

# PROCOGNITIVE LED LUMINAIRES SPECTRASOL LINEAR



**SPECTRASOL**  
BIODYNAMIC HUMAN SOLUTIONS



## Linear light fixtures for indirect daytime lighting

The patented Spectrasol LINEAR LED LIGHT fixtures illuminate your interior with artificial light with properties close to 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 eyes, 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 Linear light fixtures are designed for indirect illumination, as it can best mimic and evoke the feeling of a bright day when hung from a ceiling. They shine instantly at full power, are resistant to frequent switching, have a long lifetime and suppress the flicker effect. Existing wiring can be used for connection. The linear LED light fixtures are produced in several standard lengths and it is possible to combine several pieces to create long lines or shapes. There are also biodynamic versions of the light fixtures, equipped with warm white LEDs for evening use in addition to the procognitive LEDs.

## Lighting parameters

Light distribution	indirect
Optical system	clear PMMA cover
UGR	N/A (indirect lighting)
CCT real <sup>1</sup>	4800 K (2700 K) <sup>4</sup>
CCT specific <sup>2</sup>	5000 K (2600 K) <sup>4</sup>
CRI	> 95 (> 97) <sup>4</sup>
Flicker	Flicker Free
Calculated LED lifetime	L80B20 70.000 h

## Electrical parameters

Power supply	220-240 V 50-60 Hz
Connection	screwless terminal block
Control options	ON/OFF, DALI

## Mechanical parameters

Body	custom extruded Al profile
Light fixture cross-section	50 x 50 (mm) (A, B)
Finishing degree	anodised, RAL paint
Ceiling mount dimensions	106 x 51 x 28 (mm)
Suspension cord length	800 mm, individual
Mount/cover colour	grey/white, individual
Option to connect multiple units in a line	Yes <sup>3</sup>

Maximum ambient temperature	25 °C
Protection class	IP20
Packing	Mirelon sheet, top cover sheet

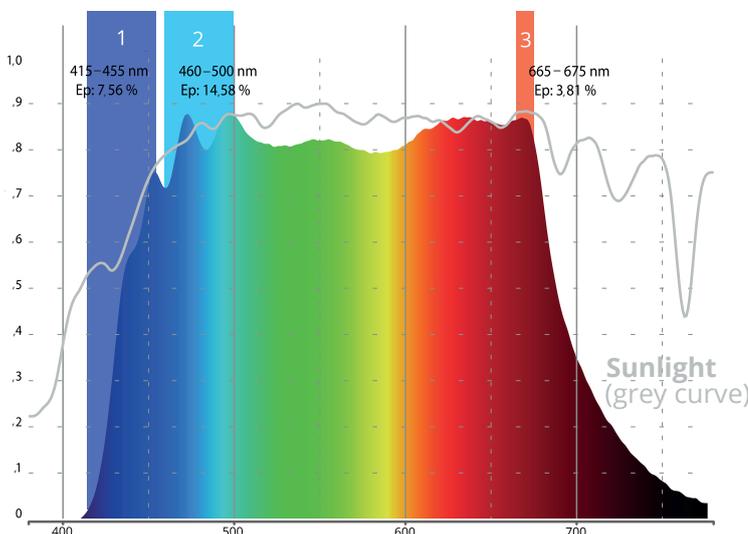
<sup>1</sup>Real CCT in a typical illuminated room

<sup>2</sup>Specific CCT of the light fixture (spherical integrator)

<sup>3</sup>To be resolved individually within the project

<sup>4</sup>The Second CCT and CRI value for is for BD variants only; CCT tolerance +/- 200 K

## Visualisation of Spectrasol spectral composition and description of its key areas



### 1 HARMFUL BLUE LIGHT

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

### 2 PROCOGNITIVE - CIRCADIAN MELANOPIC ENERGY

**Supports the circadian system and the resulting cognitive performance, health and mood**  
**Better energy in cyan region (460 - 500 nm)**

### 3 REGENERATIVE PHOTOBIO-MODULATION ENERGY

**Regenerates damaged retinal cells**  
**Peak emission in the photobiomodulation red (~ 670 nm)**





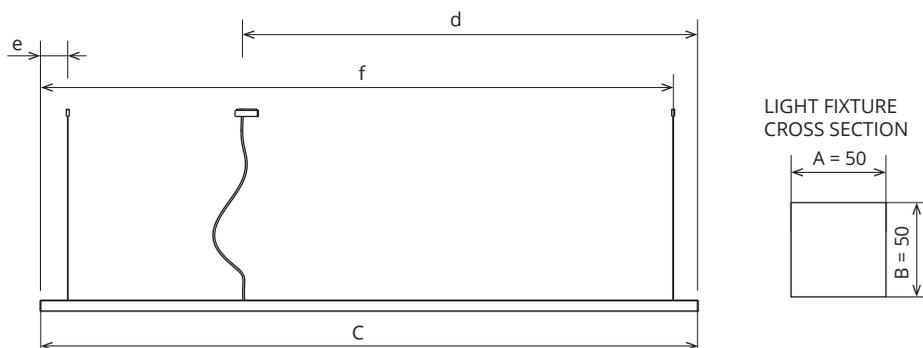
### Variants of Spectrasol Linear light fixtures

Order code	Variants	LED DPS Type	Light fixture luminous flux [lm]	Light fixture power consumption [W]	Length [mm]	Standard outlet position [mm]		Cord position [mm]		Light fixture weight [kg]			
						C	d*	e	f				
30101 30102	Spectrasol HM-LIN-ADDAM-ELOX 1800 Spectrasol HM-LIN-ADDAM-RAL 1800	procognitive LED Spectrasol 5000 K CRI 95	9600	97	1800	635	50	1700		3,5			
30103 30104	Spectrasol HM-LIN-ADDAM-DALI-ELOX 1800 Spectrasol HM-LIN-ADDAM-DALI-RAL 1800												
30181 30182	Spectrasol HM-LIN-ADDAM-BD-ELOX 1800 Spectrasol HM-LIN-ADDAM-BD-RAL 1800										procognitive LED Spectrasol 5000 K CRI 95	9600	97
											LED 2700 K CRI 97	2450	42
30201 30202	Spectrasol HM-LIN-ADDAM-ELOX 2400 Spectrasol HM-LIN-ADDAM-RAL 2400	procognitive LED Spectrasol 5000 K CRI 95	12800	126	2400	635	50	2300		4,3			
30203 30204	Spectrasol HM-LIN-ADDAM-DALI-ELOX 2400 Spectrasol HM-LIN-ADDAM-DALI-RAL 2400												
30281 30282	Spectrasol HM-LIN-ADDAM-BD-ELOX 2400 Spectrasol HM-LIN-ADDAM-BD-RAL 2400										procognitive LED Spectrasol 5000 K CRI 95	12800	126
											LED 2700 K CRI 97	3400	55
30301 30302	Spectrasol HM-LIN-ADDAM-ELOX 3000 Spectrasol HM-LIN-ADDAM-RAL 3000	procognitive LED Spectrasol 5000 K CRI 95	16000	162	3000	1215	50	2900		6			
30303 30304	Spectrasol HM-LIN-ADDAM-DALI-ELOX 3000 Spectrasol HM-LIN-ADDAM-DALI-RAL 3000												
30381 30382	Spectrasol HM-LIN-ADDAM-BD-ELOX 3000 Spectrasol HM-LIN-ADDAM-BD-RAL 3000										procognitive LED Spectrasol 5000 K CRI 95	16000	162
											LED 2700 K CRI 97	4300	69

\*Outlet positions can be individually adjusted

Luminous flux and power consumption tolerance +/- 10%

### Specification of dimensions



### Visualisation of light fixture

