SOCIAL HOUSING LIGHTING

MADE IN THE UK

TL **Thorlux Lighting**

LIGHTING FOR SOCIAL HOUSING

The lighting of social housing, whether it be high rise blocks or homes for the elderly, poses numerous challenges. The lighting should provide enough illumination to ensure a safe and secure environment whilst being robust enough to withstand vandalism where necessary.

For housing providers reducing the energy load has to be a key goal in any project, the use of LED luminaires combined with lighting controls can offer substantial savings, particularly in communal areas where the occupancy levels are low.
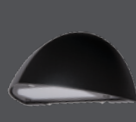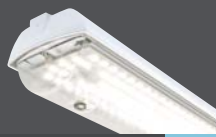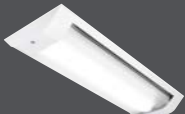
Social housing providers also have to adhere to very strict emergency regulations which not only require emergency lighting to be functional at all times, but also necessitate monthly and yearly functional and duration tests on all emergency luminaires. Under the Regulatory Reform (Fire Safety) Order failure to provide a compliant system and failure to regularly test and maintain it can result in prosecution for the employer or building owner who may face fines and imprisonment if convicted.

Thorlux Lighting

CONTENTS

General Information

Luminaire Range

INTRODUCTION

Thorlux, for over 80 years, has manufactured increasingly sophisticated luminaires in the Birmingham area and supplied social housing providers for over 50 years.

During the last 20 years, the company has focused on high technology products, including the development of its first electronic energy-saving lighting control system in the mid-1990s. Huge investment in design and testing facilities in Worcestershire has now put Thorlux at the forefront of its market sector.

Thorlux luminaires are subject to stringent quality control, as demonstrated by the company's BS EN ISO 9001:2015 (Quality management systems) accreditation. Additionally, accreditation of Thorlux to BS EN ISO 14001:2004 (Environmental management systems) gives the customer assurance that the company manufactures its products in the most environmentally friendly manner.

TL **Thorlux Lighting**

LATEST LED TECHNOLOGY

Thorlux is able to exploit recent advances in LED technology to help meet customer demand for energy-efficient solutions. The company's considerable technical expertise and its ability to invest position it to maximise the opportunities offered by LED technology.

Backed by the group's modern facilities, Thorlux designers and developers have worked over recent years to create LED luminaires to meet customers' operational and aesthetic requirements. Thorlux has made a huge investment in LED technology, including in house circuit-board design, software development, thermal modelling and optical lens design.

To increase the range and performance of its LED luminaires, Thorlux both designs dedicated LED luminaires from scratch, to optimise optical and thermal performance, and adapts existing conventional products to offer an LED option.

Unlike a traditional light source, a bare LED is a very intense point-source of light which has high glare and emits light in one direction only; therefore optical design is very important. Thorlux takes different approaches to optical design, according to the desired outcome.

Almost all LED products benefit from bespoke LED printed circuit boards (PCBs) designed by the Thorlux electronics team. These PCBs ensure that Thorlux luminaires deliver maximum performance.

LEDs, as with lamps, can sit behind a controller or diffuser which will help to spread the light over a wider area, providing a uniform light

Having multiple LEDs on a luminaire provides the option of having individual optics for each LED
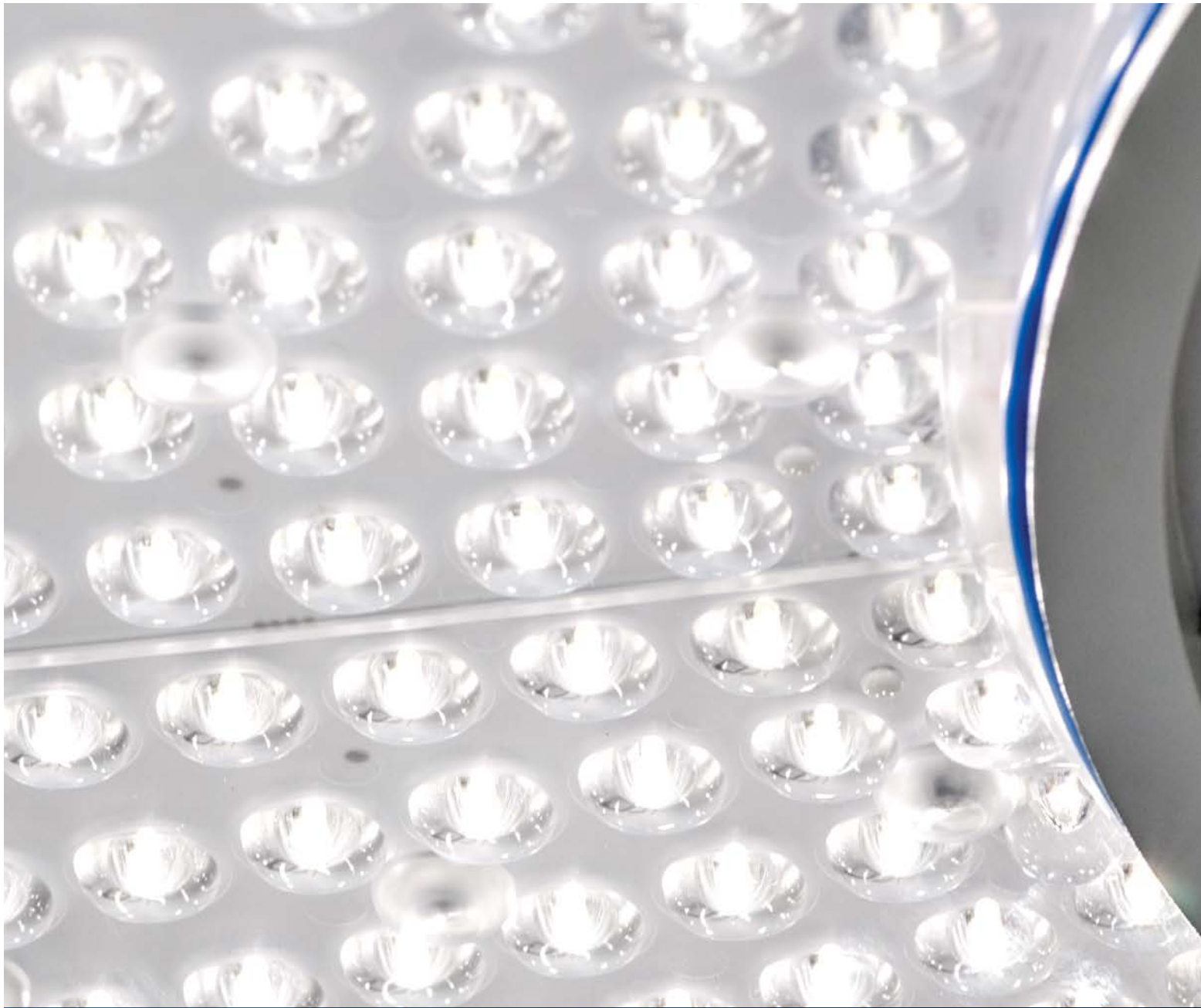
LED GUIDE

Thorlux designs, manufactures and tests the vast majority of its own LED electronic systems including the lenses for precise optical control. By carefully considering end of life scenarios, for example, LED failures, solder joint failures and isolated component failures Thorlux ensures new designs have on-going system reliability even when individual components fail.

The company history of over 80 years, running into thousands of years of combined employee experience, ensures every aspect of lighting a space is carefully considered - a requirement all the more important as LED lifetimes are now expected to reach 50,000 to 100,000 hours or even more!

Thorlux Lighting

LEDs have developed significantly now exceeding the performance of even the best fluorescent solutions. Volume increases have reduced costs, making them the ideal choice in many more applications. Not all LED solutions are the same so Thorlux has introduced a simple marking code into its literature to identify the key performance characteristics of its LED based luminaires - an example is shown to the right.

LED characteristics are shown on web catalogue download pages and show the best performance expected within the range. Please check photometric data for specific model types which may be less than the optimum figure tabulated.

EXAMPLE:

LED CHARACTERISTICS

CRI	**80+**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**100K - L70/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>92%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**148.7**

For LED characteristics explanation see
www.thorlux.com/led-guide

CRI

Indicates colour rendering index (colour quality). A minimum of 80 CRI is recommended for working areas.

COLOUR TEMPERATURE

The approximate colour temperature of the light source. There is a tolerance for a specific chosen colour temperature. More accurate information, for specialist applications, is available upon request.

RATED LIFE (HOURS)

These figures illustrate the target life expectancy of the LED (for example 60K = 60,000 hour life expectancy) which is a combination of light output degradation (L70 = when the light output has reduced to 70% of its initial level, L80 = 80%) and lamp performance expectation (B10 = when 10% of the LEDs have failed to meet operational expectations).

PROTECTION

Some LED PCBs comprise a number of LEDs connected in series or in a series/parallel group. If the system is unprotected failure of one LED will cause others in the group to extinguish. If the system is protected with **LED PROTECT** (PLEDs) then failure of a single LED will not affect others in the group. If the system is protected with patented **LUX GUARD**, other LEDs in close proximity will brighten slightly to compensate. For more information on LED failure protection see pages **8** & **9**.

DRIVER EFFICIENCY

This figure illustrates the LED driver efficiency.

REPLACEABLE

Indicates whether the LED PCB or module is replaceable should a failure occur.

POWER FACTOR

Indicates LED driver power factor.

LL/CW

Luminaire lumens per circuit watt, the luminaire efficiency including ALL optical and gear losses. It is very important to compare this figure correctly - other manufacturers may state LED efficiency, for example, which does not include all losses within the system and could therefore be a misleading, much higher figure.

This figure is always the "best in class" for the luminaire range, for specific ratings for each available luminaire please refer to the photometric data or contact the Thorlux Technical Services department.

THIS BROCHURE PRESENTS THE VERY LATEST THORLUX LED PRODUCT INNOVATIONS USING TWO DIFFERENT TYPES OF LED TECHNOLOGY:

WHITE HIGH POWER LEDS

Ideal where high power and excellent optical control is required. Each LED typically operates between 1W and 10W. Most often used in long life outdoor type products. For example, see **Starbeam**.

MEDIUM POWER LEDS

Ideal for high efficiency luminaires with a well diffused appearance. Typically used in large quantities in each luminaire with individual LEDs operating between 0.2W and 0.5W. For example, **Dot** and **Sky-Dome**.

LED SYSTEM PROTECTION

LEDs are a very efficient light source and are resilient to many conditions that can be detrimental to the lifetime of traditional lamps.

For example, LEDs are largely unaffected by frequent switching, shock or vibration. However, LEDs or their solder joints can infrequently fail. In such circumstances it would be inconvenient if the failure caused significant loss of light, or if the luminaire extinguished completely.

In many luminaires LEDs are linked in series whereby a current flows through each LED in turn. Should an LED or solder joint fail, a whole row of LEDs, or in fact all LEDs, may extinguish. Thorlux has designed specific protective measures to prevent such a condition.

There are two methods of LED system protection used by Thorlux

1   LED PROTECT
For high power LEDs

LED **PROTECT**

2   LUX GUARD
For medium power LEDs

LUX **GUARD**

LED PROTECT

Certain high lumen output Thorlux luminaires use high power LEDs, for example the Starbeam floodlight.

In this type of luminaire LEDs are connected in a series string and failure of an LED or its solder joint can cause an open circuit and all LEDs in the string to extinguish. Thorlux adds PLED protectors to the majority of these luminaire types (see LED Characteristics data on each product page).

PLED protectors provide an electronic alternative path for the current to flow in the case of LED or solder joint failure ensuring all remaining LEDs stay illuminated at the correct power. This is an invaluable feature guaranteeing that a luminaire continues to provide light, even in the case of nuisance LED failures, and reduces the maintenance costs of a project.

LED **PROTECT**

CONVENTIONAL CIRCUIT

0%
0%

0%
0%

FAILED LED
0%

0%
0%

0%
0%

0% OUTPUT

CIRCUIT

PLED 100%   PLED 100%
PLED 100%   PLED 100%
PLED FAILED LED   PLED 100%
PLED 100%   PLED 100%
PLED 100%   PLED 100%

90% OUTPUT

TL **Thorlux Lighting**
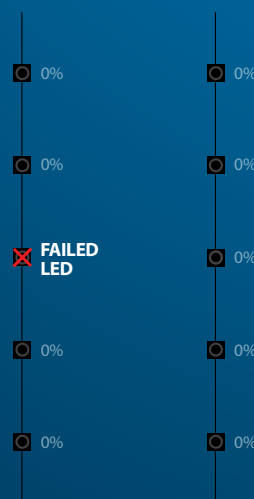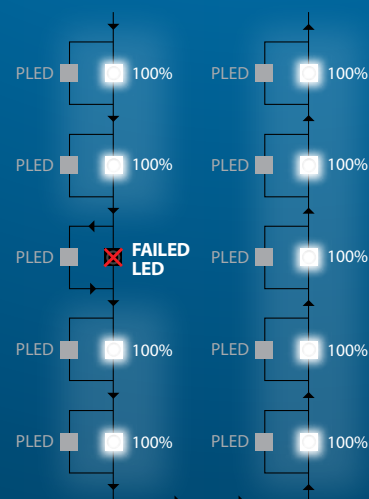
LUX GUARD

LUX GUARD by Thorlux, is a patented current sharing PCB and circuit design philosophy. If an LED fails then its current is shared via neighbouring circuits, with each LED's brightness increasing slightly to compensate. LUX GUARD ensures that a luminaire continues to provide its designed lumen performance, even in the case of nuisance LED failures, and reduces the maintenance costs of a project.

LUX GUARD

91% OUTPUT

CONVENTIONAL CIRCUIT

5 IN SERIES **11** IN PARALLEL

PARALLEL

SERIES

0%
0%
FAILED LED
0%
0%

LUX GUARD CIRCUIT

5 IN SERIES **11** IN PARALLEL

100% OUTPUT

PARALLEL

SERIES

+10% +10% +10% **FAILED LED** +10% +10% +10% +10% +10% +10% +10%

Smart Scan
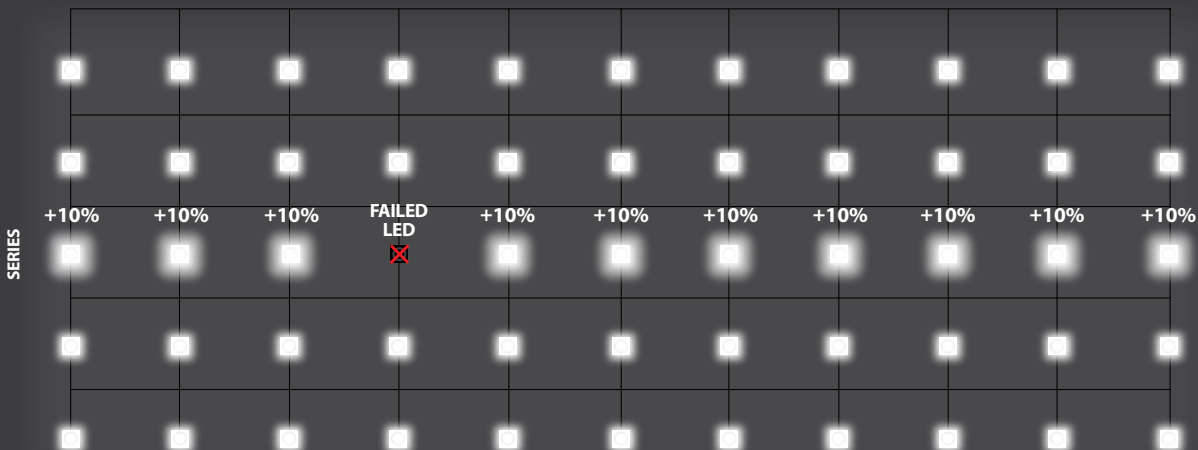
SMART ENERGY SAVING CONTROLS

The Thorlux Smart System exploits the latest 'Digital Technology' to provide a simple, effective method of lighting control which minimises energy consumption whilst retaining high levels of user comfort.

A discrete sensor integral to the luminaire monitors ambient light and presence, controlling output to the correct level, and ensuring that the area is only illuminated when occupied.

Individual Thorlux Smart luminaires may be linked using a 'Motionline' two wire low voltage bus allowing luminaires to communicate within a group. Upgrading to SmartScan provides the option of full wireless Motionline control between Smart luminaires eliminating the need for additional cabling.

Savings by the installation of automatic lighting control systems often exceed 70%.

MAINTAINED ILLUMINANCE

Smart luminaires maintain the desired lighting level throughout the maintenance cycle by automatically increasing LED output as the light source ages, avoiding over lighting new installations.

DAYLIGHT DIMMING

When daylight enters an area the sensors will take this light into account and gradually dim the LEDs, saving energy whilst maintaining the required light level.

MOVEMENT DETECTION

Presence sensors in all luminaires ensure excellent detection coverage, so that Smart luminaires switch on when movement is detected and stay on whilst the space is being used.

FULL STATUS MONITORING OF YOUR LUMINAIRES FROM THE GROUND

The functional status and energy performance of SmartScan luminaires can be monitored from anywhere via the SmartScan website (SmartScan Gateway required), or from the ground using the SmartScan Programmer.

The website provides an easy to read visual reference highlighting the following:

- Control gear status monitoring
- Light source functionality
- Thermal performance (the luminaire is operating within correct temperature limits)
- Average energy used by the luminaire
- Total hours powered
- Full energy performance monitoring

www.thorlux.com/smartscan

Thorlux Lighting

EMERGENCY

Platform 1

SmartScan emergency luminaires are stand-alone. Each luminaire will self-test to the schedule specified in BS EN 50172:2004. The operational status of each luminaire is displayed by the status LED and operational status information can be retrieved using the SmartScan Programmer. Manual tests can also be initiated at each luminaire using the SmartScan Programmer. The user, legally, will need to inspect each luminaire at prescribed intervals to monitor test status and manually log the results

Platform 2

The emergency luminaires wirelessly communicate with each other and the Gateway through the mesh network. The Gateway transmits emergency lighting status reports to the SmartScan web server and the user can then employ their chosen device to access the status reports.

REDUCED INSTALLATION COSTS

The SmartScan Gateway and compatible Smart, Smart External and emergency luminaires simply require a mains connection. All communication cables are replaced by the mesh network so there is no need for data cables, additional power supplies, control modules.

SIMPLE AND FAST COMMISSIONING

Using a single robust hand held infra-red programmer all luminaire types can be very quickly and easily commissioned, and all operational settings can be fine tuned in the future if desired.

AUTOMATED EMERGENCY TEST RECORDS

SmartScan emergency saves the significant costs associated with the monthly and annual testing of emergency luminaires, and stores accurate records on secure off site servers which can be accessed when required. This, therefore, avoids possible prosecution and conviction which may occur if manual testing and records are not maintained correctly.
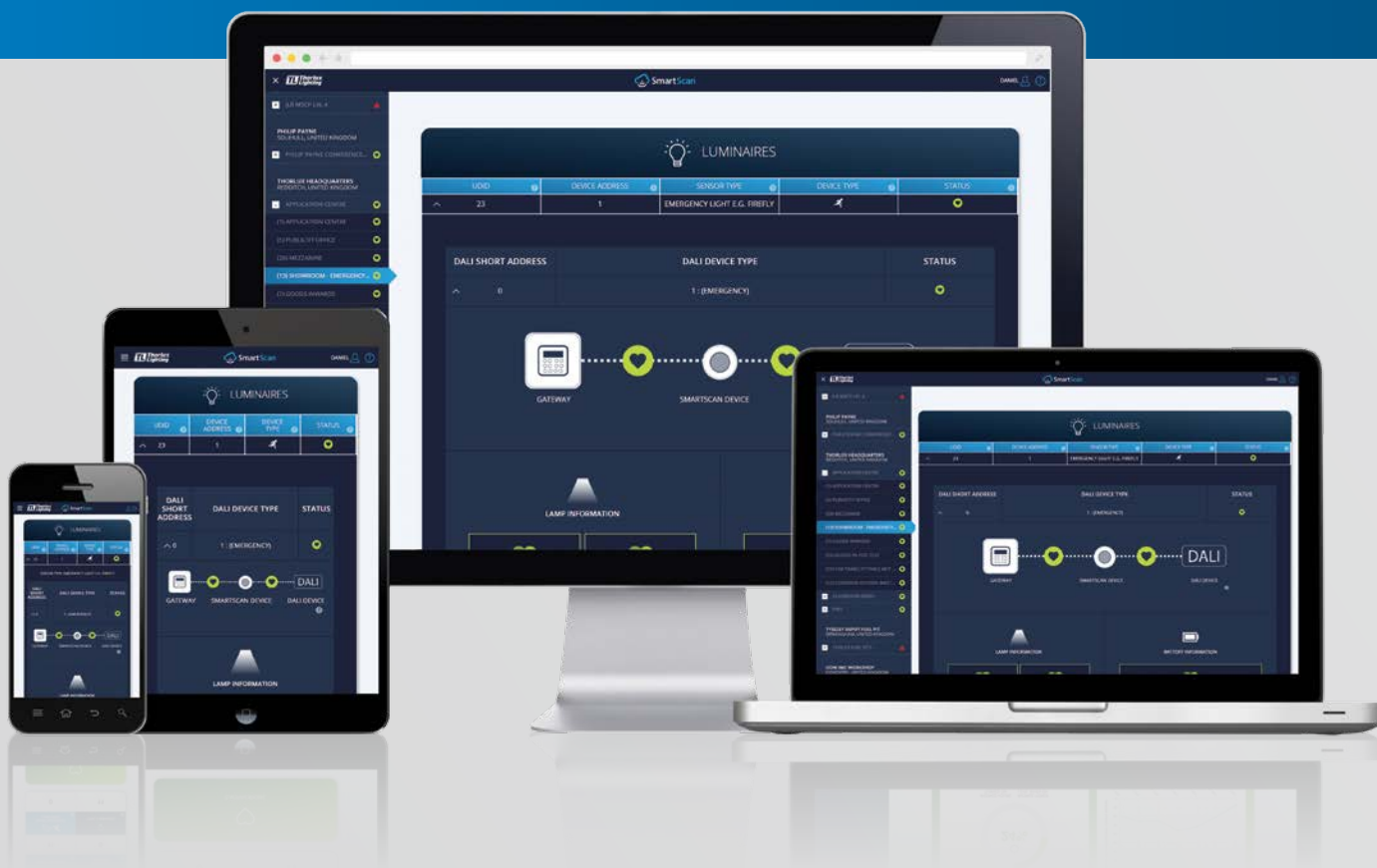
CARBON OFFSETTING

Thorlux operates a carbon offsetting scheme which involves planting trees on 215 acres of Monmouthshire, Wales. This accredited scheme carbon offsets all manufacturing and distribution processes undertaken by the group companies. Thorlux has to date planted 149,849 trees *(Spring 2018)*.

Woodland Carbon CO_2de

MADE IN THE UK

MADE IN THE UK

Thorlux Lighting, the largest company in the FW Thorpe Plc group, is proud that around **97%** of its products are manufactured in the UK.

The FW Thorpe Plc group employs over 700 people.

TL Thorlux Lighting

COMMISSIONING

Most Thorlux products can be used straight from the box with their default settings. However, to operate most effectively products need to be configured to the conditions on site. Thorlux has a team of skilled commissioning engineers who can visit your site and configure your lighting installation upon request.

Commissioning:

- Identifies the end-user's requirements
- Fine tunes the luminaire settings
- Minimises energy consumption
- Increases savings for the end user

EMERGENCY LIGHTING

BS 5266-1:2016 Emergency lighting. Code of practice for the emergency lighting of premises is the detailed guidance on the application and practice of emergency lighting. The standard's recommendations have been drawn up to encourage uniformity of application, based on providing adequate safety to people in the event that normal lighting is interrupted.

The persons responsible for control of the buildings have a legal obligation to ensure compliance. Legislation covers all aspects of emergency lighting provision, including:

- **Design**
- **Installation**
- **Regular Testing:** All emergency luminaires must be given a short test monthly and a full duration test once a year. Comprehensive test records must be maintained.
- **Maintenance:** Failures must be replaced quickly. Maintenance records must also be maintained.

Under the Regulatory Reform (Fire Safety) Order failure to provide a compliant system and failure to regularly test and maintain it can result in prosecution for the employer or building owner who may face fines and imprisonment if convicted.

Thorlux Warranty

A genuine warranty with genuine value

TL Thorlux Lighting

The Thorlux range of luminaires is designed, manufactured and distributed by Thorlux Lighting, a division of the FW Thorpe Plc group. FW Thorpe is listed on the London Stock Exchange. See the corporate website at **www.fwthorpe.co.uk**

Thorlux luminaires have been manufactured continuously in the UK since 1936, the year Frederick William Thorpe founded the company.

In 2016-17, the revenue of FW Thorpe Plc was £105m, of which £69m was generated by Thorlux Lighting luminaires and control systems.

The Thorlux product warranty offered to customers covers a period of 5 years, with no get-out clauses concerning the number of burning hours or maintenance requirements, and no convoluted registration process.

5 YEAR WARRANTY

This warranty is enhanced by the following key factors:
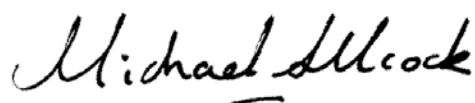
- FW Thorpe has a robust balance sheet, with net assets in excess of £100m (2017)
- More than £40m in cash reserves provide the ability for Thorlux to support any future warranty liabilities
- FW Thorpe has a stable ownership structure, with over 60% of the business owned by founding family members and management
- Investment in product research and development is continual - £1.7m invested per annum
- Thorlux product failure rates are consistently below 0.1%, with over 2,000 luminaires individually tested and shipped every day

- Critical components are supplied by market-leading global suppliers
- A dedicated team of our own employed local service engineers respond to any customer issues quickly and effectively, not only in the UK but overseas too
- Products are manufactured in the UK therefore spares are readily available

TL Thorlux Lighting

As Thorlux is a listed company, stringent conditions require it to be fully audited by a third party. In recent years this has been PricewaterhouseCoopers LLP (PwC), one of the top four audit and advisory firms globally. Auditors of listed companies follow rigorous international guidelines, ensuring that the financial details such companies publish (such as those on page 14) are accurate and can be relied upon.

Thorlux must prove that it will be able to pay any claims made according to its warranty conditions during the warranty period. Provision is made in each year's accounts, effectively putting aside profit from current orders for use in the future if required.

This is a key aspect of being a listed company that other smaller businesses are not required, and maybe not capable of doing. Thorlux customers should be reassured that a Thorlux warranty means something: at Thorlux, we are capable of meeting our obligations.

Some other companies offer long warranties but do not have the financial assets to withstand a sizeable warranty claim. Thorlux encourages customers to consider this scenario when purchasing other companies' products with extended warranty offers.

Michael Allcock
Managing Director

A genuine warranty with genuine value

Please refer to **www.thorlux.co.uk/terms** for full details of our terms and conditions of sale.

PRISMALETTE **PRO**

PERFORMANCE GUIDE

Photometric Performance -
16W LED ceiling mounted version

SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
2.4m mounting height -		
3m ctrs	94 lux	0.73
4m ctrs	79 lux	0.70
5m ctrs	67 lux	0.71
6m ctrs	57 lux	0.74
9m ctrs	39 lux	0.68
10m ctrs	36 lux	0.57
12m ctrs	30 lux	0.40
15m ctrs	24 lux	0.25

FIGURES ARE BASED ON INITIAL LUMENS

Spacing

2.4m

2m
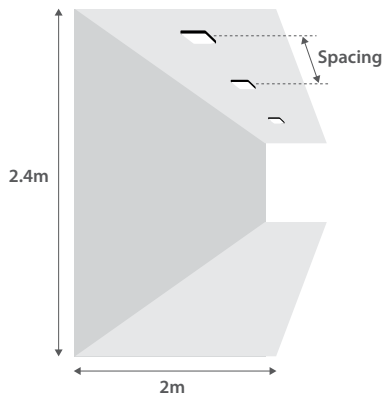
e.g. At 2.4m mounting height and 9m centres: 39 lux average horizontal illuminance at ground level

ACCESSORIES

DESCRIPTION	CAT. No.
Bezel for semi-recessed mounting *(black finish)*	**PS 11876B**
Bezel for semi-recessed mounting *(white finish)*	**PS 11876W**
Adaptor for cornice mounting *(black finish)*	**PS 18886B**
Adaptor for cornice mounting *(white finish)*	**PS 18886W**
Key for tamper-resistant screws	**KEY 7979**

Cornice mounting

PHOTOMETRIC GUIDE

AXIAL
70
70
140
210
280
350
TRANSVERSE
CANDELAS PER 1000 LUMENS
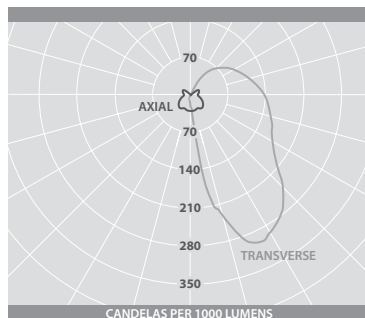
WALL MOUNTED VERSION
Luminaire Lumen Output:
12W = 1370lm

AXIAL
200
300
400
500
TRANSVERSE
CANDELAS PER 1000 LUMENS
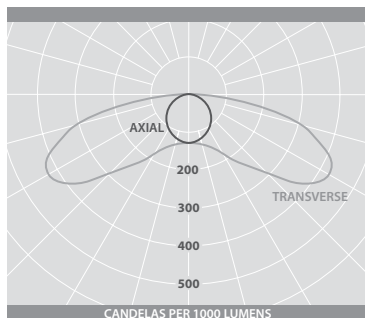
CEILING MOUNTED VERSION
Luminaire Lumen Output:
16W = 1815lm

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell ▲◆	**PC**	**PS 17312LPC**
Microwave presence detector	**MD**	**PS 17313MD**

▲ Wall mounted version only
◆ Not suitable for semi-recessed or cornice mounting

Easy upgrade module
2D to LED in 80 seconds!

2D to LED retro-fit video
**www.thorlux.com/videos/
prismalette-pro-retro-fit**

RANGE

	LED	CAT. No.	APPROX. kg
WALL VERSION	12W	**PS 17318L**	1.2
CEILING VERSION	16W	**PS 17319L**	1.2

CIRCUIT TYPE - L - non-dimming

EMERGENCY VERSION - prefix catalogue number with:
EPS - Emergency / **TPS** - AutoTest / **WPS** - SmartScan
e.g. **EPS 17318L** etc.
Add 0.3kg to weights listed
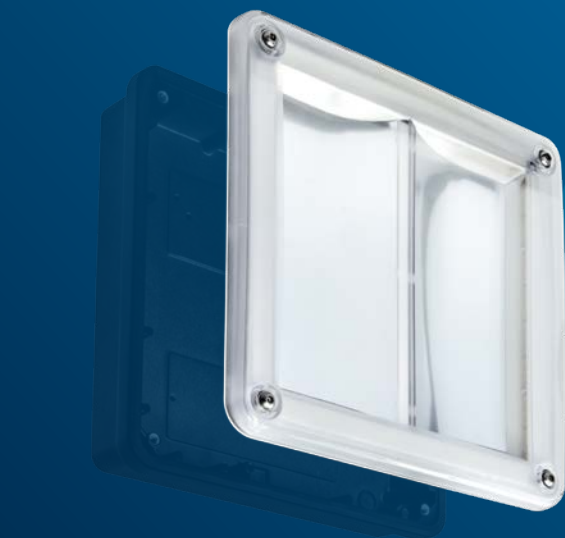
Pre-assembled retro-fit module
complete with polycarbonate cover

TL Thorlux Lighting

LED VANDAL-RESISTANT LUMINAIRES

IP66 IK10 CE LED

SPECIFICATION

- Strong high pressure die-cast LM2 aluminium body. Textured black, full polyester powder finish as standard
- Long life silicone sponge gasket ensuring IP66 rating
- SmartScan emergency version with wireless test status reporting
- White finish option
- 3mm fire-retardant polycarbonate cover
- Tamper-resistant cover screws as standard
- Two distribution versions optimised for wall or ceiling mounting
- Microwave presence detector option with stand-by light level feature
- Bezel trim for semi-recessed mounting
- Fitted with 4000K LEDs

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

	LED	CAT. No.	APPROX. kg
WALL VERSION	12W	**PS 17312L**	2.7
CEILING VERSION	16W	**PS 17313L**	2.7

WHITE OPTION - add suffix **W** - White   e.g. **PS 17312LW** etc.

CIRCUIT TYPE - **L** - non-dimming

EMERGENCY VERSION - prefix catalogue number with:
EPS - Emergency / **TPS** - AutoTest / **WPS** - SmartScan
e.g. **WPS 17312L** etc.
Add 0.3kg to weights listed

LED CHARACTERISTICS

CRI	**80+**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**88K - L70/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>80%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**95.5**

For LED characteristics explanation see page 6
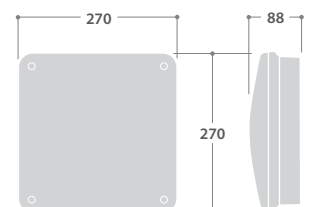
DIMENSIONS

270   88
270

Fixing points: 4 x Spot faces on 205mm centres (drill as required) and 1 central BESA box fixing

PRISMALETTE **PRO**

Wall mounted version

Security beam

The Prismalette PRO produces a security beam providing an illumination boost that is closer to the doorway than from a conventional luminaire. This improves facial recognition of doorstep callers, increasing the feeling of security for residents.

Higher illuminance provides safer entry and exit to the property.

Security beam

| Illumination boost at doorway ✓ | Increased vertical illumination ✓ | Easier identification of doorstep callers ✓ |

Limited forward throw

Reducing wasted and obtrusive light.

High angle wide distribution

Providing excellent vertical illumination for improved facial recognition.

End view

Side view
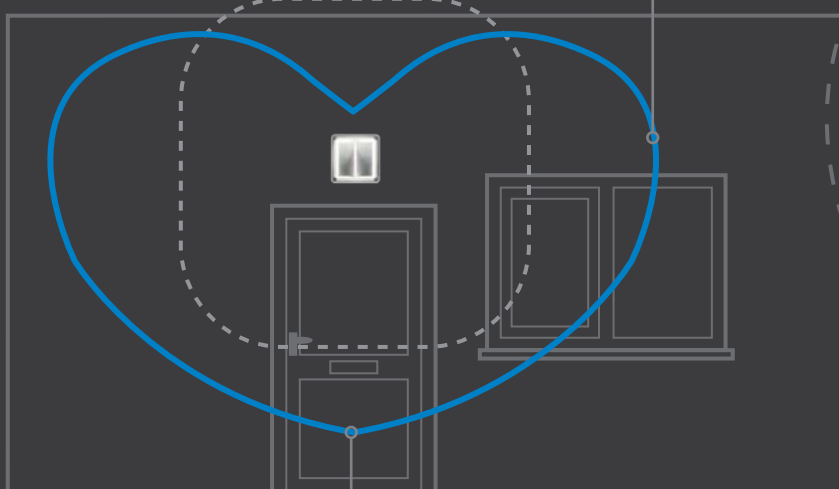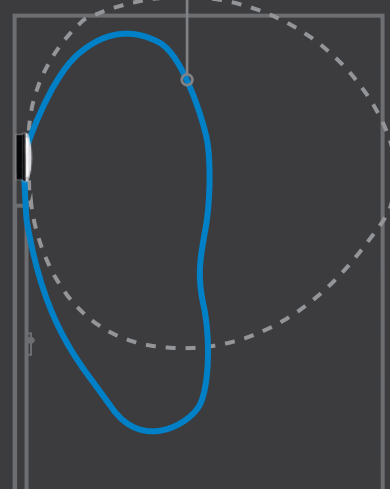
── Prismalette PRO ---- Conventional alternative

Security beam

Providing a punch of light directly below and in front of the luminaire. This is particularly useful when mounting near doorways.

TL *Thorlux Lighting*

Ceiling mounted version

Excellent vertical illumination

When ceiling mounted the light distribution of the Prismalette PRO provides excellent vertical illumination along corridors and walkways whilst also increasing the spacing of luminaires and improving uniformity. The high cut-off angle ensures more light is projected at head height so that residents can easily see and recognise the faces of others.

Uniform corridor illumination ✓	Wide spacings ✓	Increased vertical illumination ✓

Narrow distribution

Perfect for lighting corridors and walkways where wider uncontrolled distributions can cause obtrusive light.
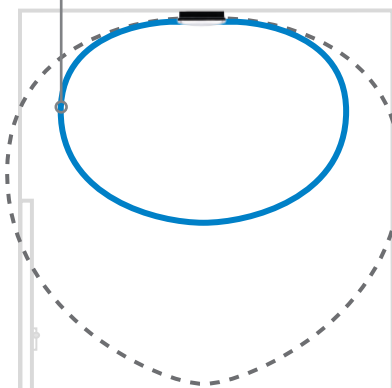
Wide lateral distribution

Projects light along corridors and walkways, providing improved uniformity and allowing luminaires to be mounted further apart.

End view

Side view
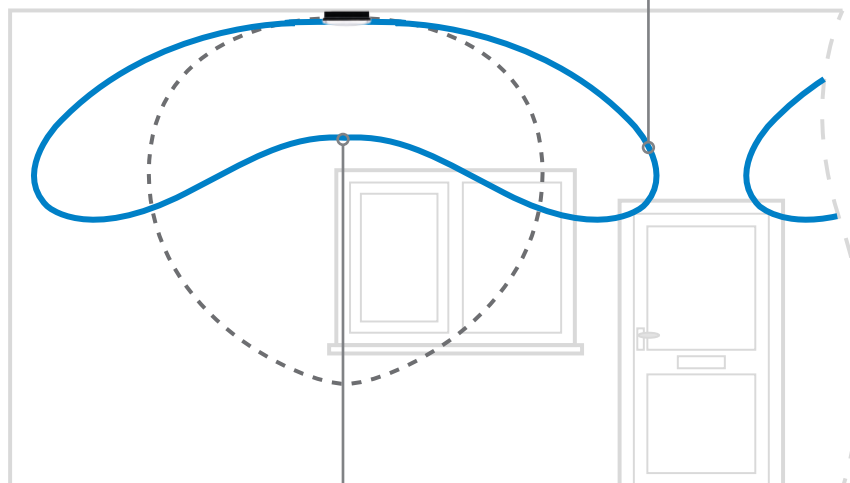
—— Prismalette PRO   - - - - Conventional alternative

Reduced forward throw

Reduces bright spots directly below the luminaires.

PRISMALETTE

PHOTOMETRIC GUIDE

CLEAR COVER

TRANSVERSE	AXIAL
80	
80	
160	
240	
320	
CANDELAS PER 1000 LUMENS	
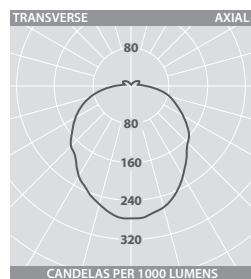
CLEAR COVER

Luminaire Lumen Output:
11W = 1665lm
16W = 2280lm

SATIN COVER

TRANSVERSE	AXIAL
80	
80	
160	
240	
320	
CANDELAS PER 1000 LUMENS	
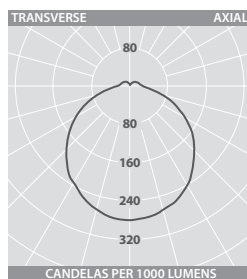
SATIN COVER

Luminaire Lumen Output:
11W = 1540lm
16W = 2145lm

LOW PROFILE SATIN COVER

TRANSVERSE	AXIAL
100	
100	
200	
300	
400	
CANDELAS PER 1000 LUMENS	
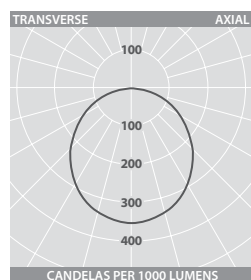
LOW PROFILE SATIN COVER

Luminaire Lumen Output:
11W = 1605lm
16W = 2170lm

DIMENSIONS
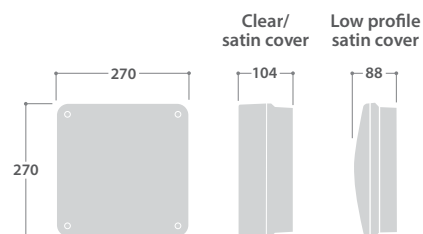
Clear/satin cover: 270 x 270, 104

Low profile satin cover: 88

Fixing points: 4 x Spot faces on
205mm centres (drill as required)
and 1 central BESA box fixing

ACCESSORIES

DESCRIPTION	CAT. No.
Bezel for semi-recessed mounting *(black finish)*	**PS 11876B**
Bezel for semi-recessed mounting *(white finish)*	**PS 11876W**
Key for tamper-resistant screws	**KEY 7979**
Adaptor for cornice mounting *(black finish)*	**PS 18886B**
Adaptor for cornice mounting *(white finish)*	**PS 18886W**

Bezel for semi-recessed mounting - black

Cornice mounting

TL Thorlux Lighting

Clear cover

Satin cover

Low profile satin cover

Clear cover version

Low profile satin cover version

VANDAL-RESISTANT LUMINAIRES

IP65 CE LED

SPECIFICATION

- Strong pressure die-cast LM2 aluminium body. Textured black, full polyester powder finish as standard
- White finish option
- Hinged clear prismatic or satin, fire-retardant polycarbonate cover
- Low profile satin polycarbonate cover version
- Tamper-resistant cover screws as standard
- Optional photocell control
- Bezel trim for semi-recessed mounting
- Complies with M.O.D. JSP482 Chapter 8 Document for 'Category C' areas
- Microwave presence detector option with stand-by light level feature
- Fitted with 4000K LEDs

LED CHARACTERISTICS

CRI	80
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	63K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	85%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	120.0

For LED characteristics explanation see page 6

RANGE

	LAMP	CAT. No.	APPROX. kg
CLEAR COVER	11W LED	**PS 17608L**	2.8
	16W LED	**PS 14913L**	2.8
SATIN COVER	11W LED	**PS 17609L**	2.8
	16W LED	**PS 14914L**	2.8
LOW PROFILE SATIN COVER	11W LED	**PS 18420L**	2.7
	16W LED	**PS 18421L**	2.7
RETRO-FIT GEAR TRAY	11W LED	**PS 14917L**	0.8

WHITE OPTION - add suffix **W** - White   e.g. **PS 17608LW** etc.

CIRCUIT TYPE - **L - non-dimming (LED)**

EMERGENCY VERSION - prefix catalogue number with:
EPS - Emergency / TPS - AutoTest   e.g. **EPS 17608L** etc.
Emergency and AutoTest versions add 0.3kg

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell ▲	**PC**	**PS 14913PC**
Microwave presence detector	**MD**	**PS 14913MD**

▲ Not suitable for semi-recessed or cornice mounting

COBALT

DIMENSIONS

340 dia. 115

REAR CONDUIT ENTRY: 1 x Spot face, drill as required. (Hood versions)

220

FIXINGS: 4 x Spot faces, drill as required

63 220

SIDE CONDUIT ENTRIES: 4 x Spot faces, drill as required

REAR CONDUIT ENTRY: 1 x Spot face, drill as required. (Plain versions)
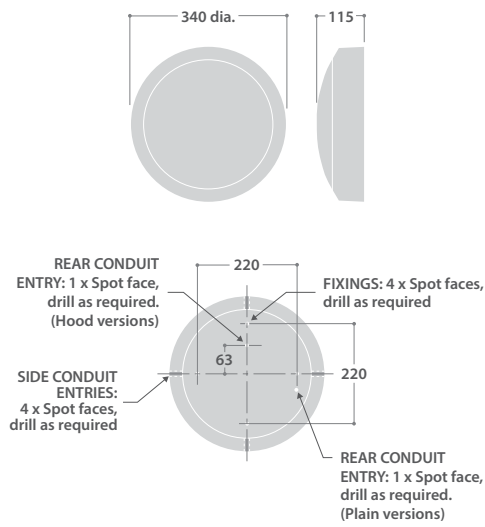
OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell ▼	PC	CT 19015LPC
Microwave presence detector ✚	MD	CT 17541MD

▼ Hood / hood & grill versions only
✚ Plain LED version only

ACCESSORIES

DESCRIPTION	CAT. No.
Tamper-resistant screw kit including key	CT 11699

PHOTOMETRIC GUIDE

420
280
140
140
280
420
CANDELAS PER 1000 LUMENS

420
280
140
140
280
420
CANDELAS PER 1000 LUMENS
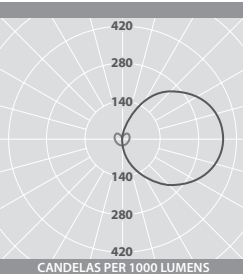
15/23W LED - PLAIN VERSION
Luminaire Lumen Output:
15W = 1335lm
23W = 1930lm
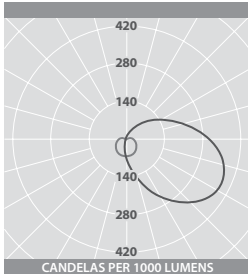
15W LED - HOOD VERSION
Luminaire Lumen Output:
15W = 1020lm

Thorlux Lighting

Plain

Hood

Plain & Grill

Hood & Grill

IP66 CIRCULAR LED LUMINAIRES

IP66 IK10 CE LED

SPECIFICATION

- Strong die-cast LM2 aluminium body and cover frame. Graphite, full polyester powder finish as standard
- Silver or white finish options
- High efficiency satin polycarbonate diffuser
- Choice of cover styles
- Complies with M.O.D. JSP482 Chapter 8 Document for 'Category C' areas
- Photocell option
- Microwave presence detector option with stand-by light level feature (plain version only)
- Fitted with 4000K or 5700K LEDs

RANGE

LED	PLAIN VERSION	HOOD VERSION	APPROX. kg	PLAIN & GRILL VERSION	HOOD & GRILL VERSION	APPROX. kg
15W - 4000K	CT 17541L		3.0	CT 17542L		3.2
15W - 4000K		CT 19015L ◆	3.0		CT 19016L ◆	3.2
23W - 4000K	CT 17545L		3.0	CT 17546L		3.2
15W - 5700K	CT 14538L		3.0	CT 14540L		3.2
23W - 5700K	CT 14542L		3.0	CT 14544L		3.2

◆ Photocell version possible see page 22

CIRCUIT TYPE - **L - non-dimming (LED)**

COLOUR OPTIONS - add suffix: **SV3** - Silver / **W9** - White   e.g. **CT 17541LSV3** etc.

EMERGENCY VERSION - prefix catalogue number with:
ECT - Emergency / **TCT - AutoTest**   e.g. **ECT 17541L** etc.
Add 0.3kg to weights listed

15W/23W LED CHARACTERISTICS

CRI	**70+**
COLOUR TEMPERATURE	**4000K/5700K**
RATED LIFE (HOURS)	**100K - L90/B10**
PROTECTION	**LED PROTECT**
DRIVER EFFICIENCY	**>90%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**77.2**

For LED characteristics explanation see page 6

15W HOOD LED CHARACTERISTICS

CRI	**80**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**77K - L80/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>90%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**56.7**
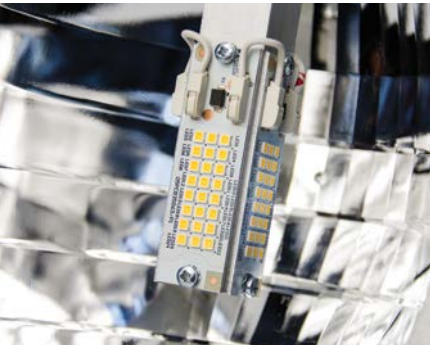
REALTA

LEDbar

The patented LEDbar substitutes the conventional Realta lamp source with an 8W LED lamp package. The aluminium bar dissipates the heat generated by the LEDs for optimum performance.

WIDE DISTRIBUTION LED CHARACTERISTICS

CRI	80
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	67K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>80%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	**120.0**

For LED characteristics explanation see page 6

AREA DISTRIBUTION LED CHARACTERISTICS

CRI	70+
COLOUR TEMPERATURE	4000K/5700K
RATED LIFE (HOURS)	100K - L90/B10
PROTECTION	LED PROTECT
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	**127.6**

TL Thorlux Lighting

Smart External version

Area distribution

Wide distribution

Realta Design Registration Number 3024955

HIGH PERFORMANCE LUMINAIRES DESIGNED TO MINIMISE LIGHT POLLUTION AND ENERGY CONSUMPTION

IP66 | IK10++ / IK10 / IK06 | CE | LED

SPECIFICATION

- Graphite full polyester powder finish. Silver option
- Strong die-cast LM2 aluminium body
- High efficiency prismatic polycarbonate or borosilicate glass front refractor
- Wide distribution (8W) or area distribution (20W, 34W and 42W) options
- Highly specular, multi-faceted injection moulded vacuum metallised reflector on wide distribution versions
- Excellent distribution with less than 2% upward light component
- Optional photocell control
- Smart External versions with intelligent lighting control for use up to 6 metres mounting height
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Fitted with 4000K or 5700K LEDs

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

	LED	WIDE DISTRIBUTION	AREA DISTRIBUTION	APPROX. kg
SMART EXTERNAL	**IK10 Polycarbonate Cover**			
	8W - 4000K	RL 19069SS		3.9
	20W - 4000K		RL 19110SS	4.0
	34W - 4000K		RL 19111SS	4.0
	42W - 4000K		RL 19112SS	4.0
	8W - 5700K	RL 19070SS		3.9
	20W - 5700K		RL 19113SS	4.0
	34W - 5700K		RL 19114SS	4.0
	42W - 5700K		RL 19115SS	4.0
STANDARD	**IK10++ Polycarbonate Cover**			
	8W - 4000K	RL 19071L		3.8
	20W - 4000K		RL 19116L	3.9
	34W - 4000K		RL 19117L	3.9
	42W - 4000K		RL 19118L	3.9
	8W - 5700K	RL 19072L		3.8
	20W - 5700K		RL 19119L	3.9
	34W - 5700K		RL 19120L	3.9
	42W - 5700K		RL 19121L	3.9
	IK06 Glass Cover			
	8W - 4000K	RL 19073L		4.6
	8W - 5700K	RL 19074L		4.6

CIRCUIT TYPE -

SMART EXTERNAL — **SS** - SmartScan

STANDARD — **L** - non-dimming (LED)

SILVER OPTION - add suffix **SV3**   e.g. **RL 19069SSSV3** etc.

EMERGENCY VERSION - prefix catalogue number with:
ERL - Emergency / **TRL** - AutoTest   (Not available when selecting the **'SS'** suffix)
WRL - SmartScan
e.g. **WRL 19069SS** etc.
Add 0.4kg to weights listed

Photometrics, Accessories, Options and Dimensions pages **26** and **27**

REALTA

PHOTOMETRIC GUIDE
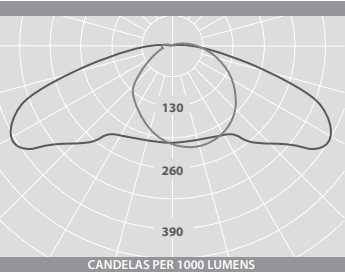
**GLASS COVER
(Wide Distribution)**
Luminaire Lumen Output:
8W = 1175lm
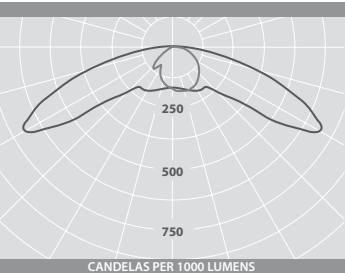
**POLYCARBONATE COVER
(Wide Distribution)**
Luminaire Lumen Output:
8W = 1320lm
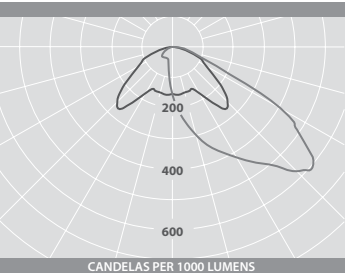
**POLYCARBONATE COVER
(Area Distribution)**
Luminaire Lumen Output:
20W = 2840lm
34W = 4850lm
42W = 5635lm

Single luminaire pole mounting attachment

Twin luminaire pole mounting attachment

ACCESSORIES

DESCRIPTION	CAT. No.	APPROX. kg
Single luminaire pole mounting attachment *(for 60m dia. poles)*	**RL 13759**	1.6
Twin luminaire pole mounting attachment *(for 60m dia. poles)*	**RL 14175**	2.6
76/60mm dia. spigot adaptor *(for retro-fit on 76mm dia. columns)*	**RL 11184**	0.8

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell *(standard versions only)*	**PC**	**RL 19071LPC**
Tamper resistant screws ◆	**T**	**RL 19071LT**

◆ To fasten tamper resistant screws order
special screwdriver **KEY 10008**

PERFORMANCE GUIDE - Wide Distribution

**Photometric Performance -
8W LED with polycarbonate cover**

SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
3m mounting height - 3m forward throw		
10m ctrs	22 lux	0.48
15m ctrs	15 lux	0.47
20m ctrs	11 lux	0.22
4m mounting height - 4m forward throw		
10m ctrs	17 lux	0.48
15m ctrs	11 lux	0.45
20m ctrs	8 lux	0.47
5m mounting height - 5m forward throw		
10m ctrs	13 lux	0.42
15m ctrs	9 lux	0.48
20m ctrs	7 lux	0.45

FIGURES ARE BASED ON INITIAL LUMENS
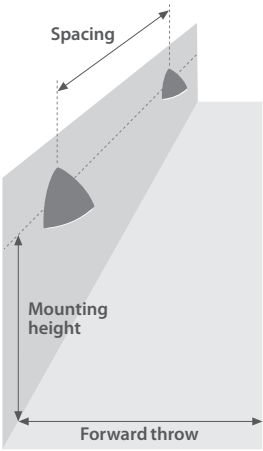
e.g. At 3m mounting height and 10m centres: 22 lux average horizontal illuminance at ground level

TL Thorlux Lighting

Area distribution

Wide distribution

DIMENSIONS

Spot marked for side entry on both sides. Customer to drill if required.

18

Photocell location

220

100

262

Photocell location

318

290

360

3 x 6.5 dia. holes

1 x 20 dia. cable entry hole (IP66 grommet supplied)

266

157

248

Thorlux Lighting
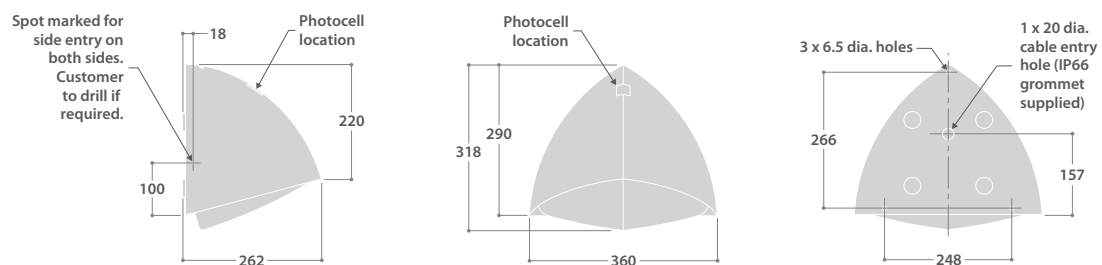
LOW LIGHT LEVEL, WALL MOUNTED LUMINAIRES

IP66 IK10++ CE LED

SPECIFICATION
- Strong die-cast LM2 aluminium body
- Graphite full polyester powder finish. Silver option
- SmartScan emergency version with wireless test status reporting
- One piece injection moulded UV stabilised polycarbonate cover
- Fitted with 4000K LEDs
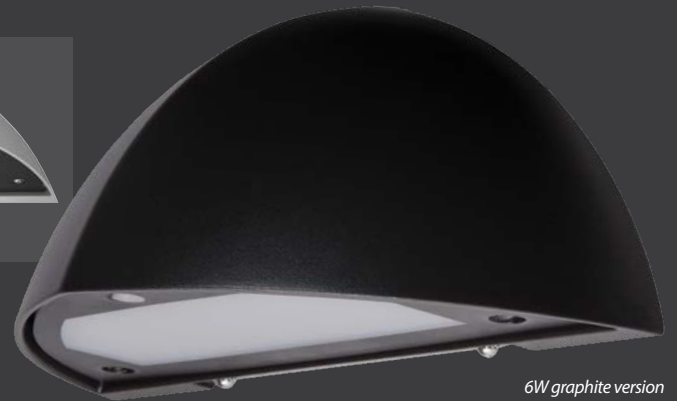
3W silver version

6W graphite version

LED CHARACTERISTICS

CRI	80
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	63K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	80%
REPLACEABLE	YES
POWER FACTOR	>0.5
LL/CW	60.6

For LED characteristics explanation see page 6

DIMENSIONS

134 130 260 137

1 x 21 dia. cable entry hole (IP 66 grommet supplied)

32 47 100

SmartScan Configurations
Find out more at **www.thorlux.com/smartscan**
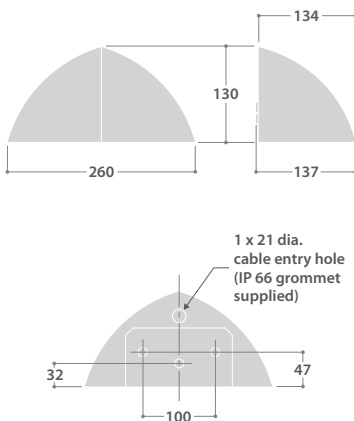
RANGE

Mains Versions

	LED	CAT. No.	APPROX. kg
MAINS	3W	RL 13543L	1.3
	6W	RL 16607L	1.5

Emergency Versions

	LED	MAINTAINED	NON MAINTAINED	APPROX. kg
AUTOTEST	3W ▲	TRL 13543L		1.3
	6W ▲	TRL 16607L		1.5
SMARTSCAN	3W		WRL 13543	1.3
	6W ▲	WRL 16607L		1.5

CIRCUIT TYPE - L - non-dimming (LED)

SILVER OPTION - add suffix **SV3**   e.g. **RL 13543LSV3** etc.

▲ Can be wired during installation for maintained or non-maintained operation

ACCESSORY

DESCRIPTION	CAT. No.	APPROX. kg
Wall mounting kit for 20mm conduit	RL 15419	0.4

SILVER OPTION - add suffix **SV3**   e.g. **RL 15419SV3** etc.

MERCIAN

PERFORMANCE GUIDE

Photometric Performance -
26W LED

SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
3m mounting height - 5m forward throw		
12m ctrs	22 lux	0.46
15m ctrs	15 lux	0.28
18m ctrs	15 lux	0.19
4m mounting height - 6m forward throw		
12m ctrs	20 lux	0.35
16m ctrs	13 lux	0.50
20m ctrs	10 lux	0.37
24m ctrs	9 lux	0.27
5m mounting height - 7m forward throw		
15m ctrs	11 lux	0.51
20m ctrs	8 lux	0.51
25m ctrs	7 lux	0.36
30m ctrs	6 lux	0.26

FIGURES ARE BASED ON INITIAL LUMENS

Spacing

Mounting height
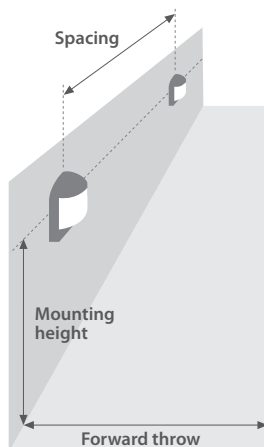
Forward throw

e.g. At 3m mounting height and 12m centres: 22 lux average horizontal illuminance at ground level over an area of 12m (centres) x 5m (forward throw)

PHOTOMETRIC GUIDE

80
160
240
CANDELAS PER 1000 LUMENS
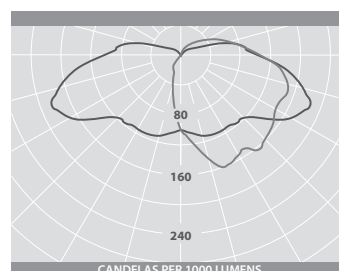
Luminaire Lumen Output:
26W = 3330lm

DIMENSIONS

315   190   335

Position of mounting bracket screw

230
65   85
185
195
2 - 6.5mm dia. holes for use with mounting bracket
255
BESA box fixing spot face, drill if required
Alternative fixings 3 - spot faces, drill if required
285

Thorlux Lighting
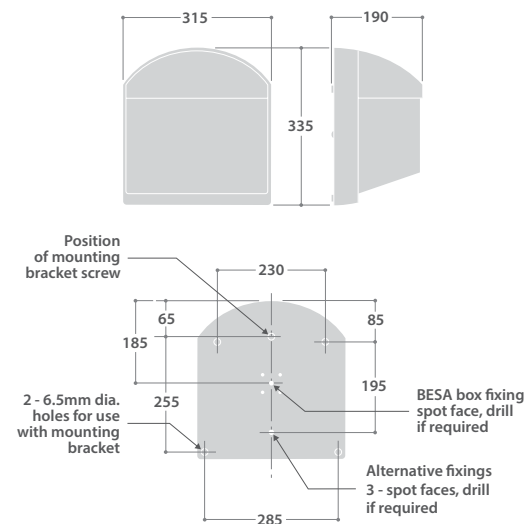
Smart External version

HIGH PERFORMANCE WALL MOUNTED LUMINAIRES

IP65 **IK10** **CE** **LED**

SPECIFICATION

- Strong pressure die-cast LM2 aluminium body prevents distortion when fixing and preserves IP rating. Textured black full polyester powder finish
- Impact-resistant, flame-retardant prismatic polycarbonate cover
- Spacings up to six times mounting height
- Optional photocell control
- Tamper-resistant cover screws available
- Simple to fix using external stainless-steel brackets and two lower points, all external to gasket line to preserve IP rating
- Complies with M.O.D. JSP482 Chapter 8 Document for 'Category C' areas
- Smart External versions with intelligent lighting control for use up to 6 metres mounting height
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Fitted with 4000K or 5700K LEDs

LED CHARACTERISTICS

CRI	**80+**
COLOUR TEMPERATURE	**4000K/5700K**
RATED LIFE (HOURS)	**100K - L70/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>85%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.9**
LL/CW	**111.0**

For LED characteristics explanation see page 6

RANGE

	LED	CAT. No.	APPROX. kg
SMART EXTERNAL	26W - 4000K	**MER 19102SS**	4.4
	26W - 5700K	**MER 19103SS**	4.4
MAINS	26W - 4000K	**MER 19104L**	4.3
	26W - 5700K	**MER 19105L**	4.3

CIRCUIT TYPE -

SMART EXTERNAL	**SS** - SmartScan
STANDARD	**L** - non-dimming (LED)

EMERGENCY VERSION - prefix catalogue number with:

EMR - Emergency
TMR - AutoTest ⎤ (Not available when selecting the **'SS'** suffix)
WMR - SmartScan (Only available when selecting the **'SS'** suffix)
e.g. **WMR 19102SS** etc.
Add 0.3kg to weights listed

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell	**PC**	**MER 19104LPC**
Tamper resistant screws ◆	**T**	**MER 19104LT**

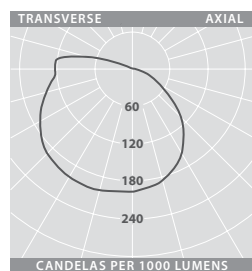◆ To fasten tamper resistant screws order special screwdriver **KEY 10008**

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**
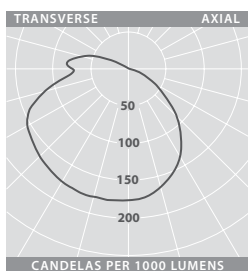

A-LINE LED PCB BOARD

PHOTOMETRIC GUIDE

1 x 35W T5
D.L.O.R. 80% / U.L.O.R. 12%
Factor:
1 x 49W = 1.18

2 x 35W T5
D.L.O.R. 70% / U.L.O.R. 11%
Factor:
2 x 49W = 0.95
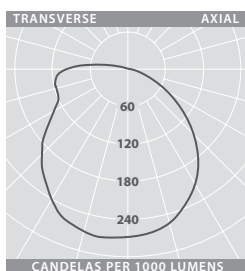
1 x 35W T5 - XL VERSION
D.L.O.R. 86% / U.L.O.R. 7%
Factor:
1 x 49W = 1.09
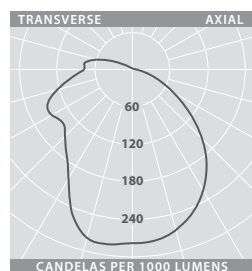
2 x 35W T5 - XL VERSION
D.L.O.R. 81% / U.L.O.R. 9%
Factor:
2 x 49W = 0.96
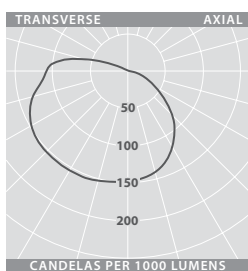
**COOKER HOOD VERSION
1 x 58W T8**
D.L.O.R. 65% / U.L.O.R. 10%
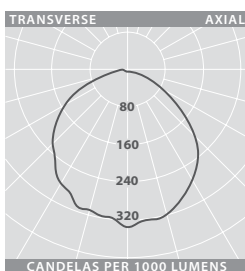
LED
Luminaire Lumen Output:
41W = 6355 lm
58W = 8540 lm

DIMENSIONS

Narrow body	Wide body

Internal Miro aluminium XL reflector (XL version only)

LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	100K - L70/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	138.2

For LED characteristics explanation see page 6

EXTERNAL FIXING

An external backstrap option is available to special order

COOKER HOOD VERSION

For high ambient temperature applications up to 60°C, specify:
AL 10116X - 1500mm, 1 x 58W T8, switch start control gear with polycarbonate cover and slotted screw cover fixings. Length 1598mm and approx. 6.0kg. Narrow body.

INSTALLATION KITS - One kit per luminaire installed

KIT	CAT. No.	DESCRIPTION	APPROX. kg
Hook suspension	IK 6388	Two stainless steel hooks (including nuts and sealing washers) for chain suspension	0.05
IP66 gland kit	IK 6389	Weatherproof nylon gland (including nuts and sealing washers) for entry of flexible cables	0.02
Conduit entry	IK 6390	IP66 20mm conduit suspension sealing washer kit	0.01
Rod suspension	IK 6391	IP66 10mm diameter rod sealing washer kit	0.01

TL Thorlux Lighting

XL version (cover removed)

Smart version
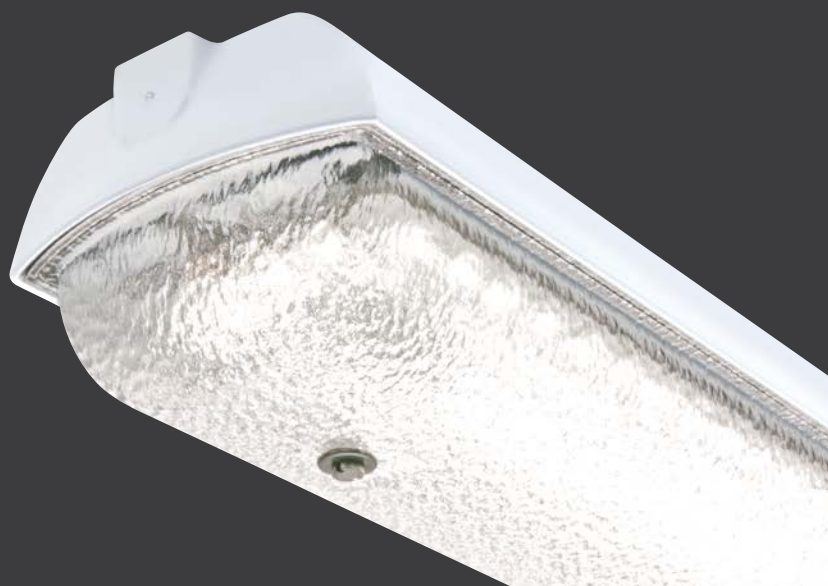
MULTI-PURPOSE, CORROSION-RESISTANT LUMINAIRES FOR T8, T5 LAMPS AND LEDS

IP66 CE T5 T8 LED

SPECIFICATION

- Robust and durable extruded aluminium body with die-cast ends finished full polyester, non-yellowing white
- Body dissipates heat, ensuring long control gear life in higher ambient temperatures
- Long life silicone sponge gasket ensuring IP66 rating
- High impact-resistant textured, fire-retardant polycarbonate cover
- Tamper-resistant cover screws
- Removable gear tray, hangs on safety straps for easy maintenance
- Version for high ambient temperatures to 60ºC
- Complies with M.O.D. JSP482 Chapter 8 Document for 'Category C' areas
- XL version - Miro aluminium XL reflectors focus and direct the light efficiently and effectively
- Smart versions with intelligent lighting control for use up to 8 metres mounting height
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- LED version fitted with 4000K LEDs

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

	NOMINAL SIZE (mm)	LAMP	CAT. No.	LENGTH (mm)	APPROX. kg	CIRCUIT
SMART	**LED Version**					
	1500	41W LED ▲ ✖	AL 17699	1598	8.1	D/SS
		58W LED ▲ ✖	AL 16511		8.1	D/SS
	T5 Lamp XL Version					
	1500	1 x 35W T5 ▲	AL 14283D	1598	6.2	
		2 x 35W T5 ▲	AL 14083D		8.2	
		1 x 49W T5 ▲	AL 14528D		6.2	
		2 x 49W T5 ▲	AL 14085D		8.2	
STANDARD	**LED Version**					
	1500	41W LED ■ ✖	AL 16512L	1598	6.0	
		58W LED ▲ ✖	AL 16513L		8.0	
	T5 Lamp XL Version					
	1500	1 x 35W T5 ■	AL 13695	1598	6.1	J/T
		2 x 35W T5 ▲	AL 13696		8.1	J/T
		1 x 49W T5 ■	AL 14224		6.1	J/T
		2 x 49W T5 ▲	AL 14081		8.1	J/T
	T5 Lamp Version					
	1200	1 x 28W T5 ■	AL 13484	1298	4.8	J/T
		2 x 28W T5 ■	AL 13485		4.9	J/T
	1500	1 x 35W T5 ■	AL 11037	1598	6.0	J/T
		2 x 35W T5 ■	AL 11038		6.1	J/T
		1 x 49W T5 ■	AL 11039		6.0	J/T
		2 x 49W T5 ■	AL 11040		6.1	J/T

CIRCUIT TYPE - suffix catalogue number with:

SMART **D** - Smart / **SS** - SmartScan

STANDARD **L** - non-dimming (LED) / **J** - non-dimming (HF fluorescent) / **T** - dimming (DSI)   e.g. **AL 17699SS** etc.

EMERGENCY VERSION - prefix catalogue number with:
EAL - Emergency / **TAL** - AutoTest (Not available when selecting the **'SS'** suffix)
WAL - SmartScan (LED versions only)
e.g. **WAL 17699SS** etc.
Add 0.7kg to weights listed for lamp versions or 0.3kg for LED versions.

■ Narrow body / ▲ Wide body / ✖ Suitable for ambient temperatures up to 50℃

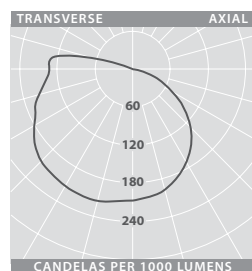**NOTE:- Emergency versions not suitable for high ambient temperatures**

Lamps must be ordered separately

Presence Detection Guide - **www.thorlux.com/files/presence-detection.pdf**

A-LINE ACRYLIC COVER

PHOTOMETRIC GUIDE

TRANSVERSE — **AXIAL**
60
120
180
240
CANDELAS PER 1000 LUMENS

1 x 35W T5
D.L.O.R. 86% / U.L.O.R. 12%
Factor:
1 x 49W = 1.07

TRANSVERSE — **AXIAL**
50
100
150
200
CANDELAS PER 1000 LUMENS

2 x 35W T5
D.L.O.R. 72% / U.L.O.R. 11%
Factor:
2 x 49W = 1.02

TRANSVERSE — **AXIAL**
80
160
240
320
CANDELAS PER 1000 LUMENS
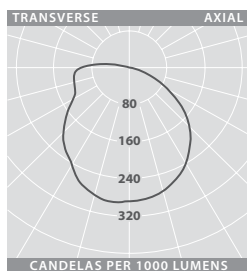
1 x 35W T5 - XL VERSION
D.L.O.R. 90% / U.L.O.R. 7%
Factor:
1 x 49W = 1.10

TRANSVERSE — **AXIAL**
80
160
240
320
CANDELAS PER 1000 LUMENS
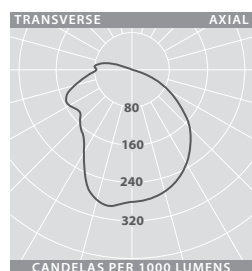
2 x 35W T5 - XL VERSION
D.L.O.R. 85% / U.L.O.R. 9%
Factor:
2 x 49W = 0.96

TRANSVERSE — **AXIAL**
80
160
240
320
CANDELAS PER 1000 LUMENS
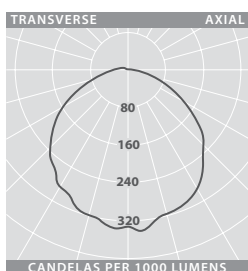
LED
Luminaire Lumen Output:
41W = 6725 lm
58W = 9065 lm

DIMENSIONS

Narrow body   Wide body

121

121   158

Internal Miro
aluminium
XL reflector
(XL version only)

LED CHARACTERISTICS

CRI	**80+**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**100K - L70/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>85%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**146.2**

For LED characteristics explanation see page 6

LED version PCB board

EXTERNAL FIXING

An external backstrap option
is available to special order

INSTALLATION KITS - One kit per luminaire installed

KIT	CAT. No.	DESCRIPTION	APPROX. kg
Hook suspension	**IK 6388**	Two stainless steel hooks (including nuts and sealing washers) for chain suspension	0.05
IP66 gland kit	**IK 6389**	Weatherproof nylon gland (including nuts and sealing washers) for entry of flexible cables	0.02
Conduit entry	**IK 6390**	IP66 20mm conduit suspension sealing washer kit	0.01
Rod suspension	**IK 6391**	IP66 10mm diameter rod sealing washer kit	0.01

TL Thorlux Lighting

XL version (cover removed)

Smart version

MULTI-PURPOSE, CORROSION-RESISTANT LUMINAIRES FOR T5 LAMPS AND LEDS

IP66 CE T5 LED

SPECIFICATION

• Robust and durable extruded aluminium body with die-cast ends finished full polyester, non-yellowing white

• Body dissipates heat, ensuring long control gear life in higher ambient temperatures

• Long life silicone sponge gasket ensuring IP66 rating

• Smooth acrylic cover has high resistance to corrosion

• Removable gear tray, hangs on safety straps for easy maintenance

• XL version - Miro aluminium XL reflectors focus and direct the light efficiently and effectively

• Smart versions with intelligent lighting control for use up to 8 metres mounting height

• SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit

• LED version fitted with 4000K LEDs

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

NOMINAL SIZE (mm)	LAMP	CAT. No.	LENGTH (mm)	APPROX. kg	CIRCUIT
SMART					
LED Version					
1500	41W LED ▲ ✖	AL 17698	1598	8.1	D/SS
	58W LED ▲ ✖	AL 16515		8.1	D/SS
T5 Lamp XL Version					
1500	1 x 35W T5 ▲	AL 14284D	1598	6.2	
	2 x 35W T5 ▲	AL 14084D		8.2	
	1 x 49W T5 ▲	AL 14527D		6.2	
	2 x 49W T5 ▲	AL 14086D		8.2	
STANDARD					
LED Version					
1500	41W LED ■ ✖	AL 16516L	1598	6.0	
	58W LED ▲ ✖	AL 16517L		8.0	
T5 Lamp XL Version					
1500	1 x 35W T5 ■	AL 13693	1598	6.1	J/T
	2 x 35W T5 ▲	AL 13694		8.1	J/T
	1 x 49W T5 ■	AL 14225		6.1	J/T
	2 x 49W T5 ▲	AL 14082		8.1	J/T
T5 Lamp Version					
1200	1 x 28W T5 ■	AL 13482	1298	4.8	J/T
	2 x 28W T5 ■	AL 13483		4.9	J/T
1500	1 x 35W T5 ■	AL 11033	1598	6.0	J/T
	2 x 35W T5 ■	AL 11034		6.1	J/T
	1 x 49W T5 ■	AL 11035		6.0	J/T
	2 x 49W T5 ■	AL 11036		6.1	J/T

CIRCUIT TYPE - suffix catalogue number with:

SMART **D** - Smart / **SS** - SmartScan

STANDARD **L** - non-dimming (LED) / **J** - non-dimming (HF fluorescent) / **T** - dimming (DSI) e.g. **AL 16515SS** etc.

EMERGENCY VERSION - prefix catalogue number with:
EAL - Emergency / **TAL** - AutoTest (Not available when selecting the **'SS'** suffix)
WAL - SmartScan (LED versions only)
e.g. **WAL 16515SS** etc.
Add 0.7kg to weights listed for lamp versions or 0.3kg for LED versions.

■ Narrow body / ▲ Wide body / ✖ Suitable for ambient temperatures up to 50°C

NOTE:- Emergency versions not suitable for high ambient temperatures

Lamps must be ordered separately

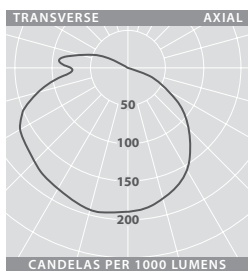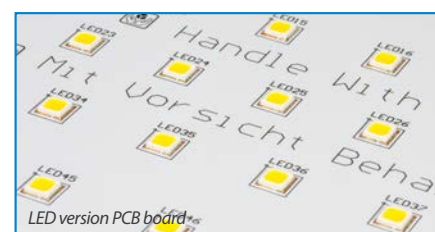Presence Detection Guide - **www.thorlux.com/files/presence-detection.pdf**

ARCADIAN

COLOUR OPTIONS

Supplied finished in RAL 9010 white as standard. Other colour options are available to special order*.

Minimum order quantity applies

EASY COVER REMOVAL

Secure fixed body

Anti-pick sealant

Cover

MOUNTING OPTIONS

CEILING

WALL

PHOTOMETRIC GUIDE

TRANSVERSE | AXIAL

100
200
300
400

CANDELAS PER 1000 LUMENS
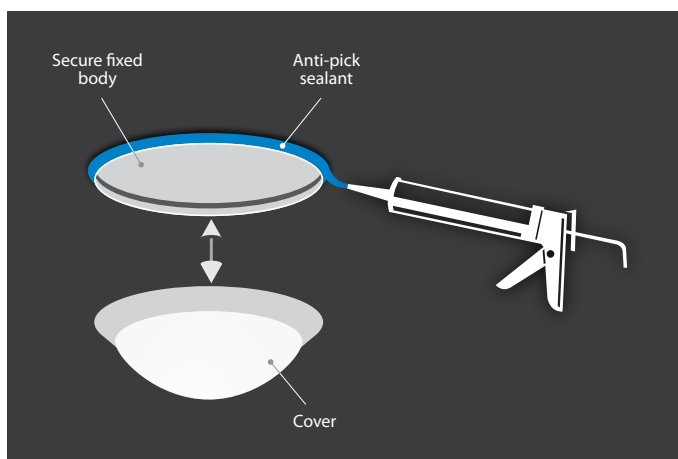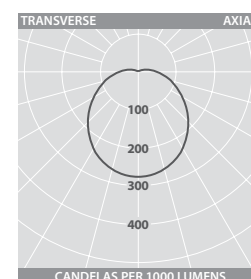
Luminaire Lumen Output
21W 3000/4000K = 2670lm
27W 3000/4000K = 3415lm

Thorlux Lighting

LED LIGATURE-RESISTANT LUMINAIRES

IP66 **IK10++** **CE** **LED**

SPECIFICATION

- Strong spun steel body
- Injection moulded 5mm thick polycarbonate cover with white painted trim as standard (RAL 9010). Other colour trim options available to special order
- SmartScan emergency version with wireless test status reporting
- Ligature-resistant design
- Anti-pick sealant can be used to seal the body whilst still allowing the cover to be removed for maintenance
- Tamper-resistant pin Torx screw fixings (requires T25 tool - see accessory table)
- Microwave presence detector option with stand-by light level feature
- Fitted with 3000K or 4000K LEDs

LED CHARACTERISTICS

CRI	80
COLOUR TEMPERATURE	3000K/4000K
RATED LIFE (HOURS)	88K - L70/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	106.7

For LED characteristics explanation see page 6

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

LED	CAT. No.	APPROX. kg	CIRCUIT
21W 3000K	**AN 17074**	3.1	L/A
21W 4000K	**AN 17075**	3.1	L/A
27W 3000K	**AN 19208**	3.1	L/A
27W 4000K	**AN 19209**	3.1	L/A

CIRCUIT TYPE - suffix catalogue number with:
L - non-dimming (LED) / **A - dimming (DALI)**   e.g. **AN 17074L** etc.

EMERGENCY VERSION - prefix catalogue number with:
TAN - AutoTest / **WAN - SmartScan**   e.g. **WAN 17074L** etc.
Add 0.3kg to weights listed.

INTEGRAL NIGHT LIGHT VERSION - suffix catalogue number with:
N e.g. **AN 17074LN** etc.

ACCESSORY

DESCRIPTION	CAT. No
T25 pin Torx bit (Suitable for magnetic bit holder)	**KEY 16976**

OPTION

DESCRIPTION	SUFFIX	EXAMPLE
Microwave presence detector (21W version only)	**MD**	**AN 17074MD**

DIMENSIONS

445 dia. 138 354 8 x 7 dia. fixing holes 354 21 dia. rear conduit entry

TL Thorlux Lighting

VENTEGO

LED TAMPER-RESISTANT AND IMPACT RESISTANT SURFACE LUMINAIRES

IP65 IK10++ CE LED

SPECIFICATION

- Robust and durable extruded aluminium body finished white (RAL 9010)
- Die-cast aluminium end caps finished white (RAL 9010)
- Clear prismatic polycarbonate lens
- Body dissipates heat, ensuring long control gear life in higher ambient temperatures
- Suitable for both individual and in-line mounting
- Fitted with 4000K LEDs

RANGE

LENGTH (mm)	LED	CAT. No.	APPROX. kg	CIRCUIT
697	19W	**VT 17215**	5.0	L/A
1307	56W	**VT 17216**	9.0	L/A

CIRCUIT TYPE - suffix catalogue number with:
L - non-dimming (LED) / **A - dimming (DALI)** e.g. **VT 17215L** etc.

EMERGENCY VERSION (56W version only) - prefix catalogue number with:
EVT - Emergency e.g. **EVT 17216L** etc.
Emergency versions add 0.3kg to weights listed.

DIMENSIONS

64
260
697 - 19W
1307 - 56W

PHOTOMETRIC GUIDE

TRANSVERSE AXIAL

80
160
240
320

CANDELAS PER 1000 LUMENS
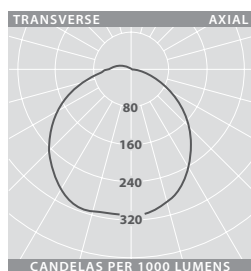
Luminaire Lumen Output
19W = 1635lm
56W = 5060lm

LED CHARACTERISTICS

CRI	**80**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**50K - L70/B10**
PROTECTION	**-**
DRIVER EFFICIENCY	**>85%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**83.0**

For LED characteristics explanation see page 6

Thorlux Lighting

SURFACE MOUNTED LED LUMINAIRES

IP40 | **IP54** WITH OPTIONAL GASKET | CE

LED

SPECIFICATION

- Spun aluminium body finished full polyester, non-yellowing white
- Textured opal polycarbonate cover
- Smart version with intelligent lighting control
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Microwave presence detector option with stand-by light level feature
- Fitted with 4000K LEDs

LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	91K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	88%
REPLACEABLE	YES
POWER FACTOR	>0.95
LL/CW	108.3

For LED characteristics explanation see page 6

Small version with conduit adaptor

Smart version

RANGE

	LED	CAT. No.	APPROX. kg	CIRCUIT
SMART	Small version 20W	GLO 17426	1.2	D/SS
STANDARD	Small version 16W	GLO 16483	1.1	L/A
	20W	GLO 16484	1.1	L/A
	Large version 26W	GLO 15856	2.1	L/A

CIRCUIT TYPE - suffix catalogue number with:
SMART D - Smart / SS - SmartScan
STANDARD L - non-dimming (LED) / A - dimming (DALI)
e.g. **GLO 17426SS** etc.
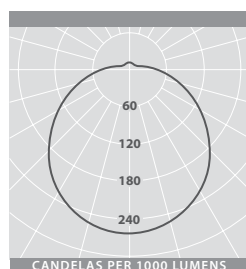
EMERGENCY VERSION - prefix catalogue number with:
EGL - Emergency /
TGL - AutoTest (Not available when selecting the **'SS'** suffix) /
WGL - SmartScan (16W and 20W only)
e.g. **WGL 17426SS** etc.
Add 0.3kg to weights listed

PHOTOMETRIC GUIDE

CANDELAS PER 1000 LUMENS

Luminaire Lumen Output:
16W = 1930lm
20W = 2455lm
26W = 3055lm

ACCESSORIES

DESCRIPTION	CAT. No.
IP54 sealing gasket - small version	GLO 16485
IP54 sealing gasket - large version	GLO 16539
Conduit adaptor - small version	GLO 17433

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Microwave presence detector	MD	GLO 16483MD

DIMENSIONS
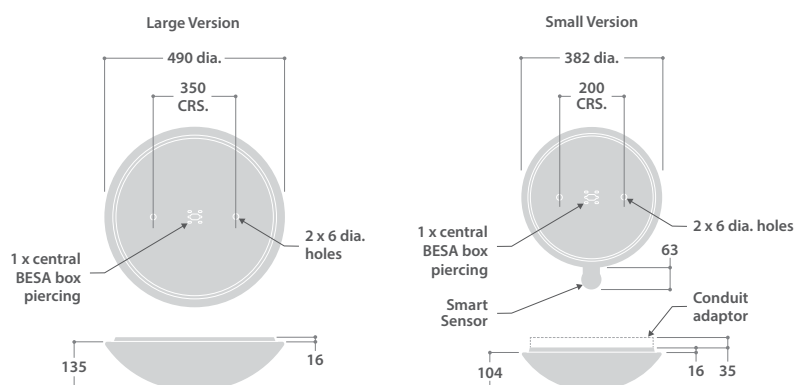
Large Version — 490 dia., 350 CRS., 1 x central BESA box piercing, 2 x 6 dia. holes, 135, 16

Small Version — 382 dia., 200 CRS., 1 x central BESA box piercing, 2 x 6 dia. holes, 63, Smart Sensor, Conduit adaptor, 104, 16, 35

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**
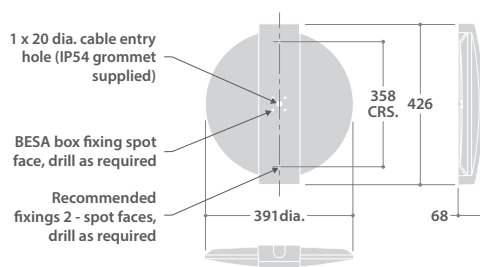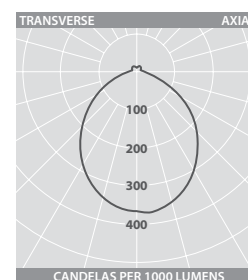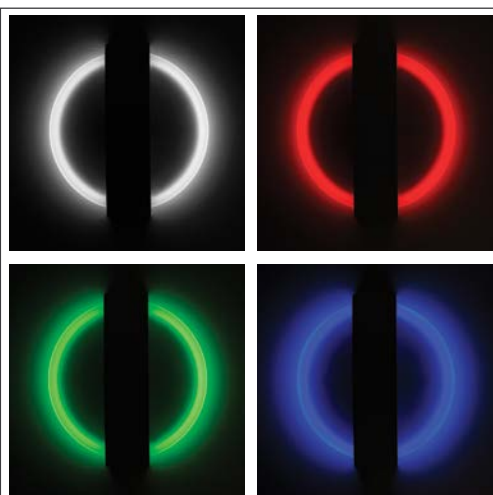
CLARA 360

CHOOSE YOUR COLOUR

Clara 360 is available with a separately switched 3W LED backlit halo in white or RGB. The ability to switch the colour of each half of the luminaire individually makes the Clara 360 extremely versatile. Different colour and pattern combinations can be used to clearly define separate floors or areas of a building or could simply be used to create an effect along a corridor or up a flight of stairs.

DIMENSIONS

1 x 20 dia. cable entry hole (IP54 grommet supplied)

BESA box fixing spot face, drill as required

Recommended fixings 2 - spot faces, drill as required

358 CRS.

426

391dia.

68

PHOTOMETRIC GUIDE

TRANSVERSE   AXIAL

100

200

300

400

CANDELAS PER 1000 LUMENS

Luminaire Lumen Output
20W = 2715lm

IP54

TL *Thorlux Lighting*

CLARA 360
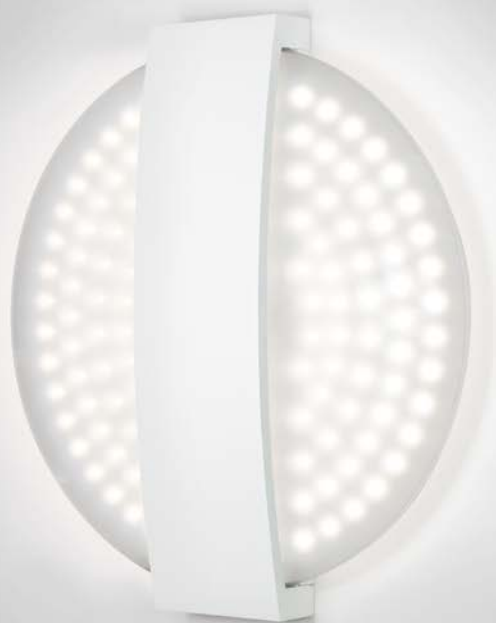
CIRCULAR LED LUMINAIRES SUITABLE FOR WALL OR CEILING MOUNTING

IP54 **CE** **IK09** **LED**

SPECIFICATION

- Die-cast aluminium body and lid finished full polyester non-yellowing satin white (RAL 9016)
- Silver option (RAL 9006)
- High efficiency satin sparkle effect polycarbonate covers
- Optional 3W LED backlight (RGB or white)
- 60,000 hour life expectancy
- Emergency and AutoTest versions using two integral 1W high power LEDs
- Smart versions with intelligent lighting control
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Fitted with 4000K LEDs

LED CHARACTERISTICS

CRI	**80+**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**67K - L80/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**>87%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**113.1**

For LED characteristics explanation see page 6

RANGE

	LED	STANDARD	APPROX. kg	WHITE LED HALO	RGB LED HALO	APPROX. kg	CIRCUIT
SMART	20W	**CA 15626**	3.2	**CA 15637**	**CA 15631**	3.3	D/SS
STANDARD	20W	**CA 15625**	3.1	**CA 15634**	**CA 15628**	3.2	L/A

CIRCUIT TYPE - suffix catalogue number with:

SMART **D - Smart / SS - SmartScan**

STANDARD **L - non-dimming (LED) / A - dimming (DALI)**   e.g. **CA 15626SS** etc.

EMERGENCY VERSION - prefix catalogue number with:

ECA - Emergency
TCA - AutoTest ⎤ (Not available when selecting the **'SS'** suffix)

WCA - SmartScan (Only available when selecting the **'SS'** suffix)
e.g. **WCA 15626SS** etc.
Add 0.3kg to weights listed.

FINISH OPTION - suffix catalogue number with: **SV3 - Silver RAL 9006**   e.g. **CA 15626DSV3** etc.

SmartScan Configurations

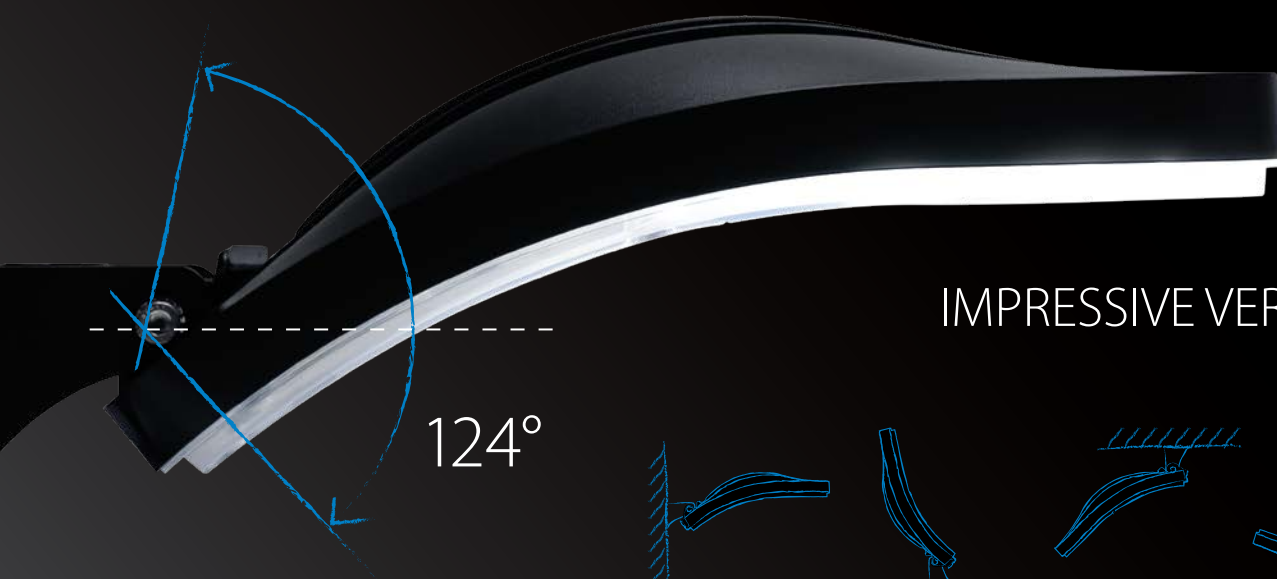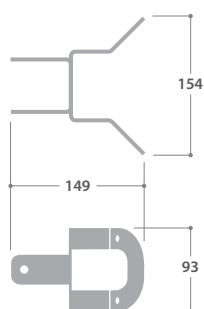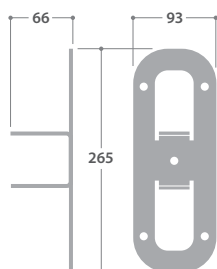Find out more at **www.thorlux.com/smartscan**

TL Thorlux Lighting

STARFLOOD

IMPRESSIVE VERSATILITY

124°

MOUNTING OPTIONS

Corner mounting bracket

154
149
93

Wide mounting bracket

66
93
265

Single luminaire pole top mount

96
20 dia. hole for cable exit
145
158
Internal stop
4 x stainless steel grub screws

STF 18750 to fit on to 76 dia.
STF 18751 to fit on to 60 dia.
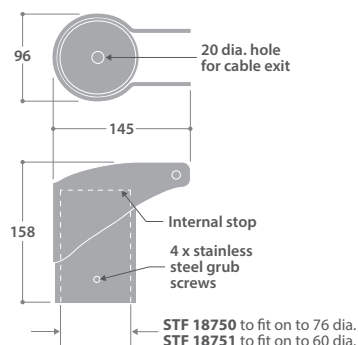
Single luminaire pole top mount

Pole top mounting kit
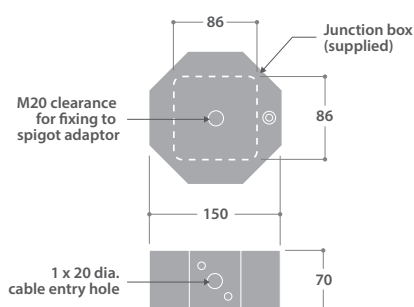
86
Junction box (supplied)
M20 clearance for fixing to spigot adaptor
86
150
1 x 20 dia. cable entry hole
70

Spigot adaptor

89
M20 fixing bolt
20 dia. hole for cable exit
235
Internal stop bar
6 x stainless steel grub screws
To fit on to 76 dia.
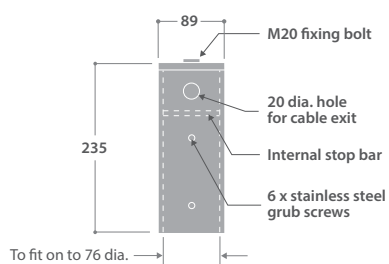
DESCRIPTION	CAT. No	APPROX. kg
Single luminaire pole top mount finished silver (76mm dia.)	**STF 18750SV3**	1.2
Single luminaire pole top mount finished graphite (76mm dia.)	**STF 18750G2**	1.2
Single luminaire pole top mount finished silver (60mm dia.)	**STF 18751SV3**	1.5
Single luminaire pole top mount finished graphite (60mm dia.)	**STF 18751G2**	1.5
Pole top mounting kit finished silver ■	**STF 17330SV3**	1.4
Pole top mounting kit finished graphite ■	**STF 17330G2**	1.4
Galvanised spigot adaptor for 76 dia. shaft	**POT-89**	2.9
Corner mounting bracket finished graphite	**STF 17329G2**	0.5
Wide mounting bracket finished graphite	**STF 17328G2**	0.5

■ For use with spigot adaptor **POT-89**, can accomodate up to 4 Starfloods

TL **Thorlux Lighting**

HIGH PERFORMANCE MINI LED FLOODLIGHTS

IP66 **IK10** **CE** **LED** WINDAGE - **0.06m²**

SPECIFICATION

- Graphite full polyester powder finish. Silver option RAL9006
- Strong die-cast LM6M aluminium body
- Highly impact resistant polycarbonate cover and acrylic high efficiency LED lenses
- Optional photocell control
- Smart External versions with intelligent lighting control for use up to 6 metres mounting height
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Fitted with 4000K or 5700K LEDs

LED CHARACTERISTICS

CRI	**70**
COLOUR TEMPERATURE	**4000K/5700K**
RATED LIFE (HOURS)	**100K - L90/B10**
PROTECTION	**LED PROTECT**
DRIVER EFFICIENCY	**>85%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**118.1**

For LED characteristics explanation see page 6

COLOUR OPTIONS

Graphite   Silver

RANGE

	LED	4000K VERSION	5700K VERSION	APPROX. kg
SMART EXTERNAL	20W	**STF 17567SS**	**STF 17410SS**	2.3
	34W	**STF 17568SS**	**STF 17411SS**	2.3
STANDARD	20W	**STF 17569L**	**STF 17413L**	2.2
	34W	**STF 17570L**	**STF 17414L**	2.2
	42W	**STF 17571L**	**STF 17415L**	2.2

CIRCUIT TYPE -

SMART EXTERNAL	**SS - SmartScan**
STANDARD	**L - non-dimming (LED)**

SILVER OPTION - add suffix **SV3**   e.g. **STF 17567SSSV3** etc.

NOTE - Smart version not suitable for uplighting applications

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell	**PC**	**STF 17569LPCSV3**

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

STARFLOOD

PHOTOMETRIC GUIDE

CANDELAS PER 1000 LUMENS

LED
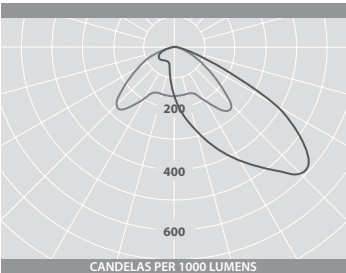
Luminaire Lumen Output:
20W = 2835lm
34W = 4575lm
42W = 5400lm

PERFORMANCE GUIDE

20W LED

SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
4m mounting height - 6m forward throw		
8m ctrs	40 lux	0.44
10m ctrs	30 lux	0.47
12m ctrs	23 lux	0.29
14m ctrs	17 lux	0.20
5m mounting height - 8m forward throw		
8m ctrs	24 lux	0.34
10m ctrs	19 lux	0.36
12m ctrs	16 lux	0.39
14m ctrs	14 lux	0.33
6m mounting height - 10m forward throw		
8m ctrs	20 lux	0.33
10m ctrs	16 lux	0.34
12m ctrs	13 lux	0.37
14m ctrs	11 lux	0.39

FIGURES ARE BASED ON INITIAL LUMENS

TYPICAL SPACING GUIDE

42W LED / 6m mounting height / 17.5 x 17.5m spacing -
Average illuminance = 32 lux / Uniformity = 0.31
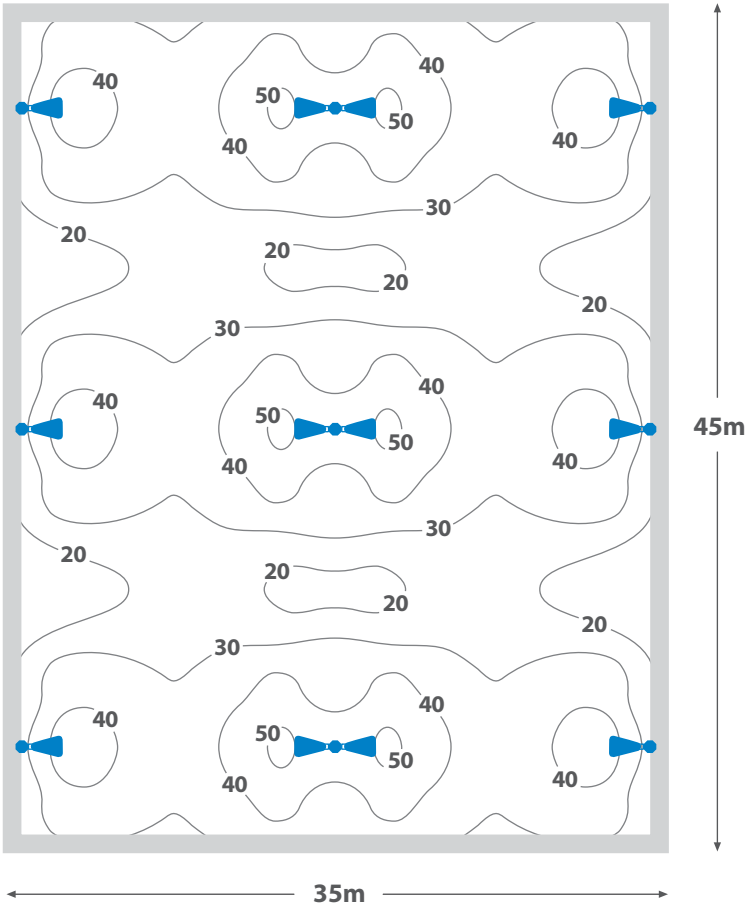
DIMENSIONS

STARBEAM
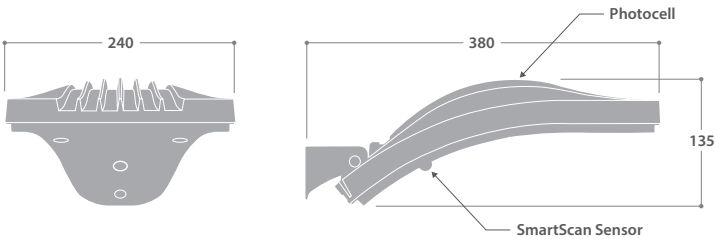
The Starbeam range of precision engineered LED area floodlights and streetlights takes external lighting to a new dimension in terms of efficiency (up to 112 luminaire lumens per circuit watt) and longevity (up to 100,000 hours). This is achieved through significant investment in high quality die-cast heat sinks and in house manufactured printed circuit boards positioning the very latest top brand LEDs within precise acrylic lenses. A range of power levels, two optical distribution types and two body sizes provides every option necessary for car park, general amenity and road lighting applications.
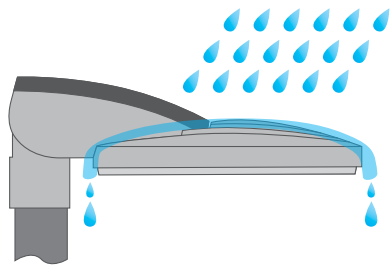
1. "Free draining" curved heat sink eliminates ponding of fluids
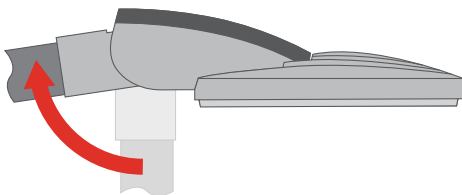
2. Integral adjustable mounting spigot allows easy retrofit on to a wide range of columns and brackets whilst maintaining 0° elevation
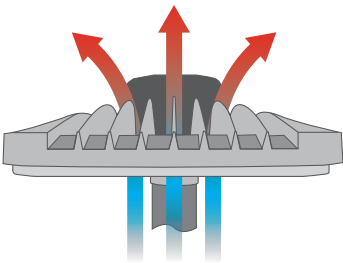
3. Heat dissipation fins combined with air flow between heat sink and gear compartment extends control gear lifetime

Smart External area distribution version

Smart External roadway distribution version

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell	**PC**	**SB 17553LPC**

ACCESSORIES - see page 50

Thorlux Lighting

LED AREA FLOODLIGHTS AND STREET LIGHTS

IP66 **IK10** **CE** **LED**

WINDAGE - small: **0.06m²** large: **0.07m²**

SPECIFICATION

- Die-cast aluminium body and gear compartment finished polyester silver RAL9006
- Die-cast aluminium, fast release gear compartment lid finished polyester graphite
- Polycarbonate cover and acrylic high efficiency LED lenses
- Area or roadway optical distributions
- Integral high efficiency driver
- Extremely efficient and long system life up to 100,000 hours
- Suitable for ambient temperatures up to 50°C
- Smart External versions with intelligent lighting control for use up to 12 metres mounting height
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
- Pole top 76mm as standard, adjustable through 90°
- Wall mounting bracket accessory
- Wide range of mounting options (see page 50 for details)
- Photocell option
- Fitted with 4000K or 5700K LEDs

LED CHARACTERISTICS

CRI	70+
COLOUR TEMPERATURE	4000K/5700K
RATED LIFE (HOURS)	100K - L90/B10
PROTECTION	LED PROTECT
DRIVER EFFICIENCY	>90%
REPLACEABLE	YES
POWER FACTOR	>0.9
LL/CW	**112.0**

For LED characteristics explanation see page 6

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

	LED	AREA DISTRIBUTION	ROADWAY DISTRIBUTION	APPROX. kg
SMART EXTERNAL	**Small Version**			
	31W - 4000K	SB 18340SS	SB 18345SS	8.2
	62W - 4000K	SB 18341SS	SB 18346SS	8.2
	31W - 5700K	SB 18352SS	SB 18357SS	8.2
	62W - 5700K	SB 18353SS	SB 18358SS	8.2
	Large Version			
	88W - 4000K	SB 18342SS	SB 18347SS	9.4
	123W - 4000K	SB 18343SS	SB 18348SS	9.4
	161W - 4000K	SB 18344SS	SB 18349SS	9.4
	88W - 5700K	SB 18354SS	SB 18359SS	9.4
	123W - 5700K	SB 18355SS	SB 18360SS	9.4
	161W - 5700K	SB 18356SS	SB 18361SS	9.4
STANDARD	**Small Version**			
	31W - 4000K	SB 17553L	SB 17561L	8.0
	62W - 4000K	SB 17554L	SB 17562L	8.0
	31W - 5700K	SB 15800L	SB 15801L	8.0
	62W - 5700K	SB 15802L	SB 15803L	8.0
	Large Version			
	88W - 4000K	SB 17555L	SB 17563L	9.2
	123W - 4000K	SB 17556L	SB 17564L	9.2
	161W - 4000K	SB 18350L	SB 18351L	9.2
	88W - 5700K	SB 15804L	SB 15805L	9.2
	123W - 5700K	SB 15806L	SB 15807L	9.2
	161W - 5700K	SB 18362L	SB 18363L	9.2

CIRCUIT TYPE -

SMART EXTERNAL	**SS** - SmartScan
STANDARD	**L** - non-dimming (LED)

EMERGENCY VERSION (31W & 62W) - prefix catalogue number with:
WSB - SmartScan (Only available when selecting the **'SS'** suffix)
e.g. **WSB 18340SS** etc.
Add 0.3kg to weights listed.

NOTE: - Emergency versions not suitable for high ambient temperatures
- Glass version available to special order

STARBEAM

AREA DISTRIBUTION

88W LED / 8m mounting height / 25 x 25m spacing - Average illuminance = 25 lux / Uniformity = 0.63
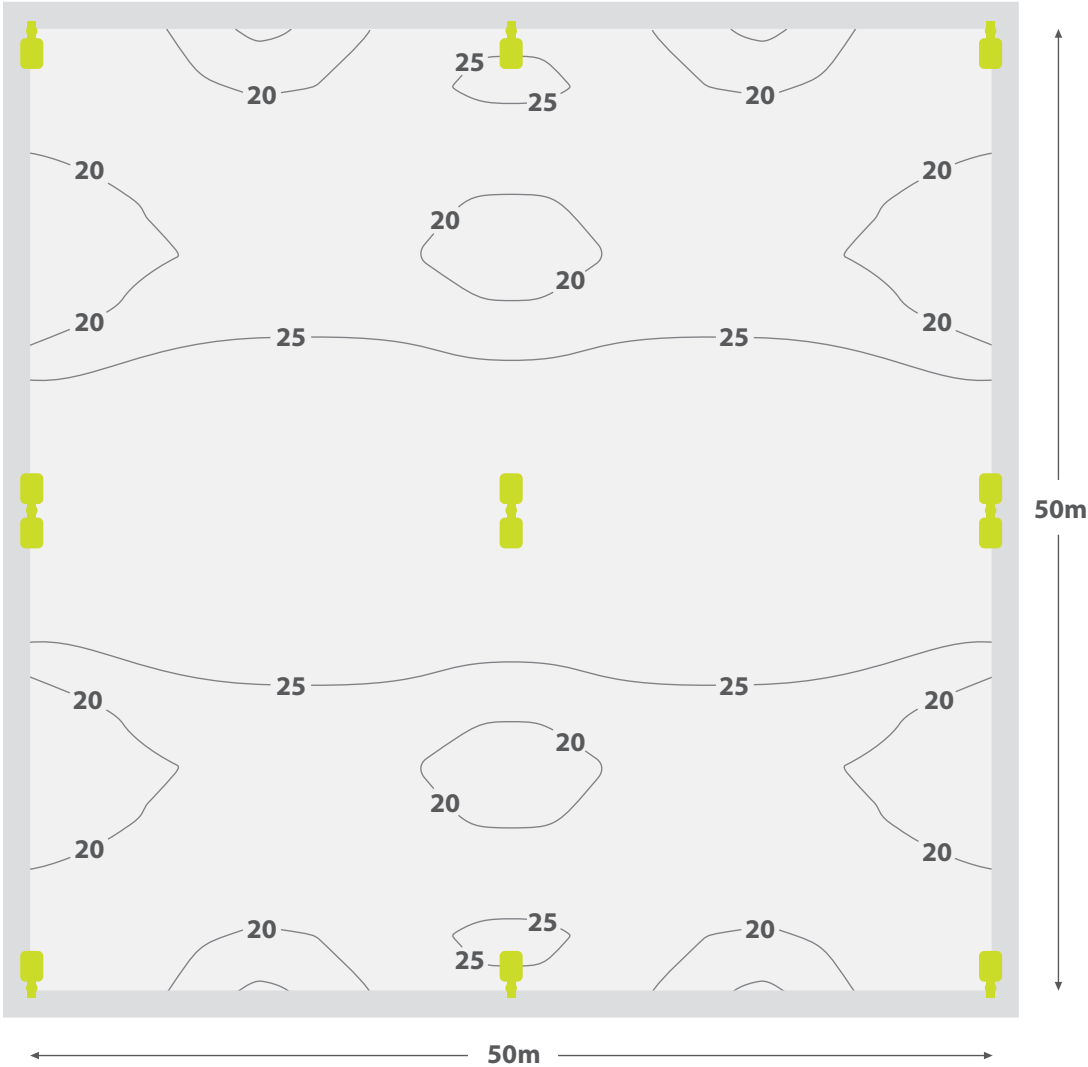

ROADWAY DISTRIBUTION

31W LED / 6m mounting height / 25m spacing - Average illuminance = 15 lux / Uniformity = 0.42

DIMENSIONS

159
156
203
351

76 dia.
(60mm or
42mm dia.
when using
a reducer)

Small - 413
Large - 540

Small - 618
Large - 745

Small - 539
Large - 666

62
(SmartScan area
distribution only)

PHOTOMETRIC GUIDE

80
160
240
CANDELAS PER 1000 LUMENS

200
400
600
CANDELAS PER 1000 LUMENS
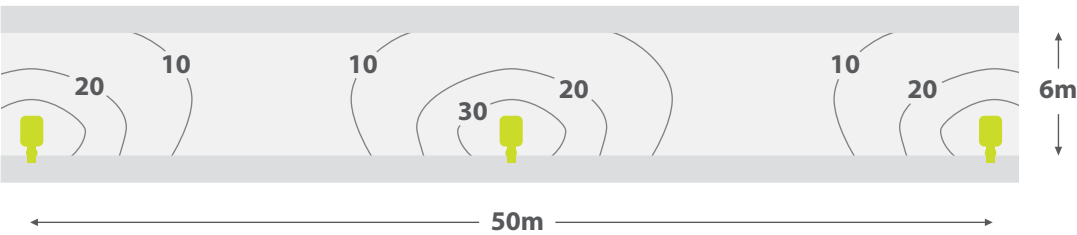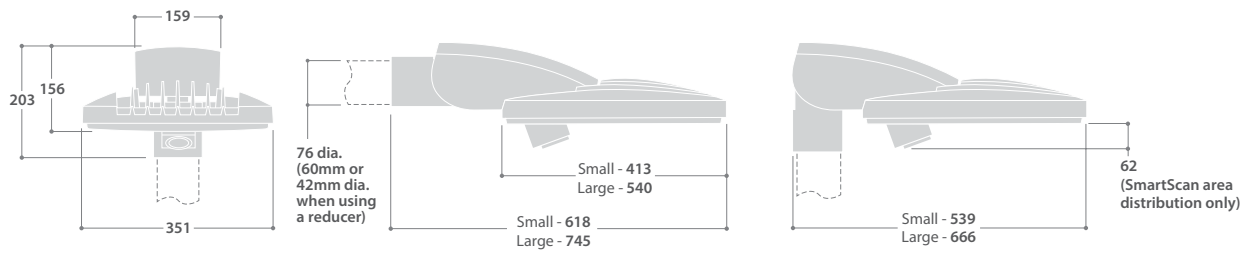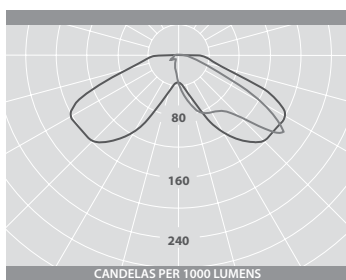
AREA DISTRIBUTION

Luminaire Lumen Output:
31W = 3500lm
62W = 6750lm
88W = 10150lm
123W = 13550lm
161W = 17250lm
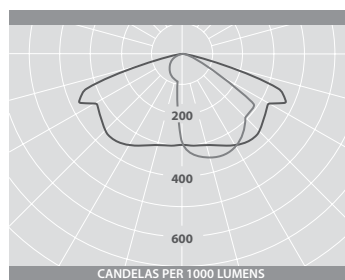
ROADWAY DISTRIBUTION

Luminaire Lumen Output:
31W = 3700lm
62W = 7100lm
88W = 10700lm
123W = 14250lm
161W = 18150lm

STARBEAM

COLUMN MOUNTING OPTIONS

Single Outreach Arm

300

76 dia.

↕10°

500

Internal stop bar

8 x stainless steel grub screws

SB 15863 to fit on to 76 dia.
SB 17788 to fit on to 89 dia.
SB 15865 to fit on to 101 dia.
SB 17180 to fit on to 114 dia.

Twin Outreach Arm 180°

500

76 dia.

↕10°

500

Internal stop bar

8 x stainless steel grub screws

SB 15864 to fit on to 76 dia.
SB 17789 to fit on to 89 dia.
SB 15866 to fit on to 101 dia.
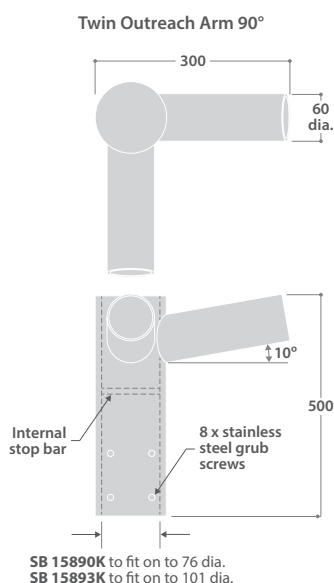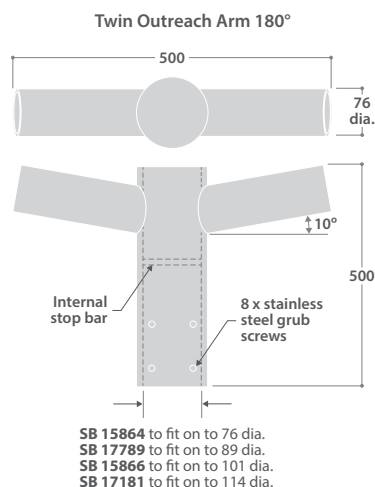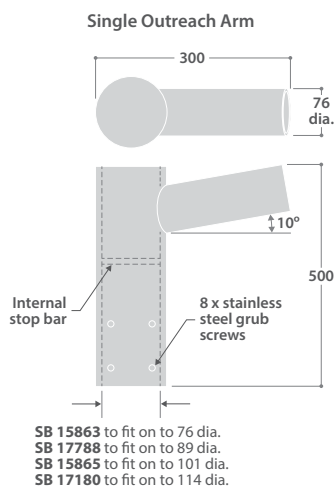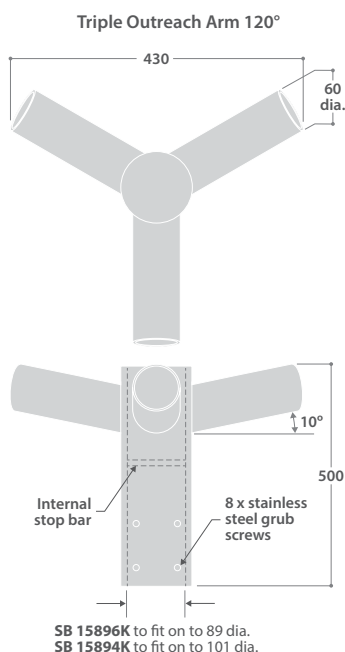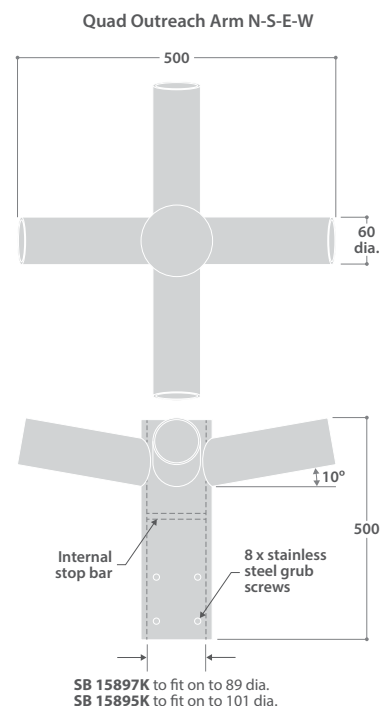**SB 17181** to fit on to 114 dia.

Twin Outreach Arm 90°

300

60 dia.

↕10°

500

Internal stop bar

8 x stainless steel grub screws

SB 15890K to fit on to 76 dia.
SB 15893K to fit on to 101 dia.

Supplied with 2 x 76mm to 60mm reducer kits (**SB 15809**)

Triple Outreach Arm 120°

430

60 dia.

↕10°

500

Internal stop bar

8 x stainless steel grub screws

SB 15896K to fit on to 89 dia.
SB 15894K to fit on to 101 dia.

Supplied with 3 x 76mm to 60mm reducer kits (**SB 15809**)

Quad Outreach Arm N-S-E-W

500

60 dia.

↕10°

500

Internal stop bar

8 x stainless steel grub screws

SB 15897K to fit on to 89 dia.
SB 15895K to fit on to 101 dia.

Supplied with 4 x 76mm to 60mm reducer kits (**SB 15809**)

COLUMN ADAPTORS

76 dia.

100

265

4 x stainless steel grub screws

POT 89-76 to fit on to 89 dia.
POT 101-76 to fit on to 101 dia.
POT 114-76 to fit on to 114 dia.

BRACKET ARM REDUCERS

86

89 dia.

76 dia.

76-60mm Reducer - SB 15809
To suit 60mm bracket arm

86

89 dia.

76 dia.

76-42mm Reducer - SB 15810
To suit 42mm bracket arm

WALL MOUNTING BRACKET

200

140

20

140

76

110

200

4 x 8.5 dia. holes

1 x 16 dia. hole

5

SB 15808
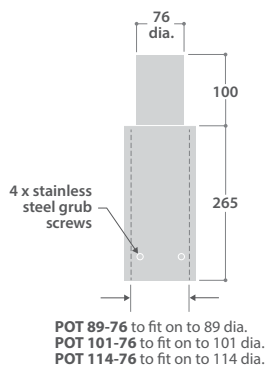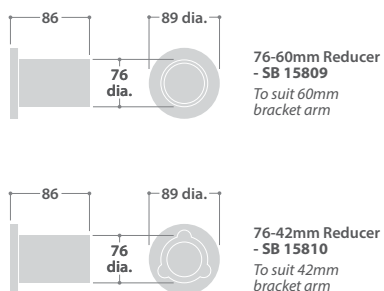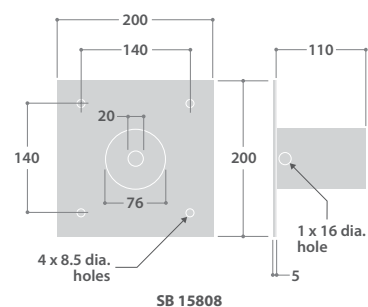
For further mounting and bracket options please contact our Technical Department

TL Thorlux Lighting

COLUMNS SPECIFICATION

• Stepped tubular galvanised steel columns, to BS EN 40-2:2004
• Mounting accessories are hot dip galvanised to BS EN ISO 1461:2009
• Black bitumen external coating to root
• Supplied with wooden baseboard for mounting cable connection accessories
• Accessories are easily fixed with stainless steel grub screws and have an internal stop to ensure cable exit

UK DELIVERY

Columns are delivered to site at a pre-arranged time. An off-loading service is not included and it is the responsibility of the client (or client's agent) for the safe undertaking of this requirement. A fork lift truck is recommended to minimise manual handling.

COLUMN RANGE

NOMINAL HEIGHT	CAT. No.	PLANTING DEPTH	BASE HEIGHT	DOOR HEIGHT	DOOR DIMENSIONS		BASE DIAMETER	SHAFT DIAMETER	APPROX. kg	BASEBOARD SIZE
A		B	C	D	E	F	G	H		
Single and Twin Starbeam Standard Columns										
4m	**FC4**	800	925	300	500	100	140	76	33	89 (w) x 500 (h)
5m	**FC5**	800	925	300	500	100	140	76	40	89 (w) x 500 (h)
6m	**FC6**	1000	925	300	500	100	140	76	44	89 (w) x 500 (h)
8m	**FC8**	1200	1200	400	600	115	168	114 ■	100	89 (w) x 600 (h)
10m	**FC10**	1500	1300	500	600	115	168	114 ■	142	89 (w) x 600 (h)
Triple and Quad Starbeam Medium Duty Columns										
4m	**FC4/89**	800	1280	300	600	115	168	89	60	89 (w) x 500 (h)
5m	**FC5/89**	800	1280	300	600	115	168	89	64	89 (w) x 500 (h)
6m	**FC6/89**	1000	1280	300	600	115	168	89	68	89 (w) x 500 (h)
8m	**FC8**	1200	1200	400	600	115	168	114 ■	100	89 (w) x 600 (h)
10m	**FC10**	1500	1300	500	600	115	168	114 ■	142	89 (w) x 600 (h)

■ Reduced at top to 101mm to accept accessories
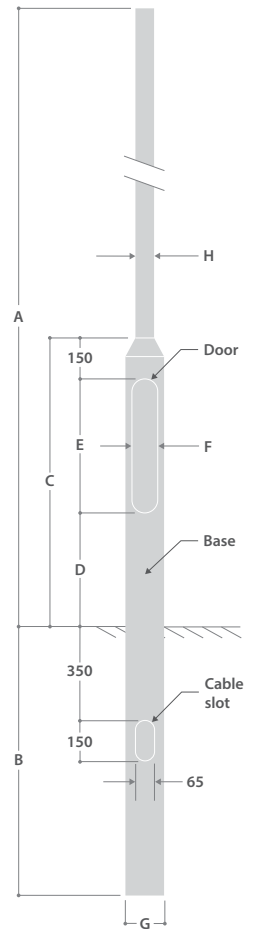
ORDERING INFORMATION

Mounting Height	SINGLE COLUMN MOUNT	SINGLE OUTREACH ARM	TWIN OUTREACH ARM 180°	TWIN OUTREACH ARM 90°	TRIPLE OUTREACH ARM 120°	QUAD OUTREACH ARM N-S-E-W
	Column Adaptor	Column Bracket	Column Bracket	Column Bracket	Column Bracket	Column Bracket
4m	FC4	FC4 SB 15863	FC4 SB 15864	FC4 SB 15890K	FC4/JUNO SB 15896K	FC4/JUNO SB 15897K
5m	FC5	FC5 SB 15863	FC5 SB 15864	FC5 SB 15890K	FC5/JUNO SB 15896K	FC5/JUNO SB 15897K
6m	FC6	FC6 SB 15863	FC6 SB 15864	FC6 SB 15890K	FC6/JUNO SB 15896K	FC6/JUNO SB 15897K
8m	FC8 POT 114-76	FC8 SB 15865	FC8 SB 15866	FC8 SB 15893K	FC8 SB 15894K	FC8 SB 15895K
10m	FC10 POT 114-76	FC10 SB 15865	FC10 SB 15866	FC10 SB 15893K	FC10 SB 15894K	FC10 SB 15895K

LED POLE TOP AMENITY LUMINAIRES

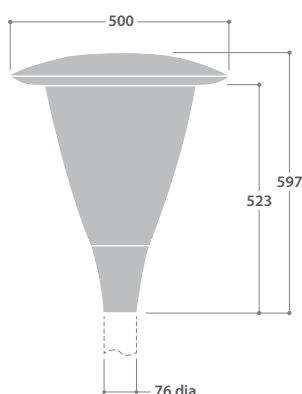**IP66** **IK10** **CE** **LED** WINDAGE - **0.14m²**

SPECIFICATION

• Strong high pressure die-cast aluminium top and column mount finished full polyester powder coat silver (RAL9006)
• High-impact UV stabilised polycarbonate cover rated IK10
• Integral high efficiency driver
• Extremely efficient and long system life up to 100,000 hours
• Fits 76mm columns as standard (60mm to special order)
• Fitted with 6m flying lead
• Photocell option
• Fitted with 4000K LEDs

LED CHARACTERISTICS

CRI	70+
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	100K - L90/B10
PROTECTION	-
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.90
LL/CW	**120.0**

For LED characteristics explanation see page 6

DIMENSIONS

500
597
523
76 dia.

PHOTOMETRIC GUIDE

70
140
210
280
350

CANDELAS PER 1000 LUMENS

Luminaire Lumen Output:
31W = 4320lm
52W = 6825lm

RANGE

LED	CAT. No.	APPROX. kg
31W	**JUN 17672L**	8.0
52W	**JUN 17673L**	8.0

CIRCUIT TYPE - **L** - non-dimming (LED)

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell	**PC**	**JUN 17672LPC**

JUNO B

HIGH PERFORMANCE LED POLE TOP LUMINAIRES

IP66 **IK10** **CE** **LED**

WINDAGE - 0.04m²

SPECIFICATION

- Strong high pressure die-cast aluminium top and column mount finished full polyester (RAL9006)
- High impact UV stabilised polycarbonate cover rated IK10
- Integral high efficiency driver
- Extremely efficient and long system life up to 100,000 hours
- Fits 76mm columns as standard (60mm to special order)
- Fitted with 10m flying lead
- Photocell option
- Zero upward light
- Fitted with 4000K LEDs

RANGE

LED*	SYMMETRIC DISTRIBUTION	ASYMMETRIC DISTRIBUTION	APPROX. kg
37W	**JUN 19200**	**JUN 19202**	7.6
78W	**JUN 19201**	**JUN 19203**	7.6

CIRCUIT TYPE - L - non-dimming (LED)

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell	**PC**	**JUN 190200PC**

ACCESSORIES

DESCRIPTION	CAT. No.
Backlight reducing shield kit	**JUN 19204**

LED CHARACTERISTICS

CRI	**70**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**100K - L80/B10**
PROTECTION	**LUX GUARD**
DRIVER EFFICIENCY	**93%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**117.2**

For LED characteristics explanation see page 6

PHOTOMETRIC GUIDE

CANDELAS PER 1000 LUMENS
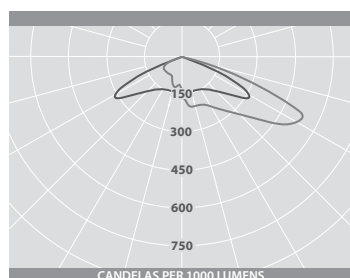
ASYMMETRIC DISTRIBUTION

Luminaire Lumen Output:
37W = 5135lm
78W = 9595lm

TRANSVERSE   AXIAL

CANDELAS PER 1000 LUMENS
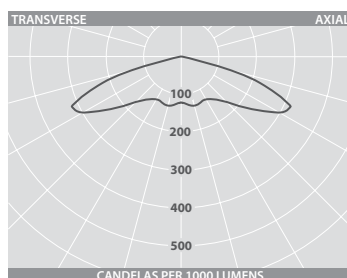
SYMMETRIC DISTRIBUTION

Luminaire Lumen Output:
37W = 5155lm
78W = 9630lm

DIMENSIONS

500
225
150
Backlight reducing shield
76 dia.

TL Thorlux Lighting
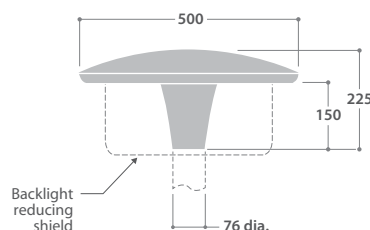
Smart External version

LED AREA FLOODLIGHTS

IP66 | IK10 | CE | LED

WINDAGE - **0.06m²**

SPECIFICATION

• Strong high pressure die-cast aluminium top and column mount finished full polyester powder coat silver (RAL9006)
• High-impact UV stabilised polycarbonate cover rated IK10
• Integral high efficiency driver
• Extremely efficient and long system life up to 100,000 hours
• Fits 76mm columns as standard (60mm to special order)
• Fitted with 6m flying lead
• Smart External versions with intelligent lighting control for use up to 6 metres mounting height
• SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit
• Photocell option
• Zero upward light
• Fitted with 4000K LEDs

LED CHARACTERISTICS

CRI	**70+**
COLOUR TEMPERATURE	**4000K**
RATED LIFE (HOURS)	**100K - L90/B10**
PROTECTION	**-**
DRIVER EFFICIENCY	**>85%**
REPLACEABLE	**YES**
POWER FACTOR	**>0.95**
LL/CW	**104.3**

For LED characteristics explanation see page 6

SmartScan Configurations

Find out more at **www.thorlux.com/smartscan**

RANGE

	LED	CAT. No.	APPROX. kg
SMART EXTERNAL	52W	**JUN 17676SS**	8.9
	78W	**JUN 17677SS**	8.9
STANDARD	52W	**JUN 17678L**	8.8
	78W	**JUN 17679L**	8.8

CIRCUIT TYPE -

SMART EXTERNAL	**SS - SmartScan**
STANDARD	**L - non-dimming (LED)**

OPTIONS

DESCRIPTION	SUFFIX	EXAMPLE
Photocell *(standard versions only)*	**PC**	**JUN 17678LPC**

PHOTOMETRIC GUIDE

CANDELAS PER 1000 LUMENS
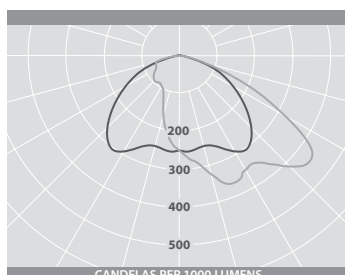
Luminaire Lumen Output:
52W = 6360lm
78W = 9155lm

DIMENSIONS

666
500
233
39 164
(Smart External versions only)
76 dia.

TL Thorlux Lighting
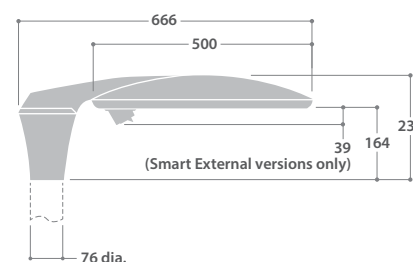
Designers, manufacturers and suppliers of professional lighting systems

INDUSTRIAL LUMINAIRES
COMMERCIAL LUMINAIRES
FLOODLIGHTING LUMINAIRES
ARCHITECTURAL LUMINAIRES
HEALTHCARE LUMINAIRES
HAZARDOUS AREA LUMINAIRES
RETAIL AND DISPLAY LUMINAIRES
CONTROLS AND SYSTEMS

A DIVISION OF FW THORPE PLC

**Thorlux Carbon Offsetting Project:
www.thorlux.com/trees**

The information given in this catalogue is typical and must not be interpreted as a guarantee of individual product performance and/or characteristics. We reserve the right to alter specifications and designs without prior notice.

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FM 10913   EMS 532104

Woodland Carbon CO2de

LIGHTING INDUSTRY ASSOCIATION

SUSTAINING MEMBER Society of Light and Lighting

MADE IN THE UK

Lighting Council AUSTRALIA MEMBER