

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: P830736

Luminaire Tested: **OHBL-60SE-W-UNV-L935-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-60SE-W-UNV-L935-CD
Description: 60000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 3500K LEDS AND WIDE LENS
Light Source: -
Ballast/Driver: -

Summary

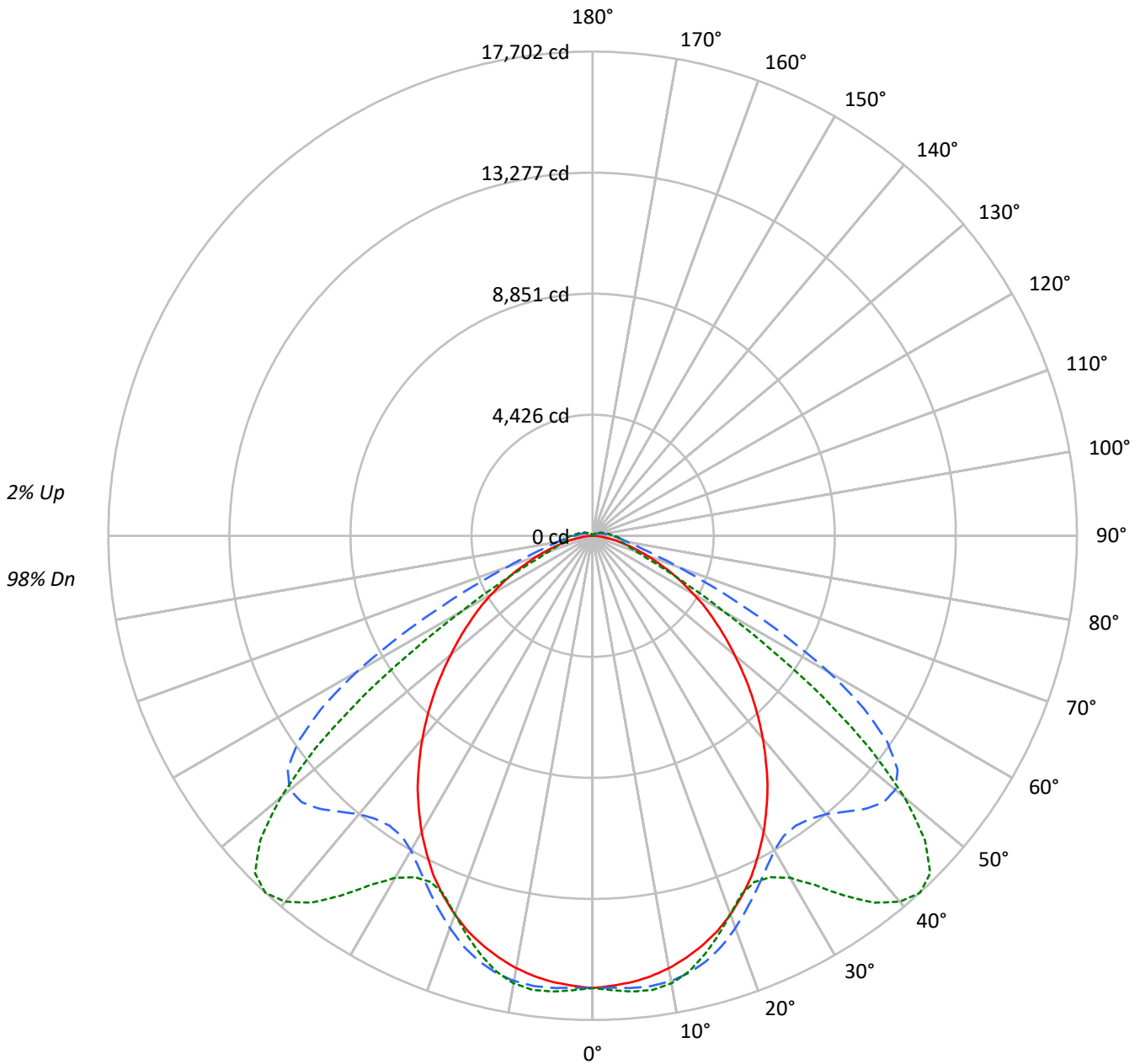
Lumens per Lamp: N/A
Luminaire Lumens: 49511.0 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 362
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P830736

CATALOG NUMBER: OHBL-60SE-W-UNV-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830736

CATALOG NUMBER: OHBL-60SE-W-UNV-L935-CD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| RF | 20 | | | | 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 100 | 100 | 100 | 98 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 85 | 85 | 85 | 83 |
| 2 | 99 | 91 | 85 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 77 | 74 | 78 | 75 | 72 | 72 | 72 | 72 | 70 |
| 3 | 90 | 80 | 72 | 66 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 62 | 69 | 65 | 61 | 61 | 61 | 61 | 59 |
| 4 | 83 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 52 | 52 | 52 | 50 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 52 | 47 | 57 | 51 | 46 | 55 | 50 | 45 | 45 | 45 | 45 | 43 |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 45 | 40 | 50 | 44 | 40 | 40 | 40 | 40 | 38 |
| 7 | 65 | 51 | 43 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 40 | 35 | 45 | 40 | 35 | 35 | 35 | 35 | 33 |
| 8 | 60 | 47 | 38 | 32 | 58 | 46 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 31 | 31 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 28 | 28 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 36 | 30 | 26 | 35 | 30 | 25 | 25 | 25 | 25 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 28243 | 28243 | 28243 |
| 5° | 27980 | 28203 | 28426 |
| 10° | 27628 | 28160 | 28321 |
| 15° | 27090 | 27694 | 27278 |
| 20° | 26352 | 26742 | 25809 |
| 25° | 25363 | 25590 | 25155 |
| 30° | 24049 | 24733 | 26914 |
| 35° | 22550 | 25190 | 31297 |
| 40° | 20810 | 27281 | 35929 |
| 45° | 18991 | 30946 | 38315 |
| 50° | 17094 | 34218 | 35328 |
| 55° | 15311 | 34175 | 26697 |
| 60° | 13496 | 28911 | 16100 |
| 65° | 11579 | 19961 | 9580 |
| 70° | 9407 | 12903 | 6750 |
| 75° | 7157 | 9245 | 6035 |
| 80° | 5137 | 8117 | 6403 |
| 85° | 3487 | 8914 | 8906 |



TEST NUMBER: P830736

CATALOG NUMBER: OHBL-60SE-W-UNV-L935-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1580.2 | 3.2 |
| 10°-20° | 4474.6 | 9.0 |
| 20°-30° | 6547.8 | 13.2 |
| 30°-40° | 8503.7 | 17.2 |
| 40°-50° | 10384.1 | 21.0 |
| 50°-60° | 9144.8 | 18.5 |
| 60°-70° | 4765.4 | 9.6 |
| 70°-80° | 2043.6 | 4.1 |
| 80°-90° | 981.4 | 2.0 |
| 90°-100° | 461.1 | 0.9 |
| 100°-110° | 286.6 | 0.6 |
| 110°-120° | 169.4 | 0.3 |
| 120°-130° | 92.1 | 0.2 |
| 130°-140° | 46.2 | 0.1 |
| 140°-150° | 22.2 | 0.0 |
| 150°-160° | 7.8 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 12602.6 | 25.5 |
| 0°-40° | 21106.3 | 42.6 |
| 0°-60° | 40635.2 | 82.1 |
| 0°-90° | 48425.6 | 97.8 |
| 90°-120° | 917.1 | 1.9 |
| 90°-150° | 1077.7 | 2.2 |
| 90°-180° | 1085.0 | 2.2 |
| 0°-180° | 49511.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 16536 | 16536 | 16536 | 16536 | 16536 | |
| 5° | 16382 | 16507 | 16596 | 16743 | 16725 | ### |
| 15° | 15501 | 15936 | 16090 | 15968 | 15840 | 4365 |
| 25° | 13735 | 14470 | 14224 | 13956 | 13971 | 6303 |
| 35° | 11149 | 12326 | 12943 | 15094 | 16061 | 6949 |
| 45° | 8209 | 10328 | 14117 | 17092 | 17449 | 6330 |
| 55° | 5466 | 9047 | 13147 | 11527 | 10246 | 4905 |
| 65° | 3136 | 6268 | 6018 | 3346 | 2879 | 3103 |
| 75° | 1263 | 2933 | 1934 | 1324 | 1256 | 1377 |
| 85° | 268 | 1045 | 985 | 963 | 974 | 298 |
| 90° | 4 | 378 | 649 | 742 | 760 | 19 |
| 95° | 7 | 221 | 517 | 606 | 624 | 5 |
| 105° | 14 | 125 | 335 | 403 | 410 | 15 |
| 115° | 21 | 71 | 207 | 253 | 260 | 22 |
| 125° | 25 | 36 | 121 | 157 | 160 | 21 |
| 135° | 21 | 21 | 57 | 96 | 100 | 17 |
| 145° | 28 | 21 | 25 | 46 | 54 | 17 |
| 155° | 28 | 28 | 21 | 21 | 21 | 9 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830736

CATALOG NUMBER: OHBL-60SE-W-UNV-L935-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 16535.8 | 16535.8 | 16535.8 | 16535.8 | 16535.8 |
| 2.5° | 16464.4 | 16535.8 | 16539.3 | 16639.2 | 16628.5 |
| 5° | 16382.4 | 16507.2 | 16596.4 | 16742.7 | 16724.9 |
| 7.5° | 16246.8 | 16443.0 | 16600.0 | 16760.5 | 16746.3 |
| 10° | 16054.1 | 16321.7 | 16528.6 | 16660.6 | 16617.8 |
| 12.5° | 15804.4 | 16157.6 | 16361.0 | 16389.5 | 16307.4 |
| 15° | 15501.2 | 15936.4 | 16089.8 | 15968.5 | 15840.1 |
| 17.5° | 15158.7 | 15668.8 | 15722.4 | 15458.4 | 15297.8 |
| 20° | 14730.6 | 15312.1 | 15258.6 | 14894.7 | 14716.3 |
| 22.5° | 14256.1 | 14919.7 | 14748.4 | 14366.7 | 14195.4 |
| 25° | 13735.2 | 14470.1 | 14224.0 | 13956.4 | 13970.7 |
| 27.5° | 13125.2 | 13960.0 | 13720.9 | 13842.2 | 14070.6 |
| 30° | 12504.4 | 13424.8 | 13278.6 | 13984.9 | 14434.5 |
| 32.5° | 11823.0 | 12875.4 | 13007.4 | 14402.4 | 15137.3 |
| 35° | 11148.7 | 12326.0 | 12943.2 | 15094.5 | 16061.3 |
| 37.5° | 10403.1 | 11769.5 | 13046.7 | 15893.6 | 16906.8 |
| 40° | 9678.9 | 11227.2 | 13282.1 | 16610.7 | 17466.9 |
| 42.5° | 8940.4 | 10742.0 | 13678.1 | 17035.2 | 17702.4 |
| 45° | 8209.0 | 10328.2 | 14116.9 | 17092.3 | 17449.1 |
| 47.5° | 7477.7 | 9978.5 | 14420.2 | 16639.2 | 16475.1 |
| 50° | 6771.3 | 9668.2 | 14441.6 | 15551.1 | 14880.4 |
| 52.5° | 6111.3 | 9382.8 | 14049.2 | 13817.3 | 12775.5 |
| 55° | 5465.5 | 9047.4 | 13146.6 | 11526.9 | 10246.1 |
| 57.5° | 4876.9 | 8583.6 | 11755.2 | 9065.2 | 7666.7 |
| 60° | 4252.6 | 7955.7 | 9957.1 | 6632.1 | 5529.8 |
| 62.5° | 3678.2 | 7174.4 | 7941.5 | 4616.5 | 3974.3 |
| 65° | 3135.9 | 6268.3 | 6018.5 | 3346.4 | 2879.0 |
| 67.5° | 2561.5 | 5330.0 | 4441.6 | 2440.2 | 2140.6 |
| 70° | 2112.0 | 4459.5 | 3307.2 | 1898.0 | 1723.1 |
| 72.5° | 1651.8 | 3631.8 | 2472.3 | 1541.2 | 1444.9 |
| 75° | 1262.9 | 2932.6 | 1933.6 | 1323.6 | 1255.8 |
| 77.5° | 931.1 | 2318.9 | 1555.5 | 1170.2 | 1106.0 |
| 80° | 652.9 | 1826.6 | 1302.2 | 1045.3 | 1020.3 |
| 82.5° | 438.8 | 1412.8 | 1109.5 | 995.4 | 998.9 |
| 85° | 267.6 | 1045.3 | 984.7 | 963.2 | 974.0 |
| 87.5° | 128.4 | 742.1 | 845.5 | 877.6 | 888.3 |
| 90° | 3.6 | 378.2 | 649.3 | 742.1 | 759.9 |
| 92.5° | 0.0 | 289.0 | 570.8 | 663.6 | 681.4 |
| 95° | 7.1 | 221.2 | 517.3 | 606.5 | 624.3 |
| 97.5° | 7.1 | 181.9 | 463.8 | 556.5 | 567.2 |
| 100° | 10.7 | 157.0 | 413.8 | 503.0 | 513.7 |
| 102.5° | 10.7 | 139.1 | 371.0 | 449.5 | 456.7 |
| 105° | 14.3 | 124.9 | 335.4 | 403.1 | 410.3 |



TEST NUMBER: P830736

CATALOG NUMBER: OHBL-60SE-W-UNV-L935-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 21.4 | 85.6 | 235.5 | 285.4 | 292.5 |
| 115° | 21.4 | 71.4 | 206.9 | 253.3 | 260.4 |
| 117.5° | 25.0 | 64.2 | 181.9 | 224.8 | 228.3 |
| 120° | 25.0 | 53.5 | 157.0 | 199.8 | 203.4 |
| 122.5° | 25.0 | 42.8 | 139.1 | 178.4 | 181.9 |
| 125° | 25.0 | 35.7 | 121.3 | 157.0 | 160.5 |
| 127.5° | 21.4 | 25.0 | 103.5 | 139.1 | 142.7 |
| 130° | 21.4 | 21.4 | 85.6 | 121.3 | 128.4 |
| 132.5° | 21.4 | 21.4 | 71.4 | 107.0 | 114.2 |
| 135° | 21.4 | 21.4 | 57.1 | 96.3 | 99.9 |
| 137.5° | 21.4 | 21.4 | 46.4 | 82.1 | 89.2 |
| 140° | 21.4 | 21.4 | 35.7 | 71.4 | 74.9 |
| 142.5° | 25.0 | 21.4 | 32.1 | 60.6 | 64.2 |
| 145° | 28.5 | 21.4 | 25.0 | 46.4 | 53.5 |
| 147.5° | 28.5 | 25.0 | 25.0 | 39.2 | 42.8 |
| 150° | 28.5 | 28.5 | 21.4 | 28.5 | 35.7 |
| 152.5° | 28.5 | 28.5 | 21.4 | 21.4 | 28.5 |
| 155° | 28.5 | 28.5 | 21.4 | 21.4 | 21.4 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|-------|-------|-------|-------|
| 107.5° | 17.8 | 110.6 | 299.7 | 360.3 | 367.5 |
| 110° | 17.8 | 96.3 | 264.0 | 321.1 | 328.2 |



(END OF REPORT)