

January 19, 2017

Test report number 102765989CRT-001i
Project number 102765989-311

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:

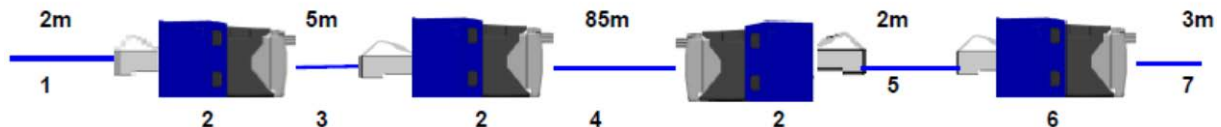
6.2: Channel transmission performance (6.2.1 to 6.2.26)

AUTHORIZATION:

The project was authorized by Ms. Kim Schmidt, representing the client, Panduit Corporation, with signed quotation number Qu-00722247.

SAMPLE DESCRIPTION:

The client supplied a 4-connector channel as illustrated below. The samples were received on November 4, 2016 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	UTP28X2M
2	Panduit	Outlet	CJ6X88TG**
3	Panduit	Zone Cord	UZJPBU15BL
4	General Cable	Horizontal Cable	GenSPEED 10,000
5	Panduit	Cross Connect	UTP28X2M
6	Panduit	Outlet	CJT6X88TG**
7	Panduit	Equipment Cord	UTP28X3M



**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	3/9/2016	3/9/2017
Keysight LCR Meter	4263B	E355	6/7/2016	6/7/2017
Temperature humidity meter	OM-EL-USB-2-LCD	H243	2/9/2016	2/9/2017

DATE OF TEST:

November 30, 2016

TEST REPORT REVISION HISTORY:

First Issue:	December 16, 2016	Original Document
Second Issue	January 19, 2017	Correct channel diagram and component ID #6 part number from CJ6X88TG** to CJT6X88TG**

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



Appendix A
Internals test results

This appendix contains 39 pages.



Low Frequency Report

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

DC Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
7.8994	7.6564	7.7705	7.6461	
7.9023	7.6026	7.7696	7.6930	

Resistance Unbalanced (%)				
45	12	36	78	Limit (%)
0.02	0.35	0.01	0.31	3.00

Resistance Unbalanced Pair-Pair (%)						
45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78	Limit (%)
1.75	0.83	1.49	0.91	0.26	0.65	

DC Loop Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
15.8000	15.2600	15.5410	15.3440	25.0000



Insertion Loss

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

Insertion Loss (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-2.30	-1.94	-1.95	-1.88	-1.87
4.	-4.16	-3.90	-3.83	-3.81	-3.78
8.	-5.81	-5.47	-5.38	-5.36	-5.31
10.	-6.49	-6.11	-6.01	-5.98	-5.93
16.	-8.20	-7.71	-7.57	-7.56	-7.49
20.	-9.17	-8.61	-8.44	-8.43	-8.33
25.	-10.27	-9.65	-9.47	-9.45	-9.34
31.25	-11.50	-10.79	-10.62	-10.59	-10.48
62.5	-16.40	-15.41	-15.08	-15.12	-14.92
100.	-20.93	-19.69	-19.34	-19.35	-19.12
155.	-26.34	-24.84	-24.37	-24.43	-24.11
200.	-30.14	-28.59	-28.04	-27.99	-27.61
250.	-33.95	-32.01	-31.39	-31.57	-31.03
300.	-37.44	-35.31	-34.67	-34.80	-34.23
350.	-40.68	-38.56	-37.68	-37.79	-37.20
400.	-43.74	-41.57	-40.69	-40.84	-40.12
450.	-46.63	-44.26	-43.41	-43.66	-42.88
500.	-49.39	-47.15	-45.88	-46.29	-45.44
550.		-49.87	-48.97	-48.87	-48.21
600.		-52.84	-51.65	-51.59	-50.61
650.		-55.33	-53.76	-54.91	-52.74



NEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	-93.01	-85.88	-92.46	-92.39	-90.31	-84.57
4.	-63.07	-87.31	-77.37	-84.70	-80.55	-83.67	-77.88
8.	-58.17	-84.17	-76.35	-76.53	-77.75	-83.04	-83.53
10.	-56.58	-85.66	-78.54	-72.40	-71.21	-79.69	-75.33
16.	-53.23	-73.26	-67.40	-92.04	-76.34	-83.98	-76.90
20.	-51.63	-76.52	-63.93	-79.64	-84.86	-80.67	-76.05
25.	-50.03	-83.39	-64.62	-71.79	-65.46	-76.93	-69.54
31.25	-48.42	-69.65	-68.61	-68.05	-64.77	-81.77	-73.34
62.5	-43.38	-72.87	-56.41	-57.25	-71.88	-70.96	-66.28
100.	-39.93	-60.62	-53.63	-62.62	-59.09	-56.80	-65.13
155.	-36.68	-53.47	-57.72	-56.14	-61.79	-59.00	-55.79
200.	-34.78	-56.54	-63.44	-67.00	-49.64	-48.93	-61.13
250.	-33.11	-50.81	-45.11	-60.17	-44.26	-46.10	-53.49
300.	-31.75	-56.64	-48.23	-62.95	-48.39	-51.09	-47.45
350.	-30.31	-56.96	-47.73	-52.87	-61.04	-50.12	-58.26
400.	-28.73	-48.88	-49.06	-51.00	-54.03	-48.14	-54.51
450.	-27.34	-43.37	-53.31	-51.66	-40.40	-44.33	-38.85
500.	-26.11	-45.04	-43.71	-48.16	-62.70	-51.48	-42.60
550.		-61.28	-39.03	-42.72	-42.50	-43.88	-38.48
600.		-38.54	-53.79	-38.24	-42.25	-44.34	-41.75
650.		-40.33	-37.26	-49.07	-38.24	-52.78	-36.65



NEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	-86.87	-91.49	-89.04	-88.19	-97.95	-89.18
4.	-63.07	-85.66	-77.88	-78.03	-86.36	-86.48	-75.65
8.	-58.17	-78.29	-71.03	-70.23	-90.01	-77.68	-81.81
10.	-56.58	-81.41	-67.78	-64.23	-80.46	-83.34	-72.00
16.	-53.23	-79.14	-68.12	-67.63	-70.32	-78.61	-71.24
20.	-51.63	-86.05	-80.27	-82.09	-66.85	-76.05	-76.14
25.	-50.03	-73.23	-72.68	-62.74	-70.31	-71.32	-67.22
31.25	-48.42	-66.05	-65.95	-60.12	-63.05	-72.78	-67.47
62.5	-43.38	-67.03	-60.43	-55.06	-59.98	-72.00	-60.78
100.	-39.93	-57.15	-53.80	-55.30	-56.45	-66.79	-56.49
155.	-36.68	-58.28	-48.91	-54.13	-52.45	-67.81	-56.05
200.	-34.78	-61.20	-46.40	-46.15	-46.02	-57.99	-57.95
250.	-33.11	-55.51	-45.86	-45.94	-53.46	-56.09	-47.90
300.	-31.75	-53.97	-42.76	-40.16	-49.41	-50.90	-57.33
350.	-30.31	-53.59	-41.10	-43.80	-45.33	-60.50	-50.73
400.	-28.73	-53.01	-38.99	-41.77	-46.68	-48.18	-53.88
450.	-27.34	-49.94	-37.49	-37.16	-43.51	-49.03	-50.27
500.	-26.11	-49.51	-36.62	-39.47	-48.18	-48.54	-48.81
550.		-58.35	-38.19	-40.37	-38.19	-43.86	-46.17
600.		-60.67	-38.15	-41.14	-42.85	-55.53	-46.43
650.		-47.84	-36.89	-38.92	-36.48	-41.68	-36.46



PSNEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSNEXT - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-83.94	-86.76	-81.72	-82.38
4.	-60.57	-76.06	-77.99	-73.49	-76.19
8.	-55.60	-73.06	-74.88	-73.35	-74.34
10.	-54.00	-70.40	-69.72	-69.21	-70.04
16.	-50.59	-66.22	-71.27	-66.41	-75.07
20.	-48.97	-63.58	-74.64	-63.64	-73.53
25.	-47.34	-63.60	-64.84	-61.23	-66.87
31.25	-45.71	-63.92	-63.42	-62.68	-66.48
62.5	-40.59	-53.74	-67.03	-55.83	-56.52
100.	-37.08	-52.37	-53.67	-52.26	-55.27
155.	-33.78	-50.60	-51.78	-52.71	-51.94
200.	-31.85	-55.35	-45.84	-49.18	-48.61
250.	-30.15	-43.96	-41.52	-41.36	-45.20
300.	-28.76	-47.51	-46.11	-43.21	-45.76
350.	-27.32	-46.18	-48.97	-47.16	-47.86
400.	-25.79	-44.76	-44.91	-46.95	-45.70
450.	-24.44	-42.35	-37.59	-36.43	-37.58
500.	-23.24	-40.47	-44.04	-40.08	-41.08
550.		-37.46	-40.09	-34.90	-36.26
600.		-35.30	-36.26	-38.84	-35.96
650.		-35.33	-36.06	-32.56	-36.31



PSNEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSNEXT - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-81.99	-84.13	-82.62	-85.78
4.	-60.57	-74.23	-81.32	-72.78	-73.30
8.	-55.60	-67.19	-74.45	-70.56	-69.21
10.	-54.00	-62.52	-75.73	-66.14	-63.48
16.	-50.59	-64.58	-69.15	-64.83	-65.79
20.	-48.97	-77.43	-66.30	-66.17	-72.49
25.	-47.34	-61.98	-65.90	-63.81	-60.90
31.25	-45.71	-58.29	-60.96	-60.31	-59.18
62.5	-40.59	-53.67	-58.81	-55.60	-53.92
100.	-37.08	-50.43	-53.54	-50.60	-52.66
155.	-33.78	-47.39	-51.32	-46.75	-51.86
200.	-31.85	-43.19	-45.63	-43.05	-45.61
250.	-30.15	-42.65	-50.10	-43.31	-43.54
300.	-28.76	-38.14	-46.27	-41.79	-39.73
350.	-27.32	-39.07	-44.61	-39.35	-42.88
400.	-25.79	-37.04	-43.79	-38.19	-40.66
450.	-24.44	-34.19	-41.72	-36.33	-36.69
500.	-23.24	-34.66	-43.88	-36.08	-38.53
550.		-36.11	-37.12	-34.85	-38.04
600.		-36.35	-42.55	-36.41	-39.89
650.		-34.57	-35.10	-31.83	-33.75



ACR - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	91.06	84.00	90.59	90.51	88.43	82.70
4.	58.91	83.48	73.56	80.93	76.74	79.89	74.11
8.	52.35	78.79	70.99	71.22	72.39	77.73	78.22
10.	50.10	79.66	72.56	66.46	65.23	73.76	69.40
16.	45.03	65.69	59.84	84.55	68.78	76.49	69.41
20.	42.46	68.08	55.50	71.30	76.43	72.34	67.72
25.	39.76	73.93	55.17	62.45	56.01	67.59	60.20
31.25	36.92	59.04	58.03	57.57	54.19	71.30	62.86
62.5	26.97	57.79	41.28	42.33	56.76	56.04	51.36
100.	18.99	41.29	34.28	43.51	39.74	37.68	46.02
155.	10.34	29.10	33.29	32.03	37.35	34.89	31.68
200.	4.64	28.50	35.45	39.39	21.65	21.32	33.52
250.	-0.84	19.41	13.54	29.14	12.69	15.07	22.46
300.	-5.69	21.97	13.43	28.72	13.58	16.86	13.22
350.	-10.37	19.28	9.94	15.67	23.25	12.92	21.06
400.	-15.00	8.18	8.21	10.88	13.19	8.02	14.38
450.	-19.29	-0.04	9.66	8.79	-3.26	1.46	-4.03
500.	-23.28	-0.83	-2.58	2.72	16.41	6.05	-2.83
550.		12.31	-9.85	-5.49	-6.37	-4.33	-9.73
600.		-13.12	2.20	-12.36	-9.35	-6.27	-8.85
650.		-13.43	-17.66	-3.68	-16.68	0.04	-16.10



ACR - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	85.01	89.60	87.18	86.30	96.09	87.32
4.	58.91	81.86	74.07	74.25	82.55	82.70	71.88
8.	52.35	72.94	65.67	64.92	84.65	72.37	76.50
10.	50.10	75.43	61.79	58.29	74.46	77.40	66.06
16.	45.03	71.58	60.56	60.16	62.76	71.14	63.77
20.	42.46	77.62	71.84	73.75	58.42	67.71	67.80
25.	39.76	63.77	63.25	53.41	60.87	61.99	57.89
31.25	36.92	55.46	55.36	49.64	52.45	62.30	56.99
62.5	26.97	51.91	45.29	40.13	44.85	57.07	45.85
100.	18.99	37.84	34.48	36.25	37.13	47.73	37.44
155.	10.34	33.99	24.53	30.09	28.08	43.78	32.01
200.	4.64	33.14	18.45	18.54	18.07	30.38	30.34
250.	-0.84	24.13	14.29	14.88	21.89	25.03	16.84
300.	-5.69	19.31	7.93	5.90	14.58	16.64	23.07
350.	-10.37	15.82	3.27	6.54	7.50	23.24	13.48
400.	-15.00	12.37	-1.87	1.64	5.81	8.05	13.75
450.	-19.29	6.55	-6.10	-5.75	-0.09	6.12	7.36
500.	-23.28	3.49	-9.78	-6.02	1.78	3.04	3.32
550.		9.58	-10.60	-7.75	-10.60	-4.26	-1.95
600.		8.68	-13.59	-9.52	-8.89	4.87	-4.23
650.		-5.90	-17.79	-13.88	-18.20	-11.12	-16.34



PSACR - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSACR - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.70	82.00	84.81	79.84	80.50
4.	56.42	72.16	74.16	69.68	72.41
8.	49.79	67.58	69.50	67.99	69.02
10.	47.51	64.29	63.71	63.22	64.11
16.	42.40	58.50	63.70	58.86	67.58
20.	39.80	54.97	66.20	55.21	65.20
25.	37.08	53.95	55.38	51.78	57.53
31.25	34.21	53.12	52.81	52.10	56.01
62.5	24.18	38.34	51.95	40.71	41.60
100.	16.15	32.68	34.33	32.91	36.15
155.	7.44	25.75	27.42	28.28	27.84
200.	1.71	26.77	17.80	21.18	21.00
250.	-3.80	11.95	10.13	9.80	14.17
300.	-8.67	12.20	11.44	8.41	11.53
350.	-13.36	7.62	11.28	9.37	10.65
400.	-17.94	3.20	4.22	6.11	5.58
450.	-22.19	-1.91	-5.82	-7.22	-5.29
500.	-26.15	-6.68	-1.84	-6.21	-4.36
550.		-12.42	-8.88	-13.97	-11.95
600.		-17.55	-15.40	-12.76	-14.65
650.		-20.00	-17.71	-22.35	-16.44



PSACR - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSACR - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.70	80.04	82.27	80.73	83.93
4.	56.42	70.33	77.52	68.97	69.53
8.	49.79	61.71	69.10	65.21	63.90
10.	47.51	56.40	69.75	60.14	57.54
16.	42.40	56.86	61.59	57.27	58.32
20.	39.80	68.83	57.86	57.74	64.15
25.	37.08	52.34	56.45	54.37	51.56
31.25	34.21	47.49	50.37	49.72	48.70
62.5	24.18	38.27	43.68	40.46	38.98
100.	16.15	30.74	34.24	31.27	33.61
155.	7.44	22.41	27.02	22.37	27.83
200.	1.71	14.74	17.57	15.10	18.00
250.	-3.80	10.65	18.72	11.73	12.48
300.	-8.67	2.82	11.61	6.95	5.47
350.	-13.36	0.49	6.83	1.52	5.63
400.	-17.94	-4.44	3.15	-2.68	0.53
450.	-22.19	-10.06	-1.68	-7.26	-6.22
500.	-26.15	-12.97	-2.14	-10.32	-6.97
550.		-13.92	-11.66	-13.95	-10.09
600.		-16.51	-9.44	-15.32	-10.76
650.		-21.09	-18.64	-22.84	-19.05



FEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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.	-78.74	-82.12	-77.96	-78.13	-102.63	-88.92	-83.29	-97.72	-78.37	-77.23	-87.88	-79.10
4.	-67.97	-74.49	-67.51	-67.71	-86.99	-78.53	-74.68	-86.67	-68.14	-67.36	-78.89	-68.19
8.	-64.07	-70.48	-63.75	-64.10	-85.99	-73.82	-70.11	-83.38	-64.19	-63.62	-74.15	-64.32
10.	-63.67	-68.40	-62.55	-63.58	-86.53	-72.70	-68.99	-81.02	-63.25	-62.68	-72.82	-63.34
16.	-64.77	-66.46	-61.81	-64.76	-81.03	-70.44	-66.56	-81.36	-61.19	-61.80	-70.50	-61.41
20.	-67.99	-65.47	-62.77	-68.30	-80.90	-69.18	-65.81	-80.37	-60.40	-62.31	-70.16	-60.38
25.	-78.38	-64.95	-65.18	-76.36	-75.82	-68.79	-65.23	-78.08	-60.12	-64.14	-69.10	-60.17
31.25	-65.66	-64.53	-65.44	-64.78	-72.75	-67.90	-64.47	-71.01	-60.78	-65.54	-67.56	-61.01
62.5	-59.89	-68.17	-53.18	-60.36	-64.50	-67.13	-68.18	-65.14	-66.10	-53.35	-67.27	-65.37
100.	-58.14	-67.83	-81.38	-58.37	-63.08	-69.62	-65.95	-64.61	-63.99	-69.93	-69.50	-63.64
155.	-62.67	-63.94	-62.70	-61.17	-63.89	-67.09	-62.76	-63.83	-62.94	-60.77	-73.81	-63.36
200.	-63.37	-63.06	-57.49	-64.82	-72.14	-68.17	-64.10	-69.75	-59.31	-58.78	-71.53	-61.53
250.	-64.24	-72.20	-61.07	-66.18	-66.66	-69.74	-75.35	-64.69	-65.50	-62.24	-71.56	-67.49
300.	-67.80	-69.50	-67.17	-69.07	-76.94	-78.11	-67.89	-79.44	-61.95	-64.98	-77.58	-62.15
350.	-72.85	-65.88	-69.64	-70.92	-74.13	-79.05	-65.73	-71.84	-74.57	-70.07	-91.59	-99.45
400.	-71.85	-69.92	-72.99	-72.38	-87.60	-76.10	-69.75	-81.26	-74.80	-72.28	-81.26	-75.86
450.	-80.00	-77.86	-75.12	-80.59	-79.90	-75.31	-80.58	-80.55	-68.64	-73.05	-76.50	-67.44
500.	-74.15	-79.58	-69.48	-79.38	-75.80	-77.24	-78.08	-76.84	-71.25	-69.27	-79.23	-70.72
550.	-77.18	-76.14	-73.49	-89.94	-79.69	-85.16	-74.94	-80.53	-82.97	-74.44	-82.21	-80.25
600.	-80.83	-80.85	-77.76	-80.41	-79.36	-81.89	-80.13	-74.43	-79.26	-82.60	-86.98	-90.99
650.	-73.73	-83.16	-76.98	-79.53	-78.72	-82.12	-81.73	-83.49	-70.55	-77.09	-80.58	-78.28



ACRF (ELFEXT) - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	-76.79	-80.24	-76.09	-76.19	-100.75	-87.04	-81.35	-95.77	-76.50	-75.29	-85.92	-77.22
4.	-51.25	-64.13	-70.68	-63.73	-63.81	-83.18	-74.76	-70.78	-82.84	-64.37	-63.46	-75.06	-64.38
8.	-45.20	-58.69	-65.12	-58.44	-58.63	-80.63	-68.51	-64.64	-78.00	-58.88	-58.15	-68.77	-58.96
10.	-43.26	-57.67	-62.41	-56.62	-57.47	-80.55	-66.76	-62.88	-75.02	-57.32	-56.57	-66.81	-57.35
16.	-39.18	-57.19	-58.91	-54.32	-57.05	-73.47	-62.95	-58.85	-73.79	-53.70	-54.08	-62.92	-53.85
20.	-37.24	-59.55	-57.04	-54.44	-59.68	-72.47	-60.85	-57.19	-71.93	-52.06	-53.70	-61.72	-51.95
25.	-35.30	-68.91	-55.50	-55.84	-66.71	-66.36	-59.44	-55.57	-68.61	-50.77	-54.49	-59.63	-50.72
31.25	-33.36	-55.04	-53.94	-54.96	-53.98	-62.17	-57.43	-53.68	-60.39	-50.31	-54.74	-56.94	-50.42
62.5	-27.34	-44.81	-53.05	-38.26	-44.95	-49.38	-52.21	-52.78	-50.06	-51.18	-37.94	-52.19	-50.25
100.	-23.26	-38.80	-48.48	-62.26	-38.68	-43.73	-50.50	-46.26	-45.27	-44.88	-50.24	-50.16	-44.29
155.	-19.45	-38.30	-39.51	-38.59	-36.33	-39.46	-42.98	-37.92	-39.46	-38.83	-35.93	-49.45	-38.93
200.	-17.24	-35.34	-35.07	-29.88	-36.23	-44.15	-40.57	-35.51	-41.72	-31.70	-30.19	-43.49	-33.54
250.	-15.30	-32.84	-40.63	-30.04	-34.17	-35.09	-38.71	-43.34	-33.30	-34.47	-30.23	-40.17	-35.93
300.	-13.71	-33.13	-34.70	-32.94	-33.76	-42.14	-43.88	-32.58	-44.76	-27.73	-29.66	-42.91	-27.35
350.	-12.38	-35.17	-28.09	-32.44	-32.36	-36.35	-41.85	-27.17	-34.16	-37.37	-31.51	-53.90	-61.67
400.	-11.22	-31.15	-29.07	-32.87	-30.81	-46.76	-35.98	-28.18	-40.57	-34.68	-30.71	-40.57	-35.01
450.	-10.19	-36.59	-34.20	-32.25	-36.33	-36.24	-32.43	-36.32	-37.14	-25.77	-28.79	-33.09	-23.79
500.	-9.28	-28.28	-33.29	-24.04	-32.22	-29.51	-31.80	-30.92	-30.96	-25.81	-22.12	-33.35	-24.43
550.		-28.21	-27.27	-25.29	-40.06	-30.81	-36.95	-25.07	-31.56	-34.77	-24.57	-33.24	-31.38
600.		-29.18	-29.26	-27.15	-27.57	-27.77	-31.28	-27.28	-22.78	-28.65	-29.76	-35.33	-39.39
650.		-19.97	-28.25	-24.24	-24.20	-23.81	-29.37	-26.40	-29.72	-17.80	-21.76	-26.82	-23.36



PSFEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

PSFEXT - Near End (dB)				
Freq (MHz)	45	12	36	78
1.	-74.22	-77.75	-77.05	-74.76
4.	-64.29	-67.32	-67.21	-64.58
8.	-60.44	-63.63	-63.16	-60.74
10.	-59.47	-63.05	-62.17	-59.76
16.	-59.14	-63.64	-60.05	-58.32
20.	-60.13	-65.57	-59.26	-57.96
25.	-61.95	-67.40	-58.89	-58.33
31.25	-60.41	-62.61	-58.95	-59.04
62.5	-52.23	-58.32	-61.52	-52.92
100.	-57.67	-56.87	-60.00	-61.89
155.	-58.29	-58.64	-58.38	-58.73
200.	-55.63	-62.65	-57.78	-56.78
250.	-59.14	-62.49	-61.87	-60.73
300.	-63.28	-67.97	-60.91	-60.25
350.	-63.78	-68.80	-64.33	-70.02
400.	-66.62	-70.74	-68.32	-70.33
450.	-72.42	-73.10	-68.04	-65.96
500.	-67.89	-72.43	-69.51	-66.67
550.	-70.50	-78.24	-73.32	-72.86
600.	-74.71	-75.44	-72.01	-80.42
650.	-71.72	-75.13	-70.03	-73.65



PSACRF (PSELFEXT) - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	-72.28	-75.80	-75.17	-72.88
4.	-48.25	-60.39	-63.48	-63.40	-60.80
8.	-42.20	-54.97	-58.25	-57.80	-55.43
10.	-40.26	-53.36	-57.05	-56.18	-53.83
16.	-36.18	-51.42	-56.07	-52.50	-50.83
20.	-34.24	-51.52	-57.13	-50.83	-49.62
25.	-32.30	-52.30	-57.93	-49.44	-48.98
31.25	-30.36	-49.61	-51.99	-48.37	-48.56
62.5	-24.34	-36.82	-43.24	-46.40	-38.00
100.	-20.26	-37.98	-37.53	-40.65	-42.77
155.	-16.45	-33.44	-34.27	-33.95	-34.62
200.	-14.24	-27.04	-34.61	-29.79	-29.18
250.	-12.30	-27.13	-31.10	-30.30	-29.70
300.	-10.71	-27.97	-33.29	-26.10	-26.02
350.	-9.38	-25.22	-31.11	-26.54	-32.81
400.	-8.22	-25.05	-30.04	-27.48	-30.21
450.	-7.19	-28.16	-29.69	-24.39	-23.09
500.	-6.28	-20.74	-26.55	-23.22	-21.24
550.		-20.62	-29.27	-24.44	-24.65
600.		-21.87	-23.79	-20.42	-29.82
650.		-16.40	-21.36	-15.11	-20.91



Return Loss - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn 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	-28.64	-25.49	-26.13	-24.41
4.	-19.00	-36.83	-34.64	-41.14	-32.06
8.	-19.00	-29.69	-28.02	-30.86	-23.97
10.	-18.96	-35.52	-28.65	-30.69	-23.00
16.	-17.98	-40.36	-57.09	-44.92	-45.52
20.	-17.49	-40.75	-35.63	-46.44	-61.60
25.	-17.01	-50.50	-29.86	-41.12	-46.71
31.25	-16.53	-39.30	-35.19	-31.92	-27.50
62.5	-14.04	-60.11	-33.03	-34.11	-52.10
100.	-12.00	-38.35	-37.94	-64.04	-25.42
155.	-10.10	-28.00	-38.21	-22.10	-40.91
200.	-8.99	-34.74	-30.74	-41.79	-25.08
250.	-8.02	-45.58	-35.05	-25.26	-52.66
300.	-7.23	-22.71	-41.63	-42.92	-33.90
350.	-6.56	-23.36	-31.68	-26.14	-48.19
400.	-6.00	-21.43	-29.59	-33.54	-27.46
450.	-6.00	-48.17	-25.86	-38.41	-29.63
500.	-6.00	-30.98	-40.67	-31.71	-28.98
550.		-20.63	-26.31	-24.99	-60.07
600.		-20.43	-26.67	-24.04	-17.79
650.		-22.20	-18.91	-23.69	-51.00



Return Loss - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

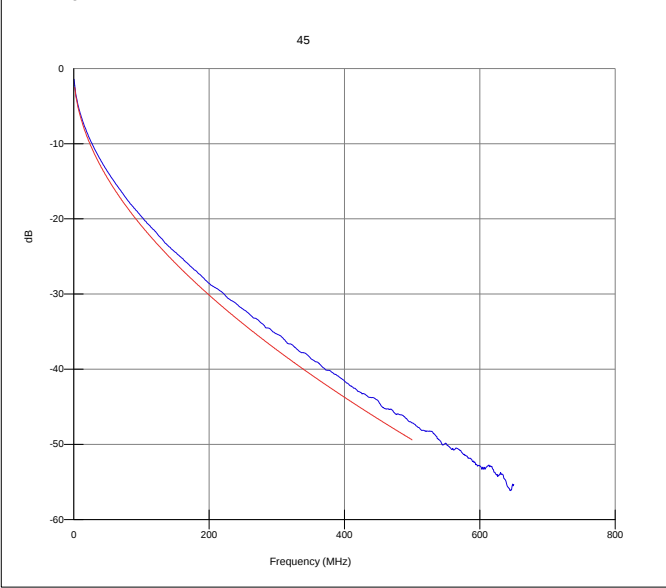
Return Loss - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-19.00	-27.64	-31.24	-25.79	-24.24
4.	-19.00	-43.31	-42.02	-37.36	-38.93
8.	-19.00	-40.88	-45.50	-41.89	-34.01
10.	-18.96	-32.48	-42.61	-31.82	-28.16
16.	-17.98	-33.80	-30.32	-41.10	-34.57
20.	-17.49	-32.13	-32.51	-37.83	-29.60
25.	-17.01	-48.47	-42.71	-53.45	-31.64
31.25	-16.53	-37.97	-44.40	-45.26	-43.63
62.5	-14.04	-74.17	-24.32	-33.66	-49.47
100.	-12.00	-54.24	-34.46	-33.69	-28.60
155.	-10.10	-36.48	-24.49	-59.96	-36.80
200.	-8.99	-28.21	-22.52	-31.04	-27.98
250.	-8.02	-39.81	-37.10	-36.87	-30.14
300.	-7.23	-28.65	-21.91	-29.71	-40.75
350.	-6.56	-35.41	-21.60	-22.95	-39.19
400.	-6.00	-52.30	-21.57	-30.81	-41.58
450.	-6.00	-39.77	-23.32	-33.81	-34.39
500.	-6.00	-17.07	-17.96	-46.91	-41.78
550.		-15.95	-16.35	-26.31	-43.75
600.		-13.37	-19.33	-24.38	-20.97
650.		-25.40	-18.47	-18.55	-33.24



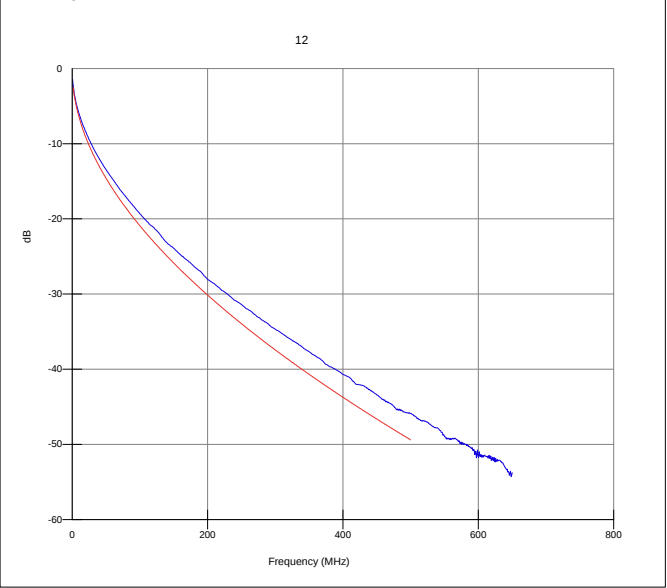
Insertion Loss

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

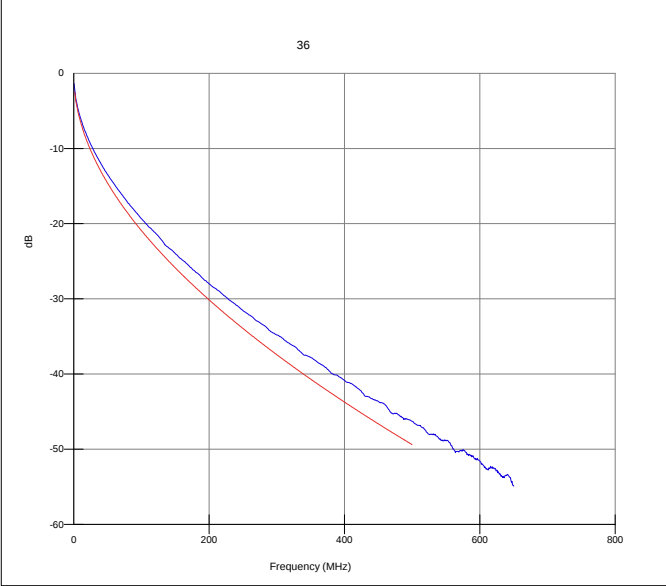
Limit Margin : 0.246 dB @ 2.124 MHz



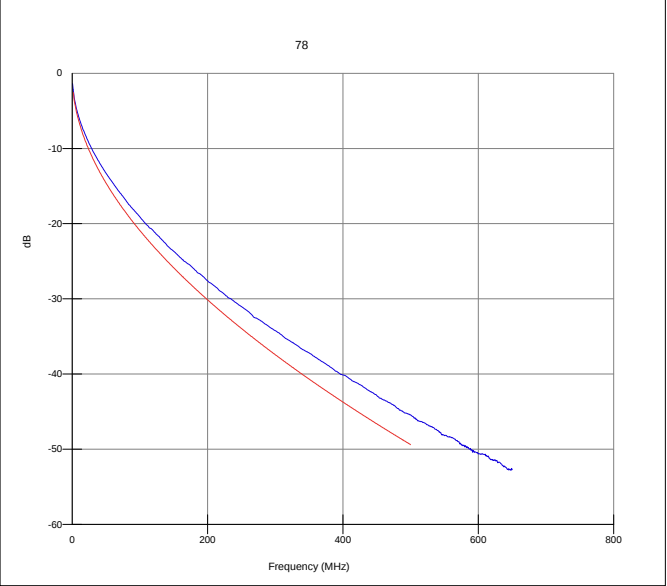
Limit Margin : 0.271 dB @ 1.312 MHz



Limit Margin : 0.323 dB @ 2.124 MHz



Limit Margin : 0.335 dB @ 2.124 MHz

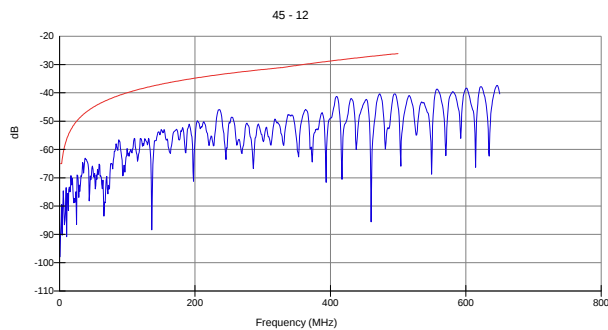




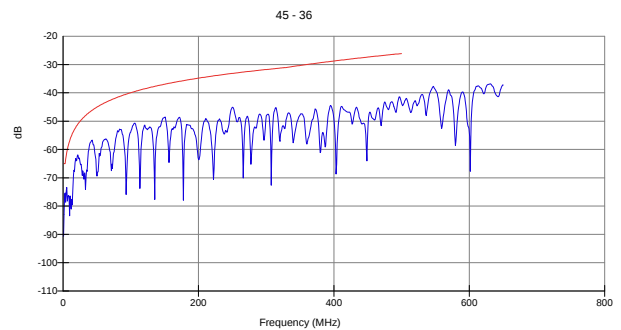
NEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

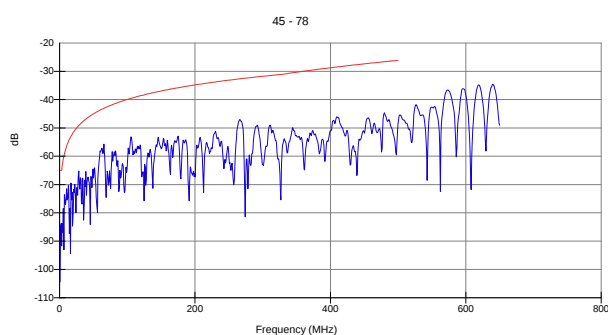
Limit Margin : 12.312 dB @ 235.944 MHz



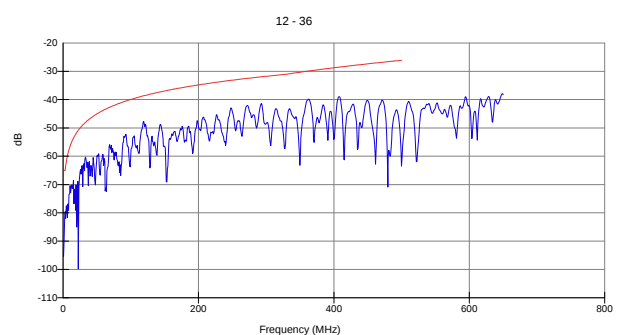
Limit Margin : 10.324 dB @ 2.936 MHz



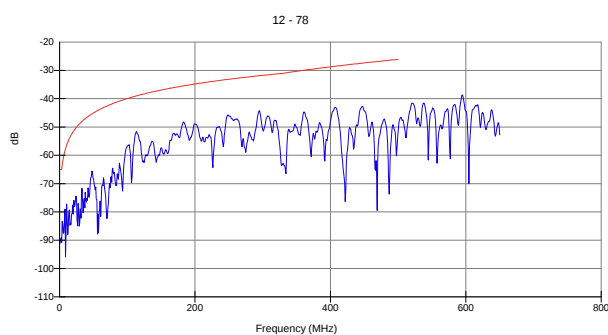
Limit Margin : 12.678 dB @ 65.450 MHz



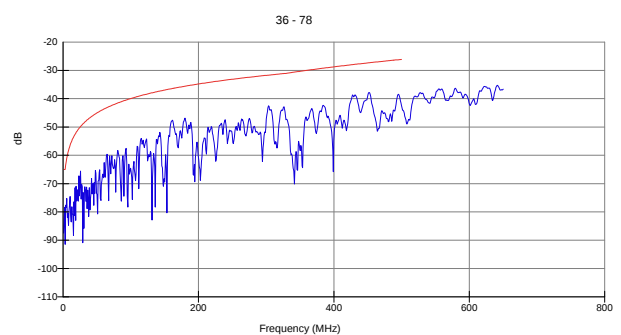
Limit Margin : 9.094 dB @ 119.034 MHz



Limit Margin : 12.401 dB @ 295.211 MHz



Limit Margin : 10.487 dB @ 451.903 MHz

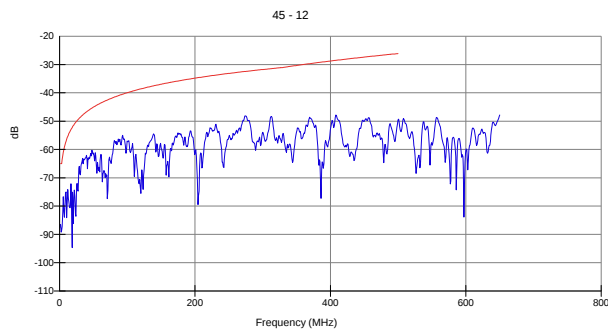




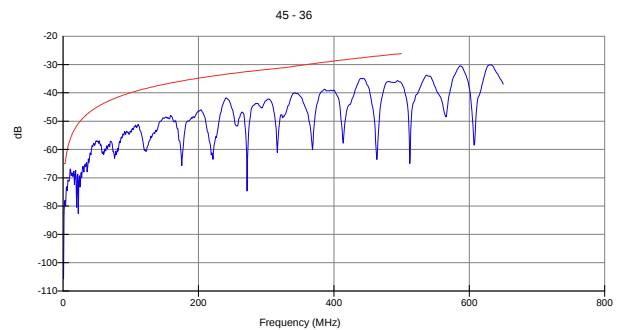
NEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

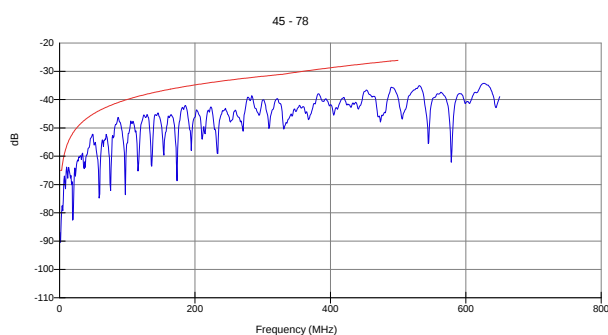
Limit Margin : 14.586 dB @ 93.054 MHz



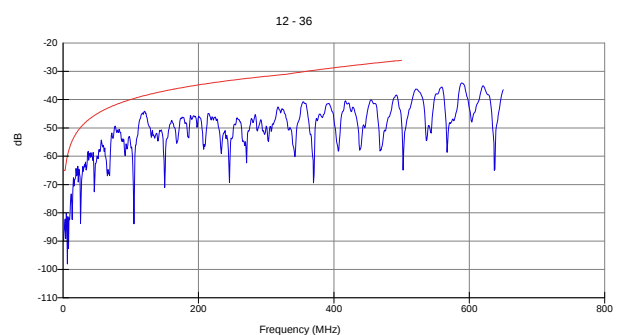
Limit Margin : 7.255 dB @ 439.724 MHz



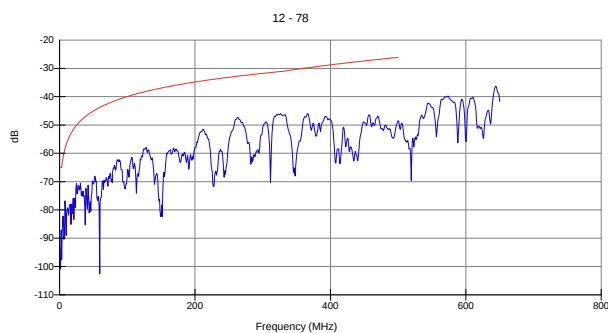
Limit Margin : 5.288 dB @ 85.747 MHz



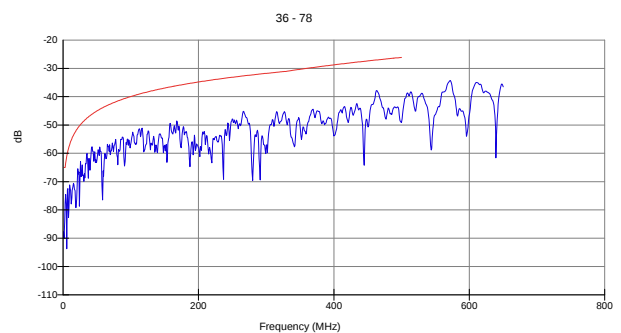
Limit Margin : 5.537 dB @ 120.658 MHz



Limit Margin : 14.538 dB @ 262.736 MHz



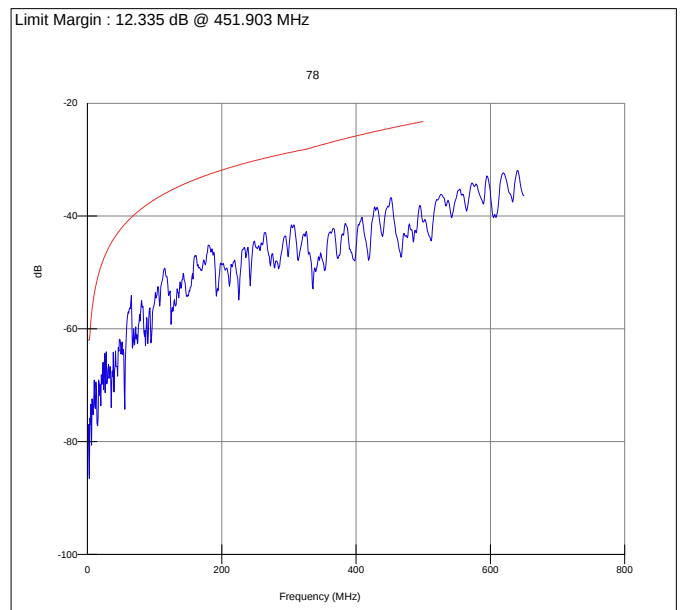
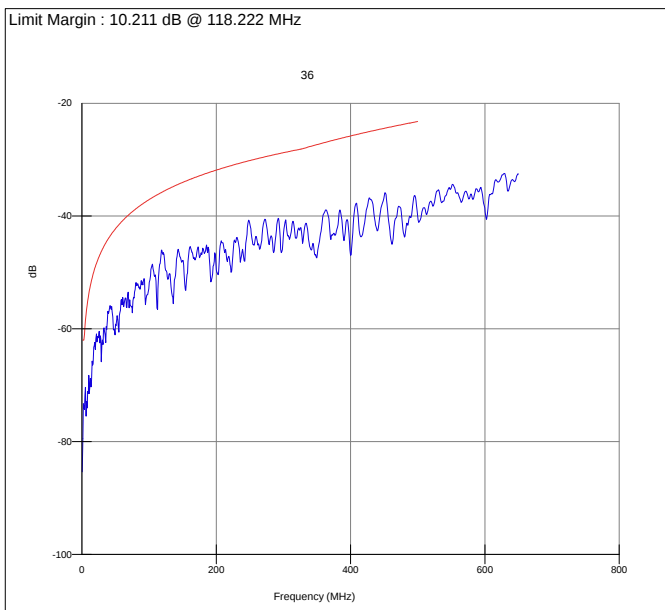
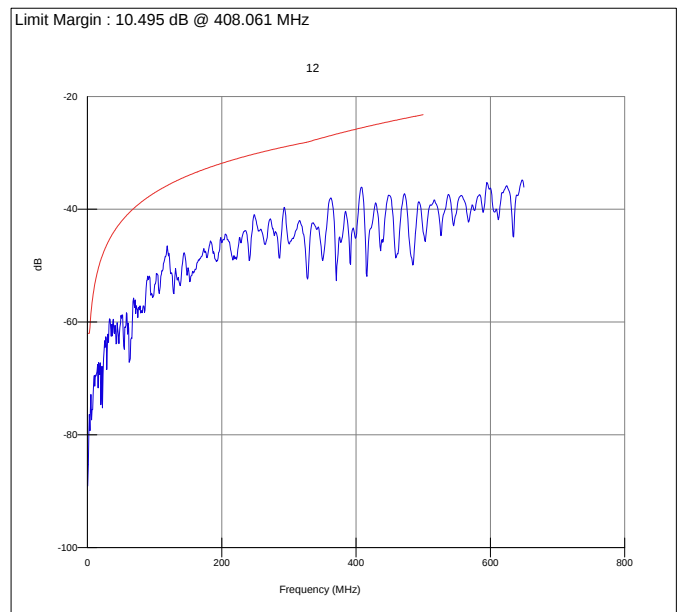
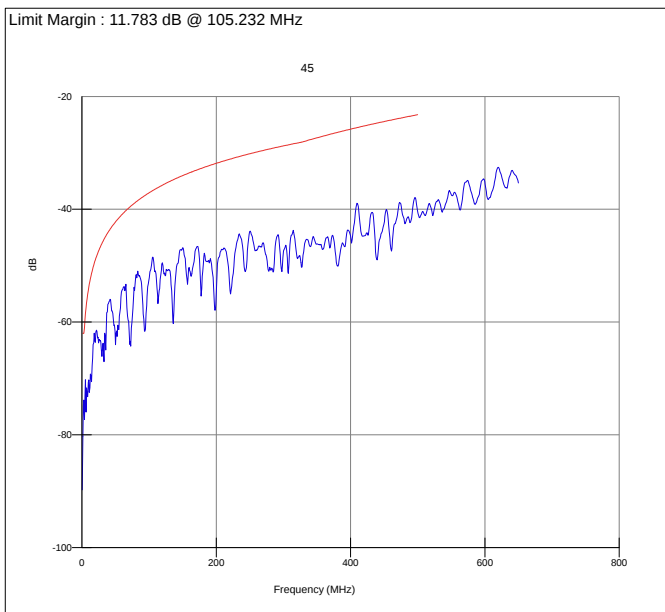
Limit Margin : 10.803 dB @ 463.269 MHz





PSNEXT - Near End

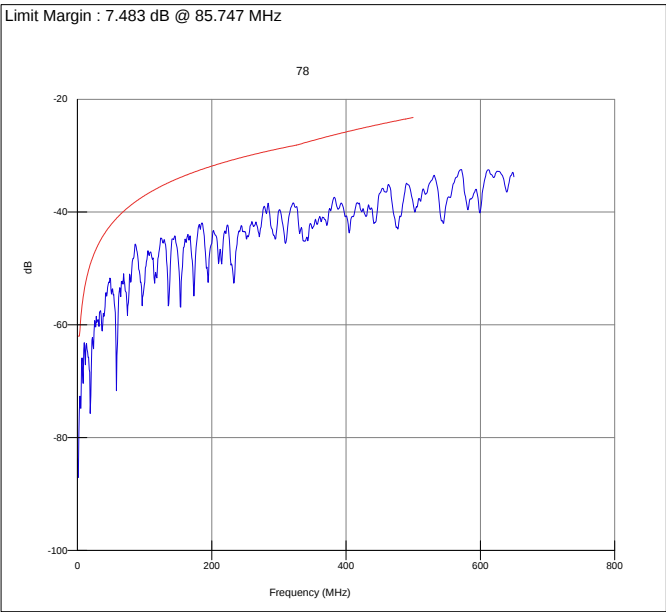
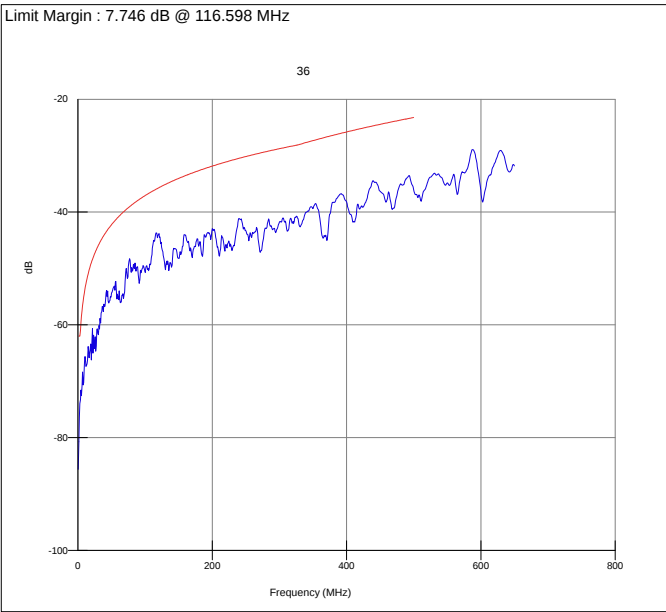
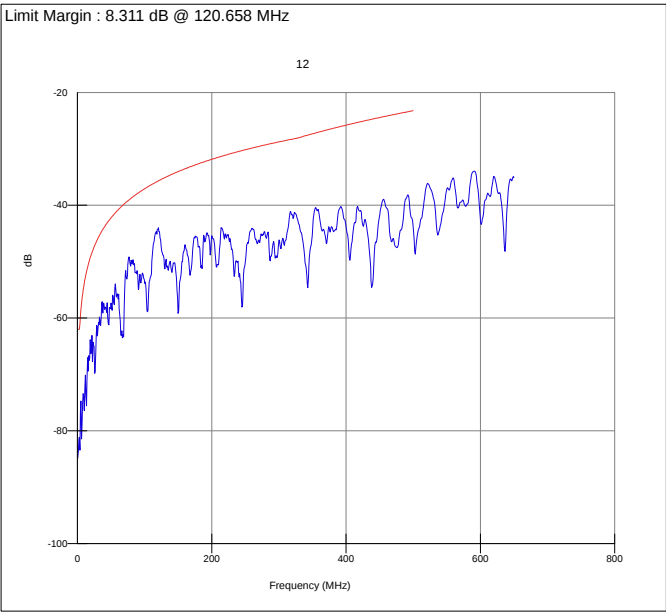
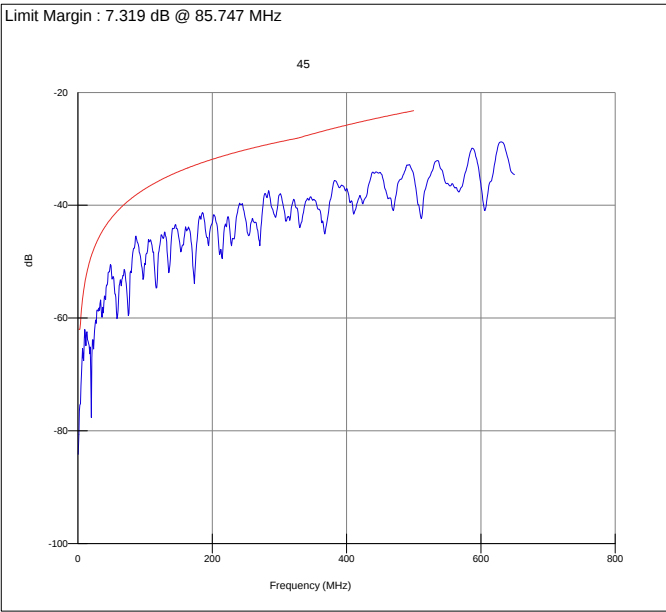
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





PSNEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

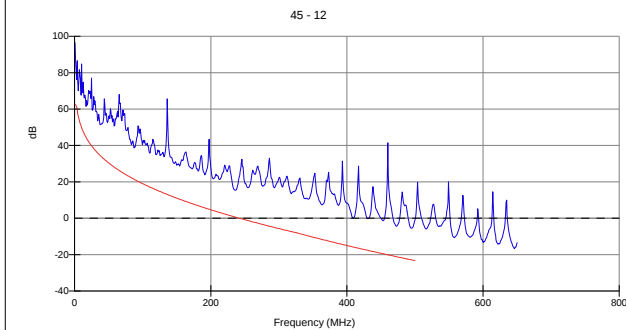




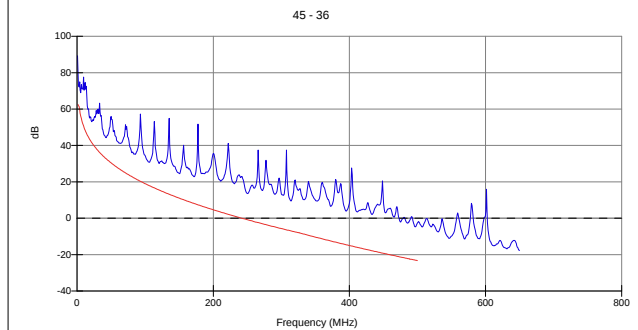
ACR - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

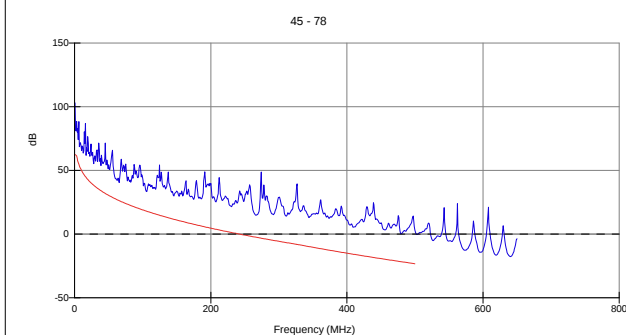
Limit Margin : 13.996 dB @ 5.371 MHz



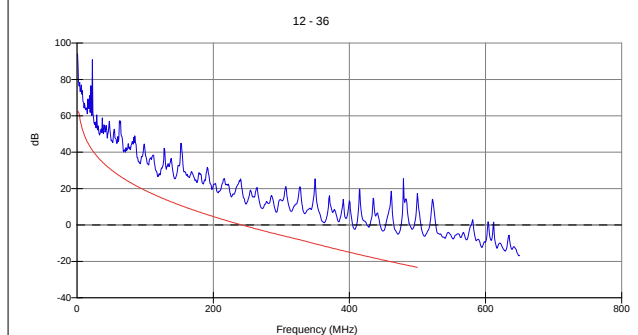
Limit Margin : 10.666 dB @ 2.936 MHz



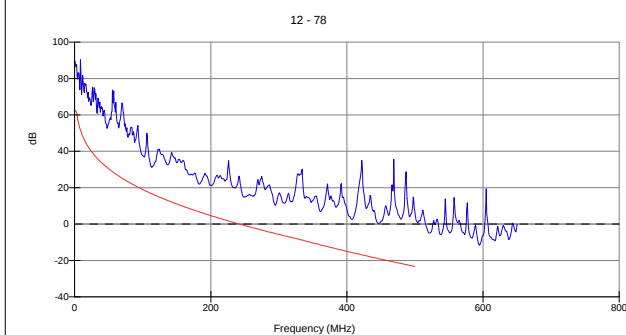
Limit Margin : 14.196 dB @ 65.450 MHz



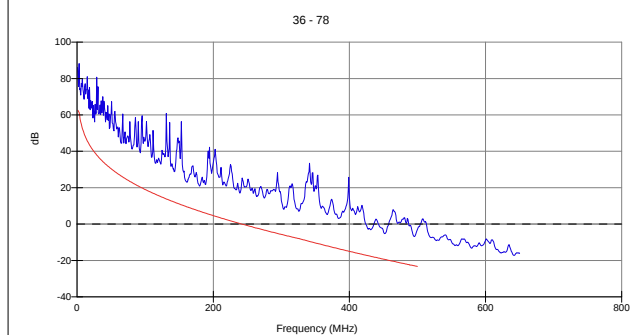
Limit Margin : 10.914 dB @ 119.034 MHz



Limit Margin : 14.495 dB @ 113.351 MHz



Limit Margin : 13.467 dB @ 161.251 MHz

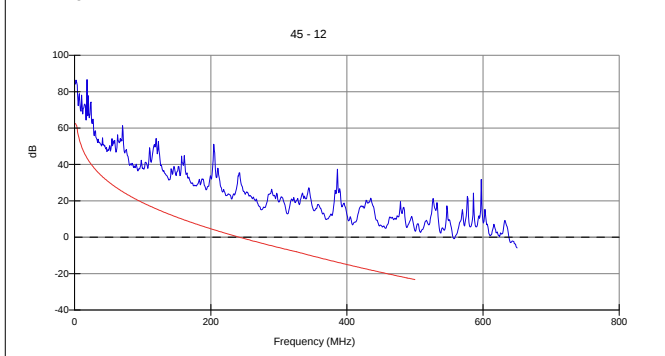




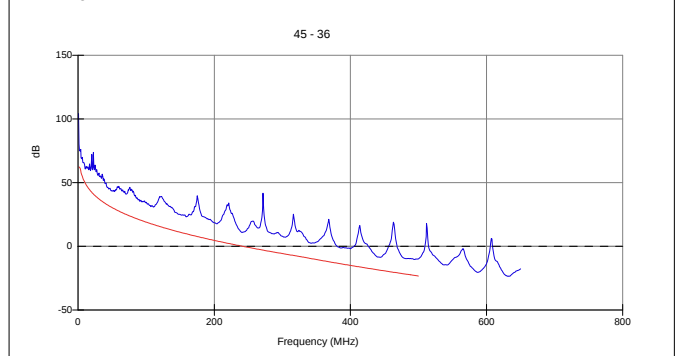
ACR - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

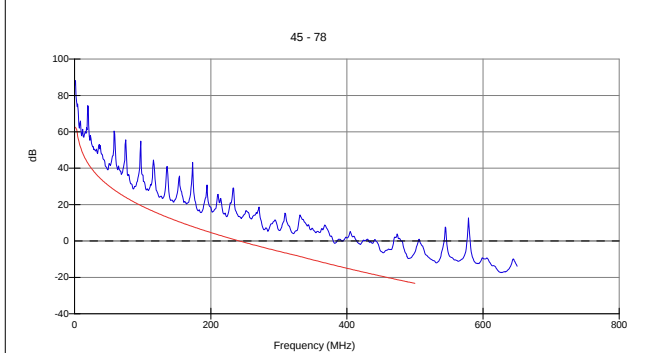
Limit Margin : 15.969 dB @ 47.589 MHz



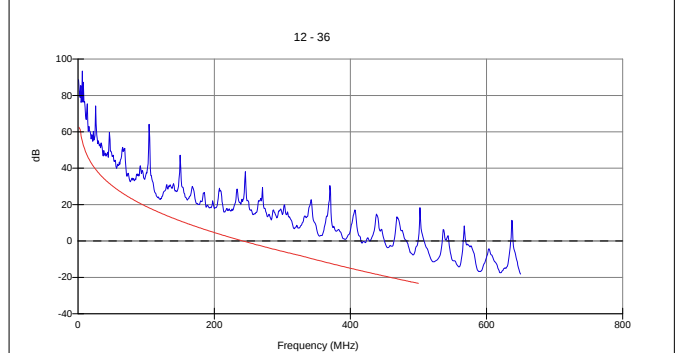
Limit Margin : 10.043 dB @ 439.724 MHz



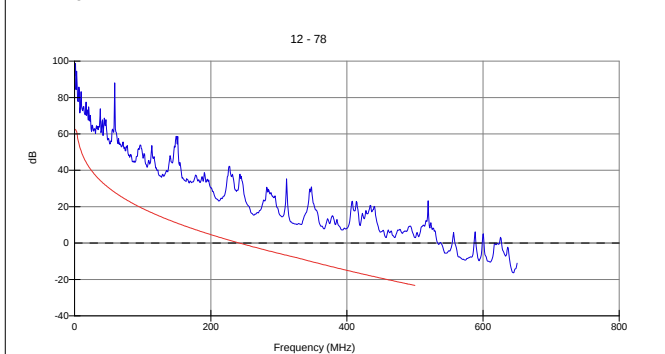
Limit Margin : 6.996 dB @ 85.747 MHz



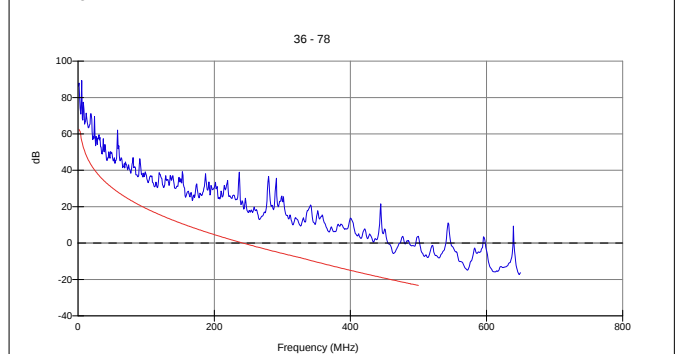
Limit Margin : 7.316 dB @ 120.658 MHz



Limit Margin : 17.489 dB @ 262.736 MHz



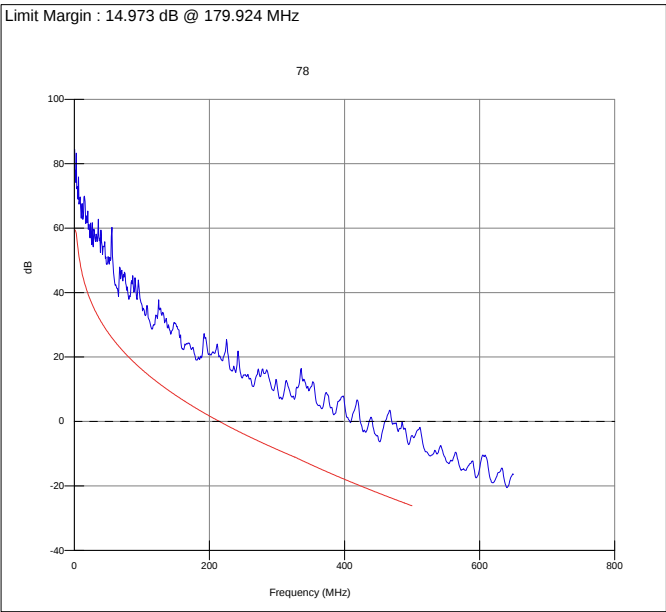
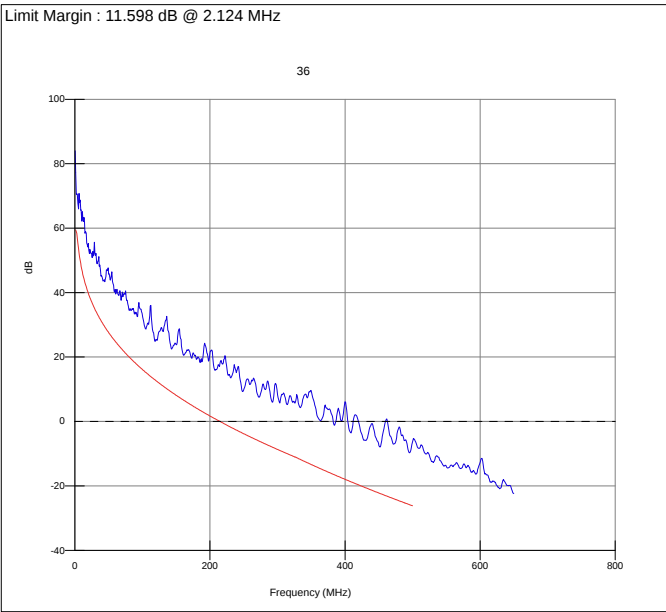
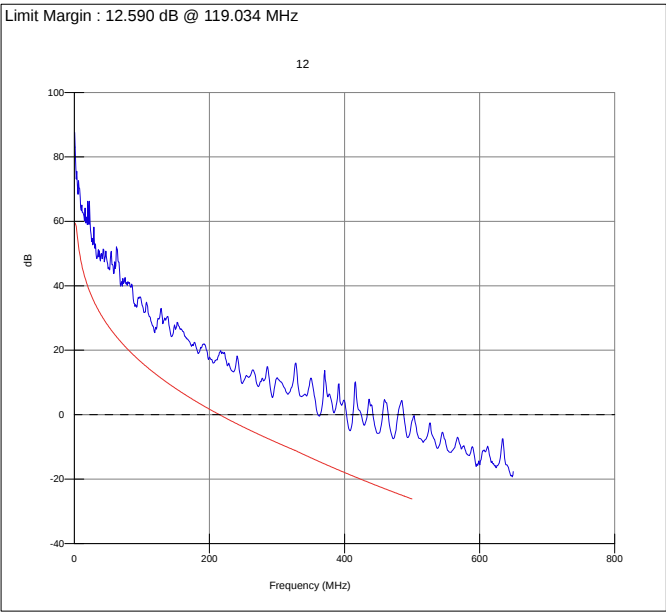
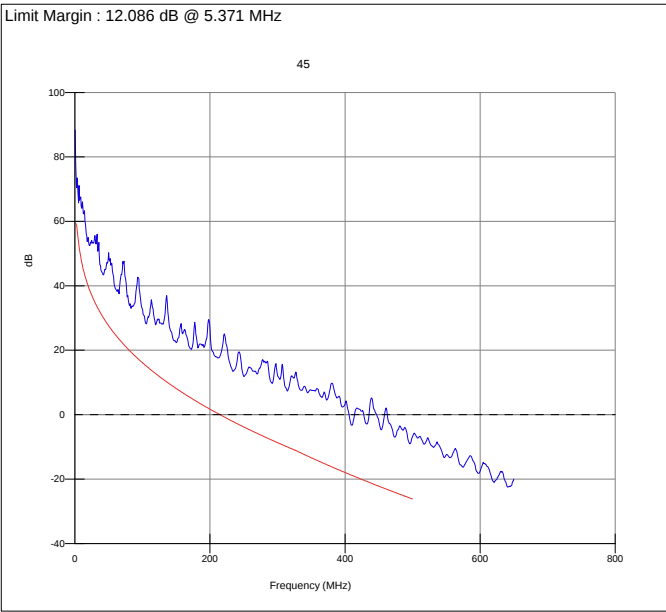
Limit Margin : 11.435 dB @ 3.748 MHz





PSACR - Near End

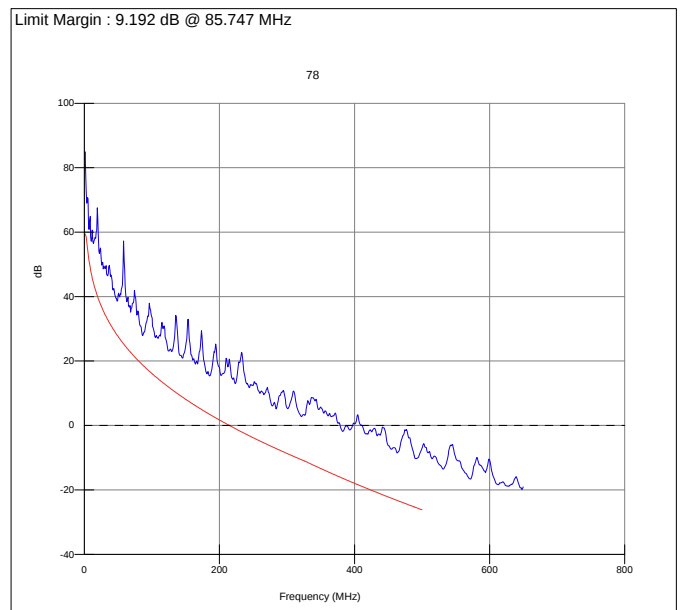
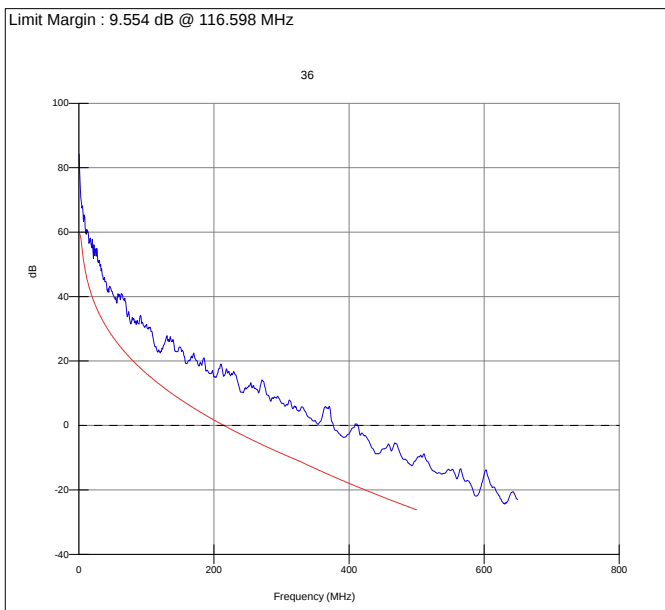
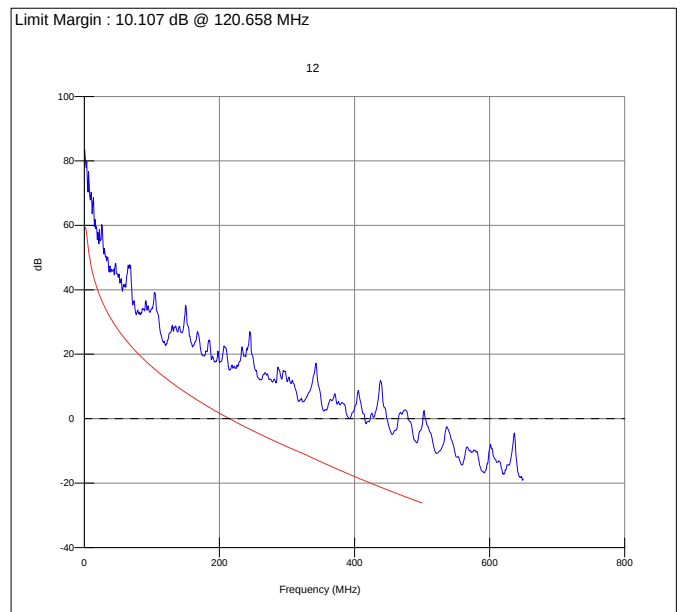
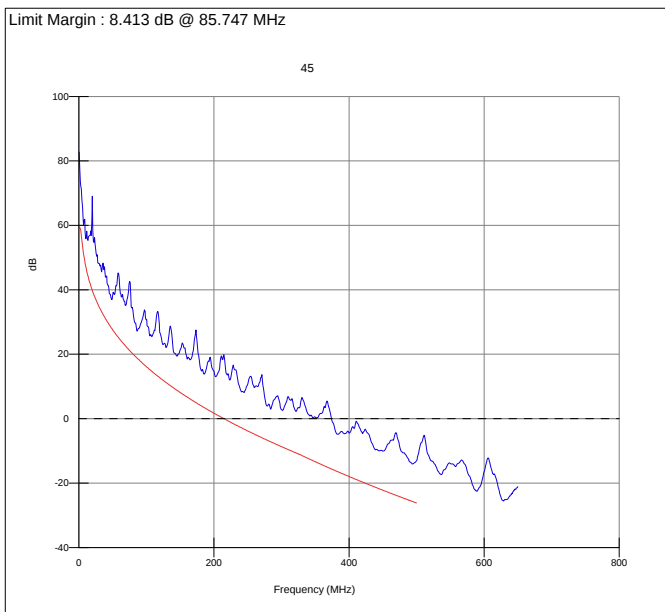
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





PSACR - Far End

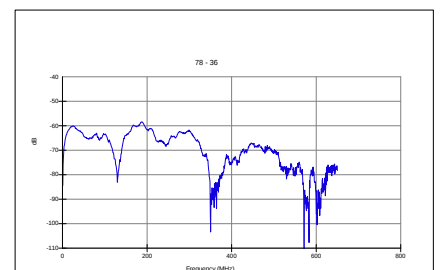
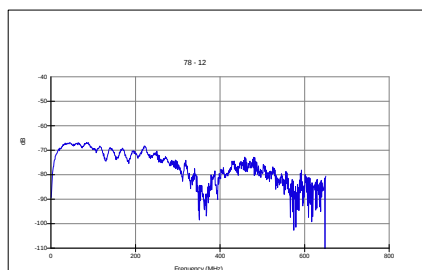
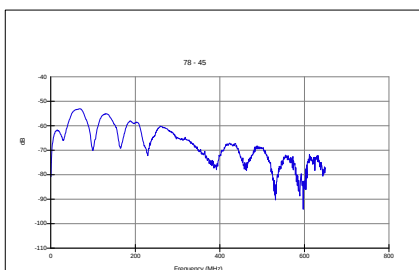
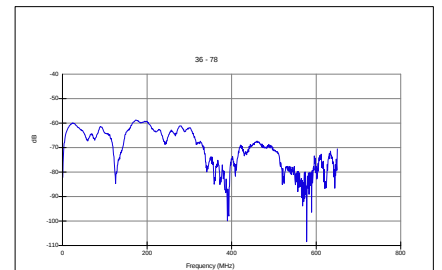
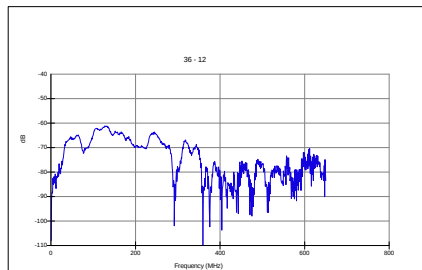
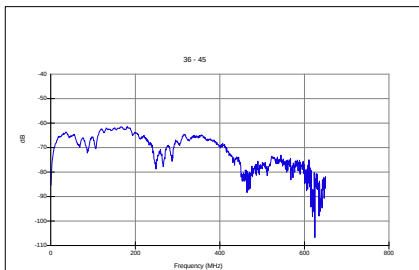
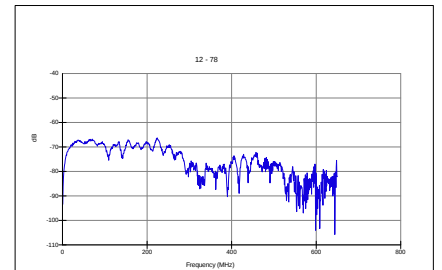
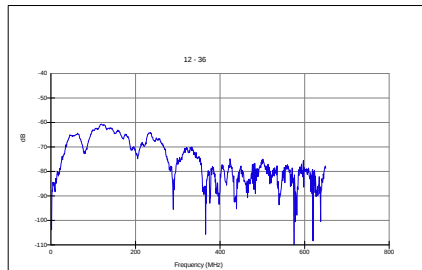
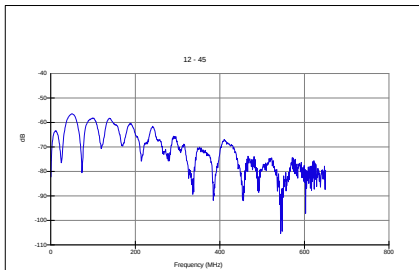
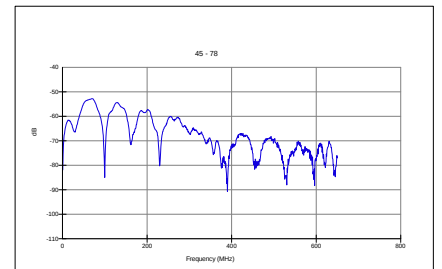
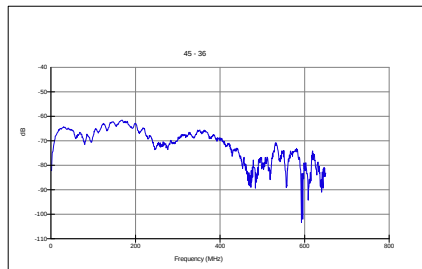
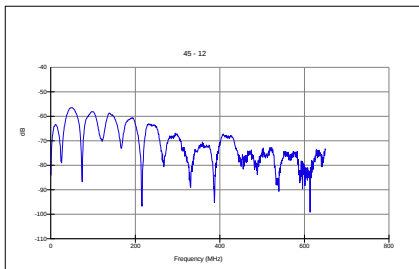
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





FEXT - Near End

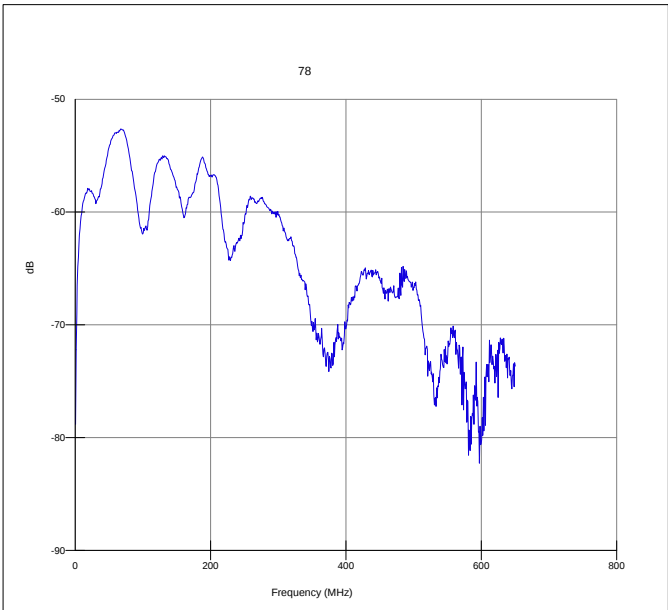
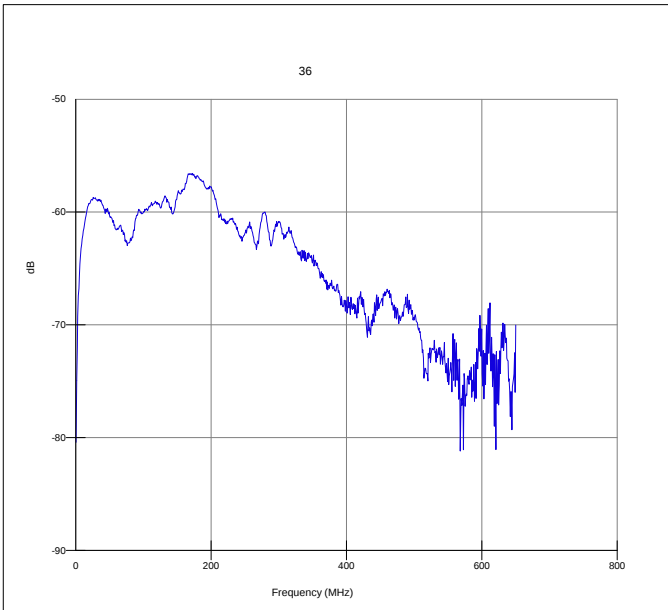
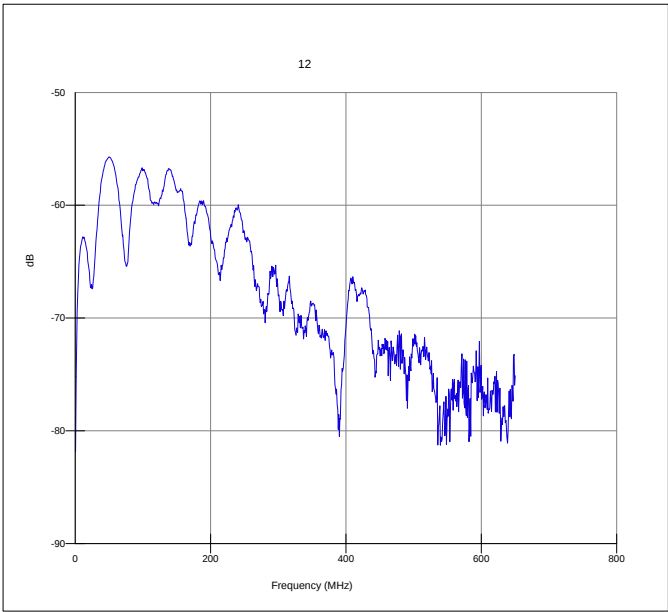
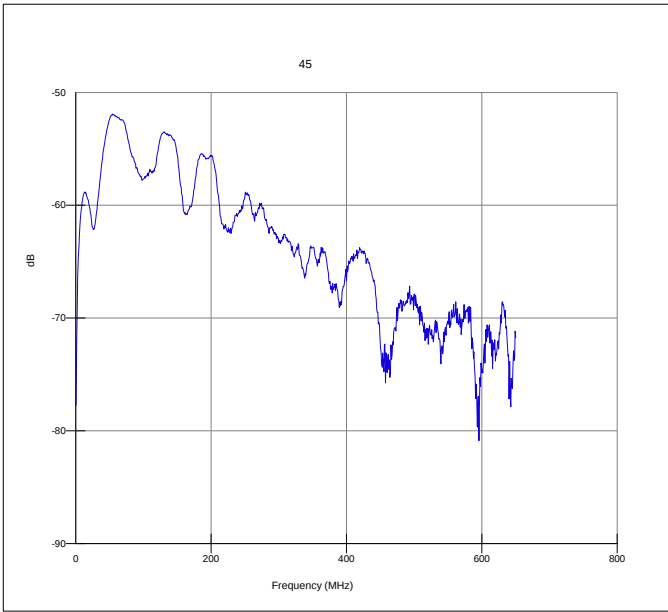
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





PSFEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

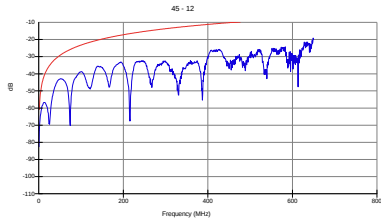




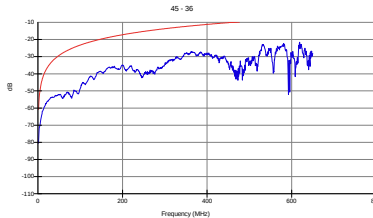
ACRF (ELFEXT) - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

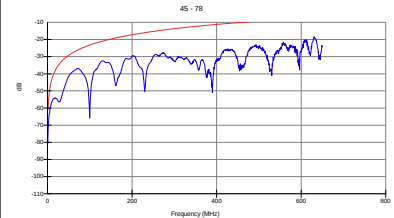
Limit Margin : 12.795 dB @ 3.748 MHz



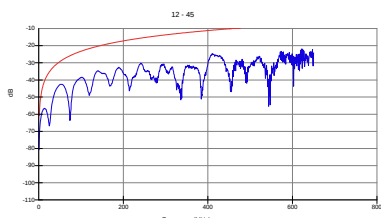
Limit Margin : 15.007 dB @ 362.596 MHz



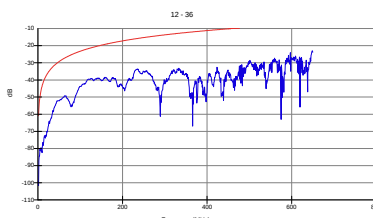
Limit Margin : 10.586 dB @ 68.698 MHz



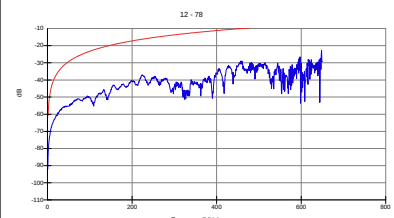
Limit Margin : 12.487 dB @ 5.371 MHz



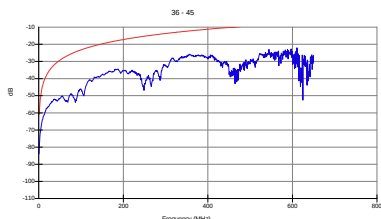
Limit Margin : 17.786 dB @ 235.132 MHz



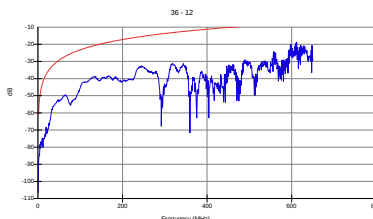
Limit Margin : 20.701 dB @ 223.766 MHz



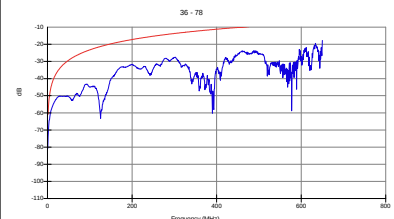
Limit Margin : 13.576 dB @ 356.913 MHz



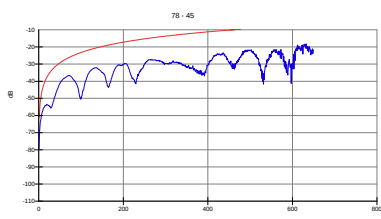
Limit Margin : 17.062 dB @ 244.874 MHz



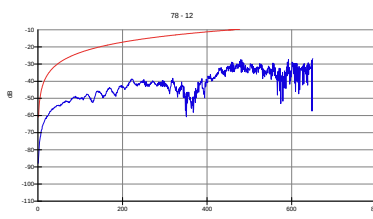
Limit Margin : 12.811 dB @ 3.748 MHz



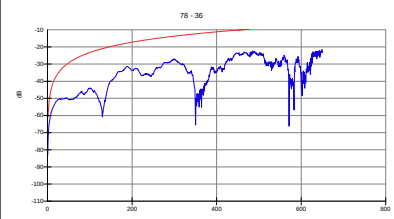
Limit Margin : 10.354 dB @ 67.074 MHz



Limit Margin : 22.392 dB @ 222.142 MHz



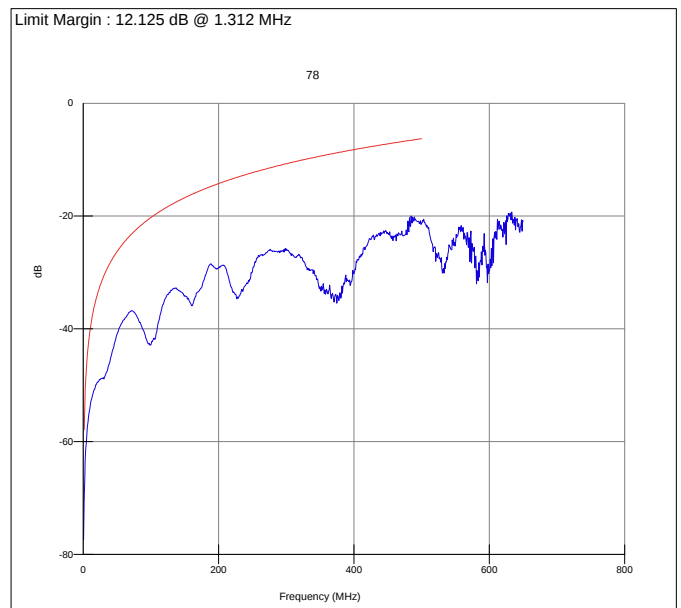
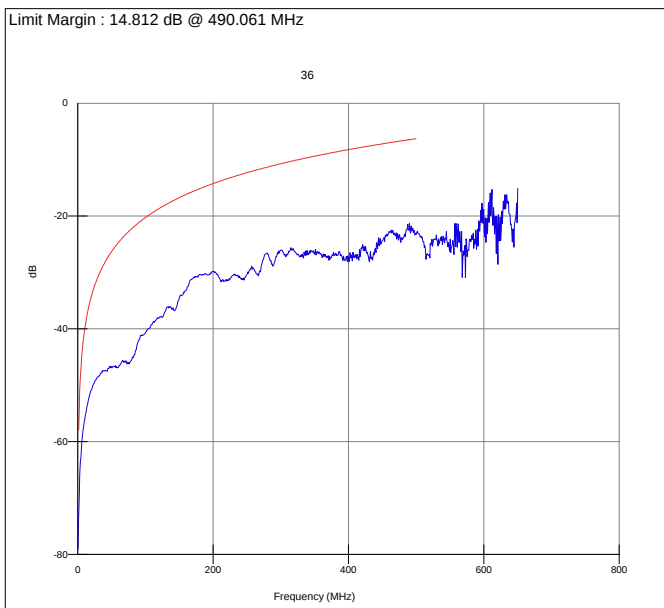
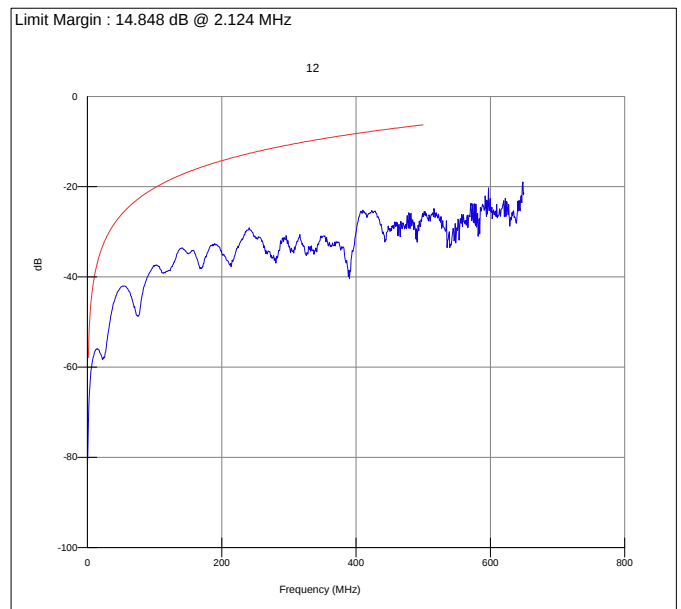
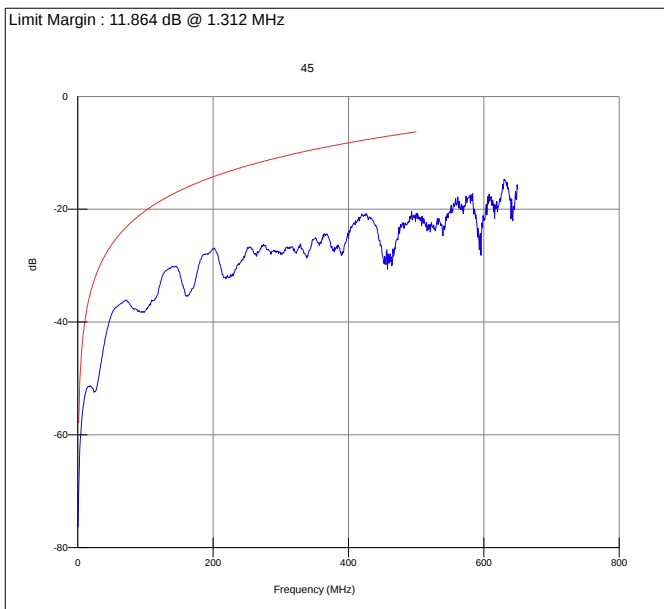
Limit Margin : 12.764 dB @ 484.378 MHz





PSACRF (PSELFEXT) - Near End

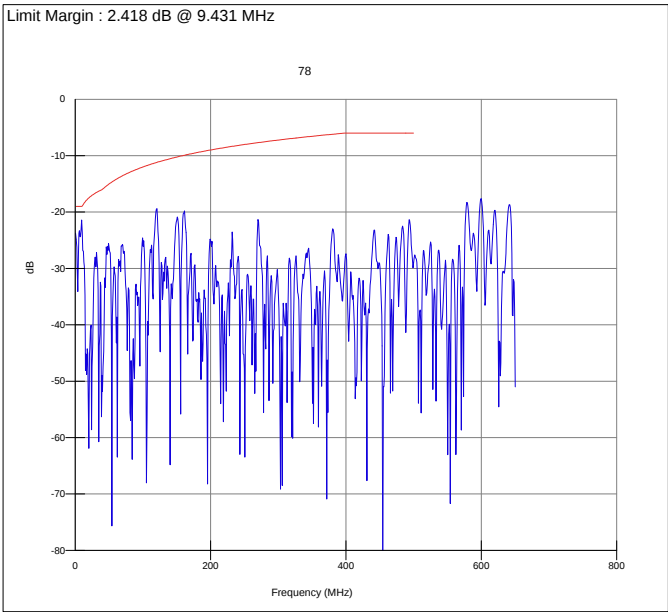
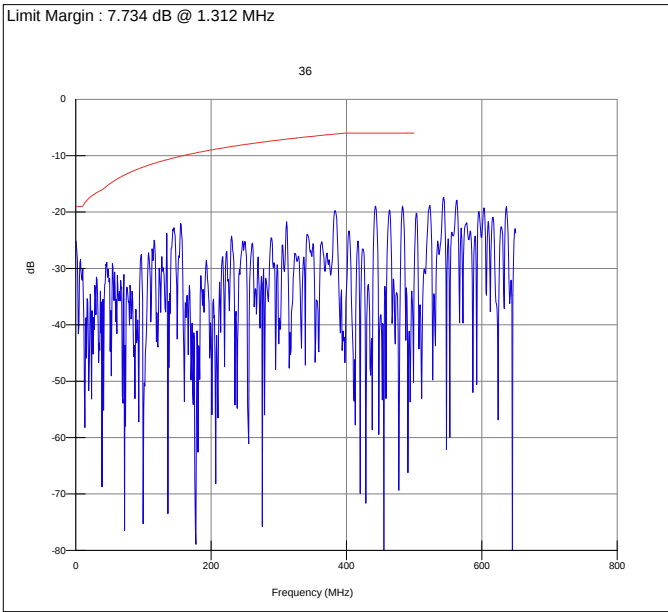
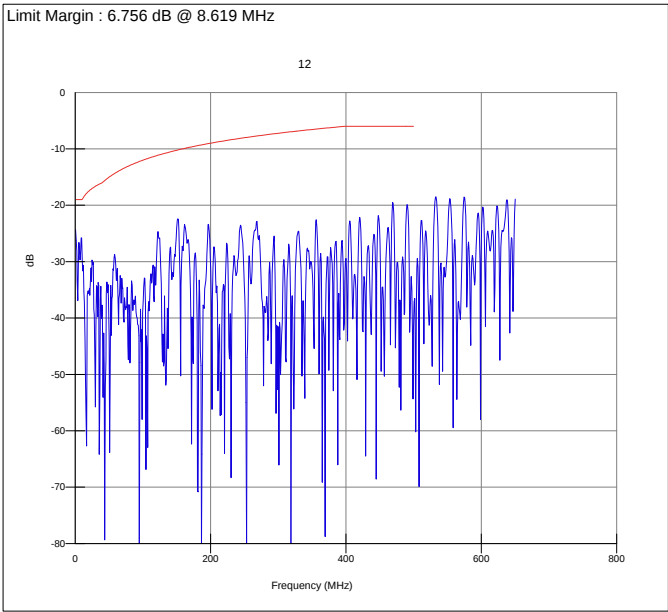
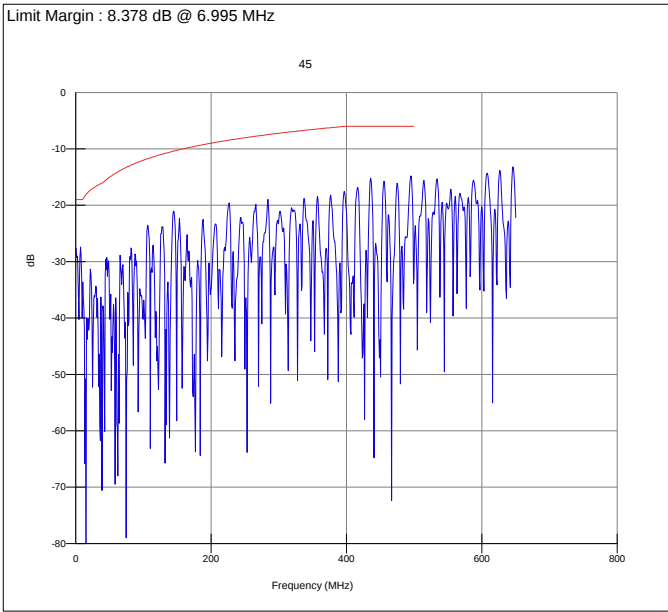
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





Return Loss - Near End

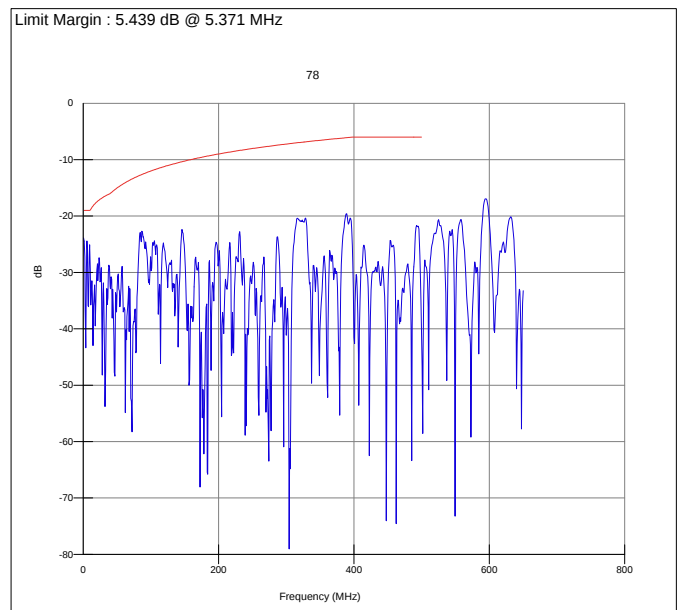
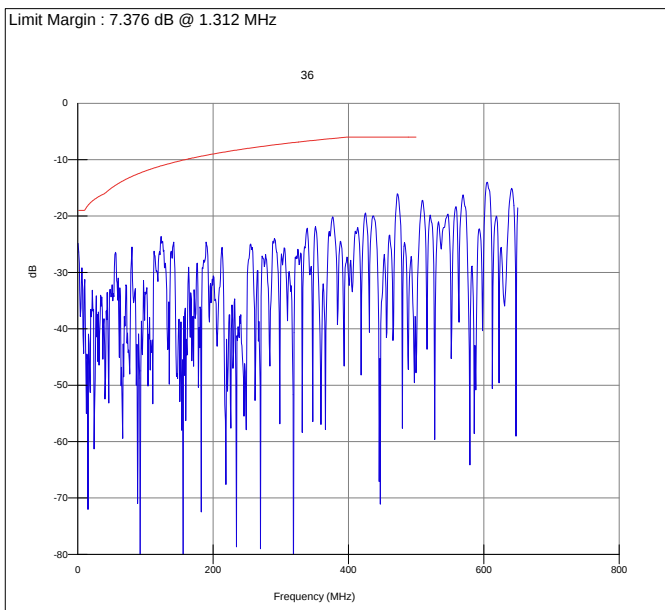
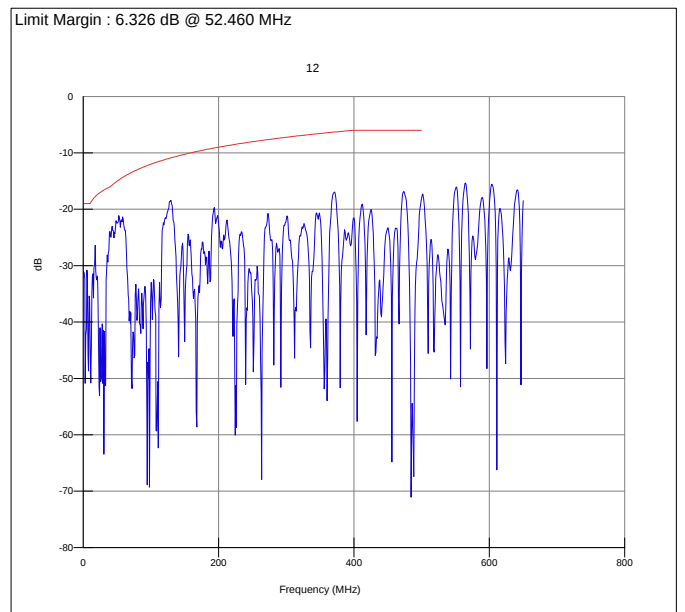
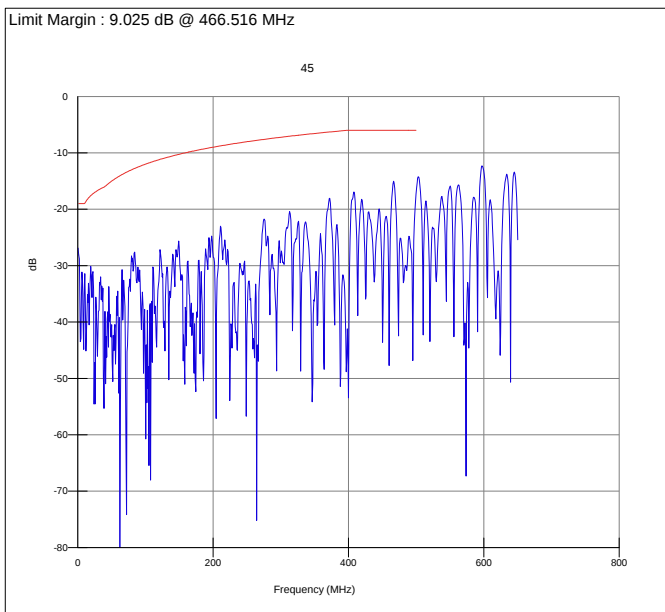
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





Return Loss - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

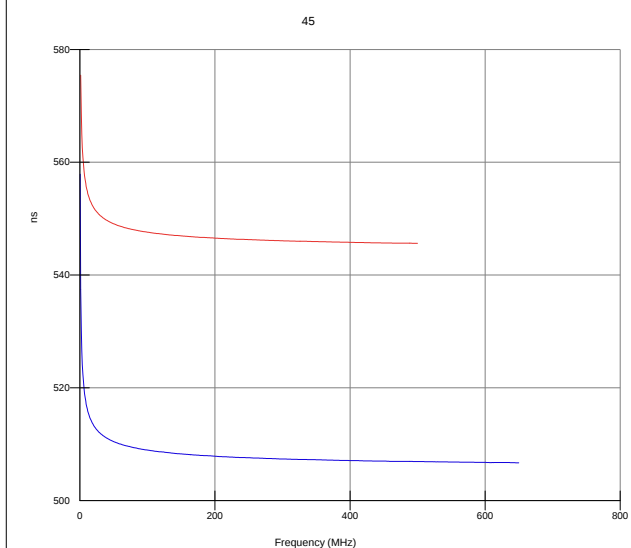




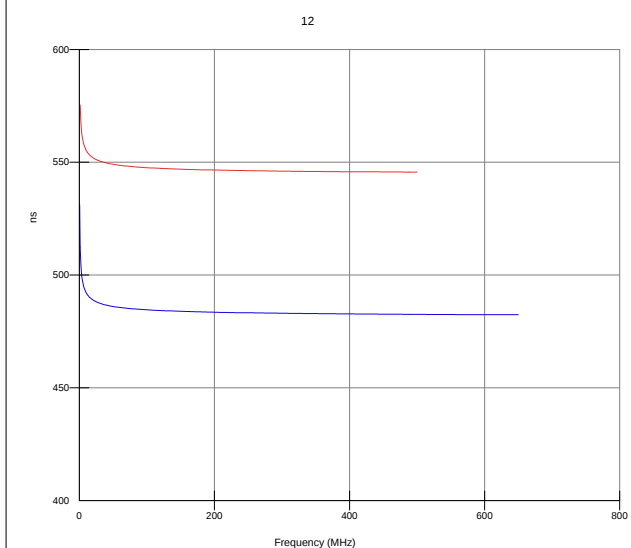
Propagation Delay - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

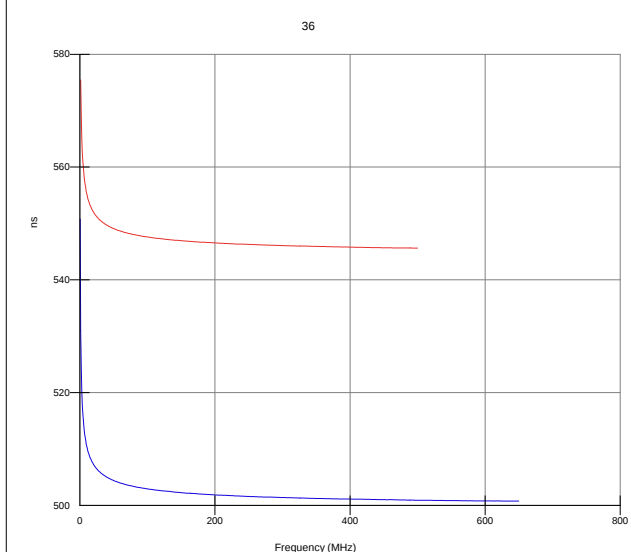
Limit Margin : 37.990 ns @ 1.312 MHz



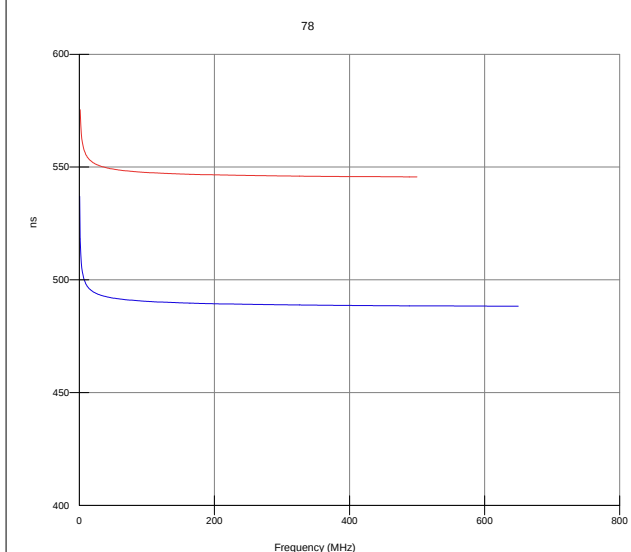
Limit Margin : 62.980 ns @ 130.400 MHz



Limit Margin : 44.490 ns @ 1.312 MHz



Limit Margin : 57.120 ns @ 79.252 MHz

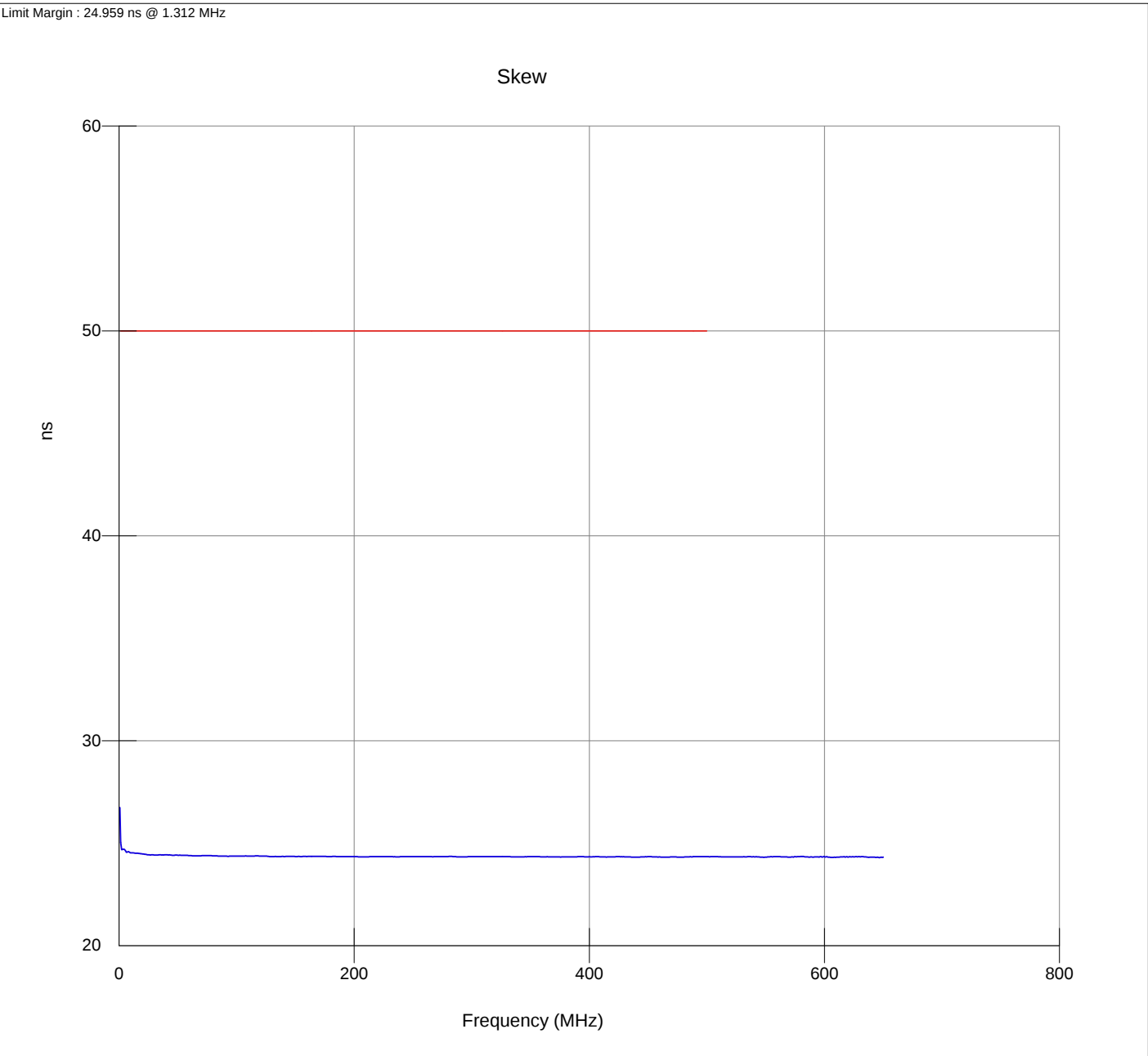




Propagation Delay Skew - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies

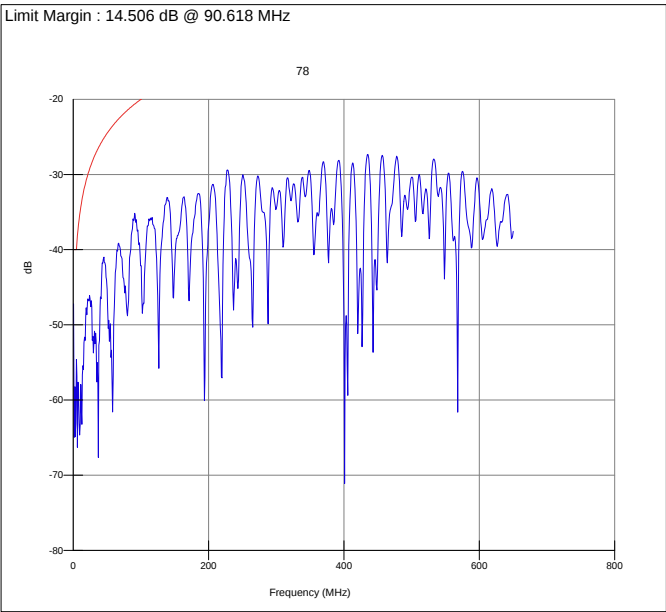
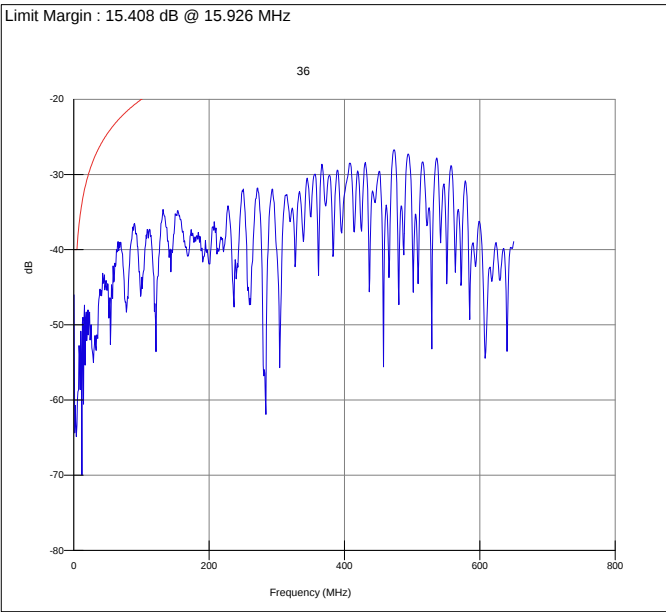
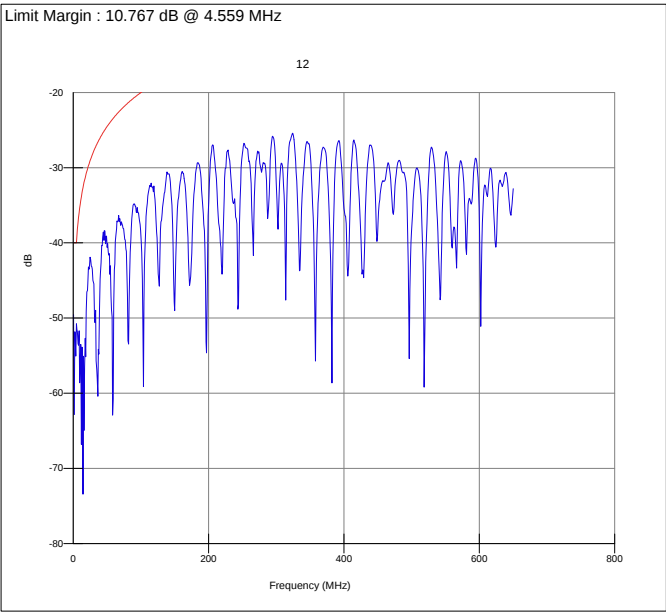
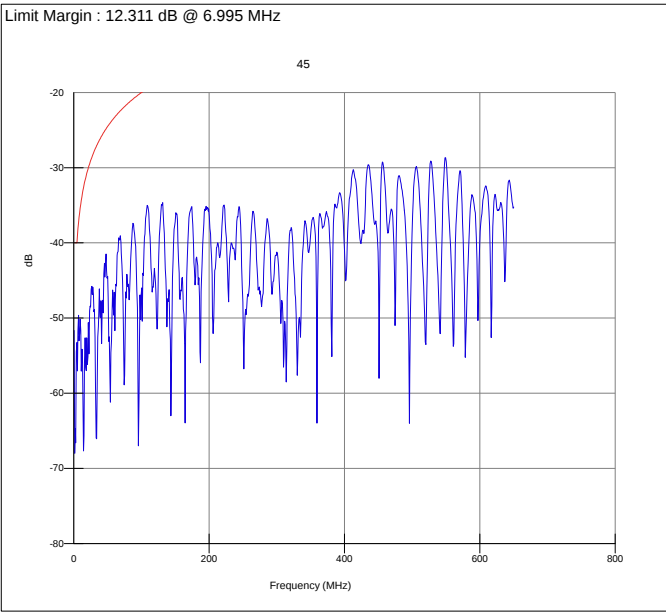
Limit Margin : 24.959 ns @ 1.312 MHz





TCL - Near End

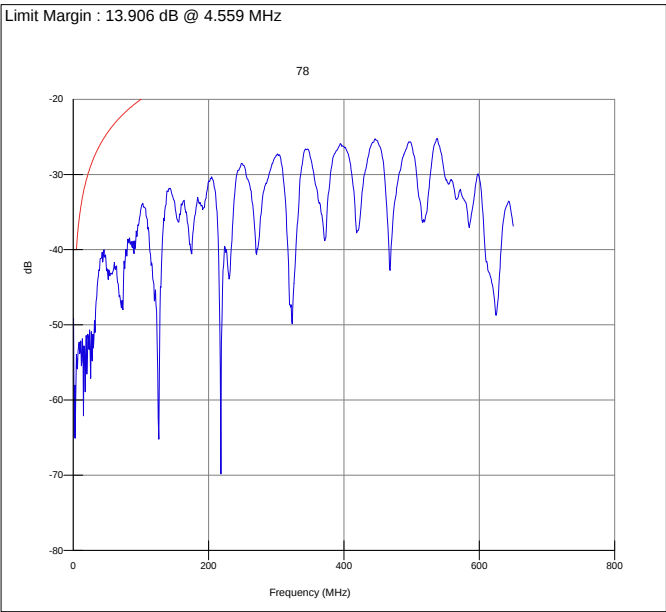
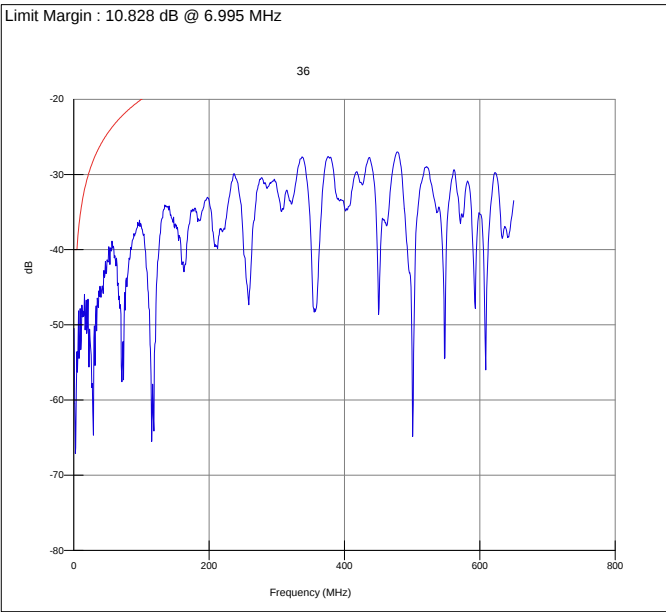
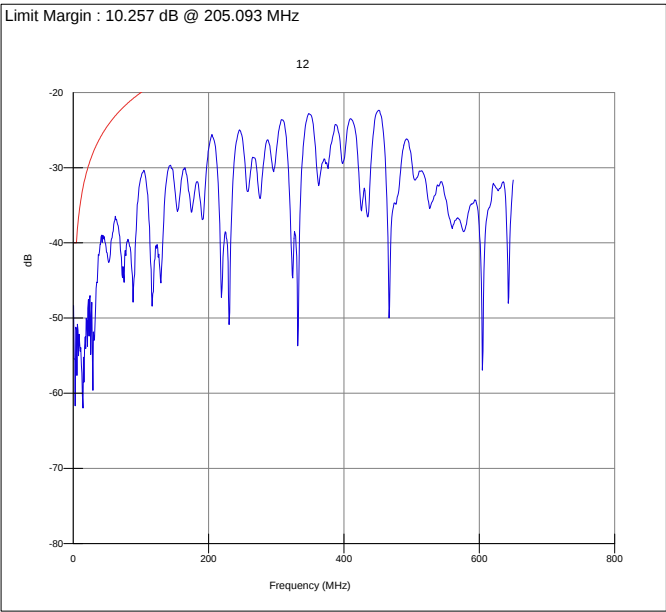
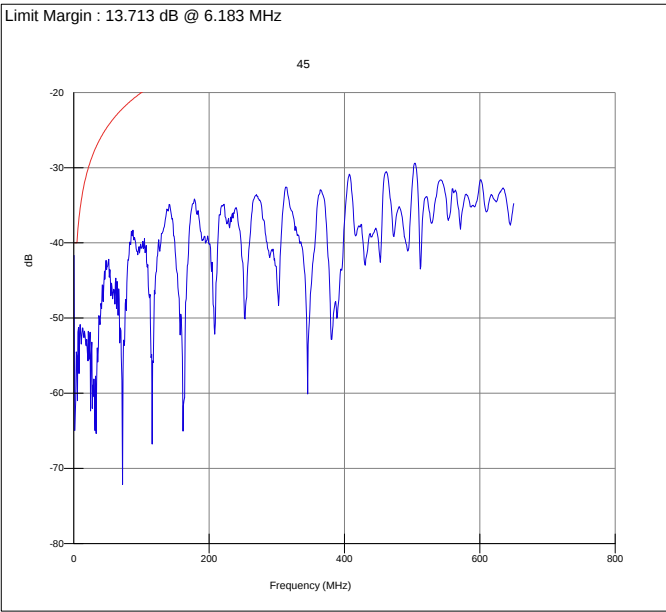
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





TCL - Far End

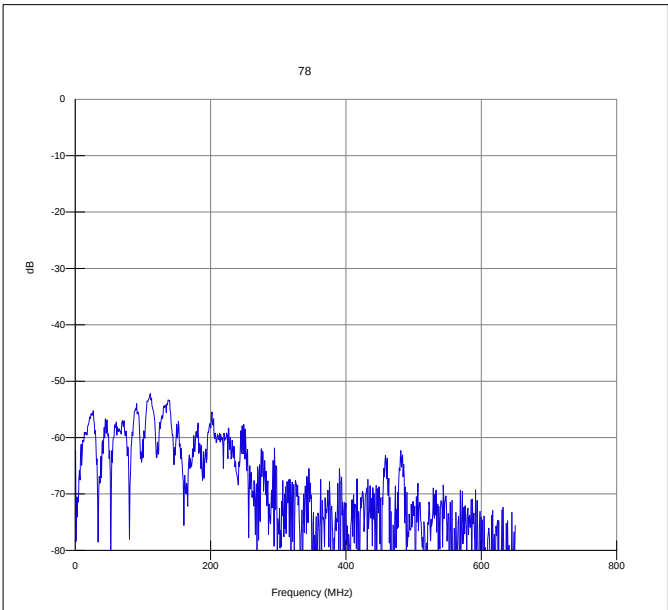
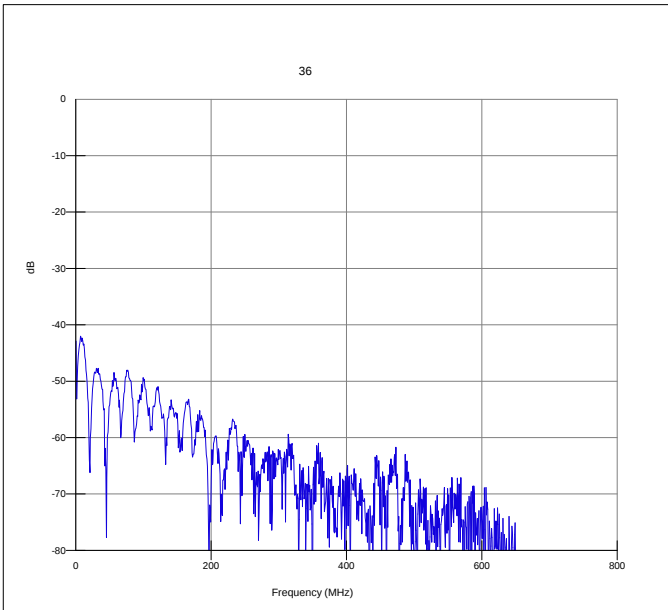
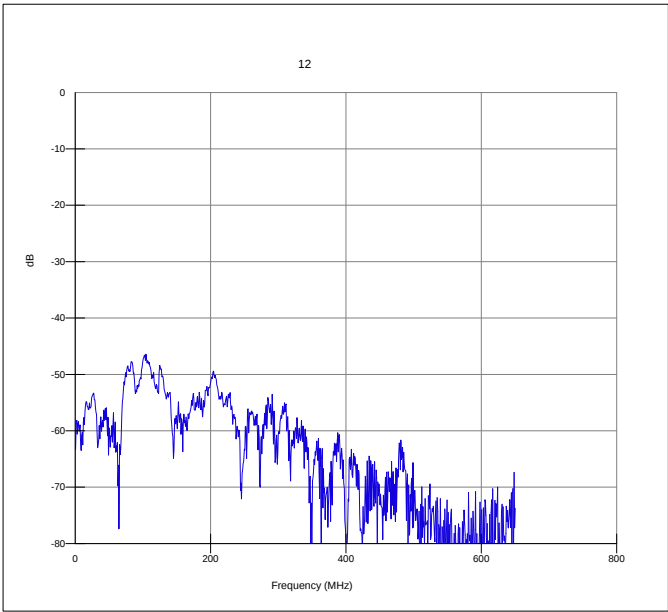
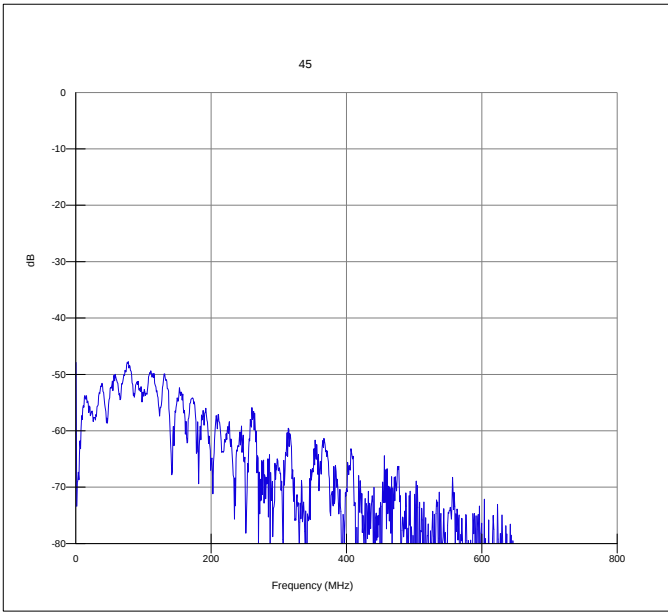
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





TCTL - Near End

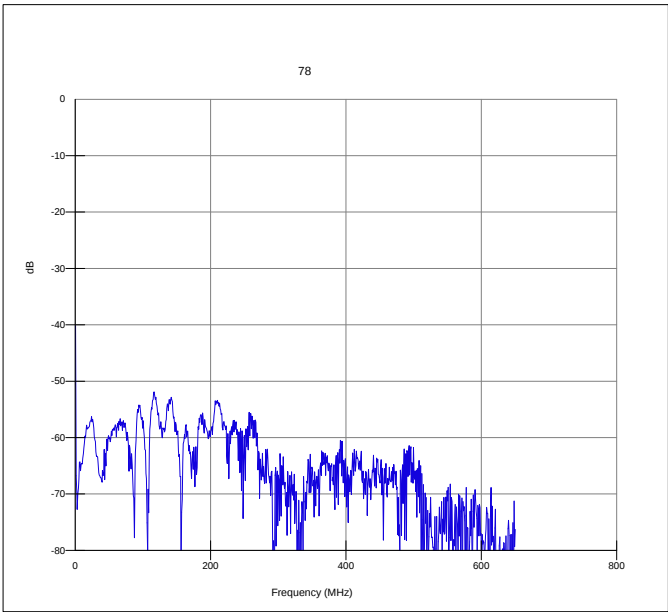
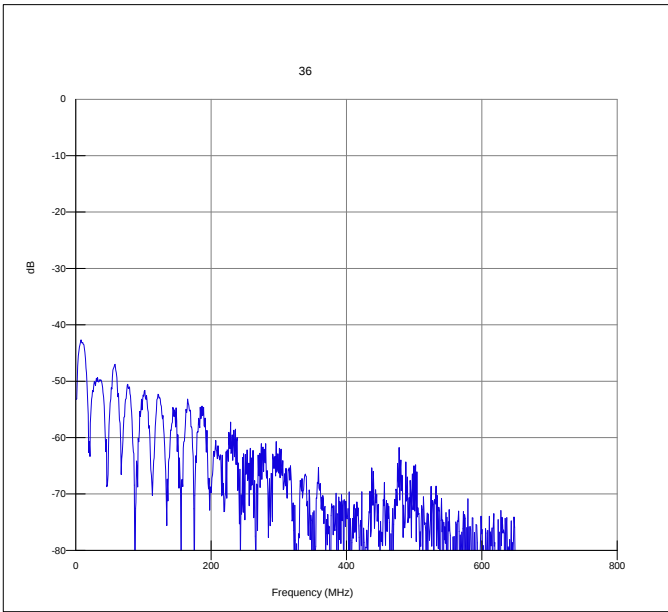
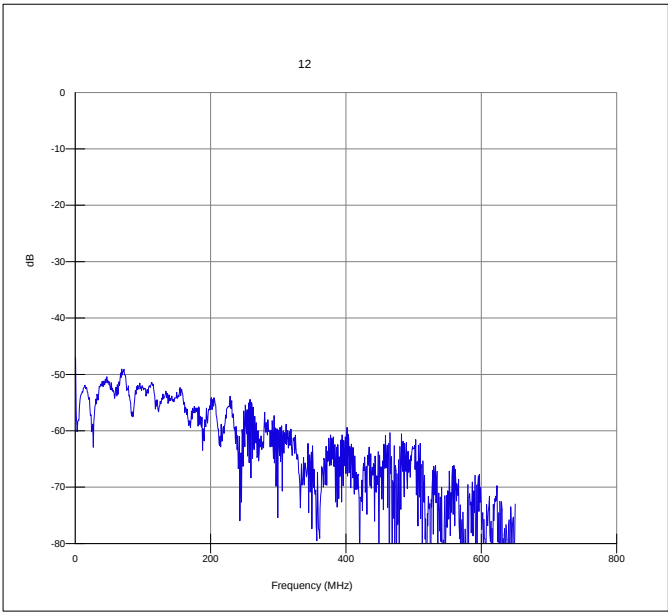
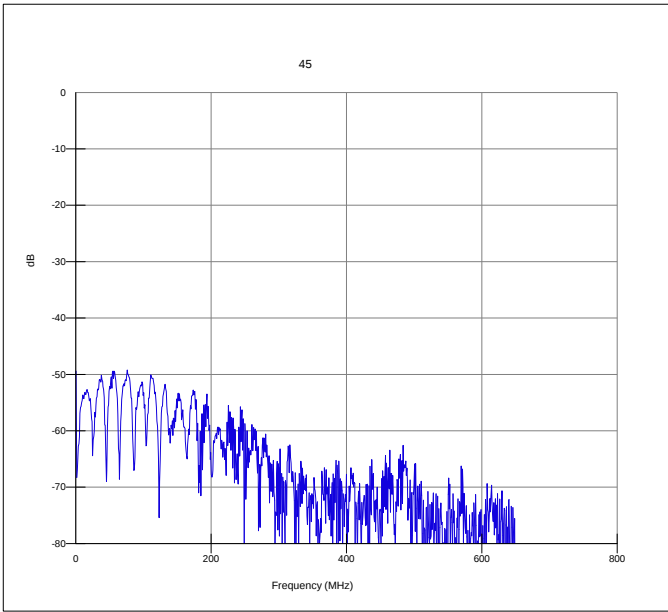
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Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





TCTL - Far End

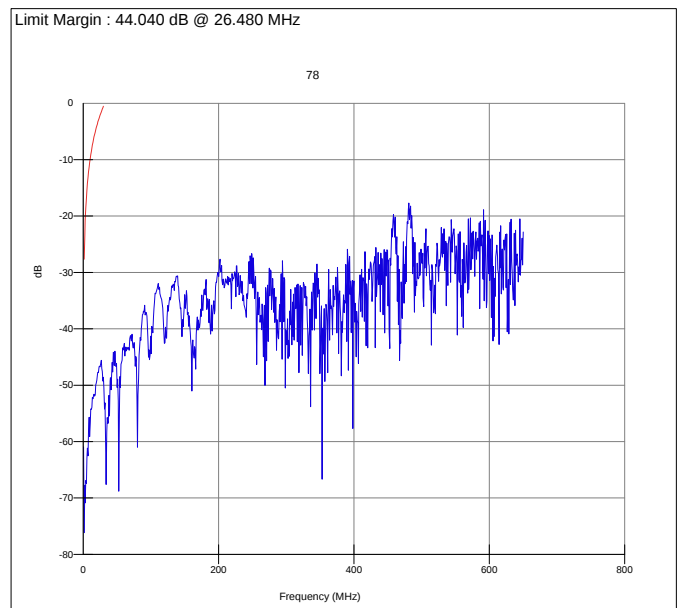
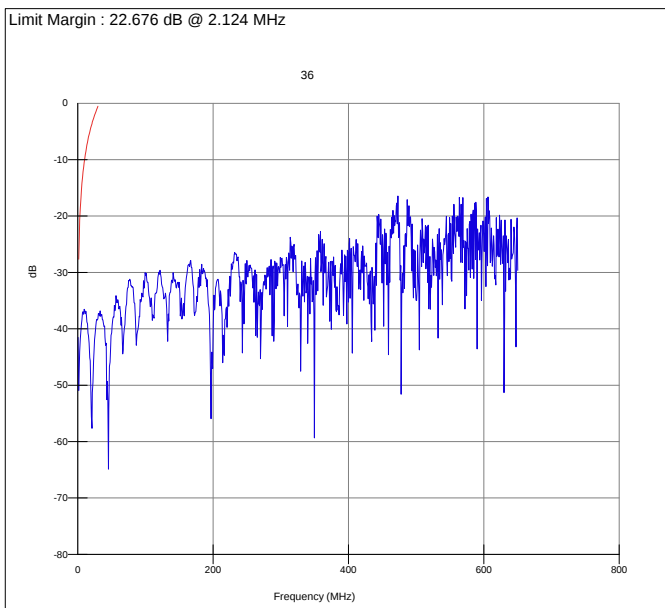
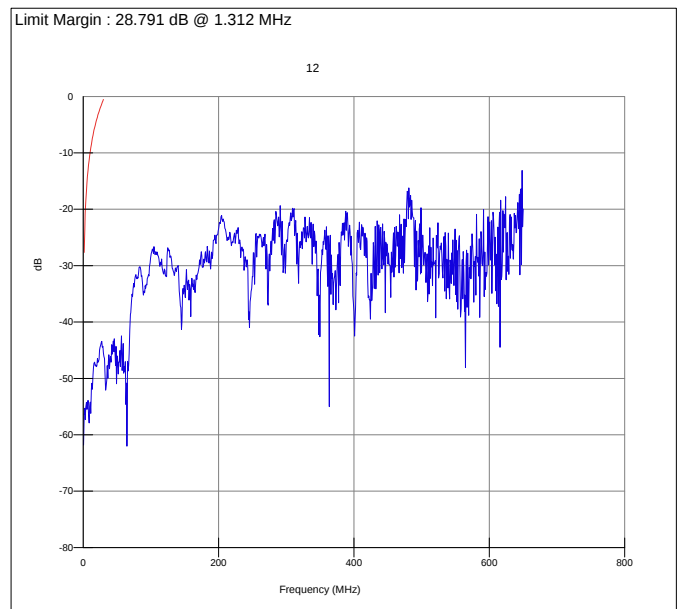
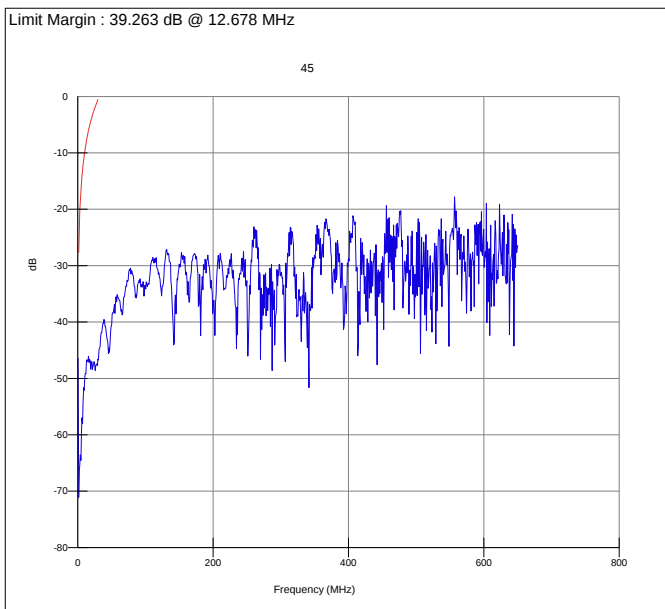
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





ELTCTL - Near End

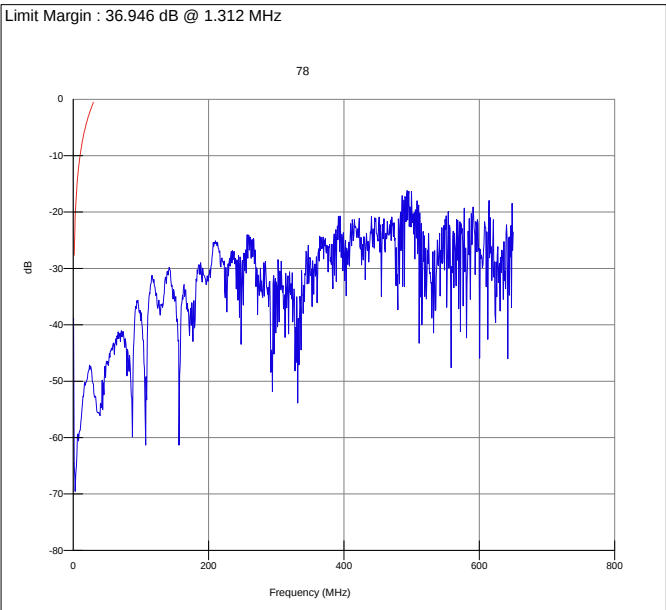
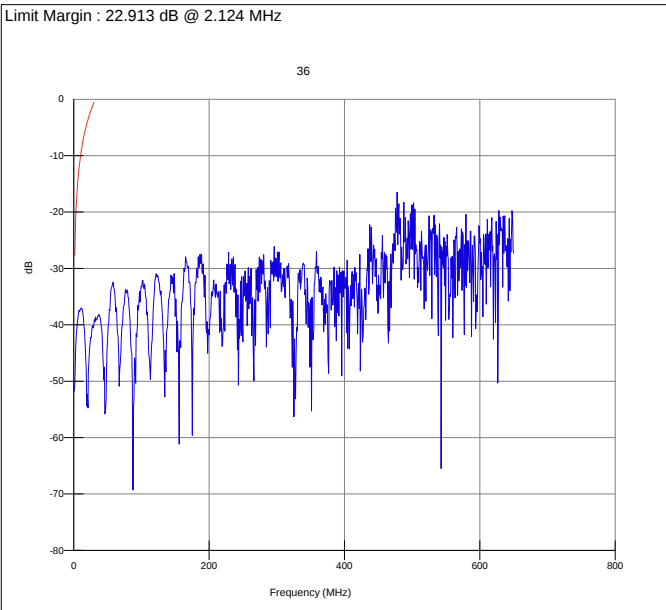
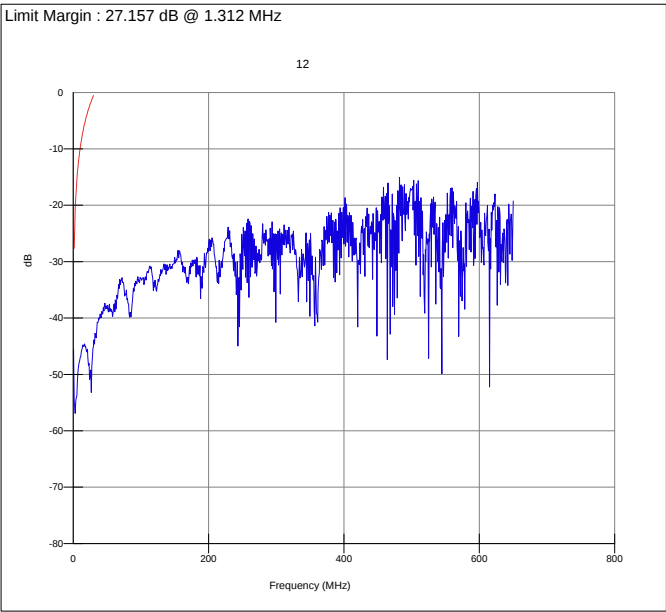
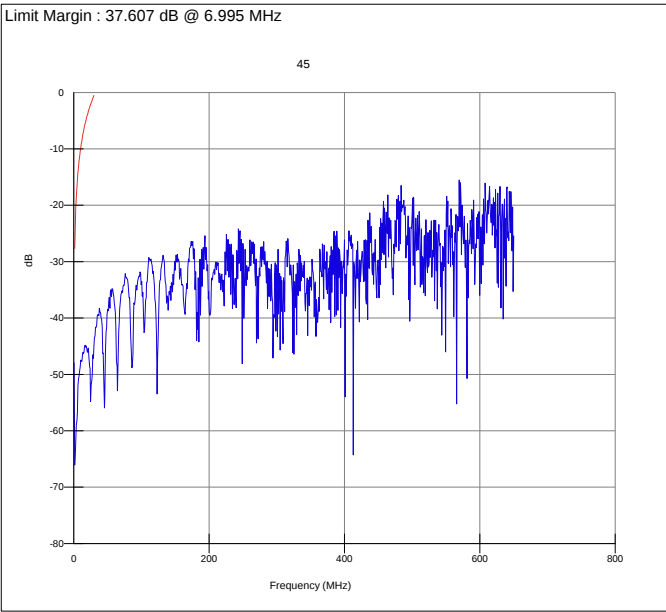
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





ELTCTL - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	A
Operator Name	David Ayers	Test Status	Complies





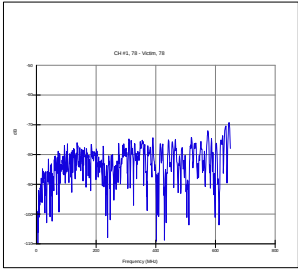
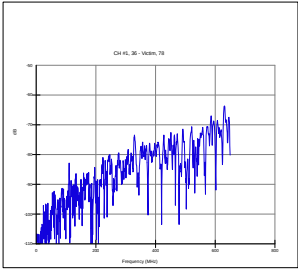
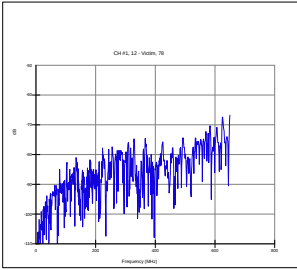
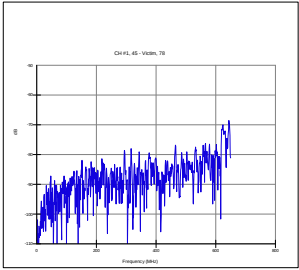
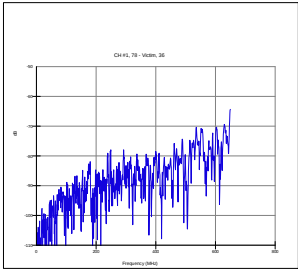
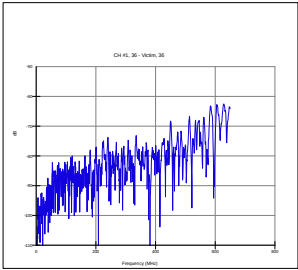
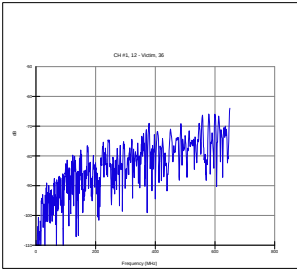
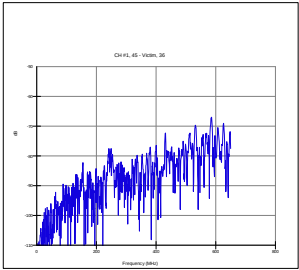
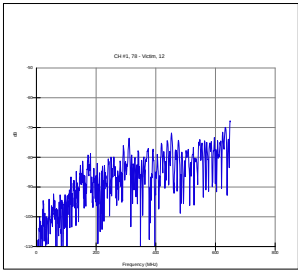
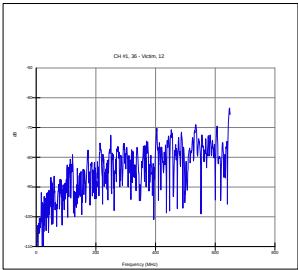
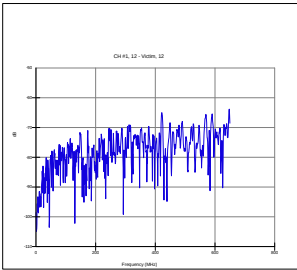
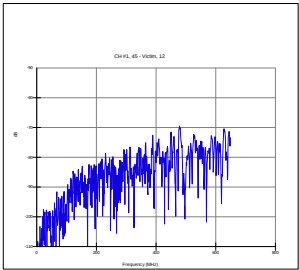
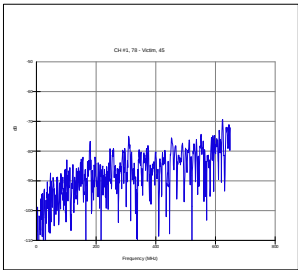
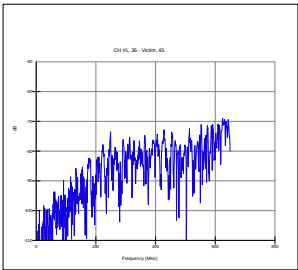
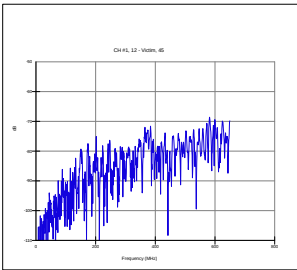
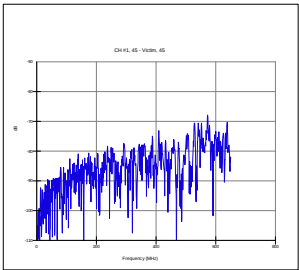
Appendix B
Aliens test results

This appendix contains 24 pages.



ANEXT - Near End

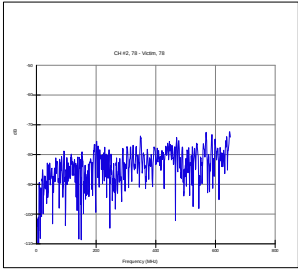
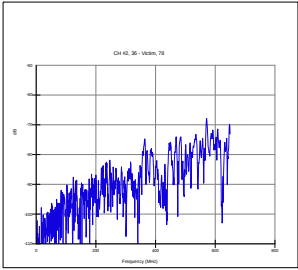
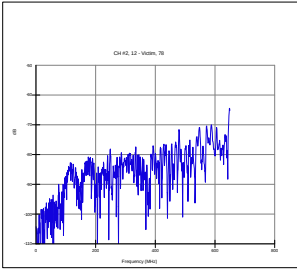
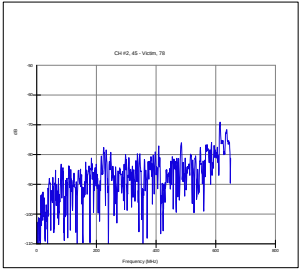
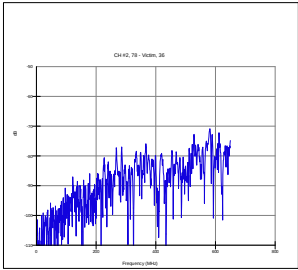
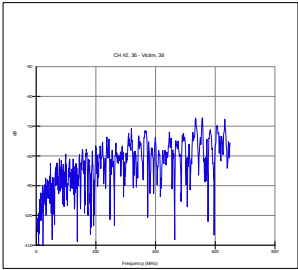
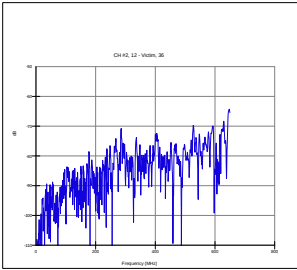
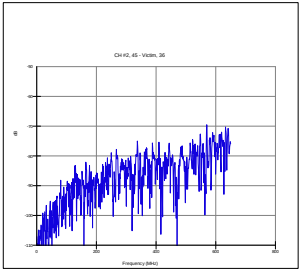
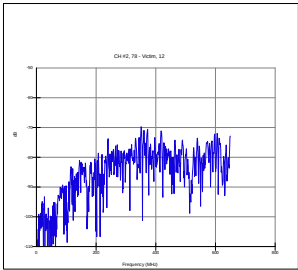
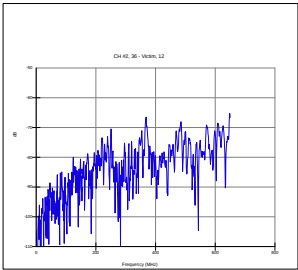
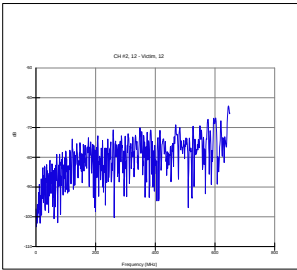
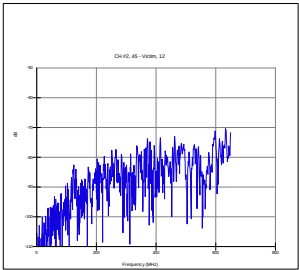
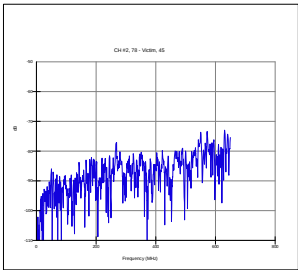
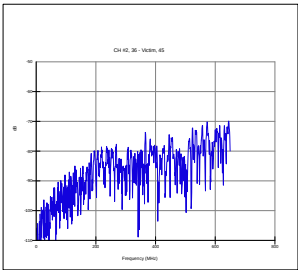
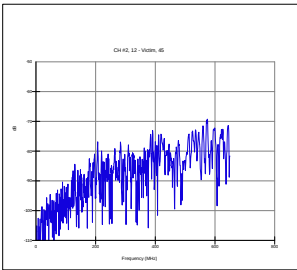
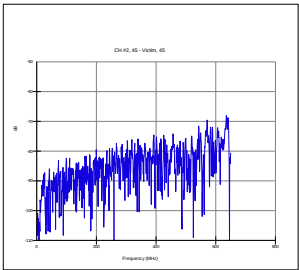
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





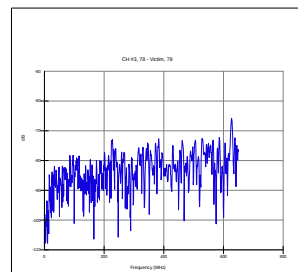
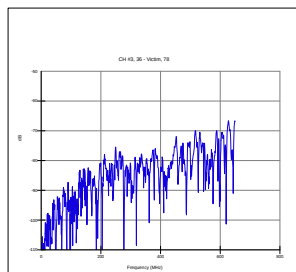
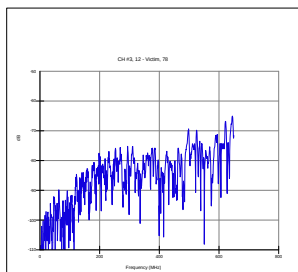
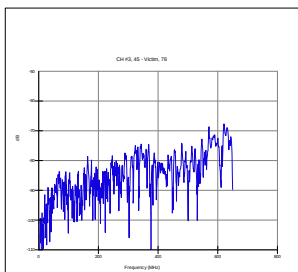
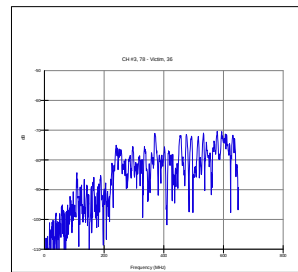
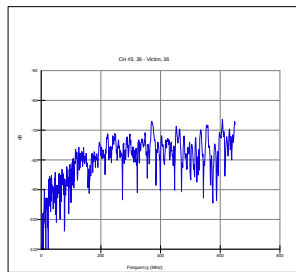
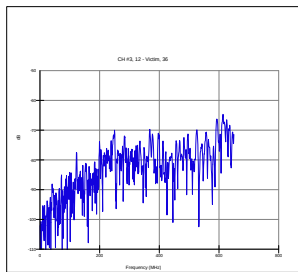
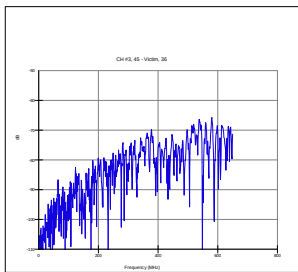
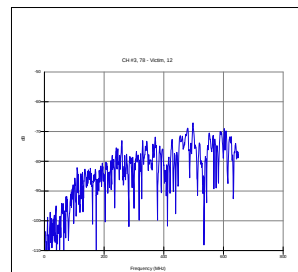
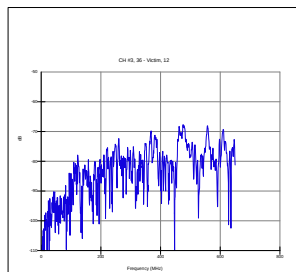
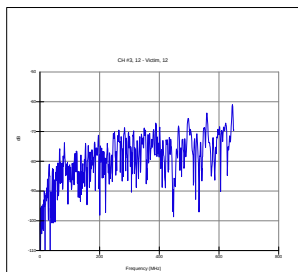
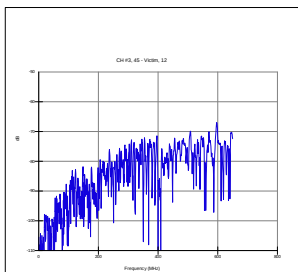
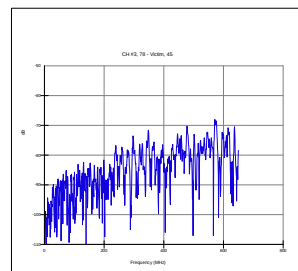
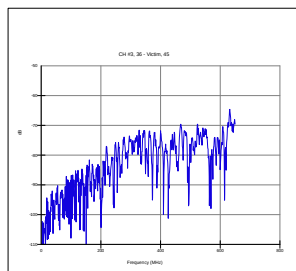
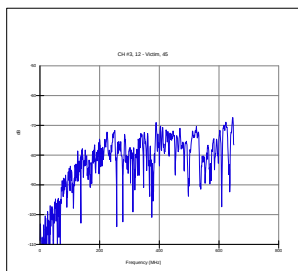
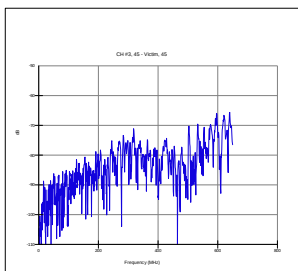
ANEXT - Near End

Client
Specification
Part No
Test Started
Description
Operator Name

Panduit
ANSI-TIA-568-C2 Cat 6A Channel
GenSpeed 10,000
11/29/2016 4:02:04 PM
4 Conn Channel
David Ayers

Report No
Length(m)
Temperature
Appendix
Test Status

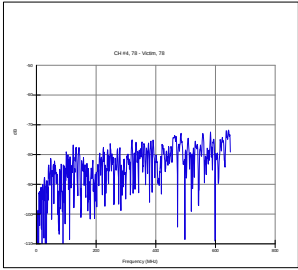
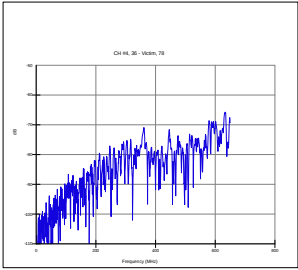
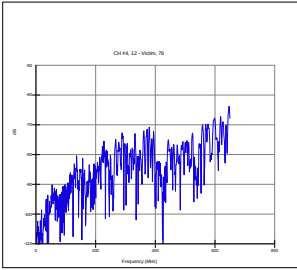
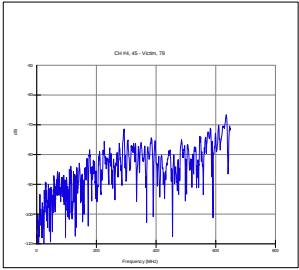
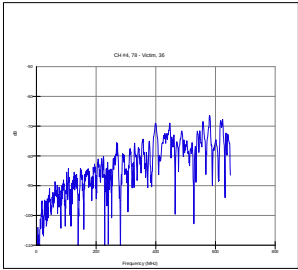
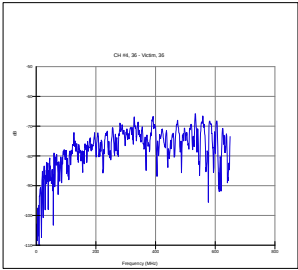
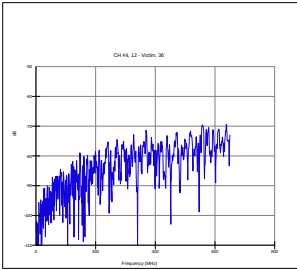
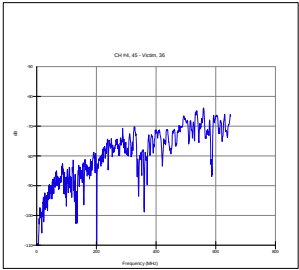
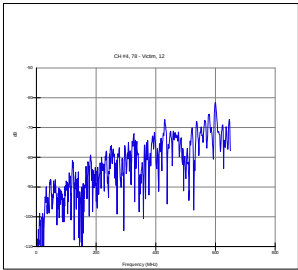
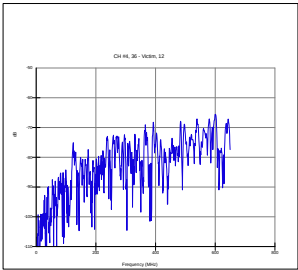
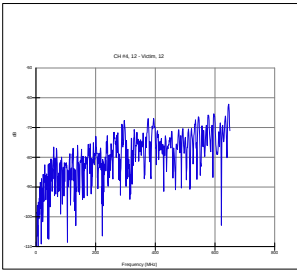
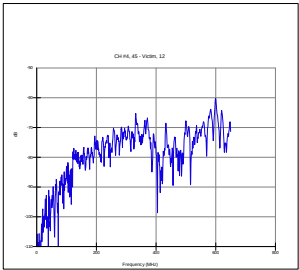
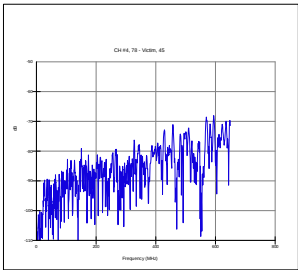
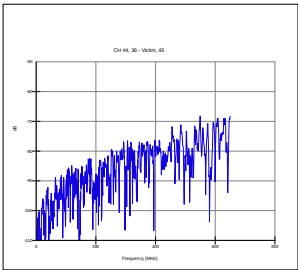
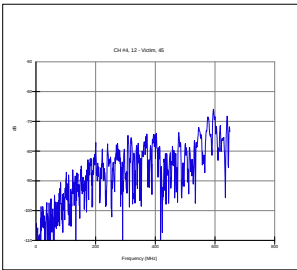
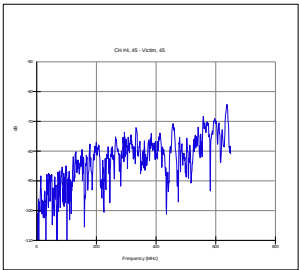
102765989CRT-001i
100.
21.8 °C
B
Complies





ANEXT - Near End

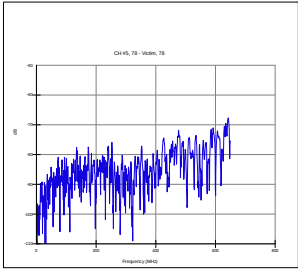
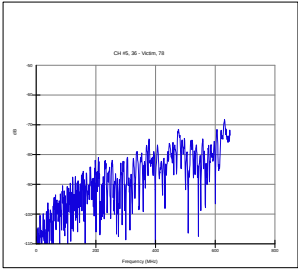
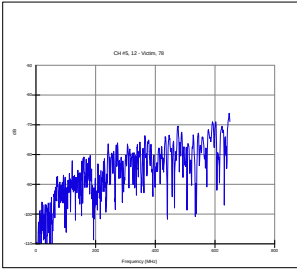
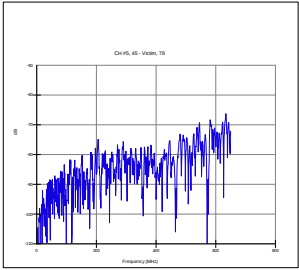
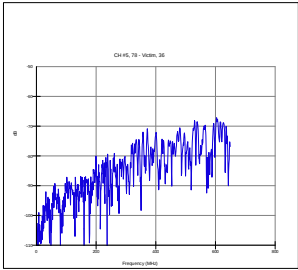
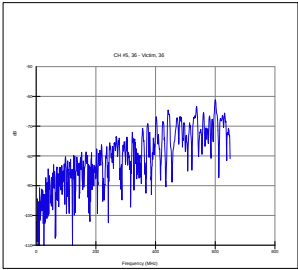
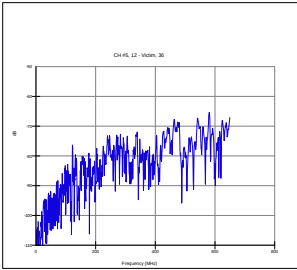
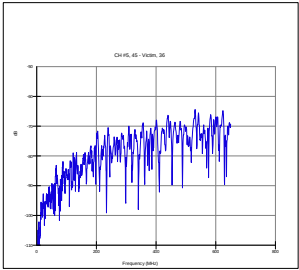
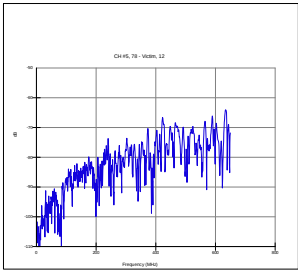
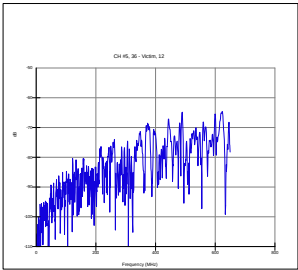
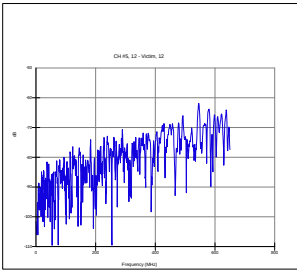
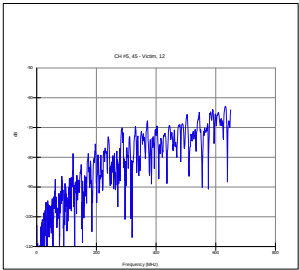
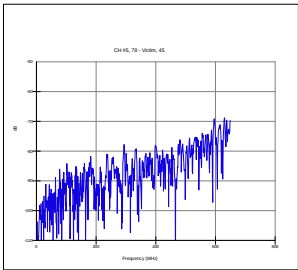
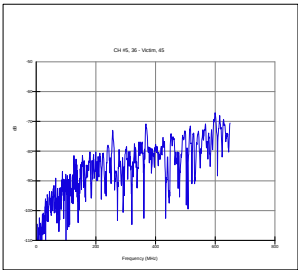
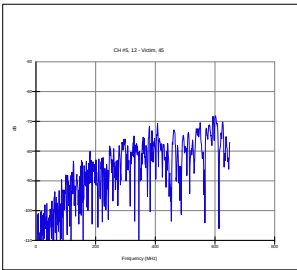
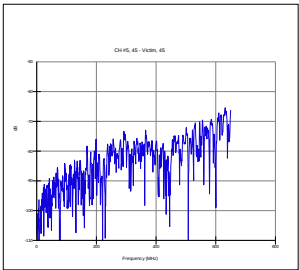
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

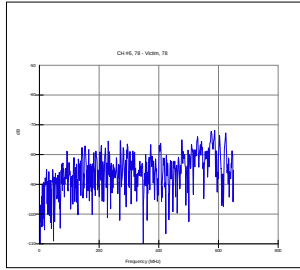
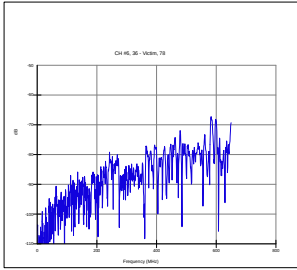
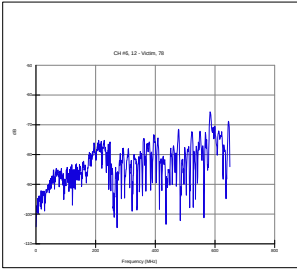
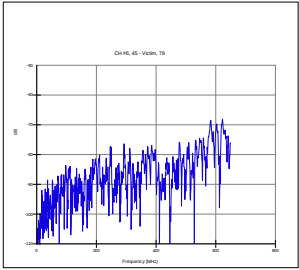
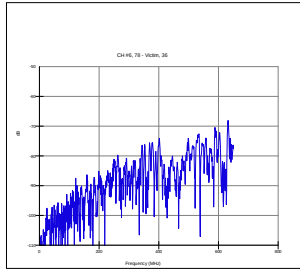
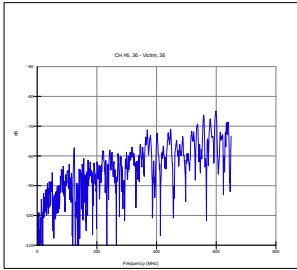
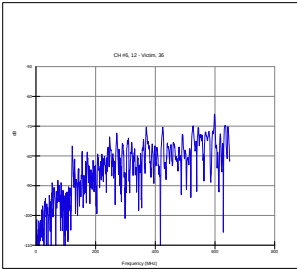
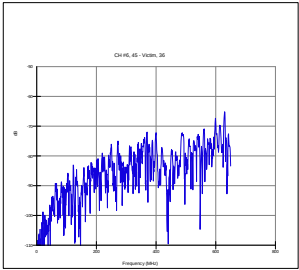
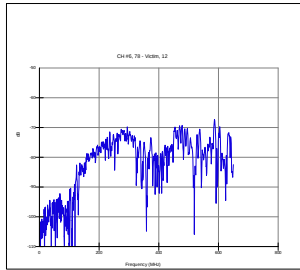
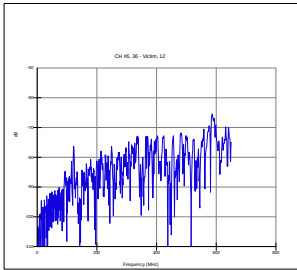
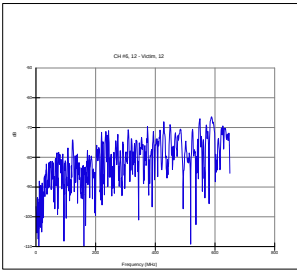
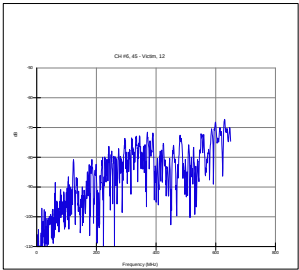
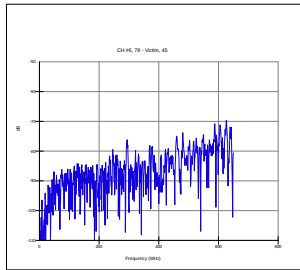
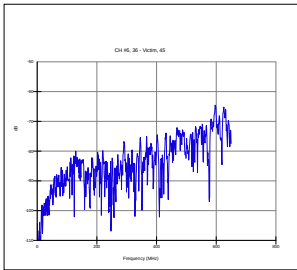
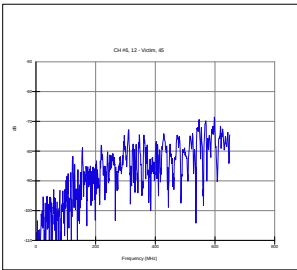
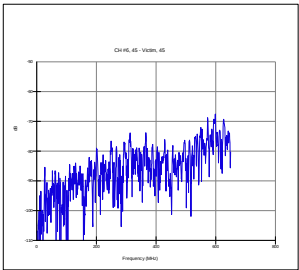
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Near End

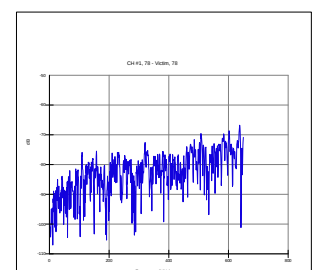
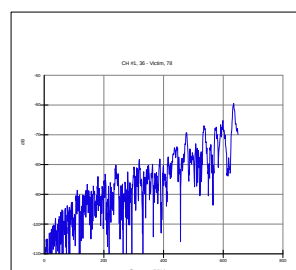
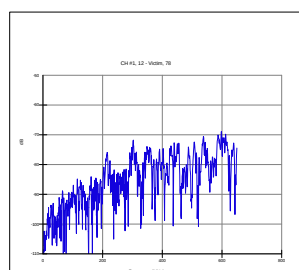
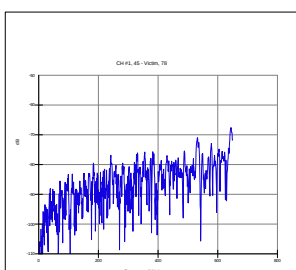
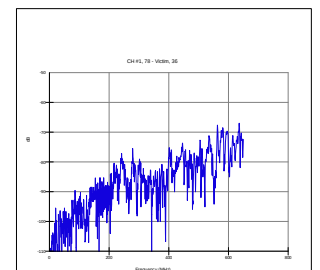
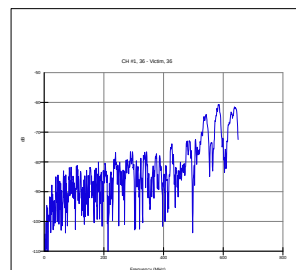
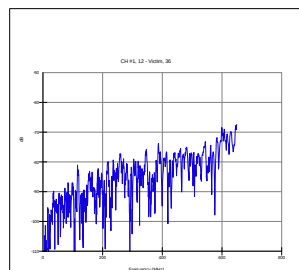
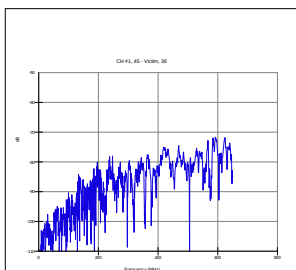
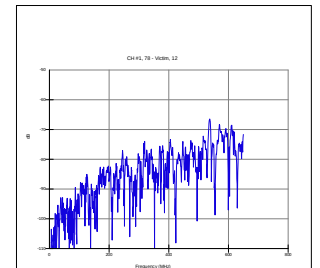
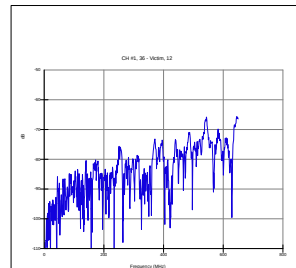
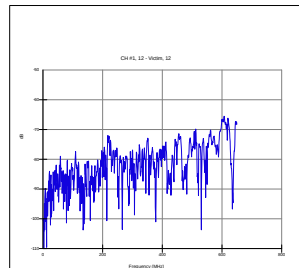
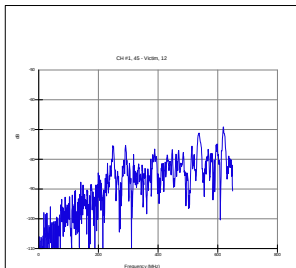
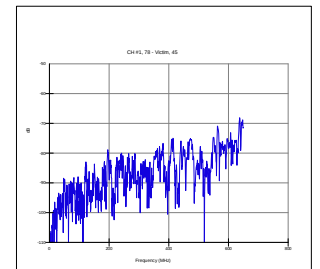
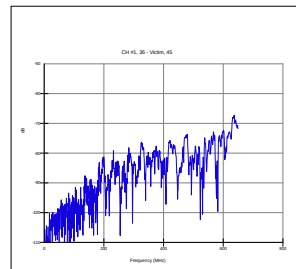
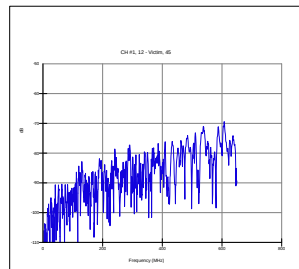
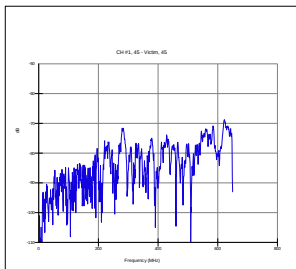
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

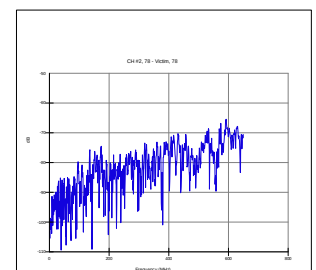
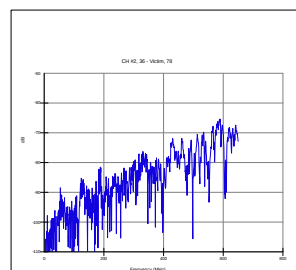
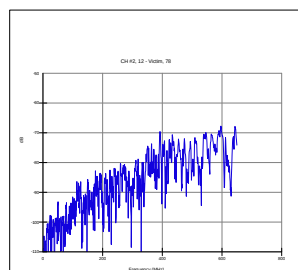
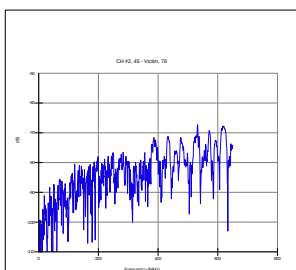
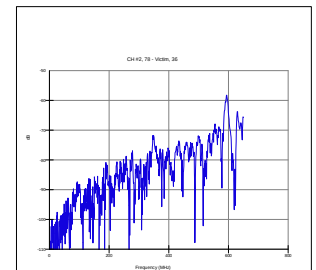
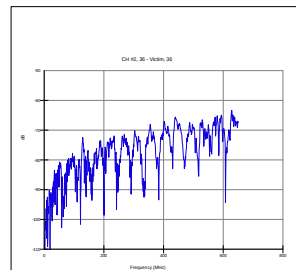
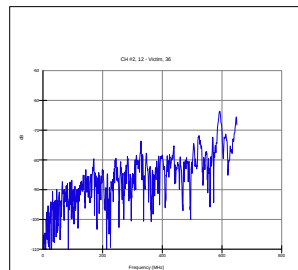
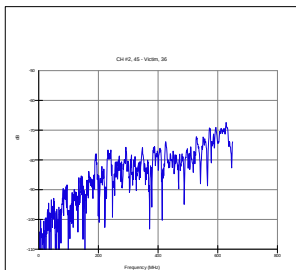
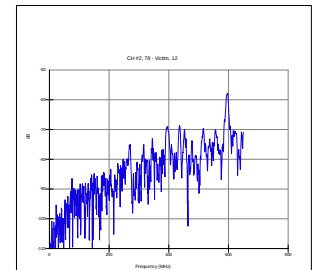
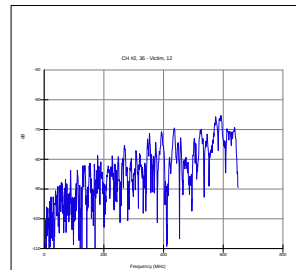
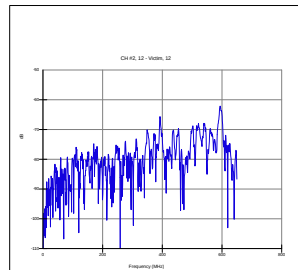
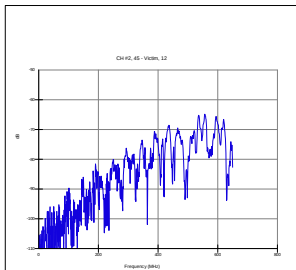
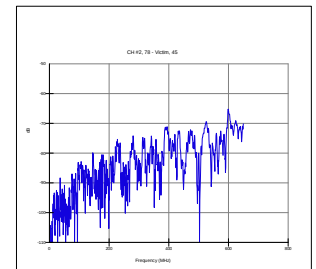
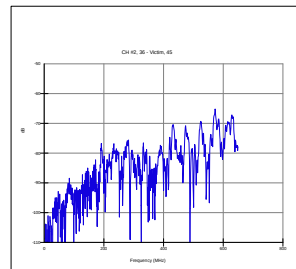
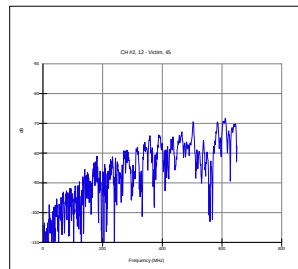
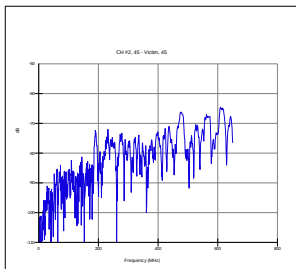
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

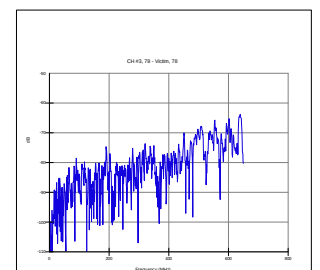
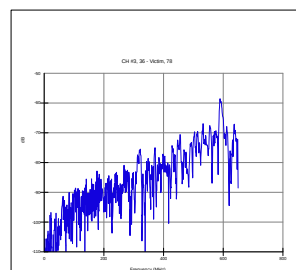
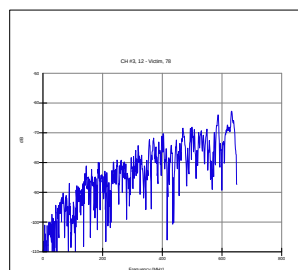
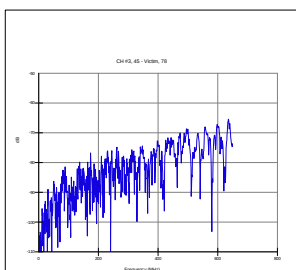
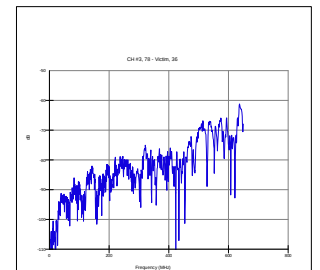
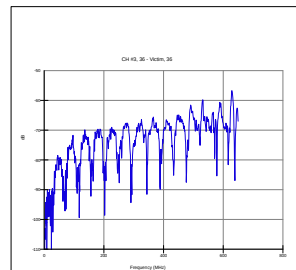
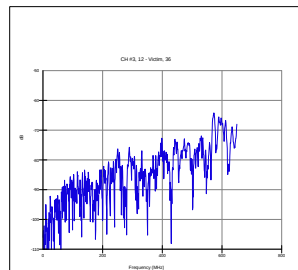
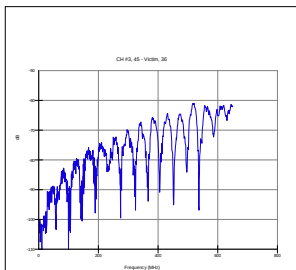
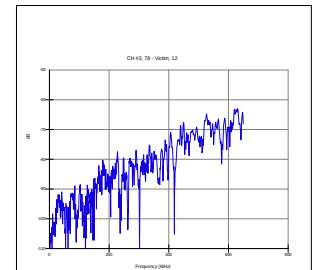
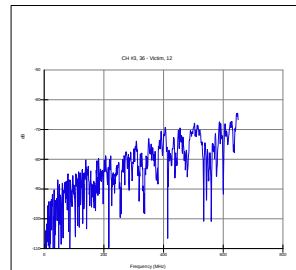
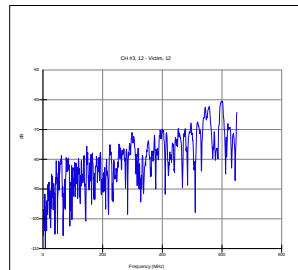
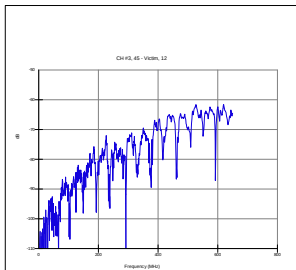
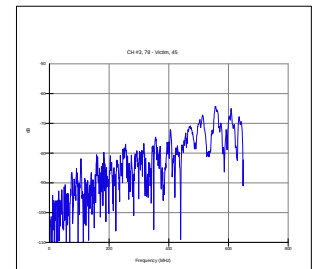
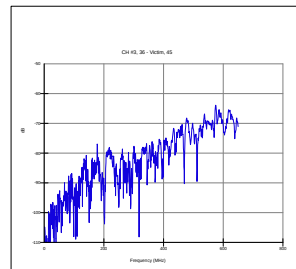
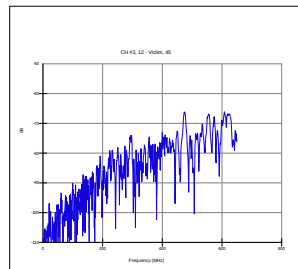
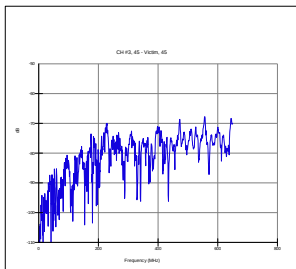
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

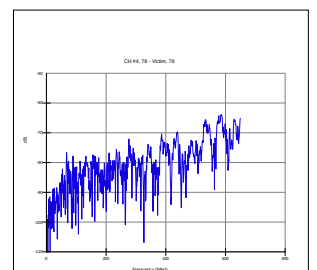
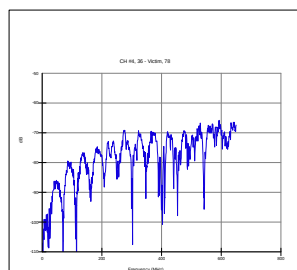
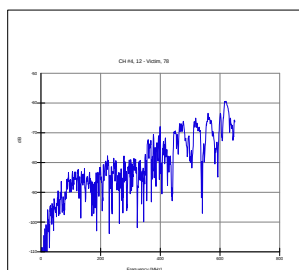
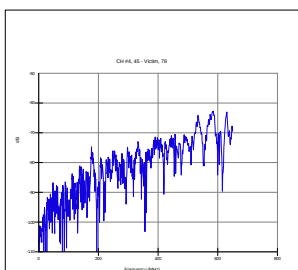
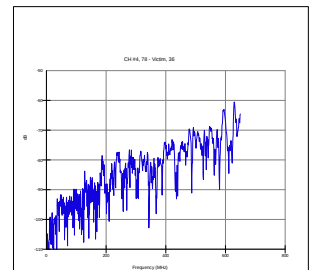
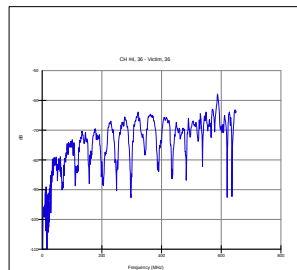
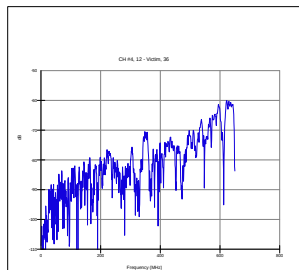
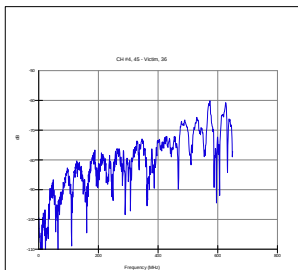
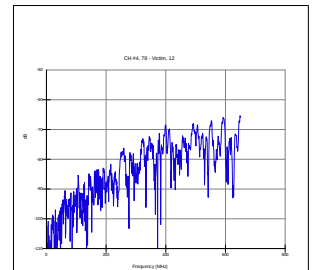
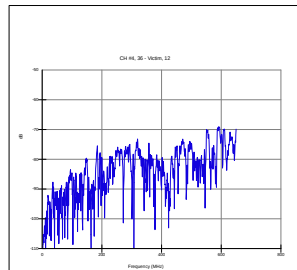
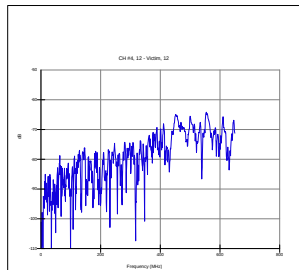
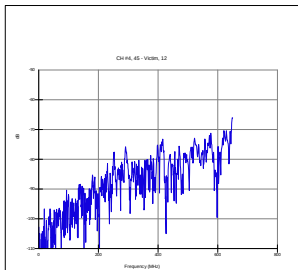
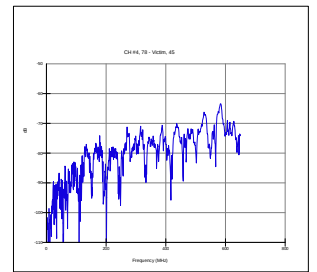
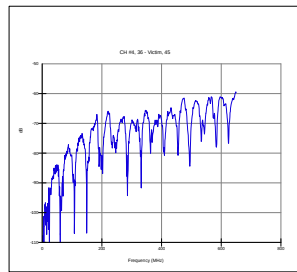
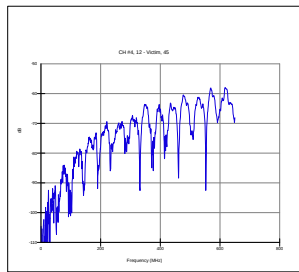
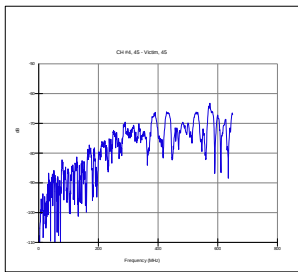
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

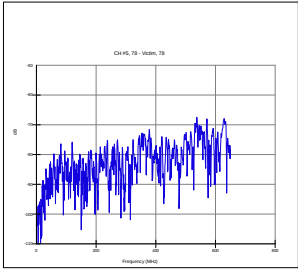
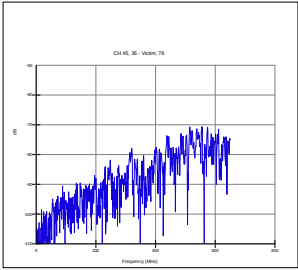
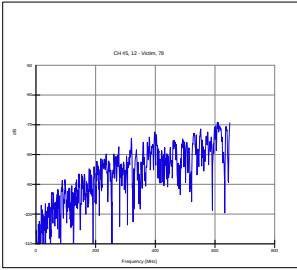
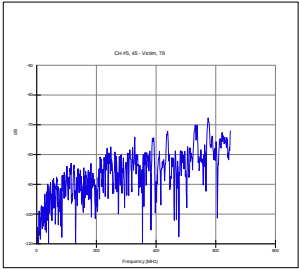
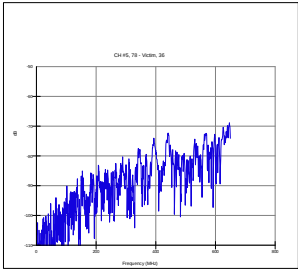
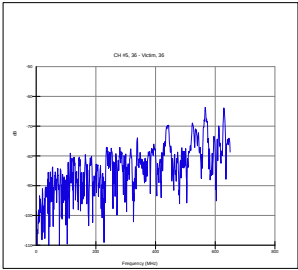
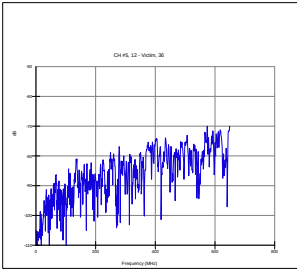
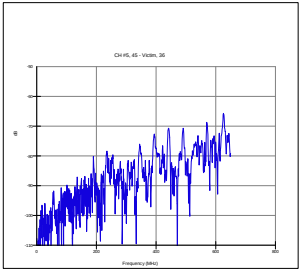
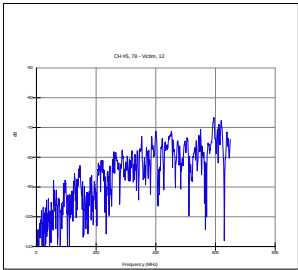
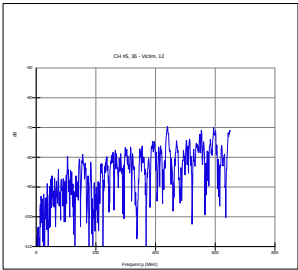
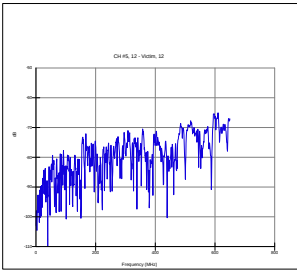
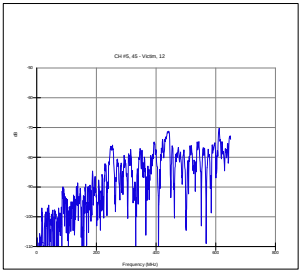
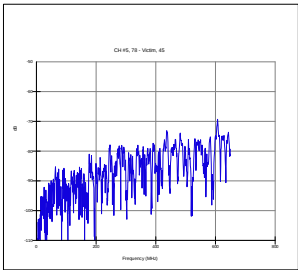
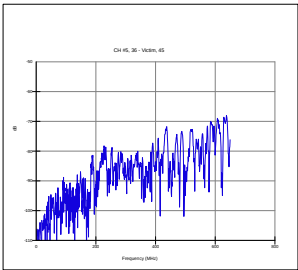
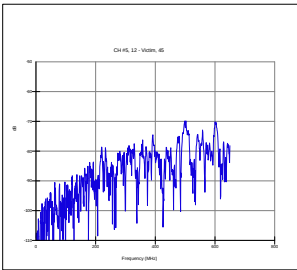
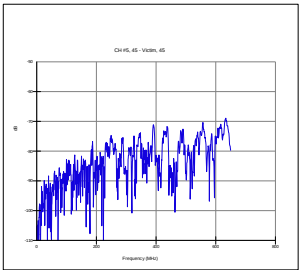
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

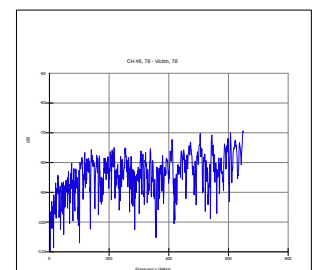
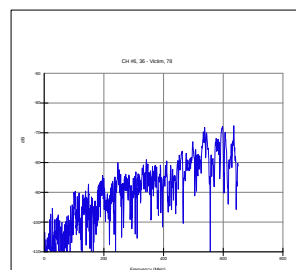
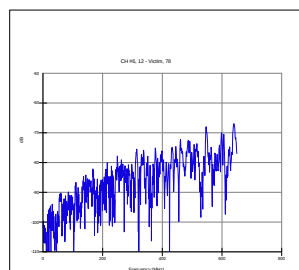
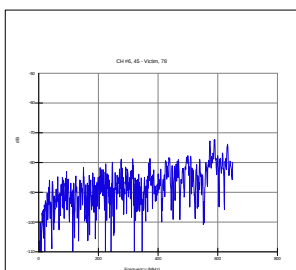
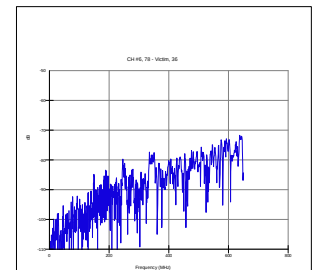
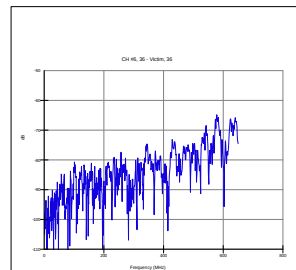
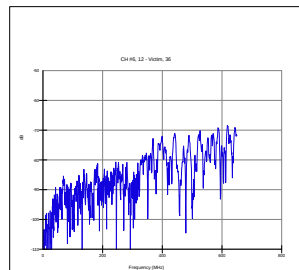
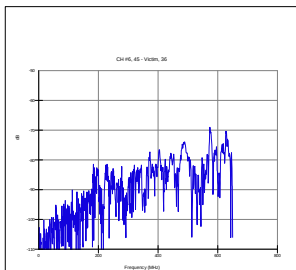
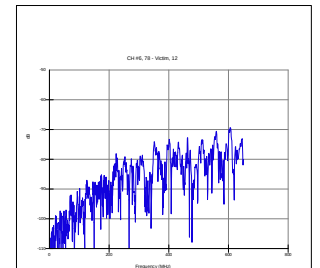
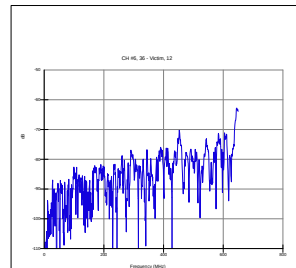
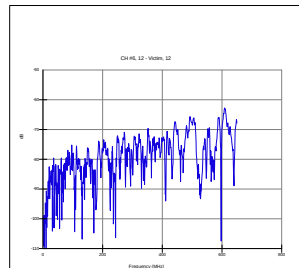
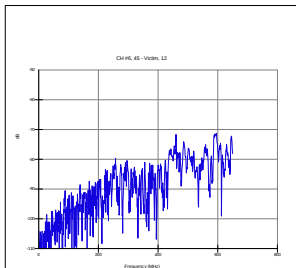
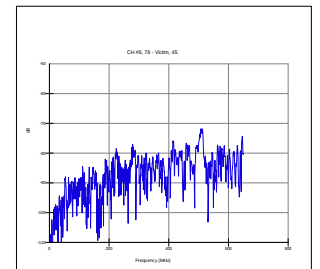
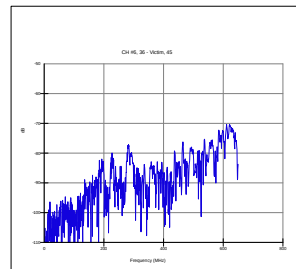
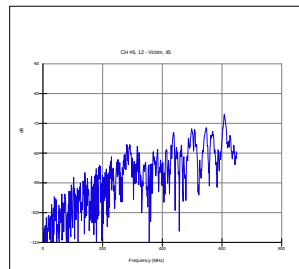
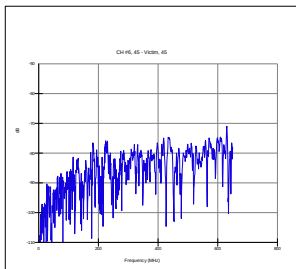
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





ANEXT - Far End

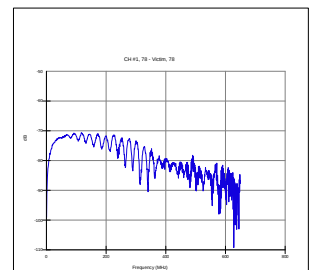
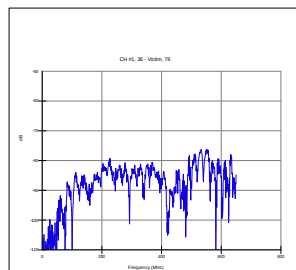
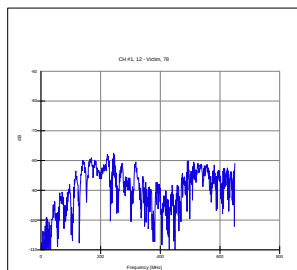
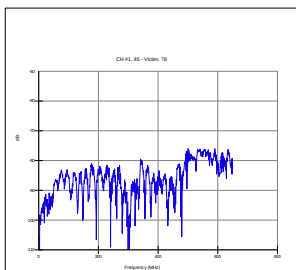
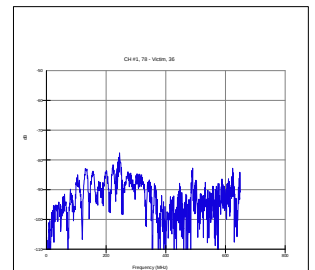
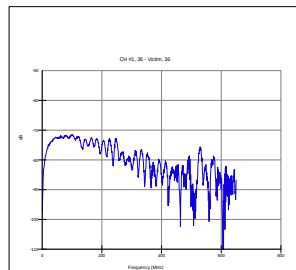
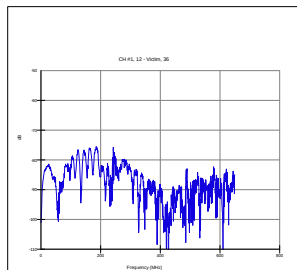
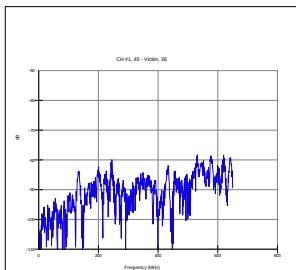
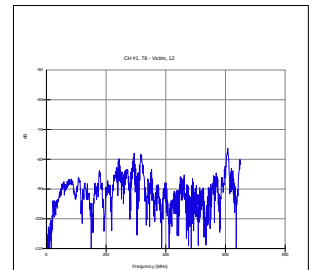
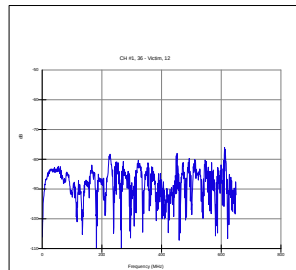
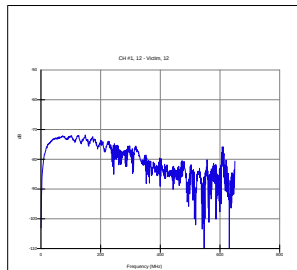
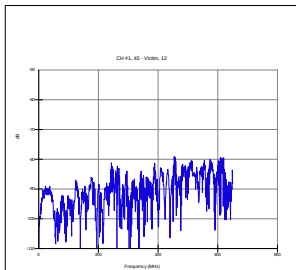
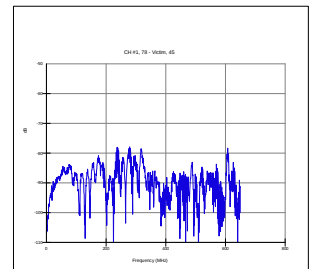
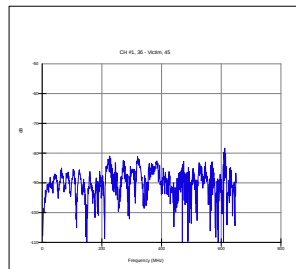
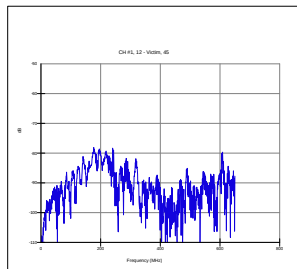
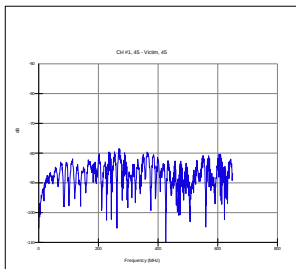
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

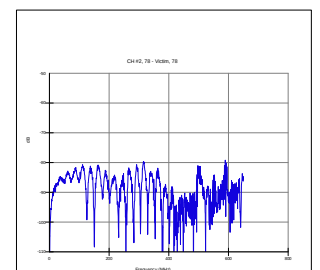
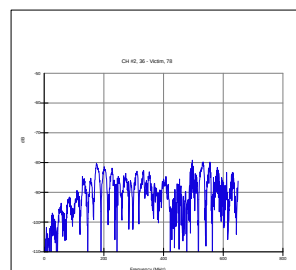
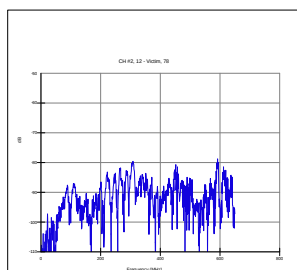
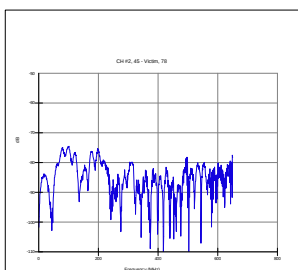
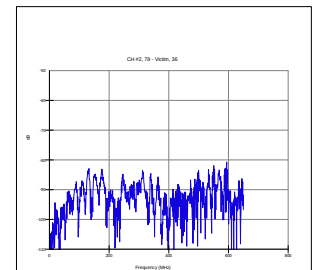
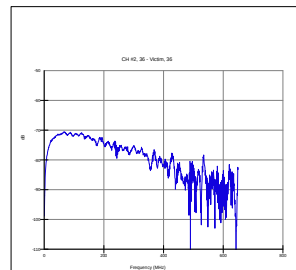
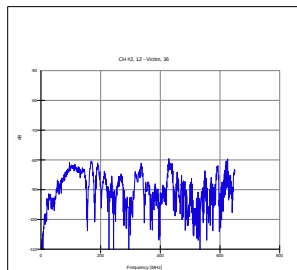
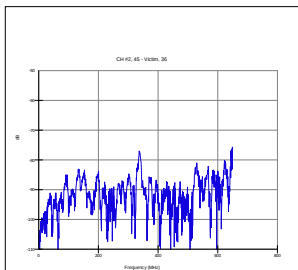
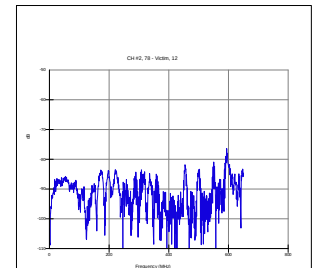
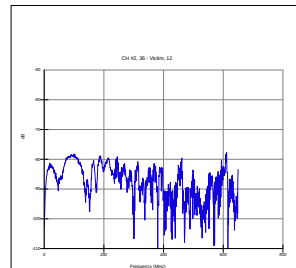
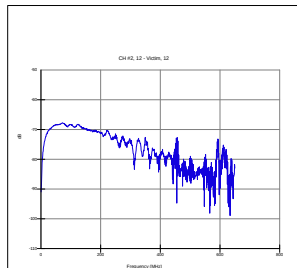
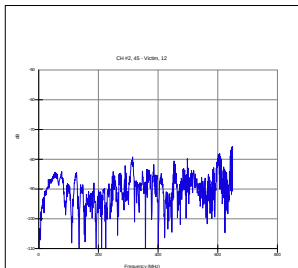
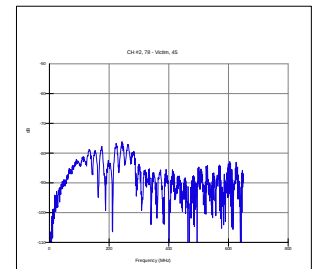
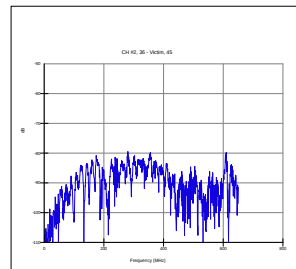
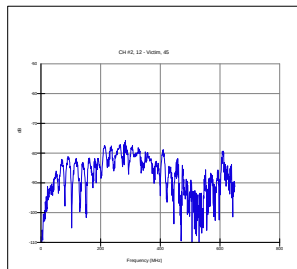
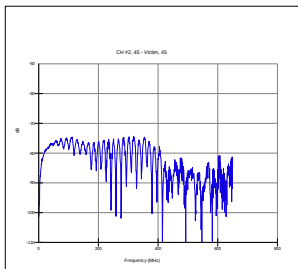
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

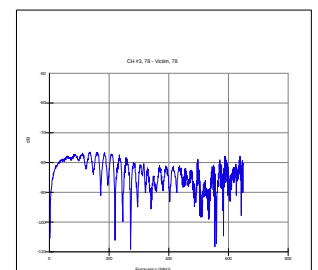
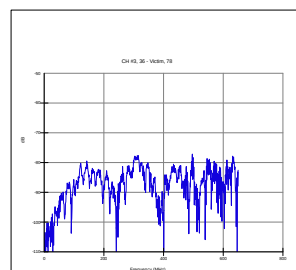
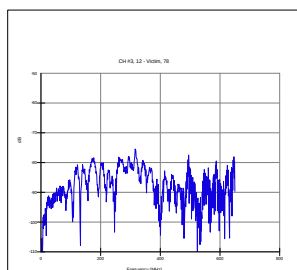
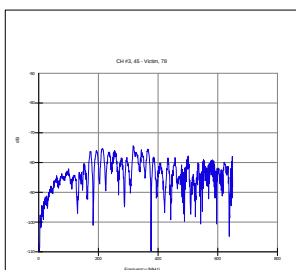
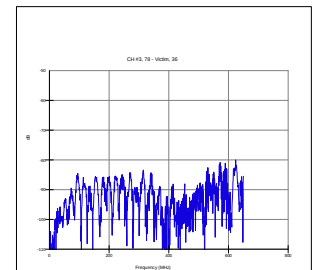
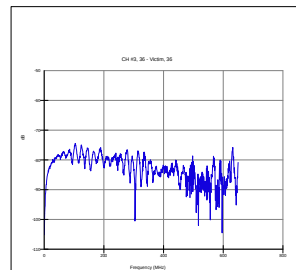
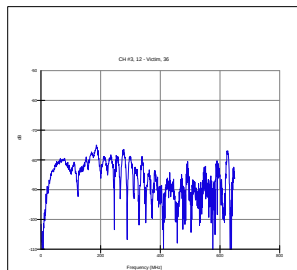
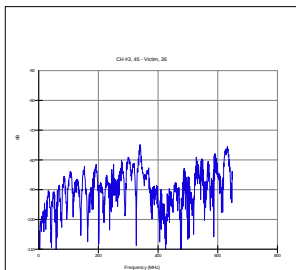
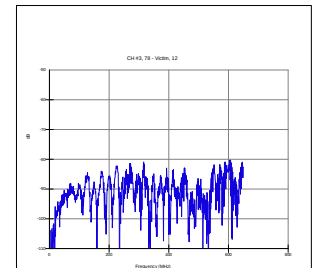
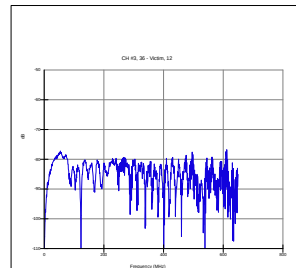
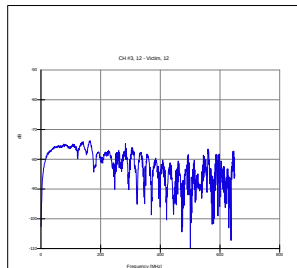
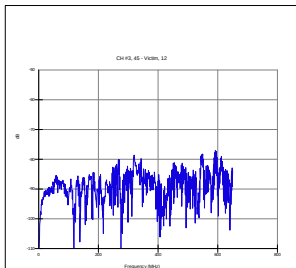
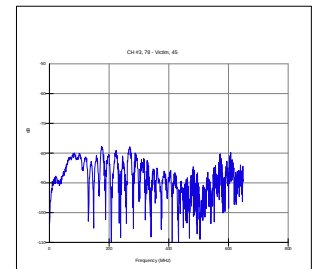
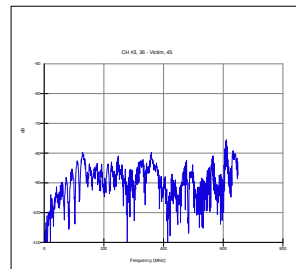
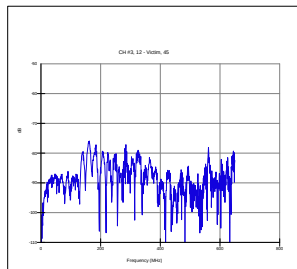
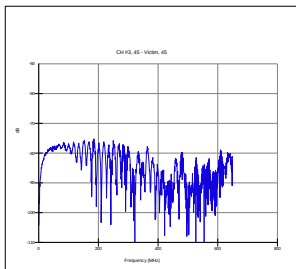
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

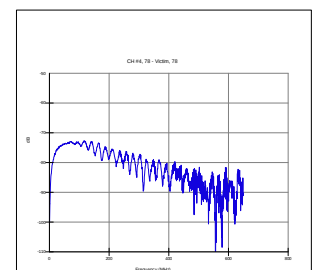
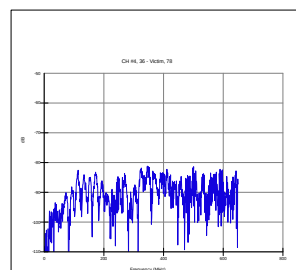
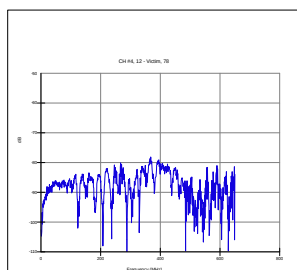
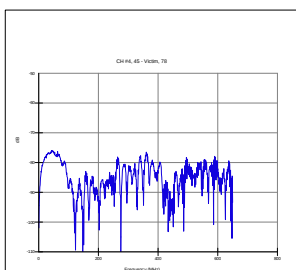
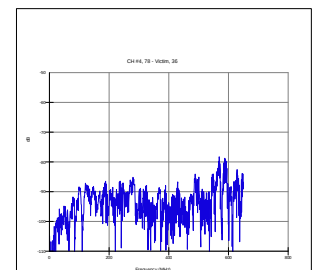
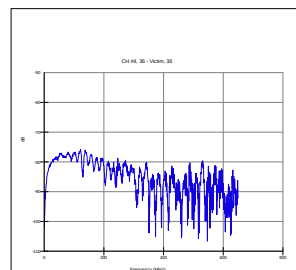
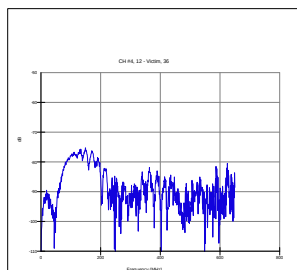
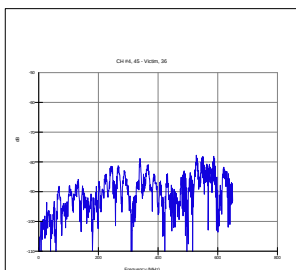
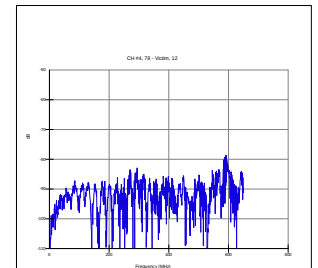
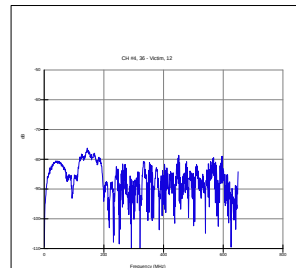
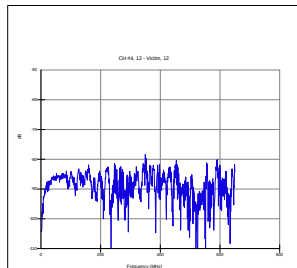
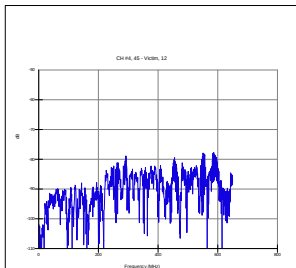
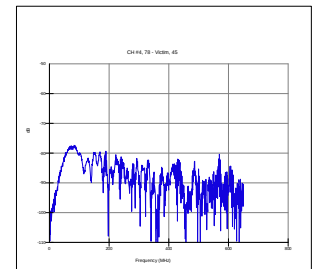
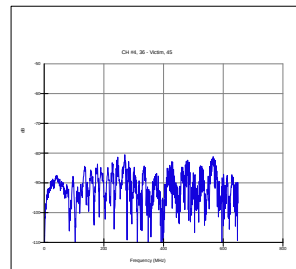
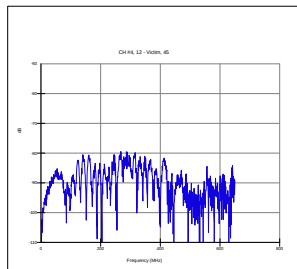
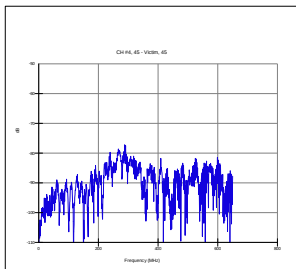
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

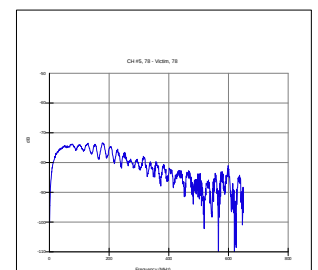
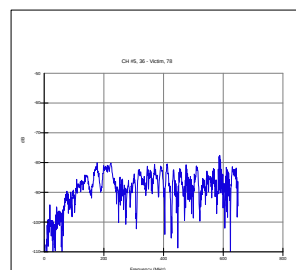
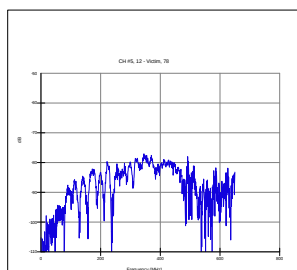
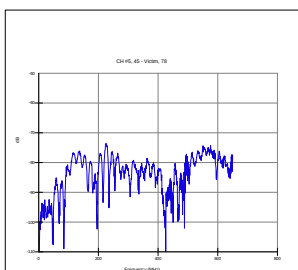
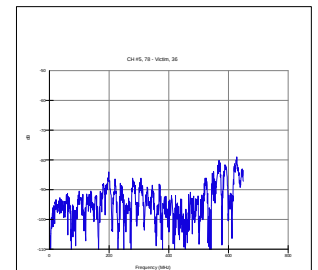
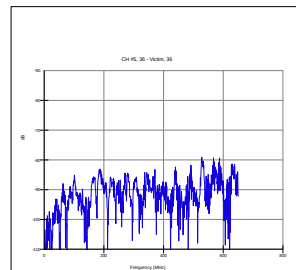
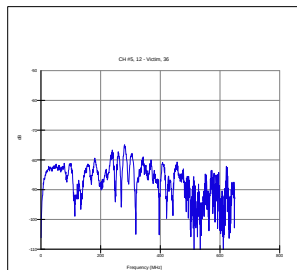
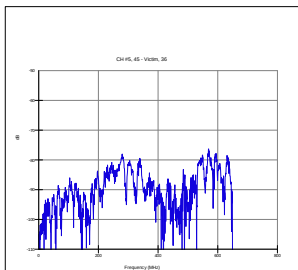
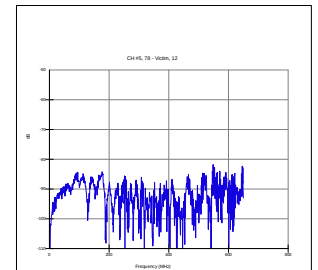
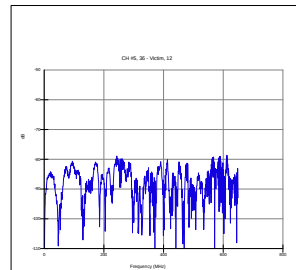
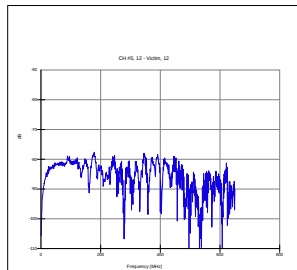
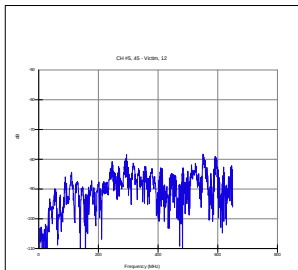
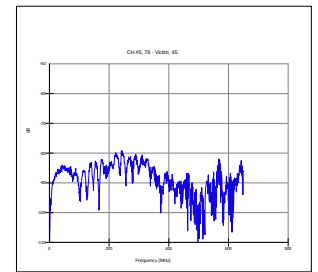
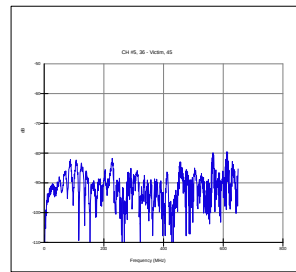
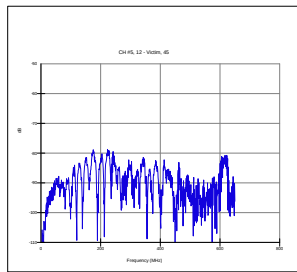
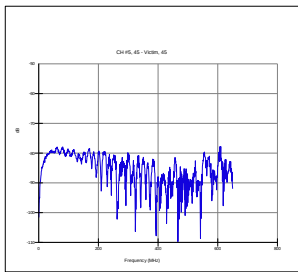
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

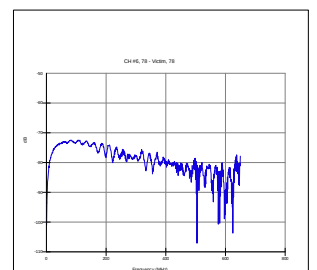
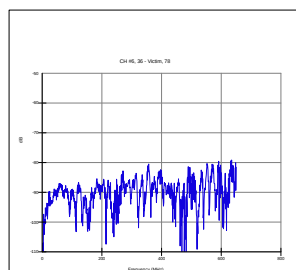
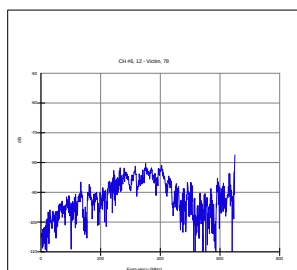
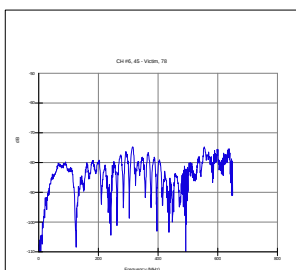
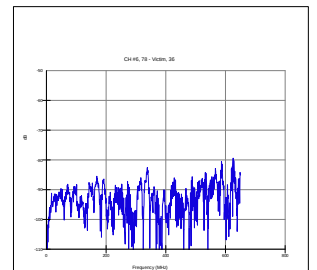
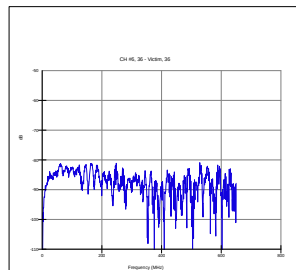
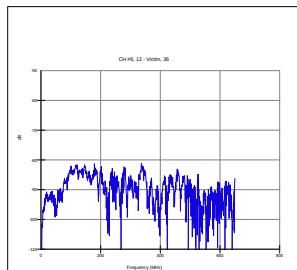
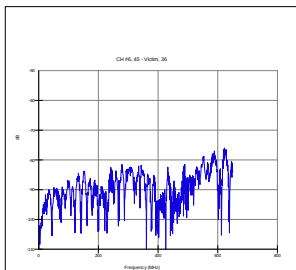
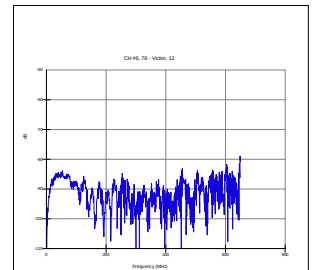
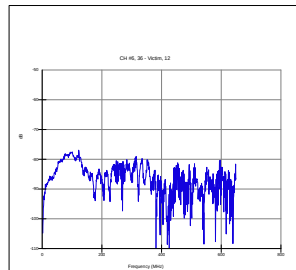
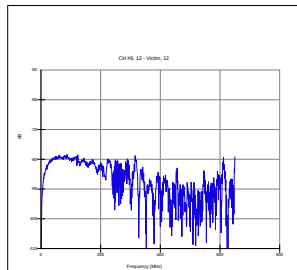
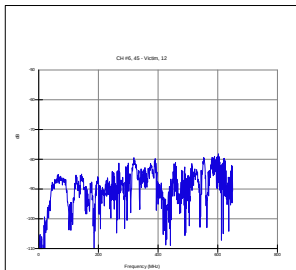
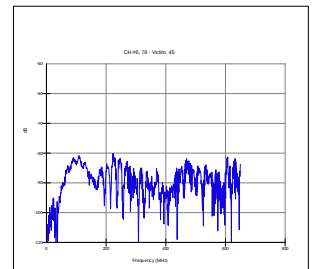
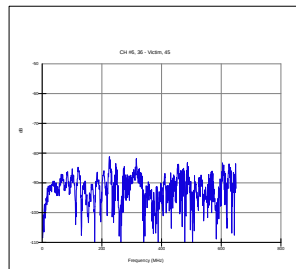
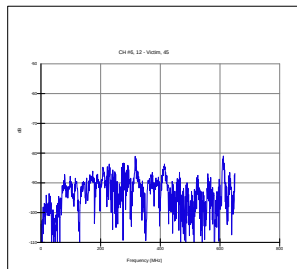
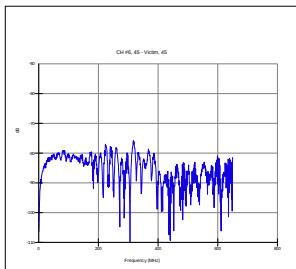
Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





AFEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

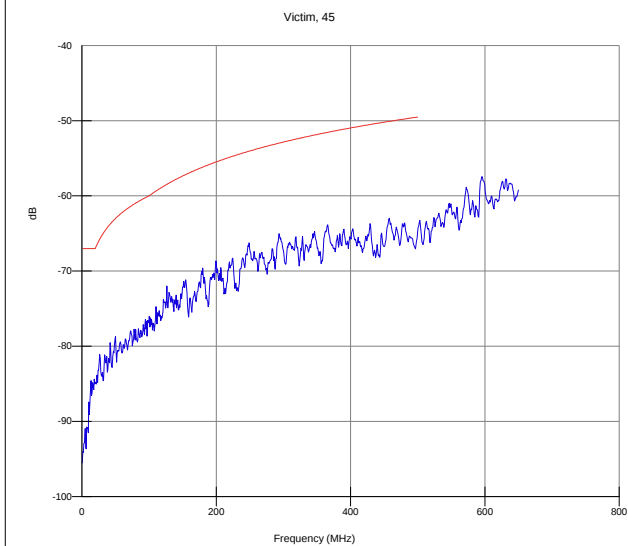




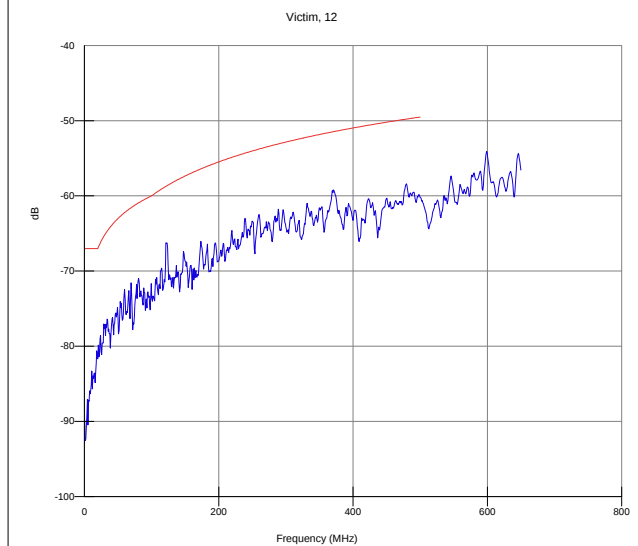
PSANEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

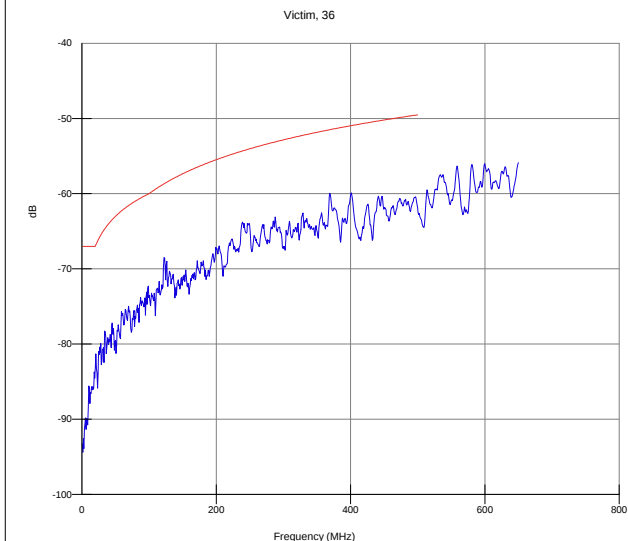
Limit Margin : 12.062 dB @ 293.587 MHz



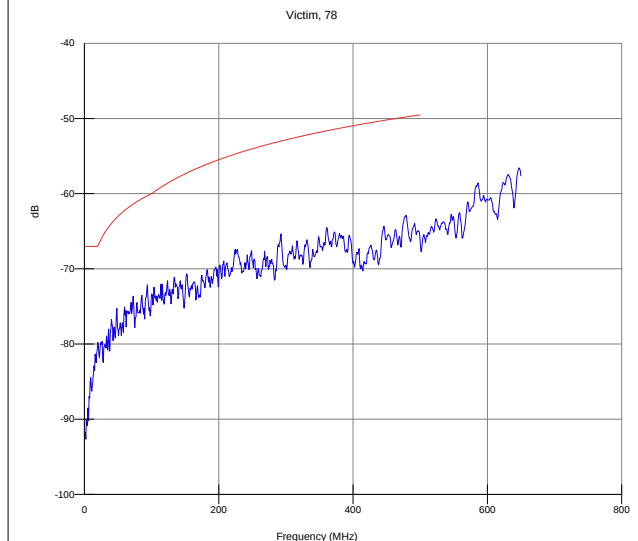
Limit Margin : 7.502 dB @ 121.469 MHz



Limit Margin : 8.459 dB @ 369.091 MHz



Limit Margin : 11.836 dB @ 93.866 MHz

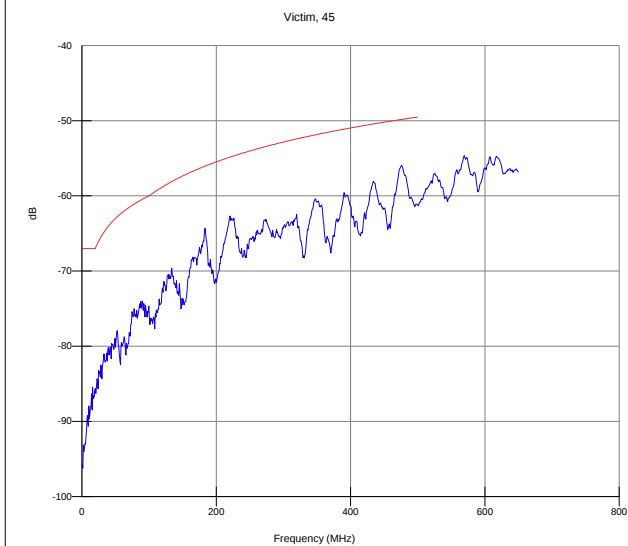




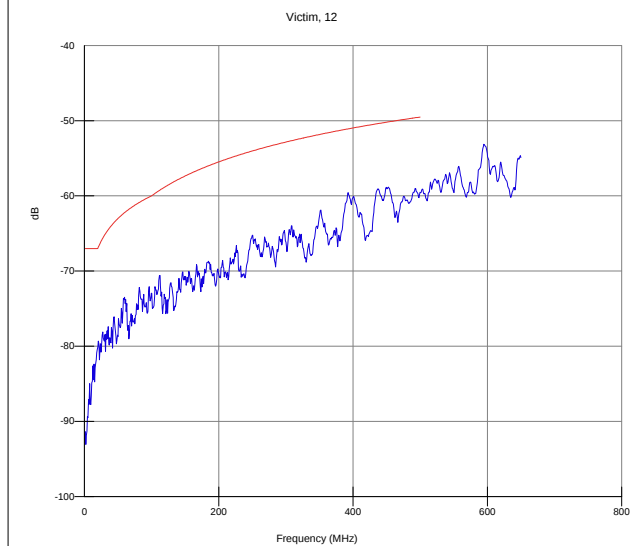
PSANEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

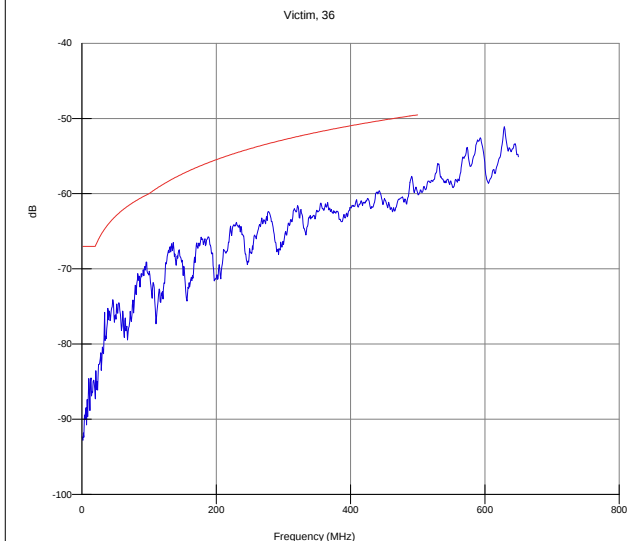
Limit Margin : 6.092 dB @ 475.447 MHz



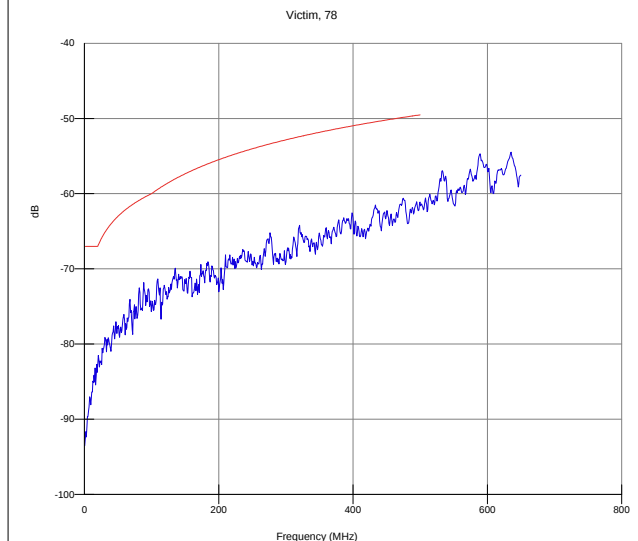
Limit Margin : 8.476 dB @ 392.636 MHz



Limit Margin : 8.066 dB @ 490.873 MHz



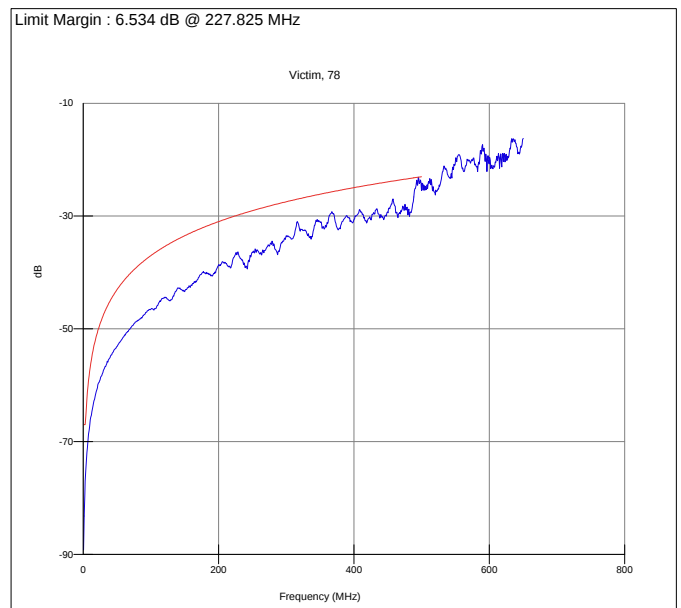
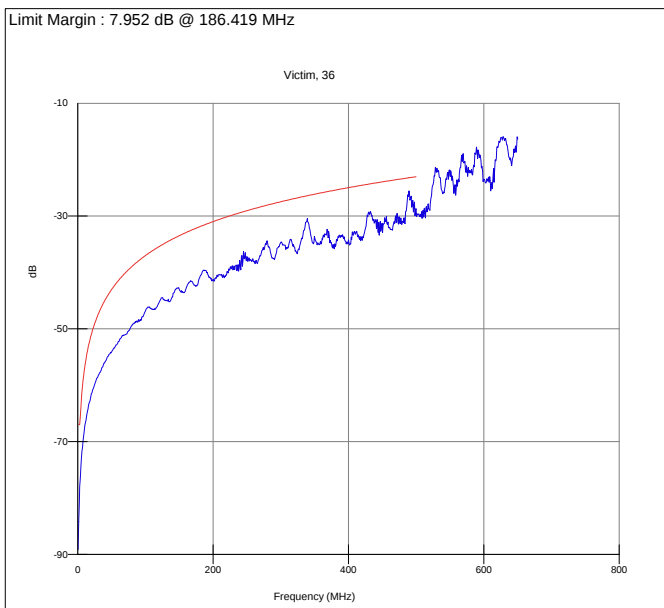
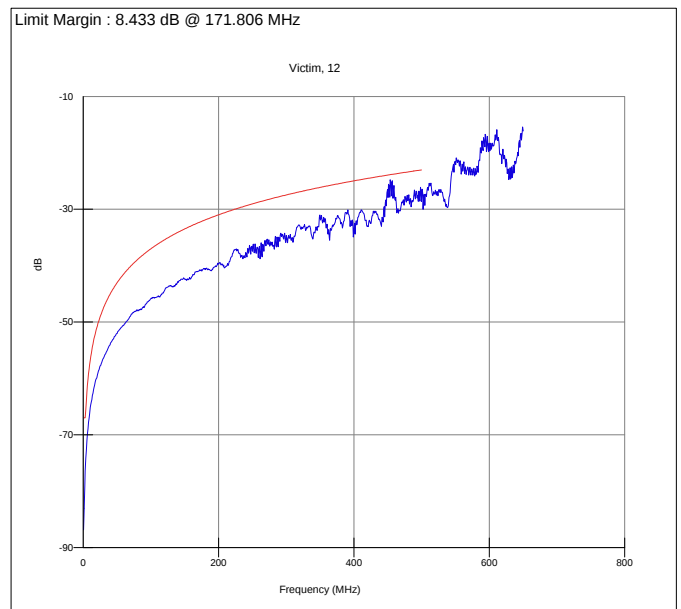
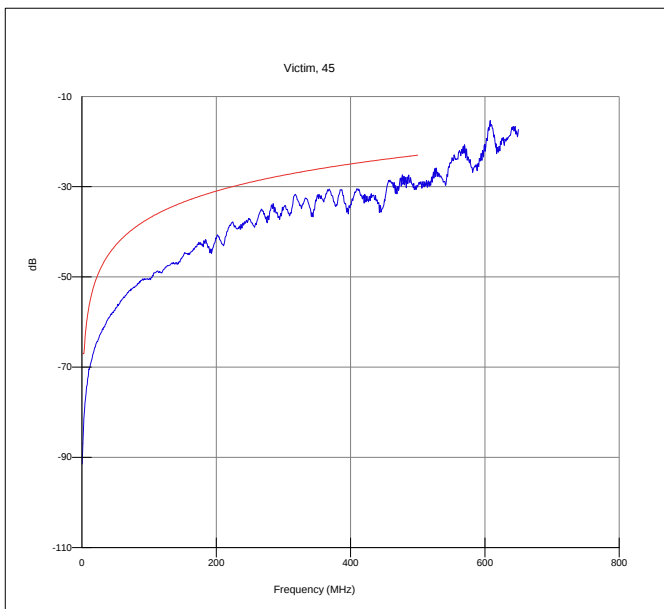
Limit Margin : 10.738 dB @ 474.635 MHz





PSAACRF (PSAELFEXT) - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

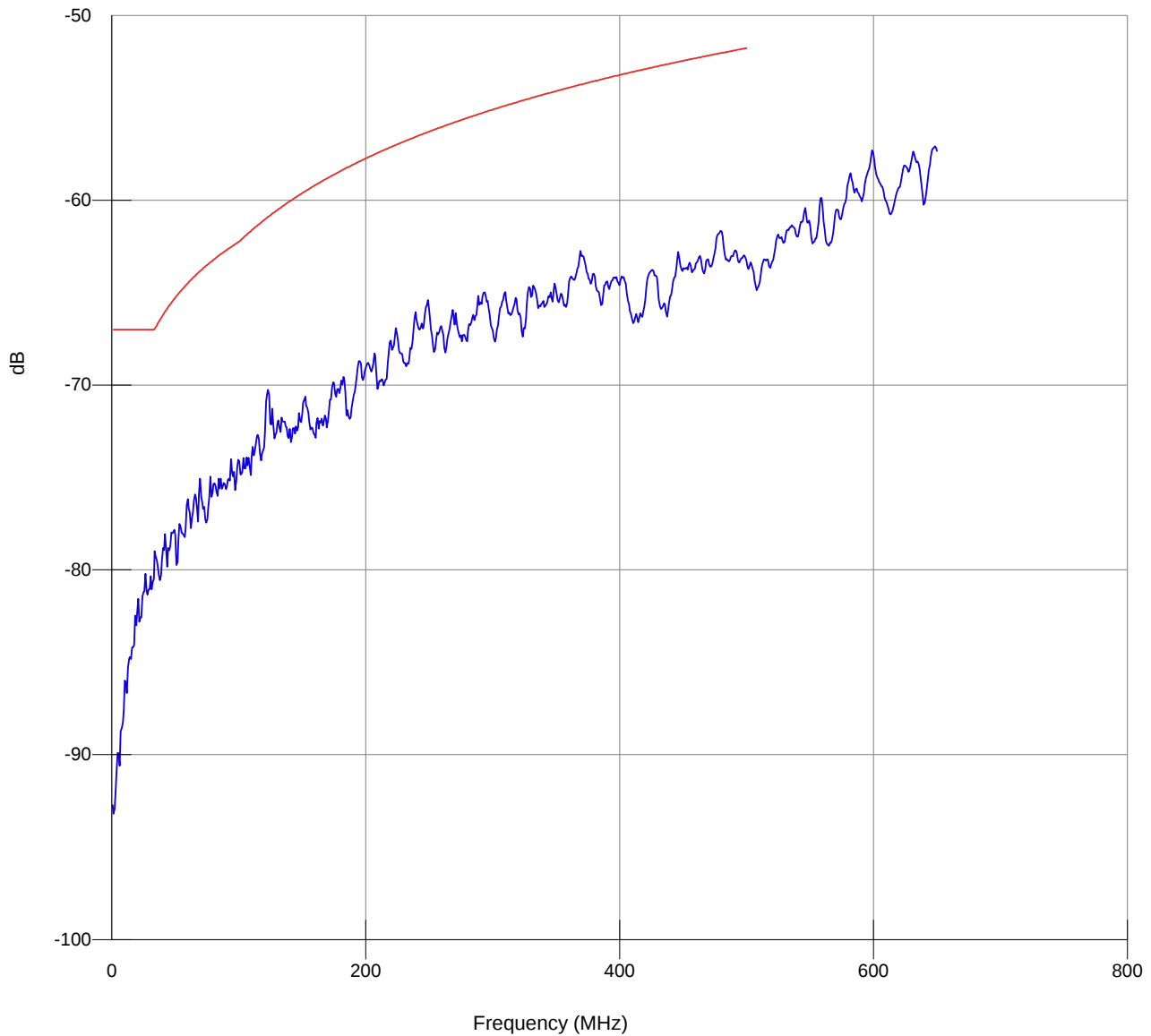




Average PSANEXT - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

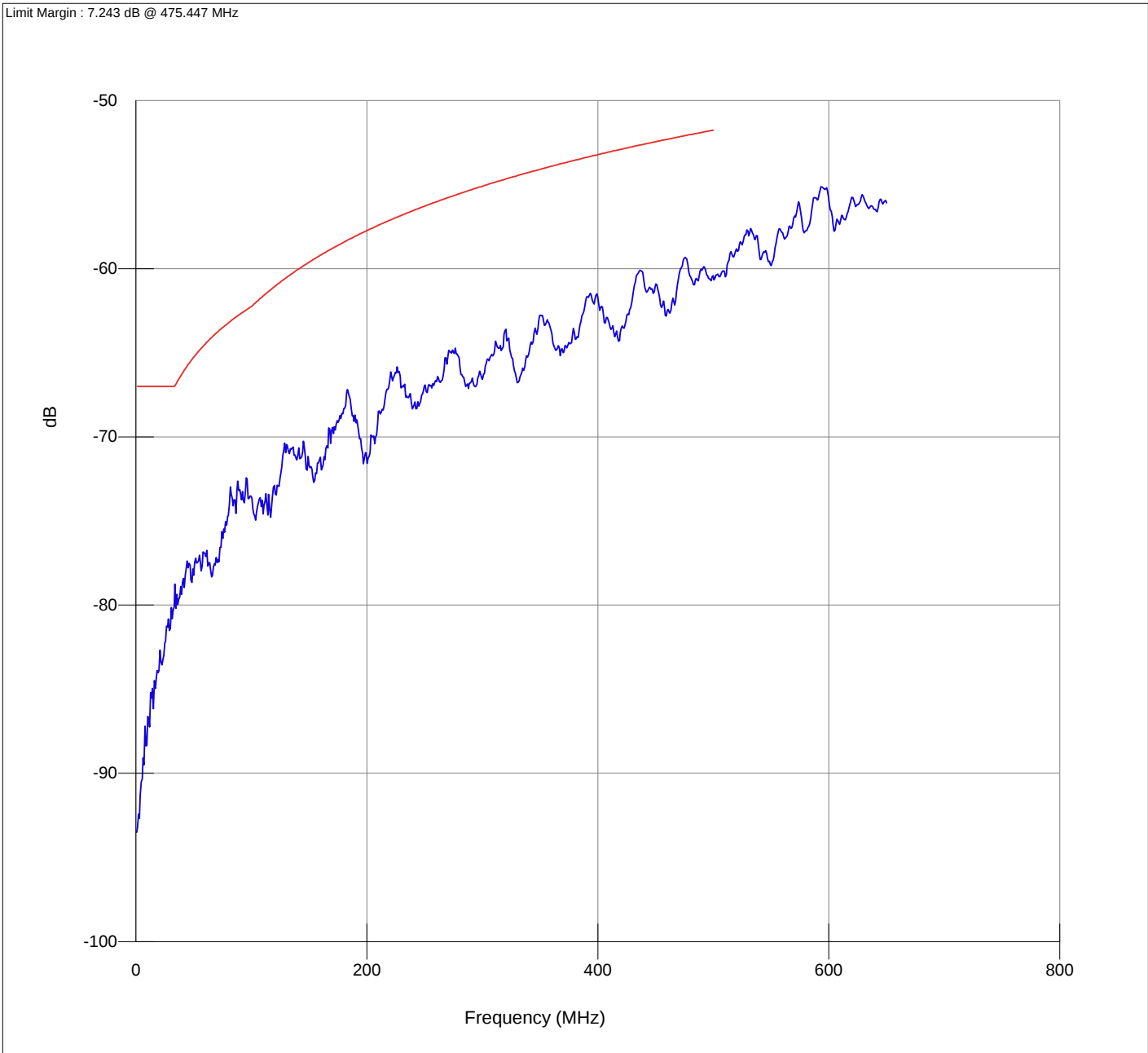
Limit Margin : 8.988 dB @ 369.091 MHz





Average PSANEXT - Far End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies





Average PSAACRF (PSAELFEXT) - Near End

Client	Panduit	Report No	102765989CRT-001i
Specification	ANSI-TIA-568-C2 Cat 6A Channel		
Part No	GenSpeed 10,000	Length(m)	100.
Test Started	11/29/2016 4:02:04 PM	Temperature	21.8 °C
Description	4 Conn Channel	Appendix	B
Operator Name	David Ayers	Test Status	Complies

