



# Spectrasol MEDD

SUSPENDED LINEAR LUMINAIRES WITH INDIRECT LIGHT DISTRIBUTION



## 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 MEDD is a pro-cognitive wall-mounted luminaire of unique design. It is created for the highest lighting comfort and provides sufficient high-quality light for work or study. Compared to the ADDAM and Sunline 45 models, it offers up to double the luminous output and is also available in biodynamic variants with direct warm relaxing light.

## TECHNICAL PARAMETERS

### Light parameters

|                           |                                      |
|---------------------------|--------------------------------------|
| Light distribution        | indirect (direct) <sup>4</sup>       |
| Optical system            | clear PMMA cover (opal) <sup>4</sup> |
| UGR                       | N/A (indirect lighting)              |
| Real CCT <sup>1</sup>     | 4800K (2300K) <sup>4</sup>           |
| Specific CCT <sup>2</sup> | 5000K (2400K) <sup>4</sup>           |
| CRI                       | 95 (>97) <sup>4</sup>                |
| DERmel (day mode)         | (D65)=0.87 ; (D50)=1                 |
| Flicker                   | flicker free                         |
| Calculated LED lifetime   | L80B20 70,000h                       |

### Elektrické parametry

|              |                     |
|--------------|---------------------|
| Power supply | 220–240V 50–60Hz    |
| Connection   | screwless terminals |

|                 |              |
|-----------------|--------------|
| Control options | ON/OFF, DALI |
|-----------------|--------------|

### Mechanické parametry

|                                  |                        |
|----------------------------------|------------------------|
| Body                             | custom ALU extrusion   |
| Extrusion dimensions             | 115×72 mm (A×B)        |
| Surface finish                   | RAL coating            |
| Ceiling mount dimensions         | 94×94×23 mm            |
| Suspension cable length          | 80 cm, individual      |
| Mount / cover colour             | grey/white, individual |
| Possibility of linear connection | yes <sup>3</sup>       |

|                             |                           |
|-----------------------------|---------------------------|
| Maximum ambient temperature | 25 °C                     |
| Luminaire protection rating | IP20                      |
| Packaging                   | Miralon + protective foil |

<sup>1</sup>real CCT in a typically illuminated room

<sup>2</sup>measured CCT of the luminaire

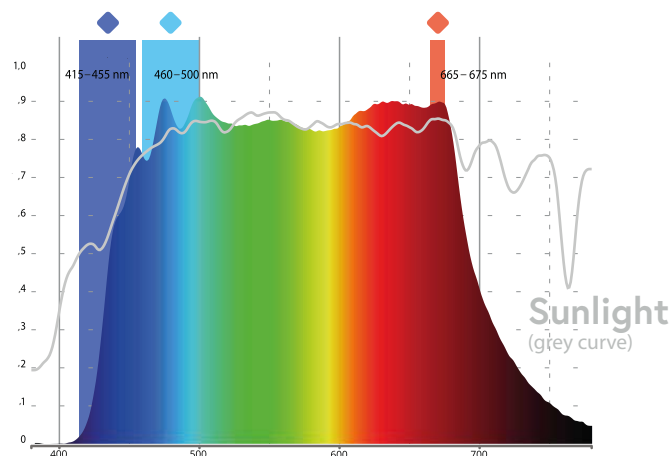
(integrating sphere)

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

<sup>4</sup>second values apply to the evening mode of the BD variant

tolerance of photometric quantities ±10%

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



### ◆ Suppressed 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)

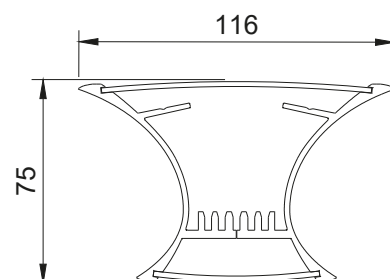
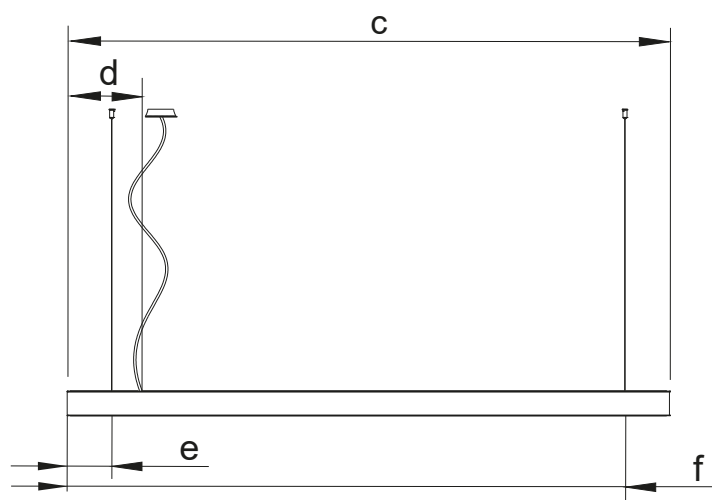


## LUMINAIRE VARIANTS OF SPECTRASOL MEDD

| Order code | Variants                  | LED module type                            | Luminous flux<br>[lm] | EDImel (D65; D50)<br>[lm] | Power consumption<br>[W] | Number of DALI control addresses | Length<br>[mm] | Standard cable entry position<br>[mm] | suspension cord position<br>[mm] |      | Luminaire weight<br>[kg] |
|------------|---------------------------|--------------------------------------------|-----------------------|---------------------------|--------------------------|----------------------------------|----------------|---------------------------------------|----------------------------------|------|--------------------------|
|            |                           |                                            |                       |                           |                          |                                  | C              | d*                                    | e                                | f    |                          |
| S03-02-003 | Spectrasol MEDD 1200      | pro-cognitive LED Spectrasol 5000 K CRI 95 | 11600                 | 10090; 11600              | 126                      | 2                                | 1200           | 80                                    | 50                               | 1150 |                          |
| S03-02-004 | Spectrasol MEDD 1200 DALI |                                            |                       |                           |                          |                                  |                |                                       |                                  |      |                          |
| S03-02-005 | Spectrasol MEDD 1200 BD   | pro-cognitive LED Spectrasol 5000 K CRI 95 | 11600                 | 10090; 11600              | 126                      | 3                                |                |                                       |                                  |      |                          |
|            |                           | evening LED 2400 K CRI 97                  | 2050                  | -                         | 38                       |                                  |                |                                       |                                  |      |                          |
| S03-02-008 | Spectrasol MEDD 1800      | pro-cognitive LED Spectrasol 5000 K CRI 95 | 17400                 | 15120; 17400              | 194                      | 3                                | 1800           | 80                                    | 50                               | 1750 |                          |
| S03-02-009 | Spectrasol MEDD 1800 DALI |                                            |                       |                           |                          |                                  |                |                                       |                                  |      |                          |
| S03-02-010 | Spectrasol MEDD 1800 BD   | pro-cognitive LED Spectrasol 5000 K CRI 95 | 17400                 | 15120; 17400              | 194                      | 4                                |                |                                       |                                  |      |                          |
|            |                           | evening LED 2400 K CRI 97                  | 2450                  | -                         | 42                       |                                  |                |                                       |                                  |      |                          |
| S03-02-013 | Spectrasol MEDD 2400      | pro-cognitive LED Spectrasol 5000 K CRI 95 | 23200                 | 20180; 23200              | 252                      | 4                                | 2400           | 80                                    | 50                               | 2350 |                          |
| S03-02-014 | Spectrasol MEDD 2400 DALI |                                            |                       |                           |                          |                                  |                |                                       |                                  |      |                          |
| S03-02-015 | Spectrasol MEDD 2400 BD   | pro-cognitive LED Spectrasol 5000 K CRI 95 | 23200                 | 20180; 23200              | 252                      | 5                                |                |                                       |                                  |      |                          |
|            |                           | evening LED 2400 K CRI 97                  | 3400                  | -                         | 55                       |                                  |                |                                       |                                  |      |                          |
| S03-02-018 | Spectrasol MEDD 3000      | pro-cognitive LED Spectrasol 5000 K CRI 95 | 29000                 | 25220; 29000              | 324                      | 5                                | 3000           | 80                                    | 50                               | 1950 |                          |
| S03-02-019 | Spectrasol MEDD 3000 DALI |                                            |                       |                           |                          |                                  |                |                                       |                                  |      |                          |
| S03-02-020 | Spectrasol MEDD 3000 BD   | pro-cognitive LED Spectrasol 5000 K CRI 95 | 29000                 | 25220; 29000              | 324                      | 6                                |                |                                       |                                  |      |                          |
|            |                           | evening LED 2400 K CRI 97                  | 4300                  | -                         | 69                       |                                  |                |                                       |                                  |      |                          |

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

## LUMINAIRE DIMENSIONS



## LUMINAIRE VISUALIZATION

