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PROJECT NO.: 3022866-311

DATE: February 11, 2009

TEST REPORT NO.: 3022866CRT-088

RENDERED TO:

Hubbell Premise Wiring
14 Lord's Hill Road
Stonington, CT 06378

TEST:

Performance testing of the Category 6 cabling configuration as defined in and to the requirements of TIA-568-C.2 (Draft 2.2), *Balanced Twisted Pair Telecommunications Cabling And Components Standard*, with internal channel parameter limits extended per guidelines of TIA TSB-155 (excluding ANEXT).

STATEMENT OF LIMITATIONS:

The purpose of this report is to provide electrical performance data on the test sample. It is not valid to use this report for any other purpose.

STANDARD USED:

ASTM D4566-98 dated December 1998, Standard Test Methods for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable.

Proposed TIA-568-C.2 (Draft 2.2), *Balanced Twisted Pair Telecommunications Cabling And Components Standard*, dated December 2008.

AUTHORIZATION:

The project was authorized by Dr. Shadi AbuGhazaleh, representing, Hubbell Premise Wiring.

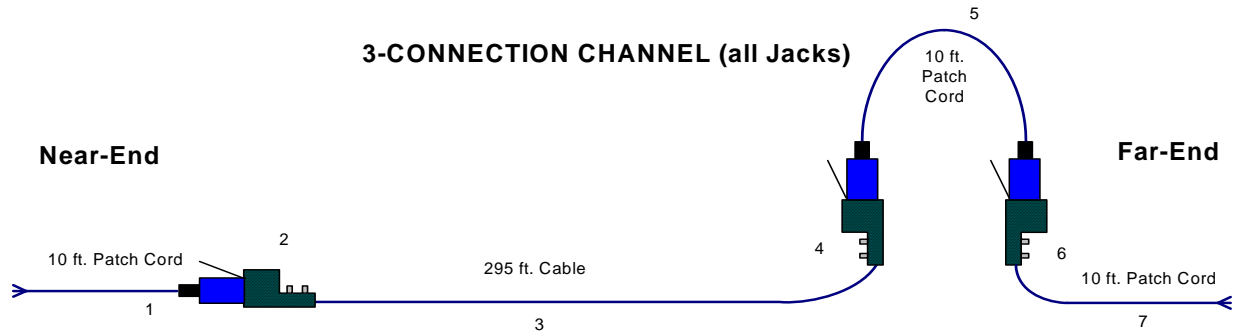
DATE OF TEST:

10/28/2008

TEST REPORT REVISION HISTORY:

First Issue: February 11, 2009 Original Document

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SAMPLE DESCRIPTION:

<u>Component ID</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Description</u>
1, 5, 7	Hubbell Premise Wiring	PS610XX ¹	Shielded 10' C6 Patch Cord
2, 4, 6	Hubbell Premise Wiring	SJ6	Shielded C6 Jack
3	Hubbell Premise Wiring	C6FTPSPX ²	NEXTSPEED C6 FTP CMP Cable

- 1. XX is the color of patch cord (black, blue, etc...)
- 2. X is cable color (blue, grey, etc...)

EQUIPMENT LIST:

The following equipment was employed in conducting the tests.

<u>Equipment Used</u>	<u>Model Number</u>	<u>Serial Number</u>	<u>Calibration Date</u>
Agilent ENA Series Network Analyzer	E5070B	MY42401505	01/14/08

RESULTS:

See appendix A for the test results.

CONCLUSION:

The channel configuration, as previously described, was tested under the SAT program of Intertek in accordance with the standard contained herein, and did comply with the indicated applicable transmission requirements. Alien Crosstalk was not measured.

These procedures and requirements were taken from the standards referred to on page 1.

Reviewed and approved by:

Antoine Pelletier

Antoine Pelletier
 Engineer
 Global Cabling Products Testing

Kathy Heath

Kathy Heath
 Project Coordinator
 Global Cabling Products Testing

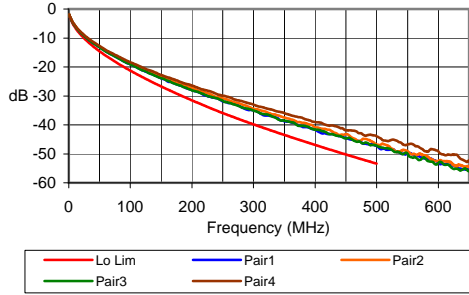
Appendix A
Test results

Any data reported above 500 MHz is for indication only.

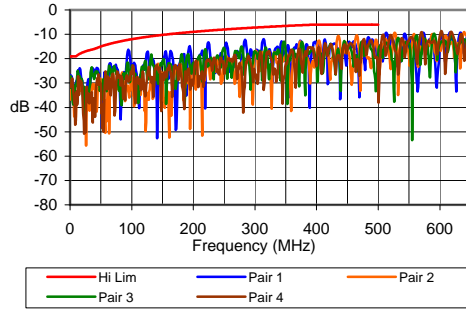
This appendix contains 2 Pages.

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Insertion Loss



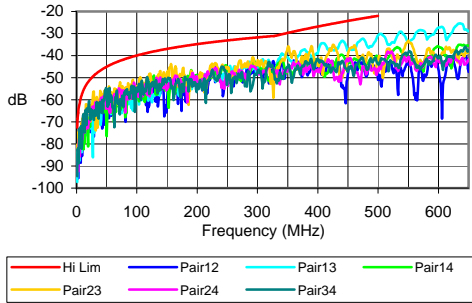
Return Loss



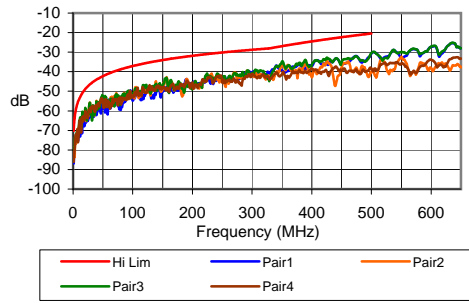
Frequency	Worst Case	Average	TIA Spec
1.0	-2.0	-1.9	-2.2
10.0	-5.8	-5.7	-6.3
31.3	-10.4	-10.2	-11.3
62.5	-14.9	-14.6	-16.4
100.0	-19.1	-18.8	-21.3
155.0	-24.2	-23.7	-27.2
200.0	-28.1	-27.3	-31.5
250.0	-31.8	-30.9	-35.9
350.0	-38.8	-37.5	-43.5
500.0	-47.3	-46.1	-53.4

Frequency	Worst Case	Average	TIA Spec
1.0	-26.8	-29.6	-19.0
10.0	-29.4	-33.8	-19.0
31.3	-32.5	-37.4	-16.5
62.5	-25.6	-32.1	-14.1
100.0	-22.8	-27.3	-12.0
155.0	-17.3	-27.9	-10.1
200.0	-21.7	-28.3	-9.0
250.0	-15.4	-24.3	-8.0
350.0	-17.1	-21.5	-6.6
500.0	-18.2	-24.3	-6.0

NEXT



PSNEXT

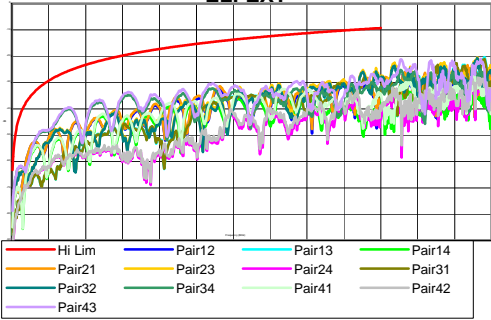


Frequency	Worst Case	Average	TIA Spec
1.0	-80.24	-89.17	-72.67
10.0	-68.2	-72.86	-56.63
31.3	-61.09	-65.65	-48.47
62.5	-56.62	-63.45	-43.45
100.0	-54.54	-58.72	-39.93
155.0	-45.24	-53.81	-36.71
200.0	-48.69	-53.25	-34.79
250.0	-45.74	-50.47	-33.14
350.0	-36.64	-45.44	-29.73
500.0	-30.78	-41.35	-21.98

Frequency	Worst Case	Average	TIA Spec
1.00	-79.67	-82.73	-70.29
10.00	-65.27	-67.75	-54.05
31.30	-57.89	-60.21	-45.76
62.50	-54.71	-57.74	-40.67
100.00	-52.11	-53.48	-37.08
155.00	-43.34	-48.45	-33.81
200.00	-45.54	-48.18	-31.86
250.00	-43.32	-45.08	-30.18
350.00	-35.09	-39.52	-26.94
500.00	-30.41	-34.91	-20.42

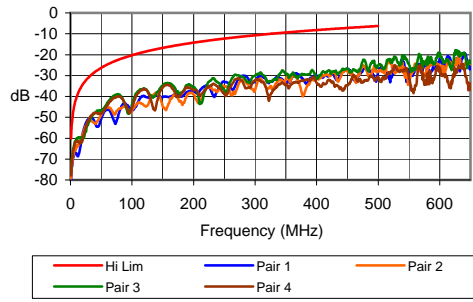
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ELFEXT



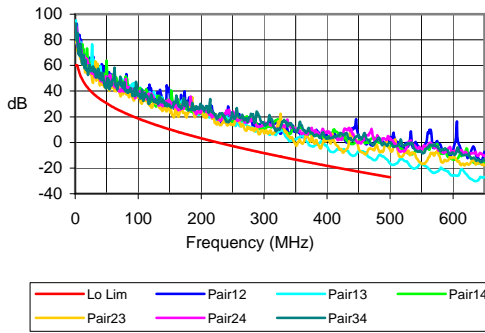
Frequency	Worst Case	Average	TIA Spec
1.0	-78.8	-84.3	-63.3
10.0	-61.8	-68.8	-43.3
31.3	-52.0	-57.2	-33.4
62.5	-43.8	-50.3	-27.4
100.0	-45.7	-51.2	-23.3
155.0	-34.1	-44.5	-19.5
200.0	-36.2	-44.0	-17.3
250.0	-35.6	-41.5	-15.3
350.0	-32.2	-38.2	-12.4
500.0	-28.5	-34.2	-9.3

PSELFEXT



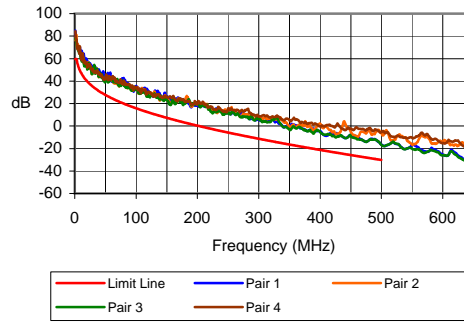
Frequency	Worst Case	Average	TIA Spec
1.0	-76.4	-78.6	-60.3
10.0	-60.0	-62.9	-40.3
31.3	-50.3	-51.1	-30.4
62.5	-42.3	-44.3	-24.4
100.0	-43.8	-45.8	-20.3
155.0	-33.8	-37.7	-16.5
200.0	-35.7	-37.6	-14.3
250.0	-33.0	-35.8	-12.3
350.0	-29.4	-32.8	-9.4
500.0	-25.4	-28.7	-6.3

ACR



Frequency	Worst Case	Average	TIA Spec
1.0	78.3	91.7	60.0
10.0	62.5	68.2	50.3
31.3	51.1	58.4	37.1
62.5	41.9	52.9	27.1
100.0	35.9	41.8	18.6
155.0	21.1	32.2	9.6
200.0	22.3	27.2	3.3
250.0	14.2	23.2	-2.7
350.0	-1.7	14.2	-13.4
500.0	-16.4	0.8	-27.1

PSACR



Frequency	Worst Case	Average	TIA Spec
1.0	78.2	82.1	59.7
10.0	59.6	62.3	47.7
31.3	49.2	50.3	34.4
62.5	40.0	43.6	24.3
100.0	34.0	34.9	15.8
155.0	19.2	25.9	6.7
200.0	20.9	21.2	0.4
250.0	11.8	14.6	-5.7
350.0	-3.2	3.6	-16.4
500.0	-14.7	-7.9	-30.2