

## Fluorescent lamps



### FLUORESCENT LAMPS

Lighting is the largest single user of electricity, typically using almost 40%, in most healthcare buildings. Lighting should be energy efficient, effective and require minimum maintenance.

Energy efficient and cost effective lighting determined by:

- colour appearance
- colour rendering
- light distribution
- lamp and luminaire efficiency
- controls
- use of daylight
- maintenance
- lamp life

Lighting in hospitals must be suitable for medical staff to do their work and meet the needs of patients and their visitors. Good luminaire can help provide a comfortable recovery environment. The main criteria for energy efficient and effective lighting in hospitals are:

Clinical areas:

Luminaires should use lamps of Ra 80 and above.

Examination or treatment areas:

Luminaires should use lamps with a colour rendering capability of Ra 80 to Ra 90+.

Corridors or streets:

These areas can use the less expensive and lower Ra 58 colour rendering lamps, with a luminaire colour appearance of choice

Applications in hospitals reception & nursing stations:

Appropriate lighting levels – 300 lux

Colour Appearance 4000 K – Colour Rendering Ra 80+

For 'General Lighting' use lamp – 8, 9 or 10

For 'Under Cabinet Lighting' use lamp – 8, 9 or 10

For 'Task Lighting' use lamp – 11

For 'Accent Lighting' use lamp 6 or 7

Patient wards luminaire:

Appropriate lighting levels – 300/500 lux (1000 lux inspection)

Colour Appearance 3500 K to 4000 K – Colour Rendering Ra 80+

For 'General Lighting' use lamp – 8, 9 or 10

For 'Task Lighting' use lamp – 3, 4 or 11

Office areas luminaire:

Appropriate lighting levels – 300/500 lux

Colour Appearance 4000 K – Colour Rendering Ra 80+

For 'General Lighting' use lamp – 8, 9 or 10

For 'Task Lighting' use lamp – 11

Examination areas:

Appropriate lighting levels – 300/500 lux (1000 lux inspection)

Colour Appearance 4000 K – Colour Rendering Ra 80+

For 'General Lighting' use lamp – 8 or 9

For 'Task Lighting' use lamp – 3, 4, 10 or 11

Lamps in hospitals should generally be either compact or tubular fluorescent using electronic high frequency control gear, taking into consideration colour rendering, colour appearance, lamp life and energy effectiveness.

Surgical theatre lamps must conform to EN 60601-2-41:2000

<http://www.seai.ie/>

WestMedGroup company offers a wide range of medical furniture, luminaire and construction elements for the comfort of the patient in the hospital. We are engaged in the design and arrangement of hospital wards, laboratories and diagnostic rooms.