

# IDEAL INDUSTRIES, Inc. Certified - LanTEK Test Report

Job Name: ARTEVELDE\_ST\_AMAMDSBERG.job  
 Company: ELECTROSERVICEANDRE

Report Date: Thursday, April 10, 2014 5:43 PM  
 Version: 1.1.1.9

**Summary:**

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 11	Total: 11	Total: 0	Total: 0
Pass: 11	Pass: 11	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 650,7m	Tot. Length: 650,7m	Tot. Length: 0m	Tot. Length: 0m

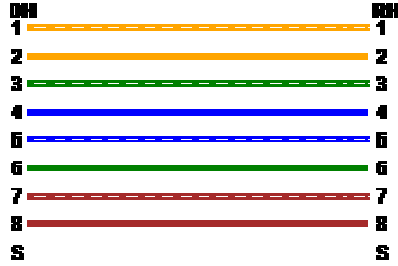
## Pass

Test Name: UTPCAT6000A1.01.1  
 Test Limit: Cat 6-250 UTP Chan  
 Test Date: 5/15/2013  
 Test Time: 14:13:17  
 Adapter ID: 6004  
 User Notes:

NVP: 72  
 LANTEK II-500 [946164/946186]  
 Firmware 1.103

Standard: TIA 568-B.2  
 Frequency Range: 1 - 250MHz  
 Operator: MEUREZ STEVEN  
 Contractor: ARTEVELDE ST AMANDSB  
 Company: ELECTROSERVICEANDRE

**Wiremap: Pass**

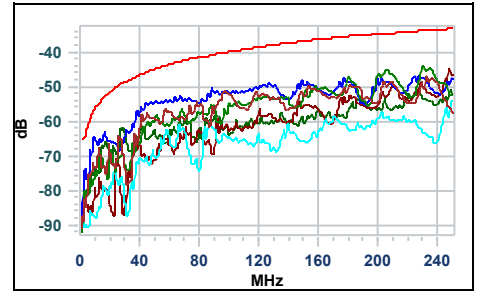


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	35,6 m.	36,6 m.	36,9 m.	35,4 m.	< 100,0 m.	Pass
Propagation Delay	165,2 ns	169,7 ns	170,9 ns	164,3 ns	< 555,0 ns	Pass
Delay Skew	0,9 ns	5,4 ns	6,6 ns	0,0 ns	< 50,0 ns	Pass
DC Resistance	6,0 ohms	5,5 ohms	6,2 ohms	6,6 ohms	< 20,0 ohms	Pass
Headroom	53,6 dB					Pass

**NEXT: Pass**

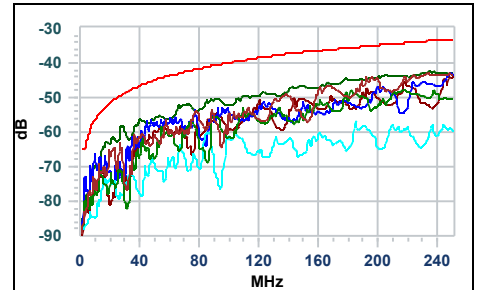
**DH**

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	51,5dB @ 96,8MHz	40,2dB	11,3dB	47,0dB @ 232,5MHz	33,7dB	13,3dB
7,8-5,4	Pass	44,1dB @ 230,0MHz	33,7dB	10,4dB	44,1dB @ 230,0MHz	33,7dB	10,4dB
7,8-1,2	Pass	61,1dB @ 66,3MHz	43,0dB	18,1dB	54,0dB @ 249,5MHz	33,1dB	20,9dB
3,6-5,4	Pass	64,6dB @ 9,6MHz	56,9dB	7,7dB	46,7dB @ 224,5MHz	33,9dB	12,8dB
3,6-1,2	Pass	44,8dB @ 248,0MHz	33,2dB	11,6dB	44,8dB @ 248,0MHz	33,2dB	11,6dB
5,4-1,2	Pass	62,1dB @ 27,7MHz	49,3dB	12,8dB	51,0dB @ 249,0MHz	33,1dB	17,9dB



**RH**

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	44,1dB @ 192,5MHz	35,1dB	9,0dB	42,6dB @ 234,5MHz	33,6dB	9,0dB
7,8-5,4	Pass	47,7dB @ 182,0MHz	35,5dB	12,2dB	47,6dB @ 216,5MHz	34,2dB	13,4dB
7,8-1,2	Pass	59,8dB @ 86,5MHz	41,0dB	18,8dB	56,7dB @ 185,0MHz	35,4dB	21,3dB
3,6-5,4	Pass	73,2dB @ 3,1MHz	64,8dB	8,4dB	42,7dB @ 249,0MHz	33,1dB	9,6dB
3,6-1,2	Pass	43,5dB @ 247,5MHz	33,2dB	10,3dB	43,5dB @ 247,5MHz	33,2dB	10,3dB
5,4-1,2	Pass	42,3dB @ 235,0MHz	33,6dB	8,7dB	42,3dB @ 235,0MHz	33,6dB	8,7dB



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 Test Time: 14:13:17  
 Adapter ID: 6004  
 User Notes:

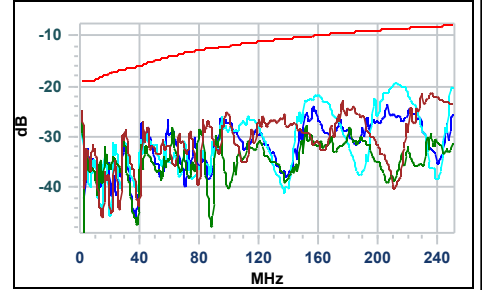
NVP: 72  
 LANTEK II-500 [946164/946186]  
 Firmware 1.103

Standard: TIA 568-B.2  
 Frequency Range: 1 - 250MHz  
 Operator: MEUREZ STEVEN  
 Contractor: ARTEVELDE ST AMANDB  
 Company: ELECTROSERVICEANDRE

## Return Loss: Pass

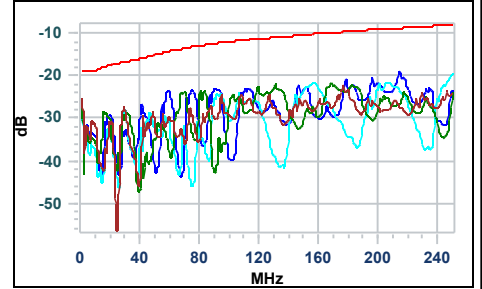
DH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	24,8dB @ 1,3MHz	19,0dB	5,8dB	21,2dB @ 235,5MHz	8,3dB	12,9dB
3,6	Pass	25,8dB @ 1,3MHz	19,0dB	6,8dB	25,8dB @ 1,3MHz	19,0dB	6,8dB
5,4	Pass	26,7dB @ 1,3MHz	19,0dB	7,7dB	19,4dB @ 212,5MHz	8,7dB	10,7dB
1,2	Pass	25,2dB @ 1,3MHz	19,0dB	6,2dB	23,7dB @ 206,5MHz	8,9dB	14,8dB



RH

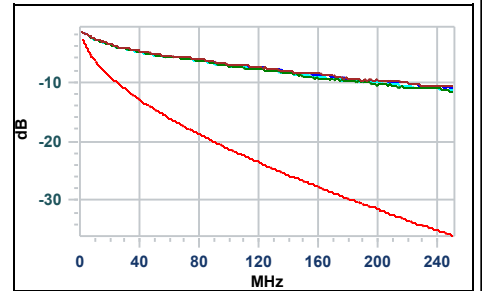
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	25,2dB @ 1,3MHz	19,0dB	6,2dB	22,1dB @ 177,0MHz	9,5dB	12,6dB
3,6	Pass	26,3dB @ 1,3MHz	19,0dB	7,3dB	21,5dB @ 169,0MHz	9,7dB	11,8dB
5,4	Pass	26,8dB @ 1,3MHz	19,0dB	7,8dB	19,4dB @ 250,0MHz	8,0dB	11,4dB
1,2	Pass	25,7dB @ 1,3MHz	19,0dB	6,7dB	19,1dB @ 214,5MHz	8,7dB	10,4dB



## Insertion Loss: Pass

DH

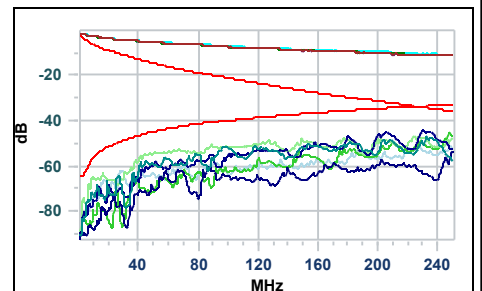
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	1,7dB @ 2,4MHz	3,1dB	1,4dB	10,7dB @ 249,0MHz	35,9dB	25,2dB
3,6	Pass	1,7dB @ 2,4MHz	3,1dB	1,4dB	11,6dB @ 250,0MHz	35,9dB	24,3dB
5,4	Pass	1,7dB @ 2,4MHz	3,1dB	1,4dB	11,5dB @ 250,0MHz	35,9dB	24,4dB
1,2	Pass	1,7dB @ 2,4MHz	3,1dB	1,4dB	10,9dB @ 250,0MHz	35,9dB	25,0dB



## ACR-N: Pass

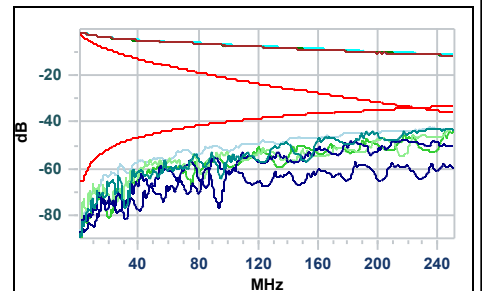
DH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	64,6dB @ 12,6MHz	47,9dB	16,7dB	35,8dB @ 232,5MHz	-0,7dB	36,5dB
7,8-5,4	Pass	78,3dB @ 3,1MHz	61,2dB	17,1dB	33,1dB @ 230,0MHz	-0,5dB	33,6dB
7,8-1,2	Pass	85,8dB @ 2,1MHz	62,0dB	23,8dB	43,1dB @ 249,5MHz	-2,8dB	45,9dB
3,6-5,4	Pass	72,2dB @ 3,0MHz	61,5dB	10,7dB	35,6dB @ 224,5MHz	0,2dB	35,4dB
3,6-1,2	Pass	81,3dB @ 3,0MHz	61,5dB	19,8dB	33,2dB @ 248,0MHz	-2,6dB	35,8dB
5,4-1,2	Pass	63,4dB @ 15,3MHz	45,8dB	17,6dB	39,5dB @ 249,0MHz	-2,8dB	42,3dB



RH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	65,9dB @ 12,9MHz	47,6dB	18,3dB	31,3dB @ 248,0MHz	-2,6dB	33,9dB
7,8-5,4	Pass	78,2dB @ 3,1MHz	61,2dB	17,0dB	36,8dB @ 237,5MHz	-1,4dB	38,2dB
7,8-1,2	Pass	83,5dB @ 2,7MHz	61,7dB	21,8dB	46,9dB @ 244,0MHz	-2,1dB	49,0dB
3,6-5,4	Pass	71,3dB @ 3,1MHz	61,2dB	10,1dB	31,1dB @ 249,0MHz	-2,8dB	33,9dB
3,6-1,2	Pass	79,3dB @ 3,1MHz	61,2dB	18,1dB	32,0dB @ 247,5MHz	-2,5dB	34,5dB
5,4-1,2	Pass	59,7dB @ 16,6MHz	44,8dB	14,9dB	31,1dB @ 235,0MHz	-1,1dB	32,2dB



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 Version: 1.1.1.9

## Pass

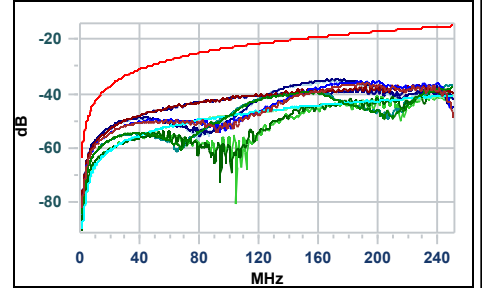
Test Name: UTPCAT6000A1.01.1  
 Test Limit: Cat 6-250 UTP Chan  
 Test Date: 5/15/2013  
 Test Time: 14:13:17  
 Adapter ID: 6004  
 User Notes:

NVP: 72  
 LANTEK II-500 [946164/946186]  
 Firmware 1.103

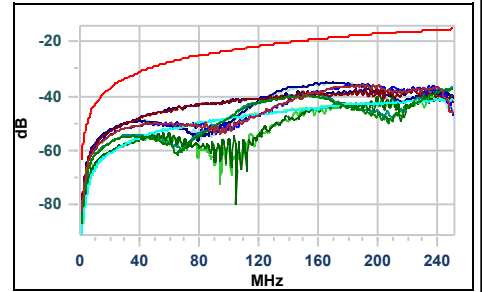
Standard: TIA 568-B.2  
 Frequency Range: 1 - 250MHz  
 Operator: MEUREZ STEVEN  
 Contractor: ARTEVELDE ST AMANDB  
 Company: ELECTROSERVICEANDRE

### ACR-F: Pass

		DH					
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	63,9dB @ 5,5MHz	48,4dB	15,5dB	36,1dB @ 190,0MHz	17,7dB	18,4dB
7,8-5,4	Pass	65,2dB @ 6,3MHz	47,3dB	17,9dB	37,5dB @ 250,0MHz	15,3dB	22,2dB
7,8-1,2	Pass	67,1dB @ 9,0MHz	44,2dB	22,9dB	40,5dB @ 243,0MHz	15,5dB	25,0dB
3,6-7,8	Pass	64,5dB @ 5,1MHz	49,2dB	15,3dB	35,4dB @ 196,5MHz	17,4dB	18,0dB
3,6-5,4	Pass	61,7dB @ 6,0MHz	47,8dB	13,9dB	36,5dB @ 192,0MHz	17,6dB	18,9dB
3,6-1,2	Pass	69,1dB @ 6,0MHz	47,8dB	21,3dB	39,5dB @ 247,5MHz	15,4dB	24,1dB
5,4-7,8	Pass	64,4dB @ 7,0MHz	46,4dB	18,0dB	36,5dB @ 250,0MHz	15,3dB	21,2dB
5,4-3,6	Pass	63,5dB @ 4,9MHz	49,5dB	14,0dB	37,1dB @ 224,0MHz	16,3dB	20,8dB
5,4-1,2	Pass	62,7dB @ 5,1MHz	49,2dB	13,5dB	34,7dB @ 172,5MHz	18,5dB	16,2dB
1,2-7,8	Pass	64,5dB @ 12,3MHz	41,5dB	23,0dB	40,7dB @ 249,5MHz	15,3dB	25,4dB
1,2-3,6	Pass	68,6dB @ 6,4MHz	47,1dB	21,5dB	40,2dB @ 250,0MHz	15,3dB	24,9dB
1,2-5,4	Pass	60,7dB @ 6,4MHz	47,1dB	13,6dB	35,4dB @ 176,0MHz	18,3dB	17,1dB

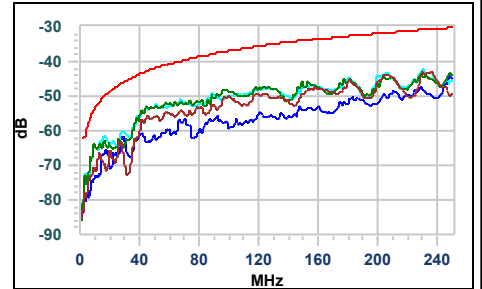


		RH					
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	Pass	64,6dB @ 5,1MHz	49,2dB	15,4dB	35,9dB @ 189,5MHz	17,7dB	18,2dB
7,8-5,4	Pass	64,5dB @ 7,0MHz	46,4dB	18,1dB	37,4dB @ 250,0MHz	15,3dB	22,1dB
7,8-1,2	Pass	64,5dB @ 12,3MHz	41,5dB	23,0dB	40,9dB @ 241,5MHz	15,6dB	25,3dB
3,6-7,8	Pass	63,8dB @ 5,5MHz	48,4dB	15,4dB	35,7dB @ 193,0MHz	17,5dB	18,2dB
3,6-5,4	Pass	63,6dB @ 4,9MHz	49,5dB	14,1dB	36,9dB @ 224,0MHz	16,3dB	20,6dB
3,6-1,2	Pass	66,7dB @ 7,9MHz	45,3dB	21,4dB	39,5dB @ 250,0MHz	15,3dB	24,2dB
5,4-7,8	Pass	65,1dB @ 6,3MHz	47,3dB	17,8dB	36,6dB @ 250,0MHz	15,3dB	21,3dB
5,4-3,6	Pass	61,7dB @ 6,0MHz	47,8dB	13,9dB	36,6dB @ 192,0MHz	17,6dB	19,0dB
5,4-1,2	Pass	60,7dB @ 6,4MHz	47,1dB	13,6dB	35,0dB @ 170,0MHz	18,6dB	16,4dB
1,2-7,8	Pass	67,1dB @ 9,0MHz	44,2dB	22,9dB	40,4dB @ 243,0MHz	15,5dB	24,9dB
1,2-3,6	Pass	69,1dB @ 6,0MHz	47,8dB	21,3dB	39,9dB @ 239,5MHz	15,7dB	24,2dB
1,2-5,4	Pass	62,8dB @ 5,1MHz	49,2dB	13,6dB	35,1dB @ 172,5MHz	18,5dB	16,6dB

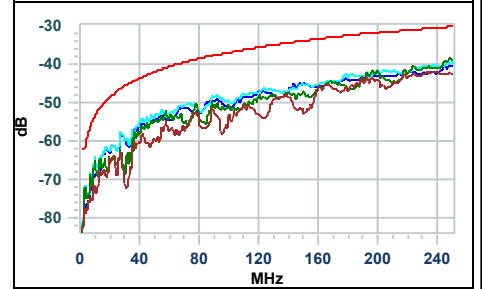


### PS NEXT: Pass

		DH					
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	42,8dB @ 229,5MHz	30,8dB	12,0dB	42,8dB @ 229,5MHz	30,8dB	12,0dB
3,6	Pass	52,9dB @ 44,5MHz	42,9dB	10,0dB	43,3dB @ 248,0MHz	30,2dB	13,1dB
5,4	Pass	64,0dB @ 9,6MHz	53,9dB	10,1dB	42,1dB @ 230,0MHz	30,7dB	11,4dB
1,2	Pass	43,8dB @ 248,0MHz	30,2dB	13,6dB	43,8dB @ 248,0MHz	30,2dB	13,6dB



		RH					
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	43,0dB @ 192,5MHz	32,1dB	10,9dB	41,8dB @ 237,5MHz	30,5dB	11,3dB
3,6	Pass	38,6dB @ 247,5MHz	30,2dB	8,4dB	38,6dB @ 249,0MHz	30,1dB	8,5dB
5,4	Pass	39,4dB @ 248,5MHz	30,2dB	9,2dB	39,3dB @ 249,0MHz	30,1dB	9,2dB
1,2	Pass	40,1dB @ 247,5MHz	30,2dB	9,9dB	40,1dB @ 247,5MHz	30,2dB	9,9dB



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 Version: 1.1.1.9

## Pass

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 Test Limit: Cat 6-250 UTP Chan  
 Test Date: 5/15/2013  
 Test Time: 14:13:17  
 Adapter ID: 6004  
 User Notes:

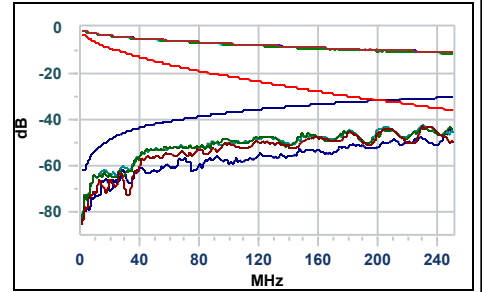
NVP: 72  
 LANTEK II-500 [946164/946186]  
 Firmware 1.103

Standard: TIA 568-B.2  
 Frequency Range: 1 - 250MHz  
 Operator: MEUREZ STEVEN  
 Contractor: ARTEVELDE ST AMAMDSB  
 Company: ELECTROSERVICEANDRE

### PS ACR-N: Pass

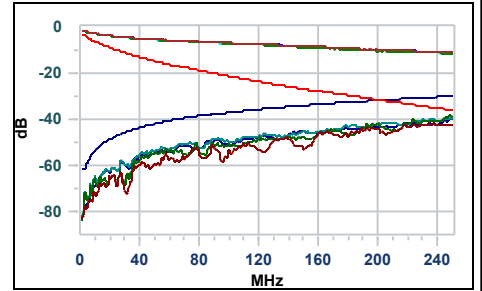
#### DH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	76,0dB @ 3,1MHz	58,2dB	17,8dB	32,1dB @ 229,5MHz	-3,4dB	35,5dB
3,6	Pass	71,3dB @ 3,0MHz	58,5dB	12,8dB	31,7dB @ 248,0MHz	-5,6dB	37,3dB
5,4	Pass	70,9dB @ 3,0MHz	58,5dB	12,4dB	31,1dB @ 230,0MHz	-3,5dB	34,6dB
1,2	Pass	77,9dB @ 3,0MHz	58,5dB	19,4dB	32,9dB @ 248,0MHz	-5,6dB	38,5dB



#### RH

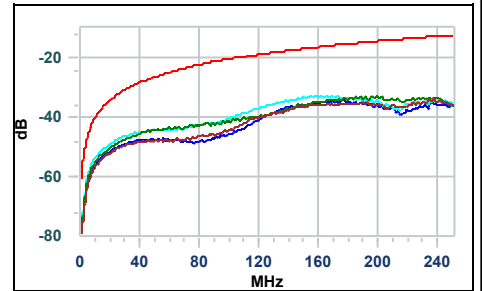
Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	75,7dB @ 3,3MHz	57,9dB	17,8dB	31,1dB @ 237,5MHz	-4,4dB	35,5dB
3,6	Pass	70,4dB @ 3,1MHz	58,2dB	12,2dB	27,0dB @ 249,0MHz	-5,8dB	32,8dB
5,4	Pass	69,6dB @ 3,3MHz	57,9dB	11,7dB	27,8dB @ 249,0MHz	-5,8dB	33,6dB
1,2	Pass	59,6dB @ 15,7MHz	42,4dB	17,2dB	29,2dB @ 247,5MHz	-5,5dB	34,7dB



### PS ACR-F: Pass

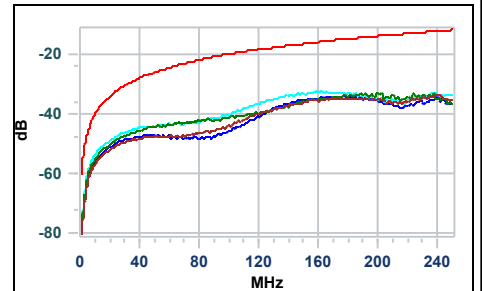
#### DH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	61,7dB @ 5,5MHz	45,4dB	16,3dB	33,5dB @ 237,5MHz	12,7dB	20,8dB
3,6	Pass	60,3dB @ 5,1MHz	46,2dB	14,1dB	32,7dB @ 192,0MHz	14,6dB	18,1dB
5,4	Pass	59,6dB @ 4,9MHz	46,5dB	13,1dB	32,7dB @ 165,5MHz	15,9dB	16,8dB
1,2	Pass	59,7dB @ 6,4MHz	44,1dB	15,6dB	34,2dB @ 176,0MHz	15,3dB	18,9dB



#### RH

Pairs	Result	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	Pass	61,5dB @ 5,7MHz	45,2dB	16,3dB	33,6dB @ 240,0MHz	12,7dB	20,9dB
3,6	Pass	60,2dB @ 5,2MHz	45,9dB	14,3dB	32,8dB @ 199,5MHz	14,3dB	18,5dB
5,4	Pass	58,2dB @ 5,7MHz	45,2dB	13,0dB	32,5dB @ 162,5MHz	16,0dB	16,5dB
1,2	Pass	61,8dB @ 5,1MHz	46,2dB	15,6dB	34,0dB @ 177,5MHz	15,3dB	18,7dB



# File01

STADHUIS LEIEBRUG MUZIEKACADEMIE

## STAD DEINZE

MARKT 21

DEINZE 9800 België

Job Description:	SM 12FO 9/125 $\mu$ OS1 LC
Test Phase:	LEIEBRUG - MUZIEK - STADHUIS
Date Awarded:	maandag 26 mei 2014
Date Completed:	woensdag 28 mei 2014
Date Prepared:	woensdag 14 mei 2014

### TestrapportFIBER



ELECTRO SERVICE ANDRE

Oudenaardseweg 35

Wortegem-Petegem België 9790

# Project Summary

**Job Name:** File01  
Job Description: SM 12FO 9/125µ OS1 LC  
Test Phase: LEIEBRUG - MUZIEK - STADHUIS  
Date Awarded: maandag 26 mei 2014  
Date Completed: woensdag 28 mei 2014  
Date Prepared: woensdag 14 mei 2014

## Results Summary:

Routes:	1	Singlemode Trace Count :	0
Cables:	1	Singlemode Wavelengths:	1310, 1550
Fibers:	36	Multimode Trace Count :	0
OLTS/OPM Results:	1	Multimode Wavelengths:	
Traces:	0		

\* Counts represent only valid fiber result items found

## STADHUIS LEIEBRUG MUZIEKACADEMIE

STAD DEINZE  
MARKT 21  
DEINZE 9800 België

## TestrapportFIBER

ELECTRO SERVICE ANDRE  
Oudenaardseweg 35  
Wortegem-Petegem België 9790  
Phone: 056/68 70 27  
Email: andre@electroserviceandre.be

## Route Summary

File01

Loc1 To Loc2

1 Cables  
36 Fibers  
36 OLTS/OPM Fiber Readings  
0 Traces

## Cable Summary

Cable ID: File01

OLTS/OPM Results:

36

Wavelengths Tested:

1310, 1550



Job Name : File01

Cable ID : File01

End 1 : Loc1

End 2 : Loc2

Port : Singlemode  
Fiber Type :  
Test Date : 27/06/2014

OPM Model # : OPM5-3  
OPM Serial # : 1Z14NS001  
Software Ver : 9.22  
Cal Date : N/A  
Operator : Joël

OLS Model # :  
OLS Serial # :  
Software Ver :  
Cal Date : N/A  
Operator : Janos

Comment :

## OLTS Loss Measurements

Loc1-Loc2-File01.atd

Fiber #	End 1 -> End 2	
	1310nm (dB)	1550nm (dB)
2	0,00	0,00
3	0,01	0,00
4	0,00	0,01
5	-0,09	-0,08
6	0,00	-0,01
7	0,07	0,03
8	-0,01	-0,13
9	-0,76	-0,84
10	-0,53	-0,60
11	-1,17	-1,20
12	0,01	-0,01
13	-0,34	-0,23
14	0,22	0,16
15	0,25	0,21
16	0,68	0,45
17	0,06	-0,03
18	0,63	0,45
19	0,01	-0,12
20	0,06	-0,04
21	-0,08	-0,12
22	-0,24	-0,21
23	-0,57	-0,53
24	-0,38	-0,39
25	-0,69	-0,59
26	-0,69	-0,59
27	-0,70	-0,60
28	-0,59	-0,43
29	-0,96	-0,82
30	-1,17	-0,97
31	-0,19	-0,18
32	-0,94	-0,75
33	-1,10	-0,93
34	-1,10	-0,93
35	-0,90	-0,77
36	-0,91	-0,73
37	-0,47	-0,42