will be contracted to remove trash from the dumpsters. This removal will take place during the normal operating hours of the facility, but not during peak times.

Snow Removal: a local snow removal contractor will be secured to clear snow from the drives, parking areas, and pump stations. As with any business, the plan is to have snow cleared prior to the opening of the facility, but this timing will be dependent upon the timing of snowfall.

Maintenance of Drives and Parking Areas: Ricker's includes an in-house maintenance staff which addresses minor repairs of drives and parking areas. For large projects (resurfacing or repaving of entire areas), a contractor will be secured for those projects or on an as-needed basis.