

byko-spectra pro

Best in Class Daylight

It is a real challenge to achieve the standard daylight D65 as defined by CIE. The new byko-spectra pro uses a smart combination of filtered tungsten-halogen lamps and LEDs. That makes the highest rendering Class A according CIE 51.2 available and guarantees accurate color matching.

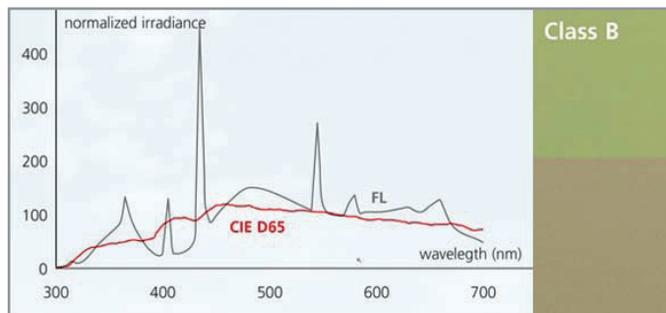


Why is CLASS A daylight important for your visual color appraisals?

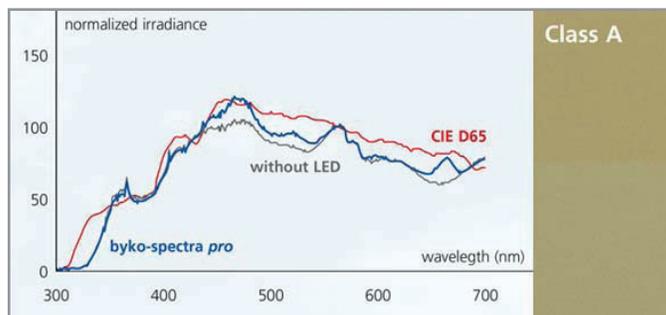
It can happen that you approve a metameric sample pair outdoors in natural daylight but reject it when evaluated in a light booth with "daylight". The reason for this is how well natural daylight can be simulated with artificial light sources.

In a light booth using **fluorescent tubes** for **daylight simulation**, only an approximation of the CIE defined D65 is achieved with quality level **MI_{vis} Class B**. In this situation the sample pair will show a **significant difference**.

The **byko-spectra pro** light booth creates an **excellent simulation of CIE D65** without any spikes resulting in a **MI_{vis} quality Class A**. Under these conditions the sample pair shows only a small difference like under natural daylight.



Daylight simulation with fluorescent tube



Daylight simulation with byko-spectra pro patented lighting setup

100% controlled illumination to ensure accurate color evaluation

The built-in sensors of byko-spectra pro permanently control the lamp performance and automatically adjust the voltage to guarantee lamp stability. Actual color temperature and light intensity in lux are detected by a light monitoring system and simultaneously shown on the display. Additionally, a time tracker indicates how long the lamps are in operation and you exactly know when a replacement is necessary.



No surprising metamerism!

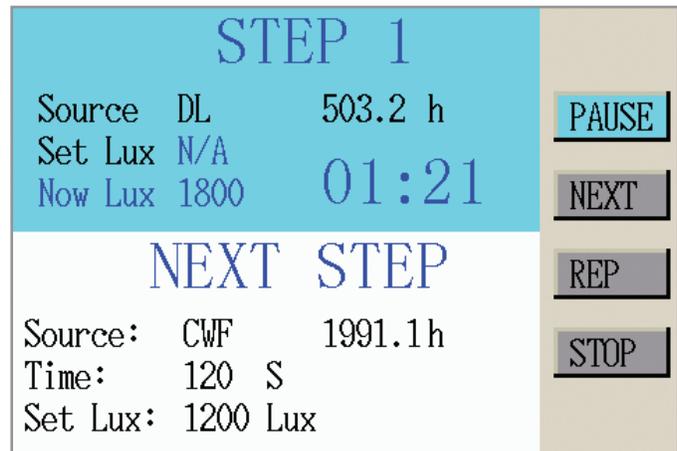
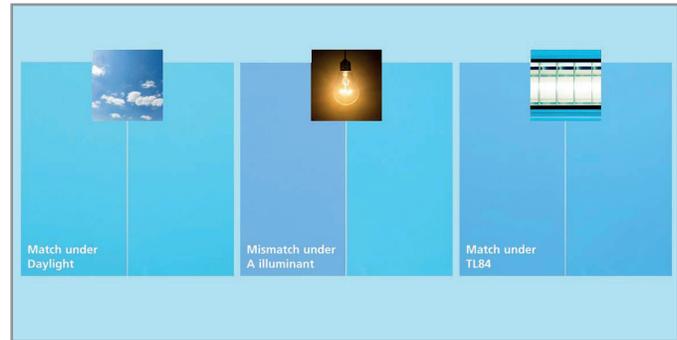
In total eight certified illuminants make you prepared to precisely ensure, that your goods will pass under all common lighting conditions without any metamerism:

- Daylight D65
- Incandescent light A
- Horizon HZ
- Department store light CWF, TL84, U30
- Ultra-violet light UV

The included remote control allows switching between illuminants from up to 10 m.

Handsfree operation

The large color display allows not only switching between the illuminants, but also enables easy menu guided operation. For hands-free operation, the Auto Sequence Mode automatically runs through the predefined sequence of illuminants allowing you to focus 100% on color appraisal.



How to best judge light and dark colors

The lux output of the fluorescent tubes can be easily adjusted based on sample type or user needs – optimum viewing for light and dark colors is guaranteed.

In accordance with international standards

As diffused light is essential in the evaluation of solid colors, a textured long term stable diffuser panel mixes the light to ensure uniform lighting over the entire inspection field. To eliminate the influence of the surroundings, the interior walls are painted with a matte light gray color.



Standards

In compliance with:
ASTM D 1729,
ISO 3668
(accessory required)



Catalog Number	6073	6072	6090
Short Description	byko-spectra pro 230V	byko-spectra pro 115V	byko-spectra pro 1500, 230 V
Type	Light Booth		
Daylight Illuminance	1800 lux		1500 lux
Viewing Area	89 x 60 x 56 cm 35 x 23.5 x 22 in		
No. of Illuminants	7		
Illuminants	<ul style="list-style-type: none"> • Daylight (D65) • Incandescent light (A) • Horizon (HZ) • Department store light (CWF, TL84, U30) • Ultra-violet light (UV) 		
Light Source for Daylight	Filtered halogen lamps with LEDs		
Voltage	230 V, 50/60 Hz	115 V, 50/60 Hz	230 V, 50/60 Hz
Display	8,3 x 5,5 cm (3.3 x 2.2 in)		
Weight	49 kg 108 lb		
Dimensions: L x W x H	99 x 64 x 91 cm 39 x 25 x 36 in		

Delivery Content

Light booth, 7 illuminants: D65, A, HZ, CWF, TL84, U30, UV (6076-6082), Remote control (6086) with 2 x AAA batteries, System report software for download, Power Cord, USB interface cable (6337), 4 snap hooks, Cascade cable, 4 backup fuses, Factory certificate, Manual

Catalog Number	Short Description
6077	Tungsten bulb A for 6072-6075
6078	Tungsten bulb HZ for 6072-6075
6079	Fluorescent tube CWF for 6072-6075
6080	Fluorescent tube TL84 for 6072-6075
6081	Fluorescent tube U30 for 6072-6075
6082	Fluorescent tube UV for 6072-6075
6085	ISO Panel Set for 6072-6075
6086	Remote Control for 6072-6075
6337	USB Interface Cable for 6360, 6072-6075