



WOLTRON¹

Woltron 01 Wide area

Technical data

rev. 2024.03

INSTALL

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

ACCESSIBILITY



Openable

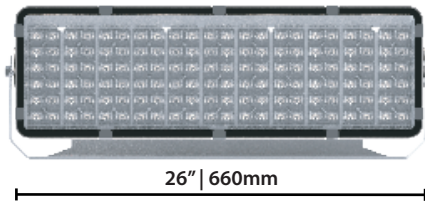
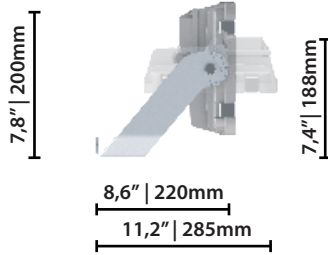
Openable fixture with basic tools
Replaceable internal components using basic tools.

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: 1:10

Max. weight

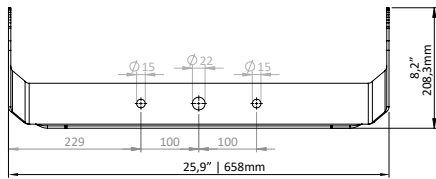
9,2 Kg (bracket+ floodlights)

Power supply (driver+driver plate): 5,3 Kg

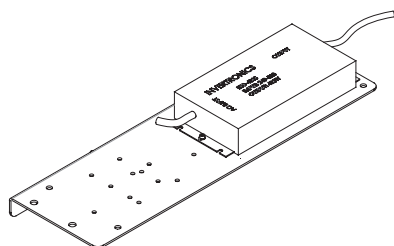
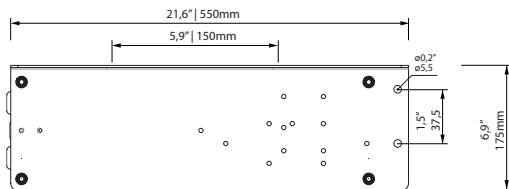
CXS

Front: 0,15 m²

FLOODLIGHTS FIXING



DRIVER PLATE



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



LIGHTING FIXTURE FEATURES

General features

Power source: 90-305V | tolerance +/-10% | 249-528V on request

Current supply: 350 mA | 525 mA | 700 mA | 1050 mA

Power: 480W

Power Factor | THD: ≥0.95 | <10 % (At full load)

Expected life (Ta=25°): > 100.000 h | L90B10 | @ LED 1050mA

Operational temperature (Ta): T_{min} = -40°C T_{max} = +50°C | LED @421W

Storage temperature: -40°C/+80°C

Overcharge protection: Main surge immunity up to 10kV

Standard functions: Current fixed |Virtual midnight |CLO

Standard equipment: Dislocable up to 50 meters, supplied with fixing plate wall mounted in galvanized steel and wire

Materials

Lighting fixture: Die cast aluminium | EN1706

Bracket: Hot galvanized steel

Optical system: Optics in PMMA

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

Fixture color: GMR light

LED FEATURES

LED data 4.000 K - 700mA: 340 lm/LED | 180 lm/W | 25°C [Tj] | ≤ 3 step MacAdam

Color temperature: 3.000K | 4.000 K | 5.700 K | CRI ≥ 70

OPTIONAL

Electrical equipment: - 380V driver
- additional IP connectors

Mechanical equipment: - Aiming device for precise pointing
- Pole-top adapter Ø60-76
- Protection grille
- Light shield

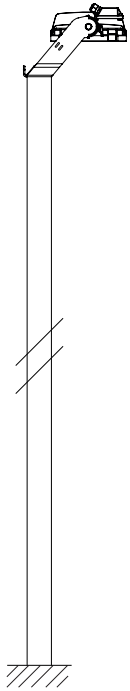
Optional functions: DALI | DMX

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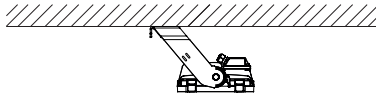
Fixing

FIXING TYPE

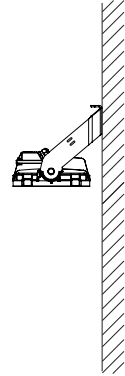
Pole-top fixing



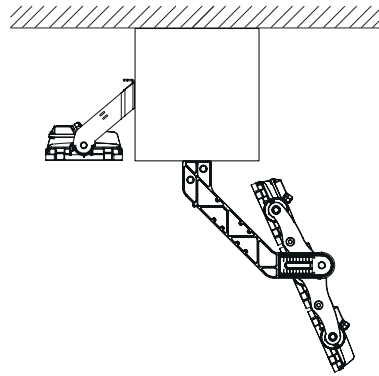
Surface mounting



Wall mounting

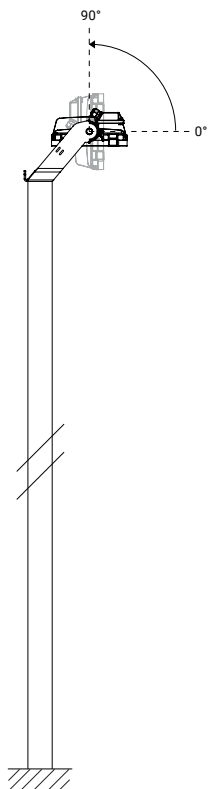


Multiple installation



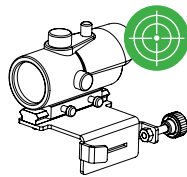
ADJUSTMENT DIAGRAMS

Complete floodlights adjustment

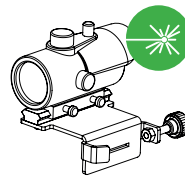


MECHANICAL OPTIONAL

Easily installable aiming device for precise pointing of the light.

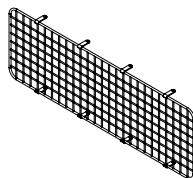


Optic

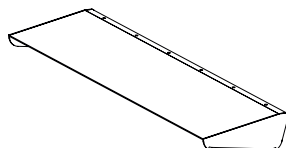


Laser

Protection grille to safeguard the floodlight's screen. It can be easily removed for cleaning.



Light shield: Vvisor to minimise upward light.

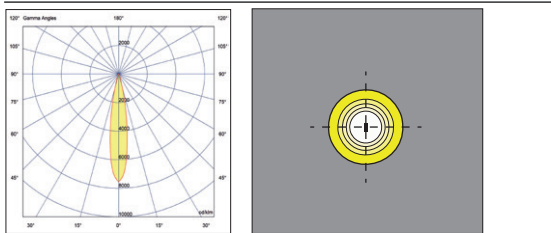


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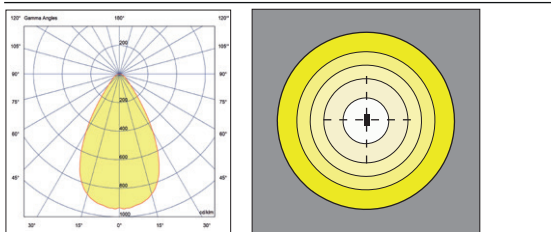
Available optical system

SYMMETRICAL DISTRIBUTION\\

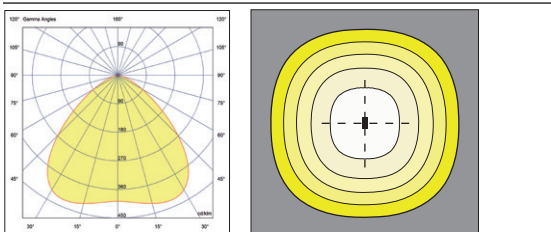
9A



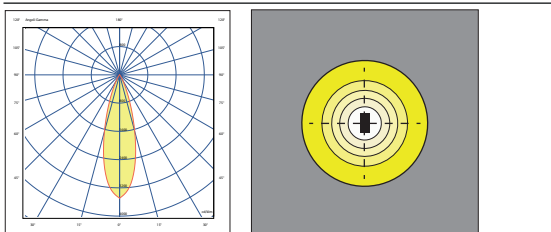
9B



9C

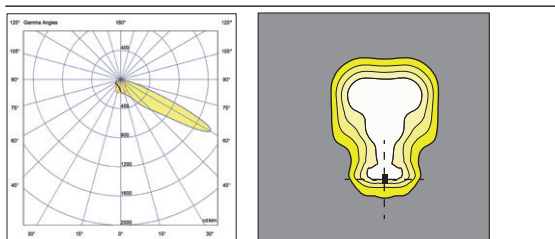


9E

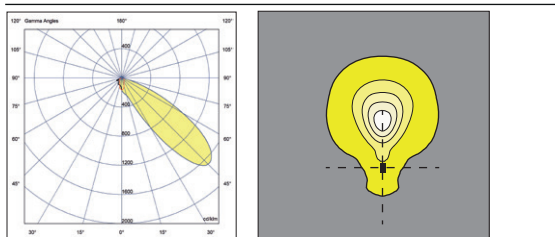


FLOODLIGHT DISTRIBUTION\\

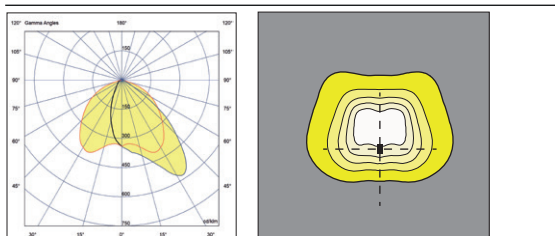
11A



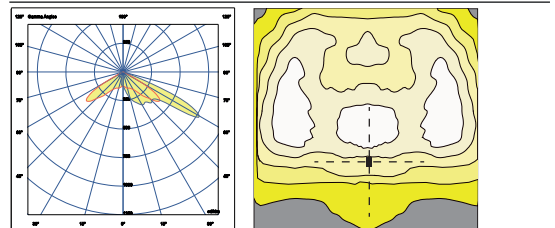
11B



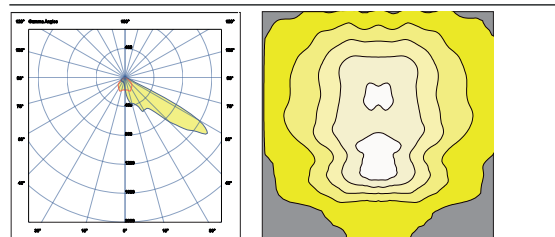
11C



11E



11F



Functions

Standard functionality

Fixed current

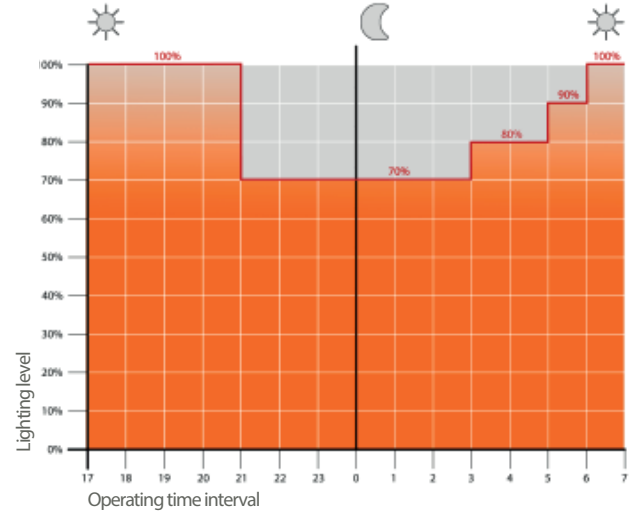
During production, the light fixture is pre-set with a fixed current amongst the standard settings that appear in the tables on page 3. Upon customer's request, it is also possible to set a specific current (custom setting).

Virtual Midnight | Automatic dimming

The driver is programmed to automatically dim the light output according to the time. As required by regulations, the maximum output is set during initial hours and towards the end of the light fixture's operating time interval. During these hours there is statistically more traffic. The light output is then dimmed during the central hours of the operating time interval. This management is achievable through a self-learning process of the device, that establishes the centre point of the time interval. This moment is called "virtual midnight" and it is the point that the dimming profile refers to in order to know when to reduce the light output. We can manage up to 8hrs of programming that evolve around the virtual midnight and up to 5 steps of dimming. This way the light output will adjust automatically, adapting throughout the year to the duration of the nighttime, by referring to the pre-set parameters based on the centre point of the operating time interval.

CLO Constant Lumen Output

LEDs over time are inevitably subject to performance depreciation. This light reduction may be compensated by gradually increasing the LED's current during its lifespan, this corresponds to a gradual increase of lumen output proportional to the amount that is naturally depreciated.



Example of 4-step adjustment with virtual midnight

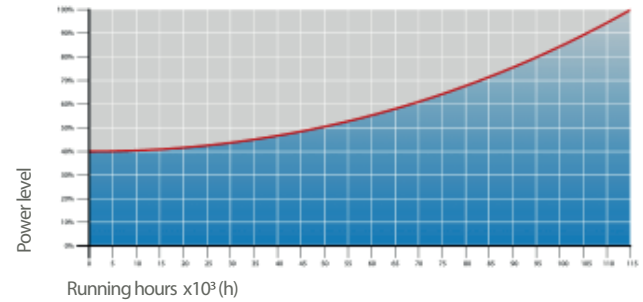
On request functionality

DALI SENSOR (D4i)

On request, the fixture can be equipped with a D4i certified power supply. This is the ideal solution for wireless sensors and/or controls. This system was developed to integrate various systems to address smart city requirements. Included is DALI2 protocol + auxiliary power (AUX) to supply power to devices and sensors. This system is usually required when using a Zhaga Lumawise socket.

DMX

This lighting control protocol allows to manage the dimming using a master device.



CLO Light Flow Compensation

Cycles de protection

GMR ENLIGHTS travaille avec la fonte, l'acier et l'aluminium. Les matériaux sont sélectionnés et traités pour maximiser les performances et la qualité.

ACIER

Protection des surfaces en acier galvanisé pour les mâts

La protection des éléments en acier galvanisé est obtenue par les étapes suivantes :

- Micro-sablage ;
- Application d'un apprêt époxy avec des phases successives de : Évaporation > Séchage > Refroidissement ;
- Application d'une laque acrylique avec des phases successives de : Évaporation > Séchage > Refroidissement ;
- Emballage après au moins 24 heures de séchage à température ambiante.

Protection des surfaces en acier galvanisé pour les consoles et crosses

La protection des éléments en acier galvanisé est obtenue par les étapes suivantes :

- Micro-sablage ;
- Décapage phosphorique à un pH compris entre 1,5 et 3 ;
- Rinçage à l'eau déminéralisée ;
- Application d'un apprêt époxy ;
- Cuisson au four ;
- Application de la couche finale époxy ;
- Cuisson au four de la couche finale époxy à 180° ;
- Refroidissement.

Protections des surfaces en fonte pour les socles

La protection des éléments en acier galvanisé est obtenue par les traitements suivants :

- Micro-grenaillage de surface ;
- Galvanisation par immersion avec un enduit de zinc monocomposant, avec des phases successives de :
- Évaporation > Séchage > Refroidissement ;
- Application d'un primaire epoxy micacé avec des phases successives de :
- Évaporation > Séchage > Refroidissement ;
- Application d'une laque acrylique avec des phases successives de : Évaporation > Séchage > Refroidissement ;
- Emballage après au moins 24 heures de séchage à température ambiante.

FONT

Protections des surfaces en fonte d'aluminium pour les luminaires, pointes, colliers, consoles et pastorales

Les luminaires, consoles, pastorales et accessoires moulés sous pression sont soumis à un cycle de peinture époxy, qui assure la protection des pièces métalliques contre la corrosion et rend l'aspect du produit fini conforme aux spécifications de conception, en termes de rugosité de surface, de couleur et de réflectance. Le cycle est structuré selon les étapes décrites ci-après :

- Micro-sablage ;
- Décapage à chaud dans une solution d'acide phosphorique dégraissant à base de zinc ;
- Procédé spécifique pour la préparation des surfaces avant peinture ;
- Lavage à l'eau ;
- Rinçage à l'eau déminéralisée et séchage ultérieur ;
- Application d'un apprêt époxy et cuisson ultérieure de l'apprêt dans un four à 180° ;
- Application d'une couche de finition époxy avec un produit Haute Durabilité et cuisson finale dans un four à 180°.

FONT D'ALUMINIUM



Test en brouillard salin

La haute qualité de ces traitements est confirmée par un test en brouillard salin, réalisé conformément à la norme ISO 9227:2017 Test de brouillard salin neutre (NSS).

Le test a été effectué pendant 8000 heures à 35°C et a été prouvé par le rapport d'essai publié.



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