

 Submarine Networks Division	C A B L E A C C E P T A N C E R E P O R T <i>D O S S I E R D ' A C C E P T A T I O N C A B L E</i>		Manufacturing Site P O R T L A N D																																				
	360americas CONTRACT 16th June - 1999 CONTRACT du 16 juin 1999 LAYING SEGMENT : 9 BLOCK : 6 LAYING PART : 932 SEGMENT DE POSE : BLOC SECTION DE POSE : CABLE TYPE : SA..8/SAL..8 TYPE DE CABLE : O.A.L.C. 4 / 30 (Line fibre Corning WDM) TOTAL LENGTH S.L.D. : 72 876 METRES LONGUEUR TOTAL DE LA SECTION S.L.D. : <table border="1"> <tr> <td>R932</td> <td>5 486 m</td> <td>38 133 m</td> <td>7 025 m</td> <td>22 232 m</td> <td>R931</td> </tr> <tr> <td>(BSC) Outer / Supérieur</td> <td>SA..8</td> <td>SAL..8</td> <td>SA..8</td> <td>SAL..8</td> <td>(BSC) Inner / Inférieur</td> </tr> </table>			R932	5 486 m	38 133 m	7 025 m	22 232 m	R931	(BSC) Outer / Supérieur	SA..8	SAL..8	SA..8	SAL..8	(BSC) Inner / Inférieur																								
R932	5 486 m	38 133 m	7 025 m	22 232 m	R931																																		
(BSC) Outer / Supérieur	SA..8	SAL..8	SA..8	SAL..8	(BSC) Inner / Inférieur																																		
<table border="1"> <thead> <tr> <th>MANUFACTURING Nb : <i>No DE FABRICATION EN USINE :</i></th> <th>TYPE CABLE <i>TYPE DE CABLE</i></th> <th>Joint Box Nb <i>No Boite Jonction</i></th> <th>ACTUAL LENGTH <i>METRAGE REEL</i></th> </tr> </thead> <tbody> <tr> <td>574241 (574T241C+D+574T242+574T243)</td> <td>SA..8</td> <td>>>>></td> <td>5 703 m.</td> </tr> <tr> <td>Transition</td> <td>SA..8/SAL..8</td> <td>>>>></td> <td>37 537 m.</td> </tr> <tr> <td>Transition</td> <td>SAL..8/SA..8</td> <td>>>>></td> <td>7 628 m.</td> </tr> <tr> <td>Transition</td> <td>SA..8/SAL..8</td> <td>>>>></td> <td>21 978 m.</td> </tr> <tr> <td colspan="3"> LONGUEUR DE LA SECTION - PART LENGTH >>>> </td> <td>72 846 m.</td> </tr> </tbody> </table> <table border="1"> <tr> <td colspan="2"> LAYING PART CONFORM SECTION DE POSE CONFORME CHARACTERISTICS - CARACTERISTIQUES Based on SLD 1.5 5/9/2001 </td> <td colspan="2"> CHECKED and ACCEPTED by the QUALITY DEPARTMENT CONTROLE et ACCEPTE par le SERVICE QUALITE </td> </tr> <tr> <td> S.L.D. OPTICAL - ELECT PHYSICAL </td> <td> A. A. A. </td> <td> DECOUPE OPTIQUE-ELECT PHYSIQUES </td> <td> QUALITY 1-May-01 Mr. Ted Bookwalter  </td> </tr> <tr> <td> F.R.C Ref. 27 </td> <td colspan="2"> A : ACCEPTED A.C : ACCEPTED ON CONCESSION </td> <td> ACCEPTE ACCEPTE AVEC DEROGATION </td> </tr> </table>				MANUFACTURING Nb : <i>No DE FABRICATION EN USINE :</i>	TYPE CABLE <i>TYPE DE CABLE</i>	Joint Box Nb <i>No Boite Jonction</i>	ACTUAL LENGTH <i>METRAGE REEL</i>	574241 (574T241C+D+574T242+574T243)	SA..8	>>>>	5 703 m.	Transition	SA..8/SAL..8	>>>>	37 537 m.	Transition	SAL..8/SA..8	>>>>	7 628 m.	Transition	SA..8/SAL..8	>>>>	21 978 m.	LONGUEUR DE LA SECTION - PART LENGTH >>>>			72 846 m.	LAYING PART CONFORM SECTION DE POSE CONFORME CHARACTERISTICS - CARACTERISTIQUES Based on SLD 1.5 5/9/2001		CHECKED and ACCEPTED by the QUALITY DEPARTMENT CONTROLE et ACCEPTE par le SERVICE QUALITE		S.L.D. OPTICAL - ELECT PHYSICAL	A. A. A.	DECOUPE OPTIQUE-ELECT PHYSIQUES	QUALITY 1-May-01 Mr. Ted Bookwalter 	F.R.C Ref. 27	A : ACCEPTED A.C : ACCEPTED ON CONCESSION		ACCEPTE ACCEPTE AVEC DEROGATION
MANUFACTURING Nb : <i>No DE FABRICATION EN USINE :</i>	TYPE CABLE <i>TYPE DE CABLE</i>	Joint Box Nb <i>No Boite Jonction</i>	ACTUAL LENGTH <i>METRAGE REEL</i>																																				
574241 (574T241C+D+574T242+574T243)	SA..8	>>>>	5 703 m.																																				
Transition	SA..8/SAL..8	>>>>	37 537 m.																																				
Transition	SAL..8/SA..8	>>>>	7 628 m.																																				
Transition	SA..8/SAL..8	>>>>	21 978 m.																																				
LONGUEUR DE LA SECTION - PART LENGTH >>>>			72 846 m.																																				
LAYING PART CONFORM SECTION DE POSE CONFORME CHARACTERISTICS - CARACTERISTIQUES Based on SLD 1.5 5/9/2001		CHECKED and ACCEPTED by the QUALITY DEPARTMENT CONTROLE et ACCEPTE par le SERVICE QUALITE																																					
S.L.D. OPTICAL - ELECT PHYSICAL	A. A. A.	DECOUPE OPTIQUE-ELECT PHYSIQUES	QUALITY 1-May-01 Mr. Ted Bookwalter 																																				
F.R.C Ref. 27	A : ACCEPTED A.C : ACCEPTED ON CONCESSION		ACCEPTE ACCEPTE AVEC DEROGATION																																				

▼ ALCATEL Submarine Networks Division		CONSTITUTION OF THE SECTION CONSTITUTION DE LA SECTION Transitions - Repairworks Position POSITION DES REPARATIONS et TRANSITIONS		Manufacturing Site PORTLAND	
LAYING PART >>> 932 <<< SECTION DE POSE : REPAIRWORKS POSITION POSITION DES REPARATIONS CONSTITUTION OF THE SECTION CONSTITUTION DE LA SECTION					
		0 m R932 OTDR Outer / Top End		574241 72 846 SA..8	
Tube Joint >>>>> Patchweld Repair (13 mm) >>>> Tube Joint >>>>>		2 345 m 3 702 m 5 384 m			
		5 703 m 10 150 m 12 757 m		<<<<< Transition cable type SA/SAL	
Patchweld Repair (40 mm) >>>> Patchweld Repair (12 mm) >>>>					
		32 915 m 35 220 m			
Patchweld Repair (6 mm) >>>> Tube Joint >>>>>					
		43 240 m 44 920 m		<<<<< Transition cable type SAL/SA	
Patchweld Repair (15 mm) >>>>					
		50 868 m		<<<<< Transition cable type SA/SAL	
		72 846 m R931 Inner/Bottom End			
REPAIRS Réparations		TUBING of FIBRES Mise sous tube des fibres		INNER CONDUCTOR and INSULATION Conducteur Interieur et Isolation	
DEEP SEA or ARMOUR PROTECTION Protection Grand fond ou Armure					
Types		Tube Joint Repair Réparation par Jonction Tube		Bare Strand Repair : Réparation par toron nu Joint Box: Réparation par Boîte de jonction Mould Repair : Réparation par moulage Patchweld Repair : Réparation par Pastillage Tape Repair : Réparation par ruban	
		Heatshrink Repair : Réparation par Thermo Yarn Repair : Réparation filin Steel Wire Repair : Réparation Fil Acier			
Outer / Top End or Inner / Bottom End : Refer To the End position of the OTDR traces position des courbes retro référencée par les extrémités Sup/Top ou Extrémités Inf/ Bottom					

LINK - LIAISON

360americas

SECTION - SECTION

932

SEGMENT: 9

LENGTH(km)

72.846

LONGUEUR (km)

MANUFACTURING NUMBER - NUMERO USINE

574241

ATTENUATION VERSUS WAVELENGTH*MESURES D'ATTENUATION SPECTRALE*

WAVELENGTH / LONGUEUR D'ONDE			
COLOR/COULEUR NZDSF	Measured values <i>Valeurs mesurées</i> at 1560nm		Limits/Limites at 1560nm NZDSF: mini 14.22 maxi 15.72 dB
	dB/km	dB	Remarks/ <i>Remarques</i>
Red/Rouge	0.202	14.75	
Blue/Bleu	0.201	14.65	
Yellow/Jaune	0.203	14.77	
Green/Vert	0.203	14.80	
Black/Noir	0.202	14.70	
Brown/Brune	0.206	15.00	
Orange/Orange	0.200	14.61	
Pink/Rose	0.203	14.77	

CHROMATIC DISPERSION READINGS AT 20°C WAVELENGTH IN VACUUM*DISPERSION CHROMATIQUE A 20°C DANS LE VIDE (**)*

SPECIFIED WAVELENGTH 1560nm - LONGUEUR D'ONDE SPECIFICATION 1560nm				
COLOR/COULEUR NZDSF	Lambda 0 nm	Slope/Pente <i>ps / nm² / km</i>	Measured Values ps/nm/km	Limits / Limites Values in ps/nm/km NZDSF: mini -2.7 maxi -0.8
				Remarks/Remarques
Red/Rouge	1584.22	0.0741	-1.8	
Blue/Bleu	1583.51	0.0764	-1.8	
Yellow/Jaune	1585.09	0.0716	-1.8	
Green/Vert	1585.39	0.0707	-1.8	
Black/Noir	1584.74	0.0721	-1.8	
Brown/Brune	1584.41	0.0739	-1.8	
Orange/Orange	1583.83	0.0752	-1.8	
Pink/Rose	1585.83	0.0712	-1.8	

(**) Coef temperature = 0.03 nm per °C

POLARIZATION MODE DISPERSION*DISPERSION DE POLARISATION (PMD)*

All values (ps/square root km) <i>ps/racine carrée km</i>		
COLOR/COULEUR NZDSF	Measure <i>Mesure</i>	Limits /Limites NZDSF: maxi 0.15
		Remarks/Remarques
Red/Rouge	0.03	
Blue/Bleu	0.04	
Yellow/Jaune	0.05	
Green/Vert	0.04	
Black/Noir	0.04	
Brown/Brune	0.03	
Orange/Orange	0.02	
Pink/Rose	0.03	

*** In the range 1530 - 1570nm ***

LINK - LIAISON

360americas

SECTION - SECTION

932

SEGMENT: 9

LENGTH(km)

72.846

LONGUEUR (km)

MANUFACTURING NUMBER - NUMERO USINE

574241

BACKSCATTERING MEASUREMENTS*MESURES DE RETRODIFFUSION*

COLOR/COULEUR NZDSF	Results <i>Resultats</i>	Remarks/Remarques
Red/Rouge	Conforms	
Blue/Bleu	Conforms	
Yellow/Jaune	Conforms	
Green/Vert	Conforms	
Black/Noir	Conforms	
Brown/Brune	Conforms	
Orange/Orange	Conforms	
Pink/Rose	Conforms	

ELECTRICAL MEASUREMENTS*MESURES ELECTRIQUES*

TYPE INSULATED CABLE CABLE ISOLE	UNIT UNITE	UNIT UNITE	LIMITS VALUES VALEURS LIMITES
COMPOSITE CONDUCTOR RESISTANCE RESISTANCE LINEIQUE CONDUCTEUR INTERIEUR Coef temperature = 0.36 % per °C	ohm/km ohm	1.38 100.75	£ 1.6 at 10°C
INSULATION RESISTANCE 500VDC RESISTANCE D'ISOLEMENT 500V CONTINU	MW .km MΩ .km	7.28E+06 7.28E+06	³ 1.0E+05
HIGH VOLTAGE TEST RIGIDITE DIELECTRIQUE	kV kV	CONFORMS CONFORME	45Kv for 5 MINUTES 45kV PENDANT 5 MINUTES

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

LENGTH (km)

72.846

SEGMENT: 9

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Red	2345	70501	-0.19	0.28	0.05	SJT
	5384	67462	0.29	-0.20	0.05	SJT
	7199	65647	-0.21	0.26	0.03	SBO
	11196	61650	0.28	-0.17	0.05	SBO
	27409	45437	-0.04	0.15	0.06	SBO
	34986	37860	-0.06	0.10	0.02	SBO
	35220	37626	0.14	-0.09	0.03	SJT
	37606	35240	0.03	0.03	0.03	SBO
	58592	14254	0.07	0.09	0.08	SBO

NOTES:

*** Single Direction Measurement
 ** No splices in this fiber
 * Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring SBC: Break @ Coloring
 SJT: Tube joint DEF: Fault Detection
 BJ: Joint Box Splice BJ*: Joint Box Splice (mixed fiber)
 SBO*: Fiber splice mixed SCC: Splice at stranding (break)
 SCA = Tube joint on CC

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

SEGMENT: 9

LENGTH (km)

72.846

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Blue	2345	70501	0.16	-0.06	0.05	SJT
	5384	67462	0.08	0.02	0.05	SJT
	25716	47130	0.06	0.08	0.07	SBO
	34465	38381	-0.08	0.15	0.04	SBO
	35220	37626	0.18	-0.01	0.08	SJT
	39319	33527	0.03	0.16	0.09	SBO
	60305	12541	0.11	0.00	0.05	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring SBC: Break @ Coloring
SJT: Tube joint DEF: Fault Detection
BJ: Joint Box Splice BJ*: Joint Box Splice (mixed fiber)
SBO*:Fiber splice mixed SCC: Splice at stranding (break)
SCA = Tube joint on CC

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

SEGMENT: 9

LENGTH (km)

72.846

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Yellow	2345	70501	0.06	0.00	0.03	SJT
	5384	67462	-0.08	0.18	0.05	SJT
	23086	49760	0.14	-0.03	0.06	SBO
	32712	40134	-0.10	0.20	0.05	SBO
	35220	37626	0.10	-0.03	0.03	SJT
	35709	37137	0.15	0.01	0.08	SBO
	55736	17110	0.29	-0.17	0.06	SBO
	70706	2140	0.02	0.04	0.03	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring
SJT: Tube joint
BJ: Joint Box Splice
SBO*:Fiber splice mixed
SCA = Tube joint on CC

SBC: Break @ Coloring
DEF: Fault Detection
BJ*: Joint Box Splice (mixed fiber)
SCC: Splice at stranding (break)

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

SEGMENT: 9

LENGTH (km)

72.846

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Green	2345	70501	0.14	-0.07	0.03	SJT
	5384	67462	-0.05	0.15	0.05	SJT
	24493	48353	0.11	-0.04	0.03	SBO
	34160	38686	0.05	0.07	0.06	SBO
	35220	37626	0.01	0.05	0.03	SJT
	40890	31956	0.21	-0.03	0.09	SBO
	57898	14948	-0.17	0.29	0.06	SBO
	71868	978	0.17	-0.04	0.06	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring
SJT: Tube joint
BJ: Joint Box Splice
SBO*:Fiber splice mixed
SCA = Tube joint on CC
SBC: Break @ Coloring
DEF: Fault Detection
BJ*: Joint Box Splice (mixed fiber)
SCC: Splice at stranding (break)

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

LENGTH (km)

72.846

SEGMENT: 9

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Black	2345	70501	-0.06	0.08	0.01	SJT
	5384	67462	0.00	0.04	0.02	SJT
	23595	49251	0.13	-0.02	0.05	SBO
	33201	39645	0.15	-0.07	0.04	SBO
	35220	37626	0.05	0.01	0.03	SJT
	56246	16600	0.08	0.05	0.06	SBO
	71195	1651	0.03	0.08	0.06	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring SBC: Break @ Coloring
SJT: Tube joint DEF: Fault Detection
BJ: Joint Box Splice BJ*: Joint Box Splice (mixed fiber)
SBO*:Fiber splice mixed SCC: Splice at stranding (break)
SCA = Tube joint on CC

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

LENGTH (km)

72.846

SEGMENT: 9

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Brown	2345	70501	0.14	0.00	0.07	SJT
	5384	67462	0.13	-0.01	0.06	SJT
	23840	49006	0.01	0.15	0.08	SBO
	34465	38381	0.05	0.12	0.09	SBO
	35220	37626	0.15	-0.09	0.03	SJT
	35659	37187	0.01	0.16	0.09	SBO
	56695	16151	0.00	0.13	0.07	SBO
	70706	2140	0.04	0.09	0.07	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring
SJT: Tube joint
BJ: Joint Box Splice
SBO*:Fiber splice mixed
SCA = Tube joint on CC
SBC: Break @ Coloring
DEF: Fault Detection
BJ*: Joint Box Splice (mixed fiber)
SCC: Splice at stranding (break)

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

LENGTH (km)

72.846

SEGMENT: 9

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Orange	2345	70501	0.07	-0.01	0.03	SJT
	5384	67462	0.27	-0.20	0.04	SJT
	30040	42806	0.05	0.04	0.05	SBO
	35220	37626	-0.06	0.12	0.03	SJT
	57021	15825	-0.07	0.16	0.04	SBO
	71012	1834	0.13	-0.06	0.04	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring SBC: Break @ Coloring
SJT: Tube joint DEF: Fault Detection
BJ: Joint Box Splice BJ*: Joint Box Splice (mixed fiber)
SBO*:Fiber splice mixed SCC: Splice at stranding (break)
SCA = Tube joint on CC

LINK - *LIAISON*

360americas

SECTION - *SECTION*

932

LENGTH (km)

72.846

SEGMENT: 9

LONGUEUR (km)

MANUFACTURING NUMBER - *NUMERO USINE*

574241

SPLICE SUMMARY*Sommaire d'épissure*

Color	Distance (m)		Loss (dB)		Average (dB)	Loss Type
	Top	Bottom	Top	Bottom		
Pink	2345	70501	-0.08	0.16	0.04	SJT
	5384	67462	0.09	0.01	0.05	SJT
	13092	59754	-0.07	0.18	0.06	SBO
	35220	37626	0.31	0.01	0.16	SJT
	39890	32956	0.05	0.17	0.11	SBO
	56919	15927	0.00	0.13	0.06	SBO

NOTES:

*** Single Direction Measurement
** No splices in this fiber
* Combined Splice Loss

Splice / Point Loss / Feature Identifiers

SBO: Splice on coloring
SJT: Tube joint
BJ: Joint Box Splice
SBO*:Fiber splice mixed
SCA = Tube joint on CC

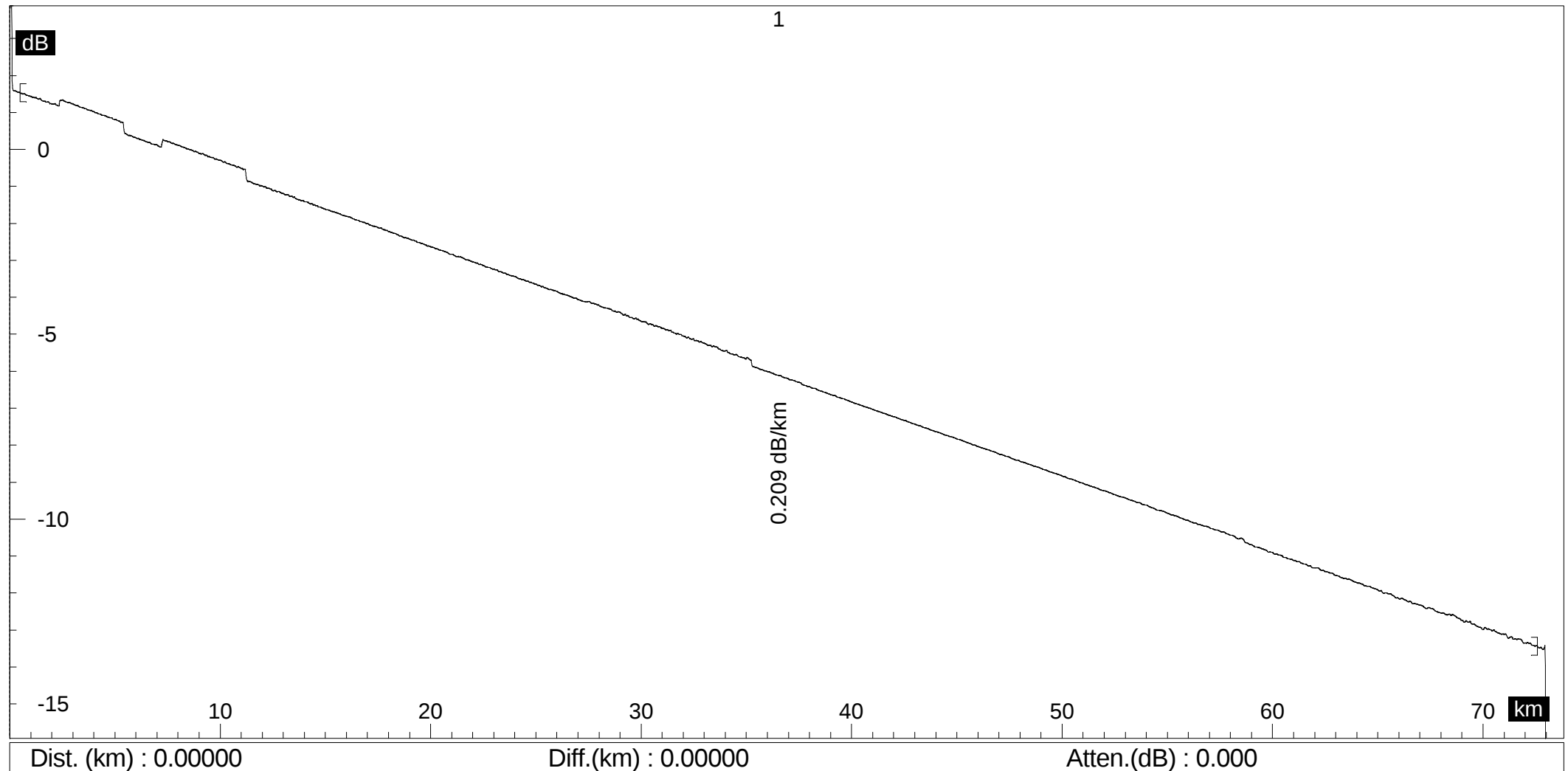
SBC: Break @ Coloring
DEF: Fault Detection
BJ*: Joint Box Splice (mixed fiber)
SCC: Splice at stranding (break)

5/1/2001 11:18:57 AM

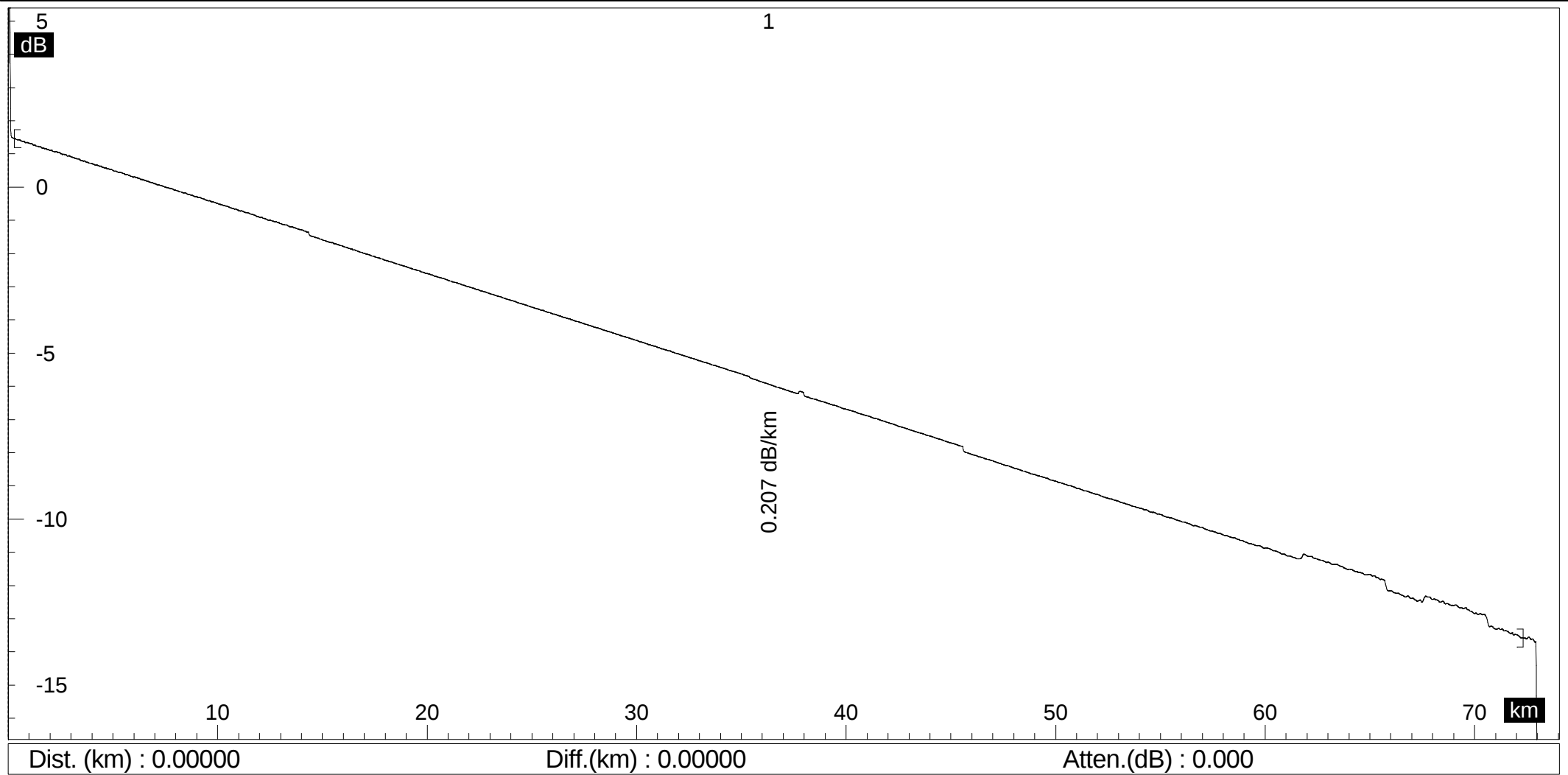
File : red15top.tfw
Date : 4/29/2001 11:20:21 PM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : red/top
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) : 1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold : -60.00 dB



		5/1/2001 11:18:47 AM		WinTrace v4.00 © WWG	
File :	red15bot.fw	Device :	MTS 5100 Num. 2001		
Date :	4/30/2001 1:21:20 AM	Module :	5026VHD		
Title :	574-932	Lambda (nm) :	1550	Backscatter coeff.:	-82.20 dB
Technic. :	Myles Kucera	Index :	1.470000	Loss thresholds :	0.05 dB
Cable :	574241	Pulse (ns) :	100	Slope thresholds :	0.000 dB/km
Fiber :	8	Range (km) :	80.000	Reflectance threshold :	-60.00 dB
Origin :	FT 06	Acq. time :	02min		
Extremity :	red/bottom	Resolution :	10 m		
Way :	O-->E				
Comment :					

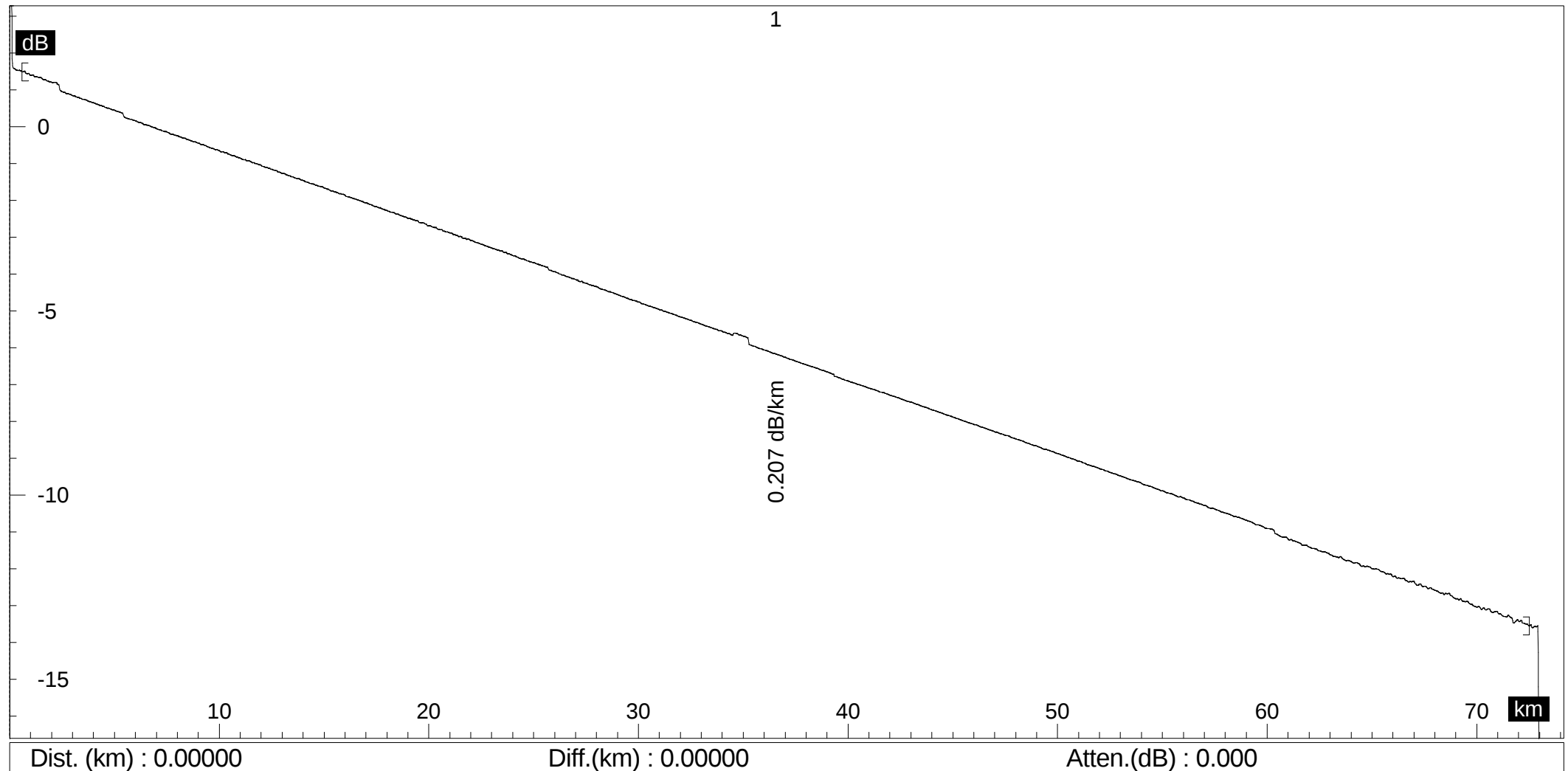


5/1/2001 11:20:38 AM

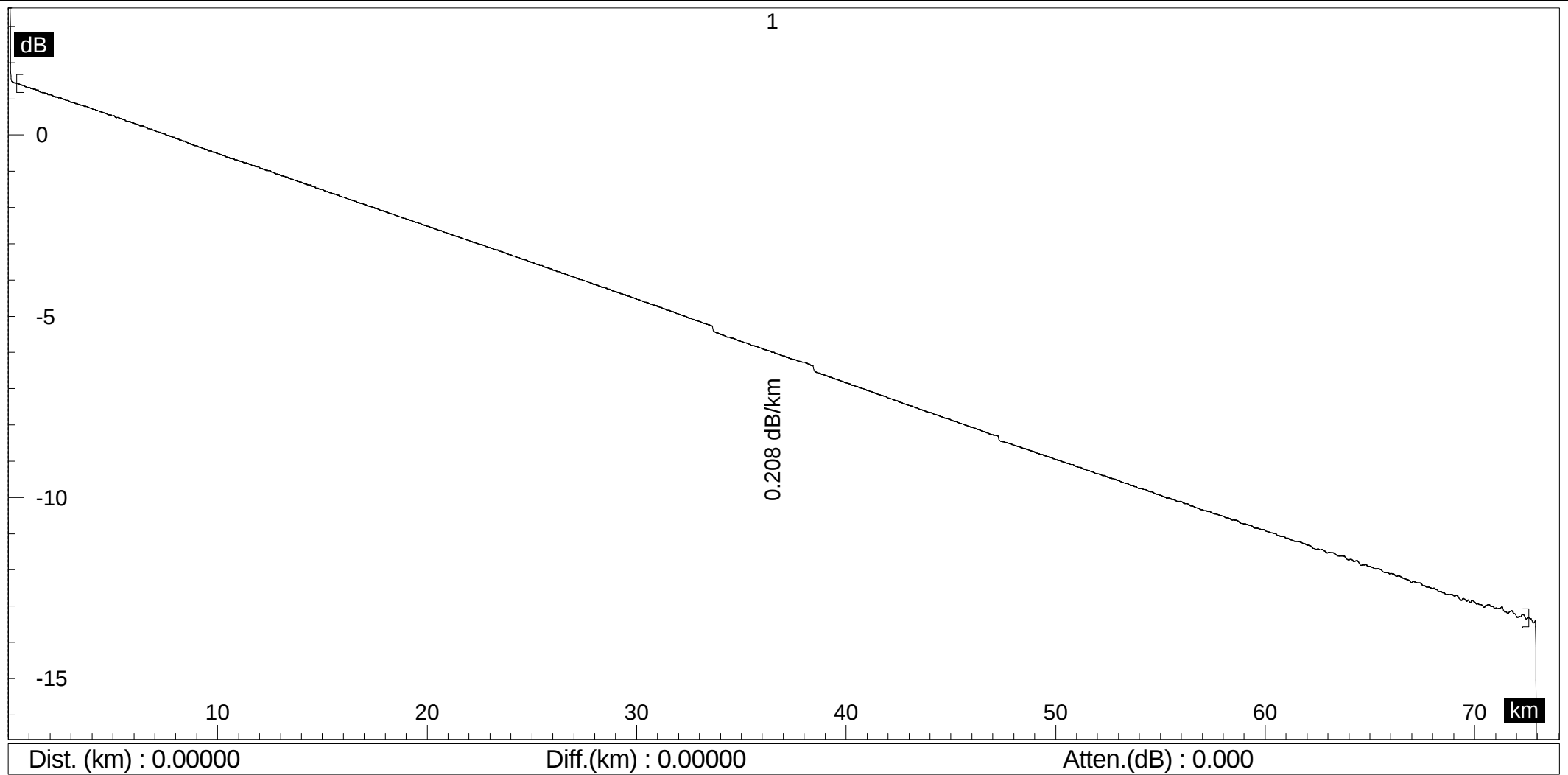
File : blu15top.tfw
Date : 4/30/2001 12:17:15 AM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : blue/top
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) : 1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold : -60.00 dB



5/1/2001 11:19:49 AM		
File :	blu15bot.tfw	Device : MTS 5100 Num. 2001
Date :	4/30/2001 3:17:27 AM	Module : 5026VHD
Title :	574-932	Lambda (nm) :1550
Technic. :	Myles Kucera	Index : 1.470000
Cable :	574241	Pulse (ns) : 100
Fiber :	8	Range (km) : 80.000
Origin :	FT 06	Acq. time : 02min
Extremity :	blue/bottom	Resolution : 10 m
Way :	O-->E	
Comment :		
		Backscatter coeff.: -82.20 dB
		Loss thresholds : 0.05 dB
		Slope thresholds : 0.000 dB/km
		Reflectance threshold :-60.00 dB

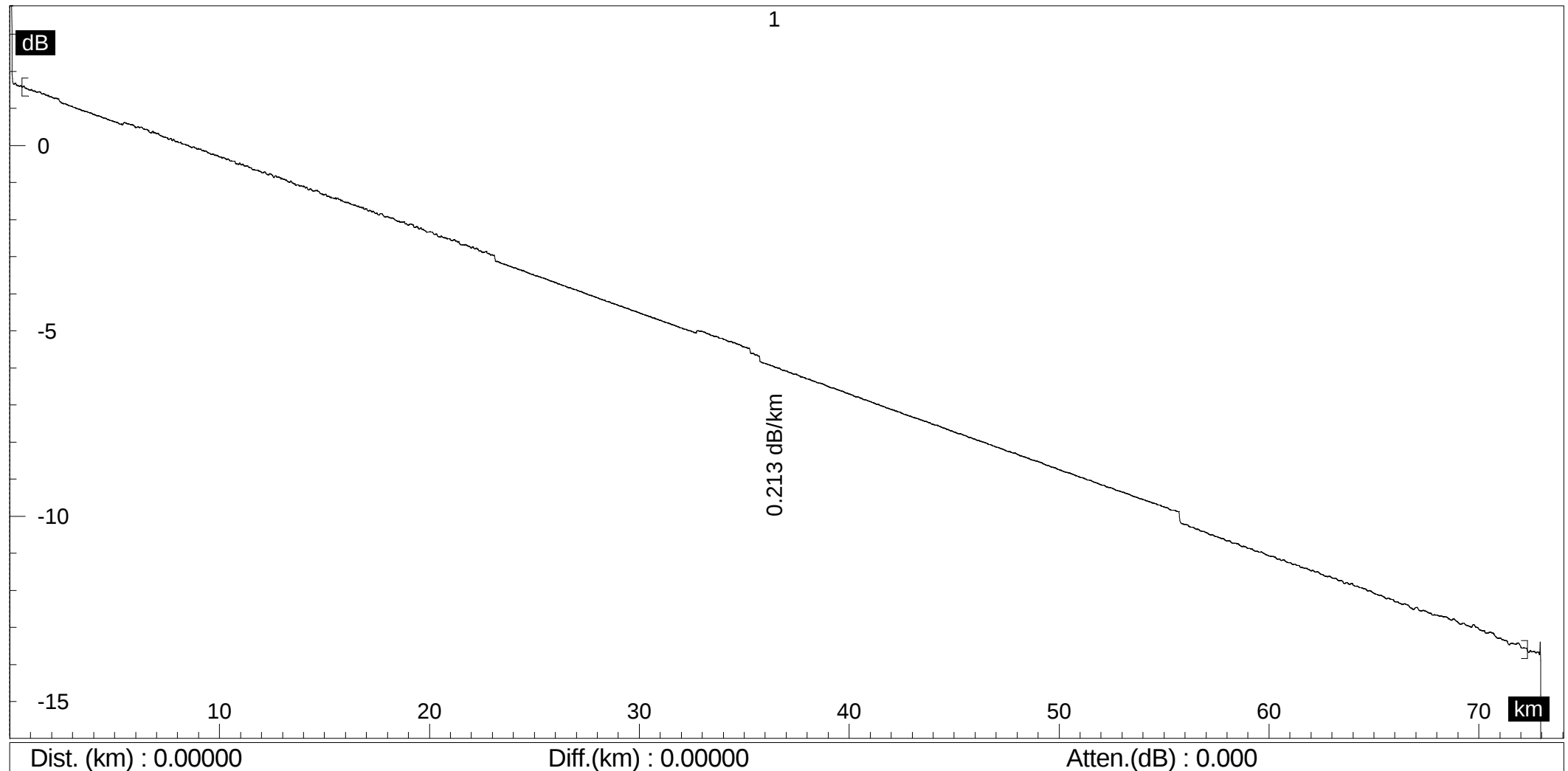


5/1/2001 11:20:51 AM

File : yel15top.tfw
Date : 4/29/2001 11:40:46 PM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : yellow/top
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) : 1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold : -60.00 dB



5/1/2001 11:20:02 AM

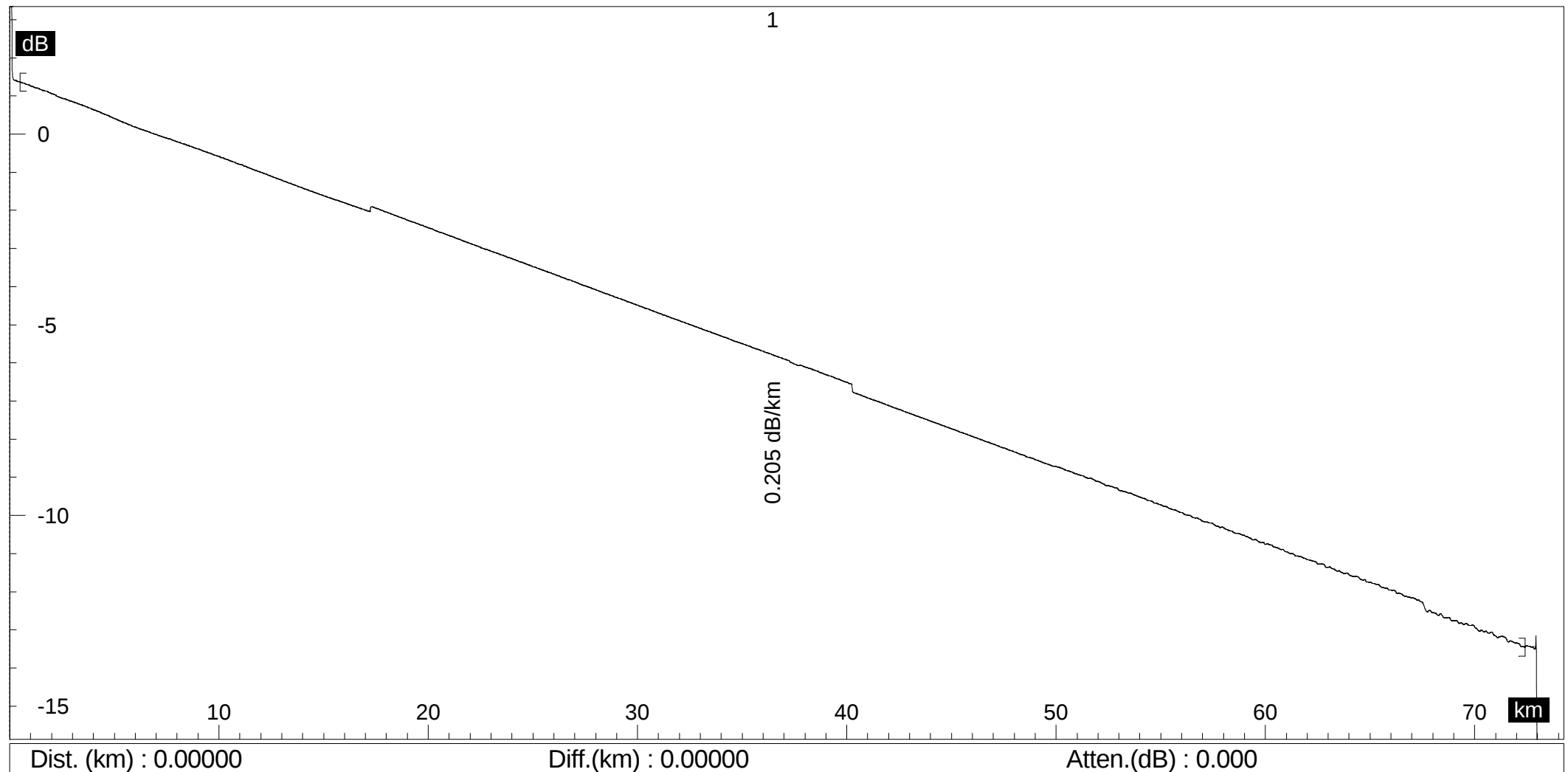
File : yel15bot.tfw
Date : 4/30/2001 1:40:21 AM

Device : MTS 5100 Num. 2001
Module : 5026VHD

Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : yellow/bottom
Way : O-->E
Comment :

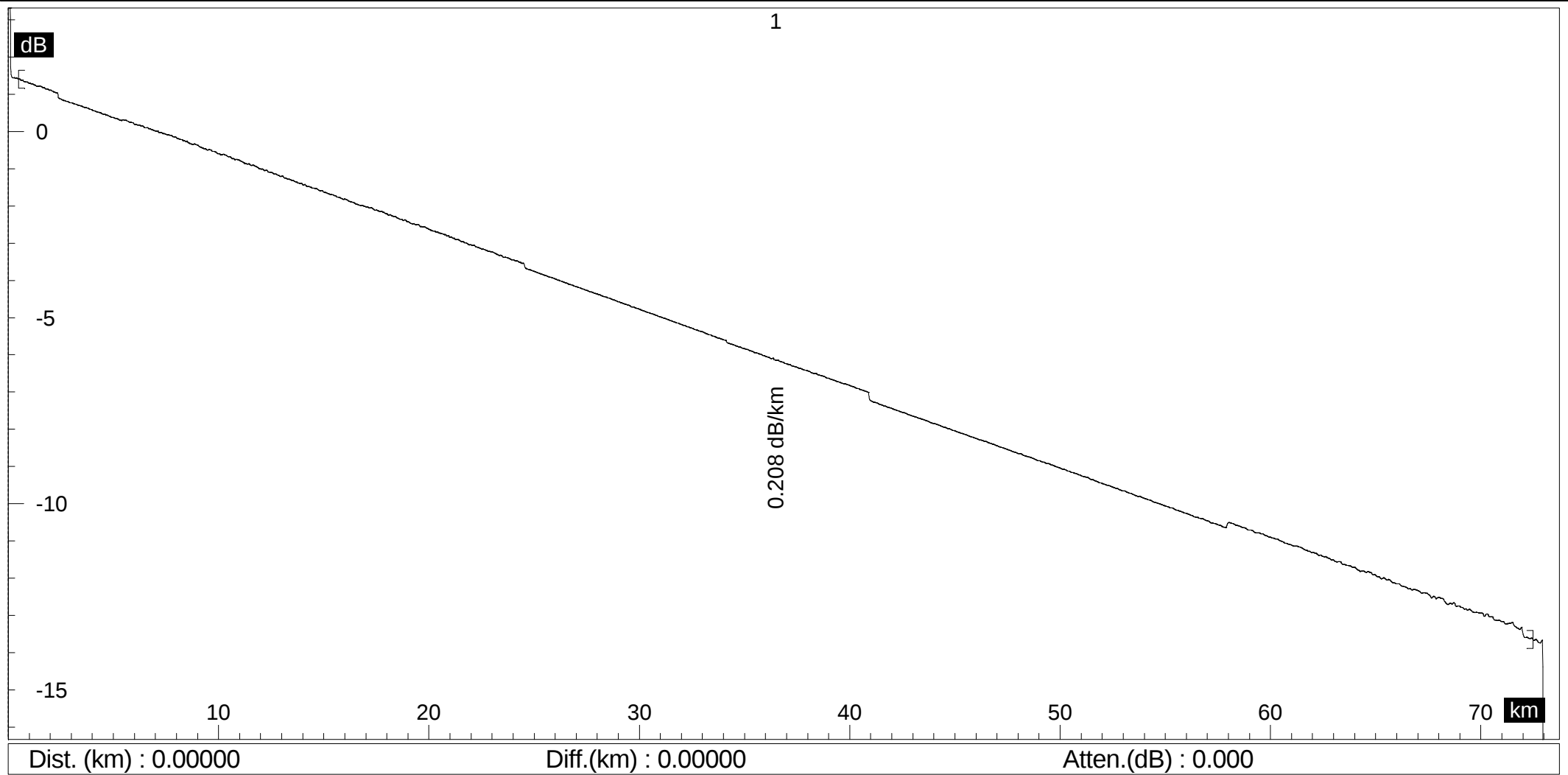
Lambda (nm) :1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold :-60.00 dB

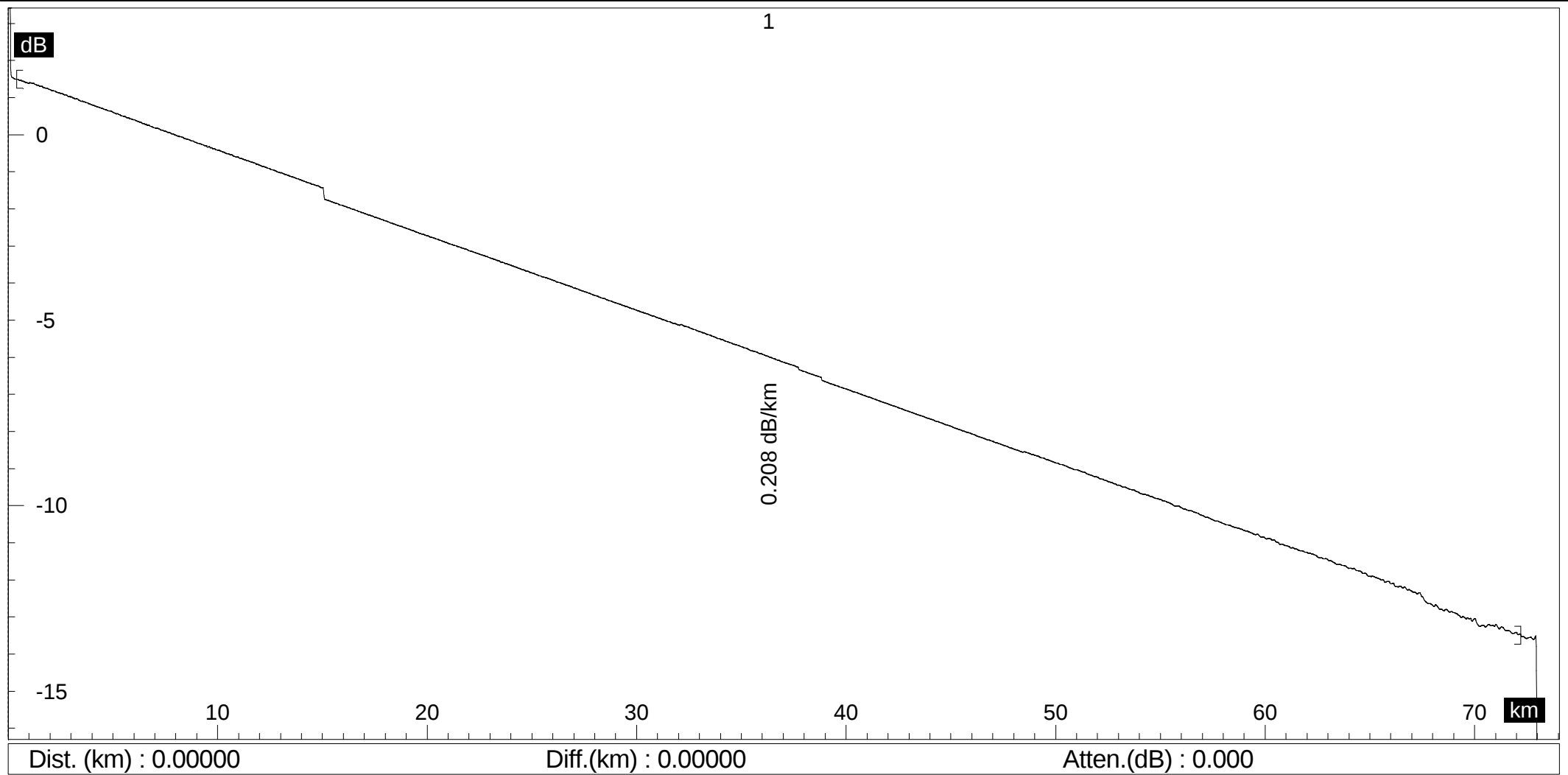


5/1/2001 11:20:25 AM

File :	grn15top.tfw	Device :	MTS 5100 Num. 2001	
Date :	4/30/2001 12:48:54 AM	Module :	5026VHD	
Title :	574-932	Lambda (nm) :	1550	Backscatter coeff. : -82.20 dB
Technic. :	Myles Kucera	Index :	1.470000	Loss thresholds : 0.05 dB
Cable :	574241	Pulse (ns) :	100	Slope thresholds : 0.000 dB/km
Fiber :	8	Range (km) :	80.000	Reflectance threshold : -60.00 dB
Origin :	FT 06	Acq. time :	02min	
Extremity :	green/top	Resolution :	10 m	
Way :	O-->E			
Comment :				



File : grn15bot.tfw		Device : MTS 5100 Num. 2001	
Date : 4/30/2001 3:41:03 AM		Module : 5026VHD	
Title : 574-932		Lambda (nm) :1550	Backscatter coeff.: -82.20 dB
Technic. : Myles Kucera		Index : 1.470000	Loss thresholds : 0.05 dB
Cable : 574241		Pulse (ns) : 100	Slope thresholds : 0.000 dB/km
Fiber : 8		Range (km) : 80.000	Reflectance threshold :-60.00 dB
Origin : FT 06		Acq. time : 02min	
Extremity : green/bottom		Resolution : 10 m	
Way : O-->E			
Comment :			

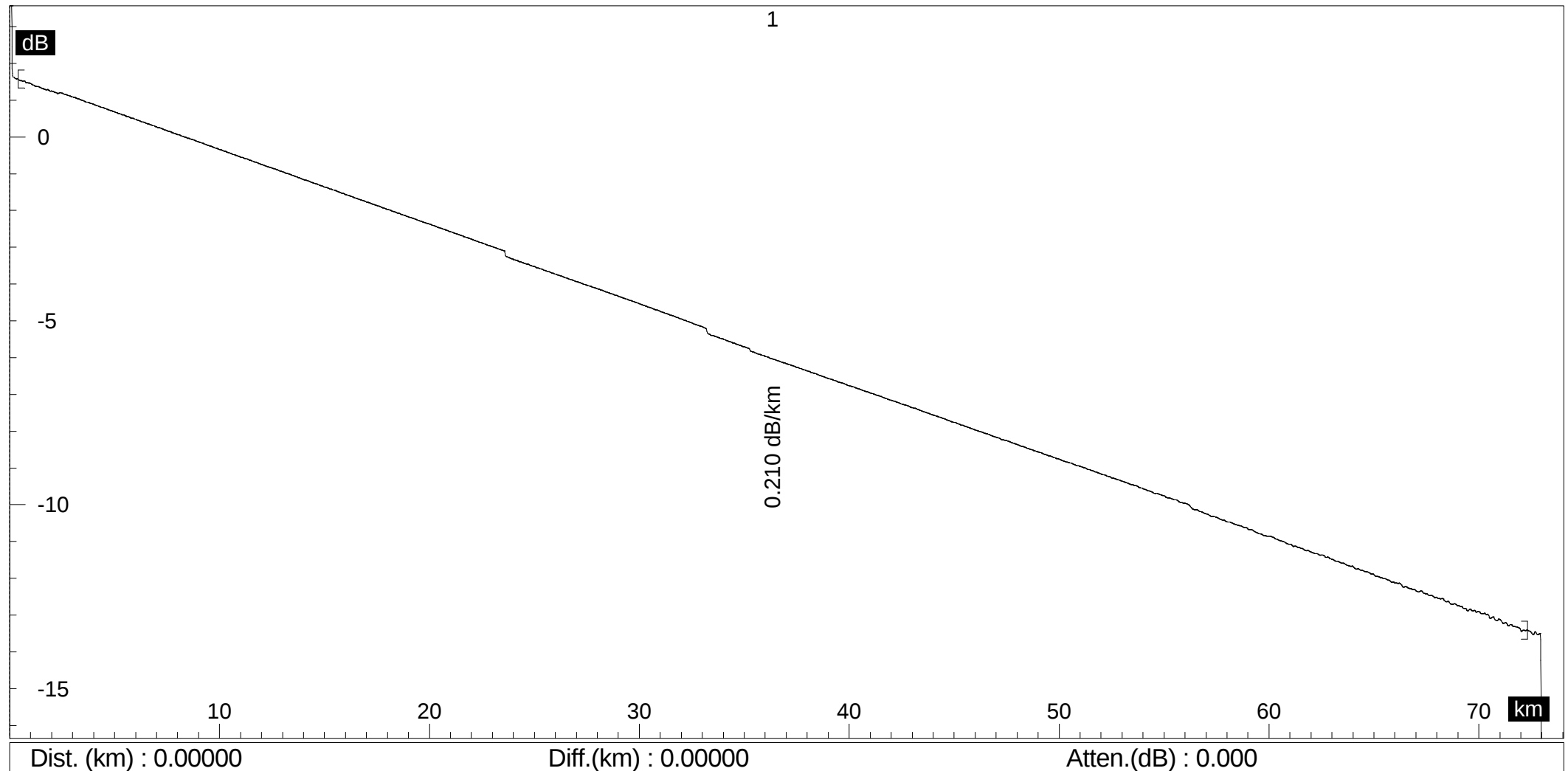


5/1/2001 11:20:44 AM

File : blk15top.tfw
Date : 4/30/2001 12:07:07 AM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : black/top
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) :1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold :-60.00 dB

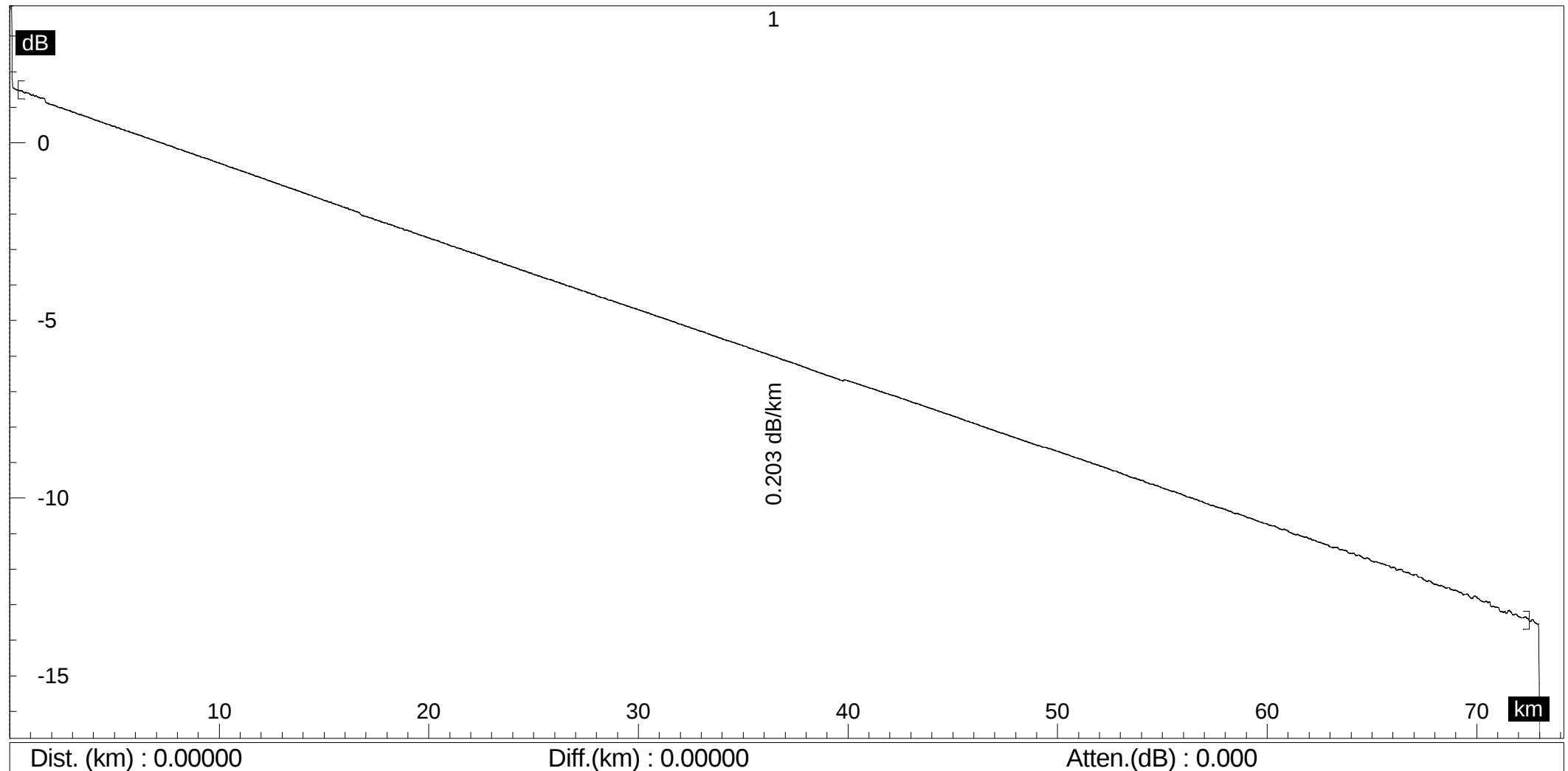


5/1/2001 11:19:56 AM

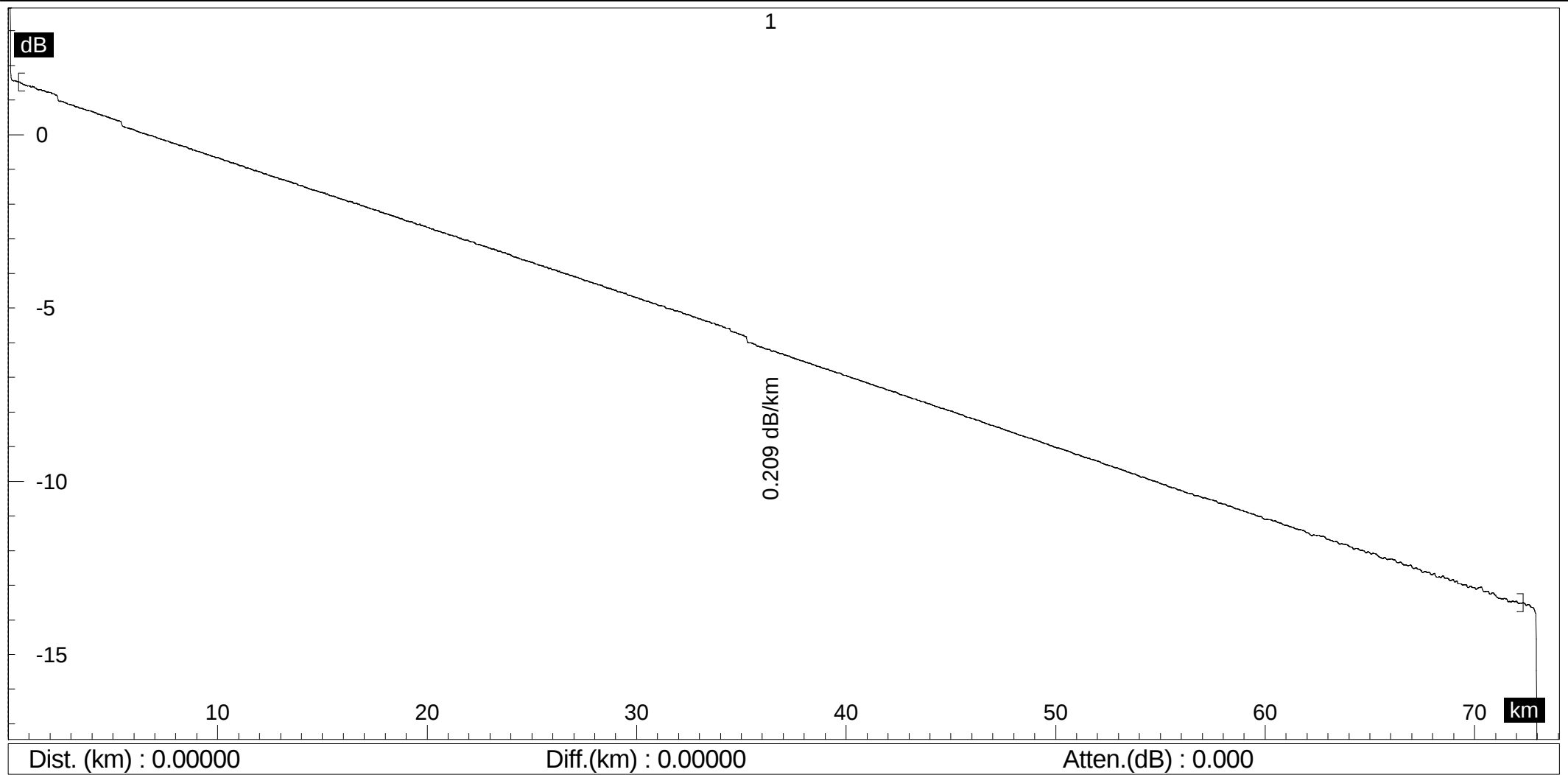
File : blk15bot.tfw
Date : 4/30/2001 2:02:02 AM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : black/bottom
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) :1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold :-60.00 dB

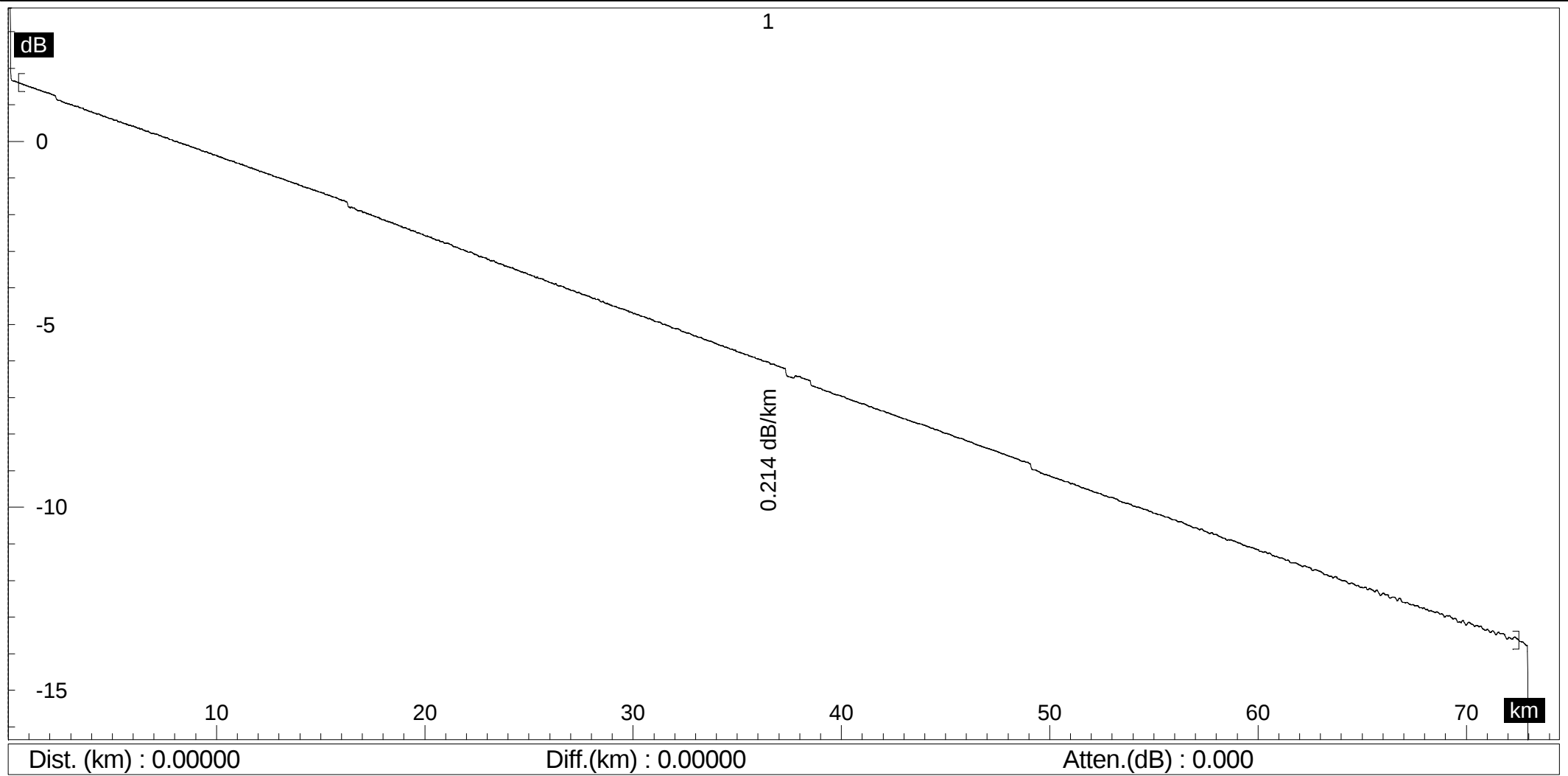


5/1/2001 11:20:31 AM		
File :	brn15top.tfw	Device : MTS 5100 Num. 2001
Date :	4/30/2001 12:34:40 AM	Module : 5026VHD
Title :	574-932	Lambda (nm) :1550
Technic. :	Myles Kucera	Index : 1.470000
Cable :	574241	Pulse (ns) : 100
Fiber :	8	Range (km) : 80.000
Origin :	FT 06	Acq. time : 02min
Extremity :	brown/top	Resolution : 10 m
Way :	O-->E	
Comment :		
		Backscatter coeff.: -82.20 dB
		Loss thresholds : 0.05 dB
		Slope thresholds : 0.000 dB/km
		Reflectance threshold :-60.00 dB



5/1/2001 11:19:42 AM

File :	brn15bot.fw	Device :	MTS 5100 Num. 2001	
Date :	4/30/2001 3:26:21 AM	Module :	5026VHD	
Title :	574-932	Lambda (nm) :	1550	Backscatter coeff.: -82.20 dB
Technic. :	Myles Kucera	Index :	1.470000	Loss thresholds : 0.05 dB
Cable :	574241	Pulse (ns) :	100	Slope thresholds : 0.000 dB/km
Fiber :	8	Range (km) :	80.000	Reflectance threshold :-60.00 dB
Origin :	FT 06	Acq. time :	02min	
Extremity :	brown/bottom	Resolution :	10 m	
Way :	O-->E			
Comment :				

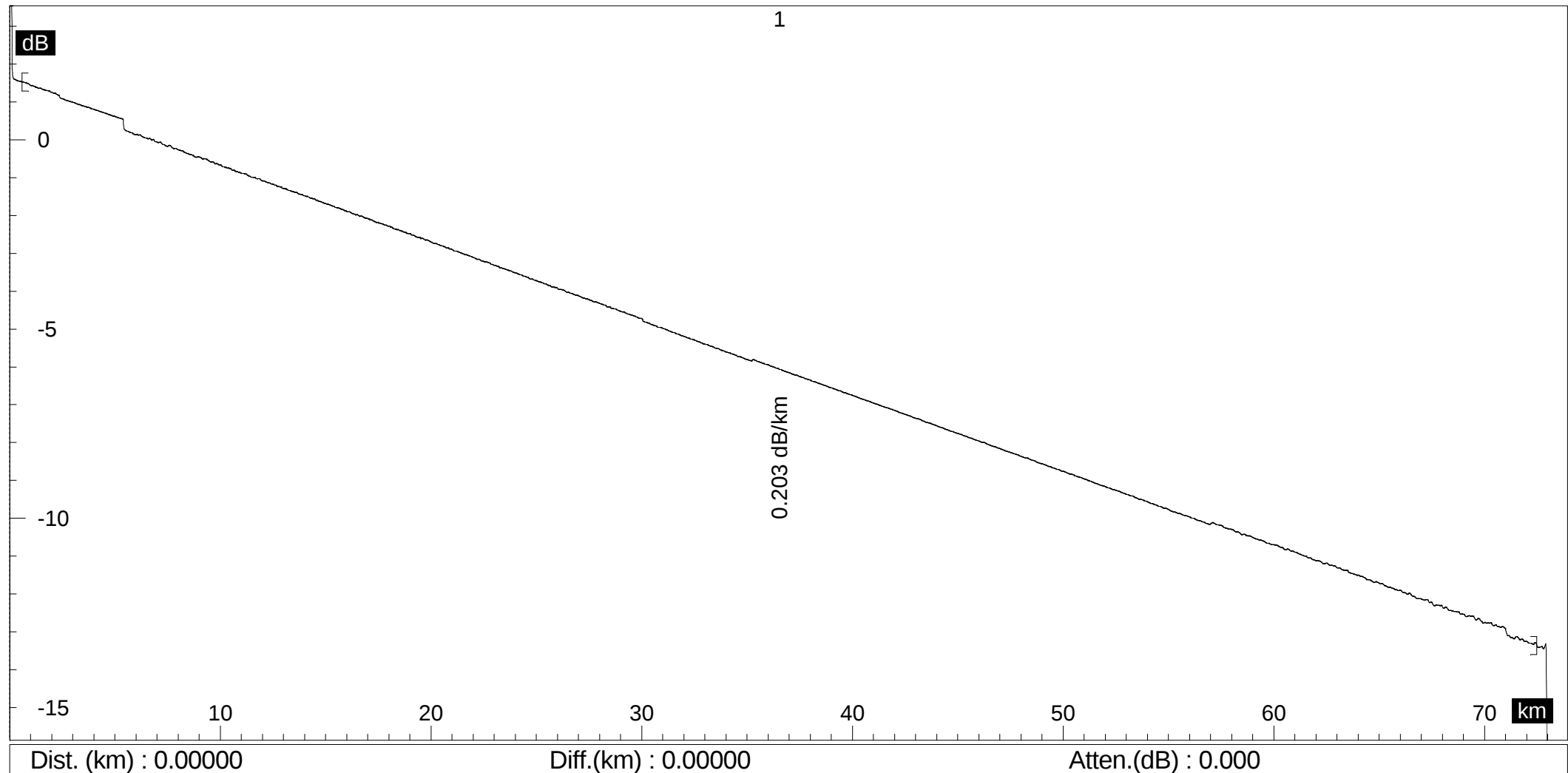


5/1/2001 11:20:18 AM

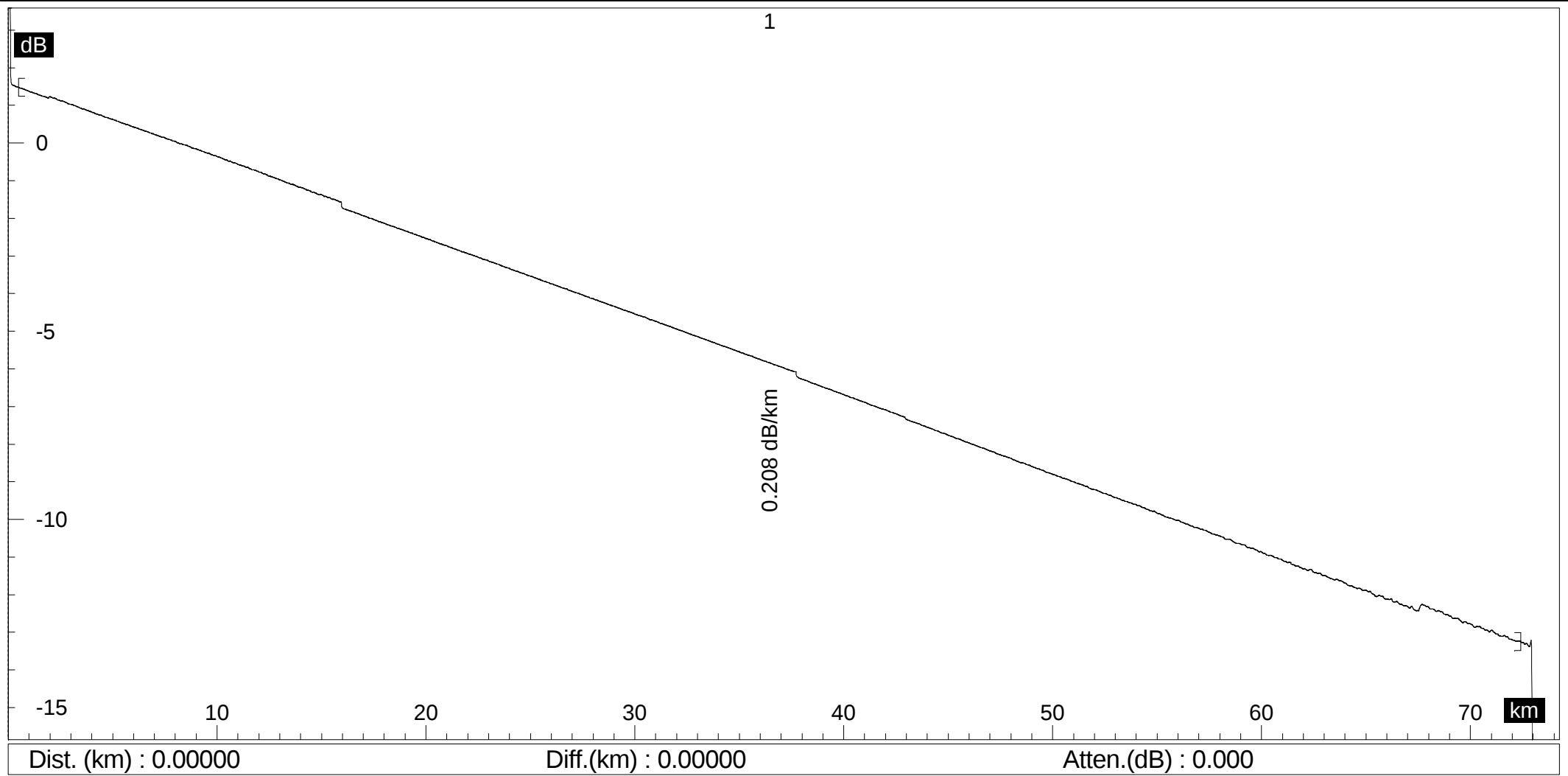
File : orn15top.tfw
Date : 4/30/2001 1:00:52 AM
Title : 574-932
Technic. : Myles Kucera
Cable : 574241
Fiber : 8
Origin : FT 06
Extremity : orange/top
Way : O-->E
Comment :

Device : MTS 5100 Num. 2001
Module : 5026VHD
Lambda (nm) : 1550
Index : 1.470000
Pulse (ns) : 100
Range (km) : 80.000
Acq. time : 02min
Resolution : 10 m

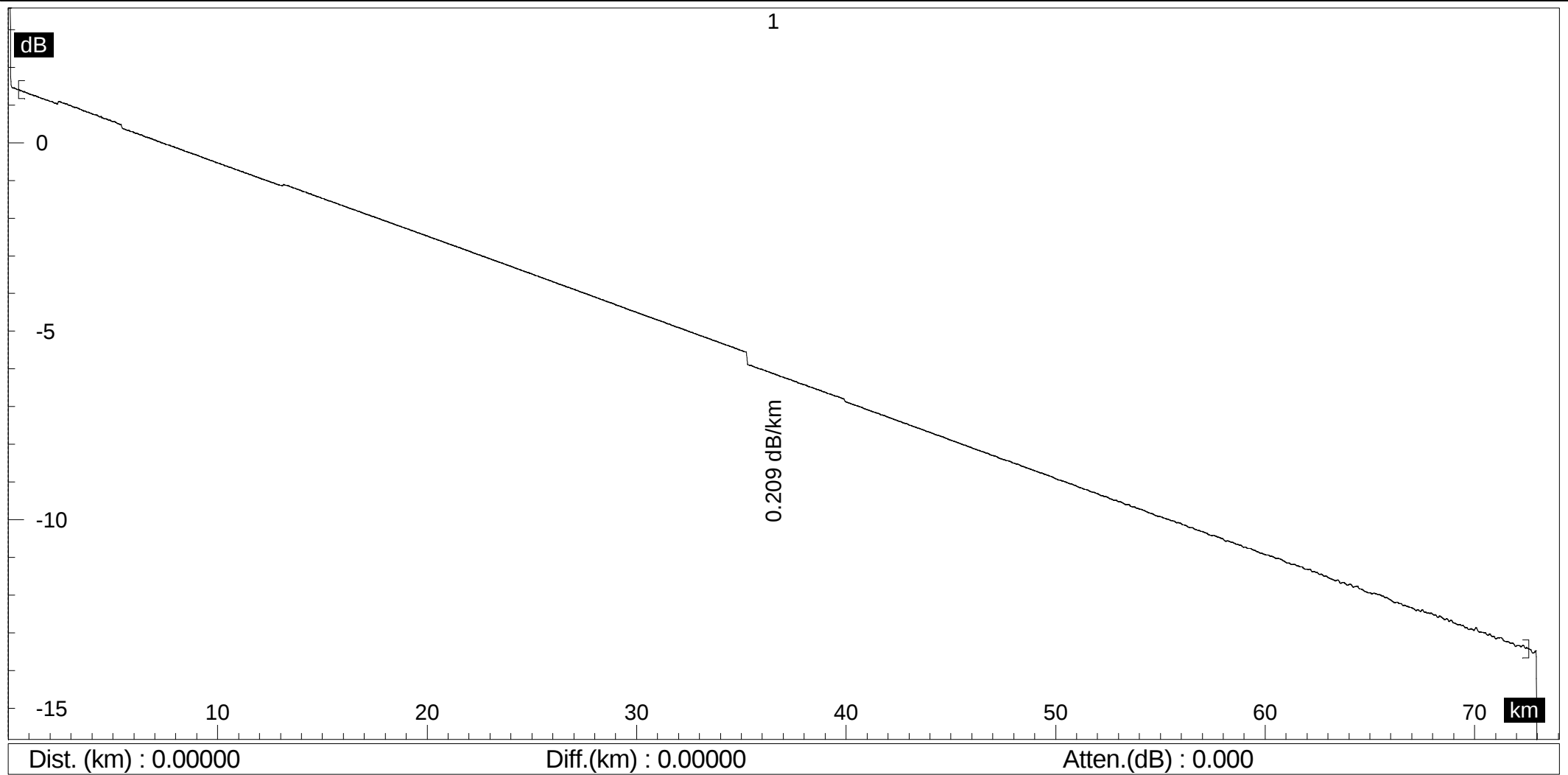
Backscatter coeff.: -82.20 dB
Loss thresholds : 0.05 dB
Slope thresholds : 0.000 dB/km
Reflectance threshold : -60.00 dB



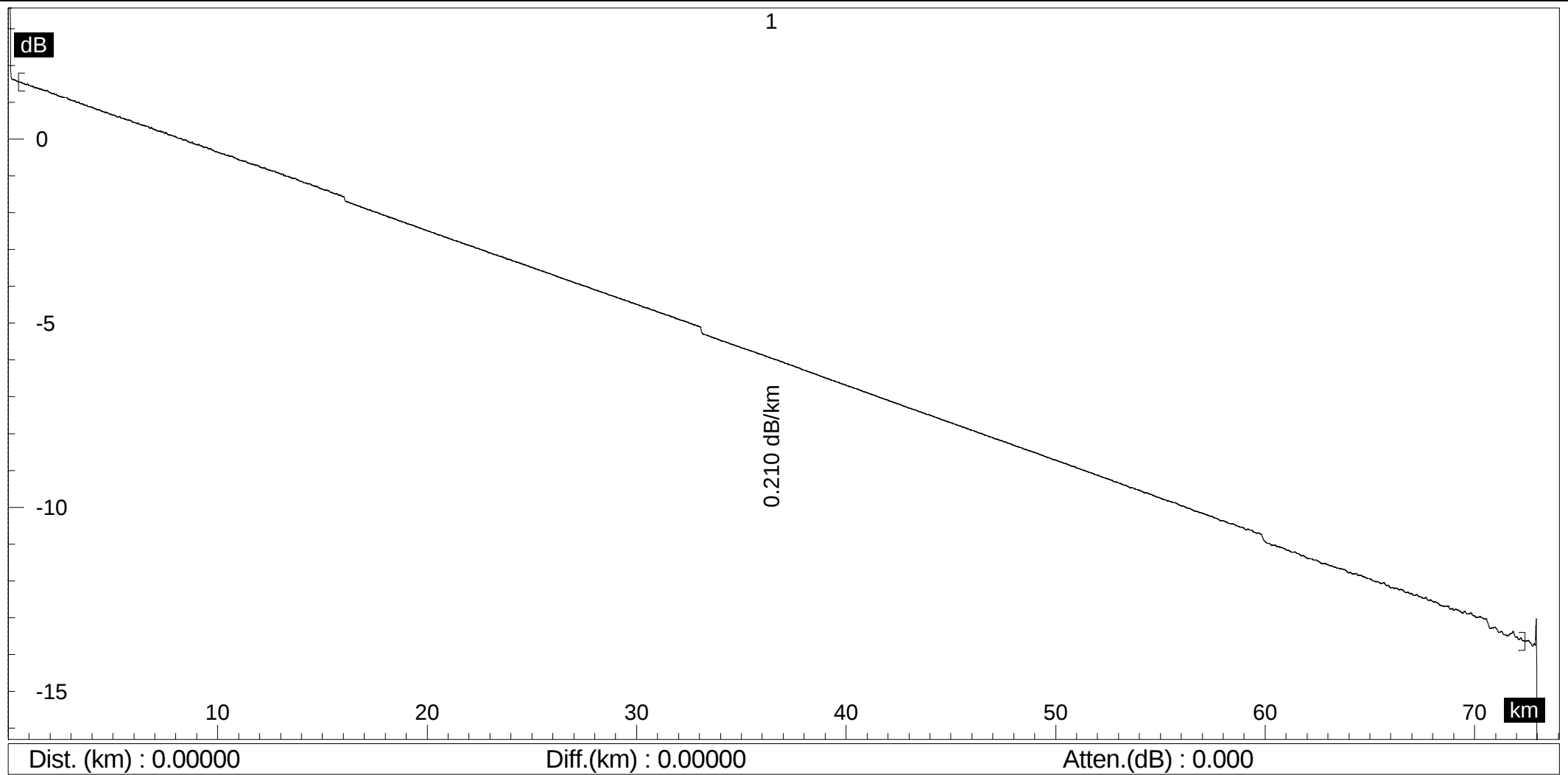
5/1/2001 11:19:27 AM		
File :	orn15bot.fw	Device : MTS 5100 Num. 2001
Date :	4/30/2001 3:50:22 AM	Module : 5026VHD
Title :	574-932	Lambda (nm) :1550
Technic. :	Myles Kucera	Index : 1.470000
Cable :	574241	Pulse (ns) : 100
Fiber :	8	Range (km) : 80.000
Origin :	FT 06	Acq. time : 02min
Extremity :	orange/bottom	Resolution : 10 m
Way :	O-->E	
Comment :		
		Backscatter coeff.: -82.20 dB
		Loss thresholds : 0.05 dB
		Slope thresholds : 0.000 dB/km
		Reflectance threshold :-60.00 dB



File : pnk15top.tfw		Device : MTS 5100 Num. 2001	
Date : 4/30/2001 1:09:28 AM		Module : 5026VHD	
Title : 574-932		Lambda (nm) :1550	Backscatter coeff.: -82.20 dB
Technic. : Myles Kucera		Index : 1.470000	Loss thresholds : 0.05 dB
Cable : 574241		Pulse (ns) : 100	Slope thresholds : 0.000 dB/km
Fiber : 8		Range (km) : 80.000	Reflectance threshold :-60.00 dB
Origin : FT 06		Acq. time : 02min	
Extremity : pink/top		Resolution : 10 m	
Way : O-->E			
Comment :			



5/1/2001 11:19:03 AM			
File :	pnk15bot.tfw	Device :	MTS 5100 Num. 2001
Date :	4/30/2001 3:58:26 AM	Module :	5026VHD
Title :	574-932	Lambda (nm) :	1550
Technic. :	Myles Kucera	Index :	1.470000
Cable :	574241	Pulse (ns) :	100
Fiber :	8	Range (km) :	80.000
Origin :	FT 06	Acq. time :	02min
Extremity :	pink/bottom	Resolution :	10 m
Way :	O-->E	Backscatter coeff.:	-82.20 dB
Comment :		Loss thresholds :	0.05 dB
		Slope thresholds :	0.000 dB/km
		Reflectance threshold :	-60.00 dB

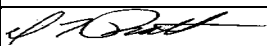


360americas**SEGMENT 9**

SUBMARINE CABLE SYSTEM

FACTORY RELEASE CERTIFICATE**for Segment : 9 Rio to Las Toninas**

Serial/Reference No	Price ref / Item	Cable Type	Quantity
Section 932	Section 1, Item 1.4	SA..8	13.331 km
Section 932	Section 1, Item 1.3	SAL..8	59.515 km
Section 932	Section 2, Item 2.3	SAL..8/SA..8	3 Transitions
TOTAL			72.846 km + 3 Transitions

PURCHASERS	360Americas		
CONTRACTOR	ALCATEL SUBMARINE NETWORKS		
MANUFACTURER	ALCATEL SUBMARINE NETWORKS - USA -		
DATE OF MANUFACTURE	Date: 1-May-01		
SPECIFICATION & ISSUE STATUS	Based on SLD 1.5 5/9/2001		
DATE & LOCATION OF TESTS	PORTLAND		
PURCHASER TEST MONITORED BY		DATE:	1-May-01
TEST PERFORMED BY A. S. N.		DATE:	1-May-01
DATA APPROVED		DATE:	1-May-01
APPROVED BY T BOOKWALTER		DATE:	1-May-01
CONCESSIONS/PRODUCT DEFECTS	////////////////////////////////////		

The signing of this Factory Release Certificate by the purchasers does not remove any responsibility from the manufacturer for the provision of this item or associated equipment in accordance with the specification stated above.

SIGNATURE:

DATE: