

# Efficiency, pure and simple

LED lighting solutions for interiors and outdoors



GE imagination at work

# CONTENTS

- 7 > Retrofit Lamps
- 17 > LED Professional Lighting Solutions
- 27 > LED Retail Solutions
- 39 > Architecture Solutions
- 49 > Outdoor Solutions



# Why LED?

**LED solutions are receiving global recognition for their energy saving capabilities, long service life and the ability to reduce carbon emissions across a host of different sectors.**

LED solutions will play a pivotal role in the future of lighting. However, when it comes to selection, how can you be sure that one system is better than another? After all, every company will tell you that theirs, understandably, is the best.

GE Lighting LEDs come from a lighting heritage that is, quite simply, unsurpassed. The company introduced LED technology to the world with the patent for the first practical, commercialised LED for indication applications in 1962. Since then, GE Lighting has pioneered the use of LED solutions and today is one of the largest LED companies in the world.

GE Lighting continues to develop high quality LED solutions and who better to rely on than those who invented the technology and developed it into the global phenomenon we see now. With over 130 years of expertise, GE Lighting has the knowledge and cutting edge LED solutions to guide you effortlessly into the future of light.

## Leading the future of LED

GE is one of the largest LED systems companies in the world. Our expansive installed base includes more than 7.62 million metres of LED linear lighting with a warranty return rate of less than 0.05%.

In addition, as a trusted partner in the transportation segment, GE has more than 6 million LED signals in 24/7 operation around the globe. Further proof of our success: the Next Generation Luminaires™ Solid State Lighting Design Competition gave us the “best in class” award for the Immersion® LED Display Case Lighting and a “special recognition” for GE LED Cove Lighting as a market-ready luminaire.

GE Lighting was the original innovator of the first commercial LED in 1962 and is an innovation market leader in LEDs for a variety of applications such as traffic and rail signals, signage, outdoor area lighting, and refrigerated display lighting. The company has a strong presence in emerging LED markets which include:

- Architectural lighting
- Commercial display lighting
- Residential and professional retrofit lighting
- Retail lighting
- Street lighting

## Proof of our success

In the 2009 Lighting Design Award our Vio LED technology was recognised by the judges as ‘a major advance in colour stability’. GE also received ‘Best in Class’ awards in 2008 and 2009 at the Next Generation Luminaires competition sponsored by the US Department of Energy, for retail and outdoor LED products.





# All LED systems are not the same

- How can you be sure that one LED system is better than another?
- What is your assurance that a given product will last as long as its manufacturer claims?
- How can you trust such an important long-term investment to a supplier without a proven record of experience?

## Setting the standard

**Making an informed decision on a LED system is unlike any other lighting purchase. Comparing fluorescent, incandescent or HID products to each other is easier because there are long established industry standards you can rely on but that is not so with LEDs.**

GE is actively working with the IEC, ELC, CELMA, ELMAPS and ANSI, as well as third party testing laboratories like Intertek, to develop measurement efficiency and performance guidelines. In addition GE is playing an active role in the ZHAGA consortium to establish standards for LED light engine interfaces.

There are many companies offering LED products and making claims about performance and it is hard for customers to know whom or what to believe. Rest assured that every GE LED system is backed by our expertise from over 100 years in the lighting business. Every performance claim we make is supported by stringent, comprehensive testing.



## GE takes reliability testing to the extreme

Rather than rely solely on test data from LED suppliers, we test the LED, sub-system and complete system at our in-house and independent laboratories around the world. Validation of our designs, components, products and processes include high-temperature, high-humidity and accelerated life testing.

For example, all of our new LED systems must undergo high-temperature testing at 60 °C for at least 10% of its rated life to help validate performance – 5,000 hours (or 7 months) of continuous testing under extreme temperatures for a product with a rated life of 50,000 hours.

To help ensure long-term performance, we continue to test our products even after initial launch. For example, the LED Area Light, launched in mid-2009, has already amassed more than 10,000 hours of reliability test data to further support our 50,000 hour life rating. Also, there is an original GE Tetra® LED product that has been in a high-temperature chamber at 60 °C for more than 7 years (70,000 hours). Even under extreme temperatures, this product still delivers more than 53% of its original light output and has exceeded both rated life and performance claims (50,000 hour life with 50% lumen maintenance).





## CALiPER certified

GE will continue to invest in its reliability testing capabilities and is pleased to be the first lighting manufacturer to be CALiPER\* certified as an independent photometric measurement laboratory for solid state lighting (SSL) under the DOE CALiPER\* program.

\* CALiPER (Commercially Available LED Product Evaluation and Reporting) is a market surveillance programme which undertakes third party testing of commercial LED products in the US. GE laboratories are certified to carry out these measurements.



“The LED Area Light, launched in mid 2009, has already amassed more than 10,000 hours of reliability test data to further support our 50,000 hour life rating.”



**Revolutionary**



# Retrofit Lamps

GE's innovative LED retrofit lamps offer substantial opportunities to reduce energy consumption and maintenance costs. Offering low cost of ownership, and with paybacks of less than 1 year in many professional applications, these lamps are true retrofits that enable users to achieve dramatic reductions in cost of ownership.

**Reflectors > 9**

**LED GLS Retrofit Lamps > 11**

**Décor > 13**

**Product range > 15**



# New era for reflectors



## APPLICATIONS

- Hotels**
  - Reception areas
  - Corridors
  - Bedrooms
- Retail**
- Cafes, Bars**
- Home**



# Reflectors

GE's reflector LEDs are a like-for-like replacement for halogen lamps, having similar light output and beam spread, but they have many advantages.

With no UV, IR or heat in the beam they are perfect for retail displays where products would previously have been harmed by these emissions, and they use far less energy.

Features >>>	>>> Benefits
Long life up to 25,000 hours (L70)	Reduced maintenance cost
CRI >80	Excellent colour reproduction
Same size and cap types as halogen equivalents	Easy installation
Robust design	Shock and vibration resistant
No mercury	Environmentally safe
Equivalent light output to existing incandescent and halogen products	Massive energy saving with no reduction of light output



## Upgrading to LED

GE LED reflectors operate just like halogen and incandescent lamps and are a direct replacement.

*Coming soon  
4 W MR16 GU5.3*



# In shape for the future

## APPLICATIONS

Extra energy savings for general lighting in the home. Can also be used in hotels, casinos and restaurants where 24 hour lighting is needed.

Home  
Guest rooms  
Hotel  
Offices, meeting rooms



# LED GLS Retrofit Lamps

A true 40 W equivalent LED bulb, GE's Energy Smart GLS consumes just 9 W, provides an 80% energy saving and produces the same light output, while lasting at least 25 times as long.

The GE bulb's unique fin-like design allows it to operate differently, distributing light like a traditional 40 watt incandescent bulb while delivering excellent light output over its 25,000 hour rated life.

Energy Smart™



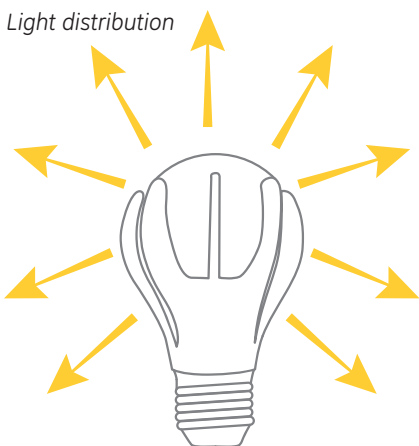
### Features >>>

- Consumes just 9 W compared to equivalent 40 W GLS
- Multi-directional light output
- 25,000 hour rated life
- Instant start
- Solid state components
- No mercury
- Cool to touch
- 470 lumens

### >>> Benefits

- Energy-saving
- Like familiar GLS lamp
- 25 times longer than 40 W GLS
- Full light output with no delay
- Durable - no fragile filament
- Environmentally safe
- Safe to touch
- Meets 40 W incandescent equivalence criteria under latest EU legislation

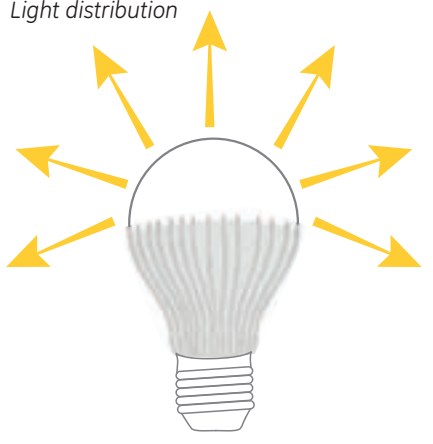
Light distribution



The fins that cradle the GE Energy Smart LED bulb look cool, and they also perform a cooling function. They are connected to the LEDs inside the bulb to draw heat out,

keeping them cool to ensure a longer life and greater efficiency. The fins also keep the surface of the bulb cooler than comparable incandescent bulbs.

Light distribution



**COMING SOON**  
New dimmable LED GLS lamps available early 2011





# Familiar shapes

## APPLICATIONS

Home  
Bars and Restaurants  
Reception and Lobby  
Conference room  
Hallways

GE's LED Décor range delivers incandescent-like sparkling and diffuse light effects, making them ideal for general and decorative lighting in home and hospitality applications.

Available in clear and frosted finishes, the range encompasses candle, spherical, globe and miniature GLS shapes that can fit all existing fixtures with E14, E27 and B22 sockets.

Features >>>	>>> Benefits
2 & 2.5 W range	Very low energy consumption
Up to 80 lumen	Suitable for decorative and mood lighting
Up to 17,000 hours life	Lasts up to 17 times longer than similar decorative halogen or incandescent lamps
Robust design	Shock and vibration resistant
Instant on	Instant light - unlike compact fluorescent
Same size as incandescent or halogen equivalents	Like-for-like exchange with same visual comfort



Globe



Spherical



Miniature GLS



Candle



## Designed to fit

GE LED Décor lamps are the same size as their incandescent or halogen equivalents, having been designed around the international standard outline. They are truly a like-for-like replacement, with all of the benefits that LED technology is known for:

- Extra long life
- Very low heat emission
- Mercury free - environmentally friendly

## Creating mood and saving energy

GE's growing family of LED retrofit lamps offers a broad range of shapes, wattages and finishes to accommodate both consumer and commercial application needs. These high-technology retrofit lighting solutions help to create ambient lighting with significant energy and cost savings.

# Retrofit Lamps

Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
<b>LED Décor Range - Energy Saving Miniature GLS</b>											
2	220-240	E27	LED2/A47/829/220-240V/E27/C	78759	60	2900	80+	17000*	47	88.5	6
2	220-240	E27	LED2/A47/829/220-240V/E27/D	78760	60	2900	80+	17000*	47	88.5	6
2	220-240	B22	LED2/A47/829/220-240V/B22/C	78761	60	2900	80+	17000*	47	87	6
2	220-240	B22	LED2/A47/829/220-240V/B22/D	78762	60	2900	80+	17000*	47	87	6
<b>LED Décor Range - Energy Saving Spherical</b>											
2	220-240	E27	LED2/P45/829/220-240V/E27/C	78763	60	2900	80+	17000*	45	71	6
2	220-240	E27	LED2/P45/829/220-240V/E27/D	78764	60	2900	80+	17000*	45	71	6
2	220-240	B22	LED2/P45/829/220-240V/B22/C	78765	60	2900	80+	17000*	45	69.5	6
2	220-240	B22	LED2/P45/829/220-240V/B22/D	78766	60	2900	80+	17000*	45	69.5	6
2	220-240	E14	LED2/P45/829/220-240V/E14/C	78767	60	2900	80+	17000*	45	77	6
2	220-240	E14	LED2/P45/829/220-240V/E14/D	78768	60	2900	80+	17000*	45	77	6
<b>LED Décor Range - Energy Saving Globe</b>											
2.5	220-240	E27	LED2.5/G80/829/220-240V/E27/D	78769	80	2900	80+	17000*	80	109.5	6
2.5	220-240	B22	LED2.5/G80/829/220-240V/B22/D	78770	80	2900	80+	17000*	80	108	6
<b>LED Décor Range - Energy Saving Candle</b>											
2	220-240	E27	LED2/B35/829/220-240V/E27/C	78771	60	2900	80+	17000*	35	95.5	6
2	220-240	E27	LED2/B35/829/220-240V/E27/D	78772	60	2900	80+	17000*	35	95.5	6
2	220-240	B22	LED2/B35/829/220-240V/B22/C	78773	60	2900	80+	17000*	35	94	6
2	220-240	B22	LED2/B35/829/220-240V/B22/D	78774	60	2900	80+	17000*	35	94	6
2	220-240	E14	LED2/B35/829/220-240V/E14/C	78775	60	2900	80+	17000*	35	101	6
2	220-240	E14	LED2/B35/829/220-240V/E14/D	78776	60	2900	80+	17000*	35	101	6
<b>LED GLS</b>											
**	220-240	E27	LED5/GLS/830/220-240/E27	79428	**	3000	80+	25000	62	110	6
**	220-240	B22	LED5/GLS/830/220-240/B22	79432	**	3000	80+	25000	62	108.5	6
**	220-240	E27	LED9/GLS/830/220-240/E27	79426	**	3000	80+	25000	62	110	6
**	220-240	B22	LED9/GLS/830/220-240/B22	79430	**	3000	80+	25000	62	108.5	6
<b>LED Energy Smart</b>											
9	220-240	B22	LED9/A60/830/220-240V/B22	63597	470	3000	80+	25000	69.5	116.5	6
9	220-240	E27	LED9/A60/830/220-240V/E27	63598	470	3000	80+	25000	69.5	116.5	6

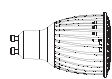
\* Based on continued testing GE is now able to guarantee an increased life of 17000 hours on our LED Décor lamps.

\*\* Further technical data will be provided by February 2011



# Retrofit Lamps

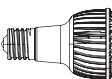
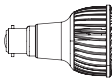
Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Lumen [lm]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
4	230	GU10	LED4/GU10/830/230V/WFL	75280	225	100	36	3100	80+	15000	50.2	57	8
4	240	GU10	LED4/GU10/830/240V/WFL	75281	225	100	36	3100	80+	15000	50.2	57	8
4	230	GU10	LED 4/GU10/830/230V/FL	76075	225	100	20	3100	80+	15000	50.2	57	8
4	230	GU10	LED 4/GU10/830/230V/WFL	76076	225	100	36	3100	80+	15000	50.2	57	8
4.5	220-240	GU10	LED4.5/GU10/827/220-240V/FL	79358	800	200	25	2700	80+	25000	50.2	57	8
4.5	220-240	GU10	LED4.5/GU10/827/220-240V/WFL	79359	480	200	35	2700	80+	25000	50.2	57	8
4.5	220-240	GU10	LED4.5/GU10/830/220-240V/FL	79360	850	200	25	3000	80+	25000	50.2	57	8
4.5	220-240	GU10	LED4.5/GU10/830/220-240V/WFL	79361	530	200	35	3000	80+	25000	50.2	57	8
7	220-240	GU10	LED7/GU10/827/220-240V/FL	79362	1200	300	25	2700	80+	25000	50.2	77.6	8
7	220-240	GU10	LED7/GU10/827/220-240V/WFL	79363	600	300	35	2700	80+	25000	50.2	77.6	8
7	220-240	GU10	LED7/GU10/830/220-240V/FL	79364	1370	300	25	3000	80+	25000	50.2	77.6	8
7	220-240	GU10	LED7/GU10/830/220-240V/WFL	79365	650	300	35	3000	80+	25000	50.2	77.6	8



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Lumen [lm]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
4	230	E14	LED4/R50/830/230V/WFL/E14	75288	225	100	36	3100	80+	15000	50.2	76	8
4	240	E14	LED4/R50/830/240V/WFL/E14	75289	225	100	36	3100	80+	15000	50.2	76	8
4.5	220-240	E14	LED4.5/R50/830/220-240V/WFL/E14	79366	480	200	36	3000	80+	25000	50.2	82.9	8
4.5	220-240	E14	LED4.5/R50/827/220-240V/WFL/E14	79367	530	200	36	2700	80+	25000	50.2	82.9	8



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Lumen [lm]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
7	220-240	E27	LED7/R63/827/220-240V/FL/E27	76093	1200	200	20	2700	80+	25,000*	63	101	8
7	220-240	E27	LED7/R63/827/220-240V/WFL/E27	76094	520	200	36	2700	80+	25,000*	63	101	8
7	220-240	B22	LED7/R63/827/220-240V/FL/B22	76099	1200	200	20	2700	80+	25,000*	63	101	8
7	220-240	B22	LED7/R63/827/220-240V/WFL/B22	76100	520	200	36	2700	80+	25,000*	63	101	8
7	220-240	E27	LED7/R63/830/220-240V/FL/E27	75294	1200	200	20	3000	80+	25,000*	63	101	8
7	220-240	E27	LED7/R63/830/220-240V/WFL/E27	75296	520	200	36	3000	80+	25,000*	63	101	8
7	220-240	B22	LED7/R63/830/220-240V/FL/B22	75295	1200	200	20	3000	80+	25,000*	63	101	8
7	220-240	B22	LED7/R63/830/220-240V/WFL/B22	75297	520	200	36	3000	80+	25,000*	63	101	8



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Lumen [lm]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
10	220-240	E27	LED10/PAR30/827/220-240V/FL/E27	78553	1600	370	24	2700	80+	25,000*	95	92	6
10	220-240	E27	LED10/PAR30/827/220-240V/WFL/E27	78554	900	370	36	2700	80+	25,000*	95	92	6
10	220-240	E27	LED10/PAR30/830/220-240V/FL/E27	78555	1700	370	24	3000	80+	25,000*	95	92	6
10	220-240	E27	LED10/PAR30/830/220-240V/WFL/E27	78556	1000	370	36	3000	80+	25,000*	95	92	6



\* Preliminary upgrade to L70 rated lifetime based on recent test data

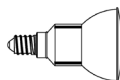
Colour	Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
White	1	220-240	GU10	LED/GU10 1W 220-240V	96736	80	20	5000	70+	12,000	50	57	10
Red	1	220-240	GU10	LED GU10 1W 220-240V	96737	80	17	N/A	N/A	12,000	50	57	10
Blue	1	220-240	GU10	LED GU10 1W 220-240V	96738	40	17	N/A	N/A	12,000	50	57	10



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
1	12	GU5.3	LED MR16 GU5.3 1W 12V	96739	80	20	5000	70+	12,000	50	50.5	10



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Beam Angle [°]	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
1	220-240	E14	LED PAR16 E14 1W 220-240V	96740	80	20	5000	70+	12,000	50	76	10





Endless possibilities

# LED Professional Lighting Solutions

GE LEDs have opened up a huge range of possibilities for lighting product designers.

They enable precise light control, and the reduced heat output compared to other light sources is also a big advantage. For a simple, pure LED light source GE's Vio™ provides the perfect answer, while the Infusion modular unit is an example of how GE provides solutions to create cutting edge innovations.

**Infusion LED Module System > 19**

**Vio™ LED Emitters > 21**

**Vio™ LED Downlight Solutions > 23**

**Product range > 25**





# Upgradeable designs



## APPLICATIONS

An exciting alternative for recessed and track lighting, as well as other applications such as downlights.

### Public areas

- Airport lounges, hotel lobbies

### Offices

- Conference rooms, lecture halls

### Retail

- Supermarkets, luxury shops

### Restaurants

# Infusion LED Module System

General lighting with energy efficient, long-lasting LEDs is now as easy as changing a standard light bulb.

In directional lighting applications such as recessed downlights, track lights and pendants, Infusion gives lighting designers and end-users the ability to easily upgrade LED lighting as technology advances. Its ease of installation – a clockwise twist motion – contrasts sharply with current integrated LED luminaires and LED modules that are not easily replaceable because they require mechanical fasteners to couple the LED package to a heat sink, and a plug to make the electrical connection. With GE Infusion thermal, mechanical and electrical connections are made with a simple twist of the module into its socket.

The first generation Infusion modules are now fully available from GE and deliver precisely controlled light equivalent to 35/50 W halogen low voltage lamps. However, this is just the beginning as in 2011 GE will introduce modules with very high lumen outputs up to 3000 lumens making them ideal for high quality, controllable retail display applications.



## Features >>>

Simple twist-and-lock  
3 beam angles (15°, 25°, or 36°)  
High CRI 80, (90 'Ultra' version in 2011)  
Long life (35,000 hours)  
No IR or UV radiation  
Dimmable, instant on  
Lumen output up to 3000 in 2011

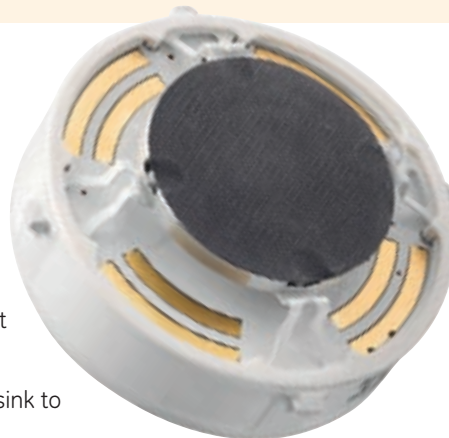
## >>> Benefits

Easy to replace, no hardware necessary  
Range of applications  
Good colour rendering  
Low maintenance cost  
Safe for people and products  
Easily create the right lighting mood  
Suitable for high output professional applications

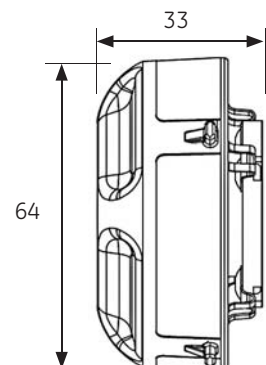


The Infusion LED Module comprises a Printed Circuit Board (PCB) with LEDs, and heat sink interface.

The module is available in three colour temperatures: 2700, 3000, and 4000 K. The heat sink interface is screwed to the PCB and has a thermal pad to interface with an external heat sink to properly remove heat from the module.



Dimensions (mm)



# Stable performance



## APPLICATIONS

### General

- Pendants, sconces

### Commercial

- Task
- Display

### Landscape

- Pathway, in-ground

### Architectural

- Wall wash, marker



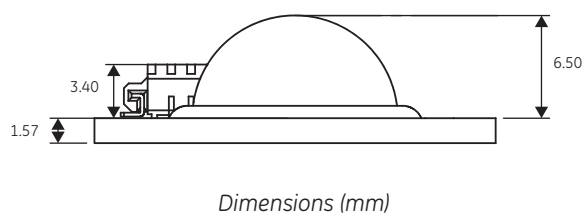
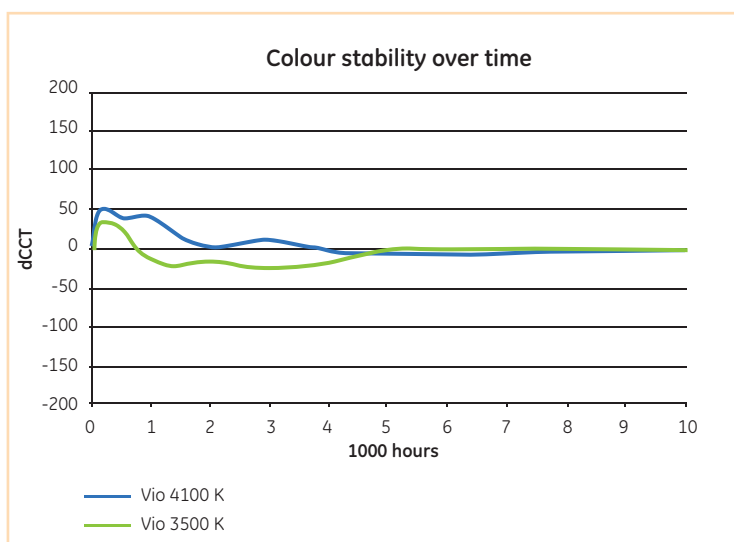
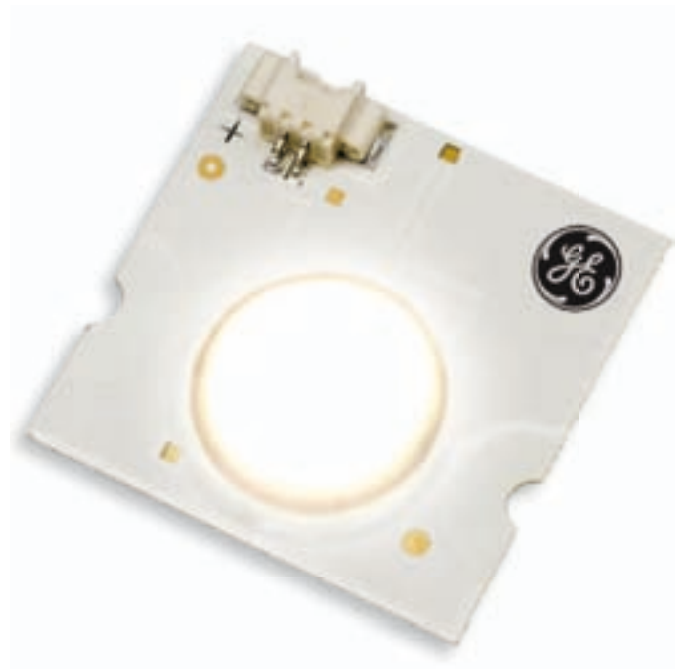
**A simple, pure light source that has no boundaries for creative lighting design - the GE Vio™ High Power White LED.**

By combining highly efficient 405 nm violet chips with proprietary phosphors, Vio™ LEDs enable tremendous flexibility in colour temperature and CRI. The result is a very stable, warm white colour. The light is diffused for a pleasing, uniform light that meets the high standards of lighting designers.

## Colour stability over life

Since the colour change is less than 75 Kelvin over 50,000 hours, Vio™ LEDs can be used with confidence in general applications as a replacement for traditional light sources. Not only will Vio™ LEDs create the mood a lighting designer is looking for, they will maintain the mood over time.

Features >>>	>>> Benefits
Less than 75 K colour change over 50,000 hours of operation	Confidence that appearance will remain constant throughout life of operation
Diffuse, warm white light source	Pleasing appearance similar to incandescent and halogen
Uniform colour across light emitting surface, with wide viewing angle	Can easily be used in reflector optics giving smooth beam pattern
Full spectrum phosphor with high red content	Excellent CRI and light quality
Chip on board assembly with plug and play connection	On board Tb point easy to assemble into LED systems with reliable performance



# Simple efficiency



## APPLICATIONS

### Directional lighting

- Recessed downlights
- Track lights
- Pendants
- Display & Accent lighting

### Landscape lighting

- Architectural lighting
- General illumination

# Vio™ LED Downlight Solutions

GE's award winning Vio™ LED technology is now available in an easy to fit modular format that can be used in place of a 50 mm halogen MR16 lamp, offering excellent quality of light and substantial energy saving possibilities.

Whether it's a domestic project like an extension or a loft conversion, or a professional building like a new boutique hotel, today's modern interiors are expected to look stunning and high end, yet at the same time save energy and be maintenance-free. LED lighting technology is now revolutionising our ability to design more sustainable buildings.



Features >>>	>>> Benefits
3.6 W and 7.2 W versions	Optimised energy saving
Runs from 350 mA constant current DC supply	Compatible with a range of LED drivers
Dimensions smaller than MR16 lamp	Enables design flexibility
Vio™ quality and stability of light	Reliable operation
50,000 hour lifetime	Drastically decreases lamp maintenance cost
High colour rendering index > 80	Vibrant colours in installations
Faceted reflector	Halogen-like reflector enables precise optical control, directing the beam where it is needed
Uniform remote phosphor light source	High level of visual comfort

## 350 mA drivers for Vio™ LEDs

- Compact packaged drivers for reliable operation of Vio™ LED products.
- Versions to run 1 x 3.6 W and 2 x 3.6 W or 1 x 7.2 W
- High efficiency and power factor
- Class II SELV equivalent

## Vio downlight solutions are available in 3 options

3.6 W Vio™ MR16 module



3.6 W Vio™ MR16 module kit



7.2 W Vio™ assembled downlight

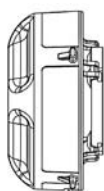


Packaged kit comprising Vio™ MR16 module, vented bezel, recess mounting springs, connector cable and high efficiency 350 mA driver



# LED Professional Lighting Solution

Wattage (W)	Input Volts	Product Description	Product Code	Candela	Beam Angle	CCT (K)	CRI (Ra)	Life (L70, h)	Diameter (mm)	Height (mm)
<b>Infusion</b>										
<i>Phase 1 launch AVAILABLE NOW</i>										
Black										
10	24	M10W07D/827/15B	78826	2750	15	2700	80+	35000	64	33
10	24	M10W07D/827/25B	78827	1450	25	2700	80+	35000	64	33
10	24	M10W07D/827/36B	78828	600	36	2700	80+	35000	64	33
10	24	M10W07D/830/15B	78829	3380	15	3000	80+	35000	64	33
10	24	M10W07D/830/25B	78830	1730	25	3000	80+	35000	64	33
10	24	M10W07D/830/36B	78831	690	36	3000	80+	35000	64	33
10	24	M10W07D/840/15B	78832	3700	15	4000	80+	35000	64	33
10	24	M10W07D/840/25B	78833	1900	25	4000	80+	35000	64	33
10	24	M10W07D/840/36B	78834	790	36	4000	80+	35000	64	33
White										
10	24	M10W07D/827/15W	61471	2750	15	2700	80+	35000	64	33
10	24	M10W07D/827/25W	61472	1450	25	2700	80+	35000	64	33
10	24	M10W07D/827/36W	61473	600	36	2700	80+	35000	64	33
10	24	M10W07D/830/15W	61474	3380	15	3000	80+	35000	64	33
10	24	M10W07D/830/25W	61475	1730	25	3000	80+	35000	64	33
10	24	M10W07D/830/36W	61476	690	36	3000	80+	35000	64	33
10	24	M10W07D/840/15W	61477	3700	15	4000	80+	35000	64	33
10	24	M10W07D/840/25W	61478	1900	25	4000	80+	35000	64	33
10	24	M10W07D/840/36W	61479	790	36	4000	80+	35000	64	33

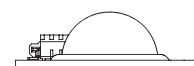


Finish	Product Description	Product Code	Information	Pack Qty
<b>Infusion Module Holder</b>				
Black	MACC07HOLDERB	78835	LED Module Holder (Black)	6
White	MACC07HOLDERW	78836	LED Module Holder (White)	6
<b>Magnetic transformer</b>				
	GE040/G/V24D0-MP	78837	10 Watt Magnetic Transformer	

*COMING SOON*

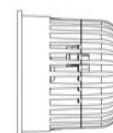
Phase 2 launch - **1100/1500 lumen modules** - Spring 2011  
 Phase 3 launch - **2000/3000 lumen modules** - Summer 2011  
 New 'Ultra' premium grade high CRI modules - Coming in 2011

Wattage [W]	Forward Voltage [V] Typical [V]	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Life [L70, h]	Dimensions	Pack Qty
<b>Vio™ Emitters</b>									
1.2	3.5	VIO/1.2W/730	73357	64	3000	70	50,000	25.40x25.40	10
1.2	3.5	VIO/1.2W/735	73355	67	3500	70	50,000	25.40x25.40	10
1.2	3.5	VIO/1.2W/741	73353	69	4100	70	50,000	25.40x25.40	10
1.2	3.5	VIO/1.2W/830	73351	55	3000	85	50,000	25.40x25.40	10
1.2	3.5	VIO/1.2W/835	73349	55	3500	85	50,000	25.40x25.40	10
1.2	3.5	VIO/1.2W/841	73347	57	4100	85	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/730	73356	171	3000	70	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/735	73354	188	3500	70	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/741	73352	196	4100	70	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/830	73350	142	3000	85	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/835	73348	153	3500	85	50,000	25.40x25.40	10
3.6	10.2	VIO/3.6W/841	73346	160	4100	85	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/730	74759	300	3000	70	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/735	74760	350	3500	70	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/741	74761	330	4100	70	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/830	74762	250	3000	85	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/835	74763	275	3500	85	50,000	25.40x25.40	10
7.2	20.0	VIO/7.2W/841	74764	285	4100	85	50,000	25.40x25.40	10



All data quoted at 350mA drive current, Tb = 25° C

Wattage [W]	Product Description	Product Code	Candela (cd)	Beam angle	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
<b>3.6 W Vio™ MR16 Modules</b>										
A range of accessories to accompany Vio Modules is available. Please contact your GE representative for full details.										
3.6	VIO/G4/MODULE/3.6W/830	77476	240	36	3000	85+	50000	50	40	10
3.6	VIO/G4/MODULE/3.6W/835	77477	250	36	3500	85+	50000	50	40	10
3.6	VIO/G4/MODULE/3.6W/841	77481	270	36	4100	85+	50000	50	40	10
3.6	VIO/G4/MODULE/3.6W/730	77499	280	36	3000	70+	50000	50	40	10
3.6	VIO/G4/MODULE/3.6W/735	77502	310	36	3500	70+	50000	50	40	10
3.6	VIO/G4/MODULE/3.6W/741	77503	325	36	4100	70+	50000	50	40	10



Wattage [W]	Product Description	Product Code	Candela (cd)	Beam angle	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
<b>3.6 W Vio™ MR16 Module Kit</b>										
A range of accessories to accompany Vio Modules is available. Please contact your GE representative for full details.										
3.6	VIO MODULE KIT G4/3.6W/830	79320	240	36	3000	85+	50000	50	40	5
3.6	VIO MODULE KIT G4/3.6W/841	79321	270	36	4100	85+	50000	50	40	5

Wattage [W]	Product Description	Product Code	Candela (cd)	Beam angle	CCT [K]	CRI [Ra]	Life [L70, h]	Diameter [mm]	Length [mm]	Pack Qty
<b>7.2 W Vio™ Assembled Downlights</b>										
A range of accessories to accompany Vio Modules is available. Please contact your GE representative for full details.										
7.2	VIO/G8/MODULE/7.2W/830	77504	600	27	3000	85+	50000	67	69	10
7.2	VIO/G8/MODULE/7.2W/835	77519	660	27	3500	85+	50000	67	69	10
7.2	VIO/G8/MODULE/7.2W/841	77520	680	27	4100	85+	50000	67	69	10
7.2	VIO/G8/MODULE/7.2W/730	77523	720	27	3000	70+	50000	67	69	10
7.2	VIO/G8/MODULE/7.2W/735	77524	840	27	3500	70+	50000	67	69	10
7.2	VIO/G8/MODULE/7.2W/741	77525	790	27	4100	70+	50000	67	69	10

Minimum wattage load [W]	Maximum wattage load [W]	Product Description	Product Code	Voltage [V]
<b>350mA drivers for Vio™ LEDs</b>				

Compliance: EN 61347-2-13; EN 6100-3-2 Class C; EN 6100-3-3; EN 61547; EN55015

5	1.2	GE005/G/C350T1-A	79335	220-240
10	6	GE010/G/C350T1-A	79336	220-240



Product Description	Product Code	Length [mm]	Pack Qty
<b>VIO™ Connectors</b>			
OT VIO/CON	73738	610	10
VIO/MODULE/CON	77526	300	10



Retail therapy



# LED Retail Solutions

27

GE LEDs provide an excellent light source for the retail environment. Not only do they enable precise control of light but also they have very low heat emissions, reducing the cost of air conditioning and protecting heat-sensitive displays.

**IMMERSION® LED Refrigerated Display Lighting > 29**

**LED Display Case Lighting System > 31**

**Tetra® AL10 > 33**

**Product range > 35**



# Cool efficiency



EAT WELL. PAY LESS.

market pantry

Supermarkets  
Convenience & Grocery stores  
Petrol stations

APPLICATIONS



# IMMERSION® LED Refrigerated Display Lighting



IMMERSION® vertical (RV30)

IMMERSION® LED Refrigerated Display Lighting from GE has changed the way people see refrigerated displays.

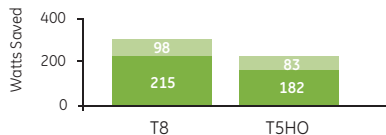
A standard fluorescent lighting will flood a display case with broad and diffuse light which can create shadows, light spillage and glare. Unlike fluorescent, dedicated GE LED systems distribute light evenly on the shelves and throughout the case. Cabinets achieve higher average illuminance and therefore become much more eye-catching. At the same time, IMMERSION® allows retailers to bring down dramatically operating costs and energy consumption.

These products comply with GE's Ecomagination initiative, ensuring that light fittings fulfil high performance claims without containing any mercury, lead or glass. Long life reduces material waste. Consequently it makes handling and recycling less of a concern.

Lightbars can be easily incorporated into new vertical/horizontal cases or retrofitted into existing ones.

Features >>>	>>> Benefits
Unique optic design	Brighter and more uniform lighting across package facings
3000, 3500, 4100 and 5000 K CCT	Multiple colour temperatures to create the perfect look for every refrigerated area
Many vertical and horizontal lightbar sizes	Fit into a variety of chillers and freezers
Low wattage and heat	Dramatic energy savings and less CO <sub>2</sub> emission.
50,000 hour lifetime and ongoing performance	No material waste, significant maintenance costs reduction. Reliable LEDs, absolutely not affected by cold temperature or multiple "turn on/off".
No IR or UV emissions	Optimal selling environment for food merchandise

RV30 LED system / wattage savings  
5-door case example  
(Long light fixtures)



■ Indirect Savings (Compressor)\*  
■ Direct Savings (Lighting)

\*Compressor savings are dependent on case temperature and design.

ecomagination<sup>SM</sup>  
a GE commitment



IMMERSION® horizontal (RH10)



# Sparkle

## APPLICATIONS

Jewellers  
Department stores  
Museums

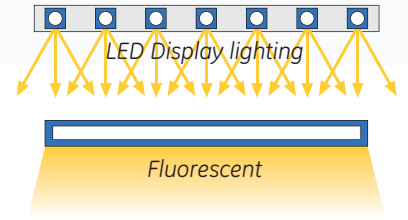
# LED Display Case Lighting System

The GE LED Display Case Lighting System brings glass cases to life. It creates a high ambient light level uniformly throughout the case, yet still delivers the all important sparkle thanks to unique optics. Combined with the tangible benefits of long life, energy saving and guaranteed reliability, this system is a retail revolution.

## Light where you need it

Traditional lighting technologies direct the light only to certain areas of the display case, creating undesirable shadows, light spillage and glare. GE's LED system offers significant improvements on these conventional systems.

Features >>>	>>> Benefits
Unique reflector optics	Merchandise sparkles, with high level of uniform light inside case
Directional LED light sources	Spill light reduced, giving high application efficacy
Highly efficient LEDs	Allows up to 80% energy saving compared to low voltage halogen lamps
3500 K and 4200 K CCT	Perfect colour temperatures to show off valuable merchandise
50,000 hour lifetime	Over 10 years of reliable performance in retail environment



### Light patterns of GE LED Display vs. Fluorescent

The unique optics of the Display Case Lighting System direct rays of light to create sparkling merchandise, allowing it to stand out against a high ambient background light, unlike fluorescent which can leave displays flat.

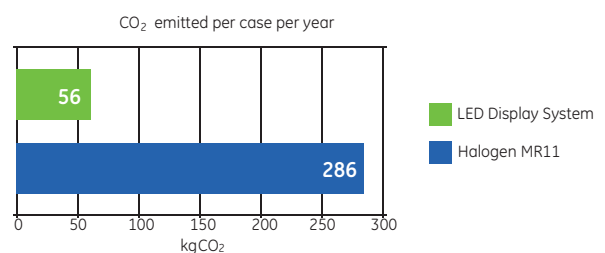
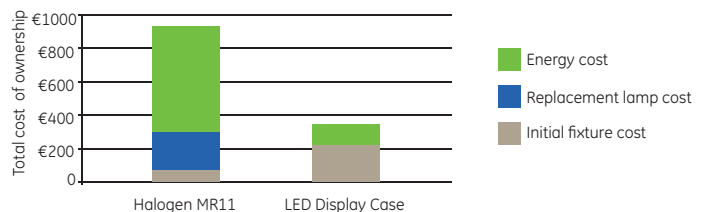
## Cost of ownership over useful life of LED system

In this example, a single 25.9 W LED Display Case unit is used instead of 6 halogen 20 W MR11 lamps in a new jewellery display case. The benefits are clear:

- 81% saving in energy consumption and CO<sub>2</sub> emissions
- 12 year life of the LED system eliminates lamp replacement costs
- 64% reduction in total cost of ownership over LED useful lifetime
- 2.4 year payback

#### Assumptions

Energy cost of €0.10 per kWh. 0.536 kg CO<sub>2</sub> emitted per kWh (European average from Eco-Invent). 4000 operational hours per year. Halogen fixture cost of €10, lamp cost of €3. NOTE theoretical 'typical' example only. All applications will vary.



# On the edge



## APPLICATIONS

- Cove
- Retail
  - Under shelf
  - Under cabinet
- Accent and task

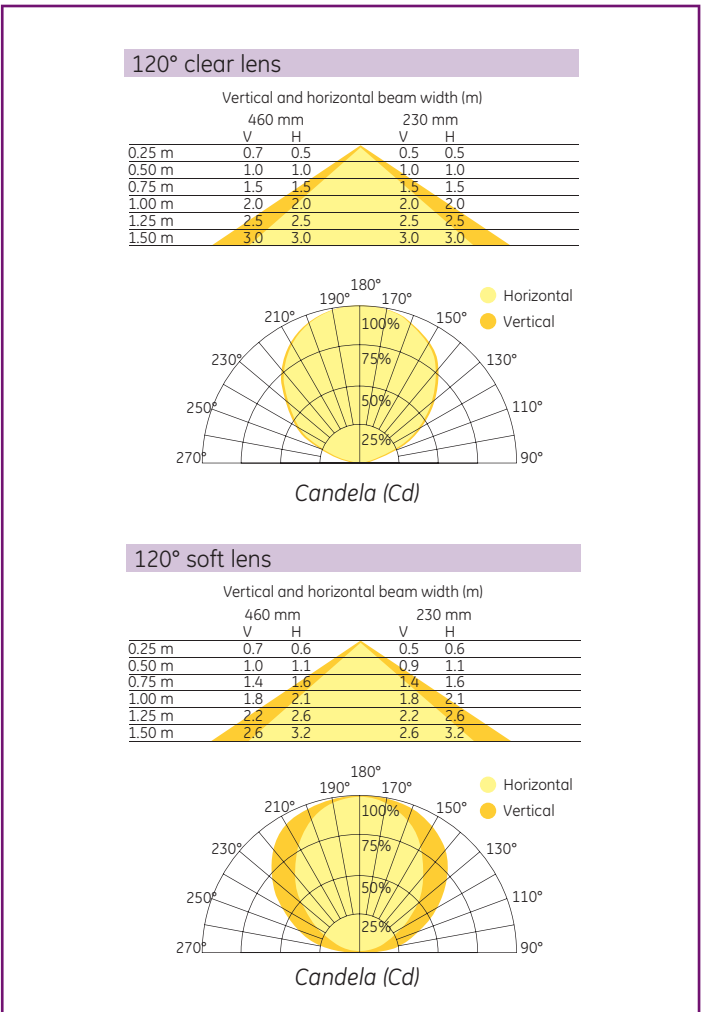
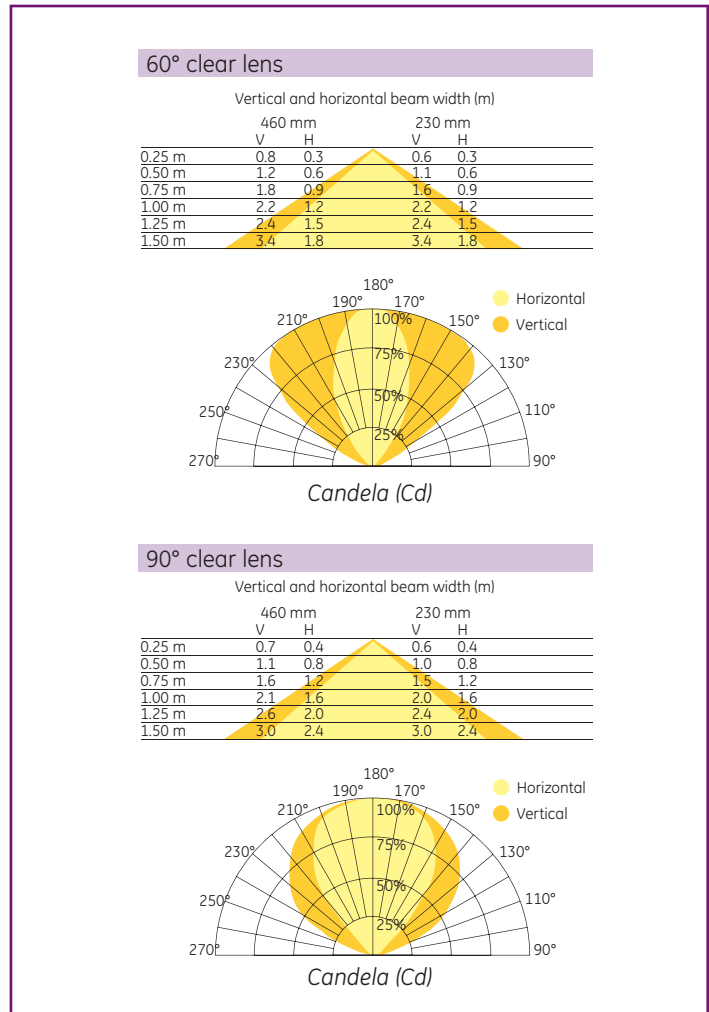


# Tetra<sup>®</sup> AL10

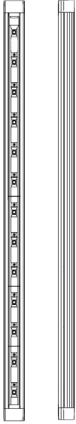
Combining an industry-leading CRI of 93 with excellent energy efficiency of 47 LPW and 50,000 hours rated life, Tetra<sup>®</sup> AL10 undershelf lighting shows fashion, cosmetics and other retail shelf displays in the best possible light.

Versatile optics, lengths and mountings of AL10 mean it can also suit to many alternative indoor and architectural applications.

Features >>>	>>> Benefits
Slimline and low weight	Easy and discrete installation
Exceptional CRI of 93	Brilliant, colourful displays
2700, 3000 and 4000 K CCT	Enables creation of a suitable lighting environment for items being displayed
60°, 90° and 120° optics	Optimal illuminance with brilliant or soft lighting effects throughout the shelves
High light level and efficacy	Attractive visual appeal which promotes sales
Only 15 W per metre system	Low energy consumption
50,000 hour lifetime and ongoing performance	Significant maintenance cost reduction



# LED Retail Solutions



Product Code	Product Description	System wattage* [W]	Illuminance (Ave. Lux)**	CCT [K]**	Life [L70, h]	Pack Qty	Product Code	Product Description	System wattage* [W]	Illuminance (Ave. Lux)**	CCT [K]**	Life [L70, h]	Pack Qty
<b>Display Case LED lights - CCT 3500 K</b>							<b>Display Case LED lights - CCT 4200 K</b>						
74217	LB24/35K	17.3	1500	3500	50000	1	74225	LB24/42K	17.3	1500	4200	50000	1
74218	LB30/35K	21.6	1500	3500	50000	1	74226	LB30/42K	21.6	1500	4200	50000	1
74219	LB36/35K	25.9	1500	3500	50000	1	74227	LB36/42K	25.9	1500	4200	50000	1
74220	LB42/35K	30.2	1500	3500	50000	1	74228	LB42/42K	30.2	1500	4200	50000	1
74221	LB48/35K	34.6	1500	3500	50000	1	74229	LB48/42K	34.6	1500	4200	50000	1
74222	LB54/35K	38.9	1500	3500	50000	1	74230	LB54/42K	38.9	1500	4200	50000	1
74223	LB60/35K	43.2	1500	3500	50000	1	74231	LB60/42K	43.2	1500	4200	50000	1
74224	LB72/35K	51.8	1500	3500	50000	1	74232	LB72/42K	51.8	1500	4200	50000	1

\* Typical system power consumption including driver losses, when driven by recommended GE power supply - product code 74601

\*\* Average lux on horizontal surface in 51x152 cm glass case with mirror back at 30 cm vertically from light source and with light source mounted 2.5 cm from front edge

\*\*\* Colour temperature (CCT) +/-5%

Product Code	Product Description	Item	Dimensions (H x W x D) [mm]	Pack Qty
<b>Display Case Accessories</b>				
74241	LB-WIRE-END (BEAUTY COVER)	Finishing Cover	25x33x3*	20
74243	LB-CLIP	Mount Clip (Standalone)	34x34x16	20
74244	LB-EXT-CLIP	Mount Clip (Integrated)	44x33x51	20
74245	LB-TUBE-MOUNT	Drop Tube Mount	69x23x31	20

\* Visible length when inserted into end cap

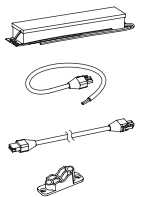
Product Code	Product Description	Input Volts [V]	Wattage [W]	Output Voltage [VDC]	Pack Qty
<b>Display Case LED Driver</b>					
74601	GE060/G/V12T1-A	220-240	60	12	1

# LED Retail Solutions

Product Code	Description Code	Product Code	Description Code	Voltage (V)	CCT (K)	CRI (Ra)	Lens Type	Length (mm)	Lumens per module	Watts per module	Lumens per Watt	Pack Qty
<b>White Fixture</b>		<b>Grey Fixture</b>										
78867	LPL-W18-060C-927	78893	LPL-G18-060C-927	12	2700K	93	60° clear	460	290	6.8	43	10
78855	LPL-W09-060C-927	78881	LPL-G09-060C-927	12	2700K	93	60° clear	230	145	3.4	43	10
78871	LPL-W18-090C-927	78896	LPL-G18-090C-927	12	2700K	93	90° clear	460	290	6.8	43	10
78858	LPL-W09-090C-927	78884	LPL-G09-090C-927	12	2700K	93	90° clear	230	145	3.4	43	10
78874	LPL-W18-120C-927	78899	LPL-G18-120C-927	12	2700K	93	120° clear	460	290	6.8	43	10
78861	LPL-W09-120C-927	78887	LPL-G09-120C-927	12	2700K	93	120° clear	230	145	3.4	43	10
78878	LPL-W18-120D-927	78902	LPL-G18-120D-927	12	2700K	93	120° soft	460	290	6.8	43	10
78864	LPL-W09-120D-927	78890	LPL-G09-120D-927	12	2700K	93	120° soft	230	145	3.4	43	10
78868	LPL-W18-060C-930	78894	LPL-G18-060C-930	12	3000K	93	60° clear	460	300	6.8	44	10
78856	LPL-W09-060C-930	78882	LPL-G09-060C-930	12	3000K	93	60° clear	230	150	3.4	44	10
78872	LPL-W18-090C-930	78897	LPL-G18-090C-930	12	3000K	93	90° clear	460	300	6.8	44	10
78859	LPL-W09-090C-930	78885	LPL-G09-090C-930	12	3000K	93	90° clear	230	150	3.4	44	10
78875	LPL-W18-120C-930	78900	LPL-G18-120C-930	12	3000K	93	120° clear	460	300	6.8	44	10
78862	LPL-W09-120C-930	78888	LPL-G09-120C-930	12	3000K	93	120° clear	230	150	3.4	44	10
78879	LPL-W18-120D-930	78903	LPL-G18-120D-930	12	3000K	93	120° soft	460	300	6.8	44	10
78865	LPL-W09-120D-930	78891	LPL-G09-120D-930	12	3000K	93	120° soft	230	150	3.4	44	10
78870	LPL-W18-060C-940	78895	LPL-G18-060C-940	12	4000K	93	60° clear	460	320	6.8	47	10
78857	LPL-W09-060C-940	78883	LPL-G09-060C-940	12	4000K	93	60° clear	230	160	3.4	47	10
78873	LPL-W18-090C-940	78898	LPL-G18-090C-940	12	4000K	93	90° clear	460	320	6.8	47	10
78860	LPL-W09-090C-940	78886	LPL-G09-090C-940	12	4000K	93	90° clear	230	160	3.4	47	10
78877	LPL-W18-120C-940	78901	LPL-G18-120C-940	12	4000K	93	120° clear	460	320	6.8	47	10
78863	LPL-W09-120C-940	78889	LPL-G09-120C-940	12	4000K	93	120° clear	230	160	3.4	47	10
78880	LPL-W18-120D-940	78904	LPL-G18-120D-940	12	4000K	93	120° soft	460	320	6.8	47	10
78866	LPL-W09-120D-940	78892	LPL-G09-120D-940	12	4000K	93	120° soft	230	160	3.4	47	10



Product Code	Description Code	Product Description	Pack Qty
74601	GE060/G/V12T1-A	LED Driver - 12VDC/60W	1/PK
74914	GE020/G/V12T1-B	LED Driver - 12VDC/20W	1/PK
78905	LC-36	Leader Cable - 914mm	5/PK
78906	LC-120	Leader Cable - 3048mm	5/PK
78907	JC-12	Jumper Cable - 305mm	5/PK
78908	JC-72	Jumper Cable - 1829mm	5/PK
78909	MB-W15	Mounting Bracket - White 15° Angle	20/PK
78910	MB-W30	Mounting Bracket - White 30° Angle	20/PK
78911	MB-G15	Mounting Bracket - Grey 15° Angle	20/PK
78912	MB-G30	Mounting Bracket - Grey 30° Angle	20/PK



## AL10 - Accessories



# LED Retail Solutions

Product Description	Product Code	Item	Wattage [W]	CCT [K]*	Life [Hours]	Length [mm]	Width [mm]	Depth [mm]	Pack Qty
<b>IMMERSSION® RV30 Refrigerated Display Lighting - Single Packs</b>									
GE-LT303050CTR	75955	Short LED Light -Center	12	5000	50,000	693.4	84	28	1
GE-LT303050EDL	75956	Short LED Light -Left End	7	5000	50,000	696	58	30	1
GE-LT303050EDR	75957	Short LED Light -Right End	7	5000	50,000	696	58	30	1
GE-LT303041CTR	75961	Short LED Light -Center	12	4100	50,000	693.4	84	28	1
GE-LT303041EDL	75962	Short LED Light -Left End	7	4100	50,000	696	58	30	1
GE-LT303041EDR	75967	Short LED Light -Right End	7	4100	50,000	696	58	30	1
GE-LT306050CTR	78633	Long LED Light -Center	29	5000	50,000	1463	84	28	1
GE-LT306050EDL	78634	Long LED Light -Left End	14.5	5000	50,000	1466	58	30	1
GE-LT306050EDR	78913	Long LED Light -Right End	14.5	5000	50,000	1466	58	30	1
GE-LT306041CTR	78917	Long LED Light -Center	29	4100	50,000	1463	84	28	1
GE-LT306041EDL	78918	Long LED Light -Left End	14.5	4100	50,000	1466	58	30	1
GE-LT306041EDR	78919	Long LED Light -Right End	14.5	4100	50,000	1466	58	30	1
GE-LT306035CTR	78923	Long LED Light -Center	29	3500	50,000	1463	84	28	1
GE-LT306035EDL	78924	Long LED Light -Left End	14.5	3500	50,000	1466	58	30	1
GE-LT306035EDR	78925	Long LED Light -Right End	14.5	3500	50,000	1466	58	30	1
GE-LT307050CTR	78966	X-long LED Light -Center	34	5000	50,000	1727	84	28	1
GE-LT307050EDL	78967	X-long LED Light -Left End	17	5000	50,000	1730	58	30	1
GE-LT307050EDR	78968	X-long LED Light -Right End	17	5000	50,000	1730	58	30	1
GE-LT307041CTR	78972	X-long LED Light -Center	34	4100	50,000	1727	84	28	1
GE-LT307041EDL	78973	X-long LED Light -Left End	17	4100	50,000	1730	58	30	1
GE-LT307041EDR	78974	X-long LED Light -Right End	17	4100	50,000	1730	58	30	1
GE-LT307035CTR	78978	X-long LED Light -Center	34	3500	50,000	1727	84	28	1
GE-LT307035EDL	78979	X-long LED Light -Left End	17	3500	50,000	1730	58	30	1
GE-LT307035EDR	78980	X-long LED Light -Right End	17	3500	50,000	1730	58	30	1

Bulk packs are also available for large installations, please contact your sales representative for details.

## IMMERSSION® RH10 Refrigerated Display Lighting - Single Packs

GE-MT103651CANSY	79637	Canopy	21	5100	50,000	895	28	28	1
GE-MT103651USLSY	79721	Undershelf	7.2	5100	50,000	895	28	28	1
GE-MT104851CANSY	79641	Canopy	28	5100	50,000	1175	28	28	1
GE-MT104851USLSY	79725	Undershelf	10.25	5100	50,000	1175	28	28	1
GE-MT103640CANSY	79623	Canopy	21	4000	50,000	895	28	28	1
GE-MT103640USLSY	79707	Undershelf	7.2	4000	50,000	895	28	28	1
GE-MT104840CANSY	79627	Canopy	28	4000	50,000	1175	28	28	1
GE-MT104840USLSY	79711	Undershelf	10.25	4000	50,000	1175	28	28	1
GE-MT103630CANSY	79609	Canopy	21	3000	50,000	895	28	28	1
GE-MT103630USLSY	79693	Undershelf	7.2	3000	50,000	895	28	28	1
GE-MT104830CANSY	79613	Canopy	28	3000	50,000	1175	28	28	1
GE-MT104830USLSY	79697	Undershelf	10.25	3000	50,000	1175	28	28	1

Bulk packs are also available for large installations. Please contact your sales representative for details.

# LED Retail Solutions

Product Description	Product Code	Item	Pack Qty
<b>IMMERSSION® RV30 Accessories</b>			
GE-CV-LT3060CTR	75974	Universal Wire Cover - Center and End	20
GE-MC-LT3060CTR	75971	Universal Mounting Clip - Center	20
GE-MC-LT3060ED1	75972	Universal Mounting Clip - End #1	20
GE-MC-LT3060ED2	75973	Universal Mounting Clip - End #2	20



Product Description	Product Code	Item	Length [mm]	Width [mm]	Depth [mm]	Pack Qty
<b>IMMERSSION® RH10 Mounting clips</b>						
GE-MT1000NCM01SY	79733	Universal Mounting Clip - L	26.3	30	23.3	2
GE-MT1000NCM01SB	79734	Universal Mounting Clip - L	26.3	30	23.3	36
GE-MT1000NCM02SY	79735	Universal Mounting Clip - U	26.7	30	18.1	2
GE-MT1000NCM02SB	79736	Universal Mounting Clip - U	26.7	30	18.1	36

<b>IMMERSSION® LED drivers</b>						
GE080/G/V24T1-A	74915	LED Driver - 24 VDC/80 W	240	43	30	1
GE-PS1700NCMUL-SY	78348	LED Driver - 1.2 A/80 W	307	43	30	1



**Defining shapes**



# Architecture Solutions

GE believes that environmental responsibility and beautiful architectural design can exist simultaneously.

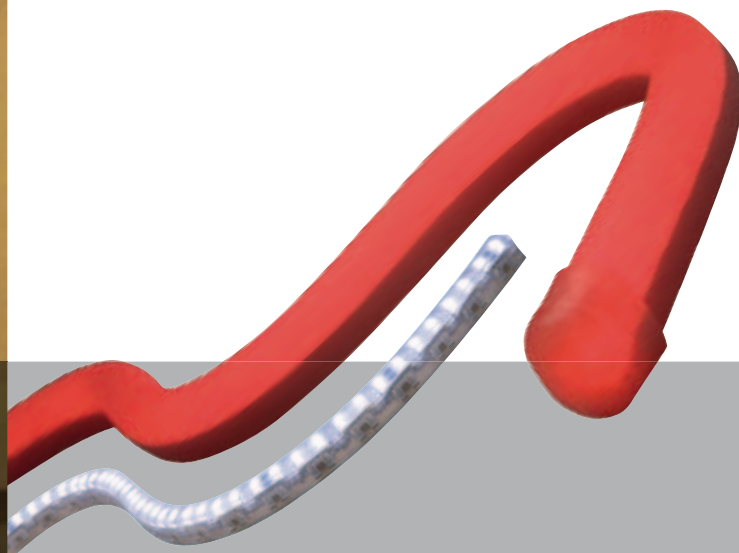
GE's architectural LED systems give lighting designers all the creative flexibility they could wish for, and at the same time offer enormous savings in energy use. LEDs also ensure consistent long term performance.

**TETRA® PowerGrid > 41**

**TETRA® Contour > 43**

**LED Cove Lighting > 45**

**Product range > 47**



# Bright areas



## APPLICATIONS

### Backlighting

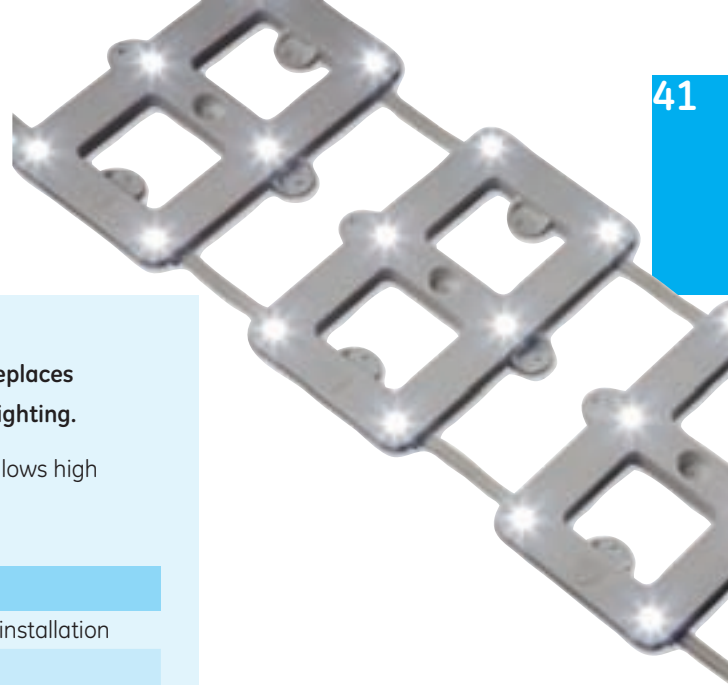
- Walls
- Ceilings
- Under cabinets

### Retail

### Hospitality

- Bars
- Reception areas
- Restaurants

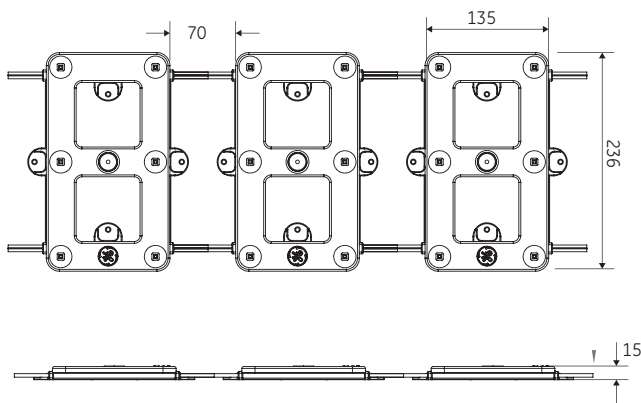
# Tetra<sup>®</sup> PowerGrid



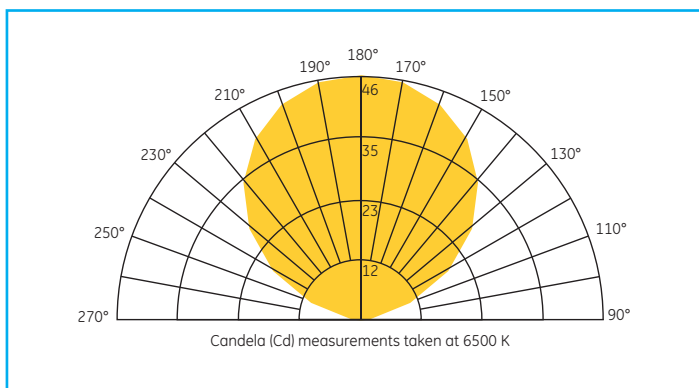
Tetra PowerGrid is a modular, long-life, energy efficient LED system that replaces fluorescent light sources for applications that require broad and uniform lighting.

With several modules assembled on a robust strip, this GE Lighting solution allows high performance and steady illumination to emphasise backlit areas.

Features >>>	>>> Benefits
6 LEDs per module, strip set up	Enables modular, quick and easy installation
Robust and overmolded design	Impact resistant
50,000 hour lifetime and ongoing performance	Decrease maintenance costs
120° large viewing angle	Ensures optimal illuminance throughout the backlit area
2700, 3000, 3500, 4000, 5000 and 6500 K CCT	Wide range of colour temperatures available to fit all lighting environments
High efficiency	Up to 64% more efficient than fluorescent
No lead, mercury or glass	Eco-friendly



Dimensions (mm)





# Shapely curves

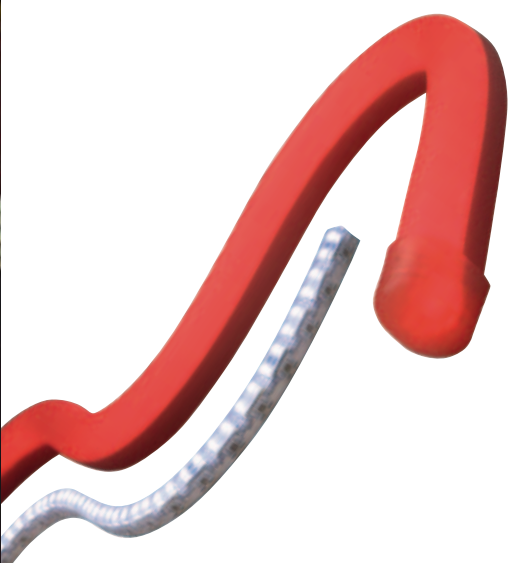


## APPLICATIONS

Border lighting  
Interior art  
Cove  
Accent lighting

**Tetra® Contour is the modern light source designed to hug and highlight architectural shapes perfectly.**

This system is comprised of a flexible LED light engine and a rigid, optically diffused light guide. It can be heat formed to fit a wide variety of applications. With multiple colours to choose from, architects can mix-n-match components to create bold designs and attractive accent lighting without the typical worries of working with fragile neon glass.

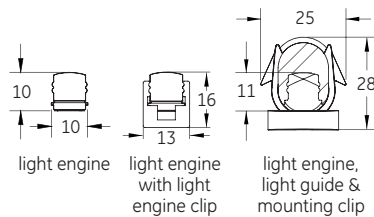
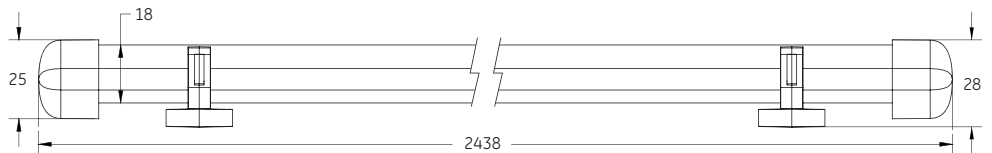


### Features >>>

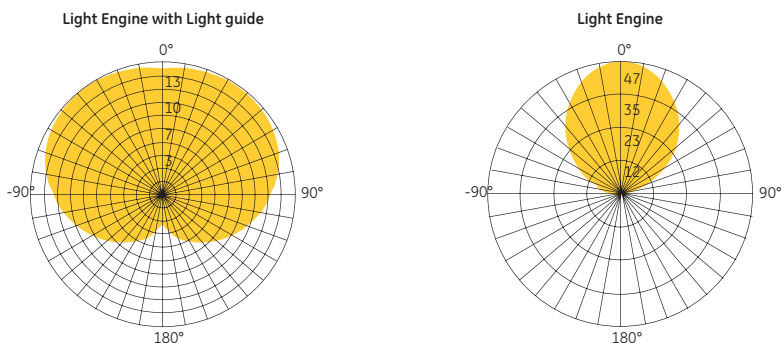
- High efficiency
- 2700, 3000, 3500, 4000, 5000 and 6500 K CCT
- Red, Green, Blue colours
- Entirely flexible light engine
- Robust & overmolded design
- Extra large viewing angle: 330° with light guide
- 50,000 hour lifetime and ongoing performance
- IP66 rated
- No lead, mercury or glass

### >>> Benefits

- Up to 40% more efficient than neon
- Wide range of colour temperatures available to fit all lighting environments
- For decorative and entertaining purpose
- Fits into narrow spaces and complex curves
- Impact resistant
- Outstanding visual appeal
- Decrease maintenance costs
- LED light engine combined with its light guide can be used in dry, damp or wet locations
- Eco-Friendly



Dimensions (mm)



Candela (Cd) measurements taken at 6500 K





# Long lasting style



## APPLICATIONS

Casinos  
Hotels  
Resorts  
Offices  
Shopping centres  
Corniche areas



# LED Cove Lighting

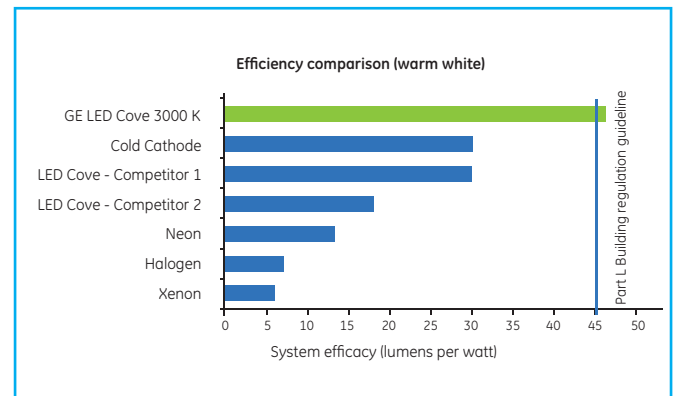
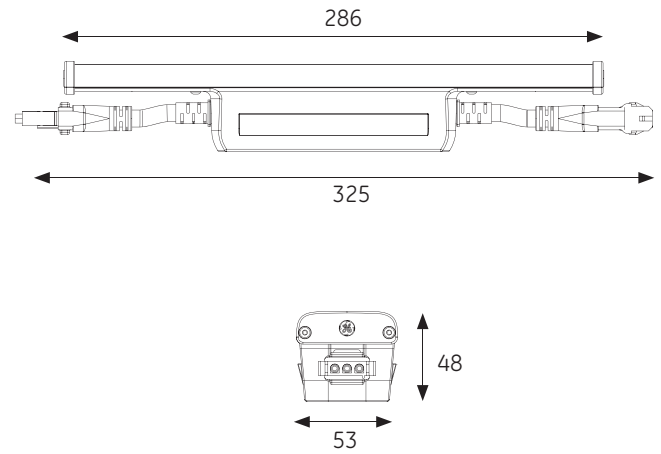
GE's LED Cove system is renowned for its ease of installation, exceptional efficacy and long life. It solves most of the problems associated with architectural cove lighting.

This system has been specially designed for illumination of long runs. Each LED fixture consumes just 6.5 watts and delivers high quality white light at outstanding efficiency - up to 49 lumens per watt. LED Cove is powered directly from line voltage thanks to its integral electronics.

Because LEDs are subject to very little loss of output, areas stay uniformly lit throughout the life of an installation, with no dark spots or shadows caused by premature lamp failure

Features >>>	>>> Benefits
High efficiency	7 times more efficient than neon
50,000 hour lifetime and ongoing performance	Decrease maintenance costs
30 cm long fixtures and flexible connectors	Allow lighting around curves and corners
Up to 330 units connected to a single main outlet	Fast and hassle-free installation
Dimmable system with electronic low voltage reverse phase control dimmer	No additional components are needed, thus saving installation cost
Mounting tracks in 3 different position	Controls light direction for maximum versatility

Dimensions (mm)

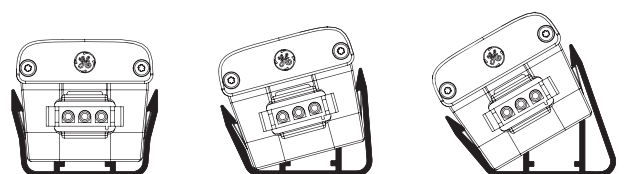


## Mounting tracks in three angles

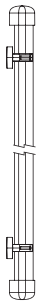
0°

15°

30°



# Architecture Solutions



Product Code	Product Description	Wattage [W]	Volts [V]	Lumen [lm]	CCT [K]	CRI [Ra]	Life [L70, h]	Length [mm]	Pack Qty
<b>Cove Lighting System - LED Fixtures</b>									
73100	LC12/727/240V	6.5	220-240	290	2700	70	50,000	325.0	10
73101	LC12/730/240V	6.5	220-240	300	3000	70	50,000	325.0	10
73826	LC12/741/240V	6.5	220-240	320	4100	77	50,000	325.0	10

Product Code	Product Description	Track Angle [°]	Length [mm]	Pack Qty	Product Code	Product Description	Length [mm]	Pack Qty
<b>Cove Lighting System: - Mounting track</b>								
73105	LC-MT48/0	0	1219	25	<b>- Jumper Cable (JC) &amp; Leader Cable (LC)</b>			
73106	LC-MT48/15	15	1219	25	73616	LC-JC/1m/CE	1000	1
73107	LC-MT48/30	30	1219	25	73617	LC-LC/12m/CE	12000	1
					73618	LC-LC/3m/CE	3000	1

Product Code	Product Description	LED Colour	Wavelength/ Colour Temp	Viewing Angle (light engine)	Viewing Angle (light engine w/ light guide)	Lumens per metre (light engine)	Lumens per metre (light engine w/light guide)	Watts per metre (light engine)	Watts per metre (system)	Pack Qty*
<b>Tetra® Contour – LED light engines</b>										
75481	GERDXNLE1-A	Red	625nm	110	330	194	154	10.63	12.50	12
75484	GEGLXNLE1-A	Green	532nm	110	330	331	180	9.45	11.12	6
75485	GEBLXNLE1-A	Blue	467nm	110	330	75	62	9.45	11.12	6
75487	GEWWXNLE1-27K-A	White	2700K	110	330	351	230	9.45	11.12	6
75488	GEWWXNLE1-30K-A	White	3000K	110	330	384	249	9.45	11.12	6
75489	GEWWXNLE1-35K-A	White	3500K	110	330	410	266	9.45	11.12	6
75490	GEWWXNLE1-40K-A	White	4000K	110	330	430	279	9.45	11.12	6
75493	GEWHXNLE1-50K-A	White	5000K	110	330	512	331	9.45	11.12	6
75486	GEWHXNLE1-65K-A	White	6500K	110	330	472	308	9.45	11.12	6

\*Each LED light engine is 2.4 metres length

Product Code	Description Code	Product Description	Quantity
<b>Tetra® Contour – Accessories</b>			
75514	9409	18 AWG Supply Wire (0.82 mm <sup>2</sup> )	152.4 m/PK
75494	GEXNWB2	Weather Box (Outdoor Use Only)	20/PK
75498	GEXNMCAC	Light Engine Mounting Clip	20/PK
75520	GEXNMC15	Light Guide Mounting Clip	50/PK
75537	GEXNBA	Silicone Bend-Aid (Reuseable)	12/PK
75541	GEXNLG15	Tetra Contour Light Guide (2.44 m) - White	12/PK
75532	GEXNLGEC15	Tetra Contour Light Guide End Cap - White	20/PK
75533	GEXNLGC15	Tetra Contour Light Guide Connector - White	20/PK
74917	GE020/G/V24T1-B	LED Driver 24 VDC/20 W	1/PK
74915	GE080/G/V24T1-A	LED Driver 24 VDC/80 W	1/PK

To get a full list of accessories, please download Contour "Parts Guide" at [www.gelighting.com/eu/led/](http://www.gelighting.com/eu/led/)

# Architecture Solutions

## Tetra® Contour - Accessories

Tetra® Contour Light Guide



Light Guide End Caps



Supply Wire



Weather Box



Light Guide Connectors



Light Guide Corners



Light Guide Bend-Aid

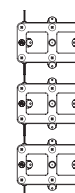


Mounting Clips



Product Code	Description Code	LED Colour	Wavelength/ Colour Temp	Viewing Angle (light engine)	LEDs per module	Modules per metre	Lumens per module	Watts/module (Strip)	Watts/Module (System)	Pack Qty*
75547	GEWWPGP6-27K-A	White	2700K	120	6	~5	94	3.6	4.2	1
75548	GEWWPGP6-30K-A	White	3000K	120	6	~5	102	3.6	4.2	1
75549	GEWWPGP6-35K-A	White	3500K	120	6	~5	110	3.6	4.2	1
75550	GEWWPGP6-40K-A	White	4000K	120	6	~5	115	3.6	4.2	1
75551	GEWHPGP6-50K-A	White	5000K	120	6	~5	136	3.6	4.2	1
75552	GEWHPGP6-65K-A	White	6500K	120	6	~5	126	3.6	4.2	1

\* Each LED strip contains 21 modules



Product Code	Description Code	Product Description	Quantity
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## Tetra® PowerGrid - Accessories

75514	9409	18 AWG Supply Wire (0.82 mm <sup>2</sup> )	152.4 metres/PK
75545	192160004	18-14 AWG In-line Splice Connector (0.82-2.08 mm <sup>2</sup> )	500/PK
75546	GEPGEC1	18 AWG Wire End Caps (0.82 mm <sup>2</sup> )	100/PK
74917	GE020/G/V24T1-B	LED Driver 24 VDC/20 W	1/PK
74915	GE080/G/V24T1-A	LED Driver 24 VDC/80 W	1/PK





Sustainable and efficient

# Outdoor

GE's LED technology has many advantages for outdoor lighting, providing 50,000 hours rated life and greatly reducing energy consumption. This results in major reductions on running costs. LED technology also delivers fittings that can be designed with improved photometry and excellent light quality, giving lighting designers far more control over their installations. The superior photometry of LED fittings also means less light spillage into areas where it is not wanted.

[Area Lighter > 51](#)

[Iberia LED > 53](#)

[Duna LED > 55](#)

[LED Tunnel > 57](#)

[LED Floodlight > 59](#)

[New solutions - coming soon > 61](#)

[Product range > 63](#)



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# Site light



## APPLICATIONS

- Site lighting
- Area lighting
- General lighting
  - Retail
  - Street lighting
  - Commercial lighting



# LED Area Lighter

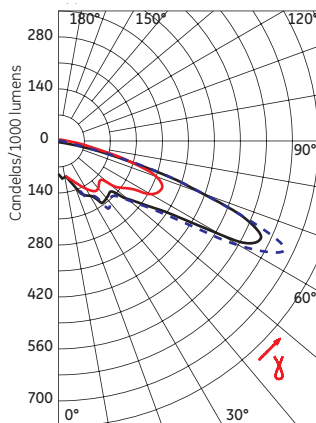
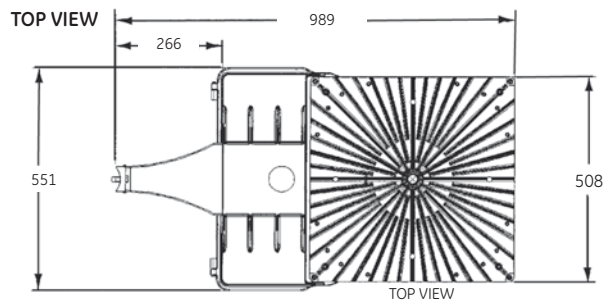


The GE LED Area Lighter is perfect for site, area and general lighting. It utilises an advanced LED optical system providing uniformity, improved vertical light distribution, reduced off-site and on-site glare and effective security light levels.

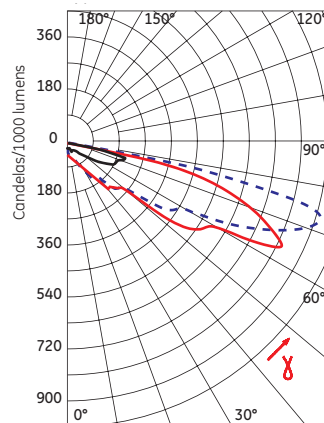
It combines strength with reliability and incorporates all the features expected of a new generation of luminaires. Optimal photometric performance is achieved thanks to LED technology, minimising light pollution.

Features >>>	>>> Benefits
50,000 hours rated life (L85) light engine enclosure	10-12 years of operation before replacement
85% lumen maintenance at 50,000 hours	Consistent light output over life
Increased output efficiency and instant-on	30-60% reduced energy consumption
Improved photometry	Uniform light with good visibility
Increased CRI (70) and higher colour temperature (5700 K)	Security aid - objects can be correctly identified
RoHS compliance	Reduced waste disposal
Solid state light source. Robust design, excellent vibration resistance	Durable and long lasting
Operation in cold temperatures	Reliable light level maintenance with temperature gradients. Also enables cold temperature operation
High degree of ingress protection	Long life & low maintenance

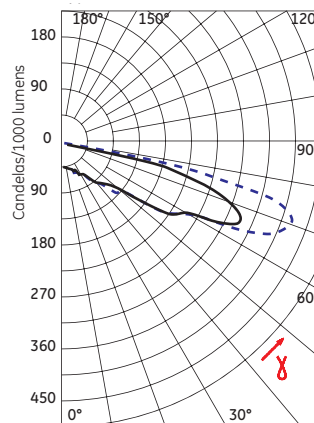
Dimensions (mm)



Distribution Type III



Distribution Type IV



Distribution Type V

Type III: asymmetric distribution (street type).  
 Type IV: asymmetric distribution.  
 Type V: symmetric distribution.

Longitudinal ———  
 Transverse ———  
 Principal - - - - -

# Multiple choice

## APPLICATIONS

Amenity lighting  
Pedestrian  
Street lighting





Iberia LED is part of GE's commitment to provide lighting products that are both energy efficient and effective. With a stylish design and a wide range of different mounting options, Iberia LED is a versatile luminaire suitable for architectural and urban environments, as well as roadway lighting.

In wattages up to 90 W, it is available with symmetrical and asymmetrical distribution. Coupled with the other options that are available, this makes Iberia LED a highly versatile luminaire for amenity lighting, pedestrian areas and squares.

## Mounting options

SP6  
POST-TOP Ø60



DP6  
POST-TOP Ø60  
DOUBLE



SP7  
POST-TOP Ø76



DP7  
POST-TOP Ø76  
DOUBLE



WM  
WALL



AT  
POLE Ø60



TP6  
POST-TOP Ø60  
TRIPLE



TP7  
POST-TOP Ø76  
TRIPLE



P1  
PENDANT 1"



### Features >>>

Optimised photometry

Symmetrical or asymmetrical distribution

High colour rendering of 70

Die-cast aluminium housing

50,000 hour life

Wide range of accessories

RoHS compliant, no mercury

85% lumen maintenance at 50,000 hours

Limited wattage up to 90 W

5700 and 4100 Kelvin

### >>> Benefits

Unifl comfortorm light levels and excellent vertical illuminance, increased security and visua

Lighting design flexibility

Reduced contrast and improved pedestrian recognition

Ease of access and long life

Low maintenance costs

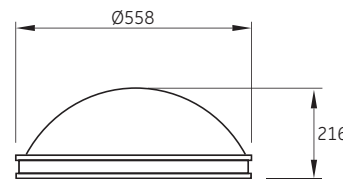
Multiple fixing options

Environment responsible

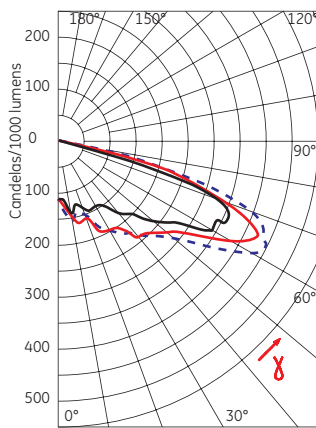
Light level is maintained throughout life

Save energy up to 60%

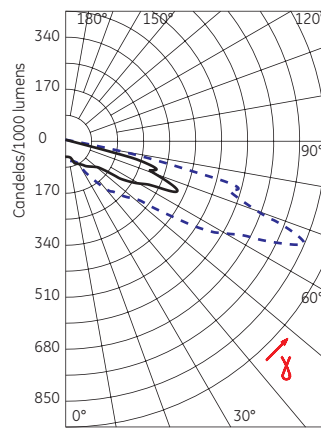
Adapts to any environment



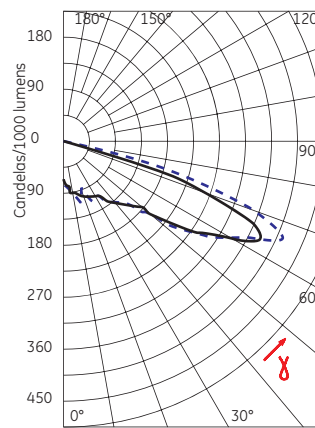
Dimensions (mm)



Distribution Type III



Distribution Type IV



Distribution Type V

Type III: asymmetric distribution (street type).

Type IV: asymmetric distribution.

Type V: symmetric distribution.

- Longitudinal ———
- Transverse ———
- Principal - - - - -

# Urban style

## APPLICATIONS

Residential areas  
Parks and gardens  
Pedestrian walkways  
Squares



The perfect combination of aesthetics and functionality, Duna LED is ideal for efficient lighting of residential areas, parks and gardens, commercial centres, pedestrian walkways and squares.

Duna LED is a decorative luminaire of truncated cone design, using LED technology up to 90 W with symmetrical and asymmetrical distributions. It is isolated from the environment with IP65 protection.



### Features >>>

LED technology up to 88 W

Symmetrical and asymmetrical distribution

CRI 70, CCT 4100 and 5700 Kelvin

Die-cast aluminium housing

50,000 hour life L85

Upper housing: one-piece spun aluminium

### >>> Benefits

High light output, low energy

Lighting design flexibility

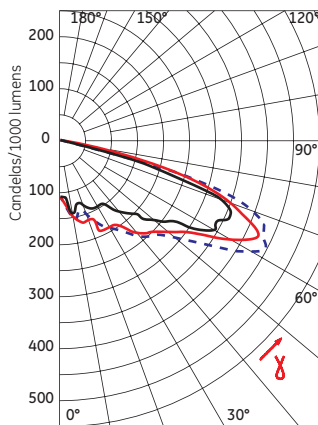
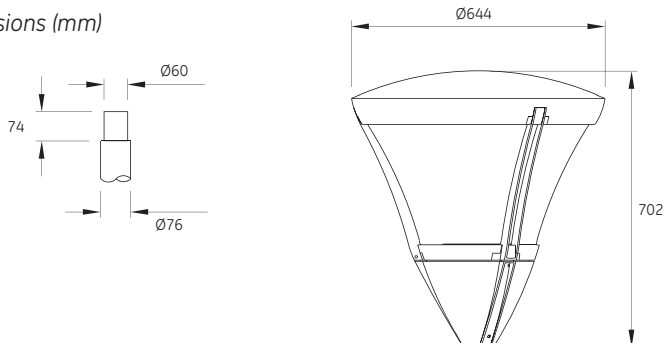
Reduced contrast and improved pedestrian recognition

Ease of access and long life

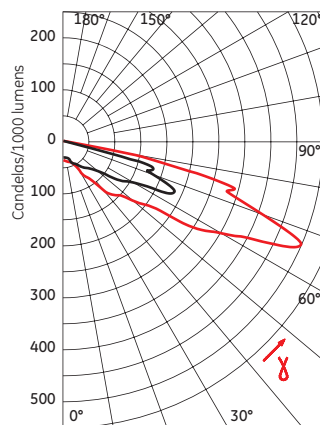
Low maintenance costs

Robust and long lasting

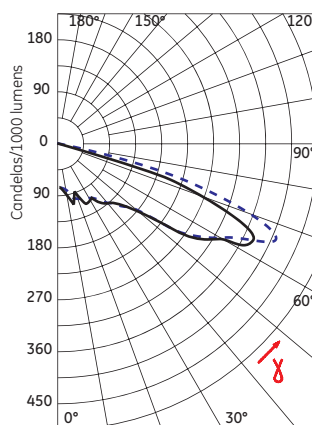
### Dimensions (mm)



Distribution Type III



Distribution Type IV



Distribution Type V

Type III: asymmetric distribution (street type).

Type IV: asymmetric distribution.

Type V: symmetric distribution.

- Longitudinal ———
- Transverse ———
- Principal - - - - -

# End to end safety



## APPLICATIONS

Tunnels  
Underpasses  
Parking garages  
Industrial areas

# LED Tunnel

The perfect combination of aesthetics and functionality, GE's LED Tunnel luminaire is ideal for efficient lighting of low speed tunnels as well as underpasses, parking garages and industrial areas.

The luminaire helps to create a safe environment for traffic, with white light for improved visibility and comfort, as well as providing an outstanding six year, 24/7 life.

Thanks to the advanced LED optical systems the fixture provides high uniformity and improved vertical light distribution.



Features >>>	>>> Benefits
Only 90 W system consumption	High light output, low energy
CRI 70 and 5700 K	Good visibility, safe lighting
Hermetically sealed to IP 66	Reduce maintenance
Choice of optics	Flexible installation options
Die cast aluminium housing	Robustness
Integral dimmable analog driver	Easy to control and dim

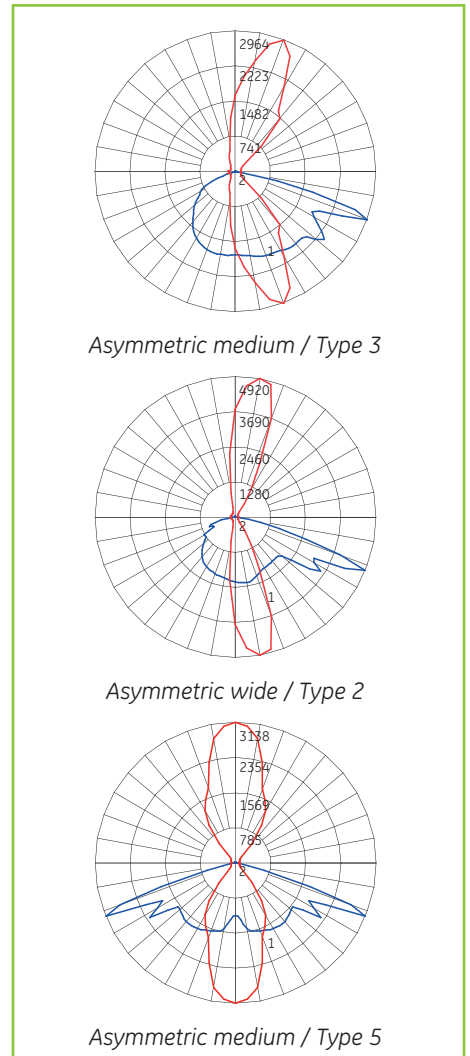
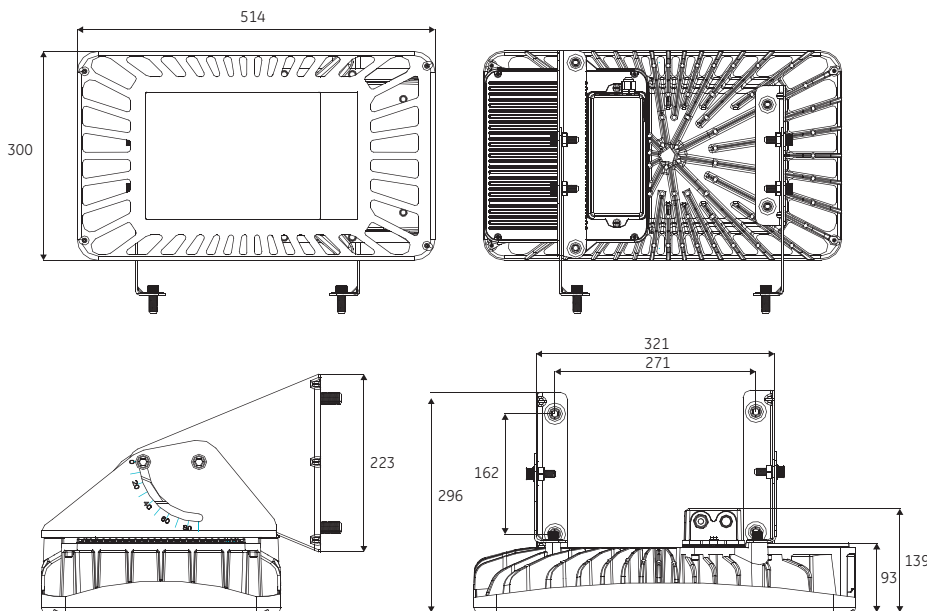


Ceiling mounted



Wall mounted

Dimensions (mm)



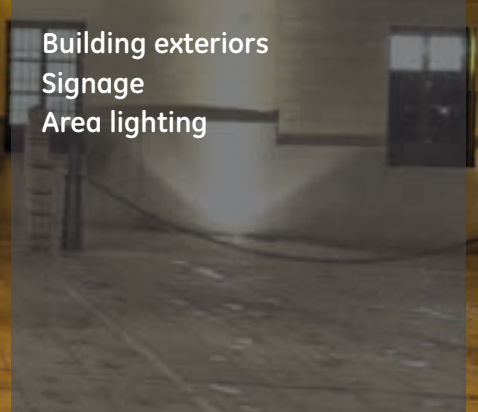


# Targeted lighting



## APPLICATIONS

Building exteriors  
Signage  
Area lighting





GE's LED Floodlight uses LED technology and specialised optical designs to offer a truly flexible range, with minimal energy consumption, for use in creative architectural lighting, area floodlighting and sign illumination.

The LED Floodlight delivers light exactly where it is required – uniform lighting with no hot spots and with improved lighting of upper areas of buildings. The optical assembly is hermetically sealed, providing IP65 protection.

### Features >>>

### >>> Benefits

Just 90 W system consumption

High light output, low energy

Three colour temperatures - 3000, 4300 and 6000 K

Helps to enhance a building's exterior.

5 different optical versions

The right solution for a big range of applications

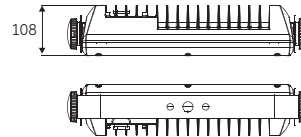
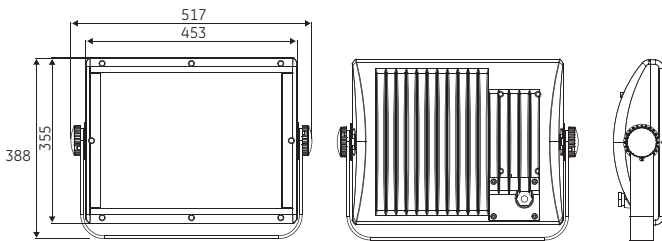
Advanced LED optical system

Maximise the utilisation of light onto the target area

Three mounting versions

Flexible installation options.

Dimensions (mm)

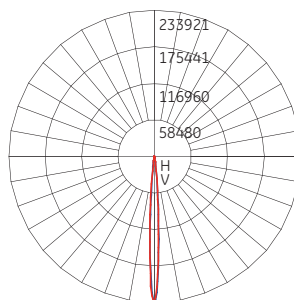


## Choice of optics

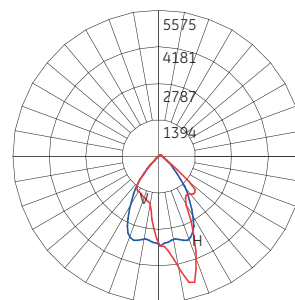
Narrow Spot NEMA	(1x1)
Medium Flood NEMA	(5x5)
Wide Flood NEMA	(6x5)
Poster NEMA	(6x5)
Bulletin NEMA	(5x4)

Choice of five different optical versions, all with a maximum system consumption of 90 W.

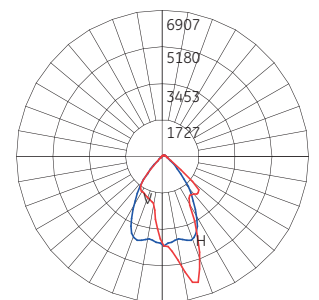
The Poster and Bulletin distributions are specifically designed for sign lighting applications - with the luminaire facing the vertical plane of the sign.



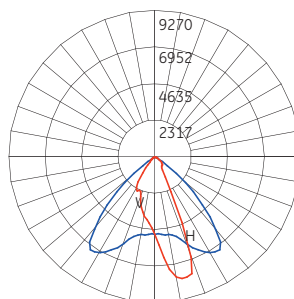
4300 K narrow spot



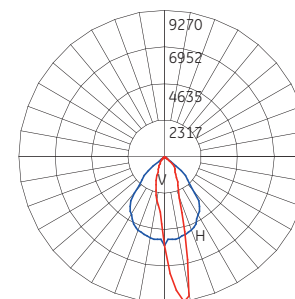
3000 K medium flood



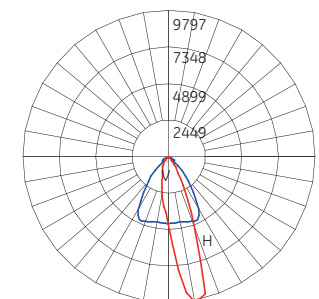
4300 K medium flood



4300 K wide flood



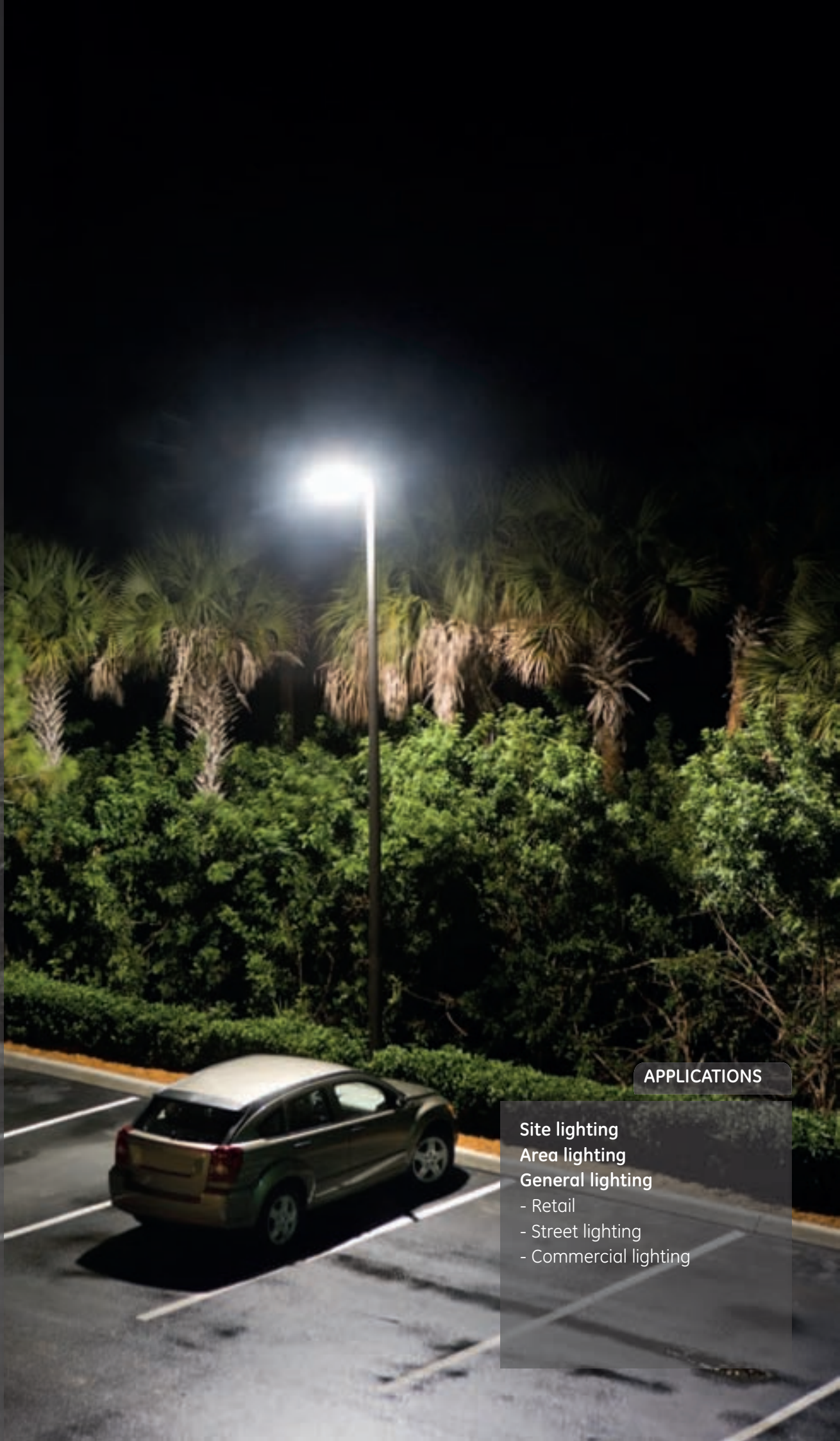
4300 K poster



4300 K bulletin



# The future is LED



## APPLICATIONS

- Site lighting
- Area lighting
- General lighting
  - Retail
  - Street lighting
  - Commercial lighting



# New solutions – coming soon

GE continues to use its experience as a product innovator to develop next generation LED lighting products. Coming very soon are the LED Road luminaire and an addition to the Area Lighter range, Area Lighter 2.



## LED Road R150 luminaire

The new LED Road R150 luminaire features an advanced LED optical system that provides improved horizontal and vertical uniformity, reduced glare and improved lighting control compared with traditional metal halide lighting systems.

It provides a 15 - 30% reduction in system energy consumption and an estimated service life of more than 10 years (50,000 hour rated life), reducing maintenance.

- High efficiency to meet rigorous photometric requirements
- System rating 50,000 hours L85 to reduce maintenance
- White light with desirable colour temperature 6000 K and 4300 K with CRI 70 for visual comfort
- Remote monitoring and control enabled

## Area Lighter 2

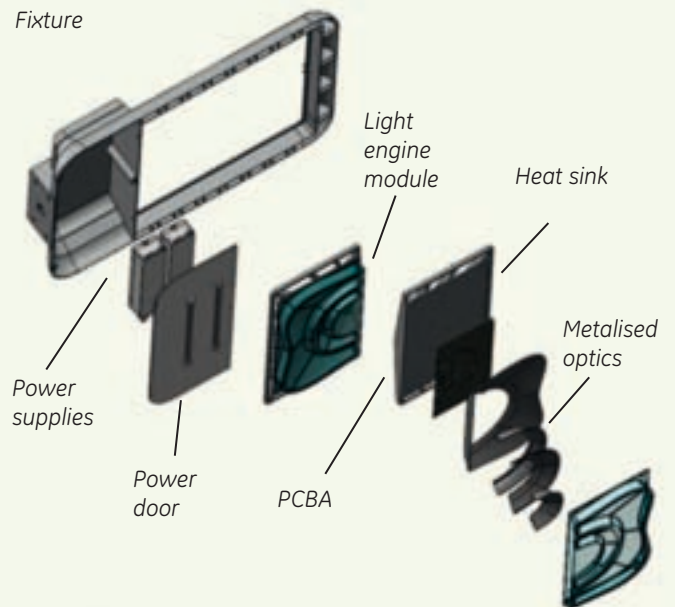
GE will take area lighting a step further forward with its next generation area lighter due in early 2011.

With dimming capability and an innovative modular construction, Area Lighter 2 will set a new standard for flexible, energy efficient LED area lighting.

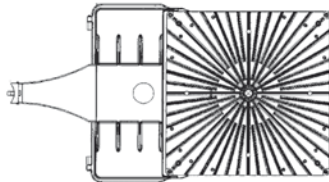
- Modular system allows upgrades and replacements
- Dimmable
- System rating 50000 hour L85 for reduced maintenance



### Modular technology



# Outdoor

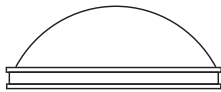


Wattage [W]	Product Description	Optics	Product code
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## LED Area Lighter

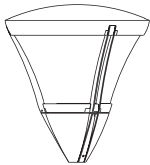
CEI 34.21 / EN 60598-1, IEC 60 – 230 V 50 Hz – Class I Optic IP65 – Control gear IP44 Luminaire supplied complete with LED.			
Mounting: with a mounting arm for round pole with easy connect terminal board SP2.54			
210	EVOL SYMS5/N SP254 R9011	Type V	75698
132	EVOL ASYW3/F SP254 R9011	Type III	75699
94	EVOL ASYF4/F SP254 R9011	Type IV	75700
Mounting: side entry mounting for 60 mm diameter pole.			
210	EVOL SYMS5/N AT60 R9011	Type V	75701
94	EVOL ASYF4/F AT60 R9011	Type IV	75702
132	EVOL ASYW3/F AT60 R9011	Type III	75703

## Iberia LED



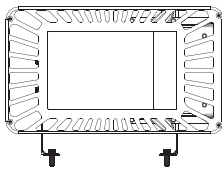
CEI 34.21 / EN 60598-1, IEC 60 – 230 V 50 Hz – Class I – IK10 Optic IP65 – Control gear IP44 Luminaire supplied complete with LED			
90	IBERIA/E/LED ASY3/41 GRIS 150 SABLE	Type III	78106
63	IBERIA/E/LED ASY4/41 GRIS 150 SABLE	Type IV	78112
90	IBERIA/E/LED SYMS/41 GRIS 150 SABLE	Type V	78107

## Duna LED



CCEI 34.21 / EN 60598-1, IEC 60 – 230 V 50 Hz – Class I – IK10 Optic IP65 – Control gear IP65 Luminaire supplied complete with LED			
Post-top mounting for 60 mm diameter poles			
88	DUNA LED ASY3/41	Type III	524555
63	DUNA LED ASY4/41	Type IV	524557
88	DUNA LED SYMS/41	Type V	524553

## Tunnel LED



CEI 34.21 / EN 60598-1, IEC 60 – 230 V 50 Hz – Class I – IK07 Optic IP65 – Control gear IP65 Luminaire supplied complete with LED			
90	TUNNEL LED/AM ASY3	Asymmetric Medium	
90	TUNNEL LED/AW ASY2	Asymmetric Wide	
90	TUNNEL LED/SV SYMS5	Symmetric	

Distribution	Type	Colour temp.	System consumption	Suggested application
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## LED Floodlight




Narrow Spot NEMA (1x1)	Symmetric		90 W	Architectural, Accent Lighting
Medium Flood NEMA (5x5)	Asymmetric Medium	6000	90 W	Site, Façade Lighting
Wide Flood NEMA (6x5)	Asymmetric Wide	4300	90 W	Site, Façade Lighting
Poster NEMA (6x5)	Asymmetric Medium	3000 K	90 W	Sign Lighting
Bulletin NEMA (5x4)	Asymmetric Wide		90 W	Sign Lighting







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