

# custom fibre optic star ceiling calculating required length of fibres





### Step 1

Decide on the density of your fibre optic installation.

ie. how many 'dots' or fibre optic strands per square metre would you like?

*Example: For a ceiling height of 2.7m, we recommend having 25 dots per square metre.*

### Step 2

Calculate the area of the ceiling to be covered.

*Example: The dimensions of our ceiling are 3m by 4m. Total area covered is  $3 \times 4 = 12$  square metres.*



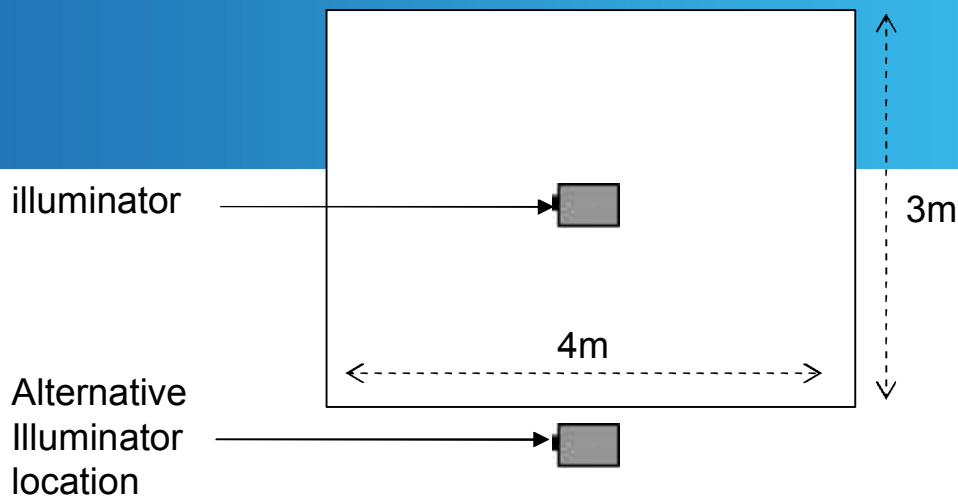


### Step 3

Decide where in the ceiling you wish to position the Fibre Optic illuminator. We recommend placing the illuminator in the middle of the ceiling, as this is the most cost effective solution.

The middle position ensures that the fibre optics are shortest, and light output is brightest. If you cannot place the illuminator in the middle, be sure to take into account the extra length of fibre optic cable required to cover the area, maximum fibre length to be no more than 25m.

*Example: In our case, the illuminator will be positioned in the middle of the ceiling.*





## Step 4 – using the ‘variable length’ solution

The following example demonstrates how to work out fibre optic configuration using the ‘variable lengths’ solution.

This is slightly more complex than the ‘easiest solution’, but it is cost effective.



Typical Star Ceiling

