

Spectrasol Sunline 45 Direct

DIRECT LUMINAIRES FOR DARK CEILINGS



LUMINAIRE DESCRIPTION

The patented Spectrasol linear LED luminaire will illuminate your interior with artificial light that has 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.

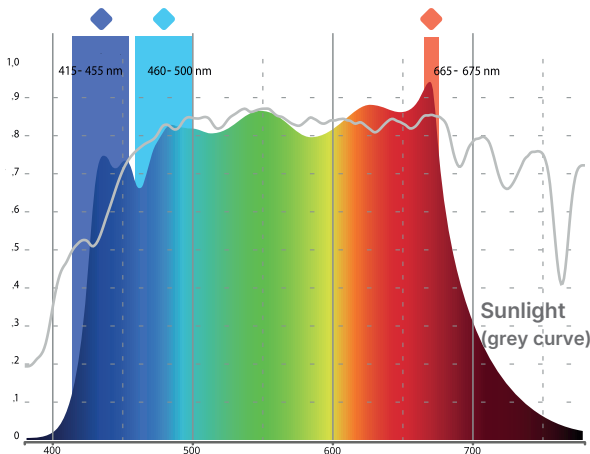
Spectrasol Sunline Direct luminaires are designed for direct lighting during the day. They are suitable, e.g., for rooms where due to dark or structured ceilings it is not possible to use luminaires with indirect or large-area light distribution.

TECHNICAL PARAMETERS

Lighting parameters	
Light distribution	direct
Optical system	microprism
UGR	<19 (depending on the lighting design)
CCT actual	4800 K
CCT specific	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 tubes
Control options	ON/OFF, DALI, SWITCH DIM
Mechanical parameters	
Body	aluminium profile
Profile dimensions	47x59 mm
Finish	powder-coating white RAL 9003 powder-coating black RAL 9005 powder coating silver TIGER 09/90530
Maximum ambient temperature	25°C
Protection class	IP20
Packaging	cardboard packaging

tolerance on photometric quantities ±10%
¹actual CCT in a typical illuminated room
²specific CCT luminaires (spherical integrator)

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 DIRECT LUMINAIRE VARIANTS

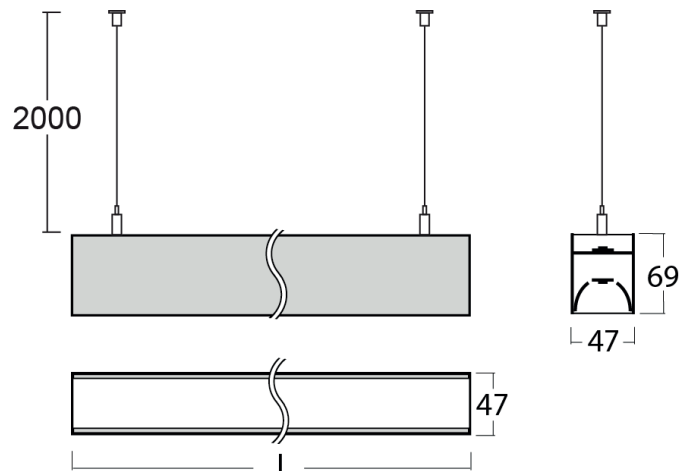
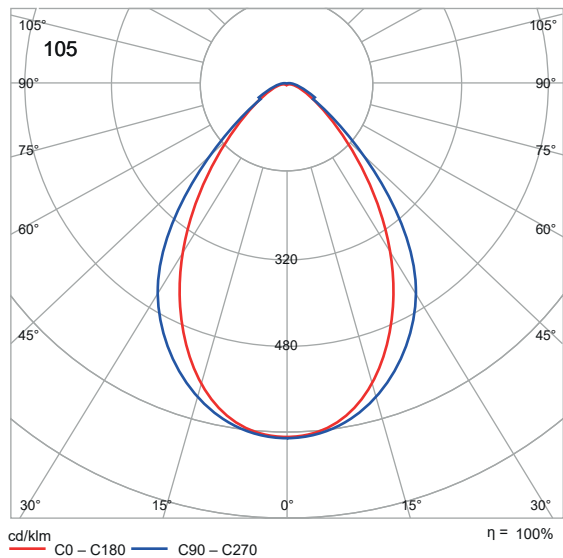
Variant	Variant	LED type	Luminaire luminous flux max.	Maximum power consumption [W]	Luminaire length [mm]
			[lm]		
Spectrasol SL45 DIR 566 DALI WH	Spectrasol SL45 DIR 566 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	104 0	12,4	566
Spectrasol SL45 DIR 566 DALI SR	Spectrasol SL45 DIR 566 SR				
Spectrasol SL45 DIR 566 DALI BK	Spectrasol SL45 DIR 566 BK				
Spectrasol SL45 DIR 847 DALI WH	Spectrasol SL45 DIR 847 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	1565	19	84 7
Spectrasol SL45 DIR 847 DALI SR	Spectrasol SL45 DIR 847 SR				
Spectrasol SL45 DIR 847 DALI BK	Spectrasol SL45 DIR 847 BK				
Spectrasol SL45 DIR 1127 DALI WH	Spectrasol SL45 DIR 1127 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	2100	25	127
Spectrasol SL45 DIR 1127 DALI SR	Spectrasol SL45 DIR 1127 SR				
Spectrasol SL45 DIR 1127 DALI BK	Spectrasol SL45 DIR 1127 BK				
Spectrasol SL45 DIR 1408 DALI WH	Spectrasol SL45 DIR 1408 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	2660	32	14 08
Spectrasol SL45 DIR 1408 DALI SR	Spectrasol SL45 DIR 1408 SR				
Spectrasol SL45 DIR 1408 DALI BK	Spectrasol SL45 DIR 1408 BK				
Spectrasol SL45 DIR 1668 DALI WH	Spectrasol SL45 DIR 1668 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	3200	4 0	1688
Spectrasol SL45 DIR 1668 DALI SR	Spectrasol SL45 DIR 1668 SR				
Spectrasol SL45 DIR 1668 DALI BK	Spectrasol SL45 DIR 1668 BK				
Spectrasol SL45 DIR 1969 DALI WH	Spectrasol SL45 DIR 1969 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	3680	4 6	1969
Spectrasol SL45 DIR 1969 DALI SR	Spectrasol SL45 DIR 1969 SR				
Spectrasol SL45 DIR 1969 DALI BK	Spectrasol SL45 DIR 1969 BK				
Spectrasol SL45 DIR 2249 DALI WH	Spectrasol SL45 DIR 2249 WH	procognitive, photobiomodulating LED Spectrasol 4800 K CRI 95	4 200	50	2250
Spectrasol SL45 DIR 2249 DALI SR	Spectrasol SL45 DIR 2249 SR				
Spectrasol SL45 DIR 2249 DALI BK	Spectrasol SL45 DIR 2249 BK				

DIR – direct distribution

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

LIGHT DISTRIBUTION

LUMINAIRE DIMENSIONS



LUMINAIRE VISUALISATION

