Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S40
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 S40

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:** 2015-04-24
4. **Issued Date:** 2015-04-27
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.

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Sample 1 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.70	0.4261	0.989
220	50	88.70	0.4075	0.986
230	50	88.70	0.3911	0.984
240	50	88.80	0.3762	0.980
250	50	88.80	0.3636	0.974

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.75	0.4264	0.989
220	50	88.75	0.4077	0.986
230	50	88.75	0.3913	0.984
240	50	88.85	0.3764	0.980
250	50	88.85	0.3638	0.974

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.65	0.4258	0.989
220	50	88.65	0.4073	0.986
230	50	88.65	0.3909	0.984
240	50	88.75	0.3760	0.980
250	50	88.75	0.3634	0.974

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.81	0.4266	0.989
220	50	88.81	0.4080	0.986
230	50	88.81	0.3916	0.984
240	50	88.91	0.3767	0.980
250	50	88.91	0.3640	0.974

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	88.59	0.4256	0.989
220	50	88.59	0.4070	0.986
230	50	88.59	0.3906	0.984
240	50	88.69	0.3757	0.980
250	50	88.69	0.3632	0.974

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	88.70	88.75	88.65	88.81	88.59
220	88.70	88.75	88.65	88.81	88.59
230	88.70	88.75	88.65	88.81	88.59
240	88.80	88.85	88.75	88.91	88.69
250	88.80	88.85	88.75	88.91	88.69

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	89.481	89.535	89.427	89.588	89.374
220	89.650	89.704	89.596	89.758	89.542
230	89.953	90.007	89.899	90.061	89.845
240	90.288	90.342	90.234	90.396	90.180
250	90.900	90.955	90.845	91.009	90.791

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

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Sample 1 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	62.90	0.3054	0.979
220	50	63.00	0.2935	0.973
230	50	63.10	0.2829	0.967
240	50	63.20	0.2726	0.964
250	50	63.30	0.2629	0.961

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	62.94	0.3056	0.979
220	50	63.04	0.2937	0.973
230	50	63.14	0.2831	0.967
240	50	63.24	0.2728	0.964
250	50	63.34	0.2631	0.961

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	62.86	0.3052	0.979
220	50	62.96	0.2933	0.973
230	50	63.06	0.2827	0.967
240	50	63.16	0.2724	0.964
250	50	63.26	0.2627	0.961

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	62.98	0.3058	0.979
220	50	63.08	0.2939	0.973
230	50	63.18	0.2832	0.967
240	50	63.28	0.2729	0.964
250	50	63.38	0.2632	0.961

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	62.82	0.3050	0.979
220	50	62.92	0.2931	0.973
230	50	63.02	0.2826	0.967
240	50	63.12	0.2723	0.964
250	50	63.22	0.2626	0.961

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	62.90	62.94	62.86	62.98	62.82
220	63.00	63.04	62.96	63.08	62.92
230	63.10	63.14	63.06	63.18	63.02
240	63.20	63.24	63.16	63.28	63.12
250	63.30	63.34	63.26	63.38	63.22

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	64.134	64.172	64.096	64.211	64.057
220	64.570	64.609	64.531	64.647	64.493
230	65.067	65.106	65.028	65.145	64.989
240	65.424	65.463	65.385	65.503	65.345
250	65.725	65.764	65.686	65.804	65.646

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

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Sample 1 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.80	0.2161	0.962
220	50	43.80	0.2073	0.958
230	50	43.90	0.1998	0.952
240	50	43.90	0.1966	0.927
250	50	43.90	0.1983	0.882

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.83	0.2162	0.962
220	50	43.83	0.2074	0.958
230	50	43.93	0.1999	0.952
240	50	43.93	0.1967	0.927
250	50	43.93	0.1984	0.882

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.77	0.2160	0.962
220	50	43.77	0.2072	0.958
230	50	43.87	0.1997	0.952
240	50	43.87	0.1965	0.927
250	50	43.87	0.1982	0.882

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.85	0.2164	0.962
220	50	43.85	0.2075	0.958
230	50	43.95	0.2000	0.952
240	50	43.95	0.1968	0.927
250	50	43.95	0.1985	0.882

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	43.75	0.2158	0.962
220	50	43.75	0.2071	0.958
230	50	43.85	0.1996	0.952
240	50	43.85	0.1964	0.927
250	50	43.85	0.1981	0.882

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	43.80	43.83	43.77	43.85	43.75
220	43.80	43.83	43.77	43.85	43.75
230	43.90	43.93	43.87	43.95	43.85
240	43.90	43.93	43.87	43.95	43.85
250	43.90	43.93	43.87	43.95	43.85

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	45.381	45.408	45.354	45.435	45.327
220	45.606	45.633	45.579	45.661	45.551
230	45.954	45.982	45.926	46.009	45.899
240	47.184	47.212	47.156	47.241	47.127
250	49.575	49.605	49.545	49.634	49.516

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

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone,
Taoyuan County 32063, Taiwan, R.O.C.
TEL : +886-3-452-6107

Photograph of Sample

Photo 1View of EUT

Photo 2 View of EUT