

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: P827757

Luminaire Tested: **OHBL-24SE-NL-UNV-L930-CD-UPL12**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827757
REPORT IS A COMBINATION OF REPORTS P826081 AND G3-2310-221-12
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24SE-NL-UNV-L930-CD-UPL12
Description:
Light Source: -
Ballast/Driver: -

Summary

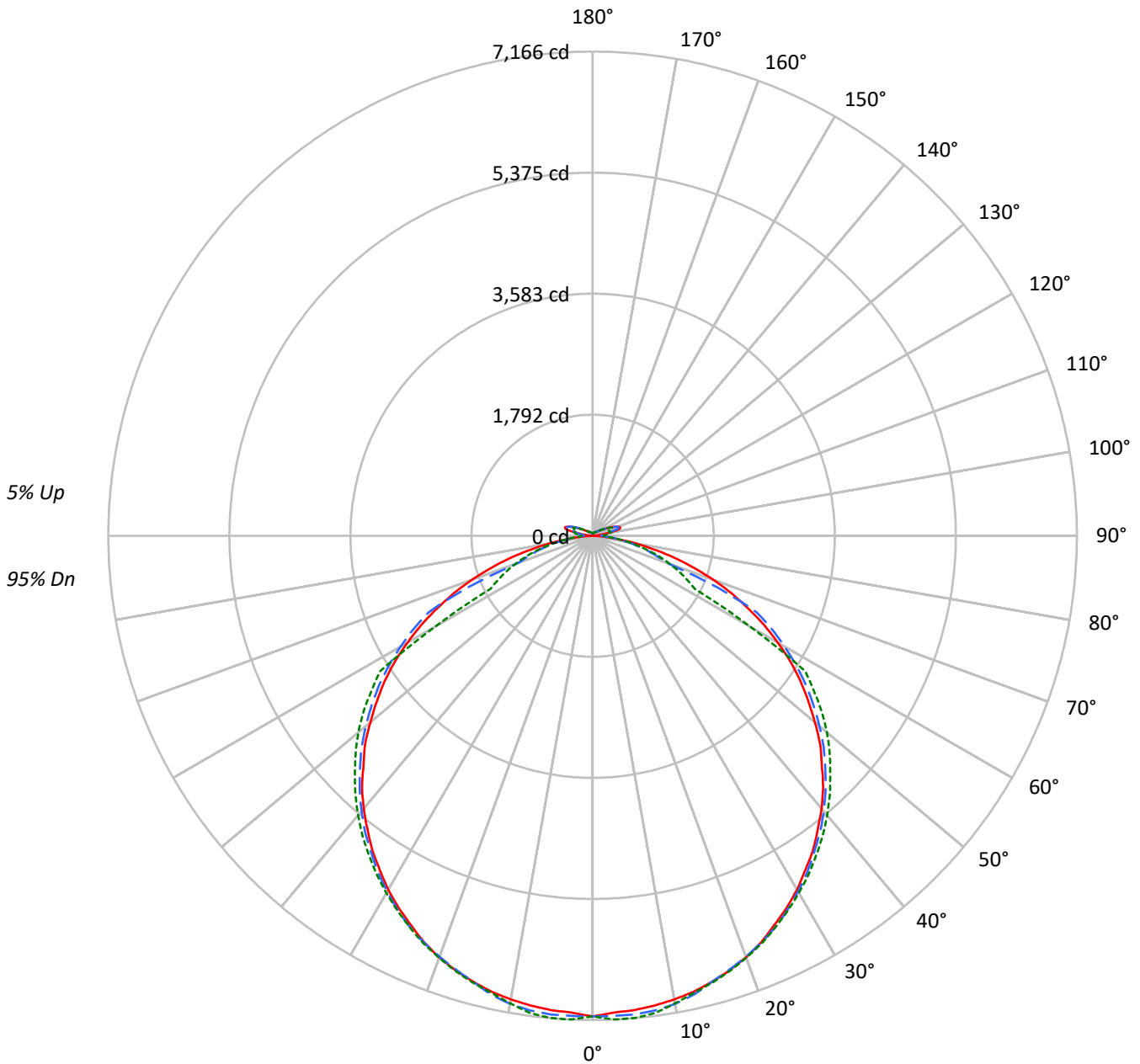
Lumens per Lamp: N/A
Luminaire Lumens: 20978.1 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.1')
CIE Type: Direct

Input Watts (W): 146.4
Input Voltage (V): NR
Input Current (Ain): 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: P827757

CATALOG NUMBER: OHBL-24SE-NL-UNV-L930-CD-UPL12

Luminous Intensity Polar Plot





TEST NUMBER: P827757

CATALOG NUMBER: OHBL-24SE-NL-UNV-L930-CD-UPL12

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 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 95 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 99 | 96 | 105 | 101 | 97 | 94 | 96 | 93 | 90 | 91 | 88 | 86 | 86 | 84 | 83 | 80 | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 84 | 78 | 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 | 40 | 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° | 12149 | 12149 | 12149 |
| 5° | 12019 | 12127 | 12255 |
| 10° | 11959 | 12070 | 12129 |
| 15° | 11892 | 11887 | 12023 |
| 20° | 11809 | 11787 | 11963 |
| 25° | 11658 | 11712 | 11908 |
| 30° | 11530 | 11582 | 11857 |
| 35° | 11374 | 11428 | 11810 |
| 40° | 11186 | 11282 | 11775 |
| 45° | 10924 | 11078 | 11702 |
| 50° | 10644 | 10848 | 11655 |
| 55° | 10305 | 10556 | 11457 |
| 60° | 9795 | 10124 | 8851 |
| 65° | 9064 | 9570 | 5896 |
| 70° | 8123 | 4920 | 5636 |
| 75° | 6744 | 4446 | 5255 |
| 80° | 4736 | 3720 | 4601 |
| 85° | 1899 | 2980 | 3982 |



TEST NUMBER: P827757

CATALOG NUMBER: OHBL-24SE-NL-UNV-L930-CD-UPL12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 675.8 | 3.2 |
| 10°-20° | 1935.0 | 9.2 |
| 20°-30° | 2944.2 | 14.0 |
| 30°-40° | 3579.8 | 17.1 |
| 40°-50° | 3764.0 | 17.9 |
| 50°-60° | 3436.9 | 16.4 |
| 60°-70° | 2203.3 | 10.5 |
| 70°-80° | 1040.8 | 5.0 |
| 80°-90° | 291.1 | 1.4 |
| 90°-100° | 172.6 | 0.8 |
| 100°-110° | 355.5 | 1.7 |
| 110°-120° | 293.2 | 1.4 |
| 120°-130° | 137.7 | 0.7 |
| 130°-140° | 68.9 | 0.3 |
| 140°-150° | 40.1 | 0.2 |
| 150°-160° | 23.4 | 0.1 |
| 160°-170° | 12.1 | 0.1 |
| 170°-180° | 3.7 | 0.0 |
| 0°-30° | 5555.0 | 26.5 |
| 0°-40° | 9134.8 | 43.5 |
| 0°-60° | 16335.7 | 77.9 |
| 0°-90° | 19870.9 | 94.7 |
| 90°-120° | 821.3 | 3.9 |
| 90°-150° | 1068.1 | 5.1 |
| 90°-180° | 1107.0 | 5.3 |
| 0°-180° | 20978.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 7113 | 7113 | 7113 | 7113 | 7113 | |
| 5° | 7047 | 7075 | 7111 | 7150 | 7164 | 670 |
| 15° | 6834 | 6885 | 6832 | 6842 | 6848 | 1929 |
| 25° | 6359 | 6369 | 6392 | 6402 | 6397 | 2934 |
| 35° | 5684 | 5650 | 5715 | 5785 | 5769 | 3552 |
| 45° | 4794 | 4785 | 4867 | 4981 | 4973 | 3706 |
| 55° | 3757 | 3728 | 3854 | 3983 | 3993 | 3351 |
| 65° | 2531 | 2531 | 2678 | 1536 | 1542 | 2510 |
| 75° | 1251 | 1274 | 828 | 871 | 875 | 1318 |
| 85° | 163 | 207 | 258 | 280 | 265 | 242 |
| 90° | 2 | 84 | 134 | 161 | 162 | 9 |
| 95° | 24 | 83 | 152 | 205 | 220 | 68 |
| 105° | 424 | 427 | 372 | 270 | 248 | 402 |
| 115° | 297 | 300 | 304 | 298 | 286 | 295 |
| 125° | 142 | 148 | 151 | 150 | 150 | 133 |
| 135° | 82 | 85 | 88 | 89 | 89 | 66 |
| 145° | 61 | 62 | 63 | 64 | 65 | 38 |
| 155° | 48 | 49 | 50 | 51 | 51 | 23 |
| 165° | 42 | 42 | 43 | 43 | 43 | 12 |
| 175° | 38 | 38 | 38 | 38 | 38 | 4 |
| 180° | 37 | 37 | 37 | 37 | 37 | |



TEST NUMBER: P827757

CATALOG NUMBER: OHBL-24SE-NL-UNV-L930-CD-UPL12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 7113.3 | 7113.3 | 7113.3 | 7113.3 | 7113.3 |
| 2.5° | 7063.4 | 7087.1 | 7113.3 | 7147.0 | 7165.6 |
| 5° | 7047.1 | 7074.6 | 7110.8 | 7149.5 | 7164.5 |
| 7.5° | 7012.2 | 7050.8 | 7085.8 | 7113.3 | 7122.1 |
| 10° | 6968.5 | 7014.7 | 7034.7 | 7032.2 | 7026.0 |
| 12.5° | 6909.8 | 6958.6 | 6952.4 | 6923.5 | 6928.6 |
| 15° | 6833.7 | 6884.8 | 6832.5 | 6842.5 | 6847.5 |
| 17.5° | 6743.8 | 6793.8 | 6732.6 | 6752.6 | 6753.9 |
| 20° | 6639.1 | 6676.4 | 6629.0 | 6645.2 | 6645.2 |
| 22.5° | 6513.0 | 6539.2 | 6519.2 | 6530.4 | 6533.0 |
| 25° | 6359.4 | 6369.3 | 6391.8 | 6401.8 | 6396.8 |
| 27.5° | 6212.2 | 6199.7 | 6243.4 | 6267.1 | 6254.5 |
| 30° | 6048.6 | 6028.6 | 6079.8 | 6118.5 | 6103.6 |
| 32.5° | 5861.4 | 5848.9 | 5907.6 | 5953.8 | 5945.0 |
| 35° | 5684.2 | 5650.5 | 5715.3 | 5785.2 | 5769.0 |
| 37.5° | 5474.4 | 5454.5 | 5528.1 | 5601.8 | 5593.1 |
| 40° | 5269.8 | 5236.1 | 5319.7 | 5407.0 | 5398.3 |
| 42.5° | 5050.1 | 5010.0 | 5101.2 | 5206.2 | 5196.1 |
| 45° | 4794.1 | 4785.4 | 4866.6 | 4981.4 | 4972.7 |
| 47.5° | 4567.2 | 4523.4 | 4636.9 | 4748.1 | 4758.1 |
| 50° | 4292.4 | 4276.2 | 4379.9 | 4514.7 | 4524.6 |
| 52.5° | 4024.1 | 4012.9 | 4121.4 | 4257.5 | 4275.0 |
| 55° | 3757.0 | 3728.3 | 3854.3 | 3982.9 | 3992.9 |
| 57.5° | 3471.2 | 3441.2 | 3569.8 | 3709.6 | 3730.8 |
| 60° | 3165.4 | 3136.7 | 3277.6 | 3407.5 | 2709.8 |
| 62.5° | 2859.6 | 2839.6 | 2987.0 | 2115.7 | 1705.1 |
| 65° | 2531.3 | 2531.3 | 2678.5 | 1536.5 | 1541.5 |
| 67.5° | 2224.3 | 2204.3 | 1997.1 | 1380.4 | 1380.4 |
| 70° | 1894.7 | 1902.3 | 1150.7 | 1209.5 | 1210.7 |
| 72.5° | 1564.0 | 1591.4 | 993.6 | 1040.9 | 1043.4 |
| 75° | 1250.7 | 1274.4 | 827.5 | 871.2 | 874.9 |
| 77.5° | 918.7 | 706.5 | 665.3 | 699.0 | 700.3 |
| 80° | 645.3 | 445.6 | 509.3 | 541.7 | 537.9 |
| 82.5° | 376.8 | 312.0 | 373.2 | 397.0 | 395.7 |
| 85° | 163.4 | 207.2 | 258.3 | 279.6 | 264.6 |
| 87.5° | 52.3 | 128.6 | 160.9 | 173.5 | 172.2 |
| 90° | 2.4 | 84.5 | 134.3 | 161.0 | 161.9 |
| 92.5° | 7.3 | 73.4 | 130.6 | 168.5 | 173.8 |
| 95° | 23.9 | 83.1 | 152.0 | 204.9 | 219.5 |
| 97.5° | 111.6 | 145.0 | 192.9 | 245.8 | 256.4 |
| 100° | 225.6 | 261.3 | 238.4 | 271.0 | 276.3 |
| 102.5° | 361.1 | 367.5 | 279.1 | 271.1 | 268.4 |
| 105° | 424.1 | 426.8 | 372.4 | 269.7 | 248.3 |



TEST NUMBER: P827757

CATALOG NUMBER: OHBL-24SE-NL-UNV-L930-CD-UPL12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 345.4 | 350.3 | 351.6 | 335.0 | 312.4 |
| 115° | 297.2 | 299.7 | 304.3 | 298.1 | 285.7 |
| 117.5° | 244.1 | 247.4 | 249.8 | 247.4 | 245.7 |
| 120° | 204.5 | 209.4 | 211.0 | 207.7 | 207.7 |
| 122.5° | 172.2 | 176.2 | 178.6 | 176.2 | 177.0 |
| 125° | 142.3 | 147.9 | 151.2 | 149.5 | 150.4 |
| 127.5° | 118.8 | 123.7 | 129.3 | 128.5 | 128.5 |
| 130° | 103.5 | 106.7 | 110.7 | 111.6 | 111.6 |
| 132.5° | 92.2 | 94.6 | 97.8 | 98.6 | 99.4 |
| 135° | 82.4 | 84.9 | 88.1 | 88.9 | 88.9 |
| 137.5° | 76.0 | 77.6 | 80.0 | 80.8 | 81.6 |
| 140° | 69.5 | 71.9 | 73.6 | 74.4 | 74.4 |
| 142.5° | 64.7 | 66.3 | 67.9 | 68.7 | 69.5 |
| 145° | 60.6 | 62.2 | 63.0 | 63.9 | 64.7 |
| 147.5° | 56.6 | 58.2 | 59.8 | 59.8 | 60.6 |
| 150° | 54.2 | 55.0 | 55.8 | 56.6 | 56.6 |
| 152.5° | 50.9 | 51.7 | 52.5 | 53.4 | 53.4 |
| 155° | 48.5 | 49.3 | 50.1 | 50.9 | 50.9 |
| 157.5° | 46.1 | 47.7 | 47.7 | 48.5 | 48.5 |
| 160° | 44.5 | 45.3 | 46.1 | 46.1 | 46.1 |
| 162.5° | 42.8 | 43.6 | 43.6 | 44.5 | 44.5 |
| 165° | 42.0 | 42.0 | 42.8 | 42.8 | 42.8 |
| 167.5° | 40.4 | 40.4 | 41.2 | 41.2 | 41.2 |
| 170° | 39.6 | 39.6 | 39.6 | 40.4 | 40.4 |
| 172.5° | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 |
| 175° | 38.0 | 38.0 | 38.0 | 38.0 | 38.0 |
| 177.5° | 37.2 | 38.0 | 38.0 | 38.0 | 38.0 |
| 180° | 37.2 | 37.2 | 37.2 | 37.2 | 37.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 426.6 | 434.4 | 406.3 | 312.7 | 253.5 |
| 110° | 392.3 | 401.7 | 387.6 | 349.5 | 299.5 |



(END OF REPORT)