Procognitive LED luminaires



Spectrasol Sunround Fit

LUMINAIRES EMBEDDED IN A SUSPENDED CEILING



















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 SunRound FIT luminaires are designed to be integrated into plasterboard or other soffits. Their round shape and thin frame make them a great design alternative to square luminaires. They are an ideal choice for modern interiors where a boost for cognitive performance, learning ability, attention, concentration and vitality needs to be combined with the aesthetics of the space.

TECHNICAL PARAMETERS

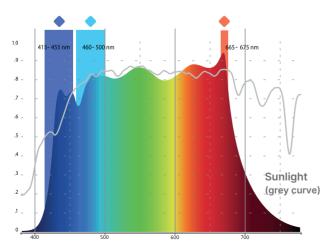
Light parameters				
Light distribution	direct microprism			
Optical system				
UGR	<19 (depending on the mounting method)			
CCT actual ¹	4800K (2700K) ³			
CCT specific ²	5000K (3000K) ³			
CRI	>95			
DER mel (daily)	(D65)=0.87; (D50)=1			
Flicker	flicker free			
Calculated LED lifetime	L80B20 70.000h			
Electrical parameters				
Power supply	220-240 V 50-60 Hz			
Connection	screwless terminal block inside luminaire			
Control options	ON/OFF, DALI, SWITCH DIM			
Mechanical parameters				
Body	metal sheet			
Finish	powder-coating white RAL 9003			
	powder-coating black RAL 9005			
	powder-coating silver TIGER			
	09/90530			
Maximum ambient temperature	25°C			
Luminaire protection	IP20 + IP54			
Packaging	Cardboard box			

1actual CCT in a typical illuminated space

²specific CCT of luminaire (spherical integrator)

tolerance on photometric quantities ±10%

VISUALISATION OF SPECTRASOL SPECTRAL COMPOSITION IN A TYPICAL ILLUMINATED SPACE AND DESCRIPTION OF ITS KEY AREAS



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)



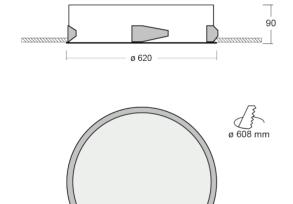


SUNROUND FIT LUMINAIRE VARIANTS

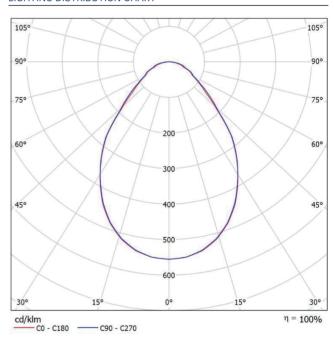
Order code	Variant	LED type	Luminous flux of luminaire	EDImel (D65; D50)	Power consumption luminaire	Luminaire diameter d	Mounting hole diameter d2
			[Im]	[lm]	[W]	[mm]	[mm]
1-S01-04-001	Spectrasol SRFIT400 WH				49	420	408
1-S01-04-002	Spectrasol SRFIT400 SR		3500	3045; 3500			
1-S01-04-003	Spectrasol SRFIT400 BK						
1-S01-04-004	Spectrasol SRFIT600 WH	procognitive LED Spectrasol 5000 K CRI 95	15000 5500 4785;		72	620	608
1-S01-04-005	Spectrasol SRFIT600 SR						
1-S01-04-006	Spectrasol SRFIT600 BK	K CRI 95					
1-S01-04-007	Spectrasol SRFIT850 WH						
1-S01-04-008	Spectrasol SRFIT850 SR		10000	8700; 10000	133	870	858
1-S01-04-009	Spectrasol SRFIT850 BK						
1-S01-04-010	Spectrasol SRFIT400 DALI WH			3045; 3500 3500	49	420	408
1-S01-04-011	Spectrasol SRFIT400 DALI SR		3500				
1-S01-04-012	Spectrasol SRFIT400 DALI BK						
1-S01-04-013	Spectrasol SRFIT600 DALI WH						
1-S01-04-014	Spectrasol SRFIT600 DALI SR	procognitive LED Spectrasol 5000	5500	4785; 5500	72	620	608
1-S01-04-015	Spectrasol SRFIT600 DALI BK	K CRI 95					
1-S01-04-016	Spectrasol SRFIT850 DALI WH		10000	8700; 10000	133	870	858
1-S01-04-017	Spectrasol SRFIT850 DALI SR						
1-S01-04-018	Spectrasol SRFIT850 DALI BK						

Tolerance on photometric quantities and power consumption of luminaire $\pm 10\%$

LUMINAIRE DIMENSIONS



LIGHTING DISTRIBUTION CHART



LUMINAIRE VISUALISATION



