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Telecommunications
Engineers***

**ENGINEERING COMMITTEE
Interface Practices Subcommittee**

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**Test Method for “F” Connector
Return Loss In-Line Pair**

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1.0 SCOPE

The purpose of this procedure is to provide instructions to measure the Return Loss characteristics of a pair of type “F” connectors and the cable interface, inserted in the middle of a cable, from 5 MHz to 1002 MHz. This test method makes use of the time domain gating feature of the network analyzer to remove the near end and far end test set connector effects from a type “F” pair in the middle of the cable, joined by a type F (female) – type F (female) adapter.

2.0 COMPLIANCE NOTATION

“SHALL”	This word or the adjective “REQUIRED” means that the item is an absolute requirement of this specification.
“SHALL NOT”	This phrase means that the item is an absolute prohibition of this specification.
“SHOULD”	This word or the adjective “RECOMMENDED” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.
“SHOULD NOT”	This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.
“MAY”	This word or the adjective “OPTIONAL” means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.

3.0 EQUIPMENT

- 3.1 Vector Network Analyzer (VNA), with Time Domain capability installed; Agilent E5071C ENA Analyzer with Time Domain option 010 or equivalent.
- 3.2 Type “F” Calibration Kit, Agilent 85039A or equivalent:

Load	HP#0955-0724 or equivalent
Open	HP#0955-0725 or equivalent
Short	HP#0955-0726 or equivalent
Type N (male) through F (female) Adapter	HP#1250-2488 or equivalent
Type N (female) through F (female) Adapter	HP#1250-2490 or equivalent
Type F (male) through F (female) Adapter	HP#1250-2489 or equivalent