66-15 Midmark Concept LR Operatory Light (Project 01-58) (9/02)

The Midmark Concept LR Operatory Light is a newly-designed dental operatory light that is advertised as delivering reduced-shade white light for dental procedures. The unit is said to contain an integrated microprocessor that monitors electrical voltage to ensure that the light output has the proper color-correct brightness. It offers three light-intensity settings (3300, 2500, and 1700 foot candles) at a 27-inch focal length as well as a "composite-safe" mode. The latter's intensity (700 foot candles) is said to provide illumination during resin composite placement but not so much that premature polymerization of the resin occurs. In place of the usual toggle switch, the light features a touchpad control with LED indicators for the different light-intensity settings. The Concept LR Light also has a unique automatic on/off feature that is activated by a change in the vertical position of the light. Midmark's claims that the light's ergonomic design permits three-axis control using anti-friction bearings with tension adjustments for individualized motion control. The light is described in company literature as having a 3" x 8" oval, feathered-edge light pattern with a 5000 ± 500K color temperature. The Concept LR Light can be installed in different configurations (e.g., on units, ceilings, cabinets, and walls) and is available in both 115- and 230-volt, 50/60 Hz electrical configurations.

Manufacturer:
Midmark Corporation
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(800) 643-6275
(937) 526-3662
(877) 725-6495 FAX
www.midmark.com

Suggested Retail Price:
$1,900.00 Midmark Concept LR Light (Item #153584)

Government Price:
$1,289.67 Midmark Concept LR Light (same item number as above)

ADVANTAGES:
+ Provides excellent illumination for dental procedures.
+ Meets all electrical safety requirements.
+ Has automatic on/off feature that is activated by a change in the light's vertical position.
+ Meets International Standard 9680 requirements for illumination pattern consistency, radiant heat production, color-coordinated temperature, and shadow pattern size.
+ Bulb is easy to remove and replace.
+ One-year warranty (except for the bulb).
+ Installation and operation manual is well organized and complete.

DISADVANTAGES:
- Controls are not intuitive to use.
- More expensive than other dental lights commonly used by the federal services.
SUMMARY AND CONCLUSIONS:
The Midmark LR Operatory Light is designed to provide strong illumination for dental procedures. The light met electrical safety requirements as well as most of the items from the Medical Procurement Item Description #2 for dental operatory lights. The light also met international standards for illumination pattern consistency, radiant heat production, color coordinated temperature, and shadow pattern. Clinical evaluators appreciated its even area of illumination and intensity. Clinical users reported that the LR Light's operational controls were counterintuitive, and they did not fully utilize the automatic on/off feature or the light's composite mode feature. This light is more expensive than lights currently in use in the federal services. The Midmark Concept LR Operatory Light is rated Acceptable for use by the federal dental services.