SITE ACCEPTACE TEST PROCEDURES AND PLAN FOR OPTICAL FIBRE CABLES

1. Introduction

The Site Acceptance Test Plan must stimulate the quality during the site work from the storage of materials to the complement of installation.

In addition to stimulating of quality control, it assists in keeping the record of test and remembering the major point of the site work,

2. List of Site Acceptance Test

1) Pre-Installation Test (Drum Test)
    a. Physical Inspection of the cable assembly for damage
    b. Optical fibre continuity and fibre attenuation with OTDR at 1550 nm
    c. Fibre Optic Cable length measurement using OTDR
2) Post-Installation Test
    a. Optical fibre continuity and fibre attenuation with OTDR at 1550 nm
    b. Fibre Optic Cable length measurement using OTDR
3) Splice Test
    a. Per splice bi-directional average attenuation with OTDR
    b. Physical inspection of splice box/enclosure for proper fibre / cable routing techniques
    c. Physical inspection of sealing techniques, weatherproofing, etc.
4) Commissioning Test
    a. End to End (FODP to FODP) bi-directional average attenuation of each fibre at 1310 nm and 1550 nm by OTDR.
    b. End to End (FODP to FODP) bi-directional average attenuation of each fibre at 1310 nm and 1550 nm by Power meter
    c. Bi-directional average splice loss by OTDR of each splice as well as for all splices in the link (including at FODP also).
    d. Proper termination and labelling of fibres & fibre optic cables at FODP as per approved labelling plan.

Reference Documents:

1) DRS of OPGW/Optical fiber.
2) Sag-Tension Chart.
3) OPGW Live-Line Installation Procedure.
4) Splicing/Jointing Manual.

PRE-INSTALLATION TEST (DRUM TEST)

Title of Test : Pre-Installation Test (Drum Test)

Application : All FO Cables

Purpose of the Test : For precluding cable that may be damaged duringshipment and transportation, every spooled FO cable segment shall be tested prior to installation.

Test Equipment : OTDR & physical inspection

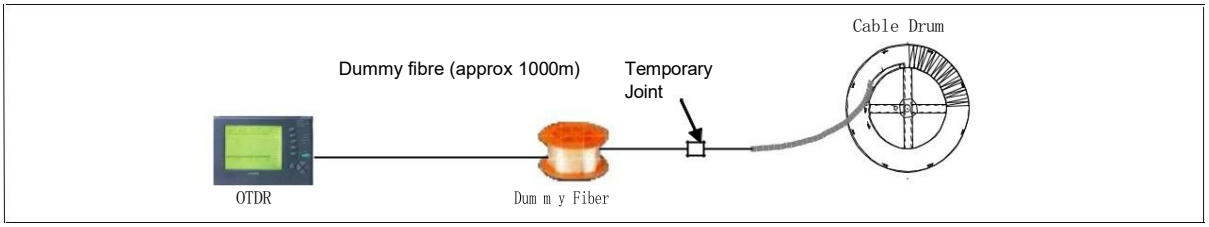
Test Set-up & Procedure : First of all, check the appearance and marking of the Drums.

SHIPPING TAG

Package Name			
Employer 's Name	**Power Grid Corporation of India Limited (A Government of India Enterprise)**		
Employer 's Address			
Destination Address			
Vendor's Name			
Vendor's address			
Year of Manufacture	**Xxxx**	**Batch No.**	**Xxxx**
Drum No.	**(As per the Drum Schedule)**		
Type of Cable			
Type of Fibres	**DWSM**		
No. of Fibres	**24/48 Fibreibre**		
Total Cable Length	**Xxx Mtrs**		
Weight of the Drum	**Xxx kg**		
Year of Production	**Day-Month-Year**	**Factory Inspection Date**	**Day-Month-Year**
Factory Seal			

Xxxx – To be furnished by Sterlite Power Transmission Ltd Shall furnished before FAT.

- Check the sealing of the cable ends and spare cable caps
- Carry out the physical inspection of the cable assembly and then check the Fibre Length, continuity and attenuation of optical fibers by OTDR. Compare the observed attenuation data with respect to the pre-shipment / FAT data.



Acceptance Criteria:

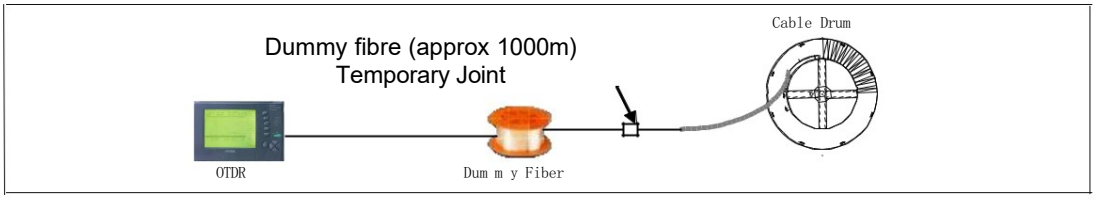
- Appearance shall have no defect and drum marking shall be correct.
- The attenuation of the fibers shall be distributed uniformly throughout its length such that there are no point discontinuities in excess of 0.1dB. The overall optical fibers attenuation should be less than 0.21dB/km at 1550nm and 0.35dB/km at 1310nm.
- Cable ends and spare cable caps shall be properly sealed.
- Every drum, OPGW cable shall be tested for compliance of fibre Length, Continuity & attenuation with the Pre-Shipment data received from manufacturer.

Result/Conclusion:

- Test result shall be filled in the respective test formats as enclosed for Pre -Installation test.
- If there is any excess of attenuation compared with the standard attenuation norms, then the test shall be re-conducted. If the result of retest does not meet the norm, proper action shall be taken promptly in accordance with the flow of trouble slip.

SAT-01-A (24 ibre)
PRE-INSTALLATION TEST REPORT FOR OPGW CABLE (DRUM TEST)

Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance check		
2	Drum Marking check		
3	Sealing of Cable ends & provision of spare cable caps		

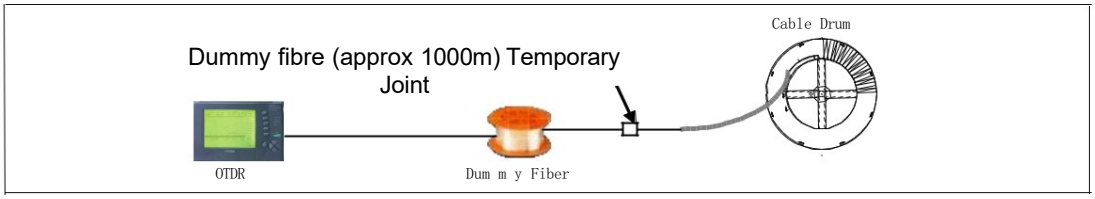
Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
ORANGE	7	Blue				
	8	Orange				
	9	Green				
	10	Brown				
	11	Slate				
	12	White				
GREEN	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
BROWN	19	Blue				
	20	Orange				
	21	Green				
	22	Brown				
	23	Slate				
	24	White				

OTDR Trace results attached for all fiber (Yes/No):

Tested By Witnessed By Approved By

SAT-01-A (48 Fibre)
PRE-INSTALLATION TEST REPORT FOR OPGW CABLE (DRUM TEST)

Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance check		
2	Drum Marking check		
3	Sealing of Cable ends & provision of spare cable caps		

Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

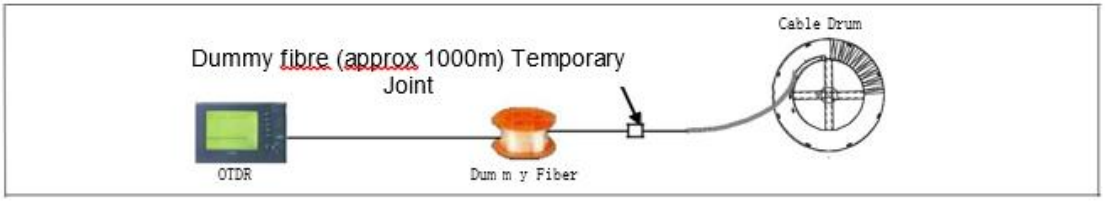
Tested By
(Sign with date)

Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-01-A (96 Fibre)
PRE-INSTALLATION TEST REPORT FOR OPGW CABLE (DRUM TEST)

Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance check		
2	Drum Marking check		
3	Sealing of Cable ends & provision of spare cable caps		

Tube colour	Fibre No	Fibre Colour	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				

	24	Aqua				
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				

Red	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				
	82	Violet				
	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

Approved By
(Sign with date)

POST-INSTALLATION TEST

Title of Test : Post-Installation Test (After Stringing)

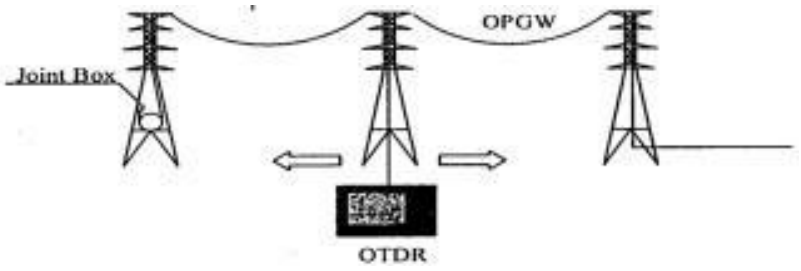
Application : All splicing points

Purpose of the Test : Before splicing work, check for any increase or step Discontinuity in attenuation that may have occurred during Transportation and installation.

Test Equipment : OTDR

Test Set-up & Procedure :

- After successfully completion of the installation work.
- Check for optical attenuation and discontinuity at every splicing point.



Acceptance Criteria:

- The attenuation of the fibers shall be distributed uniformly throughout its length such that there are no point's discontinuities in excess of 0.1dB. The overall optical fibers attenuation should be less than 0.21 dB/km at 1550nm and 0.35 dB/km at 1310nm.

Result/Conclusion:

- Test result shall be filled in the respective test formats as enclosed for Post Installation Test.

Tested By	**Witnessed By**	**Approved By**
(Sign with date)	(Sign with date)	(Sign with date)

SPLICE TEST

Title of Test : Splice Test

Application : All splicing positions

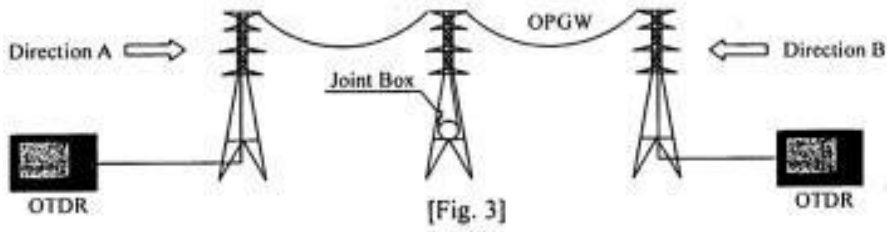
Purpose of the Test:

- Splicing as per approved splicing plan.
- Before closing the splice enclosure, splice loss shall be measured for checking the splicing condition.
- The treatment of surplus fibers on the splice tray and sealing condition shall be checked.

Test Equipment : OTDR & physical inspection

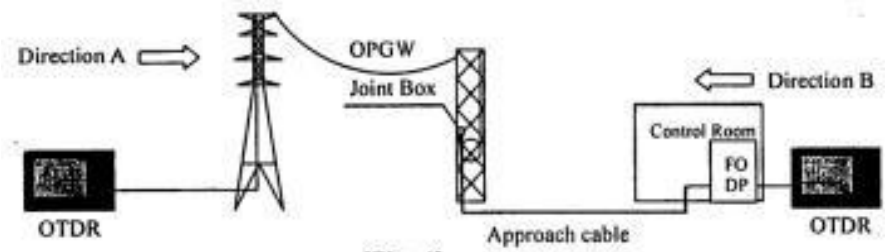
Test Set-up & Procedure:

- All in-line splices shall be encased in splice enclosures with a protective moisture and dust free environment and suitable for outdoor use. All fibers shall be accomplished through the fusion splicing, and then protected by heating shrinkable tube. All splices shall be neatly installed in covered splice trays with 0.5 meter of bare fiber service loop and 1 meter of fiber unit service loop. Before closing the in-line splice enclosure, the splice test shall be executed at both sides (direction A & direction B) of jointing point. The splicing shall be as per approved splicing plan.



[Fig. 3]

- the splice test in the sub-station is the same as that of the in-line splice. In this case, in-line splice enclosure shall be installed on the gantry tower and splicing is between OPGW and approach cable.



[Fig. 4]

- When closing the splice enclosure, the treatment of surplus fibers on the splice tray, sealing conditions and weather proofing shall be checked by physical inspection.

Acceptance Criteria:

- The average of bi-directional attenuation of each fusion splice shall not be more than 0.1 dB at 1550nm & 1310nm. Adequate care shall be taken to minimize the splice loss so as to achieve the required bi-directional average attenuation of splice in the link less than 0.05 dB per splice.
- Appearance of splice enclosure shall have no defect.
- The fibers routing is proper inside the splice enclosure and FODP.
- Splice enclosure shall have good sealing condition to prevent moisture and dust free environment and render it waterproof.
- Splicing is as per approved splicing plan.
- The connector loss shall be less than or equal to 0.5 dB per connector.

- The warning sheet is properly fixed on the splice enclosure.

Result/Conclusion:

- Test result shall be filled in the respective test formats as enclosed for splice test.

Tested By	**Witnessed By**	**Approved By**
(Sign with date)	(Sign with date)	(Sign with date)

COMMISSIONING TEST (LINK TEST)

Title of Test : Link Commissioning Test

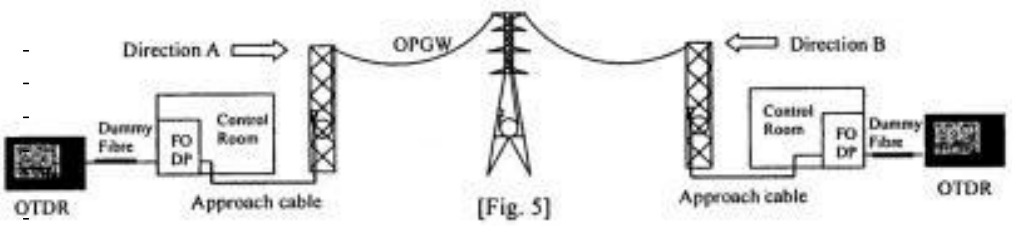
Application : All Links (FODP to FODP)

Purpose of the Test: After completion of splicing of installed section and termination at both ends, the optical fiber path attenuation shall be checked to ensure that the optical fiber shall be in operation satisfactorily.

Test Equipment : OTDR, Power Meter & Light Source

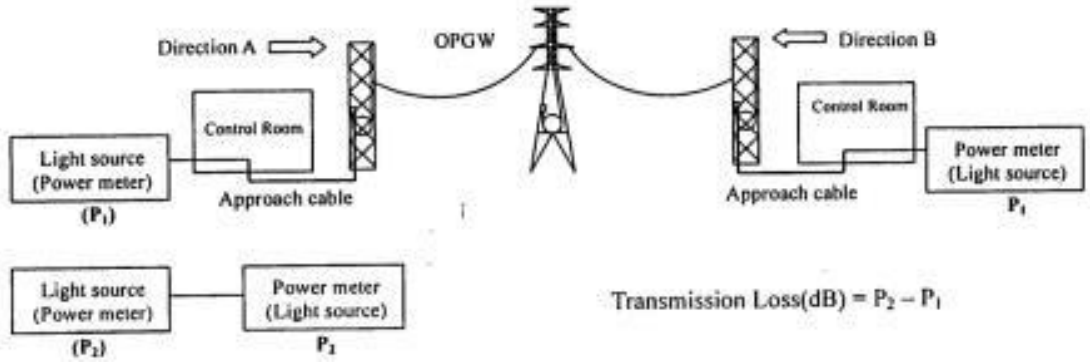
Test Set-up & Procedure:

- The numbering and labeling plan shall be checked at each FODP.
- The optical fiber path attenuation shall be measured at both ends of link by OTDR as well as Power meter and laser light at 1310nm and 1550 nm. The bi-directional average attenuation by both methods shall be calculated.



[Fig. 5]

- The measurement using the power meter is as below;



NOTE: The FODP to FODP link distance should be restricted to 70 Kms for the bidirectional test as the attenuation measurement using OTDR for the wavelength 1310nm may not be accurate for the link distances more than 70 Kms.

Acceptance Criteria:

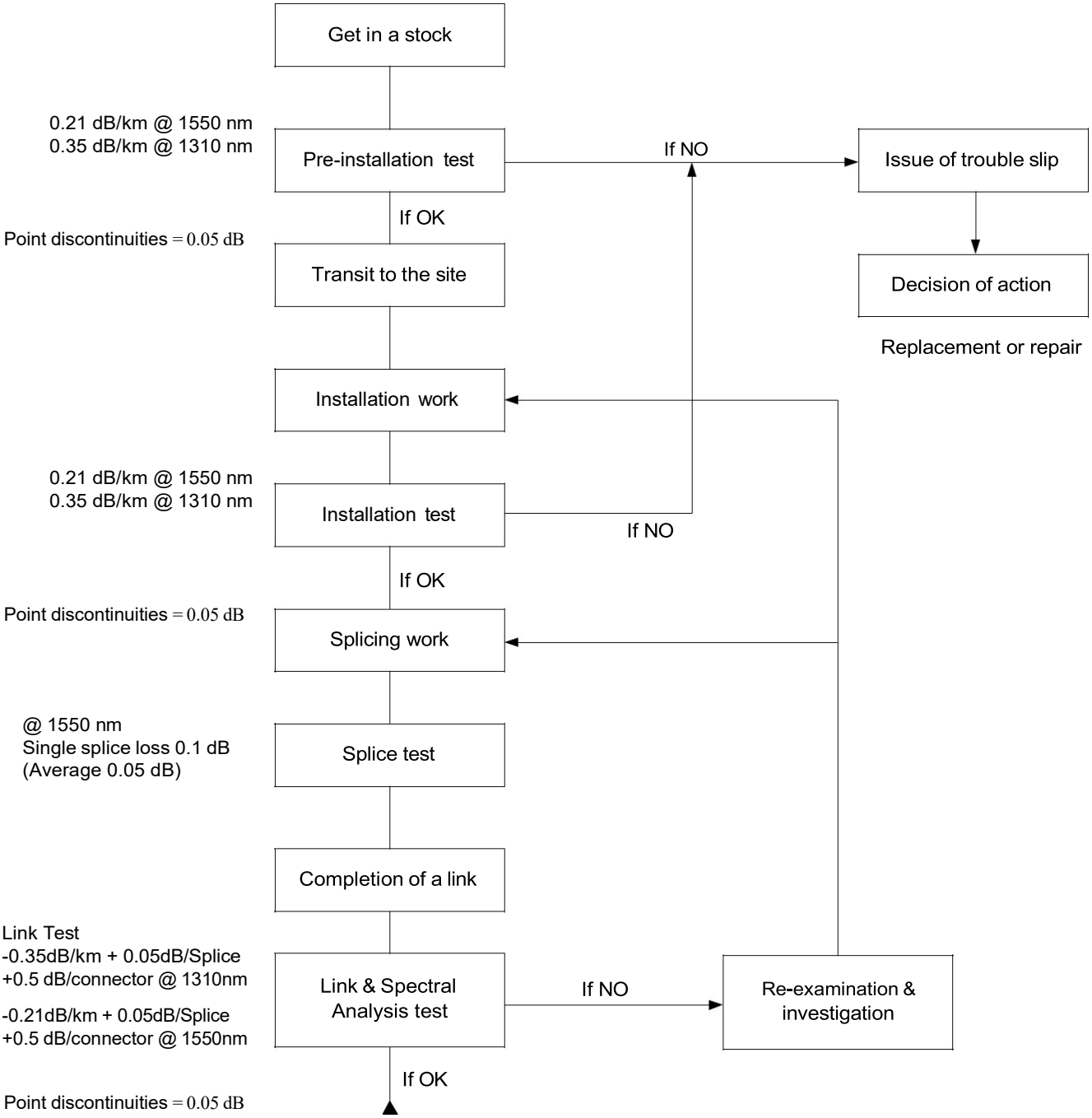
- The numbering and labeling plan at each FODP shall be as per approved plan.
- The overall optical fiber path attenuation at 1550 nm shall be 0.21 dB/km + 0.05 dB/splice + 0.5 dB/connector.
- The overall optical fiber path attenuation at 1310 nm shall be 0.35 dB/km + 0.05 dB/splice + 0.5 dB/connector.
- There are no point discontinuities in excess of 0.1 dB

Result/ Conclusion:

- Test result shall be filled in the respective test formats as enclosed for link commissioning test.
- Bidirectional averages splice loss by OTDR of each splice as well as for all splices in the link (including FODP also).
- Proper termination and labeling of fibers and fiber optic cables at FODP as per approved labeling plan.

Tested By	**Witnessed By**	**Approved By**
(Sign with date)	(Sign with date)	(Sign with date)

PROCEDURE CHART

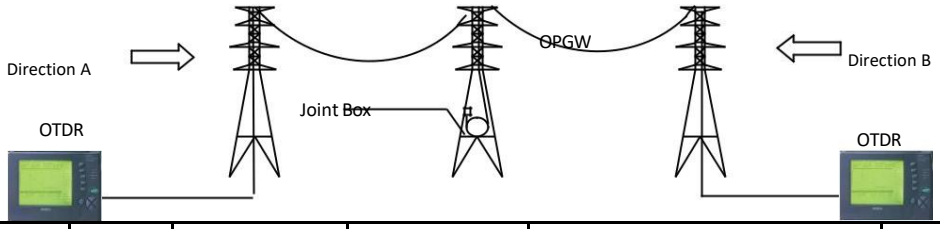


PLAN FOR SAT

Test Title	Function/Parameter	Test Equipment	Criteria	Remarks
llation Test est)	The point is whether the cable shall be used for the installation or not. Appearance of drum and cable; Optical fiber continuity end-to-end and attenuation	OTDR	Attenuation: ≤0.21dB/km@1550nm ≤0.35dB/km@1310 nm Discontinuity: ≤0.1 dB	
Installation Test	After completion of installation, check for any increase or step discontinuity in attenuation that may have occurred during transportation and installation.	OTDR	Attenuation: ≤0.21dB/km@1550 nm ≤0.35dB/km@1310 nm Discontinuity: ≤0.1 dB	
Splice Test	Before closing splice enclosure, splice loss shall be measured from both directions. OTDR Shall be located at the one side of splicing point, loop for measurement of bi-directional splice loss shall be constituted at the other side. S1=0 ≤ A+B ≤0.1dB 2 Where, A is splice loss from 'A' direction. B is splice loss from 'B' direction.	OTDR	@ 1550 nm, Single splice loss 0.1 dB Average 0.05 dB.	
Commissioning Test (Link Test)	After installation and splicing of each link, path attenuation shall be measured with the help of OTDR & power meter. Splice loss shall be measured with OTDR and average splice loss shall be calculated	OTDR & Power Meter, Laser Source	<Link Test> **Path attenuation**: ≤0.21dB/km +0.05dB/splice +0.5db/connector @1550nm ≤0.35db/km +0.05dB/splice +0.5db/connector @1310 nm **Discontinuity**:≤0.05dB **Average splice loss** $=(S_1+S_2+---Sn)/N$ Where S_1, S_2,---S_n is average splice loss at joint 1,2, ---n etc.	

SAT-02-A (24 Fibre)
POST-INSTALLATION TEST REPORT FOR OPGW

Report No:	Sector:		
Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation dB/km		Remarks
				1550nm	1310nm	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
ORANGE	7	Blue				
	8	Orange				
	9	Green				
	10	Brown				
	11	Slate				
	12	White				
GREEN	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
BROWN	19	Blue				
	20	Orange				
	21	Green				
	22	Brown				
	23	Slate				
	24	White				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

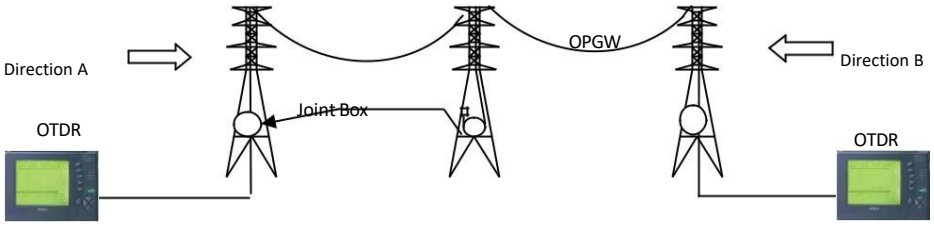
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-B (24 Fibre)

SPLICE LOSS TEST REPORT FOR OPGW @ 1550nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1550nm	1.4675	0.05 dB/Splice



Joint Box	Appearance	Fiber Routing	Sealing	Tower No.

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
ORANGE	7	Blue				
	8	Orange				
	9	Green				
	10	Brown				
	11	Slate				
	12	White				
GREEN	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
BROWN	19	Blue				
	20	Orange				
	21	Green				
	22	Brown				
	23	Slate				
	24	White				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

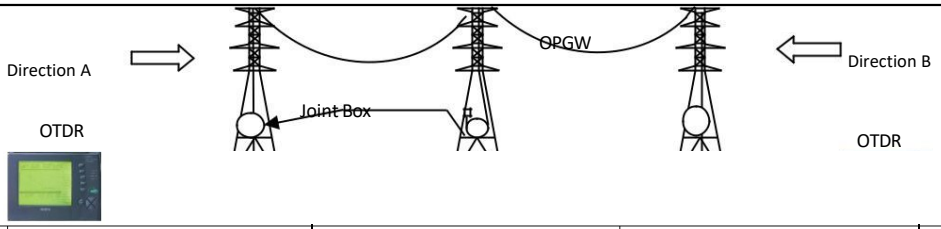
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-A (24 Fibre)

SPLICE LOSS TEST REPORT FOR OPGW @ 1310nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1310nm	1.4670	0.05 dB/Splice



Joint Box	Appearance	Fiber Routing	Sealing	Tower No.

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
ORANGE	7	Blue				
	8	Orange				
	9	Green				
	10	Brown				
	11	Slate				
	12	White				
GREEN	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
BROWN	19	Blue				
	20	Orange				
	21	Green				
	22	Brown				
	23	Slate				
	24	White				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

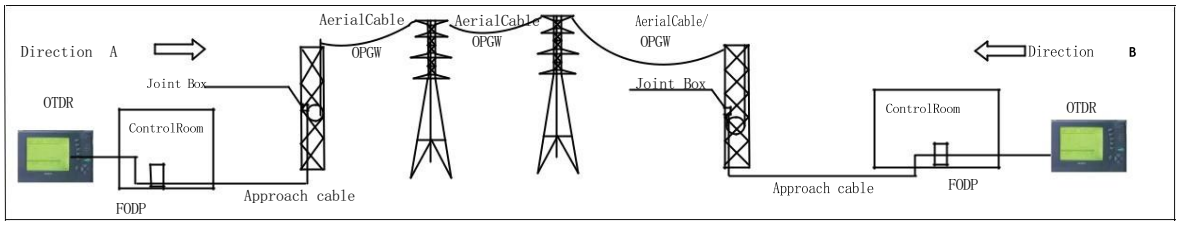
Approved By
(Sign with date)

SAT-04-A (24 Fibre)

FO CABLE END TO END TEST USING OTDR (1310 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1310 nm	0.35 dB/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube ColorFiber No	Fiber Color	Length (km)	Total LOSS (dB)		Actual Loss (dB)=(A+B)/2
			Direction A	Direction B	
BLUE 1	Blue				
2	Orange				
3	Green				
4	Brown				
5	Slate				
6	White				
ORANGE 7	Blue				
8	Orange				
9	Green				
10	Brown				
11	Slate				
12	White				
GREEN 13	Blue				
14	Orange				
15	Green				
16	Brown				
17	Slate				
18	White				
BROWN 19	Blue				
20	Orange				
21	Green				
22	Brown				
23	Slate				
24	White				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

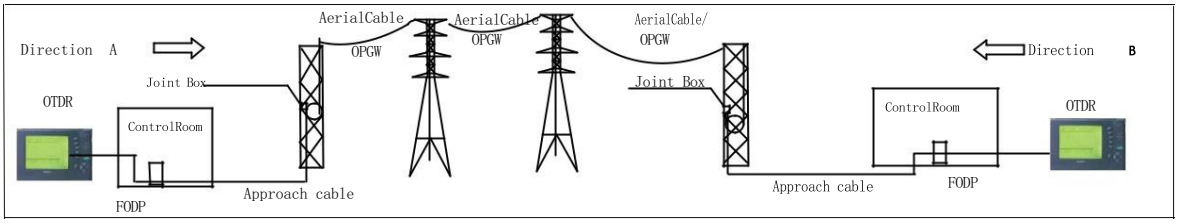
Approved By
(Sign with date)

SAT-04-B (24 Fibre)

FO CABLE END TO END TEST USING OTDR (1550 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1550 nm	0.21 dB/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (Km)	Total LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
ORANGE	7	Blue				
	8	Orange				
	9	Green				
	10	Brown				
	11	Slate				
	12	White				
GREEN	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
BROWN	19	Blue				
	20	Orange				
	21	Green				
	22	Brown				
	23	Slate				
	24	White				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

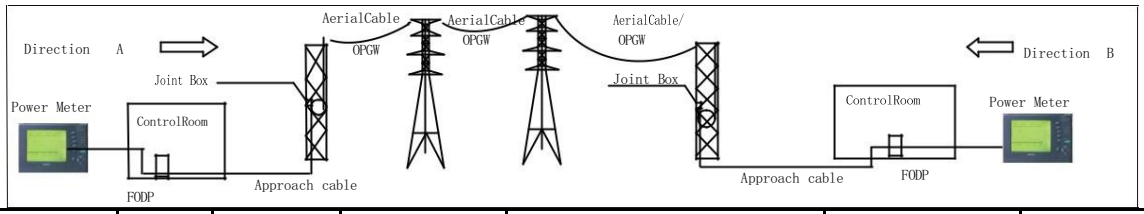
Approved By
(Sign with date)

SAT-05-A (24 Fibre)

FO CABLE END TO END TEST USING POWER METER (1550 nm)

Report No: Date:

SECTOR	FODP to FODP			
LINE LINK				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm			P1: Pr - A dBm	
B- Power measuring from B Direction dBm			P2: Pr - B dBm	
Type of Power Meter	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1550 nm	0.21 db/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
BLUE	1	Blue					
	2	Orange					
	3	Green					
	4	Brown					
	5	Slate					
	6	White					
ORANGE	7	Blue					
	8	Orange					
	9	Green					
	10	Brown					
	11	Slate					
	12	White					
GREEN	13	Blue					
	14	Orange					
	15	Green					
	16	Brown					
	17	Slate					
	18	White					
BROWN	19	Blue					
	20	Orange					
	21	Green					
	22	Brown					
	23	Slate					
	24	White					

Tested By
(Sign with date)

Witnessed By
(Sign with date)

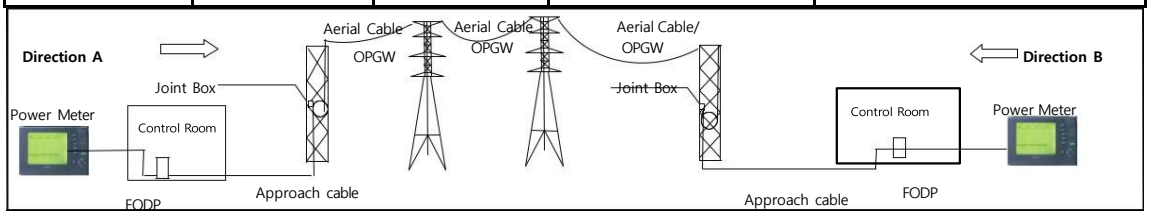
Approved By
(Sign with date)

SAT-05-B (24 Fibre)

FO CABLE END TO END TEST USING POWER METER (1310 nm)

Report No: Date:

SECTOR	FODP TO FODP			
LINE LINK				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm			P1: Pr - A dBm	
B- Power measuring from B Direction dBm			P2: Pr - B dBm	
Type of Power Meter	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1310 nm	0.35 db/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
BLUE	1	Blue					
	2	Orange					
	3	Green					
	4	Brown					
	5	Slate					
	6	White					
ORANGE	7	Blue					
	8	Orange					
	9	Green					
	10	Brown					
	11	Slate					
	12	White					
GREEN	13	Blue					
	14	Orange					
	15	Green					
	16	Brown					
	17	Slate					
	18	White					
BROWN	19	Blue					
	20	Orange					
	21	Green					
	22	Brown					
	23	Slate					
	24	White					

Tested By
(Sign with date)

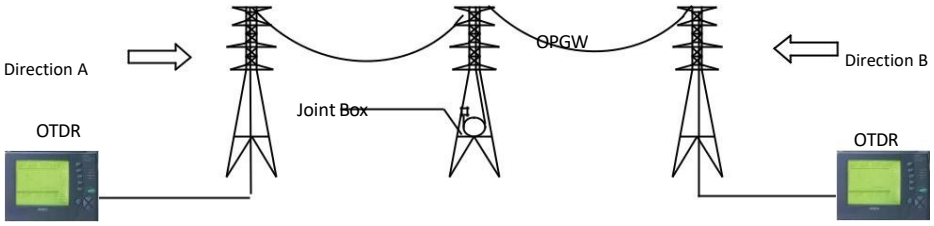
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-02-A (48 Fibre)

POST-INSTALLATION TEST REPORT FOR OPGW

Report No:	Sector:		
Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance check		
2	Drum Marking check		
3	Sealing of Cable ends & provision of spare cable caps		

Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

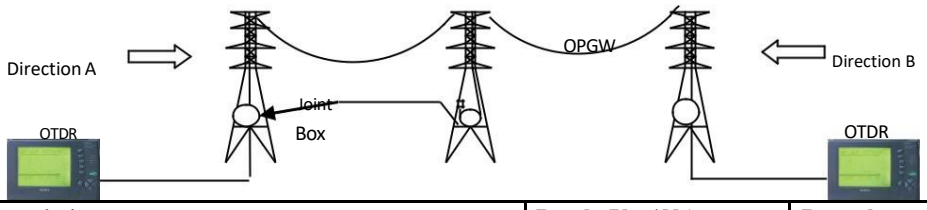
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-B (48 Fibre)

SPLICE LOSS TEST REPORT FOR OPGW @ 1550nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1550nm	1.4675	0.05 dB/Splice



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance check		
2	Drum Marking check		
3	Sealing of Cable ends & provision of spare cable caps		

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

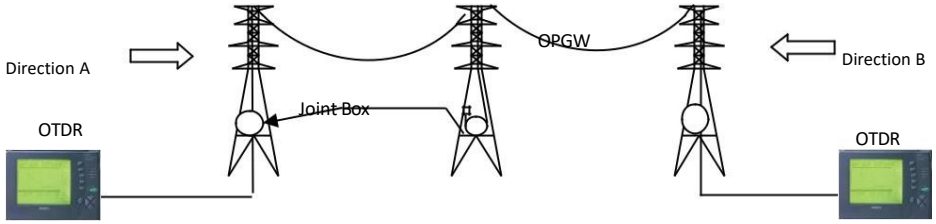
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-A (48 Fibre)

SPLICE LOSS TEST REPORT FOR OPGW @ 1310nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1310nm	1.4670	0.05 dB/Splice



S.No:	Description	Result (Yes / No)	Remarks
1	Physical Appearance Check		
2	Drum Marking Check		
3	Sealing of Cable Ends & Provision of Spare Cable Caps		

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

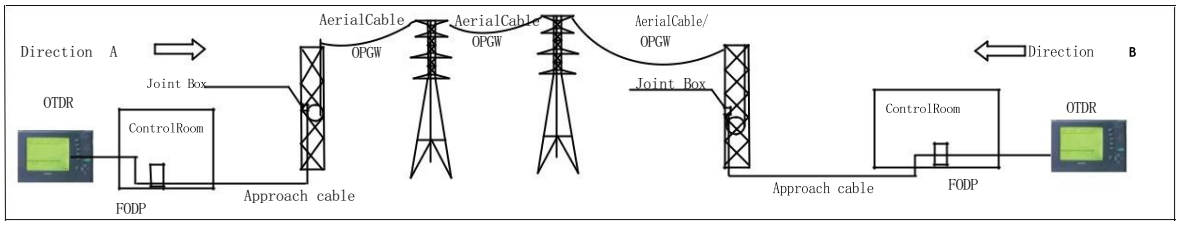
Approved By
(Sign with date)

SAT-04-A (48 Fibre)

FO CABLE END TO END TEST USING OTDR (1310 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1310 nm	0.35 db/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (km)	Total Loss (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	Total Loss (dB)		Actual Loss (dB)=(A+B)/2
				1310nm dB/km	1550nm dB/km	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

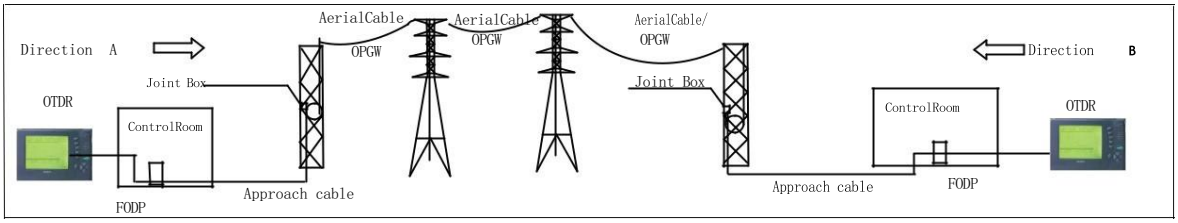
Approved By
(Sign with date)

SAT-04-B (48 Fibre)

FO CABLE END TO END TEST USING OTDR (1550 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1550 nm	0.21 db/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (km)	Total Loss (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				

Tube Color	Fiber No	Fiber Color	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

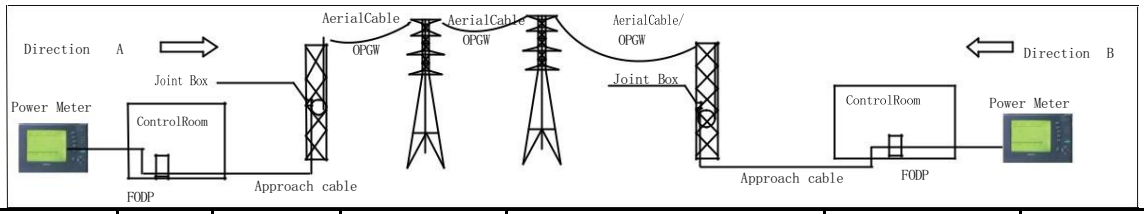
Approved By
(Sign with date)

SAT-05-A (48 Fibre)

FO CABLE END TO END TEST USING POWER METER (1550 nm)

Report No: Date:

SECTOR	FODP to FODP			
LINE LINK				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm			P1: Pr - A dBm	
B- Power measuring from B Direction dBm			P2: Pr - B dBm	
Type of Power Meter	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1550 nm	0.21 db/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
BLUE	1	Blue					
	2	Orange					
	3	Green					
	4	Brown					
	5	Slate					
	6	White					
	7	Red					
	8	Black					
	9	Yellow					
	10	Violet					
	11	Pink					
	12	Aqua					
ORANGE	13	Blue					
	14	Orange					
	15	Green					
	16	Brown					
	17	Slate					
	18	White					
	19	Red					
	20	Black					
	21	Yellow					
	22	Violet					
	23	Pink					
	24	Aqua					

Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
GREEN	25	Blue					
	26	Orange					
	27	Green					
	28	Brown					
	29	Slate					
	30	White					
	31	Red					
	32	Black					
	33	Yellow					
	34	Violet					
	35	Pink					
	36	Aqua					
BROWN	37	Blue					
	38	Orange					
	39	Green					
	40	Brown					
	41	Slate					
	42	White					
	43	Red					
	44	Black					
	45	Yellow					
	46	Violet					
	47	Pink					
	48	Aqua					

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

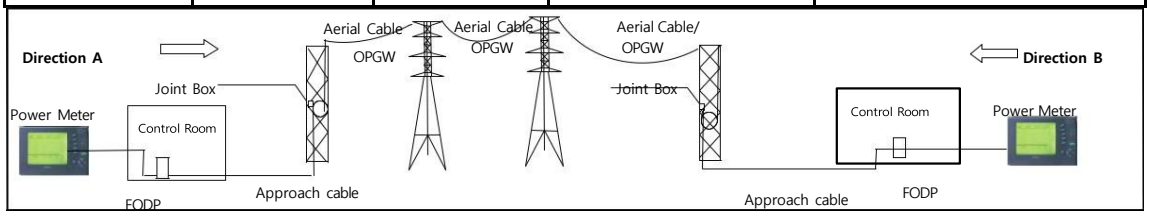
Approved By
(Sign with date)

SAT-05-B (48 Fibre)

FO CABLE END TO END TEST USING POWER METER (1310 nm)

Report No: Date:

SECTOR	FODP TO FODP			
LINE LINK				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm			P1: Pr - A dBm	
B- Power measuring from B Direction dBm			P2: Pr - B dBm	
Type of Power Meter	Testing Date	Wave Length	Max Attenuation of Fiber	Specified Loss
		1310 nm	0.35 db/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
BLUE	1	Blue					
	2	Orange					
	3	Green					
	4	Brown					
	5	Slate					
	6	White					
	7	Red					
	8	Black					
	9	Yellow					
	10	Violet					
	11	Pink					
	12	Aqua					
ORANGE	13	Blue					
	14	Orange					
	15	Green					
	16	Brown					
	17	Slate					
	18	White					
	19	Red					
	20	Black					
	21	Yellow					
	22	Violet					
	23	Pink					
	24	Aqua					

Tube Color	Fiber No	Fiber Color	Length (Km)	Received Power (dB)		Actual Loss (dB) P=(P1+P2)/2	Average Loss (dB/km) P/Section length
				Direction-A (P1)	Direction-B (P2)		
GREEN	25	Blue					
	26	Orange					
	27	Green					
	28	Brown					
	29	Slate					
	30	White					
	31	Red					
	32	Black					
	33	Yellow					
	34	Violet					
	35	Pink					
	36	Aqua					
BROWN	37	Blue					
	38	Orange					
	39	Green					
	40	Brown					
	41	Slate					
	42	White					
	43	Red					
	44	Black					
	45	Yellow					
	46	Violet					
	47	Pink					
	48	Aqua					

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

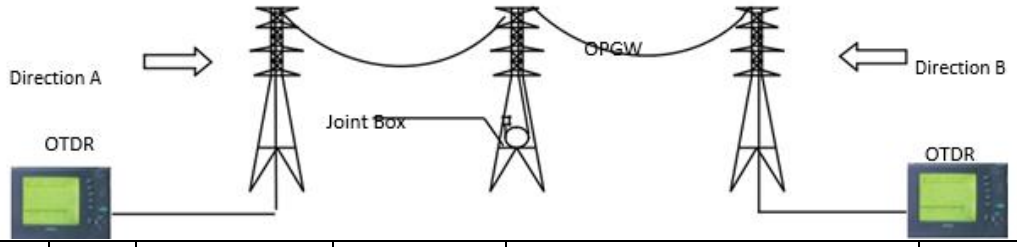
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-02-A (96 Fibre)

POST-INSTALLATION TEST REPORT FOR OPGW

Report No:	Sector:		
Date:	Section:		
	Drum No:		
	Drum Length:		(As per Pre-shipment date)
	Drum Length:		(Actual at site)
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	MAX ATTENUATION
Testing Date:	1310nm	1.4670	0.35 dB/km
	1550nm	1.4675	0.21 dB/km



Tube colour	Fibre No	Fibre Colour	Length (km)	Attenuation		Remarks
				1310nm dB/km	1550nm dB/km	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				

	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				
	82	Violet				
	83	Pink				
	84	Aqua				

Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

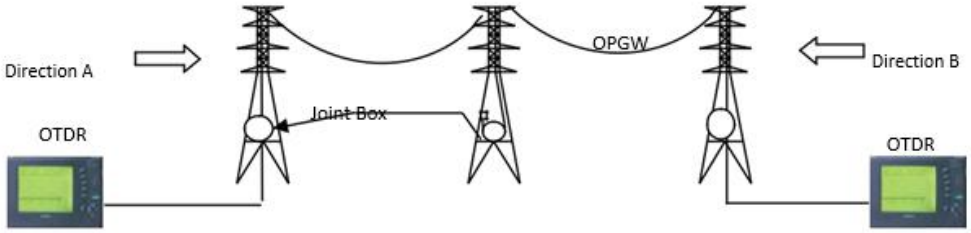
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-B (96 Fibre)

SPLICING LOSS TEST REPORT FOR OPGW @ 1550nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1550nm	1.4675	0.05 dB/Splice



Joint Box	Appearance	Fibre Routing	Sealing	Tower No.

Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
	25	Blue				
	26	Orange				
	27	Green				

GREEN	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				

	82	Violet				
	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

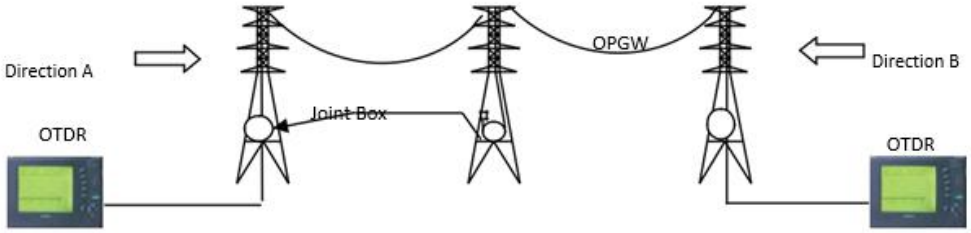
Witnessed By
(Sign with date)

Approved By
(Sign with date)

SAT-03-A (96 Fibre)

SPLICING LOSS TEST REPORT FOR OPGW @ 1330nm

Report No:	Sector:		
Date:	Section:		
	TOWER No:		
			Acceptance criteria
			Max.Splice Loss
Type of OTDR:	WAVELENGTH	REFRACTION INDEX	0.10dB(Individual splice)
Testing Date:			Average Splice loss in link
	1310nm	1.4670	0.05 dB/Splice



Joint Box	Appearance	Fibre Routing	Sealing	Tower No.

Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				

GREEN	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				
	82	Violet				

	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

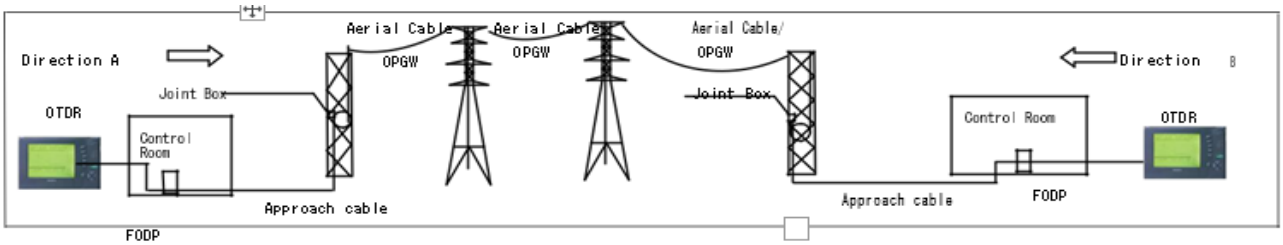
Approved By
(Sign with date)

SAT-04-A (96 Fibre)

FO CABLE END TO END TEST UNDER OTDR (1310 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wavelength	Max Attenuation Fibre	Specified Loss
		1310 nm	0.35 dB/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				

GREEN	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				
	82	Violet				

	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

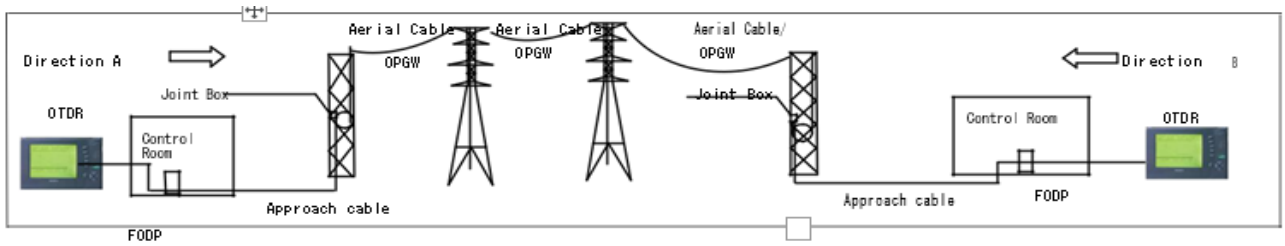
Approved By
(Sign with date)

SAT-04-B (96 Fibre)

FO CABLE END TO END TEST UNDER OTDR (1550 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
Type of OTDR	Testing Date	Wavelength	Max Attenuation Fibre	Specified Loss
		1550 nm	0.21 dB/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
GREEN	25	Blue				
	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				

	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				
	80	Black				
	81	Yellow				
	82	Violet				
	83	Pink				
	84	Aqua				

Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

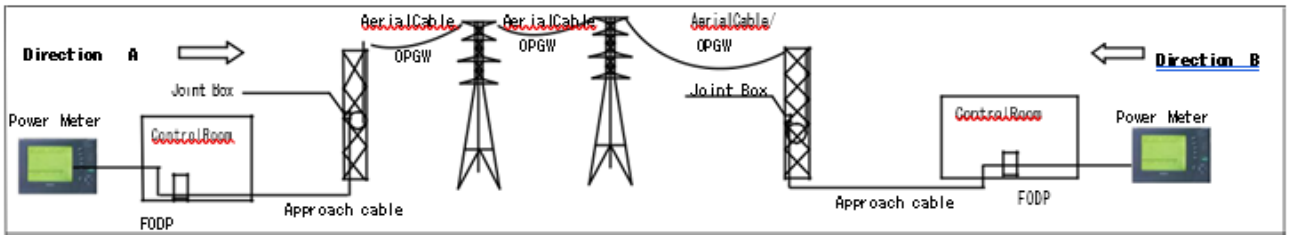
Approved By
(Sign with date)

SAT-05-A (96 Fibre)

FO CABLE END TO END TEST UNDER OTDR (1550 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm	P1: Pr - A dBm			
A- Power measuring from A Direction dBm	P2: Pr - B dBm			
Type of OTDR	Testing Date	Wavelength	Max Attenuation Fibre	Specified Loss
		1550 nm	0.21 dB/km	∑ 0.21dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
	25	Blue				

GREEN	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				

	80	Black				
	81	Yellow				
	82	Violet				
	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

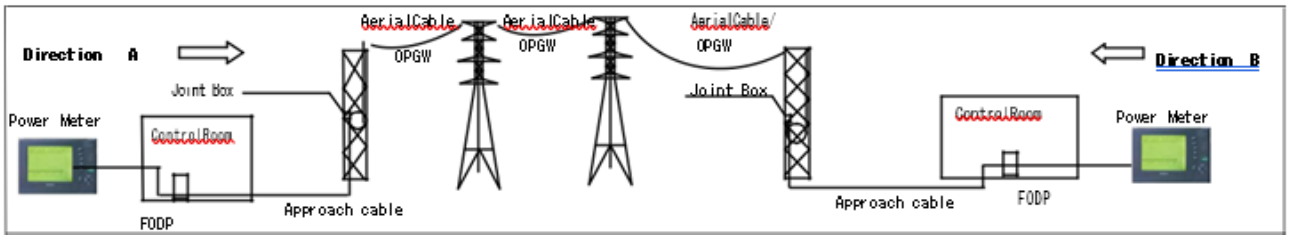
Approved By
(Sign with date)

SAT-05-B (96 Fibre)

FO CABLE END TO END TEST UNDER OTDR (1310 nm)

Report No: Date:

SECTOR				
LINE LINK				
FODP to FODP				
REFERENCE POWER : Pr dBm				
A- Power measuring from A Direction dBm	P1: Pr - A dBm			
A- Power measuring from A Direction dBm	P2: Pr - B dBm			
Type of OTDR	Testing Date	Wavelength	Max Attenuation Fibre	Specified Loss
		1310 nm	0.35 dB/km	∑ 0.35dB/km **x** Total FO length + 0.05dB/splice **x** Total No. of splice + 0.5dB/connector **x** No. of connectors



Tube colour	Fibre No	Fibre Colour	Length (km)	SPLICE LOSS (dB)		Actual Loss (dB)=(A+B)/2
				Direction A	Direction B	
BLUE	1	Blue				
	2	Orange				
	3	Green				
	4	Brown				
	5	Slate				
	6	White				
	7	Red				
	8	Black				
	9	Yellow				
	10	Violet				
	11	Pink				
	12	Aqua				
ORANGE	13	Blue				
	14	Orange				
	15	Green				
	16	Brown				
	17	Slate				
	18	White				
	19	Red				
	20	Black				
	21	Yellow				
	22	Violet				
	23	Pink				
	24	Aqua				
	25	Blue				

GREEN	26	Orange				
	27	Green				
	28	Brown				
	29	Slate				
	30	White				
	31	Red				
	32	Black				
	33	Yellow				
	34	Violet				
	35	Pink				
	36	Aqua				
BROWN	37	Blue				
	38	Orange				
	39	Green				
	40	Brown				
	41	Slate				
	42	White				
	43	Red				
	44	Black				
	45	Yellow				
	46	Violet				
	47	Pink				
	48	Aqua				
Slate	49	Blue				
	50	Orange				
	51	Green				
	52	Brown				
	53	Slate				
	54	White				
	55	Red				
	56	Black				
	57	Yellow				
	58	Violet				
	59	Pink				
	60	Aqua				
White	61	Blue				
	62	Orange				
	63	Green				
	64	Brown				
	65	Slate				
	66	White				
	67	Red				
	68	Black				
	69	Yellow				
	70	Violet				
	71	Pink				
	72	Aqua				
Red	73	Blue				
	74	Orange				
	75	Green				
	76	Brown				
	77	Slate				
	78	White				
	79	Red				

	80	Black				
	81	Yellow				
	82	Violet				
	83	Pink				
	84	Aqua				
Black	85	Blue				
	86	Orange				
	87	Green				
	88	Brown				
	89	Slate				
	90	White				
	91	Red				
	92	Black				
	93	Yellow				
	94	Violet				
	95	Pink				
	96	Aqua				

- OTDR Trace results attached for all fiber (Yes/No):

Tested By
(Sign with date)

Witnessed By
(Sign with date)

Approved By
(Sign with date)