TIGHT BUFFER OFNR CABLES
PRODUCT SPECIFICATION
77XXX12SAANOOF

This document establishes the specification requirements for a distribution indoor/outdoor fiber optic cable. This cable construction consists of multimode fibers in a distribution tight-buffered design with a riser rated PVC jacket. It contains test values for all-important mechanical, optical, and environmental parameters and as such, is the basis for all-incoming inspection and acceptance.

1.0 OVERALL CABLE CONSTRUCTION

1.1 Tight Buffered Fiber
Dimension: 900µm, nominal.
Tight buffered fiber color code: 1-blue, 2-orange, 3-green, 4-brown, 5-slate, 6-white, 7-red, 8-black, 9-yellow, 10-violet, 11-rose, and 12-aqua.

1.2 Cable strength
Aramid yarns with water swellable characteristics are pulled in with the tight-buffered fibers under the outer jacket.

1.3 Outer Sheath
Pressure extruded aqua UV resistant riser rated PVC jacket (or color per customer request)

1.4 Cable Markings
Indent printed: CCT GROUP77, FIBER OPTIC CABLE, # of fibers-50/125, MM/YY (month and year of manufacture), OFNR C(ETL)US, sequentially meter marked. Special print as required by customer.

1.5 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
7700212SAANOOF	2	4.6	.180	19	13
7700412SAANOOF	4	5.0	.195	22	15
7700612SAANOOF	6	5.3	.210	27	18
7700812SAANOOF	8	5.7	.225	31	21
7701212SAANOOF	12	6.6	.260	40	27

2.0 FIBER CHARACTERISTICS

2.1 Physical Parameters (nominal)

Fiber Type	Multimode*
Maximum Attenuation @ 850/1300nm**	3.0 /1.0 dB/km
LED Performance (Overfilled Launch Bandwidth)	1500/500MHz-km@850/1300
Laser EMB Performance	2000/500MHz-km@850/1300
Core Diameter, nominal	50 ± 3.0 µm
Cladding Diameter	125.0 ± 2.0 µm
Primary Coating Diameter	245 ± 5 µm
Cladding Non-circularity	<2%
Core-Clad Concentricity	≤3.0 µm
Zero Dispersion Wavelength	1300-1320nm
Maximum Zero Dispersion Slope	0.101 ps/nm^2-km
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.481/1.476
Proof Test	100 kpsi

**Guaranteed Gigabit Ethernet Distance of 300mtr at 850nm for 10 Gb/s per IEEE802.3ae and 1000mtr at 850nm for 1 Gb/s per IEEE802.3z.*

***Measured attenuations on shipping reels will not exceed the nominal values by .75dB/km.*

3.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:
- Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf
  12-fiber 2700N/600lbf
- Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf
  12-fiber 600N/135lbf

Minimum bending radius:
- Loaded: 20 x diameter
- Unloaded: 10 x diameter

Impact Resistance: 25 Impacts (min.)
Flexing, ±90°: 25 Cycles (min.)
Temperature rating:
- Operation: -40°C to +85°C
- Installation: 0°C to +75°C
- Storage: -55°C to +85°C

Crush Resistance: 100N/cm

4.0 PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available.

5.0 APPLICABLE DOCUMENTS

Reference Documents:
- TIA/EIA FOTP Standards 455
- Color Coding of Fiber Optic Cables TIA/EIA-598
- UL 1666
- GR-409-CORE