



Test Report

Report No : L14788
Client: : D W Windsor Ltd
Pindar Road
Hoddesdon
Herts, EN11 0DX
Description : Street Lights - 2 LED module with 25 LEDs
Manufacturer : Not Disclosed
Type/Model : LED Engine 2LX2-113-25
Test Specification : Measurement of power consumption in accordance with the
"Unmetered Supplies Operational Information" document –
Version 13.0 (7/11/13)
Date Testing Started : 12/01/15
Conclusion : Refer to body of Report
Date of Issue : 16/01/15
Date of Expiry : 15/01/20

Checked by: J.ADAMS
Position: Laboratory Supervisor




Approved by: T.MALIK
Position: Quality Accreditation &
Certification Officer



INTRODUCTION

The products identified in tables 1 where tested at the premises of D W Windsor Ltd 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 Name/Description	Street Lights - 2 LED module with 25 LEDs
Model No.	LED Engine 2LX2-113-25
Number of Samples	Five
Nominal Dimensions	L706mm, W343mm, H167mm
Product Supply Requirement	240V AC 50Hz
Lamp Type and Power	LED / Various
Sampling Method - Elexon UMS Charge Code Process	

RESULTS

Table 2. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 700mA end of life 100% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	59.73	59.74	60.11	60.12	59.44
220	59.68	59.70	60.07	60.08	59.42
230	59.64	59.66	59.98	60.00	59.32
240	59.65	59.65	59.98	59.98	59.33
250	59.66	59.65	59.98	60.01	59.33
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	60.42	60.49	60.67	60.76	60.18
220	60.55	60.63	60.98	60.85	60.19
230	60.63	60.76	61.11	61.04	60.43
240	60.94	60.94	61.29	61.44	60.61
250	61.29	61.26	61.50	61.76	61.04

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Table 3. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 630mA initial life 100% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	53.64	53.65	54.04	53.63	53.42
220	53.65	53.69	54.07	54.07	53.44
230	53.61	53.63	54.05	54.02	53.39
240	53.60	53.60	53.39	54.00	53.36
250	53.53	53.59	53.94	53.92	53.34
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	54.33	54.35	54.92	54.38	54.30
220	54.54	54.62	54.97	55.11	54.54
230	54.92	54.77	55.11	55.24	54.72
240	55.07	55.06	55.09	55.70	54.98
250	55.45	55.45	55.72	56.00	55.21

Table 4. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 700mA end of life 75% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	45.02	44.96	45.40	45.39	44.85
220	45.07	44.97	45.43	45.41	44.86
230	45.08	45.00	45.41	45.39	44.90
240	45.09	45.04	45.45	45.41	44.92
250	45.13	45.03	45.46	45.44	44.93
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	45.99	46.00	46.40	46.46	45.87
220	46.36	46.16	46.69	46.65	46.26
230	46.77	46.69	46.90	46.94	46.54
240	47.04	46.99	47.22	47.27	46.86
250	47.52	47.29	47.79	47.70	47.23

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Table 5. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 630mA initial life 75% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	40.69	40.58	41.08	41.00	40.55
220	40.75	40.67	41.14	41.10	40.60
230	40.76	70.70	41.15	41.12	40.67
240	40.83	40.74	41.19	41.13	40.69
250	40.86	40.80	41.22	41.16	40.74
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	41.81	41.81	42.28	42.18	41.87
220	42.22	42.22	42.64	42.67	42.04
230	42.59	42.59	42.82	42.97	42.62
240	42.97	42.92	43.20	43.51	43.04
250	43.49	43.51	43.71	43.78	43.44

Table 6. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 700mA end of life 50% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	30.93	30.77	31.23	31.18	30.84
220	31.02	30.86	31.32	31.25	30.93
230	31.08	30.92	31.39	31.31	30.98
240	31.14	30.99	31.47	31.39	31.04
250	31.20	31.04	31.50	31.43	31.12
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	32.63	32.34	32.82	32.99	32.51
220	33.03	32.81	33.21	33.39	33.00
230	33.65	33.37	33.79	33.89	33.58
240	34.11	33.86	34.27	34.36	34.14
250	34.75	34.43	34.80	35.03	34.73

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Table 7. Wattage and VA results for Street Lights - 2 LED module with 25 LEDs

Operating Mode	Drive Current 630mA initial life 50% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	28.19	28.03	28.51	28.44	28.13
220	28.26	28.11	28.58	28.50	28.21
230	28.33	28.17	28.64	28.56	28.25
240	28.39	28.25	28.69	28.62	28.34
250	28.45	28.31	28.75	28.70	28.39
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	29.97	29.80	30.22	30.21	29.99
220	30.40	30.42	30.80	30.81	30.55
230	31.06	30.84	31.26	31.31	31.07
240	31.65	31.47	31.74	31.91	31.72
250	32.25	32.02	32.47	32.50	32.30

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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;

Measurement of Uncertainty for power range 5 to 50w

Watts: $\pm 0.25\%$, VA: $\pm 0.39\%$

Measurement of Uncertainty for power range 50 to 100w

Watts: $\pm 0.25\%$ VA: $\pm 0.38\%$

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. *Image of tested samples*

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