## PHOTOMETRIC AND RADIOMETRIC PROBES







## HIGHLIGHTS:

• Photosynthetic activity, radiation measurement (PAR), langley radiation measurement

## **LP 471-PHOT**

Item No. 700064

Probe for photo- and radiometer HD2302, illuminance

#### APPLICATION:

Measurement of illuminance at workplaces/stations, traffic and escape routes

## TECHNICAL SPECIFICATIONS:

Measuring range (lux):	0,10199,99 1999,9 19999 199.99 · 10 <sup>3</sup>

Resolution (lux):	0.01
	0.1
	1
	0.01.103

	0.01 10
Spectral range:	in accordance with a photopic standard curve V ( $\lambda$ )

$\alpha$ (temperature coefficient) $f_6$ (T):	<0.05 % K
Calibration	<4%

Calibration	C4 70	
uncertainty:		
f' <sub>1</sub> (in agreement	<6 %	
with photopic		

sensitivity V (λ)):	
f <sub>2</sub> (sensitivity accord-	<3 %
ing to cosine law):	

f <sub>3</sub> (linearity):	<1 %
f <sub>4</sub> (read error of the device):	<0.5 %

f <sub>5</sub> (fatigue):	<0	).5 %
Class:	<u>B</u>	
Working temperature:	Λ	± 50 °C

# **LP 471-LUM 2**

Item No. 700065

Probe for photo- and radiometer HD2302, luminance

Spectral sensitivity according to the photopic curve, optical angle 2°. Measuring range: 1.0 cd/m<sup>2</sup>.2,000 · 10<sup>3</sup> cd/m<sup>2</sup>.

## APPLICATION:

f<sub>5</sub> (fatigue):

Drift after 1 year: <1 % Working temperature: 0 .. + 50 °C Reference standards: CIE n.69 - UNI 11142

The sensor measures the luminance like a human eye, e.g. Monitors, lamps, etc. diaphanoscope, reading from X-ray plates. For monitoring the lighting conditions at PC workstations and reflections from white surfaces.

#### **TECHNICAL SPECIFICATIONS:**

Measuring range (cd/m²):	1,01999,9 19999 199.99 · 10 <sup>3</sup> 1999.9 · 10 <sup>3</sup>
Resolution (cd/m²):	0.1 1 0.01 · 10 <sup>3</sup> 0.1 · 10 <sup>3</sup>
Optical angle:	2°
Spectral range:	in accordance with a photopic standard curve V (λ)
$\alpha$ (temperature coefficient) $f_6$ (T):	<0.05 % K
Calibration uncertainty:	<5 %
$f'_1$ (in agreement with photopic sensitivity $V(\lambda)$ ):	<8 %
f <sub>3</sub> (linearity):	<1 %
f <sub>4</sub> (read error of the device):	<0.5 %

< 0.5 %

## **LP 471-PAR**

Item No. 700066

Probe for photo- and radiometer HD2302, quantum radiometric PHOTON FLOW in the chlorophyll PAR range

For measuring the flow of photons in the chlorophyll range PAR (photosynthetically active radiation 400..700 nm), µmol m<sup>-2</sup>s<sup>-1</sup> measurement, diffuser for cosine correction. measuring range 0.10  $\mu$ mol m<sup>-2</sup>s<sup>-1</sup>..10  $\cdot$  10<sup>3</sup>  $\mu$ mol m<sup>-2</sup>s<sup>-1</sup>

## APPLICATION:

Plants, agriculture, greenhouses

## **TECHNICAL SPECIFICATIONS:**

Working temperature:  $0.. + 50 \,^{\circ}\text{C}$ 

Measuring range (µmol m <sup>-2</sup> s <sup>-1</sup> ):	0,10199,99 200,01999,9 200010000
Resolution (μmol m <sup>-2</sup> s <sup>-1</sup> ):	0.01 0.1 1
Spectral range:	400700 nm
Calibration uncertainty:	<5 %
$f_2$ (sensitivity according to cosine law):	<6 %
f <sub>3</sub> (linearity):	<1 %
$f_4$ (read error of the device):	± 1 digit
f₅ (fatigue):	<0.5 %
Drift after 1 year:	<1 %