

TEST REPORT

SAMPLE INFORMATION:

1. **Sample Description:** LED Street Light
2. **Trade Mark:**
3. **Models:** ARIALED S60
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 S60



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:** 2015-03-25
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.

Sample 1 100% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 132.90 | 0.6364 | 0.994 |
| 220 | 50 | 132.23 | 0.6055 | 0.993 |
| 230 | 50 | 133.20 | 0.5817 | 0.992 |
| 240 | 50 | 133.00 | 0.5571 | 0.991 |
| 250 | 50 | 131.82 | 0.5325 | 0.990 |

Sample 2 100% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 132.98 | 0.6368 | 0.994 |
| 220 | 50 | 132.31 | 0.6059 | 0.993 |
| 230 | 50 | 133.28 | 0.5820 | 0.992 |
| 240 | 50 | 133.08 | 0.5574 | 0.991 |
| 250 | 50 | 131.90 | 0.5328 | 0.990 |

Sample 3 100% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 132.82 | 0.6360 | 0.994 |
| 220 | 50 | 132.15 | 0.6051 | 0.993 |
| 230 | 50 | 133.12 | 0.5814 | 0.992 |
| 240 | 50 | 132.92 | 0.5568 | 0.991 |
| 250 | 50 | 131.74 | 0.5322 | 0.990 |

Sample 4 100% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 133.06 | 0.6372 | 0.994 |
| 220 | 50 | 132.39 | 0.6062 | 0.993 |
| 230 | 50 | 133.36 | 0.5824 | 0.992 |
| 240 | 50 | 133.16 | 0.5578 | 0.991 |
| 250 | 50 | 131.98 | 0.5331 | 0.990 |

Sample 5 100% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 132.74 | 0.6356 | 0.994 |
| 220 | 50 | 132.07 | 0.6048 | 0.993 |
| 230 | 50 | 133.04 | 0.5810 | 0.992 |
| 240 | 50 | 132.84 | 0.5564 | 0.991 |
| 250 | 50 | 131.66 | 0.5319 | 0.990 |

Watts 100% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|--------|--------|--------|--------|--------|
| 210 | 132.90 | 132.98 | 132.82 | 133.06 | 132.74 |
| 220 | 132.23 | 132.31 | 132.15 | 132.39 | 132.07 |
| 230 | 133.20 | 133.28 | 133.12 | 133.36 | 133.04 |
| 240 | 133.00 | 133.08 | 132.92 | 133.16 | 132.84 |
| 250 | 131.82 | 131.90 | 131.74 | 131.98 | 131.66 |

VA 100% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|---------|---------|---------|---------|---------|
| 210 | 133.644 | 133.724 | 133.564 | 133.804 | 133.484 |
| 220 | 133.210 | 133.290 | 133.130 | 133.370 | 133.050 |
| 230 | 133.791 | 133.871 | 133.711 | 133.952 | 133.630 |
| 240 | 133.704 | 133.784 | 133.624 | 133.864 | 133.544 |
| 250 | 133.125 | 133.205 | 133.045 | 133.285 | 132.965 |

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

Sample 1 70% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 91.10 | 0.4384 | 0.989 |
| 220 | 50 | 90.90 | 0.4182 | 0.988 |
| 230 | 50 | 90.90 | 0.4005 | 0.986 |
| 240 | 50 | 90.70 | 0.3839 | 0.984 |
| 250 | 50 | 90.40 | 0.3687 | 0.981 |

Sample 2 70% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 91.15 | 0.4387 | 0.989 |
| 220 | 50 | 90.95 | 0.4185 | 0.988 |
| 230 | 50 | 90.95 | 0.4007 | 0.986 |
| 240 | 50 | 90.75 | 0.3841 | 0.984 |
| 250 | 50 | 90.45 | 0.3689 | 0.981 |

Sample 3 70% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 91.05 | 0.4381 | 0.989 |
| 220 | 50 | 90.85 | 0.4179 | 0.988 |
| 230 | 50 | 90.85 | 0.4003 | 0.986 |
| 240 | 50 | 90.65 | 0.3837 | 0.984 |
| 250 | 50 | 90.35 | 0.3685 | 0.981 |

Sample 4 70% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 91.21 | 0.4389 | 0.989 |
| 220 | 50 | 91.01 | 0.4187 | 0.988 |
| 230 | 50 | 91.01 | 0.4010 | 0.986 |
| 240 | 50 | 90.81 | 0.3844 | 0.984 |
| 250 | 50 | 90.51 | 0.3691 | 0.981 |

Sample 5 70% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 90.99 | 0.4379 | 0.989 |
| 220 | 50 | 90.79 | 0.4177 | 0.988 |
| 230 | 50 | 90.79 | 0.4000 | 0.986 |
| 240 | 50 | 90.59 | 0.3834 | 0.984 |
| 250 | 50 | 90.29 | 0.3683 | 0.981 |

Watts 70% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|-------|-------|-------|-------|-------|
| 210 | 91.10 | 91.15 | 91.05 | 91.21 | 90.99 |
| 220 | 90.90 | 90.95 | 90.85 | 91.01 | 90.79 |
| 230 | 90.90 | 90.95 | 90.85 | 91.01 | 90.79 |
| 240 | 90.70 | 90.75 | 90.65 | 90.81 | 90.59 |
| 250 | 90.40 | 90.45 | 90.35 | 90.51 | 90.29 |

VA 70% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|--------|--------|--------|--------|--------|
| 210 | 92.064 | 92.119 | 92.009 | 92.174 | 91.954 |
| 220 | 92.004 | 92.059 | 91.949 | 92.114 | 91.894 |
| 230 | 92.115 | 92.170 | 92.060 | 92.226 | 92.004 |
| 240 | 92.136 | 92.191 | 92.081 | 92.247 | 92.025 |
| 250 | 92.175 | 92.230 | 92.120 | 92.286 | 92.064 |

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

Sample 1 50% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 64.90 | 0.3150 | 0.981 |
| 220 | 50 | 64.85 | 0.3012 | 0.978 |
| 230 | 50 | 64.85 | 0.2889 | 0.975 |
| 240 | 50 | 64.91 | 0.2780 | 0.972 |
| 250 | 50 | 64.71 | 0.2674 | 0.968 |

Sample 2 50% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 64.94 | 0.3152 | 0.981 |
| 220 | 50 | 64.89 | 0.3014 | 0.978 |
| 230 | 50 | 64.89 | 0.2891 | 0.975 |
| 240 | 50 | 64.95 | 0.2782 | 0.972 |
| 250 | 50 | 64.75 | 0.2676 | 0.968 |

Sample 3 50% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 64.86 | 0.3148 | 0.981 |
| 220 | 50 | 64.81 | 0.3010 | 0.978 |
| 230 | 50 | 64.81 | 0.2887 | 0.975 |
| 240 | 50 | 64.87 | 0.2778 | 0.972 |
| 250 | 50 | 64.67 | 0.2672 | 0.968 |

Sample 4 50% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 64.98 | 0.3154 | 0.981 |
| 220 | 50 | 64.93 | 0.3016 | 0.978 |
| 230 | 50 | 64.93 | 0.2892 | 0.975 |
| 240 | 50 | 64.99 | 0.2783 | 0.972 |
| 250 | 50 | 64.79 | 0.2677 | 0.968 |

Sample 5 50% light output

| Input voltage(V) | Frequency(Hz) | Input power(W) | Input current(A) | Power factor |
|------------------|---------------|----------------|------------------|--------------|
| 210 | 50 | 64.82 | 0.3146 | 0.981 |
| 220 | 50 | 64.77 | 0.3008 | 0.978 |
| 230 | 50 | 64.77 | 0.2886 | 0.975 |
| 240 | 50 | 64.83 | 0.2777 | 0.972 |
| 250 | 50 | 64.63 | 0.2671 | 0.968 |

Watts 50% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|-------|-------|-------|-------|-------|
| 210 | 64.90 | 64.94 | 64.86 | 64.98 | 64.82 |
| 220 | 64.85 | 64.89 | 64.81 | 64.93 | 64.77 |
| 230 | 64.85 | 64.89 | 64.81 | 64.93 | 64.77 |
| 240 | 64.91 | 64.95 | 64.87 | 64.99 | 64.83 |
| 250 | 64.71 | 64.75 | 64.67 | 64.79 | 64.63 |

VA 50% light output

| Voltage\Sample | 1 | 2 | 3 | 4 | 5 |
|----------------|--------|--------|--------|--------|--------|
| 210 | 66.150 | 66.190 | 66.110 | 66.229 | 66.071 |
| 220 | 66.264 | 66.304 | 66.224 | 66.344 | 66.184 |
| 230 | 66.447 | 66.487 | 66.407 | 66.527 | 66.367 |
| 240 | 66.720 | 66.760 | 66.680 | 66.800 | 66.640 |
| 250 | 66.850 | 66.890 | 66.810 | 66.930 | 66.770 |

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

Photograph of Sample

Photo 1 View of EUT



Photo 2 View of EUT

