Test Report

Report No	:	MI612B
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.V1 (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	:	08/07/2015
Conclusion	:	Refer to body of report
Date of Issue	:	24/07/2015
Date of Expiry	:	23/07/2015

Checked by: **J.ADAMS**
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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 - V1 (16 LED) - 70W Philips Xitanium Driver
Model No.	VMX.Lxx4.V1 (1A)
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	L 440mm, 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.

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RESULTS

Table 2. ***Wattage and VA results for V-MAX Street lighting luminaire - V1 (16 LED) - 70W Philips Xitanium Driver***

Operating Mode	1000mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	55.39	54.72	55.50	56.34	56.41
220	55.40	54.68	55.51	56.30	56.37
230	55.41	54.66	55.53	56.28	56.33
240	55.45	54.65	55.57	56.26	56.31
250	55.50	54.64	55.62	56.26	56.32
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	56.19	55.56	56.32	57.15	57.24
220	56.42	55.76	56.55	57.33	57.43
230	56.68	55.99	56.81	57.54	57.63
240	56.99	56.26	57.11	57.82	57.92
250	57.39	56.62	57.51	58.15	58.25
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.99	0.98	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	0.97	0.97	0.97	0.97	0.97
250	0.97	0.97	0.97	0.97	0.97
Ambient Temperature During Test (°C)	23.8				
PF Leading/Lagging	Leading				

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Table 3. ***Wattage and VA results for V-MAX Street lighting luminaire - V1 (16 LED) - 70W Philips Xitanium Driver***

Operating Mode	800mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	44.38	43.79	44.42	45.02	45.11
220	44.42	43.79	44.47	45.02	45.10
230	44.45	43.80	44.51	45.03	45.12
240	44.50	43.80	44.55	45.03	45.12
250	44.55	43.79	44.60	45.02	45.12
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	45.49	44.96	45.55	46.14	46.26
220	45.82	45.25	45.87	46.42	46.54
230	46.15	45.57	46.21	46.75	46.87
240	46.54	45.93	46.60	47.07	47.19
250	47.06	46.41	47.11	47.49	47.62
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.98	0.97	0.98	0.98	0.97
220	0.97	0.97	0.97	0.97	0.97
230	0.96	0.96	0.96	0.96	0.96
240	0.96	0.95	0.96	0.96	0.96
250	0.95	0.94	0.95	0.95	0.95
Ambient Temperature During Test (°C)	24.3				
PF Leading/Lagging	Leading				

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Table 4. ***Wattage and VA results for V-MAX Street lighting luminaire - V1 (16 LED) - 70W Philips Xitanium Driver***

Operating Mode	600mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	33.81	33.30	33.86	34.20	34.29
220	33.86	33.32	33.91	34.21	34.30
230	33.92	33.33	33.97	34.23	34.32
240	33.97	33.34	34.02	34.24	34.34
250	33.99	33.31	34.04	34.20	34.30
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	35.39	34.95	35.40	34.78	35.89
220	35.79	35.32	35.84	36.15	36.28
230	36.31	35.81	36.34	36.59	36.71
240	36.37	36.25	36.80	37.04	37.17
250	37.29	36.75	37.32	37.47	37.60
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.96	0.95	0.96	0.98	0.96
220	0.95	0.94	0.95	0.95	0.95
230	0.93	0.93	0.93	0.94	0.94
240	0.93	0.92	0.92	0.92	0.92
250	0.91	0.91	0.91	0.91	0.91
Ambient Temperature During Test (°C)	24.2				
PF Leading/Lagging	Leading				

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Table 5. ***Wattage and VA results for V-MAX Street lighting luminaire - V1 (16 LED) - 70W Philips Xitanium Driver***

Operating Mode	400mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	23.53	23.07	23.55	23.66	23.76
220	23.67	23.17	23.69	23.76	23.86
230	23.76	23.23	23.79	23.81	23.92
240	23.85	23.28	23.88	23.87	23.98
250	23.95	23.33	23.98	23.91	24.10
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	25.86	25.49	25.86	25.99	26.12
220	26.44	26.04	26.44	26.53	26.66
230	27.10	26.68	27.08	27.22	27.34
240	27.78	27.34	27.76	27.85	27.98
250	28.60	28.16	28.59	28.48	28.61
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.91	0.90	0.91	0.91	0.91
220	0.90	0.89	0.90	0.90	0.89
230	0.88	0.87	0.88	0.87	0.87
240	0.86	0.85	0.86	0.86	0.86
250	0.84	0.83	0.84	0.84	0.84
Ambient Temperature During Test (°C)	24.2				
PF Leading/Lagging	Leading				

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Table 6. ***Wattage and VA results for V-MAX Street lighting luminaire - V1 (16 LED) - 70W Philips Xitanium Driver***

Operating Mode	200mA Drive Current				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	13.72	13.28	13.73	13.65	13.69
220	13.82	13.35	13.83	13.73	13.77
230	13.93	13.42	13.94	13.80	13.85
240	14.07	13.51	14.08	13.90	13.94
250	14.20	13.59	14.21	13.96	14.01
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	17.84	17.22	17.47	17.37	17.42
220	18.12	17.82	18.07	18.08	18.13
230	18.86	18.55	18.82	18.83	18.88
240	19.76	19.43	19.88	19.75	20.01
250	20.65	20.31	20.57	20.42	20.46
Power Factor					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	0.77	0.77	0.79	0.79	0.79
220	0.76	0.75	0.77	0.76	0.76
230	0.74	0.72	0.74	0.73	0.73
240	0.71	0.70	0.71	0.70	0.70
250	0.69	0.67	0.69	0.68	0.68
Ambient Temperature During Test (°C)	23.8				
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;

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.

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ILLUSTRATION

Figure 1. ***Product image***

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