

<p>TEST REPORT</p> <p>COMMISSION REGULATION (EC) No 278/2009</p> <p>implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies</p>	
Report Reference No	: SZES130300053401
Tested by (name + signature).....	: Megan Xue 
Approved by (+ signature)	: Alice Gu 
Date of issue.....	: 2013-04-03
Total number of pages.....	: 5 pages
Testing Laboratory	: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch E&E Lab
Address.....	: No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
Applicant's name	: Shenzhen Shenchuang High Tech Electronics Co., Ltd.
Address.....	: 3 rd Floor, Xianshun Building, Gushu First Road, Xixiang, Baoan, Shenzhen, Guangdong, P. R. China
Test specification:	
Test procedure.....	: STR: COMMISSION REGULATION (EC) No 278/2009
Non-standard test method	: None
Test Report Form No.	: 278/2009/EC_F
Test Report Form(s) Originator	: SGS-CSTC
Master TRF.....	: 2012-07-16
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<p>Test item description..... : USB travel charger</p> <p>Model/Type reference..... : TC008</p> <p>Ratings..... : Input: 100-240 V~, 50/60 Hz, 0,15 A</p> <p style="padding-left: 150px;">Output: 5 V$\overline{\text{---}}$, 1 A</p> <p>Manufacturing site (factory) : Same as applicant</p>	
<p>Test item particulars</p> <p>Type of plug / inlet..... : Plug</p> <p>Plug configuration..... : The plug is integral with the EUT</p> <p>Length of power cord, if any : N/A</p> <p>Output cord length : N/A</p> <p>Output plug type..... : Single pin type</p> <p>Modification to connectors for testing ...: No</p> <p>With built in switch..... : No</p>	
<p>Summary of testing:</p> <p>The sample(s) tested complies with the requirements of COMMISSION REGULATION (EC) No 278/2009. These tests fulfil the requirements of standard ISO/IEC 17025.</p> <p>When determining the test conclusion, the Measurement Uncertainty of test has been considered.</p> <p>Measurements of power of 0,50 W or greater was made with an uncertainty of less than or equal to 2 % at the 95 % confidence level.</p> <p>Measurements of power of less than 0,50 W was made with an uncertainty of less than or equal to 0,01 W at the 95 % confidence level.</p>	
<p>Copy of marking plate</p> <div style="text-align: center;"> </div> <p><i>Remark: the above marking plate is only a draft artwork to show the product ratings and model No.</i></p>	

Testing

Date of receipt of test item.....: 2013-03-25

Date (s) of performance of tests.....: 2013-03-29

General remarks:

The test results presented in this report relate only to the object tested.
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TEST DESCRIPTION

Preparing for test:

- a. The built in switch was in the "on" position.
- b. The metering equipments were connected to the output and the efficiency was measured from the cord immediately adjacent to the output connector.

Test method:

EN 50563: 2011 External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes.

Load condition:

A set of variable loads was used to load the power supply to provide all active mode load conditions.

Test Conditions for Measurement:

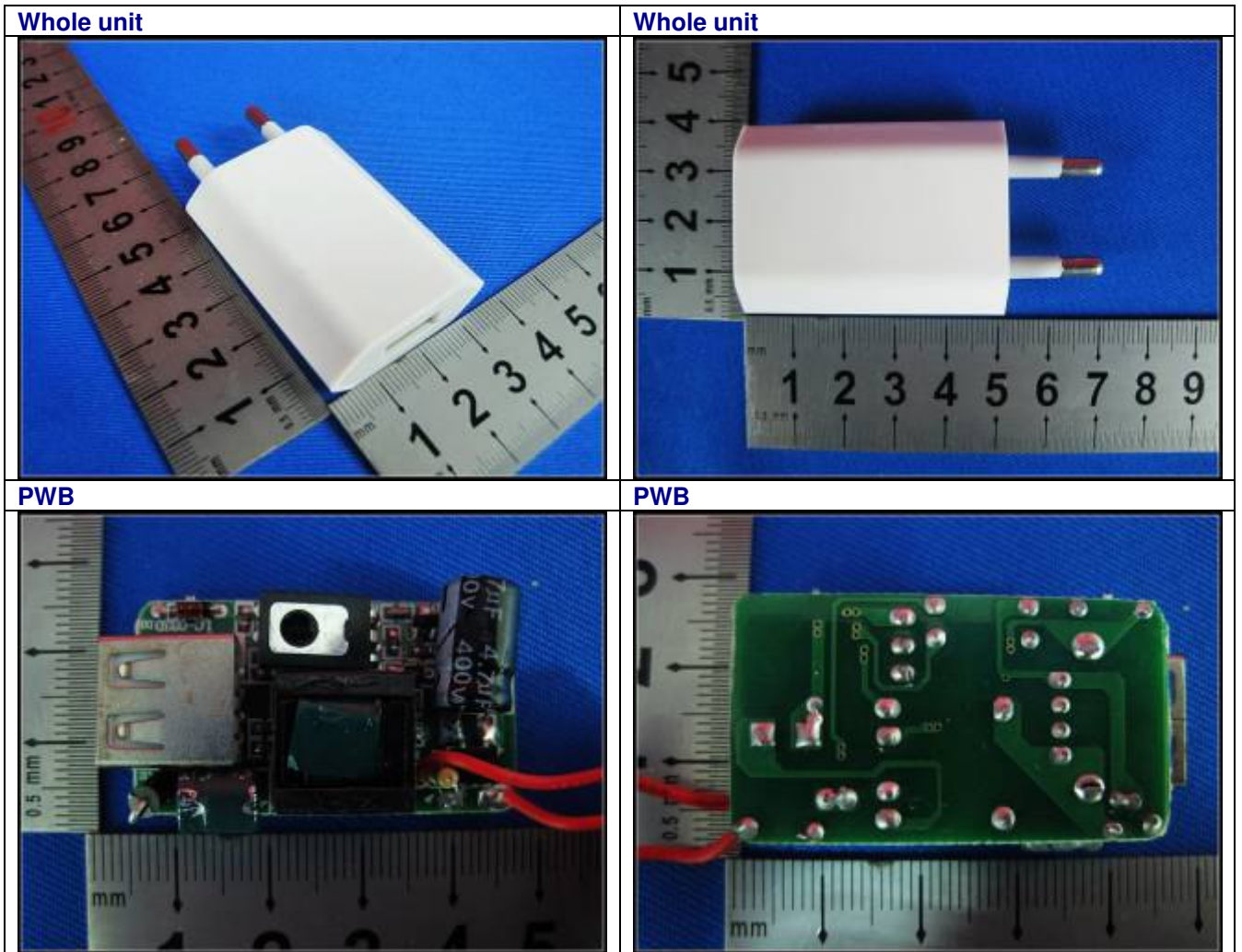
1. The EUT was operated at 100% of nameplate current output for at least 30 minutes, at rated voltage and frequency.
2. After the warm up period, the input power was monitor for a period of 5 minutes. Under the stable power level condition was established as per standard, the measurement was recorded at the end of the 5 minutes period.
3. If input power is not stable over a 5 minutes period, the average power over the time for both input and output were measured.
4. Efficiency measurement was conducted in sequence form load condition 1 to load condition 5 as per standard.
5. Efficiency was calculated by dividing the measured active output power at the given load condition by the active ac input power measured at that load condition. Then the average efficiency was calculated and reported as the arithmetic mean of the efficiency values calculated.

Measurement Result

Test result					
Rated Load	100%	75%	50%	25%	0
Ambient Temperature (°C)	22,1	22,1	22,1	22,1	22,1
Input Voltage(V)	230,0	230,0	230,0	230,0	230,0
Input frequency (Hz)	50	50	50	50	50
Measured Input Power (W)	6,68	5,06	3,65	1,92	0,09
THD (%)	0,031	0,032	0,030	0,028	0,027
True power factor	0,494	0,467	0,436	0,379	0,219
Maximum No Load Power (W)					0,3
Measured Output Voltage (V)	5,01	5,07	5,11	5,16	
Measured Output Current (mA)	1000	750	500	250	
Active Output Power (W)	5,01	3,80	2,56	1,29	
Power Consumed by EUT (W)	1,67	1,26	1,09	0,63	
Calculated Efficiency (%)	75,00	75,10	70,14	67,19	
Average Efficiency (%)	71,86				
Minimum Efficiency (%)	68,17				
Result	Complied with Stage 1(b) of ANNEX I of COMMISSION REGULATION (EC) No 278/2009				

Table 1	Test instruments			
Name	Brand	Model	Last cal. date	Next cal. date
Digital Power meter	YOKOGAWA	WT210	2012-11-03	2013-11-03
AC Power supply	KIKUSUI	PCR2000LA	--	--
Electronic Load	PRODIGIT	3302C/3310D	2012-11-03	2013-11-03

Photo documents:



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