

CLM 422 Series

LED Ceiling Luminaire Module - 45Watt



Product Information

The CLM422 LED Ceiling Luminaire Module is the first truly engineered commercial grade (2'x 2') LED office light designed to replace fluorescent fixtures of much higher wattage classes.

It delivers evenly distributed horizontal and vertical foot-candles, ideally suited for typical work spaces and utility areas. The Patented Air Bi-Pass Convection System enables excellent thermal management to ensure long LED life with extended lumen maintenance and virtually zero fixture maintenance.

The CLM422 is the most cost effective, commercially viable solution available on the market today.

Patent No. 20130242548 A1

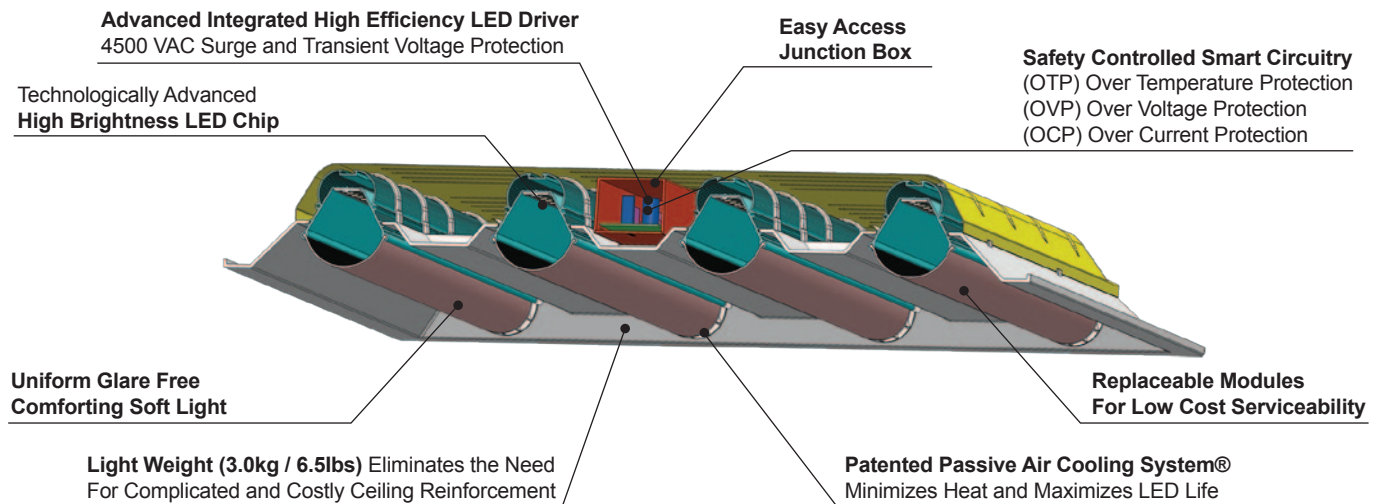
Other US and international patents pending



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Technical Drawing



Advantages of CLM422

- **Standard 2' x 2' LED replacement** ceiling luminaire (troffer) for all office spaces
- **Light Weight (3.0kg / 6.5lbs)** eliminates the need for complicated and costly ceiling reinforcement
- **Glare-Free**, comfortable uniform lighting for all working environments
- **Smart Circuitry System** gives greater protection when used in unstable electrical grids
- Available with Programmable and **RF Wireless Dali Smart Control System with PIR motion sensor** enabling greater flexibility and maximizing savings
- **Replaceable modules** for low cost serviceability
- Patented Passive Air Cooling System enables low LED Junction Temperatures (T_j) for **maintenance free long life**
- **Cost Effective Solution** as a true LED replacement with a 5-Year Warranty
- **Easy to Install**, ideal for retrofit and new construction
- Designed and Engineered in the **USA**

Application

- Commercial Office
- Hospitality
- Healthcare
- Schools

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Features

- CLM422 Light Module is designed to last 80,000 hours with a minimum of 70% Lumen Maintenance
- Available in warm (3000K), neutral (4000K) & cool (5000K) white
- High lumen output & high efficacy
- Ultra-Energy efficient
- Indoor application

Light Module

- Patented Passive Air-Flow Convection[®] System designed to minimize heat and maximize LED life by reducing junction temperature of the LED
- CLM422 is manufactured using only the highest grade extruded alloys in the construction of each luminaire to maximize performance

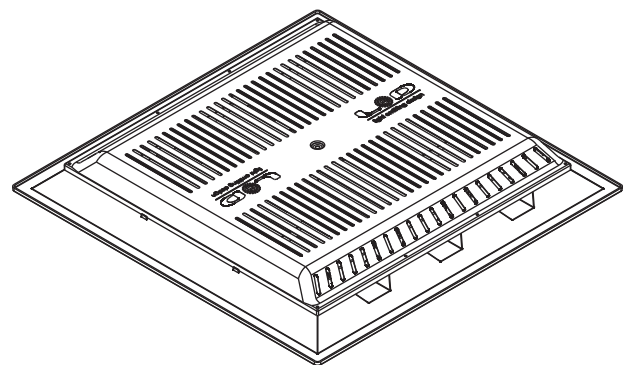
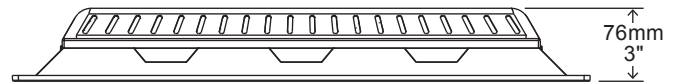
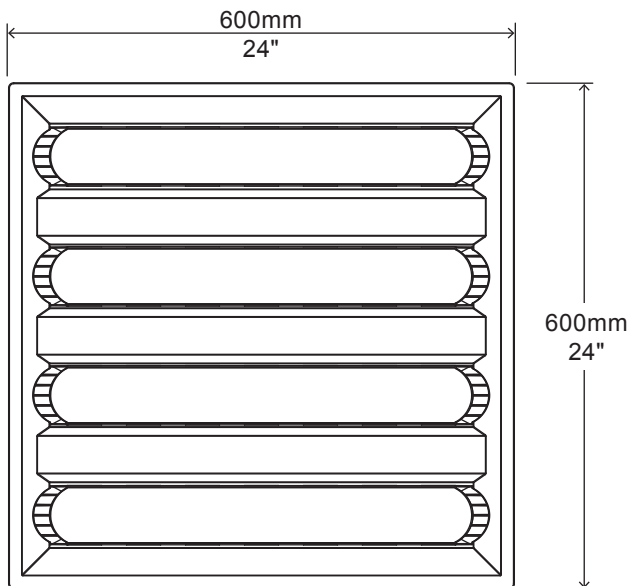
Electronics

- Patented MCPCB Technology enables ultra low LED junction temperatures for maintenance free long life
- Integrated high efficiency LED driver and power supply
- Smart circuitry with surge and transient voltage protection
- Powered by industry leading high brightness LED chip

Optics

- Proprietary reflector and optical diffuser system enables 120° glare-free comforting soft light without the uncomfortable LED “eye piercing effect”

External Dimensions



Packaging Information

Case Quantity	Dimensions (LxWxH)	Weight
5	65 x 65 x 45 cm 25% x 25% x 17% in	21.5 kg 47.4 lbs

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Ordering Information

CLM422	Wattage		Voltage		CCT		Driver	
		35 45		UV = 90-277VAC		30 = 3000K 40 = 4000K 50 = 5000K		ND = Non-Dimmable DM = Dimmable DS = Dimmable + Sensor

NOTE: White is the standard housing exterior color. Other colors are available on request.

Example

Part Number	Part Description
CLM422-45UV-50DS	2' x 2' (600 x 600mm) Ceiling Luminaire Module / 45Watt / 90-277VAC / 5000K Cool White / Dimmable with Motion Sensor

Specification

Input Voltage	90-277VAC 47~63Hz
Fixture Watts *	45 Watt
Lumens (Total) *	4,450 Lumens
Efficacy *	99 Lumens / W
LED Model	Nichia
CRI	85
T _s - Solder Point Temp *	48°C
L70 Rating @ T _a 25°C	> 80K hours
Light Beam Angle	120°
Lighting Control	Dimmable (0-10V) / DALI & Motion Sensor
Warranty	5-Year Limited
Operational Temperature (T _a)	-40°C ~ 50°C
Humidity	-40°C ~ 80°C / 20 - 95% RH non - condensing

* Test data @ T_a: 25°C
NOTE: All Values Have ±7% Tolerance



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Photometry (LM79 Test Number LTL 355365)

Average Luminance Table (cd/m²)

		Horizontal Angle (°)		
		Along	45	Across
Vertical Angle (°)	45	4470	4504	4378
	55	3953	4023	3863
	65	3359	3675	3483
	75	2579	3566	3456
	85	1179	3941	3454

NOTE: All Values Have ±7% Tolerance

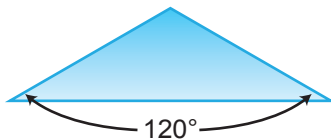
Lumen values may be lower than those indicated on the product specification page due to technological advancements.

Zonal Lumens and Percentages

Zone (°)	Lumens	% of Luminaire
0-30	1318	30.41
0-40	2102	48.49
0-60	3490	80.52
0-90	4334	100.00
40-90	2233	51.51
60-90	844	19.48
90-180	0	0.00
0-180	4334	100.00

NOTE: All Values Have ±7% Tolerance

Illumination Levels



Height	LUX	FC
2m / 6.5ft	405	37.5
3m / 9.8ft	208	19
4m / 13ft	122	11
5m / 16.5ft	60	5.5

NOTE: Light Intensities Are Measured Directly Below The Fixture Using Clear Lens.
All Values Have ±7% Tolerance.

Polar Plot

