# Minor Surgical & Examination Lighting - Wall Mounted



#### **Product Description**

#### **Astralite**®

HD-LED is a breakthrough technology with vastly better performance than standard definition LED or conventional surgical lights.

### **Product Features**

Product Images





#### Large Movement Range

Astralite<sup>®</sup> is designed so that the light head can be positioned all the way around the couch to examine all parts of the patient. The 5 rotations allow easy positioning of the light beam from any angle

#### Long Life

LED life is greater than 50,000 hours which equates to more than 20 years of normal use.

#### **Environmentally Friendly**

Astralite<sup>®</sup> uses LEDs that are mercury free and do not contain CFCs, POPs, VOCs, halogens or other harmful chemicals.

#### **Economical**

Never having to change a bulb for the lifetime of the product means that Astralite<sup>®</sup> is highly economical. LED is substantially more efficient at producing more surgical quality light for less power.

#### **Designed to Minimise Infections**

Anti-microbial additives are used to destroy harmful bacteria. The smooth, continuous surfaces are easy to wipe clean, with split lines kept to a bare minimum. The Astralite<sup>®</sup> light head is sealed against the ingress of dirt and liquids to prevent contamination.

#### Silver Ion Antimicrobial Technology

Biomaster antimicrobial additive is moulded into the plastic lamp head parts and 'Ultra Fresh' is incorporated in the lamp head paint. Both of these additives have antimicrobial properties.

#### **High Intensity Cold Light**

Choose between the AL10 with 70,000 Lux at 1m or the even more powerful ALE10 with 100,000 Lux at 1m.

#### Adjustable Colour Contrast

The colour of the light can be adjusted depending on skin, tissue or wound to select the optimum lighting.

#### Large Illuminated Field

All models produce a large 250mm max. diameter light field with a 70-140cm working distance.

#### **Sterilisable Handle Option**

The standard handle is very easy to clean and accepts most disposable covers. A resterilisable handle is an optional item.

# **Astralite**®

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# CureMed

| Model Number | Description   |
|--------------|---|
| ALE10WJ      | Astralite PLUS 10 Series Lamp (100kLux)<br>Wall Mounted |
| AL10WJ       | Astralite 10 Series Lamp (70k Lux) Wall<br>Mounted      |

#### **Technical & Performance Information:**

Unless otherwise stated: All linear dimensions in mm, angles in degrees  $(\pm 5^{\circ})$  and weights in kg

| General System<br>Information              | AL10WJ                          | ALE10WJ |  |
|--|---------------------------------|---------|--|
| Mount Type                                 | Wall + Swing- Spring Arm        |         |  |
| Lamphead 1                                 | AL10                            | ALE10   |  |
| Weight (kg)                                | 12.7                            | 12.7    |  |
| Conformity                                 | CE (EU MDR 2017/745)            |         |  |
| Type of luminaire (to<br>BS EN 60601-2-41) | Luminaire for diagnosis         |         |  |
| Medical Device<br>Classification           | I                               |         |  |
| Electrical<br>Classification               | I                               |         |  |
| Electrical Conformity                      | BS EN 60601-1; BS EN 60601-2-41 |         |  |
| System Max Power<br>[VA]                   | 25.4                            | 33.5    |  |
| Power Consumption<br>@ 100% Intensity      | 17.5W                           | 26W     |  |

| Mount   | Wall + Swing- Spring Arm       |
|---|--------------------------------|
| Number of Arms  | 1                              |
| Mounting Height   | 2060                           |
| Weight of Mount (Including<br>Suspension Arms)                        | 9.7                            |
| Arm 1 Lengths Horizontal/Suspension<br>Arm [Total Reach] (mm)         | 800/750 [1550]                 |
| Arm 1 Lateral Rotation of Horizontal about Central Stem Spindle (±5°) | 180°                           |
| Arm 1 Lateral Rotation of Spring Arm about Horizontal Spindle (±5°)   | 360°                           |
| Suspension Arm Angle Max Vertical<br>Adjustment Up (±5°)              | 45°                            |
| Suspension Arm Angle Max Vertical<br>Adjustment Down (±5°)            | 45°                            |
| Power Supply Unit Type Included                                       | 1 off Medical Grade 150W 24VDC |
| Supply Voltage  | 100 - 240V AC 50/60Hz          |

| Lamphead Photometric #                        |                               | AL10                  | ALE10                          |       |
|---|-------------------------------|-----------------------|--------------------------------|-------|
| Central Illuminance @ 1 metre (Lux max ±10%)  |                               | 70,000<br>(8 Steps)   | 100,000<br>(8 Steps)           |       |
| Field Diameter Narrow beam                    |                               | 149                   | 149                            |       |
| D <sub>10</sub> @ 1 meter (mm) [Wide beam]    |                               | [Wide beam]           | [270]                          | [270] |
| Field Diameter Narrow beam                    |                               | 77                    | 77                             |       |
| D <sub>50</sub> @ 1 meter (mm) [Wide          |                               | [Wide beam]           | [89]                           | [89]  |
| Light distri                                  | bution d50/d10 (%)            | [@Narrow Beam]        | 52                             | 52    |
| Illuminated                                   | d Area (cm²)                  |                       | 254                            | 254   |
| Nominal W                                     | /orking Distance fro          | m Lamphead m          | 1                              | 1     |
| Colour Rer                                    | ndition Ra (Av R1-R8          | 3)                    | ≥95                            | ≥95   |
| Colour Rer                                    | ndition R9 (red)              |                       | ≥95                            | ≥95   |
| Colour Ter                                    | nperature (K)                 |                       | See Adjustable Colour          |       |
| Adjustable                                    | Colour (Red Baland            | ce) (K)               | 3500 to 5000 K (6 Steps)       |       |
|   |                               | 1 Mask (%)            | n/a                            |       |
|   | <b>_</b>                      | 2 Mask (%)            | 68                             |       |
| Shadow<br>Dilution:                           | Remaining<br>Illuminance with | Tube (%)              | 100                            |       |
| Dilution.                                     | indiminance with              | Tube + 1 Mask (%)     | n/a                            |       |
|   |                               | Tube + 2 Mask (%)     | 56                             |       |
| Depth of Illumination L1+L2@60% (mm)          |                               | 1200                  |                                |       |
| Number & Type of Lights per Lamphead          |                               | 13 HD-LED®            | 13 HD-LED®                     |       |
| LED Life (hours)                              |                               | >50,000               | >50,000                        |       |
| Comfort Halo @ 1m (mm)                        |                               | N/A                   | N/A                            |       |
| Radiant En                                    | ergy (Irradiance pe           | r lux)                | 3.31 mW/m <sup>2</sup> per lux |       |
| Solid State Focusing Control                  |                               | via Handle            |                                |       |
| Intensity Control                             |                               | on Keypad             |                                |       |
| Shadow-less Light Technique                   |                               | Multiple LED Elements |                                |       |
| Electronically Dimmable Light Intensity Range |                               | 5-100%                | 5-100%                         |       |
| Endoscopy Setting                             |                               | n/a                   | n/a                            |       |
| Infrared Content                              |                               | 0                     | 0                              |       |
| UV Content                                    |                               | 0                     | 0                              |       |
| Temperature Increase in Surgeon's Head Area   |                               | <1°C                  | <1°C                           |       |
| Luminous Efficacy (Im/W)                      |                               | -                     | -                              |       |
| Keypad Orientation                            |                               | n/a                   | n/a                            |       |

| Lamphead General, Mechan                 | AL10          | ALE10                                 |             |
|--|---------------|---------------------------------------|-------------|
| Removable Sterilisable Handle            |               | Yes (Sterilisable up to 137°C)        |             |
| Anti-Microbial Surfaces                  |               | Yes                                   |             |
| Light On/Off Switch Location             |               | Keypad on Lamphead                    |             |
| Ingress Protection Rating                |               | IP54                                  |             |
| Lamphead Diameter (mm) Approx            |               | 296                                   |             |
| Lamphead Weight (kg) Approx              |               | 3                                     |             |
| Lamphead Yaw (°)                         |               | 360°                                  |             |
| Lamphead Roll (°)                        |               | n/a                                   |             |
| Lamphead Pitch (°)                       |               | 330°                                  |             |
| Power (VA)                               | Nominal [Max] | 17.2 [25.4]                           | 21.7 [33.5] |
| Power Consumption (W)                    | Nominal [Max] | 8.5 [17.5]                            | 13.2 [26]   |
| Power Supply Unit Requirements (minimum) |               | Medical Grade 150W 24V DC             |             |
| Materials                                | Enclosure     | Aluminium with Anti-bacterial coating |             |
|  | Lens Cover    | Polycarbonate                         |             |
|  | Reflectors    | ABS with metalized coating            |             |

# data per lamphead

See also Drawing: BSD\_Astralite Wall Systems Layout [15000]