

4.9.2 Perform the measurements listed below as follows:

4.9.3 Ensure the output terminals of the current calibrator are properly connected to TI input terminals listed for the measurement.

4.9.4 Set the TI controls for the TI Range listed and set the output controls of the meter calibrator for the nominal value listed for the measurement, and verify that the TI indication is within the tolerance limits listed.

Meter Calibrator			TOLERANCE LIMITS		
TI Input Terminal	TI Range	Nominal	TI = 83	TI = 85	TI = 87
MA μ A	400.0 (μ A)	100.0 (μ A)	98.6 to 101.4 (μ A)	99.2 to 100.8 (μ A)	98.8 to 101.2 (μ A)
MA μ A	4000 (mA)	1000 (mA)	986 to 1014 (mA)	992 to 1008 (mA)	988 to 1012 (mA)
MA μ A	40.00	10.00	9.86 to 10.14	9.92 to 10.08	9.88 to 10.12
MA μ A	400.0	100.0	98.6 to 101.4	99.2 to 100.8	98.8 to 101.2
A	4000 (A)	1000 (A)	986 to 1014 (A)	992 to 1008 (A)	988 to 1012 (A)
*A	10.00	10.00	9.86 to 10.14	9.92 to 10.08	9.88 to 10.12

*For the 1000 A measurement, the TI must be connected to the 5725A amplifier output terminals.

4.9.5 Unless other measurements are to be performed, disconnect and turn off all applicable equipment.

Micro Precision Calibration
Test Report

Temp.:

Hum.:

MULTIMETER	FLUKE	87 III		
Description	Make	Model	Asset Number	MPC Number

Procedure Number: 17-20AQ-398 Serial Number :

Proc. Step No. (1)	Function Tested (2)	Nominal (3)	Measured Values			Out of Tol (7)	Calibration Tolerances
			Before (4)	After (5)	Uncertainty K=2 (6)		
4.1	DC VOLTAGE						
	400 mV	390 mV	mV	mV	mV		389 to 390.5 mV
	4.0 V	3.9 V	V	V	V		3.857 to 3.903 V
	40.0 V	5 V	V	V	V		4.99 to 5.01 V
		10 V	V	V	V		9.98 to 10.02 V
		15 V	V	V	V		14.98 to 15.02 V
		20 V	V	V	V		19.98 to 20.02 V
		30 V	V	V	V		29.97 to 30.03 V
	400 V	390 V	V	V	V		389.7 to 390.3 V
	1000 V	900 V	V	V	V		899 to 901 V
4.2	AC VOLTAGE						
	400 mV @ 400 Hz	390 mV	mV	mV	mV		385.7 to 394.3 mV
	4 V @ 400 Hz	3.9 V	V	V	V		3.857 to 3.943 V
	40 V @ 400 Hz	39 V	V	V	V		38.57 to 39.43 V
	400 V @ 400 Hz	390 V	V	V	V		385.7 to 394.3 V
	1000 V @ 400 Hz	900 V	V	V	V		887 to 913 V
4.3	DC CURRENT						
	400 μA	390 μA	μA	μA	μA		389 to 391 μA
	4000 μA	3.9 mA	mA	mA	mA		3890 to 3910 μA
	40 mA	39 mA	mA	mA	mA		38.9 to 39.1 mA
	400 mA	390 mA	mA	mA	mA		389 to 391 mA
	4000 mA	3.9 A	A	A	A		3888 to 3912 mA
	10 A	10 A	A	A	A		9.96 to 10.04 A
4.4	AC CURRENT						
	400 μA @ 60 Hz	390 μA	μA	μA	μA		385.9 to 394.1 μA
	4000 μA @ 60 Hz	3.9 mA	mA	mA	mA		3859 to 3941 μA
	40 mA @ 60 Hz	39 mA	mA	mA	mA		38.59 to 39.41 mA
	400 mA @ 60 Hz	390 mA	mA	mA	mA		385.9 to 394.1 mA
	4000 mA @ 60 Hz	3900 mA	mA	mA	mA		3859 to 3941 mA
	10 A @ 60 Hz	10 A	A	A	A		9.88 to 10.12 A
	RESISTANCE						
4.5	400	190					189.4 to 190.6
	4 k	1.9 k	k	k	k		1.889 to 1.905 k
	40 k	19 k	k	k	k		18.89 to 19.05 k
	400 k	190 k	k	k	k		188.9 to 191.2 k
	4 M	1.9 M	M	M	M		1.889 to 1.912 M
	40 M	19 M	M	M	M		18.78 to 19.22 M

Calibrated By _____ Cal. Date _____
MPC TEST REPORT rev. 0 02/24/03

Due Date _____

Job Number _____
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