

able ID: TOLMIN A2-1 t 6 FTP 06.2015 08:26	10BASE-T DTX-1800		droom (NEXT): 6.: : 2083703	5 dB	PASS
Tests	Detail	Status	Value	Limit	Margin
Insertion Loss (dB)	Pair 12, 10.0 MHz	PASS	1.1	11.5	10.4
NEXT (dB)	Pair 36-45, 10.0 MHz	PASS	32.5	26.0	6.5
Length (m)	Pair 12	PASS	13.6	100.0	86.4
Prop. Delay (ns)	Pair 78		66		
Delay Skew (ns)	Pair 78		1		
Resistance (ohms)	Pair 12		3.3		
Impedance (ohms)	Pair 36		107		
Wire Map		PASS			

le ID: TOLMIN A2-2 FTP :2015 08:30	10BASE-T DTX-1800		droom (NEXT): 4.0 : 2083703	O dB	PAS
Tests	Detail	Status	Value	Limit	Margin
Insertion Loss (dB)	Pair 12, 10.0 MHz	PASS	0.8	11.5	10.7
NEXT (dB)	Pair 36-45, 9.8 MHz	PASS	30.2	26.2	4.0
Length (m)	Pair 36	PASS	9.9	100.0	90.1
Prop. Delay (ns)	Pair 12		48		
Delay Skew (ns)	Pair 12		1		
Resistance (ohms)	Pair 36		2.5		
Impedance (ohms)	Pair 36		106		
Wire Map		PASS			

e ID: TOLMIN A2-4 FTP 2015 08:19	10BASE-T DTX-1800		droom (NEXT): 7. : 2083703	7 dB	PAS
Tests	Detail	Status	Value	Limit	Margi
Insertion Loss (dB)	Pair 12, 10.0 MHz	PASS	0.8	11.5	10.
NEXT (dB)	Pair 36-45, 9.8 MHz	PASS	33.9	26.2	7.
Length (m)	Pair 36	PASS	9.7	100.0	90.
Prop. Delay (ns)	Pair 12		47		
Delay Skew (ns)	Pair 12		1		
Resistance (ohms)	Pair 36		2.4		
Impedance (ohms)	Pair 36		107		
Wire Map		PASS			

le ID: TOLMIN A2-6 FTP .2015 08:22	10BASE-T DTX-1800		droom (NEXT): 7.4 2083703	4 dB	PAS
Tests	Detail	Status	Value	Limit	Margir
Insertion Loss (dB)	Pair 12, 10.0 MHz	PASS	0.9	11.5	10.
NEXT (dB)	Pair 36-45, 9.8 MHz	PASS	33.6	26.2	7.
Length (m)	Pair 12	PASS	11.5	100.0	88.
Prop. Delay (ns)	Pair 12		55		
Delay Skew (ns)	Pair 12		0		
Resistance (ohms)	Pair 36		2.8		
Impedance (ohms)	Pair 45		108		
Wire Map		PASS			

le ID: TOLMIN A2-7 FTP .2015 08:31	10BASE-T DTX-1800		droom (NEXT): 7.	7 dB	PAS
Tests	Detail	Status	Value	Limit	Margin
Insertion Loss (dB)	Pair 12, 10.0 MHz	PASS	0.9	11.5	10.6
NEXT (dB)	Pair 36-45, 9.8 MHz	PASS	33.9	26.2	7.7
Length (m)	Pair 36	PASS	10.9	100.0	89.1
Prop. Delay (ns)	Pair 12		53		
Delay Skew (ns)	Pair 12		1		
Resistance (ohms)	Pair 12		2.6		
Impedance (ohms)	Pair 45		107		
Wire Map		PASS			





Cable ID: TOLMIN C4 OM2 Multimode 50 11.06.2015 11:45	TIA-568-C Multimode DTX-1800	Headroom S/N: 20837	(Loss Margin): 1.20 dB 03	PASS
Tests	Detail	Value	Limit	
Loss (R->M) PASS TIA-568-C Multimode	Loss (dB), 850 nm Loss (dB), 1300 nm Length (m) Prop. Delay (ns)	0.17 0.34 26.2 129	1.59 1.54 2000.0	

Cable ID: TOLMIN ETH100M Cat 6 FTP 11.06.2015 08:32	ISO11801 Channel Class D DTX-1800		droom (NEXT): 12 : 2083703	6 dB	PASS
Tests	Detail	Status	Value	Limit	Margin
Insertion Loss (dB) NEXT (dB) PS NEXT (dB) ACR-N (dB) PS ACR-N (dB) ACR-F (dB) PS ACR-F (dB) RL (dB) Length (m)	Pair 78, 100.0 MHz Pair 12-36, 73.8 MHz Pair 12, 70.8 MHz Pair 12-45, 7.5 MHz Pair 45, 7.5 MHz Pair 36-12, 77.0 MHz Pair 36, 77.0 MHz Pair 36, 3.3 MHz Pair 36	PASS PASS PASS PASS PASS	2.9 45.0 43.1 62.4 61.7 41.4 41.3 22.7 9.7	24.0 32.4 29.7 42.9 39.9 19.7 16.7 17.0	21.1 12.6 13.4 19.5 21.8 21.7 24.6 5.7
Prop. Delay (ns) Delay Skew (ns) Resistance (ohms) Wire Map	Pair 12 Pair 12 Pair 12	PASS PASS PASS PASS	47 1 2.3	555 50 25.0	508 49 22.7





Total Length: 91.5 m
Number of Reports: 7
Number of Passing Reports: 7
Number of Failing Reports: 0
Number of Warning Reports: 0
Documentation Only: 0







Date / Time: 11.06.2015 08:26:44 Headroom 6.5 dB (NEXT 36-45) Test Limit: 10BASE-T

Test Limit: 10BASE-T Cable Type: Cat 6 FTP Calibration Date: 23.06.2012 Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Site: Client Name

Test Summary: PASS

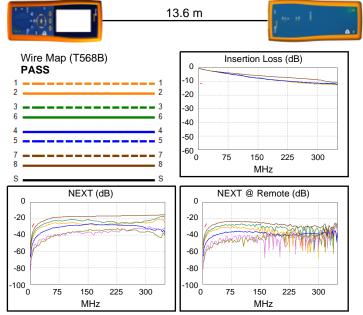
Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-PLA002 Remote Adapter: DTX-CHA002

Length (m), Limit 100.0	[Pair 12]	13.6
Prop. Delay (ns)	[Pair 78]	66
Delay Skew (ns)	[Pair 78]	1
Resistance (ohms)	[Pair 12]	3.3
Impedance (ohms)	[Pair 36]	107
Insertion Loss Margin (dB)	[Pair 12]	10.4
Frequency (MHz)	[Pair 12]	10.0
Limit (dB)	[Pair 12]	11.5

Worst Case Margin	Worst Case Value
Wordt Oddo Margin	vvoiot odoo valdo

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	6.5	8.2	6.5	8.3
Freq. (MHz)	10.0	9.8	10.0	10.0
Limit (dB)	26.0	26.2	26.0	26.0

Compliant Network Standards: 10BASE-T







Date / Time: 11.06.2015 08:30:11 Headroom 4.0 dB (NEXT 36-45) Test Limit: 10BASE-T

Cable Type: Cat 6 FTP
Calibration Date: 23.06.2012

Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Test Summary: PASS

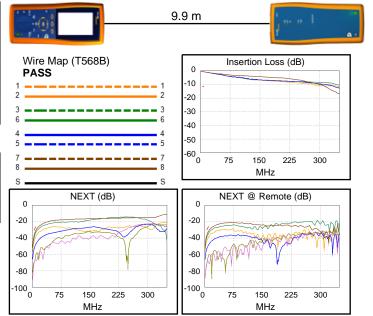
Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-PLA002 Remote Adapter: DTX-CHA002

Length (m), Limit 100.0	[Pair 36]	9.9
Prop. Delay (ns)	[Pair 12]	48
Delay Skew (ns)	[Pair 12]	1
Resistance (ohms)	[Pair 36]	2.5
Impedance (ohms)	[Pair 36]	106
Insertion Loss Margin (dB)	[Pair 12]	10.7
Frequency (MHz)	[Pair 12]	10.0
Limit (dB)	[Pair 12]	11.5

Worst Case Margin	n Worst Case Value
Wordt Oddo Margii	i vvoiot oace value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	4.0	5.3	4.0	5.3
Freq. (MHz)	9.8	9.8	10.0	10.0
Limit (dB)	26.2	26.2	26.0	26.0

Compliant Network Standards: 10BASE-T



FLUKE networks





Date / Time: 11.06.2015 08:19:54 Headroom 7.7 dB (NEXT 36-45) Test Limit: 10BASE-T

Cable Type: Cat 6 FTP
Calibration Date: 23.06.2012

Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Site: Client Name

Test Summary: PASS

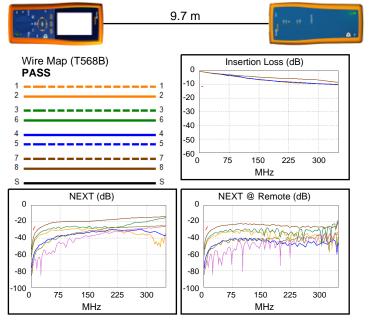
Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-PLA002 Remote Adapter: DTX-CHA002

Length (m), Limit 100.0	[Pair 36]	9.7
Prop. Delay (ns)	[Pair 12]	47
Delay Skew (ns)	[Pair 12]	1
Resistance (ohms)	[Pair 36]	2.4
Impedance (ohms)	[Pair 36]	107
Insertion Loss Margin (dB)	[Pair 12]	10.7
Frequency (MHz)	[Pair 12]	10.0
Limit (dB)	[Pair 12]	11.5

Worst Case Margin	Worst Case Value
Worst Case Margin	vvoist oase value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	7.7	9.0	7.7	9.0
Freq. (MHz)	9.8	9.8	10.0	10.0
Limit (dB)	26.2	26.2	26.0	26.0

Compliant Network Standards: 10BASE-T







Date / Time: 11.06.2015 08:22:29 Headroom 7.4 dB (NEXT 36-45) Test Limit: 10BASE-T

Cable Type: Cat 6 FTP
Calibration Date: 23.06.2012

Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Site: Client Name

Test Summary: PASS

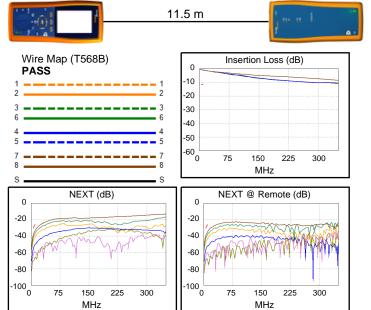
Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-PLA002 Remote Adapter: DTX-CHA002

Length (m), Limit 100.0	[Pair 12]	11.5
Prop. Delay (ns)	[Pair 12]	55
Delay Skew (ns)	[Pair 12]	0
Resistance (ohms)	[Pair 36]	2.8
Impedance (ohms)	[Pair 45]	108
Insertion Loss Margin (dB)	[Pair 12]	10.6
Frequency (MHz)	[Pair 12]	10.0
Limit (dB)	[Pair 12]	11.5

Worst Case Margin	Worst Case Value
Worst Case Margin	vvoist oase value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	7.4	8.7	7.4	8.7
Freq. (MHz)	9.8	9.3	10.0	10.0
Limit (dB)	26.2	26.5	26.0	26.0

Compliant Network Standards: 10BASE-T



FLUKE networks





Date / Time: 11.06.2015 08:31:05 Headroom 7.7 dB (NEXT 36-45) Test Limit: 10BASE-T

Cable Type: Cat 6 FTP
Calibration Date: 23.06.2012

Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Test Summary: PASS

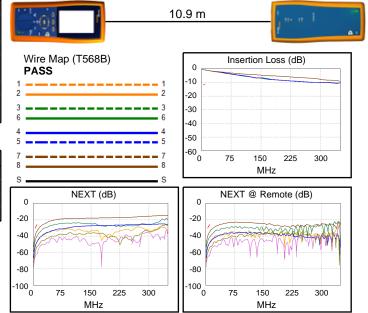
Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-PLA002 Remote Adapter: DTX-CHA002

Length (m), Limit 100.0	[Pair 36]	10.9
Prop. Delay (ns)	[Pair 12]	53
Delay Skew (ns)	[Pair 12]	1
Resistance (ohms)	[Pair 12]	2.6
Impedance (ohms)	[Pair 45]	107
Insertion Loss Margin (dB)	[Pair 12]	10.6
Frequency (MHz)	[Pair 12]	10.0
Limit (dB)	[Pair 12]	11.5

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	7.7	9.0	7.7	9.0
Freq. (MHz)	9.8	9.8	10.0	10.0
Limit (dB)	26.2	26.2	26.0	26.0

Compliant Network Standards: 10BASE-T



FLUKE networks





Cable ID: TOLMIN C4

 $\begin{array}{lll} \text{Date / Time: } 11.06.2015 & 11:45:39 & n = 1.4835 \ (850 \ \text{nm}) \\ \text{Cable Type: OM2 Multimode } 50 & n = 1.4785 \ (1300 \ \text{nm}) \\ \end{array}$

Test Summary: PASS

Modal Bandwidth: 500MHz-km (850 nm) Modal Bandwidth: 500MHz-km (1300 nm)

Loss (R->M) PASS

Date / Time: 11.06.2015 11:45:39
Test Limit: TIA-568-C Multimode
Limits Version: 1.9300
Operator: Your Name
DTX-1800 (2083703 v2.7400)
Module: DTX-MFM2(2443310)
Calibration Date: 13.06.2013
DTX-1800R (2083704 v2.7400)
Module: DTX-MFM2(2443309)

Propagation Delay (ns)	129	
Length m	26.2	PASS
Limit 2000.0		
	850 nm	1300 nm
Result	PASS	PASS
Loss (dB)	0.17	0.34
Limit (dB)	1.59	1.54
Margin (dB)	1.42	1.20
Reference (dBm)	-25.44	-23.98

1000BASE-SX

Number of Adapters: 2 Number of Splices: 0 Patch Type: OM2 Multimode 50

Patch Length1 (m): 1.0
Patch Length2 (m): 1.0

Reference Date: 11.06.2015 11:41:09

1 Jumper

Compliant Network Standards:

Calibration Date: 13.06.2013

10/100BASE-SX 100BASE-FX 10GBASE-LX4 ATM155SWL ATM622SWL Fiber Optic Fibre Channel 100-M5E-SN-I Fibre Channel 133 Fibre Channel 200-M5E-SN-I

Fibre Channel 400-M5-SN-I

1000BASE-LX 10BASE-FL 10GBASE-SR ATM52 FDDI Fiber Optic Fibre Channel 1200-M5-SN-I Fibre Channel 1600-M5-SN-S Fibre Channel 266

Fibre Channel 800-M5-SN-S

10GBASE-LRM ATM155 ATM622 Fiber Optic Fibre Channel 100-M5-SN-I Fibre Channel 1200-M5E-SN-I Fibre Channel 200-M5-SN-I Fibre Channel 266SWL

LinkWare™ PC Version 9.3







Cable ID: TOLMIN ETH100M

Date / Time: 11.06.2015 08:32:29 Headroom 12.6 dB (NEXT 12-36) Test Limit: ISO11801 Channel Class D

Cable Type: Cat 6 FTP Calibration Date: 23.06.2012 Operator: Your Name Software Version: 2.7400 Limits Version: 1.9300

NVP: 70.0%

Test Summary: PASS

300

Model: DTX-1800 Main S/N: 2083703 Remote S/N: 2083704 Main Adapter: DTX-CHA002 Remote Adapter: DTX-CHA002

Length (m)	[Pair 36]	9.7
Prop. Delay (ns), Limit 555	[Pair 12]	47
Delay Skew (ns), Limit 50	[Pair 12]	1
Resistance (ohms), Limit 25.0	[Pair 12]	2.3
Insertion Loss Margin (dB) Frequency (MHz) Limit (dB)	[Pair 78] [Pair 78] [Pair 78]	21.1 100.0 24.0

Worst Case Margin Worst Case Value

N/A	MAIN	SR	MAIN	SR
Worst Pair	12-36	12-36	12-45	12-45
NEXT (dB)	12.7	12.6	12.7	12.8
Freq. (MHz)	57.0	73.8	89.0	89.0
Limit (dB)	34.3	32.4	31.0	31.0
Worst Pair	12	12	12	12
PS NEXT (dB)	13.4	13.5	13.4	15.0
Freq. (MHz)	70.8	71.8	71.3	89.3
Limit (dB)	29.7	29.6	29.6	27.9

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-12	12-36	36-12	36-12
ACR-F (dB)	21.7	21.8	22.0	22.1
Freq. (MHz)	77.0	77.0	99.3	99.8
Limit (dB)	19.7	19.7	17.5	17.4
Worst Pair	12	36	36	36
PS ACR-F (dB)	24.7	24.6	25.0	24.8
Freq. (MHz)	77.0	77.0	99.8	99.3
Limit (dB)	16.7	16.7	14.4	14.5

PASS	MAIN	SR	MAIN	SR
PASS	IVIAIIN	<u> </u>		<u> </u>
Worst Pair	12-45	12-45	12-45	12-45
ACR-N (dB)	19.5	20.6	32.8	32.9
Freq. (MHz)	7.5	6.9	89.0	89.0
Limit (dB)	42.9	43.8	8.4	8.4
Worst Pair	45	45	12	12
PS ACR-N (dB)	21.8	23.0	31.1	34.9
Freq. (MHz)	7.5	6.9	71.3	89.3
Limit (dB)	39.9	40.8	9.6	5.4

N/A	MAIN	SR	MAIN	SR
Worst Pair	36	78	45	45
RL (dB)	5.7	6.2	11.8	11.4
Freq. (MHz)	3.3	3.3	93.8	93.5
Limit (dB)	17.0	17.0	10.3	10.3

100BASE-T4

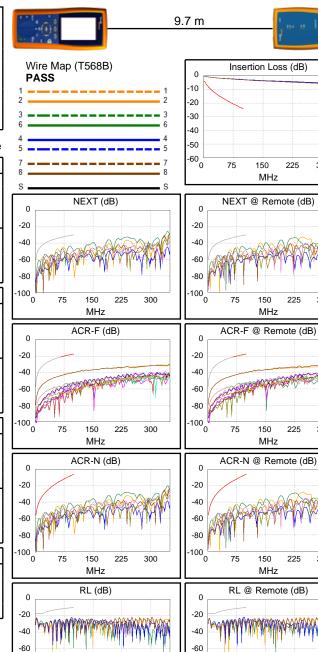
ATM-51

TR-4

Compliant Network Standards:

100BASE-TX 10BASE-T 1000BASE-T ATM-25 ATM-155 100VG-AnyLan TR-16 Active

TR-16 Passive



LinkWare™ PC Version 9.3

300

300



150

MHz

225

-80

-100 ^L

-80

·100 0

75

150

MHz

225

300

