

Project Number: G104239938

Date Issued: 6/13/2022

ETL Verified Certificate of Conformance number: 9909667CRT-003

Test Report Number: 104239938CRT-006a



**Applicant:**

Berk-Tek LLC  
132 White Oak Rd  
New Holland, PA 17557

**Manufacturer:**

Berk-Tek LLC  
132 White Oak Rd  
New Holland, PA 17557

**Applicant Contact:** Mr. Michael Boland

**Mfg. Contact:** Mr. Michael Boland

Dear Mr. Boland

Intertek is pleased to provide this letter report covering the testing of your 4-pair, 24 AWG, U/UTP, CM, cord (stranded) cable covered by ETL Verified certificate of conformance number 9909667CRT-003. The sample was randomly selected by an Intertek inspector from your manufacturing facility, Berk-Tek LLC, on 8/12/2021 for Quarter 3 2021 follow-up testing.

The testing was performed at Intertek located in Cortland, NY from 8/31/2021 through 8/31/2021, to the ANSI/TIA-568.2-D standard(s) for category 6 and passed the applicable requirements.

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.

Sincerely,

A handwritten signature in black ink that reads "Antoine Pelletier".

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

A handwritten signature in black ink that reads "Craig L. Williams".

Craig L. Williams  
Technician  
Global Cabling Products Testing  
Phone: (607) 758-6321

## Summary

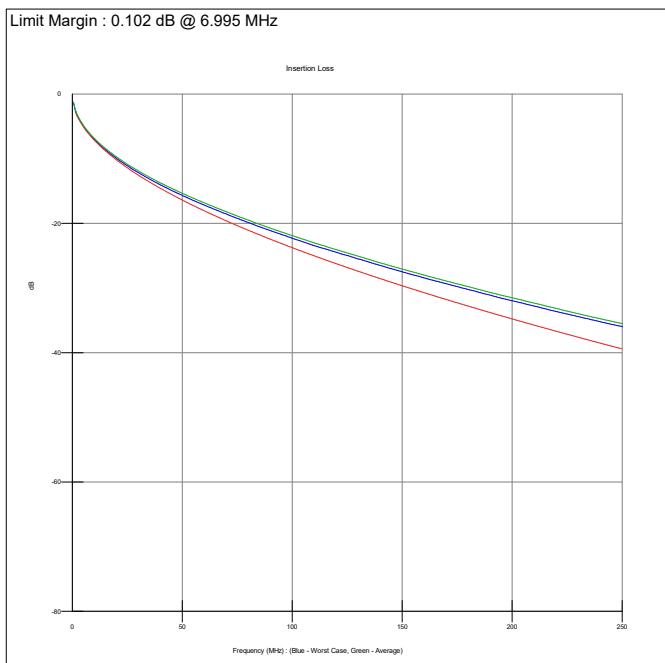
<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
<b>Part No</b>	LM-1000 CM Patch	<b>Length (m)</b>	100.
<b>Test Started</b>	8/31/2021 3:43:27 PM	<b>Temperature</b>	20.3 °C
<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies

DC Resistance (Ohms)		
Worst Case	Average	Spec
8.3	8.1	14.0
8.3	8.2	14.0

DC Resistance Unbalance (%)		
Worst Case	Average	Spec
1.1	0.6	5.0

DC Resistance Unbalance Pair-Pair (%)		
Worst Case	Average	Spec
1.6	1.0	

Capacitance Unbalance Pair-Ground (pF/100m)		
Worst Case	Average	Spec
24.1	15.5	330.0

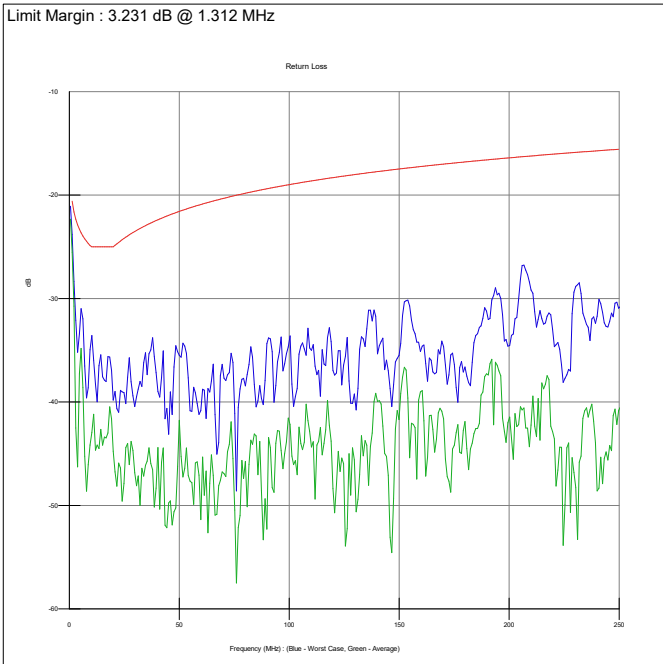


Insertion Loss			
Freq	Worst Case	Average	Spec
1.	2.0	1.9	2.5
4.	4.4	4.3	4.5
8.	6.3	6.1	6.4
10.	7.0	6.9	7.1
16.	8.9	8.7	9.1
20.	9.9	9.7	10.2
25.	11.1	10.8	11.4
31.25	12.4	12.1	12.8
62.5	17.5	17.2	18.5
100.	22.3	21.9	23.8
250.	36.0	35.5	39.4

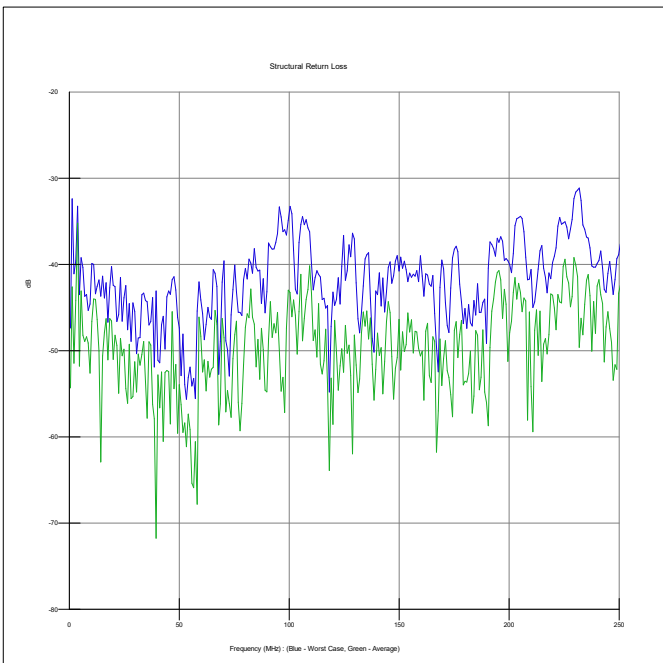
## Summary

<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
<b>Part No</b>	LM-1000 CM Patch	<b>Length (m)</b>	100.
<b>Test Started</b>	8/31/2021 3:43:27 PM	<b>Temperature</b>	20.3 °C
<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies

Limit Margin : 3.231 dB @ 1.312 MHz



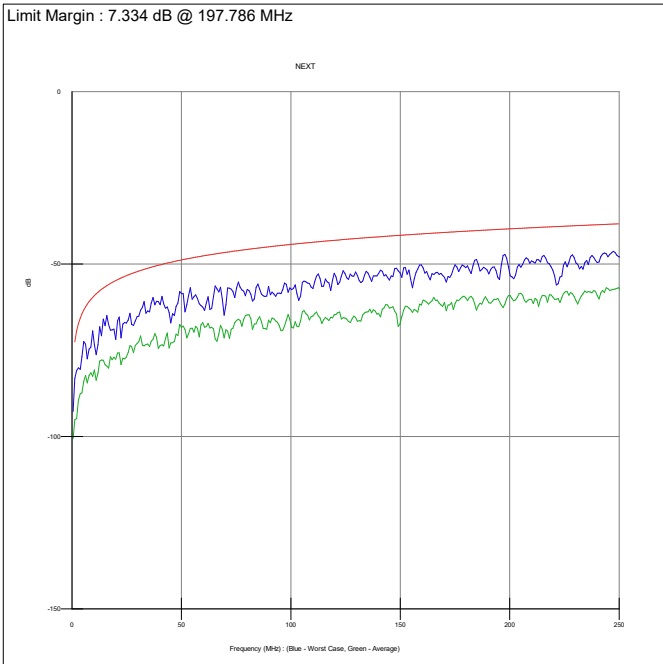
Return Loss			
Freq	Worst Case	Average	Spec
1.	22.9	24.3	20.2
4.	34.6	43.5	23.0
8.	40.6	48.0	24.5
10.	34.0	43.3	25.0
16.	37.9	43.4	25.0
20.	39.9	44.8	25.0
25.	39.3	47.3	24.2
31.25	38.8	47.3	23.3
62.5	40.5	48.9	20.7
100.	34.1	41.9	19.0
250.	30.9	40.7	15.6



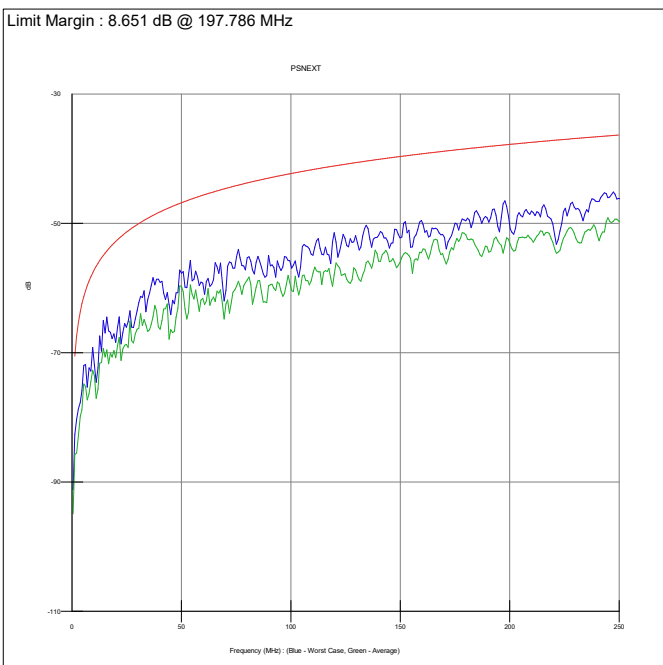
Structural Return Loss			
Freq	Worst Case	Average	Spec
1.	38.1	47.1	
4.	39.0	40.4	
8.	44.1	48.6	
10.	45.8	48.4	
16.	44.0	47.8	
20.	42.5	51.0	
25.	43.6	50.6	
31.25	49.3	50.9	
62.5	49.7	53.4	
100.	34.0	43.1	
250.	39.6	43.0	

## Summary

<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
<b>Part No</b>	LM-1000 CM Patch	<b>Length (m)</b>	100.
<b>Test Started</b>	8/31/2021 3:43:27 PM	<b>Temperature</b>	20.3 °C
<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies



NEXT			
Freq	Worst Case	Average	Spec
1.	89.4	97.3	73.7
4.	79.9	87.5	65.3
8.	74.5	82.1	60.8
10.	72.8	81.3	59.3
16.	65.2	79.6	56.2
20.	71.8	77.5	54.8
25.	67.8	76.8	53.3
31.25	63.6	71.0	51.9
62.5	62.1	67.7	47.4
100.	57.2	67.3	44.3
250.	47.9	57.0	38.3

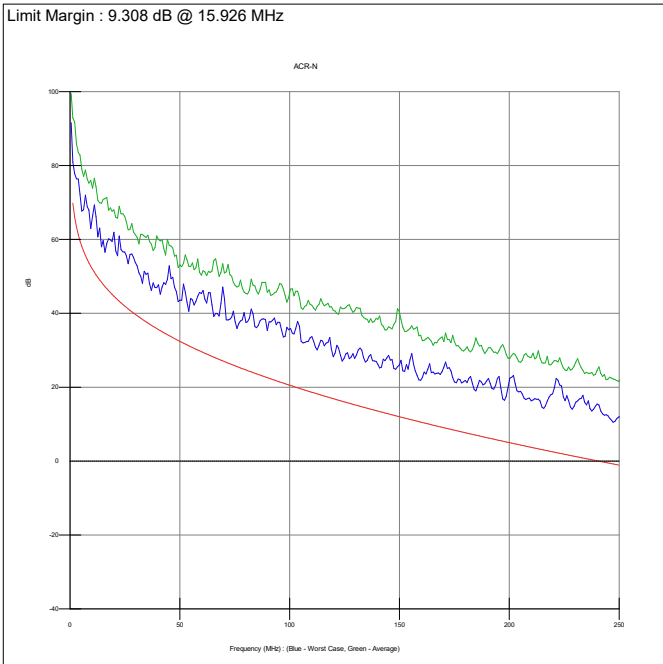


PSNEXT			
Freq	Worst Case	Average	Spec
1.	86.1	89.3	71.7
4.	77.7	79.5	63.3
8.	72.5	75.9	58.8
10.	72.1	73.3	57.3
16.	64.7	69.8	54.2
20.	68.4	70.8	52.8
25.	66.5	68.8	51.3
31.25	61.4	64.3	49.9
62.5	59.6	61.0	45.4
100.	56.4	59.8	42.3
250.	46.2	49.7	36.3

## Summary

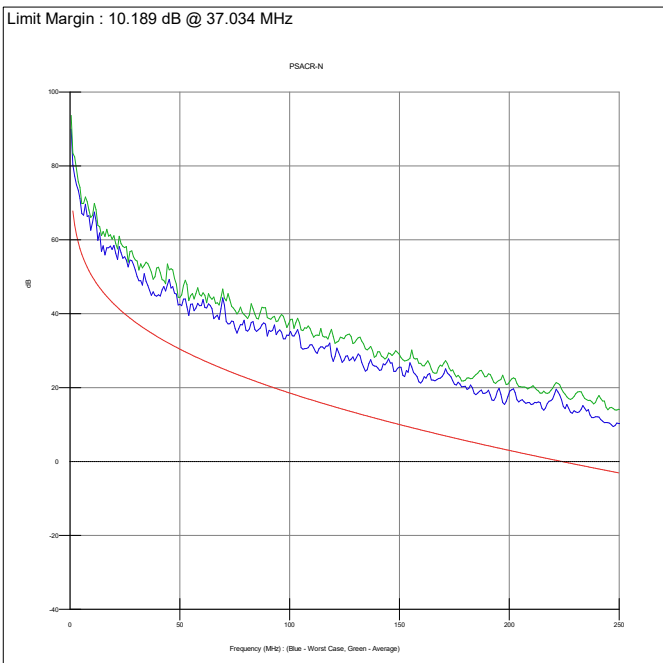
<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
<b>Part No</b>	LM-1000 CM Patch	<b>Length (m)</b>	100.
<b>Test Started</b>	8/31/2021 3:43:27 PM	<b>Temperature</b>	20.3 °C
<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies

Limit Margin : 9.308 dB @ 15.926 MHz



ACR-N			
Freq	Worst Case	Average	Spec
1.	87.5	95.4	71.3
4.	75.5	83.3	60.8
8.	68.6	76.1	54.4
10.	66.2	74.5	52.2
16.	56.8	71.1	47.2
20.	61.9	67.9	44.6
25.	57.2	66.0	41.9
31.25	51.2	59.0	39.1
62.5	44.6	50.6	28.9
100.	35.8	45.6	20.5
250.	12.0	21.7	-1.1

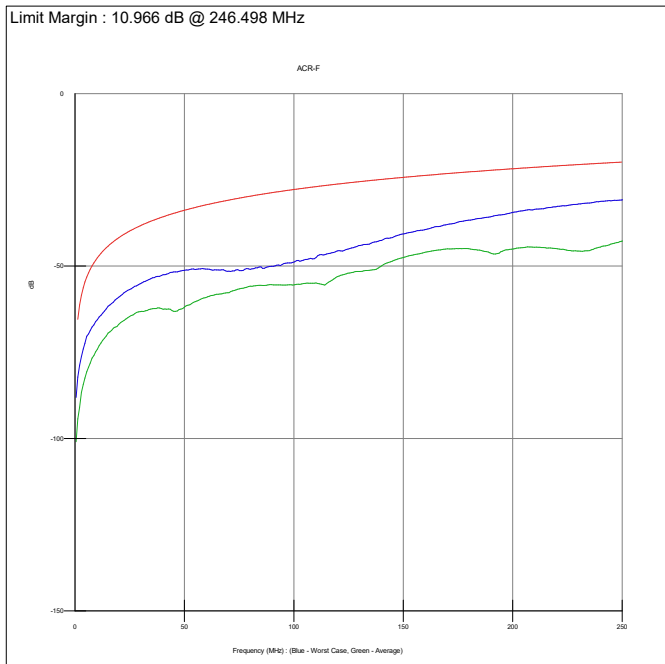
Limit Margin : 10.189 dB @ 37.034 MHz



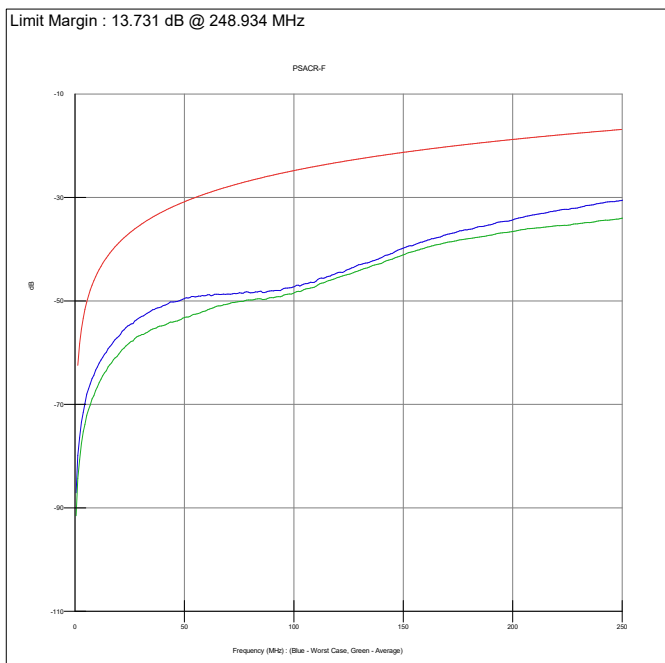
PSACR-N			
Freq	Worst Case	Average	Spec
1.	84.3	87.4	69.3
4.	73.3	75.3	58.8
8.	66.4	69.8	52.4
10.	65.1	66.4	50.2
16.	56.1	61.1	45.2
20.	58.5	61.1	42.6
25.	55.8	58.0	39.9
31.25	49.1	52.1	37.1
62.5	42.1	43.9	26.9
100.	34.7	37.9	18.5
250.	10.3	14.1	-3.1

## Summary

<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
<b>Part No</b>	LM-1000 CM Patch	<b>Length (m)</b>	100.
<b>Test Started</b>	8/31/2021 3:43:27 PM	<b>Temperature</b>	20.3 °C
<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies



ACR-F			
Freq	Worst Case	Average	Spec
1.	85.3	96.9	67.0
4.	73.7	83.8	55.8
8.	67.5	76.5	49.7
10.	65.7	74.3	47.8
16.	61.3	69.1	43.7
20.	59.0	66.9	41.8
25.	56.8	64.6	39.8
31.25	54.6	63.2	37.9
62.5	51.1	58.5	31.9
100.	48.8	55.4	27.8
250.	30.8	42.8	19.9

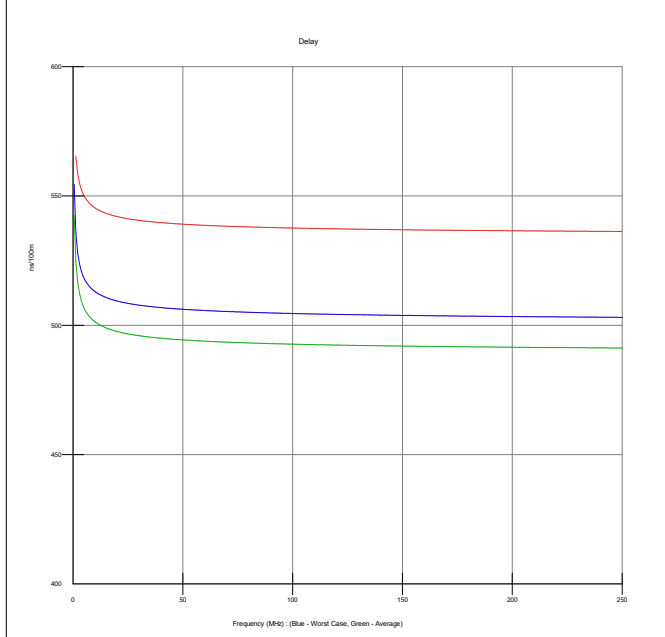


PSACR-F			
Freq	Worst Case	Average	Spec
1.	82.7	87.1	64.0
4.	71.0	74.8	52.8
8.	64.9	68.8	46.7
10.	62.9	66.8	44.8
16.	58.8	62.3	40.7
20.	56.8	60.3	38.8
25.	54.7	58.1	36.8
31.25	52.9	56.5	34.9
62.5	49.0	51.4	28.9
100.	47.3	48.5	24.8
250.	30.6	34.0	16.9

## Summary

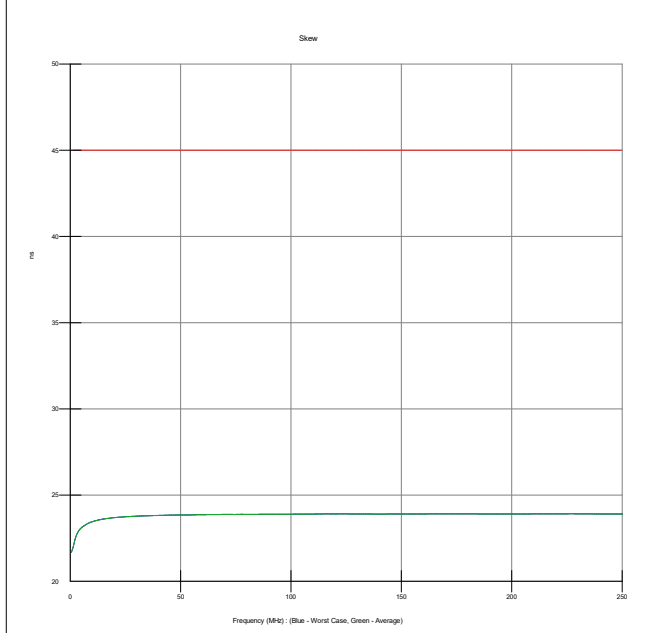
<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
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<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies

Limit Margin : 29.550 ns/100m @ 1.312 MHz



Delay			
Freq	Worst Case	Average	Spec
1.	543.0	531.7	568.0
4.	520.4	509.0	552.1
8.	514.5	502.9	546.7
10.	513.0	501.4	545.4
16.	510.4	498.7	543.0
20.	509.4	497.6	542.0
25.	508.5	496.7	541.2
31.25	507.7	495.8	540.4
62.5	505.6	493.8	538.6
100.	504.6	492.7	537.6
250.	503.1	491.2	536.3

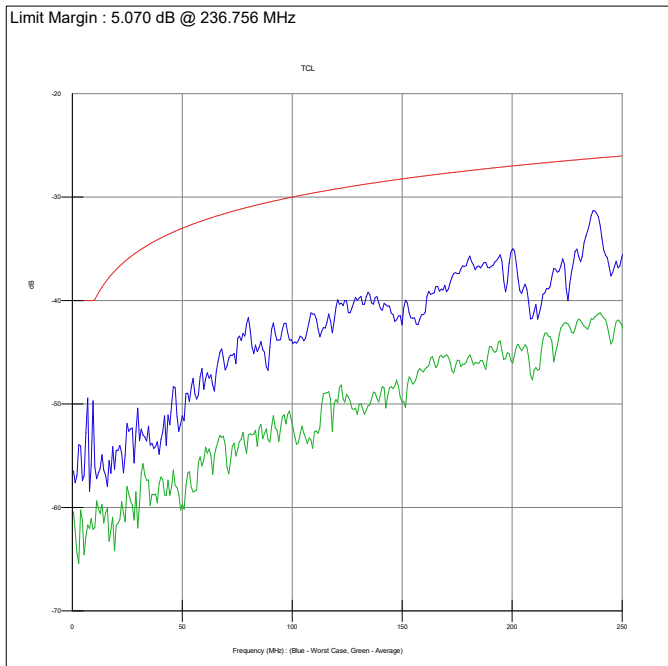
Limit Margin : 21.083 ns @ 226.201 MHz



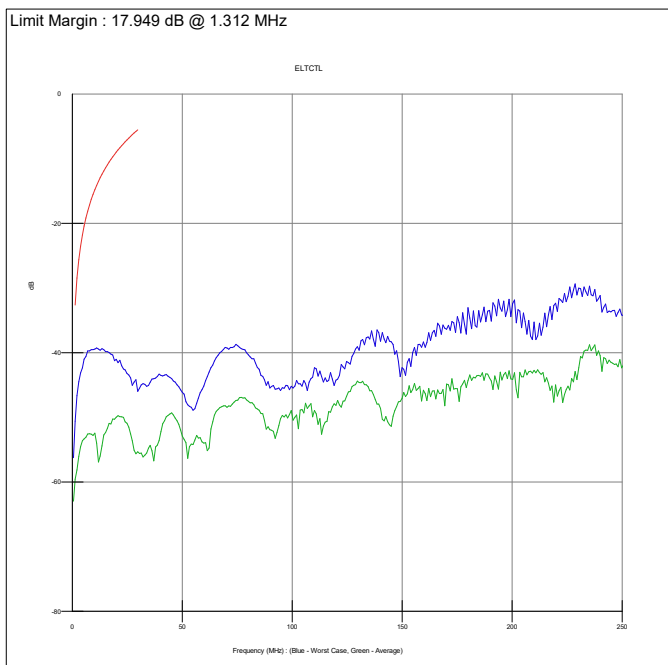
Skew			
Freq	Worst Case	Average	Spec
1.	21.9	21.9	45.0
4.	23.0	23.0	45.0
8.	23.4	23.4	45.0
10.	23.5	23.5	45.0
16.	23.6	23.6	45.0
20.	23.7	23.7	45.0
25.	23.7	23.7	45.0
31.25	23.8	23.8	45.0
62.5	23.9	23.9	45.0
100.	23.9	23.9	45.0
250.	23.9	23.9	45.0

## Summary

<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-006a
<b>Specification</b>	ANSI-TIA-568-2-D Cat 6 Cable		
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<b>Description</b>	4 Pair 24 AWG UUTP CM Stranded		
<b>Operator Name</b>	David Ayers	<b>Test Status</b>	Complies



TCL			
Freq	Worst Case	Average	Spec
1.	58.5	61.5	40.0
4.	56.1	60.6	40.0
8.	59.6	61.8	40.0
10.	56.4	62.0	39.9
16.	58.6	60.4	38.0
20.	54.7	61.7	37.0
25.	52.0	58.1	36.0
31.25	52.9	57.1	35.1
62.5	47.5	54.6	32.0
100.	44.0	52.0	30.0
250.	35.7	42.5	26.0



ELTCTL			
Freq	Worst Case	Average	Spec
1.	54.5	60.9	34.2
4.	43.1	54.2	23.0
8.	39.7	52.5	16.9
10.	39.5	52.6	15.0
16.	39.8	51.6	10.9
20.	41.0	50.0	9.0
25.	43.2	51.0	7.0
31.25	45.0	55.5	
62.5	42.8	53.7	
100.	45.3	49.8	
250.	34.2	42.2	