1.0 Equipment

Simulator capable of producing AC and DC voltage, AC and DC current, resistance, frequency and temperature, Variac Transformer, Fluke 43 Power Quality Analyzer.

Use form TS-0088 Multimeter Calibration Record Sheet.

2.0 Procedure

1) Record the ambient temperature. If the ambient temperature is <18°C or >24°C perform verification at another location.

2) Connect the meter to the simulators voltage and common connections.

3) Select DC voltage on meter selector switch.

4) Input DC voltages as per Multimeter Record Sheet and record measured voltages.

5) Select ohms on meter selector switch.

6) Input resistance as per Multimeter Record Sheet and record measured resistances.

7) Select DC mA on meter selector switch.

8) Input DC mA as per Multimeter Record Sheet and record measured current.

9) If available for that model select frequency on the meter selector switch (both AC and DC).

10) Input frequencies as per Multimeter Record Sheet and record measured frequencies.
11) If available for that model select temperature on the meter selector switch

12) Input temperature as per Multimeter Record Sheet and record measured temperatures.

3.0 Verifying AC Voltage

1) Connect the multi meter leads to the output of the Variac.

2) Connect the Fluke 43 Power Quality Analyzer to the output of the Variac.

3) Select AC Volts on the multi meter.

4) Adjust the AC Voltage output on the Variac to a minimum then turn on the Variac.

5) Turn on the Fluke 43 Power Quality Analyzer.

6) Adjust the Variac to voltages shown on the Multi Meter Record Form TS-0088 as measured on the Fluke 43 Power Quality Analyzer.

7) Record the values on the Multi Meter Form TS-0088.