

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	46.68	0.2343	0.948
220	50	46.68	0.2256	0.940
230	50	46.67	0.2177	0.931
240	50	46.69	0.2108	0.922
250	50	46.70	0.2047	0.912

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.71	0.2344	0.948
220	50	46.71	0.2257	0.940
230	50	46.70	0.2178	0.931
240	50	46.72	0.2109	0.922
250	50	46.73	0.2048	0.912

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.65	0.2342	0.948
220	50	46.65	0.2255	0.940
230	50	46.64	0.2176	0.931
240	50	46.66	0.2107	0.922
250	50	46.67	0.2046	0.912

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.74	0.2346	0.948
220	50	46.74	0.2259	0.940
230	50	46.73	0.2180	0.931
240	50	46.75	0.2111	0.922
250	50	46.76	0.2049	0.912

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	46.62	0.2340	0.948
220	50	46.62	0.2253	0.940
230	50	46.61	0.2174	0.931
240	50	46.63	0.2105	0.922
250	50	46.64	0.2045	0.912

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	46.68	46.71	46.65	46.74	46.62
220	46.68	46.71	46.65	46.74	46.62
230	46.67	46.70	46.64	46.73	46.61
240	46.69	46.72	46.66	46.75	46.63
250	46.70	46.73	46.67	46.76	46.64

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	49.203	49.233	49.173	49.262	49.144
220	49.632	49.662	49.602	49.692	49.572
230	50.071	50.101	50.041	50.131	50.011
240	50.592	50.622	50.562	50.653	50.531
250	51.175	51.206	51.144	51.236	51.114

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	32.61	0.1685	0.921
220	50	32.61	0.1630	0.909
230	50	32.63	0.1583	0.896
240	50	32.68	0.1543	0.882
250	50	32.77	0.1510	0.868

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	32.63	0.1686	0.921
220	50	32.63	0.1631	0.909
230	50	32.65	0.1584	0.896
240	50	32.70	0.1544	0.882
250	50	32.79	0.1511	0.868

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	32.59	0.1684	0.921
220	50	32.59	0.1629	0.909
230	50	32.61	0.1582	0.896
240	50	32.66	0.1542	0.882
250	50	32.75	0.1509	0.868

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	32.65	0.1687	0.921
220	50	32.65	0.1632	0.909
230	50	32.67	0.1585	0.896
240	50	32.72	0.1545	0.882
250	50	32.81	0.1512	0.868

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	32.57	0.1683	0.921
220	50	32.57	0.1628	0.909
230	50	32.59	0.1581	0.896
240	50	32.64	0.1541	0.882
250	50	32.73	0.1508	0.868

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	32.61	32.63	32.59	32.65	32.57
220	32.61	32.63	32.59	32.65	32.57
230	32.63	32.65	32.61	32.67	32.59
240	32.68	32.70	32.66	32.72	32.64
250	32.77	32.79	32.75	32.81	32.73

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	35.385	35.406	35.364	35.427	35.343
220	35.860	35.882	35.838	35.903	35.817
230	36.409	36.431	36.387	36.453	36.365
240	37.032	37.054	37.010	37.076	36.988
250	37.750	37.773	37.727	37.795	37.705

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	22.91	0.1236	0.882
220	50	23.05	0.1209	0.866
230	50	23.11	0.1182	0.849
240	50	23.21	0.1162	0.832
250	50	23.32	0.1146	0.813

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	22.92	0.1237	0.882
220	50	23.06	0.1210	0.866
230	50	23.12	0.1183	0.849
240	50	23.22	0.1163	0.832
250	50	23.33	0.1147	0.813

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	22.90	0.1235	0.882
220	50	23.04	0.1208	0.866
230	50	23.10	0.1181	0.849
240	50	23.20	0.1161	0.832
250	50	23.31	0.1145	0.813

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	22.94	0.1237	0.882
220	50	23.08	0.1210	0.866
230	50	23.14	0.1183	0.849
240	50	23.24	0.1163	0.832
250	50	23.35	0.1147	0.813

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	22.88	0.1235	0.882
220	50	23.02	0.1208	0.866
230	50	23.08	0.1181	0.849
240	50	23.18	0.1161	0.832
250	50	23.29	0.1145	0.813

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	22.91	22.92	22.90	22.94	22.88
220	23.05	23.06	23.04	23.08	23.02
230	23.11	23.12	23.10	23.14	23.08
240	23.21	23.22	23.20	23.24	23.18
250	23.32	23.33	23.31	23.35	23.29

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	25.956	25.972	25.940	25.987	25.925
220	26.598	26.614	26.582	26.630	26.566
230	27.186	27.202	27.170	27.219	27.153
240	27.888	27.905	27.871	27.921	27.855
250	28.650	28.667	28.633	28.684	28.616

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

