ZHEJIANG WEIHAO ELECTRONICS CO.,LTD

CE ERP REPORT

Prepared For:	ZHEJIANG WEIHAO ELECTRONICS CO.,LTD 231#, WeiLiu Road,YueQing, Economic, Development, Zone,ZheJiang,China
Product Name:	POWER SUPPLY
Model:	S-120,S-15,S-25,S-35,S-50,S-60,S-75,S-100,S-145,S-150,S-200,S-201,S-240, S-250,S-300,S-350,S-400,S-500,S-600,SP-500,SE-600,SCN-600,SCN-800, SCN-1000,SCN-1500,MSF-10,MSF-20,MS-15,MS-25,MS-35,MS-40,MS-50, MS-60,MS-75,MS-100,MS-120,MS-150
Prepared By:	Shenzhen BST Technology Co., Ltd. Building No.23-24, Zhiheng industrial park, Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China.
Test Date:	Aug. 27, 2016
Date of Report:	Aug. 30, 2016
Report No.:	BST16087938A0002Y-1SR-2

TEST REPORT

COMMISSION REGULATION (EU) No 278/2009

of 6 April 2009

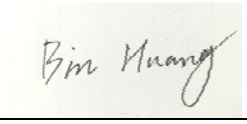
implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies

Testing laboratory	Shenzhen BST Technology Co., Ltd.
Address:	Building No.23-24, Zhiheng industrial park, Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China.
Testing location:	Shenzhen BST Technology Co., Ltd.
Applicant	ZHEJIANG WEIHAO ELECTRONICS CO.,LTD
Address	231#,WeiLiu Road,YueQing Economic Development Zone,ZheJiang,China
Test Result	Commission Regulation (EU) 278/2009
Test Procedure	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.
Non-standard test method	N.A.
Type of test object.	POWER SUPPLY
Trademark	N.A.
Model/type reference	S-120
Rating	Input: 100-240V~, 50/60Hz, Output: 12VDC, 10A
Manufacturer	ZHEJIANG WEIHAO ELECTRONICS CO.,LTD
Address	231#,WeiLiu Road,YueQing Economic Development Zone,ZheJiang,China

Name and address of the testing laboratory : **Shenzhen BST Technology Co.,Ltd.**

Building No.23-24, Zhiheng industrial park,

Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China.

Prepared by : 

Engineer

Reviewer : 

Supervisor

Approved & Authorized Signer : 

Christina / Manager

Possible test case verdicts :

Test case does not apply to the test object …….. : N(.A.)

Test object does meet the requirement …….. : P(ass)

Test object does not meet the requirement ……. : F(ail)

General remarks:

Throughout this report a point is used as the decimal separator. The test results presented in this report relate only to the object tested.

General remarks:	
"(see remark #)" refers to a remark appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. The test results presented in this report relate only to the object tested. This report shall not be reproduced except in full without the written approval of the testing laboratory.	Attached with: A. Photo documentation
Summary of testing: 1. All submitted models were tested according to Implementation measure EU 278/2009. 2. The product meets the stage 2 requirement of the implementation measure.	

Clasue	Requirement-Test	Result-Remark	Verdict
0.	ECODESIGN REQUIREMENTS		
1.	No-load power consumption and average active efficiency		P
1.1.	One year after this Regulation has come into force:		N
1.1.1	The no-load condition power consumption shall not exceed 0,50 W.		N
1.1.2	The average active efficiency shall be not less than: 0,500 * P_O, for P_O < 1,0 W; 0,090 * ln(P_O) + 0,500, for 1,0 W ≤ P_O≤ 51,0 W; 0,850, for P_O > 51,0 W		N
1.2.	Two years after this Regulation has come into force:		P
1.2.1.	The no-load condition power consumption shall not exceed the following limits:		P
1.2.1.1.	AC-AC external power supplies, except low voltage external power supplies: P_O≤ 51,0 W: 0,50 W; P_O > 51,0 W: 0,50 W.		N
1.2.1.2.	AC-DC external power supplies except low voltage external power supplies: P_O≤ 51,0 W: 0,30 W; P_O > 51,0 W: 0,50 W.	0.46W, P_O=120W	P
1.2.1.3.	Low voltage external power supplies: P_O≤ 51,0 W: 0,30 W; P_O > 51,0 W: N.A..		N
1.2.2.	The average active efficiency shall be not less than the following limits:		P
1.2.2.1.	AC-AC and AC-DC external power supplies, except low voltage external power supplies: P_O≤1,0 W: 0,480 · P_O + 0,140; 1,0 W < P_O≤ 51,0 W: 0,063 · ln(P_O) + 0,622; P_O > 51,0 W: 0,870	89.6%>87.0% P_O=120W	P

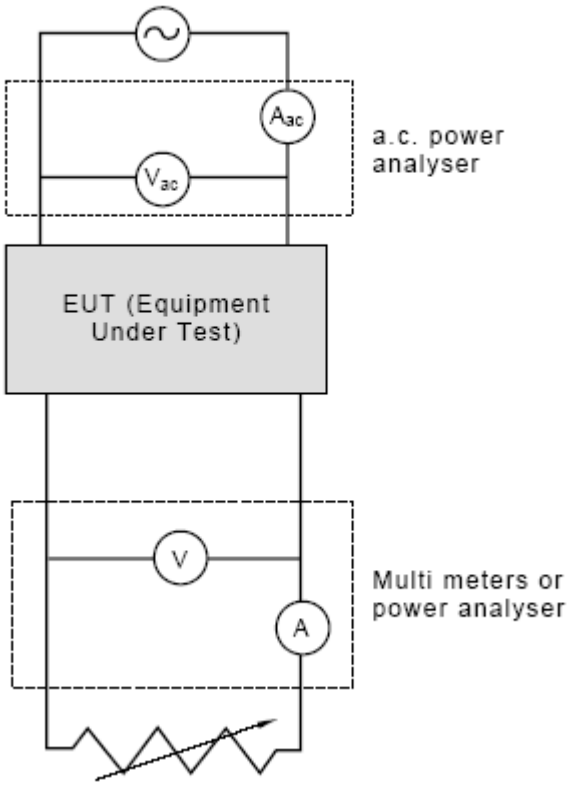
Clasue	Requirement-Test	Result-Remark	Verdict
1.2.2.2.	Low voltage external power supplies: $P_O \leqslant 1,0$ W: 0,497 · P_O + 0,067; 1,0 W < $P_O \leqslant$ 51,0 W: 0,075 · ln(P_O) + 0,561; P_O > 51,0 W: 0,860		N
2.	MEASUREMENTS		P
2.1.	The no-load condition power consumption and the average active efficiency referred to in point 1 shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art.		P
2.2.	Measurements of power of 0,50 W or greater shall be made with an uncertainty of less than or equal to 2 % at the 95 % confidence level. Measurements of power of less than 0,50 W shall be made with an uncertainty of less than or equal to 0,01 W at the 95 % confidence level.		P
3.	Information to be provided by manufacturers		P
3.1.	For the purposes of conformity assessment pursuant to Article 4, the technical documentation shall contain the following elements:		P
3.1.1	Measured at load conditions 1-4:		
3.1.1.1.	Root mean square (Rms) output current (mA)		P
3.1.1.2.	Rms output voltage (V)		P
3.1.1.3.	Active output power (W)		P
3.1.2	Measured at load conditions 1-5:		
3.1.2.1.	Rms input voltage (V)		P
3.1.2.2.	Rms input power (W)		P
3.1.2.3.	Total harmonic distortion (THD)		P
3.1.2.4.	True power factor		
3.1.3	Calculated at load condition 1-4, measured at load condition 5:		
3.1.3.1	Power consumed (W)		P
3.1.4	Calculated at load conditions 1-4		

Clasue	Requirement-Test	Result-Remark	Verdict
3.1.4.1	Efficiency		P
3.1.5.	Arithmetic average of efficiency at load conditions 1-4:		P
3.1.5.1.	Average efficiency		
3.2.	The relevant load conditions are as follows:		P
3.2.1.	Percentage of nameplate output current		
3.2.1.1.	Load condition 1: 100 % ± 2 %		P
3.2.1.2.	Load condition 2: 75 % ± 2 %		P
3.2.1.3	Load condition 3: 50 % ± 2 %		P
3.2.1.4.	Load condition 4: 25 % ± 2 %		P
3.2.1.5.	Load condition 4: 0 % (no-load condition)		P

Test Equipment Used

Description	Model
Voltmeter	BN001
Ammeter	BN001
Power meter	BN001
Power supply	BN089
Electronic load	BT008

Test Circuit



ANNEX A:

Photo-documentation

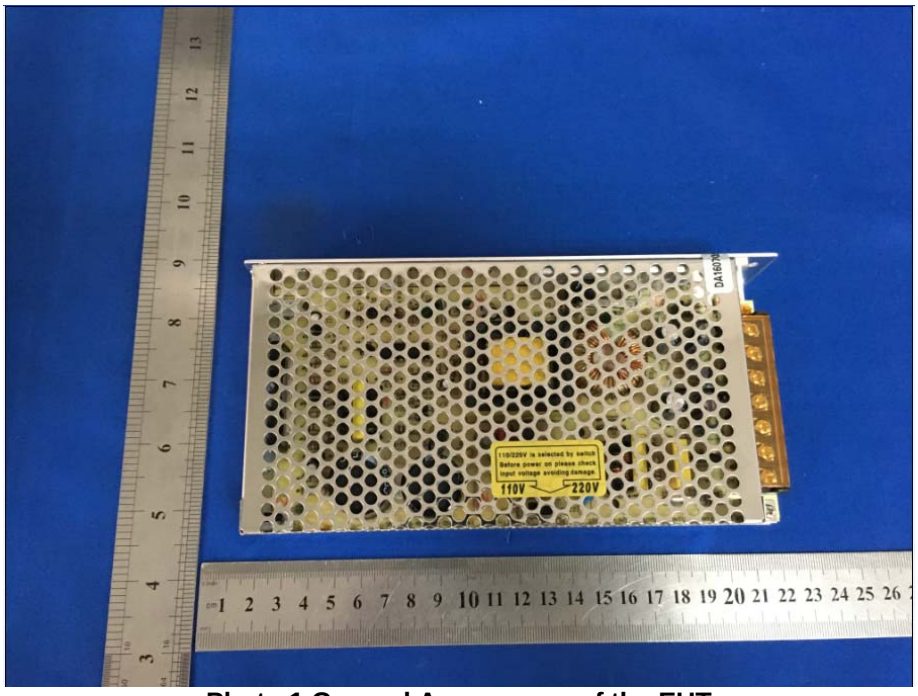


Photo 1 General Appearance of the EUT

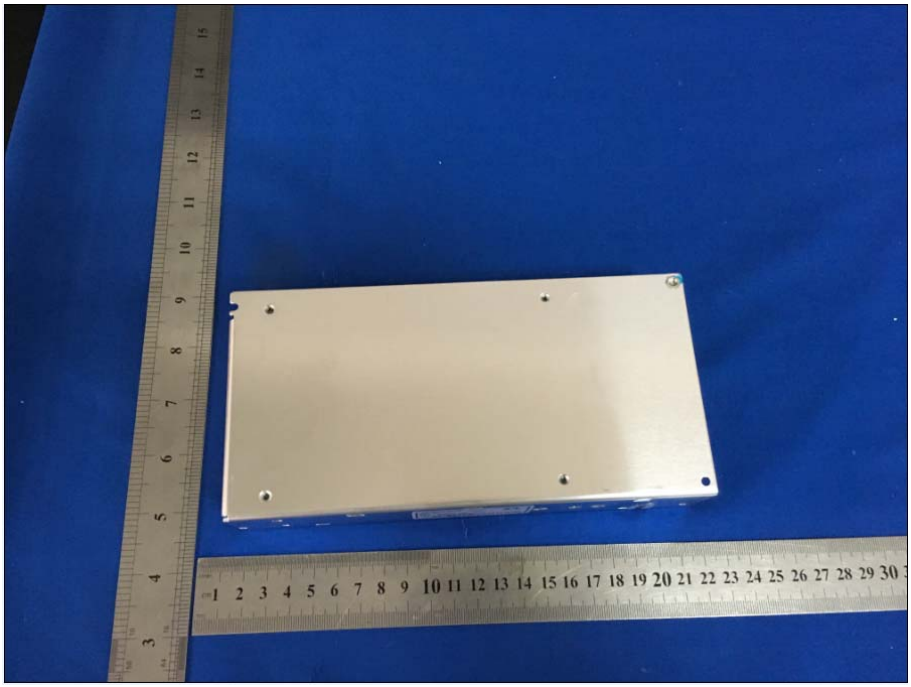


Photo 2 General Appearance of the EUT

Photo 3 General Appearance of the EUT

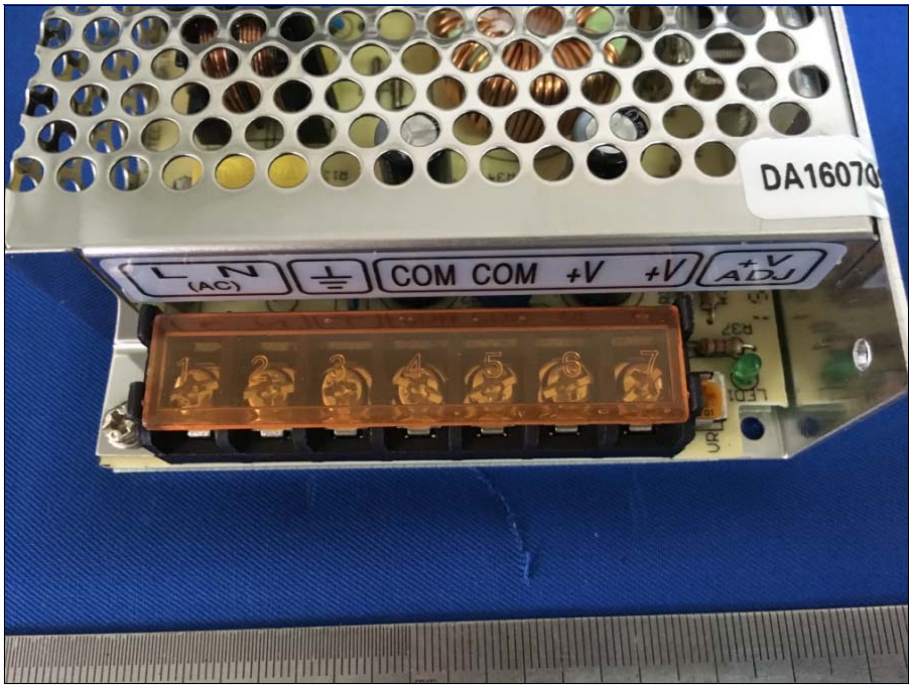


Photo 4 General Appearance of the EUT