

Cascade LED

Direct/indirect 600mm square recessed luminaire



Organic Response
smartphone dongle



Cascade LED Opal ST



Organic Response Wall
Switch



Integral Command 4 DALI
detector

Overview

Cascade LED uses advanced optics that enable compliance with all lighting regulations, whilst its curved wings add visual interest to the ceiling plane.

Optics

- Multi-optic 600mm square LED module that utilises intermediate brightness zone technology through application of flat centre strip and innovative curved wings
- The unique optic design creates a graduating light output from the centre, out to the sides, and then onto the ceiling plane. Thus eliminating harsh contrast created by flat panel LED modules. TSI technology is also incorporated to achieve optimum wall illuminance for education
- Available with 3000K and 4000K LED
- Available with e-light LED option for increased luminous efficacy (lm/cw) and reduced through life costs

Three optic options:

1. Advanced Hexaprism PMMA centre optic with prisms facing down for optimum glare control and diffusion
 - Designed for use in offices or school classrooms where LG7, LG5, and/or UGR compliance may be required
 - Light outputs:
 - 2710 lumens, 24W
 - 3322 lumens, 30W
 - 4094 lumens, 36W
2. Advanced Hexaprism TP(a) centre optic with prisms facing down for optimum glare control and diffusion

- Designed for use in offices or school classrooms where LG7, LG5, and/or UGR compliance may be required
- Light outputs:
 - 2692 lumens, 25W
 - 3341 lumens, 32W
 - 4158 lumens, 39W

3. Polycarbonate TP(a) opal micro-polymer diffuser with wipe clean finish

- Designed for use in transitory, social spaces and open areas
- Light outputs:
 - 2242 lumens, 19W
 - 4185 lumens, 36W
 - 5245 lumens, 44W
- Emergency outputs:
 - All Hexaprism non TP(a) variants (except e-light) - 330 lumens
 - e-light Hexaprism non TP(a) variants - 327 lumens
 - All Hexaprism TP(a) variants (except e-light) - 300 lumens
 - e-light Hexaprism TP(a) variants - 360 lumens
 - All Opal variants (except e-light) - 295 lumens
 - e-light Opal - 327 lumens

Body

- Steel body finished in reflective white
- For 600 x 600mm grid ceilings. See ceiling compatibility matrix on Whitecroft website
- Available with or without air handling. Air handling of 35 litres per second (refer to Whitecroft Technical Desk)
- Choice of integral emergency options; 3hr and COMEPS (can be wired as Easytest if required)
- IP44 from front face
- RAL Colour: White RAL9003.
- Installation in plasterboard ceilings possible using optional frame (supplied separately)
- Optional integral Command 5 Eco microwave, precommissioned detector fitted internally
- Optional integral Organic Response® wireless sensor that communicates with its neighbouring luminaires, automatically controlling light across the area†
- For commissioning requirements and full detector capability and functionality, contact Whitecroft Controls Department

†Every luminaire within an area that's to be controlled must have an integral Organic Response® detector. Wall switch and smart phone dongle are available (supplied separately)

Order codes

Cascade LED Hexaprism PMMA

				B50		
Cascade LED Hexaprism PMMA (4000K)	Fixed Output	3hr Emergency	LL/CW	L70	L80	L90
2710 lumens (24W)	CMH14KXT	CMH14KXTEM	112	>100k	>100k	63k
3322 lumens (30W)	CMH24KXT	CMH24KXTEM	109	>100k	98k	45k
4094 lumens (36W)	CMH34KXT	CMH34KXTEM	114	>100k	>100k	55k
3341 lumens (29W) - e-light	CMEH24KXT	CMEH24KXTEM	112	>100k	>100k	51k

High efficacy e-light available across the Cascade LED Hexaprism range, see options below for order codes on other outputs

Cascade LED Hexaprism TP(a)

B50						
Cascade LED Hexaprism TP(a) (4000K)	Fixed Output	3hr Emergency	LL/CW	L70	L80	L90
2692 lumens (25W)	CMPH14KXT	CMPH14KXTEM	104	>100k	>100k	63k
3341 lumens (32W)	CMPH24KXT	CMPH24KXTEM	103	>100k	98k	45k
4158 lumens (39W)	CMPH34KXT	CMPH34KXTEM	106	>100k	>100k	55k
3322 lumens (31W) - e-light	CMPEH24KXT	CMPEH24KXTEM	106	>100k	>100k	51k
High efficacy e-light available across the Cascade LED Hexaprism TP(a) range, see options below for order codes on other outputs						

Cascade LED Opal

B50						
Cascade LED Opal (4000K)	Fixed Output	3hr Emergency	LL/CW	L70	L80	L90
2242 lumens (19W)	CAH14KXT	CAH14KXTEM	114	>100k	66k	32k
4185 lumens (36W)	CAH34KXT	CAH34KXTEM	115	>100k	80k	38k
5245 lumens (44W)	CAH44KXT	CAH44KXTEM	119	>100k	>100k	47k
4247 lumen (34W) - e-light	CAEH34KXT	CAEH34KXTEM	123	>100k	>100k	51k
High efficacy e-light available across the Cascade LED Opal range, see options below for order codes on other outputs						

Accessories

Plasterboard installation frame (compatible for use with XT product only)	SFTPBF
Organic Response® Wall Switch	ORGWP
Organic Response® Wall Switch, Classroom version	ORGWPC
Organic Response® Smartphone Dongle	ORGDNGL
Lumafix Bracket Kit	LUMAFIXBKTKIT

Options

AIR HANDLING	Add A after T	i.e CMY24KXTA
COM 5 ECO***	Add Q5E before H	i.e CMQ5EH14KXT
COMEPS**	Add suffix /EP	i.e CMY24KXT/EP
DALI	Replace H with Y	i.e CMY14KXT
ORGANIC RESPONSE (SN3)	Add RG3 before Y	i.e CMRG3Y24KXT
SPRING T CEILING*	Replace XT with ST	i.e CMY24KST
HIGH EFFICACY e-light	Add E after CM or CA	i.e CMEY24KXT

* For specific Spring T ceilings only. See Ceiling Integration Guide

** Can be wired as Easytest if required

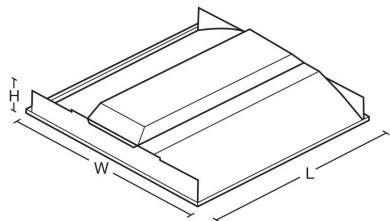
*** Cannot be used with DALI luminaires

For 3000K colour temperature, please contact Whitecroft

LED Performance

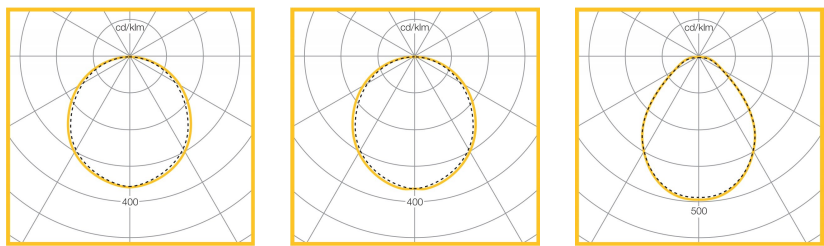
Colour Temp	RA (CRI)	Colour consistency
4000K	>80	MacAdam 3 SDCM

Dimensions



VERSION	L	W	H	KG	KG(EM)	Prepared Aperture
Exposed T	584	584	114	4.5	5.5	
Spring T	599	599	114	4.5	5.5	
Plasterboard frame	660	660	114	6.5	7.5	625 x 625

Photometric Performance

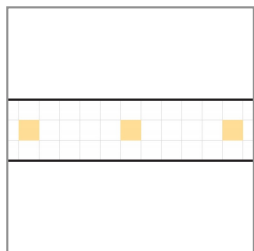


19.6W LED Opal
Micro Polymer
LOR = 100.0%
SHR MAX = 1.59

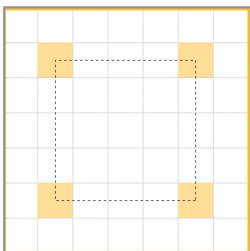
36.5W LED Opal
Micro Polymer
LOR = 100.0%
SHR MAX = 1.58

30.4W LED
Hexaprism
LOR = 100.0%
SHR MAX = 1.48

Performance Guide



Lamps	19.6W LED
Illuminance	148 lux
Spacing	3.0m
Maintenance	0.8
Reflectance	70/50/20
Ceiling Height	2.7m
Working plane	0.8m



Lamps	30.4W LED
Illuminance	529 lux
Spacing	2.4m x 2.4m
Maintenance	0.8
Reflectance	70/50/20
Ceiling Height	2.7m
Working plane	0.8m

To Specify

Cascade LED Hexaprism
Direct/indirect LED 600sq module luminaire. Advanced Hexaprism optic for excellent uniformity and glare control. Intermediate brightness zone technology; reducing the contrast between the luminaire and ceiling plane. Optional air handling facility of 35 litres per second – as Whitecroft Lighting CASCADE LED HEXAPRISM

Cascade LED Opal
Direct/indirect LED 600sq module luminaire. Polycarbonate TP(a) rated opal micro polymer optic for wipe clean finish and excellent light diffusion. Intermediate brightness zone technology; reducing the contrast between the luminaire and ceiling plane. Optional air handling facility of 35 litres per second – as Whitecroft Lighting CASCADE LED OPAL