Area and Site Lighting Redefined

A New Benchmark in Performance and Features
The Galleon LED luminaire delivers a new level of performance and versatility for commercial area, site and roadway applications. Incorporating industry-leading, patented optics, the Galleon LED luminaire offers a choice of 16 specialized optical distributions that deliver superior control and maximize light levels. With a choice of 30 lumen packages, the Galleon LED luminaire allows scalability from 3,000 to over 53,000 delivered lumens. The 4000K/70 CRI is standard, with 6000K/70 CRI and 3000K/70 CRI options available.

Long Life with Low Maintenance Costs
In addition to delivering superior performance, the Galleon LED Luminaire is designed for low maintenance, long life and low cost of ownership. These are key benefits that provide compelling justification to retrofit traditional HID solutions, or allow end users to capitalize on these advantages in new construction applications. The Galleon LED luminaire can be tailored to meet your most important needs without compromising on specification features. The LED components and fixture housing are IP66 rated, which provides years of reliable operation with minimal service requirements.
Engineered for Reliability
At Eaton’s Cooper Lighting business we believe credibility is the key to our success. We are committed to providing LED solutions that meet the highest standards of reliability and performance. Our deep-rooted understanding of outdoor product markets and application needs have been resulted through decades of supplying quality products, service and support.
Galleon LED Design Excellence

Stepping Up to the Challenge
The Galleon LED luminaire delivers exceptional performance in a highly scalable, low-profile design. The patented, high-efficiency AccuLED Optics™ system provides uniform and energy-conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. With HID equivalents ranging from 100W up to 1000W, the Galleon LED luminaire is designed to meet the toughest lighting challenges.

Construction
• Extruded aluminum driver enclosure
• Heavy-wall die-cast aluminum end caps
• 3G vibration rated
• IP66-rated housing and LED Light Squares
• Optional tool-less entry

Electrical
• Operates in -40°C to 40°C ambient with optional high ambient 50°C ambient configuration
• Proprietary circuit module designed to withstand 10kV of transient line surge
• >L90 60,000 hours at 40°C, compliant with IESNA TM-21
• 120V-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation

Controls
• Standard with 0-10V dimming driver(s)
• Optional occupancy sensor
• Optional wireless control and monitoring system

Finish
• Five-stage, super durable TGIC paint resists extreme weather conditions while providing optimal color and gloss retention. It’s available in standard grey or optional bronze, black, dark platinum, graphite metallic or white.

Warranty
• Five-year warranty

Surge Protection
A 10kV common surge (line-to-ground) and differential surge (line-to-line) mode protection is standard.

NEMA Twistlock Photocontrol Receptacle
An optional gasketed receptacle allows for mounting the standard NEMA photocontrol (order separately).

Light Square Trim Plate Finish
An optional finish to match LED trim plates to the housings exterior allows luminaire to blend seamlessly in any site lighting application.
Mounting Options

Occupancy Sensor
The optional motion sensor reduces energy use for site lighting applications.

Mast Arm Adapter
An optional cast aluminum mast arm adapter secures fixture head to nominal 2” (2-3/8” O.D. pipe size) horizontal steel tenon arm.

Wall Mount Bracket
An optional wall-mount plate is secured to wall by four lag bolts (supplied by others).

Die-cast Aluminum Heat Sinks

Scalable Lumen Packages from 3,000 to 53,000 Lumens

IP66-Rated Housing and LED Light Squares
Scalable Illumination with LED Light Squares

Energy Savings and Environmental Stewardship
The simplest and most effective way to reduce a lighting fixture’s impact on the environment is to minimize its energy consumption. By incorporating Light Squares from Eaton’s Cooper Lighting business, the Galleon LED luminaire provides energy savings up to 75 percent compared to standard HID solutions.

Long Life
With a 60,000+ hour rated life (at greater than 90 percent lumen maintenance), the Galleon LED Luminaire operates six times longer than traditional metal halide fixtures.

Low Maintenance
With simple quick disconnects, the Light Squares are easily removed in the field for replacement or for the rotation of the optics.

Warm White Color
Lighting designers, architects and specifying engineers have long preferred light sources that provide a balanced spectral power distribution and warm white light. Many LED solutions standardize on a cold blue 6000-6500K correlated color temperature (CCT) to maximize lumen output. The Galleon LED luminaire provides warm white light at a standard 4000K CCT with no sacrifice in lumen output.

Superior Efficiency and Control
With efficiencies as high as 95 percent, the patented AccuLED Optics™ system is up to 30 percent more efficient than traditional HID optical systems. Available in 16 optional distributions, this system provides the flexibility and performance required for outdoor applications.

House Side Shield
For stringent light trespass requirements and the ultimate level of backlight control, a house side shield accessory is available for factory or field installation. Designed to seamlessly integrate with the SL2, SL3, SL4 and AFL distributions, the house side shield virtually eliminates backlight and also enhances visual comfort.
**Optical Performance Redefined**

**Performance and Scalability**

The Galleon LED luminaire is designed around superior optical performance and scalability. With a choice of 30 lumen packages and 16 optical distributions, the optimal configuration can be used to maximize light levels while minimizing operating costs.

### Power Consumption (Watts)

<table>
<thead>
<tr>
<th>Number of Light Squares</th>
<th>Drive Current</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>530mA</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>105</td>
</tr>
<tr>
<td>5</td>
<td>130</td>
</tr>
<tr>
<td>6</td>
<td>159</td>
</tr>
<tr>
<td>7</td>
<td>184</td>
</tr>
<tr>
<td>8</td>
<td>209</td>
</tr>
<tr>
<td>9</td>
<td>234</td>
</tr>
<tr>
<td>10</td>
<td>259</td>
</tr>
</tbody>
</table>

### Efficacy (lm/W)

- **1A**
- **700mA**
- **530mA**

**Optical Distributions**

The Galleon luminaire has a choice of seven asymmetric area, three asymmetric roadway, three symmetric and three specialized distributions.

#### Asymmetric Area Distributions

- **T2** (Type II)
- **SL2** (Type II with Spill Control)
- **T3** (Type III)
- **SL3** (Type II with Spill Control)
- **T4FT** (Type IV Forward Throw)
- **T4W** (Type IV Wide)
- **SL4** (Type IV with Spill Control)

#### Asymmetric Roadway Distributions

- **RW** (Rectangular Wide Type I)
- **T2R** (Type II Roadway)
- **T3R** (Type III Roadway)

#### Symmetric Distributions

- **5NQ** (Type V Square Narrow)
- **5MQ** (Type V Square Medium)
- **5WQ** (Type V Square Wide)

#### Specialized Distributions

- **AFL** (Automotive Frontline)
- **SLL** (90° Spill Light Eliminator Left)
- **SLR** (90° Spill Light Eliminator Right)
Occupancy Sensing

Accelerate Payback on your Investment
To further enhance energy savings, the Galleon luminaire offers an optional occupancy sensor that is integral to each individual luminaire. When the area surrounding the luminaire is unoccupied, the sensor has the ability to reduce light levels and power consumption. In addition to financial benefits, all the control options for the Galleon luminaire are designed to be simple and cost-effective ASHRAE and Title 24 compliant solutions.

Dimming Occupancy Sensor (DOS)
When the DOS option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The sensor is factory preset to dim down to approximately 50 percent lumen output with a time delay of five minutes. To change these settings, a FSIR-100 accessory can be purchased. The FSIR-100 is a wireless configuration tool that allows the dimming level, time delay, sensitivity and other parameters to be changed. Consult a representative from Eaton’s Cooper Lighting business for additional details.

LumaWatt Wireless Control and Monitoring System (DIMRF-LW and DIMRF-LN)
The LumaWatt system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. The end user can create and manage sensor profiles with browser-based management software and broadcast to the sensors as necessary via wireless gateways. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. For additional details, refer to www.cooperlighting.com.

Dimming Occupancy Sensor (DOS)

LumaWatt (DIMRF-LW and DIMRF-LN)
Scheduled Dimming and Occupancy Detection

For outdoor parking area applications, lighting should be dimmed or turned off within one hour of business closing. Scheduled dimming and occupancy detection can be combined to reduce maximum lighting levels outside business hours. Egress and security lighting is available on occupancy detection.

Sides of Drive Fixture Location
Fixture Spacing = 160’ x 120’ on center
20 fixtures per 60’ wide drive lane; 40 fixtures total for 420’ x 120’ parking deck

IESNA Lighting Handbook 10th Edition
Illuminance Values for Area and Site Applications

<table>
<thead>
<tr>
<th>Illuminance</th>
<th>Minimum Horizontal Illuminance</th>
<th>Uniformity Ratio Max. / Min.</th>
<th>Minimum Vertical Illuminance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>2.0 / 0.2</td>
<td>20:1</td>
<td>1.0 / 0.1</td>
</tr>
<tr>
<td>Enhanced</td>
<td>5.0 / 0.5</td>
<td>15:1</td>
<td>2.5 / 0.25</td>
</tr>
<tr>
<td>Security</td>
<td>10.0 / 1.0</td>
<td>15:1</td>
<td>5.8-8.0 / 0.2-0.5</td>
</tr>
<tr>
<td>High Security</td>
<td>30.0-60.0 / 3.0-6.0</td>
<td>4:1</td>
<td>12-60 / 1.2-6.0</td>
</tr>
</tbody>
</table>

NOTES:
1. Measured on parking surface without shadowing from any object
2. For facial recognition measured at 5’ above the parking surface at the point of lowest horizontal illuminance

Energy Savings Calculations

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Daily Hours of Operation</th>
<th>Control Event</th>
<th>Annual Load (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Sensor Integrated Luminaires 35’ on Mounting Height, Centered at 120’ x 160’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bill-of-Material (BOM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) RF-EM1, (1) RF-ROUT1, (1) RF-3GW1, (14) GAN-AE10-LED-E1-T2-5-ZZ-DMPF-LN (515W)</td>
<td>11</td>
<td>100% On</td>
<td>28,948</td>
</tr>
</tbody>
</table>

Control Schedule
<table>
<thead>
<tr>
<th>Time</th>
<th>Days</th>
<th>Control Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 PM-11:30 AM</td>
<td>4</td>
<td>100% On</td>
</tr>
<tr>
<td>11:30 PM-6:30 AM</td>
<td>7</td>
<td>40% On, On Occupancy 70%</td>
</tr>
<tr>
<td>Total Controlled Load</td>
<td>11</td>
<td>2 Events</td>
</tr>
<tr>
<td>Energy Saving</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>
Configuration Flexibility

A New Level of Scalable Solutions
The Galleon LED luminaire is available in one to 10 Light Squares. As the number of Light Squares increases, the luminaire width increases proportionally.

Pole Mounting Configurations
The standard Galleon LED luminaire configuration is designed to mount to a round or square pole. When mounting two or more fixtures at 90° or 120° apart, a longer Extended Arm (EA) may be required. Please reference the table below to determine when the Extended Arm is required and designate "EA" in the catalog logic.

Arm Mounting Requirements

<table>
<thead>
<tr>
<th>Configuration</th>
<th>90° Apart</th>
<th>120° Apart</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAN-AE-01</td>
<td>7” Arm (Standard)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-02</td>
<td>7” Arm (Standard)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-03</td>
<td>7” Arm (Standard)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-04</td>
<td>7” Arm (Standard)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-05</td>
<td>10” Extended Arm (Required)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-06</td>
<td>10” Extended Arm (Required)</td>
<td>7” Arm (Standard)</td>
</tr>
<tr>
<td>GAN-AE-07</td>
<td>13” Extended Arm (Required)</td>
<td>13” Extended Arm (Required)</td>
</tr>
<tr>
<td>GAN-AE-08</td>
<td>13” Extended Arm (Required)</td>
<td>13” Extended Arm (Required)</td>
</tr>
<tr>
<td>GAN-AE-09</td>
<td>16” Extended Arm (Required)</td>
<td>16” Extended Arm (Required)</td>
</tr>
<tr>
<td>GAN-AE-10</td>
<td>16” Extended Arm (Required)</td>
<td>16” Extended Arm (Required)</td>
</tr>
</tbody>
</table>

NOTES: 1. Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2. Round poles are 3 @ 90°.
## Ordering Information

### Sample Number: GAN-AE-04-LED-U-T3A-AP

<table>
<thead>
<tr>
<th>Product Family</th>
<th>Light Engine</th>
<th>Number of Light Squares</th>
<th>Lamp Type</th>
<th>Voltage</th>
<th>Distribution</th>
<th>Color</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAN-Galleon</td>
<td>AE=1A Drive</td>
<td>01-10</td>
<td>LED=Solid</td>
<td>U=Universal</td>
<td>T2-Type II</td>
<td>AP-Grey</td>
<td>(BLANK) Arm for Pole</td>
</tr>
</tbody>
</table>

### Dimensions

#### Pole Mount

- 3-1/16" [100mm]
- 21/32" [553mm]
- 7" [178mm]

#### Wall Mount

- 6-3/16" [157mm]
- 21/32" [553mm]
- 7" [178mm]

### Lumen Multiplier

<table>
<thead>
<tr>
<th>Ambient Temperature</th>
<th>Lumen Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°C</td>
<td>1.02</td>
</tr>
<tr>
<td>10°C</td>
<td>1.01</td>
</tr>
<tr>
<td>25°C</td>
<td>1.00</td>
</tr>
<tr>
<td>40°C</td>
<td>0.99</td>
</tr>
<tr>
<td>50°C</td>
<td>0.97</td>
</tr>
</tbody>
</table>

### Lumen Maintenance

<table>
<thead>
<tr>
<th>Ambient Temperature</th>
<th>TM-21 Lumen Maintenance (60,000 Hours)</th>
<th>Theoretical L70 (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25°C</td>
<td>&gt; 94%</td>
<td>&gt; 350,000</td>
</tr>
<tr>
<td>40°C</td>
<td>&gt; 90%</td>
<td>&gt; 250,000</td>
</tr>
<tr>
<td>50°C</td>
<td>&gt; 90%</td>
<td>&gt; 170,000</td>
</tr>
</tbody>
</table>

### Compliances

- UL and cUL Wet Location Listed
- IP66 Light Squares
- 3G Vibration Rated
- ARRA Compliant
- ISO 9001

### Notes

- Specifications and dimensions subject to change without notice.
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Our Lighting Product Brands
Halo
Halo Commercial
Portfolio
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RSA
Metalux
Corelite
Neo-Ray
Fail-Safe
MWS
Ametrix
Shaper
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Lumark
McGraw-Edison
Invue
Lumière
Streetworks
AtLite
Sure-Lites

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