

## Test Cord Insertion Loss Qualification Procedure

This document describes a procedure for test cord insertion loss (IL) qualification.

Failure to use correctly qualified test cords may cause incorrect IL measurements resulting in costly rework.

For SMF and MMF installations tested in accordance with ISO/IEC and TIA specifications, the maximum IL limits for test cords as per **Table 1** below apply:

Fibre	Maximum IL, dB
MMF	$\leq 0.1$ dB
SMF	$\leq 0.2$ dB

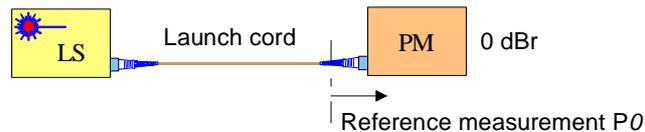
**Table 1, Test cord IL specifications**

To achieve consistent results, clean all connectors, through-connects and adapters associated with the test prior to and during measurement.

Ensure the source has warmed up before commencing measurements.

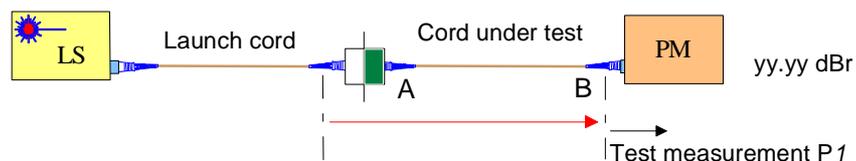
1. Connect launch cord to meter and set the reference.

For clarity the air coil or mandrel is not shown.



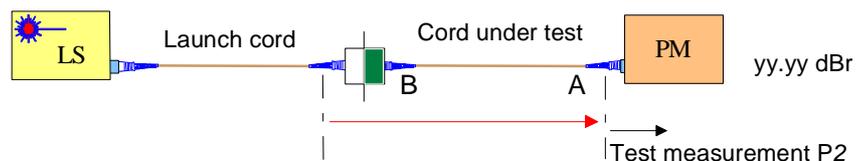
**Figure 1, One cord reference**

2. Disconnect launch cord from meter and connect cord under test to launch cord and meter.



**Figure 2, Cord under test – A end**

3. Read the insertion loss directly and compare to **Table 1**.  
If specification is met, proceed to next step.
4. Disconnect cord under test, reverse and reconnect.



**Figure 3, Cord under test – B end**

5. Read the insertion loss directly and compare to **Table 1**.  
If specification is met, the cord under test is passed for testing.