BLF22 Technical Note

Laser Safety

LOW POWER OUTPUT ASSURES INTRINSIC BLF SAFETY

The intrinsic safety of Transonic® BLF21 and BLF22 Tissue Perfusion Monitors originates from their low power output (less than 3 mW), and the divergence of their beam as it leaves the laser output connector and the Probe tip. This divergence exceeds the focusing capability of the human lens. Probes may be moved from one site to another without turning off the laser’s power. Even though, at continuous intraocular exposure, the Monitors emit less than the FDA safety limits for Class 3R devices (IEC60825-1-2007), common sense dictates that the Probe should always be directed away from the eyes. The laser light power that would reach the retina is comparable to the light of a 160 W incandescent bulb at the same Probe-to-eye and lamp-to-eye distance. However, the eye’s retina is much less sensitive to infrared than to visible light.

DO NOT BEAM LASER LIGHT DIRECTLY INTO THE EYE!

CAUTION! The use of optical instruments with this product will increase eye hazard.

WARNING! Only Transonic® personnel should open the Monitor’s case. Under no circumstances should the user open the ends of the laser canister, as the laser radiation level contained within is dangerous.

Follow all instructions and labels on the Monitor enclosure. They serve a function. Do not remove these labels under any circumstances. While this labeling indicates that the laser diode within is a Class 3R laser product, it is operated below its maximum, and not all of its output is coupled to the optical fiber.