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Instruction Manual for

Equipment for Measuring Diffusion and Transmission of Light

(Equipment for measuring diffusion and transmission of light
through headlamp front glass materials)

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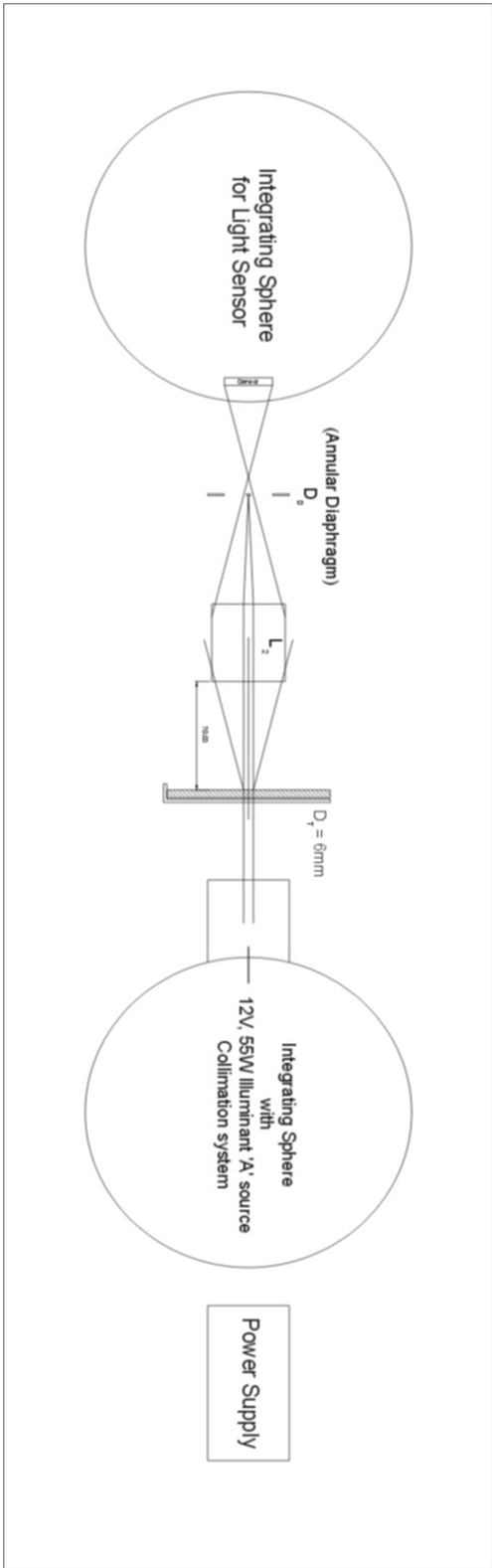
Thank You!

Dear Customer, first of all, we would like to thank you on having procured our equipment for measuring diffusion and transmission of light through automobile headlamp lens materials. We are sure that this highly sophisticated equipment will enhance your product standard in every respect and assure you of our best attention at all times.

Technical Specifications

Overall dimensions	:	1050mm (W) X 400mm (D) X 450mm (H).
Power supply	:	230V AC, 5A single phase (stabilizer or UPS may be attached if there is problem in power supply)
Projection	:	Light source with one 12V, 55W H3 bulb
Sensor	:	Provided by customer
Lens	:	Achromatic combination, made for 65mm focal length
Aperture 1 (normal)	:	ID = 27.625mm
Aperture 2 (annular)	:	ID (large circle) = 27.625mm OD (small circle) = 2.2685mm Both the apertures are placed between two flat glasses

Schematic diagram



Unpacking and Installation

Following parts are included in the package you have received.

- a. Main unit.
- b. Operating Manual.
- c. Manufacturer's Certificate.

After unpacking the contents, our technical personnel will install the equipment for you at your premises. Following are some basic requirements to be met before you install the Projector.

- a. Power supply : 230V AC, 5Amp mains power supply
- b. UPS or stabilized supply is not required or necessary. But it is advisable if there is any kind of irregularity or fluctuations in the power supply.
- c. Approximately 6' X 2' minimum table space to keep the equipment. It would be ideal if the room or space has minimum ambient light.

The system requires one H3 bulbs rating 12V, 55W. You can keep spare of these bulbs if required. No other kind of spares required.

The equipment is kept parallel to the flooring.

Using the equipment

By inserting the mains cord and switching on the mains supply, the projection lamp gets lighted and thus equipment gets ready to take readings.

Initialization :

Always for every **first** use, take the readings **without** any **specimen**. Take the readings **with and without annular aperture**. This process is called as **self-calibration**.

It is advisable to **wait at least for 10-15 mins** before taking actual readings. This would allow the equipment or the light to stabilize. There are other factors also which govern the readings. Such as heat. Heat may also cause deflected readings.

Specimen testing

- a. Pull out the specimen holder from the equipment.
- b. Put your sample into it. Usually the center part of the sample is put it in front of a small hole at the center of the holder.
- c. Put the spring strips provided on the holder over the sample to hold the sample firmly.
- d. Take the readings from the sensor.

Precautions

Please follow the instructions and procedures laid down in standards books to test the specimen. We do not undertake any kind of responsibility of tests. The equipment is factory-set for standard test. Please consult with our technical personnel for any changes or queries relating our product's specifications.

It is not advisable to open or service any of our products as warranty voids if the equipment is found open. There are no serviceable parts inside our equipment. Only highly technical individual is supposed to open the equipment for servicing.

Please call us on 020 – 2432 7160 or fax us on 020 – 2445 8682 for any complaints, clarification or troubleshooting.

Spares and other fitments are available with us with special order only. Kindly communicate with us well in advance for making any further changes to your equipment.

We once again thank you for choosing our product. We at Opel, assure you of best quality products.

Certificate

This is to certify that,

The “Diffusion and Transmission of Light measuring equipment” is designed, developed and manufactured by Opel India, Pune.

The Apertures are designed and manufactured by Opel India, Pune according to the papers, documents provided by ARAI, Pune.