Model: LDM-2003/018

LASER BEAM CHARACTERISTICS

Experiment(s):

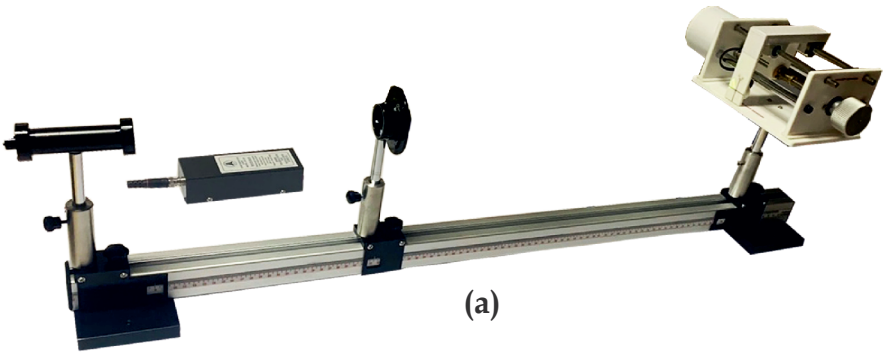
1. Study of Gaussian nature of Laser beam

2. Determination of spot width and divergence angle

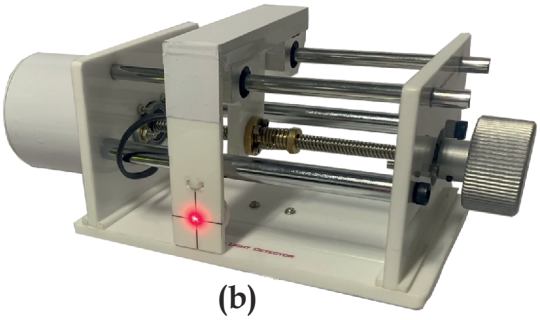
3. Polarisation nature of Laser

(For more details, procedure & manual visit: www.kamaljeeth.net)

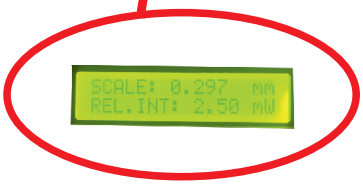
Reference : Lab Experiments Journal vol-5, No.2, Page-105

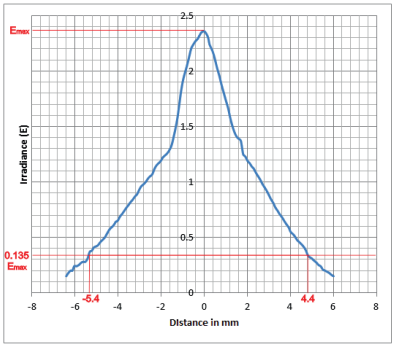


(a)



(b)





Experiment setup consists:

a) Optical bench & Laser

b) Light detecting microscope

Specifications:

a) Optical bench & Laser
Length: 1 m
Fixture: Three (for Laser source, polarizer and light detector)
Material: Aluminium & cast iron

Laser
Type: Semiconductor diode Laser
Wavelength: 625 nm (Red)
Output power: 3 mW
Mount: Height adjustable

Power supply
Output: Suitable for 3 mW & 5 mW semiconductor Lasers
Rated Input: 220 V/50 Hz
or 110 V/60 Hz
Mains cord: 2 pin

b) Light detecting microscope
Bed travel: 100 mm (One Axis)
Resolution: 0.001 mm
Intensity: up to 10 mW
Resolution: 0.01 mW
Sensor: Photo detector
Base: Acrylic
Rated Input: 220 V/50 Hz
or 110 V/60 Hz
Mains cord: 3 pin

Polariser
Graduation: 360° scale with LC = 1° mountable on to upright

KAMALJEETH INSTRUMENTS

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