

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: P827171

Luminaire Tested: **OHBL-30HE-NL-UNV-L840-CD-UPL15**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827171
REPORT IS A COMBINATION OF REPORTS P826123 AND G3-2310-221-10
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-30HE-NL-UNV-L840-CD-UPL15
Description: 30000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 1500 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

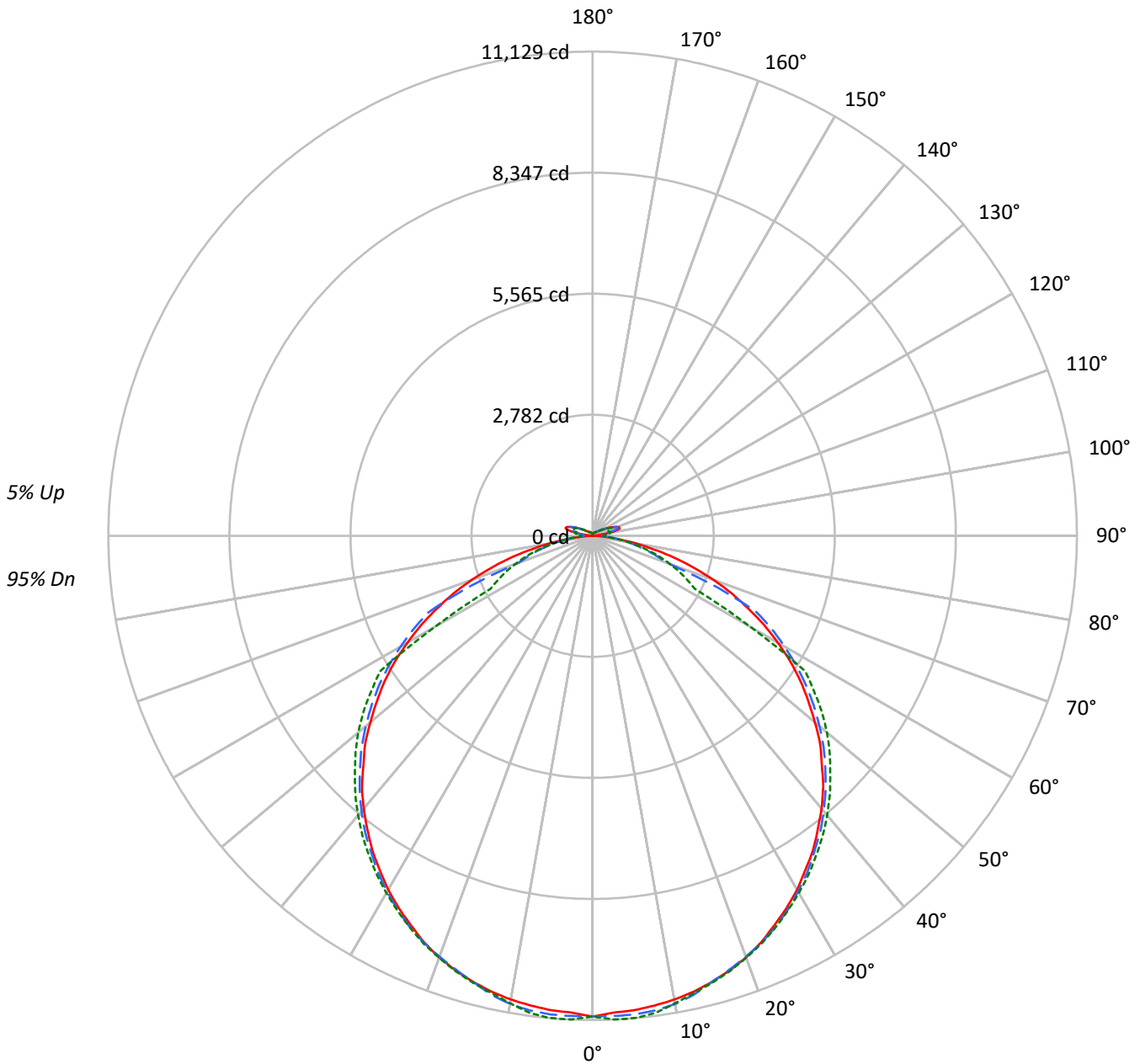
Lumens per Lamp: N/A
Luminaire Lumens: 32538.2 lumens
Efficiency: N/A
Efficacy: 186.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 174.1
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: P827171

CATALOG NUMBER: OHBL-30HE-NL-UNV-L840-CD-UPL15

Luminous Intensity Polar Plot





TEST NUMBER: P827171

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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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 103 | 103 | 103 | 97 | 97 | 97 | 95 | | | | |
| 1 | 108 | 104 | 99 | 96 | 105 | 101 | 97 | 94 | 96 | 93 | 90 | 91 | 88 | 86 | 86 | 85 | 83 | 80 | | | | |
| 2 | 99 | 91 | 84 | 79 | 95 | 88 | 82 | 77 | 84 | 79 | 75 | 80 | 76 | 72 | 76 | 73 | 70 | 67 | | | | |
| 3 | 90 | 80 | 72 | 65 | 87 | 78 | 70 | 65 | 74 | 68 | 63 | 71 | 65 | 61 | 67 | 63 | 59 | 57 | | | | |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 54 | 63 | 57 | 52 | 60 | 55 | 51 | 49 | | | | |
| 5 | 76 | 63 | 54 | 48 | 73 | 62 | 53 | 47 | 59 | 52 | 46 | 56 | 50 | 45 | 54 | 49 | 44 | 42 | | | | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 49 | 43 | 39 | 37 | | | | |
| 7 | 65 | 51 | 43 | 37 | 63 | 50 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 35 | 45 | 39 | 35 | 33 | | | | |
| 8 | 60 | 47 | 38 | 33 | 58 | 46 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 41 | 35 | 31 | 29 | | | | |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | |
| 10 | 53 | 40 | 32 | 27 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 36 | 30 | 26 | 35 | 29 | 25 | 24 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17472 | 17472 | 17472 |
| 5° | 17292 | 17445 | 17624 |
| 10° | 17212 | 17368 | 17443 |
| 15° | 17123 | 17109 | 17290 |
| 20° | 17010 | 16970 | 17205 |
| 25° | 16800 | 16867 | 17126 |
| 30° | 16622 | 16685 | 17051 |
| 35° | 16406 | 16469 | 16984 |
| 40° | 16145 | 16266 | 16934 |
| 45° | 15777 | 15979 | 16829 |
| 50° | 15384 | 15655 | 16762 |
| 55° | 14906 | 15243 | 16477 |
| 60° | 14185 | 14632 | 12729 |
| 65° | 13146 | 13846 | 8478 |
| 70° | 11805 | 7129 | 8106 |
| 75° | 9831 | 6456 | 7557 |
| 80° | 6941 | 5421 | 6618 |
| 85° | 2818 | 4379 | 5725 |



TEST NUMBER: P827171

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1049.6 | 3.2 |
| 10°-20° | 3005.3 | 9.2 |
| 20°-30° | 4572.9 | 14.1 |
| 30°-40° | 5560.0 | 17.1 |
| 40°-50° | 5846.1 | 18.0 |
| 50°-60° | 5338.1 | 16.4 |
| 60°-70° | 3422.0 | 10.5 |
| 70°-80° | 1616.5 | 5.0 |
| 80°-90° | 452.1 | 1.4 |
| 90°-100° | 264.4 | 0.8 |
| 100°-110° | 537.1 | 1.7 |
| 110°-120° | 442.6 | 1.4 |
| 120°-130° | 208.1 | 0.6 |
| 130°-140° | 104.0 | 0.3 |
| 140°-150° | 60.4 | 0.2 |
| 150°-160° | 35.2 | 0.1 |
| 160°-170° | 18.3 | 0.1 |
| 170°-180° | 5.6 | 0.0 |
| 0°-30° | 8627.8 | 26.5 |
| 0°-40° | 14187.8 | 43.6 |
| 0°-60° | 25372.0 | 78.0 |
| 0°-90° | 30862.6 | 94.9 |
| 90°-120° | 1244.0 | 3.8 |
| 90°-150° | 1616.5 | 5.0 |
| 90°-180° | 1676.0 | 5.2 |
| 0°-180° | 32538.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 11048 | 11048 | 11048 | 11048 | 11048 | |
| 5° | 10945 | 10988 | 11044 | 11104 | 11128 | ### |
| 15° | 10614 | 10693 | 10612 | 10627 | 10635 | 2996 |
| 25° | 9877 | 9893 | 9928 | 9943 | 9935 | 4558 |
| 35° | 8828 | 8776 | 8877 | 8986 | 8960 | 5517 |
| 45° | 7446 | 7433 | 7559 | 7737 | 7723 | 5755 |
| 55° | 5835 | 5791 | 5986 | 6186 | 6202 | 5204 |
| 65° | 3932 | 3932 | 4160 | 2386 | 2394 | 3898 |
| 75° | 1942 | 1979 | 1285 | 1353 | 1359 | 2048 |
| 85° | 254 | 322 | 401 | 434 | 411 | 375 |
| 90° | 3 | 131 | 207 | 249 | 250 | 13 |
| 95° | 34 | 128 | 235 | 315 | 338 | 103 |
| 105° | 643 | 645 | 563 | 407 | 374 | 609 |
| 115° | 446 | 450 | 459 | 452 | 431 | 447 |
| 125° | 211 | 223 | 229 | 227 | 226 | 199 |
| 135° | 125 | 129 | 132 | 134 | 135 | 99 |
| 145° | 91 | 93 | 95 | 97 | 97 | 58 |
| 155° | 73 | 74 | 76 | 76 | 77 | 34 |
| 165° | 63 | 63 | 64 | 64 | 64 | 18 |
| 175° | 57 | 57 | 57 | 58 | 58 | 6 |
| 180° | 57 | 57 | 57 | 57 | 57 | |



TEST NUMBER: P827171

CATALOG NUMBER: OHBL-30HE-NL-UNV-L840-CD-UPL15

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----------------|----------------|----------------|----------------|----------------|
| 0° | 11048.2 | 11048.2 | 11048.2 | 11048.2 | <i>11048.2</i> |
| 2.5° | <i>10970.6</i> | <i>11007.5</i> | <i>11048.2</i> | <i>11100.5</i> | <i>11129.4</i> |
| 5° | 10945.3 | 10988.0 | 11044.3 | 11104.4 | <i>11127.6</i> |
| 7.5° | 10891.2 | 10951.1 | 11005.5 | 11048.2 | <i>11061.7</i> |
| 10° | 10823.2 | 10895.1 | 10926.0 | 10922.1 | <i>10912.5</i> |
| 12.5° | 10732.1 | 10807.8 | 10798.2 | 10753.4 | <i>10761.2</i> |
| 15° | 10613.9 | 10693.3 | 10612.0 | 10627.4 | <i>10635.2</i> |
| 17.5° | 10474.3 | 10551.9 | 10456.9 | 10487.8 | <i>10489.9</i> |
| 20° | 10311.5 | 10369.6 | 10295.9 | 10321.2 | <i>10321.2</i> |
| 22.5° | 10115.7 | 10156.4 | 10125.4 | 10142.8 | <i>10146.7</i> |
| 25° | 9877.2 | 9892.6 | 9927.5 | 9943.1 | <i>9935.3</i> |
| 27.5° | 9648.6 | 9629.1 | 9697.0 | 9733.8 | <i>9714.3</i> |
| 30° | 9394.5 | 9363.5 | 9442.9 | 9503.1 | <i>9479.9</i> |
| 32.5° | 9103.7 | 9084.4 | 9175.5 | 9247.1 | <i>9233.6</i> |
| 35° | 8828.4 | 8776.1 | 8876.9 | 8985.5 | <i>8960.2</i> |
| 37.5° | 8502.7 | 8471.7 | 8586.0 | 8700.6 | <i>8687.0</i> |
| 40° | 8184.8 | 8132.4 | 8262.4 | 8398.0 | <i>8384.5</i> |
| 42.5° | 7843.7 | 7781.5 | 7923.1 | 8086.1 | <i>8070.5</i> |
| 45° | 7446.1 | 7432.6 | 7558.6 | 7736.9 | <i>7723.4</i> |
| 47.5° | 7093.5 | 7025.6 | 7201.9 | 7374.5 | <i>7390.1</i> |
| 50° | 6666.8 | 6641.8 | 6802.7 | 7012.0 | <i>7027.4</i> |
| 52.5° | 6250.1 | 6232.7 | 6401.2 | 6612.6 | <i>6639.7</i> |
| 55° | 5835.1 | 5790.6 | 5986.4 | 6186.1 | <i>6201.7</i> |
| 57.5° | 5391.4 | 5344.8 | 5544.5 | 5761.7 | <i>5794.5</i> |
| 60° | 4916.2 | 4871.7 | 5090.7 | 5292.5 | <i>4208.8</i> |
| 62.5° | 4441.3 | 4410.3 | 4639.2 | 3286.0 | <i>2648.3</i> |
| 65° | 3931.5 | 3931.5 | 4160.1 | 2386.4 | <i>2394.2</i> |
| 67.5° | 3454.7 | 3423.7 | 3101.9 | 2144.0 | <i>2144.0</i> |
| 70° | 2942.8 | 2954.5 | 1787.3 | 1878.6 | <i>1880.5</i> |
| 72.5° | 2429.1 | 2471.8 | 1543.2 | 1616.7 | <i>1620.6</i> |
| 75° | 1942.4 | 1979.4 | 1285.2 | 1353.2 | <i>1358.9</i> |
| 77.5° | 1426.9 | 1097.2 | 1033.2 | 1085.7 | <i>1087.6</i> |
| 80° | 1002.2 | 692.1 | 791.0 | 841.3 | <i>835.6</i> |
| 82.5° | 585.4 | 484.6 | 579.6 | 616.6 | <i>614.5</i> |
| 85° | 253.9 | 321.8 | 401.3 | 434.3 | <i>410.9</i> |
| 87.5° | 81.3 | 199.7 | 250.0 | 269.5 | <i>267.4</i> |
| 90° | 3.0 | 130.6 | 207.4 | 249.2 | <i>250.5</i> |
| 92.5° | 10.0 | 113.2 | 201.2 | 258.0 | <i>269.8</i> |
| 95° | 33.7 | 128.2 | 235.1 | 314.6 | <i>337.6</i> |
| 97.5° | 169.9 | 227.6 | 295.1 | 370.7 | <i>392.6</i> |
| 100° | 340.9 | 396.8 | 359.1 | 410.9 | <i>419.9</i> |
| 102.5° | 551.6 | 551.1 | 423.7 | 410.0 | <i>406.0</i> |
| 105° | 642.6 | 645.3 | 563.0 | 407.0 | <i>374.1</i> |



TEST NUMBER: P827171

CATALOG NUMBER: OHBL-30HE-NL-UNV-L840-CD-UPL15

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 520.7 | 531.6 | 528.3 | 504.6 | 472.8 |
| 115° | 445.6 | 449.5 | 459.3 | 451.5 | 430.8 |
| 117.5° | 374.0 | 372.0 | 376.0 | 374.0 | 372.0 |
| 120° | 312.0 | 316.0 | 317.0 | 315.0 | 314.0 |
| 122.5° | 258.0 | 266.0 | 271.0 | 268.0 | 267.0 |
| 125° | 211.0 | 223.0 | 229.0 | 227.0 | 226.0 |
| 127.5° | 180.0 | 187.0 | 195.0 | 195.0 | 193.0 |
| 130° | 156.0 | 161.0 | 167.0 | 168.0 | 168.0 |
| 132.5° | 139.0 | 143.0 | 148.0 | 149.0 | 150.0 |
| 135° | 125.0 | 129.0 | 132.0 | 134.0 | 135.0 |
| 137.5° | 115.0 | 117.0 | 121.0 | 122.0 | 123.0 |
| 140° | 105.0 | 108.0 | 111.0 | 112.0 | 113.0 |
| 142.5° | 98.0 | 100.0 | 102.0 | 104.0 | 104.0 |
| 145° | 91.0 | 93.0 | 95.0 | 97.0 | 97.0 |
| 147.5° | 86.0 | 88.0 | 90.0 | 90.0 | 91.0 |
| 150° | 81.0 | 83.0 | 84.0 | 85.0 | 85.0 |
| 152.5° | 77.0 | 78.0 | 80.0 | 80.0 | 81.0 |
| 155° | 73.0 | 74.0 | 76.0 | 76.0 | 77.0 |
| 157.5° | 70.0 | 71.0 | 72.0 | 73.0 | 73.0 |
| 160° | 67.0 | 68.0 | 69.0 | 69.0 | 70.0 |
| 162.5° | 65.0 | 66.0 | 66.0 | 67.0 | 67.0 |
| 165° | 63.0 | 63.0 | 64.0 | 64.0 | 64.0 |
| 167.5° | 61.0 | 61.0 | 62.0 | 62.0 | 63.0 |
| 170° | 59.0 | 60.0 | 60.0 | 60.0 | 61.0 |
| 172.5° | 58.0 | 58.0 | 59.0 | 59.0 | 59.0 |
| 175° | 57.0 | 57.0 | 57.0 | 58.0 | 58.0 |
| 177.5° | 56.0 | 57.0 | 57.0 | 57.0 | 57.0 |
| 180° | 57.0 | 57.0 | 57.0 | 57.0 | 57.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 642.6 | 653.3 | 614.1 | 469.4 | 384.7 |
| 110° | 595.7 | 606.4 | 586.2 | 527.6 | 451.8 |



(END OF REPORT)