

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: P830479

Luminaire Tested: **OHBL-48HE-MFL-UNV-L830-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830479
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-L830-CD
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 3000K LEDS AND MEDIUM FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

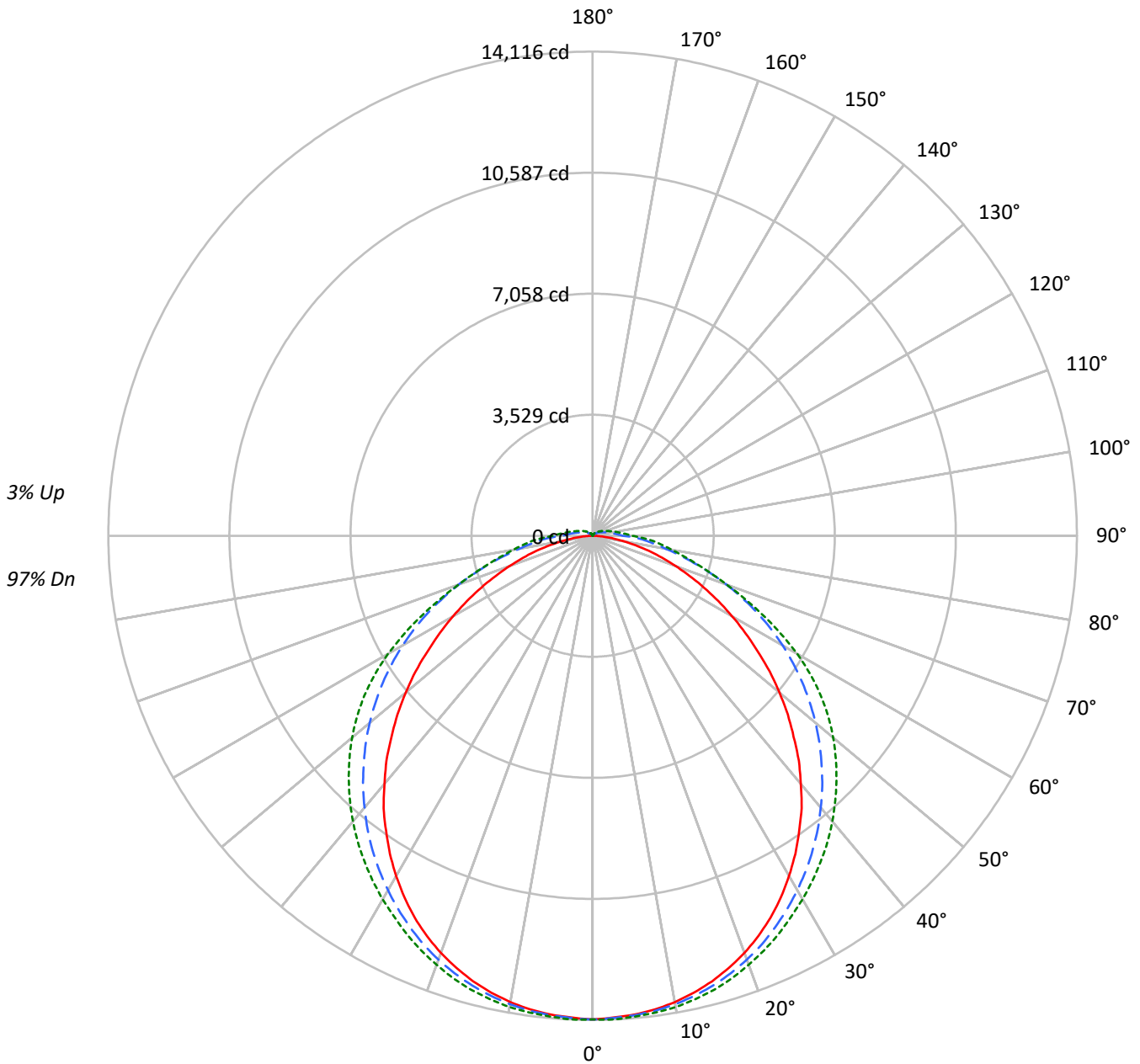
Lumens per Lamp: N/A
Luminaire Lumens: 42206.0 lumens
Efficiency: N/A
Efficacy: 158.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

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: P830479

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L830-CD

Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22303 | 22303 | 22303 |
| 5° | 22160 | 22091 | 22159 |
| 10° | 22004 | 21897 | 22043 |
| 15° | 21759 | 21664 | 21891 |
| 20° | 21433 | 21379 | 21667 |
| 25° | 20997 | 21023 | 21442 |
| 30° | 20393 | 20637 | 21215 |
| 35° | 19663 | 20227 | 21019 |
| 40° | 18786 | 19752 | 20826 |
| 45° | 17751 | 19237 | 20580 |
| 50° | 16620 | 18716 | 20281 |
| 55° | 15228 | 18078 | 19776 |
| 60° | 13803 | 17327 | 18768 |
| 65° | 12248 | 16368 | 17111 |
| 70° | 10562 | 15145 | 15317 |
| 75° | 8855 | 13731 | 14105 |
| 80° | 6714 | 12710 | 13993 |
| 85° | 4247 | 13211 | 15637 |



TEST NUMBER: P830479

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L830-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1336.3 | 3.2 |
| 10°-20° | 3833.6 | 9.1 |
| 20°-30° | 5797.6 | 13.7 |
| 30°-40° | 6960.1 | 16.5 |
| 40°-50° | 7188.7 | 17.0 |
| 50°-60° | 6467.5 | 15.3 |
| 60°-70° | 4871.9 | 11.5 |
| 70°-80° | 2941.8 | 7.0 |
| 80°-90° | 1438.8 | 3.4 |
| 90°-100° | 605.6 | 1.4 |
| 100°-110° | 345.7 | 0.8 |
| 110°-120° | 202.9 | 0.5 |
| 120°-130° | 114.8 | 0.3 |
| 130°-140° | 60.4 | 0.1 |
| 140°-150° | 29.4 | 0.1 |
| 150°-160° | 10.9 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 10967.5 | 26.0 |
| 0°-40° | 17927.6 | 42.5 |
| 0°-60° | 31583.8 | 74.8 |
| 0°-90° | 40836.2 | 96.8 |
| 90°-120° | 1154.3 | 2.7 |
| 90°-150° | 1358.9 | 3.2 |
| 90°-180° | 1370.0 | 3.2 |
| 0°-180° | 42206.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 14102 | 14102 | 14102 | 14102 | 14102 | |
| 5° | 14013 | 14051 | 14033 | 14089 | 14071 | ### |
| 15° | 13447 | 13512 | 13574 | 13688 | 13702 | 3791 |
| 25° | 12280 | 12415 | 12591 | 12787 | 12818 | 5648 |
| 35° | 10499 | 10744 | 11186 | 11524 | 11593 | 6563 |
| 45° | 8287 | 8704 | 9433 | 9947 | 10054 | 6398 |
| 55° | 5871 | 6478 | 7462 | 8024 | 8121 | 5264 |
| 65° | 3582 | 4314 | 5281 | 5543 | 5481 | 3559 |
| 75° | 1688 | 2423 | 3058 | 3137 | 3106 | 1800 |
| 85° | 352 | 928 | 1532 | 1743 | 1774 | 407 |
| 90° | 0 | 362 | 877 | 1104 | 1149 | 22 |
| 95° | 17 | 245 | 656 | 835 | 866 | 15 |
| 105° | 24 | 142 | 380 | 497 | 518 | 24 |
| 115° | 28 | 79 | 235 | 314 | 328 | 28 |
| 125° | 28 | 38 | 142 | 204 | 214 | 25 |
| 135° | 24 | 31 | 72 | 124 | 138 | 19 |
| 145° | 34 | 31 | 34 | 62 | 72 | 21 |
| 155° | 34 | 38 | 34 | 31 | 34 | 11 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830479

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L830-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----------------|----------------|----------------|----------------|----------------|
| 0° | 14102.4 | 14102.4 | 14102.4 | <i>14102.4</i> | 14102.4 |
| 2.5° | <i>14061.0</i> | <i>14095.5</i> | <i>14074.8</i> | <i>14119.6</i> | <i>14116.2</i> |
| 5° | 14012.6 | 14050.6 | 14033.3 | <i>14088.6</i> | 14071.3 |
| 7.5° | 13929.8 | 13971.2 | 13967.8 | <i>14029.9</i> | 14023.0 |
| 10° | 13809.0 | 13853.9 | 13867.7 | <i>13950.5</i> | 13950.5 |
| 12.5° | 13643.3 | 13702.0 | 13736.5 | <i>13836.6</i> | 13840.1 |
| 15° | 13446.6 | 13512.2 | 13574.3 | <i>13688.2</i> | 13702.0 |
| 17.5° | 13208.5 | 13291.3 | 13377.6 | <i>13508.7</i> | 13526.0 |
| 20° | 12939.3 | 13032.4 | 13149.8 | <i>13287.8</i> | 13308.5 |
| 22.5° | 12628.6 | 12739.1 | 12890.9 | <i>13053.1</i> | 13077.3 |
| 25° | 12280.0 | 12414.6 | 12590.7 | <i>12787.4</i> | 12818.5 |
| 27.5° | 11883.1 | 12038.4 | 12276.6 | <i>12497.5</i> | 12525.1 |
| 30° | 11451.7 | 11634.6 | 11931.4 | <i>12193.8</i> | 12238.6 |
| 32.5° | 10996.1 | 11206.7 | 11572.5 | <i>11865.9</i> | 11928.0 |
| 35° | 10499.1 | 10744.2 | 11185.9 | <i>11524.2</i> | 11593.2 |
| 37.5° | 10009.0 | 10278.2 | 10778.7 | <i>11165.2</i> | 11248.1 |
| 40° | 9436.1 | 9770.9 | 10343.8 | <i>10771.8</i> | 10871.9 |
| 42.5° | 8897.7 | 9260.1 | 9908.9 | <i>10374.9</i> | 10471.5 |
| 45° | 8286.8 | 8704.4 | 9432.6 | <i>9946.9</i> | 10053.9 |
| 47.5° | 7713.9 | 8166.0 | 8973.6 | <i>9505.1</i> | 9615.6 |
| 50° | 7109.9 | 7606.9 | 8483.5 | <i>9039.2</i> | 9153.1 |
| 52.5° | 6505.9 | 7040.8 | 7976.2 | <i>8552.5</i> | 8659.5 |
| 55° | 5870.8 | 6478.3 | 7461.9 | <i>8024.5</i> | 8121.1 |
| 57.5° | 5280.6 | 5922.6 | 6933.8 | <i>7468.8</i> | 7527.5 |
| 60° | 4697.3 | 5363.5 | 6395.4 | <i>6864.8</i> | 6885.5 |
| 62.5° | 4127.9 | 4828.5 | 5843.2 | <i>6215.9</i> | 6188.3 |
| 65° | 3582.5 | 4314.2 | 5280.6 | <i>5542.9</i> | 5480.8 |
| 67.5° | 3057.9 | 3813.8 | 4704.2 | <i>4873.4</i> | 4790.5 |
| 70° | 2560.9 | 3327.1 | 4145.1 | <i>4231.4</i> | 4155.5 |
| 72.5° | 2122.6 | 2864.7 | 3579.1 | <i>3651.6</i> | 3596.3 |
| 75° | 1687.7 | 2422.9 | 3057.9 | <i>3137.3</i> | 3106.2 |
| 77.5° | 1280.5 | 1994.9 | 2578.2 | <i>2681.7</i> | 2688.6 |
| 80° | 921.5 | 1604.9 | 2160.6 | <i>2322.8</i> | 2343.5 |
| 82.5° | 607.4 | 1246.0 | 1812.0 | <i>2019.1</i> | 2050.1 |
| 85° | 352.0 | 928.4 | 1532.4 | <i>1743.0</i> | 1774.0 |
| 87.5° | 151.9 | 669.6 | 1232.1 | <i>1422.0</i> | 1459.9 |
| 90° | 0.0 | 362.4 | 876.7 | <i>1104.4</i> | 1149.3 |
| 92.5° | 10.4 | 300.3 | 752.4 | <i>959.5</i> | 997.5 |
| 95° | 17.3 | 245.0 | 655.8 | <i>835.2</i> | 866.3 |
| 97.5° | 20.7 | 207.1 | 569.5 | <i>728.2</i> | 759.3 |
| 100° | 20.7 | 179.5 | 493.5 | <i>638.5</i> | 666.1 |
| 102.5° | 20.7 | 158.8 | 431.4 | <i>559.1</i> | 583.3 |
| 105° | 24.2 | 141.5 | 379.7 | <i>497.0</i> | 517.7 |



TEST NUMBER: P830479

CATALOG NUMBER: OHBL-48HE-MFL-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 27.6 | 93.2 | 262.3 | 352.0 | 365.8 |
| 115° | 27.6 | 79.4 | 234.7 | 314.1 | 327.9 |
| 117.5° | 31.1 | 69.0 | 207.1 | 283.0 | 293.4 |
| 120° | 31.1 | 58.7 | 182.9 | 252.0 | 265.8 |
| 122.5° | 31.1 | 48.3 | 162.2 | 227.8 | 238.1 |
| 125° | 27.6 | 38.0 | 141.5 | 203.6 | 214.0 |
| 127.5° | 24.2 | 31.1 | 120.8 | 182.9 | 193.3 |
| 130° | 24.2 | 27.6 | 103.5 | 162.2 | 172.6 |
| 132.5° | 24.2 | 31.1 | 86.3 | 141.5 | 155.3 |
| 135° | 24.2 | 31.1 | 72.5 | 124.2 | 138.1 |
| 137.5° | 24.2 | 31.1 | 58.7 | 107.0 | 120.8 |
| 140° | 27.6 | 31.1 | 48.3 | 89.7 | 103.5 |
| 142.5° | 31.1 | 31.1 | 38.0 | 75.9 | 86.3 |
| 145° | 34.5 | 31.1 | 34.5 | 62.1 | 72.5 |
| 147.5° | 34.5 | 34.5 | 34.5 | 48.3 | 58.7 |
| 150° | 34.5 | 38.0 | 34.5 | 38.0 | 48.3 |
| 152.5° | 34.5 | 38.0 | 34.5 | 31.1 | 38.0 |
| 155° | 34.5 | 38.0 | 34.5 | 31.1 | 34.5 |
| 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° | 24.2 | 124.2 | 334.8 | 441.8 | 459.0 |
| 110° | 24.2 | 110.4 | 296.8 | 393.5 | 410.7 |



(END OF REPORT)