

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: P830823

Luminaire Tested: **OHBL-90SE-MCL-UNV-L730-CD**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P830823
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-90SE-MCL-UNV-L730-CD
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 70CRI, 3000K LEDS AND MEDIUM CLEAR LENS
Light Source: -
Ballast/Driver: -

Summary

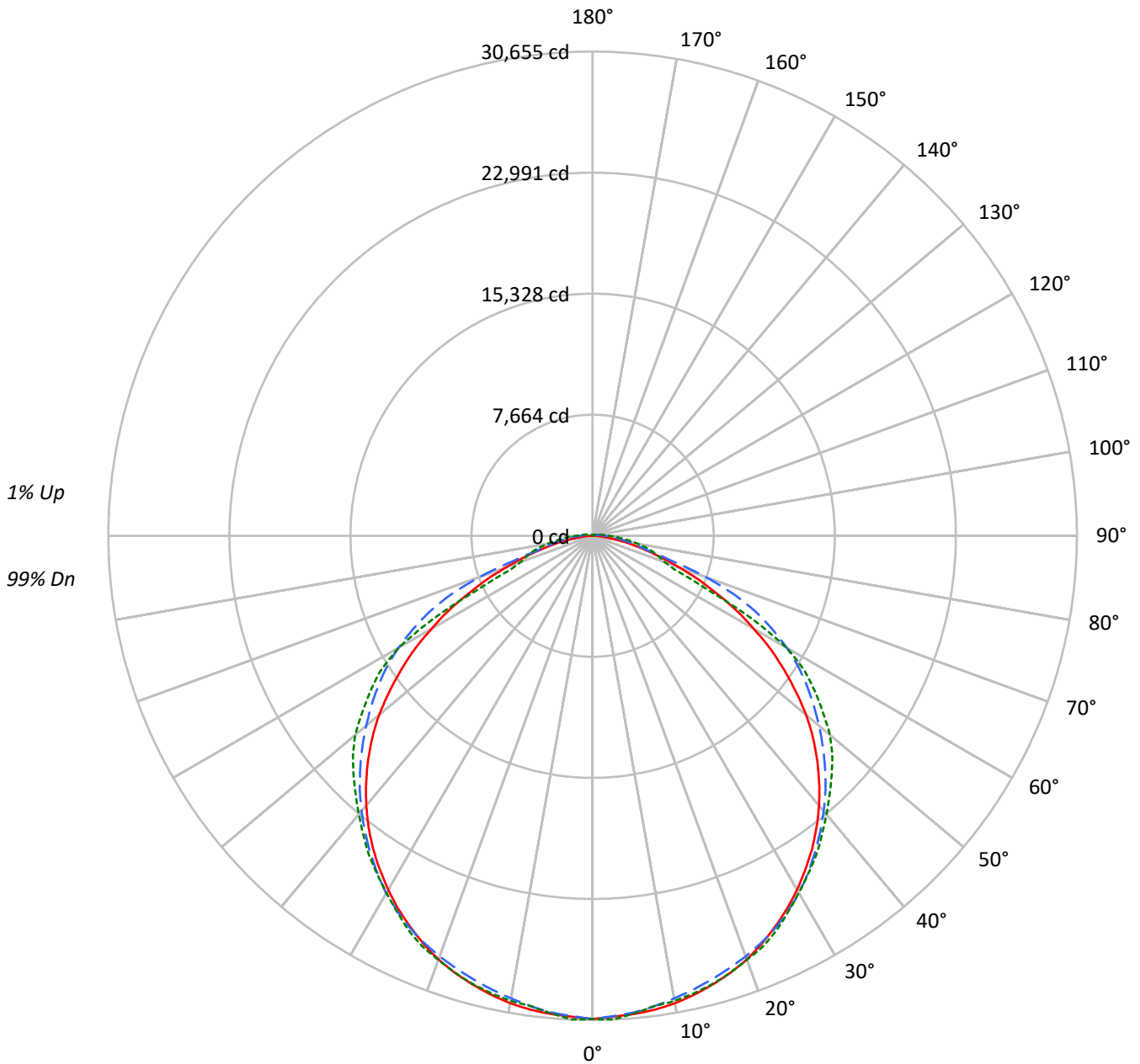
Lumens per Lamp: N/A
Luminaire Lumens: 86469.0 lumens
Efficiency: N/A
Efficacy: 163.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 529
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: P830823

CATALOG NUMBER: OHBL-90SE-MCL-UNV-L730-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830823

CATALOG NUMBER: OHBL-90SE-MCL-UNV-L730-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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 106 | 106 | 106 | 101 | 101 | 101 | | | | 99 | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 87 | 86 | | | | 83 | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 84 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | | | | 70 | | | | | | | | | | | | | | | | |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 63 | 70 | 65 | 61 | | | | 59 | | | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 62 | 57 | 53 | | | | 51 | | | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | | | | 44 | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | | | | 38 | | | | | | | | | | | | | | | | |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | | | | 34 | | | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | | | | 30 | | | | | | | | | | | | | | | | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | | | | 27 | | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | | | | 24 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 48382 | 48382 | 48382 |
| 5° | 48065 | 47679 | 47779 |
| 10° | 47889 | 46957 | 47248 |
| 15° | 47585 | 46417 | 46932 |
| 20° | 47281 | 46077 | 46517 |
| 25° | 46711 | 45734 | 46105 |
| 30° | 46090 | 45194 | 45233 |
| 35° | 45348 | 44337 | 44752 |
| 40° | 44384 | 43452 | 44097 |
| 45° | 43048 | 42427 | 43807 |
| 50° | 41236 | 41261 | 43460 |
| 55° | 38358 | 40114 | 41838 |
| 60° | 34590 | 38435 | 38679 |
| 65° | 29672 | 35319 | 24513 |
| 70° | 23900 | 27572 | 17773 |
| 75° | 17918 | 16367 | 18038 |
| 80° | 12472 | 13609 | 17221 |
| 85° | 7098 | 12470 | 16142 |



TEST NUMBER: P830823

CATALOG NUMBER: OHBL-90SE-MCL-UNV-L730-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 2884.6 | 3.3 |
| 10°-20° | 8271.7 | 9.6 |
| 20°-30° | 12633.5 | 14.6 |
| 30°-40° | 15328.8 | 17.7 |
| 40°-50° | 16066.0 | 18.6 |
| 50°-60° | 14558.2 | 16.8 |
| 60°-70° | 9760.7 | 11.3 |
| 70°-80° | 4383.0 | 5.1 |
| 80°-90° | 1590.5 | 1.8 |
| 90°-100° | 478.7 | 0.6 |
| 100°-110° | 225.9 | 0.3 |
| 110°-120° | 113.2 | 0.1 |
| 120°-130° | 62.5 | 0.1 |
| 130°-140° | 42.9 | 0.0 |
| 140°-150° | 28.9 | 0.0 |
| 150°-160° | 21.5 | 0.0 |
| 160°-170° | 13.8 | 0.0 |
| 170°-180° | 4.4 | 0.0 |
| 0°-30° | 23789.9 | 27.5 |
| 0°-40° | 39118.7 | 45.2 |
| 0°-60° | 69743.0 | 80.7 |
| 0°-90° | 85477.2 | 98.9 |
| 90°-120° | 817.9 | 0.9 |
| 90°-150° | 952.1 | 1.1 |
| 90°-180° | 992.0 | 1.1 |
| 0°-180° | 86469.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 30593 | 30593 | 30593 | 30593 | 30593 | |
| 5° | 30394 | 30500 | 30288 | 30380 | 30341 | ### |
| 15° | 29407 | 29292 | 29084 | 29341 | 29376 | 8303 |
| 25° | 27319 | 27200 | 27390 | 27642 | 27563 | 12593 |
| 35° | 24214 | 24272 | 24519 | 24780 | 24683 | 15135 |
| 45° | 20096 | 20423 | 20804 | 21334 | 21401 | 15481 |
| 55° | 14788 | 15500 | 16557 | 17221 | 17181 | 13200 |
| 65° | 8679 | 10037 | 11395 | 9617 | 7852 | 8647 |
| 75° | 3415 | 4954 | 3645 | 3729 | 3972 | 3732 |
| 85° | 588 | 1128 | 1446 | 1747 | 1831 | 718 |
| 90° | 4 | 376 | 748 | 938 | 982 | 35 |
| 95° | 4 | 234 | 513 | 624 | 641 | 6 |
| 105° | 18 | 102 | 252 | 305 | 318 | 20 |
| 115° | 35 | 53 | 128 | 164 | 172 | 33 |
| 125° | 31 | 35 | 80 | 93 | 97 | 31 |
| 135° | 40 | 44 | 49 | 71 | 75 | 32 |
| 145° | 40 | 44 | 44 | 49 | 53 | 26 |
| 155° | 44 | 49 | 49 | 49 | 44 | 20 |
| 165° | 49 | 49 | 49 | 49 | 49 | 14 |
| 175° | 49 | 49 | 44 | 40 | 40 | 5 |
| 180° | 44 | 44 | 44 | 44 | 44 | |



TEST NUMBER: P830823

CATALOG NUMBER: OHBL-90SE-MCL-UNV-L730-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 30592.8 | 30592.8 | 30592.8 | 30592.8 | 30592.8 |
| 2.5° | 30468.9 | 30597.2 | 30438.0 | 30610.5 | 30654.7 |
| 5° | 30393.7 | 30499.9 | 30287.6 | 30380.5 | 30340.7 |
| 7.5° | 30256.6 | 30292.0 | 30039.9 | 30115.1 | 30035.4 |
| 10° | 30053.1 | 30035.4 | 29739.1 | 29885.0 | 29902.7 |
| 12.5° | 29752.3 | 29699.3 | 29433.9 | 29655.0 | 29659.5 |
| 15° | 29407.3 | 29292.3 | 29084.4 | 29341.0 | 29376.3 |
| 17.5° | 29009.2 | 28858.8 | 28721.7 | 29053.4 | 29000.4 |
| 20° | 28544.7 | 28367.8 | 28341.3 | 28704.0 | 28571.3 |
| 22.5° | 27969.7 | 27832.6 | 27894.5 | 28239.5 | 28155.5 |
| 25° | 27319.4 | 27200.0 | 27390.2 | 27642.3 | 27562.7 |
| 27.5° | 26633.8 | 26563.0 | 26779.8 | 26974.4 | 26819.6 |
| 30° | 25881.8 | 25842.0 | 26129.5 | 26288.8 | 26094.1 |
| 32.5° | 25063.5 | 25076.7 | 25351.0 | 25567.7 | 25386.4 |
| 35° | 24214.1 | 24271.6 | 24519.4 | 24780.3 | 24683.0 |
| 37.5° | 23280.8 | 23409.1 | 23656.8 | 23953.2 | 23851.4 |
| 40° | 22294.4 | 22480.1 | 22754.4 | 23112.7 | 23019.8 |
| 42.5° | 21228.3 | 21462.7 | 21816.6 | 22214.7 | 22205.9 |
| 45° | 20095.9 | 20423.2 | 20803.6 | 21334.5 | 21400.8 |
| 47.5° | 18919.2 | 19286.4 | 19768.5 | 20476.3 | 20578.0 |
| 50° | 17640.8 | 18100.9 | 18702.5 | 19551.8 | 19613.7 |
| 52.5° | 16216.5 | 16844.6 | 17640.8 | 18454.8 | 18379.6 |
| 55° | 14787.7 | 15499.9 | 16557.1 | 17220.6 | 17180.8 |
| 57.5° | 13363.3 | 14164.0 | 15446.8 | 15920.1 | 15915.7 |
| 60° | 11770.9 | 12783.9 | 14186.1 | 14544.4 | 14190.5 |
| 62.5° | 10297.9 | 11386.0 | 12841.4 | 12580.4 | 11368.4 |
| 65° | 8678.9 | 10036.9 | 11394.9 | 9616.7 | 7851.7 |
| 67.5° | 7241.2 | 8656.8 | 9678.6 | 6586.6 | 5639.9 |
| 70° | 5794.8 | 7356.3 | 7546.5 | 4887.9 | 4821.6 |
| 72.5° | 4512.0 | 6175.2 | 5206.4 | 4184.6 | 4396.9 |
| 75° | 3414.9 | 4954.3 | 3644.9 | 3729.0 | 3972.3 |
| 77.5° | 2490.4 | 3804.2 | 2835.5 | 3269.0 | 3468.0 |
| 80° | 1711.9 | 2693.9 | 2313.5 | 2747.0 | 2884.1 |
| 82.5° | 1074.9 | 1778.2 | 1853.4 | 2211.7 | 2353.3 |
| 85° | 588.3 | 1128.0 | 1446.5 | 1747.3 | 1831.3 |
| 87.5° | 243.3 | 681.2 | 1105.9 | 1349.2 | 1419.9 |
| 90° | 4.4 | 376.0 | 747.6 | 937.8 | 982.0 |
| 92.5° | 4.4 | 287.5 | 610.4 | 756.4 | 787.4 |
| 95° | 4.4 | 234.4 | 513.1 | 623.7 | 641.4 |
| 97.5° | 8.8 | 185.8 | 429.1 | 517.5 | 535.2 |
| 100° | 13.3 | 154.8 | 358.3 | 433.5 | 446.8 |
| 102.5° | 17.7 | 123.9 | 300.8 | 362.7 | 376.0 |
| 105° | 17.7 | 101.7 | 252.1 | 305.2 | 318.5 |



TEST NUMBER: P830823

CATALOG NUMBER: OHBL-90SE-MCL-UNV-L730-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 31.0 | 61.9 | 150.4 | 190.2 | 199.1 |
| 115° | 35.4 | 53.1 | 128.3 | 163.7 | 172.5 |
| 117.5° | 35.4 | 44.2 | 110.6 | 137.1 | 146.0 |
| 120° | 35.4 | 39.8 | 97.3 | 119.4 | 123.9 |
| 122.5° | 35.4 | 35.4 | 84.0 | 106.2 | 110.6 |
| 125° | 31.0 | 35.4 | 79.6 | 92.9 | 97.3 |
| 127.5° | 35.4 | 35.4 | 70.8 | 84.0 | 88.5 |
| 130° | 35.4 | 39.8 | 61.9 | 79.6 | 79.6 |
| 132.5° | 39.8 | 44.2 | 57.5 | 75.2 | 75.2 |
| 135° | 39.8 | 44.2 | 48.7 | 70.8 | 75.2 |
| 137.5° | 44.2 | 44.2 | 44.2 | 66.4 | 70.8 |
| 140° | 44.2 | 44.2 | 39.8 | 57.5 | 61.9 |
| 142.5° | 39.8 | 44.2 | 39.8 | 53.1 | 57.5 |
| 145° | 39.8 | 44.2 | 44.2 | 48.7 | 53.1 |
| 147.5° | 44.2 | 44.2 | 44.2 | 44.2 | 48.7 |
| 150° | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 |
| 152.5° | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 |
| 155° | 44.2 | 48.7 | 48.7 | 48.7 | 44.2 |
| 157.5° | 44.2 | 48.7 | 48.7 | 48.7 | 48.7 |
| 160° | 44.2 | 48.7 | 48.7 | 48.7 | 48.7 |
| 162.5° | 48.7 | 48.7 | 48.7 | 48.7 | 48.7 |
| 165° | 48.7 | 48.7 | 48.7 | 48.7 | 48.7 |
| 167.5° | 48.7 | 53.1 | 48.7 | 48.7 | 48.7 |
| 170° | 48.7 | 48.7 | 48.7 | 44.2 | 44.2 |
| 172.5° | 48.7 | 48.7 | 48.7 | 44.2 | 44.2 |
| 175° | 48.7 | 48.7 | 44.2 | 39.8 | 39.8 |
| 177.5° | 53.1 | 48.7 | 44.2 | 39.8 | 35.4 |
| 180° | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 22.1 | 84.0 | 216.8 | 261.0 | 269.8 |
| 110° | 26.5 | 70.8 | 181.4 | 221.2 | 230.0 |



(END OF REPORT)