

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: P830581

Luminaire Tested: **OHBL-48SE-NL-UNV-L940-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P472951)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-48SE-NL-UNV-L940-CD
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 4000K LEDS AND NO LENS
Light Source: -
Ballast/Driver: -

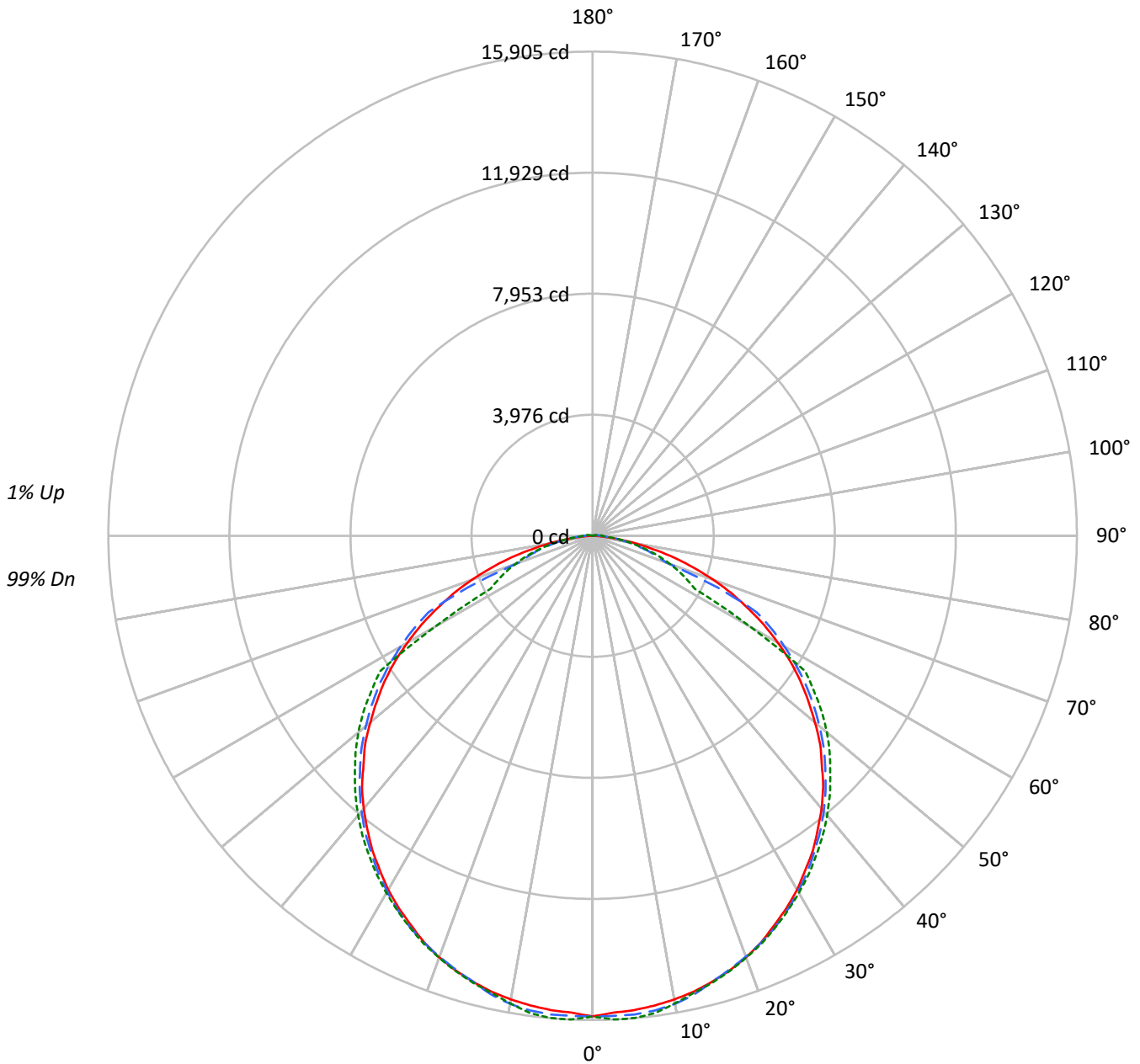
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44328.0 lumens
Efficiency: N/A
Efficacy: 153.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular (W 1.67' x L: 3.78' x H: 0')
CIE Type: Direct

Input Watts (W): 288.8
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: P830581
CATALOG NUMBER: OHBL-48SE-NL-UNV-L940-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830581

CATALOG NUMBER: OHBL-48SE-NL-UNV-L940-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 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | | | | | 99 | | | | | | | | | | | | | | | |
| 1 | 109 | 105 | 100 | 97 | 106 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | | | | | 84 | | | | | | | | | | | | | | | |
| 2 | 99 | 92 | 85 | 79 | 97 | 90 | 84 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | | | | | 71 | | | | | | | | | | | | | | | |
| 3 | 91 | 81 | 73 | 66 | 88 | 79 | 72 | 66 | 76 | 70 | 64 | 73 | 68 | 63 | 70 | 66 | 62 | | | | | 60 | | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | | | | | 51 | | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | | | | | 44 | | | | | | | | | | | | | | | |
| 6 | 71 | 57 | 49 | 42 | 69 | 56 | 48 | 42 | 55 | 47 | 42 | 53 | 46 | 41 | 51 | 45 | 41 | | | | | 39 | | | | | | | | | | | | | | | |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | | | | | 34 | | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 32 | | | | | 30 | | | | | | | | | | | | | | | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 29 | 40 | 34 | 29 | | | | | 27 | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | | | | | 25 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 26967 | 26967 | 26967 |
| 5° | 26818 | 27060 | 27264 |
| 10° | 26825 | 27080 | 27046 |
| 15° | 26821 | 26816 | 26874 |
| 20° | 26784 | 26743 | 26809 |
| 25° | 26601 | 26736 | 26757 |
| 30° | 26478 | 26614 | 26718 |
| 35° | 26306 | 26450 | 26699 |
| 40° | 26079 | 26326 | 26715 |
| 45° | 25703 | 26091 | 26660 |
| 50° | 25315 | 25831 | 26685 |
| 55° | 24831 | 25475 | 26391 |
| 60° | 23999 | 24851 | 20546 |
| 65° | 22706 | 24027 | 13827 |
| 70° | 21002 | 12755 | 13420 |
| 75° | 18319 | 12121 | 12816 |
| 80° | 14087 | 11119 | 11745 |
| 85° | 7110 | 11237 | 11507 |



TEST NUMBER: P830581

CATALOG NUMBER: OHBL-48SE-NL-UNV-L940-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1500.0 | 3.4 |
| 10°-20° | 4294.8 | 9.7 |
| 20°-30° | 6534.9 | 14.7 |
| 30°-40° | 7945.5 | 17.9 |
| 40°-50° | 8354.4 | 18.8 |
| 50°-60° | 7628.5 | 17.2 |
| 60°-70° | 4890.3 | 11.0 |
| 70°-80° | 2310.1 | 5.2 |
| 80°-90° | 640.6 | 1.4 |
| 90°-100° | 169.6 | 0.4 |
| 100°-110° | 46.4 | 0.1 |
| 110°-120° | 12.9 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 12329.7 | 27.8 |
| 0°-40° | 20275.2 | 45.7 |
| 0°-60° | 36258.1 | 81.8 |
| 0°-90° | 44099.0 | 99.5 |
| 90°-120° | 229.0 | 0.5 |
| 90°-150° | 229.0 | 0.5 |
| 90°-180° | 229.0 | 0.5 |
| 0°-180° | 44328.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 15788 | 15788 | 15788 | 15788 | 15788 | |
| 5° | 15642 | 15703 | 15783 | 15869 | 15902 | ### |
| 15° | 15168 | 15281 | 15165 | 15187 | 15198 | 4282 |
| 25° | 14115 | 14137 | 14187 | 14209 | 14198 | 6513 |
| 35° | 12616 | 12542 | 12686 | 12841 | 12805 | 7884 |
| 45° | 10641 | 10622 | 10802 | 11056 | 11037 | 8225 |
| 55° | 8339 | 8275 | 8555 | 8840 | 8863 | 7437 |
| 65° | 5618 | 5618 | 5945 | 3410 | 3421 | 5570 |
| 75° | 2776 | 2829 | 1837 | 1934 | 1942 | 2926 |
| 85° | 363 | 460 | 573 | 621 | 587 | 536 |
| 90° | 0 | 155 | 255 | 302 | 296 | 16 |
| 95° | 8 | 80 | 183 | 247 | 247 | 5 |
| 105° | 14 | 30 | 44 | 44 | 42 | 14 |
| 115° | 14 | 19 | 28 | 19 | 3 | 10 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P830581

CATALOG NUMBER: OHBL-48SE-NL-UNV-L940-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 15788.5 | 15788.5 | 15788.5 | 15788.5 | 15788.5 |
| 2.5° | 15677.6 | 15730.4 | 15788.5 | 15863.3 | 15904.6 |
| 5° | 15641.5 | 15702.6 | 15782.9 | 15868.9 | 15902.0 |
| 7.5° | 15564.1 | 15649.8 | 15727.5 | 15788.5 | 15807.9 |
| 10° | 15467.0 | 15569.7 | 15614.0 | 15608.4 | 15594.6 |
| 12.5° | 15336.8 | 15445.0 | 15431.2 | 15367.3 | 15378.4 |
| 15° | 15167.9 | 15281.4 | 15165.2 | 15187.2 | 15198.4 |
| 17.5° | 14968.4 | 15079.3 | 14943.5 | 14987.8 | 14990.7 |
| 20° | 14735.8 | 14818.8 | 14713.5 | 14749.6 | 14749.6 |
| 22.5° | 14456.0 | 14514.1 | 14469.8 | 14494.7 | 14500.3 |
| 25° | 14115.2 | 14137.2 | 14187.0 | 14209.3 | 14198.2 |
| 27.5° | 13788.4 | 13760.6 | 13857.6 | 13910.1 | 13882.3 |
| 30° | 13425.3 | 13381.0 | 13494.5 | 13580.5 | 13547.3 |
| 32.5° | 13009.7 | 12982.1 | 13112.3 | 13214.7 | 13195.4 |
| 35° | 12616.4 | 12541.6 | 12685.6 | 12840.7 | 12804.7 |
| 37.5° | 12150.9 | 12106.6 | 12270.0 | 12433.6 | 12414.3 |
| 40° | 11696.5 | 11621.8 | 11807.4 | 12001.3 | 11981.9 |
| 42.5° | 11209.1 | 11120.2 | 11322.6 | 11555.5 | 11533.2 |
| 45° | 10640.9 | 10621.6 | 10801.7 | 11056.5 | 11037.2 |
| 47.5° | 10137.0 | 10039.9 | 10291.9 | 10538.6 | 10560.9 |
| 50° | 9527.2 | 9491.5 | 9721.4 | 10020.6 | 10042.6 |
| 52.5° | 8931.8 | 8906.9 | 9147.7 | 9449.8 | 9488.5 |
| 55° | 8338.8 | 8275.1 | 8554.9 | 8840.3 | 8862.6 |
| 57.5° | 7704.6 | 7638.0 | 7923.4 | 8233.8 | 8280.7 |
| 60° | 7025.6 | 6962.0 | 7274.9 | 7563.2 | 6014.6 |
| 62.5° | 6346.9 | 6302.6 | 6629.6 | 4695.9 | 3784.6 |
| 65° | 5618.3 | 5618.3 | 5945.1 | 3410.3 | 3421.4 |
| 67.5° | 4937.0 | 4892.7 | 4432.8 | 3063.9 | 3063.9 |
| 70° | 4205.5 | 4222.2 | 2554.1 | 2684.7 | 2687.3 |
| 72.5° | 3471.3 | 3532.3 | 2205.4 | 2310.4 | 2316.0 |
| 75° | 2775.9 | 2828.7 | 1836.7 | 1933.8 | 1942.0 |
| 77.5° | 2039.1 | 1568.0 | 1476.5 | 1551.6 | 1554.2 |
| 80° | 1432.2 | 989.0 | 1130.4 | 1202.3 | 1194.1 |
| 82.5° | 836.5 | 692.5 | 828.3 | 881.1 | 878.2 |
| 85° | 362.8 | 459.9 | 573.4 | 620.6 | 587.2 |
| 87.5° | 116.2 | 285.4 | 357.2 | 385.1 | 382.2 |
| 90° | 0.0 | 155.2 | 254.9 | 301.8 | 296.5 |
| 92.5° | 0.0 | 121.7 | 221.7 | 277.2 | 279.8 |
| 95° | 8.2 | 80.4 | 183.0 | 246.7 | 246.7 |
| 97.5° | 5.6 | 58.1 | 130.2 | 193.9 | 199.4 |
| 100° | 5.6 | 46.9 | 85.9 | 138.4 | 141.4 |
| 102.5° | 13.8 | 38.7 | 52.5 | 88.6 | 91.5 |
| 105° | 13.8 | 30.5 | 44.3 | 44.3 | 41.6 |



TEST NUMBER: P830581

CATALOG NUMBER: OHBL-48SE-NL-UNV-L940-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-----|
| 112.5° | 16.7 | 22.3 | 30.5 | 22.3 | 2.6 |
| 115° | 13.8 | 19.4 | 27.6 | 19.4 | 2.6 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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° | 13.8 | 27.6 | 38.7 | 24.9 | 8.2 |
| 110° | 16.7 | 24.9 | 33.1 | 22.3 | 2.6 |



(END OF REPORT)