

July 17, 2017

Test report number 103096770CRT-001
Project number 103096770-311

Panduit Corporation
10500 West 167th Street
Orland Park, IL 60467

TEST:

Electrical performance testing of a cabling configuration to the requirements of ANSI/TIA-568-C.2 for Category 6A channel.

STANDARD USED:

ANSI/TIA-568-C.2-2009: Balanced Twisted-Pair Telecommunications Cabling and Components Standards, dated August 2009

SECTION:

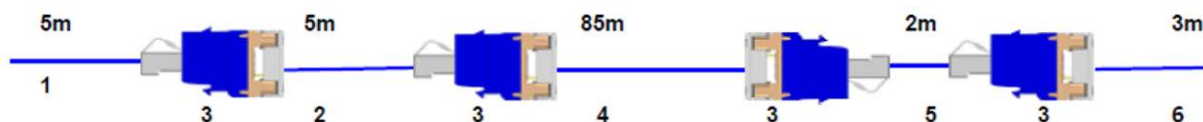
6.2: Channel transmission performance (6.2.1 to 6.2.26)

AUTHORIZATION:

The project was authorized by Ms. Kim Schmidt, representing the client, Panduit Corporation, with signed quotation number Qu-00791277.

SAMPLE DESCRIPTION:

The client supplied a 4-connector channel as illustrated below. The samples were received on July 3, 2017 and were production samples in undamaged condition.



<u>Component Id</u>	<u>Manufacturer</u>	<u>Description</u>	<u>Part number</u>
1	Panduit	Equipment Cord	NK6APC5M
2	Panduit	Outlet	NK6X88M
3	Panduit	Zone Cord	UXJPBU15
4	General Cable	U/UTP Plenum Horizontal Cable	GenSPEED 10000
5	Panduit	Cross Connect	NK6APC2M
6	Panduit	Equipment Cord	NK6APC3M

**EQUIPMENT LIST:**

The following equipment was employed in conducting the tests.

<u>Equipment used</u>	<u>Model number</u>	<u>Control number</u>	<u>Calibration date</u>	<u>Calibration due date</u>
Keysight Network Analyzer	8753E	E307	3/9/2017	3/9/2018
Keysight LCR Meter	4263B	R171	12/19/2016	12/19/2017
Temperature humidity meter	OM-EL-USB-2-LCD	H243	2/21/2017	2/21/2018

DATE OF TEST:

July 8, 2017

TEST REPORT REVISION HISTORY:

First Issue: July 17, 2017 Original Document

RESULTS: See appendixes A through B for the test results.

CONCLUSION:

The 4-connector channel, as previously described and supplied by the client, was tested in accordance with the standard referred to on page 1, and did comply with the indicated applicable transmission requirements. The testing was performed at Intertek located in Cortland, New York.

The procedures and requirements were taken from the standard referred to on page 1.

Reviewed and Approved By:

Antoine Pelletier
Project Engineer
Global Cabling Products Testing

David Ayers
Technician
Global Cabling Products Testing



Panduit Corporation

Test report number 103096770CRT-001
July 17, 2017

Appendix A
Internals test results

This appendix contains 39 pages.



Low Frequency Report

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

DC Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
8.1351	7.7298	8.0294	7.7640	
8.2305	7.7697	8.0154	7.7668	

Resistance Unbalanced (%)				
45	12	36	78	Limit (%)
0.58	0.26	0.09	0.02	3.00

Resistance Unbalanced Pair-Pair (%)						
45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78	Limit (%)
2.72	0.99	2.62	1.73	0.10	1.63	

DC Loop Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
16.3670	15.5010	16.0430	15.5310	25.0000



Insertion Loss

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

Insertion Loss (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-2.30	-1.95	-1.79	-1.88	-1.87
4.	-4.16	-3.90	-3.68	-3.80	-3.75
8.	-5.81	-5.49	-5.20	-5.37	-5.29
10.	-6.49	-6.14	-5.82	-6.00	-5.91
16.	-8.20	-7.72	-7.37	-7.56	-7.47
20.	-9.17	-8.61	-8.24	-8.43	-8.33
25.	-10.27	-9.65	-9.23	-9.46	-9.33
31.25	-11.50	-10.82	-10.37	-10.61	-10.48
62.5	-16.40	-15.41	-14.80	-15.08	-14.93
100.	-20.93	-19.72	-18.92	-19.25	-19.05
155.	-26.34	-24.84	-23.93	-24.30	-24.09
200.	-30.14	-28.42	-27.51	-27.89	-27.60
250.	-33.95	-32.03	-30.88	-31.35	-31.08
300.	-37.44	-35.34	-34.22	-34.65	-34.30
350.	-40.68	-38.56	-37.19	-37.56	-37.20
400.	-43.74	-41.26	-39.76	-40.70	-40.00
450.	-46.63	-43.99	-42.76	-43.31	-42.74
500.	-49.39	-46.93	-45.46	-46.12	-45.47
550.		-49.68	-47.83	-48.63	-47.70
600.		-53.36	-50.26	-51.68	-50.23
650.		-56.32	-52.88	-54.12	-52.40



NEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

NEXT - Near End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	-65.00	-92.72	-89.05	-89.44	-86.85	-92.27	-92.33
4.	-63.07	-84.71	-80.35	-79.28	-78.48	-89.39	-81.71
8.	-58.17	-88.25	-72.89	-78.29	-72.88	-81.32	-75.70
10.	-56.58	-80.62	-70.27	-75.64	-85.22	-76.55	-74.43
16.	-53.23	-73.73	-70.05	-74.55	-73.54	-74.79	-73.85
20.	-51.63	-74.65	-73.69	-86.67	-67.90	-78.63	-67.78
25.	-50.03	-81.44	-72.86	-66.15	-83.94	-78.24	-73.04
31.25	-48.42	-75.05	-68.06	-67.91	-77.44	-75.67	-60.78
62.5	-43.38	-67.22	-65.00	-63.90	-69.61	-65.07	-69.45
100.	-39.93	-66.98	-54.02	-61.71	-51.68	-64.45	-56.01
155.	-36.68	-53.23	-50.76	-58.59	-52.49	-58.33	-50.66
200.	-34.78	-57.19	-46.91	-62.52	-54.98	-56.35	-51.90
250.	-33.11	-47.59	-43.55	-51.70	-52.72	-47.83	-50.12
300.	-31.75	-49.95	-43.32	-65.25	-44.89	-58.50	-44.27
350.	-30.31	-43.06	-38.46	-56.89	-47.58	-41.96	-45.92
400.	-28.73	-44.77	-38.72	-53.88	-44.46	-40.32	-51.05
450.	-27.34	-38.49	-34.77	-63.05	-40.17	-43.90	-43.90
500.	-26.11	-45.03	-35.71	-73.28	-40.11	-42.63	-43.87
550.		-40.90	-35.36	-51.23	-40.09	-40.37	-39.05
600.		-43.82	-32.00	-45.34	-37.49	-37.58	-41.24
650.		-36.84	-33.97	-54.99	-38.19	-49.04	-40.04



NEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

NEXT - Far End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	-65.00	-98.40	-90.82	-86.87	-86.62	-91.04	-93.37
4.	-63.07	-80.91	-95.77	-77.76	-79.57	-86.57	-81.69
8.	-58.17	-84.03	-86.29	-71.41	-68.55	-83.97	-84.98
10.	-56.58	-80.07	-84.14	-69.02	-75.13	-81.06	-82.83
16.	-53.23	-72.73	-70.34	-69.53	-68.02	-78.60	-76.94
20.	-51.63	-75.83	-67.88	-76.48	-66.42	-73.01	-66.31
25.	-50.03	-70.95	-65.02	-65.14	-65.58	-71.15	-66.43
31.25	-48.42	-68.62	-69.96	-75.33	-58.88	-68.20	-67.40
62.5	-43.38	-60.56	-60.53	-69.27	-63.24	-63.27	-58.60
100.	-39.93	-59.19	-61.49	-56.33	-52.61	-63.74	-62.06
155.	-36.68	-52.72	-54.92	-48.79	-51.56	-56.00	-57.17
200.	-34.78	-54.10	-57.14	-48.72	-49.37	-58.66	-62.68
250.	-33.11	-54.57	-48.83	-50.31	-46.66	-46.19	-61.15
300.	-31.75	-49.34	-45.90	-51.16	-43.68	-51.61	-66.04
350.	-30.31	-48.13	-46.50	-48.79	-45.21	-56.93	-52.86
400.	-28.73	-43.64	-46.19	-44.01	-42.17	-45.01	-45.16
450.	-27.34	-42.02	-42.90	-38.26	-46.29	-38.78	-44.11
500.	-26.11	-44.13	-48.04	-43.32	-41.87	-47.27	-41.23
550.		-47.19	-37.03	-43.11	-48.63	-36.80	-40.08
600.		-47.47	-36.89	-43.38	-40.42	-37.54	-48.32
650.		-48.84	-35.03	-44.90	-36.39	-38.35	-57.14



PSNEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSNEXT - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-84.59	-84.37	-84.09	-85.79
4.	-60.57	-76.12	-77.23	-74.74	-76.67
8.	-55.60	-71.28	-71.25	-67.84	-72.40
10.	-54.00	-68.85	-74.66	-68.75	-70.65
16.	-50.59	-67.50	-69.14	-67.30	-69.60
20.	-48.97	-70.93	-66.75	-64.29	-67.37
25.	-47.34	-65.04	-74.79	-69.64	-64.82
31.25	-45.71	-64.47	-71.14	-59.94	-59.87
62.5	-40.59	-60.23	-61.96	-62.65	-60.69
100.	-37.08	-53.14	-51.34	-48.77	-54.47
155.	-33.78	-48.37	-49.25	-46.45	-49.41
200.	-31.85	-46.41	-51.29	-45.22	-50.30
250.	-30.15	-41.65	-44.05	-42.27	-44.82
300.	-28.76	-42.44	-43.56	-39.34	-44.07
350.	-27.32	-37.12	-38.84	-37.31	-40.39
400.	-25.79	-37.65	-37.90	-37.49	-39.79
450.	-24.44	-33.23	-35.55	-33.28	-40.86
500.	-23.24	-35.23	-37.37	-33.90	-40.19
550.		-34.20	-35.66	-32.89	-36.50
600.		-31.54	-34.04	-30.53	-35.54
650.		-32.14	-34.30	-31.86	-39.40



PSNEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSNEXT - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-84.93	-85.01	-84.50	-84.80
4.	-60.57	-75.79	-76.20	-76.66	-75.77
8.	-55.60	-70.84	-68.11	-68.10	-70.75
10.	-54.00	-68.54	-73.15	-73.98	-68.58
16.	-50.59	-65.85	-66.45	-65.67	-68.36
20.	-48.97	-66.74	-65.16	-62.02	-65.10
25.	-47.34	-61.54	-63.57	-60.84	-62.08
31.25	-45.71	-65.61	-58.00	-58.02	-64.25
62.5	-40.59	-56.87	-57.34	-55.56	-56.65
100.	-37.08	-53.72	-51.48	-51.66	-54.71
155.	-33.78	-46.62	-48.24	-49.15	-47.53
200.	-31.85	-47.14	-47.74	-48.50	-48.14
250.	-30.15	-45.84	-43.08	-44.50	-44.66
300.	-28.76	-43.46	-42.12	-41.62	-48.26
350.	-27.32	-42.90	-43.23	-42.38	-46.90
400.	-25.79	-39.70	-38.68	-39.39	-39.93
450.	-24.44	-35.80	-36.60	-39.44	-34.94
500.	-23.24	-39.95	-39.12	-38.06	-38.52
550.		-35.73	-36.16	-35.06	-34.47
600.		-35.70	-35.43	-35.05	-36.24
650.		-34.44	-34.10	-32.63	-37.44



ACR - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

ACR - Near End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	62.70	90.93	87.17	87.57	84.96	90.39	90.46
4.	58.91	81.03	76.55	75.52	74.68	85.64	77.95
8.	52.35	83.05	67.52	73.00	67.51	76.03	70.41
10.	50.10	74.80	64.28	69.72	79.22	70.63	68.51
16.	45.03	66.36	62.49	67.08	65.98	67.32	66.38
20.	42.46	66.40	65.26	78.34	59.47	70.30	59.44
25.	39.76	72.20	63.40	56.82	74.49	68.91	63.71
31.25	36.92	64.68	57.45	57.43	66.83	65.19	50.30
62.5	26.97	52.42	49.92	48.97	54.53	50.15	54.52
100.	18.99	48.06	34.77	42.66	32.43	45.40	36.96
155.	10.34	29.30	26.47	34.50	28.20	34.24	26.56
200.	4.64	29.68	19.02	34.92	27.09	28.75	24.30
250.	-0.84	16.71	12.21	20.62	21.37	16.75	19.04
300.	-5.69	15.73	8.66	30.95	10.24	24.20	9.97
350.	-10.37	5.87	0.90	19.69	10.03	4.76	8.72
400.	-15.00	5.01	-1.99	13.87	3.76	0.32	11.04
450.	-19.29	-4.27	-8.54	20.31	-3.14	1.16	1.17
500.	-23.28	-0.43	-10.41	27.81	-6.00	-2.83	-1.60
550.		-6.93	-13.27	3.53	-8.55	-7.34	-8.65
600.		-6.44	-19.68	-4.89	-14.20	-12.65	-8.99
650.		-16.04	-20.15	2.58	-15.93	-3.36	-12.37



ACR - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

ACR - Far End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	62.70	96.59	88.93	84.99	84.74	89.16	91.49
4.	58.91	77.20	91.96	74.01	75.76	82.81	77.94
8.	52.35	78.80	80.92	66.11	63.18	78.68	79.68
10.	50.10	74.21	78.14	63.10	69.13	75.13	76.91
16.	45.03	65.31	62.77	62.05	60.45	71.12	69.46
20.	42.46	67.55	59.44	68.14	57.98	64.67	57.97
25.	39.76	61.68	55.57	55.80	56.12	61.80	57.08
31.25	36.92	58.21	59.35	64.85	48.27	57.71	56.92
62.5	26.97	45.67	45.39	54.29	48.10	48.30	43.62
100.	18.99	40.17	42.14	37.20	33.26	44.62	42.94
155.	10.34	28.74	30.56	24.66	27.20	31.87	33.04
200.	4.64	26.56	29.22	21.13	21.45	31.08	35.10
250.	-0.84	23.69	17.48	19.21	15.32	15.09	30.05
300.	-5.69	15.12	11.28	16.84	9.05	17.28	31.72
350.	-10.37	10.90	8.86	11.63	7.57	19.77	15.69
400.	-15.00	3.74	5.55	3.99	1.54	4.99	5.14
450.	-19.29	-0.88	-0.39	-4.54	2.99	-4.02	1.31
500.	-23.28	-1.35	1.81	-2.38	-4.36	1.57	-4.47
550.		-0.79	-11.63	-4.64	-0.02	-10.95	-7.67
600.		-2.79	-14.79	-6.83	-11.25	-12.67	-1.88
650.		-4.21	-19.02	-7.58	-17.66	-14.13	4.66



PSACR - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSACR - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.70	82.64	82.58	82.21	83.92
4.	56.42	72.22	73.55	70.94	72.92
8.	49.79	65.78	66.05	62.47	67.10
10.	47.51	62.71	68.84	62.75	64.74
16.	42.40	59.78	61.77	59.74	62.13
20.	39.80	62.32	58.51	55.86	59.04
25.	37.08	55.39	65.56	60.19	55.49
31.25	34.21	53.65	60.77	49.33	49.39
62.5	24.18	44.82	47.16	47.57	45.77
100.	16.15	33.43	32.42	29.52	35.42
155.	7.44	23.53	25.31	22.16	25.32
200.	1.71	18.00	23.78	17.33	22.70
250.	-3.80	9.62	13.17	10.93	13.73
300.	-8.67	7.10	9.34	4.69	9.77
350.	-13.36	-1.43	1.65	-0.24	3.19
400.	-17.94	-3.61	-1.86	-3.21	-0.21
450.	-22.19	-10.76	-7.21	-10.04	-1.88
500.	-26.15	-11.70	-8.09	-12.22	-5.28
550.		-15.48	-12.16	-15.74	-11.21
600.		-21.82	-16.22	-21.15	-14.69
650.		-24.19	-18.58	-22.26	-13.00



PSACR - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSACR - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.70	82.99	83.20	82.62	82.92
4.	56.42	71.89	72.49	72.85	72.02
8.	49.79	65.35	62.88	62.73	65.46
10.	47.51	62.40	67.29	67.97	62.66
16.	42.40	58.12	59.03	58.11	60.88
20.	39.80	58.12	56.89	53.58	56.76
25.	37.08	51.88	54.30	51.39	52.73
31.25	34.21	54.78	47.58	47.40	53.76
62.5	24.18	41.45	42.45	40.42	41.68
100.	16.15	34.02	32.46	32.31	35.59
155.	7.44	21.80	24.26	24.80	23.40
200.	1.71	18.58	20.19	20.58	20.56
250.	-3.80	13.80	12.21	13.16	13.56
300.	-8.67	8.15	7.89	7.00	13.94
350.	-13.36	4.31	6.00	4.74	9.73
400.	-17.94	-1.57	-1.22	-1.25	-0.09
450.	-22.19	-8.19	-6.30	-3.85	-7.86
500.	-26.15	-6.86	-6.37	-8.17	-7.18
550.		-14.19	-11.83	-13.60	-13.28
600.		-17.74	-14.84	-16.63	-13.97
650.		-21.54	-18.96	-21.42	-15.05



FEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

FEXT - Near End (dB)												
f (MHz)	1-2	1-3	1-4	2-1	2-3	2-4	3-1	3-2	3-4	4-1	4-2	4-3
1.	-81.33	-81.29	-75.19	-79.89	-94.18	-88.17	-82.04	-93.65	-80.87	-75.46	-88.35	-82.30
4.	-70.98	-72.75	-64.86	-70.32	-85.12	-78.58	-72.70	-84.01	-72.01	-65.28	-79.24	-72.01
8.	-67.68	-68.70	-61.58	-67.54	-79.96	-74.91	-69.09	-81.33	-68.14	-61.66	-75.48	-68.03
10.	-67.19	-67.50	-61.00	-66.74	-79.91	-73.19	-67.35	-81.62	-66.69	-60.85	-73.19	-66.53
16.	-70.01	-65.02	-60.54	-68.53	-77.13	-71.92	-64.99	-80.41	-64.68	-60.20	-72.81	-64.67
20.	-74.87	-63.92	-61.43	-72.65	-76.79	-71.57	-63.77	-76.31	-63.28	-61.19	-72.76	-63.64
25.	-76.86	-64.59	-65.31	-77.77	-75.83	-69.88	-64.01	-71.37	-63.51	-64.94	-70.04	-63.69
31.25	-66.67	-64.30	-81.49	-66.24	-69.74	-68.82	-64.73	-70.20	-64.94	-78.91	-69.33	-64.05
62.5	-74.44	-70.75	-53.81	-75.26	-60.62	-72.57	-66.75	-60.75	-69.06	-53.96	-87.93	-69.72
100.	-64.88	-62.69	-61.76	-63.66	-66.00	-76.96	-61.38	-68.18	-58.62	-59.90	-73.93	-58.80
155.	-77.00	-67.67	-64.95	-79.77	-65.09	-73.14	-67.66	-63.37	-61.10	-65.12	-79.58	-61.45
200.	-76.64	-66.60	-63.23	-77.37	-80.53	-73.48	-65.70	-77.76	-69.61	-63.93	-78.23	-69.07
250.	-77.62	-63.32	-59.35	-71.31	-67.23	-76.04	-64.69	-73.15	-64.80	-59.09	-75.49	-63.98
300.	-73.00	-76.63	-68.66	-74.81	-73.10	-71.90	-75.83	-73.87	-69.64	-68.34	-70.93	-68.51
350.	-69.01	-71.19	-69.57	-68.83	-81.15	-70.60	-72.64	-76.13	-64.06	-70.03	-72.08	-63.42
400.	-73.95	-75.46	-77.00	-74.79	-80.18	-76.76	-72.26	-76.27	-69.00	-74.96	-72.46	-67.34
450.	-81.10	-73.58	-76.43	-80.43	-89.07	-86.68	-77.22	-77.85	-75.93	-74.82	-79.28	-75.73
500.	-79.71	-72.43	-84.52	-83.68	-72.06	-77.14	-74.09	-74.66	-71.89	-79.99	-88.55	-72.08
550.	-78.17	-79.10	-75.01	-80.71	-79.57	-86.20	-85.60	-82.01	-86.21	-74.58	-75.28	-86.08
600.	-81.63	-72.82	-78.49	-86.75	-95.55	-81.44	-74.05	-77.19	-76.37	-83.03	-77.78	-87.90
650.	-93.14	-86.72	-85.19	-87.75	-80.19	-81.09	-72.89	-77.19	-109.93	-92.28	-75.77	-79.23



ACRF (ELFEXT) - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

ACRF (ELFEXT) - Near End (dB)													
f (MHz)	Limit	1-2	1-3	1-4	2-1	2-3	2-4	3-1	3-2	3-4	4-1	4-2	4-3
1.	-62.51	-79.54	-79.41	-73.32	-77.94	-92.30	-86.30	-80.09	-91.86	-78.99	-73.51	-86.56	-80.42
4.	-51.25	-67.30	-68.95	-61.11	-66.42	-81.32	-74.82	-68.79	-80.33	-68.26	-61.37	-75.56	-68.21
8.	-45.20	-62.49	-63.33	-56.29	-62.05	-74.60	-69.62	-63.59	-76.14	-62.85	-56.16	-70.29	-62.67
10.	-43.26	-61.37	-61.50	-55.08	-60.61	-73.91	-67.27	-61.21	-75.80	-60.77	-54.71	-67.37	-60.53
16.	-39.18	-62.64	-57.46	-53.07	-60.81	-69.57	-64.45	-57.27	-73.03	-57.21	-52.48	-65.44	-57.11
20.	-37.24	-66.62	-55.50	-53.10	-64.04	-68.36	-63.23	-55.16	-68.06	-54.95	-52.58	-64.52	-55.21
25.	-35.30	-67.63	-55.14	-55.98	-68.12	-66.38	-60.55	-54.35	-62.14	-54.17	-55.29	-60.81	-54.23
31.25	-33.36	-56.30	-53.69	-71.00	-55.42	-59.12	-58.34	-53.91	-59.83	-54.46	-68.09	-58.96	-53.44
62.5	-27.34	-59.64	-55.67	-38.88	-59.85	-45.54	-57.64	-51.34	-45.95	-54.13	-38.54	-73.13	-54.64
100.	-23.26	-45.96	-43.43	-42.71	-43.95	-46.75	-57.90	-41.67	-49.26	-39.56	-40.19	-55.01	-39.55
155.	-19.45	-53.06	-43.37	-40.86	-54.93	-40.80	-49.04	-42.82	-39.44	-37.00	-40.28	-55.64	-37.15
200.	-17.24	-49.13	-38.71	-35.63	-48.95	-52.63	-45.88	-37.28	-50.25	-42.01	-35.51	-50.72	-41.18
250.	-15.30	-46.74	-31.97	-28.27	-39.28	-35.89	-44.95	-32.66	-42.27	-33.71	-27.06	-44.61	-32.63
300.	-13.71	-38.78	-41.98	-34.35	-39.47	-38.45	-37.60	-40.49	-39.65	-35.33	-33.00	-36.71	-33.86
350.	-12.38	-31.82	-33.63	-32.37	-30.27	-43.59	-33.40	-34.08	-38.94	-26.86	-31.47	-34.89	-25.86
400.	-11.22	-34.19	-34.76	-37.00	-33.53	-39.48	-36.76	-31.00	-36.51	-28.99	-33.70	-32.70	-26.64
450.	-10.19	-38.34	-30.27	-33.69	-36.44	-45.75	-43.94	-33.23	-35.09	-33.19	-30.82	-36.52	-32.42
500.	-9.28	-34.25	-26.31	-39.05	-36.75	-25.94	-31.68	-27.16	-29.20	-26.42	-33.06	-43.09	-25.96
550.		-30.34	-30.46	-27.31	-31.03	-30.94	-38.50	-35.92	-34.18	-38.50	-24.90	-27.46	-37.45
600.		-31.37	-21.14	-28.26	-33.40	-43.87	-31.21	-20.69	-26.94	-26.14	-29.68	-27.52	-36.22
650.		-40.26	-32.61	-32.79	-31.43	-26.08	-28.69	-16.56	-24.32	-57.53	-35.95	-22.89	-25.11



PSFEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSFEXT - Near End (dB)				
Freq (MHz)	45	12	36	78
1.	-73.41	-79.14	-78.17	-74.45
4.	-63.38	-69.59	-69.18	-64.30
8.	-60.00	-66.61	-65.45	-60.61
10.	-59.34	-65.69	-63.92	-59.61
16.	-58.87	-66.50	-61.76	-58.70
20.	-59.37	-68.38	-60.40	-59.04
25.	-61.78	-68.35	-60.38	-60.72
31.25	-62.26	-63.23	-61.23	-62.81
62.5	-53.68	-60.20	-59.29	-53.84
100.	-58.15	-61.54	-56.47	-56.23
155.	-62.90	-64.33	-58.51	-59.85
200.	-61.45	-71.38	-64.02	-62.64
250.	-57.84	-65.37	-61.43	-57.79
300.	-66.82	-68.34	-67.53	-64.34
350.	-65.03	-66.45	-63.26	-62.10
400.	-70.52	-71.95	-66.80	-65.63
450.	-71.25	-78.89	-72.13	-71.36
500.	-71.43	-70.65	-68.59	-71.33
550.	-72.18	-76.56	-78.04	-71.59
600.	-71.25	-79.89	-70.86	-76.08
650.	-82.49	-77.21	-71.52	-74.09



PSACRF (PSELFEXT) - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSACRF (PSELFEXT) - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-59.51	-71.46	-77.36	-76.28	-72.58
4.	-48.25	-59.48	-65.90	-65.38	-60.55
8.	-42.20	-54.51	-61.41	-60.09	-55.32
10.	-40.26	-53.20	-59.87	-57.92	-53.70
16.	-36.18	-51.15	-59.12	-54.20	-51.23
20.	-34.24	-50.76	-60.14	-51.97	-50.71
25.	-32.30	-52.13	-59.12	-50.92	-51.38
31.25	-30.36	-51.44	-52.86	-50.62	-52.32
62.5	-24.34	-38.27	-45.40	-44.21	-38.91
100.	-20.26	-38.43	-42.62	-37.21	-37.18
155.	-16.45	-38.06	-40.40	-34.21	-35.75
200.	-14.24	-33.03	-43.87	-36.13	-35.04
250.	-12.30	-25.81	-34.50	-30.08	-26.71
300.	-10.71	-31.48	-34.12	-32.87	-30.04
350.	-9.38	-26.47	-29.26	-25.70	-24.90
400.	-8.22	-29.26	-32.18	-26.09	-25.63
450.	-7.19	-27.26	-36.13	-28.82	-28.63
500.	-6.28	-24.50	-25.19	-22.47	-25.86
550.		-22.50	-28.74	-29.41	-23.89
600.		-17.89	-29.63	-19.18	-25.85
650.		-26.17	-24.33	-17.40	-21.68



Return Loss - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

Return Loss - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-19.00	-27.42	-24.77	-25.82	-25.65
4.	-19.00	-66.70	-36.75	-37.30	-44.44
8.	-19.00	-33.28	-35.57	-48.72	-44.10
10.	-18.96	-29.13	-37.18	-39.21	-41.11
16.	-17.98	-42.71	-46.07	-48.57	-36.43
20.	-17.49	-39.16	-45.75	-53.84	-54.12
25.	-17.01	-27.57	-55.52	-39.14	-41.45
31.25	-16.53	-32.79	-30.49	-36.53	-45.31
62.5	-14.04	-31.50	-40.14	-47.76	-50.82
100.	-12.00	-28.29	-35.31	-59.02	-45.44
155.	-10.10	-26.56	-30.02	-43.10	-26.53
200.	-8.99	-36.09	-22.35	-35.76	-31.56
250.	-8.02	-26.08	-30.38	-38.36	-33.92
300.	-7.23	-22.73	-32.73	-29.62	-40.05
350.	-6.56	-21.88	-60.50	-29.44	-42.78
400.	-6.00	-36.22	-23.69	-22.81	-34.10
450.	-6.00	-38.59	-24.57	-39.87	-30.81
500.	-6.00	-21.70	-44.05	-24.23	-23.95
550.		-17.58	-31.19	-31.54	-36.08
600.		-11.40	-22.29	-27.94	-38.07
650.		-18.49	-14.81	-16.99	-22.71



Return Loss - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

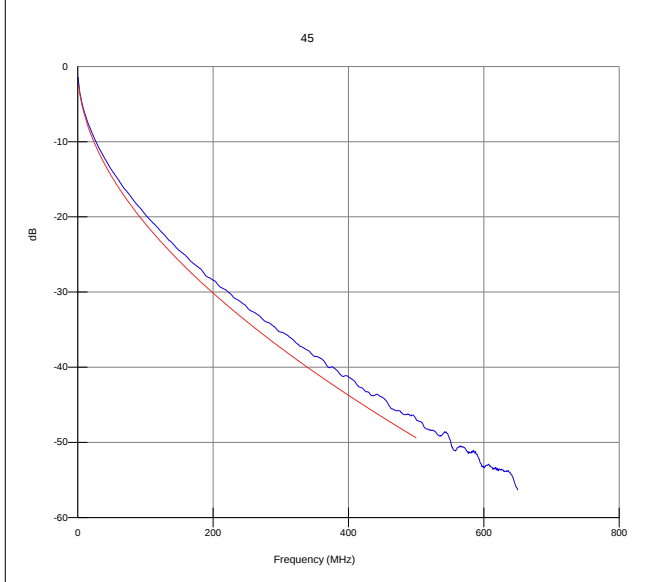
Return Loss - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-19.00	-26.29	-25.27	-24.69	-24.90
4.	-19.00	-36.98	-27.98	-37.68	-32.72
8.	-19.00	-28.10	-45.13	-26.57	-30.05
10.	-18.96	-23.77	-33.78	-24.76	-28.26
16.	-17.98	-43.32	-33.84	-46.92	-61.12
20.	-17.49	-43.84	-30.59	-51.01	-38.66
25.	-17.01	-42.13	-55.35	-35.50	-57.90
31.25	-16.53	-24.33	-43.78	-23.95	-41.60
62.5	-14.04	-43.35	-30.51	-34.80	-28.12
100.	-12.00	-31.19	-23.88	-25.74	-23.08
155.	-10.10	-35.21	-45.11	-26.16	-26.43
200.	-8.99	-27.32	-25.22	-44.75	-30.45
250.	-8.02	-29.70	-25.94	-35.04	-35.72
300.	-7.23	-21.73	-20.32	-41.34	-24.37
350.	-6.56	-18.79	-27.20	-28.08	-24.60
400.	-6.00	-33.06	-27.47	-24.43	-32.35
450.	-6.00	-28.64	-34.16	-28.55	-28.51
500.	-6.00	-32.26	-22.23	-40.88	-25.42
550.		-22.19	-35.96	-28.05	-39.70
600.		-15.67	-17.33	-38.89	-20.42
650.		-19.70	-20.50	-16.44	-25.47



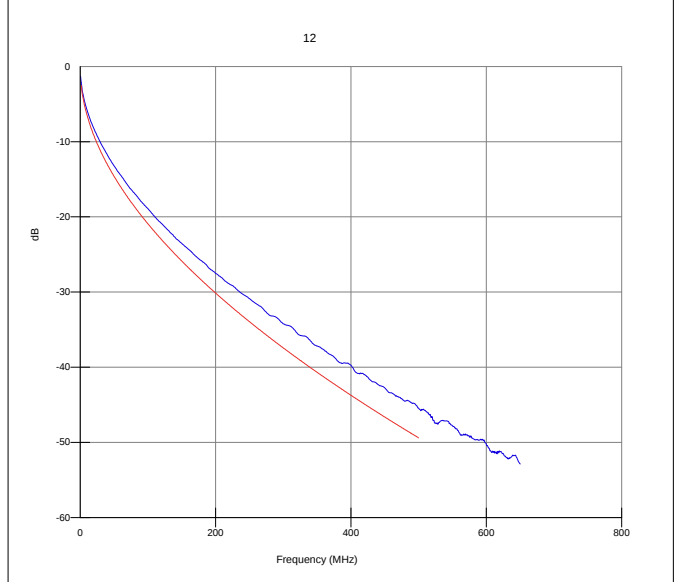
Insertion Loss

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

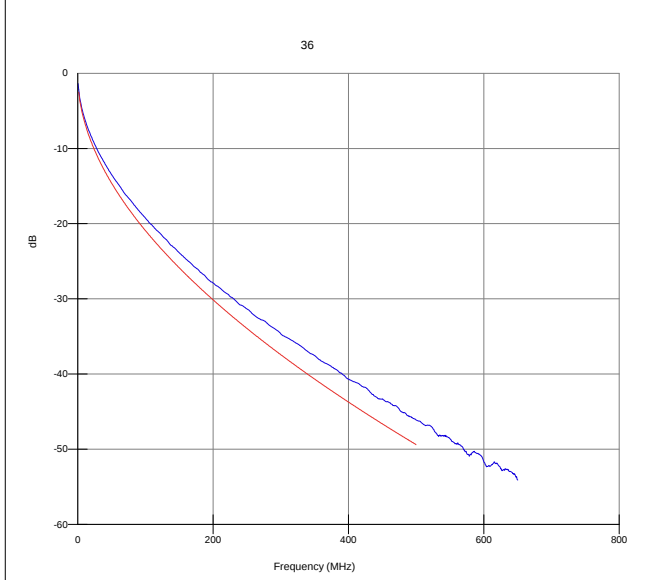
Limit Margin : 0.242 dB @ 2.124 MHz



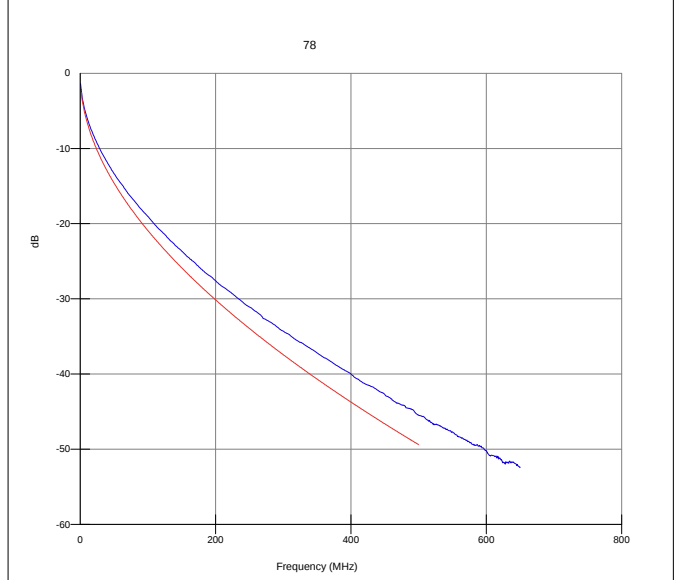
Limit Margin : 0.426 dB @ 1.312 MHz



Limit Margin : 0.330 dB @ 2.124 MHz



Limit Margin : 0.350 dB @ 1.312 MHz

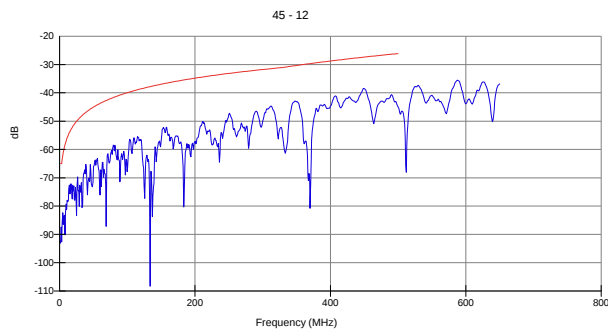




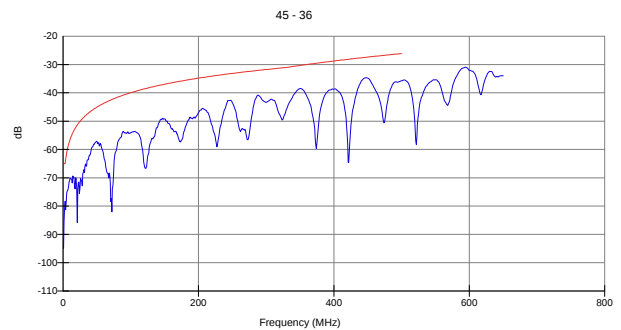
NEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

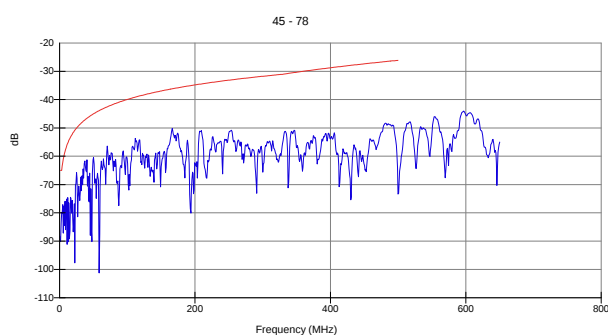
Limit Margin : 11.044 dB @ 449.467 MHz



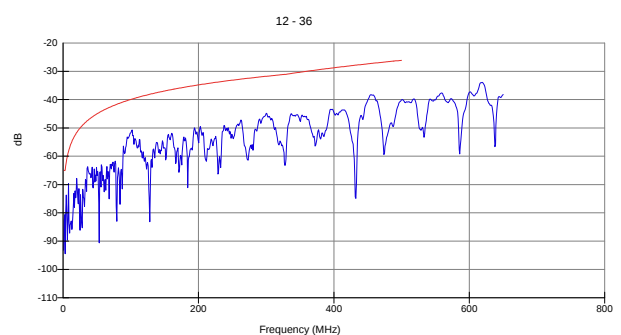
Limit Margin : 7.243 dB @ 447.031 MHz



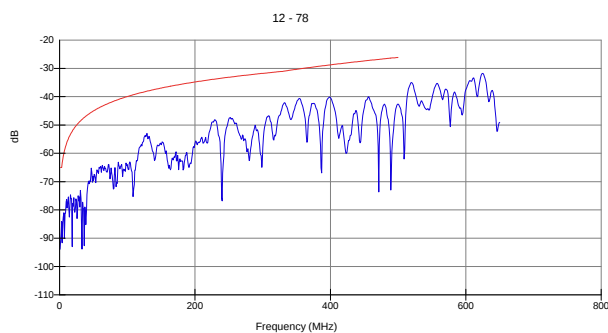
Limit Margin : 13.938 dB @ 70.321 MHz



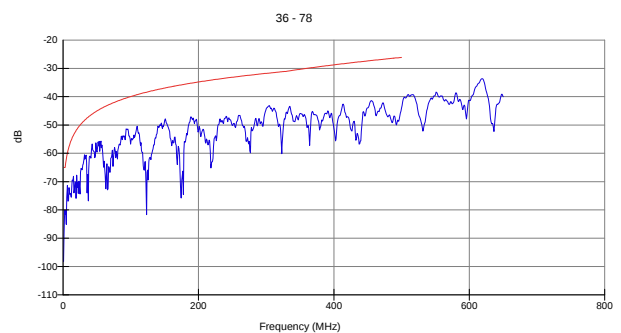
Limit Margin : 10.971 dB @ 101.173 MHz



Limit Margin : 10.431 dB @ 353.666 MHz



Limit Margin : 10.555 dB @ 42.718 MHz

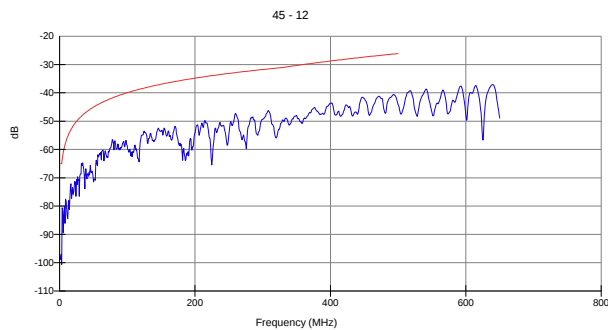




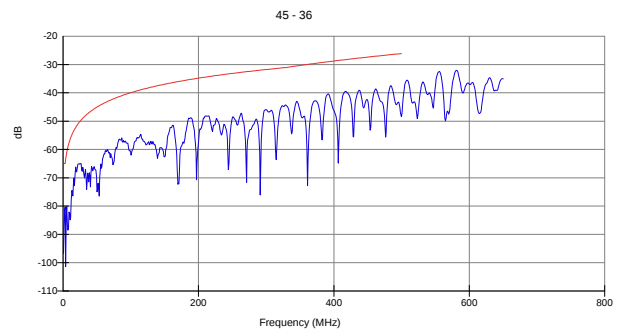
NEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

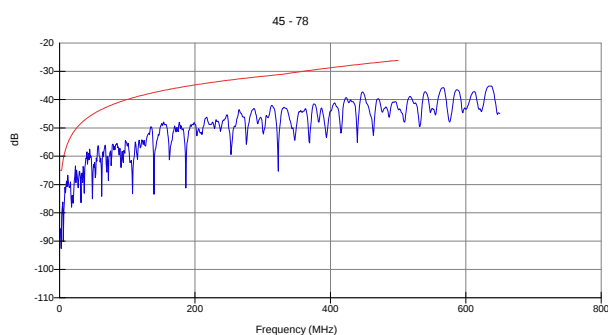
Limit Margin : 14.127 dB @ 447.031 MHz



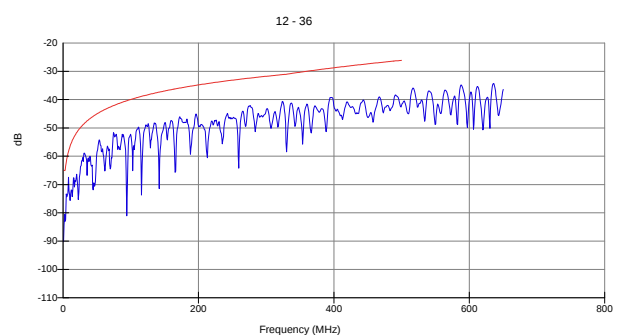
Limit Margin : 11.016 dB @ 483.566 MHz



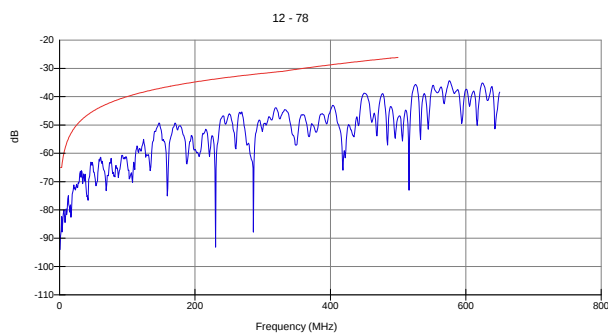
Limit Margin : 9.904 dB @ 447.843 MHz



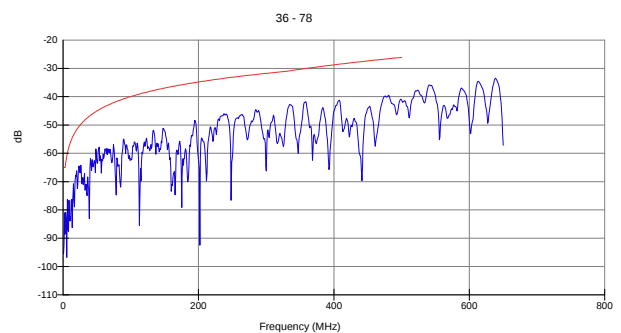
Limit Margin : 9.101 dB @ 7.807 MHz



Limit Margin : 11.433 dB @ 450.279 MHz



Limit Margin : 11.754 dB @ 358.537 MHz

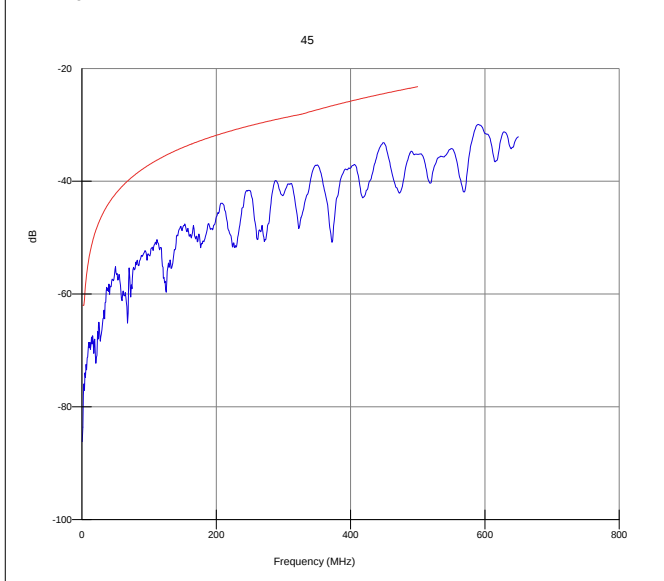




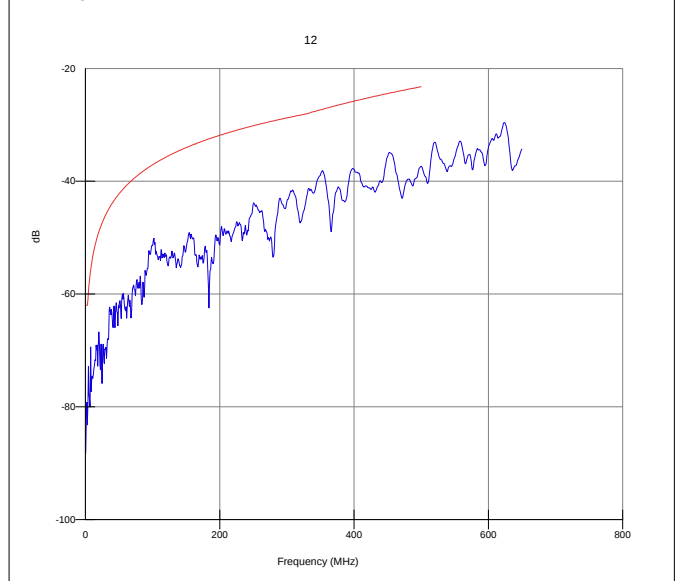
PSNEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

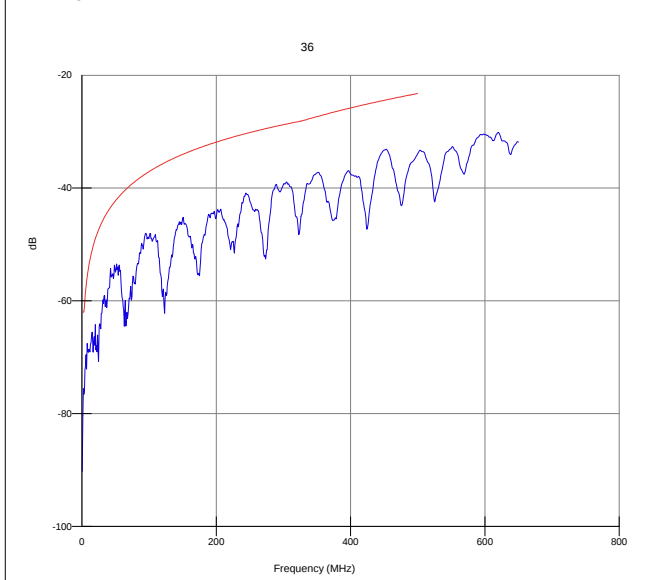
Limit Margin : 8.693 dB @ 448.655 MHz



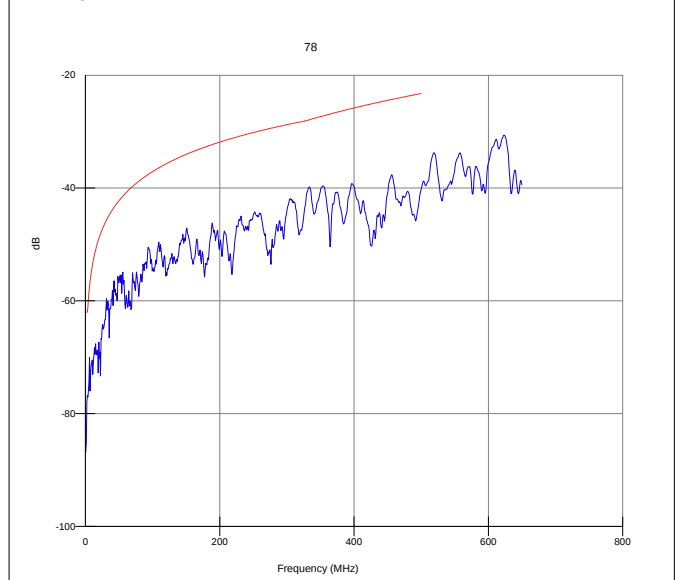
Limit Margin : 10.515 dB @ 452.714 MHz



Limit Margin : 8.750 dB @ 452.714 MHz



Limit Margin : 11.906 dB @ 333.369 MHz

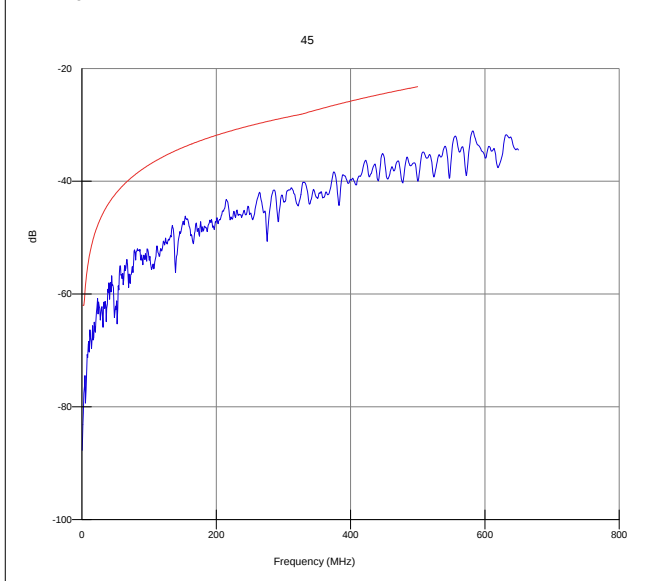




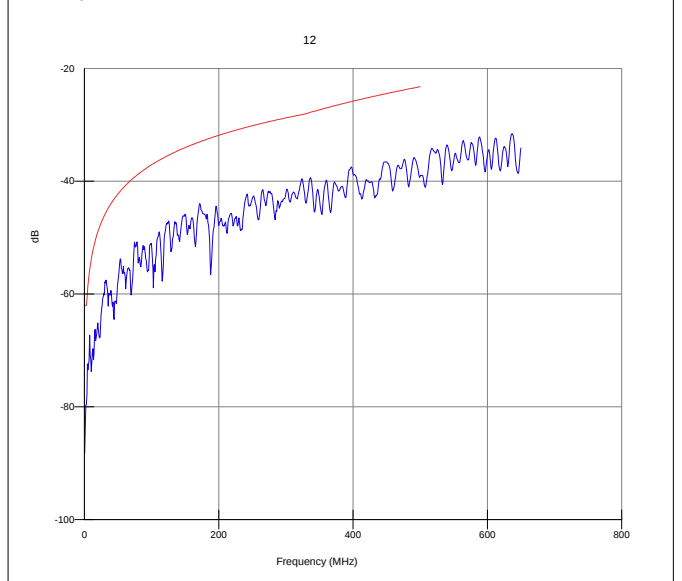
PSNEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

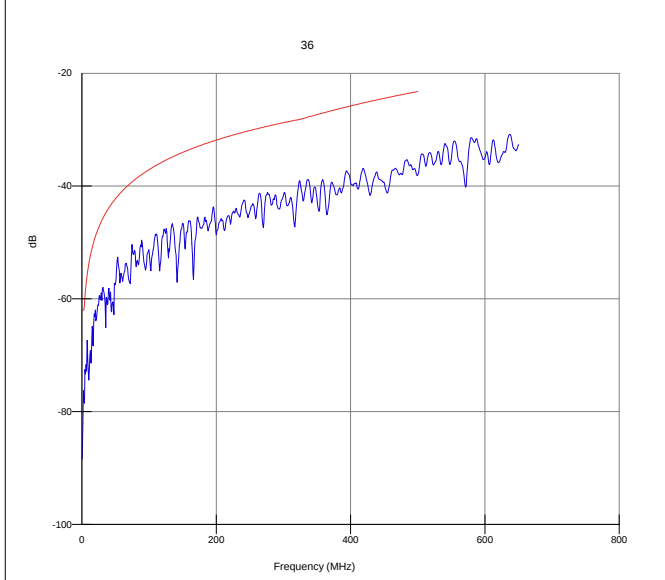
Limit Margin : 10.574 dB @ 447.843 MHz



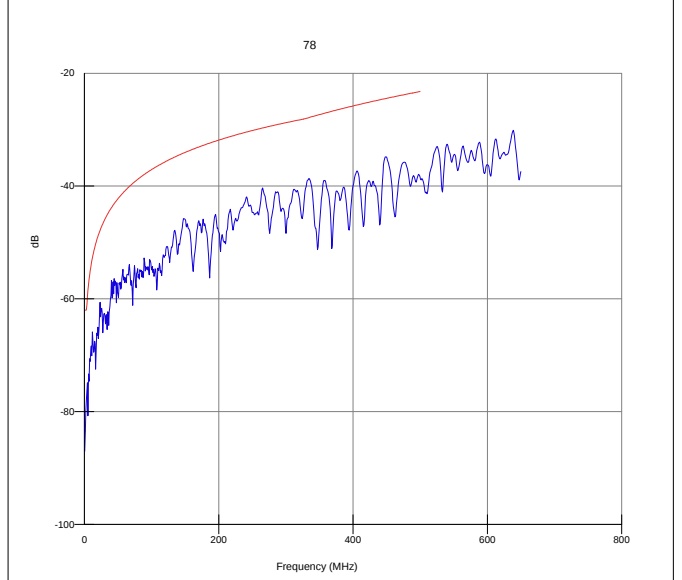
Limit Margin : 10.960 dB @ 171.806 MHz



Limit Margin : 10.796 dB @ 53.272 MHz



Limit Margin : 10.346 dB @ 448.655 MHz

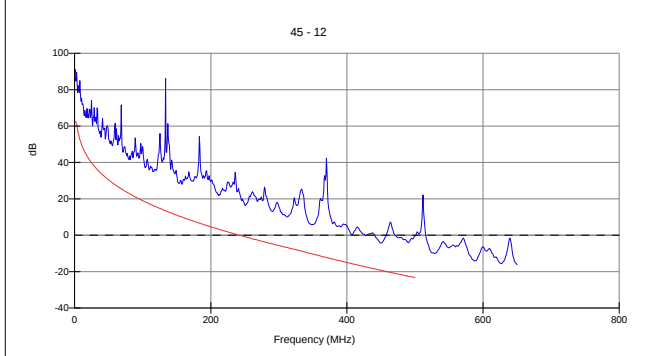




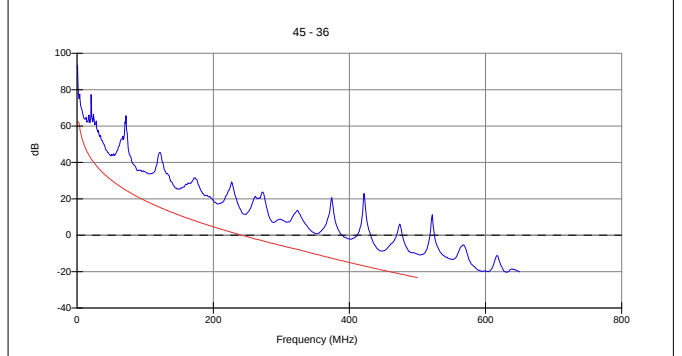
ACR - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

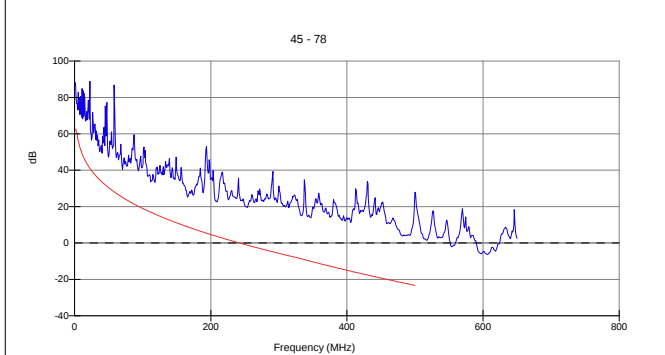
Limit Margin : 14.936 dB @ 449.467 MHz



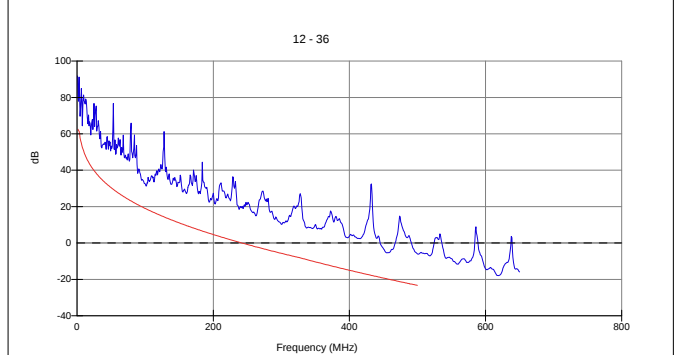
Limit Margin : 10.352 dB @ 444.596 MHz



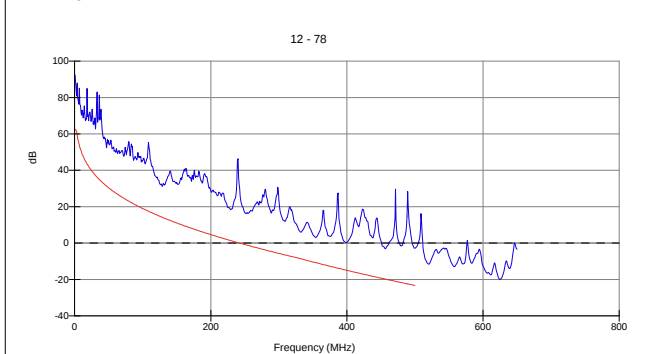
Limit Margin : 15.289 dB @ 2.936 MHz



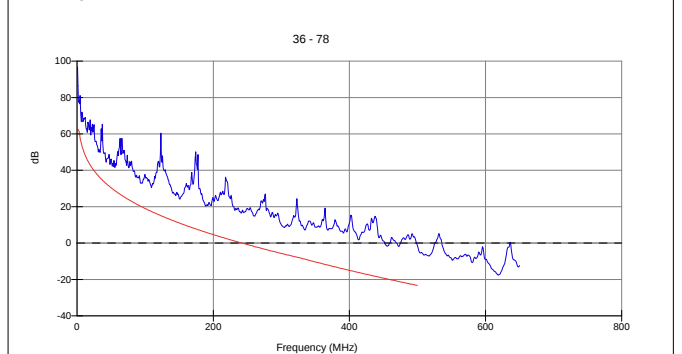
Limit Margin : 11.798 dB @ 7.807 MHz



Limit Margin : 13.909 dB @ 354.478 MHz



Limit Margin : 11.748 dB @ 42.718 MHz

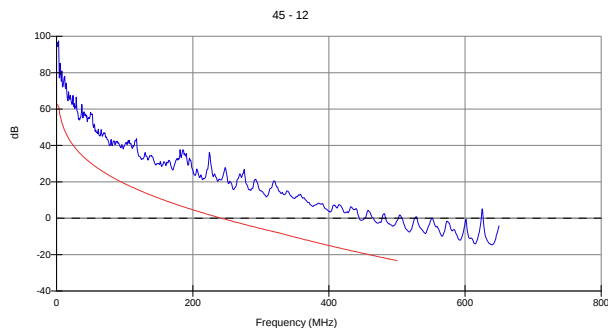




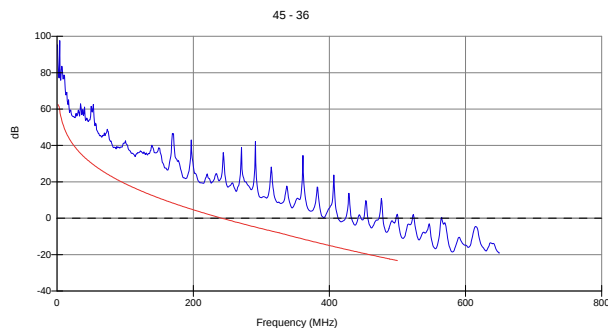
ACR - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

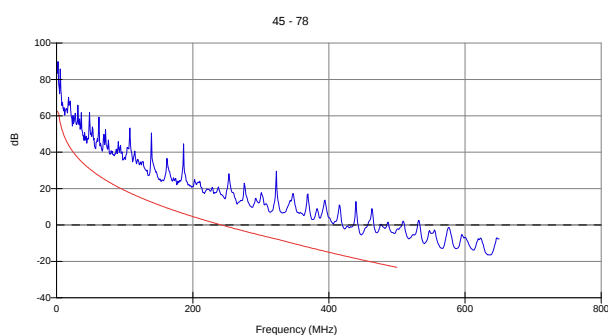
Limit Margin : 16.421 dB @ 77.628 MHz



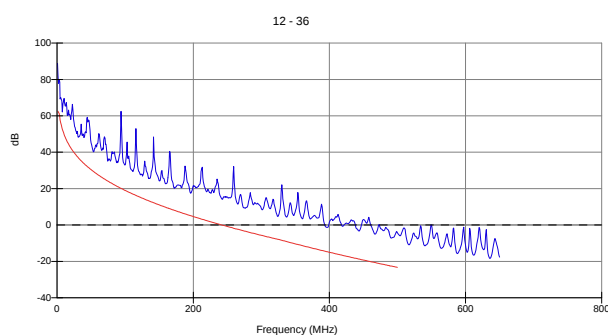
Limit Margin : 14.237 dB @ 483.566 MHz



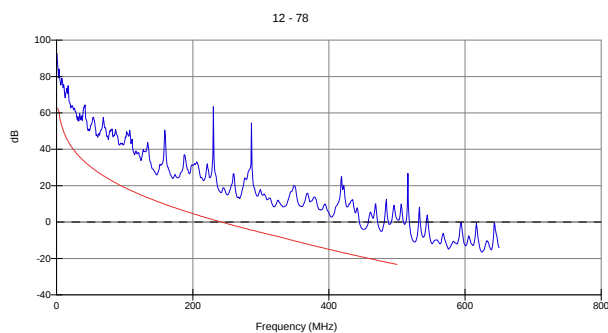
Limit Margin : 11.986 dB @ 11.866 MHz



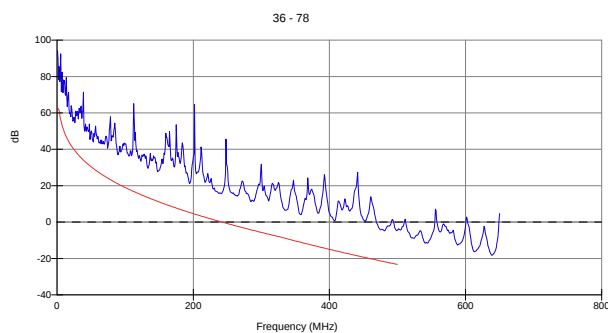
Limit Margin : 9.541 dB @ 7.807 MHz



Limit Margin : 14.394 dB @ 146.638 MHz



Limit Margin : 14.458 dB @ 48.401 MHz

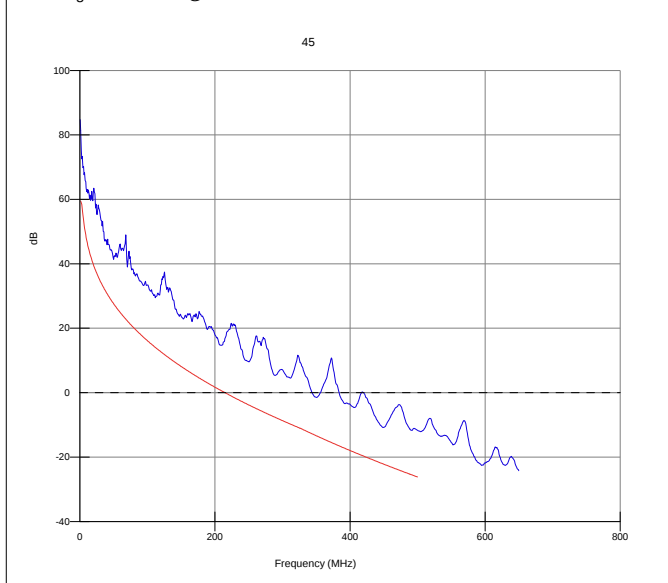




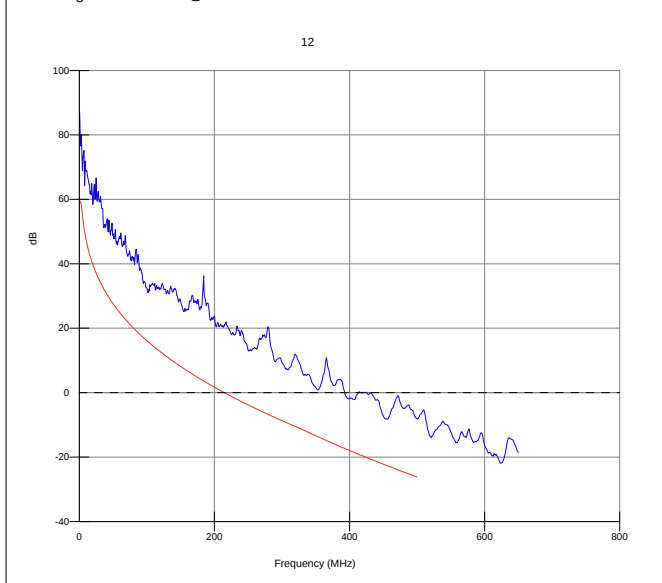
PSACR - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

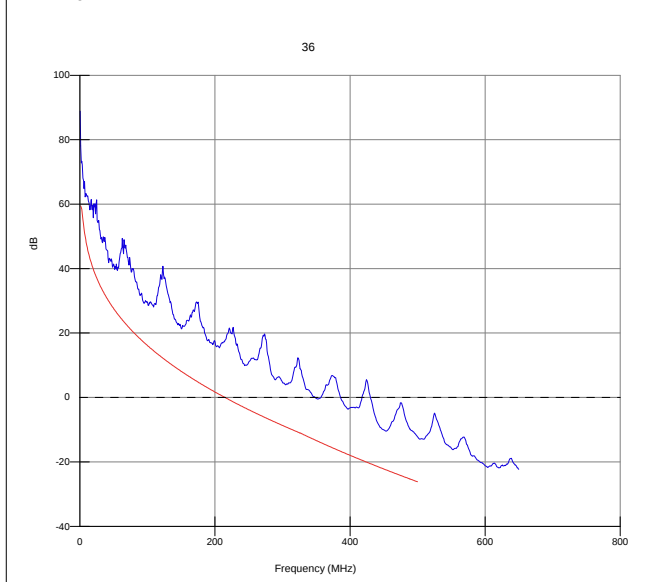
Limit Margin : 11.286 dB @ 448.655 MHz



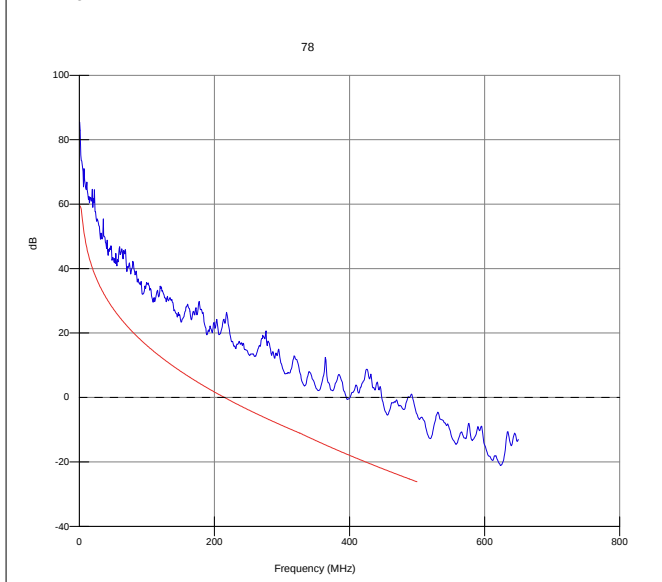
Limit Margin : 13.720 dB @ 4.559 MHz



Limit Margin : 11.901 dB @ 42.718 MHz



Limit Margin : 13.061 dB @ 6.183 MHz

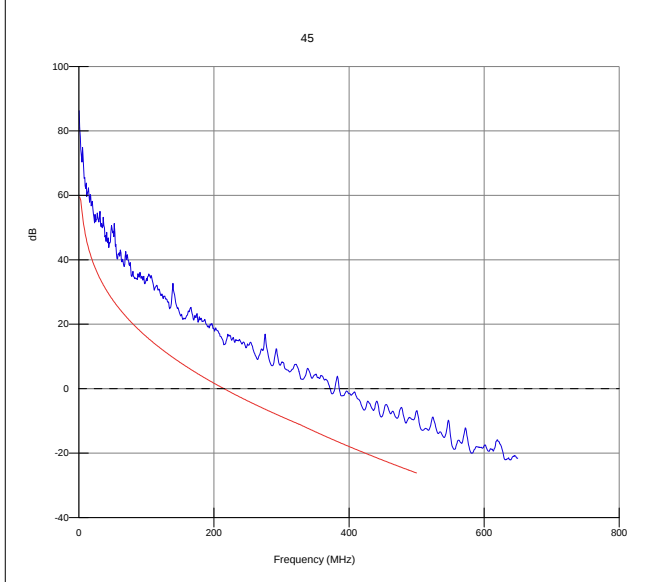




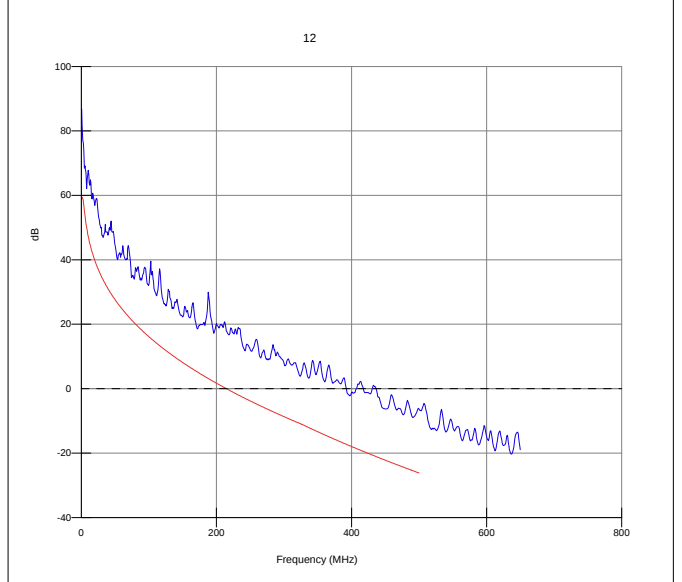
PSACR - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

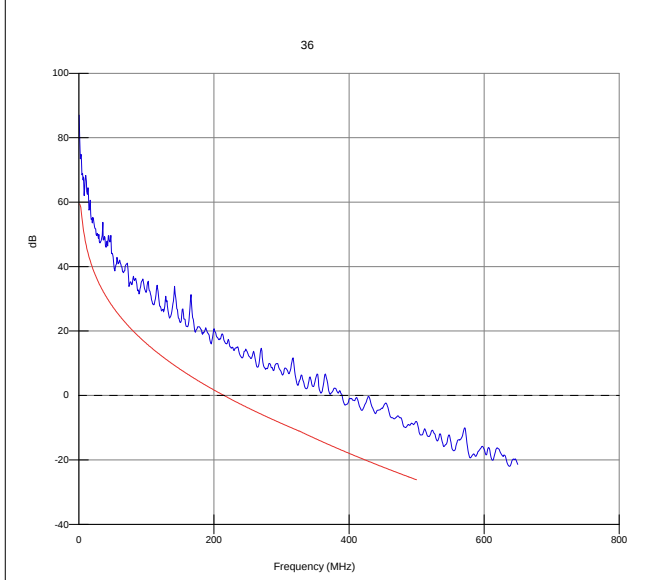
Limit Margin : 13.179 dB @ 447.843 MHz



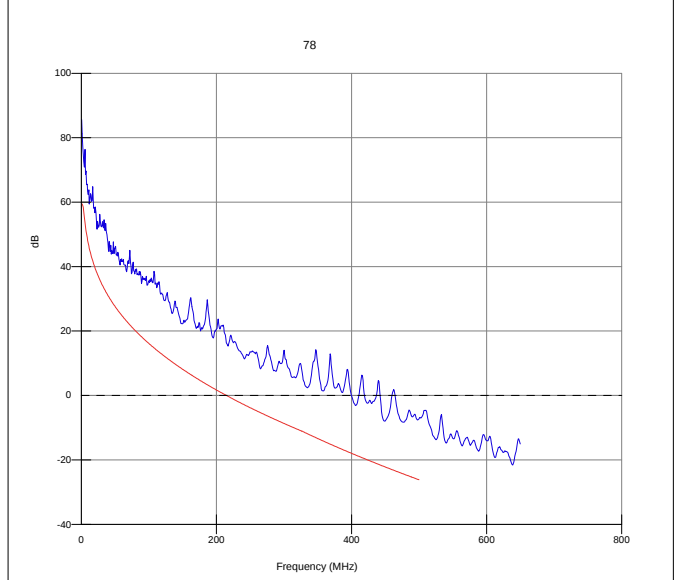
Limit Margin : 12.096 dB @ 7.807 MHz



Limit Margin : 11.986 dB @ 53.272 MHz



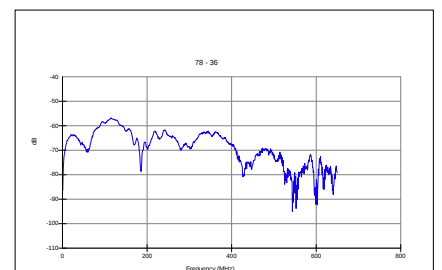
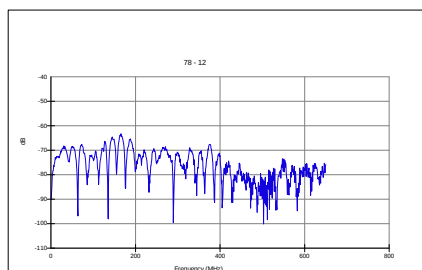
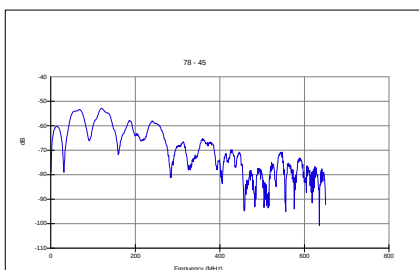
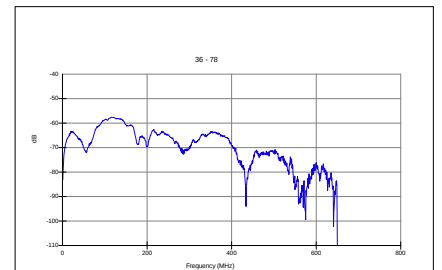
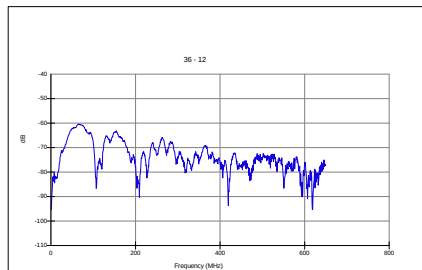
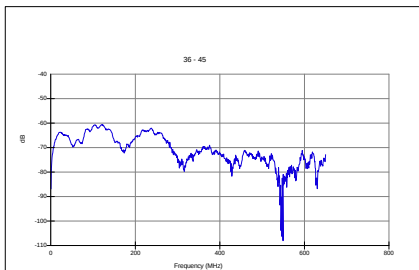
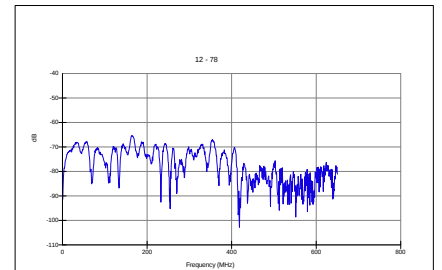
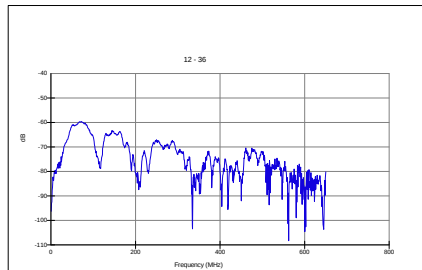
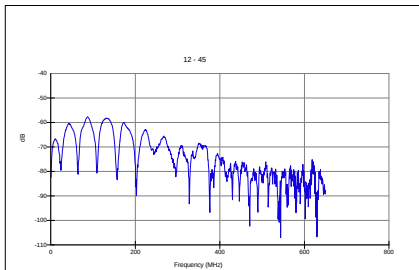
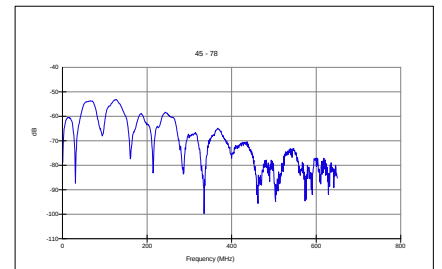
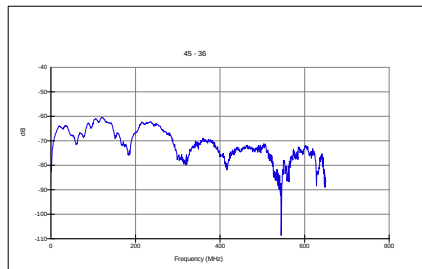
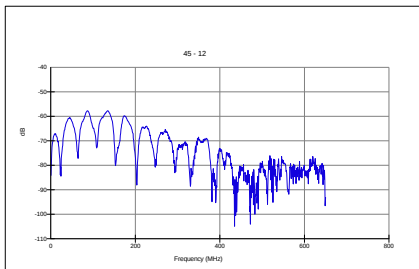
Limit Margin : 13.593 dB @ 265.171 MHz





FEXT - Near End

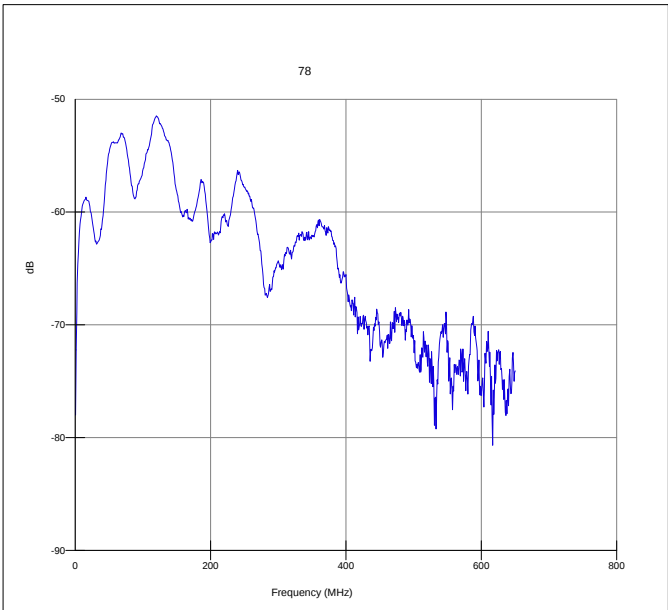
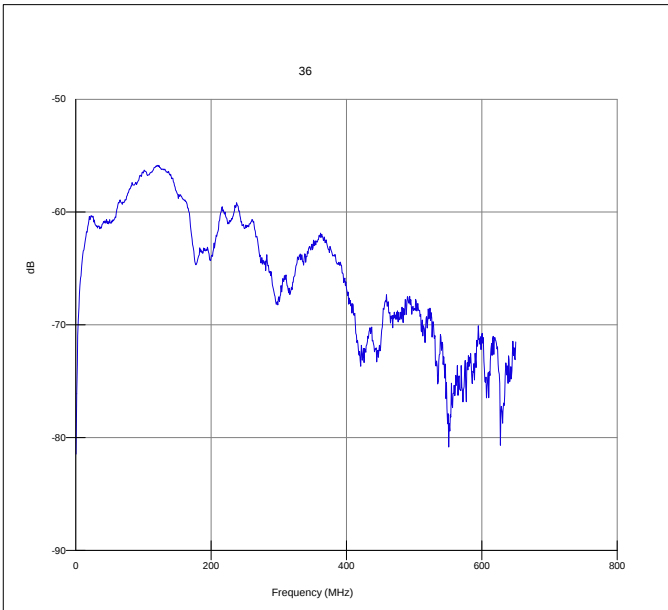
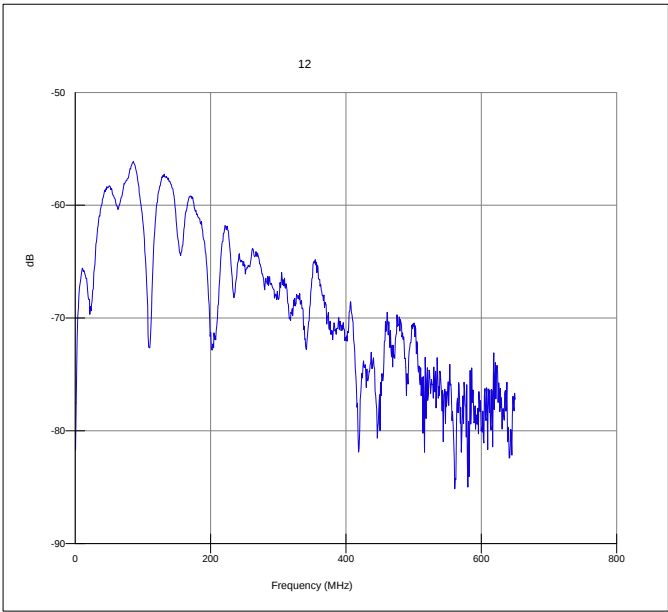
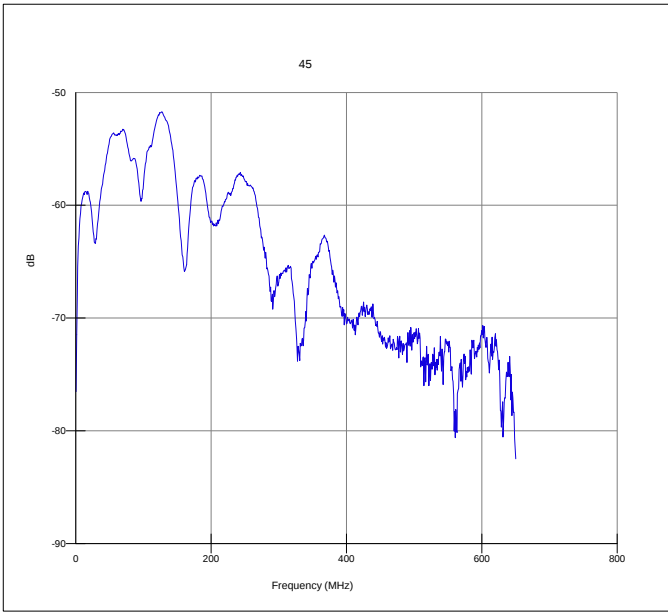
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





PSFEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

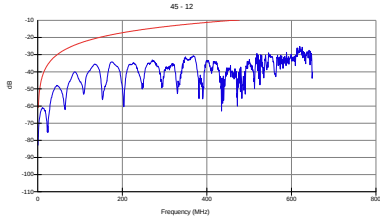




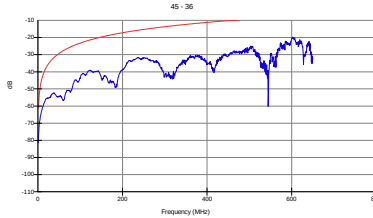
ACRF (ELFEXT) - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

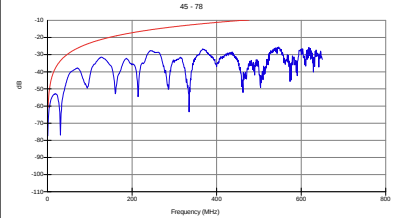
Limit Margin : 14.792 dB @ 134.459 MHz



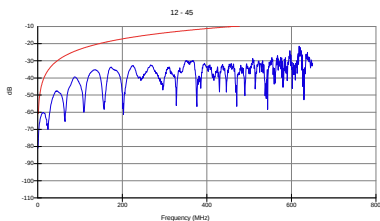
Limit Margin : 15.840 dB @ 235.132 MHz



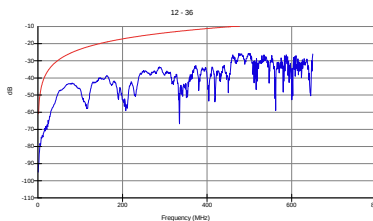
Limit Margin : 9.619 dB @ 3.748 MHz



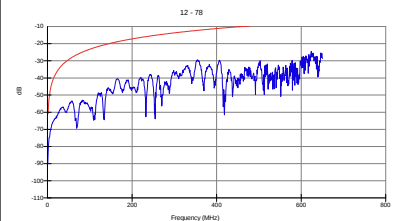
Limit Margin : 14.497 dB @ 131.212 MHz



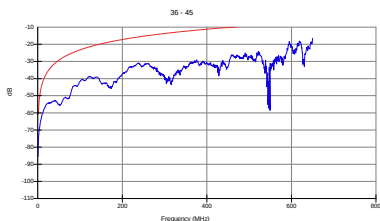
Limit Margin : 17.181 dB @ 71.945 MHz



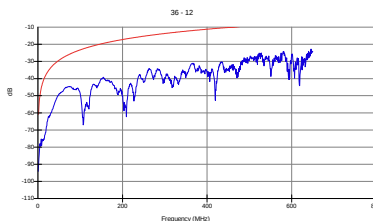
Limit Margin : 17.192 dB @ 354.478 MHz



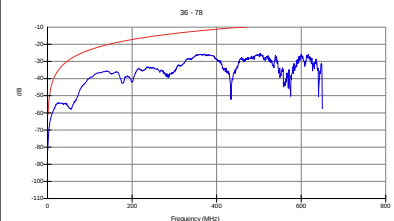
Limit Margin : 15.171 dB @ 237.568 MHz



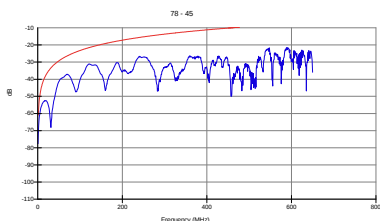
Limit Margin : 18.171 dB @ 65.450 MHz



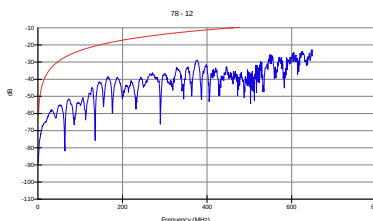
Limit Margin : 13.700 dB @ 361.784 MHz



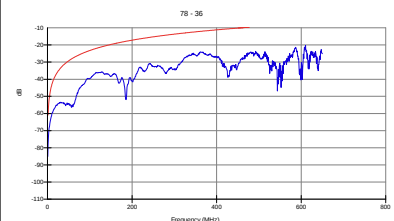
Limit Margin : 9.548 dB @ 119.846 MHz



Limit Margin : 17.081 dB @ 376.398 MHz



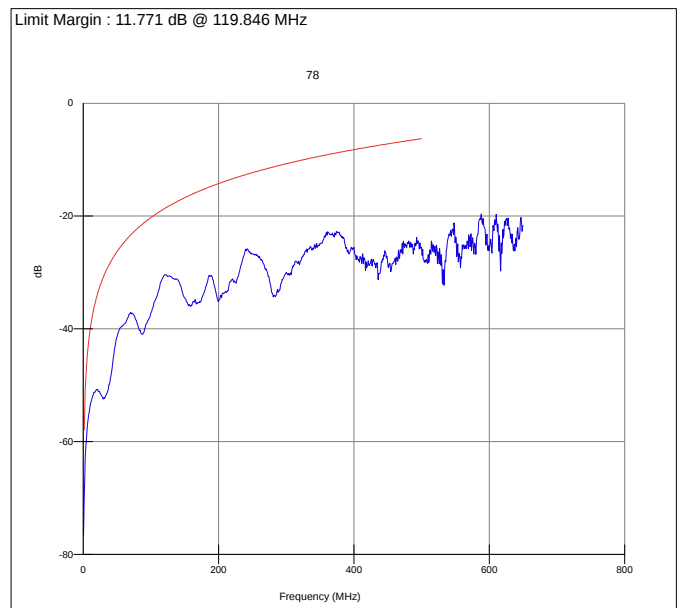
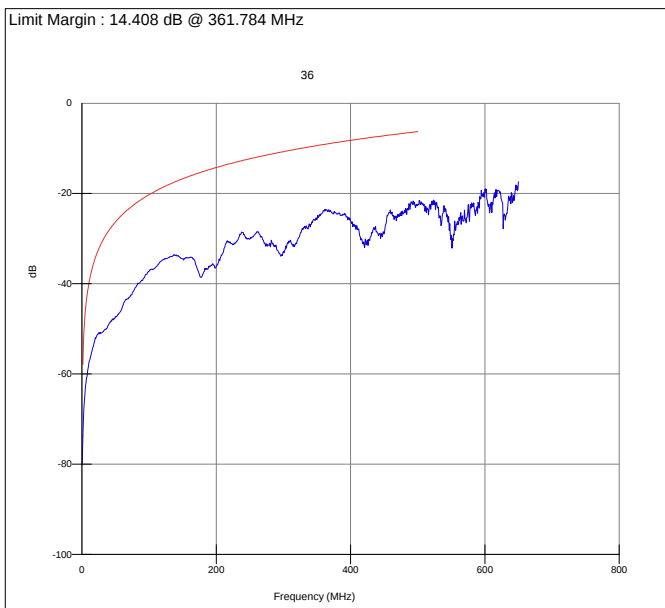
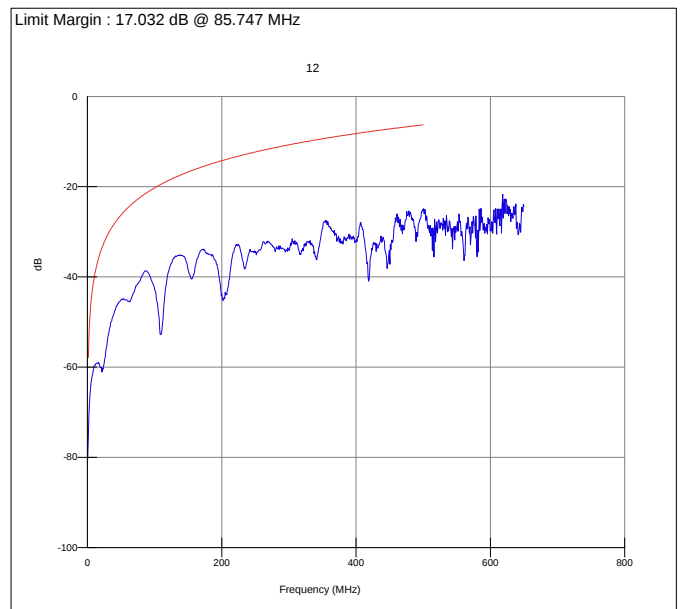
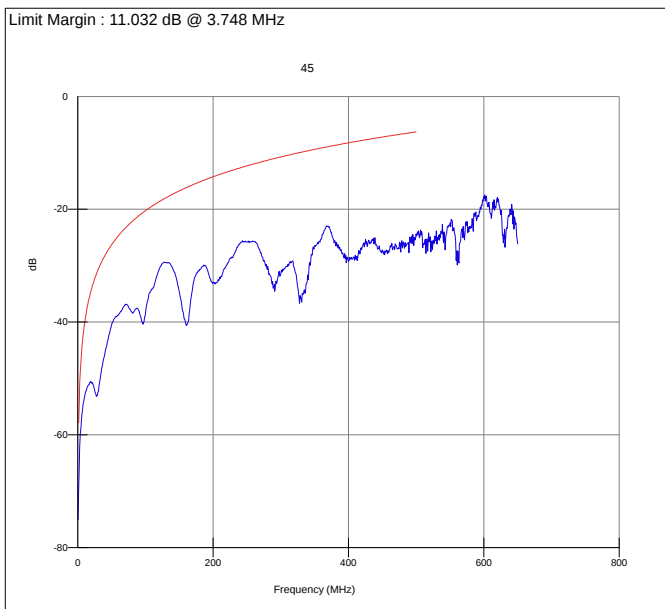
Limit Margin : 11.997 dB @ 360.973 MHz





PSACRF (PSELFEXT) - Near End

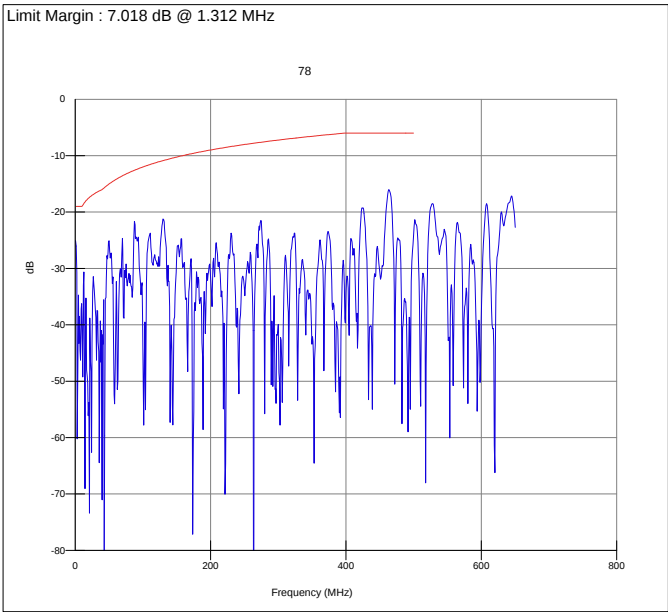
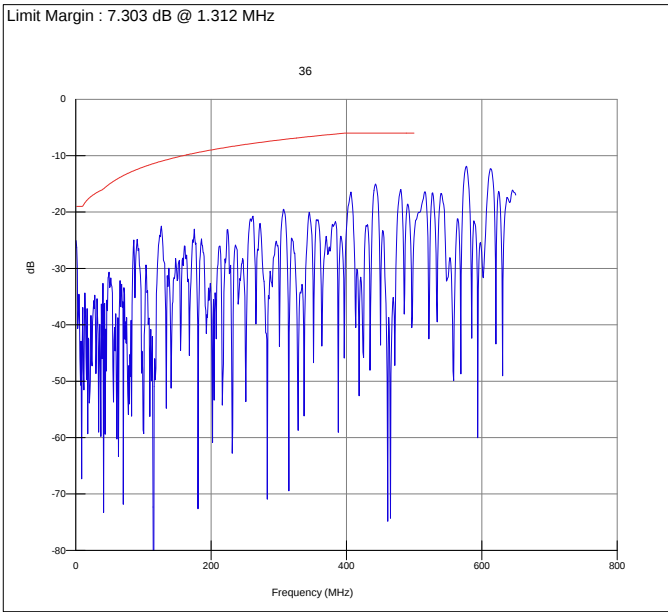
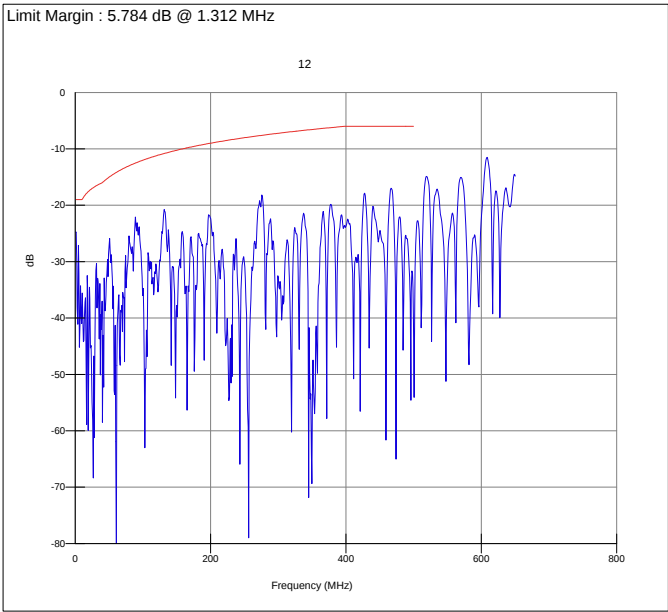
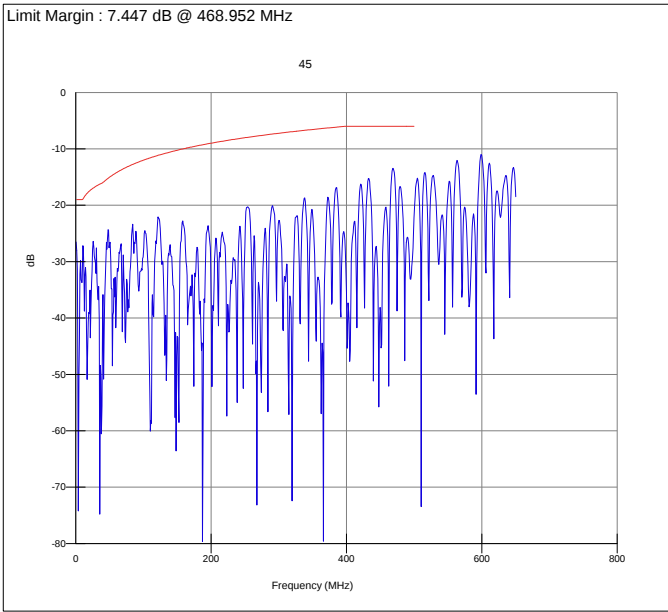
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





Return Loss - Near End

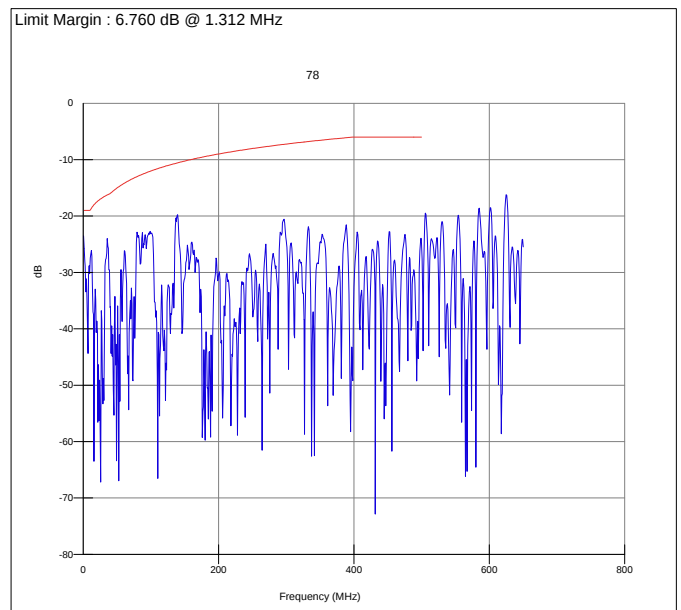
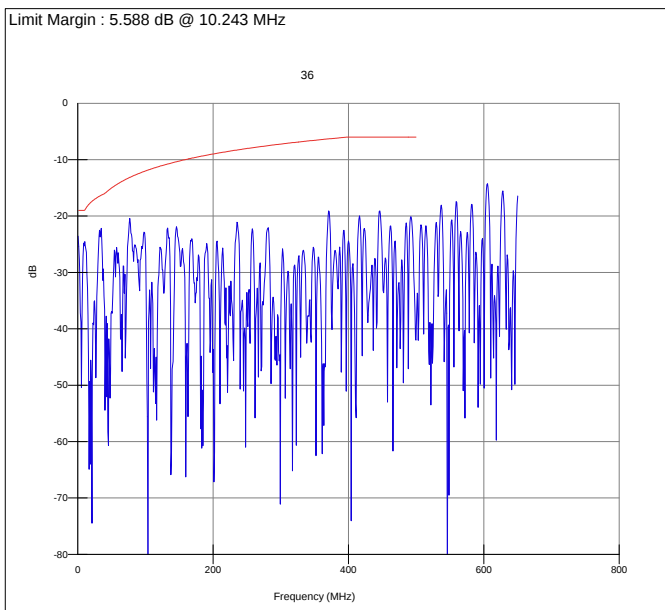
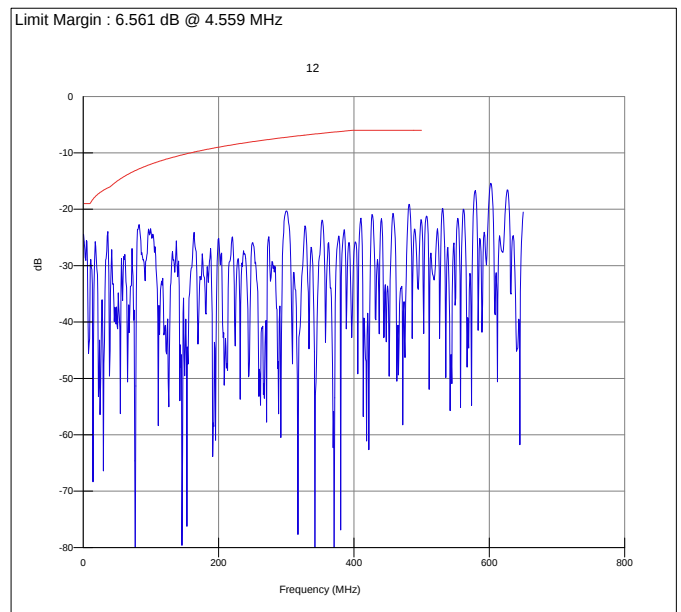
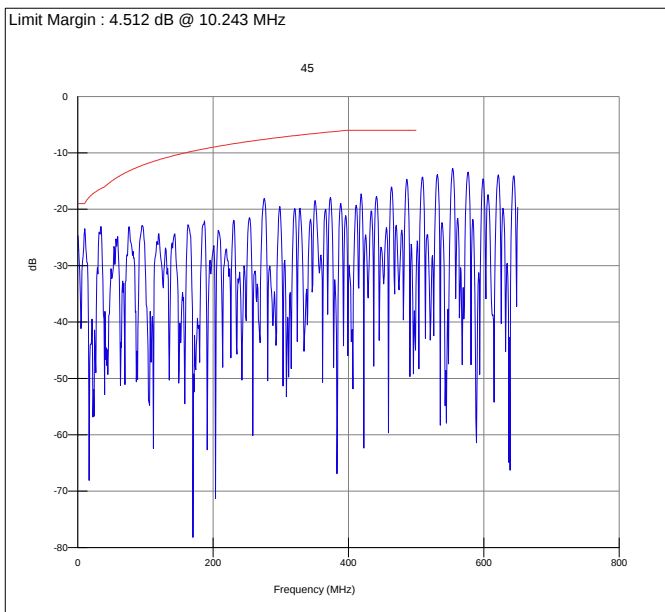
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





Return Loss - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

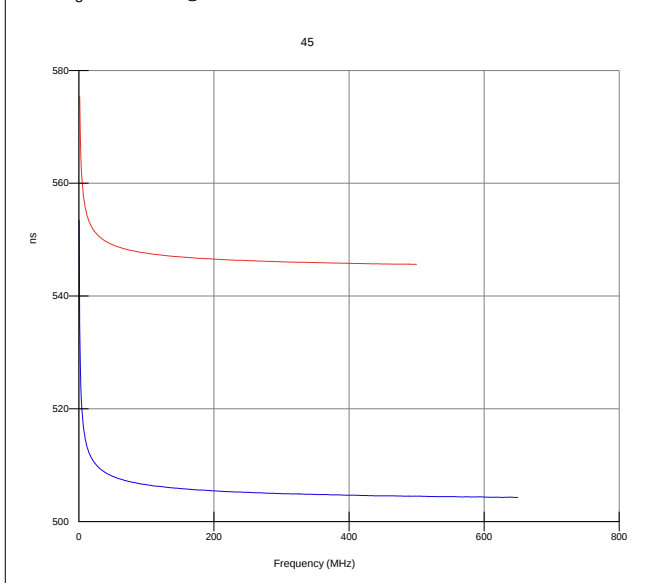




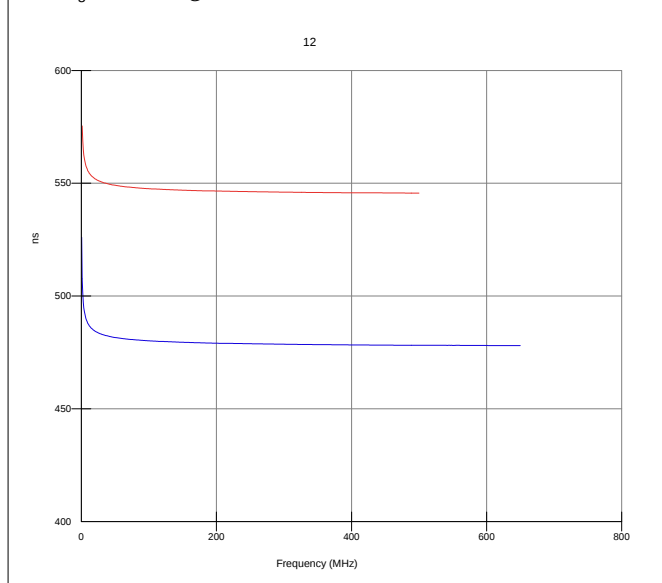
Propagation Delay - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

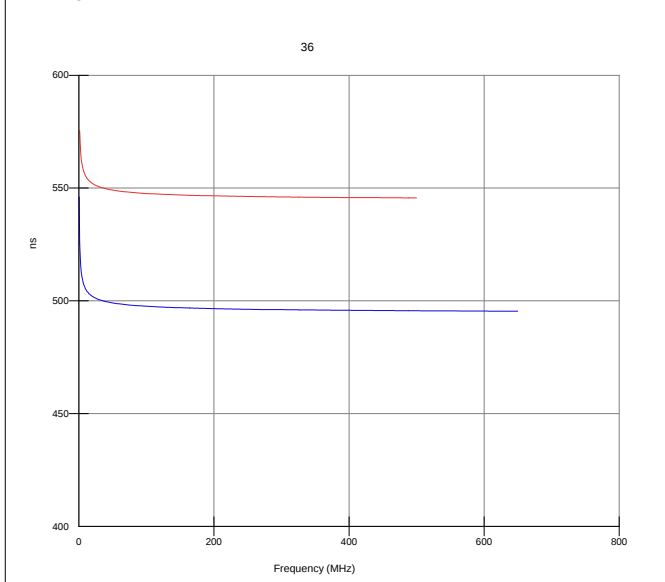
Limit Margin : 40.610 ns @ 1.312 MHz



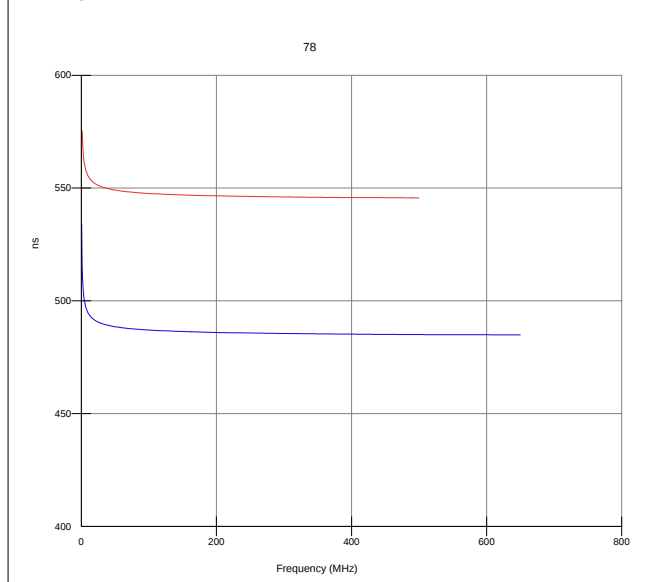
Limit Margin : 67.430 ns @ 110.103 MHz



Limit Margin : 49.790 ns @ 1.312 MHz



Limit Margin : 60.530 ns @ 170.994 MHz

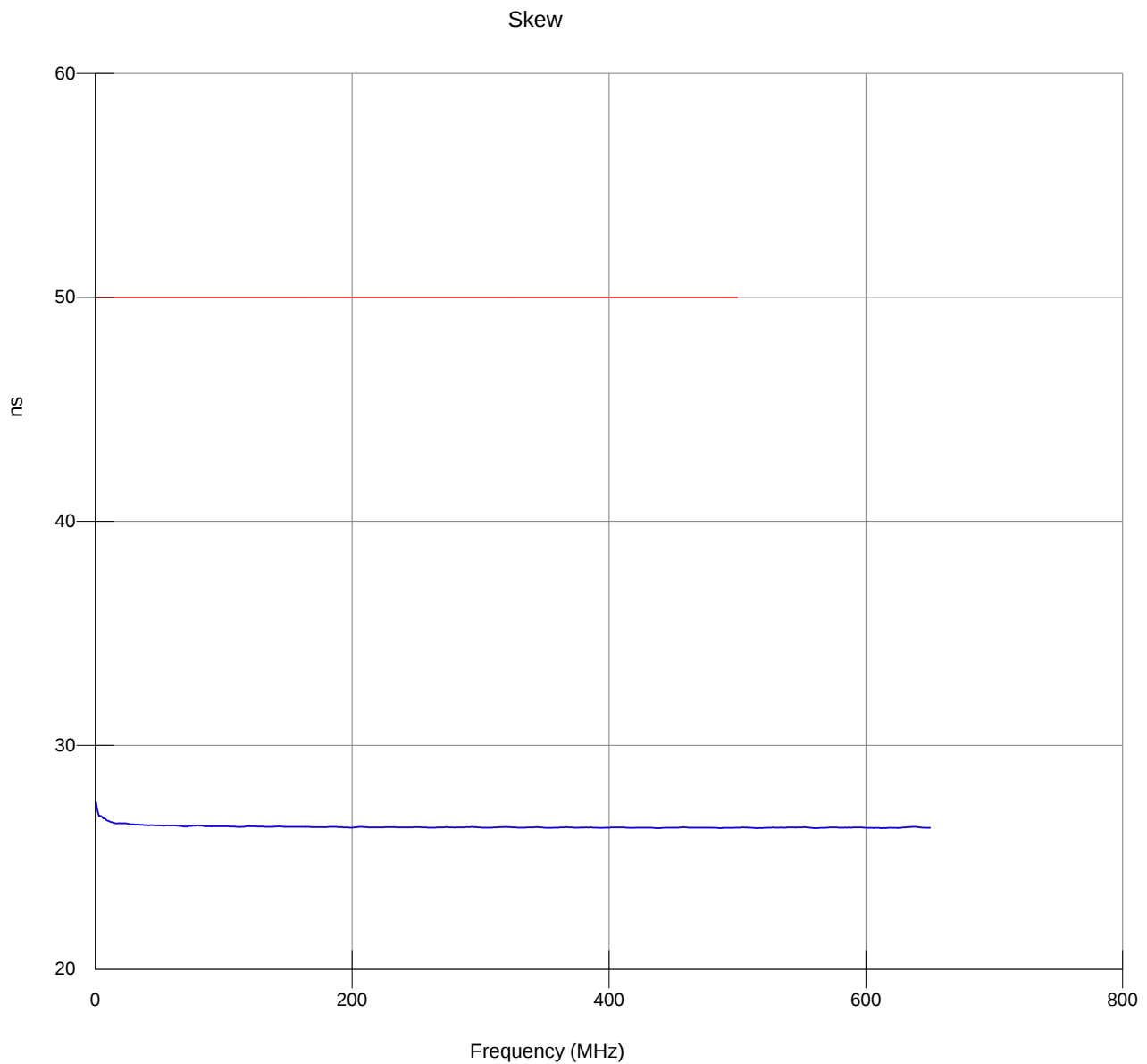




Propagation Delay Skew - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

Limit Margin : 22.822 ns @ 1.312 MHz

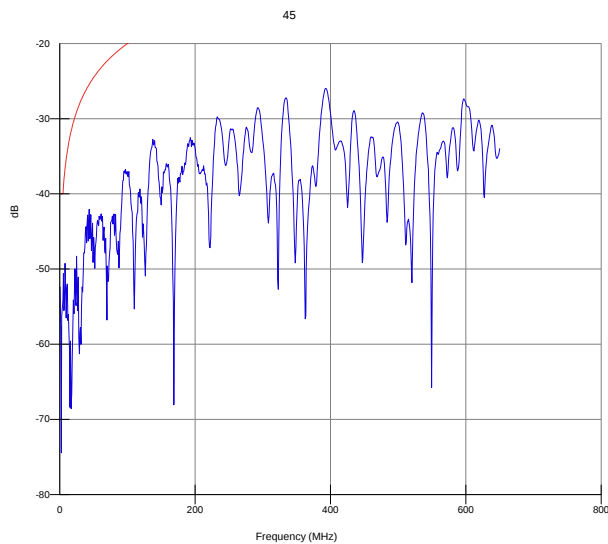




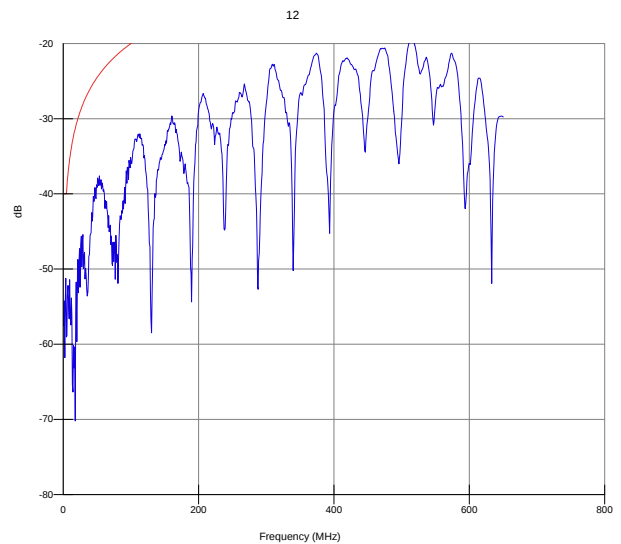
TCL - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

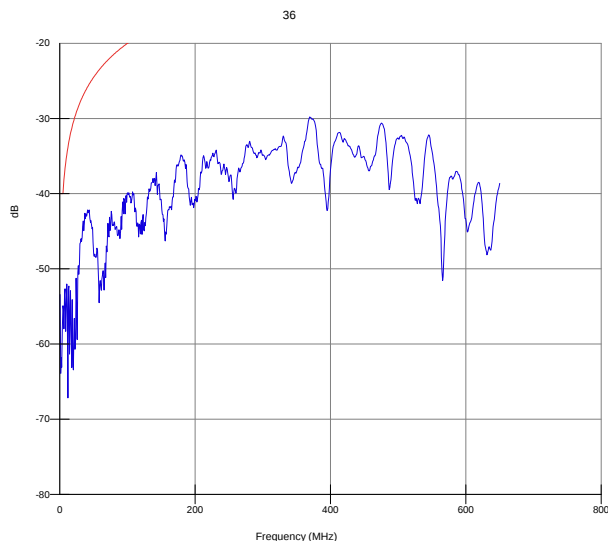
Limit Margin : 11.555 dB @ 5.371 MHz



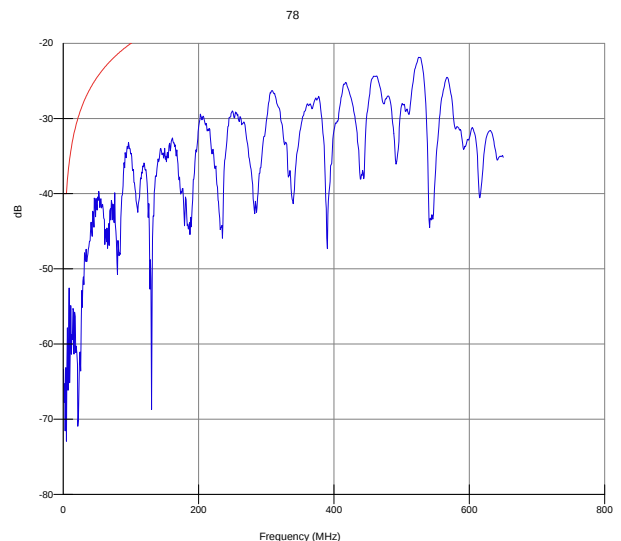
Limit Margin : 9.872 dB @ 373.963 MHz



Limit Margin : 14.905 dB @ 4.559 MHz



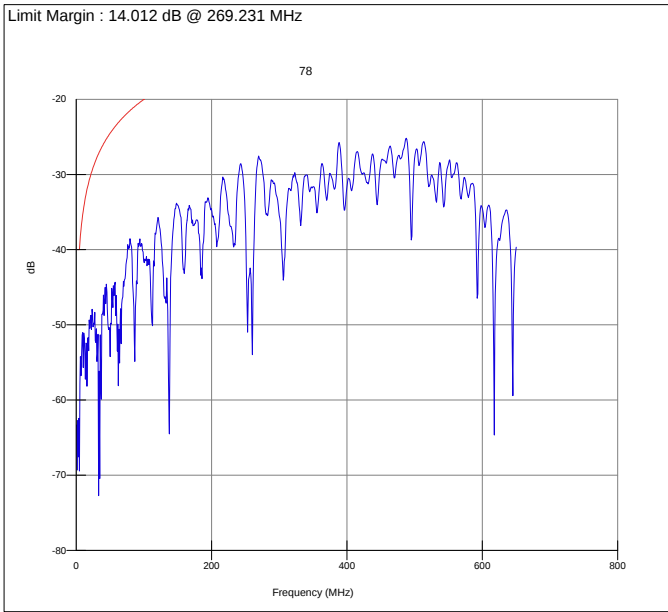
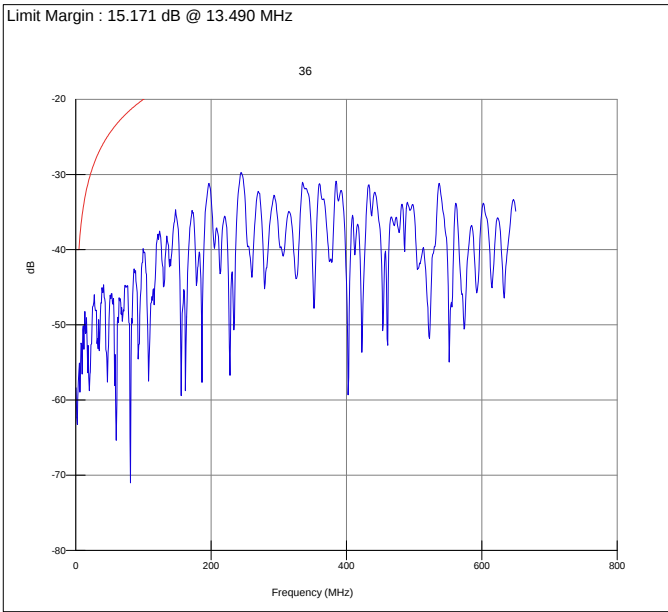
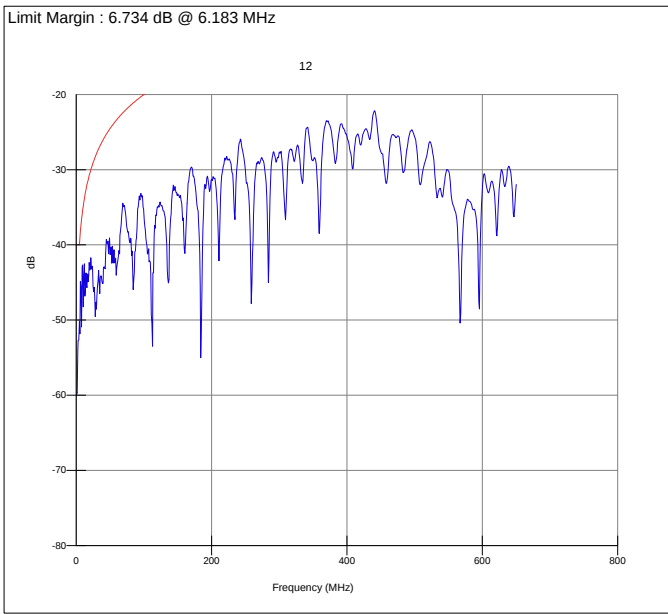
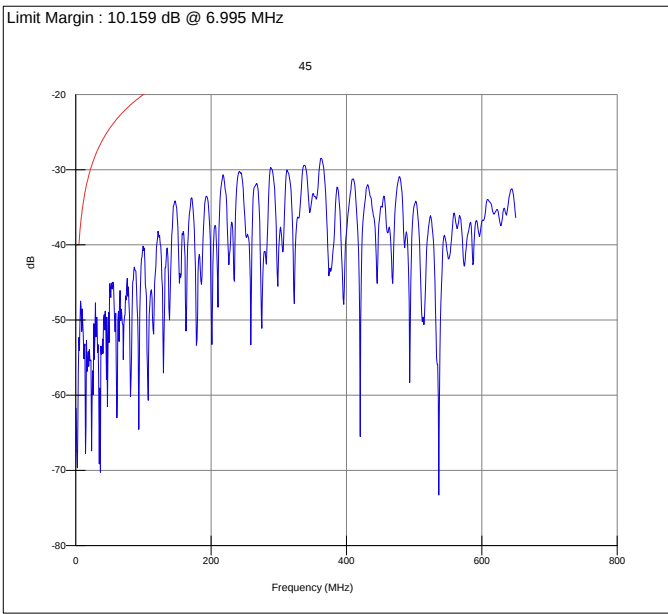
Limit Margin : 12.940 dB @ 96.301 MHz





TCL - Far End

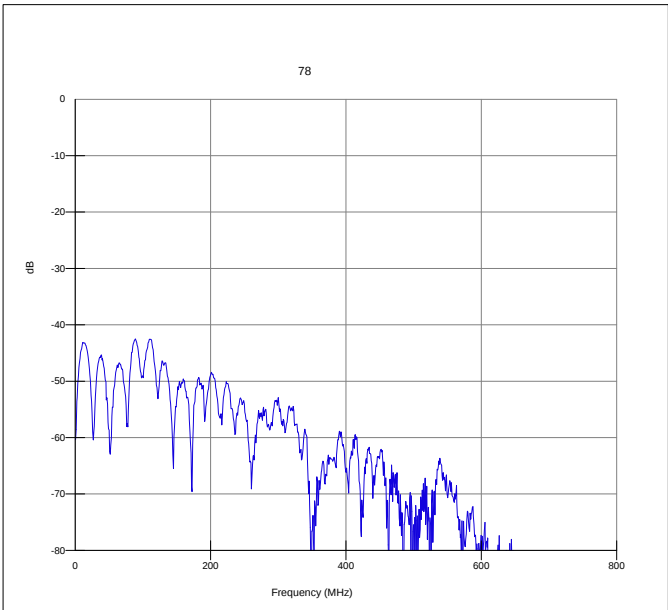
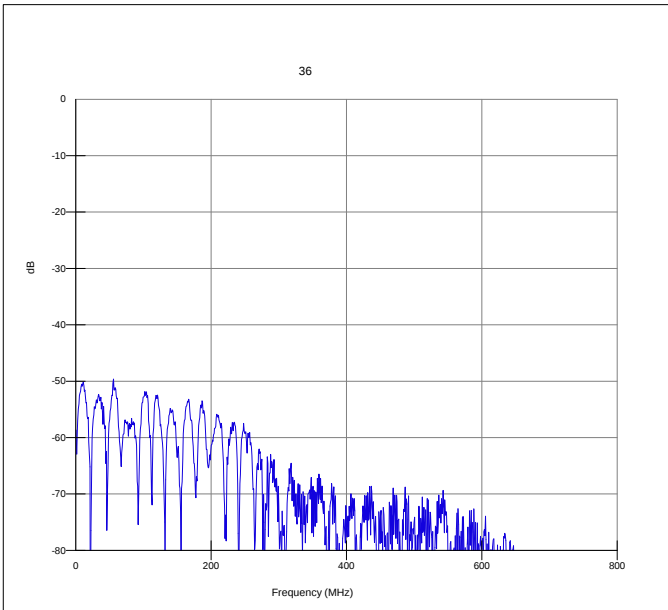
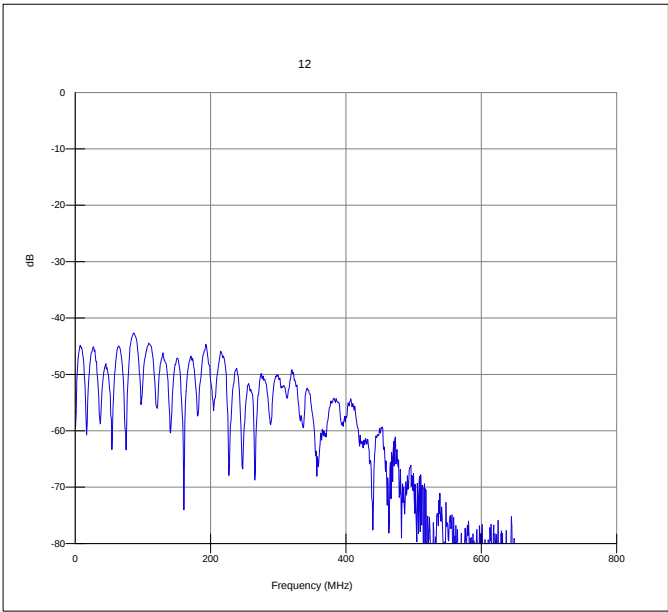
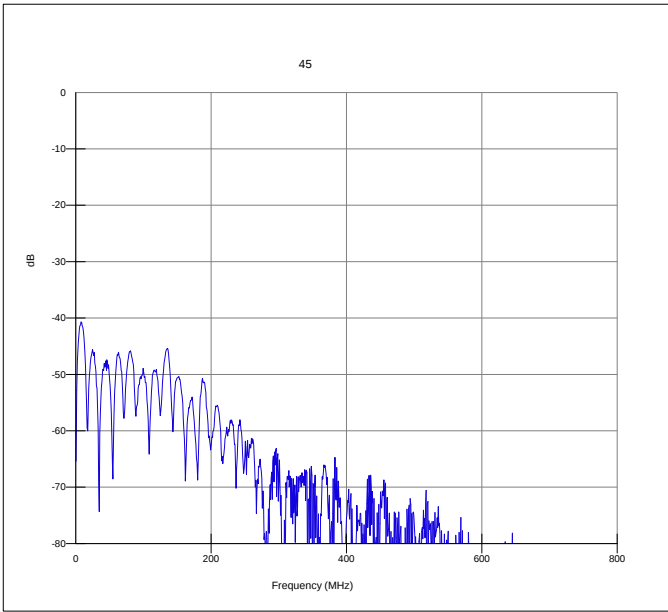
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





TCTL - Near End

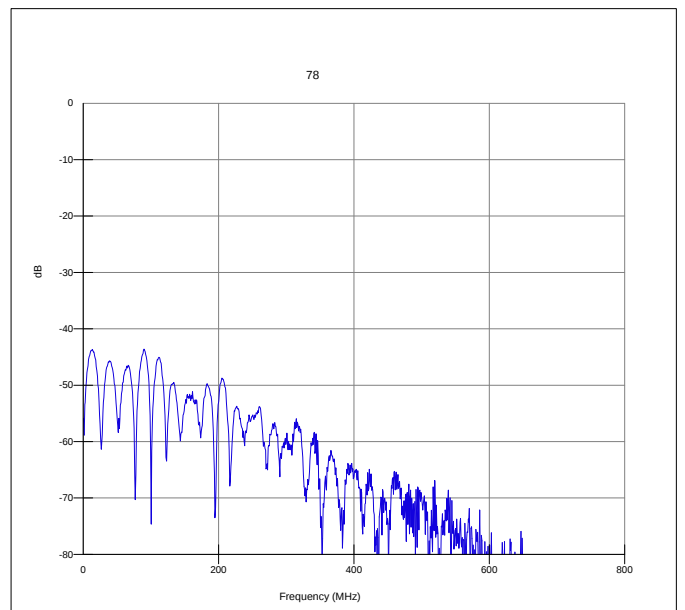
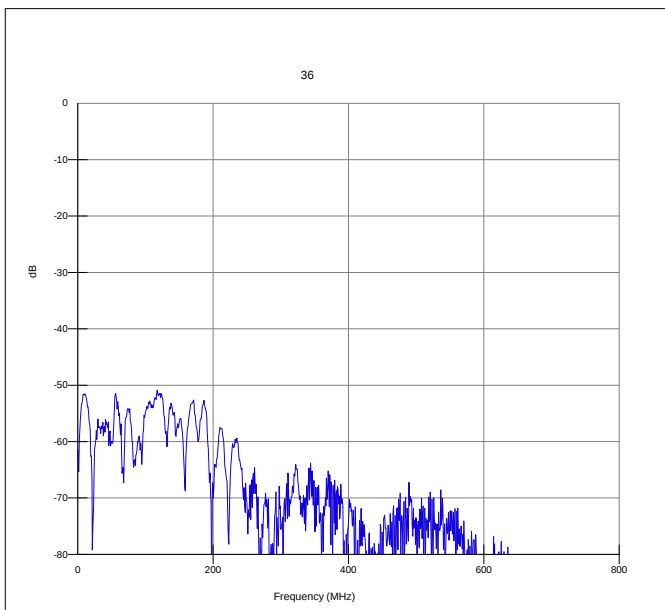
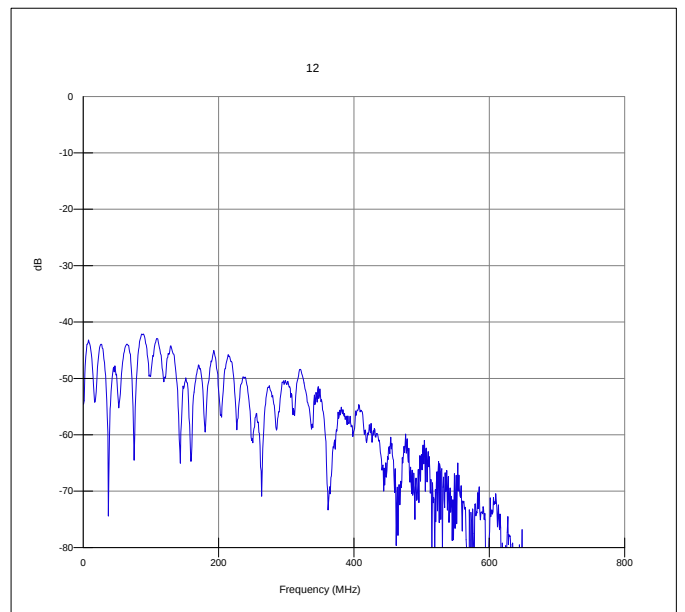
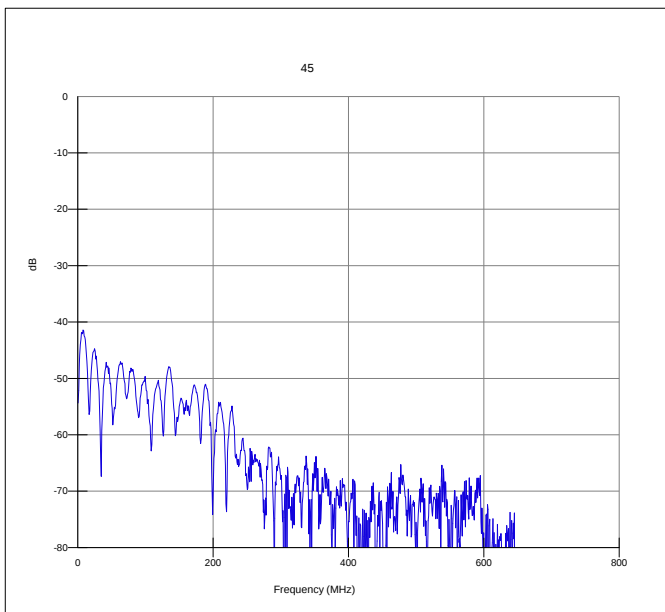
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





TCTL - Far End

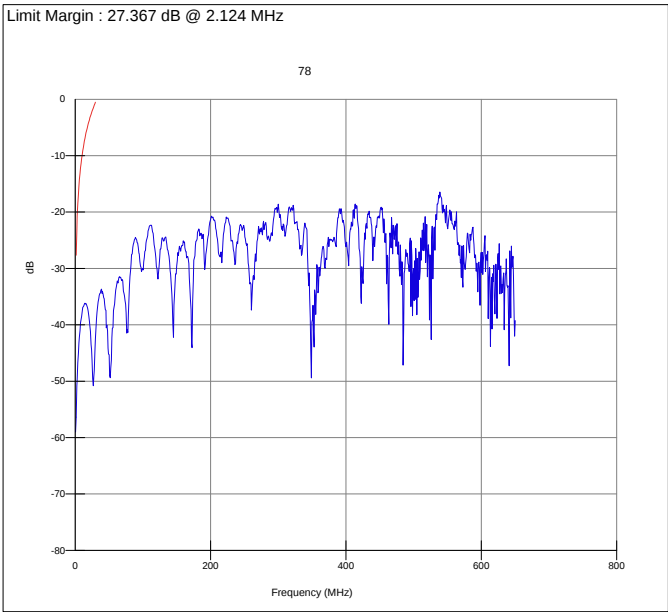
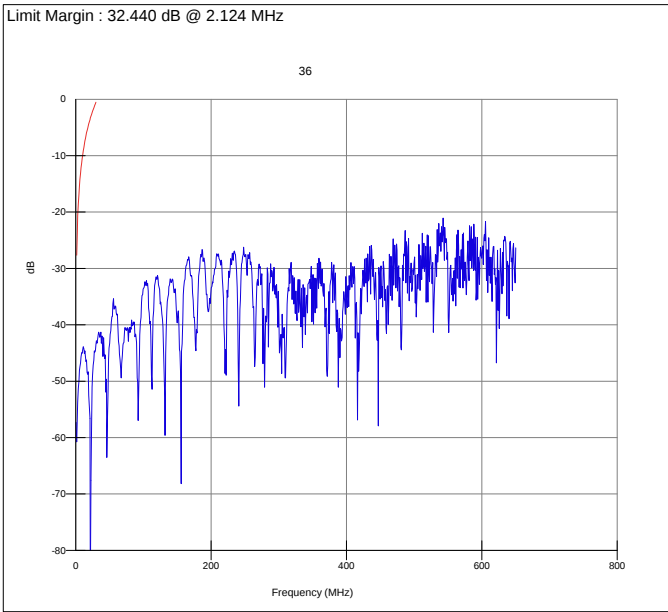
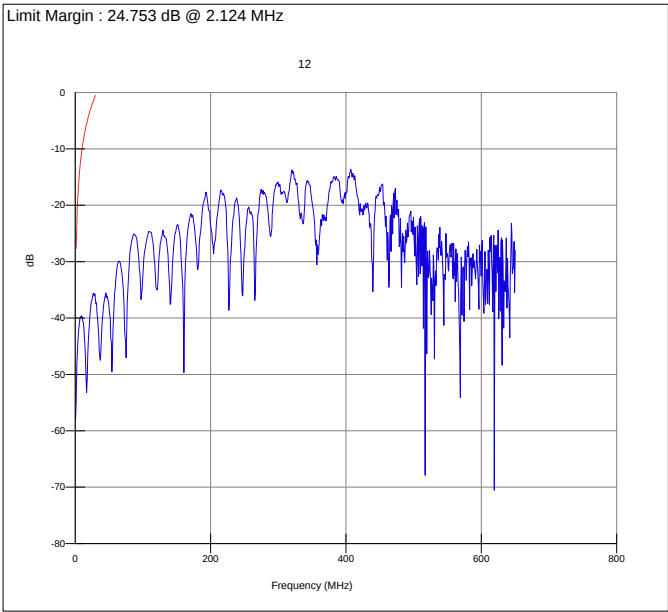
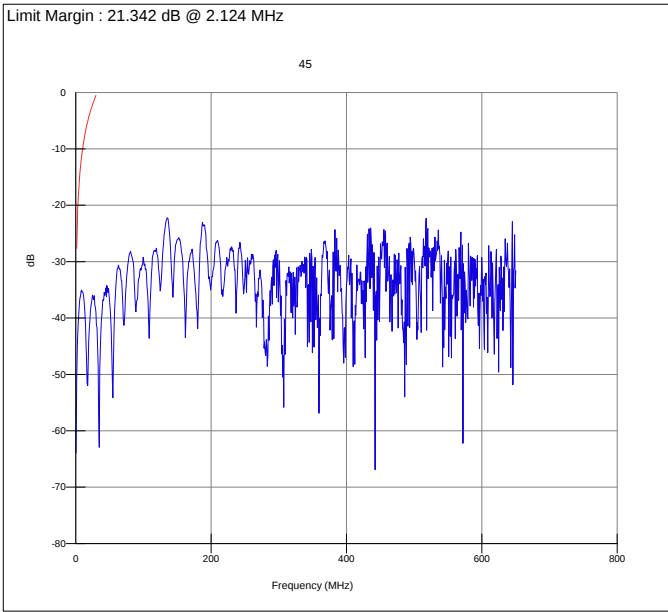
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





ELTCTL - Near End

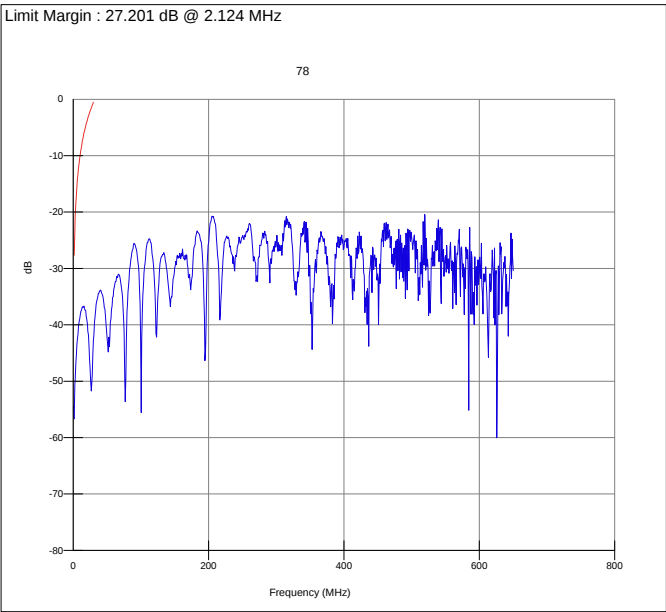
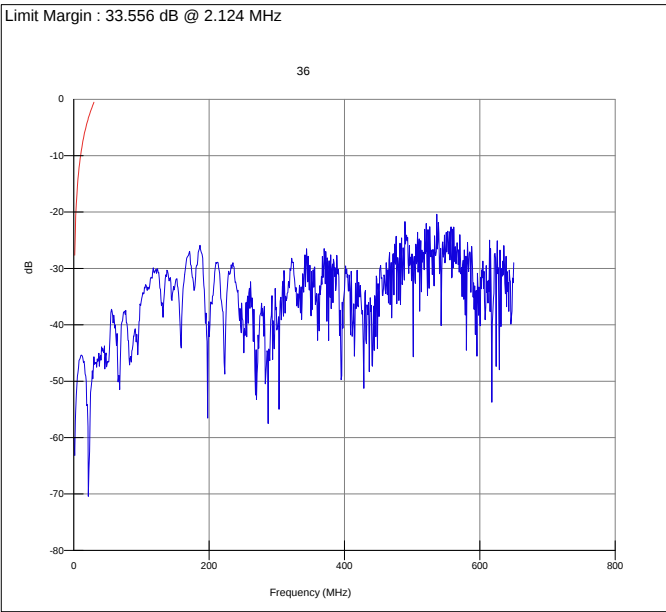
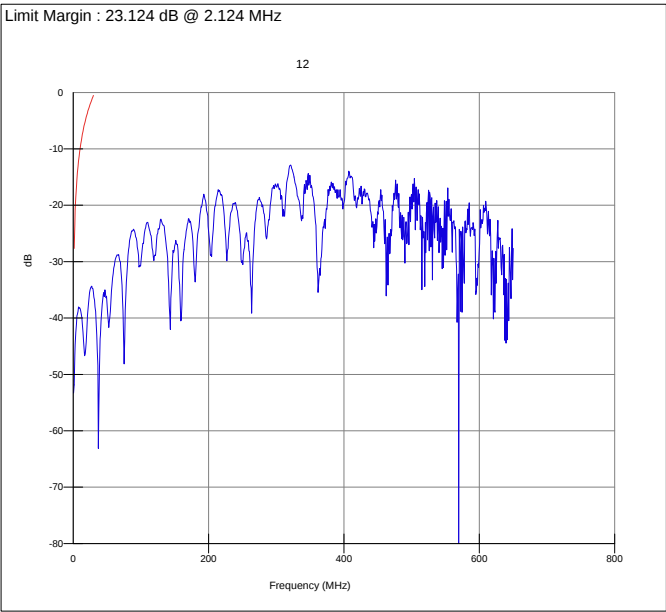
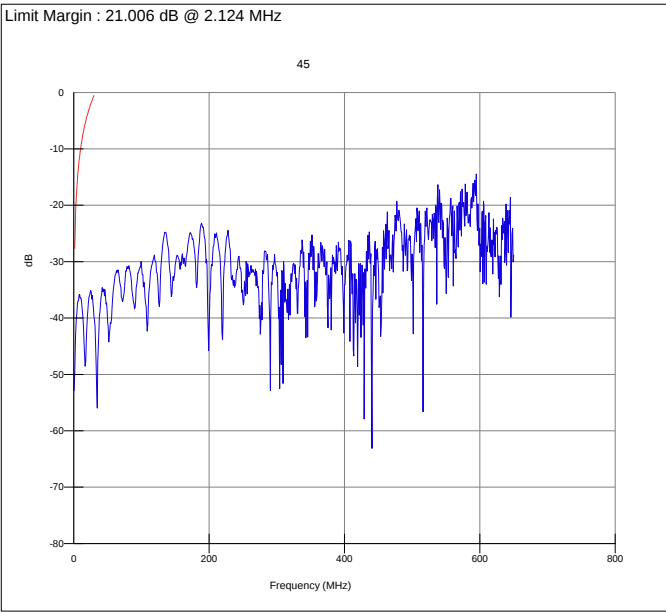
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





ELTCTL - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





Panduit Corporation

Test report number 103096770CRT-001
July 17, 2017

Appendix B

Alien crosstalk test results

This appendix contains 24 pages.



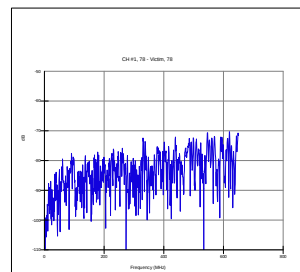
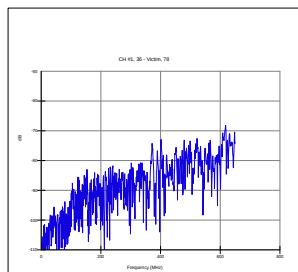
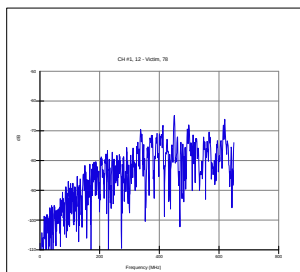
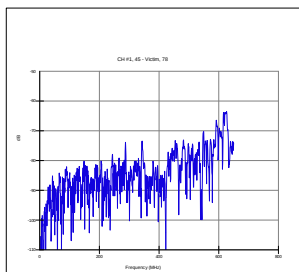
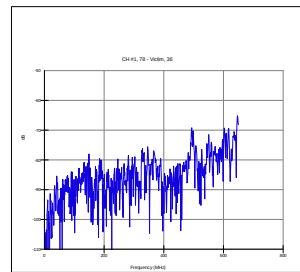
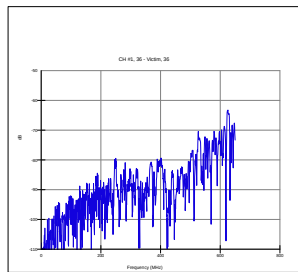
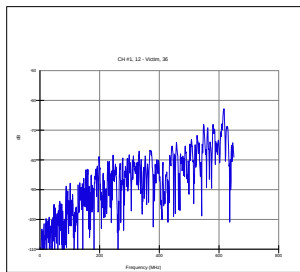
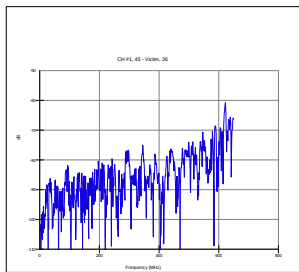
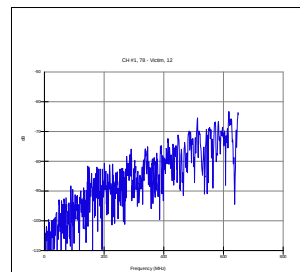
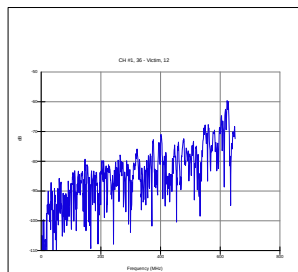
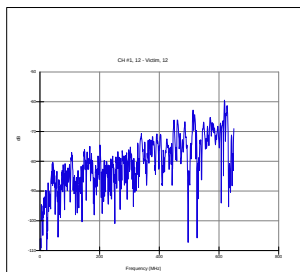
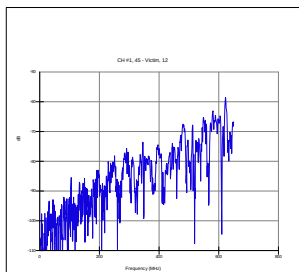
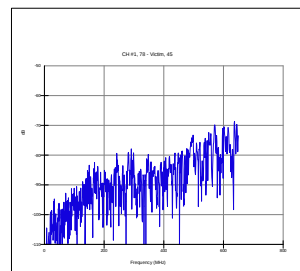
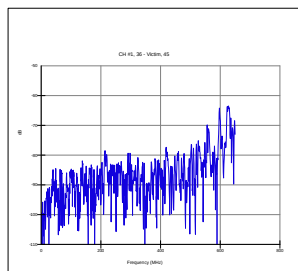
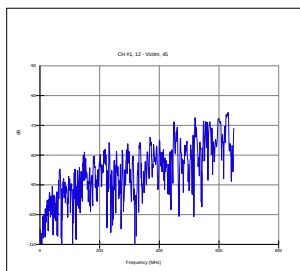
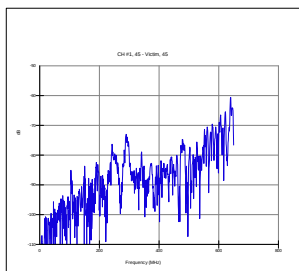
ANEXT - Near End

Client
Specification
Part No
Test Started
Description
Operator Name

Panduit
ANSI-TIA-568-C2 Cat 6A Channel
GenSPEED 10000
7/8/2017 10:22:16 AM
4 Connector Channel
David Ayers

Report No
Length(m)
Temperature
Appendix
Test Status

103096770CRT-001
100.
22 °C
B
Complies





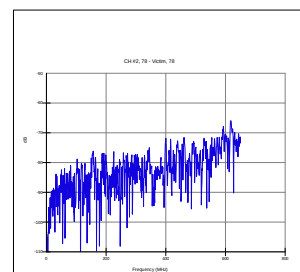
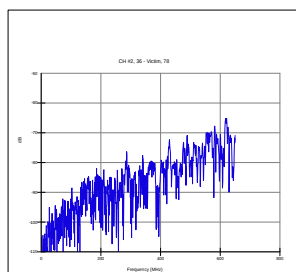
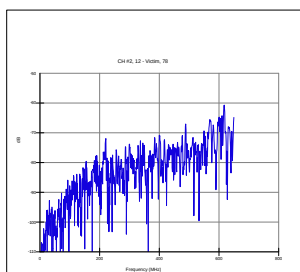
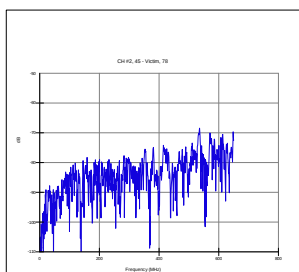
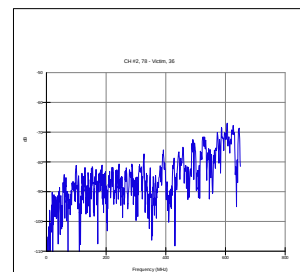
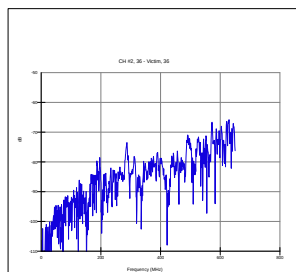
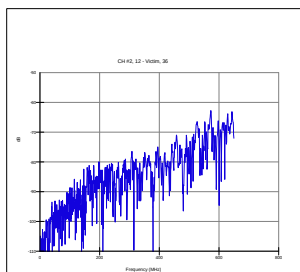
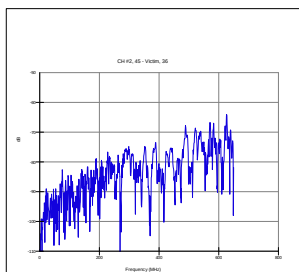
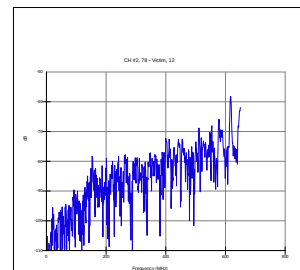
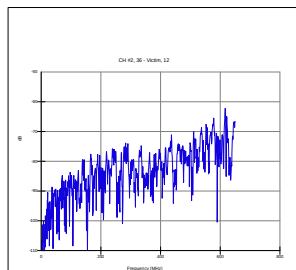
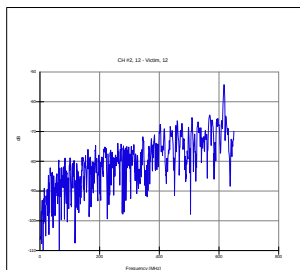
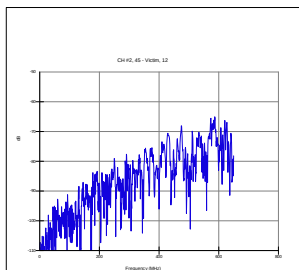
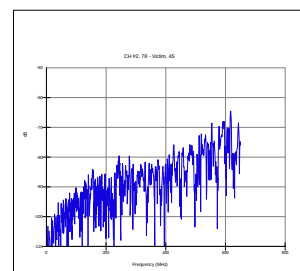
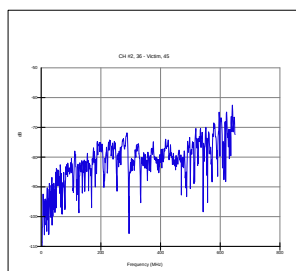
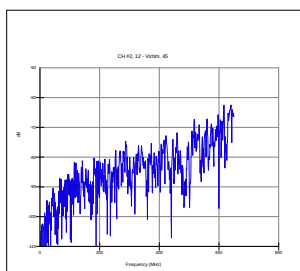
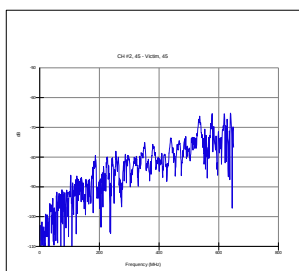
ANEXT - Near End

Client
Specification
Part No
Test Started
Description
Operator Name

Panduit
ANSI-TIA-568-C2 Cat 6A Channel
GenSPEED 10000
7/8/2017 10:22:16 AM
4 Connector Channel
David Ayers

Report No
Length(m)
Temperature
Appendix
Test Status

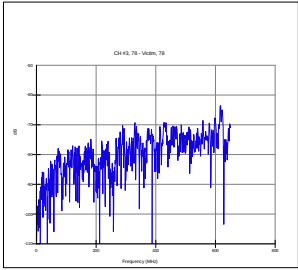
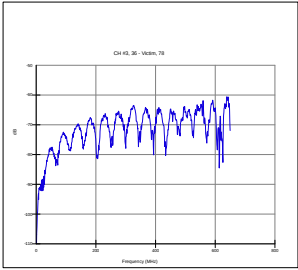
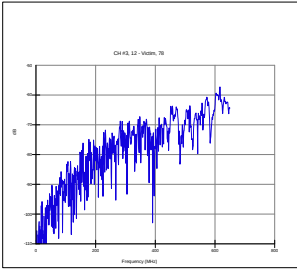
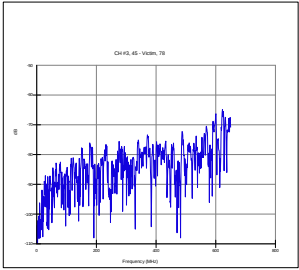
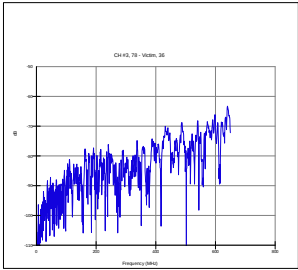
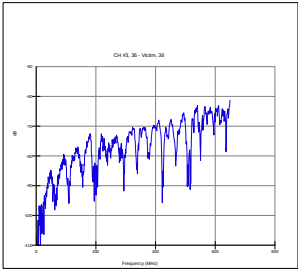
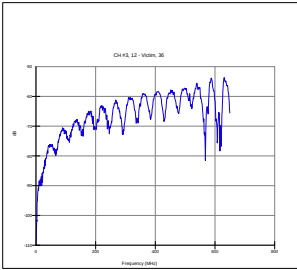
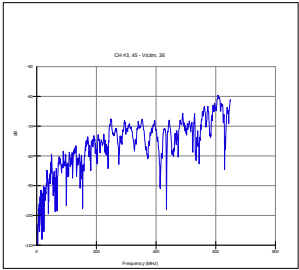
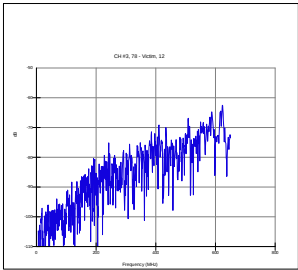
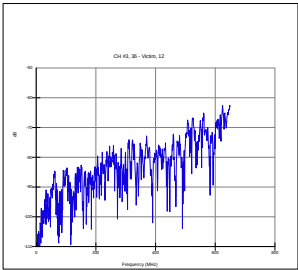
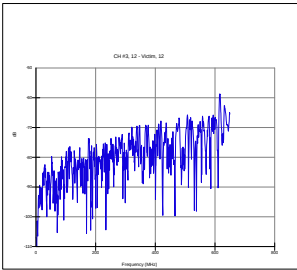
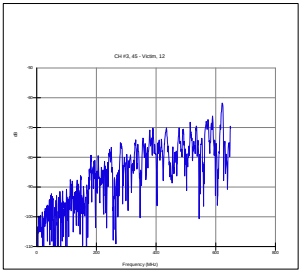
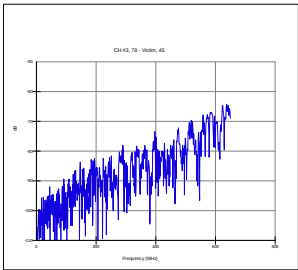
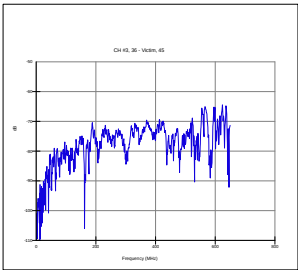
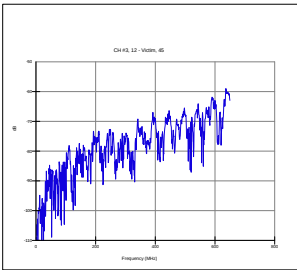
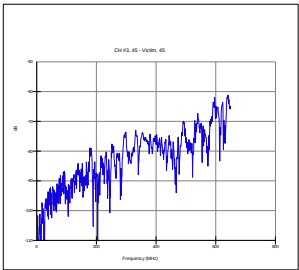
103096770CRT-001
100.
22 °C
B
Complies





ANEXT - Near End

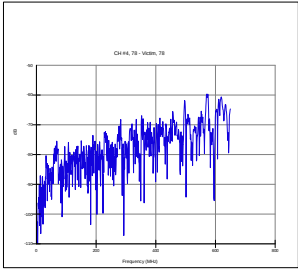
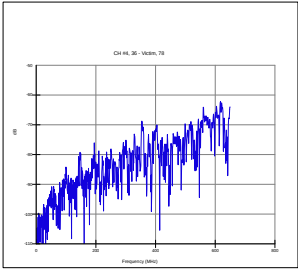
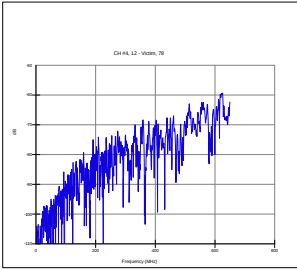
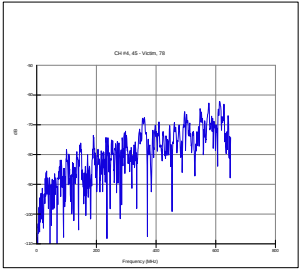
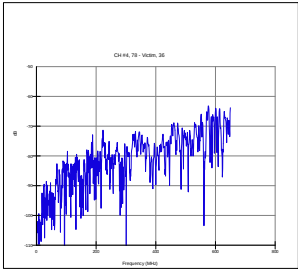
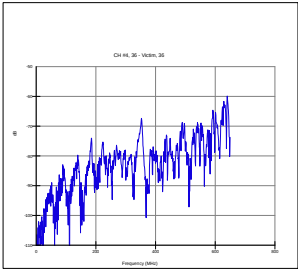
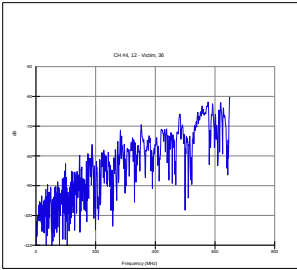
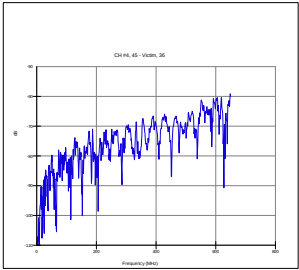
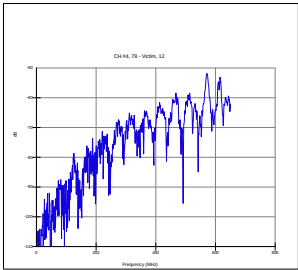
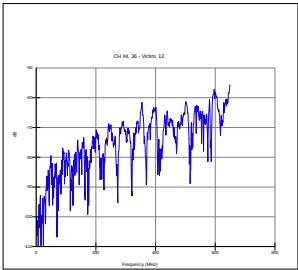
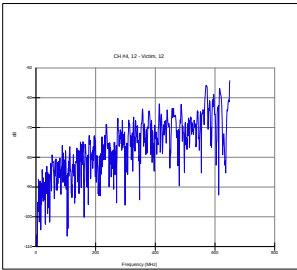
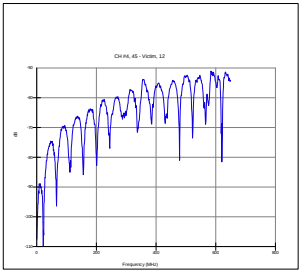
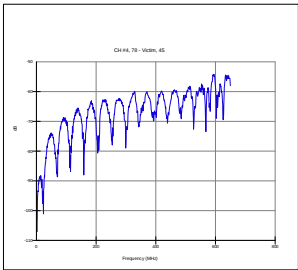
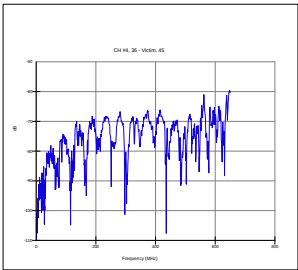
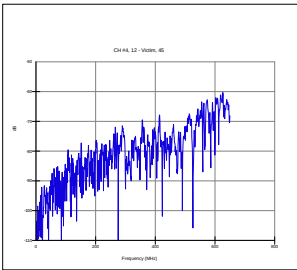
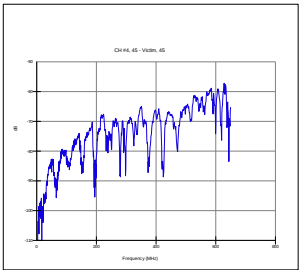
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

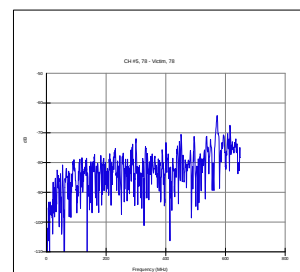
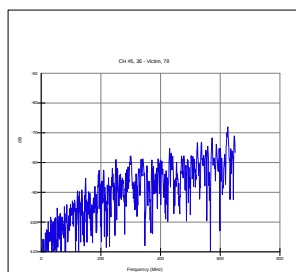
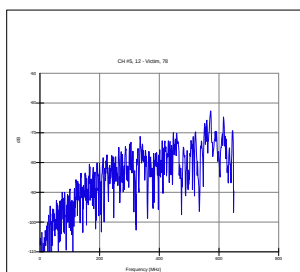
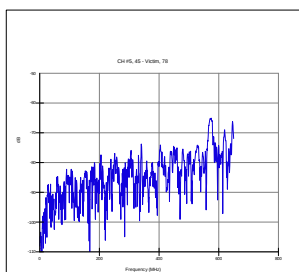
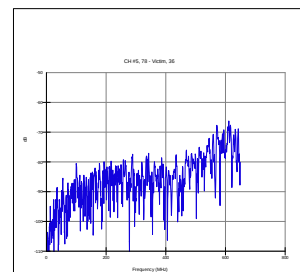
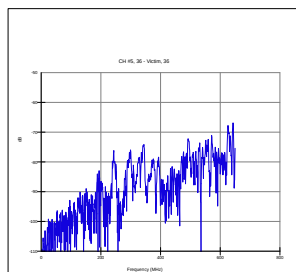
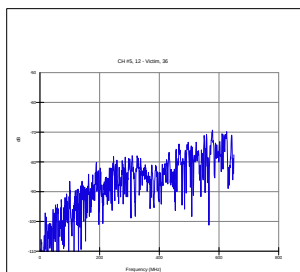
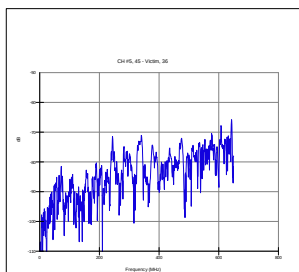
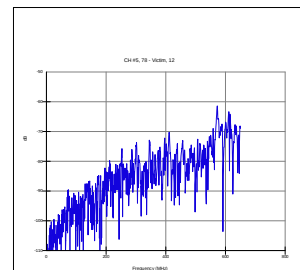
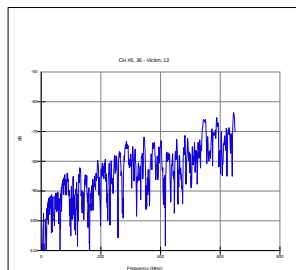
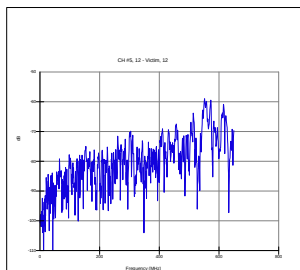
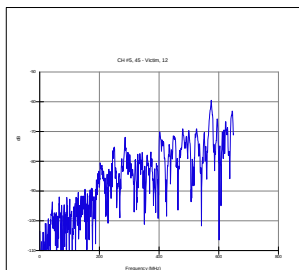
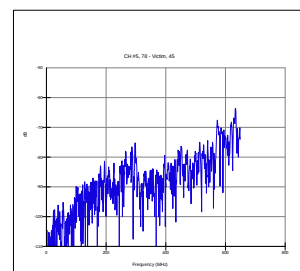
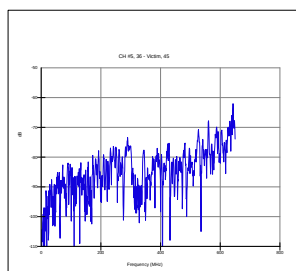
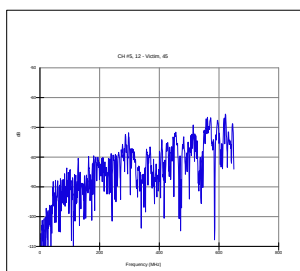
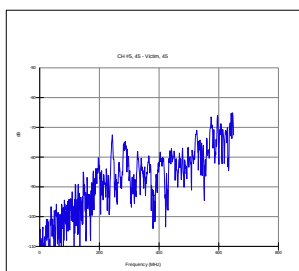
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

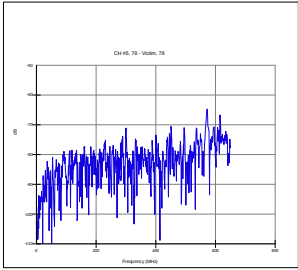
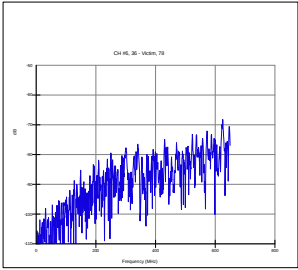
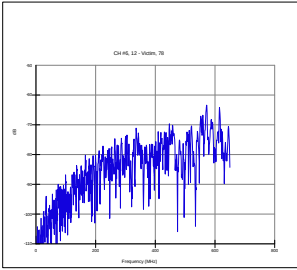
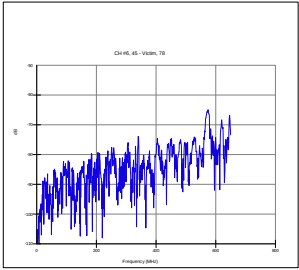
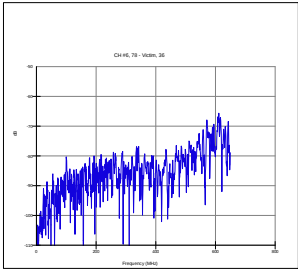
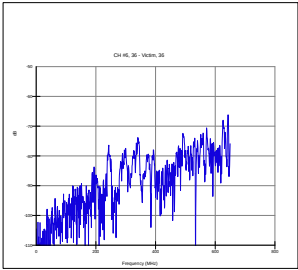
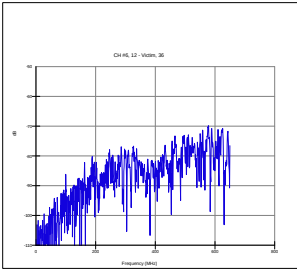
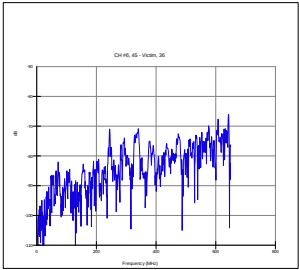
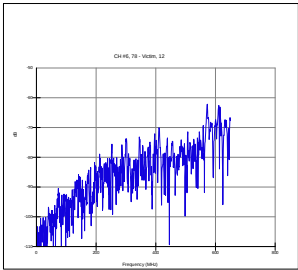
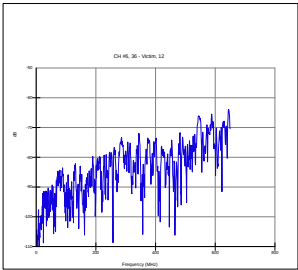
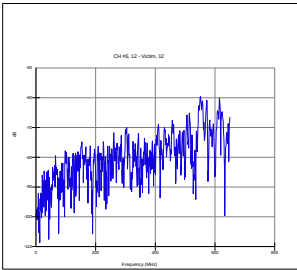
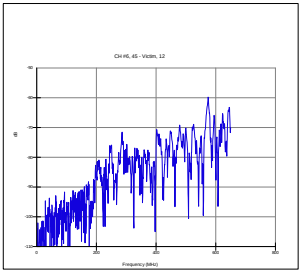
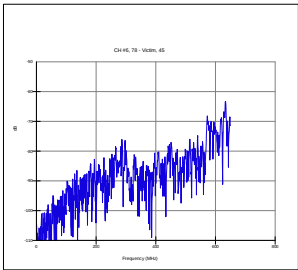
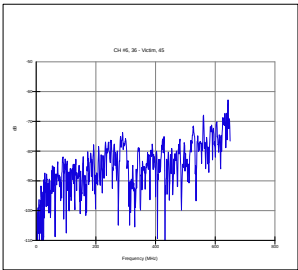
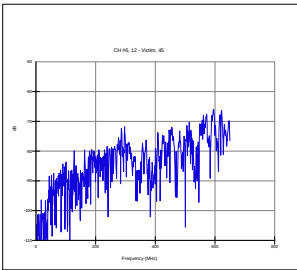
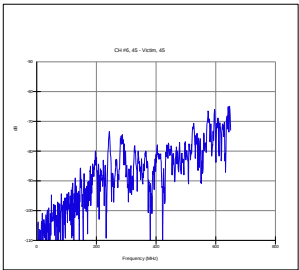
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

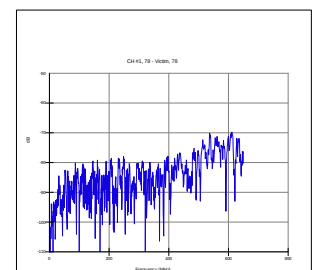
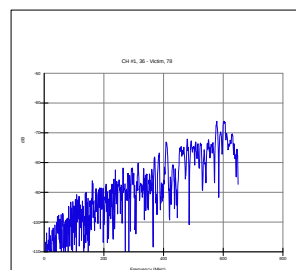
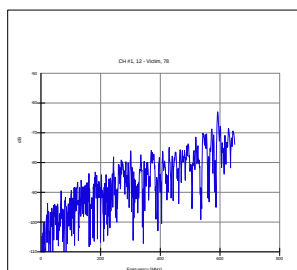
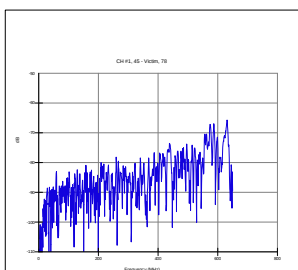
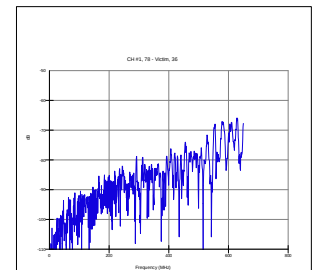
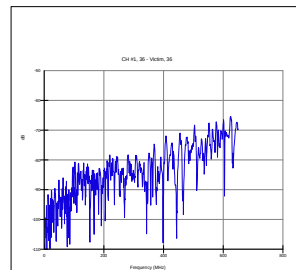
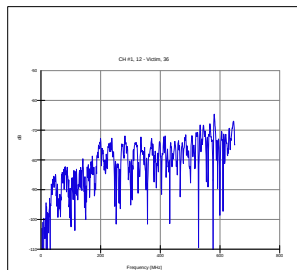
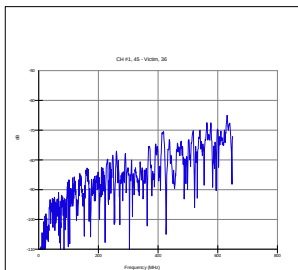
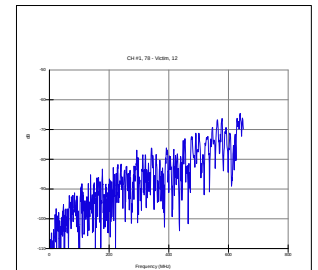
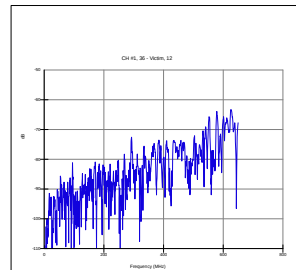
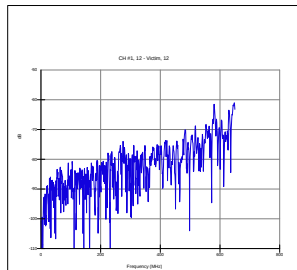
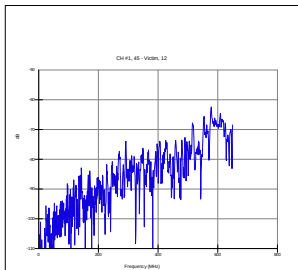
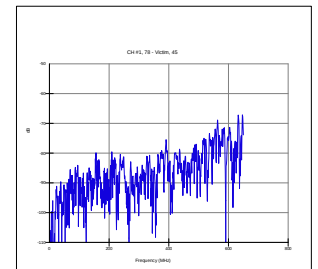
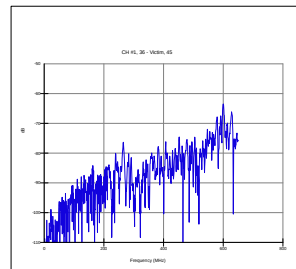
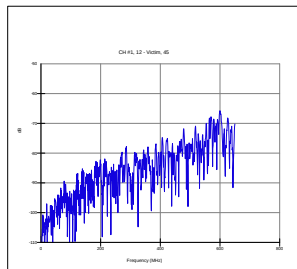
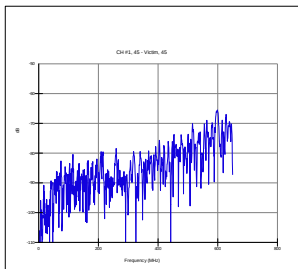
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

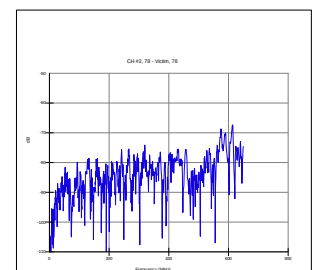
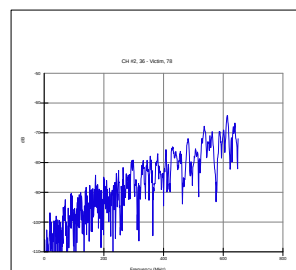
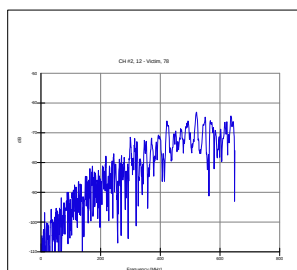
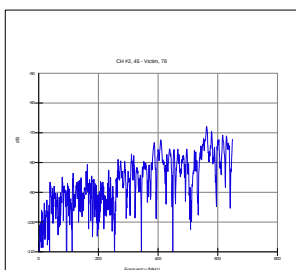
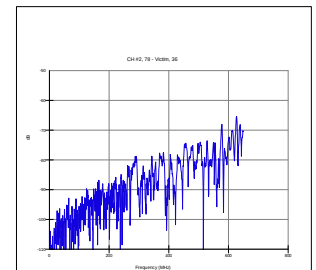
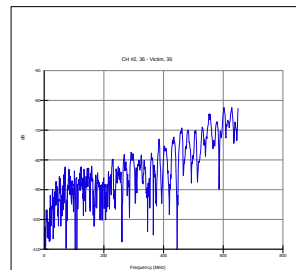
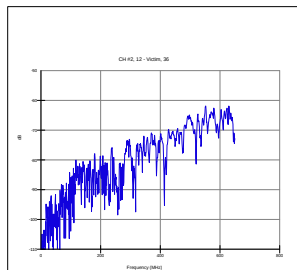
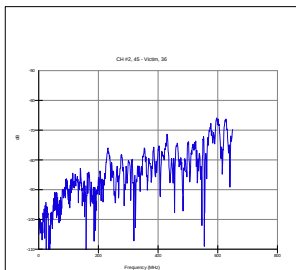
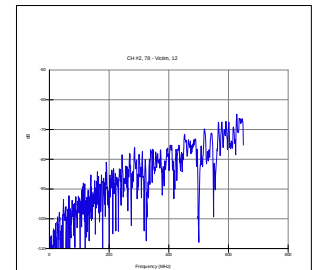
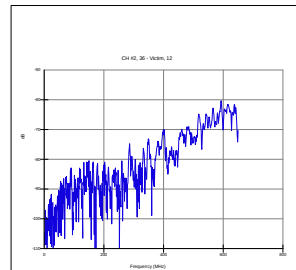
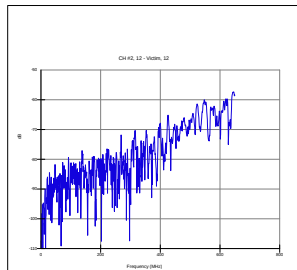
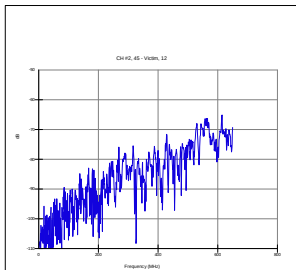
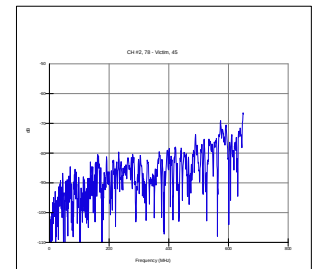
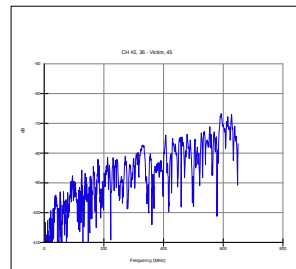
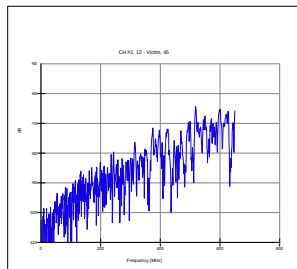
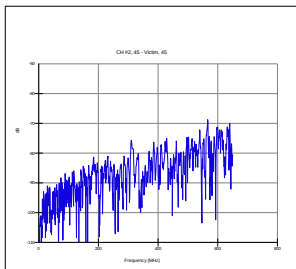
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

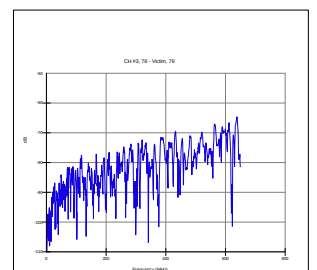
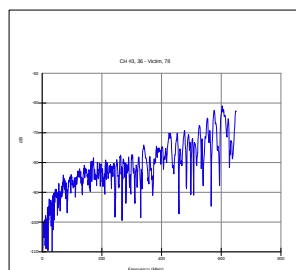
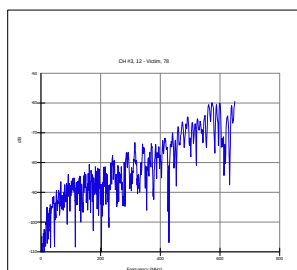
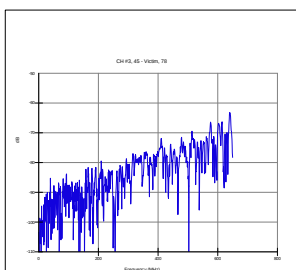
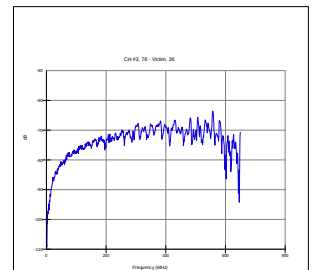
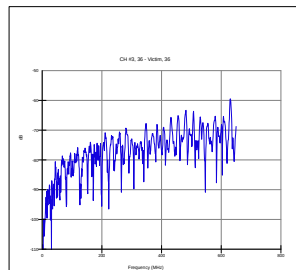
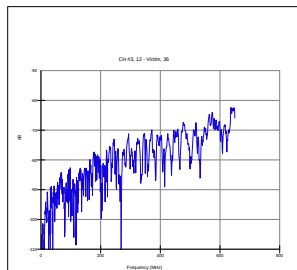
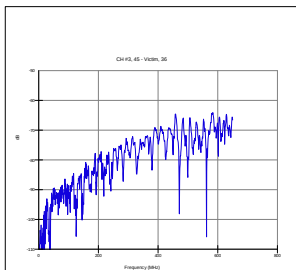
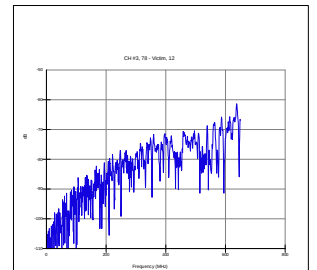
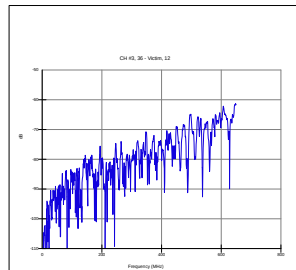
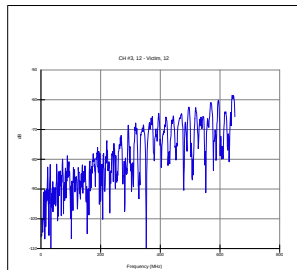
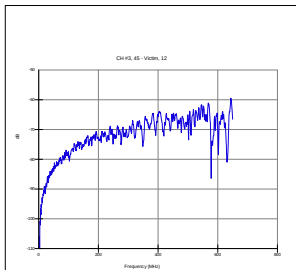
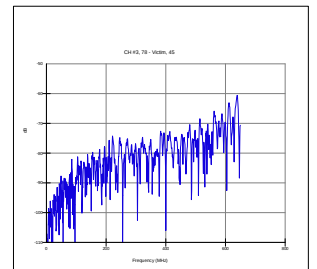
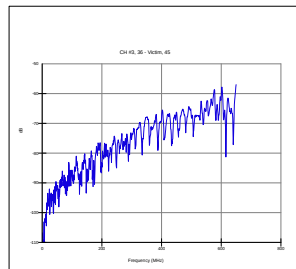
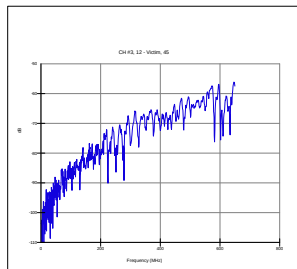
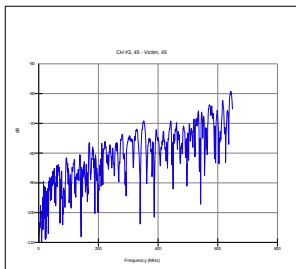
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

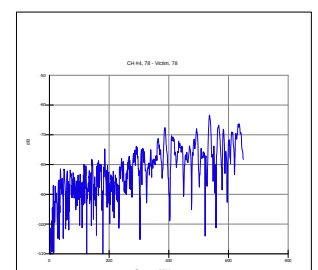
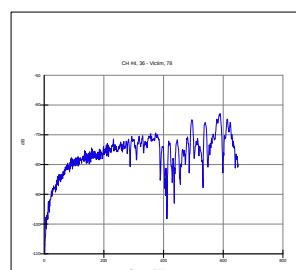
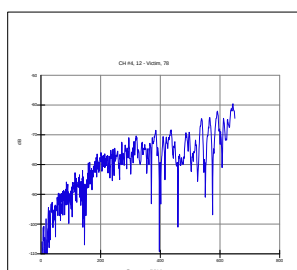
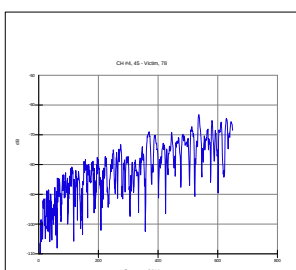
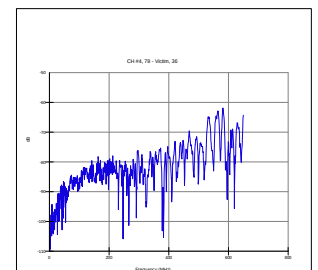
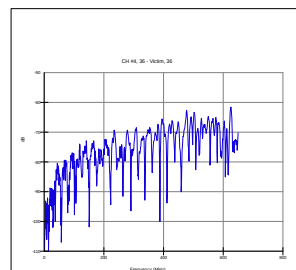
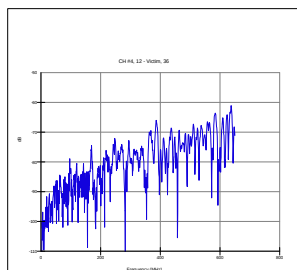
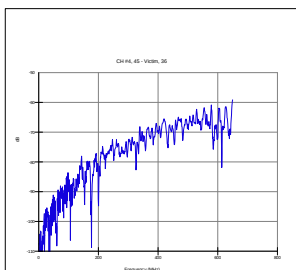
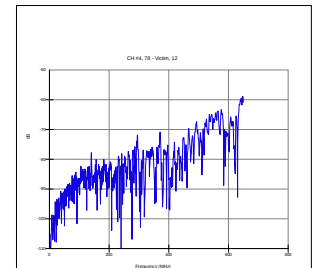
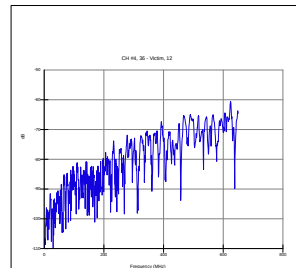
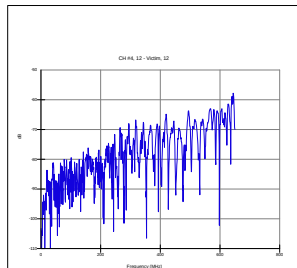
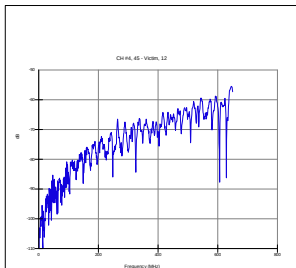
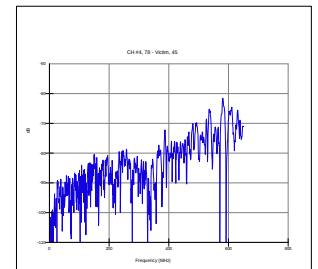
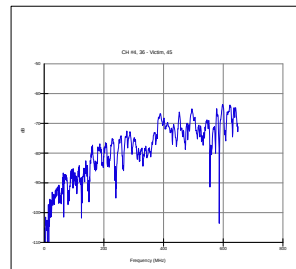
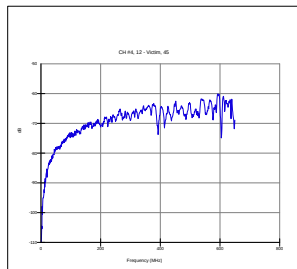
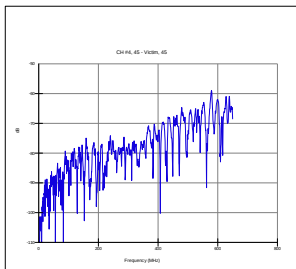
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

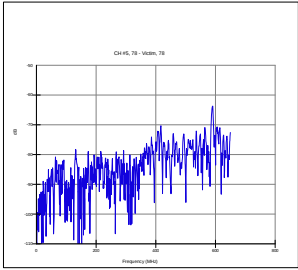
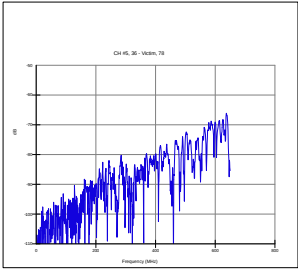
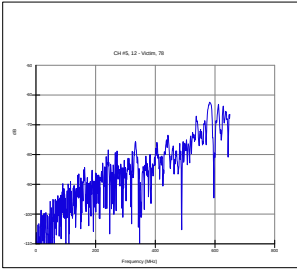
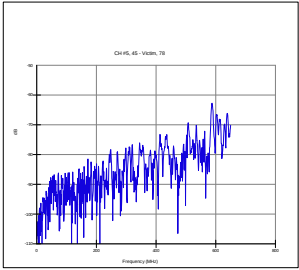
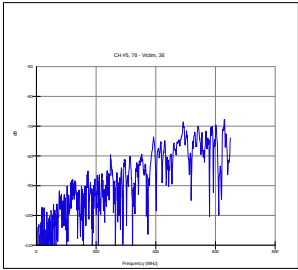
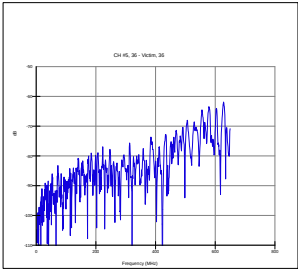
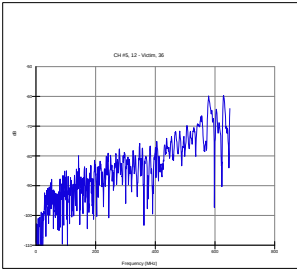
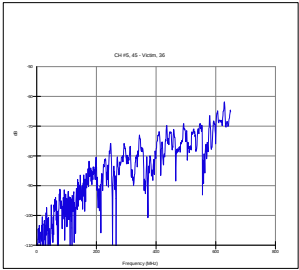
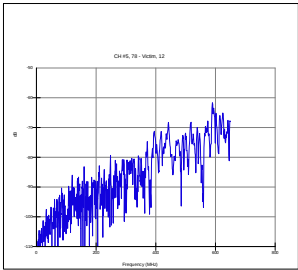
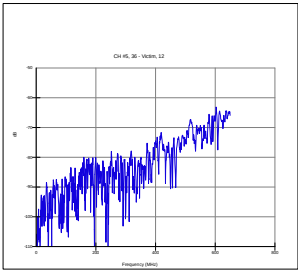
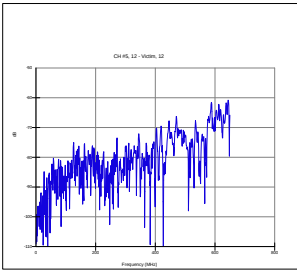
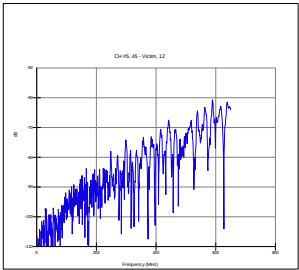
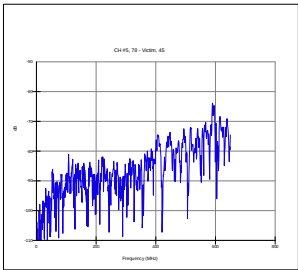
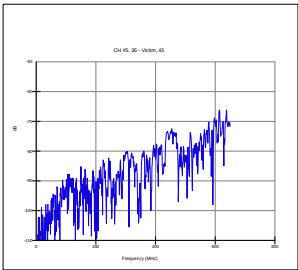
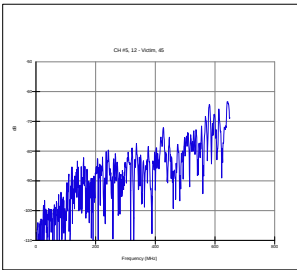
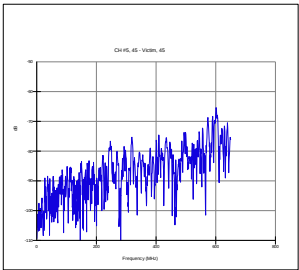
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

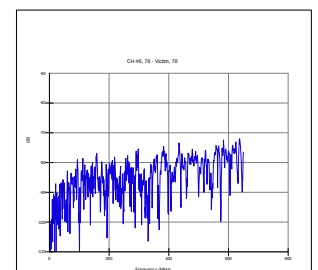
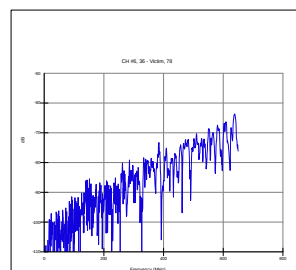
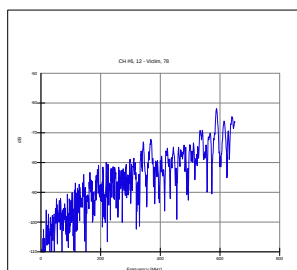
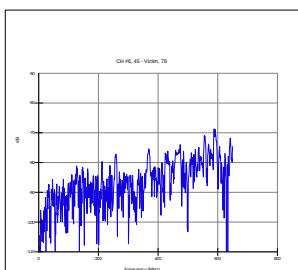
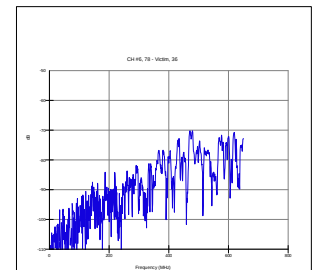
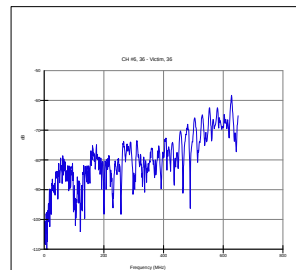
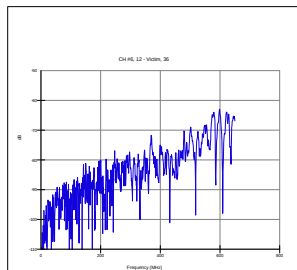
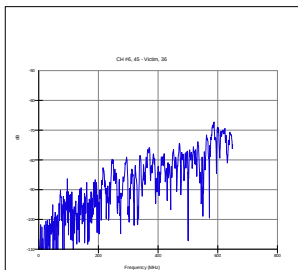
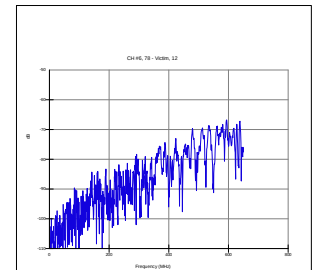
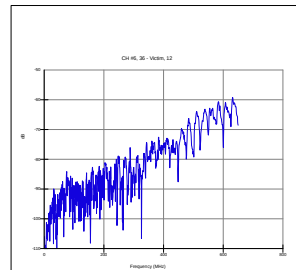
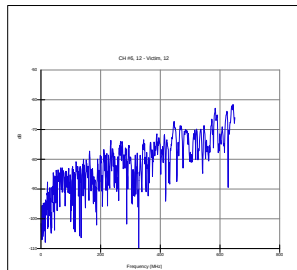
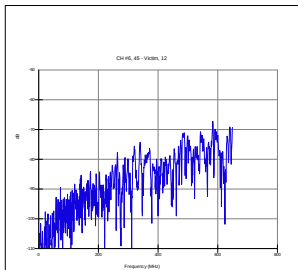
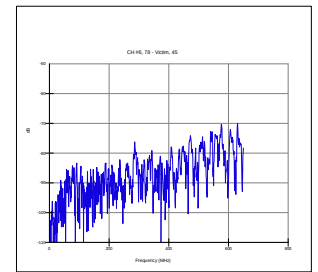
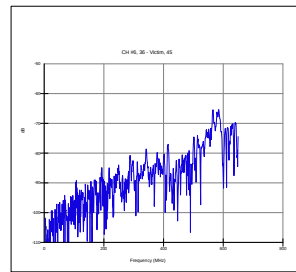
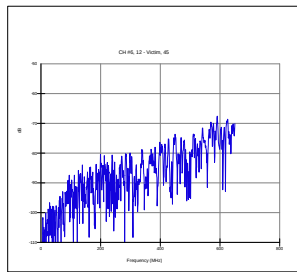
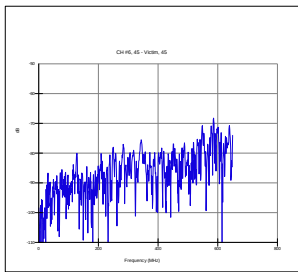
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

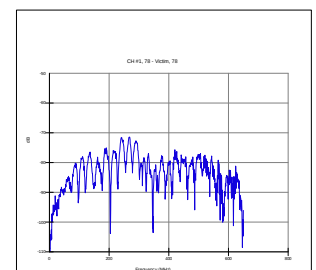
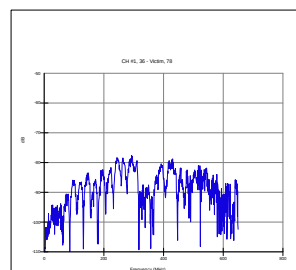
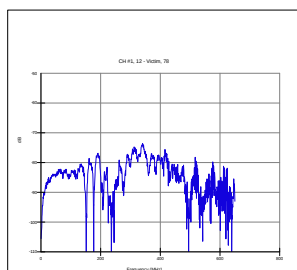
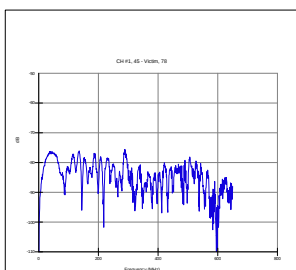
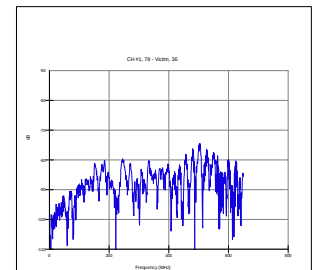
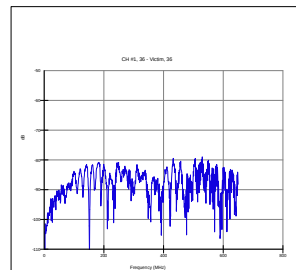
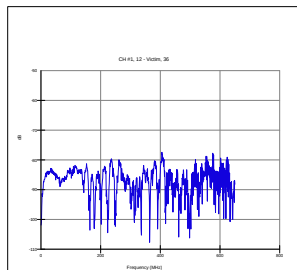
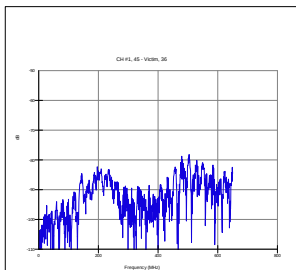
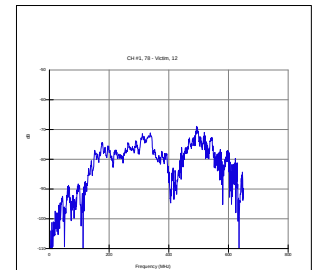
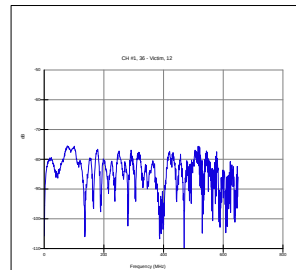
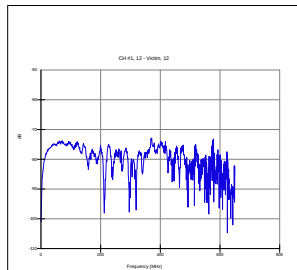
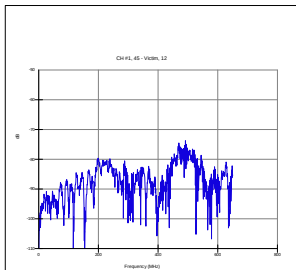
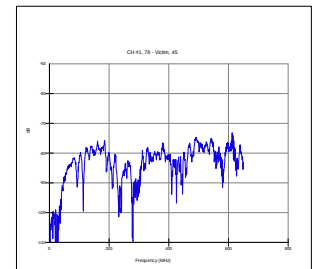
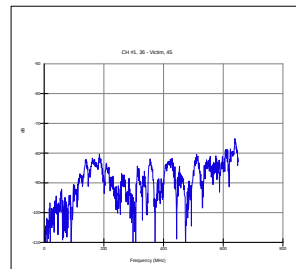
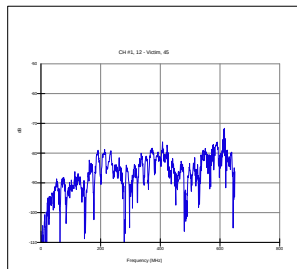
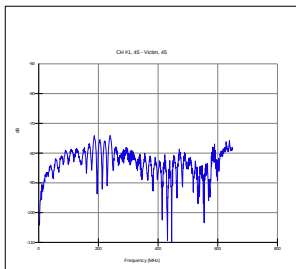
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

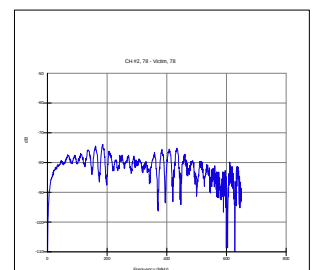
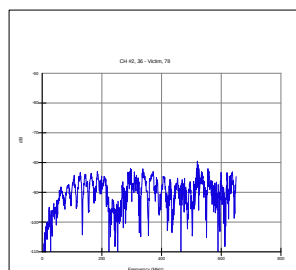
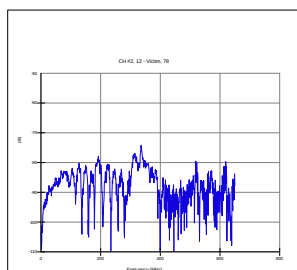
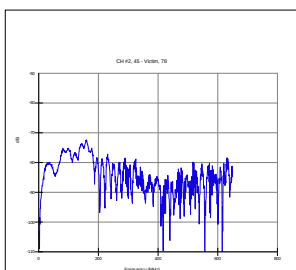
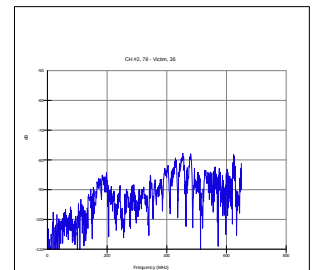
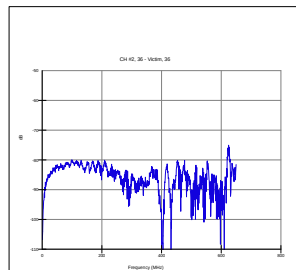
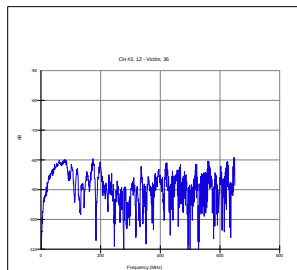
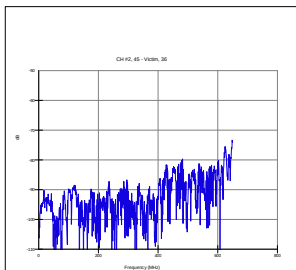
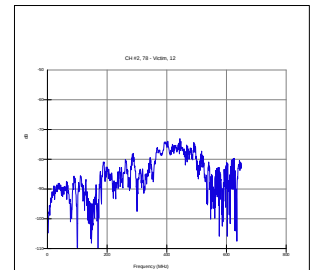
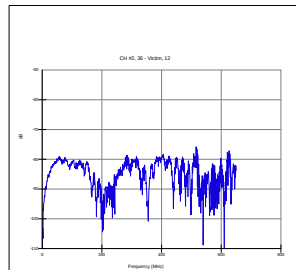
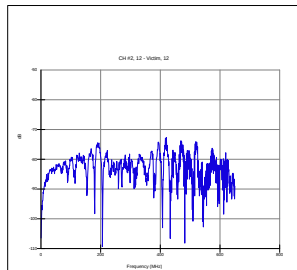
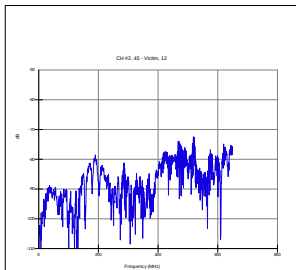
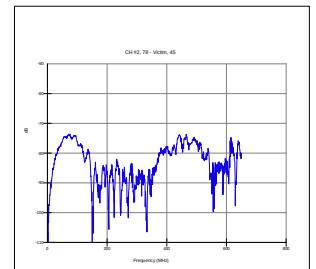
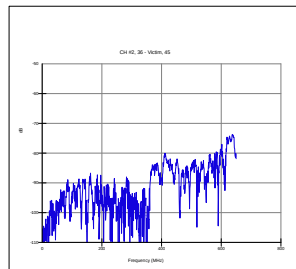
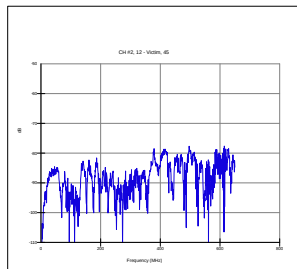
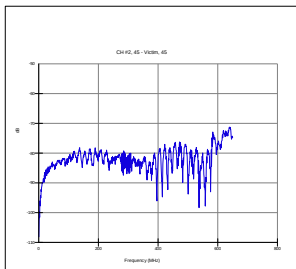
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

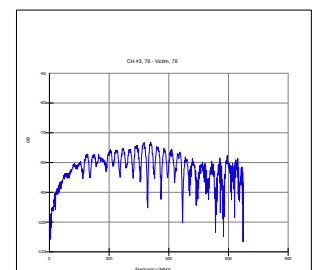
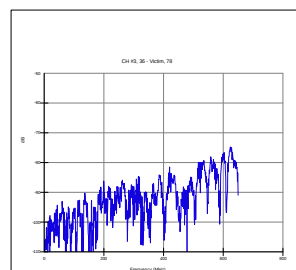
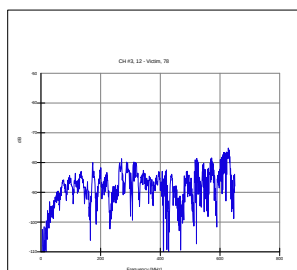
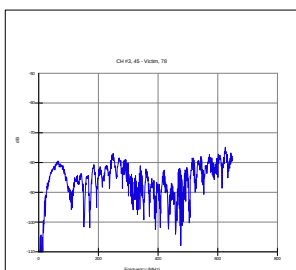
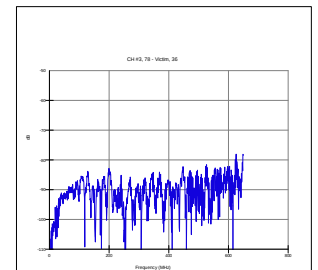
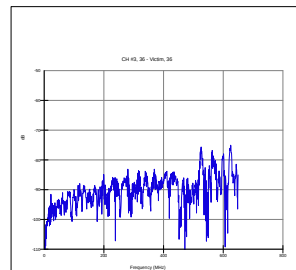
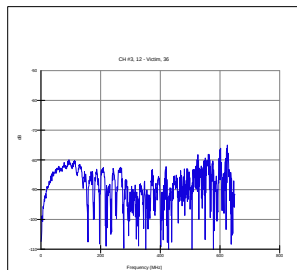
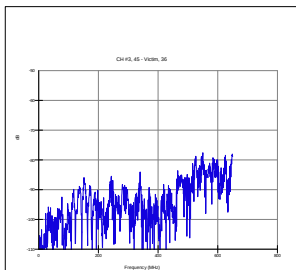
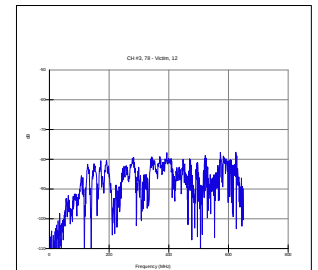
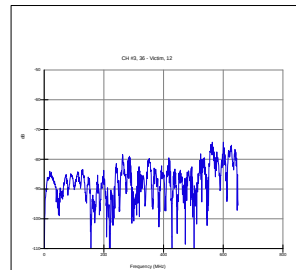
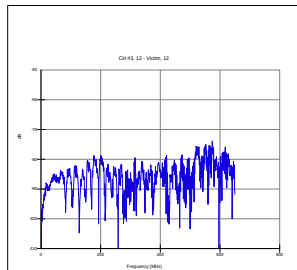
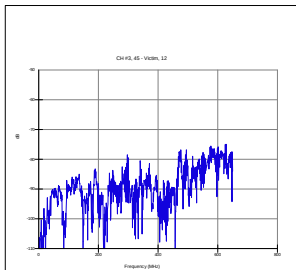
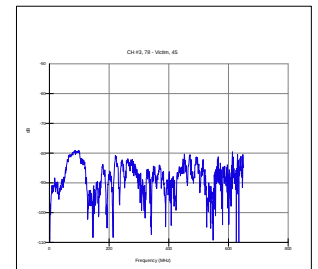
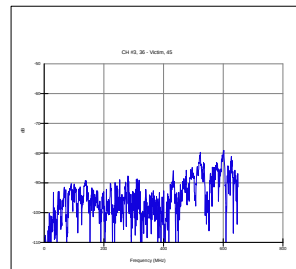
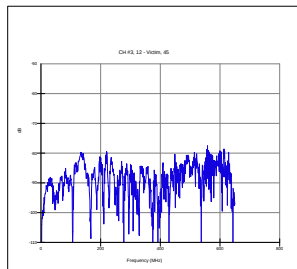
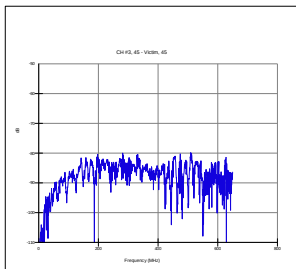
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

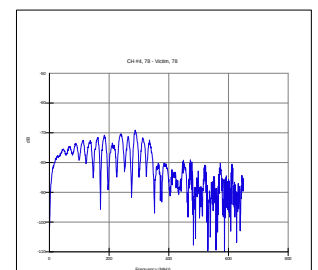
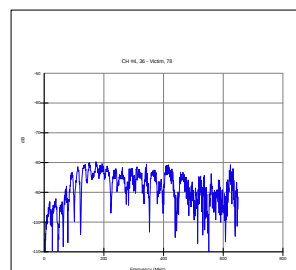
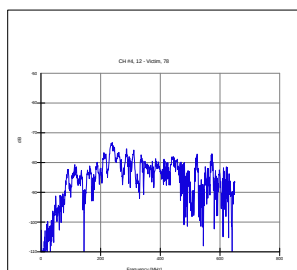
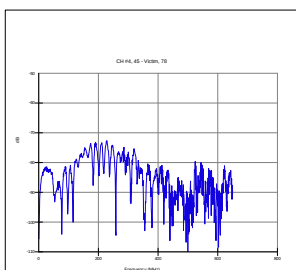
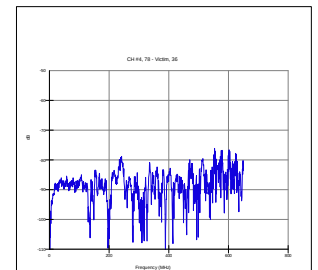
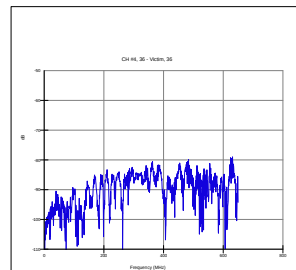
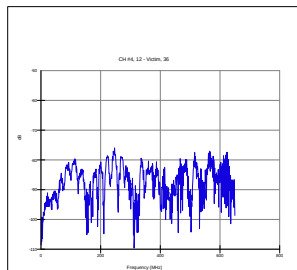
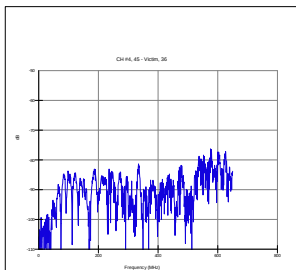
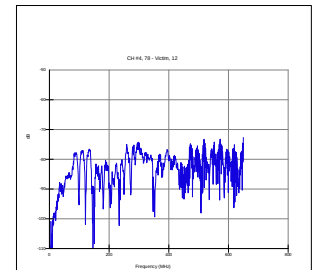
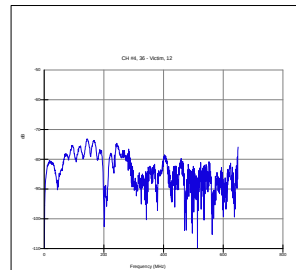
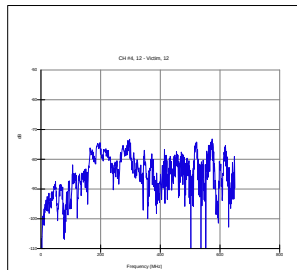
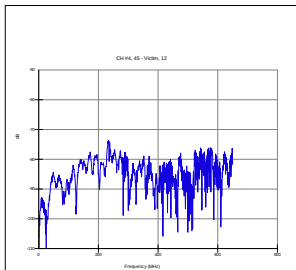
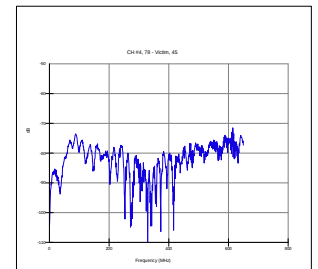
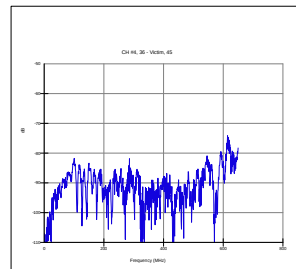
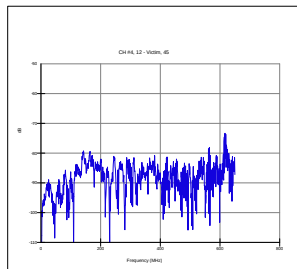
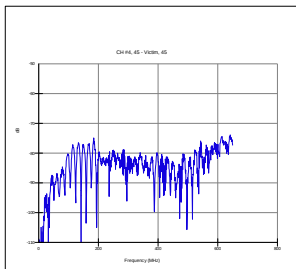
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

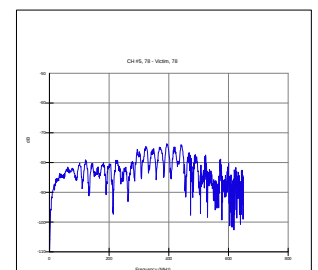
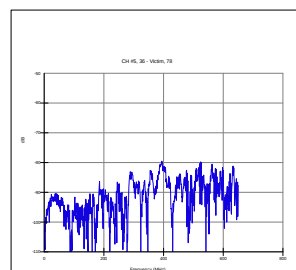
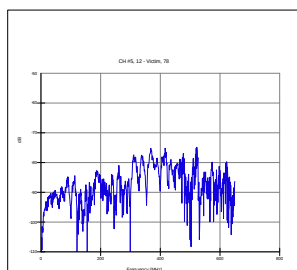
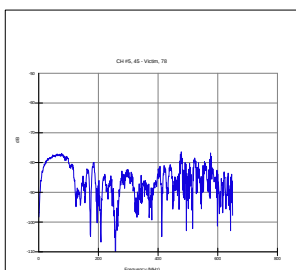
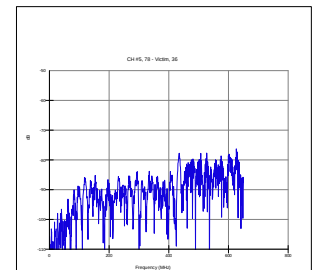
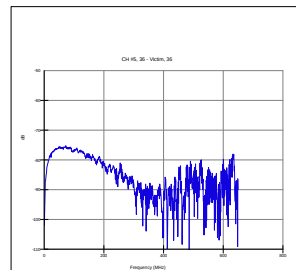
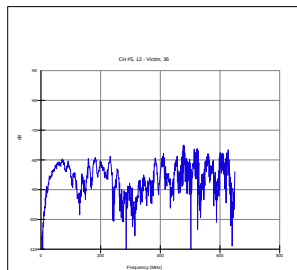
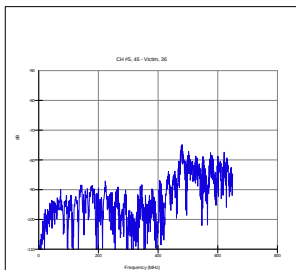
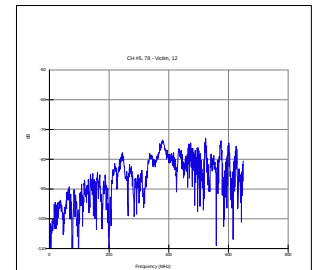
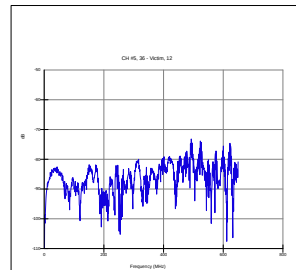
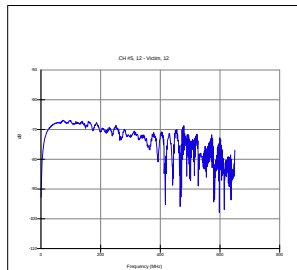
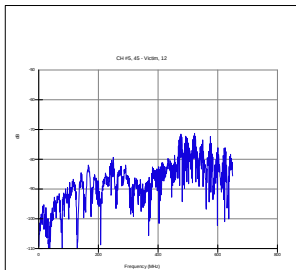
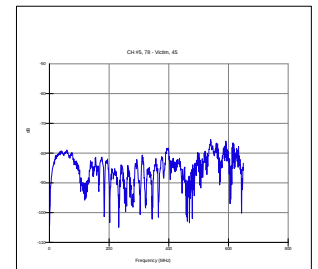
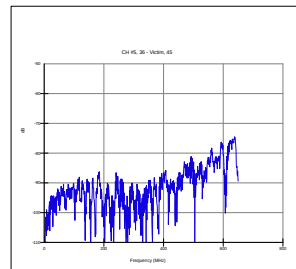
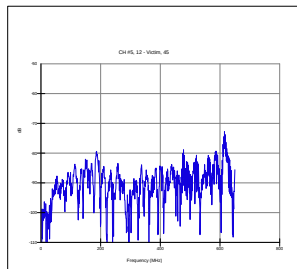
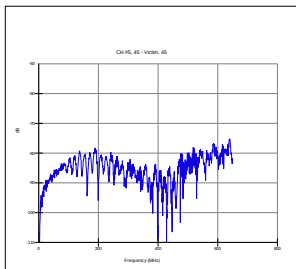
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

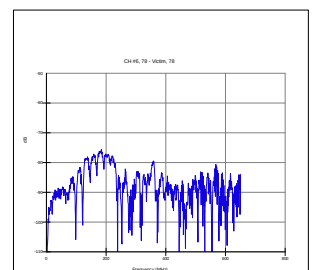
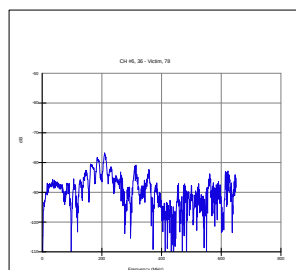
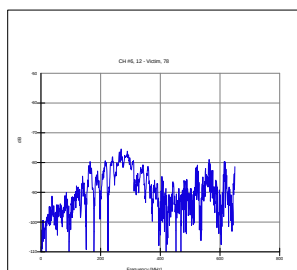
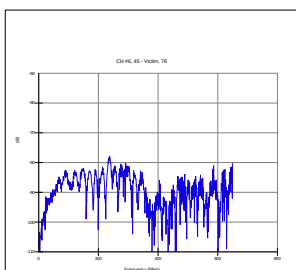
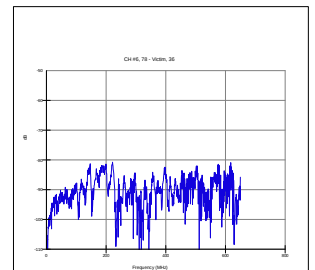
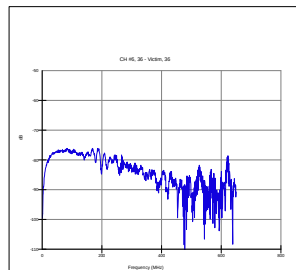
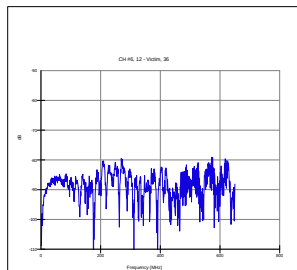
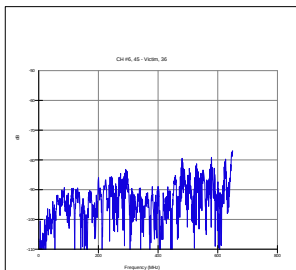
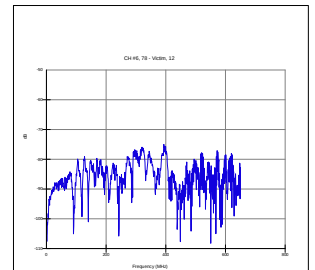
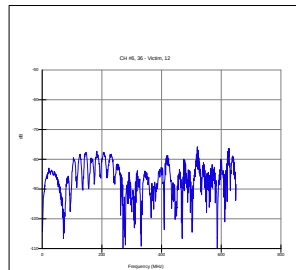
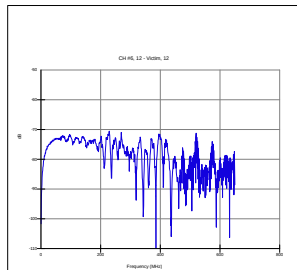
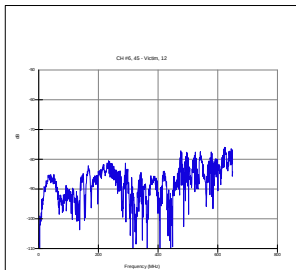
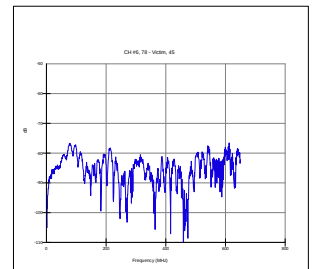
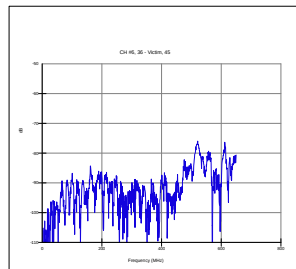
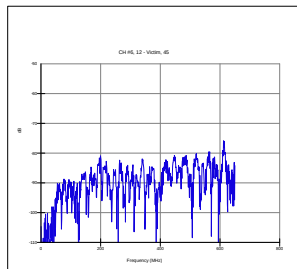
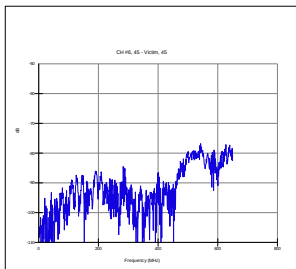
Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

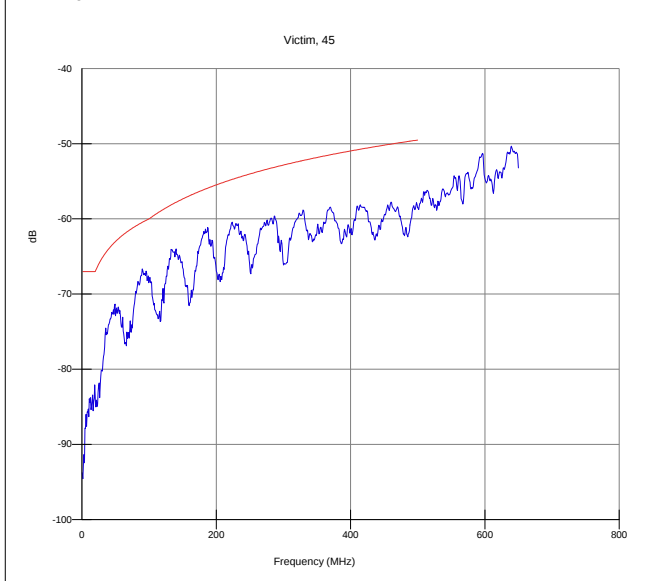




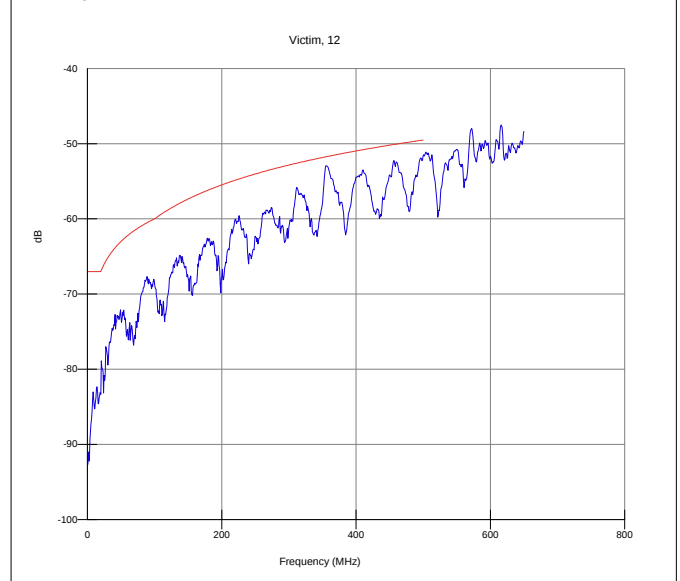
PSANEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

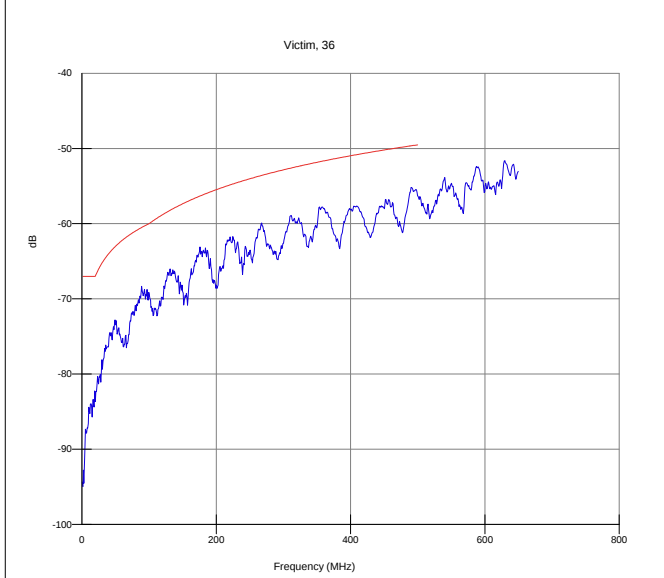
Limit Margin : 5.213 dB @ 187.231 MHz



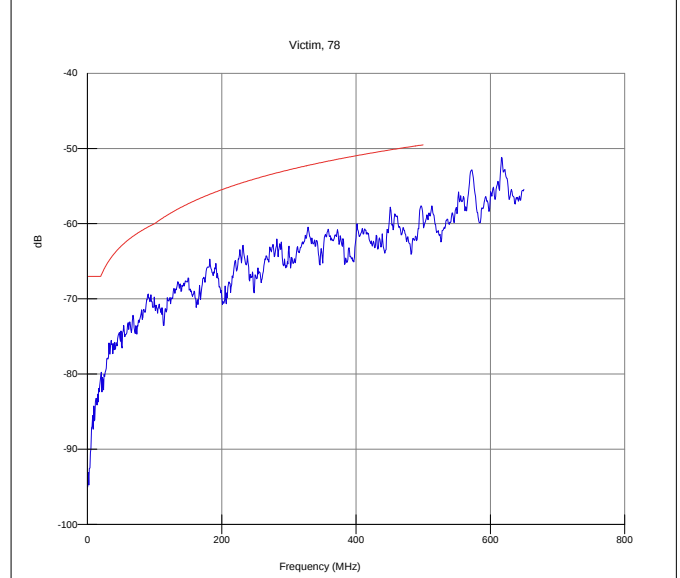
Limit Margin : 1.175 dB @ 355.289 MHz



Limit Margin : 5.538 dB @ 490.061 MHz



Limit Margin : 7.605 dB @ 451.091 MHz

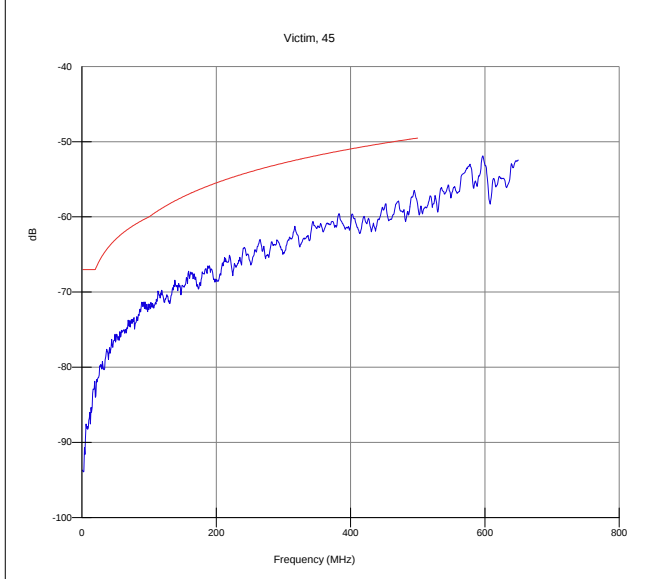




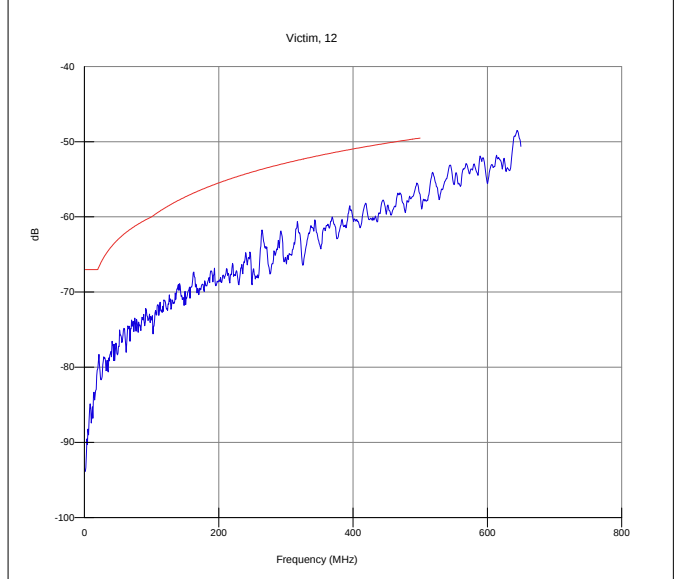
PSANEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

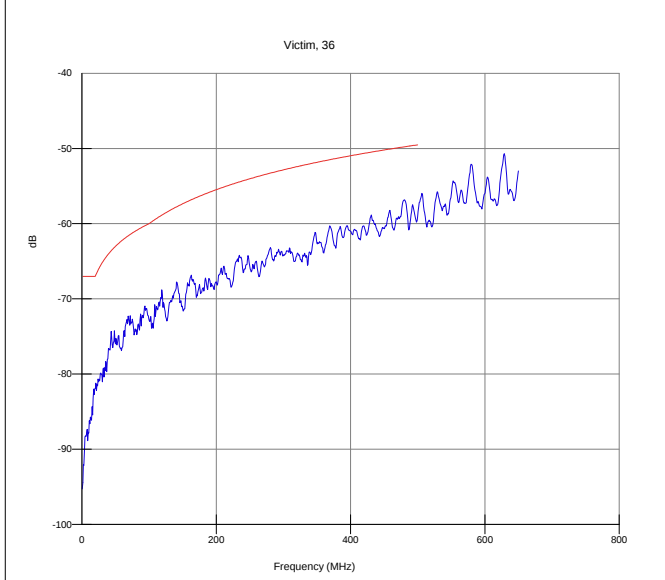
Limit Margin : 6.899 dB @ 494.932 MHz



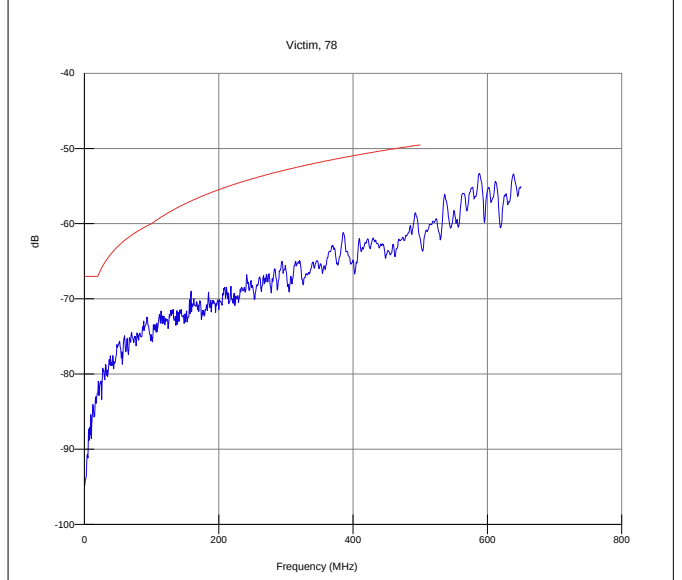
Limit Margin : 5.921 dB @ 494.932 MHz



Limit Margin : 7.045 dB @ 480.318 MHz



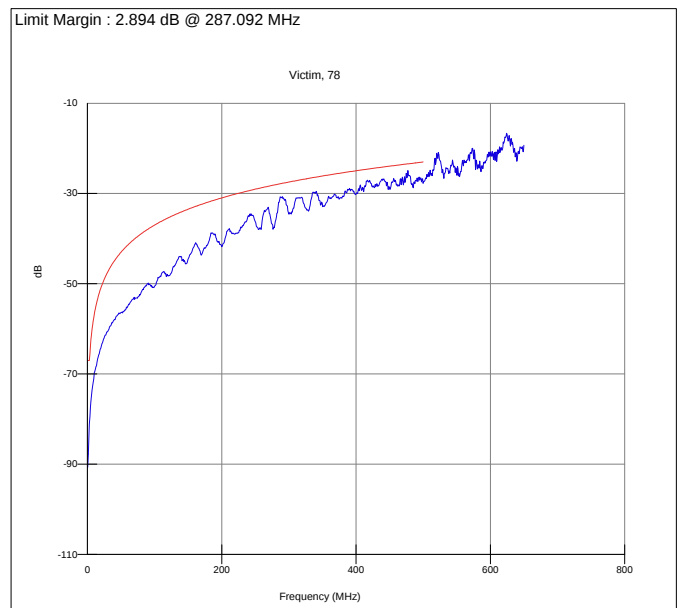
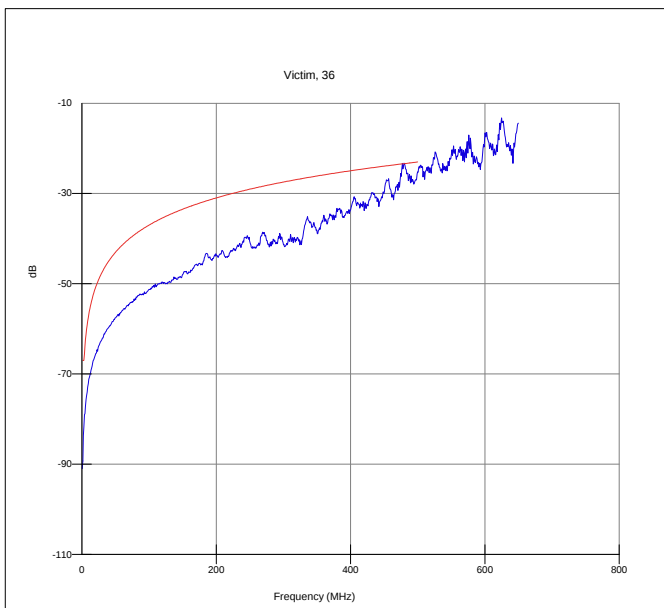
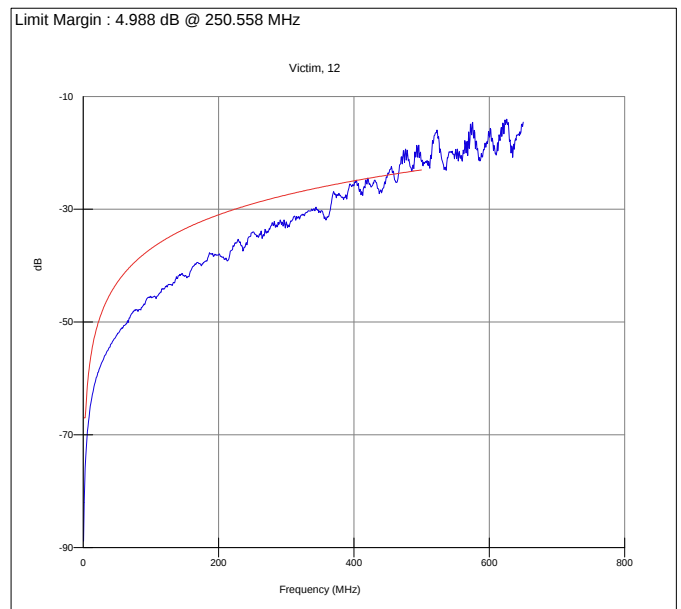
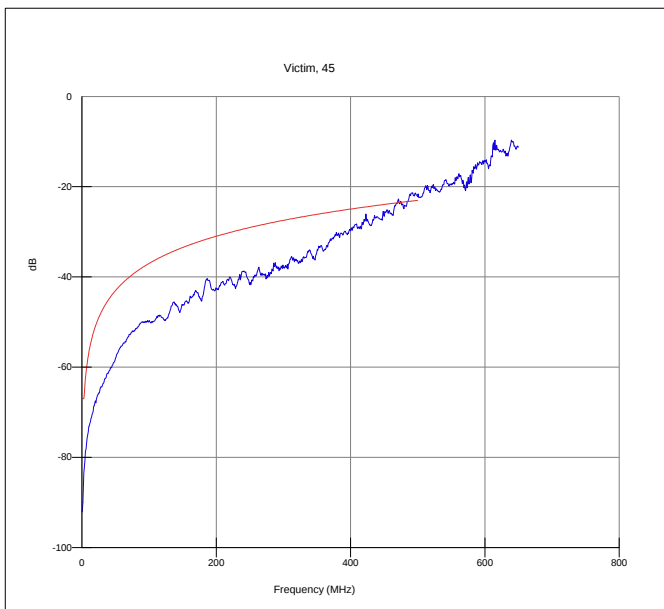
Limit Margin : 8.931 dB @ 492.496 MHz





PSAACRF (PSAELFEXT) - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

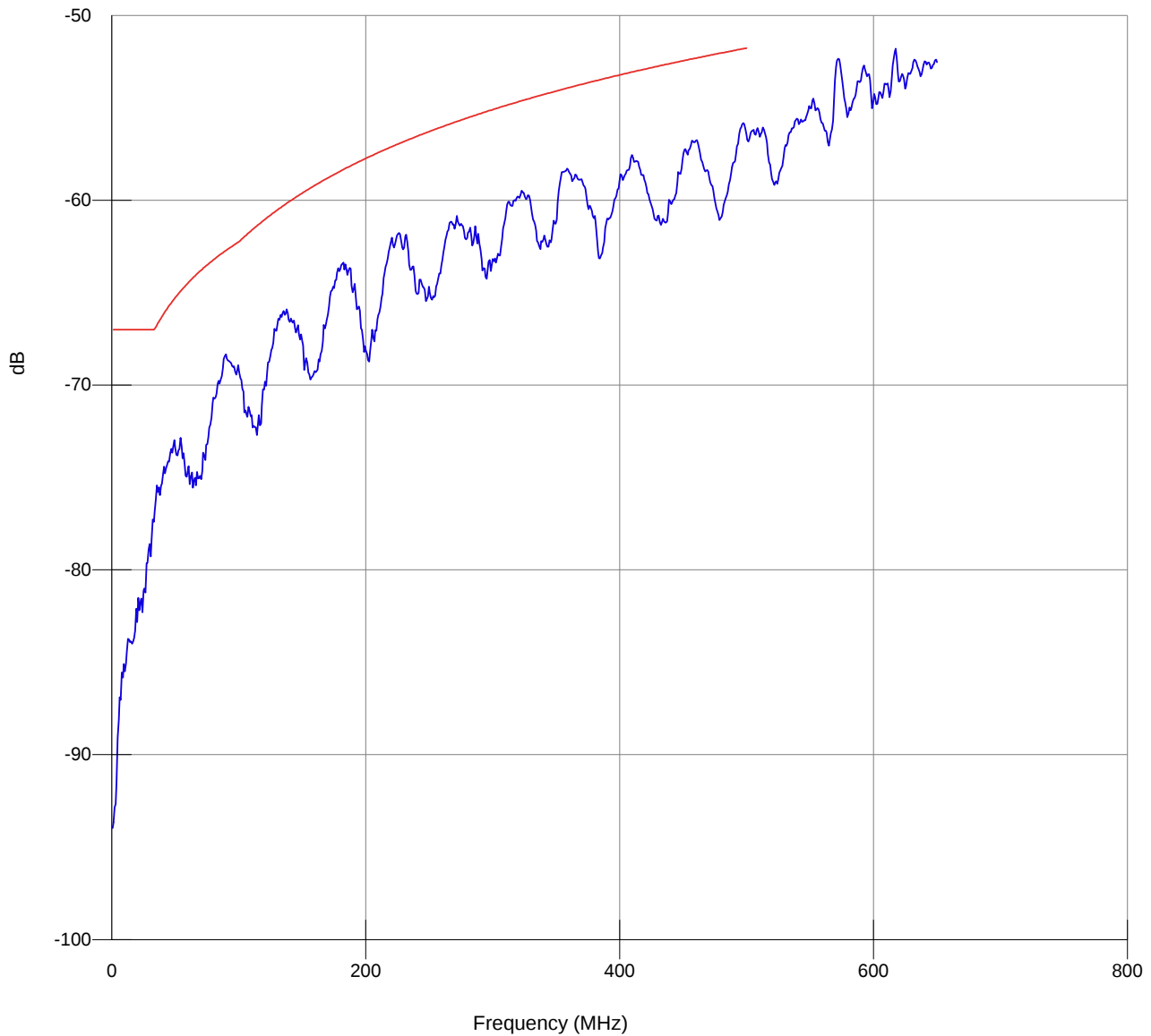




Average PSANEXT - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

Limit Margin : 4.024 dB @ 497.368 MHz

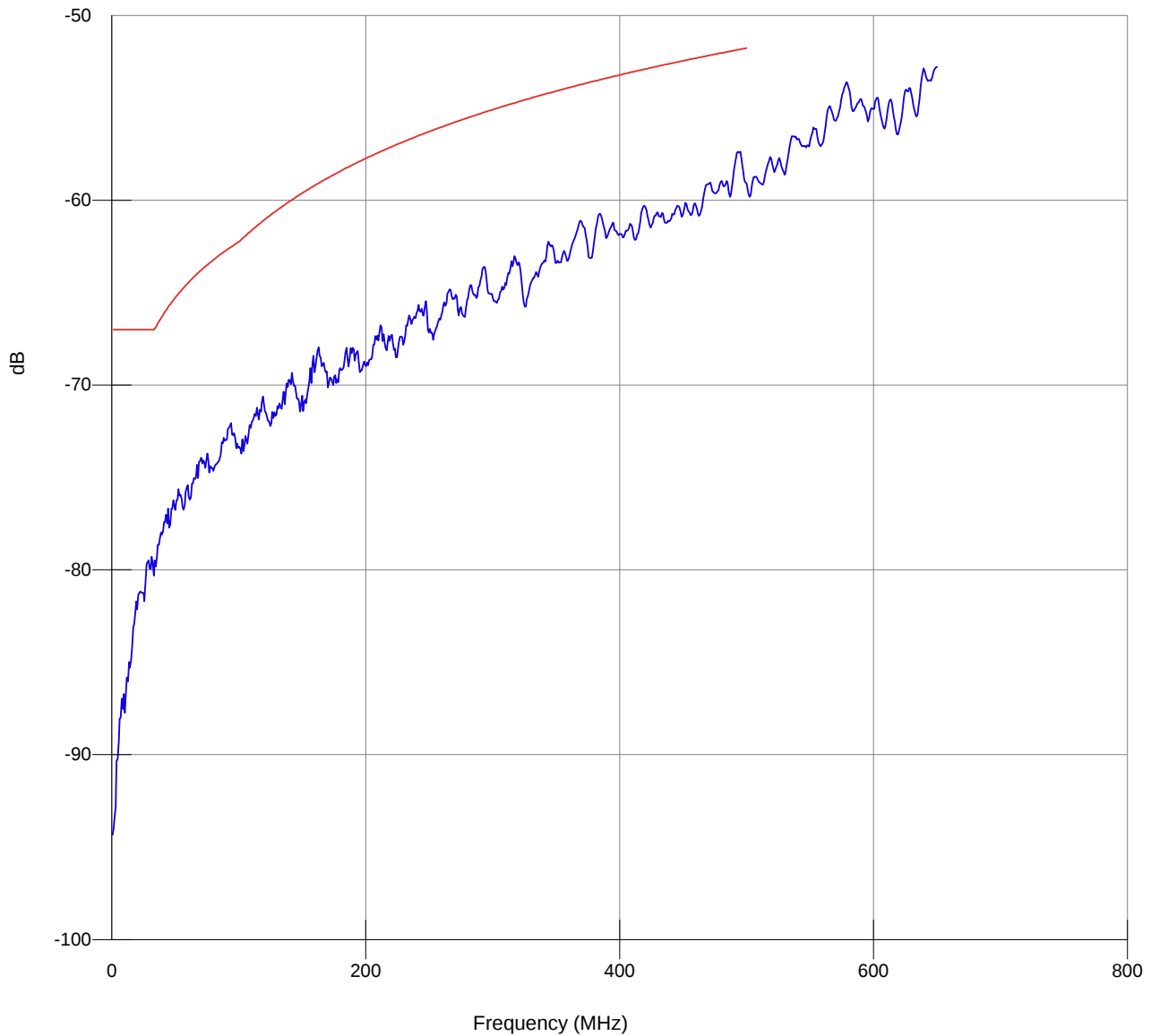




Average PSANEXT - Far End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

Limit Margin : 5.529 dB @ 493.308 MHz





Average PSAACRF (PSAELFEXT) - Near End

Client	Panduit	Report No	103096770CRT-001
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSPEED 10000	Length(m)	100.
Test Started	7/8/2017 10:22:16 AM	Temperature	22 °C
Description	4 Connector Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

