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Project Number: G100283649
Certificate of Conformance Number: 2034144CRT-003

Date Issued: 2/17/2012

Test Report Number: G100283649CRT-013f



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: P/N 10167307 LANmark 2000. The sample was selected from your manufacturer facility, Nexans Inc. DBA Berk-Tek, by the Intertek Inspector Mr. Ronald Williams on 1/27/2012, for Quarter 1 2012 Quarterly Follow-up Testing.

The testing was performed at Intertek located in Cortland, NY on 2/13/2012, to the ANSI/TIA-568-C.2, LANmark-2000, and ISO/IEC 11801 Category 6 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
Kathy Heath
Program Coordinator
Global Cabling Products Testing
Phone: (607) 758-6641
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John Cash
John Cash
Technician
Global Cabling Products Testing
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Email: john.cash@intertek.com

Antoine Pelletier
Antoine Pelletier
Engineer
Global Cabling Products Testing
Phone: (607) 758-6718
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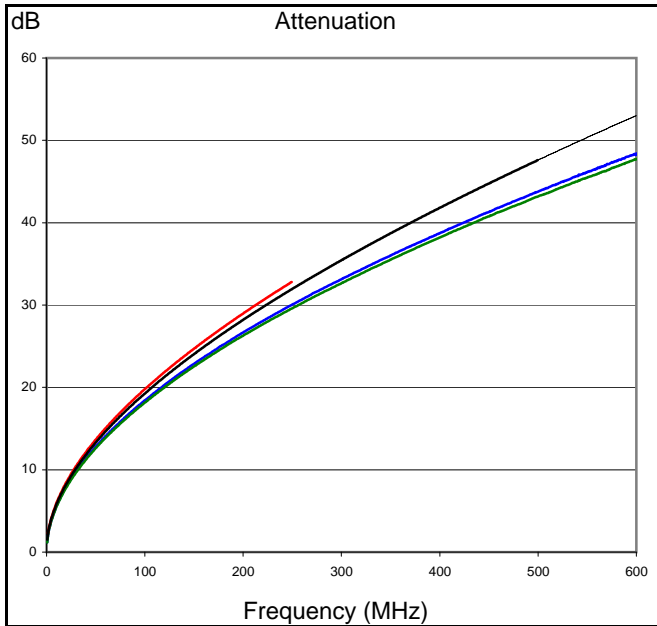
Appendix A

Test Results

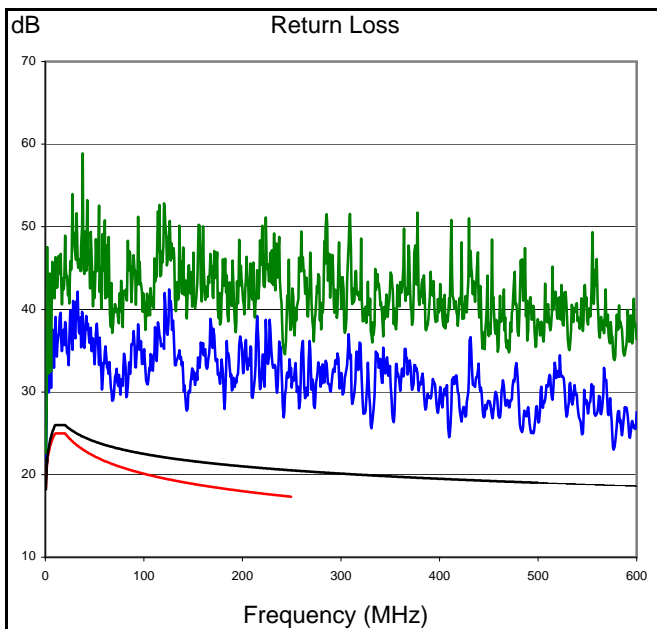
Summary

Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-2000
 ANSI/TIA-568-C.2 Category 6
 ISO/IEC 11801, Category 6
Part Number Lanmark 2000 10167397
Description **Berk-Tek LANmark-2000 CMP**
 4X23 UTP-CMP-Solid

Test Started 2/13/2012 13:29
Technician John Cash
Report No. 100283649CRT-013f
Length (m) 100
Temperature 23 °C
Test Status **PASS**



Attenuation					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	1.9	1.9	2.0	2.0	N/A
4	3.6	3.5	3.7	3.8	3.8
8	4.9	4.9	5.2	5.3	5.4
10	5.6	5.5	5.8	6.0	6.0
16	7.1	7.0	7.4	7.6	7.6
20	8.0	7.8	8.2	8.5	8.5
25	9.0	8.8	9.3	9.5	9.6
31.25	10.0	9.9	10.4	10.7	10.7
62.5	14.4	14.2	15.0	15.4	15.5
100	18.4	18.2	19.3	19.8	19.9
250	30.0	29.6	32.0	32.8	33.0
350	36.0	35.5	38.7		
500	43.8	43.2	47.6		
600	48.4	47.7			
Limit Margin (dB) :			0.21	0.30	0.36
Frequency (MHz) :			3.50	2.00	5.00



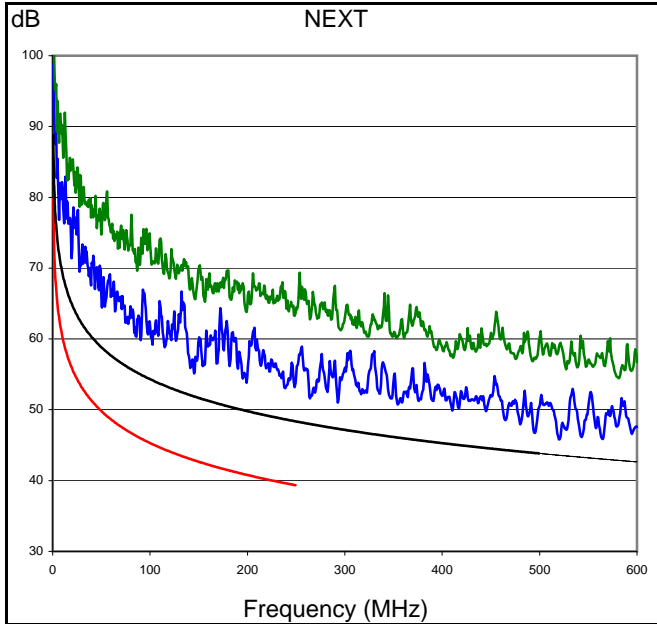
Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	26.2	27.8	20.0	20.0	N/A
4	32.8	44.3	23.6	23.0	23.0
8	36.9	41.9	25.4	24.5	24.5
10	39.1	46.3	26.0	25.0	25.0
16	36.0	43.0	26.0	25.0	25.0
20	38.5	48.9	26.0	25.0	25.0
25	39.9	45.8	25.5	24.3	24.3
31.25	40.9	46.0	25.0	23.6	23.6
62.5	33.0	41.8	23.5	21.5	21.5
100	35.2	40.6	22.5	20.1	20.1
250	32.9	37.6	20.5	17.3	17.3
350	33.2	42.4	19.8		
500	26.3	38.3	19.0		
600	27.5	36.4			
Limit Margin (dB) :			5.09	5.71	6.71
Frequency (MHz) :			409.66	1.25	5.75

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

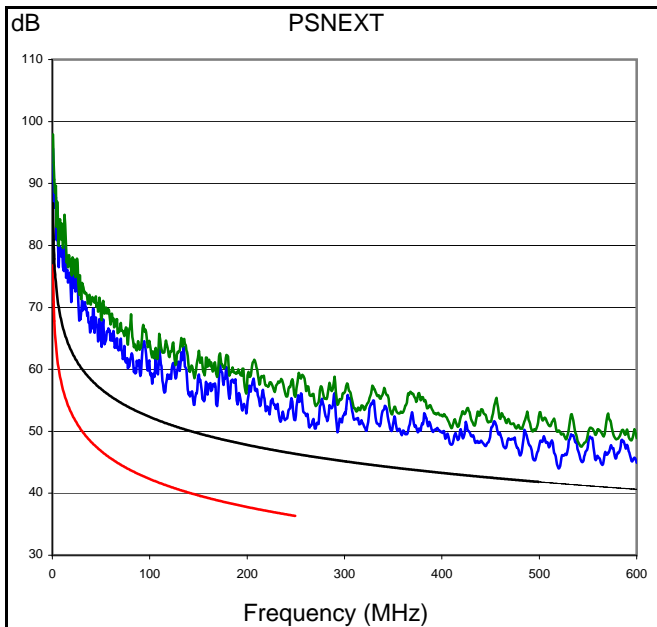
Summary

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 ANSI/TIA-568-C.2 Category 6
 ISO/IEC 11801, Category 6
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Technician John Cash
Report No. 100283649CRT-013f
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Temperature 23 °C
Test Status **PASS**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	91.5	101.6	84.3	74.3	N/A
4	82.7	89.3	75.3	65.3	66.3
8	82.0	91.8	70.8	60.8	61.8
10	81.4	88.3	69.3	59.3	60.3
16	76.3	82.5	66.3	56.2	57.2
20	72.7	85.1	64.8	54.8	55.8
25	77.8	84.2	63.3	53.3	54.3
31.25	70.6	81.0	61.9	51.9	52.9
62.5	68.1	75.2	57.4	47.4	48.4
100	61.6	73.0	54.3	44.3	45.3
250	53.8	63.6	48.3	38.3	39.3
350	53.5	60.4	46.2		
500	50.8	60.5	43.8		
600	47.6	56.7			
Limit Margin (dB) :			2.80	13.27	12.27
Frequency (MHz) :			495.09	145.13	145.13



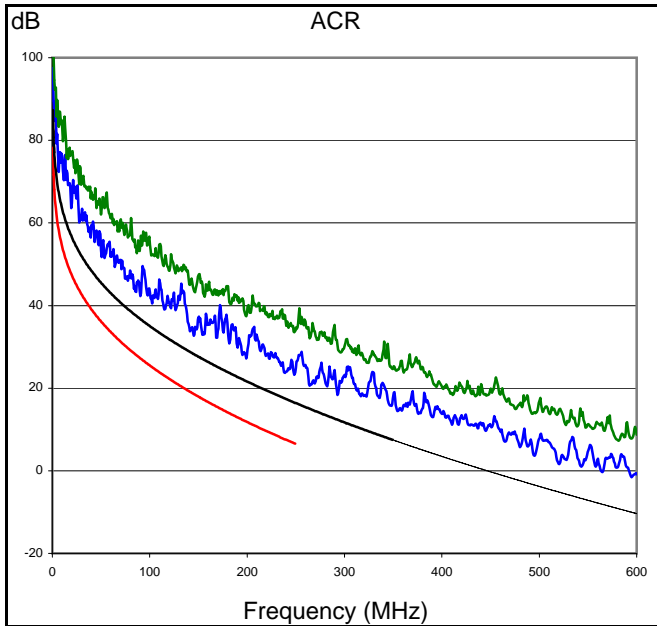
PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	90.3	93.4	82.3	72.3	N/A
4	80.9	83.0	73.3	63.3	63.3
8	79.7	84.2	68.8	58.8	58.8
10	79.4	81.9	67.3	57.3	57.3
16	74.0	76.5	64.3	54.2	54.2
20	72.3	75.1	62.8	52.8	52.8
25	75.9	77.9	61.3	51.3	51.3
31.25	69.5	73.6	59.9	49.9	49.9
62.5	66.2	68.2	55.4	45.4	45.4
100	59.4	64.0	52.3	42.3	42.3
250	51.8	55.5	46.3	36.3	36.3
350	51.0	53.2	44.2		
500	48.1	53.1	41.8		
600	44.9	48.9			
Limit Margin (dB) :			3.40	14.42	14.42
Frequency (MHz) :			495.09	145.13	145.13

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

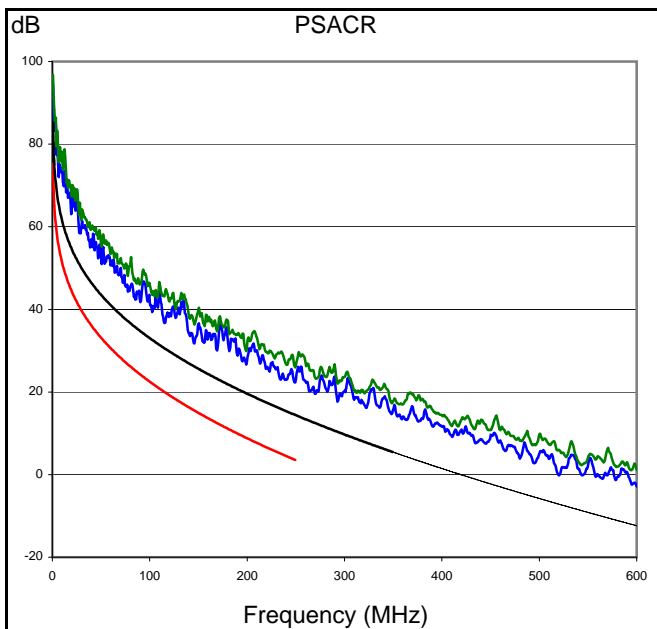
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 4X23 UTP-CMP-Solid

Test Started 2/13/2012 13:29
Technician John Cash
Report No. 100283649CRT-013f
Length (m) 100
Temperature 23 °C
Test Status **PASS**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	89.6	99.7	82.3	72.3	N/A
4	79.2	85.7	71.6	61.5	62.4
8	77.2	86.9	65.6	55.4	56.4
10	75.8	82.8	63.5	53.3	54.3
16	69.2	75.4	58.9	48.7	49.6
20	64.8	77.3	56.6	46.3	47.3
25	68.8	75.3	54.1	43.8	44.8
31.25	60.6	71.1	51.5	41.2	42.1
62.5	53.7	61.0	42.4	32.0	32.9
100	43.1	54.8	35.0	24.5	25.4
250	23.7	33.9	16.4	5.5	6.3
350	17.5	24.7	7.4		
500	8.0	17.1			
600	-0.8	8.7			
Limit Margin (dB) :			4.41	15.06	14.11
Frequency (MHz) :			145.13	6.50	6.50



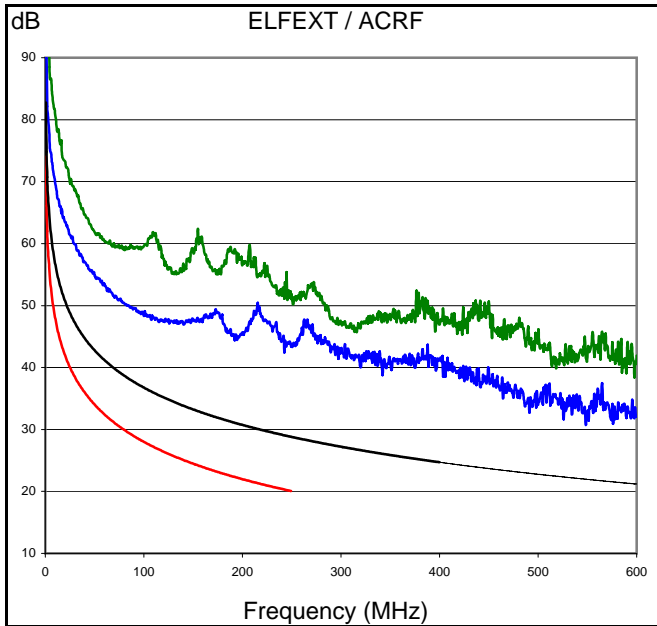
PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	88.4	91.5	80.3	70.3	N/A
4	77.4	79.5	69.6	59.5	59.4
8	74.8	79.3	63.6	53.4	53.4
10	73.8	76.4	61.5	51.3	51.3
16	67.0	69.5	56.9	46.7	46.6
20	64.4	67.3	54.6	44.3	44.3
25	67.0	69.1	52.1	41.8	41.8
31.25	59.7	63.7	49.5	39.2	39.1
62.5	52.0	54.0	40.4	30.0	29.9
100	41.3	45.8	33.0	22.5	22.4
250	22.3	26.0	14.4	3.5	3.3
350	15.5	17.7	5.4		
500	5.3	9.9			
600	-2.9	1.1			
Limit Margin (dB) :			5.57	16.23	16.36
Frequency (MHz) :			145.13	145.13	145.13

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

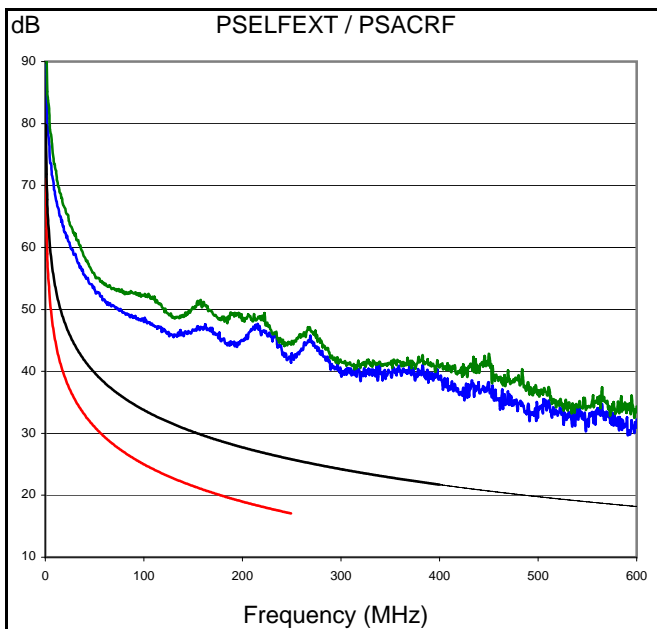
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 4X23 UTP-CMP-Solid

Test Started 2/13/2012 13:29
Technician John Cash
Report No. 100283649CRT-013f
Length (m) 100
Temperature 23 °C
Test Status **PASS**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	89.9	99.3	76.8	67.8	N/A
4	77.2	88.5	64.7	55.8	56.0
8	71.5	82.6	58.7	49.7	49.9
10	69.5	80.4	56.8	47.8	48.0
16	64.9	76.6	52.7	43.7	43.9
20	63.5	73.2	50.7	41.8	42.0
25	61.4	69.7	48.8	39.8	40.0
31.25	59.7	68.3	46.9	37.9	38.1
62.5	52.3	60.2	40.8	31.9	32.1
100	48.3	59.7	36.8	27.8	28.0
250	43.3	51.1	28.8	19.8	20.0
350	40.7	48.6	25.9		
500	34.5	46.2			
600	32.1	41.9			
Limit Margin (dB) :			11.42	20.37	20.21
Frequency (MHz) :			2.00	2.00	73.94



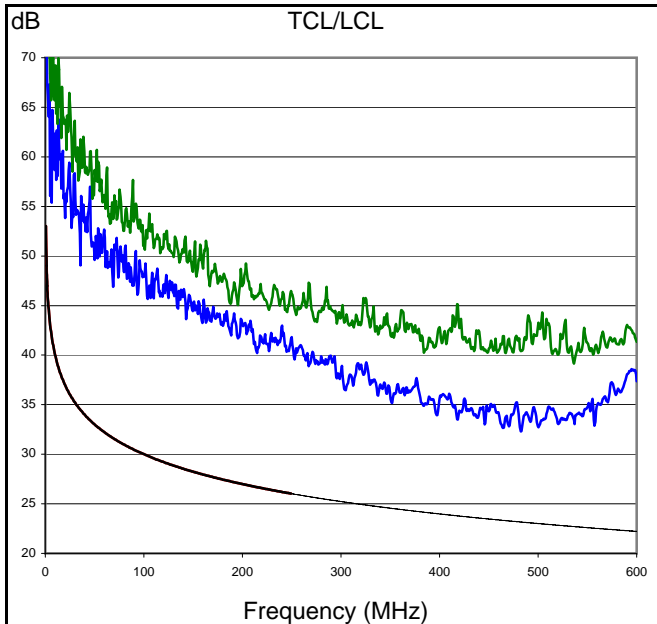
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	87.9	91.1	73.8	64.8	N/A
4	75.8	80.8	61.7	52.8	53.0
8	70.7	74.6	55.7	46.7	46.9
10	68.1	72.5	53.8	44.8	45.0
16	64.1	67.9	49.7	40.7	40.9
20	62.4	66.3	47.7	38.8	39.0
25	60.2	63.6	45.8	36.8	37.0
31.25	58.5	61.6	43.9	34.9	35.1
62.5	50.8	53.7	37.8	28.9	29.1
100	48.0	52.3	33.8	24.8	25.0
250	41.4	44.3	25.8	16.8	17.0
350	39.9	41.2	22.9		
500	34.1	37.0			
600	32.2	34.3			
Limit Margin (dB) :			13.01	21.96	21.76
Frequency (MHz) :			62.70	62.70	62.70

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

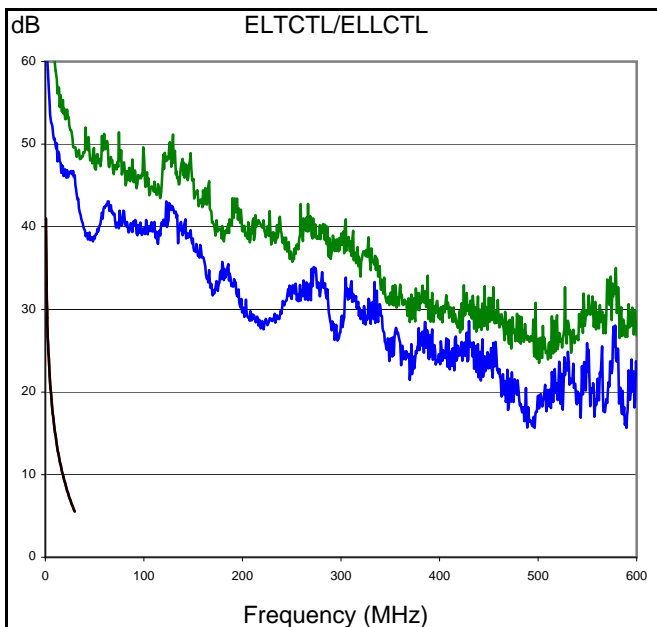
Summary

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Length (m) 100
Temperature 23 °C
Test Status **PASS**



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	72.7	78.1	50.0	40.0	50.0
4	67.3	71.2	44.0	40.0	44.0
8	61.6	69.8	41.0	40.0	41.0
10	62.4	69.2	40.0	40.0	40.0
16	56.8	61.9	38.0	38.0	38.0
20	53.8	63.4	37.0	37.0	37.0
25	56.6	64.7	36.0	36.0	36.0
31.25	54.2	60.0	35.1	35.1	35.1
62.5	50.5	58.9	32.0	32.0	32.0
100	47.9	51.1	30.0	30.0	30.0
250	41.7	46.5	26.0	26.0	26.0
350	36.3	42.6			
500	32.7	43.3			
600	37.4	41.3			
Limit Margin (dB) :			13.03	13.53	13.03
Frequency (MHz) :			5.00	214.82	5.00



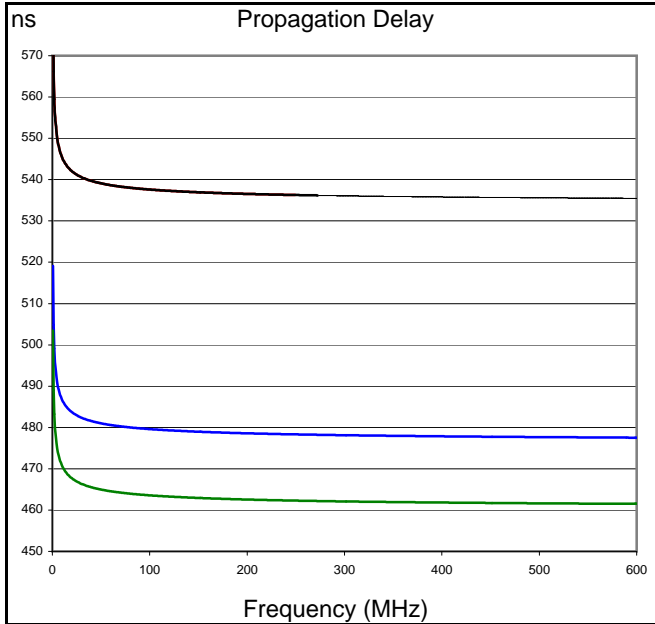
ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	65.1	73.6	35.0	35.0	35.0
4	55.2	63.9	23.0	23.0	23.0
8	51.0	62.3	16.9	16.9	16.9
10	49.9	58.9	15.0	15.0	15.0
16	46.5	54.8	10.9	10.9	10.9
20	46.9	53.0	9.0	9.0	9.0
25	46.7	51.7	7.0	7.0	7.0
31.25	44.6	48.9			
62.5	42.6	50.4			
100	39.8	48.2			
250	31.3	37.0			
350	25.4	31.2			
500	19.6	26.5			
600	22.1	26.9			
Limit Margin (dB) :			31.29	31.29	31.29
Frequency (MHz) :			2.00	2.00	2.00

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

Summary

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Specifications Berk-Tek LANmark-2000
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 ISO/IEC 11801, Category 6
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Temperature 23 °C
Test Status **PASS**



Propagation Delay					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	504.9	489.0	570.0	570.0	N/A
4	492.1	476.2	552.0	552.0	552.0
8	487.9	471.9	546.7	546.7	546.7
10	486.6	470.6	545.4	545.4	545.4
16	484.5	468.5	543.0	543.0	543.0
20	483.7	467.7	542.0	542.0	542.0
25	482.9	466.9	541.2	541.2	541.2
31.25	482.3	466.2	540.4	540.4	540.4
62.5	480.5	464.5	538.6	538.6	538.6
100	479.6	463.6	537.6	537.6	537.6
250	478.3	462.3	536.3	536.3	536.3
350	478.0	462.0	535.9		
500	477.7	461.6	535.6		
600	477.5	461.5			
Limit Margin (dB) :			57.95	57.95	57.95
Frequency (MHz) :			238.80	238.80	238.80

Delay Skew				
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec
1-250	31.17	35	45	45

Low frequency measurements								
Parameter	Worst Case	Average	LANmark		TIA		ISO/IEC	
			Spec	Margin	Spec	Margin	Spec	Margin
Mutual capacitance (nF/100m)	4.53	4.42	5.60	1.07	5.60	1.07	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	4.95	2.13	160.00	155.05	330.00	325.05	160.00	155.05
Conductor DC resistance (Ω)	7.17	7.11	9.38	2.21	9.38	2.21	9.50	2.33
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.11%	0.07%	1.50%	1.39%	2.50%	2.39%	2.00%	1.89%
DC Resistance Unbalance between pairs (%)	0.93%	0.55%	4.00%	3.07%	N/A	N/A	4.00%	3.07%

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