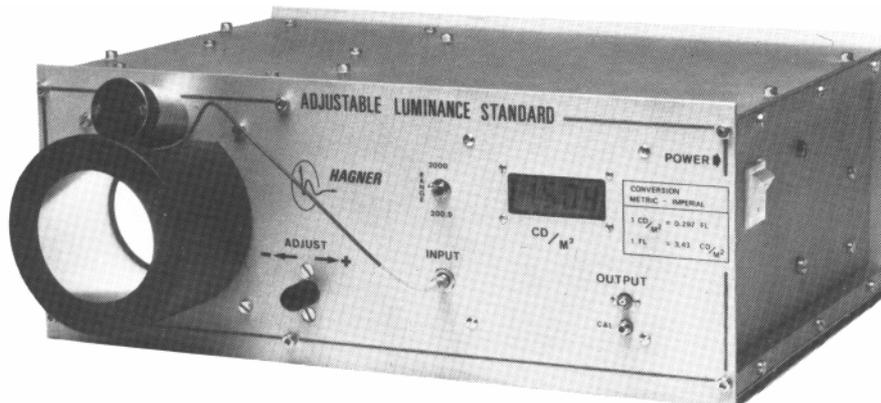


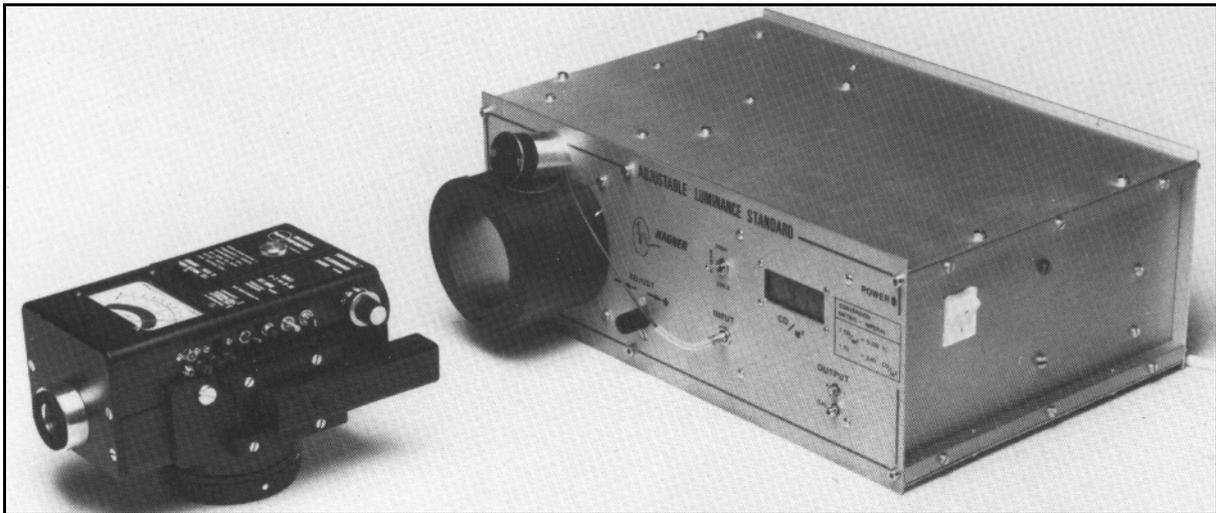
Hagner

LS1-60 Luminance standard



**For calibration of luminance meters.
Produces a uniformly bright surface of 60 mm diameter.
Continuously adjustable from 0-approx. 1500 cd/m².**

LS1-60 Luminance standard



The LS1-60 luminance standard produces a uniformly bright surface with a diameter of 60 mm. The luminance of the surface can be continuously varied from 0 to about 1500 cd/m². Irrespective of the luminance value, the colour temperature remains constant at about 2850 K (Standard Illuminant A). The luminance of the source is continuously measured and indicated on a built-in digital display. The LS1-60 luminance standard is mains-powered, and should preferably be connected via a voltage stabilizer. The light source is an incandescent lamp with an elliptical reflector. It has a life of about 2000 hours, and can easily be replaced. The condition of the lamp itself is not important, as the luminance is measured and displayed by the instrument. A recorder output has been provided for remote indication and recording. Two versions of the LS1-60 are available:

1. **The LS1-60-C**, which is fitted with a clear glass window in the viewing aperture. This version of the standard is intended for such applications as calibration of Hagner, Spectra and other tele-luminance meters. On this model the displayed value agrees closely throughout the range with the actual luminance of the viewing aperture. External light incident on the viewing opening does not affect accuracy.
2. **The LS1-60-D**, which is fitted with an opal glass window. With this the luminance standard can be used for calibration of luminance meters with wider acceptance angles than the telescopic versions, e.g. for fibre optic detectors. The LS1-60-D also differs from the LS1-60-C in that the luminance across the viewing

aperture can vary somewhat (maximum 3%), and because the displayed value of luminance does not agree exactly with the true luminance at all levels, although this effect applies mainly at luminance levels below 50 cd/m². However, correction tables supplied with the LS1-60-D make the instrument as easy to use as the LS1-60-C. Care should be taken to prevent ambient light from reaching the viewing aperture when measuring very low luminance levels.

Applications

The LS1-60 luminance standard is intended for use in such applications as calibration of luminance meters having an objective size not exceeding 55 mm. By fitting apertures with known diameters to the viewing aperture, the LS1-60 can be used to produce highly accurate, very low light levels. Normally, this would require comprehensive laboratory facilities.

Technical description

Power supply:	240 V AC
Light source:	PHR50 Spotline
Accuracy:	± 3%

If necessary, the luminance standard itself can be checked using a special detector, calibrated by a recognised Standards Laboratory, and available from B. Hagner AB.

B. Hagner AB, Box 2256, SE-169 02 Solna, Sweden
Phone: +46 8 83 61 50 Fax: +46 8 83 93 57

E-mail: hagner@hagner.se