SPECTRORADIOMETER CALIBRATION CERTIFICATE

Measuring Object	Array Type Spectroradiometer
Manufacturer	LMT Lichtmesstechnik GmbH Berlin
Type	LMT GO-DS SM 8107
Serial No.	07B316-81
Customer	Belintegra Joint-Stock Co.. 63 M. Lynkov Str. 220124 Minsk (Republic of Belarus)
Order No.	11B214
Date of measurement	November 05, 2013
Kind of Measurement	Calibration of the spectroradiometer as a system component of the goniophotometer with mirror arrangement against a calibrated incandescent halogen lamp
Test Instruments	LMT GO-DS SM 8107 Spectroradiometer SN 07B316-81 LMT GO-DS 2000 Goniophotometer SN 05B245 Incandescent Halogen Lamp OSRAM FEL/120 1000W SN 07B316-85 with LMT calibration certificate for colour temperature at rated operation current Power Supply Chroma 6415, SN 6415000000509 Wattmeter Yokogawa WT 3000, SN 91MB10881
Measurement Conditions	The measurement was performed in draught-free conditions, ambient temperature 25°± 1°C.
Calibration Procedure	**Using LMT proprietary Calibration Software "LIMES 2000-Calibration".** The incandescent halogen lamp was mounted on the GO-DS in base-up orientation with the cooling ribs of its measuring socket aligned at C-Plane C=0° (Offset C=339,3°), γ-Angle γ=90° and the lamp-filament holders aligned at C-Plane C=180°. By connection to the power supply the lamp was operated at a constant current of 8,158 A. As per lamp certificate under these conditions the lamp spectral distribution is equal to a correlated color temperature of 3100 K. The software of the LIMES 2000 generated automatically a calibration file based on measured raw data of the lamp spectrum as well as a theoretical 3100 K Planck spectral distribution.
Measurement results	3100 ± 30K
Remarks	For subsequent measurements of light sources intended for general lighting applications including solid-state light sources the measurement uncertainty is estimated at up to ±50K. It is recommended to validate the calibration files by means of the procedure described above at intervals of at least 30 days. A deviation of ± 30 K is acceptable without need of re-calibration

Baryssau, November 05, 2013

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