

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: P830102

Luminaire Tested: **OHBL-24SE-A-UNV-L950-CD**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P830102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-200-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24SE-A-UNV-L950-CD
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 5000K LEDS AND AISLE LENS
Light Source: -
Ballast/Driver: -

Summary

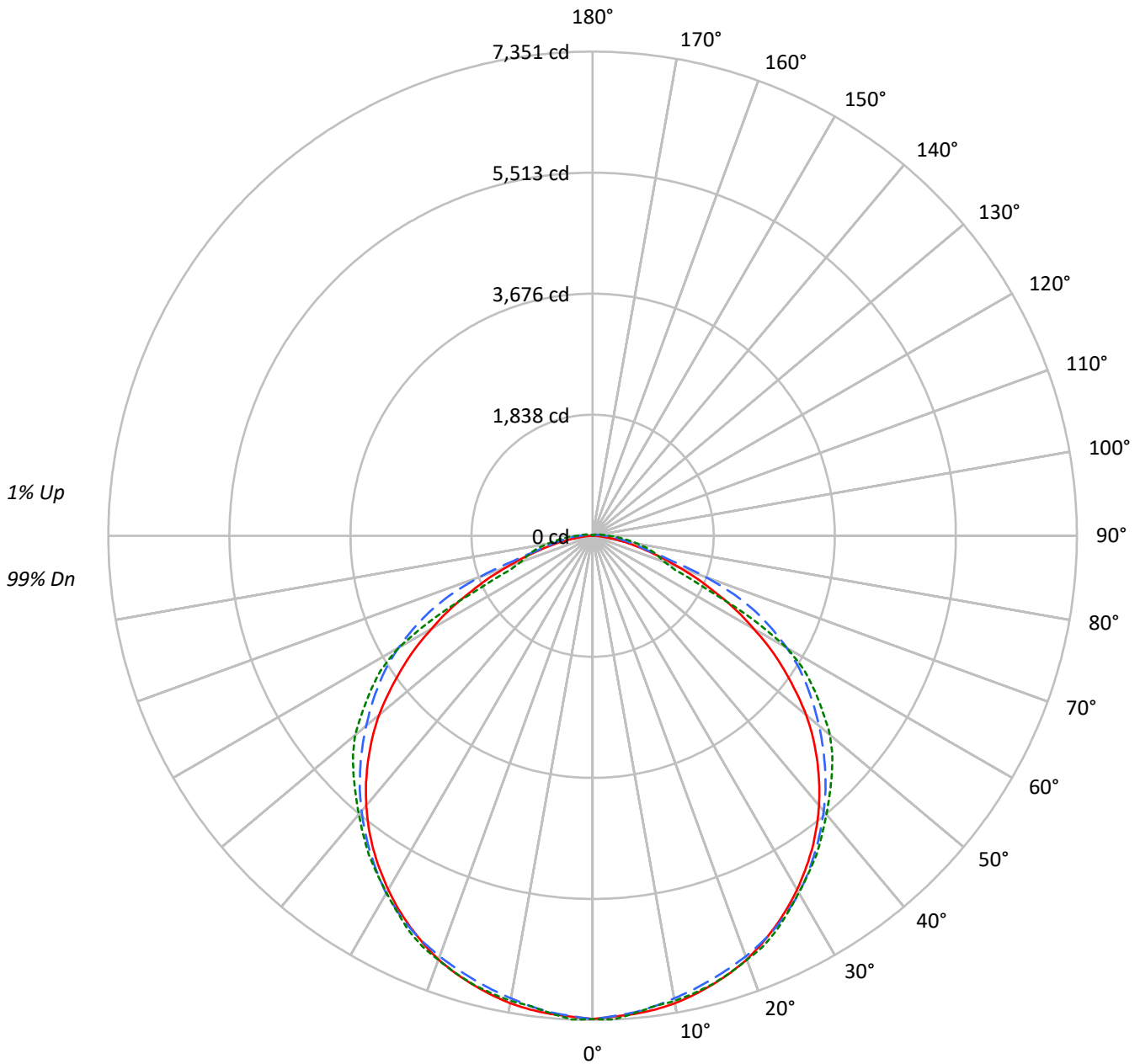
Lumens per Lamp: N/A
Luminaire Lumens: 20736.0 lumens
Efficiency: N/A
Efficacy: 150.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

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: P830102

CATALOG NUMBER: OHBL-24SE-A-UNV-L950-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830102

CATALOG NUMBER: OHBL-24SE-A-UNV-L950-CD

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 106 | 106 | 106 | 101 | 101 | 101 | 99 | | | | 99 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 87 | 86 | 83 | | | | 83 |
| 2 | 99 | 91 | 84 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | 70 | | | | 70 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 63 | 70 | 65 | 61 | 59 | | | | 59 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 62 | 57 | 53 | 51 | | | | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 44 | | | | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | 38 | | | | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | 34 | | | | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | 30 | | | | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 | | | | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 | | | | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12530 | 12530 | 12530 |
| 5° | 12449 | 12343 | 12366 |
| 10° | 12403 | 12150 | 12221 |
| 15° | 12324 | 12005 | 12132 |
| 20° | 12246 | 11912 | 12016 |
| 25° | 12098 | 11817 | 11901 |
| 30° | 11937 | 11671 | 11668 |
| 35° | 11745 | 11444 | 11534 |
| 40° | 11495 | 11208 | 11355 |
| 45° | 11149 | 10936 | 11269 |
| 50° | 10680 | 10627 | 11167 |
| 55° | 9934 | 10321 | 10735 |
| 60° | 8959 | 9878 | 9908 |
| 65° | 7685 | 9063 | 6266 |
| 70° | 6190 | 7061 | 4530 |
| 75° | 4641 | 4179 | 4578 |
| 80° | 3230 | 3458 | 4340 |
| 85° | 1839 | 3140 | 4016 |



TEST NUMBER: P830102

CATALOG NUMBER: OHBL-24SE-A-UNV-L950-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 691.8 | 3.3 |
| 10°-20° | 1983.6 | 9.6 |
| 20°-30° | 3029.6 | 14.6 |
| 30°-40° | 3676.0 | 17.7 |
| 40°-50° | 3852.8 | 18.6 |
| 50°-60° | 3491.2 | 16.8 |
| 60°-70° | 2340.7 | 11.3 |
| 70°-80° | 1051.1 | 5.1 |
| 80°-90° | 381.4 | 1.8 |
| 90°-100° | 114.8 | 0.6 |
| 100°-110° | 54.2 | 0.3 |
| 110°-120° | 27.1 | 0.1 |
| 120°-130° | 15.0 | 0.1 |
| 130°-140° | 10.3 | 0.0 |
| 140°-150° | 6.9 | 0.0 |
| 150°-160° | 5.2 | 0.0 |
| 160°-170° | 3.3 | 0.0 |
| 170°-180° | 1.1 | 0.0 |
| 0°-30° | 5705.0 | 27.5 |
| 0°-40° | 9381.0 | 45.2 |
| 0°-60° | 16725.0 | 80.7 |
| 0°-90° | 20498.2 | 98.9 |
| 90°-120° | 196.2 | 0.9 |
| 90°-150° | 228.3 | 1.1 |
| 90°-180° | 238.0 | 1.1 |
| 0°-180° | 20736.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 7336 | 7336 | 7336 | 7336 | 7336 | |
| 5° | 7289 | 7314 | 7263 | 7286 | 7276 | 693 |
| 15° | 7052 | 7024 | 6975 | 7036 | 7045 | 1991 |
| 25° | 6551 | 6523 | 6568 | 6629 | 6610 | 3020 |
| 35° | 5807 | 5820 | 5880 | 5942 | 5919 | 3629 |
| 45° | 4819 | 4898 | 4989 | 5116 | 5132 | 3712 |
| 55° | 3546 | 3717 | 3970 | 4130 | 4120 | 3165 |
| 65° | 2081 | 2407 | 2733 | 2306 | 1883 | 2074 |
| 75° | 819 | 1188 | 874 | 894 | 953 | 895 |
| 85° | 141 | 270 | 347 | 419 | 439 | 172 |
| 90° | 1 | 90 | 179 | 225 | 236 | 8 |
| 95° | 1 | 56 | 123 | 150 | 154 | 1 |
| 105° | 4 | 24 | 60 | 73 | 76 | 5 |
| 115° | 8 | 13 | 31 | 39 | 41 | 8 |
| 125° | 7 | 8 | 19 | 22 | 23 | 7 |
| 135° | 10 | 11 | 12 | 17 | 18 | 8 |
| 145° | 10 | 11 | 11 | 12 | 13 | 6 |
| 155° | 11 | 12 | 12 | 12 | 11 | 5 |
| 165° | 12 | 12 | 12 | 12 | 12 | 3 |
| 175° | 12 | 12 | 11 | 10 | 10 | 1 |
| 180° | 11 | 11 | 11 | 11 | 11 | |



TEST NUMBER: P830102

CATALOG NUMBER: OHBL-24SE-A-UNV-L950-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 7336.4 | 7336.4 | 7336.4 | 7336.4 | 7336.4 |
| 2.5° | 7306.7 | 7337.5 | 7299.3 | 7340.7 | 7351.3 |
| 5° | 7288.7 | 7314.1 | 7263.2 | 7285.5 | 7275.9 |
| 7.5° | 7255.8 | 7264.3 | 7203.8 | 7221.8 | 7202.8 |
| 10° | 7207.0 | 7202.8 | 7131.7 | 7166.7 | 7170.9 |
| 12.5° | 7134.9 | 7122.1 | 7058.5 | 7111.5 | 7112.6 |
| 15° | 7052.1 | 7024.5 | 6974.7 | 7036.2 | 7044.7 |
| 17.5° | 6956.7 | 6920.6 | 6887.7 | 6967.3 | 6954.5 |
| 20° | 6845.3 | 6802.8 | 6796.5 | 6883.5 | 6851.6 |
| 22.5° | 6707.4 | 6674.5 | 6689.3 | 6772.1 | 6751.9 |
| 25° | 6551.4 | 6522.8 | 6568.4 | 6628.9 | 6609.8 |
| 27.5° | 6387.0 | 6370.0 | 6422.0 | 6468.7 | 6431.6 |
| 30° | 6206.7 | 6197.1 | 6266.1 | 6304.3 | 6257.6 |
| 32.5° | 6010.4 | 6013.6 | 6079.4 | 6131.4 | 6087.9 |
| 35° | 5806.8 | 5820.5 | 5880.0 | 5942.5 | 5919.2 |
| 37.5° | 5582.9 | 5613.7 | 5673.1 | 5744.2 | 5719.8 |
| 40° | 5346.4 | 5390.9 | 5456.7 | 5542.6 | 5520.3 |
| 42.5° | 5090.7 | 5146.9 | 5231.8 | 5327.3 | 5325.2 |
| 45° | 4819.2 | 4897.7 | 4988.9 | 5116.2 | 5132.1 |
| 47.5° | 4537.0 | 4625.0 | 4740.7 | 4910.4 | 4934.8 |
| 50° | 4230.4 | 4340.7 | 4485.0 | 4688.7 | 4703.5 |
| 52.5° | 3888.9 | 4039.5 | 4230.4 | 4425.6 | 4407.6 |
| 55° | 3546.2 | 3717.0 | 3970.5 | 4129.7 | 4120.1 |
| 57.5° | 3204.6 | 3396.6 | 3704.3 | 3817.8 | 3816.7 |
| 60° | 2822.8 | 3065.7 | 3401.9 | 3487.9 | 3403.0 |
| 62.5° | 2469.5 | 2730.5 | 3079.5 | 3016.9 | 2726.2 |
| 65° | 2081.3 | 2406.9 | 2732.6 | 2306.2 | 1882.9 |
| 67.5° | 1736.5 | 2076.0 | 2321.0 | 1579.5 | 1352.5 |
| 70° | 1389.6 | 1764.1 | 1809.7 | 1172.2 | 1156.3 |
| 72.5° | 1082.0 | 1480.9 | 1248.5 | 1003.5 | 1054.4 |
| 75° | 818.9 | 1188.1 | 874.1 | 894.2 | 952.6 |
| 77.5° | 597.2 | 912.3 | 680.0 | 783.9 | 831.7 |
| 80° | 410.5 | 646.0 | 554.8 | 658.7 | 691.6 |
| 82.5° | 257.8 | 426.4 | 444.5 | 530.4 | 564.3 |
| 85° | 141.1 | 270.5 | 346.9 | 419.0 | 439.2 |
| 87.5° | 58.3 | 163.4 | 265.2 | 323.5 | 340.5 |
| 90° | 1.1 | 90.2 | 179.3 | 224.9 | 235.5 |
| 92.5° | 1.1 | 69.0 | 146.4 | 181.4 | 188.8 |
| 95° | 1.1 | 56.2 | 123.1 | 149.6 | 153.8 |
| 97.5° | 2.1 | 44.6 | 102.9 | 124.1 | 128.4 |
| 100° | 3.2 | 37.1 | 85.9 | 104.0 | 107.1 |
| 102.5° | 4.2 | 29.7 | 72.1 | 87.0 | 90.2 |
| 105° | 4.2 | 24.4 | 60.5 | 73.2 | 76.4 |



TEST NUMBER: P830102

CATALOG NUMBER: OHBL-24SE-A-UNV-L950-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 7.4 | 14.9 | 36.1 | 45.6 | 47.7 |
| 115° | 8.5 | 12.7 | 30.8 | 39.2 | 41.4 |
| 117.5° | 8.5 | 10.6 | 26.5 | 32.9 | 35.0 |
| 120° | 8.5 | 9.5 | 23.3 | 28.6 | 29.7 |
| 122.5° | 8.5 | 8.5 | 20.2 | 25.5 | 26.5 |
| 125° | 7.4 | 8.5 | 19.1 | 22.3 | 23.3 |
| 127.5° | 8.5 | 8.5 | 17.0 | 20.2 | 21.2 |
| 130° | 8.5 | 9.5 | 14.9 | 19.1 | 19.1 |
| 132.5° | 9.5 | 10.6 | 13.8 | 18.0 | 18.0 |
| 135° | 9.5 | 10.6 | 11.7 | 17.0 | 18.0 |
| 137.5° | 10.6 | 10.6 | 10.6 | 15.9 | 17.0 |
| 140° | 10.6 | 10.6 | 9.5 | 13.8 | 14.9 |
| 142.5° | 9.5 | 10.6 | 9.5 | 12.7 | 13.8 |
| 145° | 9.5 | 10.6 | 10.6 | 11.7 | 12.7 |
| 147.5° | 10.6 | 10.6 | 10.6 | 10.6 | 11.7 |
| 150° | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 |
| 152.5° | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 |
| 155° | 10.6 | 11.7 | 11.7 | 11.7 | 10.6 |
| 157.5° | 10.6 | 11.7 | 11.7 | 11.7 | 11.7 |
| 160° | 10.6 | 11.7 | 11.7 | 11.7 | 11.7 |
| 162.5° | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 |
| 165° | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 |
| 167.5° | 11.7 | 12.7 | 11.7 | 11.7 | 11.7 |
| 170° | 11.7 | 11.7 | 11.7 | 10.6 | 10.6 |
| 172.5° | 11.7 | 11.7 | 11.7 | 10.6 | 10.6 |
| 175° | 11.7 | 11.7 | 10.6 | 9.5 | 9.5 |
| 177.5° | 12.7 | 11.7 | 10.6 | 9.5 | 8.5 |
| 180° | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-----|------|------|------|------|
| 107.5° | 5.3 | 20.2 | 52.0 | 62.6 | 64.7 |
| 110° | 6.4 | 17.0 | 43.5 | 53.0 | 55.2 |



(END OF REPORT)