



**Recommendation WG 4.90.038**

**RFI TEST METHODS**  
**DETERMINATION AND VERIFICATION**  
**of**  
**MEASURE INTERFERENCE SOURCES**

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## RECOMMENDATION

**Subject Area:** RFI Measurements

**Title:** Determination and Verification of Measured Interference Sources

### *Overview*

RFI measurements are frequently taken in anticipation of new microwave installations and to evaluate interference in operating systems. In both cases, identification of measured signals is sometimes necessary.

The search for the source of interference is usually a multistage process which begins with collection of the most readily available information about the station receiving interference. Based on the reported nature of the problem, additional specific data will be sought on probable interfering systems. The steps recommended below envision progressing through various stages of increasing complexity and cost until sufficient information is available to make conclusive judgment identifying the source.

The individual performing on-site tests should have as complete a picture of the electromagnetic environment as possible. As testing progresses, field verification of data base parameters on the station receiving interference as well as the suspected transmitter may be necessary. Verification can be most accurately concluded by cooperative testing with the operator of the suspect system. A shut-down test is the most reliable method to link or dissociate the two systems. In cases where this is not an alternative, it becomes even more important to eliminate all other possibilities by careful testing and verification of data upon which the conclusions are based.

### *Recommendation*

One or more of the following steps should be performed until positive identification of the interference source has been assured.

1. Review existing data bases for the status of active channels, polarizations, etc.
2. Verify operating frequencies, polarizations, loading, and date of activation with the carrier or carrier's agent. (continued on next page)

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Approved: Unknown

To Membership:

Notes: No information available

3. Suspected sources should be verified through on-path or direct azimuth, LOS, measurements of actual operating frequency, polarization and loading.
4. If measurement data does not match record data, reverification should be attempted while still in the field. Where discrepancies are found, discussion with the licensee or its agent may allow resolution before testing is concluded.
5. Perform a shut-down test with the suspected interference source.