

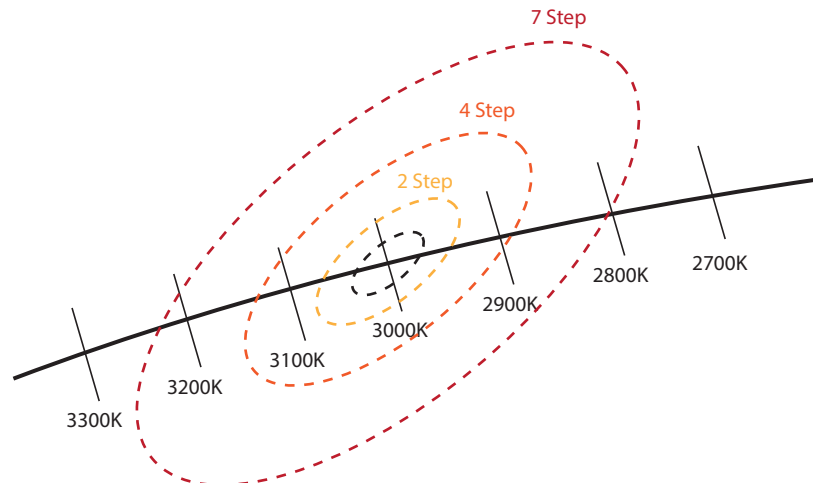
MACADAM ELLIPSES

A MacAdam Ellipse gives the range of a specific colour where the average person is unable to differentiate the colour difference.

If the chromaticity coordinates of a set of lamps are within 1-step MacAdam ellipse, most people would fail to see any difference in colour.

If the chromaticity coordinates are extended to a zone that is twice as large (i.e. a 2-step MacAdam ellipse), some people will start to see some colour difference. A 2-step MacAdam ellipse is better than a 3-step, and so on.

Shown below are ellipses centred on 3000K and extended to 2 Step, 4 Step & 7 Step.



- Notes:
- Incandescent lamps are within 1 Step (shown in black)
 - Step 4 - Entertainment industry HID lamps
 - Step 7 - ANSI/NEMA/ANSI C78.377-2008 for CFL Lamps