

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: P830601

Luminaire Tested: **OHBL-60HE-A-UNV-L840-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-200-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-60HE-A-UNV-L840-CD
Description: 60000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND AISLE LENS
Light Source: -
Ballast/Driver: -

Summary

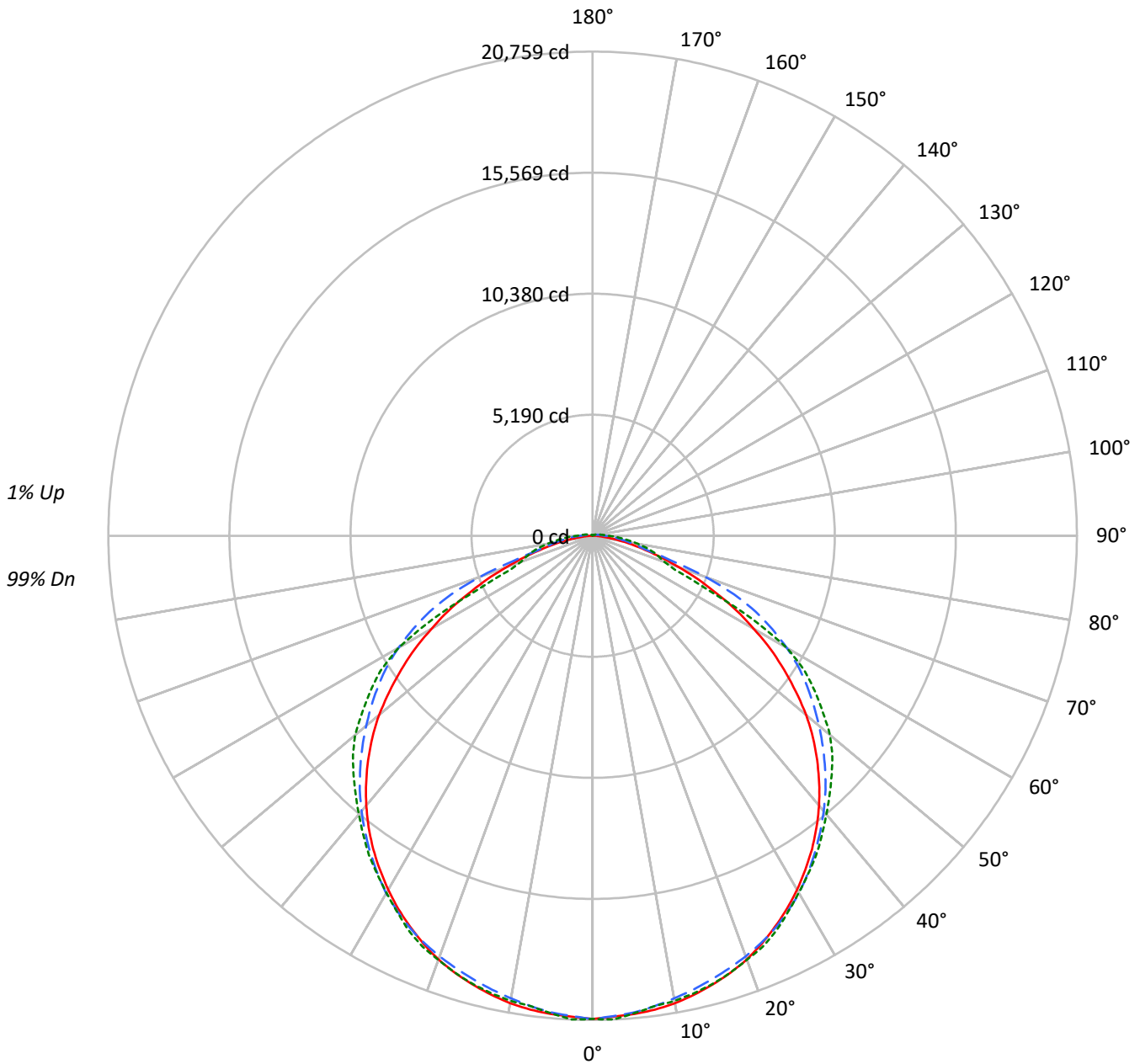
Lumens per Lamp: N/A
Luminaire Lumens: 58555.1 lumens
Efficiency: N/A
Efficacy: 173.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 338
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: P830601

CATALOG NUMBER: OHBL-60HE-A-UNV-L840-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830601

CATALOG NUMBER: OHBL-60HE-A-UNV-L840-CD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 106 | 106 | 106 | 101 | 101 | 101 | | | | 99 | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 87 | 86 | | | | 83 | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 84 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | | | | 70 | | | | | | | | | | | | | | | | |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 63 | 70 | 65 | 61 | | | | 59 | | | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 62 | 57 | 53 | | | | 51 | | | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | | | | 44 | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | | | | 38 | | | | | | | | | | | | | | | | |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | | | | 34 | | | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | | | | 30 | | | | | | | | | | | | | | | | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | | | | 27 | | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | | | | 24 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 32763 | 32763 | 32763 |
| 5° | 32549 | 32287 | 32355 |
| 10° | 32430 | 31798 | 31996 |
| 15° | 32224 | 31432 | 31781 |
| 20° | 32018 | 31202 | 31500 |
| 25° | 31632 | 30970 | 31221 |
| 30° | 31211 | 30604 | 30631 |
| 35° | 30709 | 30024 | 30305 |
| 40° | 30056 | 29424 | 29861 |
| 45° | 29151 | 28731 | 29665 |
| 50° | 27924 | 27941 | 29430 |
| 55° | 25975 | 27164 | 28332 |
| 60° | 23423 | 26027 | 26193 |
| 65° | 20093 | 23918 | 16600 |
| 70° | 16184 | 18671 | 12035 |
| 75° | 12134 | 11084 | 12215 |
| 80° | 8446 | 9216 | 11662 |
| 85° | 4807 | 8444 | 10931 |



TEST NUMBER: P830601

CATALOG NUMBER: OHBL-60HE-A-UNV-L840-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1953.4 | 3.3 |
| 10°-20° | 5601.4 | 9.6 |
| 20°-30° | 8555.2 | 14.6 |
| 30°-40° | 10380.3 | 17.7 |
| 40°-50° | 10879.6 | 18.6 |
| 50°-60° | 9858.5 | 16.8 |
| 60°-70° | 6609.8 | 11.3 |
| 70°-80° | 2968.1 | 5.1 |
| 80°-90° | 1077.1 | 1.8 |
| 90°-100° | 324.2 | 0.6 |
| 100°-110° | 153.0 | 0.3 |
| 110°-120° | 76.7 | 0.1 |
| 120°-130° | 42.3 | 0.1 |
| 130°-140° | 29.1 | 0.0 |
| 140°-150° | 19.6 | 0.0 |
| 150°-160° | 14.6 | 0.0 |
| 160°-170° | 9.4 | 0.0 |
| 170°-180° | 3.0 | 0.0 |
| 0°-30° | 16110.0 | 27.5 |
| 0°-40° | 26490.3 | 45.2 |
| 0°-60° | 47228.5 | 80.7 |
| 0°-90° | 57883.4 | 98.9 |
| 90°-120° | 553.8 | 0.9 |
| 90°-150° | 644.8 | 1.1 |
| 90°-180° | 672.0 | 1.1 |
| 0°-180° | 58555.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 20717 | 20717 | 20717 | 20717 | 20717 | |
| 5° | 20582 | 20654 | 20510 | 20573 | 20546 | ### |
| 15° | 19914 | 19836 | 19695 | 19869 | 19893 | 5623 |
| 25° | 18500 | 18419 | 18548 | 18719 | 18665 | 8528 |
| 35° | 16397 | 16436 | 16604 | 16781 | 16715 | 10249 |
| 45° | 13608 | 13830 | 14088 | 14447 | 14492 | 10483 |
| 55° | 10014 | 10496 | 11212 | 11661 | 11634 | 8939 |
| 65° | 5877 | 6797 | 7716 | 6512 | 5317 | 5856 |
| 75° | 2312 | 3355 | 2468 | 2525 | 2690 | 2527 |
| 85° | 398 | 764 | 980 | 1183 | 1240 | 486 |
| 90° | 3 | 255 | 506 | 635 | 665 | 24 |
| 95° | 3 | 159 | 348 | 422 | 434 | 4 |
| 105° | 12 | 69 | 171 | 207 | 216 | 14 |
| 115° | 24 | 36 | 87 | 111 | 117 | 22 |
| 125° | 21 | 24 | 54 | 63 | 66 | 21 |
| 135° | 27 | 30 | 33 | 48 | 51 | 21 |
| 145° | 27 | 30 | 30 | 33 | 36 | 18 |
| 155° | 30 | 33 | 33 | 33 | 30 | 14 |
| 165° | 33 | 33 | 33 | 33 | 33 | 9 |
| 175° | 33 | 33 | 30 | 27 | 27 | 3 |
| 180° | 30 | 30 | 30 | 30 | 30 | |



TEST NUMBER: P830601

CATALOG NUMBER: OHBL-60HE-A-UNV-L840-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 20716.8 | 20716.8 | 20716.8 | 20716.8 | 20716.8 |
| 2.5° | 20632.9 | 20719.8 | 20612.0 | 20728.8 | 20758.7 |
| 5° | 20582.0 | 20653.9 | 20510.1 | 20573.0 | 20546.1 |
| 7.5° | 20489.2 | 20513.1 | 20342.4 | 20393.3 | 20339.4 |
| 10° | 20351.4 | 20339.4 | 20138.7 | 20237.5 | 20249.5 |
| 12.5° | 20147.7 | 20111.7 | 19932.0 | 20081.8 | 20084.8 |
| 15° | 19914.0 | 19836.1 | 19695.3 | 19869.1 | 19893.0 |
| 17.5° | 19644.4 | 19542.6 | 19449.7 | 19674.4 | 19638.4 |
| 20° | 19329.9 | 19210.1 | 19192.1 | 19437.7 | 19347.9 |
| 22.5° | 18940.5 | 18847.6 | 18889.6 | 19123.2 | 19066.3 |
| 25° | 18500.1 | 18419.3 | 18548.1 | 18718.8 | 18664.9 |
| 27.5° | 18035.8 | 17987.9 | 18134.7 | 18266.5 | 18161.7 |
| 30° | 17526.6 | 17499.7 | 17694.4 | 17802.2 | 17670.4 |
| 32.5° | 16972.4 | 16981.4 | 17167.2 | 17313.9 | 17191.1 |
| 35° | 16397.3 | 16436.3 | 16604.0 | 16780.7 | 16714.8 |
| 37.5° | 15765.3 | 15852.1 | 16019.9 | 16220.6 | 16151.7 |
| 40° | 15097.3 | 15223.1 | 15408.8 | 15651.4 | 15588.5 |
| 42.5° | 14375.4 | 14534.1 | 14773.8 | 15043.4 | 15037.4 |
| 45° | 13608.5 | 13830.2 | 14087.8 | 14447.2 | 14492.2 |
| 47.5° | 12811.7 | 13060.3 | 13386.8 | 13866.1 | 13935.0 |
| 50° | 11946.0 | 12257.5 | 12664.9 | 13240.1 | 13282.0 |
| 52.5° | 10981.5 | 11406.8 | 11946.0 | 12497.2 | 12446.3 |
| 55° | 10013.9 | 10496.2 | 11212.1 | 11661.4 | 11634.5 |
| 57.5° | 9049.4 | 9591.6 | 10460.3 | 10780.8 | 10777.8 |
| 60° | 7971.0 | 8657.0 | 9606.5 | 9849.2 | 9609.5 |
| 62.5° | 6973.5 | 7710.4 | 8695.9 | 8519.2 | 7698.4 |
| 65° | 5877.2 | 6796.8 | 7716.4 | 6512.2 | 5317.0 |
| 67.5° | 4903.6 | 5862.2 | 6554.1 | 4460.3 | 3819.2 |
| 70° | 3924.1 | 4981.5 | 5110.3 | 3310.0 | 3265.1 |
| 72.5° | 3055.4 | 4181.7 | 3525.7 | 2833.7 | 2977.5 |
| 75° | 2312.5 | 3354.9 | 2468.3 | 2525.2 | 2689.9 |
| 77.5° | 1686.5 | 2576.1 | 1920.1 | 2213.7 | 2348.5 |
| 80° | 1159.3 | 1824.3 | 1566.6 | 1860.2 | 1953.1 |
| 82.5° | 727.9 | 1204.2 | 1255.1 | 1497.7 | 1593.6 |
| 85° | 398.4 | 763.8 | 979.5 | 1183.2 | 1240.1 |
| 87.5° | 164.8 | 461.3 | 748.9 | 913.6 | 961.6 |
| 90° | 3.0 | 254.6 | 506.2 | 635.0 | 665.0 |
| 92.5° | 3.0 | 194.7 | 413.4 | 512.2 | 533.2 |
| 95° | 3.0 | 158.8 | 347.5 | 422.4 | 434.3 |
| 97.5° | 6.0 | 125.8 | 290.6 | 350.5 | 362.5 |
| 100° | 9.0 | 104.8 | 242.6 | 293.6 | 302.5 |
| 102.5° | 12.0 | 83.9 | 203.7 | 245.6 | 254.6 |
| 105° | 12.0 | 68.9 | 170.7 | 206.7 | 215.7 |



TEST NUMBER: P830601

CATALOG NUMBER: OHBL-60HE-A-UNV-L840-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 21.0 | 41.9 | 101.8 | 128.8 | 134.8 |
| 115° | 24.0 | 35.9 | 86.9 | 110.8 | 116.8 |
| 117.5° | 24.0 | 30.0 | 74.9 | 92.9 | 98.9 |
| 120° | 24.0 | 27.0 | 65.9 | 80.9 | 83.9 |
| 122.5° | 24.0 | 24.0 | 56.9 | 71.9 | 74.9 |
| 125° | 21.0 | 24.0 | 53.9 | 62.9 | 65.9 |
| 127.5° | 24.0 | 24.0 | 47.9 | 56.9 | 59.9 |
| 130° | 24.0 | 27.0 | 41.9 | 53.9 | 53.9 |
| 132.5° | 27.0 | 30.0 | 38.9 | 50.9 | 50.9 |
| 135° | 27.0 | 30.0 | 33.0 | 47.9 | 50.9 |
| 137.5° | 30.0 | 30.0 | 30.0 | 44.9 | 47.9 |
| 140° | 30.0 | 30.0 | 27.0 | 38.9 | 41.9 |
| 142.5° | 27.0 | 30.0 | 27.0 | 35.9 | 38.9 |
| 145° | 27.0 | 30.0 | 30.0 | 33.0 | 35.9 |
| 147.5° | 30.0 | 30.0 | 30.0 | 30.0 | 33.0 |
| 150° | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| 152.5° | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| 155° | 30.0 | 33.0 | 33.0 | 33.0 | 30.0 |
| 157.5° | 30.0 | 33.0 | 33.0 | 33.0 | 33.0 |
| 160° | 30.0 | 33.0 | 33.0 | 33.0 | 33.0 |
| 162.5° | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 |
| 165° | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 |
| 167.5° | 33.0 | 35.9 | 33.0 | 33.0 | 33.0 |
| 170° | 33.0 | 33.0 | 33.0 | 30.0 | 30.0 |
| 172.5° | 33.0 | 33.0 | 33.0 | 30.0 | 30.0 |
| 175° | 33.0 | 33.0 | 30.0 | 27.0 | 27.0 |
| 177.5° | 35.9 | 33.0 | 30.0 | 27.0 | 24.0 |
| 180° | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 15.0 | 56.9 | 146.8 | 176.7 | 182.7 |
| 110° | 18.0 | 47.9 | 122.8 | 149.8 | 155.8 |



(END OF REPORT)