

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

## SCOPE OF WORK

Testing of a cabling configuration performance to the requirements of IEEE Std 802.3™ for Type 4 remote powering applications at extended distance

## REPORT NUMBER

105853508CRT-001n

## ISSUE DATE

24-June-2024

## REVISED DATE

None

## TESTS START DATE

24-June-2024

## TESTS END DATE

24-June-2024

## PAGES

5

## DOCUMENT CONTROL NUMBER

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

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## LETTER REPORT

24-June -2024

Intertek Report No. 105853508CRT-001n

Intertek Project No. G105853508

Mr. Wayne Hopkinson  
CommScope, Inc. of North Carolina  
3642 US Hwy 70 East  
Claremont NC 28610  
USA

**Subject:** Performance testing of category 6 unshielded channel per IEEE 802.3™ for support of Type 4 remote powering applications commonly referred as PoE++

Dear Mr. Hopkinson:

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

*IEEE Std 802.3™-2022 Standard for Ethernet, Approved 13-May-2022*

### SECTION 1 SUMMARY

Intertek wishes to inform you that the power delivery tests have been performed on your channel configuration. This testing was performed under project G105853508 and quotation Qu-01450453 issued 06-May-2024. Compliant results were obtained for the relevant tests contained in section 145 of IEEE 802.3™ for channel transmission performance.

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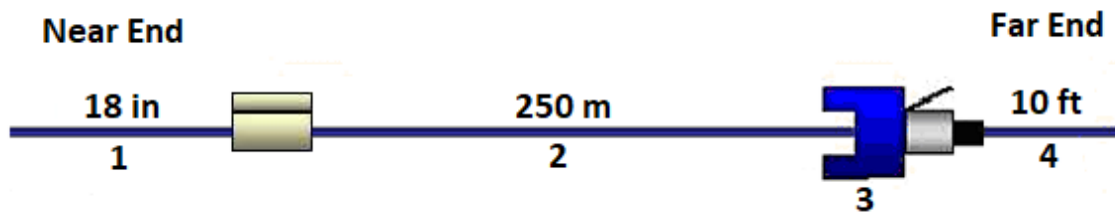
**SECTION 2**  
**NON-CONFORMANCES**

None

**SECTION 3**  
**TEST CONFIGURATION**

The client supplied a 2-connector unshielded channel as illustrated below.

The samples were received on 24-June-2024 and were production samples in undamaged condition.



Component Id	Manufacturer	Description	Part number
1	CommScope	Ceiling Connector Assembly (CCA)	CO1SJO2-88N018
2	CommScope	U/UTP OSP horizontal cable	GigaREACH 1573A
3	CommScope	Modular jack	MGS400
4	CommScope	Modular cord	CPC3312-03F010

**SECTION 4**  
**TEST EQUIPMENT USED**

The following test equipment was used to conduct the testing.

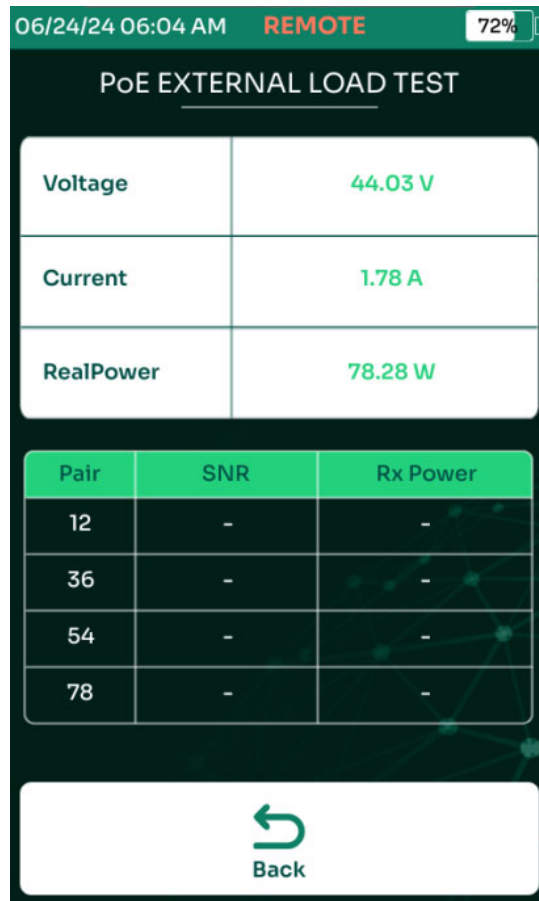
Test equipment used	Model number	Control number	Calibration due date
AEM multifunction cable tester	TestPro CV100	J388	20-December-2024
Keysight LCR Meter	4263B	E355	19-October-2024
Temperature/humidity meter	OM-EL-USB-2-LCD	H243	23-May-2025

**SECTION 5**  
**TESTING**

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

Test description	IEEE 802.3 section	Result
DC loop resistance	145.1.3	Compliant
DC resistance unbalance within a pair	145A.1	Compliant
DC resistance unbalance between pairs	145A.3	Compliant
Functional power delivery	Various	Compliant

The cabling configuration was confirmed to meet the minimum 71 W power delivery for Type 4 remote powering applications at ambient temperature. This was done using the external load function of the AEM TestPro CV100 multifunction cable tester as shown in the following screenshot.



The ambient conditions during the testing were 20°C and 62% relative humidity.

**SECTION 6**  
**PROJECT STATUS & ACTION**

Issuance of this letter report completes the power delivery testing of this channel cabling configuration per IEEE 802.3™ covered by Intertek Project No. G105853508 and quotation Qu-01450453. 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 the client’s facility located in Claremont, NC.

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:	24-June-2024	Date:	24-June-2024

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



## Low Frequency Report

<b>Client</b>	CommScope	<b>Report No</b>	105853508CRT-001n@20C
<b>Specification</b>	IEEE 802-3bt Type 4		
<b>Part No</b>	1573A	<b>Length (m)</b>	253.5
<b>Test Started</b>	6/24/2024	<b>Temperature</b>	20 °C
<b>Description</b>	2 Connector Channel		
<b>Operator Name</b>	Antoine Pelletier	<b>Test Status</b>	Complies

### DC Resistance (Ohms)

45	12	36	78	Limit (Ohms)
11.5400	12.3620	11.6470	12.2290	
11.5870	12.3580	11.6550	12.2380	

### Resistance Unbalanced (%)

45	12	36	78	Limit (%)
0.20	0.02	0.03	0.04	3.00

### Resistance Unbalanced Pair-Pair (%)

45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78	Limit (%)
3.33	0.38	2.82	2.95	0.51	2.44	7.00

### DC Loop Resistance (Ohms)

45	12	36	78	Limit (Ohms)
23.1270	24.7200	23.3020	24.4670	25.0000