

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

**Report No** : MI612A  
**Client:** : Holophane Europe Ltd  
Bond Ave  
Bletchley  
Milton Keynes  
MK1 1JG  
**Description** : V-MAX Street lighting luminaire  
**Manufacturer** : Holophane Europe Ltd  
**Type/Model** : VMX.Lxx4.V2 (1A)  
**Test Specification** : Measurement of power consumption in accordance with the  
'Unmetered Supplies Operational Information Document' –  
Version 14.0 (17/12/2014)  
**Date Testing Started** : 06/07/2015  
**Conclusion** : Refer to body of report  
**Date of Issue** : 24/07/2015  
**Date of Expiry** : 23/07/2015

**Checked by:** J.ADAMS  
**Position:** Laboratory Supervisor



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



## **INTRODUCTION**

The products identified in table 1 were tested at the premises of Holophane Europe Ltd for measurement of power consumption in accordance with the “Unmetered Supplies Operational Information” document – Version 14.0 (17/12/2014).

## **PRODUCT DETAILS**

**Table 1. Test Sample Details**

Product Description	V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver
Model No.	VMX.Lxx4.V2 (1A)
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	L 540mm, W 340mm, H 80mm
Product Supply Requirement	230V AC 50Hz
Lamp Type and Power	LED – Variable power
Sampling Method: Random selection of units as supplied by customer.	

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

---

**Continued on following page**

## **RESULTS**

**Table 2. Wattage and VA results for V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver**

Operating Mode	1000mA Drive Current				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	103.97	103.27	102.85	106.16	105.98
220	103.65	102.88	102.50	105.76	105.59
230	103.53	102.72	102.37	105.57	105.42
240	103.47	102.61	102.30	105.43	105.29
250	103.38	102.47	102.21	105.29	105.15
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	104.40	103.68	103.29	106.57	106.40
220	104.17	103.40	103.04	106.25	106.12
230	104.20	103.38	103.05	106.22	106.08
240	104.28	103.42	103.13	106.23	105.29
250	104.38	103.47	103.23	106.30	106.18
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	1.00	1.00	1.00	1.00	1.00
220	1.00	0.99	0.99	1.00	1.00
230	0.99	0.99	0.99	0.99	0.99
240	0.99	0.99	0.99	0.99	1.00
250	0.99	0.99	0.99	0.99	0.99
Ambient Temperature During Test (°C)			24.2		
PF Leading/Lagging			Leading		

Continued on following page

**Table 3. Wattage and VA results for V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver**

Operating Mode	800mA Drive Current				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	82.95	82.26	82.07	84.54	84.40
220	82.89	82.16	82.02	84.45	84.32
230	82.75	81.99	81.88	84.31	84.19
240	82.68	81.89	81.81	84.14	84.01
250	82.53	81.70	81.64	83.94	83.82
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	83.54	82.84	82.68	85.11	84.98
220	83.62	82.90	82.77	85.18	85.06
230	83.64	82.90	82.79	85.21	85.11
240	83.79	83.01	82.94	85.24	85.13
250	83.86	83.04	82.99	85.31	85.20
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	0.99	0.99	0.99	0.99	0.99
250	0.98	0.98	0.98	0.98	0.98
Ambient Temperature During Test (°C)			24.3		
PF Leading/Lagging			Leading		

Continued on following page

**Table 4. Wattage and VA results for V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver**

Operating Mode	600mA Drive Current				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	62.44	61.91	61.62	63.69	63.50
220	62.47	61.91	61.79	63.58	63.39
230	62.36	61.74	61.75	63.49	63.32
240	62.39	61.74	61.80	63.47	63.29
250	62.40	61.71	61.83	63.44	63.26
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	63.30	62.78	62.51	64.54	64.36
220	63.54	62.98	62.87	64.66	64.48
230	63.68	63.07	63.09	64.82	64.67
240	63.96	63.32	63.38	65.06	64.90
250	64.33	63.66	63.78	65.41	65.26
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.99	0.99	0.99	0.99	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	0.97	0.97	0.98	0.98
250	0.97	0.97	0.97	0.97	0.97
Ambient Temperature During Test (°C)			24.3		
PF Leading/Lagging			Leading		

Continued on following page

**Table 5. Wattage and VA results for V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver**

Operating Mode	400mA Drive Current				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	42.57	42.13	42.27	43.28	43.15
220	42.62	42.15	42.32	43.31	43.18
230	42.69	42.17	42.38	43.33	43.20
240	42.76	42.20	42.46	43.35	43.22
250	42.82	42.22	42.51	43.37	43.24
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	43.97	43.54	43.67	44.70	44.59
220	44.32	43.86	44.02	45.05	44.94
230	44.73	44.23	44.43	45.41	45.31
240	45.31	44.76	45.00	45.90	45.79
250	45.81	45.23	45.51	46.42	46.33
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	0.95	0.95	0.95	0.95	0.95
240	0.94	0.94	0.94	0.94	0.94
250	0.93	0.93	0.93	0.93	0.93
Ambient Temperature During Test (°C)			23.7		
PF Leading/Lagging			Leading		

Continued on following page

**Table 6. Wattage and VA results for V-MAX Street lighting luminaire - V2 (32 LED) - 110W Philips Xitanium Driver**

Operating Mode	200mA Drive Current				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	23.19	22.85	23.07	23.42	23.33
220	23.31	22.92	23.18	23.50	23.40
230	23.42	22.99	23.30	23.57	23.47
240	23.55	23.08	23.43	23.65	23.54
250	23.68	23.17	23.56	23.74	23.64
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	25.82	25.50	25.69	26.12	26.06
220	26.42	26.07	26.30	26.71	26.65
230	27.09	26.68	26.96	27.32	27.26
240	27.84	27.41	27.72	28.05	27.99
250	28.66	28.20	28.53	28.86	28.82
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.90	0.90	0.90	0.90	0.90
220	0.88	0.88	0.88	0.88	0.88
230	0.86	0.86	0.86	0.86	0.86
240	0.85	0.84	0.85	0.84	0.84
250	0.83	0.82	0.83	0.82	0.82
Ambient Temperature During Test (°C)			24.1		
PF Leading/Lagging			Leading		

Continued on following page

### **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;

Power  $\pm 0.879\%$

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.

---

**Continued on following page**



**ILLUSTRATION**



**Figure 1. *Product image***

**End**