# Cascade Flex E 600x600

Sustainable, Cradle to Cradle Certified feature recessed 600x600 luminaire offering differentiation for office and associated environments











Cascade Flex E Diffuser with Organic Response



Cascade Flex E Pod Dropped Cartridge

Cascade Flex E Pod with Organic Response



Cascade Flex E Diffuser

### Overview

Introducing the latest version of our Cascade Flex range of products, Cascade Flex E builds on our knowledge and development over the last four years in the delivery of the first truly circular designed recessed modular luminaire for the lighting industry. With our progression within the field of circularity, we have brought together the Cascade Flex and Cascade Flex Vitality into a single family; Cascade Flex E.

Helping you deliver on your environmental and lighting quality commitments, Cascade Flex E offers enhanced operational performance through the use of the latest LED technology for Ra80 and Ra90 light sources, and retains the breadth of range of outputs, ceiling options and optics to suit a wide variety of applications. In line with the wider business offer, the Cascade Flex E emergency options come complete with LiFeP04 battery technology and the option for integrated Organic Response sensor node for maximisation of energy performance and whole life optimisation.

Cascade Flex E demonstrates our continued commitment to the delivery of transparent data and information for circular design and embodied carbon and driving down our environmental impact.

The Cascade Flex E comes with Cradle to Cradle (Bronze) accreditation and a third party verified Environmental Product Declaration (EPD).

# Lighting Performance

Optics:

• Pod Optic supports the delivery of spaces where higher levels of glare control are needed (Disability and Discomfort).

- Opal Diffuser solution suitable for circulation and open area spaces where general amenity lighting is needed.
- Both optics are Tp(A) as standard.

Output Options (based on 4000K, Ra80):

- Pod Optic
  - · 2323, 16.6W (139.9llm/w)
  - · 3278, 23.1W (141.9llm/w)
  - 4120, 29.2W (141.1lm/w)
  - · 4801, 34.4W (139.6llm/w)
- Dlffuser Optic
  - 2327, 16.5W (141llm/w)
  - 3308, 23.1W (143.2llm/w)
  - 4108, 29W (141.7llm/w)
  - · 5103, 37W (137.9llm/w)

Light Sources Available:

- Ra80 or Ra90
- 3000K or 4000K
- >L90@50,000 hours (see individual data sheets for further details for each type)
- (Ra90 available Sept 24)

#### LED Chip:

- Ra80: E-light LED as standard. E-light utilises flip-chip technology delivering the most efficient LED chip technology on the market today.
- Ra90: 2835 chip technology utilising latest phosphor technology to minimise light output reduction when compared with Ra80 LED technology.
- 3 step Macadam Elipse

#### Control Gear:

- Fixed Output
- DALI2 driver

Lighting Controls:

• Available with integrated Organic Response smart sensor node.

#### **Emergency Lighting:**

- Integrated 3 hour LiFeP04. 3hr Keyswitch (EM), auto-test (EP) and wireless auto-test (EW) availabe.
- LiFeP04 offers several benefits versus NiCAD battery technology:
  - Improved Warranty (5 years)
  - Reduced energy in operation (up to 45%)
  - Longer Life (6-8 years)
  - Increased switching cycles
  - Lower embodied carbon
- Output (based on 4K, Ra80 Std Chips):
  - Pod
    - 3000K Ra80: 360 lumens
    - 4000K Ra80: 375 lumens
  - Diffuser
    - 3000K Ra80: 312 lumens
    - 4000K Ra90: 329 lumens

For specific product variant information, including lifetime, efficacy, power, output and electrical data, please click on the individual part number under 'Order Codes' and view the datasheet.

# Construction

Main Body:

• Steel canopy finished in white RAL 9003

Construction Methodology:

- Standard tool access to replaceable central cartridge with optics and light engine
- No screws or glues used within construction
- Up to 67% less plastic than a standard LED 600x600 flat panel solution

Ceiling Integration Options:

- 600 x 600mm Exposed Tee (584 x 584mm Ref 'XT')
- 600 x 600mm Spring Tee (599 x 599mm Ref 'ST')
- 600 x 600mm Plasterboard (use 'XT' version with 'SFTPBF' frame accessory)

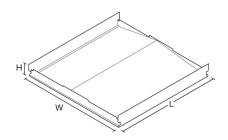
Accessories:

- Can be used with MSU Kit for Mental Health Medium Secure Unit & Anti-Ligature applications
- Plasterboard (use 'XT' version with 'SFTPBF' frame accessory)

# LED Performance

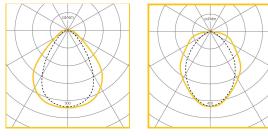
Colour Temp	RA (CRI)	Life expectancy
3000K	CRI80	>L90B50@50,000 Hours
3000K	CRI90	>L90B50@50,000 Hours
4000K	CRI80	>L90B50@50,000 Hours
4000K	CRI90	>L90B50@50,000 Hours

### **Dimensions**

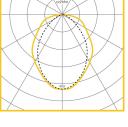


VERSION	L	W	Н	KG	KG(EM)
Pod Version Exposed T	584	584	69	4.0	5.5
Pod Version Spring T	599	599	69	4.0	5.5
Diffuser Version Exposed T	584	584	69	4.0	5.5
Diffuser Version Spring T	599	599	69	4.0	5.5

### **Photometric Performance**



Cascade Flex E Pod 600x600 LOR = 100% SHR MAX = 1.53



Cascade Flex E Diffuser 600x600 LOR = 100% SHR MAX = 1.41

# To Specify

Recessed modular luminaire with strong visual differentiation using a central linear optic. The light engine utilises LED flip chip technology and a cartridge that is easily replaced without tools for simple future upgrades and replacement ensuring a sustainable lighting solution. Cradle to Cradle Certified to Level Bronze. Emergency options complete with LiFeP04 battery technology: CASCADE FLEX E