SSL RESOURCE
Photometric Testing Efficiency

TURNING LUMINAIRE GONIOMETER
LAMP 200

LIGHT MEASUREMENT SYSTEM FOR LED TUBE LAMPS and LED STRIPS

- ✓ Accurate characterization of spatial photometric, colorimetric and spectrometric features
- ✓ Luminous flux and efficacy
- ✓ Input power and power factor
- ✓ Spatial color uniformity (SDCM)
- ✓ Total correlated color temperature (CCT), color rendering index (CRI) and spectral radiant flux distribution
- ✓ No need for integrating spheres

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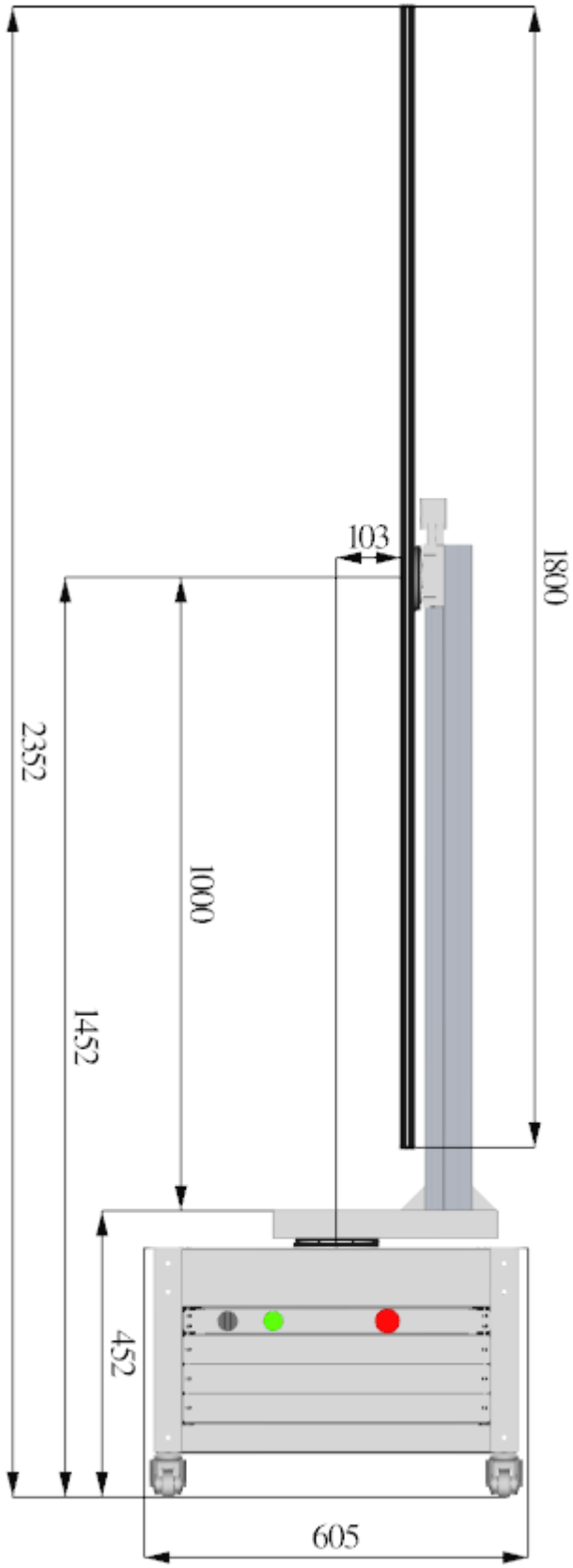

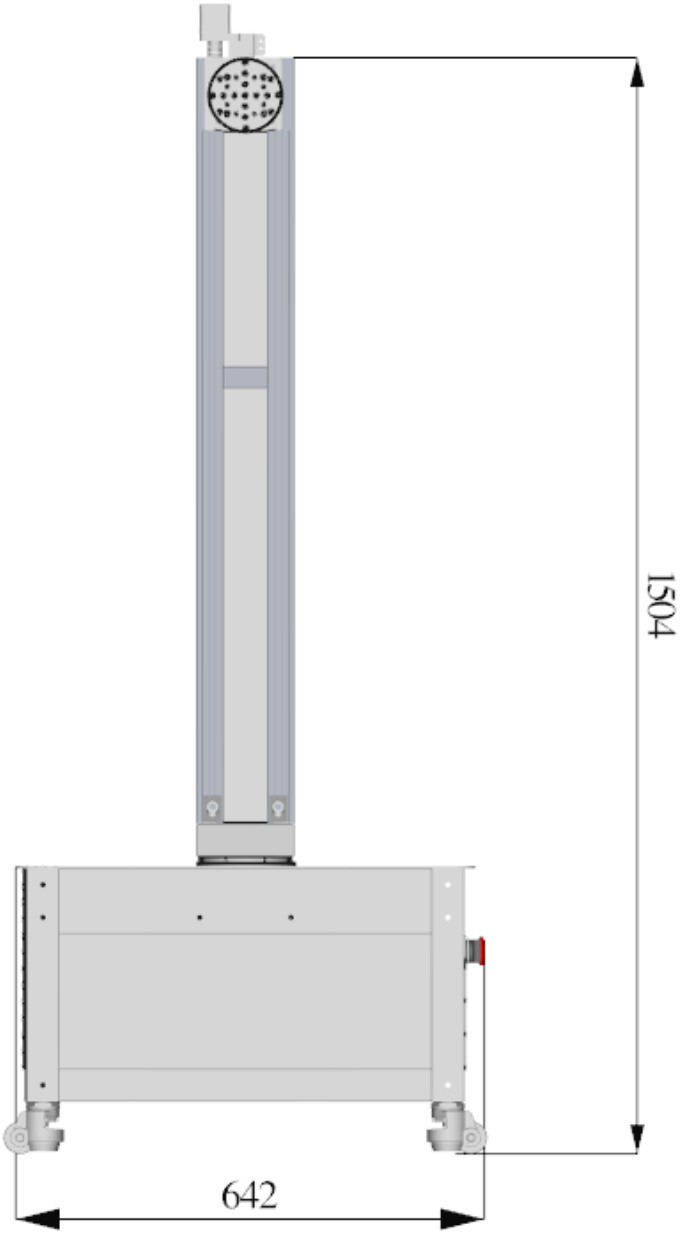

Optimal for testing LED strips and tubes < 2 m

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STRAY LIGHT TUBE

With attaching the photodetector to a stray light tube, the laboratory preparation is much easier. The stray light from the side wall, ceiling and floor is eliminated by a stray light tube having a couple of apertures with a knife edge land. The photometer can see reflections only from the back-wall behind the goniometer station, so it is the only that needs to be covered by a special black surface. The stray light tube also allows use of roof lighting in the photometer end of the gonio lab making more more comfortable working area in the lab. The stray light tube is assembled at a fixed photometric distance according to the largest possible test sample. This reduces the risk of erroneous distance setting.

EQUIPMENT HOLDER

SSL UNI 200 is equipped by a separate small device rack having an 8U space for all devices including gonio controller and DC / AC power sources.

LABORATORY SETUP

The arrangement of the goniometer station, photometer and spectrometer (option) is shown in figure below. The software has feature to setup the angles and distances of each sensor, then the measurements are made automatically with both sensors.

Spectrometer

Photometer
C600 / L200

SPECIFICATION

Goniometer	SSL LAMP **200**			
Item	SSL C-1.4-200			
Application area	For long LED modules, LED strips, LED tubes, lightweight linear lighting fixtures			
Goniometer type	C type with horizontal optical axis.			
Gonio driver and controller	2 axis Stepper motor controller with RS-232 / USB interface, Worm gear drive system with deep groove ball bearings. Emergency stop switch.			
Goniometer arrangement	Goniometer station and the electrical device rack holder are in separate units. The rack holder is of size 19" rack integration (unoccupied 3U for AC/DC power supply / meter)			
Height, Width, and Length	235 cm, 65 cm, 61 cm			
Height of optical axis	Approximately 1.5 m			
Max length, depth and mass of DUT	200 cm, 12cm, 4kg			
Resolution	<0.01° (C and γ axis)			
Reproducibility / Accuracy	<0.1° (C and γ axis)			
Minimum room space	2.5 m (width) x 2.5 m (height) x 12 m (length)			
Min. luminous intensity accuracy	>± 2.5% (k=2), depends on the angular beam shape of DUT			
Luminous flux accuracy	± 3% (k=2)			
Luminous intensity range (measurement distance 10m)	0.01 – 10 000 000 cd (L-200 photometer*))			
Luminous flux range (distance = 10 m)	Photometer/ Radiation type of the sample	Isotropic radiation (uniform over the γ range ±180°)	Lambertian radiation, γ range ±90°	Narrow beam radiation with 40° beam angle [$\cos^n(\theta)$ type beam], γ range ±90°
	L200 photometer*)	3.2 – 320 000 000 lm	8.0 – 80 000 000 lm	3 – 12 800 000 lm
Viewing angle of stray light tube (photometer)	±8°			

*) L-200 is accurate illuminance meter (measurement quantities: Illuminance), RS-232 bus

OPTIONS

- ✓ Computer controllable DC / AC Power supply
- ✓ Spectrometer / colorimeter