# **Product Specifications**

## Product No: Part# FF-HEB3.0/4.5

### 1. Scope

This specification covers basic requirements for the structure and optical performances of FF-HEB3.0/4.5.

End Emitting Fiber, 3.0mm dia. fiber with a 4.5mm dia. black PVC jacket

#### 2. Structure

| Product Data:                |              |            |
|------------------------------|--------------|------------|
| 1. Fiber core material       | MMA Polymer  |            |
| 2. Cladding material         | PTFE         | Jacket     |
| 3. Jacket material           | Black PVC    |            |
| 4. Minimum bending radius    | 6 x diameter |            |
| 5. Wavelength range          | 400-700nm    | Cladding   |
| 6. Interior Refractive Index | 1.475        | Ether core |
|                              |              | Fiber core |
|                              |              |            |

#### Specifications:

| Item                  |                                | Unit   | Index               | Testing method   |
|-----------------------|--------------------------------|--------|---------------------|------------------|
| Structural Parameters | Core diameter                  | mm     | 3                   | JIS C 6863       |
|                       | Outer diameter                 | mm     | 4.5                 |                  |
|                       | Cladding non-circularity       | %      | ≪6                  |                  |
|                       | Length                         | m/roll | 100                 |                  |
| Optical Properties    | Attenuation                    | dB/km  | ≤700                | 650nm JIS C 6863 |
|                       | Numerical Apertures            | /      | 0.68                |                  |
|                       | Attenuation (95% RH)           | dB/km  | 300-350             |                  |
| Mechanical Properties | Repeated bending<br>(200times) | dB     | Loss added $\leq 2$ | JIS C 6861       |
|                       | Tensile strength               | N      | 70                  |                  |
|                       | Twisting (5times)              | dB     | Loss added $\leq$ 2 |                  |
|                       | Impacting (0.4N/meter)         | dB     | Loss added $\leq$ 2 |                  |

Operating temperature: -40℃ to 70℃

Recommended Storage temperature: -10°C to 35°C

FiberFin Inc, www.fiberfin.com 9925 State Route 47 Unit A, Yorkville, IL 60560 P: 630-553-6924 Email: sales@fiberfin.com FiberFin ® POFULR® and Light-Seal ® are registered trademarks of FiberFin, Inc. Copyright© 2017 all Rights Reserved