

THORLite



FEATURES

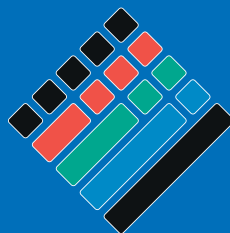
- Fast +/- 60° viewing angle displays characterization
- All included station: Measuring system EZLite-NG and its valets, thermic chamber and manual XYZ stage
- Flexibility, High Efficiency and ease of use

APPLICATIONS

- Viewing angle analysis for QC or R&D
- Environmental impact on displays optical characteristics checked with the use of temperature chamber from; -40 ° to + 85°C
- Reflective properties and/or spectral characteristics of displays available as options

THORLite system is a powerful measurement station which offers precise, flexible and easy evaluation of displays up to 10" in specific temperature environment.

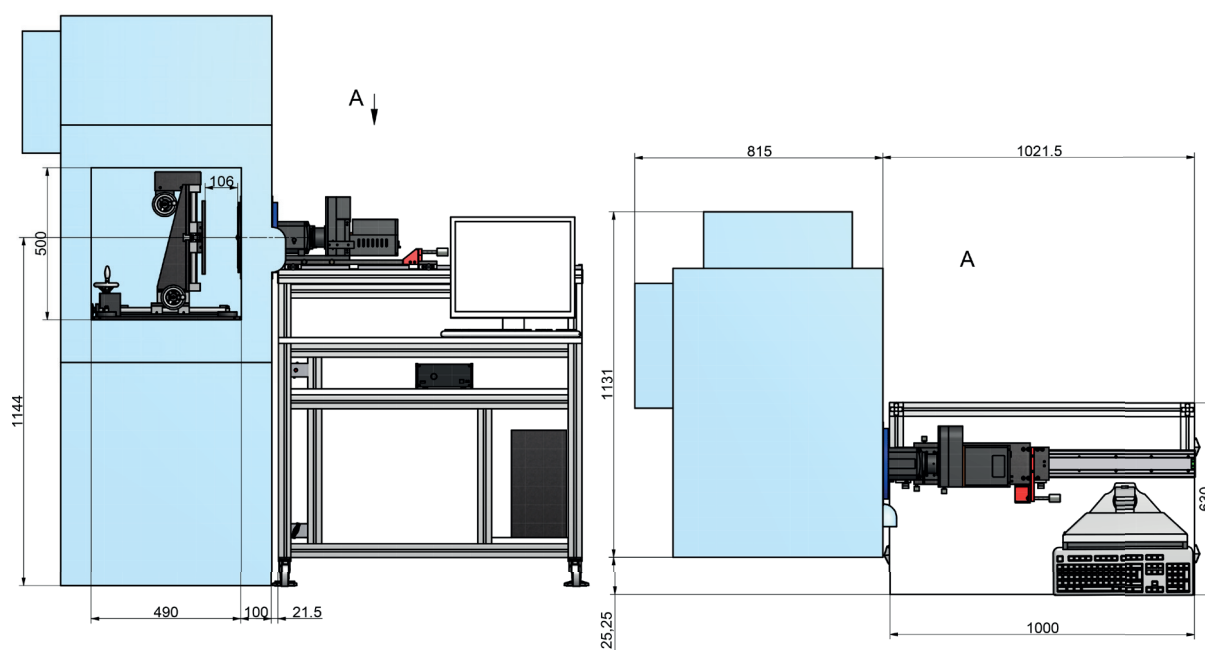
The modular design gives the freedom to use the station mounted with the provided temperature chamber or not. This complete measurement station is a precise, economical manual solution which ensures high accuracy and stability.



ELDIM

OPTICAL METROLOGY FOR DISPLAYS

Specifications		THORLite
Field coverage	Incident angle Azimuth angle	0-60° 0-360°
Measuring area	Maximum diameter	2mm
Optimum distance	Ensure light coming from same spot at any angle	4.5mm
Sensor	Peltier cooled CCD Resolution A/D converter	Yes 8M 14 bits
Neutral densities	For luminance adjustment Selection mode	0.5, 1, 2, 3 Automated
Chromaticity	Color Filters	5 ^{(*)1}
Measurement Modes	Luminance Chromaticity Reflective (option)	Yes Yes Full diffused or collimated beam illumination
Luminance Range	Minimum (cd/m ²) Maximum (cd/m ²) - on option	0.001 more than 800 000 cd/m ² ^{(*)2}
Accuracy	Angular position Angular resolution Luminance Chromaticity (x,y) RMS	±0.5° ±0.75° ±3% ^{(*)3} 0.002 ^{(*)4}
Repeatability	Luminance Chromaticity (x,y) RMS	±0.05% ^{(*)5} 0.0001 ^{(*)5}
Measurement time	Luminance Chromaticity	< 10s ^{(*)6} < 30s ^{(*)6}
Use condition		-40°C to +85°C non condensing
Thermic Chamber	Test space volume (liter) Test space dimensions (mm) External dimensions (mm) Incl. base (extension) (mm)	100 height: 500; width: 490; depth: 400 height: 1190; width: 780; depth: 930 depth: 1880; depth: 930
Manual XYZ Stage	Courses X Courses YZ Removable Sampler Holder Accuracy	+/- 50mm +/- 100mm 240 x 200 mm with holes every 25mm 5kg max charge 0.2mm
PC and software included		



^{(*)1} All the systems use 5 color filters matched on the CCD response (2 for X, 2 for Y and 1 for Z)

^{(*)2} Maximum luminance is given for the maximum spot diameter

^{(*)3} The accuracy is guaranteed for any type of color stimuli in contrast to competitors that generally guaranty only reference white. The luminance accuracy is guaranteed for a luminance higher than 50cd/m².

^{(*)4} For A type illuminant

^{(*)5} For a luminance higher than 50Cd/m² based on 100pixels

^{(*)6} Measurement times are highly dependent on the target and on the conditions. Given times are for a source with luminance level higher than 50Cd/m² and already determined exposition times for all the filters.

Specifications can be change without notice