



T e s t R e p o r t

Report No : L14807
Client: : Nexus industries Ltd
Stafford Park 1
Telford, Shropshire, TF3 3BD
Description : Atlas LED Bulkhead and Commercial LED Bulkhead
Manufacturer : Not Disclosed
Type/Model : LBH154K3M - Atlas
LBH154KMW3M - Commercial
LBH154KMW-10 - Atlas
Test Specification : Measurement of power consumption in accordance with the
'Unmetered Supplies Operational Information Document' –
Version 14.0 (17/12/2014)
Date Testing Started : 10/02/15
Conclusion : Refer to body of Report
Date of Issue : 12/02/15
Date of Expiry : 11/02/20

Tested by: J.ADAMS
Position: Laboratory Supervisor

Approved by: K.GOVINDEN
Position: Technical Manager



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These test results relate only to the unit(s) tested. This Report and any subsequent report(s) may not be reproduced except in full without the written approval of the Testing Laboratory.



INTRODUCTION

Nexus industries Ltd has supplied the product identified in table 1 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	Atlas LED Bulkhead
Model No.	LBH154KMW - 10
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	310mm Diameter x 90mm Height
Product Supply Requirement	240V 50Hz
Lamp Type and Power	LED 18W
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.



RESULTS

Table 2. *Wattage and VA results for Atlas LED Bulkhead - LBH154KMW - 10*

Operating Mode	100%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	16.21	16.83	15.93	16.18	16.00
220	16.39	16.95	16.10	16.36	16.18
230	16.61	17.09	16.32	16.58	16.42
240	16.84	17.32	16.52	16.79	16.62
250	17.05	17.50	16.72	16.99	16.82
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	18.48	19.03	18.14	18.43	18.34
220	18.88	19.22	18.54	18.80	18.67
230	18.95	19.23	18.60	18.86	18.73
240	19.33	19.61	18.97	19.26	19.09
250	19.71	19.94	19.30	19.61	19.46
Power Factor					
Voltage	Sample Number				
	1	1	1	1	1
210	0.88	0.88	0.88	0.88	0.87
220	0.87	0.88	0.87	0.87	0.87
230	0.88	0.89	0.88	0.88	0.88
240	0.87	0.88	0.87	0.87	0.87
250	0.87	0.88	0.87	0.87	0.86
Ambient Temperature During Test (°C)	22				
PF Leading/Lagging	Leading				

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RESULTS

Table 3. *Wattage and VA results for Atlas LED Bulkhead - LBH154KMW - 10*

Operating Mode	10%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	2.21	2.29	2.21	2.22	2.19
220	2.28	2.44	2.32	2.29	2.26
230	2.34	2.44	2.32	2.35	2.31
240	2.39	2.51	2.38	2.39	2.39
250	2.44	2.58	2.43	2.48	2.45
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	9.88	10.08	9.91	10.11	9.89
220	10.69	10.93	10.74	10.91	10.72
230	11.52	11.79	11.59	11.84	11.51
240	10.29	12.67	12.48	12.87	12.47
250	13.33	13.59	13.40	13.58	13.38
Power Factor					
Voltage	Sample Number				
	1	1	1	1	1
210	0.22	0.23	0.22	0.22	0.22
220	0.21	0.22	0.22	0.21	0.21
230	0.20	0.21	0.20	0.20	0.20
240	0.23	0.20	0.19	0.19	0.19
250	0.18	0.19	0.18	0.18	0.18
Ambient Temperature During Test (°C)	24				
PF Leading/Lagging	Leading				

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PRODUCT DETAILS

Table 4. Test Sample Details

Product Description	Commercial LED Bulkhead
Model No.	LBH154KMW3M
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	310mm diameter x 90mm height
Product Supply Requirement	240V 50Hz
Lamp Type and Power	LED 15W
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 5. Wattage and VA results for Commercial LED Bulkhead - LBH154KMW3M

Operating Mode	100%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	17.63	17.89	17.80	17.60	17.81
220	18.10	18.21	18.02	17.80	18.00
230	18.41	18.54	18.31	18.18	18.26
240	18.72	18.86	18.59	18.46	18.59
250	19.03	19.16	18.89	18.72	18.90
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	22.67	23.15	22.92	22.57	22.70
220	23.48	23.94	23.59	23.39	23.50
230	24.25	24.76	24.36	24.27	24.31
240	25.13	25.70	25.23	25.10	25.18
250	26.01	26.64	26.13	25.98	26.06
Power Factor					
Voltage	Sample Number				
	1	1	1	1	1
210	0.78	0.77	0.78	0.78	0.78
220	0.77	0.76	0.76	0.76	0.77
230	0.76	0.75	0.75	0.75	0.75
240	0.75	0.73	0.74	0.74	0.74
250	0.73	0.72	0.72	0.72	0.73
Ambient Temperature During Test (°C)	24.1				
PF Leading/Lagging	Leading				

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RESULTS

Table 6. *Wattage and VA results for Commercial LED Bulkhead - LBH154KMW3M*

Operating Mode	10%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	3.81	4.04	4.08	3.88	3.88
220	3.86	4.13	4.15	3.95	3.95
230	3.93	4.21	4.21	4.04	4.03
240	4.00	4.26	4.26	4.13	4.11
250	4.08	4.37	4.35	4.32	4.19
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	10.71	11.39	11.14	10.76	10.83
220	11.48	12.24	11.95	11.49	11.58
230	12.29	13.12	12.73	12.28	12.38
240	13.16	14.06	13.61	13.20	13.28
250	14.06	15.05	14.54	14.19	14.19
Power Factor					
Voltage	Sample Number				
	1	1	1	1	1
210	0.36	0.35	0.37	0.36	0.36
220	0.34	0.34	0.35	0.34	0.34
230	0.32	0.32	0.33	0.33	0.33
240	0.30	0.30	0.31	0.31	0.31
250	0.29	0.29	0.30	0.30	0.30
Ambient Temperature During Test (°C)	25.0				
PF Leading/Lagging	Leading				

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PRODUCT DETAILS

Table 7. Test Sample Details

Product Description	Atlas Led Bulkhead
Model No.	LBH154K3M
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	310mm Diameter x 90mm Height
Product Supply Requirement	240V 50Hz
Lamp Type and Power	LED 18W
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 8. *Wattage and VA results for Atlas Led Bulkhead - LBH154K3M*

Operating Mode	100%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	16.51	15.79	16.36	16.57	16.27
220	16.48	15.75	16.33	16.54	16.23
230	16.40	15.57	16.21	16.52	16.22
240	16.41	15.56	16.20	16.50	16.26
250	16.45	15.59	16.24	16.52	16.26
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	17.06	16.39	16.92	17.12	16.81
220	17.12	16.44	16.97	17.18	16.87
230	17.14	16.38	16.97	17.27	16.96
240	17.26	16.49	17.07	17.36	17.11
250	17.41	16.63	17.23	17.49	17.21
Power Factor					
Voltage	Sample Number				
	1	1	1	1	1
210	0.97	0.96	0.97	0.97	0.97
220	0.96	0.96	0.96	0.96	0.96
230	0.96	0.95	0.96	0.96	0.96
240	0.95	0.94	0.95	0.95	0.95
250	0.94	0.94	0.94	0.94	0.94
Ambient Temperature During Test (°C)	20				
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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ILLUSTRATIONS



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ILLUSTRATIONS



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