

Sterlite Technologies Limited

LETTER REPORT

SCOPE OF WORK

Performance testing of a cabling configuration electrical transmission performance to the requirements of ANSI/TIA-568.2-D for Category 6 channel.

REPORT NUMBER

105764505CRT-001a

ISSUE DATE

18-March-2024

REVISED DATE

None

TESTS START DATE

15-March-2024

TESTS END DATE

15-March-2024

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4

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LETTER REPORT

18-March-2024

Intertek Report No. 105764505CRT-001a

Intertek Project No. G105764505

Mr. S.S. Harikanth
Sterlite Technologies Limited
33/1/1, Wagdhara Road
UT of Dadra and Nagerhaveli
Silvassa 396191
India

Subject: Performance testing of category 6 unshielded channel per ANSI/TIA-568.2-D

Dear Mr. Harikanth:

This letter report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following document(s):

ANSI/TIA-568.2-D-2018, Balanced Twisted-Pair Telecommunications Cabling and Components Standard, dated September 2018

ANSI/TIA-568.2-D-2-2020, Balanced Twisted-Pair Telecommunications Cabling and Components Standard Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling, dated August 2020

SECTION 1 SUMMARY

Intertek wishes to inform you that the electrical transmission tests have been performed on your channel configuration. This testing was performed under project G105764505 and quotation CE-QUO-BAN-24-000478 issued 29-November-2023. Compliant results were obtained for the relevant tests contained in section 6.3 of ANSI/TIA-568.2-D for channel transmission performance.

SECTION 2 NON-CONFORMANCES

None

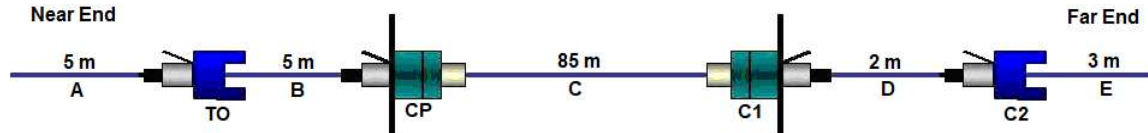
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SECTION 3

SAMPLE DESCRIPTION

The client supplied a 4-connector unshielded channel as illustrated below.

The samples were received on 12-March-2024 and were production samples in undamaged condition.



| Component Id | Manufacturer | Description | Part number |
|--------------|--------------|--------------------------------------|------------------|
| A | Sterlite | U/UTP 24 AWG Patch Cord, 5M | NXPCC06UXZ24XX05 |
| TO | Sterlite | Keystone jack, UTP, 90° | NXIOC06UX090XX |
| TO | Sterlite | Faceplate 2-Port | NXFP02BSXX |
| B | Sterlite | U/UTP 24 AWG Patch Cord, 5M | NXPCC06UXZ24XX05 |
| CP | Sterlite | Keystone jack, UTP, 180° | NXIOC06UX180XX |
| CP | Sterlite | Patch Panel UTP 24 Port Unloaded | NXPPUX Series |
| C | Sterlite | U/UTP, LSZH Horizontal (solid) cable | 2212X Series |
| C1 | Sterlite | Keystone jack, UTP, 180° | NXIOC06UX180XX |
| C1 | Sterlite | Patch Panel UTP 24 Port Unloaded | NXPPUX Series |
| D | Sterlite | U/UTP 24 AWG Patch Cord, 2M | NXPCC06UXZ24XX02 |
| C2 | Sterlite | Keystone jack, UTP, 90° | NXIOC06UX090XX |
| C2 | Sterlite | Faceplate 1-Port | NXFP01BSXX |
| E | Sterlite | U/UTP 24 AWG Patch Cord, 3M | NXPCC06UXZ24XX03 |

SECTION 4

TEST EQUIPMENT USED

The following test equipment was used to conduct the testing.

| Test equipment used | Model number | Control number | Calibration due date |
|-----------------------------------|--------------|----------------|----------------------|
| Keysight Network Analyzer | E5080A | J387 | 15-November-2024 |
| Keysight LCR Meter | 4263B | N967 | 02-February-2025 |
| Hioki Humidity/Temperature Sensor | Z2010 | I084 | 23-October-2024 |

SECTION 5 TESTING

The table below represents a summary of the tests and results. The detailed test data is enclosed with this letter report.

| Test description | ANSI/TIA-568.2-D section | Result |
|---------------------------------------|--------------------------|----------------|
| DC loop resistance | 6.3.1 | Compliant |
| DC resistance unbalance within a pair | 6.3.3 | Compliant |
| DC resistance unbalance between pairs | 6.3.4 | Compliant |
| Return Loss | 6.3.8 | Compliant |
| Insertion Loss | 6.3.9 | Compliant |
| NEXT and PSNEXT | 6.3.10 - 6.3.11 | Compliant |
| ACR-N, PSACR-N | Not applicable | Compliant |
| FEXT, ACR-F and PSACR-F | 6.3.12 - 6.3.15 | Compliant |
| TCL | 6.3.16 | Compliant |
| TCTL, ELTCTL | 6.3.17 - 6.3.18 | Compliant |
| Propagation delay | 6.3.21 | Compliant |
| Propagation delay skew | 6.3.22 | Compliant |
| Coupling attenuation | 6.3.19 | Not applicable |
| PSANEXT | 6.3.24 | Not applicable |
| Average PSANEXT | 6.3.25 | Not applicable |
| PSAACRF | 6.3.28 | Not applicable |
| Average PSAACRF | 6.3.29 | Not applicable |

SECTION 6 PROJECT STATUS & ACTION

Issuance of this letter report completes the performance testing of this channel cabling configuration electrical transmission performance per ANSI/TIA-568.2-D covered by Intertek Project No. G105764505 and quotation CE-QUO-BAN-24-000478. The test results are compliant with the requirements of the standard and sections referred to on pages 2 and 4. The testing was performed at Intertek located in Cortland, NY.

If there are any questions regarding the results contained in this report, or any of the other services offered by Intertek, please do not hesitate to contact your dedicated Intertek Project Manager.

| | | | |
|---------------|---|--------------|---|
| Completed by: | David Ayers | Reviewed by: | Antoine Pelletier |
| Title: | Technician | Title: | Project Engineer |
| Signature: |  | Signature: |  |
| Date: | 18-March-2024 | Date: | 18-March-2024 |

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