CRO3 LED Canopy Lighting

Crossover®
GENERATION 3

Marketing Positioning Statement

LSI LED Generation 3 (CRO3) canopy lighting for both new construction and retrofit applications is designed to provide the absolute best LED lighting solution at the most affordable cost. LSI's proprietary SmartTec™ technology is featured in every Generation 3 canopy fixture, providing reliable and constantly superior performance over the life of the fixture. Multiple optics and drive currents allow you to create the best possible lighting for your specific canopy application

Leading Selling Features

- ▣ SmartTec™ Technology – "Industry First"

- ▣ Low Total Cost of Ownership

- ▣ Unparalleled Speed & Ease of Installation

- ▣ Outstanding Uniformity & Visual Comfort

- ▣ Selection of Light Output Options

- ▣ Superior Vertical Illumination for a Canopy Fixture

- ▣ Exceptional Design in an LED Canopy Fixture

- ▣ Widest Range of Retrofit Installation Options in the industry

LSi
Industries™

A Company with a *Smart Vision*

SmartTec™ Technology – "Industry First"

Thermal Management

LSI proprietary SmartTec heat dissipation system

Finless heat sink design to more effectively dissipate heat and eliminate areas for dirt and grime to gather

Sensors in both optical unit and driver enclosure reduce drive current when ambient temperatures exceed 50°C

Integral Motion Sensor (IMS)

Small, built-in flush-mounted optional sensor detects movement in a 20-foot circle

Dims to 30% power

Smart dim slowly lowers power over a 30-second period

Daylight Sensing

Optional feature eliminates day-burners by sensing daylight levels

Turns fixture off at light levels approximately equal to sunrise or sunset

Low Total Cost of Ownership

Annual Energy & Maintenance Savings

$2,455 savings for (16) CRO3 84 LED fixtures (450mA, ES) replacing (16) 320W MH

$2,589 savings for (16) CRO3 128 LED fixtures (450mA, ES) replacing (16) 400W MH

Based upon 12 hour daily operation at $.12kWh

Qualified products listing by DesignLights Consortium for rebate eligibility

Unparalleled Speed & Ease of Installation

Simplified Installation

Installs in less than half the time compared to other fixture designs

Quick-connect wiring process ensures simple and correct wiring connections

Mounting

Designed to retrofit through existing 4" Scottsdale hole as well as openings for Encore® and Encore® Top Access (see additional installation options in final section of this brochure)

Height and width of driver box consistent with height and width of the Scottsdale ballast box, meaning no need to relocate or modify existing conduits

Maintenance-Free

CRO3 canopy fixture is virtually maintenance free

Outstanding Uniformity & Visual Comfort

TriLume™ Optics

Sealed tempered glass lens, high-efficiency, precision-formed metal reflector and high-efficiency LED chips

Sealed tempered glass protects diodes from contaminants, ensuring long-term light output is not compromised

Permanently sealed with robotically applied polyurethane

5X more impact resistant than standard glass

Optical unit is water resistant, sealed to an IP67 rating

Glass lens will not discolor, craze or cloud up like acrylic

LIGHT OUTPUT - CRO3					
	# of LEDS	Distribution / Lumens			Watts
		S	A	ES	
350 mA	64	7087	6872	6272	75
	84	8996	8899	7996	99
	104	11243	10951	10318	123
	128	13599	13237	12416	150
450 mA	64	8616	8304	7440	99
	84	10753	10639	9567	131
	104	13302	12981	12346	162
	128	16031	15687	14722	199
550 mA	64	9767	9435	8386	128
	84	12158	11939	10796	163

Lumen Output

Range of lumen outputs available by varying the # of LEDs, reflector type and drive current utilized

Provides a choice of overall lumen outputs for the customer's specific requirements

Selection of Light Output Options

Choice of Reflector Systems	Symmetric (S), Enhanced Symmetric (ES) or Asymmetric (A) distribution Vertical surface illumination – See "Superior Illumination for a Canopy Fixture" section below Application staff available to assist in determining the best distribution pattern
Four LED Array Choices	64 and 84 for 19.4" square optical unit 104 and 128 for 21.7" square optical unit
Color Rendering Index	CRI of 70 facilitates recognition of specific colors and meets industry standards
Color Temperature	Cool White – 5300k for a cooler, crisper color temperature
Temperature Range	-40° to +50°C (-40°F to 122°F) Suitable for use in a full range of ambient temperatures Life expectation based on temperature remaining within the rated range
Three Drive Current Options	350mA, 450mA and 550mA available Choose 350mA for greatest energy efficiency 550mA for best first-cost value
Input Voltage	120V thru 277V are standard
Photometrics	Tested using guidelines established in IES LM-79 for absolute photometry Full cutoff on all distribution types

SUPERIOR VERTICAL ILLUMINATION FOR A CANOPY FIXTURE

Unique Design	CRO3 Focus Canopy Light (CRO3 FO) Slim 2" profile luminaire, housing is die-formed aluminum Precise beam placement for optimal surface illumination
Leading Selling Features	Ultra-high efficiency optics 30 high-brightness LEDs, 5000K, 70 CRI (nominal) 3 banks (cartridges) of LEDs independently adjustable between +/-45% allowing targeted zone illumination Regardless of light cartridge position luminaire provides cutoff Gasketed clear tempered glass lens provides a water-resistant seal 350mA drive current Input voltage of 120V thru 277V is standard

Exceptional Design in an LED Canopy Fixture

Attractive Low-Profile Design	Sleek, unobtrusive contemporary design to complement surroundings Overall RoHS/WEEE compliant construction
American Made	All products designed and manufactured in the U. S. Luminaire is comprised of 80% or greater recyclable materials
Housing	Vandal resistant die-formed aluminum construction easily withstands extreme temperature changes
Driver Housing	Wet location rated driver/electrical enclosure is elevated above canopy deck to help prevent water entry and to provide easy "knock-out" connection of primary wiring

American Innovation
American Made

Gasketing	Optical unit permanently sealed with robotically applied polyurethane to ensure overall uniform compression of housing and lens frame subassemblies
	All other external seals for additional fasteners, options, are EPDM rubber or silicone rubber
	Provides resistance to pressure and temperature changes; and environmental, aging and UV resistance
	Redundant, fail-safe seals are used in most cases for additional protection of luminaire
Finish/Colors	LSI's DuraGrip® polyester powder coat process resists corrosion and is scratch and ding resistant
	Withstands extreme weather changes without cracking or peeling
	Excellent durability and resistance to ultraviolet rays
Long-Life	LEDs evaluated In-Situ to LM-80 for 60,000 to 100,000 hours of expected life
	Up to 5X the life of HID
Protection	Optical unit assembly rated for wet location (per UL1598) and 3rd party certifications for IP67
Surge Protector	Meets IEEE C62.41.2-2002, Scenario 1, Location Category C
	Prevents damage to fixture due to unexpected "surge" or "swell" in AC Line Voltage
	Thermally protected transient over voltage circuit
Pressure Stabilizing Vent/Breather	Pressure stabilizing vent breather to prevent seal fatigue
Warranty	Limited 5-year warranty

Widest Range of Retrofit Installation Options in the Industry (CRO3 Ambient and Focus)

Scottsdale & Encore Replacements (CRO3)	Installs in a 12" or 16" deck pan.
	Designed to retrofit through existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access
Universal Superkit 2X2 (CSK3 UNV)	Replaces most existing 2X2 canopy fixtures without having to know the dimensions of the existing fixture
	Pre-assembled optical unit and mounting panel replace existing door frame and lens seamlessly and effortlessly
Recessed Superkit (CSK3 RECU)	Replaces most existing recessed canopy fixtures without having to know the dimensions of the existing fixture
	Tether holds pre-assembled optical unit and mounting panel during wiring for one-man installation
Double Deck Installation (CRR3)	Designed for installation on metal, double deck canopies in retrofit or new construction
	Canopy collar attaches to a unique clamp bracket system, providing solid support

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