

Project Number: G104239938

Date Issued: 8/19/2024

ETL Verified Certificate of Conformance number: 9909667CRT-003

Test Report Number: 104239938CRT-024d



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 7/23/2024 for Quarter 3 2024 follow-up testing.

The testing was performed at Intertek located in Cortland, NY from 7/31/2024 through 8/5/2024, to the ISO/IEC 11801-1 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

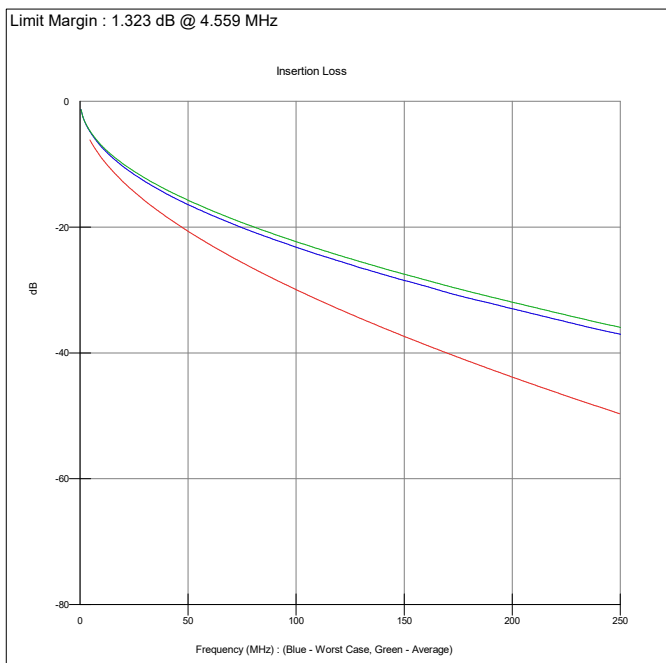
Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

DC Resistance (Ohms)		
Worst Case	Average	Spec
8.4	8.3	14.5
8.4	8.3	14.5

DC Resistance Unbalance (%)		
Worst Case	Average	Spec
0.2	0.1	2.0

DC Resistance Unbalance Pair-Pair (%)		
Worst Case	Average	Spec
1.6	1.0	5.0

Capacitance Unbalance Pair-Ground (pF/100m)		
Worst Case	Average	Spec
21.6	11.9	160.0

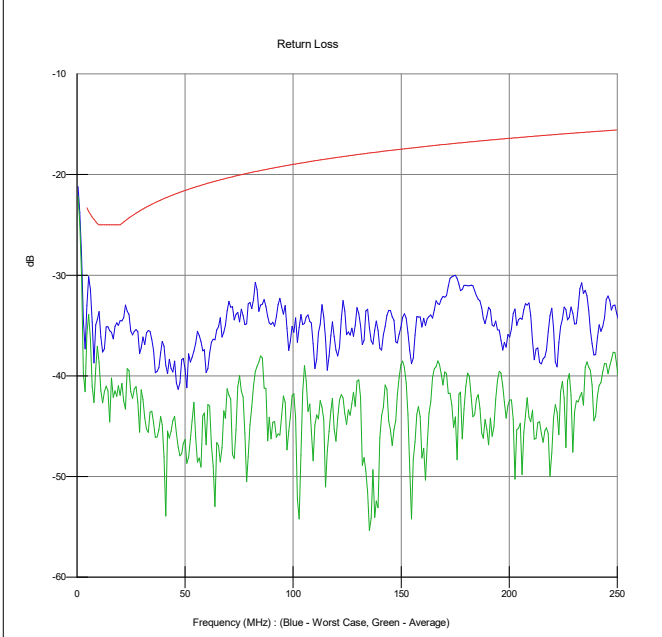


Insertion Loss			
Freq	Worst Case	Average	Spec
1.	2.0	2.0	
4.	4.5	4.4	
8.	6.5	6.3	8.1
10.	7.3	7.0	9.0
16.	9.3	8.9	11.4
20.	10.4	10.0	12.8
25.	11.6	11.1	14.4
31.25	13.0	12.4	16.1
62.5	18.3	17.6	23.3
100.	23.2	22.3	29.9
250.	37.0	35.9	49.7

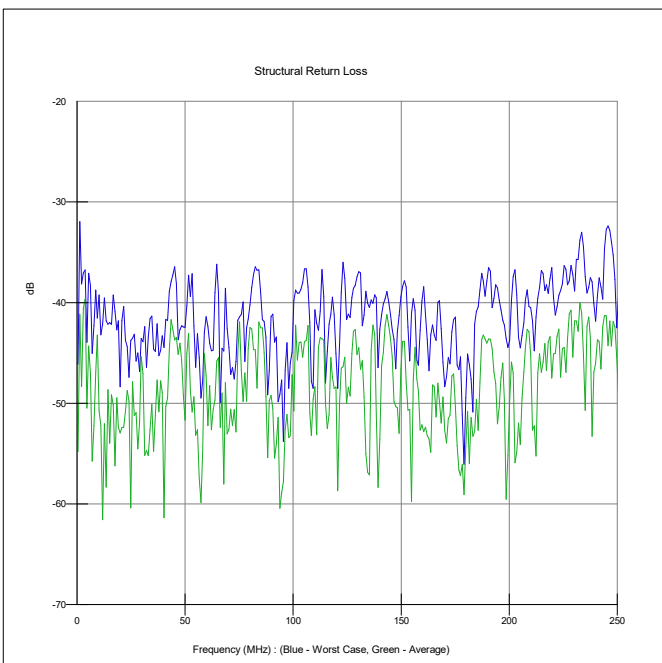
Summary

Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 6.499 dB @ 5.371 MHz



Return Loss			
Freq	Worst Case	Average	Spec
1.	22.8	23.8	
4.	36.0	39.8	
8.	38.1	41.8	24.5
10.	33.9	38.2	25.0
16.	35.7	40.4	25.0
20.	34.5	41.9	25.0
25.	35.8	41.7	24.2
31.25	36.8	44.0	23.3
62.5	36.6	47.7	20.7
100.	36.7	41.9	19.0
250.	34.0	39.3	15.6

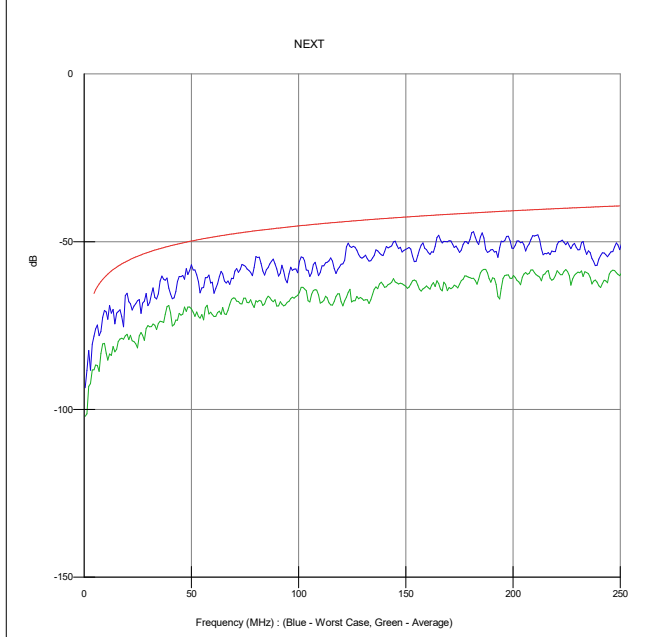


Structural Return Loss			
Freq	Worst Case	Average	Spec
1.	37.4	46.4	
4.	39.4	43.0	
8.	41.4	51.0	
10.	40.3	48.5	
16.	42.4	49.3	
20.	48.5	52.9	
25.	43.8	58.2	
31.25	42.6	54.2	
62.5	44.8	51.9	
100.	42.1	49.2	
250.	41.6	46.6	

Summary

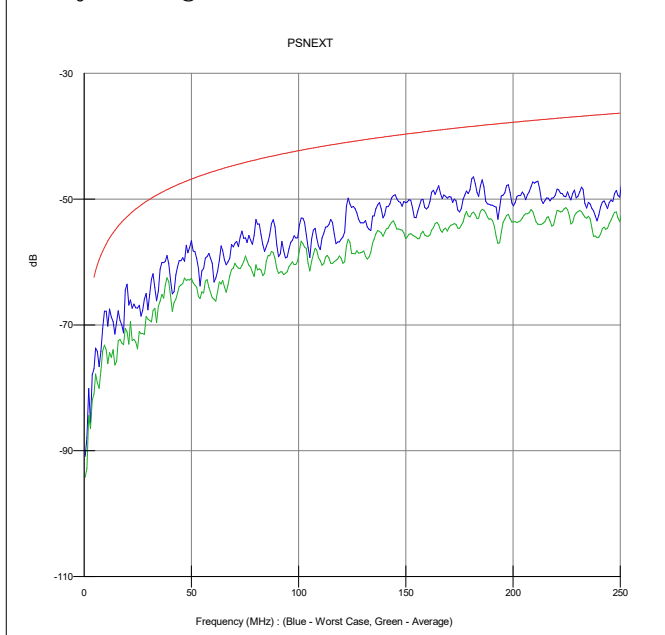
Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 5.635 dB @ 181.548 MHz



NEXT			
Freq	Worst Case	Average	Spec
1.	90.5	101.6	
4.	79.8	88.2	
8.	75.8	82.7	61.8
10.	70.8	82.4	60.3
16.	70.8	79.7	57.2
20.	65.4	77.6	55.8
25.	67.6	81.0	54.3
31.25	66.0	75.3	52.9
62.5	61.8	71.0	48.4
100.	57.6	65.5	45.3
250.	51.9	59.9	39.3

Limit Margin : 8.051 dB @ 181.548 MHz

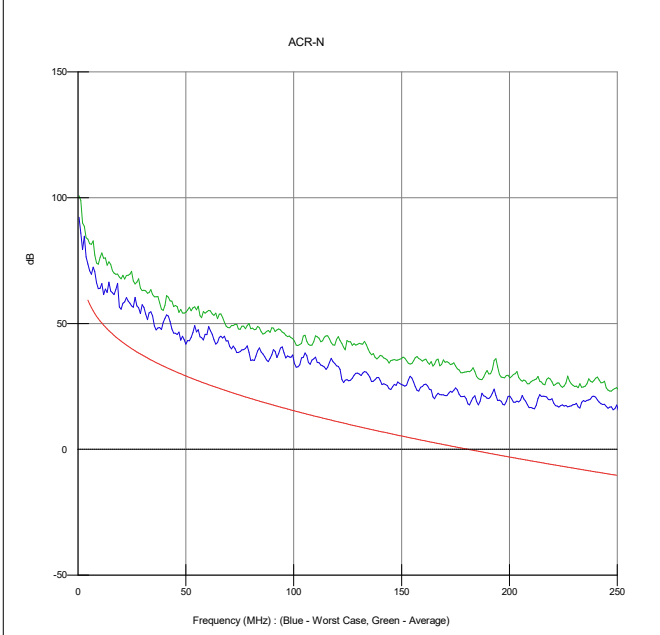


PSNEXT			
Freq	Worst Case	Average	Spec
1.	89.7	93.3	
4.	77.6	81.7	
8.	73.6	76.6	58.8
10.	67.8	73.8	57.3
16.	67.9	72.5	54.2
20.	63.6	71.2	52.8
25.	67.2	73.3	51.3
31.25	63.1	69.5	49.9
62.5	60.9	64.1	45.4
100.	55.0	58.9	42.3
250.	49.1	53.2	36.3

Summary

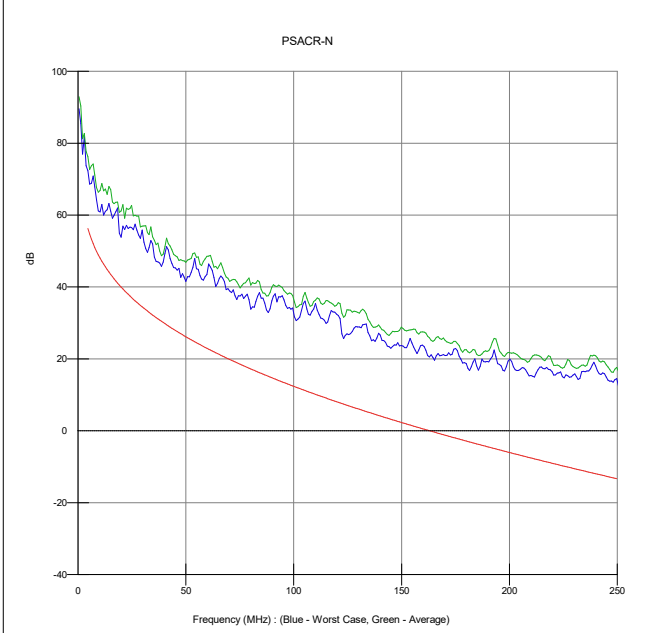
Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 11.883 dB @ 9.431 MHz



ACR-N			
Freq	Worst Case	Average	Spec
1.	88.5	99.6	
4.	75.6	83.9	
8.	69.6	76.5	53.7
10.	63.9	75.4	51.3
16.	62.2	70.9	45.8
20.	55.8	67.8	43.0
25.	56.9	70.0	40.0
31.25	54.1	63.0	36.7
62.5	44.9	53.6	25.1
100.	35.9	43.4	15.4
250.	17.1	24.3	-10.3

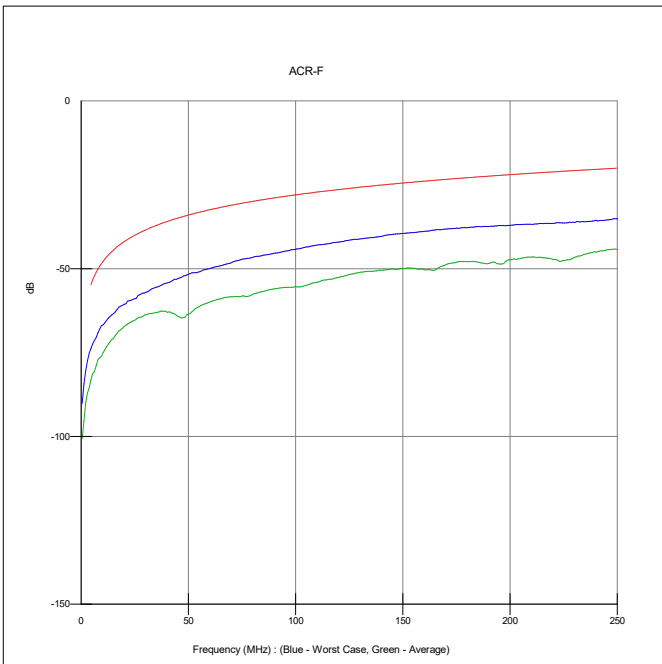
Limit Margin : 12.226 dB @ 9.431 MHz



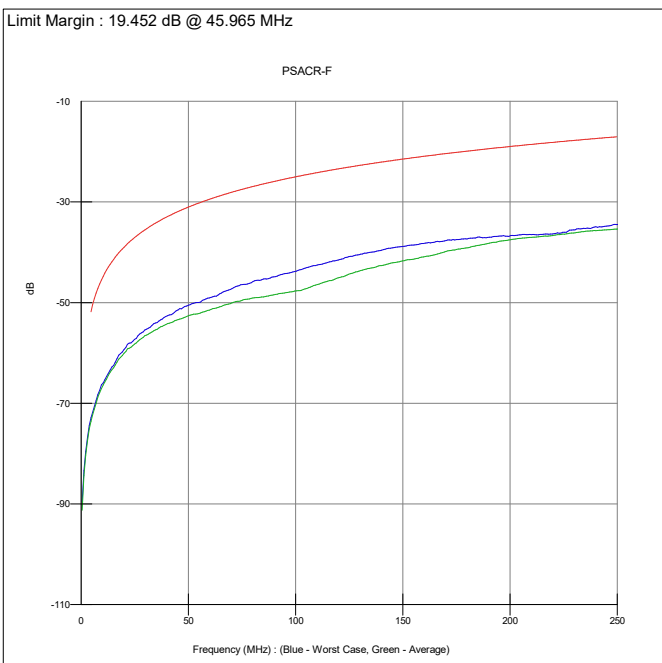
PSACR-N			
Freq	Worst Case	Average	Spec
1.	87.7	91.4	
4.	73.3	77.3	
8.	67.2	70.3	50.7
10.	61.0	66.7	48.3
16.	59.2	63.6	42.8
20.	53.9	61.2	40.0
25.	56.4	62.2	37.0
31.25	51.0	57.1	33.7
62.5	44.0	46.6	22.1
100.	32.8	36.6	12.4
250.	13.8	17.3	-13.3

Summary

Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies



ACR-F			
Freq	Worst Case	Average	Spec
1.	86.8	97.5	
4.	74.7	84.7	
8.	68.9	77.1	49.9
10.	66.8	75.3	48.0
16.	62.9	69.9	43.9
20.	60.6	67.2	42.0
25.	59.0	65.3	40.0
31.25	56.8	63.5	38.1
62.5	49.4	59.4	32.1
100.	44.2	55.4	28.0
250.	35.1	44.2	20.1

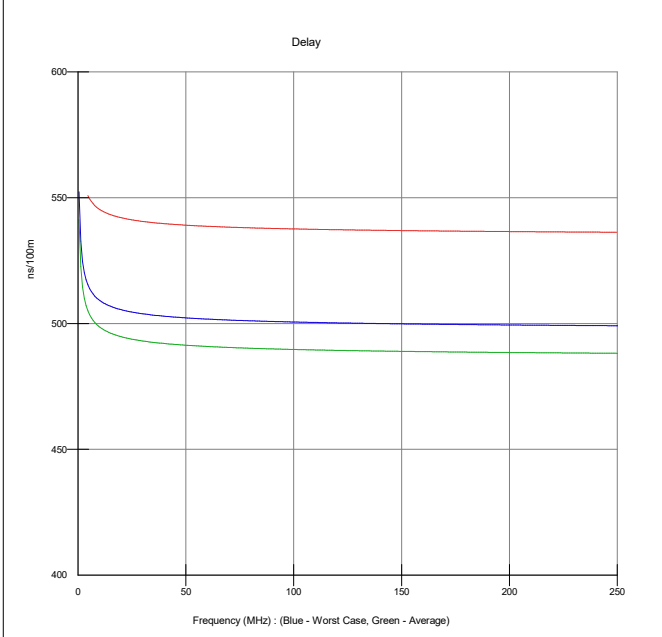


PSACR-F			
Freq	Worst Case	Average	Spec
1.	85.9	87.0	
4.	74.0	74.6	
8.	68.1	68.6	46.9
10.	66.1	66.6	45.0
16.	61.8	62.4	40.9
20.	59.3	60.0	39.0
25.	57.3	58.2	37.0
31.25	55.1	56.3	35.1
62.5	48.7	51.1	29.1
100.	43.8	47.7	25.0
250.	34.5	35.4	17.1

Summary

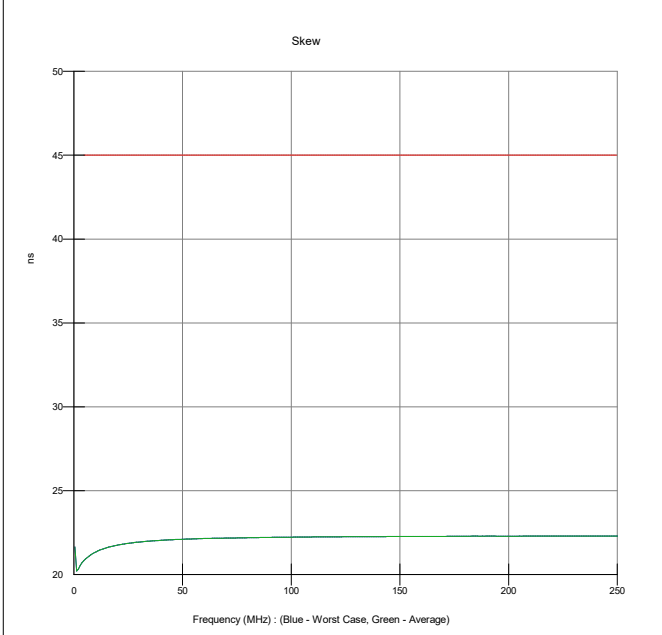
Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 35.470 ns/100m @ 4.559 MHz



Delay			
Freq	Worst Case	Average	Spec
1.	540.2	529.8	
4.	516.8	506.5	
8.	510.7	500.2	546.7
10.	509.2	498.7	545.4
16.	506.5	495.9	543.0
20.	505.5	494.8	542.0
25.	504.6	493.8	541.2
31.25	503.7	492.9	540.4
62.5	501.7	490.8	538.6
100.	500.6	489.7	537.6
250.	499.1	488.2	536.3

Limit Margin : 22.702 ns @ 249.746 MHz

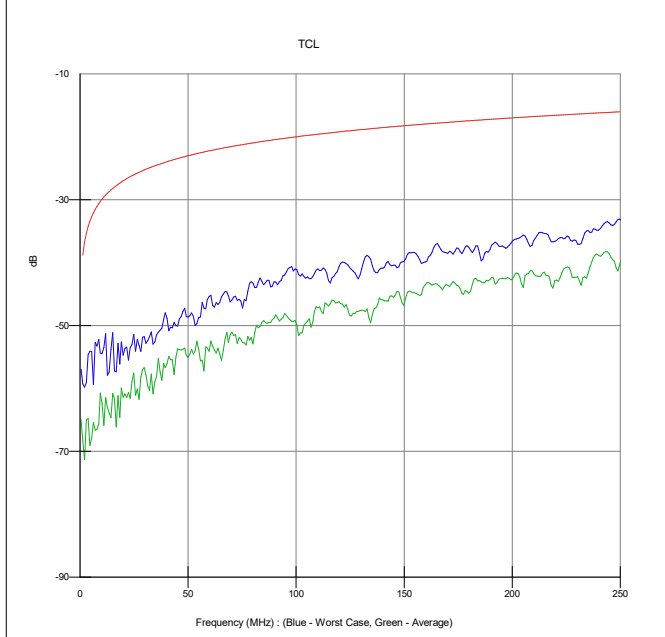


Skew			
Freq	Worst Case	Average	Spec
1.	20.8	20.8	
4.	20.7	20.7	
8.	21.2	21.2	45.0
10.	21.3	21.3	45.0
16.	21.6	21.6	45.0
20.	21.8	21.8	45.0
25.	21.9	21.9	45.0
31.25	22.0	22.0	45.0
62.5	22.2	22.2	45.0
100.	22.2	22.2	45.0
250.	22.3	22.3	45.0

Summary

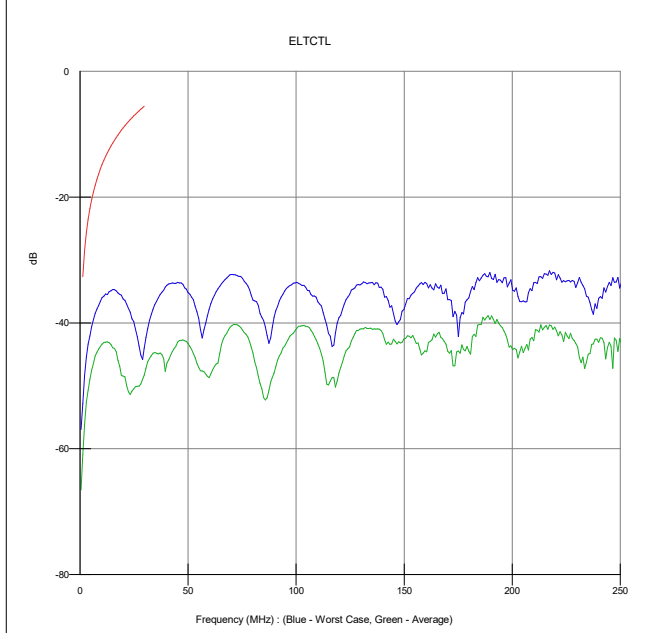
Client	Berk-Tek	Report No	104239938CRT-024d
Specification	ISO-IEC 11801-1 Cat 6 Cable		
Part No	LM-1000 CM Patch	Length (m)	100.
Test Started	8/5/2024 11:27:27 AM	Temperature	21.8 °C
Description	4 Pair 24 AWG UUTP CM Stranded		
Operator Name	Craig Williams	Test Status	Complies

Limit Margin : 17.054 dB @ 249.746 MHz



TCL			
Freq	Worst Case	Average	Spec
1.	58.7	67.1	39.6
4.	54.5	66.1	34.0
8.	53.0	66.3	31.0
10.	54.4	61.9	30.0
16.	57.4	62.1	28.0
20.	54.7	61.4	27.0
25.	52.1	58.2	26.0
31.25	52.5	59.4	25.1
62.5	46.8	54.1	22.0
100.	41.1	49.6	20.0
250.	33.1	40.1	16.0

Limit Margin : 19.779 dB @ 2.936 MHz



ELTCTL			
Freq	Worst Case	Average	Spec
1.	54.4	63.1	34.2
4.	43.0	50.1	23.0
8.	37.6	44.5	16.9
10.	36.2	43.5	15.0
16.	34.7	44.1	10.9
20.	36.2	48.5	9.0
25.	40.0	50.4	7.0
31.25	41.0	46.3	
62.5	35.4	46.8	
100.	33.6	41.0	
250.	34.2	42.7	