

## Test Report

Prepared for: Electrical Express UK Ltd

Product Description: 40W LED street lantern

Model Number: NightStar 40

Test: BSCP520 v22.0 - Elexon Charge Code

Tested at: Kiwa Blackwood Compliance Laboratories

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Test Report Issue Date: 02 April 2014

Tested by:

Test Engineer

Approved by:

Technical Management

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## **Section 1: Overview**

### **Section 1.1: General**

This test report contains details of testing carried out on samples submitted to Kiwa Blackwood Compliance Laboratories for an assessment to establish the appropriate Elexon Charge Codes for inclusion in BSCP520.

This test report relates only to the specific items detailed in Section 1.3 and Section 2 as Equipment Under Test (EUT). The results given in this report relate only to the tests, configurations, operation modes and arrangements of the EUT as defined within this report.

The results contained in this test report do not relate to any Auxiliary Equipment (AE) which has been used to exercise, monitor and/or provide suitable loading for the EUT. AE, where applicable, is also detailed in Section 2.

### **Section 1.2: Customer Details**

This test report was prepared for:

Electrical Express UK Ltd  
Unit 1 West Side  
Warne Road  
Weston Super Mare  
BS23 3TS

### **Section 1.3: Equipment Under Test (EUT)**

The equipment under test was a 40W LED street lantern.

## Section 2: Details relating to the Equipment Under Test

Test Start Date: 02 April 2014

Test Completed Date: 02 April 2014

### Section 2.1: Equipment Under Test (EUT)

Product Name:	Night Star
Manufacturer:	Electrical Express UK Ltd
Description:	40W LED street lantern
Model No:	NightStar 40
Part No:	None
Serial No:	1, 2, 3, 4, 5
Build State:	Production
Condition:	New
Software Version:	V3.07

### Section 2.2: Auxiliary Equipment (AE)

No auxiliary equipment was used.

### Section 2.3: Configuration Diagram/Photograph of EUT



## Section 3: Test Results Summary

### Section 3.1: Test Results Summary Table

Test:	Operation Mode:	Mod.:
BSCP520 v22.0 - Elexon Charge Code	Normal Operation	0
BSCP520 v22.0 - Elexon Charge Code	Off / Standby	0

**Mod.** (modification status):

- 0 The EUT was tested as received, i.e. without any modifications.

### Section 3.2: Measurement Uncertainty

ISO/IEC 17025:2005 "General requirements for the competence of testing and calibration laboratories" requires measurement uncertainty to be estimated for all testing done.

Measurement Uncertainty has been calculated for all tests in accordance with UKAS document LAB 34 Edition 1:2002.

## Section 4: Formal Test Results

### Section 4.1: Normal Operation

Test Standard: BSCP520 v22.0 - Elexon Charge Code  
 Operation Mode: Normal Operation.  
 The EUT was operated as supplied and was allowed to stabilise for 30 minutes before measurements were taken.

Test Equipment Used:

8675 Schaffner NSG1007-5 InterHarmonics Power Source  
 8562 Voltech IEC555 Reference Impedance Network (closed-circuited)  
 8117 Voltech PM3000 Power Analyser  
 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

Below are the recorded power ratings under normal operation:

Supply Voltage (Vrms):	Output (Watts) Serial Number:				
	1	2	3	4	5
210	39.390	39.480	39.170	39.240	39.030
220	39.760	39.920	39.650	39.720	39.650
230	40.220	40.390	40.170	40.220	40.300
240	40.760	40.890	40.760	40.770	41.000
250	41.320	41.400	41.410	41.300	41.700

Supply Voltage (Vrms):	VA Serial Number:				
	1	2	3	4	5
210	39.980	40.210	39.800	39.980	39.800
220	40.450	40.510	40.350	40.560	40.510
230	41.000	41.300	40.990	41.180	41.250
240	41.630	41.930	41.710	41.840	42.050
250	42.300	42.560	42.460	42.500	42.880

Supply Voltage (Vrms):	Power Factor Serial Number:				
	1	2	3	4	5
210	0.984	0.981	0.983	0.981	0.980
220	0.982	0.979	0.981	0.979	0.978
230	0.980	0.977	0.979	0.976	0.976
240	0.978	0.975	0.977	0.974	0.974
250	0.976	0.972	0.975	0.971	0.972

Additional Comments:

None.

## Section 4.2: Off / Standby

Test Standard: BSCP520 v22.0 - Elexon Charge Code

Operation Mode: Off / Standby.

The EUT was operated as supplied and was powered for 30 minutes before being switched to the "Off" position and measurements taken.

Test Equipment Used:

8675 Schaffner NSG1007-5 InterHarmonics Power Source  
 8562 Voltech IEC555 Reference Impedance Network (closed-circuited)  
 8117 Voltech PM3000 Power Analyser  
 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

Below are the recorded power ratings under Off / Standby:

Supply Voltage (Vrms):	Output (Watts) Serial Number:				
	1	2	3	4	5
210	0.000	0.000	0.000	0.000	0.000
220	0.000	0.000	0.000	0.000	0.000
230	0.000	0.000	0.000	0.000	0.000
240	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000

Supply Voltage (Vrms):	VA Serial Number:				
	1	2	3	4	5
210	0.000	0.000	0.000	0.000	0.000
220	0.000	0.000	0.000	0.000	0.000
230	0.000	0.000	0.000	0.000	0.000
240	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000

Supply Voltage (Vrms):	Power Factor Serial Number:				
	1	2	3	4	5
210	1.000	1.000	1.000	1.000	1.000
220	1.000	1.000	1.000	1.000	1.000
230	1.000	1.000	1.000	1.000	1.000
240	1.000	1.000	1.000	1.000	1.000
250	1.000	1.000	1.000	1.000	1.000

Additional Comments:

None.

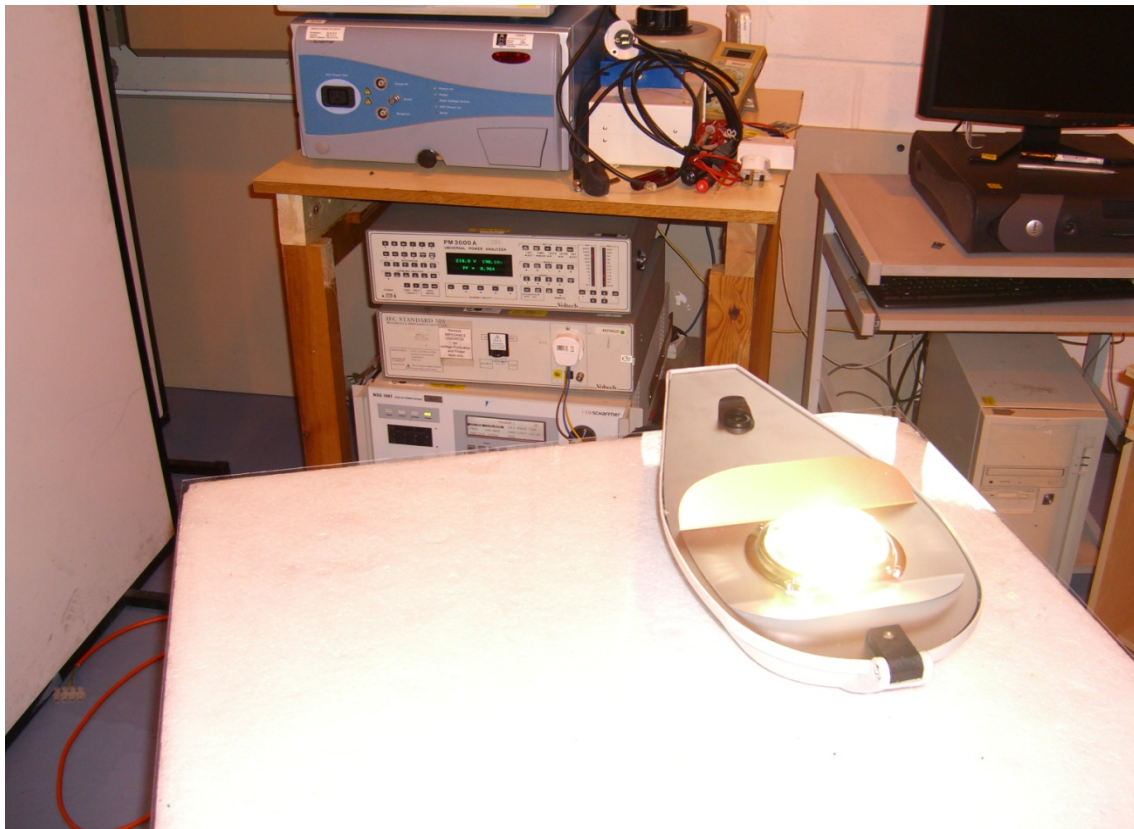
## Section 5: List of Abbreviations

**EUT:** Equipment Under Test  
**AE:** Auxiliary Equipment (i.e. equipment connected to the EUT)



## Annex A: Photographs

### Photograph 1: Test Configuration



End of Report