

rayLUX

URBAN PLUS



High Performance Street Lighting

The Urban Plus series is a range of White-Light LED illuminators optimised for street and road lighting applications. With a variety of wattages and optical distributions, Urban Plus is optimised for all ME/CE/S/P class applications. IP 66 rated and made from robust marine grade aluminium, its powerful elliptical beam pattern allows for elevated mounting heights up to 15m, and the widest column spacing. Applications include multiple classes of roads, pedestrian routes, recreational, and many other outdoor lighting purposes.

With an extremely low power consumption and high efficacy, Urban Plus delivers significant energy savings and outstanding optical performance. It provides even output White-Light illumination and excellent colour rendition, delivering increased safety and excellent visibility.

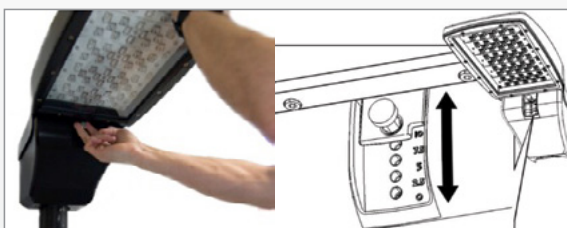
Urban Plus allows for a high speed installation, significantly reducing installation costs and time. It is provided in two lightweight parts which can be installed by one person - half the labour required for lifting and installing traditional and heavier street lighting. It is also supplied pre-wired with 11.2m of cable and plug, so that the electrician can wire in the system at ground level – further reducing labour and time. Urban Plus is highly flexible. It features a unique and tool free 'Bi-Directional' mounting system, to change the orientation of the head in only 3 seconds to accommodate for any horizontal or vertical pole installation with no bracket modification – saving further installation time and labour costs. Urban Plus also features an integrated 'Easy-Beam' adjustment system, allowing the user to alter the uplift of the illumination to accommodate different mounting locations. This allows for high speed and precise commissioning without having to demount or switch off the power – again saving installation time and labour costs.

All Urban Plus units feature a 'Direct Thermal Transfer' system. It uses the most direct heat channelling techniques with no thermal barriers for the quickest and most effective heat dissipation over the large surface area, keeping the product cooler and allowing the LEDs to deliver outstanding performance and consistency throughout the 50,000 hour operational life of the illuminator. The Urban Plus series has been designed with easy access to the light engine, making it future proof any upgradeable at any time. Urban Plus is available in 6 different optical distributions, with 13 different power options in 14, 28, 42, 56 and 70 LED arrangements.

Key Features

- Street Optimised Lighting for ME CE/S/P Class applications
- Direct Thermal Transfer System
- High Speed Installation with 2 lightweight parts
- 100,000 Hours LED Life at L70 (50,000 driver lifetime)
- Various Power Consumptions and Optical Distributions
- Quick Start
- Bi-Directional Mounting System
- Excellent Colour Rendition & Even Output Illumination
- Easy-Beam Adjustment System
- Surge Protection up to 10KV
- High Efficacy- up to 106 lm/W
- UMSUG coding is available for Urban Plus illuminators

'Easy-Beam' Adjustment System

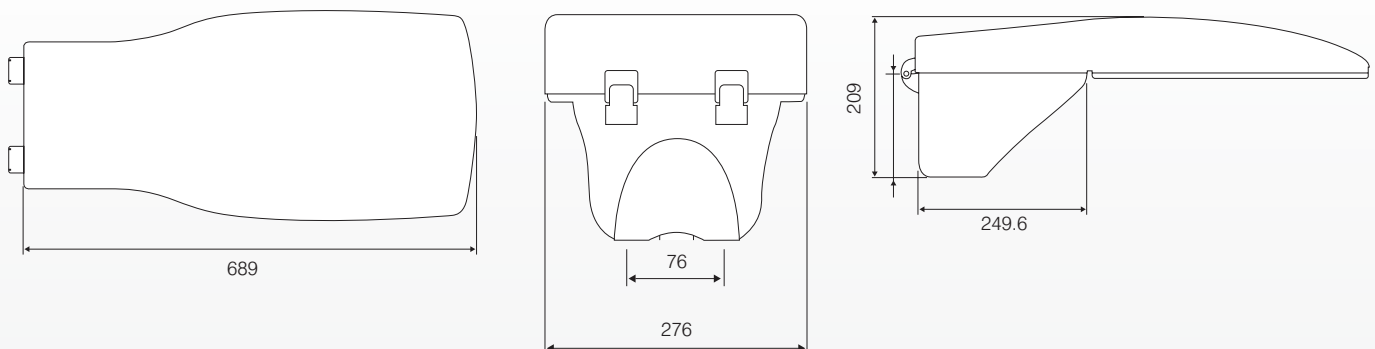


'Bi- Directional' Mounting System



Features	Benefits
Street optimised lighting for me/ce/s/p applications	The powerful elliptical beam pattern allows for elevated mounting heights up to 15m, and wide column spacing needed for high performance street and road lighting.
Various power consumptions and optical distributions	Urban Plus offers a variety of different power consumptions and optical distributions meaning that there is a solution for any ME/CE/S/P class street lighting application
High speed installation	Provided in two lightweight parts each under 6kg, the housing can be lifted by one person - half the labour required compared to traditional and heavier street lighting. Also supplied pre-wired with 11m of cable and plug for wiring at ground level -significantly reduces installation time and costs.
Bi-directional mounting system	The unique Bi-Directional mounting system allows the head to be switched from horizontal to vertical mount in 3 seconds – tool free adjustment with no bracket modification, further reduces installation time and costs.
Easy-beam adjustment system	The Easy Beam Adjustments system allows the installer to alter the uplift of the illumination to accommodate different mounting locations and provide quick and easy commissioning, without having to demount or switch off power – high speed and precise.
Direct thermal transfer system- optimum level	Urban Plus features an integrated heat sink in the hood of the unit for the most direct thermal transfer. It draws the heat away from the LEDs and releases it straight out into the atmosphere with no barriers to pass. The quick and direct heat dissipation allows the LEDs to deliver outstanding performance and consistency throughout the operational life of the illuminator.

Product Dimensions



Technical Specifications

Number of LEDs	14				28		42			56		70	
	11	16	21	26	31	47	48	65	79	90	120	154	170
Power Consumption (W)													
Total Luminous Flux (kilolumens)*	1.1	1.7	2.1	2.6	3.3	4.6	5.1	6.4	7.6	8.9	11.9	14.9	16.4
Efficacy (lm/w)	100	106	100	100	106	98	106	98	96	99	99	97	96

*Produced in accordance with IES LM 79

Illuminator

CCT	4000K
CRI	≥70
S/P Ratio	1.2
Input Voltage	90-305 Vac
Input Frequency	45-63 Hz
Power Factor at 230V 50 Hz	≥0.9
Operating Temperature	-40° to 45°
Light Source	SMT LED's
Optics	Optimised Lens Array
Wavelength	White-Light
Product Weight	11.5 kg max
Dimensions	667 x 276 x 210mm (26" x11"x 8" approx)
Cable Length	11.2m(36.7 feet)
Aerodynamic Resistance	End (max) 0.02 Front(max)0.09
Environmental	IP66
Impact Resistance	Glass 1K08 Polycarbonate 1K10
LED lifetime L70 at F10	100,000 hours at ambient of 25°C in accordance with IES LM 80
Driver lifetime	50,000 hours at ambient of 25°C
Design Standard	Designed and manufactured to comply with EN60598
Total Luminous Flux & Efficacy	See table above
Materials	PMMA lenses Polycarbonate or Glass Cover IMS Board Silicon Gasket

Bracketry

RAPID DEPLOYMENT BRACKETRY INCLUDED

Post top and side entry mounting on Ø 60-76 mm poles

Optional Features

0-10v Dimming

Sensor Control

Constant Light Output

Automatic LED failure compensation system

Control Options

Photocell (NEMA or Miniature)

Standalone Dimming(DALI/0-10v)

CMS Compatible

Optional Accessories

Spigot Adapter

PECU

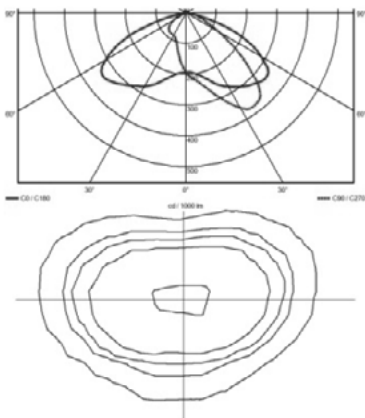
Glare Shield

Glass Cover

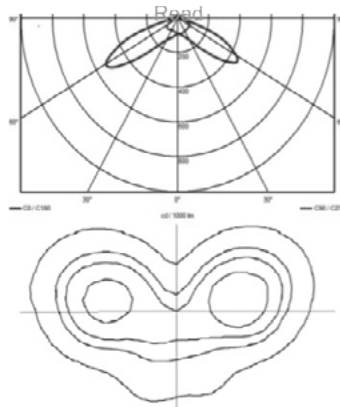
Paint Colour (RAL Number)

Available Beam Patterns

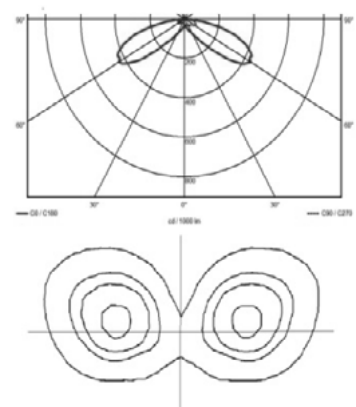
STD Optic – Urban Road
Add '-STD' to part code



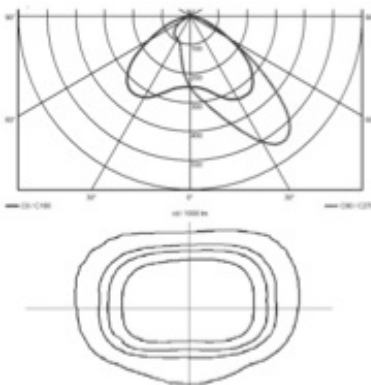
WD3 Optic – Residential Road
Add '-WD3' to part code



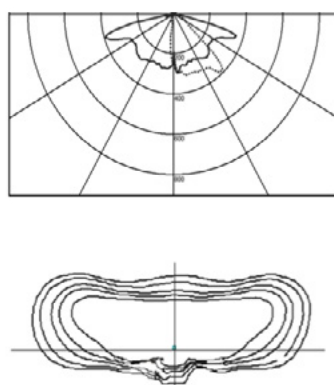
WD Optic – Residential Road
Add '-WD' to part code



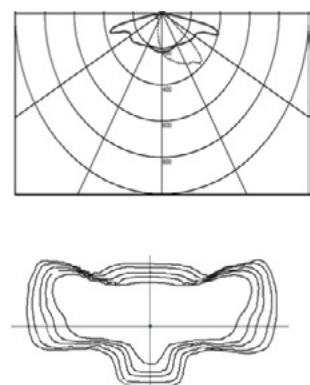
NW Optic – Area
Add '-NW' to part code



ME Optic – M Class Road
Add '-ME' to part code



ME2 Optic – M Class Road
Add '-ME2' to part code



Build Your Own Part Code

The Urban Plus range offers a range of lighting solutions in various LED configurations, power consumptions and optical distributions.

- 1) Start Part Code with UBPL
- 2) Select No of LEDs
- 3) Select Power Consumption

Number of LEDs	14	28	42	56	70
Power Consumption	11, 16, 21, 26	31, 47	48, 65, 79	90	120, 154, 170

4) Select Beam Pattern

There are 6 available beam patterns suitable for a variety of road classes. Add your chosen beam pattern to the end of part code. E.g. **UBPL-70-120-STD**

Contact Raytec for details on which beam patterns are available per model

Energy Savings

Urban Plus has been designed to replace conventional lighting solutions in a wide range of applications including ME/CE/S/P class of roads. Below are details of the potential savings and Return on Investment for 3 different scenarios.

Current Solution	LED Solution	Power Consumption	Energy Saving	
35W SOX	Urban Plus 14	21W	37W	64%
135W SOX	Urban Plus 42	79W	110W	58%
70W SON	Urban Plus 28	31W	59W	66%
250W SON	Urban Plus 70	154W	144W	48%
60W CPT	Urban Plus 28	31W	39W	56%

Urban Plus Up Close

