


T e s t R e p o r t

Report No : Cer1561-080518C
Client: : DW Windsor Ltd
Pindar Road
Hoddesdon
Herts
EN11 0DX
Description : Streetlight - LED module with 32 LEDs
Manufacturer : DW Windsor Ltd
Type/Model : Sephora 650 - 32LED
Test Specification : Measurement of power consumption in accordance with the
'Unmetered Supplies Operational Information Document' –
Version 17.0 (15/03/2017)
Date Testing Started : 10/04/2018
Conclusion : Refer to body of report
Date of Issue : 13/06/2018
Date of Expiry : 12/06/2023

Checked by: A. BOROVY
Position: Technical Lead –
Product Safety



Approved by: T. MALIK
Position: Operations Manager



INTRODUCTION

The products identified in Table 1 was tested at the premises of DW Windsor Ltd 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	Streetlight - LED module with 32 LEDs
Model No.	Sephora 650 - 32LED
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	105mm x 779mm x 690mm
Product Supply Requirement	240V AC @ 50Hz
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

Table 2. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 100% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	297.80	297.60	296.60	297.70	297.30
220	297.50	297.30	296.00	297.50	295.10
230	296.10	296.50	295.50	297.00	294.70
240	296.90	296.20	295.20	296.80	295.40
250	296.60	296.20	295.10	295.40	294.30
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	300.90	300.80	299.60	300.80	300.40
220	301.00	300.90	299.50	301.30	298.80
230	300.30	300.80	299.80	301.20	299.00
240	302.00	301.20	300.20	301.70	300.30
250	302.40	302.10	300.90	301.10	300.10
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.99	0.99	0.99	0.99	0.99
220	0.99	0.99	0.99	0.99	0.99
230	0.99	0.99	0.99	0.99	0.99
240	0.98	0.98	0.98	0.98	0.98
250	0.98	0.98	0.98	0.98	0.98
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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Table 3. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 90% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	264.10	264.50	264.60	264.20	262.80
220	264.30	264.50	264.30	264.10	262.50
230	263.90	264.10	263.70	263.90	262.50
240	263.70	263.80	263.60	263.40	262.10
250	262.40	263.60	263.50	263.20	261.80
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	267.40	267.80	267.80	267.40	266.10
220	268.10	268.40	268.20	268.00	266.40
230	268.50	268.70	268.20	268.40	266.80
240	269.10	269.10	268.90	268.90	267.40
250	268.70	269.90	269.70	269.40	267.90
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.99	0.99	0.99	0.99	0.99
220	0.99	0.99	0.99	0.99	0.99
230	0.98	0.98	0.98	0.98	0.98
240	0.98	0.98	0.98	0.98	0.98
250	0.98	0.98	0.98	0.98	0.98
Ambient Temperature During Test (°C)			24.8		
PF Leading/Lagging			Leading		

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Table 4. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 80% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	236.70	236.50	235.20	236.70	234.20
220	236.50	236.20	235.10	236.50	234.10
230	236.50	236.40	235.70	236.40	234.00
240	236.20	236.20	234.80	236.30	233.90
250	236.40	235.70	234.70	236.00	233.70
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	240.20	239.90	238.90	240.40	237.70
220	240.70	240.50	239.20	240.70	238.30
230	241.30	241.40	240.70	241.40	238.80
240	241.80	241.80	240.60	242.10	239.70
250	243.00	242.50	241.50	242.70	240.20
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.99	0.99	0.98	0.98	0.99
220	0.98	0.98	0.98	0.98	0.98
230	0.98	0.98	0.98	0.98	0.98
240	0.98	0.98	0.98	0.98	0.98
250	0.97	0.97	0.97	0.97	0.97
Ambient Temperature During Test (°C)			24.6		
PF Leading/Lagging			Leading		

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Table 5. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 70% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	203.50	204.00	203.70	203.50	202.70
220	203.20	203.40	203.30	203.20	202.40
230	203.10	203.50	203.20	203.10	202.30
240	202.40	203.00	203.30	203.50	203.00
250	203.10	203.50	203.30	203.20	202.30
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	207.50	207.90	207.50	207.50	206.70
220	207.80	207.90	207.80	207.80	206.90
230	208.60	209.00	208.50	208.60	207.60
240	208.80	209.50	209.70	209.50	209.50
250	210.50	211.00	210.80	210.50	209.80
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.98	0.98	0.98	0.98	0.98
220	0.98	0.98	0.98	0.98	0.98
230	0.97	0.97	0.97	0.97	0.97
240	0.97	0.97	0.97	0.97	0.97
250	0.96	0.96	0.96	0.97	0.96
Ambient Temperature During Test (°C)			24.1		
PF Leading/Lagging			Leading		

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Table 6. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 60% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	172.89	173.87	172.89	172.51	170.37
220	172.82	173.80	172.82	172.50	170.24
230	172.71	172.88	172.67	172.45	170.14
240	172.66	173.66	172.62	172.37	170.22
250	172.74	173.62	172.68	172.42	170.25
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	177.25	178.26	177.20	176.99	174.70
220	178.04	179.11	178.06	177.80	175.37
230	178.77	179.01	178.78	178.54	176.21
240	179.83	180.78	179.59	179.61	177.22
250	180.89	181.90	180.90	180.90	178.43
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.98	0.98	0.98	0.97	0.98
220	0.97	0.97	0.97	0.97	0.97
230	0.97	0.97	0.97	0.97	0.97
240	0.96	0.96	0.96	0.96	0.96
250	0.95	0.95	0.95	0.95	0.95
Ambient Temperature During Test (°C)			23.8		
PF Leading/Lagging			Leading		

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Table 7. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 50% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	144.49	144.94	144.67	144.78	144.74
220	144.45	144.88	144.60	144.75	144.70
230	144.61	144.69	144.54	144.77	144.64
240	144.43	144.88	144.76	144.71	144.60
250	144.43	144.95	144.57	144.71	144.70
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	149.55	149.98	149.56	149.96	149.76
220	150.36	150.81	150.36	150.78	150.58
230	151.23	151.69	151.44	151.71	151.45
240	152.30	152.77	152.76	152.78	152.30
250	153.66	154.18	153.67	153.94	153.69
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.97	0.97	0.97	0.97	0.97
220	0.96	0.96	0.96	0.96	0.96
230	0.96	0.95	0.95	0.95	0.96
240	0.95	0.95	0.95	0.95	0.95
250	0.94	0.94	0.94	0.94	0.94
Ambient Temperature During Test (°C)			24.0		
PF Leading/Lagging			Leading		

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Table 8. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 40% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	114.73	115.93	115.71	114.83	113.83
220	114.73	116.00	115.96	114.91	113.89
230	114.81	116.06	115.83	114.93	113.84
240	114.84	116.07	115.89	115.00	113.95
250	114.95	116.12	115.93	115.08	114.04
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	120.65	121.68	121.48	120.84	119.59
220	121.58	122.91	122.69	121.82	120.70
230	122.76	123.89	123.66	122.99	121.59
240	124.01	125.20	124.96	124.25	122.80
250	125.20	126.71	126.22	125.72	124.22
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.95	0.95	0.95	0.95	0.95
220	0.94	0.94	0.95	0.94	0.94
230	0.94	0.94	0.94	0.93	0.94
240	0.93	0.93	0.93	0.93	0.93
250	0.92	0.92	0.92	0.92	0.92
Ambient Temperature During Test (°C)			24.0		
PF Leading/Lagging			Leading		

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Table 9. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 30% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	88.65	88.59	88.47	88.95	89.04
220	88.72	88.70	88.53	89.04	89.08
230	88.81	88.80	88.62	89.13	89.22
240	89.13	88.95	88.77	88.97	89.27
250	89.04	89.05	88.89	89.38	89.48
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	95.48	95.48	95.28	95.90	95.70
220	96.53	96.77	96.31	97.22	96.75
230	97.94	97.94	97.72	98.40	98.17
240	99.33	99.56	99.10	99.57	99.56
250	100.98	100.99	100.73	101.48	100.99
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.93	0.93	0.93	0.93	0.93
220	0.92	0.92	0.92	0.92	0.92
230	0.91	0.91	0.91	0.91	0.91
240	0.90	0.89	0.90	0.89	0.90
250	0.88	0.88	0.88	0.88	0.89
Ambient Temperature During Test (°C)			24.0		
PF Leading/Lagging			Leading		

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Table 10. Wattage and VA results for Sephora 650 - 32LED

Operating Mode	800mA @ 20% light output				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	61.63	61.64	61.23	61.83	61.06
220	62.17	62.22	61.91	62.16	61.62
230	62.62	62.38	62.18	62.53	61.97
240	62.81	62.74	62.55	62.72	62.24
250	63.01	62.93	62.74	62.91	62.85
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	69.89	69.89	69.47	70.32	69.26
220	71.71	71.71	71.48	71.92	71.05
230	73.58	73.35	73.13	73.81	72.66
240	75.34	75.34	75.10	75.58	74.38
250	77.00	77.25	76.75	77.50	77.24
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.88	0.88	0.88	0.88	0.88
220	0.87	0.87	0.87	0.86	0.87
230	0.85	0.85	0.85	0.85	0.85
240	0.83	0.83	0.83	0.83	0.84
250	0.82	0.81	0.82	0.81	0.81
Ambient Temperature During Test (°C)			24.0		
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;

For power range 5W to 50W

True Power (W): $\pm 0.25\%$, Apparent Power (VA): $\pm 0.39\%$

For power range 50W to 100W

True Power (W): $\pm 0.25\%$, Apparent Power (VA): $\pm 0.39\%$

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

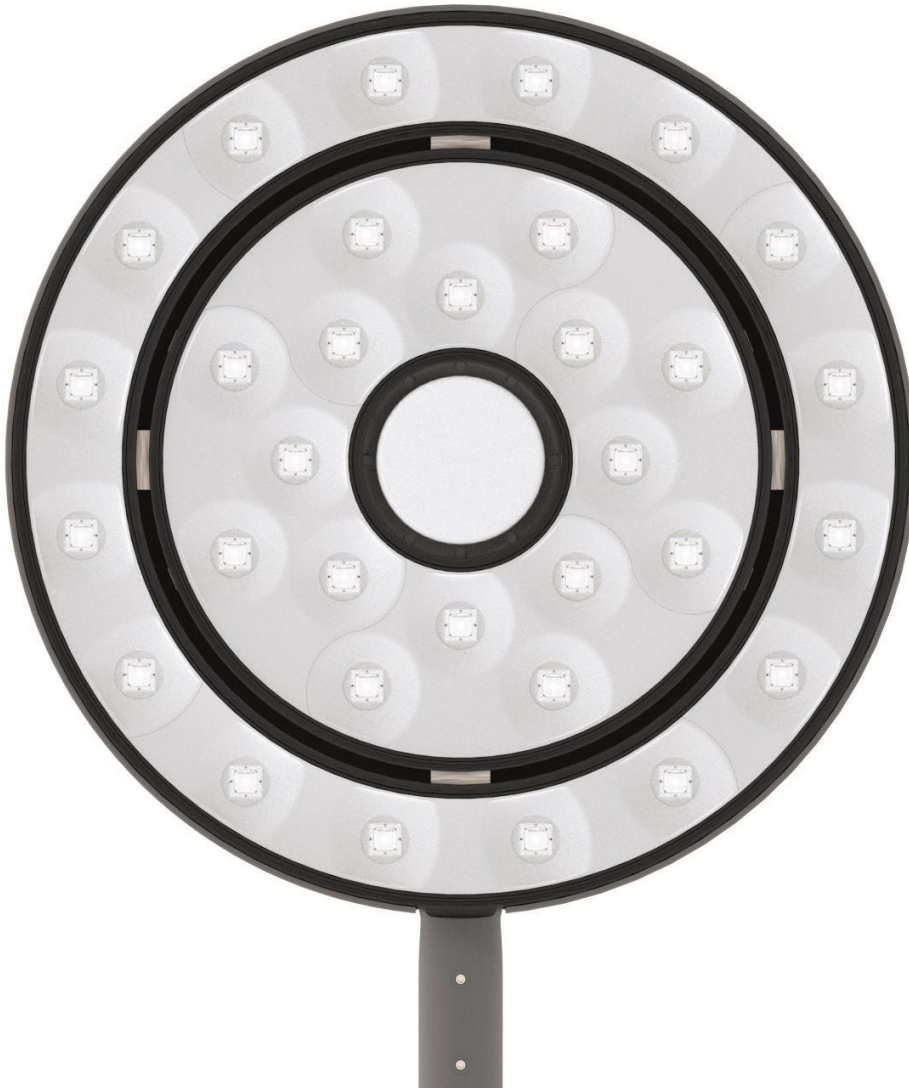


Figure 1. *Product image*

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