Advantages of the Mach LED 150

Light quality and optics

Superior colour rendition
With colour rendering indices R9 ≥ 90 and Ra ≥ 95, all the surgeon recognizes clearly, the linear nuances of colour in tissue.

The colour rendering is so good, that the surgeon has a visual representation of detail. The linear scale of the wound is rendered naturally with rich textures. This allows a clearly visible color spectrum for your eyes.

Facetted multi-lens system
A multitude of computer-calculated facetted lenses guarantees homogeneity and lowest shadiness in the light field.

Separately arranged optical systems, with one LED module, generate their own light field, which increases the contrast effect of the OT-light.

Light intensities of 130,000 Lux can be attained without difficulty.

Focusing (optional)
The light field can be focused by turning the handle. The facetted light beam allows a peripheral illumination of deepest wound channels with high intensity and an exact matching of the light field diameter with the size of the wound field.

Additional comfort

Cool light
The LED technology is much more effective than conventional light sources such as halogen bulbs. The heat radiation is reduced to a minimum without using any expensive filter technique. The temperature increase in the surgeon’s head area is almost nonexistent.

Flow properties
During development high attention was paid to the performance of the new LED OT-lights in laminar-flow ceiling systems.
Mach LED 150 small operating light

Performance description

Mach LED 150
Superior colour rendition
Facetted multi-lens system
Cool light
Optimum flow properties
Easy maintenance

Mach LED 150 FP / LED 150 F
Additionally to the advantages of the Mach LED 150;

Focussing

Handling

2 functions via touch panel:
• on / off
• light intensity control

Technical Data (1)
Mach LED 150 light system (2) Mach LED 150 F P (3) Mach LED 150 F (3) Mach LED 150 (4)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Mach LED 150 FP</th>
<th>Mach LED 150 F</th>
<th>Mach LED 150 F P</th>
<th>Mach LED 150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light intensity in Lux at 1 meter distance</td>
<td>130.000</td>
<td>110.000</td>
<td>110.000</td>
<td></td>
</tr>
<tr>
<td>Colour temperature (Kelvin)</td>
<td>4300</td>
<td>4300</td>
<td>4300</td>
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<tr>
<td>Colour rendering index Ra</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td></td>
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<tr>
<td>Focussable light field size (in cm)</td>
<td>17 – 24</td>
<td>18 – 25</td>
<td>19 (fixed focus)</td>
<td></td>
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<tr>
<td>Working distance (in cm)</td>
<td>70 – 140</td>
<td>70 – 140</td>
<td>70 – 140</td>
<td></td>
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<tr>
<td>Diameter of light head (in cm)</td>
<td>40</td>
<td>40</td>
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<tr>
<td>Temperature increase in the head area (°C)</td>
<td>0,5</td>
<td>0,5</td>
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<tr>
<td>Electronic light intensity control</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
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<tr>
<td>Light source LED</td>
<td>26</td>
<td>26</td>
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<tr>
<td>Life-span of the LEDs (h)</td>
<td>&gt; 50.000</td>
<td>&gt; 50.000</td>
<td>&gt; 50.000</td>
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<tr>
<td>Total power consumption (W)</td>
<td>35</td>
<td>35</td>
<td>35</td>
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</tr>
</tbody>
</table>

Further technical details in the data sheet of the lamp, available upon request.

Notes:
1. Standard power consumption.
2. External power supply.
3. F-models with focussing.
4. Models with fixed focus.
5. Ra is an average of R1 = burnt pink, R2 = mustard yellow, R3 = yellow green, R4 = light green, R5 = turquoise blue, R6 = skyviolet, R7 = violet, R8 = lilac. Maximum value = 100.

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