



OR light that's cool, shadow-reduced and color-corrected

The Polaris OR Lighting System provides the light you need for demanding and complex surgical procedures. It can be installed on any ceiling in minimal space—including rooms with forced air circulation.

The system includes a central hub and your choice of one or two 22-inch (559 mm) diameter lighthead/suspension arm assemblies. Each assembly is suspended from a horizontal arm that rotates around the central hub. Horizontal arms may be either 24 or 36 inches (610 or 914 mm) long, depending on the length you need.

► A Quick Look

- Dual or single surgical lights center mount
- Lighthead provides cool, shadowreduced, color-corrected light appropriate for surgical procedures
- Design prevents direct glare and disposes of 98% its generated heat



Amsco Polaris

Operating Room Lights

Equipment for the way you operate.

The Polaris' lighthead features an advanced, state-of-the-art design that prevents direct glare and disposes 98% of its generated heat. The energy emitted from its tungsten-halogen lamp is filtered and reflected by two dichroic, coated, glass surfaces. The first surface has a color-correcting cold mirror that reflects the controlled visible light and passes through 80% of the radiant heat energy. The reflected light then impinges on a heat-absorbing glass mirror with a dichroic coating that reflects and absorbs 96% of the remaining radiant heat energy and passes through the controlled visible light to two aluminum reflectors and subsequently to the surgical site.

Performance Capabilities

Maneuverability

The fixture moves freely, smoothly and quietly throughout its range of maneuverability without drifting when positioned at any point. A nominal two to four-pound force on the sterilizable handle is required to produce up and down movement of the horizontal suspension arm assembly.

Reflector

With the lighthead in the horizontal plane, it is possible to tilt the reflector 125° forward and backward; 315° laterally, left and right.

When in the horizontal plane (with the lighthead pivot 82 1/2" above the finished floor) it is possible to raise the reflector 7" without it touching the ceiling. In addition, it is possible to lower the reflector 11" without electrical components entering the area above the floor defined as hazardous in the National Fire Protection Association's publication Flammable Anesthetics Code. It is also possible to lower the lighthead an additional 12" if the fixture is mounted in a nonflammable anesthetizing location.

Area of Coverage

When in the horizontal plane, the lighthead provides unrestricted (continuous) 360° rotation. The radius of this imaginary circle (measured from the center line of the vertical extremity of the support arm suspension system to the vertical axis of the reflector) is 35 1/4".

Moreover, the horizontal support arm provides unrestricted (continuous) rotation as follows: an overall radius of 59 1/4", if a 24" long support arm and 71 1/4", if a 36" long arm (center line of mounting hub to center line of lighthead); or maximum radius of 70 7/8" and 82 7/8", respectively.



Light Color & Shadows

The color of the light beam is approximately 4400°K as measured on a Commission International de l'Eclairage chromaticity diagram.

The beam intensity loss should not exceed 10% with the light beam on a test field 42" beneath the reflector rim and an opaque disc (10" diameter) interposed in the center line of the beam 23" above the test field.

Beam Intensity

When operating the fixture between 26 and 33 volts, the beam intensity in a test field 38 inches below the reflector rim shall meet the minimum requirements (shown in the chart below) when measured with an International Light Photometer (Model 710) or other instrument of equivalent accuracy:

Pattern	Control Setting (watts)	Intensity Footcandles (Lumens/m²)
Small	235	6000 (64,584)
Medium	235	4500 (48,438)
Large	235	3000 (32,292)

Technical Specifications

Intensity at 38 inches (4-inch pattern)	9000 Footcandles
Lighthead Diameter	22"
Color Temperature	4400° K
Pattern Sizes @ 38 inches	Variable 4, 6 or 8 inches
Average Life of Tungsten-Halogen Lamp	1000 hours

