



Test Report

Report No : L14525
Client: : Westcotec Ltd
34 Bertie Ward Way,
Dereham
NR19 1TE
Description : Various Street Signs
Manufacturer : Not Disclosed
Type/Model : V/SP3/30D/M – 300mm
E/SP4/40D/M – 450mm
M/TR7/512/D/M – 750mm
Test Specification : Measurement of power consumption in accordance with the
“Unmetered Supplies Operational Information” document –
Version 13.0 (7/11/13)
Date Tested : 28/11/14
Conclusion : Refer to body of Report
Date of Issue : 10/12/14
Date of Expiry : 09/12/19

Tested by: C.LOVEITT
Position: Laboratory Technician



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Approved by: J.ADAMS
Position: Laboratory Supervisor

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These test results relate only to the unit(s) tested. This Report and any subsequent report(s) may not be reproduced except in full without the written approval of the Testing Laboratory.



INTRODUCTION

Westcotec Ltd has supplied the product identified in table 1 for measurement of power consumption in accordance with the "Unmetered Supplies Operational Information" document – Version 13.0 (7/11/13).

PRODUCT DETAILS

Table 1. Test Sample Details

Product Description	450mm 40mph Sign with Slowdown Legend
Model No.	E/SP4/40D/M
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	Not Applicable
Product Supply Requirement	240V A.C. 50Hz
Lamp Type and Power	LED
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

RESULTS

Table 2. Wattage and VA results for E/SP4/40D/M

Operating Mode	Non-Illuminated				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	1.87	1.87	1.90	1.92	1.84
220	2.05	2.05	2.08	1.99	1.91
230	1.99	1.99	2.02	2.02	1.94
240	2.04	2.04	2.06	2.02	1.95
250	2.03	2.03	2.05	2.09	2.02
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	10.09	9.89	9.92	9.82	9.76
220	11.15	10.93	10.96	10.71	10.66
230	11.84	11.58	11.63	11.52	11.47
240	12.85	12.56	12.61	12.52	12.48
250	13.76	13.45	13.50	13.33	13.30

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RESULTS

Table 3. Wattage and VA results for E/SP4/40D/M

Operating Mode	Illuminated (Dimmed level 1)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	2.04	1.99	2.04	2.04	2.01
220	2.17	2.11	2.16	2.11	2.08
230	2.06	2.01	2.06	2.14	2.11
240	2.16	2.11	2.16	2.14	2.11
250	2.25	2.11	2.25	2.19	2.16
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	10.22	9.96	10.02	10.05	10.04
220	11.17	10.89	10.95	10.81	10.80
230	11.91	11.60	11.66	11.72	11.72
240	12.98	12.65	12.72	12.53	12.53
250	13.95	13.51	13.65	13.49	13.49

RESULTS

Table 4 Wattage and VA results for E/SP4/40D/M

Operating Mode	Illuminated (Dimmed level 2)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	9.72	9.34	9.48	9.56	9.53
220	9.74	9.34	9.50	9.57	9.53
230	9.87	9.45	9.60	9.65	9.59
240	10.04	9.60	9.77	9.69	9.66
250	9.96	9.52	9.73	9.82	9.79
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	21.59	20.88	21.05	21.33	21.30
220	22.21	21.47	21.66	21.87	21.82
230	22.88	22.09	22.28	22.66	22.60
240	23.70	22.88	23.09	23.26	23.24
250	24.48	23.62	23.91	24.25	24.21

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PRODUCT DETAILS

Table 5. Test Sample Details

Product Description	750mm Bend Sign with Slowdown Legend
Model No.	M/TR7/512/D/M
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	Not Applicable
Product Supply Requirement	240V A.C. 50Hz
Lamp Type and Power	LED
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

RESULTS

Table 6. Wattage and VA results for M/TR7/512/D/M

Operating Mode	Non-Illuminated				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	1.94	1.94	1.92	1.91	1.90
220	1.98	1.98	1.96	1.99	1.98
230	2.06	2.06	2.04	2.02	2.01
240	2.15	2.15	2.14	2.01	2.00
250	2.05	2.05	2.04	2.04	2.03
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	9.91	9.98	9.82	10.03	10.12
220	10.71	10.79	10.62	10.96	11.07
230	11.59	11.69	11.50	11.68	11.80
240	12.63	12.73	12.53	12.58	12.70
250	13.39	13.52	13.29	13.62	13.76

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RESULTS

Table 7. Wattage and VA results for M/TR7/512/D/M

Operating Mode	Illuminated (Dimmed level 1)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	2.13	2.12	2.08	2.08	2.02
220	2.11	2.10	2.06	2.30	2.25
230	2.20	2.19	2.16	2.32	2.26
240	2.31	2.30	2.26	2.32	2.26
250	2.48	2.47	2.43	2.30	2.24
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	10.14	10.20	10.03	10.16	10.21
220	10.88	10.95	10.76	11.17	11.22
230	11.89	11.97	11.77	11.96	12.03
240	12.78	12.87	12.65	12.93	13.01
250	13.95	14.06	13.82	13.62	13.73

RESULTS

Table 8 Wattage and VA results for M/TR7/512/D/M

Operating Mode	Illuminated (Dimmed level 2)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	12.41	12.14	12.31	12.13	13.02
220	12.41	12.15	12.32	12.29	13.17
230	12.50	12.23	12.41	12.58	13.48
240	12.54	12.27	12.44	12.33	13.22
250	12.73	12.45	12.61	12.41	13.28
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	25.44	24.92	25.09	25.52	26.78
220	26.16	25.63	25.83	26.53	27.78
230	26.89	26.34	26.55	27.35	28.63
240	27.47	26.92	27.13	27.69	28.97
250	28.43	27.87	28.07	28.34	29.56

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PRODUCT DETAILS

Table 9. Test Sample Details

Product Description	300mm 30mph Sign with Slowdown Legend
Model No.	V/SP3/30D/M
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	Not Applicable
Product Supply Requirement	240V A.C. 50Hz
Lamp Type and Power	LED
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

RESULTS

Table 10. Wattage and VA results for V/SP3/30D/M

Operating Mode	Non-Illuminated				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	1.91	1.87	1.83	1.86	1.85
220	1.96	1.92	1.87	1.96	1.95
230	2.01	1.97	1.93	1.96	1.95
240	2.05	2.01	1.96	2.03	2.02
250	2.07	2.03	1.98	2.10	2.10
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	9.88	9.94	10.00	10.04	9.85
220	10.71	10.78	10.86	10.97	10.77
230	11.60	11.68	11.77	11.78	11.56
240	12.47	12.56	12.67	12.72	12.47
250	13.39	13.49	13.61	13.74	13.48

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RESULTS

Table 11. Wattage and VA results for V/SP3/30D/M

Operating Mode	Illuminated (Dimmed level 1)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	2.08	2.03	2.04	1.96	1.93
220	2.06	2.01	2.02	2.05	2.03
230	2.12	2.07	2.08	2.10	2.08
240	2.14	2.09	2.10	2.05	2.02
250	2.20	2.15	2.16	2.07	2.05
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	10.05	10.10	10.21	10.15	9.94
220	10.80	10.86	10.98	11.01	10.78
230	11.64	11.71	11.84	11.95	11.71
240	12.55	12.63	12.78	12.86	12.60
250	13.50	13.60	13.76	13.80	13.52

RESULTS

Table 12 Wattage and VA results for V/SP3/30D/M

Operating Mode	Illuminated (Dimmed level 2)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	8.27	8.06	8.15	8.02	8.38
220	8.30	8.10	8.20	8.10	8.42
230	8.35	8.17	8.26	8.19	8.51
240	8.45	8.26	8.36	8.13	8.44
250	8.48	8.30	8.38	8.16	8.48
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	18.65	18.43	18.62	18.62	19.11
220	19.33	19.13	19.35	19.41	19.82
230	20.06	19.88	20.10	20.17	20.56
240	20.85	20.67	20.91	20.85	21.21
250	21.66	21.52	21.74	21.48	21.81

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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



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