

# TEST REPORT

## SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S10
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 S10



## 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:** 2015-04-24
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	24.46	0.1233	0.941
220	50	24.52	0.1191	0.933
230	50	24.59	0.1154	0.923
240	50	24.66	0.1121	0.914
250	50	24.74	0.1091	0.904

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.47	0.1234	0.941
220	50	24.53	0.1192	0.933
230	50	24.60	0.1155	0.923
240	50	24.67	0.1122	0.914
250	50	24.75	0.1092	0.904

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.45	0.1232	0.941
220	50	24.51	0.1190	0.933
230	50	24.58	0.1153	0.923
240	50	24.65	0.1120	0.914
250	50	24.73	0.1090	0.904

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.49	0.1234	0.941
220	50	24.55	0.1192	0.933
230	50	24.62	0.1155	0.923
240	50	24.69	0.1122	0.914
250	50	24.77	0.1092	0.904

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.43	0.1232	0.941
220	50	24.49	0.1190	0.933
230	50	24.56	0.1153	0.923
240	50	24.63	0.1120	0.914
250	50	24.71	0.1090	0.904

**Watts**      100% light output

Voltage\Sample	1	2	3	4	5
210	24.46	24.47	24.45	24.49	24.43
220	24.52	24.53	24.51	24.55	24.49
230	24.59	24.60	24.58	24.62	24.56
240	24.66	24.67	24.65	24.69	24.63
250	24.74	24.75	24.73	24.77	24.71

**VA**      100% light output

Voltage\Sample	1	2	3	4	5
210	25.893	25.909	25.877	25.924	25.862
220	26.202	26.218	26.186	26.233	26.171
230	26.542	26.558	26.526	26.574	26.510
240	26.904	26.920	26.888	26.936	26.872
250	27.275	27.291	27.259	27.308	27.242

**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	16.99	0.0889	0.906
220	50	17.08	0.0865	0.894
230	50	17.16	0.0844	0.881
240	50	17.26	0.0826	0.868
250	50	17.36	0.0811	0.854

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.00	0.0890	0.906
220	50	17.09	0.0866	0.894
230	50	17.17	0.0845	0.881
240	50	17.27	0.0826	0.868
250	50	17.37	0.0811	0.854

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.98	0.0888	0.906
220	50	17.07	0.0864	0.894
230	50	17.15	0.0843	0.881
240	50	17.25	0.0826	0.868
250	50	17.35	0.0811	0.854

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.01	0.0890	0.906
220	50	17.10	0.0866	0.894
230	50	17.18	0.0845	0.881
240	50	17.28	0.0827	0.868
250	50	17.38	0.0812	0.854

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.97	0.0888	0.906
220	50	17.06	0.0864	0.894
230	50	17.14	0.0843	0.881
240	50	17.24	0.0825	0.868
250	50	17.34	0.0810	0.854

**Watts**      70% light output

Voltage\Sample	1	2	3	4	5
210	16.99	17.00	16.98	17.01	16.97
220	17.08	17.09	17.07	17.10	17.06
230	17.16	17.17	17.15	17.18	17.14
240	17.26	17.27	17.25	17.28	17.24
250	17.36	17.37	17.35	17.38	17.34

**VA**      70% light output

Voltage\Sample	1	2	3	4	5
210	18.669	18.680	18.658	18.691	18.647
220	19.030	19.041	19.019	19.053	19.007
230	19.412	19.424	19.400	19.435	19.389
240	19.824	19.836	19.812	19.848	19.800
250	20.275	20.287	20.263	20.299	20.251

**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	12.36	0.0676	0.868
220	50	12.45	0.0662	0.852
230	50	12.55	0.0651	0.836
240	50	12.66	0.0643	0.817
250	50	12.77	0.0636	0.801

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.37	0.0676	0.868
220	50	12.46	0.0662	0.852
230	50	12.56	0.0651	0.836
240	50	12.67	0.0643	0.817
250	50	12.78	0.0636	0.801

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.35	0.0676	0.868
220	50	12.44	0.0662	0.852
230	50	12.54	0.0651	0.836
240	50	12.65	0.0643	0.817
250	50	12.76	0.0636	0.801

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.37	0.0677	0.868
220	50	12.46	0.0663	0.852
230	50	12.57	0.0652	0.836
240	50	12.68	0.0644	0.817
250	50	12.79	0.0637	0.801

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.35	0.0675	0.868
220	50	12.44	0.0661	0.852
230	50	12.53	0.0650	0.836
240	50	12.64	0.0642	0.817
250	50	12.75	0.0635	0.801

**Watts**      50% light output

Voltage\Sample	1	2	3	4	5
210	12.36	12.37	12.35	12.37	12.35
220	12.45	12.46	12.44	12.46	12.44
230	12.55	12.56	12.54	12.57	12.53
240	12.66	12.67	12.65	12.68	12.64
250	12.77	12.78	12.76	12.79	12.75

**VA**      50% light output

Voltage\Sample	1	2	3	4	5
210	14.196	14.205	14.187	14.213	14.179
220	14.564	14.573	14.555	14.581	14.547
230	14.973	14.982	14.964	14.991	14.955
240	15.432	15.441	15.423	15.451	15.413
250	15.900	15.910	15.890	15.919	15.881

**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

