

**REVISION**

**REPORT NO. E930528-1**

**INSPECTION, TEST, AND EVALUATION**

**OF THE Universal Notebook Battery**

**RENDERED TO**

**AMERICAN POWER CONVERSION CORPORATION**

The following revisions have been made to Report No. E930528 for  
Universal Notebook Battery

<u>DATE</u>	<u>PAGE</u>	<u>DESCRIPTION</u>
		The Original Model No. (UPB80, UPB 80i )
OCT. 06, 2004		Add Model No. ( UPB80i )
OCT. 06, 2004	3 - 9	Test Model No. ( UPB80i )
OCT. 06, 2004	10 - 13	Photo Model No. ( UPB80i )

**PLACE THIS PAGE AT FRONT OF YOUR REPORT.**

Approved By : BARRY MA

**EUT DECLARATION FOR DoC PERMISSIVE CHANGE**

We hereby declare that both of the major electrical design and construction of this requested model: UPB80i is identical to the original models: UPB80 and UPB 80i listed in PEP Report No. E930528 except that they are different in data cable. From technical point of view, we verified EUT by radiated emission test. We attached UPB80i in original report as additional model.

**Applicant** : AMERICAN POWER CONVERSION CORPORATION

**Address** : 132 FAIRGROUNDS ROAD WEST KINGSTON, RI 02892

**Signature** : \_\_\_\_\_  
KY WANG

**Date** : / /

## **Support Equipment Used**

**1. DC Power Supply**

**Manufacturer :** SCHMIDT

**Model Number :** EPS-3030SD (DC-0-30V)

**2. Resistance Load**

## Radiated Emissions Test Setup Photos

**CHARGE MODE**  
**< FRONT VIEW >**



**< REAR VIEW >**



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**DISCHARGE MODE**  
**< FRONT VIEW >**



**< REAR VIEW >**



## Radiated Emissions Test Data

**Model No.** : UPB80i  
**Frequency range** : 30MHz to 1GHz      **Detector** : Quasi-Peak Value  
**Frequency range** : above 1GHz      **Detector** : Quasi-Peak/Average Value  
**Temperature** : 27° C      **Humidity** : 49 %  
**Memo** : CHARGE MODE

**Antenna polarization : HORIZONTAL ; Test distance : 10m ;**

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
45.333	17.44	-12.56	30.00	25.32	11.01	0.61	19.50	210.0	4.0
86.000	15.97	-14.03	30.00	24.69	9.66	0.98	19.36	154.0	4.0
109.311	15.00	-15.00	30.00	21.80	11.48	1.05	19.33	126.0	4.0
124.800	24.17	- 5.83	30.00	30.05	12.53	1.10	19.51	56.0	4.0
134.822	26.76	- 3.24	30.00	30.99	13.97	1.10	19.30	324.0	4.0
152.978	26.80	- 3.20	30.00	28.40	16.67	1.30	19.57	179.0	4.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

**Model No. : UPB80i**  
**Frequency range : 30MHz to 1GHz**      **Detector : Quasi-Peak Value**  
**Frequency range : above 1GHz**      **Detector : Quasi-Peak/Average Value**  
**Temperature : 27° C**      **Humidity : 49 %**  
**Memo : CHARGE MODE**

**Antenna polarization : VERTICAL ; Test distance : 10m ;**

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
86.444	16.68	-13.32	30.00	25.34	9.73	0.99	19.38	112.0	1.0
108.889	18.89	-11.11	30.00	25.70	11.48	1.05	19.34	89.0	1.0
123.822	23.48	- 6.52	30.00	29.46	12.44	1.10	19.52	210.0	1.0
129.822	17.21	-12.79	30.00	22.38	13.05	1.10	19.32	154.0	1.0
138.344	22.64	- 7.36	30.00	26.39	14.57	1.10	19.42	286.0	1.0
149.522	20.02	- 9.98	30.00	21.76	16.54	1.29	19.57	30.0	1.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

**Model No. : UPB80i**  
**Frequency range : 30MHz to 1GHz**      **Detector : Quasi-Peak Value**  
**Frequency range : above 1GHz**      **Detector : Quasi-Peak/Average Value**  
**Temperature : 27° C**      **Humidity : 49 %**  
**Memo : DISCHARGE MODE**

**Antenna polarization : HORIZONTAL ; Test distance : 10m ;**

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
86.472	26.02	- 3.98	30.00	34.68	9.73	0.99	19.38	246.0	4.0
117.547	25.60	- 4.40	30.00	32.15	11.88	1.09	19.52	186.0	4.0
122.762	25.72	- 4.28	30.00	31.88	12.29	1.10	19.55	152.0	4.0
138.318	21.96	- 8.04	30.00	25.71	14.57	1.10	19.42	265.0	4.0
152.089	20.83	- 9.17	30.00	22.46	16.65	1.30	19.58	148.0	4.0
165.356	25.96	- 4.04	30.00	28.20	15.83	1.33	19.40	95.0	4.0
172.244	19.55	-10.45	30.00	22.94	14.57	1.38	19.34	174.0	4.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line



**Model No. : UPB80i**  
**Frequency range : 30MHz to 1GHz**      **Detector : Quasi-Peak Value**  
**Frequency range : above 1GHz**      **Detector : Quasi-Peak/Average Value**  
**Temperature : 27° C**      **Humidity : 49 %**  
**Memo : DISCHARGE MODE**

**Antenna polarization : VERTICAL ; Test distance : 10m ;**

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
86.378	18.53	-11.47	30.00	27.19	9.73	0.99	19.38	114.0	1.0
128.044	20.33	- 9.67	30.00	25.76	12.86	1.10	19.39	85.0	1.0
138.044	21.53	- 8.47	30.00	25.28	14.57	1.10	19.42	196.0	1.0
153.911	15.61	-14.39	30.00	17.18	16.69	1.30	19.56	214.0	1.0
165.956	14.51	-15.49	30.00	16.84	15.72	1.34	19.39	115.0	1.0
173.356	16.44	-13.56	30.00	20.03	14.38	1.39	19.36	210.0	1.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

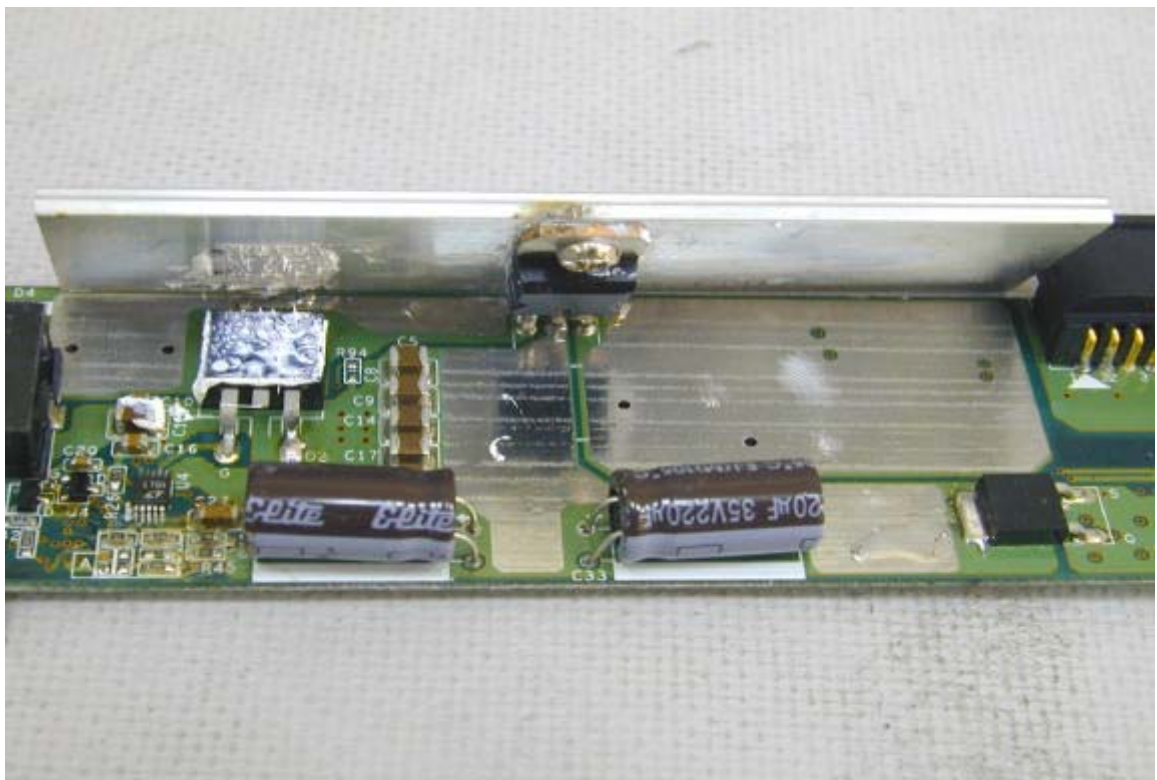
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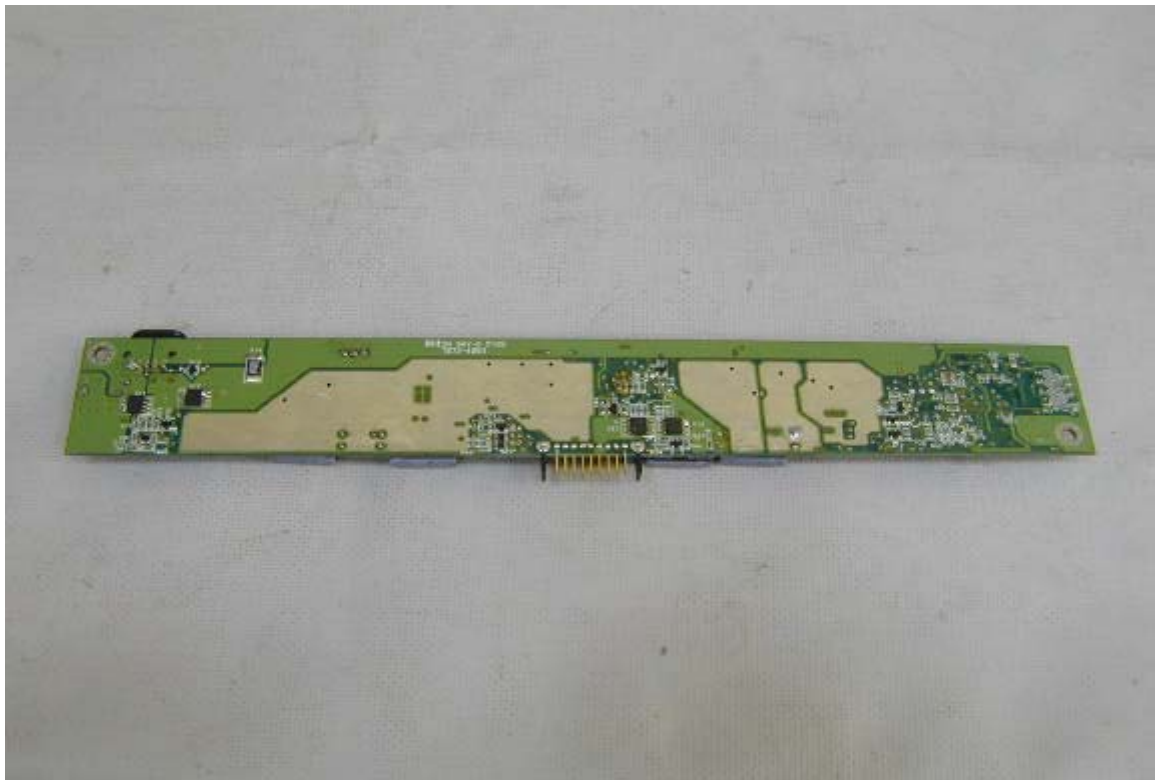
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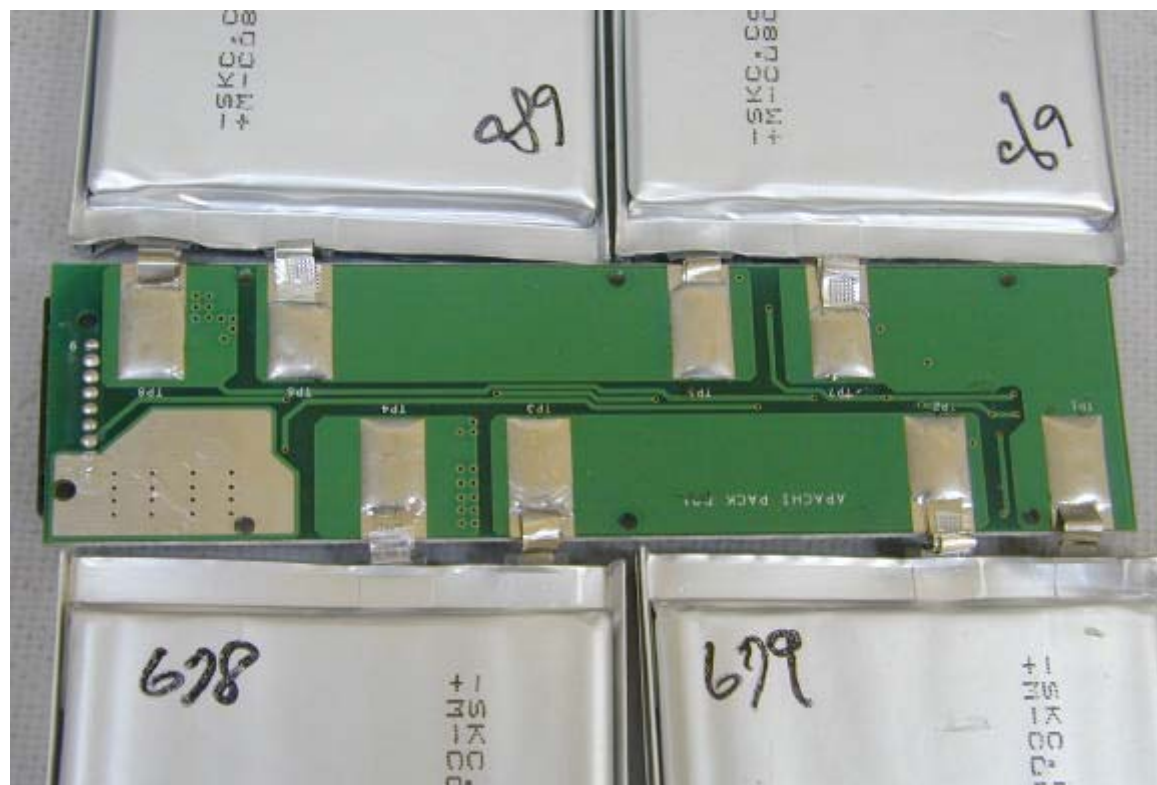
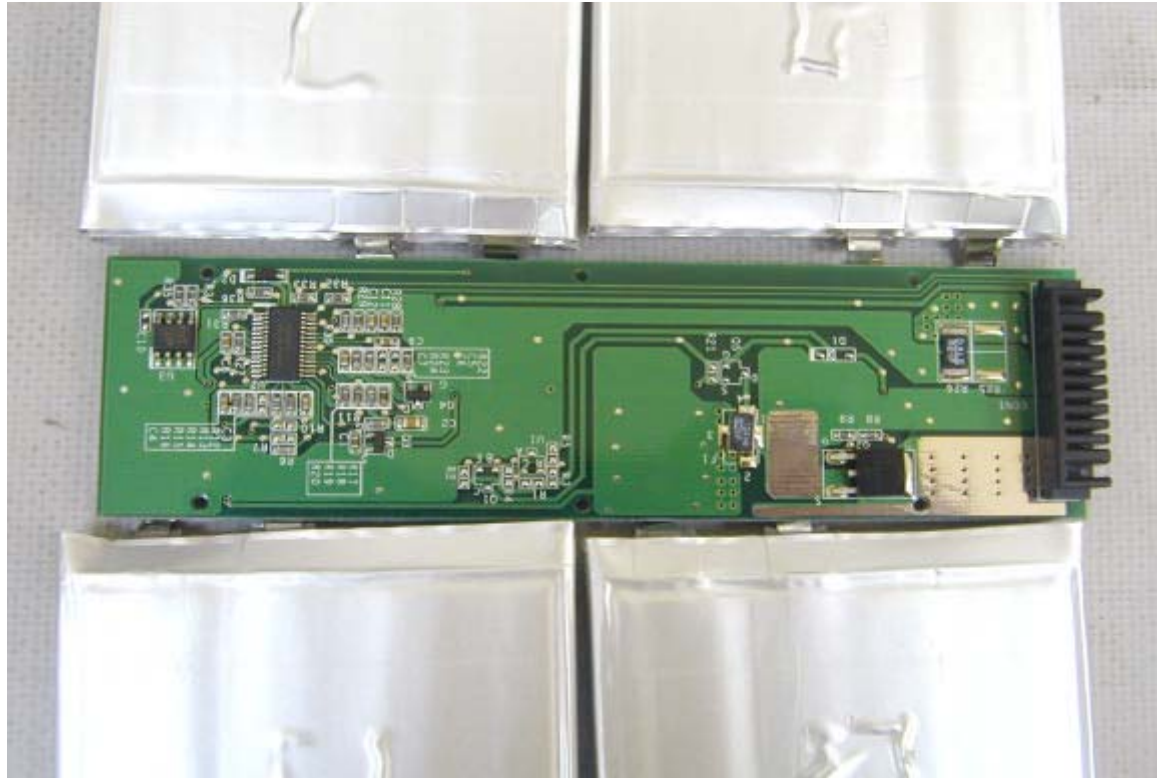
## EUT Photos

MODEL NO. : UPB80i









# DECLARATION OF CONFORMITY CERTIFICATE

**Responsible Party :** AMERICAN POWER CONVERSION CORPORATION

**Address :** 132 FAIRGROUNDS ROAD WEST KINGSTON, RI 02892

**Contact Person :** KY WANG

**Equipment :** Universal Notebook Battery

**Model No.:** UPB80, UPB 80i, UPB80i

**Traceability:** FCC Part 15 & Part 2; Docket 95-19

**Limitation:** CISPR 22 CLASS B

**Date of issued:** OCT. 06, 2004

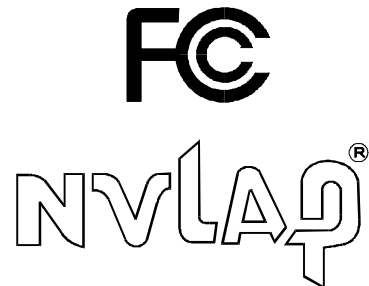
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The device bearing the trade name and model specified above has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-1992. (See Test Report if any modifications were made for compliance.)

PEP certifies that no party to this application has been denied the NVLAP benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).

*Peter Kao*

Peter Kao/NVLAP Signatory



NVLAP LAB CODE: 200097-0

## DECLARATION OF CONFORMITY

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:	AMERICAN POWER CONVERSION CORPORATION		
Address:	132 FAIRGROUNDS ROAD WEST KINGSTON, RI 02892		
Contact Person:	KY WANG		
Phone No.:	886-2-8913-1368	Fax No.:	886-2-8913-1357

Equipment : Universal Notebook Battery  
Model No. : UPB80, UPB 80i, UPB80i

We hereby declare that the equipment bearing the trade name and model number specified above was tested conforming to the applicable FCC Rules under the most accurate measurement standards possible, and that all the necessary steps have been taken and are in force to assure that production units of the same equipment will continue to comply with the Commission's requirements.



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date