

## **Phase Stability Test over Flexure**

## Phase stability over flexure can be affected by the following factors:

- Cable material and construction
- Assembly technique
- Cable bend radius
- Length of the cable assembly
- Bending direction and method etc.

## RF ONE performs the Phase Stability of Cable Assembly in below procedures.

Item	Test Method	Diagram
Initial Test	1) Connect the two ports of DUT cable with VNA, the cable is held in an initial unwrapped position and is measured in the phase and attenuation.  2) Normalize VNA in the phase.	
Test with cable wrapped 360 degree clockwise	<ol> <li>Disconnect the DUT cable and wrap it 360 degree clockwise around a mandrel(ten times of cable jacket radius).</li> <li>The DUT cable is held in such position for measurement,record the phase and attenuation change.</li> </ol>	
Test with cable returned to original unwrapped position	<ol> <li>Disconnect the DUT cable and return it to its original unwrapped position.</li> <li>The DUT cable is held in such position for measurement, record the phase change.</li> </ol>	

<sup>\*</sup> The DUT cable assembly length is in one meter, with two straight connectors.

<sup>\*</sup> After all tests, the max phase changes over initial test data will be taken as the phase stability.