

## **Product Description**

#### **Astralite®**

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



# **Product Images**

# Large Movement Range

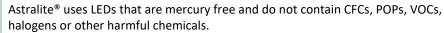
Astralite® is designed so that the light head can be positioned all the way around the couch to examine all parts of the patient. The 5 rotations allow easy positioning of the light beam from any angle

**Product Features** 

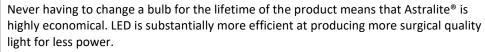
#### **Long Life**

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

### **Environmentally Friendly**



#### **Economical**



#### **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® 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®**

# Minor Surgical & Examination Lighting - Ceiling Mounted



Model Number	Description		
AL10CJ	Astralite mounted on a Ceiling Stem via 720 Swing Spring Arm		
ALE10CJ	Astralite lamphead fixed to a ceiling-mounted suspension system		
ALE1010TJ	Astralite lamphead fixed to a ceiling-mounted Tandem suspension system		

#### Technical & Performance Information: Unless otherwise stated: All linear dimensions in mm, angles in degrees (±5º) and weights in kg

General System	AL10CJ	ALE10CJ	ALE1010TJ	
Mount Type	Ceiling Stem - Swing-Spring Arm		Tandem - Swing- Spring Arms	
Weight (kg)	15.7		27.6	
Lamphead 1	AL10	ALE10	ALE10	
Lamphead 2	-	-	ALE10	
Conformity	CE (EU MDR 2017/745)			
Type of Luminaire (to BSEN 60601-2-41)	Luminaire for diagnosis			
Medical Device Classification	I			
Electrical Classification	I			
Electrical Conformity	BS EN 60601-1; BS EN 60601-2-41			
System Max Power [VA]	25.4	33.5	33.5	
Power Consumption @ 100% Intensity	17.5W	26W	52W	

Mount Specification	Ceiling Stem - Swing- Spring Arm	Tandem - Swing-Spring Arm	
Number of Arms	1	2	
Ceiling Height Range (mm) [Max Ceiling Height with Cavity Spacer]	2539-3359 [4359]	2766-3536 [4536]	
Weight of Mount (Including Suspension Arms) No Cavity Spacer	12.7	21.6	
Arm 1 Lengths Horizontal/Suspension Arm [Total Reach] (mm)	800/750 [1550]	901/750 [1650]	
Arm 1 Lateral Rotation of Horizontal about Central Stem Spindle (±5°)	360°	360°	
Arm 1 Lateral Rotation of Spring Arm about Horizontal Spindle (±5°)	360°	360°	
Arm 2 Lengths Horizontal/Suspension Arm [Total Reach] (mm)	-	901/750 [1650]	
Arm 2 Lateral Rotation of Horizontal about Central Stem Spindle (±5°)	-	230°	
Arm 2 Lateral Rotation of Spring Arm about Horizontal Spindle (±5°)	-	360°	
Suspension Arm Angle - Max Vertical Adjustment Up (±5°)	45°	45°	
Suspension Arm Angle - Max Vertical Adjustment Down (±5°)	45°	45°	
Power Supply Unit Type Included	1 off Medical Grade 150W 24V DC		
Supply Voltage	100 - 240V AC 50/60Hz		

Lamphead Photometric #			AL10	ALE10
Central Illuminance @ 1 metre (Lux max ±10%)			70,000	100,000
		(8 Steps)	(8 Steps)	
Field Diameter		Narrow beam	149	149
D <sub>10</sub> @ 1 m		[Wide beam]	[270]	[270]
		Narrow beam	77	77
, ,		[Wide beam]	[89]	[89]
		%) [@Narrow Beam]	52	52
	d Area (cm²)		254	254
		rom Lamphead m	1	1
Colour Rer	ndition Ra (Av R1-	R8)	≥95	≥95
Colour Rer	ndition R9 (red)		≥95	≥95
Colour Ter	nperature (ºK)		See Adjustable Colour	
Adjustable	Colour (Red Bala	nce) (K)	3500 to 5000 K (6 Steps)	
		1 Mask (%)	n,	′a
Shadow	Remaining	2 Mask (%)	68	
Dilution:	Illuminance with	Tube (%)	100	
Dilution.	illullilliance 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 p	per lux)	3.31 mW/m² 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 (lm/W)			-	-
Keypad Orientation		n/a	n/a	

Lamphead General, Mechani	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 Ceiling Systems Layout [14978]