

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	88.70	0.4296	0.982
220	50	88.54	0.4106	0.979
230	50	88.43	0.3936	0.976
240	50	88.34	0.3782	0.973
250	50	88.28	0.3644	0.969

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.75	0.4299	0.982
220	50	88.59	0.4108	0.979
230	50	88.48	0.3938	0.976
240	50	88.39	0.3784	0.973
250	50	88.33	0.3646	0.969

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.65	0.4293	0.982
220	50	88.49	0.4104	0.979
230	50	88.38	0.3934	0.976
240	50	88.29	0.3780	0.973
250	50	88.23	0.3642	0.969

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.81	0.4301	0.982
220	50	88.65	0.4111	0.979
230	50	88.54	0.3941	0.976
240	50	88.45	0.3787	0.973
250	50	88.39	0.3648	0.969

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.59	0.4291	0.982
220	50	88.43	0.4101	0.979
230	50	88.32	0.3931	0.976
240	50	88.23	0.3777	0.973
250	50	88.17	0.3640	0.969

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	88.70	88.75	88.65	88.81	88.59
220	88.54	88.59	88.49	88.65	88.43
230	88.43	88.48	88.38	88.54	88.32
240	88.34	88.39	88.29	88.45	88.23
250	88.28	88.33	88.23	88.39	88.17

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	90.216	90.270	90.162	90.324	90.108
220	90.332	90.386	90.278	90.440	90.224
230	90.528	90.582	90.474	90.637	90.419
240	90.768	90.822	90.714	90.877	90.659
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	60.32	0.2961	0.969
220	50	60.31	0.2841	0.964
230	50	60.30	0.2734	0.958
240	50	59.80	0.2629	0.951
250	50	60.40	0.2556	0.945

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	60.36	0.2963	0.969
220	50	60.35	0.2843	0.964
230	50	60.34	0.2736	0.958
240	50	59.84	0.2631	0.951
250	50	60.44	0.2558	0.945

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	60.28	0.2959	0.969
220	50	60.27	0.2839	0.964
230	50	60.26	0.2732	0.958
240	50	59.76	0.2627	0.951
250	50	60.36	0.2554	0.945

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	60.39	0.2965	0.969
220	50	60.38	0.2844	0.964
230	50	60.37	0.2737	0.958
240	50	59.87	0.2632	0.951
250	50	60.47	0.2559	0.945

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	60.25	0.2957	0.969
220	50	60.24	0.2838	0.964
230	50	60.23	0.2731	0.958
240	50	59.73	0.2626	0.951
250	50	60.33	0.2553	0.945

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	60.32	60.36	60.28	60.39	60.25
220	60.31	60.35	60.27	60.38	60.24
230	60.30	60.34	60.26	60.37	60.23
240	59.80	59.84	59.76	59.87	59.73
250	60.40	60.44	60.36	60.47	60.33

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	62.181	62.218	62.144	62.256	62.106
220	62.502	62.540	62.464	62.577	62.427
230	62.882	62.920	62.844	62.957	62.807
240	63.096	63.134	63.058	63.172	63.020
250	63.900	63.938	63.862	63.977	63.823

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	43.12	0.2164	0.948
220	50	43.20	0.2089	0.939
230	50	43.29	0.2023	0.930
240	50	43.39	0.1966	0.919
250	50	43.49	0.1915	0.908

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.15	0.2165	0.948
220	50	43.23	0.2090	0.939
230	50	43.32	0.2024	0.930
240	50	43.42	0.1967	0.919
250	50	43.52	0.1916	0.908

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.09	0.2163	0.948
220	50	43.17	0.2088	0.939
230	50	43.26	0.2022	0.930
240	50	43.36	0.1965	0.919
250	50	43.46	0.1914	0.908

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.17	0.2167	0.948
220	50	43.25	0.2092	0.939
230	50	43.34	0.2025	0.930
240	50	43.44	0.1968	0.919
250	50	43.54	0.1917	0.908

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.07	0.2161	0.948
220	50	43.15	0.2086	0.939
230	50	43.24	0.2021	0.930
240	50	43.34	0.1964	0.919
250	50	43.44	0.1913	0.908

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	43.12	43.15	43.09	43.17	43.07
220	43.20	43.23	43.17	43.25	43.15
230	43.29	43.32	43.26	43.34	43.24
240	43.39	43.42	43.36	43.44	43.34
250	43.49	43.52	43.46	43.54	43.44

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	45.444	45.471	45.417	45.499	45.389
220	45.958	45.986	45.930	46.013	45.903
230	46.529	46.557	46.501	46.585	46.473
240	47.184	47.212	47.156	47.241	47.127
250	47.875	47.904	47.846	47.932	47.818

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

