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 S50
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 S50

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.

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

Sample 1 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	111.10	0.5330	0.992
220	50	110.91	0.5086	0.991
230	50	110.63	0.4859	0.990
240	50	110.57	0.4660	0.988
250	50	110.54	0.4479	0.987

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	111.17	0.5333	0.992
220	50	110.98	0.5089	0.991
230	50	110.70	0.4862	0.990
240	50	110.64	0.4663	0.988
250	50	110.61	0.4482	0.987

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	111.03	0.5327	0.992
220	50	110.84	0.5083	0.991
230	50	110.56	0.4856	0.990
240	50	110.50	0.4657	0.988
250	50	110.47	0.4476	0.987

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	111.23	0.5336	0.992
220	50	111.04	0.5092	0.991
230	50	110.76	0.4865	0.990
240	50	110.70	0.4666	0.988
250	50	110.67	0.4484	0.987

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	110.97	0.5324	0.992
220	50	110.78	0.5080	0.991
230	50	110.50	0.4853	0.990
240	50	110.44	0.4654	0.988
250	50	110.41	0.4474	0.987

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

Watts 100% light output

Voltage\Sample	1	2	3	4	5
210	111.10	111.17	111.03	111.23	110.97
220	110.91	110.98	110.84	111.04	110.78
230	110.63	110.70	110.56	110.76	110.50
240	110.57	110.64	110.50	110.70	110.44
250	110.54	110.61	110.47	110.67	110.41

VA 100% light output

Voltage\Sample	1	2	3	4	5
210	111.930	111.997	111.863	112.064	111.796
220	111.892	111.959	111.825	112.026	111.758
230	111.757	111.824	111.690	111.891	111.623
240	111.840	111.907	111.773	111.974	111.706
250	111.975	112.042	111.908	112.109	111.841

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

Sample 1 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	76.10	0.3674	0.986
220	50	76.00	0.3511	0.983
230	50	75.90	0.3363	0.981
240	50	75.40	0.3220	0.978
250	50	75.20	0.3096	0.975

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	76.15	0.3676	0.986
220	50	76.05	0.3513	0.983
230	50	75.95	0.3365	0.981
240	50	75.45	0.3222	0.978
250	50	75.25	0.3098	0.975

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	76.05	0.3672	0.986
220	50	75.95	0.3509	0.983
230	50	75.85	0.3361	0.981
240	50	75.35	0.3218	0.978
250	50	75.15	0.3094	0.975

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	76.19	0.3678	0.986
220	50	76.09	0.3515	0.983
230	50	75.99	0.3367	0.981
240	50	75.49	0.3224	0.978
250	50	75.29	0.3100	0.975

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	76.01	0.3670	0.986
220	50	75.91	0.3507	0.983
230	50	75.81	0.3359	0.981
240	50	75.31	0.3216	0.978
250	50	75.11	0.3092	0.975

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

Watts 70% light output

Voltage\Sample	1	2	3	4	5
210	76.10	76.15	76.05	76.19	76.01
220	76.00	76.05	75.95	76.09	75.91
230	75.90	75.95	75.85	75.99	75.81
240	75.40	75.45	75.35	75.49	75.31
250	75.20	75.25	75.15	75.29	75.11

VA 70% light output

Voltage\Sample	1	2	3	4	5
210	77.154	77.200	77.108	77.247	77.061
220	77.242	77.288	77.196	77.335	77.149
230	77.349	77.395	77.303	77.442	77.256
240	77.280	77.326	77.234	77.373	77.187
250	77.400	77.446	77.354	77.493	77.307

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

Sample 1 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.34	0.2654	0.975
220	50	54.27	0.2540	0.971
230	50	54.30	0.2441	0.967
240	50	54.27	0.2350	0.962
250	50	54.32	0.2268	0.957

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.37	0.2656	0.975
220	50	54.30	0.2542	0.971
230	50	54.33	0.2442	0.967
240	50	54.30	0.2351	0.962
250	50	54.35	0.2269	0.957

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.31	0.2652	0.975
220	50	54.24	0.2538	0.971
230	50	54.27	0.2440	0.967
240	50	54.24	0.2349	0.962
250	50	54.29	0.2267	0.957

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.41	0.2657	0.975
220	50	54.34	0.2543	0.971
230	50	54.37	0.2444	0.967
240	50	54.34	0.2353	0.962
250	50	54.39	0.2271	0.957

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	54.27	0.2651	0.975
220	50	54.20	0.2537	0.971
230	50	54.23	0.2438	0.967
240	50	54.20	0.2347	0.962
250	50	54.25	0.2265	0.957

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

Watts 50% light output

Voltage\Sample	1	2	3	4	5
210	54.34	54.37	54.31	54.41	54.27
220	54.27	54.30	54.24	54.34	54.20
230	54.30	54.33	54.27	54.37	54.23
240	54.27	54.30	54.24	54.34	54.20
250	54.32	54.35	54.29	54.39	54.25

VA 50% light output

Voltage\Sample	1	2	3	4	5
210	55.734	55.767	55.701	55.801	55.667
220	55.880	55.914	55.846	55.947	55.813
230	56.143	56.177	56.109	56.210	56.076
240	56.400	56.434	56.366	56.468	56.332
250	56.700	56.734	56.666	56.768	56.632

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

Photograph of Sample

Photo 1View of EUT

Photo 2 View of EUT