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 30
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 30

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:** 2014-07-07
4. **Issued Date:** 2014-07-12
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.

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	34.25	0.1654	0.983
220	50	34.25	0.1584	0.980
230	50	34.26	0.1521	0.977
240	50	34.27	0.1463	0.973
250	50	34.29	0.1410	0.969

Sample 2 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.98	0.1641	0.983
220	50	33.98	0.1572	0.980
230	50	34.00	0.1508	0.977
240	50	34.01	0.1451	0.974
250	50	34.04	0.1400	0.969

Sample 3 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	34.01	0.1643	0.982
220	50	34.01	0.1574	0.979
230	50	34.02	0.1511	0.976
240	50	34.04	0.1453	0.973
250	50	34.06	0.1402	0.969

Sample 4 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.91	0.1639	0.982
220	50	33.91	0.1569	0.979
230	50	33.92	0.1506	0.976
240	50	33.94	0.1449	0.973
250	50	33.96	0.1398	0.968

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

Sample 5 100% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	33.95	0.1641	0.983
220	50	33.95	0.1571	0.979
230	50	33.97	0.1508	0.976
240	50	33.99	0.1451	0.973
250	50	34.01	0.1399	0.969

Watts 100% light output

Voltage \ Sample	1	2	3	4	5
210	34.25	33.98	34.01	33.91	33.95
220	34.25	33.98	34.01	33.91	33.95
230	34.26	34.00	34.02	33.92	33.97
240	34.27	34.01	34.04	33.94	33.99
250	34.29	34.04	34.06	33.96	34.01

VA 100% light output

Voltage \ Sample	1	2	3	4	5
210	34.734	34.461	34.503	34.419	34.461
220	34.848	34.584	34.628	34.518	34.562
230	34.983	34.684	34.753	34.638	34.684
240	35.112	34.824	34.872	34.776	34.824
250	35.250	35.000	35.050	34.950	34.975

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

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	23.25	0.1140	0.967
220	50	23.25	0.1095	0.961
230	50	23.27	0.1056	0.955
240	50	23.28	0.1020	0.948
250	50	23.36	0.0986	0.941

Sample 2 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.23	0.1140	0.967
220	50	23.25	0.1093	0.962
230	50	23.24	0.1052	0.956
240	50	23.30	0.1019	0.950
250	50	23.32	0.0986	0.943

Sample 3 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.10	0.1134	0.966
220	50	23.12	0.1090	0.961
230	50	23.15	0.1050	0.955
240	50	23.14	0.1013	0.948
250	50	23.18	0.0982	0.941

Sample 4 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.23	0.1120	0.968
220	50	23.26	0.1098	0.961
230	50	23.27	0.1056	0.954
240	50	23.29	0.1040	0.948
250	50	23.36	0.0986	0.940

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

Sample 5 70% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	23.12	0.1140	0.965
220	50	23.12	0.1090	0.962
230	50	23.15	0.1050	0.955
240	50	23.16	0.1019	0.949
250	50	23.18	0.0982	0.940

Watts 70% light output

Voltage \ Sample	1	2	3	4	5
210	23.25	23.23	23.10	23.23	23.12
220	23.25	23.25	23.12	23.26	23.12
230	23.27	23.24	23.15	23.27	23.15
240	23.28	23.30	23.14	23.29	23.16
250	23.36	23.32	23.18	23.36	23.18

VA 70% light output

Voltage \ Sample	1	2	3	4	5
210	23.940	23.940	23.814	23.520	23.940
220	24.090	24.046	23.980	24.156	23.980
230	24.288	24.196	24.150	24.288	24.150
240	24.480	24.456	24.312	24.960	24.456
250	24.650	24.650	24.555	24.650	24.555

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	17.28	0.0864	0.947
220	50	17.33	0.0836	0.940
230	50	17.38	0.0810	0.930
240	50	17.45	0.0787	0.920
250	50	17.53	0.0766	0.911

Sample 2 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.30	0.0865	0.949
220	50	17.35	0.0835	0.940
230	50	17.40	0.0808	0.932
240	50	17.46	0.0786	0.923
250	50	17.52	0.0766	0.913

Sample 3 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.19	0.0860	0.948
220	50	17.25	0.0831	0.940
230	50	17.32	0.0804	0.930
240	50	17.38	0.0783	0.922
250	50	17.42	0.0762	0.912

Sample 4 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.29	0.0865	0.948
220	50	17.33	0.0836	0.940
230	50	17.39	0.0830	0.931
240	50	17.47	0.0790	0.920
250	50	17.53	0.0766	0.911

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

Sample 5 50% light output

Input voltage(V)	Frequency(Hz)	Input power(W)	Input current(A)	Power factor
210	50	17.18	0.0850	0.947
220	50	17.27	0.0840	0.939
230	50	17.32	0.0804	0.930
240	50	17.39	0.0785	0.922
250	50	17.42	0.0762	0.914

Watts 50% light output

Voltage \ Sample	1	2	3	4	5
210	17.28	17.30	17.19	17.29	17.18
220	17.33	17.35	17.25	17.33	17.27
230	17.38	17.40	17.32	17.39	17.32
240	17.45	17.46	17.38	17.47	17.39
250	17.53	17.52	17.42	17.53	17.42

VA 50% light output

Voltage \ Sample	1	2	3	4	5
210	18.144	18.165	18.060	18.165	17.850
220	18.392	18.370	18.282	18.392	18.480
230	18.630	18.584	18.492	19.090	18.492
240	18.888	18.854	18.792	18.960	18.840
250	19.150	19.150	19.045	19.150	19.045

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