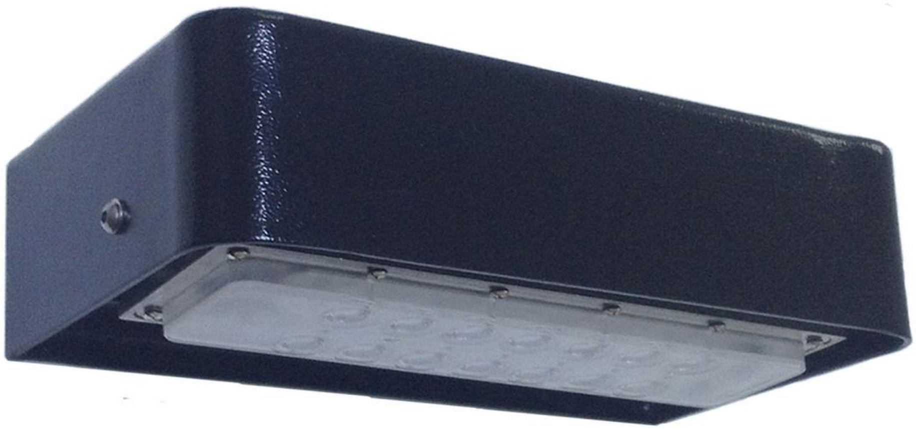
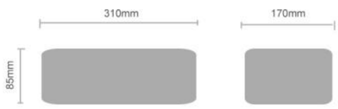

i-LED Light pack
Forward projection
from a forward thinking light fixture

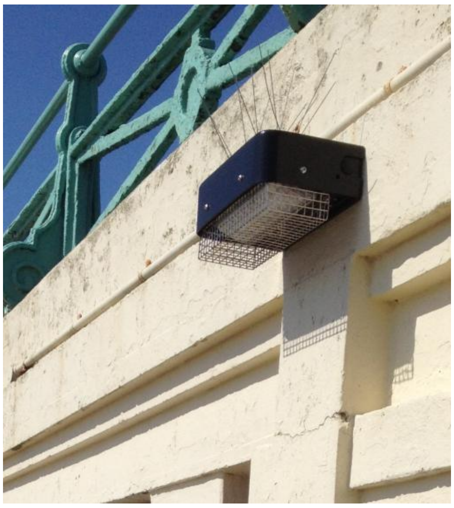
Ark
Lighting.co

i-LED Lightpack

An attractive, robust yet discreet wall mounted LED luminaire for applications where a tough environment calls for substantial energy and carbon reductions. Using our unique optical system the light distribution can be tailored to provide maximum spacings between products giving maximum energy savings over the project.Suitable for a wide variety of applications and an ideal replacement for existing fixtures or for new installations.








V1


V2

Optional Wire Guard - Part code: i-LEDWG

PRODUCT FEATURES
– Anti-glare hood, minium glare light distribution
– Instant white light
– Standard colour temperature 40000K or 5000K (other colour options available)
– Long life Cree or Philips Lumileds LED's
– Suitable for mounting heights of between 3 and 8 meters
– Adjustable/directional LED modules
– Able to achieve large reductions in energy costs and carbon emissions
– Non corrosive construction ideal for hostile environments including cold stores
– IP67 with remote or on board power supply
– Installation: body is mounted directly to suitable flat surface
– Bespoke units also available on request

TECHNICAL SPECIFICATION

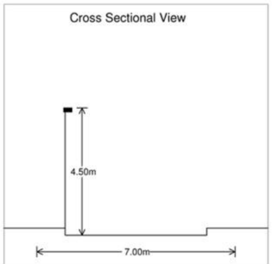
BODY	Steel finished in black powder coat
Module BODY LM6	Pressure die cast aluminium
Module COVER	High impact UV stabilised Polycarbonate
ENERGY USAGE	33Watts @ 700mA - lower running curents are available with reduced lumen output
LIGHT OUTPUT	2743 Lumens
POWER SUPPLY	Supplied with IP67 power supply integrally housed with in the base (remote PSU available)
FIXING	Surface mounted to removeable (concealed) mounting bracket

DESCRIPTION	LAMP	Wt.(kg)	PART No.
i-LED Lightpack			
With on board power supply IP67			
23° direct narrow beam	LED	4.60	i-LED.23.7
50° direct medium beam	LED	4.60	i-LED.50.7
Type II short forward throw asymmetric road optic	LED	4.60	i-LED.TII.7
Type III medium forward throw road optic	LED	4.60	i-LED.TIII.7
Type IV Long forward throw road optic	LED	4.60	i-LED.TIV.7
Type V Square distribution	LED	4.60	i-LED.TV.7

DESCRIPTION	LAMP	Wt.(kg)	PART No.
i-LED Lightpack			
With remote power supply IP67			
23° direct narrow beam	LED	4.30	i-LED.23.7
50° direct medium beam	LED	4.30	i-LED.50.7
Type II short forward throw asymmetric road optic	LED	4.30	i-LED.TII.7
Type III medium forward throw road optic	LED	4.30	i-LED.TIII.7
Type IV Long forward throw road optic	LED	4.30	i-LED.TIV.7
Type V Square distribution	LED	4.30	i-LED.TV.7

Roadway Report Summary

Layout



Road Data

Calculation Grid	EN13201 Illuminance
Width (m)	7.00
No. of Lanes	2
Road Surface	R2
Q0	0.07
Left Footpath(m)	1.00
Right Footpath(m)	1.00

Main Lighting

Column Data

Configuration	Single Sided Left
Spacing (m)	30.00
Height (m)	4.50
Tilt (deg)	0.00
Setback (m)	0.00
Outreach (m)	0.10
Overhang (m)	0.10

Luminaire Data

Supplier	
Type	TYPE II Medium Light Module XPG 700mA R4 CW
Lamp(s)	LED
Lamp Flux (klm)	2.74
File Name	TypeII-Medium-1Module -XPG R4-700mA.IES
Maintenance Factor	0.89
Lum. Int. Class	G3

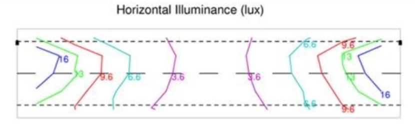
Results

Main

Complies with S3

Eav	7.98
Emin	2.07
Emax	20.21
Emin/Emax	0.10
Emin/Eav	0.26

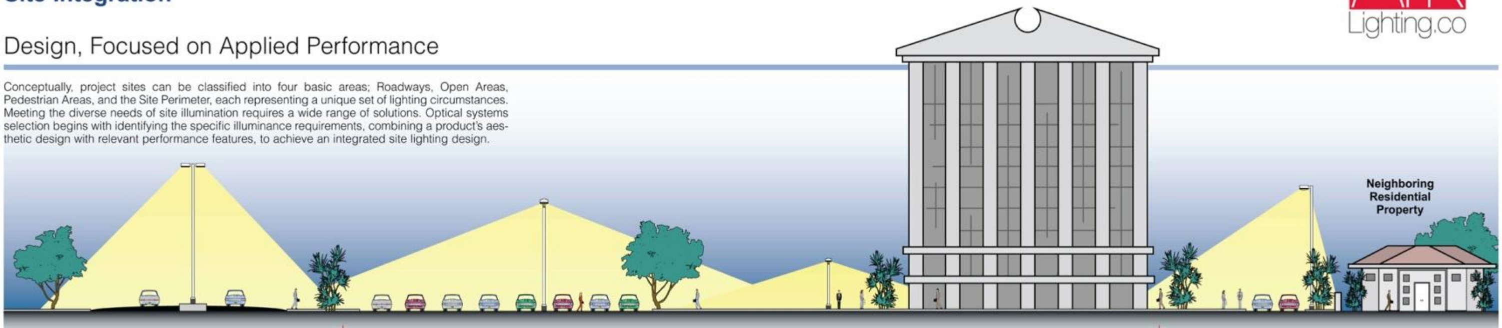
Horizontal Illuminance (lux)



Site Integration

Design, Focused on Applied Performance

Conceptually, project sites can be classified into four basic areas; Roadways, Open Areas, Pedestrian Areas, and the Site Perimeter, each representing a unique set of lighting circumstances. Meeting the diverse needs of site illumination requires a wide range of solutions. Optical systems selection begins with identifying the specific illuminance requirements, combining a product's aesthetic design with relevant performance features, to achieve an integrated site lighting design.



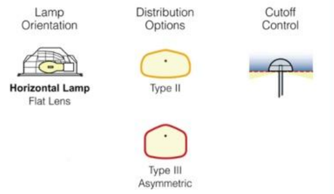
Roadways

Roadways require narrow perpendicular and wide lateral beam spreads. This facilitates wide pole spacings, excellent uniformity, and control of glare.

Luminaire selection criteria includes performance, consideration of maintenance, lamp choices influenced by utility interests, and the ability to remain in service for long periods with minimal attention.

Optical designs must include an array of distributions in order to illuminate varied roadway widths, traffic patterns and to support traffic flow / organization.

Desirable Optical Features



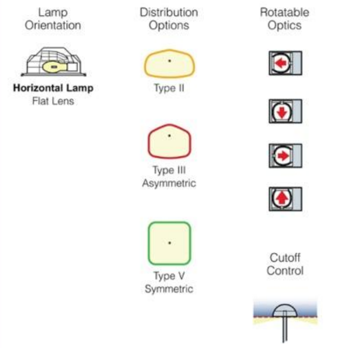
Open Areas

Open Areas require careful consideration of illuminance requirements, uniformity, and brightness control.

These areas are subject to scrutiny relevant to the safety and security of site occupants and the interface between vehicle and pedestrian traffic. Parking areas and connecting walkways are a potential source of litigation and liability for the project owner, requiring accurate prediction of illumination levels and dependable performance.

Illumination levels, uniformity, and glare must also be controlled to optimize visibility. Maximized luminaire spacings produce an economical installation.

Desirable Optical Features



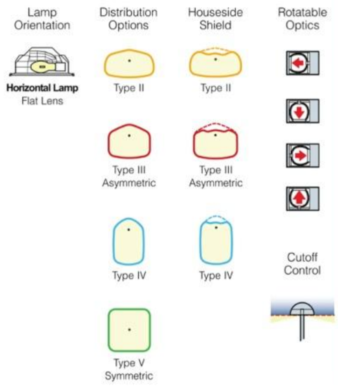
Pedestrian Areas

The transition between the surrounding site and the building itself defines the Pedestrian Area. Plazas, Courtyards, and Pathways require the widest range of optical solutions. These areas combine the concerns of Open Areas, with a heightened concern for integration of luminaire appearance with site architecture.

Illumination of irregularly shaped spaces, and a need to control stray light, requires optical diversity. Fixture placement may also be influenced by aesthetic concerns.

Luminaires in this area are highly visible, requiring attention to finish quality and detail. Design components shared with other area luminaires enhance integration of the entire site.

Desirable Optical Features



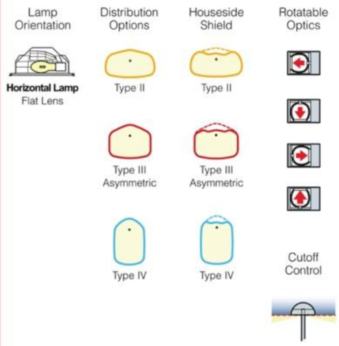
Site Perimeter

The Site Perimeter may include requirements to control illumination onto adjacent properties.

Light trespass ordinances, and courtesy to neighboring property occupants, requires tight control of light emitted behind the luminaire.

Efficient design satisfies some of this demand, while cutoff optics provide an additional level of control. Houseside shields may also be required to provide even tighter control by trimming the distribution pattern. These concerns must be satisfied, without effecting overall system performance.

Desirable Optical Features



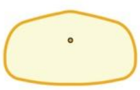
Application

Distribution Pattern Uses

Estimating Maximum Spacing

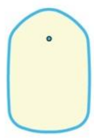
Ideally, all light energy produced would be focused into desired "lighted" zones with no wasted energy being directed elsewhere. This would require an infinite array of distributions, with the ability to tune them to every site condition.

While this is not realistic, the combination of careful luminaire selection, mounting height, and luminaire placement, can produce very efficient designs, using just four basic distribution patterns.



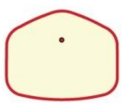
Type II

Type II distributions are well suited for narrow areas, running parallel to the luminaire's reference line, such as roadways, paths and driveways.



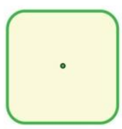
Type IV

Type IV distributions produce a deep forward throw, well suited for perimeter lighting.



Type III - Horizontal Lamp
Asymmetric - Vertical Lamp

Type III and Asymmetric distributions are well suited for site / area perimeters, wide roadways, and open areas.



Type V Square - Horizontal Lamp
Symmetric Square - Vertical Lamp

Type V and Symmetric distributions produce a wide, symmetrical pattern with excellent uniformity for large, open areas.

The example below (figure 14.1) shows how the combination of four basic distribution patterns are used to direct light energy into the lighted zones.

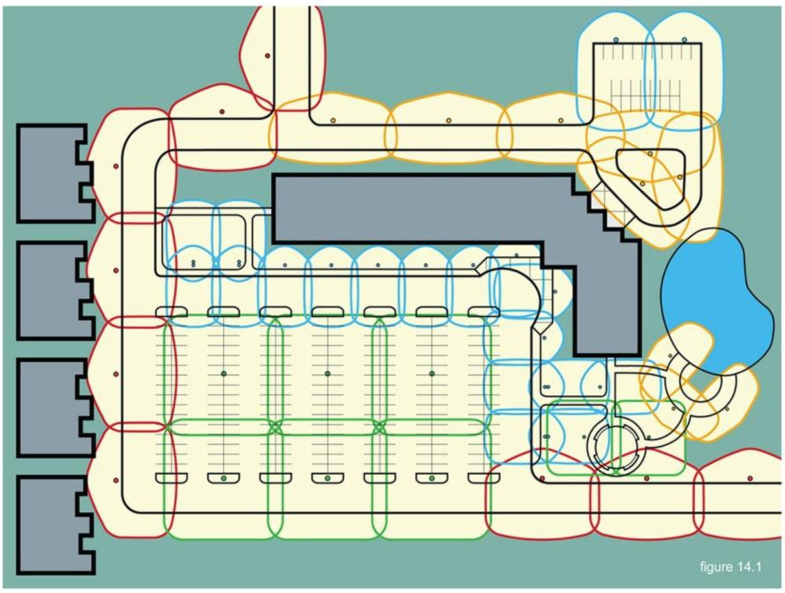


figure 14.1


Ice Creams

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