

**SPECIFICATION FOR ENHANCED LOW MACROBENDING SENSITIVE, LOW WATER PEAK
SINGLEMODE OPTICAL FIBRE
ITU-T RECOMMENDATION G.657A2, G.657A1, G.652D**

OPTICAL PROPERTIES

Fibre selected to meet cabled attenuation of	@ 1310 nm @ 1550 nm	≤ 0.38 dB/km ≤ 0.25 dB/km
Attenuation Uniformity	Point or step defect	≤ 0.1 dB
	Extended variations	≤ 0.1 dB
Mode Field Diameter	@ 1310nm	8.8 ± 0.4 μm
Cut-Off Wavelength	λ _{ccf}	≤ 1260 nm
Zero Dispersion Wavelength		1300 - 1324 nm
Slope at Zero Dispersion Wavelength		≤ 0.092 ps/nm ² .km
Polarisation Mode Dispersion		
Uncabled fibre – Individual		≤ 0.1 ps/√km
Link Design Value PMDq		≤ 0.2 ps/√km
Effective Group Index	@1310/1550 nm	1.467/1.468

MACROBENDING PROPERTIES

10 turns around 30mm diameter	@ 1550 nm	≤ 0.03 dB/km
10 turns around 30mm diameter	@ 1625 nm	≤ 0.1 dB/km
1 turn around 20mm diameter	@ 1550 nm	≤ 0.1 dB/km
1 turn around 20mm diameter	@ 1625 nm	≤ 0.2 dB/km
1 turn around 15mm diameter	@ 1550 nm	≤ 0.5 dB/km
1 turn around 15mm diameter	@ 1625 nm	≤ 1.0 dB/km

GEOMETRICAL PROPERTIES

Cladding Diameter		125 ± 0.7 μm
Glass Concentricity Error		≤ 0.5 μm
Cladding Non-Circularity		≤ 0.7 %
Coating Diameter		242 ± 7 μm
Coating Concentricity Error		≤ 12.0 μm
Coating Non-Circularity		≤ 5 %

MECHANICAL PROPERTIES

Proof Test Level		≥ 0.69 GPa / ≥ 1.0 %
------------------	--	----------------------

- *ITU-T Recommendation G.657A2 replaces ITU-T Recommendation G.657B and is compatible with G.652D