

UMSUG TEST REPORT

Report Number: TLR 113(IR3581)

Issued on 29/06/2015



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8297

Customer Details

Light Efficient Design
188 S. Northwest Highway
Cary, IL 60013
USA

Customer Reference

TLR113(IR3581)

Product Tested

The following electrical testing was carried out on the below mentioned product.

Product Code Number	LED-8039-DL-E27
Product Description	20W LED Replacement Lamp

Date Received: 17/12/2014

Test Specification

Measurement of power consumption in accordance with "Unmetered Supplies Operational Information Document Version 14.0 (17th December 2014)".

Date & Sign

Date Tested: 29/04/2015

Test Conducted By: Kishan Ram (Laboratory Manager)

Signature: 

Approved By: Kishan Ram (Lab Manager) / Simon Smith (QA)

Signature: 

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Test Conditions

Tests were performed in the following controlled laboratory conditions.

1. Room ambient @ 20 +/- 2 degrees Celsius
2. Fitting assembly tested in free-air
3. Accuracy of the measurements +/-2%

Test Equipment Used

Tests were performed using the following equipment.

1. UMSUG Testing Machine
2. VARIAC (within calibration date)
3. Fluke 43B Power Quality Analyser (within calibration date)
4. Fluke i30 Current Clamp Meter (within calibration date)

Product Illustration

The picture below illustrates the product to be tested.



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Test Data

The below tables provide the power test analysis on 5 samples of the product.

Sample No.1	Voltage	Watts	VA	Power Factor
	210	20.80	22.30	0.94
	220	20.90	22.50	0.93
	230	21.00	22.70	0.92
	240	21.10	23.40	0.90
	250	21.20	23.90	0.89

Sample No.2	Voltage	Watts	VA	Power Factor
	210	20.60	21.90	0.94
	220	20.70	22.20	0.94
	230	20.80	22.50	0.92
	240	20.90	23.00	0.91
	250	21.10	23.30	0.90

Sample No.3	Voltage	Watts	VA	Power Factor
	210	20.30	21.50	0.95
	220	20.50	21.70	0.94
	230	20.60	22.10	0.93
	240	20.70	22.60	0.91
	250	20.80	23.10	0.90

Sample No.4	Voltage	Watts	VA	Power Factor
	210	20.10	21.60	0.93
	220	20.20	21.90	0.92
	230	20.30	22.40	0.91
	240	20.50	22.80	0.90
	250	20.60	23.40	0.88

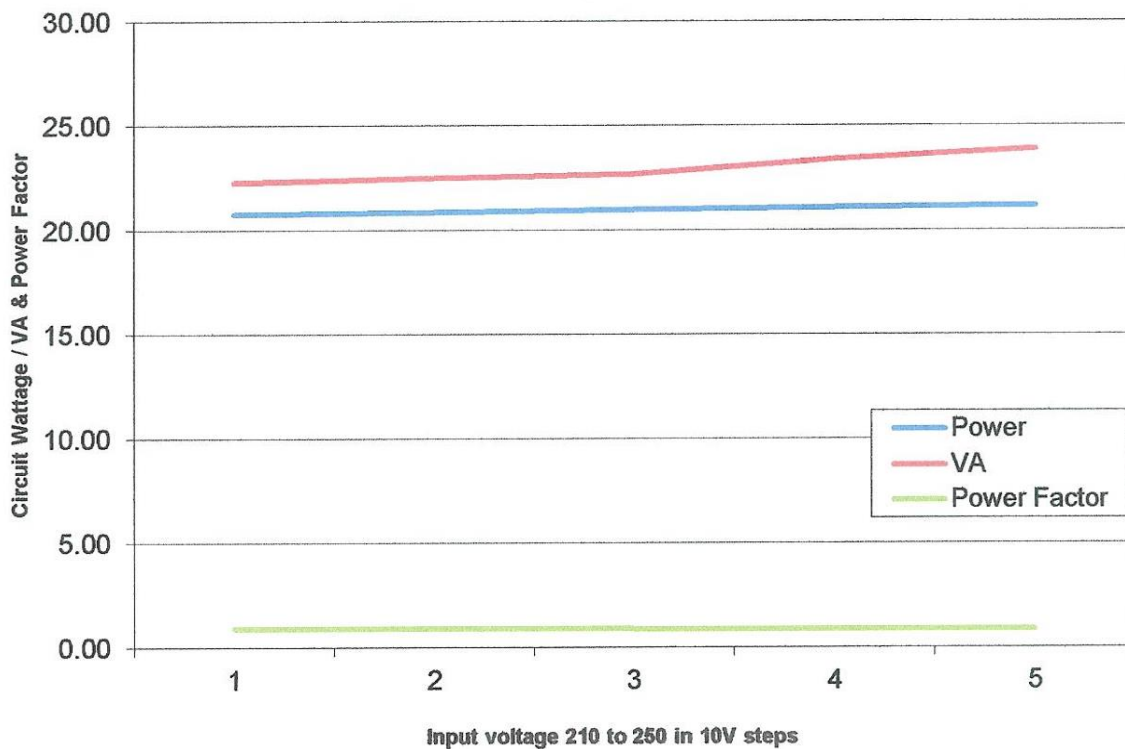
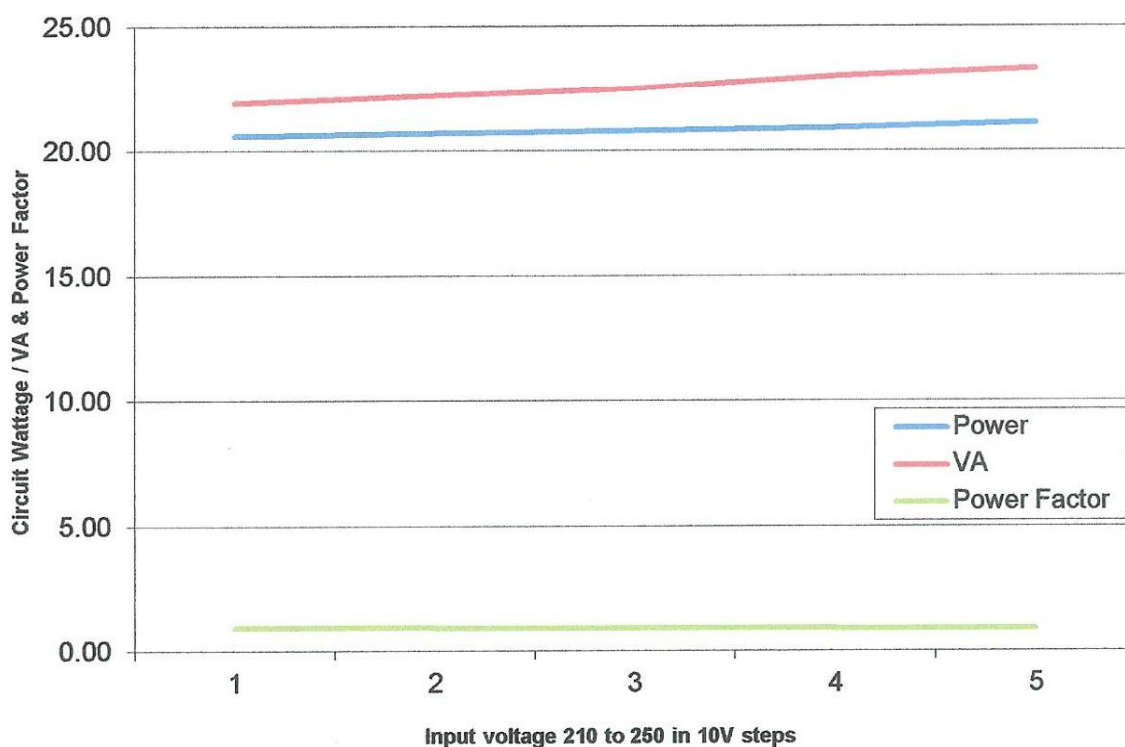
Sample No.5	Voltage	Watts	VA	Power Factor
	210	20.70	21.90	0.94
	220	20.90	22.40	0.93
	230	21.00	22.90	0.92
	240	21.00	23.30	0.90
	250	21.20	23.60	0.90

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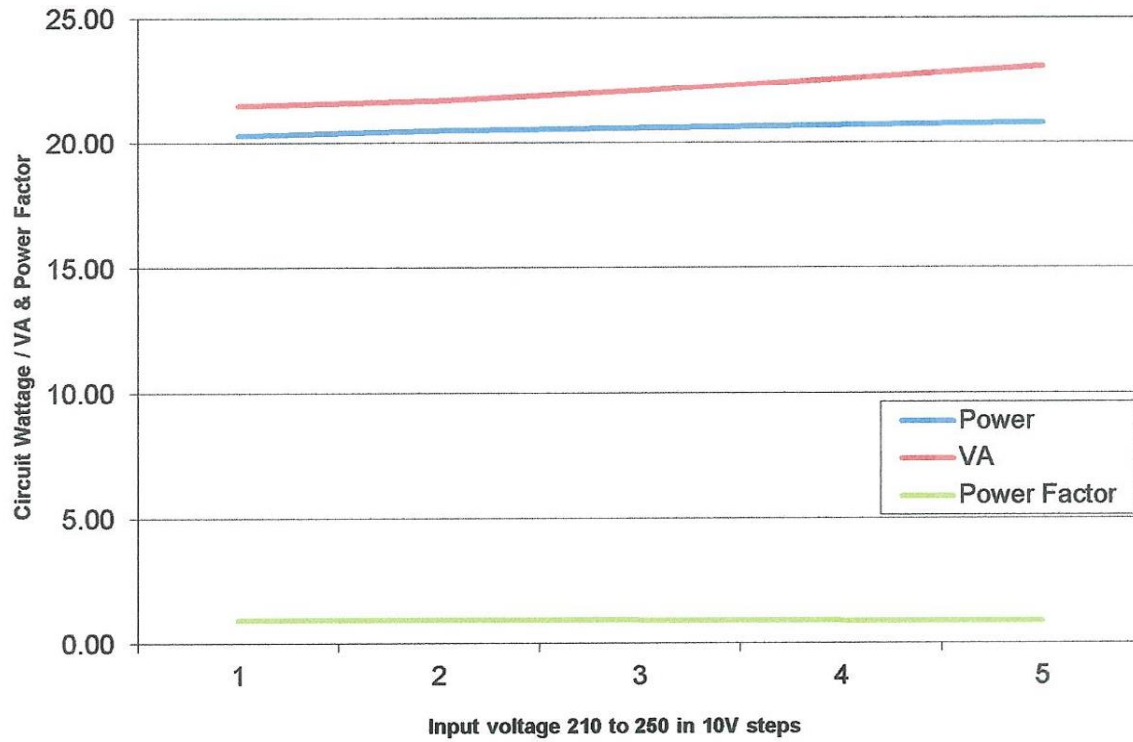
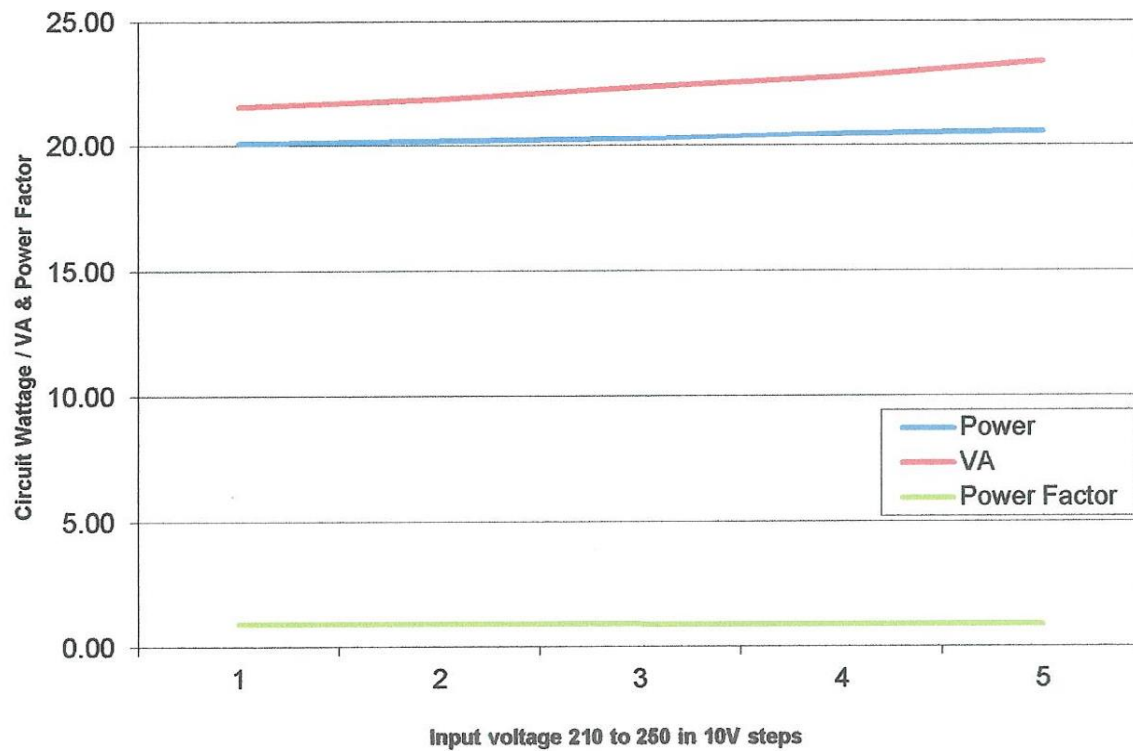
Graphs of Circuit Wattage Vs Circuit Voltage for each of the 5 Product Samples

Sample No. 1**Sample No. 2**

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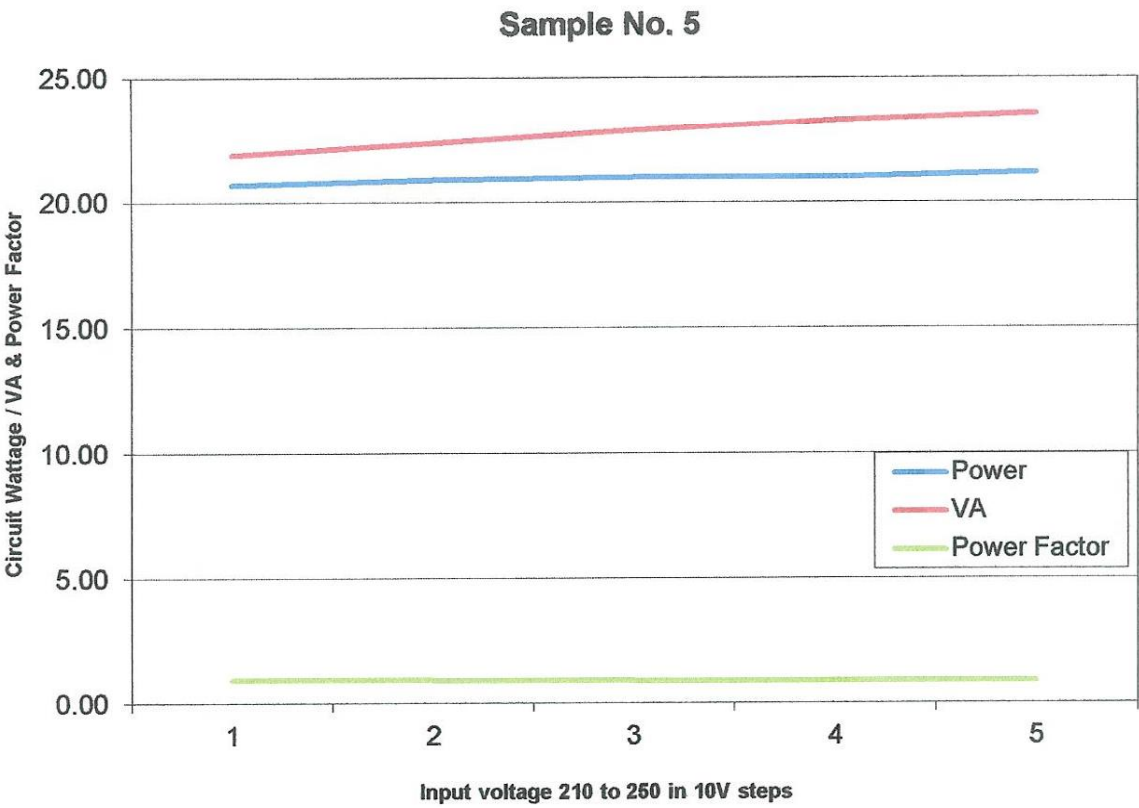
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Sample No. 3**Sample No. 4**

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END OF TEST REPORT