Procognitive LED luminaires



Spectrasol IBP PRO-SCHOOL

LUMINAIRES INSTALLED IN A GRID CEILING





















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 IBP PRO-SCHOOL luminaires are economical procognitive luminaires with a large radiation area and a maximally optimised price. The simple design, cutting-edge patented spectrum and large-area distribution make this model the ideal choice for all classrooms and staff rooms where it is important to support cognitive performance, learning abilities, attention, concentration and vitality.

TECHNICAL PARAMETERS

Light parameters	
Light distribution	Direct
Optical system	Opalescent PS cover
UGR	<19
CCT real ¹	4800K (2700K) ³
CCT measured ²	5000K (3000K) ³
CRI	>95
DER mel (daytime)	(D65)=0,87; (D50)=1
Flicker	Flicker free
Calculated LED lifetime	L80B20 70.000h

Electrical parameters

Power supply	220-240V 50-60Hz
Connection	Screwless terminal block ready for
	loopingt
Control options	ON/OFF, DALI, SWITCH DIM

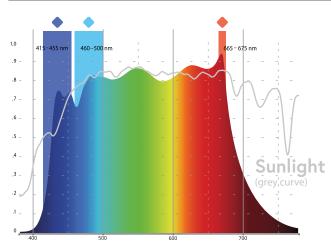
Mechanical parameters

McChainear parameters				
Body	Steel sheet			
Surface finish	Powder coating white RAL 9016			
Maximum ambient temperature	25°C			
Protection	IP20 + IP54			
Packaging	Cardboard box			
to all COT in an Amin at Illumin and all an an	Secretary of COT control for CO constants			
¹real CCT in a typical illuminated room	3second CCT value for BD variants			

²dimensional CCT of luminaires (spherical integrator)

tolerance of photometric values +/- 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

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)





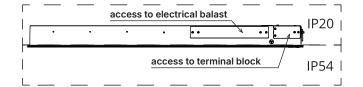
Order	Order code Name		LED Type	Luminous flux of luminaire	EDImel (D65; D50)	Luminaire power consumption Light fixture dimensio		ensions	Weight [kg]	
code				[lm]	[lm]	[w]	Α	В	С	lighting fixture
S01-03-008	Spectrasol IBP W&S5000 A KO600ND	600×600	procognitive LED Spectrasol		3910;	45	596	596	90	2,7
S01-03-009	Spectrasol IBP W&S5000 A KO600 DALI	600×600	5000 K CRI 95		4500					
S01-03-010	Spectrasol IBP W&S5000 C KO600ND	1200×300	procognitive LED Spectrasol	4500	3910;	45	1195	296	90	2,8
S01-03-011	Spectrasol IBP W&S5000CKO600DALI	1200×300	5000 K CRI 95	4500 4500	4500	43	1193	290	90	2,0

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

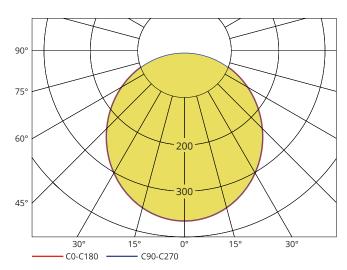
IBP LUMINAIRE ACCESSORIES

Order code	Variants
P01-03-001	Frame for plasterboard installation for luminaire IBP-A (QVESTRAMA600)
P01-03-002	Frame for surface-mounted installation for luminaire IBP-A (RAM100A600/9003)
P01-03-003	Frame for plasterboard installation for luminaire IBP-C (QVESTRAMC600)
P01-03-004	Frame for surface-mounted installation for luminaire IBP-C (RAM100C600/9003)
P01-00-001	Universal suspension system (ZH UNI4)

LUMINAIRE FITTING DIMMENSIONS



LIGHT DISTRIBUTION DIAGRAM



LUMINAIRE VISUALISATION





