

T e s t R e p o r t

Report No : U10026

Client: : Venture Lighting Europe Limited
Unit 11
Willow Farm Business Park
Castle Donnington
DE74 2US

Description : LED Lighting Module 30W

Manufacturer : Not disclosed

Type/Model : V6A

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

Date Testing Started : 12/06/2018

Conclusion : Refer to body of report

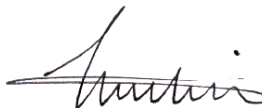
Date of Issue : 18/06/2018

Date of Expiry : 17/06/2023

Tested by: E. PERRY
Position: Technical Administrator
Apprentice



Approved by: T. MALIK
Position: Operations Manager



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INTRODUCTION

Venture Lighting Europe Limited 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	LED Lighting Module 30W
Model No.	V6A
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	H – 120mm; L – 90mm; W – 53mm
Product Supply Requirement	220-240V AC, 50/60Hz
Lamp Type and Power	LED, 30W
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 30W LED Lighting Module

Operating Mode	100% (10V)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	27.38	27.42	27.32	27.35	27.59
220	27.45	27.51	27.43	27.41	27.64
230	27.52	27.58	27.51	27.48	27.70
240	27.59	27.66	27.60	27.55	27.77
250	27.67	27.75	27.69	27.63	27.85
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	28.28	28.27	28.21	28.20	28.46
220	28.50	28.58	28.47	28.41	28.66
230	28.74	28.75	28.72	28.66	28.89
240	29.02	29.03	29.00	28.94	29.15
250	29.33	29.35	29.31	29.25	29.46
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	0.96	0.96	0.96	0.96
240	0.95	0.95	0.95	0.95	0.95
250	0.94	0.95	0.94	0.94	0.95
Ambient Temperature During Test (°C)			25.2		
PF Leading/Lagging			Leading		

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Table 3. Wattage and VA results for 30W LED Lighting Module

Operating Mode	73% (7.3V)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	22.43	21.84	21.92	22.28	21.81
220	22.52	21.91	21.99	22.34	21.89
230	22.58	22.00	22.06	22.42	21.97
240	22.67	22.09	22.14	22.50	22.06
250	22.76	22.18	22.23	22.59	22.15
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	23.39	22.79	22.88	23.20	22.77
220	23.66	23.05	23.13	23.45	23.03
230	23.92	23.35	23.39	23.74	23.31
240	24.23	23.66	23.69	24.05	23.61
250	24.55	24.00	24.01	24.38	23.95
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.96	0.96	0.96	0.96	0.96
220	0.95	0.95	0.95	0.95	0.95
230	0.94	0.94	0.94	0.94	0.94
240	0.94	0.93	0.93	0.94	0.93
250	0.93	0.92	0.93	0.93	0.92
Ambient Temperature During Test (°C)			25.7		
PF Leading/Lagging			Leading		

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Table 4. Wattage and VA results for 30W LED Lighting Module

Operating Mode	49% (5.9V)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	16.00	16.10	16.02	15.88	16.20
220	16.09	16.19	16.11	15.97	16.29
230	16.19	16.30	16.20	16.07	16.39
240	16.30	16.39	16.31	16.18	16.42
250	16.42	16.51	16.42	16.29	16.54
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	17.17	17.29	17.16	17.03	17.35
220	17.42	17.56	17.40	17.30	17.61
230	17.67	17.79	17.64	17.54	17.87
240	18.01	18.09	17.96	17.88	18.10
250	18.38	18.47	18.31	18.27	18.47
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	0.93	0.92	0.93
230	0.92	0.92	0.92	0.92	0.92
240	0.91	0.91	0.91	0.90	0.91
250	0.89	0.89	0.90	0.89	0.90
Ambient Temperature During Test (°C)			25.8		
PF Leading/Lagging			Leading		

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Table 5. Wattage and VA results for 30W LED Lighting Module

Operating Mode	22% (2.2V)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	10.80	10.59	10.27	10.87	10.38
220	10.91	10.71	10.39	10.99	10.57
230	11.04	10.84	10.52	11.12	10.63
240	11.17	10.98	10.66	11.25	10.77
250	11.32	11.11	10.80	11.39	10.91
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	12.21	12.06	11.69	12.31	11.84
220	12.58	12.45	12.07	12.70	12.23
230	13.00	12.87	12.48	13.12	12.65
240	13.46	13.34	12.93	13.59	13.10
250	14.15	13.85	13.56	14.07	13.71
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.88	0.88	0.88	0.88	0.88
220	0.87	0.86	0.86	0.87	0.86
230	0.85	0.84	0.84	0.85	0.84
240	0.83	0.82	0.82	0.83	0.82
250	0.80	0.80	0.80	0.81	0.80
Ambient Temperature During Test (°C)			25.8		
PF Leading/Lagging			Leading		

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Table 6. Wattage and VA results for 30W LED Lighting Module

Operating Mode	Minimum (0V)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	5.16	5.16	5.07	5.18	5.13
220	5.30	5.31	5.22	5.33	5.29
230	5.46	5.46	5.38	5.49	5.45
240	5.62	5.62	5.55	5.65	5.62
250	5.79	5.80	5.71	5.82	5.79
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	7.65	7.90	7.50	7.73	7.63
220	8.16	8.38	7.98	8.25	8.14
230	8.67	8.94	8.51	8.79	8.67
240	9.24	9.51	9.08	9.36	9.25
250	9.83	10.11	9.68	9.97	9.84
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.67	0.65	0.68	0.67	0.67
220	0.65	0.63	0.65	0.65	0.65
230	0.63	0.61	0.63	0.62	0.63
240	0.61	0.59	0.61	0.60	0.61
250	0.59	0.57	0.59	0.58	0.59
Ambient Temperature During Test (°C)			25.6		
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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