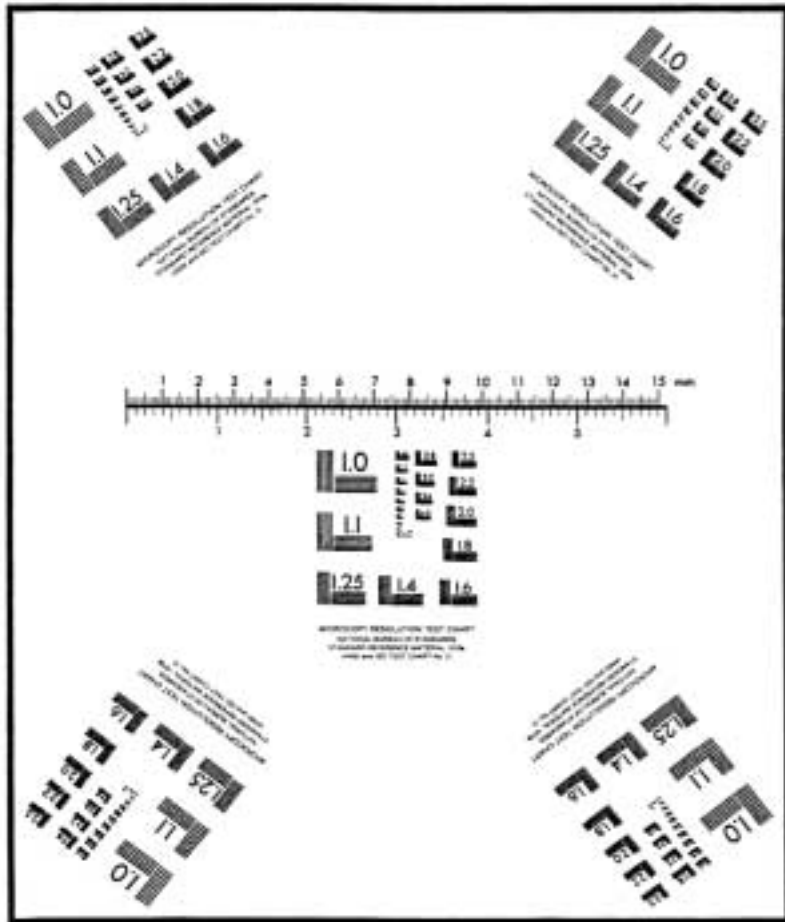


Calculating the resolution

To find the resolution, follow the steps below.

The first stage in calculating the resolution is to check the resolution test chart which should appear as a target on the microfilm.



Resolution test chart

Summary

To calculate the resolution you will need to check the resolution target to identify

- the smallest image size—in which you can clearly distinguish—
- the finest pattern of lines.

Steps/comments and examples

1. inspect under a microscope

- inspect the filmed image of the resolution chart under a microscope
- handle film carefully with cotton gloves

2. examine pairs of line patterns & move from larger to smaller

- make sure that both horizontal = and vertical || lines can be clearly distinguished
- keep on moving down to the smallest pairs of line patterns, until it is no longer possible to clearly distinguish separate line pairs

3. select the smallest pair of line patterns that can be resolved

- the fine lines should be visually separated

4. calculate resolution

- calculate the resolution, in line pairs per millimetre
- the resolution is the number linked with the smallest pattern size in which the lines are just visually separated - multiplied by the reduction ratio

For example:

- smallest pattern size is identified = 8
- reduction ratio = 1: 18
- resolution = 8 x 18 = 144 line pairs per millimetre

5. check all 5 charts

- this provides information on the resolution value out in the corners where the lenses begin to get a little 'fuzzy'