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March 6, 2012

Test report number 100617442CRT-001a
Project number 100617442-311

Schneider Electric India Pvt Ltd
Plot L-3 Verna Industrial Estate
Verna Plateau Verna
GOA 403722
India

TEST:

Initial qualification testing of telecommunication patch cords to the requirements of ANSI/TIA-568-C.2 for Category 5e patch cords.

STANDARD USED:

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

SECTIONS:

6.9 Cords and Jumpers Transmission Performance (6.9.1 to 6.9.2)

AUTHORIZATION:

The project was authorized by Mr. Ajit Gaonkar, representing the client, Schneider Electric India Pvt Ltd, with signed quotation number 500353856.

SAMPLES DESCRIPTION:

The client supplied five (5) samples of 1 meter length patch cords identified with part number, ACTPC5EUBCM10GY and five (5) samples of 5 meters length patch cords identified with part number, ACTPC5EUBCM50GY. The samples were received on February 21, 2012 and were in good condition.

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>
Fluke Networks field tester	DTX-1800	N1134	12/5/2011	12/5/2012

DATE OF TEST:

March 6, 2012

TEST REPORT REVISION HISTORY:

First Issue: March 6, 2012 Original Document



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RESULTS: See appendix A for the test results.

CONCLUSION:

The telecommunication patch cords, as previously described and supplied by the client, were 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
Technician
Global Cabling Products Testing



Appendix A
Test results

This appendix contains 10 pages.



Cable ID: 100617442CRT-001A-1

Test Summary: PASS

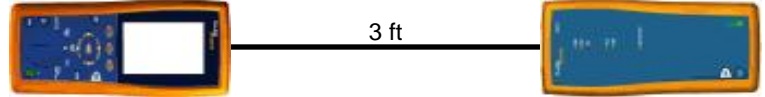
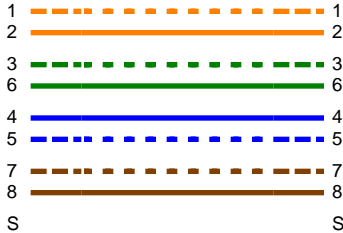
Date / Time: 03/06/2012 04:34:41am
Headroom: 3.9 dB (NEXT 36-45)
Test Limit: TIA Patch Cord Cat5e 1.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

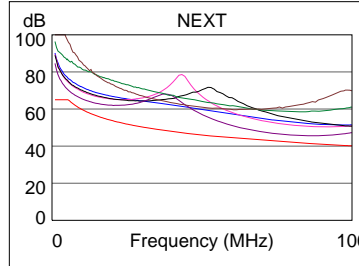
Wire Map (T568B)

PASS

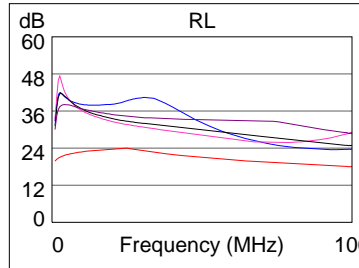


Length (ft)	[Pair 12]	3
Prop. Delay (ns)	[Pair 12]	5
Delay Skew (ns)	[Pair 12]	0
Resistance (ohms)	[Pair 12]	0.2

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	3.9		4.0	
Freq. (MHz)	77.5		84.3	
Limit (dB)	42.3		41.6	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12		12	
RL (dB)	5.1		5.1	
Freq. (MHz)	85.5		91.0	
Limit (dB)	18.7		18.4	





Cable ID: 100617442CRT-001A-2

Test Summary: PASS

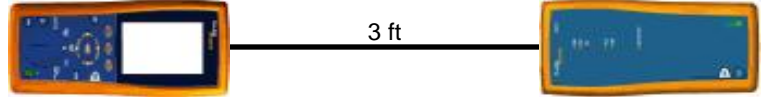
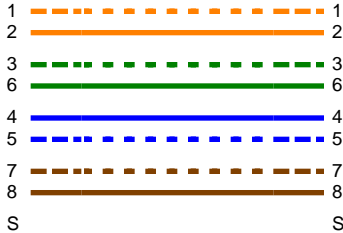
Date / Time: 03/06/2012 04:37:51am
 Headroom: 6.1 dB (NEXT 36-45)
 Test Limit: TIA Patch Cord Cat5e 1.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

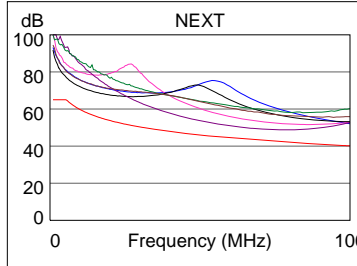
Wire Map (T568B)

PASS

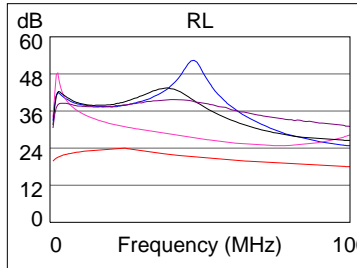


Length (ft)	[Pair 12]	3
Prop. Delay (ns)	[Pair 12]	5
Delay Skew (ns)	[Pair 12]	0
Resistance (ohms)	[Pair 12]	0.2

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	6.1		6.4	
Freq. (MHz)	67.0		76.0	
Limit (dB)	43.5		42.4	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36		12	
RL (dB)	5.4		6.7	
Freq. (MHz)	63.5		100.0	
Limit (dB)	20.0		18.0	





Cable ID: 100617442CRT-001A-3

Test Summary: PASS

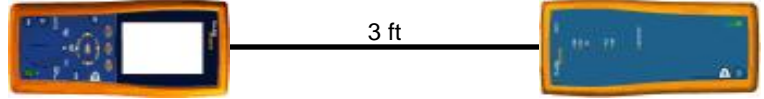
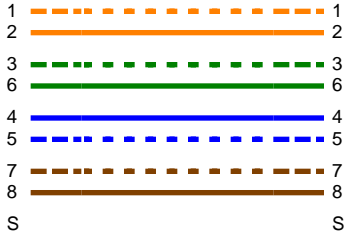
Date / Time: 03/06/2012 04:39:11am
 Headroom: 5.7 dB (NEXT 12-45)
 Test Limit: TIA Patch Cord Cat5e 1.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

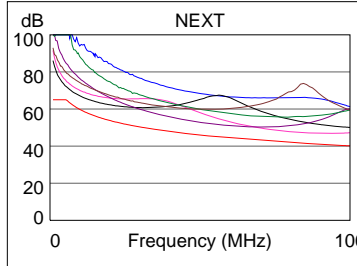
Wire Map (T568B)

PASS

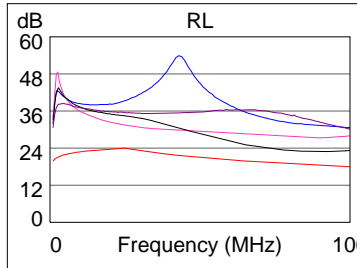


Length (ft)	[Pair 78]	3
Prop. Delay (ns)	[Pair 12]	5
Delay Skew (ns)	[Pair 12]	1
Resistance (ohms)	[Pair 78]	0.3

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-45		12-45	
NEXT (dB)	5.7		6.0	
Freq. (MHz)	79.5		92.0	
Limit (dB)	42.1		40.8	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	45		45	
RL (dB)	4.2		4.2	
Freq. (MHz)	79.5		84.3	
Limit (dB)	19.0		18.7	





Cable ID: 100617442CRT-001A-4

Test Summary: PASS

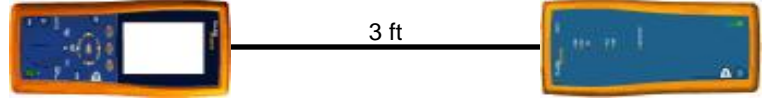
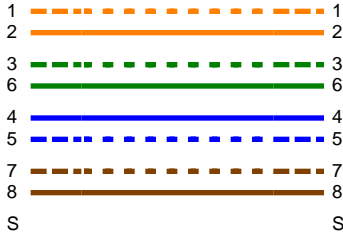
Date / Time: 03/06/2012 04:55:47am
Headroom: 3.0 dB (NEXT 36-45)
Test Limit: TIA Patch Cord Cat5e 1.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

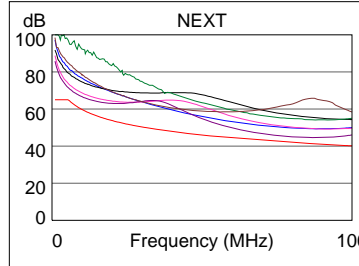
Wire Map (T568B)

PASS

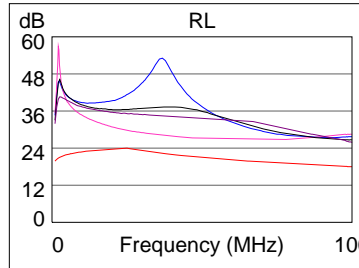


Length (ft)	[Pair 12]	3
Prop. Delay (ns)	[Pair 12]	5
Delay Skew (ns)	[Pair 12]	0
Resistance (ohms)	[Pair 12]	0.2

PASS	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
Worst Pair	36-45		36-45	
NEXT (dB)	3.0		3.2	
Freq. (MHz)	76.8		86.0	
Limit (dB)	42.4		41.4	



PASS	MAIN	SR	MAIN	SR
Worst Pair	36		78	
RL (dB)	5.7		7.8	
Freq. (MHz)	25.9		100.0	
Limit (dB)	23.9		18.0	





Cable ID: 100617442CRT-001A-5

Test Summary: PASS

Date / Time: 03/06/2012 05:03:44am

Operator: Your Name

Model: DTX-1800

Headroom: 9.3 dB (NEXT 12-45)

Software Version: 2.5200

Main S/N: 9385159

Test Limit: TIA Patch Cord Cat5e 1.0m

Limits Version: 1.7000

Remote S/N: 9385160

Cable Type: Cat 5e UTP

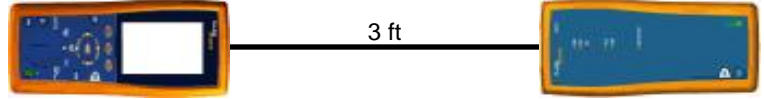
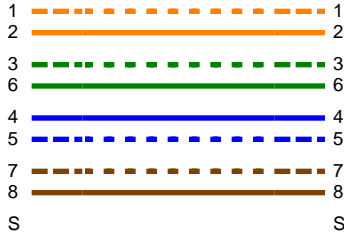
NVP: 69.0%

Main Adapter: DTX-PCU6M

Remote Adapter: DTX-PCU6R

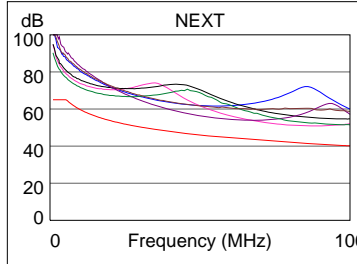
Wire Map (T568B)

PASS

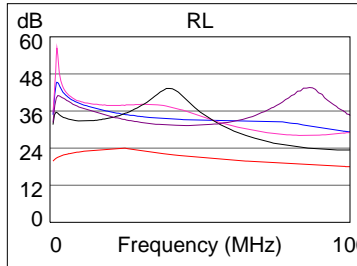


Length (ft)	[Pair 78]	3
Prop. Delay (ns)	[Pair 12]	5
Delay Skew (ns)	[Pair 12]	1
Resistance (ohms)	[Pair 45]	3.0

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-45		12-45	
NEXT (dB)	9.3		9.6	
Freq. (MHz)	77.3		88.0	
Limit (dB)	42.3		41.2	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	45		45	
RL (dB)	5.1		5.1	
Freq. (MHz)	91.5		93.8	
Limit (dB)	18.4		18.3	





Cable ID: 100617442CRT-001A-6

Test Summary: PASS

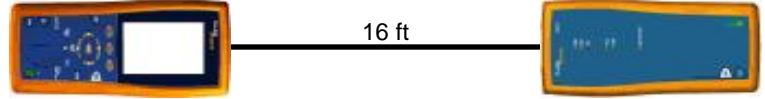
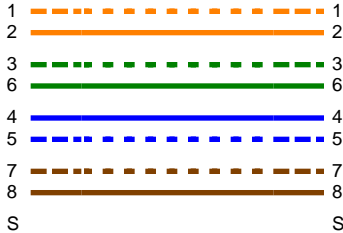
Date / Time: 03/06/2012 05:06:21am
Headroom: 6.1 dB (NEXT 36-45)
Test Limit: TIA Patch Cord Cat5e 5.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

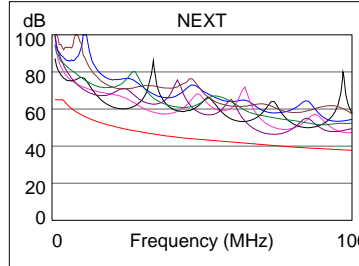
Wire Map (T568B)

PASS

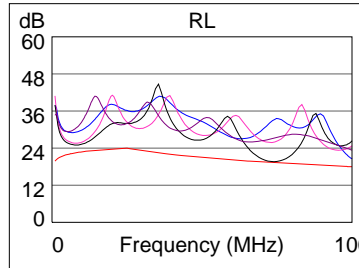


Length (ft)	[Pair 78]	16
Prop. Delay (ns)	[Pair 36]	25
Delay Skew (ns)	[Pair 36]	2
Resistance (ohms)	[Pair 45]	1.0

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	6.1		6.1	
Freq. (MHz)	73.0		73.0	
Limit (dB)	40.3		40.3	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	45		45	
RL (dB)	0.3*		0.3	
Freq. (MHz)	72.5		73.3	
Limit (dB)	19.4		19.3	



* Measurement is within the accuracy limits of the instrument.



Cable ID: 100617442CRT-001A-7

Test Summary: PASS

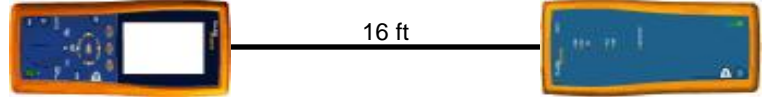
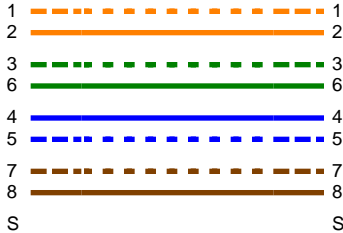
Date / Time: 03/06/2012 05:09:06am
Headroom: 6.7 dB (NEXT 36-45)
Test Limit: TIA Patch Cord Cat5e 5.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

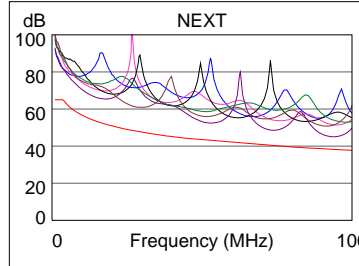
Wire Map (T568B)

PASS

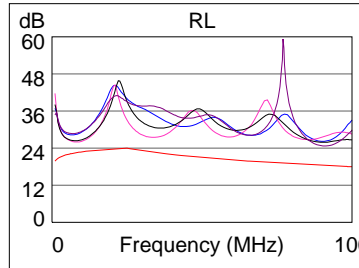


Length (ft)	[Pair 12]	16
Prop. Delay (ns)	[Pair 36]	25
Delay Skew (ns)	[Pair 36]	1
Resistance (ohms)	[Pair 12]	1.4

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	6.7		6.7	
Freq. (MHz)	92.8		93.5	
Limit (dB)	38.4		38.3	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36		78	
RL (dB)	3.3		6.3	
Freq. (MHz)	8.9		90.3	
Limit (dB)	22.7		18.4	





Cable ID: 100617442CRT-001A-8

Test Summary: PASS

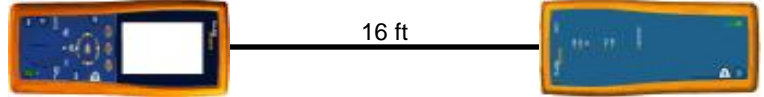
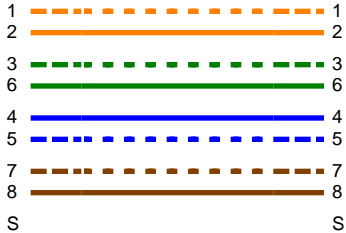
Date / Time: 03/06/2012 05:10:51am
Headroom: 6.8 dB (NEXT 12-78)
Test Limit: TIA Patch Cord Cat5e 5.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

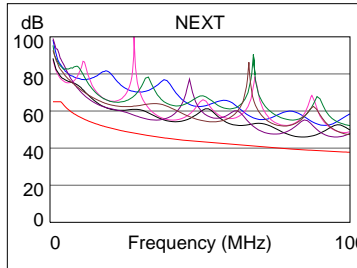
Wire Map (T568B)

PASS

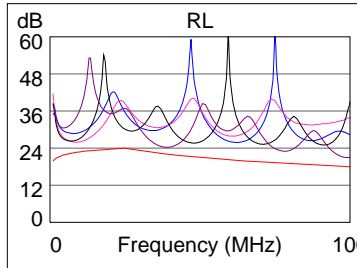


Length (ft)	[Pair 78]	16
Prop. Delay (ns)	[Pair 36]	25
Delay Skew (ns)	[Pair 36]	2
Resistance (ohms)	[Pair 12]	0.9

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-78		12-78	
NEXT (dB)	6.8		6.8	
Freq. (MHz)	82.8		83.3	
Limit (dB)	39.3		39.2	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	78		78	
RL (dB)	2.1		2.9	
Freq. (MHz)	37.3		99.3	
Limit (dB)	22.3		18.0	





Cable ID: 100617442CRT-001A-9

Test Summary: PASS

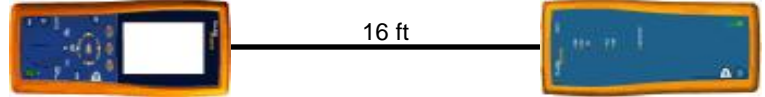
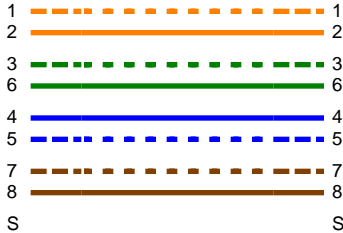
Date / Time: 03/06/2012 05:13:34am
 Headroom: 7.1 dB (NEXT 36-45)
 Test Limit: TIA Patch Cord Cat5e 5.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

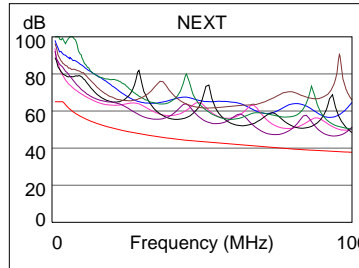
Wire Map (T568B)

PASS

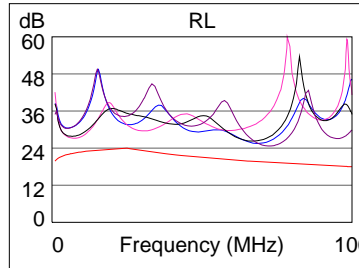


Length (ft)	[Pair 12]	16
Prop. Delay (ns)	[Pair 36]	25
Delay Skew (ns)	[Pair 36]	1
Resistance (ohms)	[Pair 36]	0.9

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	7.1		8.2	
Freq. (MHz)	73.0		93.8	
Limit (dB)	40.3		38.3	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36		78	
RL (dB)	4.7		5.3	
Freq. (MHz)	7.6		71.8	
Limit (dB)	22.5		19.4	





Cable ID: 100617442CRT-001A-10

Test Summary: PASS

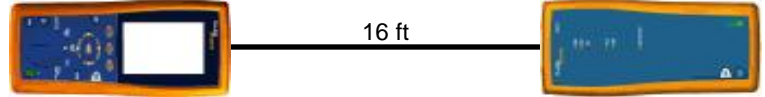
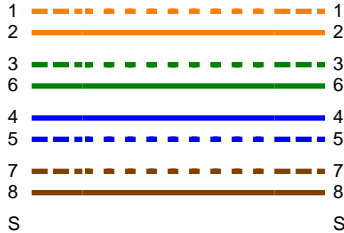
Date / Time: 03/06/2012 05:16:00am
Headroom: 2.7 dB (NEXT 36-45)
Test Limit: TIA Patch Cord Cat5e 5.0m
 Cable Type: Cat 5e UTP

Operator: Your Name
 Software Version: 2.5200
 Limits Version: 1.7000
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 9385159
 Remote S/N: 9385160
 Main Adapter: DTX-PCU6M
 Remote Adapter: DTX-PCU6R

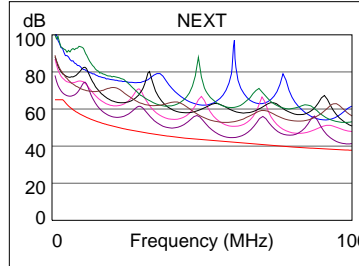
Wire Map (T568B)

PASS



Length (ft)	[Pair 78]	16
Prop. Delay (ns)	[Pair 36]	25
Delay Skew (ns)	[Pair 36]	2
Resistance (ohms)	[Pair 12]	2.4

	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45		36-45	
NEXT (dB)	2.7		3.3	
Freq. (MHz)	58.3		98.0	
Limit (dB)	42.1		37.9	



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36		78	
RL (dB)	2.5		4.9	
Freq. (MHz)	9.6		93.3	
Limit (dB)	22.8		18.3	

