

# TEST REPORT

## SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S30
4. **Serial/Batch No. of Sample:** ---
5. **Manufacturer Date:** ----
6. **Manufacturer:** OrangeTek Limited
7. **Manufacturer Address:** Coach House, Blakenhall Park, Bar Lane, Barton under Needwood,  
Burton upon Trent DE138AJ
8. **Sample Quantity:** 5 units ARIALED S30



## CLIENT INFORMATION

1. **Applicant:** OrangeTek Limited
2. **Applicant Address:** Coach House Blakenhall Park, Bar Lane, Barton under  
Needwood, Burton upon Trent DE13 8AJ
3. **Applicant Post Code:** ---
4. **Applicant Telephone:** ---+44 (0)128 371 6690

## TEST INFORMATION:

1. **Applicant No:**
2. **Sampling Method:** Delivered by Applicant
3. **Date of Receipt:** 2015-03-24
4. **Issued Date:** 2015-03-25
5. **Test Item:** Input characteristic
6. **Ref. Documents for the Test:** Specified by client.

## CONCLUSION:

### REMARKS:

1. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.
2. Characterization & Condition of Sample: Normal.
3. Ambient Condition During Testing: 25 ± 2 C, 50-60% RH.

Sample 1 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	69.30	0.3377	0.977
220	50	69.20	0.3229	0.973
230	50	69.02	0.3094	0.970
240	50	69.00	0.2976	0.965
250	50	68.95	0.2870	0.961

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	69.34	0.3379	0.977
220	50	69.24	0.3231	0.973
230	50	69.06	0.3096	0.970
240	50	69.04	0.2978	0.965
250	50	68.99	0.2872	0.961

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	69.26	0.3375	0.977
220	50	69.16	0.3227	0.973
230	50	68.98	0.3092	0.970
240	50	68.96	0.2974	0.965
250	50	68.91	0.2868	0.961

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	69.38	0.3381	0.977
220	50	69.28	0.3233	0.973
230	50	69.10	0.3098	0.970
240	50	69.08	0.2980	0.965
250	50	69.03	0.2873	0.961

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	69.22	0.3373	0.977
220	50	69.12	0.3225	0.973
230	50	68.94	0.3090	0.970
240	50	68.92	0.2972	0.965
250	50	68.87	0.2867	0.961

**Watts**      100% light output

Voltage\Sample	1	2	3	4	5
210	69.30	69.34	69.26	69.38	69.22
220	69.20	69.24	69.16	69.28	69.12
230	69.02	69.06	68.98	69.10	68.94
240	69.00	69.04	68.96	69.08	68.92
250	68.95	68.99	68.91	69.03	68.87

**VA**      100% light output

Voltage\Sample	1	2	3	4	5
210	70.917	70.960	70.874	71.002	70.832
220	71.038	71.081	70.995	71.123	70.953
230	71.162	71.205	71.119	71.247	71.077
240	71.424	71.467	71.381	71.510	71.338
250	71.750	71.793	71.707	71.836	71.664

**Notes:**

1. Test be conducted after operating for 12 hours to reach their steady load state.
2. The measurement uncertainties are for a confidence probability of not less than 98%.
3. The measurement uncertainties of the below value (k=2), Urel(v)=0.1% , Urel(w)=0.1% , Urel(i)=0.2% , Urel(f)=0.05% , Urel(PF)=0.5

Sample 1 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	49.14	0.2433	0.961
220	50	49.20	0.2331	0.955
230	50	48.60	0.2230	0.948
240	50	49.40	0.2174	0.942
250	50	48.88	0.2089	0.934

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	49.17	0.2434	0.961
220	50	49.23	0.2332	0.955
230	50	48.63	0.2231	0.948
240	50	49.43	0.2175	0.942
250	50	48.91	0.2090	0.934

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	49.11	0.2432	0.961
220	50	49.17	0.2330	0.955
230	50	48.57	0.2229	0.948
240	50	49.37	0.2173	0.942
250	50	48.85	0.2088	0.934

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	49.20	0.2436	0.961
220	50	49.26	0.2334	0.955
230	50	48.66	0.2233	0.948
240	50	49.46	0.2177	0.942
250	50	48.94	0.2092	0.934

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	49.08	0.2430	0.961
220	50	49.14	0.2328	0.955
230	50	48.54	0.2227	0.948
240	50	49.34	0.2171	0.942
250	50	48.82	0.2086	0.934

**Watts**      70% light output

Voltage\Sample	1	2	3	4	5
210	49.14	49.17	49.11	49.20	49.08
220	49.20	49.23	49.17	49.26	49.14
230	48.60	48.63	48.57	48.66	48.54
240	49.40	49.43	49.37	49.46	49.34
250	48.88	48.91	48.85	48.94	48.82

**VA**      70% light output

Voltage\Sample	1	2	3	4	5
210	51.093	51.124	51.062	51.154	51.032
220	51.282	51.313	51.251	51.344	51.220
230	51.290	51.321	51.259	51.352	51.228
240	52.176	52.207	52.145	52.239	52.113
250	52.225	52.256	52.194	52.288	52.162

**Notes:**

4. Test be conducted after operating for 12 hours to reach their steady load state.
5. The measurement uncertainties are for a confidence probability of not less than 98%.
6. The measurement uncertainties of the below value (k=2), Urel(v)=0.1% , Urel(w)=0.1% , Urel(i)=0.2% , Urel(f)=0.05% , Urel(PF)=0.5

Sample 1 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	35.74	0.1816	0.936
220	50	35.72	0.1750	0.927
230	50	35.74	0.1692	0.917
240	50	35.96	0.1649	0.908
250	50	35.98	0.1606	0.896

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	35.76	0.1817	0.936
220	50	35.74	0.1751	0.927
230	50	35.76	0.1693	0.917
240	50	35.98	0.1650	0.908
250	50	36.00	0.1607	0.896

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	35.72	0.1815	0.936
220	50	35.70	0.1749	0.927
230	50	35.72	0.1691	0.917
240	50	35.94	0.1648	0.908
250	50	35.96	0.1605	0.896

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	35.78	0.1818	0.936
220	50	35.76	0.1752	0.927
230	50	35.78	0.1694	0.917
240	50	36.00	0.1651	0.908
250	50	36.02	0.1608	0.896

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	35.70	0.1814	0.936
220	50	35.68	0.1748	0.927
230	50	35.70	0.1690	0.917
240	50	35.92	0.1647	0.908
250	50	35.94	0.1604	0.896

**Watts**      50% light output

Voltage\Sample	1	2	3	4	5
210	35.74	35.76	35.72	35.78	35.70
220	35.72	35.74	35.70	35.76	35.68
230	35.74	35.76	35.72	35.78	35.70
240	35.96	35.98	35.94	36.00	35.92
250	35.98	36.00	35.96	36.02	35.94

**VA**      50% light output

Voltage\Sample	1	2	3	4	5
210	38.136	38.159	38.113	38.182	38.090
220	38.500	38.523	38.477	38.546	38.454
230	38.916	38.939	38.893	38.963	38.869
240	39.576	39.600	39.552	39.623	39.529
250	40.150	40.174	40.126	40.198	40.102

**Notes:**

7. Test be conducted after operating for 12 hours to reach their steady load state.
8. The measurement uncertainties are for a confidence probability of not less than 98%.
9. The measurement uncertainties of the below value (k=2), Urel(v)=0.1% , Urel(w)=0.1% , Urel(i)=0.2% , Urel(f)=0.05% , Urel(PF)=0.5

## Photograph of Sample

Photo 1 View of EUT



Photo 2 View of EUT

