



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300

Photometric Indoor Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

Prepared For
Elemental LED Inc, DBA Diode LED
Wes Buck
Suite 211, 1195 Park Ave.
Emeryville, CA 94608
United States

Catalog Number
BLAZE™ 12v LED Tape Light DI-12V-0142
Project Number
10460077
Test Number
758932

Test Date

2014-09-24

Prepared By

A handwritten signature in black ink, appearing to read 'Todd'.

Todd Heiland, Technician

Approved By

A handwritten signature in black ink, appearing to read 'Eric M. Gaudreau'.

Eric Gaudreau, Engineering Project Handler

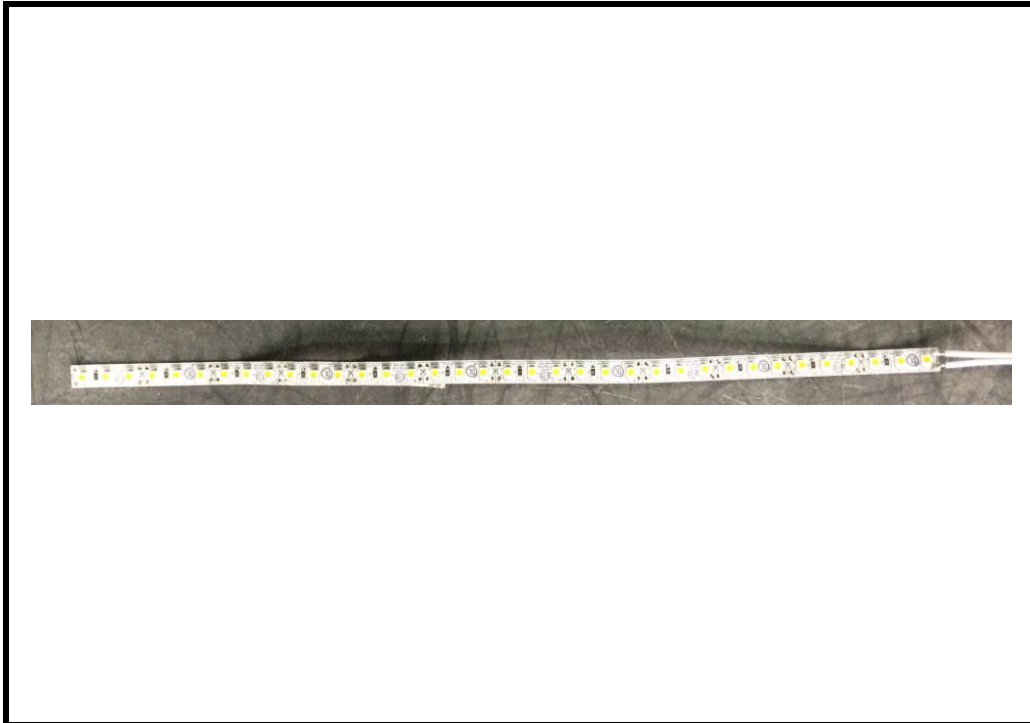
The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300

Luminaire Description: LED strip
Catalog Number: BLAZE™ 12v LED Tape Light DI-12V-0142
Lamp: 36 white LEDs
Mounting: Surface
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

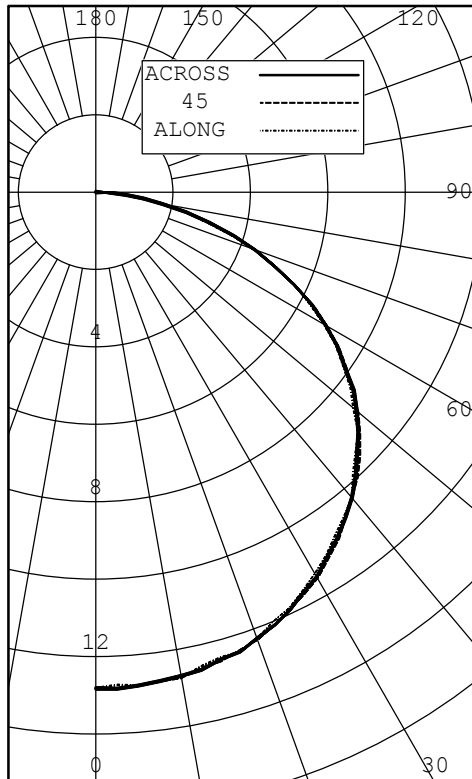


Test Conditions

| | |
|-------------------|-----------|
| Test Temperature: | 24.4 °C |
| Voltage: | 120.0 VAC |
| Current: | 0.09002 A |
| Power: | 4.443 W |
| Power Factor: | 0.409 |
| Frequency: | 60 Hz |
| Current THD: | 192 % |



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS | OUTPUT LUMENS |
|-------|-------|------|----|------|--------|---------------|
| 0 | 13 | 13 | 13 | 13 | 13 | |
| 5 | 13 | 13 | 13 | 13 | 13 | 1 |
| 10 | 13 | 13 | 13 | 13 | 13 | |
| 15 | 12 | 13 | 13 | 13 | 13 | 4 |
| 20 | 12 | 12 | 12 | 12 | 12 | |
| 25 | 12 | 12 | 12 | 12 | 12 | 5 |
| 30 | 11 | 11 | 12 | 11 | 11 | |
| 35 | 11 | 11 | 11 | 11 | 11 | 7 |
| 40 | 10 | 10 | 10 | 10 | 10 | |
| 45 | 10 | 10 | 10 | 10 | 10 | 7 |
| 50 | 9 | 9 | 9 | 9 | 9 | |
| 55 | 8 | 8 | 8 | 8 | 8 | 7 |
| 60 | 7 | 7 | 7 | 7 | 7 | |
| 65 | 6 | 6 | 6 | 6 | 6 | 6 |
| 70 | 4 | 4 | 4 | 4 | 4 | |
| 75 | 3 | 3 | 3 | 3 | 3 | 3 |
| 80 | 2 | 2 | 2 | 2 | 2 | |
| 85 | 1 | 1 | 1 | 1 | 1 | 1 |
| 90 | 0 | 0 | 0 | 0 | 0 | |

ZONAL LUMENS AND PERCENTAGES

| ZONE | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30 | 10 | 24.90 |
| 0-40 | 17 | 41.45 |
| 0-60 | 31 | 76.45 |
| 0-90 | 41 | 100.00 |
| 40-90 | 24 | 58.55 |
| 60-90 | 10 | 23.55 |
| 90-180 | 0 | 0.00 |
| 0-180 | 41 | 100.00 |

EFFICACY (LUMENS PER WATT): 9.6

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 12.000 INS
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
 SC: 1.3

| ANGLE | ALONG | 45 | ACROSS |
|-------|-------|------|--------|
| 45 | 4627 | 4718 | 4669 |
| 55 | 4684 | 4762 | 4732 |
| 65 | 4604 | 4621 | 4622 |
| 75 | 3925 | 4063 | 4074 |
| 85 | 2964 | 3169 | 3173 |

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA
 IN 2.5 DEGREE STEPS

| ANGLE | PLANE | | | | | | OUTPUT LUMENS |
|-------|-------|------|----|------|--------|---------|------------------|
| | ALONG | 22.5 | 45 | 67.5 | ACROSS | AVERAGE | |
| 0.0 | 13 | 13 | 13 | 13 | 13 | 13 | |
| 2.5 | 13 | 13 | 13 | 13 | 13 | 13 | |
| 5.0 | 13 | 13 | 13 | 13 | 13 | 13 | 1 |
| 7.5 | 13 | 13 | 13 | 13 | 13 | 13 | |
| 10.0 | 13 | 13 | 13 | 13 | 13 | 13 | |
| 12.5 | 13 | 13 | 13 | 13 | 13 | 13 | |
| 15.0 | 12 | 13 | 13 | 13 | 13 | 13 | 4 |
| 17.5 | 12 | 12 | 12 | 12 | 12 | 12 | |
| 20.0 | 12 | 12 | 12 | 12 | 12 | 12 | |
| 22.5 | 12 | 12 | 12 | 12 | 12 | 12 | |
| 25.0 | 12 | 12 | 12 | 12 | 12 | 12 | 5 |
| 27.5 | 12 | 12 | 12 | 12 | 12 | 12 | |
| 30.0 | 11 | 11 | 12 | 11 | 11 | 11 | |
| 32.5 | 11 | 11 | 11 | 11 | 11 | 11 | |
| 35.0 | 11 | 11 | 11 | 11 | 11 | 11 | 7 |
| 37.5 | 11 | 11 | 11 | 11 | 11 | 11 | |
| 40.0 | 10 | 10 | 10 | 10 | 10 | 10 | |
| 42.5 | 10 | 10 | 10 | 10 | 10 | 10 | |
| 45.0 | 10 | 10 | 10 | 10 | 10 | 10 | 7 |
| 47.5 | 9 | 9 | 9 | 9 | 9 | 9 | |
| 50.0 | 9 | 9 | 9 | 9 | 9 | 9 | |
| 52.5 | 8 | 8 | 8 | 8 | 8 | 8 | |
| 55.0 | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
| 57.5 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 60.0 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 62.5 | 6 | 6 | 6 | 6 | 6 | 6 | |
| 65.0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 67.5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| 70.0 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 72.5 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 75.0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 77.5 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 80.0 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 82.5 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 85.0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 87.5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | |



COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

| CC WALL | 90 | | | | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 | |
|------------|----|-------|------|------|-----|-------|------|------|-----|-------|------|------|-----|-------|------|------|-------|-------|------|-------|------|-------|------|------|-----|------|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | |
| RCR | 0 | 1.221 | .221 | .221 | .22 | 1.191 | .191 | .191 | .19 | 1.161 | .161 | .161 | .16 | 1.111 | .111 | .111 | .11 | 1.061 | .061 | .061 | .06 | 1.021 | .021 | .021 | .02 | 1.00 |
| | 1 | 1.111 | .061 | .020 | .97 | 1.091 | .041 | .000 | .96 | 1.061 | .020 | .980 | .94 | 0.970 | .940 | .91 | 0.940 | .910 | .89 | 0.900 | .880 | .86 | 0.84 | | | |
| | 2 | 1.020 | .930 | .860 | .80 | 0.990 | .910 | .850 | .79 | 0.970 | .890 | .830 | .78 | 0.860 | .810 | .76 | 0.830 | .780 | .74 | 0.800 | .760 | .73 | 0.71 | | | |
| | 3 | 0.930 | .820 | .730 | .66 | 0.900 | .800 | .720 | .66 | 0.880 | .780 | .710 | .65 | 0.760 | .690 | .64 | 0.730 | .670 | .63 | 0.700 | .660 | .62 | 0.60 | | | |
| | 4 | 0.850 | .730 | .630 | .56 | 0.830 | .710 | .630 | .56 | 0.810 | .700 | .620 | .56 | 0.670 | .600 | .55 | 0.650 | .590 | .54 | 0.630 | .580 | .53 | 0.51 | | | |
| | 5 | 0.780 | .650 | .550 | .48 | 0.760 | .630 | .540 | .48 | 0.740 | .620 | .540 | .47 | 0.600 | .530 | .47 | 0.580 | .510 | .46 | 0.560 | .510 | .46 | 0.44 | | | |
| | 6 | 0.720 | .570 | .480 | .42 | 0.700 | .560 | .470 | .41 | 0.680 | .550 | .470 | .41 | 0.540 | .460 | .40 | 0.520 | .450 | .40 | 0.500 | .440 | .40 | 0.38 | | | |
| | 7 | 0.660 | .510 | .420 | .36 | 0.640 | .500 | .410 | .35 | 0.620 | .490 | .410 | .35 | 0.480 | .400 | .35 | 0.460 | .390 | .34 | 0.450 | .390 | .34 | 0.32 | | | |
| | 8 | 0.610 | .460 | .370 | .31 | 0.590 | .450 | .370 | .31 | 0.580 | .450 | .370 | .31 | 0.430 | .360 | .31 | 0.420 | .350 | .30 | 0.410 | .350 | .30 | 0.28 | | | |
| | 9 | 0.560 | .420 | .330 | .27 | 0.550 | .410 | .330 | .27 | 0.530 | .410 | .330 | .27 | 0.390 | .320 | .27 | 0.380 | .310 | .27 | 0.370 | .310 | .26 | 0.25 | | | |
| | 10 | 0.520 | .380 | .290 | .24 | 0.510 | .380 | .290 | .24 | 0.500 | .370 | .290 | .24 | 0.360 | .290 | .24 | 0.350 | .280 | .23 | 0.340 | .280 | .23 | 0.22 | | | |

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LUMINAIRE INPUT WATTS 4.3

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST
 LUMINOUS OPENING OF LUMINAIRE.



Cone of Light

Cone of Light Tabulation

| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00 | 0.799 | 5.28 |
| 6.00 | 0.355 | 7.93 |
| 8.00 | 0.200 | 10.6 |
| 10.0 | 0.128 | 13.2 |
| 12.0 | 0.0888 | 15.9 |
| 14.0 | 0.0652 | 18.5 |
| 16.0 | 0.0500 | 21.1 |

Cone of Light Plot

