

## 3933 US ROUTE 11, CORTLAND, NEW YORK 13045

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# REPORT OF TEST

Panduit Corporation 10500 West 167th St Orland Park, IL 60467

The products described in this Report were tested for compliance to the standard(s) listed below. The products listed below are not part of an Intertek Verification Program and the results are provided to the client as a one time performance test.

Reference Intertek Report Nos.: 101650039CRT-001a and 101650039CRT-002a

#### Test:

Electrical performance testing of a  $100\Omega$ , 2-Pair telecommunication cable to the standard requirements of IEC 61156-6 (as referenced in ISO/IEC 11801) and ANSI/TIA-568-C.2 for Category 5e cord cable.

### Standards and sections used:

ANSI/TIA-568-C.2-2009: Balanced Twisted-Pair Telecommunications Cabling and Components Standards, dated August 2009 (Section 6.6, Cord Cable, 6.6.1 to 6.6.3)

IEC 61156-6 Edition 3.1: Multicore and symmetrical pair/quad cables for digital communications - Part 6: Symmetrical pair/quad cables with transmission characteristics up to 1000MHz – Work area wiring - Sectional specification, dated December 2012 (Sections 6.2.1, 6.2.2, 6.2.5 to 6.2.8 and 6.3.1 to 6.3.11); with the following deviations to the standard

| Return Loss <sup>1</sup> |                        | Insertion Loss <sup>2</sup> |   |
|--------------------------|------------------------|-----------------------------|---|
| Frequency                | Return loss limit (dB) | Frequency                   | Insertion loss limit (dB)   |
| 1 ≤ f < 10 MHz           | 20 + 6 log(f)          | 1 ≤ f < 100 MHz             | $\alpha = 1.2 \left( 1.967 \cdot \sqrt{f} + 0.023 \cdot f + \frac{0.100}{\sqrt{f}} \right)$ |
| 10 ≤ f < 20 MHz          | 26                     |                             |   |
| 20 ≤ f < 100 MHz         | 26 - 5 log(f/20)       |                             |   |

<sup>&</sup>lt;sup>1</sup> Return loss limits derived on more stringent ODVA requirements

## **Sample description:**

The client supplied 200 meters of a Category 5e, 2-Pair, 24 AWG, SF/UTP, Patch (stranded) Cable, identified as part number ISFX5502A\*\*-LED. The sample was received on May 12, 2014 and was in good condition.

#### Conclusion:

The  $100\Omega$ , 2-Pair telecommunication cable, as previously described and supplied by the client, was tested in accordance with the standards listed above, and did comply with the indicated applicable transmission requirements. The testing was performed at Intertek located in Cortland, New York.

Reviewed and approved by:

John Cash

Associate Enginneer

Global Cabling Products Testing

Antoine Pelletier Project Engineer

Global Cabling Products Testing

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<sup>&</sup>lt;sup>2</sup> Insertion loss limits derived on 20% de-rating relative to horizontal cable limits