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 S10
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 S10

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:** 2015-03-30
4. **Issued Date:** 2015-03-30
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	23.88	0.1145	0.989
220	50	23.86	0.1096	0.987
230	50	23.84	0.1049	0.985
240	50	23.84	0.1006	0.982
250	50	23.80	0.0968	0.980

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.89	0.1146	0.989
220	50	23.87	0.1097	0.987
230	50	23.85	0.1050	0.985
240	50	23.85	0.1007	0.982
250	50	23.81	0.0969	0.980

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.87	0.1144	0.989
220	50	23.85	0.1095	0.987
230	50	23.83	0.1048	0.985
240	50	23.83	0.1005	0.982
250	50	23.79	0.0967	0.980

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.91	0.1146	0.989
220	50	23.89	0.1097	0.987
230	50	23.87	0.1050	0.985
240	50	23.87	0.1007	0.982
250	50	23.83	0.0969	0.980

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.85	0.1144	0.989
220	50	23.83	0.1095	0.987
230	50	23.81	0.1048	0.985
240	50	23.81	0.1005	0.982
250	50	23.77	0.0967	0.980

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Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	23.88	23.89	23.87	23.91	23.85
220	23.86	23.87	23.85	23.89	23.83
230	23.84	23.85	23.83	23.87	23.81
240	23.84	23.85	23.83	23.87	23.81
250	23.80	23.81	23.79	23.83	23.77

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	24.045	24.059	24.031	24.074	24.016
220	24.112	24.126	24.098	24.141	24.083
230	24.127	24.141	24.113	24.156	24.098
240	24.144	24.158	24.130	24.173	24.115
250	24.200	24.215	24.185	24.229	24.171

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	17.02	0.0824	0.980
220	50	17.02	0.0790	0.977
230	50	17.02	0.0757	0.973
240	50	17.01	0.0729	0.969
250	50	17.01	0.0702	0.964

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.03	0.0824	0.980
220	50	17.03	0.0790	0.977
230	50	17.03	0.0757	0.973
240	50	17.02	0.0729	0.969
250	50	17.02	0.0702	0.964

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.01	0.0824	0.980
220	50	17.01	0.0790	0.977
230	50	17.01	0.0757	0.973
240	50	17.00	0.0729	0.969
250	50	17.00	0.0702	0.964

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.04	0.0825	0.980
220	50	17.04	0.0791	0.977
230	50	17.04	0.0758	0.973
240	50	17.03	0.0730	0.969
250	50	17.03	0.0703	0.964

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.00	0.0823	0.980
220	50	17.00	0.0789	0.977
230	50	17.00	0.0756	0.973
240	50	16.99	0.0728	0.969
250	50	16.99	0.0701	0.964

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Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	17.02	17.03	17.01	17.04	17.00
220	17.02	17.03	17.01	17.04	17.00
230	17.02	17.03	17.01	17.04	17.00
240	17.01	17.02	17.00	17.03	16.99
250	17.01	17.02	17.00	17.03	16.99

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	17.304	17.314	17.294	17.325	17.283
220	17.380	17.390	17.370	17.401	17.359
230	17.411	17.421	17.401	17.432	17.390
240	17.496	17.506	17.486	17.517	17.475
250	17.550	17.561	17.539	17.571	17.529

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	12.56	0.0616	0.967
220	50	12.56	0.0591	0.961
230	50	12.57	0.0569	0.956
240	50	12.57	0.0549	0.949
250	50	12.58	0.0531	0.942

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.57	0.0616	0.967
220	50	12.57	0.0591	0.961
230	50	12.58	0.0569	0.956
240	50	12.58	0.0549	0.949
250	50	12.59	0.0531	0.942

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.55	0.0616	0.967
220	50	12.55	0.0591	0.961
230	50	12.56	0.0569	0.956
240	50	12.56	0.0549	0.949
250	50	12.57	0.0531	0.942

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.58	0.0617	0.967
220	50	12.58	0.0592	0.961
230	50	12.59	0.0570	0.956
240	50	12.59	0.0550	0.949
250	50	12.60	0.0532	0.942

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	12.54	0.0615	0.967
220	50	12.54	0.0590	0.961
230	50	12.55	0.0568	0.956
240	50	12.55	0.0548	0.949
250	50	12.56	0.0530	0.942

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Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	12.56	12.57	12.55	12.58	12.54
220	12.56	12.57	12.55	12.58	12.54
230	12.57	12.58	12.56	12.59	12.55
240	12.57	12.58	12.56	12.59	12.55
250	12.58	12.59	12.57	12.60	12.56

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	12.936	12.944	12.928	12.952	12.920
220	13.002	13.010	12.994	13.018	12.986
230	13.087	13.095	13.079	13.103	13.071
240	13.176	13.184	13.168	13.192	13.160
250	13.275	13.283	13.267	13.291	13.259

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