

Light sources and propagation of light**Propagation of light****Straight-line propagation of light**

Optical bench, S1 profile

Object of the experiment

1. Demonstrate that light travels in straight lines

Setup

- Fill the cell with water, add a spatula tip-ful of fluoresceine and stir the mixture well.
- Darken the room.

Apparatus

1 Optical bench, S1 profile, 1m.....	460 310
2 Clamp riders with fixing column.....	460 313
1 Optical rider with clamp, 45/65.....	460 311
1 Lamp housing with cable.....	450 60
1 Set of 2 bulbs, 6 V/30W, E14.....	450 511
1 Iris diaphragm.....	461 65
1 Candle holder.....	459 31
1 Cell, BST D.....	539 065
1 Fluoresceine, 25 g.....	672 0110
1 Spoon-ended spatula, stainless steel.....	666 967
1 Transformer, 6/12 V.....	521 210

Procedure

- Put the cell on the candle holder and set the diameter of the iris diaphragm to about 0.5 cm.
- Move the housing of the optical lamp until a straight parallel light beam is visible in the dyed water.

Observation

The light passes through the cell in a straight line.

Evaluation

Light propagates in straight lines.