

ELECTRONICS REGIONAL TEST LABORATORY (WEST) DEPARTMENT OF INFORMATION TECHNOLOGY	REPORT NO. ERTL (W)/2007 E&S 142		
SUBJECT: TESTING OF DIGITAL MULTI METER	DATE 21/08/07	PAGE 1	OF 18

1. SCOPE

1.1 Service Request No : ERTL (W)/ 20070844, Dated: 23rd May' 2007

1.1.1 Service Request finalised on : 23rd May' 2007

1.2 Requested by (Name and address of organisation) RISHABH INSTUMENTS PVT. LTD.,
F-31, MIDC AREA,
SATPUR, NASIK-422007.

1.3 Description	Qty	Manufacturer	Type No.	Serial Nos.
3 & 3/4 DIGITS DMM	01	RISHABH INSTRUMENTS PVT. LTD.	Max 10	076062

1.4 Test specifications Customer's specification in conjunction with
IS: 13875

1.5 Lab Ambient Temperature: $(25 \pm 2)^\circ \text{C}$
RH : $(55 \pm 5) \%$

1.6 Test Equipment used :

1. UNIVERSAL CALIBRATOR S&C/138
2. HV TESTER COM/122
3. SHOCK MACHINE ENV/109
4. VIBRATION MACHINE ENV/62
5. HUMIDITY CHAMBER ENV/100
6. VARIABLE DC SOURCE E&S/88
7. TEMPERATURE CYCLIC CHAMBER ENV/56

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2.0 Test results

Sr. No.	Test Parameter	Test Condition	Test Requirement	Observation	Remark
2.1	Intrinsic Error Test	As per IS: 13875-1, Cl-4.2, at reference conditions, using standard source, the UUT to be checked for accuracy in various ranges.	Accuracy in respective ranges shall be as specified in user's manual No.30893	Annexure - A	Complied
2.2	Frequency Influence error for AC Voltage Measurements	As per IS: 13875-2, Cl-3.13, at reference conditions, using standard source, the UUT to be checked for accuracy in AC volt	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - B	Complied
2.3	Variation due to Operating Temperature				
2.3.1	Variation due to Low Operating Temperature	As per IS: 13875-2, Cl-3.4, at -10 °C, using standard source, the UUT to be checked for accuracy in various ranges.	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - C	Complied
2.3.2	Variation due to High Operating Temperature	As per IS: 13875-2, Cl-3.4, at 40 °C, using standard source, the UUT to be checked for accuracy in various ranges.	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - D	Complied

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2.0 Test results (Continued)

St. No.	Test Parameter	Test Condition	Test Requirement	Observation	Remark
2.4	Influence due to storage Temperature				
2.4.1	Post Measurement after low temperature storage	Conditioned at -25°C for 2 Hours using standard source, the UUT to be checked for accuracy in various ranges. at reference condition after 2 Hours recovery	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - E	Complied
2.4.2	Post Measurement after High temperature storage	Conditioned at 70°C for 2 Hours using standard source, the UUT to be checked for accuracy in various ranges. at reference condition after 2 Hours recovery	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - E	Complied
2.5	Variation due to Humidity	Conditioned at 75% RH, 40°C for 48 Hours, using standard source, the UUT to be checked for accuracy in various ranges at the end of 48hrs. in chamber.	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - F	Complied
2.6	Self Heating	As per IS:13875-3, Cl-3.1.1, Apply input of 90% of the full scale and note the reading after 1 min. and after 30 min in respective range as VAC, VDC, mA AC, mA DC, A DC and A AC	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - G	Complied

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2.0 Test results (Continued)

Sr. No.	Test Parameter	Test Condition	Test Requirement	Observation	Remark
2.7	Variation due to Battery Supply voltage	Set battery voltage to 3 V±0.1 V, take reading in various ranges Reduce the battery voltage till the battery symbol appears on display, take reading in various ranges	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - H	Complied
2.8	Influence due to continuous overload	As per IS:13875-2 Cl.-315, Apply the overload of specified value for specified time as in user manual, take reading in various ranges after 2Hrs recovery	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - I	Complied
2.9	Vibration test	As per IS:13875(Part 1) & IS:9000 (part-8) Vibration in the three vertically axes. Amplitude=±0.15mm with maximum result =2g. Frequency range: 10Hz...55Hz....10 Hz Sweep: 1 octave/min. Number of scanning cycles: 2 in each direction of the axes (6 in all)	Conditioning No mechanical damage to occur	Conditioned No mechanical damage is observed	Complied
2.9.1	Post vibration accuracy test	As per IS: 13875-1, Cl-4.2, at reference conditions, using standard source, the UUT to be checked for accuracy in various ranges	Variation shall not exceed the limits mentioned in user's manual No.30893.	Annexure - I	Complied



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2.0 Test results (Continued)

Sr. No.	Test Parameter	Test Condition	Test Requirement	Observation	Remark
2.10	Influence resulting from Interference	As per IS:13875-2 Cl.:3.11			
2.10.1.1	Series mode interference voltage rejection test	Apply 1000 V AC to 400mV DC range note Display value as (Ax) Determine the SMR as : S=20 log (1000/Ax) in dB	Variation shall not exceed the limits mentioned in user's manual No.30893.	SMR= 109.12 dB	Complied
2.10.1.2	Series mode interference voltage rejection test	Apply 1000 V DC to 4 00 V AC range note Display value as (Ax) Determine the SMR as : S=20 log (1000/Ax) in dB	Variation shall not exceed the limits mentioned in user's manual No.30893.	SMR= 67.95 dB	Complied
2.10.2.1	Common mode Rejection	Apply 1000 V DC to all AC V & DC V range note Display value as (Ax) Determine the CMR as: S=20 log (1000/Ax) in dB	Variation shall not exceed the limits mentioned in user's manual No.30893.	CMR: 112.4dB and higher	Complied
2.10.2.2	Common mode Rejection	Apply 1000 V AC to all DC V & AC V range note Display value as (Ax) Determine the CMR as: S=20 log (1000/Ax) in dB	Variation shall not exceed the limits mentioned in user's manual No.30893.	A	Complied



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2.0 Test results (Continued)

Sr. No.	Test Parameter	Test Condition	Test Requirement	Observation	Remark
2.11	High voltage test	Apply high voltage of 3.7 kV, 50 Hz for 1 min between I/P terminals & Body.	No breakdown, arcing or sparking should occur during the test	No breakdown, arcing or sparking is observed during test	Complied
2.12	Shock Test	As per IS:13875(Part 1) & IS:9000 (part-7/Sec-1) Pulse shape: half sine Pulse duration: 11m Sec Acceleration: 15g 3 shocks in each of three perpendicular axes and each of two directions (total-18 Shocks)	No mechanical damage should be observed. Accuracy in respective ranges to be verified	No mechanical damage is observe Annexure: L	Complied
2.13	Variation due to Magnetic field of external origin	UUT to be exposed to a magnetic field strength of 0.4 kA/m for max. Influence. Record the value of meter reading in absence and in the presence of external magnetic field.	Variation shall not be more than 100% of specified accuracy in user's manual No.30893..	Annexure: M	Complied

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Annexure – A

FUNCTION	RANGE	TEST POINT	nominal value	OBSERVED VALUE	Error	PASS/FAIL
V AC	400mV	360mV/50 Hz	360	360.9	-0.9	PASS
	4 V	3.6V/50Hz	3.6	3.598	0.002	PASS
	40 V	36V/50 Hz	36	35.94	0.06	PASS
	400 V	360 V/50Hz	360	359.2	0.8	PASS
	1000 V	900 V/50Hz	900	898	2	PASS
V DC	400mV	360mV	360	359.8	0.2	PASS
	4 V	3.6V	3.6	3.600	0	PASS
	40 V	36V	36	35.95	0.05	PASS
	400 V	360 V	360	359.5	0.5	PASS
	1000 V	900 V	900	900	0	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.999	0.001	PASS
	100 Hz	90 Hz/10V	90	89.99	0.01	PASS
	1 kHz	900Hz/10V	900	899.9	0.1	PASS
	10kHz	9 kHz/10V	9	8.999	0.001	PASS
	100kHz	90 kHz/10V	90	89.99	0.01	PASS
	500kHz	450 kHz/10V	450	449.9	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	0.1	PASS
		98% at 1kHz	98	97.9	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.8	0.2	PASS
	4 k Ohm	3.6 kOhm	3.6	3.595	0.005	PASS
	40k Ohm	36 kOhm	36	36.02	-0.02	PASS
	400 kOhm	360 kohm	360	360.1	-0.1	PASS
	4 Mohm	3.6Mohm	3.6	3.596	0.004	PASS
	40 Mohm	36 Mohm	36	35.88	0.12	PASS
Capacitance	5 nF	4.5 nF	4.5	4.41	0.09	PASS
	50 nF	45 nF	45	44.61	0.39	PASS
	500 nF	450 nF	450	450.2	-0.2	PASS
	5 uF	4.5 uF	4.5	4.538	-0.038	PASS
	50 uF	45 uF	45	45.33	-0.33	PASS
	200uF	180 uF	180	181.5	-1.5	PASS

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Annexure – A(Continued)

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE	Error	PASS/FAIL
A DC	40 mA	36mA	36	36.09	-0.09	PASS
	400 mA	360mA	360	359.9	0.1	PASS
	10.0A	9.0 A	9.00	8.96	0.04	PASS
A AC	40 mA	36mA/50Hz	36	36.03	-0.03	PASS
	400 mA	360mA/50Hz	360	359.8	0.2	PASS
	10.0A	9.0 A/50Hz	9.00	8.94	0.06	PASS
Temperature	K-TYPE	0 Deg.C	0	0	0	PASS
		300 Deg.C	300	298	2	PASS
		1000 Deg.C	1000	1005	-5	PASS
		1300 Deg.C	1300	1290	10	PASS

Annexure – B

FUNCTION	RANGE	TEST POINT	nominal value	Input Frequency 20 Hz	Input Frequency 500 Hz	Input Frequency 1k Hz	PASS/FAIL
V AC	400mV	360mV/50 Hz	360	360.2	360.3	---	PASS
	4V	3.6V/50Hz	3.6	3.597	---	3.594	PASS
	40 V	36V/50 Hz	36	35.88	---	35.82	PASS
	400V	360V/50 Hz	360	358.6	---	358.5	PASS
	1000 V	900 V/50Hz	900	897	889	---	PASS

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Annexure - C

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE at -10 deg. C	OBSERVED VALUE at Ref. Temp.	Deviation	PASS/FAIL
V AC	400mV	360mV/50 Hz	360	360.4	360.9	-0.5	PASS
	1000 V	900 V/50Hz	900	893	898	-5	PASS
V DC	400mV	360mV	360	359.1	359.8	-0.7	PASS
	1000 V	900 V	900	897	900	-3	PASS
FREQUENCY	10 Hz	9 Hz/10V	9	9.998	9.999	-0.001	PASS
	500kHz	450 kHz/10V	450	449.8	449.9	-0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.8	1.9	-0.1	PASS
		98% at 1kHz	98	97.8	97.9	-0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.6	359.8	-0.2	PASS
	40 Mohm	36 Mohm	36	35.86	35.88	0.02	PASS
Capacitance	5 nF	4.5 nF	4.5	4.36	4.41	-0.05	PASS
	200uF	180 uF	180	181.3	181.5	0.2	PASS
A DC	40 mA	36mA	36	36.07	36.09	-0.02	PASS
	10.0A	9.0 A	9.00	8.94	8.96	-0.02	PASS
A AC	40 mA	36mA/50Hz	36	36.01	36.03	-0.02	PASS
	10.0A	9.0 A/50Hz	9.00	8.92	8.94	-0.02	PASS
Temperature	K type	0 Deg C	0	0	0	0	PASS
		1300 Deg C	1300	1288	1290	-2	PASS

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Annexure – D

FUNCTION	RANGE	TEST POINT	Nominal value	Observed value at 40 deg. C	OBSERVED VALUE at ref. Temp.	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.9	360.8	-0.1	PASS
	1000 V	900 V/50Hz	900	898	897	-1	PASS
V DC	400mV	360mV	360	359.8	359.6	-0.2	PASS
	1000 V	900 V	900	901	900	-1	PASS
FREQUENCY	10 Hz	9 Hz/10V	10	9.999	9.999	0	PASS
	500kHz	450 kHz/10V	450	449.9	449.9	0	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	1.9	0	PASS
		98% at 1kHz	98	97.9	97.9	0	PASS
Resistance	400 Ohm	360 Ohm	360	359.5	359.7	0.2	PASS
	40 Mohm	36 Mohm	36	35.85	35.86	0.01	PASS
Capacitance	5 nF	4.5 nF	4.5	4.40	4.41	0.01	PASS
	200uF	180 uF	180	181.0	181.3	0.3	PASS
A DC	40 mA	36mA	36	36.10	36.09	-0.01	PASS
	10.0A	9.0 A	9.00	8.98	8.96	-0.02	PASS
A AC	40 mA	36mA/50Hz	36	36.03	36.02	-0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.95	8.93	-0.02	PASS
Temperature	K-Type	0	0	1	0	-1	PASS
		1300	1300	1293	1289	-4	PASS

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Annexure – E

FUNCTION	RANGE	TEST POINT	Nominal value	Observed value after -25 DEG. C.	Error	PASS / FAIL	Observed value after 70 DEG. C.	Error	PASS / FAIL
V AC	400mV	360mV/50 Hz	360	360.6	0.6	PASS	360.7	-0.7	PASS
	1000 V	900 V/50Hz	900	895	-5	PASS	897	3	PASS
V DC	400mV	360mV	360	359.4	-0.6	PASS	359.6	0.4	PASS
	1000 V	900 V	900	898	-2	PASS	899	1	PASS
FREQUENCY	10 Hz	9 Hz/10V	10	9.998	-0.0002	PASS	9.998	0.0002	PASS
	500kHz	450 kHz/10V	450	449.8	-0.2	PASS	449.9	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.8	-0.2	PASS	1.9	0.1	PASS
		98% at 1kHz	98	97.8	-0.2	PASS	97.9	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.7	-0.3	PASS	359.8	0.2	PASS
	40 Mohm	36 Mohm	36	35.86	-0.14	PASS	35.88	0.12	PASS
Capacitance	5 nF	4.5 nF	4.5	4.39	-0.11	PASS	4.4	0.1	PASS
	200uF	180 uF	180	181.2	1.2	PASS	181.2	-1.2	PASS
A DC	40 mA	36mA	36	36.08	0.08	PASS	36.09	-0.09	PASS
	10.0A	9.0 A	9.00	8.95	0.05	PASS	8.97	0.03	PASS
A AC	40 mA	36mA/50Hz	36	36.01	.01	PASS	36.02	-0.02	PASS
	10.0A	9.0 A/50Hz	9.00	8.92	-0.08	PASS	8.94	0.06	PASS
Temperature	K-Type	0	0	1	1	PASS	1	-1	PASS
		1300	1300	1292	8	PASS	1294	6	PASS

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Annexure – F

FUNCTION	RANGE	TEST POINT	nominal value	OBSERVED VALUE Ref. Condition	OBSERVED VALUE at 75% RH, 40 deg. C	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.8	360.9	-0.1	PASS
	1000 V	900 V/50Hz	900	897	899	-2	PASS
V DC	400mV	360mV	360	359.8	359.7	0.1	PASS
	1000 V	900 V	900	898	897	1	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.998	9.997	0.001	PASS
	500kHz	450 kHz/10V	450	449.8	449.9	-0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	1.9	0	PASS
		98% at 1kHz	98	97.9	97.8	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.9	359.8	0.1	PASS
	40 Mohm	36 Mohm	36	35.89	35.88	0.01	PASS
Capacitance	5 nF	4.5 nF	4.5	4.41	4.42	-0.01	PASS
	200uF	180 uF	180	181.0	181.1	-0.1	PASS
A DC	40 mA	36mA	36	36.06	36.07	-0.01	PASS
	10.0A	9.0 A	9.00	8.97	8.98	-0.01	PASS
A AC	40 mA	36mA/50Hz	36	36.02	36.01	0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.94	8.95	-0.01	PASS
Temperature	K Type	0 DEG C	0	0	0	0	PASS
		1300 DEG C	1300	1291	1292	1	PASS

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Annexure – G

FUNCTION	RANGE	TEST POINT	nominal value	OBSERVED VALUE after 1 min.	OBSERVED VALUE after 30 min.	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.5	360.6	-0.1	PASS
	1000 V	900 V/50Hz	900	898	899	-1	PASS
V DC	400mV	360mV	360	359.7	359.6	0.1	PASS
	1000 V	900 V	900	899	898	1	PASS
A DC	40 mA	36mA	36	36.10	36.09	0.01	PASS
	10.0A	9.0 A	9.00	8.97	8.96	0.01	PASS
A AC	40 mA	36mA/50Hz	36	36.02	36.03	-0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.93	8.94	-0.01	PASS

Annexure – H

FUNCTION	RANGE	TEST POINT	nominal value	OBSERVED VALUE at 3 V	OBSERVED VALUE at low battery supply	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.4	360.5	-0.1	PASS
	1000 V	900 V/50Hz	900	898	897	1	PASS
V DC	400mV	360mV	360	359.6	359.7	-0.1	PASS
	1000 V	900 V	900	898	899	-1	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.999	9.998	0.001	PASS
	500kHz	450 kHz/10V	450	449.9	449.8	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	1.9	0	PASS
		98% at 1kHz	98	97.9	97.9	0	PASS
Resistance	400 Ohm	360 Ohm	360	359.9	359.8	0.1	PASS
	40 Mohm	36 Mohm	36	35.89	35.88	0.01	PASS
Capacitance	5 nF	4.5 nF	4.5	4.41	4.42	-0.01	PASS
	200uF	180 uF	180	181	181.1	-0.1	PASS
A DC	40 mA	36mA	36	36.06	36.07	-0.01	PASS
	10.0A	9.0 A	9.00	8.98	8.97	0.01	PASS
A AC	40 mA	36mA/50Hz	36	36.02	36.03	-0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.93	8.94	-0.01	PASS
Temperature	K Type	0 DEG C	0	0	1	-1	PASS
		1300 DEG C	1300	1293	1292	1	PASS

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Annexure – I

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE	Deviation	PASS/FAIL
V AC	400mV	360mV/50 Hz	360	360.4	-0.4	PASS
	1000 V	900 V/50Hz	900	898	2	PASS
V DC	400mV	360mV	360	359.8	0.2	PASS
	1000 V	900 V	900	898	2	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.999	0.001	PASS
	500kHz	450 kHz/10V	450	449.9	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	0.1	PASS
		98% at 1kHz	98	97.9	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.8	0.2	PASS
	40 Mohm	36 Mohm	36	35.90	0.1	PASS
Capacitance	5 nF	4.5 nF	4.5	4.41	0.09	PASS
	200uF	180 uF	180	181.5	-1.5	PASS
A DC	40 mA	36mA	36	36.06	-0.06	PASS
	10.0A	9.0 A	9.00	8.97	0.03	PASS
A AC	40 mA	36mA/50Hz	36	36.02	-0.02	PASS
	10.0A	9.0 A/50Hz	9.00	8.95	0.05	PASS
Temperature	K Type	0 DEG C	0	0	0	PASS
		1300 DEG C	1300	1292	8	PASS

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Annexure – J

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.6	-0.6	PASS
	1000 V	900 V/50Hz	900	897	3	PASS
V DC	400mV	360mV	360	359.6	0.4	PASS
	1000 V	900 V	900	899	1	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.999	0.001	PASS
	500kHz	450 kHz/10V	450	449.9	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	0.1	PASS
		98% at 1kHz	98	97.8	0.2	PASS
Resistance	400 Ohm	360 Ohm	360	359.7	0.3	PASS
	40 Mohm	36 Mohm	36	35.91	0.09	PASS
Capacitance	5 nF	4.5 nF	4.5	4.42	0.08	PASS
	200uF	180 uF	180	181.2	-1.2	PASS
A DC	40 mA	36mA	36	36.07	-0.07	PASS
	10.0A	9.0 A	9.00	8.96	0.04	PASS
A AC	40 mA	36mA/50Hz	36	36.03	-0.03	PASS
	10.0A	9.0 A/50Hz	9.00	8.94	0.06	PASS
Temperature	K Type	0 DEG C	0	0	0	PASS
		1300 DEG C	1300	1294	6	PASS

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Annexure – K

DC VOLT. RANGE	AC VOLT. RANGE	CMR
400 mV	----	113.55 dB
4 V	---	103.1 dB
---	400 mV	81.31dB
---	4 V	81.61 dB
---	40 V	65 dB
---	400 V	44.29 dB
---	1000 V	24.15 dB

Annexure – L

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE Post Shock	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.6	-0.6	PASS
	1000 V	900 V/50Hz	900	897	3	PASS
V DC	400mV	360mV	360	359.7	0.3	PASS
	1000 V	900 V	900	897	3	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.998	0.002	PASS
	500kHz	450 kHz/10V	450	449.7	0.3	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	0.1	PASS
		98% at 1kHz	98	97.9	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.8	0.2	PASS
	40 Mohm	36 Mohm	36	35.91	0.09	PASS
Capacitance	5 nF	4.5 nF	4.5	4.42	0.08	PASS
	200uF	180 uF	180	181.1	-1.1	PASS
A DC	40 mA	36mA	36	36.07	-0.07	PASS
	10.0A	9.0 A	9.00	8.97	0.03	PASS
A AC	40 mA	36mA/50Hz	36	36.01	-0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.97	0.03	PASS
Temperature	K Type	0 DEG C	0	0	0	PASS
		1300 DEG C	1300	1295	5	PASS

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Annexure – M

FUNCTION	RANGE	TEST POINT	Nominal value	OBSERVED VALUE WITH OUT Magnetic field	OBSERVED VALUE WITH Magnetic field	Deviation	PASS/ FAIL
V AC	400mV	360mV/50 Hz	360	360.6	360.7	-0.1	PASS
	1000 V	900 V/50Hz	900	897	898	-1	PASS
V DC	400mV	360mV	360	359.6	359.7	-0.1	PASS
	1000 V	900 V	900	897	898	-1	PASS
FREQUENCY	10 Hz	10 Hz/10V	10	9.999	9.998	0.001	PASS
	500kHz	450 kHz/10V	450	449.7	449.6	0.1	PASS
Duty cycle	2...98%	2% at 1kHz	2.00	1.9	1.9	0	PASS
		98% at 1kHz	98	97.9	97.8	0.1	PASS
Resistance	400 Ohm	360 Ohm	360	359.8	359.7	0.1	PASS
	40 Mohm	36 Mohm	36	35.92	35.93	-0.01	PASS
Capacitance	5 nF	4.5 nF	4.5	4.42	4.43	-0.01	PASS
	200uF	180 uF	180	181.2	181.1	0.1	PASS
A DC	40 mA	36mA	36	36.07	36.06	0.01	PASS
	10.0A	9.0 A	9.00	8.97	8.98	-0.01	PASS
A AC	40 mA	36mA/50Hz	36	36.01	36.02	-0.01	PASS
	10.0A	9.0 A/50Hz	9.00	8.97	8.98	-0.01	PASS
Temperature	K Type	0 DEG C	0	0	1	-1	PASS
		1300 DEG C	1300	1294	1295	-1	PASS

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3.0 General Remarks : -NIL

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REPORT RECEIVED BY

Abdul Moideen
ABDUL MOID
OIC (E&S)

GURUMIT SINGH/RISHI K
OIC (E)

