

ARIA Testing Procedure

All cable assemblies and pigtails provided by ARIA Technologies, Inc. must pass rigorous standards.

Each connector is polished, cleaned, and tested in order to verify optimal signal transfer and provide low return loss* and insertion loss in accordance with Telcordia GR-326 Issue 4 requirements.

Every fiber is tested 100% for insertion loss (IL), return loss (RL)*, endface cleanliness, light transmission, and fiber breakage.

If the fiber is loaded into an enclosure, endface cleanliness, light transmission, and fiber breakage are checked again after loading.

*Return loss testing is performed for singlemode fiber only.



PASS

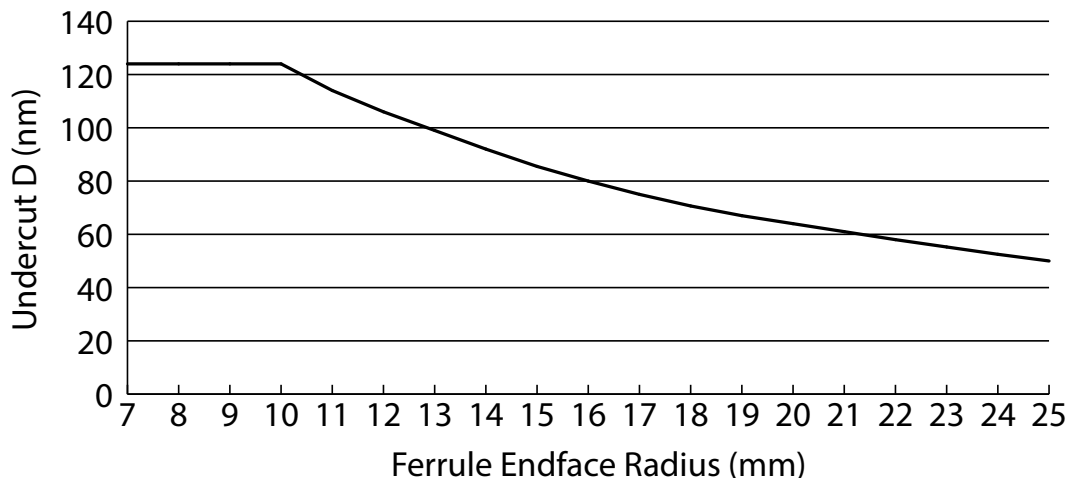
Insertion Loss (I.L.) and Return Loss (R.L.)

Singlemode 1.25mm & 2.5mm Ferrules							
Insertion Loss	Return Loss		Endface Geometry				Clarity
.20dB at 1550nm (typical 0.15 dB)	UPC -55dB	APC -65dB	Radius	Apex	Height	Angle	No visible scratches or pits at 400x magnification
			5-12mm	0-50µm	-D to 50nm*	8.0° +/- 0.30	
			7-25mm	0-50µm	-D to 50nm*	0.0° +/- 0.30	UPC

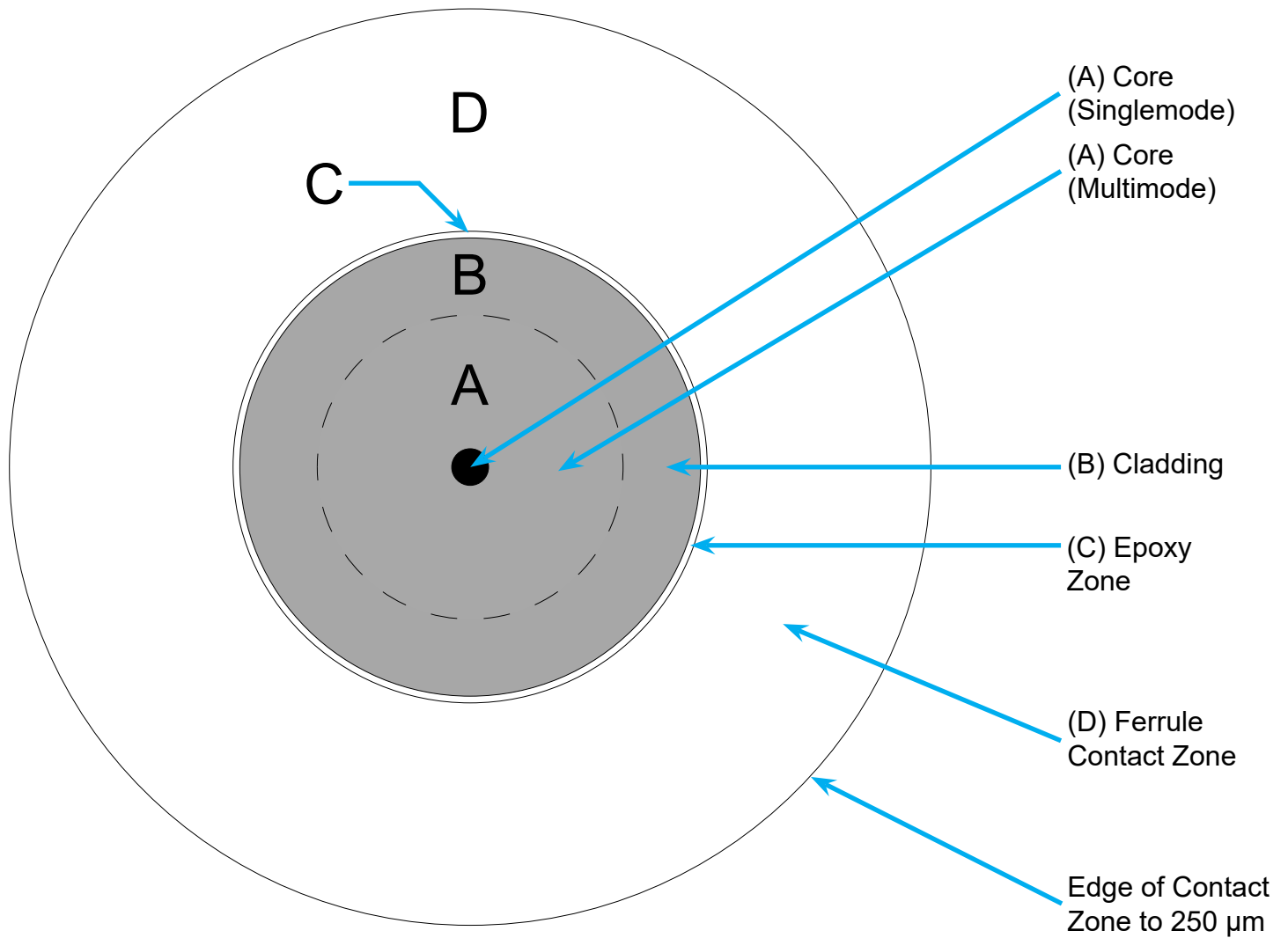
*See Telcordia GR326 Issue 4 Chart Below

Multimode 1.25mm & 2.5mm Ferrules							
Insertion Loss	Return Loss		Endface Geometry				Clarity
.20dB at 850nm (typical 0.15 dB)	No return loss testing is required		Radius	Apex	Height	Angle	No visible scratches or pits at 400x magnification
			7-25mm	0-50µm	-100 to +50nm	0.0+/-0.30	

Telcordia GR326 Issue 4 - Fiber Undercut Criteria of D



Endface Clarity



The ferrule end-face is inspected with a 400X microscope and the cleanliness requirement for each zone is given below.

Zone	Requirement		
	Scratches	Pits	Debris
A: Core (Diameter = 0-25 μm)	None	None	None
B: Cladding (Diameter = 25-120 μm)	None	None	None
C: Epoxy Zone (Diameter = 120-130 μm)	None	None	None
D: Ferrule Contact Zone (Diameter = 130-250 μm)	None	None	None