

# TEST REPORT

## SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:** 
3. **Models:** ARIALED S100
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 S100

## 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	223.40	1.0728	0.992
220	50	223.00	1.0233	0.991
230	50	222.60	0.9782	0.989
240	50	222.30	0.9378	0.988
250	50	222.00	0.9004	0.986

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	223.53	1.0734	0.992
220	50	223.13	1.0239	0.991
230	50	222.73	0.9788	0.989
240	50	222.43	0.9384	0.988
250	50	222.13	0.9009	0.986

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	223.27	1.0722	0.992
220	50	222.87	1.0227	0.991
230	50	222.47	0.9776	0.989
240	50	222.17	0.9372	0.988
250	50	221.87	0.8999	0.986

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	223.67	1.0741	0.992
220	50	223.27	1.0245	0.991
230	50	222.87	0.9794	0.989
240	50	222.57	0.9389	0.988
250	50	222.27	0.9015	0.986

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	223.13	1.0715	0.992
220	50	222.73	1.0221	0.991
230	50	222.33	0.9770	0.989
240	50	222.03	0.9367	0.988
250	50	221.73	0.8993	0.986

**Watts**      100% light output

Voltage\Sample	1	2	3	4	5
210	223.40	223.53	223.27	223.67	223.13
220	223.00	223.13	222.87	223.27	222.73
230	222.60	222.73	222.47	222.87	222.33
240	222.30	222.43	222.17	222.57	222.03
250	222.00	222.13	221.87	222.27	221.73

**VA**      100% light output

Voltage\Sample	1	2	3	4	5
210	225.288	225.423	225.153	225.558	225.018
220	225.126	225.261	224.991	225.396	224.856
230	224.986	225.121	224.851	225.256	224.716
240	225.072	225.207	224.937	225.342	224.802
250	225.100	225.235	224.965	225.370	224.830

**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	153.30	0.7403	0.985
220	50	153.00	0.7073	0.983
230	50	152.90	0.6771	0.981
240	50	152.80	0.6505	0.978
250	50	152.60	0.6256	0.975

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.39	0.7407	0.985
220	50	153.09	0.7077	0.983
230	50	152.99	0.6775	0.981
240	50	152.89	0.6509	0.978
250	50	152.69	0.6260	0.975

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.21	0.7399	0.985
220	50	152.91	0.7069	0.983
230	50	152.81	0.6767	0.981
240	50	152.71	0.6501	0.978
250	50	152.51	0.6252	0.975

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.48	0.7412	0.985
220	50	153.18	0.7081	0.983
230	50	153.08	0.6779	0.981
240	50	152.98	0.6513	0.978
250	50	152.78	0.6264	0.975

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.12	0.7394	0.985
220	50	152.82	0.7065	0.983
230	50	152.72	0.6763	0.981
240	50	152.62	0.6497	0.978
250	50	152.42	0.6248	0.975

#### Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	153.30	153.39	153.21	153.48	153.12
220	153.00	153.09	152.91	153.18	152.82
230	152.90	152.99	152.81	153.08	152.72
240	152.80	152.89	152.71	152.98	152.62
250	152.60	152.69	152.51	152.78	152.42

#### VA 70% light output

Voltage\Sample	1	2	3	4	5
210	155.463	155.556	155.370	155.650	155.276
220	155.606	155.699	155.513	155.793	155.419
230	155.733	155.826	155.640	155.920	155.546
240	156.120	156.214	156.026	156.307	155.933
250	156.400	156.494	156.306	156.588	156.212

#### 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	109.70	0.5357	0.975
220	50	109.60	0.5128	0.971
230	50	109.60	0.4924	0.967
240	50	109.50	0.4739	0.963
250	50	109.50	0.4570	0.958

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	109.77	0.5360	0.975
220	50	109.67	0.5131	0.971
230	50	109.67	0.4927	0.967
240	50	109.57	0.4742	0.963
250	50	109.57	0.4573	0.958

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	109.63	0.5354	0.975
220	50	109.53	0.5125	0.971
230	50	109.53	0.4921	0.967
240	50	109.43	0.4736	0.963
250	50	109.43	0.4567	0.958

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	109.83	0.5363	0.975
220	50	109.73	0.5134	0.971
230	50	109.73	0.4930	0.967
240	50	109.63	0.4745	0.963
250	50	109.63	0.4575	0.958

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	109.57	0.5351	0.975
220	50	109.47	0.5122	0.971
230	50	109.47	0.4918	0.967
240	50	109.37	0.4733	0.963
250	50	109.37	0.4565	0.958

**Watts**      50% light output

Voltage\Sample	1	2	3	4	5
210	109.70	109.77	109.63	109.83	109.57
220	109.60	109.67	109.53	109.73	109.47
230	109.60	109.67	109.53	109.73	109.47
240	109.50	109.57	109.43	109.63	109.37
250	109.50	109.57	109.43	109.63	109.37

**VA**      50% light output

Voltage\Sample	1	2	3	4	5
210	112.497	112.564	112.430	112.632	112.362
220	112.816	112.884	112.748	112.951	112.681
230	113.252	113.320	113.184	113.388	113.116
240	113.736	113.804	113.668	113.872	113.600
250	114.250	114.319	114.181	114.387	114.113

**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

