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Isolite i2 Dryfield Illuminator



Project #12-006 (7/13)

PRODUCTION DESCRIPTION: The **Isolite i2™**

is a dryfield illuminator manufactured by Isolite Systems that is designed as a three tools in one system. The manufacturer claims the unit offers continuous illumination, aspiration and retraction capabilities. According to Isolite, the disposable, soft, flexible, non-impinging Isoflex™ mouthpiece: isolates maxillary and mandibular quadrants simultaneously; retracts and protects tongue and cheek; delivers bright, shadowless illumination throughout the oral cavity; continuously aspirates fluids and oral debris; and obturates the throat to prevent inadvertent aspiration of material. The disposable latex-free mouthpieces are available in pedo, adult small, adult medium, adult medium deep vestibule (DV), and adult large sizes. The manufacturer claims that the new LED technology and the streamlined design of Isolite completely eliminate the need for a light box and fiber optic cable and that the Isolite System can be installed easily in minutes using a standard electrical outlet. The Isolite LED light source reportedly features a "CURE-SAFE" setting while working with light-sensitive materials. According to the manufacturer the ergonomic design of Isolite i2™ is said to reduce fatigue and repetitive stress associated with retraction, suctioning, eyestrain, and motion spent adjusting headlights, overhead light or otherwise positioning the patient for better access or visibility. Additionally, the manufacturer states that its dental isolation technology speeds procedures on average 30%. The Isolite i2™ has generated a significant interest from the field and should be evaluated.



Manufacturer:

Isolite Systems
2060 Alameda Padre Serra
Santa Barbara, CA 93103
(800) 560-6066
(805) 560-9888
(805) 966-6416 FAX, or
www.isolitesystems.com

Suggested Retail Price/ Government Price

Item	Suggested Retail Price	Gov't Price
1-Isolite Titanium Control Head Assembly: Includes Titanium Control Base, Vacuum Levers, LED Smart Stick, 6- Vacuum Light/Pipes (autoclaveable), 1- 6ft Power/ Vacuum Hose, 1-Power Adapter, 1-Suction Line Plug 1-Accessories Kit: includes cleaning brushes, lubricant for valve levers & Power/Vacuum Hose o-rings, "Y-adapter	\$1,695.00	\$1,356.00
(10) Disposable mouthpieces	\$25.00	/\$19.95

ADVANTAGES:

- Ease of Use (15)
- Continuous suction/evacuation (11)
- Patient Comfort (11)
- Improved access, visibility (8)
- Illumination of oral cavity (7)
- Enhanced retraction, improved isolation (6)
- Advantageous when working in multiple quadrants, areas (5)
- Particularly useful for crown preps (4)
- Reduced need for anesthesia (no RD clamp) (3)

DISADVANTAGES:

- Limited access, poster regions, buccal space (12)
- Inadequate suction, evacuation (7)
- Patient discomfort (7)
- Inadequate isolation (5)
- Bulky (5)
- Cost (4)
- Lack of barrier to aspiration, like RD (3)
- Not disposable, requires sterilization/cleaning, assistant down time (3)

SUMMARY AND CONCLUSION:

The Isolite i2 Dryfield Illuminator System performed as indicated by the manufacturer. The manufacturer's operating instructions were easy to understand and the unit was easy to install to dental units. The majority of evaluators agreed that the mouthpieces were useful, and comfortable to the patients. The Isolite system provided adequate tongue and cheek retraction, evacuation and moisture control. The majority of evaluators strongly agreed that the Isolite i2 Dryfield Illuminator was faster and easier to place and more comfortable for the patient than the RD. Ergonomically evaluators agreed that the Isolite reduced repetitive motions associated with manual suction and retraction, and that system reduced over-spray and aerosols in the operatory. Other advantages noted by the evaluators included improved access, increased visibility provided by the added illumination, advantage of this device when working in multiple

quadrants, and it's particular usefulness when prepping teeth for crowns. The most consistent disadvantages of the Isolite system were difficulty of use on 2nd and 3rd molars, inadequate suction/evacuation, patient discomfort, bulkiness, cost, and lack of barrier to aspiration such as a rubber dam provides. The majority of evaluators found the Isolite was extremely beneficial to their clinics and clinicians. The **Isolite i2 Dryfield Illuminator** is rated **Excellent** for use in the US Air Force dental facilities.

DECS COMMENTS: While this device may prove to be an alternative to the use of a rubber dam in certain applications, providers must keep in mind existing guidance on isolation practices when making a decision. The USAF Medical Service Dental Clinical Practice Guidelines state the following, "rubber dam is the preferred method of field isolation for use with direct restorative materials. If not used, the reason and alternate method must be noted in the dental record" (17.1, 17.1.1). Additional guidance states: "A rubber dam will be used when performing nonsurgical endodontic therapy. To help ensure proper site selection, it is permissible to establish initial access without pulpal involvement prior to placement of the rubber dam" (19.3, 19.31)