QuasarBrite Narrow Beam SMT LED decreases Light Angle for Narrow Beam Applications

The QuasarBrite narrow beam SMT LED provides users with a tight beam of high-intensity red, green or blue light. Compared to traditional SMT LEDs, this Narrow Beam allows for a 93% reduction in beam angle, making it ideal for medical device applications such as surgical tools and medical diagnostic equipment indication that require concentrated, high-intensity light. With QuasarBrite Narrow Beam SMT LEDs, the LED is mounted upside down and shines directly into an internal parabolic reflector providing high-intensity brightness in a narrow beam of light without the need for external optics. As such, QuasarBrite Narrow Beam SMT LEDs can provide a 50% cost savings when compared to traditional SMT LEDs that rely on external optics to achieve a tight beam of light. The elimination of the need for external optics also significantly simplifies manufacturing processes, resulting in additional cost savings. The internal parabolic reflector also collimates the light into a beam, allowing high-intensity light to be produced by a standard LED with standard energy consumption of 75mW or less. A typical SMT may have a brightness of 1cd with a view angle of 45 degrees. QuasarBrite Narrow Beam SMT LEDs provide an intensity of up to 100cd at a view angle of 6 degrees. The RoHs compliant QuasarBrite Narrow Beam SMT LEDs are available in 4 mm (provides beam angle of 12 to 22 degrees), 6 mm (provides beam angles of 14 to 24 degrees), and 8mm (provides beam angle of 14 to 18 degrees).

Source URL (retrieved on *03/10/2014 - 6:38am*):
http://www.mdtmag.com/product-releases/2009/08/quasarbrite-narrow-beam-smt-led-decreases-light-angle-narrow-beam-applications