

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

**Report No** : L16591B Amd 1

**Client:** : Ark Lighting Ltd  
McGann House  
Chesham Rd  
Barnsley  
South Yorkshire  
S70 2NT

**Description** : Tekk Street Luminaire 24 LED

**Manufacturer** : Not disclosed

**Type/Model** : LE24R

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

**Date Testing Started** : 12/07/2017

**Conclusion** : Refer to body of report

**Date of Issue** : 10/11/2017

**Date of Expiry** : 24/08/2022

**Tested by:** T. MALIK  
**Position:** Operations Manager



**Approved by:** J. ADAMS  
**Position:** Accreditation and  
Certification Officer



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Note: This Amendment 1 includes the addition of Tables 5 and 6.

## **INTRODUCTION**

Ark Lighting Ltd 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	Tekk Street Luminaire 24 LED
Model No.	LE24R
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	L645mm x W330mm x H122mm
Product Supply Requirement	220-240V, 50/60Hz
Lamp Type and Power	LED, Various
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 LE24R programmed at 500mA drive current**

Operating Mode	100%, (Dali Code: 254)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	38.25	38.26	38.19	38.35	39.07
220	38.24	38.26	38.18	38.06	39.06
230	38.25	38.26	38.16	39.08	39.07
240	38.23	38.24	38.16	38.24	39.07
250	38.23	38.25	38.16	38.12	39.06
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	39.50	39.49	39.41	39.59	41.81
220	39.67	39.67	39.57	39.48	42.26
230	39.88	39.88	39.75	39.68	42.76
240	40.08	40.08	39.97	40.06	43.30
250	40.32	40.33	40.21	40.18	43.88
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.97	0.97	0.97	0.97	0.93
220	0.96	0.96	0.96	0.96	0.92
230	0.96	0.96	0.96	0.98	0.91
240	0.95	0.95	0.95	0.95	0.90
250	0.95	0.95	0.95	0.95	0.89
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 3. Wattage and VA results for LE24R programmed at 500mA drive current**

Operating Mode	75%, (Dali Code: 244)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	29.00	29.98	28.81	29.67	29.11
220	28.96	28.94	28.84	29.66	29.10
230	28.99	28.97	28.87	29.65	29.09
240	29.01	28.99	28.89	29.69	29.12
250	29.03	29.01	28.91	29.71	29.14
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	30.52	30.47	30.32	32.96	30.54
220	30.73	30.66	30.50	33.46	30.73
230	31.00	30.93	30.75	34.01	30.95
240	31.19	31.15	31.02	34.62	31.22
250	31.48	31.44	31.30	35.28	31.51
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.95	0.98	0.95	0.90	0.95
220	0.94	0.94	0.95	0.89	0.95
230	0.94	0.94	0.94	0.87	0.94
240	0.93	0.93	0.93	0.86	0.93
250	0.92	0.92	0.92	0.84	0.92
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 4. Wattage and VA results for LE24R programmed at 500mA drive current**

Operating Mode	50%, (ALO: 50%)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	20.18	20.09	19.97	20.10	20.58
220	20.24	20.06	20.02	19.96	20.65
230	20.29	20.11	20.07	20.06	20.71
240	20.33	20.16	20.12	20.21	20.77
250	20.38	20.21	20.17	20.19	20.70
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	22.03	21.85	21.79	21.91	24.75
220	22.35	22.17	22.10	22.06	25.42
230	22.69	22.51	22.43	22.39	26.24
240	23.03	22.85	22.78	22.84	27.40
250	23.45	23.27	23.20	23.17	28.78
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.92	0.92	0.92	0.92	0.83
220	0.91	0.90	0.91	0.90	0.81
230	0.89	0.89	0.89	0.90	0.79
240	0.88	0.88	0.88	0.88	0.76
250	0.87	0.87	0.87	0.87	0.72
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 5. Wattage and VA results for LE24R programmed at 500mA drive current**

Operating Mode	25%, (ALO: 25%)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	11.23	11.18	11.18	11.21	11.69
220	11.30	11.25	11.25	11.18	11.60
230	11.28	11.24	11.19	11.16	11.53
240	11.22	11.18	11.15	11.08	11.45
250	11.16	11.12	11.08	11.20	11.39
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	13.87	13.79	13.79	13.76	18.02
220	14.49	14.38	14.45	14.25	19.19
230	15.37	15.27	15.26	15.11	20.35
240	16.25	16.10	16.10	16.08	21.52
250	17.07	16.92	16.90	17.26	22.54
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.81	0.81	0.81	0.81	0.65
220	0.78	0.78	0.78	0.78	0.60
230	0.73	0.74	0.73	0.74	0.57
240	0.69	0.69	0.69	0.69	0.53
250	0.65	0.66	0.66	0.65	0.51
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 6. Wattage and VA results for LE24R programmed at 500mA drive current**

Operating Mode	Minimum, (ALO: 10%)				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	7.22	7.14	7.18	7.20	7.57
220	7.10	7.18	7.14	7.16	7.51
230	7.07	7.14	7.10	7.12	7.47
240	7.03	7.11	7.06	7.08	7.42
250	7.02	7.09	7.03	7.05	7.37
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	11.13	11.13	11.13	11.07	15.70
220	11.96	11.93	11.85	11.84	16.66
230	12.45	12.42	12.37	12.32	17.68
240	13.06	13.03	13.50	12.92	18.92
250	13.73	13.68	13.67	13.56	20.26
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.65	0.64	0.65	0.65	0.48
220	0.59	0.60	0.60	0.60	0.45
230	0.57	0.57	0.57	0.58	0.42
240	0.54	0.55	0.52	0.55	0.39
250	0.51	0.52	0.51	0.52	0.36
Ambient Temperature During Test (°C)			23.0		
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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**End**