

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S40
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 S40



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:** 2015-03-23
4. **Issued Date:** 2015-03-24
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	89.90	0.4331	0.987
220	50	89.65	0.4135	0.985
230	50	89.44	0.3954	0.983
240	50	89.25	0.3792	0.980
250	50	89.10	0.3644	0.978

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	89.95	0.4334	0.987
220	50	89.70	0.4137	0.985
230	50	89.49	0.3956	0.983
240	50	89.30	0.3794	0.980
250	50	89.15	0.3646	0.978

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	89.85	0.4328	0.987
220	50	89.60	0.4133	0.985
230	50	89.39	0.3952	0.983
240	50	89.20	0.3790	0.980
250	50	89.05	0.3642	0.978

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	90.01	0.4336	0.987
220	50	89.76	0.4140	0.985
230	50	89.55	0.3959	0.983
240	50	89.36	0.3797	0.980
250	50	89.21	0.3648	0.978

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	89.79	0.4326	0.987
220	50	89.54	0.4130	0.985
230	50	89.33	0.3949	0.983
240	50	89.14	0.3787	0.980
250	50	88.99	0.3640	0.978

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	89.90	89.95	89.85	90.01	89.79
220	89.65	89.70	89.60	89.76	89.54
230	89.44	89.49	89.39	89.55	89.33
240	89.25	89.30	89.20	89.36	89.14
250	89.10	89.15	89.05	89.21	88.99

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	90.951	91.006	90.896	91.060	90.842
220	90.970	91.025	90.915	91.079	90.861
230	90.942	90.997	90.887	91.051	90.833
240	91.008	91.063	90.953	91.117	90.899
250	91.100	91.155	91.045	91.209	90.991

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	61.88	0.3015	0.977
220	50	61.70	0.2880	0.974
230	50	61.60	0.2760	0.970
240	50	61.00	0.2644	0.965
250	50	61.20	0.2551	0.961

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	61.92	0.3017	0.977
220	50	61.74	0.2882	0.974
230	50	61.64	0.2762	0.970
240	50	61.04	0.2646	0.965
250	50	61.24	0.2553	0.961

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	61.84	0.3013	0.977
220	50	61.66	0.2878	0.974
230	50	61.56	0.2758	0.970
240	50	60.96	0.2642	0.965
250	50	61.16	0.2549	0.961

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	61.95	0.3019	0.977
220	50	61.77	0.2883	0.974
230	50	61.67	0.2763	0.970
240	50	61.07	0.2647	0.965
250	50	61.27	0.2554	0.961

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	61.81	0.3011	0.977
220	50	61.63	0.2877	0.974
230	50	61.53	0.2757	0.970
240	50	60.93	0.2641	0.965
250	50	61.13	0.2548	0.961

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	61.88	61.92	61.84	61.95	61.81
220	61.70	61.74	61.66	61.77	61.63
230	61.60	61.64	61.56	61.67	61.53
240	61.00	61.04	60.96	61.07	60.93
250	61.20	61.24	61.16	61.27	61.13

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	63.315	63.353	63.277	63.391	63.239
220	63.360	63.398	63.322	63.436	63.284
230	63.480	63.518	63.442	63.556	63.404
240	63.456	63.494	63.418	63.532	63.380
250	63.775	63.813	63.737	63.852	63.698

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	44.62	0.2209	0.961
220	50	44.59	0.2119	0.956
230	50	44.51	0.2037	0.949
240	50	44.44	0.1965	0.942
250	50	44.40	0.1899	0.935

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	44.65	0.2210	0.961
220	50	44.62	0.2120	0.956
230	50	44.54	0.2038	0.949
240	50	44.47	0.1966	0.942
250	50	44.43	0.1900	0.935

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	44.59	0.2208	0.961
220	50	44.56	0.2118	0.956
230	50	44.48	0.2036	0.949
240	50	44.41	0.1964	0.942
250	50	44.37	0.1898	0.935

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	44.67	0.2212	0.961
220	50	44.64	0.2122	0.956
230	50	44.56	0.2039	0.949
240	50	44.49	0.1967	0.942
250	50	44.45	0.1901	0.935

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	44.57	0.2206	0.961
220	50	44.54	0.2116	0.956
230	50	44.46	0.2035	0.949
240	50	44.39	0.1963	0.942
250	50	44.35	0.1897	0.935

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	44.62	44.65	44.59	44.67	44.57
220	44.59	44.62	44.56	44.64	44.54
230	44.51	44.54	44.48	44.56	44.46
240	44.44	44.47	44.41	44.49	44.39
250	44.40	44.43	44.37	44.45	44.35

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	46.389	46.417	46.361	46.445	46.333
220	46.618	46.646	46.590	46.674	46.562
230	46.851	46.879	46.823	46.907	46.795
240	47.160	47.188	47.132	47.217	47.103
250	47.475	47.503	47.447	47.532	47.418

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

