

cascade LED

LED direct/indirect 600mm square recessed luminaire



cascade LED

Order Codes

Cascade LED Hexaprism	Fixed Output	3 hr Emergency
2700 lumen (26W)	CMH14KXT	CMH14KXTEM
3350 lumen (33W)	CMH24KXT	CMH24KXTEM
4100 lumen (38W)	CMH34KXT	CMH34KXTEM

Cascade LED Opal	Fixed Output	3 hr Emergency
2200 lumen (22W)	CAH14KXT	CAH14KXTEM
4200 lumen (40W)	CAH34KXT	CAH34KXTEM
5300 lumen (49W)	CAH44KXT	CAH44KXTEM

Options

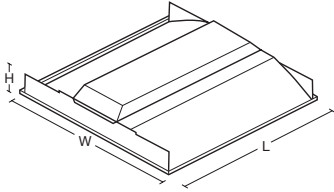
SPRING T CEILING*	Replace XT with ST	i.e. CMH24K ST
AIR HANDLING	Add A after T	i.e. CMH24K XTA
DALI	Replace H with Y	i.e. CMY24KXT
COMEPS**	Add suffix /EP	i.e. CMH24KXT/ EP
COM 5 ECO	Add Q5E before H	i.e. CMQ5EH24KXT
COM 4	Add Q4 before Y	i.e. CMQ4Y24KXT
ORGANIC RESPONSE®	Add RG before Y	i.e. CMRGY24KXT

Accessories

PLASTERBOARD INSTALLATION FRAME***	SFT PBF
ORGANIC RESPONSE® WALL SWITCH	ORG WS
ORGANIC RESPONSE® SMARTPHONE DONGLE	ORG DNGLE

* For specific Spring T ceilings only. See Ceiling Integration Guide
** Can be wired as Easytest if required
*** Must be used with XT product

Dimensions



Version	L	W	H	Prepared Aperture	KG	KG
Exposed T	584	584	96	–	4.5	5.5
Spring T	599	599	96	–	4.5	5.5
Plasterboard Frame	660	660	97	625 x 625 ⁻³ / ₊₃	6.5	7.5

Equivalent Lamp Types

2200 Lumen Output	
T5 lamp	2 x 14W
2700 Lumen Output	
T5 Eco lamp	2 x 20W
3350 Lumen Output	
T5 lamp	4 x 14W
4100/4200 Lumen Output	
T5 Eco lamp	3 x 20W
5300 Lumen Output	
TC-L lamp	2 x 40W

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
- ‘Cool’ white 4000K colour temperature

Two optic options:

- 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
 - Outputs:
 - 2700 lumens, 26W
 - 3350 lumens, 33W
 - 4100 lumens, 38W
- Polycarbonate TP(a) opal micro-polymer diffuser with wipe clean finish
 - Designed for use in transitory, social spaces and open areas
 - Outputs:
 - 2200 lumens, 22W
 - 4200 lumens, 40W
 - 5300 lumens, 49W

Body

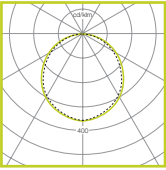
- Steel body finished in reflective white
- For 600 x 600mm grid ceilings. See ceiling compatibility matrix on Whitecroft website
- Available with or without air handling. Air handling of 35 litres per second (refer to Whitecroft Technical Desk)
- Choice of integral emergency options; 3hr and COMEPS (can be wired as Easytest if required)
- IP44 from front face
- Installation in plasterboard ceilings possible using optional frame (supplied separately)
- Optional integral Command 5 Eco microwave, pre-commissioned detector fitted internally
- Optional integral DALI Command 4 detector mounted in product diffuser
- 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)



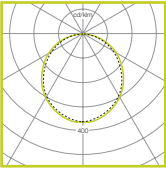
Integral Command 4 detector

Photometric Performance



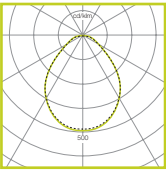
Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.69	0.97	1.04



Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.69	0.97	1.04

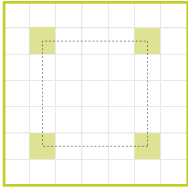


Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.75	0.99	1.05

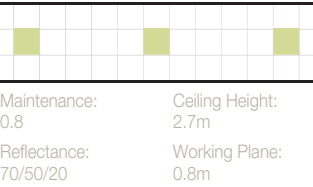
Performance Guide

Hexaprism (3350 lumens)		
Lamps	Illuminance	Spacing
33W LED	529 lux	2.4m x 2.4m



Maintenance: 0.8
Reflectance: 70/50/20
Ceiling Height: 2.7m
Working Plane: 0.8m

Opal (2200 lumens)		
Lamps	Illuminance	Spacing
22W LED	148 lux	3.0m



Maintenance: 0.8
Reflectance: 70/50/20
Ceiling Height: 2.7m
Working Plane: 0.8m

Ceiling Integration

Refer to common ceiling compatibility matrix – See Whitecroft website

Exposed T Grids

T25 Lay in
T15 Tegral

Alugrids

SAS AL 15/16
SAS AL 15/08

Spring T Grids

SAS – 150
Armstrong – Orcal 3000
Burgess – Clip in / A bar
Armstrong – Orcal 1800 Half Spring T
Burgess Clip in Half Spring T

Plasterboard (requires installation frame)

Prepared aperture

LED Performance

Colour Temp	Ra (CRI)	Life Expectancy	Colour Consistency
4000K	≥ 80	L ₈₀ (50,000hrs)	MacAdam 3 SDCM

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