

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S90
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 S90



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	201.20	0.9673	0.990
220	50	200.90	0.9233	0.989
230	50	200.60	0.8835	0.987
240	50	200.40	0.8472	0.986
250	50	200.10	0.8135	0.983

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	201.32	0.9679	0.990
220	50	201.02	0.9239	0.989
230	50	200.72	0.8840	0.987
240	50	200.52	0.8477	0.986
250	50	200.22	0.8140	0.983

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	201.08	0.9667	0.990
220	50	200.78	0.9227	0.989
230	50	200.48	0.8830	0.987
240	50	200.28	0.8467	0.986
250	50	199.98	0.8130	0.983

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	201.44	0.9685	0.990
220	50	201.14	0.9244	0.989
230	50	200.84	0.8846	0.987
240	50	200.64	0.8482	0.986
250	50	200.34	0.8145	0.983

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	200.96	0.9661	0.990
220	50	200.66	0.9222	0.989
230	50	200.36	0.8824	0.987
240	50	200.16	0.8462	0.986
250	50	199.86	0.8125	0.983

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	201.20	201.32	201.08	201.44	200.96
220	200.90	201.02	200.78	201.14	200.66
230	200.60	200.72	200.48	200.84	200.36
240	200.40	200.52	200.28	200.64	200.16
250	200.10	200.22	199.98	200.34	199.86

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	203.133	203.255	203.011	203.377	202.889
220	203.126	203.248	203.004	203.370	202.882
230	203.205	203.327	203.083	203.449	202.961
240	203.328	203.450	203.206	203.572	203.084
250	203.375	203.497	203.253	203.619	203.131

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	138.00	0.6686	0.982
220	50	137.80	0.6391	0.980
230	50	137.80	0.6126	0.977
240	50	137.50	0.5881	0.974
250	50	137.50	0.5665	0.970

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	138.08	0.6690	0.982
220	50	137.88	0.6395	0.980
230	50	137.88	0.6130	0.977
240	50	137.58	0.5885	0.974
250	50	137.58	0.5668	0.970

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	137.92	0.6682	0.982
220	50	137.72	0.6387	0.980
230	50	137.72	0.6122	0.977
240	50	137.42	0.5877	0.974
250	50	137.42	0.5662	0.970

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	138.17	0.6694	0.982
220	50	137.97	0.6399	0.980
230	50	137.97	0.6133	0.977
240	50	137.67	0.5888	0.974
250	50	137.67	0.5672	0.970

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	137.83	0.6678	0.982
220	50	137.63	0.6383	0.980
230	50	137.63	0.6119	0.977
240	50	137.34	0.5874	0.974
250	50	137.34	0.5658	0.970

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	138.00	138.08	137.92	138.17	137.83
220	137.80	137.88	137.72	137.97	137.63
230	137.80	137.88	137.72	137.97	137.63
240	137.50	137.58	137.42	137.67	137.34
250	137.50	137.58	137.42	137.67	137.34

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	140.406	140.490	140.322	140.574	140.238
220	140.602	140.686	140.518	140.771	140.433
230	140.898	140.983	140.813	141.067	140.729
240	141.144	141.229	141.059	141.313	140.975
250	141.625	141.710	141.540	141.795	141.455

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	98.80	0.4850	0.970
220	50	98.80	0.4649	0.966
230	50	98.80	0.4470	0.961
240	50	98.80	0.4307	0.955
250	50	98.70	0.4157	0.950

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	98.86	0.4853	0.970
220	50	98.86	0.4652	0.966
230	50	98.86	0.4473	0.961
240	50	98.86	0.4310	0.955
250	50	98.76	0.4159	0.950

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	98.74	0.4847	0.970
220	50	98.74	0.4646	0.966
230	50	98.74	0.4467	0.961
240	50	98.74	0.4304	0.955
250	50	98.64	0.4155	0.950

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	98.92	0.4856	0.970
220	50	98.92	0.4655	0.966
230	50	98.92	0.4475	0.961
240	50	98.92	0.4312	0.955
250	50	98.82	0.4162	0.950

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	98.68	0.4844	0.970
220	50	98.68	0.4643	0.966
230	50	98.68	0.4465	0.961
240	50	98.68	0.4302	0.955
250	50	98.58	0.4152	0.950

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	98.80	98.86	98.74	98.92	98.68
220	98.80	98.86	98.74	98.92	98.68
230	98.80	98.86	98.74	98.92	98.68
240	98.80	98.86	98.74	98.92	98.68
250	98.70	98.76	98.64	98.82	98.58

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	101.850	101.911	101.789	101.972	101.728
220	102.278	102.339	102.217	102.401	102.155
230	102.810	102.872	102.748	102.933	102.687
240	103.368	103.430	103.306	103.492	103.244
250	103.925	103.987	103.863	104.050	103.800

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

