

# OL 700-30

Goniometric Measurement Assembly

The OL 700-30 Goniometric Measurement Assembly (*goniometer*) is designed to operate with the OL 770-LED high-speed Multichannel LED Test & Measurement System. The OL 770-LED Windows® based application software provides complete control of the OL 700-30 goniometer with a comprehensive suite of spatial radiation measurement routines.



The OL 700-30 goniometer also features ActiveX™ controls and a software development kit (SDK). This enables the instrument to accommodate custom applications as developed by the user, including applications independent of the OL 770-LED.

The lightweight, small footprint design makes the OL 700-30 ideal for QA and production floor DUT spot checks.

## SPECIFICATIONS

<b>Automated Horizontal Range, <math>\theta</math></b>	-90° to +90°
<b>Minimum Horizontal Angle Resolution</b>	0.01°
<b>Angular Accuracy*</b>	0.001°
<b>Maximum Horizontal Rotation Rate @ 1° Measurement Interval</b>	15° per second
<b>Manual Axial Range, <math>\phi</math></b>	-90° to +90°
<b>Minimum Horizontal Angle Resolution</b>	10°
<b>Computer Interface</b>	USB
<b>Power Requirement</b>	External 12 VDC / 800mA Main Adapter ( <i>Supplied</i> )
<b>Single Linear Positioning Stage with Center of Rotation Tool</b>	≤ 12 mm Linear Travel
<b>Test Device Interface</b>	Banana Jack (3)
<b>Outputs</b>	TTL Trigger Output to Measurement Device (BNC)
<b>Dimensions</b>	12.5" x 6.5" x 8" (31.75 cm x 16.51 cm x 20.32 cm)
<b>Weight</b>	14.5 lbs. (6.6 kg)
<b>Enclosure</b>	Black Anodized Aluminum, Light Resistant Enclosure
*Accumulative error for each movement (start – stop) with allowance for backlash	

## Measurements



- View angle
- Lab/Luv vs angle
- Purity vs angle
- Maximum intensity versus angle
- Peak wavelength versus angle
- Dominant wavelength vs angle
- Tristimulus versus angle
- CRI vs angle
- Power vs angle
- Relative power vs angle
- Half bandwidth versus angle
- Color temperature versus angle
- Chromaticity versus angle

## Design Features



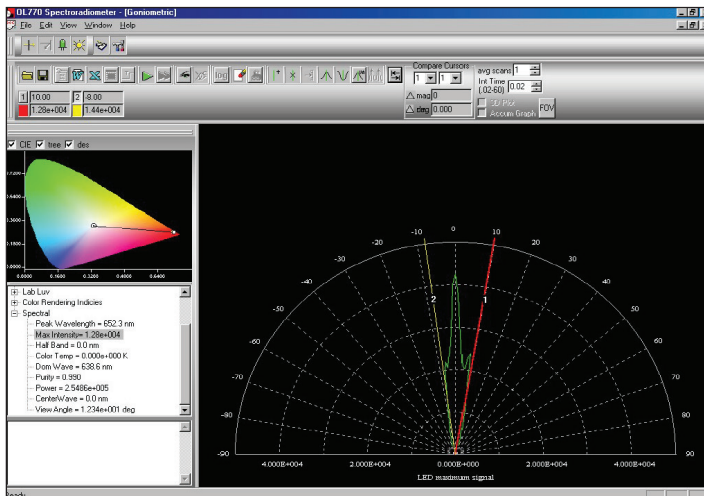
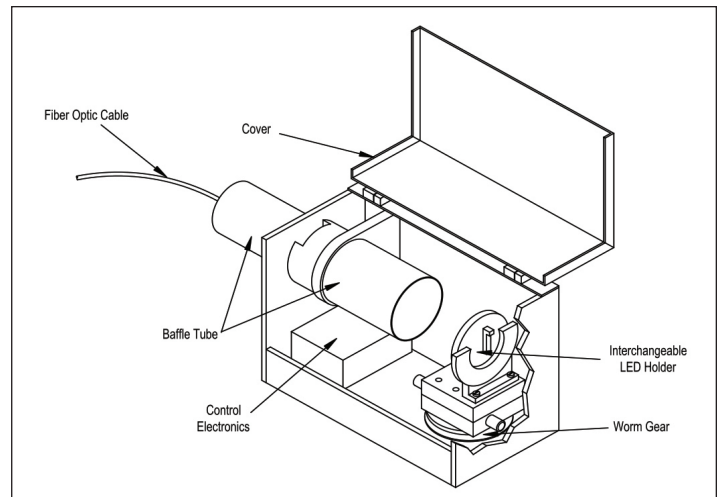
- Comprehensive suite of spatial radiation distribution measurements
- High-speed USB interface
- Powerful measurement software included
- Graphical presentation of any parameter vs. angle
- Easily customizable with ActiveX™ controls
- Lightweight, small footprint design
- Conforms to CIE Publication 127 Condition A for Averaged LED Radiant Intensity Measurements\*

\*Requires OL 15AB Led Receptor or OL 700-30A Condition A Tube

# Software Features



- Graphical presentation of any parameter vs. angle
- Automated view angle calculation
- Toggle from spatial graph to spectral scan at any angle
- Send plots/data to MS Word®
- Send data to MS Excel®
- Goniometric file save/ load
- Polar plot cursors controlled by mouse
- Cursor difference measurements
- Peak snap cursor function
- CIE plot at each angle
- Manual angle control
- Software Developers' Kit included



Spatial Scan of Red LED – Maximum Intensity vs. Angle

**OPTRONIC™**  
LABORATORIES

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As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.