

DATA SHEET

GLV92C63631 Series

Preliminary

SimpleLED® GLV92C63631 SERIES

The LED module consists of 54 LM561B Plus LEDs. It is engineered to provide customers with the flexibility to select the optimal light source for their applications. The LED module series complies with IEC62031 Class III, and can be connected with a UL Class 2 driver (alternative configurations should be confirmed.).

PRODUCT DESCRIPTION

Multiple CCTs available (2700K-5000K)

80& 90 minimum CRI options

Targeted 3 SDCM color binning

LM-80 compliant mid-power LEDs

3-Year Warranty

TARGET APPLICATIONS

Down Lighting

Recessed Lighting

Flood Lighting

Low Bay

High Bay

Area Lighting

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APPLIED STANDARDS

IEC 62031, IEC 60068-2, UL8750

Note: All specifications are subject to change without notice.

SimpleLED® GLV92C63631-JI54 WHITE SERIES

PARAMETER	CONDITIONS
PCB	MCPCB with Φ 63mm
	UL component file number: E250937
Emitter Type	54 x LM561B Plus LEDs
	UL component file number: E347623
Circuit Layout	9P x 6S
Connector Type	Wago connector: 2060-451/998-404
Thermal Resistance (p-n junction to Ts)	Rth= 15 °C/W

PRODUCT SELECTION GUIDE

PART NUMBER	CCT	CRI (min.)
GLV92C63631/CW-JI54I27A	2700K	80
GLV92C63631/CW-JI54I30A	3000K	80
GLV92C63631/CW-JI54K30A		90
GLV92C63631/CW-JI54I35A	3500K	80
GLV92C63631/CW-JI54I40A	4000K	80
GLV92C63631/CW-JI54K40A		90
GLV92C63631/CW-JI54I50A	5000K	80

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BOARD OPTICAL CHARACTERISTICS (@ 700mA, Ts=25 °C)

BOARD	CCT	CRI	FLUX (lm)		EFFICACY (lm/W)	
			MIN.	TYP.	MIN.	TYP.
GLV92C63631/C W-JI54	2700K	80	1930	2058	154	170
	3000K	80	1962	2091	157	173
		90*	1397	1521	111	125
	3500K	80	1994	2123	159	175
	4000K	80	2058	2187	164	181
		90*	1553	1677	123	138
	5000K	80	2123	2251	170	186

BOARD OPTICAL CHARACTERISTICS (@ 1050mA, Ts=25 °C)

BOARD	CCT	CRI	FLUX (lm)		EFFICACY (lm/W)	
			MIN.	TYP.	MIN.	TYP.
GLV92C63631/C W-JI54	2700K	80	2773	2958	143	158
	3000K	80	2820	3005	145	160
		90*	2066	2249	109	123
	3500K	80	2866	3051	148	163
	4000K	80	2958	3143	152	167
		90*	2295	2479	121	136
	5000K	80	3051	3236	157	172

* For CRI90 version, LED used is still LM561B. Will update the data when LM561B plus is available.

BOARD ELECTRICAL CHARACTERISTICS

		Min.	Typ.	Max.
@700mA	Voltage (V)**	16.7	17.3	17.9
	Total Board Power (W)	11.68	12.10	12.51
@1050mA	Voltage (V)**	17.3	17.9	18.5
	Total Board Power (W)	18.13	18.77	19.42

ENVIRONMENTAL CHARACTERISTICS

	Min.	Max.
Storage Temperature	-40°C	100°C
PCB Temperature (T _p)	-40°C	80°C

NOTES

* Based on nominal LED datasheet values (65 mA, T_s = 25°C). Use for reference only since application temperature and LED driver current have an influence on lumen output and forward voltage. Safe operation only possible by the use of an external constant-current source. The current source used for operation, must have the following protections:

- Short-circuit protection
- Overload protection
- Over-temperature protection

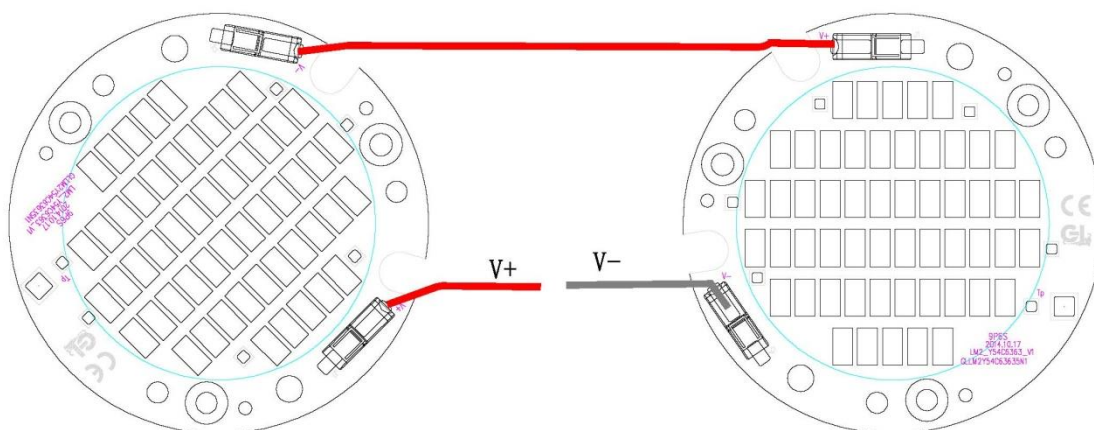
**LED SUPPLIER maintains a tolerance of ±0.1V on forward voltage measurements.

Proper current de-rating must be observed to maintain junction temperature below the maximum.

Different CCTs available upon request. Contact your local sales representative.

INTERCONNECTIVITY OPTIONS

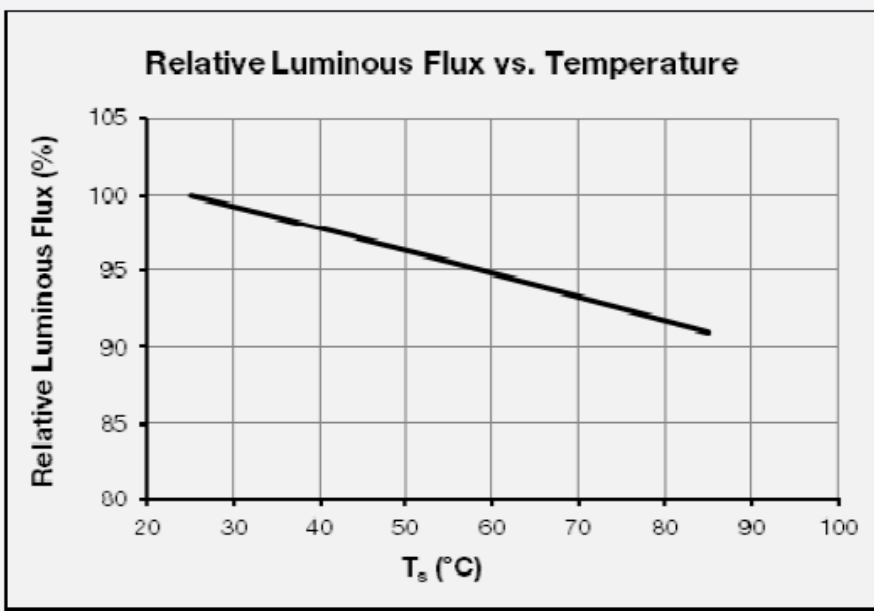
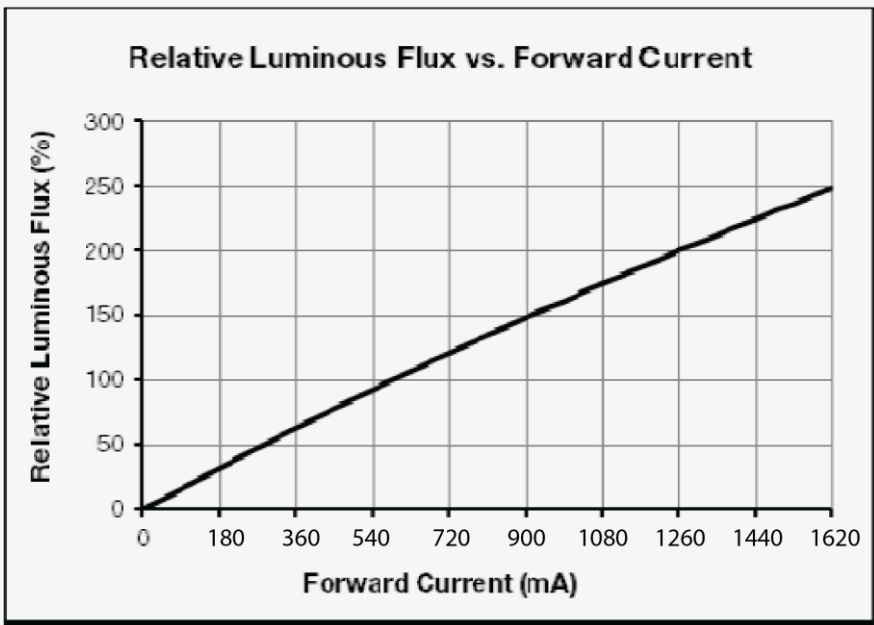
Board-to-Board wiring options and drawings.



GLV92C63631/CW-JI54	
Maximum connection units	10PCS in series

Note: All specifications are subject to change without notice.

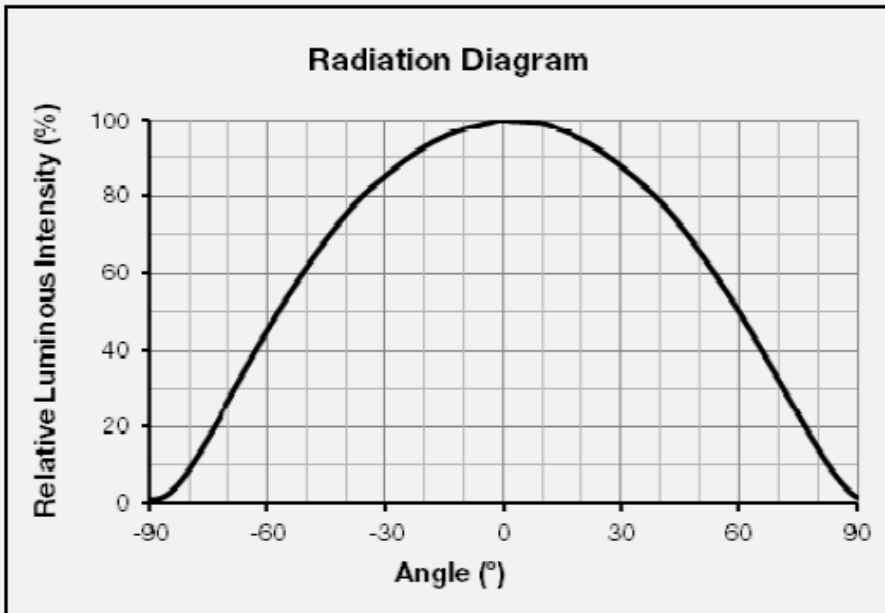
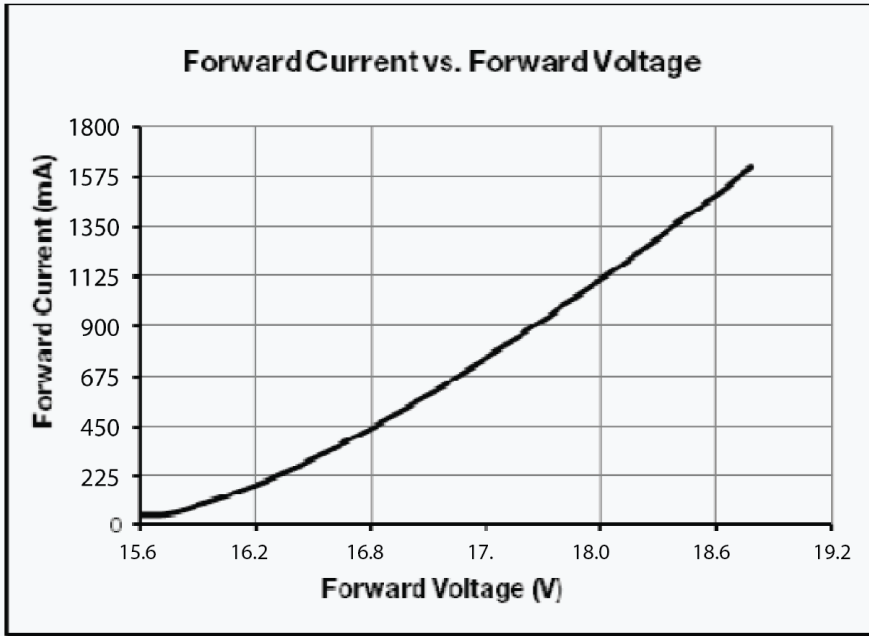
TYPICAL CHARACTERISTICS GRAPHS



Note: All specifications are subject to change without notice.

* These curves are based on scaling up the LED curves and based on the sorting current for those LEDs.

TYPICAL CHARACTERISTICS GRAPHS

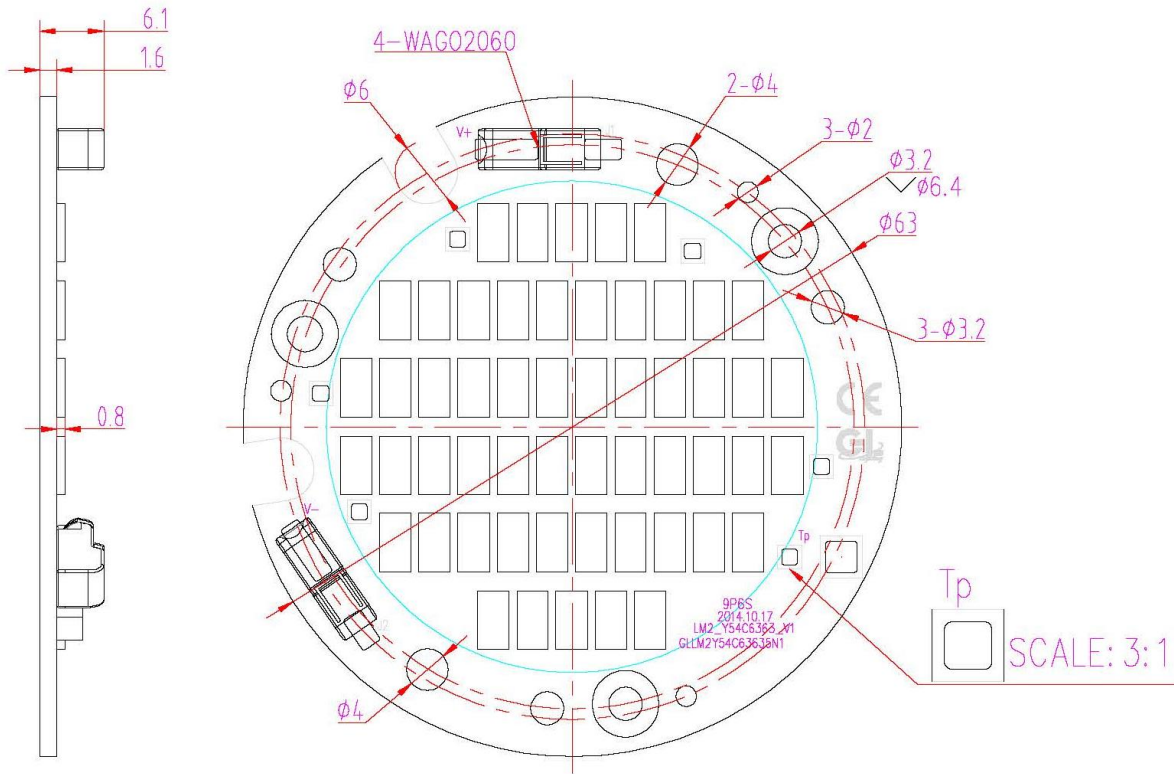


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* These curves are based on scaling up the LED curves and based on the sorting current for those LEDs.

MECHANICAL DIMENSIONS

All dimensions are in millimeters



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PART NUMBERING & ORDERING INFORMATION

<p>1. PRODUCT SERIES</p> <p>GLV92C63631</p> <p>Circular MCPCB with 54LEDs</p>	<p>4. NUMBER OF LED</p> <p>54 – 54 LEDs</p>	<p>6. FLUX BIN</p> <p>A – S0 Bin</p> <p> *Comment:</p> <p>For CRI90 version, flux bin is S1.</p> <p>(S1/SZ is acceptable for 4000K version)</p>
<p>2. CONNECTOR TYPE</p> <p>CW – Wago connector 2060-451/998-404</p>	<p>5. CCT</p> <p>I27 – CRI80 2700K ANSI</p> <p>I30 – CRI80 3000K ANSI</p> <p>K30 – CRI90 3000K ANSI</p> <p>I35 – CRI80 3500K ANSI</p> <p>I40 – CRI80 4000K ANSI</p> <p>K40 – CRI90 4000K ANSI</p> <p>I50 – CRI80 5000K ANSI</p>	
<p>3. LED TYPE</p> <p>JI - 5630 mid-power LED 9P</p>		

Part Number :

GLV92C63631 / CW – JI 54 I30 A

| | | | | |
 1 2 3 4 5 6

THERMAL CONSIDERATIONS

The LED module must be operated in environmental conditions where the ambient air temperature does NOT exceed a value which would cause the LEDs to exceed their maximum junction temperature (per the LED Supplier datasheet) or cause the maximum board temperature (T_p) to be exceeded.

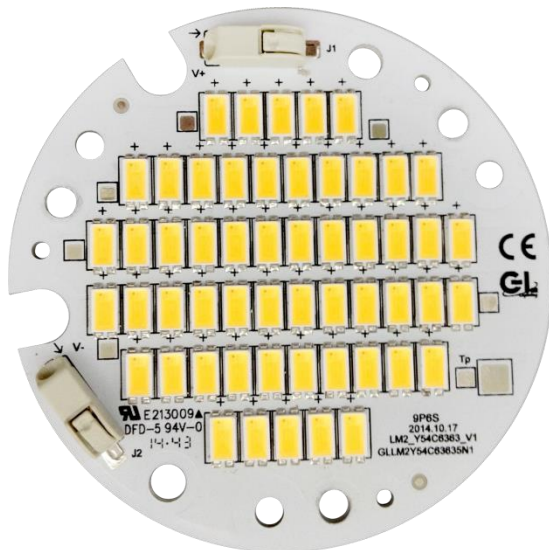
A heat sink can be used with the LED modules in order to maintain the LED junction temperature and the PCB temperature below their maximum ratings however, the following recommendations should be followed:

- The mounting surface for the LED module must be flat;
- Avoid bending of the PCB to avoid damaging the LEDs and the solder connections;
- Use a thermal interface material between the PCB and the heat sink.

For optimal lifetime performance, the LED module must be placed in an environment where air can flow freely around the luminaire, promoting heat transfer from conduction to the heat sink and from radiation to the air. It is not recommended to expose the module to direct sunlight or any other heat source.

Thermal Measurement

The maximum allowed temperature at the T_p point of the board is 80°C. This temperature is not based on the LM-80 standard but is for warranty purposes only.

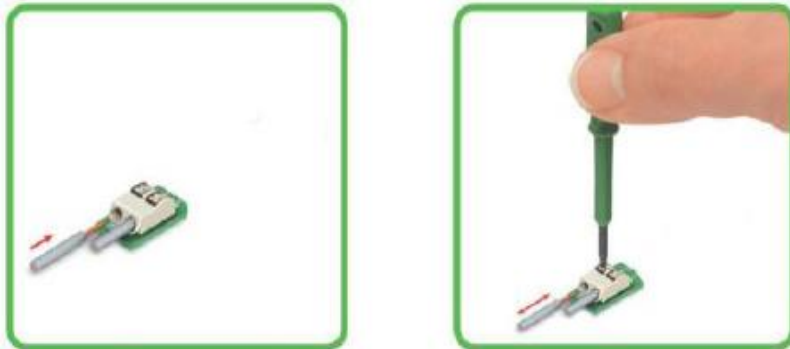


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Assembly and Safety Information

Installation must be done according to relevant regulations and standards. The following guidelines should be respected:

- Installation must be carried out in a voltage-free state;
- The LED module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken;
- A thermal interface material should be applied to the base of the PCB before fixing it onto a heat sink with screws. The fixing/cooling surface must be cleaned prior to installing the PCB to remove all dirt, dust and grease. The LED module must not be bent to avoid damaging the LEDs.
- Use wire size AWG 24-18 to connect the PCB to the constant-current power supply.
- Conductors must be inserted at a 0° angle to the PCB.
- Wires must be stripped to 6-7 mm (solid & stranded).



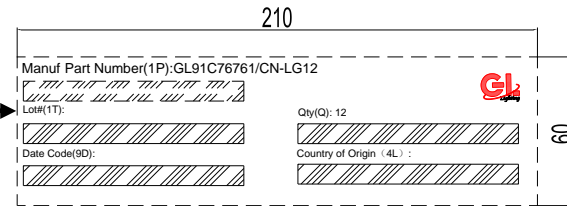
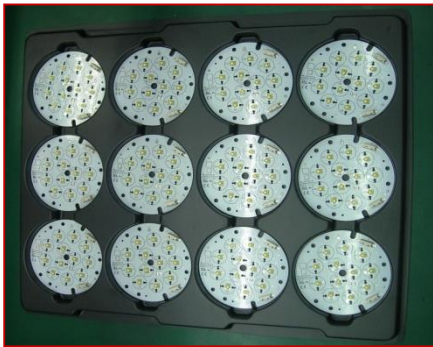
1. Insert solid conductors via push-in termination.
2. Insert/remove fine-stranded conductors by lightly pressing on the push-button

- The pressure on the LEDs will influence their reliability. Precautions should be taken to avoid such pressure.
- Do not stack PCBs on each other. LED materials are soft and this could lead to catastrophic failure of the LEDs.
- Chemicals can be harmful to the LEDs used on the module. It is recommended not to use chemicals anywhere in an LED system. The fumes from even small amounts of chemicals may damage the LEDs.
- Using corrugated boxes as packaging is only allowed if the sulfur used in the box is less than 850 ppm.
- Please ensure the correct polarity of the leads.
- For outdoor or damp locations, care must be taken to protect the LED PCB against moisture. There is the possibility of coating the board. Please contact your local sales representative for more information.

All of the above guidelines must be followed in order to qualify for the 3-year warranty. There is the possibility to extend to a 5-year warranty, please contact your local sales representative.

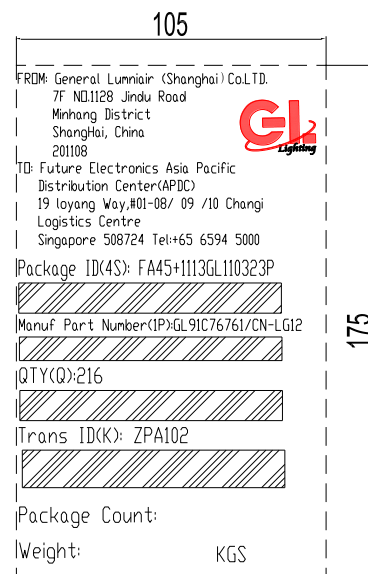
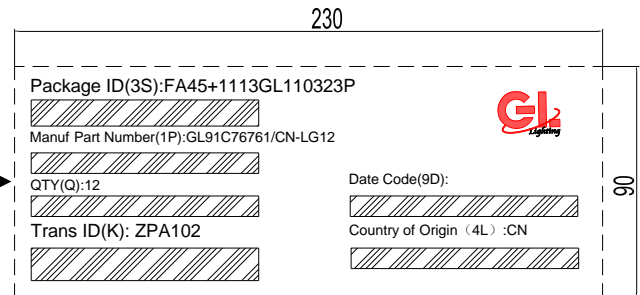
PACKAGING INFORMATION

INNER PACKING	SIZE	TRAY	QTY
TYPE	345*295*11mm	1	20



INNER PACKING	SIZE	TRAY	QTY
TYPE 1	350*300*250mm	15	300

PRODUCT LABELLING



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COMPANY INFORMATION

Founded in 1956 , GL Lighting quickly established itself as one of the leading architectural lighting companies within Asia.

In 1999 , GL Lighting recognized the importance of LED technology as a future industry leader in the emerging space of sustainable energy sources. Over the last decade, GL has devoted a large portion of its resources, research and development and energy in creating a line of LED luminaires second to none.

Striving to continue to lead the way, GL Lighting is comprised of a world class team of electrical, mechanical, electronic and optical engineers. GL Lightings management team also hold specialties in controls, electronics, power management, optics and fixture design.

With research and development centers, offices and factories in Shanghai, Hong Kong and Taipei, GL Lighting continues to commit itself to creating the best in sustainable, energy saving lighting and luminaires for generations to come.

CONTACT DETAILS

For more information about General Luminaire's products and services, contact our distribution partner Future Lighting Solutions.

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Note: All specifications are subject to change without notice. Warranty provided by the manufacturer, GL-Lighting.