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Report No.: EMC20020812
Page: 1 of 7

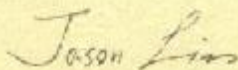
EMC TEST REPORT

Application No. : EMC20020812
Applicant : Jiaxing Huarong Battery Factory
Equipment Under Test (EUT):
Product : Battery
Model No. : R03P , R6P , R14P , R20P , LR03 , LR6 , 3R12 , 4R25 , 6F22 , LR20
Serial No. : Not supplied by client
Standards : EN50081-1 (1992) & EN50082-1 (1997)
Date of Receipt : 05 August 2002
Date of Test : N/A
Date of Issue : 08 August 2002

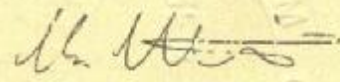
Test Result :	PASS*
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* The EUT complies with the standards specified above as the product is benign under the EMC directive. Please refer to section 2 of this report for further details.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.



Jason Lin
Laboratory Manager
SGS-CSTC Ltd.



Keith Hutchinson
General Manager
SGS IEA

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf.

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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CERTIFICATE OF EMC COMPLIANCE

Certificate No.	EMC20020812EC	Date of Issue: 08 August 2002
Product Description:	Battery	
Model No.:	R03P, R6P, R14P, R20P, LR03, LR6, 3R12, 4R25, 6F22, LR20	
Applicant:	Jiaxing Huarong Battery Factory	
Address of Applicant:	DONGZHAQUEMUQIAO, JIAXING ZHEJIANG, CHINA	
SGS Approved Laboratory:	SGS-CSTC Ltd. and No. L32	
Test Report Number(s):	EMC20020812, issued on 08 August 2002	
Date of Receipt:	05 August 2002	
Date of Test:	N/A	
Test Required:	EN50081-1 (1992) & EN50082-1 (1997)	

Conclusion

Based on a review of the test report detailed above, this apparatus meets the requirements of the above standards and hence fulfills the requirements of Directive 89/336/EEC as amended by Directives 92/31/EEC and 93/68/EEC.

This certificate is only valid for the equipment and configuration described in conjunction with the test data detailed above. It does not permit the use of the SGS PRODUCT CERTIFICATION MARK.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.

Jason Lin



Kevin Hutchinson

Jason Lin
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2 Test Summary

Test	Test Requirement	Test Method	Class/Severity	Result
Emission	EN 50081-1 : 1992	N/A	Clause 8 of EN50081-1	PASS
Immunity	EN 50082-1 : 1997	N/A	Clause 9 of EN50082-1	PASS

3 Contents

	Page
1 COVER PAGE.....	1
2 TEST SUMMARY.....	2
3 CONTENTS.....	3
4 GENERAL INFORMATION.....	4
4.1 CLIENT INFORMATION.....	4
4.2 GENERAL DESCRIPTION OF E.U.T.....	4
4.3 DETAILS OF E.U.T.	4
4.4 DESCRIPTION OF SUPPORT UNITS.....	4
4.5 STANDARDS APPLICABLE FOR TESTING	4
4.6 TEST LOCATION.....	5
4.7 DEVIATION FROM STANDARDS.....	5
4.8 ABNORMALITIES FROM STANDARD CONDITIONS.....	5
4.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	5
5 EMISSION TEST RESULTS	6
6 IMMUNITY TEST RESULTS	6
7 PHOTOGRAPHS EUT CONSTRUCTIONAL DETAILS.....	7

4 General Information

4.1 Client Information

Applicant: Jiaxing Huarong Battery Factory
Address of Applicant: DONGZHAQUEMUQIAO, JIAXING ZHEJIANG, CHINA

4.2 General Description of E.U.T.

Name: Battery
Model No.: R03P , R6P , R14P , R20P , LR03 , LR6 , 3R12 ,
4R25 , 6F22 , LR20
Seiral No.: Not supplied by client

4.3 Details of E.U.T.

Power: N/A

4.4 Description of Support Units

None.

4.5 Standards Applicable for Testing

The customer requested EMC tests for an Adaptor.

The standards used were EN50081-1 (Emissions) & EN50082-1 (Immunity).

Table 1 : Tests Carried Out Under EN50081-1 : 1992

Standard		Status
EN55022:1998	Radiated Emissions	×
EN55022:1998	Conducted Emissions on AC	×
EN60555-2:1987	Harmonic Emissions on AC	×
EN60555-3:1987 + A1:1991	Flicker Emissions on AC	×
EN55014-1:1993 + A1:1997+A2:1999	Discontinuous Emissions on AC	×

× Indicates that the test is not applicable.

√ Indicates that the test is applicable.

Note: The EUT contains no electronics at all and hence no tests need to be performed according to standard EN50081-1.

Table 2 : Tests Carried Out Under EN50082-1 : 1997

Standard		Status
EN61000-4-2:1995 + A1:1999	Electro-static discharge	×
EN61000-4-3:1996	Radio frequency EM fields (80MHz to 1GHz)	×
ENV50204:1996	Radio frequency EM field, keyed carrier (900MHz)	×
EN61000-4-4:1995	Fast transients	×
EN61000-4-5:1995 +A1:1996	Surges	×
EN61000-4-6:1996	Radio frequency continuous conducted (150kHz to 80MHz)	×
EN61000-4-8:1994	Power-frequency magnetic field (50Hz)	×
EN61000-4-11:1994	Voltage dips & interruptions	×

× Indicates that the test is not applicable.

√ Indicates that the test is applicable.

Note: The EUT contains no electronics at all and hence no tests need to be performed according to standard EN50082-1.

4.6 Test Location

All tests were performed at:-

SGS-CSTC Standards Technical Services Ltd., Guangzhou Safety & EMC Laboratory, 1/F, Building No. 1, Agriculture Machinery Materials Company Warehouse Ltd., Wushan Road Shipai, Tianhe District, Guangzhou, China. P.C. 510630.

Tel: +86 20 3848 1001

Fax: +86 20 3848 1006

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Conditions

None.

4.9 Other Information Requested by the Customer

None.

5 Emission Test Results

Test Requirement: EN50081-1
Test Method: N/A: See Remark Below

There is no need for emission tests to be performed on this product in accordance with standard EN50081-1.

For further details, please refer to clause 8 of EN50081-1 which states:-

“It may be determined from consideration of the electrical characteristics and usage of a particular apparatus that some of the measurements are inappropriate and therefore unnecessary. In such a case it is required that the decision not to measure be recorded in the test report.”

6 Immunity Test Results

Test Requirement: EN50082-1
Test Method: N/A: See Remark Below

There is no need for immunity tests to be performed on this product in accordance with standard EN50082-1.

For further details, please refer to clause 9 of EN50082-1 which states:-

“It may be determined from, consideration of the electrical characteristics ad usage of a particular apparatus that some of the tests are inappropriate and therefore unnecessary. In such a case it is required that the decision not to test be recorded in the test report.”

7 Photographs – EUT Constructional Details

