

# CommScope, Inc. of North Carolina **LETTER REPORT**

## SCOPE OF WORK

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

## REPORT NUMBER

103852960CRT-002b

## ISSUE DATE

27-February-2019

## REVISED DATE

None

## TESTS START DATE

23-February-2019

## TESTS END DATE

24-February-2019

## PAGES

4

## DOCUMENT CONTROL NUMBER

GFT-OP-10a (6-March-2017)

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## LETTER REPORT

27-February-2019

Intertek Report No. 103852960CRT-002b

Intertek Project No. G103852960

Mr. Doug Brake  
CommScope, Inc. of North Carolina  
3642 US Hwy 70 East  
Claremont NC 28610

**Subject:** Final qualification testing of Category 6 cable per IEC 61156-5 as referenced in ISO/IEC 11801-1

Dear Mr. Brake:

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 G103852960 and quotation Qu-00954306-0 issued 25-February-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	Compliant
Coupling attenuation	6.2.8	Compliant
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	Not applicable
Alien (exogenous) far-end crosstalk (AACR-F)	6.3.8	Not applicable
Alien (exogenous) crosstalk of bundled cables	6.3.9	Not applicable
Impedance	6.3.10	Compliant
Return loss (RL)	6.3.11	Compliant

Test equipment used	Model number	Control number	Calibration due date
Keysight Network Analyzer	E5080A	J387	06-December-2019
Keysight LCR Meter	4263B	N967	09-November-2019
Temperature/humidity meter	OM-EL-USB-2-LCD	H243	19-March-2019
Environmental chamber	Bally	3069	02-May-2019
Omega Humidity Temperature Meter	HH314A	T1392	11-February-2020

## SECTION 4

### SAMPLE DESCRIPTION

The client submitted a Category 6, 4-Pair, 23 AWG, F/UTP, CMP, horizontal (solid) cable identified as part number CS34P 4/23 F/UTP.

The sample was received on 20-February-2019 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. G103852960 and quotation Qu-00954306-0. The test results are compliant with the requirements of the standard 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:	
Date:	27-February-2019	Date:	27-February-2019

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