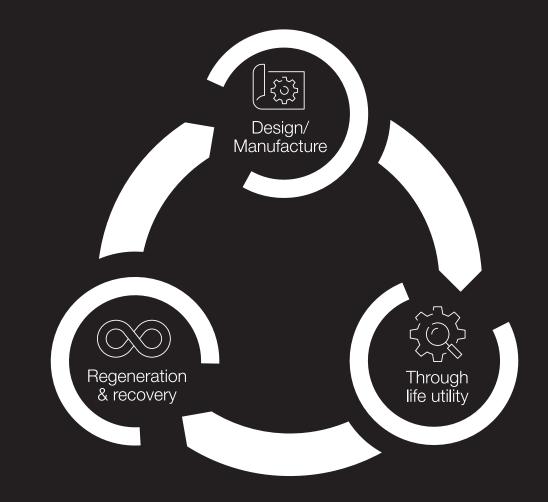
Whitecroft lighting



Whitecroft Vitality
The Change Starts Here

Sustainability is about the balanced delivery of Social, Economic and Environmental performance.

# Beginning our ICUIAT OUTH

Circularity is a model of sustainability that is about keeping products at their highest utility through life and then their regeneration and recovery



## Introducing //hitecroft /itality



Whitecroft Vitality is a new approach to circularity.

It's about creating long term, interconnected partnerships between the supply chain, manufacturer and customer around the product.

### Design and Manufacture

This begins with the development of high efficacy products that can be remotely monitored through life and are modular, upgradeable and designed for disassembly. Future regeneration and recovery is supported through material passports for component and material health transparency. Then the supply chain, production facility and product have to gain independent certification such as Cradle to Cradle Certified®.

### Through Life Utility

A truly circular solution needs to be monitored and upgraded through life to deliver its highest utility and energy saving potential. DALI and integrated controls such as Organic Response® enable Whitecroft to support you with annual Whitecroft Vitality maintenance checks to monitor the installation throughout its life and keep products at their highest utility.

### Regeneration & Recovery

Whitecroft Vitality cycles, which can be agreed at the point of installation, allow for the future upgrade and replacement of your lighting solution without the need to fully replace the luminaire. Keeping the product in the economy for additional lifecycles greatly reduces the carbon footprint of the installation and lowers return on investment triggers for future energy savings.

Whitecroft Vitality is a concept of perpetual cycles and reuse but when needed we can support with the re-sale, recovery or ultimately the responsible recycling of the product within WEEE regulations.

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### The Cradle to Cradle Certified® Vision.

A world where safe materials and products are designed and manufactured in a prosperous, circular economy to maximise health and wellbeing for people and planet.

# The Cracle to Cracle Certified® Approach

### Cradle to Cradle Certified®

is a globally recognised measure of safer, more sustainable products made for the circular economy. To achieve certification products are independently assessed for environmental and social performance against five key categories.

The standard encourages continuous improvement over time by awarding certification on the basis of ascending levels of achievement and requiring certification renewal every two years.

Cradle to Cradle Certified® is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

### 5 Key Categories



### Material Health

This category helps to ensure that products are made using materials and chemicals that are as safe as possible for humans and our environment. This is done through a process of inventorying, assessing and optimising material chemistries.



### **Material Reutilisation**

The material reutilisation category aims to eliminate the concept of waste by helping to ensure products remain in perpetual cycles of use and reuse from one product use cycle to the next.



### Renewable Energy

The renewable energy & carbon management category helps to ensure products are manufactured using renewable energy so that the impact of climate changing greenhouse gases due to the manufacturing of the product is reduced or eliminated.



### Water Stewardship

The water stewardship category helps ensure water is recognised as a valuable resource, watersheds are protected, and clean water is available to people and all other organisms.



### Social Fairness

The aim of this category is to design business operations that honour all people and natural systems affected by the manufacture of a product.

We are designing products to last longer, deliver more and consume less. To meet the needs of not only the modern day but those of the future, no matter what it may hold. **Daniel Renforth** Business Development Manager



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## Connected /

Whitecroft Vitality products feature integrated lighting controls including Organic Response® and Command 9 allowing not only for spaces to be easily configured and reconfigured but also luminaires to be remotely monitored. This functionality means the luminaires can be maintained and upgraded when necessary or desired, ensuring they remain at their highest utility throughout life.



Whitecroft Vitality allows me to make circular choices for my customers today, its tangible, a real solution. If you had the choice what would you choose?

### **Charlotte Croft**

Lighting Applications Manager

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### Cascade Flex unites high quality lighting and circularity.

### Designed to perform

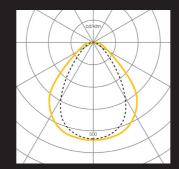
## Combining circular principles, exceptional lighting performance and a distinctive optic.

The signature optic has been rejuvenated and futureproofed taking the form of a completely removable, reusable, replaceable and recyclable cartridge. Supplied with a DALI driver and optional Organic Response® lighting controls Cascade Flex will enhance energy savings and support user well-being by creating engaging and comfortable environments.

### **Outputs and Efficiency**

A combination of the latest high efficacy e-light LEDs, superior thermal management and the pod optic see Cascade Flex achieve nominal lumen outputs ranging from 3300 up to 4100 lumens and efficacies in excess of 130ll/cw.

### **Polar Curve**



### Cradle to Cradle Certified® Bronze



### **Distinctive Optical Design**

The distinctive central optic and range of lumen outputs deliver both visual comfort and efficacy. The optic directs 80% of the output onto the task while the remaining 20% serves to illuminate the bevelled ceiling canopy. This results in an intermediate brightness zone which creates a contrasting field between the optic and the ceiling plane, adding visual interest and overall comfort.

### **Emergency Lighting**

Cascade Flex emergency luminaires utilise Lithium Iron Phosphate batteries, a safer, low toxicity alternative to Nickel Cadmium. Their stability and reliability can deliver benefits including reduced maintenance costs, longer lifetime and can be safely recycled at the end of their life. Furthermore, the use of Lithium Iron Phosphate batteries will reduce the parasitic load associated with emergency battery charging resulting in significant energy savings.

### Analysis of a typical secondary school with 450 emergency lighting units

**Ni-Cd** Annual Charge Energy Use

**Phosphate**Annual Charge
Energy Use

45% Energy Saving

8693 kW/h

4882 kW/h

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Flight gives you the ability to stay ahead of the game with minimal effort and expenditure. The removable light cartridge gives access to individual components enabling endless upgrades throughout the life of the product without the need to replace the entire luminaire.

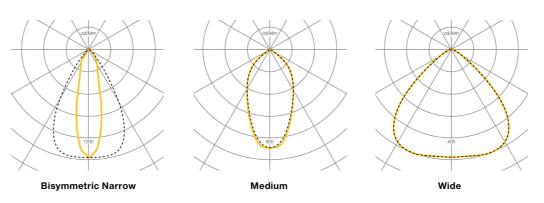
This brings benefits including the ability to change the optics, replace the LEDs and drivers and upgrade or add controls. As a result the luminaire remains up to date, at its highest utility and becomes more valuable over time.

## Flight and Flight Sport

### Cradle to Cradle Certified® Bronze

基	Material Health	Bronze
0	Material Reutilisation	Gold
	Renewable Energy	Silver
U	Water Stewardship	Bronze
A	Social Fairness	Silver
	Overall Certification Level	Bronze

### Polar Curves



**Emergency Lighting** 

Flight integral emergency luminaires use Lithium Iron Phosphate (LiFePO4) batteries as standard. Their stability and reliability can deliver benefits including reduced maintenance costs, longer lifetime and safe recycling at the end of their useful life. Furthermore, the parasitic load associated with battery charging is reduced, resulting in significant energy savings.

Energy saving when using
Lithium Iron Phosphate
compared to Nickel Cadmium

Ni-Cd Annual Charge Energy Use Phosphate Annual Charge Energy Use

45% Energy Saving

Designed to perform

### **Ambient Temperatures**

High or low ambient temperatures in manufacturing spaces can put stress on internal components and reduce both light output and life. Flight uses high quality components such as 100,000 hour industry specification drivers to ensure correct operation and the long life expected from a modern high bay luminaire. Installations in ambient temperatures between -20 to +40°C are possible using the Flight range.

### **Light Quality and Efficacy**

Using high efficacy LEDs Flight achieves outputs ranging from 12,000 up to 42,000 lumens and efficacies up to 179 ll/cw. The high transmission lens optics have been designed specifically for the Flight range to ensure light is delivered to the task efficiently for optimum performance and user comfort.



Be creative Be bold Be different

### and inspiration to deliver entire projects based around one style of luminaire. Using Mirage 3 this versatile family of products to enhance spaces, accentuate building architecture, deliver compliance and superior visual comfort all at the same time.

### **Colour and Light Quality**

Mirage 3 is available as 3000K and 4000K and Ra80 or Ra90, giving the designer the flexibility to deliver the appropriate quality of light for visual appearance and compliance within all applications.

### **Outputs and Efficiency**

The combination of the latest COB (chip on board) technology, graphite embedded heatsink and superior optical design sees the Mirage 3 deliver outputs up to 4000 lumens and efficacies in excess of 120 LL/CW.

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### **Effective Optical Design**

Mirage 3 features several distribution patterns and when combined with impressive lumen outputs makes it easier to deliver efficient and visually comfortable lighting.

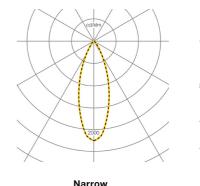
Beam angles are created by a combination of lens or dome optic, reflector and luminaire body size.

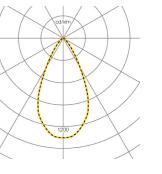
The different distribution patterns allow the designer to create feature and accent lighting, optimise lighting design and deliver exceptional visual

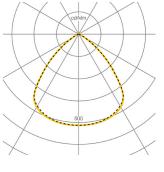
### Cradle to Cradle Certified® Bronze

丛	Material Health	Bronze
()	Material Reutilisation	Gold
	Renewable Energy	Gold
U	Water Stewardship	Gold
B	Social Fairness	Silver
	Overall Certification Level	Bronze

### **Polar Curves**







Whitecroft Lighting \ Whitecroft Vitality

Providing lighting designers with the tools

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