Goniophotometer with Turning Device

LMT GO-R 3000

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Goniophotometer LMT GO-R 3000

Technical Data

Marking	LMT GO-R 3000
Field of application	GO-R 3000 multi axes goniophotometer configured for measurement and evaluation of light technical characteristics of all types of lamps and luminaries. Luminaire turning device.
Tests performed	· Luminous intensity distribution in coordinate systems C-γ and/or B-β with conversion to C-γ · Partial luminous flux · Color quantities with LMT Spectral Color Measurement System
Version and test object dimensions	· Standard Version GO-R 3000. Bigger and smaller versions available on request · C-γ coordinate system: 2 m (diagonal length) x 0.5 m (height) · B-β coordinate system: 3 m (diagonal length) x 0.5 m (height) · Max. test object load: 50 kg in all positions when mounted with center of gravity ≤ 0.25 m from axis

System conformity	· Conform with EN 13032-1 ”Measurement and presentation of photometric data of lamps and luminaires, Part 1 Measurement and file format“
	· Conform with EN 13032-4 and International Standard CIE S 025:2015 ”Test Method for LED Lamps, LED Luminaires and LED Modules“
	· Including special features:
	  · Service conversion factoring as per Annex C.1.2 by automatic software routine
	  · Operational position factoring as per Sec. 4.2.5 with auxiliary photometer (option)
	  · Ambient temperature measurement as per Annex C.3.2 with auxiliary temperature sensor (option)
	  · Performance of temperature measurement as per Annex C.3.3 with auxiliary temperature sensor (option)

Test distances	· Fixed test distances to be placed at selectable positions between 5 m and 50 m · Numerous test distances possible
Remote Control	· For test object mounting and teaching
Test object mounting	· Freely selectable default positions for mounting of test objects
Angular accuracy and indication	· Angular resolution: 0.1° · Typical angular accuracy: 0.05° for both point and scan measurements · Scan measurements in C-γ and B-β coordinate systems · Typical angular repeatability: ≤ 0.01°

Photometric system	· Characteristics in fulfillment of EN 13032-1 Table 3 and EN 13032-4
	· Sum of 10 individual characteristics f_{total} ≤ 3% (according to EN 13032-1, Table 3, Footnote C)
	· General V(λ) mismatch index f_1' ≤ 1 % by means of LMT Mosaic Filtering®
	· Spectral mismatch correction factors:
	  · LEDs Phosphor type: f_z ≤ 1 %
	  · LEDs RGB type f_z ≤ 1.5 %
	  · Conventional light sources f_z ≤ 1 %
	· Measurement range 0.0001 – 80 000 lx (0.02 cd – 18 000 kcd at 15m)
	· Option:
	  · Additional Auxiliary Sensor
	  · Optical Flicker Unit

Spectral color measurement system (option)	· LMT array type spectrometric system in dedicated design for measurement of color quantities including:
	  · Chromaticity coordinates
	  · Correlated color temperature
	  · Color rendering indices
	· For details, please request the data sheet of LMT Spectral Color Measurement System LMT SM 8000 GO

Electrical measurement	· System integration and control of power supplies and wattmeters for supply of test objects and corresponding measurement values
Temperature measurement (option)	· Different types of temperature sensors are available on request
Software	· Complete software for system control, creation and execution of test programs, data administration, evaluation, and export to light planning softwares · Presentation of data in graphic and text form · File import and export in IES, Eulumdat and related photometric file formats
Building requirements	· Typical space requirements: 3.8 m x 3.8 m x 15 m (W x H x L) for goniophotometer and sensors
Scope of supply and services	· Scope of supply and services of basic and optional items as per individual customer request and specific quotation