



Spectrasol Sunline 45 Direct+

DIRECT-LIGHTING PROCOGNITIVE LUMINAIRES WITH A SUPPLEMENTARY INDIRECT COMPONENT



5 YEARS
WARRANTY

LUMINAIRE DESCRIPTION

The patented Spectrasol LED luminaire will illuminate your interior with artificial light with properties close to natural sunlight. Thanks to its balanced spectral composition (SPD), which positively influences the body's circadian rhythms through the non-visual system of the eye (NIF), you will obtain biologically optimised full-spectrum lighting that supports overall health, physical and mental vitality, and cognitive functions (cognitive performance and endurance, concentration, attention, speed of thought, ability to understand information, memorisation and recall) indoors during the day.

Spectrasol luminaires do not emit concentrated energy in the short wavelengths of the blue part of the light spectrum in the harmful blue light range, which increases the risk of macular degeneration. Spectrasol, on the other hand, regenerates the eyes by emitting energy in the red, photobiomodulation part of the light spectrum, which acts as a compensatory factor for harmful blue light with both preventive and therapeutic effects.

Spectrasol Sunline Direct + luminaires are designed for direct daylight illumination. They are particularly suitable for spaces where dark or textured ceilings make it impossible to use luminaires with indirect or large-area light distribution. In addition to the primary direct light component, these models also feature a supplementary indirect component.

TECHNICAL PARAMETERS

Light parameters

Light distribution	direct-indirect
Optical system	PMMA clear-microprism
UGR	<19 (depending on the lighting design)
Real CCT ¹	4800K
Specific CCT ²	5000K
CRI	>95
DER _{mel}	(D65)=0,87 ; (D50)=1
Flicker	flicker free
Calculated LED lifetime	L80B20 70.000h

Electrical parameters

Power supply	220-240V 50-60Hz
Connection	transparent supply wire terminated with ferrules
Control options	ON/OFF, DALI, SWITCH DIM

Mechanical parameters

Luminaire body	aluminum extrusion
Extrusion dimensions	47x59 mm
Surface finish	powder coat white RAL 9003 powder coat black RAL 9005 powder coat TIGER 09/90530

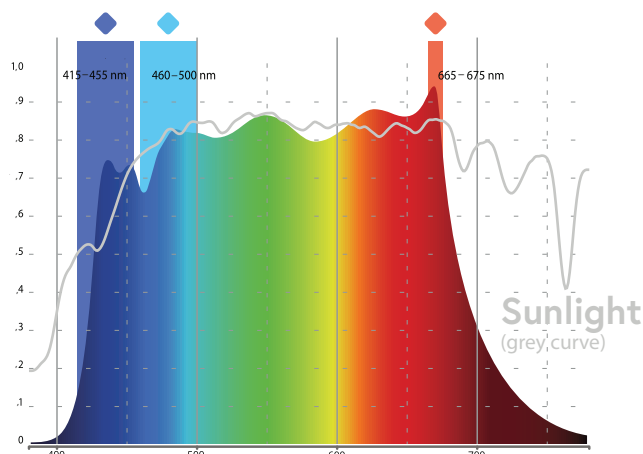
Maximum ambient temperature	25°C
Luminaire protection rating	IP20
Packaging	Cardboard box

tolerance of photometric values +/- 10%

¹real CCT in typically illuminated room

²specific CCT if luminaire (integrating sphere)

VISUALIZATION OF THE SPECTRASOL SPECTRAL COMPOSITION WITHIN A TYPICAL ILLUMINATED SPACE AND A DESCRIPTION OF ITS KEY AREAS



Supressed harmful blue light

Does not damage retina cells

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

Procognitive - Circadian melanopic energy

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

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

Regenerative photobiomodulation energy

Regenerates damaged retinal cells

Peak emission in the photobiomodulation red range (~ 670 nm)

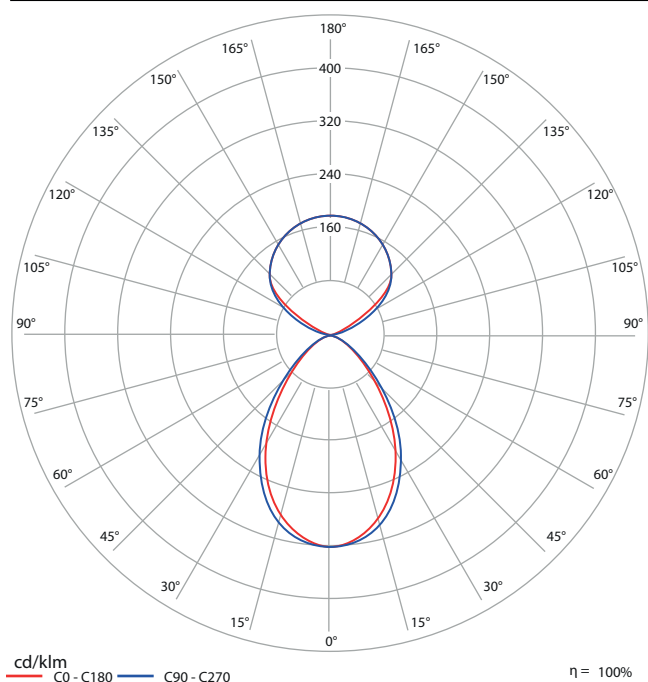


SUNLINE 45 DIRECT+ VARIANTS

Variant DALI	Variant	LED type	Luminaire light flux (max) [lm]	Luminaire power consumption (max) [W]	Luminaire length l [mm]
Spectrasol SL45 D/I 566 DALI WH	Spectrasol SL45 D/I 566 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	1720	19,4	566
Spectrasol SL45 D/I 566 DALI SR	Spectrasol SL45 D/I 566 SR				
Spectrasol SL45 D/I 566 DALI BK	Spectrasol SL45 D/I 566 BK				
Spectrasol SL45 D/I 847 DALI WH	Spectrasol SL45 D/I 847 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	2930	33,5	847
Spectrasol SL45 D/I 847 DALI SR	Spectrasol SL45 D/I 847 SR				
Spectrasol SL45 D/I 847 DALI BK	Spectrasol SL45 D/I 847 BK				
Spectrasol SL45 D/I 1127 DALI WH	Spectrasol SL45 D/I 1127 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	4140	47,6	1127
Spectrasol SL45 D/I 1127 DALI SR	Spectrasol SL45 D/I 1127 SR				
Spectrasol SL45 D/I 1127 DALI BK	Spectrasol SL45 D/I 1127 BK				
Spectrasol SL45 D/I 1408 DALI WH	Spectrasol SL45 D/I 1408 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	5280	61	1408
Spectrasol SL45 D/I 1408 DALI SR	Spectrasol SL45 D/I 1408 SR				
Spectrasol SL45 D/I 1408 DALI BK	Spectrasol SL45 D/I 1408 BK				
Spectrasol SL45 D/I 1668 DALI WH	Spectrasol SL45 D/I 1668 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	6520	74	1668
Spectrasol SL45 D/I 1668 DALI SR	Spectrasol SL45 D/I 1668 SR				
Spectrasol SL45 D/I 1668 DALI BK	Spectrasol SL45 D/I 1668 BK				
Spectrasol SL45 D/I 1969 DALI WH	Spectrasol SL45 D/I 1969 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	7690	87,7	1969
Spectrasol SL45 D/I 1969 DALI SR	Spectrasol SL45 D/I 1969 SR				
Spectrasol SL45 D/I 1969 DALI BK	Spectrasol SL45 D/I 1969 BK				
Spectrasol SL45 D/I 2249 DALI WH	Spectrasol SL45 D/I 2249 WH	Procognitive, fotobiomodulation LED Spectrasol 4800 K CRI 95	8890	99,4	2249
Spectrasol SL45 D/I 2249 DALI SR	Spectrasol SL45 D/I 2249 SR				
Spectrasol SL45 D/I 2249 DALI BK	Spectrasol SL45 D/I 2249 BK				

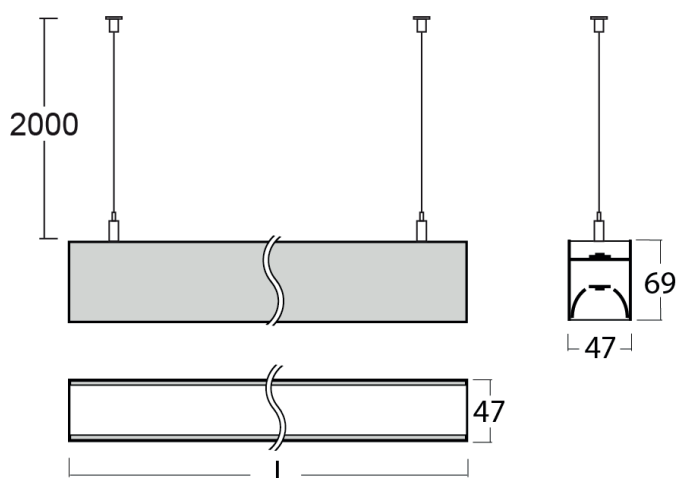
DIR - direct light distribution

SVĚTELNÁ DISTRIBUCE



Tolerance of photometric quantities and luminaire power consumption +/- 10%

LUMINAIRE DIMENSIONS



LUMINAIRE VISUALS

