



WOLTRON GRANDI AREE3 FLOOD OPTICS

For product specifications, materials and colours, please refer to the details inside

Technical data

rev. 2025.02

INSTALL

Floodlight towers for street and motorway lighting, large areas, ports and airports.

ACCESSIBILITY



Openable

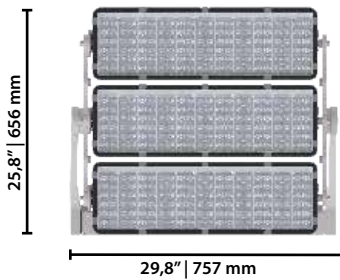
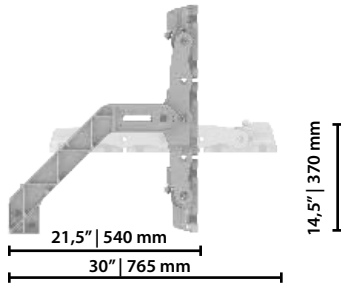
Openable fixture with basic tools
Replaceable internal components using basic tools.

OPTICAL TECHNOLOGY



Glassed

Refracting optical system consist of singlechip LED, PMMA lenses with 30 years of warranty against UV and yellowing by aging, aluminium reflector having a purity of 99,7% and extra clear tempered glass.

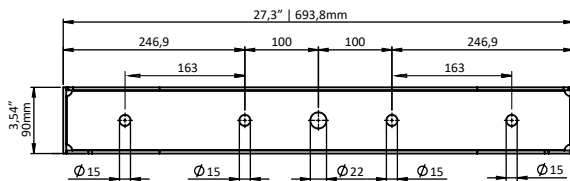


Scale: 1:15

Max. weight

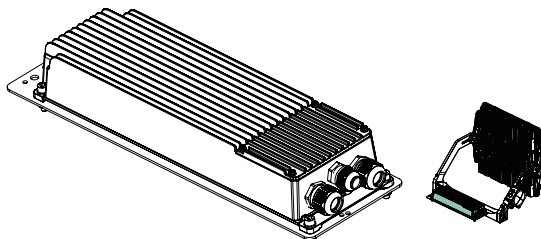
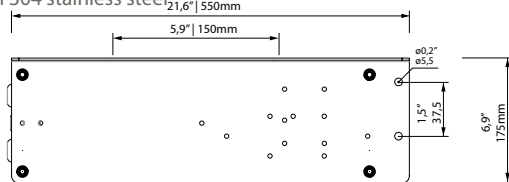
30 Kg (bracket+ floodlights)
Power supply (driver+driver plate): 7,5 Kg

FLOODLIGHTS FIXING



DRIVER PLATE

AISI 304 stainless steel

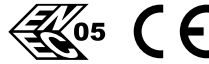


STANDARD

EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3

CONFORMITY | PROTECTION

Conformity



Salt spray test

ISO 9227



Vibration test passed

IEC 60068-2-6



Insulation classes



Protection classes



Photobiological safety



Classe 0 Exempt group IEC/TR62471

PLUS



OPTICAL FLEXIBILITY



LOW GLARE



CAM 2017 COMPLIANT



A++ IPEA MIN

LIGHTING FIXTURE FEATURES

General features

Power source:	200-400Vac tolerance +/-10%
Current supply:	Up to 1300mA
Max power:	1710W
Power Factor THD:	≥0.95 <10 % (At full load)
Expected life (Ta=25°):	> 60.000 h L90B10 @ LED 1200mA
Operational temperature (Ta):	T _{min} = -40°C T _{max} = +50°C
Storage temperature:	-40°C/+80°C
Overcharge protection:	Main surge immunity up to 10kV
Functions:	Current fixed Virtual midnight CLO DALI
Standard equipment:	Dislocable driver up to 300 meters

Materials

Lighting fixture:	Die cast aluminium EN1706
Bracket:	Made up: 2 die-cast aluminum arms 1 hot galvanized steel base
Optical system:	Optics in PMMA High Temperature
Frame:	Die cast aluminium EN1706 3 adjustments
Screen:	Ultraclear tempered glass Th. 4mm
Gaskets:	Removable silicon
Cable gland:	Polyamide PA66 PG16 Ø 14mm MAX IP 66
Screws and bolts:	AISI 304 stainless steel
Colors:	GMR light RAL 9016

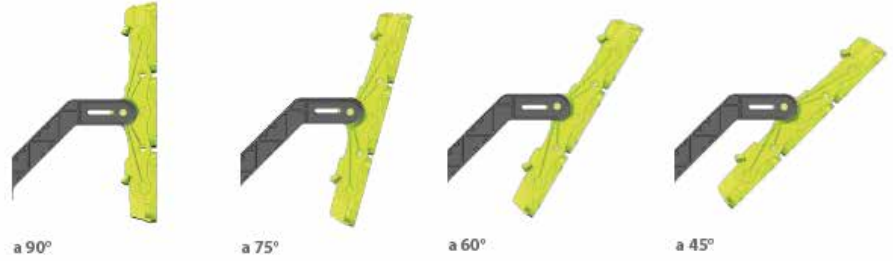
LED FEATURES

LED data 4.000k - 700mA:	331 lm/LED 167lm/W 25°C (Tj) ≤ 3 step MacAdam
Color temperature:	2.700 K 3.000 K 4.000 K CRI ≥ 70

TILT-BASED EXPOSURE

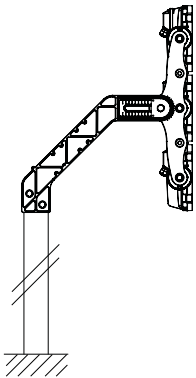
CX

Gradi	m ²
90°	0,47
75°	0,47
60°	0,39
45°	0,30

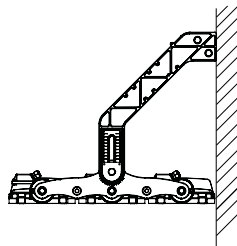


FIXING

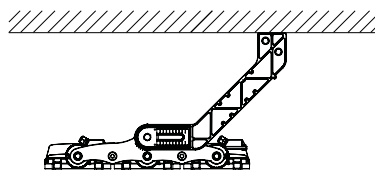
Pole top installation



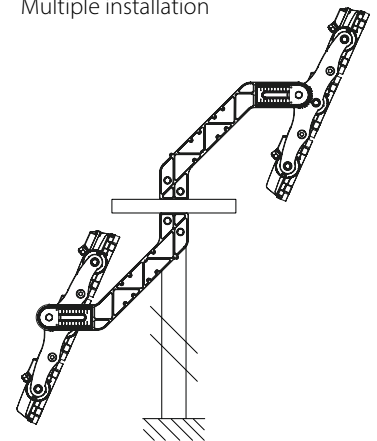
Wall installation



Surface installation

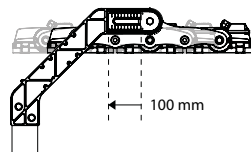


Multiple installation

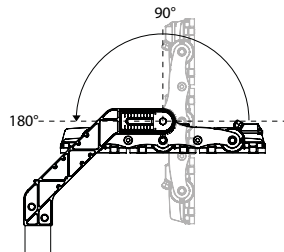


ADJUSTMENT DIAGRAMS

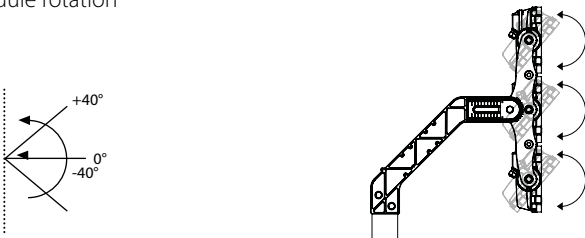
Longitudinal adjustment



Full projector rotation

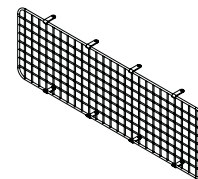


Module rotation



MECHANICAL EQUIPMENT:

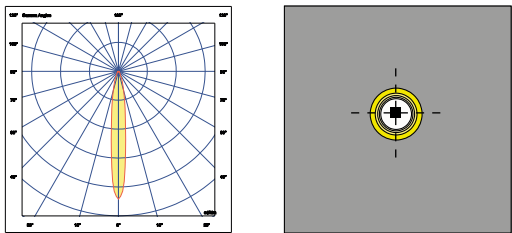
- Protection grille



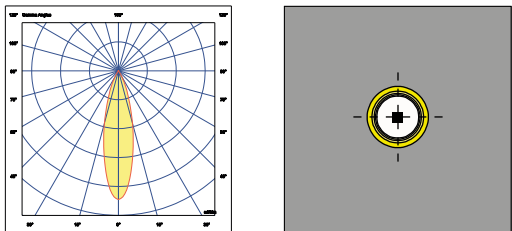
Woltron 03 Grandi Aree

Available optical system

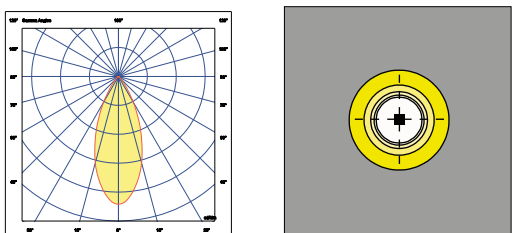
9A - 12°



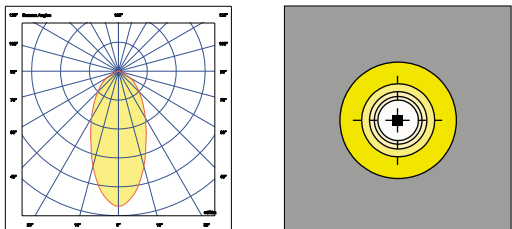
9B - 26°



9C - 42°



9D - 50°



Photometric data | Lighting fixture measured data maximum

2025.02

Measured photometric data refer to luminaires in the standard version, with typical optics, room temperature t_a equal to 25°C and inclination equal to 0°. Contact our offices for additional currents and consumption not shown in the data sheet.

GMR Enlights provides various optical configurations on request, up to a maximum of 1300mA(*).

Order code: W03_GLxx	(*) I [mA]	Flusso luminoso [lm]	Potenza [W]	Efficienza [lm/W]
GL99	1200	229440	1710	134

Below are the limitations based on the ambient temperatures for correct and safe use of the Woltron projector divided by geographical area. Please always refer to the table and discuss with the reference sales office when ordering.

AVERAGE TA IN THE HOTTEST MONTH (°C)							
America		Asia/Oceania		Middle East/Africa		Europe	
	ToP		ToP		ToP		ToP
Argentina	30	Australia	30	Saudi Arabia	45	Albania	30
Brazil	30	South Korea	30	Bahrain	40	Austria	25
Canada	25	Philippines	35	Egypt	35	Belgium	25
Chile	30	Hong Kong	35	Jordan	35	Bosnia Herzegovina	35
Colombia	20	India	35	Israel	30	Bulgaria	30
Ecuador	30	Iran	35	Kuwait	50	Cyprus	35
Mexico	30	Malaysia	35	Libanon	30	Croatia	30
Perù	30	New Zealand	25	Morocco	30	Denmark	20
Uruguay	35	Pakistan	35	Oman	40	Estonia	20
USA (Arizona)	40	Russia	25	Qatar	45	Finland	20
USA (New York)	30	Singapore	35	UAE (Abu Dhabi)	40	France (Lyon)	30
		Taiwan	35			France (Marseille)	30
		Vietnam	35			France (Parigi)	25
						Germany	25
						Greece	35
						Ireland	20
						Iceland	15
						Canary Islands	30
						Italy	30
						Lettonia	20
						Liechtenstein	25
						Lithuania	25
						Luxembourg	25
						Malta	35
						Moldavia	30
						North Macedonia	30
						Norway	20
						Netherlands	20
						Poland	25
						Portugal	30
						Czech Republic	25
						Romania	30
						Scotland	20
						Serbia	30
						Slovenia	30
						Spain (Madrid)	35
						Spain (Malaga)	30
						Spain (Barcelona)	35
						Sweden (Goteborg)	20
						Sweden (Borlänge)	25
						Switzerland	25
						Turkey (Ankara)	30
						Ukraine (Kiev)	25
						UK	20

WOLTRON							
Max Current for optical configuration	ToP20	ToP25	ToP30	ToP35	ToP40	ToP45	ToP50
GL75	1300	1300	1200	1200	1100	1000	900
GL87	1300	1200	1200	1100	1000	900	800
GL99	1200	1200	1100	1000	900	800	700

Functions

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Fixed current

The luminaire is preset at the factory with a fixed drive current from among the standard currents shown in the tables on page 3. Other currents can be set at the customer's request (custom).

Virtual midnight | Automatic dimming of luminous flux

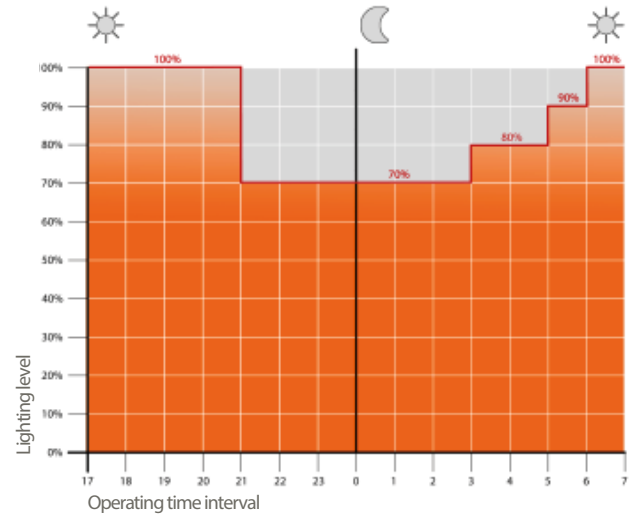
The driver is programmed to automatically dim the light output according to the time of day. As required by standards, the maximum output is concentrated in the first and last hours of the luminaire's ignition, which are statistically the busiest, and then decreases in the middle hours of the ignition period. The control takes place through a self-learning process of the luminaire, which determines the midpoint between the instant of switching on and the instant of switching off. This moment, called 'virtual midnight', is the reference point for applying the dimming according to the desired profile. Up to 5 dimming steps can be managed. The dimming then updates automatically, adapting to the length of the night throughout the year and always taking the preset parameters for the midpoint between switch-on and switch-off as a reference.

CLO | Luminous flux compensation

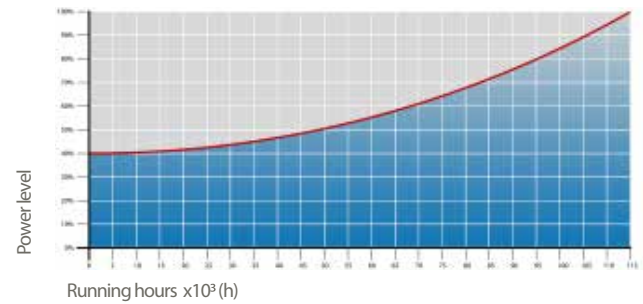
LEDs are subject to a performance decay process due to usage. Decay in performance can be compensated for by a gradual increase in drive current over the set lifetime, resulting in a gradual increase in luminous flux output that proportionally compensates for the naturally decayed luminous flux.

DALI2 | Control and monitoring system

Upon request, the luminaire can be equipped with a DALI2 communication interface. This protocol provides the possibility of controlling and monitoring the luminaire via the DALI control bus.



Example of 4-step adjustment with virtual midnight



CLO Light Flow Compensation

GMR ENLIGHTS works with cast iron, steel and aluminum. The materials are selected and processed to maximize performance and quality.

DIE-CAST ALUMINIUM

Protection of die-cast aluminium surfaces for lighting fixtures, tops, collars, brackets and pastorals

Lighting fixtures, brackets, pastoral, and die-cast accessories undergo a cycle of powder painting which creates a barrier against the corrosion of metal parts. Moreover this barrier makes the finished product comply with design specifications in terms of surface roughness, color and reflectance.

The cycle consists of the following steps:

- Micro sandblasting;
- Hot pickling bath in a zinc-based phosphodegreasing solution;
- Specific process for the preparation of surfaces before painting;
- Washing with water;
- Rinsing with demineralised water and subsequent drying;
- First bowder layer application followed by kiln baking at 180°;
- Final powder layer application using a High Durability product and final kiln roasting at 180°C (356°F).



Salt spray test

The top quality of such treatments is confirmed by salt spray tests performed in accordance with standard ISO 9227:2017 Neutral Salt Spray test (NSS).

The test was carried out for 8.000 hours at 35°C (95°F) and demonstrated through the report test released.



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