

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S50
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 S50



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:** 2015-04-22
4. **Issued Date:** 2015-04-27
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	110.80	0.5305	0.992
220	50	110.80	0.5069	0.991
230	50	110.80	0.4858	0.989
240	50	110.90	0.4665	0.987
250	50	110.90	0.4492	0.984

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	110.87	0.5308	0.992
220	50	110.87	0.5072	0.991
230	50	110.87	0.4861	0.989
240	50	110.97	0.4668	0.987
250	50	110.97	0.4495	0.984

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	110.73	0.5302	0.992
220	50	110.73	0.5066	0.991
230	50	110.73	0.4855	0.989
240	50	110.83	0.4662	0.987
250	50	110.83	0.4489	0.984

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	110.93	0.5311	0.992
220	50	110.93	0.5075	0.991
230	50	110.93	0.4864	0.989
240	50	111.03	0.4671	0.987
250	50	111.03	0.4497	0.984

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	110.67	0.5299	0.992
220	50	110.67	0.5063	0.991
230	50	110.67	0.4852	0.989
240	50	110.77	0.4659	0.987
250	50	110.77	0.4487	0.984

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	110.80	110.87	110.73	110.93	110.67
220	110.80	110.87	110.73	110.93	110.67
230	110.80	110.87	110.73	110.93	110.67
240	110.90	110.97	110.83	111.03	110.77
250	110.90	110.97	110.83	111.03	110.77

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	111.405	111.472	111.338	111.539	111.271
220	111.518	111.585	111.451	111.652	111.384
230	111.734	111.801	111.667	111.868	111.600
240	111.960	112.027	111.893	112.094	111.826
250	112.300	112.367	112.233	112.435	112.165

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	77.70	0.3745	0.985
220	50	77.70	0.3586	0.982
230	50	77.80	0.3449	0.978
240	50	77.90	0.3326	0.973
250	50	77.90	0.3206	0.969

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	77.75	0.3747	0.985
220	50	77.75	0.3588	0.982
230	50	77.85	0.3451	0.978
240	50	77.95	0.3328	0.973
250	50	77.95	0.3208	0.969

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	77.65	0.3743	0.985
220	50	77.65	0.3584	0.982
230	50	77.75	0.3447	0.978
240	50	77.85	0.3324	0.973
250	50	77.85	0.3204	0.969

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	77.79	0.3749	0.985
220	50	77.79	0.3590	0.982
230	50	77.89	0.3453	0.978
240	50	77.99	0.3330	0.973
250	50	77.99	0.3210	0.969

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	77.61	0.3741	0.985
220	50	77.61	0.3582	0.982
230	50	77.71	0.3445	0.978
240	50	77.81	0.3322	0.973
250	50	77.81	0.3202	0.969

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	77.70	77.75	77.65	77.79	77.61
220	77.70	77.75	77.65	77.79	77.61
230	77.80	77.85	77.75	77.89	77.71
240	77.90	77.95	77.85	77.99	77.81
250	77.90	77.95	77.85	77.99	77.81

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	78.645	78.692	78.598	78.739	78.551
220	78.892	78.939	78.845	78.987	78.797
230	79.327	79.375	79.279	79.422	79.232
240	79.824	79.872	79.776	79.920	79.728
250	80.150	80.198	80.102	80.246	80.054

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	54.30	0.2656	0.971
220	50	54.40	0.2555	0.966
230	50	54.60	0.2456	0.962
240	50	54.70	0.2368	0.959
250	50	54.80	0.2285	0.956

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.33	0.2658	0.971
220	50	54.43	0.2557	0.966
230	50	54.63	0.2457	0.962
240	50	54.73	0.2369	0.959
250	50	54.83	0.2286	0.956

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.27	0.2654	0.971
220	50	54.37	0.2553	0.966
230	50	54.57	0.2455	0.962
240	50	54.67	0.2367	0.959
250	50	54.77	0.2284	0.956

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.37	0.2659	0.971
220	50	54.47	0.2558	0.966
230	50	54.67	0.2459	0.962
240	50	54.77	0.2371	0.959
250	50	54.87	0.2288	0.956

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.23	0.2653	0.971
220	50	54.33	0.2552	0.966
230	50	54.53	0.2453	0.962
240	50	54.63	0.2365	0.959
250	50	54.73	0.2282	0.956

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	54.30	54.33	54.27	54.37	54.23
220	54.40	54.43	54.37	54.47	54.33
230	54.60	54.63	54.57	54.67	54.53
240	54.70	54.73	54.67	54.77	54.63
250	54.80	54.83	54.77	54.87	54.73

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	55.776	55.809	55.743	55.843	55.709
220	56.210	56.244	56.176	56.277	56.143
230	56.488	56.522	56.454	56.556	56.420
240	56.832	56.866	56.798	56.900	56.764
250	57.125	57.159	57.091	57.194	57.056

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

