

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: P830477

Luminaire Tested: **OHBL-48HE-MFL-UNV-L740-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830477
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-48HE-MFL-UNV-L740-CD
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 70CRI, 4000K LEDS AND MEDIUM FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

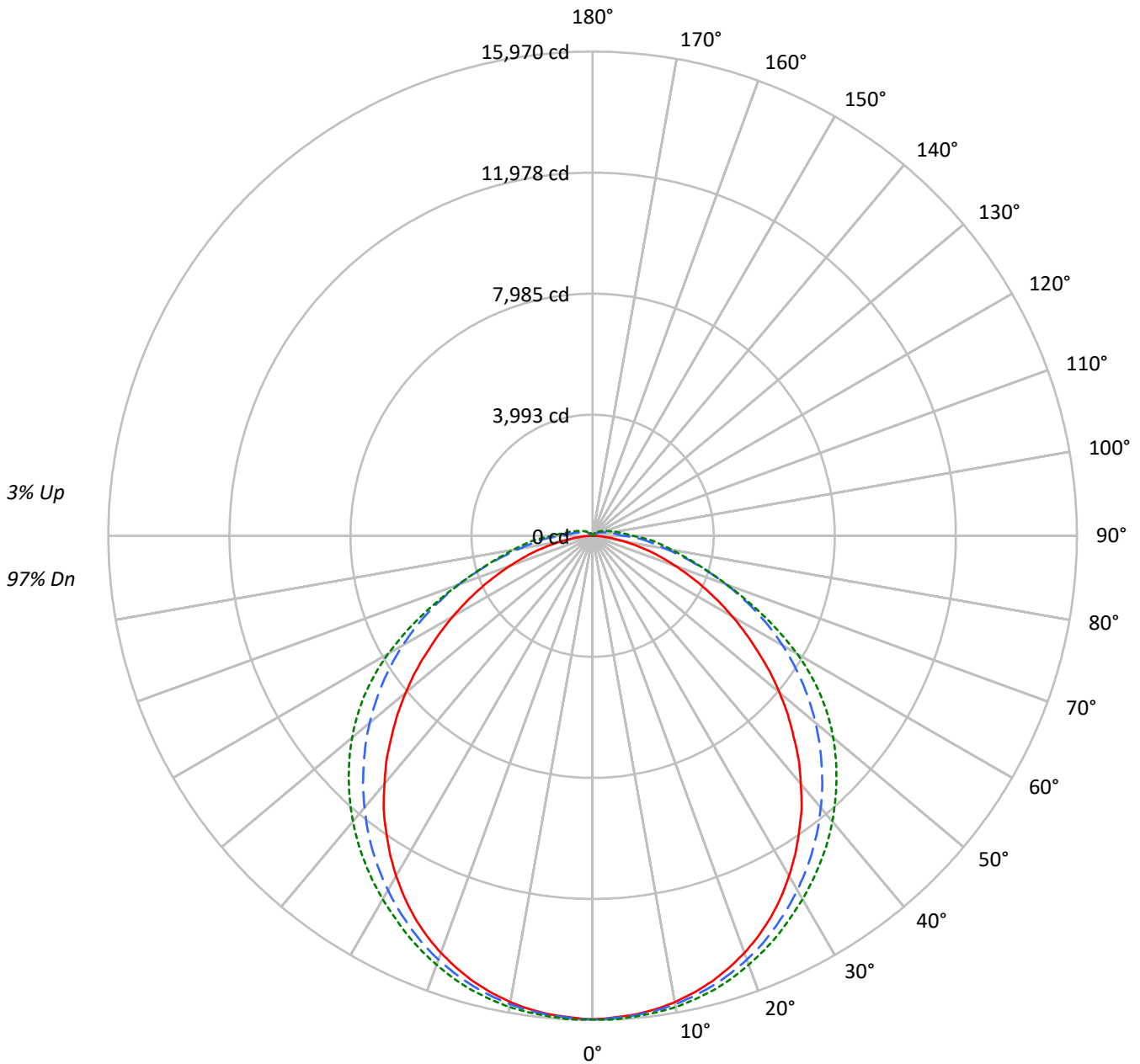
Lumens per Lamp: N/A
Luminaire Lumens: 47749.0 lumens
Efficiency: N/A
Efficacy: 179.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 266
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: P830477

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L740-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830477

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L740-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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 99 | 99 | 97 | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 92 | 95 | 91 | 88 | 90 | 88 | 85 | 86 | 84 | 82 | 82 | 82 | 80 | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 77 | 73 | 79 | 74 | 71 | 75 | 72 | 68 | 68 | 68 | 66 | | | | | | | | | | | | | | | | | |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 67 | 62 | 58 | 58 | 58 | 56 | | | | | | | | | | | | | | | | | |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 50 | 50 | 47 | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 72 | 60 | 52 | 46 | 58 | 50 | 45 | 56 | 49 | 44 | 53 | 48 | 43 | 43 | 43 | 41 | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 48 | 43 | 38 | 38 | 38 | 36 | | | | | | | | | | | | | | | | | |
| 7 | 64 | 50 | 42 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 34 | 34 | 32 | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 30 | 30 | 28 | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 37 | 32 | 27 | 27 | 27 | 25 | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 25 | 25 | 23 | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 25232 | 25232 | 25232 |
| 5° | 25070 | 24993 | 25069 |
| 10° | 24894 | 24772 | 24938 |
| 15° | 24616 | 24509 | 24765 |
| 20° | 24247 | 24186 | 24513 |
| 25° | 23754 | 23784 | 24258 |
| 30° | 23072 | 23347 | 24001 |
| 35° | 22245 | 22883 | 23780 |
| 40° | 21253 | 22347 | 23561 |
| 45° | 20082 | 21763 | 23283 |
| 50° | 18802 | 21174 | 22945 |
| 55° | 17228 | 20453 | 22373 |
| 60° | 15616 | 19603 | 21233 |
| 65° | 13857 | 18517 | 19358 |
| 70° | 11950 | 17134 | 17329 |
| 75° | 10019 | 15535 | 15958 |
| 80° | 7595 | 14379 | 15831 |
| 85° | 4806 | 14946 | 17691 |



TEST NUMBER: P830477

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L740-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1511.8 | 3.2 |
| 10°-20° | 4337.1 | 9.1 |
| 20°-30° | 6559.0 | 13.7 |
| 30°-40° | 7874.2 | 16.5 |
| 40°-50° | 8132.7 | 17.0 |
| 50°-60° | 7316.9 | 15.3 |
| 60°-70° | 5511.7 | 11.5 |
| 70°-80° | 3328.2 | 7.0 |
| 80°-90° | 1627.7 | 3.4 |
| 90°-100° | 685.2 | 1.4 |
| 100°-110° | 391.1 | 0.8 |
| 110°-120° | 229.6 | 0.5 |
| 120°-130° | 129.8 | 0.3 |
| 130°-140° | 68.4 | 0.1 |
| 140°-150° | 33.2 | 0.1 |
| 150°-160° | 12.4 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 12407.9 | 26.0 |
| 0°-40° | 20282.0 | 42.5 |
| 0°-60° | 35731.7 | 74.8 |
| 0°-90° | 46199.3 | 96.8 |
| 90°-120° | 1305.8 | 2.7 |
| 90°-150° | 1537.3 | 3.2 |
| 90°-180° | 1550.0 | 3.2 |
| 0°-180° | 47749.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 15954 | 15954 | 15954 | 15954 | 15954 | |
| 5° | 15853 | 15896 | 15876 | 15939 | 15919 | ### |
| 15° | 15213 | 15287 | 15357 | 15486 | 15502 | 4289 |
| 25° | 13893 | 14045 | 14244 | 14467 | 14502 | 6390 |
| 35° | 11878 | 12155 | 12655 | 13038 | 13116 | 7425 |
| 45° | 9375 | 9848 | 10671 | 11253 | 11374 | 7238 |
| 55° | 6642 | 7329 | 8442 | 9078 | 9188 | 5955 |
| 65° | 4053 | 4881 | 5974 | 6271 | 6201 | 4027 |
| 75° | 1909 | 2741 | 3460 | 3549 | 3514 | 2037 |
| 85° | 398 | 1050 | 1734 | 1972 | 2007 | 460 |
| 90° | 0 | 410 | 992 | 1250 | 1300 | 25 |
| 95° | 20 | 277 | 742 | 945 | 980 | 16 |
| 105° | 27 | 160 | 430 | 562 | 586 | 27 |
| 115° | 31 | 90 | 266 | 355 | 371 | 32 |
| 125° | 31 | 43 | 160 | 230 | 242 | 28 |
| 135° | 27 | 35 | 82 | 141 | 156 | 21 |
| 145° | 39 | 35 | 39 | 70 | 82 | 23 |
| 155° | 39 | 43 | 39 | 35 | 39 | 12 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830477

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L740-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 15954.5 | 15954.5 | 15954.5 | 15954.5 | 15954.5 |
| 2.5° | 15907.6 | 15946.7 | 15923.2 | 15974.0 | 15970.1 |
| 5° | 15852.9 | 15895.9 | 15876.4 | 15938.8 | 15919.3 |
| 7.5° | 15759.2 | 15806.1 | 15802.2 | 15872.5 | 15864.7 |
| 10° | 15622.6 | 15673.3 | 15688.9 | 15782.7 | 15782.7 |
| 12.5° | 15435.1 | 15501.5 | 15540.6 | 15653.8 | 15657.7 |
| 15° | 15212.6 | 15286.8 | 15357.0 | 15485.9 | 15501.5 |
| 17.5° | 14943.2 | 15036.9 | 15134.5 | 15282.9 | 15302.4 |
| 20° | 14638.6 | 14744.0 | 14876.8 | 15033.0 | 15056.4 |
| 22.5° | 14287.2 | 14412.1 | 14583.9 | 14767.4 | 14794.8 |
| 25° | 13892.8 | 14045.1 | 14244.2 | 14466.8 | 14501.9 |
| 27.5° | 13443.8 | 13619.5 | 13888.9 | 14138.8 | 14170.0 |
| 30° | 12955.7 | 13162.6 | 13498.4 | 13795.2 | 13845.9 |
| 32.5° | 12440.3 | 12678.4 | 13092.3 | 13424.2 | 13494.5 |
| 35° | 11878.0 | 12155.2 | 12655.0 | 13037.7 | 13115.8 |
| 37.5° | 11323.5 | 11628.1 | 12194.3 | 12631.6 | 12725.3 |
| 40° | 10675.4 | 11054.1 | 11702.3 | 12186.5 | 12299.7 |
| 42.5° | 10066.2 | 10476.2 | 11210.3 | 11737.4 | 11846.8 |
| 45° | 9375.1 | 9847.6 | 10671.4 | 11253.2 | 11374.3 |
| 47.5° | 8726.9 | 9238.4 | 10152.1 | 10753.4 | 10878.4 |
| 50° | 8043.6 | 8605.9 | 9597.7 | 10226.3 | 10355.2 |
| 52.5° | 7360.3 | 7965.5 | 9023.7 | 9675.8 | 9796.8 |
| 55° | 6641.8 | 7329.1 | 8441.9 | 9078.3 | 9187.7 |
| 57.5° | 5974.1 | 6700.4 | 7844.5 | 8449.7 | 8516.1 |
| 60° | 5314.2 | 6067.8 | 7235.3 | 7766.4 | 7789.8 |
| 62.5° | 4670.0 | 5462.6 | 6610.6 | 7032.3 | 7001.1 |
| 65° | 4053.0 | 4880.8 | 5974.1 | 6270.9 | 6200.6 |
| 67.5° | 3459.5 | 4314.7 | 5322.1 | 5513.4 | 5419.7 |
| 70° | 2897.3 | 3764.1 | 4689.5 | 4787.1 | 4701.2 |
| 72.5° | 2401.4 | 3240.9 | 4049.1 | 4131.1 | 4068.7 |
| 75° | 1909.4 | 2741.1 | 3459.5 | 3549.3 | 3514.2 |
| 77.5° | 1448.6 | 2256.9 | 2916.8 | 3033.9 | 3041.7 |
| 80° | 1042.5 | 1815.7 | 2444.3 | 2627.8 | 2651.3 |
| 82.5° | 687.2 | 1409.6 | 2049.9 | 2284.2 | 2319.4 |
| 85° | 398.3 | 1050.4 | 1733.7 | 1971.9 | 2007.0 |
| 87.5° | 171.8 | 757.5 | 1394.0 | 1608.7 | 1651.7 |
| 90° | 0.0 | 410.0 | 991.8 | 1249.5 | 1300.3 |
| 92.5° | 11.7 | 339.7 | 851.2 | 1085.5 | 1128.4 |
| 95° | 19.5 | 277.2 | 741.9 | 944.9 | 980.1 |
| 97.5° | 23.4 | 234.3 | 644.3 | 823.9 | 859.0 |
| 100° | 23.4 | 203.0 | 558.4 | 722.4 | 753.6 |
| 102.5° | 23.4 | 179.6 | 488.1 | 632.6 | 659.9 |
| 105° | 27.3 | 160.1 | 429.5 | 562.3 | 585.7 |



TEST NUMBER: P830477

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L740-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 31.2 | 105.4 | 296.8 | 398.3 | 413.9 |
| 115° | 31.2 | 89.8 | 265.5 | 355.3 | 370.9 |
| 117.5° | 35.1 | 78.1 | 234.3 | 320.2 | 331.9 |
| 120° | 35.1 | 66.4 | 206.9 | 285.0 | 300.7 |
| 122.5° | 35.1 | 54.7 | 183.5 | 257.7 | 269.4 |
| 125° | 31.2 | 43.0 | 160.1 | 230.4 | 242.1 |
| 127.5° | 27.3 | 35.1 | 136.7 | 206.9 | 218.7 |
| 130° | 27.3 | 31.2 | 117.1 | 183.5 | 195.2 |
| 132.5° | 27.3 | 35.1 | 97.6 | 160.1 | 175.7 |
| 135° | 27.3 | 35.1 | 82.0 | 140.6 | 156.2 |
| 137.5° | 27.3 | 35.1 | 66.4 | 121.0 | 136.7 |
| 140° | 31.2 | 35.1 | 54.7 | 101.5 | 117.1 |
| 142.5° | 35.1 | 35.1 | 43.0 | 85.9 | 97.6 |
| 145° | 39.0 | 35.1 | 39.0 | 70.3 | 82.0 |
| 147.5° | 39.0 | 39.0 | 39.0 | 54.7 | 66.4 |
| 150° | 39.0 | 43.0 | 39.0 | 43.0 | 54.7 |
| 152.5° | 39.0 | 43.0 | 39.0 | 35.1 | 43.0 |
| 155° | 39.0 | 43.0 | 39.0 | 35.1 | 39.0 |
| 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° | 27.3 | 140.6 | 378.8 | 499.8 | 519.3 |
| 110° | 27.3 | 124.9 | 335.8 | 445.1 | 464.7 |



(END OF REPORT)