

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P827192

Luminaire Tested: **OHBL-36HE-MFL-UNV-L840-CD-UPL36**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827192  
REPORT IS A COMBINATION OF REPORTS P826313 AND G3-2310-221-2  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-36HE-MFL-UNV-L840-CD-UPL36  
Description: 36000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENSAND 3600 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

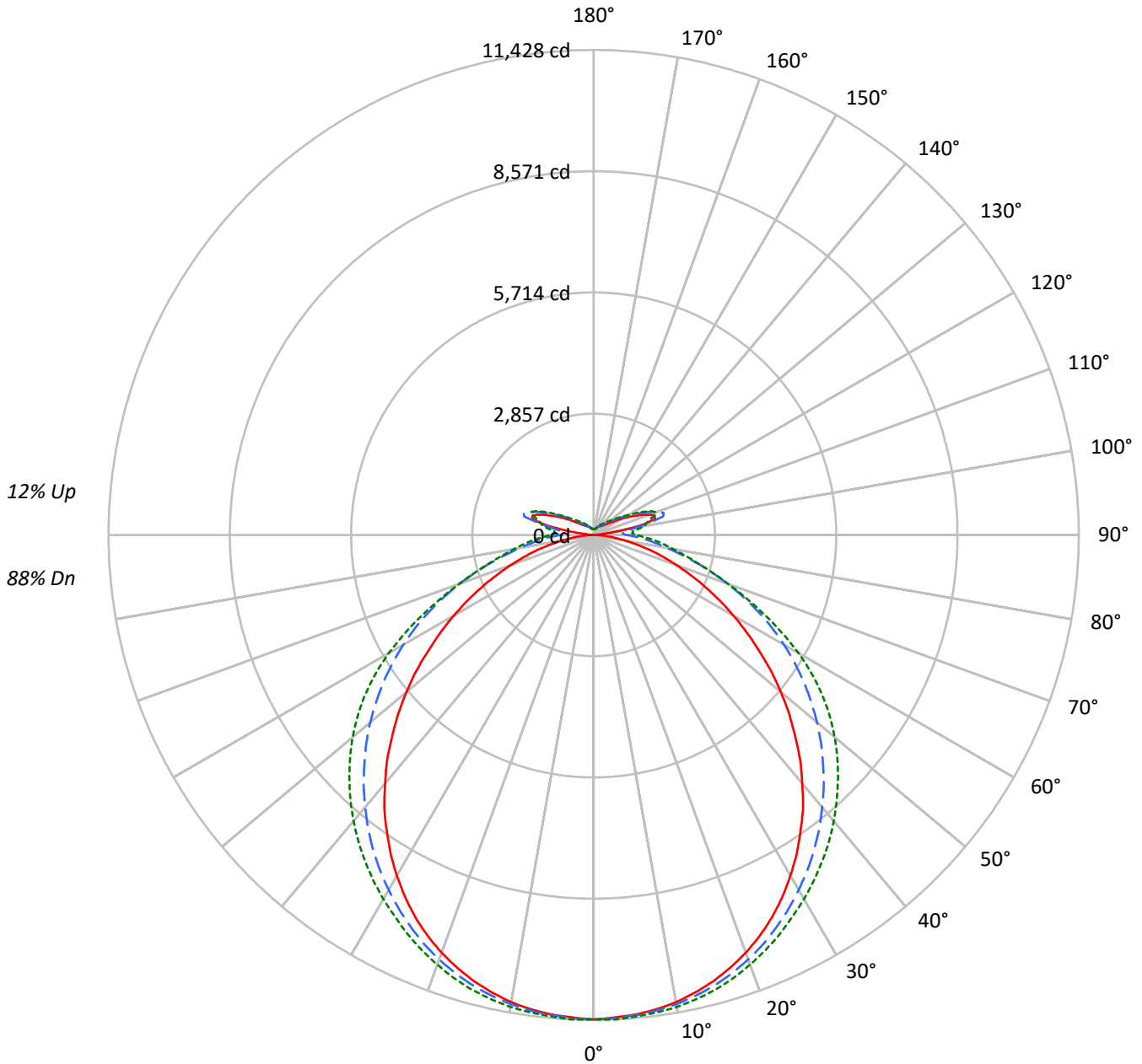
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37752.1 lumens  
Efficiency: N/A  
Efficacy: 156.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Semi-Direct  
  
Input Watts (W): 240.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |    | 20 |    |    |    | 20 |    |    |    |    |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |    | 30 |    |    |    | 10 |    |    | 0  |    |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |
| 0   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 97 | 97 | 97 | 91 | 91 | 91 | 88 |    |    | 88 |
| 1   | 105 | 100 | 96  | 92  | 101 | 97  | 93  | 89  | 90  | 87  | 84  | 84 | 82 | 80 | 79 | 77 | 75 | 72 |    |    | 72 |
| 2   | 96  | 87  | 80  | 75  | 92  | 84  | 78  | 73  | 79  | 74  | 69  | 74 | 70 | 66 | 69 | 66 | 63 | 60 |    |    | 60 |
| 3   | 87  | 77  | 68  | 62  | 84  | 74  | 67  | 61  | 69  | 63  | 58  | 65 | 60 | 55 | 61 | 57 | 53 | 50 |    |    | 50 |
| 4   | 80  | 68  | 59  | 52  | 77  | 66  | 58  | 51  | 62  | 55  | 49  | 58 | 52 | 47 | 54 | 49 | 45 | 43 |    |    | 43 |
| 5   | 73  | 61  | 52  | 45  | 70  | 59  | 50  | 44  | 55  | 48  | 43  | 52 | 46 | 41 | 49 | 44 | 39 | 37 |    |    | 37 |
| 6   | 68  | 54  | 46  | 39  | 65  | 53  | 45  | 39  | 50  | 43  | 37  | 47 | 41 | 36 | 44 | 39 | 35 | 32 |    |    | 32 |
| 7   | 63  | 49  | 41  | 35  | 60  | 48  | 40  | 34  | 45  | 38  | 33  | 43 | 36 | 32 | 40 | 35 | 31 | 29 |    |    | 29 |
| 8   | 58  | 45  | 36  | 31  | 56  | 44  | 36  | 30  | 41  | 34  | 29  | 39 | 33 | 28 | 37 | 32 | 28 | 26 |    |    | 26 |
| 9   | 54  | 41  | 33  | 28  | 52  | 40  | 32  | 27  | 38  | 31  | 26  | 36 | 30 | 26 | 34 | 29 | 25 | 23 |    |    | 23 |
| 10  | 51  | 38  | 30  | 25  | 49  | 37  | 30  | 25  | 35  | 28  | 24  | 33 | 27 | 23 | 32 | 26 | 23 | 21 |    |    | 21 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 18056 | 18056 | 18056 |
| 5°  | 17865 | 17885 | 18016 |
| 10° | 17665 | 17727 | 17997 |
| 15° | 17392 | 17539 | 17950 |
| 20° | 17055 | 17308 | 17847 |
| 25° | 16630 | 17020 | 17744 |
| 30° | 16071 | 16707 | 17645 |
| 35° | 15411 | 16376 | 17578 |
| 40° | 14634 | 15992 | 17523 |
| 45° | 13733 | 15574 | 17436 |
| 50° | 12754 | 15153 | 17322 |
| 55° | 11574 | 14636 | 17055 |
| 60° | 10366 | 14028 | 16381 |
| 65° | 9055  | 13251 | 15171 |
| 70° | 7642  | 12261 | 13876 |
| 75° | 6205  | 11117 | 13195 |
| 80° | 4455  | 10290 | 13823 |
| 85° | 2512  | 10695 | 17328 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1081.8  | 2.9       |
| 10°-20°   | 3103.7  | 8.2       |
| 20°-30°   | 4693.8  | 12.4      |
| 30°-40°   | 5634.9  | 14.9      |
| 40°-50°   | 5819.9  | 15.4      |
| 50°-60°   | 5236.1  | 13.9      |
| 60°-70°   | 3944.3  | 10.4      |
| 70°-80°   | 2381.7  | 6.3       |
| 80°-90°   | 1172.5  | 3.1       |
| 90°-100°  | 765.4   | 2.0       |
| 100°-110° | 1526.0  | 4.0       |
| 110°-120° | 1195.6  | 3.2       |
| 120°-130° | 581.0   | 1.5       |
| 130°-140° | 296.0   | 0.8       |
| 140°-150° | 168.2   | 0.4       |
| 150°-160° | 93.6    | 0.2       |
| 160°-170° | 44.1    | 0.1       |
| 170°-180° | 13.4    | 0.0       |
| 0°-30°    | 8879.3  | 23.5      |
| 0°-40°    | 14514.2 | 38.4      |
| 0°-60°    | 25570.2 | 67.7      |
| 0°-90°    | 33068.7 | 87.6      |
| 90°-120°  | 3487.0  | 9.2       |
| 90°-150°  | 4532.3  | 12.0      |
| 90°-180°  | 4683.0  | 12.4      |
| 0°-180°   | 37752.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0°   | 11417 | 11417 | 11417 | 11417 | 11417 |      |
| 5°   | 11345 | 11375 | 11361 | 11406 | 11392 | ###  |
| 15°  | 10886 | 10940 | 10990 | 11082 | 11093 | 3069 |
| 25°  | 9942  | 10051 | 10193 | 10353 | 10378 | 4573 |
| 35°  | 8500  | 8698  | 9056  | 9330  | 9386  | 5314 |
| 45°  | 6709  | 7047  | 7637  | 8053  | 8140  | 5179 |
| 55°  | 4753  | 5245  | 6041  | 6497  | 6575  | 4261 |
| 65°  | 2900  | 3493  | 4275  | 4488  | 4437  | 2882 |
| 75°  | 1366  | 1962  | 2476  | 2540  | 2515  | 1458 |
| 85°  | 285   | 752   | 1241  | 1411  | 1436  | 329  |
| 90°  | 8     | 342   | 773   | 966   | 1004  | 24   |
| 95°  | 76    | 322   | 696   | 886   | 927   | 243  |
| 105° | 1497  | 1589  | 1693  | 1433  | 1350  | 1423 |
| 115° | 1052  | 1080  | 1214  | 1285  | 1286  | 1064 |
| 125° | 529   | 556   | 652   | 693   | 691   | 497  |
| 135° | 320   | 332   | 374   | 419   | 431   | 253  |
| 145° | 246   | 248   | 256   | 281   | 291   | 156  |
| 155° | 204   | 210   | 210   | 209   | 212   | 91   |
| 165° | 151   | 153   | 154   | 155   | 156   | 43   |
| 175° | 138   | 138   | 139   | 139   | 140   | 13   |
| 180° | 136   | 136   | 136   | 136   | 136   |      |



TEST NUMBER: P827192

CATALOG NUMBER: OHBL-36HE-MFL-UNV-L840-CD-UPL36

**CANDELA DISTRIBUTION (FULL):**

|        | 0°             | 22.5°          | 45°            | 67.5°          | 90°            |
|--------|----------------|----------------|----------------|----------------|----------------|
| 0°     | 11417.3        | 11417.3        | 11417.3        | <i>11417.3</i> | 11417.3        |
| 2.5°   | <i>11383.8</i> | <i>11411.7</i> | <i>11394.9</i> | <i>11431.3</i> | <i>11428.5</i> |
| 5°     | 11344.6        | 11375.4        | 11361.4        | <i>11406.1</i> | 11392.1        |
| 7.5°   | 11277.6        | 11311.1        | 11308.3        | <i>11358.6</i> | 11353.0        |
| 10°    | 11179.8        | 11216.1        | 11227.3        | <i>11294.3</i> | 11294.3        |
| 12.5°  | 11045.6        | 11093.2        | 11121.1        | <i>11202.1</i> | 11204.9        |
| 15°    | 10886.4        | 10939.5        | 10989.8        | <i>11082.0</i> | 11093.2        |
| 17.5°  | 10693.6        | 10760.6        | 10830.5        | <i>10936.7</i> | 10950.6        |
| 20°    | 10475.6        | 10551.1        | 10646.1        | <i>10757.8</i> | 10774.6        |
| 22.5°  | 10224.1        | 10313.6        | 10436.5        | <i>10567.8</i> | 10587.4        |
| 25°    | 9941.9         | 10050.9        | 10193.4        | <i>10352.7</i> | 10377.8        |
| 27.5°  | 9620.6         | 9746.3         | 9939.1         | <i>10118.0</i> | 10140.3        |
| 30°    | 9271.3         | 9419.4         | 9659.7         | <i>9872.1</i>  | 9908.4         |
| 32.5°  | 8902.5         | 9072.9         | 9369.1         | <i>9606.6</i>  | 9656.9         |
| 35°    | 8500.1         | 8698.5         | 9056.1         | <i>9330.0</i>  | 9385.9         |
| 37.5°  | 8103.3         | 8321.3         | 8726.4         | <i>9039.4</i>  | 9106.4         |
| 40°    | 7639.5         | 7910.5         | 8374.4         | <i>8720.8</i>  | 8801.9         |
| 42.5°  | 7203.6         | 7497.0         | 8022.3         | <i>8399.5</i>  | 8477.7         |
| 45°    | 6709.0         | 7047.1         | 7636.7         | <i>8053.0</i>  | 8139.6         |
| 47.5°  | 6245.1         | 6611.2         | 7265.0         | <i>7695.4</i>  | 7784.8         |
| 50°    | 5756.1         | 6158.5         | 6868.3         | <i>7318.1</i>  | 7410.3         |
| 52.5°  | 5267.2         | 5700.3         | 6457.5         | <i>6924.1</i>  | 7010.8         |
| 55°    | 4753.0         | 5244.8         | 6041.2         | <i>6496.6</i>  | 6574.9         |
| 57.5°  | 4275.2         | 4794.9         | 5613.6         | <i>6046.7</i>  | 6094.2         |
| 60°    | 3803.0         | 4342.3         | 5177.7         | <i>5557.8</i>  | 5574.5         |
| 62.5°  | 3341.9         | 3909.1         | 4730.7         | <i>5032.4</i>  | 5010.1         |
| 65°    | 2900.4         | 3492.8         | 4275.2         | <i>4487.6</i>  | 4437.3         |
| 67.5°  | 2475.7         | 3087.6         | 3808.6         | <i>3945.5</i>  | 3878.4         |
| 70°    | 2073.3         | 2693.7         | 3355.9         | <i>3425.7</i>  | 3364.3         |
| 72.5°  | 1718.5         | 2319.2         | 2897.6         | <i>2956.3</i>  | 2911.6         |
| 75°    | 1366.4         | 1961.6         | 2475.7         | <i>2540.0</i>  | 2514.8         |
| 77.5°  | 1036.7         | 1615.1         | 2087.3         | <i>2171.1</i>  | 2176.7         |
| 80°    | 746.1          | 1299.3         | 1749.2         | <i>1880.5</i>  | 1897.3         |
| 82.5°  | 491.8          | 1008.7         | 1467.0         | <i>1634.6</i>  | 1659.8         |
| 85°    | 285.0          | 751.7          | 1240.6         | <i>1411.1</i>  | 1436.2         |
| 87.5°  | 122.9          | 542.1          | 997.5          | <i>1151.2</i>  | 1182.0         |
| 90°    | 8.0            | 342.4          | 772.7          | <i>966.2</i>   | 1003.5         |
| 92.5°  | 33.4           | 303.1          | 686.1          | <i>872.8</i>   | 909.5          |
| 95°    | 76.0           | 322.4          | 695.9          | <i>886.2</i>   | 927.4          |
| 97.5°  | 390.8          | 569.7          | 810.1          | <i>1006.6</i>  | 1055.7         |
| 100°   | 819.8          | 969.3          | 1038.6         | <i>1160.9</i>  | 1203.3         |
| 102.5° | 1274.8         | 1403.5         | 1357.3         | <i>1286.7</i>  | 1276.2         |
| 105°   | 1496.6         | 1588.6         | 1693.4         | <i>1433.4</i>  | 1350.1         |



TEST NUMBER: P827192

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1232.4 | 1288.4 | 1414.4 | 1483.0 | 1462.2 |
| 115°   | 1052.4 | 1080.3 | 1214.0 | 1285.3 | 1286.5 |
| 117.5° | 906.1  | 926.9  | 1046.7 | 1104.1 | 1101.5 |
| 120°   | 766.1  | 788.5  | 899.1  | 941.0  | 944.2  |
| 122.5° | 639.1  | 667.1  | 766.3  | 809.4  | 804.8  |
| 125°   | 529.4  | 555.7  | 651.6  | 692.9  | 691.2  |
| 127.5° | 454.6  | 466.1  | 552.8  | 598.1  | 606.5  |
| 130°   | 393.6  | 404.4  | 476.8  | 526.3  | 532.7  |
| 132.5° | 351.6  | 365.1  | 419.9  | 467.6  | 481.7  |
| 135°   | 319.6  | 332.1  | 373.7  | 418.6  | 430.8  |
| 137.5° | 293.6  | 305.1  | 333.5  | 377.6  | 389.8  |
| 140°   | 274.4  | 283.1  | 303.1  | 340.7  | 351.8  |
| 142.5° | 259.1  | 265.1  | 275.7  | 309.5  | 317.9  |
| 145°   | 245.9  | 248.1  | 255.9  | 281.3  | 290.7  |
| 147.5° | 233.9  | 237.9  | 242.9  | 255.1  | 264.5  |
| 150°   | 222.9  | 228.7  | 229.9  | 234.7  | 244.1  |
| 152.5° | 212.9  | 218.7  | 219.9  | 218.1  | 224.7  |
| 155°   | 203.9  | 209.7  | 209.9  | 209.1  | 211.9  |
| 157.5° | 168.0  | 171.0  | 174.0  | 175.0  | 175.0  |
| 160°   | 162.0  | 164.0  | 167.0  | 167.0  | 168.0  |
| 162.5° | 156.0  | 158.0  | 160.0  | 161.0  | 162.0  |
| 165°   | 151.0  | 153.0  | 154.0  | 155.0  | 156.0  |
| 167.5° | 147.0  | 148.0  | 149.0  | 150.0  | 150.0  |
| 170°   | 143.0  | 144.0  | 145.0  | 145.0  | 146.0  |
| 172.5° | 140.0  | 141.0  | 142.0  | 142.0  | 142.0  |
| 175°   | 138.0  | 138.0  | 139.0  | 139.0  | 140.0  |
| 177.5° | 136.0  | 137.0  | 137.0  | 137.0  | 138.0  |
| 180°   | 136.0  | 136.0  | 136.0  | 136.0  | 136.0  |



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| 107.5° | 1510.6 | 1594.6 | 1729.0 | 1641.7 | 1481.6 |
| 110°   | 1395.6 | 1478.4 | 1606.3 | 1627.5 | 1562.5 |



(END OF REPORT)