



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



## Indoor Distribution Test Report

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

Prepared For  
**Mercury Lighting**  
Stephen Bambush  
20 Audrey Pl  
Fairfield, NJ 07004-3416

Catalog Number  
**LR15-14G-6200-35K-U55-UNI-XXXX**  
Order Number  
10742397  
Test Number  
1020034

Test Date

2015-04-13

Prepared By

Dane Hernandez-Adams, Technician

Approved By

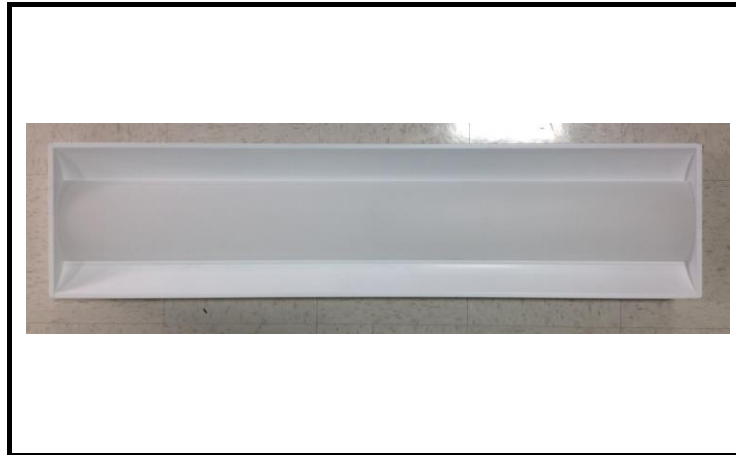
Kyle Spaziani, Project Handler

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.  
This report must not be used by the client to claim product certification, approval, or endorsement by  
NVLAP, NIST, or any agency of the Federal Government.



**Luminaire Description:** White steel housing / reflector, frosted plastic lens enclosure  
**Lamp:** 144 white LEDs  
**Mounting:** Recessed  
**Ballast/Driver:** One Universal Everline D15CC55UNVTZ-C (@1500mA)

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 47.00 in.  
Luminous Width: 11.00 in.

**Summary of Results**

|                         |              |
|-------------------------|--------------|
| Total Luminaire Output: | 5838 Lumens  |
| Luminaire Efficacy:     | 93.9 lm/w    |
| Maximum Candela:        | 1989 Candela |

**Electrical Data**

|                   |           |
|-------------------|-----------|
| Test Temperature: | 25.4 °C   |
| Voltage:          | 120.0 VAC |
| Current:          | 0.5184 A  |
| Power:            | 62.16 W   |
| Power Factor:     | 0.998     |
| Frequency:        | 60 Hz     |
| Current THD:      | 4.20 %    |

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

### Distribution Test Conditions

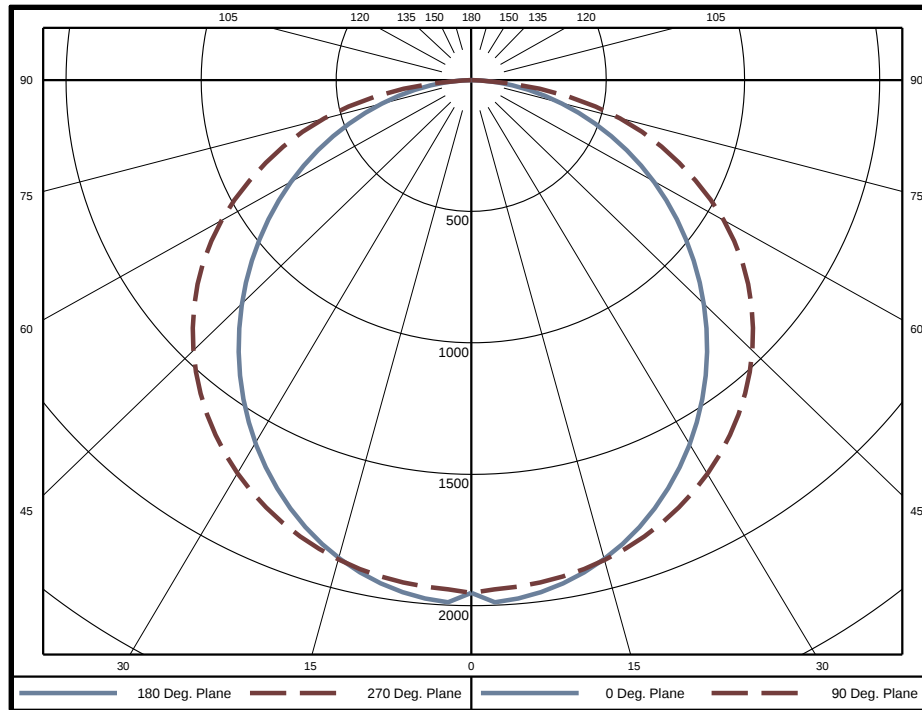
| Temperature | Voltage   | Current  | Power   | Power Factor | Frequency | Current THD |
|-------------|-----------|----------|---------|--------------|-----------|-------------|
| 25.4 °C     | 120.0 VAC | 0.5184 A | 62.16 W | 0.998        | 60 Hz     | 4.20 %      |

### Summary of Results

**Spacing Criteria**  
 0-180: 1.22  
 90-270: 1.31

**Total Lumen Output:** 5838 Lumens  
**Luminaire Efficacy:** 93.9 lm/w  
**Maximum Candela:** 1989 Candela

### Polar Plot



### Zonal Lumen Summary

| Zone  | Lumens | % of Luminaire | Zone    | Lumens | % of Luminaire | Zone    | Lumens | % of Luminaire |
|-------|--------|----------------|---------|--------|----------------|---------|--------|----------------|
| 0-5   | 49.4   | 0.8%           | 60-65   | 409.2  | 7.0%           | 120-125 | 0.0    | 0.0%           |
| 5-10  | 137.9  | 2.4%           | 65-70   | 348.4  | 6.0%           | 125-130 | 0.0    | 0.0%           |
| 10-15 | 224.7  | 3.8%           | 70-75   | 278.6  | 4.8%           | 130-135 | 0.0    | 0.0%           |
| 15-20 | 303.9  | 5.2%           | 75-80   | 200.3  | 3.4%           | 135-140 | 0.0    | 0.0%           |
| 20-25 | 373.0  | 6.4%           | 80-85   | 113.8  | 1.9%           | 140-145 | 0.0    | 0.0%           |
| 25-30 | 429.7  | 7.4%           | 85-90   | 29.0   | 0.5%           | 145-150 | 0.0    | 0.0%           |
| 30-35 | 472.4  | 8.1%           | 90-95   | 0.0    | 0.0%           | 150-155 | 0.0    | 0.0%           |
| 35-40 | 500.1  | 8.6%           | 95-100  | 0.0    | 0.0%           | 155-160 | 0.0    | 0.0%           |
| 40-45 | 512.2  | 8.8%           | 100-105 | 0.0    | 0.0%           | 160-165 | 0.0    | 0.0%           |
| 45-50 | 508.6  | 8.7%           | 105-110 | 0.0    | 0.0%           | 165-170 | 0.0    | 0.0%           |
| 50-55 | 490.0  | 8.4%           | 110-115 | 0.0    | 0.0%           | 170-175 | 0.0    | 0.0%           |
| 55-60 | 456.7  | 7.8%           | 115-120 | 0.0    | 0.0%           | 175-180 | 0.0    | 0.0%           |

| Zone   | Lumens | % of Luminaire |
|--------|--------|----------------|
| 0-40   | 2491.3 | 42.7%          |
| 0-60   | 4458.8 | 76.4%          |
| 0-90   | 5838.0 | 100.0%         |
| 90-180 | 0.0    | 0.0%           |



**Candela Tabulation**  
Horizontal Angle (Degrees)

| Vertical Angle (Degrees) |     | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |
|--------------------------|-----|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
|                          | 0   | 1951 | 1951 | 1951 | 1951 | 1951 | 1951  | 1951 | 1951  | 1951 | 1951  | 1951 | 1951  | 1951 | 1951  | 1951 | 1951  |
|                          | 5   | 1980 | 1947 | 1931 | 1935 | 1935 | 1935  | 1931 | 1947  | 1980 | 1947  | 1931 | 1935  | 1935 | 1935  | 1931 | 1947  |
|                          | 10  | 1945 | 1915 | 1905 | 1915 | 1918 | 1915  | 1905 | 1915  | 1945 | 1915  | 1905 | 1915  | 1918 | 1915  | 1905 | 1915  |
|                          | 15  | 1887 | 1864 | 1864 | 1883 | 1889 | 1883  | 1864 | 1864  | 1887 | 1864  | 1864 | 1883  | 1889 | 1883  | 1864 | 1864  |
|                          | 20  | 1810 | 1793 | 1807 | 1836 | 1848 | 1836  | 1807 | 1793  | 1810 | 1793  | 1807 | 1836  | 1848 | 1836  | 1807 | 1793  |
|                          | 25  | 1714 | 1705 | 1734 | 1777 | 1794 | 1777  | 1734 | 1705  | 1714 | 1705  | 1734 | 1777  | 1794 | 1777  | 1734 | 1705  |
|                          | 30  | 1605 | 1603 | 1648 | 1705 | 1728 | 1705  | 1648 | 1603  | 1605 | 1603  | 1648 | 1705  | 1728 | 1705  | 1648 | 1603  |
|                          | 35  | 1482 | 1489 | 1549 | 1619 | 1648 | 1619  | 1549 | 1489  | 1482 | 1489  | 1549 | 1619  | 1648 | 1619  | 1549 | 1489  |
|                          | 40  | 1350 | 1363 | 1439 | 1523 | 1557 | 1523  | 1439 | 1363  | 1350 | 1363  | 1439 | 1523  | 1557 | 1523  | 1439 | 1363  |
|                          | 45  | 1211 | 1232 | 1319 | 1414 | 1453 | 1414  | 1319 | 1232  | 1211 | 1232  | 1319 | 1414  | 1453 | 1414  | 1319 | 1232  |
|                          | 50  | 1068 | 1095 | 1190 | 1294 | 1337 | 1294  | 1190 | 1095  | 1068 | 1095  | 1190 | 1294  | 1337 | 1294  | 1190 | 1095  |
|                          | 55  | 924  | 955  | 1054 | 1164 | 1210 | 1164  | 1054 | 955   | 924  | 955   | 1054 | 1164  | 1210 | 1164  | 1054 | 955   |
|                          | 60  | 778  | 814  | 913  | 1021 | 1065 | 1021  | 913  | 814   | 778  | 814   | 913  | 1021  | 1065 | 1021  | 913  | 814   |
|                          | 65  | 631  | 670  | 764  | 864  | 904  | 864   | 764  | 670   | 631  | 670   | 764  | 864   | 904  | 864   | 764  | 670   |
|                          | 70  | 485  | 525  | 607  | 701  | 740  | 701   | 607  | 525   | 485  | 525   | 607  | 701   | 740  | 701   | 607  | 525   |
|                          | 75  | 345  | 382  | 453  | 533  | 562  | 533   | 453  | 382   | 345  | 382   | 453  | 533   | 562  | 533   | 453  | 382   |
|                          | 80  | 214  | 240  | 298  | 346  | 361  | 346   | 298  | 240   | 214  | 240   | 298  | 346   | 361  | 346   | 298  | 240   |
|                          | 85  | 96   | 111  | 134  | 142  | 140  | 142   | 134  | 111   | 96   | 111   | 134  | 142   | 140  | 142   | 134  | 111   |
|                          | 90  | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 95  | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 100 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 105 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 110 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 115 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 120 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 125 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 130 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 135 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 140 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 145 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 150 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 155 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 160 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 165 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 170 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 175 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |
|                          | 180 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     |

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

| Vertical Angle (Degrees) |    | 0    | 45   | 90   |
|--------------------------|----|------|------|------|
|                          | 0  | 5850 | 5850 | 5850 |
|                          | 45 | 5135 | 5592 | 6159 |
|                          | 55 | 4829 | 5509 | 6324 |
|                          | 65 | 4477 | 5422 | 6413 |
|                          | 75 | 4001 | 5251 | 6515 |
|                          | 85 | 3291 | 4596 | 4804 |



### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

| Ceiling Cavity Reflectance | 80                                                                 |      |      |      | 70   |      |      |      | 50   |      |      | 30   |      |      | 10   |      |      | 0    |
|----------------------------|--------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Wall Reflectance           | 70                                                                 | 50   | 30   | 10   | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 0    |
| Room Cavity Ratio (RCR)    | ** Values are expressed as Lumens delivered to the task surface ** |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0                          | 6952                                                               | 6952 | 6952 | 6952 | 6791 | 6791 | 6791 | 6791 | 6489 | 6489 | 6489 | 6213 | 6213 | 6213 | 5959 | 5959 | 5959 | 5840 |
| 1                          | 6319                                                               | 6026 | 5764 | 5527 | 6158 | 5893 | 5654 | 5437 | 5643 | 5445 | 5264 | 5413 | 5251 | 5102 | 5201 | 5071 | 4950 | 4825 |
| 2                          | 5725                                                               | 5224 | 4809 | 4459 | 5569 | 5112 | 4730 | 4406 | 4902 | 4580 | 4302 | 4709 | 4439 | 4202 | 4530 | 4307 | 4108 | 3978 |
| 3                          | 5205                                                               | 4568 | 4074 | 3681 | 5057 | 4474 | 4016 | 3647 | 4298 | 3905 | 3581 | 4134 | 3799 | 3518 | 3983 | 3699 | 3456 | 3325 |
| 4                          | 4756                                                               | 4035 | 3506 | 3103 | 4619 | 3956 | 3462 | 3080 | 3807 | 3377 | 3037 | 3669 | 3296 | 2994 | 3541 | 3219 | 2953 | 2822 |
| 5                          | 4368                                                               | 3597 | 3059 | 2661 | 4243 | 3531 | 3024 | 2646 | 3405 | 2958 | 2616 | 3288 | 2895 | 2586 | 3179 | 2834 | 2557 | 2430 |
| 6                          | 4030                                                               | 3234 | 2699 | 2316 | 3916 | 3177 | 2672 | 2305 | 3070 | 2619 | 2283 | 2971 | 2569 | 2262 | 2877 | 2520 | 2241 | 2118 |
| 7                          | 3734                                                               | 2928 | 2406 | 2040 | 3631 | 2880 | 2384 | 2032 | 2789 | 2342 | 2016 | 2703 | 2301 | 2001 | 2623 | 2261 | 1985 | 1867 |
| 8                          | 3474                                                               | 2670 | 2164 | 1816 | 3381 | 2628 | 2146 | 1810 | 2550 | 2111 | 1798 | 2476 | 2078 | 1786 | 2407 | 2045 | 1775 | 1661 |
| 9                          | 3245                                                               | 2448 | 1961 | 1631 | 3161 | 2413 | 1946 | 1627 | 2345 | 1917 | 1618 | 2281 | 1890 | 1609 | 2221 | 1863 | 1600 | 1491 |
| 10                         | 3041                                                               | 2258 | 1789 | 1477 | 2965 | 2227 | 1777 | 1474 | 2169 | 1753 | 1466 | 2113 | 1730 | 1459 | 2061 | 1707 | 1452 | 1349 |

### Cone of Light Tabulation

| Mounting Height | Footcandles at Nadir | Diameter (Feet) |
|-----------------|----------------------|-----------------|
| 4.00            | 122                  | 5.05            |
| 6.00            | 54.2                 | 7.57            |
| 8.00            | 30.5                 | 10.1            |
| 10.0            | 19.5                 | 12.6            |
| 12.0            | 13.5                 | 15.1            |
| 14.0            | 9.95                 | 17.7            |
| 16.0            | 7.62                 | 20.2            |

### Cone of Light Plot

