

EDUCATION LIGHTING

# Bringing the right light to learning





# Lighting that encourages learning

We believe that our more than 75 years of experience in the education sector gives us an invaluable perspective on meeting the needs of students and staff alike.

And the benefits that come from this insight are plainly visible to all. We provide a critical element in all of today's learning environments, from those nervous first days of pre-school to the mature confidence of graduation, we see it as our responsibility to help create a positive and supportive environment in which to learn and teach. Our lighting solutions, including controls, not only provide the flexibility that learning spaces demand, but also the technical specifications that suit the latest building techniques, and reduce installation time whether in rapid on-site programmes, modular off-site builds or in refurbishment projects.

If you want help, advice and inspiration for your lighting projects, are deciding who to work with to help realise your vision or are wanting to know more about products and their technical specifications; we can satisfy your requirements.

We can provide lighting solutions that are perfectly matched to the needs of students and staff alike – ones that create the perfect environment in which to teach, learn and achieve more.

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## 4 EDUCATION PILLARS

# Four ways we bring light to learning

Whether it's in a classroom or a storeroom, all our lighting and control solutions are built on our four pillars.

### User experience

The main purpose of any lighting scheme is to enable people to undertake their task effectively in a comfortable and safe environment.

By definition, learning spaces are multidisciplinary, multi-task areas. For this reason, all teaching surfaces (desks, interactive whiteboards, walls) and teaching methods, whether verbal or digital, must be considered.

It should be appropriate for the users – in this instance staff and pupils – and take into account aspects such as age, when settling on the required solution.

Advances in tunable white luminaires and app enabled lighting control solutions have opened up new opportunities for the designer to create truly inspiring environments.

### Lighting standards and compliance

Modern-day educational establishments are three-dimensional environments.

A fact often recognised not least by schools, colleges and universities.

To simply provide a light level on the horizontal plane is not enough.

The standards set targets throughout all areas of educational premises for, amongst other things, daylight, cylindrical illuminance, surface illumination, discomfort glare and disability glare.

Developments in lighting and control technology gives the designer an opportunity to use these guidance documents as they are intended: a starting point for all parties involved to work together to create a lighting design to produce stimulating, inspirational spaces.

### Design Optimisation

Design optimisation can only be delivered alongside compliance and consideration of the user – in light of the impact that whole life carbon considerations and delivering sustainable, resilient solutions are having, it is false economy for a scheme to be selected simply on capital cost.

Good design takes into consideration the building's fabric, changes in daylight levels throughout the day, the multi-use nature of spaces in places of education, which is why our solutions consider integration of all these factors to deliver the

best possible scheme, along with true value and cost performance.

### Environmental sustainability

Global warming, attaining Net Zero emissions' targets, uncertainty over energy costs and other wider environmental impacts beyond those related solely to carbon: they are all set to impact on the running of educational establishments of all sizes.

We recognise the importance of low energy lighting systems and the part they play in helping not only reduce running costs but also in addressing issues relating to operational and embodied carbon.

Our choice of highly efficient luminaires combined with our range of controls can optimise energy use, keep down operating costs and help lower the environmental impact of educational institutions.

In the circular economy that is becoming the norm, our increasing use of long-life and replaceable components and building in future adaptability and flexibility, puts us in a strong position to continue to provide lighting solutions that satisfy on so many levels.



\*Vitality versions are available

## Lighting Criteria

CIBSE LG5 and BS EN12464-1 set the required standards for lighting levels in classrooms and convention requires that lighting should be dimmable. The tables opposite describe the specific levels for each type of classroom. Lighting guidance states a minimum IP rating in practical learning spaces of IP44.

### CIBSE LG5

#### Classroom:

Horizontal Illuminance:  
300 lux at desk height

Mean Cylindrical Illuminance:  
150 lux at 1.2m

Wall Illumination: 50%  
of horizontal or >100 lux

Ceiling Illumination: 30%  
of horizontal or >50 lux

UGRL ≤19

#### Classroom (Evening/Adult):

Horizontal Illuminance:  
500 lux at desk height

Mean Cylindrical Illuminance:  
150 lux at 1.2m

Wall Illumination: 50%  
of horizontal or >100 lux

Ceiling Illumination: 30%  
of horizontal or >50 lux

UGRL ≤19

#### Classroom (Practical):

Horizontal Illuminance:  
500 lux at desk height

Mean Cylindrical Illuminance:  
150 lux at 1.2m

Wall Illumination: 50%  
of horizontal or >100 lux

Ceiling Illumination: 30%  
of horizontal or >50 lux

UGRL ≤19

### BS EN12464-1

#### Classroom:

Average Task/Activity Area  
Illuminance: 500 lux\*

Mean Cylindrical Illuminance  
(Section 4.6.2): 150 lux

Wall Illumination: 150 lux

Ceiling Illumination: 100 lux

UGRL ≤19

*\*BS EN12464-1 advises 300 lux  
may be suitable for young children*

#### Classroom (Practical):

Task/Activity Area Illuminance:  
500 lux

Mean Cylindrical Illuminance  
(Section 4.6.2): 150 lux

Wall Illumination: 150 lux

Ceiling Illumination: 100 lux

UGRL ≤19

## CLASSROOMS

# Giving light to positive interaction

Classrooms are the centre of any learning establishment and the most commonly occupied space. The activities undertaken in these learning areas are many and varied and, regardless of the task or age of the user, lighting must accommodate this diversity.

Lighting standards reflect this with a requirement to comply with a defined set of metrics including horizontal, wall and cylindrical illuminance and glare, for each application.

The standards define targets for both disability glare (luminaire luminance limits, cd/m<sup>2</sup>) and Unified Glare Rating (UGR) to ensure a comfortable and effective learning environment.

Delivering comfortable and safe spaces to support learning is critical in any teaching space. Our use of low glare lighting solutions aid productivity and concentration, reduce fatigue, reduce hazard risk and limit veiling reflections on monitors and other digital teaching aids.

On a day-to-day basis, tasks will vary from desk-based activities to those undertaken on the classroom wall.

Tasks can be both written and digital, and the lighting solution should not only provide sufficient illumination on the desk

to perform the task, but also consider vertical illuminance.

Visual acuity within any teaching space, both from a single point in a classroom or via close one-to-one work, is crucial. The standards achieve this by documenting cylindrical illuminance and modelling targets.

Lighting control also has an important role to play in a learning space. It must be intuitive, simple and logical to the user, as well as delivering energy-saving benefits such as maximising daylight harvesting and the inclusion of an occupancy strategy – typically absence detection.

As learning space use can change throughout the day or over time – evening study for example – the lighting control solution needs to be adaptable and configurable so that changes can be made with minimal impact.



Selene 2\*



Cascade Flex\*



Foil SRD



Inspiration

## LECTURE THEATRES

# Enhancing presentation and connection



### Lighting Criteria

CIBSE LG5 and BS EN12464-1 both set the required standards for lighting levels in auditoriums and lecture halls. The tables opposite describe the specific levels, the guidance also states that lighting should be dimmable to suit various audio/visual needs.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

### CIBSE LG5

**Auditorium, lecture halls:**  
Horizontal Illuminance: 500 lux at desk height  
Mean Cylindrical Illuminance: 150 lux at 1.2m  
Wall Illumination: 50% of horizontal or >100 lux  
Ceiling Illumination: 30% of horizontal or >50 lux  
UGRL  $\leq$ 19

### BS EN12464-1

**Auditorium, lecture halls:**  
Task/Activity Area Illuminance: 500 lux  
Mean Cylindrical Illuminance (Section 4.6.2): 150 lux  
Wall Illumination: 150 lux  
Ceiling Illumination: 50 lux  
UGRL  $\leq$ 19

We have to consider the very different needs of the two main types of user of these important study areas: those presenting and those learning- and, most importantly, lighting that allows for a real connection between the two.

Different needs that require two lighting solutions that work in tandem – a balance between doing what needs to be done and being able to take in what is being taught.

We can help achieve that balance with an illumination solution that takes into consideration factors such as the position of the lecturer, the main method of teaching undertaken, whether the seating is raked or flat, audience comfort, concentration levels and effective digital and written note taking. Another major factor we take into account is the role of horizontal lighting in practical demonstrations, and low

glare and minimised veiling in note taking, along with the importance of achieving good facial recognition – all of which we can achieve through the use of good modelling and cylindrical illuminance.

To maximise the effectiveness of any lighting solution, we advise the use of a control solution that is simple and intuitive to use.

Solutions should enable multiple lighting scenes to be set, from a blanket lux level through to all luminaires dimmed to allow for visual demonstrations, with gradual changes between light levels to minimise disturbance.



Oculus



Mirage 3\*



Rink Recessed



Avenue Metro\*

## LIBRARIES AND STUDY AREAS

# To be seen and not heard

While still fulfilling their traditional role as somewhere quiet in which to study, modern libraries are used for a wide variety of study-related activities.

A lighting design has to reflect these multiple functions in its flexibility, so it must deliver a well-lit, comfortable environment which aids concentration, whatever studying technique may be being used at any given time.

Any solution has to consider open areas where collaborative group work may occur, localised lighting for use in discreet individual study spaces, and the vertical lighting of bookcases to allow easy selection without interfering with other areas nearby.

Our research continues into the benefits of individuals having personal control over the level of light output and colour temperature.

The ultimate benefit of our solutions in these key areas is that which comes from the positive impact they have on the students' learning environment.



Avenue Metro\*



Mirage 3\*



Cascade Flex\*

### Lighting Criteria

The lighting criteria defined by both CIBSE LG5 and BS EN12464-1 is noted oppositewith particular reference to the lighting level on the vertical face of bookshelves.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

### CIBSE LG5

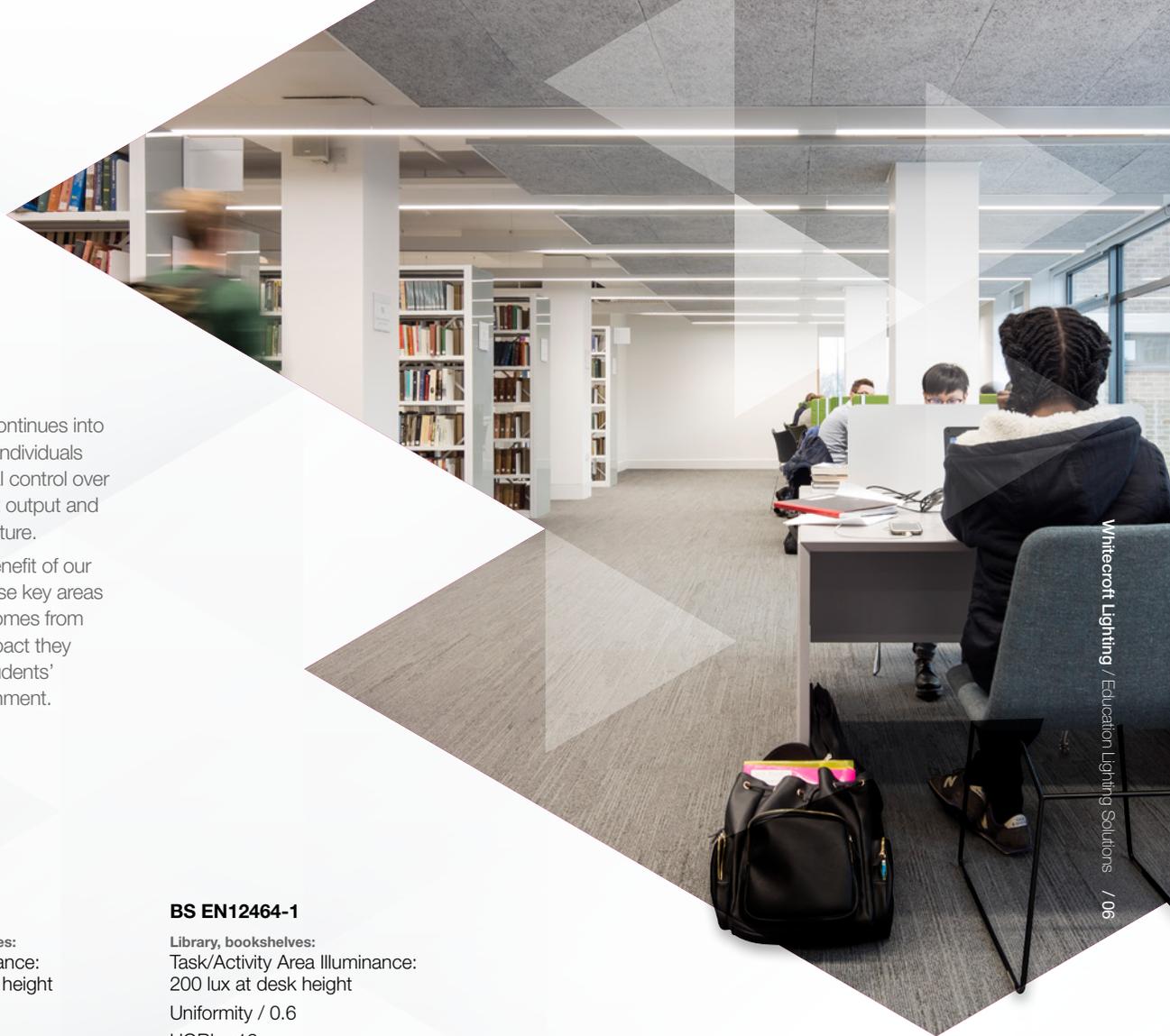
**Library, bookshelves:**  
Average Illuminance:  
200 lux at desk height  
Uniformity / 0.6  
UGRL  $\leq 19$

**Library:**  
Horizontal Illuminance:  
500 lux at desk height  
Mean Cylindrical Illuminance:  
150 lux at 1.2m  
Wall Illumination: 50%  
of horizontal or >100 lux  
Ceiling Illumination: 30%  
of horizontal or >50 lux  
Uniformity / 0.6  
UGRL  $\leq 19$

### BS EN12464-1

**Library, bookshelves:**  
Task/Activity Area Illuminance:  
200 lux at desk height  
Uniformity / 0.6  
UGRL  $\leq 19$

**Library, reading areas:**  
Task/Activity Area Illuminance:  
500 lux  
Wall Illumination: 150 lux  
Ceiling Illumination: 50 lux  
Uniformity / 0.6  
UGRL  $\leq 19$





\*Vitality versions are available

## RESEARCH AND LABORATORIES

# Focusing on the results

Work in these controlled spaces is both hard and focused, so visual comfort is critical, which we achieve through the use of premium optics with advanced glare control technology to minimise veiling reflectance on monitors, as well as minimising UGR (Unified Glare Rating) that allows people to focus on the results they are aiming for.



Lister



Cascade Flex\*

Alongside providing the right levels of illumination, consideration must be given to maintaining high standards of cleanliness and contamination prevention to ensure room integrity.

To get the balance right between light levels and cleanliness can involve an IP rating of between IP44 and IP65, depending on the nature of work being undertaken, and lighting units that are robust and easy to clean so as not to interfere with the integrity of the work being undertaken.

But the choice of luminaire is more than simply down to IP rating. They must be resistant to cleaning chemicals, have minimal horizontal surfaces and maintain room integrity during maintenance. Luminaires with minimal LED depreciation and longer driver life will not only ensure maintained illuminance values throughout the life of the installation, but also keep maintenance requirements to a minimum.

### Lighting Criteria

Lighting levels in laboratories and clean area facilities need to accommodate a wide range of visual tasks.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

### CIBSE LG5

**Laboratories:**  
Horizontal Illuminance: 500 lux at working plane  
Wall Illumination: 50% of horizontal or >100 lux  
Ceiling Illumination: 30% of horizontal or >50 lux  
Uniformity / 0.6  
UGRL ≤19

### BS EN12464-1

**Laboratories:**  
Task/Activity Area Illuminance: 500 lux  
Wall Illumination: 150 lux  
Ceiling Illumination: 100 lux  
Uniformity / 0.6  
UGRL ≤19





\*Vitality versions are available

### Lighting Criteria

CIBSE LG4 sets the standards to which sports halls should be designed, both in terms of illuminance levels and glare factors.

Further guidance can also be found in BS EN 12193:2007 and sport governing body documentation such as Sport England and the England and Wales Cricket Board.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**



Flight Sport\*

### CIBSE LG5

**School Sports/Leisure:**  
Horizontal Illuminance: 300 lux  
Wall Illumination: 50 lux  
Veiling Illumination: 30 lux  
UGRL  $\leq 22$

### BS EN12464-1

**School Sports/Leisure:**  
Task/Activity Area Illuminance: 300 lux  
Mean Cylindrical Illuminance: 100 lux at 1.6m  
Wall Illumination: 75 lux  
Ceiling Illumination: 30 lux  
Uniformity / 0.6  
UGRL  $\leq 22$

## SPORTS FACILITIES

# Light to enhance every performance

Inside and out, lighting plays an important role in students getting the maximum benefit out of physical exercise.

With so many activities from cricket to examinations, the ability to manage lighting levels becomes critical to enhance every performance. Light levels in sports halls are specified at 300 lux, but in our experience, the multiple uses of these spaces may mean higher lighting levels are required, although not at all times or across the entire hall.

Cricket nets are a good example of this, as they often need higher lighting levels but not usually across an entire hall. Additional luminaires over the required spaces that can be separately switched on and off deliver an effective and energy efficient solution.

We find that best practice is to ensure that surface finishes are light in colour and luminaires should be positioned between courts rather than directly above or at the ends to ensure maximum player comfort.

With the appropriate product and control selection, these specialised spaces can be lit in a cost-effective, energy-conscious and performance-enhancing way.





\*Vitality versions are available

## DINING AND BREAKOUT

# Putting socialising and connecting at the top of the menu

### Lighting Criteria

The lighting criteria defined by both CIBSE LG5 and BS EN12464-1 is noted in the tables opposite.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

### CIBSE LG5

**Dining/Breakout:**  
Horizontal Illuminance: 200 lux  
Wall Illumination: 50 lux  
Veiling Illumination: 30 lux  
Uniformity: 0.6  
UGRL  $\leq 22$

### BS EN12464-1: 2021

**Dining/Breakout:**  
Activity Area Illuminance: 200 lux  
Mean Cylindrical Illuminance: 100 lux  
Wall Illumination: 100 lux  
Ceiling Illumination: 75 lux  
Uniformity / 0.4  
UGRL  $\leq 22$

**Kitchens:**  
Task/Activity Area Illuminance: 500 lux  
Mean Cylindrical Illuminance: 100 lux  
Wall Illumination: 100 lux  
Ceiling Illumination: 75 lux  
Uniformity: 0.6  
UGRL  $\leq 22$

Due to the very nature of how these spaces are used, we can take full advantage of more freedom and scope for design innovation to formulate lighting solutions that create an environment with contrasts, visual stimulation and interest.

Place where everybody can meet, mingle and relax. These spaces should be bright and comfortable to encourage social interaction, whether face-to-face or digital and to enjoy some downtime. Good vertical illumination and modelling play an important role in supporting achieving these objectives.

Uniformity is important in servery and kitchen areas for a safe working environment. We recommend that luminaires should have an IP rating in keeping with the activity being undertaken and have a wipe clean front face to support the cleaning and maintenance regime.

Across all levels of education, these spaces are frequently used throughout the day and into the evenings and often have daylight at the centre of their design intent. We incorporate variable light levels and colour temperatures into our lighting solutions to reflect the desired ambience of the space at the appropriate times, while occupancy and central daylight control will reduce energy consumption.



Oculus



Mirage 3\*



Cascade Flex\*



Hygiene LED



## CIRCULATION SPACES

# Keeping everybody on the go

The arteries of any educational building, the lighting of these spaces is critical for the smooth and safe movement of students, staff and visitors.

The best solutions are based around a careful blend of horizontal illuminance at floor level and excellent vertical illumination.

As these spaces are often unsupervised, we advise the use of linear or modular luminaires with a wide distribution, delivering more light at higher angles that minimise shadows and dark corners, to create a safe environment – one which improves facial recognition and modelling.

Corridors are commonly used for carrying services around a school or college building,

reducing the available space in the ceiling void – linear off-centre lighting frees up important service space supporting construction and maintenance activity, with improved modelling and uniformity benefits.

Energy savings can be maximised, where appropriate, with the implementation of simple intuitive occupancy and daylight controls. The use of wireless controls, for stairways in particular, removes the need for additional controls' wiring, reducing installation costs and increasing positioning flexibility.



Helm



Cascade Flex\*



Radial LED



Trimpak



Avenue Metro\*



Mirage 3\*

## Lighting Criteria

The lighting criteria defined by both CIBSE LG5 and BS EN12464-1 is noted in the tables below.

### CIBSE LG5

**Circulation Areas/Corridors:**

Horizontal Illuminance:  
100 lux

Mean Cylindrical Illuminance:  
150 lux

Wall Illumination: 50 lux

Ceiling Illumination: 30 lux

Uniformity: 0.4

UGRL  $\leq 25$

**Stairs:**

Horizontal Illuminance:  
150 lux

Wall Illumination: 50 lux

Ceiling Illumination: 30 lux

Uniformity: 0.4

UGRL  $\leq 22$

For projects within the PSBP framework please see **Technical Annex 2E: Daylight and Electric Lighting**

### BS EN12464-1:2011

**Circulation Areas/Corridors:**

Task/Activity Area Illuminance:  
100 lux

Mean Cylindrical Illuminance:  
50 lux

Wall Illumination: 50 lux

Ceiling Illumination: 30 lux

Uniformity: 0.4

UGRL  $\leq 25$

**Stairs:**

Task/Activity Area Illuminance:  
150 lux

Mean Cylindrical Illuminance:  
50 lux

Wall Illumination: 50 lux

Ceiling Illumination: 30 lux

Uniformity: 0.4

UGRL  $\leq 25$

## ADMINISTRATION AND ANCILLARY

# Making work light

Often thought of by many as 'behind the scenes', we believe that the lighting in ancillary staff and administration rooms should be comfortable and aesthetically pleasing.

The wrong lighting can have quite a negative impact on concentration levels, general attitude and, in the worst possible cases, may put staff in potential danger from trip or other safety hazards.

Luminaires with good glare control will safeguard staff against discomfort and reduced visibility. The potential for reduced energy consumption is significant in these areas, where lighting is often not required for long periods of time. Integration of energy saving lighting control, with room occupancy detection, ensures that no luminaire is on when it doesn't need to be.

Essential for a clean, safe and functional environment, ancillary

areas in education establishments range from general storage of equipment and materials to more hazardous boiler and plant rooms.

Lighting must therefore allow for both the protection requirements and the functionality of each individual space. Inadequate lighting in areas such as plant rooms, maintenance and housekeeping which commonly have little or no natural light, can conceal slippery floors, trip hazards or other potentially dangerous situations.

We give careful consideration in our lighting solutions to luminaires exposed to water and condensation, with extra protection ensuring safe and reliable operation.



\*Vitality versions are available

### Lighting Criteria

Levels of illumination vary depending on the ancillary or administration area, the tables opposite give examples of lighting criteria defined by both CIBSE LG5 and BS EN12464-1.

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

#### BS EN12464-1

**Plant Rooms:**  
200 lux at floor level

**Supplies Stores:**  
100 lux at bench level

**Stock Rooms for teaching materials:**  
100 lux at floor level  
UGRL ≤19

**Staff Room/Office:**  
300 lux  
UGRL ≤19



Cascade Flex\*



Selene 2\*



Avenue Metro\*



Trimpak



ACL Industry

## OUTDOOR

# Helping keep everybody safe and secure

Whether its staff getting to their cars at the end of the day or local wildlife benefitting from the spaces around premises, our focus is to make the outside spaces safe for all, while minimising upward lighting and reducing unnecessary light pollution.

In pedestrian areas and car parks, high levels of uniformity are required and, to aid facial recognition, we recommend the use of post top fittings. For lighting roadways, our recommendation depends on the classification of the road, as access roads and car parks where traffic may be slower, a lower level of illumination may be possible than that more conventionally associated with the lighting of public roads and highways.

Combining our choice of lighting units with one of our smart lighting control systems achieves not only lower operating costs in outdoor locations, but also helps reduce light pollution while still enhancing safety and security.

### Lighting Criteria

When planning lighting for outdoor amenities, consideration should be given to the following standards and guidance:

For projects within the PSBP framework please see **Technical Annex 2E : Daylight and Electric Lighting**

### Standard / Guidance

**BS EN12464-1**  
Lighting – Indoor  
Workplaces

**BS EN12464-2**  
Lighting – Outdoor  
Workplaces

**BS 5489-1**  
Lighting of roads and  
public amenity areas

**Secured by Design Lighting  
against crime**  
A Guide for Crime  
Reduction Professionals

**ILP GN01**  
Guidance Notes for the  
Reduction of Obtrusive Light

**Park Mark®**  
The Safer Parking Scheme



Kolo Bollard



Sirocco Midi



Kolo - IP65



## LIGHTING CONTROLS

# Functionality and flexibility that controls running costs

Energy consumption reduction and the cost savings it brings is the most obvious benefit of using lighting controls, but it's not the only one.

Depending on the function of a space and its usage patterns, customising the lighting controls' design to individual spaces supports the overall lighting control strategy and gives users the optimum light levels for studying, eating, lecturing, playing.

Best practice classroom design will make use of any natural light that is available. Flexible daylight-linked dimming, activated through the monitoring of ambient light levels, will ensure that any available daylight is maximised, and unwanted illumination levels reduced.

The use of manual override controls to adapt light levels to the teaching conditions, for example, whiteboard and flip chart presentations, will help prevent veiling reflections and make material easier to read.

In corridors, staircases and administration areas, lighting controls can maintain light levels during occupation periods for safe passage but be reduced when no presence is detected.

Wireless intelligent lighting control systems offer much more than energy saving in terms of building flexibility, reduced installation costs, ease of use, particularly in areas with higher ceilings such as sports halls and entrance atria, and integration into wider building management systems. Further benefits are delivered by the ability to re-configure the lighting functionality to suit the usage of the building without costly and time-consuming external commissioning.

Lighting control configuration and energy consumption reduction can vary depending on the function of a space and its usage patterns. Customising the controls' design to the individual space will support the overall lighting control strategy and deliver favourable results.

## LIGHTING CONTROLS

# Functionality and flexibility that controls running cost

Lighting control configuration and energy consumption reduction can vary depending on the function of a space and its usage patterns. Customising the controls' design to the individual space will support the overall lighting control strategy and deliver favourable results.

### General Classroom

- Absence switching
- Whiteboard row switching
- Window row dimming
- Typical energy saving 30%

### PSBP Compliant Classroom

- Absence switching
- Independent row by row switching & dimming away from whiteboard position
- Algorithmic row by row daylight dimming away from window position
- Typical energy saving 43%

### Circulation and Administration Areas

- Offset dimming to rows 2 and 3
- Variable timing programmable from infra-red handset or smart device using app based control
- Dimming employed where sufficient daylight is present
- 30 – 40% reduction in energy depending on application

### Assembly and Dining Areas

- Presence or Absence detection
- Scene setting capability for flexible functionality
- Multiple programmable scenes selected from wall switch panel

### Sports Hall

- Presence or Absence detection
- Possible scene setting capability for flexible light level requirements
- Occupancy sensing delivers 30% energy savings in high load area

### Large Utility Areas

- Presence detection switching only
- Low cost detectors where complex programmability is not required
- 30% energy savings

### Small Utility Areas

- Integral detectors used in areas requiring a single luminaire
- Reduction in installation time and associated cost
- Delivering 30% reduction in energy usage compared with uncontrolled areas

All options could be hard wired or modular.



### Air Control

- Based on Bluetooth® Mesh networking configured to provide basic functionality through advanced lighting control and scene recall
- Bringing wireless control to areas with higher ceilings, the high-performance mesh networking technology delivers seamless communication without the need for additional gateways

### Organic Response®

- Integrated or remotely housed sensor nodes detect motion and ambient daylight levels and transmit and receive infrared messages wirelessly for intelligent decisions about optimum light levels
- Can be customised to provide an interface with building management systems and vital building management information via a web-based portal



## EMERGENCY LIGHTING

# Seen to be safe

While it may never be called upon, emergency lighting provision is an essential element of any lighting solution in an education environment.

In the event of a power failure, a secure, effective, nondisruptive emergency lighting solution is vital in order to ensure safe evacuation of students, staff and visitors.

Early consultation with us to discuss the emergency lighting needs will ensure that the lighting solution we provide, including emergency lighting in areas identified as being high risk, will be delivered.

By law, any emergency system requires regular and annual testing. The use of central emergency testing and reporting system can ensure an effective emergency provision is therefore in place at all times.

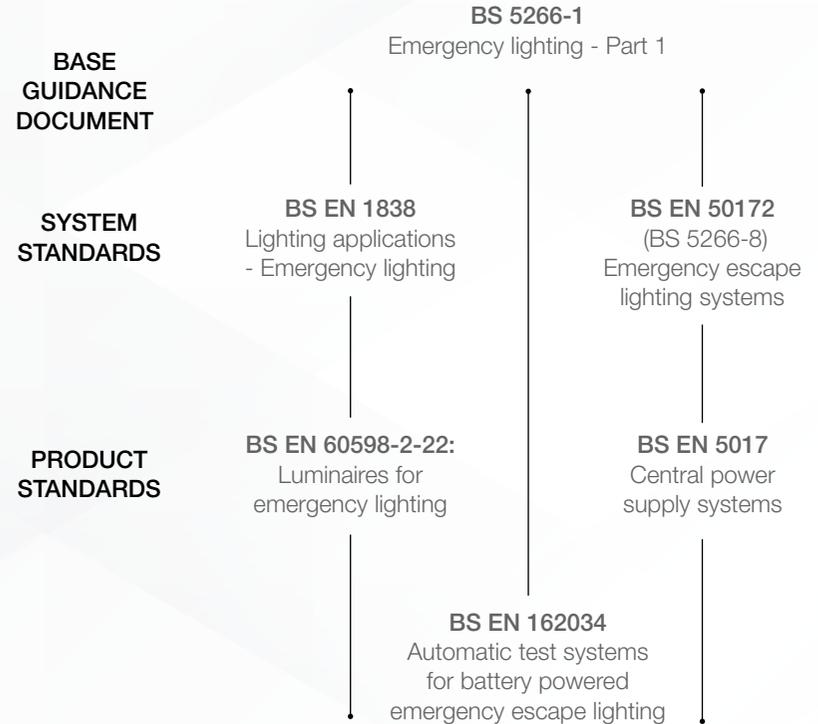
The Whitecroft Organic Response® Portal allows for simple set-up of scheduling and recording of the emergency lighting system to deliver compliance to BS EN 62034.

### Product selection and system design for the emergency lighting should consider:

- Ease of maintenance
- Flexibility of design
- Parasitic energy consumption
- Minimising patient disruption
- Testing & Reporting



Florin E3





## MEETING NET ZERO OBJECTIVES

# Lighting solutions for the circular economy

As the world changes to adapt to new demands made on the impact lighting solutions have on our environment, so too is our thinking.

We are increasingly committed to working in partnership with our customers – wherever they may be in their decision-making process – to achieving higher levels of sustainability, reducing carbon impacts to help achieve Net Zero by 2050 while still delivering commercial benefits.

By engaging in a meaningful way, we have developed our approach to circularity that allows us to provide a service for existing buildings undergoing regeneration and decarbonisation.

Our **Whitecroft Vitality** products are designed specifically to help achieve this goal. They are modular, upgradeable and designed to last using high quality components. In addition, they come with complete data transparency in the form of material health EPDs.

Further product integrity and efficacy is provided by accreditation from the Cradle to Cradle® Products Innovation Institute, an independent third party organisation.

Similarly, our **Vitality Relight** service provides owners of existing education buildings with an opportunity to make significant operational savings, as well as conserving the original embodied carbon associated with a building' construction.

Our partnerships with our customers aren't only to provide the best possible lighting solutions and support in the here and now, but to understand what their needs are for the future and to embark on research and development to ensure we are the number one lighting and controls company to meet those needs.

 [READ MORE WHITECROFT VITALITY PRODUCTS](#)

 [READ MORE VITALITY RELIGHT SOLUTION](#)

## EXPERTISE

# Delivered with expertise

We pride ourselves on the quality of the lighting solutions, luminaires and controls we deliver.

We are equally proud of the level of advice and consultancy we provide that ensures that our solutions are perfect in the particular situations and applications where they are installed.

It is a level of customer support and advance planning that saves time and money on a project by considering all relevant factors, whether newbuild or retrofit projects.

We can offer expert help on everything from the best techniques to employ designing bespoke lighting solutions and reducing carbon impact.

### Highlighting the benefits of our expertise

Just some of the ways our team of experts can help you achieve the perfect education lighting solution.

#### Total project solutions

- Indoor and outdoor lighting solutions
- Seamless integration of controls
- Circular and sustainable solutions
- Newbuild and retrofit projects
- Product life cycle assessments
- Bespoke product solutions

#### Eliminate design risk

- Ensure compliance with standards
- BIM and lighting design
- Capability to deliver large, complex projects

#### Support

- Regional and national account management
- Project management
- After-sales service



# Whitecroft Lighting

## A leading light in Sustainability

The education sector is just one of areas in which we have been at the forefront of sustainability and circularity in UK commercial lighting.

We are one of the leaders in the development of products, lighting solutions and controls that minimise the use of materials and promote reusability through replaceable modular hardware.



Whitecroft Lighting Ltd  
Burlington Street  
Ashton-Under-Lyne  
Lancashire OL7 0AX

T +44 (0)161 330 6811  
F +44 (0)161 331 5855  
[whitecroftlighting.com](http://whitecroftlighting.com)  
[email@whitecroftlight.com](mailto:email@whitecroftlight.com)

