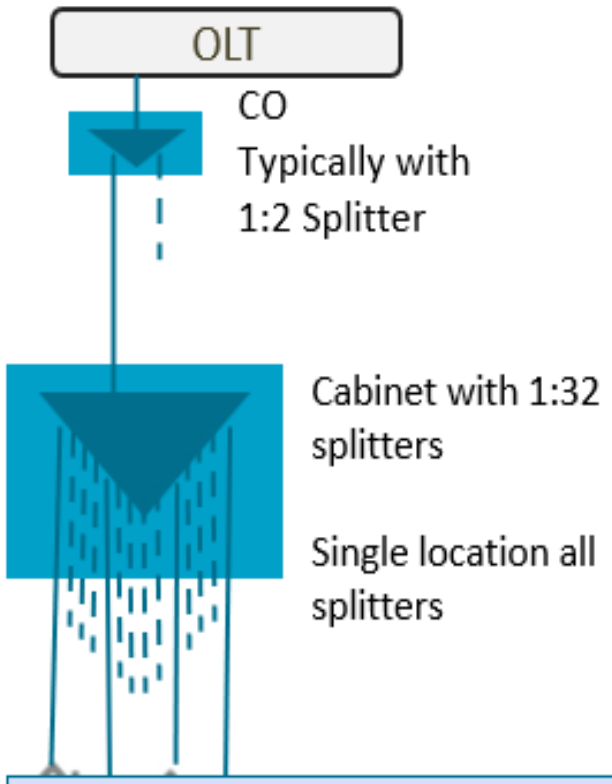
# Resounds Fiber Architecture

## Centralized Split

- Application: Urban / Suburban




- OLT utilization
- Fewer troubleshooting points
- Hight less flexibility for change
- Greater distribution fiber requirements

# Port Mapping

| FIBER CABLE | | FIBER ID | | UPLINK PORT MAPPING TABLE | | | |
|---|---|---|---|---|---|---|---|
| | | TUBE # | FIBER # | FDP PORT # | UPLINK JUMPER ID # | CALIX PORT # | CALIX CARD # |
| BL | BL | 1 | 1 | 1 | | SFP-1 | CARD-1 |
| BL | OR | 1 | 2 | 2 | | SFP-2 | CARD-1 |
| BL | GN | 1 | 3 | 3 | | | |
| BL | BR | 1 | 4 | 4 | | | |
| BL | SL | 1 | 5 | 5 | | | |
| BL | WH | 1 | 6 | 6 | | | |
| BL | RD | 1 | 7 | 7 | | | |
| BL | BK | 1 | 8 | 8 | | | |
| BL | YL | 1 | 9 | 9 | | | |
| BL | VI | 1 | 10 | 10 | | | |
| BL | RS | 1 | 11 | 11 | | | |
| BL | AQ | 1 | 12 | 12 | | | |

| FIBER CABLE | | FIBER ID | | SPLITTER OUTPUT PORT MAPPING TABLE | | | |
|---|---|---|---|---|---|---|---|
| | | TUBE # | FIBER # | FDP PORT # | SPLITTER ID/FIBER # | CALIX PORT # | CALIX CARD # |
| OR | BL | 2 | 13 | 13 | SPLITTER-1/F1 | | |
| OR | OR | 2 | 14 | 14 | SPLITTER-1/F2 | | |
| OR | GN | 2 | 15 | 15 | SPLITTER-1/F3 | | |
| OR | BR | 2 | 16 | 16 | SPLITTER-1/F4 | | |
| OR | SL | 2 | 17 | 17 | SPLITTER-1/F5 | | |
| OR | WH | 2 | 18 | 18 | SPLITTER-1/F6 | | |
| OR | RD | 2 | 19 | 19 | SPLITTER-1/F7 | | |
| OR | BK | 2 | 20 | 20 | SPLITTER-1/F8 | PORT-1 | CARD-1 |
| OR | YL | 2 | 21 | 21 | SPLITTER-1/F9 | | |
| OR | VI | 2 | 22 | 22 | SPLITTER-1/F10 | | |
| OR | RS | 2 | 23 | 23 | SPLITTER-1/F11 | | |
| OR | AQ | 2 | 24 | 24 | SPLITTER-1/F12 | | |
| GN | BL | 3 | 25 | 25 | SPLITTER-1/F13 | | |
| GN | OR | 3 | 26 | 26 | SPLITTER-1/F14 | | |
| GN | GN | 3 | 27 | 27 | SPLITTER-1/F15 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GN | BR | 3 | 28 | 28 | SPLITTER-1/F16 | | |
| GN | SL | 3 | 29 | 29 | SPLITTER-1/F17 | | |
| GN | WH | 3 | 30 | 30 | SPLITTER-1/F18 | | |
| GN | RD | 3 | 31 | 31 | SPLITTER-1/F19 | | |
| GN | BK | 3 | 32 | 32 | SPLITTER-1/F20 | | |
| GN | YL | 3 | 33 | 33 | SPLITTER-1/F21 | | |
| GN | VI | 3 | 34 | 34 | SPLITTER-1/F22 | | |
| GN | RS | 3 | 35 | 35 | SPLITTER-1/F23 | | |
| GN | AQ | 3 | 36 | 36 | SPLITTER-1/F24 | | |
| BR | BL | 4 | 37 | 37 | SPLITTER-1/F25 | | |
| BR | OR | 4 | 38 | 38 | SPLITTER-1/F26 | | |
| BR | GN | 4 | 39 | 39 | SPLITTER-1/F27 | | |
| BR | BR | 4 | 40 | 40 | SPLITTER-1/F28 | | |
| BR | SL | 4 | 41 | 41 | SPLITTER-1/F29 | | |
| BR | WH | 4 | 42 | 42 | SPLITTER-1/F30 | | |
| BR | RD | 4 | 43 | 43 | SPLITTER-1/F31 | | |
| BR | BK | 4 | 44 | 44 | SPLITTER-1/F32 | | |
| BR | YL | 4 | 45 | 45 | SPLITTER-2/F1 | | |
| BR | VI | 4 | 46 | 46 | SPLITTER-2/F2 | | |
| BR | RS | 4 | 47 | 47 | SPLITTER-2/F3 | | |
| BR | AQ | 4 | 48 | 48 | SPLITTER-2/F4 | | |
| SL | BL | 5 | 49 | 49 | SPLITTER-2/F5 | | |
| SL | OR | 5 | 50 | 50 | SPLITTER-2/F6 | | |
| SL | GN | 5 | 51 | 51 | SPLITTER-2/F7 | | |
| SL | BR | 5 | 52 | 52 | SPLITTER-2/F8 | | |
| SL | SL | 5 | 53 | 53 | SPLITTER-2/F9 | | |
| SL | WH | 5 | 54 | 54 | SPLITTER-2/F10 | | |
| SL | RD | 5 | 55 | 55 | SPLITTER-2/F11 | | |
| SL | BK | 5 | 56 | 56 | SPLITTER-2/F12 | | |
| SL | YL | 5 | 57 | 57 | SPLITTER-2/F13 | PORT-2 | CARD-1 |
| SL | VI | 5 | 58 | 58 | SPLITTER-2/F14 | | |
| SL | RS | 5 | 59 | 59 | SPLITTER-2/F15 | | |
| SL | AQ | 5 | 60 | 60 | SPLITTER-2/F16 | | |
| WH | BL | 6 | 61 | 61 | SPLITTER-2/F17 | | |
| WH | OR | 6 | 62 | 62 | SPLITTER-2/F18 | | |
| WH | GN | 6 | 63 | 63 | SPLITTER-2/F19 | | |
| WH | BR | 6 | 64 | 64 | SPLITTER-2/F20 | | |
| WH | SL | 6 | 65 | 65 | SPLITTER-2/F21 | | |
| WH | WH | 6 | 66 | 66 | SPLITTER-2/F22 | | |
| WH | RD | 6 | 67 | 67 | SPLITTER-2/F23 | | |
| WH | BK | 6 | 68 | 68 | SPLITTER-2/F24 | | |
| WH | YL | 6 | 69 | 69 | SPLITTER-2/F25 | | |

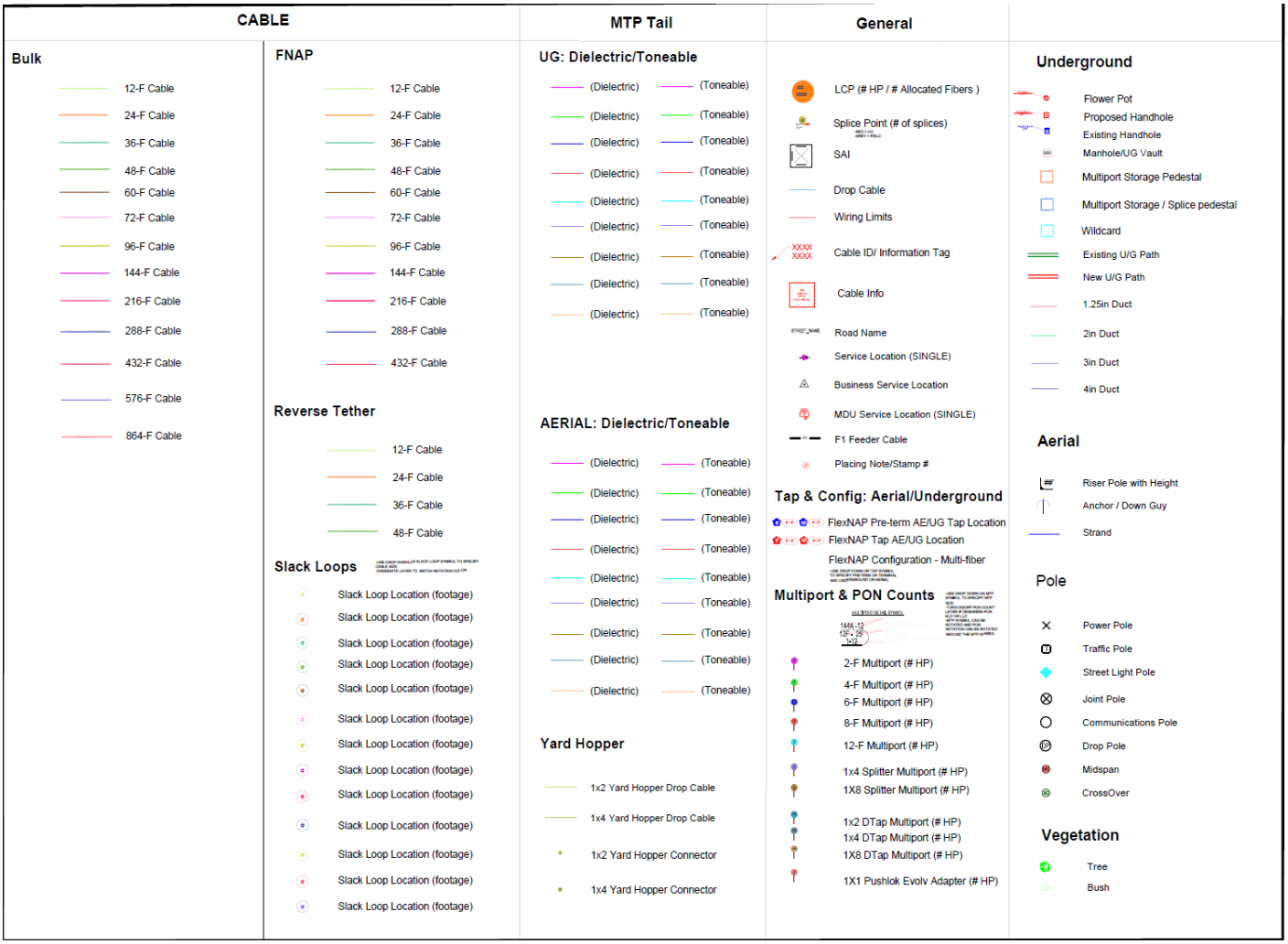
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WH | VI | 6 | 70 | 70 | SPLITTER-2/F26 | | |
| WH | RS | 6 | 71 | 71 | SPLITTER-2/F27 | | |
| WH | AQ | 6 | 72 | 72 | SPLITTER-2/F28 | | |
| RD | BL | 7 | 73 | 73 | SPLITTER-2/F29 | | |
| RD | OR | 7 | 74 | 74 | SPLITTER-2/F30 | | |
| RD | GN | 7 | 75 | 75 | SPLITTER-2/F31 | | |
| RD | BR | 7 | 76 | 76 | SPLITTER-2/F32 | | |
| RD | SL | 7 | 77 | 77 | SPLITTER-3/F1 | | |
| RD | WH | 7 | 78 | 78 | SPLITTER-3/F2 | | |
| RD | RD | 7 | 79 | 79 | SPLITTER-3/F3 | | |
| RD | BK | 7 | 80 | 80 | SPLITTER-3/F4 | | |
| RD | YL | 7 | 81 | 81 | SPLITTER-3/F5 | | |
| RD | VI | 7 | 82 | 82 | SPLITTER-3/F6 | | |
| RD | RS | 7 | 83 | 83 | SPLITTER-3/F7 | | |
| RD | AQ | 7 | 84 | 84 | SPLITTER-3/F8 | | |
| BK | BL | 8 | 85 | 85 | SPLITTER-3/F9 | | |
| BK | OR | 8 | 86 | 86 | SPLITTER-3/F10 | | |
| BK | GN | 8 | 87 | 87 | SPLITTER-3/F11 | | |
| BK | BR | 8 | 88 | 88 | SPLITTER-3/F12 | | |
| BK | SL | 8 | 89 | 89 | SPLITTER-3/F13 | | |
| BK | WH | 8 | 90 | 90 | SPLITTER-3/F14 | | |
| BK | RD | 8 | 91 | 91 | SPLITTER-3/F15 | | |
| BK | BK | 8 | 92 | 92 | SPLITTER-3/F16 | PORT-3 | CARD-1 |
| BK | YL | 8 | 93 | 93 | SPLITTER-3/F17 | | |
| BK | VI | 8 | 94 | 94 | SPLITTER-3/F18 | | |
| BK | RS | 8 | 95 | 95 | SPLITTER-3/F19 | | |
| BK | AQ | 8 | 96 | 96 | SPLITTER-3/F20 | | |
| YL | BL | 9 | 97 | 97 | SPLITTER-3/F21 | | |
| YL | OR | 9 | 98 | 98 | SPLITTER-3/F22 | | |
| YL | GN | 9 | 99 | 99 | SPLITTER-3/F23 | | |
| YL | BR | 9 | 100 | 100 | SPLITTER-3/F24 | | |
| YL | SL | 9 | 101 | 101 | SPLITTER-3/F25 | | |
| YL | WH | 9 | 102 | 102 | SPLITTER-3/F26 | | |
| YL | RD | 9 | 103 | 103 | SPLITTER-3/F27 | | |
| YL | BK | 9 | 104 | 104 | SPLITTER-3/F28 | | |
| YL | YL | 9 | 105 | 105 | SPLITTER-3/F29 | | |
| YL | VI | 9 | 106 | 106 | SPLITTER-3/F30 | | |
| YL | RS | 9 | 107 | 107 | SPLITTER-3/F31 | | |
| YL | AQ | 9 | 108 | 108 | SPLITTER-3/F32 | | |
| VI | BL | 10 | 109 | 109 | SPLITTER-4/F1 | PORT-4 | CARD-1 |
| VI | OR | 10 | 110 | 110 | SPLITTER-4/F2 | | |

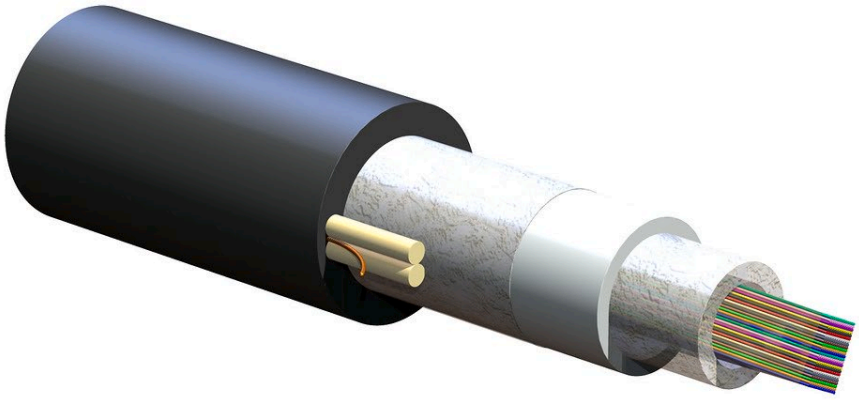
| | | | | | |
|---|---|---|---|---|---|
| VI | GN | 10 | 111 | 111 | SPLITTER-4/F3 |
| VI | BR | 10 | 112 | 112 | SPLITTER-4/F4 |
| VI | SL | 10 | 113 | 113 | SPLITTER-4/F5 |
| VI | WH | 10 | 114 | 114 | SPLITTER-4/F6 |
| VI | RD | 10 | 115 | 115 | SPLITTER-4/F7 |
| VI | BK | 10 | 116 | 116 | SPLITTER-4/F8 |
| VI | YL | 10 | 117 | 117 | SPLITTER-4/F9 |
| VI | VI | 10 | 118 | 118 | SPLITTER-4/F10 |
| VI | RS | 10 | 119 | 119 | SPLITTER-4/F11 |
| VI | AQ | 10 | 120 | 120 | SPLITTER-4/F12 |
| RS | BL | 11 | 121 | 121 | SPLITTER-4/F13 |
| RS | OR | 11 | 122 | 122 | SPLITTER-4/F14 |
| RS | GN | 11 | 123 | 123 | SPLITTER-4/F15 |
| RS | BR | 11 | 124 | 124 | SPLITTER-4/F16 |
| RS | SL | 11 | 125 | 125 | SPLITTER-4/F17 |
| RS | WH | 11 | 126 | 126 | SPLITTER-4/F18 |
| RS | RD | 11 | 127 | 127 | SPLITTER-4/F19 |
| RS | BK | 11 | 128 | 128 | SPLITTER-4/F20 |
| RS | YL | 11 | 129 | 129 | SPLITTER-4/F21 |
| RS | VI | 11 | 130 | 130 | SPLITTER-4/F22 |
| RS | RS | 11 | 131 | 131 | SPLITTER-4/F23 |
| RS | AQ | 11 | 132 | 132 | SPLITTER-4/F24 |
| AQ | BL | 12 | 133 | 133 | SPLITTER-4/F25 |
| AQ | OR | 12 | 134 | 134 | SPLITTER-4/F26 |
| AQ | GN | 12 | 135 | 135 | SPLITTER-4/F27 |
| AQ | BR | 12 | 136 | 136 | SPLITTER-4/F28 |
| AQ | SL | 12 | 137 | 137 | SPLITTER-4/F29 |
| AQ | WH | 12 | 138 | 138 | SPLITTER-4/F30 |
| AQ | RD | 12 | 139 | 139 | SPLITTER-4/F31 |
| AQ | BK | 12 | 140 | 140 | SPLITTER-4/F32 |
| AQ | YL | 12 | 141 | 141 | |
| AQ | VI | 12 | 142 | 142 | |
| AQ | RS | 12 | 143 | 143 | |
| AQ | AQ | 12 | 144 | 144 | |



**1. THE CONTRACTOR MUST OBTAIN THE LOCATES PRIOR TO DISTURBING THE GROUND.**
**2. CONTRACTOR MUST HAVE A COPY OF THE APPROVED PERMIT FROM THE APPROPRIATE AGENCY ON THE JOBSITE AT ALL TIMES.**
**3. NO MORE THAN ONE TRENCH OPENED AT ONE TIME THEN BACKFILLED AND COMPACTED IN 10" LIFTS AT THE END OF EACH DAY. (NO TRENCH LEFT OPENED OVERNIGHT)**
**4. ALL CABLE SHALL BE BURIED AT 24" UNLESS OTHERWISE NOTED.**
**5. ALL DIRECTIONAL BORES TO HAVE A MINIMUM OF 30" COVER UNLESS OTHERWISE NOTED.**
**6. ALL DIRECTIONAL CORES CROSSING ROADS SHALL CROSS AS CLOSE TO 90 DEGREES AS POSSIBLE. CROSSINGS SHALL NEVER CROSS AT AN ANGLE LESS THAN 45 DEGREES.**
**7. BONDING SHALL BE PROVIDED BETWEEN ALL ABOVE GROUND METALLIC POWER AND COMMUNICATION PEDESTALS THAT ARE SEPERATED BY 6 FEET OR LESS. (REF: 1993 NESC SECTION 35, ARTICLE 350.F.)**
**8. THE CONDITION OF ROAD UPON COMPLETION OF JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING.**
**9. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS, AND TREES ALONG THE AREA OF EXCAVATION.**
**10. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE LAWS CONCERNING EXCAVATION.**
**11. SERVICE DROP PATHS ARE GRAPHICAL IN NATURE ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION.**
**12. CABLE PATHS ARE AN APPROXIMATE LOCATION AND SHALL BE PLACED IN THE UTILITY RIGHT OF WAY.**

# Legend


CABLE
Bulk
12-F Cable
24-F Cable
36-F Cable
48-F Cable
60-F Cable
72-F Cable
96-F Cable
144-F Cable
216-F Cable
288-F Cable
432-F Cable
576-F Cable
864-F Cable
FNAP
12-F Cable
24-F Cable
36-F Cable
48-F Cable
60-F Cable
72-F Cable
96-F Cable
144-F Cable
216-F Cable
288-F Cable
432-F Cable
Reverse Tether
12-F Cable
24-F Cable
36-F Cable
48-F Cable
Slack Loops
Slack Loop Location (footage)
MTP Tail
UG: Dielectric/Toneable
(Dielectric)
(Toneable)
AERIAL: Dielectric/Toneable
(Dielectric)
(Toneable)
Yard Hopper
1x2 Yard Hopper Drop Cable
1x4 Yard Hopper Drop Cable
1x2 Yard Hopper Connector
1x4 Yard Hopper Connector
General
LCP (# HP / # Allocated Fibers )
Splice Point (# of splices)
SAI
Drop Cable
Wiring Limits
Cable ID/ Information Tag
Cable Info
Road Name
Service Location (SINGLE)
Business Service Location
MDU Service Location (SINGLE)
F1 Feeder Cable
Placing Note/Stamp #
Tap & Config: Aerial/Underground
FlexNAP Pre-term AE/UG Tap Location
FlexNAP Tap AE/UG Location
FlexNAP Configuration - Multi-fiber
Multiport & PON Counts
2-F Multiport (# HP)
4-F Multiport (# HP)
6-F Multiport (# HP)
8-F Multiport (# HP)
12-F Multiport (# HP)
1x4 Splitter Multiport (# HP)
1X8 Splitter Multiport (# HP)
1x2 DTap Multiport (# HP)
1x4 DTap Multiport (# HP)
1X8 DTap Multiport (# HP)
1X1 Pushlok Evolv Adapter (# HP)
Underground
Flower Pot
Proposed Handhole
Existing Handhole
Manhole/UG Vault
Multiport Storage Pedestal
Multiport Storage / Splice pedestal
Wildcard
Existing U/G Path
New U/G Path
1.25in Duct
2in Duct
3in Duct
4in Duct
Aerial
Riser Pole with Height
Anchor / Down Guy
Strand
Pole
Power Pole
Traffic Pole
Street Light Pole
Joint Pole
Communications Pole
Drop Pole
Midspan
CrossOver
Vegetation
Tree
Bush



XXXEV4-14100D53

# SST-UltraRibbon Single-Tube, Gel-Free Cable F, Single-mode (OS2)

- Technical Documents
- Feature/Benefits

| General Specifications | |
|---|---|
| Product Number | xxxEV4-14100D53 |
| EAN Code | 4056418187402 |
| Cable Type | Ribbon |
| Environment | Outdoor |
| Product Type | Dielectric |
| Fiber Category | Single mode (OS2) |
| Application | Aerial, Duct |
| Cable geometry | Round |

| Standards | |
|---|---|
| RoHS | Free of hazardous substances ac |

| | |
|---|---|
| Common Installations | Outdoor lashed aerial and duct, i<br>Article 770 |
| Design and Test Criteria | ANSI/ICEA S-87-640, Telcordi |

| Environmental Conditions | |
|---|---|
| Temperature Range, Installation | -30 °C |
| Temperature Range, Operation | -40 °C |
| Temperature Range, Storage | -40 °C |

| Cable Design | |
|---|---|
| Buffer Tube Color | Natural |
| Fiber Count | 288 |
| Buffer Tube Diameter | 14 mm (0.55 in) |
| Number of Ripcords | 2 |
| Fiber Coloring | Blue, Orange, Green, Brown, Slate, White, Red, Bla |
| Outer Jacket Color | Black |
| Outer Jacket Material | Polyethylene (PE) |
| Tensile Strength Elements and/or Armoring - Layer 1 | Dielectric strength members |
| Tape | Waterblocking foam tape |
| Tape, Layer 1 | Water-swellable |
| Tape, Layer 2 | Water-swellable |
| Ribbons per Tube | 12 |
| Fibers per Ribbon | 24 |

| Mechanical Specifications | |
|---|---|
| Max. Tensile Strength, Long-Term | 890 N (200.08 lbf) |
| Max. Tensile Strength, Short-Term | 2700 N (606.98 lbf) |
| Nominal Outer Diameter | 20.3 mm (0.8 in) |
| Min. Bend Diameter Operation | 406 mm (15.98 in) |
| Min. Bend Diameter Installation | 610 mm (24.02 in) |

| Optical Characteristics | |
|---|---|
| Fiber Code | E |
| Fiber Name | Single mode ( |
| Fiber Type | Single mode |
| Performance Option Code | 00 |
| Maximum Attenuation | 0.35 dB/km / ( |
| Wavelengths | 1310 nm / 138 |
| Fiber Category | G.652.D |

| Dimensions | |
|---|---|
| Cable Weight | 265 kg/km (178.07 lb/1000 ft) |

# Testing

**document to record light level results from a Fiber to the Home (FTTH) project is crucial for maintaining clear and accurate records. Below is a suggested template for a light level results recording sheet. You can adjust it according to the specific needs of your project.**

**FTTH Project Light Level Results Recording Sheet**

**Project Information**
**Project Name: _____**
**Location: _____**
**Date: _____**
**Technician Name: _____**
**Technician Contact: _____**

**Fiber Optic Cable Information**
**Cable ID: _____**
**Cable Type: (e.g., Single Mode/Multimode) _____**
**Fiber Count: _____**
**Splice Location: _____**

**Light Level Test Results**

| Test Point | Connector ID | Source Power (dBm) | Measured Power (dBm) | Attenuation (dB) | Pass/Fail |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |

**Notes**
**Test Equipment Used: _____**
**Calibration Date: _____**
**Environmental Conditions: _____**

**Additional Observations: _____**

**Approval**
**Technician Signature: _____**
**Date: _____**
**Supervisor Signature: _____**
**Date: _____**

**Instructions for Use**

**1. Project Information: Fill in the project name, location, date, technician name, and contact information.**
**2. Fiber Optic Cable Information: Record the cable ID, type of cable (e.g., single mode or multimode), fiber count, and splice location.**
**3. Light Level Test Results: For each test point, enter the connector ID, the source power level (in dBm), the measured power level (in dBm), calculate the attenuation (difference between source and measured power), and indicate if the test passed or failed. Provide any remarks if necessary.**
**4. Notes: Include the test equipment used, its calibration date, any relevant environmental conditions, and additional observations.**
**5. Approval: Sign and date the document as a technician and have a supervisor sign and date for approval.**

**This template ensures that all critical data is systematically recorded and easily accessible for analysis, reporting, and troubleshooting. It can be adapted to electronic or paper-based systems as needed.**

**This document outlines a centralized split with a 1x32 architecture for Fiber to the Home (FTTH)**

**Centralized Split 1x32 Architecture for FTTH**

**1. Project Overview**
**Project Name: _____**
**Project Location: _____**
**Date: _____**
**Prepared by: _____**
**Reviewed by: _____**

**2. Network Architecture Overview**
**Architecture Type: Centralized Split**
**Splitter Ratio: 1x32**
**Total Number of End Users: _____**

**Service Area: _____**

**3. Design Considerations**
**Distance from OLT to Splitter: _____**
**Distance from Splitter to ONT: _____**
**Loss Budget: _____**
**Optical Line Terminal (OLT) Power: _____ dBm**
**Splitter Loss: _____ dB**
**Connector Loss (Total): _____ dB**
**Fiber Loss: _____ dB/km**
**Total Allowable Loss: _____ dB**

**4. Components and Equipment**
**Optical Line Terminal (OLT):**
**Model: _____**
**Location: _____**

**Fiber Distribution Hub (FDH):**
**Type: _____**
**Location: _____**

**Splitters:**
**Type: 1x32**
**Insertion Loss: _____ dB**
**Number of Splitters: _____**
**Location (FDH): _____**

**Optical Network Terminal (ONT)**:**
**Model: _____**
**Location: Customer Premises**

**5. Network Diagram**

**Include a network diagram here or attach as a separate document)**

**- **Diagram Components:**
**- OLT in Central Office**
**- Fiber Distribution Hub (FDH)**
**- 1x32 Splitter**
**- Fiber Optic Cable Paths**
**- ONTs at Customer Premises**

**6. Installation and Cabling Plan**

**Main Feeder Cable:**
**Cable Type: _____**
**Fiber Count: _____**
**Route Description: _____**

**Distribution Cable:**
**Cable Type: _____**
**Fiber Count: _____**
**Route Description: _____**

**Drop Cable:**
**Cable Type: _____**
**Length Range: _____**

**Splicing and Connectorization:**
**Splice Type: _____**
**Connector Type: _____**

**7. Testing and Verification**
**Test Equipment:**
**Optical Time Domain Reflectometer (OTDR)**
**Power Meter**
**Light Source**

**Testing Procedures:**
**End-to-End Loss Testing**
**Continuity Testing**
**Splitter Loss Testing**

**Acceptance Criteria:**
**Maximum Loss Threshold: _____**
**Pass/Fail Criteria: _____**

**8. Risk Assessment and Mitigation**
**Potential Risks:**
- **High attenuation in fibers**
- **Splitter malfunction**
- **Poor splicing quality**

**Mitigation Strategies:**
**Regular testing and maintenance**
**Use high-quality components.**
**Training for installation personnel**

**9. Maintenance and Troubleshooting**
**Scheduled Maintenance: _____**
**Common Faults:**
**Signal Loss**
**Fiber Breaks**
**Connector Failures**

**Troubleshooting Steps:**
**Visual Inspection**
**OTDR Testing**
**Re-splicing as needed.**

**10. Documentation and Record Keeping**
**As-built Diagrams: _____**
**Splicing Records: _____**
**Test Results: _____**
**Maintenance Logs: _____**

**11. Approval and Sign-off**
**Prepared by: _____**
**Signature: _____ Date: _____**

**Reviewed by: _____**
**Signature: _____ Date: _____**

**Approved by: _____**
**Signature: _____ Date: _____**

**---**

**Instructions for Use**

**1. Project Overview**: Provide the project name, location, date, and details of the personnel involved in preparing and reviewing the document.**
**2. Network Architecture Overview**: Outline the centralized split architecture, including splitter ratio and service area.**
**3. Design Considerations**: Include key design parameters such as distances, loss budgets, and power levels.**
**4. Components and Equipment**: List all major equipment and components with their specifications and locations.**
**5. Network Diagram**: Attach a detailed network diagram showing the layout of OLT, splitters, and ONTs.**
**6. Installation and Cabling Plan**: Detail the types of cables used, their routes, and splicing and connectorization plans.**

**7. Testing and Verification**: Specify the test equipment, testing procedures, and acceptance criteria for the network.**
**8. Risk Assessment and Mitigation**: Identify potential risks and the strategies to mitigate them.**
**9. Maintenance and Troubleshooting**: Provide guidelines for regular maintenance and steps for troubleshooting common issues.**
**10. Documentation and Record Keeping**: Ensure that all diagrams, test results, and maintenance logs are kept up to date.**
**11. Approval and Sign-off**: Obtain signatures from relevant personnel to validate the document.**

**This structured document will help ensure a clear, organized, and consistent approach to implementing and maintaining a centralized split 1x32 FTTH architecture.**