



Inspection Reference Artifact Ferrule: IRA1-00-0900

AFL Telecommunications through its Noyes Fiber Systems division, has teamed with Norsam Technologies to produce the "Standard" in fiber optic connector inspection.

Precision etchings are made on the fiber end face of FC connectors with patented ion-beam technology providing line width accuracy of +/- 30nanometers.

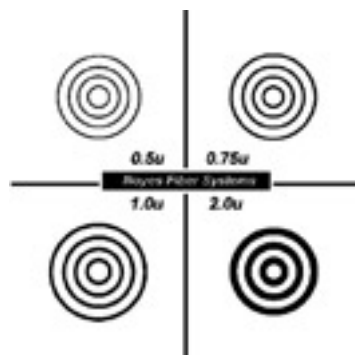
This tool answers the following user questions: What does a 1-micron spot (pit) look like? Can I see a 1/2 micron line (scratch) with the fiber scope I am currently using? Can automated inspection software (machine vision) recognize a 3/4 micron line (scratch)? Is my video fiber scope still providing the image resolution I need? What is the real magnification of my fiber inspection system?

applications

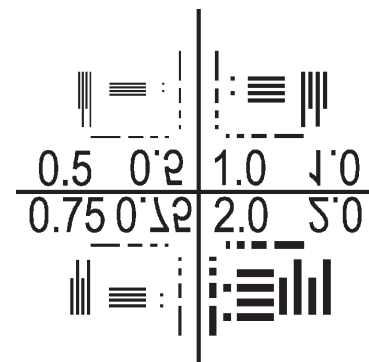
- Fiber inspection calibration
- Fiber-scope evaluation
- Training

features

- Each kit includes two artifact ferrules: each with a different pattern and each with four line widths: 1/2 micron, 3/4 micron, 1 micron, and 2 microns
- Each total pattern is 100 microns across and is centered on a 125 micron fiber end-face
- One ferrule contains concentric circles (targets) of the various line widths for a quick check of fiber-scope performance
- The other ferrule contains line pairs for resolution quantification, line segments for scratch recognition, and spot defects for pit recognition
- Each kit also includes a Video Microscope Magnification Reference card calibrated to 125-micron fiber (measures up to 500x)



Target Image



Line Pair Image



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specifications

Etched on AFL 2.5mm ferrule FC connector with 125-micron single mode fiber
Etching is 100 microns (both vertical and horizontal) and is centered on the fiber end-face
Line widths (in each quadrant) are 0.5, 0.75, 1.0 and 2.0 microns +/- 30 nanometers
Line pairs are 1000 lps / mm, 667 lps / mm, 500 lps / mm, and 250 lps / mm in 0.5, 0.75, 1.0, 2.0 micron quadrants respectively
Line segments are 1, 2, 4, and 8 microns in length for each line width
Spot defects are squares the size of the line width for each quadrant (0.5 x 0.5 micron, 0.75 x 0.75 micron, 1.0 x 1.0 micron, and 2.0 x 2.0 micron)
Case size: 8" x 2" x 1" (20.4cm x 5.1cm x 2.6cm)
Case weight (populated): 0.3 lbs. (0.14kg)
Artifact Length: 2 1/2" (6.4cm)

ordering information

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