

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S70
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 S70



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:** 2015-03-25
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	156.90	0.7577	0.986
220	50	156.60	0.7232	0.984
230	50	156.30	0.6928	0.981
240	50	156.00	0.6648	0.978
250	50	155.20	0.6368	0.974

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	156.99	0.7582	0.986
220	50	156.69	0.7236	0.984
230	50	156.39	0.6932	0.981
240	50	156.09	0.6652	0.978
250	50	155.29	0.6372	0.974

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	156.81	0.7572	0.986
220	50	156.51	0.7228	0.984
230	50	156.21	0.6924	0.981
240	50	155.91	0.6644	0.978
250	50	155.11	0.6364	0.974

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	157.09	0.7586	0.986
220	50	156.79	0.7241	0.984
230	50	156.49	0.6936	0.981
240	50	156.19	0.6656	0.978
250	50	155.39	0.6376	0.974

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	156.71	0.7568	0.986
220	50	156.41	0.7223	0.984
230	50	156.11	0.6920	0.981
240	50	155.81	0.6640	0.978
250	50	155.01	0.6360	0.974

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	156.90	156.99	156.81	157.09	156.71
220	156.60	156.69	156.51	156.79	156.41
230	156.30	156.39	156.21	156.49	156.11
240	156.00	156.09	155.91	156.19	155.81
250	155.20	155.29	155.11	155.39	155.01

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	159.117	159.212	159.022	159.308	158.926
220	159.104	159.199	159.009	159.295	158.913
230	159.344	159.440	159.248	159.535	159.153
240	159.552	159.648	159.456	159.743	159.361
250	159.200	159.296	159.104	159.391	159.009

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	107.60	0.5248	0.976
220	50	106.90	0.5005	0.972
230	50	110.20	0.4906	0.969
240	50	106.60	0.4623	0.964
250	50	107.00	0.4465	0.959

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	107.66	0.5251	0.976
220	50	106.96	0.5008	0.972
230	50	110.27	0.4909	0.969
240	50	106.66	0.4626	0.964
250	50	107.06	0.4468	0.959

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	107.54	0.5245	0.976
220	50	106.84	0.5002	0.972
230	50	110.13	0.4903	0.969
240	50	106.54	0.4620	0.964
250	50	106.94	0.4462	0.959

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	107.73	0.5254	0.976
220	50	107.03	0.5011	0.972
230	50	110.33	0.4912	0.969
240	50	106.73	0.4629	0.964
250	50	107.13	0.4470	0.959

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	107.47	0.5242	0.976
220	50	106.77	0.4999	0.972
230	50	110.07	0.4900	0.969
240	50	106.47	0.4617	0.964
250	50	106.87	0.4460	0.959

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	107.60	107.66	107.54	107.73	107.47
220	106.90	106.96	106.84	107.03	106.77
230	110.20	110.27	110.13	110.33	110.07
240	106.60	106.66	106.54	106.73	106.47
250	107.00	107.06	106.94	107.13	106.87

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	110.208	110.274	110.142	110.340	110.076
220	110.110	110.176	110.044	110.242	109.978
230	112.838	112.906	112.770	112.973	112.703
240	110.952	111.019	110.885	111.085	110.819
250	111.625	111.692	111.558	111.759	111.491

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	78.70	0.3869	0.963
220	50	76.70	0.3640	0.957
230	50	75.30	0.3450	0.949
240	50	75.00	0.3324	0.942
250	50	76.70	0.3273	0.937

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	78.75	0.3871	0.963
220	50	76.75	0.3642	0.957
230	50	75.35	0.3452	0.949
240	50	75.05	0.3326	0.942
250	50	76.75	0.3275	0.937

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	78.65	0.3867	0.963
220	50	76.65	0.3638	0.957
230	50	75.25	0.3448	0.949
240	50	74.96	0.3322	0.942
250	50	76.65	0.3271	0.937

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	78.79	0.3874	0.963
220	50	76.79	0.3644	0.957
230	50	75.39	0.3454	0.949
240	50	75.09	0.3328	0.942
250	50	76.79	0.3277	0.937

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	78.61	0.3864	0.963
220	50	76.61	0.3636	0.957
230	50	75.21	0.3446	0.949
240	50	74.91	0.3320	0.942
250	50	76.61	0.3269	0.937

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	78.70	78.75	78.65	78.79	78.61
220	76.70	76.75	76.65	76.79	76.61
230	75.30	75.35	75.25	75.39	75.21
240	75.00	75.05	74.96	75.09	74.91
250	76.70	76.75	76.65	76.79	76.61

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	81.249	81.298	81.200	81.346	81.152
220	80.080	80.128	80.032	80.176	79.984
230	79.350	79.398	79.302	79.445	79.255
240	79.776	79.824	79.728	79.872	79.680
250	81.825	81.874	81.776	81.923	81.727

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

