

FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-15M

Headroom: 0.1 dB (NEXT 12-45)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:20:53am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

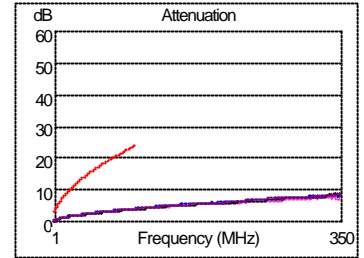
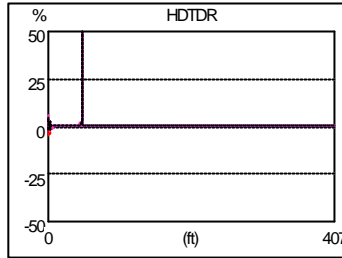
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

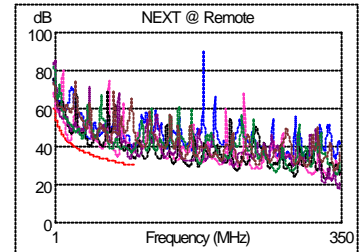
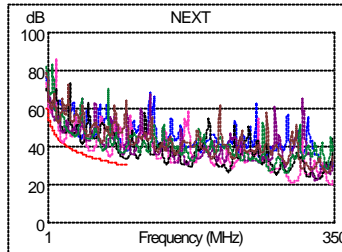
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

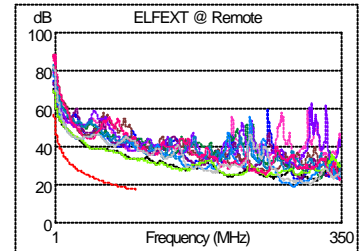
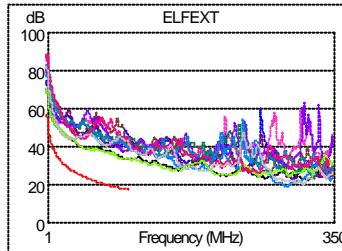
Length (ft), Limit 328 [Pair 12]	48
Prop. Delay (ns), Limit 555 [Pair 12]	71
Delay Skew (ns), Limit 50 [Pair 12]	1
Resistance (ohms)	
Impedance (ohms) [Pair 45]	109
Anomaly (ft)	
Attenuation (dB) [Pair 12]	4.1
Frequency (MHz)	100.0
Limit (dB)	24.0



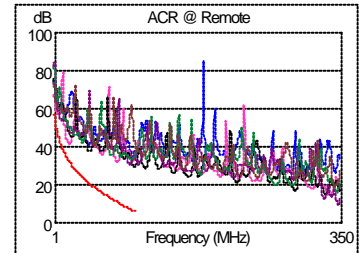
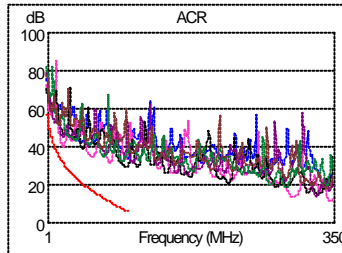
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-45	12-45	12-78	12-78
NEXT (dB)	42.0*	43.3*	33.3	34.0
Freq. (MHz)	20.4	18.4	98.2	99.2
Limit (dB)	41.9	42.6	30.2	30.1



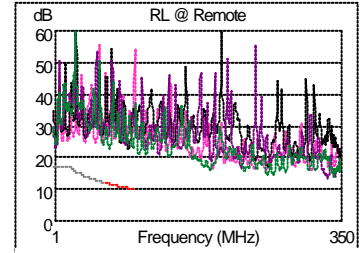
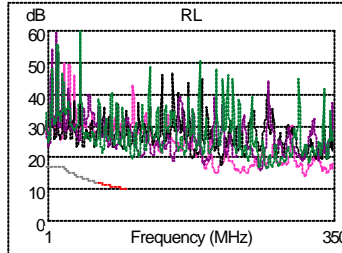
	MAIN	SR	MAIN	SR
Worst Pair	45	12	12	12
PSNEXT (dB)	40.9	42.0	31.0	31.2
Freq. (MHz)	20.1	19.8	98.2	98.2
Limit (dB)	39.0	39.1	27.2	27.2



	MAIN	SR	MAIN	SR
Worst Pair	12	12	12	12
PSELFEXT (dB)	68.6	65.8	31.9	31.8
Freq. (MHz)	1.0	1.4	93.2	97.6
Limit (dB)	54.4	51.5	15.0	14.6



	MAIN	SR	MAIN	SR
Worst Pair	12-45	12-45	12-78	12-78
ACR (dB)	40.7	62.9	29.2	29.9
Freq. (MHz)	19.6	1.9	98.2	99.2
Limit (dB)	32.1	55.8	6.4	6.2



	MAIN	SR	MAIN	SR
Worst Pair	78	78	78	36
RL (dB)	21.7	23.0	21.7	22.9
Freq. (MHz)	68.6	68.6	68.6	91.4
Limit (dB)	11.7	11.7	11.7	10.4

Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

* Measurement is within the accuracy limits of the instrument.



FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-10M

Headroom: 2.5 dB (NEXT @ Remote 12-78)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:19:38am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

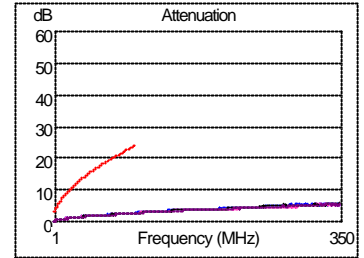
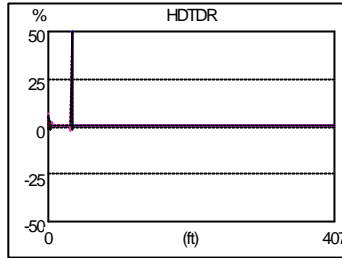
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

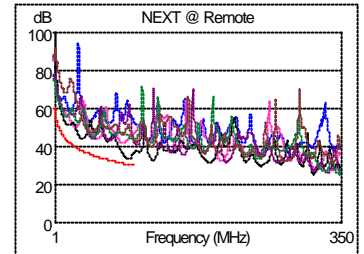
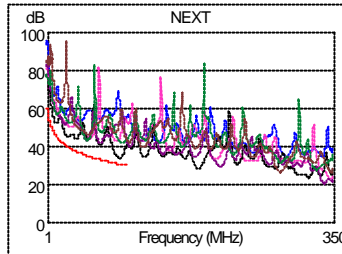
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

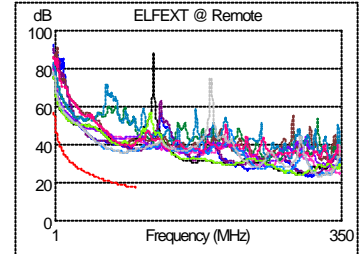
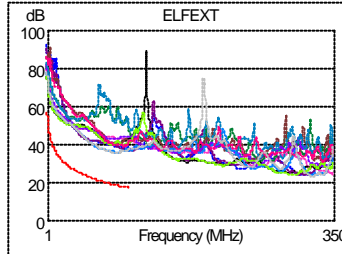
Length (ft), Limit 328 [Pair 36]	33
Prop. Delay (ns), Limit 555 [Pair 36]	49
Delay Skew (ns), Limit 50 [Pair 36]	1
Resistance (ohms)	
Impedance (ohms) [Pair 45]	108
Anomaly (ft)	
Attenuation (dB) [Pair 12]	2.8
Frequency (MHz)	100.0
Limit (dB)	24.0



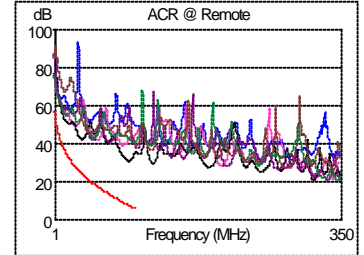
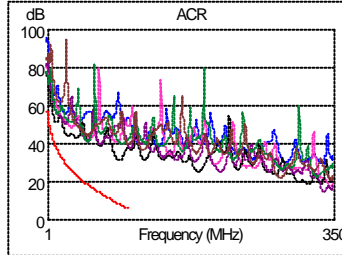
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-78	12-78	12-78	12-78
NEXT (dB)	33.8	33.3	33.8	33.3
Freq. (MHz)	88.6	91.2	90.0	92.2
Limit (dB)	31.0	30.8	30.9	30.7
Worst Pair	78	12	78	12
PSNEXT (dB)	33.2	32.9	33.2	32.9
Freq. (MHz)	88.6	90.6	88.8	90.6
Limit (dB)	28.0	27.8	27.9	27.8



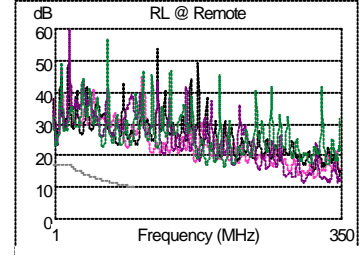
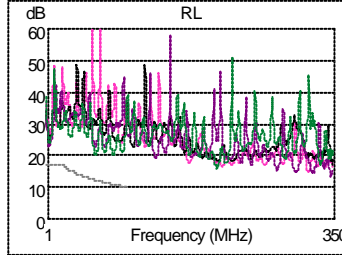
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	78-45	78-45	78-45	78-45
ELFEXT (dB)	36.4	36.4	35.6	35.6
Freq. (MHz)	77.2	77.2	87.4	87.4
Limit (dB)	19.7	19.7	18.5	18.5
Worst Pair	78	78	78	78
PSELFEXT (dB)	34.4	33.6	33.9	33.5
Freq. (MHz)	77.2	80.8	90.4	94.4
Limit (dB)	16.7	16.3	15.2	14.9



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-78	36-78	12-78	12-78
ACR (dB)	52.8	70.0	31.2	30.7
Freq. (MHz)	10.2	2.3	90.0	92.2
Limit (dB)	39.7	54.1	8.2	7.7
Worst Pair	78	36	78	12
PSACR (dB)	50.8	70.3	30.7	30.2
Freq. (MHz)	11.1	1.7	90.0	90.6
Limit (dB)	35.8	53.6	5.2	5.1



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45	36	45	36
RL (dB)	26.1	23.9	26.1	23.9
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	0.0	0.0	0.0	0.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-5M

Headroom: 4.0 dB (NEXT @ Remote 12-78)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:18:23am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

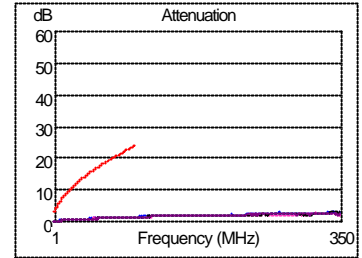
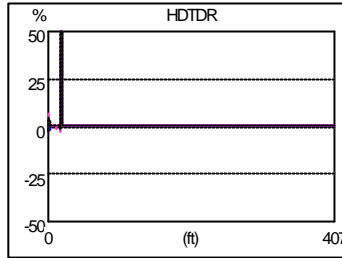
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

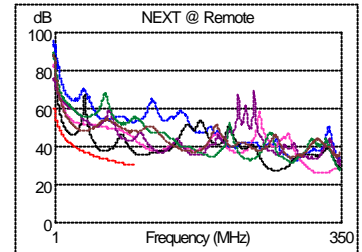
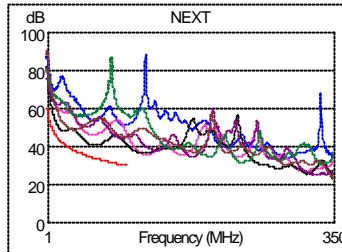
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

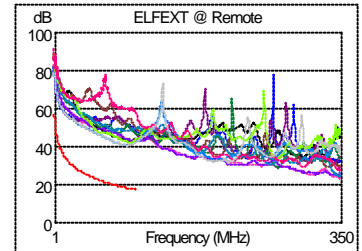
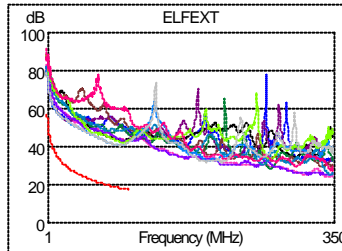
Length (ft), Limit 328 [Pair 12]	16
Prop. Delay (ns), Limit 555 [Pair 12]	24
Delay Skew (ns), Limit 50 [Pair 12]	0
Resistance (ohms)	
Impedance (ohms) [Pair 45]	108
Anomaly (ft)	
Attenuation (dB) [Pair 12]	1.5
Frequency (MHz)	100.0
Limit (dB)	24.0



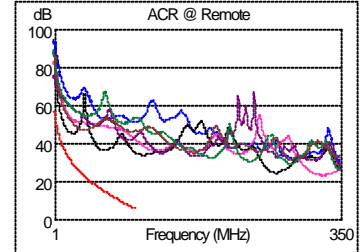
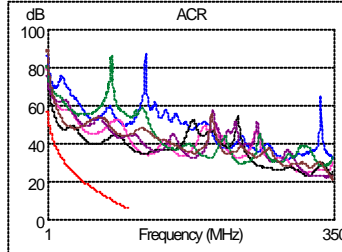
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-78	12-78	12-78	12-78
NEXT (dB)	49.6	37.7	40.5	36.5
Freq. (MHz)	16.6	61.8	100.0	100.0
Limit (dB)	43.4	33.7	30.1	30.1



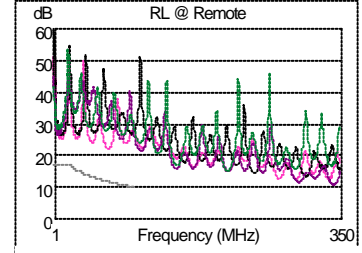
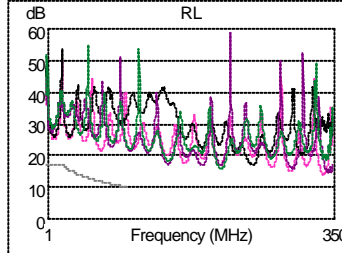
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	78-45	78-45	78-45	78-45
ELFEXT (dB)	76.6	76.6	40.6	40.6
Freq. (MHz)	1.3	1.3	89.4	89.4
Limit (dB)	55.2	55.2	18.3	18.3



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-78	12-78	12-78	12-78
ACR (dB)	50.2	48.5	39.1	35.1
Freq. (MHz)	14.6	15.1	100.0	100.0
Limit (dB)	35.7	35.3	6.0	6.0



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45	45	45	45
RL (dB)	21.9	24.7	21.9	24.7
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	0.0	0.0	0.0	0.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-3M

Headroom: 7.4 dB (NEXT @ Remote 36-45)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:17:14am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

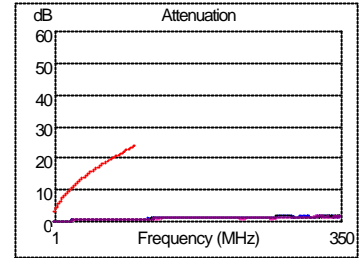
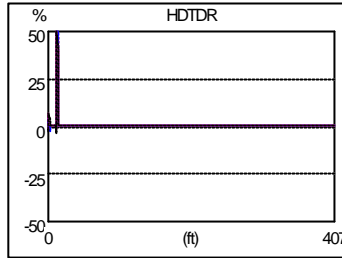
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

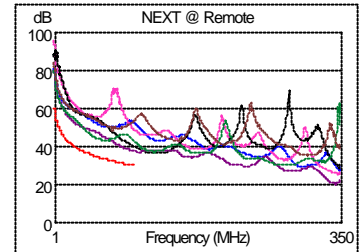
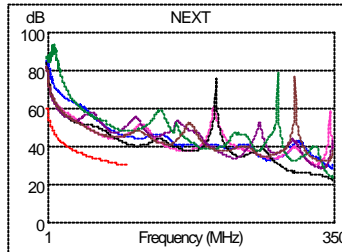
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

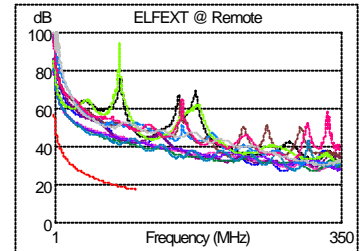
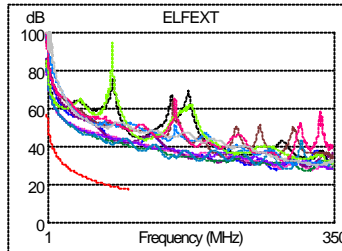
Length (ft), Limit 328 [Pair 12]	10
Prop. Delay (ns), Limit 555 [Pair 12]	14
Delay Skew (ns), Limit 50 [Pair 12]	0
Resistance (ohms)	
Impedance (ohms)	
Anomaly (ft)	
Attenuation (dB) [Pair 12]	0.9
Frequency (MHz)	100.0
Limit (dB)	24.0



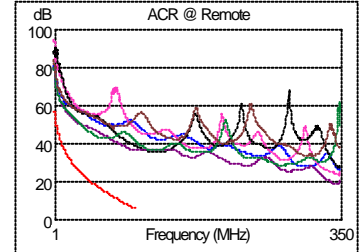
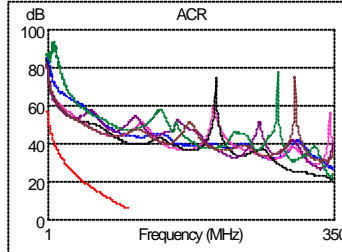
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-78	36-45	12-78	36-45
NEXT (dB)	41.4	37.5	41.4	37.5
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	30.1	30.1	30.1	30.1
Worst Pair	12	36	12	36
PSNEXT (dB)	39.5	36.2	39.1	36.2
Freq. (MHz)	92.6	100.0	100.0	100.0
Limit (dB)	27.7	27.1	27.1	27.1



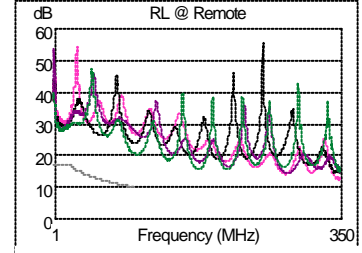
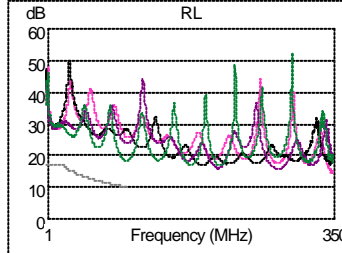
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-36	45-36	36-45	36-45
ELFEXT (dB)	41.4	41.4	40.7	40.8
Freq. (MHz)	79.8	79.8	100.0	100.0
Limit (dB)	19.4	19.4	17.4	17.4
Worst Pair	45	45	45	36
PSELFEXT (dB)	77.1	70.2	38.4	38.1
Freq. (MHz)	1.0	2.2	100.0	100.0
Limit (dB)	54.4	47.5	14.4	14.4



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-78	12-78	36-45
ACR (dB)	76.0	73.1	40.5	36.6
Freq. (MHz)	1.8	2.2	100.0	100.0
Limit (dB)	56.2	54.5	6.0	6.0
Worst Pair	45	36	12	36
PSACR (dB)	71.9	70.9	38.2	35.4
Freq. (MHz)	1.8	1.9	100.0	100.0
Limit (dB)	53.2	52.8	3.0	3.0



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	78	78	78	78
RL (dB)	18.7	20.5	18.7	20.5
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	0.0	0.0	0.0	0.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-1M

Headroom: 10.6 dB (NEXT 36-45)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:15:46am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

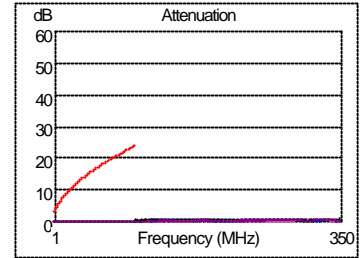
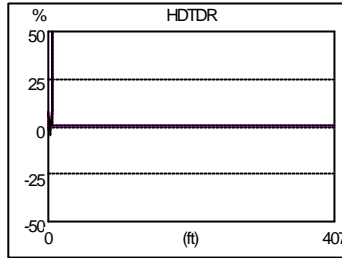
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

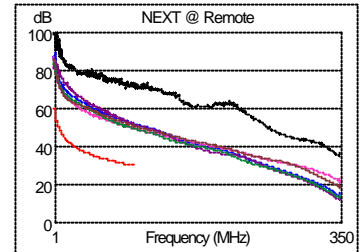
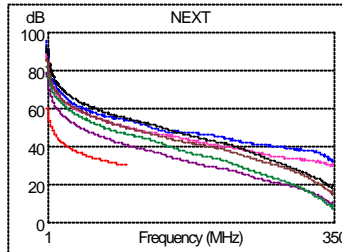
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

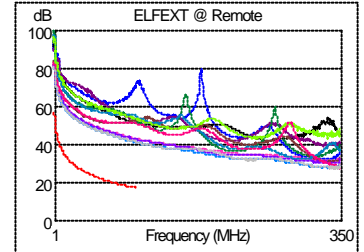
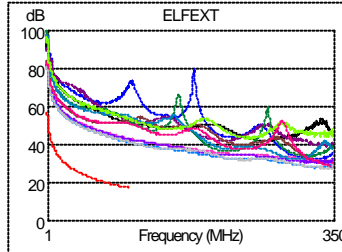
Length (ft), Limit 328 [Pair 12]	3
Prop. Delay (ns), Limit 555 [Pair 12]	5
Delay Skew (ns), Limit 50 [Pair 12]	0
Resistance (ohms)	
Impedance (ohms)	
Anomaly (ft)	
Attenuation (dB) [Pair 12]	0.3
Frequency (MHz)	100.0
Limit (dB)	24.0



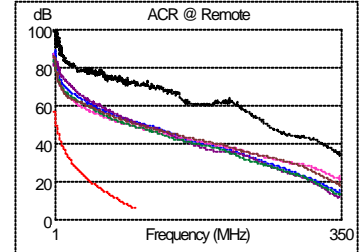
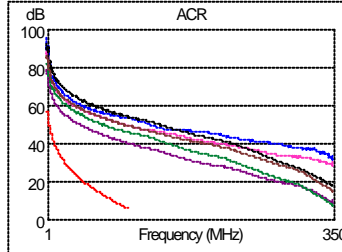
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-78	36-45	36-78
NEXT (dB)	40.7	49.4	40.7	49.4
Freq. (MHz)	100.0	99.8	100.0	99.8
Limit (dB)	30.1	30.1	30.1	30.1



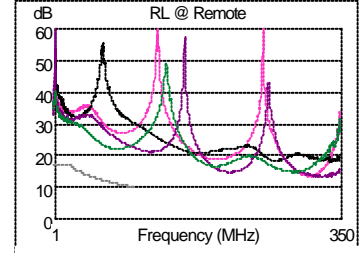
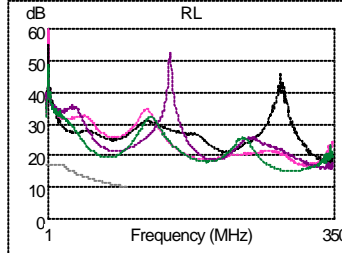
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-78	45-78	45-78	45-78
ELFEXT (dB)	80.4	80.5	41.5	41.5
Freq. (MHz)	1.0	1.0	100.0	100.0
Limit (dB)	57.4	57.4	17.4	17.4



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-78	36-45	36-78
ACR (dB)	76.0	80.9	40.4	49.1
Freq. (MHz)	1.7	1.6	100.0	99.8
Limit (dB)	56.6	57.0	6.0	6.1



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45	45	45	45
RL (dB)	22.3	22.4	22.3	22.4
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	0.0	0.0	0.0	0.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
100BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

FLUKE DSP-4100

Test Summary: PASS

Cable ID: NEX1-2M

Headroom: 10.3 dB (NEXT 36-45)

Site: CABLE MASTER

Date / Time: 10/20/2003 10:13:52am

Test Standard: TIA Cat 5e Channel

Cable Type: UTP 100 Ohm Cat 5e

FLUKE DSP-4100 S/N: 7885016 LIA012

FLUKE DSP-4100SR S/N: 7885016 LIA012

Operator: J

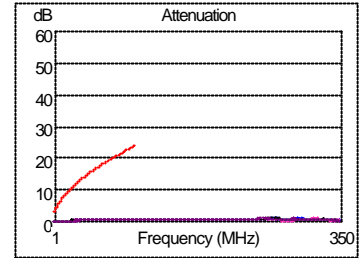
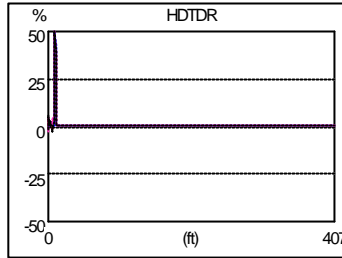
Standards Version: 5.13C Software Version: 4.906

NVP: 69.0% Fault Anomaly Threshold: 15%

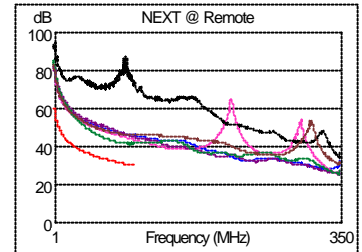
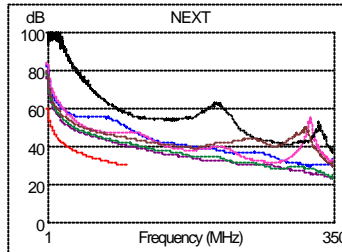
Shield Test: N/A

Wire Map	1 2 3 4 5 6 7 8 S
PASS	
	1 2 3 4 5 6 7 8

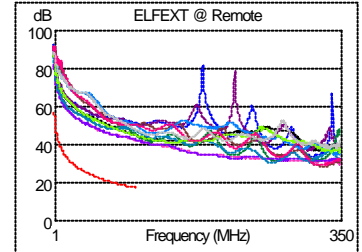
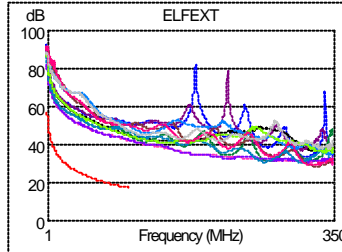
Length (ft), Limit 328 [Pair 12]	7
Prop. Delay (ns), Limit 555 [Pair 12]	10
Delay Skew (ns), Limit 50 [Pair 12]	0
Resistance (ohms)	
Impedance (ohms)	
Anomaly (ft)	
Attenuation (dB) [Pair 12]	0.7
Frequency (MHz)	100.0
Limit (dB)	24.0



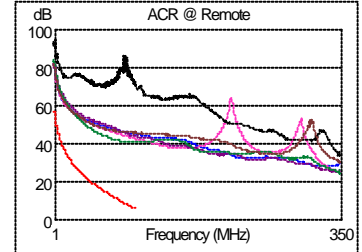
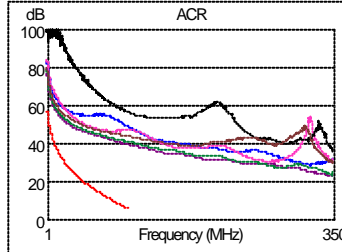
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-78	36-45	36-78
NEXT (dB)	40.4	42.0	40.4	41.6
Freq. (MHz)	100.0	82.0	100.0	97.4
Limit (dB)	30.1	31.6	30.1	30.3



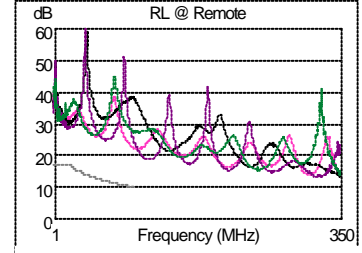
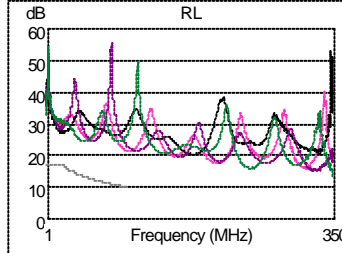
	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-12	45-12	12-45	12-45
ELFEXT (dB)	80.4	80.4	42.6	42.6
Freq. (MHz)	1.1	1.1	100.0	100.0
Limit (dB)	56.6	56.6	17.4	17.4



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	12-45	36-45	36-78
ACR (dB)	73.7	76.5	39.7	41.0
Freq. (MHz)	1.6	2.1	100.0	97.4
Limit (dB)	57.0	54.9	6.0	6.6



	Worst Margin		Worst Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	12	12	12	12
RL (dB)	21.4	22.3	21.4	22.3
Freq. (MHz)	100.0	100.0	100.0	100.0
Limit (dB)	0.0	0.0	0.0	0.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
100BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	