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Project Number: 3193544

Date Issued: 2/12/2010

Certificate of Conformance Number: 2034145CRT-002

Test Report Number: 3193544CRT-041d



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 2000 p/n 10167307. 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 2000 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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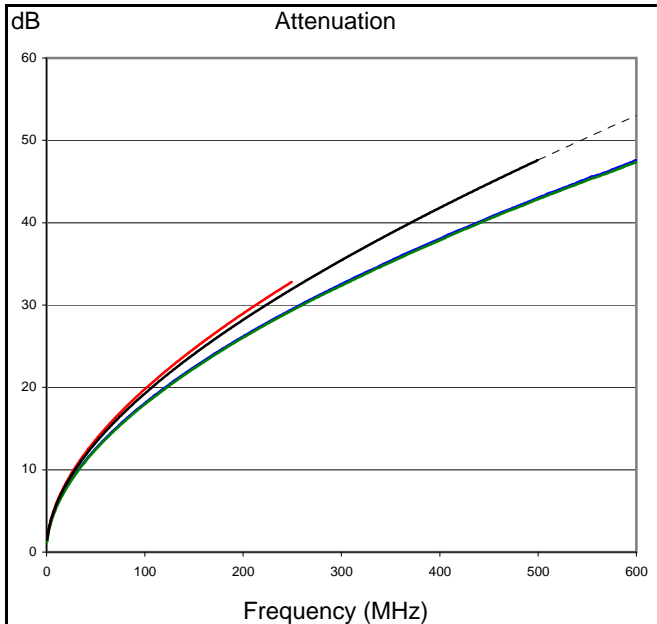
Appendix A

Test Results

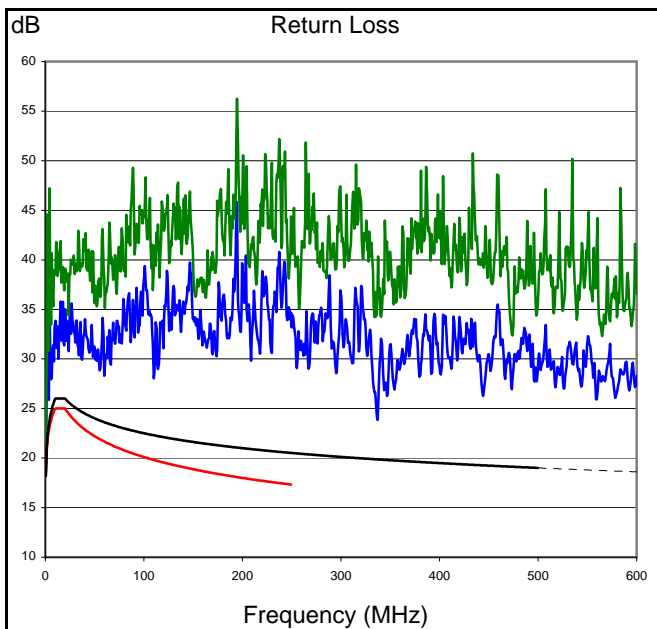
Summary

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 10167307
Description **Berk-Tek LANmark-2000 CMP**
 4X23 UTP-CMP-Solid

Test Started 2/12/2010 7:10
Technician John Cash
Report No. 3193544CRT-041d
Length (m) 100
Temperature 20 °C
Test Status **PASS**



Attenuation					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	2.1	1.9	2.2	2.2	N/A
4	3.6	3.5	3.8	3.9	3.9
8	5.0	4.8	5.2	5.3	5.4
10	5.6	5.5	5.9	6.0	6.1
16	7.0	6.9	7.4	7.6	7.7
20	7.8	7.7	8.2	8.5	8.5
25	8.8	8.7	9.3	9.6	9.6
31.25	9.8	9.7	10.4	10.7	10.7
62.5	14.1	14.0	15.0	15.4	15.5
100	18.1	18.0	19.3	19.8	19.9
250	29.5	29.3	31.9	32.8	33.0
350	35.4	35.2	38.7		
500	43.0	42.9	47.6		
600	47.6	47.4			
Limit Margin (dB) :			0.05	0.10	0.28
Frequency (MHz) :			1.25	1.25	5.00



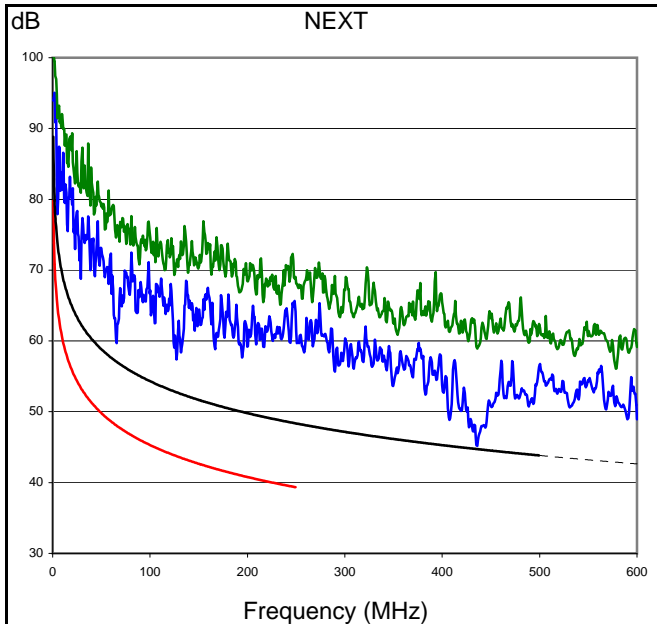
Return Loss					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	26.4	28.2	20.6	20.5	N/A
4	34.8	47.2	23.8	23.1	23.1
8	31.4	35.3	25.4	24.5	24.5
10	33.9	39.1	26.0	25.0	25.0
16	31.9	37.7	26.0	25.0	25.0
20	35.0	39.1	26.0	25.0	25.0
25	35.5	38.6	25.5	24.3	24.3
31.25	33.8	38.9	25.0	23.6	23.6
62.5	30.1	37.3	23.5	21.5	21.5
100	38.3	44.3	22.5	20.1	20.1
250	34.7	44.4	20.5	17.3	17.3
350	31.4	40.8	19.8		
500	30.1	36.9	19.0		
600	28.3	36.6			
Limit Margin (dB) :			2.61	3.15	4.10
Frequency (MHz) :			3.50	3.50	6.50

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

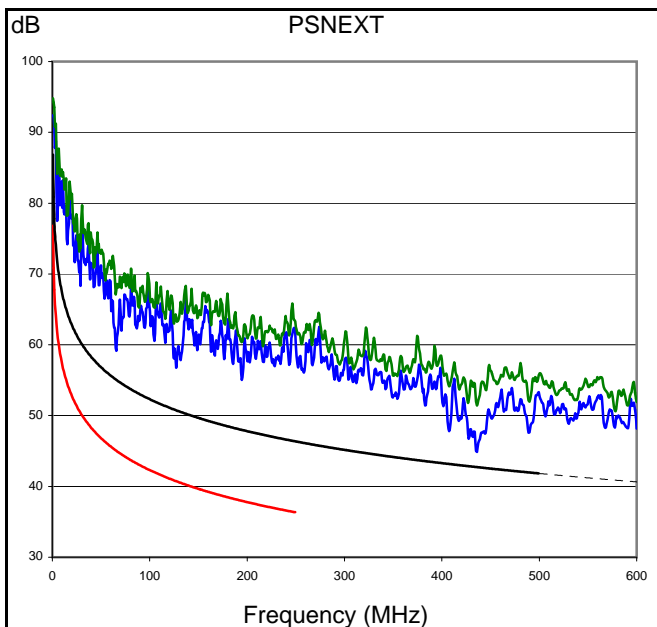
Summary

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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 7:10
Technician John Cash
Report No. 3193544CRT-041d
Length (m) 100
Temperature 20 °C
Test Status **PASS**



NEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	94.4	99.9	82.9	72.8	N/A
4	82.0	94.9	74.9	64.9	65.9
8	81.2	91.4	70.8	60.8	61.8
10	81.4	91.2	69.2	59.1	60.1
16	79.9	84.6	66.2	56.1	57.1
20	79.3	89.3	64.8	54.8	55.8
25	78.3	83.8	63.3	53.3	54.3
31.25	76.4	84.2	61.9	51.9	52.9
62.5	63.7	79.0	57.4	47.3	48.3
100	67.1	74.5	54.3	44.3	45.3
250	64.2	69.0	48.4	38.3	39.3
350	53.6	62.6	46.2		
500	56.7	61.9	43.8		
600	48.9	59.1			
Limit Margin (dB) :			0.48	12.64	11.64
Frequency (MHz) :			435.89	65.70	65.70



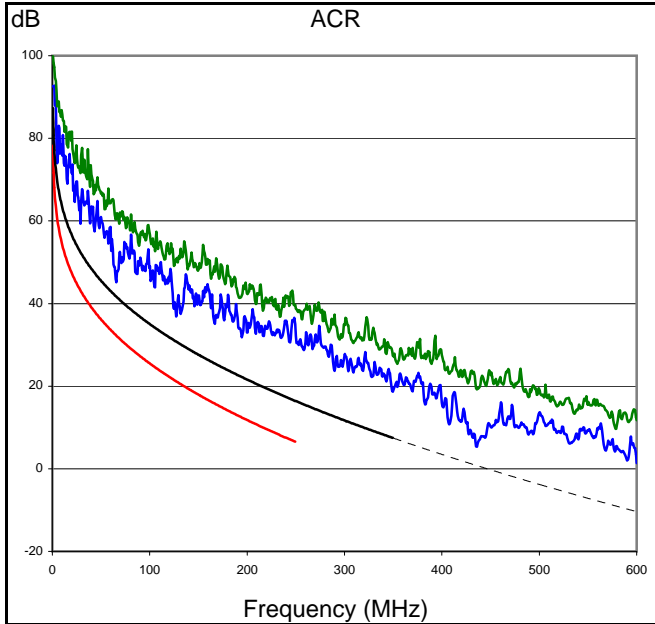
PSNEXT					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	92.2	94.2	80.9	70.8	N/A
4	81.5	87.1	72.9	62.9	62.9
8	79.7	83.9	68.8	58.8	58.8
10	79.3	83.7	67.2	57.1	57.1
16	76.2	78.3	64.2	54.1	54.1
20	77.9	81.3	62.8	52.8	52.8
25	74.8	77.8	61.3	51.3	51.3
31.25	75.2	77.3	59.9	49.9	49.9
62.5	63.1	71.8	55.4	45.3	45.3
100	64.8	66.5	52.3	42.3	42.3
250	61.7	63.3	46.4	36.3	36.3
350	52.5	55.7	44.2		
500	52.7	56.0	41.8		
600	48.2	51.9			
Limit Margin (dB) :			2.17	14.12	14.12
Frequency (MHz) :			435.89	65.70	65.70

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

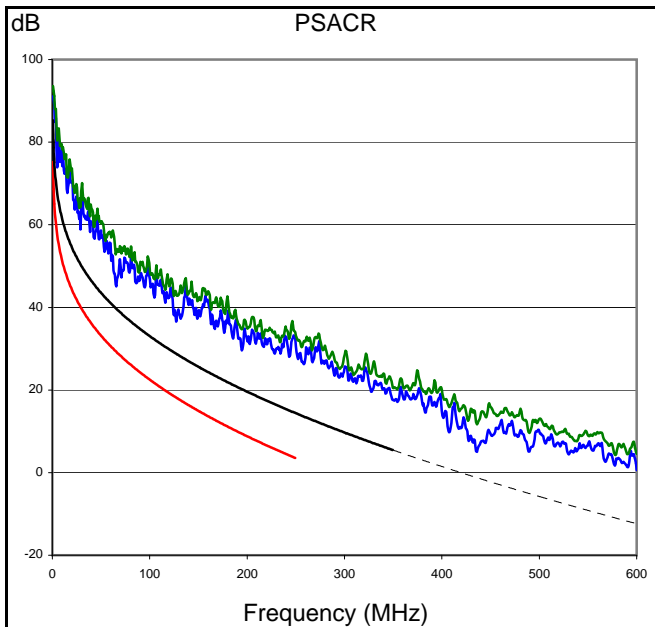
Summary

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 ISO/IEC 11801, Category 6
Part number 10167307
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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 7:10
Technician John Cash
Report No. 3193544CRT-041d
Length (m) 100
Temperature 20 °C
Test Status **PASS**



ACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	92.5	98.1	80.7	70.6	N/A
4	78.5	91.5	71.1	61.0	61.9
8	76.3	86.6	65.6	55.4	56.4
10	75.8	85.8	63.3	53.1	54.1
16	72.9	77.7	58.7	48.5	49.5
20	71.5	81.7	56.6	46.3	47.3
25	69.5	75.1	54.0	43.7	44.7
31.25	66.6	74.5	51.5	41.2	42.1
62.5	49.5	65.0	42.4	31.9	32.8
100	49.0	56.6	35.0	24.5	25.4
250	35.0	39.7	16.4	5.6	6.4
350	18.7	27.4	7.5		
500	13.7	18.9			
600	1.4	11.7			
Limit Margin (dB) :			3.48	13.92	13.01
Frequency (MHz) :			65.70	65.70	65.70



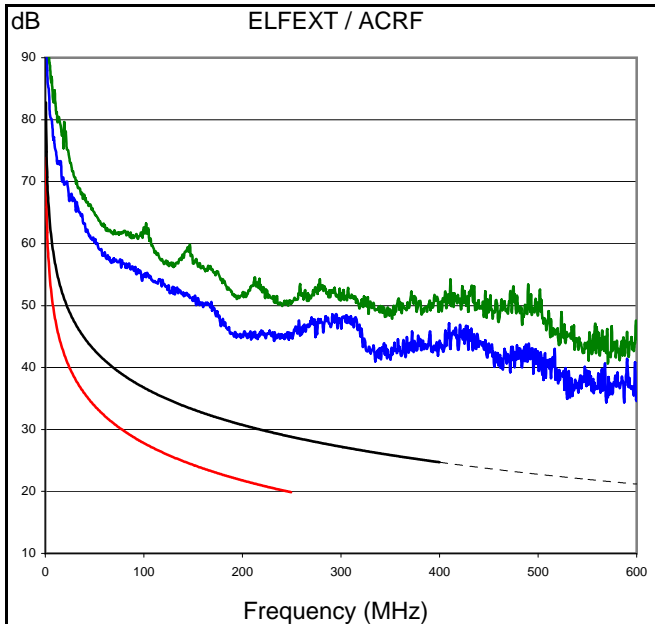
PSACR					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	90.3	92.3	78.7	68.6	N/A
4	77.9	83.7	69.1	59.0	58.9
8	75.2	79.1	63.6	53.4	53.4
10	74.2	78.3	61.3	51.1	51.1
16	69.2	71.4	56.7	46.5	46.5
20	70.2	73.6	54.6	44.3	44.3
25	66.0	69.1	52.0	41.7	41.7
31.25	65.3	67.6	49.5	39.2	39.1
62.5	48.9	57.8	40.4	29.9	29.8
100	46.7	48.5	33.0	22.5	22.4
250	32.5	34.0	14.4	3.6	3.4
350	17.6	20.5	5.5		
500	9.7	13.1			
600	0.6	4.6			
Limit Margin (dB) :			5.37	15.80	15.90
Frequency (MHz) :			65.70	65.70	65.70

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

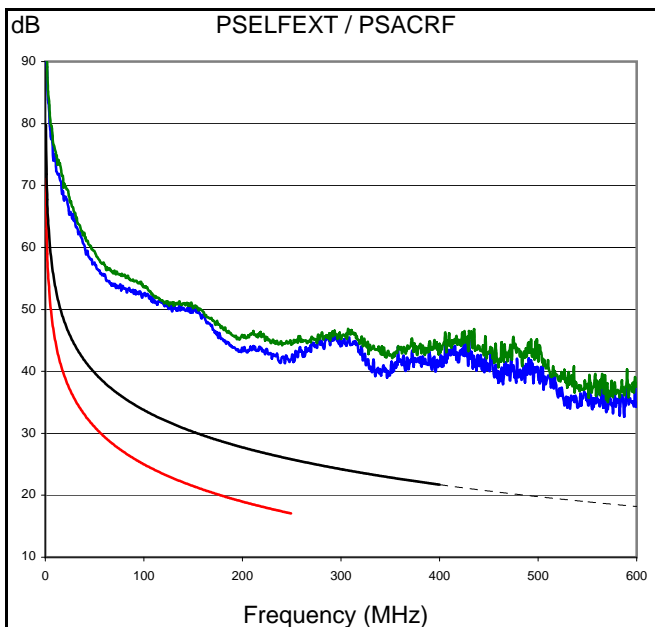
Summary

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 ANSI/TIA-568-C.2 Category 6
 ISO/IEC 11801, Category 6
Part number 10167307
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 4X23 UTP-CMP-Solid

Test Started 2/12/2010 7:10
Technician John Cash
Report No. 3193544CRT-041d
Length (m) 100
Temperature 20 °C
Test Status **PASS**



ELFEXT / ACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	91.5	97.2	74.8	65.9	N/A
4	82.2	89.2	64.2	55.2	49.4
8	76.8	82.9	58.7	49.7	43.9
10	75.1	82.4	56.5	47.6	41.8
16	72.0	78.3	52.5	43.6	37.8
20	69.7	77.0	50.7	41.8	36.0
25	67.5	73.0	48.7	39.8	34.0
31.25	65.2	69.7	46.9	37.9	32.1
62.5	57.5	62.4	40.8	31.9	26.1
100	55.1	62.6	36.7	27.8	22.0
250	45.0	50.3	28.8	19.9	14.1
350	41.9	49.4	25.9		
500	39.5	49.9			
600	34.6	44.6			
Limit Margin (dB) :			13.84	22.79	28.59
Frequency (MHz) :			191.59	191.59	191.59



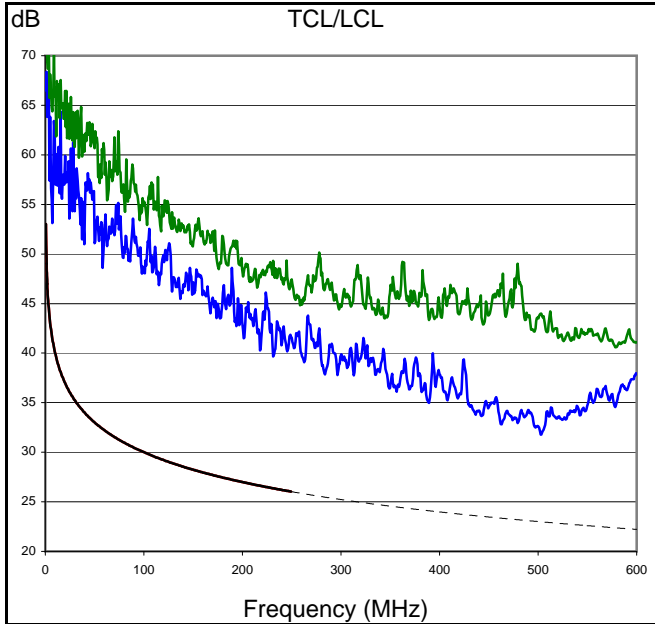
PSELFEXT / PSACRF					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	90.5	90.9	71.8	62.9	N/A
4	80.4	82.6	61.2	52.2	52.4
8	74.0	76.6	55.7	46.7	46.9
10	74.0	75.5	53.5	44.6	44.8
16	70.4	72.3	49.5	40.6	40.8
20	68.2	69.9	47.7	38.8	39.0
25	65.7	67.2	45.7	36.8	37.0
31.25	63.3	64.7	43.9	34.9	35.1
62.5	54.6	56.8	37.8	28.9	29.1
100	52.5	53.7	33.7	24.8	25.0
250	41.9	44.3	25.8	16.9	17.1
350	39.4	42.7	22.9		
500	38.6	41.7			
600	34.4	38.1			
Limit Margin (dB) :			15.19	24.14	23.94
Frequency (MHz) :			238.05	238.05	238.05

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

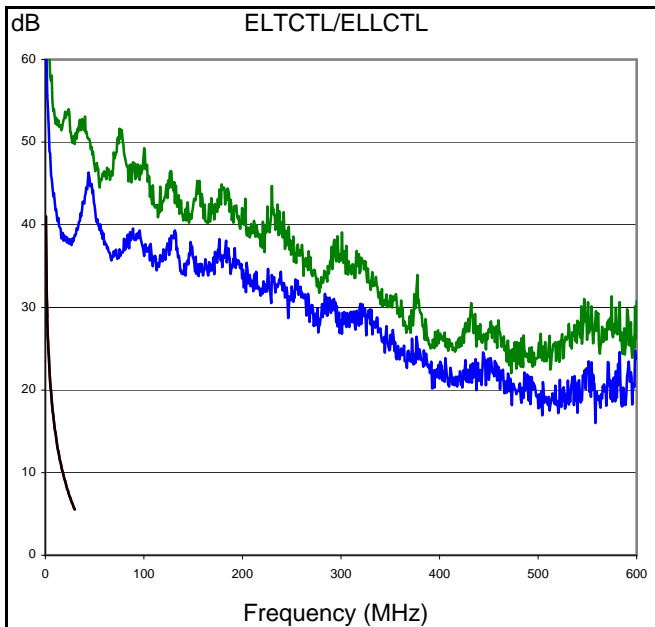
Summary

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 ANSI/TIA-568-C.2 Category 6
 ISO/IEC 11801, Category 6
Part number 10167307
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 4X23 UTP-CMP-Solid

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



TCL/LCL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	68.4	74.6	49.0	40.0	49.0
4	57.4	65.8	43.7	40.0	43.7
8	58.5	66.6	41.0	40.0	41.0
10	57.0	66.8	39.9	39.9	39.9
16	56.4	64.7	37.9	37.9	37.9
20	59.9	66.5	37.0	37.0	37.0
25	55.2	63.0	36.0	36.0	36.0
31.25	55.6	61.7	35.1	35.1	35.1
62.5	50.8	55.4	32.0	32.0	32.0
100	48.1	55.3	30.0	30.0	30.0
250	41.6	47.3	26.0	26.0	26.0
350	36.5	46.0			
500	32.6	43.5			
600	37.9	41.1			
Limit Margin (dB) :			11.72	13.12	11.72
Frequency (MHz) :			7.24	7.24	7.24



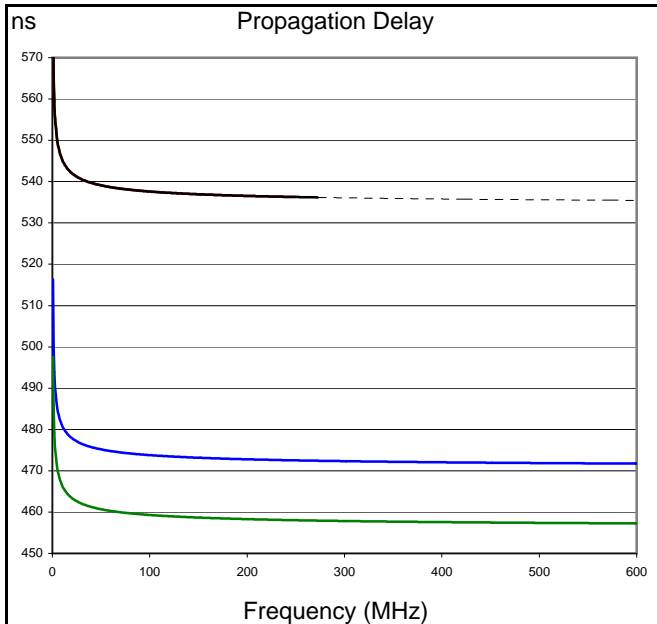
ELTCTL/ELLCTL					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	59.7	68.8	33.1	33.1	33.1
4	48.9	60.4	22.4	22.4	22.4
8	43.4	53.7	16.9	16.9	16.9
10	41.7	52.3	14.8	14.8	14.8
16	38.3	51.4	10.8	10.8	10.8
20	38.3	53.7	9.0	9.0	9.0
25	38.1	51.2	7.0	7.0	7.0
31.25	39.0	51.2			
62.5	37.1	46.9			
100	36.2	49.3			
250	30.9	36.4			
350	24.9	30.1			
500	17.8	25.0			
600	24.0	30.7			
Limit Margin (dB) :			26.21	26.21	26.21
Frequency (MHz) :			5.75	5.75	5.75

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
Part number 10167307
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 4X23 UTP-CMP-Solid

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Length (m) 100
Temperature 20 °C
Test Status **PASS**



Propagation Delay					
Freq. MHz	Worst Case	Average	LANmark Spec	TIA Spec	ISO/IEC Spec
1	500.0	485.7	566.2	566.2	N/A
4	486.5	472.0	551.5	551.5	551.5
8	482.2	467.7	546.7	546.7	546.7
10	480.9	466.4	545.2	545.2	545.2
16	478.7	464.2	542.9	542.9	542.9
20	477.9	463.4	542.1	542.1	542.1
25	477.1	462.6	541.2	541.2	541.2
31.25	476.4	461.9	540.4	540.4	540.4
62.5	474.7	460.2	538.5	538.5	538.5
100	473.8	459.3	537.6	537.6	537.6
250	472.5	458.0	536.3	536.3	536.3
350	472.2	457.7	535.9		
500	471.9	457.4	535.6		
600	471.7	457.3			
Limit Margin (dB) :			63.75	63.75	63.75
Frequency (MHz) :			248.54	248.54	248.54

Delay Skew				
Freq. MHz	Worst case	LANmark Spec	TIA Spec	ISO/IEC Spec
1-250	28.16	35	45	45

Low frequency measurements								
Parameter	Worst Case	Average	LANmark		TIA		ISO/IEC	
			Spec	Margin	Spec	Margin	Spec	Margin
Mutual capacitance (nF/100m)	4.47	4.35	5.60	1.13	5.60	1.13	N/A	N/A
Maximum Capacitance Unbalance Pair-to-Ground (pF/100m)	29.95	15.13	160.00	130.05	330.00	300.05	160.00	130.05
Conductor DC resistance (Ω)	7.32	7.24	9.38	2.06	9.38	2.06	9.50	2.18
DC Resistance Unbalance within a pair (%) using IEC calculation method	0.18%	0.09%	1.50%	1.32%	2.50%	2.32%	2.00%	1.82%
DC Resistance Unbalance between pairs (%)	1.16%	0.70%	4.00%	2.84%	N/A	N/A	4.00%	2.84%

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