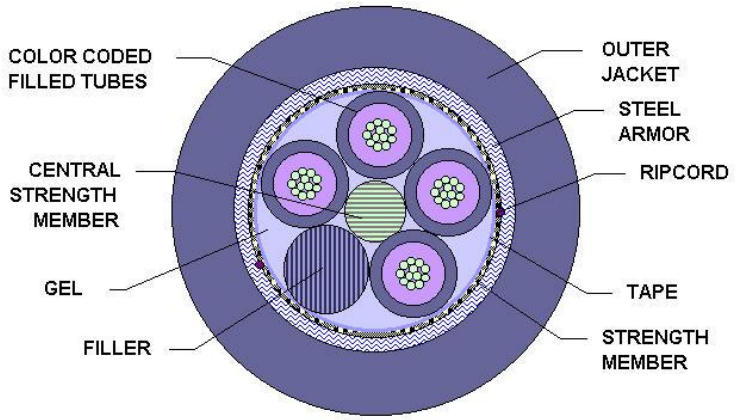
OSP LOOSE TUBE LITE ARMOUR FIBER OPTIC CABLE
PRODUCT SPECIFICATION
48XXX74EEBSXNN

This document establishes the specifications for an outdoor, direct burial, armored single mode fiber optic cable, in a flooded loose buffer tube design. 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 CABLE CROSS SECTION



2.0 OVERALL CABLE CONSTRUCTION

2.1 Buffer tube
High Modulus Polymeric material
Dimension: 2.8 mm. nominal.
Tube and fiber color code per EIA/TIA-598 or as specified by customer.
Filling compound: A non-toxic and dermatological safe antioxidant hydrocarbon based gel.

2.2 Dielectric Central strength member
Epoxy Glass Rod with an up-coat of polymer (if necessary per construction)

2.3 Cable Core
The cable elements are stranded around the CSM, using reverse oscillation.
Moisture Resistance: The interstices are flooded with a homogeneous, non-hygroscopic, non-conductive and non-toxic, dermal safe polyolefin based compound to prevent water ingress and migration of moisture through the cable core. Then a non-wicking and non-hygroscopic polypropylene tape is applied longitudinally with a nominal 25% overlap.
Binder yarns are applied over the core tape.

2.4 Cable strength
Circumferential strength members are placed over the cable core and under the armor tape.

2.5 Steel Armor tape
Corrugated flexible steel with plastic coating for bonding to sheath. The armor of each length of cable shall be electrically continuous with no more than one splice allowed per kilometer of cable. The breaking strength of any section of an armor tape containing a factory splice joint, shall not be less than 80% of the breaking strength of an adjacent section of the armor of equal length without a joint.
A ripcord is applied under the armor tape.

2.6 Outer Sheath
UV Resistant Black Polyethylene

2.7 Cable Markings
Indent printed: CCT GROUP48, FIBER OPTIC CABLE, # of fibers-SM, MM/YY (month and year of manufacture), TELEPHONE HANDSET SYMBOL sequentially meter marked. Special print as required by customer.

2.8 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers per Tube	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
4800674EEBSFNN	6	13.0	.510	161	108
4800874EEBSHNN	8	13.0	.510	161	108
4801274EEBSFNN	6	13.0	.510	166	112
4801274EEBSLNN	12	13.0	.510	161	108
4801874EEBSFNN	6	13.0	.510	163	109
4802474EEBSFNN	6	13.0	.510	168	113
4802474EEBSLNN	12	13.0	.510	171	115
4803074EEBSFNN	6	13.0	.510	161	108
4803274EEBSHNN	8	13.0	.510	168	113
4803674EEBSFNN	6	13.7	.540	190	128
4803674EEBSLNN	12	13.0	.510	162	109
4804874EEBSLNN	12	13.0	.510	163	110
4806074EEBSLNN	12	13.0	.510	177	119
4807274EEBSLNN	12	13.7	.540	190	128
4808474EEBSLNN	12	14.7	.580	205	137
4809674EEBSLNN	12	15.6	.615	236	159
4810874EEBSLNN	12	16.8	.660	263	177
4812074EEBSLNN	12	17.7	.695	288	193
4814474EEBSLNN	12	19.4	.765	344	231
4821674EEBSLNN	12	19.6	.773	346	232
4828874EEBSLNN	12	22.4	.880	444	298

3.0 FIBER CHARACTERISTICS

Fiber Type	**Single mode***
Maximum Attenuation @ 1310/1550nm	0.35/0.25 dB/km
Core Diameter	8.2 µm
Cladding Diameter	125.0 ± 0.7 µm
Maximum Core/Clad Concentricity Error	0.5 µm
Maximum Cladding Non-circularity	1.0%
Primary Coating Diameter	245 ± 5 µm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.2 ± 0.4µm @1310nm 10.4 ± 0.8µm @1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	≤0.092ps/nm^2-km
Maximum PMD Link Design Value	0.08ps/√km
Group Refractive Index @ 1310/1550	1.4677 / 1.4682
Proof Test	100 kpsi

**According to ITU G.652c,d*

4.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:
- Installation: 2700N / 607lbf
- Long Term: 890N / 200lbf

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

Crush Resistance: 440N/cm

Impact Resistance: 25 Impacts (min.)
Flexing, ±90°: 25 Cycles (min.)
Temperature Rating:
- Operation: -40°C to +70°C
- Installation: -40°C to +55°C
- Storage: -50°C to +70°C

Twist Test: 25 Cycles (min.)

5.0 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.

6.0 APPLICABLE DOCUMENTS

Reference Documents:
- TIA/EIA FOTP Standards 455
- Color Coding of Fiber Optic Cables TIA/EIA-598
- RUS 1755.900
- GR-20-CORE