

**PERFORMANCE TEST CARD
24 HOUR LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

DC Volts Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				—	—
2	Short	30mV Range	+00.0035mV	_____	-00.0035mV	—	—
3	Short	300mV Range	+000.004mV	_____	-000.004mV	—	—
4	Short	3V Range	+0.00002V	_____	-0.00002V	—	—
5	Short	30V Range	+00.0003V	_____	-00.0003V	—	—
6	Short	300V Range	+000.002V	_____	-000.002V	—	—
7	+30mV	30mV Range	+30.0116mV	_____	+29.9884mV	—	—
8	+300mV	300mV Range	+300.019mV	_____	+299.981mV	—	—
9	+300mV	3V Range	+0.30003V	_____	+0.29997V	—	—
10	+1V	3V Range	+1.00005V	_____	+0.99995V	—	—
11	-1V	3V Range	-1.00005V	_____	-0.99995V	—	—
12	-3V	3V Range	-3.00012V	_____	-2.99988V	—	—
13	+3V	3V Range	+3.00012V	_____	+2.99988V	—	—
14	+3V	Autozero Off	+3.00015V	_____	+2.99983V	—	—
15		Autozero On					
16	+3V	4 Digit Disp	+3.0002V	_____	+2.9998V	—	—
17	+3V	3 Digit Disp	+3.001V	_____	+2.999V	—	—
18		5 Digit Disp					
19	+3V	30V Range	+03.0006V	_____	+02.9994V	—	—
20	+10V	30V Range	+10.0008V	_____	+09.9992V	—	—
21	+30V	30V Range	+30.0018V	_____	+29.9982V	—	—
22	+30V	Autozero Off	+30.0029V	_____	+29.9971V	—	—
23		Autozero On					
24	+300V	300V Range	+300.019V	_____	+299.981V	—	—
25	Open	30mV Range					
26	See Below	CMR Test					

CMR Test

1. Connect a 1K Ohm resistor between the HI and LO INPUT Terminals of the 3478A.
2. Note the 3478A's reading.
3. Apply 450V dc between the 3478A's chassis (rear panel) and HI INPUT Terminal.
4. The 3478A should remain within .045mV of the reading in step 2.

**PERFORMANCE TEST CARD
90 DAY LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

DC Volts Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Short	30mV Range	+00.0041mV	_____	-00.0041mV	___	___
3	Short	300mV Range	+000.005mV	_____	-000.005mV	___	___
4	Short	3V Range	+0.00002V	_____	-0.00002V	___	___
5	Short	30V Range	+00.0003V	_____	-00.0003V	___	___
6	Short	300V Range	+000.002V	_____	-000.002V	___	___
7	+ 30mV	30mV Range	+ 30.0131mV	_____	+ 29.9869mV	___	___
8	+ 300mV	300mV Range	+ 300.027mV	_____	+ 299.973mV	___	___
9	+ 300mV	3V Range	+ 0.30004V	_____	+ 0.29996V	___	___
10	+ 1V	3V Range	+ 1.00008V	_____	+ 0.99992V	___	___
11	-1V	3V Range	-1.00008V	_____	-0.99992V	___	___
12	-3V	3V Range	-3.00020V	_____	-2.99980V	___	___
13	+ 3V	3V Range	+ 3.00020V	_____	+ 2.99980V	___	___
14	+ 3V	Autozero Off	+ 3.00023V	_____	+ 2.99977V	___	___
15		Autozero On					
16	+ 3V	4 Digit Disp	+ 3.0003V	_____	+ 2.9997V	___	___
17	+ 3V	3 Digit Disp	+ 3.001V	_____	+ 2.999V	___	___
18		5 Digit Disp					
19	+ 3V	30V Range	+ 03.0005V	_____	+ 02.9995V	___	___
20	+ 10V	30V Range	+ 10.0010V	_____	+ 09.9990V	___	___
21	+ 30V	30V Range	+ 30.0041V	_____	+ 29.9959V	___	___
22	+ 30V	Autozero Off	+ 30.0041V	_____	+ 29.9959V	___	___
23		Autozero On					
24	+ 300V	300V Range	+ 300.029V	_____	+ 299.971V	___	___
25	Open	30mV				___	___
26	See Below	CMR Test				___	___

CMR Test

1. Connect a 1K Ohm resistor between the HI and LO INPUT Terminals of the 3478A.
2. Note the 3478A's reading.
3. Apply 450V dc between the 3478A's chassis (rear panel) and HI INPUT Terminal.
4. The 3478A should remain within .045mV of the reading in step 2.

**PERFORMANCE TEST CARD
1 YEAR LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

DC Volts Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Short	30mV Range	+00.0041mV	_____	-00.0041mV	___	___
3	Short	300mV Range	+000.005mV	_____	-000.005mV	___	___
4	Short	3V Range	+0.00002V	_____	-0.00002V	___	___
5	Short	30V Range	+00.0003V	_____	-00.0003V	___	___
6	Short	300V Range	+000.002V	_____	-000.002V	___	___
7	+30mV	30mV Range	+30.0161mV	_____	+29.9839mV	___	___
8	+300mV	300mV Range	+300.065mV	_____	+299.935mV	___	___
9	+300mV	3V Range	+0.30008V	_____	+0.29992V	___	___
10	+1V	3V Range	+1.00021V	_____	+0.99979V	___	___
11	-1V	3V Range	-1.00021V	_____	-0.99979V	___	___
12	-3V	3V Range	-3.00058V	_____	-2.99942V	___	___
13	+3V	3V Range	+3.00058V	_____	+2.99942V	___	___
14	+3V	Autozero Off	+3.00061V	_____	+2.99939V	___	___
15		Autozero On					
16	+3V	4 Digit Disp	+3.0007V	_____	+2.9993V	___	___
17	+3V	3 Digit Disp	+3.002V	_____	+2.998V	___	___
18		5 Digit Disp					
19	+3V	30V Range	+03.0009V	_____	+02.9991V	___	___
20	+10V	30V Range	+10.0023V	_____	+09.9977V	___	___
21	+30V	30V Range	+30.0063V	_____	+29.9937V	___	___
22	+30V	Autozero Off	+30.0074V	_____	+29.9926V	___	___
23		Autozero On					
24	+300V	300V Range	+300.062V	_____	+299.938V	___	___
25	Open	30mV Range				___	___
26	See Below	CMR Test				___	___

CMR Test

1. Connect a 1K Ohm resistor between the HI and LO INPUT Terminals of the 3478A.
2. Note the 3478A's reading.

3. Apply 450V dc between the 3478A's chassis (rear panel) and HI INPUT Terminal.
4. The 3478A should remain within .045mV of the reading in step 2.

90 DAY LIMITS

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

DC Current Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET					
2	Open	DCI Function	+000.040mA	_____	-000.040mA	___	___
3	Open	3A Range	+0.00006A	_____	-0.00006A	___	___
4	+100mA	300mA Range	+100.150mA	_____	+099.850mA	___	___
5	+1A	3A Range	+1.00146A	_____	+0.99854A	___	___

1 YEAR LIMITS

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

DC Current Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET					
2	Open	DCI Function	+000.040mA	_____	-000.040mA	___	___
3	Open	3A Range	+0.00006A	_____	-0.00006A	___	___
4	+100mA	300mA Range	+100.190mA	_____	+099.810mA	___	___
5	+1A	3A Range	+1.00176A	_____	+0.99824A	___	___

1 YEAR LIMITS

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

AC Volts Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Open	ACV Function					
3	0.28V, 20KHz	300mV Range	028.244mV	_____	027.756mV	___	___
4	0.28V, 20KHz	300mV Range	280.975mV	_____	279.025mV	___	___
5	0.28V, 20KHz	3V Range	0.28175V	_____	0.27825V	___	___
6	1.5V, 20KHz	3V Range	1.50492V	_____	1.49508V	___	___
7	2.8V, 20KHz	3V Range	2.80830V	_____	2.79170V	___	___
8	2.8V, 20KHz	30V Range	02.8175V	_____	02.7825V	___	___
9	28V, 20KHz	30V Range	28.0830V	_____	27.9170V	___	___
10	28V, 20KHz	300V Range	028.194V	_____	027.806V	___	___
11	280V, 20KHz	300V Range	281.026V	_____	278.974V	___	___
12	0.28V, 50KHz	300mV Range	281.815V	_____	278.185V	___	___
13	2.8V, 50KHz	3V Range	2.81328V	_____	2.78672V	___	___
14	28V, 50KHz	30V Range	28.1328V	_____	27.8672V	___	___
15	280V, 50KHz	300V Range	281.720V	_____	278.280V	___	___
16	0.28V, 100KHz	300mV Range	285.754mV	_____	274.246mV	___	___
17	0.28V, 100KHz	3V Range	0.29449V	_____	0.26881V	___	___
18	2.8V, 100KHz	3V Range	2.86765V	_____	2.76235V	___	___
19	15V, 100KHz	30V Range	15.2400V	_____	14.7600V	___	___
20	28V, 100KHz	30V Range	28.3765V	_____	27.6235V	___	___
21	280V, 100KHz	300V Range	284.353V	_____	275.674V	___	___
22	25V, 300KHz	30V Range	28.8970V	_____	22.1030V	___	___
23	2.8V, 50Hz	3V Range	2.8139V	_____	2.78609V	___	___
24	2.8V, 20Hz	3V Range	2.83294V	_____	2.76706V	___	___

PERFORMANCE TEST CARD

1 YEAR LIMITS

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

AC Current Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Open	ACI Function				___	___
3	.01A,5KHz	300mA Range	010.235mA	_____	009.765mA	___	___
4	0.1A,5KHz	300mA Range	100.883mA	_____	099.117mA	___	___
5	1A,5KHz	3A Range	1.01583A	_____	0.98417A	___	___

**PERFORMANCE TEST CARD
24 HOUR LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

Ohms Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Short	Ohms Function	00.0035	_____	-00.0035	___	___
3	Short	300 Range	000.004	_____	-000.004	___	___
4	Short	3K Range	0.00002K	_____	-0.00002K	___	___
5	Short	30K Range	00.0002K	_____	-00.0002K	___	___
6	Short	300K Range	000.002K	_____	-000.0002K	___	___
7	Short	3M Range	0.00002M	_____	-0.00002M	___	___
8	Short	30M Range	00.0002M	_____	-00.0002M	___	___
9	30 ohm	30 Range	30.0104	_____	29.9896	___	___
(9)	10 ohm		10.0058	_____	09.9942	___	___
10	300 ohm	300 Range	300.018	_____	299.982	___	___
(10)	100 ohm		100.009	_____	099.991	___	___
11	3K ohm	3K Range	3.00013K	_____	2.99987K	___	___
(11)	1K ohm		1.00006K	_____	0.99994K	___	___
12	30K ohm	30K Range	30.0013K	_____	29.9987K	___	___
(12)	10K ohm		10.0006K	_____	09.9994K	___	___
13	300K ohm	300K Range	300.013K	_____	299.987K	___	___
(13)	100K ohm		100.006K	_____	099.994K	___	___
14	3M ohm	3M Range	3.00018M	_____	2.99982M	___	___
(14)	1M ohm		1.00007M	_____	0.99993M	___	___
15	30M ohm	30M Range	30.0110M	_____	29.9890M	___	___
(15)	10M ohm		10.0038M	_____	09.9962M	___	___

**PERFORMANCE TEST CARD
90 DAY LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

Ohms Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				___	___
2	Short	Ohms Function	00.0041	_____	-00.0041	___	___
3	Short	300 Range	000.005	_____	-000.005	___	___
4	Short	3K Range	0.00002K	_____	-0.00002K	___	___
5	Short	30K Range	00.0002K	_____	-00.0002K	___	___
6	Short	300K Range	000.002K	_____	-000.002K	___	___
7	Short	3M Range	0.00002M	_____	-0.00002M	___	___
8	Short	30M Range	00.0002M	_____	-00.0002M	___	___
9	30 ohm	30 Range	30.0122	_____	29.9878	___	___
(9)	10 ohm		10.0068	_____	09.9932	___	___
10	300 ohm	300 Range	300.041	_____	299.958	___	___
(10)	100 ohm		100.017	_____	099.983	___	___
11	3K ohm	3K Range	3.00035K	_____	2.99965K	___	___
(11)	1K ohm		1.00013K	_____	0.99987K	___	___
12	30K ohm	30K Range	30.0035K	_____	29.9965K	___	___
(12)	10K ohm		10.0013K	_____	09.9987K	___	___
13	300K ohm	300K Range	300.035K	_____	299.965K	___	___
(13)	100K ohm		100.013K	_____	099.987K	___	___
14	3M ohm	3M Range	3.00035M	_____	2.99965M	___	___
(14)	1M ohm		1.00013M	_____	0.99987M	___	___
15	30M ohm	30M Range	30.0200M	_____	29.9800M	___	___
(15)	10M ohm		10.0068M	_____	09.9932M	___	___

**PERFORMANCE TEST CARD
1 YEAR LIMITS**

Hewlett-Packard Model 3478A

Test Performed By _____

Digital Multimeter

Date _____

Serial Number _____

Reference Temperature _____

Ohms Test

Step#	Input to 3478A	Set-Up and Configuration	High Limit	Reading	Low Limit	Test Pass	Test Fail
1	Open	Press TEST/RESET				—	—
2	Short	Ohms Function	00.0041	_____	-00.0041	—	—
3	Short	300 Range	000.005	_____	-000.005	—	—
4	Short	3K Range	0.00002K	_____	-0.00002K	—	—
5	Short	30K Range	00.0002K	_____	-00.0002K	—	—
6	Short	300K Range	000.002K	_____	-000.002K	—	—
7	Short	3M Range	0.00002M	_____	-0.00002M	—	—
8	Short	30M Range	00.0002M	_____	-00.0002M	—	—
9	30 ohm	30 Range	30.0143	_____	29.9857	—	—
(9)	10 ohm		10.0075	_____	09.9925	—	—
10	300 ohm	300 Range	300.056	_____	299.944	—	—
(10)	100 ohm		100.022	_____	099.978	—	—
11	3K ohm	3K Range	3.00050K	_____	2.99950K	—	—
(11)	1K ohm		1.00018K	_____	0.99982K	—	—
12	30K ohm	30K Range	30.0050K	_____	29.9950K	—	—
(12)	10K ohm		10.0018K	_____	09.9982K	—	—
13	300K ohm	300K Range	300.050K	_____	299.950K	—	—
(13)	100K ohm		100.018K	_____	099.982K	—	—
14	3M ohm	3M Range	3.00050M	_____	2.99950M	—	—
(14)	1M ohm		1.00018M	_____	0.99982M	—	—
15	30M ohm	30M Range	30.0236M	_____	29.9764M	—	—
(15)	10M ohm		10.0080M	_____	09.9920M	—	—