



Features

- **Direct Nanoparticle Deposition:** Industry leading fiber deposition process
- **Beam quality:** Robust single mode operation for 1 μm applications
- **Reliability:** Extremely high photodarkening resistivity
- **Compatibility:** Good spliceability to standard single mode fibers (e.g. PM980, SM980); also matching nLIGHT passive fibers available

Applications

- Low average power ultrafast fiber lasers
- Core pumped pre-amplifier for fiber amplifier chain
- IR sources for frequency doubling

Typical Fiber Specifications

| Fiber | | LIEKKI® Yb300-6/125 | LIEKKI® Yb300-6/125-PM |
|---|---------------|---------------------------------|---------------------------------|
| Optical | | Units | |
| Mode Field Diameter at 1060 nm ⁽¹⁾ | μm | 7.0 ± 0.5 | 7.0 ± 0.5 |
| Peak Core Absorption at 976 nm (nominal) | dB/m | (300) | (300) |
| Core Absorption at 920 nm | dB/m | 75 ± 10 | 75 ± 10 |
| Core Numerical Aperture (nominal) | | 0.12 | 0.12 |
| Cut-off wavelength ⁽²⁾ | nm | 860 ± 70 | 860 ± 70 |
| Core background loss at 1200 nm, \leq | dB/km | 25 | 25 |
| Birefringence, \geq | 1E-04 | - | 2.0 |
| Geometrical and mechanical | | | |
| Core diameter (nominal) | μm | (5.5) | (5.5) |
| Core Concentricity Error, \leq | μm | 1.0 | 1.0 |
| Cladding Diameter | μm | 125 ± 2 | 125 ± 2 |
| Cladding Geometry | | Round | Round, PANDA |
| Coating Diameter | | 245 ± 15 | 245 ± 15 |
| Coating Material | | Dual coated high index acrylate | Dual coated high index acrylate |
| Proof Test, \geq | ksi | 100 | 100 |

⁽¹⁾ Near-field Mode Field Diameter

⁽²⁾ Calculated value