4395A-19

## <u>SERVICE NOTE</u>

Supersedes: NONE

## 4395A Network/Spectrum/Impedance Analyzer

**Serial Numbers: All** 

# Method to Ensure Stable Source Power Measurements in Source Level Accuracy/Flatness Test

This service note describes the improved test procedure to ensure stable Power Meter readings in Source Level Accuracy/Flatness test.

Parts Required: NONE

### **ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

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ADDITIONAL INFORMATION:

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#### **Situation:**

In the Source Level Accuracy/Flatness Test (described in Chapter 2, Performance Tests of the 4395A Service Manual), the Power Meter exhibits a small continuous variance in measured signal power. The instability of measured signal power affects the Source Level Accuracy/Flatness test results.

### **Solution/Action:**

The variance in measured signal power is caused by a periodic shutoff of source signal output in Continuous Trigger mode of operation. Since the source signal output is shut off during "fly-back" period of swept frequency measurement (even when Sweep Span is 0 Hz) , the power meter responds to the discontinuance of signal power each time a frequency sweep ends and is started by next measurement trigger.

To ensure stable power meter display readings, set Trigger mode to SINGLE at Step 3 of the Source Level Accuracy/Flatness Test as shown below:

Control Settings

Center Frequency: 50 MHz

Frequency Span: 0 Hz

Trigger Mode: Single

Key Strokes

Center , 5 , 0 , M/µ

Span , ZERO SPAN

Trigger Mode: Single

Trigger SINGLE

The source power now is set to 0 dBm (preset value). Manually trigger the 4395A each time the Center Frequency setting is changed.