

# ROUGHGUARD

Vandal-resistant linear LED luminaire











# ROUGHGUARD







IP 66

IK 10







1ft version - opaque diffuser



2ft version - clear diffuser

### Vandal-proof LED luminaire

The ROUGHGUARD has been designed to be used in industrial corrosive and harsh environments.

With applications like police stations and prison cells, railway stations, underground parking areas, mining workshops and others, where vandalism and corrosive elements are prevalent, the ROUGHGUARD will be able to not only withstand these environments, but to also efficiently provide light exactly where it is needed.







AREA





ASSEMBLY LINE





LOADING BAY



CONVEYOR BELT

### Key advantages

- · Designed and manufactured in South Africa
- · Vandal proof
- Available in two sizes for applications flexibility
- Designed to operate LED light sources of up to 55W in an ambient temperature (Tg) environment of up to 35°C, without reducing the useful lifetime of up to 50 000 hours, at a lumen depreciation of not more than 30%
- · Corrosion-resistant high-pressure die-cast aluminium body
- One-piece injection-moulded clear polycarbonate diffuser
- Removable gear tray for ease of maintenance
- 3-year warranty (Terms and conditions apply)

### Characteristics

#### GENERAL INFORMATION

Recommended	2m to 5m
installation height	
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598, SANS 62262

#### HOUSING AND FINISH

Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Optic	Acrylic PMMA
Diffuser	Polycarbonate (*)
Housing finish	Pearl Light Grey (RAL 9022), Textured finish
Tightness level	IP 66
Impact resistance	IK 10

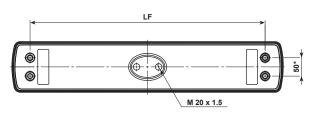
<sup>(\*)</sup> Suitable for Food & Beverage industry

#### DIMENSIONS AND MOUNTING

AxBxC (mm)	1ft: 356x138x95		
	2ft: 742x138x85		
LF (mm)	1ft: 241.5		
	2ft: 640		
LB (mm)	1ft: 241.5		
	2ft: 568		
Weight (kg)	1ft: 2.4		
	2ft: 3.8		
Standard mounting	Drill positions or bracket mounting		



#### Surface mounting through drill positions



<sup>\*</sup> Only applicable to 2ft version

#### **ELECTRICAL INFORMATION**

Electrical class	EU class I
Nominal voltage	198-277V – 50Hz
Power factor	> 95% at full load
Surge protection	10kV / 10kA
Electromagnetic compatibility (EMC)	SANS 55015:2013/A1:2015, SANS 61000-3-2:2014, SANS 61000-3- 3:2013, SANS 61547:2009, SANS 62493:2015
Control options	DALI
	Movement sensor
	Schréder ITERRA

#### OPTICAL INFORMATION

LED colour temperature	4000K (Neutral white 840)
Colour rendering index (CRI)	≥ 80 (Neutral white 840)

#### **OPERATING CONDITIONS**

Operating temperature range (Ta)	Standard version: -35°C up to +40°C
	Emergency version: -35°C up to +40°C

#### LIFETIME OF THE LEDS @ TQ 35°C

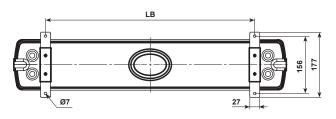
For all versions	50,000h - L70B10

#### LIFETIME OF THE DRIVER @ TQ 35°C

For all versions	90,000h ≤10% failure rate

For options and accessories, please turn to page 7.

#### Surface mount bracket



### Performance

					Nominal flux (lm) <sup>(*)</sup>	Power consump- tion (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)
Luminaire	Size	Diffuser	Driver Current (mA)	Line Current (A)	Typical	Typical	Typical	Typical	Typical
	40		350	0.03	1060	7	151	763	109
	1ft	Opaque	500	0.06	2050	15	136	1635	109
$\circ$			350	0.11	4270	26	164	3459	133
GUARI		Opaque	550	0.18	6057	42	145	4906	118
ROUGHGUARD			720	0.24	8256	55	151	6687	122
ŭ.	2ft		350	0.11	4270	26	164	3715	143
	Clear	550	0.18	6057	42	145	5270	126	
		720	0.24	8256	55	151	7183	131	
		350	0.03	1060 / 455 (EM)	7	151	763	109	
	1ft	Opaque	500	0.06	2050 / 455 (EM)	15	136	1635	109
O UC			350	0.11	4270 / 815 (EM)	26	164	3459	133
GUAR[ y Versiv our)	Opaque	Opaque	550	0.18	6057 / 815 (EM)	42	145	4906	118
ROUGHGUARD Emergency Version (1 hour)		720	0.24	8256 / 815 (EM)	55	151	6687	122	
	2ft	Clear	350	0.11	4270 / 815 (EM)	26	164	3715	143
			550	0.18	6057 / 815 (EM)	42	145	5270	126
			720	0.24	8256 / 815 (EM)	55	151	7183	131

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5%

<sup>(\*)</sup> The nominal flux is an indicative LED flux @ Ts 85°C based on LED manufacturer's data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology.

# **Key** Features





1ft version available with opaque diffuser only



2ft version with clear diffuser, opaque diffuser optional



55W version



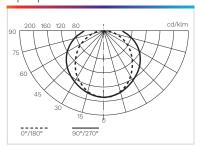
Optional integrated movement and daylight sensor for further energy savings



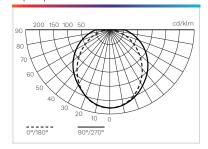
Removable gear tray with suspension hanger

### **Light** Distributions

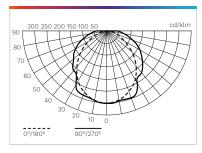
1ft optic Opaque diffuser



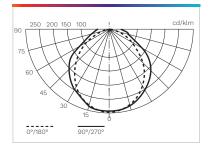
2ft optic Opaque diffuser



2ft optic - 26W & 42W Clear diffuser



2ft optic - 55W Clear diffuser



# Switching/dimming control



#### Schréder ITERRA

Schréder ITERRA provides a complete user- and installer-friendly wireless control solution for various lighting applications.

Schréder ITERRA offers site managers a robust, cost-effective and future-proof platform to run their infrastructure with the utmost flexibility for adapting the lighting to any scenario or activity while maximising energy savings and providing the best experience for employees, visitors and managers.

A mobile App based system, Schréder ITERRA is very easy to operate. It comes with a visual interface that users can quickly personalise to the layout and settings of their lighting installation.



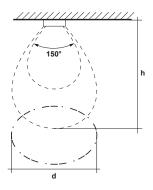
Google Play



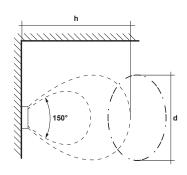
## Integrated Movement & Daylight Sensor (optional)

Diameter of the detection cone as a function of height at maximum detection area without taking objects in the room into consideration. Stationary objects (walls, tables, floor-standing luminaires, etc.) located in the direct view of the sensor change the characteristics of the detection area. The mentioned values are typical minimum values depending on the environment and application the detection area may increase.

#### Ceiling mounted



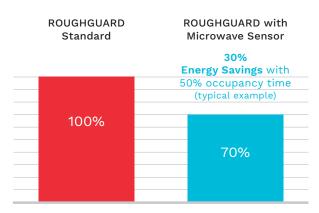
#### Wall mounted



#### Sensitivity

100%	75%	50%	30%	10%
		d		
5.0m	3.0m	1.5m	1.0m	0.50m
6.0m	4.0m	3.0m	2.0m	1.00m
6.5m	4.0m	3.0m	2.0m	1.00m
7.0m	4.5m	3.5m	2.5m	1.00m
7.0m	4.5m	3.5m	2.0m	1.50m
7.5m	5.5m	4.0m	1.5m	0.50m
5.5m	3.5m	2.0m	0.5m	0.25m
5.5m	3.0m	1.5m	0.5m	0.25m
3.5m	2.0m	1.0m	0.5m	0.25m
3.0m	1.5m	1.0m	0.5m	0.25m
	5.0m 6.0m 6.5m 7.0m 7.5m 5.5m 5.5m	5.0m 3.0m 6.0m 4.0m 6.5m 4.0m 7.0m 4.5m 7.5m 5.5m 5.5m 3.5m 5.5m 3.0m 3.5m 2.0m	d           5.0m         3.0m         1.5m           6.0m         4.0m         3.0m           6.5m         4.0m         3.5m           7.0m         4.5m         3.5m           7.5m         5.5m         4.0m           5.5m         3.5m         2.0m           5.5m         3.0m         1.5m           3.5m         2.0m         1.0m	d         5.0m       3.0m       1.5m       1.0m         6.0m       4.0m       3.0m       2.0m         6.5m       4.0m       3.0m       2.0m         7.0m       4.5m       3.5m       2.5m         7.0m       4.5m       3.5m       2.0m         7.5m       5.5m       4.0m       1.5m         5.5m       3.0m       1.5m       0.5m         5.5m       3.0m       1.5m       0.5m         3.5m       2.0m       0.5m

#### **Energy Savings**



### **Construction** Details

The luminaire consists of a high-pressure die-cast marine grade aluminium body with a robust clear polycarbonate diffuser and is designed to operate LEDs of up to 55W.

The luminaire bears the SANS 60598-2-1 safety mark.

It is specifically designed for surface mounted applications.

The body and diffuser are designed in such a way to prevent collection of dust on the accessible surface of the body, thus also preventing any grip of the luminaire. The luminaire is designed to allow entry of surface conduits via 20mm conduit threaded entries at both ends, as well as a 25mm hole in the centre of the back of the body. A silicone sponge gasket ensures reliable IP 66 rating.

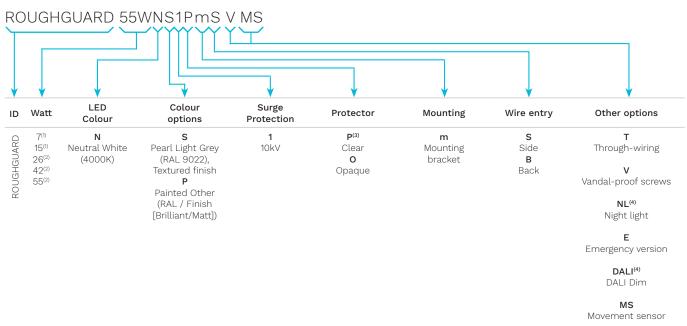
The one-piece, injection-moulded polycarbonate diffuser is vandal resistant. It is secured to the body by six stainless steel Allen head screws. Tamper-proof screws with centre-pin are available upon request.

The removable gear tray is manufactured from mild steel, powder coated white to optimise luminaire efficiency. All control gear components are mounted on the gear tray. The gear tray can be removed by loosening four Allen head screws in keyhole slots, which allow the gear tray to be relieved into a suspended position, ensuring ease of maintenance.

All control gear components are removable and bear the relevant SABS mark. All screws, bolts and metal parts are stainless steel or non-corrosive material. Mains connections are by means of a suitable screw terminal block with a wire clamping contact. Electronic temperature monitoring prevents overheating of LEDs and power supply.

### **Ordering** Information





<sup>(1) 1</sup>ft version

### **Custom** Options

	00001/414 1.1.000	
Correlated colour temperature	3000K (Warm white 830)	
	5700K (Cool white 857)	
Extra treatment	e-Coating (for very harsh environments)	
Switching/Dimming control	Integrated Schréder ITERRA	

<sup>(2) 2</sup>ft version

<sup>(3)</sup> Applicable to 2ft version only

<sup>(4)</sup> Applicable to 55W version only











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Designed and manufactured by BEKA Schréder (Pty) Ltd

