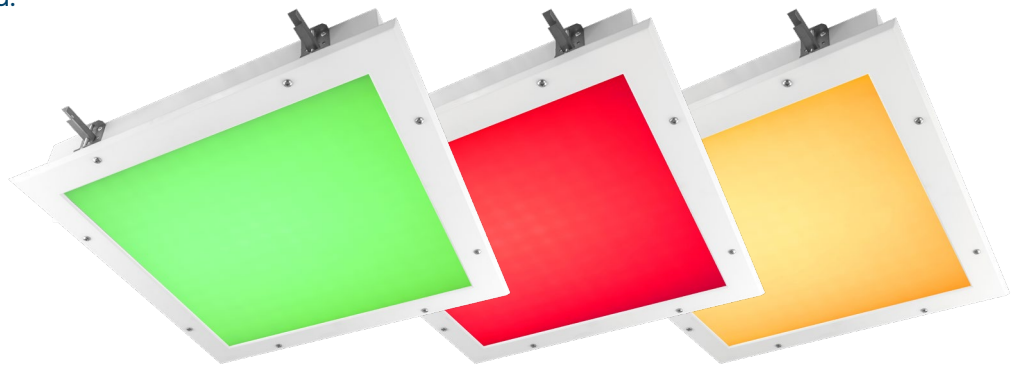


Narrow spectrum front access luminaire designed for modular 'T' and cut aperture ceilings in clean and sterile environments. IP65 (front) / IP54 (rear) ensures the ceiling integrity is maintained at all times, even when the cover is removed.



Hospitals



Laboratories



Pharmaceutical production



Electronics manufacturing



Semiconductor manufacturing



## FEATURES

- Fixed output as standard
- Dual Circuit, 4000K, CRI80 + COLOUR OF CHOICE
- Conforms to FS209E class 1000, ISO14644 class 6 standard
- IP65 (front) / IP54 (rear)
- LUX Guard, LED protection
- Removable LED platform for improved sustainability and longer life cycle

## OPTIONS

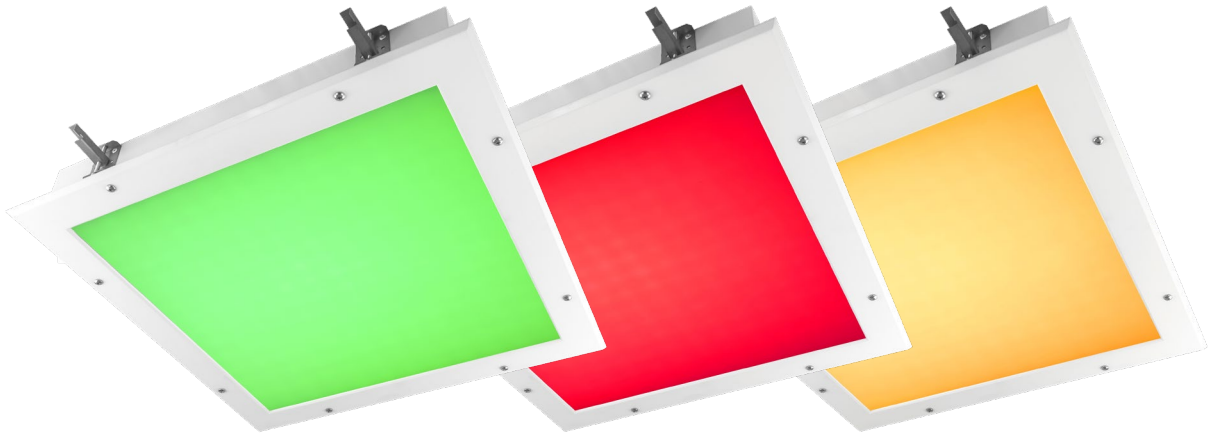
- DALI & DALI EM
- Through access hatch Add suffix **'+AH'**
- Toughened glass front panel: For applications where corrosive cleaning agents may be applied. Glass is supplied in addition to the satin polycarbonate panel. Replace **'S'** suffix with **'TGS'** for Satin and toughened glass

## OPTIONS AVAILABLE ON REQUEST

- Special RAL colour
- Anti-bacterial paint
- Stainless steel frame

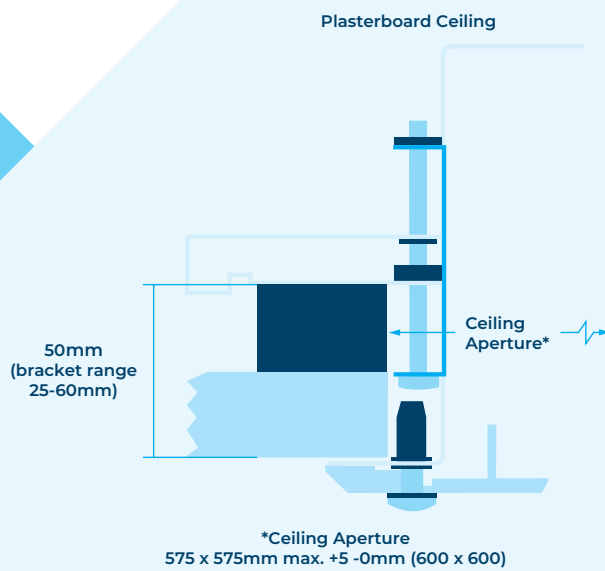
## EMERGENCY OPTIONS, 3 HOUR INTEGRAL

- Standard, Self-test, DALI
- Emergency lighting should always be a white light source, unless specifically risk assessed and deemed as safe by the site responsible person. Coloured Emergency is always treated as a special request.

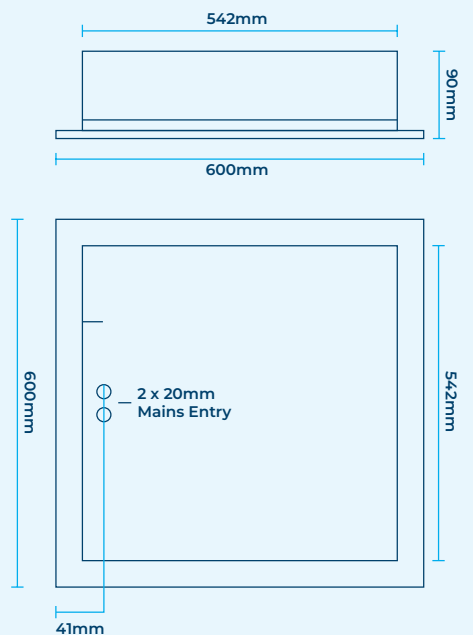
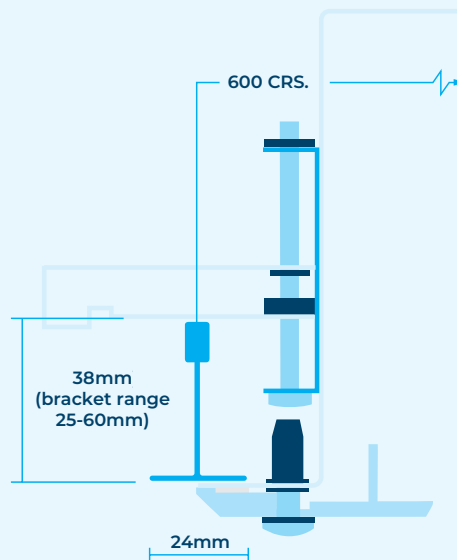


### CONSTRUCTION

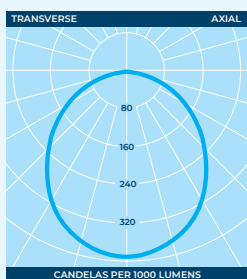
- Zinc plated steel body
- Chamfered 55mm aluminium diffuser frame, with welded and finished corners
- Polyester powder coated body and frame
- Polycarbonate fire-retardant diffuser, TP(a)
- White EPDM closed cell gaskets



### Exposed T-bar (24mm wide)



### PHOTOMETRY



SATIN

SINGLE CIRCUIT

WATTAGE*	CAT. NO.	COLOUR	NOMINAL SIZE	CUT APERTURE	LUMENS	LL/CW	APPROX. kg
20W	EPC2211SCRS	Red	v600mm x 600mm	575 mm x 575 mm	1105	55	11
39W	EPC2220SCRS	Red			2098	54	
59W	EPC2229SCRS	Red			2967	50	
27W	EPC2223SCGRS	Green			2347	87	
40W	EPC2232SCGRS	Green			3199	80	
54W	EPC2239SCGRS	Green			3945	73	
24W	EPC2228SCYLS	Yellow			2884	120	
37W	EPC2243SCYLS	Yellow			4313	117	
46W	EPC2252SCYLS	Yellow			5286	115	
56W	EPC2262SCYLS	Yellow			6243	111	

CONTROLS OPTIONS - suffix catalogue number with:  
DALI-DIM - DALI dimmable / e.g. **EPC2253/11DSR+DALI-DIM**

EMERGENCY OPTIONS - suffix catalogue number with:  
**EM** - Standard 3 hour integral / **EM-ST** - Emergency Self-test 3 hour integral / **DALI-EM** - DALI 3 hour integral /  
- SmartScan 3 hour integral e.g. **EPC2253/11DSRS+EM**

\*Emergency output is white as standard, coloured emergency available as a special request

\*Figures rounded to the nearest whole number.

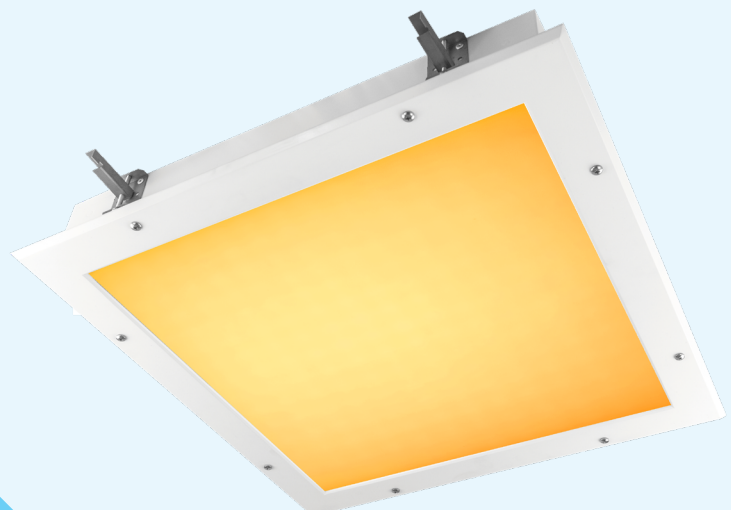
LED CHARACTERISTICS (4000K ONLY)

CRI	80+
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	100K-L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	91%
REPLACEABLE	YES
POWER FACTOR	>0.9
ENERGY EFFICIENCY CLASSIFICATION	A
<b>LL/CW</b>	<b>161</b>

 Particle PPM	 Recessed	 Front access
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 IP54 Above IP65 Below	 Cut aperture	 Modular "T" Ceilings
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 TP(a) Diffuser	 UKCA	 CE Mark
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## DUAL CIRCUIT

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
26W	EPC2253/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	4061	1105	157	55	11.5kg
26W	EPC2253/20DCRS	RED	39W			4061	2098	157	54	
26W	EPC2253/29DCRS	RED	59W			4061	2967	157	50	
26W	EPC2253/23DCGRS	GREEN	27W			4061	2347	157	87	
26W	EPC2253/31DCGRS	GREEN	40W			4061	3199	157	80	
26W	EPC2253/39DCGRS	GREEN	54W			4061	3945	157	73	
26W	EPC2253/28DCYLS	YELLOW	24W			4061	2884	157	120	
26W	EPC2253/43DCYLS	YELLOW	37W			4061	4313	157	117	
26W	EPC2253/52DCYLS	YELLOW	46W			4061	5286	157	115	
26W	EPC2253/62DCYLS	YELLOW	56W			4061	6243	157	111	

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
33W	EPC2253/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	5330	1105	160	55	11.5kg
33W	EPC2253/20DCRS	RED	39W			5330	2098	160	54	
33W	EPC2253/29DCRS	RED	59W			5330	2967	160	50	
33W	EPC2253/23DCGRS	GREEN	27W			5330	2347	160	87	
33W	EPC2253/31DCGRS	GREEN	40W			5330	3199	160	80	
33W	EPC2253/39DCGRS	GREEN	54W			5330	3945	160	73	
33W	EPC2253/28DCYLS	YELLOW	24W			5330	2884	160	120	
33W	EPC2253/43DCYLS	YELLOW	37W			5330	4313	160	117	
33W	EPC2253/52DCYLS	YELLOW	46W			5330	5286	160	115	
33W	EPC2253/62DCYLS	YELLOW	56W			5330	6243	160	111	

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
42W	EPC2266/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	6689	1105	161	55	11.5kg
42W	EPC2266/20DCRS	RED	39W			6689	2098	161	54	
42W	EPC2266/29DCRS	RED	59W			6689	2967	161	50	
42W	EPC2266/23DCGRS	GREEN	27W			6689	2347	161	87	
42W	EPC2266/31DCGRS	GREEN	40W			6689	3199	161	80	
42W	EPC2266/39DCGRS	GREEN	54W			6689	3945	161	73	
42W	EPC2266/28DCYLS	YELLOW	24W			6689	2884	161	120	
42W	EPC2266/43DCYLS	YELLOW	37W			6689	4313	161	117	
42W	EPC2266/52DCYLS	YELLOW	46W			6689	5286	161	115	
42W	EPC2266/62DCYLS	YELLOW	56W			6689	6243	161	111	



## DUAL CIRCUIT

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
50W	EPC2277/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	7778	1105	157	55	11.5kg
50W	EPC2277/20DCRS	RED	39W			7778	2098	157	54	
50W	EPC2277/29DCRS	RED	59W			7778	2967	157	50	
50W	EPC2277/23DCGRS	GREEN	27W			7778	2347	157	87	
50W	EPC2277/31DCGRS	GREEN	40W			7778	3199	157	80	
50W	EPC2277/39DCGRS	GREEN	54W			7778	3945	157	73	
50W	EPC2277/28DCYLS	YELLOW	24W			7778	2884	157	120	
50W	EPC2277/43DCYLS	YELLOW	37W			7778	4313	157	117	
50W	EPC2277/52DCYLS	YELLOW	46W			7778	5286	157	115	
50W	EPC2277/62DCYLS	YELLOW	56W			7778	6243	157	111	

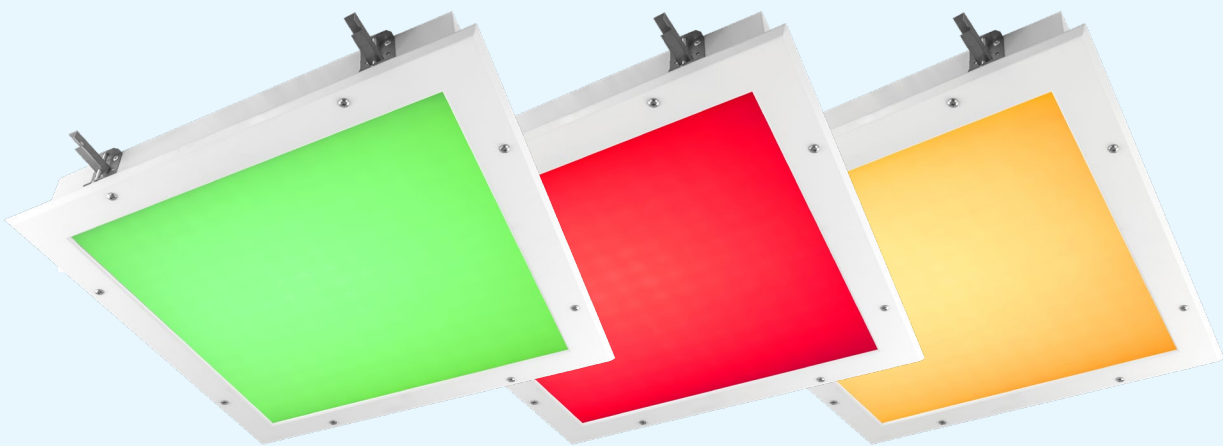
WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
53W	EPC2282/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	8273	1105	156	55	11.5kg
53W	EPC2282/20DCRS	RED	39W			8273	2098	156	54	
53W	EPC2282/29DCRS	RED	59W			8273	2967	156	50	
53W	EPC2282/23DCGRS	GREEN	27W			8273	2347	156	87	
53W	EPC2282/31DCGRS	GREEN	40W			8273	3199	156	80	
53W	EPC2282/39DCGRS	GREEN	54W			8273	3945	156	73	
53W	EPC2282/28DCYLS	YELLOW	24W			8273	2884	156	120	
53W	EPC2282/43DCYLS	YELLOW	37W			8273	4313	156	117	
53W	EPC2282/52DCYLS	YELLOW	46W			8273	5286	156	115	
53W	EPC2282/62DCYLS	YELLOW	56W			8273	6243	156	111	

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
64W	EPC2299/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	9991	1105	157	55	11.5kg
64W	EPC2299/20DCRS	RED	39W			9991	2098	157	54	
64W	EPC2299/29DCRS	RED	59W			9991	2967	157	50	
64W	EPC2299/23DCGRS	GREEN	27W			9991	2347	157	87	
64W	EPC2299/31DCGRS	GREEN	40W			9991	3199	157	80	
64W	EPC2299/39DCGRS	GREEN	54W			9991	3945	157	73	
64W	EPC2299/28DCYLS	YELLOW	24W			9991	2884	157	120	
64W	EPC2299/43DCYLS	YELLOW	37W			9991	4313	157	117	
64W	EPC2299/52DCYLS	YELLOW	46W			9991	5286	157	115	
64W	EPC2299/62DCYLS	YELLOW	56W			9991	6243	157	111	

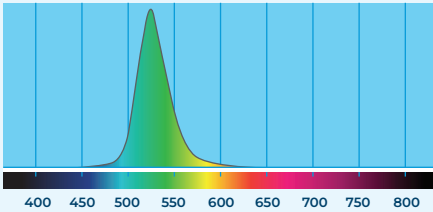
## DUAL CIRCUIT

WATTAGE* 4000K	CAT. NO.	COLOUR	COLOUR WATTAGE	NOMINAL SIZE	CUT APERTURE	LUMENS WHITES	LUMENS COLOUR	4000K LL/CW	COLOUR LL/CW	APPROX. KG
90W	EPC22137/11DCRS	RED	20W	600mm x 600mm	575 mm x 575 mm	13708	1105	153	55	11.5kg
90W	EPC22137/20DCRS	RED	39W			13708	2098	153	54	
90W	EPC22137/29DCRS	RED	59W			13708	2967	153	50	
90W	EPC22137/23DCGRS	GREEN	27W			13708	2347	153	87	
90W	EPC22137/31DCGRS	GREEN	40W			13708	3199	153	80	
90W	EPC22137/39DCGRS	GREEN	54W			13708	3945	153	73	
90W	EPC22137/28DCYLS	YELLOW	24W			13708	2884	153	120	
90W	EPC22137/43DCYLS	YELLOW	37W			13708	4313	153	117	
90W	EPC22137/52DCYLS	YELLOW	46W			13708	5286	153	115	
90W	EPC22137/62DCYLS	YELLOW	56W			13708	6243	153	111	

· No emergency available on the 90w variant.



## Green



**Green** illuminance is often used for tasks where visual acuity is important, the reasons for this are:

**Peak Sensitivity of the Human Eye:** The human eye is most sensitive to light in the green spectrum, around 555 nanometres. With a 520nm peak, our Green spectrum LED is perceived more vividly and clearly than other colours, allowing for better visual sharpness and detail recognition.

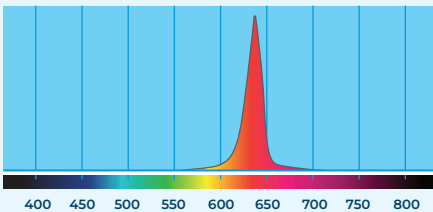
**Enhanced Contrast:** Green light provides excellent contrast against red and blue, the other primary colours of light. This contrast is beneficial for distinguishing different objects and details, which is crucial for tasks requiring precision and fine motor skills, such as surgery or laboratory work.

**Reduction in Chromatic Aberration:** Chromatic aberration is a type of distortion that occurs because different colours (wavelengths) of light refract differently as they pass through lenses. Since green light is near the middle of the visible spectrum, it experiences less chromatic aberration compared to the extremes of the spectrum (red and blue). This means images appear sharper and clearer under green light, enhancing visual acuity.

**Minimisation of Glare and Eye Strain:** Green light is less intense and less likely to cause glare compared to blue or white light, which can be harsh on the eyes, especially in prolonged use. Reduced glare leads to less eye strain, allowing for better sustained visual acuity over time.

**Optimal Pupil Response:** Green light helps maintain a moderate level of pupil constriction, balancing the amount of light entering the eye. This optimal level of constriction helps enhance focus and clarity, leading to improved visual acuity.

## Red

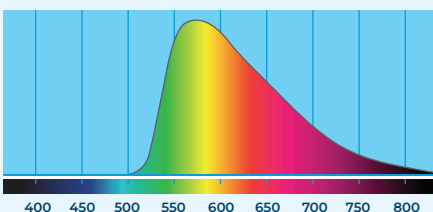


**Red** light sources are often used to provide comfortable night time lighting, without disturbing the circadian rhythm of animals within research environments and animal welfare environments.

A number of species used within laboratory environments will have a visual spectrum from around 300-575nm. Red peak output sits at 635nm and offers undiscernible output of 570nm or below, this range sits comfortably within the human visible spectrum of 400-750nm allowing lab operatives to monitor the welfare of the animals, without disturbing their sleep patterns (Circadian Rhythm).

Solite can offer Red alongside white light in a dual circuit luminaire for daytime and night time use, or full circadian or colour tuneable lighting alongside a red circuit for full daytime simulation depending welfare needs of the animals concerned.

## Yellow



**Yellow** light sources are widely used as an efficient solution for blocking UV and blue light energy up to 500 nm. But why is this important?

When you look at the light spectrum, you'll notice that ultraviolet (UV) light sits just before the visible range. Although invisible to the human eye, UV light can be harmful in certain applications. For instance, during silicon wafer fabrication, exposure to UV light can damage the product. Therefore, it's essential to eliminate UV light from the luminaire being used.