





ColourActive Lighting - Why Is It Needed?



Light does a lot more than just enable humans to see. Daylight is our "pacemaker" which sets our body clock known as the 24 hour circadian rhythm. For hundreds of thousands of years humans have evolved around the natural day/night cycle. Daylight regulates various hormone levels within the body, which affect people physically, mentally and behaviourally.

In today's modern society many people have reduced exposure to daylight as a result of spending a greater proportion of their day indoors. Lack of exposure to daylight can have a negative effect, potentially resulting in tiredness, mood swings and can even weaken a person's immune system.



THE SOLUTION

Thorlux ColourActive luminaires produce specially formulated artificial light that replicates the natural cycle of daylight, intended to promote a person's well-being, mood and health. Varying the colour temperature of artificial lighting to emulate daylight can help sustain a person's circadian rhythm.

Using modern LED light sources, luminaires and controls, the natural daylight cycle can be replicated improving lighting conditions with potentially positive benefits.



THE BENEFITS

There may be a number of benefits to health and well-being from using ColourActive lighting:

- Improved productivity
- Reduced error rates
- Increased safety
- Improved sleep pattern
- Reduced sickness days
- Improved well-being

Further benefits may be realised in the healthcare sector where ColourActive lighting is thought to enhance drug efficacy reducing overall medication costs and speeding up patient recovery. Agitation in dementia patients can also be reduced.



Morning Warm light



Afternoon Cool light



Evening Warm light

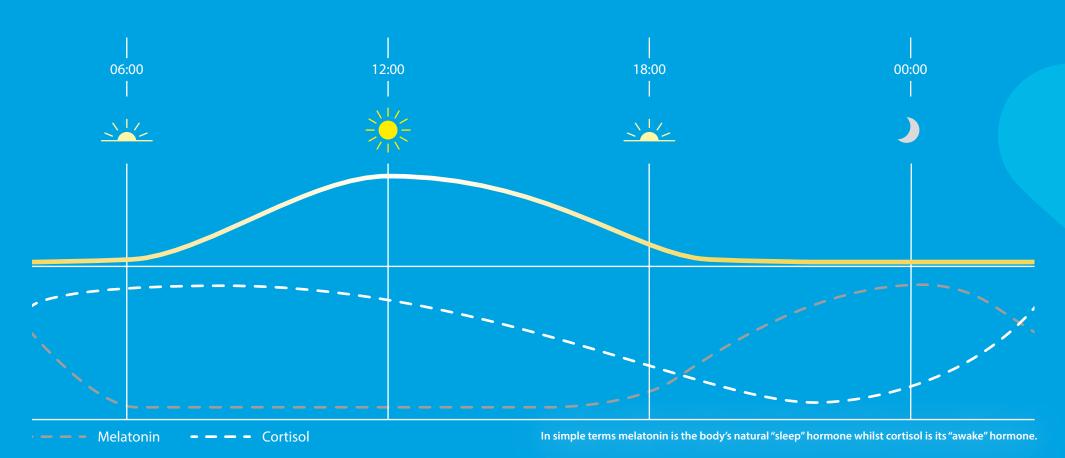


Night No light





Circadian rhythms are physical, mental and behavioural changes that follow a 24-hour cycle, responding primarily to light and darkness in a person's environment.





Daylight and LED Technology



DAYLIGHT

Daylight provides a full and varied spectrum of coloured light throughout the day, but modern lifestyles result in people spending too much time indoors under a fixed spectrum of artificial light, upsetting their circadian rhythm.

Buildings should therefore be designed to maximise the ingress of daylight encouraging good health whilst at the same time minimising lighting system energy consumption.

It is often not possible, for many practical reasons, to allow daylight into a building and in such cases use of an artificial light source matched as closely as possible to daylight should be the correct choice.

LED TECHNOLOGY

The small size and versatility of LEDs means it is now possible to produce luminaires that are able to adjust their colour temperature throughout the day, emulating the natural pattern of daylight.

The proposition that such systems are beneficial to human health and help with the sleep/wake cycle is being widely researched.







ColourActive Luminaires with SmartScan Control



COLOUR TEMPERATURE CONTROL

Thorlux ColourActive high performance LED luminaires incorporate dual populated PCBs where LEDs with two different colour temperatures (3000K and 6500K) are combined.

The Thorlux designed and manufactured technology utilises twin lighting circuits within each luminaire to vary the output to produce colour temperatures of either 3000K, 6500K or any value in between.

High quality medium power LEDs, placed on a circuit board with integral heat sinking, provide a high efficiency solution.

ADVANCED CONTROLS

SmartScan wireless mesh network technology provides signals to control the ColourActive luminaires to provide both manual and automatic control of colour temperature.

The ColourActive Gateway communicates with the luminaires throughout the day, providing automatic, seamless transitions between colour temperatures.

Manual control is provided by a range of wall mounted touch sensitive plates and smart phone apps.





Seamless Colour Temperature Transitions



3000°K 6500°K



Methods of Control



A ColourActive Gateway wirelessly provides building wide colour temperature control of ColourActive luminaires. The time schedule is configured via the Thorlux SmartScan website.

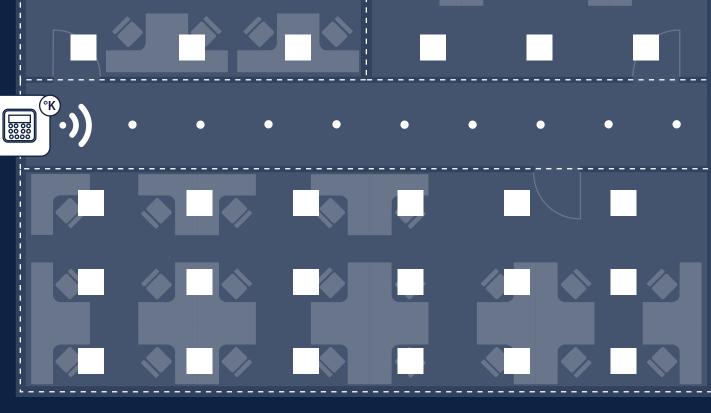




Ideal for whole buildings.

All the benefits of the Thorlux SmartScan system, plus the addition of colour temperature control.

Additional SmartScan Gateways can also be fitted for luminaire energy monitoring and status feedback.









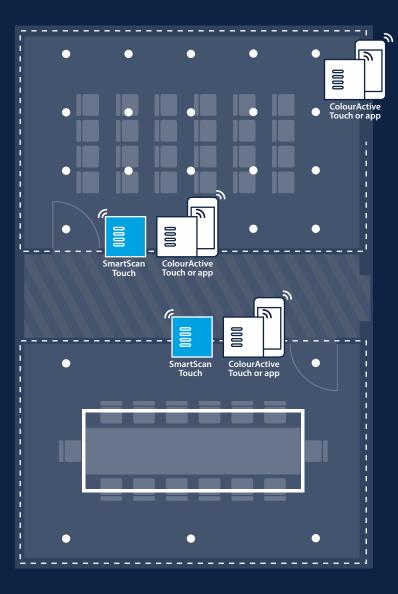
OPTION 2. Manual Control

Ideal for small offices, meeting and conference rooms.

Colour temperatures are set by the user with the ColourActive Touch or the ColourActive app.

Additional SmartScan Touch plates can also be fitted for individual group scene setting and control.

Multiple ColourActive Touch or SmartScan Touch plates can be fitted in each area for added convenience.



OPTIONS 1 AND 2 COMBINED. Automatic and Manual Controls



Automatic and manual controls can be combined to provide maximum flexibility and convenience.

Users can override the automatic building wide settings to suit their individual needs. The system reverts to automatic mode once the area has been vacated.

Learn more about SmartScan at: www.thorlux.com/smartscan



How Does ColourActive Automatic Control Work?

The daily ColourActive cycle is configured via the **SmartScan website. Preset regimes follow the natural** daylight rhythm, or specific settings can be set and tailored as required. This gives the user complete freedom to set a colour temperature regime that suits the building's usage pattern.

Settings are transferred to the ColourActive Gateway which broadcasts colour temperature settings to all luminaires every few minutes, ensuring seamlessly smooth transitions throughout the day.











15:00 - 5000°K



18:00 - 3000°K



Colour temperatures are set at hourly intervals on the website, where they are processed and transmitted to the building's ColourActive Gateway. Changes in colour are gradual between settings.





SmartScan ColourActive System



SYSTEM

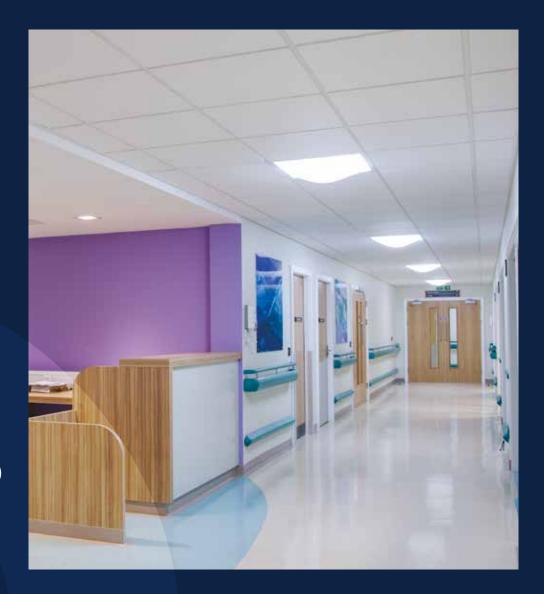
The following pages list the various options to select and specify all the parts required to create a SmartScan ColourActive system.

- Option 1 Fully automatic control
- Option 2 Local manual control
- Option 1 + 2 Fully automatic control for the whole building with local manual override where required

LUMINAIRE TYPE

Each luminaire is available in two versions:

- SmartScan ColourActive (catalogue number suffix CA) luminaires have an integral SmartScan sensor to provide energy efficient lighting control via occupancy detection and daylight harvesting as well as colour temperature control via wireless signals
- Non-Smart ColourControl (catalogue number suffix CC) luminaires have DALI control gear and colour temperature changing LEDs but no SmartScan sensor. A remotely mounted and wired SmartScan sensor is therefore required (see page 16)







ColourActive Gateway

MASTER COLOUR TEMPERATURE CONTROL AND WEB INTERFACE FOR COLOURACTIVE LUMINAIRES







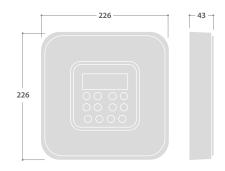


- Polycarbonate body finished white (RAL9016), silicone keypad
- Central control for ColourActive luminaires
- Communicates with the SmartScan website using GSM mobile telecommunications
- Wireless control of incremental shifts in colour temperature governed by settings on the SmartScan website

RANGE

DESCRIPTION	CAT. No.	APPROX. kg
ColourActive Gateway	SS 18548	1.0

DIMENSIONS





SmartScan Wireless Standards Compliance:

Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1 Australasia: ACMA 2014 Radio Communication Standard 2014 Thorlux Patented Wireless Technology - GB2575724 A ColourActive Gateway only provides colour temperature control. If energy monitoring and status information feedback is required an additional SmartScan Gateway is required.



ColourActive Touch

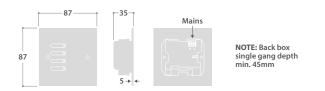




RANGE

DESCRIPTION	CAT. No.	APPROX. kg
ColourActive Touch	SS 18547	0.08

DIMENSIONS



TOUCH SENSITIVE WALL PLATE FOR LOCAL GROUP COLOUR TEMPERATURE CONTROL



SPECIFICATION

- 5mm thick polycarbonate with capacitive touch
- Provides manual control or override of the colour temperature of the luminaires
- Multiple wall plates can be used to control each group





SmartScan ColourActive Dongle and App

CONTROL OF SMARTSCAN AND COLOURACTIVE LUMINAIRES FROM A SMARTPHONE



SPECIFICATION

- Smartphone control of preset scenes or colour temperature (if ColourActive luminaires installed)
- Create custom scenes incorporating colour temperature settings
- App available for iOS or Android
- USB dongle can be powered from a computer or dedicated USB power supply





SmartScan Stand-alone Sensor with ColourControl





RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Stand-alone Sensor - Recessed ■ SmartScan Stand-alone Sensor - Surface	SS 18650 SS 18651	0.20 0.32

■ Add suffix 'TEE' for pre-fitted plug & socket connections and flying lead (3m) for use with the Thorlux 6-pole Modular Wiring Systems. e.g. **SS 18650TEE**

ACCESSORY

DESCRIPTION	CAT. No.
T-bar mounting bracket for recessed version	SLA 13101

SmartScan Wireless Standards Compliance:

Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1 Australasia: ACMA 2014 Radio Communication Standard 2014 Thorlux Patented Wireless Technology - GB2575724

DIMENSIONS

Recessed version 223 33 39 213 CRS. Minimum void depth (when passing Ceiling cut-out - 50mm dia. controller through cut-out) = 225mm

Sensor connected to controller by 900mm lead



ENABLES CONTROL OF MULTIPLE DALI/COLOURCONTROL LUMINAIRES









SPECIFICATION

- Polycarbonate body finished white (RAL9016)
- Can control colour temperature of standard ColourControl luminaires (catalogue number suffixed CC)
- DALI/colour temperature control for up to 10 DALI luminaires*
- · Can be used stand-alone without connected luminaires to act as a wireless booster/range extender and/or as a slave PIR to extend detection coverage
- Class II device. Earth connection provided for looping only
- Terminals suitable for 1.5mm² looped cable
- For presence detection guide see www.thorlux.com/ smart-presence-detection

^{*} Assuming one DALI driver per luminaire







Hi-Style LED

HIGH PERFORMANCE RECESSED COLOUR TEMPERATURE CHANGING LED LUMINAIRES













- Steel body finished full polyester non-yellowing satin white (RAL 9016)
- Carefully controlled optics for LG7:2015 (<3000 cd/m² @ 65°) compliance or opal diffuser version
- · Fire retardant polycarbonate diffusers for TP(a) compliance
- Excellent wall illumination at high angles
- Balanced direct/indirect luminance control above 65°
- Suitable for most ceiling types with optional side arm suspensions
- · Extruded side diffusers give vibrant yet low glare aesthetics
- Designed to exclude dust, dirt and flies
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations







Find out more at www.thorlux.com/smartscan

LED CHARACTERISTICS

CRI	80+
CKI	0U+
COLOURTEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	67K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9
LL/CW	124.2

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



RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	LG7:2015	OPAL	APPROX. kg
	16W	HI 18526CA	HI 18523CA	4.9
600 X 600	24W	HI 18527CA	HI 18524CA	4.9
	34W	HI 19132CA	HI 19130CA	4.9

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

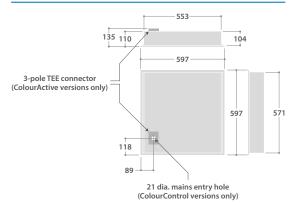
NOMINAL SIZE (mm)	LED	LG7:2015	OPAL	APPROX. kg
600 X 600	16W 24W 34W	HI 18532CC HI 18533CC HI 19133CC	HI 18529CC HI 18530CC HI 19131CC	4.8 4.8 4.8

EMERGENCY VERSION - prefix catalogue number with:

WHI - SmartScan (Only available when selecting the 'CA' suffix) e.g. WHI 18526CA etc.

Add 0.3kg to weights listed

DIMENSIONS



ACCESSORIES

DESCRIPTION	CAT. No.
Optional side arm suspension kit (4 arms per kit - not required for lay-in mounting)	HI 12349

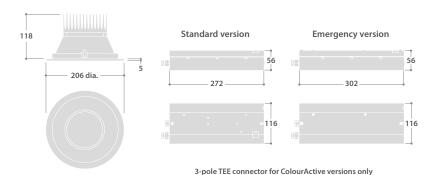








DIMENSIONS



ACCESSORIES

Cut-out - 180 dia. Minimum void depth - 200

DESCRIPTION	CAT. No.	APPROX. kg
597 x 597mm ceiling reinforcing board (3mm thick plywood with 185mm diameter central cut-out)	GT 11970	0.55



LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	60K - L80/B10
PROTECTION	LED PROTECT
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9

LL/CW 68.3

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

RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

LED	CAT. No.	APPROX. kg
12W	GT 18822CA	1.5
24W	GT 18823CA	1.5

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor APPROX.

LED	CAT. No.	kg
12W	GT 18824CC	1.5
24W	GT 18825CC	1.5

EMERGENCY VERSION - prefix catalogue number with:

e.g. EGT 18824CC etc.

Add 0.3kg to weights listed

NOTE: Emergency not available with ColourActive

CIRCULAR RECESSED COLOUR TEMPERATURE CHANGING LED **DOWNLIGHTERS**











SPECIFICATION

- · High pressure die-cast ring finished full polyester, non-yellowing white
- Aluminium heat sink
- · Injection moulded reflector finished white
- · Optional reinforcing board with centre cut aperture
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Supplied with remote gear unit fitted with 2m lead
- · ColourActive versions fitted with 3-pole TEE connector for LCM wiring
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations







Find out more at www.thorlux.com/smartscan





Kanby LED Controller

COLOUR TEMPERATURE CHANGING LED CONTROLLER LUMINAIRES











- Steel body, gear cover and end caps finished full polyester, non-yellowing white
- Ultra slim profile
- · Polycarbonate controller
- · SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations







Find out more at www.thorlux.com/smartscan

LED CHARACTERISTICS

CRI	80+
COLOURTEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	59K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9
LL/CW	119.9

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

RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg	LENGTH (mm)
1500	30W 37W	KB 18813CA KB 18814CA	4.1 4.1	1560

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg	LENGTH (mm)
1500	30W 37W	KB 18816CC KB 18817CC	4.1 4.1	1510

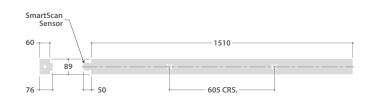
EMERGENCY VERSION - prefix catalogue number with:

WKB - SmartScan (Only available when selecting the 'CA' suffix)

e.g. WKB 18813CA etc.

Add 0.3kg to weights listed

DIMENSIONS





Jubilee





LED CHARACTERISTICS

CRI	80+
COLOURTEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	63K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.95

LL/CW	102.4

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

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg	LENGTH (mm)
1500	30W 37W	JUB 18801CA JUB 18802CA	6.6 6.6	1545

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg	LENGTH (mm)
1500	30W 37W	JUB 18804CC JUB 18805CC	6.5 6.5	1495

EMERGENCY VERSION - prefix catalogue number with:

WJB - SmartScan (Only available when selecting the 'CA' suffix)

e.g. WJB 18801CA etc.

Add 0.3kg to weights listed

SURFACE MOUNTED COLOUR TEMPERATURE CHANGING SHALLOW PROFILE CONTROLLER LUMINAIRES









SPECIFICATION

- · Steel body finished full polyester, non-yellowing white
- Shallow profile with co-extruded 'Satin-Glo' polycarbonate controller
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations



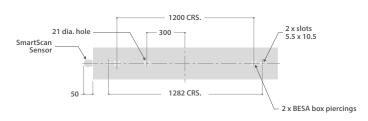






Find out more at www.thorlux.com/smartscan





SUPREMELY EFFICIENT COLOUR TEMPERATURE CHANGING LED RECESSED OFFICE VDT LUMINAIRES WITH MICROPRISM LENS













- · Steel body finished full polyester non-yellowing satin white (RAL 9016)
- Shallow body depth
- Supremely efficient lens system -138 lumens per "lamp" watt
- Excellent glare cut back above 65°. LG7:2015 (<1500cd/m²@ 65°)
- · Lively LED effect
- · Construction maintains ceiling "lines" with no protrusion into space
- Suitable for most ceiling types
- · Designed to exclude dust, dirt and flies from lamp compartment
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations







Find out more at www.thorlux.com/smartscan

LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	91K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9
II /CW	113.6

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



RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
	16W	VV 18811CA	6.4
600 x 600	31W	VV 18812CA	6.4
	41W	VV 19134CA	6.4

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
600 x 600	16W 31W 41W	VV 17250CC VV 17251CC VV 19135CC	6.3 6.3

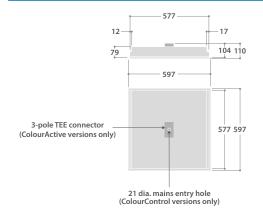
EMERGENCY VERSION - prefix catalogue number with:

EVV - Emergency]- (Only available when selecting the **'CC'** suffix)

WVV - SmartScan (Only available when selecting the 'CA' suffix) e.g. WVV 17250CA etc.

Add 0.3kg to weights listed

DIMENSIONS



ACCESSORY

DESCRIPTION	CAT. No.
Optional side arm suspension kit (4 arms per kit - not required for lay-in mounting)	XL 11138





Plateau





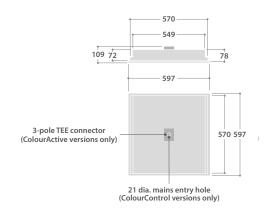
LED CHARACTERISTICS

CRI	80+
CNI	00т
COLOURTEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	67K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9

LL/CW	116.
LL/CVV	

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

DIMENSIONS





RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
	16W	PU 18809CA	6.9
600 x 600	31W	PU 18810CA	6.9
	41W	PU 19136CA	6.9

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
600 x 600	16W	PU 18002CC	6.7
	31W	PU 18003CC	6.7
	41W	PU 19137CC	6.7

EMERGENCY VERSION - prefix catalogue number with:

EPU - Emergency]- (Only available when selecting the **'CC'** suffix)

TPU - AutoTest

WPU - SmartScan (Only available when selecting the 'CA' suffix)

e.g. WPU 18809CA etc.

Add 0.3kg to weights listed

RECESSED COLOUR TEMPERATURE **CHANGING LUMINAIRES WITH** POLYCARBONATE DIFFUSER



SPECIFICATION

- · Steel body finished full polyester, non-yellowing white
- · Shallow body depth
- · Suitable for most ceiling types. Lay-in or pull-up with side arm suspensions (included with LED versions)
- · Designed to exclude dust, dirt and flies. All control gear is outside the lamp enclosure
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations









Find out more at www.thorlux.com/smartscan





Sky-Dome

RECESSED COLOUR TEMPERATURE CHANGING LUMINAIRES WITH DOMED POLYCARBONATE DIFFUSER



SPECIFICATION

- Steel body finished full polyester, non-yellowing white
- Shallow body depth
- Domed diffuser provides wall and ceiling illumination
- Suitable for most ceiling types. Lay-in or pull-up with side arm suspensions (included with LED versions)
- Designed to exclude dust, dirt and flies. All control gear is outside the lamp enclosure
- SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit (CA versions)
- Fitted with 3000K and 6500K LEDs for colour temperature control

SmartScan Configurations SmartScan Configurations SmartScan Configurations SmartScan Configurations SmartScan Configurations

LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	3000K to 6500K
RATED LIFE (HOURS)	67K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>85%
REPLACEABLE	YES
POWER FACTOR	>0.9
LL/CW	118.6

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

RANGE

COLOURACTIVE LUMINAIRE - with integral wireless SmartScan Sensor

NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
600 X 600	16W	SD 18807CA	6.9
	31W	SD 18808CA	6.9
	41W	SD 19138CA	6.9

COLOURCONTROL LUMINAIRE - for use with SmartScan Stand-alone Sensor

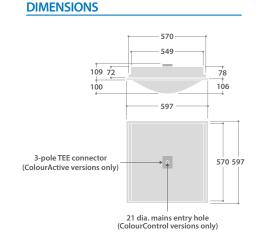
NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg
600 X 600	16W	SD 17247CC	6.7
	31W	SD 17248CC	6.7
	41W	SD 19139CC	6.7

EMERGENCY VERSION - prefix catalogue number with:

ESD - Emergency TSD - AutoTest - (Only available when selecting the 'CC' suffix)

WSD - SmartScan (Only available when selecting the **'CA'** suffix) e.g. **WSD 18807CA** etc.

Add 0.3kg to weights listed









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.

Thorlux Lighting

Merse Road North Moons Moat Redditch Worcestershire B98 9HH **England**

- T+44 (0)1527 583200
- F +44 (0)1527 584177
- E thorlux@thorlux.co.uk
- w www.thorlux.com

Direct UK Sales Line: 01527 583222

Thorlux Lighting Ireland

Unit G6 **Riverview Business Park** Nangor Road Gallanstown Dublin 12 Ireland

- +353 (0)1 460 4608
- F +353 (0)1 460 4609
- E thorlux@thorlux.ie
- w www.thorlux.ie

Thorlux Lighting Deutschland

Ernst Gnoß Strasse 7 40219 Düsseldorf Deutschland

- +49 (0)211 695 603-10
- F +49 (0)211 695 603-11
- E thorlux@thorlux.de
- www.thorlux.de

SUSTAINING MEMBER

Society of

Light and Lighting

Thorlux Lighting Australasia Pty Ltd.

31 Cross Street Brookvale Sydney NSW 2100 Australia

- T 1300 04 32 32
- +61 (0)2 9907 1261
- E thorlux@thorlux.com.au
- w www.thorlux.com.au

Registered No. ABN 139 400 507

Thorlux Lighting LLC

Office 334 **European Business Centre** Green Community Dubai Investment Park 1 PO Box 33484 Dubai

United Arab Emirates

- T +971 (0)2 656 5842
- F +971 (0)2 622 4149
- E sales@thorlux.ae
- w www.thorlux.ae









