

Spectrasol SunHigh GP

DIRECT BEAM INDUSTRIAL LUMINAIRES



LUMINAIRE DESCRIPTION

The industrial LED luminaire featuring the patented Spectrasol procognitive technology will light up your space with light having characteristics close to those of natural sunlight. Thanks to a balanced spectral power distribution (SPD) that positively influences the body's circadian rhythms through the non-image forming (NIF) system of the eye, you will achieve biologically optimised full-spectrum lighting that promotes productivity, alertness, focus, safety, error reduction and overall workplace health, mood and vitality. In addition, the light spectrum is designed for maximum visual support, including superior colour fidelity.

Moreover, the procognitive Spectrasol luminaires do not emit concentrated energy in the short-wavelength blue part of the light spectrum, the so-called harmful blue light, which increases the risk of macular degeneration. On the contrary, Spectrasol actually regenerates the eyes by emitting energy in the red, photobiomodulating part of the light spectrum, which acts as a compensating factor for harmful blue light with both preventive and therapeutic effect.

Spectrasol SunHigh GP brings procognitive light to industrial spaces with high ceilings and is a direct alternative for bell-shaped discharge luminaires. In addition to significant energy savings, it brings uncompromising top quality and biologically efficient light to workers in industrial workshops, with the parameters of the luminaires unparalleled in this segment. Available in eye or arm fixing variants.

MAIN BENEFITS OF SPECTRASOL LED LIGHTING

- Improves productivity and concentration
- Improves safety
- Reduces eye strain
- Promotes overall health

TECHNICAL PARAMETERS

Lighting parameters

Light distribution	direct
Optical system	clear PC optics
CCT	4800 K
CRI	>95
DER mel	(D65)=0.87 ; (D50)=1.02
Flicker	Flicker-free
Calculated LED lifetime	L80B20 70.000h

Electrical parameters

Power supply	100-240 V 50-60 Hz
Connection	rubber black supply cable, tinned ON/OFF

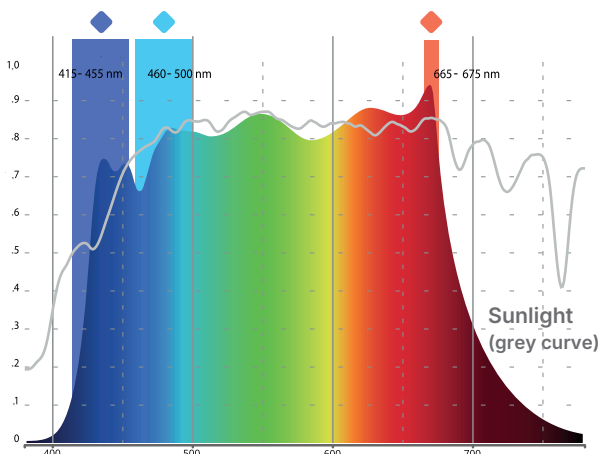
Control options

Mechanical parameters

Fe, Al	
Body	383 mm
Luminaire diameter	black powder coating
Finish	298 mm
Height of luminaire	250 mm
Length of supply cable	
-30°C ~ +50°C	
Working temperature	IP65
Protection class	Cardboard box
Packaging	

photometric quantities tolerance ± 200 K

SPECTRASOL SPECTRAL COMPOSITION VISUALISATION IN A TYPICAL ILLUMINATED SPACE AND DESCRIPTION OF ITS KEY REGIONS



◆ Harmful blue light suppressed

Does not damage retinal cells

Does not emit concentrated energy in the harmful blue light risk region (415-455 nm)

◆ Procognitive – Circadian melanopic energy

Supports the circadian system and the resulting cognitive performance, health and mood

Balanced energy in the cyan procognitive region (460-500 nm)

◆ Regenerative photobiomodulating energy

Regenerates damaged retinal cells

Peak emission in the photobiomodulation red (~670 nm)



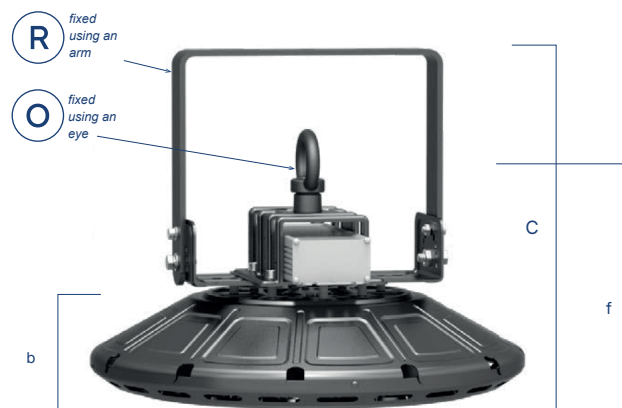
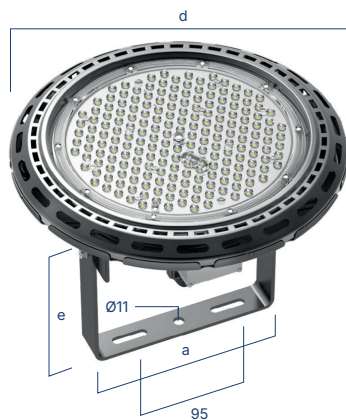
SUNHIGH GP LUMINAIRE VARIANTS

Order code	Variants	LED module type	Luminous flux of luminaire [lm]	EDImel (D65; D50) [lm]	Luminaire power consumption [W]	Maximum number of luminaires per circuit breaker		Inrush current		Dimensions [mm]					
						B16	C16	I _{max} [A]	Time [us]	a	b	c	d	e	f
1-S05-03-001	Spectrasol SL HIGH GP 150W 60 O	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	15650	13615; 15650	153	2	4	85	500	235	95	298	383	200	228
1-S05-03-002	Spectrasol SL HIGH GP 150W 60 R														
1-S05-03-003	Spectrasol SL HIGH GP 150W 90 O														
1-S05-03-004	Spectrasol SL HIGH GP 150W 90 R														
1-S05-03-005	Spectrasol SL HIGH GP 80W 60 O	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	8800	7656; 8800	80	2	4	85	500	235	95	298	383	200	228
1-S05-03-006	Spectrasol SL HIGH GP 80W 60 R														
1-S05-03-007	Spectrasol SL HIGH GP 80W 90 O														
1-S05-03-008	Spectrasol SL HIGH GP 80W 90 R														

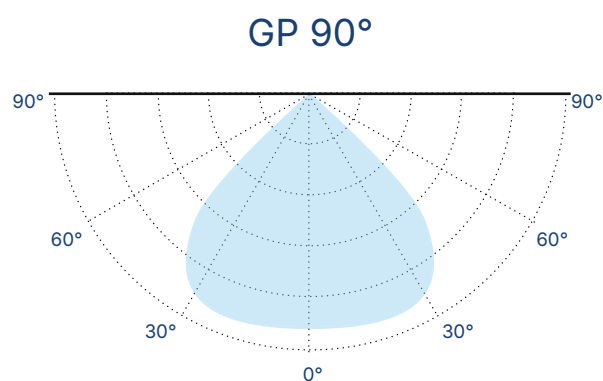
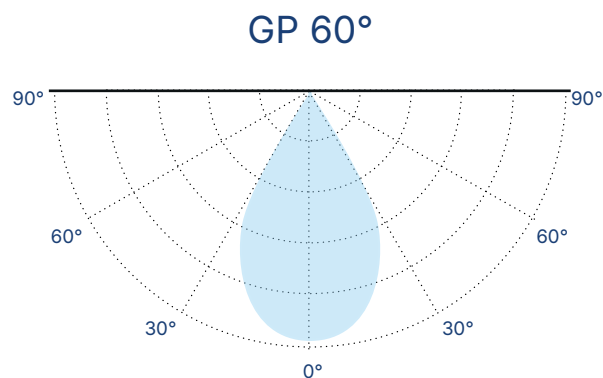
'O' eye fixing variant, 'R' arm fixing variant

Tolerance on photometric quantities and power consumption of luminaire $\pm 10\%$

DIMENSIONAL SPECIFICATIONS



LIGHT DISTRIBUTION



VISUALISATION OF AN ACTUAL APPLICATION OF THE LUMINAIRE

