2598

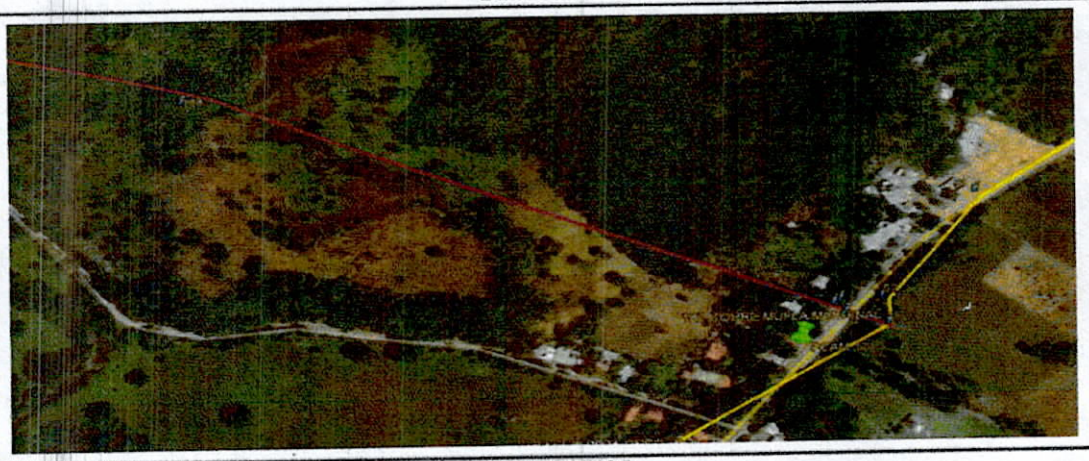
2252

Consorcio CCTV Casanare 2020

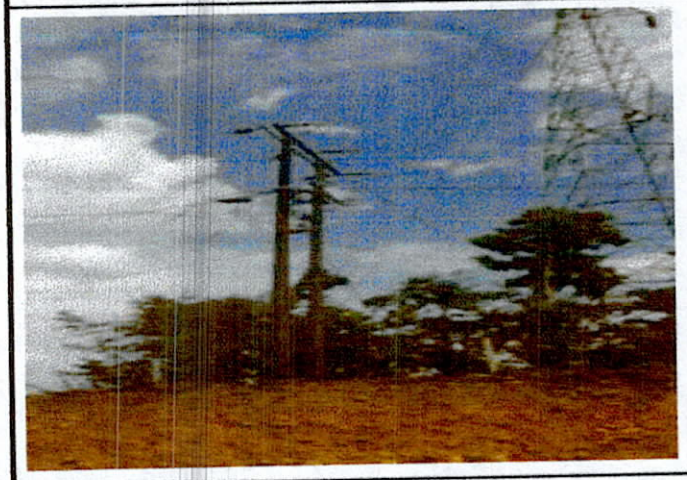
¿ Informe y observaciones del Técnico ?

Se realizó retiro de fibra óptica spam 800 y se suministró e instaló 1000 metros de nueva fibra óptica de 48 hilos Spam 800 desde Torre 1 Marginal via Chaparral a torre 2 vía Chaparral, también se certificó tramo de 48 hilos, se suministró e instaló mu de 24 hilos.

DIAGRAMA



FOTOGRAFIAS









200

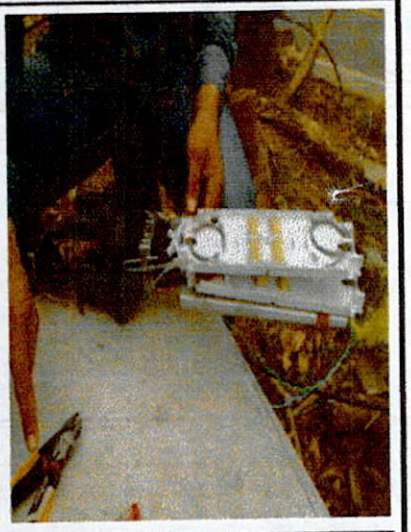
2599













ELABORÓ CONTRATISTA	JAVIER CAMACHO	Firma
REVISÓ TECNICO DE REDES	JHONAR LEONARDO PEREZ	Firma
APROBÓ POR LA INTERVENTORIA	RONNY RENNE ROJAS REINA	Firma

2600

Consorcio Casanare 2020

CONTRATO No.	2232	DEL	28/12/2020	CONSECUTIVO INTERNO	37
OBJETO:	OPTIMIZACION Y MEJORAMIENTO DE LAS TECNOLOGIAS PARA LA VIDEO VIGILANCIA Y SISTEMAS DE RECEPCION DE DENUNCIA DE DELITOS Y EMERGENCIAS EN EL DEPARTAMENTO DE CASANARE				

FORMATO DE EJECUCIÓN

MUNICIPIO:	TAURAMENA
ZONA:	URBANA

FECHA DE REALIZACION		
18	3	2021

LOCALIZACION O SITIO DE INTERVENCIÓN

TRAMO	TRONCAL CAMARAS		DIRECCION	N/A	
INICIO TRAMO	CRA 13 CALLE 4	FIN TRAMO	CARRERA13 CALLE 1	BARRIO:	0

Estado de fibra:	OPERATIVA					
¿Tarea a realizar ?		SI	EJECUCION			
¿ Daño en:?		SI	TRAMO	SI	DERIVACION	SI RESERVA

PERSONAL QUE REALIZA EJECUCION DEL CONTRATO

SUPERVISOR	JAVIER CAMACHO	**CARGO:**	REPRESENTANTE LEGAL
TÉCNICO	JHONAR LEONARDO PEREZ	**CARGO:**	TÉCNICO DE REDES

RESULTADO DE LA EJECUCIÓN

¿ Descripción del problema ?

Se presentó corte multiple en tramo de fibra, por lo que se requiere suministrar e instalar 150 metros de fibra, 24 hilos spam 200.

Tipo de revisión realizada

Revisión Tramo FO	SI	Revisión anclajes FO	SI	Adecuación Técnica	SI
Revisión Derivacion	SI	Revisión susp. FO	SI	Empalme de Fibra	NO
Revisión reserva FO	SI	Medición FO	SI	Empalme ODF	NO

ITEM	DESCRIPCION DEL ITEM DEL CONTRATO EJECUTADO	CANT
4.3	Suministro e instalación a todo costo por metro lineal Fibra óptica Monomodo 24 Hilos Span 200	150

2601

Consorcio CCTV Casanare 2020

¿ Informe y observaciones del Técnico ?
Se realizó suministro e instalación de tramo de 150 metros de fibra óptica 24 hilos spam 200.

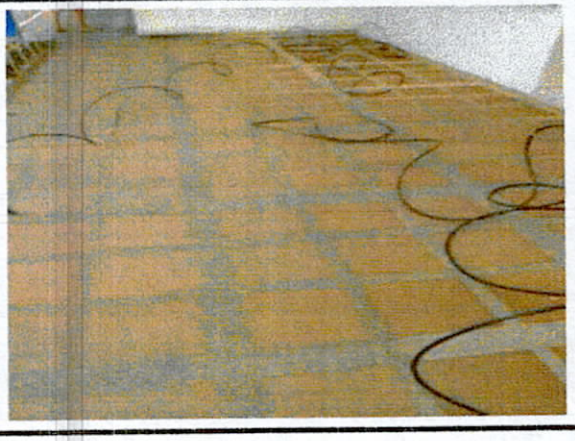
DIAGRAMA



FOTOGRAFIAS





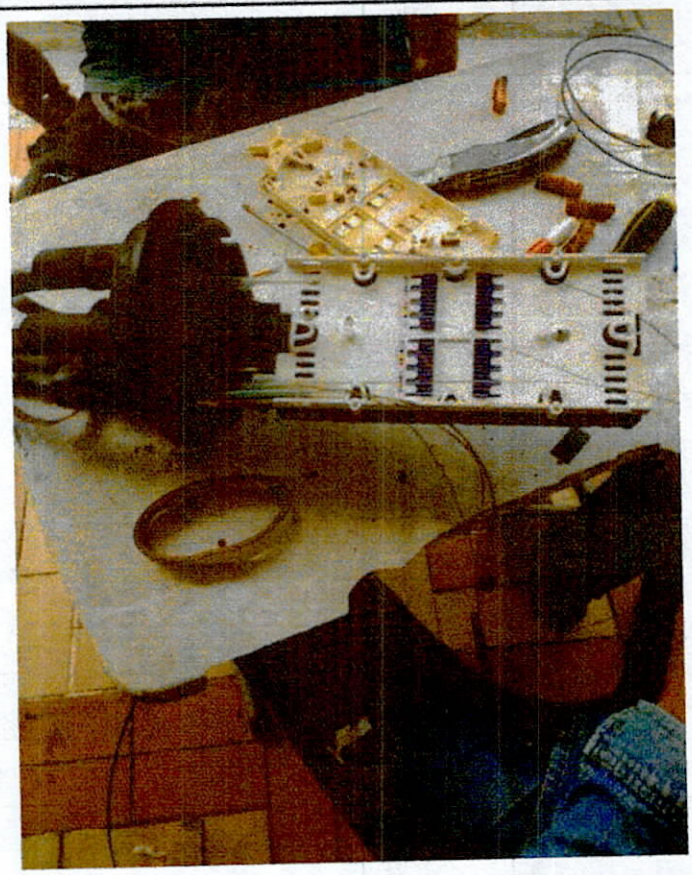




2602







ELABORÓ CONTRATISTA	JAVIER CAMACHO	Firma
REVISÓ TECNICO DE REDES	JHONAR LEONARDO PEREZ	Firma
APROBÓ POR LA INTERVENTORIA	RONNY RENNE ROJAS REINA	Firma

2603

Consorcio Casanare 2020

CONTRATO No.	2232	DEL	28/12/2020	CONSECUTIVO INTERNO	38
OBJETO:	OPTIMIZACION Y MEJORAMIENTO DE LAS TECNOLOGIAS PARA LA VIDEO VIGILANCIA Y SISTEMAS DE RECEPCION DE DENUNCIA DE DELITOS Y EMERGENCIAS EN EL DEPARTAMENTO DE CASANARE				

FORMATO DE EJECUCIÓN

MUNICIPIO:	YOPAL
ZONA:	URBANA

FECHA DE REALIZACION		
18	3	2021

LOCALIZACION O SITIO DE INTERVENCIÓN

TRAMO	N/A		DIRECCION	CENTRO DE CONTROL	
INICIO TRAMO	N/A	FIN TRAMO	N/A	BARRIO:	0

Estado de fibra:	N/A					
¿Tarea a realizar ?		SI	EJECUCION			
¿ Daño en:?		NO	TRAMO	NO	DERIVACION	NO RESERVA

PERSONAL QUE REALIZA EJECUCION DEL CONTRATO

SUPERVISOR	JAVIER CAMACHO	**CARGO:**	REPRESENTANTE LEGAL
TÉCNICO	JHONAR LEONARDO PEREZ	**CARGO:**	TÉCNICO DE REDES

RESULTADO DE LA EJECUCION

¿ Descripción del problema ?

El sistema integral de refrigeración del cuarto de control del centro de mando y control de la policía de Yopal, se encontró que cuatro unidades no operan correctamente, por lo que es necesario su pronta intervención, se requiere ejecutar el servicio de mantenimiento preventivo.

Tipo de revisión realizada

Revisión Tramo FO	NO	Revisión anclajes FO	NO	Adecuación Técnica	NO
Revisión Derivacion	NO	Revisión susp. FO	NO	Empalme de Fibra	NO
Revisión reserva FO	NO	Medición FO	NO	Empalme ODF	NO

ITEM	DESCRIPCION DEL ITEM DEL CONTRATO EJECUTADO	CANT
1.32	servicio técnico de mantenimiento preventivo a todo costo de Aire acondicionado tipo Caset 60.000 BTU, incluye Unidad condensadora de 5 toneladas.	13
1.35	servicio técnico de mantenimiento preventivo a todo costo de Aire acondicionado tipo Split 12.000 o 9.000 BTU, incluye Unidad condensadora	1

20520

2604

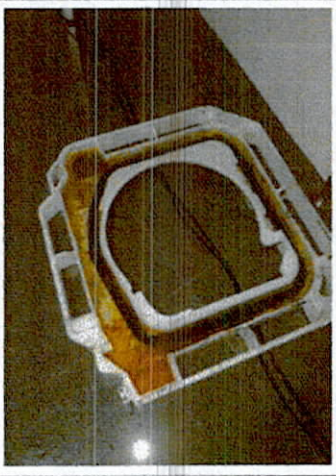
Consorcio CCTV Casanare 2020

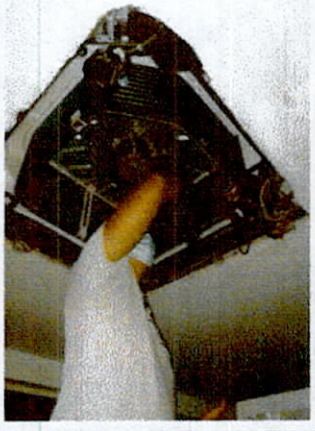
¿ Informe y observaciones del Técnico ?
Se realizó mantenimiento a unidades de refrigeración y se encontró que la tarjeta principal de la unidad manejadora de aire de diez (10) toneladas se encuentra con fallo, por lo que se requiere cambio para su correcto funcionamiento.

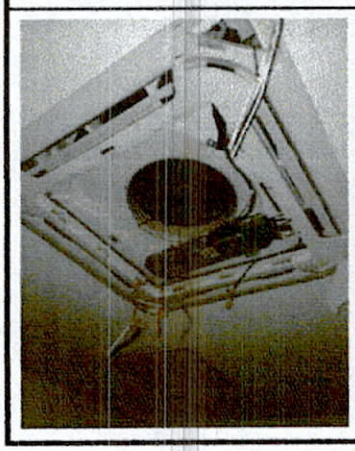
DIAGRAMA



FOTOGRAFIAS





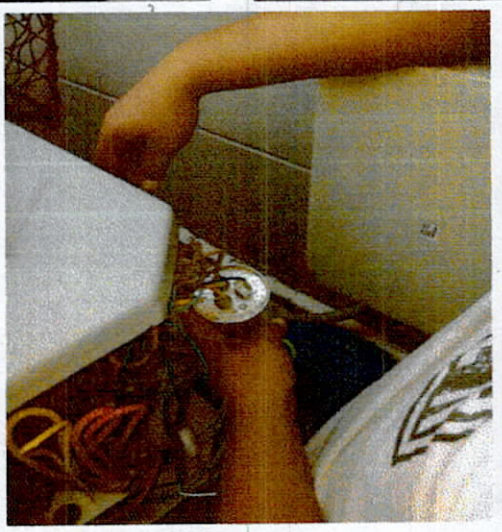
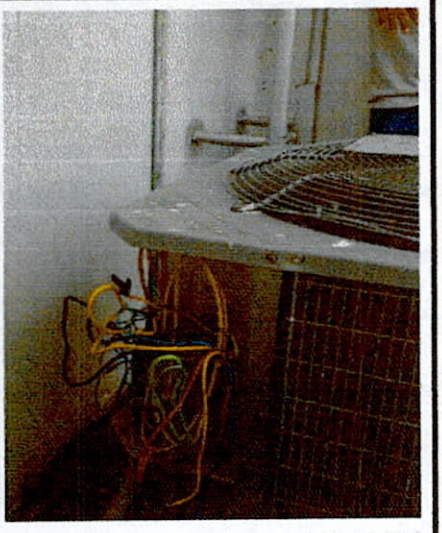




206 70

2605





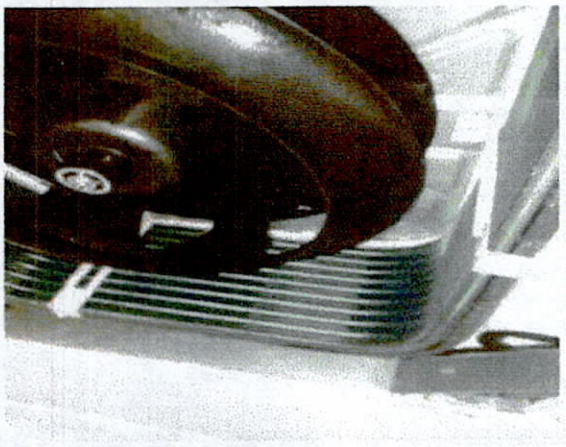
2606











ELABORÓ CONTRATISTA	JAVIER CAMACHO	Firma
REVISÓ TECNICO DE REDES	JHONAR LEONARDO PEREZ	Firma
APROBÓ POR LA INTERVENTORIA	RONNY RENNE ROJAS REINA	Firma

208 ZC

2607

Consorcio CCTV Casanare 2020

CONTRATO No.	2232	DEL	28/12/2020	CONSECUTIVO INTERNO	39
OBJETO:	OPTIMIZACION Y MEJORAMIENTO DE LAS TECNOLOGIAS PARA LA VIDEO VIGILANCIA Y SISTEMAS DE RECEPCION DE DENUNCIA DE DELITOS Y EMERGENCIAS EN EL DEPARTAMENTO DE CASANARE				

FORMATO DE EJECUCIÓN

MUNICIPIO:	YOPAL
ZONA:	URBANA

FECHA DE REALIZACION		
19	3	2021

LOCALIZACION O SITIO DE INTERVENCIÓN

TRAMO	N/A		DIRECCION	CENTRO DE CONTROL POLICIA NACIONAL	
INICIO TRAMO	N/A	FIN TRAMO	N/A	BARRIO:	0

Estado de fibra:	N/A					
¿Tarea a realizar ?		SI	EJECUCION			
¿ Daño en:?		NO	TRAMO	NO	DERIVACION	NO RESERVA

PERSONAL QUE REALIZA EJECUCION DEL CONTRATO

SUPERVISOR	JAVIER CAMACHO	**CARGO:**	REPRESENTANTE LEGAL
TÉCNICO	JHONAR LEONARDO PEREZ	**CARGO:**	TÉCNICO DE REDES

RESULTADO DE LA EJECUCION

¿ Descripción del problema ?

La red de datos del centro de control y monitoreo se encontró desorganizada, sin marcar por lo que no es posible la identificación de cada patch cord, tanto de cobre como de fibra. Por otro lado los equipos de computo se encuentran con exceso de material particulado por lo que se requiere su respectivo mantenimiento preventivo, es necesario restablecer las configuraciones para aumentar su rendimiento

Tipo de revisión realizada

Revisión Tramo FO	NO	Revisión anclajes FO	NO	Adecuación Técnica	NO
Revisión Derivacion	NO	Revisión susp. FO	NO	Empalme de Fibra	NO
Revisión reserva FO	NO	Medición FO	NO	Empalme ODF	NO

ITEM	DESCRIPCION DEL ITEM DEL CONTRATO EJECUTADO	CANT
1.36	Servicio técnico Electronico General, para inspección de Redes de Datos, Configuración de redes, reubicacion e inspección de puntos de datos. Servicio pagado por Dia.	10
5.41	Servicio técnico de mantenimiento preventivo a estaciones de trabajo tipo Workstation	10

209 209

2668

Consorcio CCTV Casanare 2020

¿ Informe y observaciones del Técnico ?

Se realizó servicio técnico electrónico general, para inspección de redes de datos, configuración de redes de datos, reubicación e inspección de puntos de redes de datos, se organizó el cableado de los equipos del cuarto de control, así mismo se realizó mantenimiento preventivo a equipos workstation tanto a nivel físico como a nivel de software, así mismo se configuró una estación workstation con el fin de manejar y visualizar el total de cámaras que actualmente se encuentran operativas.

DIAGRAMA



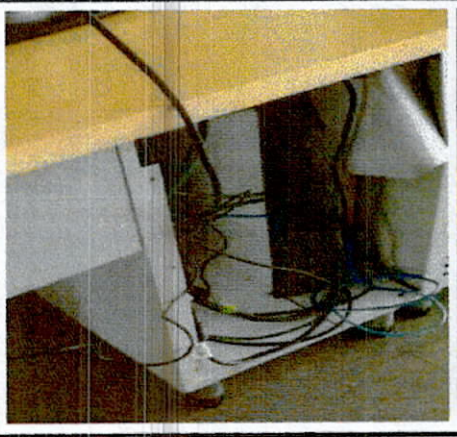
FOTOGRAFIAS

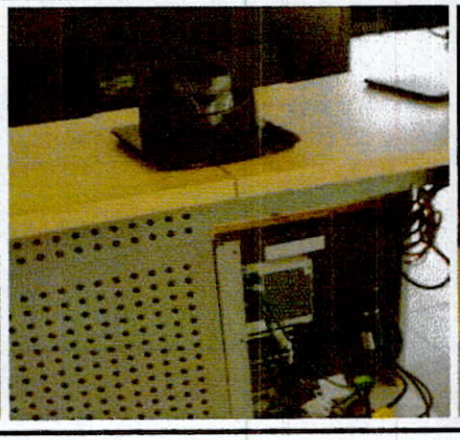






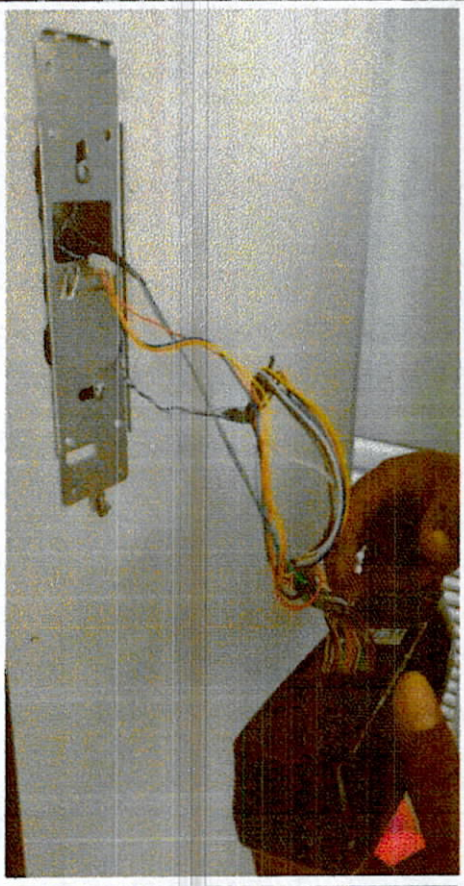


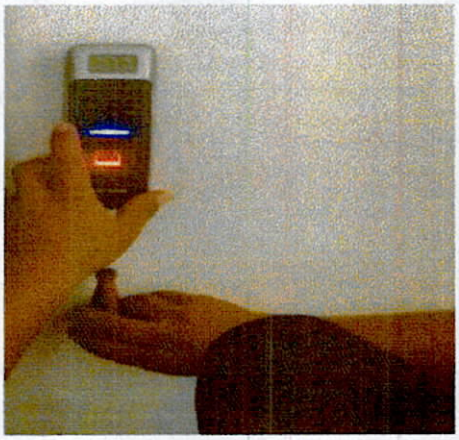


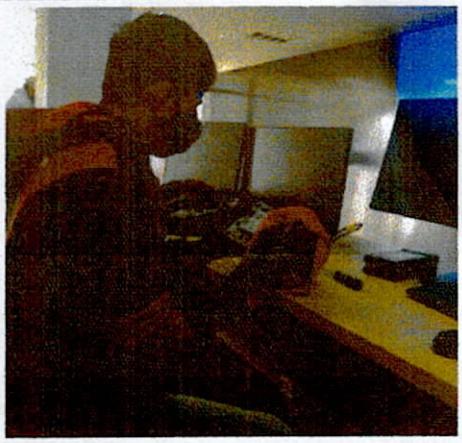




2609

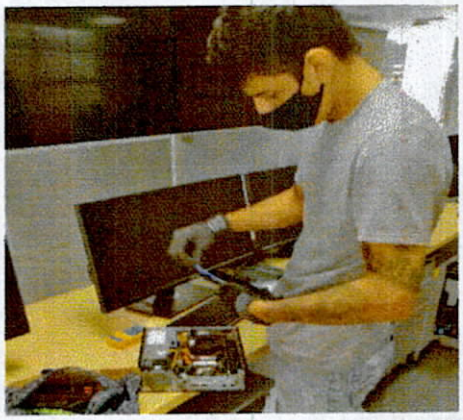


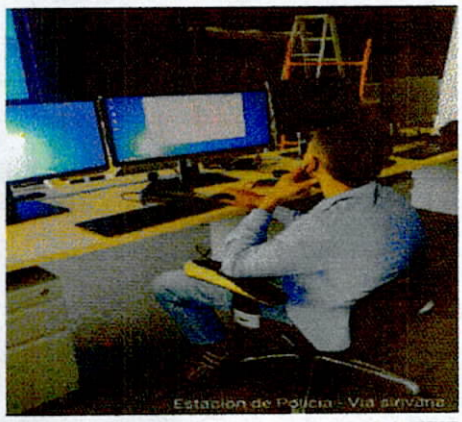




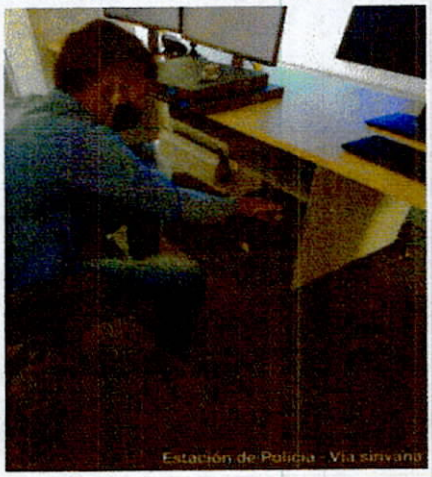






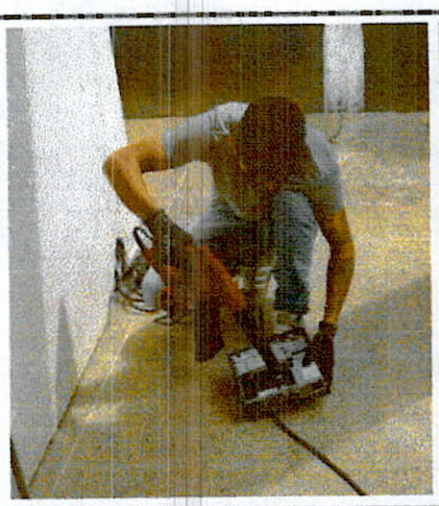

Estación de Policía - Vía sirivana

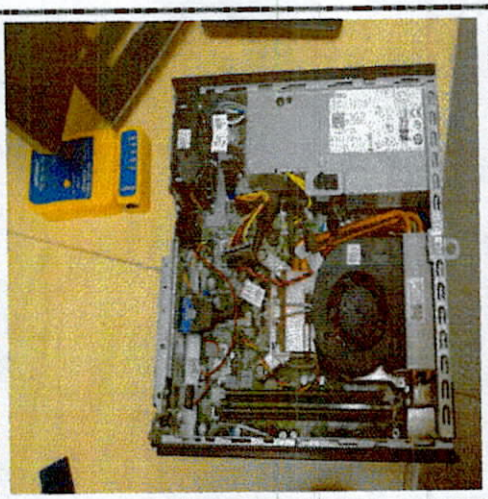

Estación de Policía - Vía sirivana

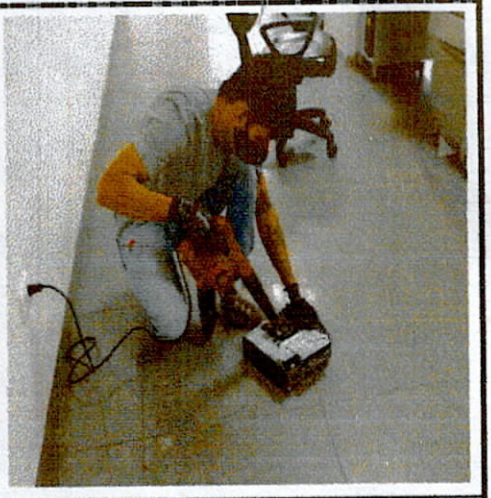

Estación de Policía - Vía sirivana

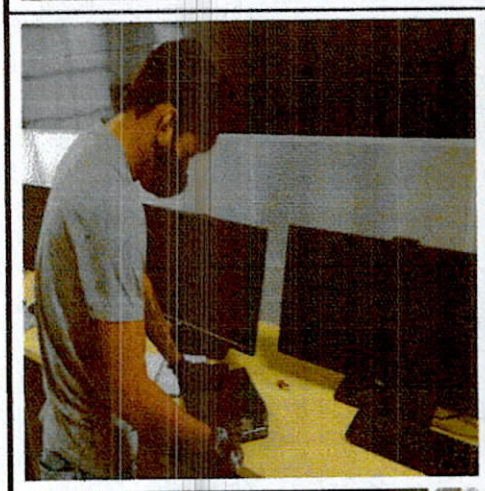


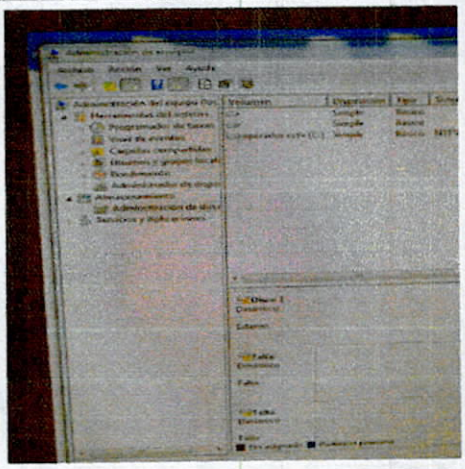
2610

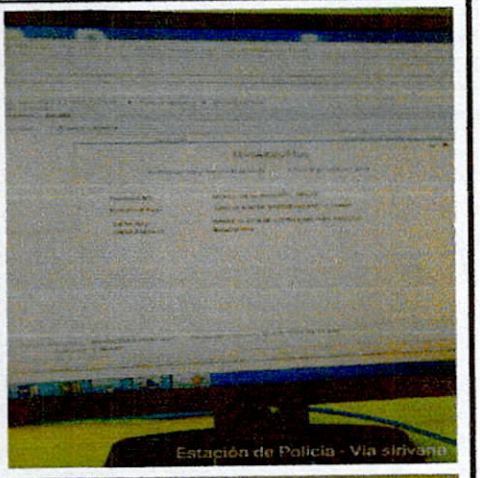




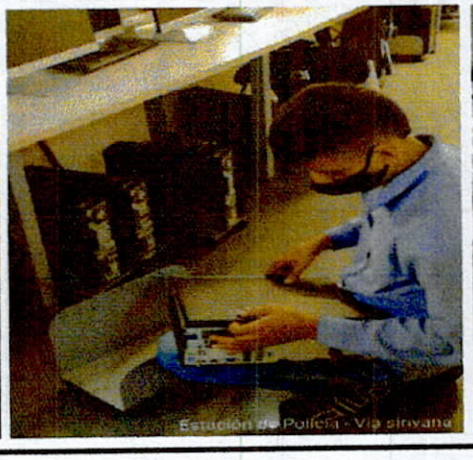


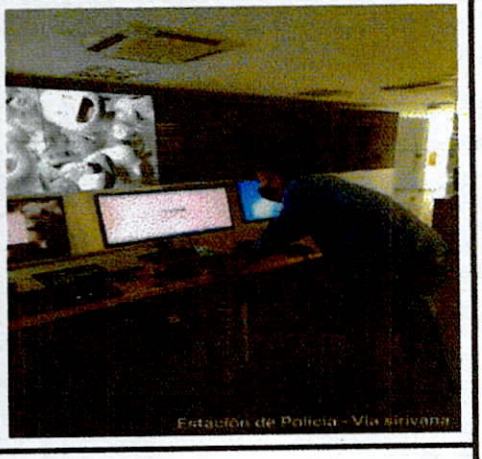












ELABORÓ CONTRATISTA	JAVIER CAMACHO	Firma
REVISÓ TECNICO DE REDES	JHONAR LEONARDO PEREZ	Firma
APROBÓ POR LA INTERVENTORIA	RONNY RENNE ROJAS REINA	Firma

212

Consorcio CCTV Casanare 2020

ANEXO TECNICO NO. 14. CERTIFICACIONES DE FIBRA MES 2.

Domicilio: Calle 7 N° 2-27 / Cel. 3204863868/ E-mail: cctvcasanare@gmail.com

OTDR Report

2612

General Information

Filename:	CAM 5.SOR	Cable ID:	
Test date:	13/03/2021	Fiber ID:	CAM 5
Test time:	8:19 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 5
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

214

2613

OTDR Report

Results

Span length:	0,6823 km	Average splice loss:	0,369 dB
Span loss:	0,959 dB	Maximum splice loss:	0,592 dB
Average loss:	1,406 dB/km	Span ORL:	< 17,38 dB
Events count :	4	Splices count :	2

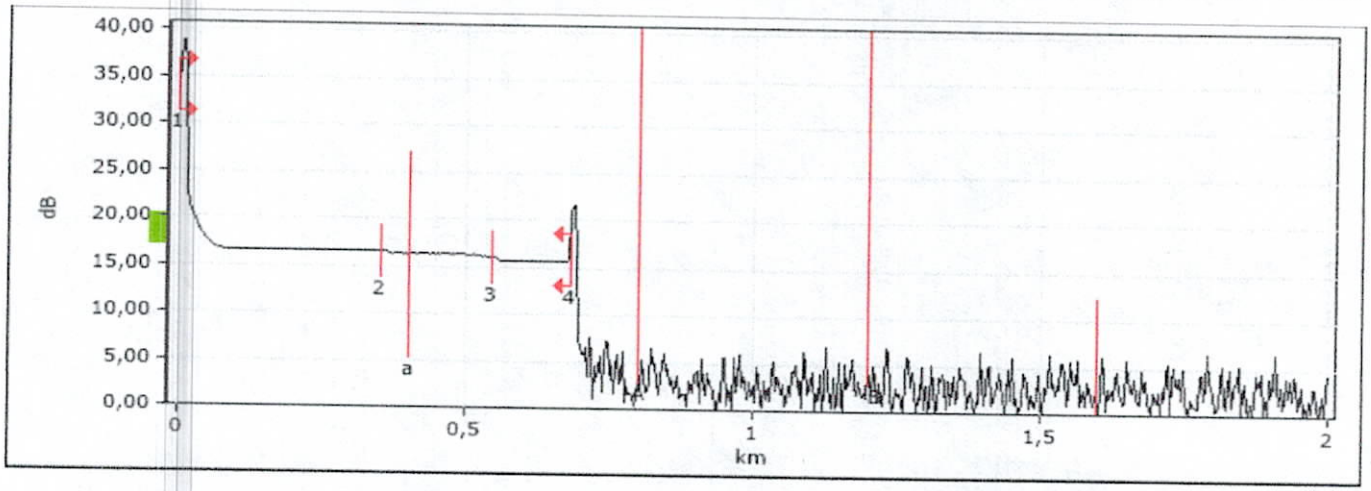
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,6		0,000
Section		0,3530	0,035		0,100	0,035
Merged Non-Reflective	2	0,3530	0,147			0,182
Section		0,1927	0,171		0,888	0,353
Non-Reflective	3	0,5457	0,592			0,945

EXFO **Signature:** _____ **Date:** 18/03/2021

215

2614

OTDR Report

Section		0,1366	0,014		0,100	0,959
Reflective	4	0,6823		-50,2		0,959

Markers Information

A:	0,8003 km	0,000 dB	B:	1,2005 km	5,552 dB
a:	0,4002 km	16,261 dB	b:	1,6007 km	0,000 dB
B-A:	0,4002 km	-5,552 dB			

Manual Measurements

4 points event loss:	17,214 dB	A-B LSA attenuation.:	1,438 dB/km
A-B LSA loss:	0,575 dB	3 points reflectance:	-70,8 dB
2 points section attenuation:	-13,873 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

216

2615

OTDR Report

General Information

Filename:	CAM 4.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	CAM 4
Test time:	03:34:39 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 4
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

217

2616

OTDR Report

Results

Span length:	0,3896 km	Average splice loss:	1,176 dB
Span loss:	1,347 dB	Maximum splice loss:	1,176 dB
Average loss:	3,457 dB/km	Span ORL:	43,82 dB
Events count :	3	Splices count :	2

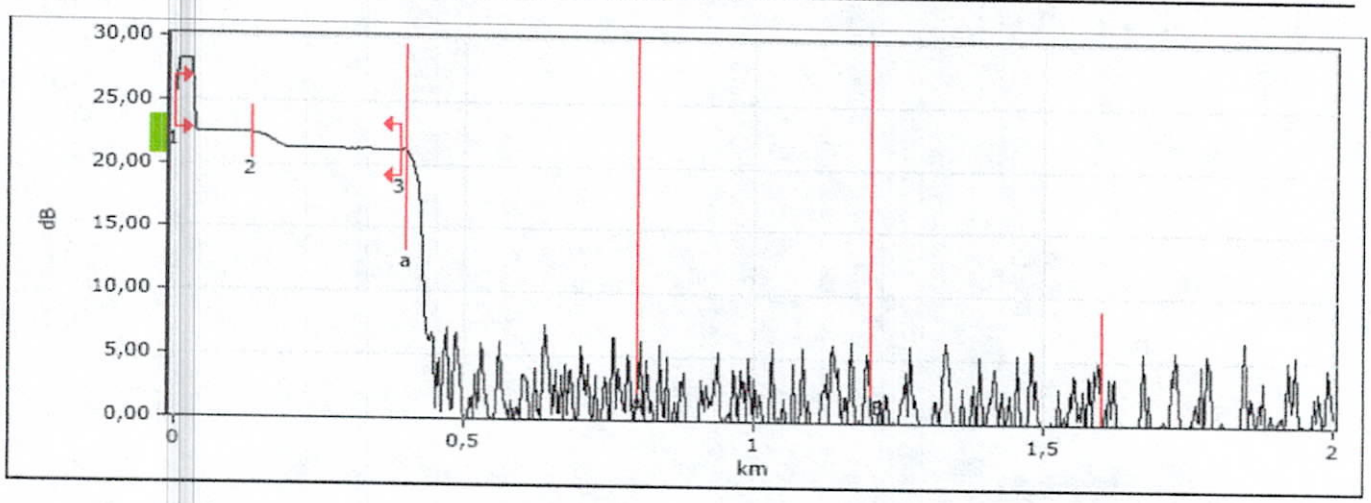
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	30 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-46,4		0,000
Section		0,1316	0,089		0,678	0,089
Non-Reflective	2	0,1316	1,176			1,265
Section		0,2580	0,082		0,316	1,347
Non-Reflective	3	0,3896				1,347

EXFO **Signature:** _____ **Date:** 18/03/2021

218

2617

OTDR Report

Markers Information

A:	0,8003 km	2,392 dB	B:	1,2005 km	0,500 dB
a:	0,4002 km	21,282 dB	b:	1,6007 km	1,002 dB
B-A:	0,4002 km	1,892 dB			

Manual Measurements

4 points event loss:	6,644 dB	A-B LSA attenuation.:	0,000 dB/km
A-B LSA loss:	0,000 dB	3 points reflectance:	*****
2 points section attenuation:	4,727 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

219

2618

OTDR Report

General Information

Filename:	CAM 11.SOR	Cable ID:	
Test date:	24/02/2021	Fiber ID:	CAM 11
Test time:	4:15:00 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 11
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

220

2619

OTDR Report

Results

Span length:	3,6313 km	Average splice loss:	1,916 dB
Span loss:	6,754 dB	Maximum splice loss:	4,993 dB
Average loss:	1,860 dB/km	Span ORL:	< 18,39 dB
Events count :	5	Splices count :	3

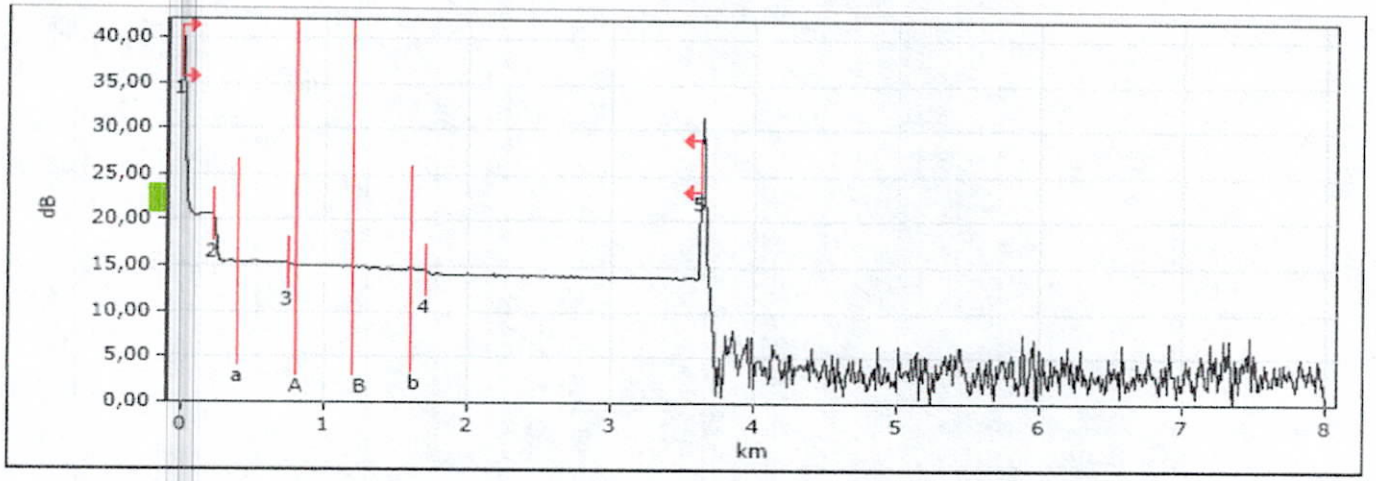
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	8,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,080 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-24,0		0,000
Section		0,2214	0,022		0,100	0,022
Non-Reflective	2	0,2214	4,993			5,015
Section		0,5269	0,126		0,240	5,141
Non-Reflective	3	0,7483	0,269			5,410

227

2620

OTDR Report

Section		0,9587	0,489		0,510	5,899
Non-Reflective	4	1,7070	0,487			6,386
Section		1,9243	0,368		0,191	6,754
Reflective	5	3,6313		-22,1		6,754

Markers Information

A:	0,8003 km	15,104 dB	B:	1,2006 km	14,916 dB
a:	0,4002 km	15,521 dB	b:	1,6007 km	14,646 dB
B-A:	0,4002 km	0,188 dB			

Manual Measurements

4 points event loss:	0,220 dB	A-B LSA attenuation.:	0,187 dB/km
A-B LSA loss:	0,075 dB	3 points reflectance:	*****
2 points section attenuation:	0,471 dB/km	A-B ORL:	46,11 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

222

2621

OTDR Report

General Information

Filename:	CAM 10.SOR	Cable ID:	
Test date:	24/02/2021	Fiber ID:	CAM 10
Test time:	3:12:01 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 10
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2622

OTDR Report

Results

Span length:	0,2146 km	Average splice loss:	
Span loss:	0,021 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 14,40 dB
Events count :	2	Splices count :	0

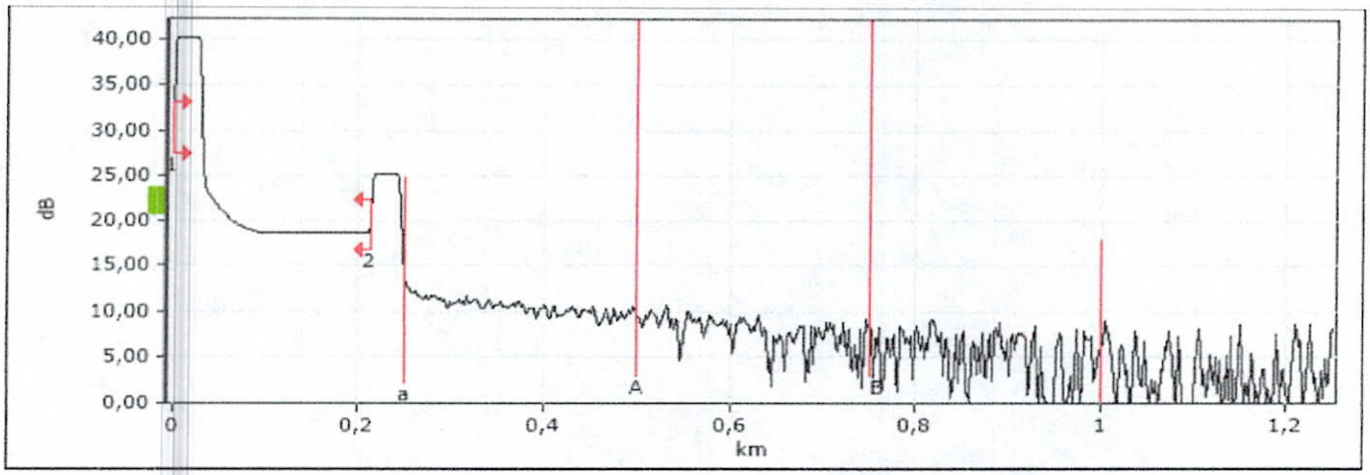
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,7		0,000
Section		0,2146	0,021		0,100	0,021
Reflective	2	0,2146		-44,4		0,021

2623

OTDR Report

Markers Information

A:	0,5002 km	9,760 dB	B:	0,7503 km	8,717 dB
a:	0,2501 km	13,115 dB	b:	1,0004 km	7,627 dB
B-A:	0,2501 km	1,043 dB			

Manual Measurements

4 points event loss:	4,826 dB	A-B LSA attenuation.:	13,817 dB/km
A-B LSA loss:	3,456 dB	3 points reflectance:	-56,0 dB
2 points section attenuation:	4,170 dB/km	A-B ORL:	52,36 dB

2624

OTDR Report

General Information

Filename:	CAM 6.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 6
Test time:	8:19:27 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 6
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

226

2625

OTDR Report

Results

Span length:	1,4542 km	Average splice loss:	0,153 dB
Span loss:	0,818 dB	Maximum splice loss:	0,192 dB
Average loss:	0,563 dB/km	Span ORL:	< 18,46 dB
Events count :	5	Splices count :	4

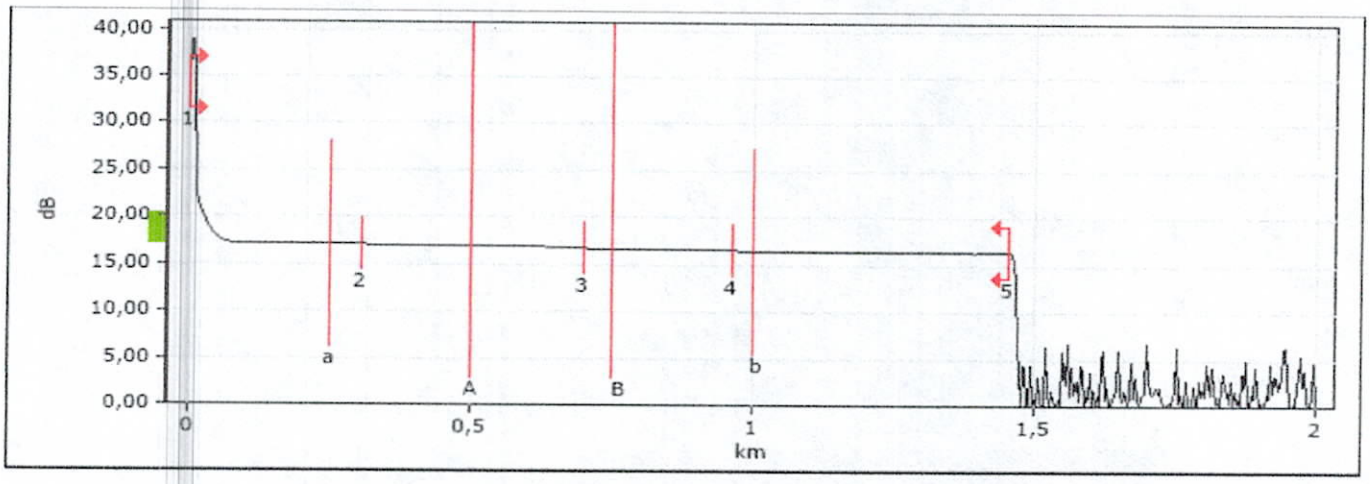
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,5		0,000
Section		0,3075	0,031		0,100	0,031
Non-Reflective	2	0,3075	0,144			0,175
Section		0,3915	0,136		0,349	0,311
Non-Reflective	3	0,6990	0,192			0,503

227

2626

OTDR Report

Section		0,2654	0,051		0,194	0,555
Non-Reflective	4	0,9644	0,124			0,679
Section		0,4898	0,139		0,285	0,818
Non-Reflective	5	1,4542				0,818

Markers Information

A:	0,5002 km	16,944 dB	B:	0,7503 km	16,662 dB
a:	0,2501 km	17,160 dB	b:	1,0004 km	16,462 dB
B-A:	0,2501 km	0,282 dB			

Manual Measurements

4 points event loss:	0,218 dB	A-B LSA attenuation.:	1,332 dB/km
A-B LSA loss:	0,333 dB	3 points reflectance:	-74,6 dB
2 points section attenuation:	1,128 dB/km	A-B ORL:	48,17 dB

2627

OTDR Report

General Information

Filename:	CAM 6.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 6
Test time:	8:19:27 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 6
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2628

OTDR Report

Results

Span length:	1,4542 km	Average splice loss:	0,153 dB
Span loss:	0,818 dB	Maximum splice loss:	0,192 dB
Average loss:	0,563 dB/km	Span ORL:	< 18,46 dB
Events count :	5	Splices count :	4

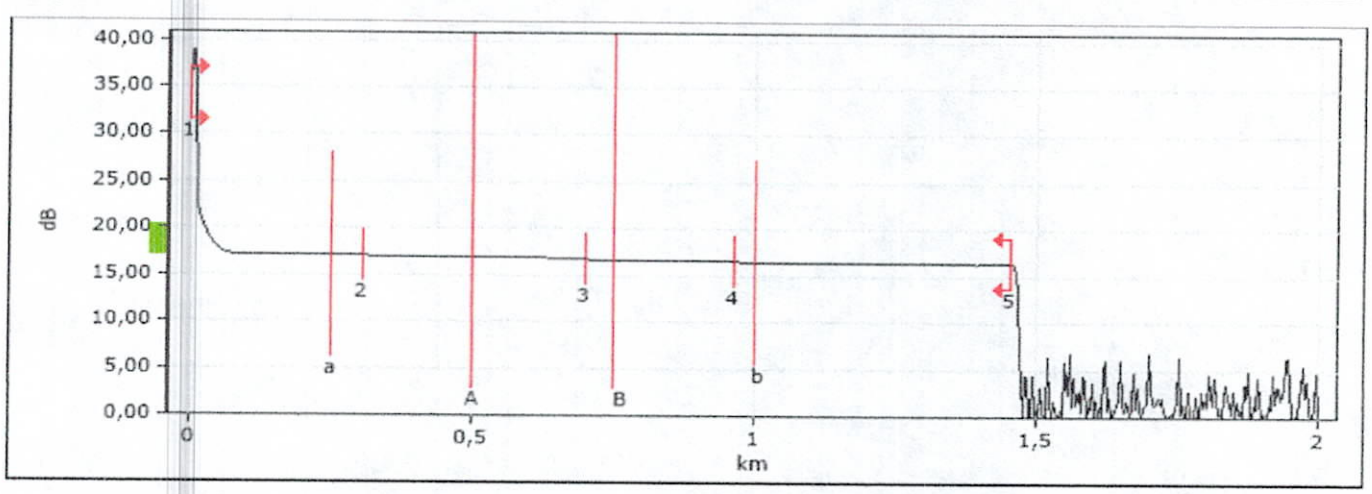
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-28,5		0,000
Section		0,3075	0,031		0,100	0,031
Non-Reflective	2	0,3075	0,144			0,175
Section		0,3915	0,136		0,349	0,311
Non-Reflective	3	0,6990	0,192			0,503

EXFO **Signature:** _____ **Date:** 18/03/2021

230

2629

OTDR Report

Section		0,2654	0,051		0,194	0,555
Non-Reflective	4	0,9644	0,124			0,679
Section		0,4898	0,139		0,285	0,818
Non-Reflective	5	1,4542				0,818

Markers Information

A:	0,5002 km	16,944 dB	B:	0,7503 km	16,662 dB
a:	0,2501 km	17,160 dB	b:	1,0004 km	16,462 dB
B-A:	0,2501 km	0,282 dB			

Manual Measurements

4 points event loss:	0,218 dB	A-B LSA attenuation.:	1,332 dB/km
A-B LSA loss:	0,333 dB	3 points reflectance:	-74,6 dB
2 points section attenuation:	1,128 dB/km	A-B ORL:	48,17 dB

231

2630

OTDR Report

General Information

Filename:	CAM 12.SOR	Cable ID:	
Test date:	24/02/2021	Fiber ID:	CAM 12
Test time:	3:32:38 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 12
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2631

OTDR Report

Results

Span length:	0,2279 km	Average splice loss:	
Span loss:	0,023 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 18,00 dB
Events count :	2	Splices count :	0

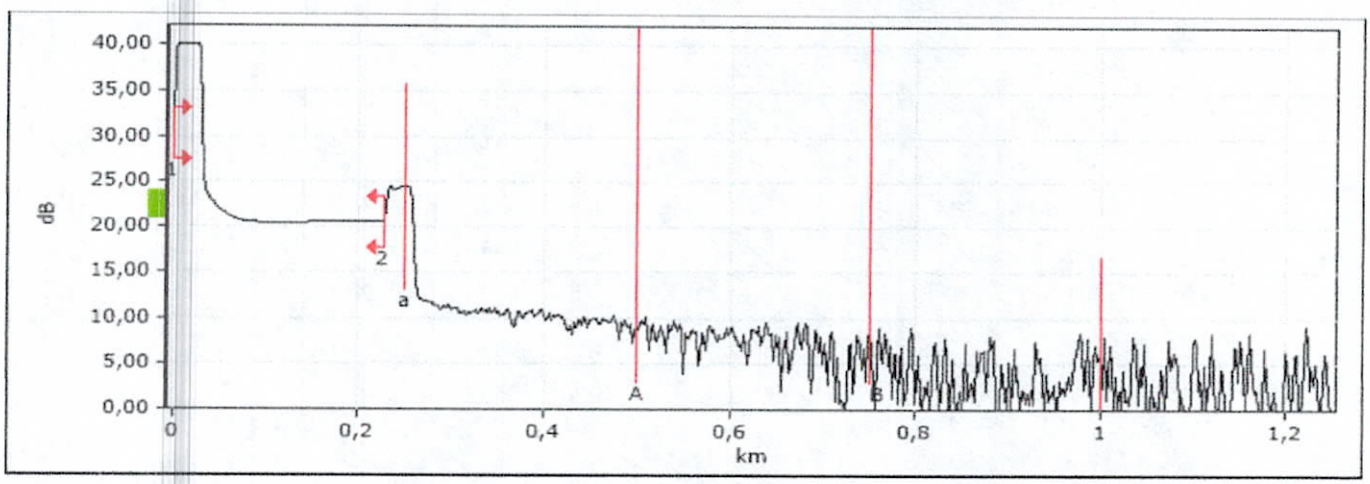
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,8		0,000
Section		0,2279	0,023		0,100	0,023
Reflective	2	0,2279		-50,2		0,023

233

2632

OTDR Report

Markers Information

A:	0,5002 km	8,967 dB	B:	0,7503 km	8,705 dB
a:	0,2501 km	24,486 dB	b:	1,0004 km	6,258 dB
B-A:	0,2501 km	0,262 dB			

Manual Measurements

4 points event loss:	9,232 dB	A-B LSA attenuation.:	16,351 dB/km
A-B LSA loss:	4,090 dB	3 points reflectance:	-54,3 dB
2 points section attenuation:	1,046 dB/km	A-B ORL:	52,29 dB

2633

OTDR Report

General Information

Filename:	CAM 13.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 13
Test time:	8:12:45 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 13
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

235

2634

OTDR Report

Results

Span length:	0,3355 km	Average splice loss:	
Span loss:	0,034 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 17,99 dB
Events count :	2	Splices count :	0

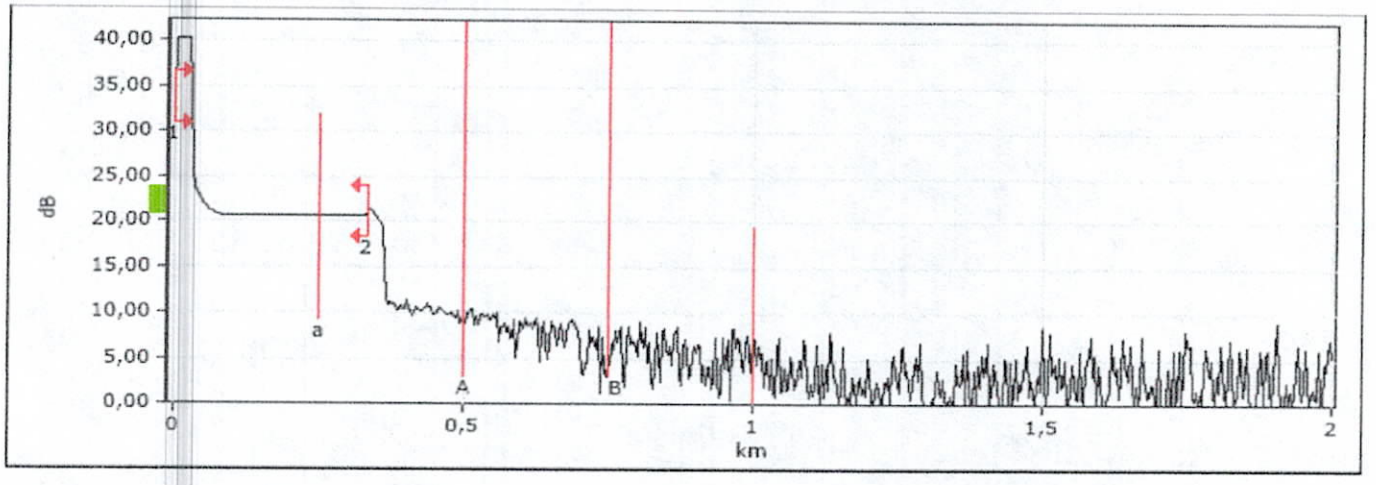
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,4		0,000
Section		0,3355	0,034		0,100	0,034
Reflective	2	0,3355		-61,6		0,034

236

2635

OTDR Report

Markers Information

A:	0,5002 km	9,900 dB	B:	0,7503 km	5,866 dB
a:	0,2501 km	20,639 dB	b:	1,0004 km	8,465 dB
B-A:	0,2501 km	4,034 dB			

Manual Measurements

4 points event loss:	16,503 dB	A-B LSA attenuation.:	17,117 dB/km
A-B LSA loss:	4,281 dB	3 points reflectance:	*****
2 points section attenuation:	16,129 dB/km	A-B ORL:	51,51 dB

2636

OTDR Report

General Information

Filename:	CAM 14.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 14
Test time:	9:07:43 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 14
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

238

2637

OTDR Report

Results

Span length:	0,2169 km	Average splice loss:	
Span loss:	0,053 dB	Maximum splice loss:	
Average loss:	0,247 dB/km	Span ORL:	40,83 dB
Events count :	2	Splices count :	0

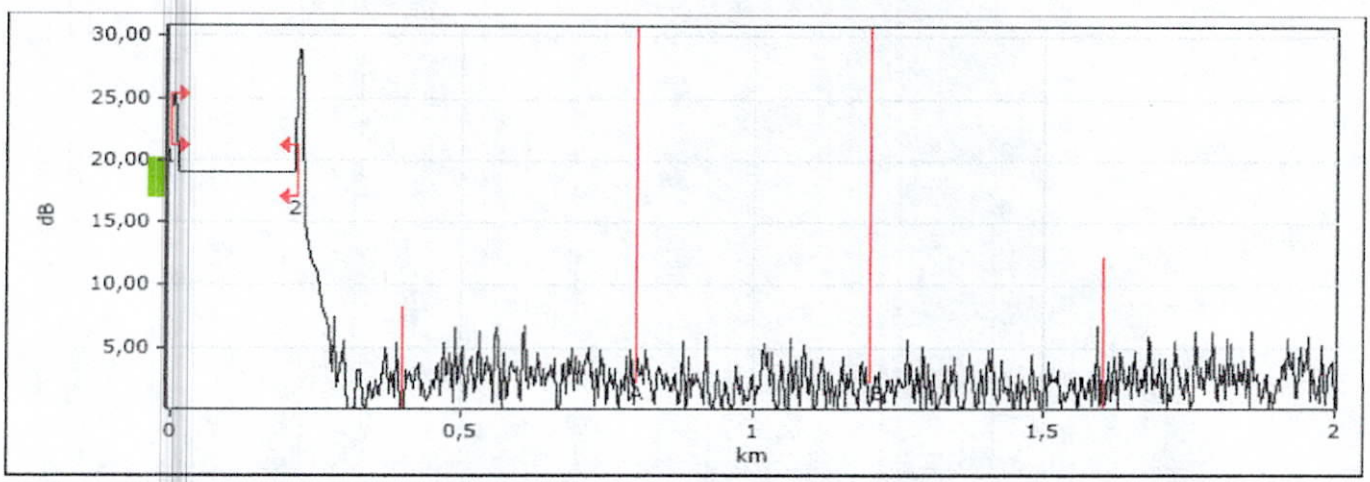
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-49,4		0,000
Section		0,2169	0,053		0,247	0,053
Reflective	2	0,2169		-42,2		0,053

239

2638

OTDR Report

Markers Information

A:	0,8003 km	7,676 dB	B:	1,2005 km	4,194 dB
a:	0,4002 km	0,000 dB	b:	1,6007 km	0,000 dB
B-A:	0,4002 km	3,481 dB			

Manual Measurements

4 points event loss:	0,678 dB	A-B LSA attenuation.:	0,799 dB/km
A-B LSA loss:	0,320 dB	3 points reflectance:	*****
2 points section attenuation:	8,700 dB/km	A-B ORL:	*****

240

2639

OTDR Report

General Information

Filename:	CAM 15.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 15
Test time:	11:36:15 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 15
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

241

2640

OTDR Report

Results

Span length:	0,1193 km	Average splice loss:	
Span loss:	0,179 dB	Maximum splice loss:	
Average loss:	1,500 dB/km	Span ORL:	< 15,58 dB
Events count :	2	Splices count :	0

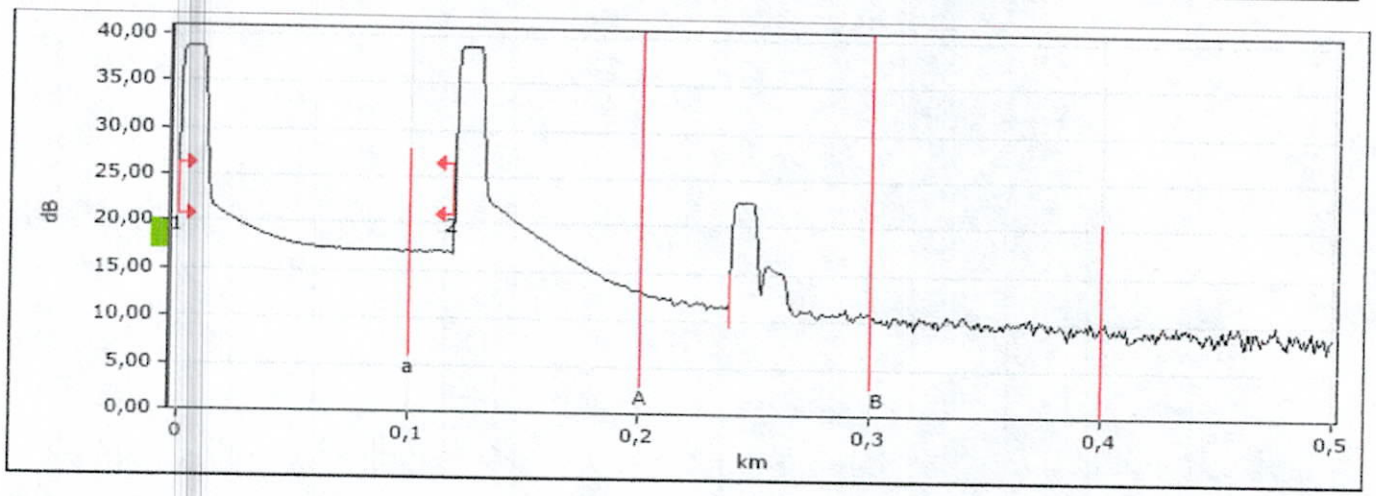
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	0,5000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,8		0,000
Section		0,1193	0,179		1,500	0,179
Reflective	2	0,1193		-18,1		0,179
Section		0,1196	0,179		1,500	
Echo		0,2389		-39,3		

EXFO **Signature:** _____ **Date:** 18/03/2021

242

2641

OTDR Report

Markers Information

A:	0,2001 km	13,063 dB	B:	0,3001 km	10,666 dB
a:	0,1000 km	17,060 dB	b:	0,4001 km	9,658 dB
B-A:	0,1000 km	2,396 dB			

Manual Measurements

4 points event loss:	15,368 dB	A-B LSA attenuation.:	22,118 dB/km
A-B LSA loss:	2,212 dB	3 points reflectance:	-51,6 dB
2 points section attenuation:	23,962 dB/km	A-B ORL:	42,48 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

243

2642

OTDR Report

General Information

Filename:	CAM 18.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 18
Test time:	8:35:58 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 18
Operator:	CARLOS
Unit.model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

244

2643

OTDR Report

Results

Span length:	0,1865 km	Average splice loss:	
Span loss:	0,280 dB	Maximum splice loss:	
Average loss:	1,500 dB/km	Span ORL:	
Events count :	2	Splices count :	1

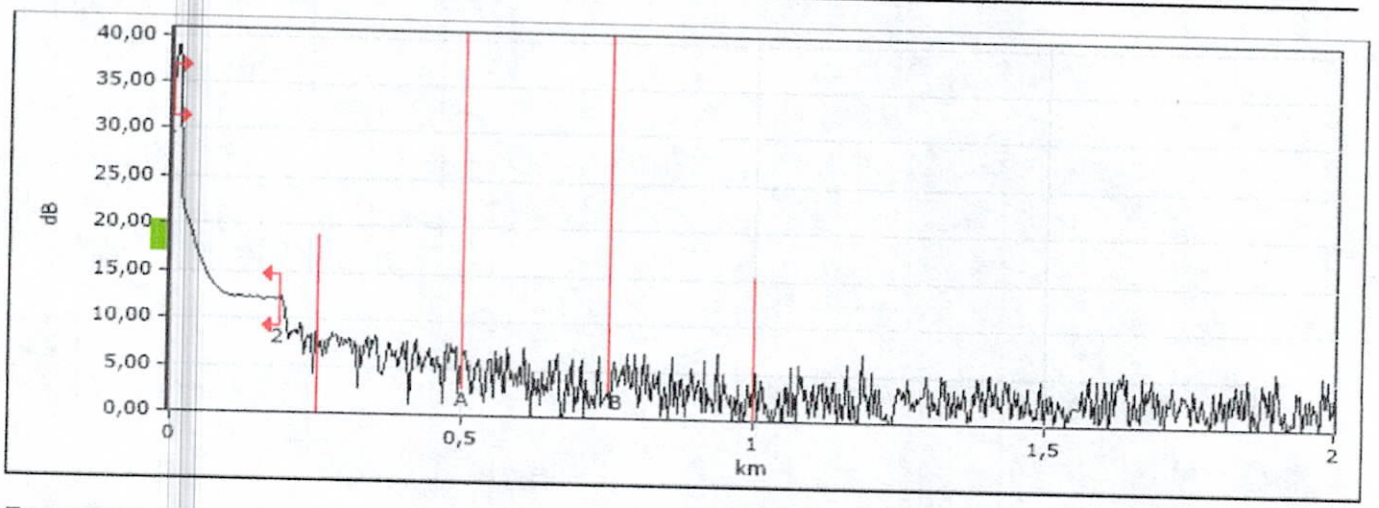
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,5		0,000
Section		0,1865	0,280		1,500	0,280
Non-Reflective	2	0,1865				0,280

EXFO **Signature:** _____ **Date:** 18/03/2021

245

2644

OTDR Report

Markers Information

A:	0,5002 km	6,086 dB	B:	0,7503 km	3,711 dB
a:	0,2501 km	7,118 dB	b:	1,0004 km	0,000 dB
B-A:	0,2501 km	2,375 dB			

Manual Measurements

4 points event loss:	2,982 dB	A-B LSA attenuation.:	10,956 dB/km
A-B LSA loss:	2,740 dB	3 points reflectance:	*****
2 points section attenuation:	9,496 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

246

2645

OTDR Report

General Information

Filename:	CAM 20.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 20
Test time:	3:20:06 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 20
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

247

2646

OTDR Report

Results

Span length:	0,2266 km	Average splice loss:	
Span loss:	0,023 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	26,51 dB
Events count :	2	Splices count :	0

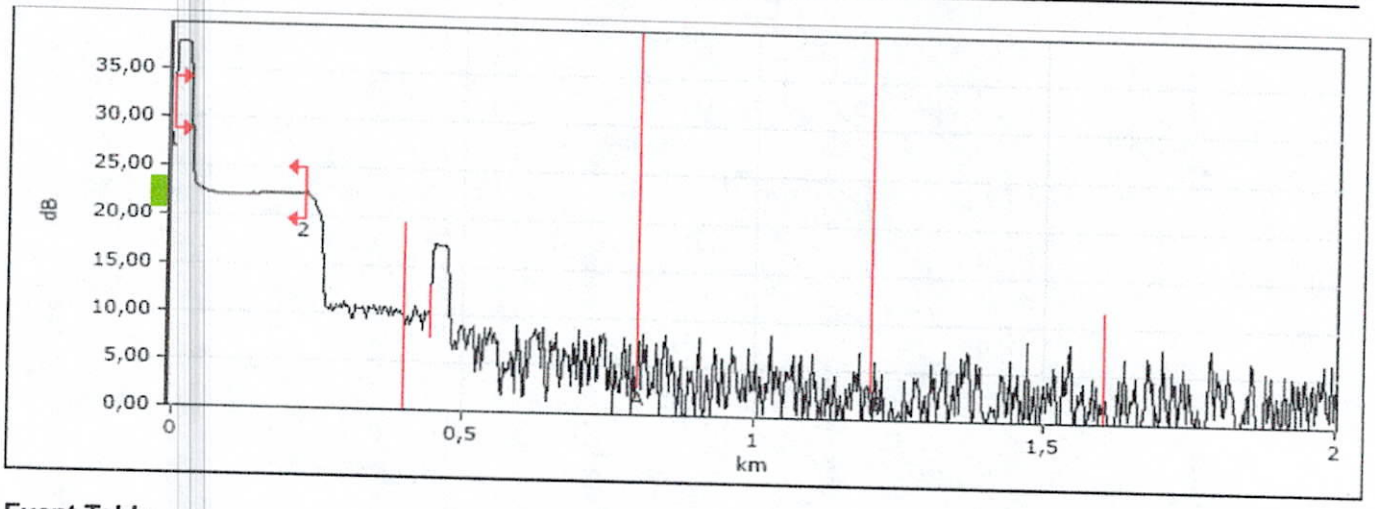
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-26,5		0,000
Section		0,2266	0,023		0,100	0,023
Reflective	2	0,2266		-65,4		0,023
Section		0,2177	0,327		1,500	
Reflective		0,4444		-42,5		

EXFO **Signature:** _____ **Date:** 18/03/2021

248

OTDR Report

Markers Information

A:	0,8003 km	8,260 dB	B:	1,2005 km	0,000 dB
a:	0,4002 km	8,948 dB	b:	1,6007 km	0,000 dB
B-A:	0,4002 km	8,260 dB			

Manual Measurements

4 points event loss:	8,702 dB	A-B LSA attenuation.:	5,090 dB/km
A-B LSA loss:	2,037 dB	3 points reflectance:	*****
2 points section attenuation:	20,641 dB/km	A-B ORL:	*****

2618

OTDR Report

General Information

Filename:	cam 21.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	cam 21
Test time:	02:27:38 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 21
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

250

7649

OTDR Report

Results

Span length:	0,4395 km	Average splice loss:	-0,243 dB
Span loss:	-0,200 dB	Maximum splice loss:	-0,243 dB
Average loss:	-0,454 dB/km	Span ORL:	< 14,95 dB
Events count :	3	Splices count :	1

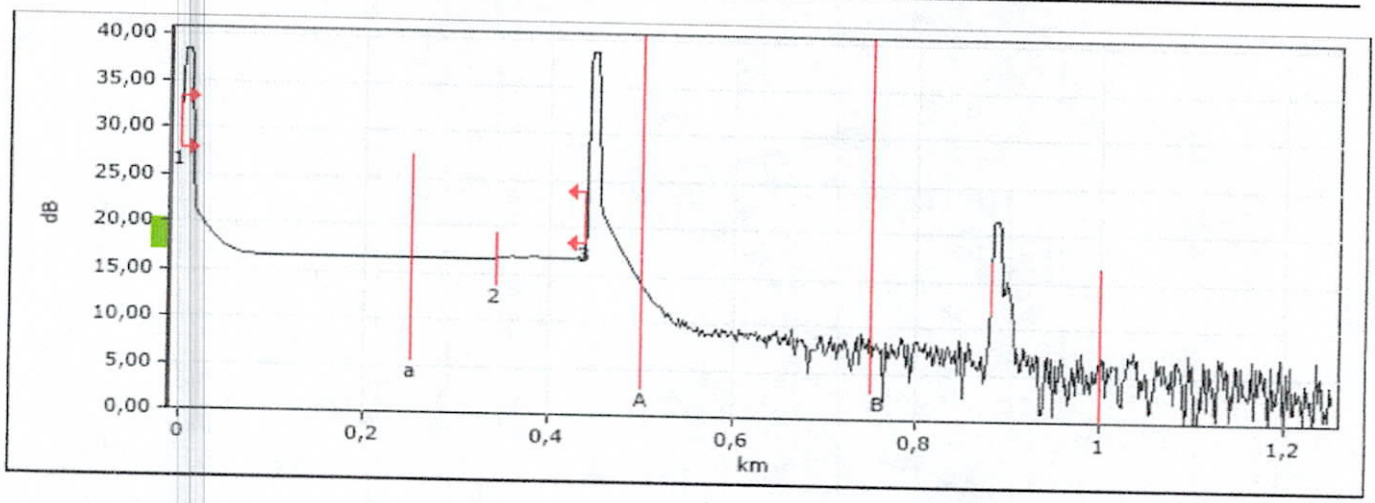
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-24,3		0,000
Section		0,3425	0,034		0,100	0,034
Positive	2	0,3425	-0,243			-0,209
Section		0,0970	0,010		0,100	-0,199
Reflective	3	0,4395		-18,0		-0,199

EXFO **Signature:** _____ **Date:** 18/03/2021

251

2650

OTDR Report

Section		0,4416	0,662		1,500	
Echo		0,8811		-32,2		

Markers Information

A:	0,5002 km	14,103 dB	B:	0,7503 km	3,766 dB
a:	0,2501 km	16,621 dB	b:	1,0004 km	7,665 dB
B-A:	0,2501 km	10,337 dB			

Manual Measurements

4 points event loss:	7,006 dB	A-B LSA attenuation.:	17,491 dB/km
A-B LSA loss:	4,375 dB	3 points reflectance:	*****
2 points section attenuation:	41,329 dB/km	A-B ORL:	56,86 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

252

2651

OTDR Report

General Information

Filename:	CAM 26.SOR	Cable ID:	
Test date:	27/02/2021	Fiber ID:	CAM 26
Test time:	8:29:03 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 26
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2652

OTDR Report

Results

Span length:	0,5147 km	Average splice loss:	
Span loss:	0,051 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	27,52 dB
Events count :	2	Splices count :	0

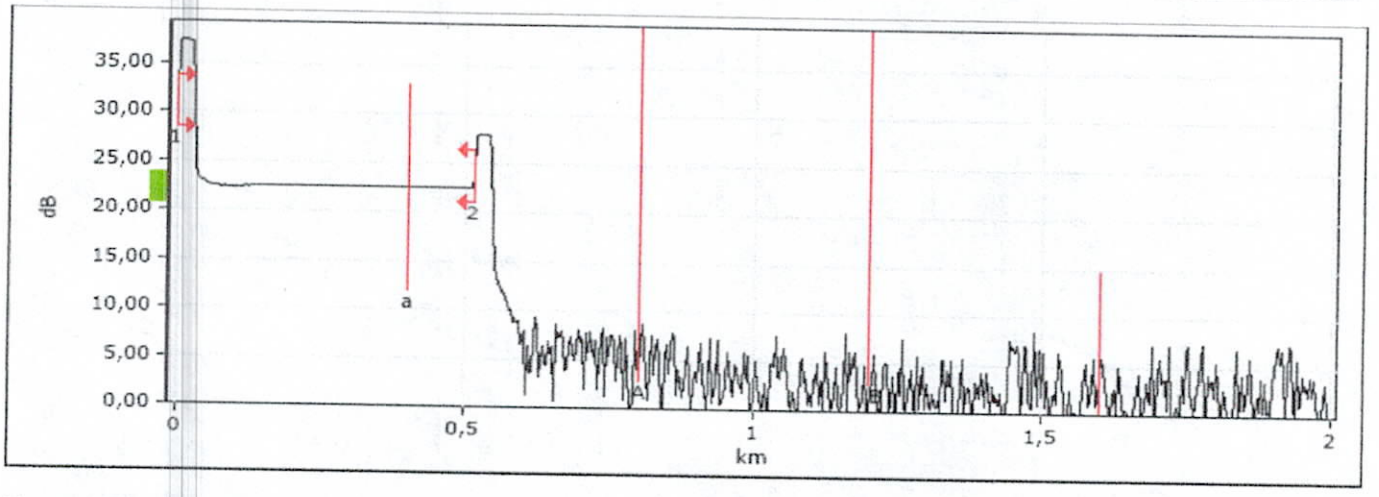
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-27,6		0,000
Section		0,5147	0,051		0,100	0,051
Reflective	2	0,5147		-46,7		0,051

EXFO **Signature:** _____ **Date:** 18/03/2021

254

26531

OTDR Report

Markers Information

A:	0,8003 km	6,351 dB	B:	1,2005 km	4,303 dB
a:	0,4002 km	22,492 dB	b:	1,6007 km	7,917 dB
B-A:	0,4002 km	2,048 dB			

Manual Measurements

4 points event loss:	22,970 dB	A-B LSA attenuation.:	6,043 dB/km
A-B LSA loss:	2,418 dB	3 points reflectance:	*****
2 points section attenuation:	5,117 dB/km	A-B ORL:	*****

2654

OTDR Report

General Information

Filename:	CAM 27.SOR	Cable ID:	
Test date:	20/02/2021	Fiber ID:	CAM 27
Test time:	10:57:52 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 27
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO Signature: _____ Date: 18/03/2021

256

2655

OTDR Report

Results

Span length:	0,3961 km	Average splice loss:	-0,271 dB
Span loss:	-0,191 dB	Maximum splice loss:	-0,271 dB
Average loss:	-0,483 dB/km	Span ORL:	< 14,68 dB
Events count :	3	Splices count :	1

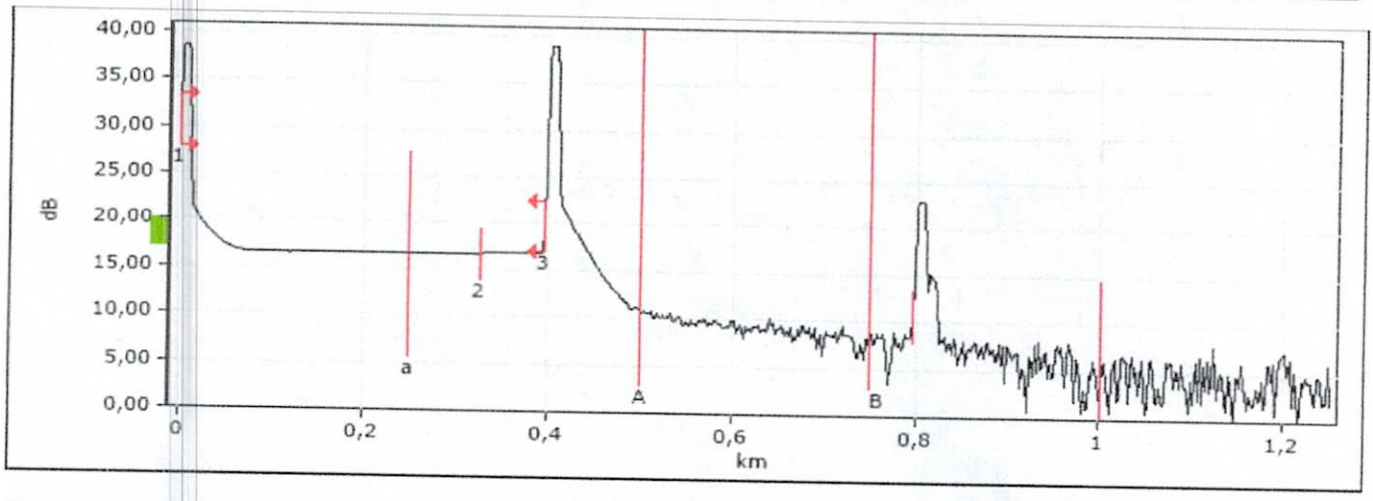
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-24,3		0,000
Section		0,3275	0,033		0,100	0,033
Positive	2	0,3275	-0,271			-0,238
Section		0,0686	0,047		0,678	-0,192
Reflective	3	0,3961		-17,7		-0,192

EXFO **Signature:** _____ **Date:** 18/03/2021

257

2656

OTDR Report

Section		0,4001	0,600		1,500	
Echo		0,7963		-30,7		

Markers Information

A:	0,5002 km	10,775 dB	B:	0,7503 km	9,199 dB
a:	0,2501 km	16,587 dB	b:	1,0004 km	6,778 dB
B-A:	0,2501 km	1,576 dB			

Manual Measurements

4 points event loss:	6,439 dB	A-B LSA attenuation.:	10,462 dB/km
A-B LSA loss:	2,617 dB	3 points reflectance:	*****
2 points section attenuation:	6,302 dB/km	A-B ORL:	50,93 dB

2657

OTDR Report

General Information

Filename:	CAM 55.SOR	Cable ID:	
Test date:	1/03/2021	Fiber ID:	CAM 55
Test time:	11:06:59 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 55
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

259

2658

OTDR Report

Results

Span length:	0,4709 km	Average splice loss:	1,178 dB
Span loss:	1,227 dB	Maximum splice loss:	1,178 dB
Average loss:	2,605 dB/km	Span ORL:	26,25 dB
Events count :	3	Splices count :	1

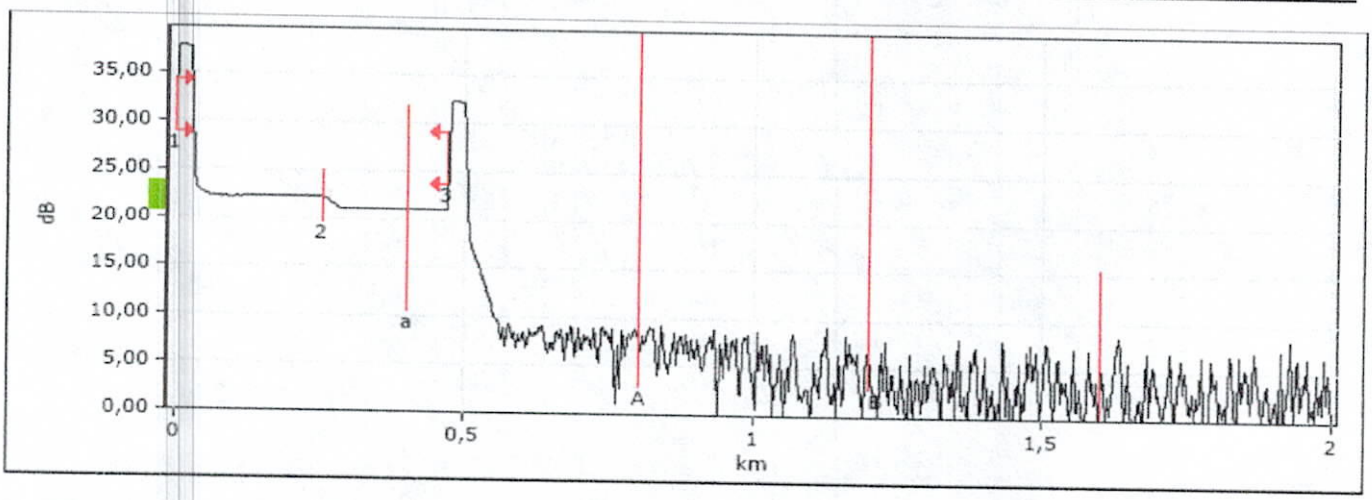
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-26,5		0,000
Section		0,2549	0,025		0,100	0,025
Non-Reflective	2	0,2549	1,178			1,203
Section		0,2160	0,023		0,107	1,227
Reflective	3	0,4709		-35,0		1,227

EXFO **Signature:** _____ **Date:** 18/03/2021

260

2659

OTDR Report

Markers Information

A:	0,8003 km	7,824 dB	B:	1,2005 km	7,146 dB
a:	0,4002 km	21,052 dB	b:	1,6007 km	0,000 dB
B-A:	0,4002 km	0,679 dB			

Manual Measurements

4 points event loss:	19,535 dB	A-B LSA attenuation.:	10,026 dB/km
A-B LSA loss:	4,012 dB	3 points reflectance:	-59,2 dB
2 points section attenuation:	1,696 dB/km	A-B ORL:	*****

2660

OTDR Report

General Information

Filename:	cam 62.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	cam 62
Test time:	02:07:35 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 62
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

262

2661

OTDR Report

Results

Span length:	0,4395 km	Average splice loss:	-0,243 dB
Span loss:	-0,200 dB	Maximum splice loss:	-0,243 dB
Average loss:	-0,454 dB/km	Span ORL:	< 14,95 dB
Events count :	3	Splices count :	1

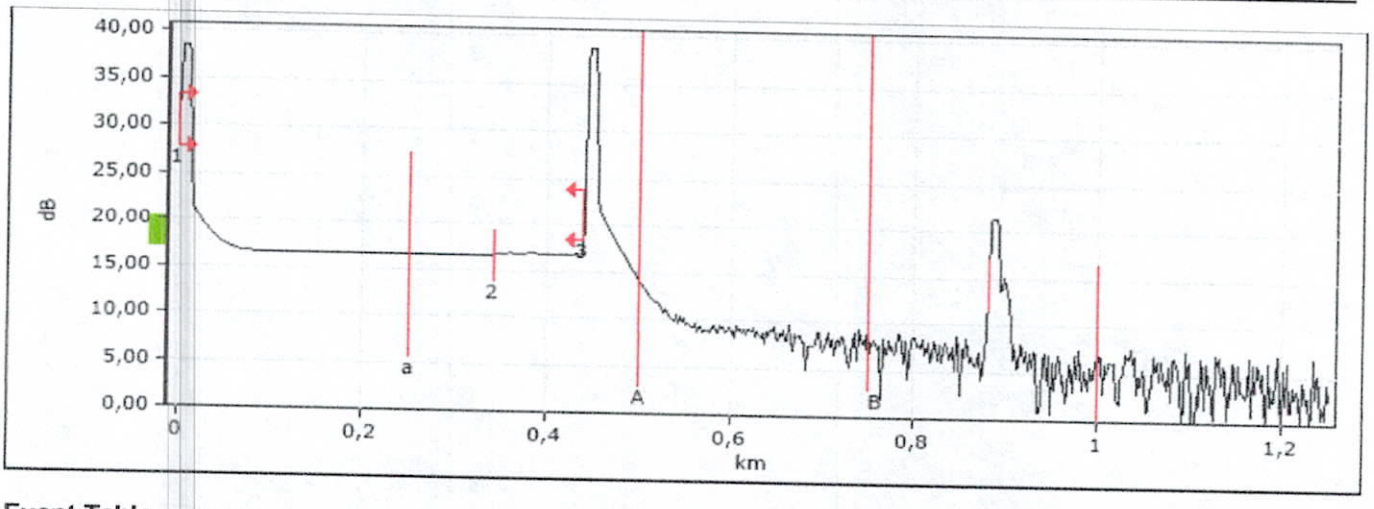
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-24,3		0,000
Section		0,3425	0,034		0,100	0,034
Positive	2	0,3425	-0,243			-0,209
Section		0,0970	0,010		0,100	-0,199
Reflective	3	0,4395		-18,0		-0,199

EXFO **Signature:** _____ **Date:** 18/03/2021

263

2662

OTDR Report

Section		0,4416	0,662		1,500	
Echo		0,8811		-32,2		

Markers Information

A:	0,5002 km	14,103 dB	B:	0,7503 km	3,766 dB
a:	0,2501 km	16,621 dB	b:	1,0004 km	7,665 dB
B-A:	0,2501 km	10,337 dB			

Manual Measurements

4 points event loss:	7,006 dB	A-B LSA attenuation.:	17,491 dB/km
A-B LSA loss:	4,375 dB	3 points reflectance:	*****
2 points section attenuation:	41,329 dB/km	A-B ORL:	56,86 dB

2663

OTDR Report

General Information

Filename:	cam 63.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	cam 63
Test time:	11:57:52 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 63
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP2
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2664

OTDR Report

Results

Span length:	0,3961 km	Average splice loss:	-0,271 dB
Span loss:	-0,191 dB	Maximum splice loss:	-0,271 dB
Average loss:	-0,483 dB/km	Span ORL:	≤ 14,68 dB
Events count :	3	Splices count :	1

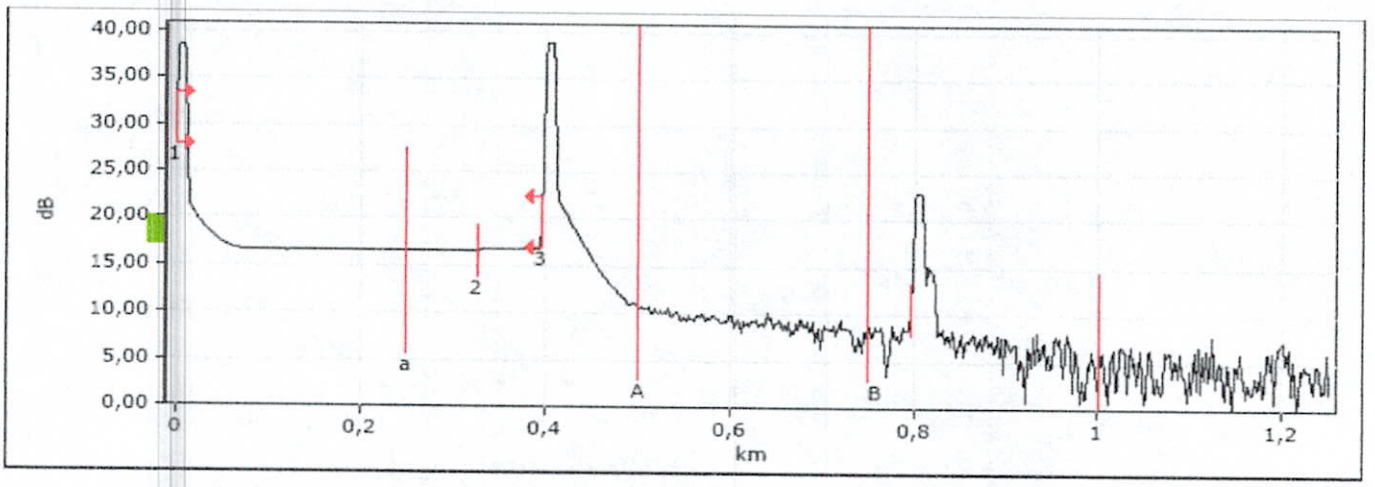
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-24,3		0,000
Section		0,3275	0,033		0,100	0,033
Positive	2	0,3275	-0,271			-0,238
Section		0,0686	0,047		0,678	-0,192
Reflective	3	0,3961		-17,7		-0,192

EXFO **Signature:** _____ **Date:** 18/03/2021

266

2665

OTDR Report

Section		0,4001	0,600		1,500	
Echo		0,7963		-30,7		

Markers Information

A:	0,5002 km	10,775 dB	B:	0,7503 km	9,199 dB
a:	0,2501 km	16,587 dB	b:	1,0004 km	6,778 dB
B-A:	0,2501 km	1,576 dB			

Manual Measurements

4 points event loss:	6,439 dB	A-B LSA attenuation.:	10,462 dB/km
A-B LSA loss:	2,617 dB	3 points reflectance:	*****
2 points section attenuation:	6,302 dB/km	A-B ORL:	50,93 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

267

2666

OTDR Report

General Information

Filename:	CAM 66.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 66
Test time:	2:01:08 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 66
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2667

OTDR Report

Results

Span length:	0,4320 km	Average splice loss:	
Span loss:	0,043 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 18,01 dB
Events count :	2	Splices count :	0

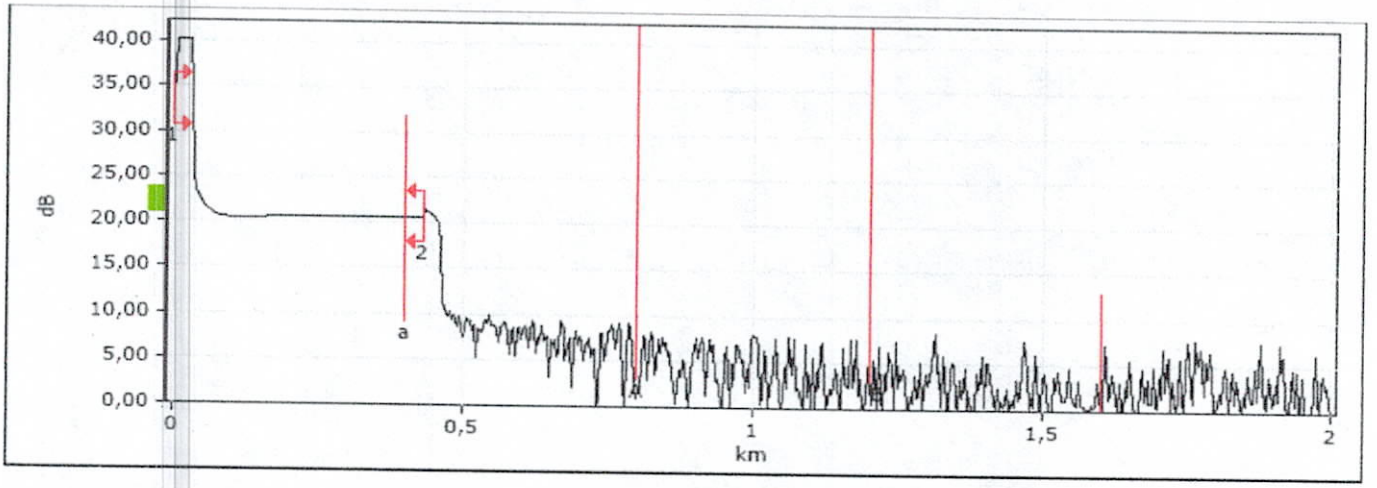
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,7		0,000
Section		0,4320	0,043		0,100	0,043
Reflective	2	0,4320		-60,5		0,043

EXFO **Signature:** _____ **Date:** 18/03/2021

209

2668

OTDR Report

Markers Information

A:	0,8003 km	0,000 dB	B:	1,2005 km	8,538 dB
a:	0,4002 km	20,551 dB	b:	1,6007 km	5,783 dB
B-A:	0,4002 km	-8,538 dB			

Manual Measurements

4 points event loss:	12,436 dB	A-B LSA attenuation.:	7,171 dB/km
A-B LSA loss:	2,870 dB	3 points reflectance:	-54,4 dB
2 points section attenuation:	-21,336 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

270

2669

OTDR Report

General Information

Filename:	CAM 73.SOR	Cable ID:	
Test date:	2/03/2021	Fiber ID:	CAM 73
Test time:	8:47:07 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 73
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2670

OTDR Report

Results

Span length:	0,1988 km	Average splice loss:	
Span loss:	0,113 dB	Maximum splice loss:	
Average loss:	0,567 dB/km	Span ORL:	< 17,72 dB
Events count :	2	Splices count :	0

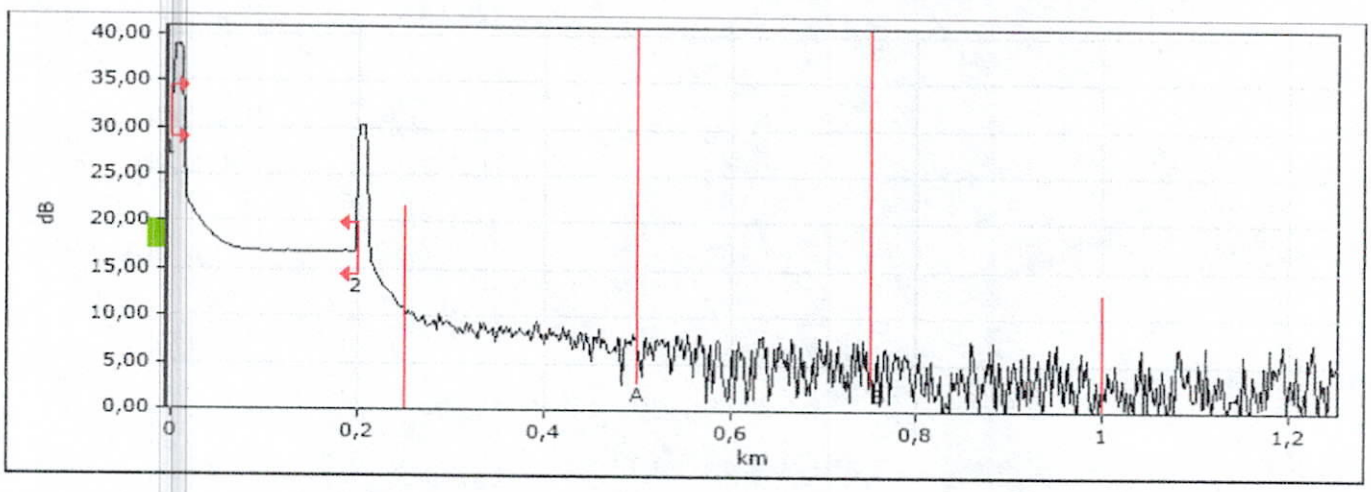
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,4		0,000
Section		0,1988	0,113		0,567	0,113
Reflective	2	0,1988		-34,8		0,113

272

2671

OTDR Report

Markers Information

A:	0,5002 km	7,754 dB	B:	0,7503 km	3,355 dB
a:	0,2501 km	11,237 dB	b:	1,0004 km	5,668 dB
B-A:	0,2501 km	4,398 dB			

Manual Measurements

4 points event loss:	5,586 dB	A-B LSA attenuation.:	8,145 dB/km
A-B LSA loss:	2,037 dB	3 points reflectance:	*****
2 points section attenuation:	17,586 dB/km	A-B ORL:	54,50 dB

2672

OTDR Report

General Information

Filename:	CAM 76.SOR	Cable ID:	
Test date:	26/02/2021	Fiber ID:	CAM 76
Test time:	9:15:35 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 76
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2673

OTDR Report

Results

Span length:	1,6152 km	Average splice loss:	0,282 dB
Span loss:	1,032 dB	Maximum splice loss:	0,335 dB
Average loss:	0,639 dB/km	Span ORL:	< 18,10 dB
Events count :	5	Splices count :	3

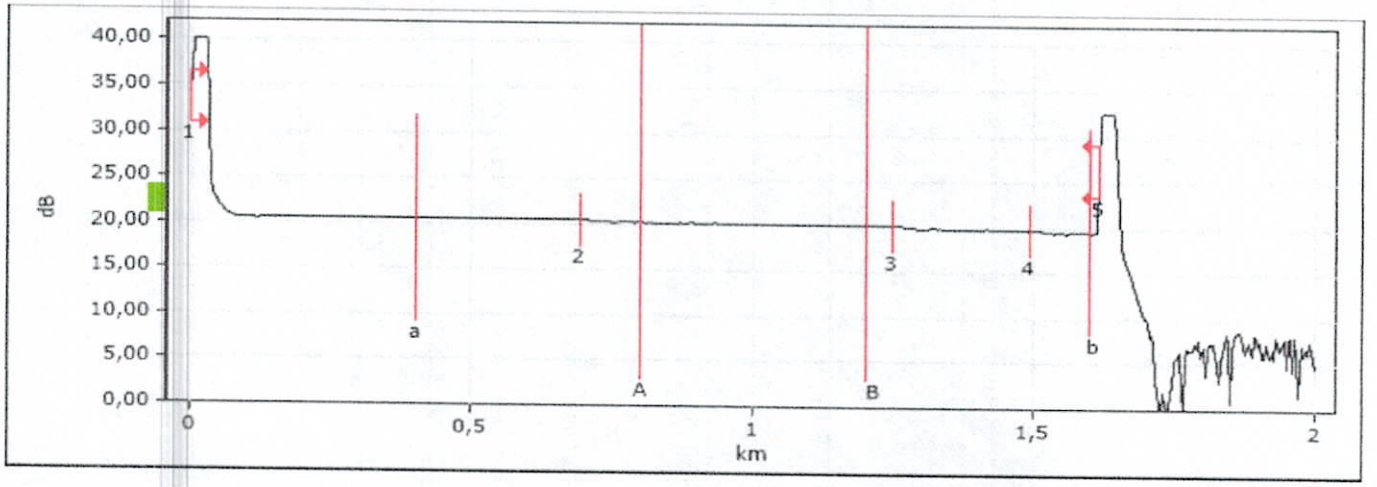
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,8		0,000
Section		0,6935	0,069		0,100	0,069
Non-Reflective	2	0,6935	0,190			0,259
Section		0,5546	0,070		0,126	0,329
Non-Reflective	3	1,2481	0,319			0,648

EXFO **Signature:** _____ **Date:** 18/03/2021

275

2674

OTDR Report

Section		0,2439	0,036		0,147	0,684
Non-Reflective	4	1,4920	0,335			1,019
Section		0,1232	0,012		0,100	1,032
Reflective	5	1,6152		-31,5		1,032

Markers Information

A:	0,8003 km	20,227 dB	B:	1,2005 km	20,176 dB
a:	0,4002 km	20,563 dB	b:	1,6007 km	19,486 dB
B-A:	0,4002 km	0,051 dB			

Manual Measurements

4 points event loss:	0,103 dB	A-B LSA attenuation.:	0,110 dB/km
A-B LSA loss:	0,044 dB	3 points reflectance:	-66,2 dB
2 points section attenuation:	0,127 dB/km	A-B ORL:	45,97 dB

276

2675

OTDR Report

General Information

Filename:	CAM 87.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	CAM 87
Test time:	09:34:49 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 87
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

277

2696

OTDR Report

Results

Span length:	0,5435 km	Average splice loss:	1,113 dB
Span loss:	2,448 dB	Maximum splice loss:	2,094 dB
Average loss:	4,504 dB/km	Span ORL:	< 17,82 dB
Events count :	4	Splices count :	2

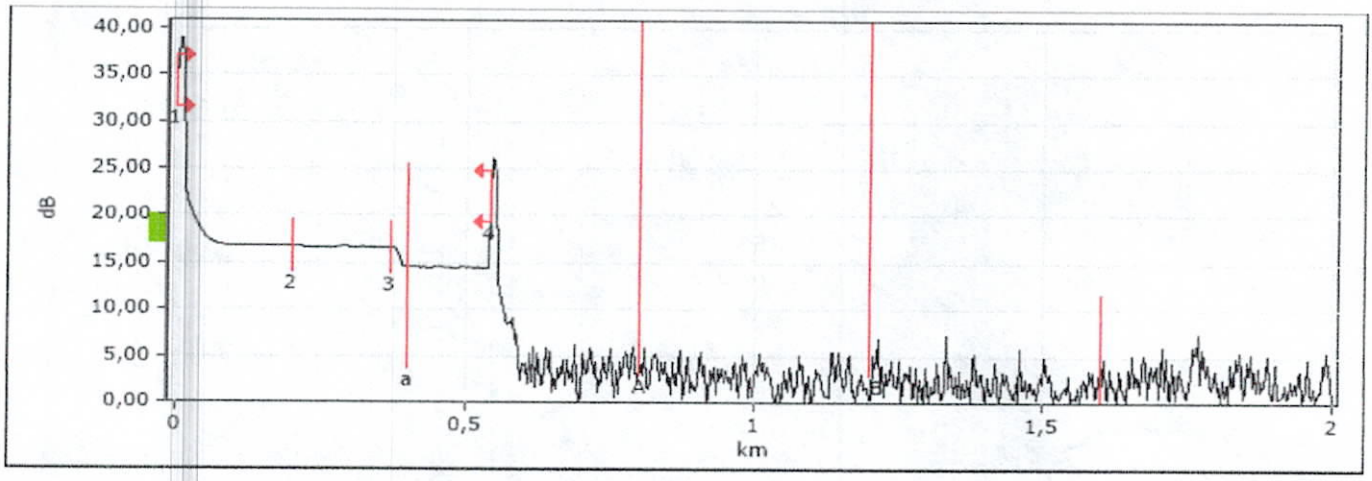
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,4		0,000
Section		0,2032	0,092		0,452	0,092
Non-Reflective	2	0,2032	0,132			0,224
Section		0,1689	0,017		0,100	0,241
Merged Non-Reflective	3	0,3721	2,094			2,335

278

2677

OTDR Report

Section		0,1714	0,114		0,664	2,449
Reflective	4	0,5435		-38,8		2,449

Markers Information

A:	0,8003 km	2,786 dB	B:	1,2005 km	0,000 dB
a:	0,4002 km	14,566 dB	b:	1,6007 km	5,915 dB
B-A:	0,4002 km	2,786 dB			

Manual Measurements

4 points event loss:	13,904 dB	A-B LSA attenuation.:	3,056 dB/km
A-B LSA loss:	1,223 dB	3 points reflectance:	*****
2 points section attenuation:	6,962 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

279

2678

OTDR Report

General Information

Filename:	CAM 90.SOR	Cable ID:	
Test date:	23/02/2021	Fiber ID:	CAM 90
Test time:	2:27:55 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 90
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

280

6 2679

OTDR Report

Results

Span length:	0,6284 km	Average splice loss:	-0,045 dB
Span loss:	-0,006 dB	Maximum splice loss:	0,314 dB
Average loss:	-0,010 dB/km	Span ORL:	< 19,53 dB
Events count :	5	Splices count :	3

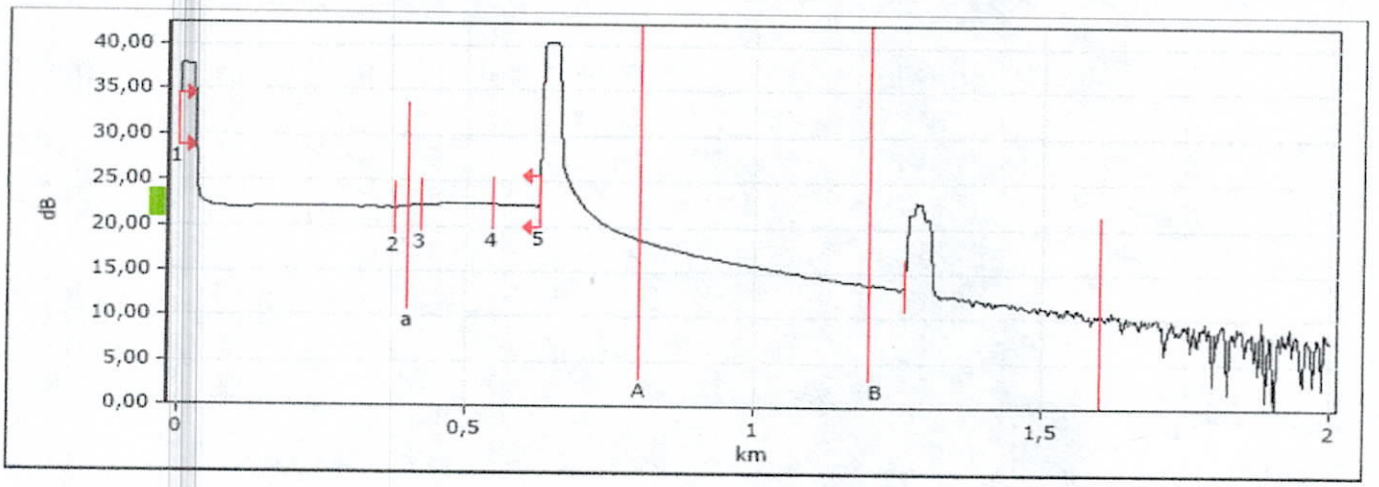
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-26,0		0,000
Section		0,3748	0,037		0,100	0,037
Positive	2	0,3748	-0,284			-0,247
Section		0,0468	0,070		1,500	-0,176
Positive	3	0,4216	-0,165			-0,341

EXFO **Signature:** _____ **Date:** 18/03/2021

281

2680

OTDR Report

Section		0,1240	0,012		0,100	-0,329
Non-Reflective	4	0,5456	0,314			-0,015
Section		0,0828	0,008		0,100	-0,007
Reflective	5	0,6284		-20,8		-0,007
Section		0,6323	0,949		1,500	
Merged Positive; Echo		1,2608		-37,8		

Markers Information

A:	0,8003 km	18,623 dB	B:	1,2005 km	13,534 dB
a:	0,4002 km	22,262 dB	b:	1,6007 km	10,323 dB
B-A:	0,4002 km	5,089 dB			

Manual Measurements

4 points event loss:	6,899 dB	A-B LSA attenuation.:	11,759 dB/km
A-B LSA loss:	4,706 dB	3 points reflectance:	*****
2 points section attenuation:	12,717 dB/km	A-B ORL:	50,60 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

282

2681

OTDR Report

General Information

Filename:	CAM 96.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 96
Test time:	10:01:08 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 96
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

283

2682

OTDR Report

Results

Span length:	0,4320 km	Average splice loss:	
Span loss:	0,043 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 18,01 dB
Events count :	2	Splices count :	0

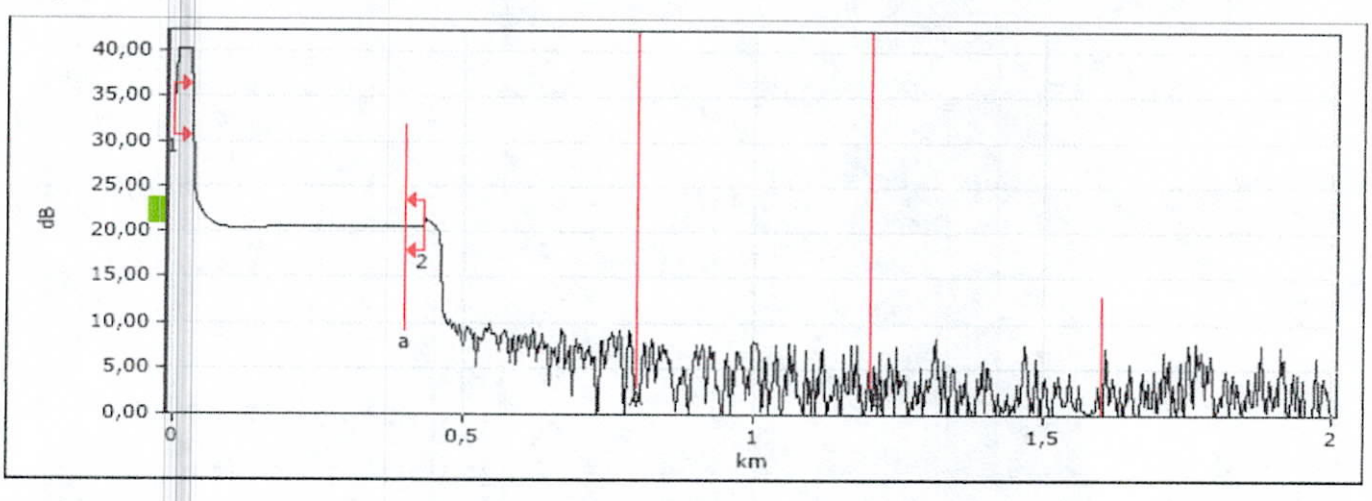
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,7		0,000
Section		0,4320	0,043		0,100	0,043
Reflective	2	0,4320		-60,5		0,043

284

2683

OTDR Report

Markers Information

A:	0,8003 km	0,000 dB	B:	1,2005 km	8,538 dB
a:	0,4002 km	20,551 dB	b:	1,6007 km	5,783 dB
B-A:	0,4002 km	-8,538 dB			

Manual Measurements

4 points event loss:	12,436 dB	A-B LSA attenuation.:	7,171 dB/km
A-B LSA loss:	2,870 dB	3 points reflectance:	-54,4 dB
2 points section attenuation:	-21,336 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

285

2684

OTDR Report

General Information

Filename:	CAM 105.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 105
Test time:	11:44:46 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 105
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2685

OTDR Report

Results

Span length:	1,6808 km	Average splice loss:	0,753 dB
Span loss:	3,261 dB	Maximum splice loss:	0,975 dB
Average loss:	1,940 dB/km	Span ORL:	< 18,51 dB
Events count :	6	Splices count :	5

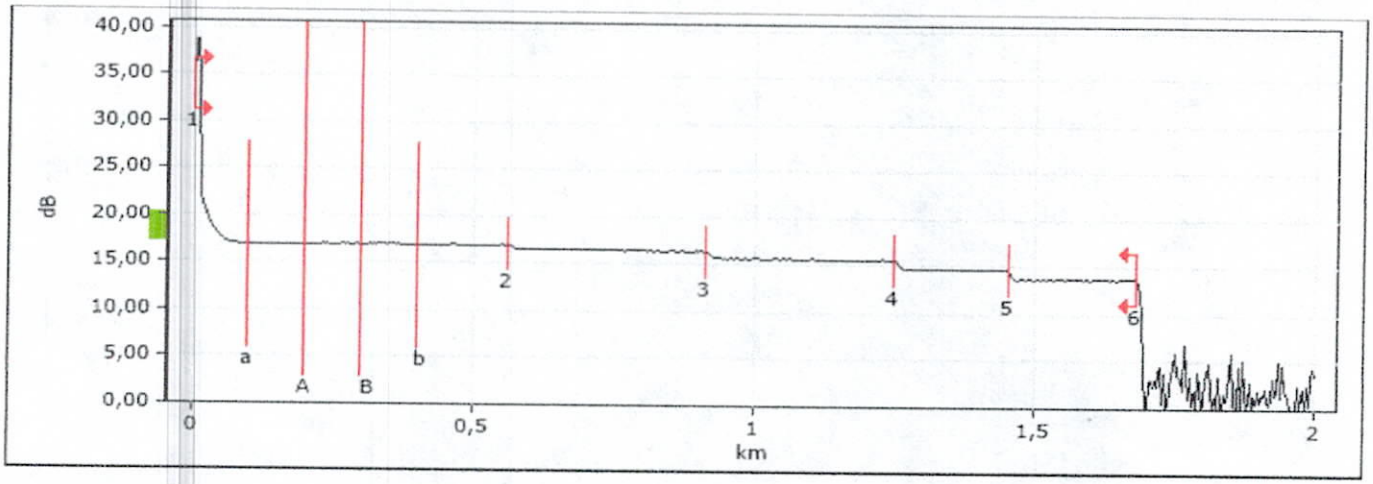
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,8		0,000
Section		0,5608	0,056		0,100	0,056
Non-Reflective	2	0,5608	0,415			0,471
Section		0,3524	0,071		0,201	0,542
Non-Reflective	3	0,9132	0,703			1,245

EXFO **Signature:** _____ **Date:** 18/03/2021

287

2686

OTDR Report

Section		0,3337	0,053		0,158	1,298
Non-Reflective	4	1,2470	0,918			2,216
Section		0,2051	0,047		0,230	2,263
Non-Reflective	5	1,4521	0,975			3,238
Section		0,2287	0,023		0,100	3,261
Non-Reflective	6	1,6808				3,261

Markers Information

A:	0,2001 km	16,929 dB	B:	0,3001 km	16,949 dB
a:	0,1000 km	16,909 dB	b:	0,4001 km	16,939 dB
B-A:	0,1000 km	-0,021 dB			

Manual Measurements

4 points event loss:	-0,078 dB	A-B LSA attenuation.:	0,000 dB/km
A-B LSA loss:	0,000 dB	3 points reflectance:	*****
2 points section attenuation:	-0,205 dB/km	A-B ORL:	51,91 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

288

2687

OTDR Report

General Information

Filename:	CAM 106.SOR	Cable ID:	
Test date:	1/03/2021	Fiber ID:	CAM 106
Test time:	8:29:03 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 106
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2688

OTDR Report

Results

Span length:	0,5147 km	Average splice loss:	
Span loss:	0,051 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	27,52 dB
Events count :	2	Splices count :	0

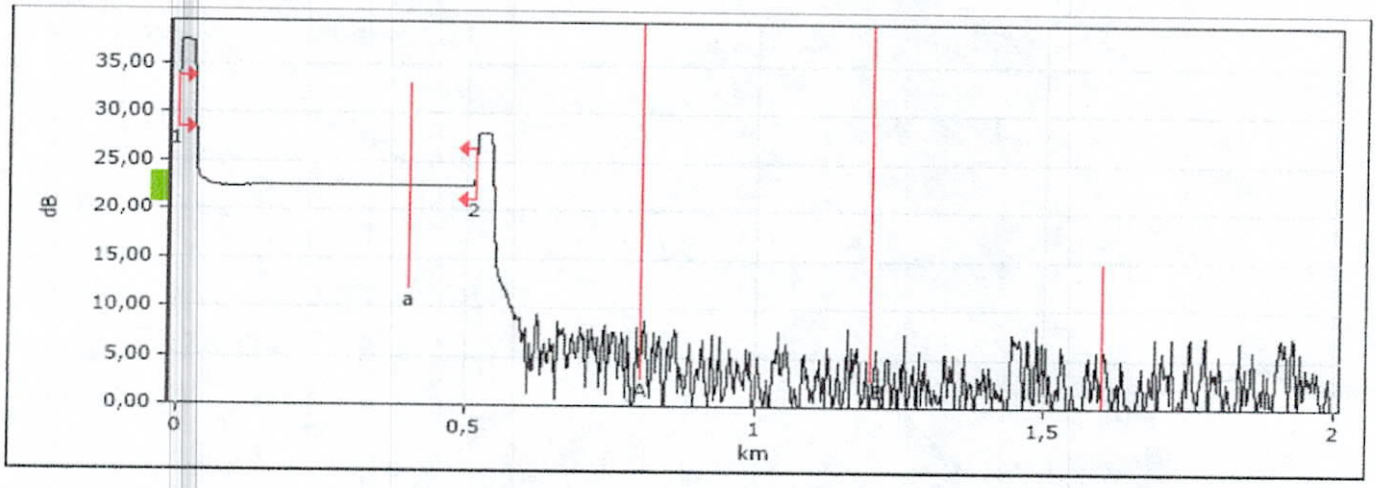
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-27,6		0,000
Section		0,5147	0,051		0,100	0,051
Reflective	2	0,5147		-46,7		0,051

EXFO **Signature:** _____ **Date:** 18/03/2021

290

2689

OTDR Report

Markers Information

A:	0,8003 km	6,351 dB	B:	1,2005 km	4,303 dB
a:	0,4002 km	22,492 dB	b:	1,6007 km	7,917 dB
B-A:	0,4002 km	2,048 dB			

Manual Measurements

4 points event loss:	22,970 dB	A-B LSA attenuation.:	6,043 dB/km
A-B LSA loss:	2,418 dB	3 points reflectance:	*****
2 points section attenuation:	5,117 dB/km	A-B ORL:	*****

291

2690

2494

OTDR Report

General Information

Filename:	CAM 110.SOR	Cable ID:	
Test date:	22/02/2021	Fiber ID:	CAM 110
Test time:	10:28:19 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 110
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

292

2691

OTDR Report

Results

Span length:	0,6823 km	Average splice loss:	0,369 dB
Span loss:	0,959 dB	Maximum splice loss:	0,592 dB
Average loss:	1,406 dB/km	Span ORL:	< 17,38 dB
Events count :	4	Splices count :	2

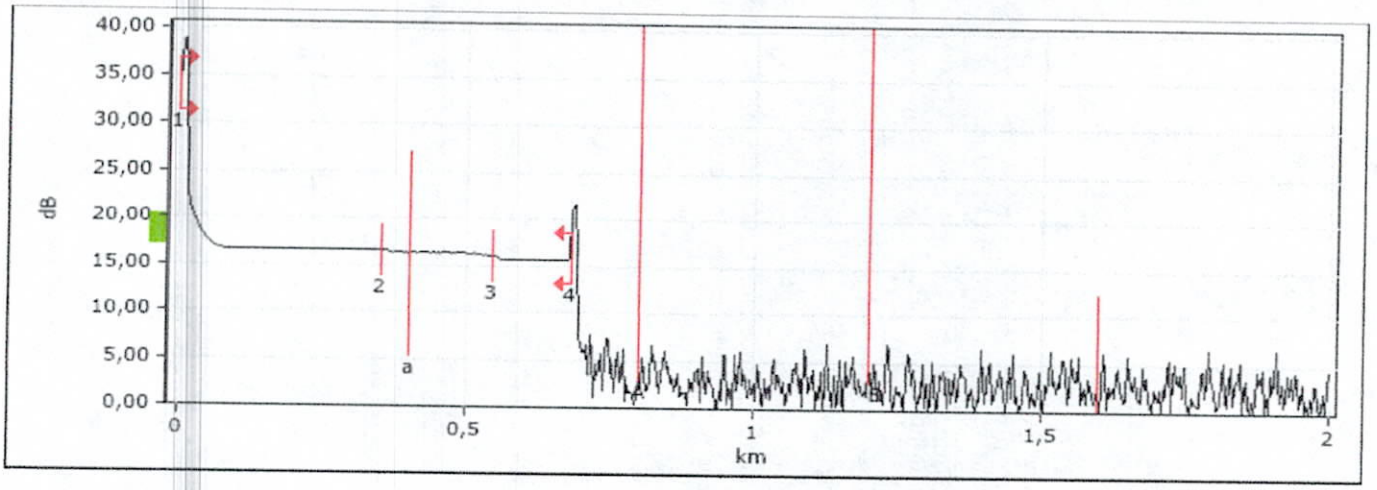
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	100 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,6		0,000
Section		0,3530	0,035		0,100	0,035
Merged Non-Reflective	2	0,3530	0,147			0,182
Section		0,1927	0,171		0,888	0,353
Non-Reflective	3	0,5457	0,592			0,945

293

2692

OTDR Report

Section		0,1366	0,014		0,100	0,959
Reflective	4	0,6823		-50,2		0,959

Markers Information

A:	0,8003 km	0,000 dB	B:	1,2005 km	5,552 dB
a:	0,4002 km	16,261 dB	b:	1,6007 km	0,000 dB
B-A:	0,4002 km	-5,552 dB			

Manual Measurements

4 points event loss:	17,214 dB	A-B LSA attenuation.:	1,438 dB/km
A-B LSA loss:	0,575 dB	3 points reflectance:	-70,8 dB
2 points section attenuation:	-13,873 dB/km	A-B ORL:	*****

EXFO **Signature:** _____ **Date:** 18/03/2021

294

2693

OTDR Report

General Information

Filename:	CAM 112.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 112
Test time:	4:36:12 p. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 112
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

EXFO **Signature:** _____ **Date:** 18/03/2021

2694

OTDR Report

Results

Span length:	0,2896 km	Average splice loss:	
Span loss:	0,029 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	≥ 14,13 dB
Events count :	2	Splices count :	0

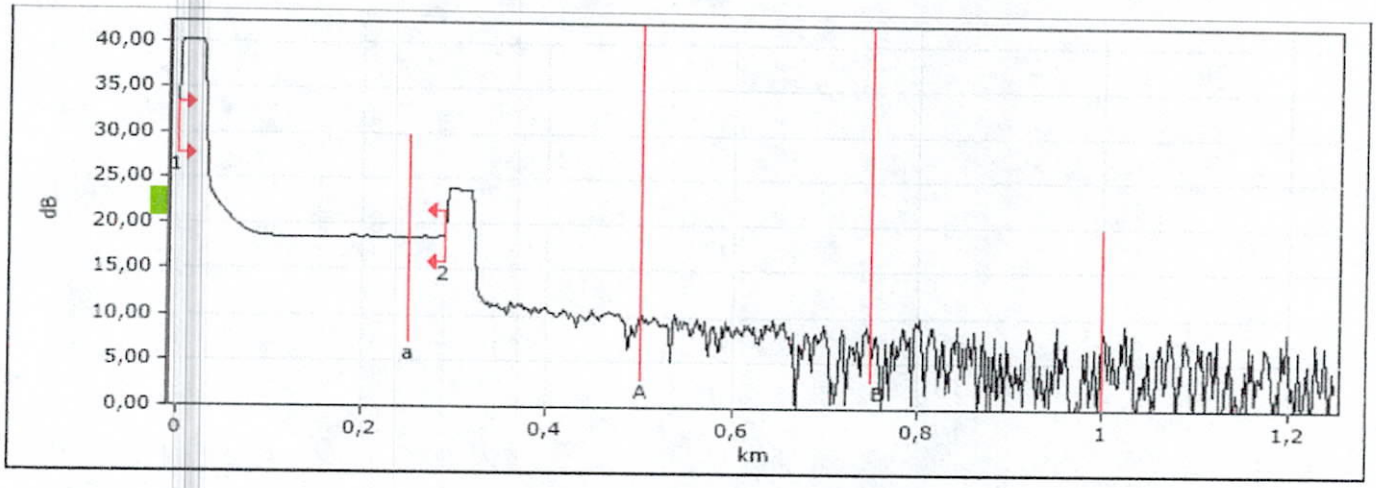
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	1,2500 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,6		0,000
Section		0,2896	0,029		0,100	0,029
Reflective	2	0,2896		-47,0		0,029

296

OTDR Report

Markers Information

A:	0,5002 km	9,837 dB	B:	0,7503 km	6,622 dB
a:	0,2501 km	18,581 dB	b:	1,0004 km	8,509 dB
B-A:	0,2501 km	3,215 dB			

Manual Measurements

4 points event loss:	13,023 dB	A-B LSA attenuation.:	15,441 dB/km
A-B LSA loss:	3,862 dB	3 points reflectance:	-64,4 dB
2 points section attenuation:	12,854 dB/km	A-B ORL:	52,02 dB

2696

OTDR Report

General Information

Filename:	CAM 133.SOR	Cable ID:	
Test date:	25/02/2021	Fiber ID:	CAM 133
Test time:	9:00:03 a. m. (GMT-05:00)	Customer:	
Job ID:	PRUEBAS	Company:	
Comments:			

Location A

Location:	cam 133
Operator:	CARLOS
Unit model:	FTB-7200D-023B-EI
Unit s/n:	592146
Calibration date:	20/07/2020

Location B

Location:	NP4
Operator:	CCTV CASANARE
Unit model:	
Unit s/n:	
Calibration date:	

OTDR Thresholds

Description	Fail	Warning
Splice loss	1,000 dB	1,000 dB
Connector loss	1,000 dB	1,000 dB
Reflectance	-40,0 dB	-40,0 dB
Fiber section attenuation	400,000 dB/km	400,000 dB/km
Span loss	45,000 dB	45,000 dB
Span length	0,0000 km	0,0000 km
Span ORL	15,00 dB	15,00 dB

2697

OTDR Report

Results

Span length:	0,4320 km	Average splice loss:	
Span loss:	0,043 dB	Maximum splice loss:	
Average loss:	0,100 dB/km	Span ORL:	< 18,06 dB
Events count :	2	Splices count :	0

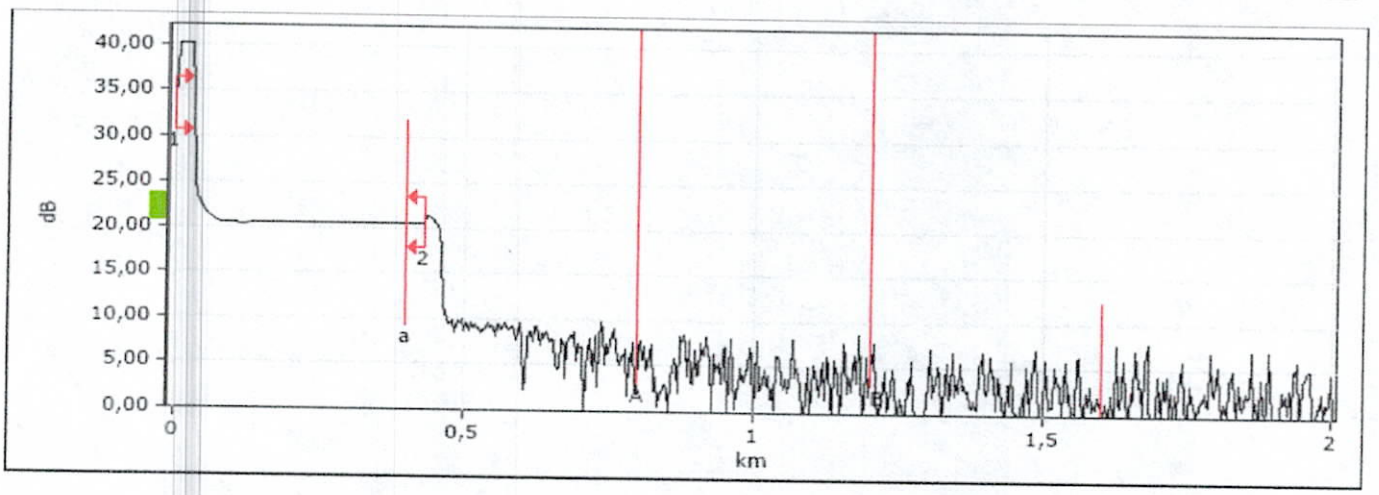
Test Parameters

Wavelength:	1550 nm (9 µm)	Duration:	15 s
Range:	2,0000 km	High resolution:	Yes
Pulse:	275 ns	Resolution:	0,040 m

Test Settings

IOR:	1,468325	Splice loss detection threshold:	0,020 dB
Backscatter:	-81,87 dB	Reflectance detection threshold:	-72,0 dB
Helix factor:	0,00 %	End-of-fiber detection threshold:	5,000 dB

Graphic



Event Table

Type	Number	Location/Length (km)	Loss (dB)	Reflection (dB)	Attenuation (dB/km)	Cumul. (dB)
Launch Level	1	0,0000		-23,7		0,000
Section		0,4320	0,043	-	0,100	0,043
Reflective	2	0,4320		-60,1		0,043

EXFO **Signature:** _____ **Date:** 18/03/2021

299