TECHLIGHT

Catalog Number	
Project	Type

FEATURES & SPECIFICATIONS

APPLICATION — The high performance luminaire is designed for refrigerated environments where the normal operation ambient temperature is below 60°F. The low 1.75" luminaire profile minimizes the chance for luminaire damage due to operational traffic. The luminaire's sloped walls further help by forcing the contact object to slip under the luminaire.

CONSTRUCTION — Heavy duty single piece die cast aluminum housing for durability. The fixture is sealed to the elements and can be cleaned by pressurized water (IP65 rated)[1]. The power supply is remotely mounted outside of the refrigerated environment for heat reduction and maintenance ease. The LED lamps are mounted onto dedicated heat sinks. The "starburst" heat sink conducts heat from lamp to radial fins and onward to the cooled pyramid walls.

FINISH — A super durable polyester powder coat finish is electrostatically applied. Standard housing finish is white. Custom colors available upon request.

OPTICAL SYSTEM — Two optical options are available. Option 1 – utilitarian design for maximum efficiency having downlight option only for mounting heights between 18'-22'. Option 2 – reduced glare diffuse hemisphere lens for general purpose lighting with all glare virtually eliminated for an aestetically appealing and even distribution of light. Also, each luminaires' lamp optical assembly is independent of neighboring lamps permitting the use of multiple optics on a single luminaire.

ELECTRICAL SYSTEM — The constant voltage LED power supply operates off a voltage input range from 90V~305V (50/60 Hz). An internal surge protection device protects the assembly from up to 10,000 kV surge events. For ease of service the power supply is typically located outside the refrigerated box with a max remote distance of 100'.Through an integral J-Box located at the luminaire center, power and signal are distributed to lamps and when needed, to nearby luminaires. 80 CRI LED lamps are available in a 4000°K color temperature. An occupancy sensor can be used as the J-Box cover.

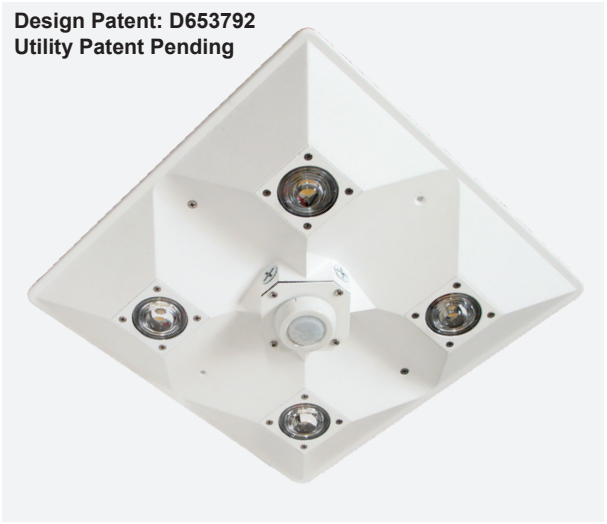
MOUNTING — A patent-pending invention sets the luminaire apart. A single non-conductive through bolt secures the luminaire to the ceiling panel. Inserted from above through a ⅞" dia. bore, the bolt also acts as a wire conduit. The bolt luminaire entry is at the J-Box. The luminaire installation is quick and easy, eliminating common issues such as sweating and air infiltration.

LISTINGS — ETL listed for wet locations (IP65)[1]. Meets US and Canadian safety standards. -40°F to 60°F ambient operation.

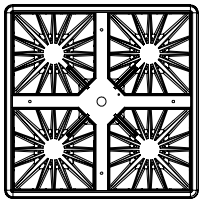
Refrigeration Canopy Luminaire

CL4 SERIES

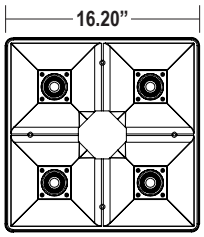
Design Patent: D653792
Utility Patent Pending



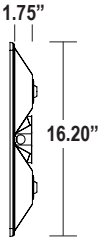
Top View (Flush to Ceiling)



Bottom View



Elevation



Series	Housing Height	Length & Width	Weight
CL4	1.75"	16.20"	14 lbs

ORDERING INFORMATION

Choose the bold face options for the appropriate luminaire configuration for your application and enter on the line above each fixture attribute. Accessories may be factory installed, depending on the particular accessory chosen, but still be ordered as a separate line item.

Example: **CL42NW6W**
LC1DA
EUV-100S048ST

CL4

Series	Optics	Color Temp & CRI	Mounting	FINISH
CL4	**1** High Mounting (18'-22')	**NW** Natural White (4000K / 80 CRI)	**4** 4" Bolt Length	**W** White
	4 Diffuse Reduced-Glare Lens		**5** 5" Bolt Length	**SP** Custom Finish
			6 6" Bolt Length	
			0 No Bolt Provided	
			SP Custom Bolt Length[6]	

Accessories

Order as separate line items

LC1DA[3]	Single Fixture Power Supply Enclosure (Power Supplies Separate)
LC6DA[3]	Up to 6 Fixture Power Supply Enclosure (Power Supplies Separate)
EUV-100S048ST[2]	90V~305V Input Power Supply for Enclosures (Order 1 per fixture)
TLGETR480/250W[3]	347V Step Down Transformer (Required for Canada)
OSP1F1W[4]	PIR Occupency Sensor (luminaire mount)
PSJ183[5]	18 Gauge, 3 Strand SO Cord
PSJ185[5]	18 Gauge, 5 Strand SO Cord

NOTES
1. IP65 is rated as water projected by a 6.3mm nozzle at 1.5 litres per minute, 30 kN/m² at a distance of 3m.
2. Auto ranging power supply from 90V to 305V input.
3. Mount prep and wireways on Multi-Power Supply Enclosures must be made in the field according to job requirements. Power Supplies will be supplied separately unless customer requests otherwise. Please note the power supply configurations for each enclosure on the purchase order.
4. The PIR Occupency Sensor is individually rated as IP65. The addition of this option downrates the entire assembly to the IP65 rating.
5. SO Cord is ordered by the linear foot.
6. Custom bolt length required must be denoted on purchase order.

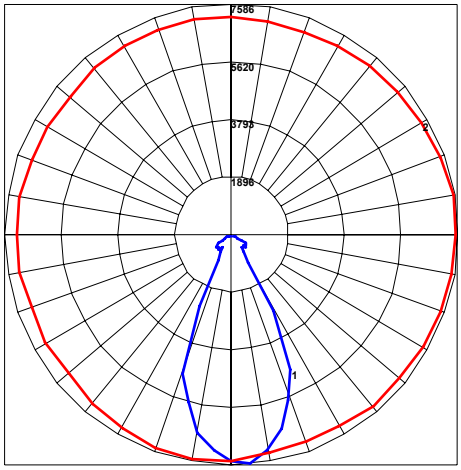
REV: 20131008-2

CL4 Refrigeration Canopy Luminaire

PHOTOMETRICS

IES INDOOR REPORT
PHOTOMETRIC FILE
NAME: CL41CW
POLAR GRAPH
High Mounting (18'-22')
Optical Assembly

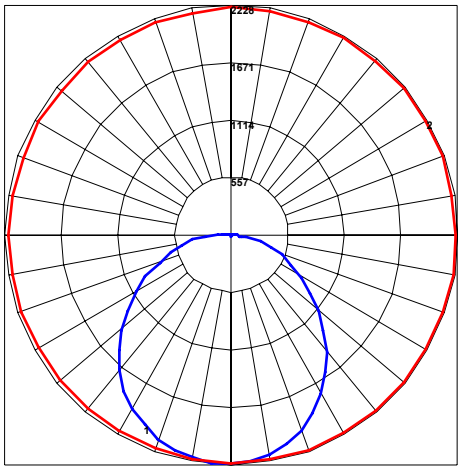
90W[1] Refrigeration Canopy
Color Temperature: 4,000 K
CRI: 80



Maximum Candela = 7586.6 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

IES INDOOR REPORT
PHOTOMETRIC FILE
NAME: CL44CW
POLAR GRAPH
Diffuse Reduced-Glare
Lens Optical Assembly

90W[1] Refrigeration Canopy
Color Temperature: 4,000 K
CRI: 80



Maximum Candela = 2228.7 Located At Horizontal Angl e = 270, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (270 - 90) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

NOTES
1 107W is the total wattage for all 4 LED modules not including driver.

TECHLIGHT

Techlight, Inc.
2707 Satsuma Drive
Dallas, TX, 75229
Phone: 214-350-0591, 800-225-0727, Fax: 214-350-9137
www.techlight.com

CL4 Refrigeration Canopy Luminaire

LED DRIVER CHARACTERISTICS — High Efficiency, Constant Current Output Driver

Power Supply	Max Output Current	Input Voltage	Input AC Current	Output Voltage	Max Ouput Power	Power Factor	
						110Vac	220Vac
High Efficiency, Constant Voltage Output Power Supply	1.95 A	90 ~ 305 Vac	1.2 A @ 100 Vac[3] 0.6 A @ 220 Vac[4]	48 Vdc	90W	0.99	0.96

LED CHARACTERISTICS

PHOTOMETRIC (Neutral White)

Initial Lumens[2]	8696
LED Lumens Per Watt[4]	112
System Lumens Per Watt[4]	97 (typical)
L70	(70%) > 50,000 hours[5]
CCT	4000K
CRI	80

LUMEN DEPRECIATION FACTORS

AMBIENT TEMP	LUMEN MULTIPLIER
-30ºC	1.08
-20ºC	1.06
-10ºC	1.04
0ºC	1.02
10ºC	1.00
8.9ºC	0.99

LIFE DEPRECIATION FACTORS

AMBIENT TEMP	LIFE HOUR MULTIPLIER
-30ºC	4.29
-20ºC	2.90
-10ºC	2.02
0ºC	1.44
10ºC	1.04
8.9ºC	1.00

NOTES
2 Initial Lumen values are based upon 10ºC (48ºF) ambient operating temperature.
3 Measured at full load and 100 Vac input.
4 Measured at full load and 220 Vac input.
5 L70 values based upon 8.9ºC (48ºF) ambient operating temperature.

TECHLIGHT

Techlight, Inc.
2707 Satsuma Drive
Dallas, TX, 75229
Phone: 214-350-0591, 800-225-0727, Fax: 214-350-9137
www.techlight.com