



# Phototherapy pavilion



Developed and verified in cooperation with



**NIMH** NATIONAL INSTITUTE OF MENTAL HEALTH

## Phototherapy pavilion

The pavilion is a large phototherapy device for promoting psychological well-being and stabilizing circadian rhythms. It is a self-contained cubic. Inside it there is comfortable seating for up to 6 people. The entire structure has a pleasant modern design with a combination of soft upholstered surfaces in light colours and natural wooden surfaces. The entire ceiling and half of one side wall are fitted with LED light sources with diffusers so that the whole area is lit and creates a feeling of open space, of sky, with its low, balanced brightness. The two side walls of the pavilion are open, fitted with curtains that allow creation of a private space.

The effectiveness of the pavilion is ensured by the combination of high illuminance, efficient spectrum and multi-directional, even light distribution in the space.

A high therapeutic impact is made possible by the use of Spectrasol Therapeutic's unique light spectrum technology (protected by patent no. 308363) with a high representation of wavelengths in the sensitivity range of ipRGC cells, which act on the circadian system. At the same time, the composition of the spectrum is beneficial for the eyes of the user due to the limitation of harmful blue wavelengths below 450 nm and the content of red wavelengths around 670 nm. The power of the light source can be infinitely adjusted according to the therapy needs. The basic setting offers therapeutic and civil mode.



### WARNING

**Do not use the equipment after sunset.  
Use only after consultation with a professional.**

## Light parameters

Light distribution	direct
Optical system	large stretched diffuser
CCT real <sup>1</sup>	5000K
CRI	80
Flicker	Flicker Free
Light area	3100x2200 mm
Relative melanopic effect (melanopic DER)	0,934 lx

	civil mode	therapeutic mode
Photopic illuminance*	2 300 lx	8 000 lx
Equivalelt melanopic illuminance by daylight*	2 100 lx	7 500 lx

## Electrical parameters

Voltage	220 – 240V, 50 – 60 Hz
Connection	Three-pin plug
Power (civil mode)	800 W
Power (therapeutic mode)	2500 W
Protection	fuse 16A B, residual-current device, switched on in zero

## Mechanical parameters

Body	Carpentry product
Surface finish	veneer, upholstery
Dimensions of pavilion	2500x2400x2550 (mm)

## User interface

civil mode control	button, touch panel
therapeutic mode control	touch panel
configuration	touch panel
intensity regulation	1 krok = 100 lx
touch panel protection	code break

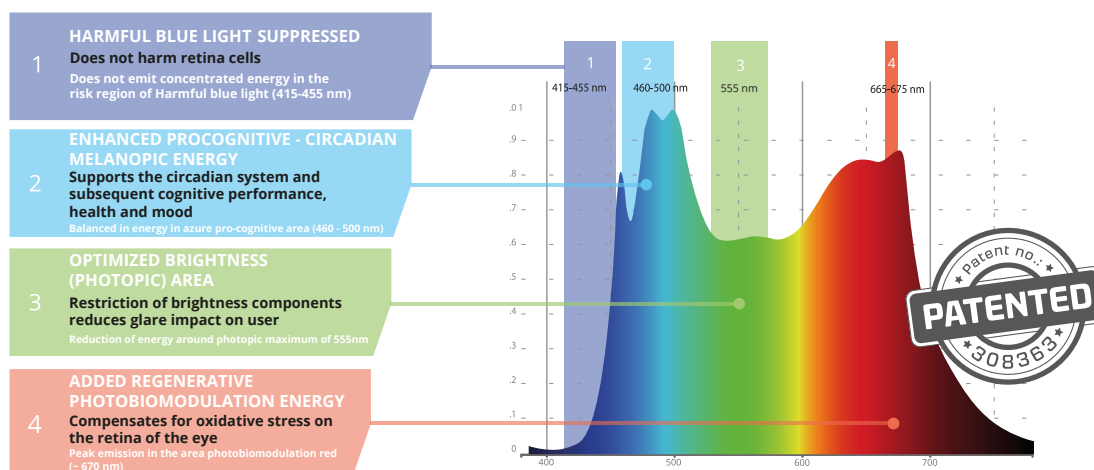
Maximum ambient temperature 25 °C

cooling	cooling requires dimensioning of ventilation equipment or direct exhaust
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Calculated lifespan of LED L80B20 70.000h

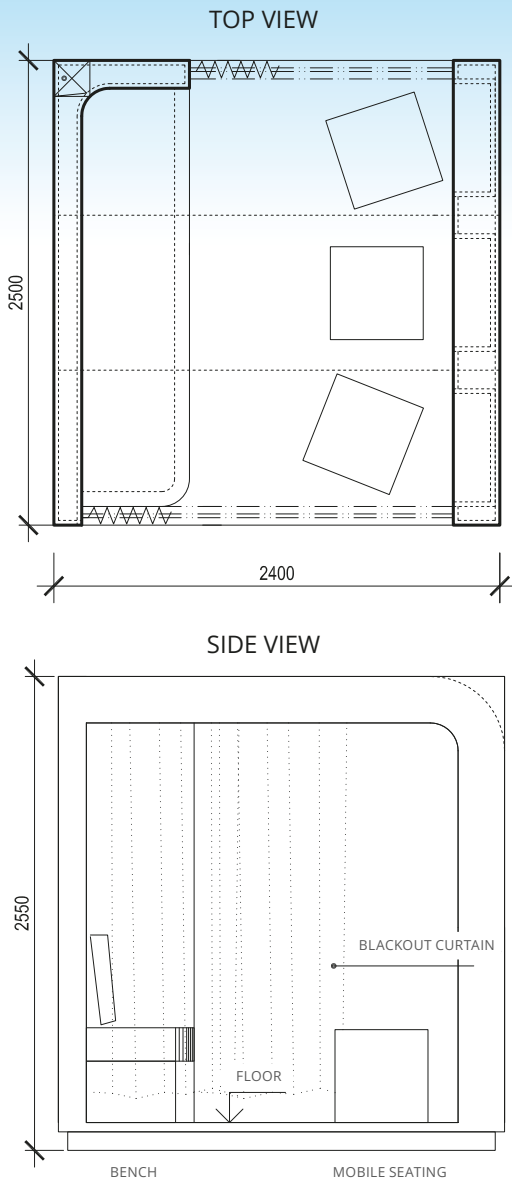
\*average vertical luminance at eye level of sitting person

## Visualisation of Spectrasol spectral composition and description of its key areas





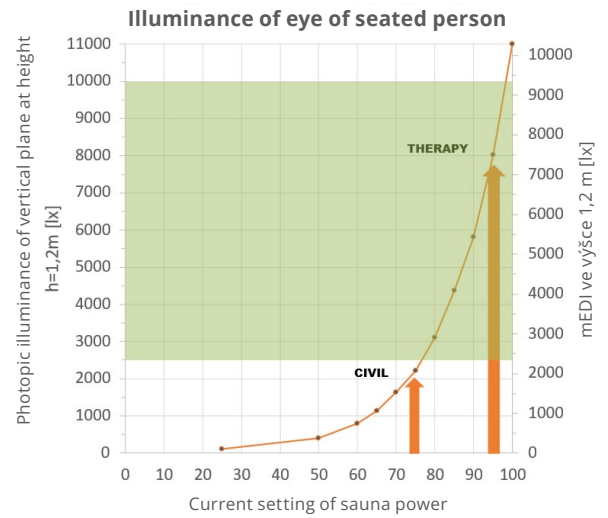
### Dimensions of pavilion



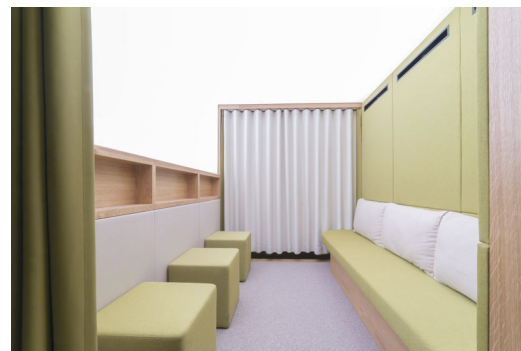
### Variants and accessories of phototherapeutic pavilion

Order code	Variant
1-S06-01-001	Phototherapeutic pavilion Spectrasol
1-P-SL-0001	Barrier free ramp for Phototherapeutic pavilion

### Interpretation of illuminance of eye under light modes



### Photographs of phototherapeutic pavilion



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The development and application methodology of this device were created in cooperation with the CTU UCEEB and the NIMH in the project No. FW02020025 funded with state support from the Technology Agency of the Czech Republic and the Ministry of Industry and Trade of the Czech Republic within the TREND Programme.

[www.tacr.cz/en](http://www.tacr.cz/en)

