

## T e s t R e p o r t

**Report No** : U10010 Amd 1

**Client:** : Ticknall Solar Ltd  
16 Ashby Road  
Ticknall  
Derbyshire  
DE73 7JJ

**Description** : Belisha Beacon High Visibility

**Manufacturer** : Ticknall Solar Ltd

**Type/Model** : TS23XX

**Test Specification** : Measurement of power consumption in accordance with the  
'Unmetered Supplies Operational Information Document' –  
Version 17.0 (15/03/2017)

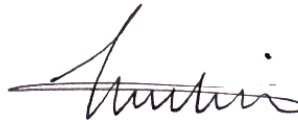
**Date Testing Started** : 15/12/2017

**Conclusion** : Refer to body of report

**Date of Issue** : 20/12/2017

**Date of Expiry** : 19/12/2022

**Tested by:** T. MALIK  
**Position:** Operations Manager



**Approved by:** A. SANGI  
**Position:** Technical Lead –  
Product Safety



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**Note:** This amendment 1 is to correct the product model number shown throughout the report and include the Manufacturer name on page 1.

## **INTRODUCTION**

Ticknall Solar Ltd has supplied the product identified in table 1 for measurement of power consumption in accordance with the 'Unmetered Supplies Operational Information Document' – Version 17.0 (15/03/2017).

## **PRODUCT DETAILS**

**Table 1. Test Sample Details**

Product Description	Belisha Beacon High Visibility
Model No.	TS23XX
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	Ø 470mm x 300mm
Product Supply Requirement	200-240V AC, 50/60Hz
Lamp Type and Power	LED, variable power
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

The customer has declared that the equipment load does not vary with ambient temperature.

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## **RESULTS**

**Note:** Measurements were made at steady output.

**Table 2. Wattage and VA results for Belisha Beacon High Visibility**

Operating Mode	Day Mode				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	6.36	6.32	6.49	6.30	6.46
220	6.38	6.34	6.51	6.33	6.47
230	6.43	6.37	6.54	6.38	6.53
240	6.49	6.43	6.43	6.42	6.57
250	6.50	6.48	6.61	6.48	6.64
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	13.25	13.21	14.50	13.19	15.59
220	13.48	13.16	15.66	13.57	14.96
230	13.80	13.52	15.96	14.12	15.88
240	14.14	14.14	15.56	14.18	15.86
250	14.29	13.92	16.16	14.17	16.46
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.48	0.48	0.45	0.48	0.41
220	0.47	0.48	0.42	0.47	0.43
230	0.47	0.47	0.41	0.45	0.41
240	0.46	0.45	0.41	0.45	0.41
250	0.45	0.47	0.41	0.46	0.40
Ambient Temperature During Test (°C)			22.5		
PF Leading/Lagging			Leading		

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This page is to be read in conjunction with the first page of this report

**Table 3. Wattage and VA results for Belisha Beacon High Visibility**

Operating Mode	Night Mode				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	3.89	3.87	3.86	3.97	3.87
220	3.92	3.92	3.89	4.00	3.89
230	3.95	3.96	3.92	4.02	3.91
240	3.98	4.00	3.94	4.04	3.95
250	4.00	4.03	3.96	4.06	4.02
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	8.71	8.87	8.75	9.02	9.76
220	9.36	9.12	9.07	10.02	10.04
230	9.60	9.19	9.44	10.12	9.98
240	9.46	9.40	9.55	10.26	10.42
250	9.92	9.76	9.59	10.09	10.67
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.45	0.44	0.44	0.44	0.40
220	0.42	0.43	0.43	0.40	0.39
230	0.41	0.43	0.42	0.40	0.39
240	0.42	0.43	0.41	0.39	0.38
250	0.40	0.41	0.41	0.40	0.38
Ambient Temperature During Test (°C)			22.7		
PF Leading/Lagging			Leading		

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### **DEVIATION(S) FROM TEST STANDARD**

No reported deviations from test standard.

### **MEASUREMENT UNCERTAINTY**

The following expanded uncertainties apply to the measurements shown in the results;

True Power (W):  $\pm 0.69\%$ , Apparent Power (VA):  $\pm 0.61\%$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k=2$ , providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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**ILLUSTRATION**



Figure 1. *Product image*

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