## **Procognitive LED Luminaires**

# **Spectrasol Terra**

FREESTANDING LUMINAIRE































#### **LUMINAIRE DESCRIPTION**

Spectrasol TERRA luminaires are equipped with patented Spectrasol LED light sources which, thanks to a balanced spectral power distribution (SPD), positively influence the circadian rhythms of the organism through the eye's non-visual system (NIF). With TERRA luminaires, you obtain biologically optimized full-spectrum lighting that supports overall health, physical and mental vitality, and cognitive functions (cognitive performance and endurance, concentration, attention, speed of thinking, ability to understand information, memorization, and recall).

The luminaire does not emit concentrated energy in the short wavelengths of the blue part of the light spectrum, the so-called harmful blue light which increases the risk of macular degeneration. Spectrasol, on the contrary, regenerates the eyes by emitting energy in the red, photobiomodulation part of the light spectrum, which acts as a compensating factor for harmful blue light with both preventive and therapeutic effects.

Spectrasol TERRA is a pro-cognitive freestanding office luminaire which, thanks to its minimalist design, fits into a wide range of interiors. TERRA emits direct and indirect full-spectrum patented LED pro-cognitive light. It combines the lighting comfort of indirect illumination with the high energy efficiency of the direct component. The ratio of direct and indirect components can be adjusted by a button control in the switch-dimm variants.

#### **TECHNICAL PARAMETERS**

Light parameters	
Light distribution	direct - indirect
Optical system	microprismatic, clear
Real CCT <sup>1</sup>	4800K
Specific CCT <sup>2</sup>	5000K
Luminous flux	10 000lm
EDImel (D65; D50)	8700lm, 10 000lm
CRI	>95
DERmel	(D65)=0,87; (D50)=1
UGR (typical room)	<16
Flicker	flicker free
Calculated LED lifetime	L80B20 70.000h

SPECTRA**SOL** 

#### Elektrické parametry

Power supply	220-240V 50-60Hz
Power consumption	112W
Connection	Power supply cord
Electrical class	1
Control options	ON/OFF, SWITCH DIM, presence and illuminance sensor

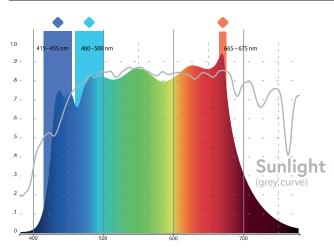
### Mechanické parametry

aluminum
615 x 325 x 1945
white, silver, black
IP20
dissasembled: head, stand, base

<sup>2</sup>specific CCT of luminaire (integrating sphere)

Tolerance of photometric quantities +/- 10%

## VISUALISATION OF THE SPECTRAL COMPOSITION OF SPECTRASOL IN A TYPICAL ILLUMINATED SPACE AND 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)

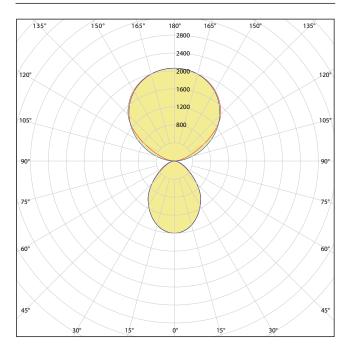




## SPECTRASOL TERRA LUMINAIRE VARIANTS

Order code	Variant
S07-02-001	Spectrasol <b>TERRA</b> on/off
S07-02-002	Spectrasol <b>TERRA</b> switch dimm
S07-02-003	Spectrasol TERRA switch dimm + sensor

### LIGHT DISTRIBUTION DIAGRAM



## LUMINAIRE VISUALIZATION







