

# Adding Upper and Lower Limits to an “Eval -e” Procedure Line

## Overview:

It is sometimes necessary to use an “EVAL -e” FSC in a procedure to evaluate if a test is within two limits. The following example procedure gives several [JRM3] ways to do this evaluation.

## Example Procedure:

```
=====
INSTRUMENT:          Example of “EVAL” with upper and
                      lower limits
DATE:                2002-06-03
AUTHOR:              William J. Spath
REVISION:
ADJUSTMENT THRESHOLD: 70%
NUMBER OF TESTS:     4
NUMBER OF LINES:     47
=====
```

## Technical Bulletin #1003

### Applies to:

MET/CAL® Version 6.XX

### Level of difficulty:

Moderate

### Issue date:

March 2004

### Written by:

Bill Spath

STEP	FSC	RANGE	NOMINAL	TOLERANCE	MOD1	MOD2	3	4	CON
1.001	LABEL		Enter_Number						
1.002	MEMI		Enter a number between -100 and +100						
1.003	JMPL		Good_Number	((MEM >= -100) + (MEM <= 100)) > 1					
1.004	DISP		the number you entered ( [MEM] ) is not between						
1.004	DISP		-100 and +100!! Try again						
1.005	JMPL		Enter_Number						
1.006	LABEL		Good_Number						
1.007	MATH		M[1] = -100 ; M[2] = -50						
1.008	MATH		S[1] = "Is " & MEM & " >= " & M[1] & " and <" & M[2]						
1.009	EVAL	-e	((MEM >= M[1]) + (MEM < M[2])) > 1 : [S1]						
2.001	MATH		M[1] = -50 ; M[2] = 0						
2.002	MATH		S[1] = "Is " & MEM & " >= " & M[1] & " and <" & M[2]						
2.003	EVAL	-e	((MEM >= M[1]) + (MEM < M[2])) > 1: [S1]						
3.001	MATH		M[1] = 0 ; M[2] = 50						
3.002	MATH		S[1] = "Is " & MEM & " >= " & M[1] & " and <" & M[2]						
3.003	EVAL	-e	((MEM >= M[1]) + (MEM < M[2])) > 1: [S1]						
4.001	MATH		M[1] = 50 ; M[2] = 100						
4.002	MATH		S[1] = "Is " & MEM & " >= " & M[1] & " and <" & M[2]						
4.003	EVAL	-e	((MEM >= M[1]) + (MEM < M[2])) > 1: [S1]						

## Summary:

Using "EVAL -e" allows multiple ways of evaluating limits of data while still giving full description on the results.

**Fluke.** *Keeping your world  
up and running.*

**Fluke Corporation**

PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

For more information call:

In the U.S.A. (800) 443-5853 or

Fax (425) 446-5116

In Europe/M-East/Africa (31 40) 2 675 200 or

Fax (31 40) 2 675 222

In Canada (800) 36-FLUKE or

Fax (905) 890-6866

From other countries +1 (425) 446-5500 or

Fax +1 (425) 446-5116

Web access: <http://www.fluke.com>