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#### Introduction: TEP-2.0 Series Tunnel Entrance Photometers

The TEP-2.0 tunnel entrance luminance photometer is designed to view the L20 conical field at the tunnel entry. The photometer is positioned to view the tunnel portal from the carriage way edge at the stopping sight distance and provides a milliampere signal output proportional to the average luminance in the field of view.

The output signal can be processed by the tunnel control system or a stand-alone controller to switch or dim the tunnel lighting system in response to changes in daylight values.





For redundancy, the photometers are normally installed in pairs at each location, hence the quoted prices are for quantity 2.

The photometer comes in two models – **single range** and **dual range**, where the dual range photometer offers greater resolution at low luminance levels.

# Option 1: Single Range Tunnel Entrance Photometer

The Single Range Tunnel Entrance Photometer has the following specifications:

- Mains supply input 220-240V 50/60 Hz;
- Single range, 4-20 mA output;
- Enclosure waterproof and dustproof to IP65;
- Pan/tilt base.

The price given includes a NATA-endorsed (ISO-17025) calibration certificate for endpoints only.

The Order Code is TEP1-FF-HHHH, where

- FF = Field-of-view. Default is standard CIE88 field of view at 20 degrees. Optional fields from 14 to 35 degrees can be factory pre-set to order.
- HHHH = Luminance corresponding to 20 mA output (full scale) for the range. Default is 3,500 cd/m<sup>2</sup>, optional from 1,000 to 10,000 cd/m<sup>2</sup>.

The field-of-view and luminance settings are factory set at the time of order. Calibration will be provided with these settings and is not field-adjustable.

# **Option 2: Dual Range Tunnel Entrance Photometer**

The Dual Range Tunnel Entrance Photometer has the following specifications:

- Mains supply input 220-240V 50/60 Hz;
- Dual ranges, both 4-20 mA output;
- Enclosure waterproof and dustproof to IP65;
- Pan/tilt base.

The price given includes a NATA-endorsed (ISO-17025) calibration certificate for endpoints only.

#### The Order Code is **TEP2-FF-LLL-HHHH**, where

- FF = Field-of-view. Default is standard CIE88 field of view at 20 degrees. Optional fields from 14 to 35 degrees can be factory pre-set to order.
- LLL = Luminance corresponding to 20 mA output (full scale) for the low range. Default is 500 cd/m<sup>2</sup>, optional from 200 to 500 cd/m<sup>2</sup>.
- HHHH = Luminance corresponding to 20 mA output (full scale) for the high range. Default is 3,500 cd/m<sup>2</sup>, optional from 1,000 to 10,000 cd/m<sup>2</sup>.

The field-of-view and luminance settings are factory set at the time of order. Calibration will be provided with these settings and is not field-adjustable.

# **Optional Extra: TEP Sighting Device**

We will provide a sighting device for aiming the TEP towards the centre of the tunnel portal. The sighting device comes as a flat pack as shown below.



After folding along the perforations according to instructions in the manual, the sighting device clips on top of the TEP. The two raised tabs are then used to perform the alignment.



Once the alignment is done the TEP Sighting Device can be removed: thus one TEP Sighting Device can be used to aim multiple TEP units. We therefore recommend acquiring only one TEP Sighting Device per location.