

specification



steropes
LED light source





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1 Steropes: stable controlled light source

Obtaining good measurement results requires good and stable lighting. With this in mind Admesy developed the Steropes LED light source, which is a stable, accurate light source controlled by a built-in colorimeter resulting in a very high stability of the light output.

With the Steropes the user is certain to have a light output at 0,1% accuracy. Combined with our colorimeters or spectrometers the stabilized light of the Steropes offers the best measurement results.



2 Highlights

- Ultra stable light source with internal regulation
- USB and RS232 communication interfaces controlled light output
- USB on GPIO for industrial purposes
- USBTMC standard device, works with NI-VISA or other USBTMC compliant drivers
- Ultra-fast stabilization within 10ms
- Stand-alone mode available
- Suitable for use in vacuum environments
- Standard in natural white LED, other colours and custom wavelengths are available on request



3 Steropes LED general specifications

Interfaces	
USB 2.0	USBTMC compliant, SCPI command set, full speed device USB connection also available on GPIO connector for industrial connection.
RS232	For PC and embedded purposes, using same command set as USB
GPIO	Same command set as USB
Trigger in- & output	5V compliant

Power ratings				
	Min voltage	Typical voltage	Max voltage	Max current
USB powered	4.75V	5.00V	5.25V	50-600mA
DC powered	8.5V	9V	9.5V	50-600mA
GPIO powered	8.5V	9V	9.5V	50-600mA

System information	
Size (HxWxD)	54.6 x 55 x 98 mm
Weight	450 gram
Mounting	4 M4 threat holes on bottom plate 2 M4 threat holes on front side
LED	LED lighting system
Light output	0 – 100% in 0.1% steps
Self-regulating	Light source regulates itself, accuracy of 0.1% over lifetime and over temperature
Stabilization time	Less than 10ms

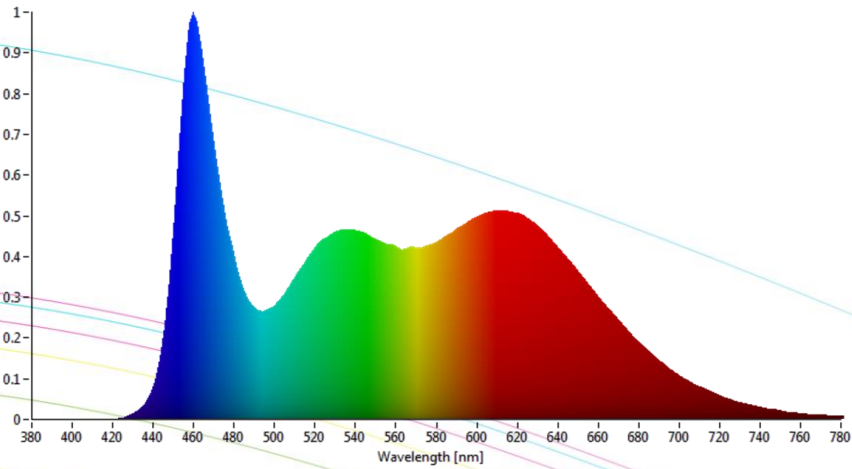


Figure 1 Steropes LED natural white.

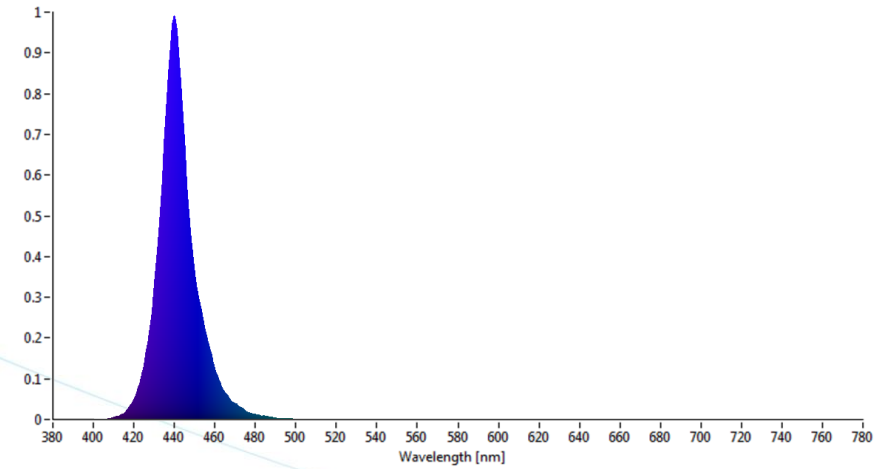


Figure 3 Steropes LED royal blue.

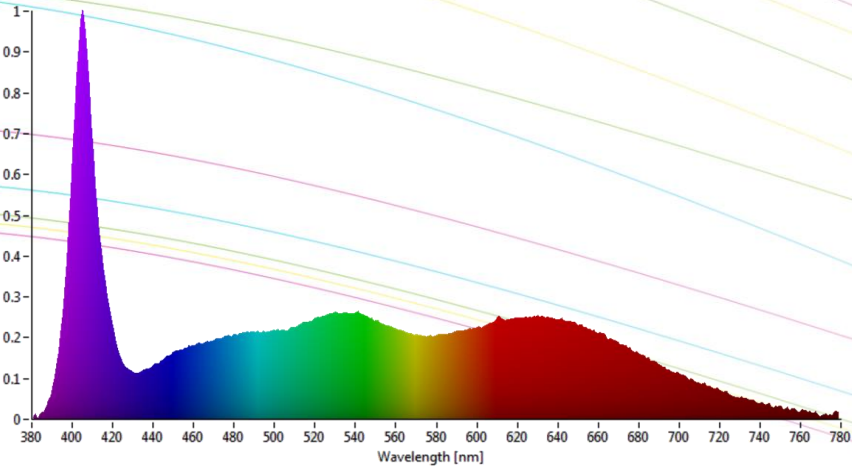


Figure 2 Steropes LED full spectrum.



4 Typical spectral sensitivity of Steropes LED controller

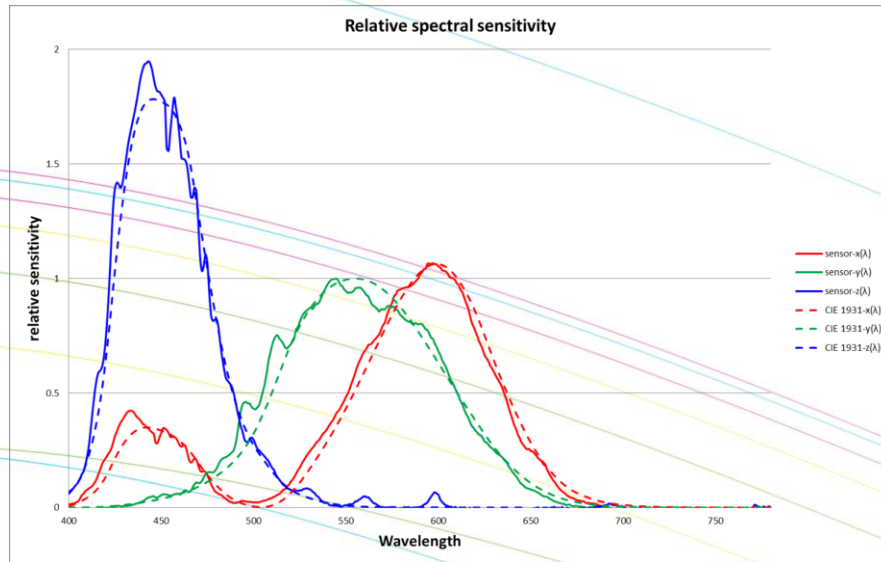


Fig 1 Spectral sensitivity of the Steropes build-in colorimeter.

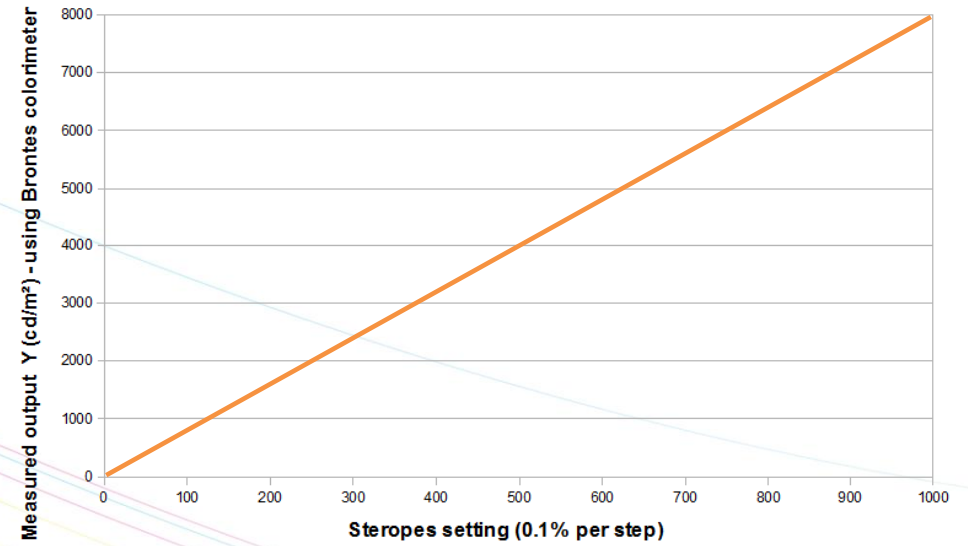
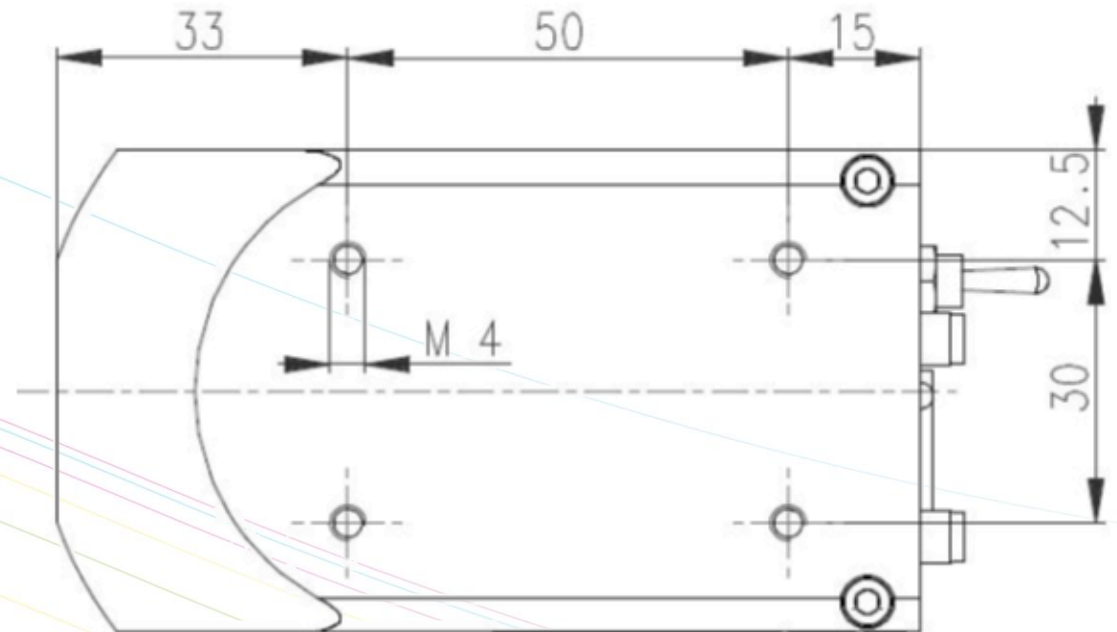
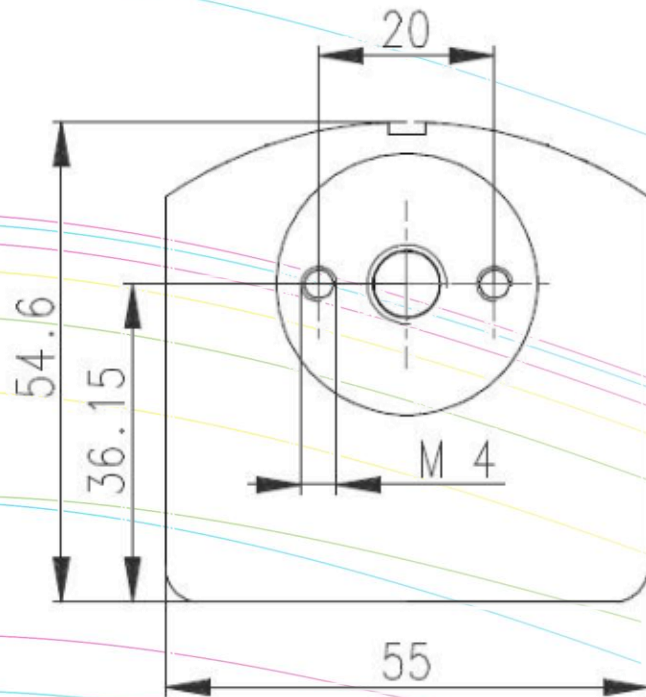


Fig 2 Linearity measured with Admesy Brontes colorimeter.



5 Steropes LED dimensions





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Version 1.0.8

04/2017