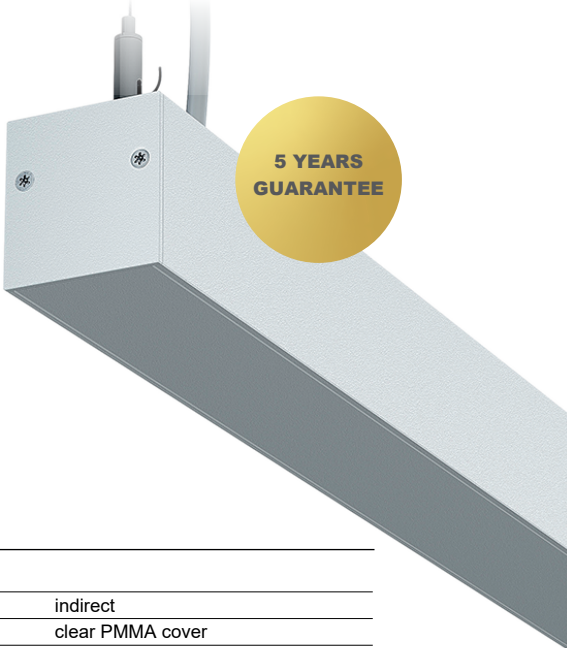


Procognitive LED luminaires

Spectrasol Sunline 45

LINEAR LUMINAIRES WITH INDIRECT LIGHT DISTRIBUTION

SPECTRASOL
PROCognitive LIGHTING



LUMINAIRE DESCRIPTION

The patented Spectrasol linear LED luminaires will illuminate your interior with artificial light with properties close to those of natural sunlight. Thanks to a balanced spectral composition (SPD) that positively influences the body's circadian rhythms through the non-image-forming (NIF) system of the eye, you will get biologically optimised full-spectrum lighting that supports overall health, physical and mental vitality and cognitive functions (cognitive performance and endurance, concentration, attention, quick thinking, ability to comprehend information, remember them and recall them from memory) indoors during the day.

Moreover, Spectrasol light fixtures 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.

The Spectrasol Sunline 45 is a procognitive linear LED pendant luminaire for the highest lighting comfort. Thanks to the indirect light distribution, it creates the impression of a clear sky in the interior and thus provides pleasant full-spectrum light for work or study.

TECHNICAL PARAMETERS

Lighting parameters	
Light distribution	indirect
Optical system	clear PMMA cover
UGR	N/A (indirect lighting)
CCT actual ¹	4800 K
CCT specific ²	5000 K
CRI	>95
DER mel	(D65)=0.87; (D50)=1
Flicker	flicker free
Calculated LED lifetime	L80B20 70.000h
Electrical parameters	
Power supply	220-240 V 50-60 Hz
Connection	transparent lead wire terminated with hollows
Control options	ON/OFF, DALI, PUSH DIM
Mechanical parameters	
Body	custom drawn Al section
Profile dimensions	46x49 mm (AxB)
Finish	powder-coating white RAL 9003 powder-coating black RAL 9005 powder coating silver TIGER 09/90530
Ceiling mount dimensions	80x80x32 (mm)
Length of the supply cable and suspension cable	180 cm
Option to connect multiple units in a line	yes ³
Maximum ambient temperature	25°C
Luminaire protection	IP20
Packaging	paper + cardboard

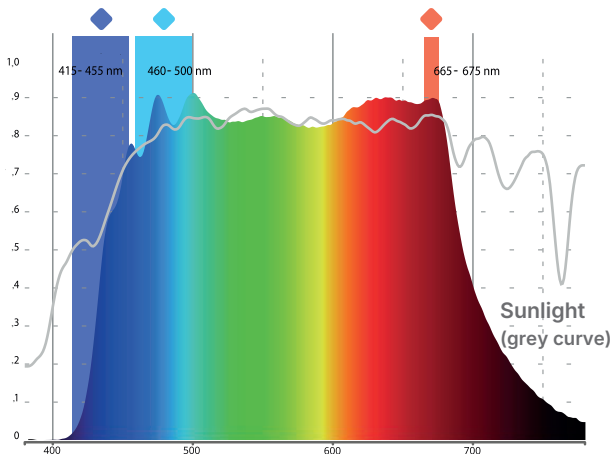
¹actual CCT in a typical illuminated room

²specific CCT luminaires (spherical integrator)

³custom finishing

tolerance on photometric quantities ±10%

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)



SUNLINE 45 LUMINAIRE VARIANTS

Order code	Variants	LED module type	Luminous flux of luminaire [lm]	EDImel (D65; D50) [lm]	Luminaire power consumption [W]	Number of DALI control addresses	Length [mm]	Standard positions outlet [mm]	Cable positions (recommended*) [mm]		Weight of luminaire [kg]
							C	d	e	f	
1-S03-05-006	Spectrasol SL45 1800 SR	procognitive LED Spectrasol 5000 K CRI95	8700	7560; 8700	97	2	1800	55	25	1775	
1-S03-05-007	Spectrasol SL45 1800 WH										
1-S03-05-008	Spectrasol SL45 1800 BK										
1-S03-05-009	Spectrasol SL45 1800 D ALI SR										
1-S03-05-010	Spectrasol SL45 1800 D ALI WH										
1-S03-05-011	Spectrasol SL45 1800 D ALI BK										
1-S03-05-013	Spectrasol SL45 2 400 SR	procognitive LED Spectrasol 5000 K CRI95	11600	10090; 11600	126	2	2400	57	25	2375	
1-S03-05-014	Spectrasol SL45 2 400 WH										
1-S03-05-005	Spectrasol SL45 2 400 BK										
1-S03-05-015	Spectrasol SL45 2 400 D ALI SR										
1-S03-05-016	Spectrasol SL45 2 400 D ALI WH										
1-S03-05-017	Spectrasol SL45 2 400 D ALI BK										
1-S03-05-019	Spectrasol SL45 3000 SR	procognitive LED Spectrasol 5000 K CRI95	14500	12610; 14500	162	3	3000	61	25	2975	
1-S03-05-020	Spectrasol SL45 3000 WH										
1-S03-05-021	Spectrasol SL45 3000 BK										
1-S03-05-022	Spectrasol SL45 3000 D ALI SR										
1-S03-05-023	Spectrasol SL45 3000 D ALI WH										
1-S03-05-024	Spectrasol SL45 3000 D ALI BK										

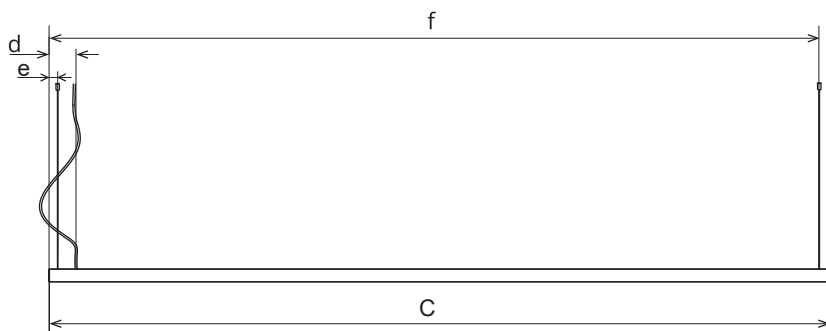
*the cable positions can be adjusted by the user

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

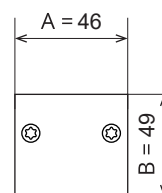
PROTECTION

Type of luminaire	Maximum number of luminaires per circuit breaker							Inrush current	
	C10	C13	C16	B10	B13	B16	B20	I _{max}	Time
Spectrasol SL45 1800	7	10	12	4	6	7	9	68 A	193 μ s
Spectrasol SL45 2 400	7	10	12	4	6	7	9	68 A	193 μ s
Spectrasol SL45 3000	5	6	8	3	4	5	6	102 A	193 μ s

LUMINAIRE DIMENSIONS



LIGHT FIXTURE CROSS-SECTION



LUMINAIRE VISUALISATION

