Delta Electronics, Inc.
252 Shangying Road, Guishan Industrial Zone,
Taoyuan County 33341, Taiwan, R.O.C.
TEL : +886-3-359-1968

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED 150
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 150

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:** 2014-06-9
4. **Issued Date:** 2014-06-12
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.

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Sample 1 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	149.37	0.7205	0.985
220	50	149.33	0.6891	0.983
230	50	149.29	0.6609	0.980
240	50	149.31	0.6350	0.977
250	50	149.34	0.6117	0.974

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	149.33	0.7203	0.985
220	50	149.29	0.6889	0.983
230	50	149.25	0.6607	0.980
240	50	149.27	0.6348	0.977
250	50	149.30	0.6115	0.974

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	149.35	0.7204	0.985
220	50	149.31	0.6890	0.983
230	50	149.27	0.6608	0.980
240	50	149.29	0.6349	0.977
250	50	149.32	0.6116	0.974

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	149.39	0.7206	0.985
220	50	149.35	0.6892	0.983
230	50	149.31	0.6610	0.980
240	50	149.33	0.6351	0.977
250	50	149.36	0.6118	0.974

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Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	149.41	0.7207	0.985
220	50	149.37	0.6893	0.983
230	50	149.33	0.6611	0.980
240	50	149.35	0.6352	0.977
250	50	149.38	0.6119	0.974

Watts 100% light output

Voltage \ Sample	1	2	3	4	5
210	149.37	149.33	149.35	149.39	149.41
220	149.33	149.29	149.31	149.35	149.37
230	149.29	149.25	149.27	149.31	149.33
240	149.31	149.27	149.29	149.33	149.35
250	149.34	149.30	149.32	149.36	149.38

VA 100% light output

Voltage \ Sample	1	2	3	4	5
210	151.305	151.263	151.284	151.326	151.347
220	151.602	151.558	151.580	151.624	151.646
230	152.007	151.961	151.984	152.030	152.053
240	152.400	152.352	152.376	152.424	152.448
250	152.925	152.875	152.900	152.950	152.975

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

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Sample 1 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	102.21	0.4981	0.975
220	50	102.23	0.4775	0.971
230	50	102.29	0.4588	0.967
240	50	102.37	0.4420	0.962
250	50	102.47	0.4269	0.958

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	102.17	0.4979	0.975
220	50	102.19	0.4773	0.971
230	50	102.25	0.4586	0.967
240	50	102.33	0.4418	0.962
250	50	102.43	0.4267	0.958

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	102.19	0.4980	0.975
220	50	102.21	0.4774	0.971
230	50	102.27	0.4587	0.967
240	50	102.35	0.4419	0.962
250	50	102.45	0.4268	0.958

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	102.23	0.4982	0.975
220	50	102.25	0.4776	0.971
230	50	102.31	0.4589	0.967
240	50	102.39	0.4421	0.962
250	50	102.49	0.4270	0.958

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Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	102.25	0.4983	0.975
220	50	102.27	0.4777	0.971
230	50	102.33	0.4590	0.967
240	50	102.41	0.4422	0.962
250	50	102.51	0.4271	0.958

Watts 70% light output

Voltage \ Sample	1	2	3	4	5
210	102.21	102.17	102.19	102.23	102.25
220	102.23	102.19	102.21	102.25	102.27
230	102.29	102.25	102.27	102.31	102.33
240	102.37	102.33	102.35	102.39	102.41
250	102.47	102.43	102.45	102.49	102.51

VA 70% light output

Voltage \ Sample	1	2	3	4	5
210	104.601	104.559	104.580	104.622	104.643
220	105.050	105.006	105.028	105.072	105.094
230	105.524	105.478	105.501	105.547	105.570
240	106.080	106.032	106.056	106.104	106.128
250	106.725	106.675	106.700	106.750	106.775

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

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Sample 1 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.19	0.3716	0.962
220	50	75.31	0.3571	0.956
230	50	75.45	0.3443	0.950
240	50	75.61	0.3326	0.944
250	50	75.81	0.3222	0.938

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.15	0.3714	0.962
220	50	75.27	0.3569	0.956
230	50	75.41	0.3441	0.950
240	50	75.57	0.3324	0.944
250	50	75.77	0.3220	0.938

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.17	0.3715	0.962
220	50	75.29	0.3570	0.956
230	50	75.43	0.3442	0.950
240	50	75.59	0.3325	0.944
250	50	75.79	0.3221	0.938

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.21	0.3717	0.962
220	50	75.33	0.3572	0.956
230	50	75.47	0.3444	0.950
240	50	75.63	0.3327	0.944
250	50	75.83	0.3223	0.938

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Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	75.23	0.3718	0.962
220	50	75.35	0.3573	0.956
230	50	75.49	0.3445	0.950
240	50	75.65	0.3328	0.944
250	50	75.85	0.3224	0.938

Watts 50% light output

Voltage \ Sample	1	2	3	4	5
210	75.19	75.15	75.17	75.21	75.23
220	75.31	75.27	75.29	75.33	75.35
230	75.45	75.41	75.43	75.47	75.49
240	75.61	75.57	75.59	75.63	75.65
250	75.81	75.77	75.79	75.83	75.85

VA 50% light output

Voltage \ Sample	1	2	3	4	5
210	78.036	77.994	78.015	78.057	78.078
220	78.562	78.518	78.540	78.584	78.606
230	79.189	79.143	79.166	79.212	79.235
240	79.824	79.776	79.800	79.848	79.872
250	80.550	80.500	80.525	80.575	80.600

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

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Photograph of Sample

Photo 1View of EUT

Photo 2 View of EUT