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Project Number: G100283649  
Certificate of Conformance Number: 9836069CRT-005

Date Issued: 2/14/2012

**Test Report Number: G100283649CRT-013a**



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, CMR, Non-Plenum Riser, Horizontal (solid) Cable, Part Number: P/N 10032428 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 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  
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John Cash  
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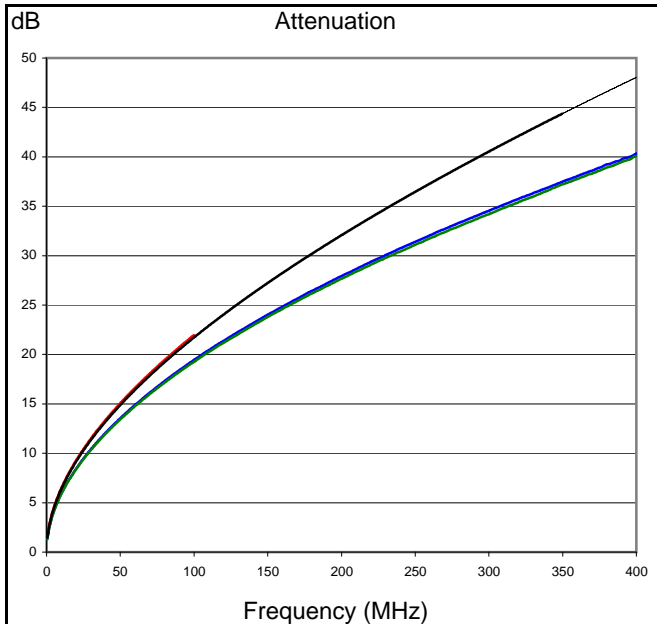
Appendix A

Test Results

Summary

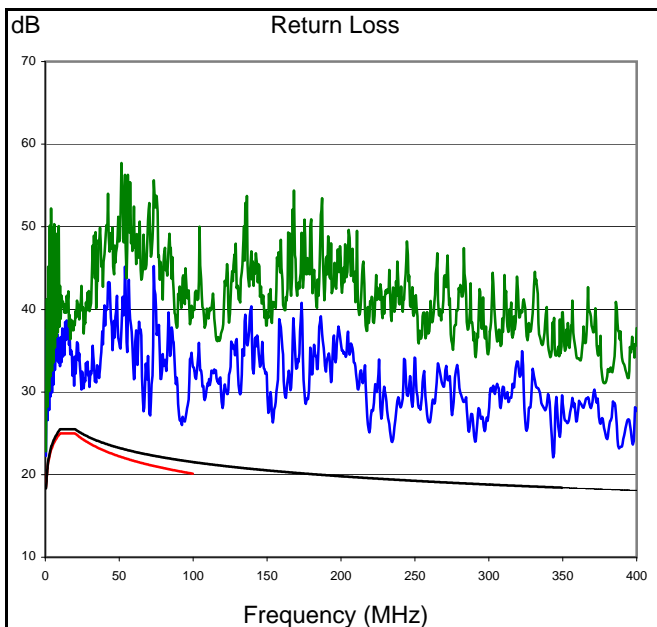
**Client** Nexans Inc., DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-350  
 ANSI/TIA-568-C.2, Category 5e  
 ISO/IEC 11801, Category 5e  
**Part Number** LANmark 350 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
**Temperature** 21.5 °C  
**Test Status** **PASS**



Attenuation					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	1.9	1.8	2.0	2.5	N/A
4	3.7	3.7	4.0	4.3	4.1
8	5.3	5.3	5.7	5.9	5.8
10	5.9	5.9	6.4	6.6	6.5
16	7.5	7.5	8.1	8.4	8.3
20	8.4	8.4	9.2	9.4	9.3
25	9.5	9.4	10.3	10.5	10.4
31.25	10.7	10.6	11.6	11.8	11.7
62.5	15.2	15.1	16.8	17.1	17.0
100	19.4	19.2	21.7	22.0	22.0
250	31.4	31.1	36.5		
350	37.5	37.2	44.4		
400	40.3	40.1			

Limit Margin (dB) : 0.15      0.55      0.33  
 Frequency (MHz) : 1.00      2.50      3.50



Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	37.6	41.2	20.0	20.0	N/A
4	42.8	52.2	23.3	23.0	23.0
8	37.0	48.3	25.0	24.5	24.5
10	33.1	42.9	25.5	25.0	25.0
16	35.7	37.9	25.5	25.0	25.0
20	34.3	38.1	25.5	25.0	25.0
25	32.5	39.9	24.9	24.3	24.3
31.25	32.5	43.4	24.4	23.6	23.6
62.5	33.3	47.5	22.7	21.5	21.5
100	33.0	39.7	21.5	20.1	20.1
250	34.1	41.6	19.2		
350	28.6	39.7	18.4		
400	27.7	37.7			

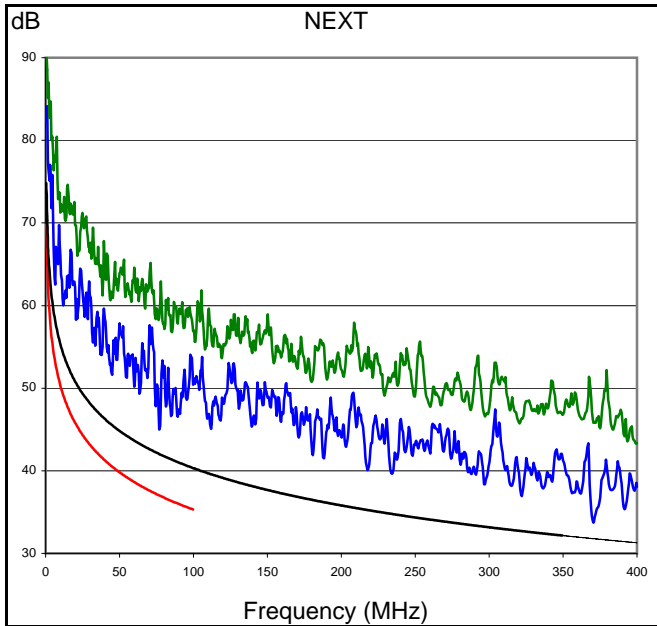
Limit Margin (dB) : 3.61      5.64      5.64  
 Frequency (MHz) : 343.57      92.39      92.39

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

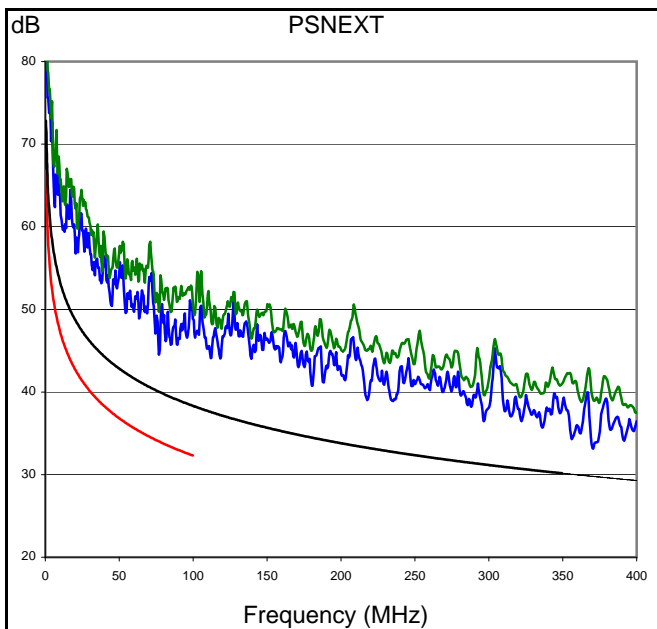
Summary

**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 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
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**Test Status** **PASS**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	84.1	88.5	70.3	65.3	N/A
4	71.8	80.0	61.3	56.3	56.3
8	66.5	75.2	56.8	51.8	51.8
10	66.1	71.3	55.3	50.3	50.3
16	62.1	71.6	52.3	47.2	47.2
20	62.2	69.7	50.8	45.8	45.8
25	61.9	71.2	49.3	44.3	44.3
31.25	56.7	66.5	47.9	42.9	42.9
62.5	52.8	62.7	43.4	38.4	38.4
100	50.4	56.9	40.3	35.3	35.3
250	43.5	49.6	34.3		
350	41.2	46.8	32.2		
400	38.1	43.4			
Limit Margin (dB) : 2.96 7.97 7.97					
Frequency (MHz) : 76.90 76.90 76.90					



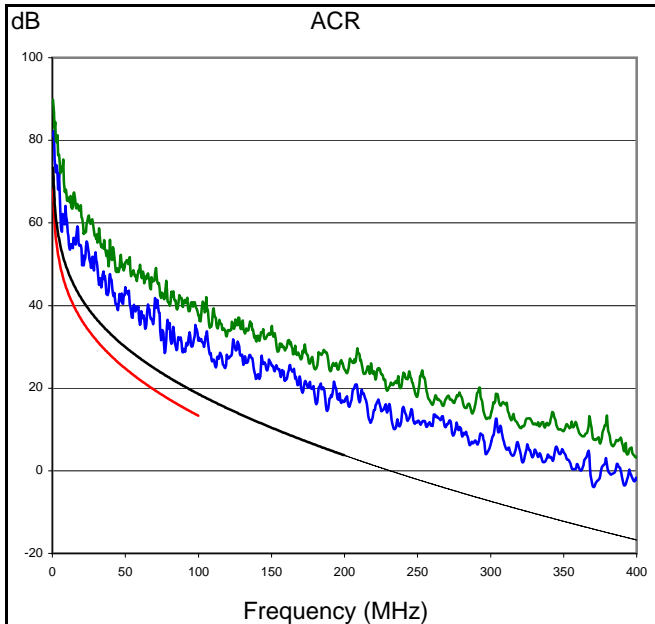
PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	80.9	82.7	68.3	62.3	N/A
4	70.4	73.2	59.3	53.3	53.3
8	65.4	68.1	54.8	48.8	48.8
10	63.7	65.4	53.3	47.3	47.3
16	60.9	64.8	50.3	44.2	44.2
20	59.2	62.7	48.8	42.8	42.8
25	59.6	63.7	47.3	41.3	41.3
31.25	55.4	59.6	45.9	39.9	39.9
62.5	52.1	54.9	41.4	35.4	35.4
100	48.9	50.7	38.3	32.3	32.3
250	41.0	43.8	32.3		
350	38.8	41.1	30.2		
400	36.5	37.5			
Limit Margin (dB) : 4.49 10.51 10.51					
Frequency (MHz) : 76.90 76.90 76.90					

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

Summary

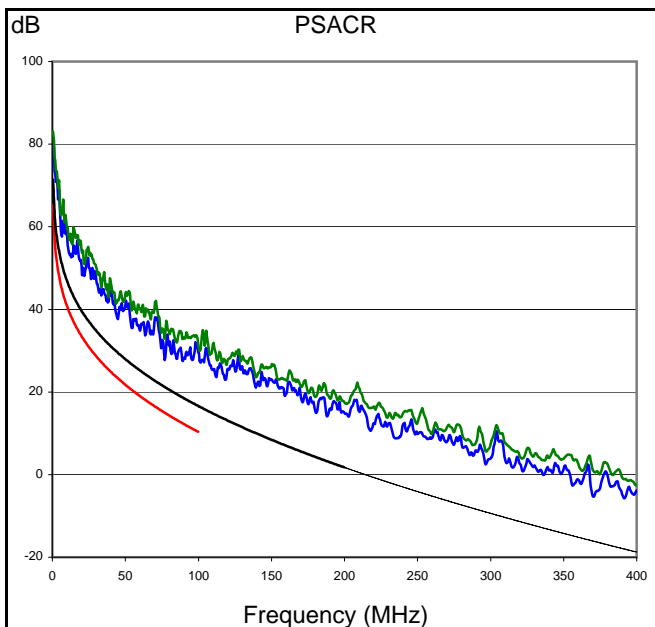
**Client** Nexans Inc., DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-350  
 ANSI/TIA-568-C.2, Category 5e  
 ISO/IEC 11801, Category 5e  
**Part Number** LANmark 350 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
**Temperature** 21.5 °C  
**Test Status** **PASS**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	82.3	86.7	68.3	62.8	N/A
4	68.1	76.4	57.3	52.0	52.2
8	61.2	69.9	51.1	45.8	46.0
10	60.3	65.4	48.9	43.7	43.8
16	54.8	64.1	44.1	38.9	39.0
20	53.8	61.4	41.6	36.4	36.5
25	52.6	61.8	39.1	33.8	33.9
31.25	46.3	55.9	36.3	31.1	31.1
62.5	37.6	47.6	26.6	21.3	21.4
100	31.5	37.6	18.6	13.3	13.3
250	12.0	18.4			
350	4.5	9.6			
400	-2.2	3.4			

Limit Margin (dB) : 4.82 10.07 9.92  
 Frequency (MHz) : 6.49 6.49 6.49



PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	79.1	80.9	66.3	59.8	N/A
4	66.6	69.5	55.3	49.0	49.2
8	60.1	62.8	49.1	42.8	43.0
10	57.8	59.5	46.9	40.7	40.8
16	53.4	57.3	42.1	35.9	36.0
20	50.8	54.4	39.6	33.4	33.5
25	50.1	54.3	37.1	30.8	30.9
31.25	44.8	49.1	34.3	28.1	28.1
62.5	36.9	39.8	24.6	18.3	18.4
100	29.6	31.5	16.6	10.3	10.3
250	9.8	12.7			
350	1.5	3.9			
400	-3.8	-2.5			

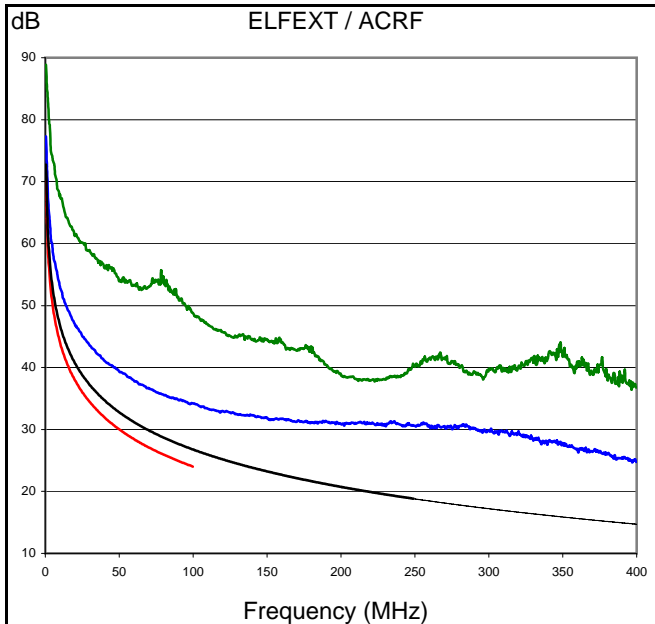
Limit Margin (dB) : 6.49 12.77 12.73  
 Frequency (MHz) : 76.90 76.90 6.49

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

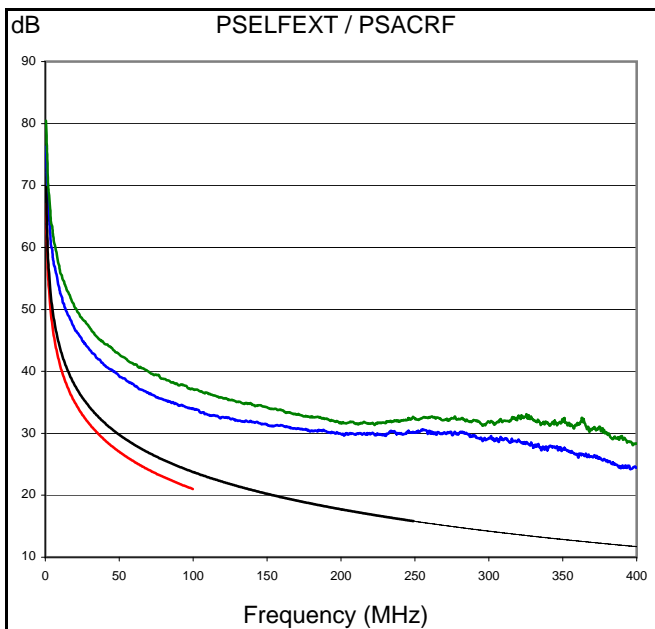
Summary

**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 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
**Temperature** 21.5 °C  
**Test Status** **PASS**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	72.5	85.3	66.8	63.8	N/A
4	60.5	74.7	54.7	51.8	52.0
8	55.3	68.9	48.7	45.7	45.9
10	52.8	67.9	46.8	43.8	44.0
16	49.0	63.3	42.7	39.7	39.9
20	47.0	61.2	40.7	37.8	38.0
25	45.1	60.1	38.8	35.8	36.0
31.25	43.2	58.4	36.9	33.9	34.1
62.5	37.6	53.2	30.8	27.9	28.1
100	34.2	48.8	26.8	23.8	24.0
250	30.5	40.1	18.8		
350	27.8	41.7			
400	24.8	36.8			
Limit Margin (dB) : 5.71 8.66 8.50					
Frequency (MHz) : 1.00 1.00 4.00					



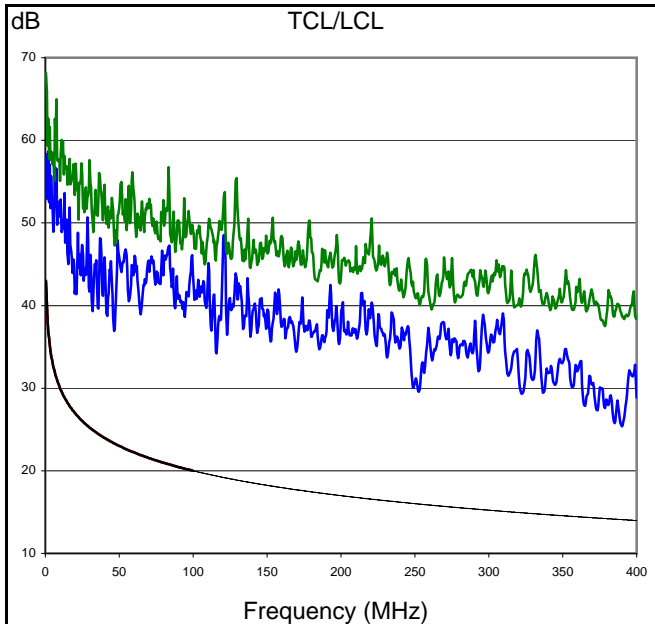
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	72.1	75.9	63.8	60.8	N/A
4	60.2	63.9	51.7	48.8	49.0
8	55.1	58.5	45.7	42.7	42.9
10	52.7	56.1	43.8	40.8	41.0
16	48.9	52.4	39.7	36.7	36.9
20	46.8	50.3	37.7	34.8	35.0
25	45.0	48.5	35.8	32.8	33.0
31.25	43.1	46.5	33.9	30.9	31.1
62.5	37.4	40.9	27.8	24.9	25.1
100	34.0	37.1	23.8	20.8	21.0
250	30.1	32.3	15.8		
350	27.5	32.3			
400	24.5	28.3			
Limit Margin (dB) : 8.32 11.27 11.28					
Frequency (MHz) : 1.00 1.00 4.00					

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

Summary

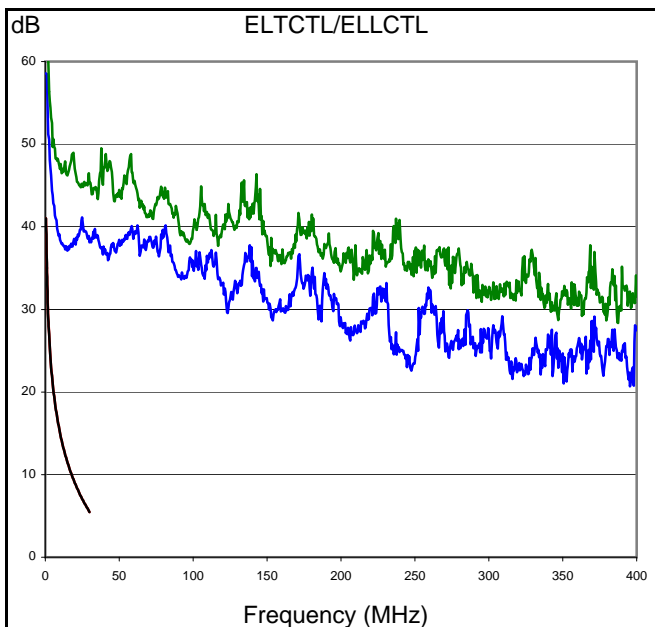
**Client** Nexans Inc., DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-350  
 ANSI/TIA-568-C.2, Category 5e  
 ISO/IEC 11801, Category 5e  
**Part Number** LANmark 350 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
**Temperature** 21.5 °C  
**Test Status** **PASS**



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	58.3	65.9	40.0	N/A	40.0
4	55.7	58.6	34.0	N/A	34.0
8	49.8	57.7	31.0	N/A	31.0
10	50.8	55.1	30.0	N/A	30.0
16	47.3	54.8	28.0	N/A	28.0
20	41.5	53.4	27.0	N/A	27.0
25	47.3	56.0	26.0	N/A	26.0
31.25	40.6	51.6	25.1	N/A	25.1
62.5	43.0	51.1	22.0	N/A	22.0
100	44.0	49.2	20.0	N/A	20.0
250	30.9	41.0			
350	33.1	40.7			
400	28.8	38.4			

Limit Margin (dB) : 13.58 N/A 13.58  
 Frequency (MHz) : 46.44 N/A 46.44



ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	58.5	63.9	35.0	N/A	35.0
4	46.3	53.2	23.0	N/A	23.0
8	39.8	48.0	16.9	N/A	16.9
10	38.4	47.0	15.0	N/A	15.0
16	37.3	46.9	10.9	N/A	10.9
20	38.3	47.0	9.0	N/A	9.0
25	41.1	45.2	7.0	N/A	7.0
31.25	38.7	43.9			
62.5	40.2	44.1			
100	35.9	39.5			
250	24.2	34.7			
350	24.7	31.6			
400	27.5	31.5			

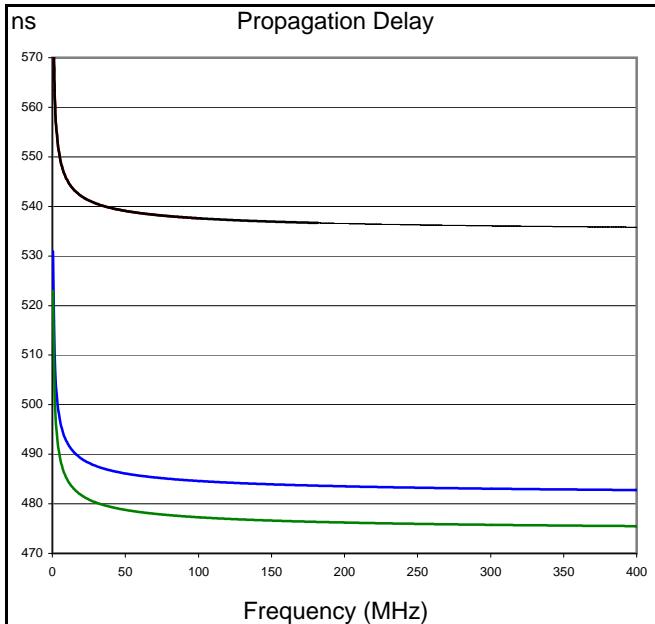
Limit Margin (dB) : 22.22 N/A 22.22  
 Frequency (MHz) : 2.00 N/A 2.00

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 10032428  
**Description** **Berk-Tek LANmark-350 CMR**  
 4X24 UTP-CMR-Solid

**Test Started** 2/10/2012 11:29  
**Technician** John Cash  
**Report No.** 100283649CRT-013a  
**Length (m)** 100  
**Temperature** 21.5 °C  
**Test Status** **PASS**



Propagation Delay					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	517.1	509.2	570.0	570.0	N/A
4	499.1	491.5	552.0	552.0	552.0
8	493.8	486.3	546.7	546.7	546.7
10	492.4	485.0	545.4	545.4	545.4
16	490.1	482.7	543.0	543.0	543.0
20	489.1	481.7	542.0	542.0	542.0
25	488.3	480.9	541.2	541.2	541.2
31.25	487.5	480.1	540.4	540.4	540.4
62.5	485.6	478.2	538.6	538.6	538.6
100	484.6	477.3	537.6	537.6	537.6
250	483.3	476.0			
350	482.9	475.6			
400	482.8	475.5			
Limit Margin (dB) : 52.94 52.94 52.94					
Frequency (MHz) : 8.99 8.99 8.99					

Delay Skew				
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec
1-100	14.81	25	45	45

Low frequency measurements								
Parameter	Worst Case	Average	LANmark		TIA		ISO/IEC	
			Spec	Margin	Spec	Margin	Spec	Margin
Mutual capacitance (nF/100m)	4.67	3.45	5.60	0.93	5.60	0.93	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	46.92	16.45	160.00	113.08	330.00	283.08	160.00	113.08
Conductor DC resistance (Ω)	8.67	6.44	9.38	0.71	9.38	0.71	9.50	0.83
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.19%	0.07%	2.00%	1.81%	2.50%	2.31%	2.00%	1.81%
DC Resistance Unbalance between pairs (%)	1.20%	0.60%	4.00%	2.80%	N/A	N/A	4.00%	2.80%

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