ATTACHMENT 1

San Juan Island Fiber Cable Inspection Results

Coriant 7100 Backbone as of 11/08/17

FW7420 Backbone as of 11/08/17



This document describes the "Overall" Fiber loss between the 7100 located in Lopez Island and La Conner Washington

- Overall fiber loss is calculated as the difference between the Tx level and the Rx levels.
- These levels were taken on the OSC channels in the 7100 AMP Modules.



La Conner to Lopez Island

ROADM supports up to 26db span loss

LOPZWAXXO02010025 LACNWAAXKRC01CUST06B Overall fiber loss: -15.7db Rx = -15.9dbTx = -0.2dbDegree A Degree A Rx = -13.2dbTx = +2.1dbOverall fiber loss: -15.3db Overall fiber loss: -15.8db Tx = +2.7dbRx = -13.1dbDegree B Degree A Rx = -15.3dbTx = +2.8dbOverall fiber loss: -18.1db LACNWAAXKRC01CUST06A

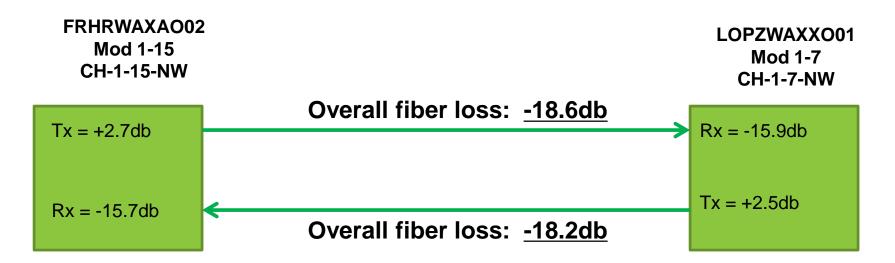


This document describes the "Overall" Fiber loss between the FW7420 located in Lopez Island and Friday Harbor Washington

- Overall fiber loss is calculated as the difference between the Tx level and the Rx levels.
- These levels were taken on the OSC channel in the FW7420.



Friday Harbor to Lopez Island



SFP Specifications
SFP/2G5U/C1570V/SM/LC
Transmitter output power range 0 dBm ... +4 dBm
Receiver dynamic range -22 dBm ... -9 dBm

SFP Specifications
SFP/2G5U/C1490V/SM/LC
Transmitter output power range 0 dBm ... +4 dBm
Receiver dynamic range -22 dBm ... -9 dBm



Cable Landings and Summary

In July 2017, CenturyLink replaced 13,000 feet of submarine cable from Otis Perkins Park on Lopez Island to Pear Point Rd on San Juan Island.

In December 2017, a site survey was conducted on the cable, vault, closures, and the surrounding environment. All was found to be in satisfactory condition.

The fiber loss readings on the Friday Harbor to Lopez Island route changed slightly from 2016 results. The change in dB was expected after cable replacement in July 2017. The changes were negligible.

The fiber loss readings on the Lopez Island to La Conner route also changed slightly from 2016. The change was a result of two cable damages in Anacortes. Crews repairing cable added splices which marginally increased loss. The loss readings on this route remain well within specifications.

