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October 7, 2010

Test report number 100230894CRT-001a
Project number 100230894-311

Superior Essex
150 Interstate North Pkwy
Suite 300
Atlanta, GA 30339

Leviton Network Solutions
2222 222nd SE
Bothell, WA 98021



TEST:

Electrical performance testing of a cabling configuration to the requirements of ANSI/TIA-568-C.2 for Category 6 channel.

STANDARD USED:

ANSI/TIA-568-C.2-2009: Balanced Twisted-Pair Telecommunications Cabling and Components Standards, dated August 2009

SECTION:

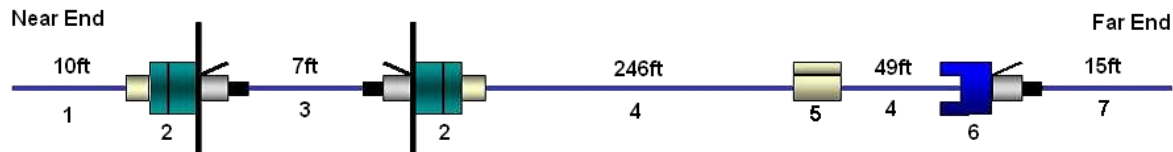
6.2: Channel transmission performance (6.2.1 to 6.2.26)

AUTHORIZATION:

The project was authorized by Ms. Gayle Watson, representing the client, Superior Essex, with signed quotation number 500259812.

SAMPLE DESCRIPTION:

The client supplied a 4-connector channel as illustrated below. The sample was received on October 1, 2010 and was in good condition.



<u>Component Id</u>	<u>Manufacturer</u>	<u>Description</u>	<u>Part number</u>
1	Leviton	Equipment Cord	62460-10L
2	Leviton	Patch Panel	057-69586-U24
3	Leviton	Cross Connect Cord	62460-07L
4	Superior Essex	Horizontal Cable CMR	77-246-2A
5	Leviton	Consolidation point	41AB6-1F4
6	Leviton	Wall Outlet	61110-RB6
7	Leviton	Patch Cord	62460-15L

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EQUIPMENT LIST:

The following equipment was employed in conducting the tests.

<u>Equipment used</u>	<u>Model number</u>	<u>Control number</u>	<u>Calibration date</u>	<u>Calibration due date</u>
HP Automatic Cable Test System	46152A	E307	3/1/2010	3/1/2011

DATE OF TEST:

October 7, 2010

TEST REPORT REVISION HISTORY:

First Issue: October 7, 2010 Original Document

RESULTS: See appendix A for the test results.

CONCLUSION:

The channel cabling configuration, as previously described and supplied by the client, was tested in accordance with the standard referred to on page 1, and did comply with the indicated applicable transmission requirements. The testing was performed at Intertek located in Cortland, New York.

The procedures and requirements were taken from the standard referred to on page 1.

Reviewed and Approved By:

Antoine Pelletier
Engineer
Global Cabling Products Testing

John Cash
Technician
Global Cabling Products Testing

Kathy Heath
Program Coordinator
Global Cabling Products Testing



Superior Essex

Test report number 100230894CRT-001a
October 7, 2010

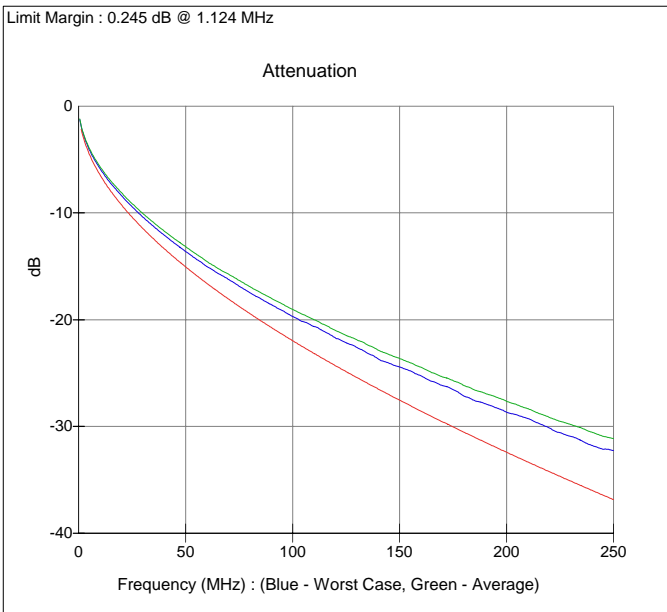
Appendix A
Summary test results

This appendix contains 5 pages.

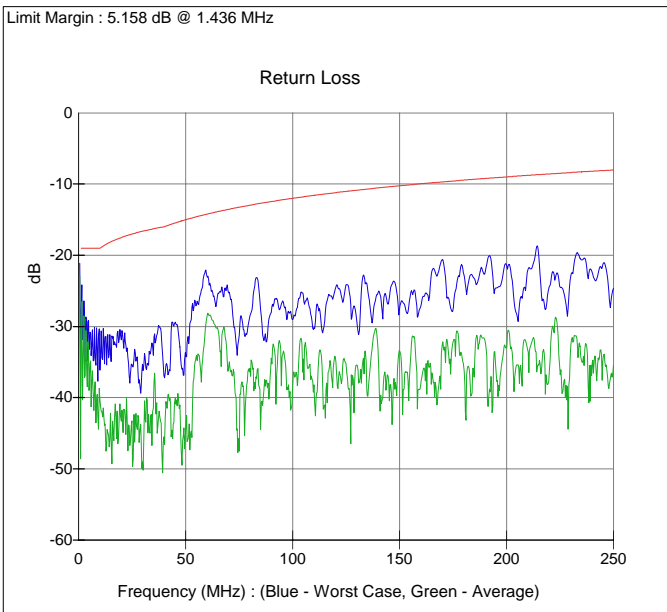


Summary

Client	Superior Essex	Report No	100230894CRT-001a
Specification	TIA-568-C2 - Cat 6 Channel	Length	100.
Part No	77-246-2A	Temperature	20 °C
Test Started	10/7/2010 10:47:19 AM		A
Description	4 Connector Channel	Test Status	Complies
Technician	John Cash		



Attenuation			
Freq	Worst Case	Average	Spec
1.	1.8	1.7	2.0
4.	3.7	3.6	4.1
8.	5.2	5.1	5.8
10.	5.9	5.7	6.5
16.	7.5	7.2	8.2
20.	8.4	8.1	9.3
25.	9.4	9.1	10.4
31.25	10.6	10.3	11.7
62.5	15.3	14.9	17.0
100.	19.7	19.0	22.0
200.	28.7	27.6	32.4
250.	32.3	31.2	36.9

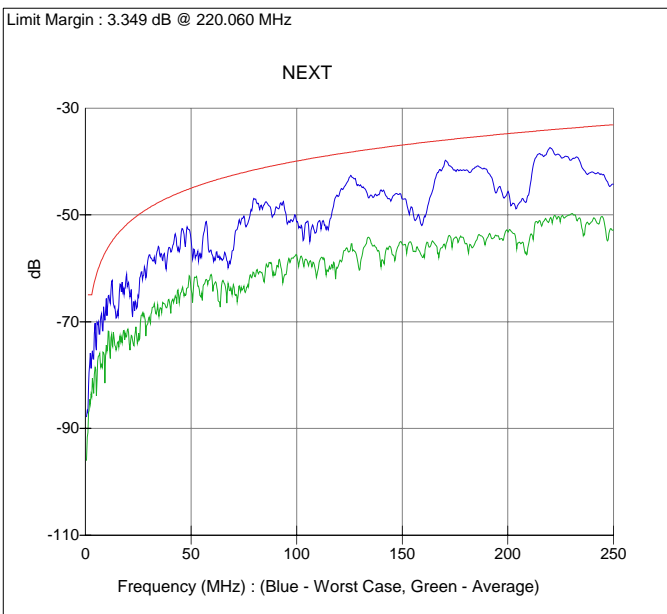


Return Loss			
Freq	Worst Case	Average	Spec
1.	32.4	36.6	19.0
4.	34.3	37.1	19.0
8.	35.2	43.4	19.0
10.	35.1	40.7	19.0
16.	32.0	44.4	18.0
20.	31.2	42.5	17.5
25.	35.8	46.8	17.0
31.25	35.3	43.3	16.5
62.5	25.1	29.1	14.0
100.	29.0	38.0	12.0
200.	21.4	32.9	9.0
250.	24.6	35.4	8.0

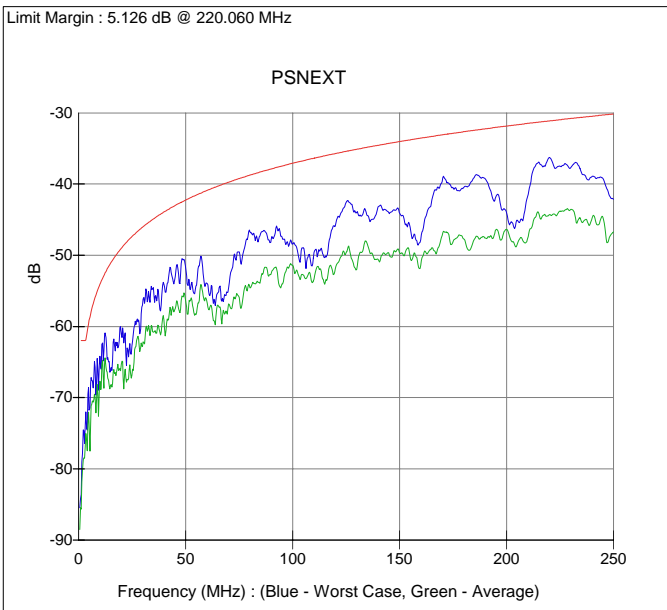


Summary

Client	Superior Essex	Report No	100230894CRT-001a
Specification	TIA-568-C2 - Cat 6 Channel	Length	100.
Part No	77-246-2A	Temperature	20 °C
Test Started	10/7/2010 10:47:19 AM		A
Description	4 Connector Channel	Test Status	Complies
Technician	John Cash		



NEXT			
Freq	Worst Case	Average	Spec
1.	86.9	91.1	65.0
4.	76.4	82.6	63.0
8.	71.8	78.4	58.2
10.	68.0	74.9	56.6
16.	65.0	73.8	53.2
20.	64.2	71.5	51.6
25.	65.8	72.8	50.0
31.25	58.1	68.4	48.4
62.5	57.7	64.1	43.4
100.	51.3	57.6	39.9
200.	45.7	53.2	34.8
250.	44.3	52.8	33.1

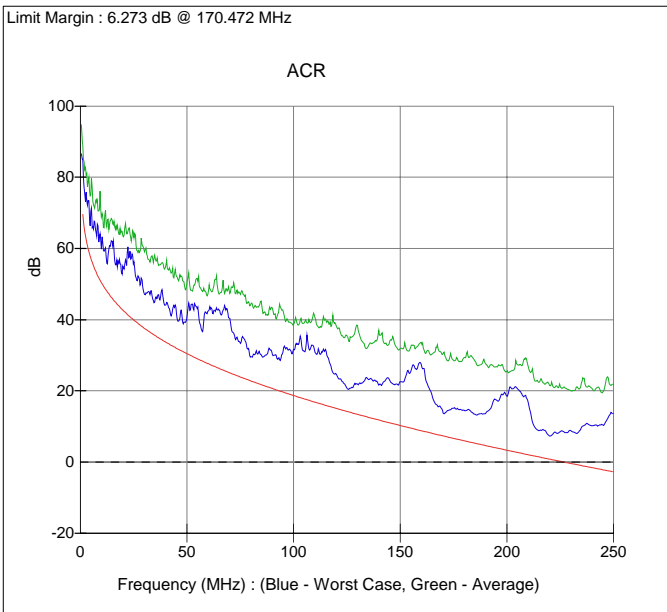


PSNEXT			
Freq	Worst Case	Average	Spec
1.	83.8	85.6	62.0
4.	73.6	76.6	60.5
8.	69.7	72.0	55.6
10.	64.8	68.2	54.0
16.	63.2	66.9	50.6
20.	61.4	65.1	49.0
25.	62.4	66.4	47.3
31.25	55.3	60.7	45.7
62.5	55.6	58.2	40.6
100.	48.5	51.4	37.1
200.	44.0	46.4	31.9
250.	42.1	46.7	30.2

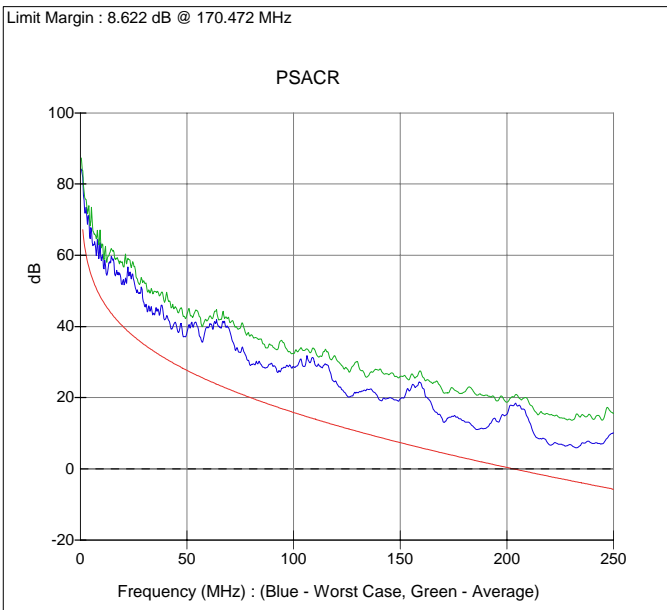


Summary

Client	Superior Essex	Report No	100230894CRT-001a
Specification	TIA-568-C2 - Cat 6 Channel	Length	100.
Part No	77-246-2A	Temperature	20 °C
Test Started	10/7/2010 10:47:19 AM		A
Description	4 Connector Channel	Test Status	Complies
Technician	John Cash		



ACR			
Freq	Worst Case	Average	Spec
1.	85.1	89.4	70.4
4.	72.8	79.1	59.0
8.	66.9	73.4	52.5
10.	62.2	69.2	50.3
16.	57.6	66.6	45.2
20.	55.8	63.4	42.6
25.	56.4	63.7	39.9
31.25	47.5	58.1	37.0
62.5	42.4	49.3	26.9
100.	31.6	38.6	18.7
200.	18.5	25.6	3.3
250.	13.7	21.7	-2.8

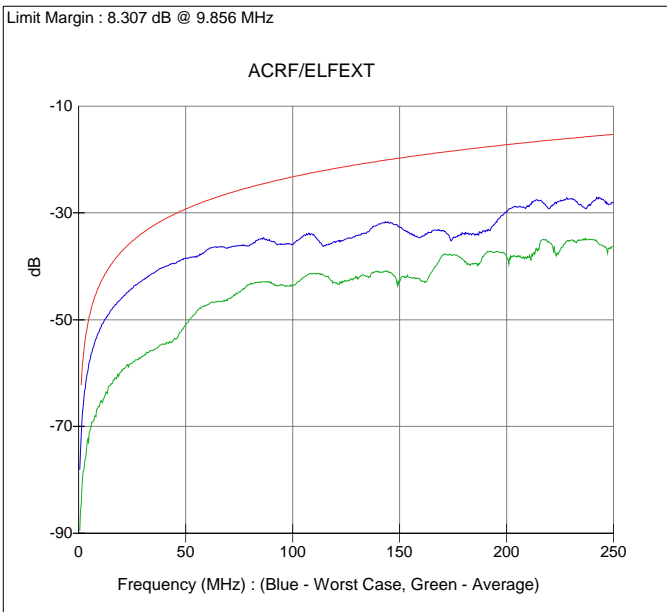


PSACR			
Freq	Worst Case	Average	Spec
1.	82.1	83.8	68.0
4.	69.9	73.1	56.5
8.	64.5	67.0	49.9
10.	59.0	62.5	47.7
16.	55.8	59.7	42.6
20.	53.0	56.9	40.0
25.	53.1	57.2	37.2
31.25	44.7	50.4	34.3
62.5	40.5	43.3	24.1
100.	28.8	32.4	15.8
200.	15.4	18.7	0.4
250.	10.1	15.6	-5.7

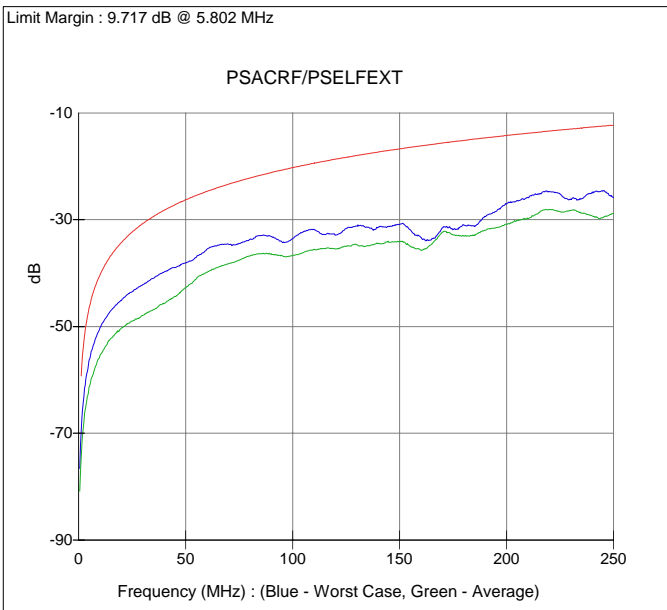


Summary

Client	Superior Essex	Report No	100230894CRT-001a
Specification	TIA-568-C2 - Cat 6 Channel	Length	100.
Part No	77-246-2A	Temperature	20 °C
Test Started	10/7/2010 10:47:19 AM		A
Description	4 Connector Channel	Test Status	Complies
Technician	John Cash		



ACRF/ELFEXT			
Freq	Worst Case	Average	Spec
1.	72.8	85.1	63.1
4.	60.0	72.7	51.2
8.	53.6	68.1	45.2
10.	51.6	65.6	43.3
16.	47.7	61.5	39.2
20.	46.0	59.6	37.2
25.	44.1	58.1	35.3
31.25	42.3	56.5	33.4
62.5	36.5	46.7	27.3
100.	36.0	43.6	23.3
200.	29.9	38.3	17.2
250.	28.1	36.2	15.3

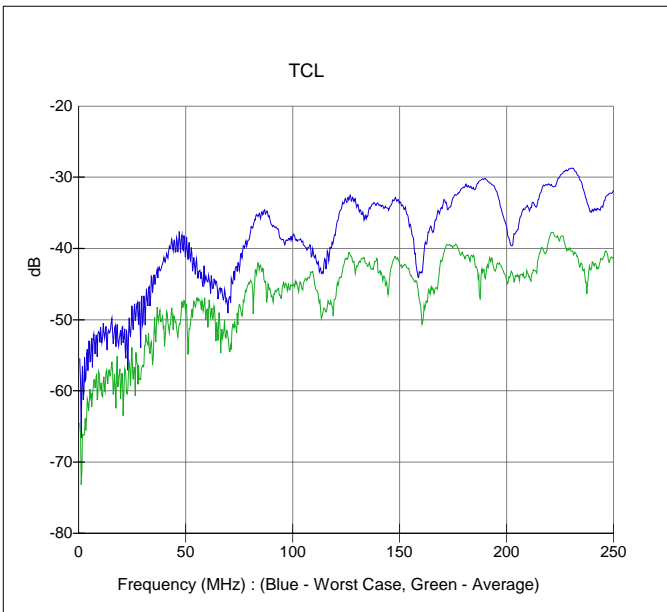


PSACRF/PSELFEXT			
Freq	Worst Case	Average	Spec
1.	70.5	75.5	60.1
4.	58.4	63.1	48.2
8.	52.1	57.3	42.2
10.	50.2	55.3	40.3
16.	46.6	51.9	36.2
20.	45.0	50.3	34.2
25.	43.5	49.0	32.3
31.25	41.9	47.6	30.4
62.5	35.1	39.3	24.3
100.	33.5	36.8	20.3
200.	27.0	30.9	14.2
250.	25.9	28.8	12.3

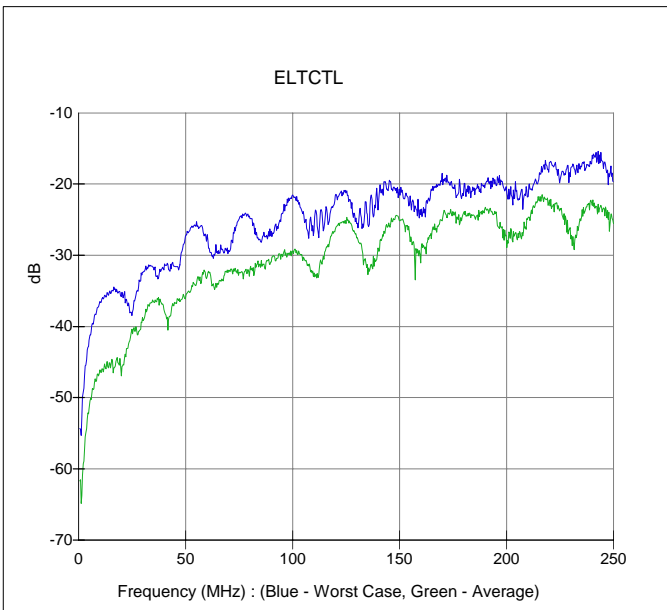


Summary

Client	Superior Essex	Report No	100230894CRT-001a
Specification	TIA-568-C2 - Cat 6 Channel	Length	100.
Part No	77-246-2A	Temperature	20 °C
Test Started	10/7/2010 10:47:19 AM		A
Description	4 Connector Channel	Test Status	Complies
Technician	John Cash		



TCL			
Freq	Worst Case	Average	Spec
1.	64.0	70.4	
4.	56.7	61.3	
8.	52.4	58.3	
10.	53.2	59.7	
16.	53.7	59.5	
20.	52.3	58.2	
25.	50.1	55.7	
31.25	49.3	52.7	
62.5	45.4	49.6	
100.	38.4	45.3	
200.	36.9	44.4	
250.	31.8	41.6	



ELTCTL			
Freq	Worst Case	Average	Spec
1.	55.0	63.5	
4.	43.2	52.8	
8.	38.3	47.7	
10.	36.6	46.2	
16.	35.0	46.1	
20.	35.5	46.3	
25.	38.1	40.8	
31.25	31.7	37.9	
62.5	30.1	34.2	
100.	21.6	29.4	
200.	21.4	28.4	
250.	19.6	25.6	