

Project Number: G104239938

Date Issued: 11/27/2024

ETL Verified Certificate of Conformance number: 104721124CRT-002

Test Report Number: 104239938CRT-025e



**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, 23 AWG, F/UTP, CMP, horizontal (solid) cable covered by ETL Verified certificate of conformance number 104721124CRT-002. The sample was randomly selected by an Intertek inspector from your manufacturing facility, Berk-Tek LLC, on 10/23/2024 for Quarter 4 2024 follow-up testing.

The testing was performed at Intertek located in Cortland, NY from 11/27/2024 through 11/27/2024, to the ANSI/TIA-568.2-E standard(s) for category 6A 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](mailto: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

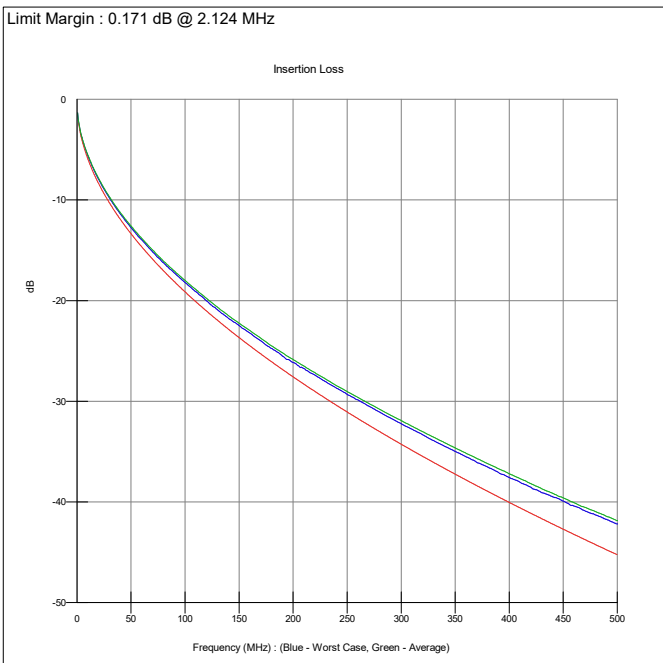
<b>Client</b>	Berk-Tek	<b>Report No</b>	104239938CRT-025e
<b>Specification</b>	ANSI-TIA-568-2-E Cat 6A Cable		
<b>Part No</b>	FDT CMP	<b>Length (m)</b>	100.
<b>Test Started</b>	11/27/2024 2:21:57 PM	<b>Temperature</b>	22.7 °C
<b>Description</b>	4 Pair 23 AWG FUTP CMP Solid		
<b>Operator Name</b>	Craig Williams	<b>Test Status</b>	Complies

DC Resistance (Ohms)		
Worst Case	Average	Spec
7.5	7.3	9.4
7.6	7.3	9.4

DC Resistance Unbalance (%)		
Worst Case	Average	Spec
0.5	0.4	5.0

DC Resistance Unbalance Pair-Pair (%)		
Worst Case	Average	Spec
3.2	2.0	5.0

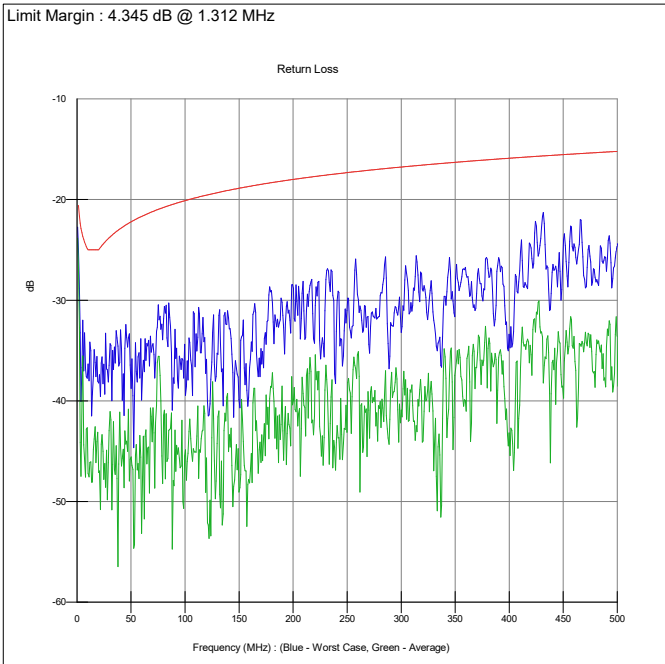
Capacitance Unbalance Pair-Ground (pF/100m)		
Worst Case	Average	Spec
74.5	40.2	330.0



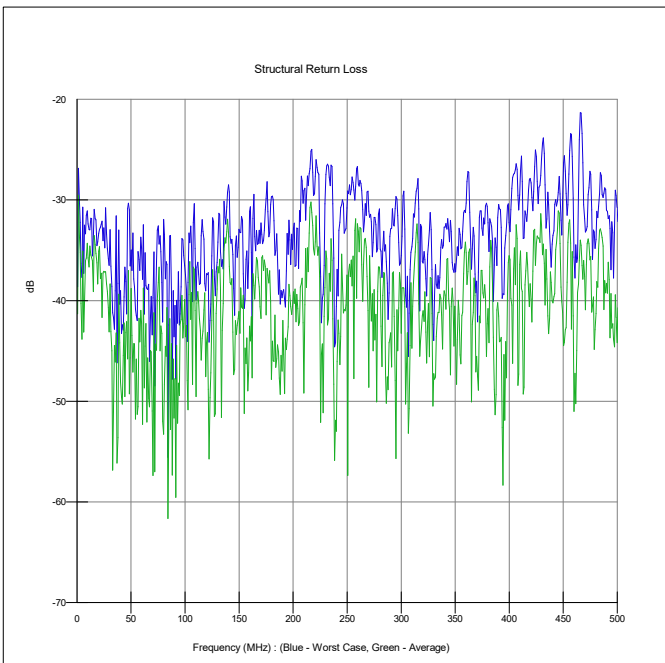
Insertion Loss			
Freq	Worst Case	Average	Spec
1.	1.8	1.8	2.1
4.	3.6	3.5	3.8
8.	5.0	4.9	5.3
10.	5.6	5.5	5.9
16.	7.1	7.0	7.5
20.	8.0	7.9	8.4
25.	8.9	8.8	9.4
31.25	10.0	9.9	10.5
62.5	14.3	14.1	15.0
100.	18.2	18.0	19.1
250.	29.3	29.0	31.1
500.	42.2	41.9	45.2

## Summary

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<b>Specification</b>	ANSI-TIA-568-2-E Cat 6A Cable		
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<b>Test Started</b>	11/27/2024 2:21:57 PM	<b>Temperature</b>	22.7 °C
<b>Description</b>	4 Pair 23 AWG FUTP CMP Solid		
<b>Operator Name</b>	Craig Williams	<b>Test Status</b>	Complies



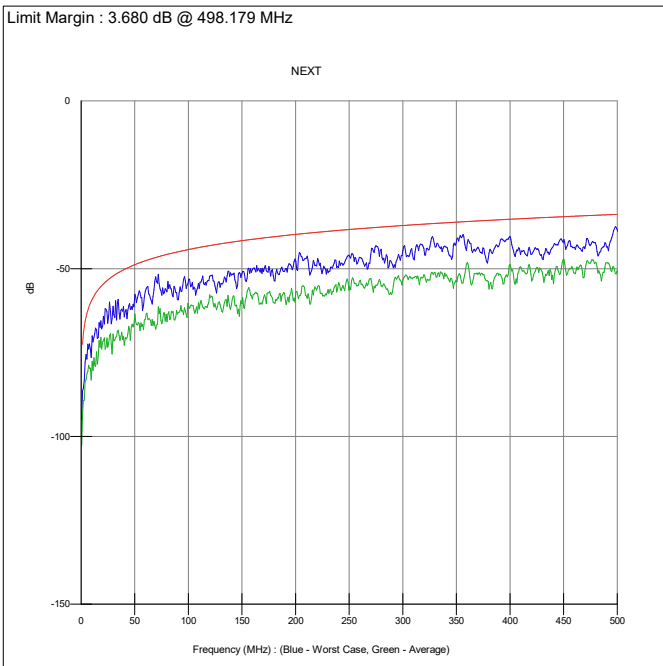
Return Loss			
Freq	Worst Case	Average	Spec
1.	24.1	25.6	20.2
4.	40.0	45.2	23.0
8.	37.4	46.4	24.5
10.	36.8	45.8	25.0
16.	35.1	43.7	25.0
20.	38.2	47.1	25.0
25.	36.9	47.5	24.3
31.25	35.4	41.8	23.6
62.5	35.9	48.7	21.5
100.	38.2	45.1	20.1
250.	30.6	41.6	17.3
500.	24.6	34.8	15.2



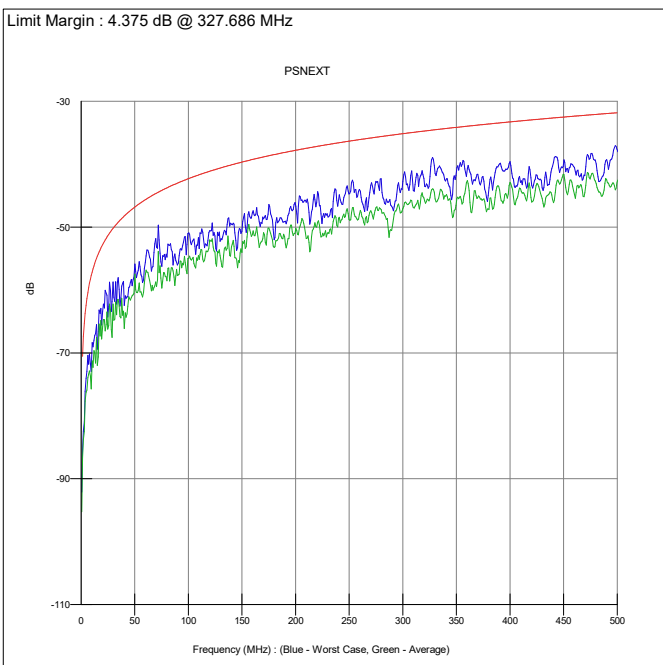
Structural Return Loss			
Freq	Worst Case	Average	Spec
1.	31.4	34.1	
4.	40.5	41.4	
8.	32.9	36.0	
10.	32.3	35.3	
16.	31.1	33.6	
20.	33.3	35.1	
25.	33.1	37.1	
31.25	36.1	42.5	
62.5	39.1	47.1	
100.	37.2	42.0	
250.	30.3	43.7	
500.	31.1	43.3	

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<b>Description</b>	4 Pair 23 AWG FUTP CMP Solid		
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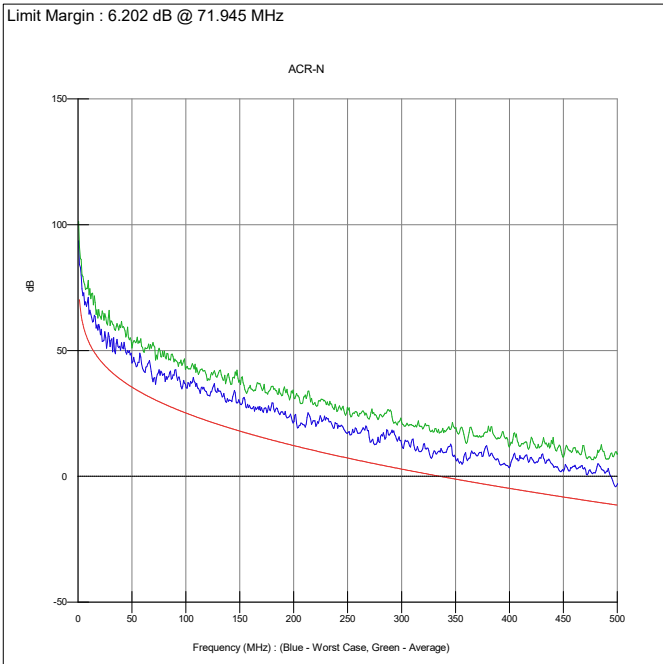
NEXT			
Freq	Worst Case	Average	Spec
1.	90.9	97.1	73.7
4.	78.6	83.5	65.3
8.	74.5	79.7	60.8
10.	72.3	79.3	59.3
16.	70.4	75.6	56.2
20.	67.4	71.9	54.8
25.	66.6	73.2	53.3
31.25	64.6	71.3	51.9
62.5	56.1	65.1	47.4
100.	53.8	60.9	44.3
250.	46.1	56.1	38.3
500.	38.5	50.7	33.8



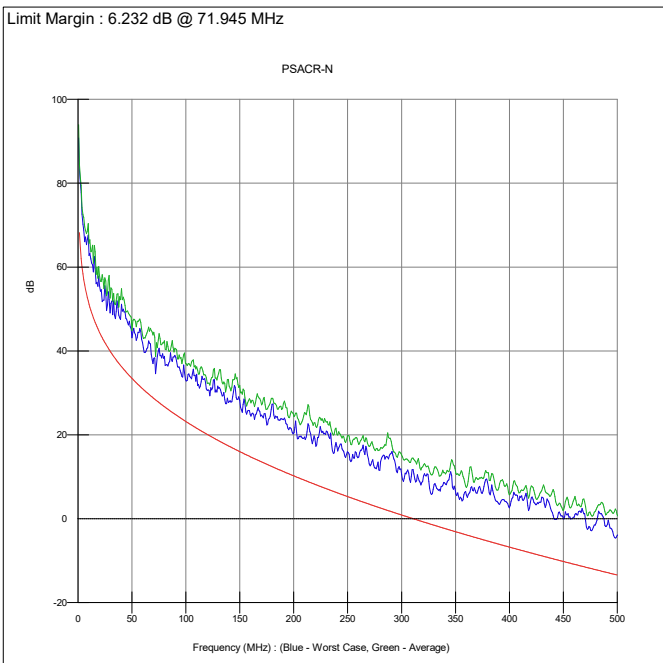
PSNEXT			
Freq	Worst Case	Average	Spec
1.	89.1	90.0	71.7
4.	75.6	77.2	63.3
8.	70.9	73.1	58.8
10.	70.0	72.6	57.3
16.	66.5	70.2	54.2
20.	63.4	65.9	52.8
25.	64.3	66.1	51.3
31.25	61.8	64.6	49.9
62.5	53.8	57.4	45.4
100.	51.2	55.0	42.3
250.	44.7	48.8	36.3
500.	37.8	42.7	31.8

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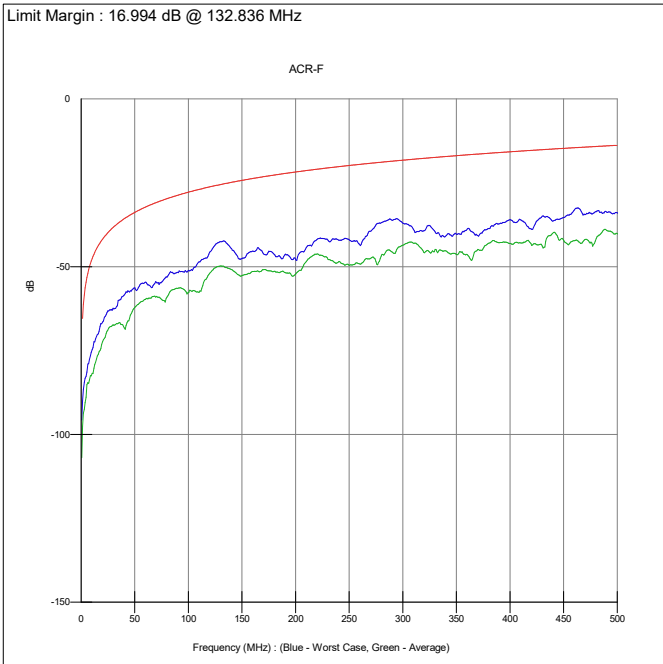
ACR-N			
Freq	Worst Case	Average	Spec
1.	89.1	95.3	71.6
4.	75.1	79.9	61.5
8.	69.5	74.7	55.5
10.	66.8	73.8	53.4
16.	63.5	68.7	48.8
20.	59.5	64.0	46.4
25.	57.8	64.4	44.0
31.25	54.7	61.4	41.4
62.5	42.0	51.0	32.4
100.	35.8	42.9	25.2
250.	17.2	27.1	7.3
500.	-3.2	8.9	-11.4



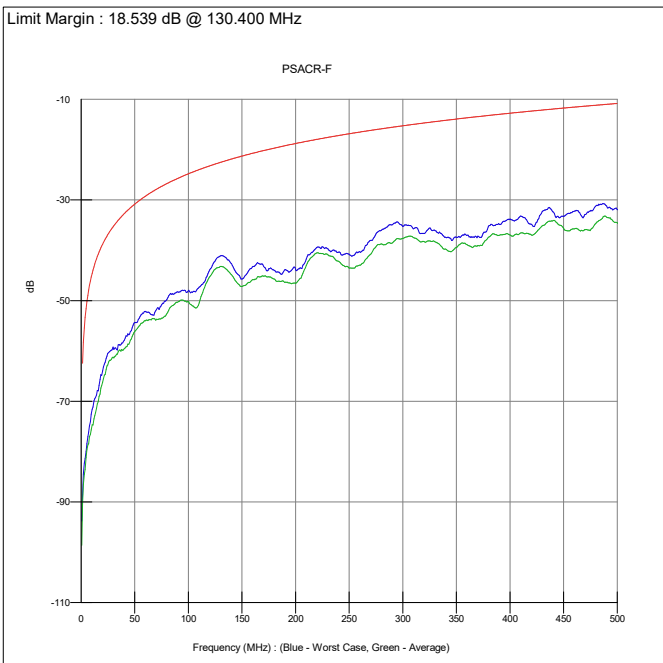
PSACR-N			
Freq	Worst Case	Average	Spec
1.	87.2	88.1	69.6
4.	72.1	73.7	59.5
8.	66.0	68.1	53.5
10.	64.6	67.1	51.4
16.	59.4	63.2	46.8
20.	55.7	58.0	44.4
25.	55.6	57.3	42.0
31.25	51.8	54.7	39.4
62.5	39.7	43.3	30.4
100.	33.2	37.0	23.2
250.	15.9	19.7	5.3
500.	-3.9	0.9	-13.4

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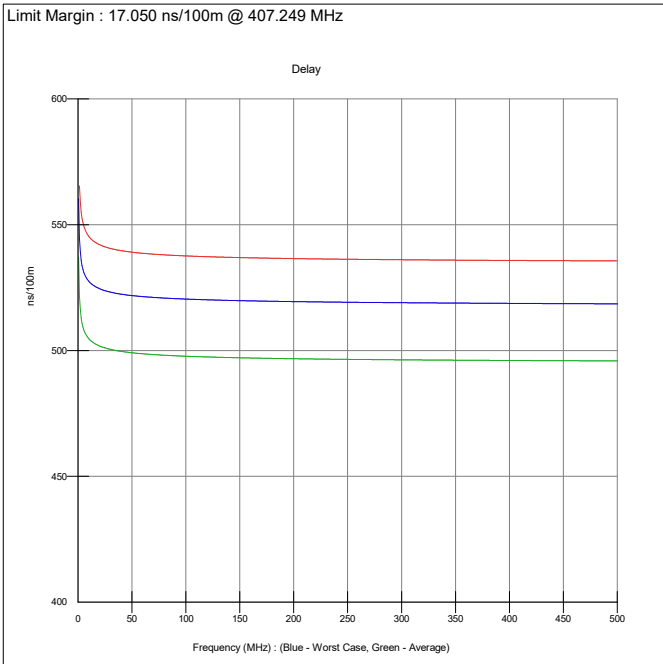
ACR-F			
Freq	Worst Case	Average	Spec
1.	93.0	101.2	67.0
4.	83.2	90.0	55.8
8.	77.9	83.5	49.7
10.	75.0	82.0	47.8
16.	70.0	76.1	43.7
20.	66.5	72.3	41.8
25.	63.2	68.9	39.8
31.25	62.4	67.4	37.9
62.5	55.4	59.5	31.9
100.	51.2	57.8	27.8
250.	42.0	49.6	19.8
500.	34.0	40.2	13.8



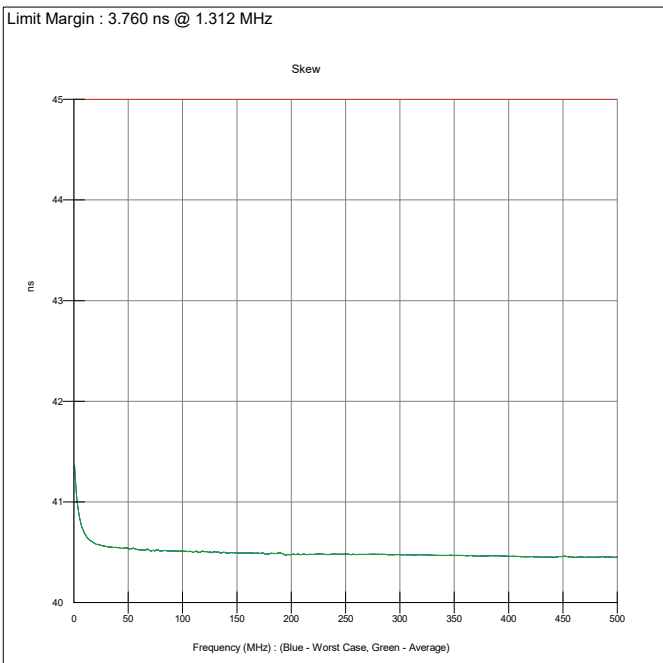
PSACR-F			
Freq	Worst Case	Average	Spec
1.	90.9	93.5	64.0
4.	81.1	82.8	52.8
8.	74.7	77.0	46.7
10.	71.9	75.0	44.8
16.	67.8	70.0	40.7
20.	64.0	66.2	38.8
25.	60.5	62.7	36.8
31.25	59.5	61.1	34.9
62.5	52.3	53.9	28.9
100.	48.1	50.2	24.8
250.	40.8	43.5	16.8
500.	31.9	34.5	10.8

## Summary

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Delay			
Freq	Worst Case	Average	Spec
1.	550.8	527.7	568.0
4.	533.3	510.4	552.1
8.	528.7	505.9	546.7
10.	527.5	504.7	545.4
16.	525.4	502.6	543.0
20.	524.6	501.8	542.0
25.	523.8	501.0	541.2
31.25	523.1	500.3	540.4
62.5	521.3	498.6	538.6
100.	520.4	497.7	537.6
250.	519.2	496.5	536.3
500.	518.6	495.9	535.6



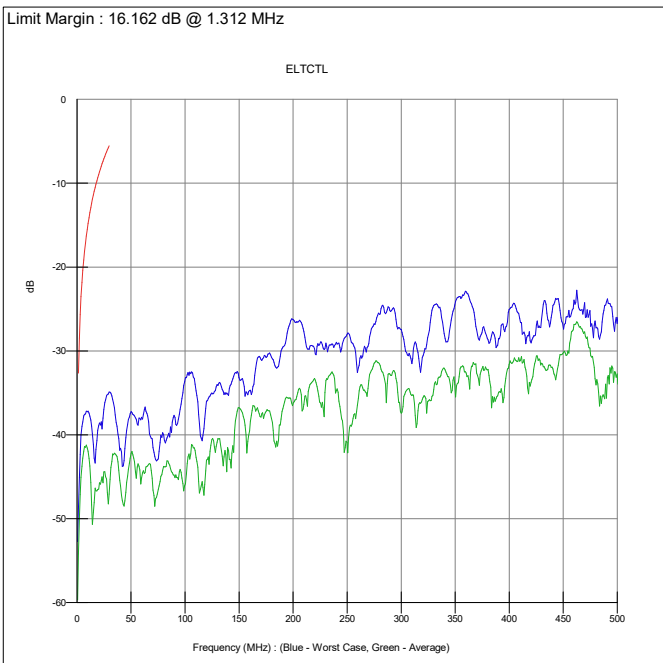
Skew			
Freq	Worst Case	Average	Spec
1.	41.3	41.3	45.0
4.	40.9	40.9	45.0
8.	40.7	40.7	45.0
10.	40.7	40.7	45.0
16.	40.6	40.6	45.0
20.	40.6	40.6	45.0
25.	40.6	40.6	45.0
31.25	40.6	40.6	45.0
62.5	40.5	40.5	45.0
100.	40.5	40.5	45.0
250.	40.5	40.5	45.0
500.	40.5	40.5	45.0

## Summary

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<b>Specification</b>	ANSI-TIA-568-2-E Cat 6A Cable		
<b>Part No</b>	FDT CMP	<b>Length (m)</b>	100.
<b>Test Started</b>	11/27/2024 2:21:57 PM	<b>Temperature</b>	22.7 °C
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<b>Operator Name</b>	Craig Williams	<b>Test Status</b>	Complies



TCL			
Freq	Worst Case	Average	Spec
1.	58.1	64.6	40.0
4.	55.6	62.1	40.0
8.	54.0	62.5	40.0
10.	56.2	60.5	39.9
16.	45.5	54.3	38.0
20.	49.9	55.2	37.0
25.	48.0	55.9	36.0
31.25	48.8	51.4	35.1
62.5	45.1	49.3	32.0
100.	43.2	52.5	30.0
250.	33.6	39.6	26.0
500.	28.3	34.7	23.0



ELTCTL			
Freq	Worst Case	Average	Spec
1.	50.3	56.3	34.2
4.	39.7	44.7	23.0
8.	37.4	41.4	16.9
10.	37.2	41.9	15.0
16.	43.0	47.9	10.9
20.	38.9	46.5	9.0
25.	36.8	44.4	7.0
31.25	35.0	44.1	
62.5	36.9	44.6	
100.	33.4	45.9	
250.	28.0	41.3	
500.	26.6	33.0	