

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIAMED 160
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 ARIAMED 160



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:** 2014-03-9
4. **Issued Date:** 2014-03-12
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	153.86	0.741	0.985
220	50	153.77	0.709	0.983
230	50	153.72	0.680	0.980
240	50	153.74	0.654	0.977
250	50	153.75	0.630	0.974

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.89	0.742	0.986
220	50	153.79	0.710	0.983
230	50	153.75	0.681	0.981
240	50	153.77	0.654	0.977
250	50	153.78	0.631	0.975

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.85	0.741	0.985
220	50	153.76	0.709	0.982
230	50	153.71	0.680	0.979
240	50	153.73	0.654	0.977
250	50	153.74	0.630	0.973

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.87	0.741	0.986
220	50	153.78	0.709	0.983
230	50	153.73	0.680	0.981
240	50	153.75	0.654	0.977
250	50	153.76	0.630	0.974

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	153.88	0.741	0.986
220	50	153.78	0.709	0.983
230	50	153.74	0.680	0.981
240	50	153.75	0.654	0.977
250	50	153.77	0.631	0.975

Watts 100% light output

Voltage \ Sample	1	2	3	4	5
210	153.86	153.89	153.85	153.87	153.88
220	153.77	153.79	153.76	153.78	153.78
230	153.72	153.75	153.71	153.73	153.74
240	153.74	153.77	153.73	153.75	153.75
250	153.75	153.78	153.74	153.76	153.77

VA 100% light output

Voltage \ Sample	1	2	3	4	5
210	155.673	155.736	155.652	155.694	155.694
220	156.024	156.090	156.002	156.046	156.068
230	156.446	156.538	156.423	156.469	156.492
240	156.984	157.032	156.984	157.008	157.032
250	157.550	157.650	157.525	157.575	157.625

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	105.54	0.514	0.975
220	50	105.63	0.493	0.972
230	50	105.62	0.473	0.967
240	50	105.73	0.456	0.963
250	50	105.83	0.441	0.958

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	105.57	0.515	0.975
220	50	105.66	0.494	0.972
230	50	105.65	0.474	0.968
240	50	105.76	0.457	0.963
250	50	105.86	0.441	0.959

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	105.53	0.514	0.975
220	50	105.62	0.493	0.972
230	50	105.61	0.473	0.966
240	50	105.71	0.456	0.963
250	50	105.82	0.440	0.957

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	105.55	0.514	0.975
220	50	105.64	0.493	0.973
230	50	105.63	0.474	0.967
240	50	105.74	0.456	0.963
250	50	105.84	0.441	0.958

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	105.56	0.515	0.976
220	50	105.65	0.494	0.972
230	50	105.64	0.474	0.968
240	50	105.75	0.457	0.963
250	50	105.85	0.441	0.959

Watts 70% light output

Voltage \ Sample	1	2	3	4	5
210	105.54	105.57	105.53	105.55	105.56
220	105.63	105.66	105.62	105.64	105.65
230	105.62	105.65	105.61	105.63	105.64
240	105.73	105.76	105.71	105.74	105.75
250	105.83	105.86	105.82	105.84	105.85

VA 70% light output

Voltage \ Sample	1	2	3	4	5
210	108.003	108.066	107.982	108.024	108.045
220	108.526	108.592	108.504	108.548	108.570
230	108.882	108.951	108.859	108.905	108.928
240	109.512	109.608	109.464	109.512	109.560
250	110.150	110.200	110.100	110.175	110.200

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	75.43	0.373	0.961
220	50	75.52	0.358	0.956
230	50	75.61	0.345	0.952
240	50	75.82	0.334	0.943
250	50	75.93	0.323	0.937

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.46	0.374	0.962
220	50	75.55	0.359	0.956
230	50	75.64	0.346	0.953
240	50	75.85	0.335	0.943
250	50	75.96	0.324	0.938

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.42	0.373	0.961
220	50	75.51	0.358	0.955
230	50	75.61	0.345	0.952
240	50	75.81	0.334	0.942
250	50	75.91	0.323	0.935

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.44	0.373	0.961
220	50	75.53	0.358	0.956
230	50	75.62	0.345	0.952
240	50	75.83	0.334	0.943
250	50	75.94	0.324	0.937

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.45	0.373	0.961
220	50	75.54	0.359	0.956
230	50	75.63	0.345	0.952
240	50	75.84	0.335	0.943
250	50	75.95	0.324	0.937

Watts 50% light output

Voltage \ Sample	1	2	3	4	5
210	75.43	75.46	75.42	75.44	75.45
220	75.52	75.55	75.51	75.53	75.54
230	75.61	75.64	75.61	75.62	75.63
240	75.82	75.85	75.81	75.83	75.84
250	75.93	75.96	75.91	75.94	75.95

VA 50% light output

Voltage \ Sample	1	2	3	4	5
210	78.372	78.435	78.351	78.393	78.414
220	78.826	78.870	78.782	78.848	78.870
230	79.396	79.488	79.396	79.419	79.442
240	80.232	80.304	80.184	80.256	80.280
250	80.850	80.900	80.800	80.875	80.900

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

