



REPORT INTERTEK / ETL SEMKO

3933 US ROUTE 11, CORTLAND, NEW YORK 13045
Phone Number: 1-800-345-3851 Fax Number: 607-758-3648

ORDER NO.: 3105503-311

DATE: October 23, 2006

REPORT NO.: 3105503CRT-011Sum

RENDERED TO:

SUPERIOR ESSEX, Inc.
150 Interstate North Pkwy
Suite 300
Atlanta, GA 30339

TEST: Performance testing of the cable as defined in, and to the requirements of, TIA/EIA 568-B.2-1 for Category 6 Cables.

STATEMENT OF LIMITATIONS: At the client's request, 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.

STANDARDS USED:

ASTM D4566-98, dated December 10, 1998, Standard Test Methods for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable

TIA/EIA-568-B.2-1, Addendum 1: Transmission Performance Specifications for 4 Pair, 100 Ω Category 6 Cabling dated June 2002.

AUTHORIZATION: The project was authorized by Ms. Gayle Watson, representing the client, SUPERIOR ESSEX, Inc.

SPECIMEN DESCRIPTION: Category 6, Four (4) pair, 23 AWG, UTP, Plenum, Horizontal (Solid) Telecommunications Cable, identified as part number, Next Gain. The sample was received on October 17, 2006 and was in good condition

DATE OF TEST: October 17, 2006

Page 1 of 2

An independent organization testing for safety, performance, and certification.

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

EQUIPMENT LIST: The following equipment was employed in conducting the tests.

<u>Equipment Used</u>	<u>Model Number</u>	<u>Serial Number</u>	<u>Control Number</u>	<u>Calibration Date</u>
Hewlett Packard Automatic Cable Test System	HP46152A	3903U01003	E356	03/04/06

Equipment

The testing was performed using a Hewlett Packard 46152A Automatic Cable Test System. The system was calibrated using a full 2 port calibration with 801 linearly spaced data points, 300 Hz I/F bandwidth and a 10-second sweep time.

Measurements

For the cable previously described, Attenuation, Near End Cross Talk, Far End Cross Talk and Return Loss were measured in accordance with ASTM D4566.

Requirements

Attenuation, Near End Cross Talk, Power Sum NEXT, Equal Level Far End Cross Talk (ELFEXT), Power Sum ELFEXT and Return Loss were tested to the requirements of TIA/EIA-568-B.2-1, Cat. 6.

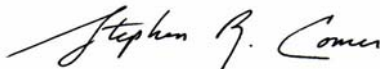
Results

The results for the cable test are shown in graphs 1-8. In each plot, the worst case and average readings are compared with the appropriate limits from the category 6 cable specification.

Conclusion:

The cable, as previously described and supplied by the client, was tested in accordance with the procedures contained herein, and did comply with the indicated applicable transmission requirements. These procedures and requirements were taken from the standards referred to on page 1. The testing was performed at Intertek ETL SEMKO located in Cortland, New York.

Reviewed and Approved By:



Stephen R. Comer
Data Lab Supervisor
Global Cabling Products Testing



Dean Beverley
Test Engineer
Global Cabling Products Testing

APPENDIX A

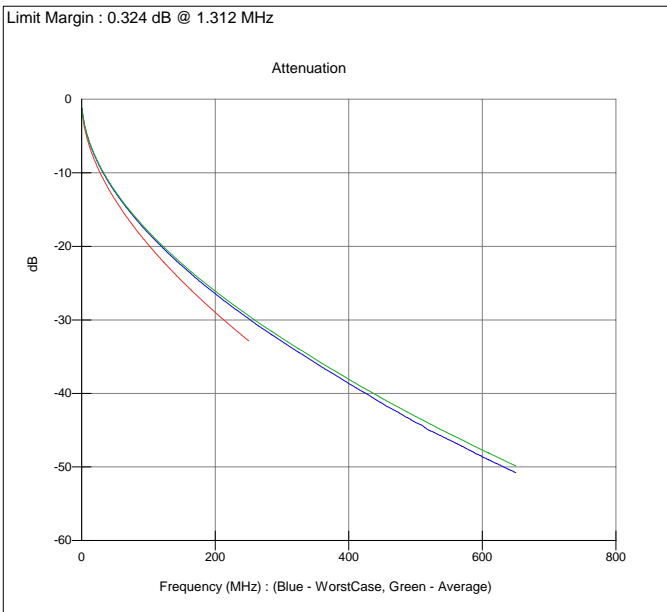
Test Results

Any data reported above 250 MHz is for indication only.

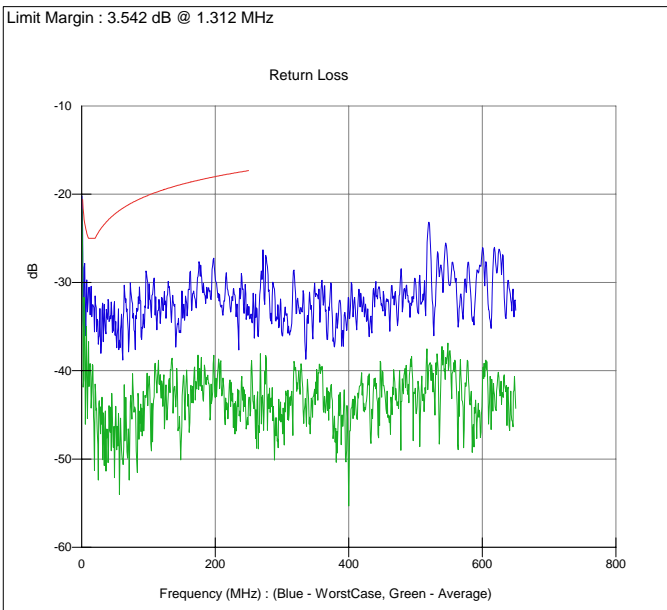


Summary

Client	Superior Essex	Report No	3105503CRT-011
Specification	TIA 568B2-1 - Cat 6 S650 L250		
Part No	54-246-2B NextGain	Length	100
Test Started	10/17/2006 3:25:41 PM	Temperature	20 °C
Description	Worst Case of Three Separate Cable Test		
Technician	Dean Beverley	Test Status	Complies



Attenuation			
Freq	Worst Case	Average	Spec
1.	1.7	1.6	2.1
4.	3.4	3.4	3.8
8.	4.9	4.8	5.3
10.	5.4	5.4	5.9
16.	7.0	6.9	7.6
20.	7.8	7.7	8.5
25.	8.8	8.7	9.5
31.25	9.9	9.7	10.7
62.5	14.2	14.0	15.4
100.	18.2	18.0	19.8
250.	29.8	29.4	32.8
350.	35.8	35.4	
650.	50.8	49.8	

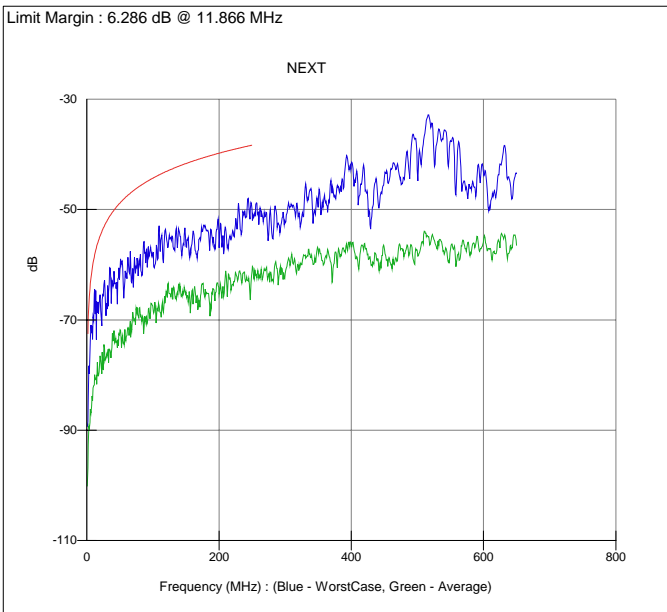


Return Loss			
Freq	Worst Case	Average	Spec
1.	22.7	24.8	20.2
4.	28.2	32.2	23.0
8.	30.6	40.9	24.5
10.	32.0	37.5	25.0
16.	32.9	39.3	25.0
20.	31.6	41.5	25.0
25.	37.3	50.9	24.3
31.25	32.4	49.2	23.6
62.5	33.9	49.9	21.5
100.	32.7	41.8	20.1
250.	33.2	43.2	17.3
350.	32.3	42.6	
650.	33.1	44.3	

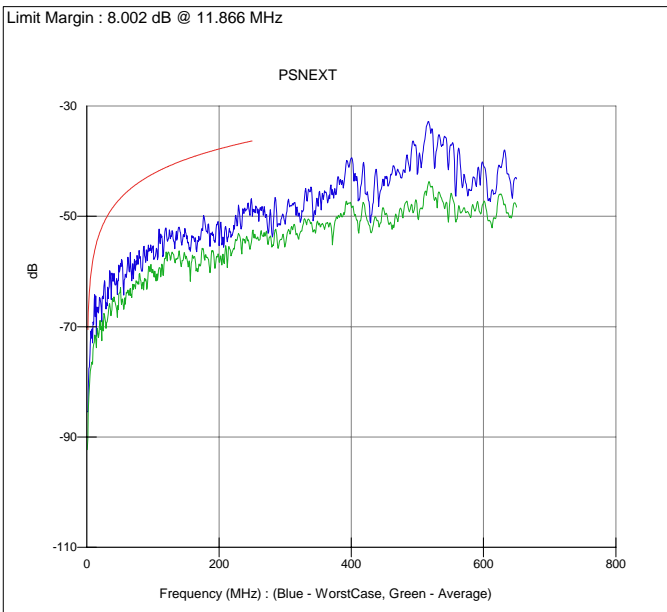


Summary

Client	Superior Essex	Report No	3105503CRT-011
Specification	TIA 568B2-1 - Cat 6 S650 L250		
Part No	54-246-2B NextGain	Length	100
Test Started	10/17/2006 3:25:41 PM	Temperature	20 °C
Description	Worst Case of Three Separate Cable Test		
Technician	Dean Beverley	Test Status	Complies



NEXT			
Freq	Worst Case	Average	Spec
1.	88.8	98.2	73.7
4.	79.7	89.3	65.3
8.	72.9	84.0	60.8
10.	72.1	82.1	59.3
16.	68.6	77.9	56.2
20.	65.5	76.5	54.8
25.	66.6	78.3	53.3
31.25	64.4	76.1	51.9
62.5	59.2	71.6	47.4
100.	58.3	68.0	44.3
250.	51.0	60.9	38.3
350.	48.7	57.5	
650.	43.6	56.5	

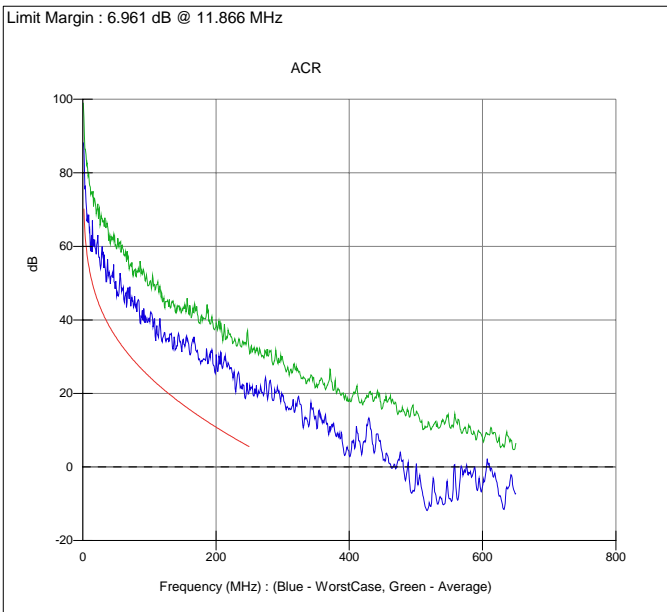


PSNEXT			
Freq	Worst Case	Average	Spec
1.	85.4	90.9	71.7
4.	76.8	80.4	63.3
8.	72.1	76.5	58.8
10.	70.3	73.5	57.3
16.	67.3	70.4	54.2
20.	64.9	68.9	52.8
25.	65.5	70.2	51.3
31.25	63.4	68.7	49.9
62.5	58.1	63.6	45.4
100.	55.4	59.8	42.3
250.	48.9	53.4	36.3
350.	47.7	51.4	
650.	43.2	48.3	

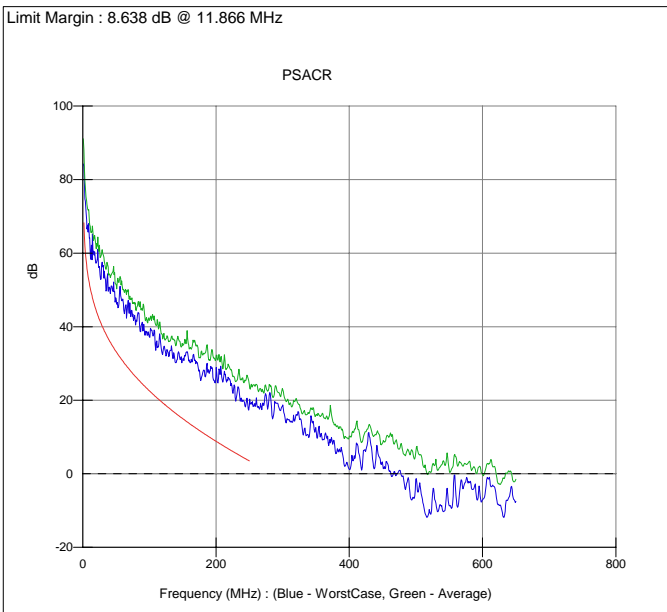


Summary

Client	Superior Essex	Report No	3105503CRT-011
Specification	TIA 568B2-1 - Cat 6 S650 L250		
Part No	54-246-2B NextGain	Length	100
Test Started	10/17/2006 3:25:41 PM	Temperature	20 °C
Description	Worst Case of Three Separate Cable Test		
Technician	Dean Beverley	Test Status	Complies



ACR			
Freq	Worst Case	Average	Spec
1.	87.2	96.5	71.7
4.	76.4	86.0	61.5
8.	68.2	79.2	55.4
10.	66.8	76.7	53.4
16.	61.9	71.1	48.7
20.	57.9	68.8	46.3
25.	58.0	69.6	43.8
31.25	54.7	66.3	41.2
62.5	45.3	57.5	32.0
100.	40.1	50.0	24.5
250.	21.9	31.4	5.5
350.	12.8	22.1	
650.	-7.2	6.5	

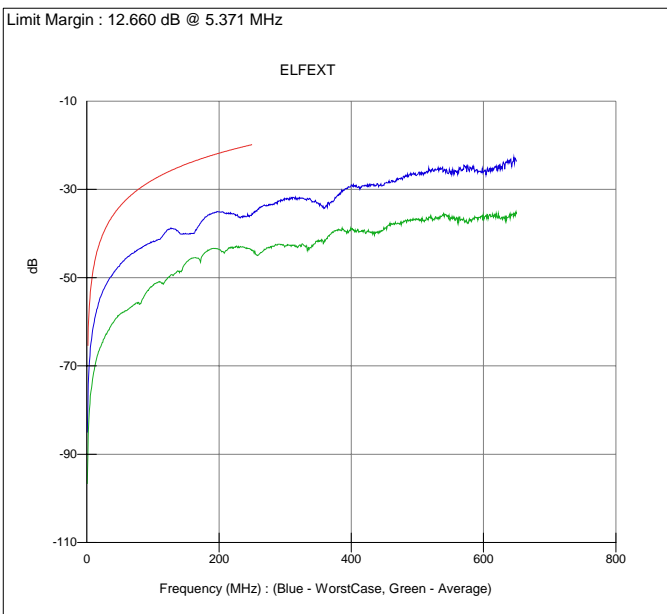


PSACR			
Freq	Worst Case	Average	Spec
1.	83.8	89.3	69.7
4.	73.4	77.1	59.5
8.	67.3	71.7	53.4
10.	64.9	68.1	51.4
16.	60.5	63.5	46.7
20.	57.3	61.2	44.3
25.	56.9	61.5	41.8
31.25	53.8	58.9	39.2
62.5	44.2	49.5	30.0
100.	37.2	41.8	22.5
250.	19.4	24.0	3.5
350.	12.0	16.1	
650.	-7.5	-1.5	

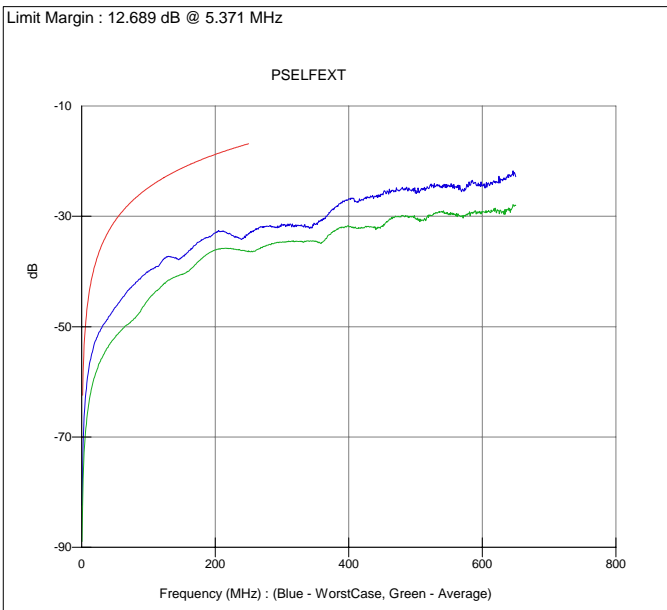


Summary

Client	Superior Essex	Report No	3105503CRT-011
Specification	TIA 568B2-1 - Cat 6 S650 L250	Length	100
Part No	54-246-2B NextGain	Temperature	20 °C
Test Started	10/17/2006 3:25:41 PM	Description	Worst Case of Three Separate Cable Test
Technician	Dean Beverley	Test Status	Complies



ELFEXT			
Freq	Worst Case	Average	Spec
1.	81.2	92.6	67.0
4.	68.7	79.6	55.8
8.	62.7	73.8	49.7
10.	60.8	71.7	47.8
16.	56.9	67.6	43.7
20.	54.5	65.8	41.8
25.	52.8	64.0	39.8
31.25	50.9	62.3	37.9
62.5	45.2	57.2	31.9
100.	41.8	51.7	27.8
250.	35.5	43.8	19.9
350.	33.2	41.7	
650.	23.7	35.6	



PSELFEXT			
Freq	Worst Case	Average	Spec
1.	78.4	84.8	64.0
4.	65.8	72.3	52.8
8.	60.0	66.4	46.7
10.	58.1	64.5	44.8
16.	54.6	60.5	40.7
20.	52.6	58.8	38.8
25.	51.3	57.0	36.8
31.25	49.9	55.5	34.9
62.5	44.6	50.3	28.9
100.	39.9	45.0	24.8
250.	33.1	36.3	16.9
350.	31.5	34.5	
650.	22.8	28.0	