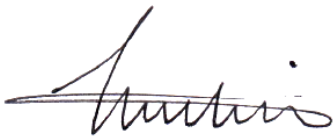
Test Report

Report No	:	L15428A
Client:	:	Holophane Europe Ltd Bond Ave Bletchley Milton Keynes MK1 1JG
Description	:	V-Max Streetlighting luminaire
Manufacturer	:	Holophane Europe Ltd
Type/Model	:	VMX.V1- 16LED LuxMZ 150W Philips F Can metal- 380 mA
Test Specification	:	Measurement of power consumption in accordance with the 'Unmetered Supplies Operational Information Document' – Version 14.0 (17/12/2014)
Date Testing Started	:	07/10/2015
Conclusion	:	Refer to body of report
Date of Issue	:	23/11/2015
Date of Expiry	:	22/11/2020

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



Approved by: **K.GOVINDEN**
Position: Technical & Operations Manager

Registered Office: Stafford Park 7, Telford, Shropshire, TF3 3BQ, United Kingdom
Tel: +44 (0) 1952 290907 **Fax:** +44 (0) 1952 290908 **Email:** lab@thelia.org.uk
Web: www.lialab.org.uk
Web: www.lialabcert.org.uk

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 with 1 LED module (16 LEDs) and 1×150W Philips Driver
Model No.	VMX.V1- 16LED LuxMZ 150W Philips F Can metal- 380 mA
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	L - 440mm, W - 340mm, H - 80mm
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.

Continued on following page

RESULTS

Table 2. ***Wattage and VA results for V-Max Street lighting Luminaire with 1 LED module (16 LEDs) and 1×150W Philips Driver***

Operating Mode	380mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	73.48	73.52	73.31	75.52	74.50
220	73.45	73.37	73.19	75.39	74.37
230	73.53	73.37	73.23	75.39	74.28
240	73.68	73.45	73.35	75.48	74.48
250	73.84	73.54	73.48	75.61	74.60
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	76.84	76.84	76.59	78.90	77.91
220	77.32	77.18	76.97	79.23	78.26
230	77.97	77.74	77.55	79.83	78.88
240	78.74	78.44	78.28	80.52	79.57
250	79.49	79.12	79.08	81.31	80.37
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	0.94	0.94	0.94	0.94
250	0.93	0.93	0.93	0.93	0.93
Ambient Temperature During Test (°C)	24.5				
PF Leading/Lagging	Leading				

Continued on following page

Table 3. *Wattage and VA results for V-Max Street lighting Luminaire with 1 LED module (16 LEDs) and 1×150W Philips Driver*

Operating Mode	304mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	59.78	59.67	59.48	61.41	60.43
220	60.00	59.87	59.72	61.65	60.65
230	60.21	60.05	59.93	61.81	60.82
240	60.45	60.24	60.18	62.02	61.04
250	60.71	60.46	60.45	62.24	61.26
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	63.42	63.26	63.04	65.05	64.12
220	64.22	64.04	63.84	65.94	65.00
230	64.92	64.70	64.54	66.58	65.66
240	65.87	65.60	65.48	67.52	66.61
250	66.81	66.48	66.40	68.40	67.50
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.94	0.94	0.94	0.94	0.94
220	0.93	0.93	0.94	0.93	0.93
230	0.93	0.93	0.93	0.93	0.93
240	0.92	0.92	0.92	0.92	0.92
250	0.91	0.91	0.91	0.91	0.91
Ambient Temperature During Test (°C)	24.6				
PF Leading/Lagging	Leading				

Continued on following page

Table 4. ***Wattage and VA results for V-Max Street lighting Luminaire with 1 LED module (16 LEDs) and 1×150W Philips Driver***

Operating Mode	228mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	45.15	45.15	44.99	46.52	45.59
220	45.37	45.36	45.24	46.74	45.81
230	45.65	45.60	45.52	46.97	46.04
240	45.90	45.83	45.80	47.23	46.30
250	46.25	46.12	46.15	47.50	46.58
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	49.30	49.25	49.05	50.70	49.84
220	50.05	49.98	49.82	51.46	50.61
230	50.98	50.87	50.75	52.26	51.42
240	51.77	51.64	51.55	53.18	52.38
250	54.57	53.09	53.84	54.23	53.41
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.92	0.92	0.92	0.92	0.91
220	0.91	0.91	0.91	0.91	0.91
230	0.90	0.90	0.90	0.90	0.90
240	0.89	0.89	0.89	0.89	0.88
250	0.85	0.87	0.86	0.88	0.87
Ambient Temperature During Test (°C)	24.7				
PF Leading/Lagging	Leading				

Continued on following page

Table 5. ***Wattage and VA results for V-Max Street lighting Luminaire with 1 LED module (16 LEDs) and 1×150W Philips Driver***

Operating Mode	152mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	31.53	31.56	31.51	32.68	31.76
220	31.79	31.78	31.77	32.88	31.97
230	32.07	32.03	32.07	33.09	32.19
240	32.33	32.25	32.32	33.38	32.48
250	32.60	32.55	32.61	33.65	32.76
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	36.30	36.28	36.18	37.51	36.70
220	37.24	37.18	37.12	38.35	37.56
230	39.13	39.02	38.82	39.16	38.41
240	39.15	39.02	39.02	40.36	39.58
250	40.48	40.18	40.38	41.45	40.76
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.87	0.87	0.87	0.87	0.87
220	0.85	0.85	0.86	0.86	0.85
230	0.82	0.82	0.83	0.84	0.84
240	0.83	0.83	0.83	0.83	0.82
250	0.81	0.81	0.81	0.81	0.80
Ambient Temperature During Test (°C)	24.3				
PF Leading/Lagging	Leading				

Continued on following page

Table 6. ***Wattage and VA results for V-Max Street lighting Luminaire with 1 LED module (16 LEDs) and 1×150W Philips Driver***

Operating Mode	76mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	17.72	17.81	17.76	18.54	17.71
220	17.85	17.91	17.92	18.61	17.79
230	17.92	17.95	18.19	18.64	17.83
240	18.11	17.98	18.19	18.65	17.84
250	18.13	17.98	18.21	18.67	17.85
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	24.73	24.52	24.85	24.70	25.06
220	27.78	27.68	27.81	27.90	27.84
230	30.27	30.23	30.40	30.52	30.35
240	32.49	32.36	32.49	33.44	33.23
250	35.28	35.18	35.27	35.62	35.40
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.72	0.73	0.71	0.75	0.71
220	0.64	0.65	0.64	0.67	0.64
230	0.59	0.59	0.60	0.61	0.59
240	0.56	0.56	0.56	0.56	0.54
250	0.51	0.51	0.52	0.52	0.50
Ambient Temperature During Test (°C)	24.2				
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 ±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***

Figure 2. ***Internal configuration***

End