E-SERIES

# PentaLED

The first one,the original one!

RIMSA

RIMSA

## The art of innovation

Right from its earliest days, RIMSA has always had a clear goal: to satisfy surgeons' needs. RIMSA is fully aware that the key to meeting this goal is INNOVATION.

Cutting-edge solutions designed by our engineers combine revolutionary new technology with consolidated concepts, such as WHITE LIGHT and INDIRECT LIGHT, as used in the RIMSA Pentaled series.

Designers of the world's first scialytic lamp using LED technology (patented in September 2002), RIMSA now applies the experience it has gained over the years to its new PENTALED **E-Series**.

**E-Series** (Pentaled**81**, Pentaled**105** and Pentaled**30E**) is a highly innovative and superior performance line of scialytic lamps and is a natural evolution of the acclaimed PENTALED series.

RIMSA remains true to its origins, over seventy years later: the first, the only and the most original when it comes to bright new ideas.



# Man and Light

RIMSA, inspired by nature, has chosen the 5.000K colour temperature, a white light similar to sunlight at Zenith for its Led lamps.

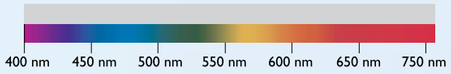
Light has a crucial affect on man's ability to work.

The importance of light during surgeries is related to the need to guarantee the reliability of the visual information perceived by the surgeon during the operation.

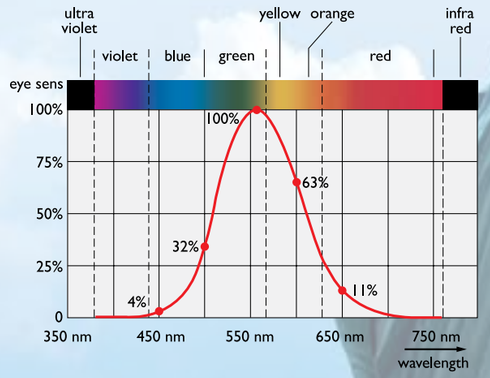
**Proper lighting makes for comfortable working conditions, reduces stress levels, minimises the feeling of tiredness and increases productivity.**

**The quality of artificial lighting** is, therefore, of the utmost importance and is directly proportional to the difficulty of the tasks required of us.
The most important factor when considering artificial light is the colour rendering index (CRI). This is an index that measures the capacity of a light source to reproduce the true colours of the illuminated object faithfully. A CRI value of 85 or more is normally held to be high and indicates that the light source has good colour rendering properties. This value has been studied by the CIE (International Commission on Illumination) and is the minimum requirement for surgical lamps in the relevant International Electrotechnical Commission standard (IEC 60601-2-41). It is obtained from the average of eight different colours (R1 to R8), given that the human eye is not as sensitive to all the various wavelengths in the same way.

**Human eye sensitivity curve**
The spectrum of electromagnetic radiation visible to the human eye ranges from 380 nm to 780 nm. (Fig.1)
The human eye is most sensitive to radiation at roughly 550 nm (yellow-green), with visibility levels dropping rapidly either side of this towards ultraviolet and infrared. (Fig.2)
When all the visible radiation is combined, we get the "sensation" of white light.




**Picture 1. Visible wavelength**




**Picture 2. Human eye sensitivity curve.**

# RIMSA PENTALED 30E

## PENTALED**30E**: compact size, great performances

PENTALED**30E** is especially recommended for operating theatres where the surgeon needs a small lamp to avoid interference with other overhead equipment.
Excellent for oral and maxillofacial surgery and aesthetic plastic surgery. It has 30 elliptical reflectors split into 6 modules, each containing 5 LEDs, providing 130,000 Lux. An aluminium ring runs around the dome for easier positioning. The **E-View** system lets the surgeon adjust the extent of the lit field to get the right type of light for each surgical procedure.


E-WHITE

E-COMFORT

E-VIEW
EXTENDED-VIEW



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Ref. March 2014

**RIMSA**
Via Monterosa, 18/22
20831 Seregno (MB) - Italy
Tel. + 39 0362 325709
Fax + 39 0362 328559
E-mail: info@rimsa.it

**www.rimsa.it**



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