



## UMSUG Power Measurement Test Report

Report No 101

DUT STL060-70

Supplier Venture Lighting Europe

Power Analyser Serial 125-04815

Thermocouple Meter Serial AZ 189/712

Test Description

UMSUG Power Testing  
-70W VSOLDIER STREET LIGHT 740

Venture Lighting Europe Limited has reviewed the Unmetered Supply Operational Information Document version 17.0 issued 15th March 2017 and confirmed that testing has been performed in accordance with clause **3.2 Test Data requirements**; this being the applicable procedure for product under test.

Measurement Error

Measurement uncertainty is given as follows:  
Real Power +/-0.4%  
Apparent Power +/-0.43%  
Power Factor +/- 1.17%

The above is based on a standard uncertainty multiplied by k=2.

Operator Karim Abdul

Signature 

Checked by Clive Riddell

Signature 

Date 07-06-17

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|--------|
| Test 1 |
|--------|

|           |      |
|-----------|------|
| Power (%) | 100  |
| DAPC      | N/A  |
| 1-10V     | 8.65 |

| Real Power (W) |       |       |       |       |       |         |
|----------------|-------|-------|-------|-------|-------|---------|
| Volts AC       | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210            | 76.29 | 76.78 | 78.63 | 76.57 | 77.38 | 77.13   |
| 220            | 76.24 | 76.71 | 77.62 | 76.49 | 77.31 | 76.87   |
| 230            | 76.21 | 76.70 | 73.53 | 76.43 | 77.25 | 76.02   |
| 240            | 76.16 | 76.67 | 78.32 | 76.41 | 77.22 | 76.96   |
| 250            | 76.13 | 76.50 | 77.31 | 76.31 | 77.15 | 76.68   |

| Apparent Power (VA) |       |       |       |       |       |         |
|---------------------|-------|-------|-------|-------|-------|---------|
| Volts AC            | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210                 | 77.97 | 78.51 | 80.12 | 78.09 | 78.90 | 78.72   |
| 220                 | 78.17 | 78.67 | 79.39 | 78.25 | 79.07 | 78.71   |
| 230                 | 78.42 | 78.70 | 78.67 | 78.47 | 79.27 | 78.70   |
| 240                 | 78.68 | 79.22 | 80.54 | 78.78 | 79.56 | 79.35   |
| 250                 | 78.98 | 79.38 | 79.94 | 79.03 | 79.84 | 79.43   |

| Power Factor |       |       |       |       |       |         |
|--------------|-------|-------|-------|-------|-------|---------|
| Volts AC     | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210          | 0.978 | 0.978 | 0.981 | 0.985 | 0.981 | 0.981   |
| 220          | 0.975 | 0.975 | 0.978 | 0.977 | 0.978 | 0.977   |
| 230          | 0.972 | 0.974 | 0.935 | 0.974 | 0.975 | 0.966   |
| 240          | 0.968 | 0.968 | 0.973 | 0.970 | 0.971 | 0.970   |
| 250          | 0.964 | 0.964 | 0.967 | 0.966 | 0.966 | 0.965   |

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| Ta (°C) | 23.70 |
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| Power Factor | Leading |
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| Test 2 |
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|           |      |
|-----------|------|
| Power (%) | 80   |
| DAPC      | N/A  |
| 1-10V     | 6.95 |

| Real Power (W) |       |       |       |       |       |         |
|----------------|-------|-------|-------|-------|-------|---------|
| Volts AC       | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210            | 63.11 | 63.45 | 64.27 | 63.42 | 64.32 | 63.71   |
| 220            | 63.71 | 63.17 | 63.28 | 63.36 | 64.25 | 63.55   |
| 230            | 63.65 | 64.76 | 63.40 | 63.32 | 64.22 | 63.87   |
| 240            | 63.65 | 64.29 | 63.42 | 63.30 | 64.19 | 63.77   |
| 250            | 63.65 | 64.32 | 63.40 | 63.29 | 64.18 | 63.77   |

| Apparent Power (VA) |       |       |       |       |       |         |
|---------------------|-------|-------|-------|-------|-------|---------|
| Volts AC            | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210                 | 64.91 | 65.30 | 65.89 | 65.08 | 65.95 | 65.43   |
| 220                 | 65.78 | 65.31 | 66.15 | 65.32 | 66.18 | 65.75   |
| 230                 | 66.05 | 66.85 | 65.83 | 65.60 | 66.46 | 66.16   |
| 240                 | 66.40 | 66.77 | 66.21 | 65.94 | 66.77 | 66.42   |
| 250                 | 66.77 | 67.13 | 66.56 | 66.34 | 67.17 | 66.79   |

| Power Factor |       |       |       |       |       |         |
|--------------|-------|-------|-------|-------|-------|---------|
| Volts AC     | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210          | 0.972 | 0.972 | 0.975 | 0.974 | 0.975 | 0.974   |
| 220          | 0.969 | 0.967 | 0.972 | 0.970 | 0.971 | 0.970   |
| 230          | 0.964 | 0.969 | 0.963 | 0.965 | 0.966 | 0.965   |
| 240          | 0.959 | 0.936 | 0.958 | 0.960 | 0.961 | 0.955   |
| 250          | 0.953 | 0.958 | 0.953 | 0.954 | 0.956 | 0.955   |

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| Ta (°C) | 22.59 |
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| Power Factor | Leading |
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| Test 3 |
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|           |      |
|-----------|------|
| Power (%) | 60   |
| DAPC      | N/A  |
| 1-10V     | 5.25 |

| Real Power (W) |       |       |       |       |       |         |
|----------------|-------|-------|-------|-------|-------|---------|
| Volts AC       | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210            | 48.05 | 48.21 | 64.27 | 48.51 | 48.94 | 51.59   |
| 220            | 48.06 | 48.23 | 63.28 | 48.49 | 48.91 | 51.39   |
| 230            | 48.08 | 48.23 | 63.40 | 48.48 | 48.91 | 51.42   |
| 240            | 48.11 | 48.27 | 63.42 | 48.45 | 48.87 | 51.42   |
| 250            | 48.78 | 48.29 | 63.40 | 48.49 | 48.89 | 51.57   |

| Apparent Power (VA) |       |       |       |       |       |         |
|---------------------|-------|-------|-------|-------|-------|---------|
| Volts AC            | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210                 | 50.12 | 50.33 | 50.77 | 50.47 | 50.88 | 50.52   |
| 220                 | 50.46 | 50.68 | 51.11 | 50.83 | 51.20 | 50.86   |
| 230                 | 50.89 | 51.09 | 51.25 | 51.24 | 51.60 | 51.22   |
| 240                 | 51.39 | 51.62 | 51.71 | 51.69 | 52.07 | 51.69   |
| 250                 | 52.45 | 52.08 | 52.19 | 52.22 | 52.57 | 52.30   |

| Power Factor |       |       |       |       |       |         |
|--------------|-------|-------|-------|-------|-------|---------|
| Volts AC     | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210          | 0.959 | 0.958 | 0.964 | 0.961 | 0.962 | 0.961   |
| 220          | 0.952 | 0.952 | 0.959 | 0.954 | 0.955 | 0.954   |
| 230          | 0.945 | 0.944 | 0.951 | 0.946 | 0.948 | 0.947   |
| 240          | 0.936 | 0.935 | 0.942 | 0.937 | 0.939 | 0.938   |
| 250          | 0.930 | 0.927 | 0.935 | 0.928 | 0.930 | 0.930   |

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| Ta (°C) | 23.97 |
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| Power Factor | Leading |
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| Test 4 |
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|           |      |
|-----------|------|
| Power (%) | 40   |
| DAPC      | N/A  |
| 1-10V     | 3.55 |

| Real Power (W) |       |       |       |       |       |         |
|----------------|-------|-------|-------|-------|-------|---------|
| Volts AC       | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210            | 33.91 | 32.76 | 32.75 | 32.94 | 33.21 | 33.11   |
| 220            | 32.06 | 32.86 | 32.89 | 32.93 | 32.92 | 32.73   |
| 230            | 32.31 | 32.83 | 32.92 | 32.96 | 33.24 | 32.85   |
| 240            | 32.48 | 33.01 | 32.98 | 32.99 | 33.28 | 32.95   |
| 250            | 32.45 | 32.97 | 33.06 | 33.04 | 33.06 | 32.92   |

| Apparent Power (VA) |       |       |       |       |       |         |
|---------------------|-------|-------|-------|-------|-------|---------|
| Volts AC            | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210                 | 36.50 | 35.49 | 35.25 | 35.49 | 35.72 | 35.69   |
| 220                 | 35.23 | 36.08 | 35.80 | 36.02 | 35.92 | 35.81   |
| 230                 | 35.96 | 36.51 | 36.23 | 36.56 | 36.73 | 36.40   |
| 240                 | 36.72 | 37.22 | 36.84 | 37.26 | 37.44 | 37.10   |
| 250                 | 37.30 | 37.82 | 37.61 | 38.06 | 37.99 | 37.76   |

| Power Factor |       |       |       |       |       |         |
|--------------|-------|-------|-------|-------|-------|---------|
| Volts AC     | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210          | 0.929 | 0.923 | 0.929 | 0.928 | 0.930 | 0.928   |
| 220          | 0.910 | 0.911 | 0.919 | 0.914 | 0.917 | 0.914   |
| 230          | 0.899 | 0.899 | 0.908 | 0.901 | 0.905 | 0.902   |
| 240          | 0.885 | 0.887 | 0.895 | 0.886 | 0.889 | 0.888   |
| 250          | 0.870 | 0.872 | 0.879 | 0.868 | 0.870 | 0.872   |

|         |       |
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| Ta (°C) | 22.49 |
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| Power Factor | Leading |
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| Test 5 |
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|           |      |
|-----------|------|
| Power (%) | 20   |
| DAPC      | N/A  |
| 1-10V     | 1.85 |

| Real Power (W) |       |       |       |       |       |         |
|----------------|-------|-------|-------|-------|-------|---------|
| Volts AC       | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210            | 19.63 | 20.18 | 19.89 | 20.75 | 20.77 | 20.24   |
| 220            | 19.93 | 20.31 | 19.91 | 20.83 | 20.89 | 20.37   |
| 230            | 20.04 | 20.39 | 20.28 | 20.83 | 20.82 | 20.47   |
| 240            | 20.12 | 20.49 | 20.15 | 20.80 | 20.88 | 20.49   |
| 250            | 20.19 | 20.59 | 20.07 | 20.94 | 20.97 | 20.55   |

| Apparent Power (VA) |       |       |       |       |       |         |
|---------------------|-------|-------|-------|-------|-------|---------|
| Volts AC            | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210                 | 23.36 | 23.93 | 23.17 | 24.58 | 24.43 | 23.89   |
| 220                 | 24.28 | 24.69 | 23.91 | 25.24 | 25.15 | 24.65   |
| 230                 | 25.10 | 25.45 | 24.75 | 26.00 | 25.82 | 25.43   |
| 240                 | 25.91 | 26.29 | 25.54 | 26.77 | 26.70 | 26.24   |
| 250                 | 26.94 | 27.24 | 26.65 | 27.91 | 27.69 | 27.28   |

| Power Factor |       |       |       |       |       |         |
|--------------|-------|-------|-------|-------|-------|---------|
| Volts AC     | DUT 1 | DUT 2 | DUT 3 | DUT 4 | DUT 5 | Average |
| 210          | 0.841 | 0.843 | 0.858 | 0.844 | 0.850 | 0.847   |
| 220          | 0.821 | 0.823 | 0.833 | 0.825 | 0.830 | 0.826   |
| 230          | 0.798 | 0.801 | 0.819 | 0.801 | 0.806 | 0.805   |
| 240          | 0.776 | 0.780 | 0.789 | 0.777 | 0.782 | 0.781   |
| 250          | 0.750 | 0.756 | 0.753 | 0.750 | 0.757 | 0.753   |

|         |       |
|---------|-------|
| Ta (°C) | 22.35 |
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|              |         |
|--------------|---------|
| Power Factor | Leading |
|--------------|---------|

## Images



## Images



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