

Ilumina ruas e vias rodoviárias, tornando as cidades mais belas e envolventes num convite irrecusável à sua descoberta.

The **Arquicity R1 Efficiency** is the most efficient, dynamic and flexible solution for street lighting.

With a strict focus on its performance, **R1 Efficiency** combines photometric excellence with a functional design. With a high luminous efficiency - up to 163 lm/W, this luminaire saves from the first moment. Whether it is a solution with a minimized investment - range **Base Efficiency**, where instant savings are checked on energy bills, or more efficient solutions - range **Ultra Efficiency**, with a fast payback.

COST EFFICIENCY

The **R1 Efficiency** is based on a Total Cost of Ownership (TCO) approach to measure the profits made over the equipment's lifetime, allowing an objective assessment and reasoned decision making.

The efficiency of LED technology associated with the right levels of light, results in a significant power consumption reduction and, therefore, reduced operating costs.

ENERGY EFFICIENCY

Arquicity R1 Efficiency is available in three efficiency ranges and in several photometrics adaptable to different types of roads, minimizing light waste and reducing carbon emissions.

ARQUILED ENGINEERING

- Power Consumption: 7 - 127 W
- Luminous Flux: 1,073 - 15,502 lm
- Luminous Efficiency: up to 163 lm/W

APPLICATION AREAS

- Roads and highways
- Rural, urban, residential and pedestrian areas
- Parks and squares
- Parking lots and outdoor areas

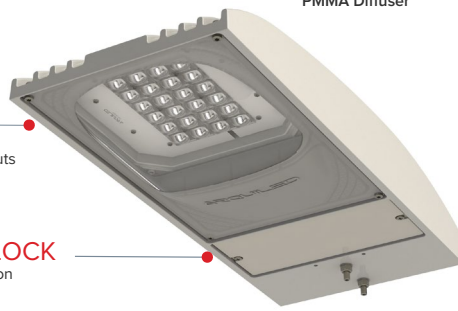


ARQUICITY R1 EFFICIENCY

PMMA Diffuser

OPTICAL BLOCK
Ultimate LED generation
Wide range of luminous flux outputs

ELECTRONIC BLOCK
Integrated thermal protection
Various control options



up to
163 lm/W
luminous efficiency

up to
80%
energy savings

BENEFITS

- Decreased energy consumption
- Several photometrics adaptable to different types of roads
- Integration of control systems, for additional savings
- Minimization of light waste
- Revitalizes areas during night period
- Increased public safety and crime prevention

IP66

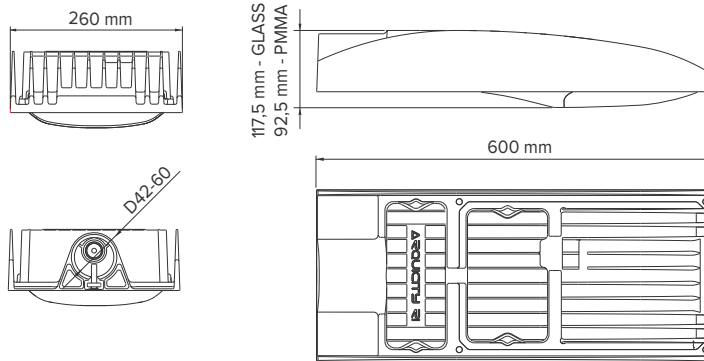
IK08

CLASS
I

CLASS
II

Ta
40°C

DIMENSIONS



PRODUCT MODELS

Product Models	R1 EFFICIENCY 10 20 30 40 50 60 70 80
Power Consumption⁽¹⁾	7 - 127 W (depending on configuration)
Luminous Flux⁽¹⁾	1,073 - 15,502 lm
Luminous Efficiency	Up to 163 lm/W

SPECIFICATIONS

Housing	Die-cast aluminum
Diffuser	Standard: High impact PMMA Optional: Glass
Product finishing	Polyester painting
Product color	RAL 7035*
Correlated Color Temperature (CCT)	3000K / 4000K*
Lumen maintenance at 100,000h	> 95% ⁽²⁾
Color Rendering Index (CRI)	≥ 70
Ingress protection (IEC – EN 60598)	IP66
Mechanical impacts protection (IEC – EN 62262)	IK08
Nominal voltage	230V / 50 - 60Hz*
Surge overvoltage protection (EN 61000-4-5)	4kV / 10kV
Electrical class	Class I / Class II
Mounting	Horizontal (standard) Vertical (optional)
Inside mounting diameter	Ø 42 - 60 mm

⁽¹⁾ The initial flux and power consumption of the luminaire are indicative values and valid for @tj=25°C. The real flux output of the luminaire depends on specific conditions, such as temperature and may vary with specific configurations. The values are subject to tolerances in technology.

⁽²⁾ In accordance with IES LM-80 - TM-21

* Other options available on request.

ARQUICITY R1 EFFICIENCY

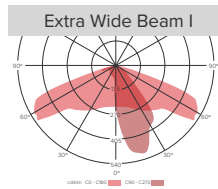
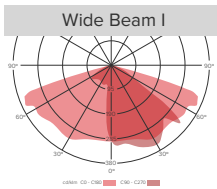
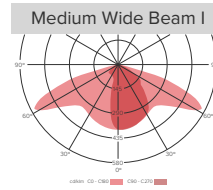
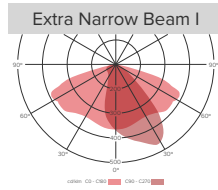
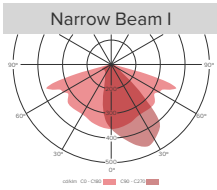
DESIGN

High ingress protection
High mechanical impacts protection



Glass Diffuser

OPTICAL DATA



IoT CONNECTIVITY SOLUTIONS

MANAGEMENT SYSTEM

ECCOS city

Arquiled's integrated management system for remote control of street lighting contributes significantly to reducing energy consumption, lowering maintenance costs, and improving the reliability of lighting infrastructure.

Through an easy and intuitive web-based platform, it is possible to control and manage devices such as luminaires, either individually or in groups of several light points, adapting energy saving profiles according to the needs of the project.

This integrated street lighting network management solution provides detailed information on the activity of the lighting system, facilitating and maximizing its monitoring and management.

The modular system can be progressively expanded according to the needs of the street lighting infrastructure.

- Remote lighting management to maximize energy savings
- Reduction in operating costs
- Individual or group programming
- Intuitive and customizable interface
- Agnostic and interoperable system
- Platform longevity and interoperability

LIGHTING CONTROL AND DIMMING

Arquiled offers a range of lighting control systems that are adaptable and scalable to the different needs of street lighting projects.

Each system is designed according to the infrastructure needs of municipalities and can include solutions integrated into the luminaires or external devices (Plug n' Play type) that can be easily attached to the luminaires.

ECCOS embedded

Internal communications module to control and dimming light through a management platform.

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