

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S20
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 S20



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:** 2015-03-24
4. **Issued Date:** 2015-03-26
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	47.16	0.2341	0.958
220	50	47.02	0.2244	0.952
230	50	47.11	0.2164	0.945
240	50	47.00	0.2088	0.938
250	50	47.00	0.2020	0.930

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	47.19	0.2342	0.958
220	50	47.05	0.2245	0.952
230	50	47.14	0.2165	0.945
240	50	47.03	0.2089	0.938
250	50	47.03	0.2021	0.930

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	47.13	0.2340	0.958
220	50	46.99	0.2243	0.952
230	50	47.08	0.2163	0.945
240	50	46.97	0.2087	0.938
250	50	46.97	0.2019	0.930

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	47.22	0.2344	0.958
220	50	47.08	0.2247	0.952
230	50	47.17	0.2167	0.945
240	50	47.06	0.2091	0.938
250	50	47.06	0.2022	0.930

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	47.10	0.2338	0.958
220	50	46.96	0.2241	0.952
230	50	47.05	0.2161	0.945
240	50	46.94	0.2085	0.938
250	50	46.94	0.2018	0.930

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	47.16	47.19	47.13	47.22	47.10
220	47.02	47.05	46.99	47.08	46.96
230	47.11	47.14	47.08	47.17	47.05
240	47.00	47.03	46.97	47.06	46.94
250	47.00	47.03	46.97	47.06	46.94

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	49.161	49.190	49.132	49.220	49.102
220	49.368	49.398	49.338	49.427	49.309
230	49.772	49.802	49.742	49.832	49.712
240	50.112	50.142	50.082	50.172	50.052
250	50.500	50.530	50.470	50.561	50.439

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	33.57	0.1717	0.930
220	50	33.37	0.1650	0.918
230	50	33.50	0.1602	0.908
240	50	33.39	0.1551	0.896
250	50	33.48	0.1514	0.884

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.59	0.1718	0.930
220	50	33.39	0.1651	0.918
230	50	33.52	0.1603	0.908
240	50	33.41	0.1552	0.896
250	50	33.50	0.1515	0.884

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.55	0.1716	0.930
220	50	33.35	0.1649	0.918
230	50	33.48	0.1601	0.908
240	50	33.37	0.1550	0.896
250	50	33.46	0.1513	0.884

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.61	0.1719	0.930
220	50	33.41	0.1652	0.918
230	50	33.54	0.1604	0.908
240	50	33.43	0.1553	0.896
250	50	33.52	0.1516	0.884

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.53	0.1715	0.930
220	50	33.33	0.1648	0.918
230	50	33.46	0.1600	0.908
240	50	33.35	0.1549	0.896
250	50	33.44	0.1512	0.884

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	33.57	33.59	33.55	33.61	33.53
220	33.37	33.39	33.35	33.41	33.33
230	33.50	33.52	33.48	33.54	33.46
240	33.39	33.41	33.37	33.43	33.35
250	33.48	33.50	33.46	33.52	33.44

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	36.057	36.079	36.035	36.100	36.014
220	36.300	36.322	36.278	36.344	36.256
230	36.846	36.868	36.824	36.890	36.802
240	37.224	37.246	37.202	37.269	37.179
250	37.850	37.873	37.827	37.895	37.805

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	24.62	0.1320	0.887
220	50	24.70	0.1283	0.874
230	50	24.47	0.1242	0.855
240	50	24.69	0.1229	0.837
250	50	24.59	0.1203	0.817

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.63	0.1321	0.887
220	50	24.71	0.1284	0.874
230	50	24.48	0.1243	0.855
240	50	24.70	0.1230	0.837
250	50	24.60	0.1204	0.817

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.61	0.1319	0.887
220	50	24.69	0.1282	0.874
230	50	24.46	0.1241	0.855
240	50	24.68	0.1228	0.837
250	50	24.58	0.1202	0.817

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.65	0.1322	0.887
220	50	24.73	0.1285	0.874
230	50	24.50	0.1243	0.855
240	50	24.72	0.1230	0.837
250	50	24.62	0.1204	0.817

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.59	0.1318	0.887
220	50	24.67	0.1281	0.874
230	50	24.44	0.1241	0.855
240	50	24.66	0.1228	0.837
250	50	24.56	0.1202	0.817

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	24.62	24.63	24.61	24.65	24.59
220	24.70	24.71	24.69	24.73	24.67
230	24.47	24.48	24.46	24.50	24.44
240	24.69	24.70	24.68	24.72	24.66
250	24.59	24.60	24.58	24.62	24.56

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	27.720	27.737	27.703	27.753	27.687
220	28.226	28.243	28.209	28.260	28.192
230	28.566	28.583	28.549	28.600	28.532
240	29.496	29.514	29.478	29.531	29.461
250	30.075	30.093	30.057	30.111	30.039

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

