



# WIRE AND CABLE

## LAN Performance Program

### Laboratory Data Report

#### Completed Tests Near & Far End

**Manufacture** ARGON COMPONENTES ELECTRICOS E ELECTRONICOS LDA **Software Rev.** 3.20.003c  
**Project** 4789531415 **File** E516333 **Test Type** ISO 11801 Cat6 Channel E E1  
**Engineer** Bellassai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** Complies  
**Comments** 4 Connector CAT6 Channel (UTP)

		Test List
Test	Result	Failing Pairs
Return Loss (Term) Near	PASS	
Return Loss (Term) Far	PASS	
Insertion Loss Near	PASS	
Insertion Loss Far	PASS	
NEXT (Pair-Pair) Near	PASS	
NEXT (Pair-Pair) Far	PASS	
NEXT (PowerSum) Near	PASS	
NEXT (PowerSum) Far	PASS	
ACR (Pair-Pair) Near	PASS	
ACR (Pair-Pair) Far	PASS	
ACR (PowerSum) Near	PASS	
ACR (PowerSum) Far	PASS	
FEXT (Pair-Pair) Near	PASS	
FEXT (Pair-Pair) Far	PASS	
FEXT (PowerSum) Near	PASS	
FEXT (PowerSum) Far	PASS	
ELFEXT (Pair-Pair) Near	PASS	
ELFEXT (Pair-Pair) Far	PASS	
ELFEXT (PowerSum) Near	PASS	
ELFEXT (PowerSum) Far	PASS	
TCL Near	PASS	
TCL Far	PASS	
TCTL Near	PASS	
TCTL Far	PASS	
ELTCTL Near	PASS	
ELTCTL Far	PASS	
Delay Near	PASS	
Delay Far	PASS	
Skew Near	PASS	
Skew Far	PASS	
DC Resistance	PASS	
DC Resistance Unbalance	PASS	
DC Loop Resistance	PASS	



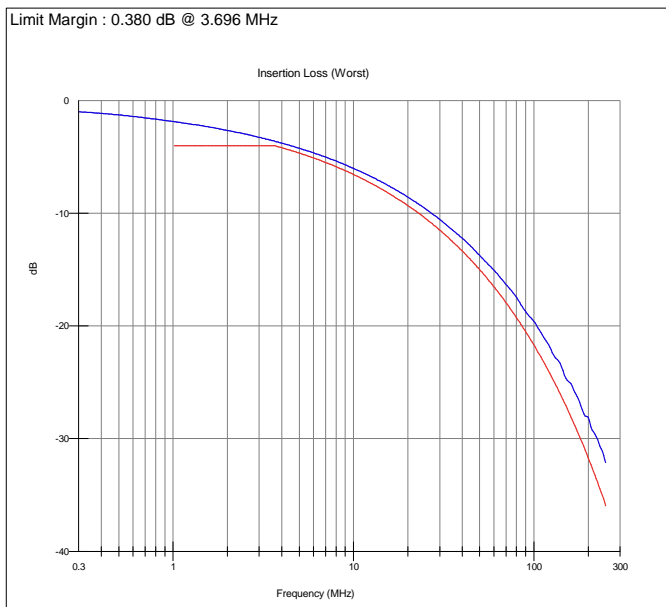
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## LAN Performance Program

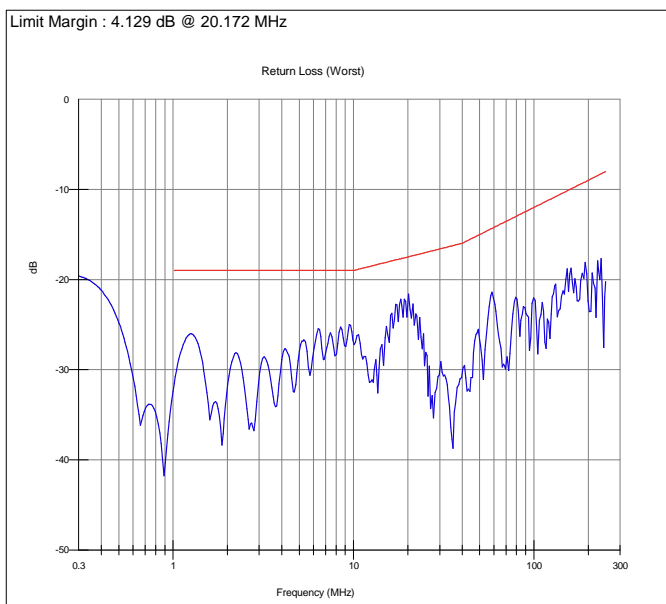
### Laboratory Data Report

#### Insertion Loss & Return Loss - Near & Far End Measurements

**Manufacture** ARGON COMPONENTES ELECTRICOS E ELECTRONICOS LDA **Software Rev.** 3.20.003c  
**Project** 4789531415 **File** E516333 **Test Type** ISO 11801 Cat6 Channel E E1  
**Engineer** Bellassai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** **Complies**  
**Comments** 4 Connector CAT6 Channel (UTP)



Insertion Loss		
Freq (MHz)	Worst Case	Limit
1.	-1.9	-4.0
4.	-3.8	-4.2
8.	-5.4	-5.9
10.	-6.0	-6.6
16.	-7.6	-8.3
25.	-9.6	-10.5
31.25	-10.8	-11.7
62.5	-15.4	-16.9
100.	-19.6	-21.7
200.	-28.1	-31.7
250.	-32.1	-35.9



Return Loss		
Freq (MHz)	Worst	Limit
1.	-32.3	-19.0
4.	-29.0	-19.0
8.	-28.3	-19.0
10.	-27.0	-19.0
16.	-24.4	-18.0
25.	-28.7	-17.0
31.25	-30.6	-16.5
62.5	-25.2	-14.0
100.	-22.1	-12.0
200.	-22.6	-9.0
250.	-20.2	-8.0



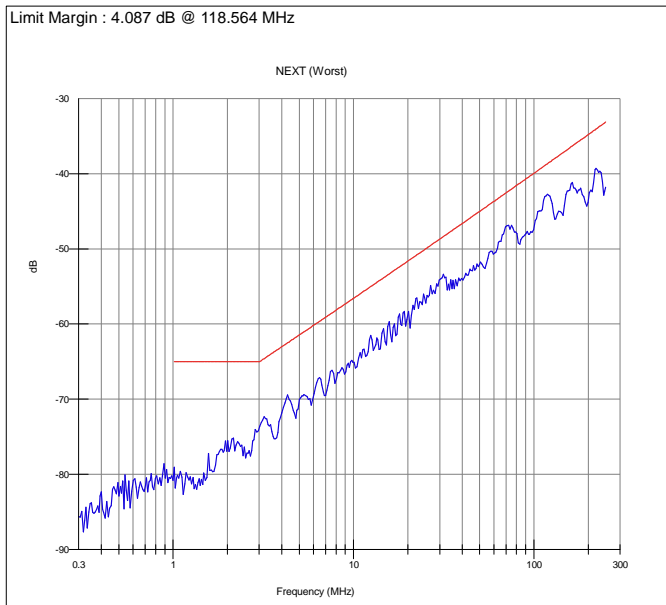
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## LAN Performance Program

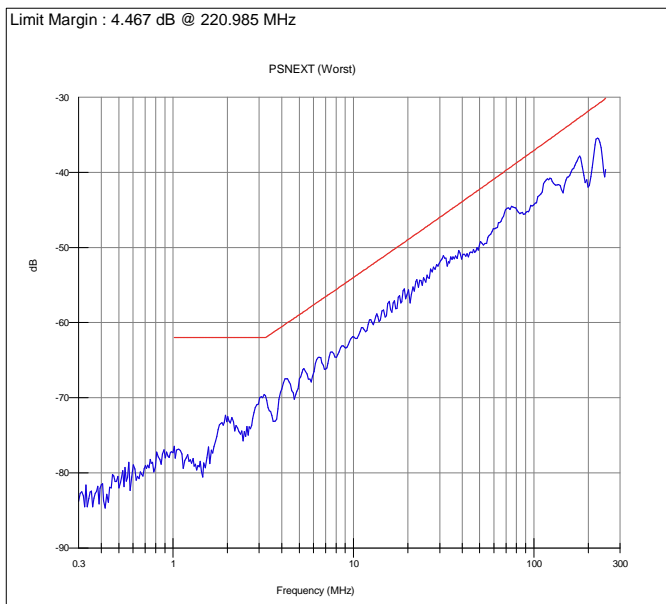
### Laboratory Data Report

#### NEXT & PSNEXT - Near & Far End Measurements

**Manufacture** ARGON COMPONENTES ELECTRICOS E ELECTRONICOS LDA **Software Rev.** 3.20.003c  
**Project** 4789531415 **File** E516333 **Test Type** ISO 11801 Cat6 Channel E E1  
**Engineer** Bellasai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** Complies  
**Comments** 4 Connector CAT6 Channel (UTP)



NEXT		
Freq (MHz)	Worst	Limit
1.	-80.7	-65.0
4.	-71.9	-63.0
8.	-67.4	-58.2
10.	-65.1	-56.6
16.	-61.2	-53.2
25.	-57.0	-50.0
31.25	-53.6	-48.4
62.5	-50.0	-43.4
100.	-47.1	-39.9
200.	-43.6	-34.8
250.	-41.8	-33.1



PSNEXT		
Freq (MHz)	Worst	Limit
1.	-77.1	-62.0
4.	-68.9	-60.5
8.	-64.6	-55.6
10.	-61.9	-54.0
16.	-58.1	-50.6
25.	-54.5	-47.3
31.25	-51.2	-45.7
62.5	-47.4	-40.6
100.	-44.4	-37.1
200.	-41.9	-31.9
250.	-39.6	-30.2



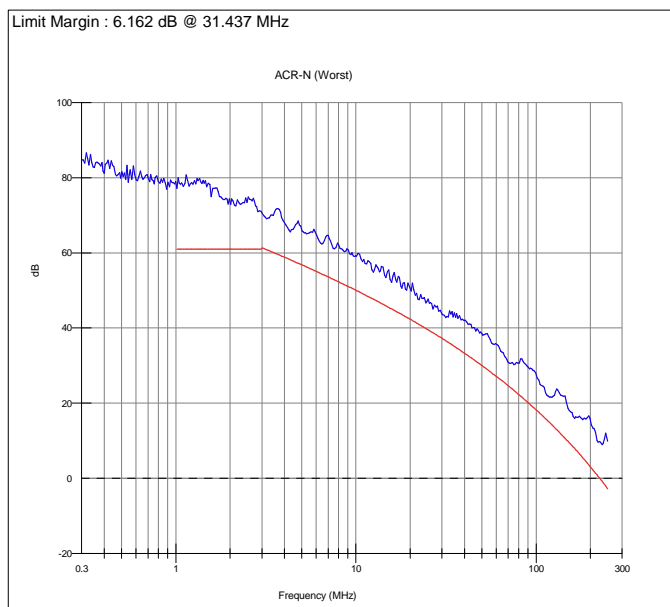
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## LAN Performance Program

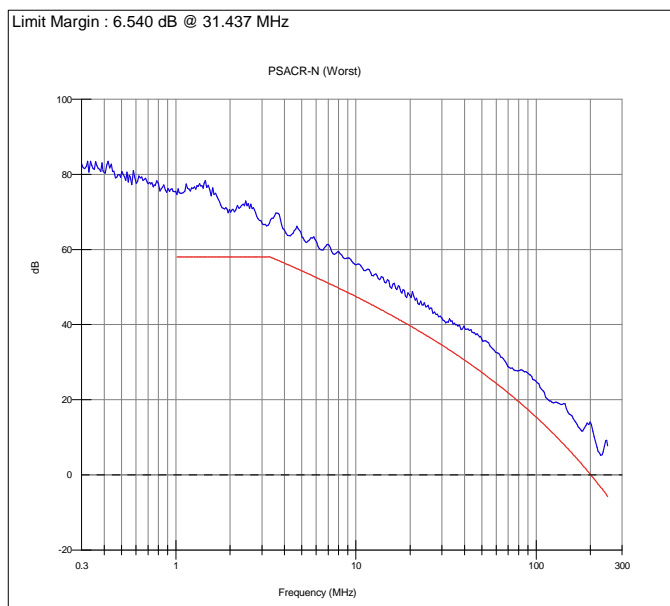
### Laboratory Data Report

#### ACR-N & PSACR-N - Near & Far End Measurements

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**Project** 4789531415 **File** E516333 **Test Type** ISO 11801 Cat6 Channel E E1  
**Engineer** Bellasai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** Complies  
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ACR-N		
Freq (MHz)	Worst	Limit
1.	78.8	61.0
4.	68.2	58.9
8.	62.2	52.3
10.	59.2	50.0
16.	53.6	44.9
25.	47.5	39.6
31.25	43.0	36.7
62.5	34.8	26.5
100.	27.7	18.2
200.	15.6	3.1
250.	9.9	-2.8



PSACR-N		
Freq (MHz)	Worst	Limit
1.	75.3	58.0
4.	65.2	56.4
8.	59.3	49.7
10.	56.0	47.4
16.	50.6	42.3
25.	45.0	36.9
31.25	40.6	34.0
62.5	32.2	23.7
100.	25.0	15.4
200.	13.9	0.1
250.	7.8	-5.8



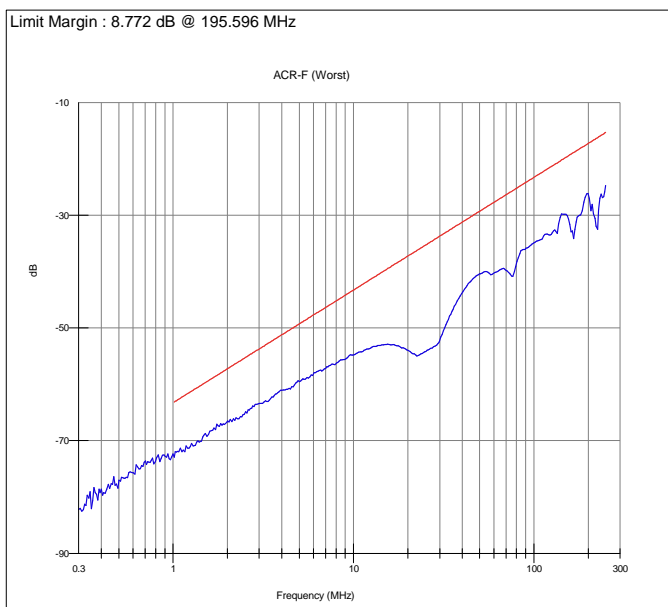
# WIRE AND CABLE

## LAN Performance Program

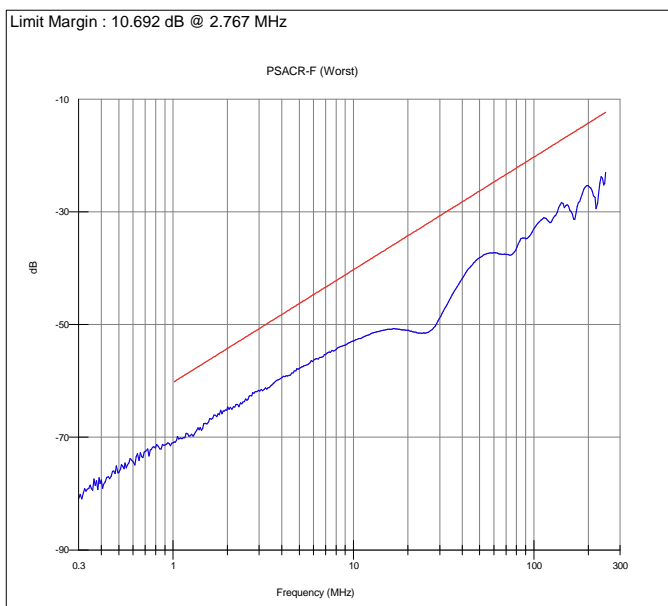
### Laboratory Data Report

#### ACR-F & PSACR-F - Near & Far End Measurements

**Manufacture** ARGON COMPONENTES ELECTRICOS E ELECTRONICOS LDA **Software Rev.** 3.20.003c  
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**Engineer** Bellasai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** Complies  
**Comments** 4 Connector CAT6 Channel (UTP)



ACR-F		
Freq (MHz)	Worst	Limit
1.	-72.5	-63.3
4.	-61.0	-51.2
8.	-56.3	-45.2
10.	-54.8	-43.3
16.	-53.0	-39.2
25.	-54.2	-35.3
31.25	-50.7	-33.4
62.5	-40.0	-27.3
100.	-34.9	-23.3
200.	-26.3	-17.2
250.	-24.7	-15.3



PSACR-F		
Freq (MHz)	Worst	Limit
1.	-71.0	-60.3
4.	-59.4	-48.2
8.	-54.4	-42.2
10.	-52.9	-40.3
16.	-50.8	-36.2
25.	-51.5	-32.3
31.25	-47.7	-30.4
62.5	-37.3	-24.3
100.	-32.9	-20.3
200.	-25.4	-14.2
250.	-23.0	-12.3



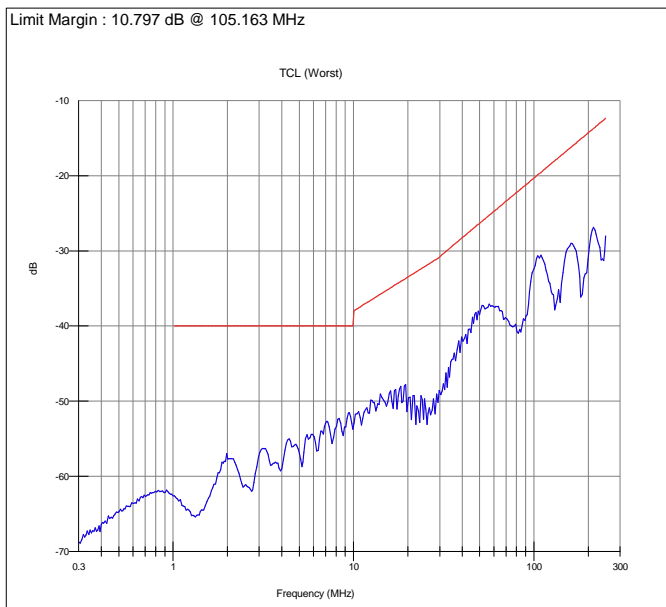
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## LAN Performance Program

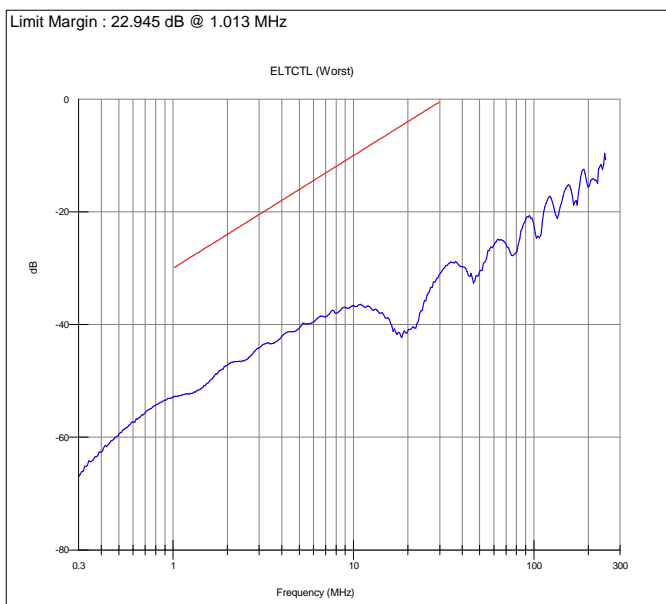
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#### TCL & ELTCTL - Near & Far End Measurements

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**Engineer** Bellasai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** Complies  
**Comments** 4 Connector CAT6 Channel (UTP)



TCL		
Freq (MHz)	Worst	Limit
1.	-62.6	-40.0
4.	-59.2	-40.0
8.	-53.7	-40.0
10.	-53.3	-39.0
16.	-48.7	-34.9
25.	-50.6	-32.0
31.25	-48.1	-30.4
62.5	-37.5	-24.4
100.	-32.3	-20.3
200.	-30.8	-14.3
250.	-28.0	-12.3



ELTCTL		
Freq (MHz)	Worst	Limit
1.	-52.8	-30.0
4.	-42.1	-18.0
8.	-38.0	-11.9
10.	-36.6	-10.0
16.	-39.7	-5.9
25.	-35.8	-2.0
30.	-31.0	-0.5
62.5	-24.9	
100.	-22.6	
200.	-15.6	
250.	-10.8	



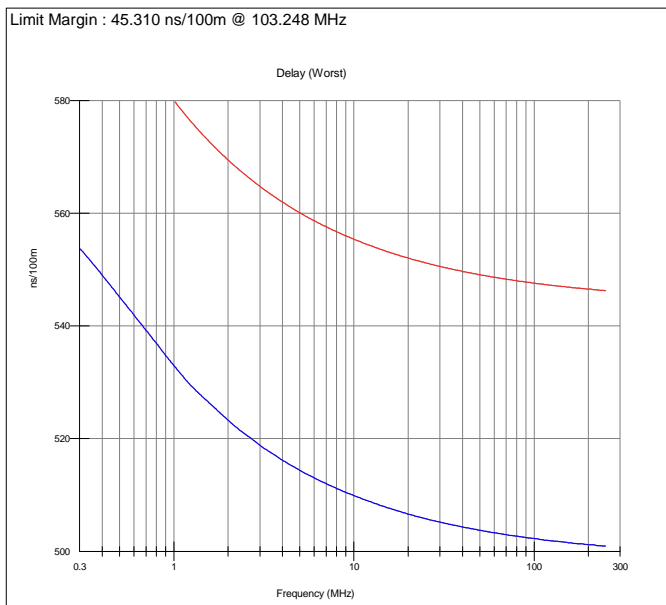
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## LAN Performance Program

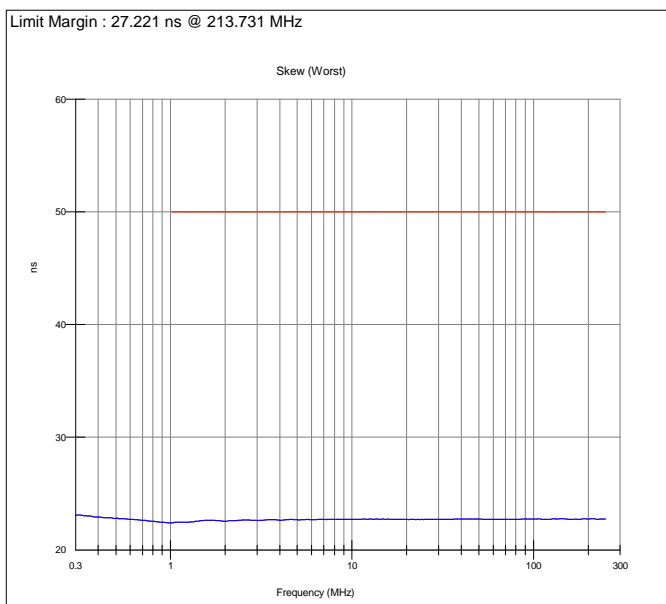
### Laboratory Data Report

#### Delay & Skew - Near & Far End Measurements

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**Engineer** Bellassai **Technician** Askin **Temperature** 20.8 °C **RH** 52 %  
**Test Start** 9/29/2020 11:13:05 AM **Length** 100. m **Status** **Complies**  
**Comments** 4 Connector CAT6 Channel (UTP)



Delay		
Freq (MHz)	Worst	Limit
1.	533.0	580.0
4.	516.2	562.0
8.	511.2	556.7
10.	509.9	555.4
16.	507.6	553.0
25.	505.8	551.2
31.25	505.1	550.4
62.5	503.2	548.6
100.	502.3	547.6
200.	501.2	546.5
250.	500.9	546.3



Skew		
Freq (MHz)	Worst	Limit
1.	22.4	50.0
4.	22.6	50.0
8.	22.7	50.0
10.	22.7	50.0
16.	22.7	50.0
25.	22.7	50.0
31.25	22.7	50.0
62.5	22.7	50.0
100.	22.7	50.0
200.	22.7	50.0
250.	22.8	50.0