

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: P828703

Luminaire Tested: **OHBL-36SE-MFL-UNV-L950-CD-UPL18**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828703
REPORT IS A COMBINATION OF REPORTS P826175 AND G3-2310-221-8
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-36SE-MFL-UNV-L950-CD-UPL18
Description:
Light Source: -
Ballast/Driver: -

Summary

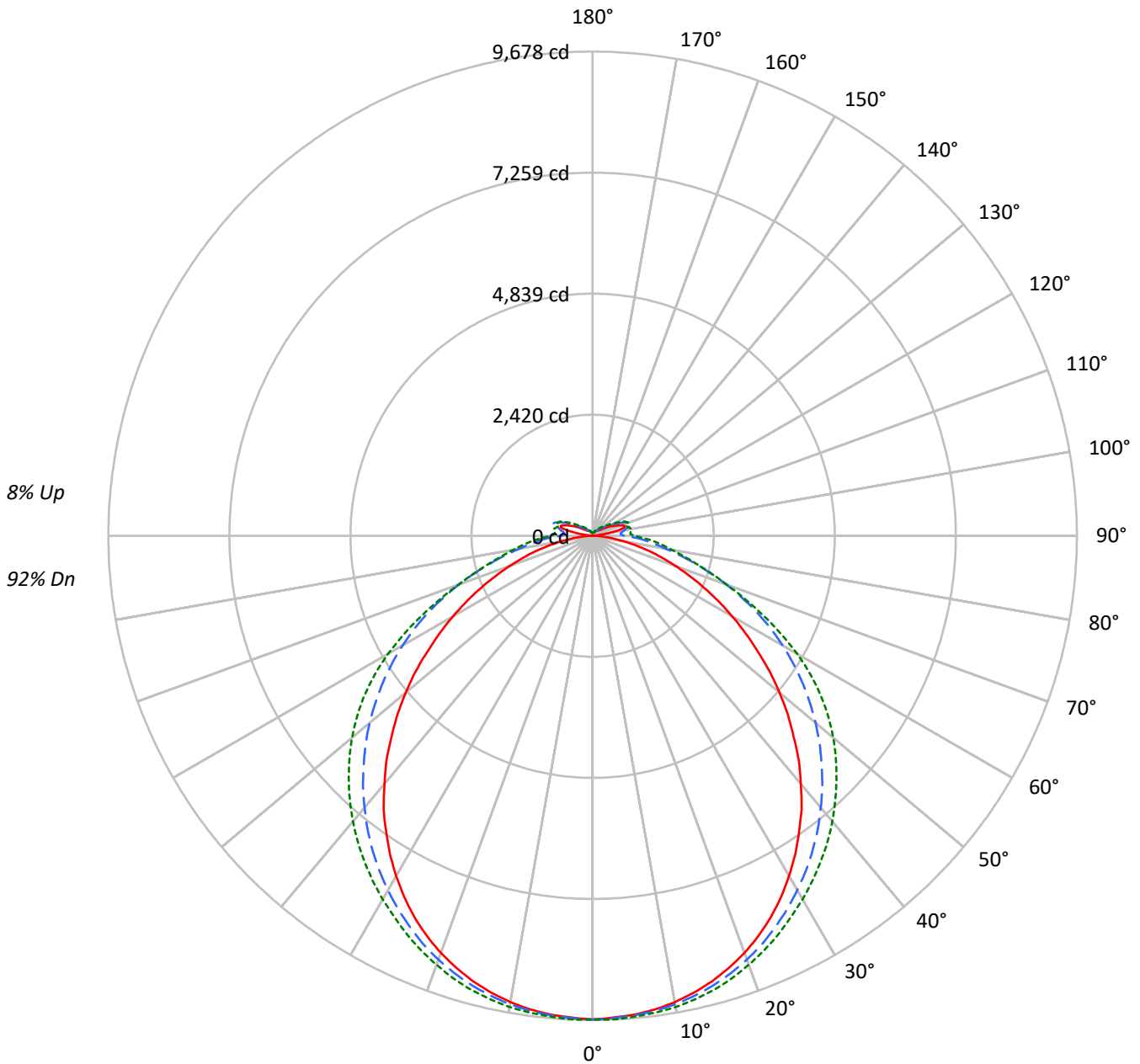
Lumens per Lamp: N/A
Luminaire Lumens: 30493.1 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 223.3
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: P828703

CATALOG NUMBER: OHBL-36SE-MFL-UNV-L950-CD-UPL18

Luminous Intensity Polar Plot





TEST NUMBER: P828703

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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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 107 | 107 | 107 | 100 | 100 | 100 | 95 | 95 | 95 | 92 | | | | | | | | | | | | | | | | | | | |
| 1 | 106 | 101 | 97 | 93 | 103 | 98 | 94 | 91 | 92 | 89 | 86 | 87 | 85 | 82 | 82 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 88 | 81 | 75 | 93 | 86 | 79 | 74 | 81 | 75 | 71 | 76 | 72 | 68 | 72 | 68 | 65 | 63 | | | | | | | | | | | | | | | | | | | |
| 3 | 88 | 77 | 69 | 63 | 85 | 75 | 68 | 61 | 71 | 65 | 59 | 67 | 62 | 57 | 64 | 59 | 55 | 53 | | | | | | | | | | | | | | | | | | | |
| 4 | 80 | 68 | 60 | 53 | 78 | 67 | 58 | 52 | 63 | 56 | 50 | 60 | 54 | 49 | 57 | 52 | 47 | 45 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 52 | 45 | 71 | 59 | 51 | 45 | 56 | 49 | 44 | 54 | 47 | 42 | 51 | 46 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 55 | 46 | 40 | 66 | 54 | 45 | 39 | 51 | 44 | 38 | 48 | 42 | 37 | 46 | 41 | 36 | 34 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 50 | 41 | 35 | 61 | 49 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 45 | 37 | 31 | 57 | 44 | 36 | 31 | 42 | 35 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 33 | 28 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 36 | 29 | 25 | 35 | 28 | 24 | 33 | 28 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15291 | 15291 | 15291 |
| 5° | 15129 | 15146 | 15257 |
| 10° | 14959 | 15012 | 15241 |
| 15° | 14729 | 14853 | 15201 |
| 20° | 14443 | 14657 | 15114 |
| 25° | 14083 | 14413 | 15027 |
| 30° | 13610 | 14149 | 14943 |
| 35° | 13051 | 13868 | 14886 |
| 40° | 12393 | 13542 | 14839 |
| 45° | 11630 | 13189 | 14766 |
| 50° | 10801 | 12832 | 14669 |
| 55° | 9802 | 12395 | 14443 |
| 60° | 8778 | 11880 | 13872 |
| 65° | 7669 | 11222 | 12847 |
| 70° | 6472 | 10384 | 11750 |
| 75° | 5254 | 9415 | 11175 |
| 80° | 3773 | 8714 | 11706 |
| 85° | 2128 | 9057 | 14675 |



TEST NUMBER: P828703

CATALOG NUMBER: OHBL-36SE-MFL-UNV-L950-CD-UPL18

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 916.2 | 3.0 |
| 10°-20° | 2628.3 | 8.6 |
| 20°-30° | 3974.9 | 13.0 |
| 30°-40° | 4771.9 | 15.6 |
| 40°-50° | 4928.6 | 16.2 |
| 50°-60° | 4434.2 | 14.5 |
| 60°-70° | 3340.2 | 11.0 |
| 70°-80° | 2017.0 | 6.6 |
| 80°-90° | 990.3 | 3.2 |
| 90°-100° | 564.1 | 1.8 |
| 100°-110° | 754.0 | 2.5 |
| 110°-120° | 583.3 | 1.9 |
| 120°-130° | 292.0 | 1.0 |
| 130°-140° | 148.0 | 0.5 |
| 140°-150° | 82.0 | 0.3 |
| 150°-160° | 43.6 | 0.1 |
| 160°-170° | 18.7 | 0.1 |
| 170°-180° | 5.7 | 0.0 |
| 0°-30° | 7519.4 | 24.7 |
| 0°-40° | 12291.3 | 40.3 |
| 0°-60° | 21654.1 | 71.0 |
| 0°-90° | 28001.7 | 91.8 |
| 90°-120° | 1901.4 | 6.2 |
| 90°-150° | 2423.5 | 7.9 |
| 90°-180° | 2491.0 | 8.2 |
| 0°-180° | 30493.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 9669 | 9669 | 9669 | 9669 | 9669 | |
| 5° | 9607 | 9633 | 9621 | 9659 | 9647 | 913 |
| 15° | 9219 | 9264 | 9307 | 9385 | 9394 | 2599 |
| 25° | 8419 | 8512 | 8632 | 8767 | 8788 | 3873 |
| 35° | 7198 | 7366 | 7669 | 7901 | 7948 | 4500 |
| 45° | 5682 | 5968 | 6467 | 6820 | 6893 | 4386 |
| 55° | 4025 | 4442 | 5116 | 5502 | 5568 | 3609 |
| 65° | 2456 | 2958 | 3620 | 3800 | 3758 | 2440 |
| 75° | 1157 | 1661 | 2097 | 2151 | 2130 | 1234 |
| 85° | 241 | 636 | 1051 | 1195 | 1216 | 279 |
| 90° | 4 | 270 | 631 | 796 | 831 | 18 |
| 95° | 45 | 239 | 562 | 718 | 760 | 114 |
| 105° | 661 | 735 | 805 | 724 | 709 | 628 |
| 115° | 465 | 506 | 611 | 660 | 669 | 469 |
| 125° | 236 | 254 | 331 | 373 | 378 | 222 |
| 135° | 145 | 153 | 185 | 223 | 233 | 115 |
| 145° | 118 | 117 | 122 | 142 | 149 | 74 |
| 155° | 98 | 102 | 101 | 100 | 102 | 42 |
| 165° | 64 | 65 | 65 | 66 | 66 | 18 |
| 175° | 58 | 58 | 59 | 59 | 59 | 6 |
| 180° | 58 | 58 | 58 | 58 | 58 | |



TEST NUMBER: P828703

CATALOG NUMBER: OHBL-36SE-MFL-UNV-L950-CD-UPL18

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 9668.7 | 9668.7 | 9668.7 | 9668.7 | 9668.7 |
| 2.5° | 9640.3 | 9664.0 | 9649.8 | 9680.6 | 9678.2 |
| 5° | 9607.2 | 9633.3 | 9621.4 | 9659.3 | 9647.4 |
| 7.5° | 9550.4 | 9578.8 | 9576.4 | 9619.0 | 9614.3 |
| 10° | 9467.6 | 9498.3 | 9507.8 | 9564.6 | 9564.6 |
| 12.5° | 9354.0 | 9394.3 | 9417.9 | 9486.5 | 9488.9 |
| 15° | 9219.2 | 9264.1 | 9306.7 | 9384.8 | 9394.3 |
| 17.5° | 9055.9 | 9112.6 | 9171.8 | 9261.8 | 9273.6 |
| 20° | 8871.3 | 8935.2 | 9015.6 | 9110.3 | 9124.5 |
| 22.5° | 8658.3 | 8734.0 | 8838.2 | 8949.4 | 8966.0 |
| 25° | 8419.4 | 8511.6 | 8632.3 | 8767.1 | 8788.4 |
| 27.5° | 8147.2 | 8253.6 | 8416.9 | 8568.4 | 8587.3 |
| 30° | 7851.4 | 7976.8 | 8180.3 | 8360.1 | 8390.9 |
| 32.5° | 7539.0 | 7683.4 | 7934.2 | 8135.4 | 8177.9 |
| 35° | 7198.3 | 7366.3 | 7669.2 | 7901.1 | 7948.5 |
| 37.5° | 6862.3 | 7046.8 | 7389.9 | 7655.0 | 7711.8 |
| 40° | 6469.4 | 6699.0 | 7091.8 | 7385.2 | 7453.8 |
| 42.5° | 6100.4 | 6348.8 | 6793.7 | 7113.1 | 7179.4 |
| 45° | 5681.5 | 5967.8 | 6467.1 | 6819.7 | 6893.0 |
| 47.5° | 5288.7 | 5598.7 | 6152.4 | 6516.8 | 6592.6 |
| 50° | 4874.6 | 5215.4 | 5816.4 | 6197.3 | 6275.5 |
| 52.5° | 4460.5 | 4827.2 | 5468.5 | 5863.7 | 5937.1 |
| 55° | 4025.1 | 4441.6 | 5116.0 | 5501.7 | 5567.9 |
| 57.5° | 3620.5 | 4060.6 | 4753.9 | 5120.7 | 5160.9 |
| 60° | 3220.5 | 3677.2 | 4384.8 | 4706.6 | 4720.7 |
| 62.5° | 2830.1 | 3310.5 | 4006.1 | 4261.8 | 4242.8 |
| 65° | 2456.3 | 2957.8 | 3620.5 | 3800.3 | 3757.7 |
| 67.5° | 2096.6 | 2614.8 | 3225.3 | 3341.2 | 3284.4 |
| 70° | 1755.8 | 2281.2 | 2842.0 | 2901.1 | 2849.0 |
| 72.5° | 1455.3 | 1964.1 | 2453.8 | 2503.6 | 2465.7 |
| 75° | 1157.1 | 1661.2 | 2096.6 | 2151.0 | 2129.7 |
| 77.5° | 877.9 | 1367.7 | 1767.7 | 1838.6 | 1843.3 |
| 80° | 631.8 | 1100.4 | 1481.3 | 1592.6 | 1606.7 |
| 82.5° | 416.5 | 854.2 | 1242.3 | 1384.3 | 1405.5 |
| 85° | 241.4 | 636.5 | 1050.6 | 1195.0 | 1216.3 |
| 87.5° | 104.2 | 459.1 | 844.8 | 974.9 | 1000.9 |
| 90° | 3.5 | 270.2 | 630.6 | 796.3 | 831.4 |
| 92.5° | 18.4 | 234.6 | 563.7 | 723.9 | 756.9 |
| 95° | 44.9 | 239.3 | 561.7 | 717.8 | 760.0 |
| 97.5° | 183.7 | 327.2 | 597.4 | 744.5 | 779.7 |
| 100° | 363.7 | 489.9 | 646.2 | 760.3 | 784.5 |
| 102.5° | 561.1 | 654.9 | 690.5 | 739.8 | 751.2 |
| 105° | 660.9 | 735.2 | 804.6 | 724.2 | 708.8 |



TEST NUMBER: P828703

CATALOG NUMBER: OHBL-36SE-MFL-UNV-L950-CD-UPL18

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 542.4 | 590.8 | 696.3 | 743.9 | 731.6 |
| 115° | 465.0 | 505.7 | 611.3 | 660.5 | 669.1 |
| 117.5° | 401.2 | 429.9 | 526.3 | 576.6 | 584.5 |
| 120° | 338.6 | 363.7 | 452.3 | 497.1 | 504.8 |
| 122.5° | 286.5 | 306.1 | 388.6 | 430.9 | 436.3 |
| 125° | 236.3 | 253.8 | 330.9 | 372.6 | 377.9 |
| 127.5° | 200.9 | 213.4 | 282.8 | 324.5 | 329.9 |
| 130° | 176.6 | 185.0 | 242.2 | 283.4 | 291.4 |
| 132.5° | 160.1 | 167.4 | 210.4 | 249.2 | 260.4 |
| 135° | 145.3 | 152.6 | 185.4 | 222.6 | 232.9 |
| 137.5° | 134.0 | 141.3 | 163.7 | 198.6 | 208.9 |
| 140° | 126.8 | 131.7 | 146.2 | 176.3 | 186.6 |
| 142.5° | 121.3 | 123.9 | 131.2 | 158.2 | 166.1 |
| 145° | 117.5 | 116.9 | 121.9 | 141.7 | 148.8 |
| 147.5° | 111.5 | 113.2 | 114.9 | 126.2 | 133.3 |
| 150° | 106.2 | 110.3 | 109.7 | 112.9 | 120.9 |
| 152.5° | 102.8 | 106.0 | 105.4 | 103.9 | 108.6 |
| 155° | 98.4 | 102.5 | 101.0 | 99.6 | 101.9 |
| 157.5° | 72.2 | 73.0 | 73.9 | 74.8 | 74.8 |
| 160° | 69.6 | 69.6 | 70.4 | 71.3 | 71.3 |
| 162.5° | 66.9 | 66.9 | 67.8 | 68.7 | 68.7 |
| 165° | 64.3 | 65.2 | 65.2 | 66.1 | 66.1 |
| 167.5° | 62.6 | 62.6 | 63.5 | 63.5 | 64.3 |
| 170° | 60.9 | 60.9 | 61.7 | 61.7 | 61.7 |
| 172.5° | 59.1 | 60.0 | 60.0 | 60.0 | 60.0 |
| 175° | 58.3 | 58.3 | 59.1 | 59.1 | 59.1 |
| 177.5° | 57.4 | 58.3 | 58.3 | 58.3 | 58.3 |
| 180° | 58.3 | 58.3 | 58.3 | 58.3 | 58.3 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 667.0 | 735.6 | 829.4 | 768.9 | 705.1 |
| 110° | 612.2 | 678.3 | 780.0 | 794.1 | 745.9 |



(END OF REPORT)