

Type B and C GONIOPHOTOMETER SSL GB-1200R



ALL INCLUSIVE MEASUREMENT SYSTEM

- ⇒ Spatial photometric, colorimetric and spectrometric characterization of any kinds of lighting units with B and C type goniophotometer
- ⇒ 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 sphere

SAVE TIME, SPACE AND MONEY

- ⇒ User-friendly and versatile test software
- ⇒ Lab space and construction costs saving solution
- ⇒ Reliable LDT/IES measurements in standard height rooms
- ⇒ Large range of accessories: black material for laboratory, sample holders, installation and training service, etc.
- ⇒ Fast colorimetric measurements
- ⇒ No over-engineering

Type B and C GONIOPHOTOMETER SSL GB-1200R

Type C Goniometer

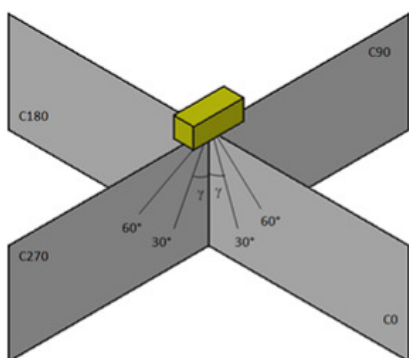


Fig. Determination of C type goniometer angles.

The luminous intensity values as a function of γ angle are provided on plane C, at angles in e.g. $22.5^\circ/5^\circ$ steps or other intervals.



Type B Goniometer

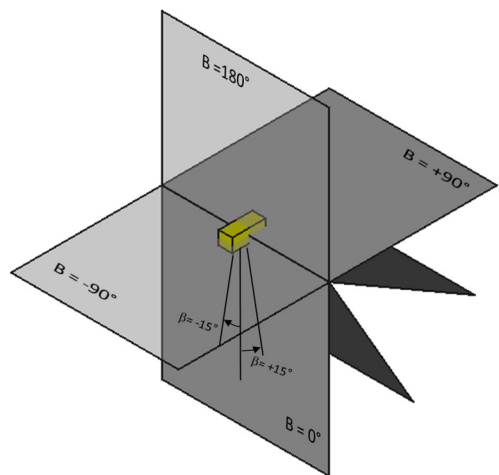


Fig. Determination of B type goniometer angles.

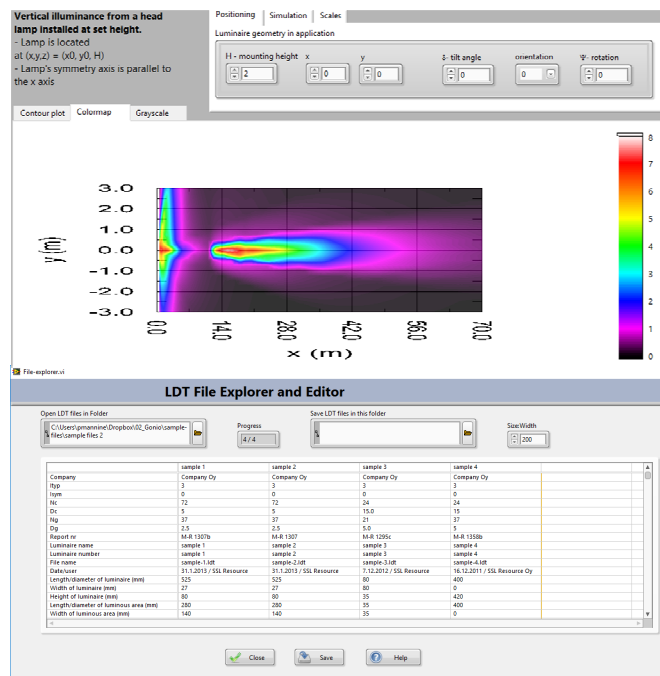
The luminous intensity values as a function of β angle are provided on plane B, at angles in e.g. $10^\circ/1^\circ$ steps or other intervals.



SSL GB-1200R — TECHNICAL DATASHEET

SOFTWARE FEATURES - Full sw

- Automatic measurement of angular dependence of luminous intensity, spectral and colorimetric parameters
- Manual beam symmetrization with symmetry of C0-180 and C90-270, or C0-180 planes, or C90-270 planes.
- Automatic symmetrization and reporting
- Up-wards / down-wards combination
- LDT - IES converter
- Compensation method for burning position
- Opening of data from an existing EULUMDAT file (analyses the parameters in the list above)
- User defined parameters for Floor illuminance, isolux, cone diagrams like turning angle, distance or isolux values
- Custom measurement angles (non-equidistant steps)
- Custom Test report (pdf)
- LDT file explorer and editor



PRODUCT	SSL GB-1200R
Application area	Any kinds of luminaires including automotive and signal lights and general lighting products
Goniometer type	B type (C type) with horizontal optical axis two columns (one column) arrangement
Gonio driver and controller	2 axis Stepper motor controller with RS-232 interface, Worm gear drive system with deep groove ball bearings
Goniometer arrangement	Goniometer station with electrical device 19" rack integration (unoccupied 4U for other devices e.g. AC/DC power supply)
Height, Width, Length, Weight	1.3 m, 0.6 m, 0.8 m, 130kg + alignment laser arm and photometer stray light tube stand
Approx. Height of optical axis	1.2 m
Max dimension of the LUT	B type: 120 cm x 60 cm x 30 cm (depth), 30 kg — C type: 120 cm x 60cm (depth), 20kg
Installation Minimum space for lab room (WxHxL)	Floor installation, 3.5 m x 2.4 m x 1.5 m
Angular range	±180° (both axes)
Resolution	<0.01° (both axes)
Reproducibility / Accuracy	<0.1° (both axes)
Pre-set angular steps	Random angles (B and C type gonio) or fixed angle steps selectable between 0.1–10° (γ axis) / 2.0–90° (C axis)
Angular speed (γ/β axis)	Several speeds selectable from 2 - 14 °/s
Angular speed (C/B axis)	Several speeds selectable from 3 - 14 °/s

SSL GB-1200R — ORDERING INFORMATION

Goniometers

SSL GB-1200R Goniometer station, Photometer SSL L-200, GPM-sw-full, Stray light tube and stand, Alignment laser, laser distance meter

Sample holders

SSL-SH-130 Sample holder of linear LUT :
two alternatives attaching mechanisms: (1) by squeezing the LUT with four angle brackets (2) by screwing the LUT using square nuts (M4/M6/M8) in the grooves (angle brackets are removed)

SSL-SH-park Sample holder of park lights :
Mounting by squeezing a park light from its edges, max. Ø70 cm, a top of the park light can be located into center hole diameter 12 cm

SSL-SH-panel Sample holder of panel lights and down lights :
Mounting by squeezing a LED panel from its edges, compatible for different sizes LED panels with thicknesses of >7.5 mm

SSL-SH-street Sample holder of street luminaires with pole mounting system :
60mm tube, fixation by two screws in radial orientation, max. distance between mounting hole and the roof of the LUT 13cm

Options

SSL-black Special low reflectance black material for a back wall and floor of gonio laboratory room

SSL-computer Measurement computer with needed communication cards and installation work (drivers and software)

SSL-GSM Goniospectrometer measurement system: Spectrometer (<10nm bandwidth, in 380-760nm) with Tripod and mechanics adapters, GSM sw measures all the total and angular dependent spectral and colorimetric quantities

SSL C-400 Tristimulus Colorimeter with USB interface

Power meter and power sources

SSL-pow-2 Automatic input power measurement, Chroma 66201 and AC plug measuring adapter, software integration into GPM software

SSL-AC-2 APS-7050, 500W: a stable programmable AC power & automatic control of LUT powering through the GPM software

SSL-DC sw DC power control software

SSL-DC-750 TDK GEN 750W, programmable DC power supply

Others

SSL-SMCF Includes the spectral calibration of the photometer

SSL-BPC Setup for burning position corrector including a related software tool

SSL-service Goniophotometer system first installation and basic training including 2-3 example measurements on customer site (2 days)



SSL Resource Oy
Vesalantie 6
FI-24910 Halikko As (Salo), FINLAND

+358 (0)44 360 8199
sales@sslresource.com
www.sslresource.com