



3933 US Route 11  
Cortland, New York 13045

Telephone: +1 (800) 345-3851  
Facsimile: +1 (607) 758-6637  
www.intertek.com

Project Number: G100283649  
Certificate of Conformance Number: 100324722CRT-001e

Date Issued: 7/28/2011

**Test Report Number: G100283649CRT-011i**



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, CMR, Non-Plenum Riser, Horizontal (solid) Cable, Part Number: 10136338 LANmark-6. The sample was selected from your manufacturer facility, Nexans Inc. DBA Berk-Tek, by the Intertek Inspector Mr. Ronald Williams on 7/21/2011, for Quarter 3 2011 Quarterly Follow-up Testing.

The testing was performed at Intertek located in Cortland, NY on 7/26/2011, to the ANSI/TIA-568-C.2, LANmark 6, 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  
Email: kathy.heath@intertek.com

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

*Antoine Pelletier*  
Antoine Pelletier  
Engineer  
Global Cabling Products Testing  
Phone: (607) 758-6718  
Email: antoine.pelletier@intertek.com



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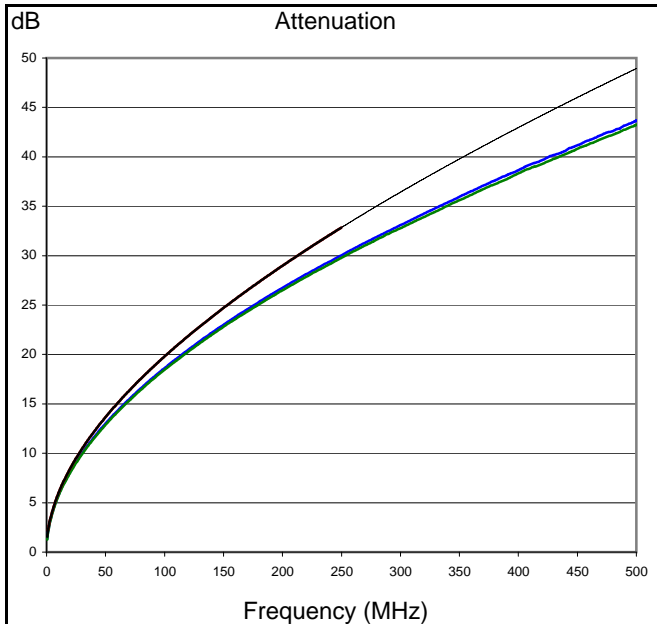
Appendix A

Test Results

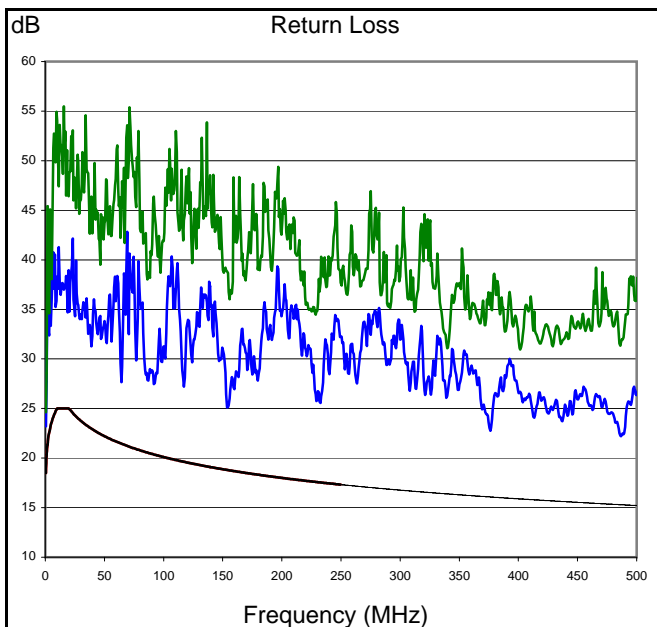
Summary

**Client** Nexans, INC, DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**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	1.9	2.0	2.0	N/A
4	3.6	3.5	3.8	3.8	3.8
8	5.2	5.1	5.3	5.3	5.4
10	5.8	5.7	6.0	6.0	6.0
16	7.3	7.2	7.6	7.6	7.6
20	8.1	8.0	8.5	8.5	8.5
25	9.2	9.1	9.5	9.5	9.6
31.25	10.2	10.1	10.7	10.7	10.7
62.5	14.5	14.4	15.4	15.4	15.5
100	18.6	18.5	19.8	19.8	19.9
250	30.0	29.8	32.8	32.8	33.0
350	35.9	35.6			
500	43.7	43.2			
Limit Margin (dB) :			0.15	0.15	0.20
Frequency (MHz) :			3.93	3.93	5.31



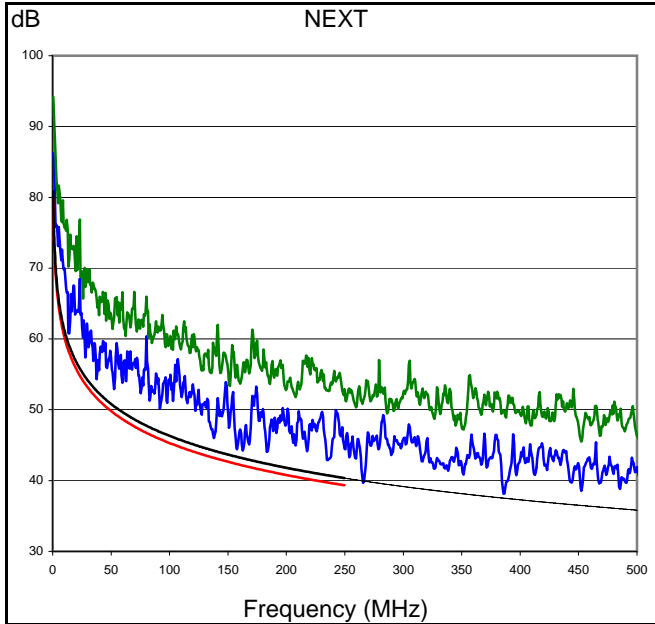
Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	27.7	28.6	20.0	20.0	N/A
4	40.7	45.1	23.0	23.0	23.0
8	40.5	52.6	24.5	24.5	24.5
10	38.3	54.1	25.0	25.0	25.0
16	37.2	51.5	25.0	25.0	25.0
20	38.9	46.4	25.0	25.0	25.0
25	34.3	47.7	24.3	24.3	24.3
31.25	34.9	50.9	23.6	23.6	23.6
62.5	37.6	47.0	21.5	21.5	21.5
100	31.3	41.9	20.1	20.1	20.1
250	32.3	37.7	17.3	17.3	17.3
350	26.9	37.5			
500	26.4	36.3			
Limit Margin (dB) :			6.20	6.20	6.20
Frequency (MHz) :			64.38	64.38	64.38

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

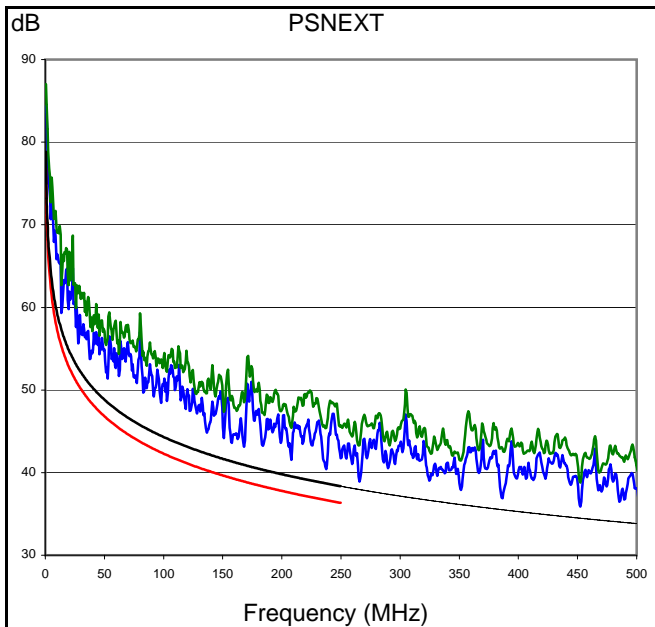
Summary

**Client** Nexans, INC, DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**Length (m)** 100  
**Temperature** 20 °C  
**Test Status** **PASS**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	85.2	91.5	76.3	74.3	N/A
4	75.7	81.3	67.3	65.3	66.3
8	72.6	76.5	62.8	60.8	61.8
10	70.0	75.8	61.3	59.3	60.3
16	63.9	72.9	58.3	56.2	57.2
20	63.8	69.6	56.8	54.8	55.8
25	61.6	69.6	55.3	53.3	54.3
31.25	59.7	69.8	53.9	51.9	52.9
62.5	57.0	61.8	49.4	47.4	48.4
100	53.6	59.8	46.3	44.3	45.3
250	44.5	52.9	40.3	38.3	39.3
350	42.7	48.2			
500	41.9	46.5			
Limit Margin (dB) :			1.07	3.08	2.08
Frequency (MHz) :			157.79	157.79	157.79



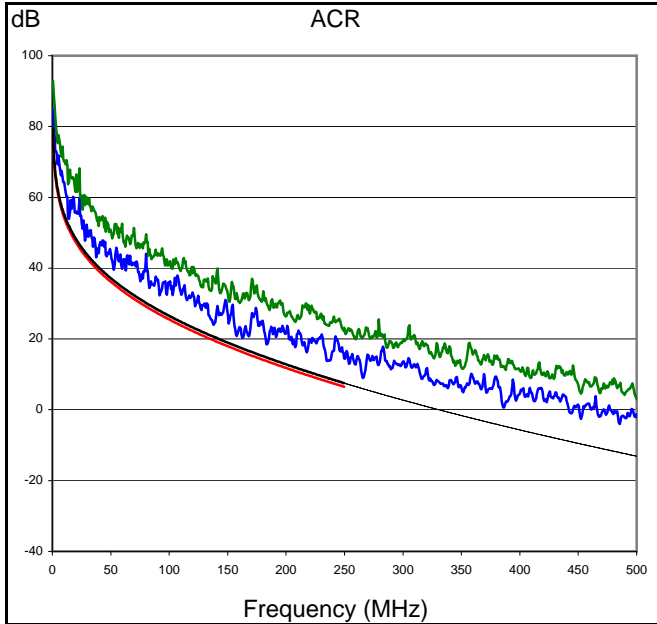
PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	83.6	84.6	74.3	72.3	N/A
4	73.2	75.7	65.3	63.3	63.3
8	69.3	71.2	60.8	58.8	58.8
10	66.5	69.1	59.3	57.3	57.3
16	62.9	66.7	56.3	54.2	54.2
20	59.8	62.7	54.8	52.8	52.8
25	60.6	62.9	53.3	51.3	51.3
31.25	56.6	61.5	51.9	49.9	49.9
62.5	53.1	56.0	47.4	45.4	45.4
100	50.6	53.9	44.3	42.3	42.3
250	41.7	45.7	38.3	36.3	36.3
350	39.6	42.0			
500	38.1	40.9			
Limit Margin (dB) :			1.73	3.74	3.74
Frequency (MHz) :			237.47	237.47	237.47

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

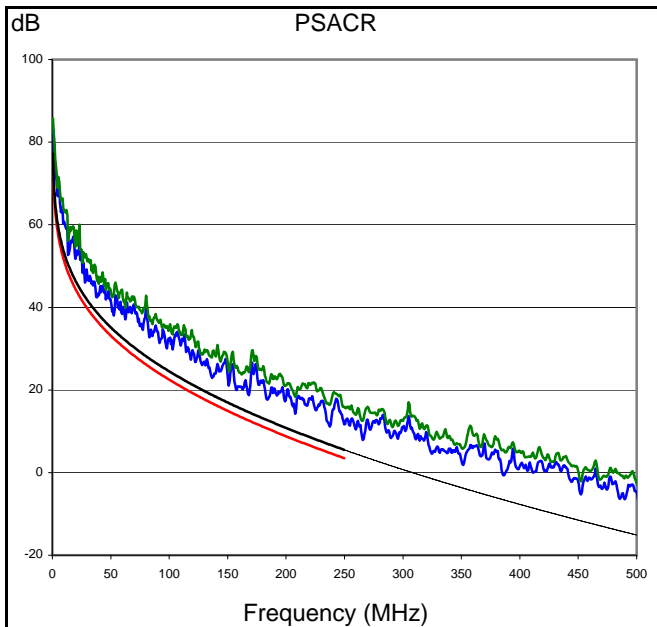
Summary

**Client** Nexans, INC, DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**Length (m)** 100  
**Temperature** 20 °C  
**Test Status** **PASS**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	83.3	89.6	74.3	72.3	N/A
4	72.3	77.8	63.5	61.5	62.4
8	67.5	71.4	57.4	55.4	56.4
10	64.2	70.1	55.4	53.3	54.3
16	56.7	65.7	50.7	48.7	49.6
20	55.7	61.6	48.3	46.3	47.3
25	52.4	60.5	45.8	43.8	44.8
31.25	49.6	59.7	43.2	41.2	42.1
62.5	42.5	47.5	34.0	32.0	32.9
100	35.4	41.4	26.5	24.5	25.4
250	14.5	23.2	7.5	5.5	6.3
350	6.9	12.6			
500	-1.4	3.3			
Limit Margin (dB) :			1.73	3.74	2.80
Frequency (MHz) :			13.55	13.55	13.55



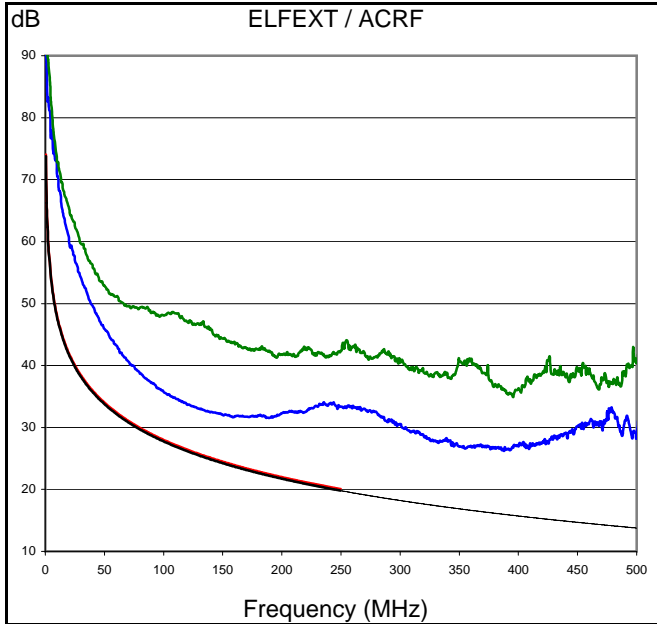
PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	81.7	82.6	72.3	70.3	N/A
4	69.6	72.1	61.5	59.5	59.4
8	64.2	66.1	55.4	53.4	53.4
10	60.7	63.4	53.4	51.3	51.3
16	55.7	59.4	48.7	46.7	46.6
20	51.7	54.7	46.3	44.3	44.3
25	51.7	53.9	43.8	41.8	41.8
31.25	46.4	51.4	41.2	39.2	39.1
62.5	38.6	41.7	32.0	30.0	29.9
100	31.9	35.4	24.5	22.5	22.4
250	11.7	16.0	5.5	3.5	3.3
350	3.7	6.4			
500	-4.5	-2.3			
Limit Margin (dB) :			2.25	4.26	4.32
Frequency (MHz) :			13.55	13.55	13.55

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

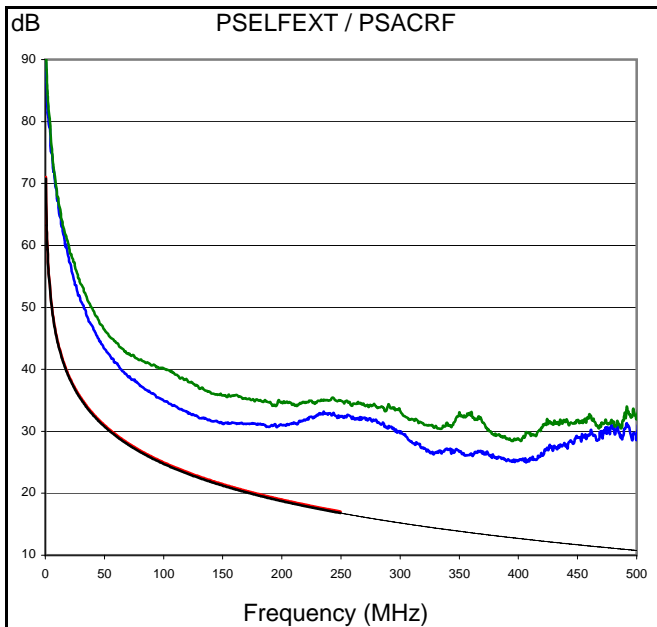
Summary

**Client** Nexans, INC, DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**Length (m)** 100  
**Temperature** 20 °C  
**Test Status** **PASS**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	88.6	94.9	67.8	67.8	N/A
4	81.0	85.6	55.7	55.8	56.0
8	73.4	76.1	49.7	49.7	49.9
10	70.5	72.8	47.8	47.8	48.0
16	63.7	67.5	43.7	43.7	43.9
20	60.9	65.6	41.7	41.8	42.0
25	56.8	62.4	39.8	39.8	40.0
31.25	53.5	59.6	37.9	37.9	38.1
62.5	42.7	51.0	31.8	31.9	32.1
100	35.7	48.0	27.8	27.8	28.0
250	33.3	42.4	19.8	19.8	20.0
350	27.0	41.2			
500	28.2	40.4			
Limit Margin (dB) :			7.46	7.41	7.21
Frequency (MHz) :			120.02	120.02	120.02



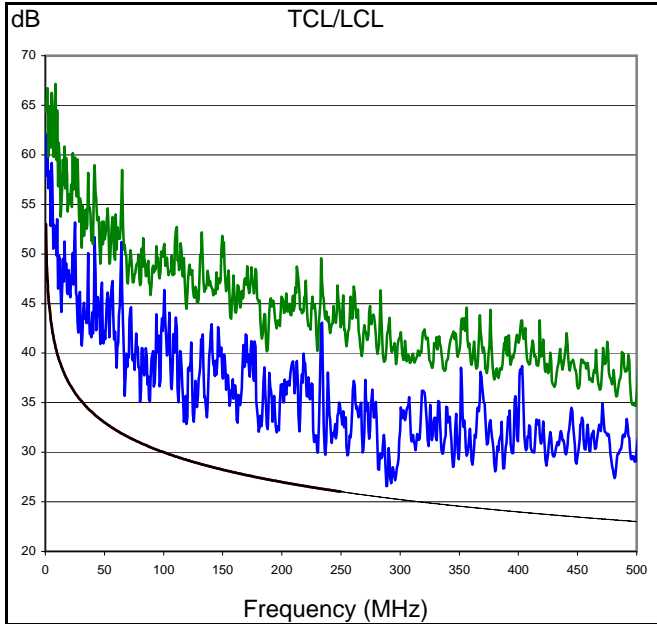
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	86.4	88.3	64.8	64.8	N/A
4	78.7	79.7	52.7	52.8	53.0
8	70.5	71.2	46.7	46.7	46.9
10	67.2	67.9	44.8	44.8	45.0
16	61.0	62.3	40.7	40.7	40.9
20	58.1	60.1	38.7	38.8	39.0
25	53.6	56.5	36.8	36.8	37.0
31.25	50.6	53.4	34.9	34.9	35.1
62.5	40.6	44.1	28.8	28.9	29.1
100	35.0	40.1	24.8	24.8	25.0
250	32.4	35.0	16.8	16.8	17.0
350	26.9	32.5			
500	28.6	31.9			
Limit Margin (dB) :			9.66	9.62	9.42
Frequency (MHz) :			130.32	130.32	130.32

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

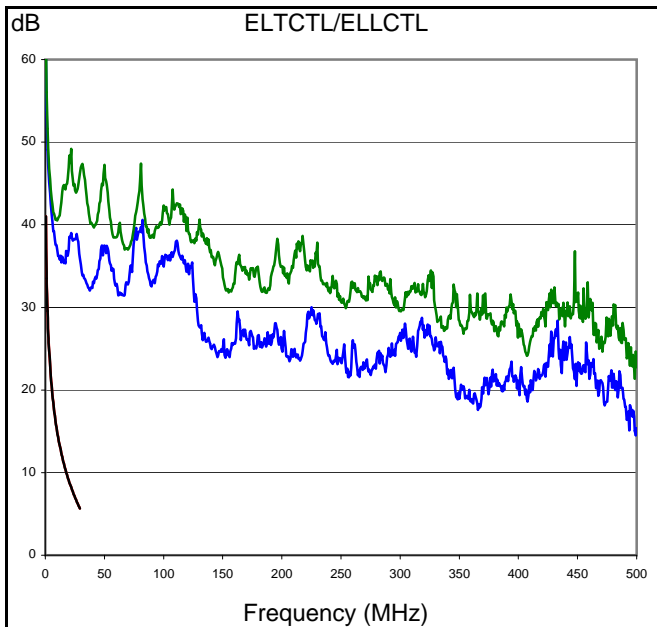
Summary

**Client** Nexans, INC, DBA Berk-Tek  
**Specifications** Berk-Tek LANmark-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**Length (m)** 100  
**Temperature** 20 °C  
**Test Status** **PASS**



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	57.9	65.2	50.0	40.0	50.0
4	57.3	64.8	44.0	40.0	44.0
8	51.7	65.7	41.0	40.0	41.0
10	53.5	64.5	40.0	40.0	40.0
16	51.3	60.8	38.0	38.0	38.0
20	48.4	56.0	37.0	37.0	37.0
25	53.2	59.7	36.0	36.0	36.0
31.25	41.9	54.9	35.1	35.1	35.1
62.5	41.1	51.6	32.0	32.0	32.0
100	44.3	50.7	30.0	30.0	30.0
250	34.0	42.6	26.0	26.0	26.0
350	29.3	40.1			
500	29.9	35.3			
Limit Margin (dB) :			3.49	3.49	3.49
Frequency (MHz) :			236.79	236.79	236.79



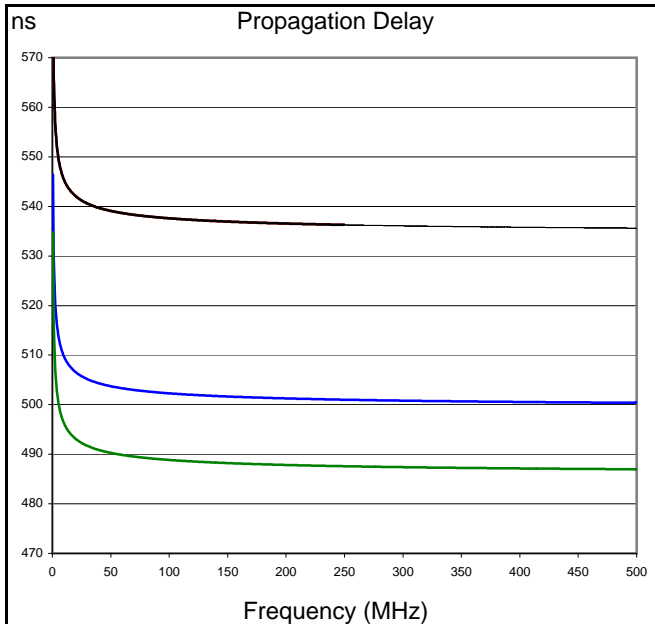
ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	53.9	56.0	35.0	35.0	35.0
4	43.8	45.5	23.0	23.0	23.0
8	38.2	41.0	16.9	16.9	16.9
10	37.0	40.5	15.0	15.0	15.0
16	35.7	44.6	10.9	10.9	10.9
20	36.9	46.9	9.0	9.0	9.0
25	38.2	44.2	7.0	7.0	7.0
31.25	33.8	47.4			
62.5	31.4	39.1			
100	34.9	42.3			
250	23.4	30.8			
350	19.7	28.5			
500	15.4	22.8			
Limit Margin (dB) :			19.53	19.53	19.53
Frequency (MHz) :			1.87	1.87	1.87

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-6  
 ANSI/TIA-568-C.2, Category 6  
 ISO/IEC 11801, Category 6  
**Part number** 10136338  
**Description** **Berk-Tek LANmark-6 CMR**  
 4X23 UTP-CMR-Solid

**Test Started** 7/26/2011 11:04  
**Technician** John Cash  
**Report No.** 100283649CRT-011i  
**Length (m)** 100  
**Temperature** 20 °C  
**Test Status** **PASS**



Propagation Delay						
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec	
1	530.2	517.0	570.0	570.0	N/A	
4	516.2	502.8	552.0	552.0	552.0	
8	511.0	497.5	546.7	546.7	546.7	
10	509.7	496.2	545.4	545.4	545.4	
16	507.4	493.9	543.0	543.0	543.0	
20	506.6	493.1	542.0	542.0	542.0	
25	505.7	492.3	541.2	541.2	541.2	
31.25	505.0	491.6	540.4	540.4	540.4	
62.5	503.2	489.8	538.6	538.6	538.6	
100	502.3	488.9	537.6	537.6	537.6	
250	501.0	487.6	536.3	536.3	536.3	
350	500.7	487.3				
500	500.4	487.0				
Limit Margin (dB) :			35.27	35.27	35.27	
Frequency (MHz) :			241.59	241.59	241.59	

Delay Skew					
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec	
1-250	25.59	45	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	4.72	5.60	0.74	5.60	0.74	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	11.97	9.83	160.00	148.03	330.00	318.03	160.00	148.03
Conductor DC resistance (Ω)	7.50	7.44	9.38	1.88	9.38	1.88	9.50	2.00
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.63%	0.26%	2.00%	1.37%	2.50%	1.87%	2.00%	1.37%
DC Resistance Unbalance between pairs (%)	0.69%	0.38%	4.00%	3.31%	N/A	N/A	4.00%	3.31%

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