Vaginal Speculum Single-Use Light Source Illumination Study

The Medical Device Challenge

Abstract

A built-in light source is now a must have feature when shopping for a new single-use disposable vaginal speculum. Consider the three products below and see how they compare to one another.
The Study

OBP Medical conducted a study comparing the illumination strength of three disposable single-use vaginal speculum with built-in light sources: OBP Medical’s ER-SPEC, Competitor A, and Competitor B. The illumination strength of an LED light source is measured in LUX, or luminous flux per unit area. This means the brightness of one candle in one square meter of area where all points are one meter from the flame. To put this in perspective, the normal lighting requirements for precision operations is >1500 LUX\(^1\). **The results from OBP Medical’s study were as follows:**

**OBP Medical’s ER-SPEC: 3500-4500 LUX**

**Competitor A (bottom pull tab w/ removable light source): 1200 LUX**

Competitor B (wide handle w/ red push button): 140-153 LUX

The Conclusion

Of the three models, OBP Medical’s ER-SPEC offers the brightest light source. Competitor A’s device came in at a distant second with Competitor B’s product trailing far behind. The weak illumination strength demonstrated during this study makes both Competitor A’s and B’s product ineffective choices. **Of the three products, the ER-SPEC is clearly the best choice.**

The Problem with Light Pipes