

# TEST REPORT

## SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S80
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 S80



## 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:** 2015-03-26
4. **Issued Date:** 2015-03-27
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	178.50	0.8608	0.987
220	50	178.20	0.8221	0.985
230	50	178.00	0.7873	0.983
240	50	177.80	0.7553	0.981
250	50	177.70	0.7263	0.978

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	178.61	0.8613	0.987
220	50	178.31	0.8226	0.985
230	50	178.11	0.7878	0.983
240	50	177.91	0.7558	0.981
250	50	177.81	0.7267	0.978

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	178.39	0.8603	0.987
220	50	178.09	0.8216	0.985
230	50	177.89	0.7868	0.983
240	50	177.69	0.7548	0.981
250	50	177.59	0.7259	0.978

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	178.71	0.8618	0.987
220	50	178.41	0.8231	0.985
230	50	178.21	0.7882	0.983
240	50	178.01	0.7562	0.981
250	50	177.91	0.7272	0.978

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	178.29	0.8598	0.987
220	50	177.99	0.8211	0.985
230	50	177.79	0.7864	0.983
240	50	177.59	0.7544	0.981
250	50	177.49	0.7254	0.978

**Watts**      100% light output

Voltage\Sample	1	2	3	4	5
210	178.50	178.61	178.39	178.71	178.29
220	178.20	178.31	178.09	178.41	177.99
230	178.00	178.11	177.89	178.21	177.79
240	177.80	177.91	177.69	178.01	177.59
250	177.70	177.81	177.59	177.91	177.49

**VA**      100% light output

Voltage\Sample	1	2	3	4	5
210	180.768	180.876	180.660	180.985	180.551
220	180.862	180.971	180.753	181.079	180.645
230	181.079	181.188	180.970	181.296	180.862
240	181.272	181.381	181.163	181.490	181.054
250	181.575	181.684	181.466	181.793	181.357

**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	123.20	0.6000	0.978
220	50	123.10	0.5742	0.974
230	50	123.00	0.5508	0.971
240	50	123.00	0.5298	0.967
250	50	123.00	0.5111	0.962

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	123.27	0.6004	0.978
220	50	123.17	0.5745	0.974
230	50	123.07	0.5511	0.971
240	50	123.07	0.5301	0.967
250	50	123.07	0.5114	0.962

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	123.13	0.5996	0.978
220	50	123.03	0.5739	0.974
230	50	122.93	0.5505	0.971
240	50	122.93	0.5295	0.967
250	50	122.93	0.5108	0.962

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	123.35	0.6007	0.978
220	50	123.25	0.5749	0.974
230	50	123.15	0.5515	0.971
240	50	123.15	0.5304	0.967
250	50	123.15	0.5117	0.962

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	123.05	0.5993	0.978
220	50	122.95	0.5735	0.974
230	50	122.85	0.5501	0.971
240	50	122.85	0.5292	0.967
250	50	122.85	0.5105	0.962

#### Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	123.20	123.27	123.13	123.35	123.05
220	123.10	123.17	123.03	123.25	122.95
230	123.00	123.07	122.93	123.15	122.85
240	123.00	123.07	122.93	123.15	122.85
250	123.00	123.07	122.93	123.15	122.85

#### VA 70% light output

Voltage\Sample	1	2	3	4	5
210	126.000	126.076	125.924	126.151	125.849
220	126.324	126.400	126.248	126.476	126.172
230	126.684	126.760	126.608	126.836	126.532
240	127.152	127.228	127.076	127.305	126.999
250	127.775	127.852	127.698	127.928	127.622

#### 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	88.70	0.4386	0.962
220	50	88.70	0.4209	0.957
230	50	88.60	0.4051	0.951
240	50	88.70	0.3912	0.944
250	50	88.70	0.3785	0.937

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.75	0.4389	0.962
220	50	88.75	0.4212	0.957
230	50	88.65	0.4053	0.951
240	50	88.75	0.3914	0.944
250	50	88.75	0.3787	0.937

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.65	0.4383	0.962
220	50	88.65	0.4206	0.957
230	50	88.55	0.4049	0.951
240	50	88.65	0.3910	0.944
250	50	88.65	0.3783	0.937

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.81	0.4391	0.962
220	50	88.81	0.4214	0.957
230	50	88.71	0.4056	0.951
240	50	88.81	0.3917	0.944
250	50	88.81	0.3790	0.937

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.59	0.4381	0.962
220	50	88.59	0.4204	0.957
230	50	88.49	0.4046	0.951
240	50	88.59	0.3907	0.944
250	50	88.59	0.3780	0.937

**Watts**      50% light output

Voltage\Sample	1	2	3	4	5
210	88.70	88.75	88.65	88.81	88.59
220	88.70	88.75	88.65	88.81	88.59
230	88.60	88.65	88.55	88.71	88.49
240	88.70	88.75	88.65	88.81	88.59
250	88.70	88.75	88.65	88.81	88.59

**VA**      50% light output

Voltage\Sample	1	2	3	4	5
210	92.106	92.161	92.051	92.217	91.995
220	92.598	92.654	92.542	92.709	92.487
230	93.173	93.229	93.117	93.285	93.061
240	93.888	93.944	93.832	94.001	93.775
250	94.625	94.682	94.568	94.739	94.511

**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

