

January 24, 2014

Test report number 101505289CRT-001
Project number 101505289-311

Automated Systems Design, Inc
775 Goddard Court
Alpharetta, GA 30005

TEST:

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

STANDARD USED:

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

SECTION:

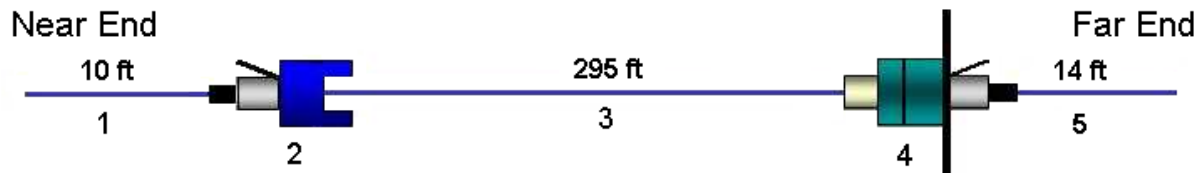
6.2: Channel transmission performance (6.2.1 to 6.2.26)

AUTHORIZATION:

The project was authorized by Mr. Robert Eskew, representing the client, Automated Systems Design, Inc, with signed quotation number 500497211.

SAMPLE DESCRIPTION:

The client supplied a 2-connector channel as illustrated below. The sample was received on January 17, 2014 and was in good condition.



<u>Component Id</u>	<u>Manufacturer</u>	<u>Description</u>	<u>Part number</u>
1	ASD	iCAT-ITS Patch Cord	PC-C6-10FT-BU
2	ASD	iCAT-ITS Jack / iCAT-ITS Face Plate	JK-C6-BK / FP-2P-LBL-WH
3	ASD	iCAT-ITS UTP CMR Horizontal Cable	CBL-C6-400-CMR-BU
4	ASD	iCAT-ITS Jack / iCAT-ITS Patch Panel	JK-C6-BK / PP-BLANK-24P-1U
5	ASD	iCAT-ITS Patch Cord	PC-C6-14FT-BU





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>
HP Automatic Cable Test System	46152A	E307	2/27/2013	2/27/2014

DATE OF TEST:

January 24, 2014

TEST REPORT REVISION HISTORY:

First Issue: January 24, 2014 Original Document

RESULTS: See appendix A for the test results.

CONCLUSION:

The channel cabling configuration, 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
Engineer
Global Cabling Products Testing

John Cash
Associate Engineer
Global Cabling Products Testing



Appendix A
Test results

This appendix contains 39 pages.



Low Frequency Report

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

DC Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
7.6612	7.3185	7.6747	7.3251	
7.6355	7.3228	7.5703	7.2838	

Resistance Unbalanced (%)				
45	12	36	78	Limit (%)
0.17	0.03	0.68	0.28	3.00

Resistance Unbalanced Pair-Pair (%)						
45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78	Limit (%)
2.19	0.17	2.30	2.02	0.11	2.13	

DC Loop Resistance (Ohms)				
45	12	36	78	Limit (Ohms)
15.2920	14.6380	15.2500	14.6080	25.0000



Insertion Loss

Client	Automated Systems Design	Project No	101505289CRT-001
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Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

Insertion Loss (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-2.16	-1.82	-1.72	-1.70	-1.66
4.	-4.02	-3.56	-3.42	-3.39	-3.35
8.	-5.66	-5.00	-4.83	-4.80	-4.76
10.	-6.34	-5.58	-5.41	-5.38	-5.34
16.	-8.05	-7.00	-6.79	-6.80	-6.74
20.	-9.03	-7.81	-7.58	-7.61	-7.54
25.	-10.14	-8.75	-8.50	-8.55	-8.47
31.25	-11.40	-9.80	-9.54	-9.59	-9.50
62.5	-16.48	-13.99	-13.67	-13.78	-13.62
100.	-21.31	-17.81	-17.39	-17.66	-17.41
155.	-27.26	-22.55	-21.83	-22.38	-21.95
200.	-31.57	-25.79	-24.95	-25.76	-25.07
250.	-35.98	-28.80	-28.22	-28.89	-28.23



NEXT - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	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	-96.19	-80.67	-90.10	-88.27	-95.46	-87.64
4.	-63.04	-87.79	-73.07	-77.10	-78.71	-71.17	-85.78
8.	-58.16	-81.86	-72.25	-79.78	-78.63	-89.19	-80.06
10.	-56.58	-96.24	-82.89	-71.41	-74.82	-76.95	-78.12
16.	-53.23	-70.95	-62.42	-69.20	-76.86	-64.41	-71.38
20.	-51.63	-68.48	-67.80	-76.29	-67.07	-77.46	-80.79
25.	-50.03	-66.30	-63.99	-73.53	-76.23	-72.60	-66.53
31.25	-48.42	-65.68	-60.36	-68.85	-71.19	-68.50	-65.55
62.5	-43.38	-63.86	-59.12	-67.43	-61.89	-59.43	-58.61
100.	-39.93	-54.94	-51.80	-70.98	-57.01	-61.37	-57.58
155.	-36.68	-52.91	-50.26	-49.46	-46.49	-56.16	-54.66
200.	-34.78	-49.43	-46.59	-46.09	-46.58	-53.76	-50.89
250.	-33.11	-44.44	-48.97	-44.03	-50.69	-46.06	-50.95



NEXT - Far End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	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	-94.07	-79.40	-91.20	-86.99	-93.54	-89.49
4.	-63.04	-81.69	-73.89	-75.44	-79.43	-71.91	-93.76
8.	-58.16	-101.41	-69.83	-73.37	-80.15	-77.43	-78.44
10.	-56.58	-84.27	-66.07	-71.34	-71.23	-79.26	-85.01
16.	-53.23	-72.22	-62.41	-74.39	-65.97	-70.93	-84.48
20.	-51.63	-72.62	-64.45	-63.37	-64.46	-80.13	-70.45
25.	-50.03	-65.91	-62.76	-64.95	-66.76	-74.51	-63.90
31.25	-48.42	-70.89	-54.19	-59.54	-67.21	-62.49	-72.31
62.5	-43.38	-63.76	-51.48	-60.28	-75.69	-63.86	-63.76
100.	-39.93	-56.40	-49.79	-50.12	-56.17	-71.94	-63.58
155.	-36.68	-56.68	-48.20	-53.50	-59.91	-57.41	-66.14
200.	-34.78	-51.44	-46.78	-46.32	-47.18	-58.33	-56.23
250.	-33.11	-48.00	-42.04	-45.48	-46.13	-52.04	-44.59



PSNEXT - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

PSNEXT - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-80.05	-86.64	-79.22	-84.96
4.	-60.55	-71.51	-70.34	-71.84	-69.98
8.	-55.60	-71.14	-76.65	-70.79	-76.62
10.	-53.99	-71.02	-72.67	-72.32	-69.29
16.	-50.59	-61.05	-63.26	-61.68	-62.49
20.	-48.97	-64.59	-64.47	-63.99	-72.59
25.	-47.34	-61.47	-65.00	-61.78	-64.89
31.25	-45.71	-58.79	-63.08	-58.87	-62.53
62.5	-40.59	-57.36	-56.56	-54.75	-55.65
100.	-37.08	-50.04	-52.27	-49.85	-55.92
155.	-33.78	-45.85	-45.23	-44.51	-47.64
200.	-31.85	-42.36	-44.24	-42.81	-44.31
250.	-30.15	-40.55	-41.60	-45.34	-41.41



PSNEXT - Far End

Client	Automated Systems Design	Project No	101505289CRT-001
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Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

PSNEXT - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-62.00	-78.97	-85.31	-78.34	-86.15
4.	-60.55	-71.18	-70.82	-72.63	-70.23
8.	-55.60	-68.21	-75.55	-68.90	-70.99
10.	-53.99	-64.71	-70.41	-64.77	-70.49
16.	-50.59	-61.68	-64.01	-60.79	-69.14
20.	-48.97	-60.55	-63.66	-60.93	-62.47
25.	-47.34	-59.41	-62.91	-59.16	-61.06
31.25	-45.71	-52.99	-60.76	-53.90	-57.56
62.5	-40.59	-50.71	-60.62	-51.22	-57.51
100.	-37.08	-46.47	-53.21	-48.75	-49.89
155.	-33.78	-46.62	-53.00	-47.85	-51.86
200.	-31.85	-42.87	-45.56	-43.71	-45.65
250.	-30.15	-39.72	-43.33	-39.15	-41.59



ACR - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

ACR - Near End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	62.84	94.47	78.97	88.44	86.57	93.79	85.98
4.	59.02	84.37	69.68	73.75	75.33	67.81	82.43
8.	52.49	77.02	67.44	75.02	73.83	84.43	75.30
10.	50.24	90.84	77.50	66.07	69.44	71.61	72.78
16.	45.18	64.16	55.63	62.45	70.06	57.67	64.64
20.	42.60	60.90	60.19	68.74	59.45	69.92	73.25
25.	39.89	57.80	55.45	65.06	67.68	64.13	58.06
31.25	37.02	56.15	50.77	59.35	61.60	59.00	56.05
62.5	26.89	50.20	45.33	53.81	48.10	45.80	44.98
100.	18.61	37.55	34.14	53.57	39.35	43.96	40.18
155.	9.42	31.08	27.88	27.51	24.11	34.21	32.71
200.	3.22	24.48	20.82	21.02	20.82	28.69	25.82
250.	-2.87	16.23	20.08	15.80	21.80	17.83	22.72



ACR - Far End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

ACR - Far End (dB)							
Freq (MHz)	Limit	45 - 12	45 - 36	45 - 78	12 - 36	12 - 78	36 - 78
1.	62.84	92.35	77.69	89.57	85.29	91.90	87.86
4.	59.02	78.26	70.50	72.11	76.04	68.59	90.44
8.	52.49	96.58	65.03	68.64	75.34	72.70	73.71
10.	50.24	78.87	60.68	66.03	65.85	73.94	79.69
16.	45.18	65.38	55.58	67.63	59.14	64.17	77.72
20.	42.60	64.98	56.80	55.79	56.80	72.55	62.87
25.	39.89	57.35	54.17	56.44	58.17	66.00	55.39
31.25	37.02	61.29	44.53	50.00	57.55	52.95	62.76
62.5	26.89	50.03	37.59	46.60	61.80	50.18	50.09
100.	18.61	38.88	32.04	32.68	38.42	54.51	46.14
155.	9.42	34.70	25.67	31.45	37.38	35.35	44.09
200.	3.22	26.45	21.04	21.21	21.45	33.22	31.13
250.	-2.87	19.71	13.06	17.22	17.14	23.78	16.33



PSACR - Near End

Client Automated Systems Design **Project No** 101505289CRT-001
Specification ANSI-TIA-568-C2 Cat 6 Channel
Part No **Length(m)** 97.23
Test Started 1/24/2014 7:35:23 AM **Temperature** 20 °C
Description 2 Connector Channel **Appendix** A
Operator Name John Cash **Test Status** **Complies**

PSACR - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.84	78.23	84.93	77.52	83.30
4.	56.52	67.96	66.91	68.46	66.62
8.	49.93	66.15	71.82	65.99	71.86
10.	47.66	65.44	67.26	66.94	63.95
16.	42.54	54.05	56.47	54.88	55.75
20.	39.94	56.78	56.89	56.37	65.05
25.	37.20	52.72	56.50	53.24	56.42
31.25	34.31	48.99	53.54	49.28	53.03
62.5	24.10	43.37	42.90	40.97	42.03
100.	15.77	32.23	34.88	32.20	38.51
155.	6.52	23.29	23.39	22.13	25.69
200.	0.29	16.57	19.29	17.05	19.23
250.	-5.83	11.75	13.38	16.45	13.18



PSACR - Far End

Client Automated Systems Design **Project No** 101505289CRT-001
Specification ANSI-TIA-568-C2 Cat 6 Channel
Part No **Length(m)** 97.23
Test Started 1/24/2014 7:35:23 AM **Temperature** 20 °C
Description 2 Connector Channel **Appendix** A
Operator Name John Cash **Test Status** **Complies**

PSACR - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	59.84	77.14	83.58	76.63	84.52
4.	56.52	67.62	67.40	69.23	66.90
8.	49.93	63.21	70.72	64.09	66.26
10.	47.66	59.12	65.01	59.38	65.18
16.	42.54	54.64	57.18	53.96	62.38
20.	39.94	52.67	56.02	53.27	54.90
25.	37.20	50.59	54.34	50.56	52.55
31.25	34.31	43.11	51.16	44.24	48.02
62.5	24.10	36.64	46.89	37.33	43.84
100.	15.77	28.58	35.70	30.99	32.46
155.	6.52	23.96	31.02	25.32	29.80
200.	0.29	17.26	20.56	17.97	20.54
250.	-5.83	10.76	15.03	10.16	13.33



FEXT - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	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.	-91.13	-71.91	-82.08	-100.00	-82.22	-81.28	-71.29	-82.52	-75.63	-80.92	-82.05	-75.43
4.	-85.88	-62.08	-72.07	-87.73	-73.77	-70.02	-61.94	-74.09	-65.62	-72.67	-70.74	-65.70
8.	-82.50	-57.98	-68.66	-82.19	-71.82	-66.87	-58.07	-71.77	-61.97	-68.54	-66.56	-62.11
10.	-77.26	-56.66	-68.03	-77.23	-71.01	-65.21	-56.55	-70.41	-61.67	-67.20	-65.36	-61.78
16.	-72.54	-54.24	-67.95	-71.32	-71.00	-62.93	-54.09	-69.06	-64.52	-67.97	-62.91	-64.18
20.	-69.75	-53.12	-68.88	-68.37	-73.22	-61.55	-52.92	-72.80	-71.45	-67.83	-61.61	-72.02
25.	-67.25	-52.44	-67.32	-66.67	-81.62	-60.56	-52.44	-87.93	-66.85	-67.37	-60.57	-67.98
31.25	-67.32	-51.72	-65.22	-67.68	-67.55	-59.91	-51.86	-67.37	-58.70	-65.07	-59.95	-58.81
62.5	-72.78	-53.63	-61.10	-72.09	-63.40	-59.27	-53.52	-65.03	-72.15	-61.10	-58.97	-72.66
100.	-69.03	-78.05	-62.42	-65.18	-59.68	-61.34	-65.93	-57.95	-67.51	-61.30	-61.28	-64.57
155.	-64.50	-56.55	-66.03	-67.90	-55.52	-66.68	-53.80	-56.09	-54.61	-64.78	-69.44	-54.53
200.	-66.94	-52.56	-61.73	-66.40	-61.52	-67.88	-50.38	-63.37	-52.05	-59.73	-64.99	-52.63
250.	-75.70	-57.79	-73.27	-65.66	-59.37	-62.83	-53.94	-86.32	-56.27	-76.28	-62.93	-55.81



ACRF (ELFEXT) - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	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.	-63.09	-89.41	-70.21	-80.42	-98.17	-80.53	-79.62	-69.46	-80.80	-73.97	-79.10	-80.33	-73.73
4.	-51.22	-82.45	-58.69	-68.72	-84.17	-70.38	-66.67	-58.39	-70.66	-62.27	-69.11	-67.31	-62.32
8.	-45.20	-77.67	-53.18	-63.90	-77.19	-67.02	-62.11	-53.07	-66.93	-57.21	-63.54	-61.73	-57.30
10.	-43.26	-71.85	-51.28	-62.69	-71.64	-65.63	-59.87	-50.96	-65.00	-56.33	-61.62	-59.95	-56.40
16.	-39.18	-65.75	-47.45	-61.21	-64.33	-64.20	-56.19	-47.09	-62.27	-57.78	-60.97	-56.12	-57.38
20.	-37.24	-62.17	-45.51	-61.34	-60.57	-65.61	-54.01	-45.12	-65.22	-63.90	-60.03	-54.03	-64.41
25.	-35.30	-58.75	-43.90	-58.85	-57.93	-73.07	-52.08	-43.70	-79.43	-58.38	-58.62	-52.07	-59.43
31.25	-33.36	-57.78	-42.12	-55.72	-57.88	-57.96	-50.41	-42.06	-57.83	-49.20	-55.27	-50.41	-49.22
62.5	-27.34	-59.12	-39.85	-47.48	-58.10	-49.62	-45.64	-39.53	-51.36	-58.53	-47.11	-45.31	-58.87
100.	-23.26	-51.64	-60.39	-45.01	-47.38	-42.02	-43.94	-48.13	-40.56	-50.11	-43.49	-43.89	-46.91
155.	-19.45	-42.67	-34.17	-44.08	-45.35	-33.15	-44.73	-31.25	-34.26	-32.66	-42.23	-47.61	-32.16
200.	-17.24	-41.99	-26.80	-36.65	-40.62	-35.76	-42.80	-24.59	-38.42	-26.97	-33.94	-40.04	-26.87
250.	-15.30	-47.48	-28.90	-45.04	-36.86	-30.48	-34.60	-25.14	-58.10	-28.04	-47.48	-34.71	-26.92



PSFEXT - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

PSFEXT - Near End (dB)				
Freq (MHz)	45	12	36	78
1.	-71.46	-78.62	-69.69	-73.66
4.	-61.65	-68.44	-60.21	-63.90
8.	-57.61	-65.57	-56.45	-60.10
10.	-56.32	-63.99	-55.25	-59.41
16.	-54.00	-61.79	-53.59	-59.77
20.	-52.92	-60.49	-52.82	-60.37
25.	-52.17	-59.58	-52.29	-59.13
31.25	-51.41	-58.64	-50.94	-55.79
62.5	-52.87	-57.69	-53.17	-56.78
100.	-61.46	-56.75	-56.91	-57.36
155.	-55.50	-54.97	-49.96	-54.01
200.	-51.92	-59.59	-47.99	-51.65
250.	-57.60	-57.10	-51.94	-55.01



PSACRF (PSELFEXT) - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

PSACRF (PSELFEXT) - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-60.09	-69.64	-76.91	-67.99	-72.00
4.	-48.22	-58.09	-65.01	-56.83	-60.55
8.	-42.20	-52.61	-60.74	-51.65	-55.34
10.	-40.26	-50.74	-58.58	-49.86	-54.07
16.	-36.18	-47.01	-55.00	-46.79	-53.03
20.	-34.24	-45.11	-52.91	-45.21	-52.83
25.	-32.30	-43.42	-51.08	-43.74	-50.66
31.25	-30.36	-41.61	-49.10	-41.35	-46.29
62.5	-24.34	-38.88	-44.02	-39.38	-43.16
100.	-20.26	-43.66	-39.36	-39.26	-39.96
155.	-16.45	-32.95	-33.14	-27.58	-32.06
200.	-14.24	-26.14	-34.64	-22.23	-26.58
250.	-12.30	-28.80	-28.89	-23.05	-26.78



Return Loss - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

Return Loss - Near End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-19.00	-42.82	-41.27	-33.98	-39.02
4.	-19.00	-36.77	-41.34	-53.64	-49.18
8.	-19.00	-38.45	-37.95	-45.52	-34.89
10.	-18.98	-41.40	-36.10	-40.27	-31.55
16.	-17.98	-41.56	-32.99	-34.30	-28.44
20.	-17.50	-43.56	-35.66	-38.28	-30.15
25.	-17.01	-38.72	-36.18	-49.37	-28.69
31.25	-16.53	-40.84	-46.15	-45.46	-33.99
62.5	-14.04	-36.34	-29.52	-31.08	-53.45
100.	-12.00	-42.75	-26.22	-31.75	-41.26
155.	-10.10	-19.73	-33.44	-23.97	-28.34
200.	-8.99	-33.75	-32.08	-23.60	-26.55
250.	-8.02	-30.09	-17.70	-38.71	-26.76



Return Loss - Far End

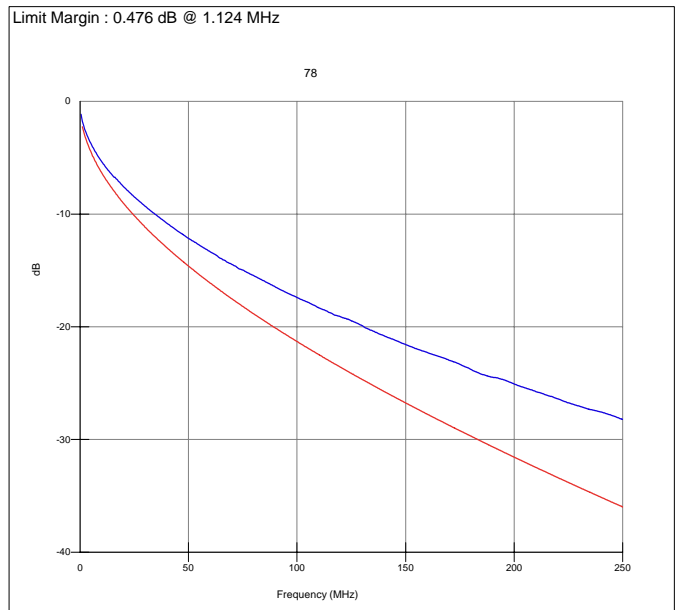
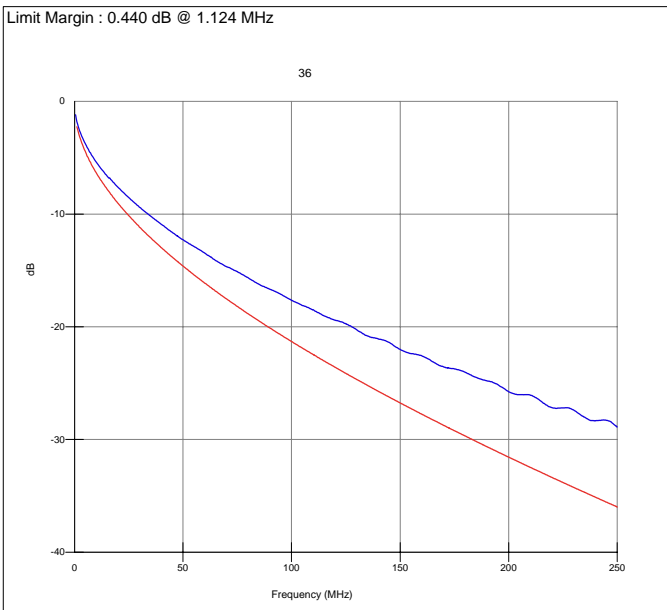
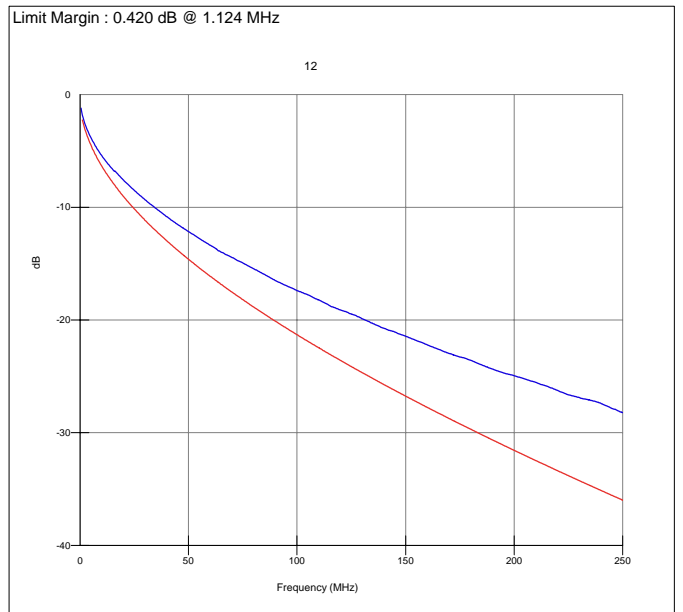
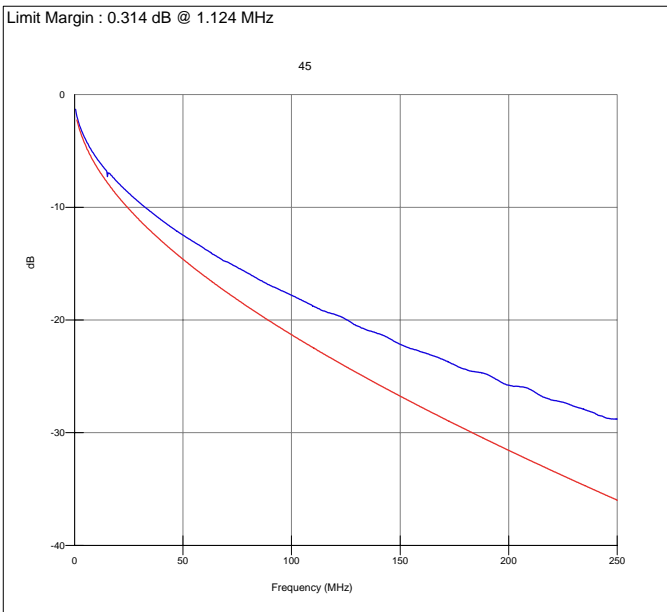
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies

Return Loss - Far End (dB)					
Freq (MHz)	Limit	45	12	36	78
1.	-19.00	-39.16	-42.56	-34.88	-36.89
4.	-19.00	-54.31	-53.55	-38.27	-42.35
8.	-19.00	-41.34	-52.79	-33.48	-41.57
10.	-18.98	-39.94	-47.83	-32.15	-36.47
16.	-17.98	-47.51	-41.84	-42.54	-32.47
20.	-17.50	-38.26	-41.95	-38.04	-31.02
25.	-17.01	-47.52	-46.37	-40.22	-33.45
31.25	-16.53	-34.32	-36.68	-36.63	-48.33
62.5	-14.04	-33.89	-30.51	-56.34	-39.81
100.	-12.00	-26.40	-34.53	-24.06	-46.39
155.	-10.10	-38.13	-27.46	-36.03	-25.77
200.	-8.99	-36.08	-29.84	-34.70	-32.45
250.	-8.02	-26.72	-28.42	-23.77	-22.66



Insertion Loss

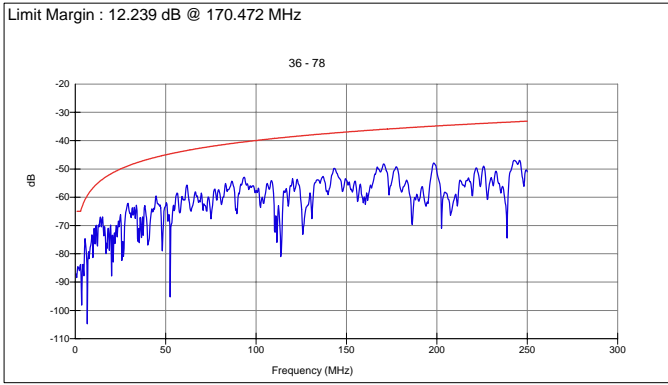
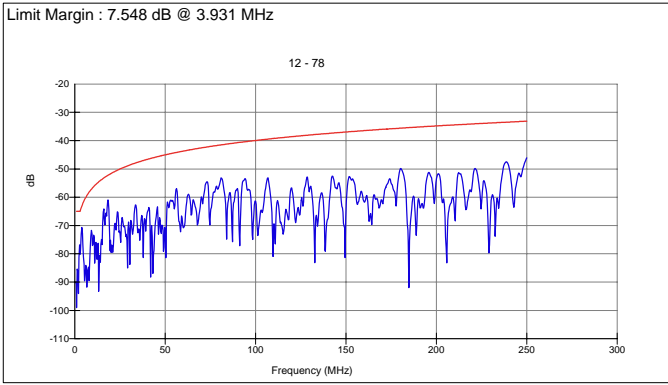
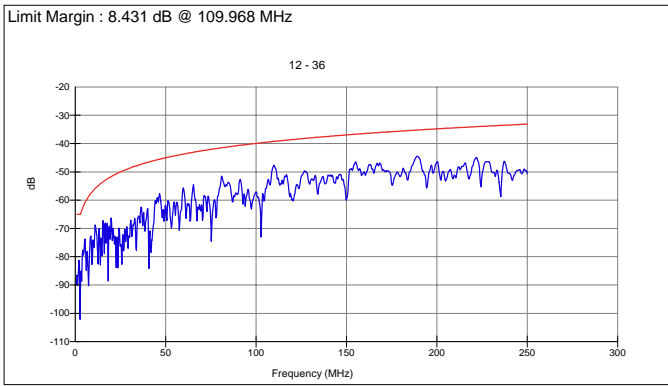
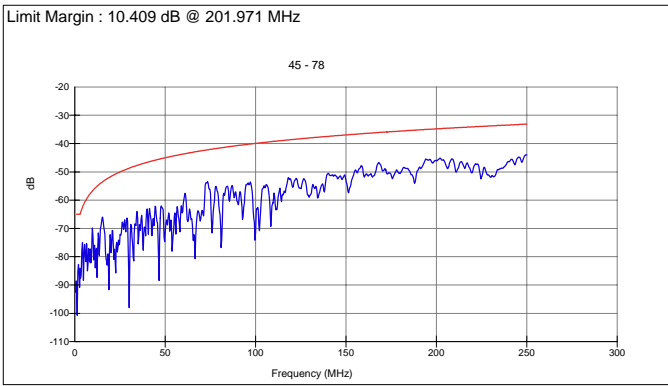
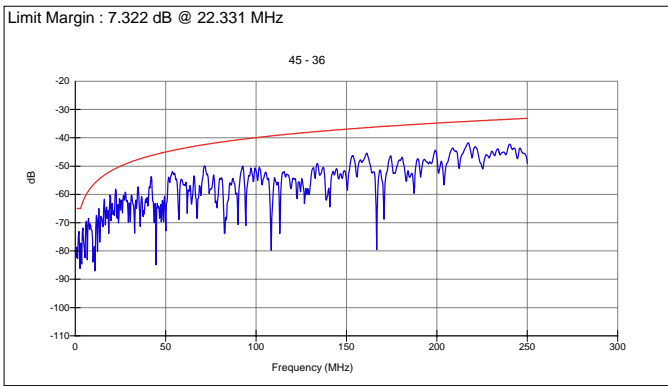
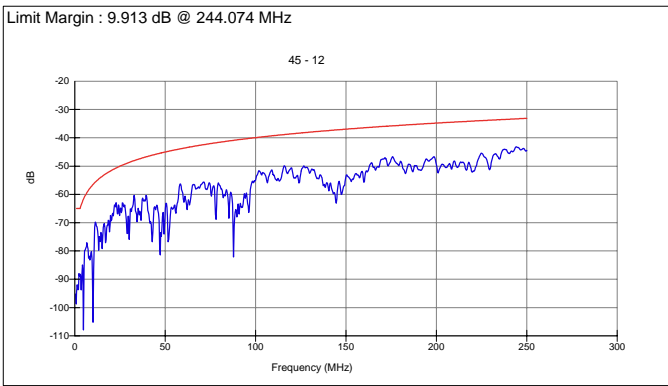
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





NEXT - Near End

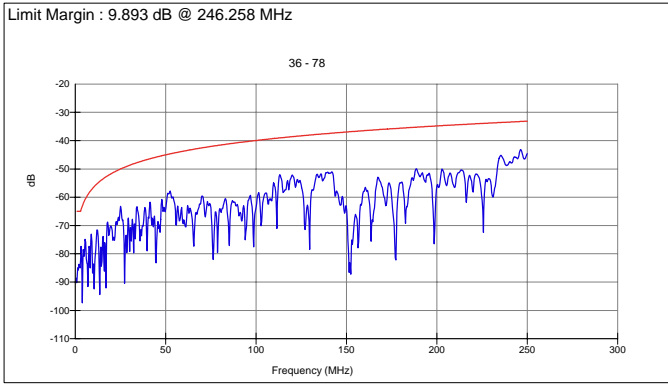
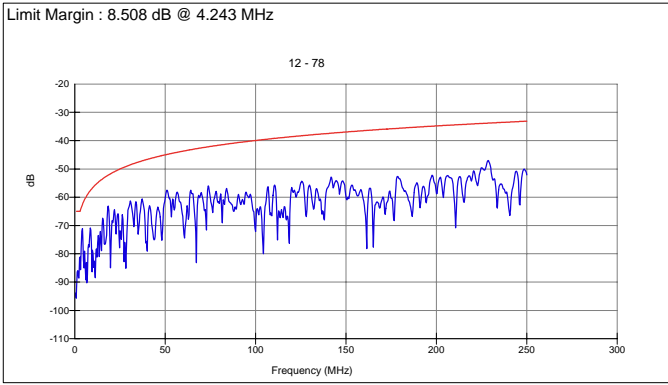
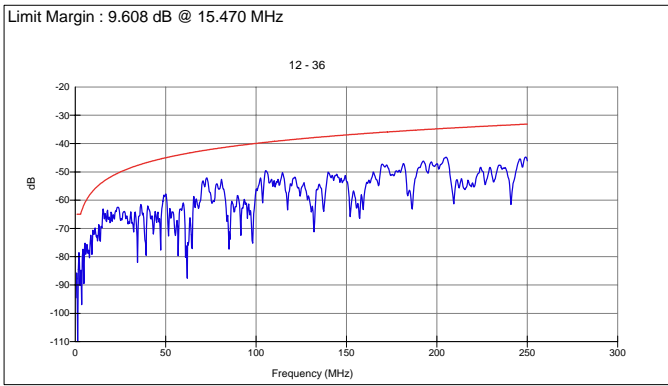
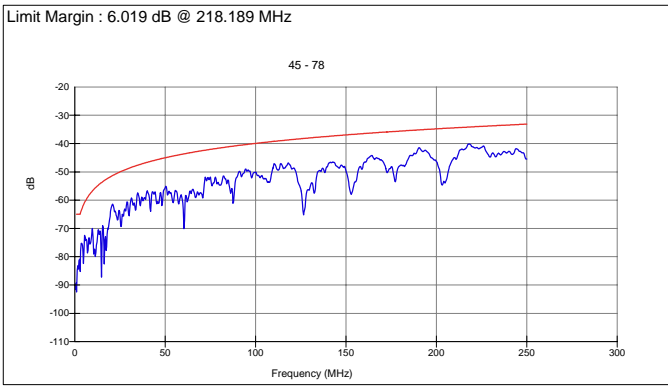
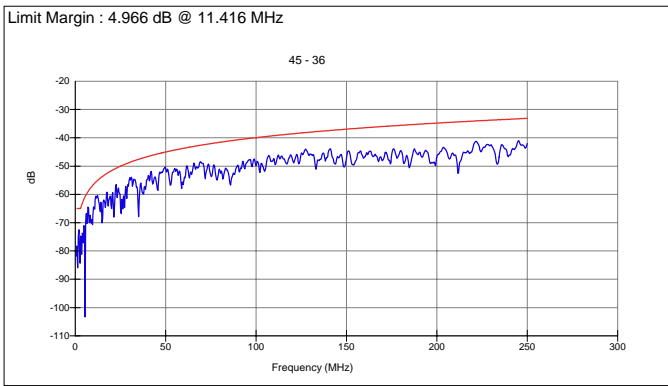
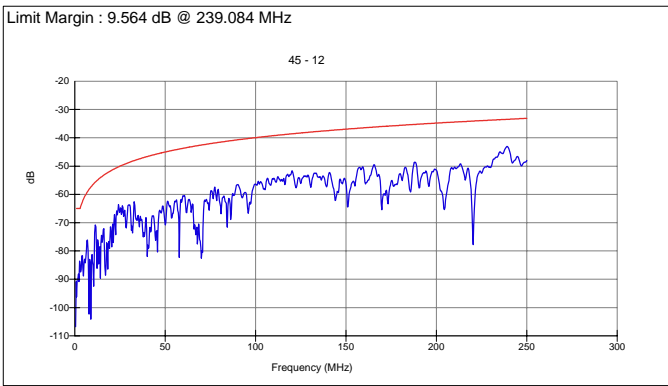
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies





NEXT - Far End

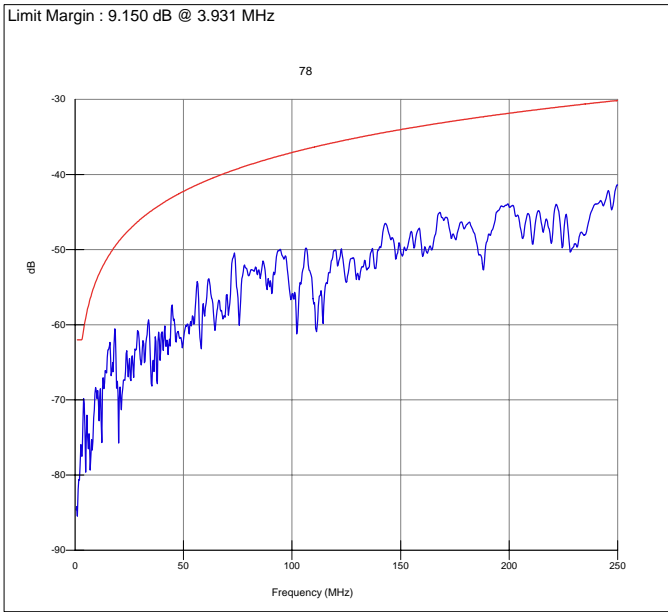
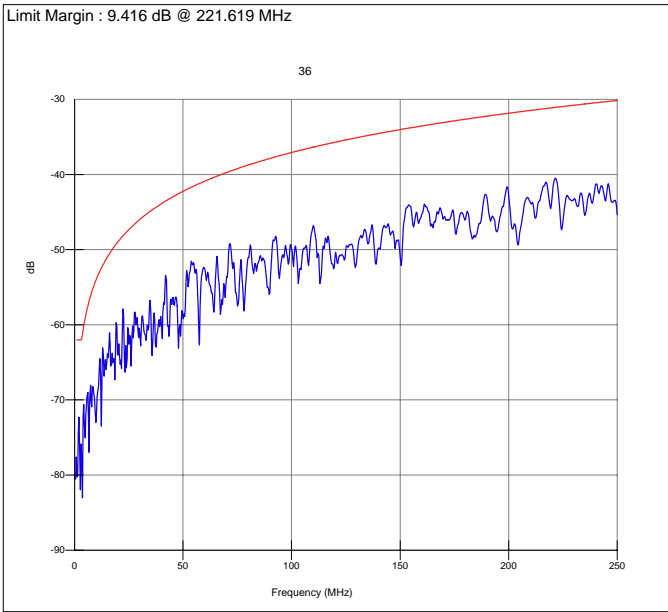
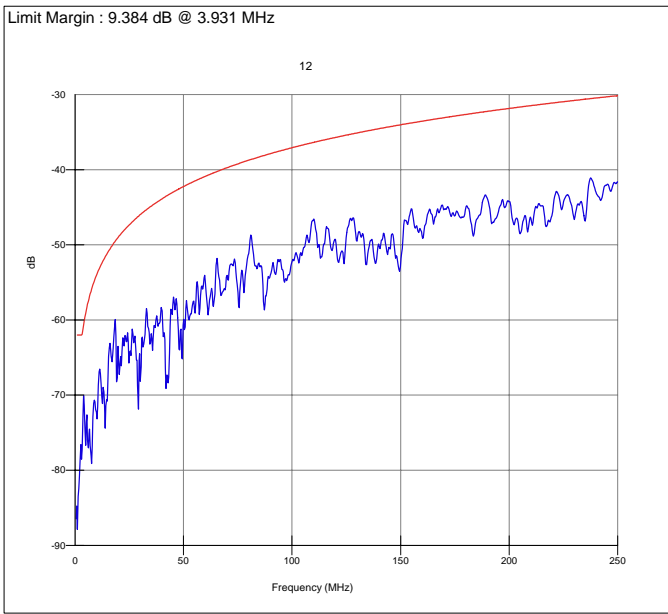
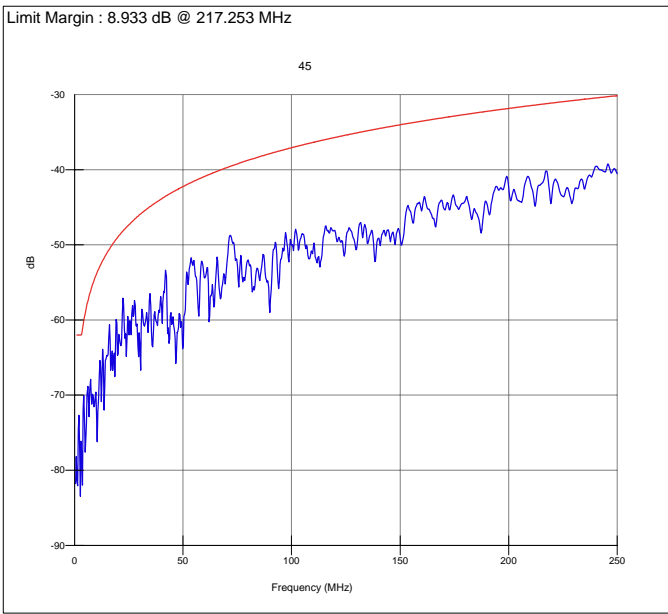
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies





PSNEXT - Near End

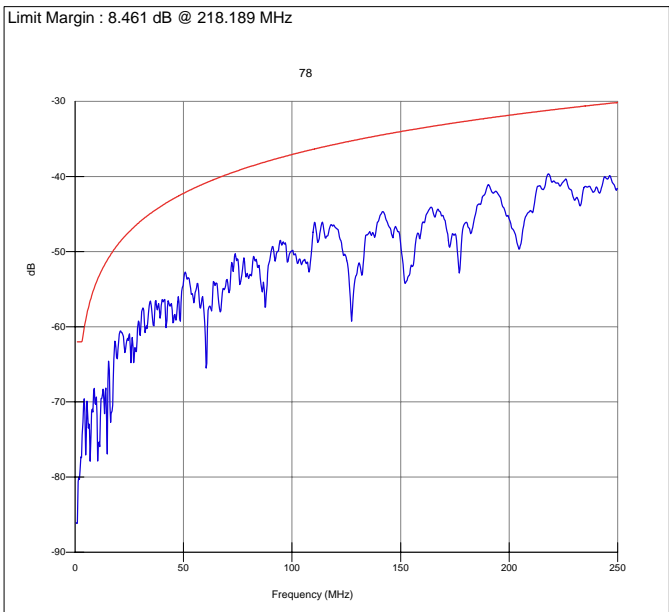
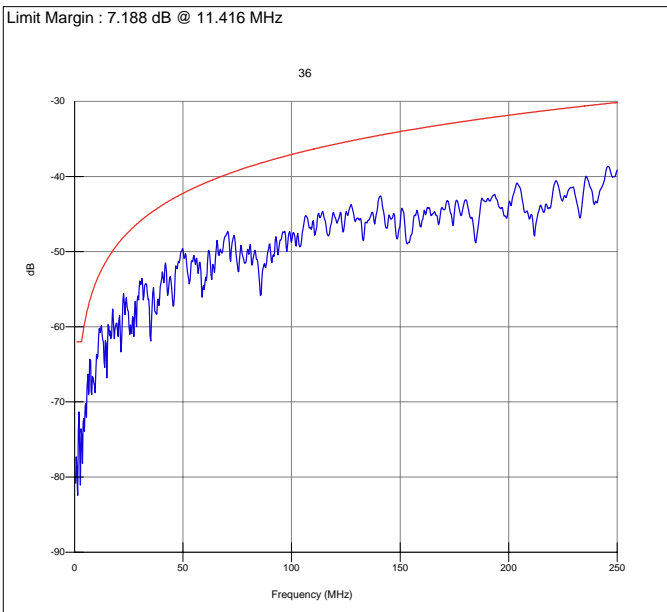
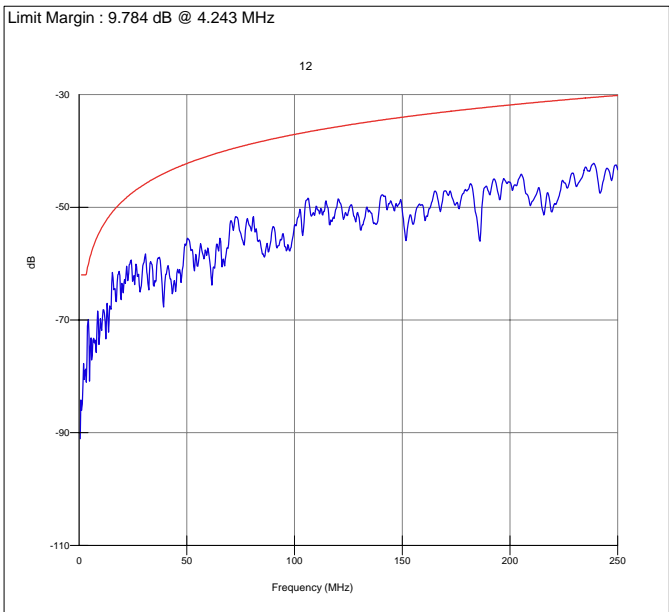
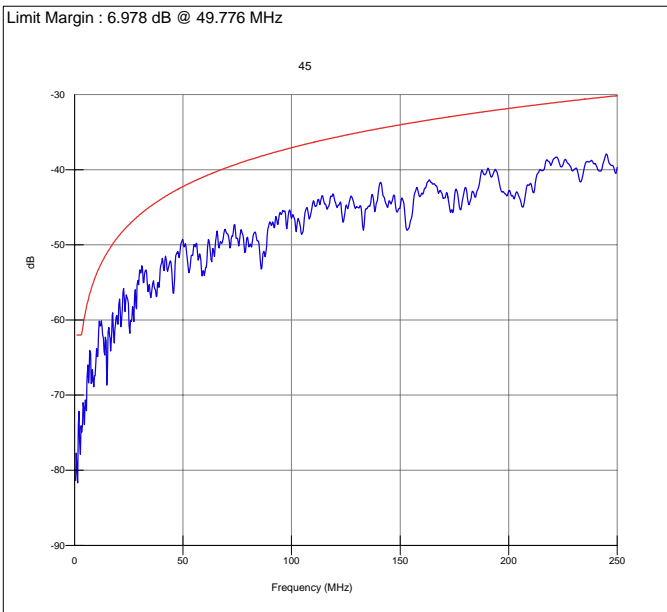
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Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





PSNEXT - Far End

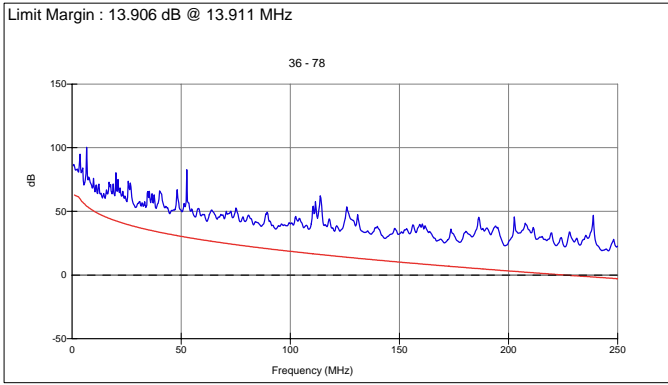
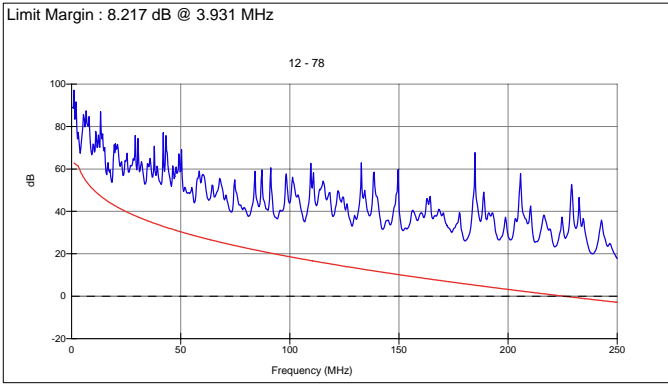
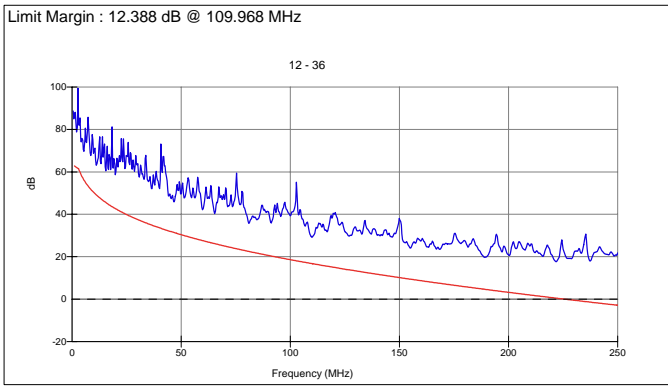
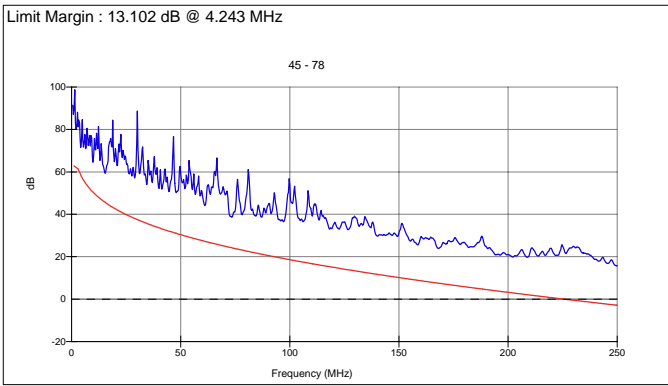
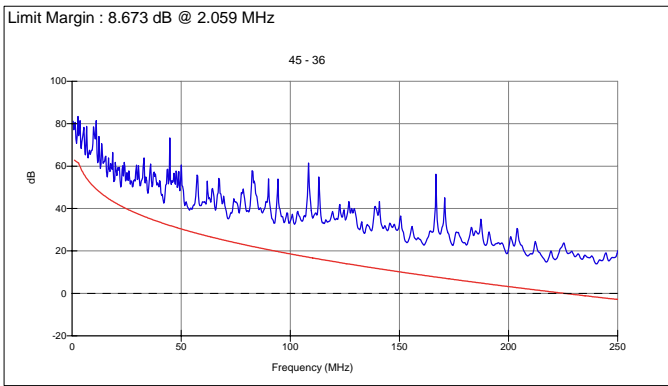
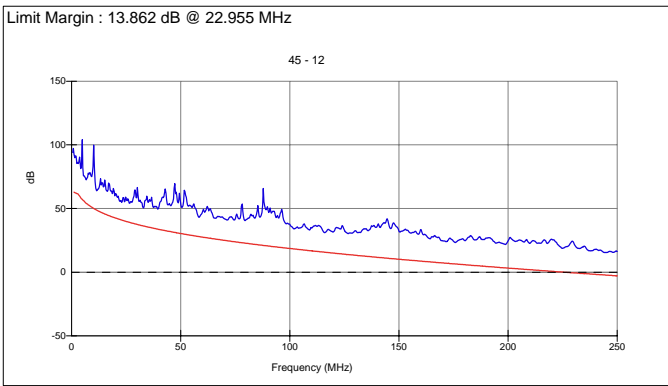
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





ACR - Near End

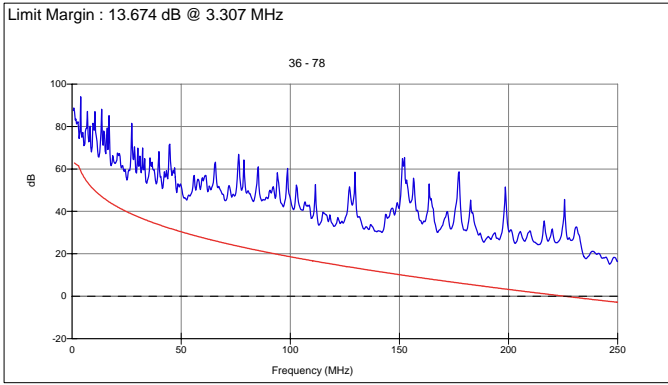
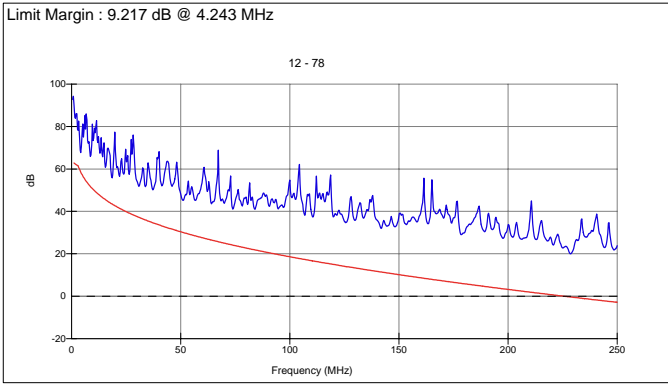
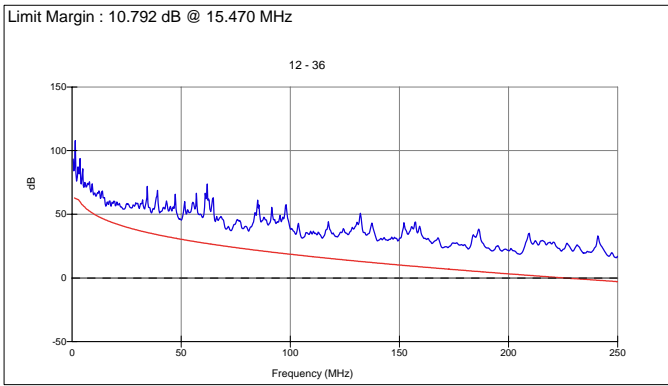
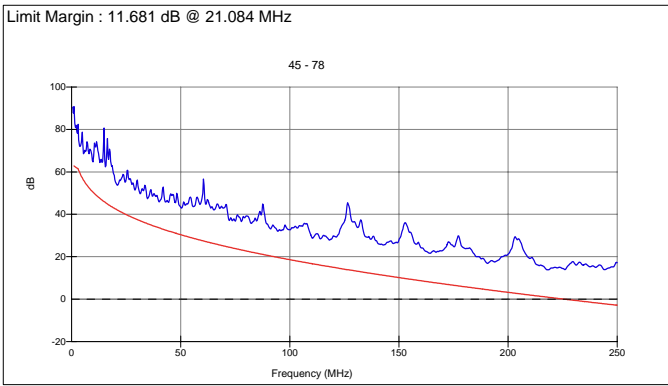
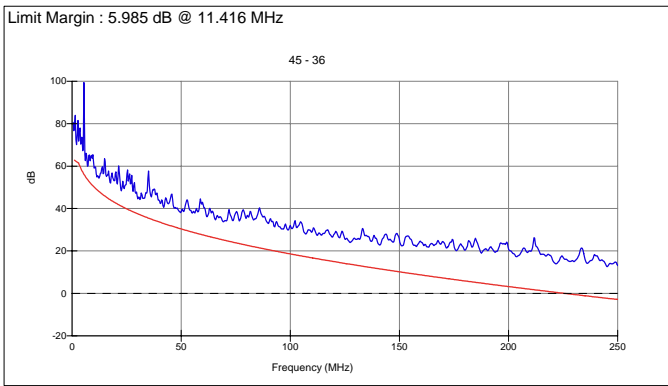
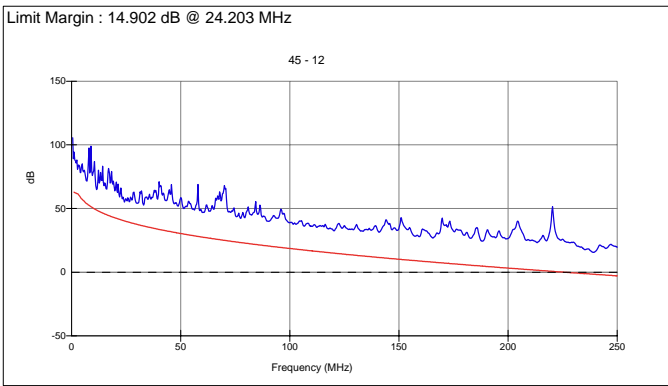
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies





ACR - Far End

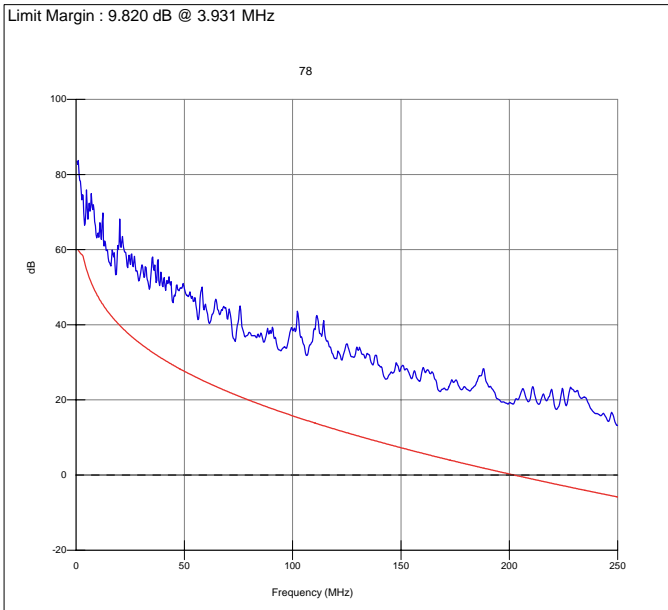
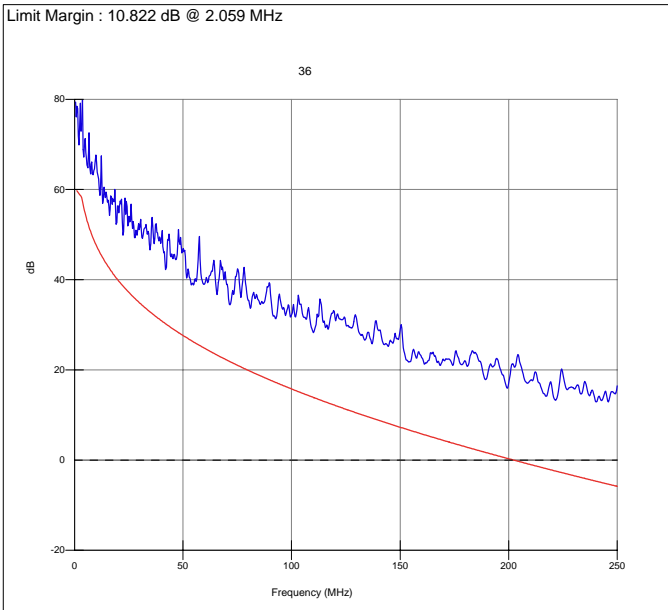
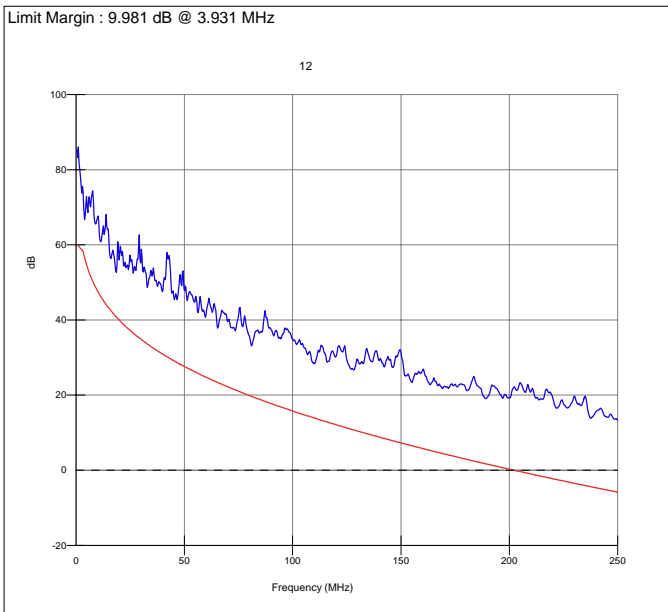
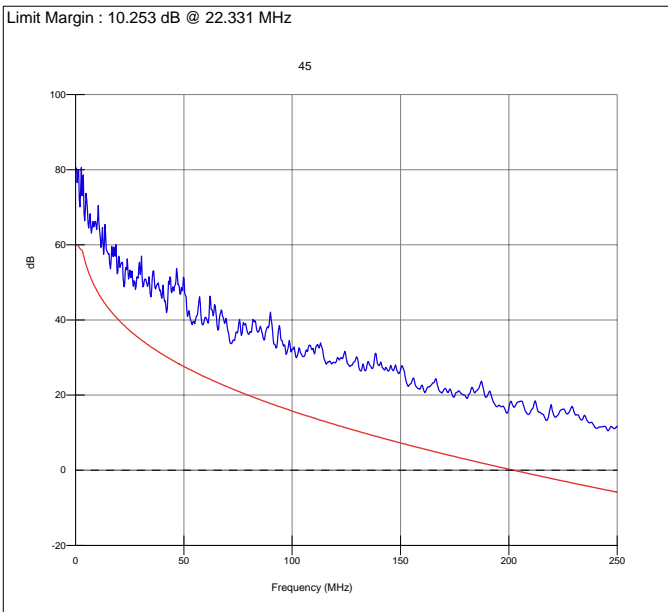
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Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





PSACR - Near End

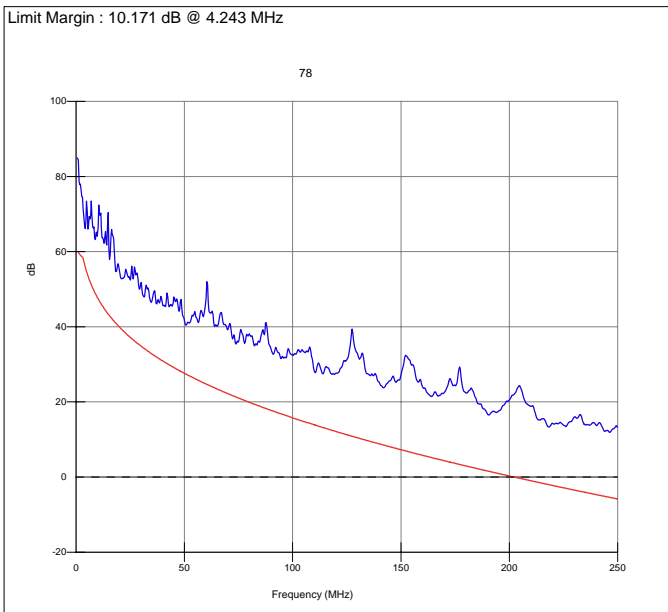
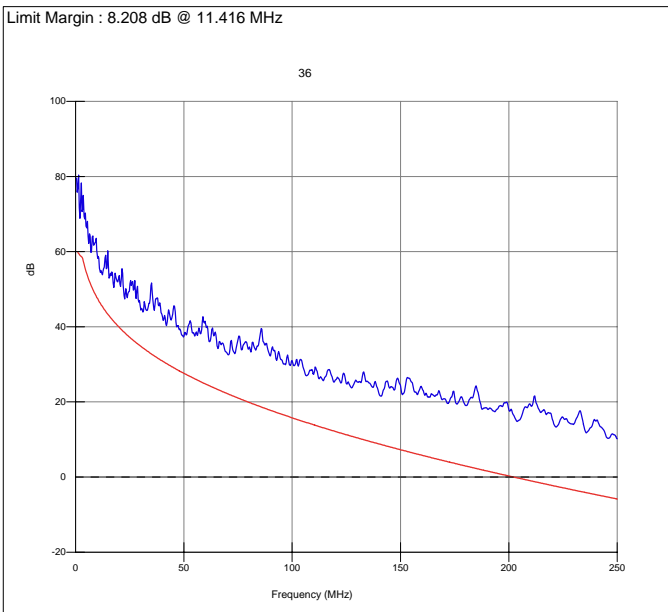
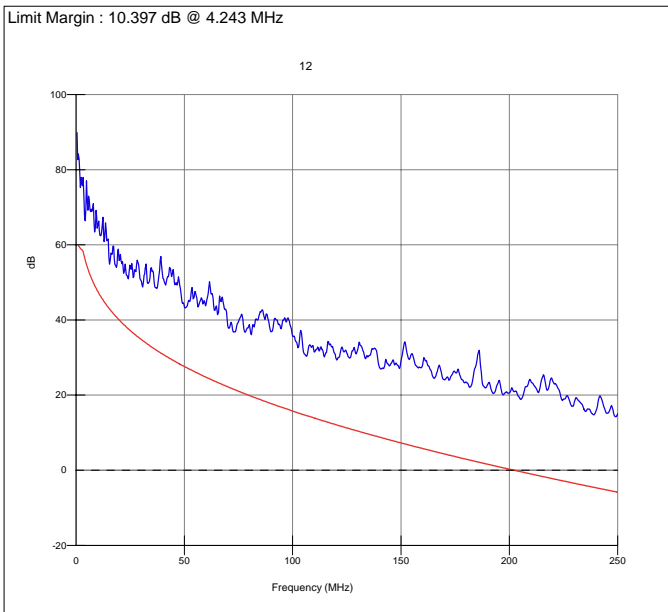
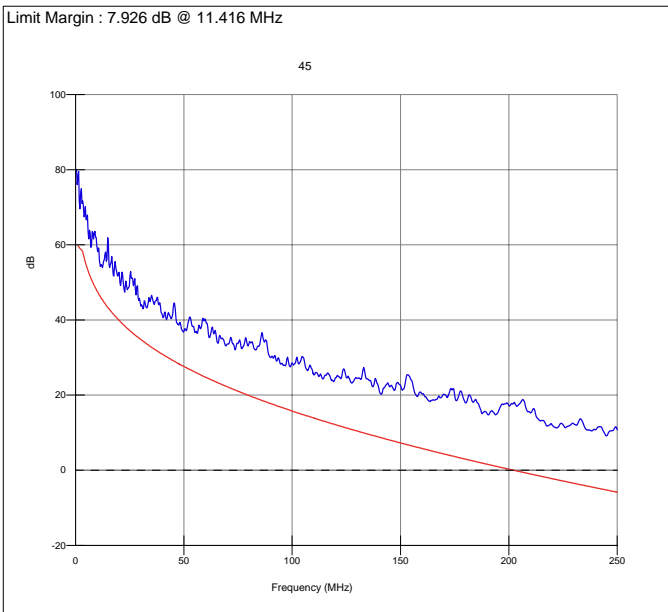
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Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





PSACR - Far End

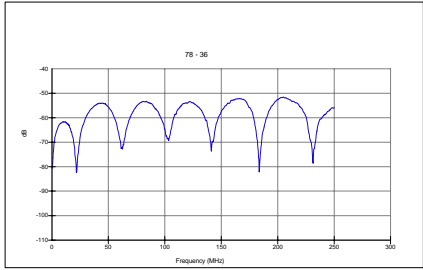
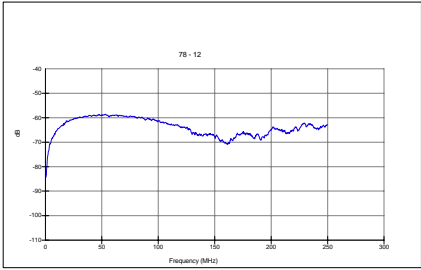
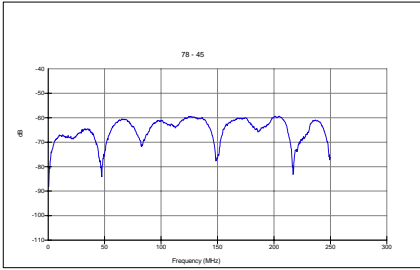
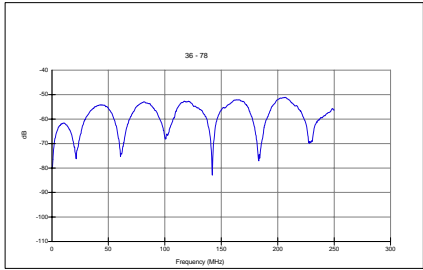
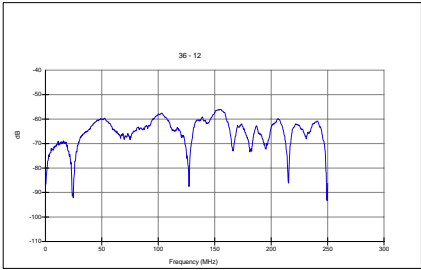
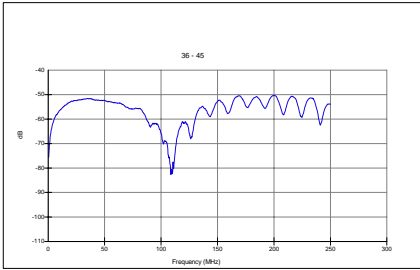
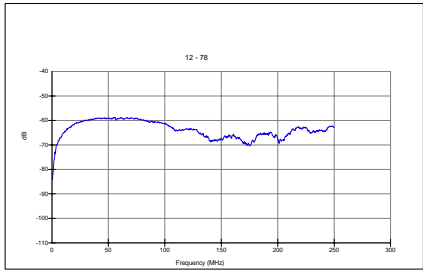
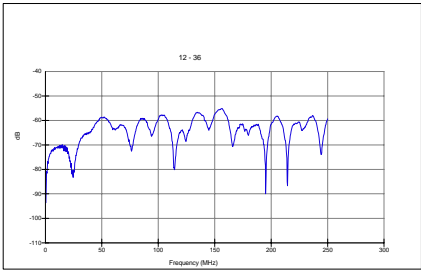
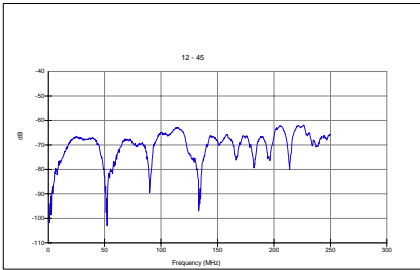
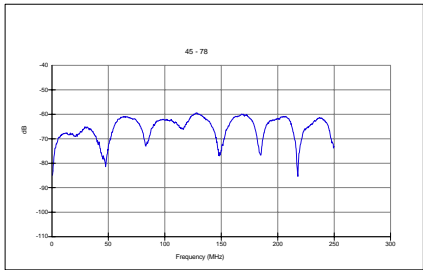
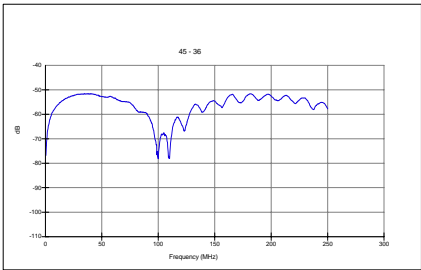
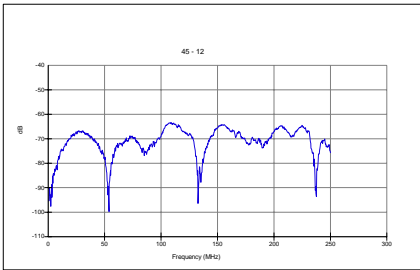
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Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





FEXT - Near End

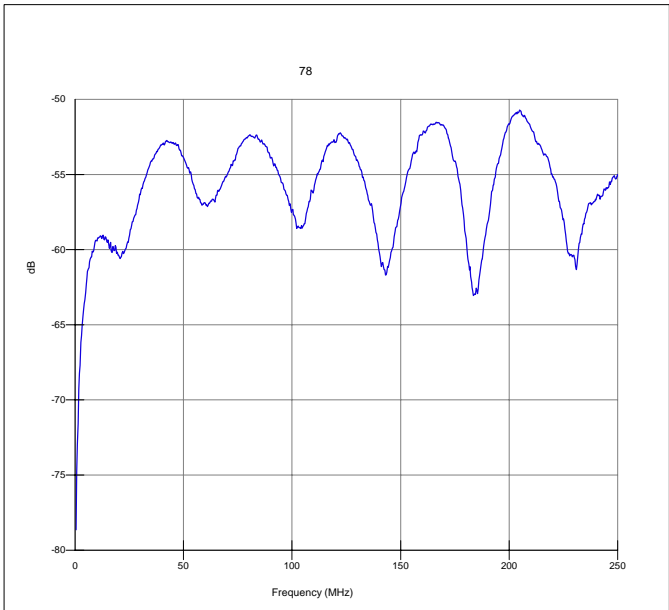
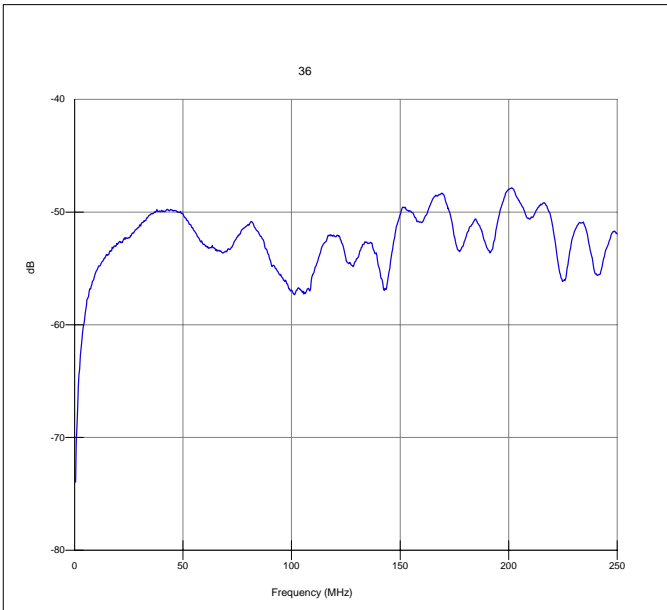
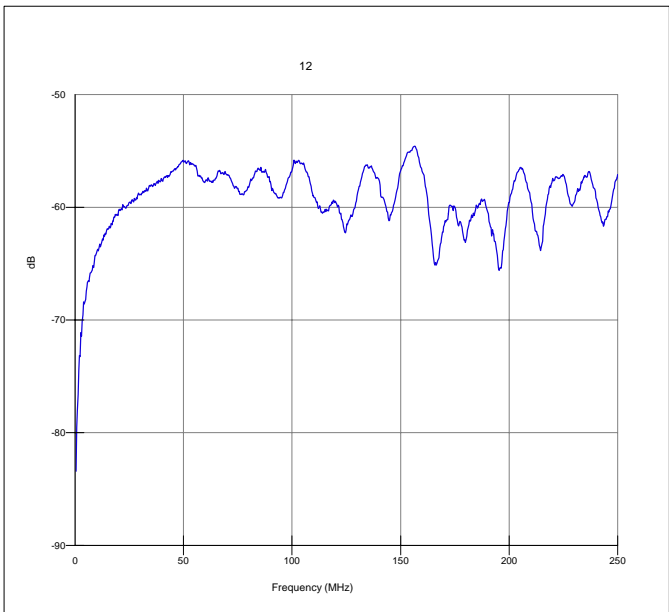
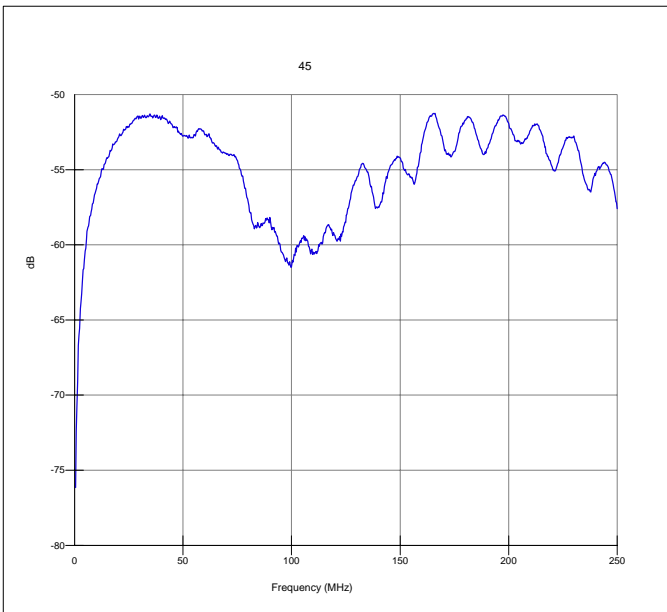
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Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





PSFEXT - Near End

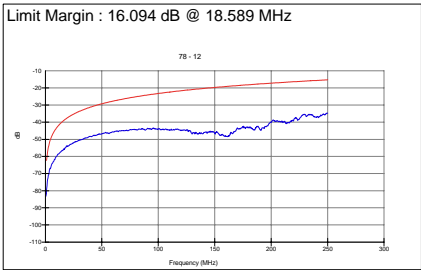
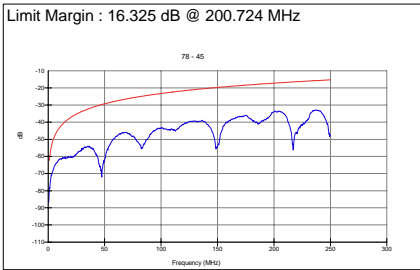
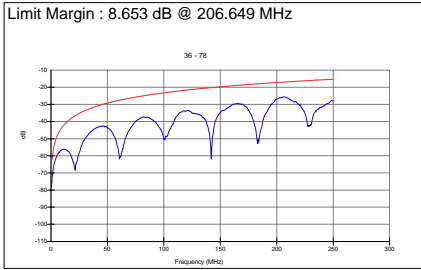
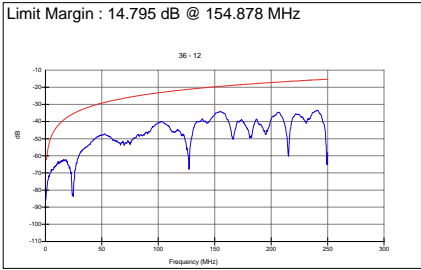
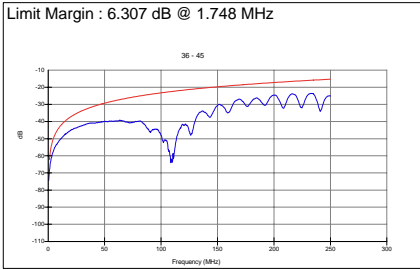
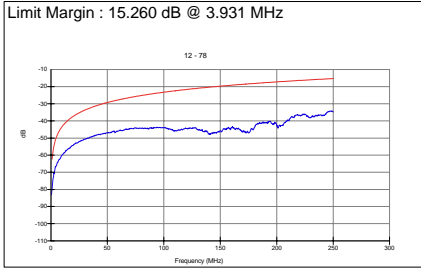
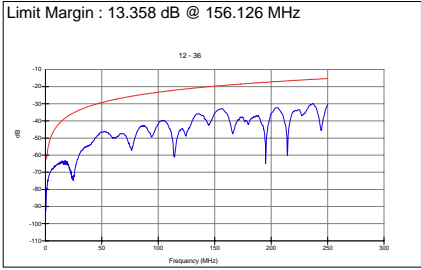
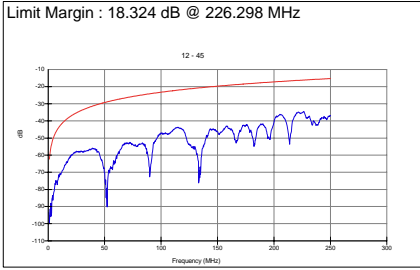
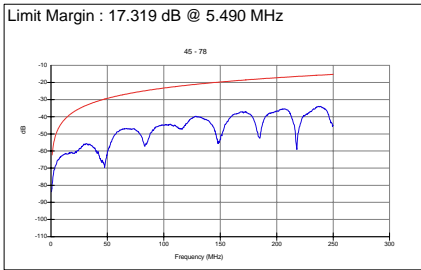
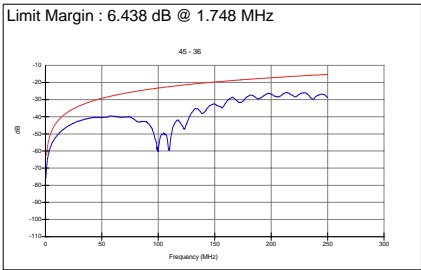
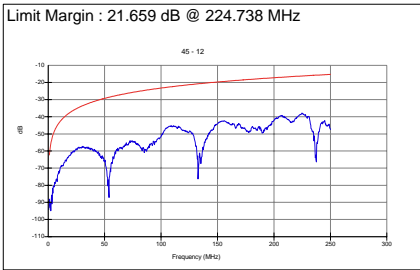
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





ACRF (ELFEXT) - Near End

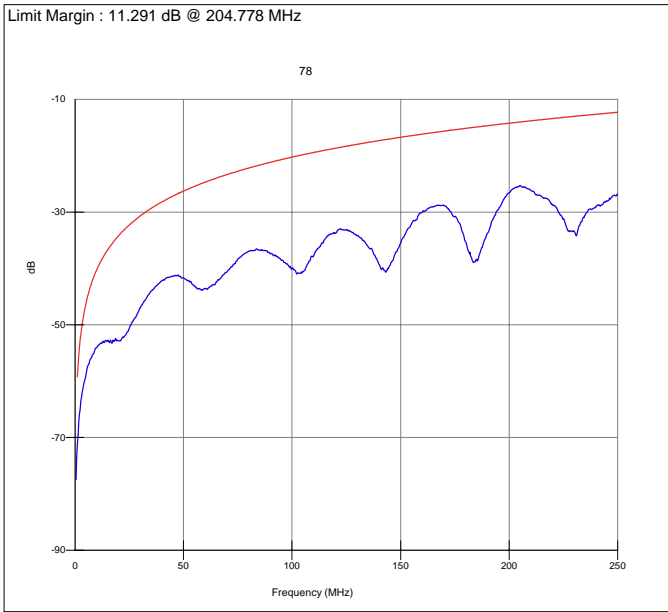
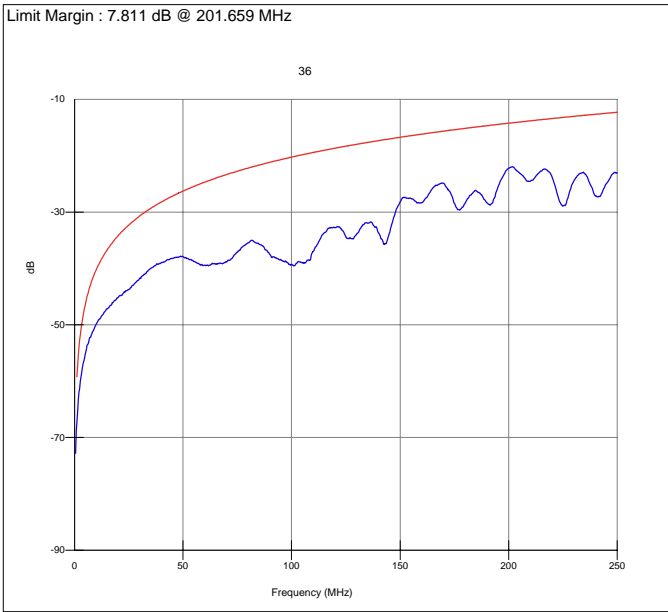
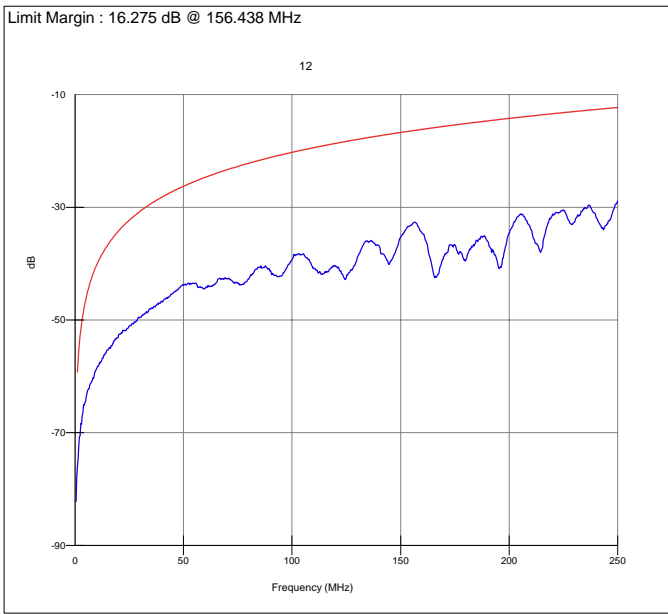
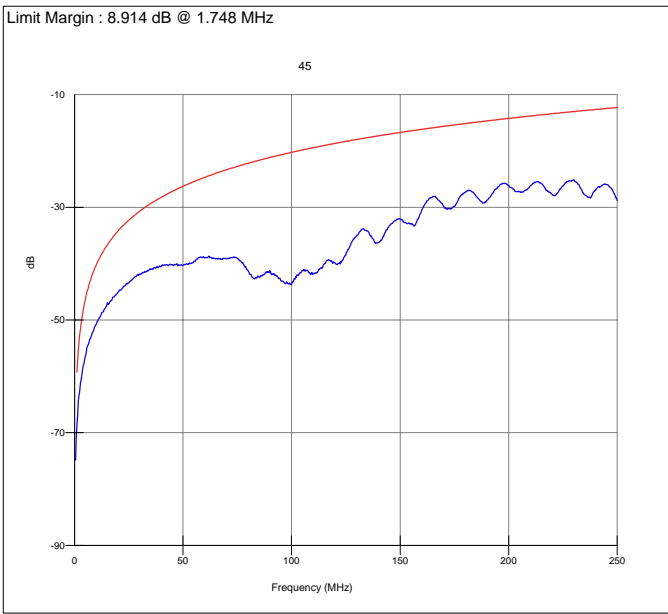
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





PSACRF (PSELFEXT) - Near End

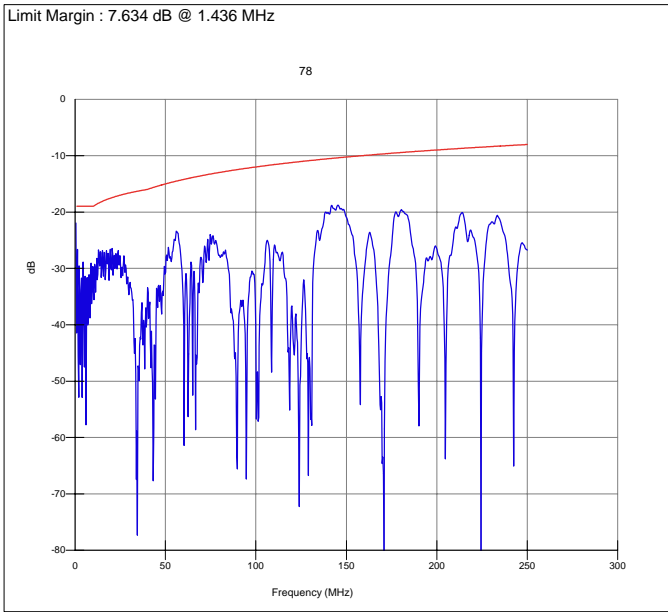
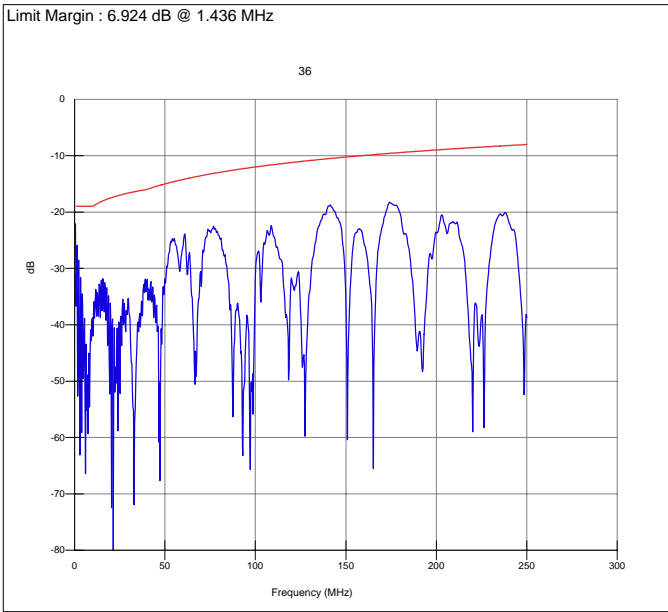
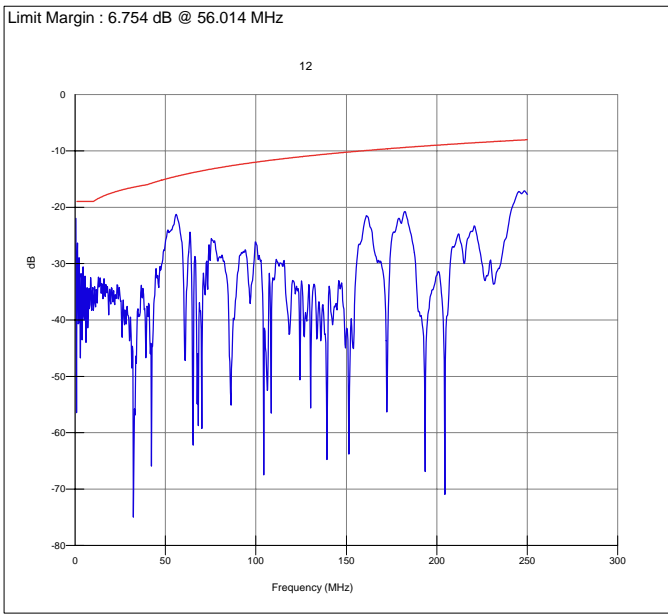
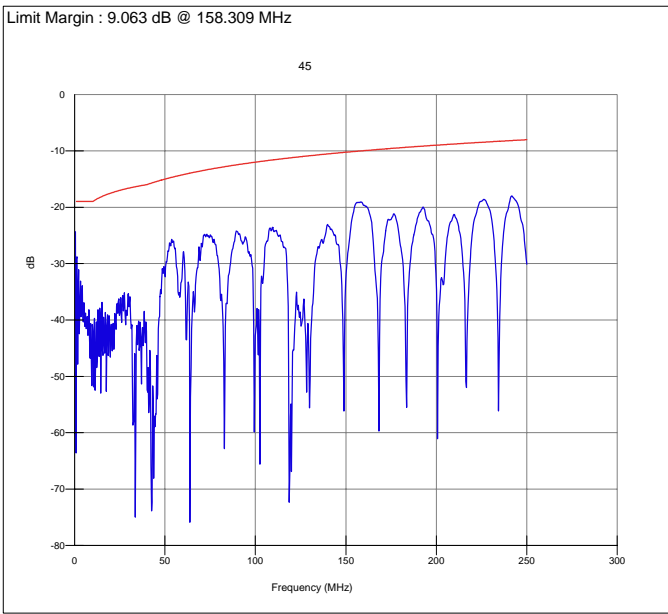
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





Return Loss - Near End

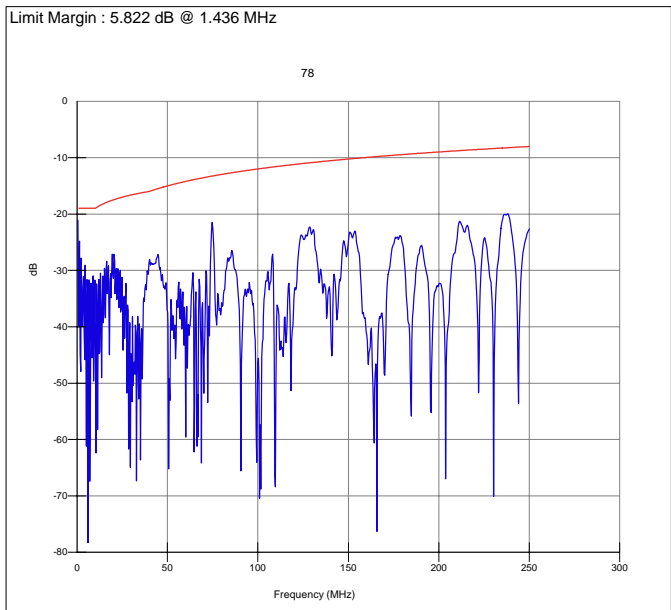
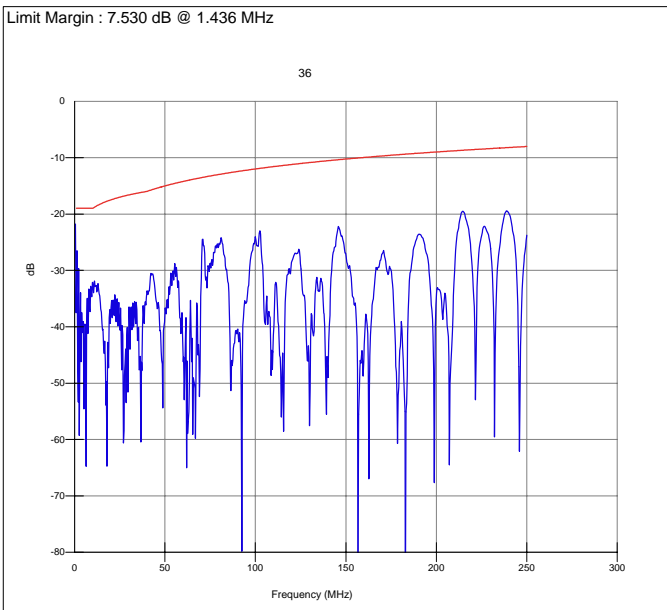
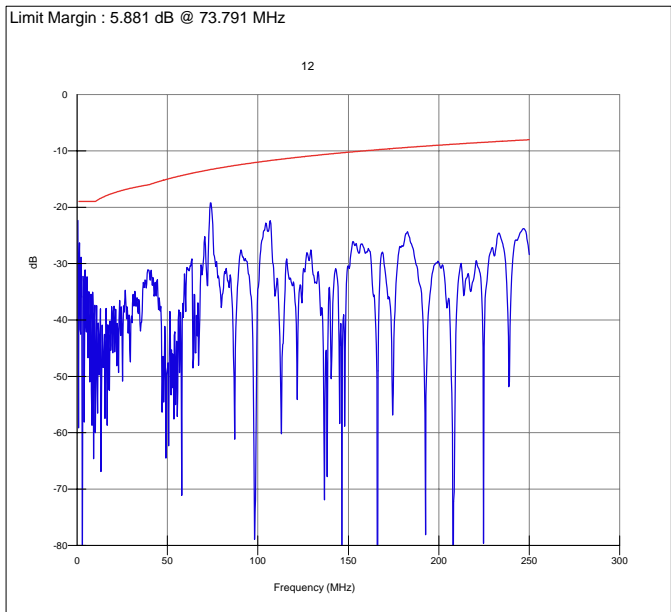
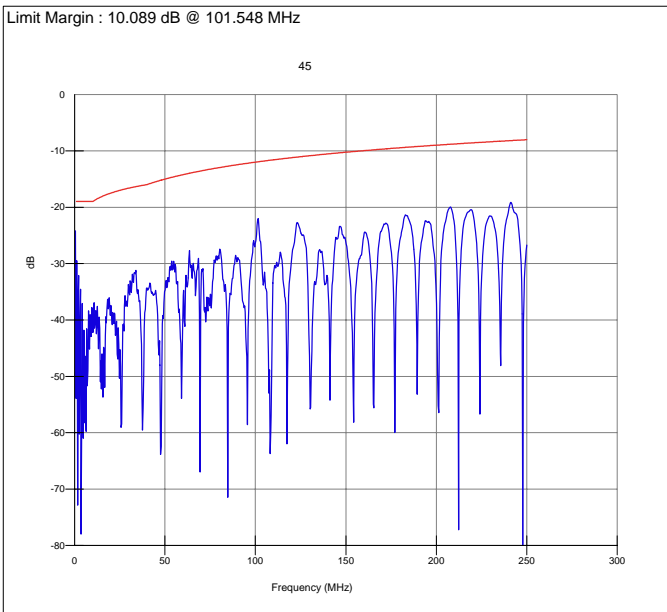
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





Return Loss - Far End

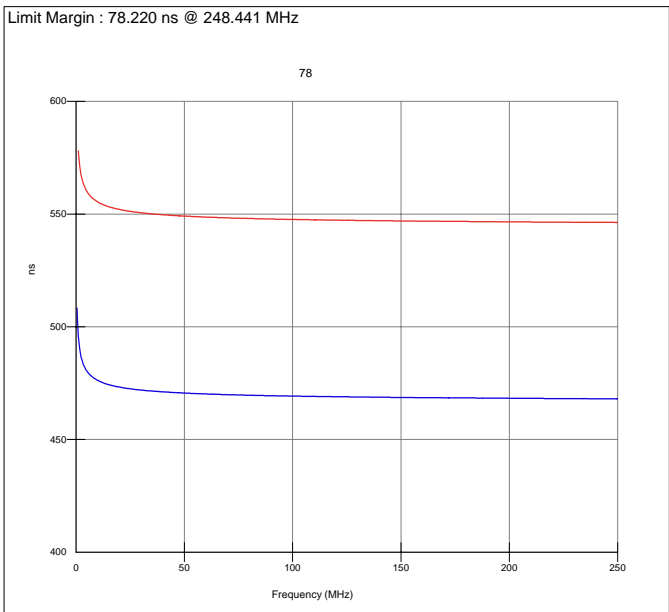
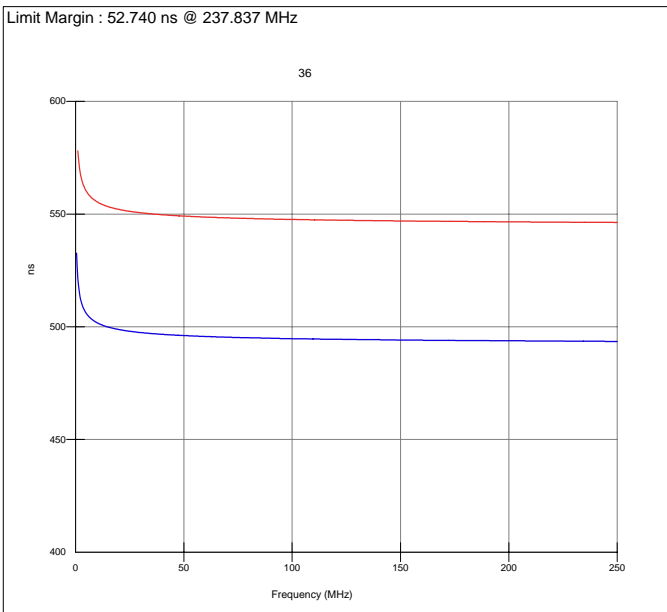
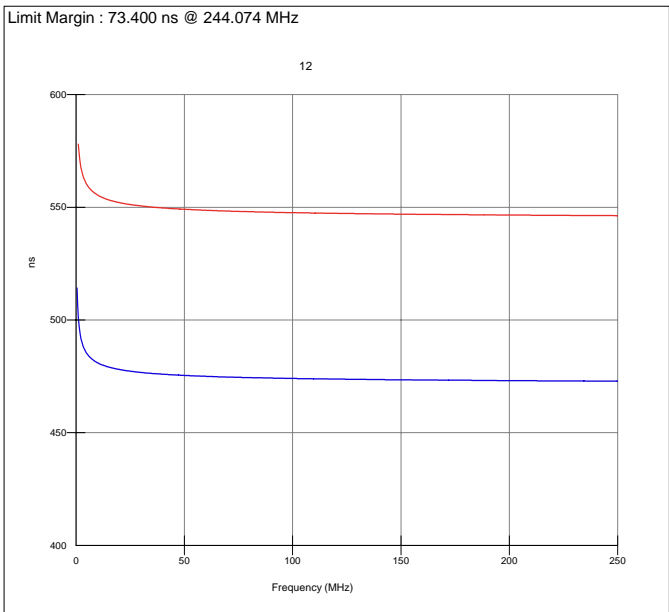
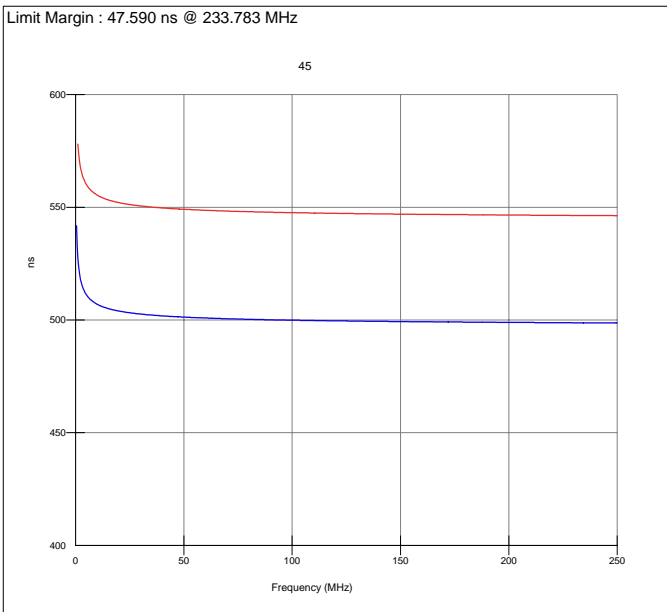
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





Propagation Delay - Near End

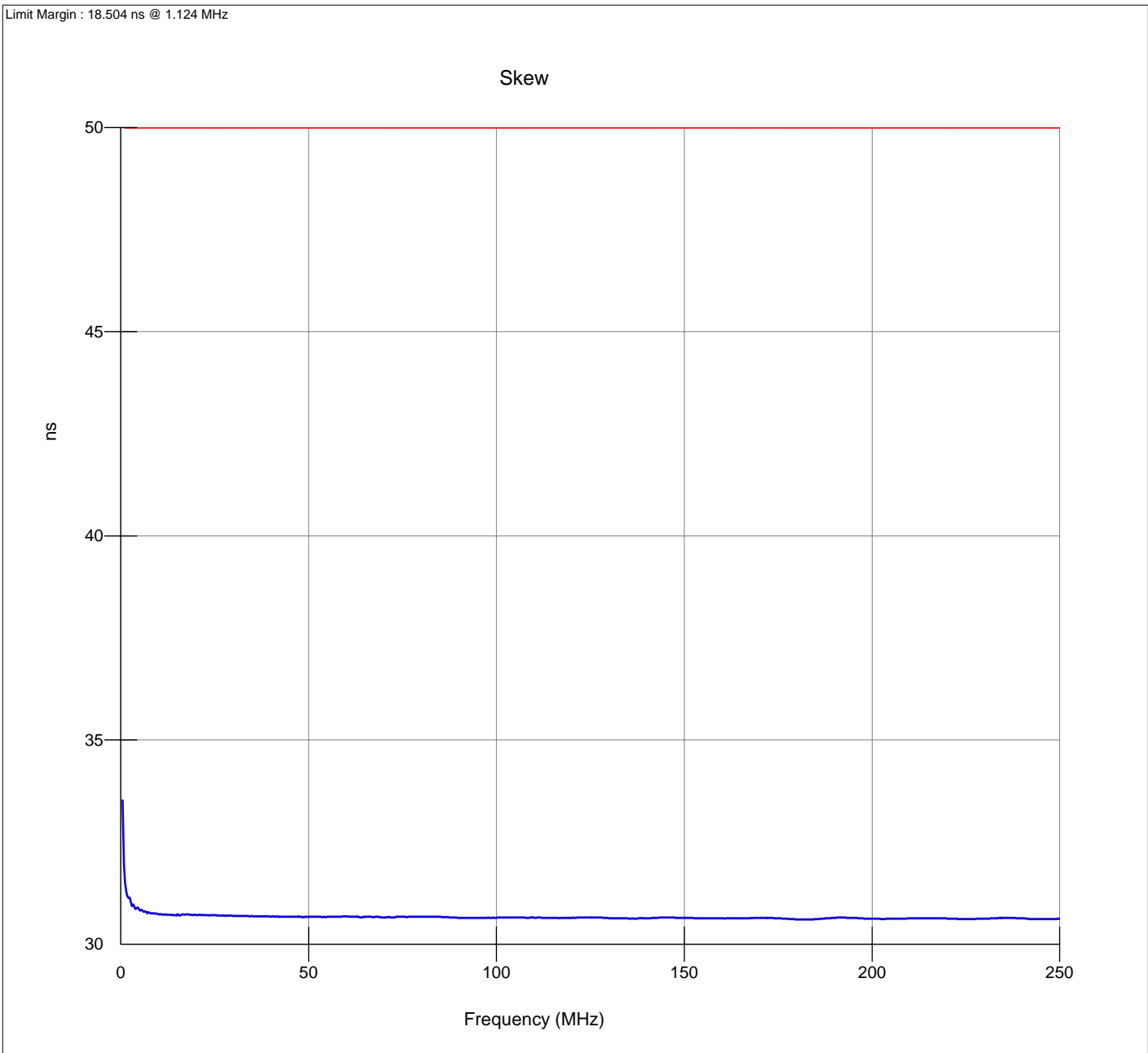
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





Propagation Delay Skew - Near End

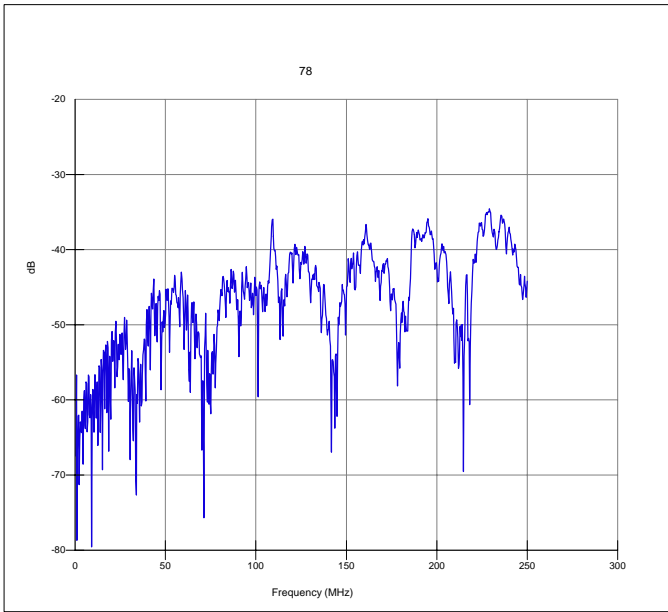
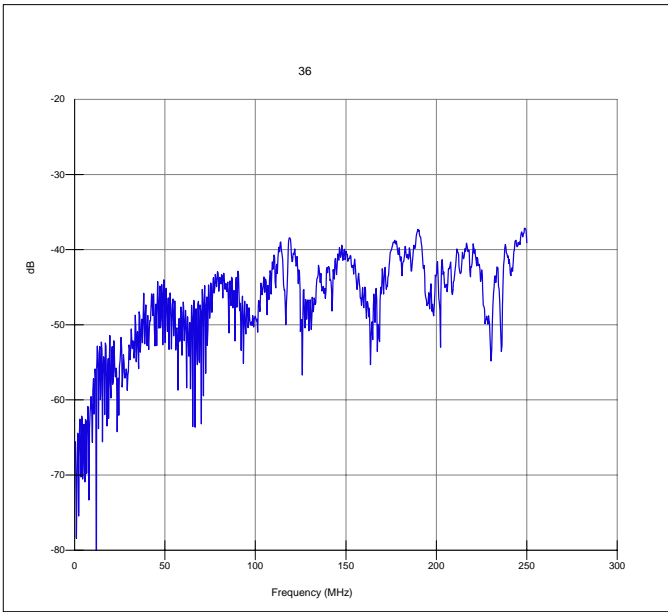
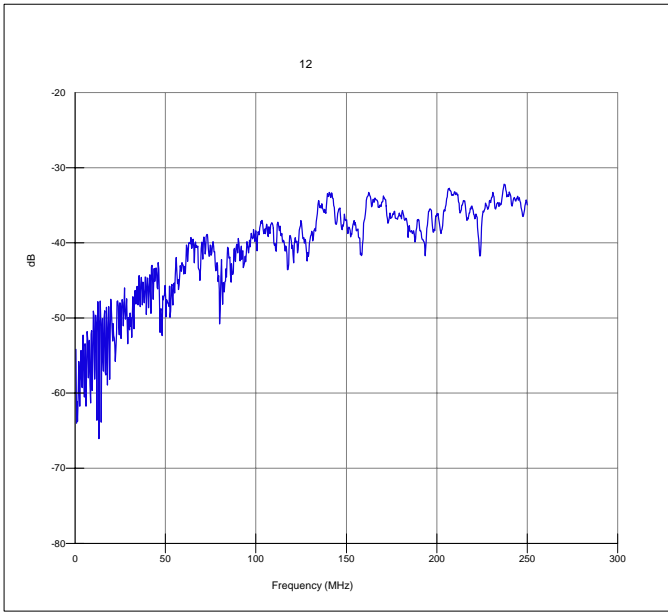
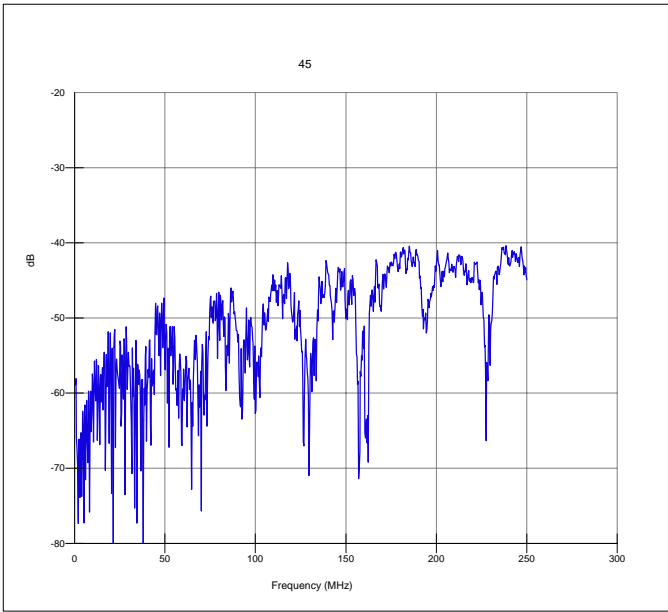
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel		
Part No		Length(m)	97.23
Test Started	1/24/2014 7:35:23 AM	Temperature	20 °C
Description	2 Connector Channel	Appendix	A
Operator Name	John Cash	Test Status	Complies





TCL - Near End

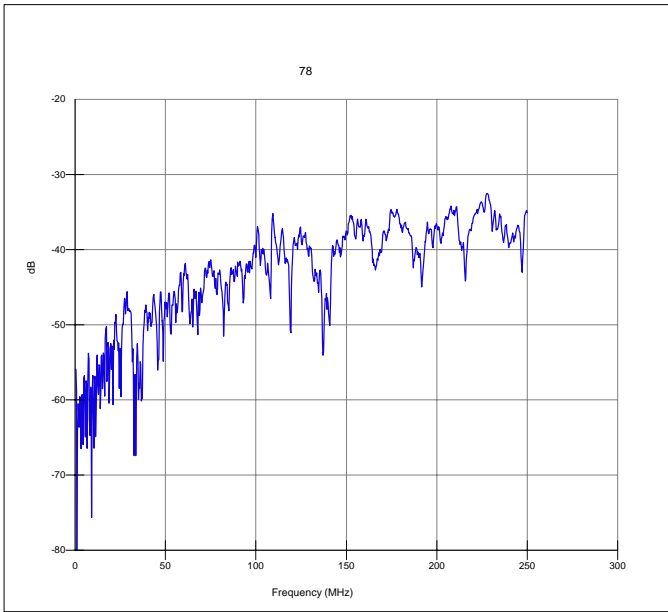
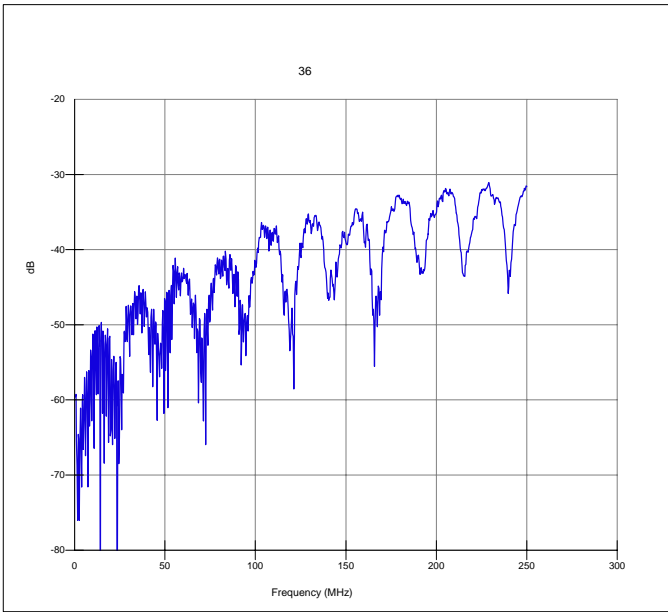
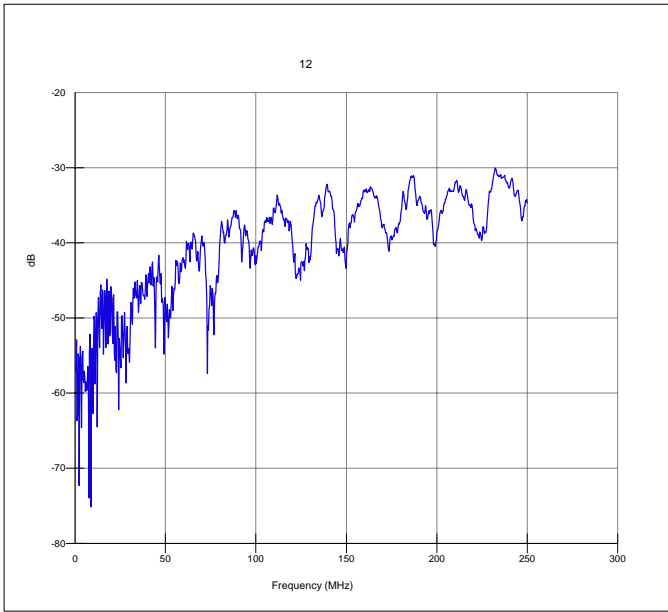
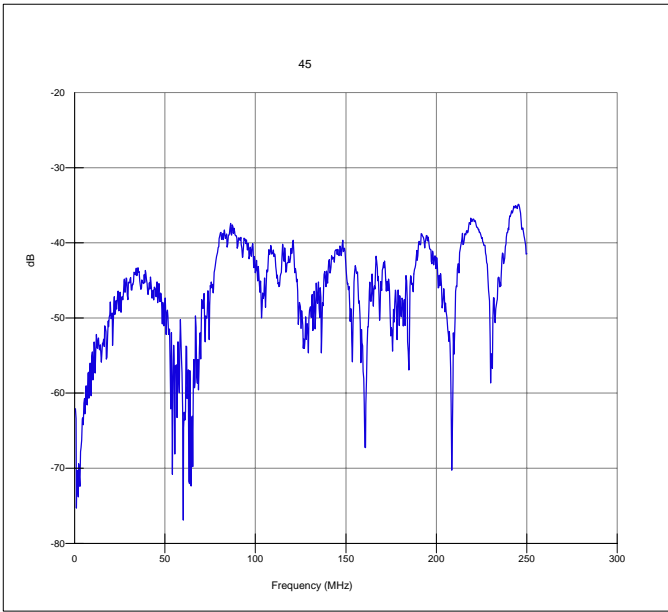
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





TCL - Far End

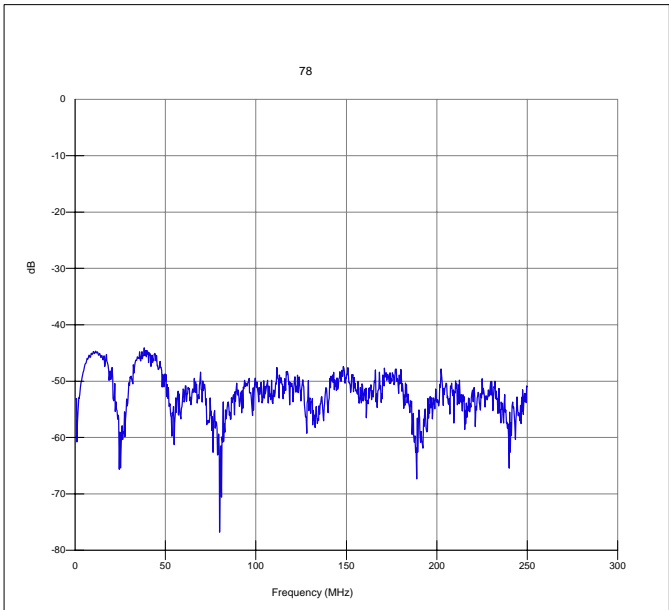
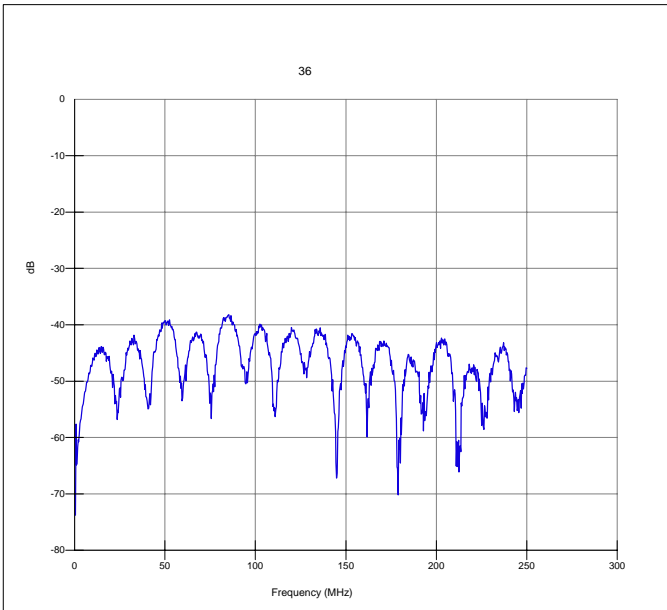
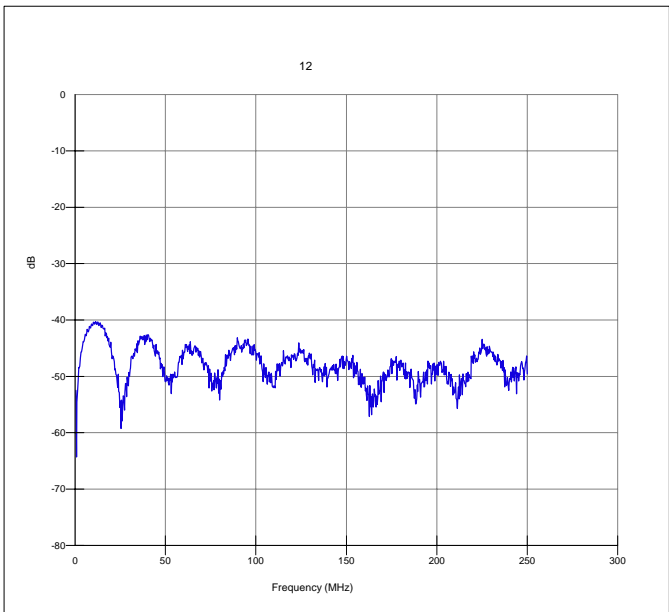
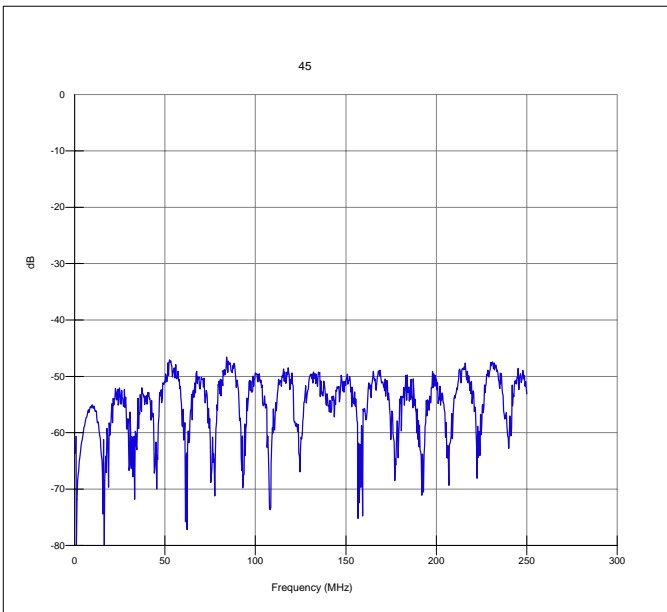
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





TCTL - Near End

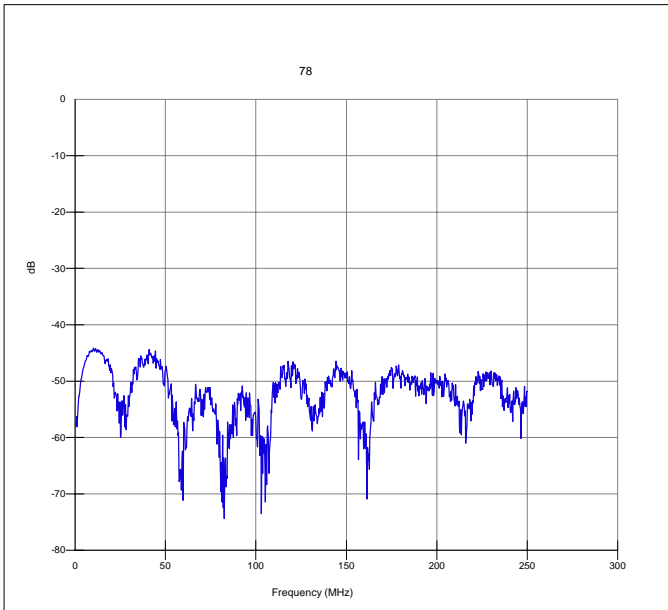
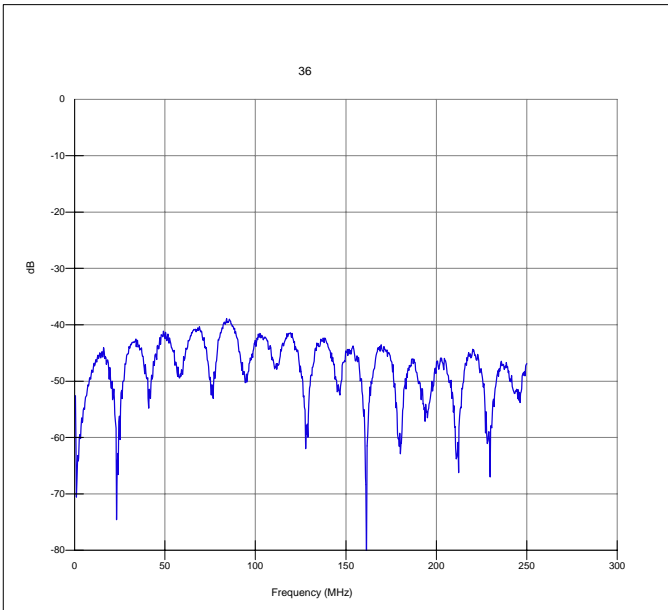
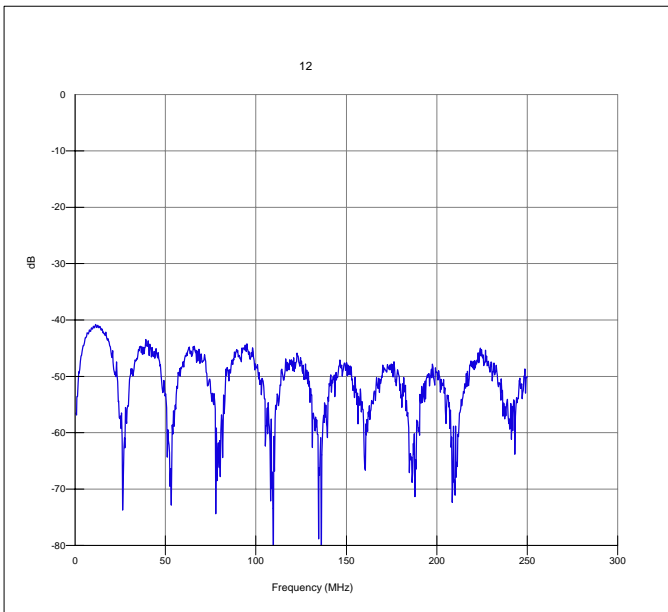
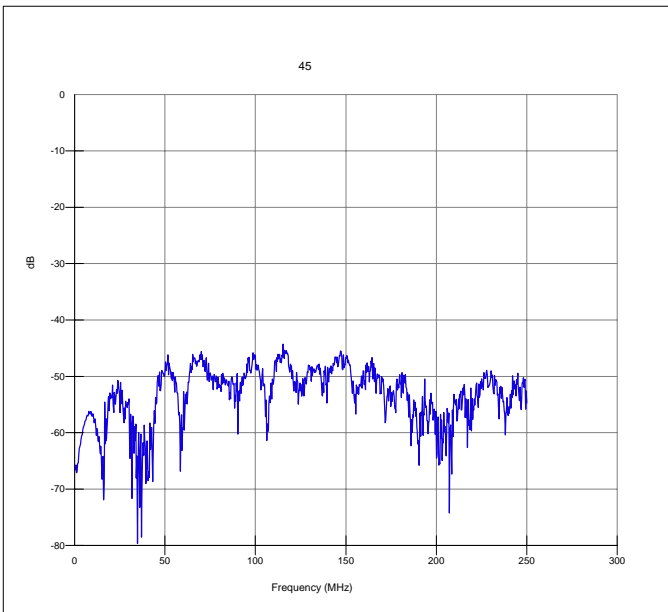
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





TCTL - Far End

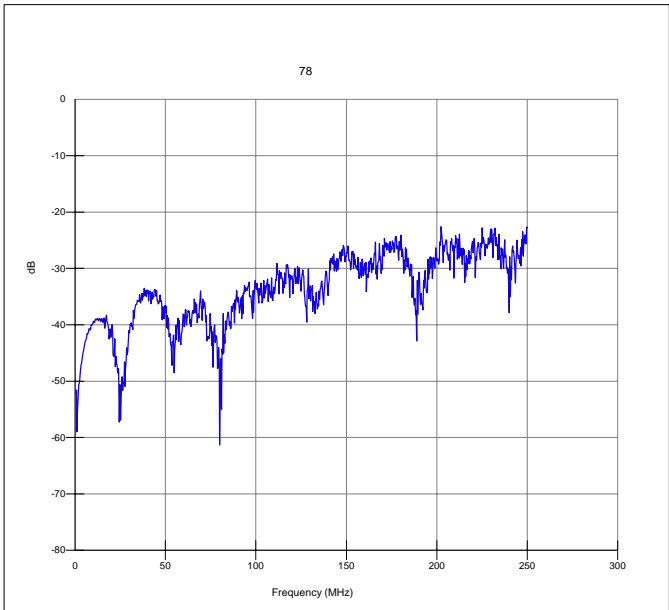
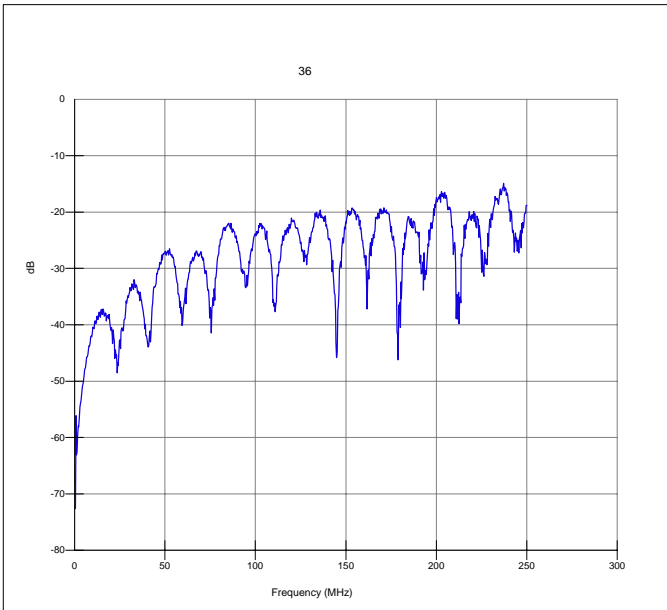
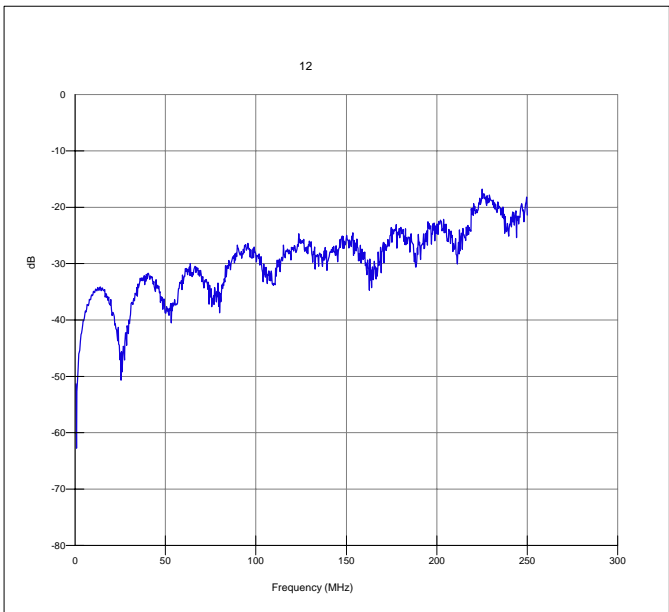
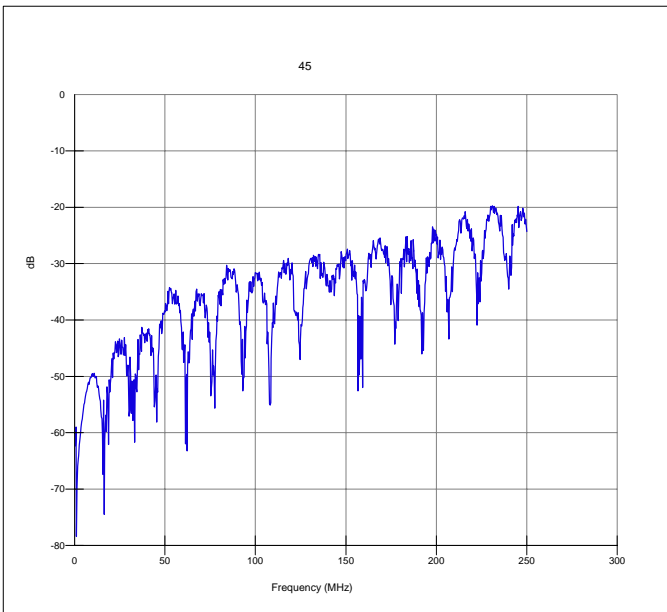
Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





ELTCTL - Near End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		





ELTCTL - Far End

Client	Automated Systems Design	Project No	101505289CRT-001
Specification	ANSI-TIA-568-C2 Cat 6 Channel	Length(m)	97.23
Part No		Temperature	20 °C
Test Started	1/24/2014 7:35:23 AM	Appendix	A
Description	2 Connector Channel	Test Status	Complies
Operator Name	John Cash		

