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Project Number: G100283649
Certificate of Conformance Number: 9803068CRT-005

Date Issued: 2/14/2012

Test Report Number: G100283649CRT-013b



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, 24 AWG, UTP, CMP, Plenum, Horizontal (solid) Cable, Part Number: P/N 10032064 LANmark 350. 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 2/10/2012, to the ANSI/TIA-568-C.2, LANmark-350, and ISO/IEC 11801 Category 5e specifications and did not 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
Email: kathy.heath@intertek.com

John Cash
John Cash
Technician
Global Cabling Products Testing
Phone: (607) 758-6677
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Antoine Pelletier
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Engineer
Global Cabling Products Testing
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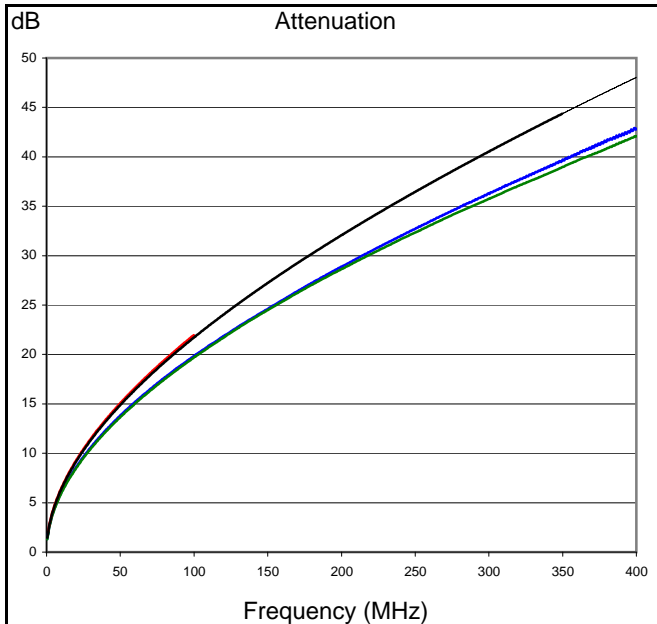
Appendix A

Test Results

Summary

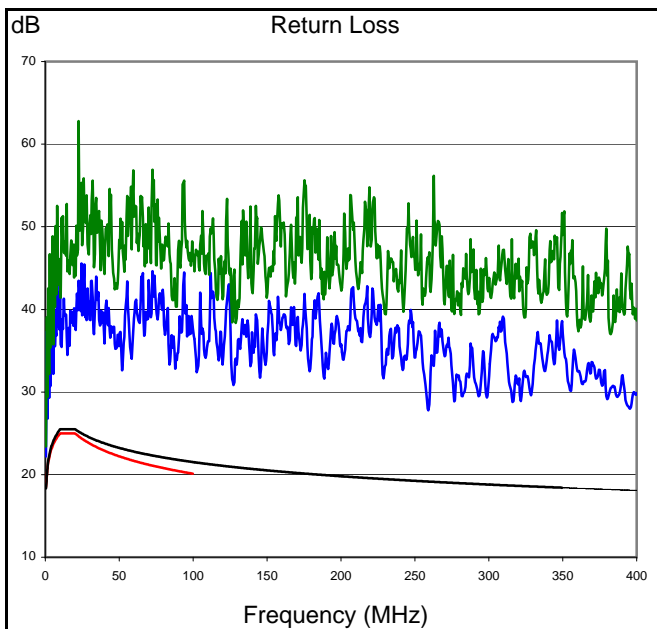
Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-350
 ANSI/TIA-568-C.2, Category 5e
 ISO/IEC 11801, Category 5e
Part Number LANmark 350 10032064
Description **Berk-Tek LANmark-350 CMP**
 4X24 UTP-CMP-Solid

Test Started 2/10/2012 12:53
Technician John Cash
Report No. 100283649CRT-013b
Length (m) 100
Temperature 21.5 °C
Test Status **FAIL**



Attenuation					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	1.9	1.9	2.0	2.5	N/A
4	3.8	3.7	4.0	4.3	4.1
8	5.4	5.3	5.7	5.9	5.8
10	6.1	6.0	6.4	6.6	6.5
16	7.7	7.6	8.1	8.4	8.3
20	8.6	8.5	9.2	9.4	9.3
25	9.7	9.5	10.3	10.5	10.4
31.25	10.9	10.7	11.6	11.8	11.7
62.5	15.5	15.3	16.8	17.1	17.0
100	19.8	19.7	21.7	22.0	22.0
250	32.8	32.4	36.5		
350	39.7	39.0	44.4		
400	42.9	42.1			

Limit Margin (dB) : 0.10 0.45 0.24
 Frequency (MHz) : 1.00 3.50 3.50



Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	37.3	39.0	20.0	20.0	N/A
4	42.1	46.3	23.3	23.0	23.0
8	45.8	52.5	25.0	24.5	24.5
10	42.1	46.1	25.5	25.0	25.0
16	37.8	45.9	25.5	25.0	25.0
20	38.7	47.8	25.5	25.0	25.0
25	39.3	47.8	24.9	24.3	24.3
31.25	43.5	53.3	24.4	23.6	23.6
62.5	39.3	49.2	22.7	21.5	21.5
100	37.7	45.9	21.5	20.1	20.1
250	34.2	44.8	19.2		
350	37.1	49.0	18.4		
400	29.9	38.7			

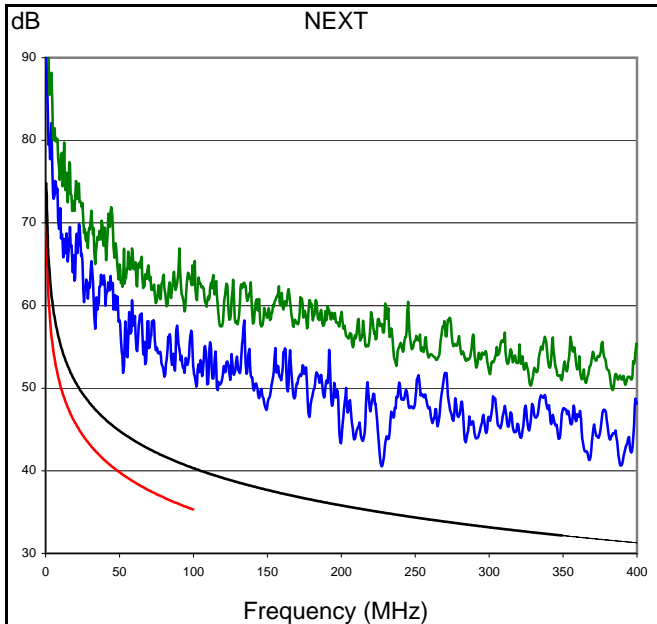
Limit Margin (dB) : 5.82 5.90 8.01
 Frequency (MHz) : 1.50 1.50 3.50

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

Summary

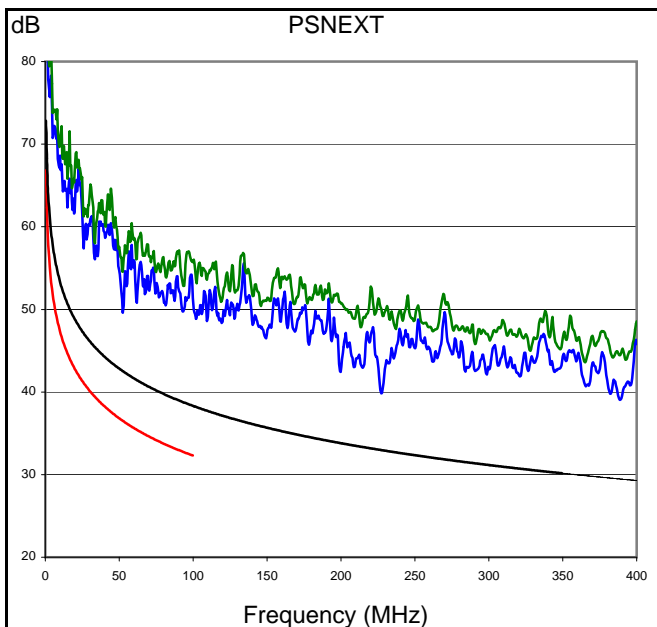
Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-350
 ANSI/TIA-568-C.2, Category 5e
 ISO/IEC 11801, Category 5e
Part Number LANmark 350 10032064
Description **Berk-Tek LANmark-350 CMP**
 4X24 UTP-CMP-Solid

Test Started 2/10/2012 12:53
Technician John Cash
Report No. 100283649CRT-013b
Length (m) 100
Temperature 21.5 °C
Test Status **FAIL**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	86.7	92.7	70.3	65.3	N/A
4	82.1	88.2	61.3	56.3	56.3
8	74.1	80.2	56.8	51.8	51.8
10	71.8	76.0	55.3	50.3	50.3
16	67.4	77.4	52.3	47.2	47.2
20	63.2	72.8	50.8	45.8	45.8
25	65.4	72.4	49.3	44.3	44.3
31.25	64.6	70.1	47.9	42.9	42.9
62.5	55.6	65.0	43.4	38.4	38.4
100	52.7	62.5	40.3	35.3	35.3
250	48.9	55.8	34.3		
350	47.5	52.1	32.2		
400	48.1	55.3			

Limit Margin (dB) : 5.58 12.35 12.35
 Frequency (MHz) : 227.22 52.44 52.44



PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	83.8	86.3	68.3	62.3	N/A
4	78.3	81.7	59.3	53.3	53.3
8	71.1	74.2	54.8	48.8	48.8
10	68.6	70.1	53.3	47.3	47.3
16	65.4	68.4	50.3	44.2	44.2
20	62.2	66.8	48.8	42.8	42.8
25	61.9	66.0	47.3	41.3	41.3
31.25	61.3	63.9	45.9	39.9	39.9
62.5	52.2	58.0	41.4	35.4	35.4
100	51.4	55.7	38.3	32.3	32.3
250	45.3	49.2	32.3		
350	44.3	46.5	30.2		
400	45.8	48.5			

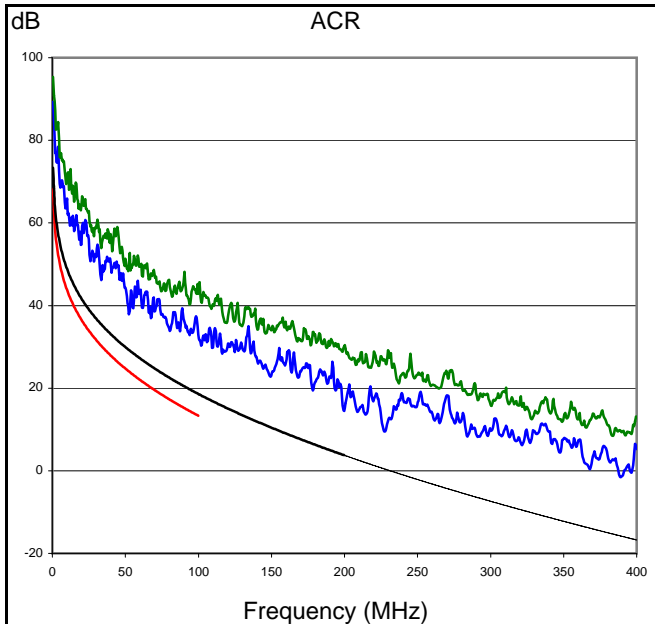
Limit Margin (dB) : 6.88 13.09 13.09
 Frequency (MHz) : 227.22 52.44 52.44

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

Summary

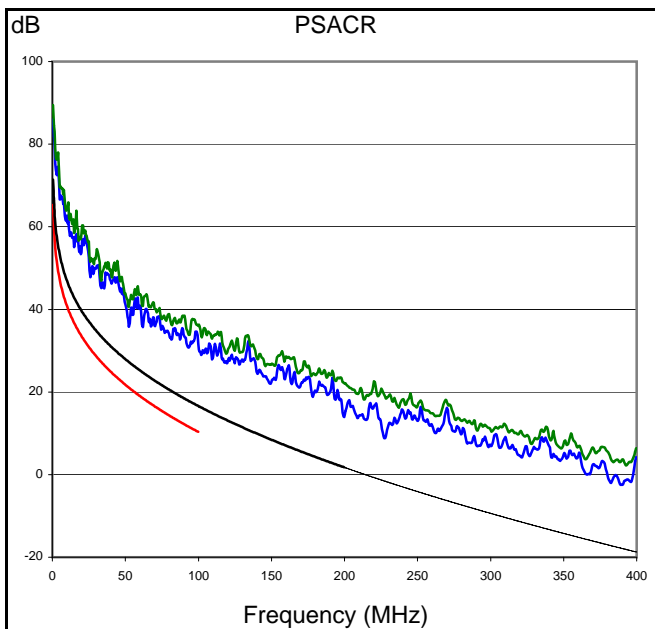
Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-350
 ANSI/TIA-568-C.2, Category 5e
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Part Number LANmark 350 10032064
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 4X24 UTP-CMP-Solid

Test Started 2/10/2012 12:53
Technician John Cash
Report No. 100283649CRT-013b
Length (m) 100
Temperature 21.5 °C
Test Status **FAIL**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	84.9	90.9	68.3	62.8	N/A
4	78.4	84.5	57.3	52.0	52.2
8	68.8	74.9	51.1	45.8	46.0
10	65.9	70.1	48.9	43.7	43.8
16	59.7	69.8	44.1	38.9	39.0
20	54.8	64.3	41.6	36.4	36.5
25	56.0	62.9	39.1	33.8	33.9
31.25	54.0	59.4	36.3	31.1	31.1
62.5	40.5	49.6	26.6	21.3	21.4
100	33.0	42.8	18.6	13.3	13.3
250	16.6	23.2			
350	7.8	12.9			
400	5.2	13.0			

Limit Margin (dB) : 8.63 13.89 13.83
 Frequency (MHz) : 52.44 52.44 52.44



PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	81.9	84.5	66.3	59.8	N/A
4	74.6	78.0	55.3	49.0	49.2
8	65.8	68.9	49.1	42.8	43.0
10	62.8	64.1	46.9	40.7	40.8
16	57.7	60.8	42.1	35.9	36.0
20	53.9	58.3	39.6	33.4	33.5
25	52.6	56.5	37.1	30.8	30.9
31.25	50.7	53.2	34.3	28.1	28.1
62.5	37.1	42.6	24.6	18.3	18.4
100	31.7	36.0	16.6	10.3	10.3
250	13.0	16.8			
350	5.0	7.6			
400	3.9	6.4			

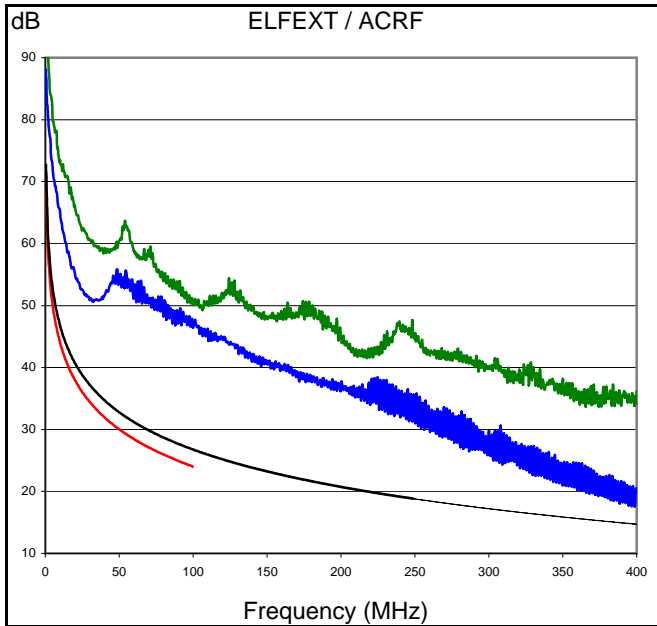
Limit Margin (dB) : 8.56 14.81 14.76
 Frequency (MHz) : 52.44 52.44 52.44

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

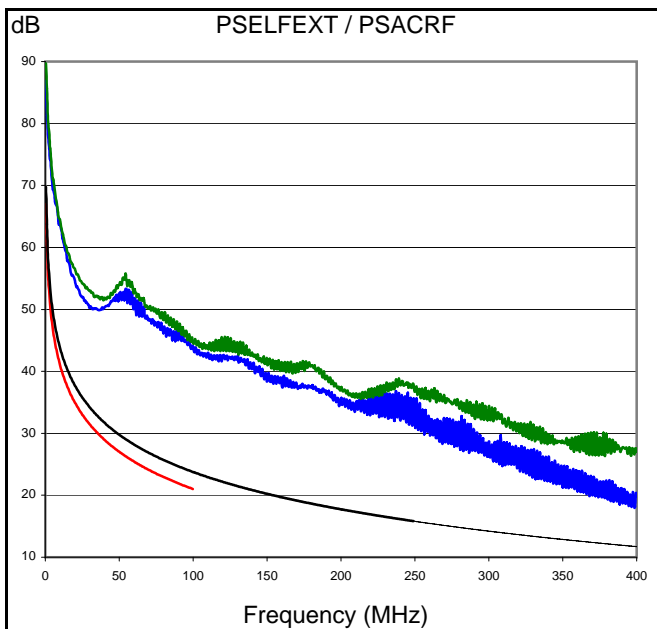
Summary

Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-350
 ANSI/TIA-568-C.2, Category 5e
 ISO/IEC 11801, Category 5e
Part Number LANmark 350 10032064
Description **Berk-Tek LANmark-350 CMP**
 4X24 UTP-CMP-Solid

Test Started 2/10/2012 12:53
Technician John Cash
Report No. 100283649CRT-013b
Length (m) 100
Temperature 21.5 °C
Test Status **FAIL**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	82.8	93.4	66.8	63.8	N/A
4	73.9	83.8	54.7	51.8	52.0
8	68.1	75.3	48.7	45.7	45.9
10	65.2	73.5	46.8	43.8	44.0
16	58.1	69.3	42.7	39.7	39.9
20	55.3	66.2	40.7	37.8	38.0
25	52.6	62.1	38.8	35.8	36.0
31.25	50.8	60.2	36.9	33.9	34.1
62.5	53.8	57.9	30.8	27.9	28.1
100	46.5	50.4	26.8	23.8	24.0
250	31.0	45.6	18.8		
350	21.0	38.2			
400	19.9	36.1			
Limit Margin (dB) : 10.74 16.41 16.21					
Frequency (MHz) : 248.19 23.97 23.97					



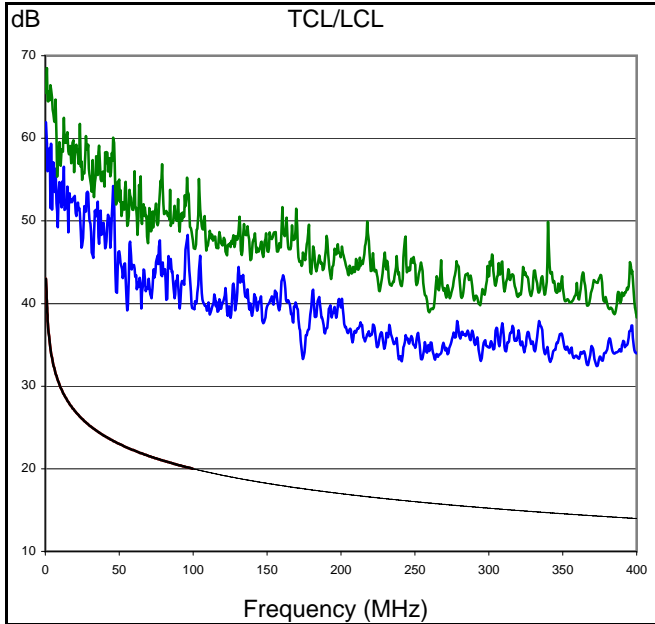
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	81.3	85.6	63.8	60.8	N/A
4	72.7	74.3	51.7	48.8	49.0
8	66.3	66.7	45.7	42.7	42.9
10	63.7	64.5	43.8	40.8	41.0
16	57.4	58.9	39.7	36.7	36.9
20	54.7	56.6	37.7	34.8	35.0
25	51.9	54.2	35.8	32.8	33.0
31.25	50.2	52.6	33.9	30.9	31.1
62.5	51.4	52.4	27.8	24.9	25.1
100	44.1	44.7	23.8	20.8	21.0
250	30.9	37.1	15.8		
350	21.3	28.7			
400	19.7	27.0			
Limit Margin (dB) : 13.45 18.97 18.77					
Frequency (MHz) : 248.19 29.96 29.96					

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

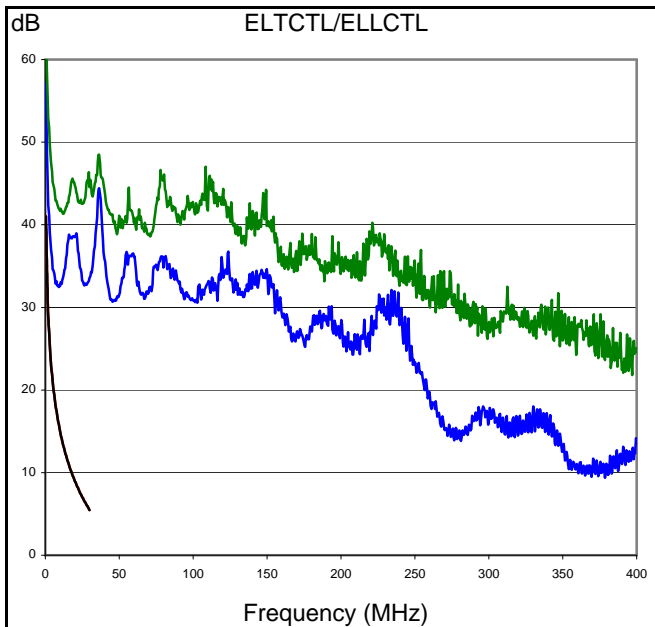
Summary

Client Nexans Inc., DBA Berk-Tek
Specifications Berk-Tek LANmark-350
 ANSI/TIA-568-C.2, Category 5e
 ISO/IEC 11801, Category 5e
Part Number LANmark 350 10032064
Description **Berk-Tek LANmark-350 CMP**
 4X24 UTP-CMP-Solid

Test Started 2/10/2012 12:53
Technician John Cash
Report No. 100283649CRT-013b
Length (m) 100
Temperature 21.5 °C
Test Status **FAIL**



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	59.4	68.5	40.0	N/A	40.0
4	59.3	65.9	34.0	N/A	34.0
8	51.1	55.3	31.0	N/A	31.0
10	53.4	58.1	30.0	N/A	30.0
16	52.7	58.1	28.0	N/A	28.0
20	53.0	58.3	27.0	N/A	27.0
25	47.0	55.0	26.0	N/A	26.0
31.25	46.2	53.6	25.1	N/A	25.1
62.5	42.5	48.3	22.0	N/A	22.0
100	39.5	47.7	20.0	N/A	20.0
250	34.6	44.7			
350	35.8	41.9			
400	34.0	38.3			
Limit Margin (dB) :			16.59	N/A	16.59
Frequency (MHz) :			55.43	N/A	55.43



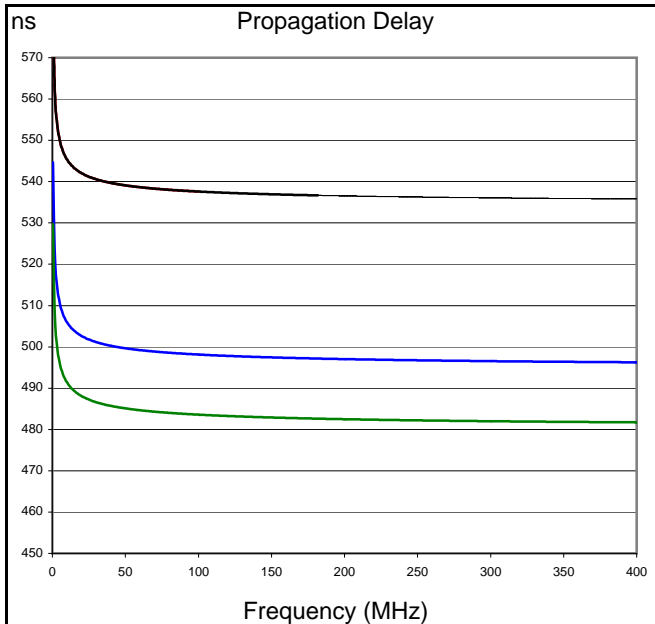
ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	49.0	58.5	35.0	N/A	35.0
4	36.9	47.5	23.0	N/A	23.0
8	32.7	42.5	16.9	N/A	16.9
10	32.6	41.7	15.0	N/A	15.0
16	38.8	43.4	10.9	N/A	10.9
20	38.5	44.8	9.0	N/A	9.0
25	33.3	42.5	7.0	N/A	7.0
31.25	34.2	43.7			
62.5	32.6	40.9			
100	30.9	42.8			
250	23.3	34.3			
350	12.9	26.0			
400	13.5	24.6			
Limit Margin (dB) :			13.42	N/A	13.42
Frequency (MHz) :			2.00	N/A	2.00

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-350
 ANSI/TIA-568-C.2, Category 5e
 ISO/IEC 11801, Category 5e
Part Number LANmark 350 10032064
Description **Berk-Tek LANmark-350 CMP**
 4X24 UTP-CMP-Solid

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Technician John Cash
Report No. 100283649CRT-013b
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Test Status **FAIL**



Propagation Delay					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	530.6	515.9	570.0	570.0	N/A
4	512.6	498.0	552.0	552.0	552.0
8	507.3	492.7	546.7	546.7	546.7
10	506.0	491.4	545.4	545.4	545.4
16	503.6	489.0	543.0	543.0	543.0
20	502.6	488.1	542.0	542.0	542.0
25	501.8	487.2	541.2	541.2	541.2
31.25	501.0	486.4	540.4	540.4	540.4
62.5	499.1	484.6	538.6	538.6	538.6
100	498.1	483.6	537.6	537.6	537.6
250	496.8	482.2			
350	496.4	481.8			
400	496.3	481.7			
Limit Margin (dB) : 39.41 39.41 39.41					
Frequency (MHz) : 17.48 17.48 17.48					

Delay Skew				
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec
1-100	30.98	25	45	45

Low frequency measurements								
Parameter	Worst Case	Average	LANmark		TIA		ISO/IEC	
			Spec	Margin	Spec	Margin	Spec	Margin
Mutual capacitance (nF/100m)	4.86	3.52	5.60	0.74	5.60	0.74	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	11.89	7.35	160.00	148.11	330.00	318.11	160.00	148.11
Conductor DC resistance (Ω)	8.79	6.52	9.38	0.59	9.38	0.59	9.50	0.71
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.96%	0.34%	2.00%	1.04%	2.50%	1.54%	2.00%	1.04%
DC Resistance Unbalance between pairs (%)	1.78%	0.70%	4.00%	2.22%	N/A	N/A	4.00%	2.22%

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