

End Face Appearance of LaserWave® *FLEX* Bend-Optimized Multimode Fiber

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LaserWave *FLEX* multimode fiber provides improved bending performance at tight radii by confining higher order modes that normally escape from standard multimode fiber under bent conditions. To do this, the fiber cladding area surrounding the core is modified to include a depression that prevents light from escaping. Because it is outside the core region, this depression does not affect other fiber performance parameters such as bandwidth. It simply traps the light inside the core.

Because this depressed area exists, careful inspection of a fiber's end face (usually conducted with a fiber scope after connectorization) will reveal a difference from standard multimode fiber. Figure 1 shows a standard LaserWave Fiber under a standard inspection microscope, while Figure 2 shows a view of a LaserWave *FLEX* bend-optimized fiber. Notice the ring around the core of the LaserWave *FLEX* fiber.

To characterize bandwidth, OFS uses the DMD Mask method, which measures fiber performance accurately even for the higher order modes (modes that operate closer to the core clad interface). Because the depressed area does not affect fiber performance, end users can be assured that this fiber will provide the high quality and high bandwidth they expect from LaserWave fiber, with the added benefit of superior bend performance.

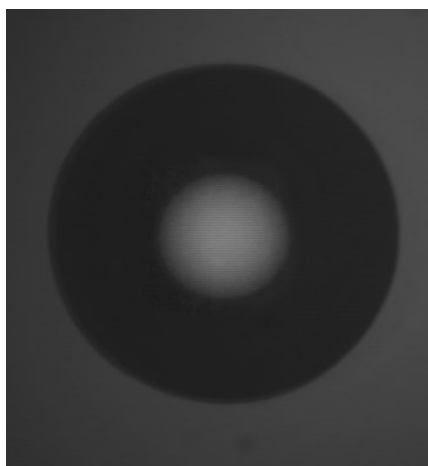


Figure 1 – Standard LaserWave Fiber

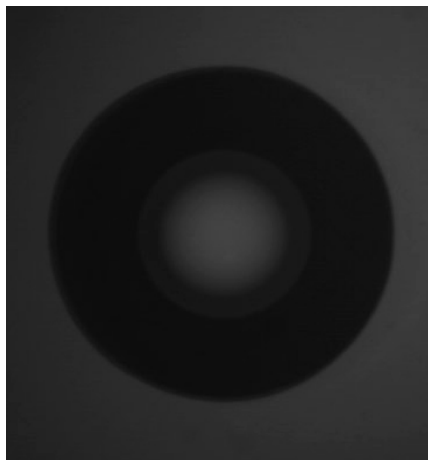


Figure 2 – LaserWave *FLEX* Fiber