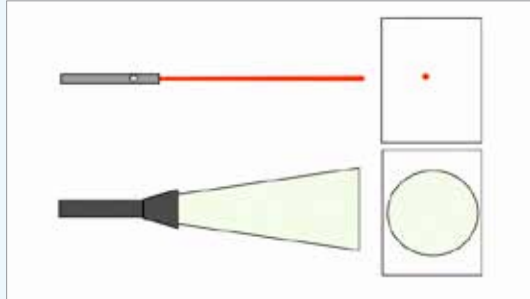


# How laser light is different from non-laser light

(Ireland)

## Background

Laser light can be dispersed by a simple frosted plastic bag (clear bin bag liner). A clear plastic bag acts like a gradient when it is exposed to laser light. Laser light's nature (wavelength) is close enough to that of the pores within the plastic bag and can have its direction slightly altered – we see this as a dotted pattern. The laser light has a narrow band of wavelengths and is easily directed into a dotted pattern. The LED light on the other hand has too wide a range of colours (wavelengths) within itself and does not disperse to form such a dotted pattern. The nature of laser light makes it the optimum choice to send scrambled light packets of information down fibre optic cables.



## You will need:

- ✓ A laser pointer
- ✓ Red LED light/red light
- ✓ Section of a clear plastic

2. Keep the plastic bag still and begin to pull the laser pointer away and watch the pattern that emerges.
3. Repeat steps 1 & 2 with a red torch/LED and compare both patterns created.

## Follow these steps:

1. Shine laser pointer through the section of the clear plastic bag towards the surface your working on.

## So what happened?

Laser light was dispersed and the non-laser light was not dispersed.

