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:** 2015-03-24
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.

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Sample 1 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.10	0.1186	0.967
220	50	24.11	0.1139	0.961
230	50	24.13	0.1097	0.955
240	50	24.14	0.1059	0.949
250	50	24.17	0.1026	0.942

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.11	0.1187	0.967
220	50	24.12	0.1140	0.961
230	50	24.14	0.1098	0.955
240	50	24.15	0.1060	0.949
250	50	24.18	0.1027	0.942

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.09	0.1185	0.967
220	50	24.10	0.1138	0.961
230	50	24.12	0.1096	0.955
240	50	24.13	0.1058	0.949
250	50	24.16	0.1025	0.942

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.13	0.1187	0.967
220	50	24.14	0.1140	0.961
230	50	24.16	0.1098	0.955
240	50	24.17	0.1060	0.949
250	50	24.20	0.1027	0.942

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	24.07	0.1185	0.967
220	50	24.08	0.1138	0.961
230	50	24.10	0.1096	0.955
240	50	24.11	0.1058	0.949
250	50	24.14	0.1025	0.942

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Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	24.10	24.11	24.09	24.13	24.07
220	24.11	24.12	24.10	24.14	24.08
230	24.13	24.14	24.12	24.16	24.10
240	24.14	24.15	24.13	24.17	24.11
250	24.17	24.18	24.16	24.20	24.14

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	24.906	24.921	24.891	24.936	24.876
220	25.058	25.073	25.043	25.088	25.028
230	25.231	25.246	25.216	25.261	25.201
240	25.416	25.431	25.401	25.446	25.386
250	25.650	25.665	25.635	25.681	25.619

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	16.88	0.0848	0.946
220	50	16.87	0.0818	0.936
230	50	16.90	0.0793	0.926
240	50	16.93	0.0770	0.915
250	50	17.05	0.0753	0.904

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.89	0.0849	0.946
220	50	16.88	0.0818	0.936
230	50	16.91	0.0793	0.926
240	50	16.94	0.0770	0.915
250	50	17.06	0.0753	0.904

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.87	0.0847	0.946
220	50	16.86	0.0818	0.936
230	50	16.89	0.0793	0.926
240	50	16.92	0.0770	0.915
250	50	17.04	0.0753	0.904

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.90	0.0849	0.946
220	50	16.89	0.0819	0.936
230	50	16.92	0.0794	0.926
240	50	16.95	0.0771	0.915
250	50	17.07	0.0754	0.904

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	16.86	0.0847	0.946
220	50	16.85	0.0817	0.936
230	50	16.88	0.0792	0.926
240	50	16.91	0.0769	0.915
250	50	17.03	0.0752	0.904

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Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	16.88	16.89	16.87	16.90	16.86
220	16.87	16.88	16.86	16.89	16.85
230	16.90	16.91	16.89	16.92	16.88
240	16.93	16.94	16.92	16.95	16.91
250	17.05	17.06	17.04	17.07	17.03

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	17.808	17.819	17.797	17.829	17.787
220	17.996	18.007	17.985	18.018	17.974
230	18.239	18.250	18.228	18.261	18.217
240	18.480	18.491	18.469	18.502	18.458
250	18.825	18.836	18.814	18.848	18.802

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	11.96	0.0626	0.909
220	50	12.00	0.0609	0.895
230	50	12.08	0.0596	0.880
240	50	12.14	0.0585	0.865
250	50	12.19	0.0574	0.849

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	11.97	0.0626	0.909
220	50	12.01	0.0609	0.895
230	50	12.09	0.0596	0.880
240	50	12.15	0.0585	0.865
250	50	12.20	0.0574	0.849

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	11.95	0.0626	0.909
220	50	11.99	0.0609	0.895
230	50	12.07	0.0596	0.880
240	50	12.13	0.0585	0.865
250	50	12.18	0.0574	0.849

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	11.97	0.0627	0.909
220	50	12.01	0.0610	0.895
230	50	12.09	0.0597	0.880
240	50	12.15	0.0586	0.865
250	50	12.20	0.0575	0.849

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	11.95	0.0625	0.909
220	50	11.99	0.0608	0.895
230	50	12.07	0.0595	0.880
240	50	12.13	0.0584	0.865
250	50	12.18	0.0573	0.849

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Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	11.96	11.97	11.95	11.97	11.95
220	12.00	12.01	11.99	12.01	11.99
230	12.08	12.09	12.07	12.09	12.07
240	12.14	12.15	12.13	12.15	12.13
250	12.19	12.20	12.18	12.20	12.18

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	13.146	13.154	13.138	13.162	13.130
220	13.398	13.406	13.390	13.414	13.382
230	13.708	13.716	13.700	13.724	13.692
240	14.040	14.048	14.032	14.057	14.023
250	14.350	14.359	14.341	14.367	14.333

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