



Ontario Auto Dealership to Become First North American Installation of Next-Generation Graphene LED Lighting Technology

Lumeneering Innovations To Install LED Lighting System That Makes Quantum Leap in Quality, Durability, Savings

Spelmer Chrysler Jeep Dodge Sales in Trenton, Ontario, Canada will become the first Northern American installation of a next-generation graphene enhanced LED lighting technology from Canadian companies Graphene Lighting PLC and Lumeneering Innovations, Inc.

Jason Spelmer, Dealer Principal and President, Spelmer Chrysler Jeep Dodge Sales, chose Lumeneering Innovations to upgrade all the dealership's lighting indoors and out to LED technology because of strong references from Ontario Power Authority's saveONenergy program and neighbouring auto dealerships. "We are excited about upgrading to the latest technology and are always looking for way to lessen our carbon footprint," says Mr. Spelmer. The first project phase completed in November included replacement of all outdoor and service area lighting using the latest commerciallyavailable LED lighting technology. The next phase will deploy next-generation graphene-enhanced LED lighting in the indoor showroom to boost lighting quality and energy savings beyond the capability of current technology.

The installation will showcase a new LED technology developed by Graphene Lighting PLC, a Canadian-financed company, using the ultra-strong carbon graphene which was first discovered in 2004 by two scientists from the University of Manchester in England who later won the Nobel Prize in physics. The new bulb copies the classic design of inventor Thomas Edison but its filament has a coating of graphene, an atom-thick layer of carbon that is stronger than steel and conducts heat and electricity efficiently. As a result, graphene-enhanced bulbs offer an industry-leading 10 year warranty to produce superior quality illumination in a maintenance-free system which may last 20 years or more.

Lumeneering Innovations (LI) is a leading supplier of lighting solutions focused on turnkey system upgrades for commercial and institutional businesses in Canada and the United States. Business owners, tenants and managers of real estate are working with LI to take advantage of the saveONenergy program offered by the Ontario Power Authority and local utilities. Lighting system upgrades can dramatically cut energy bills every month, and many projects often qualify for utility-sponsored rebates to help offset the upfront expense.





Graphene Flood Light — 90W

Application

Features

- Industrial / Warehouse
- Garage Lighting
- Advertising Lighting
- Architectural Lighting

• Light source: Multi-Chip COB LED

Graphene thermal technology

• Luminous efficiency > 120 lm/W



Graphene Park Light — 45W

Application

- Industrial / Warehouse
- Garage Lighting
- Park Lighting
- Municipal Lighting



205

Features

- Light source: Multi-Chip COB LED
- Graphene thermal technology
- Luminous efficiency > 120 lm/W
- Energy saving and environment friendly

Energy saving and environment friendly

Specification

Model	STG-90CW-AF/CTD STG-90NW-AF/CTD STG-90WW-AF/CTD
Input Voltage (AC, V)	90V~264V, 50/60Hz
Power Consumption (W)	90±10%
Color Temperature (K)	WW:3000 / NW:4000 / CW:6000
Luminous Flux (lm)	9900 / 11000/ 11000
Beam Angle (Degree)	160° x 80° / 170° x 60°
Outline Dimensions (mm)	420mm x 260mm x 76mm
Weight (Kg)	2.1
Operation Temperature (°C)	-40°C~+60°C
Storage Temperature (°C)	-40°C~+65°C
Lifetime to 70% luminous flux (hr), L70 at Ta=25°C	35,000hr
Lifetime to 50% luminous flux (hr), L50 at Ta=25°C	50,000hr
Ingress Protection Rating	IP65

Specification

Model	PKC-45CW-AF/CTD PKC-45NW-AF/CTD PKC-45WW-AF/CTD
Input Voltage (AC, V)	90V~264V , 50/60Hz
Power Consumption (W)	45±10%
Color Temperature (K)	WW:3000 / NW:4000 / CW:6000
Luminous Flux (lm)	4900 / 5400/ 5400
Beam Angle (Degree)	160° x 80° / 170° x 60°
Outline Dimensions (mm)	300mm x 300mm x 95mm
Outline Dimensions (mm) Weight (Kg)	300mm x 300mm x 95mm 1.0
, ,	
Weight (Kg)	1.0
Weight (Kg) Operation Temperature (°C)	1.0 -40°C~+60°C
Weight (Kg) Operation Temperature (°C) Storage Temperature (°C) Lifetime to 70% luminous	1.0 -40°C~+60°C -40°C~+65°C



Graphene Street Light — 100W

Application

- Street Lighting
- Garage Lighting
- Amusement Park Accent
- Architectural Lighting

Features

- Light source: Multi-Chip COB LED
- UV or IR free
- Luminous efficiency > 120 lm/W
- Energy saving and environment friendly



Graphene Street Light — 120W

Application

- Street Lighting
- Garage Lighting
- Amusement Park Accent
- Architectural Lighting

Features

- Light source: Multi-Chip COB LED
- UV or IR free
- Luminous efficiency > 120 lm/W
- Energy saving and environment friendly



Specification

Input Voltage (AC, V) 90V~265V, 50/60Hz Power Consumption (W) 96±10% Color Temperature (K) WW:3000 / NW:4000 / CW:6000 Luminous Flux (Im) 10800 / 11700 / 11700 Beam Angle (Degree) 160° x 80° / 170° x 60° Outline Dimensions (mm) 720mm x 340mm x 88mm Weight (Kg) 5.2 Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C Ingress Protection Rating IP65	Model	STG-100CW-AF/CTD STG-100NW-AF/CTD STG-100WW-AF/CTD
Color Temperature (K) WW:3000 / NW:4000 / CW:6000 Luminous Flux (Im) Beam Angle (Degree) 160° x 80° / 170° x 60° Outline Dimensions (mm) Weight (Kg) 5.2 Operation Temperature (°C) Storage Temperature (°C) Lifetime to 70% luminous flux (hr), L70 at Ta=25°C VW:3000 / NW:4000 / CW:6000 10800 / 11700 / 11700 150° x 80° / 170° x 60° 720mm x 340mm x 88mm 720mm x 340mm x 88mm 5.2 40°C~+60°C 50,000hr 50,000hr	Input Voltage (AC, V)	90V~265V, 50/60Hz
CW:6000 Luminous Flux (lm) 10800 / 11700 / 11700 Beam Angle (Degree) 160° x 80° / 170° x 60° Outline Dimensions (mm) 720mm x 340mm x 88mm Weight (Kg) 5.2 Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C	Power Consumption (W)	96±10%
Beam Angle (Degree) 160° x 80° / 170° x 60° Outline Dimensions (mm) 720mm x 340mm x 88mm Weight (Kg) 5.2 Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C	Color Temperature (K)	
Outline Dimensions (mm) 720mm x 340mm x 88mm Weight (Kg) 5.2 Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C	Luminous Flux (lm)	10800 / 11700 / 11700
Weight (Kg) 5.2 Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C 5.2 5.2 5.2 5.2 5.2 5.2 6.2 6.2	Beam Angle (Degree)	160° x 80° / 170° x 60°
Operation Temperature (°C) -40°C~+60°C Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C 50,000hr	Outline Dimensions (mm)	720mm x 340mm x 88mm
Storage Temperature (°C) -40°C~+65°C Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C 50,000hr	Weight (Kg)	5.2
Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous flux (hr), L50 at Ta=25°C 50,000hr		
flux (hr), L70 at Ta=25°C Lifetime to 50% luminous 50,000hr flux (hr), L50 at Ta=25°C	Operation Temperature (°C)	-40°C~+60°C
flux (hr), L50 at Ta=25°C		
Ingress Protection Rating IP65	Storage Temperature (°C) Lifetime to 70% luminous	-40°C~+65°C
	Storage Temperature (°C) Lifetime to 70% luminous flux (hr), L70 at Ta=25°C Lifetime to 50% luminous	-40°C~+65°C 35,000hr

Specification

Specification	
Model	STG-120CW-AF/CTD STG-120NW-AF/CTD STG-120WW-AF/CTD
Input Voltage (AC, V)	90V~264V , 50/60Hz
Power Consumption (W)	120±10%
Color Temperature (K)	WW:3000 / NW:4000 / CW:6000
Luminous Flux (lm)	12500 / 13500 / 13500
Beam Angle (Degree)	160° x 80° / 170° x 60°
Outline Dimensions (mm)	720mm x 340mm x 88mm
Weight (Kg)	5.2
Operation Temperature (°C)	-40°C~+60°C
Storage Temperature (°C)	-40°C~+65°C
Lifetime to 70% luminous flux (hr), L70 at Ta=25°C	35,000hr
Lifetime to 50% luminous flux (hr), L50 at Ta=25°C	50,000hr
Ingress Protection Rating	IP65



100% Risk-Free Financing Available For Limited Time

No Upfront Investment, Plus You Keep the Rebate!

Upgrade your lighting system today with no upfront investment and pay for it monthly from the savings on your hydro bill. Plus, you can keep the utility program rebate cheque!

Our Offer:

- At no upfront cost to you, we will install a complete LED lighting change for every light bulb in all your facilities. Our installation will include 5 years of complete lighting warranty (material and labor), plus an additional 5 years of product warranty for a total of 10 years coverage.
- 2. You will receive a rebate cheque from the saveONenergy program (Belleville Nissan's cheque amount was \$14,544)
- 3. You agree to pay us 70% of the energy costs you save monthly for 60 months. (Belleville Nissan's total annual energy cost savings is \$29,000.00

- as calculated by the saveONenergy program. If your savings were similar, your payment to Lumeneering would be \$1,692 monthly for 60 months).
- 4. After 60 months, the system ownership will be passed to you for \$1.00.

Next Steps:

- 1. Apply for your saveONenergy grant now before the rebates are reduced by 60%.
- 2. Help us finalize your lighting design and other requirements to calculate estimated energy savings and receive authorization to proceed from the saveONenergy program.
- 3. Endorse the 60-month agreement so we can begin to deploy your new lighting system upgrade.

This is a Limited Offer

Lumeneering Innovations is a Market Leader

Business owners, tenants, and managers of real estate are working with Lumeneering Innovations to take advantage of utility rebates.

The utility programs provide your company the opportunity to work with Lumeneering Innovations and capture substantial cash rebates for upgrading existing lighting systems with new high-efficiency Light- Emitting Diode (LED) lighting solutions. Our next-generation LED systems are already serving our clients with huge savings on their electrical Hydro bills.

The Lumeneering Innovations Solution, coupled with utility cash rebates, can result in a payback period for the your lighting system upgrade in less than three years... and often in less than two.

Learn More About Graphene Lighting Technology

www.graphenelighting.com/light-bulb-graphene-led/ www.business.financialpost.com/news/fp-street/ getting-graphene-and-its-nobel-prize-team-to-canadafrom-manchester

www.prnewswire.co.uk/news-releases/oriana-resources-corporation-announces-letter-of-intent-to-complete-qualifying-transaction-with-graphene-lighting-plc-and-5-million-subscription-receipt-private-placement-518324581.html

To learn more ask your Lumeneering Innovations representative or visit our website at www.lumeneeringinnovations.com.