Since 1969, Electro-Matic has helped transform American industry by supplying automation components and solutions to leading U.S. manufacturers. Today, Electro-Matic Visual, Inc. continues to leverage the value of emerging technologies such as LED lighting and visual displays by developing practical applications for industrial, commercial and retail markets.

This is what we mean by turning innovation into value. And it is the reason we build our LED lighting fixtures with Kingsun optics and other best in class components.

Kingsun Optoelectronics is one of the world’s leading developers of LED lighting technology. Their research has brought the science of light distribution and head dissipation to the design and manufacture of best in class specification-grade LED lighting components and fixtures.

Electro-Matic and Kingsun bring unsurpassed innovation, reliability and technical superiority to the North American LED lighting market. Together, we are light years ahead.
Decades of Experience
Better products and service for you

In the Spring of 2014 Electro-Matic Visual opened a 17,000 square foot LED Production Center devoted solely to building LED lighting and display products.

Electro-Matic has been manufacturing and marketing LED based display products since the late 1990s. That experience provided the platform for entering the fast growing LED lighting market a decade later, culminating in our recent joint venture with Kingsun Optoelectronics. Over the years we have focused on achieving technical superiority of our products while providing innovative solutions for a wide range of industrial, roadway and commercial lighting applications.

Electro-Matic Facilities and Resources
- 100,000 square foot campus of office, warehousing and manufacturing facilities.
- Over $10 million in component inventory and finished product ready to ship.
- Totally integrated ERP business system with CRM, SCM, warehousing management and automated purchasing.
Decades of Experience
Better products and service for you

Manufacturer's Certificate of Compliance

Date: June 4, 2015
Re: American Recovery Act Compliance
Per Section 1605 of arra-09

Products: ELECTRO-MATIC AP and AR SERIES PRODUCTS Manufactured by ELECTRO-MATIC VISUAL, INC.

ELECTRO-MATIC VISUAL, INC. hereby certifies ELECTRO-MATIC AP and AR SERIES LED LIGHTING PRODUCTS are manufactured at our facility located at 23660 Industrial Park Ctr., Farmington Hills, MI 48335, United States of America, complying with section 1605 of ARRA-09 requirements with regards of determining whether substantial transformation has occurred in the U.S.

Questions for Determining Whether Substantial Transformation has occurred in the U.S.:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were all of the components of the manufactured good manufactured in the United States, and were all of the components assembled into the final product in the U.S.? (If the answer is yes, then this is clearly manufactured in the U.S., and the inquiry is complete)</td>
<td>Yes</td>
<td></td>
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<tr>
<td>2. Was there a change in character or use of the good or the components in America? (These questions are asked about the finished good as a whole, not about each individual component)</td>
<td>Yes</td>
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<td>a. Was there a change in the physical and/or chemical properties or characteristics designed to alter the functionality of the good?</td>
<td>Yes</td>
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<td>b. Did the manufacturing or processing operation result in a change of a product(s) with one use into a product with a different use?</td>
<td>Yes</td>
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<tr>
<td>c. Did the manufacturing or processing operation result in the narrowing of the range of possible uses of a multi-use product?</td>
<td>Yes</td>
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<td>4. Was (were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful?</td>
<td>Yes</td>
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<td>a. Did the process(es) take a substantial amount of time?</td>
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<td>b. Was (were) the process(es) costly?</td>
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<td>c. Did the process(es) require particular high level skills?</td>
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<td>d. Did the process(es) require a number of different operations?</td>
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<td>e. Was substantial value added in the process(es)?</td>
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Electro-Matic Visual Inc. - Manufacturer Warranty


Electro-Matic Visual, Inc., Farmington Hills, MI referred to herein as “EMV”, warrants its products, referred to herein as “Product”, when delivered in new condition and in original packaging, to be free from defects of material and workmanship for a period of five (5) years for luminaire housing, finish, LED modules, connectors, SPD, terminal blocks and power supply. EMV will under warranty obligation, repair or replace defective part/product at its discretion based on the overall performance.

Definition of Defect: A Product shall not be considered defective solely as a result of the failure of individual LED components to emit light if the number of inoperable components is less than 10% of the total number of LED components in the product. Driver defects includes functional problems of IP system, power factor etc. which affect the function of the product will be considered as defects under this warranty obligation.

This limited warranty does not apply to any product or parts that have been subject to: misuse; negligence; abuse; mishandling; defect, improper installation, improper grounding, storage, or maintenance; damage due to fire or acts of God, vandalism, civil disturbance, power surges; improper power supply, electrical current fluctuations; corrosive environment installations; induced vibration; harmonic oscillation or resonance associated with movement of air currents around the product; alteration; accident; failure to follow installation, operating, environmental or institutional instructions prescribed by EMV or applicable civil, safety and electrical codes or attempted repair/modification and/or other improper service of the Product performed by anyone other than EMV or authorized service provider. This limited warranty excludes field labor and service charges related to the repair or replacement of the Product.

EMV’s sole liability for defects or breach of warranty shall be replacement of the parts involved, and, in no event will EMV be liable for incidental, compensatory, consequential, indirect, special or consequential damages or losses including property damage or other loss as related directly or indirectly to the use of Product.

In no event shall EMV be liable for incidental, compensatory, consequential, indirect, and special or other damages, losses including property damage or other loss, personal injury as related directly or indirectly to the use of Product or caused by installation and transportation or negligence during installation or transportation or negligence. EMV's aggregate liability with respect to a defective product shall in any event be limited to the monies paid to EMV for that defective product. The limitations contained in this section apply regardless of the basis of the claim or the form of action including, without limitation, negligence or other tort, or breach of contract. EMV disclaims all liability for the cost of installation or any other cost incurred during the use of products manufactured by EMV. No representative is authorized to assume additional liability for EMV.

To order a warranty claim, you must notify EMV in writing within 30 days after discovering defects. All returns must provide proof of purchase such as the original invoice from EMV. EMV must issue a Return Material Authorization (RMA), prior to shipping. Returns will be shipped at buyer’s expense. If EMV finds the product working properly, Buyer may be billed for testing, re-packaging, and shipping. If the Product was under Warranty and EMV replaces or repairs the defective product, EMV will pay for return shipping to the customer. In no case will EMV be liable for any cost incurred in removing or installing the Product, even if the Product has failed under a covered Warranty.

EMV reserves the right to make product specification changes to any product at any time, as deemed necessary without prior notice to the customers. This warranty is effective for purchases of product on or after the effective date set forth below. EMV reserves the right to modify this warranty from time to time. Any modification of this warranty shall be effective for all orders placed with EMV on or after the effective date of such revised warranty. No other warranties are implied and there are no warranties extended beyond those stated herein.

If the warranty has expired, EMV will provide a quote to repair prior to making any such repairs. For pricing information on out of warranty repair, contact EMV Customer Service at 248-478-1182.
AP SERIES Apollo & AR SERIES Artemis LED LIGHT — INSTALLATION & REFERENCES BY DATE

August 2015
PROJECT: Fan Automation — World Headquarters, Shelby Township Plant 3
APPLICATION: High Bay Application — Production facilities with Emergency Backup Lighting
PROJECT SUMMARY: 
OWNER: Fan Automation USA
CONTACT:

August 2015
PROJECT: Comerica Bank Center — 411 West Lafayette Blvd., Detroit, MI
APPLICATION: Outdoor Area Lighting and Sign Illumination
PROJECT SUMMARY: Electro-Matic was asked to provide an LED lighting alternative to the HID wall washers and floods at this large downtown Detroit office building. We successfully illuminated the Comerica signage on top of the building, as well as the sides of the building through ground mounted fixtures. Along with reducing operating costs for the bank, a more attractive lighting environment was achieved.
OWNER: Comerica Bank
CONTACT: Property Manager CBRE, Brian Bennett Ph: 734-632-2207, brian.bennett@cbre.com

July 2015
PROJECT: City of Houston, TX
APPLICATION: Roadway Lighting
PROJECT SUMMARY: First of four stage project: (90) AP Series 150W lights installed on new poles
OWNER: City of Houston
CONTACT: Distributor — KNK Tribal Council, Bob Charles Ph: 907-373-7991, bcharles@knktc.com

June 2015
PROJECT: Brownstown Sports Center, 21902 Telegraph Rd., Brownstown Twp., MI
APPLICATION: Sports Court High Bay Lighting
Revolutionary Modular Design
AP/AR Series

Electro-Matic AP and AR Series luminaires are based on an innovative modular design that addresses two challenges in LED lighting: incremental optic control and heat dissipation.

Features

- Compact, low-profile design
- Extremely durable (high shock and high vibration resistant)
- High luminance uniformity with accurate light distribution
- Energy efficient: nominal luminaire efficacy of 115 lumens per watt
- Patented modular light bar system
- Optic solutions for any application
- Photo sensor option (AP Series only)
- 100,000+ hours of useful life (L70) reported
- Smart programmable power supply
- Tool-less service and maintenance (AP Series only)

Finish

- Cast components and arm finished in 2.5-mil powder coat for superior protection against fade, oxidation and wear
- Standard colors: silver, bronze, and white
- Custom painted colors available (non-powder coat)

Certifications

- ANSI/ISO/ASO 09001-2008
- Certificate No. GMSR C1007-1031
- IES data available
- LM79 and LM80 National Listed Lab Tests in accordance with IES Standards. Available upon request.

Patented modular light bar system

- Incremental power
- Project scalability
- Superior heat dissipation
- Separate, sealed-off electronics
- All components in stock for fast assembly and delivery
AP Series

Modular Power Serialization

<table>
<thead>
<tr>
<th>LIGHT BARS</th>
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The AP Series offers LED brilliance in a sleek, low profile luminaire with tool-free maintenance. Rugged housing with reliable snap-open/close access to separate IP66 driver and electronics compartment. Convenient plug-n-play wiring connectors for quick and frustration-free install and service.

Brightly lit, more aesthetic parking lots and roadways improve security and peace of mind. Directed light in five available light distributions for more efficient and aesthetic lighting design. Dark Sky friendly. Easy mounting and installation.

Applications
- Roadway
- Parking Lot
- Wall Pack
- Area/Flood

Mounting Options

- Photocell
  - Available interface for the NEMA photoelectric control unit (PECU).
  - Optional seven-pin photocell receptacle available.

Key Cost Savings
- Long LED life
- Lower overall wattage for fewer fixtures/poles
- Lower maintenance and replacement costs

LED TYPE
- CREE XPG-2

L70 CALCULATED
- 362,500 Hours

COLOR TEMP
- 3745 - 4311 K*

OPERATING TEMP.
- -40° to 55° C
  - -40° to 131° F

OPERATING HUMIDITY
- < 95%

POWER FACTOR
- 96%

SURGE PROTECTION
- 10kV Standard

TOTAL HARMONIC DISTORTION
- < 20%

FREQUENCY RANGE
- 50/60 Hz

IP RATING
- 66
Electro-Matic AP and AR Series

Optics & Photometrics
Unique optics solution optimizes the light distribution to comply with road lighting standards.

Modular Design
- Easy assembly and maintenance;
- Replaceable and upgradeable;
- Excellent thermal management.

Mechanical Structure
- Independent LED driver compartment.

Mounting Interface
- Adaptive for standard arm outer diameters;
- Adjustable tenon meets the post/pole top mounting need.

Leds
- High reliability and performance powered by the best LED light source supplier;
- LM-80 compliant;
- 100,000 life time to 70% lumen maintenance.

Photocell
Available interface for the NEMA photoelectric control unit (PECU).

Power Supply
- Worldwide certified
- Universal input voltage and frequency
Roadway
30W - 300W

HID Replacement Guide

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Mounting

Recommended Optics*

- T2M
- T3L
- L5W

Available Options
Photocell, Programmable Controls
Parking Lot
30W - 300W

HID Replacement Guide

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Mounting

Available Options
Photocell, Programmable Controls

Recommended Optics*

- T2M
- T3L
- L5W
Area/Flood
30W - 300W

HID Replacement Guide

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Available Options
Photocell, Programmable Controls

Mounting

Recommended Optics*

- T2M
- L5W
- T7M
Wall Pack
30W - 90W

HID Replacement Guide

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Mounting

Available Options
Photocell, Programmable Controls

Recommended Optics*

- T2M
- L5W
- T7M
AR Series

Modular Power Serialization

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The AR Series features the same modular light bar system as the AP Series in a different frame and housing design. Ideal for recessed and pendant mounting. Offers a different look with versatility for additional applications and mounting requirements.

Available Optics

- T1S
- T2M
- T3L
- L5W
- T7M

Key Cost Savings
- Long LED life
- Lower overall wattage for fewer fixtures/poles
- Lower maintenance and replacement costs

Applications
- Canopy
- High and Low Bay
- Parking Garage
- Wall Pack
- Area/Flood

Mounting Options

B2G
- High/Low Bay
- Parking Garage
- Canopy

B2G-H (Hook)
- High/Low Bay
- Parking Garage

B2G-WR (Pendant)
- High Bay

F2G
- Flood/Area

F2G-MM (Mid-Mount)
- Flood/Area
- Parking Garage

B2H
- Canopy

F2F
- Wall Pack

LED TYPE
- CREE XPG-2

L70 CALCULATED
- 362,500 Hours

COLOR TEMP
- 3745 - 4311 K*

CRI
- > 75

DRIVER CURRENT
- 700 mA

VOLTAGE
- Univ. 120-277V or 347-480V

OPERATING TEMP.
- -40° to 55°C
- -40° to 131°F

OPERATING HUMIDITY
- < 95%

POWER FACTOR
- 96%

SURGE PROTECTION
- 10kV Standard

TOTAL HARMONIC DISTORTION
- < 20%

FREQUENCY RANGE
- 50/60 Hz

IP RATING
- 66
Electro-Matic AP and AR Series

Ceiling-mount bracket
14 LEDs per module, maximum 10 modules. Replaceable & upgradeable modules.

Reverse side of body
Polycarbonate lens kits Symmetrical lens options

Control drivers at both ends

[Images of Electro-Matic AP and AR Series]
Canopy
30W - 90W

HID Replacement Guide

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Mounting Options

Recommended Optics*

- B2G
- B2H
- T1S
- L5W

Available Options
Programmable Controls
Parking Garage

30W - 90W

HID Replacement Guide

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Mounting Options

- B2G
- B2G-H
- F2G-MM

Available Options
Programmable Controls

Recommended Optics*

- T1S
- L5W
Low/High Bay
30W - 120W (< 20ft. Mounting Height) / 120W-300W (20ft. - 50ft. Mount Height)

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Mounting Options

- B2G
- B2G-H
- B2G-WR
- F2G-MM

Recommended Optics*

- T1S
- L5W

Available Options
Programmable Controls
Area/Flood
30W - 300W

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Mounting Options

- F2G
- F2G-MM

Recommended Optics*

- T2M
- L5W
- T7M

Available Options
Programmable Controls
Wall Pack

30W - 90W

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Mounting

Recommended Optics*

Available Options
Programmable Controls
Smart Lighting Controls

Integration-friendly enabled technology for more energy savings, monitoring and control

What Makes Lighting Smart?
Our standard UNIV 110-277V driver is already intelligent. The Phillips Xitanium driver can be programmed and easily integrated into an existing or new control system or networked solution.

Non-Networked Control Capability Options
- Multi-level dimming control with integrated occupancy sensor
- Pre-wired for 0-10V Dimming
- NEMA Photocell Receptacle
- DALI preset programming
- Dynadim

Wireless Networked Controls – How Does it Work?
Best-in-class outdoor lighting controls create their own wireless communication networks for control and monitoring, yet can also operate on their own if the network is interrupted. When connected to a network, they deliver real time data, from energy use to failure alarms, that empowers energy managers.

Case Study: Dealership trims energy use 86%
Using EM LED lighting and Smart Lighting Controls: goo.gl/qhmgUW
Smart Lighting Controls

The BULIT® is a wireless intelligent controller designed to replace the standard photocell control modules on the AP and R2K Series luminaires. The BULIT® seamlessly connects to the WattStopper Segment Manager or other Niagara-AX JACE controllers utilizing wireless 2.4GHz, IEEE 802.15.4 and deliver unprecedented functionality including:

• Wireless connectivity and automatic inclusion in self-healing networks.
• Full range 0-10 volt dimming control via NEMA standard ANSI C136.41-2013 connection.
• Code-compliant, utility-grade sub-metering per fixture.
• Compatibility with secure, web-enabled building automation systems (BAS).
• Initiation of self-contained astronomic and scheduled control events.

What Applications Do Electro-Matic’s Wireless Solutions Address?
Our wireless controls are ideal for a wide range of industrial, commercial and municipal lighting including:

• Corporate and school campuses
• Parking lots
• Roadway, path, trails
• Parks
• Retail and industrial buildings
• Car dealerships
Other Product Offerings
OEM or ......
R2K Mini AP

LED Lighting

Modular Power Serialization

<table>
<thead>
<tr>
<th>Light No.</th>
<th>Nominal Power</th>
<th>Nominal Lumen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48W</td>
<td>5175</td>
</tr>
<tr>
<td>2</td>
<td>96W</td>
<td>7350</td>
</tr>
<tr>
<td>3</td>
<td>115W</td>
<td>9150</td>
</tr>
<tr>
<td>4</td>
<td>123W</td>
<td>14156</td>
</tr>
<tr>
<td>A</td>
<td>120W</td>
<td>20700</td>
</tr>
</tbody>
</table>

Available Optics

Key Cost Savings
- Long LED life
- Lower overall wattage for lower future prices
- Lower maintenance and replacement costs

The Mini AP Series offers LED brilliance in a sleek, low profile and cost-effective luminaire designed for high-volume roadway applications in cities, municipalities and neighborhoods. The Mini AP provides superior cost/performance metrics. Convenient plug-in-play wiring connectors for quick and frustration-free install and service.

Applications
- Die-cast integrated light emitting diode (LED) light fixture.
- Built-in heat sink to extend lifespan of the fixture.
- High-power, best-in-class LEDs.
- Unique modular and optical design.
- Wide operating voltage range of 100-277V

Features
- State-of-the-art low profile, streamlined modular design.
- Weather and rust resistant anodized or powder coated surface.
- Unique open air ventilation technology.
- Easy maintenance and installation.
- Photocells and programming controls available.

Mounting Options
- Fits 1.98-2.36” diameter mast arms.
- Square pole tenons available for 4”x4”/6” square poles.

Optics and Photometrics
- Unique optic solution optimizes the light distribution to comply with application standards. See pages 65-68 for details.
- Polycarbonate plastic lens material.

Power Supply
- Philips worldwide-certified.
- Available units: 120-277V

Programmable
- D180
- Digital Addressable Lighting Interface (DALI)
- Easily integrated into a new or existing control system or networked solution.
- Dynamik

LEDs
- High visibility and performance, powered by best-in-class suppliers.
- LH40 tested.
- Calculated L70 to 392,000 hours.

Photocell
- Available interface for the NEHA photoelectric control unit (PECU).
- Optional seven-pin photocell receptacle available.
## CZ Series High Bay

<table>
<thead>
<tr>
<th>Model</th>
<th>LE5L5W300ETX01W</th>
<th>LE5L5W240ETX01W</th>
<th>LE5L5W200ETX01W</th>
<th>LE5L5W150ETX01W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>300W</td>
<td>240W</td>
<td>200W</td>
<td>150W</td>
</tr>
<tr>
<td>LED</td>
<td>Cree 3535 198pcs</td>
<td>Cree 3535 132pcs</td>
<td>Cree 3535 120pcs</td>
<td>Philip 3030198pcs</td>
</tr>
<tr>
<td>Power Efficiency</td>
<td>&gt;90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Factor</td>
<td>&gt;0.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Voltage</td>
<td>100-240VAC/277VAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luminous Flux</td>
<td>31500lm</td>
<td>25200lm</td>
<td>21000lm</td>
<td>15750lm</td>
</tr>
<tr>
<td>Ra</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70/80</td>
</tr>
<tr>
<td>Net Weight</td>
<td>6.3kg</td>
<td>6.5kg</td>
<td>5.8kg</td>
<td>5.6kg</td>
</tr>
<tr>
<td>Size</td>
<td>Ø380x240</td>
<td>Ø380x240</td>
<td>Ø380x240</td>
<td>Ø380x240</td>
</tr>
<tr>
<td>CCT</td>
<td>4000K</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lens</td>
<td>PC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beam Angle</td>
<td>60° (3030LED), 70° (3535LED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient humidity</td>
<td>IP65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temp</td>
<td>-40°C-50°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Aluminum Alloy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>5 years</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: X represents installation, which may be X=A,B. A represents fixed installation, B represents suspension.
BB201
High Bay LED Fixture

The Fintronx BB201 High Bay LED fixture is engineered for the harshest commercial and industrial environments. The IP66 dust tight and waterproof rating allows for the fixture to be chemically power washed daily with up to 1600psi. The smooth, seamless and downward angled aluminum alloy housing ensures zero residue remains after wash down and allows the fixture to drip dry in minutes. The ambient heat range is -40°C to +50°C.

The fixture is a great fit for the harsh environment of Food & Beverage and Live Stock Processing, Cold Storage, Manufacturing and Warehousing. In addition, the sleek, modern design also makes it an ideal choice for many other environments such as Retail, Gymnasiums, Health Clubs, Natatoriums, Flight Hangers, Convention Centers and Sporting Venues.

The fixture has an L70 calculated life span of 94,000 hours which means it will provide 10+ years of 24/7 continuous light. It replaces traditional 400W HID fixtures and yields greater than 85% energy savings which directly translates to 85% money saved on your power bill. For light traffic areas the optional motion sensor can increase energy savings significantly.

<table>
<thead>
<tr>
<th>DLC Listed Product Name</th>
<th>Wattage</th>
<th>Voltage</th>
<th>LED Qty</th>
<th>CRI</th>
<th>Finish</th>
<th>IP Rating</th>
<th>Dimensions</th>
<th>Color Temp</th>
<th>Lens Type</th>
<th>Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB13651</td>
<td>150W</td>
<td>120-277V</td>
<td>136</td>
<td>&gt;75</td>
<td>Anti-Corrosion Powder Coated Silver Finish</td>
<td>66</td>
<td>Height: 16.59” Diameter: 17.72” Weight: 17 lbs</td>
<td>6000K</td>
<td>Anti-Glare Shatter-Proof PC Lens</td>
<td>14,724</td>
</tr>
</tbody>
</table>
185W Explosion Proof Lighting

Product Features

- High Efficacy Low Decay 700Ma 45 Mil LED Chip
- Efficacy: 150lm @350ma (watt)
- PCB: 2.0 mm, Copper Thickness: 2oz
- Heat Transmit: 2.5
- Expected LED Life-span: 100,000 hrs
- Working Temp: -22 to +122°F
- Does not contain harmful materials/RoHS compliance
- 70-80% savings compared to HPS/MH
- EMC test standard
- Driver Efficacy > 90%
- UL, cUL Certification
2x2 ft. LED Panel Light

Features:
- Large range full flat illumination design promotes even light distribution, preventing hot spots with a uniformity ratio of illuminance of 0.86.
- Ultra-slim design, thickness of only 6.6mm
- White frame color
- Recessed or suspended mounting options
- flicker-free

Product Information:

<table>
<thead>
<tr>
<th>Model</th>
<th>L1E200-40W2000-WD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>LE1403042000-WD</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>40 W</td>
</tr>
<tr>
<td>Replacement Incandescent</td>
<td>100 W</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>120-277 V</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>50-60 Hz</td>
</tr>
<tr>
<td>Power Factor</td>
<td>0.98</td>
</tr>
<tr>
<td>Color Temperature</td>
<td>4000K</td>
</tr>
<tr>
<td>IP Rating</td>
<td>20</td>
</tr>
<tr>
<td>LED Lifetime</td>
<td>0.120000 hr.</td>
</tr>
<tr>
<td>Lumens/Flux</td>
<td>1000 lum.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>100lm/1W</td>
</tr>
<tr>
<td>CRI/CRI Index</td>
<td>80</td>
</tr>
<tr>
<td>Beam Angle</td>
<td>10°</td>
</tr>
<tr>
<td>Dimming</td>
<td>5-100%</td>
</tr>
<tr>
<td>Weight</td>
<td>10 lbs</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-4°F to 104°F</td>
</tr>
<tr>
<td>Ambient</td>
<td>0.15</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>2.0%</td>
</tr>
<tr>
<td>Spacing/Ceil</td>
<td>11.81 x 11.81</td>
</tr>
</tbody>
</table>

Photometrics:

- Luminous Efficacy: 100 lum/1W
- Color Rendering Index: 80
- Beam Angle: 10°
- Dimming: 5-100%
- Weight: 10 lbs
- Operating Temperature: -4°F to 104°F
- Dimmer: Class 2
- Total Harmonic Distortion: 2.0%
- Spacing/Ceil: 11.81 x 11.81

800-468-0681 | 2883 Industrial Park Drive, Pembroke Pines, FL 33026

---

2x4 ft. LED Panel Light

Features:
- Large range full flat illumination design promotes even light distribution, preventing hot spots with a uniformity ratio of illuminance of 0.86.
- Ultra-slim design, thickness of only 6.6mm
- White frame color
- Recessed or suspended mounting options
- flicker-free

Product Information:

<table>
<thead>
<tr>
<th>Model</th>
<th>L1E200-40W2000-WD</th>
</tr>
</thead>
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</tr>
<tr>
<td>Power Consumption</td>
<td>40 W</td>
</tr>
<tr>
<td>Replacement Incandescent</td>
<td>100 W</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>120-277 V</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>50-60 Hz</td>
</tr>
<tr>
<td>Power Factor</td>
<td>0.98</td>
</tr>
<tr>
<td>Color Temperature</td>
<td>4000K</td>
</tr>
<tr>
<td>IP Rating</td>
<td>20</td>
</tr>
<tr>
<td>LED Lifetime</td>
<td>0.120000 hr.</td>
</tr>
<tr>
<td>Lumens/Flux</td>
<td>1000 lum.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>100lm/1W</td>
</tr>
<tr>
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<td>80</td>
</tr>
<tr>
<td>Beam Angle</td>
<td>10°</td>
</tr>
<tr>
<td>Dimming</td>
<td>5-100%</td>
</tr>
<tr>
<td>Weight</td>
<td>10 lbs</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-4°F to 104°F</td>
</tr>
<tr>
<td>Ambient</td>
<td>0.15</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>2.0%</td>
</tr>
<tr>
<td>Spacing/Ceil</td>
<td>11.81 x 11.81</td>
</tr>
</tbody>
</table>

Photometrics:

- Luminous Efficacy: 100 lum/1W
- Color Rendering Index: 80
- Beam Angle: 10°
- Dimming: 5-100%
- Weight: 10 lbs
- Operating Temperature: -4°F to 104°F
- Dimmer: Class 2
- Total Harmonic Distortion: 2.0%
- Spacing/Ceil: 11.81 x 11.81

800-468-0681 | 2883 Industrial Park Drive, Pembroke Pines, FL 33026
EM-CL8 - MullionStick® Cooler Light
Refrigerated Display Applications

Benefits
• Cooler display lighting
• Uniform illumination
• High 120° viewing angle enhances visual clarity
• High LED efficiency reduces energy cost
• 60,000 hour life reduces maintenance, eliminates "dark spots"

Features
• Instant start LEDs are compatible with inverter and
  battery backup emergency lighting systems.
• Energy savings reduces greenhouse gases.
• 100% mercury and lead-free.
• RoHS compliant.
• Designright® Consortium qualified.

Light Emitting Diodes
High-power white LEDs produce minimal 1/30 lux
levels per watt and 700% of incandescent at 93,900 hours.
They have a semiconductor core with junctions at 150
of 16. LEDs are 100% safe and energy efficient.

Optical Systems
Micro-lens system provides "prismatic distribution" of light from
the LED chip to the lens. Structured distribution
produces two intense beams (70° and 90°) and a diffuse area.

Electrical Power Supply includes a Power Factor of 0.9 and 90%
DC-DC converter and harmonic distortion 10%. EMV meets or exceeds FCC 58
For TS Series, this system consists of a MR-22-41 C-A 5-44.5VAC

Finish
Clear anodized.

Listing/Rating/Specifications
• ETL listed to UL standards.
• Super-efficient/assembly designed
• cosmetic integrity.

Design/Highlights
• Environmentally. qualified product.

Fixture Ordering Guide Example

EM-CL8 2A-GSF

Series | Nominal Length | No. & Type of LEDs | Input Voltage
--- | --- | --- | ---
EM-CL8 | 24” | 5A | 3,329 (24)
3A | 48” | 5A | 3,329 (24)
6” | 72” | 5A | 3,329 (24)
6” | 96” | 5A | 3,329 (24)
6” | 120” | 5A | 3,329 (24)
6” | 144” | 5A | 3,329 (24)

Notes:
1. OCLP, LAP, and LAPF are UL Recognized by CLP, LAP, and LAPF.
2. Input voltage is rated at 120VAC and 277VAC.

24V DC Power Supply Ordering

Ordering Guide

EM-CL8 2A-GSF

DLC | Fix Config | Input Watts | Omni-Dimensional Lumens
--- | --- | --- | ---
0 | 29 | 2,550 | 1 Lamp T5 High 05
1 | 3,060 | 2,930 | 2 Lamp T5 High 15
2 | 3,450 | 3,350 | 3 Lamp T5 High 25
3 | 3,840 | 3,830 | 4 Lamp T5 High 34
4 | 4,230 | 4,300 | 4 Lamp T5 High 44
5 | 4,620 | 4,570 | 4 Lamp T5 High 54
6 | 5,010 | 5,000 | 4 Lamp T5 High 64
7 | 5,400 | 5,100 | 4 Lamp T5 High 74
8 | 5,790 | 5,790 | 4 Lamp T5 High 84
9 | 6,180 | 6,180 | 4 Lamp T5 High 94
10 | 6,570 | 6,570 | 4 Lamp T5 High 104
11 | 6,960 | 6,960 | 4 Lamp T5 High 114
12 | 7,350 | 7,350 | 4 Lamp T5 High 124
13 | 7,740 | 7,740 | 4 Lamp T5 High 134
14 | 8,130 | 8,130 | 4 Lamp T5 High 144
15 | 8,520 | 8,520 | 4 Lamp T5 High 154
16 | 8,910 | 8,910 | 4 Lamp T5 High 164

Fixture Ordering Guide Example

EM-FSN - LED Strip Fixture

Features
• Low Profile
• Energy Efficient
• Versatile

Application
• General area
• Case
• Aisle
• Task

Benefits
• Rated 63,000 | Calculated 90,000 hours
• Immediate energy savings
• Extremely energy efficient
• Mercury-free technology

Features
• Cool, Quiet® heat dissipation
• Excellent lumen maintenance
• Reduced maintenance cost
• Instant on

Photometry
• EM-FSN-03204-WAN-40K

Design
• Manufacturer and assembled in the USA
• Dimensions: 0.50” x 0.50” x 1.70”
• Designed for surface, chain, pendant
  mount, pendant mount optional.
• Fixture body and ends constructed from
  0.032 aluminum (will not rust)
• Color temp: 4000K, CRI: 80+
• 110° Lm/Watt LED efficiency

Option Ordering Guide

EM-FSN-03204-WAN-40K

Series
EM-FSN: Race-radiator Strip
1 | 1 Lamp T5 Eqv.
2 | 2 Lamp T5 Eqv.
4 | 4 Lamp T5 Eqv.

Technology
X-LED

Length
3 – 4
N/A

Material
N/A

Power Factor
L: Low | N: Normal
CCT
S: SRK | BK: BK-800 |
0 – 500

Industry Leader in Customization - Lead Times
for Over 15 Years
Farmington Hills, MI
(660) 000-0006

Electro-Matic Visual, Inc.
**EM-DWN-06 6” Recessed Downlight Kit**

- **Application**
  - Recessed lighting
  - Task lighting
  - Office
  - Kitchen

- **Benefits**
  - Wattage Replacement: 100W Incandescent
  - 97% Energy Reduction
  - 50,000 Hours
  - Suitable for indoor/outdoor
  - Dry, damp & wet locations
  - Mercury free/no toxins

- **Certifications**
  - ETL Certified
  - RoHS Compliant

- **Photometry**
  - Lumen: 550
  - Lumen/Watt: 6.5W

- **Technical**
  - Dimensions: 7.33” x 4.43”
  - Wattage Replacement: 100W Incandescent
  - System Watts: 13
  - Input Voltage: 120 V
  - Cone Temperature: 5000 K
  - Minimum Starting Temperature: 32° C
  - Maximum Operating Temperature: 104° F
  - Insulated ceiling or non-insulated ceiling
  - CRI: 83
  - LED: Sylvania

**EM-DWN-04 4” Recessed Downlight Kit**

- **Application**
  - Ambient
  - Necessitated
  - Task

- **Benefits**
  - Wattage Replacement: 50W Incandescent
  - 92% Energy Reduction
  - 60,000 Hours (L70)
  - Suitable for recessed/ceiling
  - Dry, damp & wet locations
  - Mercury free/no toxins

- **Certifications**
  - ETL Certified
  - RoHS Compliant

- **Photometry**
  - Lumen: 550
  - Lumen/Watt: 61W

- **Technical**
  - Dimensions: 3.33” x 3.33”
  - Wattage Replacement: 50W Incandescent
  - System Watts: 6
  - Input Voltage: 120 V
  - Cone Temperature: 2100 - 4000 K
  - Minimum Starting Temperature: -4° F
  - Maximum Operating Temperature: 104° F
  - Insulated ceiling or non-insulated ceiling
  - CRI: 83
  - LED: Sylvania

**Product Code**

- **EM-DWN-06**
  - Series: EM-DWN-06
  - Voltage: 25K - 3000K
  - 4K - 4000K
  - 5K - 5000K

- **EM-DWN-04**
  - Series: EM-DWN-04
  - Voltage: 35K - 4000K
  - 4K - 4000K
  - 5K - 5000K

**Industry Leader**

- DLC Listed
- Made in USA
- ETL Listed
- CalGreen

- Farmington Hills, MI (866) 988-0980
Sustainable Retrofit Revolution

Leave No Fixture Behind

- Yoke
- Universal Plates
- Threaded Rod
- Platos
- Post Top

LED Lighting

Made in USA
RoHS Compliant
UL Listed
LED Module E351605
0-10V Dimming Capable

GTSOL5498
GTSOLM21