

CommScope, Inc. of North Carolina LETTER REPORT

SCOPE OF WORK

ETL Verification final qualification testing of a 100 Ω , 4-pair telecommunication cable electrical transmission performance to the requirements of ISO/IEC 11801-1 for Category 6_A horizontal cable.

REPORT NUMBER

104196819CRT-001f

ISSUE DATE REVISED DATE

05-February-2020 None

TESTS START DATE TESTS END DATE

22-January-2020 05-February-2020

PAGES

4

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LETTER REPORT

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05-February-2020

Intertek Report No. 104196819CRT-001f Intertek Project No. G104196819

Mr. Thomas M. Faison CommScope, Inc. of North Carolina 3642 US Hwy 70 East Claremont NC 28610 USA

Subject: Final qualification testing of Category 6_A cable per IEC 61156-5 as referenced in

ISO/IEC 11801-1

Dear Mr. Faison:

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

ISO/IEC 11801-1 Edition 1.0, Information technology — Generic cabling for customer premises - Part 1: General requirements, dated November 2017

IEC 61156-5 Edition 2.1, Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1000MHz - Horizontal floor wiring - Sectional specification, dated December 2012

SECTION 1

SUMMARY

Intertek wishes to inform you that the electrical transmission tests have been performed on your cable. This testing was performed under project G104196819 and quotation Qu-01039511 issued 19-December-2019. Compliant results were obtained for the relevant tests contained in IEC 61156-5 sections 6.2 and 6.3 for horizontal cable transmission performance.

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SECTION 2

NON-CONFORMANCES

None

SECTION 3

TESTING

The tables below represent a summary of the tests and results. The detailed test data is enclosed to this letter report.

| Test description | IEC 61156-5 section | Result |
|---|------------------------|----------------|
| Conductor resistance | 6.2.1 | Compliant |
| DC resistance unbalance | 6.2.2 | Compliant |
| Dielectric strength | 6.2.3 | Not tested |
| Insulation resistance | 6.2.4 | Not tested |
| Mutual Capacitance | 6.2.5 | Compliant |
| Capacitance Unbalance | 6.2.6 | Compliant |
| Transfer Impedance | 6.2.7 | Not applicable |
| Coupling attenuation | 6.2.8 | Not applicable |
| Current-carrying capacity | 6.2.9 | Not specified |
| Velocity of propagation (phase velocity) | 6.3.1 | Compliant |
| Phase delay and differential delay (delay skew) | 6.3.2 | Compliant |
| Attenuation | 6.3.3 | Compliant |
| Unbalance attenuation (TCL) | 6.3.4 | Compliant |
| Near-end crosstalk (NEXT) | 6.3.5 | Compliant |
| Far-end crosstalk (ACR-F) | 6.3.6 | Compliant |
| Alien (exogenous) near-end crosstalk (ANEXT) | 6.3.7 | Compliant |
| Alien (exogenous) far-end crosstalk (AACR-F) | 6.3.8 | Compliant |
| Alien (exogenous) crosstalk of bundled cables | 6.3.9 | Not applicable |
| Impedance | 6.3.10 | Not tested |
| Return loss (RL) | 6.3.11 | Not tested |

| Test equipment used | Model number | Control number | Calibration due date |
|-------------------------------------|-----------------|-------------------|----------------------|
| Keysight Network Analyzer | E8357A | E382 | 07-January-2021 |
| Keysight LCR Meter | 4263B | R171 | 12-February-2020 |
| Environmental chamber | Bally | 3069 | 07-May-2020 |
| Omega Humidity Temperature Meter | HH314A | T1392 | 11-February-2020 |
| Temperature/humidity meter | OM-EL-USB-2-LCD | H243 | 28-March-2020 |



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SECTION 4

SAMPLE DESCRIPTION

An Intertek representative randomly selected a Category 6_A, 4-Pair, 24 AWG, U/UTP, LSZH, horizontal (solid) cable identified as part number CS41ZC.

The sample was received on 20-January-2020 and was a production sample in undamaged condition.

SECTION 5

PROJECT STATUS & ACTION

Issuance of this letter report completes the final qualification testing of this cable electrical transmission performance per ISO/IEC 11801-1 covered by Intertek Project No. G104196819 and quotation Qu-01039511. The test results are compliant with the requirements of the standard(s) and sections referred to on pages 2 and 3. 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 Signature Date: 05-February-2020 Date: 05-February-2020

Please note: this Letter Report does not represent authorization for the use of any Intertek certification marks.

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