



ENERGY EFFICIENCY VERIFICATION RECORD

FILE NUMBER: EE1191

Applicant

GlobTek Inc.
186 Veterans Drive, Northvale
NJ 07647, USA

Manufacturer

Same as Factory

Factory Location

GlobTek (Suzhou) Co., Ltd
Building 4, No. 76, Jin Ling East Rd., Suzhou
Industrial Park, Suzhou, JiangSu 215021,
China

PRODUCT CATEGORY: Energy Efficiency

Product Description

Power Supply: Models GT-41052-WWVV-X.X, GTM or -41060-WWVV-X.X, GTM or -41076-WWVV-X.X, GT-41081-WWVV-X.X, GT-41082-WWVV-X.X-Y, GT-41083-WWVV-X.X- Y, GT-41130-WWVV-X.X-Y, GT-41132-WWVV-X.X-Y, GT-41133- WWVV-X.X-Y, GT-41134-WWVV-X.X-Y, GT-81081-WWVV-X.X-Y, GT-41062-WWVV-X.X-Y and GTA 41077PWWWYY-X.X where:

“WW” is the rated output wattage designation;

“VV” is the standard rated output voltage designation; and

"X.X" designates the optional deviation.

"Y" = T2 or T3 or T3A or W2. Where "T2" presents C8 inlet, "T3" presents C14 inlet, T3A" presents C6 inlet, "W2" presents direct wall plug.

Power Supply: Additional Models

GTA-41062-1824-T3 P/N (TR9CI750CCP-N)

Input: 100-240 V~, 50-60 Hz, 0.6A Output: 24 Vdc, 0.75A

GTA-41077P12048 P/N (TR9CX2500LCP-N)

Input: 100-240 V~, 50-60 Hz, 1.8A Output: 48 Vdc, 2.5A

Notes:



CUSTOMER FILE HISTORY

File Number: EE1191

GlobTek Inc.

Report/Application Number	Issue Date	Description
EE1191-1	June 30, 2011	Power Supply: Models GT-41052-WWVV-X.X, GT-41060-WWVV-X.X, GT-41076-WWVV-X.X, GT-41081-WWVV-X.X, GT-41082-WWVV-X.X-Y, GT-41083-WWVV-X.X-Y, GT-41130-WWVV-X.X-Y, GT-41132-WWVV-X.X-Y, GT-41133-WWVV-X.X-Y, GT-41134-WWVV-X.X-Y and GT-81081-WWVV-X.X-Y, where: "WW" is the rated output wattage designation; "VV" is the standard rated output voltage designation; and "X.X" designates the optional deviation. "Y" = T2 or T3 or T3A or W2. Where "T2" presents C8 inlet, "T3" presents C14 inlet, "T3A" presents C6 inlet, "W2" presents direct wall plug.
EE1191-1R1	October 31, 2011	Added Power Supply models: GT-41062-WWVV-X.X-Y, Input: 100-240 V~, 50-60 Hz, 0.6A Output: 24 Vdc, 0.75A GTA41077PWWYY-X.X-Y Input: 100-240 V~, 50-60 Hz, 1.8A Output: 48 Vdc, 2.5A



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 EEV1191

CERTIFICATE OF COMPLIANCE
(ISO TYPE 3 CERTIFICATION SYSTEM)
ENERGY EFFICIENCY VERIFICATION

Issued to	GlobTek Inc.
Address	186 Veterans Drive, Northvale, NJ 07647 USA
Project Number	EE1191-1R1
Product	External Power Supply
Model Number	GT-41052-WWVV-X.X, GTM or GT-41060-WWVV-X.X, GTM or GT-41076-WWVV-X.X, GT-41081-WWVV-X.X, GT-41082-WWVV-X.X-Y, GT-41083-WWVV-X.X-Y, GT-41130-WWVV-X.X-Y, GT-41132-WWVV-X.X-Y, GT-41133-WWVV-X.X-Y, GT-41134-WWVV-X.X-Y and GT-81081-WWVV-X.X-Y, GT-41062-WWVV-X.X-Y and GTA41077PWWYYX.X, where: "WW" is the rated output wattage designation; "VV" is the standard rated output voltage designation; and "X.X" designates the optional deviation. "Y" = T2 or T3 or T3A or W2 or blank. Where "T2" presents C8 inlet, "T3" presents C14 inlet, "T3A" presents C6 inlet, "W2" presents direct wall plug. (see page 2 and 3 for details)
Ratings	Input: 100-240 Vac, 50-60 Hz (See page 2 and 3 for details)
Applicable Standards	CSA Standard C381.1-08: Test method for calculating the energy efficiency of single-voltage external ac-dc and ac-ac power supplies. Canada's Energy Efficiency Regulations for External Power Supplies.
Factory/Manufacturing Location	GlobTek (Suzhou) Co., Ltd Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China

Statement of Compliance: The product(s) identified in this Certificate and described in the Report covered under the above referenced project number have been investigated and found to be in compliance with the relevant requirements of the above referenced standard(s). As such, they are eligible to bear the QPS Certification Mark shown below, in accordance with the provisions of QPS's Service Agreement.



Issued By: *MARIK P. CHMIELEWSKI*

Signature: *[Handwritten Signature]*

Date: *NOVEMBER 17, 2011*



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Models and rating details continued.

1. GT-41052-WWVV-X.X, where:
“WW” is the rated output wattage designation, with a maximum value of "15";
“VV” is the standard rated output voltage designation, with values between "05" to "48"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 Vac, 50-60 Hz, 0.6 A.
Output: 5-48 V (0.1 V increments), 15 W max.
2. GTM or GT-41060-WWVV-X.X, where:
“WW” is the rated output wattage designation, with a maximum value of "25";
“VV” is the standard rated output voltage designation, with values between "03" to "30"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 0.6 A, 50-60 Hz
Output: 3-30 V (0.1 V increments), 0.833-3.0 A, 25 W max.
3. GTM or GT-41076-WWVV-X.X, where:
“WW” is the rated output wattage designation, with a value of "06";
“VV” is the standard rated output voltage designation, with values between "03" to "24"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 0.3 A, 50-60 Hz
Output: 3-24 V (0.1 V increments), 6 W max.
4. GT-41081-WWVV-X.X
“WW” is the rated output wattage designation, with a maximum value of "18";
“VV” is the standard rated output voltage designation, with a maximum value of "09"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 0.6 A, 50-60 Hz
Output: 5-9 V (0.1 V increments), 18 W max.
5. GT-41082-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a value of "15 or 18";
“VV” is the standard rated output voltage designation, with values between "05" to "15"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 0.5 A, 50-60 Hz
Output: 5-15 V (0.1 V increments), 18 W max.
6. GT-41083-WWVV-X.X-Y,
“WW” is the rated output wattage designation, with a value of "40";
“VV” is the standard rated output voltage designation, with values between "12" to "48"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 1.0 A, 50-60 Hz
Output: 12-48 V (0.1 V increments), 40 W max.
7. GT-41130-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a maximum value of "24";
“VV” is the standard rated output voltage designation, with a maximum value of "24"; and
“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
Input: 100-240 VAC, 0.8 A, 50-60 Hz
Output: 10-24 V (0.1 V increments), 24 W max.



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8. GT-41132-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a maximum value of "60";
“VV” is the standard rated output voltage designation, with a maximum value of "48"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 1.5 A, 50-60 Hz
Output: 12-48 V (0.1 V increments), 60 W max.
9. GT-41133-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a maximum value of "90";
“VV” is the standard rated output voltage designation, with a maximum value of "48"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 1.5 A, 50-60 Hz
Output: 12-48 V (0.1 V increments), 90 W max.
10. GT-41134-WWVV-X.X-Y (WW is the rated output wattage designation, with a maximum value of "06";
VV is the standard rated output voltage designation, with a maximum value of "15";
-X.X is optional or blank and denotes the output voltage differentiator, subtracting or adding X.X volts from standard
output voltage VV in 0.1V increments.)

Input: 100-240 VAC, 0.3A, 50-60 Hz
Output: 3.3-15 V (0.1 V increments), 6 W max.
11. GT-81081-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a value of "60";
“VV” is the standard rated output voltage designation, with a maximum value of "24"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 1.5 A, 50 60 Hz
Output: 12-24 V (0.1 V increments), 60 W max.
12. GT-41062-WWVV-X.X-Y (WW is the rated output wattage designation, with a maximum value of "18";
“VV” is the standard rated output voltage designation, with a maximum value of "24";
“X.X” designates the optional deviation, subtracted from standard output voltage is 0.1 volt increments.
Input: 100-240 VAC, 50-60 Hz, 0.6A
Output: 5-24 V (0.1 V increments), 18 W max.
13. GTA41077PWWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a value of "120";
“VV” is the standard rated output voltage designation, with a maximum value of "48"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 50-60 Hz, 1.8 A
Output: 12-48 V (0.1 V increments), 120 W max.



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**TESTING - CERTIFICATION - FIELD EVALUATION
Energy Efficiency Verification - CB Scheme - IECEx Scheme
CE Marking - ATEX**

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Report No: EE1191-1	Issue Date: June 30, 2011
Issued By: Tom Yeh <i>Original Signature on File</i>	Reviewed By: Tom Mah <i>Original Signature on File</i>
Customer Name: GlobTek Inc.	Address: 186 Veterans Drive, Northvale, NJ 07647 USA
Contents: Energy Efficiency Certificate of Verification; Report: Pages 1 to 88 including photographs on pages 42-62, 80-82 and illustration on page 63-65, 85-88	

Revision History

Project No. / Date	Revised By	Reviewed By	Affected Pages	Description of Changes
EE1191-1R1 / August 11, 2011	Tom Yeh	Zhanmin Yang	1 to 4 and added 70 to 88	Add Model GT-41062-1824-T3 P/N (TR9CI750CCP-N), and Model GTA41077P12048 P/N (TR9CX2500LCP-N)

SUBJECT:

Power Supply:

Models GT-41052-WWVV-X.X, GTM or -41060-WWVV-X.X, GTM or -41076-WWVV-X.X, GT-41081-WWVV-X.X, GT-41082-WWVV-X.X-Y, GT-41083-WWVV-X.X-Y, GT-41130-WWVV-X.X-Y, GT-41132-WWVV-X.X-Y, GT-41133-WWVV-X.X-Y, GT-41134-WWVV-X.X-Y, GT-81081-WWVV-X.X-Y, GT-41062-WWVV-X.X-Y, and GTA41077PWWVYY-X.X-Y,

where:

“WW” is the rated output wattage designation;

“WWW” is the rated 120 Watt Max output wattage designation;

“VV” is the standard rated output voltage designation; and

“X.X” designates the optional deviation.

“Y” = T2 or T3 or T3A or W2. Where “T2” represents C8 inlet, “T3” represents C14 inlet, “T3A” represents C6 inlet, “W2” represents direct wall plug.

“YY” is the rated output voltage that can be between 12 and 48 Vdc.

Input: see “PRODUCT DESCRIPTION” below.

Output: see “PRODUCT DESCRIPTION” below.

The models above were tested in accordance with Canada's Energy Efficiency Regulations for External Power Supplies.

STANDARD(S) USED:

- Test method for calculating the energy efficiency of single-voltage external ac-dc and ac-ac power supplies, CSA Standard C381.1-08 with revisions through and including January 01, 2010.
- Canada's Energy Efficiency Regulations for External Power Supplies: Updated Bulletin on Amending the Standard as pre-published in the Canada Gazette, Part I, June 2010.

PRODUCT DESCRIPTION:

1. GT-41052-WWVV-X.X, where:

“WW” is the rated output wattage designation, with a maximum value of "15";

“VV” is the standard rated output voltage designation, with values between "05" to "48"; and

“X.X” designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 Vac, 50-60 Hz, 0.6 A.
Output: 5-48 V (0.1 V increments), 15 W max.

2. GTM or -41060-WWVV-X.X, where:
“WW” is the rated output wattage designation, with a maximum value of "25";
“VV” is the standard rated output voltage designation, with values between "03" to "30"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 0.6 A, 50-60 Hz
Output: 3-30 V (0.1 V increments), 0.833-3.0 A, 25 W max.

3. GTM or -41076-WWVV-X.X, where:
“WW” is the rated output wattage designation, with a value of "06";
“VV” is the standard rated output voltage designation, with values between "03" to "24"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 0.3 A, 50-60 Hz
Output: 3-24 V (0.1 V increments), 6 W max.

4. GT-41081-WWVV-X.X
“WW” is the rated output wattage designation, with a maximum value of "18";
“VV” is the standard rated output voltage designation, with a maximum value of "09"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 0.6 A, 50-60 Hz
Output: 5-9 V (0.1 V increments), 18 W max.

5. GT-41082-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a value of "15 or 18";
“VV” is the standard rated output voltage designation, with values between "05" to "15"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 0.5 A, 50-60 Hz
Output: 5-15 V (0.1 V increments), 18 W max.

6. GT-41083-WWVV-X.X-Y,
“WW” is the rated output wattage designation, with a value of "40";
“VV” is the standard rated output voltage designation, with values between "12" to "48"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 1.0 A, 50-60 Hz
Output: 12-48 V (0.1 V increments), 40 W max.

7. GT-41130-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a maximum value of "24";
“VV” is the standard rated output voltage designation, with a maximum value of "24"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.


Input: 100-240 VAC, 0.8 A, 50-60 Hz
Output: 10-24 V (0.1 V increments), 24 W max.

8. GT-41132-WWVV-X.X-Y, where:
“WW” is the rated output wattage designation, with a maximum value of "60";
“VV” is the standard rated output voltage designation, with a maximum value of "48"; and
"X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.

Input: 100-240 VAC, 1.5 A, 50-60 Hz
Output: 12-48 V (0.1 V increments), 60 W max.

9. GT-41133-WWVV-X.X-Y, where:
 “WW” is the rated output wattage designation, with a maximum value of "90";
 “VV” is the standard rated output voltage designation, with a maximum value of "48"; and
 "X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
 Input: 100-240 VAC, 1.5 A, 50-60 Hz
 Output: 12-48 V (0.1 V increments), 90 W max.
10. GT-41134-WWVV-X.X-Y, where:
 “WW” is the rated output wattage designation, with a maximum value of "06";
 “VV” is the standard rated output voltage designation, with a maximum value of "15"; and
 "X.X" is optional or blank and denotes the output voltage differentiator, subtracting or adding X.X volts from standard output voltage VV in 0.1V increments.
 Input: 100-240 VAC, 0.3 A, 50-60 Hz;
 Output: 3.3-15 V (0.1 V increments), 6 W max.
11. GT-81081-WWVV-X.X-Y, where:
 “WW” is the rated output wattage designation, with a value of "60";
 “VV” is the standard rated output voltage designation, with a maximum value of "24"; and
 "X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
 Input: 100-240 VAC, 1.5 A, 50/60 Hz
 Output: 12-24 V (0.1 V increments), 60 W max.
12. GT-41062-WWVV-X.X-Y, where:
 “WW” is the rated output wattage designation, with a value of "18";
 “VV” is the standard rated output voltage designation, with a maximum value of "24"; and
 "X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
 Input: 100-240 V~, 50-60 Hz, 0.6A
 Output: 5-24 V (0.1 V increments), 18 W max.
13. GTA41077PWWYY-X.X-Y, where:
 “WW” is the rated output wattage designation, with a value of "120";
 “VV” is the standard rated output voltage designation, with a maximum value of "48"; and
 "X.X" designates the optional deviation, subtracted from standard output voltage in 0.1 volt increments.
 Input: 100-240 V~, 50-60 Hz, 1.8A
 Output: 12-48 V (0.1 V increments), 120 W max.

GENERAL PRODUCT INFORMATION:

Replacement type (Y/N)	N
End use equipment	N/A
Energy verification mark	
Safety approval / file number	cULus / file # - E336418 (GT-41133-WWVV-X.X-Y, GTM or -41060-WWVV-X.X, GTM or -41076-WWVV-X.X, GT-41083-WWVV-X.X-Y, GT-41130-WWVV-X.X-Y, GT-41132-WWVV-X.X-Y), GT-41134-WWVV-X.X-Y; - E170507 (GT-81081-WWVV-X.X-Y, GT-41052-WWVV-X.X, GT-41081-WWVV-X.X, GT-41082-WWVV-X.X-Y and GT-81081-WWVV-X.X-Y,)

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	- E170507-A13-UL-1 (GT-41062-WWVV-X.X-Y), and E170507-A24-UL-1 (GTA41077PWWYY-X.X -Y)
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TEST LAB INFORMATION:

TEST LOCATION: QPS Evaluation Services Inc. 81 Kelfield St Unit 8, Toronto Ontario, M9W 5A3			
Tested by: Andy Wu and Zhanmin Yang			
Test Date: May18, 2011	Ambient: 23°C	Humidity: 42%	Atmosphere Pressure: 1013 mbar
Test Date: June 3, 2011	Ambient: 23°C	Humidity: 43%	Atmosphere Pressure: 1017 mbar
Test Date: June29, 2011	Ambient: 23°C	Humidity: 42%	Atmosphere Pressure: 1013 mbar

MARKING REQUIREMENTS:

Markings on the Equipment: The product is plainly marked in a permanent manner in a place where the details are readily visible with the following:

- The "cQPS Energy Efficiency Verified" Mark. The letter "C" must appear in the 8 o'clock position adjacent to the QPS Energy Efficiency Verified Mark .
- Manufacturer's name or trademark or file No. "EE1191";
- Model designation;
- Date code/serial number;
- Complete electrical ratings;
- Electrical Safety Certifier's Mark

Note 1: Jurisdictions in Canada may require markings to be also in French. It is the responsibility of the Customer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities.

Note 2: NRCan will also accept the use of the Roman Numeral as an alternative to the energy efficiency verification mark if the Roman Numeral is clearly indicated on the product according to the ENERGY STAR protocol and if the product performance is initially verified by an Standards Council of Canada accredited certification organization with a relevant energy efficiency scope (i.e. offering an EPS energy efficiency verification program.)

**EQUIPMENT USED:**

Inst. ID No.	Instrument Type	Test Number +, Test Title or Conditioning	Function/Range	Last Cal. Date	Next Cal. Date
979	Power conditioner	1-5, Mains input power conditioning	115V, 60Hz	N/A	N/A
1343	Power Analyzer	1-4 (Active modes)	VAC, W, Hz, PF, %THD, mA, Auto	14-Dec-10	14-Dec-11
1343	Power Analyzer	5 (No-load)	W, Hz, PF, %THD, Auto. VAC 150V, 10 mA.	14-Dec-10	14-Dec-11
QPS 80	Power Analyzer	1-4 (Active modes)	VAC, W, Hz, PF, %THD, mA, Auto	08-Mar-11	08-Mar-12
QPS 80	Power Analyzer	5 (No-Load modes)	VAC, W, Hz, PF, %THD, mA, External Shunt with 11.63Ω resistor	08-Mar-11	08-Mar-12
617	Multimeter	1-5	mA, Auto	7-Mar-11	7-Mar-12
1374	Multimeter	1-5	Vdc, Auto	20-Aug-10	20-Aug-11
1371	Timer	1-5	minutes	23-Apr-10	23-Apr-12
1333	Barometer	1-5 Room conditions	mbar	7-Mar-11	7-Mar-12
125	Chart recorder	1-5 Room conditions	°C, %RH	14-Sep-10	14-Sep-11
1226	Hot wire anemometer	1-5 Room conditions	m/s	21-Dec-10	21-Dec-11
1255	Measuring Tape	DC cord length	cm	19-Mar-08	--

TEST (METHOD):

- No power switch was provided on the samples under test. UUT was in a constant power ON state for all product conditioning periods and energy efficiency measurements.
- Power supplies that are packaged for consumer use to power a product were tested with the dc output cord supplied by the manufacturer.
- Clip leads were attached to measure the current and voltage from the equipment’s output connector.

Load Conditions

All single voltage external ac-dc power supplies have a nameplate output current, as shown in Figure 1. This was the value used to determine the four active mode load conditions and the no load condition required by this test procedure. The UUT was tested at the following load conditions:

Table 1 – Load Conditions for UUT

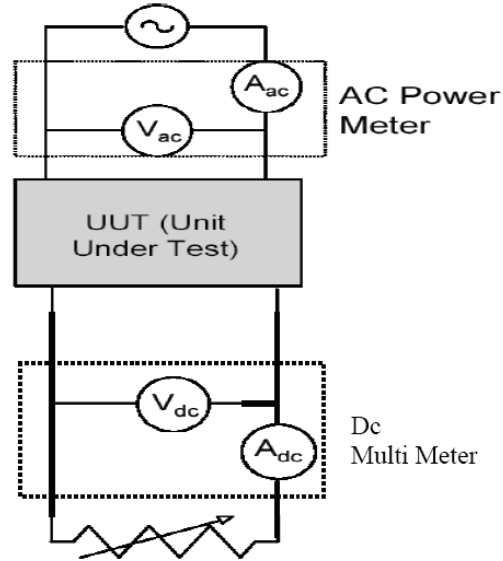
Percentage of Nameplate Output Current	
Load Condition 1	100 % ± 2%
Load Condition 2	75% ± 2%
Load Condition 3	50% ± 2%
Load Condition 4	25% ± 2%
Load Condition 5	0%

Note: The 2% allowance is of nameplate output current, not of the calculated current value. For example, a UUT at Load Condition 3 may be tested in a range from 48% to 52% of rated output current.

Dc Load

In order to load the power supply to produce all four active mode load conditions, a set of variable resistive or electronic loads were used. While these loads may have different characteristics than the electronic loads power supplies are intended to power, they provide standardized and readily repeatable references for testing and product comparison. Note that resistive loads were not measured precisely with an ohmmeter. A variable resistor was simply adjusted to the point where the ammeter confirmed that the desired percentage of nameplate output current was flowing. Figure 2 shows a simplified schematic of an external ac-dc power supply test set-up using variable resistance as dc load. For electronic loads, the desired output current was adjusted in constant current (CC) mode rather than adjusting the required output power in constant power (CP) mode.

Figure 2 - Generic Test Set-up Using a Variable Resistance Dc Load



The UUT was operated at 100% of nameplate current output for at least 30 minutes immediately prior to conducting efficiency measurements. After this warm-up period, the ac input power was monitored for a period of at least 5 minutes to assess the stability of the UUT. If the power level did not drift by more than 5% from the maximum value observed, the UUT was considered stable and the measurements were recorded at the end of the 5 minute period. Subsequent load conditions (see below) were then measured under the same stability guidelines. Note that only one warm-up period of 30 minutes is required for each UUT at the beginning of the test procedure.

If ac input power was not stable over a 5 minute period, the guidelines established by IEC 62301 for measuring average power or accumulated energy over time for both ac input and dc output were used.

Efficiency measurements were conducted in sequence from Load Condition 1 to Load Condition 5 as indicated in Table 1 above. If testing of additional optional load conditions was desired, that testing was conducted in accordance with this test procedure and subsequent to completing the sequence described above.

Efficiency Calculation

Efficiency was calculated by dividing the UUT's measured dc output power at a given load condition by the true ac input power measured at that load condition. Average efficiency was calculated and reported as the arithmetic mean of the efficiency values calculated at Test Conditions 1, 2, 3, and 4 in Table 1. This is a simple arithmetic average of active mode efficiency values, and is not intended to represent weighted average efficiency, which would vary according to the duty cycle of the product powered by the UUT.

Power Consumption Calculation

Power consumption of the UUT at each Load Condition 1 – 4 is the difference between the dc output power (W) at that Load Condition and the ac input power (W) at that Load Condition. The power consumption of Load Condition 5 (no load) is equal to the ac input power (W) at that Load Condition.

The key data (measured and calculated) reported for each input voltage and frequency combination at which the tests were conducted is found in the Tables below.

Energy Performance Standards

The following minimum efficiencies levels will apply to external power supplies. The calculation of minimum efficiencies and maximum energy consumptions are as follows:

Minimum Average Efficiency in Active Mode

Nameplate Output	Minimum Average Efficiency in Active Mode (expressed as a decimal)
< 1 watt	0.5 * Nameplate Output
=1 watt and = 51 watts	0.09*Ln (Nameplate Output) +0.5
> 51 watts	0.85

Where Ln(Nameplate Output) = Natural Logarithm of the nameplate output expressed in watts

Maximum Energy Consumption in No-Load Mode

Nameplate Output	Maximum power in No-Load Mode
Any output	0.5 watt

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	GT-81081-6024-T3(part # TR9CI2500LCP-F)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	180

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	24 Vdc
Current (A)	1.5	2.5
Power (W)	--	60 W (Calculated)
Frequency (Hz)	50/60	DC

Sample #17

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		625	1250	1875	2500	
Dc Output voltage (V)		24.20	24.12	24.01	23.91	
Dc output power (W)		15.13	30.15	45.02	59.78	

Ac Input Voltage (V)	115.02	114.99	114.99	114.94	115.1	
Ac input Power (W)	0.34	17.40	34.65	52.33	69.70	
Total Harmonic Distortion (THD)%		0.87	1.06	1.3	1.5	1.18
True Power Factor (W/VA)		0.983	0.987	0.983	0.976	0.982
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.34	2.28	4.50	7.31	9.92	
Efficiency %		86.95	87.01	86.03	85.77	86.44

Sample #18

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		625	1250	1875	2500	
Dc Output voltage (V)		24.31	24.24	24.15	24.06	
Dc output power (W)		15.19	30.30	45.02	59.78	

Ac Input Voltage (V)	115.08	115.07	114.99	115.02	114.93	
Ac input Power (W)	0.44	17.72	35.02	52.64	70.27	
Total Harmonic Distortion (THD)%		0.87	1.04	1.3	1.5	1.18
True Power Factor (W/VA)		0.980	0.985	0.980	0.973	0.980
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.35	2.53	4.72	7.36	10.12	
Efficiency %		85.72	86.52	85.52	85.07	85.71

Sample #14

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		625	1250	1875	2500	
Dc Output voltage (V)		24.31	24.24	24.17	24.10	
Dc output power (W)		15.19	30.30	45.32	59.78	
Ac Input Voltage (V)	115.09	115.04	115.04	114.96	114.96	
Ac input Power (W)	0.33	17.52	34.81	52.52	70.52	
Total Harmonic Distortion (THD)%		0.78	1.00	1.3	1.5	1.15
True Power Factor (W/VA)		0.980	0.985	0.982	0.973	0.980
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.33	2.33	4.51	7.20	10.27	
Efficiency %		86.70	87.04	86.29	84.77	86.20

SAMPLING PLAN:

GT-81081-6024-T3 (part # TR9CI2500LCP-F)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
17	0.8644	0.34
18	0.8571	0.35
14	0.8620	0.33
Sample Mean	0.8612	0.3400
Standard Deviation	0.0030	0.0082
UCL =	0.8663	0.35
UCL/1.1=	0.7875	0.32

Requirements:

Minimum Average Efficiency in Active mode	0.85
Maximum power limit in no-load mode (Watts)	0.5

UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

where

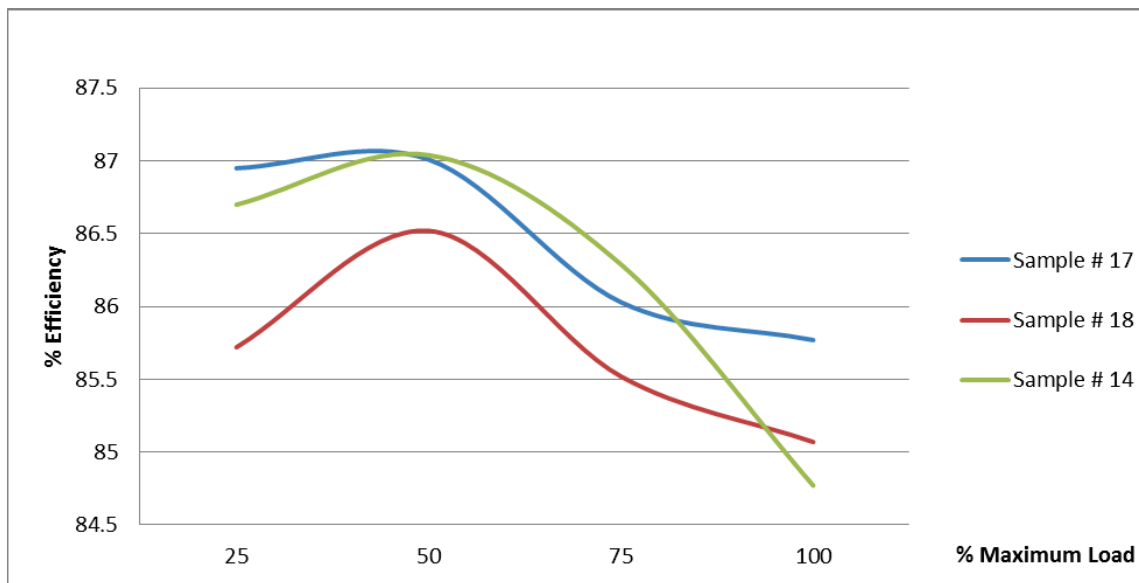
X =	sample mean
t =	multiplier for 95% confidence, based on (n)
S =	sample standard deviation
n =	number of samples tested

In this case t = 2.92

In this case n = 3

TEST RESULTS SUMMARY CHART

GT-81081-6024-T3(part # TR9CI2500LCP-F)

**Conclusion:**

The evaluated energy efficiency levels for model GT-81081-6024-T3 (part # TR9CI2500LCP-F) in both no-load (0.34W) and active load modes (0.86) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	GT-41133-9028-4.0-T3 (part # TR9CI3750CCP-N(RV))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	155

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	24 Vdc
Current (A)	1.5	3.75
Power (W)	--	90 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #28

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		937	1875	2813	3750	
Dc Output voltage (V)		24.21	24.17	24.13	24.08	
Dc output power (W)		22.68	45.32	67.88	90.30	

Ac Input Voltage (V)	115.09	115.04	115.15	114.89	114.98	
Ac input Power (W)	0.35	26.18	51.15	76.05	100.86	
Total Harmonic Distortion (THD)%		0.88	1.11	0.79	0.84	0.91
True Power Factor (W/VA)		0.996	0.996	0.995	0.997	0.996
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60

Power Consumed by UUT (W)	0.35	3.5	5.83	8.17	10.56	
Efficiency %		86.63	88.60	89.26	89.53	88.51

Sample #29

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		937	1875	2813	3750	
Dc Output voltage (V)		24.14	24.09	24.04	24.01	
Dc output power (W)		22.62	45.17	67.62	90.04	

Ac Input Voltage (V)	115.13	115.03	115.15	114.90	114.84	
Ac input Power (W)	0.33	25.88	50.98	75.78	101.37	
Total Harmonic Distortion (THD)%		0.87	1.19	0.81	0.81	0.92
True Power Factor (W/VA)		0.995	0.995	0.995	0.997	0.996
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.33	3.26	5.81	8.16	11.33	
Efficiency %		87.40	88.60	89.23	88.82	88.52

Sample #27

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		937	1875	2813	3750	
Dc Output voltage (V)		24.12	24.08	24.04	24.00	
Dc output power (W)		22.60	45.15	67.62	90.00	
Ac Input Voltage (V)	115.07	115.04	114.96	114.90	114.82	
Ac input Power (W)	0.33	25.87	51.06	75.85	101.21	
Total Harmonic Distortion (THD)%		0.88	1.13	0.75	0.77	0.88
True Power Factor (W/VA)		0.995	0.996	0.995	0.997	0.996
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.33	3.27	5.91	8.23	11.21	
Efficiency %		87.36	88.43	89.15	88.92	88.46

SAMPLING PLAN:

GT-41133-9028-4.0-T3 (part # TR9CI3750CCP-N(RV))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
28	0.8851	0.35
29	0.8852	0.33
27	0.8846	0.33
Sample Mean	0.8850	0.3367
Standard Deviation	0.0003	0.0094
UCL =	0.8854	0.35
UCL/1.1=	0.8049	0.32

Requirements:

Minimum Average Efficiency in Active mode	0.85
Maximum power limit in no-load mode (Watts)	0.5

UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

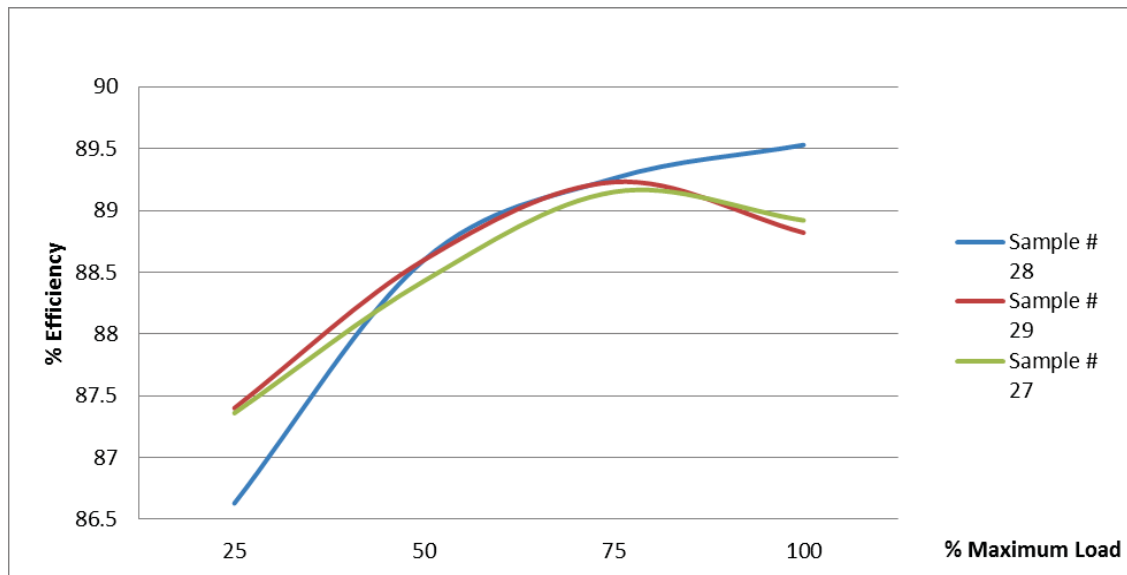
where

X =	sample mean
t =	multiplier for 95% confidence, based on (n)
S =	sample standard deviation
n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

GT-41133-9028-4.0-T3 (part # TR9CI3750CCP-N(RV))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41133-9028-4.0-T3(part # TR9CI3750CCP-N(RV)) in both no-load (0.34W)and active load modes (0.89)comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41130-2024-T2 (PART # TR9KI1000CCP-N(RV))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	160

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	24 Vdc
Current (A)	0.8	1.0
Power (W)	--	24 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #13

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		250	500	750	1000	
Dc Output voltage (V)		24.03	24.01	23.99	23.97	
Dc output power (W)		6.01	12.01	17.99	23.97	

Ac Input Voltage (V)	115.08	115.09	114.96	114.97	115.03	
Ac input Power (W)	0.17	7.04	14.05	21.00	28.07	
Total Harmonic Distortion (THD)%		0.84	0.88	1.00	1.13	0.96
True Power Factor (W/VA)		0.996	0.987	0.973	0.958	0.979
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.17	1.03	2.04	3.01	4.1	
Efficiency %		85.37	85.48	85.67	85.39	85.48

Sample #15

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		250	500	750	1000	
Dc Output voltage (V)		24.04	24.01	23.99	23.97	
Dc output power (W)		6.01	12.01	17.99	23.97	

Ac Input Voltage (V)	115.11	115.07	114.99	115.00	115.03	
Ac input Power (W)	0.19	7.25	14.15	21.04	27.96	
Total Harmonic Distortion (THD)%		0.89	0.93	1.04	1.10	0.99
True Power Factor (W/VA)		0.995	0.987	0.974	0.958	0.979
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.19	1.24	2.14	3.05	3.99	
Efficiency %		82.90	84.88	85.50	85.73	84.75

Sample #16

Percent of nameplate current	No Load	Active Power Values				
	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		250	500	750	1000	
Dc Output voltage (V)		23.92	23.90	23.87	23.85	
Dc output power (W)		6.01	11.95	17.90	23.85	
Ac Input Voltage (V)	115.11	114.99	115.08	115.02	115.01	
Ac input Power (W)	0.18	7.17	14.03	21.00	27.95	
Total Harmonic Distortion (THD)%		0.83	0.89	1.04	1.14	0.98
True Power Factor (W/VA)		0.996	0.987	0.973	0.957	0.978
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.18	1.16	2.08	3.10	4.10	
Efficiency %		83.82	85.17	85.24	85.33	84.89

SAMPLING PLAN:

Model GT-41130-2024-T2 (PART # TR9KI1000CCP-N(RV))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
13	0.8548	0.17
15	0.8475	0.19
16	0.8489	0.18
Sample Mean	0.8504	0.1800
Standard Deviation	0.0032	0.0082
UCL =	0.8557	0.19
UCL/1.1=	0.7779	0.18

Requirements:

Minimum Average Efficiency in Active mode	0.79
Maximum power limit in no-load mode (Watts)	0.5

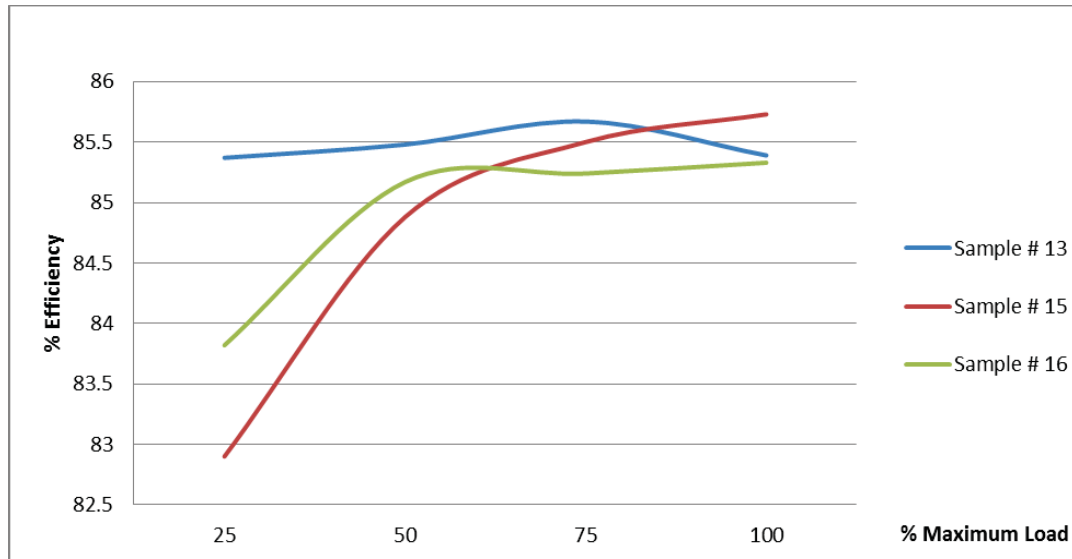
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

where	X =	sample mean
	t =	multiplier for 95% confidence, based on (n)
	S =	sample standard deviation
	n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GT-41130-2024-T2 (PART # TR9KI1000CCP-N(RV))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41130-2024-T2 (PART # TR9KI1000CCP-N(RV)) in both no-load (0.18W) and active load modes (0.85) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41082-1812-T3 (part # TR9CE1500LCP-N(RV))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	12 Vdc
Current (A)	0.6	1.5
Power (W)	--	18 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #11

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		375	750	1125	1500	
Dc Output voltage (V)		12.07	12.03	12.00	11.96	
Dc output power (W)		4.53	9.02	13.50	17.94	

Ac Input Voltage (V)	115.00	114.99	114.90	114.93	114.91	
Ac input Power (W)	0.13	5.46	10.62	15.87	21.44	
Total Harmonic Distortion (THD)%		0.74	0.75	0.79	0.86	0.79
True Power Factor (W/VA)		0.948	0.946	0.938	0.926	0.940
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.13	0.93	1.6	2.37	3.50	
Efficiency %		82.97	84.93	85.07	83.68	84.16

Sample #12

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		375	750	1125	1500	
Dc Output voltage (V)		12.04	12.01	11.98	11.94	
Dc output power (W)		4.51	9.01	13.48	17.91	

Ac Input Voltage (V)	114.89	114.94	114.93	114.92	114.90	
Ac input Power (W)	0.15	5.50	10.65	15.93	21.58	
Total Harmonic Distortion (THD)%		0.68	0.75	0.83	0.89	0.79
True Power Factor (W/VA)		0.957	0.955	0.943	0.932	0.947
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.15	0.90	1.64	2.45	3.67	
Efficiency %		82.00	84.60	84.62	82.99	83.55

Sample #10

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		375	750	1125	1500	
Dc Output voltage (V)		12.06	12.02	11.98	11.95	
Dc output power (W)		4.52	9.02	13.48	17.93	
Ac Input Voltage (V)	114.92	114.99	114.90	114.88	114.91	
Ac input Power (W)	0.13	5.49	10.66	15.89	21.49	
Total Harmonic Distortion (THD)%		0.67	0.72	0.80	0.81	0.75
True Power Factor (W/VA)		0.992	0.975	0.960	0.945	0.968
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.13	0.97	1.64	2.41	3.56	
Efficiency %		82.33	84.62	84.83	83.43	83.80

SAMPLING PLAN:

Model GT-41082-1812-T3 (part # TR9CE1500LCP-N(RV))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
11	0.8416	0.13
12	0.8355	0.15
10	0.8380	0.13
Sample Mean	0.8384	0.1367
Standard Deviation	0.0025	0.0094
UCL =	0.8426	0.15
UCL/1.1=	0.7660	0.14

Requirements:

Minimum Average Efficiency in Active mode	0.76
Maximum power limit in no-load mode (Watts)	0.5

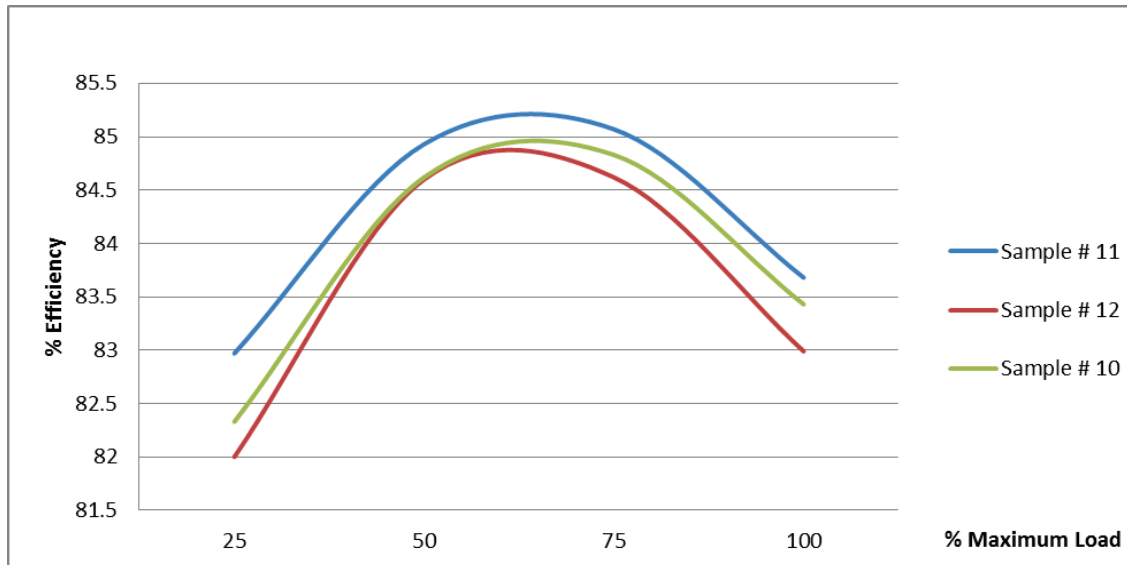
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

where	X =	sample mean
	t =	multiplier for 95% confidence, based on (n)
	S =	sample standard deviation
	n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GT-41082-1812-T3 (part # TR9CE1500LCP-N(RV))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41082-1812-T3 (part # TR9CE1500LCP-N(RV)) in both no-load (0.14W) and active load modes (0.84) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41076-0624 (PART # WR9QI250LCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	24 Vdc
Current (A)	0.3	0.25
Power (W)	--	6 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #1

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		62.5	125	187.5	250	
Dc Output voltage (V)		24.13	24.11	24.09	24.07	
Dc output power (W)		1.51	3.01	4.52	6.02	

Ac Input Voltage (V)	114.92	115.11	114.90	114.88	115.13	
Ac input Power (W)	0.31	2.11	3.82	5.62	7.59	
Total Harmonic Distortion (THD)%		0.86	0.95	0.96	0.94	0.93
True Power Factor (W/VA)		0.984	0.976	0.966	0.958	0.971
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.31	0.60	0.81	1.10	1.57	
Efficiency %		71.56	78.80	80.43	79.31	77.53

Sample #2

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		62.5	125	187.5	250	
Dc Output voltage (V)		24.32	24.30	24.29	24.26	
Dc output power (W)		1.52	3.04	4.55	6.07	

Ac Input Voltage (V)	115.13	115.10	115.12	114.88	115.10	
Ac input Power (W)	0.32	2.14	3.91	5.66	7.69	
Total Harmonic Distortion (THD)%		0.92	0.96	0.94	0.98	0.95
True Power Factor (W/VA)		0.983	0.974	0.964	0.954	0.969
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.32	0.62	0.87	1.11	1.62	
Efficiency %		71.03	77.75	80.39	78.93	77.02

Sample #3

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		62.5	125	187.5	250	
Dc Output voltage (V)		24.08	24.01	24.04	24.03	
Dc output power (W)		1.51	3.00	4.51	6.01	
Ac Input Voltage (V)	115.08	115.11	115.11	114.88	114.91	
Ac input Power (W)	0.31	2.07	3.80	5.61	7.60	
Total Harmonic Distortion (THD)%		0.94	0.88	0.99	0.95	0.94
True Power Factor (W/VA)		0.985	0.978	0.968	0.958	0.972
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.31	0.56	0.80	1.10	1.59	
Efficiency %		72.95	78.95	80.39	79.08	77.84

SAMPLING PLAN:

Model GT-41076-0624 (PART # WR9QI250LCP-N)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
1	0.7753	0.31
2	0.7702	0.32
3	0.7784	0.31
Sample Mean	0.7746	0.3133
Standard Deviation	0.0034	0.0047
UCL =	0.7803	0.32
UCL/1.1=	0.7094	0.29

Requirements:

Minimum Average Efficiency in Active mode	0.66
Maximum power limit in no-load mode (Watts)	0.5

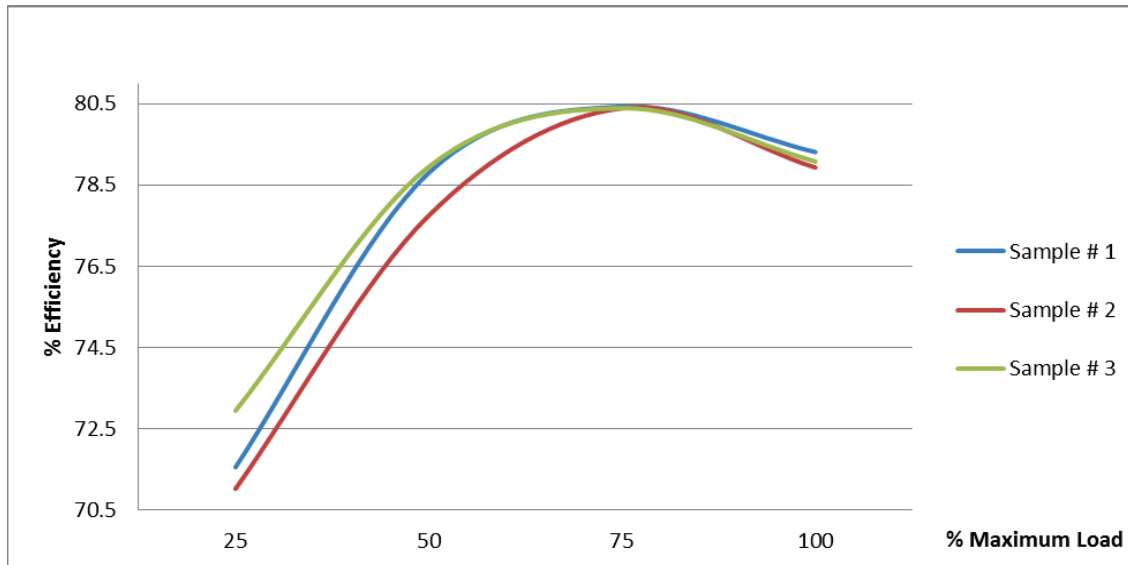
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

where	X =	sample mean
	t =	multiplier for 95% confidence, based on (n)
	S =	sample standard deviation
	n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GT-41076-0624 (PART # WR9QI250LCP-N)

**Conclusion:**

The evaluated energy efficiency levels for model GT-41076-0624 (PART # WR9QI250LCP-N) in both no-load (0.31W) and active load modes (0.77) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41132-6048-T2 (PART # TR9KX1250LCP-N(RV))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	48 Vdc
Current (A)	1.5	1.25
Power (W)	--	60 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #26

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		312.5	625	937.5	1250	
Dc Output voltage (V)		48.7	48.7	48.6	48.6	
Dc output power (W)		15.22	30.44	45.56	60.75	

Ac Input Voltage (V)	115.08	115.04	114.99	114.98	114.74	
Ac input Power (W)	0.24	17.05	33.63	50.31	67.31	
Total Harmonic Distortion (THD)%		1.02	1.09	1.31	1.51	1.23
True Power Factor (W/VA)		0.985	0.992	0.987	0.976	0.985
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.24	1.83	3.19	4.75	6.56	
Efficiency %		89.27	90.51	90.56	90.25	90.15

Sample #25

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		312.5	625	937.5	1250	
Dc Output voltage (V)		48.5	48.5	48.5	48.4	
Dc output power (W)		15.16	30.31	45.47	60.50	

Ac Input Voltage (V)	115.14	115.03	115.00	114.80	114.75	
Ac input Power (W)	0.22	16.87	33.49	49.83	66.63	
Total Harmonic Distortion (THD)%		0.99	1.11	1.23	1.48	1.20
True Power Factor (W/VA)		0.984	0.992	0.985	0.976	0.984
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.22	1.71	3.18	4.36	6.13	
Efficiency %		89.86	90.50	91.25	90.80	90.60

Sample #24

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		312.5	625	937.5	1250	
Dc Output voltage (V)		48.2	48.2	48.1	48.0	
Dc output power (W)		15.06	30.13	45.09	60.00	
Ac Input Voltage (V)	115.11	115.04	114.99	114.91	114.72	
Ac input Power (W)	0.20	16.82	33.07	49.51	65.92	
Total Harmonic Distortion (THD)%		1.01	1.06	1.32	1.50	1.22
True Power Factor (W/VA)		0.984	0.992	0.987	0.977	0.985
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.20	1.76	2.94	4.42	5.92	
Efficiency %		89.54	91.11	91.07	91.02	90.68

SAMPLING PLAN:

Model GT-41132-6048-T2 (PART # TR9KX1250LCP-N(RV))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
26	0.9015	0.24
25	0.9060	0.22
24	0.9068	0.20
Sample Mean	0.9048	0.2200
Standard Deviation	0.0023	0.0163
UCL =	0.9087	0.25
UCL/1.1=	0.8261	0.23

Requirements:

Minimum Average Efficiency in Active mode **0.85**
 Maximum power limit in no-load mode (Watts) **0.5**

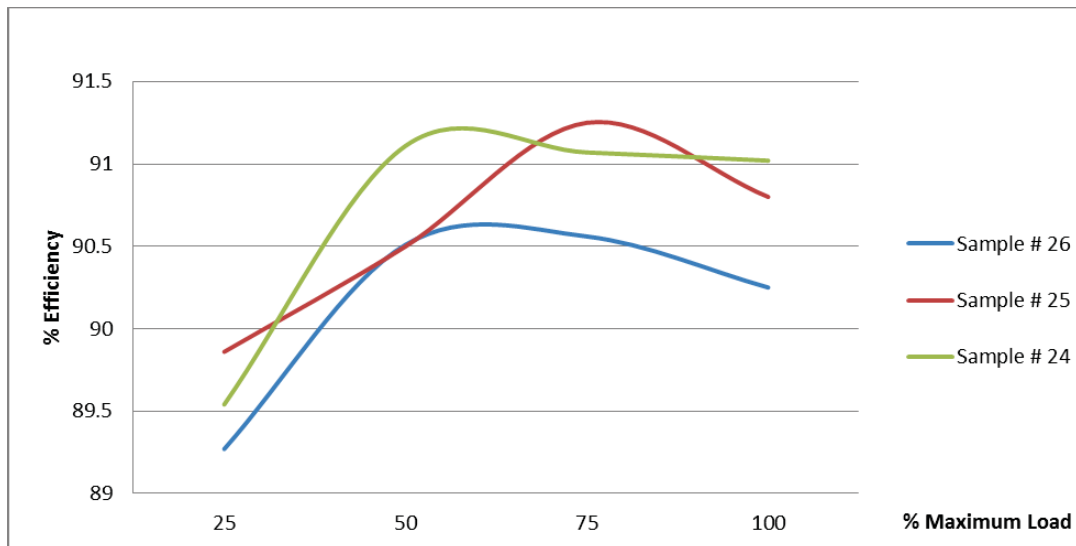
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

where X = sample mean
 t = multiplier for 95% confidence, based on (n)
 S = sample standard deviation
 n = number of samples tested

In this case t = 2.92
 In this case n = 3

TEST RESULTS SUMMARY CHART

Model GT-41132-6048-T2 (PART # TR9KX1250LCP-N(RV))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41132-6048-T2 (PART # TR9KX1250LCP-N(RV)) in both no-load (0.22W) and active load modes (0.90) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41083-4048-T2 (Part # TR9KX833LRPN(RVB))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	48 Vdc
Current (A)	1.0	0.83
Power (W)	--	39.84 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #5

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		207.5	415	622.5	830	
Dc Output voltage (V)		47.7	47.6	47.6	47.6	
Dc output power (W)		9.90	19.75	29.63	39.51	

Ac Input Voltage (V)	115.07	114.91	115.02	114.98	114.94	
Ac input Power (W)	0.23	11.26	21.78	32.62	43.55	
Total Harmonic Distortion (THD)%		0.83	0.98	1.13	1.34	1.07
True Power Factor (W/VA)		0.993	0.993	0.989	0.983	0.990
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.23	1.36	2.03	2.99	4.04	
Efficiency %		87.92	90.68	90.83	90.72	90.04

Sample #4

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		207.5	415	622.5	830	
Dc Output voltage (V)		47.6	47.6	47.6	47.4	
Dc output power (W)		9.88	19.75	29.63	39.34	

Ac Input Voltage (V)	115.07	114.94	115.03	115.00	114.96	
Ac input Power (W)	0.25	11.27	21.83	32.67	43.40	
Total Harmonic Distortion (THD)%		0.83	1.01	1.18	1.30	1.08
True Power Factor (W/VA)		0.995	0.993	0.989	0.982	0.990
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.25	1.39	2.08	3.04	4.06	
Efficiency %		87.67	90.47	90.69	90.65	89.87

Sample #6

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		207.5	415	622.5	830	
Dc Output voltage (V)		47.6	47.5	47.5	47.4	
Dc output power (W)		9.88	19.71	29.57	39.34	
Ac Input Voltage (V)	115.07	114.93	115.00	114.83	114.81	
Ac input Power (W)	0.24	11.20	21.81	32.55	43.44	
Total Harmonic Distortion (THD)%		0.80	0.98	1.04	1.20	1.01
True Power Factor (W/VA)		0.994	0.994	0.988	0.979	0.989
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.24	1.32	2.10	2.98	4.10	
Efficiency %		88.21	90.37	90.84	90.56	90.00

SAMPLING PLAN:

Model GT-41083-4048-T2 (Part # TR9KX833LRPN(RVB))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
5	0.9004	0.23
4	0.8987	0.25
6	0.9000	0.24
Sample Mean	0.8997	0.2400
Standard Deviation	0.0007	0.0082
UCL =	0.9009	0.25
UCL/1.1=	0.8190	0.23

Requirements:

Minimum Average Efficiency in Active mode	0.83
Maximum power limit in no-load mode (Watts)	0.5

UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

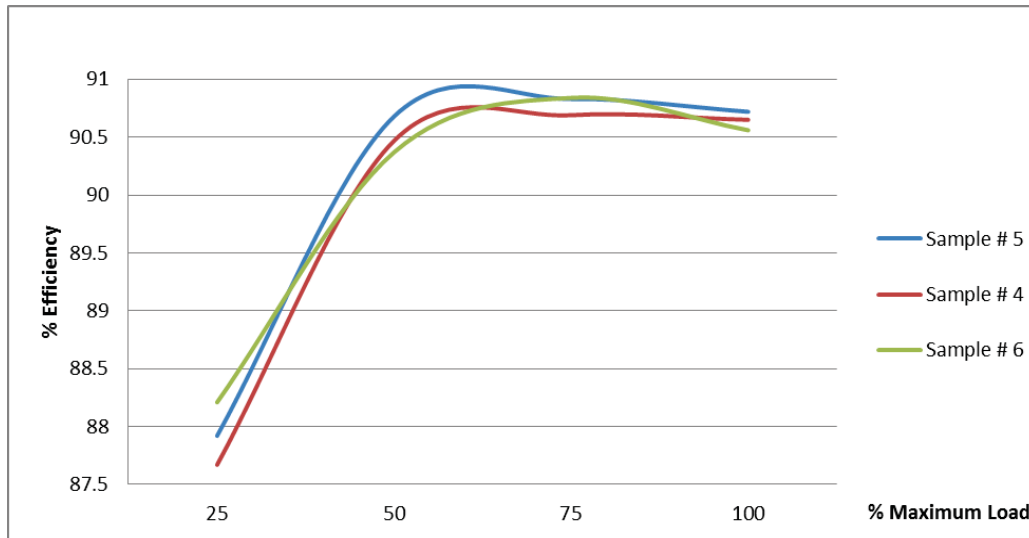
where

X =	sample mean
t =	multiplier for 95% confidence, based on (n)
S =	sample standard deviation
n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GT-41083-4048-T2 (Part # TR9KX833LRPN(RVB))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41083-4048-T2 (Part # TR9KX833LRPN(RVB)) in both no-load (0.24W) and active load modes (0.90) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GTM41060-2530 (part # WR9QR833LCP-N-MED)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	30 Vdc
Current (A)	0.6	0.833
Power (W)	--	24.99 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #19

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		208.3	416.5	624.8	833	
Dc Output voltage (V)		31.02	31.02	30.99	30.95	
Dc output power (W)		6.46	12.92	19.36	25.78	

Ac Input Voltage (V)	115.09	115.15	115.06	114.83	114.87	
Ac input Power (W)	0.45	7.94	15.27	22.61	30.12	
Total Harmonic Distortion (THD)%		0.86	0.92	1.02	1.00	0.95
True Power Factor (W/VA)		0.945	0.966	0.965	0.948	0.956
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.45	1.48	2.35	3.25	4.34	
Efficiency %		81.36	84.61	85.63	85.59	84.30

Sample #21

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		208.3	416.5	624.8	833	
Dc Output voltage (V)		31.08	31.06	31.02	30.98	
Dc output power (W)		6.47	12.94	19.38	25.81	

Ac Input Voltage (V)	115.11	115.04	115.09	115.03	114.88	
Ac input Power (W)	0.42	8.03	15.14	22.61	30.13	
Total Harmonic Distortion (THD)%		0.89	0.90	1.02	0.96	0.94
True Power Factor (W/VA)		0.942	0.965	0.959	0.936	0.951
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.42	1.56	2.20	3.23	4.32	
Efficiency %		80.57	85.47	85.71	85.66	84.35

Sample #20

Percent of nameplate current	No Load	Active Power Values				
	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		208.3	416.5	624.8	833	
Dc Output voltage (V)		30.95	30.93	30.91	30.89	
Dc output power (W)		6.45	12.88	19.31	25.73	
Ac Input Voltage (V)	115.11	115.06	115.00	114.83	114.87	
Ac input Power (W)	0.52	7.96	15.07	22.62	30.03	
Total Harmonic Distortion (THD)%		0.88	0.90	0.96	1.00	0.94
True Power Factor (W/VA)		0.942	0.963	0.951	0.939	0.949
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.52	1.51	2.19	3.31	4.30	
Efficiency %		81.03	85.47	85.37	85.68	84.39

SAMPLING PLAN:

Model GTM41060-2530 (part # WR9QR833LCP-N-MED)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
19	0.8430	0.45
21	0.8435	0.42
20	0.8439	0.52
Sample Mean	0.8435	0.4633
Standard Deviation	0.0004	0.0419
UCL =	0.8441	0.53
UCL/1.1=	0.7674	0.49

Requirements:

Minimum Average Efficiency in Active mode	0.80
Maximum power limit in no-load mode (Watts)	0.5

UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

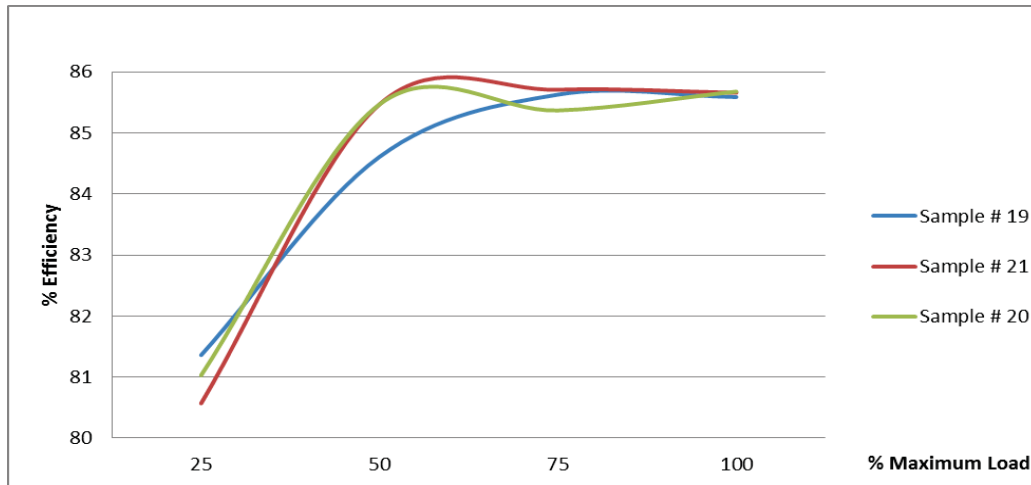
where

X =	sample mean
t =	multiplier for 95% confidence, based on (n)
S =	sample standard deviation
n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GTM41060-2530 (part # WR9QR833LCP-N-MED)

**Conclusion:**

The evaluated energy efficiency levels for model GTM41060-2530 (part # WR9QR833LCP-N-MED) in both no-load (0.46W) and active load modes (0.84) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Model GT-41052-1548 (part # WR9QX310LRP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	48 Vdc
Current (A)	0.6	0.31
Power (W)	--	14.88 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #9

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		77.5	155	232.5	310	
Dc Output voltage (V)		48.1	48.12	48.11	48.1	
Dc output power (W)		3.73	7.46	11.19	14.91	

Ac Input Voltage (V)	115.11	115.06	115.07	115.09	115.02	
Ac input Power (W)	0.18	4.74	9.07	13.24	17.74	
Total Harmonic Distortion (THD)%		0.88	0.91	0.90	0.94	0.91
True Power Factor (W/VA)		0.942	0.971	0.964	0.956	0.958
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.18	1.01	1.61	2.05	2.83	
Efficiency %		78.69	82.25	84.52	84.05	82.38

Sample #8

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		77.5	155	232.5	310	
Dc Output voltage (V)		48.5	48.50	48.49	48.5	
Dc output power (W)		3.76	7.52	11.27	15.04	

Ac Input Voltage (V)	114.97	114.95	115.05	115.07	114.92	
Ac input Power (W)	0.19	4.94	9.15	13.40	17.85	
Total Harmonic Distortion (THD)%		0.72	0.82	0.94	0.83	0.83
True Power Factor (W/VA)		0.964	0.971	0.964	0.954	0.963
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.19	1.18	1.63	2.13	2.81	
Efficiency %		76.11	82.19	84.10	84.26	81.67

Sample #7

	No Load	Active Power Values				
		25%	50%	75%	100%	Average
Percent of nameplate current	0%					
Dc Output Current (mA)		77.5	155	232.5	310	
Dc Output voltage (V)		48.5	48.50	48.48	48.46	
Dc output power (W)		3.76	7.52	11.27	15.02	
Ac Input Voltage (V)	114.97	115.09	115.06	115.06	114.95	
Ac input Power (W)	0.19	4.91	9.18	13.06	17.95	
Total Harmonic Distortion (THD)%		0.82	0.75	0.92	0.83	0.83
True Power Factor (W/VA)		0.965	0.969	0.965	0.954	0.963
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.19	1.15	1.66	1.79	2.93	
Efficiency %		76.58	81.92	86.29	83.68	82.12

SAMPLING PLAN:

Model GT-41052-1548 (part # WR9QX310LRP-N)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
9	0.8238	0.18
8	0.8167	0.19
7	0.8212	0.19
Sample Mean	0.8206	0.1867
Standard Deviation	0.0029	0.0047
UCL =	0.8255	0.19
UCL/1.1=	0.7505	0.18

Requirements:

Minimum Average Efficiency in Active mode	0.74
Maximum power limit in no-load mode (Watts)	0.5

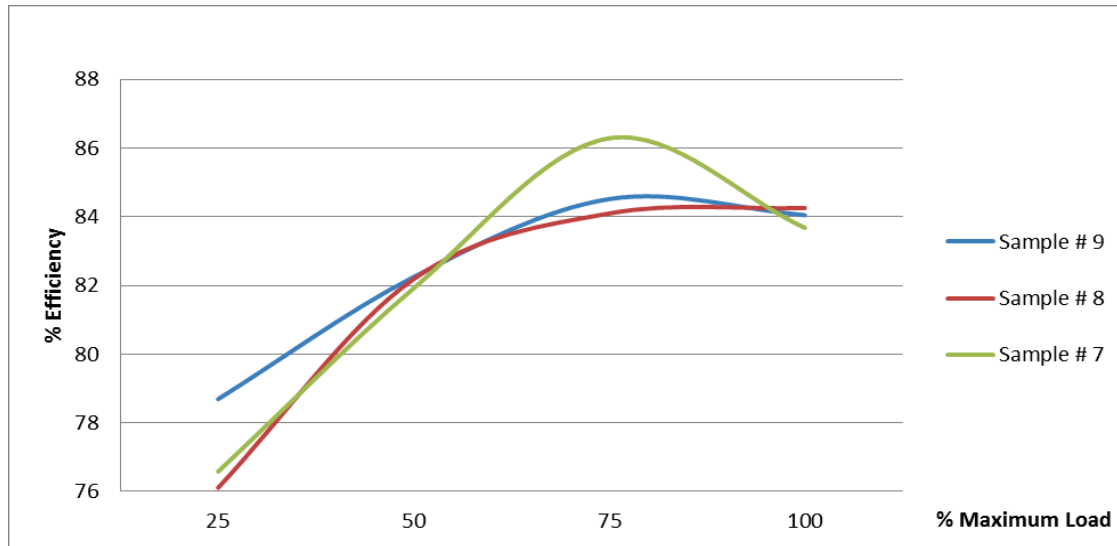
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

where	X =	sample mean
	t =	multiplier for 95% confidence, based on (n)
	S =	sample standard deviation
	n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Model GT-41052-1548 (part # WR9QX310LRP-N)

**Conclusion:**

The evaluated energy efficiency levels for model GT-41052-1548 (part # WR9QX310LRP-N) in both no-load (0.19W) and active load modes (0.82) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	Mode GT-41081-1805 (PART # WR9QA3000Q00-N(RV))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240 Vac	5 Vdc
Current (A)	0.6	3
Power (W)	--	15 W (Calculated)
Frequency (Hz)	50-60	DC

Sample #1

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		750	1500	2250	3000	
Dc Output voltage (V)		5.08	4.98	4.88	4.76	
Dc output power (W)		3.81	7.47	10.98	14.28	

Ac Input Voltage (V)	115.11	115.04	115.12	115.09	115.02	
Ac input Power (W)	0.18	4.77	9.41	14.23	19.11	
Total Harmonic Distortion (THD)%		1.21	1.21	1.28	1.48	1.30
True Power Factor (W/VA)		0.973	0.975	0.966	0.955	0.967
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.18	0.96	1.94	3.25	4.83	
Efficiency %		79.87	79.38	77.16	74.73	77.79

Sample #2

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		750	1500	2250	3000	
Dc Output voltage (V)		5.06	4.92	4.88	4.74	
Dc output power (W)		3.80	7.38	10.98	14.22	

Ac Input Voltage (V)	115.11	115.02	115.04	115.09	115.02	
Ac input Power (W)	0.18	4.75	9.41	14.19	19.12	
Total Harmonic Distortion (THD)%		1.20	1.22	1.28	1.37	1.27
True Power Factor (W/VA)		0.973	0.973	0.964	0.952	0.966
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0

Power Consumed by UUT (W)	0.18	0.95	2.03	3.21	4.9	
Efficiency %		80.00	78.43	77.38	74.37	77.54

Sample #3

Percent of nameplate current	No Load	Active Power Values				
	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		750	1500	2250	3000	
Dc Output voltage (V)		5.08	4.98	4.89	4.79	
Dc output power (W)		3.81	7.47	11.00	14.37	
Ac Input Voltage (V)	115.04	115.08	115.05	115.09	115.03	
Ac input Power (W)	0.15	4.73	9.42	14.23	19.15	
Total Harmonic Distortion (THD)%		1.23	1.28	1.31	1.40	1.31
True Power Factor (W/VA)		0.972	0.971	0.962	0.951	0.964
AC Input Frequency (Hz)	60.0	60.0	60.0	60.0	60.0	60.0
Power Consumed by UUT (W)	0.15	0.92	1.95	3.23	4.78	
Efficiency %		80.55	79.30	77.30	75.04	78.05

SAMPLING PLAN:

Mode GT-41081-1805 (PART # WR9QA3000Q00-N(RV))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
1	0.7779	0.18
2	0.7754	0.18
3	0.7805	0.15
Sample Mean	0.7779	0.1700
Standard Deviation	0.0021	0.0141
UCL =	0.7814	0.19
UCL/1.1=	0.7104	0.18

Requirements:

Minimum Average Efficiency in Active mode	0.74
Maximum power limit in no-load mode (Watts)	0.5

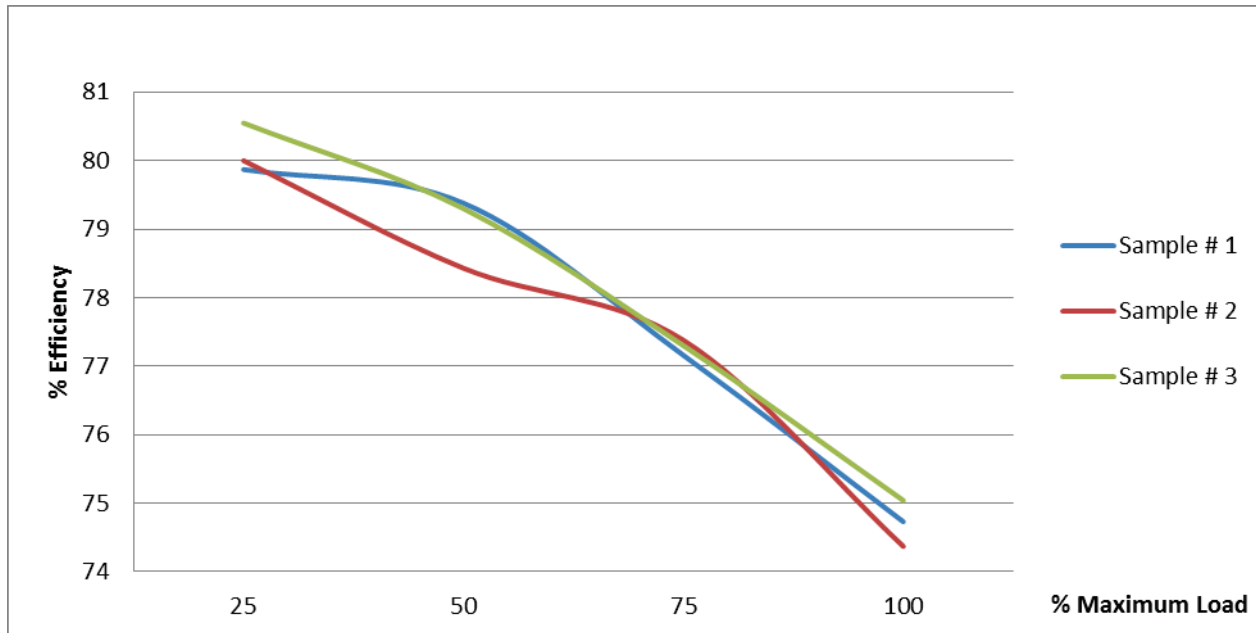
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \text{sqrt } n$

where	X =	sample mean
	t =	multiplier for 95% confidence, based on (n)
	S =	sample standard deviation
	n =	number of samples tested

In this case t =	2.92
In this case n =	3

TEST RESULTS SUMMARY CHART

Mode GT-41081-1805 (PART # WR9QA3000Q00-N(RV))

**Conclusion:**

The evaluated energy efficiency levels for model GT-41081-1805 (PART # WR9QA3000Q00-N(RV)) in both no-load (0.17W) and active load modes (0.78) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

Test results relate only to the items tested.

Manufacture Name	GlobTek Inc.
Model	GT-41134-0605(part # WR9QA1200FX9-N(RVB))
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	155

Nameplate specifications	Input	Output
Voltage (V)	100-240	5.0
Current (A)	0.3	1.2
Power (W)	--	6.0 (Calculated)
Frequency (Hz)	50-60	DC

Sample # 1/3

Nameplate specifications	No Load	Active Power Values					Average
		25%	50%	75%	100%		
Percent of nameplate current	0%						
Dc Output Current (mA)		303	592	901	1199		
Dc Output voltage (V)		5.05	5.07	5.07	5.05		
Dc output power (W)		1.53	3.00	4.57	6.05		

Ac Input Voltage (V)	115.25	115.15	115.16	115.14	115.08	
Ac input Power (W)	0.084	2.119	4.075	6.263	8.492	
Total Harmonic Distortion (THD)%		0.682	0.670	0.724	0.742	0.705
True Power Factor (W/VA)		0.396	0.484	0.567	0.592	0.510
AC Input Frequency (Hz)	59.98	59.96	60.01	59.99	59.99	59.99

Power Consumed by UUT (W)	0.084	0.589	1.075	1.693	2.442	
Efficiency %		0.72	0.74	0.73	0.71	0.725

Sample # 2/3

Nameplate specifications	No Load	Active Power Values					Average
		25%	50%	75%	100%		
Percent of nameplate current	0%						
Dc Output Current (mA)		301	585	900	1208		
Dc Output voltage (V)		5.03	5.06	5.07	5.07		
Dc output power (W)		1.505	2.960	4.563	6.125		

Ac Input Voltage (V)	115.20	115.19	115.15	115.12	115.06	
Ac input Power (W)	0.094	2.070	3.951	6.158	8.441	
Total Harmonic Distortion (THD)%		0.846	0.883	0.908	0.892	0.882
True Power Factor (W/VA)		0.389	0.480	0.566	0.584	0.505
AC Input Frequency (Hz)	59.97	59.95	59.98	59.95	59.99	59.97

Power Consumed by UUT (W)	0.094	0.565	0.991	1.595	2.316	
Efficiency %		0.73	0.75	0.75	0.73	0.74

Sample # 3/3

Percent of nameplate current	No Load	Active Power Values				
	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		304	598	897	1198	
Dc Output voltage (V)		5.10	5.13	5.14	5.14	
Dc output power (W)		1.550	3.068	4.611	6.158	
Ac Input Voltage (V)	115.19	115.19	115.18	115.18	115.09	
Ac input Power (W)	0.090	2.126	4.110	6.241	8.500	
Total Harmonic Distortion (THD)%		0.746	0.827	0.822	0.751	0.787
True Power Factor (W/VA)		0.391	0.475	0.561	0.583	0.503
AC Input Frequency (Hz)	59.99	60.00	59.98	60.04	59.98	60.00
Power Consumed by UUT (W)	0.090	0.576	1.042	1.63	2.342	
Efficiency %		0.73	0.75	0.74	0.72	0.735

SAMPLING PLAN:

GT-41134-0605(part # WR9QA1200FX9-N(RVB))

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
1/3	0.725	0.084
2/3	0.740	0.094
3/3	0.735	0.090
Sample Mean	0.733	0.089
Standard Deviation	0.0076	0.0050
UCL =	0.746	0.097
UCL/1.1=	0.678	0.088

Requirements:

Minimum Average Efficiency in Active mode
 Maximum power limit in no-load mode (Watts)

0.661
0.5

UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

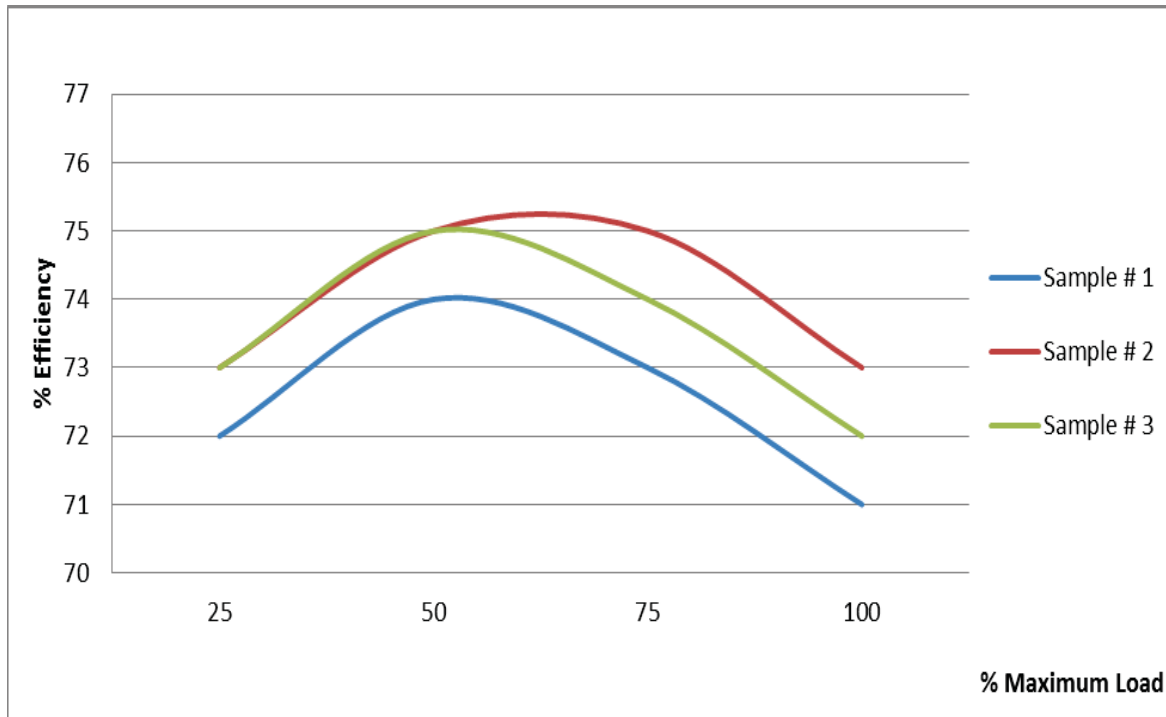
where

X =	sample mean
t =	multiplier for 95% confidence, based on (n)
S =	sample standard deviation
n =	number of samples tested

In this case t = 2.92
 In this case n = 3

TEST RESULTS SUMMARY CHART

GT-41134-0605(part # WR9QA1200FX9-N(RVB))

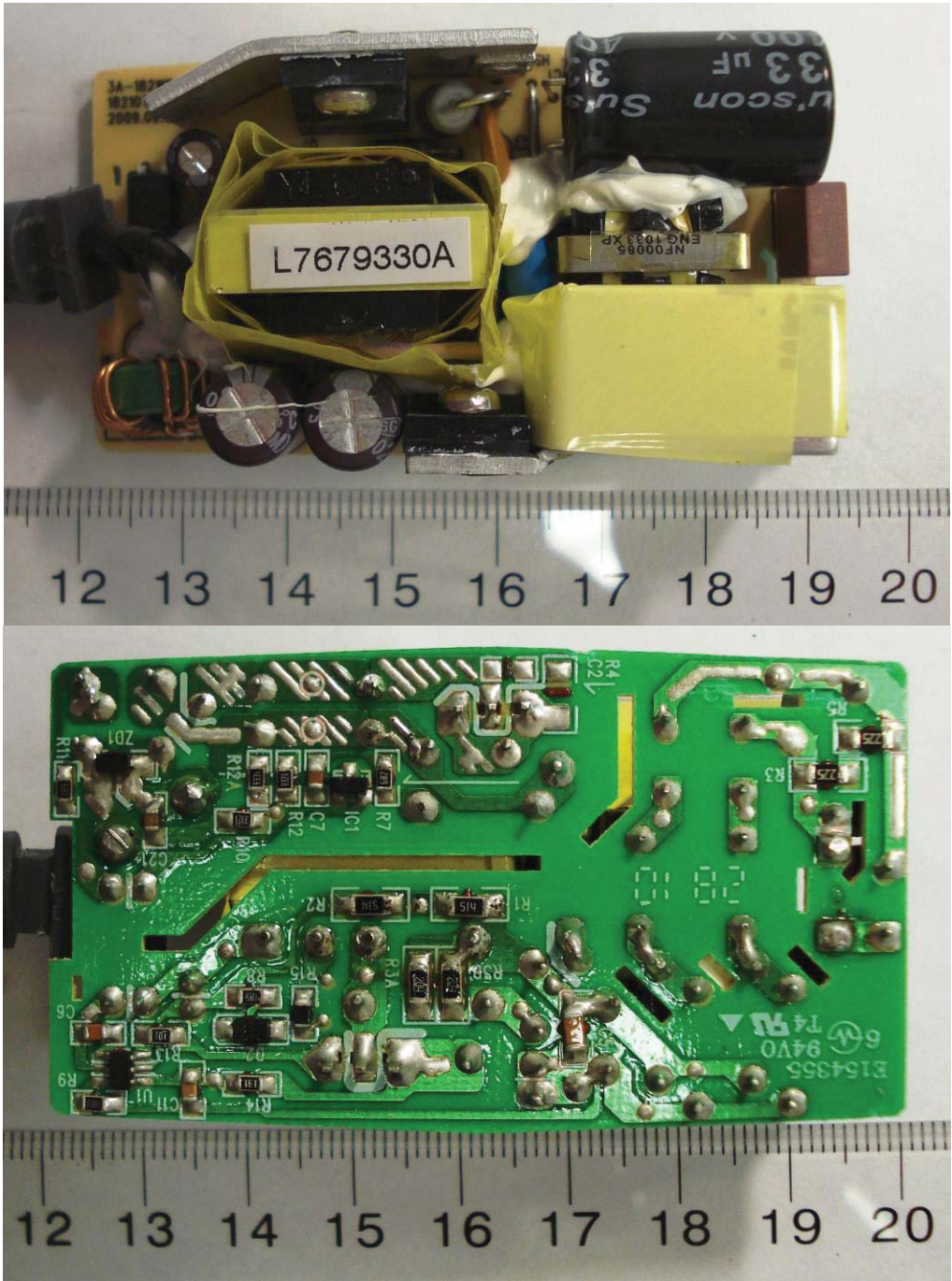
**Conclusion:**

The evaluated energy efficiency levels for model GT-41134-0605 (part # WR9QA1200FX9-N(RVB)) in both no-load (0.097W) and active load modes (0.75) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

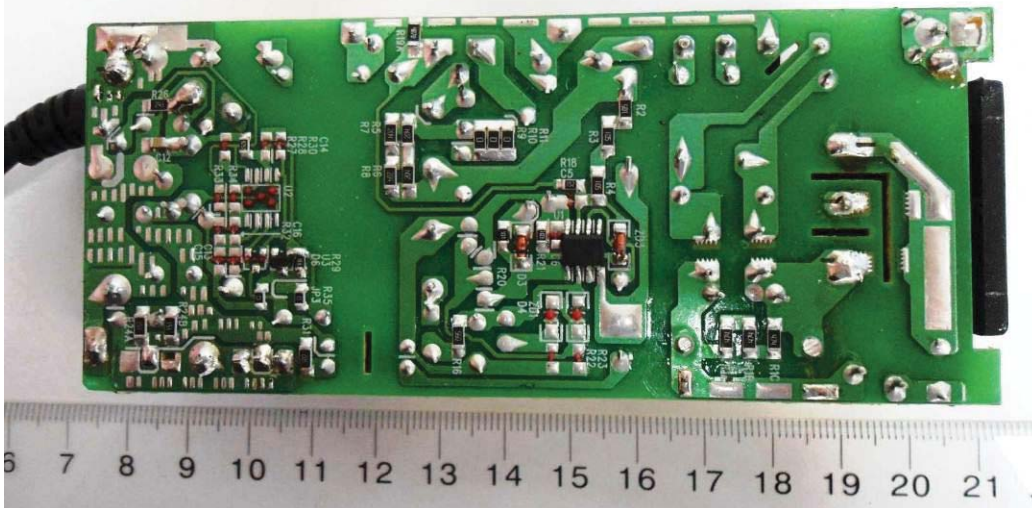
PHOTOS:
Model GT-41081-WWVV-X.X



Model GT-41081-WWVV-X.X



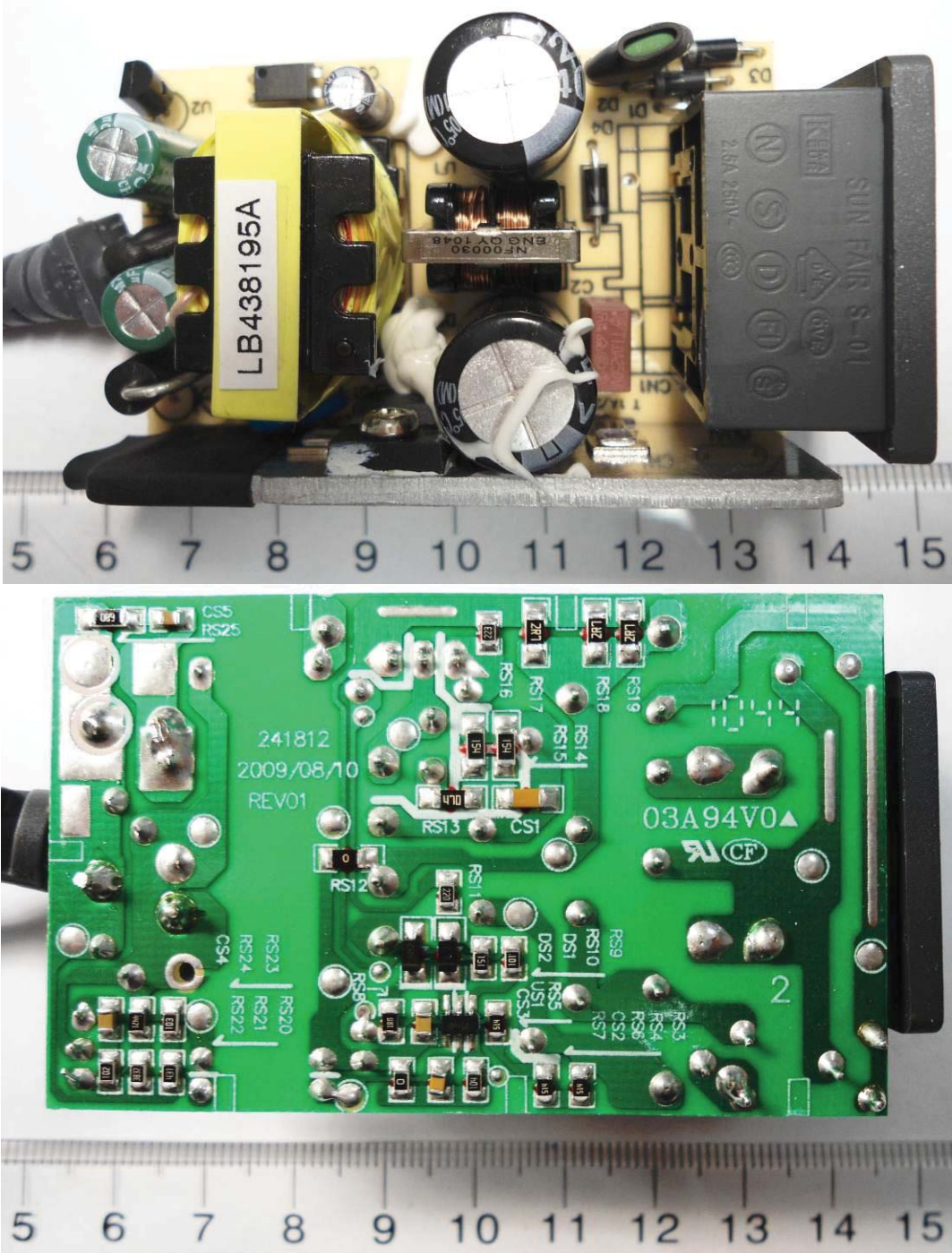
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Model GT-41132-WWVV-X.X-Y



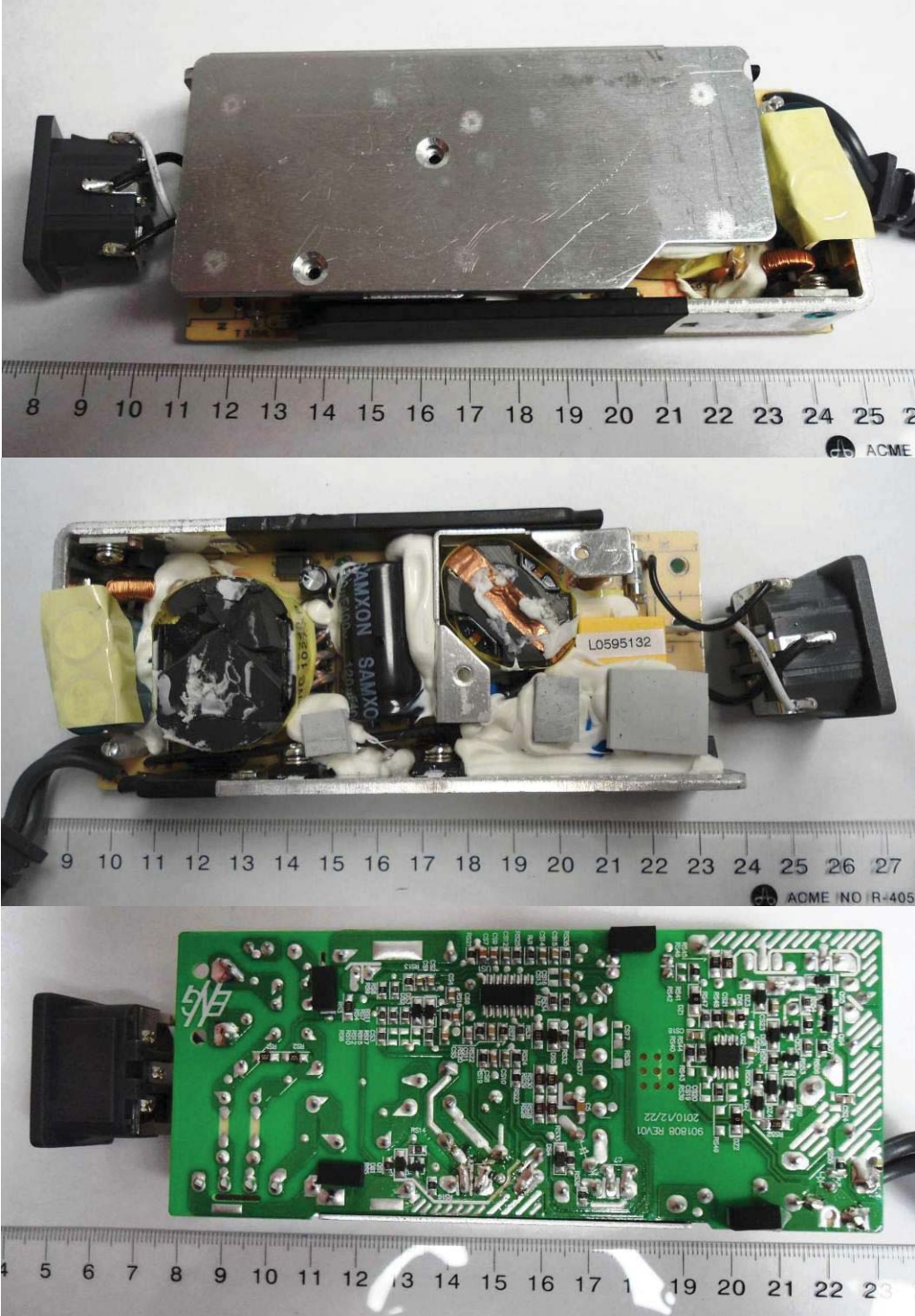
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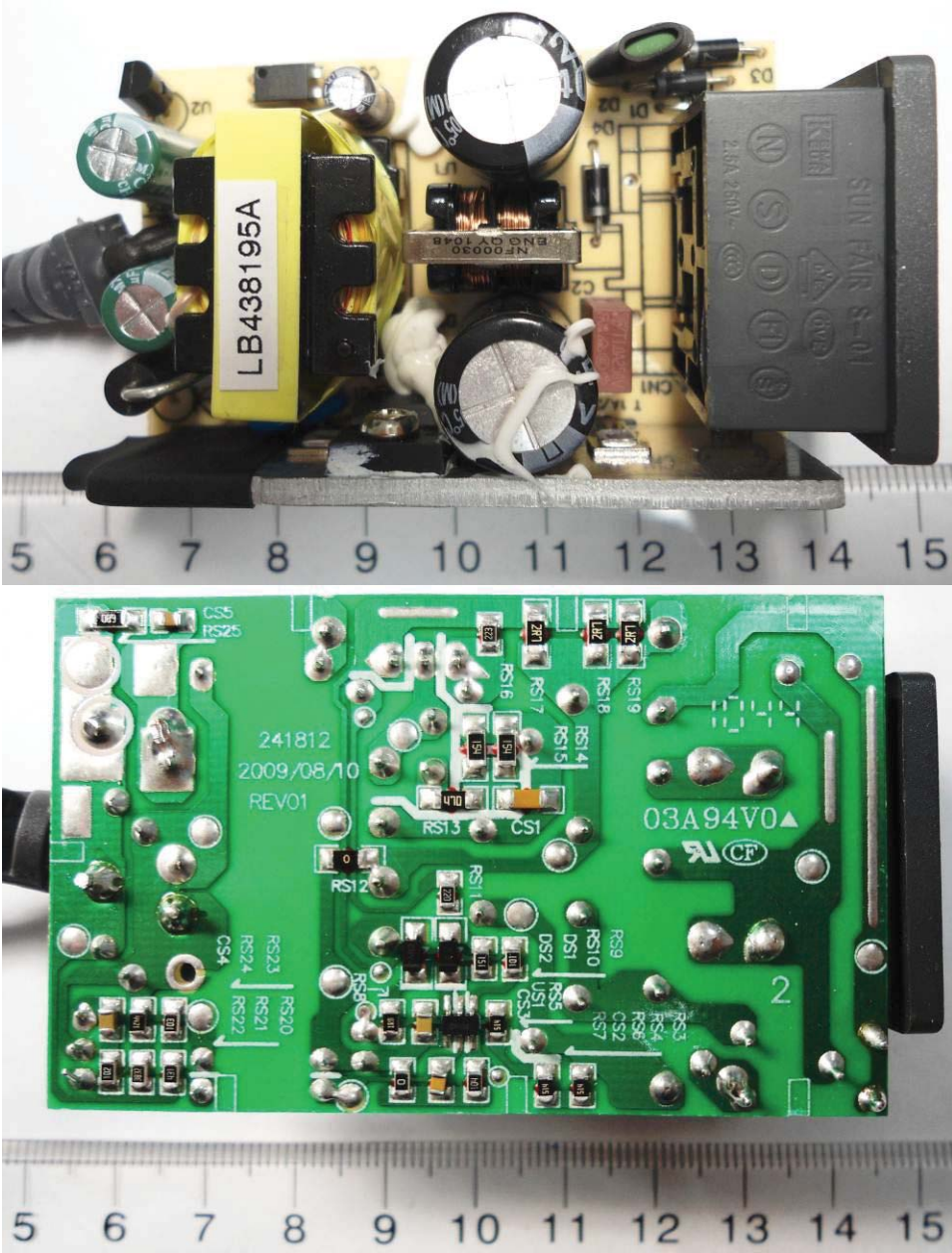
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Model GT-41133-WWVV-X.X-Y



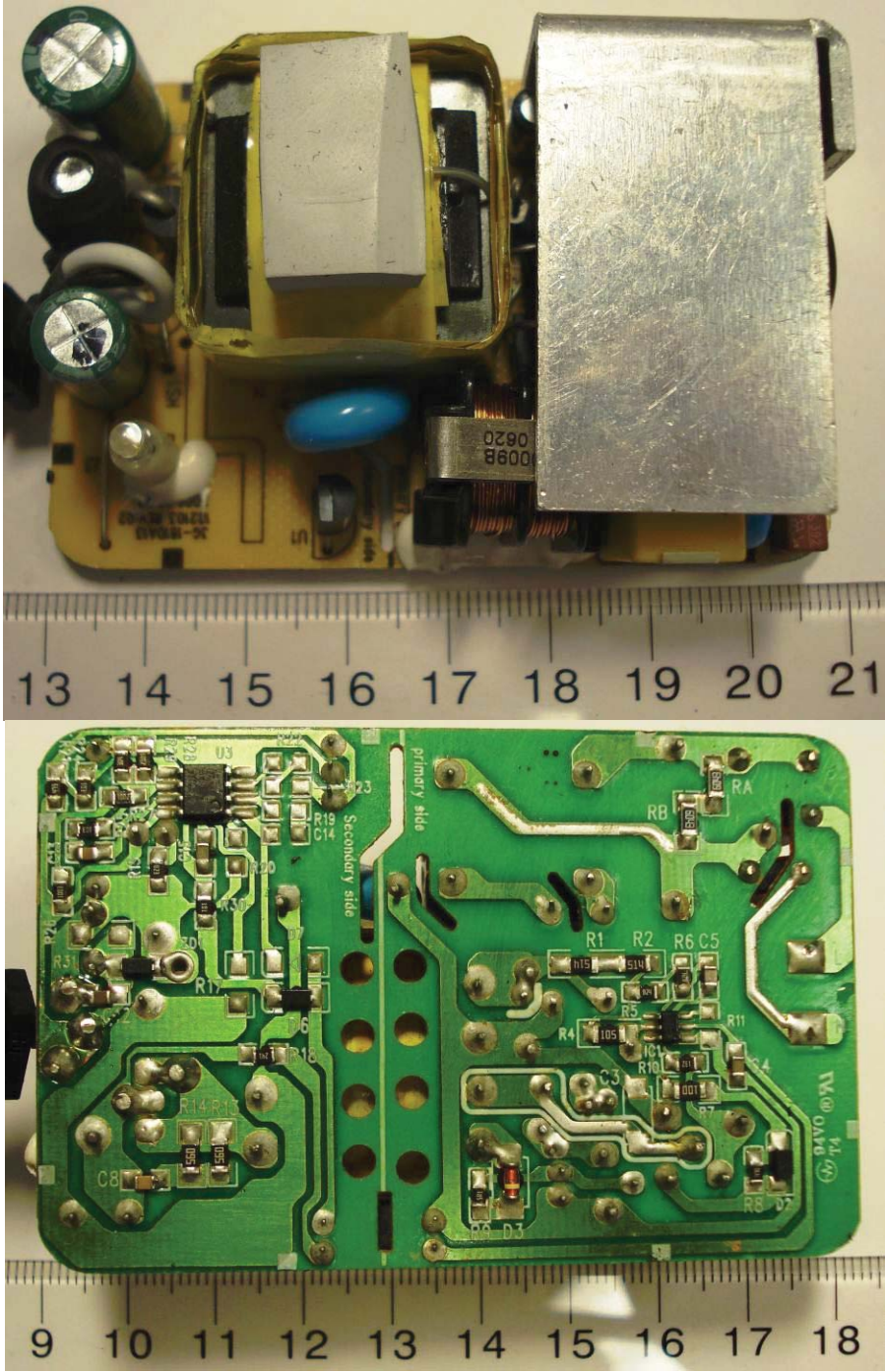
Model GT-41130-WWVV-X.X-Y



Model GTM or -41060-WWVV-X.X



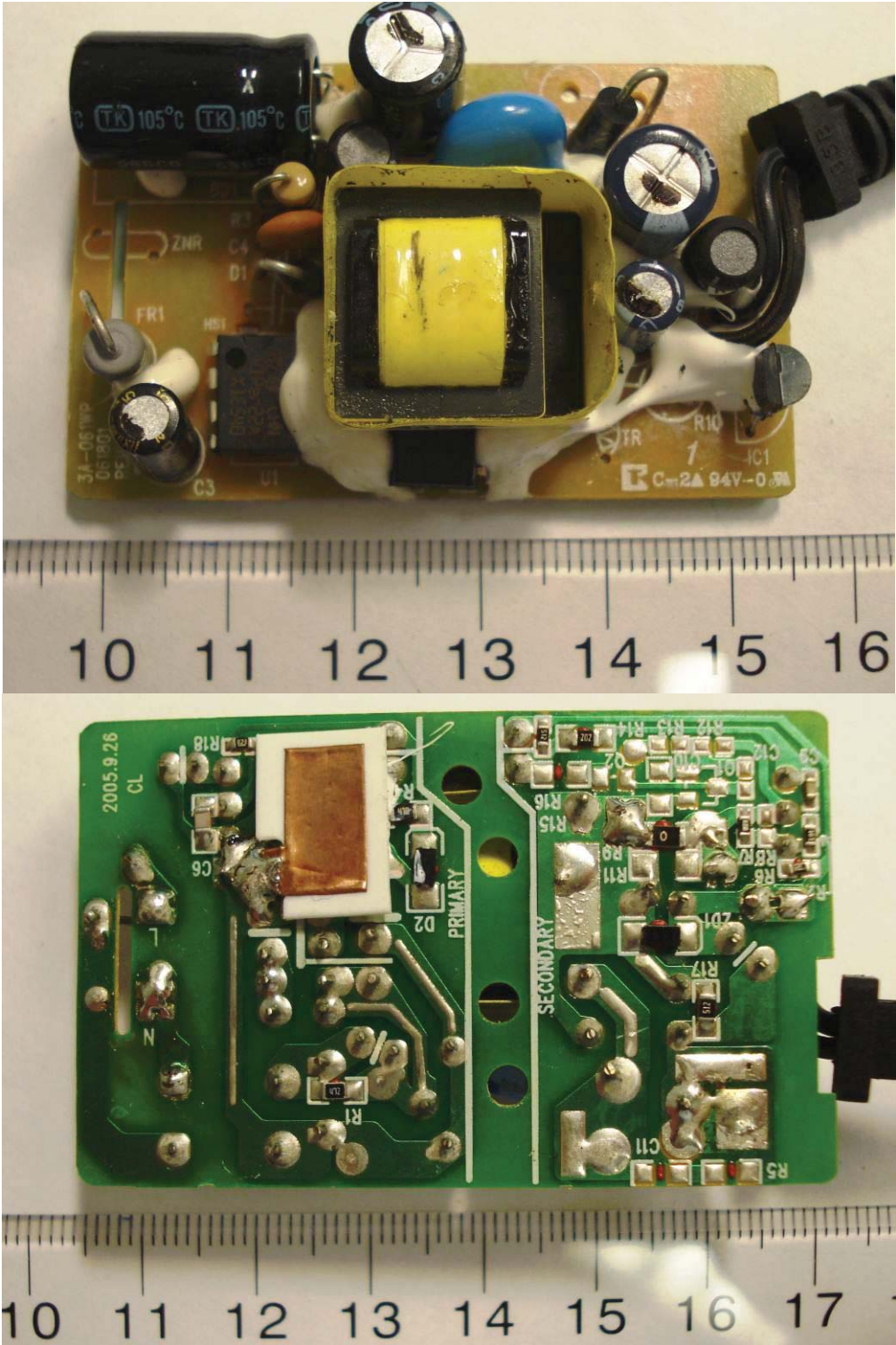
Model GTM or -41060-WWVV-X.X



Model GTM or -41076-WWVV-X.X



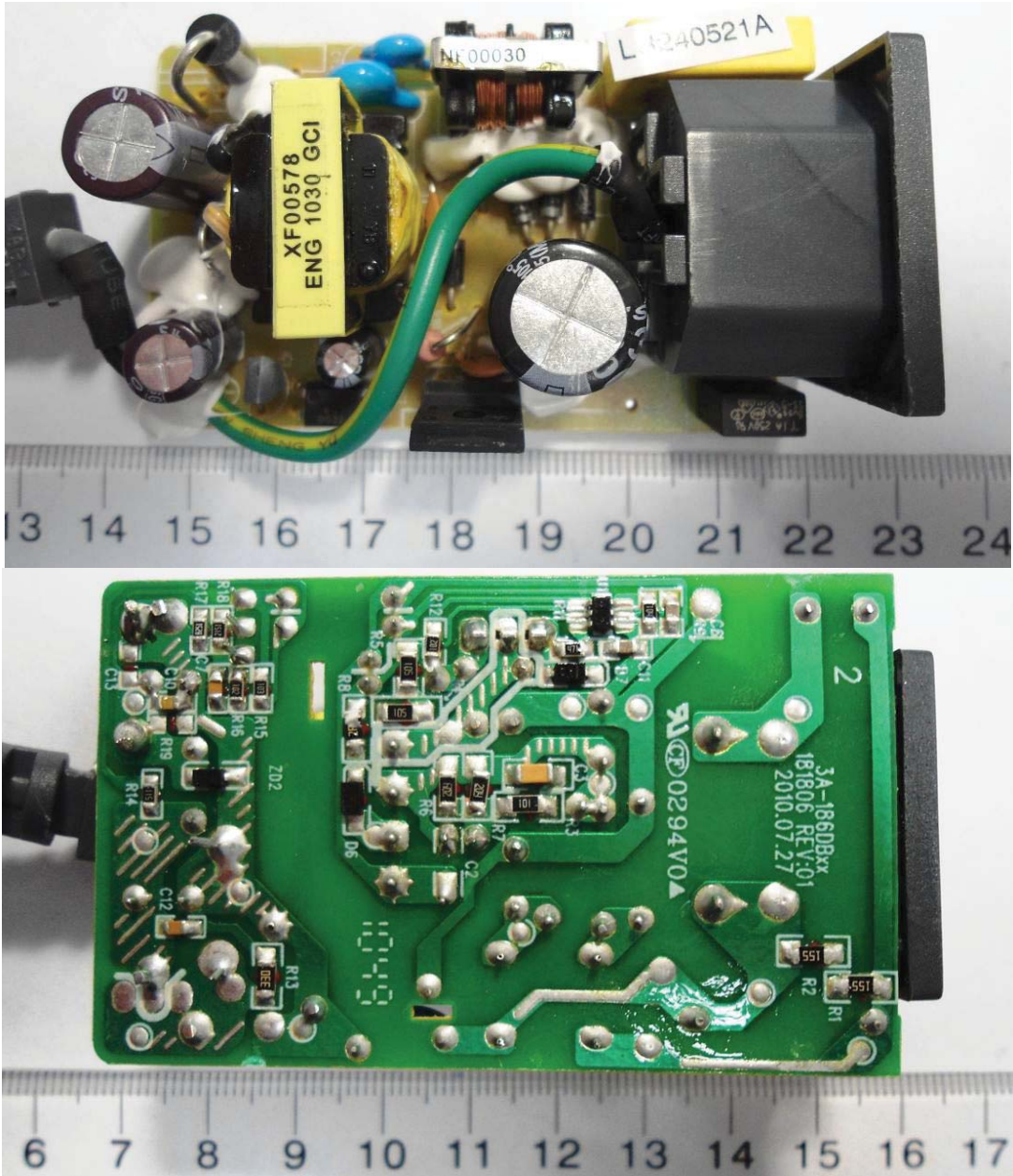
Model GTM or -41076-WWVV-X.X



Model GT-41082-WWVV-X.X-Y



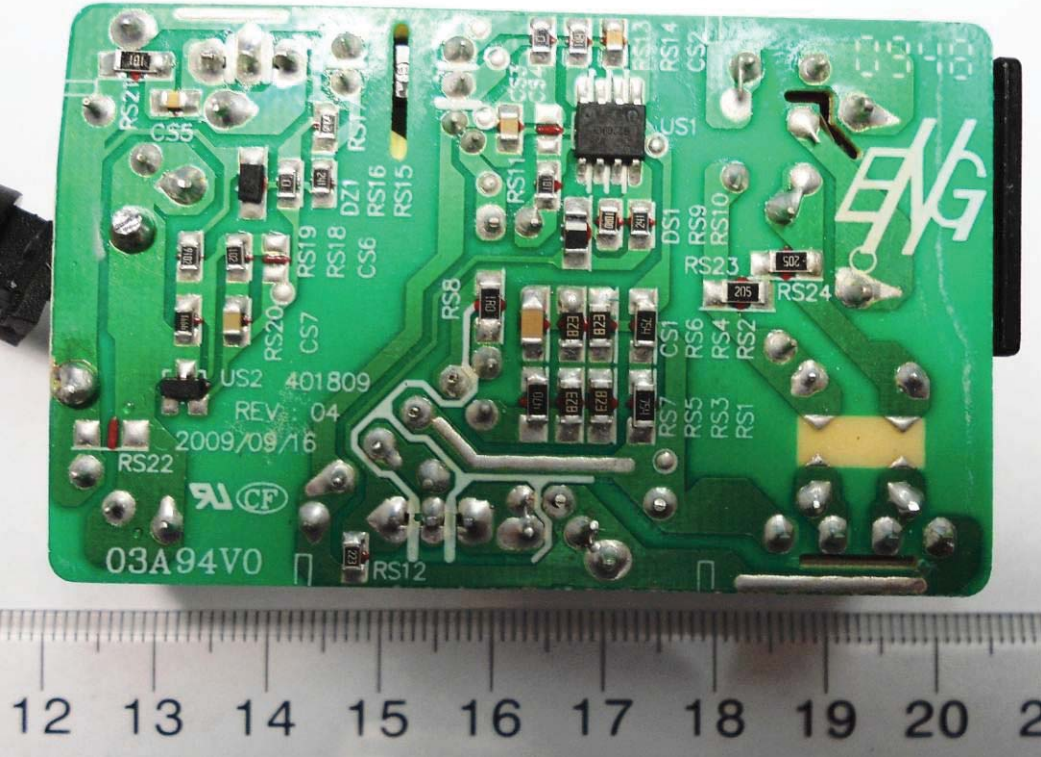
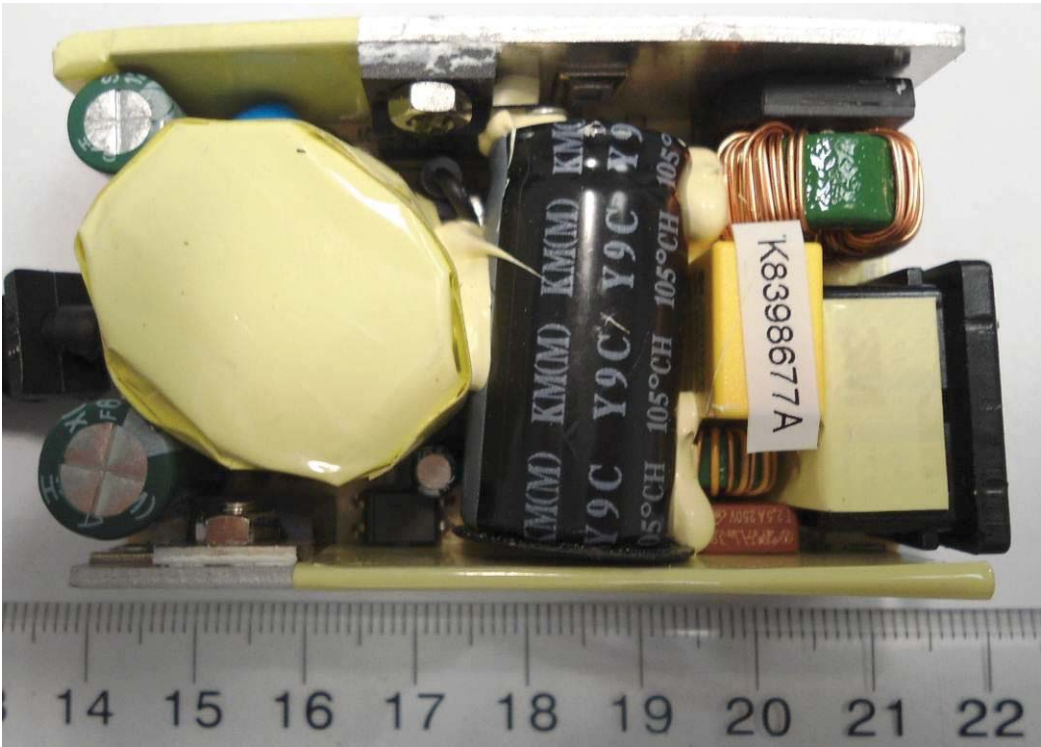
Model GT-41082-WWVV-X.X-Y



Model GT-41083-WWVV-X.X-Y



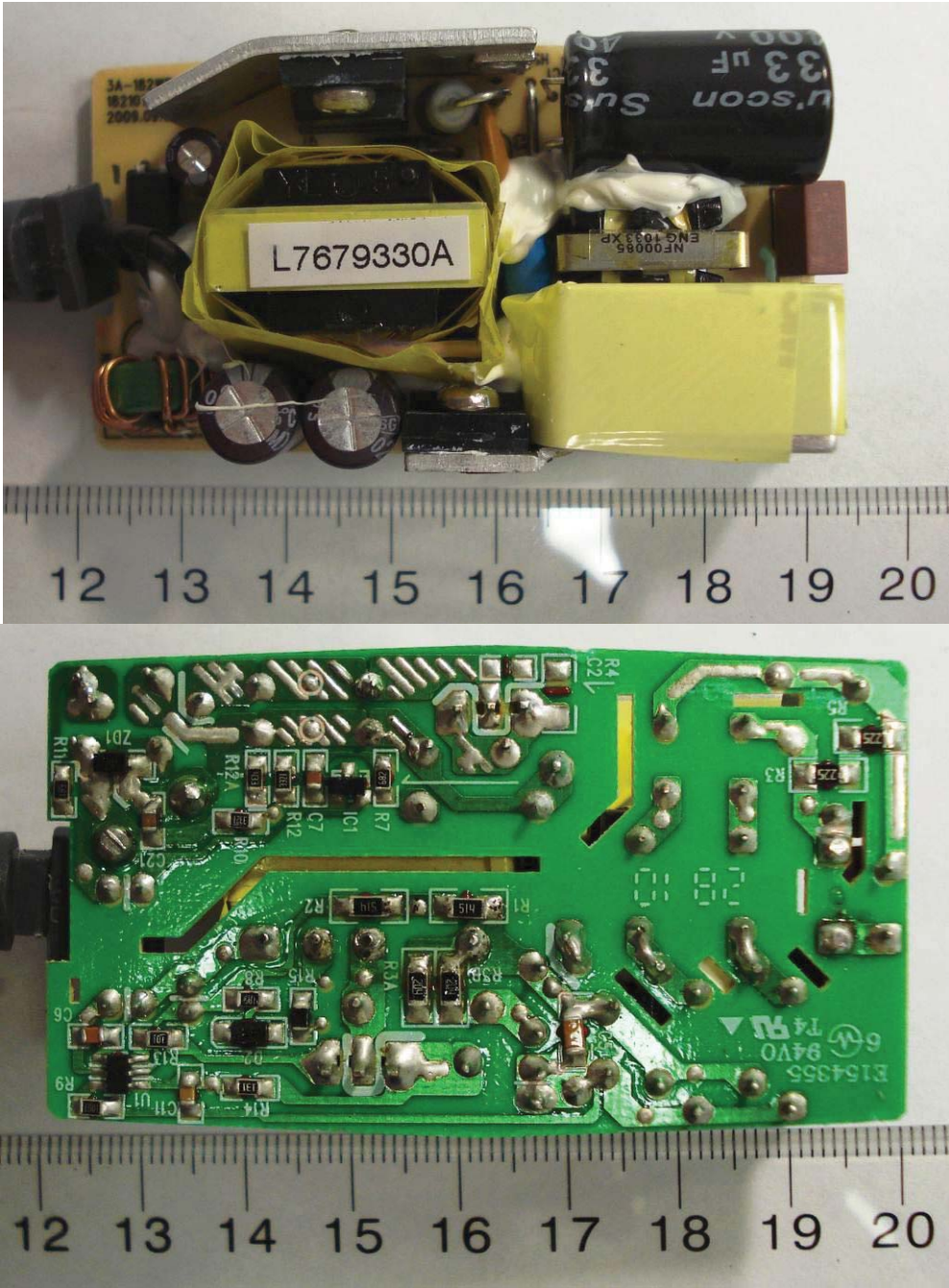
Model GT-41083-WWVV-X.X-Y



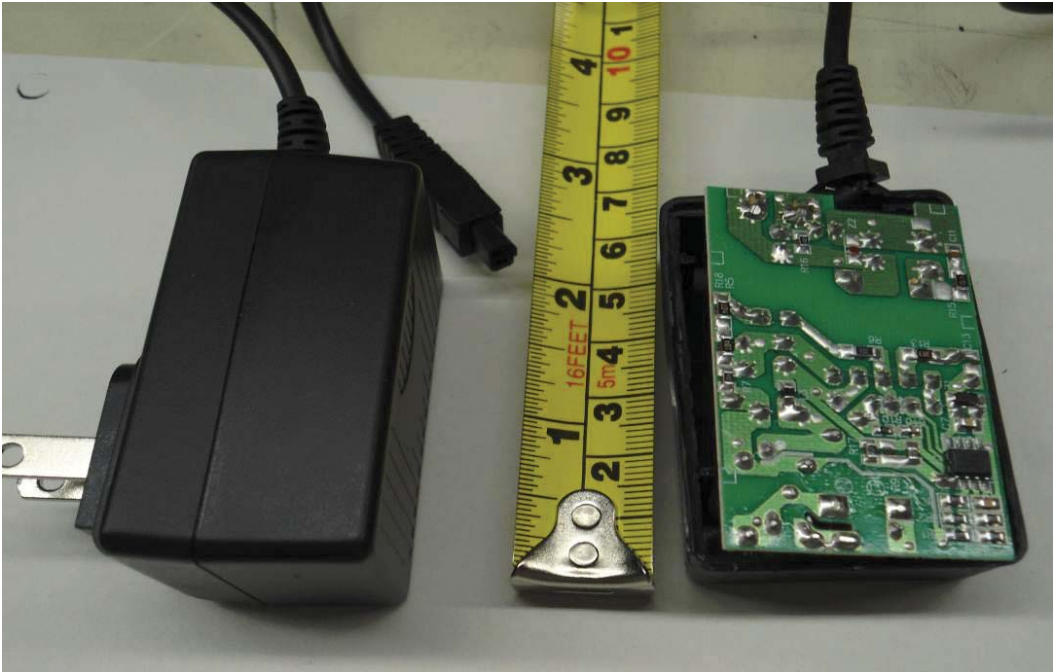
Model GT-41052-WWVV-X.X



Model GT-41052-WWVV-X.X



PHOTOS:
Model GT-41134-WWVV-X.X



TEST RESULTS

GT-41062-WWVV-X.X-Y,

Test results relate only to the items tested.

Date	August 11, 2011				
Sample tag No	O3942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	1/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GT-41062-1824-T3 P/N (TR9CI750CCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	24Vdc
Current (A)	0.6	0.75
Power (W)	--	18(Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		0.1895	0.379	0.562	0.758	
Dc Output voltage (V)		23.98	23.96	23.93	23.83	
Dc output power (W)		4.54	9.08	13.45	18.06	

Ac Input Voltage (V)	115.27	115.24	115.13	115.19	115.17	
Ac input Power (W)	0.149	5.608	10.90	15.88	21.78	
Total Harmonic Distortion (THD)%		1.337	0.841	1.112	0.815	1.026
True Power Factor (W/VA)		0.358	0.427	0.549	0.578	0.478
AC Input Frequency (Hz)	59.98	59.96	59.99	59.96	59.96	59.97

Power Consumed by UUT (W)	0.149	1.064	1.819	2.431	3.717	
Efficiency %		0.81	0.83	0.85	0.83	0.83

Date	July 27, 2011				
Sample tag No	O3942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	2/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GT-41062-1824-T3 P/N (TR9CI750CCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	24Vdc
Current (A)	0.6	0.75
Power (W)	--	18 (Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				Average
		25%	50%	75%	100%	
Percent of nameplate current	0%					
Dc Output Current (mA)		0.1895	0.379	0.562	0.758	
Dc Output voltage (V)		23.91	23.93	23.93	23.82	
Dc output power (W)		4.53	9.07	13.45	18.06	

Ac Input Voltage (V)	115.27	115.24	115.21	115.13	115.16	
Ac input Power (W)	0.0128	5.649	10.90	15.96	21.72	
Total Harmonic Distortion (THD)%		1.135	1.165	1.195	0.871	1.135
True Power Factor (W/VA)		0.355	0.424	0.479	0.528	0.355
AC Input Frequency (Hz)	59.97	59.97	59.97	59.98	59.95	59.94

Power Consumed by UUT (W)	0.0128	1.118	1.831	2.511	3.664	
Efficiency %		0.80	0.83	0.84	0.83	0.83

Date	July 27, 2011				
Sample tag No	O3942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	3/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GT-41062-1824-T3 P/N (TR9CI750CCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	185

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	24Vdc
Current (A)	0.6	0.75
Power (W)	--	18 (Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		0.1895	0.379	0.562	0.758	
Dc Output voltage (V)		23.93	23.9	23.87	23.85	
Dc output power (W)		4.53	9.06	13.41	18.08	

Ac Input Voltage (V)	115.27	115.24	115.27	115.27	115.27	
Ac input Power (W)	0.0139	5.653	10.9	15.88	21.78	
Total Harmonic Distortion (THD)%		1.191	1.201	1.156	1.189	1.184
True Power Factor (W/VA)		0.357	0.426	0.469	0.526	0.445
AC Input Frequency (Hz)	59.96	59.93	59.93	59.98	59.98	59.96

Power Consumed by UUT (W)	0.0139	1.118	1.842	2.465	3.702	
Efficiency %		0.80	0.83	0.84	0.83	0.83

SAMPLING PLAN

GT-41062-1824-T3 P/N (TR9CI750CCP-N)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
1/3	0.83	0.0149
2/3	0.83	0.0128
3/3	0.83	0.0139
Sample Mean	0.828	0.014
Standard Deviation	0.002	0.001
UCL =	5.060	5.059
UCL/1.1=	4.600	4.599

Requirements:

Minimum Average Efficiency in Active mode **0.76**
 Maximum power limit in no-load mode (Watts) **0.5**

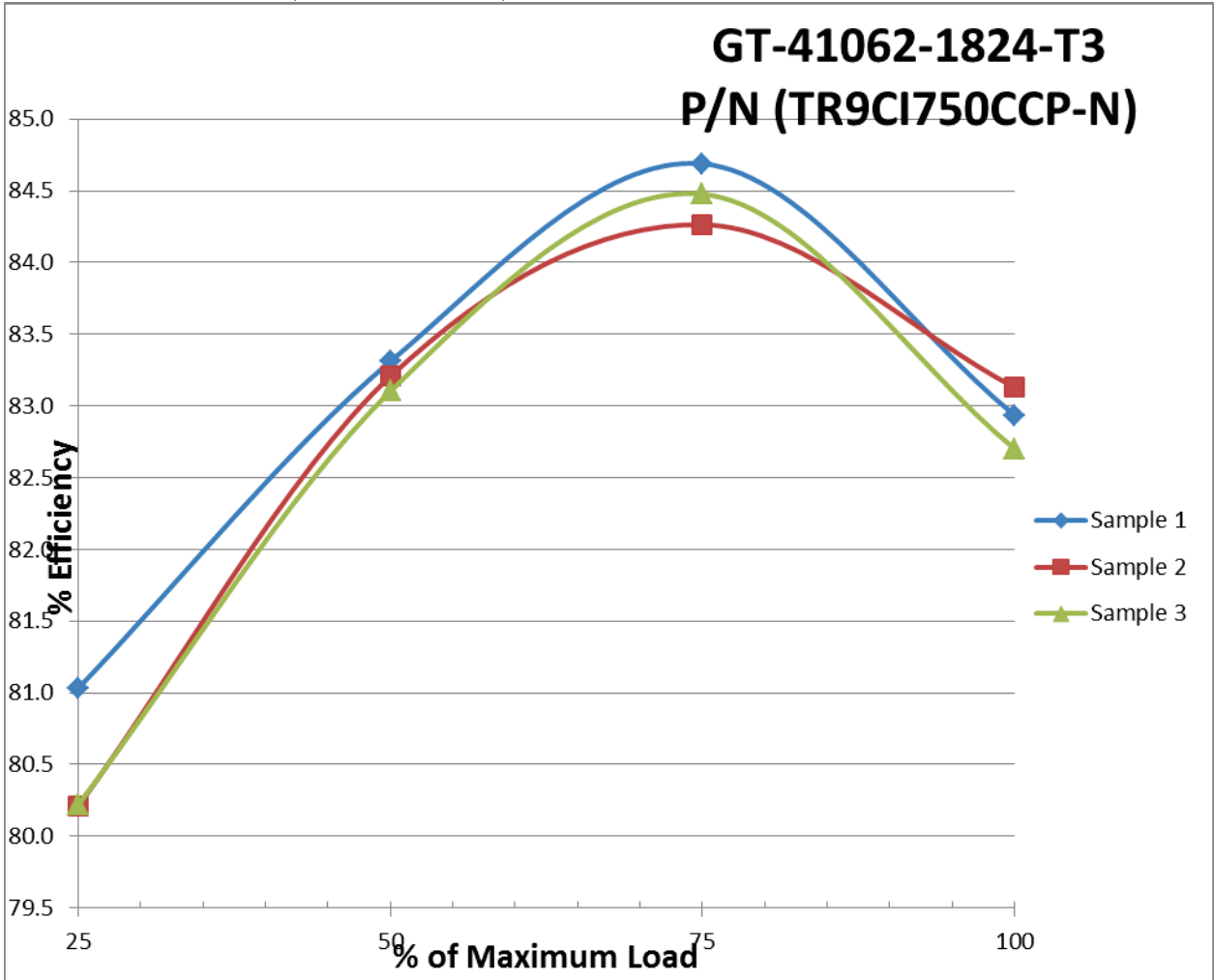
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

where X = sample mean
 t = multiplier for 95% confidence, based on (n)
 S = sample standard deviation
 n = number of samples tested

In this case t = 2.92
 In this case n = 3

Date	July 27, 2011	Sample tag No	03942
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GT-41062-1824-T3 P/N (TR9CI750CCP-N)



Conclusion:

The evaluated energy efficiency levels for model GT-41062-1824-T3 P/N (TR9CI750CCP-N) in both no-load (0.0140W) and active load modes (0.83) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

TEST RESULTS

GTA41077PWWWYY-X.X-Y,

Date	July 27, 2011				
Sample tag No	03942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	1/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GTA41077P12048 P/N (TR9CX2500LCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	155

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	48Vdc
Current (A)	1.8	2.5
Power (W)	--	125 (Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
Dc Output Current (mA)		0.625	1.250	1.875	2.501	
Dc Output voltage (V)		48.21	48.17	48.18	48.09	
Dc output power (W)		30.13	60.21	90.34	120.27	

Ac Input Voltage (V)	115.08	115.15	115.13	115.19	115.17	
Ac input Power (W)	0.028	35.69	68.57	101.65	135.71	
Total Harmonic Distortion (THD)%		1.284	1.251	1.245	1.310	1.284
True Power Factor (W/VA)		0.987	0.992	0.996	0.997	0.987
AC Input Frequency (Hz)	59.97	59.96	59.99	59.96	59.96	59.96

Power Consumed by UUT (W)	0.028	5.559	8.357	11.313	15.437	
Efficiency %		0.84	0.88	0.89	0.89	0.87

Date	July 27, 2011				
Sample tag No	03942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	2/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GTA41077P12048 P/N (TR9CX2500LCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	155

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	48Vdc
Current (A)	1.8	2.5
Power (W)	--	125 (Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				Average
		25%	50%	75%	100%	
Percent of nameplate current	0%					
Dc Output Current (mA)		0.625	1.250	1.875	2.501	
Dc Output voltage (V)		48.64	48.64	48.6	48.55	
Dc output power (W)		30.40	60.80	91.13	121.42	

Ac Input Voltage (V)	116.14	116.03	115.59	115.46	115.12	
Ac input Power (W)	0.023	36.19	69.78	103.12	137.09	
Total Harmonic Distortion (THD)%		1.576	1.576	1.528	1.260	1.560
True Power Factor (W/VA)		0.994	0.993	0.996	0.995	0.994
AC Input Frequency (Hz)	59.96	59.99	59.97	59.98	59.97	59.98

Power Consumed by UUT (W)	0.023	8.980	11.995	15.666	15.666	
Efficiency %		0.84	0.87	0.88	0.89	0.87

Date	July 27, 2011				
Sample tag No	03942	Ambient:	23°C	Humidity 42 %	Atmosphere Pressure: 1013 mbar
Sample No.	3/3				

RESULTS

Manufacture Name	GlobTek Inc.
Model	GTA41077P12048 P/N (TR9CX2500LCP-N)
Product Powered (if known)	--
Country of manufacture	China
Integral Input power switch	No power switch provided.
DC output cord length (cm)	155

Nameplate specifications	Input	Output
Voltage (V)	100-240Vac	48Vdc
Current (A)	1.8	2.5
Power (W)	--	125 (Calculated)
Frequency (Hz)	50-60	DC

	No Load	Active Power Values				Average
		25%	50%	75%	100%	
Percent of nameplate current	0%					
Dc Output Current (mA)		0.625	1.250	1.875	2.503	
Dc Output voltage (V)		48.47	48.49	48.39	48.31	
Dc output power (W)		30.29	60.61	90.73	120.92	

Ac Input Voltage (V)	115.27	116.03	115.95	115.85	115.84	
Ac input Power (W)	0.025	36.69	69.76	101.91	136.01	
Total Harmonic Distortion (THD)%		1.392	1.266	1.383	1.411	1.347
True Power Factor (W/VA)		0.970	0.992	0.996	0.994	0.986
AC Input Frequency (Hz)	59.99	59.99	59.69	59.97	59.96	59.91

Power Consumed by UUT (W)	0.025	6.396	9.148	11.179	15.090	
Efficiency %		0.83	0.87	0.89	0.89	0.86

Date	July 27, 2011	Sample tag No	03942
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SAMPLING PLAN

GTA41077P12048 P/N (TR9CX2500LCP-N)

SAMPLE #	Average Energy Efficiency Active mode	Maximum Power Consumption No-Load (W)
1/3	0.87	0.0280
2/3	0.87	0.0230
3/3	0.86	0.0250
Sample Mean	0.866	0.025
Standard Deviation	0.005	0.004
UCL =	5.063	5.061
UCL/1.1=	4.603	4.601

Requirements:

Minimum Average Efficiency in Active mode **0.85**
Maximum power limit in no-load mode (Watts) **0.5**

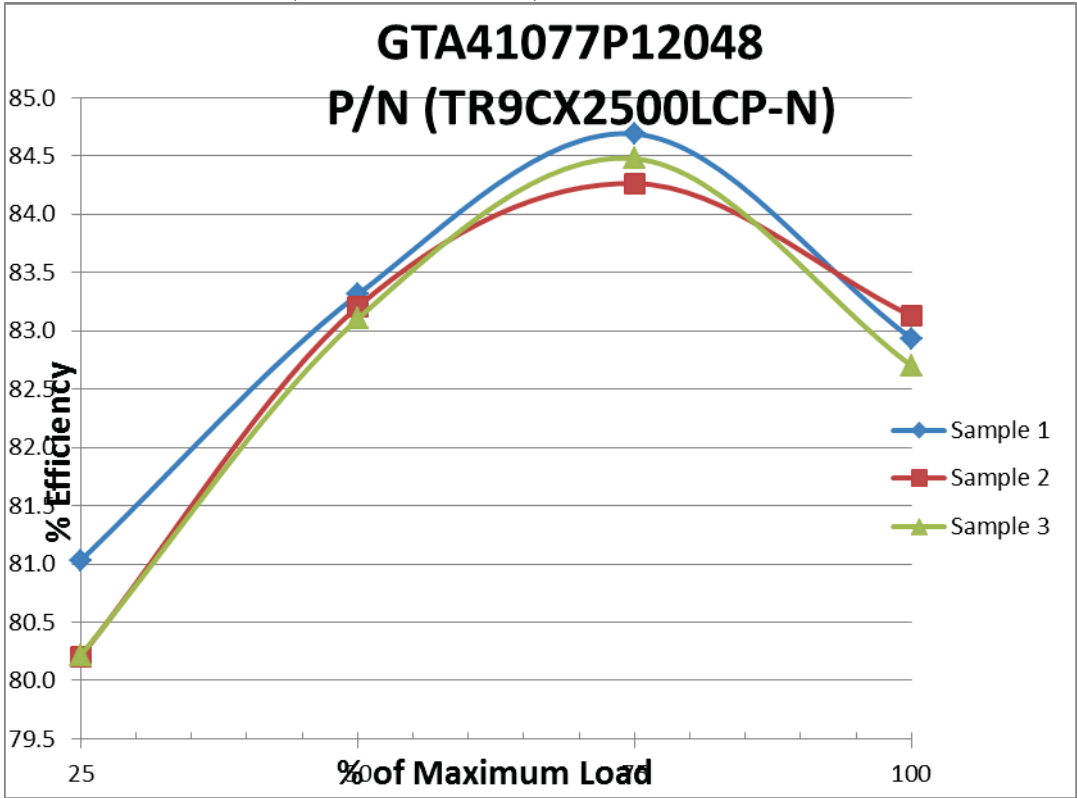
UPPER CONFIDENCE LIMIT (UCL) = $X + (t * S) / \sqrt{n}$

where X = sample mean
t = multiplier for 95% confidence, based on (n)
S = sample standard deviation
n = number of samples tested

In this case t = 2.92
In this case n = 3

Date	July 27, 2011	Sample tag No	03942
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GTA41077P12048 P/N (TR9CX2500LCP-N)



Conclusion:

The evaluated energy efficiency levels for model GTA41077P12048 P/N (TR9CX2500LCP-N) in both no-load (0.025W) and active load modes (0.866) comply with Canada's Energy Efficiency Regulations for External Power Supplies (as pre-published, June 2010).

PHOTOS:

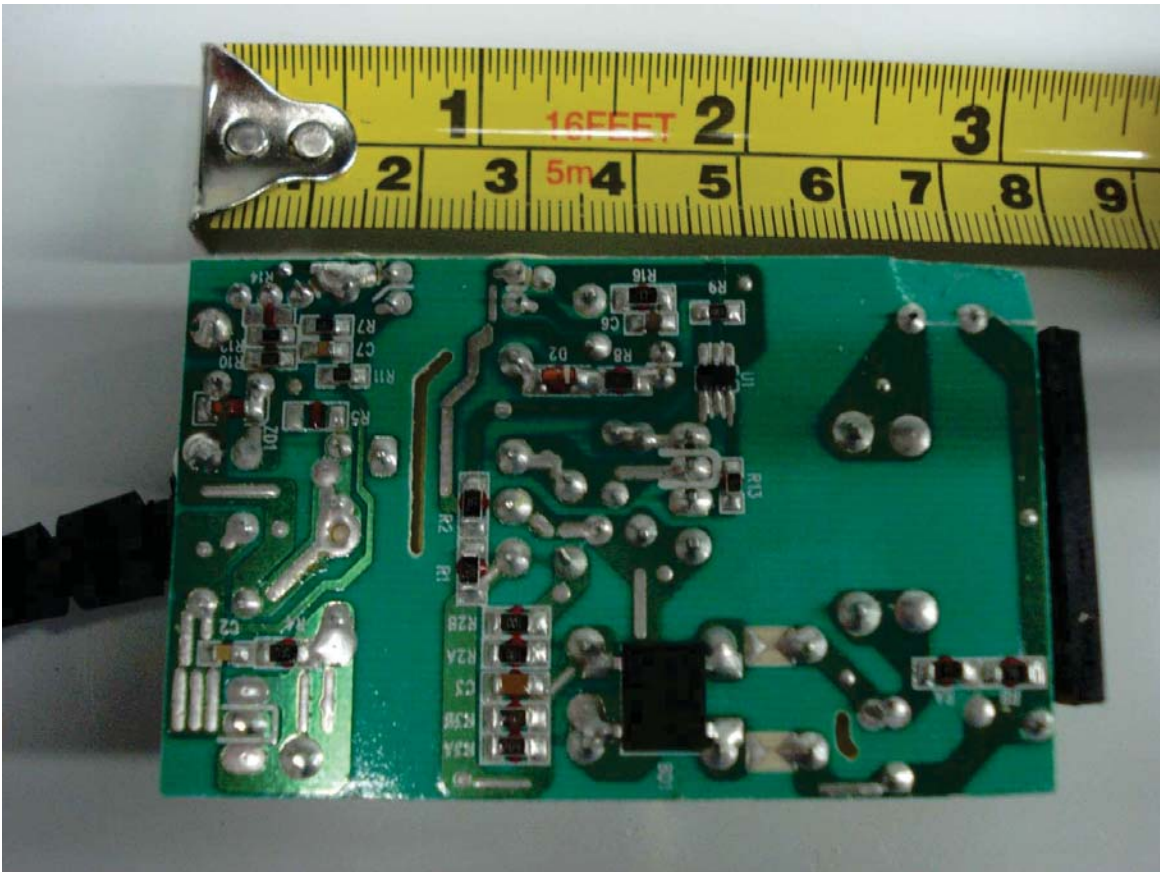
Model GT-41062-1824-T3 P/N (TR9CI750CCP-N)



PHOTOS:

Model GT-41062-1824-T3 P/N (TR9CI750CCP-N)





PHOTOS:
 Model GTA41077P12048 P/N (TR9CX2500LCP-N)





Model GTA41077P12048 P/N (TR9CX2500LCP-N)



