Anti-Corrosive Luminaires, LED

A comprehensive range of 110V, IP65, anti-corrosive luminaires incorporating a high output LED light source; also available with i-Site movement and light level detection. Comprising of a robust polycarbonate body and diffuser with an impact rating of IK10, luminaires are offered (i) unwired, (ii) pre-wired with an input lead and terminal box or (iii) pre-wired with an input lead complete with 16A 2P+E 110V IP44 plug. They are available in Standard or Maintained Emergency format with integral battery back-up (3 hour duration when batteries are fully charged).

General

Unwired and pre-wired luminaires are available with 27W or 37W LED arrays mounted behind an opaque cover, which reduces glare. The LEDs have a colour temperature of 5000K. 27W luminaires are supplied in 2' "twin" bodies and 37W are supplied in 5' "single" bodies. All luminaires are supplied with suspension hooks. (i-Site fittings are rated at 30W and 44W).

Energy Efficiency

Please see over the page for charts comparing the basic light output and energy consumption of LED fittings, when operating for 24 hours a day and, alternatively, when controlled by a time clock or other means. As can be seen, there are significant savings to be made in energy costs and CO_2 emissions. See also data sheet SLDS008 for more information on the i-Site range of intelligent site lights with movement and light level detection, which provide a dynamic approach to energy and emission reduction.

Emergency Luminaires

The batteries in luminaires with integral emergency back-up will be damaged if they are discharged on a regular basis i.e. if they are routinely switched off at the end of each shift they will lose the ability to hold a charge. In addition, once discharged, batteries take up to 24 hours to recharge. In order to avoid damage to batteries and to ensure they are always fully charged at the start of a shift, the supply to emergency fittings should be unswitched.

Emergency Fittings with i-Site

All i-Site fittings can be supplied in 3C cable and the supply should be unswitched. Maximum energy and emission savings can be achieved thanks to the dynamic nature of the movement and light level detection incorporated within each luminaire.

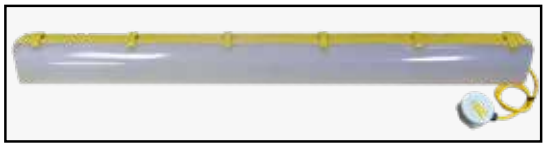
Intelligent Site Lighting

I-SITE

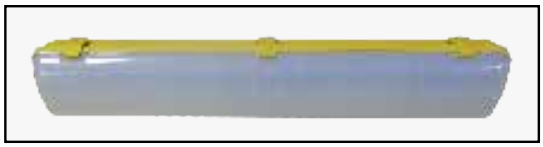
Part No. S061087
i-Site luminaire, 5', 110V, 44W LED array

Part No. S061089EC
i-Site luminaire, 2', 110V, 30W LED array
c/w 1m input lead & T box

Traditional Site Lighting



Part No. S060929H
Standard LED Luminaire, 5', 37W, 110V
c/w 1m input lead & T box



Part No. S060912H
Standard unwired LED Luminaire,
2', 27W, 110V

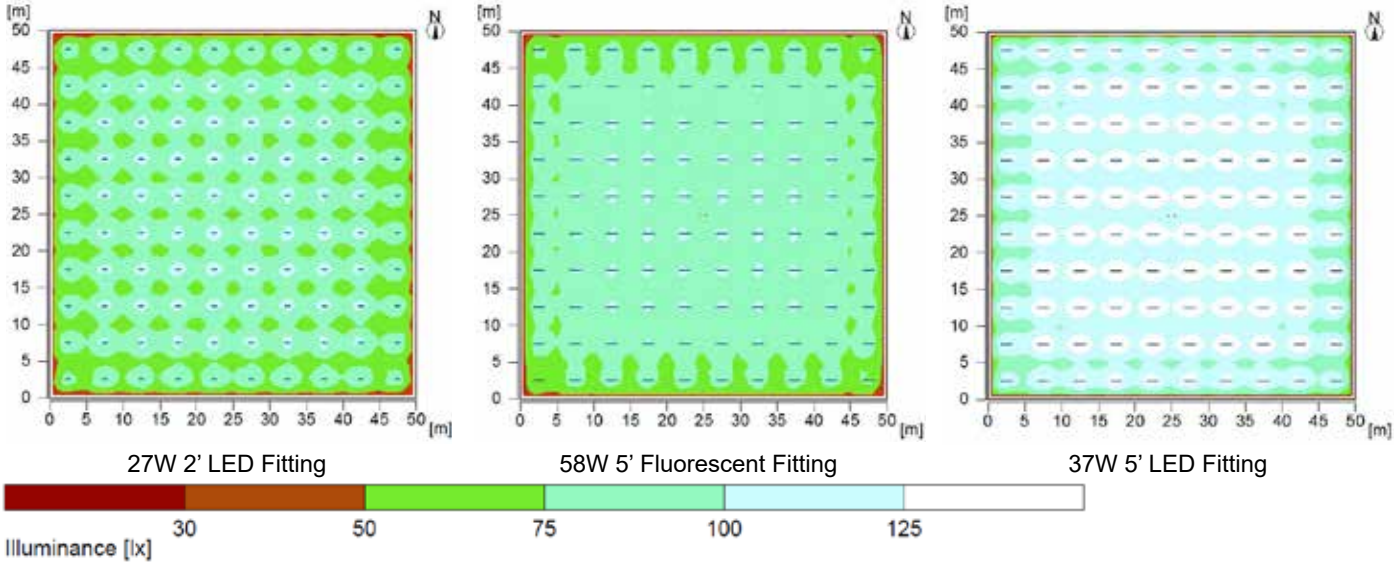
Emergency Fittings without i-Site

If the supply to emergency fittings is via a 3C cable, they must be left on permanently to avoid damaging batteries through repeated discharging. To reduce energy consumption without discharging batteries, pre-wired emergency luminaires are wired in 4C cable. If the supply from the transformer to the fitting is also in 4C cable, the LED array can be switched off, without causing the batteries to discharge. Also see data sheet SLDS002 for Flori-67/4P, which is our 4 pin plug and play lighting system incorporating 4C cable.

Part Numbers

Over the page are part numbers for our standard range of loose and pre-wired fittings. Please see data sheets SLDS001 and 002 for details of our Flori-67 plug and play lighting systems featuring luminaires with LED arrays. See data sheet SLDS008 for further details on i-Site intelligent site lighting.

Comparison of Illumination Levels



The three schemes shown above are based on: a room measuring 50m x 50m; a luminaire every 5 metres in the X and Y axis; a mounting height of 3 metres; the floor as the working plane; a reflectance level of 20% for all surfaces. A maintenance factor of 0.67 has been applied to the scheme based on fluorescent lighting and a maintenance factor of 0.72 to the schemes based on LED lighting, due to the longer "lamp" life of LED arrays. The illumination provided by a 27W LED is equivalent to that provided by a 58W fluorescent.

Summary of illumination levels, running costs and emissions based on 100 luminaires per annum

Luminaire	Average Lux	Average Uniformity	Consumption	Cost per annum ##	CO_2 per annum ##
27W LED	77	0.72	2.7 kW per hour	£4730.40	5.5 tonnes
37W LED	110	0.70	3.7 kW per hour	£6282.40	7.5 tonnes
58W Fluorescent	79	0.72	5.8 kW per hour	£10161.60	11.8 tonnes
## Based on 100 fittings operating 24 hours per day, for 365 days (at a cost of £0.20 per kWHr & 0.233 kg CO_2 per kWHr)					

Part No.	Description
Anti-Corrosive LED fittings, 110V, IP65, Unwired and Pre-wired with T Box	
S060912H	Standard 2', 110V, 27W LED array, twin yellow body, unwired
S060913H	Emergency 2', 110V, 27W LED array, twin yellow body, unwired
S060926H	Standard 2', 110V, 27W LED array, twin yellow body c/w 1m 3C input lead & T box
S060928H	Emergency 2', 110V, 27W LED array, twin yellow body c/w 1m 4C input lead & T box
S060914H	Standard 5', 110V, 37W LED array, single yellow body, unwired
S060915H	Emergency 5', 110V, 37W LED array, single yellow body, unwired
S060929H	Standard 5', 110V, 37W LED array, single yellow body c/w 1m 3C input lead & T box
S060931H	Emergency 5', 110V, 37W LED array, single yellow body c/w 1m 4C input lead & T box
Anti-Corrosive LED fittings, 110V, IP65, Pre-wired with 2m input lead complete with 16A, 2P+E, 110V, IP44 plug	
S061104H	Standard 2', 110V, 27W LED array, twin yellow body c/w 2m input lead & 16A 110V plug
S061105H	Emergency 2', 110V, 27W LED array, twin yellow body c/w 2m input lead & 16A 110V plug
S061106H	Standard 5', 110V, 37W LED array, single yellow body c/w 2m input lead & 16A 110V plug
S061107H	Emergency 5', 110V, 37W LED array, single yellow body c/w 2m input lead & 16A 110V plug
i-Site Intelligent Site Lighting with Movement and Light Level Detection (see Data Sheet SLDS008)	
S061085	Standard 2', 110V, 30W LED array, twin yellow body, unwired
S061086F	Emergency 2', 110V, 30W LED array, twin yellow body, unwired
S061089EC	Standard 2', 110V, 30W LED array, twin yellow body c/w 1m input lead & T box
S061090FC	Emergency 2', 110V, 30W LED array, twin yellow body c/w 1m input lead & T box
S061087	Standard 5', 110V, 44W LED array, single yellow body, unwired
S061088F	Emergency 5', 110V, 44W LED array, single yellow body, unwired
S061091EC	Standard 5', 110V, 44W LED array, single yellow body c/w 1m input lead & T box
S061092FC	Emergency 5', 110V, 44W LED array, single yellow body c/w 1m input lead & T box