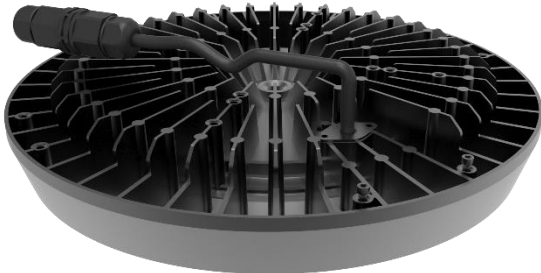


GinoLED HO* Module E

*HO: High lumen output

Datasheet



Driver Box



The GinoLED is a high power LED module with integrated heat sink for optimal thermal management and tailored optical design. The GinoLED lightweight and easy assembly design make installation become much easier. Up to 146Lm/W high efficacy designed to reach more energy saving. GinoLED is an IP65 unit equipped with IP connector for easy installation. GinoLED E version is designed for good enough specification to fulfill customer basic requirements.

BENEFITS

- **Tailored optical and thermal design**
 - 60°x60° and 90°x90° lens design, adaptation to different mounting heights.
 - The high performance of GinoLED module is attributable to the omnidirectional nature of tree-like fins. Thanks to that, air streams are able to enter and exit from all directions.
- **IP65/IK08 protection**
 - Self-contained housing with heat sink, no extra protection is needed
- **High energy efficiency**
 - Up to 146Lm/W high efficacy*.
- **Easy for assembly**
 - Thanks for GinoLED integrated design, only few step to finish assembly.
- **Long life time**
 - 50,000hrs

* Mentioned efficacy without driver power consumption.

APPLICATIONS

- Airport, Station, Factory
- Indoor Court, Exhibition Hall, Warehouse

SPECIFICATION (4000K & 6500K)

The typical values involved in this specification are under the following conditions:

Product category	t _p -normal
GL-HO-E 80-XXX-LXXXXX	50 °C
GL-HO-E 120-XXX-LXXXXX	55 °C
GL-HO-E 150-XXX-LXXXXX	60 °C
GL-HO-E 180-XXX-LXXXXX	60 °C

	Parameter	GinoLED HO Module E			
		GL-HO-E 80	GL-HO-E 120	GL-HO-E 150	GL-HO-E 180
Light Output	Typical Module flux	11000 lm	16500 lm	20500 lm	25600 lm
	Typical Module efficacy	143 Lm/W	143 Lm/W	146 Lm/W	143 Lm/W
	Optical	60° x 60° 90° x 90°			
	CCT	4000K & 6500K			
	SDCM	5			
	Typical CRI (Ra)	80			
	Lifetime(L70B50 @ t _p -normal)	50,000 hours			
Electrical	Typical input voltage	110V DC	165V DC	200V DC	256V DC
	Typical input current	0.7 A	0.7 A	0.7 A	0.7 A
	Module Power @ (typical)	77W	116W	140W	179W
	Recommended Driver	OSRAM OPTOTRONIC			
		80W: OT 100/220...240/1A4 1DIMA P7			
		120W: OT 150/220...240/1A4 1DIMA P7 150W: OT 150/220...240/1A4 1DIMA P7 180W: OT 200/220...240/1A4 1 DIMA P7			
Mechanical	Dimension	Φ296mmL x 204mmH (Include Driver box)		Φ339mmL x 233mmH (Include Driver box)	
	Mounting	Suspended / wall mounted**			
	Optics	Polycarbonate lens			
	Module Weight	2.1 kg		2.8 kg	
Temperature	Operating temp. range (t _a)*	-30 ... 45°C			
	Storage temp. range*	-40 ... 80°C			
Standard Compliance	IP Rating	IP65			
	IK Rating	IK08			
	Certification	CE/CB/CQC Ready by Apr.2019			

IP65 IK08



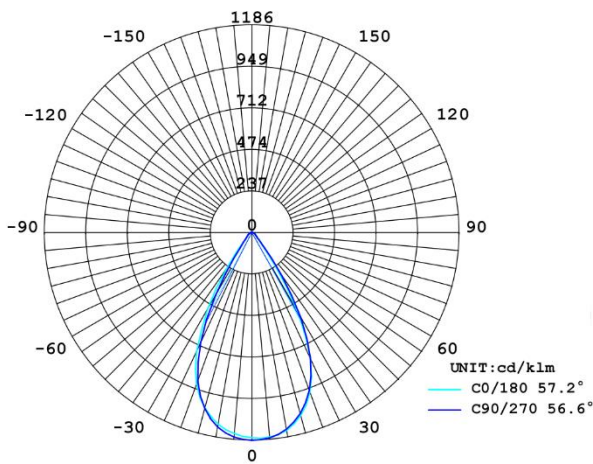
Due to the special conditions of manufacturing processes of LED, the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. Actual lumen output can be varied due to many factors like lamp factor of LED, input current/voltage, thermal conditions, many other optical tolerance, and measurement tolerance. The data above is for reference only. Please contact Osram sales or marketing staff for advice if customers has any specific demand on particular parameters.

Tolerance of measurements for the color rendering Ra is ±2.

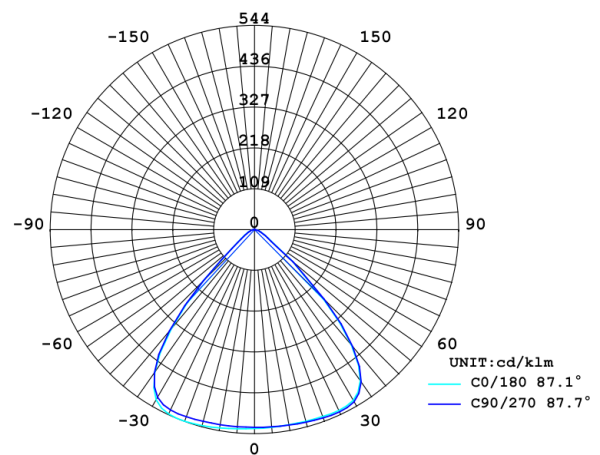
* Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED module. The temperature of the LED module needs to be measured at the t_c-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

** Additional accessories are needed for Wall mounted, please contact with sales to get more information.

PHOTOMETRICS



60°x60°



90°x90°

Due to the special conditions of manufacturing processes of LED, the polar candela distribution and distance illuminance can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. The actual data may differ from the typical data. Tolerance of measurements for beam angle is ±10°.

Environmental and Application Conditions

Ambient temperature range (t_a on free air)	-30~45°C	
Operating (case) temperature range (t_{c max})	GL-HO-E 80	70°C
	GL-HO-E 120	75°C
	GL-HO-E 150	80°C
	GL-HO-E 180	80°C
Storage temperature range	-40~+80°C	
IP rating	IP65	
Mech. impact protection	IK08	
Lifetime @ t_p-normal (L70/B50)	50,000hrs	
Net weight	GL-HO-E 80	2.1KG
	GL-HO-E 120	
	GL-HO-E 150	2.8KG
	GL-HO-E 180	

Standards / Normative Requirements

Eye security	IEC 62778
Flammability	IEC 60598-1
Safety Requirements	EN 62031 IEC 60598-1
EMC / radio disturbance characteristics	EN 55015
EMC / immunity	EN 61547
EMC limits for harmonic current emissions	IEC 61000-3-2
EMC limitation of voltage changes, voltage fluctuations and flicker	IEC 61000-3-3
CE Mark	Yes
Application in Class I	Yes

Electrical parameters

Driving mode	Constant current	
Input voltage range	GL-HO-E 80	99-121 VDC @700mA
	GL-HO-E 120	149-182 VDC @700mA
	GL-HO-E 150	180-220 VDC @700mA
	GL-HO-E 180	230-282 VDC @700mA
Input current range	GL-HO-E 80	630~770 mA
	GL-HO-E 120	630~770 mA
	GL-HO-E 150	630~770 mA
	GL-HO-E 180	630~770 mA
Power Range	GL-HO-E 80	69-85 W @700mA
	GL-HO-E 120	104-128 W @700mA
	GL-HO-E 150	126-154 W @700mA
	GL-HO-E 180	161-197 W @700mA

CCT / Color and Color rendering parameters

Product	Min. CCT (k)	Max. CCT (k)	Center		Ra
			CIE X	CIE Y	
GL-HO-E 80-840 L60x60 GL-HO-E 120-840 L60x60 GL-HO-E 150-840 L60x60 GL-HO-E 180-840 L60x60 GL-HO-E 80-840 L90X90 GL-HO-E 120-840 L90X90 GL-HO-E 150-840 L90X90 GL-HO-E 180-840 L90X90	3700K	4250K	0.3818	0.3797	>80
GL-HO-E 80-865 L60x60 GL-HO-E 120-865 L60x60 GL-HO-E 150-865 L60x60 GL-HO-E 180-865 L60x60 GL-HO-E 80-865 L90x90 GL-HO-E 120-865 L90x90 GL-HO-E 150-865 L90x90 GL-HO-E 180-865 L90x90	6000K	7000K	0.3123	0.3282	

Remarks:

1. Test by t_p -normal condition;
2. Tolerance of measurements for the color rendering Ra is ± 2 ;
3. Tolerance of measurements for the Chromaticity Coordinate is ± 0.005 ; the tolerance of CCT should be calculated accordingly.

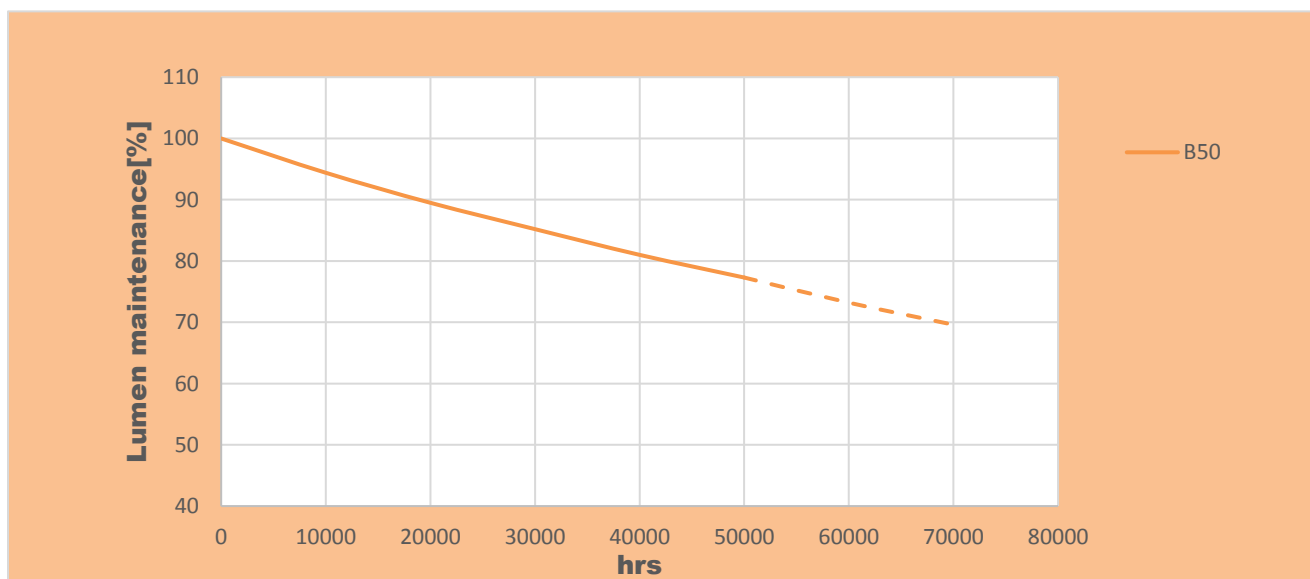
Brightness parameters

Product	Current(mA)	Lumen Flux(Lm)	
		Min.	Max.
GL-HO-E 80	700	9900	12100
GL-HO-E 120	700	14850	18150
GL-HO-E 150	700	18450	22550
GL-HO-E 180	700	23040	28160

Remarks:

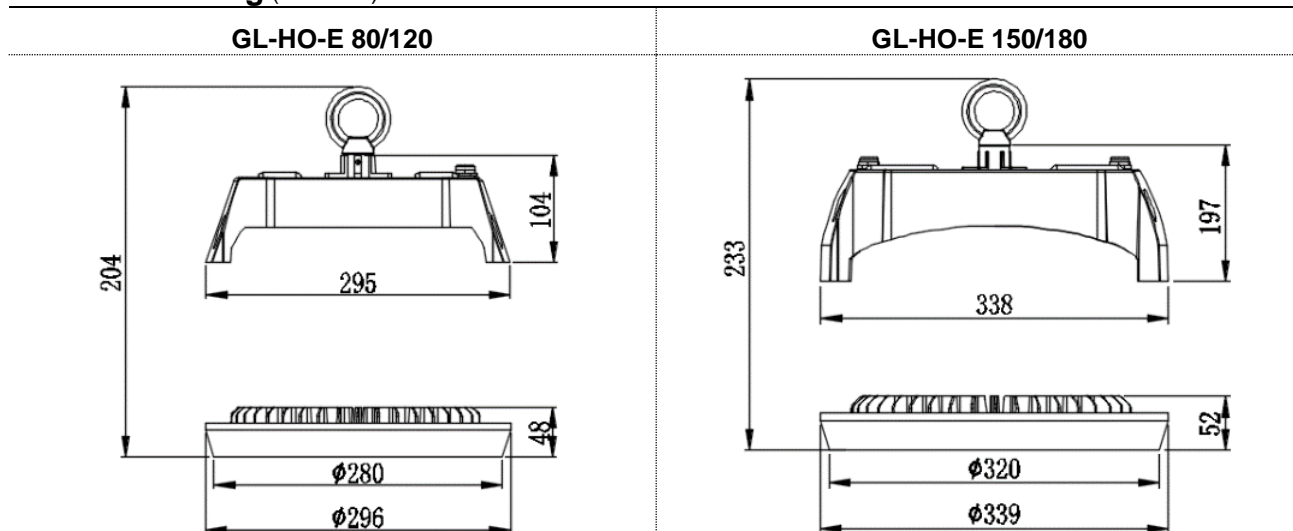
- Ranking at t_p -normal condition.
- Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.
- The temperature of the LED module must be measured at the t_c -point according to EN60598-1 in thermal stable status. Exact location of t_c point please see "safety information".
- Due to the special conditions of the manufacturing processes of LED, the typical data or calculated correlations of technical parameters can only reflect statistical figures. These do not necessarily correspond to the actual parameters of each single product, which could differ from the typical data and calculated correlations or the typical characteristic line. If requested, e.g. because of technical improvements, these typ. data will be changed without any further notice.
- Tolerance of measurement of the luminous flux is $\pm 5\%$.

Lumen maintenance



Remark: Lumen maintenance at t_p -normal conditions. Lumen maintenance value base on available LM80 LED data (9000hrs).

Product Drawing (unit: mm)

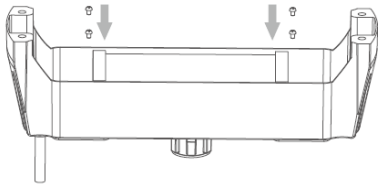


Sales & Technical Support

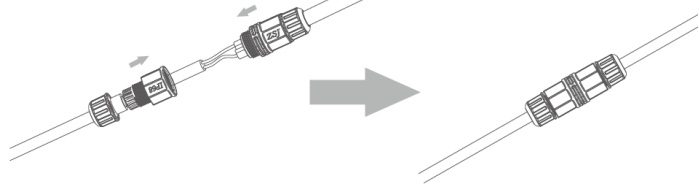
Application:

GinoLED HO module provide IP65 connector can easy be installed with IP67 driver, total system meet IP65 requirement.

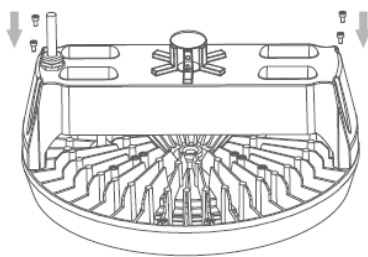
1. Assembly driver



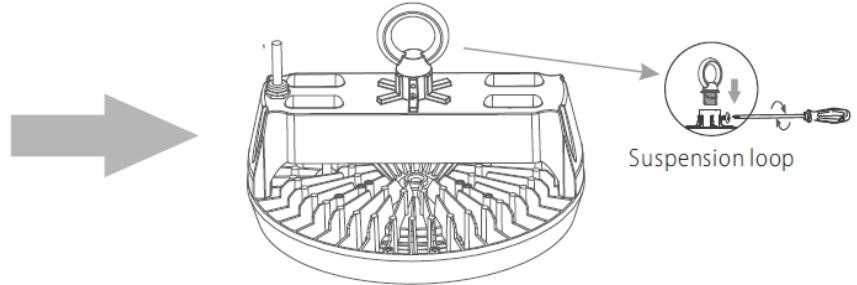
2. Wiring with IP connector



4. Assembly driver box on the module

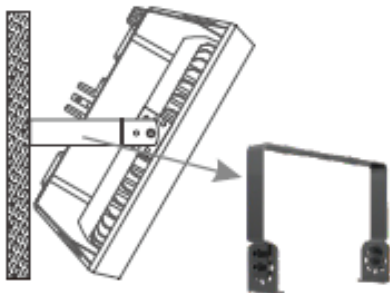


4. Assembly hook and ready to install



Other assembly accessories

Wall mounted accessory*



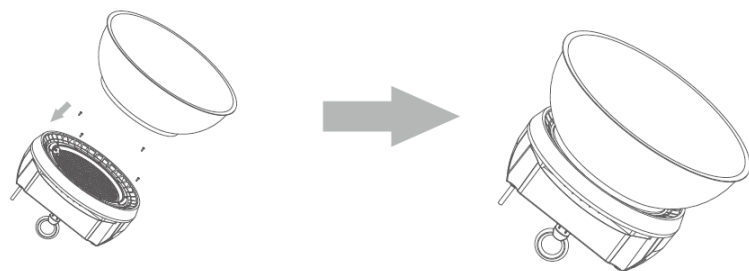
PC / Aluminum cover*



PC Cover
(GL-HO 80/100/120/180)



Aluminum Cover
(GL-HO 80/100/120/180)



* Additional accessories are needed for Wall mounted, please contact with sales to get more information.

**Additional accessories are needed for reflector cover, procurement required, please contact with sales to get more information.

Order Number

Model	EAN10	S-unit	EAN40	S-unit
GL-HO-E 80-840 L60X60	TBD	1	TBD	1
GL-HO-E 80-840 L90X90	TBD	1	TBD	1
GL-HO-E 80-865 L60X60	TBD	1	TBD	1
GL-HO-E 80-865 L90X90	TBD	1	TBD	1
GL-HO-E 120-840 L60X60	TBD	1	TBD	1
GL-HO-E 120-840 L90X90	TBD	1	TBD	1
GL-HO-E 120-865 L60X60	TBD	1	TBD	1
GL-HO-E 120-865 L90X90	TBD	1	TBD	1
GL-HO-E 150-840 L60X60	TBD	1	TBD	1
GL-HO-E 150-840 L90X90	TBD	1	TBD	1
GL-HO-E 150-865 L60X60	TBD	1	TBD	1
GL-HO-E 150-865 L90X90	TBD	1	TBD	1
GL-HO-E 180-840 L60X60	TBD	1	TBD	1
GL-HO-E 180-840 L90X90	TBD	1	TBD	1
GL-HO-E 180-865 L60X60	TBD	1	TBD	1
GL-HO-E 180-865 L90X90	TBD	1	TBD	1

Matching Driver Order Number

Module name	Matching driver model name	Driver order number			
		EAN-010	S-unit	EAN-40	S-unit
GL-HO-E 80-840 L60X60	OT 100/220-240/1A4 1DIMA P7	4052899495036	1	4052899495043	10
GL-HO-E 80-840 L90X90	OT 100/220-240/1A4 1DIMA P7	4052899495036	1	4052899495043	10
GL-HO-E 80-865 L60X60	OT 100/220-240/1A4 1DIMA P7	4052899495036	1	4052899495043	10
GL-HO-E 80-865 L90X90	OT 100/220-240/1A4 1DIMA P7	4052899495036	1	4052899495043	10
GL-HO-E 120-840 L60X60	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 120-840 L90X90	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 120-865 L60X60	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 120-865 L90X90	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 150-840 L60X60	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 150-840 L90X90	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 150-865 L60X60	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 150-865 L90X90	OT 150/220-240/1A4 1DIMA P7	4052899495050	1	4052899495067	10
GL-HO-E 180-840 L60X60	OT 200/220-240/1A4 1DIMA P7	4052899495074	1	4052899495081	10
GL-HO-E 180-840 L90X90	OT 200/220-240/1A4 1DIMA P7	4052899495074	1	4052899495081	10
GL-HO-E 180-865 L60X60	OT 200/220-240/1A4 1DIMA P7	4052899495074	1	4052899495081	10
GL-HO-E 180-865 L90X90	OT 200/220-240/1A4 1DIMA P7	4052899495074	1	4052899495081	10

Safety information

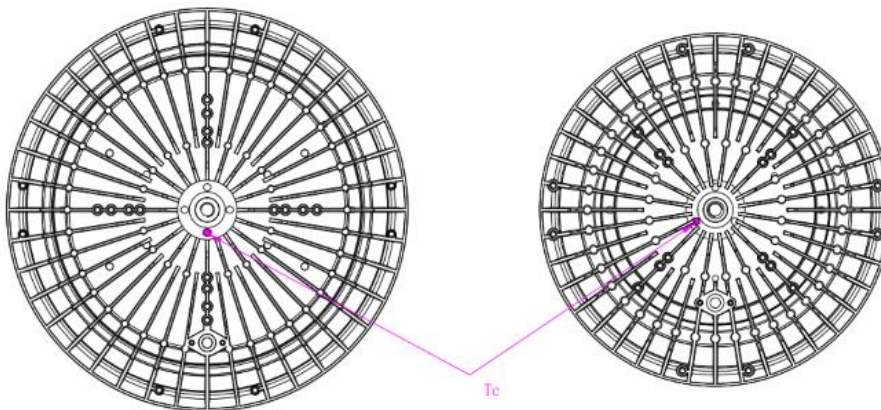
- ★ The LED module itself and all its components may not be mechanical stressed.
- ★ Assembly must not damage or destroy conducting paths on the circuit board.
- ★ To avoid mechanical damage to the connecting cables, the module should be attached securely to the fixture. Heavy vibration should be avoided.
- ★ Installation of LED modules with (power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installation.
- ★ Please ensure that the power supply is of adequate power to operate the total load.
- ★ Please ensure that the power supply with correct output parameters (driving mode, voltage, current) for LED module.
- ★ Pay attention to standard ESD precautions when installing the module.
- ★ If surge protection structure not within power supplier, a lightning protector should be needed additionally for outdoor application.



- ★ Higher t_c application is not recommended, under the condition of higher than $t_{c\ max}$, the product life is shortened.
- ★ t_c / t_p location as below:

GL-HO-E 150/180

GL-HO-E 80/120



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