

# THORN

## Areaflood

General purpose area floodlights with superior optical performance and control







## Control your light

The worldwide emphasis on eco-friendly floodlighting and the necessity for the reduction of obtrusive light everywhere has led to a reassessment of floodlighting techniques and given fresh impetus to the drive for more efficient and effective lighting equipment

Thorn remains at the forefront of this work. An entirely new technological approach to the issue has led to the development of the new Areaflood. The floodlight combines the positive attributes of existing floodlight design, especially the sports-oriented Champion, but in addition it embodies the company's PEC – Performance, Efficiency and Comfort – programme, which set new standards in environmental and optical performance.



Areaflood's optical secret lies in the design of a new generation of reflectors which, when combined with the inclined front glass and integrated visor, deliver precise lighting control. There is a choice of asymmetric and street optics.



Available in two sizes, the new Areaflood is extremely versatile in the light source it can take golden white light – 70-600W high pressure sodium (HST), 45-400W metal halide (HIT) for high levels of white light or 42-57W compact fluorescent (TC-TEL) for excellent colour rendering. Despite being able to take up to 600W lamps of high efficacy and having the control gear mounted inside the luminaire (up to 400W only, except 400W electronic and hot restrike), its aerodynamic design theme means that when wall or column mounted it has an attractive and neat appearance.

Made from tough aluminium finished in textured grey (ANT - dark sandy grey 900, SR - silver sandy grey 150) and sealed to IP66 (IP65 for mini photocell PM and electronic radio frequency LDRF versions), the floodlight can be supplied with electronic gear (HF/DGE) and lighting controls (LDC, LDRF, LET, LSC). Emergency (E3MT) and hot restrike (HR) options add further flexibility.

The floodlight has a formidable list of standards clearances. It conforms to EN 60598, EN 12464-2, EN 12193 and EN 13201; the RoHS and WEEE directives, and complies with the EuP. It is CE and ENEC marked and meets EMC regulations.

Areaflood also boasts features which simplify installation and maintenance, plus a range of optical attachments, colour filters, dedicated brackets and excellent thermal management. These all combine to give the best value in area floodlighting today.

Areaflood is ideal for a wide range of uses from functional lighting (vehicle parks, forecourts, industrial or open storage areas and transport terminals), many types of street lighting, decorative applications (from parks to plazas) and recreational and club sports areas, including indoor swimming pools and coastal areas.

## How to avoid obtrusive light

Obtrusive light has come to be a major cause for concern among environmentalists, conservationists, astronomers, and many other bodies. The subject has received substantial media coverage and, quite rightly, a whole range of legislation has been set in place to prevent it.

While light comes from many sources, and is spilled out by many applications, it is local area floodlighting, such as car parks, tennis courts and freight areas, which are singled out by many as a major contributor to the problem. The use of high-powered floodlights, often without decent optics, ensures that lit facilities are very visible

outside the boundary of the facility itself, are often very bright, and therefore become 'prime suspects'.

It is near certain that if a facility is planned, with area floodlighting, then local residents will raise objections, and the planning process will demand evidence from the designer that obtrusive light will be prevented.

How do you do this? Just how do you make sure that the light is placed where you want it, and does not escape beyond that area?

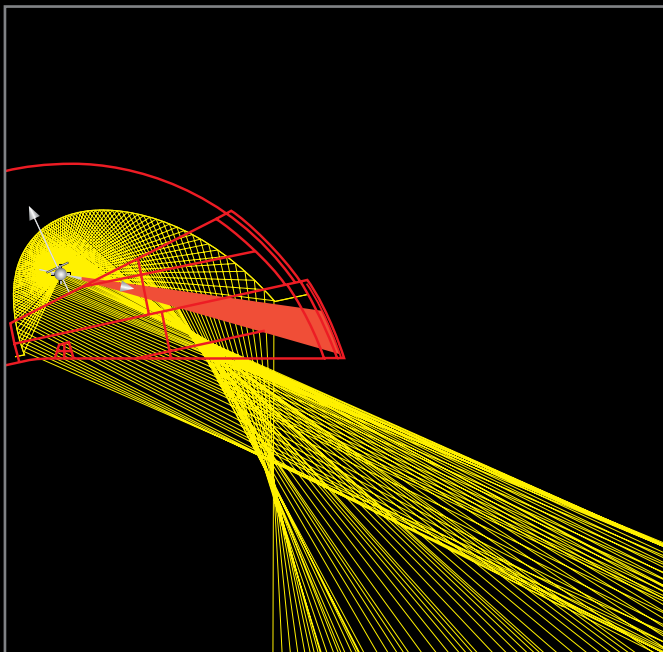
## Your choice of floodlight

In recent years, 'flat glass' types have become familiar to control obtrusive light. These are characterised by having very 'asymmetric' beams (lighting directed across the surface area although the floodlight is mounted horizontally). Their use has largely superseded the traditional 'projector' type, where the front of the floodlight is tilted, and high light output projected forward, but inevitably with the open face of the floodlight visible.

Projector floods are inherently more efficient than flat glass types, while flat glass types sometimes do not have a sufficiently high 'peak beam angle' to reach across the area properly, and they are then tilted upwards for results.

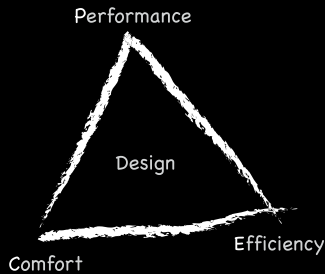
The optical design of the Areaflood is notably different from normal area floodlights. It combines the performance features of classic and 'flat glass' projectors. Instead of having a 'flat glass' construction Areaflood's front glass closure is inclined inside the floodlight. The front lip of the body acts as a cowl, giving full cut-off and providing a 'virtual' light emitting surface, which for most applications is aimed parallel (flat) to the ground. Even for the most demanding sports applications the floodlight will not need to be tilted over 5°.

The results are impressive. Illuminance and uniformity are optimised, glare minimised and obtrusive light avoided. Peak beam angles are up to 60° and the flood offers a total cut off at 90°.



# Performance, Efficiency and Comfort (PEC) – for a better lit environment

Areaflood evokes the spirit of Thorn Lighting's dynamic, results-orientated PEC programme



The programme is based on the principle that Performance, Efficiency and Comfort determine the effectiveness of lighting, its impact on the people using it, and its impact on the natural environment. Areaflood delivers the right light on the right place at the right time.

**Performance:** Providing the best visual effectiveness

**Efficiency:** Minimising the use of energy, CO<sub>2</sub> emissions and waste

**Comfort:** giving people satisfaction and stimulation

## Performance

### High optical efficiency

A floodlight is of little value if, due to poor optical design, it is unable to provide light of the desired intensity exactly where it is required. If the maximum light output and control is to be achieved, the light-centre of the lamp must be positioned accurately within a correctly designed reflector and relative to the front glass design.

The Areaflood range is available with two types of reflector giving complete scheme capability: Asymmetric and Street. All deliver good illuminance, luminance and uniformity, precise light control and minimal glare. Key performance points include:

- The asymmetrical reflectors are made of high quality aluminium and ultra high reflectivity aluminium coating for size 2 (95% total reflectivity). Peak beam angles are: 45° for Size 1 asymmetrical and 20° intensive, 30° extensive or 60° control for Size 2 asymmetric reflectors (A/S2, A/S3, A/S6).
- Smooth cut-off of the light beam at the rear of the floodlight to avoid striations on the task area
- Additional accessories available for on-site 'fine tuning' in areas of extreme sensitivity. These include adjustable shutter to cut-off the intensity in the vertical plane and anti-glare louvres
- Areaflood Street size 1 integrates Civic lantern optical system size 1. Areaflood Street size 2 integrates the first class Oracle lantern Optibloc® comfort size 1 with the most common settings
- The use of metal halide and compact fluorescent lamps means good colour rendition



# Efficiency

## Energy saving and the environment

The lighting market is currently witnessing a period of rapid technical development, driven by the economic pressures associated with energy costs and overall environmental considerations. The swift rate of introduction of new lamps and controls has made it difficult for the lighting user to exploit fully the benefits of the new technology. Areaflood makes full use of this advancing technology by offering:

- A wide selection of light sources with high efficacy – 70-600W HST/HIT-CE, 210-315W CDM Elite MW (depending on availability of new lamp and gear packages from the manufacturers), 45-60-90-140W CosmoPolis and 42-57W TC-T
- The accurate optical system and integrated visor permits effective control of obtrusive light (0 cd at 90°)
- Electronic ballast versions are available as standard (remote gear for 400W outdoor use only)
- Integral photocell option, which automatically switches the floodlight on as daylight fades
- Bi-power (power reduction device)
- Ability to accept outdoor lighting controls, Telea system
- Eco-design – including EuP, WEEE and RoHS compliance
- Aluminium body, front glass, reflector, stirrup and plastic elements are all recyclable

## Simple, easy installation and low maintenance

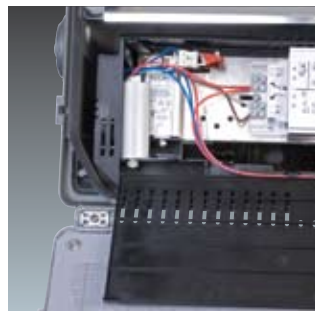
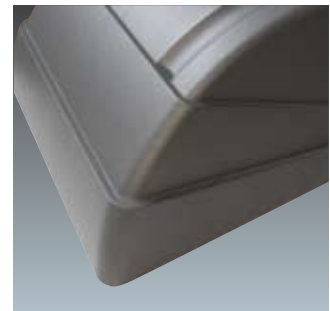
A complete removable gear tray for floodlighting versions enables easy maintenance. The hidden cost this represents is sometimes not appreciated until the final cost is presented. The installing electrician should not be forgotten either. They may be 8m above the ground, perhaps in an inaccessible position, and their task becomes even harder if floodlights present wiring or aiming difficulties. Areaflood is designed with easy installation and maintenance in mind to bring benefits to the user in financial terms and in the standard of the final work:

- The front glass is retained by two captive screws (four for Size 2 models) and when opened hinges down to provide easy access to the lamp and gear tray.
- A single cable gland is supplied, with provision for a second gland for through wiring (custom order)
- Safety is assured through a Class I/II electrical rating
- Aiming is simplified via pre-marked positions for both the body and stirrup to secure the horizontal position
- Supplied with a streamlined and 'reversible mounting' stirrup
- Compatible with existing Thorn floodlight mounting accessories

## Tough construction and reliable operation

Prolonged, reliable service is expected of floodlights which are often infrequently maintained even where environmental conditions are severe. Warm humid atmospheres, such as encountered in indoor swimming pools, are not unrepresentative of the more extreme applications. If the floodlight has not been designed for prolonged operation in the areas where it will find most use, it will fail. In the Areaflood careful consideration was given to thermal and mechanical issues.

- Use of high grade die-cast aluminium body AS12 (LM6) for corrosion resistance
- Unique thermal system (self regulating breather) for reliable operation in indoor and outdoor applications (+35°C Ta indoor depending on version and position of the floodlight)
- Toughened front glass (5mm)
- Silicon gasket ensures IP66 seal (except IP65 for mini photocell and LDRF)
- Shock resistance 5/6j (IK08) and IK10 with wire guard





## Comfort

The 'Comfort' component of PEC addresses the physiological needs of people in places. It is a more subconscious factor relating to the ability to give people satisfaction and stimulation in all areas. In outdoor work areas efficiency can be maintained through the night with good floodlighting. Freight can be loaded and unloaded, car and lorry parks are much more secure against vandalism and theft.

Area floodlighting encourages performers, be they tennis players or car salespeople, and retail staff as well as the elderly and the young feel more protected when public places are well lit. There's no better way of producing a vibrant atmosphere than by attractive and dramatic floodlighting. Areaflood brings other, more tangible, features:

- Sleek aesthetics for good architectural integration. The textured grey finish in both dark sandy grey and silver sandy grey, makes Areaflood discretely inconspicuous
- Broad choice of lamps and accessories helps create the most appropriate ambience and mood
- Distinct colours and dramatic results can be created by the use of filters (red, blue, green and yellow)
- Integrated emergency lighting versions give added safety
- Hot-restrike options allow rapid re-start after floodlights are turned off
- A unique, decorative, post-top stirrup blends especially well with urban areas









## Product Features

### Lamps

Areaflood size 1

☛ 100-150W HST/HIT-CE (ST/MT) tubular high pressure sodium and metal halide.

Cap: E40

☛ 70-150W HIT-DE/HST-DE

(MD/SD) double ended high pressure sodium and metal halide.

Cap: RX7s

☛ 45-140W CPO Cosmopolis.

Cap: PGZ12

☛ 50-70W HST/HIT-CE (ST/MT) high pressure sodium and metal halide. Cap: E27

☛ 42-57W TC-T (FSM) compact fluorescent. Cap: GX24q-4/5

Areaflood size 2

☛ 100-600\* HST (ST) tubular high pressure sodium. Cap: E40

☛ 100-400W HIT/HIT-CE (MT) tubular metal halide. Cap: E40

☛ 210-315W CDM elite MW.

Cap: PGZ18

☛ 90-140W CPO cosmopolis.

Cap: PGZ12

\* Remote gear tray

### Materials/Finish

Body: recyclable die-cast aluminium AS12 (LM6) for high corrosion resistance

Finishes: powered paint Akzo Nobel dark sandy grey 900 or silver sandy grey 150

Gasket: silicon gasket provides IP66 seal

Hinges and finger grips: polyamid glass fibre 20%

Closing glass: captive or retaining screws (2 for size 1, 4 for size 2)

Gear tray box: polyamid glass fibre 30%

Gear tray box cover: polypropylene

Reflectors:

Size 1: high reflectivity pre-anodised high grade aluminium

Size 2: very high reflectivity pre-anodised high grade aluminium (95% total reflectivity)

Glass: toughened (5mm thick)

Accessories: metal plate painted in the same finish as the body

Filters: tinted row coloured filters

### Installation/Mounting

Reversible mounting stirrup and aiming for horizontal position is simplified via 2 indicators depending on the stirrup mounting position

Cable gland for 8-12mm

Drop front glass access with 2 screws for size 1 and 4 screws for size 2

Delivered with stirrup, gear tray and with or without lamp in a single packaging

Choice of spigot adaptor for post top mounting the stirrup onto a column (60 or 76mmØ).

Fixes to column with 2 M10 bolts and nuts (supplied). Stirrup fixed by 2 bolts and washers (supplied). Choice of decorative bracket arm for mounting size 1 floodlight stirrup onto column (60 or 76mmØ). Fixes via 4 M8 bolts (not supplied).

### Standards

Designed and manufactured to comply with EN 60598, EN 12464-2, EN 12193 and EN 13201

RoHS and WEEE directives complies with the EuP meets EMC regulations

☉ Class I or ☐ Class II electrical Ta 35°C indoor depending on version and/or position

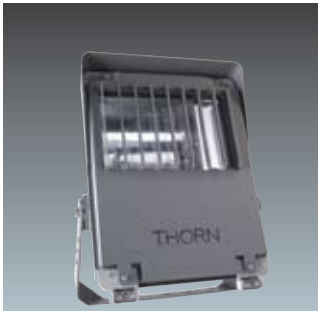
IK08/IK10 with wire guard  
♦IP66/♦IP65 photocell and LDRF versions ⚡ CE



Size 1



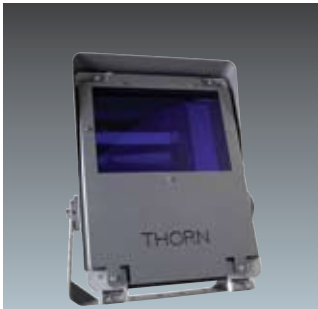
Size 2



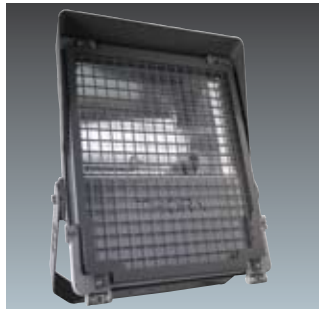
Louvre - size 1



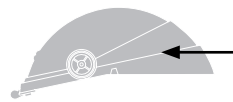
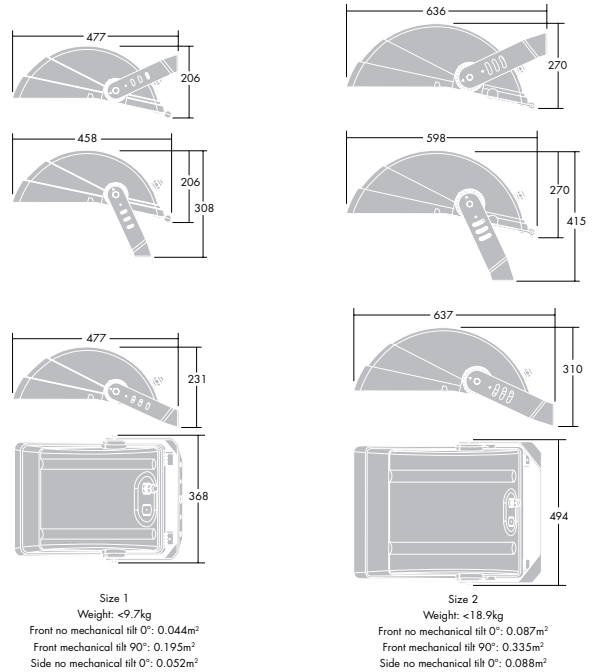
Louvre - size 2



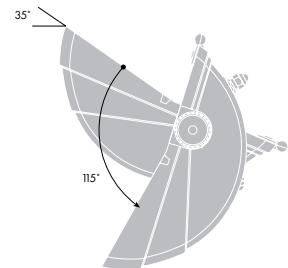
Blue filter - size 1



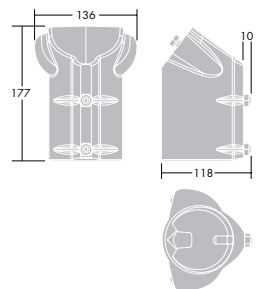
Wire guard - size 2



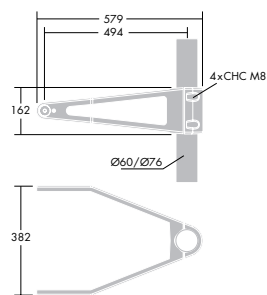
<b>Mechanical tilting</b>	$0^\circ$
<b>Direction</b>	Front
<b>Scx Size 1</b>	$0.044\text{m}^2$
<b>Scx Size 2</b>	$0.087\text{m}^2$



Tilting angles not suitable for outdoor use



Posttop  $\varnothing 60$  or  $76\text{mm}$



Decorative post-top bracket  $\varnothing 60$  or  $76\text{mm}$

### Specification

To specify state:  
Full IP66 and AS12 (LM6)  
General purpose area floodlight with superior optical performance and control. Two sizes delivering 42-57W compact fluorescent for excellent colour rendering lighting, 45-400W metal halide (HIT) for high levels of white light, or 70-600W high pressure sodium (HST) lamps for economical golden white light. Inclined front glass and integrated visor deliver precise lighting control while construction provides excellent thermal management. Its aerodynamic design theme and two textured grey finishes means that when wall or column mounted it has an attractive and neat appearance. With electronic gear, emergency

lighting, power reduction device, mini photocell, hot restrike and lighting control, all combine to give the best value in area floodlighting today. As Thorn Areaflood.

## Sample project

Sample project showing car park lighting for the previous Areaflood and opposite, for the new state of the art Areaflood

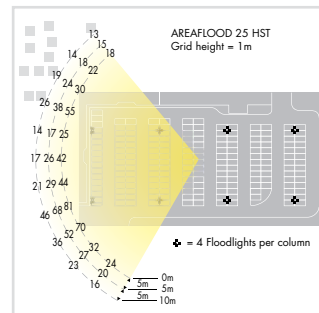
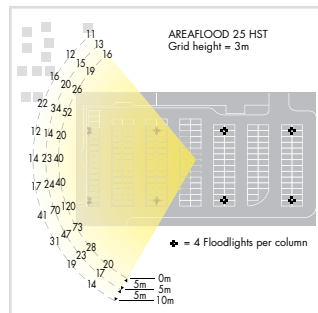
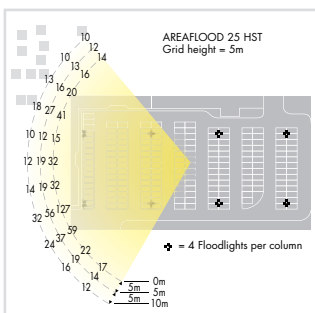
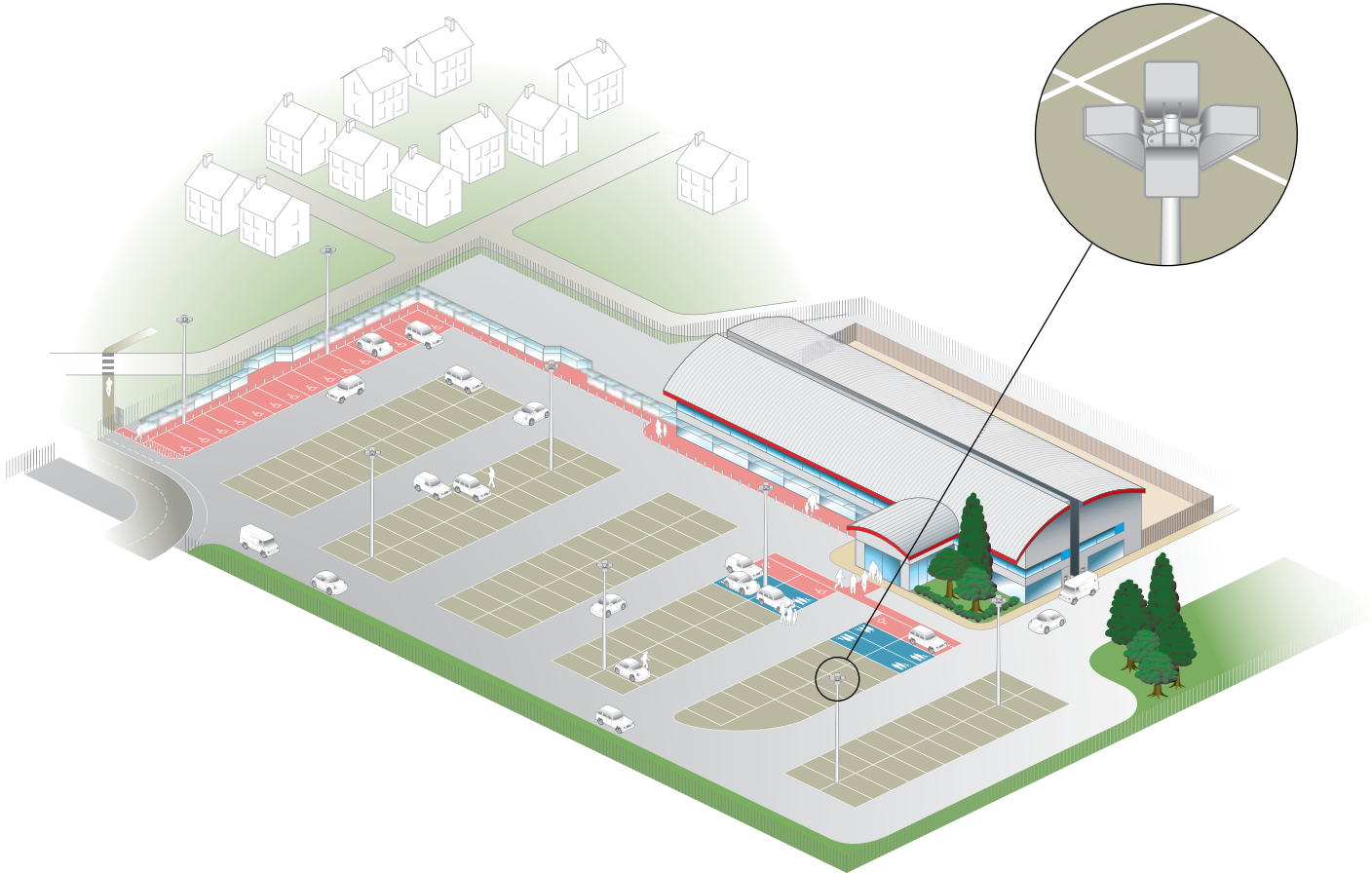
In both examples shown 250W HST lamps are used. To achieve the same illuminance the new scheme would require 25% less floodlights than the old scheme. The improved figures include power savings and no light above the horizontal can be seen in the comparison table opposite.

Specific requirements from the customer are typical for large DIY shops (do it yourself distributors) **> 50 lx maintained/62 lx initial** due to CCTV, security of visitors and for heavy traffic and specific events, for example outdoor markets (in some specific cases DIY stores can require even more  $E_m$  80 lux).

Normal activity for this area is defined as follows by outdoor workplaces: **standard EN 12464-2: 5.9.2**

Medium traffic, parking areas of department stores:  
 **$E_m \geq 10$  lux,  $U_{0.5} \geq 0.25$**

## Previous Areaflood



Radius of the circle is 130m (the diagonal of the area) divided by 2

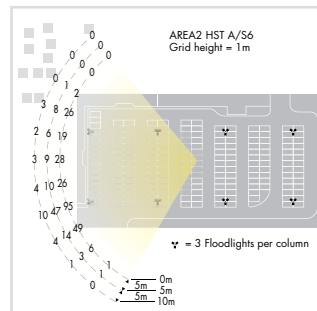
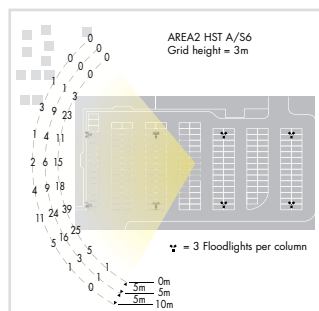
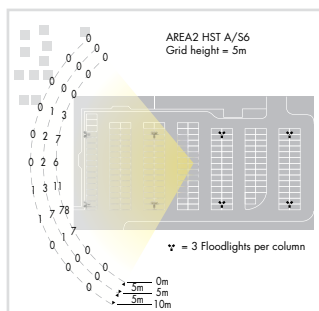
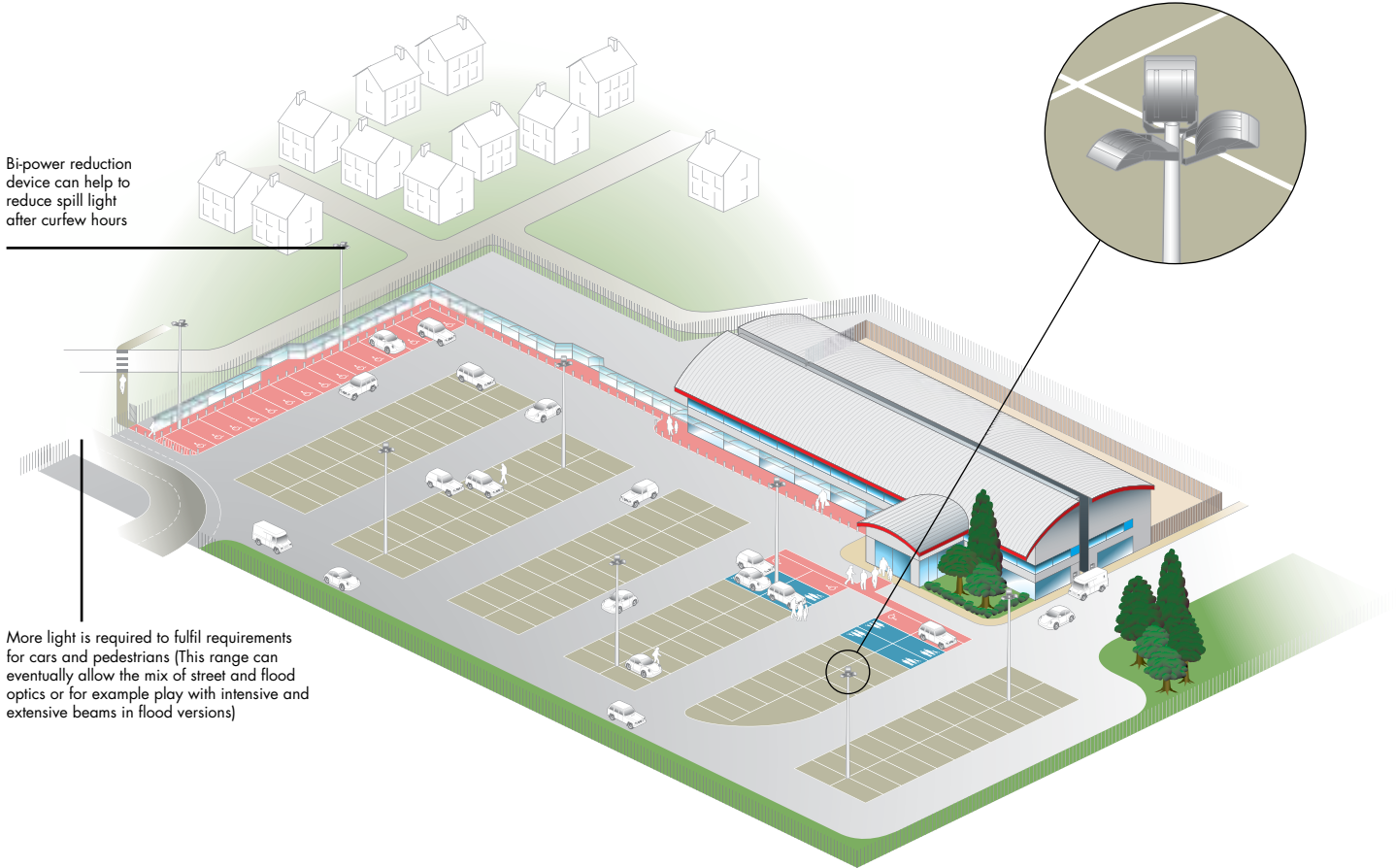
Values are vertical illuminances toward an observer located on the centre of the circle

## Areaflood comparison table

		Previous Areaflood 25	New Areaflood	Areaflood with power reduction
Dimensions		113x63	113x63	113x63
Calculation points		841 points	841 points	841 points
Lamp type		250W HST	250W HST	250W HST
Initial lamp lumens		27000	27000	18900
No. floodlights		32	24	24
No. columns		8	8	8
Mounting height		8m	8m	8m
Mechanical tilting angle		45°*	5°	5°
Peak intensity		65°	65°	65°
Lux values	Required	Achieved	Achieved	Achieved
Maintained average illuminance	50lux	52lux	55lux	17lux
Initial average illuminance	62lux	65lux	69lux	21lux
Uniformity (min/ave)		0.33	0.25	0.25
Power installed		8.96kW	6.72kW	4.24kW

\* This angle can be reduced to 40° achieving 0.26 uniformity and Average Illuminance 72lux but without significant change to the spill light

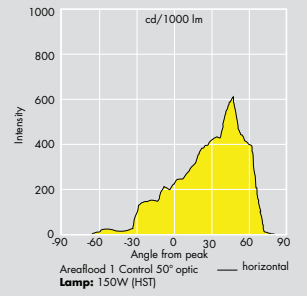
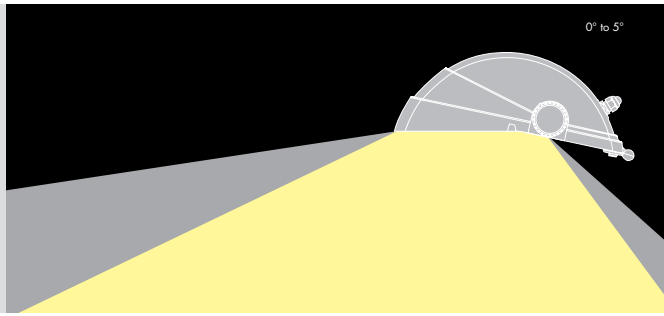
## New Areaflood



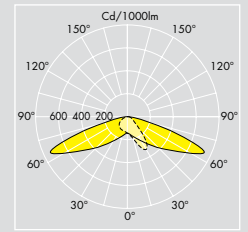
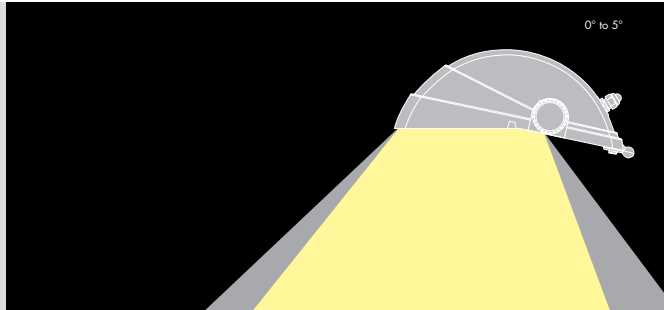
Radius of the circle is 130m (the diagonal of the area) divided by 2

Values are vertical illuminances toward an observer located on the centre of the circle

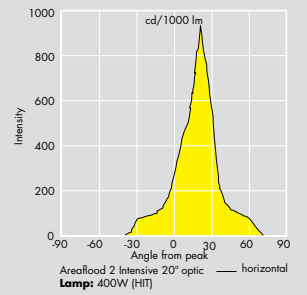
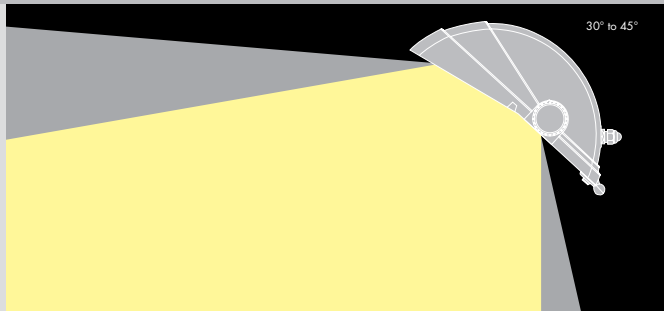
**Areaflood 1**  
Control 50° for typical surround lighting



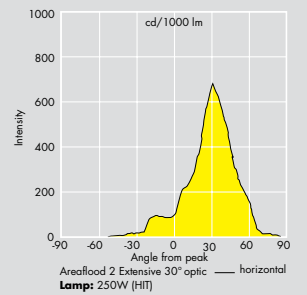
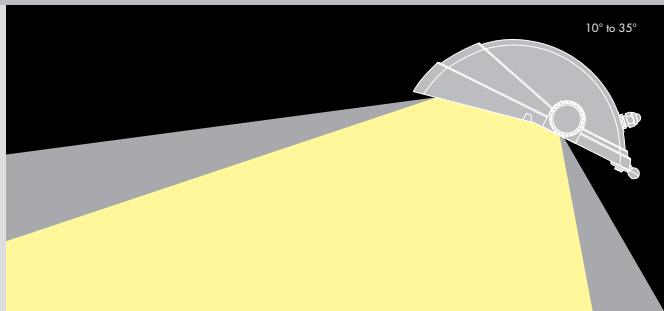
**Areaflood 1**  
Street for typical urban lighting



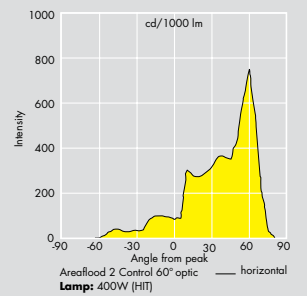
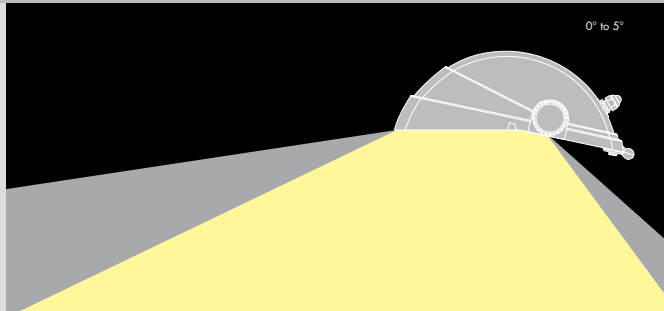
**Areaflood 2**  
Intensive 20° for typical industrial large areas



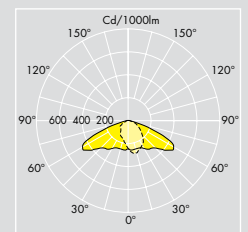
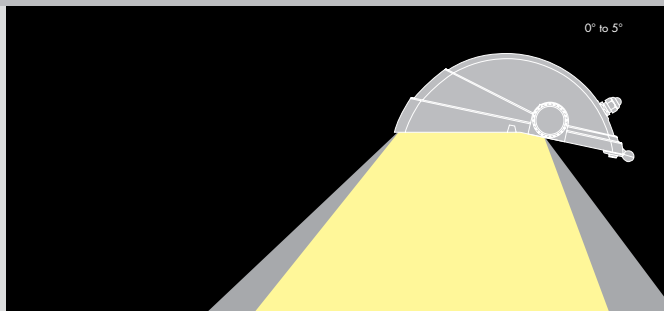
**Areaflood 2**  
Extensive 30° for typical tennis courts



**Areaflood 2**  
Control 60° for typical car parks



**Areaflood 2**  
Street for typical road lighting



# Areaflood 1

**Ordering Guide - 230V** Lamps to be ordered separately

W	LBS	Socket	Optic	Col	Conventional gear			Electronic gear									
					BP	HR	PM	BP	E3MT	LDC	LDRF	LET	PM	SLD			
42W	TC-TEL	GX24q-4	A/S	ANT				96254407		96254411				V	S		
				SR				96254141		96254408				V	S		
45W	HIT-CE	PGZ12	A/S	ANT				96255557						V			
				SR				96255559						V			
50/70W	HST	E27	A/S	ANT				S									
				SR				S									
			STR	ANT	96255565												
				SR	V												
57W	TC-TEL	GX24q-5	STR	ANT				96255566							V		
				SR				96255567							V		
60W	HIT-CE	PGZ12	A/S	ANT				96255572	V						V		
				SR				96255574	V						V		
70W	HIT	E27	A/S	ANT	96255584			V	96255581						V		
				SR	96255586			V	96255582						V		
			STR	ANT	96255585				V								
				SR	96255587				V								
	HST	E27	A/S	ANT	96255249	96255625			96255612	96255621				96255616	V		
				SR	96255619	96255627			96255614	96255623				96255617	V		
			STR	ANT	96255618	96255626			V								
				SR	96255620	96255628			V								
	HID-DE	RX7s	A/S	ANT	96254551												
				SR	96255580												
ANT						96255606			96255604								
			SR				96255607			96255605							
			ANT		V	V		V	V								
			SR		V	V		V	V								
90W	HIT-CE	PGZ12	A/S	ANT				96255646							V		
				SR				96255648							V		
100W	HID	E40	A/S	ANT	96255658			V									
				SR	96255660			V									
			STR	ANT	96255659				V								
				SR	96255661				V								
	HIT	E40	A/S	ANT				96255662							V		
				SR				96255664							V		
	HIT-CE	E40	A/S	ANT							96255666	96255670					
				SR								96255668	96255672				
HST	E40	A/S	ANT		96255710			96255714	96255706						V		
			SR		96255712			96255716	96255708			96255698	96255702		V		
			STR	ANT	96255711							96255700	96255704		V		
			SR	96255713													
140W	HIT-CE	PGZ12	A/S	ANT				96254412							V		
				SR				96255743							V		
150W	HID	E40	A/S	ANT	96254139			V									
				SR	96255754			V									
			STR	ANT	96255753				V								
				SR	96255755				V								
	HIT	E40	A/S	ANT				96255756							V		
				SR				96255758							V		
	HIT-CE	E40	A/S	ANT							96255760	96255764					
				SR								96255762	96255766				
	HST	E40	A/S	ANT		96255809			96255813	96255805			96255798	96255801		V	
				SR		96255811			96255815	96255807			96255799	96255803		V	
				STR	ANT	96255810											
				SR	96255812												
HID-DE	RX7s	A/S	ANT	96254416													
			SR	96255062													
HIT-DE	RX7s	A/S	ANT				96255791			96255790							
			SR				96255792			96255065							
HST-DE	RX7s	A/S	ANT		V	V		V	V		V	V					
			SR		V	V		V	V		V	V					

V - Variant a modified standard S - SPECIAL is a complete new version  
A/S - Asymmetric optic, STR - Street Optic, SR - Silver, ANT - Anthracite, BP - Power reduction, HR - Hot restrike, PM - Mini photocell, E3MT - Emergency three hour maintained  
LDC - Stepless dim controller, LDRF - Stepless dim controller radio frequency, LET - StepDim controller, SLD - Presence detector, E3MT and HR codes are master codes (Kits) with slaves codes behind

# Areaflood 1

## Ordering Guide - 240V Supplied complete with lamp

W	LBS	Socket	Optic	Col	Conventional gear			Electronic gear						
					BP	HR	PM	BP	E3MT	LDC	LDRF	LET	PM	SLD
42W	TC-TEL	GX24q-4	A/S	ANT				96255553	96255551				96255555	S
				SR				96255554	96255552				96255556	S
45W	HIT-CE	PGZ12	A/S	ANT				96255561					96255562	
				SR				96255564					96255563	
50/70W	HST-MF	E27	STR	ANT	V									
				SR	V									
57W	TC-TEL	GX24q-5	STR	ANT				96255568					96255570	
				SR				96255569					96255571	
60W	HIT-CE	PGZ12	A/S	ANT				96255576	V				96255578	
				SR				96255577	V				96255579	
70W	HIT-CE	E27	A/S	ANT	96255596			96255598	96255588				96255590	
				SR	96255602			96255600	96255594				96255592	
			STR	ANT	96255597			96255599						
				SR	96255603			96255601						
	HST-MF	E27	A/S	ANT	96255250	V		96255640	96255629	V			96255637	96255631
				SR	96255644	V		96255642	96255635	V			96255638	96255633
			STR	ANT	96255639	V		96255641						
	HIT-DE-CE	RX7s	A/S	ANT	96255610		V		96255608					
				SR	96255611		V		96255609					
				ANT	V	V	V		V	V				
HST-DEMF			SR	V	V	V		V	V					
90W	HIT-CE	PGZ12	A/S	ANT				96255650					96255652	
				SR				96255656					96255654	
100W	HIT-CE	E40	A/S	ANT	96255690			96255692	96255682		96255674	96255678	96255684	
				SR	96255696			96255694	96255688		96255676	96255680	96255686	
			STR	ANT	96255691			96255693						
				SR	96255697			96255695						
	HST-MF	E40	A/S	ANT	96255734	V		96255736	96255718	V		96255726	96255730	96255720
				SR	96255740	V		96255738	96255724	V		96255728	96255732	96255722
STR	ANT	96255735	V		96255737									
SR	96255741	V		96255739										
140W	HIT-CE	PGZ12	A/S	ANT				96255745					96255747	
				SR				96255751					96255749	
150W	HIT-CE	E40	A/S	ANT	96254413			96255785	96255776		96255768	96255772	96255778	
				SR	96255789			96255787	96255782		96255770	96255774	96255780	
			STR	ANT	96255784			96255786						
				SR	96254414			96255788						
	HST-MF	E40	A/S	ANT	96255251	V		96255834	96255817	V		96255825	96255829	96255819
				SR	96255838	V		96255836	96255823	V		96255827	96255831	96255821
			STR	ANT	96255833	V		96255835						
	HIT-DE-CE	RX7s	A/S	ANT	96254140		96255795		96255793					
				SR	96255797		96255796		96255794					
				ANT	V	V	V		V	V		V	V	
HST-DEMF			SR	V	V	V		V	V		V	V		

V - Variant a modified standard S - SPECIAL is a complete new version

A/S - Asymmetric optic, STR - Street Optic, SR - Silver, ANT - Anthracite, BP - Power reduction, HR - Hot restrike, PM - Mini photocell, E3MT - Emergency three hour maintained

LDC - Stepless dim controller, LDRF - Stepless dim controller radio frequency, LET - StepDim controller, SLD - Presence detector, E3MT and HR codes are master codes (Kits) with slaves codes behind



# Areaflood 2

## Ordering Guide - 230V Lamps to be ordered separately

W	LBS	Socket	Optic	Col	Conventional gear			Electronic gear				
					System/Control BP	LSC	PM	System/Control BP	LDC	LDRF	PM	
90W	HIT-CE	PGZ12	A/S2	ANT				S				S
				SR				S				S
			A/S3	ANT				S				S
				SR				S				S
			A/S6	ANT				S				S
				SR				S				S
			STR	ANT				V				V
				SR				V				V
100W	HID	E40	A/S2	ANT	V		V					
				SR	V		V					
			A/S3	ANT	V		V					
				SR	V		V					
			A/S6	ANT	V		V					
				SR	V		V					
			STR	ANT	V		V					
				SR	V		V					
	HIT	E40	A/S2	ANT				V				V
				SR				V				V
			A/S3	ANT				V				V
				SR				V				V
			A/S6	ANT				V				V
				SR				V				V
			STR	ANT				V				V
				SR				V				V
	HIT-CE	E40	A/S2	ANT						V	V	
				SR						V	V	
			A/S3	ANT							V	V
				SR							V	V
			A/S6	ANT							V	V
				SR							V	V
			STR	ANT							V	V
				SR							V	V
HST	E40	A/S2	ANT		V	V		V	V	V	V	
			SR		V	V		V	V	V	V	
		A/S3	ANT		V	V		V	V	V	V	
			SR		V	V		V	V	V	V	
		A/S6	ANT		V	V		V	V	V	V	
			SR		V	V		V	V	V	V	
		STR	ANT		V	V		V	V	V	V	
			SR		V	V		V	V	V	V	
140W	HIT-CE	PGZ12	A/S2	ANT				V				V
				SR				V				V
			A/S3	ANT				S				S
				SR				S				S
			A/S6	ANT				S				S
				SR				S				S
			STR	ANT				96255840				V
				SR				96255841				V
	150W	HID	E40	A/S2	ANT	96255843		V				
					SR	96255847		V				
				A/S3	ANT	96255842		V				
					SR	96255845		V				
A/S6				ANT	96255252		V					
				SR	96255846		V					
STR				ANT	96255529		V					
				SR	96255848		V					
HIT		E40	A/S2	ANT				96255851				V
				SR				V				V
			A/S3	ANT				96255849				V
				SR				V				V
			A/S6	ANT				96255850				V
				SR				V				V
			STR	ANT				96255852				V
				SR				V				V
HIT-CE	E40	A/S2	ANT						V	V		
			SR						V	V		
		A/S3	ANT						V	V		
			SR						V	V		
		A/S6	ANT						V	V		
			SR						V	V		
		STR	ANT						V	V		
			SR						V	V		
HST	E40	A/S2	ANT		V	V		96255855	V	V	V	
			SR		V	V		V	V	V	V	
		A/S3	ANT		V	V		96255853	V	V	V	
			SR		V	V		V	V	V	V	
		A/S6	ANT		V	V		96255854	V	V	V	
			SR		V	V		V	V	V	V	
		STR	ANT		V	V		96255856	V	V	V	
			SR		V	V		V	V	V	V	
210W	HIT-CE	PGZ18*	A/S2	ANT				96255881				V
				SR				96255884				V
			A/S3	ANT				96255880				V
				SR				96255882				V

# Areaflood 2

## Ordering Guide - 230V Lamps to be ordered separately

W	LBS	Socket	Optic	Col	Conventional gear				Electronic gear				
					System/Control BP	HR	LSC	PM	System/Control BP	PM			
210W	HIT-CE	PGZ18*	A/S6	ANT					96254138		V		
				SR					96255883		V		
250W	HID	E40	A/S2	ANT	96254421			V					
				SR	96255892			V					
			A/S3	ANT	96255253			V					
				SR	96255255			V					
			A/S6	ANT	96255254			V					
				SR	96255256			V					
			HIDE	E40	A/S2	ANT					96255895		V
						SR					96255898		V
	A/S3	ANT							96255893		V		
		SR							96255896		V		
	HST	FC2	A/S6	ANT					96255894		V		
				SR					96255897		V		
			A/S2	ANT		V		V		V			
				SR		V		V		V			
			A/S3	ANT	96255923			96255916		96255919			
				SR	96255925			96255917		96255921			
			A/S6	ANT	96255924			96254423		96255920			
				SR	96255926			96255918		96255922			
	315W	HIT-DE	FC2	A/S2	ANT	V		V		V			
					SR	V		V		V			
A/S3				ANT	V		V		V				
				SR	V		V		V				
A/S6				ANT	96255258		V		V				
				SR	V		V		V				
HST-DE		FC2	A/S2	ANT	S	V	S	S	S	V			
				SR	S	V	S	S	S	V			
			A/S3	ANT	S	V	S	S	S	V			
				SR	S	V	S	S	S	V			
			A/S6	ANT	S	V	S	S	S	V			
				SR	S	V	S	S	S	V			
315W	HIT-CE	PGZ18*	A/S2	ANT					96255943		V		
				SR					96255946		V		
			A/S3	ANT					96255942		V		
				SR					96255944		V		
			A/S6	ANT					96254424		V		
				SR					96255945		V		
			400W	HID	E40	A/S2	ANT	96255955			V		
							SR	96255956			V		
A/S3	ANT	96255260						V					
	SR	96255261						V					
A/S6	ANT	96254425						V					
	SR	96255083						V					
HIDE	E40	A/S2				ANT					96255958		V
						SR					96255961		V
		A/S3		ANT					96255957		V		
				SR					96255959		V		
HST	FC2	A/S6		ANT					96255262		V		
				SR					96255960		V		
		A/S2		ANT		V		V		V			
				SR		V		V		V			
		A/S3		ANT	96255985			96255977		96255981			
				SR	96255987			96255979		96255983			
		A/S6		ANT	96255986			96255978		96255982			
				SR	96255988			96255980		96255984			
400W	HID-DE	FC2		A/S2	ANT					V			
					SR					V			
				A/S3	ANT					V			
					SR					V			
				A/S6	ANT					V			
					SR					V			
	HIT-DE	FC2	A/S2	ANT	V		V						
				SR	V		V						
			A/S3	ANT	96255970		V						
				SR	V		V						
			A/S6	ANT	96255263		V						
				SR	V		V						
HST-DE	FC2	A/S2	ANT	S	V	S	S		V				
			SR	S	V	S	S		V				
		A/S3	ANT	S	V	S	S		V				
			SR	S	V	S	S		V				
		A/S6	ANT	S	V	S	S		V				
			SR	S	V	S	S		V				
600W	HST	E40	A/S2	ANT	V								
				SR	V								
			A/S3	ANT	96255993								
				SR	96255995								
			A/S6	ANT	96255994								
				SR	96255996								

V - Variant a modified standard S - SPECIAL is a complete new version  
A/S - Asymmetric optic, STR - Street Optic, SR - Silver, ANT - Anthracite, BP - Power reduction, HR - Hot restrike, PM - Mini photocell, E3MT - Emergency three hour maintained  
LDC - Stepless dim controller, LDRF - Stepless dim controller radio frequency, LET - StepDim controller, SLD - Presence detector, E3MT and HR codes are master codes (Kits) with slaves codes behind  
HR codes are master code (Kit) with slaves codes behind. Codes for 600W conventional & 400W Electronic = separated geararray to be ordered.  
\*PGZ18 versions - availability dependant on availability of lamps and gears from manufacturer



# THORN

Lighting people and places

## Thorn Lighting Main Offices

### Australia

Thorn Lighting Pty Limited  
43 Newton Road, Wetherill Park  
NSW 2164  
Tel: (02) 8786 6000  
Fax: (02) 9612 2700  
E-mail: infoaustralia@thornlighting.com  
Website: www.thornlighting.com.au

### Austria

Thorn Licht GmbH  
Donau-City-Straße 1,  
1220 Wien, Austria  
Tel: (43) 1 202 66 11  
Fax: (43) 1 202 66 11 12  
E-mail: office.at@thornlighting.com  
Website: www.thornlighting.at

### China

Thorn Lighting (Guangzhou) Operations Ltd,  
No.12 Lian Yun Road, Eastern Section,  
GETDD, Guangzhou 510530, China  
Tel: (86) 20 3228 2706  
Fax: (86) 20 3228 1777  
E-mail: sales.cn@thornlighting.com

Thorn Lighting (Tianjin) Co. Ltd  
332 Hongqi Road, Tianjin 300190,  
China  
Tel: (86) 22 8369 2303  
Fax: (86) 22 8369 2302  
E-mail: info.tj@thornlighting.com

### Czech Republic

Thorn Lighting CS spol. s.r.o.,  
Na Březince 6/930, 150 00 Praha 5  
Czech Republic  
Tel: (420) 224 315 252  
Fax: (420) 233 326 313  
E-mail: thorn.cz@thornlighting.com  
Website: www.thornlighting.cz

### Denmark

Thorn Lighting A/S  
Kanonbådsvej 12B, 1437 København K, Denmark  
Tel: (45) 7696 3600  
Fax: (45) 3264 0499  
E-mail: info.dk@thornlighting.com  
Website: www.thornlighting.dk

### France

Thorn Europhane SA  
156 Boulevard Haussmann,  
Cedex 08, Paris 75379, France  
Tel: (33) 1 49 53 6262  
Fax: (33) 1 49 53 6240  
Website: www.thornlighting.fr

### Hong Kong

Thorn Lighting (Hong Kong) Limited  
Unit 4301, Level 43, Tower 1,  
Metropolaza, 223 Hing Fong Road,  
Kwai Chung, N.T., Hong Kong  
Tel: (852) 2578 4303  
Fax: (852) 2887 0247  
E-mail: info.hk@thornlighting.com

### India

Thorn Lighting India Pvt. Ltd.  
501, 5th Floor, Tanishka,  
Opp. Gundecha Industrial Estate  
Akurli Road, Kandivali (E), Mumbai – 400 101  
Tel: (91) 22285 41056  
Fax: (91) 22285 1120  
E-mail: international\_sales@thornlighting.com  
Website: www.thornlighting.com

### Ireland

Thorn Lighting (Ireland) Limited  
320 Harold's Cross Road,  
Dublin 6W, Ireland  
Tel: (353) 1 4922 877  
Fax: (353) 1 4922 724  
E-mail: dublinsales@thornlighting.com  
Website: www.thornlighting.co.uk

### Italy

Thorn Europhane Spa  
Via G Di Vittorio, 2, Cadriano di Granarolo,  
Bologna 40057, Italy  
Tel: (39) 051 763391  
Fax: (39) 051 763088  
E-mail: info@thornlighting.it  
Website: www.thornlighting.it

### New Zealand

Thorn Lighting (NZ) Ltd  
399 Rosebank Road, Avondale, Auckland 1026  
PO Box 71 134, Rosebank, Auckland 1348  
Tel: (64) 9 828 7155  
Fax: (64) 9 828 7591  
E-mail: info.NZ@thornlighting.com  
Website: www.thornlighting.co.nz

### Norway

Thorn Lighting AS  
Strømsveien 344, 1081 Oslo,  
Norway  
Tel: (47) 22 82 07 00  
Fax: (47) 22 82 07 01  
E-mail: info.no@thornlighting.com  
Website: www.thornlighting.no

### Poland

Thorn Lighting Polska Sp.z.o.o.,  
Ul. Gazowa 26A, Wrocław 50-513,  
Poland  
Tel: (48) 71 7833 740  
Fax: (48) 71 3366 029  
E-mail: thorn.pl@thornlighting.com  
Website: www.thornlighting.pl

### Russia

Thorn Lighting  
Novoslobodskaya Str., 21, office 406  
Business Center "Novoslobodskaya 21",  
Moscow 127030, Russia  
Tel: (7) 495 981 35 41  
Fax: (7) 495 981 35 42  
E-mail: anna.kisteneva@thornlighting.com  
Website: www.thornlighting.ru

### Singapore

Thorn Lighting (Singapore) Pte Ltd  
5 Kaki Bukit Crescent, 04-02 Koyotech  
Building, 416238 Singapore  
Tel: (65) 6844 5800  
Fax: (65) 6745 7707  
E-mail: info.sg@thornlighting.com

### Sweden

Thorn Lighting AB  
Industrigatan, Box 305, SE-261 23  
Landskrona, Sweden  
Tel: (46) 418 520 00  
Fax: (46) 418 265 74  
E-mail: info.se@thornlighting.com  
Website: www.thornlighting.se

### United Arab Emirates

Thorn Lighting Ltd Dubai  
Al Shoala Building, Office 301,  
Block E, Airport road, P.O. Box 1200,  
Deira, Dubai, UAE  
Tel: (971) 4 2940181  
Fax: (971) 4 2948838  
E-mail: thluae@emirates.net.ae  
Website: www.thornlighting.com

### Thorn Gulf LLC

Al Shoala Building, Office 301/2, Block E,  
Airport road, P.O. Box 22672, Deira,  
Dubai, UAE  
Tel: (971) 4 2948938  
Fax: (971) 4 2948838  
E-mail: thorgn@emirates.net.ae  
Website: www.thornlighting.com

### United Kingdom

Thorn Lighting Limited  
Silver Screens, Elstree Way, Borehamwood,  
Hertfordshire, WD6 1FE, UK  
Tel: (44) 20 8732 9800  
Fax: (44) 20 8732 9801  
E-mail: brochures.uk@thornlighting.com

Thorn Olympics Sports Lighting Team  
Tel: 07785 251 438  
E-mail: olympics.team@thornlighting.com  
Website: www.thornlighting.co.uk

### International Sales

Thorn Lighting Limited  
Silver Screens, Elstree Way, Borehamwood,  
Hertfordshire, WD6 1FE, UK  
Tel: (44) 20 8732 1915  
Fax: (44) 20 8732 1911  
E-mail: international\_sales@thornlighting.com  
Website: www.thornlighting.com

**www.thornlighting.com**

Thorn Lighting is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement. All goods supplied by the company are supplied subject to the company's General Conditions of Sale, a copy of which is available on request. All measurements are in millimetres and weights in kilograms unless otherwise stated.

**Publication No: 433 (INT) Publication Date: 03/09**