

Project Number: G104239938

Date Issued: 5/23/2024

ETL Verified Certificate of Conformance number: 102929526CRT-002

Test Report Number: 104239938CRT-023c



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, 22 AWG, U/UTP, CMP, horizontal (solid) cable covered by ETL Verified certificate of conformance number 102929526CRT-002. The sample was randomly selected by an Intertek inspector from your manufacturing facility, Berk-Tek LLC, on 5/9/2024 for Quarter 2 2024 follow-up testing.

The testing was performed at Intertek located in Cortland, NY from 5/15/2024 through 5/15/2024, to the ANSI/TIA-568.2-D standard(s) for category 5e 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

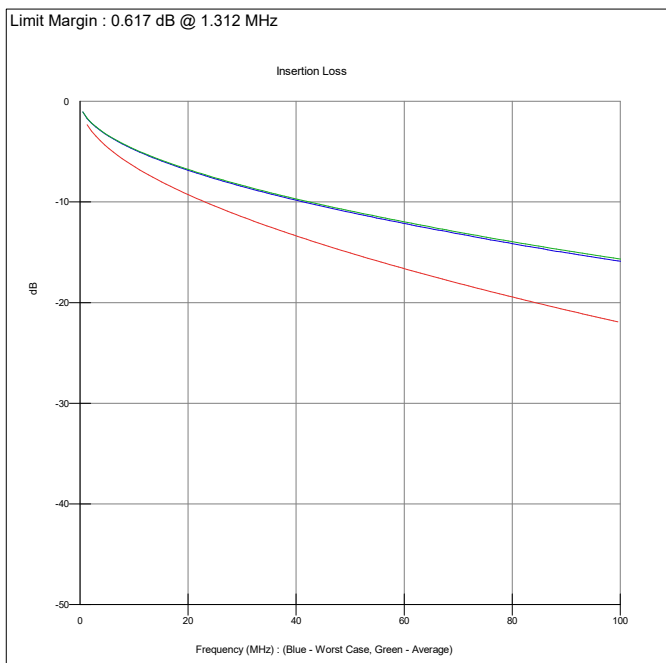
Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

DC Resistance (Ohms)		
Worst Case	Average	Spec
5.3	5.2	9.4
5.2	5.1	9.4

DC Resistance Unbalance (%)		
Worst Case	Average	Spec
0.7	0.4	5.0

DC Resistance Unbalance Pair-Pair (%)		
Worst Case	Average	Spec
1.9	1.1	5.0

Capacitance Unbalance Pair-Ground (pF/100m)		
Worst Case	Average	Spec
4.5	2.6	330.0

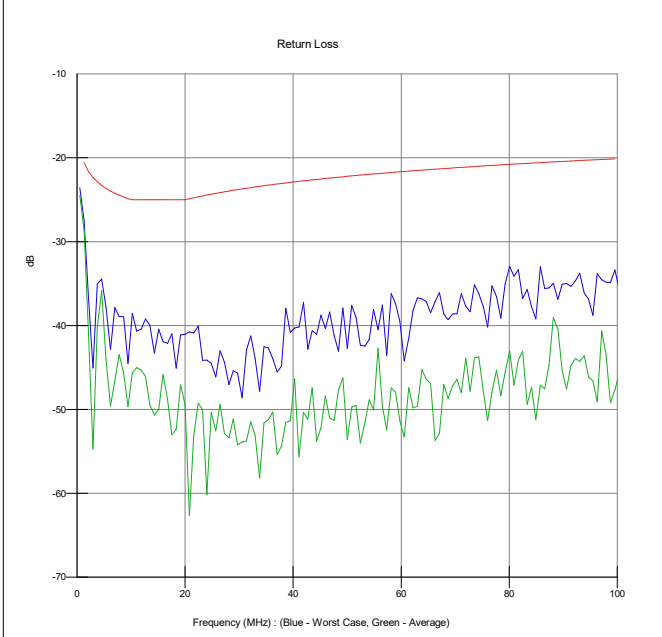


Insertion Loss			
Freq	Worst Case	Average	Spec
1.	1.5	1.4	2.1
4.	3.0	3.0	4.0
8.	4.3	4.2	5.8
10.	4.8	4.7	6.5
16.	6.1	6.0	8.2
20.	6.9	6.8	9.3
25.	7.7	7.6	10.4
31.25	8.6	8.5	11.7
62.5	12.4	12.2	17.0
100.	15.9	15.7	21.9

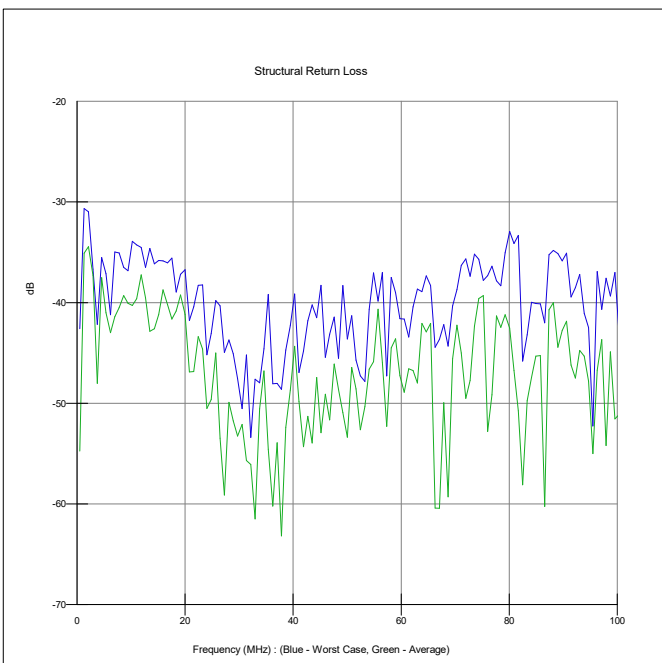
Summary

Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 6.930 dB @ 1.312 MHz



Return Loss			
Freq	Worst Case	Average	Spec
1.	26.0	27.1	20.2
4.	34.9	38.8	23.0
8.	41.4	44.0	24.5
10.	40.5	46.8	25.0
16.	41.9	46.1	25.0
20.	41.1	49.6	25.0
25.	45.0	50.8	24.3
31.25	44.1	53.8	23.6
62.5	37.6	49.7	21.5
100.	35.9	46.6	20.1

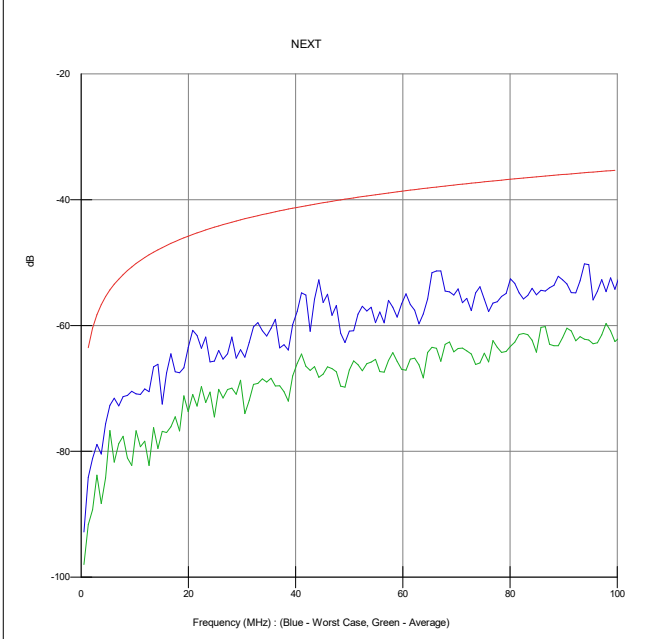


Structural Return Loss			
Freq	Worst Case	Average	Spec
1.	35.2	42.6	
4.	40.4	44.8	
8.	35.7	40.2	
10.	34.8	40.2	
16.	35.9	38.9	
20.	36.9	41.3	
25.	42.5	48.8	
31.25	46.0	55.3	
62.5	39.8	47.2	
100.	44.7	51.3	

Summary

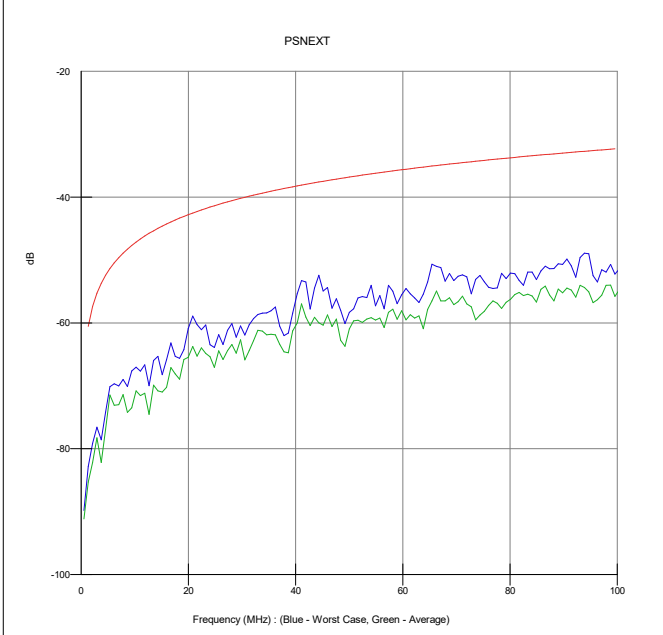
Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 12.140 dB @ 44.341 MHz



NEXT			
Freq	Worst Case	Average	Spec
1.	89.0	94.1	64.7
4.	78.9	87.0	56.3
8.	72.2	78.4	51.8
10.	71.4	78.4	50.3
16.	67.3	76.9	47.2
20.	63.5	73.6	45.8
25.	66.1	73.8	44.3
31.25	63.1	72.2	42.9
62.5	58.4	65.6	38.4
100.	53.5	62.2	35.3

Limit Margin : 14.818 dB @ 44.341 MHz

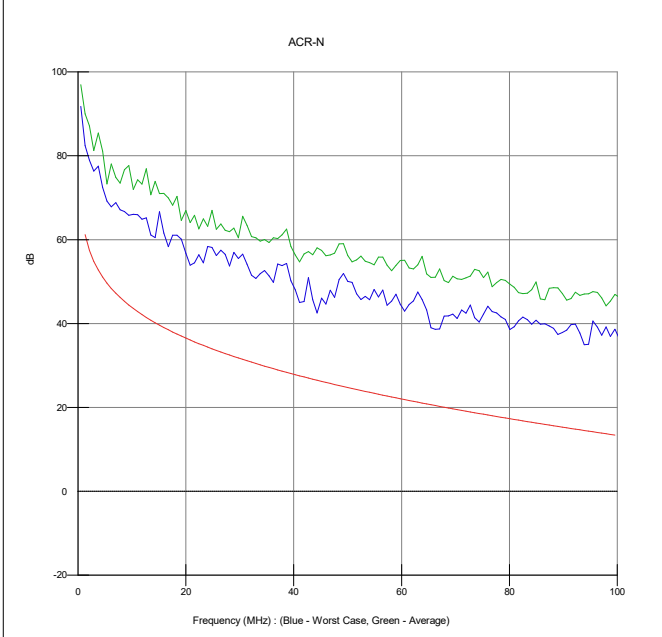


PSNEXT			
Freq	Worst Case	Average	Spec
1.	85.7	87.6	61.7
4.	77.6	80.5	53.3
8.	69.3	72.1	48.8
10.	67.2	71.6	47.3
16.	65.6	69.9	44.2
20.	60.9	65.4	42.8
25.	63.5	66.6	41.3
31.25	60.5	64.6	39.9
62.5	56.8	59.1	35.4
100.	52.6	55.2	32.3

Summary

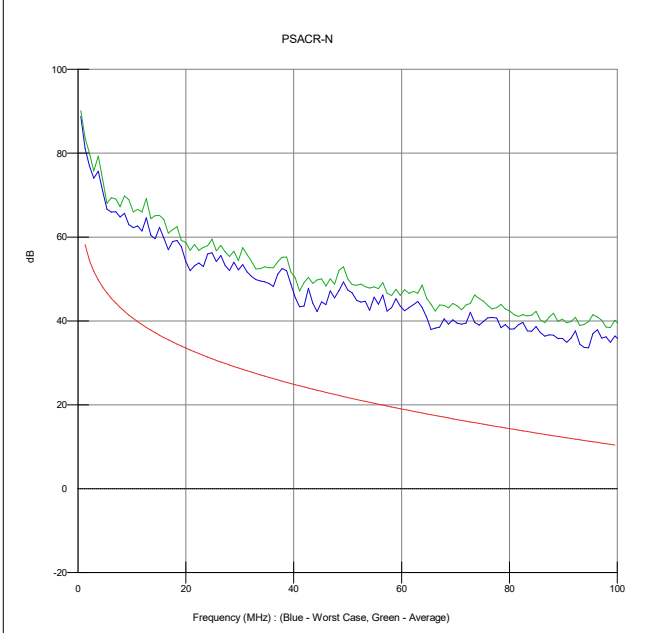
Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 16.067 dB @ 44.341 MHz



ACR-N			
Freq	Worst Case	Average	Spec
1.	87.6	92.7	62.6
4.	76.0	84.1	52.2
8.	68.0	74.2	46.0
10.	66.6	73.7	43.8
16.	61.3	70.9	39.0
20.	56.7	66.9	36.5
25.	58.5	66.2	33.9
31.25	54.5	63.7	31.2
62.5	46.2	53.4	21.4
100.	37.7	46.6	13.4

Limit Margin : 18.745 dB @ 44.341 MHz

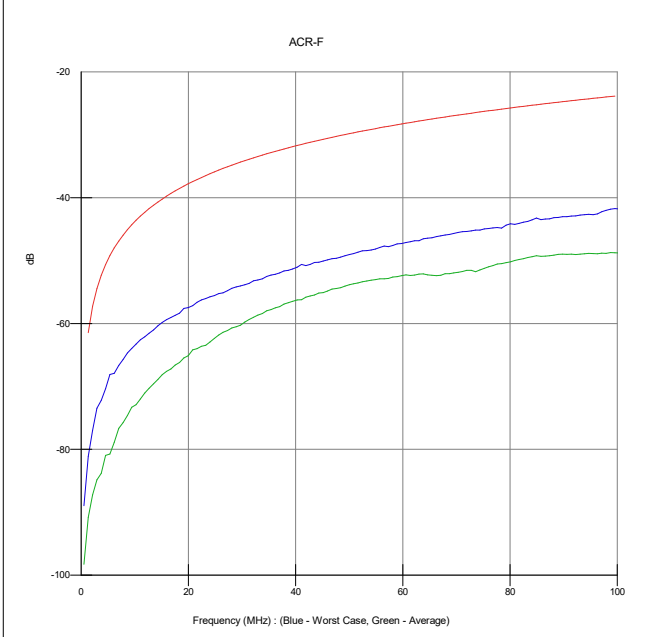


PSACR-N			
Freq	Worst Case	Average	Spec
1.	84.3	86.1	59.6
4.	74.7	77.6	49.2
8.	65.1	67.9	43.0
10.	62.5	66.9	40.8
16.	59.5	63.9	36.0
20.	54.1	58.7	33.5
25.	55.9	59.0	30.9
31.25	51.9	56.1	28.2
62.5	44.6	46.9	18.4
100.	36.9	39.5	10.4

Summary

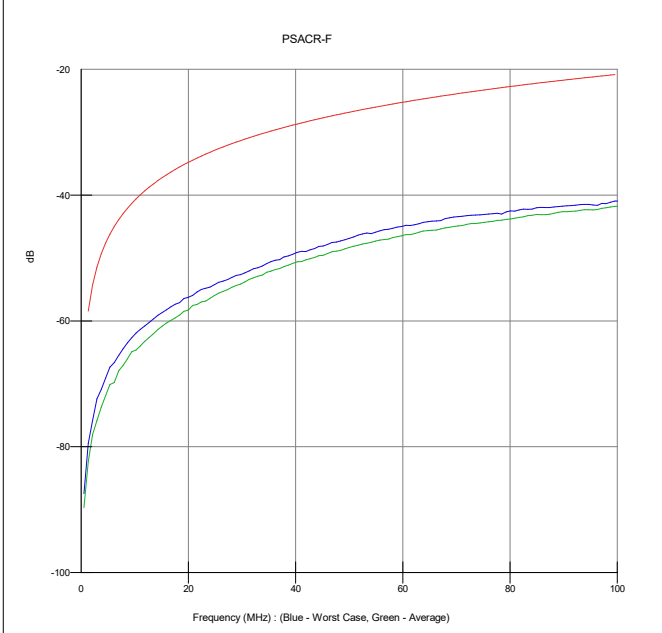
Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 17.898 dB @ 99.549 MHz



ACR-F			
Freq	Worst Case	Average	Spec
1.	84.5	93.7	63.0
4.	71.7	82.9	51.8
8.	65.5	75.5	45.7
10.	63.5	73.0	43.8
16.	59.4	67.6	39.7
20.	57.5	65.1	37.8
25.	55.5	62.3	35.8
31.25	53.7	59.4	33.9
62.5	46.8	52.2	27.9
100.	41.8	48.8	23.8

Limit Margin : 19.533 dB @ 69.509 MHz

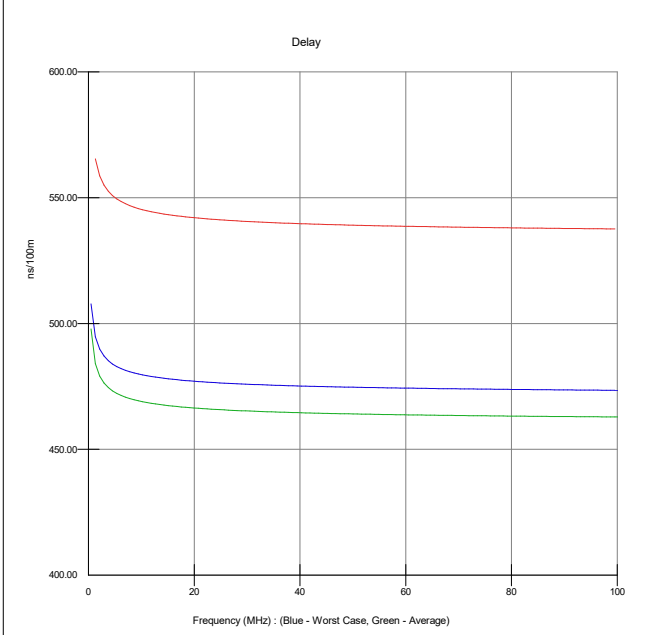


PSACR-F			
Freq	Worst Case	Average	Spec
1.	82.6	85.2	60.0
4.	70.3	73.2	48.8
8.	64.2	66.8	42.7
10.	62.2	64.7	40.8
16.	58.2	60.3	36.7
20.	56.2	58.3	34.8
25.	54.2	55.9	32.8
31.25	52.1	53.4	30.9
62.5	44.6	46.0	24.9
100.	40.9	41.8	20.8

Summary

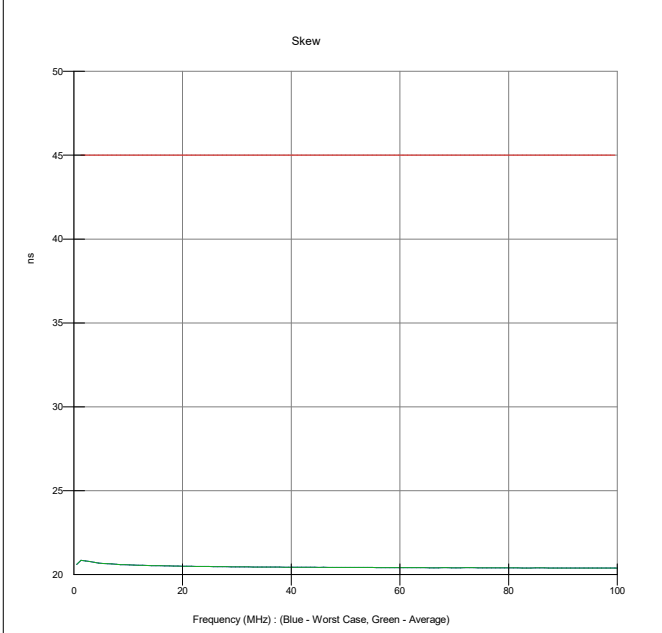
Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 64.140 ns/100m @ 98.737 MHz



Delay			
Freq	Worst Case	Average	Spec
1.	499.8	489.3	568.0
4.	484.8	474.1	552.1
8.	480.7	470.0	546.7
10.	479.7	469.0	545.4
16.	477.8	467.2	543.0
20.	477.1	466.4	542.0
25.	476.4	465.7	541.2
31.25	475.8	465.1	540.4
62.5	474.3	463.6	538.6
100.	473.5	462.9	537.6

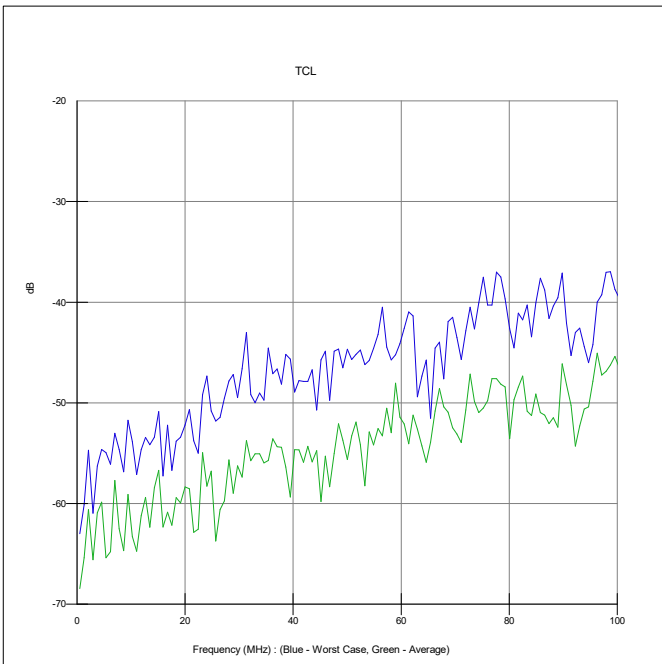
Limit Margin : 24.159 ns @ 1.312 MHz



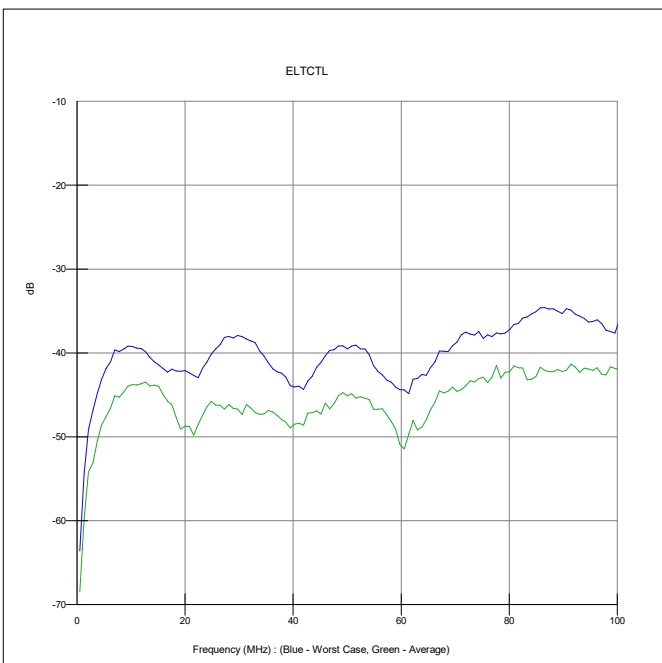
Skew			
Freq	Worst Case	Average	Spec
1.	20.7	20.7	45.0
4.	20.7	20.7	45.0
8.	20.6	20.6	45.0
10.	20.6	20.6	45.0
16.	20.5	20.5	45.0
20.	20.5	20.5	45.0
25.	20.5	20.5	45.0
31.25	20.5	20.5	45.0
62.5	20.4	20.4	45.0
100.	20.4	20.4	45.0

Summary

Client	Berk-Tek	Report No	104239938CRT-023c
Specification	ANSI-TIA-568-2-D Cat 5e Cable		
Part No	LM-IP CMP UTP	Length (m)	100.
Test Started	5/15/2024 10:52:36 AM	Temperature	21.8 °C
Description	4 Pair 22 AWG UUTP CMP Solid		
Operator Name	Craig Williams	Test Status	Complies



TCL			
Freq	Worst Case	Average	Spec
1.	62.7	66.6	
4.	56.9	60.6	
8.	55.9	63.0	
10.	54.0	62.0	
16.	57.9	62.2	
20.	52.2	58.4	
25.	51.4	58.0	
31.25	43.5	54.2	
62.5	45.2	51.7	
100.	39.6	46.0	



ELTCTL			
Freq	Worst Case	Average	Spec
1.	57.9	63.1	
4.	44.3	49.9	
8.	39.8	45.1	
10.	39.2	43.8	
16.	41.9	45.0	
20.	42.1	48.7	
25.	40.0	45.8	
31.25	38.3	46.3	
62.5	43.1	48.5	
100.	36.8	41.9	