

# 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:** 2015-04-23
4. **Issued Date:** 2015-04-27
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	67.30	0.3264	0.981
220	50	67.30	0.3124	0.978
230	50	67.40	0.2997	0.975
240	50	67.40	0.2881	0.972
250	50	67.40	0.2776	0.968

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	67.34	0.3266	0.981
220	50	67.34	0.3126	0.978
230	50	67.44	0.2999	0.975
240	50	67.44	0.2883	0.972
250	50	67.44	0.2778	0.968

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	67.26	0.3262	0.981
220	50	67.26	0.3122	0.978
230	50	67.36	0.2995	0.975
240	50	67.36	0.2879	0.972
250	50	67.36	0.2774	0.968

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	67.38	0.3268	0.981
220	50	67.38	0.3128	0.978
230	50	67.48	0.3001	0.975
240	50	67.48	0.2884	0.972
250	50	67.48	0.2779	0.968

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	67.22	0.3260	0.981
220	50	67.22	0.3120	0.978
230	50	67.32	0.2993	0.975
240	50	67.32	0.2878	0.972
250	50	67.32	0.2773	0.968

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	67.30	67.34	67.26	67.38	67.22
220	67.30	67.34	67.26	67.38	67.22
230	67.40	67.44	67.36	67.48	67.32
240	67.40	67.44	67.36	67.48	67.32
250	67.40	67.44	67.36	67.48	67.32

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	68.544	68.585	68.503	68.626	68.462
220	68.728	68.769	68.687	68.810	68.646
230	68.931	68.972	68.890	69.014	68.848
240	69.144	69.185	69.103	69.227	69.061
250	69.400	69.442	69.358	69.483	69.317

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	46.20	0.2273	0.966
220	50	46.30	0.2183	0.961
230	50	46.30	0.2102	0.956
240	50	46.40	0.2028	0.950
250	50	46.40	0.1962	0.943

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.23	0.2274	0.966
220	50	46.33	0.2184	0.961
230	50	46.33	0.2103	0.956
240	50	46.43	0.2029	0.950
250	50	46.43	0.1963	0.943

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.17	0.2272	0.966
220	50	46.27	0.2182	0.961
230	50	46.27	0.2101	0.956
240	50	46.37	0.2027	0.950
250	50	46.37	0.1961	0.943

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.26	0.2276	0.966
220	50	46.36	0.2186	0.961
230	50	46.36	0.2105	0.956
240	50	46.46	0.2030	0.950
250	50	46.46	0.1964	0.943

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.14	0.2270	0.966
220	50	46.24	0.2180	0.961
230	50	46.24	0.2099	0.956
240	50	46.34	0.2026	0.950
250	50	46.34	0.1960	0.943

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	46.20	46.23	46.17	46.26	46.14
220	46.30	46.33	46.27	46.36	46.24
230	46.30	46.33	46.27	46.36	46.24
240	46.40	46.43	46.37	46.46	46.34
250	46.40	46.43	46.37	46.46	46.34

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	47.733	47.762	47.704	47.790	47.676
220	48.026	48.055	47.997	48.084	47.968
230	48.346	48.375	48.317	48.404	48.288
240	48.672	48.701	48.643	48.730	48.614
250	49.050	49.079	49.021	49.109	48.991

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	33.46	0.1684	0.943
220	50	33.51	0.1623	0.935
230	50	33.58	0.1570	0.927
240	50	33.61	0.1521	0.917
250	50	33.64	0.1479	0.907

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.48	0.1685	0.943
220	50	33.53	0.1624	0.935
230	50	33.60	0.1571	0.927
240	50	33.63	0.1522	0.917
250	50	33.66	0.1480	0.907

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.44	0.1683	0.943
220	50	33.49	0.1622	0.935
230	50	33.56	0.1569	0.927
240	50	33.59	0.1520	0.917
250	50	33.62	0.1478	0.907

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.50	0.1686	0.943
220	50	33.55	0.1625	0.935
230	50	33.62	0.1572	0.927
240	50	33.65	0.1523	0.917
250	50	33.68	0.1481	0.907

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.42	0.1682	0.943
220	50	33.47	0.1621	0.935
230	50	33.54	0.1568	0.927
240	50	33.57	0.1519	0.917
250	50	33.60	0.1477	0.907

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	33.46	33.48	33.44	33.50	33.42
220	33.51	33.53	33.49	33.55	33.47
230	33.58	33.60	33.56	33.62	33.54
240	33.61	33.63	33.59	33.65	33.57
250	33.64	33.66	33.62	33.68	33.60

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	35.364	35.385	35.343	35.406	35.322
220	35.706	35.727	35.685	35.749	35.663
230	36.110	36.132	36.088	36.153	36.067
240	36.504	36.526	36.482	36.548	36.460
250	36.975	36.997	36.953	37.019	36.931

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

