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Project Number: 3193544

Date Issued: 2/12/2010

Certificate of Conformance Number: 2034145CRT-002

Test Report Number: 3193544CRT-041e



Applicant:

Nexans Inc.
dba Berk-Tek
132 White Oak Road
New Holland, PA 17557

Applicant Contact: Mr. Joel Fasnacht

Manufacturer:

Nexans Inc.
dba Berk-Tek
132 White Oak Road
New Holland, PA 17557USA

Mfg. Contact: Mr. Joel Fasnacht

Dear Mr. Joel Fasnacht;

Intertek is pleased to provide this letter report covering the testing of one (1) 4 Pair, 23 AWG, UTP, CMP, Plenum, Horizontal (solid) Cable, Part Number: LANmark 1000 p/n 10032025. The sample was selected from your manufacturer facility, Nexans Inc. DBA Berk-Tek, by the Intertek Inspector Mr. Ronald Williams on 2/4/2010, for Quarter 1 2010 Quarterly Follow-up Testing.

The testing was performed at Intertek located in Cortland, NY on 2/12/2010, to the TIA 568-C.2, ISO 11801 Category 6, and the Berk-Tek LanMark 1000 specifications and did comply with the applicable requirements of the specifications.

We have appreciated this opportunity to be of service to you. If there are any questions regarding this letter or any other services offered by Intertek, Please do not hesitate to contact us.

Refer to Appendix A for test summary results

Sincerely,

Kathy Heath
Program Coordinator
Global Cabling Products Testing
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Email: kathy.heath@intertek.com

John Cash
Technician
Global Cabling Products Testing
Phone: (607) 758-6677
Email: john.cash@intertek.com

Antoine Pelletier
Engineer
Global Cabling Products Testing
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Email: antoine.pelletier@intertek.com



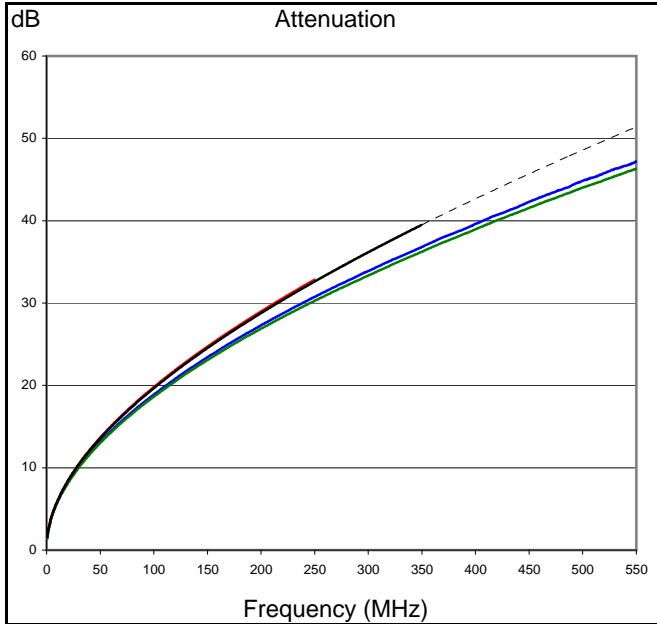
Appendix A

Test Results

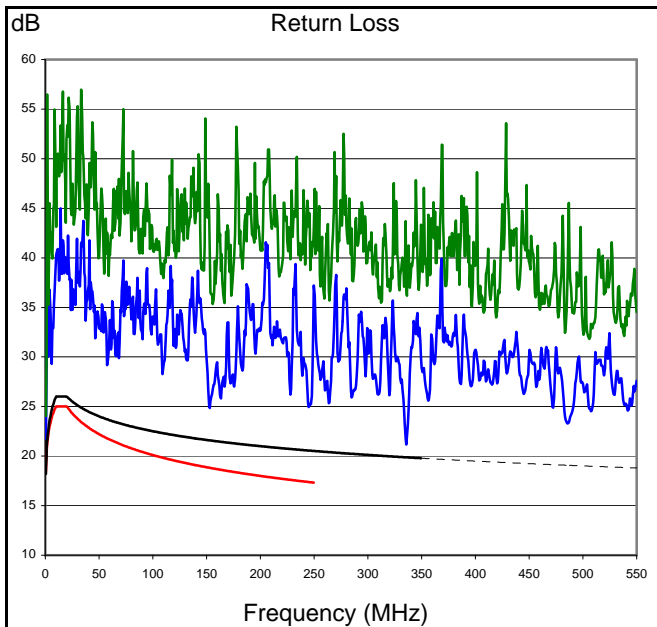
Summary

Client Nexans, INC, DBA Berk-Tek
Specifications Berk-Tek LANmark-1000
 ANSI/TIA-568-C.2, Category 6
 ISO/IEC 11801, Category 6
Part number 10032025
Description **Berk-Tek LANmark-1000 CMP**
 4X23 UTP-CMP-Solid

Test Started 2/12/2010 8:04
Technician John Cash
Report No. 3193544CRT-041e
Length (m) 100
Temperature 20 °C
Test Status **PASS**



Attenuation					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	2.0	2.0	2.2	2.2	N/A
4	3.7	3.7	3.7	3.8	3.8
8	5.2	5.2	5.3	5.3	5.4
10	5.9	5.8	5.9	6.0	6.0
16	7.4	7.3	7.6	7.6	7.7
20	8.2	8.1	8.4	8.4	8.5
25	9.3	9.2	9.5	9.5	9.6
31.25	10.4	10.2	10.6	10.7	10.8
62.5	14.7	14.5	15.2	15.3	15.4
100	18.9	18.6	19.7	19.8	19.9
250	30.7	30.3	32.6	32.8	33.0
350	36.8	36.2	39.5		
550	47.2	46.3			
Limit Margin (dB) :			0.04	0.07	0.12
Frequency (MHz) :			5.31	5.31	5.31



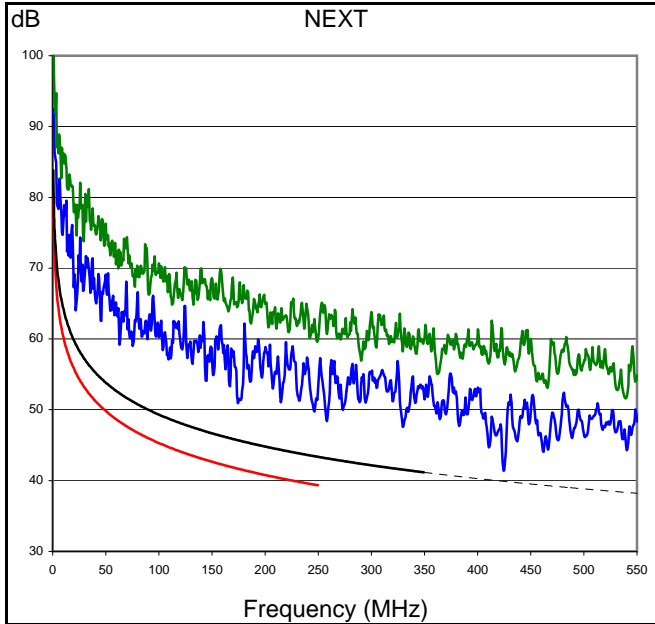
Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	29.2	30.3	20.4	20.4	N/A
4	36.8	45.5	23.6	23.0	23.0
8	35.3	45.4	25.4	24.5	24.5
10	40.3	43.1	26.0	25.0	25.0
16	41.8	56.8	26.0	25.0	25.0
20	39.8	51.9	26.0	25.0	25.0
25	34.7	47.5	25.5	24.3	24.3
31.25	38.6	46.1	25.0	23.6	23.6
62.5	31.3	42.4	23.6	21.6	21.6
100	33.9	40.8	22.5	20.1	20.1
250	37.2	42.9	20.5	17.3	17.3
350	29.9	43.4	19.8		
550	27.6	34.5			
Limit Margin (dB) :			1.29	5.41	5.41
Frequency (MHz) :			335.70	6.00	6.00

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification

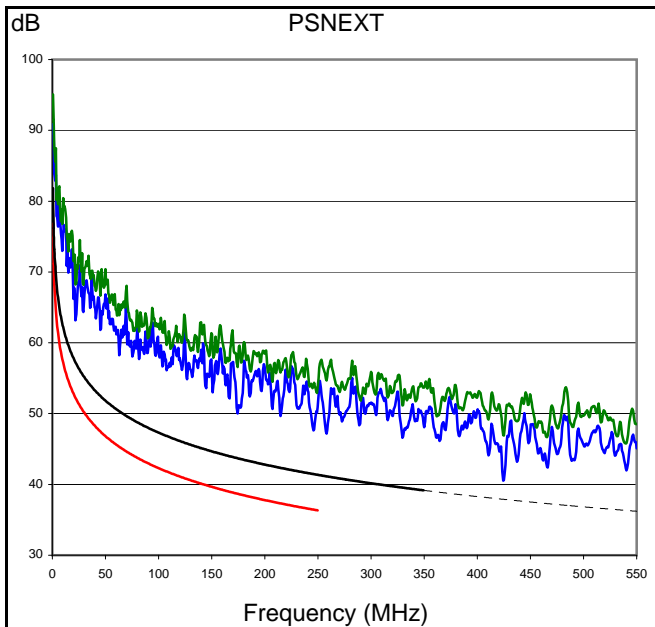
Summary

Client Nexans, INC, DBA Berk-Tek
Specifications Berk-Tek LANmark-1000
 ANSI/TIA-568-C.2, Category 6
 ISO/IEC 11801, Category 6
Part number 10032025
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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 8:04
Technician John Cash
Report No. 3193544CRT-041e
Length (m) 100
Temperature 20 °C
Test Status **PASS**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	92.5	97.1	78.2	73.2	N/A
4	79.2	87.1	70.4	65.4	66.4
8	78.0	82.7	65.7	60.7	61.7
10	76.9	86.2	64.2	59.2	60.2
16	72.1	82.8	61.1	56.1	57.1
20	67.3	77.9	59.9	54.9	55.9
25	70.3	78.4	58.3	53.3	54.3
31.25	71.7	76.6	56.9	51.8	52.8
62.5	64.4	69.9	52.5	47.5	48.5
100	60.2	70.7	49.3	44.3	45.3
250	52.7	59.8	43.3	38.3	39.3
350	52.3	59.8	41.2		
550	48.3	54.8			
Limit Margin (dB) :			4.77	9.79	8.79
Frequency (MHz) :			21.79	21.79	21.79



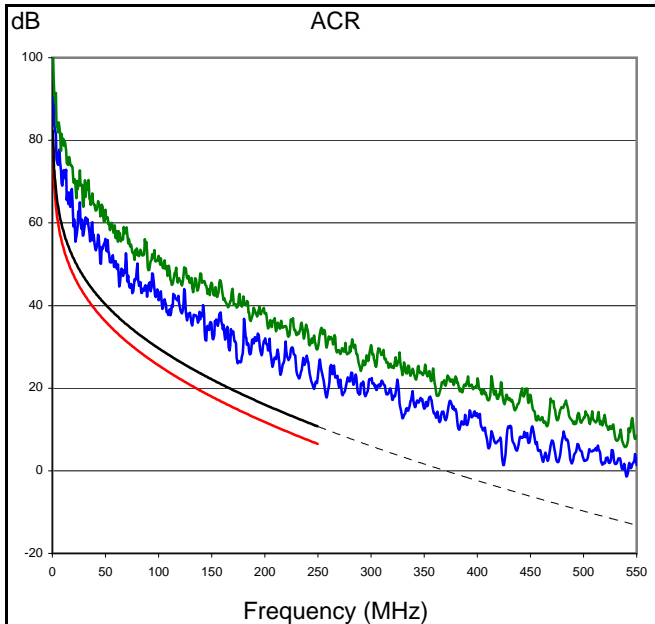
PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	89.5	91.5	76.2	71.2	N/A
4	77.9	80.2	68.4	63.4	63.4
8	75.5	77.1	63.7	58.7	58.7
10	75.5	80.4	62.2	57.2	57.2
16	71.4	74.7	59.1	54.1	54.1
20	66.2	71.5	57.9	52.9	52.9
25	68.6	71.9	56.3	51.3	51.3
31.25	68.7	70.8	54.9	49.8	49.8
62.5	61.8	64.0	50.5	45.5	45.5
100	58.5	62.7	47.3	42.3	42.3
250	50.9	53.7	41.3	36.3	36.3
350	48.6	53.7	39.2		
550	45.1	48.5			
Limit Margin (dB) :			5.93	10.95	10.95
Frequency (MHz) :			21.79	21.79	21.79

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification

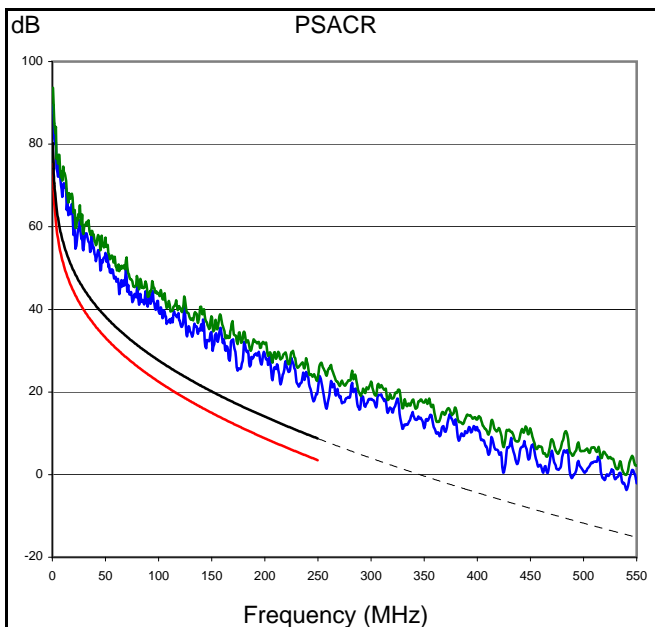
Summary

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 4X23 UTP-CMP-Solid

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Technician John Cash
Report No. 3193544CRT-041e
Length (m) 100
Temperature 20 °C
Test Status **PASS**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	90.5	95.1	76.0	71.0	N/A
4	75.4	83.4	66.7	61.6	62.6
8	72.6	77.5	60.4	55.4	56.3
10	70.9	80.4	58.3	53.2	54.2
16	64.7	75.5	53.6	48.5	49.4
20	59.1	69.8	51.5	46.5	47.4
25	61.2	69.2	48.8	43.7	44.7
31.25	61.4	66.3	46.2	41.1	42.1
62.5	49.9	55.5	37.3	32.2	33.1
100	41.3	52.0	29.6	24.5	25.4
250	22.5	29.5	10.7	5.5	6.3
350	15.5	23.5			
550	1.4	8.5			
Limit Margin (dB) :			5.04	10.11	9.18
Frequency (MHz) :			21.79	21.79	21.79



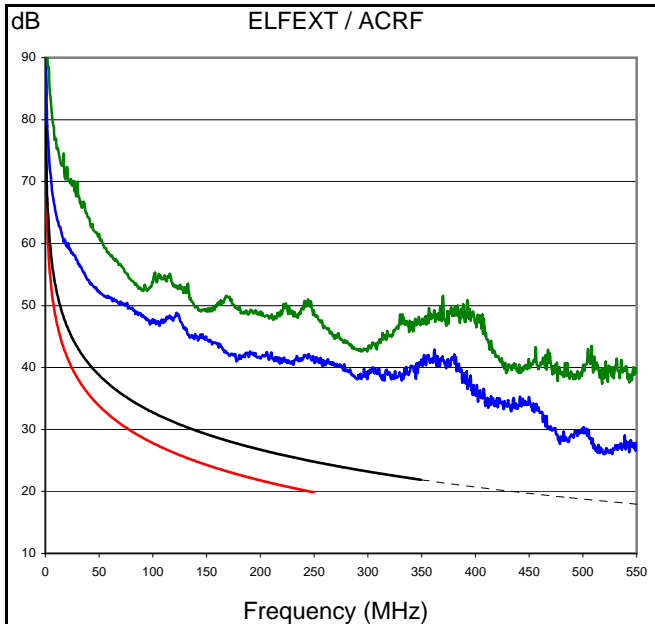
PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	87.5	89.5	74.0	69.0	N/A
4	74.1	76.5	64.7	59.6	59.6
8	70.1	71.9	58.4	53.4	53.3
10	69.5	74.6	56.3	51.2	51.2
16	64.0	67.4	51.6	46.5	46.4
20	58.0	63.4	49.5	44.5	44.4
25	59.4	62.7	46.8	41.7	41.7
31.25	58.4	60.6	44.2	39.1	39.1
62.5	47.4	49.5	35.3	30.2	30.1
100	39.6	44.0	27.6	22.5	22.4
250	20.2	23.4	8.7	3.5	3.3
350	11.8	17.5			
550	-2.1	2.2			
Limit Margin (dB) :			6.21	11.28	11.34
Frequency (MHz) :			21.79	21.79	21.79

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification

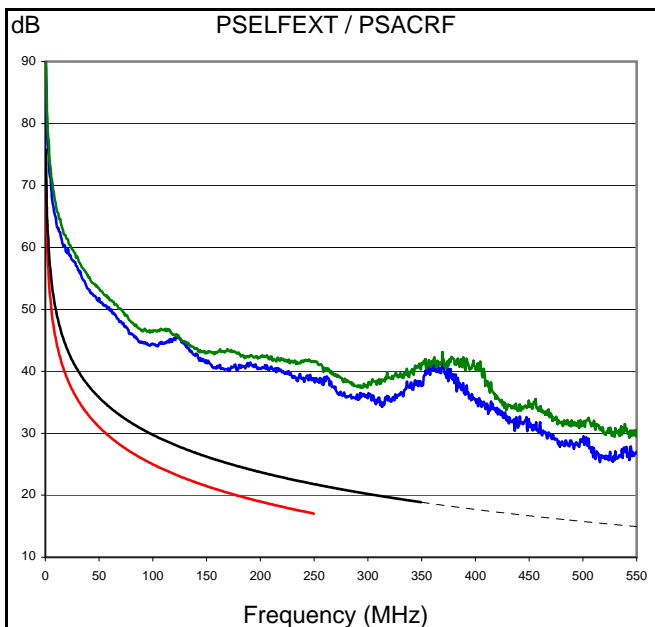
Summary

Client Nexans, INC, DBA Berk-Tek
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 ANSI/TIA-568-C.2, Category 6
 ISO/IEC 11801, Category 6
Part number 10032025
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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 8:04
Technician John Cash
Report No. 3193544CRT-041e
Length (m) 100
Temperature 20 °C
Test Status **PASS**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	84.1	93.7	71.3	66.3	N/A
4	72.8	85.3	60.9	55.9	50.1
8	66.6	78.6	54.6	49.7	43.9
10	64.7	76.5	52.7	47.7	41.9
16	60.9	72.8	48.5	43.6	37.8
20	59.9	72.4	46.8	41.9	36.1
25	58.5	69.4	44.7	39.8	34.0
31.25	56.7	67.5	42.8	37.9	32.1
62.5	51.3	58.1	37.0	32.0	26.2
100	47.8	53.7	32.7	27.8	22.0
250	41.2	49.2	24.8	19.8	14.0
350	40.4	47.4	21.9		
550	27.9	39.2			
Limit Margin (dB) :			11.57	16.52	22.57
Frequency (MHz) :			1.87	1.87	6.00



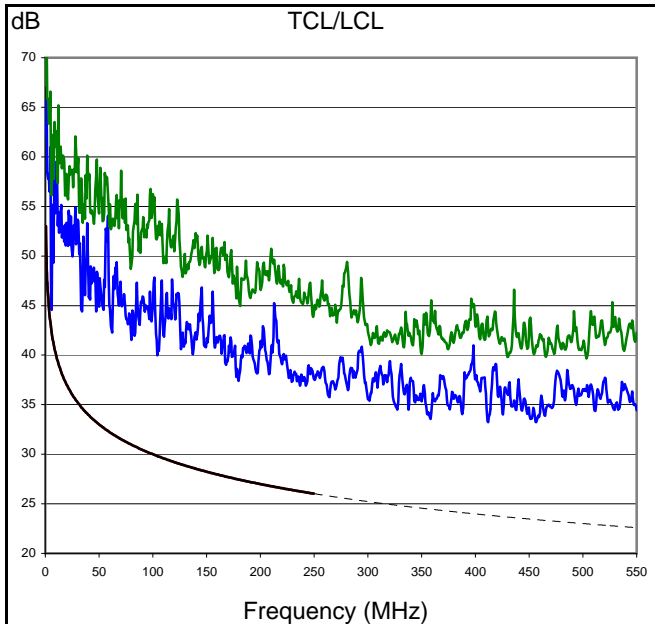
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	83.9	85.8	68.3	63.3	N/A
4	71.9	74.3	57.9	52.9	53.1
8	65.9	68.7	51.6	46.7	46.9
10	64.1	66.5	49.7	44.7	44.9
16	60.5	62.9	45.5	40.6	40.8
20	59.5	61.4	43.8	38.9	39.1
25	57.9	59.7	41.7	36.8	37.0
31.25	56.3	57.6	39.8	34.9	35.1
62.5	50.0	51.5	34.0	29.0	29.2
100	44.5	46.6	29.7	24.8	25.0
250	38.8	41.6	21.8	16.8	17.0
350	37.6	40.3	18.9		
550	27.0	30.6			
Limit Margin (dB) :			13.50	18.45	18.55
Frequency (MHz) :			1.87	1.87	87.05

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification

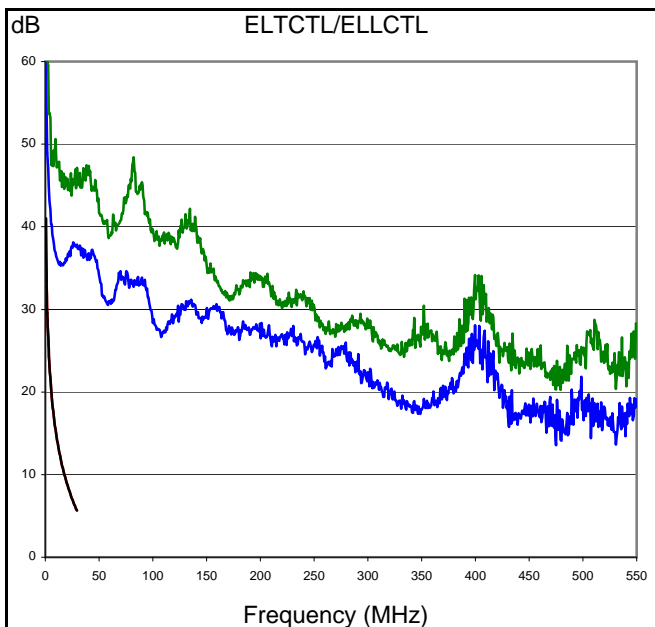
Summary

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 ANSI/TIA-568-C.2, Category 6
 ISO/IEC 11801, Category 6
Part number 10032025
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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 8:04
Technician John Cash
Report No. 3193544CRT-041e
Length (m) 100
Temperature 20 °C
Test Status **PASS**



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	65.7	72.6	49.3	40.0	49.3
4	56.5	63.5	44.1	40.0	44.1
8	54.6	60.1	40.9	40.0	40.9
10	56.3	61.0	39.9	39.9	39.9
16	53.0	60.1	37.9	37.9	37.9
20	53.4	58.3	37.0	37.0	37.0
25	49.9	58.5	36.0	36.0	36.0
31.25	50.2	54.4	35.0	35.0	35.0
62.5	42.6	53.0	32.1	32.1	32.1
100	45.1	56.3	30.0	30.0	30.0
250	37.6	44.2	26.0	26.0	26.0
350	35.7	40.3			
550	34.4	42.3			
Limit Margin (dB) :			2.33	4.56	2.33
Frequency (MHz) :			6.00	6.00	6.00



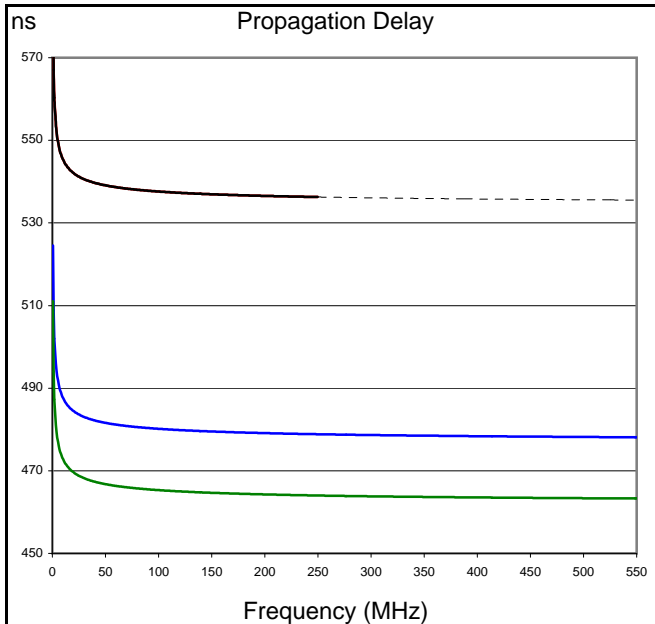
ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	53.8	63.5	33.5	33.5	33.5
4	43.1	53.8	23.1	23.1	23.1
8	37.9	49.3	16.9	16.9	16.9
10	36.4	48.4	14.9	14.9	14.9
16	35.3	45.2	10.8	10.8	10.8
20	35.9	44.9	9.1	9.1	9.1
25	37.5	45.8	7.0	7.0	7.0
31.25	37.3	45.9			
62.5	31.2	39.4			
100	28.4	39.6			
250	25.7	30.5			
350	17.9	27.9			
550	18.2	27.6			
Limit Margin (dB) :			19.37	19.37	19.37
Frequency (MHz) :			1.87	1.87	1.87

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification

Summary

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 ISO/IEC 11801, Category 6
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 4X23 UTP-CMP-Solid

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Test Status **PASS**



Propagation Delay					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	508.8	494.0	567.0	567.0	N/A
4	494.3	479.5	552.1	552.1	552.1
8	488.9	474.1	546.7	546.7	546.7
10	487.6	472.8	545.3	545.3	545.3
16	485.3	470.4	542.9	542.9	542.9
20	484.5	469.7	542.1	542.1	542.1
25	483.6	468.8	541.2	541.2	541.2
31.25	482.9	468.0	540.4	540.4	540.4
62.5	481.1	466.3	538.6	538.6	538.6
100	480.2	465.3	537.6	537.6	537.6
250	478.9	464.0	536.3	536.3	536.3
350	478.5	463.7			
550	478.1	463.3			
Limit Margin (dB) :			57.42	57.42	57.42
Frequency (MHz) :			210.68	210.68	210.68

Delay Skew				
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec
1-250	28.53	35	45	45

Low frequency measurements								
Parameter	Worst Case	Average	LANmark		TIA		ISO/IEC	
			Spec	Margin	Spec	Margin	Spec	Margin
Mutual capacitance (nF/100m)	4.65	3.33	5.60	0.95	5.60	0.95	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	36.64	14.77	160.00	123.36	330.00	293.36	160.00	123.36
Conductor DC resistance (Ω)	7.37	5.49	9.38	2.01	9.38	2.01	9.50	2.13
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.15%	0.06%	1.50%	1.35%	2.50%	2.35%	2.00%	1.85%
DC Resistance Unbalance between pairs (%)	0.84%	0.39%	4.00%	3.16%	N/A	N/A	4.00%	3.16%

Legend : Blue - Worst Case; Green - Average; Red - TIA and ISO/IEC Specifications; Black - LANmark Specification