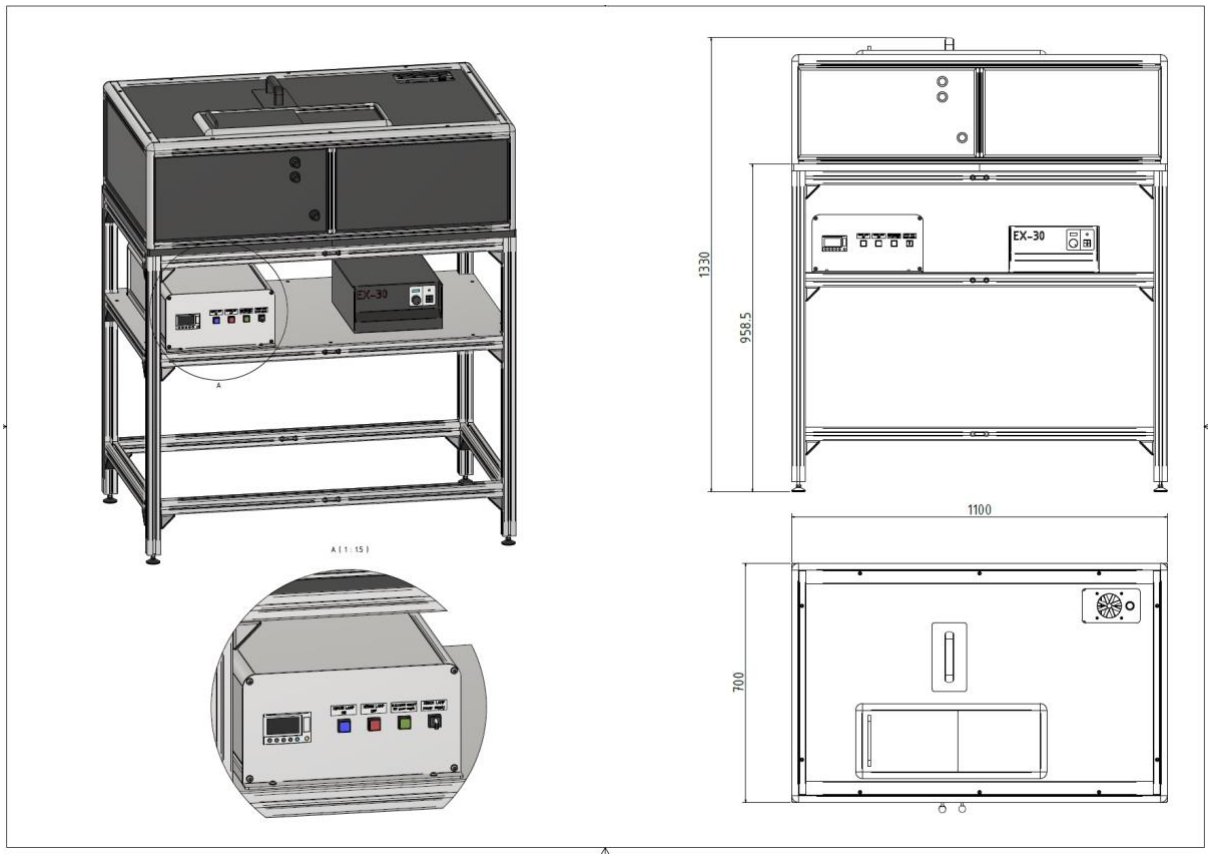
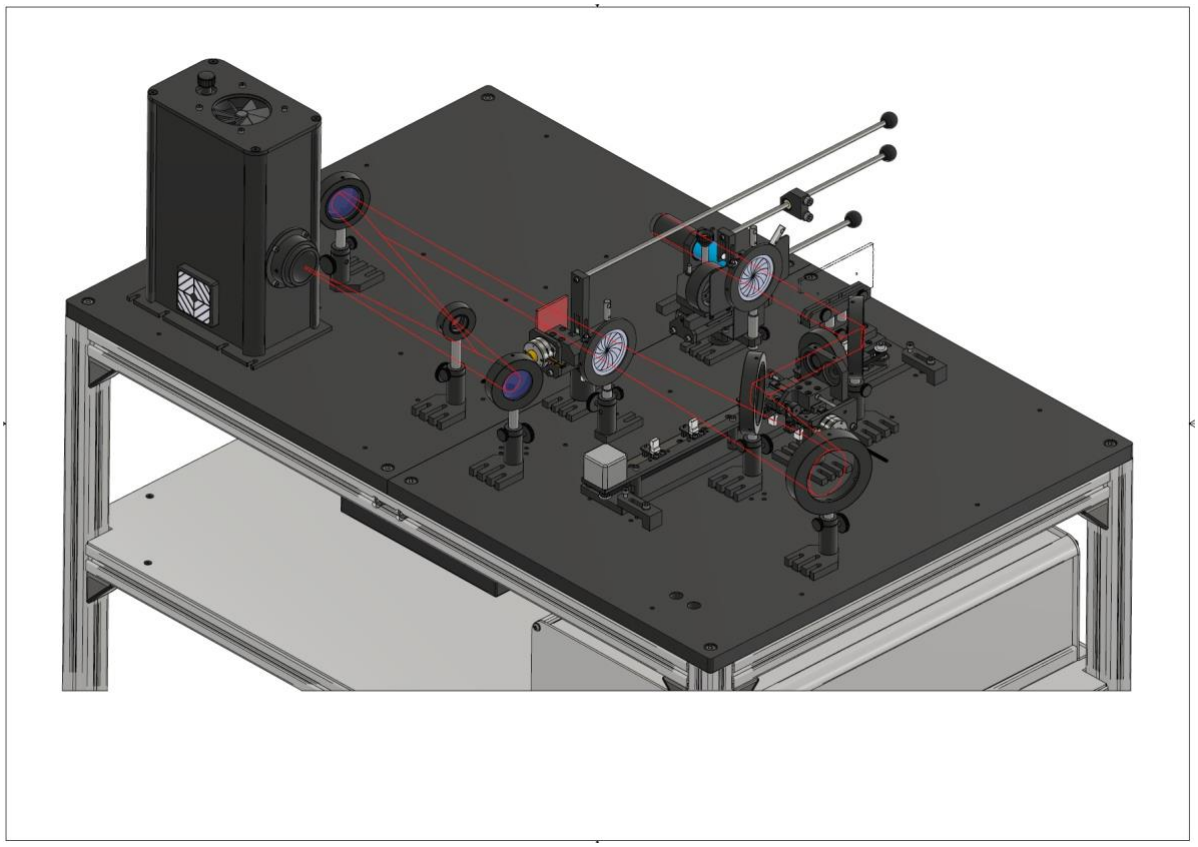
GTM & SYSTEMS
GENERALTESTINGMACHINES
MADE IN SWITZERLAND

Via Sottomurata 1 6934 Bioggio TI - Switzerland
Tel.+41 091 6001315
www.gtmsa.ch info@gtmsa.ch

1191	**LDM 1060 A Plus**	**A new model for basic light diffusion testing, featuring a 150 W xenon lamp source and a 9 mm diameter light spot with a silicon photodetector. Operation and calculations are fully automatic via PC and utilize completely new hardware.**





GTiM & SYSTEMS
GENERALTESTINGMACHINES
MADE IN SWITZERLAND

Via Sottomurata 1 6934 Bioggio TI - Switzerland
Tel.+41 091 6001315
www.gtmsa.ch info@gtmsa.ch

Technical features:

- On a ITEM aluminium profiles table (dimensions 700×1100 mm) with a working surface, all optical components are assembled, including a Xenon light source and the photoreceptor.
- The honeycomb tabletop is mounted on an aluminium frame manufactured using high-quality ITEM profiles.
- The following parts are installed on the tabletop:
  - Xenon lamp assembly: Osram XBO 150 W lamp, ES parabolic mirror, socket, electronic interface, housing, and an IREM EX 30 G power supply unit.

Optical components:

  - n. 1 concave mirror H1, diameter 2", effective focal length (EFL) = 100 mm.
  - n. 2 concave mirrors H2 and H3, diameter 2", effective focal length (EFL) = 200 mm.
  - n. 2 flat Pyrex mirrors, diameter 40 mm.
  - Achromatic lens, diameter 2", effective focal length (EFL) = 200 mm.
  - Annular diaphragm (BR), outer diameter 21 mm, inner diameter 15.75 mm.
  - Circular iris adjustable diaphragm, range 1–8.5 mm.
  - n. 2 circular iris adjustable diaphragms, range 2–36 mm.
  - Optical assembly kit consisting of multiple lens and mirror holders, including combination pillars and pillar pins.
  - Assembly parts including carriers, micro-positioning optical component holders, and other devices.
- Tabletop made of ferromagnetic stainless steel with an array of M6 tapped holes on a 25 mm grid spacing.
- Hamamatsu high-sensitivity photoreceptor, 100 mm square, assembled inside an aluminium housing.
- Hamamatsu photomultiplier for lower light level
- Special photopic filter installed in front of the photoreceptor.
- Attenuation filters for adjusting the test light level.
- ±12 V high-precision linear power supply.
- Measuring device using an HP professional high-precision multimeter (8½ digits), connected to the PC via USB.
- Measurement system and software installed on a PC with 19" LCD colour monitor and keyboard.
- Custom-made control microprocessor with USB communication for data acquisition from the photoreceptor and data transmission to the PC.
- Two high-precision stepper motors for automatic positioning of the diaphragm and the sample.

Software:

- The software uses the Windows 11 operating system.
- The software, developed in-house by our engineers and dedicated to the light diffusion test, has the following main functions:
  - Immediate calculation of light transmittance.
  - Continuous graphic bar showing the detected light.
  - Calculation formulas are already built into the software.
  - Each measurement (T0, T1, T2) is recorded when ready by pressing the corresponding function key.
  - Final calculation is automatic and is executed by pressing the Enter key.
  - All data are displayed on the color monitor using different colours.
  - Gain selection and transducer sensitivity selection via software.
  - Automatic or manual recording of data (stored on the hard drive) after each test.
- Possibility to provide a complete description of the sample under test, including:
  - Sequential test number, test date, customer ID, batch ID, sample ID, and the three measured test values.
  - Three main selectable languages: English, French, and Italian.
  - Additional languages can be installed easily (original Windows version required).
  - Printing capability with company logo, including all displayed data and information.

Software features:

- Extremely fast in all operations.
- Highly flexible and easily customizable.
- Compatible with all printers via Windows printing options.
- Fully automatic testing, controllable solely from the PC.

Hardware features:

- Lens cover to prevent interference from ambient light.
- Capability to test all types of lenses, including dark and tinted filters.
- Variable testing area via an iris diaphragm.
- Testing lenses calibrated in a supplied reference laboratory.
- Weight: 130 kg.
- Dimensions: 1100×700×1328 mm (including table).

Scope of the device :

Equipment for measuring diffuse and transmitted light on dark lenses and eyewear, in accordance with EN 167 - EN 12312 and similar.