

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: P828485

Luminaire Tested: **OHB-24HE-A-UNV-L950-CD-UPL36**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828485
REPORT IS A COMBINATION OF REPORTS P826287 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: OHB-24HE-A-UNV-L950-CD-UPL36
Description:
Light Source: -
Ballast/Driver: -

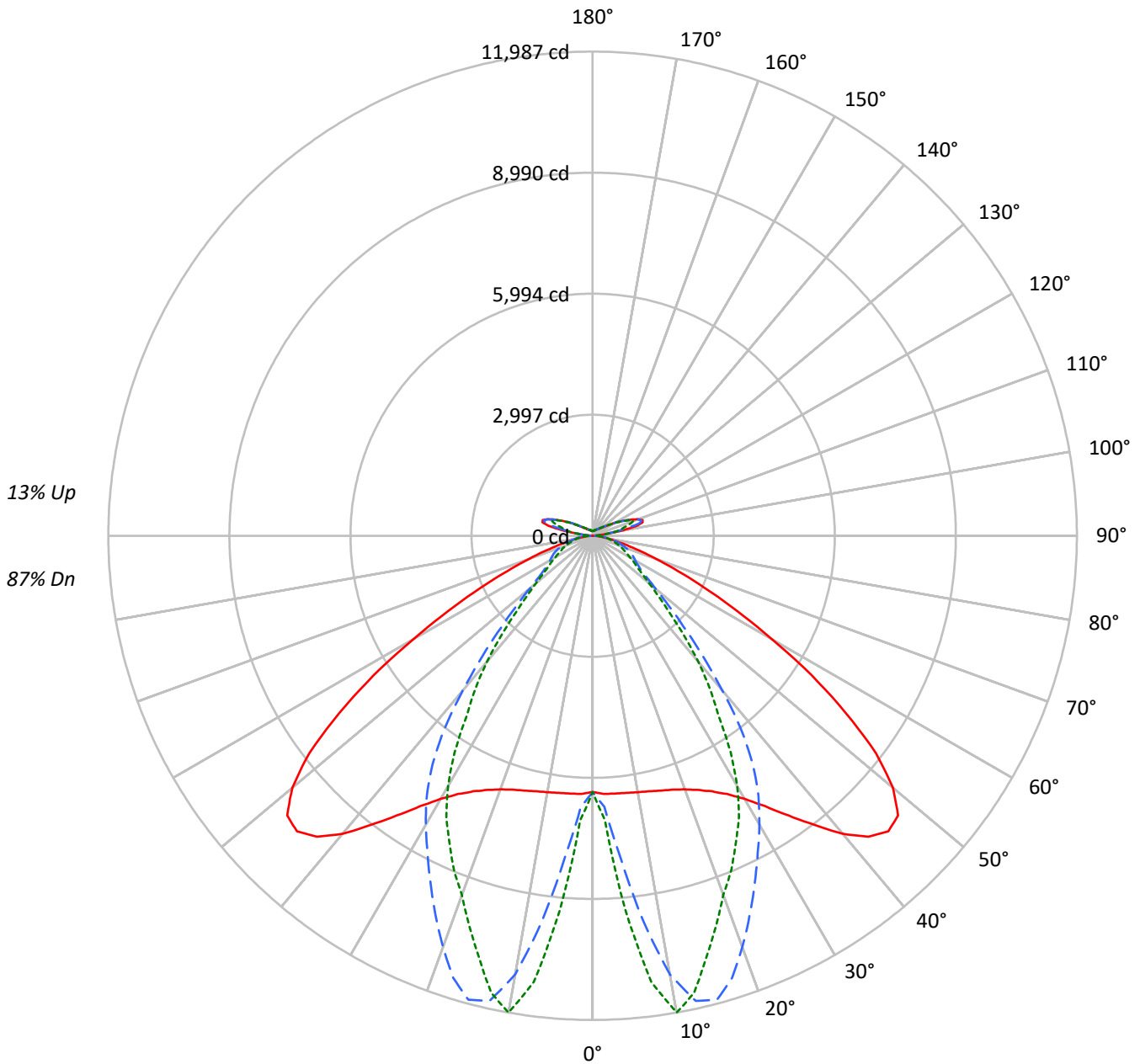
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23469.9 lumens
Efficiency: N/A
Efficacy: 147.8 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 1.93' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 158.8
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: P828485
CATALOG NUMBER: OHB-24HE-A-UNV-L950-CD-UPL36

Luminous Intensity Polar Plot





TEST NUMBER: P828485

CATALOG NUMBER: OHB-24HE-A-UNV-L950-CD-UPL36

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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 97 | 97 | 97 | 90 | 90 | 90 | 87 | | | 87 |
| 1 | 107 | 103 | 100 | 97 | 103 | 100 | 97 | 94 | 93 | 91 | 88 | 87 | 85 | 83 | 82 | 80 | 79 | 76 | | | 76 |
| 2 | 99 | 92 | 87 | 82 | 96 | 89 | 84 | 80 | 84 | 80 | 76 | 79 | 75 | 72 | 74 | 71 | 69 | 66 | | | 66 |
| 3 | 92 | 83 | 76 | 70 | 88 | 80 | 74 | 69 | 75 | 70 | 66 | 71 | 67 | 63 | 67 | 64 | 61 | 58 | | | 58 |
| 4 | 85 | 74 | 67 | 61 | 82 | 72 | 65 | 60 | 68 | 62 | 58 | 65 | 60 | 56 | 61 | 57 | 54 | 51 | | | 51 |
| 5 | 79 | 67 | 60 | 54 | 76 | 66 | 58 | 53 | 62 | 56 | 51 | 59 | 54 | 50 | 56 | 51 | 48 | 46 | | | 46 |
| 6 | 73 | 61 | 53 | 48 | 71 | 60 | 52 | 47 | 57 | 50 | 46 | 54 | 48 | 44 | 51 | 47 | 43 | 41 | | | 41 |
| 7 | 68 | 56 | 48 | 43 | 66 | 55 | 47 | 42 | 52 | 46 | 41 | 50 | 44 | 40 | 47 | 42 | 39 | 37 | | | 37 |
| 8 | 64 | 52 | 44 | 39 | 62 | 50 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 44 | 39 | 35 | 33 | | | 33 |
| 9 | 60 | 48 | 40 | 35 | 58 | 46 | 39 | 35 | 44 | 38 | 34 | 42 | 37 | 33 | 41 | 36 | 32 | 30 | | | 30 |
| 10 | 56 | 44 | 37 | 32 | 54 | 43 | 36 | 32 | 41 | 35 | 31 | 40 | 34 | 30 | 38 | 33 | 30 | 28 | | | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19620 | 19620 | 19620 |
| 5° | 19733 | 24624 | 28656 |
| 10° | 19922 | 33878 | 37085 |
| 15° | 20410 | 36826 | 33910 |
| 20° | 21268 | 34094 | 30187 |
| 25° | 22835 | 30592 | 27500 |
| 30° | 25481 | 27479 | 24346 |
| 35° | 29980 | 23988 | 19309 |
| 40° | 36081 | 18216 | 15285 |
| 45° | 41429 | 12370 | 10814 |
| 50° | 42049 | 8454 | 7942 |
| 55° | 36448 | 6624 | 6433 |
| 60° | 27272 | 6165 | 5727 |
| 65° | 18734 | 6142 | 5351 |
| 70° | 12013 | 5871 | 5086 |
| 75° | 7254 | 5364 | 4730 |
| 80° | 4298 | 4618 | 4650 |
| 85° | 2095 | 3821 | 3889 |



TEST NUMBER: P828485

CATALOG NUMBER: OHB-24HE-A-UNV-L950-CD-UPL36

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 828.1 | 3.5 |
| 10°-20° | 2922.8 | 12.5 |
| 20°-30° | 4307.0 | 18.4 |
| 30°-40° | 4526.0 | 19.3 |
| 40°-50° | 3463.2 | 14.8 |
| 50°-60° | 2091.2 | 8.9 |
| 60°-70° | 1276.1 | 5.4 |
| 70°-80° | 696.5 | 3.0 |
| 80°-90° | 251.2 | 1.1 |
| 90°-100° | 239.2 | 1.0 |
| 100°-110° | 1083.4 | 4.6 |
| 110°-120° | 896.7 | 3.8 |
| 120°-130° | 424.4 | 1.8 |
| 130°-140° | 214.9 | 0.9 |
| 140°-150° | 125.6 | 0.5 |
| 150°-160° | 73.7 | 0.3 |
| 160°-170° | 38.3 | 0.2 |
| 170°-180° | 11.7 | 0.0 |
| 0°-30° | 8057.9 | 34.3 |
| 0°-40° | 12583.9 | 53.6 |
| 0°-60° | 18138.3 | 77.3 |
| 0°-90° | 20362.1 | 86.8 |
| 90°-120° | 2219.3 | 9.5 |
| 90°-150° | 2984.1 | 12.7 |
| 90°-180° | 3108.0 | 13.2 |
| 0°-180° | 23469.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 6343 | 6343 | 6343 | 6343 | 6343 | |
| 5° | 6407 | 6874 | 8019 | 8954 | 9299 | 613 |
| 15° | 6532 | 10174 | 11890 | 11095 | 10834 | 1857 |
| 25° | 6980 | 11807 | 9492 | 8594 | 8382 | 3262 |
| 35° | 8455 | 9455 | 6915 | 5759 | 5422 | 5363 |
| 45° | 10348 | 5395 | 3186 | 2803 | 2685 | 7819 |
| 55° | 7653 | 1830 | 1450 | 1344 | 1340 | 6762 |
| 65° | 3068 | 1158 | 1067 | 913 | 866 | 3144 |
| 75° | 817 | 720 | 661 | 545 | 523 | 940 |
| 85° | 122 | 223 | 263 | 240 | 218 | 150 |
| 90° | 7 | 43 | 55 | 63 | 64 | 11 |
| 95° | 54 | 108 | 144 | 183 | 196 | 201 |
| 105° | 1284 | 1282 | 1205 | 896 | 810 | 1221 |
| 115° | 896 | 883 | 890 | 896 | 888 | 905 |
| 125° | 441 | 456 | 467 | 459 | 450 | 415 |
| 135° | 261 | 267 | 274 | 276 | 277 | 206 |
| 145° | 190 | 194 | 198 | 201 | 202 | 121 |
| 155° | 153 | 156 | 158 | 160 | 160 | 72 |
| 165° | 131 | 133 | 134 | 135 | 136 | 38 |
| 175° | 120 | 120 | 121 | 121 | 122 | 12 |
| 180° | 118 | 118 | 118 | 118 | 118 | |



TEST NUMBER: P828485

CATALOG NUMBER: OHB-24HE-A-UNV-L950-CD-UPL36

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 6343.3 | 6343.3 | 6343.3 | 6343.3 | 6343.3 |
| 2.5° | 6395.3 | 6460.6 | 6717.8 | 6984.9 | 7050.0 |
| 5° | 6406.9 | 6873.7 | 8018.6 | 8953.5 | 9299.0 |
| 7.5° | 6420.6 | 7543.1 | 9630.3 | 10774.9 | 11141.3 |
| 10° | 6446.4 | 8389.6 | 11026.8 | 11848.5 | 11987.0 |
| 12.5° | 6478.5 | 9286.4 | 11795.2 | 11765.3 | 11590.7 |
| 15° | 6531.8 | 10173.5 | 11889.9 | 11095.1 | 10834.2 |
| 17.5° | 6587.9 | 10924.0 | 11477.0 | 10365.5 | 10138.4 |
| 20° | 6679.0 | 11481.1 | 10834.8 | 9717.1 | 9458.9 |
| 22.5° | 6810.4 | 11787.3 | 10161.3 | 9130.6 | 8962.2 |
| 25° | 6979.8 | 11807.2 | 9492.4 | 8593.9 | 8381.8 |
| 27.5° | 7206.9 | 11533.3 | 8851.3 | 8068.1 | 7844.0 |
| 30° | 7515.9 | 11008.8 | 8255.5 | 7434.1 | 7156.0 |
| 32.5° | 7935.7 | 10254.1 | 7641.4 | 6668.6 | 6356.9 |
| 35° | 8454.7 | 9455.4 | 6915.4 | 5759.0 | 5422.3 |
| 37.5° | 9021.0 | 8568.6 | 6034.3 | 4953.6 | 4757.5 |
| 40° | 9630.3 | 7654.9 | 4990.1 | 4199.9 | 4059.5 |
| 42.5° | 10105.7 | 6661.6 | 4020.1 | 3490.2 | 3340.8 |
| 45° | 10348.1 | 5395.3 | 3185.6 | 2803.1 | 2685.3 |
| 47.5° | 10253.7 | 4188.2 | 2525.4 | 2227.3 | 2191.9 |
| 50° | 9702.9 | 3092.5 | 2021.6 | 1834.7 | 1820.0 |
| 52.5° | 8841.7 | 2305.0 | 1669.9 | 1554.3 | 1529.0 |
| 55° | 7652.8 | 1829.6 | 1450.1 | 1344.0 | 1339.9 |
| 57.5° | 6425.2 | 1554.3 | 1316.3 | 1234.1 | 1205.6 |
| 60° | 5115.7 | 1385.9 | 1214.8 | 1122.0 | 1064.1 |
| 62.5° | 4010.0 | 1268.1 | 1140.3 | 1014.3 | 960.2 |
| 65° | 3068.0 | 1158.2 | 1066.8 | 912.8 | 866.3 |
| 67.5° | 2287.1 | 1053.5 | 977.1 | 806.2 | 779.0 |
| 70° | 1666.4 | 946.0 | 874.7 | 717.0 | 695.6 |
| 72.5° | 1187.6 | 838.8 | 772.5 | 633.2 | 609.6 |
| 75° | 816.8 | 720.2 | 660.7 | 545.1 | 523.1 |
| 77.5° | 551.1 | 599.2 | 550.5 | 465.4 | 456.2 |
| 80° | 368.0 | 475.2 | 445.2 | 394.4 | 388.7 |
| 82.5° | 223.4 | 344.9 | 351.4 | 320.7 | 305.2 |
| 85° | 121.5 | 223.4 | 263.3 | 239.9 | 217.6 |
| 87.5° | 47.6 | 123.7 | 181.5 | 162.9 | 153.5 |
| 90° | 7.0 | 42.6 | 54.8 | 62.6 | 63.5 |
| 92.5° | 21.7 | 52.2 | 66.9 | 83.5 | 88.7 |
| 95° | 53.9 | 107.8 | 143.5 | 182.6 | 196.5 |
| 97.5° | 325.2 | 349.5 | 303.4 | 362.6 | 383.4 |
| 100° | 698.2 | 716.4 | 555.6 | 559.9 | 577.3 |
| 102.5° | 1093.8 | 1108.5 | 876.4 | 725.1 | 699.0 |
| 105° | 1284.2 | 1281.6 | 1205.0 | 896.4 | 809.5 |



TEST NUMBER: P828485

CATALOG NUMBER: OHB-24HE-A-UNV-L950-CD-UPL36

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1052.0 | 1054.6 | 1045.1 | 1041.6 | 1013.8 |
| 115° | 895.5 | 883.4 | 890.3 | 896.4 | 887.7 |
| 117.5° | 766.0 | 757.3 | 764.2 | 760.8 | 751.2 |
| 120° | 644.3 | 644.3 | 653.0 | 640.8 | 633.8 |
| 122.5° | 533.8 | 546.0 | 552.1 | 543.4 | 532.1 |
| 125° | 440.8 | 456.5 | 466.9 | 459.1 | 450.4 |
| 127.5° | 378.2 | 383.4 | 395.6 | 391.2 | 391.2 |
| 130° | 325.2 | 332.1 | 341.7 | 343.4 | 341.7 |
| 132.5° | 288.7 | 295.6 | 304.3 | 306.9 | 309.5 |
| 135° | 260.8 | 266.9 | 273.9 | 276.5 | 277.4 |
| 137.5° | 238.2 | 243.4 | 248.7 | 253.0 | 253.9 |
| 140° | 219.1 | 224.3 | 229.5 | 233.0 | 233.0 |
| 142.5° | 203.5 | 208.7 | 213.0 | 215.6 | 215.6 |
| 145° | 189.5 | 193.9 | 198.2 | 200.8 | 201.7 |
| 147.5° | 179.1 | 182.6 | 186.9 | 187.8 | 188.7 |
| 150° | 169.5 | 172.2 | 175.6 | 177.4 | 178.2 |
| 152.5° | 160.8 | 163.5 | 166.9 | 167.8 | 168.7 |
| 155° | 153.0 | 155.6 | 158.2 | 160.0 | 160.0 |
| 157.5° | 146.1 | 148.7 | 151.3 | 152.2 | 152.2 |
| 160° | 140.8 | 142.6 | 145.2 | 145.2 | 146.1 |
| 162.5° | 135.6 | 137.4 | 139.1 | 140.0 | 140.8 |
| 165° | 131.3 | 133.0 | 133.9 | 134.8 | 135.6 |
| 167.5° | 127.8 | 128.7 | 129.5 | 130.4 | 130.4 |
| 170° | 124.3 | 125.2 | 126.1 | 126.1 | 126.9 |
| 172.5° | 121.7 | 122.6 | 123.5 | 123.5 | 123.5 |
| 175° | 120.0 | 120.0 | 120.9 | 120.9 | 121.7 |
| 177.5° | 118.2 | 119.1 | 119.1 | 119.1 | 120.0 |
| 180° | 118.2 | 118.2 | 118.2 | 118.2 | 118.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|--------|--------|--------|--------|--------|
| 107.5° | 1296.3 | 1299.0 | 1267.6 | 1116.4 | 965.1 |
| 110° | 1196.4 | 1207.7 | 1187.7 | 1138.1 | 1069.4 |



(END OF REPORT)