

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: P830136

Luminaire Tested: **OHBL-24SE-N-UNV-L935-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24SE-N-UNV-L935-CD
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 3500K LEDS AND NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

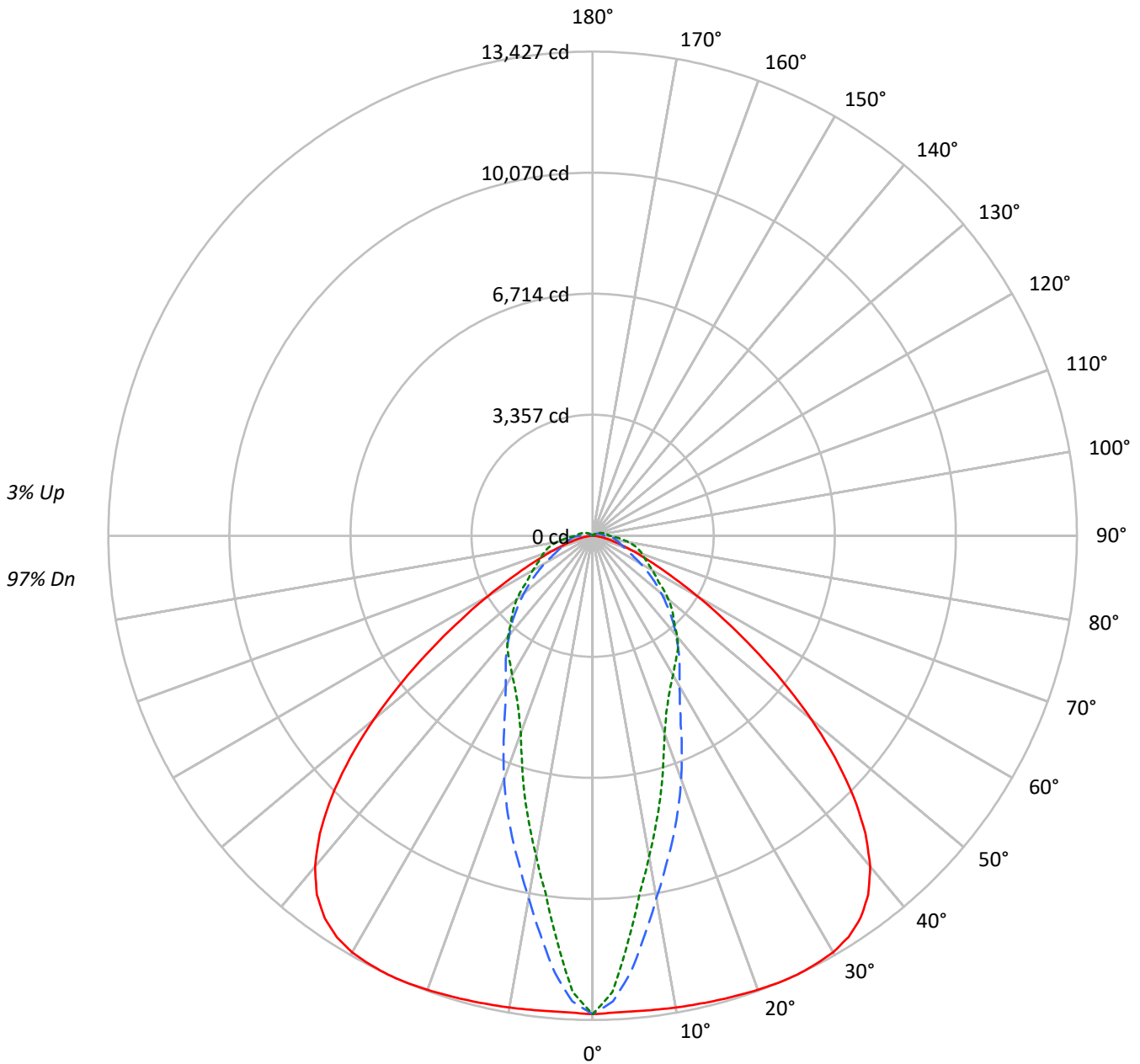
Lumens per Lamp: N/A
Luminaire Lumens: 19577.0 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 138
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: P830136

CATALOG NUMBER: OHBL-24SE-N-UNV-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830136

CATALOG NUMBER: OHBL-24SE-N-UNV-L935-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 | 109 | 104 | 100 | 97 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 92 | 90 | 88 | 88 | 86 | 85 | 85 | 85 | 82 | | | | | | | | | | | | | | | | | |
| 2 | 100 | 93 | 86 | 81 | 97 | 90 | 85 | 80 | 86 | 82 | 78 | 83 | 79 | 75 | 79 | 76 | 73 | 73 | 73 | 71 | | | | | | | | | | | | | | | | | |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 69 | 78 | 72 | 67 | 74 | 70 | 65 | 72 | 67 | 64 | 64 | 64 | 62 | | | | | | | | | | | | | | | | | |
| 4 | 85 | 74 | 66 | 60 | 83 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 57 | 65 | 60 | 56 | 56 | 56 | 54 | | | | | | | | | | | | | | | | | |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 59 | 53 | 64 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 50 | 50 | 48 | | | | | | | | | | | | | | | | | |
| 6 | 74 | 62 | 53 | 47 | 72 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 45 | 45 | 43 | | | | | | | | | | | | | | | | | |
| 7 | 69 | 56 | 48 | 43 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 50 | 45 | 41 | 41 | 41 | 39 | | | | | | | | | | | | | | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 48 | 42 | 38 | 47 | 41 | 37 | 37 | 37 | 35 | | | | | | | | | | | | | | | | | |
| 9 | 61 | 48 | 41 | 35 | 59 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 38 | 34 | 34 | 34 | 32 | | | | | | | | | | | | | | | | | |
| 10 | 57 | 45 | 37 | 33 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 35 | 32 | 32 | 32 | 30 | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22656 | 22656 | 22656 |
| 5° | 22610 | 20632 | 19182 |
| 10° | 22865 | 17379 | 15381 |
| 15° | 23311 | 14863 | 12625 |
| 20° | 23966 | 12567 | 10211 |
| 25° | 24795 | 10402 | 8947 |
| 30° | 25652 | 8962 | 8312 |
| 35° | 26186 | 8167 | 7919 |
| 40° | 25738 | 7377 | 7513 |
| 45° | 23677 | 6667 | 6955 |
| 50° | 19977 | 5890 | 6528 |
| 55° | 15179 | 5159 | 5809 |
| 60° | 10637 | 4424 | 5561 |
| 65° | 7155 | 3810 | 5444 |
| 70° | 4887 | 3576 | 5712 |
| 75° | 3391 | 3688 | 6103 |
| 80° | 2335 | 4084 | 6283 |
| 85° | 1366 | 5109 | 6592 |



TEST NUMBER: P830136

CATALOG NUMBER: OHBL-24SE-N-UNV-L935-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1116.6 | 5.7 |
| 10°-20° | 2626.7 | 13.4 |
| 20°-30° | 3292.6 | 16.8 |
| 30°-40° | 3493.8 | 17.8 |
| 40°-50° | 3158.9 | 16.1 |
| 50°-60° | 2290.4 | 11.7 |
| 60°-70° | 1437.3 | 7.3 |
| 70°-80° | 951.2 | 4.9 |
| 80°-90° | 548.0 | 2.8 |
| 90°-100° | 265.5 | 1.4 |
| 100°-110° | 183.2 | 0.9 |
| 110°-120° | 113.1 | 0.6 |
| 120°-130° | 54.8 | 0.3 |
| 130°-140° | 25.2 | 0.1 |
| 140°-150° | 13.7 | 0.1 |
| 150°-160° | 6.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| <hr/> | | |
| 0°-30° | 7035.8 | 35.9 |
| 0°-40° | 10529.6 | 53.8 |
| 0°-60° | 15979.0 | 81.6 |
| 0°-90° | 18915.5 | 96.6 |
| 90°-120° | 561.8 | 2.9 |
| 90°-150° | 655.5 | 3.3 |
| 90°-180° | 661.0 | 3.4 |
| 0°-180° | 19577.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 13264 | 13264 | 13264 | 13264 | 13264 | |
| 5° | 13238 | 12898 | 12141 | 11578 | 11286 | ### |
| 15° | 13339 | 10872 | 8635 | 7679 | 7331 | 3783 |
| 25° | 13427 | 8407 | 5782 | 5132 | 4969 | 6203 |
| 35° | 12946 | 5589 | 4196 | 4065 | 4064 | 8048 |
| 45° | 10235 | 3540 | 3041 | 3114 | 3168 | 7797 |
| 55° | 5418 | 2194 | 1985 | 2152 | 2230 | 4896 |
| 65° | 1938 | 1272 | 1149 | 1472 | 1636 | 2016 |
| 75° | 598 | 686 | 771 | 1198 | 1270 | 667 |
| 85° | 105 | 284 | 564 | 785 | 721 | 126 |
| 90° | 0 | 119 | 327 | 461 | 465 | 7 |
| 95° | 5 | 83 | 288 | 391 | 409 | 4 |
| 105° | 10 | 56 | 210 | 278 | 285 | 10 |
| 115° | 14 | 39 | 141 | 177 | 180 | 14 |
| 125° | 15 | 20 | 72 | 91 | 90 | 13 |
| 135° | 13 | 15 | 32 | 49 | 49 | 10 |
| 145° | 15 | 16 | 19 | 29 | 28 | 9 |
| 155° | 15 | 19 | 20 | 22 | 19 | 5 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830136

CATALOG NUMBER: OHBL-24SE-N-UNV-L935-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 13264.5 | 13264.5 | 13264.5 | 13264.5 | 13264.5 |
| 2.5° | 13236.7 | 13160.9 | 12924.9 | 12780.9 | 12659.8 |
| 5° | 13238.0 | 12898.4 | 12140.9 | 11577.8 | 11286.2 |
| 7.5° | 13256.9 | 12501.9 | 11137.2 | 10315.4 | 9994.7 |
| 10° | 13285.9 | 12010.9 | 10200.5 | 9324.4 | 9025.2 |
| 12.5° | 13307.4 | 11457.9 | 9376.1 | 8476.0 | 8147.8 |
| 15° | 13338.9 | 10872.1 | 8635.1 | 7679.4 | 7331.0 |
| 17.5° | 13368.0 | 10320.5 | 7902.9 | 6904.3 | 6516.7 |
| 20° | 13397.0 | 9725.8 | 7170.7 | 6141.8 | 5822.4 |
| 22.5° | 13424.8 | 9098.4 | 6456.1 | 5549.7 | 5331.3 |
| 25° | 13427.3 | 8406.6 | 5782.0 | 5131.8 | 4969.0 |
| 27.5° | 13394.5 | 7689.5 | 5235.3 | 4782.1 | 4681.1 |
| 30° | 13337.7 | 6993.9 | 4811.2 | 4529.6 | 4457.7 |
| 32.5° | 13196.3 | 6284.4 | 4482.9 | 4286.0 | 4244.3 |
| 35° | 12946.3 | 5588.8 | 4196.4 | 4065.1 | 4063.8 |
| 37.5° | 12552.4 | 4971.5 | 3885.8 | 3863.1 | 3890.8 |
| 40° | 11970.5 | 4431.2 | 3591.6 | 3652.2 | 3652.2 |
| 42.5° | 11194.1 | 3961.5 | 3325.3 | 3387.1 | 3370.7 |
| 45° | 10234.6 | 3539.9 | 3041.2 | 3114.4 | 3167.5 |
| 47.5° | 9122.4 | 3168.7 | 2750.9 | 2892.3 | 2965.5 |
| 50° | 7913.0 | 2815.2 | 2485.7 | 2666.3 | 2749.6 |
| 52.5° | 6645.5 | 2488.3 | 2226.9 | 2434.0 | 2500.9 |
| 55° | 5418.4 | 2194.1 | 1984.6 | 2152.5 | 2229.5 |
| 57.5° | 4307.4 | 1913.9 | 1747.2 | 1906.3 | 2065.4 |
| 60° | 3351.8 | 1672.7 | 1523.8 | 1751.0 | 1910.1 |
| 62.5° | 2560.2 | 1458.1 | 1314.2 | 1605.8 | 1764.9 |
| 65° | 1937.8 | 1272.5 | 1148.8 | 1472.0 | 1636.1 |
| 67.5° | 1460.6 | 1112.2 | 1020.1 | 1374.8 | 1535.1 |
| 70° | 1097.1 | 956.9 | 916.5 | 1314.2 | 1458.1 |
| 72.5° | 810.5 | 814.3 | 834.5 | 1261.2 | 1371.0 |
| 75° | 598.4 | 685.5 | 771.4 | 1198.1 | 1270.0 |
| 77.5° | 428.0 | 568.1 | 714.5 | 1122.3 | 1147.6 |
| 80° | 296.7 | 463.3 | 655.2 | 1022.6 | 1001.1 |
| 82.5° | 185.6 | 371.2 | 602.2 | 912.7 | 853.4 |
| 85° | 104.8 | 284.0 | 564.3 | 785.2 | 720.9 |
| 87.5° | 46.7 | 212.1 | 493.6 | 612.3 | 571.9 |
| 90° | 0.0 | 118.7 | 327.0 | 460.8 | 464.6 |
| 92.5° | 2.5 | 98.5 | 301.7 | 421.7 | 434.3 |
| 95° | 5.0 | 83.3 | 287.8 | 391.4 | 409.0 |
| 97.5° | 6.3 | 73.2 | 270.2 | 363.6 | 378.7 |
| 100° | 7.6 | 65.6 | 248.7 | 334.5 | 347.2 |
| 102.5° | 8.8 | 60.6 | 228.5 | 304.2 | 314.3 |
| 105° | 10.1 | 55.5 | 209.6 | 277.7 | 285.3 |



TEST NUMBER: P830136

CATALOG NUMBER: OHBL-24SE-N-UNV-L935-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 12.6 | 42.9 | 157.8 | 199.5 | 205.8 |
| 115° | 13.9 | 39.1 | 141.4 | 176.7 | 180.5 |
| 117.5° | 15.1 | 34.1 | 123.7 | 155.3 | 156.5 |
| 120° | 15.1 | 30.3 | 106.0 | 132.6 | 132.6 |
| 122.5° | 15.1 | 25.2 | 88.4 | 109.8 | 108.6 |
| 125° | 15.1 | 20.2 | 72.0 | 90.9 | 89.6 |
| 127.5° | 13.9 | 16.4 | 58.1 | 75.7 | 74.5 |
| 130° | 13.9 | 16.4 | 46.7 | 64.4 | 64.4 |
| 132.5° | 12.6 | 15.1 | 37.9 | 55.5 | 55.5 |
| 135° | 12.6 | 15.1 | 31.6 | 49.2 | 49.2 |
| 137.5° | 12.6 | 16.4 | 26.5 | 42.9 | 42.9 |
| 140° | 12.6 | 15.1 | 22.7 | 37.9 | 37.9 |
| 142.5° | 13.9 | 15.1 | 20.2 | 32.8 | 32.8 |
| 145° | 15.1 | 16.4 | 18.9 | 29.0 | 27.8 |
| 147.5° | 15.1 | 17.7 | 18.9 | 25.2 | 24.0 |
| 150° | 15.1 | 18.9 | 18.9 | 22.7 | 21.5 |
| 152.5° | 15.1 | 18.9 | 18.9 | 21.5 | 20.2 |
| 155° | 15.1 | 18.9 | 20.2 | 21.5 | 18.9 |
| 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° | 10.1 | 51.8 | 191.9 | 248.7 | 257.5 |
| 110° | 11.4 | 46.7 | 175.5 | 222.2 | 231.0 |



(END OF REPORT)