Procognitive LED luminaires

Spectrasol IBP Work

LUMINAIRES EMBEDDED IN A SUSPENDED CEILING

SPECTRASOL
PROCOGNITIVE LIGHTING

PATENT NO. 309539 PATENTED

PATENT NO. 308363 PATENTED

IP20 / IP54 · 220-240 V 50-60 Hz · ON/OFF · 0 sec · CRI ≥95 · LED · CE · RoHS

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 IBP Work&School luminaires are cost-efficient procognitive luminaires with a large luminous area and an optimised price. The simple design, cutting-edge patented spectrum and large-area distribution make this model an ideal choice for all classrooms and assembly halls where it is important to boost cognitive performance, learning skills, attention concentration and vitality.

TECHNICAL PARAMETERS

Lighting parameters

Light distribution	direct
Optical system	opal PS cover
UGR	<19
CCT actual[1]	4800K (2700K)[3]
CCT specific[2]	5000K (3000K)[3]
CRI	>95
DER mel (daily)	(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	screwless terminal block ready for looping
Control options	ON/OFF, DALI, SWITCH DIM

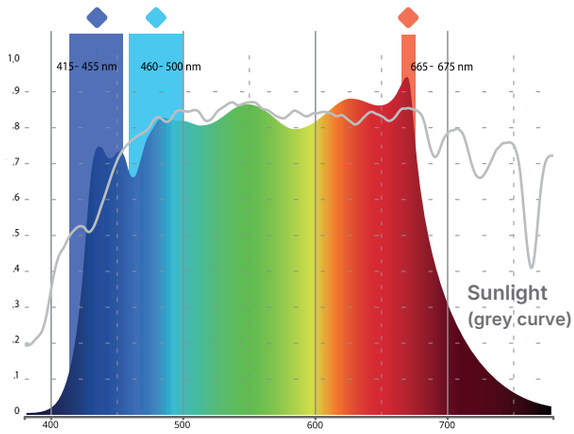
Mechanical parameters

Body	sheet steel
Finish	Powder-coating white RAL 9016

Maximum ambient temperature	25°C
Luminaire protection	IP20 + IP54
Packaging	Cardboard box

[1]actual CCT in a typical illuminated space
[2]specific CCT of luminaire (spherical integrator)
[3]second CCT value for biodynamic variants only
tolerance on photometric quantities ±10%

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)

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T0013
rev. 01
02/2025

IBP Work LUMINAIRE VARIANTS

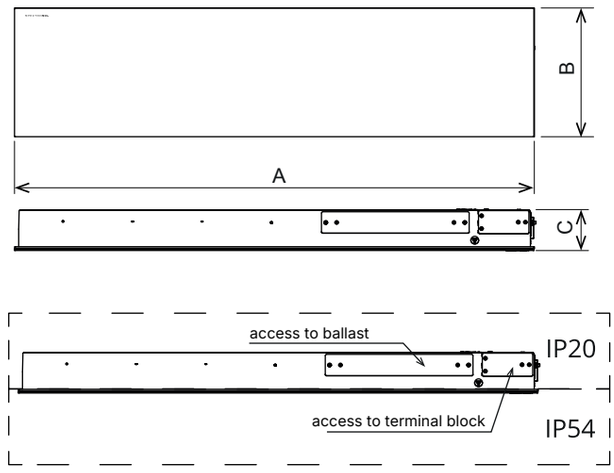
Order code	Title		LED TYPE	Luminous flux of luminaire	EDImel (D65; D50	Luminaire power consumption	Light fixture dimension [mm]			Weight [kg]
				[lm]	[lm]	[W]	A	B	C	luminaire
S01-03-008	Spectrasol IBP W&S 5000AKO600ND	600x600	procognitive LED Spectrasol 5000 K CRI 95	4500	3910; 4500	45	596	596	90	2,7
S01-03-009	Spectrasol IBP W&S 5000AKO600DALI	600x600								
S01-03-010	Spectrasol IBP W&S 5000CKO600ND	1200x300	procognitive LED Spectrasol 5000 K CRI 95	4500	3910; 4500	45	1195	296	90	2,8
S01-03-011	Spectrasol IBP W&S 5000CKO600DALI	1200x300								

Tolerance on photometric quantities and power consumption of luminaire ±10%

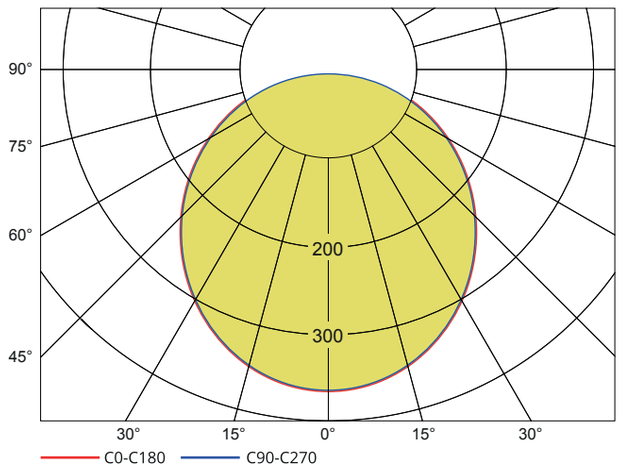
IBP LUMINAIRE ACCESSORIES

Order code	Variants
P01-03-001	Plasterboard mounting frame for the IBP-A luminaire (QVESTRAMA600)
P01-03-002	Recessed mounting frame for the IPB-A luminaire (RAM100A600/9003)
P01-03-003	Plasterboard mounting frame for the IBP-C luminaire (QVESTRAMC600)
P01-03-004	Recessed mounting frame for the IBP-C luminaire (RAM100C600/9003)
P01-00-001	Universal suspension system (ZH UNI4)

LUMINAIRE DIMENSIONS



LIGHTING DISTRIBUTION CHART



LUMINAIRE VISUALISATION