

# **Education** Solutions

Dynamic lighting solutions let students shine.





# Making **learning** bright

Today's education campuses require healthy spaces that promote learning, improve student productivity, and enhance the student experience.

Lighting and controls solve those needs while also providing significant energy and cost savings.

Learn how lighting can help students maximize their talents and capabilities in the classroom and beyond.



Front Cover: Fail-Safe GAW UV-C Air Wall Mount, GLR Germicidal UV Louvered Recessed & Metalux Cruze

# It's time to shed some light on the possibilities



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Lighting By Space
Classroom
Cafetorium & Multi-purpose
Theater & Auditorium
Library
Higher Education
Hallway & Stairway
Administration & Office
Exit & Emergency
Natatorium
Indoor Athletic
Outdoor Athletic
Campus Pedestrian Space
Walkways & Building Exterior
Parking
About Us



# In step with today's challenges



#### Safety and security

In a survey of 21,000 teens, conducted between 2011 and 2017, 1 in 3 students reported not feeling safe at school. Schools face an ever-increasing number of threats, ranging from cyber attacks to bomb threats and violence.

https://studyfinds.org/teens-dont-feel-safe-in-school/



#### **Navigating campuses**

Large campuses can be difficult to navigate. It's hard to book available collaboration spaces and find them once booked, causing students to arrive late to meetings/classes or miss them entirely.



#### **Technology adoption**

Remote learning is augmenting traditional classroom learning, a strategy that was accelerated by the recent pandemic.

Teachers have to adapt and incorporate technology in their curriculums while ensuring students acquire the soft skills traditionally gained through physical interaction.

https://www.forbes.com/sites/sievakozinsky/2017/07/24/how-generation-z-is-shaping-the-change-in-education/?sh=23ba3e4f6520



#### Inequality in education

In comparing the top 1% spending districts with that of the average spending districts between 2000 and 2015, the funding gap widened by 32%.

https://hechingerreport.org/a-decade-of-research-on-the-rich-poor-divide-in-education/



#### **Decreasing attention spans**

A Microsoft study examining data between the year 2000 and 2015 found that people's average attention span has decreased from 12 to 8 seconds. The drop is attributed to the increase in mobile engagement.

https://time.com/3858309/attention-spans-goldfish/



#### **Accessibility**

Better lighting makes school areas more accessible to the entire community, helping to strengthen relationships between the schools and surrounding neighborhoods.



# Ahead of tomorrow's trends



#### **Digitalization**

By the end of 2017, more than 6.5 million students were enrolled in some type of remote learning course offered by a post-secondary degree-granting institution. Gen Z expects schools to have Smart Buildings equipped with the latest technology.

 $https://online learning consortium.org/news\_item/new-study-six-million-students-now-enrolled-distance-education/line learning consortium. \\$ 



#### **Facilitating learning**

Living in the information age, teachers need to evolve from delivering knowledge to helping students learn how to learn, guiding them to the information, and helping them understand the information.



#### **Sustainability**

Energy usage is the second-largest source of expenses for school districts. The annual greenhouse gas emissions from K-12 school buildings in the U.S. are equivalent to 18 coal-fired power plants.

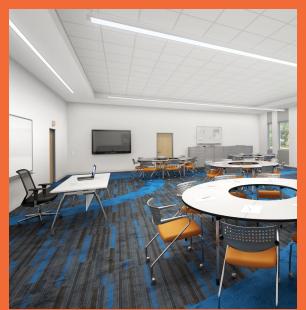
https://betterbuildingssolutioncenter.energy.gov/accelerators/zero-energy-schools



#### Wellness

Students and teachers spend a significant amount of time in school facilities and their wellness is key. Initiatives for improvement include better class acoustics, non-glare lighting, cleaner air quality, and healthy food availability.





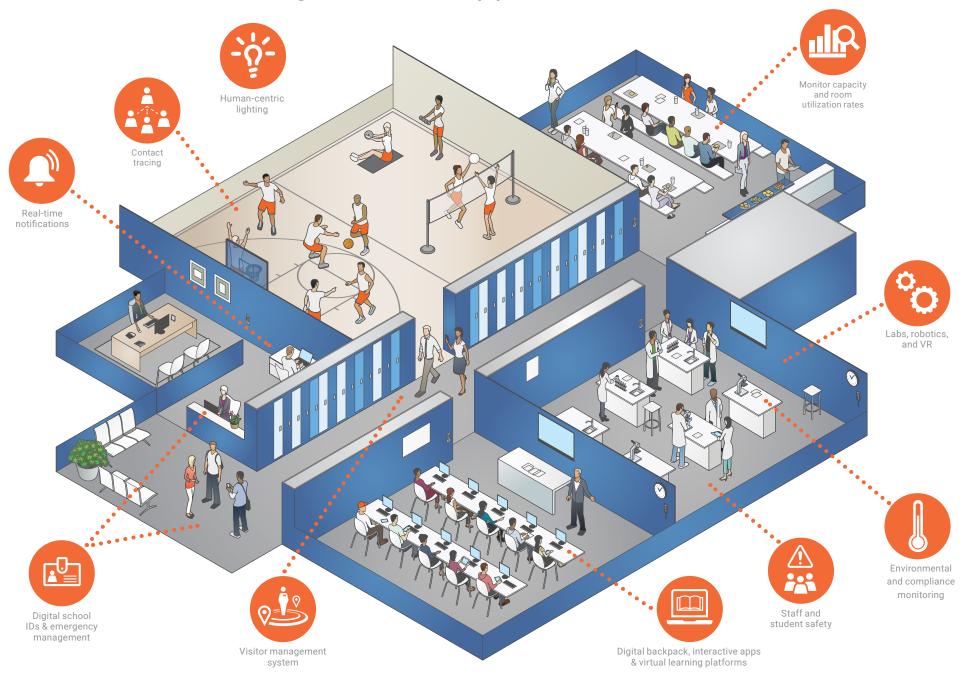




Cooper Lighting Solutions offers a variety of technology solutions for education campuses

# Today's connected schools

Safeguard students, staff, equipment, and environments



# Beyond Lighting: solutions to meet the moment

Lighting is no longer just about illumination.

By adding the transformative powers of connected technology, schools are able to better serve students, meet more ambitious objectives, even lower costs.

WELLNESS - HEALTH - SAFETY - PERFORMANCE





# Digital solutions create a better environment for students.



Lighting can influence academic performance. Research shows quality lighting helps students stay alert and better focus on their lessons. Color tuning, which mimics natural daylight and helps relieve stress, can be very effective in optimizing improvement in students with behavioral or autism issues.

- Color Tuning: VividTune
- · Augmented Reality: Light **ARchitect**



#### Health

Outbreaks can be dramatically contained when reliable technology is added to the lighting control system, from UV-C sanitation to environmental monitoring, contact tracing, and hand hygiene.

- UV-C Upper Air and UV-C Surface sanitation solutions
- · App for Geofencing: Locate
- · Connected System: WaveLinx



#### Safety

Safety is a top consideration when designing campus lighting. Lowglare, uniform lighting can provide clear visibility for vehicles and pedestrians. Luminaire-mounted cameras and RTLS can help deter inappropriate behavior.

- Integrated camera: LumenSafe
- App for RTLS: Locate
- Connected System: WaveLinx
- Lighting for egress during power outages: Sure-Lites



#### **Performance**

Designing with the right level of lighting is key for student and teacher performance. Energysaving features, such as daylight occupancy sensors, help schools achieve their operational target budget or sustainability goal.

- Code compliance
- Energy savings
- · 3D printing design freedom

# **Color Tuning** solutions

#### **Discover the Power of Preference**

The color temperature and intensity of lighting in education environments can affect mood, alertness, wellbeing, and even improve academic performance. Our easy-to-use VividTune white solutions allow students and staff to adjust color temperature and intensity according to the mood, scenario, or task at hand.

VividTune solutions are sustainable and easy to install. Schools can choose from a range of control solutions, from a simple 0-10V slide dimmer to more advanced connected lighting capabilities with WaveLinx.

#### **Ideal for Special Needs Classrooms**

The Vividtune system is an appealing option for designers when creating lighting solutions for special education classes. It helps educators maximize student and staff results by reducing problem behaviors, increasing patience and attention, and increasing the school's interest in their special education programs.









#### color temperature



Change the color temperature of the space throughout the day to align more closely with people's circadian rhythms, from cooler light in the morning and afternoon to warmer light in the evening.





#### light intensity



Control the intensity of lighting to suit individual comfort levels or the task at hand.



# **3D printing** technology

# Introducing Shaper PrentaLux, where innovation comes to lighting

Designers create exclusive luminaires with choices from our vast collection of colors, textures, and shapes. Thousands of combinations are possible.

Then we use 3D printing technology to bring designers' vision to life.

Sustainability is built in. Our 3D printed lighting requires less material during manufacturing and we're able to recycle these products.



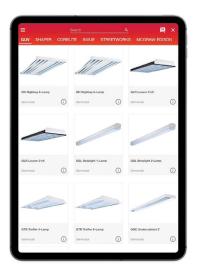


# **Light ARchitect** App

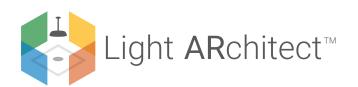
#### Visualize your new lighting solution with augmented reality

We've got an app that lets us show you what different fixtures would look like in any space in your school, from the classroom to the cafeteria to the parking lot.

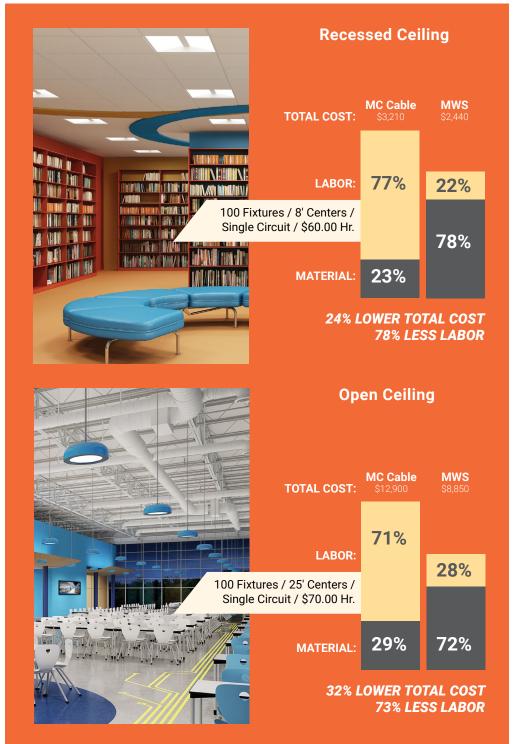
Using digitalization and augmented reality, our proprietary App lets us take a photo of the space that needs better lighting and superimpose a lighting design over it so you can visualize what the result. Best of all, our App lets us do this on the spot, in about 10 minutes.











# MWS solutions

#### **Modular Wiring System**

This sustainable wiring solution solves the challenges of branch circuit wiring in new construction and renovation projects. MWS is simple and cost-effective. Components arrive at the job site completely assembled and ready to be snapped together to form a branch circuit system.

- · Reduces installation setup time and labor costs.
- · Flexible, reconfigurable system enables future changes.
- · Ideal for new construction or renovation.





# Better lighting improves wellness with UV-C sanitation

#### Quick, continuous, occupant-safe sanitation

UV-C upper air technology is safe to use in occupied spaces and runs continuously, quietly, and independently from your HVAC system. It's tested and proven to inactivate harmful pathogens in seconds, and is even CDC-recommended as part of a layered strategy to reduce SARS-CoV-2 transmission in certain settings.

#### Designed with safety in mind

Fail-Safe's UV-C Air sanitation solutions distribute UV-C in the upper air. preventing direct human exposure to UV-C. The result is fresh air that's constantly cleaned and recirculated, similar to the tried and true method of opening the windows.

#### Save time and money

Installation costs are low because installation is simple and no control systems are required to operate Fail-Safe's UV-C Upper-Air Sanitation products. And because there's no additional demand on the HVAC system, Fail-Safe's UV-C Upper-Air Sanitation products cost less to use than other filter solutions.

#### Featured Air Products Click on products to learn more





#### Fail-Safe **GAW**

- · Germicidal UV Air Wall Mount
- · Air sanitation fixture with UL 1598 listing
- · Provides air sanitation for large areas
- Horizontal distribution keeps UV-C in the upper air
- · Can be used in occupied spaces



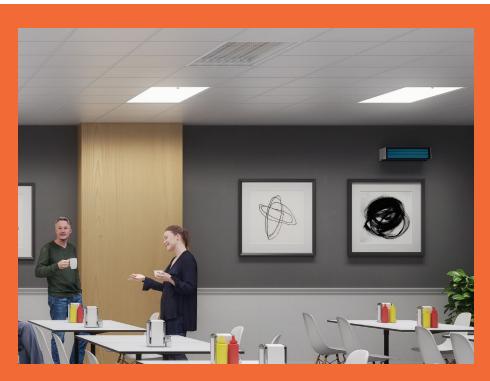
#### Fail-Safe **GAC**

- Germicidal UV Air Ceiling Mount
- · Air sanitation fixture with UL 1598 listing
- Symmetrical coverage area
- Horizontal distribution keeps UV-C in upper air
- Can be used in occupied spaces



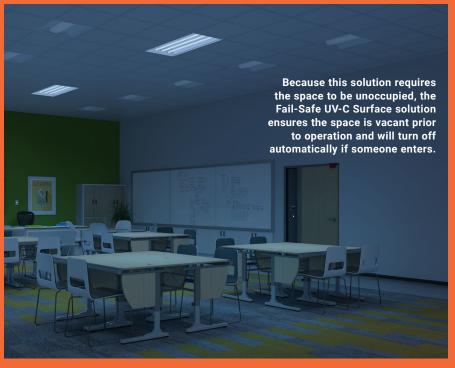
#### **Neo-Ray Define UV-C**

- · Direct LED + Indirect UV-C enabled
- · Suspended and wall mount family in 5" housing sizes
- · Upper Air UV-C enabled, safe operation while space is occupied
- UV-C and ambient LED light are controlled separately
- 2700K, 3000K, 3500K, 4000K, and 5000K correlated color temperatures available









#### Surface Disinfection with UV-C Control System - Tested and Trusted

We developed the first and only UL8802 Safety Certified Controls Solution for UV-C Fixtures. Designed to meet UL1598 standards for safer disinfection than systems without an equivalent control system in place.

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#### Featured Surface Products Click on proto to learn m





#### UV-C **GTR Troffer Recessed**

- Provides maximum germicidal disinfection in grid or hard ceiling applications
- · Available in 2' x 4' with 4- and 6-source options
- Compatible with standard grid ceilings
- Optional drywall kit
- Optional door with wireguard



#### UV-C **GSL Striplight**

- · Available in 4' lengths with 1 or 2 UV-C sources
- Ideal for surface mounted or suspended
- Optional wireguard to protect sources from damage
- Optional reflectors for symmetric and asymmetric control

# SOLUTIONS

#### **UV-C Control Panel** ROLS Manages the UV-C Control System based on inputs received from UV-C Clearance Pushbuttons and UV-C

Magnetic Access Sensors · Each UV-C Control Panel can have 1 UV-C User Station and up to 24 UV-C Clearance Pushbuttons connected to it



#### **UV-C User Station**

- An information center and user interface to the UV-C Control System
- Houses a keyed activation switch to ensure only authorized personnel can operate the system
- Three LED indicators
- · ON/OFF selector switch



#### **UV-C Magnetic Access Sensor**

- · Composed of an actuator and read head
- Ensures all doors, windows, and other access points are closed
- To be activated, all of these sensors must be in the closed position
- Opening a door or window will stop the UV-C session



#### **UV-C Clearance Pushbutton**

- Used to verify that no one is within the space prior to the UV-C session
- Pushbutton will light up when the button is pressed letting the user know it is active



# **Connected** lighting

The right lighting at the right time. Good for students and your bottom line.

Our WaveLinx connected system provides you with complete control over your lighting solutions, so you can optimize the student benefits - and energy savings - of your lighting system. With its integrated sensors, WaveLinx provides immediate out-of-the-box performance and code compliance, and can be configured as a system from a secure mobile application. Lighting Core WaveLinx Wireless Area Controller H TITE indoor athletic and education spaces outdoor spaces pathways/parking areas multi-purpose spaces

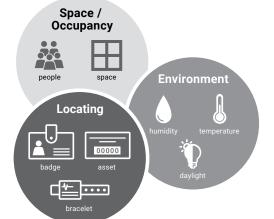
# **Smart Spaces** platform and apps

Digitalization – with our smart spaces platform and apps – allows you to analyze facility data in real time, then put it to work with a suite of education-minded applications that improve efficiency, enhance occupant experience, and promote wellbeing.

Valuable real-time facility data and ready-to-use tools are at your fingertips.















# **OPTIMIZED** facilities

- Increased productivity
- · Improved safety and security
- · Better asset utilization
- · Data-informed business decisions
- Maintenance and operational savings
- · Real-time device status

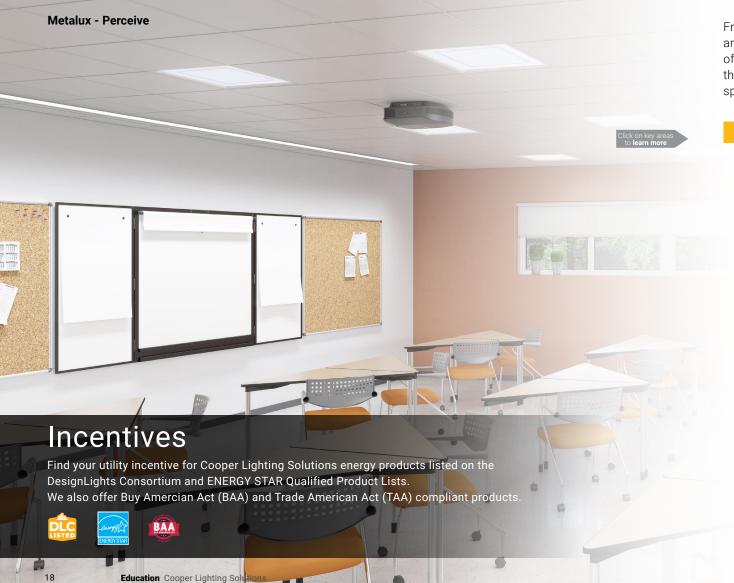
#### **Sensing and Locating**

The WaveLinx sensor and transmission network are optimally positioned to collect facility data.

#### **Platform and Applications**

Leveraging BACnet and APIs (REST), Cooper Lighting Solutions empowers you to put your data to work.

# Lighting for a brighter tomorrow: The right lighting can help each space better serve students



From lobbies, to classrooms, to indoor athletics and the parking lot, Cooper Lighting Solutions offers the lighting fixtures and connected solutions that meet the individual needs of the widely varied spaces of a school campus.



#### **Key Areas**

Classroom

**Cafetorium & Multi-purpose** 

**Theater & Auditorium** 

Library

**Higher Education** 

Hallway & Stairway

**Administration & Office** 

**Exit & Emergency** 

**Natatorium** 

**Indoor Athletic** 

**Outdoor Athletic** 

**Campus Pedestrian Space** 

**Walkways & Building Exterior** 

**Parking** 





#### **Space Overview**

Classrooms and other learning environments should foster student engagement and improve academic performance. Traditional fluorescent lighting generates glare that can lead to eye strain, visual fatigue, and headaches. LEDs can be combined with color tuning and daylight harvesting, for example, to support learning and help decrease students' stress levels.

#### **Design Features**

#### **Fixtures**

- · Troffer, cylinders, adjustable, track, multi-Head, and linear
- · Variety of shapes, sizes, textures, and colors to complement any design
- Exit & Emergency: options include edge-lit exit signs and EBPs installed in luminaires

#### **Light Quality**

- Tunable color temperature 2700K-6500K (VividTune)
- · Recommended 80 or 90 CRI

#### **Light Level**

• 50Fc, 500Lx

#### Solutions

- WaveLinx
- DLVP
- VividTune
- · MWS Modular Wiring Systems
- Fifth Light
- UV-C

#### **Featured Products**





#### Corelite **Discreet**

- Sleek architectural design and quality to meet the needs of general educational environments
- · Low glare illumination with
- precision-engineered optical system · Black (UGR less than 6) and White
- Wide range of direct/indirect distributions plus independent up/down circuiting



#### Metalux **FPX**

- · Meet the needs of both new construction and renovation projects
- Versatile, low-profile design
- Streamline code compliance
- Enable smart spaces integration with a variety of integrated control and emergency battery pack options



#### Metalux Cruze

- Latch-less design provides clean architectural look
- · Ribbed, smooth, square and round perforated lens options
- Integrated sensor systems occupancy, daylight, and smart spaces connectivity



#### VividTune **Technology**

- Tunable white solutions from warm to cool white
- · Achieve the right color temperature and light intensity
- Balance circadian rhythms as well provide the best lighting for improved student experience



#### WaveLinx Wallstation

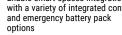
- Multi-scene selection: Scene. Raise/Lower, Toggle On/Off
- · Clean, elegant, and simple way to control lighting
- Settings programmable through software, no physical adjustments needed



#### Greengate **Room Controller**

- Code compliant automatic lighting. emergency & plug load control
- · Click & Go ready, RJ45 connections
- Preconfigured for automatic
- functionality upon power-up Manual or automatic on, bi-level, trilevel, and dimming control
- Integral demand response input with four levels of energy reduction

LIGHTING



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# Cafetorium & Multi-purpose

#### **Space Overview**

The lighting in cafeterias and other multi-purpose spaces has to be adaptable. Because a cafeteria may also serve as a school dance venue, PTA meeting room, and emergency shelter during an extreme weather event.

#### **Design Features**

#### **Fixtures**

- Downlights, cylinders, adjustable, track, multi-head, linear, acoustic, troffer, and decorative
- Variety of shapes, sizes, textures, and colors to complement any design
- Exit & Emergency: options include die-cast exit signs and EBPs installed in luminaires

#### **Light Quality**

- Precision optics maximize uniformity and glare control
- Fixed color temperature 3500K (recommended) and 4000K

#### **Light Level**

• 30Fc, 300Lx

#### Solutions

- WaveLinx
- Fifth Light
- · MWS Modular Wiring Systems
- UV-C



#### **Featured Products**





#### Shaper Sense Drum Duo

- Acoustic lighting with industryleading noise reduction coefficient
- Comes in 4 different styles, with various texture and design pattern ontions
- Substrate material can be steamcleaned up to 200°F ensuring that bacteria and viruses don't live on these surfaces



## Corelite Discreet

- Sleek architectural design and quality to meet the needs of general educational environments
- Low glare illumination with precision-engineered optical system
   Black (UGR less than 6) and White
- (UGR less than 13) baffle options

   Wide range of direct/indirect
  distributions plus independent
  up/down circuiting



#### Portfolio LD4

- LED 4" Round Recessed Downlight or lensed wall wash
- W2N Tunable White 2700K-6500K or 2000K-5000K
- Lumens: 1,000-6,000; 0-10V dimming down to 1%
  - WaveLinx and DLVP connected lighting systems compatibility





#### **Locate Tags**

- Ideal for asset management, enhanced student security, workflows, and staff duress and infection prevention
- Multiple form factors
- Long battery life



## Field Selectable Technology

- Choose from a range of color temperatures and/or lumens with a simple slide on the product.
- Multiple products in one, saving money by carrying less inventory



#### MWS Modular Wiring Systems

- No bending, cutting, or assembly is needed
- Reduce construction cycle time with less labor and faster installation
- Easily configure the system for future additions and renovations
- Saves an average of 50% off labor and project expenses





# Theater & Auditorium

#### **Space Overview**

Theater and auditorium lighting must be flexible enough to accommodate a range of events. Moreover, the controls should be intuitive enough for staff or students to operate with minimal training.

#### **Design Features**

#### **Fixtures**

- Cylinders, downlights, recessed, adjustable, and decorative complement any design
- Exit & Emergency: options include black exit signs and EBPs installed in luminaires

#### **Light Quality**

- Functional lighting uniformity for theater, room, and stage benefits staff and visitors
- Low-glare side and wall lighting add to safety and overall ambiance
- Variable light levels are achieved via switching or dimming
- D2W dim to warm color tunning (recommended)
- 3500K or 4000K fixed color temperature

#### Light Level

· 30Fc, 300Lx

#### Solutions

- WaveLinx
- · DMX solutions with Wavel inx Wired
- VividTune
- UV-C

#### **Featured Products**





#### Portfolio LER6/LESQ6 Cylinders

- Designed with a two-stage optical system producing smooth distribution with excellent light control and low aperture brightness
- 6 color temperatures from 2400K to 5000K CCT, Tunable White
- 0-10V dimming down to 1% option
- Round and square forms
   DMX control

LIGHTING



# HALO Commercial HCC4, HCC6, HCC8

- Distributions include precisionformed reflectors in Narrow, Medium and Wide
- Wall wash distribution includes exclusive rotatable linear spread lens
- Lumens: 500-6,000
- 0-10V analog dimming down to 1%



#### Neo-Ray Define

- Gain precision and flexibility with 2", 3", 4", and 5" widths, specifiable to the nearest inch
- Removable flush or drop satin lens design allows staff to easily clean and wipe down
- Precision trims accommodate a variety of ceiling types



## WaveLinx Wired Wallstation

- Easily reprogram the system to accommodate changes within your flexible spaces
- Adapt room light levels and energy savings based on occupancy
- Enhance occupant experiences as data is shared with other systems for ventilation and shade control



#### Fail-Safe GAW

- · Germicidal UV Air Wall Mount
- Air sanitation fixture with UL 1598 listing
- Provides air sanitation for large areas of coverage
- Horizontal distribution keeps UV-C in the upper air
- · Can be used in occupied spaces



#### Lighting App

- Get insights about your spaces'
- occupancy and energy usage

  Manage recurring light schedules
  for your buildings
- Use your computer, smartphone or tablet

# Library

#### **Space Overview**

Library lighting should include shelf lighting that helps students find the books they need. It should also create a comfortable atmosphere that's conducive to reading and working. Incorporating daylight contributes to creating a pleasant environment as well as saves energy.

#### **Design Features**

#### **Fixtures**

- Downlights, suspended, cylinders, adjustable, track, multi-head, linear, acoustic, troffer, and decorative
- Variety of shapes, sizes, textures, and colors to complement any design
- Exit & Emergency: options include EUX edge-lit exit signs and EBPs installed in luminaires

#### Light Quality

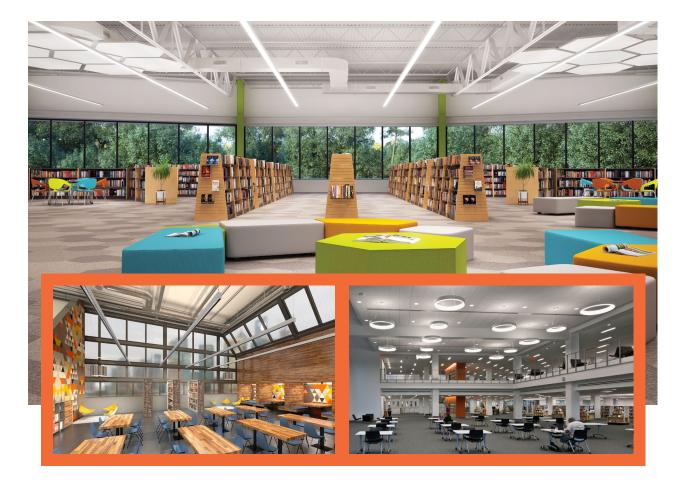
- Precision optics maximize uniformity
- Tunable color temperature 2700K-6500K (VividTune)

#### **Light Level**

• 30Fc, 300Lx

#### **Solutions**

- WaveLinx
- MWS Modular Wiring Systems
- 3D Printing Technology
- UV-C



#### **Featured Products**

Click on products to **learn more** 



#### Corelite Continua

- Available in 4', 8', 12', and continuous runs
- Continuous line of light via single-piece luminous roll lens
- 500 to 1,500 delivered lumens per foot
- Multiple lumen packages with efficacies up to 147 lumens per watt



#### Corelite SQ4

- Available in 2', 4', 6', 8', 12', and continuous runs
- Continuous line of light via singlepiece luminous roll lens
- 450 to 3,700 delivered lumens per foot
- Perceive Technology includes
   5 differentiated lens aesthetics:
   PARAmid, Prism, Waves, Ripple,
   and Honeycomb



#### HALO Commercial HC6

- Distributions include precisionformed reflectors in Narrow, Medium, and Wide
- Wall wash distribution with exclusive rotatable linear spread lens
- Lumens 500-6.000
- Universal Voltage 120V-277V; 0-10V analog dimming down to 1%



#### Shaper 845 Loop Series

- Decorative and high-performing acrylic and metal pendant
- 2 fixture sizes, 27" and 36" ceiling pendant mount
- 6 standard painted metallic finishes and custom color available



CONTROLS SOLUTIONS

**ECHNOLOGY &** 

# Shaper Sense Box

- Acoustic lighting with industryleading noise reduction coefficient
- Comes in 4 different styles, with various color, texture, and pattern options.
- Substrate material can be steamcleaned up to 200°F ensuring that bacteria and viruses don't live on these surfaces



#### Fail-Safe GAC

- Germicidal UV Air Ceiling Mount
- Air sanitation fixture with UL 1598 listing
- Symmetrical coverage area
- Horizontal distribution keeps UV-C in upper air
- · Can be used in occupied spaces

LIGHTING





# **Higher Education**

#### **Space Overview**

Networked lighting controls are helping colleges and universities better serve their students while also containing costs and conserving energy. Today's connected LEDbased lighting systems can include sensors and controllers that allow the devices to even collect and process data.

#### **Design Features**

#### **Fixtures**

- · Cylinders, troffers, suspended, adjustable, track, Multihead, and linear
- Exit & Emergency: options include EUX edge-lit series and inverters for emergency lighting

#### **Light Quality**

- · Elevated light levels at the tables
- Multiple color temperature and lumen options
- Fixed color temperature 3500K (recommended) and 4000K
- · Recommended 80 or 90 CRI

#### **Light Level**

50Fc, 500Lx

#### Solutions

- WaveLinx
- · Fifth Light
- DLVP
- D2W
- VividTune
- UV-C

#### **Featured Products**



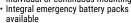


#### Corelite **Jaylum**

- Architectural design and quality
- Highly efficient LED

LIGHTING

- · Wide array of distribution options with J2 and J3 series
- Multiple lumen packages (up to 127 lumen per watt)
- Individual or continuous mounting





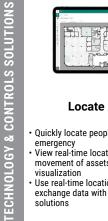
#### Metalux **CGTS**

- Selectable lumens with Low. Medium, and High settings from 2500-6800 lumens
- Selectable CCT offered in 3500K, 400K, and 5000K settings
- · Shallow, less than 2" fixture height, ideal for shallow plenums
- Minimalist design for visual aesthetics



#### HALO - 808 HP LED **Flatback Track Luminaire**

- Lumens 1.300 and 1.800 (3") and 3,000 (4")
- 3 field-interchangeable optics (spot, narrow flood, and flood)
- · Holds 2 pieces of standard 2" MR16 media filters or lenses
- Smooth dimming down to 5% at 120V



#### Locate App

- Ouickly locate people in case of emergency
- · View real-time location and movement of assets with map visualization
- Use real-time location APIs to exchange data with 3rd-party solutions



#### Shaper 3D Printing Prentalux

- 3D printed products ranging from 8"x8"x8" to 17"x17"x17"
- 16 or 18 neutral color options and 3 inner and 3 outer textures
- Lumen output ranges from 1000-7000



#### WaveLinx **Dimming Switchpack**

- Output control loads up to 20 amps or 1.5 HP and 0-10V dimming control with easy junction box mounting
- Universal voltage input (120V-347V) · Models for normal and emergency (UL924) compliant applications

# **Hallway & Stairway**

#### **Space Overview**

Lighting in hallways and stairwells should be bright enough to feel safe and comfortable and to make a quick evacuation during an emergency possible. With the addition of sensors, the lighting in hallways and stairwells can also conserve energy by dimming when no people are present.

#### **Design Features**

#### **Fixtures**

- · Linear, surface, suspended, and recessed
- · Exit & Emergency: options include die-cast exit signs and EBPs installed in luminaires

#### **Light Quality**

- · Precision optics maximize uniformity
- Fixed color temperature 3000K, 3500K (recommended)

#### **Light Level**

10Fc, 100Lx

#### Solutions

- WaveLinx
- · Fifth Light
- D2W
- · DLVP
- · MWS Modular Wiring Systems
- UV-C



TECHNOLOGY & CONTROLS SOLUTIONS

#### **Featured Products**



#### Metalux RBG

- 4" aperture, 6" grid width provides sleek lines of light
- · 2', 4', and 8' sizes available
- Switch tamper cover included
- · High-performance efficacy up to 115 lumens per watt
- · Flexible with recessed, drywall, surface, and suspension mount



#### Metalux NWS

- Offered in 2' and 4' lengths at 2 1/8" depth
- Selectable CCT in 3500K, 4000K, 5000K at 80 CRI
- 0-10V dimming with 120-277V (UNV) standard
- Suitable for ceiling, wall, or suspension mounting



#### Metalux **SWLED**

- 4' and 2' product configurations for mounting versatility
- · Standard 0-10V driver with optional DALI, 1%, and step dimming options
- · Available with 80 CRI and three CCT: 3500K, 4000K, 5000K
- Ideal for surface, suspended, and wall applications



#### Metalux **Perceive**

- Uses patent pending Perceive™ Technology based on cognitive science
- Efficacy up to 137 lumens per watt
  80CRI and 90CRI options in 3000K,
- 3500K, 4000K, 5000K CCT
- Available in 2x2, 2x4, and 1x4 sizes



#### WaveLinx **Integrated Sensors**

- · For indoor ambient, outdoor, and industrial luminaires
- · Sensing, daylighting, and wireless
- Out-of-the-box functionality



#### Insights App

- · Ready-to-use space occupancy dashboards and reports
- · Space occupancy trends and comparison
- Real-time occupancy status





#### **Featured Products**



#### Metalux Cruze

· Latch-less design provides clean architectural look

LIGHTING

- Ribbed, smooth, square, and round perforated lens options
- Integrated sensor systems includes occupancy, daylight, and smart spaces connectivity



#### Metalux **RBG**

- · 4" aperture, 6" grid width providing
- sleek lines of light
- 2'. 4'. and 8' sizes available · Switch tamper cover included
- · High-performance efficacy up to 115 lumens per watt
- · Flexible, with recessed, drywall, surface, and suspension mount



#### **HALO Commercial** HC4

- Distributions include precisionformed reflectors in Narrow, Medium, and Wide
- Wall wash distribution includes exclusive rotatable linear spread lens
- Lumens 500-6,000
- Universal Voltage 120V-277V; 0-10V analog dimming down to 1%

# **TECHNOLOGY & CONTROLS SOLUTIONS**

#### **WaveLinx Lite** Mobile App

- Create groups without additional hardware or IT support required for site set-up
- Empowers the installer to adjust the settings using a mobile app and Bluetooth
- Securely transfer the ownership of a system to the customer once the project is completed



#### WaveLinx **Integrated Sensors**

- · For indoor ambient, outdoor, and industrial luminaires
- Sensing, daylighting, and wireless
- Out-of-the-box functionality



#### **Lighting App**

- · Get insights about your spaces' occupancy and energy usage
- Manage recurring light schedules for your buildings
- Use your computer, smartphone, or tablet



UV-C



**Administration** 

Lighting can help employees focus and improve their productivity. It sets the tone and mood of the area. Human-centric lighting can make a meaningful difference in the health and

· Downlights, adjustable, track, multi-head, linear,

· Variety of shapes, sizes, textures, and colors are available to complement any design · Exit & Emergency: options include edge-lit exit signs and EBPs installed in luminaires

 High CRI lighting for wall decoration and frames Fixed color temperature 3500K (recommended)

Precision optics maximize uniformity

· MWS - Modular Wiring Systems

& Office

**Space Overview** 

wellbeing of employees.

troffer, and decorative

**Design Features** 

**Fixtures** 

**Light Quality** 

and 4000K Liaht Level 50Fc, 500Lx **Solutions**  WaveLinx · Fifth Light D2W DLVP

# **Exit & Emergency**

#### **Space Overview**

Life safety lighting is essential. Code compliance is legally mandatory. To help occupants find their way out of the building during an emergency or power outage, exits must be clearly marked and illuminated in accordance with requirements. During power loss, lighting is essential for illuminating classrooms and common areas and for providing continuous illumination to paths of egress from the building. Power for these applications can be provided through battery back up, inverters, or generators.

#### **Design Features**

#### **Exit Lighting**

- · Size and color for code compliance
- Self-powered (battery) models have 90 minutes of emergency run time

#### **Emergency Lighting**

 Provides 90 minutes of emergency illumination when AC power fails

#### **Solutions**

- · Self-diagnostic products eliminate manual testing
- Inverters provide large-scale emergency power options

#### **Sure-Lites Compliance**

- UL 924 listed, NFPA, NEC, OSHA compliant
- · Battery-supplied models are Title 20 compliant



#### **Featured Products**





### Sure-Lites APX series

- · High-impact thermoplastic housing
- Long-life LED illumination
- Can be configured as single- or double-face
- (APX7) No-maintenance sealed NiCad battery



# Sure-Lites CX series

- Die-cast aluminum housing
- Field configurable red or green
   I FD illumination
- (CX7) No-maintenance, sealed NiCad battery
- Self-diagnostics conduct NFPA required testing
- EZ-Key battery disconnects for install



## Sure-Lites UX series

- Wet location, IP66, NEMA 4X-rated
   Die-cast aluminum housing, vandal-proof shield
- Field configurable red or green LED illumination
- (UX7) No-maintenance sealed NiCad battery
- Self-diagnostics conduct NFPA required testing



#### Sure-Lites EU series

- Edge-lit with long-life LED illumination
- · Aluminum housing
- High-impact acrylic lens
- Surface and recessed mount versions
- (EUS7, EUR7) No-maintenance sealed NiCad battery



### Sure-Lites **EUX** series

- Aluminum housing with universal mounting: standard surface, end and ceiling, recessed ceiling and wall
- High-impact acrylic lens with clear,
- mirror or white insert options included
   (EUX7) No-maintenance sealed NiCad battery
- Self-diagnostics conduct NFPA required testing
- EZ-Key battery disconnects for install





#### **Achieve Full Brightness During Power Interruptions**

Cooper lighting Solutions delivers peace of mind with a complete line of life safety emergency lighting solutions that you can rely on.

Our solutions are thoroughly tested to meet code compliance. They provide you with the assurance you need.

#### **Featured Products**





### Sure-Lites APEL series

- Emergency egress coverage of 17ft
- UL 924 damp location listed
- High-impact thermoplastic housing
- Maintenance-free sealed NiCad battery
- Self-diagnostics conduct NFPA required testing



#### Sure-Lites SELD series

- Emergency egress coverage of 58ft
- UL 924 wet location, IP66, NEMA 4X, NSF Splash Zone rated
- Die-cast aluminum housing, vandalresistant polycarbonate lens
- Maintenance-free sealed NiCad battery
- Self-diagnostics conduct NFPA required testing



#### Sure-Lites Inverter

- 20 watt to 50K watts of power
- Self-diagnostics conduct NFPA required testing
- Centralized emergency power source



#### Sure-Lites (EBP) Emergency Battery Pack

- Up to 2000 lumens per fixture
- Self-diagnostics conduct NFPA required testing
- Installs in most fixtures



SOLUTIONS

CONNECTED & CONTROLS

#### Greengate - CEPC Emergency Power Control

- Eliminates energy waste by allowing
- emergency lighting to be switched
- Fail safe operationVisible emergency power LED
- Visible regular power LED



#### WaveLinx Wired - DAC Digital to Analog Converter

- Built-in latching relay and 0-10V current sinking interface
- Automatic detection of power loss for Emergency lighting control
- (UL924)

   Available for Class 1 or 2 configurations
- Ultra-low profile form factor
- Buy American Act requirements options

# **Natatorium**

#### **Space Overview**

In spaces with indoor pools, the reflective properties of water require glare control strategies that are more sophisticated than usual. Because fixtures in natatoriums are difficult to access, long-life and reliability are very important to keep maintenance hours and costs at a minimum.

#### **Design Features**

#### **Fixtures**

- Architectural asymmetric and Ephesus Sports Lighting
- Variety of shapes, sizes, textures, and colors are available to complement any design
- Exit & Emergency: options include inverters, UX series signs, and SELDW60SD series emergency lighting

#### **Light Quality**

- · Indirect lighting creates a more spacious feeling by illuminating the walls and ceiling rather than directly illuminating the floor
- Indirect lighting eliminates glare for swimmers, lifeguards, and spectators while improving visibility
- Precision optics maximize fixture spacing and deliver the desired illumination with the fewest number of fixtures
- Fixed-color temperatures 3500K and 4000K are recommended
- Sealed LEDs maintain lumen output and CCT over years of pool chemical exposure

#### **Light Level**

• 30Fc at water surface for recreational pools; higher values recommended for collegiate competition and broadcasting

#### Solutions

- WaveLinx
- UV-C
- Ephesus

**Featured Products** 







#### **Ametrix** Asyx

- Lumen outputs from 6.000 lm to 68.000, depending
- · Can be used indoors, outdoors (IP66), or in natatoriums Standard 2700K, 3000K, 3500K, all at +80CRI, 4000K
- minimum 70 CRI · AccuLED optics optimize optical distributions and
- fixture spacing Natatorium specialized protective coating
- on all metal components
- Natural finish option



#### **Ephesus** LumaVision 8

- · White light LED luminaire
- Utilizes patented. industry-leading UV coated AccuLED Optics™ prevent yellowing and degradation over time
- Thermally managed driver and LED housing provides demonstrated reliability confidence
- · Designed to last with a 90,000+ hour-rated life at greater than 90% lumen maintenance





#### **WaveLinx Wired Area Controller**

- Modular design control panels with digital, 0-10V dimming, relay modules, bridge interface, and ethernet gateway
- Available in Small, Medium, and Large panel configurations

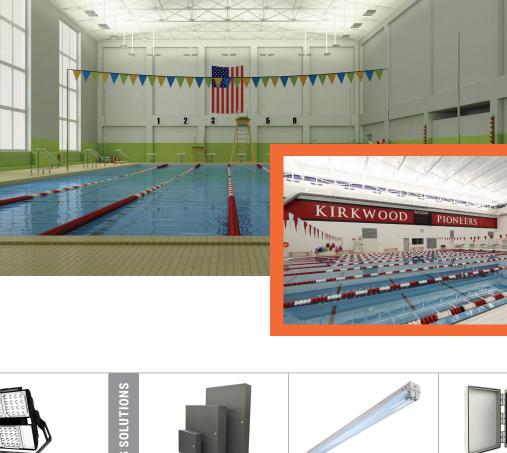
#### UV-C **GSL Striplight**

- Available in 4' lengths with 1 or 2 UV-C sources
- Ideal for surface mounted or suspended
- Optional wireguard to protect sources from damage
- Optional reflectors for symmetric and asymmetric control

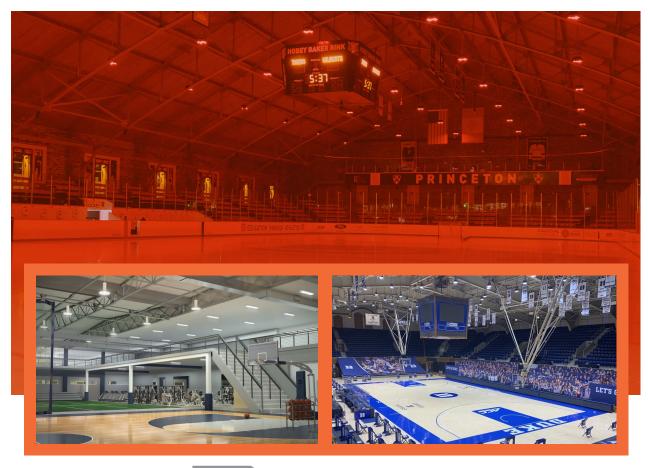


#### **Ephesus** Wireless AirMesh Hub

- · Install anywhere you need wireless. push-button control
- · Five-button, pre-programmed switch provides easy control of all lights
- Five specified dimming levels: 0%, 25%, 50%, 75%, and 100%
- Hub can communicate via LAN. Wi-Fi, or through a cellular network



LIGHTING



# **Indoor Athletic**

#### **Space Overview**

Indoor sports facilities are typically used by several different types of sports, so the lighting has to be flexible enough to meet each sport's requirements. The spaces are large, with high ceilings, so the lighting must be bright enough to provide proper illumination. And, if there are windows, sensors can help with daylight harvesting and energy savings.

#### **Design Features**

#### **Fixtures**

- · Troffer, high-bay, industrial, Fail-Safe (locker rooms), and Ephesus Sports Lighting
- · Variety of shapes, sizes, textures, and colors are available to complement any design
- Exit & Emergency: options include UX series exit signs. SELDW60SD series emergency lighting, and emergency battery packs for lighting

#### Light Quality

- Precision optics maximize uniformity
- Fixed color temperature 3500K and 4000K (recommended)

#### **Light Level**

30Fc, 300Lx

#### Solutions

- WaveLinx
- VividTune
- Ephesus
- · Ephesus AirMesh Hub

#### **Featured Products**





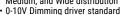
#### Metalux **VHB High Bay**

- Compact, lightweight design for ease of installation
- · 5 lumen packages available (9,000, 12.000, 15.000, 18.000 and 24.000)
- · High-performance efficacy up to 147 lumens per watt
- Precision optics in narrow and wide distribution
- 0-10V Dimming driver standard



#### Metalux Steeler High Bay

- Compact, lightweight design for ease of installation
- Available in 7 lumen packages up to 36.000 lumens
- High-performance efficacy up to 152 lumens per watt
- Industry-leading optics in Narrow, Medium, and Wide distribution





#### Metalux **HBLED High Bay**

- Durable CRS and aluminum housing
- · High-performance efficacy up to 170 LPW
- LEDs available in 3500K. 4000K. and 5000K at typical 85 CRI
- · Rated for -40°C to 55°C ambient Precision optics in Narrow and Wide distribution
- · Multiple lens options



#### **Ephesus** LumaSport 8

- White light LED luminaire
- · Virtually eliminate maintenance and downtime with power redundancy and industry-leading light source reliability with Chip-On-Board LEDs Reduce installation time with
- pre-amiable two-piece assembly
- Wireless AirMesh or wired DMX land burst controls
- 55.000 or 90.000 lumen outputs



#### WaveLinx **Industrial Standalone Sensor**

- Easily enable 0-10V luminaires to be controlled, 120-277VAC with 8 amp/zero cross relay
- Suitable for high bay (up to 40ft) and low bay (up to 15ft), coverage up to 5,000 square feet
- Integrated photocell for closed-loop daylight harvesting



#### **Ephesus** Wireless AirMesh Hub

- Install anywhere you need wireless. push-button control
- Five-button, pre-programmed switch provides easy control of all lights
- Five specified dimming levels: 0%, 25%, 50%, 75%, and 100%
- Hub can communicate via LAN. Wi-Fi, or through a cellular network

### **Outdoor Athletic**

#### **Space Overview**

Outdoor sports field lighting requires special consideration for the benefits of both players and spectators. Controlling glare. Maintaining uniformity in light and shade. Minimizing spill light. LED technology puts most sports field lighting goals within reach.

#### **Design Features**

#### **Fixtures**

- · Ephesus Sports Lighting White LED and RGBA LED
- · Exit & Emergency: options include inverters

#### Light Quality

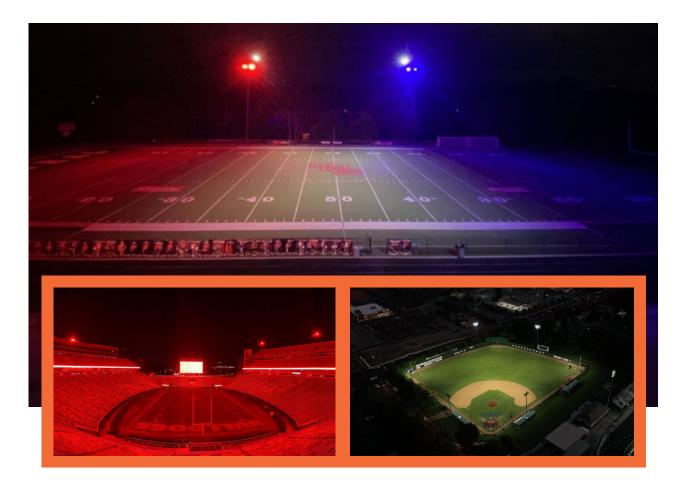
· Professional, collegiate, recreational / municipal, and K-12

#### **Light Level**

30Fc, 300Lx

#### Solutions

- Ephesus
- · Ephesus AirMesh Hub
- · Wireless
- Contactors



#### **Featured Products**





#### **Ephesus** LumaSport 16

- 150.000 lumen output
- · Glare and cutoff control via reflector and louver optical system
- Reduce install time with pre-aimable two-piece assembly
- · Virtually eliminate maintenance with power redundancy



#### **Ephesus** LumaSport 8

- · White light LED luminaire
- Virtually eliminate maintenance and downtime with power redundancy and industry leading light source reliability with Chip-On-Board LEDs
- Wireless AirMesh or wired DMX land burst controls
- · 55,000 or 90,000 lumen outputs



#### **Ephesus** LumaVision 8

- White light LED luminaire
- Utilizes patented and industry leading UV coated AccuLED Optics™ that prevents yellowing and degradation over time
- Thermally managed driver and LED housing provide demonstrated reliability confidence
- Designed to last with a 90.000+ hour rated life (at greater than 90% lumen maintenance)



#### **Ephesus Prism RGBA**

- Custom-engineered optics precisely direct light while minimizing glare
- · Control options provide flexibility and fan experience effects
- Rugged and weather-tight for use even in harsh environments
- Solid state design means no moving parts and maintenance-free operation



#### **Ephesus** Wireless AirMesh Hub

 Install anywhere you need wireless. push-button control

**ECHNOLOGY & CONTROLS SOLUTION** 

- · Five-button, preprogrammed switch provides easy control of all lights
- · Five specified dimming levels: 0%, 25%, 50%, 75%, and 100%
- Hub can communicate via LAN. Wi-Fi, or through a cellular network



- · Reduce installation time with pre-amiable two-piece assembly



**Sports & Entertainment Venue Spaces** 

We're committed to providing you with the right solution for every venue. But our work doesn't stop there. All our solutions are designed to evolve along with your needs. With advanced systems like Lumadapt 8, you can even update your system remotely, adding new features and functionality over time. These types of capabilities are why our full line of sports lighting products have been recognized for innovative design, superior efficiency, longer life, and better performance.

Stadiums | Arenas | Track & Ball fields | Diamonds | Courts | Gymnasiums | Fieldhouses & Athletic Complexes | Natatoriums

# 4

# Campus Pedestrian

#### **Space Overview**

This lighting has primarily two goals: safety and security. Safety helps pedestrians and bikers see potential hazards such as uneven pavement, tree roots, and other tripping hazards. Security allows them to evaluate potential threats.

#### **Design Features**

#### Fixtures

· Bollard/pathway, landscape, area/site, and wall

#### **Light Quality**

· Multiple color temperature options

#### Solutions

WaveLinx



TECHNOLOGY & CONTROLS SOLUTIONS

#### **Featured Products**





#### McGraw-Edison BRT6 Bollard

- · Pedestrian and Pathway luminaire
- 4 optical distributions
- Available in 30", 36", and 42" heights
- Up to 4,400 lumens
- · Efficacy up to 122 lumens per watt



#### Invue ARB Arbor Post Top

- Area and Site LED luminaire
- Visual comfort optical configurations
- Up to 9.500 lumens
- · Wall mount accessories available
- Integrated connected and standalone controls



#### Invue ClearCurve Wall

- · Wall mount luminaire
- Visual comfort and discrete optical configurations
- Up to 12.000 lumens
- 11 color temperature options
- Integrated connected and standalone controls



#### Invue ClearPath Bollard

- Simple yet elegant architectural form3 optical distributions
- 3000K/80 CRI and 4000K/70 CRI available
- Symmetric, asymmetric, and
- one-sided asymmetric distribution 10kV/10VkA surge protection standard
- 6 standard corrosion-resistant durable finishes



# WaveLinx Outdoor Fixture Mount Sensor

- Photocell dusk-to-dawn control
   Passive Infra-Red (PIR) for motion
- sensing
   Hardware capable of Real-Time
  Location Services (RTLS)



#### WaveStream™ Optics

- Provides visual comfort
- Reduces glare
- Particularly beneficial for low mounting height, pedestrian applications

# Outdoor Walkways & Building Exterior

#### **Space Overview**

Lighting for these areas promotes safety and security for your staff and students. In addition, proper lighting provides a deterrent to theft and vandalism on your campus. Not only can lighting provide a safe environment for your staff and students, but it can also help your campus look its best with sleek and architectural designs that compliment the surroundings.

#### **Design Features**

#### **Fixtures**

- Area/site, wall mount, and bollard/pathway
- Exit & Emergency: options include die-cast emergency lights and inverters

#### **Light Quality**

- Precision optics maximize uniformity
- Multiple color temperatures

#### Solutions

- WaveLinx
- Telensa

#### **Featured Products**

Click on products



#### Invue Mesa

- Wall, single, and dual-mount configurations available
- Choice of 13 high-efficiency, patented AccuLED Optics™
- Stylish architectural design



#### Lumark LAS Area & Site Luminaire

- 10-position lumen selectable
- Twistlock NEMA photocontrol for dusk-to-dawn operation
- Pole mount arm or adjustable slipfitter mounting arm included



#### Lumark Prevail Petite Discrete Wall

- Low-profile, die-cast aluminum housing with full cutoff for zero uplight
- Drop door for surface mounted wall installation
- Optional integrated battery pack solutions for emergency egress



#### Portfolio LD4 & LD6

- Narrow, Medium, and Wide distributions
- Single, double, and corner wall wash
- Fixed 2400-5000K or tunable white, 2000-5000K or 2700-6500K CCT
- 250-12,000 delivered lumens
- Supports a broad range of control and connected systems



*IECHNOLOGY & CONTROLS SOLUTIONS* 

#### **Telensa**

- Central Management System (CMS) for outdoor lighting
- Up to 8 miles long range connectivity to base station
- Revenue grade metering within <0.5% accuracy</li>
- Self-commissioning automatically connects to optimized base station
- Integrated GPS plots fixture locations in management mapping system



#### WaveStream™ Optics

- Provides visual comfortReduces glare
- Particularly beneficial for low mounting-height, pedestrian applications

# Parking

#### **Space Overview**

Parking areas are very busy spaces and it's important that students and staff can easily navigate them in a safe manner. Highperformance and uniform lighting can help motorists and pedestrians identify risks, making sure both people and vehicles are easily visible, thus reducing the risk of injury.

#### **Design Features**

#### **Fixtures**

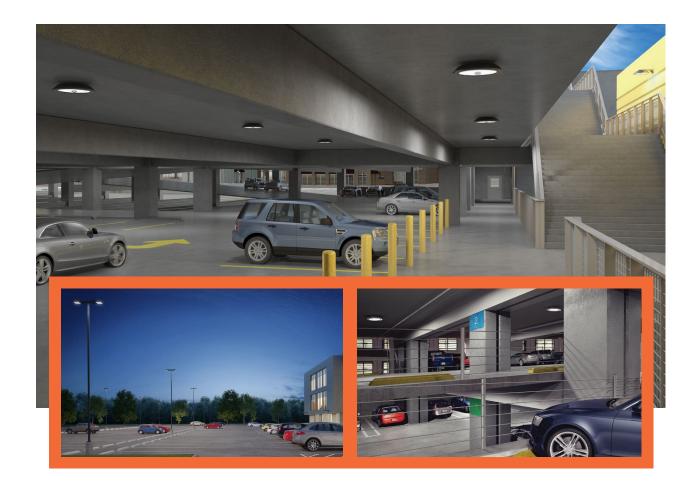
Area/site, garage/canopy, wall mount, and pathway

#### **Light Quality**

- Precision optics maximize uniformity
- · Multiple color temperatures

#### Solutions

WaveLinx



#### **Featured Products**





## McGraw-Edison GALN Galleon II

- Area and Site LED luminaire
- 16 high-efficiency optical distributions
- · Efficacy up to 159 lumens per watt
- Up to 73,500 lumens
- Integrated connected and standalone controls



#### Lumark Prevail Discrete Series

- Direct-mounted discrete light engine for uniformity and visual comfort
- Low profile, die-cast aluminum housing
- Versatile mount arm, with multiple drill patterns, round and square poles



# McGraw-Edison TT TopTier

- Garage and canopy LED luminaire
- 5 optical distributions
- Up to 13,300 lumens
- Integrated, connected, and stand-alone controls



#### Lumark Axcent LED

- · Wall mount luminaire
- Inverted wall option
- Up to 17,000 lumens
- Integrated, connected, and stand-alone controls



# LumenSafe Security Camera

- Streamlined design Integrated Network Security Camera
- One-trip installation

**TECHNOLOGY & CONTROLS SOLUTIONS** 

- Flexible software integration –
- compatible with 3rd-party software
- · Real-time. HD video surveillance
- · Remote zoom and focus
- Multiple data-backhaul options cellular, Wi-Fi, and fiber/Ethernet



# WaveLinx Lite Outdoor Fixture Mount Sensor

- App-based, programmable for individual and group control
- Passive Infra-Red (PIR) for motion sensing
- Photocell dusk-to-dawn control and dimming



# Why Cooper Lighting Solutions?

For more than 50 years, we've partnered with education facilities to unlock the power of lighting to improve wellbeing and sustainability while solving unique business problems. Our solutions are tailored to the complex needs of the industry, balancing application requirements with aesthetics to create spaces that are both hospitable and functional — from the parking lots and libraries, to special education classrooms and sports fields.

Our extensive luminaire portfolio includes brands that have long been trusted in Education applications, like McGraw, Metalux, and Fail-Safe. Paired with integrated sensors, the WaveLinx connected lighting system, these solutions provide a foundation for countless operational improvements through valuable facility data and insights.

Imagine having access to real-time data about your facility, assets, and occupants that not only keep people and assets secure, but can be mined to improve everything from workflows to asset utilization.

With the right lighting solution partner, these capabilities are just the beginning.



# **Our brands**

# Industry leading lighting and controls solutions



Ametrix | AtLite | Corelite | Ephesus | Fail-Safe | Fifth Light | Greengate |
HALO Commercial | HALO | Invue | iO | IRiS | Lumark | Lumiére | McGraw-Edison |
Metalux | Modular Wiring Systems (MWS) | Neo-Ray | Portfolio | RSA | Shaper |
Shaper PrentaLux | Streetworks | Sure-Lites | WaveLinx | Telensa







#### **Lighting Brands**

Ametrix AtLite Corelite Ephesus Fail-Safe HALO

**HALO** Commercial

Invue i0

Iris Lumark Lumière

McGraw-Edison

Metalux MWS

Neo-Ray Portfolio RSA

Shaper

Shaper PrentaLux - 3D Printed Lighting

Streetworks Sure-Lites Telensa



Greengate Fifth Light

Connected Lighting Systems and Smart Spaces Platform

WaveLinx

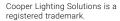


#### SCAN

for more Education Solutions information

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