

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: P826541

Luminaire Tested: **OHBL-24HE-NL-UNV-L830-CD-UPL36**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826541
REPORT IS A COMBINATION OF REPORTS P826303 AND G3-2310-221-2
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24HE-NL-UNV-L830-CD-UPL36
Description:
Light Source: -
Ballast/Driver: -

Summary

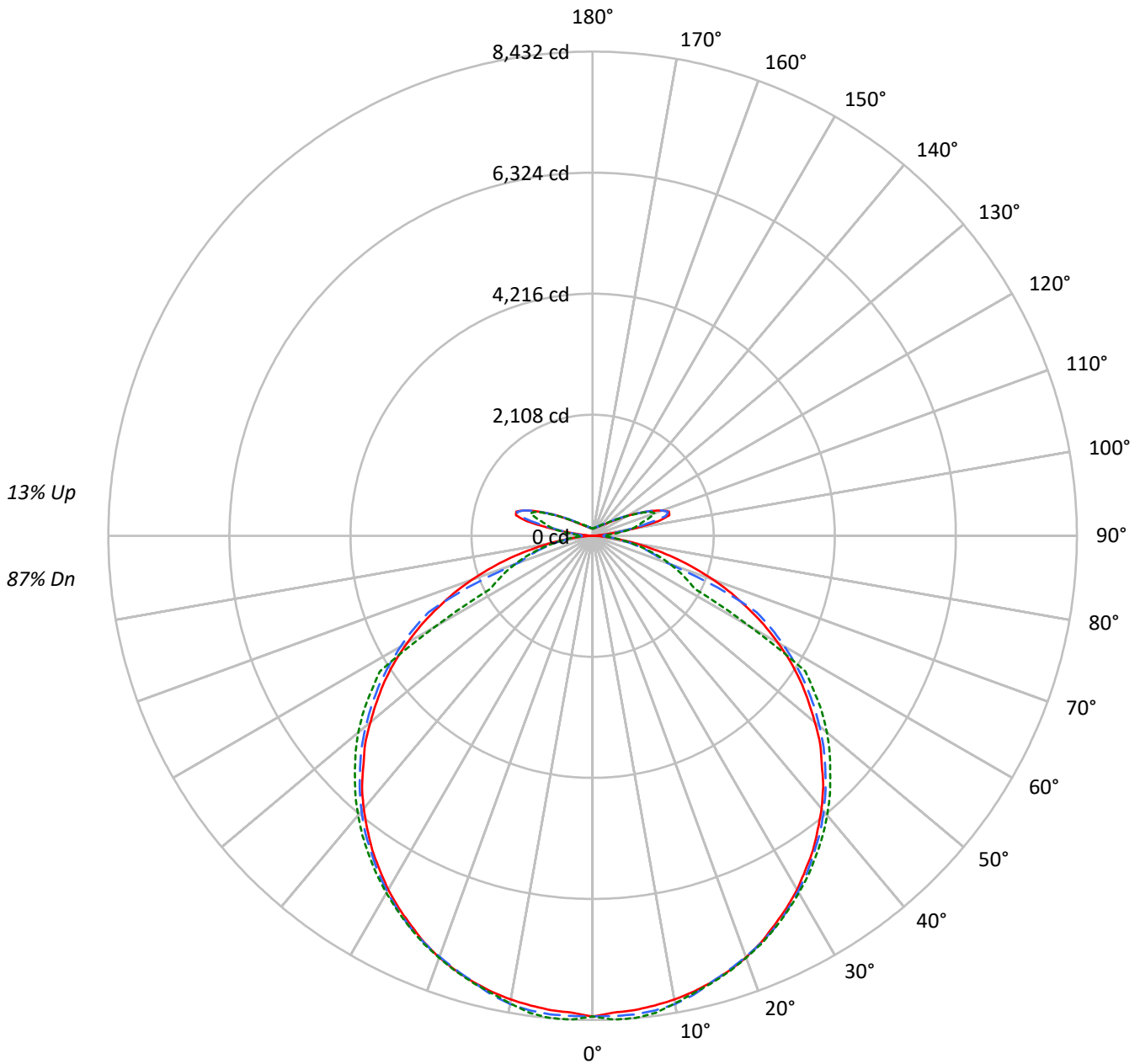
Lumens per Lamp: N/A
Luminaire Lumens: 26835.5 lumens
Efficiency: N/A
Efficacy: 165.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 161.8
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: P826541

CATALOG NUMBER: OHBL-24HE-NL-UNV-L830-CD-UPL36

Luminous Intensity Polar Plot





TEST NUMBER: P826541

CATALOG NUMBER: OHBL-24HE-NL-UNV-L830-CD-UPL36

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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 97 | 97 | 97 | 90 | 90 | 90 | 87 | | | | | | | | | | | | | | | | | | | |
| 1 | 106 | 102 | 98 | 94 | 102 | 98 | 95 | 91 | 92 | 89 | 86 | 86 | 83 | 81 | 80 | 78 | 77 | 74 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 89 | 83 | 77 | 93 | 86 | 80 | 75 | 81 | 76 | 72 | 75 | 71 | 68 | 71 | 68 | 65 | 62 | | | | | | | | | | | | | | | | | | | |
| 3 | 88 | 78 | 71 | 64 | 85 | 76 | 69 | 63 | 71 | 65 | 60 | 67 | 62 | 58 | 63 | 59 | 55 | 52 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 69 | 61 | 55 | 78 | 67 | 59 | 53 | 63 | 57 | 51 | 59 | 54 | 49 | 56 | 51 | 47 | 45 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 62 | 53 | 47 | 71 | 60 | 52 | 46 | 57 | 50 | 44 | 53 | 47 | 43 | 50 | 45 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 41 | 66 | 54 | 46 | 40 | 51 | 44 | 39 | 48 | 42 | 37 | 45 | 40 | 36 | 34 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 50 | 42 | 36 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | 44 | 38 | 33 | 41 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 31 | 42 | 35 | 31 | 40 | 34 | 30 | 38 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 34 | 29 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 27 | 35 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 30 | 26 | 36 | 29 | 25 | 34 | 28 | 24 | 33 | 27 | 23 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13238 | 13238 | 13238 |
| 5° | 13101 | 13217 | 13353 |
| 10° | 13041 | 13159 | 13216 |
| 15° | 12973 | 12963 | 13100 |
| 20° | 12888 | 12857 | 13035 |
| 25° | 12729 | 12780 | 12975 |
| 30° | 12594 | 12642 | 12919 |
| 35° | 12430 | 12478 | 12869 |
| 40° | 12232 | 12324 | 12830 |
| 45° | 11954 | 12106 | 12751 |
| 50° | 11656 | 11861 | 12700 |
| 55° | 11294 | 11550 | 12484 |
| 60° | 10747 | 11086 | 9644 |
| 65° | 9960 | 10491 | 6424 |
| 70° | 8945 | 5401 | 6142 |
| 75° | 7449 | 4892 | 5727 |
| 80° | 5258 | 4108 | 5014 |
| 85° | 2134 | 3317 | 4339 |



TEST NUMBER: P826541

CATALOG NUMBER: OHBL-24HE-NL-UNV-L830-CD-UPL36

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 795.3 | 3.0 |
| 10°-20° | 2277.1 | 8.5 |
| 20°-30° | 3464.7 | 12.9 |
| 30°-40° | 4212.6 | 15.7 |
| 40°-50° | 4429.4 | 16.5 |
| 50°-60° | 4044.6 | 15.1 |
| 60°-70° | 2592.8 | 9.7 |
| 70°-80° | 1224.8 | 4.6 |
| 80°-90° | 346.8 | 1.3 |
| 90°-100° | 345.9 | 1.3 |
| 100°-110° | 1184.2 | 4.4 |
| 110°-120° | 966.5 | 3.6 |
| 120°-130° | 454.2 | 1.7 |
| 130°-140° | 230.0 | 0.9 |
| 140°-150° | 134.4 | 0.5 |
| 150°-160° | 78.8 | 0.3 |
| 160°-170° | 41.0 | 0.2 |
| 170°-180° | 12.5 | 0.0 |
| 0°-30° | 6537.0 | 24.4 |
| 0°-40° | 10749.6 | 40.1 |
| 0°-60° | 19223.6 | 71.6 |
| 0°-90° | 23387.9 | 87.2 |
| 90°-120° | 2496.6 | 9.3 |
| 90°-150° | 3315.2 | 12.4 |
| 90°-180° | 3448.0 | 12.8 |
| 0°-180° | 26835.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 8371 | 8371 | 8371 | 8371 | 8371 | |
| 5° | 8293 | 8325 | 8368 | 8413 | 8431 | 789 |
| 15° | 8042 | 8102 | 8040 | 8052 | 8058 | 2270 |
| 25° | 7484 | 7495 | 7522 | 7534 | 7528 | 3453 |
| 35° | 6689 | 6649 | 6726 | 6808 | 6789 | 4180 |
| 45° | 5642 | 5631 | 5727 | 5862 | 5852 | 4361 |
| 55° | 4421 | 4387 | 4536 | 4687 | 4699 | 3943 |
| 65° | 2979 | 2979 | 3152 | 1808 | 1814 | 2953 |
| 75° | 1472 | 1500 | 974 | 1025 | 1030 | 1551 |
| 85° | 192 | 244 | 304 | 329 | 311 | 284 |
| 90° | 7 | 128 | 194 | 227 | 225 | 14 |
| 95° | 62 | 158 | 251 | 326 | 341 | 217 |
| 105° | 1382 | 1388 | 1313 | 983 | 888 | 1314 |
| 115° | 966 | 956 | 968 | 970 | 952 | 974 |
| 125° | 472 | 488 | 500 | 491 | 482 | 444 |
| 135° | 279 | 286 | 293 | 296 | 297 | 221 |
| 145° | 203 | 208 | 212 | 215 | 216 | 129 |
| 155° | 164 | 167 | 169 | 171 | 171 | 77 |
| 165° | 140 | 142 | 143 | 144 | 145 | 40 |
| 175° | 128 | 128 | 129 | 129 | 130 | 12 |
| 180° | 127 | 127 | 127 | 127 | 127 | |



TEST NUMBER: P826541

CATALOG NUMBER: OHBL-24HE-NL-UNV-L830-CD-UPL36

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 8370.8 | 8370.8 | 8370.8 | 8370.8 | 8370.8 |
| 2.5° | 8312.1 | 8340.0 | 8370.8 | 8410.5 | 8432.4 |
| 5° | 8292.9 | 8325.3 | 8367.9 | 8413.4 | 8431.0 |
| 7.5° | 8251.9 | 8297.3 | 8338.5 | 8370.8 | 8381.1 |
| 10° | 8200.4 | 8254.9 | 8278.3 | 8275.3 | 8268.1 |
| 12.5° | 8131.4 | 8188.7 | 8181.4 | 8147.6 | 8153.4 |
| 15° | 8041.8 | 8102.0 | 8040.4 | 8052.1 | 8058.0 |
| 17.5° | 7936.1 | 7994.9 | 7922.8 | 7946.3 | 7947.9 |
| 20° | 7812.8 | 7856.8 | 7800.9 | 7820.0 | 7820.0 |
| 22.5° | 7664.3 | 7695.1 | 7671.7 | 7684.9 | 7687.9 |
| 25° | 7483.7 | 7495.3 | 7521.8 | 7533.6 | 7527.6 |
| 27.5° | 7310.4 | 7295.6 | 7347.1 | 7374.9 | 7360.2 |
| 30° | 7117.9 | 7094.5 | 7154.6 | 7200.2 | 7182.6 |
| 32.5° | 6897.6 | 6882.9 | 6952.0 | 7006.2 | 6996.0 |
| 35° | 6689.0 | 6649.4 | 6725.7 | 6807.9 | 6788.9 |
| 37.5° | 6442.2 | 6418.8 | 6505.3 | 6592.1 | 6581.9 |
| 40° | 6201.3 | 6161.7 | 6260.1 | 6363.0 | 6352.6 |
| 42.5° | 5942.9 | 5895.8 | 6003.1 | 6126.6 | 6114.8 |
| 45° | 5641.7 | 5631.4 | 5726.9 | 5862.0 | 5851.8 |
| 47.5° | 5374.5 | 5323.1 | 5456.6 | 5587.4 | 5599.2 |
| 50° | 5051.2 | 5032.3 | 5154.2 | 5312.8 | 5324.5 |
| 52.5° | 4735.5 | 4722.3 | 4850.0 | 5010.2 | 5030.7 |
| 55° | 4421.1 | 4387.4 | 4535.7 | 4687.0 | 4698.8 |
| 57.5° | 4084.9 | 4049.6 | 4200.9 | 4365.4 | 4390.3 |
| 60° | 3724.9 | 3691.1 | 3857.1 | 4010.0 | 3188.8 |
| 62.5° | 3365.1 | 3341.5 | 3515.0 | 2489.7 | 2006.6 |
| 65° | 2978.8 | 2978.8 | 3152.0 | 1808.1 | 1814.0 |
| 67.5° | 2617.5 | 2594.0 | 2350.2 | 1624.5 | 1624.5 |
| 70° | 2229.7 | 2238.5 | 1354.1 | 1423.4 | 1424.8 |
| 72.5° | 1840.5 | 1872.7 | 1169.2 | 1225.0 | 1227.9 |
| 75° | 1471.8 | 1499.7 | 973.8 | 1025.3 | 1029.7 |
| 77.5° | 1081.1 | 831.4 | 782.8 | 822.6 | 824.0 |
| 80° | 759.3 | 524.4 | 599.4 | 637.4 | 633.1 |
| 82.5° | 443.5 | 367.2 | 439.1 | 467.1 | 465.6 |
| 85° | 192.3 | 243.8 | 304.0 | 329.0 | 311.4 |
| 87.5° | 61.6 | 151.3 | 189.4 | 204.2 | 202.6 |
| 90° | 7.4 | 127.9 | 193.7 | 227.1 | 225.2 |
| 92.5° | 23.3 | 120.4 | 189.2 | 236.3 | 243.2 |
| 95° | 62.1 | 158.0 | 250.6 | 326.2 | 341.0 |
| 97.5° | 351.0 | 404.9 | 393.8 | 490.9 | 516.1 |
| 100° | 750.2 | 791.6 | 640.2 | 672.7 | 692.8 |
| 102.5° | 1178.0 | 1207.0 | 965.8 | 823.1 | 796.6 |
| 105° | 1381.8 | 1387.8 | 1313.2 | 982.9 | 888.4 |



TEST NUMBER: P826541

CATALOG NUMBER: OHBL-24HE-NL-UNV-L830-CD-UPL36

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1134.8 | 1140.6 | 1134.7 | 1126.6 | 1086.4 |
| 115° | 965.8 | 955.7 | 967.5 | 969.6 | 951.5 |
| 117.5° | 819.8 | 810.5 | 818.0 | 814.2 | 804.0 |
| 120° | 689.5 | 689.5 | 698.8 | 685.8 | 678.4 |
| 122.5° | 571.4 | 584.4 | 590.9 | 581.6 | 569.5 |
| 125° | 471.8 | 488.5 | 499.7 | 491.3 | 482.0 |
| 127.5° | 404.8 | 410.4 | 423.4 | 418.8 | 418.8 |
| 130° | 348.0 | 355.5 | 365.7 | 367.6 | 365.7 |
| 132.5° | 308.9 | 316.4 | 325.7 | 328.5 | 331.3 |
| 135° | 279.2 | 285.7 | 293.1 | 295.9 | 296.8 |
| 137.5° | 255.0 | 260.6 | 266.1 | 270.8 | 271.7 |
| 140° | 234.5 | 240.1 | 245.7 | 249.4 | 249.4 |
| 142.5° | 217.8 | 223.3 | 228.0 | 230.8 | 230.8 |
| 145° | 202.9 | 207.5 | 212.2 | 215.0 | 215.9 |
| 147.5° | 191.7 | 195.4 | 200.1 | 201.0 | 201.9 |
| 150° | 181.5 | 184.2 | 188.0 | 189.8 | 190.8 |
| 152.5° | 172.2 | 174.9 | 178.7 | 179.6 | 180.5 |
| 155° | 163.8 | 166.6 | 169.4 | 171.2 | 171.2 |
| 157.5° | 156.3 | 159.1 | 161.9 | 162.8 | 162.8 |
| 160° | 150.8 | 152.6 | 155.4 | 155.4 | 156.3 |
| 162.5° | 145.2 | 147.0 | 148.9 | 149.8 | 150.8 |
| 165° | 140.5 | 142.4 | 143.3 | 144.2 | 145.2 |
| 167.5° | 136.8 | 137.7 | 138.7 | 139.6 | 139.6 |
| 170° | 133.1 | 134.0 | 134.9 | 134.9 | 135.9 |
| 172.5° | 130.3 | 131.2 | 132.1 | 132.1 | 132.1 |
| 175° | 128.4 | 128.4 | 129.3 | 129.3 | 130.3 |
| 177.5° | 126.6 | 127.5 | 127.5 | 127.5 | 128.4 |
| 180° | 126.6 | 126.6 | 126.6 | 126.6 | 126.6 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|--------|--------|--------|--------|---------------|
| 107.5° | 1394.8 | 1404.9 | 1377.3 | 1208.0 | <i>1037.3</i> |
| 110° | 1289.3 | 1305.8 | 1288.7 | 1229.9 | <i>1146.0</i> |



(END OF REPORT)