

SurfBeam Modem Short-Cable Test

Summary

Use the **Modem Short-Cable Test** to differentiate between an Antenna issue and an on-site cabling problem.

This Job Aid covers:

[Process](#)

[Possible Results](#)

[Tools required](#)

[Required Escalation Data](#)

[Test Details](#)

This Job Aid supports all Technician audience.

Process

Power down modem

Isolate the satellite modem for the Customer Computer or data equipment and the on-site coax cabling.

Connect the satellite modem to the antenna using Technician provided coax test cable(s).

Power up modem

Observe Modem Lock process.

Possible Results

There are two possible outcomes for this test:

- PASSED/Modem Lock OK
 - Investigate coax cable failure with **Coax Cable Test**
- FAILED/Modem Lock Failed
 - Investigate Point and Peak or TRIA failure with **Antenna Test**

Tools required

- Power extension cord
- Two coax test cables

Required Escalation Data

LED Status

Test Details

Disconnect the AC power cord from the power source to power down the modem.

SurfBeam Modem:

- Disconnect both coax cables and the Ethernet cable from the modem.

Plug the extension cord into the power source.

Move the modem and the powered extension cord close to the antenna.

SurfBeam Modem:

- Connect the coax test cable from the TRIA TX port to the modem Transmit (TX) port.
- Connect the coax test cable from the TRIA RX port to the modem Receive (RX) port.
- Connect the modem AC power cord to the extension cable.

Observe the modem LED activity.

Results:

- If Modem Lock occurs, the *test is considered PASSED.*
- If Modem Lock does not occur, the *test is considered FAILED.*
 - Connect APA, Attenuators, and Satellite Signal Level Meter on receive (RX) side.
 - Follow Point & Peak Procedures
 - Complete with a Push/Pull test

Use the results of this test to determine the next step based on the checklist.