

## Requirements of EN 1838: illuminance of 5 lx for safety equipment

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The aim of emergency lighting is to enable people to exit a room or building safely. It must also ensure that fire fighting and safety equipment can be easily found and operated when needed. This equipment includes (but not exclusively):

- First aid stations
- All fire fighting equipment and all alarm devices

Lighting is required near each first aid kit, near each alarm and piece of fire fighting equipment, as well as each sign indicating a fire alarm system. In accordance with EN 1838, „near“ generally means a distance of no greater than 2 metres, measured horizontally (this corresponds with distance  $a$  in the diagram below).

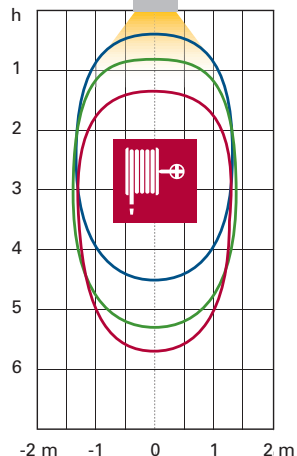
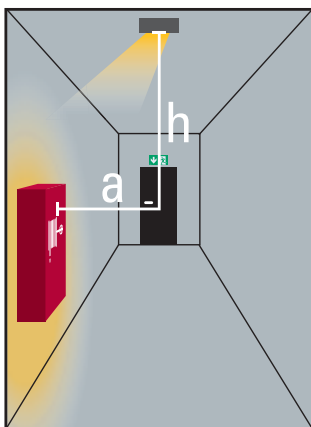
The required level of illuminance on the equipment is 5 lx measured vertically – i.e. perpendicular to the usual horizontal illuminance measurements on one level.

In comparison to the escape route requirement for 1 lx horizontally, different requirements apply in this situation for the light distribution from the safety luminaires, due to the flatter light angle of incidence.

### GuideLed SL 13051.1 und 13052.1 CG-S meet the specific requirements of EN 1838

In order to meet the requirements of EN 1838, the new GuideLed SL 13051.1 and 13052.1 CG-S have special optics to guarantee the required illuminance of 5 lx vertically over a wide area. Hence mounting at heights of up to 5.6 m, and a breadth of illumination of up to 2.8 metres, are possible.

#### Engineering help, GuideLed SL 13051.1 and 13052.1 CG-S



Area in which a minimum illuminance of 5 lx (maintenance factor 0.8) is achieved, depending on distance  $a$  and the rated operating time:

$a = 1.0$  m

$a = 1.5$  m

$a = 2.0$  m





### \*3 GuideLed SL 13051.1, 13052.1 CG-S

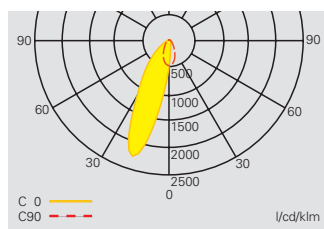
- Safety luminaire in LED technology for recessed and ceiling surface-mounting
- Unobtrusive design through optics integrated in the luminaire
- Special asymmetric optics for illumination of 5 lx vertically for first aid stations, fire fighting equipment and safety equipment acc. to EN 1838
- Suitable for mounting heights up to 5.6 m above the illuminated equipment
- The illuminated area has a width of up to 2.8 m.
- Minimum service requirement due to high service life of the LEDs (up to 50,000 hours)

GuideLed SL 13051.1 CG-S



with optional square bezel

GuideLed SL 13052.1 CG-S



Light distribution curve  
GuideLed SL 13051.1, 13052.1

\*1 GuideLed SL 13052.1 CG-S

\*2 GuideLed SL 13051.1 CG-S

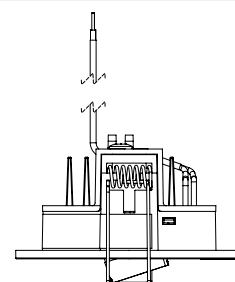
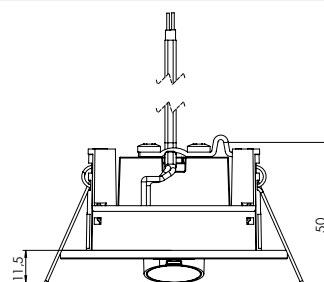
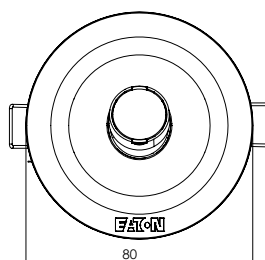
\*3 GuideLed SL 13051.1 CG-S:  
Degree of protection of the luminaire: IP41  
Degree of protection of the module housing: IP20

Luminous flux $\Phi_N$	288 lm
Luminous flux $\Phi_E/\Phi_N$ at end of rated operating time	100%
Housing material	Polycarbonate, aluminium
Housing colour	White, similar to RAL 9010
Weight	0.43 kg
Type of mounting	Ceiling recessing, ceiling surface-mounting
Terminals	2 x 3 x 2.5 mm <sup>2</sup>
Connection voltage	220 – 240 V AC, 50/60 Hz 176 – 275 V DC
Current consumption- battery operation (220 V)	20 mA
Power consumption mains operation (apparent power/effective power)	8.0 VA / 3.9 W
Inrush current	1.5 A
Permissible ambient temperature	-20 °C to +40 °C
Light source	HighPower LEDs 1 x 2.2 W

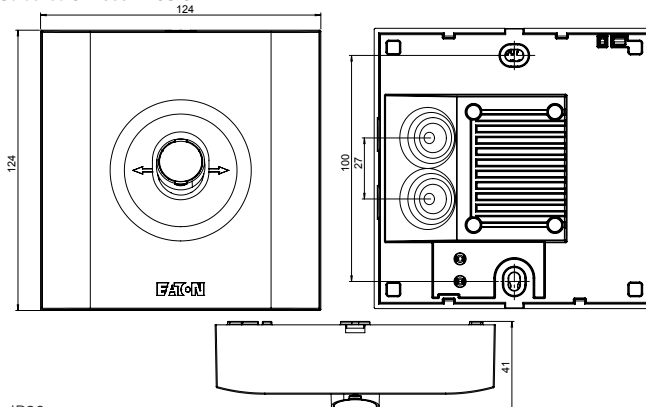
### Ordering details

Type	Scope of supply	Order No.
GuideLed SL 13051.1 CG-S	GuideLed SL 13051.1 CG-S, recessed mounting with 40071354477 asymmetric optics for illuminance of 5 lx vertically, incl. LED supply and CG-S Technology (20 addresses)	
GuideLed SL 13052.1 CG-S	GuideLed SL 13052.1 CG-S, surface mounting with 40071354478 asymmetric optics for illuminance of 5 lx vertically, incl. LED supply and CG-S Technology (20 addresses)	
Square bezel	Square bezel GuideLed SL	40071654488

GuideLed SL 13051.1 CG-S



GuideLed SL 13052.1 CG-S



Module housing

